



REPORT No.: SZ20120168W09

# TEST REPORT

**APPLICANT** : Nubia Technology Co.,Ltd.

**PRODUCT NAME** : 5G Mobile Phone

**MODEL NAME** : NX669J

**BRAND NAME** : REDMAGIC

**FCC ID** : 2AHJO-NX669J

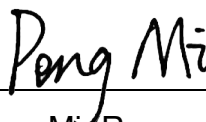
**STANDARD(S)** : 47 CFR Part 22, Subpart H  
47 CFR Part 24, Subpart E  
47 CFR Part 27, Subpart H&L&M

**RECEIPT DATE** : 2020-12-29

**TEST DATE** : 2020-12-31 to 2021-03-13

**ISSUE DATE** : 2021-03-13

Edited by:

  
Peng Mi (Rapporteur)

Approved by:

  
Peng Huarui (Supervisor)

**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>3</b>   |
| 1.1. Applicant and Manufacturer Information                                     | 3          |
| 1.2. Equipment Under Test (EUT) Description                                     | 3          |
| 1.3. Maximum E.R.P./E.I.R.P. and Emission Designator                            | 6          |
| 1.4. Test Standards and Results                                                 | 9          |
| 1.5. Environmental Conditions                                                   | 10         |
| <b>2. 47 CFR Part 2, Part 22H, Part 24E, Part 27 H&amp;L&amp;M Requirements</b> | <b>11</b>  |
| 2.1. Transmitter Conducted Output Power and E.R.P./E.I.R.P.                     | 11         |
| 2.2. Occupied Bandwidth                                                         | 113        |
| 2.3. Frequency Stability                                                        | 203        |
| 2.4. Peak to Average Ratio                                                      | 211        |
| 2.5. Conducted Spurious Emissions                                               | 250        |
| 2.6. Band Edge                                                                  | 342        |
| 2.7. Radiated Spurious Emissions                                                | 388        |
| <b>Annex A Test Uncertainty</b>                                                 | <b>465</b> |
| <b>Annex B Testing Laboratory Information</b>                                   | <b>466</b> |

| Change History |            |                   |
|----------------|------------|-------------------|
| Version        | Date       | Reason for change |
| 1.0            | 2021-03-13 | First edition     |
|                |            |                   |



# 1. Technical Information

**Note:** Provide by applicant.

## 1.1. Applicant and Manufacturer Information

|                              |                                                                                                                                                    |
|------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Applicant:</b>            | Nubia Technology Co.,Ltd.                                                                                                                          |
| <b>Applicant Address:</b>    | Room 1801, Building 2, Chongwen Park, Nanshan Zhiyuan,<br>No.3370, Liuxian Rd, Nanshan District, Shenzhen City,<br>Guangdong Province, P. R. China |
| <b>Manufacturer:</b>         | Nubia Technology Co.,Ltd.                                                                                                                          |
| <b>Manufacturer Address:</b> | Room 1801, Building 2, Chongwen Park, Nanshan Zhiyuan,<br>No.3370, Liuxian Rd, Nanshan District, Shenzhen City,<br>Guangdong Province, P. R. China |

## 1.2. Equipment Under Test (EUT) Description

|                             |                                                            |                     |
|-----------------------------|------------------------------------------------------------|---------------------|
| <b>Product Name:</b>        | 5G Mobile Phone                                            |                     |
| <b>Serial No.:</b>          | (N/A, marked #1 by test site)                              |                     |
| <b>Hardware Version:</b>    | NX669J_V1AMB                                               |                     |
| <b>Software Version:</b>    | NX669J_EUCommon_V3.05                                      |                     |
| <b>Modulation Type:</b>     | QPSK, 16QAM, 64QAM                                         |                     |
| <b>Carrier Aggregation:</b> | Not support                                                |                     |
| <b>Operation Band:</b>      | Band 2 / 4 / 5 / 7 / 12 / 17 / 18 / 19 / 26 / 38 / 40 / 66 |                     |
| <b>Frequency Range:</b>     | LTE Band 2                                                 | Tx: 1850MHz–1910MHz |
|                             |                                                            | Rx: 1930MHz–1990MHz |
|                             | LTE Band 4                                                 | Tx: 1710MHz–1755MHz |
|                             |                                                            | Rx: 2110MHz–2155MHz |
|                             | LTE Band 5                                                 | Tx: 824MHz–849MHz   |
|                             |                                                            | Rx: 869MHz–894MHz   |
|                             | LTE Band 7                                                 | Tx: 2500MHz–2570MHz |
|                             |                                                            | Rx: 2620MHz–2690MHz |
|                             | LTE Band 12                                                | Tx: 699MHz - 716MHz |
|                             |                                                            | Rx: 729MHz – 746MHz |
|                             | LTE Band 17                                                | Tx: 704MHz - 716MHz |
|                             |                                                            | Rx: 734MHz – 746MHz |



|                           |                     |                                         |
|---------------------------|---------------------|-----------------------------------------|
| <b>Frequency Range:</b>   | LTE Band 18         | Tx: 824MHz–830MHz                       |
|                           |                     | Rx: 869MHz–875MHz                       |
|                           | LTE Band 19         | Tx: 830MHz–845MHz                       |
|                           |                     | Rx: 875MHz–890MHz                       |
|                           | LTE Band 26         | Tx: 824MHz–849MHz                       |
|                           |                     | Rx: 869MHz–894MHz                       |
|                           | LTE Band 38         | Tx: 2570MHz–2620MHz                     |
|                           |                     | Rx: 2570MHz–2620MHz                     |
|                           | LTE Band 40 Block A | Tx: 2305MHz–2315MHz                     |
|                           |                     | Rx: 2305MHz–2315MHz                     |
| <b>Channel Bandwidth:</b> | LTE Band 40 Block B | Tx: 2350MHz–2360MHz                     |
|                           |                     | Rx: 2350MHz–2360MHz                     |
|                           | LTE Band 66         | Tx: 1710MHz –1780MHz                    |
|                           |                     | Rx: 2110MHz –2200MHz                    |
|                           | LTE Band 2          | 1.4MHz, 3MHz, 5MHz, 10MHz, 15MHz, 20MHz |
|                           | LTE Band 4          | 1.4MHz, 3MHz, 5MHz, 10MHz, 15MHz, 20MHz |
|                           | LTE Band 5          | 1.4MHz, 3MHz, 5MHz, 10MHz               |
|                           | LTE Band 7          | 5 MHz, 10MHz, 15MHz, 20MHz              |
|                           | LTE Band 12         | 1.4MHz, 3 MHz, 5 MHz, 10MHz             |
|                           | LTE Band 17         | 5 MHz, 10MHz                            |
|                           | LTE Band 18         | 5 MHz                                   |
|                           | LTE Band 19         | 5 MHz, 10MHz, 15MHz                     |
|                           | LTE Band 26         | 1.4MHz, 3MHz, 5MHz, 10MHz, 15MHz        |
|                           | LTE Band 38         | 5 MHz, 10MHz, 15MHz, 20MHz              |
|                           | LTE Band 40         | 5 MHz, 10MHz                            |
|                           | LTE Band 66         | 1.4MHz, 3MHz, 5MHz, 10MHz, 15MHz, 20MHz |
| <b>Antenna Type:</b>      | PIFA Antenna        |                                         |
| <b>Antenna Gain:</b>      | LTE Band 2          | -0.3dBi                                 |
|                           | LTE Band 4          | -0.5dBi                                 |
|                           | LTE Band 5          | -1.0dBi                                 |
|                           | LTE Band 7          | 0.2dBi                                  |
|                           | LTE Band 12         | -1.2dBi                                 |
|                           | LTE Band 17         | -1.2dBi                                 |
|                           | LTE Band 18         | -1.0dBi                                 |
|                           | LTE Band 19         | -1.0dBi                                 |
|                           | LTE Band 26         | -1.0dBi                                 |

|                               |                |                                        |
|-------------------------------|----------------|----------------------------------------|
| <b>Antenna Gain:</b>          | LTE Band 38    | 0dBi                                   |
|                               | LTE Band 40    | 0.2dBi                                 |
|                               | LTE Band 66    | -0.3dBi                                |
| <b>Accessory Information:</b> | Battery        |                                        |
|                               | Brand Name:    | nubia                                  |
|                               | Model No.:     | Li3945T44P8h906455                     |
|                               | Serial No.:    | (N/A, marked #1 by test site)          |
|                               | Capacity:      | 4960mAh                                |
|                               | Rated Voltage: | 3.87V                                  |
|                               | Charge Limit:  | 4.45V                                  |
|                               | Manufacturer:  | Dongguan Amperex Technology Limited    |
|                               | AC Adapter     |                                        |
|                               | Brand Name:    | nubia                                  |
|                               | Model No.:     | NB-A930A-A, NB-A930A-USBA-1            |
|                               | Serial No.:    | (N/A, marked #1 by test site)          |
|                               | Rated Output:  | 5V=3A, 9V=3A, 12V=2.5A, 15V=2A,        |
|                               | Rated Input:   | 100-240V~50/60Hz, Max 0.8A             |
|                               | Manufacturer:  | ShenZhen Kingfulin Technology Co., Ltd |

**Note 1:** SIM 1 and SIM 2 is a chipset unit and tested as a single chipset. The SIM 1 is chosen for test.

**Note 2:** There are 2 antennas TX diversity, top antenna and bottom antenna. Both of two antennas have been evaluated, only the worst test results(top antenna) for E.I.R.P. were recorded in this report.

**Note 3:** For a more detailed description, please refer to Specification or User's Manual supplied by the applicant and/or manufacturer.

### 1.3. Maximum E.R.P./E.I.R.P. and Emission Designator

| LTE Band 2  | Maximum E.R.P./E.I.R.P. (W) |       |       | Emission Designator (99%OBW) |         |         |
|-------------|-----------------------------|-------|-------|------------------------------|---------|---------|
| BW(MHz)     | QPSK                        | 16QAM | 64QAM | QPSK                         | 16QAM   | 64QAM   |
| 20          | 0.193                       | 0.161 | 0.129 | 18M0G7D                      | 18M0W7D | 18M0W7D |
| 15          | 0.172                       | 0.146 | 0.118 | 13M5G7D                      | 13M5W7D | 13M5W7D |
| 10          | 0.168                       | 0.148 | 0.110 | 8M99G7D                      | 8M96W7D | 8M98W7D |
| 5           | 0.169                       | 0.148 | 0.117 | 4M50G7D                      | 4M50W7D | 4M50W7D |
| 3           | 0.173                       | 0.140 | 0.120 | 2M70G7D                      | 2M70W7D | 2M71W7D |
| 1.4         | 0.168                       | 0.139 | 0.114 | 1M10G7D                      | 1M10W7D | 1M09W7D |
| LTE Band 4  | Maximum E.R.P./E.I.R.P. (W) |       |       | Emission Designator (99%OBW) |         |         |
| BW(MHz)     | QPSK                        | 16QAM | 64QAM | QPSK                         | 16QAM   | 64QAM   |
| 20          | 0.161                       | 0.127 | 0.107 | 17M9G7D                      | 18M0W7D | 18M0W7D |
| 15          | 0.157                       | 0.123 | 0.107 | 13M5G7D                      | 13M5W7D | 13M5W7D |
| 10          | 0.156                       | 0.124 | 0.108 | 9M00G7D                      | 8M96W7D | 8M99W7D |
| 5           | 0.155                       | 0.125 | 0.107 | 4M50G7D                      | 4M50W7D | 4M50W7D |
| 3           | 0.158                       | 0.128 | 0.102 | 2M70G7D                      | 2M70W7D | 2M71W7D |
| 1.4         | 0.154                       | 0.124 | 0.102 | 1M10G7D                      | 1M10W7D | 1M09W7D |
| LTE Band 5  | Maximum E.R.P./E.I.R.P. (W) |       |       | Emission Designator (99%OBW) |         |         |
| BW(MHz)     | QPSK                        | 16QAM | 64QAM | QPSK                         | 16QAM   | 64QAM   |
| 10          | 0.102                       | 0.085 | 0.067 | 9M00G7D                      | 8M96W7D | 8M97W7D |
| 5           | 0.100                       | 0.087 | 0.066 | 4M50G7D                      | 4M50W7D | 4M50W7D |
| 3           | 0.100                       | 0.086 | 0.065 | 2M70G7D                      | 2M70W7D | 2M71W7D |
| 1.4         | 0.101                       | 0.083 | 0.064 | 1M10G7D                      | 1M09W7D | 1M09W7D |
| LTE Band 7  | Maximum E.R.P./E.I.R.P. (W) |       |       | Emission Designator (99%OBW) |         |         |
| BW(MHz)     | QPSK                        | 16QAM | 64QAM | QPSK                         | 16QAM   | 64QAM   |
| 20          | 0.181                       | 0.147 | 0.124 | 18M0G7D                      | 18M0W7D | 18M0W7D |
| 15          | 0.178                       | 0.160 | 0.125 | 13M5G7D                      | 13M5W7D | 13M5W7D |
| 10          | 0.174                       | 0.157 | 0.122 | 8M99G7D                      | 8M96W7D | 8M97W7D |
| 5           | 0.175                       | 0.146 | 0.119 | 4M51G7D                      | 4M51W7D | 4M50W7D |
| LTE Band 12 | Maximum E.R.P./E.I.R.P. (W) |       |       | Emission Designator (99%OBW) |         |         |
| BW(MHz)     | QPSK                        | 16QAM | 64QAM | QPSK                         | 16QAM   | 64QAM   |
| 10          | 0.102                       | 0.082 | 0.071 | 9M00G7D                      | 8M95W7D | 8M97W7D |
| 5           | 0.100                       | 0.081 | 0.070 | 4M50G7D                      | 4M51W7D | 4M50W7D |
| 3           | 0.100                       | 0.085 | 0.068 | 2M70G7D                      | 2M70W7D | 2M71W7D |
| 1.4         | 0.098                       | 0.084 | 0.066 | 1M09G7D                      | 1M10W7D | 1M09W7D |



| <b>LTE Band 17</b>         | <b>Maximum E.R.P./E.I.R.P. (W)</b> |       |       | <b>Emission Designator (99%OBW)</b> |         |         |
|----------------------------|------------------------------------|-------|-------|-------------------------------------|---------|---------|
| BW(MHz)                    | QPSK                               | 16QAM | 64QAM | QPSK                                | 16QAM   | 64QAM   |
| 10                         | 0.098                              | 0.084 | 0.069 | 9M01G7D                             | 8M95W7D | 8M97W7D |
| 5                          | 0.095                              | 0.077 | 0.063 | 4M50G7D                             | 4M51W7D | 4M50W7D |
| <b>LTE Band 18</b>         | <b>Maximum E.R.P./E.I.R.P. (W)</b> |       |       | <b>Emission Designator (99%OBW)</b> |         |         |
| BW(MHz)                    | QPSK                               | 16QAM | 64QAM | QPSK                                | 16QAM   | 64QAM   |
| 5                          | 0.205                              | 0.176 | 0.145 | 4M49G7D                             | 4M49W7D | 4M49W7D |
| <b>LTE Band 19</b>         | <b>Maximum E.R.P./E.I.R.P. (W)</b> |       |       | <b>Emission Designator (99%OBW)</b> |         |         |
| BW(MHz)                    | QPSK                               | 16QAM | 64QAM | QPSK                                | 16QAM   | 64QAM   |
| 15                         | 0.215                              | 0.175 | 0.143 | 13M5G7D                             | 13M5W7D | 13M5W7D |
| 10                         | 0.100                              | 0.082 | 0.066 | 9M00G7D                             | 8M96W7D | 8M98W7D |
| 5                          | 0.100                              | 0.081 | 0.066 | 4M51G7D                             | 4M50W7D | 4M50W7D |
| <b>LTE Band 26</b>         | <b>Maximum E.R.P./E.I.R.P. (W)</b> |       |       | <b>Emission Designator (99%OBW)</b> |         |         |
| BW(MHz)                    | QPSK                               | 16QAM | 64QAM | QPSK                                | 16QAM   | 64QAM   |
| 15                         | 0.207                              | 0.182 | 0.145 | 13M5G7D                             | 13M5W7D | 13M5W7D |
| 10                         | 0.212                              | 0.178 | 0.136 | 8M98G7D                             | 9M00W7D | 8M98W7D |
| 5                          | 0.202                              | 0.176 | 0.140 | 4M49G7D                             | 4M50W7D | 4M50W7D |
| 3                          | 0.200                              | 0.182 | 0.149 | 2M69G7D                             | 2M70W7D | 2M70W7D |
| 1.4                        | 0.195                              | 0.179 | 0.143 | 1M09G7D                             | 1M09W7D | 1M09W7D |
| <b>LTE Band 38</b>         | <b>Maximum E.R.P./E.I.R.P. (W)</b> |       |       | <b>Emission Designator (99%OBW)</b> |         |         |
| BW(MHz)                    | QPSK                               | 16QAM | 64QAM | QPSK                                | 16QAM   | 64QAM   |
| 20                         | 0.189                              | 0.147 | 0.126 | 18M0G7D                             | 18M0W7D | 17M9W7D |
| 15                         | 0.188                              | 0.148 | 0.126 | 13M5G7D                             | 13M5W7D | 13M5W7D |
| 10                         | 0.182                              | 0.143 | 0.119 | 8M97G7D                             | 8M97W7D | 8M98W7D |
| 5                          | 0.185                              | 0.146 | 0.120 | 4M50G7D                             | 4M51W7D | 4M50W7D |
| <b>LTE Band 40 Block A</b> | <b>Maximum E.R.P./E.I.R.P. (W)</b> |       |       | <b>Emission Designator (99%OBW)</b> |         |         |
| BW(MHz)                    | QPSK                               | 16QAM | 64QAM | QPSK                                | 16QAM   | 64QAM   |
| 10                         | 0.190                              | 0.155 | 0.119 | 8M95G7D                             | 8M94W7D | 8M96W7D |
| 5                          | 0.199                              | 0.171 | 0.132 | 4M50G7D                             | 4M49W7D | 4M50W7D |
| <b>LTE Band 40 Block B</b> | <b>Maximum E.R.P./E.I.R.P. (W)</b> |       |       | <b>Emission Designator (99%OBW)</b> |         |         |
| BW(MHz)                    | QPSK                               | 16QAM | 64QAM | QPSK                                | 16QAM   | 64QAM   |
| 10                         | 0.188                              | 0.150 | 0.121 | 8M97G7D                             | 8M97W7D | 8M95W7D |
| 5                          | 0.203                              | 0.171 | 0.132 | 4M50G7D                             | 4M50W7D | 4M49W7D |



REPORT No.: SZ20120168W09

| LTE Band 66 | Maximum E.R.P./E.I.R.P. (W) |       |       | Emission Designator (99%OBW) |         |         |
|-------------|-----------------------------|-------|-------|------------------------------|---------|---------|
| BW(MHz)     | QPSK                        | 16QAM | 64QAM | QPSK                         | 16QAM   | 64QAM   |
| 20          | 0.191                       | 0.160 | 0.129 | 18M0G7D                      | 18M0W7D | 18M0W7D |
| 15          | 0.185                       | 0.164 | 0.132 | 13M5G7D                      | 13M5W7D | 13M5W7D |
| 10          | 0.187                       | 0.157 | 0.136 | 8M99G7D                      | 8M98W7D | 8M98W7D |
| 5           | 0.187                       | 0.149 | 0.124 | 4M50G7D                      | 4M49W7D | 4M49W7D |
| 3           | 0.177                       | 0.157 | 0.127 | 2M70G7D                      | 2M70W7D | 2M69W7D |
| 1.4         | 0.169                       | 0.149 | 0.129 | 1M09G7D                      | 1M09W7D | 1M09W7D |



## 1.4. Test Standards and Results

The objective of the report is to perform testing according to Part 2, Part 22, Part 24, 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 22 | Public Mobile Services                                                        |
| 3   | 47 CFR Part 24 | Personal Communications Services                                              |
| 4   | 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 | Method Determination /Remark |
|---------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------|-------------------------------------------------------------|-------------------------|--------|------------------------------|
| 2.1046<br>22.913(a)<br>22.913(a)(2)<br>24.232(c)<br>27.50(a)(3)<br>27.50(c)(10)<br>27.50(d)(4)<br>27.50(h)(2) | Transmitter<br>Conducted<br>Output Power<br>and<br>E.R.P./E.I.R.P. | Mar 03&04, 2021                                             | Chen Hao<br>Gao Jianrou | PASS   | No<br>deviation              |
| 2.1049                                                                                                        | Occupied<br>Bandwidth                                              | Jan<br>09&11&12&23,<br>2021                                 | Ling Keye               | PASS   | No<br>deviation              |
| 2.1055<br>22.355<br>24.235<br>27.54                                                                           | Frequency<br>Stability                                             | Feb 19, 2021                                                | Ling Keye               | PASS   | No<br>deviation              |
| 24.232(d),<br>27.50(d)(5)                                                                                     | Peak to<br>Average Radio                                           | Jan 11&23, 2021                                             | Ling Keye               | PASS   | No<br>deviation              |
| 2.1051<br>22.917(a)<br>24.238(a)<br>27.53(a)(4)<br>27.53(g)<br>27.53(h)<br>27.53(m)(4)                        | Conducted<br>Spurious<br>Emissions                                 | Dec 31, 2020<br>Jan<br>11&23&28&29,<br>2021<br>Mar 13, 2021 | Ling Keye               | PASS   | No<br>deviation              |



|                                                                                        |                                   |                                       |             |      |              |
|----------------------------------------------------------------------------------------|-----------------------------------|---------------------------------------|-------------|------|--------------|
| 2.1051<br>22.917(a)<br>24.238(a)<br>27.53(a)(4)<br>27.53(g)<br>27.53(h)<br>27.53(m)(4) | Band Edge                         | Dec 31, 2020<br>Jan 02&09, 2021       | Ling Keye   | PASS | No deviation |
| 2.1051<br>22.917(a)<br>24.238(a)<br>27.53(a)(4)<br>27.53(g)<br>27.53(h)<br>27.53(m)(4) | Radiated<br>Spurious<br>Emissions | Jan 13&08, 2021<br>Feb 09&12&18, 2021 | Gao Jianrou | PASS | No deviation |

**Note 1:** The tests were performed according to the method of measurements prescribed in KDB971168 D01 v03 and ANSI/TIA-603-E-2016.

**Note 2:** The path loss during the RF test is calibrated to correct the results by the offset setting in the test equipments. The ref offset 23.5dB contains two parts that cable loss 13.5dB and Attenuator 10dB.

**Note 3:** Additions to, deviation, or exclusions from the method shall be judged in the "method determination" column of add, deviate or exclude from the specific method shall be explained in the "Remark" of the above table.

**Note 4:** When the test result is a critical value, we will use the measurement uncertainty give the judgment result based on the 95% risk level.

## 1.5. 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 22H, Part 24E, Part 27 H&L&M Requirements**

### **2.1. Transmitter Conducted Output Power and E.R.P./E.I.R.P.**

#### **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).

According to FCC section 24.232 (c) for LTE Band 2, Mobile and portable stations are limited to 2 watts E.I.R.P. and the equipment must employ a means for limiting power to the minimum necessary for successful communications.

According to FCC section 27.50 (d)(4) for LTE Band 4/66, Fixed, mobile and portable (hand-held) stations in the 1710-1755MHz band are limited to 1wat E.I.R.P.

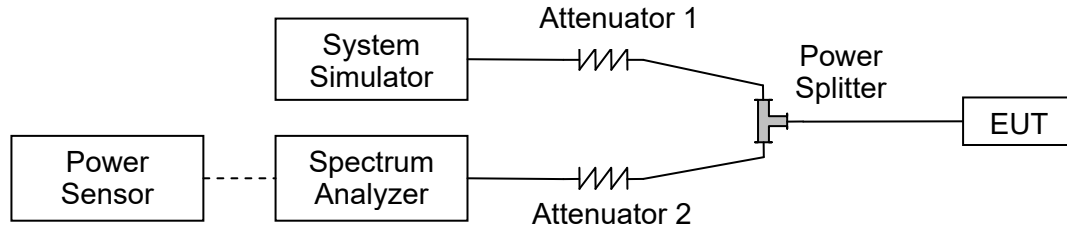
According to FCC section 22.913 (a)(2) for LTE Band 5/18/19/26, the E.R.P. of mobile transmitters and auxiliary test transmitters must not exceed 7 watts.

According to FCC section 27.50 (h)(2) for LTE Band 7/38, Mobile and other user stations. Mobile stations are limited to 2 watts E.I.R.P. All user stations are limited to 2 watts transmitter output power.

According to FCC section 27.50 (c)(10) for LTE Band 12/17, Portable stations (hand-held devices) operating in the 704-716MHz band are limited to 3watts E.R.P.

According to FCC section 27.50 (a)(3) for LTE Band 40, For mobile and portable stations transmitting in the 2305-2315 MHz band or the 2350-2360 MHz band, the average E.I.R.P. must not exceed 50 mill watts within any 1 megahertz of authorized bandwidth

### 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.

$E.I.R.P. (dBm) = \text{Conducted Output Power (dBm)} + \text{Antenna Gain (dBi)}$

$E.R.P. (dBm) = E.I.R.P. (dBm) - 2.15$



#### 2.1.4. Result

**Note:** There are 2 antennas TX diversity, top antenna and bottom antenna. Both of two antennas have been evaluated, only the worst test results(top antenna) for E.I.R.P. were recorded in this report.

#### Conducted Output Power:

| LTE Band 2      |            |         |           |                               |                                  |                                |
|-----------------|------------|---------|-----------|-------------------------------|----------------------------------|--------------------------------|
| BW [MHz]        | Modulation | RB Size | RB Offset | Average Power Low Ch. / Freq. | Average Power Middle Ch. / Freq. | Average Power High Ch. / Freq. |
| Channel         |            |         |           | 18700                         | 18900                            | 19100                          |
| Frequency (MHz) |            |         |           | 1860                          | 1880                             | 1900                           |
| 20              | QPSK       | 1       | 0         | 22.58                         | 22.75                            | 22.72                          |
| 20              | QPSK       | 1       | 49        | 22.54                         | 22.62                            | 22.55                          |
| 20              | QPSK       | 1       | 99        | 22.52                         | 22.68                            | 22.66                          |
| 20              | QPSK       | 50      | 0         | 21.63                         | 21.72                            | 21.65                          |
| 20              | QPSK       | 50      | 24        | 21.64                         | 21.69                            | 21.69                          |
| 20              | QPSK       | 50      | 50        | 21.69                         | 21.65                            | 21.71                          |
| 20              | QPSK       | 100     | 0         | 21.62                         | 21.71                            | 21.67                          |
| 20              | 16QAM      | 1       | 0         | 21.68                         | 21.68                            | 21.70                          |
| 20              | 16QAM      | 1       | 49        | 21.52                         | 21.82                            | 21.78                          |
| 20              | 16QAM      | 1       | 99        | 21.77                         | 21.62                            | 22.02                          |
| 20              | 16QAM      | 50      | 0         | 21.70                         | 21.67                            | 21.65                          |
| 20              | 16QAM      | 50      | 24        | 21.66                         | 21.71                            | 21.72                          |
| 20              | 16QAM      | 50      | 50        | 21.74                         | 21.71                            | 21.78                          |
| 20              | 16QAM      | 100     | 0         | 21.77                         | 21.78                            | 21.65                          |
| 20              | 64QAM      | 1       | 0         | 20.72                         | 20.91                            | 20.65                          |
| 20              | 64QAM      | 1       | 49        | 20.67                         | 20.85                            | 20.76                          |
| 20              | 64QAM      | 1       | 99        | 20.62                         | 20.95                            | 20.95                          |
| 20              | 64QAM      | 50      | 0         | 20.72                         | 20.64                            | 20.69                          |
| 20              | 64QAM      | 50      | 24        | 20.75                         | 20.69                            | 20.74                          |
| 20              | 64QAM      | 50      | 50        | 20.74                         | 20.75                            | 20.69                          |
| 20              | 64QAM      | 100     | 0         | 20.74                         | 20.71                            | 20.72                          |



| LTE Band 2      |            |         |           |                               |                                  |                                |
|-----------------|------------|---------|-----------|-------------------------------|----------------------------------|--------------------------------|
| BW [MHz]        | Modulation | RB Size | RB Offset | Average Power Low Ch. / Freq. | Average Power Middle Ch. / Freq. | Average Power High Ch. / Freq. |
| Channel         |            |         |           | 18675                         | 18900                            | 19125                          |
| Frequency (MHz) |            |         |           | 1857.5                        | 1880                             | 1902.5                         |
| 15              | QPSK       | 1       | 0         | 22.49                         | 22.52                            | 22.43                          |
| 15              | QPSK       | 1       | 37        | 22.28                         | 22.64                            | 22.52                          |
| 15              | QPSK       | 1       | 74        | 22.65                         | 22.57                            | 22.65                          |
| 15              | QPSK       | 36      | 0         | 21.61                         | 21.70                            | 21.69                          |
| 15              | QPSK       | 36      | 20        | 21.60                         | 21.79                            | 21.76                          |
| 15              | QPSK       | 36      | 39        | 21.72                         | 21.73                            | 21.70                          |
| 15              | QPSK       | 75      | 0         | 21.64                         | 21.70                            | 21.66                          |
| 15              | 16QAM      | 1       | 0         | 21.73                         | 21.81                            | 21.75                          |
| 15              | 16QAM      | 1       | 37        | 21.86                         | 21.89                            | 21.75                          |
| 15              | 16QAM      | 1       | 74        | 21.81                         | 21.93                            | 21.93                          |
| 15              | 16QAM      | 36      | 0         | 21.60                         | 21.65                            | 21.68                          |
| 15              | 16QAM      | 36      | 20        | 21.69                         | 21.62                            | 21.75                          |
| 15              | 16QAM      | 36      | 39        | 21.74                         | 21.83                            | 21.80                          |
| 15              | 16QAM      | 75      | 0         | 21.61                         | 21.63                            | 21.72                          |
| 15              | 64QAM      | 1       | 0         | 20.81                         | 20.57                            | 20.63                          |
| 15              | 64QAM      | 1       | 37        | 20.80                         | 20.61                            | 21.03                          |
| 15              | 64QAM      | 1       | 74        | 20.69                         | 20.73                            | 20.88                          |
| 15              | 64QAM      | 36      | 0         | 20.54                         | 20.71                            | 20.59                          |
| 15              | 64QAM      | 36      | 20        | 20.74                         | 20.76                            | 20.66                          |
| 15              | 64QAM      | 36      | 39        | 20.62                         | 20.67                            | 20.76                          |
| 15              | 64QAM      | 75      | 0         | 20.61                         | 20.68                            | 20.67                          |



| LTE Band 2      |            |         |           |                               |                                  |                                |
|-----------------|------------|---------|-----------|-------------------------------|----------------------------------|--------------------------------|
| BW [MHz]        | Modulation | RB Size | RB Offset | Average Power Low Ch. / Freq. | Average Power Middle Ch. / Freq. | Average Power High Ch. / Freq. |
| Channel         |            |         |           | 18650                         | 18900                            | 19150                          |
| Frequency (MHz) |            |         |           | 1855                          | 1880                             | 1905                           |
| 10              | QPSK       | 1       | 0         | 22.34                         | 22.33                            | 22.43                          |
| 10              | QPSK       | 1       | 25        | 22.45                         | 22.55                            | 22.43                          |
| 10              | QPSK       | 1       | 49        | 22.34                         | 22.42                            | 22.34                          |
| 10              | QPSK       | 25      | 0         | 21.60                         | 21.61                            | 21.57                          |
| 10              | QPSK       | 25      | 12        | 21.56                         | 21.68                            | 21.61                          |
| 10              | QPSK       | 25      | 25        | 21.47                         | 21.60                            | 21.56                          |
| 10              | QPSK       | 50      | 0         | 21.53                         | 21.62                            | 21.60                          |
| 10              | 16QAM      | 1       | 0         | 22.01                         | 21.94                            | 21.93                          |
| 10              | 16QAM      | 1       | 25        | 21.70                         | 21.66                            | 21.73                          |
| 10              | 16QAM      | 1       | 49        | 21.65                         | 21.73                            | 21.52                          |
| 10              | 16QAM      | 25      | 0         | 21.55                         | 21.54                            | 21.09                          |
| 10              | 16QAM      | 25      | 12        | 21.17                         | 21.13                            | 21.12                          |
| 10              | 16QAM      | 25      | 25        | 21.12                         | 21.08                            | 21.07                          |
| 10              | 16QAM      | 50      | 0         | 21.08                         | 21.01                            | 21.05                          |
| 10              | 64QAM      | 1       | 0         | 20.59                         | 20.64                            | 20.64                          |
| 10              | 64QAM      | 1       | 25        | 20.62                         | 20.67                            | 20.71                          |
| 10              | 64QAM      | 1       | 49        | 20.29                         | 20.42                            | 20.39                          |
| 10              | 64QAM      | 25      | 0         | 20.59                         | 20.63                            | 20.64                          |
| 10              | 64QAM      | 25      | 12        | 20.62                         | 20.60                            | 20.61                          |
| 10              | 64QAM      | 25      | 25        | 20.55                         | 20.33                            | 20.55                          |
| 10              | 64QAM      | 50      | 0         | 20.56                         | 20.56                            | 20.53                          |



| LTE Band 2      |            |         |           |                               |                                  |                                |
|-----------------|------------|---------|-----------|-------------------------------|----------------------------------|--------------------------------|
| BW [MHz]        | Modulation | RB Size | RB Offset | Average Power Low Ch. / Freq. | Average Power Middle Ch. / Freq. | Average Power High Ch. / Freq. |
| Channel         |            |         |           | 18625                         | 18900                            | 19175                          |
| Frequency (MHz) |            |         |           | 1852.5                        | 1880                             | 1907.5                         |
| 5               | QPSK       | 1       | 0         | 22.48                         | 22.53                            | 22.47                          |
| 5               | QPSK       | 1       | 12        | 22.47                         | 22.58                            | 22.45                          |
| 5               | QPSK       | 1       | 24        | 22.43                         | 22.59                            | 22.52                          |
| 5               | QPSK       | 12      | 0         | 21.59                         | 21.50                            | 21.57                          |
| 5               | QPSK       | 12      | 7         | 21.60                         | 21.65                            | 21.57                          |
| 5               | QPSK       | 12      | 13        | 21.59                         | 21.58                            | 21.61                          |
| 5               | QPSK       | 25      | 0         | 21.58                         | 21.56                            | 21.58                          |
| 5               | 16QAM      | 1       | 0         | 21.71                         | 21.61                            | 21.99                          |
| 5               | 16QAM      | 1       | 12        | 21.69                         | 21.62                            | 21.99                          |
| 5               | 16QAM      | 1       | 24        | 21.72                         | 21.59                            | 21.98                          |
| 5               | 16QAM      | 12      | 0         | 21.42                         | 21.45                            | 21.22                          |
| 5               | 16QAM      | 12      | 7         | 21.14                         | 21.16                            | 21.10                          |
| 5               | 16QAM      | 12      | 13        | 21.17                         | 21.06                            | 21.01                          |
| 5               | 16QAM      | 25      | 0         | 21.09                         | 21.07                            | 21.05                          |
| 5               | 64QAM      | 1       | 0         | 20.98                         | 20.53                            | 20.58                          |
| 5               | 64QAM      | 1       | 12        | 20.97                         | 20.63                            | 20.74                          |
| 5               | 64QAM      | 1       | 24        | 20.98                         | 20.62                            | 20.64                          |
| 5               | 64QAM      | 12      | 0         | 20.63                         | 20.56                            | 20.55                          |
| 5               | 64QAM      | 12      | 7         | 20.69                         | 20.53                            | 20.53                          |
| 5               | 64QAM      | 12      | 13        | 20.66                         | 20.62                            | 20.60                          |
| 5               | 64QAM      | 25      | 0         | 20.73                         | 20.53                            | 20.60                          |



| LTE Band 2      |            |         |           |                               |                                  |                                |
|-----------------|------------|---------|-----------|-------------------------------|----------------------------------|--------------------------------|
| BW [MHz]        | Modulation | RB Size | RB Offset | Average Power Low Ch. / Freq. | Average Power Middle Ch. / Freq. | Average Power High Ch. / Freq. |
| Channel         |            |         |           | 18615                         | 18900                            | 19185                          |
| Frequency (MHz) |            |         |           | 1851.5                        | 1880                             | 1908.5                         |
| 3               | QPSK       | 1       | 0         | 22.53                         | 22.31                            | 22.43                          |
| 3               | QPSK       | 1       | 8         | 22.46                         | 22.67                            | 22.50                          |
| 3               | QPSK       | 1       | 14        | 22.65                         | 22.52                            | 22.52                          |
| 3               | QPSK       | 8       | 0         | 21.59                         | 21.54                            | 21.56                          |
| 3               | QPSK       | 8       | 4         | 21.65                         | 21.59                            | 21.60                          |
| 3               | QPSK       | 8       | 7         | 21.65                         | 21.59                            | 21.55                          |
| 3               | QPSK       | 15      | 0         | 21.57                         | 21.65                            | 21.58                          |
| 3               | 16QAM      | 1       | 0         | 21.73                         | 21.64                            | 21.58                          |
| 3               | 16QAM      | 1       | 8         | 21.77                         | 21.71                            | 21.67                          |
| 3               | 16QAM      | 1       | 14        | 21.70                         | 21.67                            | 21.55                          |
| 3               | 16QAM      | 8       | 0         | 21.13                         | 21.26                            | 21.18                          |
| 3               | 16QAM      | 8       | 4         | 21.20                         | 21.17                            | 21.23                          |
| 3               | 16QAM      | 8       | 7         | 21.10                         | 21.15                            | 21.18                          |
| 3               | 16QAM      | 15      | 0         | 21.13                         | 21.17                            | 21.12                          |
| 3               | 64QAM      | 1       | 0         | 20.66                         | 20.59                            | 20.62                          |
| 3               | 64QAM      | 1       | 8         | 21.08                         | 21.07                            | 20.67                          |
| 3               | 64QAM      | 1       | 14        | 20.69                         | 21.05                            | 20.69                          |
| 3               | 64QAM      | 8       | 0         | 20.61                         | 20.63                            | 20.47                          |
| 3               | 64QAM      | 8       | 4         | 20.71                         | 20.61                            | 20.61                          |
| 3               | 64QAM      | 8       | 7         | 20.81                         | 20.70                            | 20.56                          |
| 3               | 64QAM      | 15      | 0         | 20.66                         | 20.66                            | 20.64                          |



| LTE Band 2      |            |         |           |                               |                                  |                                |
|-----------------|------------|---------|-----------|-------------------------------|----------------------------------|--------------------------------|
| BW [MHz]        | Modulation | RB Size | RB Offset | Average Power Low Ch. / Freq. | Average Power Middle Ch. / Freq. | Average Power High Ch. / Freq. |
| Channel         |            |         |           | 18607                         | 18900                            | 19193                          |
| Frequency (MHz) |            |         |           | 1850.7                        | 1880                             | 1909.3                         |
| 1.4             | QPSK       | 1       | 0         | 22.40                         | 22.42                            | 22.38                          |
| 1.4             | QPSK       | 1       | 3         | 22.50                         | 22.48                            | 22.47                          |
| 1.4             | QPSK       | 1       | 5         | 22.47                         | 22.45                            | 22.43                          |
| 1.4             | QPSK       | 3       | 0         | 22.46                         | 22.46                            | 22.42                          |
| 1.4             | QPSK       | 3       | 1         | 22.50                         | 22.47                            | 22.45                          |
| 1.4             | QPSK       | 3       | 3         | 22.52                         | 22.56                            | 22.45                          |
| 1.4             | QPSK       | 6       | 0         | 21.55                         | 21.53                            | 21.52                          |
| 1.4             | 16QAM      | 1       | 0         | 21.58                         | 21.58                            | 21.52                          |
| 1.4             | 16QAM      | 1       | 3         | 21.54                         | 21.74                            | 21.72                          |
| 1.4             | 16QAM      | 1       | 5         | 21.42                         | 21.62                            | 21.30                          |
| 1.4             | 16QAM      | 3       | 0         | 21.44                         | 21.49                            | 21.46                          |
| 1.4             | 16QAM      | 3       | 1         | 21.62                         | 21.44                            | 21.49                          |
| 1.4             | 16QAM      | 3       | 3         | 21.64                         | 21.61                            | 21.35                          |
| 1.4             | 16QAM      | 6       | 0         | 21.65                         | 21.58                            | 21.53                          |
| 1.4             | 64QAM      | 1       | 0         | 20.53                         | 20.45                            | 20.48                          |
| 1.4             | 64QAM      | 1       | 3         | 20.55                         | 20.76                            | 20.64                          |
| 1.4             | 64QAM      | 1       | 5         | 20.53                         | 20.88                            | 20.47                          |
| 1.4             | 64QAM      | 3       | 0         | 20.56                         | 20.62                            | 20.63                          |
| 1.4             | 64QAM      | 3       | 1         | 20.65                         | 20.62                            | 20.36                          |
| 1.4             | 64QAM      | 3       | 3         | 20.57                         | 20.71                            | 20.48                          |
| 1.4             | 64QAM      | 6       | 0         | 20.62                         | 20.65                            | 20.54                          |



| LTE Band 4      |            |            |              |                                     |                                        |                                      |
|-----------------|------------|------------|--------------|-------------------------------------|----------------------------------------|--------------------------------------|
| BW<br>[MHz]     | Modulation | RB<br>Size | RB<br>Offset | Average Power<br>Low<br>Ch. / Freq. | Average Power<br>Middle<br>Ch. / Freq. | Average Power<br>High<br>Ch. / Freq. |
| Channel         |            |            |              | 20050                               | 20175                                  | 20300                                |
| Frequency (MHz) |            |            |              | 1720                                | 1732.5                                 | 1745                                 |
| 20              | QPSK       | 1          | 0            | 22.44                               | 22.56                                  | 22.51                                |
| 20              | QPSK       | 1          | 49           | 22.30                               | 22.38                                  | 22.37                                |
| 20              | QPSK       | 1          | 99           | 22.22                               | 22.35                                  | 22.47                                |
| 20              | QPSK       | 50         | 0            | 21.51                               | 21.64                                  | 21.61                                |
| 20              | QPSK       | 50         | 24           | 21.51                               | 21.59                                  | 21.59                                |
| 20              | QPSK       | 50         | 50           | 21.40                               | 21.51                                  | 21.52                                |
| 20              | QPSK       | 100        | 0            | 21.50                               | 21.54                                  | 21.61                                |
| 20              | 16QAM      | 1          | 0            | 21.37                               | 21.45                                  | 21.34                                |
| 20              | 16QAM      | 1          | 49           | 21.52                               | 21.29                                  | 21.43                                |
| 20              | 16QAM      | 1          | 99           | 21.31                               | 21.53                                  | 21.29                                |
| 20              | 16QAM      | 50         | 0            | 21.18                               | 21.23                                  | 21.33                                |
| 20              | 16QAM      | 50         | 24           | 21.14                               | 21.25                                  | 21.14                                |
| 20              | 16QAM      | 50         | 50           | 21.10                               | 21.11                                  | 21.11                                |
| 20              | 16QAM      | 100        | 0            | 21.12                               | 21.20                                  | 21.21                                |
| 20              | 64QAM      | 1          | 0            | 20.48                               | 20.59                                  | 20.81                                |
| 20              | 64QAM      | 1          | 49           | 20.52                               | 20.45                                  | 20.33                                |
| 20              | 64QAM      | 1          | 99           | 20.79                               | 20.36                                  | 20.83                                |
| 20              | 64QAM      | 50         | 0            | 20.49                               | 20.58                                  | 20.53                                |
| 20              | 64QAM      | 50         | 24           | 20.51                               | 20.62                                  | 20.56                                |
| 20              | 64QAM      | 50         | 50           | 20.55                               | 20.50                                  | 20.52                                |
| 20              | 64QAM      | 100        | 0            | 20.58                               | 20.56                                  | 20.65                                |



| LTE Band 4      |            |            |              |                                     |                                        |                                      |
|-----------------|------------|------------|--------------|-------------------------------------|----------------------------------------|--------------------------------------|
| BW<br>[MHz]     | Modulation | RB<br>Size | RB<br>Offset | Average Power<br>Low<br>Ch. / Freq. | Average Power<br>Middle<br>Ch. / Freq. | Average Power<br>High<br>Ch. / Freq. |
| Channel         |            |            |              | 20025                               | 20175                                  | 20325                                |
| Frequency (MHz) |            |            |              | 1717.5                              | 1732.5                                 | 1747.5                               |
| 15              | QPSK       | 1          | 0            | 22.31                               | 22.35                                  | 22.45                                |
| 15              | QPSK       | 1          | 37           | 22.35                               | 22.44                                  | 22.36                                |
| 15              | QPSK       | 1          | 74           | 22.22                               | 22.44                                  | 22.47                                |
| 15              | QPSK       | 36         | 0            | 21.45                               | 21.52                                  | 21.55                                |
| 15              | QPSK       | 36         | 20           | 21.49                               | 21.62                                  | 21.58                                |
| 15              | QPSK       | 36         | 39           | 21.54                               | 21.53                                  | 21.62                                |
| 15              | QPSK       | 75         | 0            | 21.49                               | 21.51                                  | 21.52                                |
| 15              | 16QAM      | 1          | 0            | 21.19                               | 21.41                                  | 21.13                                |
| 15              | 16QAM      | 1          | 37           | 21.27                               | 21.27                                  | 21.11                                |
| 15              | 16QAM      | 1          | 74           | 21.13                               | 21.43                                  | 21.22                                |
| 15              | 16QAM      | 36         | 0            | 21.14                               | 21.16                                  | 21.35                                |
| 15              | 16QAM      | 36         | 20           | 21.09                               | 21.16                                  | 21.22                                |
| 15              | 16QAM      | 36         | 39           | 21.05                               | 21.14                                  | 21.20                                |
| 15              | 16QAM      | 75         | 0            | 21.16                               | 21.17                                  | 21.26                                |
| 15              | 64QAM      | 1          | 0            | 20.35                               | 20.66                                  | 20.71                                |
| 15              | 64QAM      | 1          | 37           | 20.77                               | 20.53                                  | 20.59                                |
| 15              | 64QAM      | 1          | 74           | 20.81                               | 20.52                                  | 20.56                                |
| 15              | 64QAM      | 36         | 0            | 20.46                               | 20.53                                  | 20.57                                |
| 15              | 64QAM      | 36         | 20           | 20.52                               | 20.54                                  | 20.56                                |
| 15              | 64QAM      | 36         | 39           | 20.55                               | 20.51                                  | 20.53                                |
| 15              | 64QAM      | 75         | 0            | 20.48                               | 20.59                                  | 20.52                                |



| LTE Band 4      |            |            |              |                                     |                                        |                                      |
|-----------------|------------|------------|--------------|-------------------------------------|----------------------------------------|--------------------------------------|
| BW<br>[MHz]     | Modulation | RB<br>Size | RB<br>Offset | Average Power<br>Low<br>Ch. / Freq. | Average Power<br>Middle<br>Ch. / Freq. | Average Power<br>High<br>Ch. / Freq. |
| Channel         |            |            |              | 20000                               | 20175                                  | 20350                                |
| Frequency (MHz) |            |            |              | 1715                                | 1732.5                                 | 1750                                 |
| 10              | QPSK       | 1          | 0            | 22.23                               | 22.42                                  | 22.25                                |
| 10              | QPSK       | 1          | 25           | 22.21                               | 22.34                                  | 22.35                                |
| 10              | QPSK       | 1          | 49           | 22.29                               | 22.12                                  | 22.35                                |
| 10              | QPSK       | 25         | 0            | 21.28                               | 21.50                                  | 21.52                                |
| 10              | QPSK       | 25         | 12           | 21.40                               | 21.46                                  | 21.50                                |
| 10              | QPSK       | 25         | 25           | 21.29                               | 21.40                                  | 21.47                                |
| 10              | QPSK       | 50         | 0            | 21.35                               | 21.45                                  | 21.37                                |
| 10              | 16QAM      | 1          | 0            | 21.10                               | 21.25                                  | 21.01                                |
| 10              | 16QAM      | 1          | 25           | 21.37                               | 21.11                                  | 21.43                                |
| 10              | 16QAM      | 1          | 49           | 21.44                               | 21.34                                  | 21.33                                |
| 10              | 16QAM      | 25         | 0            | 21.10                               | 21.09                                  | 21.08                                |
| 10              | 16QAM      | 25         | 12           | 21.02                               | 21.12                                  | 21.09                                |
| 10              | 16QAM      | 25         | 25           | 21.36                               | 21.27                                  | 21.36                                |
| 10              | 16QAM      | 50         | 0            | 21.30                               | 21.34                                  | 21.46                                |
| 10              | 64QAM      | 1          | 0            | 20.40                               | 20.48                                  | 20.38                                |
| 10              | 64QAM      | 1          | 25           | 20.47                               | 20.76                                  | 20.85                                |
| 10              | 64QAM      | 1          | 49           | 20.45                               | 20.49                                  | 20.44                                |
| 10              | 64QAM      | 25         | 0            | 20.29                               | 20.43                                  | 20.42                                |
| 10              | 64QAM      | 25         | 12           | 20.38                               | 20.49                                  | 20.53                                |
| 10              | 64QAM      | 25         | 25           | 20.26                               | 20.38                                  | 20.40                                |
| 10              | 64QAM      | 50         | 0            | 20.32                               | 20.39                                  | 20.38                                |



| LTE Band 4      |            |            |              |                                     |                                        |                                      |
|-----------------|------------|------------|--------------|-------------------------------------|----------------------------------------|--------------------------------------|
| BW<br>[MHz]     | Modulation | RB<br>Size | RB<br>Offset | Average Power<br>Low<br>Ch. / Freq. | Average Power<br>Middle<br>Ch. / Freq. | Average Power<br>High<br>Ch. / Freq. |
| Channel         |            |            |              | 19975                               | 20175                                  | 20375                                |
| Frequency (MHz) |            |            |              | 1712.5                              | 1732.5                                 | 1752.5                               |
| 5               | QPSK       | 1          | 0            | 22.13                               | 22.35                                  | 22.40                                |
| 5               | QPSK       | 1          | 12           | 22.19                               | 22.34                                  | 22.31                                |
| 5               | QPSK       | 1          | 24           | 22.14                               | 22.26                                  | 22.25                                |
| 5               | QPSK       | 12         | 0            | 21.36                               | 21.36                                  | 21.40                                |
| 5               | QPSK       | 12         | 7            | 21.36                               | 21.47                                  | 21.44                                |
| 5               | QPSK       | 12         | 13           | 21.31                               | 21.48                                  | 21.40                                |
| 5               | QPSK       | 25         | 0            | 21.34                               | 21.38                                  | 21.44                                |
| 5               | 16QAM      | 1          | 0            | 21.00                               | 21.41                                  | 21.09                                |
| 5               | 16QAM      | 1          | 12           | 21.11                               | 21.46                                  | 21.05                                |
| 5               | 16QAM      | 1          | 24           | 21.05                               | 21.40                                  | 21.00                                |
| 5               | 16QAM      | 12         | 0            | 21.04                               | 20.98                                  | 21.01                                |
| 5               | 16QAM      | 12         | 7            | 21.07                               | 21.11                                  | 21.09                                |
| 5               | 16QAM      | 12         | 13           | 21.34                               | 21.41                                  | 21.45                                |
| 5               | 16QAM      | 25         | 0            | 21.35                               | 21.46                                  | 21.39                                |
| 5               | 64QAM      | 1          | 0            | 20.36                               | 20.80                                  | 20.78                                |
| 5               | 64QAM      | 1          | 12           | 20.74                               | 20.50                                  | 20.77                                |
| 5               | 64QAM      | 1          | 24           | 20.70                               | 20.40                                  | 20.47                                |
| 5               | 64QAM      | 12         | 0            | 20.37                               | 20.44                                  | 20.46                                |
| 5               | 64QAM      | 12         | 7            | 20.36                               | 20.45                                  | 20.51                                |
| 5               | 64QAM      | 12         | 13           | 20.37                               | 20.43                                  | 20.42                                |
| 5               | 64QAM      | 25         | 0            | 20.32                               | 20.46                                  | 20.37                                |



| LTE Band 4      |            |            |              |                                     |                                        |                                      |
|-----------------|------------|------------|--------------|-------------------------------------|----------------------------------------|--------------------------------------|
| BW<br>[MHz]     | Modulation | RB<br>Size | RB<br>Offset | Average Power<br>Low<br>Ch. / Freq. | Average Power<br>Middle<br>Ch. / Freq. | Average Power<br>High<br>Ch. / Freq. |
| Channel         |            |            |              | 19965                               | 20175                                  | 20385                                |
| Frequency (MHz) |            |            |              | 1711.5                              | 1732.5                                 | 1753.5                               |
| 3               | QPSK       | 1          | 0            | 22.25                               | 22.26                                  | 22.38                                |
| 3               | QPSK       | 1          | 8            | 22.34                               | 22.48                                  | 22.42                                |
| 3               | QPSK       | 1          | 14           | 22.14                               | 22.33                                  | 22.33                                |
| 3               | QPSK       | 8          | 0            | 21.34                               | 21.40                                  | 21.41                                |
| 3               | QPSK       | 8          | 4            | 21.40                               | 21.48                                  | 21.50                                |
| 3               | QPSK       | 8          | 7            | 21.36                               | 21.46                                  | 21.46                                |
| 3               | QPSK       | 15         | 0            | 21.36                               | 21.42                                  | 21.36                                |
| 3               | 16QAM      | 1          | 0            | 21.20                               | 21.29                                  | 21.33                                |
| 3               | 16QAM      | 1          | 8            | 21.42                               | 21.42                                  | 21.16                                |
| 3               | 16QAM      | 1          | 14           | 21.33                               | 21.11                                  | 21.19                                |
| 3               | 16QAM      | 8          | 0            | 21.12                               | 21.13                                  | 21.22                                |
| 3               | 16QAM      | 8          | 4            | 21.22                               | 21.22                                  | 21.23                                |
| 3               | 16QAM      | 8          | 7            | 21.44                               | 21.52                                  | 21.56                                |
| 3               | 16QAM      | 15         | 0            | 21.44                               | 21.42                                  | 21.49                                |
| 3               | 64QAM      | 1          | 0            | 20.35                               | 20.44                                  | 20.42                                |
| 3               | 64QAM      | 1          | 8            | 20.54                               | 20.42                                  | 20.58                                |
| 3               | 64QAM      | 1          | 14           | 20.35                               | 20.42                                  | 20.25                                |
| 3               | 64QAM      | 8          | 0            | 20.33                               | 20.37                                  | 20.31                                |
| 3               | 64QAM      | 8          | 4            | 20.45                               | 20.43                                  | 20.47                                |
| 3               | 64QAM      | 8          | 7            | 20.39                               | 20.46                                  | 20.58                                |
| 3               | 64QAM      | 15         | 0            | 20.35                               | 20.43                                  | 20.34                                |



| LTE Band 4      |            |            |              |                                     |                                        |                                      |
|-----------------|------------|------------|--------------|-------------------------------------|----------------------------------------|--------------------------------------|
| BW<br>[MHz]     | Modulation | RB<br>Size | RB<br>Offset | Average Power<br>Low<br>Ch. / Freq. | Average Power<br>Middle<br>Ch. / Freq. | Average Power<br>High<br>Ch. / Freq. |
| Channel         |            |            |              | 19957                               | 20175                                  | 20393                                |
| Frequency (MHz) |            |            |              | 1710.7                              | 1732.5                                 | 1754.3                               |
| 1.4             | QPSK       | 1          | 0            | 22.00                               | 22.21                                  | 22.22                                |
| 1.4             | QPSK       | 1          | 3            | 22.34                               | 22.34                                  | 22.38                                |
| 1.4             | QPSK       | 1          | 5            | 22.20                               | 22.29                                  | 22.31                                |
| 1.4             | QPSK       | 3          | 0            | 22.28                               | 22.25                                  | 22.24                                |
| 1.4             | QPSK       | 3          | 1            | 22.24                               | 22.34                                  | 22.39                                |
| 1.4             | QPSK       | 3          | 3            | 22.23                               | 22.30                                  | 22.29                                |
| 1.4             | QPSK       | 6          | 0            | 21.12                               | 21.21                                  | 21.21                                |
| 1.4             | 16QAM      | 1          | 0            | 21.09                               | 21.56                                  | 21.22                                |
| 1.4             | 16QAM      | 1          | 3            | 21.22                               | 21.30                                  | 21.34                                |
| 1.4             | 16QAM      | 1          | 5            | 21.28                               | 21.44                                  | 21.24                                |
| 1.4             | 16QAM      | 3          | 0            | 21.31                               | 21.35                                  | 21.26                                |
| 1.4             | 16QAM      | 3          | 1            | 21.32                               | 21.35                                  | 21.37                                |
| 1.4             | 16QAM      | 3          | 3            | 21.31                               | 21.43                                  | 21.32                                |
| 1.4             | 16QAM      | 6          | 0            | 21.22                               | 21.23                                  | 21.14                                |
| 1.4             | 64QAM      | 1          | 0            | 20.24                               | 20.18                                  | 20.32                                |
| 1.4             | 64QAM      | 1          | 3            | 20.50                               | 20.48                                  | 20.60                                |
| 1.4             | 64QAM      | 1          | 5            | 20.41                               | 20.37                                  | 20.21                                |
| 1.4             | 64QAM      | 3          | 0            | 20.32                               | 20.30                                  | 20.49                                |
| 1.4             | 64QAM      | 3          | 1            | 20.23                               | 20.38                                  | 20.35                                |
| 1.4             | 64QAM      | 3          | 3            | 20.29                               | 20.46                                  | 20.34                                |
| 1.4             | 64QAM      | 6          | 0            | 20.28                               | 20.29                                  | 20.36                                |



| LTE Band 5      |            |         |              |                                     |                                        |                                      |
|-----------------|------------|---------|--------------|-------------------------------------|----------------------------------------|--------------------------------------|
| BW<br>[MHz]     | Modulation | RB Size | RB<br>Offset | Average Power<br>Low<br>Ch. / Freq. | Average Power<br>Middle<br>Ch. / Freq. | Average Power<br>High<br>Ch. / Freq. |
| Channel         |            |         |              | 20450                               | 20525                                  | 20600                                |
| Frequency (MHz) |            |         |              | 829                                 | 836.5                                  | 844                                  |
| 10              | QPSK       | 1       | 0            | 23.21                               | 23.22                                  | 23.03                                |
| 10              | QPSK       | 1       | 25           | 23.07                               | 23.10                                  | 22.90                                |
| 10              | QPSK       | 1       | 49           | 22.99                               | 23.11                                  | 22.79                                |
| 10              | QPSK       | 25      | 0            | 22.30                               | 22.32                                  | 22.13                                |
| 10              | QPSK       | 25      | 12           | 22.06                               | 22.08                                  | 22.13                                |
| 10              | QPSK       | 25      | 25           | 22.06                               | 22.17                                  | 22.22                                |
| 10              | QPSK       | 50      | 0            | 22.12                               | 22.00                                  | 22.14                                |
| 10              | 16QAM      | 1       | 0            | 22.16                               | 22.35                                  | 22.06                                |
| 10              | 16QAM      | 1       | 25           | 22.39                               | 22.42                                  | 22.10                                |
| 10              | 16QAM      | 1       | 49           | 22.22                               | 22.28                                  | 22.35                                |
| 10              | 16QAM      | 25      | 0            | 22.31                               | 22.32                                  | 22.14                                |
| 10              | 16QAM      | 25      | 12           | 22.25                               | 22.33                                  | 22.11                                |
| 10              | 16QAM      | 25      | 25           | 22.28                               | 22.21                                  | 22.24                                |
| 10              | 16QAM      | 50      | 0            | 22.29                               | 22.20                                  | 22.10                                |
| 10              | 64QAM      | 1       | 0            | 21.25                               | 21.35                                  | 21.23                                |
| 10              | 64QAM      | 1       | 25           | 21.22                               | 21.42                                  | 21.22                                |
| 10              | 64QAM      | 1       | 49           | 21.11                               | 21.33                                  | 21.24                                |
| 10              | 64QAM      | 25      | 0            | 21.22                               | 21.33                                  | 21.00                                |
| 10              | 64QAM      | 25      | 12           | 21.21                               | 21.38                                  | 21.09                                |
| 10              | 64QAM      | 25      | 25           | 21.33                               | 21.22                                  | 20.92                                |
| 10              | 64QAM      | 50      | 0            | 21.29                               | 21.25                                  | 21.11                                |



| LTE Band 5      |            |         |              |                                     |                                        |                                      |
|-----------------|------------|---------|--------------|-------------------------------------|----------------------------------------|--------------------------------------|
| BW<br>[MHz]     | Modulation | RB Size | RB<br>Offset | Average Power<br>Low<br>Ch. / Freq. | Average Power<br>Middle<br>Ch. / Freq. | Average Power<br>High<br>Ch. / Freq. |
| Channel         |            |         |              | 20425                               | 20525                                  | 20625                                |
| Frequency (MHz) |            |         |              | 826.5                               | 836.5                                  | 846.5                                |
| 5               | QPSK       | 1       | 0            | 23.16                               | 23.12                                  | 23.10                                |
| 5               | QPSK       | 1       | 12           | 23.06                               | 23.17                                  | 23.01                                |
| 5               | QPSK       | 1       | 24           | 23.06                               | 23.01                                  | 23.01                                |
| 5               | QPSK       | 12      | 0            | 22.21                               | 22.26                                  | 22.12                                |
| 5               | QPSK       | 12      | 7            | 22.28                               | 22.29                                  | 22.21                                |
| 5               | QPSK       | 12      | 13           | 22.33                               | 22.17                                  | 22.12                                |
| 5               | QPSK       | 25      | 0            | 22.24                               | 22.20                                  | 22.12                                |
| 5               | 16QAM      | 1       | 0            | 22.53                               | 22.46                                  | 22.22                                |
| 5               | 16QAM      | 1       | 12           | 22.23                               | 22.45                                  | 22.21                                |
| 5               | 16QAM      | 1       | 24           | 22.10                               | 22.45                                  | 22.28                                |
| 5               | 16QAM      | 12      | 0            | 22.19                               | 22.28                                  | 22.27                                |
| 5               | 16QAM      | 12      | 7            | 22.26                               | 22.29                                  | 22.11                                |
| 5               | 16QAM      | 12      | 13           | 22.26                               | 22.17                                  | 22.22                                |
| 5               | 16QAM      | 25      | 0            | 22.27                               | 22.32                                  | 22.27                                |
| 5               | 64QAM      | 1       | 0            | 21.34                               | 21.22                                  | 21.33                                |
| 5               | 64QAM      | 1       | 12           | 21.22                               | 21.16                                  | 21.30                                |
| 5               | 64QAM      | 1       | 24           | 21.36                               | 21.20                                  | 21.14                                |
| 5               | 64QAM      | 12      | 0            | 21.08                               | 21.22                                  | 21.02                                |
| 5               | 64QAM      | 12      | 7            | 21.12                               | 21.28                                  | 21.06                                |
| 5               | 64QAM      | 12      | 13           | 21.30                               | 21.25                                  | 20.82                                |
| 5               | 64QAM      | 25      | 0            | 21.18                               | 21.25                                  | 20.86                                |



| LTE Band 5      |            |         |              |                                     |                                        |                                      |
|-----------------|------------|---------|--------------|-------------------------------------|----------------------------------------|--------------------------------------|
| BW<br>[MHz]     | Modulation | RB Size | RB<br>Offset | Average Power<br>Low<br>Ch. / Freq. | Average Power<br>Middle<br>Ch. / Freq. | Average Power<br>High<br>Ch. / Freq. |
| Channel         |            |         |              | 20415                               | 20525                                  | 20635                                |
| Frequency (MHz) |            |         |              | 825.5                               | 836.5                                  | 847.5                                |
| 3               | QPSK       | 1       | 0            | 22.85                               | 23.16                                  | 23.01                                |
| 3               | QPSK       | 1       | 8            | 23.11                               | 23.12                                  | 23.03                                |
| 3               | QPSK       | 1       | 14           | 23.12                               | 23.10                                  | 22.84                                |
| 3               | QPSK       | 8       | 0            | 22.14                               | 22.27                                  | 22.25                                |
| 3               | QPSK       | 8       | 4            | 22.28                               | 22.34                                  | 22.31                                |
| 3               | QPSK       | 8       | 7            | 22.23                               | 22.25                                  | 22.12                                |
| 3               | QPSK       | 15      | 0            | 22.21                               | 22.27                                  | 22.26                                |
| 3               | 16QAM      | 1       | 0            | 22.23                               | 22.34                                  | 22.41                                |
| 3               | 16QAM      | 1       | 8            | 22.16                               | 22.42                                  | 22.26                                |
| 3               | 16QAM      | 1       | 14           | 22.21                               | 22.47                                  | 22.22                                |
| 3               | 16QAM      | 8       | 0            | 22.17                               | 22.26                                  | 22.00                                |
| 3               | 16QAM      | 8       | 4            | 22.33                               | 22.44                                  | 22.01                                |
| 3               | 16QAM      | 8       | 7            | 22.25                               | 22.31                                  | 22.05                                |
| 3               | 16QAM      | 15      | 0            | 22.19                               | 22.21                                  | 21.76                                |
| 3               | 64QAM      | 1       | 0            | 21.14                               | 21.02                                  | 21.23                                |
| 3               | 64QAM      | 1       | 8            | 21.02                               | 21.26                                  | 21.02                                |
| 3               | 64QAM      | 1       | 14           | 21.04                               | 21.22                                  | 21.03                                |
| 3               | 64QAM      | 8       | 0            | 21.14                               | 21.24                                  | 21.22                                |
| 3               | 64QAM      | 8       | 4            | 21.36                               | 21.20                                  | 21.14                                |
| 3               | 64QAM      | 8       | 7            | 21.31                               | 21.23                                  | 21.20                                |
| 3               | 64QAM      | 15      | 0            | 21.20                               | 21.30                                  | 21.10                                |



| LTE Band 5      |            |         |              |                                     |                                        |                                      |
|-----------------|------------|---------|--------------|-------------------------------------|----------------------------------------|--------------------------------------|
| BW<br>[MHz]     | Modulation | RB Size | RB<br>Offset | Average Power<br>Low<br>Ch. / Freq. | Average Power<br>Middle<br>Ch. / Freq. | Average Power<br>High<br>Ch. / Freq. |
| Channel         |            |         |              | 20407                               | 20525                                  | 20643                                |
| Frequency (MHz) |            |         |              | 824.7                               | 836.5                                  | 848.3                                |
| 1.4             | QPSK       | 1       | 0            | 23.06                               | 23.13                                  | 23.17                                |
| 1.4             | QPSK       | 1       | 3            | 23.19                               | 23.12                                  | 23.19                                |
| 1.4             | QPSK       | 1       | 5            | 23.08                               | 23.02                                  | 23.03                                |
| 1.4             | QPSK       | 3       | 0            | 23.09                               | 23.15                                  | 23.11                                |
| 1.4             | QPSK       | 3       | 1            | 23.15                               | 23.02                                  | 23.12                                |
| 1.4             | QPSK       | 3       | 3            | 23.16                               | 23.08                                  | 23.08                                |
| 1.4             | QPSK       | 6       | 0            | 22.19                               | 22.18                                  | 22.17                                |
| 1.4             | 16QAM      | 1       | 0            | 22.32                               | 22.13                                  | 22.30                                |
| 1.4             | 16QAM      | 1       | 3            | 22.12                               | 22.36                                  | 22.25                                |
| 1.4             | 16QAM      | 1       | 5            | 22.51                               | 22.19                                  | 22.25                                |
| 1.4             | 16QAM      | 3       | 0            | 22.04                               | 22.02                                  | 22.16                                |
| 1.4             | 16QAM      | 3       | 1            | 22.07                               | 22.34                                  | 22.20                                |
| 1.4             | 16QAM      | 3       | 3            | 22.15                               | 22.26                                  | 22.14                                |
| 1.4             | 16QAM      | 6       | 0            | 22.34                               | 22.21                                  | 22.25                                |
| 1.4             | 64QAM      | 1       | 0            | 20.87                               | 21.04                                  | 21.06                                |
| 1.4             | 64QAM      | 1       | 3            | 21.18                               | 21.19                                  | 21.14                                |
| 1.4             | 64QAM      | 1       | 5            | 21.13                               | 21.12                                  | 21.00                                |
| 1.4             | 64QAM      | 3       | 0            | 20.79                               | 21.06                                  | 21.07                                |
| 1.4             | 64QAM      | 3       | 1            | 21.07                               | 21.01                                  | 21.02                                |
| 1.4             | 64QAM      | 3       | 3            | 20.97                               | 21.14                                  | 21.18                                |
| 1.4             | 64QAM      | 6       | 0            | 21.18                               | 21.30                                  | 21.19                                |



| LTE Band 7      |            |            |              |                                     |                                        |                                      |
|-----------------|------------|------------|--------------|-------------------------------------|----------------------------------------|--------------------------------------|
| BW<br>[MHz]     | Modulation | RB<br>Size | RB<br>Offset | Average Power<br>Low<br>Ch. / Freq. | Average Power<br>Middle<br>Ch. / Freq. | Average Power<br>High<br>Ch. / Freq. |
| Channel         |            |            |              | 20850                               | 21100                                  | 21350                                |
| Frequency (MHz) |            |            |              | 2510                                | 2535                                   | 2560                                 |
| 20              | QPSK       | 1          | 0            | 22.36                               | 22.37                                  | 22.29                                |
| 20              | QPSK       | 1          | 49           | 22.31                               | 22.35                                  | 22.24                                |
| 20              | QPSK       | 1          | 99           | 22.26                               | 22.21                                  | 22.26                                |
| 20              | QPSK       | 50         | 0            | 21.25                               | 21.62                                  | 21.29                                |
| 20              | QPSK       | 50         | 24           | 21.31                               | 21.28                                  | 21.18                                |
| 20              | QPSK       | 50         | 50           | 21.41                               | 21.44                                  | 21.41                                |
| 20              | QPSK       | 100        | 0            | 21.36                               | 21.38                                  | 21.35                                |
| 20              | 16QAM      | 1          | 0            | 21.17                               | 21.27                                  | 21.45                                |
| 20              | 16QAM      | 1          | 49           | 21.32                               | 21.18                                  | 21.46                                |
| 20              | 16QAM      | 1          | 99           | 21.26                               | 21.57                                  | 21.22                                |
| 20              | 16QAM      | 50         | 0            | 21.11                               | 21.21                                  | 21.14                                |
| 20              | 16QAM      | 50         | 24           | 21.16                               | 21.08                                  | 21.19                                |
| 20              | 16QAM      | 50         | 50           | 21.24                               | 21.29                                  | 21.12                                |
| 20              | 16QAM      | 100        | 0            | 21.12                               | 21.24                                  | 21.22                                |
| 20              | 64QAM      | 1          | 0            | 20.72                               | 20.56                                  | 20.29                                |
| 20              | 64QAM      | 1          | 49           | 20.66                               | 20.63                                  | 20.68                                |
| 20              | 64QAM      | 1          | 99           | 20.64                               | 20.69                                  | 20.60                                |
| 20              | 64QAM      | 50         | 0            | 20.38                               | 20.39                                  | 20.44                                |
| 20              | 64QAM      | 50         | 24           | 20.43                               | 20.44                                  | 20.44                                |
| 20              | 64QAM      | 50         | 50           | 20.47                               | 20.54                                  | 20.39                                |
| 20              | 64QAM      | 100        | 0            | 20.40                               | 20.37                                  | 20.49                                |



| LTE Band 7      |            |            |              |                                     |                                        |                                      |
|-----------------|------------|------------|--------------|-------------------------------------|----------------------------------------|--------------------------------------|
| BW<br>[MHz]     | Modulation | RB<br>Size | RB<br>Offset | Average Power<br>Low<br>Ch. / Freq. | Average Power<br>Middle<br>Ch. / Freq. | Average Power<br>High<br>Ch. / Freq. |
| Channel         |            |            |              | 20825                               | 21100                                  | 21375                                |
| Frequency (MHz) |            |            |              | 2507.5                              | 2535                                   | 2562.5                               |
| 15              | QPSK       | 1          | 0            | 22.19                               | 22.28                                  | 22.28                                |
| 15              | QPSK       | 1          | 37           | 22.29                               | 22.26                                  | 22.30                                |
| 15              | QPSK       | 1          | 74           | 22.23                               | 22.30                                  | 22.30                                |
| 15              | QPSK       | 36         | 0            | 21.34                               | 21.43                                  | 21.45                                |
| 15              | QPSK       | 36         | 20           | 21.42                               | 21.49                                  | 21.44                                |
| 15              | QPSK       | 36         | 39           | 21.45                               | 21.48                                  | 21.52                                |
| 15              | QPSK       | 75         | 0            | 21.51                               | 21.44                                  | 21.46                                |
| 15              | 16QAM      | 1          | 0            | 21.67                               | 21.78                                  | 21.85                                |
| 15              | 16QAM      | 1          | 37           | 21.49                               | 21.60                                  | 21.58                                |
| 15              | 16QAM      | 1          | 74           | 21.53                               | 21.53                                  | 21.75                                |
| 15              | 16QAM      | 36         | 0            | 21.12                               | 21.23                                  | 21.25                                |
| 15              | 16QAM      | 36         | 20           | 21.19                               | 21.22                                  | 21.21                                |
| 15              | 16QAM      | 36         | 39           | 21.25                               | 21.23                                  | 21.12                                |
| 15              | 16QAM      | 75         | 0            | 21.20                               | 21.28                                  | 21.20                                |
| 15              | 64QAM      | 1          | 0            | 20.62                               | 20.59                                  | 20.47                                |
| 15              | 64QAM      | 1          | 37           | 20.52                               | 20.67                                  | 20.76                                |
| 15              | 64QAM      | 1          | 74           | 20.51                               | 20.63                                  | 20.69                                |
| 15              | 64QAM      | 36         | 0            | 20.36                               | 20.44                                  | 20.43                                |
| 15              | 64QAM      | 36         | 20           | 20.47                               | 20.46                                  | 20.53                                |
| 15              | 64QAM      | 36         | 39           | 20.51                               | 20.42                                  | 20.44                                |
| 15              | 64QAM      | 75         | 0            | 20.36                               | 20.46                                  | 20.41                                |



| LTE Band 7      |            |            |              |                                     |                                        |                                      |
|-----------------|------------|------------|--------------|-------------------------------------|----------------------------------------|--------------------------------------|
| BW<br>[MHz]     | Modulation | RB<br>Size | RB<br>Offset | Average Power<br>Low<br>Ch. / Freq. | Average Power<br>Middle<br>Ch. / Freq. | Average Power<br>High<br>Ch. / Freq. |
| Channel         |            |            |              | 20800                               | 21100                                  | 21400                                |
| Frequency (MHz) |            |            |              | 2505                                | 2535                                   | 2565                                 |
| 10              | QPSK       | 1          | 0            | 22.18                               | 22.05                                  | 22.08                                |
| 10              | QPSK       | 1          | 25           | 22.21                               | 22.11                                  | 22.13                                |
| 10              | QPSK       | 1          | 49           | 22.14                               | 22.11                                  | 22.13                                |
| 10              | QPSK       | 25         | 0            | 21.26                               | 21.26                                  | 21.25                                |
| 10              | QPSK       | 25         | 12           | 21.22                               | 21.34                                  | 21.39                                |
| 10              | QPSK       | 25         | 25           | 21.15                               | 21.33                                  | 21.33                                |
| 10              | QPSK       | 50         | 0            | 21.24                               | 21.36                                  | 21.35                                |
| 10              | 16QAM      | 1          | 0            | 21.29                               | 21.47                                  | 21.32                                |
| 10              | 16QAM      | 1          | 25           | 21.28                               | 21.30                                  | 21.35                                |
| 10              | 16QAM      | 1          | 49           | 21.75                               | 21.65                                  | 21.56                                |
| 10              | 16QAM      | 25         | 0            | 21.18                               | 21.06                                  | 21.14                                |
| 10              | 16QAM      | 25         | 12           | 21.00                               | 21.17                                  | 21.10                                |
| 10              | 16QAM      | 25         | 25           | 21.05                               | 21.08                                  | 21.00                                |
| 10              | 16QAM      | 50         | 0            | 21.08                               | 21.17                                  | 21.02                                |
| 10              | 64QAM      | 1          | 0            | 20.62                               | 20.58                                  | 20.56                                |
| 10              | 64QAM      | 1          | 25           | 20.31                               | 20.56                                  | 20.39                                |
| 10              | 64QAM      | 1          | 49           | 20.42                               | 20.66                                  | 20.47                                |
| 10              | 64QAM      | 25         | 0            | 20.28                               | 20.26                                  | 20.30                                |
| 10              | 64QAM      | 25         | 12           | 20.30                               | 20.41                                  | 20.34                                |
| 10              | 64QAM      | 25         | 25           | 20.23                               | 20.13                                  | 20.12                                |
| 10              | 64QAM      | 50         | 0            | 20.17                               | 20.23                                  | 20.15                                |



| LTE Band 7      |            |            |              |                                     |                                        |                                      |
|-----------------|------------|------------|--------------|-------------------------------------|----------------------------------------|--------------------------------------|
| BW<br>[MHz]     | Modulation | RB<br>Size | RB<br>Offset | Average Power<br>Low<br>Ch. / Freq. | Average Power<br>Middle<br>Ch. / Freq. | Average Power<br>High<br>Ch. / Freq. |
| Channel         |            |            |              | 20775                               | 21100                                  | 21425                                |
| Frequency (MHz) |            |            |              | 2502.5                              | 2535                                   | 2567.5                               |
| 5               | QPSK       | 1          | 0            | 22.22                               | 22.13                                  | 22.03                                |
| 5               | QPSK       | 1          | 12           | 22.09                               | 22.02                                  | 22.10                                |
| 5               | QPSK       | 1          | 24           | 22.03                               | 22.09                                  | 22.13                                |
| 5               | QPSK       | 12         | 0            | 21.06                               | 21.14                                  | 21.06                                |
| 5               | QPSK       | 12         | 7            | 21.13                               | 21.28                                  | 21.20                                |
| 5               | QPSK       | 12         | 13           | 21.15                               | 21.31                                  | 21.16                                |
| 5               | QPSK       | 25         | 0            | 21.16                               | 21.17                                  | 21.12                                |
| 5               | 16QAM      | 1          | 0            | 21.14                               | 21.12                                  | 21.18                                |
| 5               | 16QAM      | 1          | 12           | 21.19                               | 21.41                                  | 21.31                                |
| 5               | 16QAM      | 1          | 24           | 21.25                               | 21.44                                  | 21.26                                |
| 5               | 16QAM      | 12         | 0            | 21.16                               | 21.22                                  | 21.13                                |
| 5               | 16QAM      | 12         | 7            | 21.05                               | 21.07                                  | 21.03                                |
| 5               | 16QAM      | 12         | 13           | 21.05                               | 21.11                                  | 21.24                                |
| 5               | 16QAM      | 25         | 0            | 21.02                               | 21.07                                  | 21.09                                |
| 5               | 64QAM      | 1          | 0            | 20.38                               | 20.43                                  | 20.39                                |
| 5               | 64QAM      | 1          | 12           | 20.43                               | 20.55                                  | 20.43                                |
| 5               | 64QAM      | 1          | 24           | 20.47                               | 20.57                                  | 20.53                                |
| 5               | 64QAM      | 12         | 0            | 20.18                               | 20.15                                  | 20.20                                |
| 5               | 64QAM      | 12         | 7            | 20.27                               | 20.32                                  | 20.11                                |
| 5               | 64QAM      | 12         | 13           | 20.22                               | 20.31                                  | 20.17                                |
| 5               | 64QAM      | 25         | 0            | 20.17                               | 20.16                                  | 20.21                                |



| LTE Band 12     |            |            |              |                                     |                                        |                                      |
|-----------------|------------|------------|--------------|-------------------------------------|----------------------------------------|--------------------------------------|
| BW<br>[MHz]     | Modulation | RB<br>Size | RB<br>Offset | Average Power<br>Low<br>Ch. / Freq. | Average Power<br>Middle<br>Ch. / Freq. | Average Power<br>High<br>Ch. / Freq. |
| Channel         |            |            |              | 23060                               | 23095                                  | 23130                                |
| Frequency (MHz) |            |            |              | 704                                 | 707.5                                  | 711                                  |
| 10              | QPSK       | 1          | 0            | 23.26                               | 23.42                                  | 23.31                                |
| 10              | QPSK       | 1          | 25           | 23.12                               | 23.25                                  | 23.28                                |
| 10              | QPSK       | 1          | 49           | 23.22                               | 23.23                                  | 23.22                                |
| 10              | QPSK       | 25         | 0            | 22.51                               | 22.61                                  | 22.52                                |
| 10              | QPSK       | 25         | 12           | 22.48                               | 22.42                                  | 22.21                                |
| 10              | QPSK       | 25         | 25           | 22.53                               | 22.59                                  | 22.52                                |
| 10              | QPSK       | 50         | 0            | 22.54                               | 22.56                                  | 22.47                                |
| 10              | 16QAM      | 1          | 0            | 22.47                               | 22.02                                  | 22.15                                |
| 10              | 16QAM      | 1          | 25           | 22.22                               | 22.17                                  | 22.31                                |
| 10              | 16QAM      | 1          | 49           | 22.31                               | 22.36                                  | 22.25                                |
| 10              | 16QAM      | 25         | 0            | 22.20                               | 22.22                                  | 22.16                                |
| 10              | 16QAM      | 25         | 12           | 22.24                               | 22.28                                  | 22.17                                |
| 10              | 16QAM      | 25         | 25           | 22.29                               | 22.30                                  | 22.24                                |
| 10              | 16QAM      | 50         | 0            | 22.19                               | 22.27                                  | 22.32                                |
| 10              | 64QAM      | 1          | 0            | 21.34                               | 21.46                                  | 21.80                                |
| 10              | 64QAM      | 1          | 25           | 21.78                               | 21.84                                  | 21.43                                |
| 10              | 64QAM      | 1          | 49           | 21.80                               | 21.48                                  | 21.41                                |
| 10              | 64QAM      | 25         | 0            | 21.31                               | 21.25                                  | 21.22                                |
| 10              | 64QAM      | 25         | 12           | 21.36                               | 21.39                                  | 21.31                                |
| 10              | 64QAM      | 25         | 25           | 21.41                               | 21.38                                  | 21.38                                |
| 10              | 64QAM      | 50         | 0            | 21.33                               | 21.26                                  | 21.37                                |



| LTE Band 12     |            |            |              |                                     |                                        |                                      |
|-----------------|------------|------------|--------------|-------------------------------------|----------------------------------------|--------------------------------------|
| BW<br>[MHz]     | Modulation | RB<br>Size | RB<br>Offset | Average Power<br>Low<br>Ch. / Freq. | Average Power<br>Middle<br>Ch. / Freq. | Average Power<br>High<br>Ch. / Freq. |
| Channel         |            |            |              | 23035                               | 23095                                  | 23155                                |
| Frequency (MHz) |            |            |              | 701.5                               | 707.5                                  | 713.5                                |
| 5               | QPSK       | 1          | 0            | 23.01                               | 23.17                                  | 23.12                                |
| 5               | QPSK       | 1          | 12           | 23.17                               | 23.33                                  | 23.17                                |
| 5               | QPSK       | 1          | 24           | 23.13                               | 23.32                                  | 23.18                                |
| 5               | QPSK       | 12         | 0            | 22.24                               | 22.31                                  | 22.30                                |
| 5               | QPSK       | 12         | 7            | 22.35                               | 22.37                                  | 22.34                                |
| 5               | QPSK       | 12         | 13           | 22.30                               | 22.33                                  | 22.30                                |
| 5               | QPSK       | 25         | 0            | 22.26                               | 22.38                                  | 22.34                                |
| 5               | 16QAM      | 1          | 0            | 22.27                               | 22.29                                  | 22.31                                |
| 5               | 16QAM      | 1          | 12           | 22.44                               | 22.39                                  | 22.40                                |
| 5               | 16QAM      | 1          | 24           | 22.40                               | 22.38                                  | 22.34                                |
| 5               | 16QAM      | 12         | 0            | 22.14                               | 22.11                                  | 22.14                                |
| 5               | 16QAM      | 12         | 7            | 22.28                               | 22.33                                  | 22.17                                |
| 5               | 16QAM      | 12         | 13           | 22.23                               | 22.20                                  | 22.25                                |
| 5               | 16QAM      | 25         | 0            | 22.24                               | 22.20                                  | 22.22                                |
| 5               | 64QAM      | 1          | 0            | 21.32                               | 21.33                                  | 21.38                                |
| 5               | 64QAM      | 1          | 12           | 21.77                               | 21.47                                  | 21.40                                |
| 5               | 64QAM      | 1          | 24           | 21.75                               | 21.44                                  | 21.49                                |
| 5               | 64QAM      | 12         | 0            | 21.29                               | 21.31                                  | 21.26                                |
| 5               | 64QAM      | 12         | 7            | 21.39                               | 21.27                                  | 21.33                                |
| 5               | 64QAM      | 12         | 13           | 21.26                               | 21.36                                  | 21.41                                |
| 5               | 64QAM      | 25         | 0            | 21.41                               | 21.37                                  | 21.34                                |



| LTE Band 12     |            |            |              |                                     |                                        |                                      |
|-----------------|------------|------------|--------------|-------------------------------------|----------------------------------------|--------------------------------------|
| BW<br>[MHz]     | Modulation | RB<br>Size | RB<br>Offset | Average Power<br>Low<br>Ch. / Freq. | Average Power<br>Middle<br>Ch. / Freq. | Average Power<br>High<br>Ch. / Freq. |
| Channel         |            |            |              | 23025                               | 23095                                  | 23165                                |
| Frequency (MHz) |            |            |              | 700.5                               | 707.5                                  | 714.5                                |
| 3               | QPSK       | 1          | 0            | 23.09                               | 23.18                                  | 23.03                                |
| 3               | QPSK       | 1          | 8            | 23.27                               | 23.26                                  | 23.36                                |
| 3               | QPSK       | 1          | 14           | 23.21                               | 23.32                                  | 23.27                                |
| 3               | QPSK       | 8          | 0            | 22.32                               | 22.30                                  | 22.30                                |
| 3               | QPSK       | 8          | 4            | 22.35                               | 22.38                                  | 22.39                                |
| 3               | QPSK       | 8          | 7            | 22.30                               | 22.38                                  | 22.32                                |
| 3               | QPSK       | 15         | 0            | 22.29                               | 22.37                                  | 22.23                                |
| 3               | 16QAM      | 1          | 0            | 22.30                               | 22.66                                  | 22.25                                |
| 3               | 16QAM      | 1          | 8            | 22.50                               | 22.48                                  | 22.43                                |
| 3               | 16QAM      | 1          | 14           | 22.33                               | 22.38                                  | 22.24                                |
| 3               | 16QAM      | 8          | 0            | 22.30                               | 22.19                                  | 22.22                                |
| 3               | 16QAM      | 8          | 4            | 22.35                               | 22.32                                  | 22.43                                |
| 3               | 16QAM      | 8          | 7            | 22.19                               | 22.22                                  | 22.28                                |
| 3               | 16QAM      | 15         | 0            | 22.17                               | 22.10                                  | 22.09                                |
| 3               | 64QAM      | 1          | 0            | 21.33                               | 21.67                                  | 21.66                                |
| 3               | 64QAM      | 1          | 8            | 21.62                               | 21.52                                  | 21.53                                |
| 3               | 64QAM      | 1          | 14           | 21.55                               | 21.40                                  | 21.51                                |
| 3               | 64QAM      | 8          | 0            | 21.22                               | 21.30                                  | 21.21                                |
| 3               | 64QAM      | 8          | 4            | 21.31                               | 21.35                                  | 21.34                                |
| 3               | 64QAM      | 8          | 7            | 21.30                               | 21.22                                  | 21.37                                |
| 3               | 64QAM      | 15         | 0            | 21.29                               | 21.31                                  | 21.23                                |



| LTE Band 12     |            |            |              |                                     |                                        |                                      |
|-----------------|------------|------------|--------------|-------------------------------------|----------------------------------------|--------------------------------------|
| BW<br>[MHz]     | Modulation | RB<br>Size | RB<br>Offset | Average Power<br>Low<br>Ch. / Freq. | Average Power<br>Middle<br>Ch. / Freq. | Average Power<br>High<br>Ch. / Freq. |
| Channel         |            |            |              | 23017                               | 23095                                  | 23173                                |
| Frequency (MHz) |            |            |              | 699.7                               | 707.5                                  | 715.3                                |
| 1.4             | QPSK       | 1          | 0            | 23.12                               | 23.16                                  | 23.09                                |
| 1.4             | QPSK       | 1          | 3            | 23.23                               | 23.22                                  | 23.24                                |
| 1.4             | QPSK       | 1          | 5            | 23.12                               | 23.17                                  | 23.13                                |
| 1.4             | QPSK       | 3          | 0            | 23.07                               | 23.20                                  | 23.18                                |
| 1.4             | QPSK       | 3          | 1            | 23.28                               | 23.28                                  | 23.29                                |
| 1.4             | QPSK       | 3          | 3            | 23.23                               | 23.25                                  | 23.21                                |
| 1.4             | QPSK       | 6          | 0            | 22.29                               | 22.26                                  | 22.24                                |
| 1.4             | 16QAM      | 1          | 0            | 22.33                               | 22.27                                  | 22.12                                |
| 1.4             | 16QAM      | 1          | 3            | 22.14                               | 22.57                                  | 22.24                                |
| 1.4             | 16QAM      | 1          | 5            | 22.26                               | 22.27                                  | 22.26                                |
| 1.4             | 16QAM      | 3          | 0            | 22.10                               | 22.13                                  | 22.14                                |
| 1.4             | 16QAM      | 3          | 1            | 22.26                               | 22.34                                  | 22.18                                |
| 1.4             | 16QAM      | 3          | 3            | 22.09                               | 22.23                                  | 22.23                                |
| 1.4             | 16QAM      | 6          | 0            | 22.02                               | 22.22                                  | 22.12                                |
| 1.4             | 64QAM      | 1          | 0            | 21.17                               | 21.32                                  | 21.16                                |
| 1.4             | 64QAM      | 1          | 3            | 21.29                               | 21.22                                  | 21.27                                |
| 1.4             | 64QAM      | 1          | 5            | 21.45                               | 21.48                                  | 21.44                                |
| 1.4             | 64QAM      | 3          | 0            | 21.35                               | 21.36                                  | 21.19                                |
| 1.4             | 64QAM      | 3          | 1            | 21.33                               | 21.57                                  | 21.42                                |
| 1.4             | 64QAM      | 3          | 3            | 21.35                               | 21.19                                  | 21.35                                |
| 1.4             | 64QAM      | 6          | 0            | 21.31                               | 21.32                                  | 21.19                                |



| LTE Band 17     |            |            |              |                                     |                                        |                                      |
|-----------------|------------|------------|--------------|-------------------------------------|----------------------------------------|--------------------------------------|
| BW<br>[MHz]     | Modulation | RB<br>Size | RB<br>Offset | Average Power<br>Low<br>Ch. / Freq. | Average Power<br>Middle<br>Ch. / Freq. | Average Power<br>High<br>Ch. / Freq. |
| Channel         |            |            |              | 23780                               | 23790                                  | 23800                                |
| Frequency (MHz) |            |            |              | 709                                 | 710                                    | 711                                  |
| 10              | QPSK       | 1          | 0            | 23.12                               | 23.25                                  | 22.90                                |
| 10              | QPSK       | 1          | 25           | 23.11                               | 23.02                                  | 23.11                                |
| 10              | QPSK       | 1          | 49           | 23.08                               | 22.92                                  | 23.08                                |
| 10              | QPSK       | 25         | 0            | 22.34                               | 22.42                                  | 22.22                                |
| 10              | QPSK       | 25         | 12           | 22.26                               | 22.25                                  | 22.31                                |
| 10              | QPSK       | 25         | 25           | 22.32                               | 22.19                                  | 22.27                                |
| 10              | QPSK       | 50         | 0            | 22.30                               | 22.32                                  | 22.32                                |
| 10              | 16QAM      | 1          | 0            | 22.20                               | 22.28                                  | 22.22                                |
| 10              | 16QAM      | 1          | 25           | 22.32                               | 22.32                                  | 22.32                                |
| 10              | 16QAM      | 1          | 49           | 22.56                               | 22.58                                  | 22.24                                |
| 10              | 16QAM      | 25         | 0            | 22.32                               | 22.02                                  | 22.36                                |
| 10              | 16QAM      | 25         | 12           | 21.92                               | 22.23                                  | 22.07                                |
| 10              | 16QAM      | 25         | 25           | 22.06                               | 22.23                                  | 21.94                                |
| 10              | 16QAM      | 50         | 0            | 22.03                               | 22.06                                  | 22.09                                |
| 10              | 64QAM      | 1          | 0            | 21.73                               | 21.42                                  | 21.68                                |
| 10              | 64QAM      | 1          | 25           | 21.71                               | 21.38                                  | 21.38                                |
| 10              | 64QAM      | 1          | 49           | 21.61                               | 21.34                                  | 21.42                                |
| 10              | 64QAM      | 25         | 0            | 21.38                               | 21.38                                  | 21.38                                |
| 10              | 64QAM      | 25         | 12           | 21.26                               | 21.34                                  | 21.30                                |
| 10              | 64QAM      | 25         | 25           | 21.38                               | 21.08                                  | 21.42                                |
| 10              | 64QAM      | 50         | 0            | 21.12                               | 21.29                                  | 21.13                                |



| LTE Band 17     |            |            |              |                                     |                                        |                                      |
|-----------------|------------|------------|--------------|-------------------------------------|----------------------------------------|--------------------------------------|
| BW<br>[MHz]     | Modulation | RB<br>Size | RB<br>Offset | Average Power<br>Low<br>Ch. / Freq. | Average Power<br>Middle<br>Ch. / Freq. | Average Power<br>High<br>Ch. / Freq. |
| Channel         |            |            |              | 23755                               | 23790                                  | 23825                                |
| Frequency (MHz) |            |            |              | 706.5                               | 710                                    | 713.5                                |
| 5               | QPSK       | 1          | 0            | 22.66                               | 22.83                                  | 22.85                                |
| 5               | QPSK       | 1          | 12           | 23.10                               | 23.14                                  | 23.14                                |
| 5               | QPSK       | 1          | 24           | 22.98                               | 22.92                                  | 22.94                                |
| 5               | QPSK       | 12         | 0            | 22.09                               | 22.06                                  | 22.10                                |
| 5               | QPSK       | 12         | 7            | 22.20                               | 22.24                                  | 22.25                                |
| 5               | QPSK       | 12         | 13           | 22.17                               | 22.19                                  | 22.16                                |
| 5               | QPSK       | 25         | 0            | 22.18                               | 22.07                                  | 22.11                                |
| 5               | 16QAM      | 1          | 0            | 22.09                               | 22.02                                  | 22.22                                |
| 5               | 16QAM      | 1          | 12           | 22.14                               | 22.06                                  | 22.12                                |
| 5               | 16QAM      | 1          | 24           | 22.12                               | 22.03                                  | 22.11                                |
| 5               | 16QAM      | 12         | 0            | 22.05                               | 22.10                                  | 22.08                                |
| 5               | 16QAM      | 12         | 7            | 22.20                               | 22.10                                  | 22.22                                |
| 5               | 16QAM      | 12         | 13           | 22.16                               | 22.15                                  | 22.15                                |
| 5               | 16QAM      | 25         | 0            | 22.17                               | 22.11                                  | 22.15                                |
| 5               | 64QAM      | 1          | 0            | 21.22                               | 21.33                                  | 21.16                                |
| 5               | 64QAM      | 1          | 12           | 21.21                               | 21.32                                  | 21.17                                |
| 5               | 64QAM      | 1          | 24           | 21.22                               | 21.22                                  | 21.22                                |
| 5               | 64QAM      | 12         | 0            | 21.32                               | 21.09                                  | 21.10                                |
| 5               | 64QAM      | 12         | 7            | 21.19                               | 21.12                                  | 21.26                                |
| 5               | 64QAM      | 12         | 13           | 21.17                               | 21.19                                  | 21.12                                |
| 5               | 64QAM      | 25         | 0            | 21.13                               | 21.17                                  | 21.18                                |



| LTE Band 18     |            |            |              |                                     |                                        |                                      |
|-----------------|------------|------------|--------------|-------------------------------------|----------------------------------------|--------------------------------------|
| BW<br>[MHz]     | Modulation | RB<br>Size | RB<br>Offset | Average Power<br>Low<br>Ch. / Freq. | Average Power<br>Middle<br>Ch. / Freq. | Average Power<br>High<br>Ch. / Freq. |
| Channel         |            |            |              | /                                   | 23925                                  | /                                    |
| Frequency (MHz) |            |            |              | /                                   | 822.5                                  | /                                    |
| 15              | QPSK       | 1          | 0            | /                                   | 23.34                                  | /                                    |
| 15              | QPSK       | 1          | 37           | /                                   | 23.26                                  | /                                    |
| 15              | QPSK       | 1          | 74           | /                                   | 23.21                                  | /                                    |
| 15              | QPSK       | 36         | 0            | /                                   | 22.51                                  | /                                    |
| 15              | QPSK       | 36         | 20           | /                                   | 22.42                                  | /                                    |
| 15              | QPSK       | 36         | 39           | /                                   | 22.34                                  | /                                    |
| 15              | QPSK       | 75         | 0            | /                                   | 22.22                                  | /                                    |
| 15              | 16QAM      | 1          | 0            | /                                   | 22.31                                  | /                                    |
| 15              | 16QAM      | 1          | 37           | /                                   | 22.22                                  | /                                    |
| 15              | 16QAM      | 1          | 74           | /                                   | 22.34                                  | /                                    |
| 15              | 16QAM      | 36         | 0            | /                                   | 22.46                                  | /                                    |
| 15              | 16QAM      | 36         | 20           | /                                   | 22.24                                  | /                                    |
| 15              | 16QAM      | 36         | 39           | /                                   | 22.19                                  | /                                    |
| 15              | 16QAM      | 75         | 0            | /                                   | 22.34                                  | /                                    |
| 15              | 64QAM      | 1          | 0            | /                                   | 21.33                                  | /                                    |
| 15              | 64QAM      | 1          | 37           | /                                   | 21.22                                  | /                                    |
| 15              | 64QAM      | 1          | 74           | /                                   | 21.42                                  | /                                    |
| 15              | 64QAM      | 36         | 0            | /                                   | 21.38                                  | /                                    |
| 15              | 64QAM      | 36         | 20           | /                                   | 21.29                                  | /                                    |
| 15              | 64QAM      | 36         | 39           | /                                   | 21.37                                  | /                                    |
| 15              | 64QAM      | 75         | 0            | /                                   | 21.28                                  | /                                    |



| LTE Band 18     |            |            |              |                                     |                                        |                                      |
|-----------------|------------|------------|--------------|-------------------------------------|----------------------------------------|--------------------------------------|
| BW<br>[MHz]     | Modulation | RB<br>Size | RB<br>Offset | Average Power<br>Low<br>Ch. / Freq. | Average Power<br>Middle<br>Ch. / Freq. | Average Power<br>High<br>Ch. / Freq. |
| Channel         |            |            |              | 23900                               | 23925                                  | 23950                                |
| Frequency (MHz) |            |            |              | 820                                 | 822.5                                  | 825                                  |
| 10              | QPSK       | 1          | 0            | 23.02                               | 23.27                                  | 23.28                                |
| 10              | QPSK       | 1          | 25           | 23.09                               | 23.02                                  | 22.89                                |
| 10              | QPSK       | 1          | 49           | 23.20                               | 22.96                                  | 22.84                                |
| 10              | QPSK       | 25         | 0            | 22.17                               | 22.31                                  | 22.13                                |
| 10              | QPSK       | 25         | 12           | 22.12                               | 22.16                                  | 22.22                                |
| 10              | QPSK       | 25         | 25           | 22.11                               | 22.09                                  | 22.10                                |
| 10              | QPSK       | 50         | 0            | 22.20                               | 22.17                                  | 22.16                                |
| 10              | 16QAM      | 1          | 0            | 22.24                               | 22.15                                  | 22.30                                |
| 10              | 16QAM      | 1          | 25           | 22.30                               | 22.18                                  | 22.17                                |
| 10              | 16QAM      | 1          | 49           | 22.50                               | 22.19                                  | 22.19                                |
| 10              | 16QAM      | 25         | 0            | 22.23                               | 22.16                                  | 22.20                                |
| 10              | 16QAM      | 25         | 12           | 22.24                               | 22.04                                  | 22.27                                |
| 10              | 16QAM      | 25         | 25           | 22.04                               | 22.05                                  | 22.00                                |
| 10              | 16QAM      | 50         | 0            | 22.07                               | 22.18                                  | 22.23                                |
| 10              | 64QAM      | 1          | 0            | 21.33                               | 21.23                                  | 21.34                                |
| 10              | 64QAM      | 1          | 25           | 21.23                               | 21.22                                  | 21.22                                |
| 10              | 64QAM      | 1          | 49           | 21.25                               | 21.15                                  | 21.23                                |
| 10              | 64QAM      | 25         | 0            | 21.25                               | 21.22                                  | 21.12                                |
| 10              | 64QAM      | 25         | 12           | 21.05                               | 21.11                                  | 21.10                                |
| 10              | 64QAM      | 25         | 25           | 21.00                               | 21.15                                  | 21.06                                |
| 10              | 64QAM      | 50         | 0            | 21.14                               | 21.14                                  | 21.12                                |