

## FCC Test Report

### (ENDC: n77+B2/B5/B7/B12/B13/B14/B30/B41/B66)

**Report No.:** RFBHQC-WTW-P21030610B-1

**FCC ID:** 2AQ68T99W175

**Test Model:** T99W175

**Received Date:** Sep. 06, 2021

**Test Date:** Sep. 29 ~ Oct. 10, 2021

**Issued Date:** Oct. 29, 2021

**Applicant:** Hon Lin Technology Co., Ltd.

**Address:** 11F, No. 32, Jihu Rd., Neihu Dist., Taipei City 114, Taiwan R.O.C.

**Issued By:** Bureau Veritas Consumer Products Services (H.K.) Ltd., Taoyuan Branch  
Lin Kou Laboratories

**Lab Address:** No. 47-2, 14th Ling, Chia Pau Vil., Lin Kou Dist., New Taipei City, Taiwan

**Test Location(1):** No. 19, Hwa Ya 2nd Rd., Wen Hwa Vil., Kwei Shan Dist., Taoyuan City  
33383, Taiwan

**FCC Registration /**  
**Designation Number(1):** 788550 / TW0003

**Test Location(2):** No. 70, Wenming Rd., Guishan Dist., Taoyuan City 333, Taiwan (R.O.C.)

**FCC Registration /**  
**Designation Number(2):** 281270 / TW0032



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### Release Control Record

| Issue No.               | Description      | Date Issued   |
|-------------------------|------------------|---------------|
| RFBHQC-WTW-P21030610B-1 | Original release | Oct. 29, 2021 |

## 1 Certificate of Conformity

**Product:** 5G WWAN Module

**Brand:** Foxconn

**Test Model:** T99W175

**Sample Status:** Engineering Sample

**Applicant:** Hon Lin Technology Co., Ltd.

**Test Date:** Sep. 29 ~ Oct. 10, 2021

**Standards:** FCC Part 22, Subpart H  
FCC Part 24, Subpart E  
FCC Part 27, Subpart C, D, F, H, L, M, O, Q  
FCC Part 90, Subpart R

The above equipment has been tested by **Bureau Veritas Consumer Products Services (H.K.) Ltd., Taoyuan Branch**, and found compliance with the requirement of the above standards. The test record, data evaluation & Equipment Under Test (EUT) configurations represented herein are true and accurate accounts of the measurements of the sample's RF characteristics under the conditions specified in this report.

**Prepared by :** Pettie Chen, **Date:** Oct. 29, 2021  
Pettie Chen / Senior Specialist

**Approved by :** Bruce Chen, **Date:** Oct. 29, 2021  
Bruce Chen / Senior Engineer

## 2 Summary of Test Results

For 5GNR n77, n78(Part 27O):

| Applied Standard: FCC Part 27 & Part 2 |                                                                       |        |                                                                                        |
|----------------------------------------|-----------------------------------------------------------------------|--------|----------------------------------------------------------------------------------------|
| FCC Clause                             | Test Item                                                             | Result | Remarks                                                                                |
| 2.1046<br>27.50<br>(j)                 | Equivalent Radiated Power                                             | Pass   | Meet the requirement of limit.                                                         |
| 2.1047                                 | Modulation Characteristics                                            | Pass   | Meet the requirement                                                                   |
| 2.1055<br>27.54                        | Frequency Stability<br>Stay with the authorized bands of<br>operation | Pass   | Meet the requirement of limit.                                                         |
| 2.1049                                 | Occupied Bandwidth                                                    | Pass   | Meet the requirement of limit.                                                         |
| 2.1051<br>27.53(l)                     | Band Edge / Out of Band Emissions<br>Measurements                     | Pass   | Meet the requirement of limit.                                                         |
| ----                                   | Peak To Average Ratio                                                 | Pass   | Meet the requirement of limit.                                                         |
| 2.1051<br>27.53(l)                     | Conducted Spurious Emissions                                          | Pass   | Meet the requirement of limit.                                                         |
| 2.1053<br>27.53(l)                     | Radiated Spurious Emissions                                           | Pass   | Meet the requirement of limit.<br>Minimum passing margin is -26.88dB at<br>7680.00MHz. |

Note: Determining compliance based on the results of the compliance measurement, not taking into account measurement instrumentation uncertainty.

For 5GNR n77, n78 (Part 27Q):

| Applied Standard: FCC Part 27 & Part 2 |                                                                       |        |                                                                                        |
|----------------------------------------|-----------------------------------------------------------------------|--------|----------------------------------------------------------------------------------------|
| FCC Clause                             | Test Item                                                             | Result | Remarks                                                                                |
| 2.1046<br>27.50 (k)                    | Equivalent Radiated Power                                             | Pass   | Meet the requirement of limit.                                                         |
| 2.1047                                 | Modulation Characteristics                                            | Pass   | Meet the requirement                                                                   |
| ----                                   | Peak To Average Ratio                                                 | Pass   | Meet the requirement of limit.                                                         |
| 2.1055<br>27.54                        | Frequency Stability<br>Stay with the authorized bands of<br>operation | Pass   | Meet the requirement of limit.                                                         |
| 2.1049                                 | Occupied Bandwidth                                                    | Pass   | Meet the requirement of limit.                                                         |
| 2.1051<br>27.53(n)                     | Band Edge / Out of Band Emissions<br>Measurements                     | Pass   | Meet the requirement of limit.                                                         |
| 2.1051<br>27.53(n)                     | Conducted Spurious Emissions                                          | Pass   | Meet the requirement of limit.                                                         |
| 2.1053<br>27.53(n)                     | Radiated Spurious Emissions                                           | Pass   | Meet the requirement of limit.<br>Minimum passing margin is -26.94dB at<br>7000.02MHz. |

Note: Determining compliance based on the results of the compliance measurement, not taking into account measurement instrumentation uncertainty.

For LTE Band 2:

| Applied Standard: FCC Part 24 & Part 2 |                                        |        |                                                                                     |
|----------------------------------------|----------------------------------------|--------|-------------------------------------------------------------------------------------|
| FCC Clause                             | Test Item                              | Result | Remarks                                                                             |
| 2.1046<br>24.232                       | Effective Isotropically Radiated Power | Pass   | Meet the requirement of limit.                                                      |
| 2.1046<br>24.232<br>(d)                | Peak To Average Ratio                  | Pass   | Meet the requirement of limit.                                                      |
| 2.1047                                 | Modulation Characteristics             | Pass   | Meet the requirement                                                                |
| 2.1055<br>24.235                       | Frequency Stability                    | Pass   | Meet the requirement of limit.                                                      |
| 2.1049                                 | Occupied Bandwidth                     | Pass   | Meet the requirement of limit.                                                      |
| 24.238                                 | Band Edge Measurements                 | Pass   | Meet the requirement of limit.                                                      |
| 2.1051<br>24.238                       | Conducted Spurious Emissions           | Pass   | Meet the requirement of limit.                                                      |
| 2.1053<br>24.238                       | Radiated Spurious Emissions            | Pass   | Meet the requirement of limit.<br>Minimum passing margin is -34.50dB at 3760.00MHz. |

Note: Determining compliance based on the results of the compliance measurement, not taking into account measurement instrumentation uncertainty.

For LTE Band 5:

| Applied Standard: FCC Part 22 & Part 2 |                              |        |                                                                                     |
|----------------------------------------|------------------------------|--------|-------------------------------------------------------------------------------------|
| FCC Clause                             | Test Item                    | Result | Remarks                                                                             |
| 2.1046<br>22.913<br>(a)                | Effective radiated power     | Pass   | Meet the requirement of limit.                                                      |
| 2.1047                                 | Modulation Characteristics   | Pass   | Meet the requirement                                                                |
| 22.913<br>(d)                          | Peak To Average Ratio        | Pass   | Meet the requirement of limit.                                                      |
| 2.1055<br>22.355                       | Frequency Stability          | Pass   | Meet the requirement of limit.                                                      |
| 2.1049                                 | Occupied Bandwidth           | Pass   | Meet the requirement of limit.                                                      |
| 22.917                                 | Band Edge Measurements       | Pass   | Meet the requirement of limit.                                                      |
| 2.1051<br>22.917                       | Conducted Spurious Emissions | Pass   | Meet the requirement of limit.                                                      |
| 2.1053<br>22.917                       | Radiated Spurious Emissions  | Pass   | Meet the requirement of limit.<br>Minimum passing margin is -37.23dB at 1688.00MHz. |

Note: Determining compliance based on the results of the compliance measurement, not taking into account measurement instrumentation uncertainty.

For LTE Band 7:

| Applied Standard: FCC Part 27 & Part 2 |                                         |        |                                                                                        |
|----------------------------------------|-----------------------------------------|--------|----------------------------------------------------------------------------------------|
| FCC Clause                             | Test Item                               | Result | Remarks                                                                                |
| 2.1046<br>27.50(h)(2)                  | Equivalent Isotropically radiated power | Pass   | Meet the requirement of limit.                                                         |
| 2.1047                                 | Modulation characteristics              | Pass   | Meet the requirement                                                                   |
| 2.1055<br>27.54                        | Frequency Stability                     | Pass   | Meet the requirement of limit.                                                         |
| 2.1049                                 | Emission Bandwidth                      | Pass   | Meet the requirement of limit.                                                         |
| 2.1051<br>27.53(m)(4)(6)               | Out of Band Emission Measurements       | Pass   | Meet the requirement of limit.                                                         |
| --                                     | Peak To Average Ratio                   | Pass   | Meet the requirement of limit.                                                         |
| 2.1051<br>27.53(m)(4)(6)               | Conducted Spurious Emissions            | Pass   | Meet the requirement of limit.                                                         |
| 2.1053<br>27.53(m)(4)(6)               | Radiated Spurious Emissions             | Pass   | Meet the requirement of limit.<br>Minimum passing margin is<br>-21.82dB at 5070.00MHz. |

Note: Determining compliance based on the results of the compliance measurement, not taking into account measurement instrumentation uncertainty.

For LTE Band 12:

| Applied Standard: FCC Part 27 & Part 2 |                                   |        |                                                                                        |
|----------------------------------------|-----------------------------------|--------|----------------------------------------------------------------------------------------|
| FCC Clause                             | Test Item                         | Result | Remarks                                                                                |
| 2.1046<br>27.50 (c)                    | Equivalent Radiated Power         | Pass   | Meet the requirement of limit.                                                         |
| 2.1047                                 | Modulation Characteristics        | Pass   | Meet the requirement                                                                   |
| 2.1055<br>27.54                        | Frequency Stability               | Pass   | Meet the requirement of limit.                                                         |
| 2.1049                                 | Emission Bandwidth                | Pass   | Meet the requirement of limit.                                                         |
| 2.1051<br>27.53 (g)                    | Out of Band Emission Measurements | Pass   | Meet the requirement of limit.                                                         |
| --                                     | Peak To Average Ratio             | Pass   | Meet the requirement of limit.                                                         |
| 2.1051<br>27.53<br>(g)                 | Conducted Spurious Emissions      | Pass   | Meet the requirement of limit.                                                         |
| 2.1053<br>27.53<br>(g)                 | Radiated Spurious Emissions       | Pass   | Meet the requirement of limit.<br>Minimum passing margin is<br>-39.05dB at 1399.40MHz. |

Note: Determining compliance based on the results of the compliance measurement, not taking into account measurement instrumentation uncertainty.

For LTE Band 13:

| Applied Standard: FCC Part 27 & Part 2 |                              |        |                                                                                     |
|----------------------------------------|------------------------------|--------|-------------------------------------------------------------------------------------|
| FCC Clause                             | Test Item                    | Result | Remarks                                                                             |
| 2.1046<br>27.50(b)                     | Equivalent radiated power    | Pass   | Meet the requirement of limit.                                                      |
| 2.1047                                 | Modulation characteristics   | Pass   | Meet the requirement                                                                |
| 2.1055<br>27.54                        | Frequency Stability          | Pass   | Meet the requirement of limit.                                                      |
| 2.1049                                 | Emission Bandwidth           | Pass   | Meet the requirement of limit.                                                      |
| 2.1051<br>27.53(c)                     | Channel Edge Measurements    | Pass   | Meet the requirement of limit.                                                      |
| --                                     | Peak To Average Ratio        | Pass   | Meet the requirement of limit.                                                      |
| 2.1051<br>27.53(c)(f)                  | Conducted Spurious Emissions | Pass   | Meet the requirement of limit.                                                      |
| 2.1053<br>27.53(c)(f))                 | Radiated Spurious Emissions  | Pass   | Meet the requirement of limit.<br>Minimum passing margin is -10.97dB at 1564.00MHz. |

Note: Determining compliance based on the results of the compliance measurement, not taking into account measurement instrumentation uncertainty.

For LTE Band 14:

| Applied Standard: FCC Part 90 & Part 2 |                              |        |                                                                                    |
|----------------------------------------|------------------------------|--------|------------------------------------------------------------------------------------|
| FCC Clause                             | Test Item                    | Result | Remarks                                                                            |
| 2.1046<br>90.542 (a)(7)                | Effective Radiated Power     | Pass   | Meet the requirement of limit.                                                     |
| 2.1047                                 | Modulation Characteristics   | Pass   | Meet the requirement                                                               |
| 2.1055<br>90.539 (e)                   | Frequency Stability          | Pass   | Meet the requirement of limit.                                                     |
| 2.1049                                 | Occupied Bandwidth           | Pass   | Meet the requirement of limit.                                                     |
| 90.210 (n)                             | Emission Masks               | Pass   | Meet the requirement of limit.                                                     |
| 2.1053<br>90.543 (e)(2)(3)             | Band Edge Measurements       | Pass   | Meet the requirement of limit.                                                     |
| 2.1051<br>90.543 (e)(3)                | Conducted Spurious Emissions | Pass   | Meet the requirement of limit.                                                     |
| 2.1053<br>90.543 (e)(f)                | Radiated Spurious Emissions  | Pass   | Meet the requirement of limit.<br>Minimum passing margin is -7.34dB at 1586.00MHz. |

Note: Determining compliance based on the results of the compliance measurement, not taking into account measurement instrumentation uncertainty.

For LTE Band 30:

| Applied Standard: FCC Part 27 & Part 2 |                                         |        |                                                                                    |
|----------------------------------------|-----------------------------------------|--------|------------------------------------------------------------------------------------|
| FCC Clause                             | Test Item                               | Result | Remarks                                                                            |
| 2.1046<br>27.50(a)                     | Equivalent Isotropically radiated power | Pass   | Meet the requirement of limit.                                                     |
| 2.1047                                 | Modulation characteristics              | Pass   | Meet the requirement                                                               |
| 2.1055<br>27.54                        | Frequency Stability                     | Pass   | Meet the requirement of limit.                                                     |
| 2.1049                                 | Emission Bandwidth                      | Pass   | Meet the requirement of limit.                                                     |
| 2.1051<br>27.53(a)                     | Out of Band Emission Measurements       | Pass   | Meet the requirement of limit.                                                     |
| --                                     | Peak To Average Ratio                   | Pass   | Meet the requirement of limit.                                                     |
| 2.1051<br>27.53(a)                     | Conducted Spurious Emissions            | Pass   | Meet the requirement of limit.                                                     |
| 2.1053<br>27.53(a)                     | Radiated Spurious Emissions             | Pass   | Meet the requirement of limit.<br>Minimum passing margin is -6.40dB at 4620.00MHz. |

Note: Determining compliance based on the results of the compliance measurement, not taking into account measurement instrumentation uncertainty.

For LTE Band 41:

| Applied Standard: FCC Part 27 & Part 2 |                                                                    |        |                                                                                     |
|----------------------------------------|--------------------------------------------------------------------|--------|-------------------------------------------------------------------------------------|
| FCC Clause                             | Test Item                                                          | Result | Remarks                                                                             |
| 2.1046<br>27.50<br>(h)(2)              | Equivalent Isotropically Radiated Power                            | Pass   | Meet the requirement of limit.                                                      |
| 2.1047                                 | Modulation Characteristics                                         | Pass   | Meet the requirement                                                                |
| ----                                   | Peak To Average Ratio                                              | Pass   | Meet the requirement of limit.                                                      |
| 2.1055<br>27.54                        | Frequency Stability<br>Stay with the authorized bands of operation | Pass   | Meet the requirement of limit.                                                      |
| 2.1049                                 | Occupied Bandwidth                                                 | Pass   | Meet the requirement of limit.                                                      |
| 2.1051<br>27.53<br>(m)(4)(6)           | Band Edge / Out of Band Emissions Measurements                     | Pass   | Meet the requirement of limit.                                                      |
| 2.1051<br>27.53<br>(m)(4)(6)           | Conducted Spurious Emissions                                       | Pass   | Meet the requirement of limit.                                                      |
| 2.1053<br>27.53<br>(m)(4)(6)           | Radiated Spurious Emissions                                        | Pass   | Meet the requirement of limit.<br>Minimum passing margin is -20.61dB at 5186.00MHz. |

Note: Determining compliance based on the results of the compliance measurement, not taking into account measurement instrumentation uncertainty.

For LTE Band 66:

| Applied Standard: FCC Part 27 & Part 2 |                                         |        |                                                                                        |
|----------------------------------------|-----------------------------------------|--------|----------------------------------------------------------------------------------------|
| FCC Clause                             | Test Item                               | Result | Remarks                                                                                |
| 2.1046<br>27.50(d)                     | Equivalent Isotropically radiated power | Pass   | Meet the requirement of limit.                                                         |
| 2.1047                                 | Modulation characteristics              | Pass   | Meet the requirement                                                                   |
| 2.1055<br>27.54                        | Frequency Stability                     | Pass   | Meet the requirement of limit.                                                         |
| 2.1049                                 | Emission Bandwidth                      | Pass   | Meet the requirement of limit.                                                         |
| 2.1051<br>27.53(h)                     | Channel Edge Measurements               | Pass   | Meet the requirement of limit.                                                         |
| 27.50(d)(5)                            | Peak To Average Ratio                   | Pass   | Meet the requirement of limit.                                                         |
| 2.1051<br>27.53(h)                     | Conducted Spurious Emissions            | Pass   | Meet the requirement of limit.                                                         |
| 2.1053<br>27.53(h)                     | Radiated Spurious Emissions             | Pass   | Meet the requirement of limit.<br>Minimum passing margin is<br>-35.11dB at 3490.00MHz. |

Note: Determining compliance based on the results of the compliance measurement, not taking into account measurement instrumentation uncertainty.

## 2.1 Measurement Uncertainty

Where relevant, the following measurement uncertainty levels have been estimated for tests performed on the EUT as specified in CISPR 16-4-2:

| Measurement                    | Frequency        | Expanded Uncertainty<br>(k=2) (±) |
|--------------------------------|------------------|-----------------------------------|
| Radiated Emissions up to 1 GHz | 9kHz ~ 30MHz     | 3.04 dB                           |
|                                | 30MHz ~ 200MHz   | 3.59 dB                           |
|                                | 200MHz ~ 1000MHz | 3.60 dB                           |
| Radiated Emissions above 1 GHz | 1GHz ~ 18GHz     | 2.29 dB                           |
|                                | 18GHz ~ 40GHz    | 2.29 dB                           |

## 2.2 Test Site and Instruments

| Description & Manufacturer                                  | Model No.                          | Serial No.                                      | Cal. Date     | Cal. Due      |
|-------------------------------------------------------------|------------------------------------|-------------------------------------------------|---------------|---------------|
| Test Receiver<br>Rohde & Schwarz                            | N9038A                             | MY55420137                                      | Apr. 09, 2021 | Apr. 08, 2022 |
| Spectrum Analyzer<br>KEYSIGHT                               | N9020B                             | MY60110440                                      | Dec. 18, 2020 | Dec. 17, 2021 |
| BILOG Antenna<br>SCHWARZBECK                                | VULB9168                           | 1213                                            | Nov. 04, 2020 | Nov. 03, 2021 |
| HORN Antenna<br>SCHWARZBECK                                 | BBHA 9120 D                        | 9120D-563                                       | Nov. 22, 2020 | Nov. 21, 2021 |
| HORN Antenna<br>SCHWARZBECK                                 | BBHA 9170                          | 995                                             | Nov. 22, 2020 | Nov. 21, 2021 |
| Preamplifier<br>EMCI                                        | EMC330N                            | 980782                                          | Jan. 12, 2021 | Jan. 11, 2022 |
| Preamplifier<br>EMCI                                        | EMC118A45SE                        | 980808                                          | Jan. 12, 2021 | Jan. 11, 2022 |
| Preamplifier<br>EMCI                                        | EMC184045SE                        | 980788                                          | Jan. 12, 2021 | Jan. 11, 2022 |
| RF signal cable<br>EMCI                                     | EMC104-SM-SM-(9<br>000+2000+1000)  | 201243+ 201231+<br>210102                       | Jan. 12, 2021 | Jan. 11, 2022 |
| RF signal cable<br>EMCI                                     | EMCCFD400-NM-N<br>M-(9000+300+500) | 201236+ 201235+<br>201233                       | Jan. 12, 2021 | Jan. 11, 2022 |
| RF signal cable<br>EMCI                                     | EMC101G-KM-KM-<br>(5000+3000+2000) | 201260+201257+201254                            | Jan. 12, 2021 | Jan. 11, 2022 |
| Software<br>BV ADT                                          | ADT_Radiated_V7.<br>6.15.9.5       | NA                                              | NA            | NA            |
| Antenna Tower<br>Max-Full                                   | MFT-151SS-0.5T                     | NA                                              | NA            | NA            |
| Turn Table<br>Max-Full                                      | MF-7802BS                          | NA                                              | NA            | NA            |
| Turn Table Controller<br>Max-Full                           | MF-7802BS                          | MF780208674                                     | NA            | NA            |
| USB Wideband Power Sensor<br>KEYSIGHT                       | U2021XA                            | MY55050005/MY55190004/<br>MY55190007/MY55210005 | Jul. 12, 2021 | Jul. 11, 2022 |
| Turn Table<br>BV ADT                                        | TT100                              | TT93021705                                      | NA            | NA            |
| Turn Table Controller<br>BV ADT                             | SC100                              | SC93021705                                      | NA            | NA            |
| Boresight Antenna Fixture                                   | FBA-01                             | FBA-SIP01                                       | NA            | NA            |
| Standard Temperature And<br>Humidity Chamber<br>GIANT FORCE | GTH-120-40-CP-A<br>R               | MAA1306-019                                     | Sep. 10, 2021 | Sep. 09, 2022 |
| JFW 20dB attenuation                                        | 50HF-020-SMA                       | NA                                              | NA            | NA            |
| True RMS Clamp Meter<br>Fluke                               | 325                                | 31130711WS                                      | Jun. 02, 2021 | Jun. 01, 2022 |
| DC power supply<br>Keysight                                 | U8002A                             | MY56330015                                      | NA            | NA            |

Note: 1. The calibration interval of the above test instruments is 12 months and the calibrations are traceable to NML/ROC and NIST/USA.  
2. The test was performed in WM Chamber 8.

### 3 General Information

#### 3.1 General Description of EUT

|                     |                                                     |
|---------------------|-----------------------------------------------------|
| Product             | 5G WWAN Module                                      |
| Brand               | Foxconn                                             |
| Test Model          | T99W175                                             |
| Sample Status       | Engineering Sample                                  |
| Power Supply Rating | 5 Vdc (Host equipment)<br>3.135Vdc~3.63Vdc (Module) |

#### 5GNR n77, n78 (Part 270)

|                     |                                          |                         |                         |                         |                         |                         |
|---------------------|------------------------------------------|-------------------------|-------------------------|-------------------------|-------------------------|-------------------------|
| Modulation Type     | $\pi/2$ BPSK, QPSK, 16QAM, 64QAM, 256QAM |                         |                         |                         |                         |                         |
| Waveform Type       | CP-OFDM, DFT-s-OFDM                      |                         |                         |                         |                         |                         |
| Operating Band      | n77 (3700-3980MHz) / n78 (3700-3800MHz)  |                         |                         |                         |                         |                         |
| Operating Frequency | n77 (Channel Bandwidth 20MHz)            | 3710.01MHz ~ 3969.99MHz |                         |                         |                         |                         |
|                     | n77 (Channel Bandwidth 40MHz)            | 3720.00MHz ~ 3960.00MHz |                         |                         |                         |                         |
|                     | n77 (Channel Bandwidth 50MHz)            | 3725.01MHz ~ 3954.99MHz |                         |                         |                         |                         |
|                     | n77 (Channel Bandwidth 60MHz)            | 3730.02MHz ~ 3949.98MHz |                         |                         |                         |                         |
|                     | n77 (Channel Bandwidth 80MHz)            | 3740.01MHz ~ 3939.99MHz |                         |                         |                         |                         |
|                     | n77 (Channel Bandwidth 90MHz)            | 3745.02MHz ~ 3934.98MHz |                         |                         |                         |                         |
|                     | n77 (Channel Bandwidth 100MHz)           | 3750.00MHz ~ 3930.00MHz |                         |                         |                         |                         |
| Max. EIRP Power     |                                          | $\pi/2$ BPSK            | QPSK                    | 16QAM                   | 64QAM                   | 256QAM                  |
|                     | n77 (Channel Bandwidth 20MHz)            | 912.011mW<br>(29.60dBm) | 870.964mW<br>(29.40dBm) | 690.240mW<br>(28.39dBm) | 539.511mW<br>(27.32dBm) | 375.837mW<br>(25.75dBm) |
|                     | n77 (Channel Bandwidth 40MHz)            | 912.011mW<br>(29.60dBm) | 870.964mW<br>(29.40dBm) | 683.912mW<br>(28.35dBm) | 548.277mW<br>(27.39dBm) | 374.973mW<br>(25.74dBm) |
|                     | n77 (Channel Bandwidth 50MHz)            | 909.913mW<br>(29.59dBm) | 860.994mW<br>(29.35dBm) | 691.831mW<br>(28.40dBm) | 549.541mW<br>(27.40dBm) | 380.189mW<br>(25.80dBm) |
|                     | n77 (Channel Bandwidth 60MHz)            | 899.498mW<br>(29.54dBm) | 870.964mW<br>(29.40dBm) | 691.831mW<br>(28.40dBm) | 545.758mW<br>(27.37dBm) | 370.681mW<br>(25.69dBm) |
|                     | n77 (Channel Bandwidth 80MHz)            | 907.821mW<br>(29.58dBm) | 862.979mW<br>(29.36dBm) | 690.240mW<br>(28.39dBm) | 544.503mW<br>(27.36dBm) | 380.189mW<br>(25.80dBm) |
|                     | n77 (Channel Bandwidth 90MHz)            | 897.429mW<br>(29.53dBm) | 870.964mW<br>(29.40dBm) | 691.831mW<br>(28.40dBm) | 549.541mW<br>(27.40dBm) | 380.189mW<br>(25.80dBm) |
|                     | n77 (Channel Bandwidth 100MHz)           | 905.733mW<br>(29.57dBm) | 870.964mW<br>(29.40dBm) | 690.240mW<br>(28.39dBm) | 542.001mW<br>(27.34dBm) | 380.189mW<br>(25.80dBm) |
| Emission Designator |                                          | $\pi/2$ BPSK            | QPSK                    | 16QAM                   | 64QAM                   | 256QAM                  |
|                     | n77 (Channel Bandwidth 20MHz)            | 18M1G7D                 | 18M3G7D                 | 18M2D7W                 | 18M2D7W                 | 18M3D7W                 |
|                     | n77 (Channel Bandwidth 40MHz)            | 37M5G7D                 | 37M8G7D                 | 37M8D7W                 | 37M8D7W                 | 37M8D7W                 |
|                     | n77 (Channel Bandwidth 50MHz)            | 47M1G7D                 | 47M5G7D                 | 47M5D7W                 | 47M5D7W                 | 47M5D7W                 |
|                     | n77 (Channel Bandwidth 60MHz)            | 57M9G7D                 | 57M9G7D                 | 57M9D7W                 | 57M9D7W                 | 57M9D7W                 |
|                     | n77 (Channel Bandwidth 80MHz)            | 77M2G7D                 | 77M5G7D                 | 77M5D7W                 | 77M5D7W                 | 77M5D7W                 |
|                     | n77 (Channel Bandwidth 90MHz)            | 86M9G7D                 | 87M5G7D                 | 87M5D7W                 | 87M5D7W                 | 87M5D7W                 |
|                     | n77 (Channel Bandwidth 100MHz)           | 96M8G7D                 | 97M6G7D                 | 97M7D7W                 | 97M6D7W                 | 97M6D7W                 |

\*n78 has the same RF characteristic and power setting as n77, the operating frequency range of n77 is wider than n78, therefore n77 was selected as final mode for test.

### 5GNR n77, n78 (Part 27Q)

|                     |                                          |                         |                         |                         |                         |                         |
|---------------------|------------------------------------------|-------------------------|-------------------------|-------------------------|-------------------------|-------------------------|
| Modulation Type     | $\pi/2$ BPSK, QPSK, 16QAM, 64QAM, 256QAM |                         |                         |                         |                         |                         |
| Waveform Type       | CP-OFDM, DFT-s-OFDM                      |                         |                         |                         |                         |                         |
| Operating Band      | n77, n78 (3450-3550MHz)                  |                         |                         |                         |                         |                         |
| Operating Frequency | n77 (Channel Bandwidth 20MHz)            | 3460.02MHz ~ 3540.00MHz |                         |                         |                         |                         |
|                     | n77 (Channel Bandwidth 40MHz)            | 3470.01MHz ~ 3529.98MHz |                         |                         |                         |                         |
|                     | n77 (Channel Bandwidth 50MHz)            | 3475.02MHz ~ 3525.00MHz |                         |                         |                         |                         |
|                     | n77 (Channel Bandwidth 60MHz)            | 3480.00MHz ~ 3519.99MHz |                         |                         |                         |                         |
|                     | n77 (Channel Bandwidth 80MHz)            | 3490.02MHz ~ 3510.00MHz |                         |                         |                         |                         |
|                     | n77 (Channel Bandwidth 90MHz)            | 3495.00MHz ~ 3504.99MHz |                         |                         |                         |                         |
|                     | n77 (Channel Bandwidth 100MHz)           | 3500.01MHz              |                         |                         |                         |                         |
| Max. EIRP Power     |                                          | $\pi/2$ BPSK            | QPSK                    | 16QAM                   | 64QAM                   | 256QAM                  |
|                     | n77 (Channel Bandwidth 20MHz)            | 907.821mW<br>(29.58dBm) | 699.842mW<br>(28.45dBm) | 543.250mW<br>(27.35dBm) | 495.450mW<br>(26.95dBm) | 358.922mW<br>(25.55dBm) |
|                     | n77 (Channel Bandwidth 40MHz)            | 881.049mW<br>(29.45dBm) | 639.735mW<br>(28.06dBm) | 555.904mW<br>(27.45dBm) | 495.450mW<br>(26.95dBm) | 350.752mW<br>(25.45dBm) |
|                     | n77 (Channel Bandwidth 50MHz)            | 860.994mW<br>(29.35dBm) | 653.131mW<br>(28.15dBm) | 568.853mW<br>(27.55dBm) | 506.991mW<br>(27.05dBm) | 358.922mW<br>(25.55dBm) |
|                     | n77 (Channel Bandwidth 60MHz)            | 881.049mW<br>(29.45dBm) | 704.693mW<br>(28.48dBm) | 555.904mW<br>(27.45dBm) | 484.172mW<br>(26.85dBm) | 350.752mW<br>(25.45dBm) |
|                     | n77 (Channel Bandwidth 80MHz)            | 883.080mW<br>(29.46dBm) | 683.912mW<br>(28.35dBm) | 568.853mW<br>(27.55dBm) | 506.991mW<br>(27.05dBm) | 367.282mW<br>(25.65dBm) |
|                     | n77 (Channel Bandwidth 90MHz)            | 883.080mW<br>(29.46dBm) | 699.842mW<br>(28.45dBm) | 518.800mW<br>(27.15dBm) | 462.381mW<br>(26.65dBm) | 334.965mW<br>(25.25dBm) |
|                     | n77 (Channel Bandwidth 100MHz)           | 879.023mW<br>(29.44dBm) | 696.627mW<br>(28.43dBm) | 526.017mW<br>(27.21dBm) | 463.447mW<br>(26.66dBm) | 318.420mW<br>(25.03dBm) |
| Emission Designator |                                          | $\pi/2$ BPSK            | QPSK                    | 16QAM                   | 64QAM                   | 256QAM                  |
|                     | n77 (Channel Bandwidth 20MHz)            | 18M0G7D                 | 18M2G7D                 | 18M2D7W                 | 18M3D7W                 | 18M2D7W                 |
|                     | n77 (Channel Bandwidth 40MHz)            | 37M5G7D                 | 37M8G7D                 | 37M8D7W                 | 37M8D7W                 | 37M8D7W                 |
|                     | n77 (Channel Bandwidth 50MHz)            | 47M1G7D                 | 47M5G7D                 | 47M5D7W                 | 47M5D7W                 | 47M5D7W                 |
|                     | n77 (Channel Bandwidth 60MHz)            | 57M9G7D                 | 57M9G7D                 | 57M9D7W                 | 57M9D7W                 | 57M9D7W                 |
|                     | n77 (Channel Bandwidth 80MHz)            | 77M2G7D                 | 77M5G7D                 | 77M5D7W                 | 77M5D7W                 | 77M5D7W                 |
|                     | n77 (Channel Bandwidth 90MHz)            | 86M9G7D                 | 87M5G7D                 | 87M5D7W                 | 87M5D7W                 | 87M5D7W                 |
|                     | n77 (Channel Bandwidth 100MHz)           | 96M5G7D                 | 97M4G7D                 | 97M4D7W                 | 97M4D7W                 | 97M4D7W                 |

\*n78 has the same RF characteristic and power setting as n77, the operating frequency range of n77 is wider than n78, therefore n77 was selected as final mode for test.

## LTE Band

| Modulation Type        | QPSK, 16QAM, 64QAM, 256QAM |                          |                        |
|------------------------|----------------------------|--------------------------|------------------------|
| Operating<br>Frequency | LTE Band 2                 | Channel Bandwidth 1.4MHz | 1850.7MHz ~ 1909.3MHz  |
|                        |                            | Channel Bandwidth 3MHz   | 1851.5MHz ~ 1908.5MHz  |
|                        |                            | Channel Bandwidth 5MHz   | 1852.5MHz ~ 1907.5MHz  |
|                        |                            | Channel Bandwidth 10MHz  | 1855.0MHz ~ 1905.0MHz  |
|                        |                            | Channel Bandwidth 15MHz  | 1857.5MHz ~ 1902.5MHz  |
|                        |                            | Channel Bandwidth 20MHz  | 1860.0MHz ~ 1900.0MHz  |
|                        | LTE Band 5                 | Channel Bandwidth 1.4MHz | 824.7MHz ~ 848.3MHz    |
|                        |                            | Channel Bandwidth 3MHz   | 825.5MHz ~ 847.5MHz    |
|                        |                            | Channel Bandwidth 5MHz   | 826.5MHz ~ 846.5MHz    |
|                        |                            | Channel Bandwidth 10MHz  | 829.0MHz ~ 844.0MHz    |
|                        | LTE Band 7                 | Channel Bandwidth 5MHz   | 2502.5MHz ~ 2567.5MHz  |
|                        |                            | Channel Bandwidth 10MHz  | 2505.0MHz ~ 2565.0MHz  |
|                        |                            | Channel Bandwidth 15MHz  | 2507.5MHz ~ 2562.5MHz  |
|                        |                            | Channel Bandwidth 20MHz  | 2510.0MHz ~ 2560.0MHz  |
|                        | LTE Band 12                | Channel Bandwidth 1.4MHz | 699.7MHz ~ 715.3MHz    |
|                        |                            | Channel Bandwidth 3MHz   | 700.5MHz ~ 714.5MHz    |
|                        |                            | Channel Bandwidth 5MHz   | 701.5MHz ~ 713.5MHz    |
|                        |                            | Channel Bandwidth 10MHz  | 704.0MHz ~ 711.0MHz    |
|                        | LTE Band 13                | Channel Bandwidth 5MHz   | 779.5MHz ~ 784.5MHz    |
|                        |                            | Channel Bandwidth 10MHz  | 782.0MHz               |
|                        | LTE Band 14                | Channel Bandwidth 5MHz   | 790.5MHz ~ 795.5MHz    |
|                        |                            | Channel Bandwidth 10MHz  | 793MHz                 |
|                        | LTE Band 30                | Channel Bandwidth 5MHz   | 2307.5MHz ~ 2312.5MHz  |
|                        |                            | Channel Bandwidth 10MHz  | 2310.0MHz              |
|                        | LTE Band 41                | Channel Bandwidth 5MHz   | 2498.5MHz ~ 2687.5MHz  |
|                        |                            | Channel Bandwidth 10MHz  | 2501.0MHz ~ 2685.0 MHz |
|                        |                            | Channel Bandwidth 15MHz  | 2503.5MHz ~ 2682.5MHz  |
|                        |                            | Channel Bandwidth 20MHz  | 2506.0MHz ~ 2680.0 MHz |
|                        | LTE Band 66                | Channel Bandwidth 1.4MHz | 1710.7MHz ~ 1779.3MHz  |
|                        |                            | Channel Bandwidth 3MHz   | 1711.5MHz ~ 1778.5MHz  |
|                        |                            | Channel Bandwidth 5MHz   | 1712.5MHz ~ 1777.5MHz  |
|                        |                            | Channel Bandwidth 10MHz  | 1715.0MHz ~ 1775.0MHz  |
|                        |                            | Channel Bandwidth 15MHz  | 1717.5MHz ~ 1772.5MHz  |
|                        |                            | Channel Bandwidth 20MHz  | 1720.0MHz ~ 1770.0MHz  |

| Max. EIRP Power   |                        |                          | QPSK                     | 16QAM                    | 64QAM                    | 256QAM                  |
|-------------------|------------------------|--------------------------|--------------------------|--------------------------|--------------------------|-------------------------|
|                   |                        |                          |                          |                          |                          |                         |
| Max. EIRP Power   | LTE Band 2             | Channel Bandwidth 1.4MHz | 801.678mW<br>(29.04dBm)  | 703.072mW<br>(28.47dBm)  | 547.016mW<br>(27.38dBm)  | 358.922mW<br>(25.55dBm) |
|                   |                        | Channel Bandwidth 3MHz   | 810.961mW<br>(29.09dBm)  | 714.496mW<br>(28.54dBm)  | 572.796mW<br>(27.58dBm)  | 381.944mW<br>(25.82dBm) |
|                   |                        | Channel Bandwidth 5MHz   | 812.831mW<br>(29.10dBm)  | 709.578mW<br>(28.51dBm)  | 563.638mW<br>(27.51dBm)  | 350.752mW<br>(25.45dBm) |
|                   |                        | Channel Bandwidth 10MHz  | 816.582mW<br>(29.12dBm)  | 727.780mW<br>(28.62dBm)  | 588.844mW<br>(27.70dBm)  | 374.111mW<br>(25.73dBm) |
|                   |                        | Channel Bandwidth 15MHz  | 803.526mW<br>(29.05dBm)  | 721.107mW<br>(28.58dBm)  | 567.545mW<br>(27.54dBm)  | 360.579mW<br>(25.57dBm) |
|                   |                        | Channel Bandwidth 20MHz  | 818.465mW<br>(29.13dBm)  | 717.794mW<br>(28.56dBm)  | 579.429mW<br>(27.63dBm)  | 378.443mW<br>(25.78dBm) |
|                   | LTE Band 7             | Channel Bandwidth 5MHz   | 1109.175mW<br>(30.45dBm) | 966.051mW<br>(29.85dBm)  | 778.037mW<br>(28.91dBm)  | 498.884mW<br>(26.98dBm) |
|                   |                        | Channel Bandwidth 10MHz  | 1071.519mW<br>(30.30dBm) | 972.747mW<br>(29.88dBm)  | 779.830mW<br>(28.92dBm)  | 510.505mW<br>(27.08dBm) |
|                   |                        | Channel Bandwidth 15MHz  | 1083.927mW<br>(30.35dBm) | 905.733mW<br>(29.57dBm)  | 743.019mW<br>(28.71dBm)  | 489.779mW<br>(26.90dBm) |
|                   |                        | Channel Bandwidth 20MHz  | 1071.519mW<br>(30.30dBm) | 961.612mW<br>(29.83dBm)  | 783.430mW<br>(28.94dBm)  | 527.230mW<br>(27.22dBm) |
|                   | LTE Band 30            | Channel Bandwidth 5MHz   | 247.172mW<br>(23.93dBm)  | 220.800mW<br>(23.44dBm)  | 170.216mW<br>(22.31dBm)  | 114.815mW<br>(20.60dBm) |
|                   |                        | Channel Bandwidth 10MHz  | 246.604mW<br>(23.92dBm)  | 207.014mW<br>(23.16dBm)  | 158.855mW<br>(22.01dBm)  | 103.992mW<br>(20.17dBm) |
|                   | LTE Band 41            | Channel Bandwidth 5MHz   | 1958.845mW<br>(32.92dBm) | 1667.247mW<br>(32.22dBm) | 1367.729mW<br>(31.36dBm) | 893.305mW<br>(29.51dBm) |
|                   |                        | Channel Bandwidth 10MHz  | 1976.970mW<br>(32.96dBm) | 1713.957mW<br>(32.34dBm) | 1383.566mW<br>(31.41dBm) | 870.964mW<br>(29.40dBm) |
|                   |                        | Channel Bandwidth 15MHz  | 1940.886mW<br>(32.88dBm) | 1713.957mW<br>(32.34dBm) | 1294.196mW<br>(31.12dBm) | 851.138mW<br>(29.30dBm) |
|                   |                        | Channel Bandwidth 20MHz  | 1981.527mW<br>(32.97dBm) | 1674.943mW<br>(32.24dBm) | 1306.171mW<br>(31.16dBm) | 881.049mW<br>(29.45dBm) |
|                   | LTE Band 66            | Channel Bandwidth 1.4MHz | 774.462mW<br>(28.89dBm)  | 663.743mW<br>(28.22dBm)  | 526.017mW<br>(27.21dBm)  | 339.625mW<br>(25.31dBm) |
|                   |                        | Channel Bandwidth 3MHz   | 814.704mW<br>(29.11dBm)  | 688.652mW<br>(28.38dBm)  | 526.017mW<br>(27.21dBm)  | 339.625mW<br>(25.31dBm) |
|                   |                        | Channel Bandwidth 5MHz   | 824.138mW<br>(29.16dBm)  | 711.214mW<br>(28.52dBm)  | 554.626mW<br>(27.44dBm)  | 352.371mW<br>(25.47dBm) |
|                   |                        | Channel Bandwidth 10MHz  | 818.465mW<br>(29.13dBm)  | 695.024mW<br>(28.42dBm)  | 542.001mW<br>(27.34dBm)  | 338.844mW<br>(25.30dBm) |
|                   |                        | Channel Bandwidth 15MHz  | 803.526mW<br>(29.05dBm)  | 699.842mW<br>(28.45dBm)  | 553.350mW<br>(27.43dBm)  | 350.752mW<br>(25.45dBm) |
|                   |                        | Channel Bandwidth 20MHz  | 816.582mW<br>(29.12dBm)  | 712.853mW<br>(28.53dBm)  | 555.904mW<br>(27.45dBm)  | 340.408mW<br>(25.32dBm) |
| Max. ERP Power    | LTE Band 5             | Channel Bandwidth 1.4MHz | 457.088mW<br>(26.60dBm)  | 411.150mW<br>(26.14dBm)  | 316.228mW<br>(25.00dBm)  | 209.411mW<br>(23.21dBm) |
|                   |                        | Channel Bandwidth 3MHz   | 474.242mW<br>(26.76dBm)  | 412.098mW<br>(26.15dBm)  | 330.370mW<br>(25.19dBm)  | 213.304mW<br>(23.29dBm) |
|                   |                        | Channel Bandwidth 5MHz   | 475.335mW<br>(26.77dBm)  | 412.098mW<br>(26.15dBm)  | 331.131mW<br>(25.20dBm)  | 213.304mW<br>(23.29dBm) |
|                   |                        | Channel Bandwidth 10MHz  | 472.063mW<br>(26.74dBm)  | 431.519mW<br>(26.35dBm)  | 343.558mW<br>(25.36dBm)  | 217.771mW<br>(23.38dBm) |
|                   | LTE Band 12            | Channel Bandwidth 1.4MHz | 524.807mW<br>(27.20dBm)  | 461.318mW<br>(26.64dBm)  | 367.282mW<br>(25.65dBm)  | 237.137mW<br>(23.75dBm) |
|                   |                        | Channel Bandwidth 3MHz   | 532.108mW<br>(27.26dBm)  | 464.515mW<br>(26.67dBm)  | 365.595mW<br>(25.63dBm)  | 242.661mW<br>(23.85dBm) |
|                   |                        | Channel Bandwidth 5MHz   | 537.032mW<br>(27.30dBm)  | 463.447mW<br>(26.66dBm)  | 371.535mW<br>(25.70dBm)  | 231.206mW<br>(23.64dBm) |
|                   |                        | Channel Bandwidth 10MHz  | 524.807mW<br>(27.20dBm)  | 480.839mW<br>(26.82dBm)  | 373.250mW<br>(25.72dBm)  | 230.675mW<br>(23.63dBm) |
|                   | LTE Band 13            | Channel Bandwidth 5MHz   | 539.511mW<br>(27.32dBm)  | 485.289mW<br>(26.86dBm)  | 403.645mW<br>(26.06dBm)  | 258.821mW<br>(24.13dBm) |
|                   |                        | Channel Bandwidth 10MHz  | 528.445mW<br>(27.23dBm)  | 462.381mW<br>(26.65dBm)  | 368.978mW<br>(25.67dBm)  | 246.037mW<br>(23.91dBm) |
|                   | LTE Band 14            | Channel Bandwidth 5MHz   | 538.270mW<br>(27.31dBm)  | 479.733mW<br>(26.81dBm)  | 384.592mW<br>(25.85dBm)  | 237.684mW<br>(23.76dBm) |
|                   |                        | Channel Bandwidth 10MHz  | 524.807mW<br>(27.20dBm)  | 484.172mW<br>(26.85dBm)  | 401.791mW<br>(26.04dBm)  | 264.850mW<br>(24.23dBm) |
| Antenna Type      | Refer to Note as below |                          |                          |                          |                          |                         |
| Antenna Connector | Refer to Note as below |                          |                          |                          |                          |                         |
| Accessory Device  | Refer to Note as below |                          |                          |                          |                          |                         |
| Cable Supplied    | Refer to Note as below |                          |                          |                          |                          |                         |

|                                          |                               |                    |                       |                   |
|------------------------------------------|-------------------------------|--------------------|-----------------------|-------------------|
| Output Power<br>/ Emission<br>Designator | n77(Part 27O)+<br>LTE Band 2  |                    | Maximum EIRP          | Sum Bandwidth     |
|                                          |                               | n77(Part 27O)      | 912.011mW (29.6dBm)   | 38M4D7W           |
|                                          |                               | LTE Band 2 (EIRP)  | 818.465mW (29.13dBm)  |                   |
|                                          |                               |                    | EIRP                  | MAX Sum Bandwidth |
|                                          |                               | n77(Part 27O)      | 595.662mW (27.75dBm)  | 116MD7W           |
|                                          |                               | LTE Band 2 (EIRP)  | 818.465mW (29.13dBm)  |                   |
|                                          | n77(Part 27O)+<br>LTE Band 5  |                    | Maximum EIRP / ERP    | Sum Bandwidth     |
|                                          |                               | n77(Part 27O)      | 912.011mW (29.6dBm)   | 41M8D7W           |
|                                          |                               | LTE Band 5 (ERP)   | 475.335mW (26.77dBm)  |                   |
|                                          |                               |                    | EIRP / ERP            | MAX Sum Bandwidth |
|                                          |                               | n77(Part 27O)      | 595.662mW (27.75dBm)  | 107MD7W           |
|                                          |                               | LTE Band 5 (ERP)   | 374.111mW (25.73dBm)  |                   |
|                                          | n77(Part 27O)+<br>LTE Band 7  |                    | Maximum EIRP          | Sum Bandwidth     |
|                                          |                               | n77(Part 27O)      | 912.011mW (29.6dBm)   | 41M8D7W           |
|                                          |                               | LTE Band 7 (EIRP)  | 1109.175mW (30.45dBm) |                   |
|                                          |                               |                    | EIRP                  | MAX Sum Bandwidth |
|                                          |                               | n77(Part 27O)      | 595.662mW (27.75dBm)  | 116MD7W           |
|                                          |                               | LTE Band 7 (EIRP)  | 338.065mW (25.29dBm)  |                   |
|                                          | n77(Part 27O)+<br>LTE Band 12 |                    | Maximum EIRP / ERP    | Sum Bandwidth     |
|                                          |                               | n77(Part 27O)      | 912.011mW (29.6dBm)   | 41M8D7W           |
|                                          |                               | LTE Band 12 (ERP)  | 573.032mW (27.3dBm)   |                   |
|                                          |                               |                    | EIRP / ERP            | MAX Sum Bandwidth |
|                                          |                               | n77(Part 27O)      | 595.662mW (27.75dBm)  | 107MD7W           |
|                                          |                               | LTE Band 12 (ERP)  | 429.536mW (26.33dBm)  |                   |
|                                          | n77(Part 27O)+<br>LTE Band 13 |                    | Maximum EIRP / ERP    | Sum Bandwidth     |
|                                          |                               | n77(Part 27O)      | 912.011mW (29.6dBm)   | 41M8D7W           |
|                                          |                               | LTE Band 13 (ERP)  | 539.511mW (27.32dBm)  |                   |
|                                          |                               |                    | EIRP / ERP            | MAX Sum Bandwidth |
|                                          |                               | n77(Part 27O)      | 595.662mW (27.75dBm)  | 107MD7W           |
|                                          |                               | LTE Band 13 (ERP)  | 441.570mW (26.45dBm)  |                   |
|                                          | n77(Part 27O)+<br>LTE Band 14 |                    | Maximum EIRP / ERP    | Sum Bandwidth     |
|                                          |                               | n77(Part 27O)      | 912.011mW (29.6dBm)   | 41M8D7W           |
|                                          |                               | LTE Band 14 (ERP)  | 538.270mW (27.31dBm)  |                   |
|                                          |                               |                    | EIRP / ERP            | MAX Sum Bandwidth |
|                                          |                               | n77(Part 27O)      | 595.662mW (27.75dBm)  | 107MD7W           |
|                                          |                               | LTE Band 14 (ERP)  | 419.759mW (26.23dBm)  |                   |
|                                          | n77(Part 27O)+<br>LTE Band 30 |                    | Maximum EIRP          | Sum Bandwidth     |
|                                          |                               | n77(Part 27O)      | 912.011mW (29.60dBm)  | 41M8D7W           |
|                                          |                               | LTE Band 30 (EIRP) | 247.172mW (23.93dBm)  |                   |
|                                          |                               |                    | EIRP                  | MAX Sum Bandwidth |
|                                          |                               | n77(Part 27O)      | 595.662mW (27.75dBm)  | 107MD7W           |
|                                          |                               | LTE Band 30 (EIRP) | 194.536mW (22.89dBm)  |                   |

| Output Power<br>/ Emission<br>Designator | n77(Part 27O)+<br>LTE Band 41 |                    | Maximum EIRP          | Sum Bandwidth     |
|------------------------------------------|-------------------------------|--------------------|-----------------------|-------------------|
|                                          |                               | n77(Part 27O)      | 912.011mW (29.6dBm)   | 46M3D7W           |
|                                          |                               | LTE Band 41 (EIRP) | 1976.970mW (32.96dBm) |                   |
|                                          |                               |                    | EIRP                  | MAX Sum Bandwidth |
|                                          |                               | n77(Part 27O)      | 595.662mW (27.75dBm)  | 116MD7W           |
|                                          |                               | LTE Band 41 (EIRP) | 1264.736mW (31.02dBm) |                   |
|                                          | n77(Part 27O)+<br>LTE Band 66 |                    | Maximum EIRP          | Sum Bandwidth     |
|                                          |                               | n77(Part 27O)      | 912.011mW (29.6dBm)   | 41M8D7W           |
|                                          |                               | LTE Band 66 (EIRP) | 824.138mW (29.16dBm)  |                   |
|                                          |                               |                    | EIRP                  | MAX Sum Bandwidth |
|                                          |                               | n77(Part 27O)      | 595.662mW (27.75dBm)  | 116MD7W           |
|                                          |                               | LTE Band 66 (EIRP) | 674.143mW (28.11dBm)  |                   |

| Output Power<br>/ Emission<br>Designator | n77(Part 27Q)+<br>LTE Band 2  |                   | Maximum EIRP          | Sum Bandwidth     |
|------------------------------------------|-------------------------------|-------------------|-----------------------|-------------------|
|                                          |                               | n77(Part 27Q)     | 907.821mW (29.58dBm)  | 35M9D7W           |
|                                          |                               | LTE Band 2 (EIRP) | 818.465mW (29.13dBm)  |                   |
|                                          |                               |                   | EIRP                  | MAX Sum Bandwidth |
|                                          |                               | n77(Part 27Q)     | 879.023mW (29.44dBm)  | 115MD7W           |
|                                          |                               | LTE Band 2 (EIRP) | 818.465mW (29.13dBm)  |                   |
|                                          | n77(Part 27Q)+<br>LTE Band 5  |                   | Maximum EIRP / ERP    | Sum Bandwidth     |
|                                          |                               | n77(Part 27Q)     | 907.821mW (29.58dBm)  | 22M5D7W           |
|                                          |                               | LTE Band 5 (ERP)  | 475.335mW (26.77dBm)  |                   |
|                                          |                               |                   | EIRP / ERP            | MAX Sum Bandwidth |
|                                          |                               | n77(Part 27Q)     | 879.023mW (29.44dBm)  | 106MD7W           |
|                                          |                               | LTE Band 5 (ERP)  | 374.111mW (25.73dBm)  |                   |
|                                          | n77(Part 27Q)+<br>LTE Band 7  |                   | Maximum EIRP          | Sum Bandwidth     |
|                                          |                               | n77(Part 27Q)     | 907.821mW (29.58dBm)  | 22M5D7W           |
|                                          |                               | LTE Band 7 (EIRP) | 1109.175mW (30.45dBm) |                   |
|                                          |                               |                   | EIRP                  | MAX Sum Bandwidth |
|                                          |                               | n77(Part 27Q)     | 879.023mW (29.44dBm)  | 101MD7W           |
|                                          |                               | LTE Band 7 (EIRP) | 338.065mW (26.33dBm)  |                   |
|                                          | n77(Part 27Q)+<br>LTE Band 12 |                   | Maximum EIRP / ERP    | Sum Bandwidth     |
|                                          |                               | n77(Part 27Q)     | 907.821mW (29.58dBm)  | 22M5D7W           |
|                                          |                               | LTE Band 12 (ERP) | 537.032mW (27.3dBm)   |                   |
|                                          |                               |                   | EIRP / ERP            | MAX Sum Bandwidth |
|                                          |                               | n77(Part 27Q)     | 879.023mW (29.44dBm)  | 106MD7W           |
|                                          |                               | LTE Band 12 (ERP) | 429.536mW (26.33dBm)  |                   |
|                                          | n77(Part 27Q)+<br>LTE Band 13 |                   | Maximum EIRP / ERP    | Sum Bandwidth     |
|                                          |                               | n77(Part 27Q)     | 907.821mW (29.58dBm)  | 22M5D7W           |
|                                          |                               | LTE Band 13 (ERP) | 539.511mW (27.32dBm)  |                   |
|                                          |                               |                   | EIRP / ERP            | MAX Sum Bandwidth |
|                                          |                               | n77(Part 27Q)     | 879.023mW (29.44dBm)  | 106MD7W           |
|                                          |                               | LTE Band 13 (ERP) | 528.445mW (27.23dBm)  |                   |

| Output Power<br>/ Emission<br>Designator | n77(Part 27Q)+<br>LTE Band 14 |                    | Maximum EIRP / ERP    | Sum Bandwidth     |
|------------------------------------------|-------------------------------|--------------------|-----------------------|-------------------|
|                                          |                               | n77(Part 27Q)      | 907.821mW (29.58dBm)  | 22M5D7W           |
|                                          |                               | LTE Band 14 (ERP)  | 538.270mW (27.31dBm)  |                   |
|                                          |                               |                    | EIRP / ERP            | MAX Sum Bandwidth |
|                                          |                               | n77(Part 27Q)      | 879.023mW (29.44dBm)  | 106MD7W           |
|                                          |                               | LTE Band 14 (ERP)  | 524.807mW (27.20dBm)  |                   |
|                                          | n77(Part 27Q)+<br>LTE Band 30 |                    | Maximum EIRP          | Sum Bandwidth     |
|                                          |                               | n77(Part 27Q)      | 907.821mW (29.58dBm)  | 22M5D7W           |
|                                          |                               | LTE Band 30 (EIRP) | 247.172mW (23.93dBm)  |                   |
|                                          |                               |                    | EIRP                  | MAX Sum Bandwidth |
|                                          |                               | n77(Part 27Q)      | 879.023mW (29.44dBm)  | 106MD7W           |
|                                          |                               | LTE Band 30 (EIRP) | 246.604mW (23.92dBm)  |                   |
|                                          | n77(Part 27Q)+<br>LTE Band 41 |                    | Maximum EIRP          | Sum Bandwidth     |
|                                          |                               | n77(Part 27Q)      | 907.821mW (29.58dBm)  | 35M9D7W           |
|                                          |                               | LTE Band 41 (EIRP) | 1981.527mW (32.97dBm) |                   |
|                                          |                               |                    | EIRP                  | MAX Sum Bandwidth |
|                                          |                               | n77(Part 27Q)      | 879.023mW (29.44dBm)  | 115MD7W           |
|                                          |                               | LTE Band 41 (EIRP) | 1981.527mW (32.97dBm) |                   |
|                                          | n77(Part 27Q)+<br>LTE Band 66 |                    | Maximum EIRP          | Sum Bandwidth     |
|                                          |                               | n77(Part 27Q)      | 907.821mW (29.58dBm)  | 22M5D7W           |
|                                          |                               | LTE Band 66 (EIRP) | 824.138mW (29.16dBm)  |                   |
|                                          |                               |                    | EIRP                  | MAX Sum Bandwidth |
|                                          |                               | n77(Part 27Q)      | 879.023mW (29.44dBm)  | 115MD7W           |
|                                          |                               | LTE Band 66 (EIRP) | 816.582mW (29.12dBm)  |                   |

Note:

1. This report is prepared for FCC class II permissive change. This report is issued as a supplementary report of BV CPS report no.: RF200109E02B-2. Difference compared with the original report is adding ENDC mode (n77/n78+LTE B2/5/7/12/13/14/30/41/66) through software enable. Therefore, the EUT was tested for all items and presented in the test report.
2. There are four Difference HW of T99W175.

| Brand   | Model   | HW                                          |
|---------|---------|---------------------------------------------|
| Foxconn | T99W175 | 1. 3G+LTE+Sub6+eSIM                         |
|         |         | 2. 3G+LTE+Sub6 only w/o eSIM                |
|         |         | 3. 3G+LTE+Sub6+eSIM+GNSS connector          |
|         |         | 4. 3G+LTE+Sub6 only+w/o eSIM+GNSS connector |

\*After pre-testing, "HW: 1. 3G+LTE+Sub6+eSIM" is the worst for the final tests.

## 3. The following antennas were provided to the EUT.

| Antenna No. | RF Chain No. | Brand        | Model          | Antenna Net Gain(dBi)                                                    | Frequency range (MHz)                                                                                         | Antenna Type | Connector Type |
|-------------|--------------|--------------|----------------|--------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------|--------------|----------------|
| 1           |              | WHA YU       | C107-511720-A  | 4.41                                                                     | 660~803                                                                                                       | PCB          | I-PEX          |
| 2           |              | WHA YU       | C107-511721-A  | 3.81<br>4.03                                                             | 791~960<br>1447.9~1606                                                                                        | PCB          | I-PEX          |
| 3           |              | WHA YU       | C107-511722-A  | 4.27<br>5.31                                                             | 1710~2170<br>2500~2690                                                                                        | PCB          | I-PEX          |
| 4           |              | WHA YU       | C107-511723-A  | 2.99<br>0.92                                                             | 2300~2400<br>3500~3700                                                                                        | PCB          | I-PEX          |
| 5           |              | WHA YU       | C107-511724-A  | 6.45                                                                     | 5150~5925                                                                                                     | PCB          | I-PEX          |
| 6           |              | WHA YU       | C107-511725-A  | 4.89                                                                     | 3400~3700                                                                                                     | PCB          | I-PEX          |
| 7           |              | AVX          | 5000106-R1-X01 | 2.91                                                                     | 699~803                                                                                                       | Monopole     | I-PEX          |
| 8           |              | AVX          | 5000107-R1-X01 | 2.59                                                                     | 791~960                                                                                                       | Monopole     | I-PEX          |
| 9           |              | AVX          | 5000108-R1-X01 | 2.85                                                                     | 1427~1610                                                                                                     | Monopole     | I-PEX          |
| 10          |              | AVX          | 5000109-R1-X01 | 2.23<br>2.94                                                             | 1710~2200<br>5150~5925                                                                                        | Monopole     | I-PEX          |
| 11          |              | AVX          | 5000110-R1-X01 | 0.9                                                                      | 2300~2690                                                                                                     | Monopole     | I-PEX          |
| 12          |              | AVX          | 5000111-R1-X01 | 0.87                                                                     | 3300~5000                                                                                                     | Monopole     | I-PEX          |
| 13          | Tx1/<br>Rx1  | Ethertronics | 5003806        | 0.4<br>-1.61<br>0.39<br>2.95<br>1.98<br>0.38<br>0.83<br>2.31             | 698-821<br>824-960<br>1425-1515<br>1710-2200<br>2300-2690<br>3300-4200<br>4400-5000<br>5150-5925              | PIFA         | I-PEX          |
|             | Rx2          | Ethertronics | 5003807        | -2.24<br>-4.52<br>2.87<br>2.99<br>2.93<br>2.91<br>2.23<br>-0.85<br>-3.04 | 716-821<br>824-960<br>1425-1515<br>1557-1610<br>1805-2200<br>2300-2690<br>3300-4200<br>4400-5000<br>5150-5925 | PIFA         | I-PEX          |
|             | Tx2/<br>Rx3  | Ethertronics | 5003806        | 2.21<br>2.25<br>-0.45<br>2.6                                             | 1710-2200<br>2300-2690<br>3300-4200<br>4400-5000                                                              | PIFA         | I-PEX          |
|             | Rx4          | Ethertronics | 5003700        | 1.38<br>2.87<br>0.6<br>-2.09                                             | 1805-2200<br>2300-2690<br>3300-4200<br>4400-5000                                                              | PIFA         | I-PEX          |

| Antenna No. | RF Chain No.   | Brand       | Model | Antenna Net Gain(dBi) | Frequency range (MHz) | Antenna Type | Connector Type |
|-------------|----------------|-------------|-------|-----------------------|-----------------------|--------------|----------------|
| 14          | Ant. 0 (TX/RX) | Master Wave | NA    | 2.4                   | 880~960               | PCB          | I-PEX          |
|             |                |             |       | 2.2                   | 1020~2170             |              |                |
|             |                |             |       | 2.9                   | 2545~2595             |              |                |
|             |                |             |       | 2.9                   | 3565~3600             |              |                |
|             |                |             |       | 2.9                   | 3900~4000             |              |                |
|             |                |             |       | NA                    | GPS                   |              |                |
|             | Ant. 2 (TX/RX) | Master Wave | NA    | NA                    | 880~960               | PCB          | I-PEX          |
|             |                |             |       | 2.2                   | 1020~2170             |              |                |
|             |                |             |       | 2.8                   | 2545~2595             |              |                |
|             |                |             |       | 2.9                   | 3565~3600             |              |                |
|             |                |             |       | 2.8                   | 3900~4000             |              |                |
|             |                |             |       | NA                    | GPS                   |              |                |
|             | Ant. 1 (RX)    | Master Wave | NA    | NA                    | 880~960               | PCB          | I-PEX          |
|             |                |             |       | 5.3                   | 1020~2170             |              |                |
|             |                |             |       | 5.1                   | 2545~2595             |              |                |
|             |                |             |       | 4.3                   | 3565~3600             |              |                |
|             |                |             |       | 4.5                   | 3900~4000             |              |                |
|             |                |             |       | NA                    | GPS                   |              |                |
|             | Ant. 3 (RX)    | Master Wave | NA    | 1.3                   | 880~960               | PCB          | I-PEX          |
|             |                |             |       | 6.8                   | 1020~2170             |              |                |
|             |                |             |       | 3.7                   | 2545~2595             |              |                |
|             |                |             |       | 6.4                   | 3565~3600             |              |                |
|             |                |             |       | 6.2                   | 3900~4000             |              |                |
|             |                |             |       | 3.7                   | GPS                   |              |                |

\*The antenna for the final tests as following table.

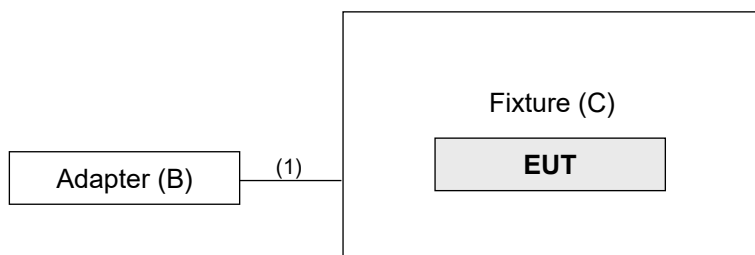
|      | Band                                          | Antenna    |
|------|-----------------------------------------------|------------|
| 5GNR | n77 (Part27O) (30kHz) / 20/40/50/60/80/90/100 | Antenna 14 |
| 5GNR | n77 (Part27Q) (30kHz) / 20/40/50/60/80/90/100 | Antenna 6  |

|     | Band | Antenna   |
|-----|------|-----------|
| LTE | 2    | Antenna 3 |
|     | 5    | Antenna 2 |
|     | 7    | Antenna 3 |
|     | 12   | Antenna 1 |
|     | 13   | Antenna 1 |
|     | 14   | Antenna 3 |
|     | 30   | Antenna 4 |
|     | 41   | Antenna 3 |
|     | 66   | Antenna 3 |

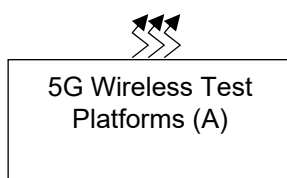
4. The EUT supports the following ENDC configuration.

| 5GNR | FCC 5G FR1 |       |                       | ENDC                         |
|------|------------|-------|-----------------------|------------------------------|
|      | Band       | SCS   | Bandwidth (MHz)       |                              |
|      | n25        | 15kHz | 5/10/15/20            | Band 12                      |
|      | n77        | 30kHz | 20/40/50/60/80/90/100 | Band 2/5/7/12/13/14/30/41/66 |

### 3.2 Configuration of System under Test



Remote site



#### 3.2.1 Description of Support Units

The EUT has been tested as an independent unit together with other necessary accessories or support units. The following support units or accessories were used to form a representative test configuration during the tests.

| ID | Product                    | Brand    | Model No.  | Serial No. | FCC ID | Remarks             |
|----|----------------------------|----------|------------|------------|--------|---------------------|
| A. | 5G Wireless Test Platforms | Keysight | E7515B     | MY60102114 | NA     | -                   |
| B. | Adapter                    | LITEON   | PA-1050-39 | NA         | NA     | -                   |
| C. | Fixture                    | NA       | NA         | NA         | NA     | Provided by client. |

Note:

1. All power cords of the above support units are non-shielded (1.8m).
2. Item A acted as a communication partner to transfer data.

| ID | Descriptions | Qty. | Length (m) | Shielding (Yes/No) | Cores (Qty.) | Remarks |
|----|--------------|------|------------|--------------------|--------------|---------|
| 1. | USB cable    | 1    | 1.5        | Y                  | 0            | -       |

### 3.3 Test Mode Applicability and Tested Channel Detail

Pre-Scan has been conducted to determine the worst-case mode from all possible combinations between available modulations, data rates, XYZ axis and antenna ports. The worst case was found when positioned as the table below. Following channel(s) was (were) selected for the final test as listed below:

| Band        | Radiated Emission |
|-------------|-------------------|
| 5GNR n77    | Z-plane           |
| LTE Band 2  | Z-plane           |
| LTE Band 5  | Z-plane           |
| LTE Band 7  | Z-plane           |
| LTE Band 12 | Z-plane           |
| LTE Band 13 | Z-plane           |
| LTE Band 14 | Z-plane           |
| LTE Band 30 | Z-plane           |
| LTE Band 41 | Z-plane           |
| LTE Band 66 | Z-plane           |

# 5GNR n77 (Part 270)

| EUT<br>Configure<br>Mode | Test item | Available channel | Tested channel                                                      | Channel<br>Bandwidth | Modulation                                            | Mode                                                                                                                                                                  |
|--------------------------|-----------|-------------------|---------------------------------------------------------------------|----------------------|-------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| -                        | EIRP      | 647334 to 665666  | 647334 (3710.01MHz),<br>656000 (3840.00MHz),<br>665666 (3969.99MHz) | 20MHz                | $\pi/2$ BPSK /<br>QPSK / 16QAM /<br>64QAM /<br>256QAM | 1 RB / 0 RB Offset<br>1 RB / 26 RB Offset<br>1 RB / 49 RB Offset<br>25 RB / 0 RB Offset<br>25 RB / 13 RB Offset<br>25 RB / 26 RB Offset<br>50 RB / 0 RB Offset        |
|                          |           | 648000 to 664000  | 648000 (3720.00MHz),<br>656000 (3840.00MHz),<br>664000 (3960.00MHz) | 40MHz                | $\pi/2$ BPSK /<br>QPSK / 16QAM /<br>64QAM /<br>256QAM | 1 RB / 0 RB Offset<br>1 RB / 53 RB Offset<br>1 RB / 104 RB Offset<br>50 RB / 0 RB Offset<br>50 RB / 28 RB Offset<br>50 RB / 56 RB Offset<br>100 RB / 0 RB Offset      |
|                          |           | 648334 to 663666  | 648334 (3725.01MHz),<br>656000 (3840.00MHz),<br>663666 (3954.99MHz) | 50MHz                | $\pi/2$ BPSK /<br>QPSK / 16QAM /<br>64QAM /<br>256QAM | 1 RB / 0 RB Offset<br>1 RB / 67 RB Offset<br>1 RB / 131 RB Offset<br>64 RB / 0 RB Offset<br>64 RB / 35 RB Offset<br>64 RB / 69 RB Offset<br>128 RB / 0 RB Offset      |
|                          |           | 648668 to 663332  | 648668 (3730.02MHz),<br>656000 (3840.00MHz),<br>663332 (3949.98MHz) | 60MHz                | $\pi/2$ BPSK /<br>QPSK / 16QAM /<br>64QAM /<br>256QAM | 1 RB / 0 RB Offset<br>1 RB / 81 RB Offset<br>1 RB / 160 RB Offset<br>81 RB / 0 RB Offset<br>81 RB / 41 RB Offset<br>81 RB / 81 RB Offset<br>162 RB / 0 RB Offset      |
|                          |           | 649334 to 662666  | 649334 (3740.01MHz),<br>656000 (3840.00MHz),<br>662666 (3939.99MHz) | 80MHz                | $\pi/2$ BPSK /<br>QPSK / 16QAM /<br>64QAM /<br>256QAM | 1 RB / 0 RB Offset<br>1 RB / 109 RB Offset<br>1 RB / 215 RB Offset<br>108 RB / 0 RB Offset<br>108 RB / 55 RB Offset<br>108 RB / 109 RB Offset<br>216 RB / 0 RB Offset |
|                          |           | 649558 to 662332  | 649558 (3745.02MHz),<br>656000 (3840.00MHz),<br>662332 (3934.98MHz) | 90MHz                | $\pi/2$ BPSK /<br>QPSK / 16QAM /<br>64QAM /<br>256QAM | 1 RB / 0 RB Offset<br>1 RB / 123 RB Offset<br>1 RB / 243 RB Offset<br>120 RB / 0 RB Offset<br>120 RB / 63 RB Offset<br>120 RB / 125 RB Offset<br>240 RB / 0 RB Offset |
|                          |           | 650000 to 662000  | 650000 (3750.00MHz),<br>656000 (3840.00MHz),<br>662000 (3930.00MHz) | 100MHz               | $\pi/2$ BPSK /<br>QPSK / 16QAM /<br>64QAM /<br>256QAM | 1 RB / 0 RB Offset<br>1 RB / 137 RB Offset<br>1 RB / 271 RB Offset<br>135 RB / 0 RB Offset<br>135 RB / 69 RB Offset<br>135 RB / 138 RB Offset<br>270 RB / 0 RB Offset |

| EUT<br>Configure<br>Mode | Test item                     | Available channel | Tested channel                                                      | Channel<br>Bandwidth | Modulation                                            | Mode                 |
|--------------------------|-------------------------------|-------------------|---------------------------------------------------------------------|----------------------|-------------------------------------------------------|----------------------|
| -                        | Modulation<br>Characteristics | 650000 to 662000  | 656000 (3840.00MHz)                                                 | 100MHz               | $\pi/2$ BPSK /<br>QPSK / 16QAM /<br>64QAM /<br>256QAM | 270 RB / 0 RB Offset |
| -                        | Frequency Stability           | 647334 to 665666  | 647334 (3710.01MHz),<br>665666 (3969.99MHz)                         | 20MHz                | $\pi/2$ BPSK                                          | 50 RB / 0 RB Offset  |
|                          |                               | 648000 to 664000  | 648000 (3720.00MHz),<br>664000 (3960.00MHz)                         | 40MHz                | $\pi/2$ BPSK                                          | 100 RB / 0 RB Offset |
|                          |                               | 648334 to 663666  | 648334 (3725.01MHz),<br>663666 (3954.99MHz)                         | 50MHz                | $\pi/2$ BPSK                                          | 128 RB / 0 RB Offset |
|                          |                               | 648668 to 663332  | 648668 (3730.02MHz),<br>663332 (3949.98MHz)                         | 60MHz                | $\pi/2$ BPSK                                          | 162 RB / 0 RB Offset |
|                          |                               | 649334 to 662666  | 649334 (3740.01MHz),<br>662666 (3939.99MHz)                         | 80MHz                | $\pi/2$ BPSK                                          | 216 RB / 0 RB Offset |
|                          |                               | 649558 to 662332  | 649558 (3745.02MHz),<br>662332 (3934.98MHz)                         | 90MHz                | $\pi/2$ BPSK                                          | 240 RB / 0 RB Offset |
|                          |                               | 650000 to 662000  | 650000 (3750.00MHz),<br>662000 (3930.00MHz)                         | 100MHz               | $\pi/2$ BPSK                                          | 270 RB / 0 RB Offset |
| -                        | Emission Bandwidth            | 647334 to 665666  | 647334 (3710.01MHz),<br>656000 (3840.00MHz),<br>665666 (3969.99MHz) | 20MHz                | $\pi/2$ BPSK /<br>QPSK / 16QAM /<br>64QAM /<br>256QAM | 50 RB / 0 RB Offset  |
|                          |                               | 648000 to 664000  | 648000 (3720.00MHz),<br>656000 (3840.00MHz),<br>664000 (3960.00MHz) | 40MHz                | $\pi/2$ BPSK /<br>QPSK / 16QAM /<br>64QAM /<br>256QAM | 100 RB / 0 RB Offset |
|                          |                               | 648334 to 663666  | 648334 (3725.01MHz),<br>656000 (3840.00MHz),<br>663666 (3954.99MHz) | 50MHz                | $\pi/2$ BPSK /<br>QPSK / 16QAM /<br>64QAM /<br>256QAM | 128 RB / 0 RB Offset |
|                          |                               | 648668 to 663332  | 648668 (3730.02MHz),<br>656000 (3840.00MHz),<br>663332 (3949.98MHz) | 60MHz                | $\pi/2$ BPSK /<br>QPSK / 16QAM /<br>64QAM /<br>256QAM | 162 RB / 0 RB Offset |
|                          |                               | 649334 to 662666  | 649334 (3740.01MHz),<br>656000 (3840.00MHz),<br>662666 (3939.99MHz) | 80MHz                | $\pi/2$ BPSK /<br>QPSK / 16QAM /<br>64QAM /<br>256QAM | 216 RB / 0 RB Offset |
|                          |                               | 649558 to 662332  | 649558 (3745.02MHz),<br>656000 (3840.00MHz),<br>662332 (3934.98MHz) | 90MHz                | $\pi/2$ BPSK /<br>QPSK / 16QAM /<br>64QAM /<br>256QAM | 240 RB / 0 RB Offset |
|                          |                               | 650000 to 662000  | 650000 (3750.00MHz),<br>656000 (3840.00MHz),<br>662000 (3930.00MHz) | 100MHz               | $\pi/2$ BPSK /<br>QPSK / 16QAM /<br>64QAM /<br>256QAM | 270 RB / 0 RB Offset |

| EUT<br>Configure<br>Mode | Test item                | Available channel | Tested channel                                                      | Channel<br>Bandwidth | Modulation                                            | Mode                                                               |
|--------------------------|--------------------------|-------------------|---------------------------------------------------------------------|----------------------|-------------------------------------------------------|--------------------------------------------------------------------|
| -                        | Band Edge                | 647334 to 665666  | 647334 (3710.01MHz),<br>665666 (3969.99MHz)                         | 20MHz                | $\pi/2$ BPSK                                          | 1 RB / 0 RB Offset<br>1 RB / 49 RB Offset<br>50 RB / 0 RB Offset   |
|                          |                          | 648000 to 664000  | 648000 (3720.00MHz),<br>664000 (3960.00MHz)                         | 40MHz                | $\pi/2$ BPSK                                          | 1 RB / 0 RB Offset<br>1 RB / 104 RB Offset<br>100 RB / 0 RB Offset |
|                          |                          | 648334 to 663666  | 648334 (3725.01MHz),<br>663666 (3954.99MHz)                         | 50MHz                | $\pi/2$ BPSK                                          | 1 RB / 0 RB Offset<br>1 RB / 131 RB Offset<br>128 RB / 0 RB Offset |
|                          |                          | 648668 to 663332  | 648668 (3730.02MHz),<br>663332 (3949.98MHz)                         | 60MHz                | $\pi/2$ BPSK                                          | 1 RB / 0 RB Offset<br>1 RB / 160 RB Offset<br>162 RB / 0 RB Offset |
|                          |                          | 649334 to 662666  | 649334 (3740.01MHz),<br>662666 (3939.99MHz)                         | 80MHz                | $\pi/2$ BPSK                                          | 1 RB / 0 RB Offset<br>1 RB / 215 RB Offset<br>216 RB / 0 RB Offset |
|                          |                          | 649558 to 662332  | 649558 (3745.02MHz),<br>662332 (3934.98MHz)                         | 90MHz                | $\pi/2$ BPSK                                          | 1 RB / 0 RB Offset<br>1 RB / 243 RB Offset<br>240 RB / 0 RB Offset |
|                          |                          | 650000 to 662000  | 650000 (3750.00MHz),<br>662000 (3930.00MHz)                         | 100MHz               | $\pi/2$ BPSK                                          | 1 RB / 0 RB Offset<br>1 RB / 271 RB Offset<br>270 RB / 0 RB Offset |
| -                        | Peak to Average<br>Ratio | 647334 to 665666  | 647334 (3710.01MHz),<br>656000 (3840.00MHz),<br>665666 (3969.99MHz) | 20MHz                | $\pi/2$ BPSK /<br>QPSK / 16QAM /<br>64QAM /<br>256QAM | 1 RB / 0 RB Offset                                                 |
|                          |                          | 648000 to 664000  | 648000 (3720.00MHz),<br>656000 (3840.00MHz),<br>664000 (3960.00MHz) | 40MHz                | $\pi/2$ BPSK /<br>QPSK / 16QAM /<br>64QAM /<br>256QAM | 1 RB / 0 RB Offset                                                 |
|                          |                          | 648334 to 663666  | 648334 (3725.01MHz),<br>656000 (3840.00MHz),<br>663666 (3954.99MHz) | 50MHz                | $\pi/2$ BPSK /<br>QPSK / 16QAM /<br>64QAM /<br>256QAM | 1 RB / 0 RB Offset                                                 |
|                          |                          | 648668 to 663332  | 648668 (3730.02MHz),<br>656000 (3840.00MHz),<br>663332 (3949.98MHz) | 60MHz                | $\pi/2$ BPSK /<br>QPSK / 16QAM /<br>64QAM /<br>256QAM | 1 RB / 0 RB Offset                                                 |
|                          |                          | 649334 to 662666  | 649334 (3740.01MHz),<br>656000 (3840.00MHz),<br>662666 (3939.99MHz) | 80MHz                | $\pi/2$ BPSK /<br>QPSK / 16QAM /<br>64QAM /<br>256QAM | 1 RB / 0 RB Offset                                                 |
|                          |                          | 649558 to 662332  | 649558 (3745.02MHz),<br>656000 (3840.00MHz),<br>662332 (3934.98MHz) | 90MHz                | $\pi/2$ BPSK /<br>QPSK / 16QAM /<br>64QAM /<br>256QAM | 1 RB / 0 RB Offset                                                 |
|                          |                          | 650000 to 662000  | 650000 (3750.00MHz),<br>656000 (3840.00MHz),<br>662000 (3930.00MHz) | 100MHz               | $\pi/2$ BPSK /<br>QPSK / 16QAM /<br>64QAM /<br>256QAM | 1 RB / 0 RB Offset                                                 |

| EUT Configure Mode | Test item                    | Available channel | Tested channel                                                      | Channel Bandwidth | Modulation   | Mode               |
|--------------------|------------------------------|-------------------|---------------------------------------------------------------------|-------------------|--------------|--------------------|
| -                  | Conducted Emission           | 647334 to 665666  | 647334 (3710.01MHz),<br>656000 (3840.00MHz),<br>665666 (3969.99MHz) | 20MHz             | $\pi/2$ BPSK | 1 RB / 0 RB Offset |
|                    |                              | 648000 to 664000  | 648000 (3720.00MHz),<br>656000 (3840.00MHz),<br>664000 (3960.00MHz) | 40MHz             | $\pi/2$ BPSK | 1 RB / 0 RB Offset |
|                    |                              | 648334 to 663666  | 648334 (3725.01MHz),<br>656000 (3840.00MHz),<br>663666 (3954.99MHz) | 50MHz             | $\pi/2$ BPSK | 1 RB / 0 RB Offset |
|                    |                              | 648668 to 663332  | 648668 (3730.02MHz),<br>656000 (3840.00MHz),<br>663332 (3949.98MHz) | 60MHz             | $\pi/2$ BPSK | 1 RB / 0 RB Offset |
|                    |                              | 649334 to 662666  | 649334 (3740.01MHz),<br>656000 (3840.00MHz),<br>662666 (3939.99MHz) | 80MHz             | $\pi/2$ BPSK | 1 RB / 0 RB Offset |
|                    |                              | 649558 to 662332  | 649558 (3745.02MHz),<br>656000 (3840.00MHz),<br>662332 (3934.98MHz) | 90MHz             | $\pi/2$ BPSK | 1 RB / 0 RB Offset |
|                    |                              | 650000 to 662000  | 650000 (3750.00MHz),<br>656000 (3840.00MHz),<br>662000 (3930.00MHz) | 100MHz            | $\pi/2$ BPSK | 1 RB / 0 RB Offset |
| -                  | Radiated Emission Below 1GHz | 648334 to 663666  | 656000 (3840.00MHz)                                                 | 50MHz             | $\pi/2$ BPSK | 1 RB / 0 RB Offset |
| -                  | Radiated Emission Above 1GHz | 647334 to 665666  | 647334 (3710.01MHz),<br>656000 (3840.00MHz),<br>665666 (3969.99MHz) | 20MHz             | $\pi/2$ BPSK | 1 RB / 0 RB Offset |
|                    |                              | 648334 to 663666  | 648334 (3725.01MHz),<br>656000 (3840.00MHz),<br>663666 (3954.99MHz) | 50MHz             | $\pi/2$ BPSK | 1 RB / 0 RB Offset |
|                    |                              | 650000 to 662000  | 650000 (3750.00MHz),<br>656000 (3840.00MHz),<br>662000 (3930.00MHz) | 100MHz            | $\pi/2$ BPSK | 1 RB / 0 RB Offset |

Note:

1. Only output power, modulation characteristics, occupied bandwidth and Peak to average ratio items had been tested under  $\pi/2$  BPSK, QPSK, 16QAM, 64QAM and 256QAM modes, the other test items were performed under worst mode according to the maximum output power.
2. For radiated emission above 1GHz, according to 3GPP 38.521-1 Section 6.5.3.1.4, choose the lowest, mid and highest channel bandwidth for final test.
3. For radiated emission below 1GHz, select the worst radiated emission channel (above 1GHz) for final testing.

# 5GNR n77 (Part 27Q)

| EUT<br>Configure<br>Mode | Test item | Available channel | Tested channel                                                      | Channel<br>Bandwidth | Modulation                                            | Mode                                                                                                                                                                  |
|--------------------------|-----------|-------------------|---------------------------------------------------------------------|----------------------|-------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| -                        | EIRP      | 630668 to 636000  | 630668 (3460.02MHz),<br>633334 (3500.01MHz),<br>636000 (3540.00MHz) | 20MHz                | $\pi/2$ BPSK /<br>QPSK / 16QAM /<br>64QAM /<br>256QAM | 1 RB / 0 RB Offset<br>1 RB / 26 RB Offset<br>1 RB / 49 RB Offset<br>25 RB / 0 RB Offset<br>25 RB / 13 RB Offset<br>25 RB / 26 RB Offset<br>50 RB / 0 RB Offset        |
|                          |           | 631334 to 635332  | 631334 (3470.01MHz),<br>633334 (3500.01MHz),<br>635332 (3529.98MHz) | 40MHz                | $\pi/2$ BPSK /<br>QPSK / 16QAM /<br>64QAM /<br>256QAM | 1 RB / 0 RB Offset<br>1 RB / 53 RB Offset<br>1 RB / 104 RB Offset<br>50 RB / 0 RB Offset<br>50 RB / 28 RB Offset<br>50 RB / 56 RB Offset<br>100 RB / 0 RB Offset      |
|                          |           | 631668 to 635000  | 631668 (3475.02MHz),<br>633334 (3500.01MHz),<br>635000 (3525.00MHz) | 50MHz                | $\pi/2$ BPSK /<br>QPSK / 16QAM /<br>64QAM /<br>256QAM | 1 RB / 0 RB Offset<br>1 RB / 67 RB Offset<br>1 RB / 131 RB Offset<br>64 RB / 0 RB Offset<br>64 RB / 35 RB Offset<br>64 RB / 69 RB Offset<br>128 RB / 0 RB Offset      |
|                          |           | 632000 to 634666  | 632000 (3480.00MHz),<br>633334 (3500.01MHz),<br>634666 (3519.99MHz) | 60MHz                | $\pi/2$ BPSK /<br>QPSK / 16QAM /<br>64QAM /<br>256QAM | 1 RB / 0 RB Offset<br>1 RB / 81 RB Offset<br>1 RB / 160 RB Offset<br>81 RB / 0 RB Offset<br>81 RB / 41 RB Offset<br>81 RB / 81 RB Offset<br>162 RB / 0 RB Offset      |
|                          |           | 632668 to 634000  | 632668 (3490.02MHz),<br>633334 (3500.01MHz),<br>634000 (3510.00MHz) | 80MHz                | $\pi/2$ BPSK /<br>QPSK / 16QAM /<br>64QAM /<br>256QAM | 1 RB / 0 RB Offset<br>1 RB / 109 RB Offset<br>1 RB / 215 RB Offset<br>108 RB / 0 RB Offset<br>108 RB / 55 RB Offset<br>108 RB / 109 RB Offset<br>216 RB / 0 RB Offset |
|                          |           | 633000 to 633666  | 633000 (3495.00MHz),<br>633334 (3500.01MHz),<br>633666 (3504.99MHz) | 90MHz                | $\pi/2$ BPSK /<br>QPSK / 16QAM /<br>64QAM /<br>256QAM | 1 RB / 0 RB Offset<br>1 RB / 123 RB Offset<br>1 RB / 243 RB Offset<br>120 RB / 0 RB Offset<br>120 RB / 63 RB Offset<br>120 RB / 125 RB Offset<br>240 RB / 0 RB Offset |
|                          |           | 633334            | 633334 (3500.01MHz)                                                 | 100MHz               | $\pi/2$ BPSK /<br>QPSK / 16QAM /<br>64QAM /<br>256QAM | 1 RB / 0 RB Offset<br>1 RB / 137 RB Offset<br>1 RB / 271 RB Offset<br>135 RB / 0 RB Offset<br>135 RB / 69 RB Offset<br>135 RB / 138 RB Offset<br>270 RB / 0 RB Offset |

| EUT Configure Mode | Test item                  | Available channel | Tested channel                                                | Channel Bandwidth | Modulation                                   | Mode                 |
|--------------------|----------------------------|-------------------|---------------------------------------------------------------|-------------------|----------------------------------------------|----------------------|
| -                  | Modulation Characteristics | 633334            | 633334 (3500.01MHz)                                           | 100MHz            | $\pi/2$ BPSK / QPSK / 16QAM / 64QAM / 256QAM | 270 RB / 0 RB Offset |
| -                  | Frequency Stability        | 630668 to 636000  | 630668 (3460.02MHz), 636000 (3540.00MHz)                      | 20MHz             | $\pi/2$ BPSK                                 | 50 RB / 0 RB Offset  |
|                    |                            | 631334 to 635332  | 631334 (3470.01MHz), 635332 (3529.98MHz)                      | 40MHz             | $\pi/2$ BPSK                                 | 100 RB / 0 RB Offset |
|                    |                            | 631668 to 635000  | 631668 (3475.02MHz), 635000 (3525.00MHz)                      | 50MHz             | $\pi/2$ BPSK                                 | 128 RB / 0 RB Offset |
|                    |                            | 632000 to 634666  | 632000 (3480.00MHz), 634666 (3519.99MHz)                      | 60MHz             | $\pi/2$ BPSK                                 | 162 RB / 0 RB Offset |
|                    |                            | 632668 to 634000  | 632668 (3490.02MHz), 634000 (3510.00MHz)                      | 80MHz             | $\pi/2$ BPSK                                 | 216 RB / 0 RB Offset |
|                    |                            | 633000 to 633666  | 633000 (3495.00MHz), 633666 (3504.99MHz)                      | 90MHz             | $\pi/2$ BPSK                                 | 240 RB / 0 RB Offset |
|                    |                            | 633334            | 633334 (3500.01MHz)                                           | 100MHz            | $\pi/2$ BPSK                                 | 270 RB / 0 RB Offset |
| -                  | Emission Bandwidth         | 630668 to 636000  | 630668 (3460.02MHz), 633334 (3500.01MHz), 636000 (3540.00MHz) | 20MHz             | $\pi/2$ BPSK / QPSK / 16QAM / 64QAM / 256QAM | 50 RB / 0 RB Offset  |
|                    |                            | 631334 to 635332  | 631334 (3470.01MHz), 633334 (3500.01MHz), 635332 (3529.98MHz) | 40MHz             | $\pi/2$ BPSK / QPSK / 16QAM / 64QAM / 256QAM | 100 RB / 0 RB Offset |
|                    |                            | 631668 to 635000  | 631668 (3475.02MHz), 633334 (3500.01MHz), 635000 (3525.00MHz) | 50MHz             | $\pi/2$ BPSK / QPSK / 16QAM / 64QAM / 256QAM | 128 RB / 0 RB Offset |
|                    |                            | 632000 to 634666  | 632000 (3480.00MHz), 633334 (3500.01MHz), 634666 (3519.99MHz) | 60MHz             | $\pi/2$ BPSK / QPSK / 16QAM / 64QAM / 256QAM | 162 RB / 0 RB Offset |
|                    |                            | 632668 to 634000  | 632668 (3490.02MHz), 633334 (3500.01MHz), 634000 (3510.00MHz) | 80MHz             | $\pi/2$ BPSK / QPSK / 16QAM / 64QAM / 256QAM | 216 RB / 0 RB Offset |
|                    |                            | 633000 to 633666  | 633000 (3495.00MHz), 633334 (3500.01MHz), 633666 (3504.99MHz) | 90MHz             | $\pi/2$ BPSK / QPSK / 16QAM / 64QAM / 256QAM | 240 RB / 0 RB Offset |
|                    |                            | 633334            | 633334 (3500.01MHz)                                           | 100MHz            | $\pi/2$ BPSK / QPSK / 16QAM / 64QAM / 256QAM | 270 RB / 0 RB Offset |

| EUT Configure Mode | Test item             | Available channel | Tested channel                                                      | Channel Bandwidth | Modulation                                            | Mode                                                               |
|--------------------|-----------------------|-------------------|---------------------------------------------------------------------|-------------------|-------------------------------------------------------|--------------------------------------------------------------------|
| -                  | Band Edge             | 630668 to 636000  | 630668 (3460.02MHz),<br>636000 (3540.00MHz)                         | 20MHz             | $\pi/2$ BPSK                                          | 1 RB / 0 RB Offset<br>1 RB / 49 RB Offset<br>50 RB / 0 RB Offset   |
|                    |                       | 631334 to 635332  | 631334 (3470.01MHz),<br>635332 (3529.98MHz)                         | 40MHz             | $\pi/2$ BPSK                                          | 1 RB / 0 RB Offset<br>1 RB / 104 RB Offset<br>100 RB / 0 RB Offset |
|                    |                       | 631668 to 635000  | 631668 (3475.02MHz),<br>635000 (3525.00MHz)                         | 50MHz             | $\pi/2$ BPSK                                          | 1 RB / 0 RB Offset<br>1 RB / 131 RB Offset<br>128 RB / 0 RB Offset |
|                    |                       | 632000 to 634666  | 632000 (3480.00MHz),<br>634666 (3519.99MHz)                         | 60MHz             | $\pi/2$ BPSK                                          | 1 RB / 0 RB Offset<br>1 RB / 160 RB Offset<br>162 RB / 0 RB Offset |
|                    |                       | 632668 to 634000  | 632668 (3490.02MHz),<br>634000 (3510.00MHz)                         | 80MHz             | $\pi/2$ BPSK                                          | 1 RB / 0 RB Offset<br>1 RB / 215 RB Offset<br>216 RB / 0 RB Offset |
|                    |                       | 633000 to 633666  | 633000 (3495.00MHz),<br>633666 (3504.99MHz)                         | 90MHz             | $\pi/2$ BPSK                                          | 1 RB / 0 RB Offset<br>1 RB / 243 RB Offset<br>240 RB / 0 RB Offset |
|                    |                       | 633334            | 633334 (3500.01MHz)                                                 | 100MHz            | $\pi/2$ BPSK                                          | 1 RB / 0 RB Offset<br>1 RB / 271 RB Offset<br>270 RB / 0 RB Offset |
| -                  | Peak to Average Ratio | 630668 to 636000  | 630668 (3460.02MHz),<br>633334 (3500.01MHz),<br>636000 (3540.00MHz) | 20MHz             | $\pi/2$ BPSK /<br>QPSK / 16QAM /<br>64QAM /<br>256QAM | 1 RB / 0 RB Offset                                                 |
|                    |                       | 631334 to 635332  | 631334 (3470.01MHz),<br>633334 (3500.01MHz),<br>635332 (3529.98MHz) | 40MHz             | $\pi/2$ BPSK /<br>QPSK / 16QAM /<br>64QAM /<br>256QAM | 1 RB / 0 RB Offset                                                 |
|                    |                       | 631668 to 635000  | 631668 (3475.02MHz),<br>633334 (3500.01MHz),<br>635000 (3525.00MHz) | 50MHz             | $\pi/2$ BPSK /<br>QPSK / 16QAM /<br>64QAM /<br>256QAM | 1 RB / 0 RB Offset                                                 |
|                    |                       | 632000 to 634666  | 632000 (3480.00MHz),<br>633334 (3500.01MHz),<br>634666 (3519.99MHz) | 60MHz             | $\pi/2$ BPSK /<br>QPSK / 16QAM /<br>64QAM /<br>256QAM | 1 RB / 0 RB Offset                                                 |
|                    |                       | 632668 to 634000  | 632668 (3490.02MHz),<br>633334 (3500.01MHz),<br>634000 (3510.00MHz) | 80MHz             | $\pi/2$ BPSK /<br>QPSK / 16QAM /<br>64QAM /<br>256QAM | 1 RB / 0 RB Offset                                                 |
|                    |                       | 633000 to 633666  | 633000 (3495.00MHz),<br>633334 (3500.01MHz),<br>633666 (3504.99MHz) | 90MHz             | $\pi/2$ BPSK /<br>QPSK / 16QAM /<br>64QAM /<br>256QAM | 1 RB / 0 RB Offset                                                 |
|                    |                       | 633334            | 633334 (3500.01MHz)                                                 | 100MHz            | $\pi/2$ BPSK /<br>QPSK / 16QAM /<br>64QAM /<br>256QAM | 1 RB / 0 RB Offset                                                 |

| EUT<br>Configure<br>Mode | Test item                       | Available channel | Tested channel                                                      | Channel<br>Bandwidth | Modulation   | Mode               |
|--------------------------|---------------------------------|-------------------|---------------------------------------------------------------------|----------------------|--------------|--------------------|
| -                        | Conducted Emission              | 630668 to 636000  | 630668 (3460.02MHz),<br>633334 (3500.01MHz),<br>636000 (3540.00MHz) | 20MHz                | $\pi/2$ BPSK | 1 RB / 0 RB Offset |
|                          |                                 | 631334 to 635332  | 631334 (3470.01MHz),<br>633334 (3500.01MHz),<br>635332 (3529.98MHz) | 40MHz                | $\pi/2$ BPSK | 1 RB / 0 RB Offset |
|                          |                                 | 631668 to 635000  | 631668 (3475.02MHz),<br>633334 (3500.01MHz),<br>635000 (3525.00MHz) | 50MHz                | $\pi/2$ BPSK | 1 RB / 0 RB Offset |
|                          |                                 | 632000 to 634666  | 632000 (3480.00MHz),<br>633334 (3500.01MHz),<br>634666 (3519.99MHz) | 60MHz                | $\pi/2$ BPSK | 1 RB / 0 RB Offset |
|                          |                                 | 632668 to 634000  | 632668 (3490.02MHz),<br>633334 (3500.01MHz),<br>634000 (3510.00MHz) | 80MHz                | $\pi/2$ BPSK | 1 RB / 0 RB Offset |
|                          |                                 | 633000 to 633666  | 633000 (3495.00MHz),<br>633334 (3500.01MHz),<br>633666 (3504.99MHz) | 90MHz                | $\pi/2$ BPSK | 1 RB / 0 RB Offset |
|                          |                                 | 633334            | 633334 (3500.01MHz)                                                 | 100MHz               | $\pi/2$ BPSK | 1 RB / 0 RB Offset |
| -                        | Radiated Emission<br>Below 1GHz | 633334            | 633334 (3500.01MHz)                                                 | 100MHz               | $\pi/2$ BPSK | 1 RB / 0 RB Offset |
| -                        | Radiated Emission<br>Above 1GHz | 630668 to 636000  | 630668 (3460.02MHz),<br>633334 (3500.01MHz),<br>636000 (3540.00MHz) | 20MHz                | $\pi/2$ BPSK | 1 RB / 0 RB Offset |
|                          |                                 | 631668 to 635000  | 631668 (3475.02MHz),<br>633334 (3500.01MHz),<br>635000 (3525.00MHz) | 50MHz                | $\pi/2$ BPSK | 1 RB / 0 RB Offset |
|                          |                                 | 633334            | 633334 (3500.01MHz)                                                 | 100MHz               | $\pi/2$ BPSK | 1 RB / 0 RB Offset |

**Note:**

1. Only output power, modulation characteristics, occupied bandwidth and Peak to average ratio items had been tested under  $\pi/2$  BPSK, QPSK, 16QAM, 64QAM and 256QAM modes, the other test items were performed under worst mode according to the maximum output power.
2. For radiated emission above 1GHz, according to 3GPP 38.521-1 Section 6.5.3.1.4, choose the lowest, mid and highest channel bandwidth for final test.
3. For radiated emission below 1GHz, select the worst radiated emission channel (above 1GHz) for final testing.

## LTE Band 2

| EUT<br>Configure<br>Mode | Test item                     | Available channel | Tested Channel                                                   | Channel<br>Bandwidth | Modulation                          | Mode                                                                                                                                                            |
|--------------------------|-------------------------------|-------------------|------------------------------------------------------------------|----------------------|-------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------|
| -                        | EIRP                          | 18607 to 19193    | 18607 (1850.70MHz),<br>18900 (1880.00MHz),<br>19193 (1909.30MHz) | 1.4MHz               | QPSK / 16QAM /<br>64QAM /<br>256QAM | 1 RB / 0 RB Offset<br>1 RB / 2 RB Offset<br>1 RB / 5 RB Offset<br>3 RB / 0 RB Offset<br>3 RB / 1 RB Offset<br>3 RB / 3 RB Offset<br>6 RB / 0 RB Offset          |
|                          |                               | 18615 to 19185    | 18615 (1851.50MHz),<br>18900 (1880.00MHz),<br>19185 (1908.50MHz) | 3MHz                 | QPSK / 16QAM /<br>64QAM /<br>256QAM | 1 RB / 0 RB Offset<br>1 RB / 7 RB Offset<br>1 RB / 14 RB Offset<br>8 RB / 0 RB Offset<br>8 RB / 3 RB Offset<br>8 RB / 7 RB Offset<br>15 RB / 0 RB Offset        |
|                          |                               | 18625 to 19175    | 18625 (1852.50MHz),<br>18900 (1880.00MHz),<br>19175 (1907.50MHz) | 5MHz                 | QPSK / 16QAM /<br>64QAM /<br>256QAM | 1 RB / 0 RB Offset<br>1 RB / 12 RB Offset<br>1 RB / 24 RB Offset<br>12 RB / 0 RB Offset<br>12 RB / 6 RB Offset<br>12 RB / 13 RB Offset<br>25 RB / 0 RB Offset   |
|                          |                               | 18650 to 19150    | 18650 (1855.00MHz),<br>18900 (1880.00MHz),<br>19150 (1905.00MHz) | 10MHz                | QPSK / 16QAM /<br>64QAM /<br>256QAM | 1 RB / 0 RB Offset<br>1 RB / 24 RB Offset<br>1 RB / 49 RB Offset<br>25 RB / 0 RB Offset<br>25 RB / 12 RB Offset<br>25 RB / 25 RB Offset<br>50 RB / 0 RB Offset  |
|                          |                               | 18675 to 19125    | 18675 (1857.50MHz),<br>18900 (1880.00MHz),<br>19125 (1902.50MHz) | 15MHz                | QPSK / 16QAM /<br>64QAM /<br>256QAM | 1 RB / 0 RB Offset<br>1 RB / 37 RB Offset<br>1 RB / 74 RB Offset<br>36 RB / 0 RB Offset<br>36 RB / 19 RB Offset<br>36 RB / 39 RB Offset<br>75 RB / 0 RB Offset  |
|                          |                               | 18700 to 19100    | 18700 (1860.00MHz),<br>18900 (1880.00MHz),<br>19100 (1900.00MHz) | 20MHz                | QPSK / 16QAM /<br>64QAM /<br>256QAM | 1 RB / 0 RB Offset<br>1 RB / 50 RB Offset<br>1 RB / 99 RB Offset<br>50 RB / 0 RB Offset<br>50 RB / 25 RB Offset<br>50 RB / 50 RB Offset<br>100 RB / 0 RB Offset |
| -                        | Modulation<br>Characteristics | 18700 to 19100    | 18900 (1880.00MHz)                                               | 20MHz                | QPSK                                | 100 RB / 0 RB Offset                                                                                                                                            |
| -                        | Frequency<br>Stability        | 18607 to 19193    | 18607 (1850.70MHz),<br>19193 (1909.30MHz)                        | 1.4MHz               | QPSK                                | 6 RB / 0 RB Offset                                                                                                                                              |
|                          |                               | 18615 to 19185    | 18615 (1851.50MHz),<br>19185 (1908.50MHz)                        | 3MHz                 | QPSK                                | 15 RB / 0 RB Offset                                                                                                                                             |
|                          |                               | 18625 to 19175    | 18625 (1852.50MHz),<br>19175 (1907.50MHz)                        | 5MHz                 | QPSK                                | 25 RB / 0 RB Offset                                                                                                                                             |
|                          |                               | 18650 to 19150    | 18650 (1855.00MHz),<br>19150 (1905.00MHz)                        | 10MHz                | QPSK                                | 50 RB / 0 RB Offset                                                                                                                                             |
|                          |                               | 18675 to 19125    | 18675 (1857.50MHz),<br>19125 (1902.50MHz)                        | 15MHz                | QPSK                                | 75 RB / 0 RB Offset                                                                                                                                             |
|                          |                               | 18700 to 19100    | 18700 (1860.00MHz),<br>19100 (1900.00MHz)                        | 20MHz                | QPSK                                | 100 RB / 0 RB Offset                                                                                                                                            |

| EUT Configure Mode | Test item             | Available channel | Tested Channel                                                   | Channel Bandwidth | Modulation                          | Mode                                                              |
|--------------------|-----------------------|-------------------|------------------------------------------------------------------|-------------------|-------------------------------------|-------------------------------------------------------------------|
| -                  | Occupied Bandwidth    | 18607 to 19193    | 18607 (1850.70MHz),<br>18900 (1880.00MHz),<br>19193 (1909.30MHz) | 1.4MHz            | QPSK / 16QAM /<br>64QAM /<br>256QAM | 6 RB / 0 RB Offset                                                |
|                    |                       | 18615 to 19185    | 18615 (1851.50MHz),<br>18900 (1880.00MHz),<br>19185 (1908.50MHz) | 3MHz              | QPSK / 16QAM /<br>64QAM /<br>256QAM | 15 RB / 0 RB Offset                                               |
|                    |                       | 18625 to 19175    | 18625 (1852.50MHz),<br>18900 (1880.00MHz),<br>19175 (1907.50MHz) | 5MHz              | QPSK / 16QAM /<br>64QAM /<br>256QAM | 25 RB / 0 RB Offset                                               |
|                    |                       | 18650 to 19150    | 18650 (1855.00MHz),<br>18900 (1880.00MHz),<br>19150 (1905.00MHz) | 10MHz             | QPSK / 16QAM /<br>64QAM /<br>256QAM | 50 RB / 0 RB Offset                                               |
|                    |                       | 18675 to 19125    | 18675 (1857.50MHz),<br>18900 (1880.00MHz),<br>19125 (1902.50MHz) | 15MHz             | QPSK / 16QAM /<br>64QAM /<br>256QAM | 75 RB / 0 RB Offset                                               |
|                    |                       | 18700 to 19100    | 18700 (1860.00MHz),<br>18900 (1880.00MHz),<br>19100 (1900.00MHz) | 20MHz             | QPSK / 16QAM /<br>64QAM /<br>256QAM | 100 RB / 0 RB Offset                                              |
| -                  | Band Edge             | 18607 to 19193    | 18607 (1850.70MHz),<br>19193 (1909.30MHz)                        | 1.4MHz            | QPSK                                | 1 RB / 0 RB Offset<br>1 RB / 5 RB Offset<br>6 RB / 0 RB Offset    |
|                    |                       | 18615 to 19185    | 18615 (1851.50MHz),<br>19185 (1908.50MHz)                        | 3MHz              | QPSK                                | 1 RB / 0 RB Offset<br>1 RB / 14 RB Offset<br>15 RB / 0 RB Offset  |
|                    |                       | 18625 to 19175    | 18625 (1852.50MHz),<br>19175 (1907.50MHz)                        | 5MHz              | QPSK                                | 1 RB / 0 RB Offset<br>1 RB / 24 RB Offset<br>25 RB / 0 RB Offset  |
|                    |                       | 18650 to 19150    | 18650 (1855.00MHz),<br>19150 (1905.00MHz)                        | 10MHz             | QPSK                                | 1 RB / 0 RB Offset<br>1 RB / 49 RB Offset<br>50 RB / 0 RB Offset  |
|                    |                       | 18675 to 19125    | 18675 (1857.50MHz),<br>19125 (1902.50MHz)                        | 15MHz             | QPSK                                | 1 RB / 0 RB Offset<br>1 RB / 74 RB Offset<br>75 RB / 0 RB Offset  |
|                    |                       | 18700 to 19100    | 18700 (1860.00MHz),<br>19100 (1900.00MHz)                        | 20MHz             | QPSK                                | 1 RB / 0 RB Offset<br>1 RB / 99 RB Offset<br>100 RB / 0 RB Offset |
| -                  | Peak to Average Ratio | 18607 to 19193    | 18607 (1850.70MHz),<br>18900 (1880.00MHz),<br>19193 (1909.30MHz) | 1.4MHz            | QPSK / 16QAM /<br>64QAM /<br>256QAM | 1 RB / 0 RB Offset                                                |
|                    |                       | 18615 to 19185    | 18615 (1851.50MHz),<br>18900 (1880.00MHz),<br>19185 (1908.50MHz) | 3MHz              | QPSK / 16QAM /<br>64QAM /<br>256QAM | 1 RB / 0 RB Offset                                                |
|                    |                       | 18625 to 19175    | 18625 (1852.50MHz),<br>18900 (1880.00MHz),<br>19175 (1907.50MHz) | 5MHz              | QPSK / 16QAM /<br>64QAM /<br>256QAM | 1 RB / 0 RB Offset                                                |
|                    |                       | 18650 to 19150    | 18650 (1855.00MHz),<br>18900 (1880.00MHz),<br>19150 (1905.00MHz) | 10MHz             | QPSK / 16QAM /<br>64QAM /<br>256QAM | 1 RB / 0 RB Offset                                                |
|                    |                       | 18675 to 19125    | 18675 (1857.50MHz),<br>18900 (1880.00MHz),<br>19125 (1902.50MHz) | 15MHz             | QPSK / 16QAM /<br>64QAM /<br>256QAM | 1 RB / 0 RB Offset                                                |
|                    |                       | 18700 to 19100    | 18700 (1860.00MHz),<br>18900 (1880.00MHz),<br>19100 (1900.00MHz) | 20MHz             | QPSK / 16QAM /<br>64QAM /<br>256QAM | 1 RB / 0 RB Offset                                                |

| EUT<br>Configure<br>Mode | Test item                          | Available channel | Tested Channel                                                   | Channel<br>Bandwidth | Modulation | Mode               |
|--------------------------|------------------------------------|-------------------|------------------------------------------------------------------|----------------------|------------|--------------------|
| -                        | Conducted<br>Emission              | 18607 to 19193    | 18607 (1850.70MHz),<br>18900 (1880.00MHz),<br>19193 (1909.30MHz) | 1.4MHz               | QPSK       | 1 RB / 0 RB Offset |
|                          |                                    | 18615 to 19185    | 18615 (1851.50MHz),<br>18900 (1880.00MHz),<br>19185 (1908.50MHz) | 3MHz                 | QPSK       | 1 RB / 0 RB Offset |
|                          |                                    | 18625 to 19175    | 18625 (1852.50MHz),<br>18900 (1880.00MHz),<br>19175 (1907.50MHz) | 5MHz                 | QPSK       | 1 RB / 0 RB Offset |
|                          |                                    | 18650 to 19150    | 18650 (1855.00MHz),<br>18900 (1880.00MHz),<br>19150 (1905.00MHz) | 10MHz                | QPSK       | 1 RB / 0 RB Offset |
|                          |                                    | 18675 to 19125    | 18675 (1857.50MHz),<br>18900 (1880.00MHz),<br>19125 (1902.50MHz) | 15MHz                | QPSK       | 1 RB / 0 RB Offset |
|                          |                                    | 18700 to 19100    | 18700 (1860.00MHz),<br>18900 (1880.00MHz),<br>19100 (1900.00MHz) | 20MHz                | QPSK       | 1 RB / 0 RB Offset |
| -                        | Radiated<br>Emission<br>Below 1GHz | 18700 to 19100    | 18900 (1880.00MHz)                                               | 20MHz                | QPSK       | 1 RB / 0 RB Offset |
| -                        | Radiated<br>Emission<br>Above 1GHz | 18607 to 19193    | 18607 (1850.70MHz),<br>18900 (1880.00MHz),<br>19193 (1909.30MHz) | 1.4MHz               | QPSK       | 1 RB / 0 RB Offset |
|                          |                                    | 18625 to 19175    | 18625 (1852.50MHz),<br>18900 (1880.00MHz),<br>19175 (1907.50MHz) | 5MHz                 | QPSK       | 1 RB / 0 RB Offset |
|                          |                                    | 18700 to 19100    | 18700 (1860.00MHz),<br>18900 (1880.00MHz),<br>19100 (1900.00MHz) | 20MHz                | QPSK       | 1 RB / 0 RB Offset |

Note:

- For radiated emission below 1GHz, select the worst radiated emission (above 1GHz) channel for final testing.

# LTE Band 5

| EUT<br>Configure<br>Mode | Test item                     | Available channel | Tested channel                                          | Channel<br>Bandwidth | Modulation                          | Mode                                                                                                                                                           |
|--------------------------|-------------------------------|-------------------|---------------------------------------------------------|----------------------|-------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------|
| -                        | ERP                           | 20407 to 20643    | 20407(824.7MHz),<br>20525(836.5MHz),<br>20643(848.3MHz) | 1.4MHz               | QPSK / 16QAM /<br>64QAM /<br>256QAM | 1 RB / 0 RB Offset<br>1 RB / 2 RB Offset<br>1 RB / 5 RB Offset<br>3 RB / 0 RB Offset<br>3 RB / 1 RB Offset<br>3 RB / 3 RB Offset<br>6 RB / 0 RB Offset         |
|                          |                               | 20415 to 20635    | 20415(825.5MHz),<br>20525(836.5MHz),<br>20635(847.5MHz) | 3MHz                 | QPSK / 16QAM /<br>64QAM /<br>256QAM | 1 RB / 0 RB Offset<br>1 RB / 7 RB Offset<br>1 RB / 14 RB Offset<br>8 RB / 0 RB Offset<br>8 RB / 3 RB Offset<br>8 RB / 7 RB Offset<br>15 RB / 0 RB Offset       |
|                          |                               | 20425 to 20625    | 20425(826.5MHz),<br>20525(836.5MHz),<br>20625(846.5MHz) | 5MHz                 | QPSK / 16QAM /<br>64QAM /<br>256QAM | 1 RB / 0 RB Offset<br>1 RB / 12 RB Offset<br>1 RB / 24 RB Offset<br>12 RB / 0 RB Offset<br>12 RB / 6 RB Offset<br>12 RB / 13 RB Offset<br>25 RB / 0 RB Offset  |
|                          |                               | 20450 to 20600    | 20450(829.0MHz),<br>20525(836.5MHz),<br>20600(844.0MHz) | 10MHz                | QPSK / 16QAM /<br>64QAM /<br>256QAM | 1 RB / 0 RB Offset<br>1 RB / 24 RB Offset<br>1 RB / 49 RB Offset<br>25 RB / 0 RB Offset<br>25 RB / 12 RB Offset<br>25 RB / 25 RB Offset<br>50 RB / 0 RB Offset |
| -                        | Modulation<br>characteristics | 20450 to 20600    | 20525(836.5MHz)                                         | 10MHz                | QPSK / 16QAM /<br>64QAM /<br>256QAM | 50 RB / 0 RB Offset                                                                                                                                            |
| -                        | Frequency Stability           | 20407 to 20643    | 20407(824.7MHz),<br>20643(848.3MHz)                     | 1.4MHz               | QPSK                                | 6 RB / 0 RB Offset                                                                                                                                             |
|                          |                               | 20415 to 20635    | 20415(825.5MHz),<br>20635(847.5MHz)                     | 3MHz                 | QPSK                                | 15 RB / 0 RB Offset                                                                                                                                            |
|                          |                               | 20425 to 20625    | 20425(826.5MHz),<br>20625(846.5MHz)                     | 5MHz                 | QPSK                                | 25 RB / 0 RB Offset                                                                                                                                            |
|                          |                               | 20450 to 20600    | 20450(829.0MHz),<br>20600(844.0MHz)                     | 10MHz                | QPSK                                | 50 RB / 0 RB Offset                                                                                                                                            |
| -                        | Occupied Bandwidth            | 20407 to 20643    | 20407(824.7MHz),<br>20525(836.5MHz),<br>20643(848.3MHz) | 1.4MHz               | QPSK / 16QAM /<br>64QAM /<br>256QAM | 6 RB / 0 RB Offset                                                                                                                                             |
|                          |                               | 20415 to 20635    | 20415(825.5MHz),<br>20525(836.5MHz),<br>20635(847.5MHz) | 3MHz                 | QPSK / 16QAM /<br>64QAM /<br>256QAM | 15 RB / 0 RB Offset                                                                                                                                            |
|                          |                               | 20425 to 20625    | 20425(826.5MHz),<br>20525(836.5MHz),<br>20625(846.5MHz) | 5MHz                 | QPSK / 16QAM /<br>64QAM /<br>256QAM | 25 RB / 0 RB Offset                                                                                                                                            |
|                          |                               | 20450 to 20600    | 20450(829.0MHz),<br>20525(836.5MHz),<br>20600(844.0MHz) | 10MHz                | QPSK / 16QAM /<br>64QAM /<br>256QAM | 50 RB / 0 RB Offset                                                                                                                                            |

| EUT Configure Mode | Test item                    | Available channel | Tested channel                                          | Channel Bandwidth | Modulation                          | Mode                                                             |
|--------------------|------------------------------|-------------------|---------------------------------------------------------|-------------------|-------------------------------------|------------------------------------------------------------------|
| -                  | Band Edge                    | 20407 to 20643    | 20407(824.7MHz),<br>20643(848.3MHz)                     | 1.4MHz            | QPSK                                | 1 RB / 0 RB Offset<br>1 RB / 5 RB Offset<br>6 RB / 0 RB Offset   |
|                    |                              | 20415 to 20635    | 20415(825.5MHz),<br>20635(847.5MHz)                     | 3MHz              | QPSK                                | 1 RB / 0 RB Offset<br>1 RB / 14 RB Offset<br>15 RB / 0 RB Offset |
|                    |                              | 20425 to 20625    | 20425(826.5MHz),<br>20625(846.5MHz)                     | 5MHz              | QPSK                                | 1 RB / 0 RB Offset<br>1 RB / 24 RB Offset<br>25 RB / 0 RB Offset |
|                    |                              | 20450 to 20600    | 20450(829.0MHz),<br>20600(844.0MHz)                     | 10MHz             | QPSK                                | 1 RB / 0 RB Offset<br>1 RB / 49 RB Offset<br>50 RB / 0 RB Offset |
| -                  | Peak to Average Ratio        | 20407 to 20643    | 20407(824.7MHz),<br>20525(836.5MHz),<br>20643(848.3MHz) | 1.4MHz            | QPSK / 16QAM /<br>64QAM /<br>256QAM | 1 RB / 0 RB Offset                                               |
|                    |                              | 20415 to 20635    | 20415(825.5MHz),<br>20525(836.5MHz),<br>20635(847.5MHz) | 3MHz              | QPSK / 16QAM /<br>64QAM /<br>256QAM | 1 RB / 0 RB Offset                                               |
|                    |                              | 20425 to 20625    | 20425(826.5MHz),<br>20525(836.5MHz),<br>20625(846.5MHz) | 5MHz              | QPSK / 16QAM /<br>64QAM /<br>256QAM | 1 RB / 0 RB Offset                                               |
|                    |                              | 20450 to 20600    | 20450(829.0MHz),<br>20525(836.5MHz),<br>20600(844.0MHz) | 10MHz             | QPSK / 16QAM /<br>64QAM /<br>256QAM | 1 RB / 0 RB Offset                                               |
| -                  | Conducted Emission           | 20407 to 20643    | 20407(824.7MHz),<br>20525(836.5MHz),<br>20643(848.3MHz) | 1.4MHz            | QPSK                                | 1 RB / 0 RB Offset                                               |
|                    |                              | 20415 to 20635    | 20415(825.5MHz),<br>20525(836.5MHz),<br>20635(847.5MHz) | 3MHz              | QPSK                                | 1 RB / 0 RB Offset                                               |
|                    |                              | 20425 to 20625    | 20425(826.5MHz),<br>20525(836.5MHz),<br>20625(846.5MHz) | 5MHz              | QPSK                                | 1 RB / 0 RB Offset                                               |
|                    |                              | 20450 to 20600    | 20450(829.0MHz),<br>20525(836.5MHz),<br>20600(844.0MHz) | 10MHz             | QPSK                                | 1 RB / 0 RB Offset                                               |
| -                  | Radiated Emission Below 1GHz | 20450 to 20600    | 20600(844.0MHz)                                         | 10MHz             | QPSK                                | 1 RB / 0 RB Offset                                               |
| -                  | Radiated Emission Above 1GHz | 20407 to 20643    | 20407(824.7MHz),<br>20525(836.5MHz),<br>20643(848.3MHz) | 1.4MHz            | QPSK                                | 1 RB / 0 RB Offset                                               |
|                    |                              | 20425 to 20625    | 20425(826.5MHz),<br>20525(836.5MHz),<br>20625(846.5MHz) | 5MHz              | QPSK                                | 1 RB / 0 RB Offset                                               |
|                    |                              | 20450 to 20600    | 20450(829.0MHz),<br>20525(836.5MHz),<br>20600(844.0MHz) | 10MHz             | QPSK                                | 1 RB / 0 RB Offset                                               |

Note:

1. The measured output power for QPSK mode is higher than the measured output power for 16QAM, 64QAM and 256QAM modes. Therefore the radiated emission test items was performed under QPSK mode only.
2. For radiated emission below 1GHz, select the worst radiated emission channel (above 1GHz) for final testing.

# LTE Band 7

| EUT Configure Mode | Test item                  | Available channel | Tested channel                                                | Channel Bandwidth | Modulation                          | Mode                                                                                                                                                            |
|--------------------|----------------------------|-------------------|---------------------------------------------------------------|-------------------|-------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------|
| -                  | EIRP                       | 20775 to 21425    | 20775 (2502.5MHz),<br>21100 (2535.0MHz),<br>21425 (2567.5MHz) | 5 MHz             | QPSK / 16QAM /<br>64QAM /<br>256QAM | 1 RB / 0 RB Offset<br>1 RB / 12 RB Offset<br>1 RB / 24 RB Offset<br>12 RB / 0 RB Offset<br>12 RB / 6 RB Offset<br>12 RB / 13 RB Offset<br>25 RB / 0 RB Offset   |
|                    |                            | 20800 to 21400    | 20800 (2505.0MHz),<br>21100 (2535.0MHz),<br>21400 (2565.0MHz) | 10 MHz            | QPSK / 16QAM /<br>64QAM /<br>256QAM | 1 RB / 0 RB Offset<br>1 RB / 24 RB Offset<br>1 RB / 49 RB Offset<br>25 RB / 0 RB Offset<br>25 RB / 12 RB Offset<br>25 RB / 25 RB Offset<br>50 RB / 0 RB Offset  |
|                    |                            | 20825 to 21375    | 20825 (2507.5MHz),<br>21100 (2535.0MHz),<br>21375 (2562.5MHz) | 15 MHz            | QPSK / 16QAM /<br>64QAM /<br>256QAM | 1 RB / 0 RB Offset<br>1 RB / 37 RB Offset<br>1 RB / 74 RB Offset<br>36 RB / 0 RB Offset<br>36 RB / 19 RB Offset<br>36 RB / 39 RB Offset<br>75 RB / 0 RB Offset  |
|                    |                            | 20850 to 21350    | 20850 (2510.0MHz),<br>21100 (2535.0MHz),<br>21350 (2560.0MHz) | 20 MHz            | QPSK / 16QAM /<br>64QAM /<br>256QAM | 1 RB / 0 RB Offset<br>1 RB / 50 RB Offset<br>1 RB / 99 RB Offset<br>50 RB / 0 RB Offset<br>50 RB / 25 RB Offset<br>50 RB / 50 RB Offset<br>100 RB / 0 RB Offset |
| -                  | Modulation Characteristics | 20850 to 21350    | 21100 (2535.0MHz)                                             | 20MHz             | QPSK / 16QAM /<br>64QAM /<br>256QAM | 100 RB / 0 RB Offset                                                                                                                                            |
| -                  | Frequency Stability        | 20775 to 21425    | 20775 (2502.5MHz),<br>21425 (2567.5MHz)                       | 5 MHz             | QPSK                                | 25 RB / 0 RB Offset                                                                                                                                             |
|                    |                            | 20800 to 21400    | 20800 (2505.0MHz),<br>21400 (2565.0MHz)                       | 10 MHz            | QPSK                                | 50 RB / 0 RB Offset                                                                                                                                             |
|                    |                            | 20825 to 21375    | 20825 (2507.5MHz),<br>21375 (2562.5MHz)                       | 15 MHz            | QPSK                                | 75 RB / 0 RB Offset                                                                                                                                             |
|                    |                            | 20850 to 21350    | 20850 (2510.0MHz),<br>21350 (2560.0MHz)                       | 20 MHz            | QPSK                                | 100 RB / 0 RB Offset                                                                                                                                            |
| -                  | Emission Bandwidth         | 20775 to 21425    | 20775 (2502.5MHz),<br>21100 (2535.0MHz),<br>21425 (2567.5MHz) | 5 MHz             | QPSK / 16QAM /<br>64QAM /<br>256QAM | 25 RB / 0 RB Offset                                                                                                                                             |
|                    |                            | 20800 to 21400    | 20800 (2505.0MHz),<br>21100 (2535.0MHz),<br>21400 (2565.0MHz) | 10 MHz            | QPSK / 16QAM /<br>64QAM /<br>256QAM | 50 RB / 0 RB Offset                                                                                                                                             |
|                    |                            | 20825 to 21375    | 20825 (2507.5MHz),<br>21100 (2535.0MHz),<br>21375 (2562.5MHz) | 15 MHz            | QPSK / 16QAM /<br>64QAM /<br>256QAM | 75 RB / 0 RB Offset                                                                                                                                             |
|                    |                            | 20850 to 21350    | 20850 (2510.0MHz),<br>21100 (2535.0MHz),<br>21350 (2560.0MHz) | 20 MHz            | QPSK / 16QAM /<br>64QAM /<br>256QAM | 100 RB / 0 RB Offset                                                                                                                                            |
| -                  | Emission Mask              | 20775 to 21425    | 20775 (2502.5MHz),<br>21100 (2535.0MHz),<br>21425 (2567.5MHz) | 5 MHz             | QPSK                                | 1 RB / 0 RB Offset<br>1 RB / 24 RB Offset<br>25 RB / 0 RB Offset                                                                                                |
|                    |                            | 20800 to 21400    | 20800 (2505.0MHz),<br>21100 (2535.0MHz),<br>21400 (2565.0MHz) | 10 MHz            | QPSK                                | 1 RB / 0 RB Offset<br>1 RB / 49 RB Offset<br>50 RB / 0 RB Offset                                                                                                |
|                    |                            | 20825 to 21375    | 20825 (2507.5MHz),<br>21100 (2535.0MHz),<br>21375 (2562.5MHz) | 15 MHz            | QPSK                                | 1 RB / 0 RB Offset<br>1 RB / 74 RB Offset<br>75 RB / 0 RB Offset                                                                                                |
|                    |                            | 20850 to 21350    | 20850 (2510.0MHz),<br>21100 (2535.0MHz),<br>21350 (2560.0MHz) | 20 MHz            | QPSK                                | 1 RB / 0 RB Offset<br>1 RB / 99 RB Offset<br>100 RB / 0 RB Offset                                                                                               |

| EUT Configure Mode | Test item                    | Available channel | Tested channel                                                | Channel Bandwidth | Modulation                          | Mode               |
|--------------------|------------------------------|-------------------|---------------------------------------------------------------|-------------------|-------------------------------------|--------------------|
| -                  | Peak to Average Ratio        | 20775 to 21425    | 20775 (2502.5MHz),<br>21100 (2535.0MHz),<br>21425 (2567.5MHz) | 5 MHz             | QPSK / 16QAM /<br>64QAM /<br>256QAM | 1 RB / 0 RB Offset |
|                    |                              | 20800 to 21400    | 20800 (2505.0MHz),<br>21100 (2535.0MHz),<br>21400 (2565.0MHz) | 10 MHz            | QPSK / 16QAM /<br>64QAM /<br>256QAM | 1 RB / 0 RB Offset |
|                    |                              | 20825 to 21375    | 20825 (2507.5MHz),<br>21100 (2535.0MHz),<br>21375 (2562.5MHz) | 15 MHz            | QPSK / 16QAM /<br>64QAM /<br>256QAM | 1 RB / 0 RB Offset |
|                    |                              | 20850 to 21350    | 20850 (2510.0MHz),<br>21100 (2535.0MHz),<br>21350 (2560.0MHz) | 20 MHz            | QPSK / 16QAM /<br>64QAM /<br>256QAM | 1 RB / 0 RB Offset |
| -                  | Conducted Emission           | 20775 to 21425    | 20775 (2502.5MHz),<br>21100 (2535.0MHz),<br>21425 (2567.5MHz) | 5 MHz             | QPSK                                | 1 RB / 0 RB Offset |
|                    |                              | 20800 to 21400    | 20800 (2505.0MHz),<br>21100 (2535.0MHz),<br>21400 (2565.0MHz) | 10 MHz            | QPSK                                | 1 RB / 0 RB Offset |
|                    |                              | 20825 to 21375    | 20825 (2507.5MHz),<br>21100 (2535.0MHz),<br>21375 (2562.5MHz) | 15 MHz            | QPSK                                | 1 RB / 0 RB Offset |
|                    |                              | 20850 to 21350    | 20850 (2510.0MHz),<br>21100 (2535.0MHz),<br>21350 (2560.0MHz) | 20 MHz            | QPSK                                | 1 RB / 0 RB Offset |
| -                  | Radiated Emission Below 1GHz | 20850 to 21350    | 21100 (2535.0MHz)                                             | 20MHz             | QPSK                                | 1 RB / 0 RB Offset |
| -                  | Radiated Emission Above 1GHz | 20775 to 21425    | 20775 (2502.5MHz),<br>21100 (2535.0MHz),<br>21425 (2567.5MHz) | 5MHz              | QPSK                                | 1 RB / 0 RB Offset |
|                    |                              | 20850 to 21350    | 20850 (2510.0MHz),<br>21100 (2535.0MHz),<br>21350 (2560.0MHz) | 20MHz             | QPSK                                | 1 RB / 0 RB Offset |

Note:

1. The measured output power for QPSK mode is higher than the measured output power for 16QAM, 64QAM and 256QAM modes. Therefore the radiated emission test items was performed under QPSK mode only.
2. For radiated emission below 1GHz, select the worst radiated emission channel (above 1GHz) for final testing.

# LTE Band 12

| EUT Configure Mode | Test item                  | Available channel | Tested channel                                            | Channel Bandwidth | Modulation                          | Mode                                                                                                                                                           |
|--------------------|----------------------------|-------------------|-----------------------------------------------------------|-------------------|-------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------|
| -                  | ERP                        | 23017 to 23173    | 23017(699.7MHz),<br>23095(707.5MHz),<br>23173(715.3MHz)   | 1.4MHz            | QPSK / 16QAM /<br>64QAM /<br>256QAM | 1 RB / 0 RB Offset<br>1 RB / 2 RB Offset<br>1 RB / 5 RB Offset<br>3 RB / 0 RB Offset<br>3 RB / 1 RB Offset<br>3 RB / 3 RB Offset<br>6 RB / 0 RB Offset         |
|                    |                            | 23025 to 23165    | 23025(700.5MHz),<br>23095(707.5MHz),<br>23165(714.5MHz)   | 3MHz              | QPSK / 16QAM /<br>64QAM /<br>256QAM | 1 RB / 0 RB Offset<br>1 RB / 7 RB Offset<br>1 RB / 14 RB Offset<br>8 RB / 0 RB Offset<br>8 RB / 3 RB Offset<br>8 RB / 7 RB Offset<br>15 RB / 0 RB Offset       |
|                    |                            | 23035 to 23155    | 23035(701.5MHz),<br>23095(707.5MHz),<br>23155(713.5MHz)   | 5MHz              | QPSK / 16QAM /<br>64QAM /<br>256QAM | 1 RB / 0 RB Offset<br>1 RB / 12 RB Offset<br>1 RB / 24 RB Offset<br>12 RB / 0 RB Offset<br>12 RB / 6 RB Offset<br>12 RB / 13 RB Offset<br>25 RB / 0 RB Offset  |
|                    |                            | 23060 to 23130    | 23060(704.0MHz),<br>23095(707.5 MHz),<br>23130(711.0 MHz) | 10MHz             | QPSK / 16QAM /<br>64QAM /<br>256QAM | 1 RB / 0 RB Offset<br>1 RB / 24 RB Offset<br>1 RB / 49 RB Offset<br>25 RB / 0 RB Offset<br>25 RB / 12 RB Offset<br>25 RB / 25 RB Offset<br>50 RB / 0 RB Offset |
| -                  | Modulation Characteristics | 23060 to 23130    | 23095(707.5MHz)                                           | 10MHz             | QPSK / 16QAM /<br>64QAM /<br>256QAM | 50 RB / 0 RB Offset                                                                                                                                            |
| -                  | Frequency Stability        | 23017 to 23173    | 23017(699.7MHz),<br>23173(715.3MHz)                       | 1.4MHz            | QPSK                                | 6 RB / 0 RB Offset                                                                                                                                             |
|                    |                            | 23025 to 23165    | 23025(700.5MHz),<br>23165(714.5MHz)                       | 3MHz              | QPSK                                | 15 RB / 0 RB Offset                                                                                                                                            |
|                    |                            | 23035 to 23155    | 23035(701.5MHz),<br>23155(713.5MHz)                       | 5MHz              | QPSK                                | 25 RB / 0 RB Offset                                                                                                                                            |
|                    |                            | 23060 to 23130    | 23060(704.0MHz),<br>23130(711.0MHz)                       | 10MHz             | QPSK                                | 50 RB / 0 RB Offset                                                                                                                                            |
| -                  | Emission Bandwidth         | 23017 to 23173    | 23017(699.7MHz),<br>23095(707.5MHz),<br>23173(715.3MHz)   | 1.4MHz            | QPSK / 16QAM /<br>64QAM /<br>256QAM | 6 RB / 0 RB Offset                                                                                                                                             |
|                    |                            | 23025 to 23165    | 23025(700.5MHz),<br>23095(707.5MHz),<br>23165(714.5MHz)   | 3MHz              | QPSK / 16QAM /<br>64QAM /<br>256QAM | 15 RB / 0 RB Offset                                                                                                                                            |
|                    |                            | 23035 to 23155    | 23035(701.5MHz),<br>23095(707.5MHz),<br>23155(713.5MHz)   | 5MHz              | QPSK / 16QAM /<br>64QAM /<br>256QAM | 25 RB / 0 RB Offset                                                                                                                                            |
|                    |                            | 23060 to 23130    | 23060(704.0MHz),<br>23095(707.5MHz),<br>23130(711.0MHz)   | 10MHz             | QPSK / 16QAM /<br>64QAM /<br>256QAM | 50 RB / 0 RB Offset                                                                                                                                            |
| -                  | Band Edge                  | 23017 to 23173    | 23017(699.7MHz),<br>23173(715.3MHz)                       | 1.4MHz            | QPSK                                | 1 RB / 0 RB Offset<br>1 RB / 5 RB Offset<br>6 RB / 0 RB Offset                                                                                                 |
|                    |                            | 23025 to 23165    | 23025(700.5MHz),<br>23165(714.5MHz)                       | 3MHz              | QPSK                                | 1 RB / 0 RB Offset<br>1 RB / 14 RB Offset<br>15 RB / 0 RB Offset                                                                                               |
|                    |                            | 23035 to 23155    | 23035(701.5MHz),<br>23155(713.5MHz)                       | 5MHz              | QPSK                                | 1 RB / 0 RB Offset<br>1 RB / 24 RB Offset<br>25 RB / 0 RB Offset                                                                                               |
|                    |                            | 23060 to 23130    | 23060(704.0MHz),<br>23130(711.0MHz)                       | 10MHz             | QPSK                                | 1 RB / 0 RB Offset<br>1 RB / 49 RB Offset<br>50 RB / 0 RB Offset                                                                                               |

| EUT Configure Mode | Test item                    | Available channel | Tested channel                                          | Channel Bandwidth | Modulation                          | Mode               |
|--------------------|------------------------------|-------------------|---------------------------------------------------------|-------------------|-------------------------------------|--------------------|
| -                  | Peak to Average Ratio        | 23017 to 23173    | 23017(699.7MHz),<br>23095(707.5MHz),<br>23173(715.3MHz) | 1.4MHz            | QPSK / 16QAM /<br>64QAM /<br>256QAM | 1 RB / 0 RB Offset |
|                    |                              | 23025 to 23165    | 23025(700.5MHz),<br>23095(707.5MHz),<br>23165(714.5MHz) | 3MHz              | QPSK / 16QAM /<br>64QAM /<br>256QAM | 1 RB / 0 RB Offset |
|                    |                              | 23035 to 23155    | 23035(701.5MHz),<br>23095(707.5MHz),<br>23155(713.5MHz) | 5MHz              | QPSK / 16QAM /<br>64QAM /<br>256QAM | 1 RB / 0 RB Offset |
|                    |                              | 23060 to 23130    | 23060(704.0MHz),<br>23095(707.5MHz),<br>23130(711.0MHz) | 10MHz             | QPSK / 16QAM /<br>64QAM /<br>256QAM | 1 RB / 0 RB Offset |
| -                  | Conducted Emission           | 23017 to 23173    | 23017(699.7MHz),<br>23095(707.5MHz),<br>23173(715.3MHz) | 1.4MHz            | QPSK                                | 1 RB / 0 RB Offset |
|                    |                              | 23025 to 23165    | 23025(700.5MHz),<br>23095(707.5MHz),<br>23165(714.5MHz) | 3MHz              | QPSK                                | 1 RB / 0 RB Offset |
|                    |                              | 23035 to 23155    | 23035(701.5MHz),<br>23095(707.5MHz),<br>23155(713.5MHz) | 5MHz              | QPSK                                | 1 RB / 0 RB Offset |
|                    |                              | 23060 to 23130    | 23060(704.0MHz),<br>23095(707.5MHz),<br>23130(711.0MHz) | 10MHz             | QPSK                                | 1 RB / 0 RB Offset |
| -                  | Radiated Emission Below 1GHz | 23017 to 23173    | 23017(699.7MHz)                                         | 1.4MHz            | QPSK                                | 1 RB / 0 RB Offset |
| -                  | Radiated Emission Above 1GHz | 23017 to 23173    | 23017(699.7MHz),<br>23095(707.5MHz),<br>23173(715.3MHz) | 1.4MHz            | QPSK                                | 1 RB / 0 RB Offset |
|                    |                              | 23035 to 23155    | 23035(701.5MHz),<br>23095(707.5MHz),<br>23155(713.5MHz) | 5MHz              | QPSK                                | 1 RB / 0 RB Offset |
|                    |                              | 23060 to 23130    | 23060(704.0MHz),<br>23095(707.5MHz),<br>23130(711.0MHz) | 10MHz             | QPSK                                | 1 RB / 0 RB Offset |

**Note:**

1. For radiated emission below 1GHz, select the worst radiated emission (above 1GHz) channel for final testing.
2. For radiated emission above 1GHz, according to 3GPP 36.521 Section 6.6.3.1.4, choose the 1.4MHz & highest channel bandwidth for final test.
3. The conducted output power for QPSK, 16QAM, 64QAM and 256QAM measured value of QPSK is higher than 16QAM, 64QAM and 256QAM mode. Therefore, only ERP, Modulation characteristics, occupied bandwidth and Peak to average ratio items had been tested under QPSK, 16QAM, 64QAM and 256QAM modes, the other test items were performed under QPSK mode only.

# LTE Band 13

| EUT Configure Mode | Test item                    | Available channel | Tested channel                                          | Channel Bandwidth | Modulation                          | Mode                                                                                                                                                           |
|--------------------|------------------------------|-------------------|---------------------------------------------------------|-------------------|-------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------|
| -                  | ERP                          | 23205 to 23255    | 23205(779.5MHz),<br>23230(782.0MHz),<br>23255(784.5MHz) | 5MHz              | QPSK / 16QAM /<br>64QAM /<br>256QAM | 1 RB / 0 RB Offset<br>1 RB / 12 RB Offset<br>1 RB / 24 RB Offset<br>12 RB / 0 RB Offset<br>12 RB / 6 RB Offset<br>12 RB / 13 RB Offset<br>25 RB / 0 RB Offset  |
|                    |                              | 23230             | 23230(782.0MHz)                                         | 10MHz             | QPSK / 16QAM /<br>64QAM /<br>256QAM | 1 RB / 0 RB Offset<br>1 RB / 24 RB Offset<br>1 RB / 49 RB Offset<br>25 RB / 0 RB Offset<br>25 RB / 12 RB Offset<br>25 RB / 25 RB Offset<br>50 RB / 0 RB Offset |
| -                  | Modulation Characteristics   | 23230             | 23230(782.0MHz),                                        | 10MHz             | QPSK / 16QAM /<br>64QAM /<br>256QAM | 50 RB / 0 RB Offset                                                                                                                                            |
| -                  | Frequency Stability          | 23205 to 23255    | 23205(779.5MHz),<br>23255(784.5MHz)                     | 5MHz              | QPSK                                | 25 RB / 0 RB Offset                                                                                                                                            |
|                    |                              | 23230             | 23230(782.0MHz),                                        | 10MHz             | QPSK                                | 50 RB / 0 RB Offset                                                                                                                                            |
| -                  | Emission Bandwidth           | 23205 to 23255    | 23205(779.5MHz),<br>23230(782.0MHz),<br>23255(784.5MHz) | 5MHz              | QPSK / 16QAM /<br>64QAM /<br>256QAM | 25 RB / 0 RB Offset                                                                                                                                            |
|                    |                              | 23230             | 23230(782.0MHz)                                         | 10MHz             | QPSK / 16QAM /<br>64QAM /<br>256QAM | 50 RB / 0 RB Offset                                                                                                                                            |
| -                  | Band Edge                    | 23205 to 23255    | 23205(779.5MHz),<br>23255(784.5MHz)                     | 5MHz              | QPSK                                | 1 RB / 0 RB Offset<br>1 RB / 24 RB Offset<br>25 RB / 0 RB Offset                                                                                               |
|                    |                              | 23230             | 23230(782.0MHz)                                         | 10MHz             | QPSK                                | 1 RB / 0 RB Offset<br>1 RB / 49 RB Offset<br>50 RB / 0 RB Offset                                                                                               |
| -                  | Peak to Average Ratio        | 23205 to 23255    | 23205(779.5MHz),<br>23230(782.0MHz),<br>23255(784.5MHz) | 5MHz              | QPSK / 16QAM /<br>64QAM /<br>256QAM | 1 RB / 0 RB Offset                                                                                                                                             |
|                    |                              | 23230             | 23230(782.0MHz)                                         | 10MHz             | QPSK / 16QAM /<br>64QAM /<br>256QAM | 1 RB / 0 RB Offset                                                                                                                                             |
| -                  | Conducted Emission           | 23205 to 23255    | 23205(779.5MHz),<br>23230(782.0MHz),<br>23255(784.5MHz) | 5MHz              | QPSK                                | 1 RB / 0 RB Offset                                                                                                                                             |
|                    |                              | 23230             | 23230(782.0MHz)                                         | 10MHz             | QPSK                                | 1 RB / 0 RB Offset                                                                                                                                             |
| -                  | Radiated Emission Below 1GHz | 23230             | 23230(782.0MHz)                                         | 10MHz             | QPSK                                | 1 RB / 0 RB Offset                                                                                                                                             |
| -                  | Radiated Emission Above 1GHz | 23205 to 23255    | 23205(779.5MHz),<br>23230(782.0MHz),<br>23255(784.5MHz) | 5MHz              | QPSK                                | 1 RB / 0 RB Offset                                                                                                                                             |
|                    |                              | 23230             | 23230(782.0MHz)                                         | 10MHz             | QPSK                                | 1 RB / 0 RB Offset                                                                                                                                             |

## Note:

1. The measured output power for QPSK mode is higher than the measured output power for 16QAM, 64QAM and 256QAM modes. Therefore the radiated emission test items was performed under QPSK mode only.
2. For radiated emission below 1GHz, select the worst radiated emission channel (above 1GHz) for final testing.

# LTE Band 14

| EUT Configure Mode | Test item                    | Available channel | Tested channel                                          | Channel Bandwidth | Modulation                       | Mode                                                                                                                                                           |
|--------------------|------------------------------|-------------------|---------------------------------------------------------|-------------------|----------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------|
| -                  | ERP                          | 23305 to 23355    | 23305(790.5MHz),<br>23330(793.0MHz),<br>23355(795.5MHz) | 5MHz              | QPSK / 16QAM /<br>64QAM / 256QAM | 1 RB / 0 RB Offset<br>1 RB / 12 RB Offset<br>1 RB / 24 RB Offset<br>12 RB / 0 RB Offset<br>12 RB / 6 RB Offset<br>12 RB / 13 RB Offset<br>25 RB / 0 RB Offset  |
|                    |                              | 23330             | 23330(793.0MHz)                                         | 10MHz             | QPSK / 16QAM /<br>64QAM / 256QAM | 1 RB / 0 RB Offset<br>1 RB / 24 RB Offset<br>1 RB / 49 RB Offset<br>25 RB / 0 RB Offset<br>25 RB / 12 RB Offset<br>25 RB / 25 RB Offset<br>50 RB / 0 RB Offset |
| -                  | Modulation Characteristics   | 23330             | 23330(793.0MHz)                                         | 10MHz             | QPSK / 16QAM /<br>64QAM / 256QAM | 50 RB / 0 RB Offset                                                                                                                                            |
| -                  | Frequency Stability          | 23305 to 23355    | 23305(790.5MHz),<br>23355(795.5MHz)                     | 5MHz              | QPSK                             | 25 RB / 0 RB Offset                                                                                                                                            |
|                    |                              | 23330             | 23330(793.0MHz)                                         | 10MHz             | QPSK                             | 50 RB / 0 RB Offset                                                                                                                                            |
| -                  | Occupied Bandwidth           | 23305 to 23355    | 23305(790.5MHz),<br>23330(793.0MHz),<br>23355(795.5MHz) | 5MHz              | QPSK / 16QAM /<br>64QAM / 256QAM | 25 RB / 0 RB Offset                                                                                                                                            |
|                    |                              | 23330             | 23330(793.0MHz)                                         | 10MHz             | QPSK / 16QAM /<br>64QAM / 256QAM | 50 RB / 0 RB Offset                                                                                                                                            |
| -                  | Emission Mask                | 23305 to 23355    | 23305(790.5MHz),<br>23330(793.0MHz),<br>23355(795.5MHz) | 5MHz              | QPSK                             | 1 RB / 0 RB Offset<br>1 RB / 24 RB Offset<br>25 RB / 0 RB Offset                                                                                               |
|                    |                              | 23330             | 23330(793.0MHz)                                         | 10MHz             | QPSK                             | 1 RB / 0 RB Offset<br>1 RB / 49 RB Offset<br>50 RB / 0 RB Offset                                                                                               |
| -                  | Conducted Emission           | 23305 to 23355    | 23305(790.5MHz),<br>23330(793.0MHz),<br>23355(795.5MHz) | 5MHz              | QPSK                             | 1 RB / 0 RB Offset                                                                                                                                             |
|                    |                              | 23330             | 23330(793.0MHz)                                         | 10MHz             | QPSK                             | 1 RB / 0 RB Offset                                                                                                                                             |
| -                  | Radiated Emission below 1GHz | 23305 to 23355    | 23330(793.0MHz)                                         | 5MHz              | QPSK                             | 1 RB / 0 RB Offset                                                                                                                                             |
| -                  | Radiated Emission above 1GHz | 23305 to 23355    | 23305(790.5MHz),<br>23330(793.0MHz),<br>23355(795.5MHz) | 5MHz              | QPSK                             | 1 RB / 0 RB Offset                                                                                                                                             |
|                    |                              | 23330             | 23330(793.0MHz)                                         | 10MHz             | QPSK                             | 1 RB / 0 RB Offset                                                                                                                                             |

## Note:

1. The conducted output power for QPSK, 16QAM, 64QAM and 256QAM measured value of QPSK is higher than 16QAM, 64QAM and 256QAM mode. Therefore, only ERP, Modulation Characteristics, and Emission Bandwidth items had been tested under QPSK, 16QAM, 64QAM and 256QAM modes, the other test items were performed under QPSK mode only.
2. For radiated emission below 1GHz, select the worst radiated emission (above 1GHz) channel for final testing.

# LTE Band 30

| EUT Configure Mode | Test item                    | Available channel | Tested channel                                                | Channel Bandwidth | Modulation                          | Mode                                                                                                                                                           |
|--------------------|------------------------------|-------------------|---------------------------------------------------------------|-------------------|-------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------|
| -                  | EIRP                         | 27685 to 27735    | 27685 (2307.5MHz),<br>27710 (2310.0MHz),<br>27735 (2312.5MHz) | 5MHz              | QPSK / 16QAM /<br>64QAM /<br>256QAM | 1 RB / 0 RB Offset<br>1 RB / 12 RB Offset<br>1 RB / 24 RB Offset<br>12 RB / 0 RB Offset<br>12 RB / 6 RB Offset<br>12 RB / 13 RB Offset<br>25 RB / 0 RB Offset  |
|                    |                              | 27710             | 27710 (2310.0MHz)                                             | 10MHz             | QPSK / 16QAM /<br>64QAM /<br>256QAM | 1 RB / 0 RB Offset<br>1 RB / 24 RB Offset<br>1 RB / 49 RB Offset<br>25 RB / 0 RB Offset<br>25 RB / 12 RB Offset<br>25 RB / 25 RB Offset<br>50 RB / 0 RB Offset |
| -                  | Modulation Characteristics   | 27710             | 27710 (2310.0MHz)                                             | 10MHz             | QPSK / 16QAM /<br>64QAM /<br>256QAM | 50 RB / 0 RB Offset                                                                                                                                            |
| -                  | Frequency Stability          | 27685 to 27735    | 27685 (2307.5MHz),<br>27735 (2312.5MHz)                       | 5MHz              | QPSK                                | 25 RB / 0 RB Offset                                                                                                                                            |
|                    |                              | 27710             | 27710 (2310.0MHz)                                             | 10MHz             | QPSK                                | 50 RB / 0 RB Offset                                                                                                                                            |
| -                  | Emission Bandwidth           | 27685 to 27735    | 27685 (2307.5MHz),<br>27710 (2310.0MHz),<br>27735 (2312.5MHz) | 5MHz              | QPSK / 16QAM /<br>64QAM /<br>256QAM | 25 RB / 0 RB Offset                                                                                                                                            |
|                    |                              | 27710             | 27710 (2310.0MHz)                                             | 10MHz             | QPSK / 16QAM /<br>64QAM /<br>256QAM | 50 RB / 0 RB Offset                                                                                                                                            |
| -                  | Emission Mask                | 27685 to 27735    | 27685 (2307.5MHz),<br>27735 (2312.5MHz)                       | 5MHz              | QPSK                                | 1 RB / 0 RB Offset<br>25 RB / 0 RB Offset                                                                                                                      |
|                    |                              | 27710             | 27710 (2310.0MHz)                                             | 10MHz             | QPSK                                | 1 RB / 0 RB Offset<br>1 RB / 49 RB Offset<br>50 RB / 0 RB Offset                                                                                               |
| -                  | Conducted Emission           | 27685 to 27735    | 27685 (2307.5MHz),<br>27710 (2310.0MHz),<br>27735 (2312.5MHz) | 5MHz              | QPSK                                | 1 RB / 0 RB Offset                                                                                                                                             |
|                    |                              | 27710             | 27710 (2310.0MHz)                                             | 10MHz             | QPSK                                | 1 RB / 0 RB Offset                                                                                                                                             |
| -                  | Radiated Emission Below 1GHz | 27710             | 27710 (2310.0MHz)                                             | 10MHz             | QPSK                                | 1 RB / 0 RB Offset                                                                                                                                             |
| -                  | Radiated Emission Above 1GHz | 27685 to 27735    | 27685 (2307.5MHz),<br>27710 (2310.0MHz),<br>27735 (2312.5MHz) | 5MHz              | QPSK                                | 1 RB / 0 RB Offset                                                                                                                                             |
|                    |                              | 27710             | 27710 (2310.0MHz)                                             | 10MHz             | QPSK                                | 1 RB / 0 RB Offset                                                                                                                                             |

## Note:

1. The measured output power for QPSK mode is higher than the measured output power for 16QAM, 64QAM and 256QAM modes. Therefore the radiated emission test items was performed under QPSK mode only.
2. For radiated emission below 1GHz, select the worst radiated emission channel (above 1GHz) for final testing.

# LTE Band 41

| EUT Configure Mode | Test item                  | Available channel | Tested channel                                                | Channel Bandwidth | Modulation                          | Mode                                                                                                                                                            |
|--------------------|----------------------------|-------------------|---------------------------------------------------------------|-------------------|-------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------|
| -                  | EIRP                       | 39675 to 41565    | 39675 (2498.5MHz),<br>40620 (2593.0MHz),<br>41565 (2687.5MHz) | 5MHz              | QPSK / 16QAM /<br>64QAM /<br>256QAM | 1 RB / 0 RB Offset<br>1 RB / 12 RB Offset<br>1 RB / 24 RB Offset<br>12 RB / 0 RB Offset<br>12 RB / 6 RB Offset<br>12 RB / 13 RB Offset<br>25 RB / 0 RB Offset   |
|                    |                            | 39700 to 41540    | 39700 (2501.0MHz),<br>40620 (2593.0MHz),<br>41540 (2685.0MHz) | 10MHz             | QPSK / 16QAM /<br>64QAM /<br>256QAM | 1 RB / 0 RB Offset<br>1 RB / 24 RB Offset<br>1 RB / 49 RB Offset<br>25 RB / 0 RB Offset<br>25 RB / 12 RB Offset<br>25 RB / 25 RB Offset<br>50 RB / 0 RB Offset  |
|                    |                            | 39725 to 41515    | 39725 (2503.5MHz),<br>40620 (2593.0MHz),<br>41515 (2682.5MHz) | 15MHz             | QPSK / 16QAM /<br>64QAM /<br>256QAM | 1 RB / 0 RB Offset<br>1 RB / 37 RB Offset<br>1 RB / 74 RB Offset<br>36 RB / 0 RB Offset<br>36 RB / 19 RB Offset<br>36 RB / 39 RB Offset<br>75 RB / 0 RB Offset  |
|                    |                            | 39750 to 41490    | 39750 (2506.0MHz),<br>40620 (2593.0MHz),<br>41490 (2680.0MHz) | 20MHz             | QPSK / 16QAM /<br>64QAM /<br>256QAM | 1 RB / 0 RB Offset<br>1 RB / 50 RB Offset<br>1 RB / 99 RB Offset<br>50 RB / 0 RB Offset<br>50 RB / 25 RB Offset<br>50 RB / 50 RB Offset<br>100 RB / 0 RB Offset |
| -                  | Modulation Characteristics | 39700 to 41540    | 40620 (2593.0MHz)                                             | 10MHz             | QPSK / 16QAM /<br>64QAM /<br>256QAM | 50 RB / 0 RB Offset                                                                                                                                             |
| -                  | Frequency Stability        | 39675 to 41565    | 39675 (2498.5MHz),<br>41565 (2687.5MHz)                       | 5MHz              | QPSK                                | 25 RB / 0 RB Offset                                                                                                                                             |
|                    |                            | 39700 to 41540    | 39700 (2501.0MHz),<br>41540 (2685.0MHz)                       | 10MHz             | QPSK                                | 50 RB / 0 RB Offset                                                                                                                                             |
|                    |                            | 39725 to 41515    | 39725 (2503.5MHz),<br>41515 (2682.5MHz)                       | 15MHz             | QPSK                                | 75 RB / 0 RB Offset                                                                                                                                             |
|                    |                            | 39750 to 41490    | 39750 (2506.0MHz),<br>41490 (2680.0MHz)                       | 20MHz             | QPSK                                | 100 RB / 0 RB Offset                                                                                                                                            |
| -                  | Emission Bandwidth         | 39675 to 41565    | 39675 (2498.5MHz),<br>40620 (2593.0MHz),<br>41565 (2687.5MHz) | 5MHz              | QPSK / 16QAM /<br>64QAM /<br>256QAM | 25 RB / 0RB Offset                                                                                                                                              |
|                    |                            | 39700 to 41540    | 39700 (2501.0MHz),<br>40620 (2593.0MHz),<br>41540 (2685.0MHz) | 10MHz             | QPSK / 16QAM /<br>64QAM /<br>256QAM | 50 RB / 0RB Offset                                                                                                                                              |
|                    |                            | 39725 to 41515    | 39725 (2503.5MHz),<br>40620 (2593.0MHz),<br>41515 (2682.5MHz) | 15MHz             | QPSK / 16QAM /<br>64QAM /<br>256QAM | 75 RB / 0 RB Offset                                                                                                                                             |
|                    |                            | 39750 to 41490    | 39750 (2506.0MHz),<br>40620 (2593.0MHz),<br>41490 (2680.0MHz) | 20MHz             | QPSK / 16QAM /<br>64QAM /<br>256QAM | 100 RB / 0 RB Offset                                                                                                                                            |
| -                  | Band Edge                  | 39675 to 41565    | 39675 (2498.5MHz),<br>40620 (2593.0MHz),<br>41565 (2687.5MHz) | 5MHz              | QPSK                                | 1 RB / 0 RB Offset<br>1 RB / 24 RB Offset<br>25 RB / 0 RB Offset                                                                                                |
|                    |                            | 39700 to 41540    | 39700 (2501.0MHz),<br>40620 (2593.0MHz),<br>41540 (2685.0MHz) | 10MHz             | QPSK                                | 1 RB / 0 RB Offset<br>1 RB / 49 RB Offset<br>50 RB / 0 RB Offset                                                                                                |
|                    |                            | 39725 to 41515    | 39725 (2503.5MHz),<br>40620 (2593.0MHz),<br>41515 (2682.5MHz) | 15MHz             | QPSK                                | 1 RB / 0 RB Offset<br>1 RB / 74 RB Offset<br>75 RB / 0 RB Offset                                                                                                |
|                    |                            | 39750 to 41490    | 39750 (2506.0MHz),<br>40620 (2593.0MHz),<br>41490 (2680.0MHz) | 20MHz             | QPSK                                | 1 RB / 0 RB Offset<br>1 RB / 99 RB Offset<br>100 RB / 0 RB Offset                                                                                               |

| EUT Configure Mode | Test item                    | Available channel | Tested channel                                                | Channel Bandwidth | Modulation                          | Mode               |
|--------------------|------------------------------|-------------------|---------------------------------------------------------------|-------------------|-------------------------------------|--------------------|
| -                  | Peak to Average Ratio        | 39675 to 41565    | 39675 (2498.5MHz),<br>40620 (2593.0MHz),<br>41565 (2687.5MHz) | 5MHz              | QPSK / 16QAM /<br>64QAM /<br>256QAM | 1 RB / 0 RB Offset |
|                    |                              | 39700 to 41540    | 39700 (2501.0MHz),<br>40620 (2593.0MHz),<br>41540 (2685.0MHz) | 10MHz             | QPSK / 16QAM /<br>64QAM /<br>256QAM | 1 RB / 0 RB Offset |
|                    |                              | 39725 to 41515    | 39725 (2503.5MHz),<br>40620 (2593.0MHz),<br>41515 (2682.5MHz) | 15MHz             | QPSK / 16QAM /<br>64QAM /<br>256QAM | 1 RB / 0 RB Offset |
|                    |                              | 39750 to 41490    | 39750 (2506.0MHz),<br>40620 (2593.0MHz),<br>41490 (2680.0MHz) | 20MHz             | QPSK / 16QAM /<br>64QAM /<br>256QAM | 1 RB / 0 RB Offset |
| -                  | Conducted Emission           | 39675 to 41565    | 39675 (2498.5MHz),<br>40620 (2593.0MHz),<br>41565 (2687.5MHz) | 5MHz              | QPSK                                | 1 RB / 0 RB Offset |
|                    |                              | 39700 to 41540    | 39700 (2501.0MHz),<br>40620 (2593.0MHz),<br>41540 (2685.0MHz) | 10MHz             | QPSK                                | 1 RB / 0 RB Offset |
|                    |                              | 39725 to 41515    | 39725 (2503.5MHz),<br>40620 (2593.0MHz),<br>41515 (2682.5MHz) | 15MHz             | QPSK                                | 1 RB / 0 RB Offset |
|                    |                              | 39750 to 41490    | 39750 (2506.0MHz),<br>40620 (2593.0MHz),<br>41490 (2680.0MHz) | 20MHz             | QPSK                                | 1 RB / 0 RB Offset |
| -                  | Radiated Emission Below 1GHz | 39750 to 41490    | 40620 (2593.0MHz)                                             | 20MHz             | QPSK                                | 1 RB / 0 RB Offset |
| -                  | Radiated Emission Above 1GHz | 39675 to 41565    | 39675 (2498.5MHz),<br>40620 (2593.0MHz),<br>41565 (2687.5MHz) | 5MHz              | QPSK                                | 1 RB / 0 RB Offset |
|                    |                              | 39750 to 41490    | 39750 (2506.0MHz),<br>40620 (2593.0MHz),<br>41490 (2680.0MHz) | 20MHz             | QPSK                                | 1 RB / 0 RB Offset |

**Note:**

1. For radiated emission below 1GHz, select the worst radiated emission (above 1GHz) channel for final testing.
2. The conducted output power for QPSK, 16QAM, 64QAM and 256QAM measured value of QPSK is higher than 16QAM, 64QAM and 256QAM mode. Therefore, only EIRP, Modulation characteristics, occupied bandwidth and Peak to average ratio items had been tested under QPSK, 16QAM, 64QAM and 256QAM modes, the other test items were performed under QPSK mode only.

# LTE Band 66

| EUT Configure Mode | Test Item                  | Available Channel | Tested Channel                                                   | Channel Bandwidth | Modulation                             | Mode                                                                                                                                                            |
|--------------------|----------------------------|-------------------|------------------------------------------------------------------|-------------------|----------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------|
| -                  | EIRP                       | 131979 to 132665  | 131979 (1710.7MHz),<br>132322 (1745.0MHz),<br>132665 (1779.3MHz) | 1.4MHz            | QPSK /<br>16QAM /<br>64QAM /<br>256QAM | 1 RB / 0 RB Offset<br>1 RB / 2 RB Offset<br>1 RB / 5 RB Offset<br>3 RB / 0 RB Offset<br>3 RB / 1 RB Offset<br>3 RB / 3 RB Offset<br>6 RB / 0 RB Offset          |
|                    |                            | 131987 to 132657  | 131987 (1711.5MHz),<br>132322 (1745.0MHz),<br>132657 (1778.5MHz) | 3MHz              | QPSK /<br>16QAM /<br>64QAM /<br>256QAM | 1 RB / 0 RB Offset<br>1 RB / 7 RB Offset<br>1 RB / 14 RB Offset<br>8 RB / 0 RB Offset<br>8 RB / 3 RB Offset<br>8 RB / 7 RB Offset<br>15 RB / 0 RB Offset        |
|                    |                            | 131997 to 132647  | 131997 (1712.5MHz),<br>132322 (1745.0MHz),<br>132647 (1777.5MHz) | 5MHz              | QPSK /<br>16QAM /<br>64QAM /<br>256QAM | 1 RB / 0 RB Offset<br>1 RB / 12 RB Offset<br>1 RB / 24 RB Offset<br>12 RB / 0 RB Offset<br>12 RB / 6 RB Offset<br>12 RB / 13 RB Offset<br>25 RB / 0 RB Offset   |
|                    |                            | 132022 to 132622  | 132022 (1715.0MHz),<br>132322 (1745.0MHz),<br>132622 (1775.0MHz) | 10MHz             | QPSK /<br>16QAM /<br>64QAM /<br>256QAM | 1 RB / 0 RB Offset<br>1 RB / 24 RB Offset<br>1 RB / 49 RB Offset<br>25 RB / 0 RB Offset<br>25 RB / 12 RB Offset<br>25 RB / 25 RB Offset<br>50 RB / 0 RB Offset  |
|                    |                            | 132047 to 132597  | 132047 (1717.5MHz),<br>132322 (1745.0MHz),<br>132597 (1772.5MHz) | 15MHz             | QPSK /<br>16QAM /<br>64QAM /<br>256QAM | 1 RB / 0 RB Offset<br>1 RB / 37 RB Offset<br>1 RB / 74 RB Offset<br>36 RB / 0 RB Offset<br>36 RB / 19 RB Offset<br>36 RB / 39 RB Offset<br>75 RB / 0 RB Offset  |
|                    |                            | 132072 to 132572  | 132072 (1720.0MHz),<br>132322 (1745.0MHz),<br>132572 (1770.0MHz) | 20MHz             | QPSK /<br>16QAM /<br>64QAM /<br>256QAM | 1 RB / 0 RB Offset<br>1 RB / 50 RB Offset<br>1 RB / 99 RB Offset<br>50 RB / 0 RB Offset<br>50 RB / 25 RB Offset<br>50 RB / 50 RB Offset<br>100 RB / 0 RB Offset |
| -                  | Modulation Characteristics | 132072 to 132572  | 132322 (1745.0MHz)                                               | 20MHz             | QPSK /<br>16QAM /<br>64QAM /<br>256QAM | 100 RB / 0 RB Offset                                                                                                                                            |
| -                  | Frequency Stability        | 131979 to 132665  | 131979 (1710.7MHz),<br>132665 (1779.3MHz)                        | 1.4MHz            | QPSK                                   | 6 RB / 0 RB Offset                                                                                                                                              |
|                    |                            | 131987 to 132657  | 131987 (1711.5MHz),<br>132657 (1778.5MHz)                        | 3MHz              | QPSK                                   | 15 RB / 0 RB Offset                                                                                                                                             |
|                    |                            | 131997 to 132647  | 131997 (1712.5MHz),<br>132647 (1777.5MHz)                        | 5MHz              | QPSK                                   | 25 RB / 0 RB Offset                                                                                                                                             |
|                    |                            | 132022 to 132622  | 132022 (1715.0MHz),<br>132622 (1775.0MHz)                        | 10MHz             | QPSK                                   | 50 RB / 0 RB Offset                                                                                                                                             |
|                    |                            | 132047 to 132597  | 132047 (1717.5MHz),<br>132597 (1772.5MHz)                        | 15MHz             | QPSK                                   | 75 RB / 0 RB Offset                                                                                                                                             |
|                    |                            | 132072 to 132572  | 132072 (1720.0MHz),<br>132572 (1770.0MHz)                        | 20MHz             | QPSK                                   | 100 RB / 0 RB Offset                                                                                                                                            |

| EUT Configure Mode | Test Item             | Available Channel | Tested Channel                                                   | Channel Bandwidth | Modulation                    | Mode                                                              |
|--------------------|-----------------------|-------------------|------------------------------------------------------------------|-------------------|-------------------------------|-------------------------------------------------------------------|
| -                  | Emission Bandwidth    | 131979 to 132665  | 131979 (1710.7MHz),<br>132322 (1745.0MHz),<br>132665 (1779.3MHz) | 1.4MHz            | QPSK / 16QAM / 64QAM / 256QAM | 6 RB / 0 RB Offset                                                |
|                    |                       | 131987 to 132657  | 131987 (1711.5MHz),<br>132322 (1745.0MHz),<br>132657 (1778.5MHz) | 3MHz              | QPSK / 16QAM / 64QAM / 256QAM | 15 RB / 0 RB Offset                                               |
|                    |                       | 131997 to 132647  | 131997 (1712.5MHz),<br>132322 (1745.0MHz),<br>132647 (1777.5MHz) | 5MHz              | QPSK / 16QAM / 64QAM / 256QAM | 25 RB / 0 RB Offset                                               |
|                    |                       | 132022 to 132622  | 132022 (1715.0MHz),<br>132322 (1745.0MHz),<br>132622 (1775.0MHz) | 10MHz             | QPSK / 16QAM / 64QAM / 256QAM | 50 RB / 0 RB Offset                                               |
|                    |                       | 132047 to 132597  | 132047 (1717.5MHz),<br>132322 (1745.0MHz),<br>132597 (1772.5MHz) | 15MHz             | QPSK / 16QAM / 64QAM / 256QAM | 75 RB / 0 RB Offset                                               |
|                    |                       | 132072 to 132572  | 132072 (1720.0MHz),<br>132322 (1745.0MHz),<br>132572 (1770.0MHz) | 20MHz             | QPSK / 16QAM / 64QAM / 256QAM | 100 RB / 0 RB Offset                                              |
| -                  | Band Edge             | 131979 to 132665  | 131979 (1710.7MHz),<br>132665 (1779.3MHz)                        | 1.4MHz            | QPSK                          | 1 RB / 0 RB Offset<br>1 RB / 5 RB Offset<br>6 RB / 0 RB Offset    |
|                    |                       | 131987 to 132657  | 131987 (1711.5MHz),<br>132657 (1778.5MHz)                        | 3MHz              | QPSK                          | 1 RB / 0 RB Offset<br>1 RB / 14 RB Offset<br>15 RB / 0 RB Offset  |
|                    |                       | 131997 to 132647  | 131997 (1712.5MHz),<br>132647 (1777.5MHz)                        | 5MHz              | QPSK                          | 1 RB / 0 RB Offset<br>1 RB / 24 RB Offset<br>25 RB / 0 RB Offset  |
|                    |                       | 132022 to 132622  | 132022 (1715.0MHz),<br>132622 (1775.0MHz)                        | 10MHz             | QPSK                          | 1 RB / 0 RB Offset<br>1 RB / 49 RB Offset<br>50 RB / 0 RB Offset  |
|                    |                       | 132047 to 132597  | 132047 (1717.5MHz),<br>132597 (1772.5MHz)                        | 15MHz             | QPSK                          | 1 RB / 0 RB Offset<br>1 RB / 74 RB Offset<br>75 RB / 0 RB Offset  |
|                    |                       | 132072 to 132572  | 132072 (1720.0MHz),<br>132572 (1770.0MHz)                        | 20MHz             | QPSK                          | 1 RB / 0 RB Offset<br>1 RB / 99 RB Offset<br>100 RB / 0 RB Offset |
| -                  | Peak to Average Ratio | 131979 to 132665  | 131979 (1710.7MHz),<br>132322 (1745.0MHz),<br>132665 (1779.3MHz) | 1.4MHz            | QPSK / 16QAM / 64QAM / 256QAM | 1 RB / 0 RB Offset                                                |
|                    |                       | 131987 to 132657  | 131987 (1711.5MHz),<br>132322 (1745.0MHz),<br>132657 (1778.5MHz) | 3MHz              | QPSK / 16QAM / 64QAM / 256QAM | 1 RB / 0 RB Offset                                                |
|                    |                       | 131997 to 132647  | 131997 (1712.5MHz),<br>132322 (1745.0MHz),<br>132647 (1777.5MHz) | 5MHz              | QPSK / 16QAM / 64QAM / 256QAM | 1 RB / 0 RB Offset                                                |
|                    |                       | 132022 to 132622  | 132022 (1715.0MHz),<br>132322 (1745.0MHz),<br>132622 (1775.0MHz) | 10MHz             | QPSK / 16QAM / 64QAM / 256QAM | 1 RB / 0 RB Offset                                                |
|                    |                       | 132047 to 132597  | 132047 (1717.5MHz),<br>132322 (1745.0MHz),<br>132597 (1772.5MHz) | 15MHz             | QPSK / 16QAM / 64QAM / 256QAM | 1 RB / 0 RB Offset                                                |
|                    |                       | 132072 to 132572  | 132072 (1720.0MHz),<br>132322 (1745.0MHz),<br>132572 (1770.0MHz) | 20MHz             | QPSK / 16QAM / 64QAM / 256QAM | 1 RB / 0 RB Offset                                                |

| EUT Configure Mode | Test Item                    | Available Channel | Tested Channel                                                   | Channel Bandwidth | Modulation | Mode               |
|--------------------|------------------------------|-------------------|------------------------------------------------------------------|-------------------|------------|--------------------|
| -                  | Conducted Emission           | 131979 to 132665  | 131979 (1710.7MHz),<br>132322 (1745.0MHz),<br>132665 (1779.3MHz) | 1.4MHz            | QPSK       | 1 RB / 0 RB Offset |
|                    |                              | 131987 to 132657  | 131987 (1711.5MHz),<br>132322 (1745.0MHz),<br>132657 (1778.5MHz) | 3MHz              | QPSK       | 1 RB / 0 RB Offset |
|                    |                              | 131997 to 132647  | 131997 (1712.5MHz),<br>132322 (1745.0MHz),<br>132647 (1777.5MHz) | 5MHz              | QPSK       | 1 RB / 0 RB Offset |
|                    |                              | 132022 to 132622  | 132022 (1715.0MHz),<br>132322 (1745.0MHz),<br>132622 (1775.0MHz) | 10MHz             | QPSK       | 1 RB / 0 RB Offset |
|                    |                              | 132047 to 132597  | 132047 (1717.5MHz),<br>132322 (1745.0MHz),<br>132597 (1772.5MHz) | 15MHz             | QPSK       | 1 RB / 0 RB Offset |
|                    |                              | 132072 to 132572  | 132072 (1720.0MHz),<br>132322 (1745.0MHz),<br>132572 (1770.0MHz) | 20MHz             | QPSK       | 1 RB / 0 RB Offset |
| -                  | Radiated Emission Below 1GHz | 132072 to 132572  | 132322 (1745.0MHz)                                               | 20MHz             | QPSK       | 1 RB / 0 RB Offset |
| -                  | Radiated Emission Above 1GHz | 131979 to 132665  | 131979 (1710.7MHz),<br>132322 (1745.0MHz),<br>132665 (1779.3MHz) | 1.4MHz            | QPSK       | 1 RB / 0 RB Offset |
|                    |                              | 131997 to 132647  | 131997 (1712.5MHz),<br>132322 (1745.0MHz),<br>132647 (1777.5MHz) | 5MHz              | QPSK       | 1 RB / 0 RB Offset |
|                    |                              | 132072 to 132572  | 132072 (1720.0MHz),<br>132322 (1745.0MHz),<br>132572 (1770.0MHz) | 20MHz             | QPSK       | 1 RB / 0 RB Offset |

**Note:**

1. The measured output power for QPSK mode is higher than the measured output power for 16QAM, 64QAM and 256QAM modes. Therefore the radiated emission test items was performed under QPSK mode only.
2. For radiated emission below 1GHz, select the worst radiated emission channel (above 1GHz) for final testing.

**Test Condition:**

| Test Item                  | Environmental Conditions | Input Power (system) | Tested By               |
|----------------------------|--------------------------|----------------------|-------------------------|
| EIRP/ERP                   | 25deg. C, 60%RH          | 120Vac, 60Hz         | James Yang              |
| Modulation characteristics | 25deg. C, 60%RH          | 120Vac, 60Hz         | James Yang              |
| Frequency Stability        | 25deg. C, 60%RH          | 3.87Vdc              | James Yang              |
| Occupied Bandwidth         | 25deg. C, 60%RH          | 120Vac, 60Hz         | James Yang              |
| Band Edge                  | 25deg. C, 60%RH          | 120Vac, 60Hz         | James Yang              |
| Peak To Average Ratio      | 25deg. C, 60%RH          | 120Vac, 60Hz         | James Yang              |
| Conducted Emission         | 25deg. C, 60%RH          | 120Vac, 60Hz         | James Yang              |
| Radiated Emission          | 23deg. C, 67%RH          | 120Vac, 60Hz         | Titan Hsu<br>Adair Peng |

### **3.4 EUT Operating Conditions**

The EUT makes a call to the communication simulator. The communication simulator station system controlled a EUT to export maximum output power under transmission mode and specific channel frequency

### **3.5 General Description of Applied Standards and References**

The EUT is a RF Product. According to the specifications of the manufacturer, it must comply with the requirements of the following standards and References:

#### **Test Standard:**

**FCC 47 CFR Part 2**

**FCC 47 CFR Part 22**

**FCC 47 CFR Part 24**

**FCC 47 CFR Part 27**

**FCC 47 CFR Part 90**

**ANSI/TIA/EIA-603-E 2016**

**ANSI 63.26-2015**

All test items have been performed and recorded as per the above standards.

#### **References Test Guidance:**

**KDB 971168 D01 Power Meas License Digital Systems v03r01**

**KDB 971168 D02 Misc Rev Approv License Devices v02r01**

All test items have been performed as a reference to the above KDB test guidance.

## 4 Test Types and Results

### 4.1 Output Power Measurement

#### 4.1.1 Limits of Output Power Measurement

For 5GNR n77 (Part 27O):

Mobile and portable stations transmitting in the 3700-3980 MHz band are limited to 1 Watt EIRP. Mobile and portable stations operating in these bands must employ a means for limiting power to the minimum necessary for successful communications.

For 5GNR n77 (Part 27Q):

Mobile devices transmitting in the 3450-3550 MHz band are limited to 1Watt (30 dBm) EIRP. Mobile devices operating in these bands must employ a means for limiting power to the minimum necessary for successful communications.

For LTE Band 2:

Mobile / Portable station are limited to 2 watts e.i.r.p.

For LTE Band 5:

Mobile / Portable station are limited to 7 watts e.r.p.

For LTE Band 12:

Control and mobile stations in the 698-746 MHz band are limited to 30 watts ERP.

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

For LTE Band 13:

Control and mobile stations in the 698-746 MHz, 746-757 MHz, 787-788 MHz and 805-806 MHz band are limited to 30 watts ERP.

Portable stations (hand-held devices) in the 600 MHz uplink band and the 698-746 MHz band, and fixed and mobile stations in the 600 MHz uplink, 746-757 MHz, 787-788 MHz and 805-806 MHz band are limited to 3 watts ERP.

For LTE Band 14:

Control stations and mobile stations transmitting in the 758-768 MHz band and the 788-798 MHz band are limited to 30 watts ERP. Portable stations (hand-held devices) transmitting in the 758-768 MHz band and the 788-798 MHz band are limited to 3 watts ERP.

For LTE Band 30:

For mobile and portable stations compliant with 3GPP LTE standards or another advanced mobile broadband protocol that avoids concentrating energy at the edge of the operating band the average EIRP must not exceed 250 milliwatts within any 5 megahertz of authorized bandwidth but may exceed 50 milliwatts within any 1 megahertz of authorized bandwidth.

For LTE Band 7, LTE Band 41:

Mobile stations are limited to 2.0 watts EIRP. All user stations are limited to 2.0 watts transmitter output power.

For LTE Band 66:

Fixed, mobile, and portable (hand-held) stations operating in the 1710-1755 MHz band and mobile and portable stations operating in the 1695-1710 MHz and 1755-1780 MHz bands are limited to 1 watt EIRP.

#### 4.1.2 Test Procedures

##### Conducted Power Measurement:

The EUT was set up for the maximum power with 5GNR and LTE link data modulation and link up with simulator. Set the EUT to transmit under low, middle and high channel and record the power level shown on simulator.

##### For all band except 5GNR n77 (Part 27Q):

##### Maximum EIRP / ERP

The relevant equation for determining the maximum ERP or EIRP from the measured RF output power is given in Equation as follows:

$$\text{EIRP} = P_{\text{Meas}} + G_T$$

$$\text{ERP} = P_{\text{Meas}} + G_T - 2.15$$

where

ERP or EIRP effective radiated power or equivalent isotropically radiated power, respectively  
 (expressed in the same units as  $P_{\text{Meas}}$ , e.g., dBm or dBW)

$P_{\text{Meas}}$  measured transmitter output power or PSD, in dBm or dBW

$G_T$  gain of the transmitting antenna, in dBd (ERP) or dBi (EIRP)

##### For 5GNR n77 (Part 27Q):

##### EIRP Measurement:

- In the semi-anechoic chamber, EUT placed on the 0.8m(below or equal 1GHz) and/or 1.5m(above 1GHz) height of Turn Table, rotated the table around 360 degrees to search the maximum radiation power and receiver antenna shall be rotated vertical and horizontal polarization and moved height from 1m to 4m to find the maximum polar radiated power. The "Read Value" is the spectrum reading the maximum power value.
- The height of antenna is varied from one meter to four meters above the ground to determine the maximum value of the field strength. Both horizontal and vertical polarizations of the antenna are set to make the measurement.
- Perform a field strength measurement and record the worse read value, is the field strength value via a spectrum reading obtained corrected for antenna factor, cable loss and pre-amplifier factor and then mathematically convert the measured field strength level to EIRP/ERP level.
- Following C63.26 section 5.2.7 and 5.2.2.4
  - EIRP (dBm) =  $E \text{ (dB}\mu\text{V/m)} + 20\log(D) - 104.8$ ; where D is the measurement distance (in the far field region) in m.
  - ERP (dBm) =  $E \text{ (dB}\mu\text{V/m)} + 20\log(D) - 104.8 - 2.15$ ; where D is the measurement distance (in the far field region) in m.

#### 4.1.3 Test Setup

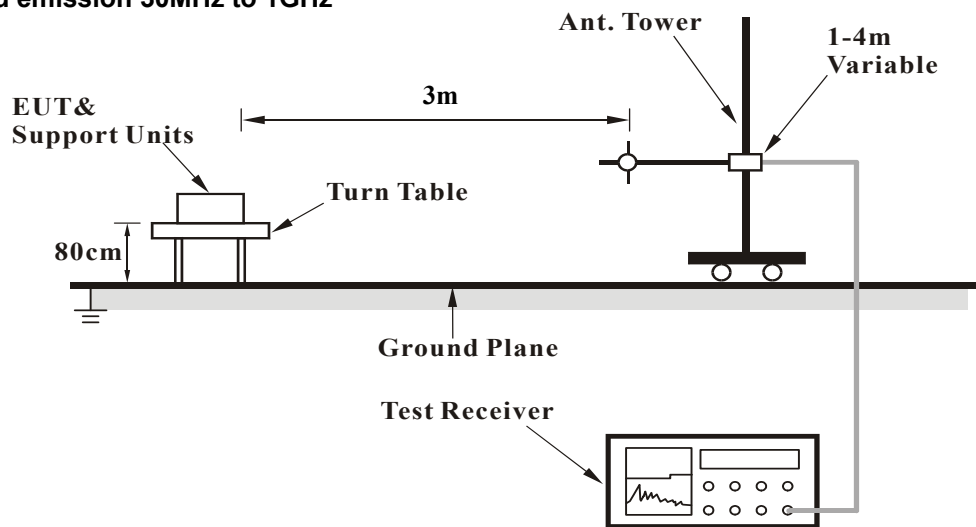
Conducted Power Measurement:



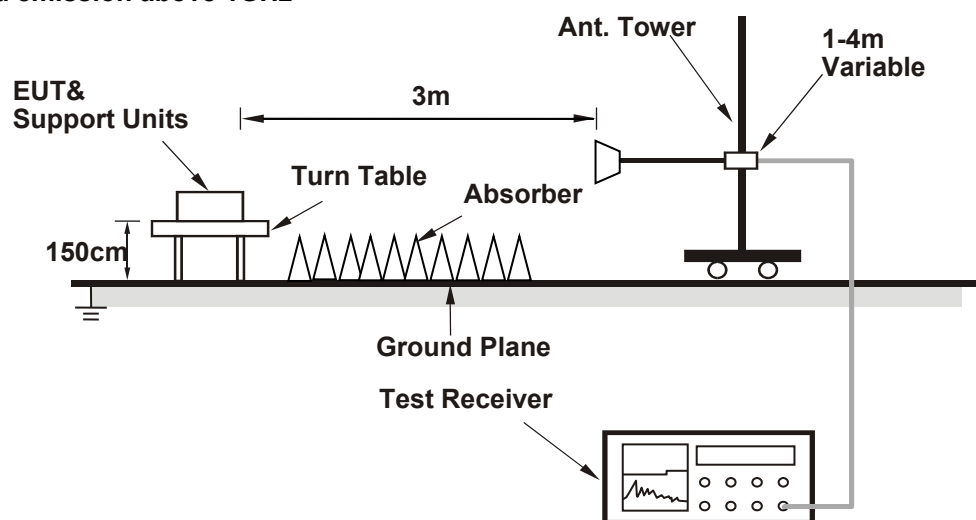
**For 5GNR n77 (Part 27Q):**

EIRP Measurement:

**For radiated emission 30MHz to 1GHz**



**For radiated emission above 1GHz**



For the actual test configuration, please refer to the attached file (Test Setup Photo).

#### 4.1.4 Test Results

##### Conducted Output Power (dBm)

5GNR n77 (Part 270):

| 5GNR n77 |              |                 |           |        |        |        |
|----------|--------------|-----------------|-----------|--------|--------|--------|
| BW       | MCS Index    | RB Size         | RB Offset | Low    | Mid    | High   |
|          |              | Channel         |           | 650000 | 656000 | 662000 |
|          |              | Frequency (MHz) |           | 3750   | 3840   | 3930   |
| 100M     | $\pi/2$ BPSK | 1               | 0         | 26.67  | 26.50  | 26.49  |
|          |              | 1               | 137       | 26.51  | 26.59  | 26.55  |
|          |              | 1               | 271       | 26.62  | 26.57  | 26.58  |
|          |              | 135             | 0         | 26.15  | 26.13  | 26.01  |
|          |              | 135             | 69        | 26.04  | 26.13  | 26.22  |
|          |              | 135             | 138       | 26.16  | 26.17  | 26.06  |
|          |              | 270             | 0         | 26.02  | 26.18  | 26.13  |
|          | QPSK         | 1               | 0         | 26.20  | 26.39  | 26.36  |
|          |              | 1               | 137       | 26.40  | 26.31  | 26.33  |
|          |              | 1               | 271       | 26.21  | 26.46  | 26.50  |
|          |              | 135             | 0         | 25.90  | 25.74  | 25.95  |
|          |              | 135             | 69        | 25.75  | 25.86  | 25.98  |
|          |              | 135             | 138       | 25.72  | 25.91  | 25.71  |
|          |              | 270             | 0         | 25.80  | 25.91  | 25.82  |
|          | 16QAM        | 1               | 0         | 25.41  | 25.49  | 25.40  |
|          |              | 1               | 137       | 25.24  | 25.41  | 25.32  |
|          |              | 1               | 271       | 25.28  | 25.20  | 25.32  |
|          |              | 135             | 0         | 24.83  | 24.73  | 24.83  |
|          |              | 135             | 69        | 24.91  | 24.97  | 24.94  |
|          |              | 135             | 138       | 24.90  | 24.80  | 24.78  |
|          |              | 270             | 0         | 24.85  | 24.87  | 24.98  |
|          | 64QAM        | 1               | 0         | 24.39  | 24.32  | 24.23  |
|          |              | 1               | 137       | 24.39  | 24.20  | 24.44  |
|          |              | 1               | 271       | 24.31  | 24.21  | 24.25  |
|          |              | 135             | 0         | 23.87  | 23.94  | 23.78  |
|          |              | 135             | 69        | 23.85  | 23.98  | 23.79  |
|          |              | 135             | 138       | 23.99  | 23.75  | 23.73  |
|          |              | 270             | 0         | 23.84  | 23.78  | 23.86  |
|          | 256QAM       | 1               | 0         | 22.74  | 22.60  | 22.69  |
|          |              | 1               | 137       | 22.69  | 22.75  | 22.68  |
|          |              | 1               | 271       | 22.73  | 22.90  | 22.68  |
|          |              | 135             | 0         | 22.13  | 22.37  | 22.31  |
|          |              | 135             | 69        | 22.18  | 22.19  | 22.31  |
|          |              | 135             | 138       | 22.15  | 22.26  | 22.23  |
|          |              | 270             | 0         | 22.30  | 22.11  | 22.35  |

| 5GNR n77 |              |                 |           |         |        |         |
|----------|--------------|-----------------|-----------|---------|--------|---------|
| BW       | MCS Index    | RB Size         | RB Offset | Low     | Mid    | High    |
|          |              | Channel         |           | 649558  | 656000 | 662332  |
|          |              | Frequency (MHz) |           | 3745.02 | 3840   | 3934.98 |
| 90M      | $\pi/2$ BPSK | 1               | 0         | 26.57   | 26.52  | 26.52   |
|          |              | 1               | 123       | 26.46   | 26.58  | 26.49   |
|          |              | 1               | 243       | 26.52   | 26.63  | 26.44   |
|          |              | 120             | 0         | 26.19   | 26.30  | 26.27   |
|          |              | 120             | 63        | 26.19   | 26.18  | 26.13   |
|          |              | 120             | 125       | 26.26   | 26.06  | 26.27   |
|          |              | 240             | 0         | 26.23   | 26.18  | 26.20   |
|          | QPSK         | 1               | 0         | 26.42   | 26.25  | 26.45   |
|          |              | 1               | 123       | 26.28   | 26.24  | 26.45   |
|          |              | 1               | 243       | 26.50   | 26.26  | 26.46   |
|          |              | 120             | 0         | 25.98   | 25.84  | 25.82   |
|          |              | 120             | 63        | 25.75   | 25.77  | 25.96   |
|          |              | 120             | 125       | 25.83   | 25.89  | 25.85   |
|          |              | 240             | 0         | 25.89   | 25.83  | 25.99   |
|          | 16QAM        | 1               | 0         | 25.46   | 25.50  | 25.24   |
|          |              | 1               | 123       | 25.40   | 25.36  | 25.25   |
|          |              | 1               | 243       | 25.26   | 25.24  | 25.46   |
|          |              | 120             | 0         | 24.91   | 24.70  | 24.87   |
|          |              | 120             | 63        | 24.95   | 24.71  | 24.92   |
|          |              | 120             | 125       | 24.95   | 24.82  | 24.79   |
|          |              | 240             | 0         | 24.92   | 24.93  | 24.78   |
|          | 64QAM        | 1               | 0         | 24.41   | 24.50  | 24.32   |
|          |              | 1               | 123       | 24.26   | 24.22  | 24.28   |
|          |              | 1               | 243       | 24.49   | 24.50  | 24.39   |
|          |              | 120             | 0         | 23.73   | 23.75  | 23.92   |
|          |              | 120             | 63        | 23.81   | 23.80  | 24.00   |
|          |              | 120             | 125       | 23.72   | 23.81  | 23.70   |
|          |              | 240             | 0         | 23.91   | 23.94  | 23.71   |
|          | 256QAM       | 1               | 0         | 22.90   | 22.76  | 22.61   |
|          |              | 1               | 123       | 22.68   | 22.88  | 22.90   |
|          |              | 1               | 243       | 22.80   | 22.63  | 22.63   |
|          |              | 120             | 0         | 22.26   | 22.12  | 22.37   |
|          |              | 120             | 63        | 22.16   | 22.38  | 22.37   |
|          |              | 120             | 125       | 22.33   | 22.23  | 22.11   |
|          |              | 240             | 0         | 22.21   | 22.11  | 22.36   |

| 5GNR n77 |              |                 |           |         |        |         |
|----------|--------------|-----------------|-----------|---------|--------|---------|
| BW       | MCS Index    | RB Size         | RB Offset | Low     | Mid    | High    |
|          |              | Channel         |           | 649334  | 656000 | 662666  |
|          |              | Frequency (MHz) |           | 3740.01 | 3840   | 3939.99 |
| 80M      | $\pi/2$ BPSK | 1               | 0         | 26.68   | 26.56  | 26.44   |
|          |              | 1               | 109       | 26.68   | 26.51  | 26.67   |
|          |              | 1               | 215       | 26.53   | 26.61  | 26.54   |
|          |              | 108             | 0         | 26.22   | 26.24  | 26.15   |
|          |              | 108             | 55        | 26.28   | 26.08  | 26.24   |
|          |              | 108             | 109       | 26.29   | 26.02  | 26.24   |
|          |              | 216             | 0         | 26.05   | 26.14  | 26.01   |
|          | QPSK         | 1               | 0         | 26.46   | 26.26  | 26.44   |
|          |              | 1               | 109       | 26.25   | 26.41  | 26.27   |
|          |              | 1               | 215       | 26.44   | 26.22  | 26.32   |
|          |              | 108             | 0         | 25.71   | 25.78  | 25.89   |
|          |              | 108             | 55        | 25.78   | 25.71  | 25.76   |
|          |              | 108             | 109       | 25.86   | 25.71  | 25.78   |
|          |              | 216             | 0         | 25.74   | 25.72  | 25.98   |
|          | 16QAM        | 1               | 0         | 25.22   | 25.35  | 25.32   |
|          |              | 1               | 109       | 25.40   | 25.41  | 25.49   |
|          |              | 1               | 215       | 25.25   | 25.41  | 25.45   |
|          |              | 108             | 0         | 24.74   | 24.70  | 24.90   |
|          |              | 108             | 55        | 24.74   | 24.95  | 24.78   |
|          |              | 108             | 109       | 24.99   | 24.92  | 24.99   |
|          |              | 216             | 0         | 24.78   | 24.75  | 24.73   |
|          | 64QAM        | 1               | 0         | 24.26   | 24.24  | 24.32   |
|          |              | 1               | 109       | 24.45   | 24.45  | 24.46   |
|          |              | 1               | 215       | 24.38   | 24.37  | 24.20   |
|          |              | 108             | 0         | 23.87   | 23.72  | 23.79   |
|          |              | 108             | 55        | 23.77   | 23.92  | 23.70   |
|          |              | 108             | 109       | 23.83   | 23.91  | 23.88   |
|          |              | 216             | 0         | 23.77   | 23.78  | 23.79   |
|          | 256QAM       | 1               | 0         | 22.89   | 22.78  | 22.85   |
|          |              | 1               | 109       | 22.90   | 22.65  | 22.83   |
|          |              | 1               | 215       | 22.73   | 22.85  | 22.75   |
|          |              | 108             | 0         | 22.28   | 22.28  | 22.29   |
|          |              | 108             | 55        | 22.34   | 22.29  | 22.33   |
|          |              | 108             | 109       | 22.33   | 22.11  | 22.18   |
|          |              | 216             | 0         | 22.29   | 22.22  | 22.18   |

| 5GNR n77 |              |                 |           |         |        |         |
|----------|--------------|-----------------|-----------|---------|--------|---------|
| BW       | MCS Index    | RB Size         | RB Offset | Low     | Mid    | High    |
|          |              | Channel         |           | 648668  | 656000 | 663332  |
|          |              | Frequency (MHz) |           | 3730.02 | 3840   | 3949.98 |
| 60M      | $\pi/2$ BPSK | 1               | 0         | 26.50   | 26.52  | 26.64   |
|          |              | 1               | 81        | 26.54   | 26.53  | 26.45   |
|          |              | 1               | 160       | 26.54   | 26.41  | 26.44   |
|          |              | 81              | 0         | 26.13   | 26.23  | 26.26   |
|          |              | 81              | 41        | 26.25   | 26.14  | 26.04   |
|          |              | 81              | 81        | 26.05   | 26.26  | 26.10   |
|          |              | 162             | 0         | 26.03   | 26.13  | 26.26   |
|          | QPSK         | 1               | 0         | 26.24   | 26.37  | 26.47   |
|          |              | 1               | 81        | 26.42   | 26.27  | 26.30   |
|          |              | 1               | 160       | 26.50   | 26.34  | 26.36   |
|          |              | 81              | 0         | 25.89   | 25.79  | 25.92   |
|          |              | 81              | 41        | 25.72   | 25.90  | 25.98   |
|          |              | 81              | 81        | 25.70   | 25.90  | 25.73   |
|          |              | 162             | 0         | 25.94   | 25.82  | 25.76   |
|          | 16QAM        | 1               | 0         | 25.37   | 25.33  | 25.20   |
|          |              | 1               | 81        | 25.49   | 25.24  | 25.46   |
|          |              | 1               | 160       | 25.40   | 25.50  | 25.26   |
|          |              | 81              | 0         | 24.98   | 24.89  | 24.98   |
|          |              | 81              | 41        | 24.85   | 24.77  | 24.93   |
|          |              | 81              | 81        | 24.94   | 24.97  | 24.86   |
|          |              | 162             | 0         | 24.90   | 24.89  | 24.72   |
|          | 64QAM        | 1               | 0         | 24.44   | 24.24  | 24.23   |
|          |              | 1               | 81        | 24.23   | 24.40  | 24.30   |
|          |              | 1               | 160       | 24.40   | 24.38  | 24.47   |
|          |              | 81              | 0         | 23.82   | 23.98  | 23.85   |
|          |              | 81              | 41        | 23.79   | 23.83  | 23.95   |
|          |              | 81              | 81        | 23.89   | 23.97  | 23.95   |
|          |              | 162             | 0         | 23.81   | 23.95  | 23.91   |
|          | 256QAM       | 1               | 0         | 22.64   | 22.60  | 22.79   |
|          |              | 1               | 81        | 22.72   | 22.62  | 22.63   |
|          |              | 1               | 160       | 22.72   | 22.62  | 22.70   |
|          |              | 81              | 0         | 22.17   | 22.31  | 22.39   |
|          |              | 81              | 41        | 22.16   | 22.16  | 22.26   |
|          |              | 81              | 81        | 22.39   | 22.26  | 22.34   |
|          |              | 162             | 0         | 22.13   | 22.30  | 22.22   |

| 5GNR n77 |              |                 |           |         |        |         |
|----------|--------------|-----------------|-----------|---------|--------|---------|
| BW       | MCS Index    | RB Size         | RB Offset | Low     | Mid    | High    |
|          |              | Channel         |           | 648334  | 656000 | 663666  |
|          |              | Frequency (MHz) |           | 3725.01 | 3840   | 3954.99 |
| 50M      | $\pi/2$ BPSK | 1               | 0         | 26.68   | 26.61  | 26.68   |
|          |              | 1               | 67        | 26.69   | 26.66  | 26.48   |
|          |              | 1               | 131       | 26.50   | 26.40  | 26.47   |
|          |              | 64              | 0         | 26.14   | 26.04  | 26.24   |
|          |              | 64              | 35        | 26.18   | 26.11  | 26.11   |
|          |              | 64              | 69        | 26.25   | 26.28  | 26.20   |
|          |              | 128             | 0         | 26.08   | 26.10  | 26.06   |
|          | QPSK         | 1               | 0         | 26.21   | 26.23  | 26.35   |
|          |              | 1               | 67        | 26.36   | 26.26  | 26.41   |
|          |              | 1               | 131       | 26.45   | 26.35  | 26.43   |
|          |              | 64              | 0         | 25.73   | 25.81  | 25.81   |
|          |              | 64              | 35        | 25.81   | 25.89  | 25.74   |
|          |              | 64              | 69        | 25.93   | 25.97  | 25.88   |
|          |              | 128             | 0         | 25.96   | 25.95  | 25.92   |
|          | 16QAM        | 1               | 0         | 25.25   | 25.29  | 25.24   |
|          |              | 1               | 67        | 25.24   | 25.38  | 25.20   |
|          |              | 1               | 131       | 25.42   | 25.25  | 25.50   |
|          |              | 64              | 0         | 24.92   | 24.82  | 24.83   |
|          |              | 64              | 35        | 24.73   | 24.87  | 24.91   |
|          |              | 64              | 69        | 24.70   | 24.72  | 24.72   |
|          |              | 128             | 0         | 24.87   | 24.79  | 24.98   |
|          | 64QAM        | 1               | 0         | 24.39   | 24.20  | 24.41   |
|          |              | 1               | 67        | 24.28   | 24.22  | 24.42   |
|          |              | 1               | 131       | 24.50   | 24.38  | 24.25   |
|          |              | 64              | 0         | 23.89   | 23.87  | 23.81   |
|          |              | 64              | 35        | 23.86   | 23.93  | 23.72   |
|          |              | 64              | 69        | 23.95   | 23.84  | 23.73   |
|          |              | 128             | 0         | 23.74   | 23.82  | 23.96   |
|          | 256QAM       | 1               | 0         | 22.76   | 22.85  | 22.89   |
|          |              | 1               | 67        | 22.76   | 22.69  | 22.90   |
|          |              | 1               | 131       | 22.70   | 22.81  | 22.76   |
|          |              | 64              | 0         | 22.20   | 22.14  | 22.35   |
|          |              | 64              | 35        | 22.27   | 22.16  | 22.17   |
|          |              | 64              | 69        | 22.33   | 22.12  | 22.35   |
|          |              | 128             | 0         | 22.16   | 22.22  | 22.26   |

| 5GNR n77 |              |                 |           |        |        |        |
|----------|--------------|-----------------|-----------|--------|--------|--------|
| BW       | MCS Index    | RB Size         | RB Offset | Low    | Mid    | High   |
|          |              | Channel         |           | 648000 | 656000 | 664000 |
|          |              | Frequency (MHz) |           | 3720   | 3840   | 3960   |
| 40M      | $\pi/2$ BPSK | 1               | 0         | 26.52  | 26.55  | 26.69  |
|          |              | 1               | 53        | 26.67  | 26.63  | 26.57  |
|          |              | 1               | 104       | 26.69  | 26.58  | 26.70  |
|          |              | 50              | 0         | 26.20  | 26.00  | 26.28  |
|          |              | 50              | 28        | 26.14  | 26.00  | 26.28  |
|          |              | 50              | 56        | 26.30  | 26.01  | 26.09  |
|          |              | 100             | 0         | 26.17  | 26.05  | 26.09  |
|          | QPSK         | 1               | 0         | 26.40  | 26.39  | 26.44  |
|          |              | 1               | 53        | 26.35  | 26.29  | 26.33  |
|          |              | 1               | 104       | 26.35  | 26.49  | 26.50  |
|          |              | 50              | 0         | 25.99  | 25.87  | 25.71  |
|          |              | 50              | 28        | 25.73  | 25.90  | 25.84  |
|          |              | 50              | 56        | 25.90  | 25.70  | 25.79  |
|          |              | 100             | 0         | 26.00  | 25.83  | 25.83  |
|          | 16QAM        | 1               | 0         | 25.36  | 25.41  | 25.33  |
|          |              | 1               | 53        | 25.28  | 25.45  | 25.32  |
|          |              | 1               | 104       | 25.36  | 25.28  | 25.30  |
|          |              | 50              | 0         | 24.90  | 24.77  | 24.98  |
|          |              | 50              | 28        | 24.97  | 24.96  | 24.85  |
|          |              | 50              | 56        | 24.73  | 24.90  | 24.98  |
|          |              | 100             | 0         | 24.96  | 25.00  | 24.76  |
|          | 64QAM        | 1               | 0         | 24.37  | 24.45  | 24.49  |
|          |              | 1               | 53        | 24.22  | 24.38  | 24.23  |
|          |              | 1               | 104       | 24.29  | 24.21  | 24.22  |
|          |              | 50              | 0         | 23.96  | 23.76  | 23.82  |
|          |              | 50              | 28        | 23.86  | 23.82  | 23.81  |
|          |              | 50              | 56        | 23.72  | 23.84  | 23.98  |
|          |              | 100             | 0         | 23.90  | 23.77  | 23.97  |
|          | 256QAM       | 1               | 0         | 22.73  | 22.67  | 22.68  |
|          |              | 1               | 53        | 22.65  | 22.70  | 22.84  |
|          |              | 1               | 104       | 22.71  | 22.74  | 22.83  |
|          |              | 50              | 0         | 22.21  | 22.28  | 22.23  |
|          |              | 50              | 28        | 22.35  | 22.22  | 22.35  |
|          |              | 50              | 56        | 22.27  | 22.22  | 22.21  |
|          |              | 100             | 0         | 22.36  | 22.39  | 22.29  |

| 5GNR n77 |              |                 |           |         |        |         |
|----------|--------------|-----------------|-----------|---------|--------|---------|
| BW       | MCS Index    | RB Size         | RB Offset | Low     | Mid    | High    |
|          |              | Channel         |           | 647334  | 656000 | 665666  |
|          |              | Frequency (MHz) |           | 3710.01 | 3840   | 3969.99 |
| 20M      | $\pi/2$ BPSK | 1               | 0         | 26.66   | 26.52  | 26.50   |
|          |              | 1               | 26        | 26.57   | 26.48  | 26.52   |
|          |              | 1               | 49        | 26.54   | 26.52  | 26.70   |
|          |              | 25              | 0         | 26.10   | 26.25  | 26.29   |
|          |              | 25              | 13        | 26.03   | 26.15  | 26.00   |
|          |              | 25              | 26        | 26.02   | 26.30  | 26.14   |
|          |              | 50              | 0         | 26.09   | 26.22  | 26.01   |
|          | QPSK         | 1               | 0         | 26.27   | 26.28  | 26.50   |
|          |              | 1               | 26        | 26.43   | 26.27  | 26.30   |
|          |              | 1               | 49        | 26.27   | 26.46  | 26.34   |
|          |              | 25              | 0         | 25.92   | 25.74  | 25.79   |
|          |              | 25              | 13        | 25.78   | 25.97  | 25.91   |
|          |              | 25              | 26        | 25.74   | 25.84  | 25.83   |
|          |              | 50              | 0         | 25.77   | 25.74  | 25.76   |
|          | 16QAM        | 1               | 0         | 25.49   | 25.26  | 25.23   |
|          |              | 1               | 26        | 25.38   | 25.45  | 25.32   |
|          |              | 1               | 49        | 25.36   | 25.49  | 25.41   |
|          |              | 25              | 0         | 25.00   | 24.73  | 24.74   |
|          |              | 25              | 13        | 24.70   | 24.78  | 24.79   |
|          |              | 25              | 26        | 24.76   | 24.98  | 24.74   |
|          |              | 50              | 0         | 25.00   | 24.85  | 24.90   |
|          | 64QAM        | 1               | 0         | 24.36   | 24.39  | 24.41   |
|          |              | 1               | 26        | 24.42   | 24.25  | 24.30   |
|          |              | 1               | 49        | 24.25   | 24.27  | 24.23   |
|          |              | 25              | 0         | 24.00   | 23.77  | 23.96   |
|          |              | 25              | 13        | 23.74   | 23.70  | 23.98   |
|          |              | 25              | 26        | 23.99   | 23.77  | 23.80   |
|          |              | 50              | 0         | 23.97   | 23.78  | 23.86   |
|          | 256QAM       | 1               | 0         | 22.75   | 22.77  | 22.63   |
|          |              | 1               | 26        | 22.72   | 22.67  | 22.85   |
|          |              | 1               | 49        | 22.70   | 22.74  | 22.76   |
|          |              | 25              | 0         | 22.35   | 22.25  | 22.25   |
|          |              | 25              | 13        | 22.33   | 22.34  | 22.11   |
|          |              | 25              | 26        | 22.38   | 22.20  | 22.33   |
|          |              | 50              | 0         | 22.17   | 22.17  | 22.30   |

## 5GNR n77 (Part 27Q):

| 5GNR n77 |           |                 |           |         |
|----------|-----------|-----------------|-----------|---------|
| BW       | MCS Index | RB Size         | RB Offset | Mid     |
|          |           | Channel         |           | 633334  |
|          |           | Frequency (MHz) |           | 3500.01 |
| 100M     | QPSK      | 1               | 0         | 26.69   |
|          |           | 1               | 137       | 26.49   |
|          |           | 1               | 271       | 26.48   |
|          |           | 135             | 0         | 26.16   |
|          |           | 135             | 69        | 26.02   |
|          |           | 135             | 138       | 26.15   |
|          |           | 270             | 0         | 26.12   |
|          | 16QAM     | 1               | 0         | 26.31   |
|          |           | 1               | 137       | 26.38   |
|          |           | 1               | 271       | 26.20   |
|          |           | 135             | 0         | 25.87   |
|          |           | 135             | 69        | 25.87   |
|          |           | 135             | 138       | 25.76   |
|          |           | 270             | 0         | 25.93   |
|          | 64QAM     | 1               | 0         | 25.25   |
|          |           | 1               | 137       | 25.46   |
|          |           | 1               | 271       | 25.26   |
|          |           | 135             | 0         | 24.94   |
|          |           | 135             | 69        | 24.90   |
|          |           | 135             | 138       | 24.81   |
|          |           | 270             | 0         | 24.86   |
|          | 256QAM    | 1               | 0         | 24.41   |
|          |           | 1               | 137       | 24.22   |
|          |           | 1               | 271       | 24.40   |
|          |           | 135             | 0         | 23.99   |
|          |           | 135             | 69        | 23.78   |
|          |           | 135             | 138       | 23.86   |
|          |           | 270             | 0         | 23.79   |

| 5GNR n77 |              |                 |           |        |         |         |
|----------|--------------|-----------------|-----------|--------|---------|---------|
| BW       | MCS Index    | RB Size         | RB Offset | Low    | Mid     | High    |
|          |              | Channel         |           | 633000 | 633334  | 633666  |
|          |              | Frequency (MHz) |           | 3495   | 3500.01 | 3504.99 |
| 90M      | $\pi/2$ BPSK | 1               | 0         | 26.50  | 26.69   | 26.55   |
|          |              | 1               | 123       | 26.64  | 26.62   | 26.68   |
|          |              | 1               | 243       | 26.69  | 26.53   | 26.47   |
|          |              | 120             | 0         | 26.07  | 26.27   | 26.01   |
|          |              | 120             | 63        | 26.11  | 26.25   | 26.25   |
|          |              | 120             | 125       | 26.10  | 26.27   | 26.24   |
|          |              | 240             | 0         | 26.24  | 26.30   | 26.15   |
|          | QPSK         | 1               | 0         | 26.37  | 26.46   | 26.48   |
|          |              | 1               | 123       | 26.31  | 26.30   | 26.29   |
|          |              | 1               | 243       | 26.40  | 26.24   | 26.45   |
|          |              | 120             | 0         | 25.78  | 25.72   | 25.93   |
|          |              | 120             | 63        | 25.73  | 25.94   | 25.70   |
|          |              | 120             | 125       | 25.99  | 25.71   | 25.92   |
|          |              | 240             | 0         | 25.92  | 25.94   | 25.79   |
|          | 16QAM        | 1               | 0         | 25.25  | 25.28   | 25.35   |
|          |              | 1               | 123       | 25.37  | 25.45   | 25.39   |
|          |              | 1               | 243       | 25.42  | 25.43   | 25.25   |
|          |              | 120             | 0         | 24.86  | 24.83   | 24.98   |
|          |              | 120             | 63        | 24.90  | 24.77   | 24.85   |
|          |              | 120             | 125       | 24.84  | 24.76   | 24.92   |
|          |              | 240             | 0         | 24.90  | 25.00   | 24.93   |
|          | 64QAM        | 1               | 0         | 24.35  | 24.36   | 24.48   |
|          |              | 1               | 123       | 24.38  | 24.29   | 24.41   |
|          |              | 1               | 243       | 24.40  | 24.36   | 24.47   |
|          |              | 120             | 0         | 23.71  | 23.72   | 23.99   |
|          |              | 120             | 63        | 23.93  | 24.00   | 23.88   |
|          |              | 120             | 125       | 24.00  | 23.86   | 24.00   |
|          |              | 240             | 0         | 23.87  | 23.73   | 23.91   |
|          | 256QAM       | 1               | 0         | 22.74  | 22.73   | 22.90   |
|          |              | 1               | 123       | 22.70  | 22.74   | 22.83   |
|          |              | 1               | 243       | 22.87  | 22.72   | 22.78   |
|          |              | 120             | 0         | 22.39  | 22.28   | 22.20   |
|          |              | 120             | 63        | 22.36  | 22.25   | 22.30   |
|          |              | 120             | 125       | 22.35  | 22.23   | 22.27   |
|          |              | 240             | 0         | 22.19  | 22.39   | 22.14   |

| 5GNR n77 |              |                 |           |         |         |        |
|----------|--------------|-----------------|-----------|---------|---------|--------|
| BW       | MCS Index    | RB Size         | RB Offset | Low     | Mid     | High   |
|          |              | Channel         |           | 632668  | 633334  | 634000 |
|          |              | Frequency (MHz) |           | 3490.02 | 3500.01 | 3510   |
| 80M      | $\pi/2$ BPSK | 1               | 0         | 26.54   | 26.70   | 26.70  |
|          |              | 1               | 109       | 26.60   | 26.68   | 26.48  |
|          |              | 1               | 215       | 26.68   | 26.57   | 26.45  |
|          |              | 108             | 0         | 26.04   | 26.00   | 26.23  |
|          |              | 108             | 55        | 26.03   | 26.17   | 26.15  |
|          |              | 108             | 109       | 26.27   | 26.20   | 26.12  |
|          |              | 216             | 0         | 26.01   | 26.11   | 26.10  |
|          | QPSK         | 1               | 0         | 26.47   | 26.26   | 26.26  |
|          |              | 1               | 109       | 26.46   | 26.24   | 26.26  |
|          |              | 1               | 215       | 26.28   | 26.35   | 26.29  |
|          |              | 108             | 0         | 25.79   | 25.89   | 25.95  |
|          |              | 108             | 55        | 25.93   | 25.83   | 25.71  |
|          |              | 108             | 109       | 25.87   | 25.75   | 25.94  |
|          |              | 216             | 0         | 25.82   | 25.89   | 25.70  |
|          | 16QAM        | 1               | 0         | 25.37   | 25.40   | 25.31  |
|          |              | 1               | 109       | 25.47   | 25.47   | 25.26  |
|          |              | 1               | 215       | 25.30   | 25.41   | 25.43  |
|          |              | 108             | 0         | 24.70   | 24.72   | 24.75  |
|          |              | 108             | 55        | 24.79   | 24.72   | 24.87  |
|          |              | 108             | 109       | 24.72   | 24.73   | 24.88  |
|          |              | 216             | 0         | 24.85   | 24.83   | 24.98  |
|          | 64QAM        | 1               | 0         | 24.37   | 24.40   | 24.31  |
|          |              | 1               | 109       | 24.21   | 24.37   | 24.26  |
|          |              | 1               | 215       | 24.26   | 24.24   | 24.30  |
|          |              | 108             | 0         | 23.83   | 23.92   | 24.00  |
|          |              | 108             | 55        | 23.94   | 23.87   | 23.98  |
|          |              | 108             | 109       | 23.83   | 23.92   | 23.77  |
|          |              | 216             | 0         | 23.82   | 23.93   | 23.75  |
|          | 256QAM       | 1               | 0         | 22.78   | 22.86   | 22.67  |
|          |              | 1               | 109       | 22.77   | 22.88   | 22.64  |
|          |              | 1               | 215       | 22.60   | 22.87   | 22.80  |
|          |              | 108             | 0         | 22.26   | 22.34   | 22.21  |
|          |              | 108             | 55        | 22.33   | 22.18   | 22.20  |
|          |              | 108             | 109       | 22.17   | 22.40   | 22.15  |
|          |              | 216             | 0         | 22.25   | 22.13   | 22.39  |

| 5GNR n77 |              |                 |           |        |         |         |
|----------|--------------|-----------------|-----------|--------|---------|---------|
| BW       | MCS Index    | RB Size         | RB Offset | Low    | Mid     | High    |
|          |              | Channel         |           | 632000 | 633334  | 634666  |
|          |              | Frequency (MHz) |           | 3480   | 3500.01 | 3519.99 |
| 60M      | $\pi/2$ BPSK | 1               | 0         | 26.51  | 26.64   | 26.55   |
|          |              | 1               | 81        | 26.51  | 26.66   | 26.70   |
|          |              | 1               | 160       | 26.62  | 26.51   | 26.45   |
|          |              | 81              | 0         | 26.04  | 26.06   | 26.02   |
|          |              | 81              | 41        | 26.13  | 26.00   | 26.12   |
|          |              | 81              | 81        | 26.23  | 26.30   | 26.15   |
|          |              | 162             | 0         | 26.19  | 26.29   | 26.23   |
|          | QPSK         | 1               | 0         | 26.31  | 26.38   | 26.29   |
|          |              | 1               | 81        | 26.35  | 26.47   | 26.50   |
|          |              | 1               | 160       | 26.50  | 26.49   | 26.43   |
|          |              | 81              | 0         | 25.72  | 25.75   | 25.94   |
|          |              | 81              | 41        | 25.86  | 25.81   | 25.83   |
|          |              | 81              | 81        | 25.81  | 25.92   | 25.93   |
|          |              | 162             | 0         | 26.00  | 25.84   | 25.78   |
|          | 16QAM        | 1               | 0         | 25.24  | 25.37   | 25.29   |
|          |              | 1               | 81        | 25.43  | 25.31   | 25.46   |
|          |              | 1               | 160       | 25.31  | 25.49   | 25.43   |
|          |              | 81              | 0         | 24.93  | 24.83   | 25.00   |
|          |              | 81              | 41        | 24.83  | 24.79   | 24.80   |
|          |              | 81              | 81        | 24.71  | 24.80   | 24.99   |
|          |              | 162             | 0         | 24.72  | 24.70   | 24.86   |
|          | 64QAM        | 1               | 0         | 24.26  | 24.35   | 24.46   |
|          |              | 1               | 81        | 24.28  | 24.45   | 24.34   |
|          |              | 1               | 160       | 24.23  | 24.42   | 24.23   |
|          |              | 81              | 0         | 23.92  | 23.75   | 23.71   |
|          |              | 81              | 41        | 23.74  | 23.93   | 23.82   |
|          |              | 81              | 81        | 23.77  | 23.77   | 23.72   |
|          |              | 162             | 0         | 23.75  | 23.86   | 23.78   |
|          | 256QAM       | 1               | 0         | 22.89  | 22.64   | 22.62   |
|          |              | 1               | 81        | 22.89  | 22.62   | 22.65   |
|          |              | 1               | 160       | 22.67  | 22.70   | 22.65   |
|          |              | 81              | 0         | 22.11  | 22.40   | 22.19   |
|          |              | 81              | 41        | 22.26  | 22.19   | 22.38   |
|          |              | 81              | 81        | 22.40  | 22.30   | 22.30   |
|          |              | 162             | 0         | 22.31  | 22.36   | 22.38   |

| 5GNR n77 |              |                 |           |         |         |        |
|----------|--------------|-----------------|-----------|---------|---------|--------|
| BW       | MCS Index    | RB Size         | RB Offset | Low     | Mid     | High   |
|          |              | Channel         |           | 631668  | 633334  | 635000 |
|          |              | Frequency (MHz) |           | 3475.02 | 3500.01 | 3525   |
| 50M      | $\pi/2$ BPSK | 1               | 0         | 26.50   | 26.50   | 26.60  |
|          |              | 1               | 67        | 26.62   | 26.70   | 26.66  |
|          |              | 1               | 131       | 26.40   | 26.41   | 26.69  |
|          |              | 64              | 0         | 26.08   | 26.13   | 26.14  |
|          |              | 64              | 35        | 26.06   | 26.14   | 26.30  |
|          |              | 64              | 69        | 26.30   | 26.03   | 26.14  |
|          |              | 128             | 0         | 26.22   | 26.19   | 26.08  |
|          | QPSK         | 1               | 0         | 26.47   | 26.26   | 26.49  |
|          |              | 1               | 67        | 26.24   | 26.24   | 26.21  |
|          |              | 1               | 131       | 26.40   | 26.24   | 26.48  |
|          |              | 64              | 0         | 25.96   | 25.89   | 25.71  |
|          |              | 64              | 35        | 25.73   | 25.92   | 25.89  |
|          |              | 64              | 69        | 25.84   | 25.91   | 25.74  |
|          |              | 128             | 0         | 25.76   | 25.89   | 25.94  |
|          | 16QAM        | 1               | 0         | 25.48   | 25.39   | 25.47  |
|          |              | 1               | 67        | 25.28   | 25.22   | 25.48  |
|          |              | 1               | 131       | 25.50   | 25.20   | 25.33  |
|          |              | 64              | 0         | 25.00   | 24.80   | 24.81  |
|          |              | 64              | 35        | 24.75   | 24.95   | 24.82  |
|          |              | 64              | 69        | 24.98   | 24.78   | 24.77  |
|          |              | 128             | 0         | 24.77   | 24.82   | 24.98  |
|          | 64QAM        | 1               | 0         | 24.35   | 24.47   | 24.26  |
|          |              | 1               | 67        | 24.43   | 24.35   | 24.35  |
|          |              | 1               | 131       | 24.30   | 24.44   | 24.36  |
|          |              | 64              | 0         | 23.81   | 23.83   | 23.84  |
|          |              | 64              | 35        | 23.85   | 23.90   | 23.73  |
|          |              | 64              | 69        | 23.87   | 23.97   | 23.88  |
|          |              | 128             | 0         | 23.95   | 23.82   | 23.82  |
|          | 256QAM       | 1               | 0         | 22.68   | 22.75   | 22.81  |
|          |              | 1               | 67        | 22.64   | 22.66   | 22.72  |
|          |              | 1               | 131       | 22.64   | 22.60   | 22.89  |
|          |              | 64              | 0         | 22.32   | 22.19   | 22.21  |
|          |              | 64              | 35        | 22.20   | 22.22   | 22.33  |
|          |              | 64              | 69        | 22.23   | 22.20   | 22.18  |
|          |              | 128             | 0         | 22.30   | 22.11   | 22.15  |

| 5GNR n77 |              |                 |           |         |         |         |
|----------|--------------|-----------------|-----------|---------|---------|---------|
| BW       | MCS Index    | RB Size         | RB Offset | Low     | Mid     | High    |
|          |              | Channel         |           | 631334  | 633334  | 635332  |
|          |              | Frequency (MHz) |           | 3470.01 | 3500.01 | 3529.98 |
| 40M      | $\pi/2$ BPSK | 1               | 0         | 26.44   | 26.47   | 26.53   |
|          |              | 1               | 53        | 26.60   | 26.45   | 26.70   |
|          |              | 1               | 104       | 26.66   | 26.41   | 26.62   |
|          |              | 50              | 0         | 26.25   | 26.06   | 26.18   |
|          |              | 50              | 28        | 26.04   | 26.11   | 26.12   |
|          |              | 50              | 56        | 26.25   | 26.28   | 26.07   |
|          |              | 100             | 0         | 26.11   | 26.00   | 26.18   |
|          | QPSK         | 1               | 0         | 26.33   | 26.28   | 26.21   |
|          |              | 1               | 53        | 26.44   | 26.28   | 26.34   |
|          |              | 1               | 104       | 26.46   | 26.24   | 26.32   |
|          |              | 50              | 0         | 25.75   | 25.96   | 25.71   |
|          |              | 50              | 28        | 25.90   | 25.91   | 25.82   |
|          |              | 50              | 56        | 25.76   | 25.72   | 25.78   |
|          |              | 100             | 0         | 25.94   | 25.93   | 25.95   |
|          | 16QAM        | 1               | 0         | 25.36   | 25.20   | 25.32   |
|          |              | 1               | 53        | 25.34   | 25.38   | 25.24   |
|          |              | 1               | 104       | 25.50   | 25.45   | 25.24   |
|          |              | 50              | 0         | 24.71   | 24.81   | 24.86   |
|          |              | 50              | 28        | 24.70   | 24.92   | 24.97   |
|          |              | 50              | 56        | 24.70   | 24.71   | 24.91   |
|          |              | 100             | 0         | 24.96   | 24.72   | 24.76   |
|          | 64QAM        | 1               | 0         | 24.49   | 24.37   | 24.31   |
|          |              | 1               | 53        | 24.26   | 24.20   | 24.37   |
|          |              | 1               | 104       | 24.50   | 24.40   | 24.42   |
|          |              | 50              | 0         | 23.86   | 23.96   | 23.74   |
|          |              | 50              | 28        | 23.72   | 23.80   | 23.86   |
|          |              | 50              | 56        | 23.82   | 23.84   | 23.91   |
|          |              | 100             | 0         | 23.99   | 23.72   | 23.78   |
|          | 256QAM       | 1               | 0         | 22.90   | 22.86   | 22.68   |
|          |              | 1               | 53        | 22.75   | 22.82   | 22.63   |
|          |              | 1               | 104       | 22.76   | 22.85   | 22.61   |
|          |              | 50              | 0         | 22.12   | 22.26   | 22.24   |
|          |              | 50              | 28        | 22.27   | 22.27   | 22.18   |
|          |              | 50              | 56        | 22.10   | 22.20   | 22.38   |
|          |              | 100             | 0         | 22.16   | 22.14   | 22.33   |

| 5GNR n77 |              |                 |           |         |         |        |
|----------|--------------|-----------------|-----------|---------|---------|--------|
| BW       | MCS Index    | RB Size         | RB Offset | Low     | Mid     | High   |
|          |              | Channel         |           | 630668  | 633334  | 636000 |
|          |              | Frequency (MHz) |           | 3460.02 | 3500.01 | 3540   |
| 20M      | $\pi/2$ BPSK | 1               | 0         | 26.57   | 26.53   | 26.58  |
|          |              | 1               | 26        | 26.51   | 26.48   | 26.46  |
|          |              | 1               | 49        | 26.57   | 26.70   | 26.43  |
|          |              | 25              | 0         | 26.15   | 26.25   | 26.16  |
|          |              | 25              | 13        | 26.14   | 26.10   | 26.28  |
|          |              | 25              | 26        | 26.19   | 26.06   | 26.00  |
|          |              | 50              | 0         | 26.08   | 26.07   | 26.30  |
|          | QPSK         | 1               | 0         | 26.28   | 26.49   | 26.34  |
|          |              | 1               | 26        | 26.34   | 26.31   | 26.50  |
|          |              | 1               | 49        | 26.23   | 26.43   | 26.47  |
|          |              | 25              | 0         | 25.71   | 25.72   | 25.96  |
|          |              | 25              | 13        | 25.80   | 25.73   | 25.78  |
|          |              | 25              | 26        | 25.71   | 25.79   | 25.98  |
|          |              | 50              | 0         | 25.87   | 25.94   | 25.70  |
|          | 16QAM        | 1               | 0         | 25.23   | 25.28   | 25.42  |
|          |              | 1               | 26        | 25.48   | 25.23   | 25.26  |
|          |              | 1               | 49        | 25.50   | 25.26   | 25.32  |
|          |              | 25              | 0         | 24.88   | 24.77   | 24.87  |
|          |              | 25              | 13        | 24.78   | 24.71   | 24.76  |
|          |              | 25              | 26        | 24.81   | 24.88   | 24.75  |
|          |              | 50              | 0         | 24.83   | 24.72   | 24.86  |
|          | 64QAM        | 1               | 0         | 24.38   | 24.38   | 24.49  |
|          |              | 1               | 26        | 24.41   | 24.41   | 24.40  |
|          |              | 1               | 49        | 24.46   | 24.30   | 24.40  |
|          |              | 25              | 0         | 23.97   | 23.75   | 23.91  |
|          |              | 25              | 13        | 23.78   | 23.70   | 23.92  |
|          |              | 25              | 26        | 23.74   | 23.75   | 23.87  |
|          |              | 50              | 0         | 23.74   | 23.78   | 23.87  |
|          | 256QAM       | 1               | 0         | 22.89   | 22.73   | 22.73  |
|          |              | 1               | 26        | 22.73   | 22.73   | 22.61  |
|          |              | 1               | 49        | 22.83   | 22.61   | 22.86  |
|          |              | 25              | 0         | 22.40   | 22.12   | 22.12  |
|          |              | 25              | 13        | 22.17   | 22.13   | 22.34  |
|          |              | 25              | 26        | 22.26   | 22.32   | 22.38  |
|          |              | 50              | 0         | 22.31   | 22.18   | 22.21  |

| LTE Band 2 |           |                 |           |       |       |       |
|------------|-----------|-----------------|-----------|-------|-------|-------|
| BW         | MCS Index | RB Size         | RB Offset | Low   | Mid   | High  |
|            |           | Channel         |           | 18700 | 18900 | 19100 |
|            |           | Frequency (MHz) |           | 1860  | 1880  | 1900  |
| 20M        | QPSK      | 1               | 0         | 24.86 | 24.73 | 24.68 |
|            |           | 1               | 50        | 24.73 | 24.70 | 24.41 |
|            |           | 1               | 99        | 24.45 | 24.72 | 24.57 |
|            |           | 50              | 0         | 23.77 | 23.77 | 23.63 |
|            |           | 50              | 25        | 23.83 | 23.76 | 23.63 |
|            |           | 50              | 50        | 23.75 | 23.79 | 23.62 |
|            |           | 100             | 0         | 23.81 | 23.67 | 23.68 |
|            | 16QAM     | 1               | 0         | 23.83 | 24.28 | 24.13 |
|            |           | 1               | 50        | 23.92 | 24.29 | 23.75 |
|            |           | 1               | 99        | 23.83 | 24.29 | 23.60 |
|            |           | 50              | 0         | 22.64 | 22.80 | 22.62 |
|            |           | 50              | 25        | 22.78 | 22.69 | 22.64 |
|            |           | 50              | 50        | 22.81 | 22.87 | 22.58 |
|            |           | 100             | 0         | 22.82 | 22.80 | 22.63 |
|            | 64QAM     | 1               | 0         | 22.66 | 23.20 | 22.91 |
|            |           | 1               | 50        | 22.71 | 23.19 | 22.62 |
|            |           | 1               | 99        | 22.70 | 23.36 | 22.62 |
|            |           | 50              | 0         | 21.43 | 21.74 | 21.56 |
|            |           | 50              | 25        | 21.49 | 21.48 | 21.37 |
|            |           | 50              | 50        | 21.55 | 22.05 | 21.50 |
|            |           | 100             | 0         | 22.01 | 21.98 | 21.65 |
|            | 256QAM    | 1               | 0         | 20.84 | 21.38 | 20.64 |
|            |           | 1               | 50        | 20.60 | 21.42 | 20.44 |
|            |           | 1               | 99        | 20.42 | 21.51 | 20.83 |
|            |           | 50              | 0         | 19.55 | 19.67 | 19.44 |
|            |           | 50              | 25        | 19.59 | 19.73 | 19.43 |
|            |           | 50              | 50        | 19.29 | 19.96 | 19.42 |
|            |           | 100             | 0         | 19.86 | 20.23 | 19.58 |

| LTE Band 2 |           |                 |           |        |       |        |
|------------|-----------|-----------------|-----------|--------|-------|--------|
| BW         | MCS Index | RB Size         | RB Offset | Low    | Mid   | High   |
|            |           | Channel         |           | 18675  | 18900 | 19125  |
|            |           | Frequency (MHz) |           | 1857.5 | 1880  | 1902.5 |
| 15M        | QPSK      | 1               | 0         | 24.70  | 24.61 | 24.50  |
|            |           | 1               | 37        | 24.58  | 24.78 | 24.52  |
|            |           | 1               | 74        | 24.59  | 24.66 | 24.52  |
|            |           | 36              | 0         | 23.79  | 23.72 | 23.59  |
|            |           | 36              | 19        | 23.85  | 23.79 | 23.61  |
|            |           | 36              | 39        | 23.83  | 23.77 | 23.64  |
|            |           | 75              | 0         | 23.90  | 23.68 | 23.69  |
|            | 16QAM     | 1               | 0         | 24.24  | 24.31 | 23.67  |
|            |           | 1               | 37        | 23.89  | 24.24 | 24.02  |
|            |           | 1               | 74        | 24.07  | 23.94 | 24.05  |
|            |           | 36              | 0         | 22.76  | 22.82 | 22.58  |
|            |           | 36              | 19        | 22.85  | 22.72 | 22.65  |
|            |           | 36              | 39        | 22.82  | 22.77 | 22.63  |
|            |           | 75              | 0         | 22.89  | 22.72 | 22.68  |
|            | 64QAM     | 1               | 0         | 23.25  | 23.27 | 22.52  |
|            |           | 1               | 37        | 22.89  | 23.03 | 22.83  |
|            |           | 1               | 74        | 22.80  | 22.70 | 22.83  |
|            |           | 36              | 0         | 21.66  | 21.92 | 21.73  |
|            |           | 36              | 19        | 21.93  | 21.88 | 21.83  |
|            |           | 36              | 39        | 21.73  | 21.90 | 21.77  |
|            |           | 75              | 0         | 22.03  | 21.89 | 21.83  |
|            | 256QAM    | 1               | 0         | 21.30  | 21.11 | 20.36  |
|            |           | 1               | 37        | 20.91  | 20.87 | 20.70  |
|            |           | 1               | 74        | 20.68  | 20.92 | 20.67  |
|            |           | 36              | 0         | 19.88  | 19.91 | 19.56  |
|            |           | 36              | 19        | 19.87  | 20.01 | 19.67  |
|            |           | 36              | 39        | 20.03  | 19.97 | 19.97  |
|            |           | 75              | 0         | 20.18  | 19.85 | 20.11  |

| LTE Band 2 |           |                 |           |       |       |       |
|------------|-----------|-----------------|-----------|-------|-------|-------|
| BW         | MCS Index | RB Size         | RB Offset | Low   | Mid   | High  |
|            |           | Channel         |           | 18650 | 18900 | 19150 |
|            |           | Frequency (MHz) |           | 1855  | 1880  | 1905  |
| 10M        | QPSK      | 1               | 0         | 24.76 | 24.85 | 24.43 |
|            |           | 1               | 24        | 24.60 | 24.50 | 24.50 |
|            |           | 1               | 49        | 24.69 | 24.59 | 24.48 |
|            |           | 25              | 0         | 23.78 | 23.73 | 23.63 |
|            |           | 25              | 12        | 23.84 | 23.77 | 23.59 |
|            |           | 25              | 25        | 23.83 | 23.81 | 23.61 |
|            |           | 50              | 0         | 23.82 | 23.79 | 23.67 |
|            | 16QAM     | 1               | 0         | 24.25 | 24.15 | 23.79 |
|            |           | 1               | 24        | 23.76 | 24.00 | 24.08 |
|            |           | 1               | 49        | 24.35 | 23.96 | 24.08 |
|            |           | 25              | 0         | 22.79 | 22.68 | 22.57 |
|            |           | 25              | 12        | 22.78 | 22.80 | 22.56 |
|            |           | 25              | 25        | 22.78 | 22.69 | 22.67 |
|            |           | 50              | 0         | 22.80 | 22.72 | 22.65 |
|            | 64QAM     | 1               | 0         | 23.43 | 22.91 | 22.92 |
|            |           | 1               | 24        | 22.76 | 22.73 | 23.26 |
|            |           | 1               | 49        | 23.29 | 22.83 | 23.04 |
|            |           | 25              | 0         | 21.75 | 21.80 | 21.61 |
|            |           | 25              | 12        | 21.69 | 21.61 | 21.44 |
|            |           | 25              | 25        | 21.50 | 21.41 | 21.41 |
|            |           | 50              | 0         | 21.54 | 21.67 | 21.44 |
|            | 256QAM    | 1               | 0         | 21.42 | 20.66 | 21.18 |
|            |           | 1               | 24        | 20.50 | 20.87 | 21.25 |
|            |           | 1               | 49        | 21.46 | 21.02 | 20.79 |
|            |           | 25              | 0         | 19.97 | 19.97 | 19.61 |
|            |           | 25              | 12        | 19.57 | 19.75 | 19.49 |
|            |           | 25              | 25        | 19.52 | 19.52 | 19.70 |
|            |           | 50              | 0         | 19.77 | 19.87 | 19.33 |

| LTE Band 2 |           |                 |           |        |       |        |
|------------|-----------|-----------------|-----------|--------|-------|--------|
| BW         | MCS Index | RB Size         | RB Offset | Low    | Mid   | High   |
|            |           | Channel         |           | 18625  | 18900 | 19175  |
|            |           | Frequency (MHz) |           | 1852.5 | 1880  | 1907.5 |
| 5M         | QPSK      | 1               | 0         | 24.63  | 24.53 | 24.40  |
|            |           | 1               | 12        | 24.83  | 24.69 | 24.60  |
|            |           | 1               | 24        | 24.62  | 24.64 | 24.42  |
|            |           | 12              | 0         | 23.75  | 23.70 | 23.49  |
|            |           | 12              | 6         | 23.78  | 23.72 | 23.56  |
|            |           | 12              | 13        | 23.77  | 23.75 | 23.62  |
|            |           | 25              | 0         | 23.81  | 23.74 | 23.54  |
|            | 16QAM     | 1               | 0         | 23.91  | 24.19 | 23.79  |
|            |           | 1               | 12        | 24.23  | 23.98 | 23.66  |
|            |           | 1               | 24        | 23.83  | 24.24 | 23.84  |
|            |           | 12              | 0         | 22.74  | 22.71 | 22.57  |
|            |           | 12              | 6         | 22.89  | 22.76 | 22.47  |
|            |           | 12              | 13        | 22.75  | 22.78 | 22.67  |
|            |           | 25              | 0         | 22.88  | 22.65 | 22.52  |
|            | 64QAM     | 1               | 0         | 22.61  | 22.90 | 22.87  |
|            |           | 1               | 12        | 23.10  | 22.71 | 22.75  |
|            |           | 1               | 24        | 22.98  | 23.24 | 23.00  |
|            |           | 12              | 0         | 21.68  | 21.81 | 21.35  |
|            |           | 12              | 6         | 21.84  | 21.90 | 21.22  |
|            |           | 12              | 13        | 21.78  | 21.71 | 21.68  |
|            |           | 25              | 0         | 21.59  | 21.54 | 21.63  |
|            | 256QAM    | 1               | 0         | 20.64  | 20.97 | 20.71  |
|            |           | 1               | 12        | 20.96  | 20.98 | 20.82  |
|            |           | 1               | 24        | 20.70  | 21.18 | 21.14  |
|            |           | 12              | 0         | 19.57  | 19.78 | 19.53  |
|            |           | 12              | 6         | 20.07  | 20.04 | 19.50  |
|            |           | 12              | 13        | 19.66  | 19.45 | 19.90  |
|            |           | 25              | 0         | 19.74  | 19.76 | 19.69  |

| LTE Band 2 |           |                 |           |        |       |        |
|------------|-----------|-----------------|-----------|--------|-------|--------|
| BW         | MCS Index | RB Size         | RB Offset | Low    | Mid   | High   |
|            |           | Channel         |           | 18615  | 18900 | 19185  |
|            |           | Frequency (MHz) |           | 1851.5 | 1880  | 1908.5 |
| 3M         | QPSK      | 1               | 0         | 24.48  | 24.67 | 24.37  |
|            |           | 1               | 7         | 24.76  | 24.73 | 24.59  |
|            |           | 1               | 14        | 24.82  | 24.76 | 24.44  |
|            |           | 8               | 0         | 23.79  | 23.72 | 23.56  |
|            |           | 8               | 3         | 23.76  | 23.75 | 23.49  |
|            |           | 8               | 7         | 23.80  | 23.79 | 23.54  |
|            |           | 15              | 0         | 23.74  | 23.75 | 23.55  |
|            | 16QAM     | 1               | 0         | 23.96  | 24.02 | 23.46  |
|            |           | 1               | 7         | 24.21  | 24.27 | 23.84  |
|            |           | 1               | 14        | 23.90  | 23.78 | 24.13  |
|            |           | 8               | 0         | 22.78  | 22.81 | 22.61  |
|            |           | 8               | 3         | 22.87  | 22.78 | 22.66  |
|            |           | 8               | 7         | 22.90  | 22.89 | 22.47  |
|            |           | 15              | 0         | 22.65  | 22.74 | 22.66  |
|            | 64QAM     | 1               | 0         | 23.06  | 22.89 | 22.35  |
|            |           | 1               | 7         | 22.93  | 23.31 | 22.57  |
|            |           | 1               | 14        | 22.87  | 22.49 | 22.89  |
|            |           | 8               | 0         | 21.77  | 21.99 | 21.35  |
|            |           | 8               | 3         | 21.82  | 21.96 | 21.53  |
|            |           | 8               | 7         | 21.65  | 21.63 | 21.47  |
|            |           | 15              | 0         | 21.43  | 21.75 | 21.70  |
|            | 256QAM    | 1               | 0         | 21.26  | 21.18 | 20.49  |
|            |           | 1               | 7         | 20.91  | 21.55 | 20.54  |
|            |           | 1               | 14        | 20.94  | 20.34 | 21.08  |
|            |           | 8               | 0         | 19.97  | 19.99 | 19.55  |
|            |           | 8               | 3         | 19.62  | 19.87 | 19.40  |
|            |           | 8               | 7         | 19.81  | 19.63 | 19.59  |
|            |           | 15              | 0         | 19.43  | 19.54 | 19.97  |

| LTE Band 2 |           |                 |           |        |       |        |
|------------|-----------|-----------------|-----------|--------|-------|--------|
| BW         | MCS Index | RB Size         | RB Offset | Low    | Mid   | High   |
|            |           | Channel         |           | 18607  | 18900 | 19193  |
|            |           | Frequency (MHz) |           | 1850.7 | 1880  | 1909.3 |
| 1.4M       | QPSK      | 1               | 0         | 24.64  | 24.59 | 24.35  |
|            |           | 1               | 2         | 24.77  | 24.71 | 24.44  |
|            |           | 1               | 5         | 24.58  | 24.63 | 24.31  |
|            |           | 3               | 0         | 24.57  | 24.63 | 24.36  |
|            |           | 3               | 1         | 24.71  | 24.72 | 24.44  |
|            |           | 3               | 3         | 24.63  | 24.62 | 24.37  |
|            |           | 6               | 0         | 23.74  | 23.69 | 23.40  |
|            | 16QAM     | 1               | 0         | 24.20  | 23.99 | 23.33  |
|            |           | 1               | 2         | 23.63  | 24.20 | 23.65  |
|            |           | 1               | 5         | 23.77  | 23.82 | 23.95  |
|            |           | 3               | 0         | 23.73  | 23.75 | 23.46  |
|            |           | 3               | 1         | 23.79  | 23.78 | 23.58  |
|            |           | 3               | 3         | 23.76  | 23.74 | 23.51  |
|            |           | 6               | 0         | 22.83  | 22.79 | 22.45  |
|            | 64QAM     | 1               | 0         | 23.08  | 23.06 | 22.41  |
|            |           | 1               | 2         | 22.44  | 22.96 | 22.74  |
|            |           | 1               | 5         | 22.55  | 22.70 | 23.11  |
|            |           | 3               | 0         | 22.83  | 22.78 | 22.17  |
|            |           | 3               | 1         | 22.88  | 22.92 | 22.41  |
|            |           | 3               | 3         | 22.80  | 22.60 | 22.65  |
|            |           | 6               | 0         | 21.99  | 21.81 | 21.31  |
|            | 256QAM    | 1               | 0         | 21.28  | 20.78 | 20.33  |
|            |           | 1               | 2         | 20.29  | 20.78 | 20.71  |
|            |           | 1               | 5         | 20.64  | 20.86 | 21.27  |
|            |           | 3               | 0         | 20.72  | 21.00 | 19.92  |
|            |           | 3               | 1         | 21.16  | 21.01 | 20.21  |
|            |           | 3               | 3         | 21.10  | 20.77 | 20.71  |
|            |           | 6               | 0         | 19.70  | 19.65 | 19.02  |

| LTE Band 5 |           |                 |           |       |       |       |
|------------|-----------|-----------------|-----------|-------|-------|-------|
| BW         | MCS Index | RB Size         | RB Offset | Low   | Mid   | High  |
|            |           | Channel         |           | 20450 | 20525 | 20600 |
|            |           | Frequency (MHz) |           | 829   | 836.5 | 844   |
| 10M        | QPSK      | 1               | 0         | 24.95 | 25.08 | 24.89 |
|            |           | 1               | 24        | 24.90 | 25.05 | 24.65 |
|            |           | 1               | 49        | 24.74 | 24.96 | 24.67 |
|            |           | 25              | 0         | 24.01 | 24.03 | 23.94 |
|            |           | 25              | 12        | 24.00 | 23.97 | 24.01 |
|            |           | 25              | 25        | 24.04 | 23.98 | 23.92 |
|            |           | 50              | 0         | 24.07 | 24.06 | 24.01 |
|            | 16QAM     | 1               | 0         | 24.22 | 24.55 | 24.69 |
|            |           | 1               | 24        | 24.16 | 24.36 | 24.26 |
|            |           | 1               | 49        | 24.14 | 24.17 | 24.15 |
|            |           | 25              | 0         | 23.01 | 23.06 | 22.92 |
|            |           | 25              | 12        | 23.04 | 22.92 | 22.86 |
|            |           | 25              | 25        | 22.99 | 22.92 | 22.98 |
|            |           | 50              | 0         | 22.97 | 22.94 | 22.84 |
|            | 64QAM     | 1               | 0         | 23.06 | 23.36 | 23.70 |
|            |           | 1               | 24        | 23.31 | 23.42 | 23.31 |
|            |           | 1               | 49        | 23.19 | 22.87 | 23.30 |
|            |           | 25              | 0         | 21.87 | 21.95 | 21.65 |
|            |           | 25              | 12        | 22.09 | 22.02 | 21.68 |
|            |           | 25              | 25        | 22.11 | 21.87 | 22.07 |
|            |           | 50              | 0         | 21.92 | 21.74 | 21.85 |
|            | 256QAM    | 1               | 0         | 21.35 | 21.61 | 21.56 |
|            |           | 1               | 24        | 21.61 | 21.72 | 21.12 |
|            |           | 1               | 49        | 21.41 | 20.66 | 21.15 |
|            |           | 25              | 0         | 19.84 | 19.74 | 19.59 |
|            |           | 25              | 12        | 20.17 | 20.13 | 19.66 |
|            |           | 25              | 25        | 20.21 | 19.70 | 19.81 |
|            |           | 50              | 0         | 19.71 | 19.86 | 19.94 |

| LTE Band 5 |           |                 |           |       |       |       |
|------------|-----------|-----------------|-----------|-------|-------|-------|
| BW         | MCS Index | RB Size         | RB Offset | Low   | Mid   | High  |
|            |           | Channel         |           | 20425 | 20525 | 20625 |
|            |           | Frequency (MHz) |           | 826.5 | 836.5 | 846.5 |
| 5M         | QPSK      | 1               | 0         | 25.11 | 25.04 | 24.84 |
|            |           | 1               | 12        | 24.97 | 25.08 | 24.91 |
|            |           | 1               | 24        | 25.01 | 24.88 | 24.83 |
|            |           | 12              | 0         | 24.01 | 23.95 | 24.01 |
|            |           | 12              | 6         | 24.02 | 24.04 | 23.90 |
|            |           | 12              | 13        | 24.00 | 24.02 | 23.89 |
|            |           | 25              | 0         | 24.01 | 24.00 | 24.01 |
|            | 16QAM     | 1               | 0         | 24.38 | 23.98 | 24.29 |
|            |           | 1               | 12        | 24.49 | 24.42 | 24.43 |
|            |           | 1               | 24        | 23.93 | 24.13 | 24.11 |
|            |           | 12              | 0         | 23.11 | 23.06 | 23.00 |
|            |           | 12              | 6         | 23.16 | 22.96 | 22.87 |
|            |           | 12              | 13        | 23.04 | 23.01 | 23.00 |
|            |           | 25              | 0         | 23.02 | 22.91 | 22.90 |
|            | 64QAM     | 1               | 0         | 23.35 | 23.08 | 23.08 |
|            |           | 1               | 12        | 23.33 | 23.51 | 23.54 |
|            |           | 1               | 24        | 22.79 | 23.26 | 23.05 |
|            |           | 12              | 0         | 21.87 | 22.25 | 21.96 |
|            |           | 12              | 6         | 22.18 | 22.01 | 22.03 |
|            |           | 12              | 13        | 22.02 | 22.21 | 21.80 |
|            |           | 25              | 0         | 22.07 | 22.11 | 22.06 |
|            | 256QAM    | 1               | 0         | 21.54 | 20.99 | 21.16 |
|            |           | 1               | 12        | 21.54 | 21.63 | 21.46 |
|            |           | 1               | 24        | 20.89 | 21.50 | 20.90 |
|            |           | 12              | 0         | 19.87 | 20.17 | 19.96 |
|            |           | 12              | 6         | 20.05 | 19.89 | 19.94 |
|            |           | 12              | 13        | 20.17 | 20.24 | 19.63 |
|            |           | 25              | 0         | 20.21 | 20.09 | 19.78 |

| LTE Band 5 |           |                 |           |       |       |       |
|------------|-----------|-----------------|-----------|-------|-------|-------|
| BW         | MCS Index | RB Size         | RB Offset | Low   | Mid   | High  |
|            |           | Channel         |           | 20415 | 20525 | 20635 |
|            |           | Frequency (MHz) |           | 825.5 | 836.5 | 847.5 |
| 3M         | QPSK      | 1               | 0         | 24.95 | 24.92 | 24.94 |
|            |           | 1               | 7         | 25.10 | 24.93 | 24.98 |
|            |           | 1               | 14        | 24.96 | 24.84 | 24.83 |
|            |           | 8               | 0         | 24.05 | 23.96 | 23.89 |
|            |           | 8               | 3         | 24.02 | 23.95 | 23.93 |
|            |           | 8               | 7         | 24.01 | 23.91 | 23.95 |
|            |           | 15              | 0         | 24.02 | 23.96 | 23.88 |
|            | 16QAM     | 1               | 0         | 24.13 | 24.49 | 24.13 |
|            |           | 1               | 7         | 24.48 | 24.09 | 24.05 |
|            |           | 1               | 14        | 24.09 | 24.42 | 24.17 |
|            |           | 8               | 0         | 23.11 | 23.05 | 22.98 |
|            |           | 8               | 3         | 23.18 | 23.06 | 23.06 |
|            |           | 8               | 7         | 23.01 | 22.94 | 22.94 |
|            |           | 15              | 0         | 23.10 | 22.89 | 22.99 |
|            | 64QAM     | 1               | 0         | 22.91 | 23.53 | 23.20 |
|            |           | 1               | 7         | 23.32 | 22.98 | 22.92 |
|            |           | 1               | 14        | 23.13 | 23.32 | 23.01 |
|            |           | 8               | 0         | 22.23 | 21.78 | 21.84 |
|            |           | 8               | 3         | 22.28 | 22.20 | 21.88 |
|            |           | 8               | 7         | 21.99 | 21.67 | 21.94 |
|            |           | 15              | 0         | 22.13 | 21.83 | 21.89 |
|            | 256QAM    | 1               | 0         | 20.62 | 21.63 | 21.18 |
|            |           | 1               | 7         | 21.62 | 21.00 | 20.82 |
|            |           | 1               | 14        | 21.37 | 21.27 | 20.81 |
|            |           | 8               | 0         | 20.52 | 19.72 | 19.59 |
|            |           | 8               | 3         | 20.14 | 20.35 | 19.94 |
|            |           | 8               | 7         | 20.18 | 19.49 | 20.02 |
|            |           | 15              | 0         | 20.16 | 20.02 | 20.17 |

| LTE Band 5 |           |                 |           |       |       |       |
|------------|-----------|-----------------|-----------|-------|-------|-------|
| BW         | MCS Index | RB Size         | RB Offset | Low   | Mid   | High  |
|            |           | Channel         |           | 20407 | 20525 | 20643 |
|            |           | Frequency (MHz) |           | 824.7 | 836.5 | 848.3 |
| 1.4M       | QPSK      | 1               | 0         | 24.94 | 24.81 | 24.81 |
|            |           | 1               | 2         | 24.91 | 24.92 | 24.85 |
|            |           | 1               | 5         | 24.82 | 24.78 | 24.73 |
|            |           | 3               | 0         | 24.91 | 24.78 | 24.83 |
|            |           | 3               | 1         | 24.91 | 24.83 | 24.85 |
|            |           | 3               | 3         | 24.90 | 24.89 | 24.75 |
|            |           | 6               | 0         | 23.96 | 23.93 | 23.85 |
|            | 16QAM     | 1               | 0         | 24.48 | 23.84 | 24.21 |
|            |           | 1               | 2         | 24.02 | 24.11 | 24.37 |
|            |           | 1               | 5         | 24.11 | 24.34 | 23.99 |
|            |           | 3               | 0         | 24.00 | 23.77 | 23.94 |
|            |           | 3               | 1         | 23.86 | 23.95 | 23.93 |
|            |           | 3               | 3         | 23.91 | 23.94 | 23.72 |
|            |           | 6               | 0         | 22.93 | 23.05 | 23.05 |
|            | 64QAM     | 1               | 0         | 23.32 | 22.59 | 23.16 |
|            |           | 1               | 2         | 23.19 | 22.82 | 23.31 |
|            |           | 1               | 5         | 23.14 | 23.34 | 22.74 |
|            |           | 3               | 0         | 22.92 | 22.69 | 22.76 |
|            |           | 3               | 1         | 22.60 | 23.15 | 22.71 |
|            |           | 3               | 3         | 22.66 | 22.93 | 22.90 |
|            |           | 6               | 0         | 22.03 | 21.88 | 21.75 |
|            | 256QAM    | 1               | 0         | 21.55 | 20.46 | 20.98 |
|            |           | 1               | 2         | 21.30 | 20.99 | 21.13 |
|            |           | 1               | 5         | 21.28 | 21.20 | 20.67 |
|            |           | 3               | 0         | 20.82 | 20.57 | 20.60 |
|            |           | 3               | 1         | 20.66 | 21.13 | 20.99 |
|            |           | 3               | 3         | 20.89 | 20.91 | 20.82 |
|            |           | 6               | 0         | 20.23 | 19.81 | 19.48 |

| LTE Band 7 |           |                 |           |       |       |       |
|------------|-----------|-----------------|-----------|-------|-------|-------|
| BW         | MCS Index | RB Size         | RB Offset | Low   | Mid   | High  |
|            |           | Channel         |           | 20850 | 21100 | 21350 |
|            |           | Frequency (MHz) |           | 2510  | 2535  | 2560  |
| 20M        | QPSK      | 1               | 0         | 24.98 | 24.87 | 24.79 |
|            |           | 1               | 50        | 24.88 | 24.75 | 24.64 |
|            |           | 1               | 99        | 24.95 | 24.99 | 24.75 |
|            |           | 50              | 0         | 24.12 | 23.99 | 23.82 |
|            |           | 50              | 25        | 24.13 | 24.00 | 23.99 |
|            |           | 50              | 50        | 24.15 | 24.05 | 23.88 |
|            |           | 100             | 0         | 24.18 | 24.00 | 24.00 |
|            | 16QAM     | 1               | 0         | 24.08 | 24.26 | 23.95 |
|            |           | 1               | 50        | 24.19 | 24.08 | 24.27 |
|            |           | 1               | 99        | 24.07 | 24.52 | 24.40 |
|            |           | 50              | 0         | 23.12 | 22.99 | 22.83 |
|            |           | 50              | 25        | 23.14 | 22.99 | 22.97 |
|            |           | 50              | 50        | 23.11 | 23.02 | 22.95 |
|            |           | 100             | 0         | 23.10 | 23.01 | 22.90 |
|            | 64QAM     | 1               | 0         | 23.04 | 23.45 | 22.95 |
|            |           | 1               | 50        | 22.96 | 23.26 | 23.18 |
|            |           | 1               | 99        | 23.15 | 23.63 | 23.20 |
|            |           | 50              | 0         | 22.10 | 22.06 | 21.76 |
|            |           | 50              | 25        | 22.02 | 21.83 | 21.97 |
|            |           | 50              | 50        | 21.93 | 22.03 | 21.89 |
|            |           | 100             | 0         | 21.84 | 22.21 | 21.83 |
|            | 256QAM    | 1               | 0         | 20.91 | 21.51 | 21.18 |
|            |           | 1               | 50        | 21.19 | 21.56 | 21.41 |
|            |           | 1               | 99        | 21.42 | 21.91 | 20.95 |
|            |           | 50              | 0         | 19.82 | 20.05 | 19.66 |
|            |           | 50              | 25        | 20.30 | 19.97 | 20.09 |
|            |           | 50              | 50        | 19.96 | 20.28 | 19.77 |
|            |           | 100             | 0         | 19.80 | 19.98 | 19.90 |

| LTE Band 7 |           |                 |           |        |       |        |
|------------|-----------|-----------------|-----------|--------|-------|--------|
| BW         | MCS Index | RB Size         | RB Offset | Low    | Mid   | High   |
|            |           | Channel         |           | 20825  | 21100 | 21375  |
|            |           | Frequency (MHz) |           | 2507.5 | 2535  | 2562.5 |
| 15M        | QPSK      | 1               | 0         | 25.02  | 24.89 | 24.81  |
|            |           | 1               | 37        | 24.96  | 24.91 | 24.72  |
|            |           | 1               | 74        | 25.04  | 24.98 | 24.85  |
|            |           | 36              | 0         | 24.01  | 23.95 | 23.94  |
|            |           | 36              | 19        | 24.18  | 23.91 | 23.86  |
|            |           | 36              | 39        | 24.14  | 24.00 | 23.93  |
|            |           | 75              | 0         | 24.07  | 23.98 | 23.82  |
|            | 16QAM     | 1               | 0         | 24.26  | 23.98 | 23.90  |
|            |           | 1               | 37        | 24.00  | 23.77 | 23.99  |
|            |           | 1               | 74        | 24.26  | 24.15 | 24.05  |
|            |           | 36              | 0         | 23.13  | 22.96 | 22.85  |
|            |           | 36              | 19        | 23.14  | 22.98 | 22.79  |
|            |           | 36              | 39        | 23.08  | 23.03 | 22.92  |
|            |           | 75              | 0         | 23.14  | 22.88 | 22.82  |
|            | 64QAM     | 1               | 0         | 23.36  | 22.77 | 22.75  |
|            |           | 1               | 37        | 23.03  | 22.96 | 22.93  |
|            |           | 1               | 74        | 23.40  | 23.17 | 22.79  |
|            |           | 36              | 0         | 22.28  | 21.84 | 21.77  |
|            |           | 36              | 19        | 21.93  | 21.87 | 21.93  |
|            |           | 36              | 39        | 22.01  | 21.86 | 22.02  |
|            |           | 75              | 0         | 22.28  | 21.72 | 21.87  |
|            | 256QAM    | 1               | 0         | 21.57  | 20.68 | 20.71  |
|            |           | 1               | 37        | 20.76  | 20.93 | 20.97  |
|            |           | 1               | 74        | 21.59  | 21.24 | 21.01  |
|            |           | 36              | 0         | 20.36  | 20.01 | 19.95  |
|            |           | 36              | 19        | 20.14  | 19.90 | 19.99  |
|            |           | 36              | 39        | 20.12  | 19.78 | 20.01  |
|            |           | 75              | 0         | 20.26  | 19.50 | 19.78  |

| LTE Band 7 |           |                 |           |       |       |       |
|------------|-----------|-----------------|-----------|-------|-------|-------|
| BW         | MCS Index | RB Size         | RB Offset | Low   | Mid   | High  |
|            |           | Channel         |           | 20800 | 21100 | 21400 |
|            |           | Frequency (MHz) |           | 2505  | 2535  | 2565  |
| 10M        | QPSK      | 1               | 0         | 24.92 | 24.74 | 24.67 |
|            |           | 1               | 24        | 24.99 | 24.77 | 24.68 |
|            |           | 1               | 49        | 24.95 | 24.90 | 24.73 |
|            |           | 25              | 0         | 24.03 | 23.92 | 23.86 |
|            |           | 25              | 12        | 24.15 | 24.02 | 23.99 |
|            |           | 25              | 25        | 24.16 | 23.98 | 23.94 |
|            |           | 50              | 0         | 24.12 | 23.84 | 23.86 |
|            | 16QAM     | 1               | 0         | 24.48 | 23.82 | 23.75 |
|            |           | 1               | 24        | 24.42 | 24.08 | 24.35 |
|            |           | 1               | 49        | 24.29 | 24.57 | 23.94 |
|            |           | 25              | 0         | 23.18 | 22.85 | 22.80 |
|            |           | 25              | 12        | 23.22 | 22.99 | 22.99 |
|            |           | 25              | 25        | 23.07 | 23.02 | 22.97 |
|            |           | 50              | 0         | 23.18 | 22.91 | 22.85 |
|            | 64QAM     | 1               | 0         | 23.61 | 23.00 | 22.93 |
|            |           | 1               | 24        | 23.27 | 23.13 | 23.20 |
|            |           | 1               | 49        | 23.36 | 23.41 | 23.10 |
|            |           | 25              | 0         | 22.38 | 21.59 | 21.95 |
|            |           | 25              | 12        | 22.23 | 21.77 | 21.88 |
|            |           | 25              | 25        | 22.15 | 21.97 | 22.11 |
|            |           | 50              | 0         | 22.09 | 21.66 | 21.68 |
|            | 256QAM    | 1               | 0         | 21.77 | 20.71 | 21.12 |
|            |           | 1               | 24        | 21.45 | 20.95 | 21.35 |
|            |           | 1               | 49        | 21.48 | 21.13 | 20.86 |
|            |           | 25              | 0         | 20.28 | 19.84 | 19.96 |
|            |           | 25              | 12        | 19.97 | 19.84 | 19.68 |
|            |           | 25              | 25        | 19.87 | 20.14 | 19.89 |
|            |           | 50              | 0         | 20.11 | 19.50 | 19.39 |

| LTE Band 7 |           |                 |           |        |       |        |
|------------|-----------|-----------------|-----------|--------|-------|--------|
| BW         | MCS Index | RB Size         | RB Offset | Low    | Mid   | High   |
|            |           | Channel         |           | 20775  | 21100 | 21425  |
|            |           | Frequency (MHz) |           | 2502.5 | 2535  | 2567.5 |
| 5M         | QPSK      | 1               | 0         | 24.94  | 24.82 | 24.86  |
|            |           | 1               | 12        | 25.14  | 24.87 | 24.84  |
|            |           | 1               | 24        | 24.98  | 24.91 | 24.65  |
|            |           | 12              | 0         | 24.16  | 24.03 | 23.93  |
|            |           | 12              | 6         | 24.06  | 24.01 | 23.86  |
|            |           | 12              | 13        | 24.03  | 23.99 | 23.89  |
|            |           | 25              | 0         | 24.04  | 23.96 | 23.87  |
|            | 16QAM     | 1               | 0         | 24.03  | 24.31 | 23.94  |
|            |           | 1               | 12        | 24.54  | 24.03 | 24.25  |
|            |           | 1               | 24        | 24.21  | 24.07 | 23.87  |
|            |           | 12              | 0         | 23.10  | 23.02 | 22.85  |
|            |           | 12              | 6         | 23.12  | 22.96 | 22.94  |
|            |           | 12              | 13        | 23.15  | 22.93 | 22.88  |
|            |           | 25              | 0         | 23.16  | 23.04 | 22.89  |
|            | 64QAM     | 1               | 0         | 23.23  | 23.30 | 22.83  |
|            |           | 1               | 12        | 23.60  | 22.91 | 23.09  |
|            |           | 1               | 24        | 22.96  | 22.97 | 22.85  |
|            |           | 12              | 0         | 22.29  | 22.11 | 21.93  |
|            |           | 12              | 6         | 22.24  | 22.14 | 22.12  |
|            |           | 12              | 13        | 21.89  | 21.94 | 22.03  |
|            |           | 25              | 0         | 22.05  | 22.00 | 21.77  |
|            | 256QAM    | 1               | 0         | 21.06  | 21.08 | 20.92  |
|            |           | 1               | 12        | 21.67  | 20.64 | 21.06  |
|            |           | 1               | 24        | 21.10  | 20.99 | 21.09  |
|            |           | 12              | 0         | 20.56  | 20.01 | 19.69  |
|            |           | 12              | 6         | 20.27  | 20.08 | 19.99  |
|            |           | 12              | 13        | 19.97  | 19.87 | 19.75  |
|            |           | 25              | 0         | 19.79  | 20.28 | 19.79  |

| LTE Band 12 |           |                 |           |       |       |       |
|-------------|-----------|-----------------|-----------|-------|-------|-------|
| BW          | MCS Index | RB Size         | RB Offset | Low   | Mid   | High  |
|             |           | Channel         |           | 23060 | 23095 | 23130 |
|             |           | Frequency (MHz) |           | 704   | 707.5 | 711   |
| 10M         | QPSK      | 1               | 0         | 24.89 | 24.94 | 24.82 |
|             |           | 1               | 24        | 24.72 | 24.84 | 24.93 |
|             |           | 1               | 49        | 24.82 | 24.79 | 24.65 |
|             |           | 25              | 0         | 23.93 | 23.89 | 23.93 |
|             |           | 25              | 12        | 23.96 | 23.88 | 24.01 |
|             |           | 25              | 25        | 23.97 | 24.01 | 24.04 |
|             |           | 50              | 0         | 24.07 | 23.90 | 23.99 |
|             | 16QAM     | 1               | 0         | 24.32 | 24.35 | 23.94 |
|             |           | 1               | 24        | 24.56 | 24.45 | 24.17 |
|             |           | 1               | 49        | 24.25 | 24.00 | 24.23 |
|             |           | 25              | 0         | 22.99 | 22.96 | 22.97 |
|             |           | 25              | 12        | 23.02 | 22.95 | 23.03 |
|             |           | 25              | 25        | 22.96 | 22.94 | 23.01 |
|             |           | 50              | 0         | 23.02 | 22.95 | 23.03 |
|             | 64QAM     | 1               | 0         | 23.22 | 23.33 | 22.99 |
|             |           | 1               | 24        | 23.46 | 23.17 | 23.15 |
|             |           | 1               | 49        | 22.96 | 23.04 | 23.01 |
|             |           | 25              | 0         | 22.18 | 21.92 | 21.80 |
|             |           | 25              | 12        | 22.12 | 21.86 | 21.74 |
|             |           | 25              | 25        | 22.01 | 21.78 | 21.91 |
|             |           | 50              | 0         | 21.78 | 21.67 | 22.05 |
|             | 256QAM    | 1               | 0         | 21.02 | 21.26 | 20.79 |
|             |           | 1               | 24        | 21.34 | 20.89 | 21.37 |
|             |           | 1               | 49        | 20.73 | 21.32 | 20.87 |
|             |           | 25              | 0         | 20.19 | 19.71 | 19.82 |
|             |           | 25              | 12        | 20.23 | 19.86 | 19.55 |
|             |           | 25              | 25        | 20.21 | 19.58 | 19.62 |
|             |           | 50              | 0         | 19.94 | 19.95 | 19.79 |

| LTE Band 12 |           |                 |           |       |       |       |
|-------------|-----------|-----------------|-----------|-------|-------|-------|
| BW          | MCS Index | RB Size         | RB Offset | Low   | Mid   | High  |
|             |           | Channel         |           | 23035 | 23095 | 23155 |
|             |           | Frequency (MHz) |           | 701.5 | 707.5 | 713.5 |
| 5M          | QPSK      | 1               | 0         | 24.86 | 24.84 | 24.81 |
|             |           | 1               | 12        | 25.04 | 24.88 | 24.70 |
|             |           | 1               | 24        | 24.91 | 24.91 | 24.89 |
|             |           | 12              | 0         | 24.04 | 23.94 | 23.89 |
|             |           | 12              | 6         | 24.03 | 23.90 | 23.96 |
|             |           | 12              | 13        | 23.98 | 23.97 | 23.93 |
|             |           | 25              | 0         | 23.94 | 23.86 | 23.86 |
|             | 16QAM     | 1               | 0         | 24.21 | 24.09 | 23.75 |
|             |           | 1               | 12        | 24.40 | 24.04 | 24.22 |
|             |           | 1               | 24        | 23.84 | 24.02 | 24.38 |
|             |           | 12              | 0         | 23.10 | 22.90 | 22.85 |
|             |           | 12              | 6         | 22.95 | 22.93 | 22.96 |
|             |           | 12              | 13        | 22.96 | 23.01 | 22.89 |
|             |           | 25              | 0         | 22.91 | 22.94 | 22.91 |
|             | 64QAM     | 1               | 0         | 22.99 | 23.25 | 22.92 |
|             |           | 1               | 12        | 23.44 | 23.04 | 23.39 |
|             |           | 1               | 24        | 22.90 | 23.12 | 23.18 |
|             |           | 12              | 0         | 22.06 | 21.96 | 21.64 |
|             |           | 12              | 6         | 21.77 | 22.05 | 21.84 |
|             |           | 12              | 13        | 21.80 | 21.76 | 21.95 |
|             |           | 25              | 0         | 22.05 | 22.06 | 22.09 |
|             | 256QAM    | 1               | 0         | 20.77 | 21.32 | 21.21 |
|             |           | 1               | 12        | 21.38 | 21.10 | 21.12 |
|             |           | 1               | 24        | 21.14 | 21.14 | 20.98 |
|             |           | 12              | 0         | 20.00 | 20.17 | 19.52 |
|             |           | 12              | 6         | 20.07 | 19.89 | 20.08 |
|             |           | 12              | 13        | 19.60 | 19.64 | 19.76 |
|             |           | 25              | 0         | 20.35 | 20.14 | 20.22 |

| LTE Band 12 |           |                 |           |       |       |       |
|-------------|-----------|-----------------|-----------|-------|-------|-------|
| BW          | MCS Index | RB Size         | RB Offset | Low   | Mid   | High  |
|             |           | Channel         |           | 23025 | 23095 | 23165 |
|             |           | Frequency (MHz) |           | 700.5 | 707.5 | 714.5 |
| 3M          | QPSK      | 1               | 0         | 25.00 | 24.90 | 24.82 |
|             |           | 1               | 7         | 24.83 | 24.95 | 24.79 |
|             |           | 1               | 14        | 24.80 | 24.79 | 24.81 |
|             |           | 8               | 0         | 23.96 | 23.89 | 23.85 |
|             |           | 8               | 3         | 24.01 | 23.94 | 23.85 |
|             |           | 8               | 7         | 23.89 | 23.88 | 23.87 |
|             |           | 15              | 0         | 24.02 | 23.90 | 23.83 |
|             | 16QAM     | 1               | 0         | 24.16 | 24.32 | 24.06 |
|             |           | 1               | 7         | 24.06 | 24.00 | 24.21 |
|             |           | 1               | 14        | 24.09 | 24.41 | 23.76 |
|             |           | 8               | 0         | 22.86 | 23.00 | 22.86 |
|             |           | 8               | 3         | 23.15 | 22.97 | 22.88 |
|             |           | 8               | 7         | 23.04 | 22.91 | 22.83 |
|             |           | 15              | 0         | 23.05 | 22.88 | 22.78 |
|             | 64QAM     | 1               | 0         | 23.31 | 23.08 | 22.81 |
|             |           | 1               | 7         | 22.93 | 23.02 | 23.37 |
|             |           | 1               | 14        | 22.91 | 23.35 | 22.84 |
|             |           | 8               | 0         | 21.96 | 22.11 | 21.62 |
|             |           | 8               | 3         | 21.93 | 22.15 | 21.66 |
|             |           | 8               | 7         | 21.97 | 21.87 | 21.79 |
|             |           | 15              | 0         | 22.01 | 22.08 | 21.86 |
|             | 256QAM    | 1               | 0         | 21.30 | 21.31 | 21.08 |
|             |           | 1               | 7         | 21.11 | 21.20 | 21.59 |
|             |           | 1               | 14        | 20.96 | 21.38 | 20.94 |
|             |           | 8               | 0         | 20.17 | 20.11 | 19.78 |
|             |           | 8               | 3         | 20.11 | 19.89 | 19.95 |
|             |           | 8               | 7         | 20.04 | 20.15 | 19.73 |
|             |           | 15              | 0         | 20.31 | 20.11 | 19.96 |

| LTE Band 12 |           |                 |           |       |       |       |
|-------------|-----------|-----------------|-----------|-------|-------|-------|
| BW          | MCS Index | RB Size         | RB Offset | Low   | Mid   | High  |
|             |           | Channel         |           | 23017 | 23095 | 23173 |
|             |           | Frequency (MHz) |           | 699.7 | 707.5 | 715.3 |
| 1.4M        | QPSK      | 1               | 0         | 24.81 | 24.83 | 24.74 |
|             |           | 1               | 2         | 24.92 | 24.82 | 24.77 |
|             |           | 1               | 5         | 24.77 | 24.69 | 24.66 |
|             |           | 3               | 0         | 24.82 | 24.75 | 24.68 |
|             |           | 3               | 1         | 24.94 | 24.72 | 24.74 |
|             |           | 3               | 3         | 24.82 | 24.83 | 24.68 |
|             |           | 6               | 0         | 23.96 | 23.87 | 23.76 |
|             | 16QAM     | 1               | 0         | 24.38 | 24.20 | 23.90 |
|             |           | 1               | 2         | 24.12 | 24.07 | 24.05 |
|             |           | 1               | 5         | 24.08 | 24.21 | 23.71 |
|             |           | 3               | 0         | 23.91 | 23.83 | 23.77 |
|             |           | 3               | 1         | 24.03 | 23.95 | 23.68 |
|             |           | 3               | 3         | 23.92 | 23.86 | 23.84 |
|             |           | 6               | 0         | 23.11 | 23.01 | 22.88 |
|             | 64QAM     | 1               | 0         | 23.21 | 23.18 | 22.66 |
|             |           | 1               | 2         | 23.14 | 23.06 | 23.01 |
|             |           | 1               | 5         | 23.04 | 23.39 | 22.48 |
|             |           | 3               | 0         | 23.01 | 22.65 | 22.70 |
|             |           | 3               | 1         | 23.14 | 22.79 | 22.43 |
|             |           | 3               | 3         | 22.70 | 22.70 | 22.54 |
|             |           | 6               | 0         | 22.19 | 22.13 | 21.76 |
|             | 256QAM    | 1               | 0         | 21.07 | 21.17 | 20.54 |
|             |           | 1               | 2         | 21.28 | 21.31 | 20.77 |
|             |           | 1               | 5         | 21.18 | 21.49 | 20.36 |
|             |           | 3               | 0         | 20.77 | 20.57 | 20.64 |
|             |           | 3               | 1         | 21.18 | 20.90 | 20.68 |
|             |           | 3               | 3         | 20.83 | 20.44 | 20.26 |
|             |           | 6               | 0         | 20.32 | 20.18 | 19.89 |

| LTE Band 13 |           |                 |           |       |
|-------------|-----------|-----------------|-----------|-------|
| BW          | MCS Index | RB Size         | RB Offset | Mid   |
|             |           | Channel         |           | 23230 |
|             |           | Frequency (MHz) |           | 782   |
| 10M         | QPSK      | 1               | 0         | 24.97 |
|             |           | 1               | 24        | 24.97 |
|             |           | 1               | 49        | 24.93 |
|             |           | 25              | 0         | 24.11 |
|             |           | 25              | 12        | 24.09 |
|             |           | 25              | 25        | 24.14 |
|             |           | 50              | 0         | 24.19 |
|             | 16QAM     | 1               | 0         | 24.39 |
|             |           | 1               | 24        | 24.24 |
|             |           | 1               | 49        | 24.38 |
|             |           | 25              | 0         | 23.15 |
|             |           | 25              | 12        | 23.09 |
|             |           | 25              | 25        | 23.23 |
|             |           | 50              | 0         | 23.07 |
|             | 64QAM     | 1               | 0         | 23.33 |
|             |           | 1               | 24        | 23.39 |
|             |           | 1               | 49        | 23.41 |
|             |           | 25              | 0         | 22.31 |
|             |           | 25              | 12        | 21.84 |
|             |           | 25              | 25        | 21.99 |
|             |           | 50              | 0         | 21.87 |
|             | 256QAM    | 1               | 0         | 21.13 |
|             |           | 1               | 24        | 21.35 |
|             |           | 1               | 49        | 21.65 |
|             |           | 25              | 0         | 20.58 |
|             |           | 25              | 12        | 20.05 |
|             |           | 25              | 25        | 19.99 |
|             |           | 50              | 0         | 19.97 |

| LTE Band 13 |           |                 |           |       |       |       |
|-------------|-----------|-----------------|-----------|-------|-------|-------|
| BW          | MCS Index | RB Size         | RB Offset | Low   | Mid   | High  |
|             |           | Channel         |           | 23205 | 23230 | 23255 |
|             |           | Frequency (MHz) |           | 779.5 | 782   | 784.5 |
| 5M          | QPSK      | 1               | 0         | 24.85 | 24.92 | 24.98 |
|             |           | 1               | 12        | 24.95 | 25.06 | 24.99 |
|             |           | 1               | 24        | 25.04 | 24.90 | 24.85 |
|             |           | 12              | 0         | 24.05 | 24.08 | 23.97 |
|             |           | 12              | 6         | 24.10 | 24.02 | 24.02 |
|             |           | 12              | 13        | 24.13 | 24.09 | 24.06 |
|             |           | 25              | 0         | 24.13 | 24.10 | 23.98 |
|             | 16QAM     | 1               | 0         | 23.95 | 24.14 | 24.47 |
|             |           | 1               | 12        | 24.60 | 24.51 | 24.00 |
|             |           | 1               | 24        | 24.32 | 24.21 | 24.42 |
|             |           | 12              | 0         | 23.05 | 23.10 | 23.25 |
|             |           | 12              | 6         | 23.08 | 23.07 | 23.17 |
|             |           | 12              | 13        | 23.20 | 23.09 | 23.11 |
|             |           | 25              | 0         | 23.05 | 23.12 | 23.10 |
|             | 64QAM     | 1               | 0         | 23.07 | 23.29 | 23.31 |
|             |           | 1               | 12        | 23.80 | 23.45 | 23.11 |
|             |           | 1               | 24        | 23.09 | 23.07 | 23.50 |
|             |           | 12              | 0         | 22.17 | 21.86 | 22.33 |
|             |           | 12              | 6         | 21.96 | 22.20 | 21.98 |
|             |           | 12              | 13        | 21.97 | 21.87 | 22.14 |
|             |           | 25              | 0         | 21.79 | 22.08 | 21.83 |
|             | 256QAM    | 1               | 0         | 20.96 | 21.20 | 21.45 |
|             |           | 1               | 12        | 21.87 | 21.34 | 21.28 |
|             |           | 1               | 24        | 20.97 | 20.89 | 21.59 |
|             |           | 12              | 0         | 20.21 | 19.64 | 20.11 |
|             |           | 12              | 6         | 20.05 | 20.32 | 19.70 |
|             |           | 12              | 13        | 20.09 | 19.58 | 20.00 |
|             |           | 25              | 0         | 19.67 | 20.27 | 19.57 |

| LTE Band 14 |           |                 |           |       |
|-------------|-----------|-----------------|-----------|-------|
| BW          | MCS Index | RB Size         | RB Offset | Mid   |
|             |           | Channel         |           | 23330 |
|             |           | Frequency (MHz) |           | 793   |
| 10M         | QPSK      | 1               | 0         | 24.88 |
|             |           | 1               | 24        | 24.87 |
|             |           | 1               | 49        | 24.94 |
|             |           | 25              | 0         | 24.04 |
|             |           | 25              | 12        | 23.95 |
|             |           | 25              | 25        | 23.97 |
|             |           | 50              | 0         | 23.97 |
|             | 16QAM     | 1               | 0         | 24.59 |
|             |           | 1               | 24        | 24.40 |
|             |           | 1               | 49        | 23.96 |
|             |           | 25              | 0         | 22.94 |
|             |           | 25              | 12        | 23.02 |
|             |           | 25              | 25        | 22.98 |
|             |           | 50              | 0         | 23.02 |
|             | 64QAM     | 1               | 0         | 23.78 |
|             |           | 1               | 24        | 23.16 |
|             |           | 1               | 49        | 22.83 |
|             |           | 25              | 0         | 21.80 |
|             |           | 25              | 12        | 21.90 |
|             |           | 25              | 25        | 22.13 |
|             |           | 50              | 0         | 21.82 |
|             | 256QAM    | 1               | 0         | 21.97 |
|             |           | 1               | 24        | 21.12 |
|             |           | 1               | 49        | 21.12 |
|             |           | 25              | 0         | 20.02 |
|             |           | 25              | 12        | 20.16 |
|             |           | 25              | 25        | 20.32 |
|             |           | 50              | 0         | 20.03 |

| LTE Band 14 |           |                 |           |       |       |       |
|-------------|-----------|-----------------|-----------|-------|-------|-------|
| BW          | MCS Index | RB Size         | RB Offset | Low   | Mid   | High  |
|             |           | Channel         |           | 23305 | 23330 | 23355 |
|             |           | Frequency (MHz) |           | 790.5 | 793   | 795.5 |
| 5M          | QPSK      | 1               | 0         | 24.80 | 24.87 | 24.88 |
|             |           | 1               | 12        | 24.96 | 25.05 | 24.85 |
|             |           | 1               | 24        | 24.98 | 25.03 | 24.88 |
|             |           | 12              | 0         | 24.00 | 23.92 | 23.99 |
|             |           | 12              | 6         | 24.04 | 24.01 | 23.87 |
|             |           | 12              | 13        | 23.98 | 24.00 | 24.00 |
|             |           | 25              | 0         | 24.04 | 23.98 | 23.95 |
|             | 16QAM     | 1               | 0         | 24.48 | 24.45 | 24.44 |
|             |           | 1               | 12        | 24.23 | 23.89 | 24.20 |
|             |           | 1               | 24        | 24.55 | 24.39 | 24.07 |
|             |           | 12              | 0         | 22.92 | 23.02 | 23.07 |
|             |           | 12              | 6         | 23.05 | 22.97 | 23.03 |
|             |           | 12              | 13        | 23.05 | 23.01 | 22.96 |
|             |           | 25              | 0         | 23.13 | 22.94 | 22.97 |
|             | 64QAM     | 1               | 0         | 23.20 | 23.31 | 23.59 |
|             |           | 1               | 12        | 22.93 | 22.80 | 23.31 |
|             |           | 1               | 24        | 23.38 | 23.14 | 23.17 |
|             |           | 12              | 0         | 21.94 | 21.80 | 22.27 |
|             |           | 12              | 6         | 21.82 | 22.05 | 22.16 |
|             |           | 12              | 13        | 22.25 | 21.74 | 21.99 |
|             |           | 25              | 0         | 21.99 | 21.85 | 22.10 |
|             | 256QAM    | 1               | 0         | 21.26 | 21.05 | 21.50 |
|             |           | 1               | 12        | 20.72 | 20.63 | 21.17 |
|             |           | 1               | 24        | 21.14 | 21.07 | 21.47 |
|             |           | 12              | 0         | 20.05 | 19.85 | 19.98 |
|             |           | 12              | 6         | 20.00 | 20.29 | 19.97 |
|             |           | 12              | 13        | 20.13 | 19.93 | 20.18 |
|             |           | 25              | 0         | 19.91 | 20.12 | 19.90 |

| LTE Band 30 |           |                 |           |       |
|-------------|-----------|-----------------|-----------|-------|
| BW          | MCS Index | RB Size         | RB Offset | Mid   |
|             |           | Channel         |           | 27710 |
|             |           | Frequency (MHz) |           | 2310  |
| 10M         | QPSK      | 1               | 0         | 20.93 |
|             |           | 1               | 24        | 20.84 |
|             |           | 1               | 49        | 20.70 |
|             |           | 25              | 0         | 19.74 |
|             |           | 25              | 12        | 19.93 |
|             |           | 25              | 25        | 19.97 |
|             |           | 50              | 0         | 19.90 |
|             | 16QAM     | 1               | 0         | 20.10 |
|             |           | 1               | 24        | 20.17 |
|             |           | 1               | 49        | 19.85 |
|             |           | 25              | 0         | 18.72 |
|             |           | 25              | 12        | 18.85 |
|             |           | 25              | 25        | 18.88 |
|             |           | 50              | 0         | 18.76 |
|             | 64QAM     | 1               | 0         | 18.83 |
|             |           | 1               | 24        | 19.02 |
|             |           | 1               | 49        | 18.58 |
|             |           | 25              | 0         | 17.89 |
|             |           | 25              | 12        | 18.01 |
|             |           | 25              | 25        | 18.04 |
|             |           | 50              | 0         | 17.90 |
|             | 256QAM    | 1               | 0         | 16.58 |
|             |           | 1               | 24        | 17.18 |
|             |           | 1               | 49        | 16.64 |
|             |           | 25              | 0         | 15.83 |
|             |           | 25              | 12        | 16.23 |
|             |           | 25              | 25        | 16.30 |
|             |           | 50              | 0         | 15.94 |

| LTE Band 30 |           |                 |           |        |       |        |
|-------------|-----------|-----------------|-----------|--------|-------|--------|
| BW          | MCS Index | RB Size         | RB Offset | Low    | Mid   | High   |
|             |           | Channel         |           | 27685  | 27710 | 27735  |
|             |           | Frequency (MHz) |           | 2307.5 | 2310  | 2312.5 |
| 5M          | QPSK      | 1               | 0         | 20.56  | 20.69 | 20.71  |
|             |           | 1               | 12        | 20.87  | 20.94 | 20.91  |
|             |           | 1               | 24        | 20.85  | 20.85 | 20.86  |
|             |           | 12              | 0         | 19.76  | 19.73 | 19.80  |
|             |           | 12              | 6         | 19.92  | 19.87 | 19.85  |
|             |           | 12              | 13        | 19.89  | 19.89 | 19.88  |
|             |           | 25              | 0         | 19.86  | 19.86 | 19.77  |
|             | 16QAM     | 1               | 0         | 19.90  | 19.87 | 20.24  |
|             |           | 1               | 12        | 20.28  | 20.24 | 20.26  |
|             |           | 1               | 24        | 19.77  | 20.42 | 20.45  |
|             |           | 12              | 0         | 18.78  | 18.78 | 18.80  |
|             |           | 12              | 6         | 18.86  | 18.94 | 18.93  |
|             |           | 12              | 13        | 18.93  | 18.89 | 18.96  |
|             |           | 25              | 0         | 18.84  | 18.87 | 18.86  |
|             | 64QAM     | 1               | 0         | 18.62  | 19.01 | 19.27  |
|             |           | 1               | 12        | 19.32  | 19.20 | 19.06  |
|             |           | 1               | 24        | 18.47  | 19.17 | 19.16  |
|             |           | 12              | 0         | 17.60  | 17.52 | 17.97  |
|             |           | 12              | 6         | 17.66  | 17.65 | 17.64  |
|             |           | 12              | 13        | 17.74  | 17.69 | 17.74  |
|             |           | 25              | 0         | 17.99  | 17.97 | 17.85  |
|             | 256QAM    | 1               | 0         | 16.33  | 17.25 | 17.31  |
|             |           | 1               | 12        | 17.61  | 17.13 | 16.87  |
|             |           | 1               | 24        | 16.57  | 17.17 | 17.13  |
|             |           | 12              | 0         | 15.42  | 15.23 | 15.90  |
|             |           | 12              | 6         | 15.79  | 15.73 | 15.93  |
|             |           | 12              | 13        | 15.94  | 15.46 | 15.93  |
|             |           | 25              | 0         | 16.23  | 15.87 | 16.12  |

| LTE Band 41 |           |                 |           |       |       |       |
|-------------|-----------|-----------------|-----------|-------|-------|-------|
| BW          | MCS Index | RB Size         | RB Offset | Low   | Mid   | High  |
|             |           | Channel         |           | 39750 | 40620 | 41490 |
|             |           | Frequency (MHz) |           | 2506  | 2593  | 2680  |
| 20M         | QPSK      | 1               | 0         | 27.66 | 27.50 | 27.36 |
|             |           | 1               | 50        | 27.53 | 27.35 | 26.96 |
|             |           | 1               | 99        | 27.47 | 27.48 | 26.16 |
|             |           | 50              | 0         | 26.74 | 26.63 | 26.51 |
|             |           | 50              | 25        | 26.77 | 26.65 | 26.16 |
|             |           | 50              | 50        | 26.78 | 26.70 | 25.75 |
|             |           | 100             | 0         | 26.73 | 26.70 | 26.16 |
|             | 16QAM     | 1               | 0         | 26.93 | 26.85 | 26.84 |
|             |           | 1               | 50        | 26.84 | 26.70 | 26.29 |
|             |           | 1               | 99        | 26.88 | 26.72 | 25.45 |
|             |           | 50              | 0         | 25.64 | 25.69 | 25.57 |
|             |           | 50              | 25        | 25.74 | 25.68 | 25.24 |
|             |           | 50              | 50        | 25.82 | 25.70 | 24.85 |
|             |           | 100             | 0         | 25.83 | 25.71 | 25.25 |
|             | 64QAM     | 1               | 0         | 25.69 | 25.85 | 25.74 |
|             |           | 1               | 50        | 25.85 | 25.62 | 25.00 |
|             |           | 1               | 99        | 25.69 | 25.46 | 24.25 |
|             |           | 50              | 0         | 24.52 | 24.55 | 24.56 |
|             |           | 50              | 25        | 24.45 | 24.83 | 24.37 |
|             |           | 50              | 50        | 24.56 | 24.69 | 23.70 |
|             |           | 100             | 0         | 24.75 | 24.72 | 24.09 |
|             | 256QAM    | 1               | 0         | 23.77 | 24.14 | 23.68 |
|             |           | 1               | 50        | 24.02 | 23.75 | 22.73 |
|             |           | 1               | 99        | 23.79 | 23.70 | 22.43 |
|             |           | 50              | 0         | 22.38 | 22.70 | 22.43 |
|             |           | 50              | 25        | 22.58 | 22.87 | 22.49 |
|             |           | 50              | 50        | 22.47 | 22.52 | 21.74 |
|             |           | 100             | 0         | 22.57 | 23.01 | 22.38 |

| LTE Band 41 |           |                 |           |        |       |        |
|-------------|-----------|-----------------|-----------|--------|-------|--------|
| BW          | MCS Index | RB Size         | RB Offset | Low    | Mid   | High   |
|             |           | Channel         |           | 39725  | 40620 | 41515  |
|             |           | Frequency (MHz) |           | 2503.5 | 2593  | 2682.5 |
| 15M         | QPSK      | 1               | 0         | 27.56  | 27.44 | 27.34  |
|             |           | 1               | 37        | 27.57  | 27.42 | 26.72  |
|             |           | 1               | 74        | 27.51  | 27.47 | 26.21  |
|             |           | 36              | 0         | 26.85  | 26.50 | 26.19  |
|             |           | 36              | 19        | 26.81  | 26.59 | 25.95  |
|             |           | 36              | 39        | 26.74  | 26.63 | 25.69  |
|             |           | 75              | 0         | 26.79  | 26.69 | 26.03  |
|             | 16QAM     | 1               | 0         | 26.95  | 26.74 | 26.94  |
|             |           | 1               | 37        | 26.90  | 27.03 | 25.98  |
|             |           | 1               | 74        | 26.87  | 26.73 | 25.50  |
|             |           | 36              | 0         | 25.82  | 25.60 | 25.27  |
|             |           | 36              | 19        | 25.69  | 25.65 | 24.99  |
|             |           | 36              | 39        | 25.70  | 25.60 | 24.69  |
|             |           | 75              | 0         | 25.81  | 25.69 | 25.05  |
|             | 64QAM     | 1               | 0         | 25.74  | 25.60 | 25.81  |
|             |           | 1               | 37        | 25.62  | 25.74 | 24.78  |
|             |           | 1               | 74        | 25.80  | 25.58 | 24.60  |
|             |           | 36              | 0         | 24.80  | 24.67 | 24.42  |
|             |           | 36              | 19        | 24.59  | 24.82 | 23.94  |
|             |           | 36              | 39        | 24.45  | 24.63 | 23.80  |
|             |           | 75              | 0         | 24.74  | 24.75 | 24.21  |
|             | 256QAM    | 1               | 0         | 23.99  | 23.33 | 23.83  |
|             |           | 1               | 37        | 23.76  | 23.46 | 22.69  |
|             |           | 1               | 74        | 23.60  | 23.48 | 22.69  |
|             |           | 36              | 0         | 23.01  | 22.79 | 22.66  |
|             |           | 36              | 19        | 22.47  | 23.05 | 21.91  |
|             |           | 36              | 39        | 22.54  | 22.36 | 21.76  |
|             |           | 75              | 0         | 22.72  | 22.68 | 22.46  |

| LTE Band 41 |           |                 |           |       |       |       |
|-------------|-----------|-----------------|-----------|-------|-------|-------|
| BW          | MCS Index | RB Size         | RB Offset | Low   | Mid   | High  |
|             |           | Channel         |           | 39700 | 40620 | 41540 |
|             |           | Frequency (MHz) |           | 2501  | 2593  | 2685  |
| 10M         | QPSK      | 1               | 0         | 27.63 | 27.40 | 26.93 |
|             |           | 1               | 24        | 27.65 | 27.47 | 26.56 |
|             |           | 1               | 49        | 27.62 | 27.30 | 26.22 |
|             |           | 25              | 0         | 26.80 | 26.64 | 25.97 |
|             |           | 25              | 12        | 26.80 | 26.72 | 25.82 |
|             |           | 25              | 25        | 26.76 | 26.70 | 25.61 |
|             |           | 50              | 0         | 26.85 | 26.67 | 25.76 |
|             | 16QAM     | 1               | 0         | 27.03 | 26.74 | 26.57 |
|             |           | 1               | 24        | 26.93 | 26.82 | 26.18 |
|             |           | 1               | 49        | 26.99 | 26.84 | 25.51 |
|             |           | 25              | 0         | 25.81 | 25.77 | 25.06 |
|             |           | 25              | 12        | 25.84 | 25.81 | 24.93 |
|             |           | 25              | 25        | 25.81 | 25.65 | 24.68 |
|             |           | 50              | 0         | 25.87 | 25.74 | 24.85 |
|             | 64QAM     | 1               | 0         | 25.88 | 25.66 | 25.56 |
|             |           | 1               | 24        | 25.83 | 25.77 | 25.11 |
|             |           | 1               | 49        | 26.10 | 25.77 | 24.31 |
|             |           | 25              | 0         | 24.92 | 24.75 | 24.14 |
|             |           | 25              | 12        | 24.55 | 24.72 | 24.01 |
|             |           | 25              | 25        | 24.55 | 24.81 | 23.60 |
|             |           | 50              | 0         | 24.80 | 24.49 | 23.95 |
|             | 256QAM    | 1               | 0         | 23.62 | 23.58 | 23.27 |
|             |           | 1               | 24        | 24.09 | 23.75 | 23.14 |
|             |           | 1               | 49        | 23.94 | 23.62 | 22.18 |
|             |           | 25              | 0         | 22.92 | 22.50 | 22.01 |
|             |           | 25              | 12        | 22.27 | 22.89 | 22.06 |
|             |           | 25              | 25        | 22.48 | 22.84 | 21.68 |
|             |           | 50              | 0         | 22.79 | 22.75 | 22.12 |

| LTE Band 41 |           |                 |           |        |       |        |
|-------------|-----------|-----------------|-----------|--------|-------|--------|
| BW          | MCS Index | RB Size         | RB Offset | Low    | Mid   | High   |
|             |           | Channel         |           | 39675  | 40620 | 41565  |
|             |           | Frequency (MHz) |           | 2498.5 | 2593  | 2687.5 |
| 5M          | QPSK      | 1               | 0         | 27.58  | 27.38 | 26.53  |
|             |           | 1               | 12        | 27.61  | 27.44 | 26.34  |
|             |           | 1               | 24        | 27.54  | 27.38 | 26.21  |
|             |           | 12              | 0         | 26.81  | 26.66 | 25.69  |
|             |           | 12              | 6         | 26.74  | 26.61 | 25.66  |
|             |           | 12              | 13        | 26.77  | 26.64 | 25.55  |
|             |           | 25              | 0         | 26.74  | 26.61 | 25.59  |
|             | 16QAM     | 1               | 0         | 26.88  | 26.74 | 25.88  |
|             |           | 1               | 12        | 26.86  | 26.77 | 25.72  |
|             |           | 1               | 24        | 26.91  | 26.73 | 25.59  |
|             |           | 12              | 0         | 25.82  | 25.72 | 24.79  |
|             |           | 12              | 6         | 25.80  | 25.78 | 24.74  |
|             |           | 12              | 13        | 25.83  | 25.67 | 24.62  |
|             |           | 25              | 0         | 25.78  | 25.72 | 24.69  |
|             | 64QAM     | 1               | 0         | 26.05  | 25.63 | 24.84  |
|             |           | 1               | 12        | 26.04  | 25.73 | 24.59  |
|             |           | 1               | 24        | 25.68  | 25.64 | 24.51  |
|             |           | 12              | 0         | 24.74  | 24.46 | 23.74  |
|             |           | 12              | 6         | 24.63  | 24.58 | 23.66  |
|             |           | 12              | 13        | 24.98  | 24.76 | 23.55  |
|             |           | 25              | 0         | 24.59  | 24.91 | 23.51  |
|             | 256QAM    | 1               | 0         | 24.20  | 23.82 | 22.86  |
|             |           | 1               | 12        | 23.96  | 23.73 | 22.67  |
|             |           | 1               | 24        | 23.88  | 23.89 | 22.56  |
|             |           | 12              | 0         | 22.45  | 22.40 | 21.88  |
|             |           | 12              | 6         | 22.56  | 22.48 | 21.64  |
|             |           | 12              | 13        | 22.96  | 22.78 | 21.73  |
|             |           | 25              | 0         | 22.49  | 23.06 | 21.25  |

| LTE Band 66 |           |                 |           |        |        |        |
|-------------|-----------|-----------------|-----------|--------|--------|--------|
| BW          | MCS Index | RB Size         | RB Offset | Low    | Mid    | High   |
|             |           | Channel         |           | 132072 | 132322 | 132572 |
|             |           | Frequency (MHz) |           | 1720   | 1745   | 1770   |
| 20M         | QPSK      | 1               | 0         | 24.78  | 24.85  | 24.78  |
|             |           | 1               | 50        | 24.84  | 24.75  | 24.79  |
|             |           | 1               | 99        | 24.80  | 24.69  | 24.66  |
|             |           | 50              | 0         | 23.85  | 23.66  | 23.74  |
|             |           | 50              | 25        | 23.70  | 23.74  | 23.84  |
|             |           | 50              | 50        | 23.89  | 23.69  | 23.87  |
|             |           | 100             | 0         | 23.65  | 23.71  | 23.84  |
|             | 16QAM     | 1               | 0         | 23.84  | 24.11  | 24.26  |
|             |           | 1               | 50        | 23.84  | 24.11  | 24.00  |
|             |           | 1               | 99        | 23.98  | 23.89  | 23.88  |
|             |           | 50              | 0         | 23.00  | 23.03  | 22.97  |
|             |           | 50              | 25        | 22.78  | 22.80  | 23.00  |
|             |           | 50              | 50        | 23.00  | 22.71  | 22.89  |
|             |           | 100             | 0         | 23.05  | 22.76  | 23.28  |
|             | 64QAM     | 1               | 0         | 22.68  | 22.81  | 23.18  |
|             |           | 1               | 50        | 22.55  | 23.03  | 22.90  |
|             |           | 1               | 99        | 22.71  | 22.72  | 22.82  |
|             |           | 50              | 0         | 21.87  | 21.97  | 21.89  |
|             |           | 50              | 25        | 21.75  | 21.68  | 21.83  |
|             |           | 50              | 50        | 21.91  | 21.53  | 21.81  |
|             |           | 100             | 0         | 22.01  | 21.71  | 22.25  |
|             | 256QAM    | 1               | 0         | 20.69  | 20.69  | 21.05  |
|             |           | 1               | 50        | 20.63  | 21.00  | 20.77  |
|             |           | 1               | 99        | 20.51  | 20.81  | 20.91  |
|             |           | 50              | 0         | 19.85  | 19.90  | 19.75  |
|             |           | 50              | 25        | 19.64  | 19.54  | 19.78  |
|             |           | 50              | 50        | 19.80  | 19.63  | 19.85  |
|             |           | 100             | 0         | 19.91  | 19.76  | 20.16  |

| LTE Band 66 |           |                 |           |        |        |        |
|-------------|-----------|-----------------|-----------|--------|--------|--------|
| BW          | MCS Index | RB Size         | RB Offset | Low    | Mid    | High   |
|             |           | Channel         |           | 132047 | 132322 | 132597 |
|             |           | Frequency (MHz) |           | 1717.5 | 1745   | 1772.5 |
| 15M         | QPSK      | 1               | 0         | 24.73  | 24.54  | 24.52  |
|             |           | 1               | 37        | 24.60  | 24.63  | 24.75  |
|             |           | 1               | 74        | 24.69  | 24.75  | 24.78  |
|             |           | 36              | 0         | 23.84  | 23.65  | 23.68  |
|             |           | 36              | 19        | 23.67  | 23.70  | 23.78  |
|             |           | 36              | 39        | 23.67  | 23.77  | 23.82  |
|             |           | 75              | 0         | 23.60  | 23.61  | 23.71  |
|             | 16QAM     | 1               | 0         | 23.87  | 23.74  | 23.64  |
|             |           | 1               | 37        | 24.10  | 24.12  | 24.11  |
|             |           | 1               | 74        | 23.78  | 24.18  | 24.13  |
|             |           | 36              | 0         | 23.22  | 22.69  | 22.94  |
|             |           | 36              | 19        | 22.86  | 23.03  | 23.15  |
|             |           | 36              | 39        | 22.95  | 23.13  | 22.92  |
|             |           | 75              | 0         | 22.61  | 22.91  | 23.06  |
|             | 64QAM     | 1               | 0         | 22.66  | 22.46  | 22.49  |
|             |           | 1               | 37        | 22.83  | 23.03  | 22.81  |
|             |           | 1               | 74        | 22.69  | 23.16  | 22.91  |
|             |           | 36              | 0         | 22.20  | 21.63  | 21.76  |
|             |           | 36              | 19        | 21.82  | 21.77  | 22.05  |
|             |           | 36              | 39        | 21.76  | 21.85  | 21.65  |
|             |           | 75              | 0         | 21.45  | 21.64  | 22.00  |
|             | 256QAM    | 1               | 0         | 20.69  | 20.38  | 20.34  |
|             |           | 1               | 37        | 20.78  | 21.05  | 20.75  |
|             |           | 1               | 74        | 20.68  | 21.18  | 20.98  |
|             |           | 36              | 0         | 20.17  | 19.66  | 19.59  |
|             |           | 36              | 19        | 19.69  | 19.64  | 19.93  |
|             |           | 36              | 39        | 19.81  | 19.85  | 19.46  |
|             |           | 75              | 0         | 19.25  | 19.58  | 20.01  |

| LTE Band 66 |           |                 |           |        |        |        |
|-------------|-----------|-----------------|-----------|--------|--------|--------|
| BW          | MCS Index | RB Size         | RB Offset | Low    | Mid    | High   |
|             |           | Channel         |           | 132022 | 132322 | 132622 |
|             |           | Frequency (MHz) |           | 1715   | 1745   | 1775   |
| 10M         | QPSK      | 1               | 0         | 24.76  | 24.75  | 24.86  |
|             |           | 1               | 24        | 24.51  | 24.53  | 24.71  |
|             |           | 1               | 49        | 24.62  | 24.61  | 24.58  |
|             |           | 25              | 0         | 23.66  | 23.70  | 23.63  |
|             |           | 25              | 12        | 23.84  | 23.76  | 23.75  |
|             |           | 25              | 25        | 23.82  | 23.81  | 23.90  |
|             |           | 50              | 0         | 23.78  | 23.71  | 23.91  |
|             | 16QAM     | 1               | 0         | 24.06  | 23.82  | 24.15  |
|             |           | 1               | 24        | 23.86  | 24.03  | 23.93  |
|             |           | 1               | 49        | 23.72  | 23.62  | 24.06  |
|             |           | 25              | 0         | 22.69  | 22.91  | 22.99  |
|             |           | 25              | 12        | 22.86  | 23.00  | 23.14  |
|             |           | 25              | 25        | 22.94  | 22.88  | 22.90  |
|             |           | 50              | 0         | 23.12  | 22.87  | 23.20  |
|             | 64QAM     | 1               | 0         | 22.77  | 22.59  | 23.07  |
|             |           | 1               | 24        | 22.71  | 22.76  | 22.85  |
|             |           | 1               | 49        | 22.48  | 22.61  | 22.77  |
|             |           | 25              | 0         | 21.43  | 21.79  | 21.81  |
|             |           | 25              | 12        | 21.71  | 21.70  | 21.97  |
|             |           | 25              | 25        | 21.64  | 21.86  | 21.70  |
|             |           | 50              | 0         | 22.03  | 21.78  | 21.95  |
|             | 256QAM    | 1               | 0         | 20.69  | 20.41  | 21.03  |
|             |           | 1               | 24        | 20.58  | 20.75  | 20.70  |
|             |           | 1               | 49        | 20.42  | 20.49  | 20.70  |
|             |           | 25              | 0         | 19.52  | 19.79  | 19.62  |
|             |           | 25              | 12        | 19.57  | 19.80  | 19.82  |
|             |           | 25              | 25        | 19.64  | 19.88  | 19.66  |
|             |           | 50              | 0         | 20.09  | 19.64  | 20.04  |

| LTE Band 66 |           |                 |           |        |        |        |
|-------------|-----------|-----------------|-----------|--------|--------|--------|
| BW          | MCS Index | RB Size         | RB Offset | Low    | Mid    | High   |
|             |           | Channel         |           | 131997 | 132322 | 132647 |
|             |           | Frequency (MHz) |           | 1712.5 | 1745   | 1777.5 |
| 5M          | QPSK      | 1               | 0         | 24.63  | 24.70  | 24.82  |
|             |           | 1               | 12        | 24.49  | 24.69  | 24.69  |
|             |           | 1               | 24        | 24.89  | 24.83  | 24.61  |
|             |           | 12              | 0         | 23.86  | 23.67  | 23.73  |
|             |           | 12              | 6         | 23.62  | 23.61  | 23.65  |
|             |           | 12              | 13        | 23.84  | 23.73  | 23.82  |
|             |           | 25              | 0         | 23.76  | 23.64  | 23.85  |
|             | 16QAM     | 1               | 0         | 23.92  | 23.73  | 24.15  |
|             |           | 1               | 12        | 23.60  | 24.06  | 23.89  |
|             |           | 1               | 24        | 24.25  | 24.20  | 23.62  |
|             |           | 12              | 0         | 22.87  | 22.97  | 23.16  |
|             |           | 12              | 6         | 22.78  | 22.98  | 22.66  |
|             |           | 12              | 13        | 23.25  | 22.82  | 23.21  |
|             |           | 25              | 0         | 22.80  | 22.79  | 23.00  |
|             | 64QAM     | 1               | 0         | 22.63  | 22.69  | 22.87  |
|             |           | 1               | 12        | 22.37  | 22.91  | 22.78  |
|             |           | 1               | 24        | 23.04  | 23.17  | 22.32  |
|             |           | 12              | 0         | 21.65  | 21.86  | 22.13  |
|             |           | 12              | 6         | 21.70  | 21.83  | 21.44  |
|             |           | 12              | 13        | 22.06  | 21.58  | 22.16  |
|             |           | 25              | 0         | 21.76  | 21.55  | 21.94  |
|             | 256QAM    | 1               | 0         | 20.57  | 20.63  | 20.77  |
|             |           | 1               | 12        | 20.35  | 20.95  | 20.76  |
|             |           | 1               | 24        | 21.11  | 21.20  | 20.39  |
|             |           | 12              | 0         | 19.61  | 19.96  | 20.15  |
|             |           | 12              | 6         | 19.58  | 19.89  | 19.40  |
|             |           | 12              | 13        | 19.92  | 19.68  | 20.04  |
|             |           | 25              | 0         | 19.58  | 19.59  | 19.94  |

| LTE Band 66 |           |                 |           |        |        |        |
|-------------|-----------|-----------------|-----------|--------|--------|--------|
| BW          | MCS Index | RB Size         | RB Offset | Low    | Mid    | High   |
|             |           | Channel         |           | 131987 | 132322 | 132657 |
|             |           | Frequency (MHz) |           | 1711.5 | 1745   | 1778.5 |
| 3M          | QPSK      | 1               | 0         | 24.84  | 24.65  | 24.58  |
|             |           | 1               | 7         | 24.59  | 24.58  | 24.59  |
|             |           | 1               | 14        | 24.74  | 24.71  | 24.63  |
|             |           | 8               | 0         | 23.59  | 23.69  | 23.88  |
|             |           | 8               | 3         | 23.81  | 23.64  | 23.64  |
|             |           | 8               | 7         | 23.74  | 23.71  | 23.67  |
|             |           | 15              | 0         | 23.63  | 23.66  | 23.57  |
|             | 16QAM     | 1               | 0         | 23.88  | 23.98  | 23.83  |
|             |           | 1               | 7         | 23.77  | 23.81  | 23.69  |
|             |           | 1               | 14        | 24.11  | 23.86  | 23.68  |
|             |           | 8               | 0         | 22.95  | 22.88  | 23.36  |
|             |           | 8               | 3         | 23.22  | 22.68  | 23.10  |
|             |           | 8               | 7         | 22.97  | 23.13  | 22.72  |
|             |           | 15              | 0         | 22.79  | 22.84  | 22.76  |
|             | 64QAM     | 1               | 0         | 22.77  | 22.94  | 22.62  |
|             |           | 1               | 7         | 22.77  | 22.72  | 22.43  |
|             |           | 1               | 14        | 22.92  | 22.65  | 22.44  |
|             |           | 8               | 0         | 21.80  | 21.82  | 22.08  |
|             |           | 8               | 3         | 22.20  | 21.49  | 21.90  |
|             |           | 8               | 7         | 21.69  | 22.04  | 21.59  |
|             |           | 15              | 0         | 21.58  | 21.66  | 21.54  |
|             | 256QAM    | 1               | 0         | 20.85  | 21.04  | 20.56  |
|             |           | 1               | 7         | 20.78  | 20.80  | 20.46  |
|             |           | 1               | 14        | 20.86  | 20.58  | 20.50  |
|             |           | 8               | 0         | 19.78  | 19.89  | 20.18  |
|             |           | 8               | 3         | 20.09  | 19.37  | 19.73  |
|             |           | 8               | 7         | 19.72  | 20.05  | 19.51  |
|             |           | 15              | 0         | 19.41  | 19.61  | 19.63  |

| LTE Band 66 |           |                 |           |        |        |        |
|-------------|-----------|-----------------|-----------|--------|--------|--------|
| BW          | MCS Index | RB Size         | RB Offset | Low    | Mid    | High   |
|             |           | Channel         |           | 131979 | 132322 | 132665 |
|             |           | Frequency (MHz) |           | 1710.7 | 1745   | 1779.3 |
| 1.4M        | QPSK      | 1               | 0         | 24.44  | 24.56  | 24.60  |
|             |           | 1               | 2         | 24.37  | 24.53  | 24.47  |
|             |           | 1               | 5         | 24.28  | 24.44  | 24.51  |
|             |           | 3               | 0         | 24.42  | 24.32  | 24.31  |
|             |           | 3               | 1         | 24.35  | 24.46  | 24.62  |
|             |           | 3               | 3         | 24.18  | 24.43  | 24.22  |
|             |           | 6               | 0         | 23.29  | 23.58  | 23.44  |
|             | 16QAM     | 1               | 0         | 23.88  | 23.94  | 23.89  |
|             |           | 1               | 2         | 23.54  | 23.80  | 23.93  |
|             |           | 1               | 5         | 23.71  | 23.83  | 23.84  |
|             |           | 3               | 0         | 23.84  | 23.67  | 23.58  |
|             |           | 3               | 1         | 23.47  | 23.58  | 23.95  |
|             |           | 3               | 3         | 23.61  | 23.54  | 23.22  |
|             |           | 6               | 0         | 22.53  | 22.64  | 22.86  |
|             | 64QAM     | 1               | 0         | 22.82  | 22.94  | 22.73  |
|             |           | 1               | 2         | 22.41  | 22.72  | 22.74  |
|             |           | 1               | 5         | 22.58  | 22.66  | 22.84  |
|             |           | 3               | 0         | 22.59  | 22.50  | 22.48  |
|             |           | 3               | 1         | 22.33  | 22.44  | 22.87  |
|             |           | 3               | 3         | 22.33  | 22.53  | 22.01  |
|             |           | 6               | 0         | 21.38  | 21.44  | 21.81  |
|             | 256QAM    | 1               | 0         | 20.92  | 21.04  | 20.75  |
|             |           | 1               | 2         | 20.45  | 20.70  | 20.72  |
|             |           | 1               | 5         | 20.64  | 20.46  | 20.74  |
|             |           | 3               | 0         | 20.41  | 20.38  | 20.56  |
|             |           | 3               | 1         | 20.30  | 20.46  | 20.86  |
|             |           | 3               | 3         | 20.23  | 20.35  | 20.09  |
|             |           | 6               | 0         | 19.37  | 19.40  | 19.88  |

**EIRP / ERP Power (dBm)**

5GNR n77 (Part 270):

| 5GNR n77 |              |                 |           |        |        |        |
|----------|--------------|-----------------|-----------|--------|--------|--------|
| BW       | MCS Index    | RB Size         | RB Offset | Low    | Mid    | High   |
|          |              | Channel         |           | 650000 | 656000 | 662000 |
|          |              | Frequency (MHz) |           | 3750   | 3840   | 3930   |
| 100M     | $\pi/2$ BPSK | 1               | 0         | 29.57  | 29.40  | 29.39  |
|          |              | 1               | 137       | 29.41  | 29.49  | 29.45  |
|          |              | 1               | 271       | 29.52  | 29.47  | 29.48  |
|          |              | 135             | 0         | 29.05  | 29.03  | 28.91  |
|          |              | 135             | 69        | 28.94  | 29.03  | 29.12  |
|          |              | 135             | 138       | 29.06  | 29.07  | 28.96  |
|          |              | 270             | 0         | 28.92  | 29.08  | 29.03  |
|          | QPSK         | 1               | 0         | 29.10  | 29.29  | 29.26  |
|          |              | 1               | 137       | 29.30  | 29.21  | 29.23  |
|          |              | 1               | 271       | 29.11  | 29.36  | 29.40  |
|          |              | 135             | 0         | 28.80  | 28.64  | 28.85  |
|          |              | 135             | 69        | 28.65  | 28.76  | 28.88  |
|          |              | 135             | 138       | 28.62  | 28.81  | 28.61  |
|          |              | 270             | 0         | 28.70  | 28.81  | 28.72  |
|          | 16QAM        | 1               | 0         | 28.31  | 28.39  | 28.30  |
|          |              | 1               | 137       | 28.14  | 28.31  | 28.22  |
|          |              | 1               | 271       | 28.18  | 28.10  | 28.22  |
|          |              | 135             | 0         | 27.73  | 27.63  | 27.73  |
|          |              | 135             | 69        | 27.81  | 27.87  | 27.84  |
|          |              | 135             | 138       | 27.80  | 27.70  | 27.68  |
|          |              | 270             | 0         | 27.75  | 27.77  | 27.88  |
|          | 64QAM        | 1               | 0         | 27.29  | 27.22  | 27.13  |
|          |              | 1               | 137       | 27.29  | 27.10  | 27.34  |
|          |              | 1               | 271       | 27.21  | 27.11  | 27.15  |
|          |              | 135             | 0         | 26.77  | 26.84  | 26.68  |
|          |              | 135             | 69        | 26.75  | 26.88  | 26.69  |
|          |              | 135             | 138       | 26.89  | 26.65  | 26.63  |
|          |              | 270             | 0         | 26.74  | 26.68  | 26.76  |
|          | 256QAM       | 1               | 0         | 25.64  | 25.50  | 25.59  |
|          |              | 1               | 137       | 25.59  | 25.65  | 25.58  |
|          |              | 1               | 271       | 25.63  | 25.80  | 25.58  |
|          |              | 135             | 0         | 25.03  | 25.27  | 25.21  |
|          |              | 135             | 69        | 25.08  | 25.09  | 25.21  |
|          |              | 135             | 138       | 25.05  | 25.16  | 25.13  |
|          |              | 270             | 0         | 25.20  | 25.01  | 25.25  |

\*EIRP = Conducted + antenna gain (2.9dBi)

| 5GNR n77 |              |                 |           |         |        |         |
|----------|--------------|-----------------|-----------|---------|--------|---------|
| BW       | MCS Index    | RB Size         | RB Offset | Low     | Mid    | High    |
|          |              | Channel         |           | 649558  | 656000 | 662332  |
|          |              | Frequency (MHz) |           | 3745.02 | 3840   | 3934.98 |
| 90M      | $\pi/2$ BPSK | 1               | 0         | 29.47   | 29.42  | 29.42   |
|          |              | 1               | 123       | 29.36   | 29.48  | 29.39   |
|          |              | 1               | 243       | 29.42   | 29.53  | 29.34   |
|          |              | 120             | 0         | 29.09   | 29.20  | 29.17   |
|          |              | 120             | 63        | 29.09   | 29.08  | 29.03   |
|          |              | 120             | 125       | 29.16   | 28.96  | 29.17   |
|          |              | 240             | 0         | 29.13   | 29.08  | 29.10   |
|          | QPSK         | 1               | 0         | 29.32   | 29.15  | 29.35   |
|          |              | 1               | 123       | 29.18   | 29.14  | 29.35   |
|          |              | 1               | 243       | 29.40   | 29.16  | 29.36   |
|          |              | 120             | 0         | 28.88   | 28.74  | 28.72   |
|          |              | 120             | 63        | 28.65   | 28.67  | 28.86   |
|          |              | 120             | 125       | 28.73   | 28.79  | 28.75   |
|          |              | 240             | 0         | 28.79   | 28.73  | 28.89   |
|          | 16QAM        | 1               | 0         | 28.36   | 28.40  | 28.14   |
|          |              | 1               | 123       | 28.30   | 28.26  | 28.15   |
|          |              | 1               | 243       | 28.16   | 28.14  | 28.36   |
|          |              | 120             | 0         | 27.81   | 27.60  | 27.77   |
|          |              | 120             | 63        | 27.85   | 27.61  | 27.82   |
|          |              | 120             | 125       | 27.85   | 27.72  | 27.69   |
|          |              | 240             | 0         | 27.82   | 27.83  | 27.68   |
|          | 64QAM        | 1               | 0         | 27.31   | 27.40  | 27.22   |
|          |              | 1               | 123       | 27.16   | 27.12  | 27.18   |
|          |              | 1               | 243       | 27.39   | 27.40  | 27.29   |
|          |              | 120             | 0         | 26.63   | 26.65  | 26.82   |
|          |              | 120             | 63        | 26.71   | 26.70  | 26.90   |
|          |              | 120             | 125       | 26.62   | 26.71  | 26.60   |
|          |              | 240             | 0         | 26.81   | 26.84  | 26.61   |
|          | 256QAM       | 1               | 0         | 25.80   | 25.66  | 25.51   |
|          |              | 1               | 123       | 25.58   | 25.78  | 25.80   |
|          |              | 1               | 243       | 25.70   | 25.53  | 25.53   |
|          |              | 120             | 0         | 25.16   | 25.02  | 25.27   |
|          |              | 120             | 63        | 25.06   | 25.28  | 25.27   |
|          |              | 120             | 125       | 25.23   | 25.13  | 25.01   |
|          |              | 240             | 0         | 25.11   | 25.01  | 25.26   |

\*EIRP = Conducted + antenna gain (2.9dBi)

| 5GNR n77 |              |                 |           |         |        |         |
|----------|--------------|-----------------|-----------|---------|--------|---------|
| BW       | MCS Index    | RB Size         | RB Offset | Low     | Mid    | High    |
|          |              | Channel         |           | 649334  | 656000 | 662666  |
|          |              | Frequency (MHz) |           | 3740.01 | 3840   | 3939.99 |
| 80M      | $\pi/2$ BPSK | 1               | 0         | 29.58   | 29.46  | 29.34   |
|          |              | 1               | 109       | 29.58   | 29.41  | 29.57   |
|          |              | 1               | 215       | 29.43   | 29.51  | 29.44   |
|          |              | 108             | 0         | 29.12   | 29.14  | 29.05   |
|          |              | 108             | 55        | 29.18   | 28.98  | 29.14   |
|          |              | 108             | 109       | 29.19   | 28.92  | 29.14   |
|          |              | 216             | 0         | 28.95   | 29.04  | 28.91   |
|          | QPSK         | 1               | 0         | 29.36   | 29.16  | 29.34   |
|          |              | 1               | 109       | 29.15   | 29.31  | 29.17   |
|          |              | 1               | 215       | 29.34   | 29.12  | 29.22   |
|          |              | 108             | 0         | 28.61   | 28.68  | 28.79   |
|          |              | 108             | 55        | 28.68   | 28.61  | 28.66   |
|          |              | 108             | 109       | 28.76   | 28.61  | 28.68   |
|          |              | 216             | 0         | 28.64   | 28.62  | 28.88   |
|          | 16QAM        | 1               | 0         | 28.12   | 28.25  | 28.22   |
|          |              | 1               | 109       | 28.30   | 28.31  | 28.39   |
|          |              | 1               | 215       | 28.15   | 28.31  | 28.35   |
|          |              | 108             | 0         | 27.64   | 27.60  | 27.80   |
|          |              | 108             | 55        | 27.64   | 27.85  | 27.68   |
|          |              | 108             | 109       | 27.89   | 27.82  | 27.89   |
|          |              | 216             | 0         | 27.68   | 27.65  | 27.63   |
|          | 64QAM        | 1               | 0         | 27.16   | 27.14  | 27.22   |
|          |              | 1               | 109       | 27.35   | 27.35  | 27.36   |
|          |              | 1               | 215       | 27.28   | 27.27  | 27.10   |
|          |              | 108             | 0         | 26.77   | 26.62  | 26.69   |
|          |              | 108             | 55        | 26.67   | 26.82  | 26.60   |
|          |              | 108             | 109       | 26.73   | 26.81  | 26.78   |
|          |              | 216             | 0         | 26.67   | 26.68  | 26.69   |
|          | 256QAM       | 1               | 0         | 25.79   | 25.68  | 25.75   |
|          |              | 1               | 109       | 25.80   | 25.55  | 25.73   |
|          |              | 1               | 215       | 25.63   | 25.75  | 25.65   |
|          |              | 108             | 0         | 25.18   | 25.18  | 25.19   |
|          |              | 108             | 55        | 25.24   | 25.19  | 25.23   |
|          |              | 108             | 109       | 25.23   | 25.01  | 25.08   |
|          |              | 216             | 0         | 25.19   | 25.12  | 25.08   |

\*EIRP = Conducted + antenna gain (2.9dBi)

| 5GNR n77 |              |                 |           |         |        |         |
|----------|--------------|-----------------|-----------|---------|--------|---------|
| BW       | MCS Index    | RB Size         | RB Offset | Low     | Mid    | High    |
|          |              | Channel         |           | 648668  | 656000 | 663332  |
|          |              | Frequency (MHz) |           | 3730.02 | 3840   | 3949.98 |
| 60M      | $\pi/2$ BPSK | 1               | 0         | 29.40   | 29.42  | 29.54   |
|          |              | 1               | 81        | 29.44   | 29.43  | 29.35   |
|          |              | 1               | 160       | 29.44   | 29.31  | 29.34   |
|          |              | 81              | 0         | 29.03   | 29.13  | 29.16   |
|          |              | 81              | 41        | 29.15   | 29.04  | 28.94   |
|          |              | 81              | 81        | 28.95   | 29.16  | 29.00   |
|          |              | 162             | 0         | 28.93   | 29.03  | 29.16   |
|          | QPSK         | 1               | 0         | 29.14   | 29.27  | 29.37   |
|          |              | 1               | 81        | 29.32   | 29.17  | 29.20   |
|          |              | 1               | 160       | 29.40   | 29.24  | 29.26   |
|          |              | 81              | 0         | 28.79   | 28.69  | 28.82   |
|          |              | 81              | 41        | 28.62   | 28.80  | 28.88   |
|          |              | 81              | 81        | 28.60   | 28.80  | 28.63   |
|          |              | 162             | 0         | 28.84   | 28.72  | 28.66   |
|          | 16QAM        | 1               | 0         | 28.27   | 28.23  | 28.10   |
|          |              | 1               | 81        | 28.39   | 28.14  | 28.36   |
|          |              | 1               | 160       | 28.30   | 28.40  | 28.16   |
|          |              | 81              | 0         | 27.88   | 27.79  | 27.88   |
|          |              | 81              | 41        | 27.75   | 27.67  | 27.83   |
|          |              | 81              | 81        | 27.84   | 27.87  | 27.76   |
|          |              | 162             | 0         | 27.80   | 27.79  | 27.62   |
|          | 64QAM        | 1               | 0         | 27.34   | 27.14  | 27.13   |
|          |              | 1               | 81        | 27.13   | 27.30  | 27.20   |
|          |              | 1               | 160       | 27.30   | 27.28  | 27.37   |
|          |              | 81              | 0         | 26.72   | 26.88  | 26.75   |
|          |              | 81              | 41        | 26.69   | 26.73  | 26.85   |
|          |              | 81              | 81        | 26.79   | 26.87  | 26.85   |
|          |              | 162             | 0         | 26.71   | 26.85  | 26.81   |
|          | 256QAM       | 1               | 0         | 25.54   | 25.50  | 25.69   |
|          |              | 1               | 81        | 25.62   | 25.52  | 25.53   |
|          |              | 1               | 160       | 25.62   | 25.52  | 25.60   |
|          |              | 81              | 0         | 25.07   | 25.21  | 25.29   |
|          |              | 81              | 41        | 25.06   | 25.06  | 25.16   |
|          |              | 81              | 81        | 25.29   | 25.16  | 25.24   |
|          |              | 162             | 0         | 25.03   | 25.20  | 25.12   |

\*EIRP = Conducted + antenna gain (2.9dBi)

| 5GNR n77 |              |                 |           |         |        |         |
|----------|--------------|-----------------|-----------|---------|--------|---------|
| BW       | MCS Index    | RB Size         | RB Offset | Low     | Mid    | High    |
|          |              | Channel         |           | 648334  | 656000 | 663666  |
|          |              | Frequency (MHz) |           | 3725.01 | 3840   | 3954.99 |
| 50M      | $\pi/2$ BPSK | 1               | 0         | 29.58   | 29.51  | 29.58   |
|          |              | 1               | 67        | 29.59   | 29.56  | 29.38   |
|          |              | 1               | 131       | 29.40   | 29.30  | 29.37   |
|          |              | 64              | 0         | 29.04   | 28.94  | 29.14   |
|          |              | 64              | 35        | 29.08   | 29.01  | 29.01   |
|          |              | 64              | 69        | 29.15   | 29.18  | 29.10   |
|          |              | 128             | 0         | 28.98   | 29.00  | 28.96   |
|          | QPSK         | 1               | 0         | 29.11   | 29.13  | 29.25   |
|          |              | 1               | 67        | 29.26   | 29.16  | 29.31   |
|          |              | 1               | 131       | 29.35   | 29.25  | 29.33   |
|          |              | 64              | 0         | 28.63   | 28.71  | 28.71   |
|          |              | 64              | 35        | 28.71   | 28.79  | 28.64   |
|          |              | 64              | 69        | 28.83   | 28.87  | 28.78   |
|          |              | 128             | 0         | 28.86   | 28.85  | 28.82   |
|          | 16QAM        | 1               | 0         | 28.15   | 28.19  | 28.14   |
|          |              | 1               | 67        | 28.14   | 28.28  | 28.10   |
|          |              | 1               | 131       | 28.32   | 28.15  | 28.40   |
|          |              | 64              | 0         | 27.82   | 27.72  | 27.73   |
|          |              | 64              | 35        | 27.63   | 27.77  | 27.81   |
|          |              | 64              | 69        | 27.60   | 27.62  | 27.62   |
|          |              | 128             | 0         | 27.77   | 27.69  | 27.88   |
|          | 64QAM        | 1               | 0         | 27.29   | 27.10  | 27.31   |
|          |              | 1               | 67        | 27.18   | 27.12  | 27.32   |
|          |              | 1               | 131       | 27.40   | 27.28  | 27.15   |
|          |              | 64              | 0         | 26.79   | 26.77  | 26.71   |
|          |              | 64              | 35        | 26.76   | 26.83  | 26.62   |
|          |              | 64              | 69        | 26.85   | 26.74  | 26.63   |
|          |              | 128             | 0         | 26.64   | 26.72  | 26.86   |
|          | 256QAM       | 1               | 0         | 25.66   | 25.75  | 25.79   |
|          |              | 1               | 67        | 25.66   | 25.59  | 25.80   |
|          |              | 1               | 131       | 25.60   | 25.71  | 25.66   |
|          |              | 64              | 0         | 25.10   | 25.04  | 25.25   |
|          |              | 64              | 35        | 25.17   | 25.06  | 25.07   |
|          |              | 64              | 69        | 25.23   | 25.02  | 25.25   |
|          |              | 128             | 0         | 25.06   | 25.12  | 25.16   |

\*EIRP = Conducted + antenna gain (2.9dBi)

| 5GNR n77 |              |                 |           |        |        |        |
|----------|--------------|-----------------|-----------|--------|--------|--------|
| BW       | MCS Index    | RB Size         | RB Offset | Low    | Mid    | High   |
|          |              | Channel         |           | 648000 | 656000 | 664000 |
|          |              | Frequency (MHz) |           | 3720   | 3840   | 3960   |
| 40M      | $\pi/2$ BPSK | 1               | 0         | 29.42  | 29.45  | 29.59  |
|          |              | 1               | 53        | 29.57  | 29.53  | 29.47  |
|          |              | 1               | 104       | 29.59  | 29.48  | 29.60  |
|          |              | 50              | 0         | 29.10  | 28.90  | 29.18  |
|          |              | 50              | 28        | 29.04  | 28.90  | 29.18  |
|          |              | 50              | 56        | 29.20  | 28.91  | 28.99  |
|          |              | 100             | 0         | 29.07  | 28.95  | 28.99  |
|          | QPSK         | 1               | 0         | 29.30  | 29.29  | 29.34  |
|          |              | 1               | 53        | 29.25  | 29.19  | 29.23  |
|          |              | 1               | 104       | 29.25  | 29.39  | 29.40  |
|          |              | 50              | 0         | 28.89  | 28.77  | 28.61  |
|          |              | 50              | 28        | 28.63  | 28.80  | 28.74  |
|          |              | 50              | 56        | 28.80  | 28.60  | 28.69  |
|          |              | 100             | 0         | 28.90  | 28.73  | 28.73  |
|          | 16QAM        | 1               | 0         | 28.26  | 28.31  | 28.23  |
|          |              | 1               | 53        | 28.18  | 28.35  | 28.22  |
|          |              | 1               | 104       | 28.26  | 28.18  | 28.20  |
|          |              | 50              | 0         | 27.80  | 27.67  | 27.88  |
|          |              | 50              | 28        | 27.87  | 27.86  | 27.75  |
|          |              | 50              | 56        | 27.63  | 27.80  | 27.88  |
|          |              | 100             | 0         | 27.86  | 27.90  | 27.66  |
|          | 64QAM        | 1               | 0         | 27.27  | 27.35  | 27.39  |
|          |              | 1               | 53        | 27.12  | 27.28  | 27.13  |
|          |              | 1               | 104       | 27.19  | 27.11  | 27.12  |
|          |              | 50              | 0         | 26.86  | 26.66  | 26.72  |
|          |              | 50              | 28        | 26.76  | 26.72  | 26.71  |
|          |              | 50              | 56        | 26.62  | 26.74  | 26.88  |
|          |              | 100             | 0         | 26.80  | 26.67  | 26.87  |
|          | 256QAM       | 1               | 0         | 25.63  | 25.57  | 25.58  |
|          |              | 1               | 53        | 25.55  | 25.60  | 25.74  |
|          |              | 1               | 104       | 25.61  | 25.64  | 25.73  |
|          |              | 50              | 0         | 25.11  | 25.18  | 25.13  |
|          |              | 50              | 28        | 25.25  | 25.12  | 25.25  |
|          |              | 50              | 56        | 25.17  | 25.12  | 25.11  |
|          |              | 100             | 0         | 25.26  | 25.29  | 25.19  |

\*EIRP = Conducted + antenna gain (2.9dBi)

| 5GNR n77 |              |                 |           |         |        |         |
|----------|--------------|-----------------|-----------|---------|--------|---------|
| BW       | MCS Index    | RB Size         | RB Offset | Low     | Mid    | High    |
|          |              | Channel         |           | 647334  | 656000 | 665666  |
|          |              | Frequency (MHz) |           | 3710.01 | 3840   | 3969.99 |
| 20M      | $\pi/2$ BPSK | 1               | 0         | 29.56   | 29.42  | 29.40   |
|          |              | 1               | 26        | 29.47   | 29.38  | 29.42   |
|          |              | 1               | 49        | 29.44   | 29.42  | 29.60   |
|          |              | 25              | 0         | 29.00   | 29.15  | 29.19   |
|          |              | 25              | 13        | 28.93   | 29.05  | 28.90   |
|          |              | 25              | 26        | 28.92   | 29.20  | 29.04   |
|          |              | 50              | 0         | 28.99   | 29.12  | 28.91   |
|          | QPSK         | 1               | 0         | 29.17   | 29.18  | 29.40   |
|          |              | 1               | 26        | 29.33   | 29.17  | 29.20   |
|          |              | 1               | 49        | 29.17   | 29.36  | 29.24   |
|          |              | 25              | 0         | 28.82   | 28.64  | 28.69   |
|          |              | 25              | 13        | 28.68   | 28.87  | 28.81   |
|          |              | 25              | 26        | 28.64   | 28.74  | 28.73   |
|          |              | 50              | 0         | 28.67   | 28.64  | 28.66   |
|          | 16QAM        | 1               | 0         | 28.39   | 28.16  | 28.13   |
|          |              | 1               | 26        | 28.28   | 28.35  | 28.22   |
|          |              | 1               | 49        | 28.26   | 28.39  | 28.31   |
|          |              | 25              | 0         | 27.90   | 27.63  | 27.64   |
|          |              | 25              | 13        | 27.60   | 27.68  | 27.69   |
|          |              | 25              | 26        | 27.66   | 27.88  | 27.64   |
|          |              | 50              | 0         | 27.90   | 27.75  | 27.80   |
|          | 64QAM        | 1               | 0         | 27.26   | 27.29  | 27.31   |
|          |              | 1               | 26        | 27.32   | 27.15  | 27.20   |
|          |              | 1               | 49        | 27.15   | 27.17  | 27.13   |
|          |              | 25              | 0         | 26.90   | 26.67  | 26.86   |
|          |              | 25              | 13        | 26.64   | 26.60  | 26.88   |
|          |              | 25              | 26        | 26.89   | 26.67  | 26.70   |
|          |              | 50              | 0         | 26.87   | 26.68  | 26.76   |
|          | 256QAM       | 1               | 0         | 25.65   | 25.67  | 25.53   |
|          |              | 1               | 26        | 25.62   | 25.57  | 25.75   |
|          |              | 1               | 49        | 25.60   | 25.64  | 25.66   |
|          |              | 25              | 0         | 25.25   | 25.15  | 25.15   |
|          |              | 25              | 13        | 25.23   | 25.24  | 25.01   |
|          |              | 25              | 26        | 25.28   | 25.10  | 25.23   |
|          |              | 50              | 0         | 25.07   | 25.07  | 25.20   |

\*EIRP = Conducted + antenna gain (2.9dBi)

5GNR n77 (Part 27Q):

**Modulation Type:  $\pi/2$  BPSK**

5GNR n77 (Part 27Q), Channel Bandwidth 100MHz

|                                                      |                    |                   |                |                |                          |                            |                        |                                |
|------------------------------------------------------|--------------------|-------------------|----------------|----------------|--------------------------|----------------------------|------------------------|--------------------------------|
| Mode                                                 |                    | TX channel 633334 |                |                |                          |                            |                        |                                |
| Antenna Polarity & Test Distance : Horizontal at 3 m |                    |                   |                |                |                          |                            |                        |                                |
| No                                                   | Frequency<br>(MHz) | EIRP<br>(dBm)     | Limit<br>(dBm) | Margin<br>(dB) | Antenna<br>Height<br>(m) | Table<br>Angle<br>(Degree) | Raw<br>Value<br>(dBuV) | Correction<br>Factor<br>(dB/m) |
| 1                                                    | 3500.01            | 29.44             | 30.00          | -0.56          | 1.77 H                   | 5                          | 89.79                  | -60.35                         |
| Antenna Polarity & Test Distance: Vertical at 3 m    |                    |                   |                |                |                          |                            |                        |                                |
| No                                                   | Frequency<br>(MHz) | EIRP<br>(dBm)     | Limit<br>(dBm) | Margin<br>(dB) | Antenna<br>Height<br>(m) | Table<br>Angle<br>(Degree) | Raw<br>Value<br>(dBuV) | Correction<br>Factor<br>(dB/m) |
| 1                                                    | 3500.01            | 24.29             | 30.00          | -5.71          | 1.53 V                   | 190                        | 84.64                  | -60.35                         |

Remarks:

1.  $EIRP(dBm) = Raw\ Value(dBuV) + Correction\ Factor(dB/m)$
2.  $Correction\ Factor(dB/m) = Antenna\ Factor(dB/m) + Cable\ Factor(dB) - Pre-Amplifier\ Factor(dB) + 20\log(D) - 104.8$
3.  $Margin\ value = EIRP - Limit\ value$

5GNR n77 (Part 27Q), Channel Bandwidth 90MHz

|                                                      |                    |                                   |                |                |                          |                            |                        |                                |
|------------------------------------------------------|--------------------|-----------------------------------|----------------|----------------|--------------------------|----------------------------|------------------------|--------------------------------|
| Mode                                                 |                    | TX channel 633000, 633334, 633666 |                |                |                          |                            |                        |                                |
| Antenna Polarity & Test Distance : Horizontal at 3 m |                    |                                   |                |                |                          |                            |                        |                                |
| No                                                   | Frequency<br>(MHz) | EIRP<br>(dBm)                     | Limit<br>(dBm) | Margin<br>(dB) | Antenna<br>Height<br>(m) | Table<br>Angle<br>(Degree) | Raw<br>Value<br>(dBuV) | Correction<br>Factor<br>(dB/m) |
| 1                                                    | 3495.00            | 29.44                             | 30.00          | -0.56          | 1.72 H                   | 9                          | 89.82                  | -60.38                         |
| 2                                                    | 3500.01            | 29.46                             | 30.00          | -0.54          | 1.81 H                   | 4                          | 89.81                  | -60.35                         |
| 3                                                    | 3504.99            | 29.38                             | 30.00          | -0.62          | 1.81 H                   | 6                          | 89.71                  | -60.33                         |
| Antenna Polarity & Test Distance: Vertical at 3 m    |                    |                                   |                |                |                          |                            |                        |                                |
| No                                                   | Frequency<br>(MHz) | EIRP<br>(dBm)                     | Limit<br>(dBm) | Margin<br>(dB) | Antenna<br>Height<br>(m) | Table<br>Angle<br>(Degree) | Raw<br>Value<br>(dBuV) | Correction<br>Factor<br>(dB/m) |
| 1                                                    | 3495.00            | 24.15                             | 30.00          | -5.85          | 1.58 V                   | 188                        | 84.53                  | -60.38                         |
| 2                                                    | 3500.01            | 24.15                             | 30.00          | -5.85          | 1.50 V                   | 188                        | 84.50                  | -60.35                         |
| 3                                                    | 3504.99            | 24.45                             | 30.00          | -5.55          | 1.49 V                   | 193                        | 84.78                  | -60.33                         |

Remarks:

1.  $EIRP(dBm) = Raw\ Value(dBuV) + Correction\ Factor(dB/m)$
2.  $Correction\ Factor(dB/m) = Antenna\ Factor(dB/m) + Cable\ Factor(dB) - Pre-Amplifier\ Factor(dB) + 20\log(D) - 104.8$
3.  $Margin\ value = EIRP - Limit\ value$

5GNR n77 (Part 27Q), Channel Bandwidth 80MHz

|                                                      |                    |                                   |                |                |                          |                            |                        |                                |
|------------------------------------------------------|--------------------|-----------------------------------|----------------|----------------|--------------------------|----------------------------|------------------------|--------------------------------|
| Mode                                                 |                    | TX channel 632668, 633334, 634000 |                |                |                          |                            |                        |                                |
| Antenna Polarity & Test Distance : Horizontal at 3 m |                    |                                   |                |                |                          |                            |                        |                                |
| No                                                   | Frequency<br>(MHz) | EIRP<br>(dBm)                     | Limit<br>(dBm) | Margin<br>(dB) | Antenna<br>Height<br>(m) | Table<br>Angle<br>(Degree) | Raw<br>Value<br>(dBuV) | Correction<br>Factor<br>(dB/m) |
| 1                                                    | 3490.02            | 29.41                             | 30.00          | -0.59          | 1.78 H                   | 5                          | 89.80                  | -60.39                         |
| 2                                                    | 3500.01            | 29.46                             | 30.00          | -0.54          | 1.78 H                   | 6                          | 89.81                  | -60.35                         |
| 3                                                    | 3510.00            | 29.28                             | 30.00          | -0.72          | 1.81 H                   | 4                          | 89.58                  | -60.30                         |
| Antenna Polarity & Test Distance: Vertical at 3 m    |                    |                                   |                |                |                          |                            |                        |                                |
| No                                                   | Frequency<br>(MHz) | EIRP<br>(dBm)                     | Limit<br>(dBm) | Margin<br>(dB) | Antenna<br>Height<br>(m) | Table<br>Angle<br>(Degree) | Raw<br>Value<br>(dBuV) | Correction<br>Factor<br>(dB/m) |
| 1                                                    | 3490.02            | 24.25                             | 30.00          | -5.75          | 1.51 V                   | 188                        | 84.64                  | -60.39                         |
| 2                                                    | 3500.01            | 24.26                             | 30.00          | -5.74          | 1.53 V                   | 191                        | 84.61                  | -60.35                         |
| 3                                                    | 3510.00            | 24.35                             | 30.00          | -5.65          | 1.57 V                   | 189                        | 84.65                  | -60.30                         |

Remarks:

1.  $EIRP(dBm) = Raw\ Value(dBuV) + Correction\ Factor(dB/m)$
2.  $Correction\ Factor(dB/m) = Antenna\ Factor(dB/m) + Cable\ Factor(dB) - Pre-Amplifier\ Factor(dB) + 20\log(D) - 104.8$
3.  $Margin\ value = EIRP - Limit\ value$

5GNR n77 (Part 27Q), Channel Bandwidth 60MHz

|                                                      |                    |                                   |                |                |                          |                            |                        |                                |
|------------------------------------------------------|--------------------|-----------------------------------|----------------|----------------|--------------------------|----------------------------|------------------------|--------------------------------|
| Mode                                                 |                    | TX channel 632000, 633334, 634666 |                |                |                          |                            |                        |                                |
| Antenna Polarity & Test Distance : Horizontal at 3 m |                    |                                   |                |                |                          |                            |                        |                                |
| No                                                   | Frequency<br>(MHz) | EIRP<br>(dBm)                     | Limit<br>(dBm) | Margin<br>(dB) | Antenna<br>Height<br>(m) | Table<br>Angle<br>(Degree) | Raw<br>Value<br>(dBuV) | Correction<br>Factor<br>(dB/m) |
| 1                                                    | 3480.00            | 29.28                             | 30.00          | -0.72          | 1.80 H                   | 2                          | 89.72                  | -60.44                         |
| 2                                                    | 3500.01            | 29.45                             | 30.00          | -0.55          | 1.73 H                   | 9                          | 89.80                  | -60.35                         |
| 3                                                    | 3519.99            | 29.38                             | 30.00          | -0.62          | 1.79 H                   | 5                          | 89.64                  | -60.26                         |
| Antenna Polarity & Test Distance: Vertical at 3 m    |                    |                                   |                |                |                          |                            |                        |                                |
| No                                                   | Frequency<br>(MHz) | EIRP<br>(dBm)                     | Limit<br>(dBm) | Margin<br>(dB) | Antenna<br>Height<br>(m) | Table<br>Angle<br>(Degree) | Raw<br>Value<br>(dBuV) | Correction<br>Factor<br>(dB/m) |
| 1                                                    | 3480.00            | 24.15                             | 30.00          | -5.85          | 1.57 V                   | 188                        | 84.59                  | -60.44                         |
| 2                                                    | 3500.01            | 24.08                             | 30.00          | -5.92          | 1.58 V                   | 190                        | 84.43                  | -60.35                         |
| 3                                                    | 3519.99            | 24.15                             | 30.00          | -5.85          | 1.50 V                   | 191                        | 84.41                  | -60.26                         |

Remarks:

1.  $EIRP(dBm) = Raw\ Value(dBuV) + Correction\ Factor(dB/m)$
2.  $Correction\ Factor(dB/m) = Antenna\ Factor(dB/m) + Cable\ Factor(dB) - Pre-Amplifier\ Factor(dB) + 20\log(D) - 104.8$
3.  $Margin\ value = EIRP - Limit\ value$

5GNR n77 (Part 27Q), Channel Bandwidth 50MHz

|                                                      |                    |                                   |                |                |                          |                            |                        |                                |
|------------------------------------------------------|--------------------|-----------------------------------|----------------|----------------|--------------------------|----------------------------|------------------------|--------------------------------|
| Mode                                                 |                    | TX channel 631668, 633334, 635000 |                |                |                          |                            |                        |                                |
| Antenna Polarity & Test Distance : Horizontal at 3 m |                    |                                   |                |                |                          |                            |                        |                                |
| No                                                   | Frequency<br>(MHz) | EIRP<br>(dBm)                     | Limit<br>(dBm) | Margin<br>(dB) | Antenna<br>Height<br>(m) | Table<br>Angle<br>(Degree) | Raw<br>Value<br>(dBuV) | Correction<br>Factor<br>(dB/m) |
| 1                                                    | 3475.02            | 29.18                             | 30.00          | -0.82          | 1.79 H                   | 7                          | 89.65                  | -60.47                         |
| 2                                                    | 3500.01            | 29.35                             | 30.00          | -0.65          | 1.74 H                   | 9                          | 89.70                  | -60.35                         |
| 3                                                    | 3525.00            | 29.28                             | 30.00          | -0.72          | 1.73 H                   | 3                          | 89.52                  | -60.24                         |
| Antenna Polarity & Test Distance: Vertical at 3 m    |                    |                                   |                |                |                          |                            |                        |                                |
| No                                                   | Frequency<br>(MHz) | EIRP<br>(dBm)                     | Limit<br>(dBm) | Margin<br>(dB) | Antenna<br>Height<br>(m) | Table<br>Angle<br>(Degree) | Raw<br>Value<br>(dBuV) | Correction<br>Factor<br>(dB/m) |
| 1                                                    | 3475.02            | 24.45                             | 30.00          | -5.55          | 1.54 V                   | 194                        | 84.92                  | -60.47                         |
| 2                                                    | 3500.01            | 24.15                             | 30.00          | -5.85          | 1.49 V                   | 193                        | 84.50                  | -60.35                         |
| 3                                                    | 3525.00            | 24.36                             | 30.00          | -5.64          | 1.50 V                   | 195                        | 84.60                  | -60.24                         |

Remarks:

1.  $EIRP(dBm) = Raw\ Value(dBuV) + Correction\ Factor(dB/m)$
2.  $Correction\ Factor(dB/m) = Antenna\ Factor(dB/m) + Cable\ Factor(dB) - Pre-Amplifier\ Factor(dB) + 20\log(D) - 104.8$
3.  $Margin\ value = EIRP - Limit\ value$

5GNR n77 (Part 27Q), Channel Bandwidth 40MHz

|                                                      |                 |                                   |             |             |                    |                      |                  |                          |
|------------------------------------------------------|-----------------|-----------------------------------|-------------|-------------|--------------------|----------------------|------------------|--------------------------|
| Mode                                                 |                 | TX channel 631334, 633334, 635332 |             |             |                    |                      |                  |                          |
| Antenna Polarity & Test Distance : Horizontal at 3 m |                 |                                   |             |             |                    |                      |                  |                          |
| No                                                   | Frequency (MHz) | EIRP (dBm)                        | Limit (dBm) | Margin (dB) | Antenna Height (m) | Table Angle (Degree) | Raw Value (dBuV) | Correction Factor (dB/m) |
| 1                                                    | 3470.01         | 29.38                             | 30.00       | -0.62       | 1.75 H             | 7                    | 89.86            | -60.48                   |
| 2                                                    | 3500.01         | 29.45                             | 30.00       | -0.55       | 1.80 H             | 8                    | 89.80            | -60.35                   |
| 3                                                    | 3529.98         | 29.41                             | 30.00       | -0.59       | 1.79 H             | 7                    | 89.63            | -60.22                   |
| Antenna Polarity & Test Distance: Vertical at 3 m    |                 |                                   |             |             |                    |                      |                  |                          |
| No                                                   | Frequency (MHz) | EIRP (dBm)                        | Limit (dBm) | Margin (dB) | Antenna Height (m) | Table Angle (Degree) | Raw Value (dBuV) | Correction Factor (dB/m) |
| 1                                                    | 3470.01         | 24.35                             | 30.00       | -5.65       | 1.49 V             | 191                  | 84.83            | -60.48                   |
| 2                                                    | 3500.01         | 24.05                             | 30.00       | -5.95       | 1.48 V             | 190                  | 84.40            | -60.35                   |
| 3                                                    | 3529.98         | 24.37                             | 30.00       | -5.63       | 1.51 V             | 191                  | 84.59            | -60.22                   |

Remarks:

1.  $EIRP(dBm) = Raw\ Value(dBuV) + Correction\ Factor(dB/m)$
2.  $Correction\ Factor(dB/m) = Antenna\ Factor(dB/m) + Cable\ Factor(dB) - Pre-Amplifier\ Factor(dB) + 20\log(D) - 104.8$
3.  $Margin\ value = EIRP - Limit\ value$

5GNR n77 (Part 27Q), Channel Bandwidth 20MHz

| Mode                                                 |                 | TX channel 630668, 633334, 636000 |             |             |                    |                      |                  |                          |
|------------------------------------------------------|-----------------|-----------------------------------|-------------|-------------|--------------------|----------------------|------------------|--------------------------|
| Antenna Polarity & Test Distance : Horizontal at 3 m |                 |                                   |             |             |                    |                      |                  |                          |
| No                                                   | Frequency (MHz) | EIRP (dBm)                        | Limit (dBm) | Margin (dB) | Antenna Height (m) | Table Angle (Degree) | Raw Value (dBuV) | Correction Factor (dB/m) |
| 1                                                    | 3460.02         | 29.18                             | 30.00       | -0.82       | 1.75 H             | 2                    | 89.71            | -60.53                   |
| 2                                                    | 3500.01         | 29.58                             | 30.00       | -0.42       | 1.76 H             | 4                    | 89.93            | -60.35                   |
| 3                                                    | 3540.00         | 29.28                             | 30.00       | -0.72       | 1.79 H             | 7                    | 89.45            | -60.17                   |
| Antenna Polarity & Test Distance: Vertical at 3 m    |                 |                                   |             |             |                    |                      |                  |                          |
| No                                                   | Frequency (MHz) | EIRP (dBm)                        | Limit (dBm) | Margin (dB) | Antenna Height (m) | Table Angle (Degree) | Raw Value (dBuV) | Correction Factor (dB/m) |
| 1                                                    | 3460.02         | 24.35                             | 30.00       | -5.65       | 1.51 V             | 192                  | 84.88            | -60.53                   |
| 2                                                    | 3500.01         | 24.25                             | 30.00       | -5.75       | 1.53 V             | 194                  | 84.60            | -60.35                   |
| 3                                                    | 3540.00         | 24.26                             | 30.00       | -5.74       | 1.49 V             | 188                  | 84.43            | -60.17                   |

Remarks:

1.  $EIRP(dBm) = Raw\ Value(dBuV) + Correction\ Factor(dB/m)$
2.  $Correction\ Factor(dB/m) = Antenna\ Factor(dB/m) + Cable\ Factor(dB) - Pre-Amplifier\ Factor(dB) + 20\log(D) - 104.8$
3.  $Margin\ value = EIRP - Limit\ value$

### Modulation Type: QPSK

5GNR n77 (Part 27Q), Channel Bandwidth 100MHz

|                                                      |                 |                   |             |             |                    |                      |                  |                          |
|------------------------------------------------------|-----------------|-------------------|-------------|-------------|--------------------|----------------------|------------------|--------------------------|
| Mode                                                 |                 | TX channel 633334 |             |             |                    |                      |                  |                          |
| Antenna Polarity & Test Distance : Horizontal at 3 m |                 |                   |             |             |                    |                      |                  |                          |
| No                                                   | Frequency (MHz) | EIRP (dBm)        | Limit (dBm) | Margin (dB) | Antenna Height (m) | Table Angle (Degree) | Raw Value (dBuV) | Correction Factor (dB/m) |
| 1                                                    | 3500.01         | 28.43             | 30.00       | -1.57       | 1.81 H             | 6                    | 88.78            | -60.35                   |
| Antenna Polarity & Test Distance: Vertical at 3 m    |                 |                   |             |             |                    |                      |                  |                          |
| No                                                   | Frequency (MHz) | EIRP (dBm)        | Limit (dBm) | Margin (dB) | Antenna Height (m) | Table Angle (Degree) | Raw Value (dBuV) | Correction Factor (dB/m) |
| 1                                                    | 3500.01         | 23.34             | 30.00       | -6.66       | 1.53 V             | 187                  | 83.69            | -60.35                   |

Remarks:

1.  $EIRP(dBm) = Raw\ Value(dBuV) + Correction\ Factor(dB/m)$
2.  $Correction\ Factor(dB/m) = Antenna\ Factor(dB/m) + Cable\ Factor(dB) - Pre-Amplifier\ Factor(dB) + 20\log(D) - 104.8$
3.  $Margin\ value = EIRP - Limit\ value$

5GNR n77 (Part 27Q), Channel Bandwidth 90MHz

|                                                      |                    |                                   |                |                |                          |                            |                        |                                |
|------------------------------------------------------|--------------------|-----------------------------------|----------------|----------------|--------------------------|----------------------------|------------------------|--------------------------------|
| Mode                                                 |                    | TX channel 633000, 633334, 633666 |                |                |                          |                            |                        |                                |
| Antenna Polarity & Test Distance : Horizontal at 3 m |                    |                                   |                |                |                          |                            |                        |                                |
| No                                                   | Frequency<br>(MHz) | EIRP<br>(dBm)                     | Limit<br>(dBm) | Margin<br>(dB) | Antenna<br>Height<br>(m) | Table<br>Angle<br>(Degree) | Raw<br>Value<br>(dBuV) | Correction<br>Factor<br>(dB/m) |
| 1                                                    | 3495.00            | 28.45                             | 30.00          | -1.55          | 1.81 H                   | 7                          | 88.83                  | -60.38                         |
| 2                                                    | 3500.01            | 28.45                             | 30.00          | -1.55          | 1.78 H                   | 7                          | 88.80                  | -60.35                         |
| 3                                                    | 3504.99            | 28.35                             | 30.00          | -1.65          | 1.81 H                   | 5                          | 88.68                  | -60.33                         |
| Antenna Polarity & Test Distance: Vertical at 3 m    |                    |                                   |                |                |                          |                            |                        |                                |
| No                                                   | Frequency<br>(MHz) | EIRP<br>(dBm)                     | Limit<br>(dBm) | Margin<br>(dB) | Antenna<br>Height<br>(m) | Table<br>Angle<br>(Degree) | Raw<br>Value<br>(dBuV) | Correction<br>Factor<br>(dB/m) |
| 1                                                    | 3495.00            | 23.14                             | 30.00          | -6.86          | 1.57 V                   | 195                        | 83.52                  | -60.38                         |
| 2                                                    | 3500.01            | 23.44                             | 30.00          | -6.56          | 1.50 V                   | 190                        | 83.79                  | -60.35                         |
| 3                                                    | 3504.99            | 23.34                             | 30.00          | -6.66          | 1.58 V                   | 192                        | 83.67                  | -60.33                         |

Remarks:

1.  $EIRP(dBm) = Raw\ Value(dBuV) + Correction\ Factor(dB/m)$
2.  $Correction\ Factor(dB/m) = Antenna\ Factor(dB/m) + Cable\ Factor(dB) - Pre-Amplifier\ Factor(dB) + 20\log(D) - 104.8$
3.  $Margin\ value = EIRP - Limit\ value$

5GNR n77 (Part 27Q), Channel Bandwidth 80MHz

|                                                      |                    |                                   |                |                |                          |                            |                        |                                |
|------------------------------------------------------|--------------------|-----------------------------------|----------------|----------------|--------------------------|----------------------------|------------------------|--------------------------------|
| Mode                                                 |                    | TX channel 632668, 633334, 634000 |                |                |                          |                            |                        |                                |
| Antenna Polarity & Test Distance : Horizontal at 3 m |                    |                                   |                |                |                          |                            |                        |                                |
| No                                                   | Frequency<br>(MHz) | EIRP<br>(dBm)                     | Limit<br>(dBm) | Margin<br>(dB) | Antenna<br>Height<br>(m) | Table<br>Angle<br>(Degree) | Raw<br>Value<br>(dBuV) | Correction<br>Factor<br>(dB/m) |
| 1                                                    | 3490.02            | 28.35                             | 30.00          | -1.65          | 1.78 H                   | 7                          | 88.74                  | -60.39                         |
| 2                                                    | 3500.01            | 28.15                             | 30.00          | -1.85          | 1.73 H                   | 6                          | 88.50                  | -60.35                         |
| 3                                                    | 3510.00            | 28.18                             | 30.00          | -1.82          | 1.73 H                   | 3                          | 88.48                  | -60.30                         |
| Antenna Polarity & Test Distance: Vertical at 3 m    |                    |                                   |                |                |                          |                            |                        |                                |
| No                                                   | Frequency<br>(MHz) | EIRP<br>(dBm)                     | Limit<br>(dBm) | Margin<br>(dB) | Antenna<br>Height<br>(m) | Table<br>Angle<br>(Degree) | Raw<br>Value<br>(dBuV) | Correction<br>Factor<br>(dB/m) |
| 1                                                    | 3490.02            | 23.04                             | 30.00          | -6.96          | 1.57 V                   | 188                        | 83.43                  | -60.39                         |
| 2                                                    | 3500.01            | 23.24                             | 30.00          | -6.76          | 1.52 V                   | 192                        | 83.59                  | -60.35                         |
| 3                                                    | 3510.00            | 23.14                             | 30.00          | -6.86          | 1.48 V                   | 189                        | 83.44                  | -60.30                         |

Remarks:

1.  $EIRP(dBm) = Raw\ Value(dBuV) + Correction\ Factor(dB/m)$
2.  $Correction\ Factor(dB/m) = Antenna\ Factor(dB/m) + Cable\ Factor(dB) - Pre-Amplifier\ Factor(dB) + 20\log(D) - 104.8$
3.  $Margin\ value = EIRP - Limit\ value$

5GNR n77 (Part 27Q), Channel Bandwidth 60MHz

|                                                      |                    |                                   |                |                |                          |                            |                        |                                |
|------------------------------------------------------|--------------------|-----------------------------------|----------------|----------------|--------------------------|----------------------------|------------------------|--------------------------------|
| Mode                                                 |                    | TX channel 632000, 633334, 634666 |                |                |                          |                            |                        |                                |
| Antenna Polarity & Test Distance : Horizontal at 3 m |                    |                                   |                |                |                          |                            |                        |                                |
| No                                                   | Frequency<br>(MHz) | EIRP<br>(dBm)                     | Limit<br>(dBm) | Margin<br>(dB) | Antenna<br>Height<br>(m) | Table<br>Angle<br>(Degree) | Raw<br>Value<br>(dBuV) | Correction<br>Factor<br>(dB/m) |
| 1                                                    | 3480.00            | 28.45                             | 30.00          | -1.55          | 1.82 H                   | 5                          | 88.89                  | -60.44                         |
| 2                                                    | 3500.01            | 28.48                             | 30.00          | -1.52          | 1.77 H                   | 5                          | 88.83                  | -60.35                         |
| 3                                                    | 3519.99            | 28.15                             | 30.00          | -1.85          | 1.72 H                   | 6                          | 88.41                  | -60.26                         |
| Antenna Polarity & Test Distance: Vertical at 3 m    |                    |                                   |                |                |                          |                            |                        |                                |
| No                                                   | Frequency<br>(MHz) | EIRP<br>(dBm)                     | Limit<br>(dBm) | Margin<br>(dB) | Antenna<br>Height<br>(m) | Table<br>Angle<br>(Degree) | Raw<br>Value<br>(dBuV) | Correction<br>Factor<br>(dB/m) |
| 1                                                    | 3480.00            | 23.14                             | 30.00          | -6.86          | 1.56 V                   | 191                        | 83.58                  | -60.44                         |
| 2                                                    | 3500.01            | 23.24                             | 30.00          | -6.76          | 1.57 V                   | 188                        | 83.59                  | -60.35                         |
| 3                                                    | 3519.99            | 23.14                             | 30.00          | -6.86          | 1.54 V                   | 193                        | 83.40                  | -60.26                         |

Remarks:

1.  $EIRP(dBm) = Raw\ Value(dBuV) + Correction\ Factor(dB/m)$
2.  $Correction\ Factor(dB/m) = Antenna\ Factor(dB/m) + Cable\ Factor(dB) - Pre-Amplifier\ Factor(dB) + 20\log(D) - 104.8$
3.  $Margin\ value = EIRP - Limit\ value$

5GNR n77 (Part 27Q), Channel Bandwidth 50MHz

| Mode                                                 |                 | TX channel 631668, 633334, 635000 |             |             |                    |                      |                  |                          |
|------------------------------------------------------|-----------------|-----------------------------------|-------------|-------------|--------------------|----------------------|------------------|--------------------------|
| Antenna Polarity & Test Distance : Horizontal at 3 m |                 |                                   |             |             |                    |                      |                  |                          |
| No                                                   | Frequency (MHz) | EIRP (dBm)                        | Limit (dBm) | Margin (dB) | Antenna Height (m) | Table Angle (Degree) | Raw Value (dBuV) | Correction Factor (dB/m) |
| 1                                                    | 3475.02         | 28.15                             | 30.00       | -1.85       | 1.72 H             | 4                    | 88.62            | -60.47                   |
| 2                                                    | 3500.01         | 28.07                             | 30.00       | -1.93       | 1.73 H             | 4                    | 88.42            | -60.35                   |
| 3                                                    | 3525.00         | 28.15                             | 30.00       | -1.85       | 1.75 H             | 4                    | 88.39            | -60.24                   |
| Antenna Polarity & Test Distance: Vertical at 3 m    |                 |                                   |             |             |                    |                      |                  |                          |
| No                                                   | Frequency (MHz) | EIRP (dBm)                        | Limit (dBm) | Margin (dB) | Antenna Height (m) | Table Angle (Degree) | Raw Value (dBuV) | Correction Factor (dB/m) |
| 1                                                    | 3475.02         | 23.44                             | 30.00       | -6.56       | 1.51 V             | 190                  | 83.91            | -60.47                   |
| 2                                                    | 3500.01         | 23.15                             | 30.00       | -6.85       | 1.54 V             | 188                  | 83.50            | -60.35                   |
| 3                                                    | 3525.00         | 23.24                             | 30.00       | -6.76       | 1.53 V             | 191                  | 83.48            | -60.24                   |

Remarks:

1.  $EIRP(dBm) = Raw\ Value(dBuV) + Correction\ Factor(dB/m)$
2.  $Correction\ Factor(dB/m) = Antenna\ Factor(dB/m) + Cable\ Factor(dB) - Pre-Amplifier\ Factor(dB) + 20\log(D) - 104.8$
3.  $Margin\ value = EIRP - Limit\ value$

5GNR n77 (Part 27Q), Channel Bandwidth 40MHz

|                                                      |                    |                                   |                |                |                          |                            |                        |                                |
|------------------------------------------------------|--------------------|-----------------------------------|----------------|----------------|--------------------------|----------------------------|------------------------|--------------------------------|
| Mode                                                 |                    | TX channel 631334, 633334, 635332 |                |                |                          |                            |                        |                                |
| Antenna Polarity & Test Distance : Horizontal at 3 m |                    |                                   |                |                |                          |                            |                        |                                |
| No                                                   | Frequency<br>(MHz) | EIRP<br>(dBm)                     | Limit<br>(dBm) | Margin<br>(dB) | Antenna<br>Height<br>(m) | Table<br>Angle<br>(Degree) | Raw<br>Value<br>(dBuV) | Correction<br>Factor<br>(dB/m) |
| 1                                                    | 3470.01            | 28.05                             | 30.00          | -1.95          | 1.76 H                   | 9                          | 88.53                  | -60.48                         |
| 2                                                    | 3500.01            | 28.06                             | 30.00          | -1.94          | 1.79 H                   | 2                          | 88.41                  | -60.35                         |
| 3                                                    | 3529.98            | 28.03                             | 30.00          | -1.97          | 1.74 H                   | 3                          | 88.25                  | -60.22                         |
| Antenna Polarity & Test Distance: Vertical at 3 m    |                    |                                   |                |                |                          |                            |                        |                                |
| No                                                   | Frequency<br>(MHz) | EIRP<br>(dBm)                     | Limit<br>(dBm) | Margin<br>(dB) | Antenna<br>Height<br>(m) | Table<br>Angle<br>(Degree) | Raw<br>Value<br>(dBuV) | Correction<br>Factor<br>(dB/m) |
| 1                                                    | 3470.01            | 23.24                             | 30.00          | -6.76          | 1.50 V                   | 195                        | 83.72                  | -60.48                         |
| 2                                                    | 3500.01            | 23.14                             | 30.00          | -6.86          | 1.52 V                   | 188                        | 83.49                  | -60.35                         |
| 3                                                    | 3529.98            | 23.04                             | 30.00          | -6.96          | 1.48 V                   | 193                        | 83.26                  | -60.22                         |

Remarks:

1.  $EIRP(dBm) = Raw\ Value(dBuV) + Correction\ Factor(dB/m)$
2.  $Correction\ Factor(dB/m) = Antenna\ Factor(dB/m) + Cable\ Factor(dB) - Pre-Amplifier\ Factor(dB) + 20\log(D) - 104.8$
3.  $Margin\ value = EIRP - Limit\ value$

5GNR n77 (Part 27Q), Channel Bandwidth 20MHz

|                                                      |                 |                                   |             |             |                    |                      |                  |                          |
|------------------------------------------------------|-----------------|-----------------------------------|-------------|-------------|--------------------|----------------------|------------------|--------------------------|
| Mode                                                 |                 | TX channel 630668, 633334, 636000 |             |             |                    |                      |                  |                          |
| Antenna Polarity & Test Distance : Horizontal at 3 m |                 |                                   |             |             |                    |                      |                  |                          |
| No                                                   | Frequency (MHz) | EIRP (dBm)                        | Limit (dBm) | Margin (dB) | Antenna Height (m) | Table Angle (Degree) | Raw Value (dBuV) | Correction Factor (dB/m) |
| 1                                                    | 3460.02         | 28.45                             | 30.00       | -1.55       | 1.73 H             | 6                    | 88.98            | -60.53                   |
| 2                                                    | 3500.01         | 28.22                             | 30.00       | -1.78       | 1.79 H             | 8                    | 88.57            | -60.35                   |
| 3                                                    | 3540.00         | 28.35                             | 30.00       | -1.65       | 1.75 H             | 4                    | 88.52            | -60.17                   |
| Antenna Polarity & Test Distance: Vertical at 3 m    |                 |                                   |             |             |                    |                      |                  |                          |
| No                                                   | Frequency (MHz) | EIRP (dBm)                        | Limit (dBm) | Margin (dB) | Antenna Height (m) | Table Angle (Degree) | Raw Value (dBuV) | Correction Factor (dB/m) |
| 1                                                    | 3460.02         | 23.04                             | 30.00       | -6.96       | 1.53 V             | 193                  | 83.57            | -60.53                   |
| 2                                                    | 3500.01         | 23.44                             | 30.00       | -6.56       | 1.49 V             | 190                  | 83.79            | -60.35                   |
| 3                                                    | 3540.00         | 23.04                             | 30.00       | -6.96       | 1.56 V             | 192                  | 83.21            | -60.17                   |

Remarks:

1.  $EIRP(dBm) = Raw\ Value(dBuV) + Correction\ Factor(dB/m)$
2.  $Correction\ Factor(dB/m) = Antenna\ Factor(dB/m) + Cable\ Factor(dB) - Pre-Amplifier\ Factor(dB) + 20\log(D) - 104.8$
3.  $Margin\ value = EIRP - Limit\ value$

### Modulation Type: 16QAM

5GNR n77 (Part 27Q), Channel Bandwidth 100MHz

|                                                      |                 |                   |             |             |                    |                      |                  |                          |
|------------------------------------------------------|-----------------|-------------------|-------------|-------------|--------------------|----------------------|------------------|--------------------------|
| Mode                                                 |                 | TX channel 633334 |             |             |                    |                      |                  |                          |
| Antenna Polarity & Test Distance : Horizontal at 3 m |                 |                   |             |             |                    |                      |                  |                          |
| No                                                   | Frequency (MHz) | EIRP (dBm)        | Limit (dBm) | Margin (dB) | Antenna Height (m) | Table Angle (Degree) | Raw Value (dBuV) | Correction Factor (dB/m) |
| 1                                                    | 3500.01         | 27.21             | 30.00       | -2.79       | 1.78 H             | 7                    | 87.56            | -60.35                   |
| Antenna Polarity & Test Distance: Vertical at 3 m    |                 |                   |             |             |                    |                      |                  |                          |
| No                                                   | Frequency (MHz) | EIRP (dBm)        | Limit (dBm) | Margin (dB) | Antenna Height (m) | Table Angle (Degree) | Raw Value (dBuV) | Correction Factor (dB/m) |
| 1                                                    | 3500.01         | 22.21             | 30.00       | -7.79       | 1.53 V             | 187                  | 82.56            | -60.35                   |

Remarks:

1.  $EIRP(dBm) = Raw\ Value(dBuV) + Correction\ Factor(dB/m)$
2.  $Correction\ Factor(dB/m) = Antenna\ Factor(dB/m) + Cable\ Factor(dB) - Pre-Amplifier\ Factor(dB) + 20\log(D) - 104.8$
3.  $Margin\ value = EIRP - Limit\ value$

5GNR n77 (Part 27Q), Channel Bandwidth 90MHz

|                                                      |                    |                                   |                |                |                          |                            |                        |                                |
|------------------------------------------------------|--------------------|-----------------------------------|----------------|----------------|--------------------------|----------------------------|------------------------|--------------------------------|
| Mode                                                 |                    | TX channel 633000, 633334, 633666 |                |                |                          |                            |                        |                                |
| Antenna Polarity & Test Distance : Horizontal at 3 m |                    |                                   |                |                |                          |                            |                        |                                |
| No                                                   | Frequency<br>(MHz) | EIRP<br>(dBm)                     | Limit<br>(dBm) | Margin<br>(dB) | Antenna<br>Height<br>(m) | Table<br>Angle<br>(Degree) | Raw<br>Value<br>(dBuV) | Correction<br>Factor<br>(dB/m) |
| 1                                                    | 3495.00            | 27.15                             | 30.00          | -2.85          | 1.73 H                   | 2                          | 87.53                  | -60.38                         |
| 2                                                    | 3500.01            | 27.15                             | 30.00          | -2.85          | 1.75 H                   | 8                          | 87.50                  | -60.35                         |
| 3                                                    | 3504.99            | 27.15                             | 30.00          | -2.85          | 1.77 H                   | 2                          | 87.48                  | -60.33                         |
| Antenna Polarity & Test Distance: Vertical at 3 m    |                    |                                   |                |                |                          |                            |                        |                                |
| No                                                   | Frequency<br>(MHz) | EIRP<br>(dBm)                     | Limit<br>(dBm) | Margin<br>(dB) | Antenna<br>Height<br>(m) | Table<br>Angle<br>(Degree) | Raw<br>Value<br>(dBuV) | Correction<br>Factor<br>(dB/m) |
| 1                                                    | 3495.00            | 22.24                             | 30.00          | -7.76          | 1.57 V                   | 194                        | 82.62                  | -60.38                         |
| 2                                                    | 3500.01            | 22.34                             | 30.00          | -7.66          | 1.57 V                   | 193                        | 82.69                  | -60.35                         |
| 3                                                    | 3504.99            | 22.44                             | 30.00          | -7.56          | 1.53 V                   | 191                        | 82.77                  | -60.33                         |

Remarks:

1.  $EIRP(dBm) = Raw\ Value(dBuV) + Correction\ Factor(dB/m)$
2.  $Correction\ Factor(dB/m) = Antenna\ Factor(dB/m) + Cable\ Factor(dB) - Pre-Amplifier\ Factor(dB) + 20\log(D) - 104.8$
3.  $Margin\ value = EIRP - Limit\ value$



5GNR n77 (Part 27Q), Channel Bandwidth 50MHz

|                                                      |                 |                                   |             |             |                    |                      |                  |                          |
|------------------------------------------------------|-----------------|-----------------------------------|-------------|-------------|--------------------|----------------------|------------------|--------------------------|
| Mode                                                 |                 | TX channel 631668, 633334, 635000 |             |             |                    |                      |                  |                          |
| Antenna Polarity & Test Distance : Horizontal at 3 m |                 |                                   |             |             |                    |                      |                  |                          |
| No                                                   | Frequency (MHz) | EIRP (dBm)                        | Limit (dBm) | Margin (dB) | Antenna Height (m) | Table Angle (Degree) | Raw Value (dBuV) | Correction Factor (dB/m) |
| 1                                                    | 3475.02         | 27.45                             | 30.00       | -2.55       | 1.73 H             | 9                    | 87.92            | -60.47                   |
| 2                                                    | 3500.01         | 27.25                             | 30.00       | -2.75       | 1.75 H             | 9                    | 87.60            | -60.35                   |
| 3                                                    | 3525.00         | 27.55                             | 30.00       | -2.45       | 1.73 H             | 4                    | 87.79            | -60.24                   |
| Antenna Polarity & Test Distance: Vertical at 3 m    |                 |                                   |             |             |                    |                      |                  |                          |
| No                                                   | Frequency (MHz) | EIRP (dBm)                        | Limit (dBm) | Margin (dB) | Antenna Height (m) | Table Angle (Degree) | Raw Value (dBuV) | Correction Factor (dB/m) |
| 1                                                    | 3475.02         | 21.94                             | 30.00       | -8.06       | 1.58 V             | 190                  | 82.41            | -60.47                   |
| 2                                                    | 3500.01         | 22.54                             | 30.00       | -7.46       | 1.52 V             | 194                  | 82.89            | -60.35                   |
| 3                                                    | 3525.00         | 22.24                             | 30.00       | -7.76       | 1.51 V             | 194                  | 82.48            | -60.24                   |

Remarks:

1.  $EIRP(dBm) = Raw\ Value(dBuV) + Correction\ Factor(dB/m)$
2.  $Correction\ Factor(dB/m) = Antenna\ Factor(dB/m) + Cable\ Factor(dB) - Pre-Amplifier\ Factor(dB) + 20\log(D) - 104.8$
3.  $Margin\ value = EIRP - Limit\ value$

5GNR n77 (Part 27Q), Channel Bandwidth 40MHz

|                                                      |                 |                                   |             |             |                    |                      |                  |                          |
|------------------------------------------------------|-----------------|-----------------------------------|-------------|-------------|--------------------|----------------------|------------------|--------------------------|
| Mode                                                 |                 | TX channel 631334, 633334, 635332 |             |             |                    |                      |                  |                          |
| Antenna Polarity & Test Distance : Horizontal at 3 m |                 |                                   |             |             |                    |                      |                  |                          |
| No                                                   | Frequency (MHz) | EIRP (dBm)                        | Limit (dBm) | Margin (dB) | Antenna Height (m) | Table Angle (Degree) | Raw Value (dBuV) | Correction Factor (dB/m) |
| 1                                                    | 3470.01         | 27.15                             | 30.00       | -2.85       | 1.81 H             | 2                    | 87.63            | -60.48                   |
| 2                                                    | 3500.01         | 27.45                             | 30.00       | -2.55       | 1.80 H             | 6                    | 87.80            | -60.35                   |
| 3                                                    | 3529.98         | 27.35                             | 30.00       | -2.65       | 1.80 H             | 7                    | 87.57            | -60.22                   |
| Antenna Polarity & Test Distance: Vertical at 3 m    |                 |                                   |             |             |                    |                      |                  |                          |
| No                                                   | Frequency (MHz) | EIRP (dBm)                        | Limit (dBm) | Margin (dB) | Antenna Height (m) | Table Angle (Degree) | Raw Value (dBuV) | Correction Factor (dB/m) |
| 1                                                    | 3470.01         | 21.94                             | 30.00       | -8.06       | 1.51 V             | 190                  | 82.42            | -60.48                   |
| 2                                                    | 3500.01         | 22.24                             | 30.00       | -7.76       | 1.57 V             | 188                  | 82.59            | -60.35                   |
| 3                                                    | 3529.98         | 22.54                             | 30.00       | -7.46       | 1.57 V             | 188                  | 82.76            | -60.22                   |

Remarks:

1.  $EIRP(dBm) = Raw\ Value(dBuV) + Correction\ Factor(dB/m)$
2.  $Correction\ Factor(dB/m) = Antenna\ Factor(dB/m) + Cable\ Factor(dB) - Pre-Amplifier\ Factor(dB) + 20\log(D) - 104.8$
3.  $Margin\ value = EIRP - Limit\ value$

5GNR n77 (Part 27Q), Channel Bandwidth 20MHz

|                                                      |                 |                                   |             |             |                    |                      |                  |                          |
|------------------------------------------------------|-----------------|-----------------------------------|-------------|-------------|--------------------|----------------------|------------------|--------------------------|
| Mode                                                 |                 | TX channel 630668, 633334, 636000 |             |             |                    |                      |                  |                          |
| Antenna Polarity & Test Distance : Horizontal at 3 m |                 |                                   |             |             |                    |                      |                  |                          |
| No                                                   | Frequency (MHz) | EIRP (dBm)                        | Limit (dBm) | Margin (dB) | Antenna Height (m) | Table Angle (Degree) | Raw Value (dBuV) | Correction Factor (dB/m) |
| 1                                                    | 3460.02         | 27.35                             | 30.00       | -2.65       | 1.80 H             | 7                    | 87.88            | -60.53                   |
| 2                                                    | 3500.01         | 27.06                             | 30.00       | -2.94       | 1.81 H             | 7                    | 87.41            | -60.35                   |
| 3                                                    | 3540.00         | 27.25                             | 30.00       | -2.75       | 1.73 H             | 4                    | 87.42            | -60.17                   |
| Antenna Polarity & Test Distance: Vertical at 3 m    |                 |                                   |             |             |                    |                      |                  |                          |
| No                                                   | Frequency (MHz) | EIRP (dBm)                        | Limit (dBm) | Margin (dB) | Antenna Height (m) | Table Angle (Degree) | Raw Value (dBuV) | Correction Factor (dB/m) |
| 1                                                    | 3460.02         | 22.44                             | 30.00       | -7.56       | 1.54 V             | 195                  | 82.97            | -60.53                   |
| 2                                                    | 3500.01         | 22.54                             | 30.00       | -7.46       | 1.57 V             | 195                  | 82.89            | -60.35                   |
| 3                                                    | 3540.00         | 22.05                             | 30.00       | -7.95       | 1.48 V             | 188                  | 82.22            | -60.17                   |

Remarks:

1.  $EIRP(dBm) = Raw\ Value(dBuV) + Correction\ Factor(dB/m)$
2.  $Correction\ Factor(dB/m) = Antenna\ Factor(dB/m) + Cable\ Factor(dB) - Pre-Amplifier\ Factor(dB) + 20\log(D) - 104.8$
3.  $Margin\ value = EIRP - Limit\ value$

### Modulation Type: 64QAM

5GNR n77 (Part 27Q), Channel Bandwidth 100MHz

|                                                      |                    |                   |                |                |                          |                            |                        |                                |
|------------------------------------------------------|--------------------|-------------------|----------------|----------------|--------------------------|----------------------------|------------------------|--------------------------------|
| Mode                                                 |                    | TX channel 633334 |                |                |                          |                            |                        |                                |
| Antenna Polarity & Test Distance : Horizontal at 3 m |                    |                   |                |                |                          |                            |                        |                                |
| No                                                   | Frequency<br>(MHz) | EIRP<br>(dBm)     | Limit<br>(dBm) | Margin<br>(dB) | Antenna<br>Height<br>(m) | Table<br>Angle<br>(Degree) | Raw<br>Value<br>(dBuV) | Correction<br>Factor<br>(dB/m) |
| 1                                                    | 3500.01            | 26.66             | 30.00          | -3.34          | 1.82 H                   | 5                          | 87.01                  | -60.35                         |
| Antenna Polarity & Test Distance: Vertical at 3 m    |                    |                   |                |                |                          |                            |                        |                                |
| No                                                   | Frequency<br>(MHz) | EIRP<br>(dBm)     | Limit<br>(dBm) | Margin<br>(dB) | Antenna<br>Height<br>(m) | Table<br>Angle<br>(Degree) | Raw<br>Value<br>(dBuV) | Correction<br>Factor<br>(dB/m) |
| 1                                                    | 3500.01            | 21.56             | 30.00          | -8.44          | 1.52 V                   | 189                        | 81.91                  | -60.35                         |

Remarks:

1.  $EIRP(dBm) = Raw\ Value(dBuV) + Correction\ Factor(dB/m)$
2.  $Correction\ Factor(dB/m) = Antenna\ Factor(dB/m) + Cable\ Factor(dB) - Pre-Amplifier\ Factor(dB) + 20\log(D) - 104.8$
3.  $Margin\ value = EIRP - Limit\ value$

5GNR n77 (Part 27Q), Channel Bandwidth 90MHz

|                                                      |                    |                                   |                |                |                          |                            |                        |                                |
|------------------------------------------------------|--------------------|-----------------------------------|----------------|----------------|--------------------------|----------------------------|------------------------|--------------------------------|
| Mode                                                 |                    | TX channel 633000, 633334, 633666 |                |                |                          |                            |                        |                                |
| Antenna Polarity & Test Distance : Horizontal at 3 m |                    |                                   |                |                |                          |                            |                        |                                |
| No                                                   | Frequency<br>(MHz) | EIRP<br>(dBm)                     | Limit<br>(dBm) | Margin<br>(dB) | Antenna<br>Height<br>(m) | Table<br>Angle<br>(Degree) | Raw<br>Value<br>(dBuV) | Correction<br>Factor<br>(dB/m) |
| 1                                                    | 3495.00            | 26.65                             | 30.00          | -3.35          | 1.72 H                   | 4                          | 87.03                  | -60.38                         |
| 2                                                    | 3500.01            | 26.55                             | 30.00          | -3.45          | 1.74 H                   | 7                          | 86.90                  | -60.35                         |
| 3                                                    | 3504.99            | 26.55                             | 30.00          | -3.45          | 1.78 H                   | 2                          | 86.88                  | -60.33                         |
| Antenna Polarity & Test Distance: Vertical at 3 m    |                    |                                   |                |                |                          |                            |                        |                                |
| No                                                   | Frequency<br>(MHz) | EIRP<br>(dBm)                     | Limit<br>(dBm) | Margin<br>(dB) | Antenna<br>Height<br>(m) | Table<br>Angle<br>(Degree) | Raw<br>Value<br>(dBuV) | Correction<br>Factor<br>(dB/m) |
| 1                                                    | 3495.00            | 21.64                             | 30.00          | -8.36          | 1.53 V                   | 191                        | 82.02                  | -60.38                         |
| 2                                                    | 3500.01            | 21.94                             | 30.00          | -8.06          | 1.55 V                   | 193                        | 82.29                  | -60.35                         |
| 3                                                    | 3504.99            | 22.01                             | 30.00          | -7.99          | 1.56 V                   | 194                        | 82.34                  | -60.33                         |

Remarks:

1.  $EIRP(dBm) = Raw\ Value(dBuV) + Correction\ Factor(dB/m)$
2.  $Correction\ Factor(dB/m) = Antenna\ Factor(dB/m) + Cable\ Factor(dB) - Pre-Amplifier\ Factor(dB) + 20\log(D) - 104.8$
3.  $Margin\ value = EIRP - Limit\ value$

5GNR n77 (Part 27Q), Channel Bandwidth 80MHz

|                                                      |                 |                                   |             |             |                    |                      |                  |                          |
|------------------------------------------------------|-----------------|-----------------------------------|-------------|-------------|--------------------|----------------------|------------------|--------------------------|
| Mode                                                 |                 | TX channel 632668, 633334, 634000 |             |             |                    |                      |                  |                          |
| Antenna Polarity & Test Distance : Horizontal at 3 m |                 |                                   |             |             |                    |                      |                  |                          |
| No                                                   | Frequency (MHz) | EIRP (dBm)                        | Limit (dBm) | Margin (dB) | Antenna Height (m) | Table Angle (Degree) | Raw Value (dBuV) | Correction Factor (dB/m) |
| 1                                                    | 3490.02         | 26.65                             | 30.00       | -3.35       | 1.82 H             | 4                    | 87.04            | -60.39                   |
| 2                                                    | 3500.01         | 27.05                             | 30.00       | -2.95       | 1.77 H             | 3                    | 87.40            | -60.35                   |
| 3                                                    | 3510.00         | 26.45                             | 30.00       | -3.55       | 1.79 H             | 5                    | 86.75            | -60.30                   |
| Antenna Polarity & Test Distance: Vertical at 3 m    |                 |                                   |             |             |                    |                      |                  |                          |
| No                                                   | Frequency (MHz) | EIRP (dBm)                        | Limit (dBm) | Margin (dB) | Antenna Height (m) | Table Angle (Degree) | Raw Value (dBuV) | Correction Factor (dB/m) |
| 1                                                    | 3490.02         | 21.64                             | 30.00       | -8.36       | 1.51 V             | 190                  | 82.03            | -60.39                   |
| 2                                                    | 3500.01         | 21.94                             | 30.00       | -8.06       | 1.58 V             | 193                  | 82.29            | -60.35                   |
| 3                                                    | 3510.00         | 21.74                             | 30.00       | -8.26       | 1.55 V             | 193                  | 82.04            | -60.30                   |

Remarks:

1.  $EIRP(dBm) = Raw\ Value(dBuV) + Correction\ Factor(dB/m)$
2.  $Correction\ Factor(dB/m) = Antenna\ Factor(dB/m) + Cable\ Factor(dB) - Pre-Amplifier\ Factor(dB) + 20\log(D) - 104.8$
3.  $Margin\ value = EIRP - Limit\ value$

5GNR n77 (Part 27Q), Channel Bandwidth 60MHz

|                                                      |                    |                                   |                |                |                          |                            |                        |                                |
|------------------------------------------------------|--------------------|-----------------------------------|----------------|----------------|--------------------------|----------------------------|------------------------|--------------------------------|
| Mode                                                 |                    | TX channel 632000, 633334, 634666 |                |                |                          |                            |                        |                                |
| Antenna Polarity & Test Distance : Horizontal at 3 m |                    |                                   |                |                |                          |                            |                        |                                |
| No                                                   | Frequency<br>(MHz) | EIRP<br>(dBm)                     | Limit<br>(dBm) | Margin<br>(dB) | Antenna<br>Height<br>(m) | Table<br>Angle<br>(Degree) | Raw<br>Value<br>(dBuV) | Correction<br>Factor<br>(dB/m) |
| 1                                                    | 3480.00            | 26.85                             | 30.00          | -3.15          | 1.81 H                   | 5                          | 87.29                  | -60.44                         |
| 2                                                    | 3500.01            | 26.85                             | 30.00          | -3.15          | 1.76 H                   | 3                          | 87.20                  | -60.35                         |
| 3                                                    | 3519.99            | 26.65                             | 30.00          | -3.35          | 1.81 H                   | 5                          | 86.91                  | -60.26                         |
| Antenna Polarity & Test Distance: Vertical at 3 m    |                    |                                   |                |                |                          |                            |                        |                                |
| No                                                   | Frequency<br>(MHz) | EIRP<br>(dBm)                     | Limit<br>(dBm) | Margin<br>(dB) | Antenna<br>Height<br>(m) | Table<br>Angle<br>(Degree) | Raw<br>Value<br>(dBuV) | Correction<br>Factor<br>(dB/m) |
| 1                                                    | 3480.00            | 21.44                             | 30.00          | -8.56          | 1.51 V                   | 190                        | 81.88                  | -60.44                         |
| 2                                                    | 3500.01            | 21.94                             | 30.00          | -8.06          | 1.50 V                   | 195                        | 82.29                  | -60.35                         |
| 3                                                    | 3519.99            | 21.44                             | 30.00          | -8.56          | 1.55 V                   | 192                        | 81.70                  | -60.26                         |

Remarks:

1.  $EIRP(dBm) = Raw\ Value(dBuV) + Correction\ Factor(dB/m)$
2.  $Correction\ Factor(dB/m) = Antenna\ Factor(dB/m) + Cable\ Factor(dB) - Pre-Amplifier\ Factor(dB) + 20\log(D) - 104.8$
3.  $Margin\ value = EIRP - Limit\ value$

5GNR n77 (Part 27Q), Channel Bandwidth 50MHz

|                                                      |                    |                                   |                |                |                          |                            |                        |                                |
|------------------------------------------------------|--------------------|-----------------------------------|----------------|----------------|--------------------------|----------------------------|------------------------|--------------------------------|
| Mode                                                 |                    | TX channel 631668, 633334, 635000 |                |                |                          |                            |                        |                                |
| Antenna Polarity & Test Distance : Horizontal at 3 m |                    |                                   |                |                |                          |                            |                        |                                |
| No                                                   | Frequency<br>(MHz) | EIRP<br>(dBm)                     | Limit<br>(dBm) | Margin<br>(dB) | Antenna<br>Height<br>(m) | Table<br>Angle<br>(Degree) | Raw<br>Value<br>(dBuV) | Correction<br>Factor<br>(dB/m) |
| 1                                                    | 3475.02            | 26.95                             | 30.00          | -3.05          | 1.73 H                   | 7                          | 87.42                  | -60.47                         |
| 2                                                    | 3500.01            | 26.75                             | 30.00          | -3.25          | 1.82 H                   | 6                          | 87.10                  | -60.35                         |
| 3                                                    | 3525.00            | 27.05                             | 30.00          | -2.95          | 1.80 H                   | 3                          | 87.29                  | -60.24                         |
| Antenna Polarity & Test Distance: Vertical at 3 m    |                    |                                   |                |                |                          |                            |                        |                                |
| No                                                   | Frequency<br>(MHz) | EIRP<br>(dBm)                     | Limit<br>(dBm) | Margin<br>(dB) | Antenna<br>Height<br>(m) | Table<br>Angle<br>(Degree) | Raw<br>Value<br>(dBuV) | Correction<br>Factor<br>(dB/m) |
| 1                                                    | 3475.02            | 21.54                             | 30.00          | -8.46          | 1.54 V                   | 195                        | 82.01                  | -60.47                         |
| 2                                                    | 3500.01            | 22.14                             | 30.00          | -7.86          | 1.55 V                   | 194                        | 82.49                  | -60.35                         |
| 3                                                    | 3525.00            | 21.74                             | 30.00          | -8.26          | 1.54 V                   | 188                        | 81.98                  | -60.24                         |

Remarks:

1.  $EIRP(dBm) = Raw\ Value(dBuV) + Correction\ Factor(dB/m)$
2.  $Correction\ Factor(dB/m) = Antenna\ Factor(dB/m) + Cable\ Factor(dB) - Pre-Amplifier\ Factor(dB) + 20\log(D) - 104.8$
3.  $Margin\ value = EIRP - Limit\ value$

5GNR n77 (Part 27Q), Channel Bandwidth 40MHz

|                                                      |                 |                                   |             |             |                    |                      |                  |                          |
|------------------------------------------------------|-----------------|-----------------------------------|-------------|-------------|--------------------|----------------------|------------------|--------------------------|
| Mode                                                 |                 | TX channel 631334, 633334, 635332 |             |             |                    |                      |                  |                          |
| Antenna Polarity & Test Distance : Horizontal at 3 m |                 |                                   |             |             |                    |                      |                  |                          |
| No                                                   | Frequency (MHz) | EIRP (dBm)                        | Limit (dBm) | Margin (dB) | Antenna Height (m) | Table Angle (Degree) | Raw Value (dBuV) | Correction Factor (dB/m) |
| 1                                                    | 3470.01         | 26.75                             | 30.00       | -3.25       | 1.78 H             | 3                    | 87.23            | -60.48                   |
| 2                                                    | 3500.01         | 26.95                             | 30.00       | -3.05       | 1.78 H             | 7                    | 87.30            | -60.35                   |
| 3                                                    | 3529.98         | 26.85                             | 30.00       | -3.15       | 1.77 H             | 7                    | 87.07            | -60.22                   |
| Antenna Polarity & Test Distance: Vertical at 3 m    |                 |                                   |             |             |                    |                      |                  |                          |
| No                                                   | Frequency (MHz) | EIRP (dBm)                        | Limit (dBm) | Margin (dB) | Antenna Height (m) | Table Angle (Degree) | Raw Value (dBuV) | Correction Factor (dB/m) |
| 1                                                    | 3470.01         | 22.14                             | 30.00       | -7.86       | 1.48 V             | 190                  | 82.62            | -60.48                   |
| 2                                                    | 3500.01         | 21.45                             | 30.00       | -8.55       | 1.53 V             | 189                  | 81.80            | -60.35                   |
| 3                                                    | 3529.98         | 21.94                             | 30.00       | -8.06       | 1.48 V             | 188                  | 82.16            | -60.22                   |

Remarks:

1.  $EIRP(dBm) = Raw\ Value(dBuV) + Correction\ Factor(dB/m)$
2.  $Correction\ Factor(dB/m) = Antenna\ Factor(dB/m) + Cable\ Factor(dB) - Pre-Amplifier\ Factor(dB) + 20\log(D) - 104.8$
3.  $Margin\ value = EIRP - Limit\ value$

5GNR n77 (Part 27Q), Channel Bandwidth 20MHz

|                                                      |                    |                                   |                |                |                          |                            |                        |                                |
|------------------------------------------------------|--------------------|-----------------------------------|----------------|----------------|--------------------------|----------------------------|------------------------|--------------------------------|
| Mode                                                 |                    | TX channel 630668, 633334, 636000 |                |                |                          |                            |                        |                                |
| Antenna Polarity & Test Distance : Horizontal at 3 m |                    |                                   |                |                |                          |                            |                        |                                |
| No                                                   | Frequency<br>(MHz) | EIRP<br>(dBm)                     | Limit<br>(dBm) | Margin<br>(dB) | Antenna<br>Height<br>(m) | Table<br>Angle<br>(Degree) | Raw<br>Value<br>(dBuV) | Correction<br>Factor<br>(dB/m) |
| 1                                                    | 3460.02            | 26.95                             | 30.00          | -3.05          | 1.74 H                   | 9                          | 87.48                  | -60.53                         |
| 2                                                    | 3500.01            | 26.55                             | 30.00          | -3.45          | 1.78 H                   | 7                          | 86.90                  | -60.35                         |
| 3                                                    | 3540.00            | 26.85                             | 30.00          | -3.15          | 1.82 H                   | 8                          | 87.02                  | -60.17                         |
| Antenna Polarity & Test Distance: Vertical at 3 m    |                    |                                   |                |                |                          |                            |                        |                                |
| No                                                   | Frequency<br>(MHz) | EIRP<br>(dBm)                     | Limit<br>(dBm) | Margin<br>(dB) | Antenna<br>Height<br>(m) | Table<br>Angle<br>(Degree) | Raw<br>Value<br>(dBuV) | Correction<br>Factor<br>(dB/m) |
| 1                                                    | 3460.02            | 22.04                             | 30.00          | -7.96          | 1.58 V                   | 191                        | 82.57                  | -60.53                         |
| 2                                                    | 3500.01            | 22.05                             | 30.00          | -7.95          | 1.57 V                   | 188                        | 82.40                  | -60.35                         |
| 3                                                    | 3540.00            | 21.39                             | 30.00          | -8.61          | 1.58 V                   | 190                        | 81.56                  | -60.17                         |

Remarks:

1.  $EIRP(dBm) = Raw\ Value(dBuV) + Correction\ Factor(dB/m)$
2.  $Correction\ Factor(dB/m) = Antenna\ Factor(dB/m) + Cable\ Factor(dB) - Pre-Amplifier\ Factor(dB) + 20\log(D) - 104.8$
3.  $Margin\ value = EIRP - Limit\ value$

### Modulation Type: 256QAM

5GNR n77 (Part 27Q), Channel Bandwidth 100MHz

|                                                      |                 |                   |             |             |                    |                      |                  |                          |
|------------------------------------------------------|-----------------|-------------------|-------------|-------------|--------------------|----------------------|------------------|--------------------------|
| Mode                                                 |                 | TX channel 633334 |             |             |                    |                      |                  |                          |
| Antenna Polarity & Test Distance : Horizontal at 3 m |                 |                   |             |             |                    |                      |                  |                          |
| No                                                   | Frequency (MHz) | EIRP (dBm)        | Limit (dBm) | Margin (dB) | Antenna Height (m) | Table Angle (Degree) | Raw Value (dBuV) | Correction Factor (dB/m) |
| 1                                                    | 3500.01         | 25.03             | 30.00       | -4.97       | 1.81 H             | 9                    | 85.38            | -60.35                   |
| Antenna Polarity & Test Distance: Vertical at 3 m    |                 |                   |             |             |                    |                      |                  |                          |
| No                                                   | Frequency (MHz) | EIRP (dBm)        | Limit (dBm) | Margin (dB) | Antenna Height (m) | Table Angle (Degree) | Raw Value (dBuV) | Correction Factor (dB/m) |
| 1                                                    | 3500.01         | 20.08             | 30.00       | -9.92       | 1.57 V             | 186                  | 80.43            | -60.35                   |

Remarks:

1.  $EIRP(dBm) = Raw\ Value(dBuV) + Correction\ Factor(dB/m)$
2.  $Correction\ Factor(dB/m) = Antenna\ Factor(dB/m) + Cable\ Factor(dB) - Pre-Amplifier\ Factor(dB) + 20\log(D) - 104.8$
3.  $Margin\ value = EIRP - Limit\ value$

5GNR n77 (Part 27Q), Channel Bandwidth 90MHz

|                                                      |                    |                                   |                |                |                          |                            |                        |                                |
|------------------------------------------------------|--------------------|-----------------------------------|----------------|----------------|--------------------------|----------------------------|------------------------|--------------------------------|
| Mode                                                 |                    | TX channel 633000, 633334, 633666 |                |                |                          |                            |                        |                                |
| Antenna Polarity & Test Distance : Horizontal at 3 m |                    |                                   |                |                |                          |                            |                        |                                |
| No                                                   | Frequency<br>(MHz) | EIRP<br>(dBm)                     | Limit<br>(dBm) | Margin<br>(dB) | Antenna<br>Height<br>(m) | Table<br>Angle<br>(Degree) | Raw<br>Value<br>(dBuV) | Correction<br>Factor<br>(dB/m) |
| 1                                                    | 3495.00            | 25.25                             | 30.00          | -4.75          | 1.81 H                   | 3                          | 85.63                  | -60.38                         |
| 2                                                    | 3500.01            | 25.05                             | 30.00          | -4.95          | 1.75 H                   | 9                          | 85.40                  | -60.35                         |
| 3                                                    | 3504.99            | 25.04                             | 30.00          | -4.96          | 1.82 H                   | 2                          | 85.37                  | -60.33                         |
| Antenna Polarity & Test Distance: Vertical at 3 m    |                    |                                   |                |                |                          |                            |                        |                                |
| No                                                   | Frequency<br>(MHz) | EIRP<br>(dBm)                     | Limit<br>(dBm) | Margin<br>(dB) | Antenna<br>Height<br>(m) | Table<br>Angle<br>(Degree) | Raw<br>Value<br>(dBuV) | Correction<br>Factor<br>(dB/m) |
| 1                                                    | 3495.00            | 20.03                             | 30.00          | -9.97          | 1.50 V                   | 188                        | 80.41                  | -60.38                         |
| 2                                                    | 3500.01            | 20.54                             | 30.00          | -9.46          | 1.53 V                   | 190                        | 80.89                  | -60.35                         |
| 3                                                    | 3504.99            | 20.54                             | 30.00          | -9.46          | 1.53 V                   | 189                        | 80.87                  | -60.33                         |

Remarks:

1.  $EIRP(dBm) = Raw\ Value(dBuV) + Correction\ Factor(dB/m)$
2.  $Correction\ Factor(dB/m) = Antenna\ Factor(dB/m) + Cable\ Factor(dB) - Pre-Amplifier\ Factor(dB) + 20\log(D) - 104.8$
3.  $Margin\ value = EIRP - Limit\ value$

5GNR n77 (Part 27Q), Channel Bandwidth 80MHz

|                                                      |                    |                                   |                |                |                          |                            |                        |                                |
|------------------------------------------------------|--------------------|-----------------------------------|----------------|----------------|--------------------------|----------------------------|------------------------|--------------------------------|
| Mode                                                 |                    | TX channel 632668, 633334, 634000 |                |                |                          |                            |                        |                                |
| Antenna Polarity & Test Distance : Horizontal at 3 m |                    |                                   |                |                |                          |                            |                        |                                |
| No                                                   | Frequency<br>(MHz) | EIRP<br>(dBm)                     | Limit<br>(dBm) | Margin<br>(dB) | Antenna<br>Height<br>(m) | Table<br>Angle<br>(Degree) | Raw<br>Value<br>(dBuV) | Correction<br>Factor<br>(dB/m) |
| 1                                                    | 3490.02            | 25.15                             | 30.00          | -4.85          | 1.73 H                   | 3                          | 85.54                  | -60.39                         |
| 2                                                    | 3500.01            | 25.65                             | 30.00          | -4.35          | 1.79 H                   | 4                          | 86.00                  | -60.35                         |
| 3                                                    | 3510.00            | 24.95                             | 30.00          | -5.05          | 1.78 H                   | 5                          | 85.25                  | -60.30                         |
| Antenna Polarity & Test Distance: Vertical at 3 m    |                    |                                   |                |                |                          |                            |                        |                                |
| No                                                   | Frequency<br>(MHz) | EIRP<br>(dBm)                     | Limit<br>(dBm) | Margin<br>(dB) | Antenna<br>Height<br>(m) | Table<br>Angle<br>(Degree) | Raw<br>Value<br>(dBuV) | Correction<br>Factor<br>(dB/m) |
| 1                                                    | 3490.02            | 20.04                             | 30.00          | -9.96          | 1.49 V                   | 193                        | 80.43                  | -60.39                         |
| 2                                                    | 3500.01            | 20.54                             | 30.00          | -9.46          | 1.55 V                   | 191                        | 80.89                  | -60.35                         |
| 3                                                    | 3510.00            | 20.14                             | 30.00          | -9.86          | 1.58 V                   | 192                        | 80.44                  | -60.30                         |

Remarks:

1.  $EIRP(dBm) = Raw\ Value(dBuV) + Correction\ Factor(dB/m)$
2.  $Correction\ Factor(dB/m) = Antenna\ Factor(dB/m) + Cable\ Factor(dB) - Pre-Amplifier\ Factor(dB) + 20\log(D) - 104.8$
3.  $Margin\ value = EIRP - Limit\ value$

5GNR n77 (Part 27Q), Channel Bandwidth 60MHz

|                                                      |                    |                                   |                |                |                          |                            |                        |                                |
|------------------------------------------------------|--------------------|-----------------------------------|----------------|----------------|--------------------------|----------------------------|------------------------|--------------------------------|
| Mode                                                 |                    | TX channel 632000, 633334, 634666 |                |                |                          |                            |                        |                                |
| Antenna Polarity & Test Distance : Horizontal at 3 m |                    |                                   |                |                |                          |                            |                        |                                |
| No                                                   | Frequency<br>(MHz) | EIRP<br>(dBm)                     | Limit<br>(dBm) | Margin<br>(dB) | Antenna<br>Height<br>(m) | Table<br>Angle<br>(Degree) | Raw<br>Value<br>(dBuV) | Correction<br>Factor<br>(dB/m) |
| 1                                                    | 3480.00            | 25.35                             | 30.00          | -4.65          | 1.80 H                   | 9                          | 85.79                  | -60.44                         |
| 2                                                    | 3500.01            | 25.45                             | 30.00          | -4.55          | 1.73 H                   | 7                          | 85.80                  | -60.35                         |
| 3                                                    | 3519.99            | 25.15                             | 30.00          | -4.85          | 1.72 H                   | 2                          | 85.41                  | -60.26                         |
| Antenna Polarity & Test Distance: Vertical at 3 m    |                    |                                   |                |                |                          |                            |                        |                                |
| No                                                   | Frequency<br>(MHz) | EIRP<br>(dBm)                     | Limit<br>(dBm) | Margin<br>(dB) | Antenna<br>Height<br>(m) | Table<br>Angle<br>(Degree) | Raw<br>Value<br>(dBuV) | Correction<br>Factor<br>(dB/m) |
| 1                                                    | 3480.00            | 20.04                             | 30.00          | -9.96          | 1.50 V                   | 189                        | 80.48                  | -60.44                         |
| 2                                                    | 3500.01            | 20.34                             | 30.00          | -9.66          | 1.53 V                   | 191                        | 80.69                  | -60.35                         |
| 3                                                    | 3519.99            | 20.05                             | 30.00          | -9.95          | 1.49 V                   | 192                        | 80.31                  | -60.26                         |

Remarks:

1.  $EIRP(dBm) = Raw\ Value(dBuV) + Correction\ Factor(dB/m)$
2.  $Correction\ Factor(dB/m) = Antenna\ Factor(dB/m) + Cable\ Factor(dB) - Pre-Amplifier\ Factor(dB) + 20\log(D) - 104.8$
3.  $Margin\ value = EIRP - Limit\ value$

5GNR n77 (Part 27Q), Channel Bandwidth 50MHz

|                                                      |                    |                                   |                |                |                          |                            |                        |                                |
|------------------------------------------------------|--------------------|-----------------------------------|----------------|----------------|--------------------------|----------------------------|------------------------|--------------------------------|
| Mode                                                 |                    | TX channel 631668, 633334, 635000 |                |                |                          |                            |                        |                                |
| Antenna Polarity & Test Distance : Horizontal at 3 m |                    |                                   |                |                |                          |                            |                        |                                |
| No                                                   | Frequency<br>(MHz) | EIRP<br>(dBm)                     | Limit<br>(dBm) | Margin<br>(dB) | Antenna<br>Height<br>(m) | Table<br>Angle<br>(Degree) | Raw<br>Value<br>(dBuV) | Correction<br>Factor<br>(dB/m) |
| 1                                                    | 3475.02            | 25.45                             | 30.00          | -4.55          | 1.77 H                   | 2                          | 85.92                  | -60.47                         |
| 2                                                    | 3500.01            | 25.15                             | 30.00          | -4.85          | 1.75 H                   | 4                          | 85.50                  | -60.35                         |
| 3                                                    | 3525.00            | 25.55                             | 30.00          | -4.45          | 1.73 H                   | 8                          | 85.79                  | -60.24                         |
| Antenna Polarity & Test Distance: Vertical at 3 m    |                    |                                   |                |                |                          |                            |                        |                                |
| No                                                   | Frequency<br>(MHz) | EIRP<br>(dBm)                     | Limit<br>(dBm) | Margin<br>(dB) | Antenna<br>Height<br>(m) | Table<br>Angle<br>(Degree) | Raw<br>Value<br>(dBuV) | Correction<br>Factor<br>(dB/m) |
| 1                                                    | 3475.02            | 20.14                             | 30.00          | -9.86          | 1.57 V                   | 191                        | 80.61                  | -60.47                         |
| 2                                                    | 3500.01            | 20.64                             | 30.00          | -9.36          | 1.48 V                   | 193                        | 80.99                  | -60.35                         |
| 3                                                    | 3525.00            | 20.24                             | 30.00          | -9.76          | 1.73 V                   | 8                          | 80.48                  | -60.24                         |

Remarks:

1.  $EIRP(dBm) = Raw\ Value(dBuV) + Correction\ Factor(dB/m)$
2.  $Correction\ Factor(dB/m) = Antenna\ Factor(dB/m) + Cable\ Factor(dB) - Pre-Amplifier\ Factor(dB) + 20\log(D) - 104.8$
3.  $Margin\ value = EIRP - Limit\ value$

5GNR n77 (Part 27Q), Channel Bandwidth 40MHz

|                                                      |                    |                                   |                |                |                          |                            |                        |                                |
|------------------------------------------------------|--------------------|-----------------------------------|----------------|----------------|--------------------------|----------------------------|------------------------|--------------------------------|
| Mode                                                 |                    | TX channel 631334, 633334, 635332 |                |                |                          |                            |                        |                                |
| Antenna Polarity & Test Distance : Horizontal at 3 m |                    |                                   |                |                |                          |                            |                        |                                |
| No                                                   | Frequency<br>(MHz) | EIRP<br>(dBm)                     | Limit<br>(dBm) | Margin<br>(dB) | Antenna<br>Height<br>(m) | Table<br>Angle<br>(Degree) | Raw<br>Value<br>(dBuV) | Correction<br>Factor<br>(dB/m) |
| 1                                                    | 3470.01            | 25.25                             | 30.00          | -4.75          | 1.77 H                   | 3                          | 85.73                  | -60.48                         |
| 2                                                    | 3500.01            | 25.35                             | 30.00          | -4.65          | 1.82 H                   | 8                          | 85.70                  | -60.35                         |
| 3                                                    | 3529.98            | 25.45                             | 30.00          | -4.55          | 1.82 H                   | 4                          | 85.67                  | -60.22                         |
| Antenna Polarity & Test Distance: Vertical at 3 m    |                    |                                   |                |                |                          |                            |                        |                                |
| No                                                   | Frequency<br>(MHz) | EIRP<br>(dBm)                     | Limit<br>(dBm) | Margin<br>(dB) | Antenna<br>Height<br>(m) | Table<br>Angle<br>(Degree) | Raw<br>Value<br>(dBuV) | Correction<br>Factor<br>(dB/m) |
| 1                                                    | 3470.01            | 20.64                             | 30.00          | -9.36          | 1.51 V                   | 195                        | 81.12                  | -60.48                         |
| 2                                                    | 3500.01            | 20.01                             | 30.00          | -9.99          | 1.57 V                   | 193                        | 80.36                  | -60.35                         |
| 3                                                    | 3529.98            | 20.34                             | 30.00          | -9.66          | 1.51 V                   | 190                        | 80.56                  | -60.22                         |

Remarks:

1.  $EIRP(dBm) = Raw\ Value(dBuV) + Correction\ Factor(dB/m)$
2.  $Correction\ Factor(dB/m) = Antenna\ Factor(dB/m) + Cable\ Factor(dB) - Pre-Amplifier\ Factor(dB) + 20\log(D) - 104.8$
3.  $Margin\ value = EIRP - Limit\ value$

5GNR n77 (Part 27Q), Channel Bandwidth 20MHz

|                                                      |                 |                                   |             |             |                    |                      |                  |                          |
|------------------------------------------------------|-----------------|-----------------------------------|-------------|-------------|--------------------|----------------------|------------------|--------------------------|
| Mode                                                 |                 | TX channel 630668, 633334, 636000 |             |             |                    |                      |                  |                          |
| Antenna Polarity & Test Distance : Horizontal at 3 m |                 |                                   |             |             |                    |                      |                  |                          |
| No                                                   | Frequency (MHz) | EIRP (dBm)                        | Limit (dBm) | Margin (dB) | Antenna Height (m) | Table Angle (Degree) | Raw Value (dBuV) | Correction Factor (dB/m) |
| 1                                                    | 3460.02         | 25.55                             | 30.00       | -4.45       | 1.79 H             | 5                    | 86.08            | -60.53                   |
| 2                                                    | 3500.01         | 25.05                             | 30.00       | -4.95       | 1.80 H             | 7                    | 85.40            | -60.35                   |
| 3                                                    | 3540.00         | 25.45                             | 30.00       | -4.55       | 1.76 H             | 3                    | 85.62            | -60.17                   |
| Antenna Polarity & Test Distance: Vertical at 3 m    |                 |                                   |             |             |                    |                      |                  |                          |
| No                                                   | Frequency (MHz) | EIRP (dBm)                        | Limit (dBm) | Margin (dB) | Antenna Height (m) | Table Angle (Degree) | Raw Value (dBuV) | Correction Factor (dB/m) |
| 1                                                    | 3460.02         | 20.44                             | 30.00       | -9.56       | 1.58 V             | 191                  | 80.97            | -60.53                   |
| 2                                                    | 3500.01         | 20.64                             | 30.00       | -9.36       | 1.56 V             | 190                  | 80.99            | -60.35                   |
| 3                                                    | 3540.00         | 20.45                             | 30.00       | -9.55       | 1.58 V             | 195                  | 80.62            | -60.17                   |

Remarks:

1.  $EIRP(dBm) = Raw\ Value(dBuV) + Correction\ Factor(dB/m)$
2.  $Correction\ Factor(dB/m) = Antenna\ Factor(dB/m) + Cable\ Factor(dB) - Pre-Amplifier\ Factor(dB) + 20\log(D) - 104.8$
3.  $Margin\ value = EIRP - Limit\ value$

| LTE Band 2 |           |                 |           |       |       |       |
|------------|-----------|-----------------|-----------|-------|-------|-------|
| BW         | MCS Index | RB Size         | RB Offset | Low   | Mid   | High  |
|            |           | Channel         |           | 18700 | 18900 | 19100 |
|            |           | Frequency (MHz) |           | 1860  | 1880  | 1900  |
| 20M        | QPSK      | 1               | 0         | 29.13 | 29.00 | 28.95 |
|            |           | 1               | 50        | 29.00 | 28.97 | 28.68 |
|            |           | 1               | 99        | 28.72 | 28.99 | 28.84 |
|            |           | 50              | 0         | 28.04 | 28.04 | 27.90 |
|            |           | 50              | 25        | 28.10 | 28.03 | 27.90 |
|            |           | 50              | 50        | 28.02 | 28.06 | 27.89 |
|            |           | 100             | 0         | 28.08 | 27.94 | 27.95 |
|            | 16QAM     | 1               | 0         | 28.10 | 28.55 | 28.40 |
|            |           | 1               | 50        | 28.19 | 28.56 | 28.02 |
|            |           | 1               | 99        | 28.10 | 28.56 | 27.87 |
|            |           | 50              | 0         | 26.91 | 27.07 | 26.89 |
|            |           | 50              | 25        | 27.05 | 26.96 | 26.91 |
|            |           | 50              | 50        | 27.08 | 27.14 | 26.85 |
|            |           | 100             | 0         | 27.09 | 27.07 | 26.90 |
|            | 64QAM     | 1               | 0         | 26.93 | 27.47 | 27.18 |
|            |           | 1               | 50        | 26.98 | 27.46 | 26.89 |
|            |           | 1               | 99        | 26.97 | 27.63 | 26.89 |
|            |           | 50              | 0         | 25.70 | 26.01 | 25.83 |
|            |           | 50              | 25        | 25.76 | 25.75 | 25.64 |
|            |           | 50              | 50        | 25.82 | 26.32 | 25.77 |
|            |           | 100             | 0         | 26.28 | 26.25 | 25.92 |
|            | 256QAM    | 1               | 0         | 25.11 | 25.65 | 24.91 |
|            |           | 1               | 50        | 24.87 | 25.69 | 24.71 |
|            |           | 1               | 99        | 24.69 | 25.78 | 25.10 |
|            |           | 50              | 0         | 23.82 | 23.94 | 23.71 |
|            |           | 50              | 25        | 23.86 | 24.00 | 23.70 |
|            |           | 50              | 50        | 23.56 | 24.23 | 23.69 |
|            |           | 100             | 0         | 24.13 | 24.50 | 23.85 |

\*EIRP = Conducted + antenna gain (4.27dBi)

| LTE Band 2 |           |                 |           |        |       |        |
|------------|-----------|-----------------|-----------|--------|-------|--------|
| BW         | MCS Index | RB Size         | RB Offset | Low    | Mid   | High   |
|            |           | Channel         |           | 18675  | 18900 | 19125  |
|            |           | Frequency (MHz) |           | 1857.5 | 1880  | 1902.5 |
| 15M        | QPSK      | 1               | 0         | 28.97  | 28.88 | 28.77  |
|            |           | 1               | 37        | 28.85  | 29.05 | 28.79  |
|            |           | 1               | 74        | 28.86  | 28.93 | 28.79  |
|            |           | 36              | 0         | 28.06  | 27.99 | 27.86  |
|            |           | 36              | 19        | 28.12  | 28.06 | 27.88  |
|            |           | 36              | 39        | 28.10  | 28.04 | 27.91  |
|            |           | 75              | 0         | 28.17  | 27.95 | 27.96  |
|            | 16QAM     | 1               | 0         | 28.51  | 28.58 | 27.94  |
|            |           | 1               | 37        | 28.16  | 28.51 | 28.29  |
|            |           | 1               | 74        | 28.34  | 28.21 | 28.32  |
|            |           | 36              | 0         | 27.03  | 27.09 | 26.85  |
|            |           | 36              | 19        | 27.12  | 26.99 | 26.92  |
|            |           | 36              | 39        | 27.09  | 27.04 | 26.90  |
|            |           | 75              | 0         | 27.16  | 26.99 | 26.95  |
|            | 64QAM     | 1               | 0         | 27.52  | 27.54 | 26.79  |
|            |           | 1               | 37        | 27.16  | 27.30 | 27.10  |
|            |           | 1               | 74        | 27.07  | 26.97 | 27.10  |
|            |           | 36              | 0         | 25.93  | 26.19 | 26.00  |
|            |           | 36              | 19        | 26.20  | 26.15 | 26.10  |
|            |           | 36              | 39        | 26.00  | 26.17 | 26.04  |
|            |           | 75              | 0         | 26.30  | 26.16 | 26.10  |
|            | 256QAM    | 1               | 0         | 25.57  | 25.38 | 24.63  |
|            |           | 1               | 37        | 25.18  | 25.14 | 24.97  |
|            |           | 1               | 74        | 24.95  | 25.19 | 24.94  |
|            |           | 36              | 0         | 24.15  | 24.18 | 23.83  |
|            |           | 36              | 19        | 24.14  | 24.28 | 23.94  |
|            |           | 36              | 39        | 24.30  | 24.24 | 24.24  |
|            |           | 75              | 0         | 24.45  | 24.12 | 24.38  |

\*EIRP = Conducted + antenna gain (4.27dBi)

| LTE Band 2 |           |                 |           |       |       |       |
|------------|-----------|-----------------|-----------|-------|-------|-------|
| BW         | MCS Index | RB Size         | RB Offset | Low   | Mid   | High  |
|            |           | Channel         |           | 18650 | 18900 | 19150 |
|            |           | Frequency (MHz) |           | 1855  | 1880  | 1905  |
| 10M        | QPSK      | 1               | 0         | 29.03 | 29.12 | 28.70 |
|            |           | 1               | 24        | 28.87 | 28.77 | 28.77 |
|            |           | 1               | 49        | 28.96 | 28.86 | 28.75 |
|            |           | 25              | 0         | 28.05 | 28.00 | 27.90 |
|            |           | 25              | 12        | 28.11 | 28.04 | 27.86 |
|            |           | 25              | 25        | 28.10 | 28.08 | 27.88 |
|            |           | 50              | 0         | 28.09 | 28.06 | 27.94 |
|            | 16QAM     | 1               | 0         | 28.52 | 28.42 | 28.06 |
|            |           | 1               | 24        | 28.03 | 28.27 | 28.35 |
|            |           | 1               | 49        | 28.62 | 28.23 | 28.35 |
|            |           | 25              | 0         | 27.06 | 26.95 | 26.84 |
|            |           | 25              | 12        | 27.05 | 27.07 | 26.83 |
|            |           | 25              | 25        | 27.05 | 26.96 | 26.94 |
|            |           | 50              | 0         | 27.07 | 26.99 | 26.92 |
|            | 64QAM     | 1               | 0         | 27.70 | 27.18 | 27.19 |
|            |           | 1               | 24        | 27.03 | 27.00 | 27.53 |
|            |           | 1               | 49        | 27.56 | 27.10 | 27.31 |
|            |           | 25              | 0         | 26.02 | 26.07 | 25.88 |
|            |           | 25              | 12        | 25.96 | 25.88 | 25.71 |
|            |           | 25              | 25        | 25.77 | 25.68 | 25.68 |
|            |           | 50              | 0         | 25.81 | 25.94 | 25.71 |
|            | 256QAM    | 1               | 0         | 25.69 | 24.93 | 25.45 |
|            |           | 1               | 24        | 24.77 | 25.14 | 25.52 |
|            |           | 1               | 49        | 25.73 | 25.29 | 25.06 |
|            |           | 25              | 0         | 24.24 | 24.24 | 23.88 |
|            |           | 25              | 12        | 23.84 | 24.02 | 23.76 |
|            |           | 25              | 25        | 23.79 | 23.79 | 23.97 |
|            |           | 50              | 0         | 24.04 | 24.14 | 23.60 |

\*EIRP = Conducted + antenna gain (4.27dBi)

| LTE Band 2 |           |                 |           |        |       |        |
|------------|-----------|-----------------|-----------|--------|-------|--------|
| BW         | MCS Index | RB Size         | RB Offset | Low    | Mid   | High   |
|            |           | Channel         |           | 18625  | 18900 | 19175  |
|            |           | Frequency (MHz) |           | 1852.5 | 1880  | 1907.5 |
| 5M         | QPSK      | 1               | 0         | 28.90  | 28.80 | 28.67  |
|            |           | 1               | 12        | 29.10  | 28.96 | 28.87  |
|            |           | 1               | 24        | 28.89  | 28.91 | 28.69  |
|            |           | 12              | 0         | 28.02  | 27.97 | 27.76  |
|            |           | 12              | 6         | 28.05  | 27.99 | 27.83  |
|            |           | 12              | 13        | 28.04  | 28.02 | 27.89  |
|            |           | 25              | 0         | 28.08  | 28.01 | 27.81  |
|            | 16QAM     | 1               | 0         | 28.18  | 28.46 | 28.06  |
|            |           | 1               | 12        | 28.50  | 28.25 | 27.93  |
|            |           | 1               | 24        | 28.10  | 28.51 | 28.11  |
|            |           | 12              | 0         | 27.01  | 26.98 | 26.84  |
|            |           | 12              | 6         | 27.16  | 27.03 | 26.74  |
|            |           | 12              | 13        | 27.02  | 27.05 | 26.94  |
|            |           | 25              | 0         | 27.15  | 26.92 | 26.79  |
|            | 64QAM     | 1               | 0         | 26.88  | 27.17 | 27.14  |
|            |           | 1               | 12        | 27.37  | 26.98 | 27.02  |
|            |           | 1               | 24        | 27.25  | 27.51 | 27.27  |
|            |           | 12              | 0         | 25.95  | 26.08 | 25.62  |
|            |           | 12              | 6         | 26.11  | 26.17 | 25.49  |
|            |           | 12              | 13        | 26.05  | 25.98 | 25.95  |
|            |           | 25              | 0         | 25.86  | 25.81 | 25.90  |
|            | 256QAM    | 1               | 0         | 24.91  | 25.24 | 24.98  |
|            |           | 1               | 12        | 25.23  | 25.25 | 25.09  |
|            |           | 1               | 24        | 24.97  | 25.45 | 25.41  |
|            |           | 12              | 0         | 23.84  | 24.05 | 23.80  |
|            |           | 12              | 6         | 24.34  | 24.31 | 23.77  |
|            |           | 12              | 13        | 23.93  | 23.72 | 24.17  |
|            |           | 25              | 0         | 24.01  | 24.03 | 23.96  |

\*EIRP = Conducted + antenna gain (4.27dBi)

| LTE Band 2 |           |                 |           |        |       |        |
|------------|-----------|-----------------|-----------|--------|-------|--------|
| BW         | MCS Index | RB Size         | RB Offset | Low    | Mid   | High   |
|            |           | Channel         |           | 18615  | 18900 | 19185  |
|            |           | Frequency (MHz) |           | 1851.5 | 1880  | 1908.5 |
| 3M         | QPSK      | 1               | 0         | 28.75  | 28.94 | 28.64  |
|            |           | 1               | 7         | 29.03  | 29.00 | 28.86  |
|            |           | 1               | 14        | 29.09  | 29.03 | 28.71  |
|            |           | 8               | 0         | 28.06  | 27.99 | 27.83  |
|            |           | 8               | 3         | 28.03  | 28.02 | 27.76  |
|            |           | 8               | 7         | 28.07  | 28.06 | 27.81  |
|            |           | 15              | 0         | 28.01  | 28.02 | 27.82  |
|            | 16QAM     | 1               | 0         | 28.23  | 28.29 | 27.73  |
|            |           | 1               | 7         | 28.48  | 28.54 | 28.11  |
|            |           | 1               | 14        | 28.17  | 28.05 | 28.40  |
|            |           | 8               | 0         | 27.05  | 27.08 | 26.88  |
|            |           | 8               | 3         | 27.14  | 27.05 | 26.93  |
|            |           | 8               | 7         | 27.17  | 27.16 | 26.74  |
|            |           | 15              | 0         | 26.92  | 27.01 | 26.93  |
|            | 64QAM     | 1               | 0         | 27.33  | 27.16 | 26.62  |
|            |           | 1               | 7         | 27.20  | 27.58 | 26.84  |
|            |           | 1               | 14        | 27.14  | 26.76 | 27.16  |
|            |           | 8               | 0         | 26.04  | 26.26 | 25.62  |
|            |           | 8               | 3         | 26.09  | 26.23 | 25.80  |
|            |           | 8               | 7         | 25.92  | 25.90 | 25.74  |
|            |           | 15              | 0         | 25.70  | 26.02 | 25.97  |
|            | 256QAM    | 1               | 0         | 25.53  | 25.45 | 24.76  |
|            |           | 1               | 7         | 25.18  | 25.82 | 24.81  |
|            |           | 1               | 14        | 25.21  | 24.61 | 25.35  |
|            |           | 8               | 0         | 24.24  | 24.26 | 23.82  |
|            |           | 8               | 3         | 23.89  | 24.14 | 23.67  |
|            |           | 8               | 7         | 24.08  | 23.90 | 23.86  |
|            |           | 15              | 0         | 23.70  | 23.81 | 24.24  |

\*EIRP = Conducted + antenna gain (4.27dBi)

| LTE Band 2 |           |                 |           |        |       |        |
|------------|-----------|-----------------|-----------|--------|-------|--------|
| BW         | MCS Index | RB Size         | RB Offset | Low    | Mid   | High   |
|            |           | Channel         |           | 18607  | 18900 | 19193  |
|            |           | Frequency (MHz) |           | 1850.7 | 1880  | 1909.3 |
| 1.4M       | QPSK      | 1               | 0         | 28.91  | 28.86 | 28.62  |
|            |           | 1               | 2         | 29.04  | 28.98 | 28.71  |
|            |           | 1               | 5         | 28.85  | 28.90 | 28.58  |
|            |           | 3               | 0         | 28.84  | 28.90 | 28.63  |
|            |           | 3               | 1         | 28.98  | 28.99 | 28.71  |
|            |           | 3               | 3         | 28.90  | 28.89 | 28.64  |
|            |           | 6               | 0         | 28.01  | 27.96 | 27.67  |
|            | 16QAM     | 1               | 0         | 28.47  | 28.26 | 27.60  |
|            |           | 1               | 2         | 27.90  | 28.47 | 27.92  |
|            |           | 1               | 5         | 28.04  | 28.09 | 28.22  |
|            |           | 3               | 0         | 28.00  | 28.02 | 27.73  |
|            |           | 3               | 1         | 28.06  | 28.05 | 27.85  |
|            |           | 3               | 3         | 28.03  | 28.01 | 27.78  |
|            |           | 6               | 0         | 27.10  | 27.06 | 26.72  |
|            | 64QAM     | 1               | 0         | 27.35  | 27.33 | 26.68  |
|            |           | 1               | 2         | 26.71  | 27.23 | 27.01  |
|            |           | 1               | 5         | 26.82  | 26.97 | 27.38  |
|            |           | 3               | 0         | 27.10  | 27.05 | 26.44  |
|            |           | 3               | 1         | 27.15  | 27.19 | 26.68  |
|            |           | 3               | 3         | 27.07  | 26.87 | 26.92  |
|            |           | 6               | 0         | 26.26  | 26.08 | 25.58  |
|            | 256QAM    | 1               | 0         | 25.55  | 25.05 | 24.60  |
|            |           | 1               | 2         | 24.56  | 25.05 | 24.98  |
|            |           | 1               | 5         | 24.91  | 25.13 | 25.54  |
|            |           | 3               | 0         | 24.99  | 25.27 | 24.19  |
|            |           | 3               | 1         | 25.43  | 25.28 | 24.48  |
|            |           | 3               | 3         | 25.37  | 25.04 | 24.98  |
|            |           | 6               | 0         | 23.97  | 23.92 | 23.29  |

\*EIRP = Conducted + antenna gain (4.27dBi)

| LTE Band 5 |           |                 |           |       |       |       |
|------------|-----------|-----------------|-----------|-------|-------|-------|
| BW         | MCS Index | RB Size         | RB Offset | Low   | Mid   | High  |
|            |           | Channel         |           | 20450 | 20525 | 20600 |
|            |           | Frequency (MHz) |           | 829   | 836.5 | 844   |
| 10M        | QPSK      | 1               | 0         | 26.61 | 26.74 | 26.55 |
|            |           | 1               | 24        | 26.56 | 26.71 | 26.31 |
|            |           | 1               | 49        | 26.40 | 26.62 | 26.33 |
|            |           | 25              | 0         | 25.67 | 25.69 | 25.60 |
|            |           | 25              | 12        | 25.66 | 25.63 | 25.67 |
|            |           | 25              | 25        | 25.70 | 25.64 | 25.58 |
|            |           | 50              | 0         | 25.73 | 25.72 | 25.67 |
|            | 16QAM     | 1               | 0         | 25.88 | 26.21 | 26.35 |
|            |           | 1               | 24        | 25.82 | 26.02 | 25.92 |
|            |           | 1               | 49        | 25.80 | 25.83 | 25.81 |
|            |           | 25              | 0         | 24.67 | 24.72 | 24.58 |
|            |           | 25              | 12        | 24.70 | 24.58 | 24.52 |
|            |           | 25              | 25        | 24.65 | 24.58 | 24.64 |
|            |           | 50              | 0         | 24.63 | 24.60 | 24.50 |
|            | 64QAM     | 1               | 0         | 24.72 | 25.02 | 25.36 |
|            |           | 1               | 24        | 24.97 | 25.08 | 24.97 |
|            |           | 1               | 49        | 24.85 | 24.53 | 24.96 |
|            |           | 25              | 0         | 23.53 | 23.61 | 23.31 |
|            |           | 25              | 12        | 23.75 | 23.68 | 23.34 |
|            |           | 25              | 25        | 23.77 | 23.53 | 23.73 |
|            |           | 50              | 0         | 23.58 | 23.40 | 23.51 |
|            | 256QAM    | 1               | 0         | 23.01 | 23.27 | 23.22 |
|            |           | 1               | 24        | 23.27 | 23.38 | 22.78 |
|            |           | 1               | 49        | 23.07 | 22.32 | 22.81 |
|            |           | 25              | 0         | 21.50 | 21.40 | 21.25 |
|            |           | 25              | 12        | 21.83 | 21.79 | 21.32 |
|            |           | 25              | 25        | 21.87 | 21.36 | 21.47 |
|            |           | 50              | 0         | 21.37 | 21.52 | 21.60 |

\*ERP = Conducted + antenna gain (3.81dBi)-2.15

| LTE Band 5 |           |                 |           |       |       |       |
|------------|-----------|-----------------|-----------|-------|-------|-------|
| BW         | MCS Index | RB Size         | RB Offset | Low   | Mid   | High  |
|            |           | Channel         |           | 20425 | 20525 | 20625 |
|            |           | Frequency (MHz) |           | 826.5 | 836.5 | 846.5 |
| 5M         | QPSK      | 1               | 0         | 26.77 | 26.70 | 26.50 |
|            |           | 1               | 12        | 26.63 | 26.74 | 26.57 |
|            |           | 1               | 24        | 26.67 | 26.54 | 26.49 |
|            |           | 12              | 0         | 25.67 | 25.61 | 25.67 |
|            |           | 12              | 6         | 25.68 | 25.70 | 25.56 |
|            |           | 12              | 13        | 25.66 | 25.68 | 25.55 |
|            |           | 25              | 0         | 25.67 | 25.66 | 25.67 |
|            | 16QAM     | 1               | 0         | 26.04 | 25.64 | 25.95 |
|            |           | 1               | 12        | 26.15 | 26.08 | 26.09 |
|            |           | 1               | 24        | 25.59 | 25.79 | 25.77 |
|            |           | 12              | 0         | 24.77 | 24.72 | 24.66 |
|            |           | 12              | 6         | 24.82 | 24.62 | 24.53 |
|            |           | 12              | 13        | 24.70 | 24.67 | 24.66 |
|            |           | 25              | 0         | 24.68 | 24.57 | 24.56 |
|            | 64QAM     | 1               | 0         | 25.01 | 24.74 | 24.74 |
|            |           | 1               | 12        | 24.99 | 25.17 | 25.20 |
|            |           | 1               | 24        | 24.45 | 24.92 | 24.71 |
|            |           | 12              | 0         | 23.53 | 23.91 | 23.62 |
|            |           | 12              | 6         | 23.84 | 23.67 | 23.69 |
|            |           | 12              | 13        | 23.68 | 23.87 | 23.46 |
|            |           | 25              | 0         | 23.73 | 23.77 | 23.72 |
|            | 256QAM    | 1               | 0         | 23.20 | 22.65 | 22.82 |
|            |           | 1               | 12        | 23.20 | 23.29 | 23.12 |
|            |           | 1               | 24        | 22.55 | 23.16 | 22.56 |
|            |           | 12              | 0         | 21.53 | 21.83 | 21.62 |
|            |           | 12              | 6         | 21.71 | 21.55 | 21.60 |
|            |           | 12              | 13        | 21.83 | 21.90 | 21.29 |
|            |           | 25              | 0         | 21.87 | 21.75 | 21.44 |

\*ERP = Conducted + antenna gain (3.81dBi)-2.15

| LTE Band 5 |           |                 |           |       |       |       |
|------------|-----------|-----------------|-----------|-------|-------|-------|
| BW         | MCS Index | RB Size         | RB Offset | Low   | Mid   | High  |
|            |           | Channel         |           | 20415 | 20525 | 20635 |
|            |           | Frequency (MHz) |           | 825.5 | 836.5 | 847.5 |
| 3M         | QPSK      | 1               | 0         | 26.61 | 26.58 | 26.60 |
|            |           | 1               | 7         | 26.76 | 26.59 | 26.64 |
|            |           | 1               | 14        | 26.62 | 26.50 | 26.49 |
|            |           | 8               | 0         | 25.71 | 25.62 | 25.55 |
|            |           | 8               | 3         | 25.68 | 25.61 | 25.59 |
|            |           | 8               | 7         | 25.67 | 25.57 | 25.61 |
|            |           | 15              | 0         | 25.68 | 25.62 | 25.54 |
|            | 16QAM     | 1               | 0         | 25.79 | 26.15 | 25.79 |
|            |           | 1               | 7         | 26.14 | 25.75 | 25.71 |
|            |           | 1               | 14        | 25.75 | 26.08 | 25.83 |
|            |           | 8               | 0         | 24.77 | 24.71 | 24.64 |
|            |           | 8               | 3         | 24.84 | 24.72 | 24.72 |
|            |           | 8               | 7         | 24.67 | 24.60 | 24.60 |
|            |           | 15              | 0         | 24.76 | 24.55 | 24.65 |
|            | 64QAM     | 1               | 0         | 24.57 | 25.19 | 24.86 |
|            |           | 1               | 7         | 24.98 | 24.64 | 24.58 |
|            |           | 1               | 14        | 24.79 | 24.98 | 24.67 |
|            |           | 8               | 0         | 23.89 | 23.44 | 23.50 |
|            |           | 8               | 3         | 23.94 | 23.86 | 23.54 |
|            |           | 8               | 7         | 23.65 | 23.33 | 23.60 |
|            |           | 15              | 0         | 23.79 | 23.49 | 23.55 |
|            | 256QAM    | 1               | 0         | 22.28 | 23.29 | 22.84 |
|            |           | 1               | 7         | 23.28 | 22.66 | 22.48 |
|            |           | 1               | 14        | 23.03 | 22.93 | 22.47 |
|            |           | 8               | 0         | 22.18 | 21.38 | 21.25 |
|            |           | 8               | 3         | 21.80 | 22.01 | 21.60 |
|            |           | 8               | 7         | 21.84 | 21.15 | 21.68 |
|            |           | 15              | 0         | 21.82 | 21.68 | 21.83 |

\*ERP = Conducted + antenna gain (3.81dBi)-2.15

| LTE Band 5 |           |                 |           |       |       |       |
|------------|-----------|-----------------|-----------|-------|-------|-------|
| BW         | MCS Index | RB Size         | RB Offset | Low   | Mid   | High  |
|            |           | Channel         |           | 20407 | 20525 | 20643 |
|            |           | Frequency (MHz) |           | 824.7 | 836.5 | 848.3 |
| 1.4M       | QPSK      | 1               | 0         | 26.60 | 22.66 | 22.66 |
|            |           | 1               | 2         | 26.57 | 22.77 | 22.70 |
|            |           | 1               | 5         | 26.48 | 22.63 | 22.58 |
|            |           | 3               | 0         | 26.57 | 22.63 | 22.68 |
|            |           | 3               | 1         | 26.57 | 22.68 | 22.70 |
|            |           | 3               | 3         | 26.56 | 22.74 | 22.60 |
|            |           | 6               | 0         | 25.62 | 21.78 | 21.70 |
|            | 16QAM     | 1               | 0         | 26.14 | 25.50 | 25.87 |
|            |           | 1               | 2         | 25.68 | 25.77 | 26.03 |
|            |           | 1               | 5         | 25.77 | 26.00 | 25.65 |
|            |           | 3               | 0         | 25.66 | 25.43 | 25.60 |
|            |           | 3               | 1         | 25.52 | 25.61 | 25.59 |
|            |           | 3               | 3         | 25.57 | 25.60 | 25.38 |
|            |           | 6               | 0         | 24.59 | 24.71 | 24.71 |
|            | 64QAM     | 1               | 0         | 24.98 | 24.25 | 24.82 |
|            |           | 1               | 2         | 24.85 | 24.48 | 24.97 |
|            |           | 1               | 5         | 24.80 | 25.00 | 24.40 |
|            |           | 3               | 0         | 24.58 | 24.35 | 24.42 |
|            |           | 3               | 1         | 24.26 | 24.81 | 24.37 |
|            |           | 3               | 3         | 24.32 | 24.59 | 24.56 |
|            |           | 6               | 0         | 23.69 | 23.54 | 23.41 |
|            | 256QAM    | 1               | 0         | 23.21 | 22.12 | 22.64 |
|            |           | 1               | 2         | 22.96 | 22.65 | 22.79 |
|            |           | 1               | 5         | 22.94 | 22.86 | 22.33 |
|            |           | 3               | 0         | 22.48 | 22.23 | 22.26 |
|            |           | 3               | 1         | 22.32 | 22.79 | 22.65 |
|            |           | 3               | 3         | 22.55 | 22.57 | 22.48 |
|            |           | 6               | 0         | 21.89 | 21.47 | 21.14 |

\*ERP = Conducted + antenna gain (3.81dBi)-2.15

| LTE Band 7 |           |                 |           |       |       |       |
|------------|-----------|-----------------|-----------|-------|-------|-------|
| BW         | MCS Index | RB Size         | RB Offset | Low   | Mid   | High  |
|            |           | Channel         |           | 20850 | 21100 | 21350 |
|            |           | Frequency (MHz) |           | 2510  | 2535  | 2560  |
| 20M        | QPSK      | 1               | 0         | 30.29 | 30.18 | 30.10 |
|            |           | 1               | 50        | 30.19 | 30.06 | 29.95 |
|            |           | 1               | 99        | 30.26 | 30.30 | 30.06 |
|            |           | 50              | 0         | 29.43 | 29.30 | 29.13 |
|            |           | 50              | 25        | 29.44 | 29.31 | 29.30 |
|            |           | 50              | 50        | 29.46 | 29.36 | 29.19 |
|            |           | 100             | 0         | 29.49 | 29.31 | 29.31 |
|            | 16QAM     | 1               | 0         | 29.39 | 29.57 | 29.26 |
|            |           | 1               | 50        | 29.50 | 29.39 | 29.58 |
|            |           | 1               | 99        | 29.38 | 29.83 | 29.71 |
|            |           | 50              | 0         | 28.43 | 28.30 | 28.14 |
|            |           | 50              | 25        | 28.45 | 28.30 | 28.28 |
|            |           | 50              | 50        | 28.42 | 28.33 | 28.26 |
|            |           | 100             | 0         | 28.41 | 28.32 | 28.21 |
|            | 64QAM     | 1               | 0         | 28.35 | 28.76 | 28.26 |
|            |           | 1               | 50        | 28.27 | 28.57 | 28.49 |
|            |           | 1               | 99        | 28.46 | 28.94 | 28.51 |
|            |           | 50              | 0         | 27.41 | 27.37 | 27.07 |
|            |           | 50              | 25        | 27.33 | 27.14 | 27.28 |
|            |           | 50              | 50        | 27.24 | 27.34 | 27.20 |
|            |           | 100             | 0         | 27.15 | 27.52 | 27.14 |
|            | 256QAM    | 1               | 0         | 26.22 | 26.82 | 26.49 |
|            |           | 1               | 50        | 26.50 | 26.87 | 26.72 |
|            |           | 1               | 99        | 26.73 | 27.22 | 26.26 |
|            |           | 50              | 0         | 25.13 | 25.36 | 24.97 |
|            |           | 50              | 25        | 25.61 | 25.28 | 25.40 |
|            |           | 50              | 50        | 25.27 | 25.59 | 25.08 |
|            |           | 100             | 0         | 25.11 | 25.29 | 25.21 |

\*EIRP = Conducted + antenna gain (5.31dBi)

| LTE Band 7 |           |                 |           |        |       |        |
|------------|-----------|-----------------|-----------|--------|-------|--------|
| BW         | MCS Index | RB Size         | RB Offset | Low    | Mid   | High   |
|            |           | Channel         |           | 20825  | 21100 | 21375  |
|            |           | Frequency (MHz) |           | 2507.5 | 2535  | 2562.5 |
| 15M        | QPSK      | 1               | 0         | 30.33  | 30.20 | 30.12  |
|            |           | 1               | 37        | 30.27  | 30.22 | 30.03  |
|            |           | 1               | 74        | 30.35  | 30.29 | 30.16  |
|            |           | 36              | 0         | 29.32  | 29.26 | 29.25  |
|            |           | 36              | 19        | 29.49  | 29.22 | 29.17  |
|            |           | 36              | 39        | 29.45  | 29.31 | 29.24  |
|            |           | 75              | 0         | 29.38  | 29.29 | 29.13  |
|            | 16QAM     | 1               | 0         | 29.57  | 29.29 | 29.21  |
|            |           | 1               | 37        | 29.31  | 29.08 | 29.30  |
|            |           | 1               | 74        | 29.57  | 29.46 | 29.36  |
|            |           | 36              | 0         | 28.44  | 28.27 | 28.16  |
|            |           | 36              | 19        | 28.45  | 28.29 | 28.10  |
|            |           | 36              | 39        | 28.39  | 28.34 | 28.23  |
|            |           | 75              | 0         | 28.45  | 28.19 | 28.13  |
|            | 64QAM     | 1               | 0         | 28.67  | 28.08 | 28.06  |
|            |           | 1               | 37        | 28.34  | 28.27 | 28.24  |
|            |           | 1               | 74        | 28.71  | 28.48 | 28.10  |
|            |           | 36              | 0         | 27.59  | 27.15 | 27.08  |
|            |           | 36              | 19        | 27.24  | 27.18 | 27.24  |
|            |           | 36              | 39        | 27.32  | 27.17 | 27.33  |
|            |           | 75              | 0         | 27.59  | 27.03 | 27.18  |
|            | 256QAM    | 1               | 0         | 26.88  | 25.99 | 26.02  |
|            |           | 1               | 37        | 26.07  | 26.24 | 26.28  |
|            |           | 1               | 74        | 26.90  | 26.55 | 26.32  |
|            |           | 36              | 0         | 25.67  | 25.32 | 25.26  |
|            |           | 36              | 19        | 25.45  | 25.21 | 25.30  |
|            |           | 36              | 39        | 25.43  | 25.09 | 25.32  |
|            |           | 75              | 0         | 25.57  | 24.81 | 25.09  |

\*EIRP = Conducted + antenna gain (5.31dBi)

| LTE Band 7 |           |                 |           |       |       |       |
|------------|-----------|-----------------|-----------|-------|-------|-------|
| BW         | MCS Index | RB Size         | RB Offset | Low   | Mid   | High  |
|            |           | Channel         |           | 20800 | 21100 | 21400 |
|            |           | Frequency (MHz) |           | 2505  | 2535  | 2565  |
| 10M        | QPSK      | 1               | 0         | 30.23 | 30.05 | 29.98 |
|            |           | 1               | 24        | 30.30 | 30.08 | 29.99 |
|            |           | 1               | 49        | 30.26 | 30.21 | 30.04 |
|            |           | 25              | 0         | 29.34 | 29.23 | 29.17 |
|            |           | 25              | 12        | 29.46 | 29.33 | 29.30 |
|            |           | 25              | 25        | 29.47 | 29.29 | 29.25 |
|            |           | 50              | 0         | 29.43 | 29.15 | 29.17 |
|            | 16QAM     | 1               | 0         | 29.79 | 29.13 | 29.06 |
|            |           | 1               | 24        | 29.73 | 29.39 | 29.66 |
|            |           | 1               | 49        | 29.60 | 29.88 | 29.25 |
|            |           | 25              | 0         | 28.49 | 28.16 | 28.11 |
|            |           | 25              | 12        | 28.53 | 28.30 | 28.30 |
|            |           | 25              | 25        | 28.38 | 28.33 | 28.28 |
|            |           | 50              | 0         | 28.49 | 28.22 | 28.16 |
|            | 64QAM     | 1               | 0         | 28.92 | 28.31 | 28.24 |
|            |           | 1               | 24        | 28.58 | 28.44 | 28.51 |
|            |           | 1               | 49        | 28.67 | 28.72 | 28.41 |
|            |           | 25              | 0         | 27.69 | 26.90 | 27.26 |
|            |           | 25              | 12        | 27.54 | 27.08 | 27.19 |
|            |           | 25              | 25        | 27.46 | 27.28 | 27.42 |
|            |           | 50              | 0         | 27.40 | 26.97 | 26.99 |
|            | 256QAM    | 1               | 0         | 27.08 | 26.02 | 26.43 |
|            |           | 1               | 24        | 26.76 | 26.26 | 26.66 |
|            |           | 1               | 49        | 26.79 | 26.44 | 26.17 |
|            |           | 25              | 0         | 25.59 | 25.15 | 25.27 |
|            |           | 25              | 12        | 25.28 | 25.15 | 24.99 |
|            |           | 25              | 25        | 25.18 | 25.45 | 25.20 |
|            |           | 50              | 0         | 25.42 | 24.81 | 24.70 |

\*EIRP = Conducted + antenna gain (5.31dBi)

| LTE Band 7 |           |                 |           |        |       |        |
|------------|-----------|-----------------|-----------|--------|-------|--------|
| BW         | MCS Index | RB Size         | RB Offset | Low    | Mid   | High   |
|            |           | Channel         |           | 20775  | 21100 | 21425  |
|            |           | Frequency (MHz) |           | 2502.5 | 2535  | 2567.5 |
| 5M         | QPSK      | 1               | 0         | 30.25  | 30.13 | 30.17  |
|            |           | 1               | 12        | 30.45  | 30.18 | 30.15  |
|            |           | 1               | 24        | 30.29  | 30.22 | 29.96  |
|            |           | 12              | 0         | 29.47  | 29.34 | 29.24  |
|            |           | 12              | 6         | 29.37  | 29.32 | 29.17  |
|            |           | 12              | 13        | 29.34  | 29.30 | 29.20  |
|            |           | 25              | 0         | 29.35  | 29.27 | 29.18  |
|            | 16QAM     | 1               | 0         | 29.34  | 29.62 | 29.25  |
|            |           | 1               | 12        | 29.85  | 29.34 | 29.56  |
|            |           | 1               | 24        | 29.52  | 29.38 | 29.18  |
|            |           | 12              | 0         | 28.41  | 28.33 | 28.16  |
|            |           | 12              | 6         | 28.43  | 28.27 | 28.25  |
|            |           | 12              | 13        | 28.46  | 28.24 | 28.19  |
|            |           | 25              | 0         | 28.47  | 28.35 | 28.20  |
|            | 64QAM     | 1               | 0         | 28.54  | 28.61 | 28.14  |
|            |           | 1               | 12        | 28.91  | 28.22 | 28.40  |
|            |           | 1               | 24        | 28.27  | 28.28 | 28.16  |
|            |           | 12              | 0         | 27.60  | 27.42 | 27.24  |
|            |           | 12              | 6         | 27.55  | 27.45 | 27.43  |
|            |           | 12              | 13        | 27.20  | 27.25 | 27.34  |
|            |           | 25              | 0         | 27.36  | 27.31 | 27.08  |
|            | 256QAM    | 1               | 0         | 26.37  | 26.39 | 26.23  |
|            |           | 1               | 12        | 26.98  | 25.95 | 26.37  |
|            |           | 1               | 24        | 26.41  | 26.30 | 26.40  |
|            |           | 12              | 0         | 25.87  | 25.32 | 25.00  |
|            |           | 12              | 6         | 25.58  | 25.39 | 25.30  |
|            |           | 12              | 13        | 25.28  | 25.18 | 25.06  |
|            |           | 25              | 0         | 25.10  | 25.59 | 25.10  |

\*EIRP = Conducted + antenna gain (5.31dBi)

| LTE Band 12 |           |                 |           |       |       |       |
|-------------|-----------|-----------------|-----------|-------|-------|-------|
| BW          | MCS Index | RB Size         | RB Offset | Low   | Mid   | High  |
|             |           | Channel         |           | 23060 | 23095 | 23130 |
|             |           | Frequency (MHz) |           | 704   | 707.5 | 711   |
| 10M         | QPSK      | 1               | 0         | 27.15 | 27.20 | 27.08 |
|             |           | 1               | 24        | 26.98 | 27.10 | 27.19 |
|             |           | 1               | 49        | 27.08 | 27.05 | 26.91 |
|             |           | 25              | 0         | 26.19 | 26.15 | 26.19 |
|             |           | 25              | 12        | 26.22 | 26.14 | 26.27 |
|             |           | 25              | 25        | 26.23 | 26.27 | 26.30 |
|             |           | 50              | 0         | 26.33 | 26.16 | 26.25 |
|             | 16QAM     | 1               | 0         | 26.58 | 26.61 | 26.20 |
|             |           | 1               | 24        | 26.82 | 26.71 | 26.43 |
|             |           | 1               | 49        | 26.51 | 26.26 | 26.49 |
|             |           | 25              | 0         | 25.25 | 25.22 | 25.23 |
|             |           | 25              | 12        | 25.28 | 25.21 | 25.29 |
|             |           | 25              | 25        | 25.22 | 25.20 | 25.27 |
|             |           | 50              | 0         | 25.28 | 25.21 | 25.29 |
|             | 64QAM     | 1               | 0         | 25.48 | 25.59 | 25.25 |
|             |           | 1               | 24        | 25.72 | 25.43 | 25.41 |
|             |           | 1               | 49        | 25.22 | 25.30 | 25.27 |
|             |           | 25              | 0         | 24.44 | 24.18 | 24.06 |
|             |           | 25              | 12        | 24.38 | 24.12 | 24.00 |
|             |           | 25              | 25        | 24.27 | 24.04 | 24.17 |
|             |           | 50              | 0         | 24.04 | 23.93 | 24.31 |
|             | 256QAM    | 1               | 0         | 23.28 | 23.52 | 23.05 |
|             |           | 1               | 24        | 23.60 | 23.15 | 23.63 |
|             |           | 1               | 49        | 22.99 | 23.58 | 23.13 |
|             |           | 25              | 0         | 22.45 | 21.97 | 22.08 |
|             |           | 25              | 12        | 22.49 | 22.12 | 21.81 |
|             |           | 25              | 25        | 22.47 | 21.84 | 21.88 |
|             |           | 50              | 0         | 22.20 | 22.21 | 22.05 |

\*ERP = Conducted + antenna gain (4.41dBi)-2.15

| LTE Band 12 |           |                 |           |       |       |       |
|-------------|-----------|-----------------|-----------|-------|-------|-------|
| BW          | MCS Index | RB Size         | RB Offset | Low   | Mid   | High  |
|             |           | Channel         |           | 23035 | 23095 | 23155 |
|             |           | Frequency (MHz) |           | 701.5 | 707.5 | 713.5 |
| 5M          | QPSK      | 1               | 0         | 27.12 | 27.10 | 27.07 |
|             |           | 1               | 12        | 27.30 | 27.14 | 26.96 |
|             |           | 1               | 24        | 27.17 | 27.17 | 27.15 |
|             |           | 12              | 0         | 26.30 | 26.20 | 26.15 |
|             |           | 12              | 6         | 26.29 | 26.16 | 26.22 |
|             |           | 12              | 13        | 26.24 | 26.23 | 26.19 |
|             |           | 25              | 0         | 26.20 | 26.12 | 26.12 |
|             | 16QAM     | 1               | 0         | 26.47 | 26.35 | 26.01 |
|             |           | 1               | 12        | 26.66 | 26.30 | 26.48 |
|             |           | 1               | 24        | 26.10 | 26.28 | 26.64 |
|             |           | 12              | 0         | 25.36 | 25.16 | 25.11 |
|             |           | 12              | 6         | 25.21 | 25.19 | 25.22 |
|             |           | 12              | 13        | 25.22 | 25.27 | 25.15 |
|             |           | 25              | 0         | 25.17 | 25.20 | 25.17 |
|             | 64QAM     | 1               | 0         | 25.25 | 25.51 | 25.18 |
|             |           | 1               | 12        | 25.70 | 25.30 | 25.65 |
|             |           | 1               | 24        | 25.16 | 25.38 | 25.44 |
|             |           | 12              | 0         | 24.32 | 24.22 | 23.90 |
|             |           | 12              | 6         | 24.03 | 24.31 | 24.10 |
|             |           | 12              | 13        | 24.06 | 24.02 | 24.21 |
|             |           | 25              | 0         | 24.31 | 24.32 | 24.35 |
|             | 256QAM    | 1               | 0         | 23.03 | 23.58 | 23.47 |
|             |           | 1               | 12        | 23.64 | 23.36 | 23.38 |
|             |           | 1               | 24        | 23.40 | 23.40 | 23.24 |
|             |           | 12              | 0         | 22.26 | 22.43 | 21.78 |
|             |           | 12              | 6         | 22.33 | 22.15 | 22.34 |
|             |           | 12              | 13        | 21.86 | 21.90 | 22.02 |
|             |           | 25              | 0         | 22.61 | 22.40 | 22.48 |

\*ERP = Conducted + antenna gain (4.41dBi)-2.15

| LTE Band 12 |           |                 |           |       |       |       |
|-------------|-----------|-----------------|-----------|-------|-------|-------|
| BW          | MCS Index | RB Size         | RB Offset | Low   | Mid   | High  |
|             |           | Channel         |           | 23025 | 23095 | 23165 |
|             |           | Frequency (MHz) |           | 700.5 | 707.5 | 714.5 |
| 3M          | QPSK      | 1               | 0         | 27.26 | 27.16 | 27.08 |
|             |           | 1               | 7         | 27.09 | 27.21 | 27.05 |
|             |           | 1               | 14        | 27.06 | 27.05 | 27.07 |
|             |           | 8               | 0         | 26.22 | 26.15 | 26.11 |
|             |           | 8               | 3         | 26.27 | 26.20 | 26.11 |
|             |           | 8               | 7         | 26.15 | 26.14 | 26.13 |
|             |           | 15              | 0         | 26.28 | 26.16 | 26.09 |
|             | 16QAM     | 1               | 0         | 26.42 | 26.58 | 26.32 |
|             |           | 1               | 7         | 26.32 | 26.26 | 26.47 |
|             |           | 1               | 14        | 26.35 | 26.67 | 26.02 |
|             |           | 8               | 0         | 25.12 | 25.26 | 25.12 |
|             |           | 8               | 3         | 25.41 | 25.23 | 25.14 |
|             |           | 8               | 7         | 25.30 | 25.17 | 25.09 |
|             |           | 15              | 0         | 25.31 | 25.14 | 25.04 |
|             | 64QAM     | 1               | 0         | 25.57 | 25.34 | 25.07 |
|             |           | 1               | 7         | 25.19 | 25.28 | 25.63 |
|             |           | 1               | 14        | 25.17 | 25.61 | 25.10 |
|             |           | 8               | 0         | 24.22 | 24.37 | 23.88 |
|             |           | 8               | 3         | 24.19 | 24.41 | 23.92 |
|             |           | 8               | 7         | 24.23 | 24.13 | 24.05 |
|             |           | 15              | 0         | 24.27 | 24.34 | 24.12 |
|             | 256QAM    | 1               | 0         | 23.56 | 23.57 | 23.34 |
|             |           | 1               | 7         | 23.37 | 23.46 | 23.85 |
|             |           | 1               | 14        | 23.22 | 23.64 | 23.20 |
|             |           | 8               | 0         | 22.43 | 22.37 | 22.04 |
|             |           | 8               | 3         | 22.37 | 22.15 | 22.21 |
|             |           | 8               | 7         | 22.30 | 22.41 | 21.99 |
|             |           | 15              | 0         | 22.57 | 22.37 | 22.22 |

\*ERP = Conducted + antenna gain (4.41dBi)-2.15

| LTE Band 12 |           |                 |           |       |       |       |
|-------------|-----------|-----------------|-----------|-------|-------|-------|
| BW          | MCS Index | RB Size         | RB Offset | Low   | Mid   | High  |
|             |           | Channel         |           | 23017 | 23095 | 23173 |
|             |           | Frequency (MHz) |           | 699.7 | 707.5 | 715.3 |
| 1.4M        | QPSK      | 1               | 0         | 27.07 | 27.09 | 27.00 |
|             |           | 1               | 2         | 27.18 | 27.08 | 27.03 |
|             |           | 1               | 5         | 27.03 | 26.95 | 26.92 |
|             |           | 3               | 0         | 27.08 | 27.01 | 26.94 |
|             |           | 3               | 1         | 27.20 | 26.98 | 27.00 |
|             |           | 3               | 3         | 27.08 | 27.09 | 26.94 |
|             |           | 6               | 0         | 26.22 | 26.13 | 26.02 |
|             | 16QAM     | 1               | 0         | 26.64 | 26.46 | 26.16 |
|             |           | 1               | 2         | 26.38 | 26.33 | 26.31 |
|             |           | 1               | 5         | 26.34 | 26.47 | 25.97 |
|             |           | 3               | 0         | 26.17 | 26.09 | 26.03 |
|             |           | 3               | 1         | 26.29 | 26.21 | 25.94 |
|             |           | 3               | 3         | 26.18 | 26.12 | 26.10 |
|             |           | 6               | 0         | 25.37 | 25.27 | 25.14 |
|             | 64QAM     | 1               | 0         | 25.47 | 25.44 | 24.92 |
|             |           | 1               | 2         | 25.40 | 25.32 | 25.27 |
|             |           | 1               | 5         | 25.30 | 25.65 | 24.74 |
|             |           | 3               | 0         | 25.27 | 24.91 | 24.96 |
|             |           | 3               | 1         | 25.40 | 25.05 | 24.69 |
|             |           | 3               | 3         | 24.96 | 24.96 | 24.80 |
|             |           | 6               | 0         | 24.45 | 24.39 | 24.02 |
|             | 256QAM    | 1               | 0         | 23.33 | 23.43 | 22.80 |
|             |           | 1               | 2         | 23.54 | 23.57 | 23.03 |
|             |           | 1               | 5         | 23.44 | 23.75 | 22.62 |
|             |           | 3               | 0         | 23.03 | 22.83 | 22.90 |
|             |           | 3               | 1         | 23.44 | 23.16 | 22.94 |
|             |           | 3               | 3         | 23.09 | 22.70 | 22.52 |
|             |           | 6               | 0         | 22.58 | 22.44 | 22.15 |

\*ERP = Conducted + antenna gain (4.41dBi)-2.15

| LTE Band 13 |           |                 |           |       |
|-------------|-----------|-----------------|-----------|-------|
| BW          | MCS Index | RB Size         | RB Offset | Mid   |
|             |           | Channel         |           | 23230 |
|             |           | Frequency (MHz) |           | 782   |
| 10M         | QPSK      | 1               | 0         | 27.23 |
|             |           | 1               | 24        | 27.23 |
|             |           | 1               | 49        | 27.19 |
|             |           | 25              | 0         | 26.37 |
|             |           | 25              | 12        | 26.35 |
|             |           | 25              | 25        | 26.40 |
|             |           | 50              | 0         | 26.45 |
|             | 16QAM     | 1               | 0         | 26.65 |
|             |           | 1               | 24        | 26.50 |
|             |           | 1               | 49        | 26.64 |
|             |           | 25              | 0         | 25.41 |
|             |           | 25              | 12        | 25.35 |
|             |           | 25              | 25        | 25.49 |
|             |           | 50              | 0         | 25.33 |
|             | 64QAM     | 1               | 0         | 25.59 |
|             |           | 1               | 24        | 25.65 |
|             |           | 1               | 49        | 25.67 |
|             |           | 25              | 0         | 24.57 |
|             |           | 25              | 12        | 24.10 |
|             |           | 25              | 25        | 24.25 |
|             |           | 50              | 0         | 24.13 |
|             | 256QAM    | 1               | 0         | 23.39 |
|             |           | 1               | 24        | 23.61 |
|             |           | 1               | 49        | 23.91 |
|             |           | 25              | 0         | 22.84 |
|             |           | 25              | 12        | 22.31 |
|             |           | 25              | 25        | 22.25 |
|             |           | 50              | 0         | 22.23 |

\*ERP = Conducted + antenna gain (4.41dBi)-2.15

| LTE Band 13 |           |                 |           |       |       |       |
|-------------|-----------|-----------------|-----------|-------|-------|-------|
| BW          | MCS Index | RB Size         | RB Offset | Low   | Mid   | High  |
|             |           | Channel         |           | 23205 | 23230 | 23255 |
|             |           | Frequency (MHz) |           | 779.5 | 782   | 784.5 |
| 5M          | QPSK      | 1               | 0         | 27.11 | 27.18 | 27.24 |
|             |           | 1               | 12        | 27.21 | 27.32 | 27.25 |
|             |           | 1               | 24        | 27.30 | 27.16 | 27.11 |
|             |           | 12              | 0         | 26.31 | 26.34 | 26.23 |
|             |           | 12              | 6         | 26.36 | 26.28 | 26.28 |
|             |           | 12              | 13        | 26.39 | 26.35 | 26.32 |
|             |           | 25              | 0         | 26.39 | 26.36 | 26.24 |
|             | 16QAM     | 1               | 0         | 26.21 | 26.40 | 26.73 |
|             |           | 1               | 12        | 26.86 | 26.77 | 26.26 |
|             |           | 1               | 24        | 26.58 | 26.47 | 26.68 |
|             |           | 12              | 0         | 25.31 | 25.36 | 25.51 |
|             |           | 12              | 6         | 25.34 | 25.33 | 25.43 |
|             |           | 12              | 13        | 25.46 | 25.35 | 25.37 |
|             |           | 25              | 0         | 25.31 | 25.38 | 25.36 |
|             | 64QAM     | 1               | 0         | 25.33 | 25.55 | 25.57 |
|             |           | 1               | 12        | 26.06 | 25.71 | 25.37 |
|             |           | 1               | 24        | 25.35 | 25.33 | 25.76 |
|             |           | 12              | 0         | 24.43 | 24.12 | 24.59 |
|             |           | 12              | 6         | 24.22 | 24.46 | 24.24 |
|             |           | 12              | 13        | 24.23 | 24.13 | 24.40 |
|             |           | 25              | 0         | 24.05 | 24.34 | 24.09 |
|             | 256QAM    | 1               | 0         | 23.22 | 23.46 | 23.71 |
|             |           | 1               | 12        | 24.13 | 23.60 | 23.54 |
|             |           | 1               | 24        | 23.23 | 23.15 | 23.85 |
|             |           | 12              | 0         | 22.47 | 21.90 | 22.37 |
|             |           | 12              | 6         | 22.31 | 22.58 | 21.96 |
|             |           | 12              | 13        | 22.35 | 21.84 | 22.26 |
|             |           | 25              | 0         | 21.93 | 22.53 | 21.83 |

\*ERP = Conducted + antenna gain (4.41dBi)-2.15

| LTE Band 14 |           |                 |           |       |
|-------------|-----------|-----------------|-----------|-------|
| BW          | MCS Index | RB Size         | RB Offset | Mid   |
|             |           | Channel         |           | 23330 |
|             |           | Frequency (MHz) |           | 793   |
| 10M         | QPSK      | 1               | 0         | 27.14 |
|             |           | 1               | 24        | 27.13 |
|             |           | 1               | 49        | 27.20 |
|             |           | 25              | 0         | 26.30 |
|             |           | 25              | 12        | 26.21 |
|             |           | 25              | 25        | 26.23 |
|             |           | 50              | 0         | 26.23 |
|             | 16QAM     | 1               | 0         | 26.85 |
|             |           | 1               | 24        | 26.66 |
|             |           | 1               | 49        | 26.22 |
|             |           | 25              | 0         | 25.20 |
|             |           | 25              | 12        | 25.28 |
|             |           | 25              | 25        | 25.24 |
|             |           | 50              | 0         | 25.28 |
|             | 64QAM     | 1               | 0         | 26.04 |
|             |           | 1               | 24        | 25.42 |
|             |           | 1               | 49        | 25.09 |
|             |           | 25              | 0         | 24.06 |
|             |           | 25              | 12        | 24.16 |
|             |           | 25              | 25        | 24.39 |
|             |           | 50              | 0         | 24.08 |
|             | 256QAM    | 1               | 0         | 24.23 |
|             |           | 1               | 24        | 23.38 |
|             |           | 1               | 49        | 23.38 |
|             |           | 25              | 0         | 22.28 |
|             |           | 25              | 12        | 22.42 |
|             |           | 25              | 25        | 22.58 |
|             |           | 50              | 0         | 22.29 |

\*ERP = Conducted + antenna gain (4.41dBi)-2.15

| LTE Band 14 |           |                 |           |       |       |       |
|-------------|-----------|-----------------|-----------|-------|-------|-------|
| BW          | MCS Index | RB Size         | RB Offset | Low   | Mid   | High  |
|             |           | Channel         |           | 23305 | 23330 | 23355 |
|             |           | Frequency (MHz) |           | 790.5 | 793   | 795.5 |
| 5M          | QPSK      | 1               | 0         | 27.06 | 27.13 | 27.14 |
|             |           | 1               | 12        | 27.22 | 27.31 | 27.11 |
|             |           | 1               | 24        | 27.24 | 27.29 | 27.14 |
|             |           | 12              | 0         | 26.26 | 26.18 | 26.25 |
|             |           | 12              | 6         | 26.30 | 26.27 | 26.13 |
|             |           | 12              | 13        | 26.24 | 26.26 | 26.26 |
|             |           | 25              | 0         | 26.30 | 26.24 | 26.21 |
|             | 16QAM     | 1               | 0         | 26.74 | 26.71 | 26.70 |
|             |           | 1               | 12        | 26.49 | 26.15 | 26.46 |
|             |           | 1               | 24        | 26.81 | 26.65 | 26.33 |
|             |           | 12              | 0         | 25.18 | 25.28 | 25.33 |
|             |           | 12              | 6         | 25.31 | 25.23 | 25.29 |
|             |           | 12              | 13        | 25.31 | 25.27 | 25.22 |
|             |           | 25              | 0         | 25.39 | 25.20 | 25.23 |
|             | 64QAM     | 1               | 0         | 25.46 | 25.57 | 25.85 |
|             |           | 1               | 12        | 25.19 | 25.06 | 25.57 |
|             |           | 1               | 24        | 25.64 | 25.40 | 25.43 |
|             |           | 12              | 0         | 24.20 | 24.06 | 24.53 |
|             |           | 12              | 6         | 24.08 | 24.31 | 24.42 |
|             |           | 12              | 13        | 24.51 | 24.00 | 24.25 |
|             |           | 25              | 0         | 24.25 | 24.11 | 24.36 |
|             | 256QAM    | 1               | 0         | 23.52 | 23.31 | 23.76 |
|             |           | 1               | 12        | 22.98 | 22.89 | 23.43 |
|             |           | 1               | 24        | 23.40 | 23.33 | 23.73 |
|             |           | 12              | 0         | 22.31 | 22.11 | 22.24 |
|             |           | 12              | 6         | 22.26 | 22.55 | 22.23 |
|             |           | 12              | 13        | 22.39 | 22.19 | 22.44 |
|             |           | 25              | 0         | 22.17 | 22.38 | 22.16 |

\*ERP = Conducted + antenna gain (4.41dBi)-2.15

| LTE Band 30 |           |                 |           |       |
|-------------|-----------|-----------------|-----------|-------|
| BW          | MCS Index | RB Size         | RB Offset | Mid   |
|             |           | Channel         |           | 27710 |
|             |           | Frequency (MHz) |           | 2310  |
| 10M         | QPSK      | 1               | 0         | 23.92 |
|             |           | 1               | 24        | 23.83 |
|             |           | 1               | 49        | 23.69 |
|             |           | 25              | 0         | 22.73 |
|             |           | 25              | 12        | 22.92 |
|             |           | 25              | 25        | 22.96 |
|             |           | 50              | 0         | 22.89 |
|             | 16QAM     | 1               | 0         | 23.09 |
|             |           | 1               | 24        | 23.16 |
|             |           | 1               | 49        | 22.84 |
|             |           | 25              | 0         | 21.71 |
|             |           | 25              | 12        | 21.84 |
|             |           | 25              | 25        | 21.87 |
|             |           | 50              | 0         | 21.75 |
|             | 64QAM     | 1               | 0         | 21.82 |
|             |           | 1               | 24        | 22.01 |
|             |           | 1               | 49        | 21.57 |
|             |           | 25              | 0         | 20.88 |
|             |           | 25              | 12        | 21.00 |
|             |           | 25              | 25        | 21.03 |
|             |           | 50              | 0         | 20.89 |
|             | 256QAM    | 1               | 0         | 19.57 |
|             |           | 1               | 24        | 20.17 |
|             |           | 1               | 49        | 19.63 |
|             |           | 25              | 0         | 18.82 |
|             |           | 25              | 12        | 19.22 |
|             |           | 25              | 25        | 19.29 |
|             |           | 50              | 0         | 18.93 |

\*EIRP = Conducted + antenna gain (2.99dBi)

| LTE Band 30 |           |                 |           |        |       |        |
|-------------|-----------|-----------------|-----------|--------|-------|--------|
| BW          | MCS Index | RB Size         | RB Offset | Low    | Mid   | High   |
|             |           | Channel         |           | 27685  | 27710 | 27735  |
|             |           | Frequency (MHz) |           | 2307.5 | 2310  | 2312.5 |
| 5M          | QPSK      | 1               | 0         | 23.55  | 23.68 | 23.70  |
|             |           | 1               | 12        | 23.86  | 23.93 | 23.90  |
|             |           | 1               | 24        | 23.84  | 23.84 | 23.85  |
|             |           | 12              | 0         | 22.75  | 22.72 | 22.79  |
|             |           | 12              | 6         | 22.91  | 22.86 | 22.84  |
|             |           | 12              | 13        | 22.88  | 22.88 | 22.87  |
|             |           | 25              | 0         | 22.85  | 22.85 | 22.76  |
|             | 16QAM     | 1               | 0         | 22.89  | 22.86 | 23.23  |
|             |           | 1               | 12        | 23.27  | 23.23 | 23.25  |
|             |           | 1               | 24        | 22.76  | 23.41 | 23.44  |
|             |           | 12              | 0         | 21.77  | 21.77 | 21.79  |
|             |           | 12              | 6         | 21.85  | 21.93 | 21.92  |
|             |           | 12              | 13        | 21.92  | 21.88 | 21.95  |
|             |           | 25              | 0         | 21.83  | 21.86 | 21.85  |
|             | 64QAM     | 1               | 0         | 21.61  | 22.00 | 22.26  |
|             |           | 1               | 12        | 22.31  | 22.19 | 22.05  |
|             |           | 1               | 24        | 21.46  | 22.16 | 22.15  |
|             |           | 12              | 0         | 20.59  | 20.51 | 20.96  |
|             |           | 12              | 6         | 20.65  | 20.64 | 20.63  |
|             |           | 12              | 13        | 20.73  | 20.68 | 20.73  |
|             |           | 25              | 0         | 20.98  | 20.96 | 20.84  |
|             | 256QAM    | 1               | 0         | 19.32  | 20.24 | 20.30  |
|             |           | 1               | 12        | 20.60  | 20.12 | 19.86  |
|             |           | 1               | 24        | 19.56  | 20.16 | 20.12  |
|             |           | 12              | 0         | 18.41  | 18.22 | 18.89  |
|             |           | 12              | 6         | 18.78  | 18.72 | 18.92  |
|             |           | 12              | 13        | 18.93  | 18.45 | 18.92  |
|             |           | 25              | 0         | 19.22  | 18.86 | 19.11  |

\*EIRP = Conducted + antenna gain (2.99dBi)

| LTE Band 41 |           |                 |           |       |       |       |
|-------------|-----------|-----------------|-----------|-------|-------|-------|
| BW          | MCS Index | RB Size         | RB Offset | Low   | Mid   | High  |
|             |           | Channel         |           | 39750 | 40620 | 41490 |
|             |           | Frequency (MHz) |           | 2506  | 2593  | 2680  |
| 20M         | QPSK      | 1               | 0         | 32.97 | 32.81 | 32.67 |
|             |           | 1               | 50        | 32.84 | 32.66 | 32.27 |
|             |           | 1               | 99        | 32.78 | 32.79 | 31.47 |
|             |           | 50              | 0         | 32.05 | 31.94 | 31.82 |
|             |           | 50              | 25        | 32.08 | 31.96 | 31.47 |
|             |           | 50              | 50        | 32.09 | 32.01 | 31.06 |
|             |           | 100             | 0         | 32.04 | 32.01 | 31.47 |
|             | 16QAM     | 1               | 0         | 32.24 | 32.16 | 32.15 |
|             |           | 1               | 50        | 32.15 | 32.01 | 31.60 |
|             |           | 1               | 99        | 32.19 | 32.03 | 30.76 |
|             |           | 50              | 0         | 30.95 | 31.00 | 30.88 |
|             |           | 50              | 25        | 31.05 | 30.99 | 30.55 |
|             |           | 50              | 50        | 31.13 | 31.01 | 30.16 |
|             |           | 100             | 0         | 31.14 | 31.02 | 30.56 |
|             | 64QAM     | 1               | 0         | 31.00 | 31.16 | 31.05 |
|             |           | 1               | 50        | 31.16 | 30.93 | 30.31 |
|             |           | 1               | 99        | 31.00 | 30.77 | 29.56 |
|             |           | 50              | 0         | 29.83 | 29.86 | 29.87 |
|             |           | 50              | 25        | 29.76 | 30.14 | 29.68 |
|             |           | 50              | 50        | 29.87 | 30.00 | 29.01 |
|             |           | 100             | 0         | 30.06 | 30.03 | 29.40 |
|             | 256QAM    | 1               | 0         | 29.08 | 29.45 | 28.99 |
|             |           | 1               | 50        | 29.33 | 29.06 | 28.04 |
|             |           | 1               | 99        | 29.10 | 29.01 | 27.74 |
|             |           | 50              | 0         | 27.69 | 28.01 | 27.74 |
|             |           | 50              | 25        | 27.89 | 28.18 | 27.80 |
|             |           | 50              | 50        | 27.78 | 27.83 | 27.05 |
|             |           | 100             | 0         | 27.88 | 28.32 | 27.69 |

\*EIRP = Conducted + antenna gain (5.31dBi)

| LTE Band 41 |           |                 |           |        |       |        |
|-------------|-----------|-----------------|-----------|--------|-------|--------|
| BW          | MCS Index | RB Size         | RB Offset | Low    | Mid   | High   |
|             |           | Channel         |           | 39725  | 40620 | 41515  |
|             |           | Frequency (MHz) |           | 2503.5 | 2593  | 2682.5 |
| 15M         | QPSK      | 1               | 0         | 32.87  | 32.75 | 32.65  |
|             |           | 1               | 37        | 32.88  | 32.73 | 32.03  |
|             |           | 1               | 74        | 32.82  | 32.78 | 31.52  |
|             |           | 36              | 0         | 32.16  | 31.81 | 31.50  |
|             |           | 36              | 19        | 32.12  | 31.90 | 31.26  |
|             |           | 36              | 39        | 32.05  | 31.94 | 31.00  |
|             |           | 75              | 0         | 32.10  | 32.00 | 31.34  |
|             | 16QAM     | 1               | 0         | 32.26  | 32.05 | 32.25  |
|             |           | 1               | 37        | 32.21  | 32.34 | 31.29  |
|             |           | 1               | 74        | 32.18  | 32.04 | 30.81  |
|             |           | 36              | 0         | 31.13  | 30.91 | 30.58  |
|             |           | 36              | 19        | 31.00  | 30.96 | 30.30  |
|             |           | 36              | 39        | 31.01  | 30.91 | 30.00  |
|             |           | 75              | 0         | 31.12  | 31.00 | 30.36  |
|             | 64QAM     | 1               | 0         | 31.05  | 30.91 | 31.12  |
|             |           | 1               | 37        | 30.93  | 31.05 | 30.09  |
|             |           | 1               | 74        | 31.11  | 30.89 | 29.91  |
|             |           | 36              | 0         | 30.11  | 29.98 | 29.73  |
|             |           | 36              | 19        | 29.90  | 30.13 | 29.25  |
|             |           | 36              | 39        | 29.76  | 29.94 | 29.11  |
|             |           | 75              | 0         | 30.05  | 30.06 | 29.52  |
|             | 256QAM    | 1               | 0         | 29.30  | 28.64 | 29.14  |
|             |           | 1               | 37        | 29.07  | 28.77 | 28.00  |
|             |           | 1               | 74        | 28.91  | 28.79 | 28.00  |
|             |           | 36              | 0         | 28.32  | 28.10 | 27.97  |
|             |           | 36              | 19        | 27.78  | 28.36 | 27.22  |
|             |           | 36              | 39        | 27.85  | 27.67 | 27.07  |
|             |           | 75              | 0         | 28.03  | 27.99 | 27.77  |

\*EIRP = Conducted + antenna gain (5.31dBi)

| LTE Band 41 |           |                 |           |       |       |       |
|-------------|-----------|-----------------|-----------|-------|-------|-------|
| BW          | MCS Index | RB Size         | RB Offset | Low   | Mid   | High  |
|             |           | Channel         |           | 39700 | 40620 | 41540 |
|             |           | Frequency (MHz) |           | 2501  | 2593  | 2685  |
| 10M         | QPSK      | 1               | 0         | 32.94 | 32.71 | 32.24 |
|             |           | 1               | 24        | 32.96 | 32.78 | 31.87 |
|             |           | 1               | 49        | 32.93 | 32.61 | 31.53 |
|             |           | 25              | 0         | 32.11 | 31.95 | 31.28 |
|             |           | 25              | 12        | 32.11 | 32.03 | 31.13 |
|             |           | 25              | 25        | 32.07 | 32.01 | 30.92 |
|             |           | 50              | 0         | 32.16 | 31.98 | 31.07 |
|             | 16QAM     | 1               | 0         | 32.34 | 32.05 | 31.88 |
|             |           | 1               | 24        | 32.24 | 32.13 | 31.49 |
|             |           | 1               | 49        | 32.30 | 32.15 | 30.82 |
|             |           | 25              | 0         | 31.12 | 31.08 | 30.37 |
|             |           | 25              | 12        | 31.15 | 31.12 | 30.24 |
|             |           | 25              | 25        | 31.12 | 30.96 | 29.99 |
|             |           | 50              | 0         | 31.18 | 31.05 | 30.16 |
|             | 64QAM     | 1               | 0         | 31.19 | 30.97 | 30.87 |
|             |           | 1               | 24        | 31.14 | 31.08 | 30.42 |
|             |           | 1               | 49        | 31.41 | 31.08 | 29.62 |
|             |           | 25              | 0         | 30.23 | 30.06 | 29.45 |
|             |           | 25              | 12        | 29.86 | 30.03 | 29.32 |
|             |           | 25              | 25        | 29.86 | 30.12 | 28.91 |
|             |           | 50              | 0         | 30.11 | 29.80 | 29.26 |
|             | 256QAM    | 1               | 0         | 28.93 | 28.89 | 28.58 |
|             |           | 1               | 24        | 29.40 | 29.06 | 28.45 |
|             |           | 1               | 49        | 29.25 | 28.93 | 27.49 |
|             |           | 25              | 0         | 28.23 | 27.81 | 27.32 |
|             |           | 25              | 12        | 27.58 | 28.20 | 27.37 |
|             |           | 25              | 25        | 27.79 | 28.15 | 26.99 |
|             |           | 50              | 0         | 28.10 | 28.06 | 27.43 |

\*EIRP = Conducted + antenna gain (5.31dBi)

| LTE Band 41 |           |                 |           |        |       |        |
|-------------|-----------|-----------------|-----------|--------|-------|--------|
| BW          | MCS Index | RB Size         | RB Offset | Low    | Mid   | High   |
|             |           | Channel         |           | 39675  | 40620 | 41565  |
|             |           | Frequency (MHz) |           | 2498.5 | 2593  | 2687.5 |
| 5M          | QPSK      | 1               | 0         | 32.89  | 32.69 | 31.84  |
|             |           | 1               | 12        | 32.92  | 32.75 | 31.65  |
|             |           | 1               | 24        | 32.85  | 32.69 | 31.52  |
|             |           | 12              | 0         | 32.12  | 31.97 | 31.00  |
|             |           | 12              | 6         | 32.05  | 31.92 | 30.97  |
|             |           | 12              | 13        | 32.08  | 31.95 | 30.86  |
|             |           | 25              | 0         | 32.05  | 31.92 | 30.90  |
|             | 16QAM     | 1               | 0         | 32.19  | 32.05 | 31.19  |
|             |           | 1               | 12        | 32.17  | 32.08 | 31.03  |
|             |           | 1               | 24        | 32.22  | 32.04 | 30.90  |
|             |           | 12              | 0         | 31.13  | 31.03 | 30.10  |
|             |           | 12              | 6         | 31.11  | 31.09 | 30.05  |
|             |           | 12              | 13        | 31.14  | 30.98 | 29.93  |
|             |           | 25              | 0         | 31.09  | 31.03 | 30.00  |
|             | 64QAM     | 1               | 0         | 31.36  | 30.94 | 30.15  |
|             |           | 1               | 12        | 31.35  | 31.04 | 29.90  |
|             |           | 1               | 24        | 30.99  | 30.95 | 29.82  |
|             |           | 12              | 0         | 30.05  | 29.77 | 29.05  |
|             |           | 12              | 6         | 29.94  | 29.89 | 28.97  |
|             |           | 12              | 13        | 30.29  | 30.07 | 28.86  |
|             |           | 25              | 0         | 29.90  | 30.22 | 28.82  |
|             | 256QAM    | 1               | 0         | 29.51  | 29.13 | 28.17  |
|             |           | 1               | 12        | 29.27  | 29.04 | 27.98  |
|             |           | 1               | 24        | 29.19  | 29.20 | 27.87  |
|             |           | 12              | 0         | 27.76  | 27.71 | 27.19  |
|             |           | 12              | 6         | 27.87  | 27.79 | 26.95  |
|             |           | 12              | 13        | 28.27  | 28.09 | 27.04  |
|             |           | 25              | 0         | 27.80  | 28.37 | 26.56  |

\*EIRP = Conducted + antenna gain (5.31dBi)

| LTE Band 66 |           |                 |           |        |        |        |
|-------------|-----------|-----------------|-----------|--------|--------|--------|
| BW          | MCS Index | RB Size         | RB Offset | Low    | Mid    | High   |
|             |           | Channel         |           | 132072 | 132322 | 132572 |
|             |           | Frequency (MHz) |           | 1720   | 1745   | 1770   |
| 20M         | QPSK      | 1               | 0         | 29.05  | 29.12  | 29.05  |
|             |           | 1               | 50        | 29.11  | 29.02  | 29.06  |
|             |           | 1               | 99        | 29.07  | 28.96  | 28.93  |
|             |           | 50              | 0         | 28.12  | 27.93  | 28.01  |
|             |           | 50              | 25        | 27.97  | 28.01  | 28.11  |
|             |           | 50              | 50        | 28.16  | 27.96  | 28.14  |
|             |           | 100             | 0         | 27.92  | 27.98  | 28.11  |
|             | 16QAM     | 1               | 0         | 28.11  | 28.38  | 28.53  |
|             |           | 1               | 50        | 28.11  | 28.38  | 28.27  |
|             |           | 1               | 99        | 28.25  | 28.16  | 28.15  |
|             |           | 50              | 0         | 27.27  | 27.30  | 27.24  |
|             |           | 50              | 25        | 27.05  | 27.07  | 27.27  |
|             |           | 50              | 50        | 27.27  | 26.98  | 27.16  |
|             |           | 100             | 0         | 27.32  | 27.03  | 27.55  |
|             | 64QAM     | 1               | 0         | 26.95  | 27.08  | 27.45  |
|             |           | 1               | 50        | 26.82  | 27.30  | 27.17  |
|             |           | 1               | 99        | 26.98  | 26.99  | 27.09  |
|             |           | 50              | 0         | 26.14  | 26.24  | 26.16  |
|             |           | 50              | 25        | 26.02  | 25.95  | 26.10  |
|             |           | 50              | 50        | 26.18  | 25.80  | 26.08  |
|             |           | 100             | 0         | 26.28  | 25.98  | 26.52  |
|             | 256QAM    | 1               | 0         | 24.96  | 24.96  | 25.32  |
|             |           | 1               | 50        | 24.90  | 25.27  | 25.04  |
|             |           | 1               | 99        | 24.78  | 25.08  | 25.18  |
|             |           | 50              | 0         | 24.12  | 24.17  | 24.02  |
|             |           | 50              | 25        | 23.91  | 23.81  | 24.05  |
|             |           | 50              | 50        | 24.07  | 23.90  | 24.12  |
|             |           | 100             | 0         | 24.18  | 24.03  | 24.43  |

\*EIRP = Conducted + antenna gain (4.27dBi)

| LTE Band 66 |           |                 |           |        |        |        |
|-------------|-----------|-----------------|-----------|--------|--------|--------|
| BW          | MCS Index | RB Size         | RB Offset | Low    | Mid    | High   |
|             |           | Channel         |           | 132047 | 132322 | 132597 |
|             |           | Frequency (MHz) |           | 1717.5 | 1745   | 1772.5 |
| 15M         | QPSK      | 1               | 0         | 29.00  | 28.81  | 28.79  |
|             |           | 1               | 37        | 28.87  | 28.90  | 29.02  |
|             |           | 1               | 74        | 28.96  | 29.02  | 29.05  |
|             |           | 36              | 0         | 28.11  | 27.92  | 27.95  |
|             |           | 36              | 19        | 27.94  | 27.97  | 28.05  |
|             |           | 36              | 39        | 27.94  | 28.04  | 28.09  |
|             |           | 75              | 0         | 27.87  | 27.88  | 27.98  |
|             | 16QAM     | 1               | 0         | 28.14  | 28.01  | 27.91  |
|             |           | 1               | 37        | 28.37  | 28.39  | 28.38  |
|             |           | 1               | 74        | 28.05  | 28.45  | 28.40  |
|             |           | 36              | 0         | 27.49  | 26.96  | 27.21  |
|             |           | 36              | 19        | 27.13  | 27.30  | 27.42  |
|             |           | 36              | 39        | 27.22  | 27.40  | 27.19  |
|             |           | 75              | 0         | 26.88  | 27.18  | 27.33  |
|             | 64QAM     | 1               | 0         | 26.93  | 26.73  | 26.76  |
|             |           | 1               | 37        | 27.10  | 27.30  | 27.08  |
|             |           | 1               | 74        | 26.96  | 27.43  | 27.18  |
|             |           | 36              | 0         | 26.47  | 25.90  | 26.03  |
|             |           | 36              | 19        | 26.09  | 26.04  | 26.32  |
|             |           | 36              | 39        | 26.03  | 26.12  | 25.92  |
|             |           | 75              | 0         | 25.72  | 25.91  | 26.27  |
|             | 256QAM    | 1               | 0         | 24.96  | 24.65  | 24.61  |
|             |           | 1               | 37        | 25.05  | 25.32  | 25.02  |
|             |           | 1               | 74        | 24.95  | 25.45  | 25.25  |
|             |           | 36              | 0         | 24.44  | 23.93  | 23.86  |
|             |           | 36              | 19        | 23.96  | 23.91  | 24.20  |
|             |           | 36              | 39        | 24.08  | 24.12  | 23.73  |
|             |           | 75              | 0         | 23.52  | 23.85  | 24.28  |

\*EIRP = Conducted + antenna gain (4.27dBi)

| LTE Band 66 |           |                 |           |        |        |        |
|-------------|-----------|-----------------|-----------|--------|--------|--------|
| BW          | MCS Index | RB Size         | RB Offset | Low    | Mid    | High   |
|             |           | Channel         |           | 132022 | 132322 | 132622 |
|             |           | Frequency (MHz) |           | 1715   | 1745   | 1775   |
| 10M         | QPSK      | 1               | 0         | 29.03  | 29.02  | 29.13  |
|             |           | 1               | 24        | 28.78  | 28.80  | 28.98  |
|             |           | 1               | 49        | 28.89  | 28.88  | 28.85  |
|             |           | 25              | 0         | 27.93  | 27.97  | 27.90  |
|             |           | 25              | 12        | 28.11  | 28.03  | 28.02  |
|             |           | 25              | 25        | 28.09  | 28.08  | 28.17  |
|             |           | 50              | 0         | 28.05  | 27.98  | 28.18  |
|             | 16QAM     | 1               | 0         | 28.33  | 28.09  | 28.42  |
|             |           | 1               | 24        | 28.13  | 28.30  | 28.20  |
|             |           | 1               | 49        | 27.99  | 27.89  | 28.33  |
|             |           | 25              | 0         | 26.96  | 27.18  | 27.26  |
|             |           | 25              | 12        | 27.13  | 27.27  | 27.41  |
|             |           | 25              | 25        | 27.21  | 27.15  | 27.17  |
|             |           | 50              | 0         | 27.39  | 27.14  | 27.47  |
|             | 64QAM     | 1               | 0         | 27.04  | 26.86  | 27.34  |
|             |           | 1               | 24        | 26.98  | 27.03  | 27.12  |
|             |           | 1               | 49        | 26.75  | 26.88  | 27.04  |
|             |           | 25              | 0         | 25.70  | 26.06  | 26.08  |
|             |           | 25              | 12        | 25.98  | 25.97  | 26.24  |
|             |           | 25              | 25        | 25.91  | 26.13  | 25.97  |
|             |           | 50              | 0         | 26.30  | 26.05  | 26.22  |
|             | 256QAM    | 1               | 0         | 24.96  | 24.68  | 25.30  |
|             |           | 1               | 24        | 24.85  | 25.02  | 24.97  |
|             |           | 1               | 49        | 24.69  | 24.76  | 24.97  |
|             |           | 25              | 0         | 23.79  | 24.06  | 23.89  |
|             |           | 25              | 12        | 23.84  | 24.07  | 24.09  |
|             |           | 25              | 25        | 23.91  | 24.15  | 23.93  |
|             |           | 50              | 0         | 24.36  | 23.91  | 24.31  |

\*EIRP = Conducted + antenna gain (4.27dBi)

| LTE Band 66 |           |                 |           |        |        |        |
|-------------|-----------|-----------------|-----------|--------|--------|--------|
| BW          | MCS Index | RB Size         | RB Offset | Low    | Mid    | High   |
|             |           | Channel         |           | 131997 | 132322 | 132647 |
|             |           | Frequency (MHz) |           | 1712.5 | 1745   | 1777.5 |
| 5M          | QPSK      | 1               | 0         | 28.90  | 28.97  | 29.09  |
|             |           | 1               | 12        | 28.76  | 28.96  | 28.96  |
|             |           | 1               | 24        | 29.16  | 29.10  | 28.88  |
|             |           | 12              | 0         | 28.13  | 27.94  | 28.00  |
|             |           | 12              | 6         | 27.89  | 27.88  | 27.92  |
|             |           | 12              | 13        | 28.11  | 28.00  | 28.09  |
|             |           | 25              | 0         | 28.03  | 27.91  | 28.12  |
|             | 16QAM     | 1               | 0         | 28.19  | 28.00  | 28.42  |
|             |           | 1               | 12        | 27.87  | 28.33  | 28.16  |
|             |           | 1               | 24        | 28.52  | 28.47  | 27.89  |
|             |           | 12              | 0         | 27.14  | 27.24  | 27.43  |
|             |           | 12              | 6         | 27.05  | 27.25  | 26.93  |
|             |           | 12              | 13        | 27.52  | 27.09  | 27.48  |
|             |           | 25              | 0         | 27.07  | 27.06  | 27.27  |
|             | 64QAM     | 1               | 0         | 26.90  | 26.96  | 27.14  |
|             |           | 1               | 12        | 26.64  | 27.18  | 27.05  |
|             |           | 1               | 24        | 27.31  | 27.44  | 26.59  |
|             |           | 12              | 0         | 25.92  | 26.13  | 26.40  |
|             |           | 12              | 6         | 25.97  | 26.10  | 25.71  |
|             |           | 12              | 13        | 26.33  | 25.85  | 26.43  |
|             |           | 25              | 0         | 26.03  | 25.82  | 26.21  |
|             | 256QAM    | 1               | 0         | 24.84  | 24.90  | 25.04  |
|             |           | 1               | 12        | 24.62  | 25.22  | 25.03  |
|             |           | 1               | 24        | 25.38  | 25.47  | 24.66  |
|             |           | 12              | 0         | 23.88  | 24.23  | 24.42  |
|             |           | 12              | 6         | 23.85  | 24.16  | 23.67  |
|             |           | 12              | 13        | 24.19  | 23.95  | 24.31  |
|             |           | 25              | 0         | 23.85  | 23.86  | 24.21  |

\*EIRP = Conducted + antenna gain (4.27dBi)

| LTE Band 66 |           |                 |           |        |        |        |
|-------------|-----------|-----------------|-----------|--------|--------|--------|
| BW          | MCS Index | RB Size         | RB Offset | Low    | Mid    | High   |
|             |           | Channel         |           | 131987 | 132322 | 132657 |
|             |           | Frequency (MHz) |           | 1711.5 | 1745   | 1778.5 |
| 3M          | QPSK      | 1               | 0         | 29.11  | 28.92  | 28.85  |
|             |           | 1               | 7         | 28.86  | 28.85  | 28.86  |
|             |           | 1               | 14        | 29.01  | 28.98  | 28.90  |
|             |           | 8               | 0         | 27.86  | 27.96  | 28.15  |
|             |           | 8               | 3         | 28.08  | 27.91  | 27.91  |
|             |           | 8               | 7         | 28.01  | 27.98  | 27.94  |
|             |           | 15              | 0         | 27.90  | 27.93  | 27.84  |
|             | 16QAM     | 1               | 0         | 28.15  | 28.25  | 28.10  |
|             |           | 1               | 7         | 28.04  | 28.08  | 27.96  |
|             |           | 1               | 14        | 28.38  | 28.13  | 27.95  |
|             |           | 8               | 0         | 27.22  | 27.15  | 27.63  |
|             |           | 8               | 3         | 27.49  | 26.95  | 27.37  |
|             |           | 8               | 7         | 27.24  | 27.40  | 26.99  |
|             |           | 15              | 0         | 27.06  | 27.11  | 27.03  |
|             | 64QAM     | 1               | 0         | 27.04  | 27.21  | 26.89  |
|             |           | 1               | 7         | 27.04  | 26.99  | 26.70  |
|             |           | 1               | 14        | 27.19  | 26.92  | 26.71  |
|             |           | 8               | 0         | 26.07  | 26.09  | 26.35  |
|             |           | 8               | 3         | 26.47  | 25.76  | 26.17  |
|             |           | 8               | 7         | 25.96  | 26.31  | 25.86  |
|             |           | 15              | 0         | 25.85  | 25.93  | 25.81  |
|             | 256QAM    | 1               | 0         | 25.12  | 25.31  | 24.83  |
|             |           | 1               | 7         | 25.05  | 25.07  | 24.73  |
|             |           | 1               | 14        | 25.13  | 24.85  | 24.77  |
|             |           | 8               | 0         | 24.05  | 24.16  | 24.45  |
|             |           | 8               | 3         | 24.36  | 23.64  | 24.00  |
|             |           | 8               | 7         | 23.99  | 24.32  | 23.78  |
|             |           | 15              | 0         | 23.68  | 23.88  | 23.90  |

\*EIRP = Conducted + antenna gain (4.27dBi)

| LTE Band 66 |           |                 |           |        |        |        |
|-------------|-----------|-----------------|-----------|--------|--------|--------|
| BW          | MCS Index | RB Size         | RB Offset | Low    | Mid    | High   |
|             |           | Channel         |           | 131979 | 132322 | 132665 |
|             |           | Frequency (MHz) |           | 1710.7 | 1745   | 1779.3 |
| 1.4M        | QPSK      | 1               | 0         | 28.71  | 28.83  | 28.87  |
|             |           | 1               | 2         | 28.64  | 28.80  | 28.74  |
|             |           | 1               | 5         | 28.55  | 28.71  | 28.78  |
|             |           | 3               | 0         | 28.69  | 28.59  | 28.58  |
|             |           | 3               | 1         | 28.62  | 28.73  | 28.89  |
|             |           | 3               | 3         | 28.45  | 28.70  | 28.49  |
|             |           | 6               | 0         | 27.56  | 27.85  | 27.71  |
|             | 16QAM     | 1               | 0         | 28.15  | 28.21  | 28.16  |
|             |           | 1               | 2         | 27.81  | 28.07  | 28.20  |
|             |           | 1               | 5         | 27.98  | 28.10  | 28.11  |
|             |           | 3               | 0         | 28.11  | 27.94  | 27.85  |
|             |           | 3               | 1         | 27.74  | 27.85  | 28.22  |
|             |           | 3               | 3         | 27.88  | 27.81  | 27.49  |
|             |           | 6               | 0         | 26.80  | 26.91  | 27.13  |
|             | 64QAM     | 1               | 0         | 27.09  | 27.21  | 27.00  |
|             |           | 1               | 2         | 26.68  | 26.99  | 27.01  |
|             |           | 1               | 5         | 26.85  | 26.93  | 27.11  |
|             |           | 3               | 0         | 26.86  | 26.77  | 26.75  |
|             |           | 3               | 1         | 26.60  | 26.71  | 27.14  |
|             |           | 3               | 3         | 26.60  | 26.80  | 26.28  |
|             |           | 6               | 0         | 25.65  | 25.71  | 26.08  |
|             | 256QAM    | 1               | 0         | 25.19  | 25.31  | 25.02  |
|             |           | 1               | 2         | 24.72  | 24.97  | 24.99  |
|             |           | 1               | 5         | 24.91  | 24.73  | 25.01  |
|             |           | 3               | 0         | 24.68  | 24.65  | 24.83  |
|             |           | 3               | 1         | 24.57  | 24.73  | 25.13  |
|             |           | 3               | 3         | 24.50  | 24.62  | 24.36  |
|             |           | 6               | 0         | 23.64  | 23.67  | 24.15  |

\*EIRP = Conducted + antenna gain (4.27dBi)

## 4.2 Modulation Characteristics Measurement

### 4.2.1 Limits of Modulation Characteristics

N/A

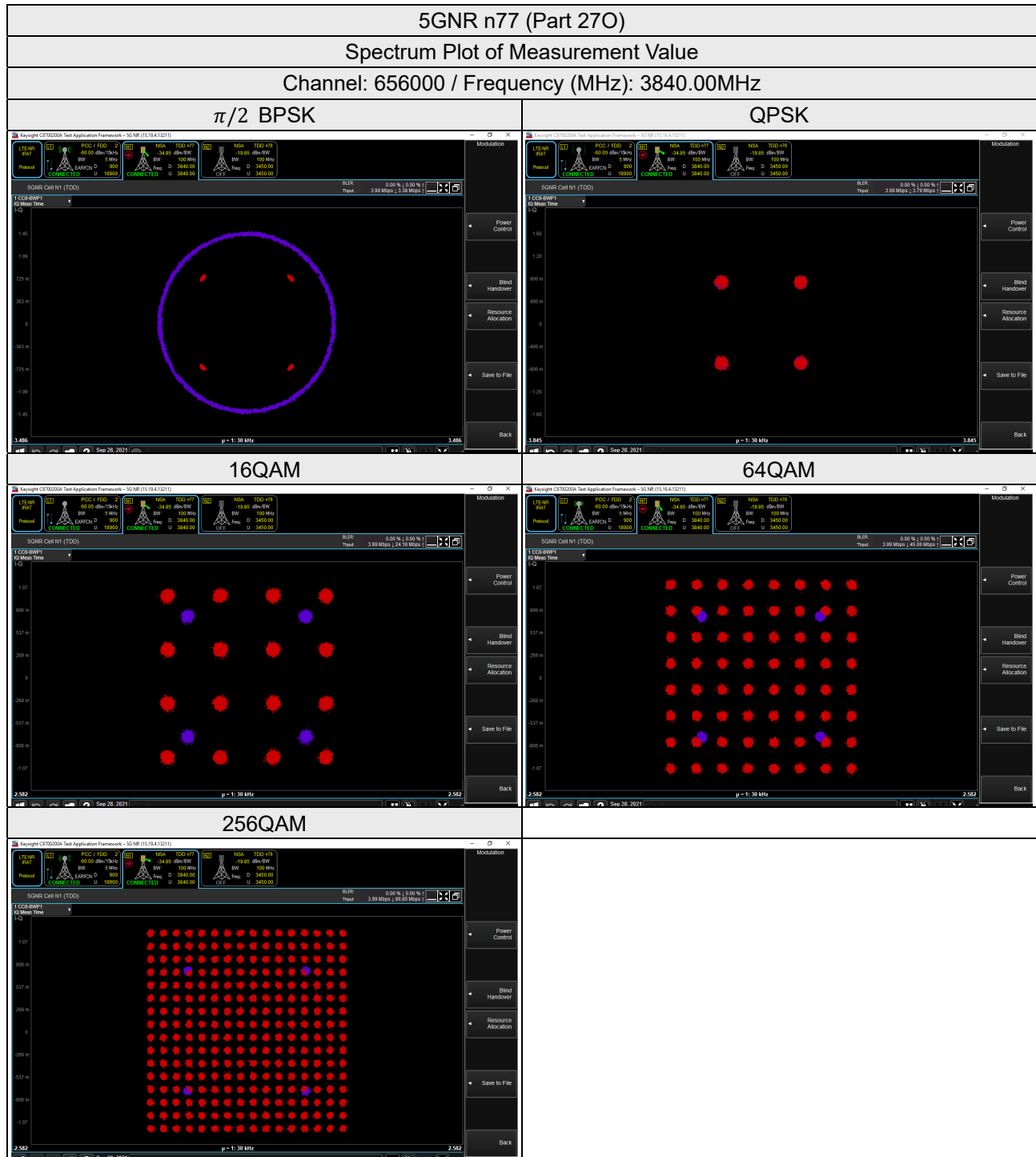
### 4.2.2 Test Procedure

Connect the EUT to Communication Simulator via the antenna connector, The frequency band is set as EUT supported Modulation and Channels, the EUT output is matched with 50 ohm load, the waveform quality and constellation of the EUT was tested.

### 4.2.3 Test Setup



## 4.2.4 Test Results

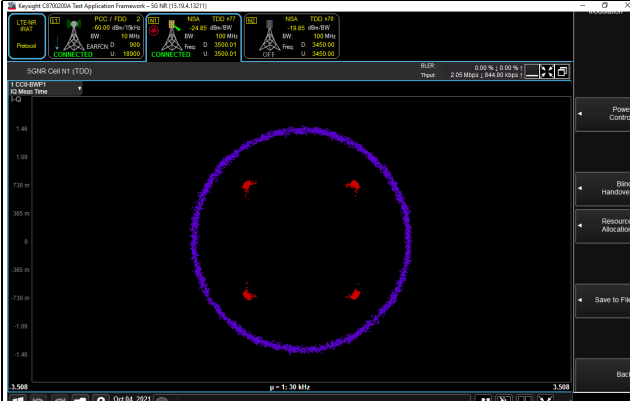


## 5G NR n77 (Part 27Q)

### Spectrum Plot of Measurement Value

Channel: 633334 / Frequency (MHz): 3500.01MHz

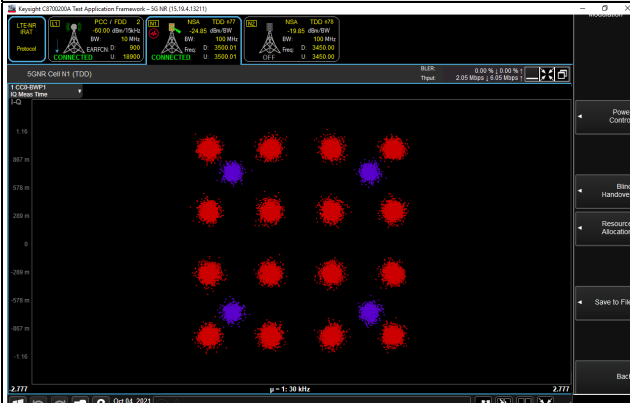
$\pi/2$  BPSK



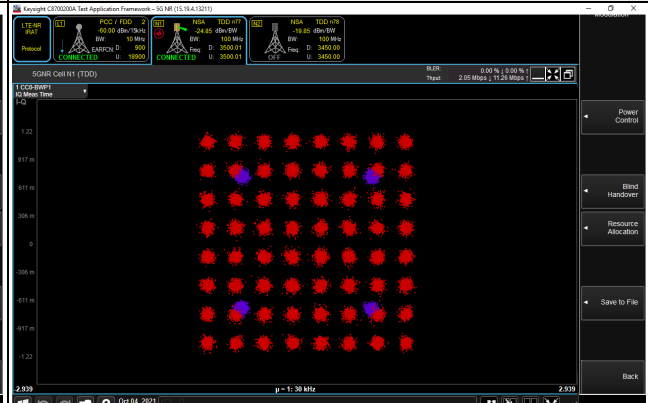
QPSK



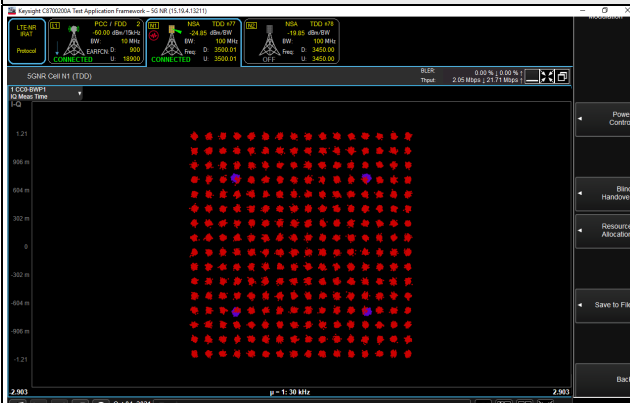
16QAM



64QAM



256QAM

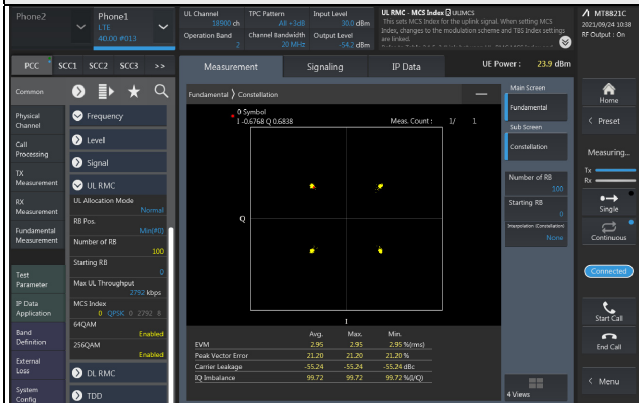


## LTE Band 2

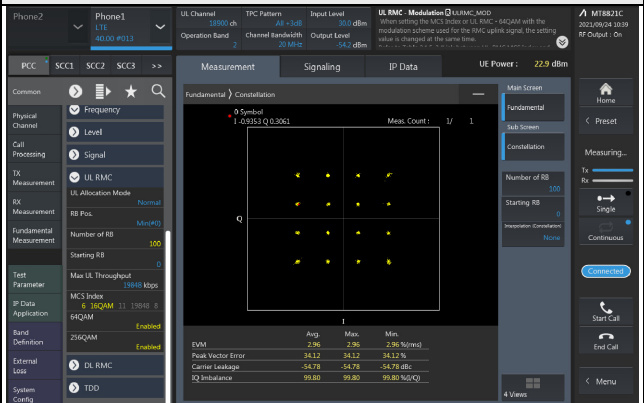
### Spectrum Plot of Measurement Value

Channel: 18900 / Frequency (MHz): 1880.0MHz

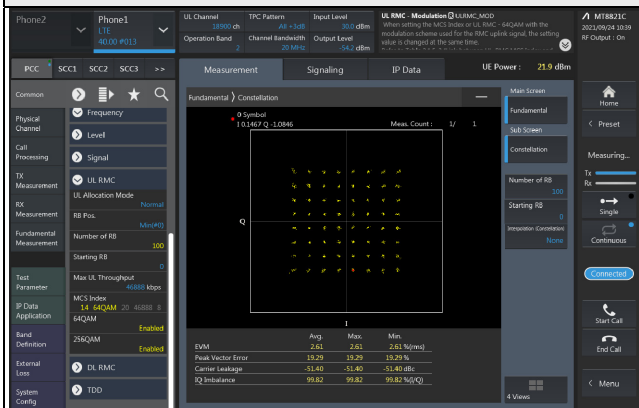
#### QPSK



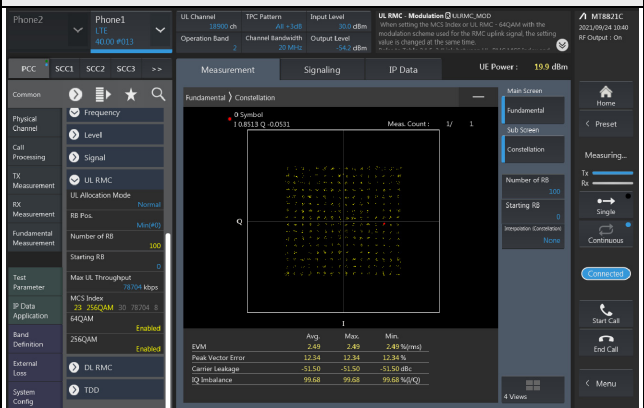
#### 16QAM



#### 64QAM



#### 256QAM

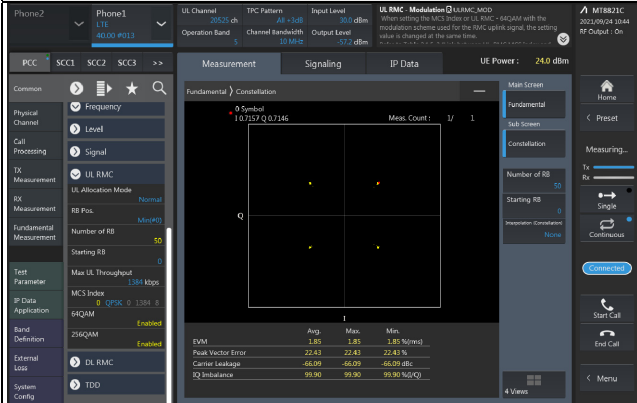


## LTE Band 5

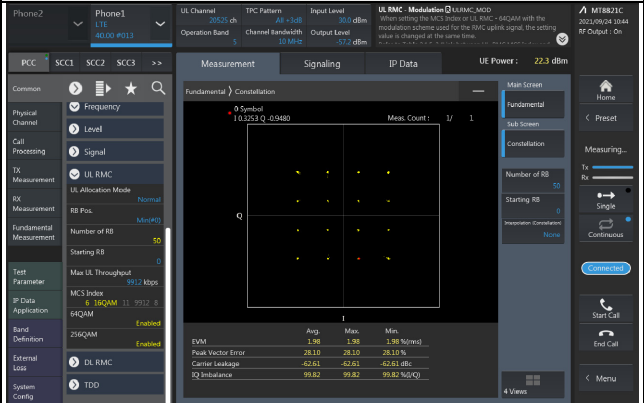
### Spectrum Plot of Measurement Value

Channel: 20525 / Frequency (MHz): 836.5MHz

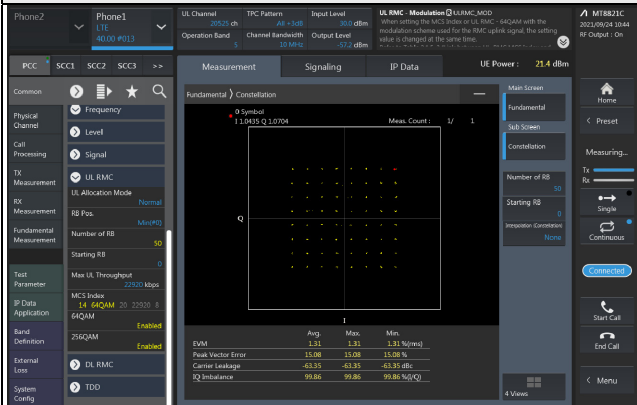
#### QPSK



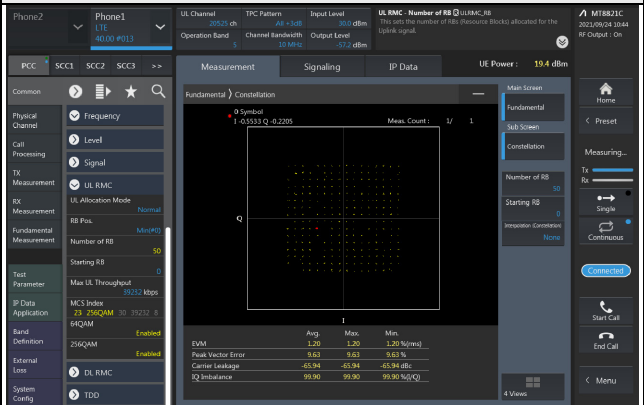
#### 16QAM



#### 64QAM



#### 256QAM

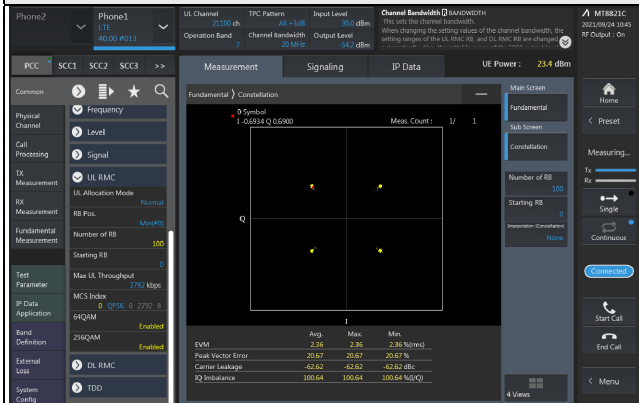


## LTE Band 7

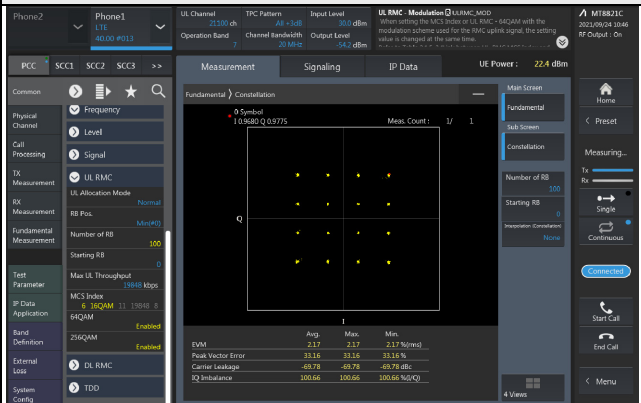
### Spectrum Plot of Measurement Value

Channel: 21100 / Frequency (MHz): 2535.0MHz

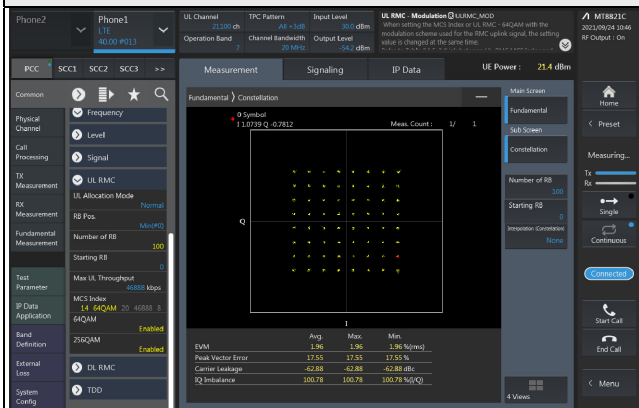
#### QPSK



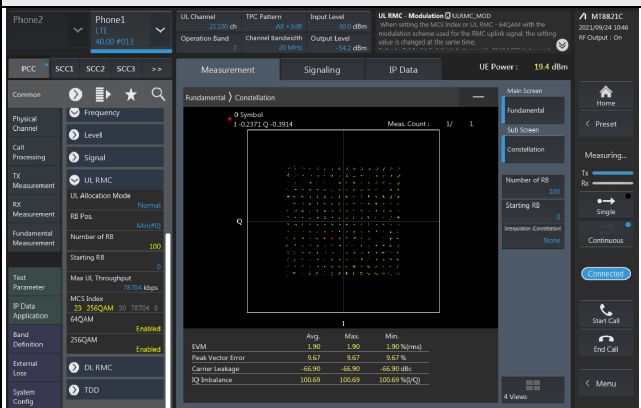
#### 16QAM



#### 64QAM



#### 256QAM

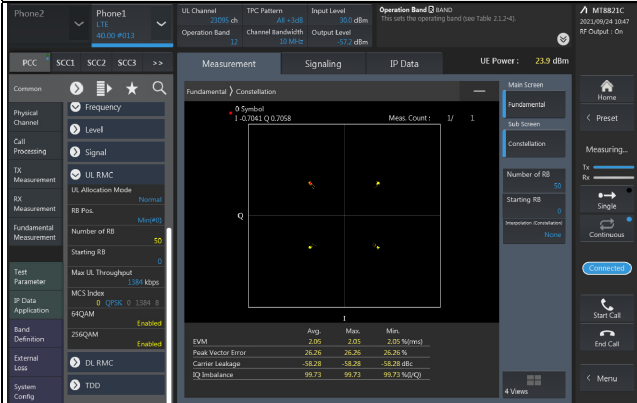


## LTE Band 12

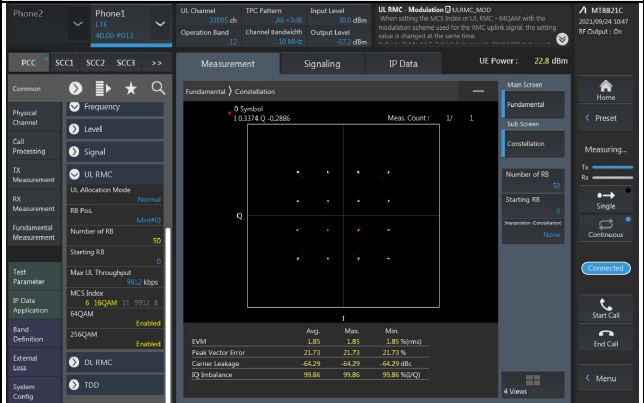
### Spectrum Plot of Measurement Value

Channel: 23095 / Frequency (MHz): 707.5 MHz

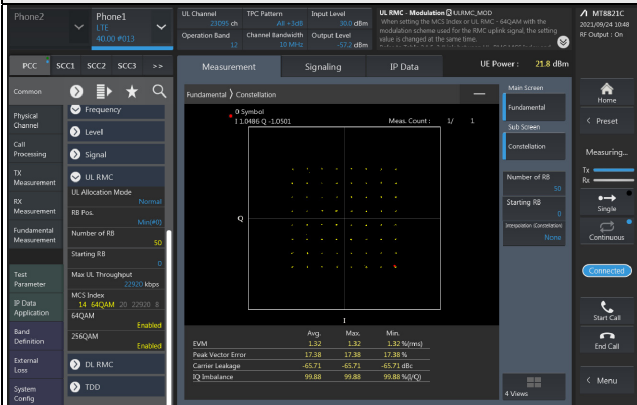
#### QPSK



#### 16QAM



#### 64QAM



#### 256QAM

