



REPORT No.: SZ17120080W07

# TEST REPORT

**APPLICANT** : Shenzhen Chainway Information Technology Co.,Ltd.

**PRODUCT NAME** : Mobile Data Terminal

**MODEL NAME** : C6000

**BRAND NAME** : CHAINWAY

**FCC ID** : 2AC6AC6000

**STANDARD(S)** : 47 CFR Part 22, Subpart H  
47 CFR Part 24, Subpart E  
47 CFR Part 27, Subpart L&M

**TEST DATE** : 2018-01-14 to 2018-05-09

**ISSUE DATE** : 2018-05-10

Tested by:

*Tu Ya'nan*

Tu Ya'nan (Test Engineer)

Approved by:

*Andy Yeh*

Andy Yeh (Technical Director)

**NOTE:** This document is issued by MORLAB, the test report shall not be reproduced except in full without prior written permission of the company. The test results apply only to the particular sample(s) tested and to the specific tests carried out which is available on request for validation and information confirmed at our website.

**MORLAB**

SHENZHEN MORLAB COMMUNICATIONS TECHNOLOGY Co., Ltd.  
FL1-3, Building A, FeiYang Science Park, No.8 LongChang Road,  
Block67, BaoAn District, ShenZhen , GuangDong Province, P. R. China

Tel: 86-755-36698555

Http://www.morlab.cn

Fax: 86-755-36698525

E-mail: service@morlab.cn





## DIRECTORY

|                                                         |            |
|---------------------------------------------------------|------------|
| <b>1. Technical Information</b>                         | <b>4</b>   |
| 1.1. Applicant and Manufacturer Information             | 4          |
| 1.2. Equipment Under Test (EUT) Description             | 4          |
| 1.3. Test Standards and Results                         | 7          |
| 1.4. Environmental Conditions                           | 7          |
| <b>2. 47 CFR Part 2, Part 24E &amp; 27 Requirements</b> | <b>8</b>   |
| 2.1. Transmitter Conducted Output Power                 | 8          |
| 2.2. Occupied Bandwidth                                 | 31         |
| 2.3. Frequency Stability                                | 63         |
| 2.4. Peak to Average Radio                              | 67         |
| 2.5. Conducted Spurious Emissions                       | 99         |
| 2.6. Band Edge                                          | 166        |
| 2.7. Transmitter Radiated Power (EIRP/ERP)              | 198        |
| 2.8. Radiated Spurious Emissions                        | 209        |
| <b>Annex A Test Uncertainty</b>                         | <b>242</b> |
| <b>Annex B Testing Laboratory Information</b>           | <b>243</b> |



REPORT No.: SZ17120080W07

| Change History |            |                   |
|----------------|------------|-------------------|
| Issue          | Date       | Reason for change |
| 1.0            | 2018-03-15 | First edition     |
| 2.0            | 2018-05-10 | Second edition    |



# 1. Technical Information

**Note:** Provide by applicant.

## 1.1. Applicant and Manufacturer Information

|                              |                                                                                       |
|------------------------------|---------------------------------------------------------------------------------------|
| <b>Applicant:</b>            | Shenzhen Chainway Information Technology Co.,Ltd.                                     |
| <b>Applicant Address:</b>    | 9/F, Building 2, Daqian Industrial Park, Longchang Rd., District 67, Bao'an, Shenzhen |
| <b>Manufacturer:</b>         | Shenzhen Chainway Information Technology Co.,Ltd.                                     |
| <b>Manufacturer Address:</b> | 9/F, Building 2, Daqian Industrial Park, Longchang Rd., District 67, Bao'an, Shenzhen |

## 1.2. Equipment Under Test (EUT) Description

|                          |                                         |                                             |
|--------------------------|-----------------------------------------|---------------------------------------------|
| <b>Product Name:</b>     | Mobile Data Terminal                    |                                             |
| <b>Serial No:</b>        | (N/A, marked #1 by test site)           |                                             |
| <b>Hardware Version:</b> | C6000EA_MB_10                           |                                             |
| <b>Software Version:</b> | C6000A_MT6735_V3_AM_GITe978618_20180315 |                                             |
| <b>Modulation Type:</b>  | QPSK, 16QAM                             |                                             |
| <b>Operation Band:</b>   | Band 2 / 4 / 7 / 12 / 17                |                                             |
| <b>Frequency Range:</b>  | LTE Band 2                              | Tx: 1850MHz -1910MHz                        |
|                          |                                         | Rx: 1930MHz -1990MHz                        |
|                          | LTE Band 4                              | Tx: 1710MHz -1755MHz                        |
|                          |                                         | Rx: 2110MHz - 2155MHz                       |
|                          | LTE Band 7                              | Tx: 2500MHz - 2570MHz                       |
|                          |                                         | Rx: 2500MHz - 2570MHz                       |
|                          | LTE Band 12                             | Tx: 699MHz - 716MHz                         |
|                          |                                         | Rx: 729MHz - 746MHz                         |
|                          | LTE Band 17                             | Tx: 704MHz - 716MHz                         |
|                          |                                         | Rx: 734MHz- 746MHz                          |
| <b>Channel Bandwidth</b> | LTE Band 2                              | 1.4MHz, 3 MHz, 5 MHz, 10MHz, 15 MHz, 20 MHz |
|                          | LTE Band 4                              | 1.4MHz, 3 MHz, 5 MHz, 10MHz, 15 MHz, 20 MHz |
|                          | LTE Band 7                              | 5 MHz, 10MHz, 15 MHz, 20 MHz                |
|                          | LTE Band 12                             | 1.4MHz, 3 MHz, 5 MHz, 10MHz                 |
|                          | LTE Band 17                             | 5 MHz, 10MHz                                |



|                             |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |
|-----------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Emission Designator:</b> | 1M10G7D (LTE Band 2, QPSK, BW 1.4MHz)<br>1M10W7D (LTE Band 2, 16QAM, BW 1.4MHz)<br>2M72G7D (LTE Band 2, QPSK, BW 3MHz)<br>2M71 W7D (LTE Band 2, 16QAM, BW 3MHz)<br>4M54G7D (LTE Band 2, QPSK, BW 5MHz)<br>4M54W7D (LTE Band 2, 16QAM, BW 5MHz)<br>9M00G7D (LTE Band 2, QPSK, BW 10MHz)<br>9M00W7D (LTE Band 2, 16QAM, BW 10MHz)<br>13M50G7D (LTE Band 2, QPSK, BW 15MHz)<br>13M49W7D (LTE Band 2, 16QAM, BW 15MHz)<br>18M02G7D (LTE Band 2, QPSK, BW 20MHz)<br>18M02W7D (LTE Band 2, 16QAM, BW 20MHz)<br>1M11G7D (LTE Band 4, QPSK, BW 1.4MHz)<br>1M10W7D (LTE Band 4, 16QAM, BW 1.4MHz)<br>2M71G7D (LTE Band 4, QPSK, BW 3MHz)<br>2M70W7D (LTE Band 4, 16QAM, BW 3MHz)<br>4M54G7D (LTE Band 4, QPSK, BW 5MHz)<br>4M53W7D (LTE Band 4, 16QAM, BW 5MHz)<br>9M00G7D (LTE Band 4, QPSK, BW 10MHz)<br>9M01W7D (LTE Band 4, 16QAM, BW 10MHz)<br>13M54G7D (LTE Band 4, QPSK, BW 15MHz)<br>13M52W7D (LTE Band 4, 16QAM, BW 15MHz)<br>17M97G7D (LTE Band 4, QPSK, BW 20MHz)<br>17M95W7D (LTE Band 4, 16QAM, BW 20MHz)<br>4M54G7D (LTE Band 7, QPSK, BW 5MHz)<br>4M55W7D (LTE Band 7, 16QAM, BW 5MHz)<br>9M02G7D (LTE Band 7, QPSK, BW 10MHz)<br>9M03W7D (LTE Band 7, 16QAM, BW 10MHz)<br>13M53G7D (LTE Band 7, QPSK, BW 15MHz)<br>13M52W7D (LTE Band 7, 16QAM, BW 15MHz)<br>18M01G7D (LTE Band 7, QPSK, BW 20MHz)<br>18M00W7D (LTE Band 7, 16QAM, BW 20MHz)<br>1M09G7D (LTE Band 12, QPSK, BW 1.4MHz)<br>1M10W7D (LTE Band 12, 16QAM, BW 1.4MHz)<br>2M69G7D (LTE Band 12, QPSK, BW 3MHz)<br>2M69W7D (LTE Band 12, 16QAM, BW 3MHz)<br>4M50G7D (LTE Band 12, QPSK, BW 5MHz)<br>4M49W7D (LTE Band 12, 16QAM, BW 5MHz)<br>8M99G7D (LTE Band 12, QPSK, BW 10MHz) |
|-----------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|



|                           |                                                                                                                                                                                                            |       |
|---------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------|
|                           | 8M99W7D (LTE Band 12, 16QAM, BW 10MHz)<br>4M50G7D (LTE Band 17, QPSK, BW 5MHz)<br>4M49W7D (LTE Band 17, 16QAM, BW 5MHz)<br>8M98G7D (LTE Band 17, QPSK, BW 10MHz)<br>8M99W7D (LTE Band 17, 16QAM, BW 10MHz) |       |
| <b>Antenna Type:</b>      | PIFA Antenna                                                                                                                                                                                               |       |
| <b>Antenna Gain:</b>      | 0.49 dBi                                                                                                                                                                                                   |       |
| <b>Operating voltage:</b> | Normal(NV):                                                                                                                                                                                                | 3.8V  |
|                           | Lowest(LV):                                                                                                                                                                                                | 3.6V  |
|                           | Highest(HV):                                                                                                                                                                                               | 4.35V |

**Note 1:** For a more detailed description, please refer to Specification or User's Manual supplied by the applicant and/or manufacturer.



### 1.3. Test Standards and Results

The objective of the report is to perform testing according to Part 2, Part 24 and Part 27 for the EUT FCC ID Certification:

| No | Identity       | Document Title                                                                |
|----|----------------|-------------------------------------------------------------------------------|
| 1  | 47 CFR Part 2  | Frequency Allocations and Radio Treaty Matters; General Rules and Regulations |
| 2  | 47 CFR Part 24 | Personal Communications Services                                              |
| 3  | 47 CFR Part 27 | Miscellaneous Wireless Communications Services                                |

Test detailed items/section required by FCC rules and results are as below:

| Section                                                                                                                                               | Description                         | Test Date                    | Test Engineer | Result |
|-------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------|------------------------------|---------------|--------|
| 2.1046                                                                                                                                                | Transmitter Conducted Output Power  | Mar 15, 2018                 | Li Jingzong   | PASS   |
| 2.1049                                                                                                                                                | Occupied Bandwidth                  | Feb 07, 2018                 | Li Jingzong   | PASS   |
| 2.1055, 24.235, 27.54                                                                                                                                 | Frequency Stability                 | Feb 07, 2018                 | Li Jingzong   | PASS   |
| 24.232(d), 27.50(d)(5)                                                                                                                                | Peak to Average Ratio               | Feb 07, 2018<br>May 09, 2018 | Li Jingzong   | PASS   |
| 2.1051, 24.238, 27.53(g)(h), 27.53(m)(4)                                                                                                              | Conducted Spurious Emissions        | Feb 13, 2018                 | Li Jingzong   | PASS   |
| 2.1051, 24.238, 27.53(g)(h), 27.53(m)(4)                                                                                                              | Band Edge                           | Feb 13, 2018<br>May 09, 2018 | Li Jingzong   | PASS   |
| 24.232(c), 27.50(c)(10)<br>27.50(d)(4), 27.50(h)(2)                                                                                                   | Equivalent Isotropic Radiated Power | Mar 15, 2018                 | Wu Zhongwen   | PASS   |
| 2.1051, 24.238, 27.53(g)(h), 27.53(m)(4)                                                                                                              | Radiated Spurious Emissions         | Jan 14, 2017                 | Wu Zhongwen   | PASS   |
| <b>Note:</b> The tests were performed according to the method of measurements prescribed in KDB971168 D01 v03 (Oct 27, 2017) and ANSI/TIA-603-E-2016. |                                     |                              |               |        |

### 1.4. Environmental Conditions

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

|                             |         |
|-----------------------------|---------|
| Temperature (°C):           | 15 - 35 |
| Relative Humidity (%):      | 30 -60  |
| Atmospheric Pressure (kPa): | 86-106  |

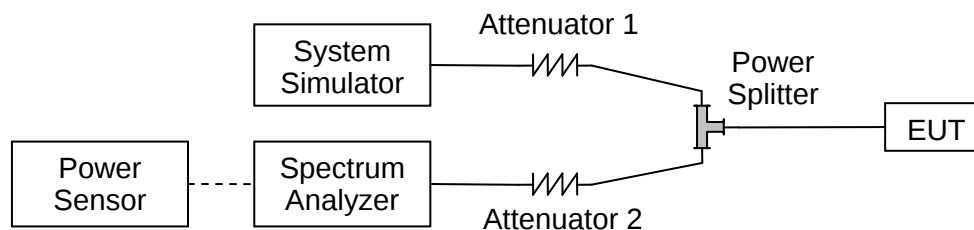
## 2. 47 CFR Part 2, Part 24E & 27 Requirements

### 2.1. Transmitter Conducted Output Power

#### 2.1.1. Requirement

According to FCC section 2.1046(a), for transmitters other than single sideband, independent sideband and controlled carrier radiotelephone, power output shall be measured at the RF output terminals when the transmitter is adjusted in accordance with the tune-up procedure to give the values of current and voltage on the circuit elements specified in FCC section 2.1033(c)(8).

#### 2.1.2. Test Description



The EUT is coupled to the Spectrum Analyzer (SA) and the System Simulator (SS) with Attenuators through the Power Splitter; the RF load attached to the EUT antenna terminal is 50Ohm; the path loss as the factor is calibrated to correct the reading. The EUT is commanded by the SS to operate at the maximum output power. A call is established between the EUT and the SS.

#### 2.1.3. Test procedure

KDB 971168 D01v03 Section 5.2 and ANSI/TIA-603-E-2016.

#### 2.1.4. Result



| Band          | Band Width | Channel    | Freq.(MHz) | Modulation | RB Configuration |           | Average Power<br>(dBm) |
|---------------|------------|------------|------------|------------|------------------|-----------|------------------------|
|               |            |            |            |            | RB Size          | RB Offset |                        |
| LTE<br>Band 2 | 20MHz      | L<br>18700 | 1860       | QPSK       | 1                | 0         | 19.25                  |
|               |            |            |            |            | 1                | 49        | 18.99                  |
|               |            |            |            |            | 1                | 99        | 18.93                  |
|               |            |            |            |            | 50               | 0         | 18.98                  |
|               |            |            |            |            | 50               | 25        | 18.36                  |
|               |            |            |            |            | 50               | 49        | 18.65                  |
|               |            |            |            |            | 100              | 0         | 18.66                  |
|               |            |            |            | 16-QAM     | 1                | 0         | 18.40                  |
|               |            |            |            |            | 1                | 49        | 18.10                  |
|               |            |            |            |            | 1                | 99        | 18.25                  |
|               |            |            |            |            | 50               | 0         | 17.04                  |
|               |            |            |            |            | 50               | 25        | 16.88                  |
|               |            |            |            |            | 50               | 49        | 16.93                  |
|               |            |            |            |            | 100              | 0         | 16.96                  |
|               |            | M<br>18900 | 1880       | QPSK       | 1                | 0         | 19.21                  |
|               |            |            |            |            | 1                | 49        | 18.90                  |
|               |            |            |            |            | 1                | 99        | 18.69                  |
|               |            |            |            |            | 50               | 0         | 18.98                  |
|               |            |            |            |            | 50               | 25        | 18.95                  |
|               |            |            |            |            | 50               | 49        | 19.11                  |
|               |            |            |            |            | 100              | 0         | 18.92                  |
|               |            |            |            | 16-QAM     | 1                | 0         | 18.48                  |
|               |            |            |            |            | 1                | 49        | 18.44                  |
|               |            |            |            |            | 1                | 99        | 17.99                  |
|               |            |            |            |            | 50               | 0         | 16.93                  |
|               |            |            |            |            | 50               | 25        | 16.80                  |
|               |            |            |            |            | 50               | 49        | 16.74                  |
|               |            |            |            |            | 100              | 0         | 16.85                  |
|               |            | H<br>19100 | 1900       | QPSK       | 1                | 0         | 18.83                  |
|               |            |            |            |            | 1                | 49        | 18.36                  |
|               |            |            |            |            | 1                | 99        | 18.32                  |
|               |            |            |            |            | 50               | 0         | 18.63                  |
|               |            |            |            |            | 50               | 25        | 18.27                  |
|               |            |            |            |            | 50               | 49        | 17.99                  |
|               |            |            |            |            | 100              | 0         | 18.69                  |
|               |            |            |            | 16-QAM     | 1                | 0         | 18.11                  |
|               |            |            |            |            | 1                | 49        | 18.23                  |
|               |            |            |            |            | 1                | 99        | 17.34                  |
|               |            |            |            |            | 50               | 0         | 16.68                  |
|               |            |            |            |            | 50               | 25        | 16.57                  |
|               |            |            |            |            | 50               | 49        | 16.47                  |
|               |            |            |            |            | 100              | 0         | 16.56                  |



| Band          | Band Width | Channel    | Freq.(MHz) | Modulation | RB Configuration |           | Average Power<br>(dBm) |
|---------------|------------|------------|------------|------------|------------------|-----------|------------------------|
|               |            |            |            |            | RB Size          | RB Offset |                        |
| LTE<br>Band 2 | 15MHz      | L<br>18675 | 1857.5     | QPSK       | 1                | 0         | 18.93                  |
|               |            |            |            |            | 1                | 37        | 18.56                  |
|               |            |            |            |            | 1                | 74        | 18.31                  |
|               |            |            |            |            | 36               | 0         | 18.03                  |
|               |            |            |            |            | 36               | 18        | 18.25                  |
|               |            |            |            |            | 36               | 35        | 17.55                  |
|               |            |            |            |            | 75               | 0         | 18.99                  |
|               |            |            |            | 16-QAM     | 1                | 0         | 18.16                  |
|               |            |            |            |            | 1                | 37        | 18.43                  |
|               |            |            |            |            | 1                | 74        | 18.03                  |
|               |            |            |            |            | 36               | 0         | 16.95                  |
|               |            |            |            |            | 36               | 18        | 16.88                  |
|               |            |            |            |            | 36               | 35        | 16.92                  |
|               |            |            |            |            | 75               | 0         | 16.96                  |
|               |            | M<br>18900 | 1880       | QPSK       | 1                | 0         | 19.03                  |
|               |            |            |            |            | 1                | 37        | 19.02                  |
|               |            |            |            |            | 1                | 74        | 18.36                  |
|               |            |            |            |            | 36               | 0         | 18.57                  |
|               |            |            |            |            | 36               | 18        | 18.24                  |
|               |            |            |            |            | 36               | 35        | 18.59                  |
|               |            |            |            |            | 75               | 0         | 18.88                  |
|               |            |            |            | 16-QAM     | 1                | 0         | 18.47                  |
|               |            |            |            |            | 1                | 37        | 18.13                  |
|               |            |            |            |            | 1                | 74        | 18.01                  |
|               |            |            |            |            | 36               | 0         | 16.82                  |
|               |            |            |            |            | 36               | 18        | 16.74                  |
|               |            |            |            |            | 36               | 35        | 16.67                  |
|               |            |            |            |            | 75               | 0         | 16.81                  |
|               |            | H<br>19125 | 1902.5     | QPSK       | 1                | 0         | 18.99                  |
|               |            |            |            |            | 1                | 37        | 18.65                  |
|               |            |            |            |            | 1                | 74        | 18.81                  |
|               |            |            |            |            | 36               | 0         | 18.38                  |
|               |            |            |            |            | 36               | 18        | 18.36                  |
|               |            |            |            |            | 36               | 35        | 18.31                  |
|               |            |            |            |            | 75               | 0         | 18.61                  |
|               |            |            |            | 16-QAM     | 1                | 0         | 18.29                  |
|               |            |            |            |            | 1                | 37        | 17.93                  |
|               |            |            |            |            | 1                | 74        | 17.32                  |
|               |            |            |            |            | 36               | 0         | 16.58                  |
|               |            |            |            |            | 36               | 18        | 16.43                  |
|               |            |            |            |            | 36               | 35        | 16.35                  |
|               |            |            |            |            | 75               | 0         | 16.47                  |



| Band          | Band Width | Channel    | Freq.(MHz) | Modulation | RB Configuration |           | Average Power<br>(dBm) |
|---------------|------------|------------|------------|------------|------------------|-----------|------------------------|
|               |            |            |            |            | RB Size          | RB Offset |                        |
| LTE<br>Band 2 | 10MHz      | L<br>18650 | 1855       | QPSK       | 1                | 0         | 18.87                  |
|               |            |            |            |            | 1                | 24        | 18.98                  |
|               |            |            |            |            | 1                | 49        | 19.00                  |
|               |            |            |            |            | 25               | 0         | 18.9                   |
|               |            |            |            |            | 25               | 12        | 18.36                  |
|               |            |            |            |            | 25               | 24        | 18.35                  |
|               |            |            |            |            | 50               | 0         | 18.64                  |
|               |            |            |            | 16-QAM     | 1                | 0         | 17.91                  |
|               |            |            |            |            | 1                | 24        | 17.99                  |
|               |            |            |            |            | 1                | 49        | 18.13                  |
|               |            |            |            |            | 25               | 0         | 16.93                  |
|               |            |            |            |            | 25               | 12        | 16.80                  |
|               |            |            |            |            | 25               | 24        | 16.83                  |
|               |            |            |            |            | 50               | 0         | 16.85                  |
|               |            | M<br>18900 | 1880       | QPSK       | 1                | 0         | 18.76                  |
|               |            |            |            |            | 1                | 24        | 18.66                  |
|               |            |            |            |            | 1                | 49        | 18.84                  |
|               |            |            |            |            | 25               | 0         | 18.88                  |
|               |            |            |            |            | 25               | 12        | 18.15                  |
|               |            |            |            |            | 25               | 24        | 18.45                  |
|               |            |            |            |            | 50               | 0         | 18.57                  |
|               |            |            |            | 16-QAM     | 1                | 0         | 17.63                  |
|               |            |            |            |            | 1                | 24        | 18.06                  |
|               |            |            |            |            | 1                | 49        | 17.90                  |
|               |            |            |            |            | 25               | 0         | 16.84                  |
|               |            |            |            |            | 25               | 12        | 16.72                  |
|               |            |            |            |            | 25               | 24        | 16.73                  |
|               |            |            |            |            | 50               | 0         | 16.78                  |
|               |            | H<br>19150 | 1905       | QPSK       | 1                | 0         | 18.35                  |
|               |            |            |            |            | 1                | 24        | 18.25                  |
|               |            |            |            |            | 1                | 49        | 18.63                  |
|               |            |            |            |            | 25               | 0         | 18.31                  |
|               |            |            |            |            | 25               | 12        | 18.20                  |
|               |            |            |            |            | 25               | 24        | 18.87                  |
|               |            |            |            |            | 50               | 0         | 18.12                  |
|               |            |            |            | 16-QAM     | 1                | 0         | 17.77                  |
|               |            |            |            |            | 1                | 24        | 17.67                  |
|               |            |            |            |            | 1                | 49        | 17.33                  |
|               |            |            |            |            | 25               | 0         | 16.47                  |
|               |            |            |            |            | 25               | 12        | 16.3                   |
|               |            |            |            |            | 25               | 24        | 16.24                  |
|               |            |            |            |            | 50               | 0         | 16.41                  |



| Band          | Band Width | Channel    | Freq.(MHz) | Modulation | RB Configuration |           | Average Power<br>(dBm) |
|---------------|------------|------------|------------|------------|------------------|-----------|------------------------|
|               |            |            |            |            | RB Size          | RB Offset |                        |
| LTE<br>Band 2 | 5MHz       | L<br>18625 | 1852.5     | QPSK       | 1                | 0         | 18.81                  |
|               |            |            |            |            | 1                | 12        | 18.10                  |
|               |            |            |            |            | 1                | 24        | 18.51                  |
|               |            |            |            |            | 12               | 0         | 18.35                  |
|               |            |            |            |            | 12               | 6         | 18.18                  |
|               |            |            |            |            | 12               | 11        | 18.24                  |
|               |            |            |            |            | 25               | 0         | 18.29                  |
|               |            |            |            | 16-QAM     | 1                | 0         | 17.83                  |
|               |            |            |            |            | 1                | 12        | 18.40                  |
|               |            |            |            |            | 1                | 24        | 17.71                  |
|               |            |            |            |            | 12               | 0         | 16.95                  |
|               |            |            |            |            | 12               | 6         | 16.83                  |
|               |            |            |            |            | 12               | 11        | 16.88                  |
|               |            |            |            |            | 25               | 0         | 16.80                  |
|               |            | M<br>18900 | 1880       | QPSK       | 1                | 0         | 18.63                  |
|               |            |            |            |            | 1                | 12        | 18.35                  |
|               |            |            |            |            | 1                | 24        | 18.43                  |
|               |            |            |            |            | 12               | 0         | 18.86                  |
|               |            |            |            |            | 12               | 6         | 18.85                  |
|               |            |            |            |            | 12               | 11        | 18.74                  |
|               |            |            |            |            | 25               | 0         | 18.76                  |
|               |            |            |            | 16-QAM     | 1                | 0         | 17.81                  |
|               |            |            |            |            | 1                | 12        | 17.84                  |
|               |            |            |            |            | 1                | 24        | 17.57                  |
|               |            |            |            |            | 12               | 0         | 16.73                  |
|               |            |            |            |            | 12               | 6         | 16.75                  |
|               |            |            |            |            | 12               | 11        | 16.70                  |
|               |            |            |            |            | 25               | 0         | 16.69                  |
|               |            | H<br>19175 | 1907.5     | QPSK       | 1                | 0         | 18.18                  |
|               |            |            |            |            | 1                | 12        | 17.87                  |
|               |            |            |            |            | 1                | 24        | 17.88                  |
|               |            |            |            |            | 12               | 0         | 18.57                  |
|               |            |            |            |            | 12               | 6         | 17.99                  |
|               |            |            |            |            | 12               | 11        | 18.05                  |
|               |            |            |            |            | 25               | 0         | 18.36                  |
|               |            |            |            | 16-QAM     | 1                | 0         | 17.28                  |
|               |            |            |            |            | 1                | 12        | 17.40                  |
|               |            |            |            |            | 1                | 24        | 16.95                  |
|               |            |            |            |            | 12               | 0         | 16.37                  |
|               |            |            |            |            | 12               | 6         | 16.16                  |
|               |            |            |            |            | 12               | 11        | 16.19                  |
|               |            |            |            |            | 25               | 0         | 16.27                  |



| Band          | Band Width | Channel    | Freq.(MHz) | Modulation | RB Configuration |           | Average Power<br>(dBm) |
|---------------|------------|------------|------------|------------|------------------|-----------|------------------------|
|               |            |            |            |            | RB Size          | RB Offset |                        |
| LTE<br>Band 2 | 3MHz       | L<br>18615 | 1851.5     | QPSK       | 1                | 0         | 19.01                  |
|               |            |            |            |            | 1                | 7         | 18.32                  |
|               |            |            |            |            | 1                | 14        | 18.15                  |
|               |            |            |            |            | 8                | 0         | 18.24                  |
|               |            |            |            |            | 8                | 4         | 18.26                  |
|               |            |            |            |            | 8                | 7         | 18.54                  |
|               |            |            |            |            | 15               | 0         | 18.27                  |
|               |            |            |            | 16-QAM     | 1                | 0         | 18.20                  |
|               |            |            |            |            | 1                | 7         | 18.20                  |
|               |            |            |            |            | 1                | 14        | 18.08                  |
|               |            |            |            |            | 8                | 0         | 16.83                  |
|               |            |            |            |            | 8                | 4         | 16.74                  |
|               |            |            |            |            | 8                | 7         | 16.85                  |
|               |            |            |            |            | 15               | 0         | 16.77                  |
|               |            | M<br>18900 | 1880       | QPSK       | 1                | 0         | 18.65                  |
|               |            |            |            |            | 1                | 7         | 18.69                  |
|               |            |            |            |            | 1                | 14        | 18.57                  |
|               |            |            |            |            | 8                | 0         | 18.75                  |
|               |            |            |            |            | 8                | 4         | 18.73                  |
|               |            |            |            |            | 8                | 7         | 18.21                  |
|               |            |            |            |            | 15               | 0         | 17.20                  |
|               |            |            |            | 16-QAM     | 1                | 0         | 18.06                  |
|               |            |            |            |            | 1                | 7         | 17.96                  |
|               |            |            |            |            | 1                | 14        | 17.78                  |
|               |            |            |            |            | 8                | 0         | 16.71                  |
|               |            |            |            |            | 8                | 4         | 16.72                  |
|               |            |            |            |            | 8                | 7         | 16.66                  |
|               |            |            |            |            | 15               | 0         | 16.79                  |
|               |            | H<br>19185 | 1908.5     | QPSK       | 1                | 0         | 18.36                  |
|               |            |            |            |            | 1                | 7         | 18.22                  |
|               |            |            |            |            | 1                | 14        | 18.66                  |
|               |            |            |            |            | 8                | 0         | 18.74                  |
|               |            |            |            |            | 8                | 4         | 18.73                  |
|               |            |            |            |            | 8                | 7         | 18.48                  |
|               |            |            |            |            | 15               | 0         | 18.57                  |
|               |            |            |            | 16-QAM     | 1                | 0         | 17.45                  |
|               |            |            |            |            | 1                | 7         | 17.41                  |
|               |            |            |            |            | 1                | 14        | 17.50                  |
|               |            |            |            |            | 8                | 0         | 16.26                  |
|               |            |            |            |            | 8                | 4         | 16.14                  |
|               |            |            |            |            | 8                | 7         | 16.33                  |
|               |            |            |            |            | 15               | 0         | 16.16                  |



| Band          | Band Width | Channel    | Freq.(MHz) | Modulation | RB Configuration |           | Average Power<br>(dBm) |
|---------------|------------|------------|------------|------------|------------------|-----------|------------------------|
|               |            |            |            |            | RB Size          | RB Offset |                        |
| LTE<br>Band 2 | 1.4MHz     | L<br>18607 | 1850.7     | QPSK       | 1                | 0         | 18.52                  |
|               |            |            |            |            | 1                | 2         | 18.25                  |
|               |            |            |            |            | 1                | 5         | 18.22                  |
|               |            |            |            |            | 3                | 0         | 18.14                  |
|               |            |            |            |            | 3                | 1         | 18.45                  |
|               |            |            |            |            | 3                | 2         | 18.25                  |
|               |            |            |            |            | 6                | 0         | 18.29                  |
|               |            |            |            | 16-QAM     | 1                | 0         | 17.75                  |
|               |            |            |            |            | 1                | 2         | 18.18                  |
|               |            |            |            |            | 1                | 5         | 17.70                  |
|               |            |            |            |            | 3                | 0         | 17.99                  |
|               |            |            |            |            | 3                | 1         | 17.90                  |
|               |            |            |            |            | 3                | 2         | 17.95                  |
|               |            |            |            |            | 6                | 0         | 16.9                   |
|               |            | M<br>18900 | 1880       | QPSK       | 1                | 0         | 18.51                  |
|               |            |            |            |            | 1                | 2         | 18.76                  |
|               |            |            |            |            | 1                | 5         | 18.55                  |
|               |            |            |            |            | 3                | 0         | 18.54                  |
|               |            |            |            |            | 3                | 1         | 18.17                  |
|               |            |            |            |            | 3                | 2         | 18.32                  |
|               |            |            |            |            | 6                | 0         | 18.76                  |
|               |            |            |            | 16-QAM     | 1                | 0         | 17.45                  |
|               |            |            |            |            | 1                | 2         | 17.99                  |
|               |            |            |            |            | 1                | 5         | 17.69                  |
|               |            |            |            |            | 3                | 0         | 17.65                  |
|               |            |            |            |            | 3                | 2         | 17.80                  |
|               |            |            |            |            | 3                | 5         | 17.87                  |
|               |            |            |            |            | 6                | 0         | 16.65                  |
|               |            | H<br>19193 | 1909.3     | QPSK       | 1                | 0         | 17.85                  |
|               |            |            |            |            | 1                | 2         | 17.65                  |
|               |            |            |            |            | 1                | 5         | 18.05                  |
|               |            |            |            |            | 3                | 0         | 18.36                  |
|               |            |            |            |            | 3                | 1         | 18.25                  |
|               |            |            |            |            | 3                | 2         | 17.69                  |
|               |            |            |            |            | 6                | 0         | 17.98                  |
|               |            |            |            | 16-QAM     | 1                | 0         | 17.24                  |
|               |            |            |            |            | 1                | 2         | 17.26                  |
|               |            |            |            |            | 1                | 5         | 16.89                  |
|               |            |            |            |            | 3                | 0         | 17.14                  |
|               |            |            |            |            | 3                | 1         | 17.28                  |
|               |            |            |            |            | 3                | 2         | 17.10                  |
|               |            |            |            |            | 6                | 0         | 16.16                  |



| Band          | Band Width | Channel    | Freq.(MHz) | Modulation | RB Configuration |           | Average Power<br>(dBm) |
|---------------|------------|------------|------------|------------|------------------|-----------|------------------------|
|               |            |            |            |            | RB Size          | RB Offset |                        |
| LTE<br>Band 4 | 20MHz      | L<br>20050 | 1720.0     | QPSK       | 1                | 0         | 19.39                  |
|               |            |            |            |            | 1                | 49        | 19.21                  |
|               |            |            |            |            | 1                | 99        | 18.96                  |
|               |            |            |            |            | 50               | 0         | 19.17                  |
|               |            |            |            |            | 50               | 25        | 19.11                  |
|               |            |            |            |            | 50               | 49        | 19.31                  |
|               |            |            |            |            | 100              | 0         | 19.15                  |
|               |            |            |            | 16-QAM     | 1                | 0         | 18.76                  |
|               |            |            |            |            | 1                | 49        | 18.16                  |
|               |            |            |            |            | 1                | 99        | 17.72                  |
|               |            |            |            |            | 50               | 0         | 17.14                  |
|               |            |            |            |            | 50               | 25        | 16.90                  |
|               |            |            |            |            | 50               | 49        | 16.86                  |
|               |            |            |            |            | 100              | 0         | 16.98                  |
|               |            | M<br>20175 | 1732.5     | QPSK       | 1                | 0         | 19.10                  |
|               |            |            |            |            | 1                | 49        | 18.89                  |
|               |            |            |            |            | 1                | 99        | 19.05                  |
|               |            |            |            |            | 50               | 0         | 19.02                  |
|               |            |            |            |            | 50               | 25        | 18.88                  |
|               |            |            |            |            | 50               | 49        | 19.05                  |
|               |            |            |            |            | 100              | 0         | 18.97                  |
|               |            |            |            | 16-QAM     | 1                | 0         | 18.12                  |
|               |            |            |            |            | 1                | 49        | 18.20                  |
|               |            |            |            |            | 1                | 99        | 17.92                  |
|               |            |            |            |            | 50               | 0         | 17.00                  |
|               |            |            |            |            | 50               | 25        | 16.83                  |
|               |            |            |            |            | 50               | 49        | 16.87                  |
|               |            |            |            |            | 100              | 0         | 16.9                   |
|               |            | H<br>20300 | 1745.0     | QPSK       | 1                | 0         | 18.25                  |
|               |            |            |            |            | 1                | 49        | 18.36                  |
|               |            |            |            |            | 1                | 99        | 18.71                  |
|               |            |            |            |            | 50               | 0         | 18.81                  |
|               |            |            |            |            | 50               | 25        | 18.69                  |
|               |            |            |            |            | 50               | 49        | 18.77                  |
|               |            |            |            |            | 100              | 0         | 18.64                  |
|               |            |            |            | 16-QAM     | 1                | 0         | 18.28                  |
|               |            |            |            |            | 1                | 49        | 18.68                  |
|               |            |            |            |            | 1                | 99        | 17.83                  |
|               |            |            |            |            | 50               | 0         | 17.10                  |
|               |            |            |            |            | 50               | 25        | 16.99                  |
|               |            |            |            |            | 50               | 49        | 17.00                  |
|               |            |            |            |            | 100              | 0         | 17.04                  |



| Band          | Band Width | Channel    | Freq.(MHz) | Modulation | RB Configuration |           | Average Power<br>(dBm) |
|---------------|------------|------------|------------|------------|------------------|-----------|------------------------|
|               |            |            |            |            | RB Size          | RB Offset |                        |
| LTE<br>Band 4 | 15MHz      | L<br>20025 | 1717.5     | QPSK       | 1                | 0         | 18.66                  |
|               |            |            |            |            | 1                | 37        | 18.52                  |
|               |            |            |            |            | 1                | 74        | 18.59                  |
|               |            |            |            |            | 36               | 0         | 18.69                  |
|               |            |            |            |            | 36               | 18        | 18.99                  |
|               |            |            |            |            | 36               | 35        | 19.04                  |
|               |            |            |            |            | 75               | 0         | 18.47                  |
|               |            |            |            | 16-QAM     | 1                | 0         | 18.77                  |
|               |            |            |            |            | 1                | 37        | 18.5                   |
|               |            |            |            |            | 1                | 74        | 17.82                  |
|               |            |            |            |            | 36               | 0         | 17.03                  |
|               |            |            |            |            | 36               | 18        | 17.03                  |
|               |            |            |            |            | 36               | 35        | 16.87                  |
|               |            |            |            |            | 75               | 0         | 16.99                  |
|               |            | M<br>20175 | 1732.5     | QPSK       | 1                | 0         | 18.68                  |
|               |            |            |            |            | 1                | 37        | 18.65                  |
|               |            |            |            |            | 1                | 74        | 18.05                  |
|               |            |            |            |            | 36               | 0         | 18.36                  |
|               |            |            |            |            | 36               | 18        | 18.37                  |
|               |            |            |            |            | 36               | 35        | 18.34                  |
|               |            |            |            |            | 75               | 0         | 18.53                  |
|               |            |            |            | 16-QAM     | 1                | 0         | 18.39                  |
|               |            |            |            |            | 1                | 37        | 18.22                  |
|               |            |            |            |            | 1                | 74        | 18.03                  |
|               |            |            |            |            | 36               | 0         | 16.87                  |
|               |            |            |            |            | 36               | 18        | 16.88                  |
|               |            |            |            |            | 36               | 35        | 16.85                  |
|               |            |            |            |            | 75               | 0         | 16.82                  |
|               |            | H<br>20325 | 1747.5     | QPSK       | 1                | 0         | 18.68                  |
|               |            |            |            |            | 1                | 37        | 18.65                  |
|               |            |            |            |            | 1                | 74        | 18.55                  |
|               |            |            |            |            | 36               | 0         | 18.45                  |
|               |            |            |            |            | 36               | 18        | 18.54                  |
|               |            |            |            |            | 36               | 35        | 18.78                  |
|               |            |            |            |            | 75               | 0         | 18.68                  |
|               |            |            |            | 16-QAM     | 1                | 0         | 18.64                  |
|               |            |            |            |            | 1                | 37        | 18.42                  |
|               |            |            |            |            | 1                | 74        | 17.72                  |
|               |            |            |            |            | 36               | 0         | 17.05                  |
|               |            |            |            |            | 36               | 18        | 17.01                  |
|               |            |            |            |            | 36               | 35        | 16.88                  |
|               |            |            |            |            | 75               | 0         | 16.99                  |



| Band          | Band Width | Channel    | Freq.(MHz) | Modulation | RB Configuration |           | Average Power<br>(dBm) |
|---------------|------------|------------|------------|------------|------------------|-----------|------------------------|
|               |            |            |            |            | RB Size          | RB Offset |                        |
| LTE<br>Band 4 | 10MHz      | L<br>20000 | 1715.0     | QPSK       | 1                | 0         | 18.99                  |
|               |            |            |            |            | 1                | 24        | 19.01                  |
|               |            |            |            |            | 1                | 49        | 18.86                  |
|               |            |            |            |            | 25               | 0         | 19.16                  |
|               |            |            |            |            | 25               | 12        | 18.98                  |
|               |            |            |            |            | 25               | 24        | 18.98                  |
|               |            |            |            |            | 50               | 0         | 18.68                  |
|               |            |            |            | 16-QAM     | 1                | 0         | 18.40                  |
|               |            |            |            |            | 1                | 24        | 17.91                  |
|               |            |            |            |            | 1                | 49        | 18.18                  |
|               |            |            |            |            | 25               | 0         | 17.05                  |
|               |            |            |            |            | 25               | 12        | 16.91                  |
|               |            |            |            |            | 25               | 24        | 16.93                  |
|               |            |            |            |            | 50               | 0         | 17.00                  |
|               |            | M<br>20175 | 1732.5     | QPSK       | 1                | 0         | 18.74                  |
|               |            |            |            |            | 1                | 24        | 18.77                  |
|               |            |            |            |            | 1                | 49        | 18.88                  |
|               |            |            |            |            | 25               | 0         | 18.93                  |
|               |            |            |            |            | 25               | 12        | 18.25                  |
|               |            |            |            |            | 25               | 24        | 18.57                  |
|               |            |            |            |            | 50               | 0         | 18.75                  |
|               |            |            |            | 16-QAM     | 1                | 0         | 17.93                  |
|               |            |            |            |            | 1                | 24        | 17.93                  |
|               |            |            |            |            | 1                | 49        | 17.82                  |
|               |            |            |            |            | 25               | 0         | 16.84                  |
|               |            |            |            |            | 25               | 12        | 16.74                  |
|               |            |            |            |            | 25               | 24        | 16.72                  |
|               |            |            |            |            | 50               | 0         | 16.84                  |
|               |            | H<br>20350 | 1750.0     | QPSK       | 1                | 0         | 18.75                  |
|               |            |            |            |            | 1                | 24        | 18.66                  |
|               |            |            |            |            | 1                | 49        | 18.81                  |
|               |            |            |            |            | 25               | 0         | 18.33                  |
|               |            |            |            |            | 25               | 12        | 18.81                  |
|               |            |            |            |            | 25               | 24        | 18.52                  |
|               |            |            |            |            | 50               | 0         | 18.51                  |
|               |            |            |            | 16-QAM     | 1                | 0         | 17.78                  |
|               |            |            |            |            | 1                | 24        | 18.31                  |
|               |            |            |            |            | 1                | 49        | 17.86                  |
|               |            |            |            |            | 25               | 0         | 16.94                  |
|               |            |            |            |            | 25               | 12        | 16.95                  |
|               |            |            |            |            | 25               | 24        | 16.80                  |
|               |            |            |            |            | 50               | 0         | 16.85                  |



| Band          | Band Width | Channel    | Freq.(MHz) | Modulation | RB Configuration |           | Average Power<br>(dBm) |
|---------------|------------|------------|------------|------------|------------------|-----------|------------------------|
|               |            |            |            |            | RB Size          | RB Offset |                        |
| LTE<br>Band 4 | 5MHz       | L<br>19975 | 1712.5     | QPSK       | 1                | 0         | 18.95                  |
|               |            |            |            |            | 1                | 12        | 18.69                  |
|               |            |            |            |            | 1                | 24        | 18.44                  |
|               |            |            |            |            | 12               | 0         | 19.12                  |
|               |            |            |            |            | 12               | 6         | 18.63                  |
|               |            |            |            |            | 12               | 11        | 18.68                  |
|               |            |            |            |            | 25               | 0         | 18.77                  |
|               |            |            |            | 16-QAM     | 1                | 0         | 18.20                  |
|               |            |            |            |            | 1                | 12        | 18.27                  |
|               |            |            |            |            | 1                | 24        | 17.55                  |
|               |            |            |            |            | 12               | 0         | 17.20                  |
|               |            |            |            |            | 12               | 6         | 16.94                  |
|               |            |            |            |            | 12               | 11        | 16.97                  |
|               |            |            |            |            | 25               | 0         | 16.97                  |
|               |            | M<br>20175 | 1732.5     | QPSK       | 1                | 0         | 18.64                  |
|               |            |            |            |            | 1                | 12        | 18.88                  |
|               |            |            |            |            | 1                | 24        | 18.54                  |
|               |            |            |            |            | 12               | 0         | 18.81                  |
|               |            |            |            |            | 12               | 6         | 18.65                  |
|               |            |            |            |            | 12               | 11        | 18.76                  |
|               |            |            |            |            | 25               | 0         | 18.67                  |
|               |            |            |            | 16-QAM     | 1                | 0         | 17.54                  |
|               |            |            |            |            | 1                | 12        | 18.19                  |
|               |            |            |            |            | 1                | 24        | 17.50                  |
|               |            |            |            |            | 12               | 0         | 16.80                  |
|               |            |            |            |            | 12               | 6         | 16.70                  |
|               |            |            |            |            | 12               | 11        | 16.63                  |
|               |            |            |            |            | 25               | 0         | 16.70                  |
|               |            | H<br>20375 | 1752.5     | QPSK       | 1                | 0         | 18.22                  |
|               |            |            |            |            | 1                | 12        | 18.24                  |
|               |            |            |            |            | 1                | 24        | 18.14                  |
|               |            |            |            |            | 12               | 0         | 18.21                  |
|               |            |            |            |            | 12               | 6         | 18.32                  |
|               |            |            |            |            | 12               | 11        | 18.53                  |
|               |            |            |            |            | 25               | 0         | 18.34                  |
|               |            |            |            | 16-QAM     | 1                | 0         | 17.99                  |
|               |            |            |            |            | 1                | 12        | 17.86                  |
|               |            |            |            |            | 1                | 24        | 17.57                  |
|               |            |            |            |            | 12               | 0         | 16.78                  |
|               |            |            |            |            | 12               | 6         | 16.69                  |
|               |            |            |            |            | 12               | 11        | 16.54                  |
|               |            |            |            |            | 25               | 0         | 16.60                  |



| Band          | Band Width | Channel    | Freq.(MHz) | Modulation | RB Configuration |           | Average Power<br>(dBm) |
|---------------|------------|------------|------------|------------|------------------|-----------|------------------------|
|               |            |            |            |            | RB Size          | RB Offset |                        |
| LTE<br>Band 4 | 3MHz       | L<br>19965 | 1711.5     | QPSK       | 1                | 0         | 18.32                  |
|               |            |            |            |            | 1                | 7         | 18.25                  |
|               |            |            |            |            | 1                | 14        | 18.62                  |
|               |            |            |            |            | 8                | 0         | 18.66                  |
|               |            |            |            |            | 8                | 4         | 18.16                  |
|               |            |            |            |            | 8                | 7         | 18.18                  |
|               |            |            |            |            | 15               | 0         | 18.34                  |
|               |            |            |            | 16-QAM     | 1                | 0         | 18.16                  |
|               |            |            |            |            | 1                | 7         | 18.45                  |
|               |            |            |            |            | 1                | 14        | 18.29                  |
|               |            |            |            |            | 8                | 0         | 17.12                  |
|               |            |            |            |            | 8                | 4         | 16.87                  |
|               |            |            |            |            | 8                | 7         | 16.92                  |
|               |            |            |            |            | 15               | 0         | 17.17                  |
|               |            | M<br>20175 | 1732.5     | QPSK       | 1                | 0         | 18.65                  |
|               |            |            |            |            | 1                | 7         | 18.25                  |
|               |            |            |            |            | 1                | 14        | 18.54                  |
|               |            |            |            |            | 8                | 0         | 18.66                  |
|               |            |            |            |            | 8                | 4         | 18.69                  |
|               |            |            |            |            | 8                | 7         | 18.46                  |
|               |            |            |            |            | 15               | 0         | 18.27                  |
|               |            |            |            | 16-QAM     | 1                | 0         | 17.93                  |
|               |            |            |            |            | 1                | 7         | 17.94                  |
|               |            |            |            |            | 1                | 14        | 17.80                  |
|               |            |            |            |            | 8                | 0         | 16.75                  |
|               |            |            |            |            | 8                | 4         | 16.77                  |
|               |            |            |            |            | 8                | 7         | 16.65                  |
|               |            |            |            |            | 15               | 0         | 16.78                  |
|               |            | H<br>20385 | 1753.5     | QPSK       | 1                | 0         | 18.68                  |
|               |            |            |            |            | 1                | 7         | 18.84                  |
|               |            |            |            |            | 1                | 14        | 18.45                  |
|               |            |            |            |            | 8                | 0         | 18.57                  |
|               |            |            |            |            | 8                | 4         | 18.63                  |
|               |            |            |            |            | 8                | 7         | 18.25                  |
|               |            |            |            |            | 15               | 0         | 18.57                  |
|               |            |            |            | 16-QAM     | 1                | 0         | 18.04                  |
|               |            |            |            |            | 1                | 7         | 17.57                  |
|               |            |            |            |            | 1                | 14        | 17.90                  |
|               |            |            |            |            | 8                | 0         | 16.70                  |
|               |            |            |            |            | 8                | 4         | 16.45                  |
|               |            |            |            |            | 8                | 7         | 16.39                  |
|               |            |            |            |            | 15               | 0         | 16.70                  |



| Band          | Band Width | Channel    | Freq.(MHz) | Modulation | RB Configuration |           | Average Power<br>(dBm) |
|---------------|------------|------------|------------|------------|------------------|-----------|------------------------|
|               |            |            |            |            | RB Size          | RB Offset |                        |
| LTE<br>Band 4 | 1.4MHz     | L<br>19957 | 1710.7     | QPSK       | 1                | 0         | 18.73                  |
|               |            |            |            |            | 1                | 2         | 18.98                  |
|               |            |            |            |            | 1                | 5         | 18.81                  |
|               |            |            |            |            | 3                | 0         | 18.72                  |
|               |            |            |            |            | 3                | 1         | 18.63                  |
|               |            |            |            |            | 3                | 2         | 18.58                  |
|               |            |            |            |            | 6                | 0         | 19.16                  |
|               |            |            |            | 16-QAM     | 1                | 0         | 17.97                  |
|               |            |            |            |            | 1                | 2         | 18.55                  |
|               |            |            |            |            | 1                | 5         | 18.04                  |
|               |            |            |            |            | 3                | 0         | 18.11                  |
|               |            |            |            |            | 3                | 1         | 18.27                  |
|               |            |            |            |            | 3                | 2         | 18.15                  |
|               |            |            |            |            | 6                | 0         | 17.10                  |
|               |            | M<br>20175 | 1732.5     | QPSK       | 1                | 0         | 18.38                  |
|               |            |            |            |            | 1                | 2         | 18.40                  |
|               |            |            |            |            | 1                | 5         | 18.52                  |
|               |            |            |            |            | 3                | 0         | 18.41                  |
|               |            |            |            |            | 3                | 1         | 18.62                  |
|               |            |            |            |            | 3                | 2         | 18.12                  |
|               |            |            |            |            | 6                | 0         | 18.83                  |
|               |            |            |            | 16-QAM     | 1                | 0         | 17.50                  |
|               |            |            |            |            | 1                | 2         | 17.84                  |
|               |            |            |            |            | 1                | 5         | 17.91                  |
|               |            |            |            |            | 3                | 0         | 17.80                  |
|               |            |            |            |            | 3                | 2         | 17.85                  |
|               |            |            |            |            | 3                | 5         | 17.80                  |
|               |            |            |            |            | 6                | 0         | 16.81                  |
|               |            | H<br>20393 | 1754.3     | QPSK       | 1                | 0         | 18.56                  |
|               |            |            |            |            | 1                | 2         | 18.26                  |
|               |            |            |            |            | 1                | 5         | 18.31                  |
|               |            |            |            |            | 3                | 0         | 18.36                  |
|               |            |            |            |            | 3                | 1         | 18.67                  |
|               |            |            |            |            | 3                | 2         | 18.55                  |
|               |            |            |            |            | 6                | 0         | 18.63                  |
|               |            |            |            | 16-QAM     | 1                | 0         | 17.32                  |
|               |            |            |            |            | 1                | 2         | 17.70                  |
|               |            |            |            |            | 1                | 5         | 17.64                  |
|               |            |            |            |            | 3                | 0         | 17.63                  |
|               |            |            |            |            | 3                | 1         | 17.68                  |
|               |            |            |            |            | 3                | 2         | 17.64                  |
|               |            |            |            |            | 6                | 0         | 16.53                  |



| Band          | Band Width | Channel    | Freq.(MHz) | Modulation | RB Configuration |           | Average Power<br>(dBm) |
|---------------|------------|------------|------------|------------|------------------|-----------|------------------------|
|               |            |            |            |            | RB Size          | RB Offset |                        |
| LTE<br>Band 7 | 20MHz      | L<br>20850 | 2510       | QPSK       | 1                | 0         | 20.42                  |
|               |            |            |            |            | 1                | 49        | 20.05                  |
|               |            |            |            |            | 1                | 99        | 20.16                  |
|               |            |            |            |            | 50               | 0         | 20.32                  |
|               |            |            |            |            | 50               | 25        | 20.31                  |
|               |            |            |            |            | 50               | 49        | 20.24                  |
|               |            |            |            |            | 100              | 0         | 20.32                  |
|               |            |            |            | 16-QAM     | 1                | 0         | 19.37                  |
|               |            |            |            |            | 1                | 49        | 19.39                  |
|               |            |            |            |            | 1                | 99        | 19.34                  |
|               |            |            |            |            | 50               | 0         | 18.22                  |
|               |            |            |            |            | 50               | 25        | 18.05                  |
|               |            |            |            |            | 50               | 49        | 18.10                  |
|               |            |            |            |            | 100              | 0         | 18.16                  |
|               |            | M<br>21100 | 2535       | QPSK       | 1                | 0         | 20.72                  |
|               |            |            |            |            | 1                | 49        | 20.35                  |
|               |            |            |            |            | 1                | 99        | 20.57                  |
|               |            |            |            |            | 50               | 0         | 20.6                   |
|               |            |            |            |            | 50               | 25        | 20.13                  |
|               |            |            |            |            | 50               | 49        | 20.30                  |
|               |            |            |            |            | 100              | 0         | 20.41                  |
|               |            |            |            | 16-QAM     | 1                | 0         | 19.66                  |
|               |            |            |            |            | 1                | 49        | 19.80                  |
|               |            |            |            |            | 1                | 99        | 19.82                  |
|               |            |            |            |            | 50               | 0         | 18.61                  |
|               |            |            |            |            | 50               | 25        | 18.55                  |
|               |            |            |            |            | 50               | 49        | 18.51                  |
|               |            |            |            |            | 100              | 0         | 18.55                  |
|               |            | H<br>21350 | 2560       | QPSK       | 1                | 0         | 21.25                  |
|               |            |            |            |            | 1                | 49        | 20.69                  |
|               |            |            |            |            | 1                | 99        | 20.36                  |
|               |            |            |            |            | 50               | 0         | 20.88                  |
|               |            |            |            |            | 50               | 25        | 20.38                  |
|               |            |            |            |            | 50               | 49        | 20.87                  |
|               |            |            |            |            | 100              | 0         | 20.79                  |
|               |            |            |            | 16-QAM     | 1                | 0         | 20.47                  |
|               |            |            |            |            | 1                | 49        | 20.26                  |
|               |            |            |            |            | 1                | 99        | 19.13                  |
|               |            |            |            |            | 50               | 0         | 18.98                  |
|               |            |            |            |            | 50               | 25        | 18.66                  |
|               |            |            |            |            | 50               | 49        | 18.51                  |
|               |            |            |            |            | 100              | 0         | 18.71                  |



| Band          | Band Width | Channel    | Freq.(MHz) | Modulation | RB Configuration |           | Average Power<br>(dBm) |
|---------------|------------|------------|------------|------------|------------------|-----------|------------------------|
|               |            |            |            |            | RB Size          | RB Offset |                        |
| LTE<br>Band 7 | 15MHz      | L<br>20825 | 2507.5     | QPSK       | 1                | 0         | 20.12                  |
|               |            |            |            |            | 1                | 37        | 20.23                  |
|               |            |            |            |            | 1                | 74        | 20.11                  |
|               |            |            |            |            | 36               | 0         | 20.3                   |
|               |            |            |            |            | 36               | 18        | 20.31                  |
|               |            |            |            |            | 36               | 35        | 20.54                  |
|               |            |            |            |            | 75               | 0         | 20.42                  |
|               |            |            |            | 16-QAM     | 1                | 0         | 19.26                  |
|               |            |            |            |            | 1                | 37        | 19.43                  |
|               |            |            |            |            | 1                | 74        | 19.26                  |
|               |            |            |            |            | 36               | 0         | 18.18                  |
|               |            |            |            |            | 36               | 18        | 18.07                  |
|               |            |            |            |            | 36               | 35        | 18.09                  |
|               |            |            |            |            | 75               | 0         | 18.14                  |
|               |            | M<br>21100 | 2535       | QPSK       | 1                | 0         | 20.15                  |
|               |            |            |            |            | 1                | 37        | 20.18                  |
|               |            |            |            |            | 1                | 74        | 20.16                  |
|               |            |            |            |            | 36               | 0         | 20.45                  |
|               |            |            |            |            | 36               | 18        | 20.57                  |
|               |            |            |            |            | 36               | 35        | 20.58                  |
|               |            |            |            |            | 75               | 0         | 20.75                  |
|               |            |            |            | 16-QAM     | 1                | 0         | 19.90                  |
|               |            |            |            |            | 1                | 37        | 19.80                  |
|               |            |            |            |            | 1                | 74        | 19.49                  |
|               |            |            |            |            | 36               | 0         | 18.56                  |
|               |            |            |            |            | 36               | 18        | 18.57                  |
|               |            |            |            |            | 36               | 35        | 18.54                  |
|               |            |            |            |            | 75               | 0         | 18.56                  |
|               |            | H<br>21375 | 2562.5     | QPSK       | 1                | 0         | 20.68                  |
|               |            |            |            |            | 1                | 37        | 20.66                  |
|               |            |            |            |            | 1                | 74        | 20.10                  |
|               |            |            |            |            | 36               | 0         | 20.35                  |
|               |            |            |            |            | 36               | 18        | 20.78                  |
|               |            |            |            |            | 36               | 35        | 20.98                  |
|               |            |            |            |            | 75               | 0         | 20.45                  |
|               |            |            |            | 16-QAM     | 1                | 0         | 20.31                  |
|               |            |            |            |            | 1                | 37        | 19.84                  |
|               |            |            |            |            | 1                | 74        | 19.24                  |
|               |            |            |            |            | 36               | 0         | 18.72                  |
|               |            |            |            |            | 36               | 18        | 18.59                  |
|               |            |            |            |            | 36               | 35        | 18.35                  |
|               |            |            |            |            | 75               | 0         | 18.55                  |



| Band          | Band Width | Channel    | Freq.(MHz) | Modulation | RB Configuration |           | Average Power<br>(dBm) |
|---------------|------------|------------|------------|------------|------------------|-----------|------------------------|
|               |            |            |            |            | RB Size          | RB Offset |                        |
| LTE<br>Band 7 | 10MHz      | L<br>20800 | 2505       | QPSK       | 1                | 0         | 20.36                  |
|               |            |            |            |            | 1                | 24        | 20.30                  |
|               |            |            |            |            | 1                | 49        | 20.57                  |
|               |            |            |            |            | 25               | 0         | 20.17                  |
|               |            |            |            |            | 25               | 12        | 20.58                  |
|               |            |            |            |            | 25               | 24        | 20.60                  |
|               |            |            |            |            | 50               | 0         | 20.34                  |
|               |            |            |            | 16-QAM     | 1                | 0         | 19.38                  |
|               |            |            |            |            | 1                | 24        | 19.36                  |
|               |            |            |            |            | 1                | 49        | 19.27                  |
|               |            |            |            |            | 25               | 0         | 18.21                  |
|               |            |            |            |            | 25               | 12        | 18.08                  |
|               |            |            |            |            | 25               | 24        | 18.08                  |
|               |            |            |            |            | 50               | 0         | 18.20                  |
|               |            | M<br>21100 | 2535       | QPSK       | 1                | 0         | 20.12                  |
|               |            |            |            |            | 1                | 24        | 20.11                  |
|               |            |            |            |            | 1                | 49        | 20.32                  |
|               |            |            |            |            | 25               | 0         | 20.31                  |
|               |            |            |            |            | 25               | 12        | 20.15                  |
|               |            |            |            |            | 25               | 24        | 20.14                  |
|               |            |            |            |            | 50               | 0         | 20.36                  |
|               |            |            |            | 16-QAM     | 1                | 0         | 19.65                  |
|               |            |            |            |            | 1                | 24        | 19.55                  |
|               |            |            |            |            | 1                | 49        | 19.82                  |
|               |            |            |            |            | 25               | 0         | 18.54                  |
|               |            |            |            |            | 25               | 12        | 18.49                  |
|               |            |            |            |            | 25               | 24        | 18.44                  |
|               |            |            |            |            | 50               | 0         | 18.55                  |
|               |            | H<br>21400 | 2565       | QPSK       | 1                | 0         | 20.55                  |
|               |            |            |            |            | 1                | 24        | 20.65                  |
|               |            |            |            |            | 1                | 49        | 20.61                  |
|               |            |            |            |            | 25               | 0         | 20.51                  |
|               |            |            |            |            | 25               | 12        | 20.15                  |
|               |            |            |            |            | 25               | 24        | 20.38                  |
|               |            |            |            |            | 50               | 0         | 20.67                  |
|               |            |            |            | 16-QAM     | 1                | 0         | 19.65                  |
|               |            |            |            |            | 1                | 24        | 19.55                  |
|               |            |            |            |            | 1                | 49        | 19.82                  |
|               |            |            |            |            | 25               | 0         | 18.54                  |
|               |            |            |            |            | 25               | 12        | 18.49                  |
|               |            |            |            |            | 25               | 24        | 18.44                  |
|               |            |            |            |            | 50               | 0         | 18.55                  |



| Band          | Band Width | Channel    | Freq.(MHz) | Modulation | RB Configuration |           | Average Power<br>(dBm) |
|---------------|------------|------------|------------|------------|------------------|-----------|------------------------|
|               |            |            |            |            | RB Size          | RB Offset |                        |
| LTE<br>Band 7 | 5MHz       | L<br>20775 | 2502.5     | QPSK       | 1                | 0         | 20.09                  |
|               |            |            |            |            | 1                | 12        | 19.88                  |
|               |            |            |            |            | 1                | 24        | 19.87                  |
|               |            |            |            |            | 12               | 0         | 19.86                  |
|               |            |            |            |            | 12               | 6         | 19.96                  |
|               |            |            |            |            | 12               | 11        | 20.01                  |
|               |            |            |            |            | 25               | 0         | 20.15                  |
|               |            |            |            | 16-QAM     | 1                | 0         | 19.27                  |
|               |            |            |            |            | 1                | 12        | 19.68                  |
|               |            |            |            |            | 1                | 24        | 19.01                  |
|               |            |            |            |            | 12               | 0         | 18.31                  |
|               |            |            |            |            | 12               | 6         | 18.25                  |
|               |            |            |            |            | 12               | 11        | 18.20                  |
|               |            |            |            |            | 25               | 0         | 18.17                  |
|               |            | M<br>21100 | 2535       | QPSK       | 1                | 0         | 20.40                  |
|               |            |            |            |            | 1                | 12        | 20.12                  |
|               |            |            |            |            | 1                | 24        | 20.25                  |
|               |            |            |            |            | 12               | 0         | 20.60                  |
|               |            |            |            |            | 12               | 6         | 20.35                  |
|               |            |            |            |            | 12               | 11        | 20.11                  |
|               |            |            |            |            | 25               | 0         | 20.34                  |
|               |            |            |            | 16-QAM     | 1                | 0         | 19.50                  |
|               |            |            |            |            | 1                | 12        | 19.88                  |
|               |            |            |            |            | 1                | 24        | 19.10                  |
|               |            |            |            |            | 12               | 0         | 18.56                  |
|               |            |            |            |            | 12               | 6         | 18.50                  |
|               |            |            |            |            | 12               | 11        | 18.49                  |
|               |            |            |            |            | 25               | 0         | 18.51                  |
|               |            | H<br>21425 | 2567.5     | QPSK       | 1                | 0         | 20.35                  |
|               |            |            |            |            | 1                | 12        | 19.99                  |
|               |            |            |            |            | 1                | 24        | 19.93                  |
|               |            |            |            |            | 12               | 0         | 20.10                  |
|               |            |            |            |            | 12               | 6         | 20.15                  |
|               |            |            |            |            | 12               | 11        | 20.22                  |
|               |            |            |            |            | 25               | 0         | 20.19                  |
|               |            |            |            | 16-QAM     | 1                | 0         | 19.36                  |
|               |            |            |            |            | 1                | 12        | 19.69                  |
|               |            |            |            |            | 1                | 24        | 19.05                  |
|               |            |            |            |            | 12               | 0         | 18.40                  |
|               |            |            |            |            | 12               | 6         | 18.29                  |
|               |            |            |            |            | 12               | 11        | 18.27                  |
|               |            |            |            |            | 25               | 0         | 18.29                  |



| Band           | Band Width | Channel    | Freq.(MHz) | Modulation | RB Configuration |           | Average Power<br>(dBm) |
|----------------|------------|------------|------------|------------|------------------|-----------|------------------------|
|                |            |            |            |            | RB Size          | RB Offset |                        |
| LTE<br>Band 12 | 10MHz      | L<br>23060 | 704        | QPSK       | 1                | 0         | 21.89                  |
|                |            |            |            |            | 1                | 24        | 21.77                  |
|                |            |            |            |            | 1                | 49        | 21.73                  |
|                |            |            |            |            | 25               | 0         | 21.63                  |
|                |            |            |            |            | 25               | 12        | 21.68                  |
|                |            |            |            |            | 25               | 24        | 21.10                  |
|                |            |            |            |            | 50               | 0         | 21.04                  |
|                |            |            |            | 16-QAM     | 1                | 0         | 20.92                  |
|                |            |            |            |            | 1                | 24        | 21.20                  |
|                |            |            |            |            | 1                | 49        | 20.95                  |
|                |            |            |            |            | 25               | 0         | 19.99                  |
|                |            |            |            |            | 25               | 12        | 19.84                  |
|                |            |            |            |            | 25               | 24        | 19.73                  |
|                |            |            |            |            | 50               | 0         | 19.88                  |
|                |            | M<br>23095 | 707.5      | QPSK       | 1                | 0         | 21.82                  |
|                |            |            |            |            | 1                | 24        | 21.55                  |
|                |            |            |            |            | 1                | 49        | 21.67                  |
|                |            |            |            |            | 25               | 0         | 21.97                  |
|                |            |            |            |            | 25               | 12        | 21.85                  |
|                |            |            |            |            | 25               | 24        | 21.87                  |
|                |            |            |            |            | 50               | 0         | 21.66                  |
|                |            |            |            | 16-QAM     | 1                | 0         | 20.74                  |
|                |            |            |            |            | 1                | 24        | 21.07                  |
|                |            |            |            |            | 1                | 49        | 20.5                   |
|                |            |            |            |            | 25               | 0         | 19.89                  |
|                |            |            |            |            | 25               | 12        | 19.68                  |
|                |            |            |            |            | 25               | 24        | 19.59                  |
|                |            |            |            |            | 50               | 0         | 19.75                  |
|                |            | H<br>23130 | 711        | QPSK       | 1                | 0         | 21.57                  |
|                |            |            |            |            | 1                | 24        | 21.55                  |
|                |            |            |            |            | 1                | 49        | 21.81                  |
|                |            |            |            |            | 25               | 0         | 21.65                  |
|                |            |            |            |            | 25               | 12        | 21.50                  |
|                |            |            |            |            | 25               | 24        | 21.12                  |
|                |            |            |            |            | 50               | 0         | 21.33                  |
|                |            |            |            | 16-QAM     | 1                | 0         | 20.52                  |
|                |            |            |            |            | 1                | 24        | 20.70                  |
|                |            |            |            |            | 1                | 49        | 20.91                  |
|                |            |            |            |            | 25               | 0         | 19.6                   |
|                |            |            |            |            | 25               | 12        | 19.64                  |
|                |            |            |            |            | 25               | 24        | 19.48                  |
|                |            |            |            |            | 50               | 0         | 19.59                  |



| Band           | Band Width | Channel    | Freq.(MHz) | Modulation | RB Configuration |           | Average Power<br>(dBm) |
|----------------|------------|------------|------------|------------|------------------|-----------|------------------------|
|                |            |            |            |            | RB Size          | RB Offset |                        |
| LTE<br>Band 12 | 5MHz       | L<br>23035 | 701.5      | QPSK       | 1                | 0         | 21.88                  |
|                |            |            |            |            | 1                | 12        | 21.21                  |
|                |            |            |            |            | 1                | 24        | 21.70                  |
|                |            |            |            |            | 12               | 0         | 21.12                  |
|                |            |            |            |            | 12               | 6         | 21.33                  |
|                |            |            |            |            | 12               | 11        | 21.34                  |
|                |            |            |            |            | 25               | 0         | 21.54                  |
|                |            |            |            | 16-QAM     | 1                | 0         | 20.88                  |
|                |            |            |            |            | 1                | 12        | 21.38                  |
|                |            |            |            |            | 1                | 24        | 21.01                  |
|                |            |            |            |            | 12               | 0         | 20.04                  |
|                |            |            |            |            | 12               | 6         | 20.01                  |
|                |            |            |            |            | 12               | 11        | 19.95                  |
|                |            |            |            |            | 25               | 0         | 19.92                  |
|                |            | M<br>23095 | 707.5      | QPSK       | 1                | 0         | 21.67                  |
|                |            |            |            |            | 1                | 12        | 21.50                  |
|                |            |            |            |            | 1                | 24        | 21.31                  |
|                |            |            |            |            | 12               | 0         | 21.87                  |
|                |            |            |            |            | 12               | 6         | 21.12                  |
|                |            |            |            |            | 12               | 11        | 21.57                  |
|                |            |            |            |            | 25               | 0         | 21.36                  |
|                |            |            |            | 16-QAM     | 1                | 0         | 20.90                  |
|                |            |            |            |            | 1                | 12        | 21.04                  |
|                |            |            |            |            | 1                | 24        | 20.58                  |
|                |            |            |            |            | 12               | 0         | 19.95                  |
|                |            |            |            |            | 12               | 6         | 19.69                  |
|                |            |            |            |            | 12               | 11        | 19.65                  |
|                |            |            |            |            | 25               | 0         | 19.63                  |
|                |            | H<br>23155 | 713.5      | QPSK       | 1                | 0         | 21.18                  |
|                |            |            |            |            | 1                | 12        | 21.56                  |
|                |            |            |            |            | 1                | 24        | 21.24                  |
|                |            |            |            |            | 12               | 0         | 21.02                  |
|                |            |            |            |            | 12               | 6         | 21.1                   |
|                |            |            |            |            | 12               | 11        | 21.51                  |
|                |            |            |            |            | 25               | 0         | 21.30                  |
|                |            |            |            | 16-QAM     | 1                | 0         | 20.42                  |
|                |            |            |            |            | 1                | 12        | 20.83                  |
|                |            |            |            |            | 1                | 24        | 20.31                  |
|                |            |            |            |            | 12               | 0         | 19.46                  |
|                |            |            |            |            | 12               | 6         | 19.47                  |
|                |            |            |            |            | 12               | 11        | 19.47                  |
|                |            |            |            |            | 25               | 0         | 19.39                  |



| Band           | Band Width | Channel    | Freq.(MHz) | Modulation | RB Configuration |           | Average Power<br>(dBm) |
|----------------|------------|------------|------------|------------|------------------|-----------|------------------------|
|                |            |            |            |            | RB Size          | RB Offset |                        |
| LTE<br>Band 12 | 3MHz       | L<br>23025 | 700.5      | QPSK       | 1                | 0         | 21.22                  |
|                |            |            |            |            | 1                | 7         | 21.50                  |
|                |            |            |            |            | 1                | 14        | 21.56                  |
|                |            |            |            |            | 8                | 0         | 21.36                  |
|                |            |            |            |            | 8                | 4         | 21.37                  |
|                |            |            |            |            | 8                | 7         | 21.64                  |
|                |            |            |            |            | 15               | 0         | 21.57                  |
|                |            |            |            | 16-QAM     | 1                | 0         | 21.41                  |
|                |            |            |            |            | 1                | 7         | 21.15                  |
|                |            |            |            |            | 1                | 14        | 21.37                  |
|                |            |            |            |            | 8                | 0         | 19.91                  |
|                |            |            |            |            | 8                | 4         | 19.88                  |
|                |            |            |            |            | 8                | 7         | 19.83                  |
|                |            |            |            |            | 15               | 0         | 20.01                  |
|                |            | M<br>23095 | 707.5      | QPSK       | 1                | 0         | 21.70                  |
|                |            |            |            |            | 1                | 7         | 21.56                  |
|                |            |            |            |            | 1                | 14        | 21.58                  |
|                |            |            |            |            | 8                | 0         | 21.35                  |
|                |            |            |            |            | 8                | 4         | 21.50                  |
|                |            |            |            |            | 8                | 7         | 21.30                  |
|                |            |            |            |            | 15               | 0         | 21.47                  |
|                |            |            |            | 16-QAM     | 1                | 0         | 21.13                  |
|                |            |            |            |            | 1                | 7         | 20.90                  |
|                |            |            |            |            | 1                | 14        | 21.01                  |
|                |            |            |            |            | 8                | 0         | 19.86                  |
|                |            |            |            |            | 8                | 4         | 19.75                  |
|                |            |            |            |            | 8                | 7         | 19.79                  |
|                |            |            |            |            | 15               | 0         | 19.74                  |
|                |            | H<br>23165 | 714.5      | QPSK       | 1                | 0         | 21.36                  |
|                |            |            |            |            | 1                | 7         | 21.58                  |
|                |            |            |            |            | 1                | 14        | 21.59                  |
|                |            |            |            |            | 8                | 0         | 21.47                  |
|                |            |            |            |            | 8                | 4         | 21.71                  |
|                |            |            |            |            | 8                | 7         | 21.34                  |
|                |            |            |            |            | 15               | 0         | 21.56                  |
|                |            |            |            | 16-QAM     | 1                | 0         | 20.65                  |
|                |            |            |            |            | 1                | 7         | 20.57                  |
|                |            |            |            |            | 1                | 14        | 20.99                  |
|                |            |            |            |            | 8                | 0         | 19.45                  |
|                |            |            |            |            | 8                | 4         | 19.34                  |
|                |            |            |            |            | 8                | 7         | 19.60                  |
|                |            |            |            |            | 15               | 0         | 19.51                  |



| Band           | Band Width | Channel    | Freq.(MHz) | Modulation | RB Configuration |           | Average Power<br>(dBm) |
|----------------|------------|------------|------------|------------|------------------|-----------|------------------------|
|                |            |            |            |            | RB Size          | RB Offset |                        |
| LTE<br>Band 12 | 1.4MHz     | L<br>23017 | 699.7      | QPSK       | 1                | 0         | 21.75                  |
|                |            |            |            |            | 1                | 2         | 21.55                  |
|                |            |            |            |            | 1                | 5         | 21.58                  |
|                |            |            |            |            | 3                | 0         | 21.48                  |
|                |            |            |            |            | 3                | 1         | 21.8                   |
|                |            |            |            |            | 3                | 2         | 21.36                  |
|                |            |            |            |            | 6                | 0         | 21.59                  |
|                |            |            |            | 16-QAM     | 1                | 0         | 20.72                  |
|                |            |            |            |            | 1                | 2         | 21.33                  |
|                |            |            |            |            | 1                | 5         | 20.74                  |
|                |            |            |            |            | 3                | 0         | 21.02                  |
|                |            |            |            |            | 3                | 1         | 20.97                  |
|                |            |            |            |            | 3                | 2         | 20.87                  |
|                |            |            |            |            | 6                | 0         | 19.89                  |
|                |            | M<br>23095 | 707.5      | QPSK       | 1                | 0         | 21.54                  |
|                |            |            |            |            | 1                | 2         | 21.60                  |
|                |            |            |            |            | 1                | 5         | 21.7                   |
|                |            |            |            |            | 3                | 0         | 21.64                  |
|                |            |            |            |            | 3                | 1         | 21.25                  |
|                |            |            |            |            | 3                | 2         | 21.78                  |
|                |            |            |            |            | 6                | 0         | 21.77                  |
|                |            |            |            | 16-QAM     | 1                | 0         | 20.60                  |
|                |            |            |            |            | 1                | 2         | 21.07                  |
|                |            |            |            |            | 1                | 5         | 20.68                  |
|                |            |            |            |            | 3                | 0         | 20.76                  |
|                |            |            |            |            | 3                | 2         | 20.80                  |
|                |            |            |            |            | 3                | 5         | 20.62                  |
|                |            |            |            |            | 6                | 0         | 19.748                 |
|                |            | H<br>23173 | 715.3      | QPSK       | 1                | 0         | 21.25                  |
|                |            |            |            |            | 1                | 2         | 21.10                  |
|                |            |            |            |            | 1                | 5         | 21.50                  |
|                |            |            |            |            | 3                | 0         | 21.52                  |
|                |            |            |            |            | 3                | 1         | 21.36                  |
|                |            |            |            |            | 3                | 2         | 21.38                  |
|                |            |            |            |            | 6                | 0         | 21.30                  |
|                |            |            |            | 16-QAM     | 1                | 0         | 20.29                  |
|                |            |            |            |            | 1                | 2         | 21.09                  |
|                |            |            |            |            | 1                | 5         | 20.46                  |
|                |            |            |            |            | 3                | 0         | 20.62                  |
|                |            |            |            |            | 3                | 1         | 20.58                  |
|                |            |            |            |            | 3                | 2         | 20.64                  |
|                |            |            |            |            | 6                | 0         | 19.57                  |



| Band           | Band Width | Channel    | Freq.(MHz) | Modulation | RB Configuration |           | Average Power<br>(dBm) |
|----------------|------------|------------|------------|------------|------------------|-----------|------------------------|
|                |            |            |            |            | RB Size          | RB Offset |                        |
| LTE<br>Band 17 | 10MHz      | L<br>23780 | 709        | QPSK       | 1                | 0         | 21.07                  |
|                |            |            |            |            | 1                | 24        | 21.10                  |
|                |            |            |            |            | 1                | 49        | 21.34                  |
|                |            |            |            |            | 25               | 0         | 21.18                  |
|                |            |            |            |            | 25               | 12        | 21.07                  |
|                |            |            |            |            | 25               | 24        | 21.08                  |
|                |            |            |            |            | 50               | 0         | 21.20                  |
|                |            |            |            | 16-QAM     | 1                | 0         | 20.42                  |
|                |            |            |            |            | 1                | 24        | 20.38                  |
|                |            |            |            |            | 1                | 49        | 19.79                  |
|                |            |            |            |            | 25               | 0         | 19.12                  |
|                |            |            |            |            | 25               | 12        | 19.08                  |
|                |            |            |            |            | 25               | 24        | 18.99                  |
|                |            |            |            |            | 50               | 0         | 19.15                  |
|                |            | M<br>23790 | 710        | QPSK       | 1                | 0         | 21.04                  |
|                |            |            |            |            | 1                | 24        | 21.10                  |
|                |            |            |            |            | 1                | 49        | 21.31                  |
|                |            |            |            |            | 25               | 0         | 21.25                  |
|                |            |            |            |            | 25               | 12        | 21.11                  |
|                |            |            |            |            | 25               | 24        | 21.23                  |
|                |            |            |            |            | 50               | 0         | 21.21                  |
|                |            |            |            | 16-QAM     | 1                | 0         | 20.23                  |
|                |            |            |            |            | 1                | 24        | 20.41                  |
|                |            |            |            |            | 1                | 49        | 19.68                  |
|                |            |            |            |            | 25               | 0         | 19.11                  |
|                |            |            |            |            | 25               | 12        | 18.99                  |
|                |            |            |            |            | 25               | 24        | 19.01                  |
|                |            |            |            |            | 50               | 0         | 19.10                  |
|                |            | H<br>23800 | 711        | QPSK       | 1                | 0         | 20.30                  |
|                |            |            |            |            | 1                | 24        | 20.25                  |
|                |            |            |            |            | 1                | 49        | 20.75                  |
|                |            |            |            |            | 25               | 0         | 20.38                  |
|                |            |            |            |            | 25               | 12        | 20.63                  |
|                |            |            |            |            | 25               | 24        | 20.39                  |
|                |            |            |            |            | 50               | 0         | 20.31                  |
|                |            |            |            | 16-QAM     | 1                | 0         | 20.31                  |
|                |            |            |            |            | 1                | 24        | 20.17                  |
|                |            |            |            |            | 1                | 49        | 20.12                  |
|                |            |            |            |            | 25               | 0         | 19.05                  |
|                |            |            |            |            | 25               | 12        | 18.87                  |
|                |            |            |            |            | 25               | 24        | 18.73                  |
|                |            |            |            |            | 50               | 0         | 19.06                  |



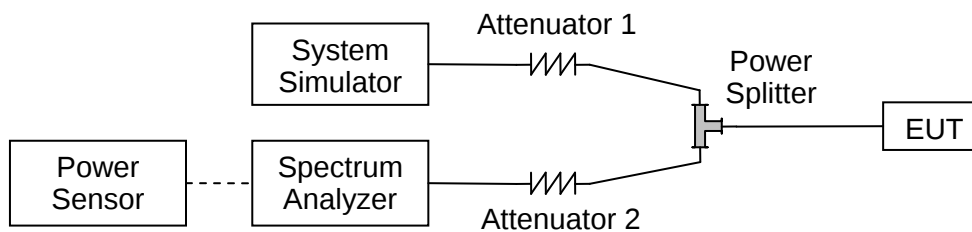
| Band           | Band Width | Channel    | Freq.(MHz) | Modulation | RB Configuration |           | Average Power<br>(dBm) |
|----------------|------------|------------|------------|------------|------------------|-----------|------------------------|
|                |            |            |            |            | RB Size          | RB Offset |                        |
| LTE<br>Band 17 | 5MHz       | L<br>23755 | 706.5      | QPSK       | 1                | 0         | 21.03                  |
|                |            |            |            |            | 1                | 12        | 21.3                   |
|                |            |            |            |            | 1                | 24        | 21.22                  |
|                |            |            |            |            | 12               | 0         | 21.23                  |
|                |            |            |            |            | 12               | 6         | 21.05                  |
|                |            |            |            |            | 12               | 11        | 21.00                  |
|                |            |            |            |            | 25               | 0         | 21.19                  |
|                |            |            |            | 16-QAM     | 1                | 0         | 20.19                  |
|                |            |            |            |            | 1                | 12        | 20.22                  |
|                |            |            |            |            | 1                | 24        | 19.81                  |
|                |            |            |            |            | 12               | 0         | 19.06                  |
|                |            |            |            |            | 12               | 6         | 19.03                  |
|                |            |            |            |            | 12               | 11        | 19.02                  |
|                |            |            |            |            | 25               | 0         | 19.01                  |
|                |            | M<br>23790 | 710        | QPSK       | 1                | 0         | 21.04                  |
|                |            |            |            |            | 1                | 12        | 21.05                  |
|                |            |            |            |            | 1                | 24        | 21.30                  |
|                |            |            |            |            | 12               | 0         | 21.21                  |
|                |            |            |            |            | 12               | 6         | 21.12                  |
|                |            |            |            |            | 12               | 11        | 21.24                  |
|                |            |            |            |            | 25               | 0         | 21.17                  |
|                |            |            |            | 16-QAM     | 1                | 0         | 19.87                  |
|                |            |            |            |            | 1                | 12        | 20.43                  |
|                |            |            |            |            | 1                | 24        | 19.91                  |
|                |            |            |            |            | 12               | 0         | 19.04                  |
|                |            |            |            |            | 12               | 6         | 19.07                  |
|                |            |            |            |            | 12               | 11        | 18.95                  |
|                |            |            |            |            | 25               | 0         | 19.06                  |
|                |            | H<br>23825 | 713.5      | QPSK       | 1                | 0         | 20.38                  |
|                |            |            |            |            | 1                | 12        | 20.65                  |
|                |            |            |            |            | 1                | 24        | 20.59                  |
|                |            |            |            |            | 12               | 0         | 20.42                  |
|                |            |            |            |            | 12               | 6         | 20.40                  |
|                |            |            |            |            | 12               | 11        | 20.65                  |
|                |            |            |            |            | 25               | 0         | 20.55                  |
|                |            |            |            | 16-QAM     | 1                | 0         | 19.86                  |
|                |            |            |            |            | 1                | 12        | 19.84                  |
|                |            |            |            |            | 1                | 24        | 19.91                  |
|                |            |            |            |            | 12               | 0         | 18.85                  |
|                |            |            |            |            | 12               | 6         | 18.56                  |
|                |            |            |            |            | 12               | 11        | 18.59                  |
|                |            |            |            |            | 25               | 0         | 18.67                  |

## 2.2. Occupied Bandwidth

### 2.2.1. Requirement

According to FCC section 2.1049, the occupied bandwidth is the frequency bandwidth such that, below its lower and above its upper frequency limits, the mean powers radiated are each equal to 0.5 percent of the total mean power radiated by a given emission. Occupied bandwidth is also known as the 99% emission bandwidth.

### 2.2.2. Test Description



The EUT is coupled to the Spectrum Analyzer (SA) and the System Simulator (SS) with Attenuators through the Power Splitter; the RF load attached to the EUT antenna terminal is 50Ohm; the path loss as the factor is calibrated to correct the reading. The EUT is commanded by the SS to operate at the maximum output power. A call is established between the EUT and the SS.

### 2.2.3. Test procedure

KDB 971168 D01v03 Section 4.1 and ANSI/TIA-603-E-2016.

### 2.2.4. Test Result

| LTE Band 2, BW: 1.4MHz |                 |                     |                      |                     |                      |
|------------------------|-----------------|---------------------|----------------------|---------------------|----------------------|
| Channel                | Frequency (MHz) | QPSK                |                      | 16QAM               |                      |
|                        |                 | 99% Bandwidth (MHz) | 26dB Bandwidth (MHz) | 99% Bandwidth (MHz) | 26dB Bandwidth (MHz) |
| 18607                  | 1850.7          | 1.0981              | 1.279                | 1.0969              | 1.271                |
| 18900                  | 1880.0          | 1.0958              | 1.281                | 1.0926              | 1.267                |
| 19192                  | 1909.2          | 1.0890              | 1.252                | 1.0884              | 1.264                |

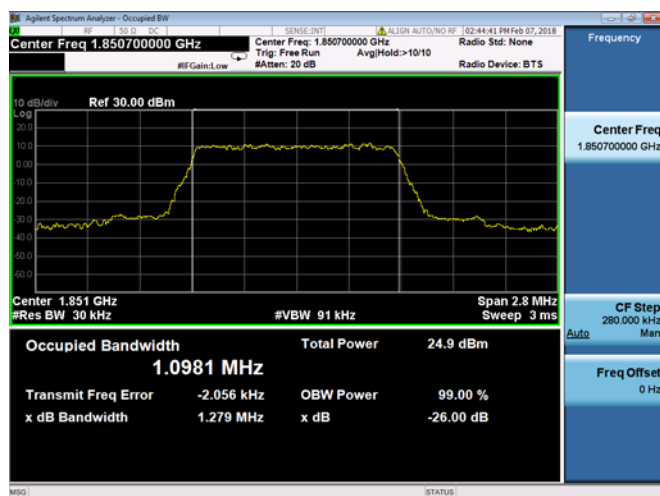


| LTE Band 2, BW: 3MHz  |                    |                        |                         |                        |                         |
|-----------------------|--------------------|------------------------|-------------------------|------------------------|-------------------------|
| Channel               | Frequency<br>(MHz) | QPSK                   |                         | 16QAM                  |                         |
|                       |                    | 99% Bandwidth<br>(MHz) | 26dB Bandwidth<br>(MHz) | 99% Bandwidth<br>(MHz) | 26dB Bandwidth<br>(MHz) |
| 18615                 | 1851.5             | 2.7048                 | 2.980                   | 2.6959                 | 2.995                   |
| 18900                 | 1880.0             | 2.7154                 | 2.995                   | 2.7018                 | 2.988                   |
| 19184                 | 1908.4             | 2.7117                 | 2.989                   | 2.7107                 | 2.984                   |
| LTE Band 2, BW: 5MHz  |                    |                        |                         |                        |                         |
| Channel               | Frequency<br>(MHz) | QPSK                   |                         | 16QAM                  |                         |
|                       |                    | 99% Bandwidth<br>(MHz) | 26dB Bandwidth<br>(MHz) | 99% Bandwidth<br>(MHz) | 26dB Bandwidth<br>(MHz) |
| 18625                 | 1852.5             | 4.5347                 | 5.065                   | 4.5356                 | 5.071                   |
| 18900                 | 1880.0             | 4.5447                 | 5.083                   | 4.5350                 | 5.066                   |
| 19175                 | 1907.5             | 4.5207                 | 5.039                   | 4.5279                 | 5.083                   |
| LTE Band 2, BW: 10MHz |                    |                        |                         |                        |                         |
| Channel               | Frequency<br>(MHz) | QPSK                   |                         | 16QAM                  |                         |
|                       |                    | 99% Bandwidth<br>(MHz) | 26dB Bandwidth<br>(MHz) | 99% Bandwidth<br>(MHz) | 26dB Bandwidth<br>(MHz) |
| 18650                 | 1855.0             | 8.9984                 | 9.985                   | 8.9910                 | 9.904                   |
| 18900                 | 1880.0             | 9.0019                 | 9.962                   | 8.9978                 | 10.02                   |
| 19150                 | 1905.0             | 8.9828                 | 9.924                   | 8.9820                 | 9.907                   |
| LTE Band 2, BW: 15MHz |                    |                        |                         |                        |                         |
| Channel               | Frequency<br>(MHz) | QPSK                   |                         | 16QAM                  |                         |
|                       |                    | 99% Bandwidth<br>(MHz) | 26dB Bandwidth<br>(MHz) | 99% Bandwidth<br>(MHz) | 26dB Bandwidth<br>(MHz) |
| 18675                 | 1857.5             | 13.486                 | 14.81                   | 13.479                 | 14.72                   |
| 18900                 | 1880.0             | 13.499                 | 14.77                   | 13.488                 | 14.70                   |
| 19125                 | 1902.5             | 13.477                 | 14.81                   | 13.470                 | 14.91                   |
| LTE Band 2, BW: 20MHz |                    |                        |                         |                        |                         |
| Channel               | Frequency<br>(MHz) | QPSK                   |                         | 16QAM                  |                         |
|                       |                    | 99% Bandwidth<br>(MHz) | 26dB Bandwidth<br>(MHz) | 99% Bandwidth<br>(MHz) | 26dB Bandwidth<br>(MHz) |
| 18700                 | 1860.0             | 18.000                 | 19.45                   | 17.941                 | 19.61                   |
| 18900                 | 1880.0             | 18.017                 | 19.61                   | 18.020                 | 19.53                   |
| 19100                 | 1900.0             | 17.987                 | 19.71                   | 18.010                 | 19.72                   |



## LTE Band 2 99%&amp;26dB Bandwidth

## 1.4MHz/QPSK/Low CH



## 1.4MHz/16QAM/Low CH



## 1.4MHz/QPSK/Mid CH



## 1.4MHz/16QAM/Mid CH

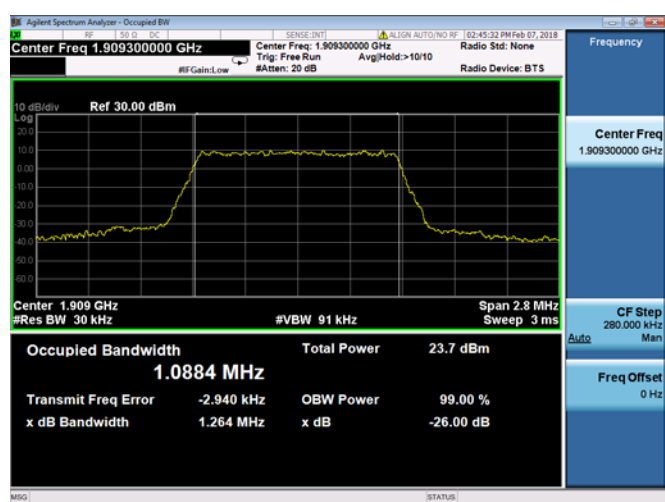




## 1.4MHz/QPSK/High CH

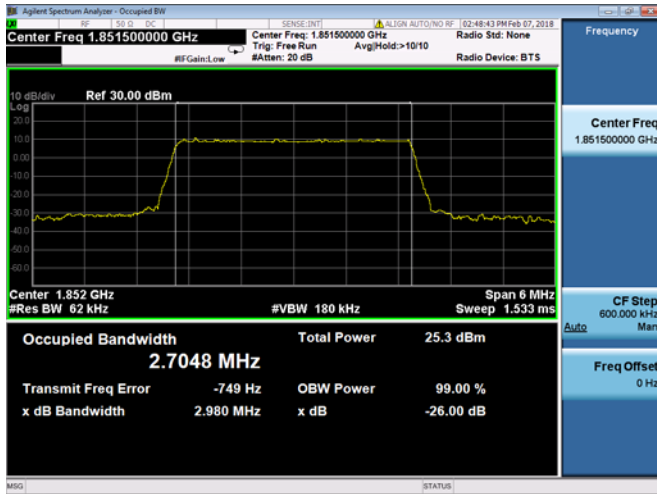


## 1.4MHz/16QAM/High CH

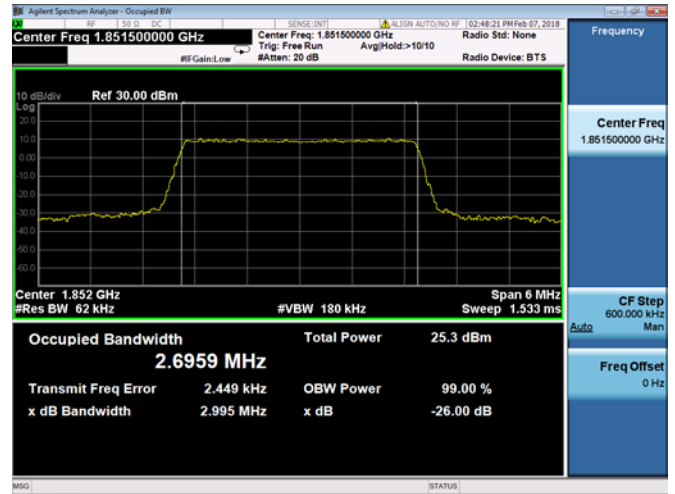




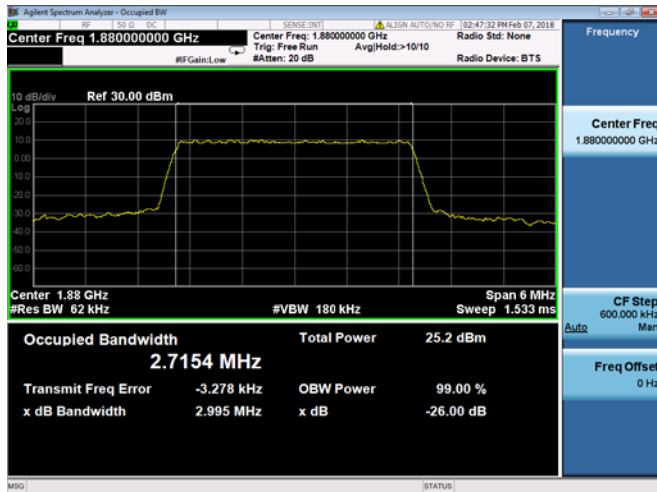
## 3MHz/QPSK/Low CH



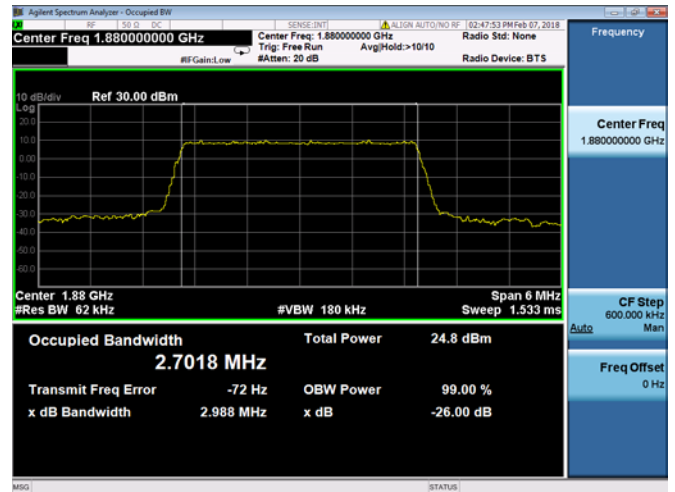
## 3MHz/16QAM/Low CH



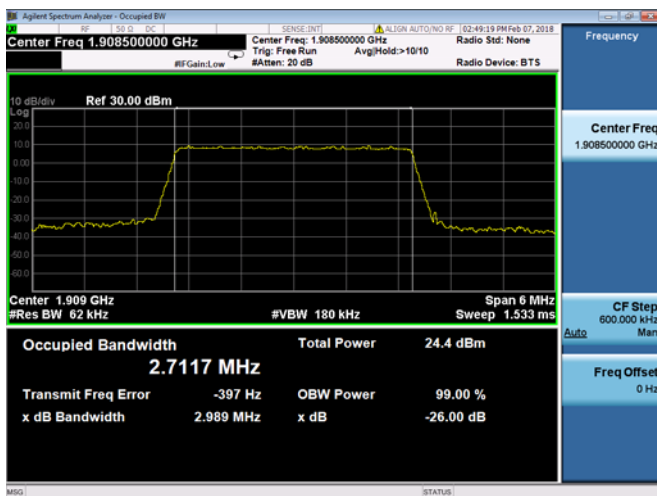
## 3MHz/QPSK/Mid CH



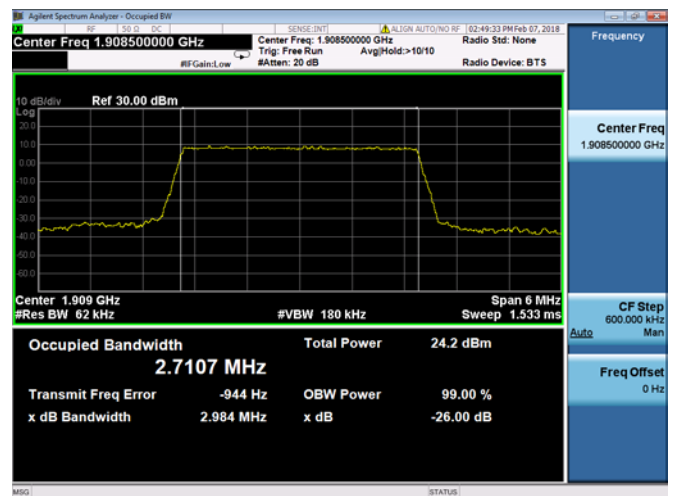
## 3MHz/16QAM/Mid CH



## 3MHz/QPSK/High CH

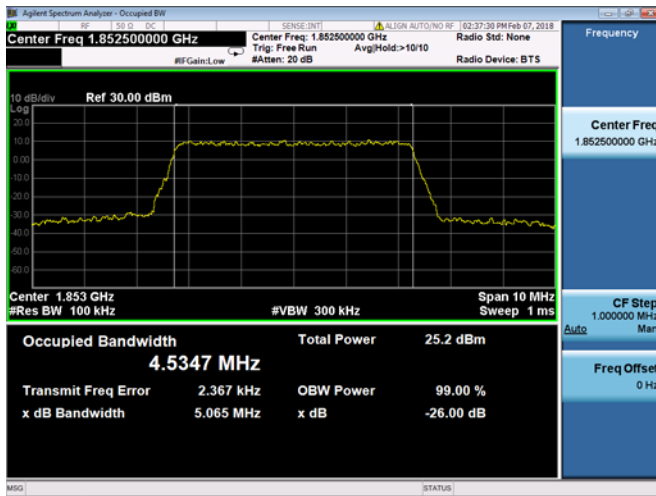


## 3MHz/16QAM/High CH

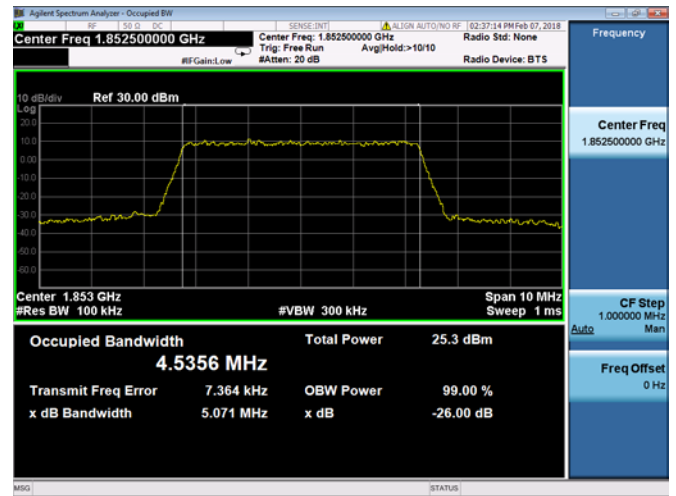




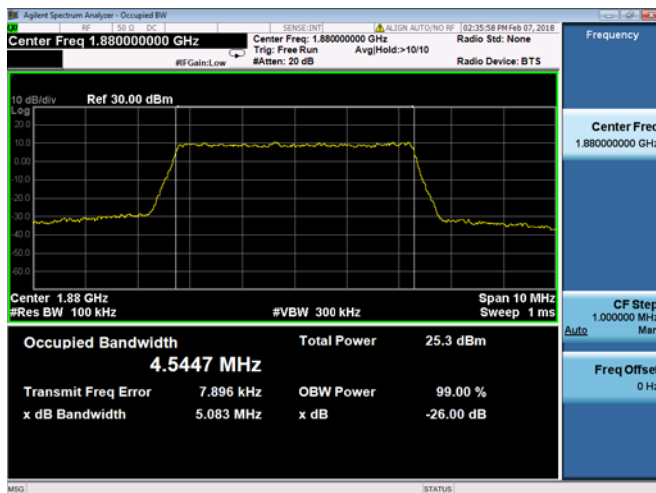
## 5MHz/QPSK/Low CH



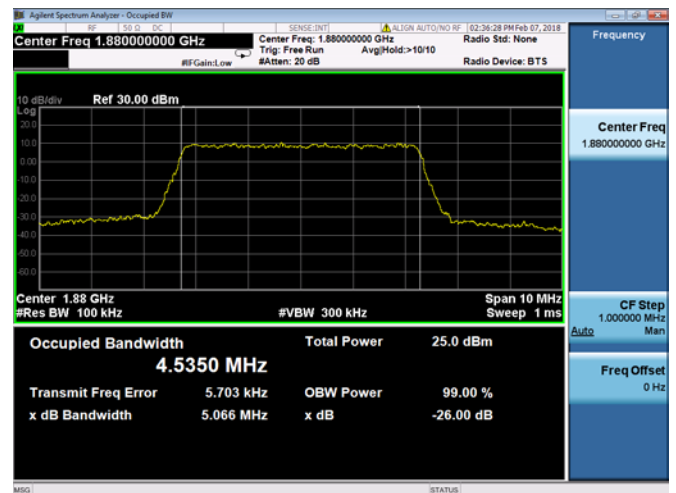
## 5MHz/16QAM/Low CH



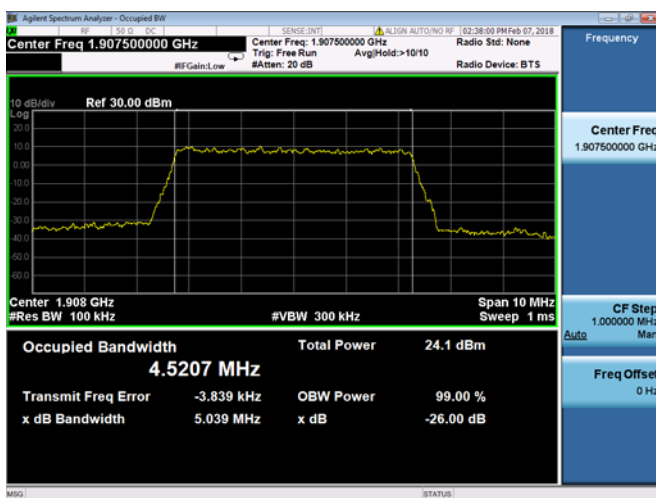
## 5MHz/QPSK/Mid CH



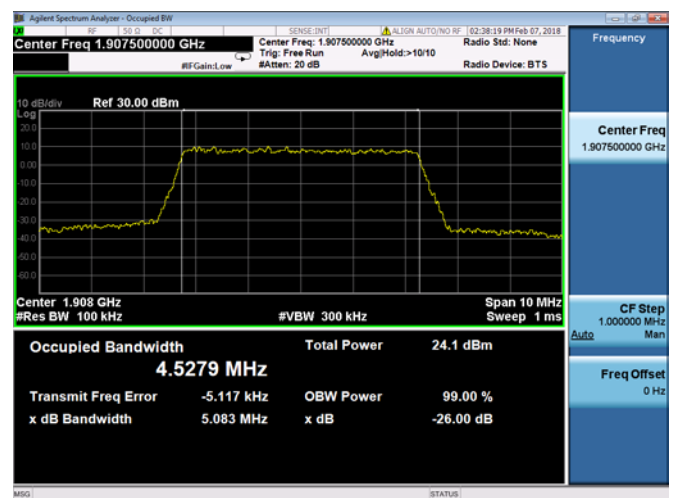
## 5MHz/16QAM/Mid CH



## 5MHz/QPSK/High CH

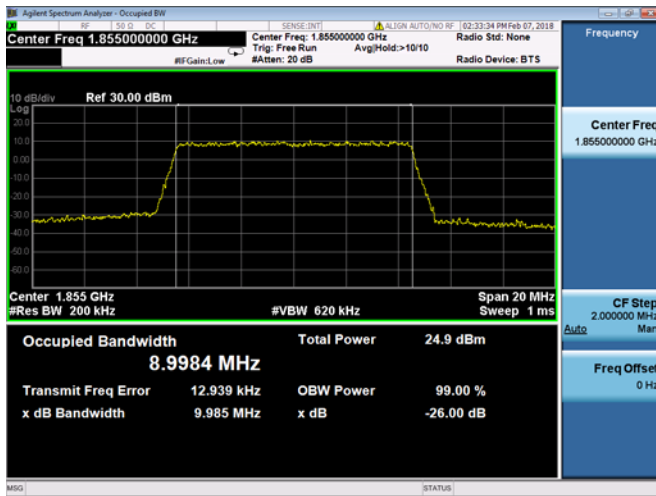


## 5MHz/16QAM/High CH

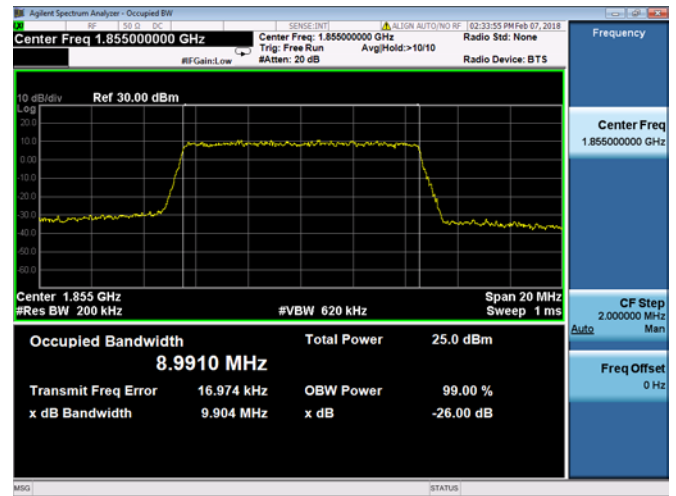




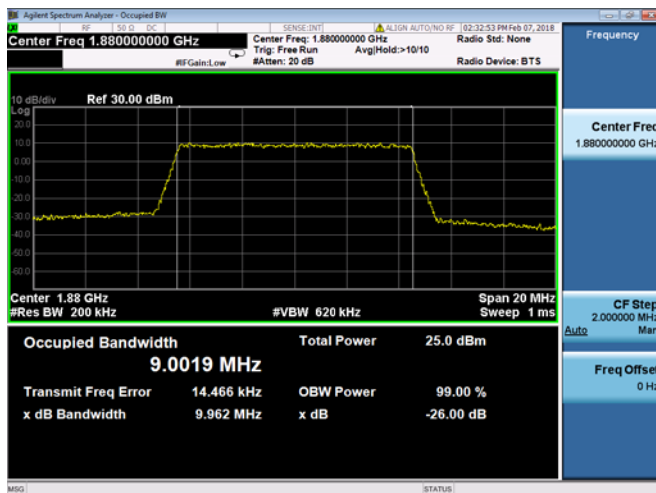
## 10MHz/QPSK/Low CH



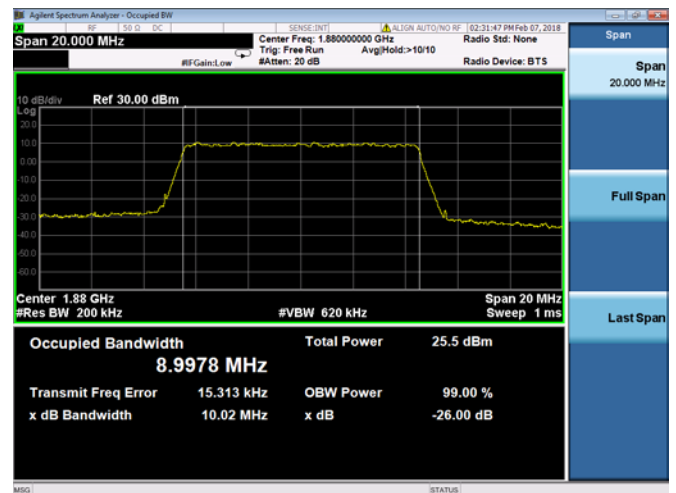
## 10MHz/16QAM/Low CH



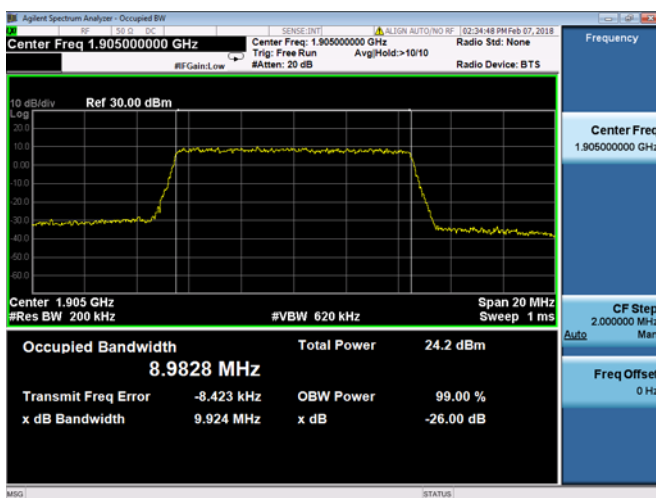
## 10MHz/QPSK/Mid CH



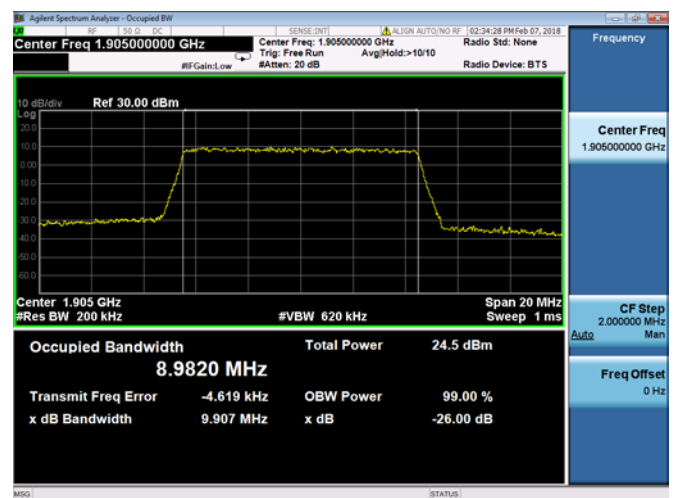
## 10MHz/16QAM/Mid CH



## 10MHz/QPSK/High CH

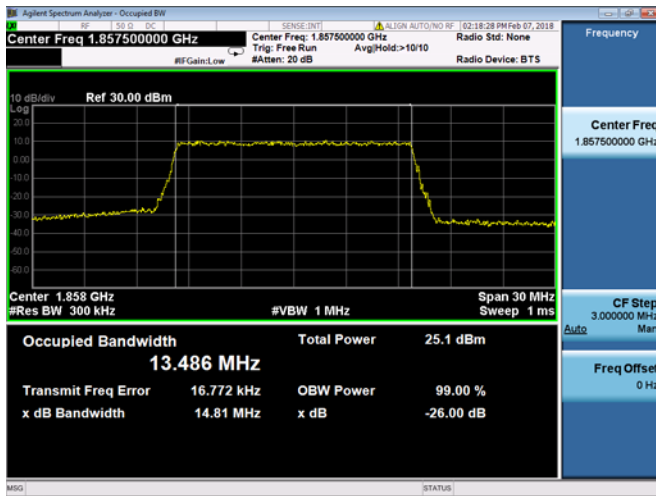


## 10MHz/16QAM/High CH

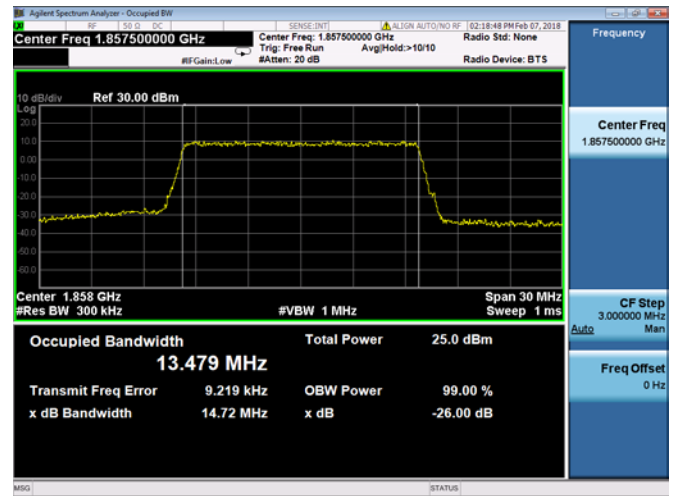




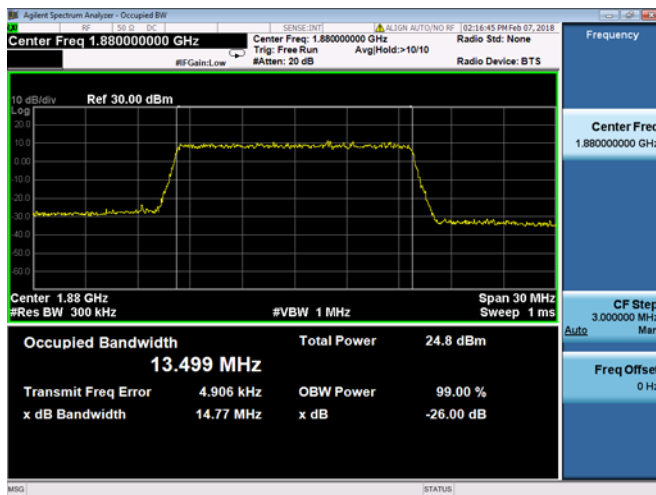
## 15MHz/QPSK/Low CH



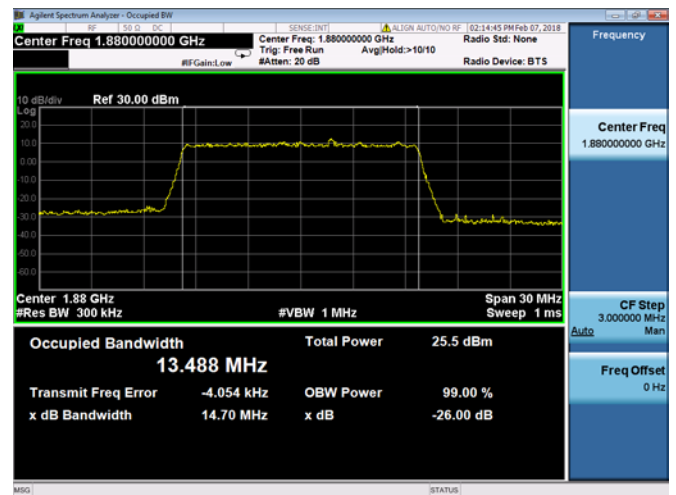
## 15MHz/16QAM/Low CH



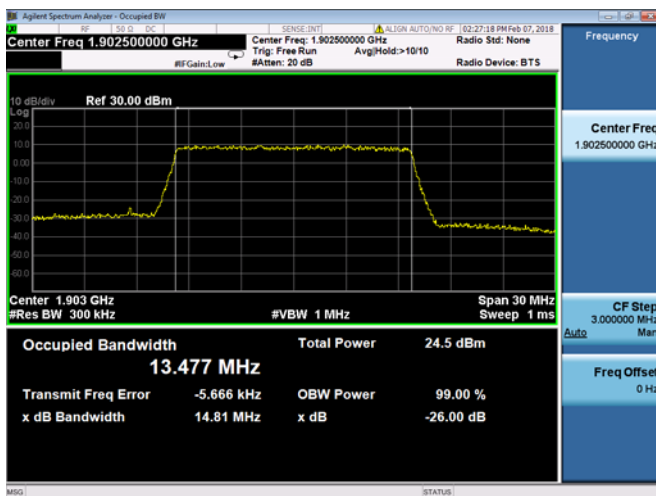
## 15MHz/QPSK/Mid CH



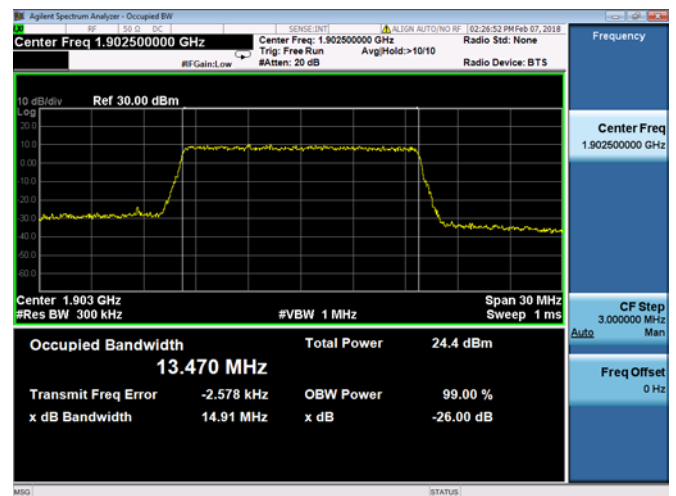
## 15MHz/16QAM/Mid CH



## 15MHz/QPSK/High CH

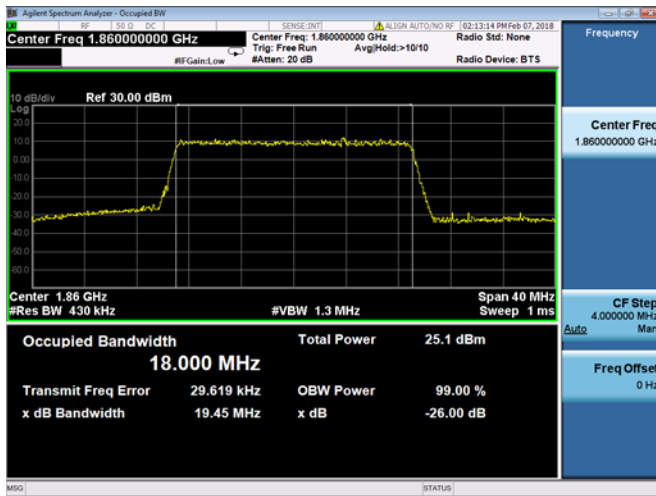


## 15MHz/16QAM/High CH

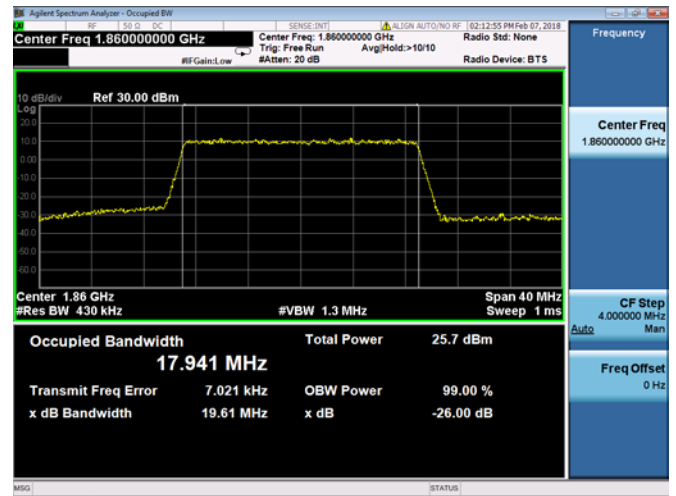




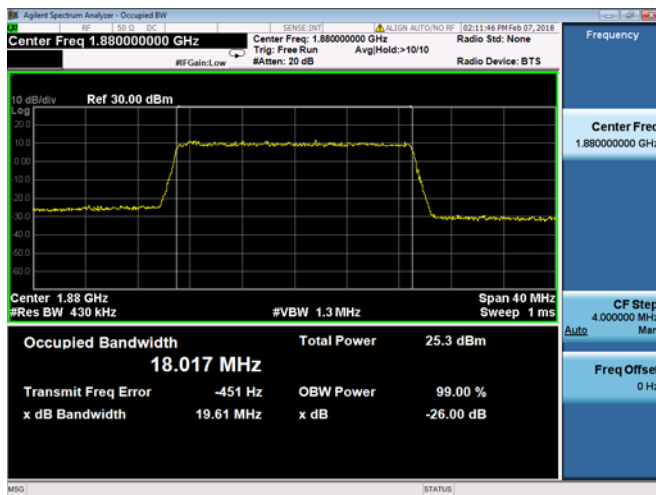
## 20MHz/QPSK/Low CH



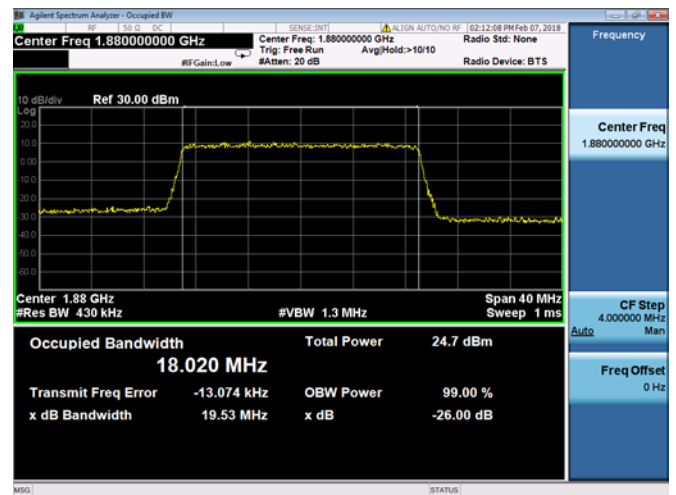
## 20MHz/16QAM/Low CH



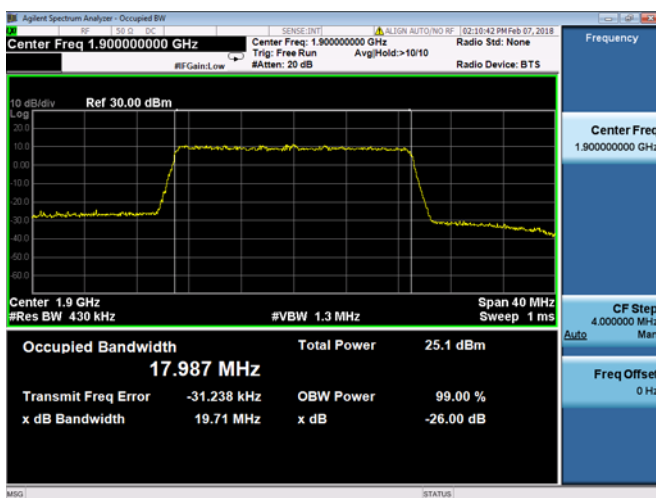
## 20MHz/QPSK/Mid CH



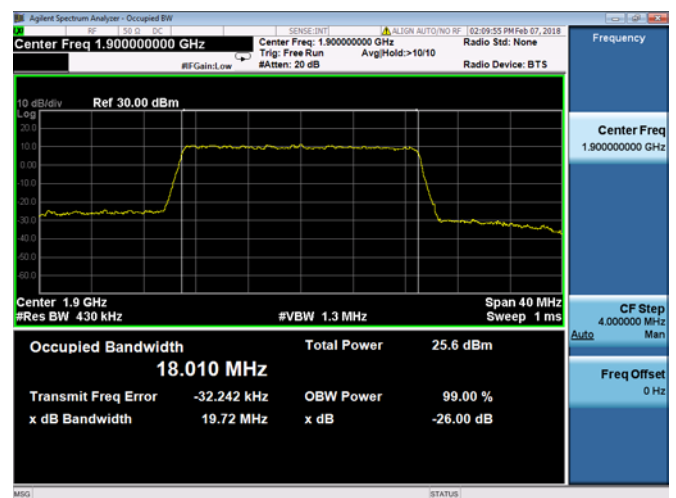
## 20MHz/16QAM/Mid CH



## 20MHz/QPSK/High CH



## 20MHz/16QAM/High CH





| LTE Band 4, BW: 1.4MHz |                 |                     |                      |                     |                      |
|------------------------|-----------------|---------------------|----------------------|---------------------|----------------------|
| Channel                | Frequency (MHz) | QPSK                |                      | 16QAM               |                      |
|                        |                 | 99% Bandwidth (MHz) | 26dB Bandwidth (MHz) | 99% Bandwidth (MHz) | 26dB Bandwidth (MHz) |
| 19957                  | 1710.7          | 1.0993              | 1.261                | 1.0942              | 1.269                |
| 20175                  | 1732.5          | 1.1107              | 1.280                | 1.0930              | 1.259                |
| 20392                  | 1754.2          | 1.0915              | 1.267                | 1.0971              | 1.267                |
| LTE Band 4, BW: 3MHz   |                 |                     |                      |                     |                      |
| Channel                | Frequency (MHz) | QPSK                |                      | 16QAM               |                      |
|                        |                 | 99% Bandwidth (MHz) | 26dB Bandwidth (MHz) | 99% Bandwidth (MHz) | 26dB Bandwidth (MHz) |
| 19965                  | 1711.5          | 2.7103              | 2.969                | 2.7036              | 2.979                |
| 20175                  | 1732.5          | 2.7092              | 2.983                | 2.7040              | 2.961                |
| 20384                  | 1753.4          | 2.7048              | 2.952                | 2.7019              | 2.993                |
| LTE Band 4, BW: 5MHz   |                 |                     |                      |                     |                      |
| Channel                | Frequency (MHz) | QPSK                |                      | 16QAM               |                      |
|                        |                 | 99% Bandwidth (MHz) | 26dB Bandwidth (MHz) | 99% Bandwidth (MHz) | 26dB Bandwidth (MHz) |
| 19975                  | 1712.5          | 4.5308              | 4.985                | 4.5147              | 5.016                |
| 20175                  | 1732.5          | 4.5431              | 5.095                | 4.5195              | 5.021                |
| 20375                  | 1752.5          | 4.5255              | 5.076                | 4.5266              | 5.066                |
| LTE Band 4, BW: 10MHz  |                 |                     |                      |                     |                      |
| Channel                | Frequency (MHz) | QPSK                |                      | 16QAM               |                      |
|                        |                 | 99% Bandwidth (MHz) | 26dB Bandwidth (MHz) | 99% Bandwidth (MHz) | 26dB Bandwidth (MHz) |
| 20000                  | 1715.0          | 8.9907              | 9.914                | 9.0139              | 9.982                |
| 20175                  | 1732.5          | 8.9973              | 9.980                | 9.0035              | 9.946                |
| 20350                  | 1750.0          | 8.9847              | 9.963                | 9.0039              | 9.982                |
| LTE Band 4, BW: 15MHz  |                 |                     |                      |                     |                      |
| Channel                | Frequency (MHz) | QPSK                |                      | 16QAM               |                      |
|                        |                 | 99% Bandwidth (MHz) | 26dB Bandwidth (MHz) | 99% Bandwidth (MHz) | 26dB Bandwidth (MHz) |
| 20025                  | 1717.5          | 13.535              | 14.78                | 13.487              | 14.80                |
| 20175                  | 1732.5          | 13.524              | 14.93                | 13.515              | 14.76                |
| 20325                  | 1747.5          | 13.479              | 14.75                | 13.447              | 14.78                |

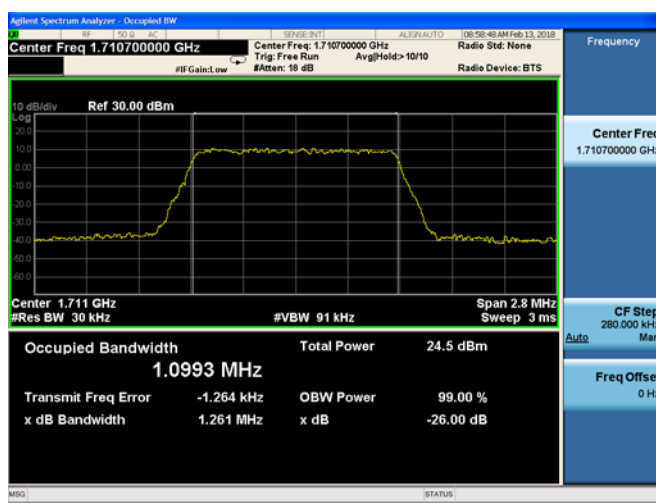


### LTE Band 4, BW: 20MHz

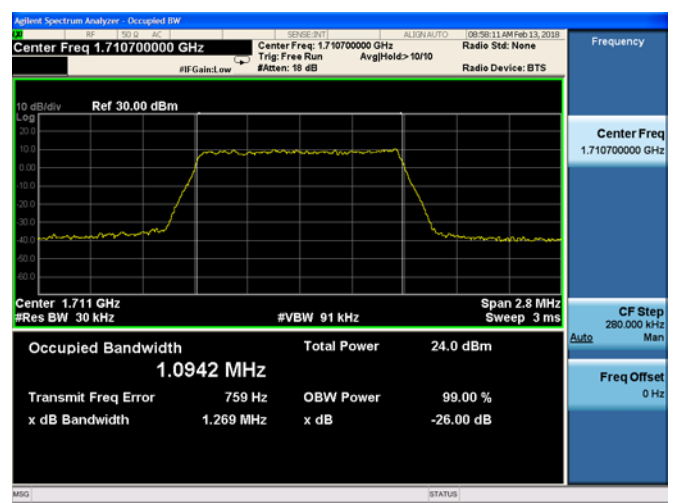
| Channel | Frequency (MHz) | QPSK                |                      | 16QAM               |                      |
|---------|-----------------|---------------------|----------------------|---------------------|----------------------|
|         |                 | 99% Bandwidth (MHz) | 26dB Bandwidth (MHz) | 99% Bandwidth (MHz) | 26dB Bandwidth (MHz) |
| 20050   | 1720.0          | 17.940              | 19.23                | 17.915              | 19.31                |
| 20175   | 1732.5          | 17.970              | 19.43                | 17.953              | 19.34                |
| 20300   | 1745.0          | 17.920              | 19.31                | 17.888              | 19.46                |

### LTE Band 4 99%&26dB Bandwidth

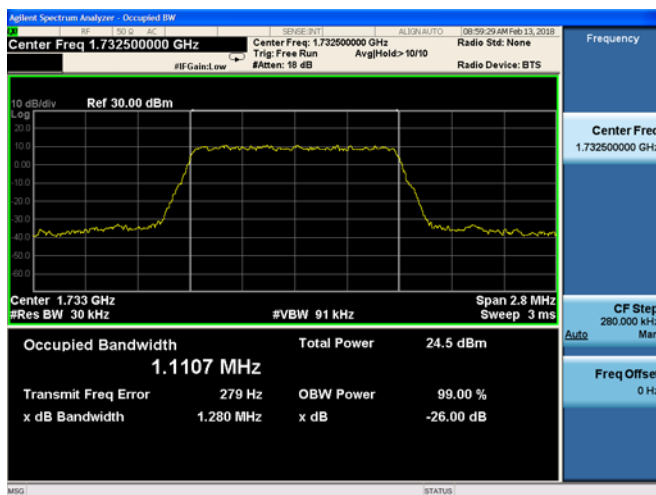
#### 1.4MHz/QPSK/Low CH



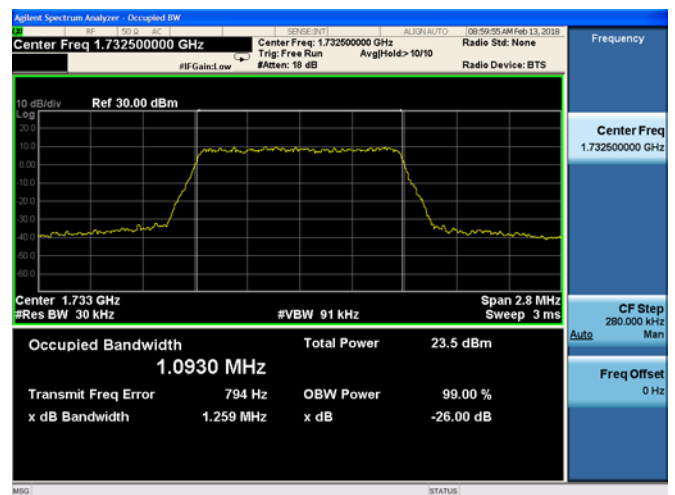
#### 1.4MHz/16QAM/Low CH



#### 1.4MHz/QPSK/Mid CH

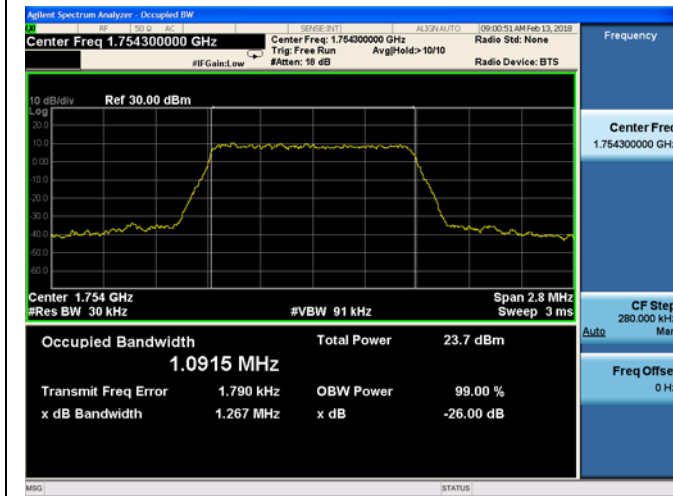


#### 1.4MHz/16QAM/Mid CH

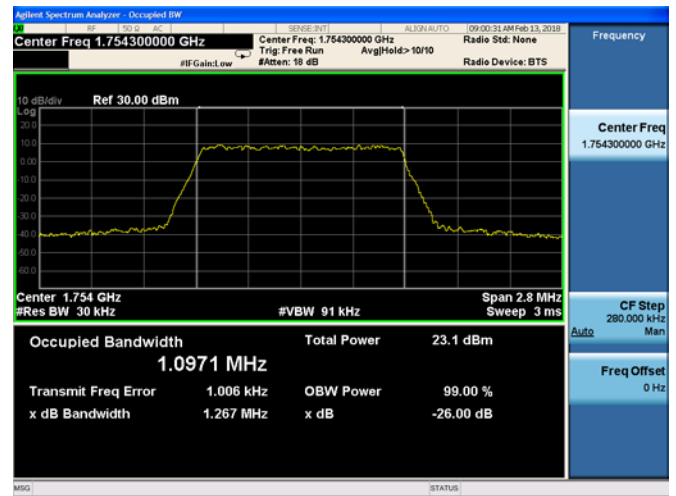


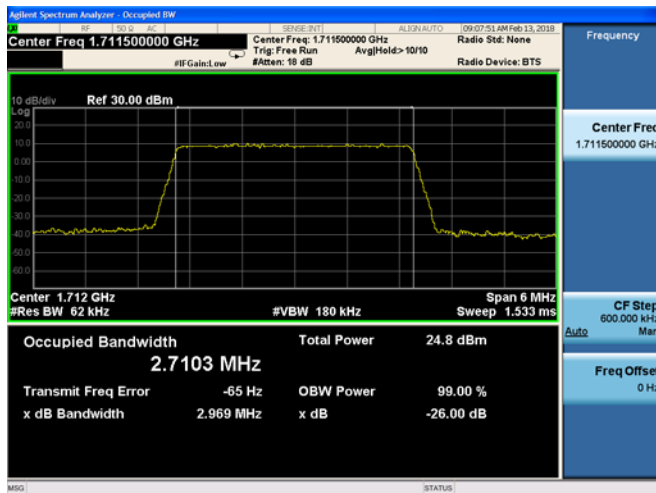
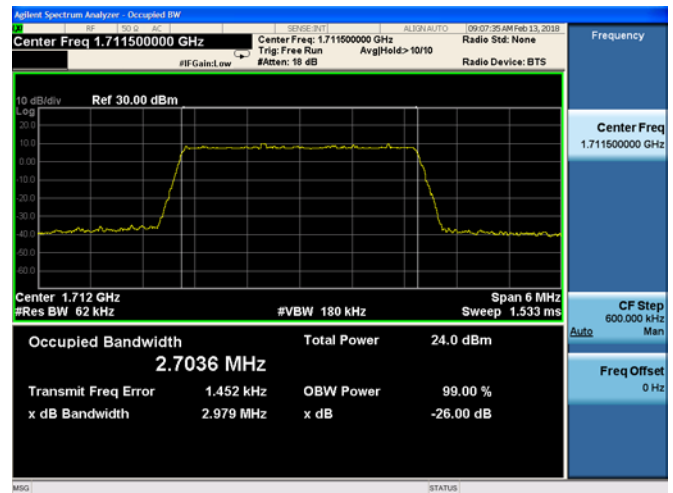
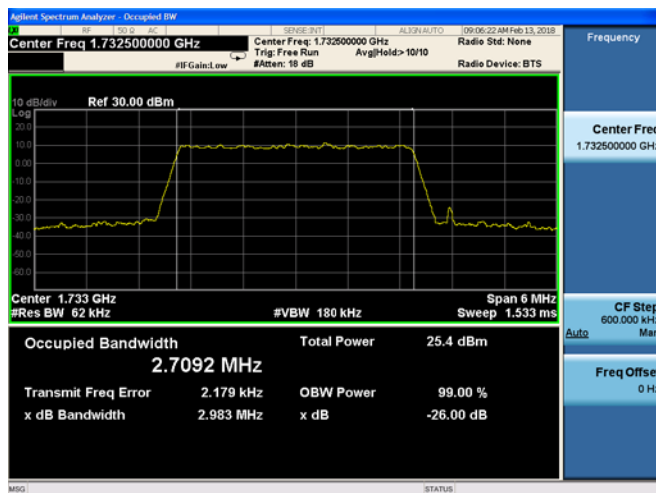
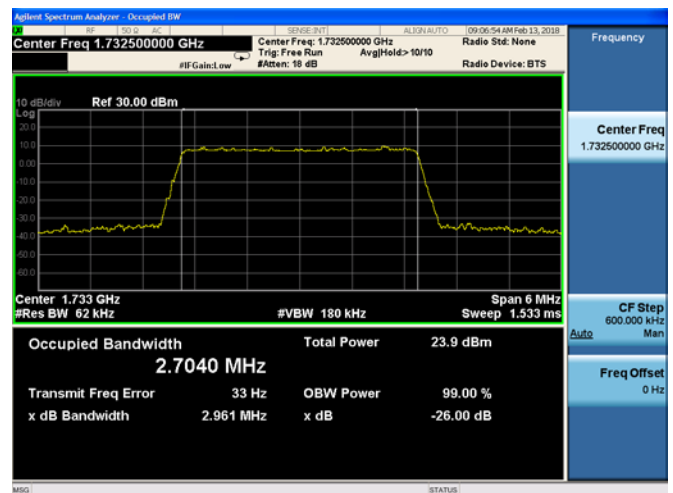
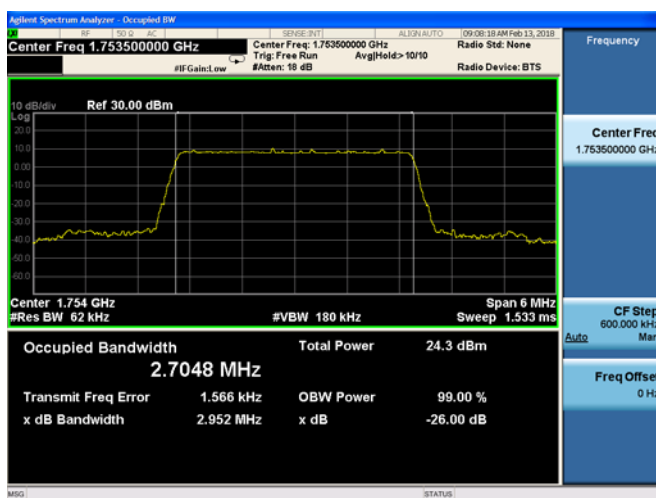
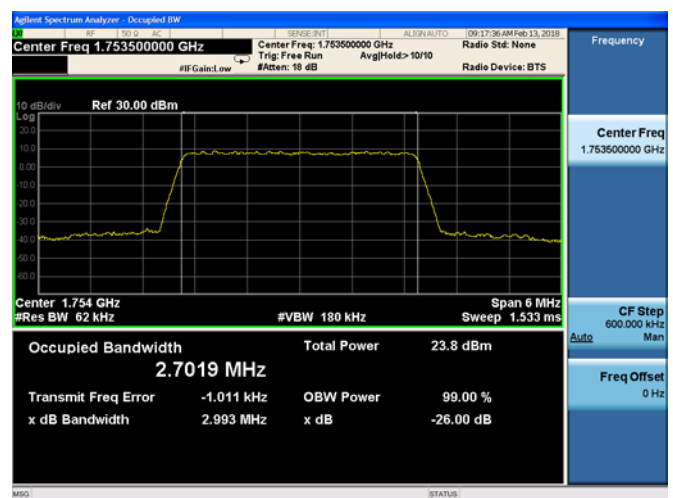


## 1.4MHz/QPSK/High CH



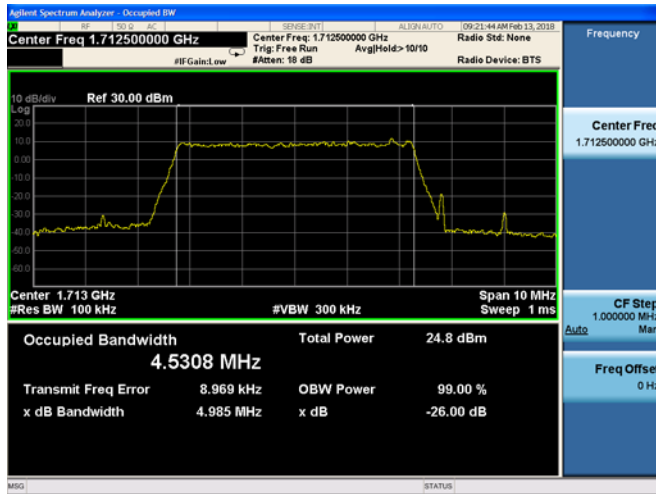
## 1.4MHz/16QAM/High CH



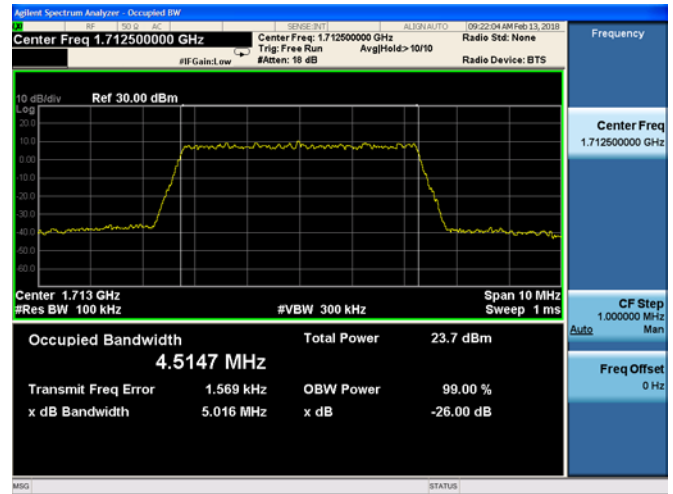
**3MHz/QPSK/Low CH****3MHz/16QAM/Low CH****3MHz/QPSK/Mid CH****3MHz/16QAM/Mid CH****3MHz/QPSK/High CH****3MHz/16QAM/High CH**



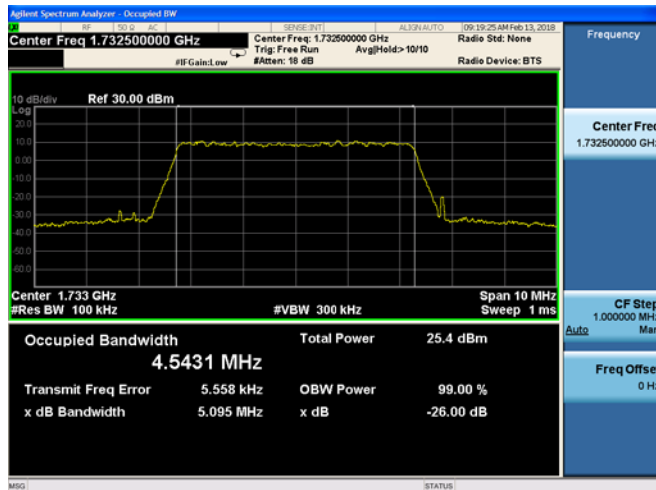
## 5MHz/QPSK/Low CH



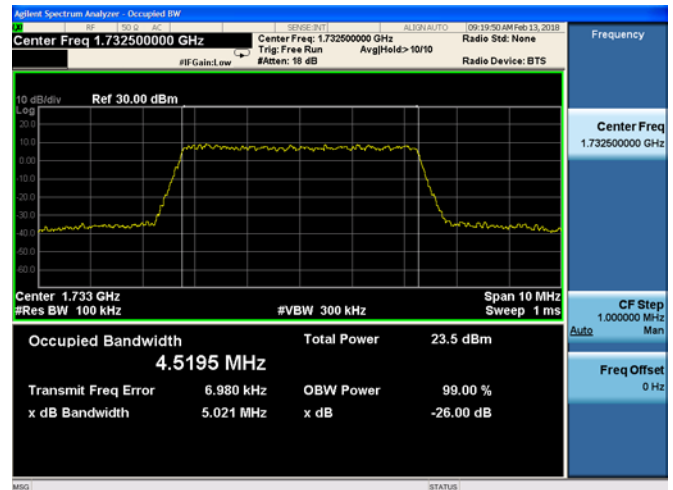
## 5MHz/16QAM/Low CH



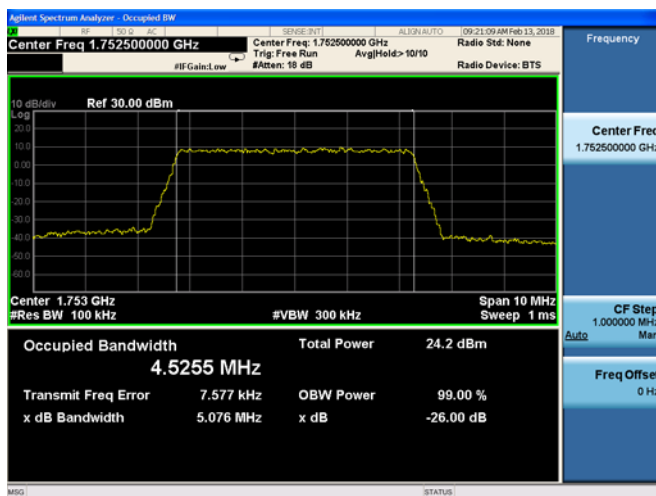
## 5MHz/QPSK/Mid CH



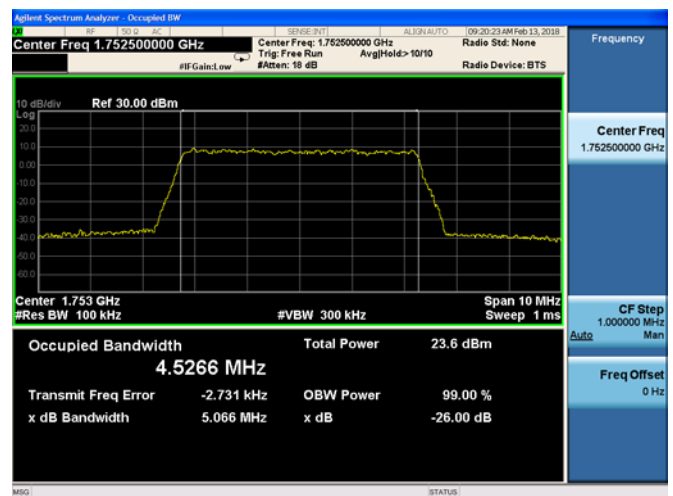
## 5MHz/16QAM/Mid CH



## 5MHz/QPSK/High CH

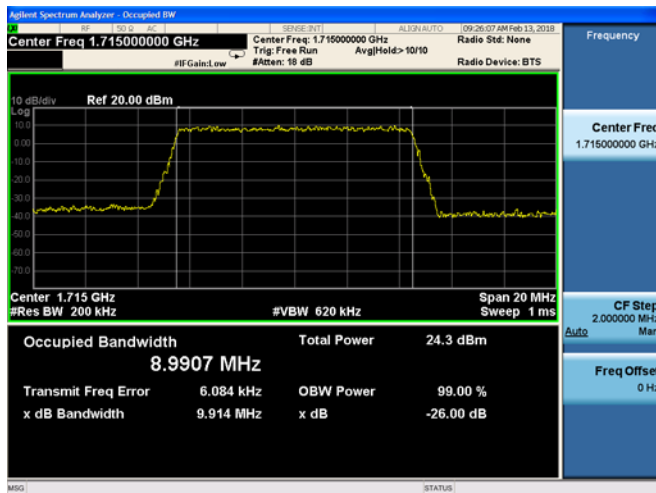


## 5MHz/16QAM/High CH

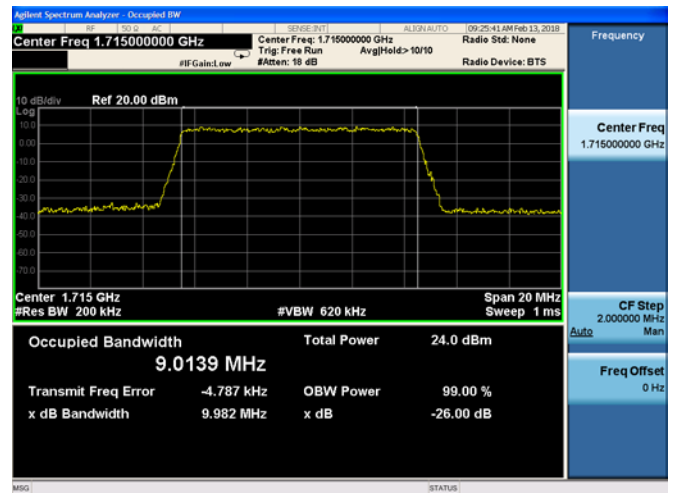




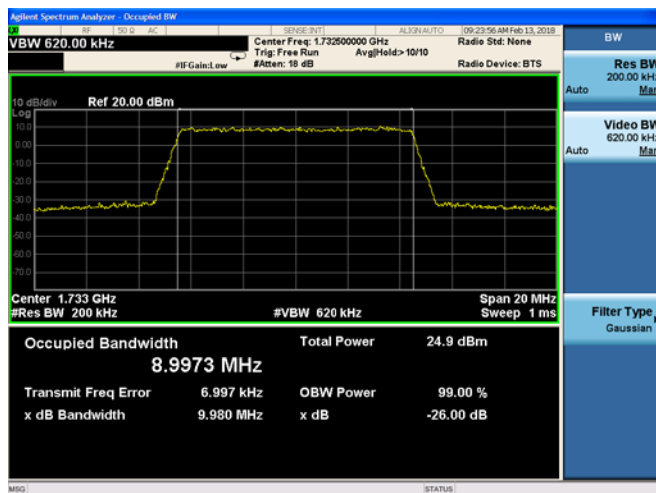
## 10MHz/QPSK/Low CH



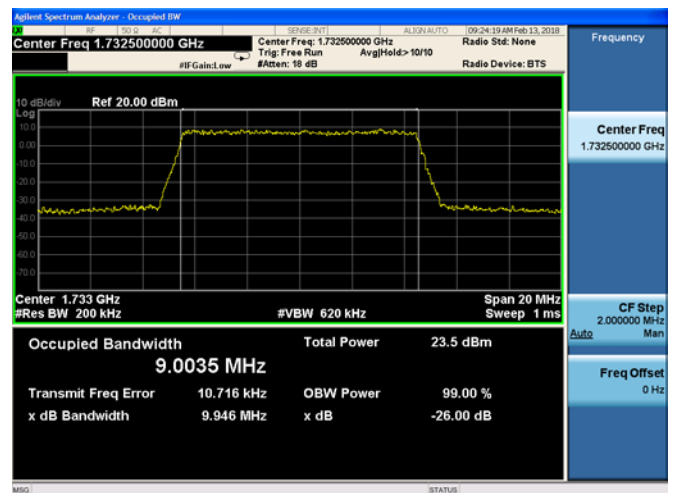
## 10MHz/16QAM/Low CH



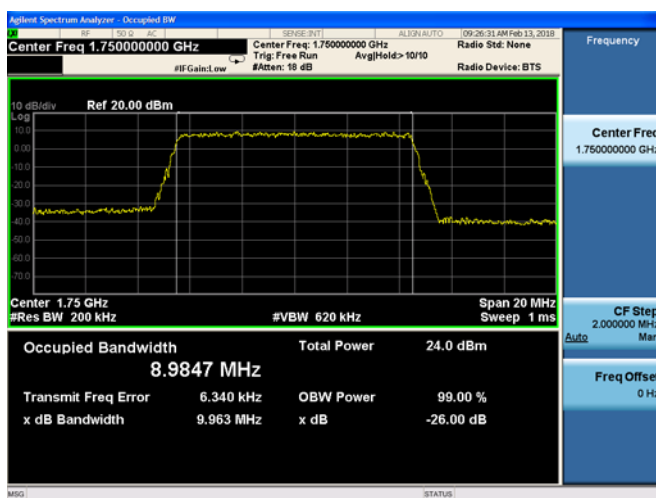
## 10MHz/QPSK/Mid CH



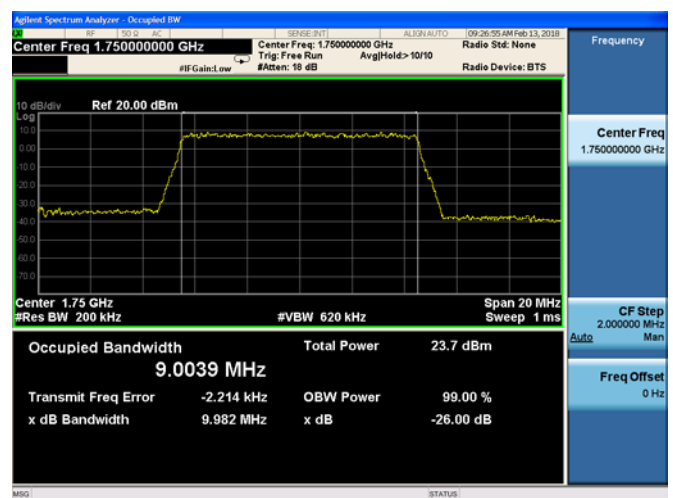
## 10MHz/16QAM/Mid CH



## 10MHz/QPSK/High CH

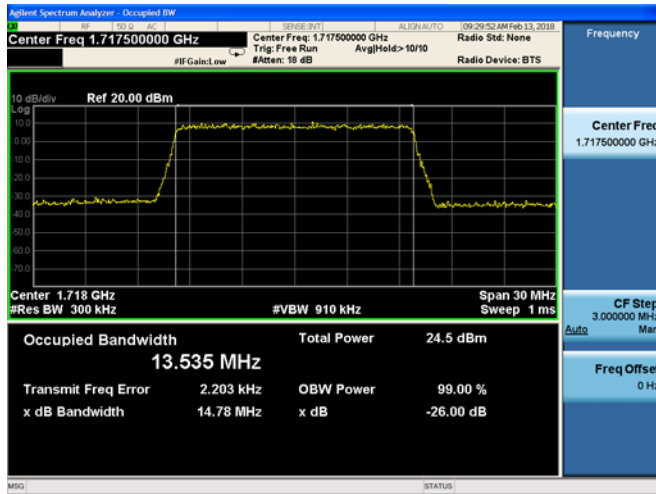


## 10MHz/16QAM/High CH

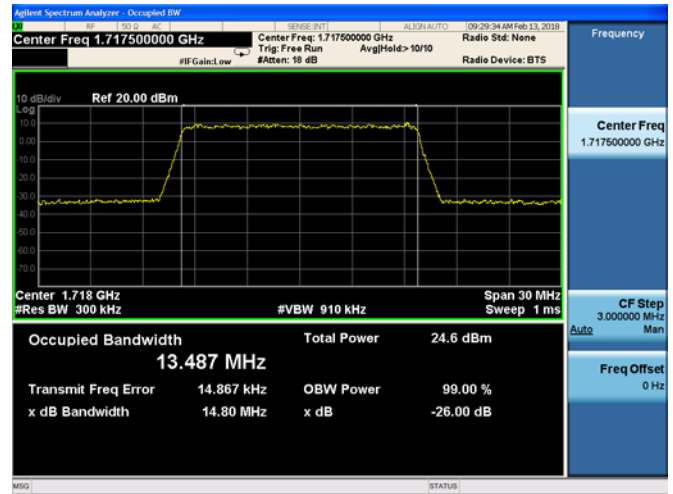




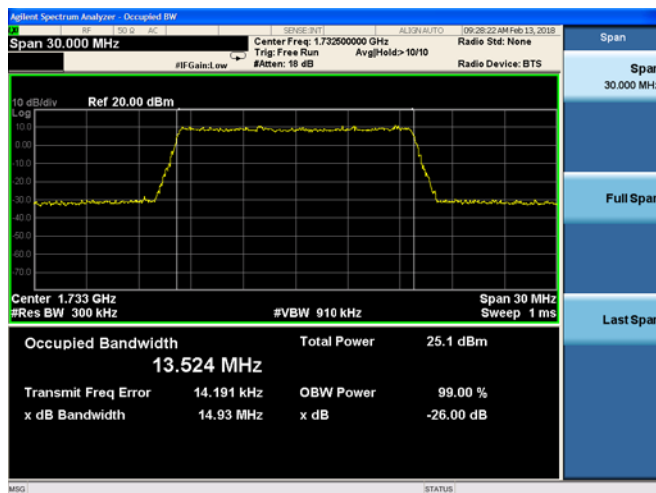
## 15MHz/QPSK/Low CH



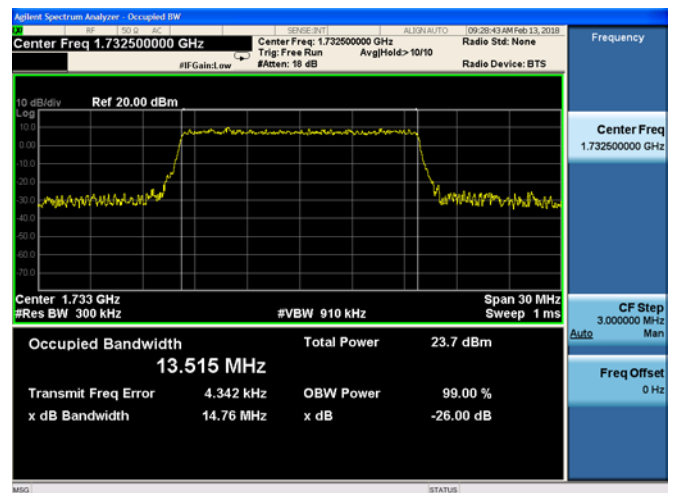
## 15MHz/16QAM/Low CH



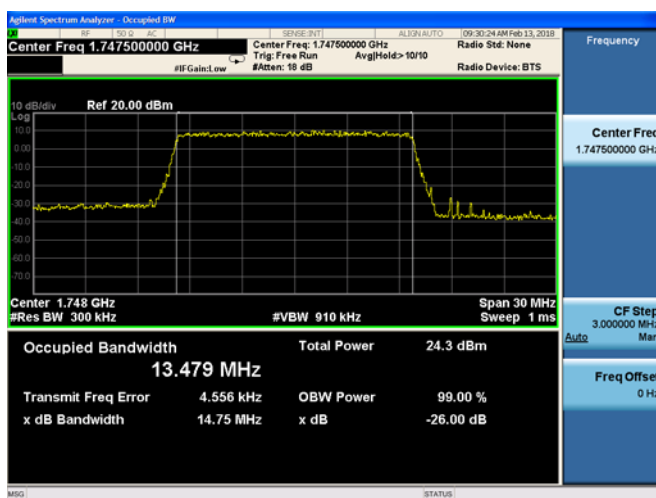
## 15MHz/QPSK/Mid CH



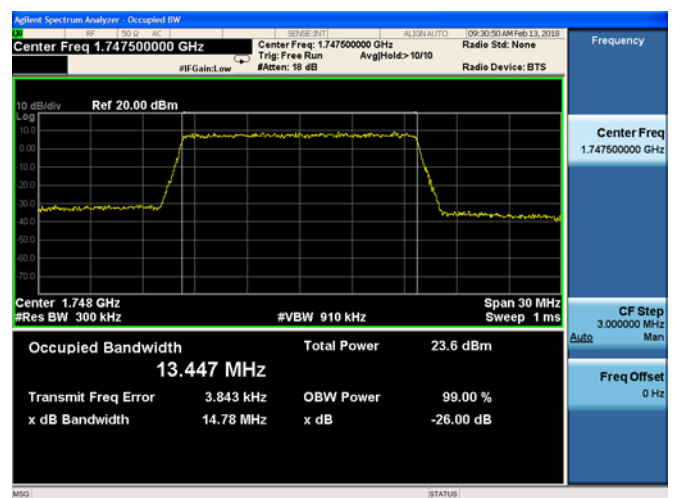
## 15MHz/16QAM/Mid CH



## 15MHz/QPSK/High CH

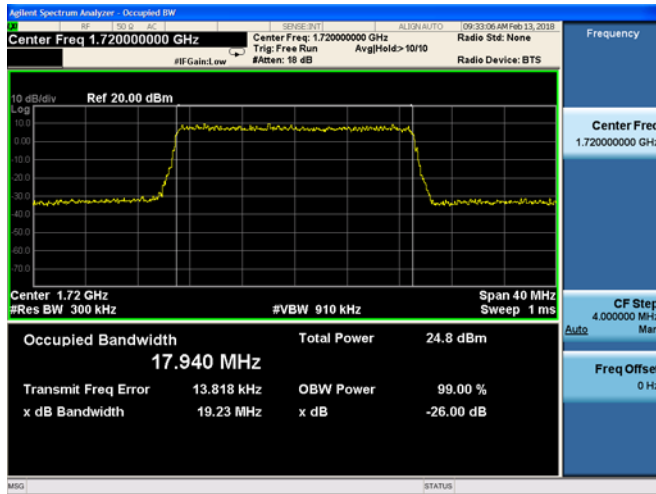


## 15MHz/16QAM/High CH

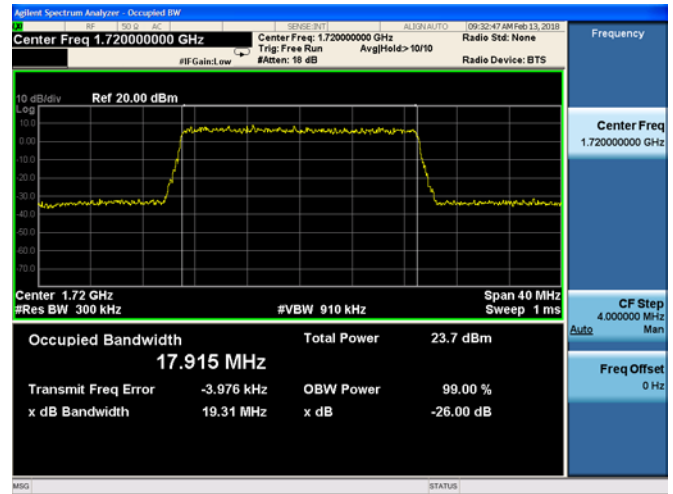




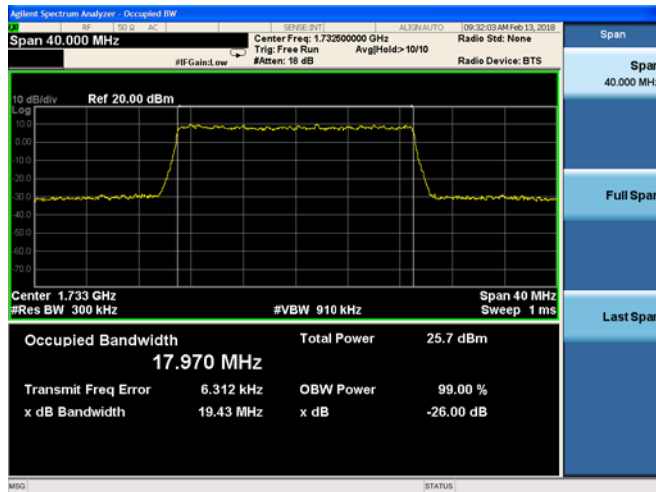
## 20MHz/QPSK/Low CH



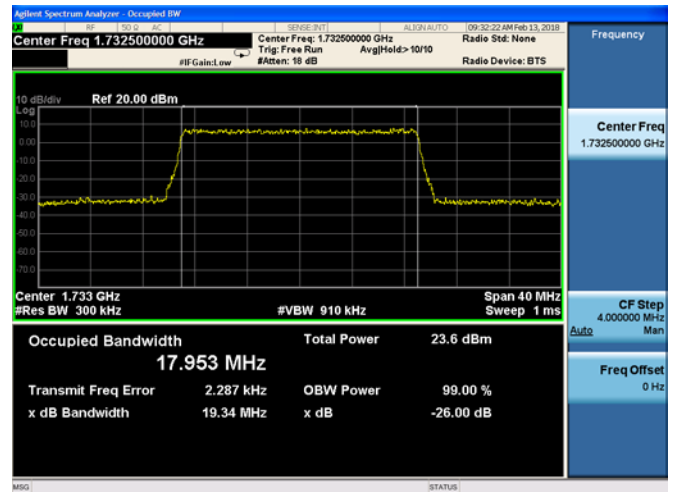
## 20MHz/16QAM/Low CH



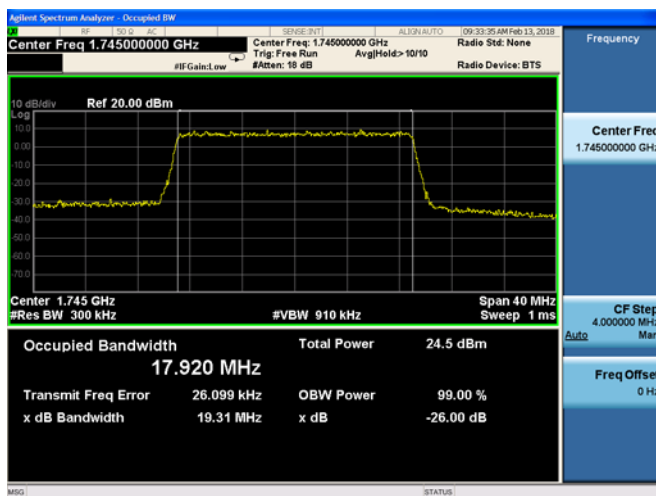
## 20MHz/QPSK/Mid CH



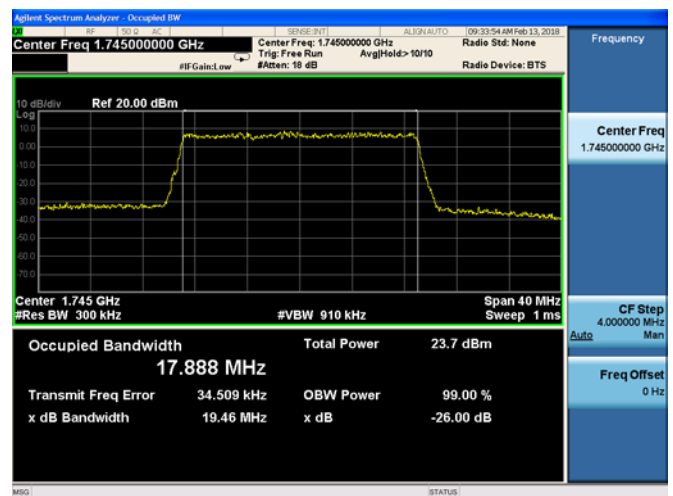
## 20MHz/16QAM/Mid CH



## 20MHz/QPSK/High CH



## 20MHz/16QAM/High CH



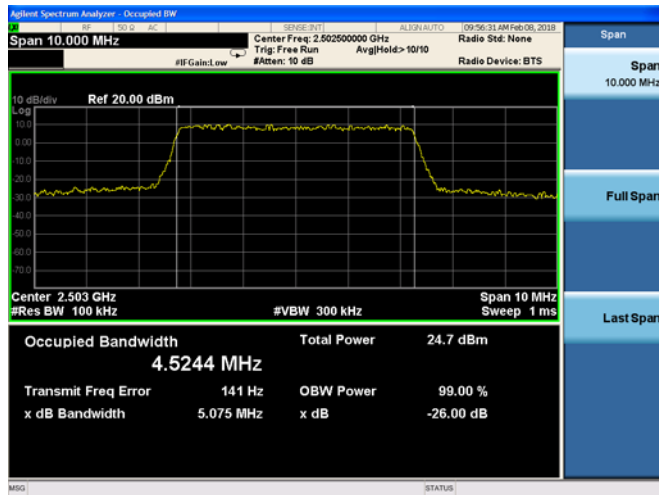


| LTE Band 7, BW: 5MHz  |                 |                     |                      |                     |                      |
|-----------------------|-----------------|---------------------|----------------------|---------------------|----------------------|
| Channel               | Frequency (MHz) | QPSK                |                      | 16QAM               |                      |
|                       |                 | 99% Bandwidth (MHz) | 26dB Bandwidth (MHz) | 99% Bandwidth (MHz) | 26dB Bandwidth (MHz) |
| 20775                 | 2502.5          | 4.5244              | 5.075                | 4.5464              | 5.047                |
| 21100                 | 2535.0          | 4.5434              | 5.061                | 4.5500              | 5.095                |
| 21425                 | 2567.5          | 4.5259              | 5.033                | 4.5480              | 5.119                |
| LTE Band 7, BW: 10MHz |                 |                     |                      |                     |                      |
| Channel               | Frequency (MHz) | QPSK                |                      | 16QAM               |                      |
|                       |                 | 99% Bandwidth (MHz) | 26dB Bandwidth (MHz) | 99% Bandwidth (MHz) | 26dB Bandwidth (MHz) |
| 20800                 | 2505.0          | 9.0197              | 9.963                | 9.0132              | 9.961                |
| 21100                 | 2535.0          | 9.0150              | 10.07                | 8.9787              | 9.993                |
| 21400                 | 2565.0          | 9.0178              | 10.00                | 9.0288              | 9.890                |
| LTE Band 7, BW: 15MHz |                 |                     |                      |                     |                      |
| Channel               | Frequency (MHz) | QPSK                |                      | 16QAM               |                      |
|                       |                 | 99% Bandwidth (MHz) | 26dB Bandwidth (MHz) | 99% Bandwidth (MHz) | 26dB Bandwidth (MHz) |
| 20825                 | 2507.5          | 13.493              | 14.94                | 13.466              | 14.74                |
| 21100                 | 2535.0          | 13.529              | 14.83                | 13.516              | 14.92                |
| 21375                 | 2562.5          | 13.453              | 14.77                | 13.467              | 14.79                |
| LTE Band 7, BW: 20MHz |                 |                     |                      |                     |                      |
| Channel               | Frequency (MHz) | QPSK                |                      | 16QAM               |                      |
|                       |                 | 99% Bandwidth (MHz) | 26dB Bandwidth (MHz) | 99% Bandwidth (MHz) | 26dB Bandwidth (MHz) |
| 20850                 | 2510.0          | 18.011              | 19.72                | 17.990              | 19.62                |
| 21100                 | 2535.0          | 17.998              | 19.41                | 18.003              | 19.51                |
| 21350                 | 2560.0          | 17.968              | 19.71                | 17.986              | 19.70                |

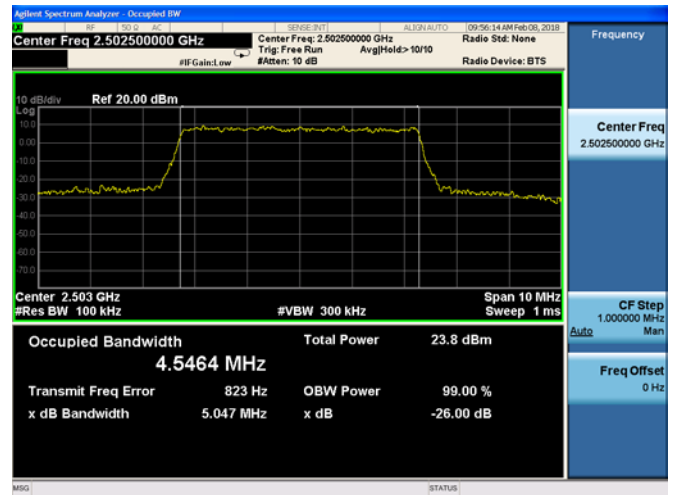


## LTE Band 7 99%&amp;26dB Bandwidth

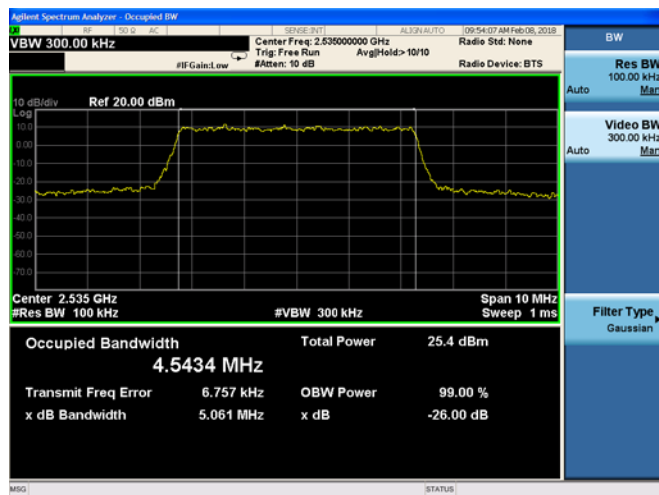
## 5MHz/QPSK/Low CH



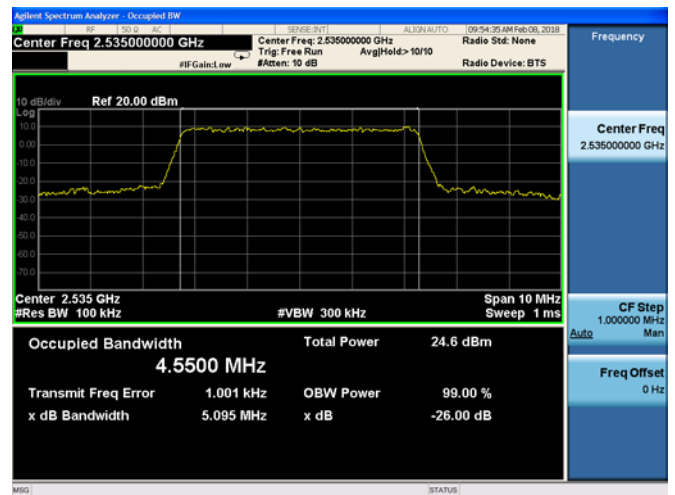
## 5MHz/16QAM/Low CH



## 5MHz/QPSK/Mid CH

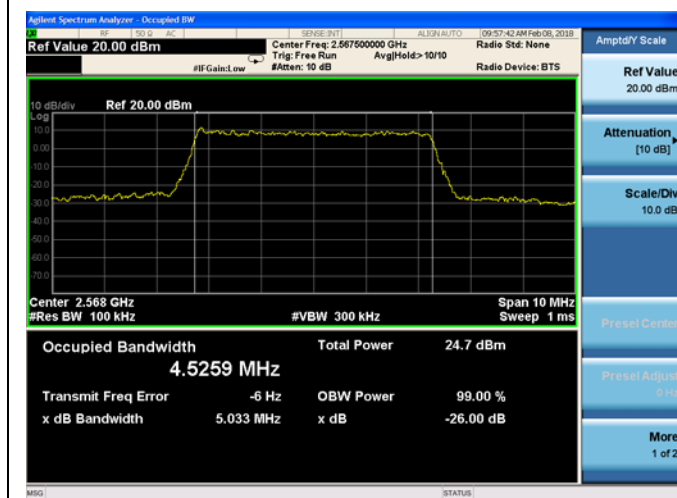


## 5MHz/16QAM/Mid CH





## 5MHz/QPSK/High CH



## 5MHz/16QAM/High CH

