



Test Report No.: W7L-P23030004RF06



# FCC TEST REPORT (PART 27)

|            |   |
|------------|---|
| Applicant: | Xiaomi Communications Co., Ltd.   |
| Address:   | #019, 9th Floor, Building 6, 33 Xi'erqi Middle Road, Haidian District, Beijing, China, 100085 |

|                           |   |
|---------------------------|---|
| Manufacturer or Supplier: | Xiaomi Communications Co., Ltd.   |
| Address:                  | #019, 9th Floor, Building 6, 33 Xi'erqi Middle Road, Haidian District, Beijing, China, 100085 |
| Product:                  | Mobile Phone  |
| Brand Name:               | Redmi   |
| Model Name:               | 23053RN02Y  |
| FCC ID:                   | 2AFZZRN02Y  |
| Date of tests:            | Mar. 06, 2023 ~ Mar. 29, 2023   |

The tests have been carried out according to the requirements of the following standard:

- FCC Part 27     ANSI/TIA/EIA-603-D
- FCC Part 2     ANSI/TIA/EIA-603-E     ANSI C63.26-2015

CONCLUSION: The submitted sample was found to COMPLY with the test requirement

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Engineer / Mobile Department

Approved by Luke Lu  
Manager / Mobile Department

Date: Mar. 29, 2023

Date: Mar. 29, 2023

This report is governed by, and incorporates by reference, the Conditions of Testing as posted at the date of issuance of this report at <http://www.bureauveritas.com/home/about-us/our-business/cps/about-us/terms-conditions/> and is intended for your exclusive use. Any copying or replication of this report to or for any other person or entity, or use of our name or trademark, is permitted only with our prior written permission. This report sets forth our findings solely with respect to the test samples identified herein. The results set forth in this report are not indicative or representative of the quality or characteristics of the lot from which a test sample was taken or any similar or identical product unless specifically and expressly noted. Our report includes all of the tests requested by you and the results thereof based upon the information that you provided to us. Measurement uncertainty is only provided upon request for accredited tests. Statements of conformity are based on simple acceptance criteria without taking measurement uncertainty into account, unless otherwise requested in writing. You have 60 days from date of issuance of this report to notify us of any material error or omission caused by our negligence or if you require measurement uncertainty; provided, however, that such notice shall be in writing and shall specifically address the issue you wish to raise. A failure to raise such issue within the prescribed time shall constitute your unqualified acceptance of the completeness of this report, the tests conducted and the correctness of the report contents.



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## RELEASE CONTROL RECORD

| ISSUE NO.         | REASON FOR CHANGE | DATE ISSUED   |
|-------------------|-------------------|---------------|
| W7L-P23030004RF06 | Original release  | Mar. 29, 2023 |



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## 1 SUMMARY OF TEST RESULTS

The EUT has been tested according to the following specifications:

| APPLIED STANDARD: FCC PART 27 & PART 2 |   |            |           |
|--|---|------------|-----------|
| STANDARD SECTION                       | TEST TYPE AND LIMIT   | RESULT     | TEST LAB* |
| §2.1046                                | Conducted Output Power  | Compliance | A         |
| §27.50(h)(2)                           | Equivalent Isotropically Radiated Power<br>(Band 7) (Band 38) (Band 41) | Compliance | A         |
| §2.1055<br>§27.54                      | Frequency Stability   | Compliance | A         |
| §2.1049                                | Occupied Bandwidth  | Compliance | A         |
| §2.1051<br>§27.53(m)(4)(6)             | Conducted Band Edge Measurements<br>(Band 7) (Band 38) (Band 41)        | Compliance | A         |
| §2.1051<br>§27.53(m)(4)(6)             | Conducted Spurious Emissions<br>(Band 7) (Band 38) (Band 41)            | Compliance | A         |
| §2.1053<br>§27.53(m)(4)(6)             | Radiated Spurious Emissions<br>(Band 7) (Band 38) (Band 41)             | Compliance | B         |
| NA                                     | Peak to average ratio   | Compliance | A         |



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**\*Test Lab Information Reference**

**Lab A:**

BV 7Layers Communications Technology (Shenzhen) Co., Ltd

**Lab Address:**

No.B102, Dazu Chuangxin Mansion, North of Beihuan Avenue, North Area, Hi-Tech Industrial Park, Nanshan District, Shenzhen, Guangdong, China

**Accredited Test Lab Cert 3939.01**

**The FCC Site Registration No. : 525120; Designation No. : CN1171;**

**Lab B:**

Huarui 7Layers High Technology (Suzhou) Co., Ltd.

**Lab Address:**

Tower N, Innovation Center, 88 Zhuyi Road, High-tech District, Suzhou City, Anhui Province

**Accredited Test Lab Cert 6613.01**

**The FCC Site Registration No. is 434559; The Designation No. is CN1325.**

## 1.1 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                                      | UNCERTAINTY |
|--|-------------|
| Frequency Stability                              | ±76.97Hz    |
| Radiated emissions (9KHz~30MHz)                  | ±2.68dB     |
| Radiated emissions & Radiated Power (30MHz~1GHz) | ±4.98dB     |
| Radiated emissions & Radiated Power (1GHz ~6GHz) | ±4.70dB     |
| Radiated emissions (6GHz ~18GHz)                 | ±4.60dB     |
| Radiated emissions (18GHz ~40GHz)                | ±4.12dB     |
| Conducted emissions                              | ±4.01dB     |
| Occupied Channel Bandwidth                       | ±43.58KHz   |
| Conducted Output power                           | ±2.06dB     |
| Band Edge Measurements                           | ±4.70dB     |

This uncertainty represents an expanded uncertainty expressed at approximately the 95% confidence level using a coverage factor of k=2.

## 1.2 TEST SITE AND INSTRUMENTS

| Equipment                                   | Manufacturer  | Model No.                           | Serial No.                          | Last Cal.  | Next Cal.  |
|---|---------------|-------------------------------------|-------------------------------------|------------|------------|
| MXE EMI Receiver                            | KEYSIGHT      | N9038A-544                          | MY54450026                          | Feb. 17,23 | Feb. 16,24 |
| EXA Signal Analyzer                         | KEYSIGHT      | N9010A-544                          | MY54510355                          | May.14,22  | May.13,23  |
| Loop Antenna                                | Schwarzbeck   | FMZB 1519B                          | 00173                               | Sep.03,22  | Sep.02,23  |
| Bilog Antenna                               | ETS-LINDGREN  | 3143B                               | 00161965                            | Mar. 05,23 | Mar. 04,24 |
| Horn Antenna                                | ETS-LINDGREN  | 3117                                | 00168692                            | Mar. 05,23 | Mar. 04,24 |
| Horn Antenna<br>(18GHz-40GHz)               | N/A           | QWH-SL-18-40-<br>K-SG/QMS-003<br>61 | 15433                               | Sep.04, 22 | Sep.03, 23 |
| Radio Communication<br>Analyzer             | ANRITSU       | MT8820C                             | 6201465426                          | Feb. 14,23 | Feb. 13,24 |
| Signal Pre-Amplifier                        | EMSI          | EMC 9135                            | 980249                              | May.12,22  | May.11,23  |
| Signal Pre-Amplifier                        | EMSI          | EMC 012645B                         | 980257                              | May.12,22  | May.11,23  |
| Signal Pre-Amplifier                        | EMSI          | EMC 184045B                         | 980259                              | Feb. 17,23 | Feb.16,24  |
| 3m<br>Semi-anechoic<br>Chamber              | ETS-LINDGREN  | 9m*6m*6m                            | Euroshieldpn-<br>CT0001143-121<br>6 | May. 19,20 | May. 18,23 |
| Test Software                               | E3            | V 9.160323                          | N/A                                 | N/A        | N/A        |
| Test Software                               | JS1120        | 3.1.36                              | N/A                                 | N/A        | N/A        |
| 10dB Attenuator                             | JFW/USA       | 50HF-010-SMA                        | N/A                                 | May. 12,22 | May. 11,23 |
| Power Meter                                 | Anritsu       | ML2495A                             | 1506002                             | Feb. 14,23 | Feb. 13,24 |
| Power Sensor                                | Anritsu       | MA2411B                             | 1339352                             | Feb. 14,23 | Feb. 13,24 |
| Temperature<br>Chamber                      | ESPEC         | SH-242                              | 93000855                            | May. 12,22 | May. 11,23 |
| MXG<br>Analog Microwave<br>Signal Generator | KEYSIGHT      | N5183A                              | MY50143024                          | Feb. 14,23 | Feb. 13,24 |
| Base station R&S<br>CMW500                  | Rohde&Schwarz | CMW500                              | 153085                              | May.12,22  | May.11,23  |
| DC Source                                   | Kikusui/JP    | PMX18-5A                            | N/A                                 | Aug. 12,22 | Aug. 11,23 |

- NOTE:**
1. The calibration interval of the above test instruments is 12 months or 36 months and the calibrations are traceable to CEPREI/CHINA, GRGT/CHINA and NIM/CHINA.
  2. The test was performed in 3m Semi-anechoic Chamber and RF Oven Room.
  3. The horn antenna is used only for the measurement of emission frequency above 1GHz if tested.
  4. The FCC Site Registration No. is 525120; The Designation No. is CN1171.





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| Equipment                          | Manufacturer            | Model No.        | Serial No.            | Last Cal. | Next Cal. |
|------------------------------------|-------------------------|------------------|-----------------------|-----------|-----------|
| Pre-Amplifier                      | R&S                     | SCU18F1          | 100815                | Aug.30,22 | Aug.29,24 |
| Pre-Amplifier                      | R&S                     | SCU08F1          | 101028                | Sep.16,22 | Sep.15,24 |
| Vector Signal Generator            | R&S                     | SMBV100B         | 102176                | Feb.16,22 | Feb.15,24 |
| Signal Generator                   | R&S                     | SMB100A          | 182185                | Feb.16,22 | Feb.15,24 |
| 3m Fully-anechoic Chamber          | TDK                     | 9m*6m*6m         | HRSW-SZ-EMC-01Chamber | Nov.25,22 | Nov.24,25 |
| 3m Semi-anechoic Chamber           | TDK                     | 9m*6m*6m         | HRSW-SZ-EMC-02Chamber | Nov.25,22 | Nov.24,25 |
| EMI TEST Receiver                  | R&S                     | ESR26            | 101734                | Feb.25,22 | Feb.24,24 |
| EMI TEST Receiver                  | R&S                     | ESW44            | 101973                | Feb.25,22 | Feb.24,24 |
| Bilog Antenna                      | SCHWARZBECK             | VULB 9163        | 1264                  | Feb.28,22 | Feb.27,24 |
| Horn Antenna                       | ETS-LINDGREN            | 3117             | 227836                | Aug.22,22 | Aug.21,24 |
| Horn Antenna (18GHz-40GHz)         | Steatite Q-par Antennas | QMS 00880        | 23486                 | Feb.23,22 | Feb.22,24 |
| Horn Antenna                       | Steatite Q-par Antennas | QMS 00208        | 23485                 | Aug.22,22 | Aug.21,24 |
| Loop Antenna                       | SCHWARZ                 | HFH2-Z2/Z2E      | 100976                | Feb.23,22 | Feb.22,24 |
| WIDEBANDRADIO COMMUNICATION TESTER | R&S                     | CMW500           | 169399                | Jun.27,22 | Jun.26,24 |
| Test Software                      | EMC32                   | EMC32            | N/A                   | N/A       | N/A       |
| Test Software                      | ELEKTRA                 | ELEKTRA4.32      | N/A                   | N/A       | N/A       |
| Open Switch and Control Unit       | R&S                     | OSP220           | 101964                | Oct.01,22 | Sep.30,24 |
| DC Source                          | HYELEC                  | HY3010B          | 551016                | Aug.31,22 | Aug.30,24 |
| Hygrothermograph                   | DELI                    | 20210528         | SZ014                 | Sep.06,22 | Sep.05,24 |
| PC                                 | LENOVO                  | E14              | HRSW0024              | N/A       | N/A       |
| TMC-AMI18843A(CABLE)               | R&S                     | HF290-NMNM-7.00M | N/A                   | N/A       | N/A       |
| TMC-AMI18843A(CABLE)               | R&S                     | HF290-NMNM-4.00M | N/A                   | N/A       | N/A       |
| CABLE                              | R&S                     | W13.02           | N/A                   | Oct.31,22 | Apr.29,23 |
| CABLE                              | R&S                     | W12.14           | N/A                   | Oct.31,22 | Apr.29,23 |
| CABLE                              | R&S                     | J12J103539-00-1  | SEP-03-20-069         | Oct.31,22 | Apr.29,23 |
| CABLE                              | R&S                     | J12J103539-00-1  | SEP-03-20-070         | Oct.31,22 | Apr.29,23 |
| Temperature Chamber                | votsch                  | VT4002           | 58566078100050        | May.31,22 | May.30,24 |

- NOTE:**
1. The calibration interval of the above test instruments is 12 months or 36 months and the calibrations are traceable to CEPREI/CHINA, GRGT/CHINA and NIM/CHINA.
  2. The test was performed in 3m Semi-anechoic Chamber and RF Oven Room.
  3. The horn antenna is used only for the measurement of emission frequency above 1GHz if tested.
  4. The FCC Site Registration No. is 434559; The Designation No. is CN1325.

## 2 GENERAL INFORMATION

### 2.1 GENERAL DESCRIPTION OF EUT

|  |  |                                       |
|--|--|---------------------------------------|
| <b>PRODUCT</b>                         | Mobile Phone   |                                       |
| <b>BRAND NAME</b>                      | Redmi  |                                       |
| <b>MODEL NAME</b>                      | 23053RN02Y   |                                       |
| <b>NOMINAL VOLTAGE</b>                 | 5V/9V/10V/12Vdc(adapter or host equipment)<br>3.8Vdc (Li-ion, battery) |                                       |
| <b>MODULATION TECHNOLOGY</b>           | LTE  | QPSK, 16QAM, 64QAM                    |
| <b>FREQUENCY RANGE</b>                 | LTE Band 7<br>Channel Bandwidth: 5MHz                                  | 2502.5MHz ~ 2567.5MHz                 |
|  | LTE Band 7<br>Channel Bandwidth: 10MHz                                 | 2505MHz ~ 2565MHz                     |
|  | LTE Band 7<br>Channel Bandwidth: 15MHz                                 | 2507.5MHz ~ 2562.5MHz                 |
|  | LTE Band 7<br>Channel Bandwidth: 20MHz                                 | 2510MHz ~ 2560MHz                     |
|  | LTE Band 38<br>Channel Bandwidth: 5MHz                                 | 2572.5MHz ~ 2617.5MHz                 |
|  | LTE Band 38<br>Channel Bandwidth: 10MHz                                | 2575MHz ~ 2615MHz                     |
|  | LTE Band 38<br>Channel Bandwidth: 15MHz                                | 2577.5MHz ~ 2612.5MHz                 |
|  | LTE Band 38<br>Channel Bandwidth: 20MHz                                | 2580MHz ~ 2610MHz                     |
|  | LTE Band 41<br>Channel Bandwidth: 5MHz                                 | 2498.5MHz ~ 2687.5MHz                 |
|  | LTE Band 41<br>Channel Bandwidth: 10MHz                                | 2501MHz ~ 2685MHz                     |
|  | LTE Band 41<br>Channel Bandwidth: 15MHz                                | 2503.5MHz ~ 2682.5MHz                 |
|  | LTE Band 41<br>Channel Bandwidth: 20MHz                                | 2506MHz ~ 2680MHz                     |
|  | <b>MAX. EIRP POWER</b>   | LTE Band 7<br>Channel Bandwidth: 5MHz |
| LTE Band 7<br>Channel Bandwidth: 10MHz |  | 283.14mW                              |
| LTE Band 7<br>Channel Bandwidth: 15MHz |  | 279.9mW                               |
| LTE Band 7<br>Channel Bandwidth: 20MHz |  | 285.76mW                              |
| LTE Band 38<br>Channel Bandwidth: 5MHz |  | 416.87mW                              |



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|                            |   |                |
|----------------------------|---|----------------|
| <b>MAX. EIRP POWER</b>     | <b>LTE Band 38<br/>Channel Bandwidth: 10MHz</b> | 414.95mW       |
|                            | <b>LTE Band 38<br/>Channel Bandwidth: 15MHz</b> | 417.83mW       |
|                            | <b>LTE Band 38<br/>Channel Bandwidth: 20MHz</b> | 426.58mW       |
|                            | <b>LTE Band 41<br/>Channel Bandwidth: 5MHz</b>  | 864.97mW       |
|                            | <b>LTE Band 41<br/>Channel Bandwidth: 10MHz</b> | 874.98mW       |
|                            | <b>LTE Band 41<br/>Channel Bandwidth: 15MHz</b> | 857.04mW       |
|                            | <b>LTE Band 41<br/>Channel Bandwidth: 20MHz</b> | 883.08mW       |
| <b>EMISSION DESIGNATOR</b> | <b>LTE Band 7<br/>Channel Bandwidth: 5MHz</b>   | QPSK: 4M50G7D  |
|                            |   | 16QAM: 4M51W7D |
|                            |   | 64QAM: 4M50W7D |
|                            | <b>LTE Band 7<br/>Channel Bandwidth: 10MHz</b>  | QPSK: 8M99G7D  |
|                            |   | 16QAM: 8M99W7D |
|                            |   | 64QAM: 9M01W7D |
|                            | <b>LTE Band 7<br/>Channel Bandwidth: 15MHz</b>  | QPSK: 13M5G7D  |
|                            |   | 16QAM: 13M5W7D |
|                            |   | 64QAM: 13M5W7D |
|                            | <b>LTE Band 7<br/>Channel Bandwidth: 20MHz</b>  | QPSK: 17M9G7D  |
|                            |   | 16QAM: 17M9W7D |
|                            |   | 64QAM: 18M0W7D |
|                            | <b>LTE Band 41<br/>Channel Bandwidth: 5MHz</b>  | QPSK: 4M50G7D  |
|                            |   | 16QAM: 4M49W7D |
|                            |   | 64QAM: 4M51W7D |
|                            | <b>LTE Band 41<br/>Channel Bandwidth: 10MHz</b> | QPSK: 8M97G7D  |
|                            |   | 16QAM: 8M98W7D |
|                            |   | 64QAM: 8M99W7D |
|                            | <b>LTE Band 41<br/>Channel Bandwidth: 15MHz</b> | QPSK: 13M5G7D  |
|                            |   | 16QAM: 13M5W7D |
|                            |   | 64QAM: 13M5W7D |



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|                            |  |                |
|----------------------------|--|----------------|
|                            | <b>LTE Band 41<br/>Channel Bandwidth: 20MHz</b>  | QPSK: 17M9G7D  |
|                            |  | 16QAM: 17M9W7D |
|                            |  | 64QAM: 18M0W7D |
| <b>ANTENNA TYPE</b>        | ANT 0:<br>IFA Antenna with 0.45dBi gain for LTE7<br>IFA Antenna with 0.96dBi gain for LTE38<br>IFA Antenna with 0.96dBi gain for LTE41<br><br>ANT 4:<br>IFA Antenna with 0.28dBi gain for LTE7<br>IFA Antenna with 2.21dBi gain for LTE38<br>IFA Antenna with 5.21dBi gain for LTE41 |                |
| <b>HW VERSION</b>          | P1.1   |                |
| <b>SW VERSION</b>          | MIUI14   |                |
| <b>IMEI</b>                | 867457060032244<br>867457060047483<br>867457060047491  |                |
| <b>I/O PORTS</b>           | Refer to user's manual   |                |
| <b>CABLE SUPPLIED</b>      | USB cable1: non-shielded cable, with w/o ferrite core, 1.0 meter<br>USB cable2: non-shielded cable, with w/o ferrite core, 1.0 meter   |                |
| <b>EXTREME TEMPERATURE</b> | 0-40 °C  |                |
| <b>EXTREME VOLTAGE</b>     | 3.5V - 4.2V  |                |

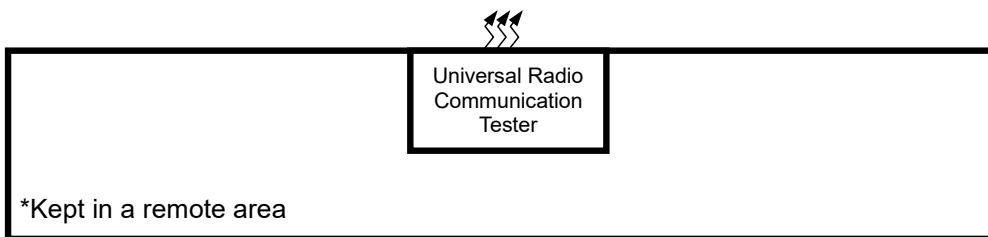
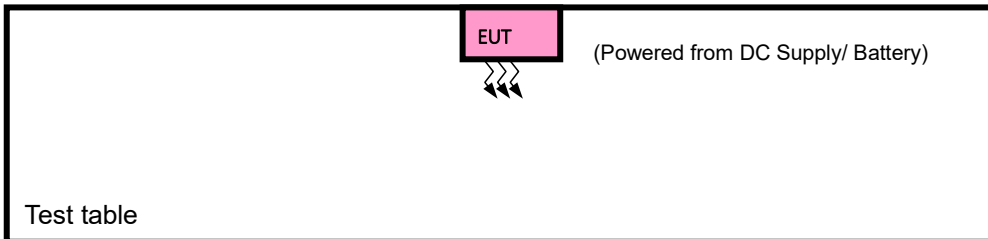
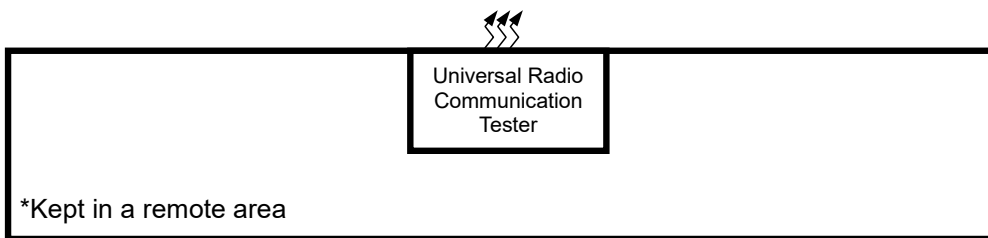
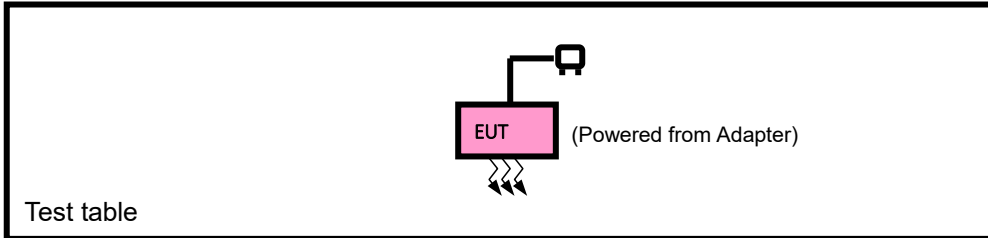
**NOTE:**

1. For a more detailed features description, please refer to the manufacturer's specifications or the user's manual.
2. The EUT incorporates a SISO function. Physically, the EUT provides two completed transmitter and two receiver.

| MODULATION MODE | TX FUNCTION |
|-----------------|-------------|
| LTE             | 2TX/2RX     |

3. For the test results, the EUT had been tested with all conditions. But only the worst case was shown in test report.

## 2.2 CONFIGURATION OF SYSTEM UNDER TEST FOR RADIATION EMISSION TEST



## 2.3 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.

| NO. | PRODUCT   | BRAND    | MODEL NO. | SERIAL NO. | FCC ID |
|-----|-----------|----------|-----------|------------|--------|
| 1   | DC source | LONG WEI | PS-6403D  | 010934269  | N/A    |

| NO. | SIGNAL CABLE DESCRIPTION OF THE ABOVE SUPPORT UNITS |
|-----|---|
| 1   | DC Line: Unshielded, Detachable 1.8m                |

## 2.4 TEST ITEM AND TEST CONFIGURATION

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 on Y-plane for EIRP and X-axis for radiated emission. Following channel(s) was (were) selected for the final test as listed below:

| EUT CONFIGURE MODE | DESCRIPTION                             |
|--------------------|---|
| A                  | EUT + Adapter + USB Cable with LTE link |
| B                  | EUT + DC source with LTE link           |

### LTE BAND 7 MODE

| EUT CONFIGURE MODE | TEST ITEM             | AVAILABLE CHANNEL | TESTED CHANNEL      | CHANNEL BANDWIDTH H | MODULATION         | MODE                                       |
|--------------------|-----------------------|-------------------|---------------------|---------------------|--------------------|--|
| A                  | EIRP                  | 20775 to 21425    | 20775, 21100, 21425 | 5MHz                | QPSK, 16QAM, 64QAM | 1 RB / 0 RB Offset                         |
|                    |                       | 20800 to 21400    | 20800, 21100, 21400 | 10MHz               | QPSK, 16QAM, 64QAM | 1 RB / 0 RB Offset                         |
|                    |                       | 20825 to 21375    | 20825, 21100, 21375 | 15MHz               | QPSK, 16QAM, 64QAM | 1 RB / 0 RB Offset                         |
|                    |                       | 20850 to 21350    | 20850, 21100, 21350 | 20MHz               | QPSK, 16QAM, 64QAM | 1 RB / 0 RB Offset                         |
| B                  | FREQUENCY STABILITY   | 20850 to 21350    | 20850, 21100, 21350 | 20MHz               | QPSK               | 100 RB / 0 RB Offset                       |
| A                  | OCCUPIED BANDWIDTH    | 20775 to 21425    | 20775, 21100, 21425 | 5MHz                | QPSK, 16QAM, 64QAM | 25 RB / 0 RB Offset                        |
|                    |                       | 20800 to 21400    | 20800, 21100, 21400 | 10MHz               | QPSK, 16QAM, 64QAM | 50 RB / 0 RB Offset                        |
|                    |                       | 20825 to 21375    | 20825, 21100, 21375 | 15MHz               | QPSK, 16QAM, 64QAM | 75 RB / 0 RB Offset                        |
|                    |                       | 20850 to 21350    | 20850, 21100, 21350 | 20MHz               | QPSK, 16QAM, 64QAM | 100 RB / 0 RB Offset                       |
| A                  | PEAK TO AVERAGE RATIO | 20850 to 21350    | 20850, 21100, 21350 | 20MHz               | QPSK, 16QAM, 64QAM | 1 RB / 0 RB Offset<br>100 RB / 0 RB Offset |
| A                  | BAND EDGE             | 20775 to 21425    | 20775               | 5MHz                | QPSK, 16QAM, 64QAM | 1 RB / 0 RB Offset<br>25 RB / 0 RB Offset  |
|                    |                       |                   | 21425               | 5MHz                | QPSK, 16QAM, 64QAM | 1 RB / 24 RB Offset                        |



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|          |                    |                |                     |       |                    |                      |
|----------|--------------------|----------------|---------------------|-------|--------------------|----------------------|
|          |                    |                |                     |       |                    | 25 RB / 0 RB Offset  |
|          |                    | 20800 to 21400 | 20800               | 10MHz | QPSK, 16QAM, 64QAM | 1 RB / 0 RB Offset   |
|          |                    |                | 21400               | 10MHz | QPSK, 16QAM, 64QAM | 50 RB / 0 RB Offset  |
|          |                    | 20825 to 21375 | 20825               | 15MHz | QPSK, 16QAM, 64QAM | 1 RB / 49 RB Offset  |
|          |                    |                | 21375               | 15MHz | QPSK, 16QAM, 64QAM | 50 RB / 0 RB Offset  |
|          |                    | 20850 to 21350 | 20825               | 15MHz | QPSK, 16QAM, 64QAM | 1 RB / 0 RB Offset   |
|          |                    |                | 21375               | 15MHz | QPSK, 16QAM, 64QAM | 75 RB / 0 RB Offset  |
|          |                    | 20850 to 21350 | 20850               | 20MHz | QPSK, 16QAM, 64QAM | 1 RB / 74 RB Offset  |
|          |                    |                | 21350               | 20MHz | QPSK, 16QAM, 64QAM | 75 RB / 0 RB Offset  |
|          |                    | 20850 to 21350 | 20850               | 20MHz | QPSK, 16QAM, 64QAM | 1 RB / 0 RB Offset   |
|          |                    |                | 21350               | 20MHz | QPSK, 16QAM, 64QAM | 100 RB / 0 RB Offset |
|          |                    | 20850 to 21350 | 20850               | 20MHz | QPSK, 16QAM, 64QAM | 1 RB / 99 RB Offset  |
|          |                    |                | 21350               | 20MHz | QPSK, 16QAM, 64QAM | 100 RB / 0 RB Offset |
| <b>A</b> | CONDUCTED EMISSION | 20775 to 21425 | 20775, 21100, 21425 | 5MHz  | QPSK               | 1 RB / 0 RB Offset   |
|          |                    | 20800 to 21400 | 20800, 21100, 21400 | 10MHz | QPSK               | 1 RB / 0 RB Offset   |
|          |                    | 20825 to 21375 | 20825, 21100, 21375 | 15MHz | QPSK               | 1 RB / 0 RB Offset   |
|          |                    | 20850 to 21350 | 20850, 21100, 21350 | 20MHz | QPSK               | 1 RB / 0 RB Offset   |
| <b>A</b> | RADIATED EMISSION  | 20775 to 21425 | 21100               | 5MHz  | QPSK               | 1 RB / 0 RB Offset   |
|          |                    | 20800 to 21400 | 20800, 21100, 21400 | 10MHz | QPSK               | 1 RB / 0 RB Offset   |
|          |                    | 20825 to 21375 | 21100               | 15MHz | QPSK               | 1 RB / 0 RB Offset   |
|          |                    | 20850 to 21350 | 21100               | 20MHz | QPSK               | 1 RB / 0 RB Offset   |

**Note:** This device was tested under all bandwidths, RB configurations and modulations. The worst case was found in QPSK modulation.

**LTE BAND 38 MODE**

| EUT CONFIGURE MODE | TEST ITEM | AVAILABLE CHANNEL | TESTED CHANNEL      | CHANNEL BANDWIDTH | MODULATION         | MODE               |
|--------------------|-----------|-------------------|---------------------|-------------------|--------------------|--------------------|
| A                  | EIRP      | 37775 to 38225    | 37775, 38000, 38225 | 5MHz              | QPSK, 16QAM, 64QAM | 1 RB / 0 RB Offset |
|                    |           | 37800 to 38200    | 37800, 38000, 38200 | 10MHz             | QPSK, 16QAM, 64QAM | 1 RB / 0RB Offset  |
|                    |           | 37825 to 38175    | 37825, 38000, 38175 | 15MHz             | QPSK, 16QAM, 64QAM | 1 RB / 0 RB Offset |
|                    |           | 37850 to 38150    | 37850, 38000, 38150 | 20MHz             | QPSK, 16QAM, 64QAM | 1 RB / 0 RB Offset |

**Note:** 1. This device was tested under all bandwidths, RB configurations and modulations. The worst case was found in QPSK modulation.

2. LTE Band 38 are covered by LTE Band 41, Because it is a subset of LTE Band 41 with the same output power and supported bandwidths, So the conducted test data and RSE test data please refer to LTE Band 41

**LTE BAND 41 MODE**

| EUT CONFIGURE MODE | TEST ITEM             | AVAILABLE CHANNEL | TESTED CHANNEL      | CHANNEL BANDWIDTH | MODULATION         | MODE                                       |
|--------------------|-----------------------|-------------------|---------------------|-------------------|--------------------|--|
| A                  | EIRP                  | 39675 to 41565    | 39675, 40620, 41565 | 5MHz              | QPSK, 16QAM, 64QAM | 1 RB / 0 RB Offset                         |
|                    |                       | 39700 to 41540    | 39700, 40620, 41540 | 10MHz             | QPSK, 16QAM, 64QAM | 1 RB / 0RB Offset                          |
|                    |                       | 39725 to 41515    | 39725, 40620, 41515 | 15MHz             | QPSK, 16QAM, 64QAM | 1 RB / 0 RB Offset                         |
|                    |                       | 39750 to 41490    | 39750, 40620, 41490 | 20MHz             | QPSK, 16QAM, 64QAM | 1 RB / 0 RB Offset                         |
| B                  | FREQUENCY STABILITY   | 39750 to 41490    | 39750, 41490        | 20MHz             | QPSK               | 100 RB / 0 RB Offset                       |
| A                  | OCCUPIED BANDWIDTH    | 39675 to 41565    | 39675, 40620, 41565 | 5MHz              | QPSK, 16QAM, 64QAM | 25 RB / 0 RB Offset                        |
|                    |                       | 39700 to 41540    | 39700, 40620, 41540 | 10MHz             | QPSK, 16QAM, 64QAM | 50 RB / 0 RB Offset                        |
|                    |                       | 39725 to 41515    | 39725, 40620, 41515 | 15MHz             | QPSK, 16QAM, 64QAM | 75 RB / 0 RB Offset                        |
|                    |                       | 39750 to 41490    | 39750, 40620, 41490 | 20MHz             | QPSK, 16QAM, 64QAM | 100 RB / 0 RB Offset                       |
| A                  | PEAK TO AVERAGE RATIO | 39750 to 41490    | 39750, 40620, 41490 | 20MHz             | QPSK, 16QAM, 64QAM | 1 RB / 0 RB Offset<br>100 RB / 0 RB Offset |
| A                  | BAND EDGE             | 39675 to 41565    | 39675               | 5MHz              | QPSK, 16QAM, 64QAM | 1 RB / 0 RB Offset<br>25 RB / 0 RB Offset  |
|                    |                       |                   | 41565               | 5MHz              | QPSK, 16QAM, 64QAM | 1 RB / 24 RB Offset<br>25 RB / 0 RB Offset |
|                    |                       | 39700 to 41540    | 39700               | 10MHz             | QPSK, 16QAM, 64QAM | 1 RB / 0 RB Offset<br>50 RB / 0 RB Offset  |
|                    |                       |                   | 41540               | 10MHz             | QPSK, 16QAM, 64QAM | 1 RB / 49 RB Offset                        |





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|   |                          |                |                     |       |                    |                      |
|---|--------------------------|----------------|---------------------|-------|--------------------|----------------------|
|   |                          |                |                     |       |                    | 50 RB / 0 RB Offset  |
|   |                          | 39725 to 41515 | 39725               | 15MHz | QPSK, 16QAM, 64QAM | 1 RB / 0 RB Offset   |
|   |                          |                | 41515               | 15MHz | QPSK, 16QAM, 64QAM | 75 RB / 0 RB Offset  |
|   |                          | 39750 to 41490 | 41515               | 15MHz | QPSK, 16QAM, 64QAM | 1 RB / 74 RB Offset  |
|   |                          |                | 39750               | 20MHz | QPSK, 16QAM, 64QAM | 75 RB / 0 RB Offset  |
|   |                          | 39750 to 41490 | 41490               | 20MHz | QPSK, 16QAM, 64QAM | 1 RB / 0 RB Offset   |
|   |                          |                | 41490               | 20MHz | QPSK, 16QAM, 64QAM | 100 RB / 0 RB Offset |
| A | CONDCUDET<br>ED EMISSION | 39675 to 41565 | 39675, 40620, 41565 | 5MHz  | QPSK               | 1 RB / 0 RB Offset   |
|   |                          | 39700 to 41540 | 39700, 40620, 41540 | 10MHz | QPSK               | 1 RB / 0 RB Offset   |
|   |                          | 39725 to 41515 | 39725, 40620, 41515 | 15MHz | QPSK               | 1 RB / 0 RB Offset   |
|   |                          | 39750 to 41490 | 39750, 40620, 41490 | 20MHz | QPSK               | 1 RB / 0 RB Offset   |
| A | RADIATED<br>EMISSION     | 39675 to 41565 | 40620               | 5MHz  | QPSK               | 1 RB / 0 RB Offset   |
|   |                          | 39700 to 41540 | 40620               | 10MHz | QPSK               | 1 RB / 0 RB Offset   |
|   |                          | 39725 to 41515 | 40620               | 15MHz | QPSK               | 1 RB / 0 RB Offset   |
|   |                          | 39750 to 41490 | 39750, 40620, 41490 | 20MHz | QPSK               | 1 RB / 0 RB Offset   |

**Note:** This device was tested under all bandwidths, RB configurations and modulations. The worst case was found in QPSK modulation.



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**TEST CONDITION:**

| TEST ITEM             | ENVIRONMENTAL CONDITIONS | INPUT POWER                    | TESTED BY |
|-----------------------|--------------------------|--------------------------------|-----------|
| ERP&EIRP              | 23deg. C, 70%RH          | DC 5V/9V/10V/12V<br>By Adapter | Jace Hu   |
| FREQUENCY STABILITY   | 23deg. C, 70%RH          | DC 3.5/3.8/4.2 By DC<br>Source | James Fu  |
| OCCUPIED BANDWIDTH    | 23deg. C, 70%RH          | DC 5V/9V/10V/12V<br>By Adapter | James Fu  |
| BAND EDGE             | 23deg. C, 70%RH          | DC 5V/9V/10V/12V<br>By Adapter | James Fu  |
| CONDCUDED EMISSION    | 23deg. C, 70%RH          | DC 5V/9V/10V/12V<br>By Adapter | James Fu  |
| RADIATED EMISSION     | 23deg. C, 70%RH          | DC 5V/9V/10V/12V<br>By Adapter | Jace Hu   |
| PEAK TO AVERAGE RATIO | 23deg. C, 70%RH          | DC 5V/9V/10V/12V<br>By Adapter | James Fu  |



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## 2.5 GENERAL DESCRIPTION OF APPLIED STANDARDS

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

**FCC 47 CFR Part 2**

**FCC 47 CFR Part 27**

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

**ANSI/TIA/EIA-603-D**

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

**ANSI C63.26-2015**

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



### 3 TEST TYPES AND RESULTS

#### 3.1 OUTPUT POWER MEASUREMENT

##### 3.1.1 LIMITS OF OUTPUT POWER MEASUREMENT

The radiated peak output power shall be according to the specific rule Part 27.50(h)(2) that “User stations are limited to 2 watts” and 27.50(i) specific that “Peak transmit power must be measure over any interval of continuous transmission using instrumentation calibration in terms of rms-equivalent voltage.”

##### 3.1.2 TEST PROCEDURES

###### **EIRP MEASUREMENT:**

Per KDB 971168 D01 Power Meas License Digital Systems v03r01 or subclause 5.2.5.5 of ANSI C63.26-2015, the relevant equation for determining the ERP or EIRP from the conducted RF output power measured using the guidance provided above is:

$$\text{ERP or EIRP} = P_{\text{Meas}} + G_{\text{T}} - L_{\text{c}}$$

Where:

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

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

$G_{\text{T}}$  = gain of the transmitting antenna, in dBd (ERP) or dBi (EIRP);

$L_{\text{c}}$  = signal attenuation in the connecting cable between the transmitter and antenna, in dB.

###### **CONDUCTED POWER MEASUREMENT:**

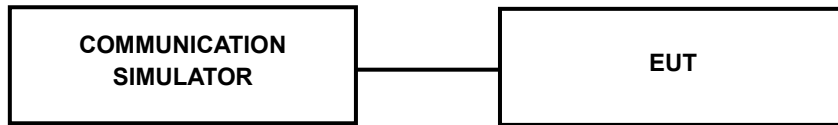
- a. The EUT was set up for the maximum power with LTE link data modulation and link up with simulator.
- b. Set the EUT to transmit under low, middle and high channel and record the power level shown on simulator.



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### 3.1.3 TEST SETUP

#### CONDUCTED POWER MEASUREMENT:



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

### 3.1.4 TEST RESULTS

#### AVERAGE CONDUCTED OUTPUT POWER (dBm)

Ant 0

LTE Band 7

| Band/BW | Modulation | RB Size | RB Offset | Low CH<br>20775         | Mid CH<br>21100       | High CH<br>21425        |
|---------|------------|---------|-----------|-------------------------|-----------------------|-------------------------|
|         |            |         |           | Frequency<br>2502.5 MHz | Frequency<br>2535 MHz | Frequency<br>2567.5 MHz |
| 7/5     | QPSK       | 1       | 0         | 23.92                   | 23.87                 | 23.82                   |
|         |            | 1       | 12        | 24.01                   | 24.04                 | 24.03                   |
|         |            | 1       | 24        | 23.92                   | 23.85                 | 23.94                   |
|         |            | 12      | 0         | 23.06                   | 23.02                 | 23.02                   |
|         |            | 12      | 6         | 23.10                   | 23.07                 | 23.17                   |
|         |            | 12      | 13        | 23.11                   | 23.08                 | 23.13                   |
|         |            | 25      | 0         | 23.06                   | 23.01                 | 23.07                   |
|         | 16QAM      | 1       | 0         | 22.96                   | 22.89                 | 22.95                   |
|         |            | 1       | 12        | 23.15                   | 23.20                 | 23.16                   |
|         |            | 1       | 24        | 23.03                   | 22.99                 | 23.07                   |
|         |            | 12      | 0         | 22.03                   | 21.94                 | 21.99                   |
|         |            | 12      | 6         | 22.05                   | 22.02                 | 22.12                   |
|         |            | 12      | 13        | 22.07                   | 22.09                 | 22.00                   |
|         |            | 25      | 0         | 22.02                   | 22.03                 | 22.05                   |
|         | 64QAM      | 1       | 0         | 22.08                   | 21.99                 | 22.01                   |
|         |            | 1       | 12        | 22.20                   | 22.19                 | 22.21                   |
|         |            | 1       | 24        | 21.95                   | 21.89                 | 21.93                   |
|         |            | 12      | 0         | 21.03                   | 21.03                 | 20.97                   |
|         |            | 12      | 6         | 21.04                   | 21.07                 | 21.09                   |
|         |            | 12      | 13        | 21.08                   | 21.05                 | 21.00                   |
|         |            | 25      | 0         | 21.04                   | 20.99                 | 21.06                   |



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| Band/BW | Modulation | RB Size | RB Offset | Low CH 20800       | Mid CH 21100       | High CH 21400      |
|---------|------------|---------|-----------|--------------------|--------------------|--------------------|
|         |            |         |           | Frequency 2505 MHz | Frequency 2535 MHz | Frequency 2565 MHz |
| 7/ 10   | QPSK       | 1       | 0         | 23.90              | 23.84              | 23.85              |
|         |            | 1       | 24        | 24.07              | 23.97              | 24.07              |
|         |            | 1       | 49        | 23.88              | 23.86              | 23.90              |
|         |            | 25      | 0         | 23.10              | 22.96              | 23.06              |
|         |            | 25      | 12        | 23.09              | 23.08              | 23.14              |
|         |            | 25      | 25        | 23.16              | 23.04              | 23.16              |
|         |            | 50      | 0         | 23.06              | 23.02              | 23.04              |
|         | 16QAM      | 1       | 0         | 22.98              | 22.87              | 23.01              |
|         |            | 1       | 24        | 23.20              | 23.20              | 23.14              |
|         |            | 1       | 49        | 23.05              | 22.96              | 23.03              |
|         |            | 25      | 0         | 22.08              | 21.95              | 22.02              |
|         |            | 25      | 12        | 22.10              | 21.99              | 22.13              |
|         |            | 25      | 25        | 22.07              | 22.07              | 22.01              |
|         |            | 50      | 0         | 22.08              | 21.96              | 22.06              |
|         | 64QAM      | 1       | 0         | 22.04              | 22.00              | 22.04              |
|         |            | 1       | 24        | 22.25              | 22.14              | 22.21              |
|         |            | 1       | 49        | 21.97              | 21.87              | 21.96              |
|         |            | 25      | 0         | 21.03              | 20.97              | 20.98              |
|         |            | 25      | 12        | 21.11              | 21.06              | 21.03              |
|         |            | 25      | 25        | 21.07              | 21.02              | 21.02              |
|         |            | 50      | 0         | 21.09              | 20.95              | 21.07              |

| Band/BW | Modulation | RB Size | RB Offset | Low CH<br>20825         | Mid CH<br>21100       | High CH<br>21375        |
|---------|------------|---------|-----------|-------------------------|-----------------------|-------------------------|
|         |            |         |           | Frequency<br>2507.5 MHz | Frequency<br>2535 MHz | Frequency<br>2562.5 MHz |
| 7/ 15   | QPSK       | 1       | 0         | 23.95                   | 23.90                 | 23.79                   |
|         |            | 1       | 37        | 24.02                   | 23.97                 | 24.02                   |
|         |            | 1       | 74        | 23.93                   | 23.84                 | 23.93                   |
|         |            | 36      | 0         | 23.10                   | 22.97                 | 23.02                   |
|         |            | 36      | 19        | 23.11                   | 23.04                 | 23.17                   |
|         |            | 36      | 39        | 23.17                   | 23.02                 | 23.17                   |
|         |            | 75      | 0         | 23.00                   | 23.05                 | 23.04                   |
|         | 16QAM      | 1       | 0         | 23.02                   | 22.87                 | 23.02                   |
|         |            | 1       | 37        | 23.13                   | 23.18                 | 23.17                   |
|         |            | 1       | 74        | 23.07                   | 22.98                 | 23.07                   |
|         |            | 36      | 0         | 22.07                   | 21.94                 | 21.99                   |
|         |            | 36      | 19        | 22.06                   | 21.99                 | 22.12                   |
|         |            | 36      | 39        | 22.14                   | 22.09                 | 21.98                   |
|         |            | 75      | 0         | 22.05                   | 21.96                 | 22.01                   |
|         | 64QAM      | 1       | 0         | 22.11                   | 21.98                 | 22.07                   |
|         |            | 1       | 37        | 22.26                   | 22.13                 | 22.18                   |
|         |            | 1       | 74        | 21.93                   | 21.86                 | 21.99                   |
|         |            | 36      | 0         | 21.08                   | 21.03                 | 20.92                   |
|         |            | 36      | 19        | 21.05                   | 21.00                 | 21.05                   |
|         |            | 36      | 39        | 21.10                   | 21.09                 | 21.04                   |
|         |            | 75      | 0         | 21.08                   | 20.93                 | 21.08                   |



| Band/BW | Modulation | RB Size | RB Offset | Low CH<br>20850       | Mid CH<br>21100       | High CH<br>21350      |
|---------|------------|---------|-----------|-----------------------|-----------------------|-----------------------|
|         |            |         |           | Frequency<br>2510 MHz | Frequency<br>2535 MHz | Frequency<br>2560 MHz |
| 7/ 20   | QPSK       | 1       | 0         | 23.98                 | 23.94                 | 23.99                 |
|         |            | 1       | 50        | <b>24.11</b>          | 24.07                 | 24.10                 |
|         |            | 1       | 99        | 23.98                 | 24.02                 | 23.97                 |
|         |            | 50      | 0         | 23.14                 | 23.06                 | 23.09                 |
|         |            | 50      | 25        | 23.19                 | 23.14                 | 23.21                 |
|         |            | 50      | 50        | 23.21                 | 23.12                 | 23.20                 |
|         |            | 100     | 0         | 23.10                 | 23.11                 | 23.11                 |
|         | 16QAM      | 1       | 0         | 23.06                 | 22.97                 | 23.05                 |
|         |            | 1       | 50        | 23.23                 | 23.24                 | 23.24                 |
|         |            | 1       | 99        | 23.12                 | 23.06                 | 23.11                 |
|         |            | 50      | 0         | 22.11                 | 22.03                 | 22.06                 |
|         |            | 50      | 25        | 22.14                 | 22.09                 | 22.16                 |
|         |            | 50      | 50        | 22.17                 | 22.13                 | 22.08                 |
|         |            | 100     | 0         | 22.12                 | 22.06                 | 22.09                 |
|         | 64QAM      | 1       | 0         | 22.14                 | 22.06                 | 22.11                 |
|         |            | 1       | 50        | 22.30                 | 22.22                 | 22.25                 |
|         |            | 1       | 99        | 22.01                 | 21.96                 | 22.03                 |
|         |            | 50      | 0         | 21.11                 | 21.07                 | 21.02                 |
|         |            | 50      | 25        | 21.14                 | 21.10                 | 21.13                 |
|         |            | 50      | 50        | 21.14                 | 21.12                 | 21.10                 |
|         |            | 100     | 0         | 21.12                 | 21.03                 | 21.11                 |

LTE Band 38

| Band/BW | Modulation | RB Size | RB Offset | Low CH 37775         | Mid CH 38000       | High CH 38225       |
|---------|------------|---------|-----------|----------------------|--------------------|---------------------|
|         |            |         |           | Frequency 2572.5 MHz | Frequency 2595 MHz | Frequency 2617.5MHz |
| 38/ 5   | QPSK       | 1       | 0         | 23.83                | 23.81              | 23.95               |
|         |            | 1       | 12        | 24.06                | 24.04              | 24.09               |
|         |            | 1       | 24        | 23.91                | 24.00              | 24.05               |
|         |            | 12      | 0         | 22.89                | 22.91              | 22.92               |
|         |            | 12      | 6         | 22.78                | 22.85              | 22.87               |
|         |            | 12      | 13        | 22.83                | 22.86              | 22.96               |
|         |            | 25      | 0         | 22.88                | 22.93              | 22.95               |
|         | 16QAM      | 1       | 0         | 22.49                | 22.45              | 22.60               |
|         |            | 1       | 12        | 22.76                | 22.76              | 22.84               |
|         |            | 1       | 24        | 22.61                | 22.73              | 22.71               |
|         |            | 12      | 0         | 21.87                | 21.87              | 22.00               |
|         |            | 12      | 6         | 21.89                | 21.96              | 22.00               |
|         |            | 12      | 13        | 21.89                | 21.92              | 22.02               |
|         |            | 25      | 0         | 21.98                | 22.03              | 22.04               |
|         | 64QAM      | 1       | 0         | 21.62                | 21.71              | 21.79               |
|         |            | 1       | 12        | 21.87                | 21.89              | 21.83               |
|         |            | 1       | 24        | 21.62                | 21.70              | 21.74               |
|         |            | 12      | 0         | 20.92                | 20.90              | 20.94               |
|         |            | 12      | 6         | 20.98                | 21.05              | 21.01               |
|         |            | 12      | 13        | 20.92                | 21.02              | 20.98               |
|         |            | 25      | 0         | 20.90                | 20.91              | 20.99               |

| Band/BW | Modulation | RB Size | RB Offset | Low CH 37800       | Mid CH 38000       | High CH 38200      |
|---------|------------|---------|-----------|--------------------|--------------------|--------------------|
|         |            |         |           | Frequency 2575 MHz | Frequency 2595 MHz | Frequency 2615 MHz |
| 38/ 10  | QPSK       | 1       | 0         | 23.84              | 23.84              | 23.95              |
|         |            | 1       | 24        | 24.04              | 24.07              | 24.09              |
|         |            | 1       | 49        | 23.92              | 23.96              | 24.08              |
|         |            | 25      | 0         | 22.85              | 22.94              | 22.88              |
|         |            | 25      | 12        | 22.82              | 22.79              | 22.90              |
|         |            | 25      | 25        | 22.82              | 22.85              | 22.90              |
|         |            | 50      | 0         | 22.90              | 22.93              | 22.94              |
|         | 16QAM      | 1       | 0         | 22.44              | 22.48              | 22.60              |
|         |            | 1       | 24        | 22.78              | 22.75              | 22.87              |
|         |            | 1       | 49        | 22.60              | 22.70              | 22.75              |
|         |            | 25      | 0         | 21.86              | 21.90              | 21.96              |
|         |            | 25      | 12        | 21.87              | 22.02              | 22.03              |
|         |            | 25      | 25        | 21.92              | 21.92              | 21.96              |
|         |            | 50      | 0         | 21.98              | 22.04              | 22.08              |
|         | 64QAM      | 1       | 0         | 21.66              | 21.67              | 21.73              |
|         |            | 1       | 24        | 21.85              | 21.92              | 21.88              |
|         |            | 1       | 49        | 21.62              | 21.70              | 21.74              |
|         |            | 25      | 0         | 20.89              | 20.90              | 21.00              |
|         |            | 25      | 12        | 20.96              | 21.05              | 20.99              |
|         |            | 25      | 25        | 20.98              | 20.95              | 20.98              |
|         |            | 50      | 0         | 20.91              | 20.94              | 20.98              |



Test Report No.: W7L-P23030004RF06

| Band/BW | Modulation | RB Size | RB Offset | Low CH 37825         | Mid CH 38000       | High CH 38175       |
|---------|------------|---------|-----------|----------------------|--------------------|---------------------|
|         |            |         |           | Frequency 2577.5 MHz | Frequency 2595 MHz | Frequency 2612.5MHz |
| 38/ 15  | QPSK       | 1       | 0         | 23.85                | 23.83              | 23.94               |
|         |            | 1       | 37        | 24.08                | 24.02              | 24.09               |
|         |            | 1       | 74        | 23.93                | 23.93              | 24.08               |
|         |            | 36      | 0         | 22.92                | 22.94              | 22.85               |
|         |            | 36      | 19        | 22.77                | 22.79              | 22.86               |
|         |            | 36      | 39        | 22.87                | 22.85              | 22.96               |
|         |            | 75      | 0         | 22.94                | 22.88              | 22.95               |
|         | 16QAM      | 1       | 0         | 22.45                | 22.45              | 22.60               |
|         |            | 1       | 37        | 22.82                | 22.74              | 22.91               |
|         |            | 1       | 74        | 22.59                | 22.71              | 22.72               |
|         |            | 36      | 0         | 21.92                | 21.84              | 22.01               |
|         |            | 36      | 19        | 21.87                | 21.99              | 22.00               |
|         |            | 36      | 39        | 21.93                | 21.91              | 22.02               |
|         |            | 75      | 0         | 22.04                | 21.98              | 22.05               |
|         | 64QAM      | 1       | 0         | 21.64                | 21.64              | 21.79               |
|         |            | 1       | 37        | 21.90                | 21.92              | 21.83               |
|         |            | 1       | 74        | 21.65                | 21.63              | 21.70               |
|         |            | 36      | 0         | 20.95                | 20.89              | 21.00               |
|         |            | 36      | 19        | 21.03                | 21.05              | 20.96               |
|         |            | 36      | 39        | 20.99                | 21.01              | 20.92               |
|         |            | 75      | 0         | 20.95                | 20.89              | 20.96               |



Test Report No.: W7L-P23030004RF06

| Band/BW | Modulation | RB Size | RB Offset | Low CH 37850       | Mid CH 38000       | High CH 38150      |
|---------|------------|---------|-----------|--------------------|--------------------|--------------------|
|         |            |         |           | Frequency 2580 MHz | Frequency 2595 MHz | Frequency 2610 MHz |
| 38/ 20  | QPSK       | 1       | 0         | 24.02              | 24.01              | 24.04              |
|         |            | 1       | 50        | 24.12              | 24.11              | <b>24.16</b>       |
|         |            | 1       | 99        | 24.01              | 24.03              | 24.12              |
|         |            | 50      | 0         | 22.95              | 22.98              | 22.95              |
|         |            | 50      | 25        | 22.86              | 22.89              | 22.94              |
|         |            | 50      | 50        | 22.92              | 22.93              | 23.00              |
|         |            | 100     | 0         | 22.98              | 22.97              | 23.02              |
|         | 16QAM      | 1       | 0         | 22.53              | 22.55              | 22.64              |
|         |            | 1       | 50        | 22.86              | 22.84              | 22.94              |
|         |            | 1       | 99        | 22.69              | 22.77              | 22.79              |
|         |            | 50      | 0         | 21.96              | 21.94              | 22.04              |
|         |            | 50      | 25        | 21.97              | 22.05              | 22.07              |
|         |            | 50      | 50        | 21.98              | 21.99              | 22.06              |
|         |            | 100     | 0         | 22.08              | 22.07              | 22.12              |
|         | 64QAM      | 1       | 0         | 21.72              | 21.74              | 21.83              |
|         |            | 1       | 50        | 21.93              | 21.96              | 21.93              |
|         |            | 1       | 99        | 21.72              | 21.73              | 21.78              |
|         |            | 50      | 0         | 20.98              | 20.97              | 21.04              |
|         |            | 50      | 25        | 21.06              | 21.09              | 21.06              |
|         |            | 50      | 50        | 21.02              | 21.05              | 21.02              |
|         |            | 100     | 0         | 20.99              | 20.98              | 21.03              |



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**Test Report No.: W7L-P23030004RF06**

LTE Band 41

| Band/BW | Modulation | RB Size | RB Offset | Low CH<br>(39675)        | Mid CH<br>(40620)      | High CH<br>(41565)       |
|---------|------------|---------|-----------|--------------------------|------------------------|--------------------------|
|         |            |         |           | Frequency<br>(2498.5)MHz | Frequency<br>(2593)MHz | Frequency<br>(2687.5)MHz |
| 41/ 5   | QPSK       | 1       | 0         | 23.95                    | 23.90                  | 23.97                    |
|         |            | 1       | 12        | 24.07                    | 24.07                  | 24.12                    |
|         |            | 1       | 24        | 23.94                    | 23.98                  | 23.97                    |
|         |            | 12      | 0         | 22.94                    | 23.00                  | 23.04                    |
|         |            | 12      | 6         | 22.96                    | 22.97                  | 22.98                    |
|         |            | 12      | 13        | 22.85                    | 22.96                  | 22.97                    |
|         |            | 25      | 0         | 22.92                    | 22.93                  | 23.00                    |
|         | 16QAM      | 1       | 0         | 22.63                    | 22.67                  | 22.74                    |
|         |            | 1       | 12        | 22.76                    | 22.83                  | 22.88                    |
|         |            | 1       | 24        | 22.53                    | 22.58                  | 22.60                    |
|         |            | 12      | 0         | 21.89                    | 21.92                  | 22.04                    |
|         |            | 12      | 6         | 21.86                    | 21.91                  | 21.98                    |
|         |            | 12      | 13        | 21.83                    | 21.91                  | 21.97                    |
|         |            | 25      | 0         | 21.97                    | 21.93                  | 22.05                    |
|         | 64QAM      | 1       | 0         | 21.63                    | 21.72                  | 21.78                    |
|         |            | 1       | 12        | 21.77                    | 21.78                  | 21.82                    |
|         |            | 1       | 24        | 21.46                    | 21.58                  | 21.66                    |
|         |            | 12      | 0         | 20.91                    | 20.82                  | 20.99                    |
|         |            | 12      | 6         | 20.75                    | 20.84                  | 20.89                    |
|         |            | 12      | 13        | 20.86                    | 20.82                  | 20.94                    |
|         |            | 25      | 0         | 20.90                    | 20.96                  | 20.95                    |



Test Report No.: W7L-P23030004RF06

| Band/BW | Modulation | RB Size | RB Offset | Low CH (39700)      | Mid CH (40620)      | High CH (41540)     |
|---------|------------|---------|-----------|---------------------|---------------------|---------------------|
|         |            |         |           | Frequency (2501)MHz | Frequency (2593)MHz | Frequency (2685)MHz |
| 41/ 10  | QPSK       | 1       | 0         | 23.92               | 23.90               | 23.95               |
|         |            | 1       | 24        | 24.07               | 24.08               | 24.17               |
|         |            | 1       | 49        | 23.91               | 23.94               | 23.95               |
|         |            | 25      | 0         | 22.95               | 23.03               | 23.08               |
|         |            | 25      | 12        | 23.02               | 22.97               | 23.04               |
|         |            | 25      | 25        | 22.83               | 22.95               | 22.98               |
|         |            | 50      | 0         | 22.97               | 22.90               | 23.00               |
|         | 16QAM      | 1       | 0         | 22.63               | 22.63               | 22.74               |
|         |            | 1       | 24        | 22.81               | 22.86               | 22.87               |
|         |            | 1       | 49        | 22.53               | 22.55               | 22.57               |
|         |            | 25      | 0         | 21.91               | 21.98               | 22.00               |
|         |            | 25      | 12        | 21.90               | 21.96               | 21.97               |
|         |            | 25      | 25        | 21.82               | 21.88               | 21.92               |
|         |            | 50      | 0         | 22.01               | 21.97               | 21.98               |
|         | 64QAM      | 1       | 0         | 21.62               | 21.69               | 21.81               |
|         |            | 1       | 24        | 21.82               | 21.82               | 21.79               |
|         |            | 1       | 49        | 21.52               | 21.55               | 21.61               |
|         |            | 25      | 0         | 20.89               | 20.88               | 20.94               |
|         |            | 25      | 12        | 20.82               | 20.78               | 20.91               |
|         |            | 25      | 25        | 20.85               | 20.84               | 20.96               |
|         |            | 50      | 0         | 20.95               | 20.97               | 20.97               |

| Band/BW | Modulation | RB Size | RB Offset | Low CH (39725)        | Mid CH (40620)      | High CH (41515)       |
|---------|------------|---------|-----------|-----------------------|---------------------|-----------------------|
|         |            |         |           | Frequency (2503.5)MHz | Frequency (2593)MHz | Frequency (2682.5)MHz |
| 41/ 15  | QPSK       | 1       | 0         | 23.99                 | 23.87               | 23.97                 |
|         |            | 1       | 37        | 24.05                 | 24.03               | 24.17                 |
|         |            | 1       | 74        | 23.97                 | 23.95               | 23.97                 |
|         |            | 36      | 0         | 22.92                 | 23.04               | 23.10                 |
|         |            | 36      | 19        | 23.03                 | 22.97               | 22.99                 |
|         |            | 36      | 39        | 22.81                 | 22.95               | 23.01                 |
|         |            | 75      | 0         | 22.97                 | 22.95               | 22.97                 |
|         | 16QAM      | 1       | 0         | 22.67                 | 22.63               | 22.77                 |
|         |            | 1       | 37        | 22.80                 | 22.86               | 22.82                 |
|         |            | 1       | 74        | 22.49                 | 22.57               | 22.61                 |
|         |            | 36      | 0         | 21.95                 | 21.99               | 22.05                 |
|         |            | 36      | 19        | 21.84                 | 21.92               | 21.98                 |
|         |            | 36      | 39        | 21.87                 | 21.91               | 21.97                 |
|         |            | 75      | 0         | 22.02                 | 21.90               | 22.00                 |
|         | 64QAM      | 1       | 0         | 21.64                 | 21.70               | 21.82                 |
|         |            | 1       | 37        | 21.83                 | 21.79               | 21.79                 |
|         |            | 1       | 74        | 21.48                 | 21.58               | 21.66                 |
|         |            | 36      | 0         | 20.94                 | 20.82               | 20.98                 |
|         |            | 36      | 19        | 20.76                 | 20.80               | 20.90                 |
|         |            | 36      | 39        | 20.88                 | 20.86               | 20.96                 |
|         |            | 75      | 0         | 20.94                 | 20.98               | 21.00                 |



| Band/BW | Modulation | RB Size | RB Offset | Low CH (39750)      | Mid CH (40620)      | High CH (41490)     |
|---------|------------|---------|-----------|---------------------|---------------------|---------------------|
|         |            |         |           | Frequency (2506)MHz | Frequency (2593)MHz | Frequency (2680)MHz |
| 41/ 20  | QPSK       | 1       | 0         | 24.03               | 23.95               | 24.00               |
|         |            | 1       | 50        | <b>24.19</b>        | 24.09               | 24.09               |
|         |            | 1       | 99        | 24.03               | 23.99               | 23.99               |
|         |            | 50      | 0         | 23.11               | 23.05               | 22.98               |
|         |            | 50      | 25        | 23.06               | 23.02               | 23.04               |
|         |            | 50      | 50        | 23.03               | 22.97               | 22.89               |
|         |            | 100     | 0         | 23.02               | 22.98               | 22.98               |
|         | 16QAM      | 1       | 0         | 22.79               | 22.69               | 22.70               |
|         |            | 1       | 50        | 22.89               | 22.88               | 22.84               |
|         |            | 1       | 99        | 22.65               | 22.60               | 22.55               |
|         |            | 50      | 0         | 22.06               | 22.00               | 21.97               |
|         |            | 50      | 25        | 22.03               | 21.97               | 21.92               |
|         |            | 50      | 50        | 21.99               | 21.93               | 21.90               |
|         |            | 100     | 0         | 22.06               | 21.98               | 22.03               |
|         | 64QAM      | 1       | 0         | 21.83               | 21.74               | 21.70               |
|         |            | 1       | 50        | 21.87               | 21.84               | 21.85               |
|         |            | 1       | 99        | 21.67               | 21.60               | 21.54               |
|         |            | 50      | 0         | 21.01               | 20.90               | 20.95               |
|         |            | 50      | 25        | 20.94               | 20.86               | 20.83               |
|         |            | 50      | 50        | 20.98               | 20.90               | 20.90               |
|         |            | 100     | 0         | 21.03               | 20.99               | 20.96               |

**Ant 4**

LTE Band 7

| Band/BW | Modulation | RB Size | RB Offset | Low CH<br>20775         | Mid CH<br>21100       | High CH<br>21425        |
|---------|------------|---------|-----------|-------------------------|-----------------------|-------------------------|
|         |            |         |           | Frequency<br>2502.5 MHz | Frequency<br>2535 MHz | Frequency<br>2567.5 MHz |
| 7/5     | QPSK       | 1       | 0         | 23.06                   | 23.01                 | 22.95                   |
|         |            | 1       | 12        | 23.08                   | 23.08                 | 23.04                   |
|         |            | 1       | 24        | 23.07                   | 22.95                 | 23.12                   |
|         |            | 12      | 0         | 23.06                   | 22.95                 | 22.96                   |
|         |            | 12      | 6         | 23.08                   | 22.98                 | 23.09                   |
|         |            | 12      | 13        | 23.06                   | 22.96                 | 23.02                   |
|         |            | 25      | 0         | 23.04                   | 22.92                 | 22.99                   |
|         | 16QAM      | 1       | 0         | 22.95                   | 22.81                 | 22.88                   |
|         |            | 1       | 12        | 23.02                   | 23.00                 | 22.97                   |
|         |            | 1       | 24        | 22.94                   | 22.83                 | 22.92                   |
|         |            | 12      | 0         | 21.99                   | 21.83                 | 21.89                   |
|         |            | 12      | 6         | 22.04                   | 21.94                 | 22.05                   |
|         |            | 12      | 13        | 22.01                   | 21.96                 | 21.88                   |
|         |            | 25      | 0         | 21.99                   | 21.93                 | 21.96                   |
|         | 64QAM      | 1       | 0         | 22.00                   | 21.84                 | 21.87                   |
|         |            | 1       | 12        | 22.06                   | 21.98                 | 22.01                   |
|         |            | 1       | 24        | 22.00                   | 21.87                 | 21.92                   |
|         |            | 12      | 0         | 21.02                   | 20.95                 | 20.90                   |
|         |            | 12      | 6         | 21.01                   | 20.97                 | 21.00                   |
|         |            | 12      | 13        | 21.04                   | 20.94                 | 20.90                   |
|         |            | 25      | 0         | 21.00                   | 20.88                 | 20.96                   |

| Band/BW | Modulation | RB Size | RB Offset | Low CH 20800       | Mid CH 21100       | High CH 21400      |
|---------|------------|---------|-----------|--------------------|--------------------|--------------------|
|         |            |         |           | Frequency 2505 MHz | Frequency 2535 MHz | Frequency 2565 MHz |
| 7/ 10   | QPSK       | 1       | 0         | 23.06              | 23.02              | 23.01              |
|         |            | 1       | 24        | 23.13              | 22.98              | 23.12              |
|         |            | 1       | 49        | 23.00              | 23.02              | 23.04              |
|         |            | 25      | 0         | 23.10              | 22.89              | 23.00              |
|         |            | 25      | 12        | 23.07              | 22.99              | 23.06              |
|         |            | 25      | 25        | 23.11              | 22.92              | 23.05              |
|         |            | 50      | 0         | 23.04              | 22.93              | 22.96              |
|         | 16QAM      | 1       | 0         | 22.97              | 22.79              | 22.94              |
|         |            | 1       | 24        | 23.07              | 23.00              | 22.95              |
|         |            | 1       | 49        | 22.96              | 22.80              | 22.88              |
|         |            | 25      | 0         | 22.04              | 21.84              | 21.92              |
|         |            | 25      | 12        | 22.09              | 21.91              | 22.06              |
|         |            | 25      | 25        | 22.01              | 21.94              | 21.89              |
|         |            | 50      | 0         | 22.05              | 21.86              | 21.97              |
|         | 64QAM      | 1       | 0         | 21.96              | 21.85              | 21.90              |
|         |            | 1       | 24        | 22.11              | 21.93              | 22.01              |
|         |            | 1       | 49        | 22.02              | 21.85              | 21.95              |
|         |            | 25      | 0         | 21.02              | 20.89              | 20.91              |
|         |            | 25      | 12        | 21.08              | 20.96              | 20.94              |
|         |            | 25      | 25        | 21.03              | 20.91              | 20.92              |
|         |            | 50      | 0         | 21.05              | 20.84              | 20.97              |

| Band/BW | Modulation | RB Size | RB Offset | Low CH<br>20825         | Mid CH<br>21100       | High CH<br>21375        |
|---------|------------|---------|-----------|-------------------------|-----------------------|-------------------------|
|         |            |         |           | Frequency<br>2507.5 MHz | Frequency<br>2535 MHz | Frequency<br>2562.5 MHz |
| 7/ 15   | QPSK       | 1       | 0         | 23.14                   | 23.07                 | 23.03                   |
|         |            | 1       | 37        | 23.13                   | 23.08                 | 23.02                   |
|         |            | 1       | 74        | 23.05                   | 22.95                 | 23.07                   |
|         |            | 36      | 0         | 23.09                   | 22.91                 | 22.99                   |
|         |            | 36      | 19        | 23.13                   | 22.96                 | 23.06                   |
|         |            | 36      | 39        | 23.08                   | 22.90                 | 23.05                   |
|         |            | 75      | 0         | 23.04                   | 22.92                 | 23.00                   |
|         | 16QAM      | 1       | 0         | 22.95                   | 22.83                 | 22.91                   |
|         |            | 1       | 37        | 23.06                   | 22.94                 | 23.02                   |
|         |            | 1       | 74        | 22.93                   | 22.84                 | 22.89                   |
|         |            | 36      | 0         | 22.02                   | 21.84                 | 21.92                   |
|         |            | 36      | 19        | 22.09                   | 21.92                 | 22.02                   |
|         |            | 36      | 39        | 22.03                   | 21.90                 | 21.92                   |
|         |            | 75      | 0         | 22.06                   | 21.92                 | 21.90                   |
|         | 64QAM      | 1       | 0         | 21.99                   | 21.81                 | 21.89                   |
|         |            | 1       | 37        | 22.13                   | 21.93                 | 22.01                   |
|         |            | 1       | 74        | 22.02                   | 21.85                 | 21.95                   |
|         |            | 36      | 0         | 21.02                   | 20.89                 | 20.91                   |
|         |            | 36      | 19        | 21.08                   | 20.96                 | 20.94                   |
|         |            | 36      | 39        | 21.01                   | 20.91                 | 20.92                   |
|         |            | 75      | 0         | 21.04                   | 20.89                 | 20.95                   |

| Band/BW | Modulation | RB Size | RB Offset | Low CH<br>20850       | Mid CH<br>21100       | High CH<br>21350      |
|---------|------------|---------|-----------|-----------------------|-----------------------|-----------------------|
|         |            |         |           | Frequency<br>2510 MHz | Frequency<br>2535 MHz | Frequency<br>2560 MHz |
| 7/ 20   | QPSK       | 1       | 0         | 23.15                 | 23.08                 | 23.14                 |
|         |            | 1       | 50        | <b>23.26</b>          | 23.09                 | 23.19                 |
|         |            | 1       | 99        | 23.17                 | 23.01                 | 23.14                 |
|         |            | 50      | 0         | 23.18                 | 23.03                 | 23.07                 |
|         |            | 50      | 25        | 23.21                 | 23.09                 | 23.17                 |
|         |            | 50      | 50        | 23.20                 | 23.04                 | 23.13                 |
|         |            | 100     | 0         | 23.12                 | 23.06                 | 23.07                 |
|         | 16QAM      | 1       | 0         | 23.09                 | 22.93                 | 23.02                 |
|         |            | 1       | 50        | 23.14                 | 23.08                 | 23.09                 |
|         |            | 1       | 99        | 23.07                 | 22.94                 | 23.00                 |
|         |            | 50      | 0         | 22.11                 | 21.96                 | 22.00                 |
|         |            | 50      | 25        | 22.17                 | 22.05                 | 22.13                 |
|         |            | 50      | 50        | 22.15                 | 22.04                 | 22.00                 |
|         |            | 100     | 0         | 22.13                 | 22.00                 | 22.04                 |
|         | 64QAM      | 1       | 0         | 22.10                 | 21.95                 | 22.01                 |
|         |            | 1       | 50        | 22.20                 | 22.05                 | 22.09                 |
|         |            | 1       | 99        | 22.10                 | 21.98                 | 22.06                 |
|         |            | 50      | 0         | 21.14                 | 21.03                 | 20.99                 |
|         |            | 50      | 25        | 21.15                 | 21.04                 | 21.08                 |
|         |            | 50      | 50        | 21.14                 | 21.05                 | 21.04                 |
|         |            | 100     | 0         | 21.12                 | 20.96                 | 21.05                 |

LTE Band 38

| Band/BW | Modulation | RB Size | RB Offset | Low CH 37775         | Mid CH 38000       | High CH 38225       |
|---------|------------|---------|-----------|----------------------|--------------------|---------------------|
|         |            |         |           | Frequency 2572.5 MHz | Frequency 2595 MHz | Frequency 2617.5MHz |
| 38/ 5   | QPSK       | 1       | 0         | 23.91                | 23.79              | 23.87               |
|         |            | 1       | 12        | 23.94                | 23.91              | 23.99               |
|         |            | 1       | 24        | 23.78                | 23.75              | 23.72               |
|         |            | 12      | 0         | 22.79                | 22.80              | 22.84               |
|         |            | 12      | 6         | 22.81                | 22.81              | 22.80               |
|         |            | 12      | 13        | 22.82                | 22.74              | 22.77               |
|         |            | 25      | 0         | 22.80                | 22.80              | 22.81               |
|         | 16QAM      | 1       | 0         | 22.55                | 22.42              | 22.52               |
|         |            | 1       | 12        | 22.69                | 22.63              | 22.69               |
|         |            | 1       | 24        | 22.49                | 22.53              | 22.47               |
|         |            | 12      | 0         | 21.87                | 21.76              | 21.82               |
|         |            | 12      | 6         | 21.81                | 21.79              | 21.78               |
|         |            | 12      | 13        | 21.84                | 21.76              | 21.79               |
|         |            | 25      | 0         | 21.90                | 21.91              | 21.92               |
|         | 64QAM      | 1       | 0         | 21.60                | 21.54              | 21.51               |
|         |            | 1       | 12        | 21.66                | 21.74              | 21.78               |
|         |            | 1       | 24        | 21.58                | 21.56              | 21.54               |
|         |            | 12      | 0         | 20.82                | 20.80              | 20.88               |
|         |            | 12      | 6         | 20.78                | 20.84              | 20.83               |
|         |            | 12      | 13        | 20.81                | 20.87              | 20.83               |
|         |            | 25      | 0         | 20.85                | 20.79              | 20.84               |



Test Report No.: W7L-P23030004RF06

| Band/BW | Modulation | RB Size | RB Offset | Low CH 37800       | Mid CH 38000       | High CH 38200      |
|---------|------------|---------|-----------|--------------------|--------------------|--------------------|
|         |            |         |           | Frequency 2575 MHz | Frequency 2595 MHz | Frequency 2615 MHz |
| 38/ 10  | QPSK       | 1       | 0         | 23.91              | 23.82              | 23.88              |
|         |            | 1       | 24        | 23.94              | 23.94              | 23.97              |
|         |            | 1       | 49        | 23.81              | 23.71              | 23.73              |
|         |            | 25      | 0         | 22.75              | 22.83              | 22.80              |
|         |            | 25      | 12        | 22.84              | 22.75              | 22.84              |
|         |            | 25      | 25        | 22.76              | 22.73              | 22.76              |
|         |            | 50      | 0         | 22.79              | 22.80              | 22.83              |
|         | 16QAM      | 1       | 0         | 22.55              | 22.45              | 22.47              |
|         |            | 1       | 24        | 22.72              | 22.62              | 22.71              |
|         |            | 1       | 49        | 22.53              | 22.50              | 22.46              |
|         |            | 25      | 0         | 21.83              | 21.79              | 21.81              |
|         |            | 25      | 12        | 21.84              | 21.85              | 21.76              |
|         |            | 25      | 25        | 21.78              | 21.76              | 21.82              |
|         |            | 50      | 0         | 21.94              | 21.92              | 21.92              |
|         | 64QAM      | 1       | 0         | 21.54              | 21.50              | 21.55              |
|         |            | 1       | 24        | 21.71              | 21.77              | 21.76              |
|         |            | 1       | 49        | 21.58              | 21.56              | 21.54              |
|         |            | 25      | 0         | 20.88              | 20.80              | 20.85              |
|         |            | 25      | 12        | 20.76              | 20.84              | 20.81              |
|         |            | 25      | 25        | 20.81              | 20.80              | 20.89              |
|         |            | 50      | 0         | 20.84              | 20.82              | 20.85              |



Test Report No.: W7L-P23030004RF06

| Band/BW | Modulation | RB Size | RB Offset | Low CH 37825         | Mid CH 38000       | High CH 38175       |
|---------|------------|---------|-----------|----------------------|--------------------|---------------------|
|         |            |         |           | Frequency 2577.5 MHz | Frequency 2595 MHz | Frequency 2612.5MHz |
| 38/ 15  | QPSK       | 1       | 0         | 23.92                | 23.87              | 23.92               |
|         |            | 1       | 37        | 23.97                | 23.90              | 24.00               |
|         |            | 1       | 74        | 23.78                | 23.69              | 23.78               |
|         |            | 36      | 0         | 22.78                | 22.77              | 22.82               |
|         |            | 36      | 19        | 22.78                | 22.81              | 22.85               |
|         |            | 36      | 39        | 22.78                | 22.71              | 22.77               |
|         |            | 75      | 0         | 22.83                | 22.76              | 22.86               |
|         | 16QAM      | 1       | 0         | 22.52                | 22.43              | 22.52               |
|         |            | 1       | 37        | 22.75                | 22.61              | 22.71               |
|         |            | 1       | 74        | 22.54                | 22.47              | 22.51               |
|         |            | 36      | 0         | 21.84                | 21.77              | 21.81               |
|         |            | 36      | 19        | 21.85                | 21.78              | 21.82               |
|         |            | 36      | 39        | 21.81                | 21.77              | 21.78               |
|         |            | 75      | 0         | 21.94                | 21.87              | 21.97               |
|         | 64QAM      | 1       | 0         | 21.57                | 21.48              | 21.57               |
|         |            | 1       | 37        | 21.72                | 21.71              | 21.76               |
|         |            | 1       | 74        | 21.52                | 21.55              | 21.61               |
|         |            | 36      | 0         | 20.84                | 20.77              | 20.87               |
|         |            | 36      | 19        | 20.79                | 20.80              | 20.88               |
|         |            | 36      | 39        | 20.75                | 20.86              | 20.90               |
|         |            | 75      | 0         | 20.79                | 20.82              | 20.90               |





Test Report No.: W7L-P23030004RF06

| Band/BW | Modulation | RB Size | RB Offset | Low CH 37850       | Mid CH 38000       | High CH 38150      |
|---------|------------|---------|-----------|--------------------|--------------------|--------------------|
|         |            |         |           | Frequency 2580 MHz | Frequency 2595 MHz | Frequency 2610 MHz |
| 38/ 20  | QPSK       | 1       | 0         | 23.98              | 23.93              | 23.98              |
|         |            | 1       | 50        | 24.05              | 24.02              | <b>24.09</b>       |
|         |            | 1       | 99        | 23.99              | 23.92              | 23.96              |
|         |            | 50      | 0         | 22.86              | 22.91              | 22.94              |
|         |            | 50      | 25        | 22.92              | 22.89              | 22.92              |
|         |            | 50      | 50        | 22.90              | 22.85              | 22.90              |
|         |            | 100     | 0         | 22.91              | 22.88              | 22.95              |
|         | 16QAM      | 1       | 0         | 22.63              | 22.56              | 22.60              |
|         |            | 1       | 50        | 22.83              | 22.75              | 22.83              |
|         |            | 1       | 99        | 22.61              | 22.61              | 22.59              |
|         |            | 50      | 0         | 21.95              | 21.87              | 21.95              |
|         |            | 50      | 25        | 21.92              | 21.92              | 21.90              |
|         |            | 50      | 50        | 21.92              | 21.87              | 21.92              |
|         |            | 100     | 0         | 22.02              | 21.99              | 22.06              |
|         | 64QAM      | 1       | 0         | 21.68              | 21.61              | 21.65              |
|         |            | 1       | 50        | 21.80              | 21.85              | 21.88              |
|         |            | 1       | 99        | 21.66              | 21.63              | 21.68              |
|         |            | 50      | 0         | 20.96              | 20.91              | 20.98              |
|         |            | 50      | 25        | 20.87              | 20.92              | 20.95              |
|         |            | 50      | 50        | 20.89              | 20.94              | 20.97              |
|         |            | 100     | 0         | 20.93              | 20.90              | 20.97              |



**BUREAU  
VERITAS**

**Test Report No.: W7L-P23030004RF06**

LTE Band 41

| Band/BW | Modulation | RB Size | RB Offset | Low CH (39675)        | Mid CH (40620)      | High CH (41565)       |
|---------|------------|---------|-----------|-----------------------|---------------------|-----------------------|
|         |            |         |           | Frequency (2498.5)MHz | Frequency (2593)MHz | Frequency (2687.5)MHz |
| 41/ 5   | QPSK       | 1       | 0         | 24.00                 | 23.89               | 24.02                 |
|         |            | 1       | 12        | 24.11                 | 24.05               | 24.16                 |
|         |            | 1       | 24        | 23.88                 | 23.86               | 23.91                 |
|         |            | 12      | 0         | 23.01                 | 23.01               | 23.11                 |
|         |            | 12      | 6         | 22.95                 | 22.90               | 22.97                 |
|         |            | 12      | 13        | 22.94                 | 22.99               | 23.06                 |
|         |            | 25      | 0         | 22.97                 | 22.92               | 23.05                 |
|         | 16QAM      | 1       | 0         | 22.88                 | 22.86               | 22.99                 |
|         |            | 1       | 12        | 22.99                 | 23.00               | 23.11                 |
|         |            | 1       | 24        | 22.78                 | 22.77               | 22.85                 |
|         |            | 12      | 0         | 22.01                 | 21.98               | 22.16                 |
|         |            | 12      | 6         | 21.88                 | 21.87               | 22.00                 |
|         |            | 12      | 13        | 21.89                 | 21.91               | 22.03                 |
|         |            | 25      | 0         | 22.02                 | 21.92               | 22.10                 |
|         | 64QAM      | 1       | 0         | 21.87                 | 21.90               | 22.02                 |
|         |            | 1       | 12        | 22.02                 | 21.97               | 22.07                 |
|         |            | 1       | 24        | 21.72                 | 21.78               | 21.92                 |
|         |            | 12      | 0         | 20.97                 | 20.82               | 21.05                 |
|         |            | 12      | 6         | 20.85                 | 20.88               | 20.99                 |
|         |            | 12      | 13        | 20.90                 | 20.80               | 20.98                 |
|         |            | 25      | 0         | 20.92                 | 20.92               | 20.97                 |



Test Report No.: W7L-P23030004RF06

| Band/BW | Modulation | RB Size | RB Offset | Low CH (39700)      | Mid CH (40620)      | High CH (41540)     |
|---------|------------|---------|-----------|---------------------|---------------------|---------------------|
|         |            |         |           | Frequency (2501)MHz | Frequency (2593)MHz | Frequency (2685)MHz |
| 41/ 10  | QPSK       | 1       | 0         | 23.97               | 23.89               | 24.00               |
|         |            | 1       | 24        | 24.11               | 24.06               | 24.21               |
|         |            | 1       | 49        | 23.85               | 23.82               | 23.89               |
|         |            | 25      | 0         | 23.02               | 23.04               | 23.15               |
|         |            | 25      | 12        | 23.01               | 22.90               | 23.03               |
|         |            | 25      | 25        | 22.92               | 22.98               | 23.07               |
|         |            | 50      | 0         | 23.02               | 22.89               | 23.05               |
|         | 16QAM      | 1       | 0         | 22.88               | 22.82               | 22.99               |
|         |            | 1       | 24        | 23.04               | 23.03               | 23.10               |
|         |            | 1       | 49        | 22.78               | 22.74               | 22.82               |
|         |            | 25      | 0         | 22.03               | 22.04               | 22.12               |
|         |            | 25      | 12        | 21.92               | 21.92               | 21.99               |
|         |            | 25      | 25        | 21.88               | 21.88               | 21.98               |
|         |            | 50      | 0         | 22.06               | 21.96               | 22.03               |
|         | 64QAM      | 1       | 0         | 21.86               | 21.87               | 22.05               |
|         |            | 1       | 24        | 22.07               | 22.01               | 22.04               |
|         |            | 1       | 49        | 21.78               | 21.75               | 21.87               |
|         |            | 25      | 0         | 20.95               | 20.88               | 21.00               |
|         |            | 25      | 12        | 20.92               | 20.82               | 21.01               |
|         |            | 25      | 25        | 20.89               | 20.82               | 21.00               |
|         |            | 50      | 0         | 20.97               | 20.93               | 20.99               |

| Band/BW | Modulation | RB Size | RB Offset | Low CH (39725)        | Mid CH (40620)      | High CH (41515)       |
|---------|------------|---------|-----------|-----------------------|---------------------|-----------------------|
|         |            |         |           | Frequency (2503.5)MHz | Frequency (2593)MHz | Frequency (2682.5)MHz |
| 41/ 15  | QPSK       | 1       | 0         | 23.96                 | 23.85               | 23.98                 |
|         |            | 1       | 37        | 24.07                 | 24.01               | 24.12                 |
|         |            | 1       | 74        | 23.84                 | 23.82               | 23.87                 |
|         |            | 36      | 0         | 22.97                 | 22.97               | 23.07                 |
|         |            | 36      | 19        | 22.91                 | 22.86               | 22.93                 |
|         |            | 36      | 39        | 22.90                 | 22.95               | 23.02                 |
|         |            | 75      | 0         | 22.93                 | 22.88               | 23.01                 |
|         | 16QAM      | 1       | 0         | 22.84                 | 22.82               | 22.95                 |
|         |            | 1       | 37        | 22.95                 | 22.96               | 23.07                 |
|         |            | 1       | 74        | 22.74                 | 22.73               | 22.81                 |
|         |            | 36      | 0         | 21.97                 | 21.94               | 22.12                 |
|         |            | 36      | 19        | 21.84                 | 21.83               | 21.96                 |
|         |            | 36      | 39        | 21.85                 | 21.87               | 21.99                 |
|         |            | 75      | 0         | 21.98                 | 21.88               | 22.06                 |
|         | 64QAM      | 1       | 0         | 21.83                 | 21.86               | 21.98                 |
|         |            | 1       | 37        | 21.98                 | 21.93               | 22.03                 |
|         |            | 1       | 74        | 21.68                 | 21.74               | 21.88                 |
|         |            | 36      | 0         | 20.93                 | 20.78               | 21.01                 |
|         |            | 36      | 19        | 20.81                 | 20.84               | 20.95                 |
|         |            | 36      | 39        | 20.86                 | 20.76               | 20.94                 |
|         |            | 75      | 0         | 20.88                 | 20.88               | 20.93                 |

| Band/BW | Modulation | RB Size | RB Offset | Low CH (39750)      | Mid CH (40620)      | High CH (41490)     |
|---------|------------|---------|-----------|---------------------|---------------------|---------------------|
|         |            |         |           | Frequency (2506)MHz | Frequency (2593)MHz | Frequency (2680)MHz |
| 41/ 20  | QPSK       | 1       | 0         | 24.10               | 23.96               | 24.07               |
|         |            | 1       | 50        | <b>24.25</b>        | 24.09               | 24.15               |
|         |            | 1       | 99        | 23.99               | 23.97               | 23.95               |
|         |            | 50      | 0         | 23.20               | 23.08               | 23.07               |
|         |            | 50      | 25        | 23.07               | 22.97               | 23.05               |
|         |            | 50      | 50        | 23.14               | 23.02               | 23.00               |
|         |            | 100     | 0         | 23.09               | 22.99               | 23.05               |
|         | 16QAM      | 1       | 0         | 23.06               | 22.90               | 22.97               |
|         |            | 1       | 50        | 23.14               | 23.07               | 23.09               |
|         |            | 1       | 99        | 22.92               | 22.81               | 22.82               |
|         |            | 50      | 0         | 22.20               | 22.08               | 22.11               |
|         |            | 50      | 25        | 22.07               | 21.95               | 21.96               |
|         |            | 50      | 50        | 22.07               | 21.95               | 21.98               |
|         |            | 100     | 0         | 22.13               | 21.99               | 22.10               |
|         | 64QAM      | 1       | 0         | 22.09               | 21.94               | 21.96               |
|         |            | 1       | 50        | 22.14               | 22.05               | 22.12               |
|         |            | 1       | 99        | 21.95               | 21.82               | 21.82               |
|         |            | 50      | 0         | 21.09               | 20.92               | 21.03               |
|         |            | 50      | 25        | 21.06               | 20.92               | 20.95               |
|         |            | 50      | 50        | 21.04               | 20.90               | 20.96               |
|         |            | 100     | 0         | 21.07               | 20.97               | 21.00               |



**BUREAU  
VERITAS**

Test Report No.: W7L-P23030004RF06

**EIRP**

**Ant 0**

**LTE BAND 7**

**CHANNEL BANDWIDTH: 5MHz QPSK**

| Channel | Frequency (MHz) | Conducted Power (dBm) | G <sub>T</sub> -L <sub>c</sub> (dB) | EIRP (dBm) | EIRP (mW) | Limit (W) |
|---------|-----------------|-----------------------|-------------------------------------|------------|-----------|-----------|
| 20775   | 2502.5          | 24.01                 | 0.45                                | 24.46      | 279.25    | 2         |
| 21100   | 2535.0          | 24.04                 | 0.45                                | 24.49      | 281.19    | 2         |
| 21425   | 2567.5          | 24.03                 | 0.45                                | 24.48      | 280.54    | 2         |

**CHANNEL BANDWIDTH: 5MHz 16QAM**

| Channel | Frequency (MHz) | Conducted Power (dBm) | G <sub>T</sub> -L <sub>c</sub> (dB) | EIRP (dBm) | EIRP (mW) | Limit (W) |
|---------|-----------------|-----------------------|-------------------------------------|------------|-----------|-----------|
| 20775   | 2502.5          | 23.15                 | 0.45                                | 23.6       | 229.09    | 2         |
| 21100   | 2535.0          | 23.2                  | 0.45                                | 23.65      | 231.74    | 2         |
| 21425   | 2567.5          | 23.16                 | 0.45                                | 23.61      | 229.61    | 2         |

**CHANNEL BANDWIDTH: 5MHz 64QAM**

| Channel | Frequency (MHz) | Conducted Power (dBm) | G <sub>T</sub> -L <sub>c</sub> (dB) | EIRP (dBm) | EIRP (mW) | Limit (W) |
|---------|-----------------|-----------------------|-------------------------------------|------------|-----------|-----------|
| 20775   | 2502.5          | 22.2                  | 0.45                                | 22.65      | 184.08    | 2         |
| 21100   | 2535            | 22.19                 | 0.45                                | 22.64      | 183.65    | 2         |
| 21425   | 2567.5          | 22.21                 | 0.45                                | 22.66      | 184.5     | 2         |

**CHANNEL BANDWIDTH: 10MHz QPSK**

| Channel | Frequency (MHz) | Conducted Power (dBm) | G <sub>T</sub> -L <sub>c</sub> (dB) | EIRP (dBm) | EIRP (mW) | Limit (W) |
|---------|-----------------|-----------------------|-------------------------------------|------------|-----------|-----------|
| 20800   | 2505.0          | 24.07                 | 0.45                                | 24.52      | 283.14    | 2         |
| 21100   | 2535.0          | 23.97                 | 0.45                                | 24.42      | 276.69    | 2         |
| 21400   | 2565.0          | 24.07                 | 0.45                                | 24.52      | 283.14    | 2         |

**CHANNEL BANDWIDTH: 10MHz 16QAM**

| Channel | Frequency (MHz) | Conducted Power (dBm) | G <sub>T</sub> -L <sub>c</sub> (dB) | EIRP (dBm) | EIRP (mW) | Limit (W) |
|---------|-----------------|-----------------------|-------------------------------------|------------|-----------|-----------|
| 20800   | 2505.0          | 23.2                  | 0.45                                | 23.65      | 231.74    | 2         |
| 21100   | 2535.0          | 23.2                  | 0.45                                | 23.65      | 231.74    | 2         |
| 21400   | 2565.0          | 23.14                 | 0.45                                | 23.59      | 228.56    | 2         |

**CHANNEL BANDWIDTH: 10MHz 64QAM**

| Channel | Frequency (MHz) | Conducted Power (dBm) | G <sub>T</sub> -L <sub>c</sub> (dB) | EIRP (dBm) | EIRP (mW) | Limit (W) |
|---------|-----------------|-----------------------|-------------------------------------|------------|-----------|-----------|
| 20800   | 2505            | 22.25                 | 0.45                                | 22.7       | 186.21    | 2         |
| 21100   | 2535            | 22.14                 | 0.45                                | 22.59      | 181.55    | 2         |
| 21400   | 2565            | 22.21                 | 0.45                                | 22.66      | 184.5     | 2         |

**CHANNEL BANDWIDTH: 15MHz QPSK**

| Channel | Frequency (MHz) | Conducted Power (dBm) | G <sub>T</sub> -L <sub>c</sub> (dB) | EIRP (dBm) | EIRP (mW) | Limit (W) |
|---------|-----------------|-----------------------|-------------------------------------|------------|-----------|-----------|
| 20825   | 2507.5          | 24.02                 | 0.45                                | 24.47      | 279.9     | 2         |
| 21100   | 2535.0          | 23.97                 | 0.45                                | 24.42      | 276.69    | 2         |
| 21375   | 2562.5          | 24.02                 | 0.45                                | 24.47      | 279.9     | 2         |

**CHANNEL BANDWIDTH: 15MHz 16QAM**

| Channel | Frequency (MHz) | Conducted Power (dBm) | G <sub>T</sub> -L <sub>c</sub> (dB) | EIRP (dBm) | EIRP (mW) | Limit (W) |
|---------|-----------------|-----------------------|-------------------------------------|------------|-----------|-----------|
| 20825   | 2507.5          | 23.13                 | 0.45                                | 23.58      | 228.03    | 2         |
| 21100   | 2535.0          | 23.18                 | 0.45                                | 23.63      | 230.67    | 2         |
| 21375   | 2562.5          | 23.17                 | 0.45                                | 23.62      | 230.14    | 2         |

**CHANNEL BANDWIDTH: 15MHz 64QAM**

| Channel | Frequency (MHz) | Conducted Power (dBm) | G <sub>T</sub> -L <sub>c</sub> (dB) | EIRP (dBm) | EIRP (mW) | Limit (W) |
|---------|-----------------|-----------------------|-------------------------------------|------------|-----------|-----------|
| 20825   | 2507.5          | 22.26                 | 0.45                                | 22.71      | 186.64    | 2         |
| 21100   | 2535            | 22.13                 | 0.45                                | 22.58      | 181.13    | 2         |
| 21375   | 2562.5          | 22.18                 | 0.45                                | 22.63      | 183.23    | 2         |





**BUREAU  
VERITAS**

Test Report No.: W7L-P23030004RF06

**CHANNEL BANDWIDTH: 20MHz QPSK**

| Channel | Frequency (MHz) | Conducted Power (dBm) | G <sub>T</sub> -L <sub>c</sub> (dB) | EIRP (dBm) | EIRP (mW) | Limit (W) |
|---------|-----------------|-----------------------|-------------------------------------|------------|-----------|-----------|
| 20850   | 2510.0          | 24.11                 | 0.45                                | 24.56      | 285.76    | 2         |
| 21100   | 2535.0          | 24.07                 | 0.45                                | 24.52      | 283.14    | 2         |
| 21350   | 2560.0          | 24.1                  | 0.45                                | 24.55      | 285.1     | 2         |

**CHANNEL BANDWIDTH: 20MHz 16QAM**

| Channel | Frequency (MHz) | Conducted Power (dBm) | G <sub>T</sub> -L <sub>c</sub> (dB) | EIRP (dBm) | EIRP (mW) | Limit (W) |
|---------|-----------------|-----------------------|-------------------------------------|------------|-----------|-----------|
| 20850   | 2510.0          | 23.23                 | 0.45                                | 23.68      | 233.35    | 2         |
| 21100   | 2535.0          | 23.24                 | 0.45                                | 23.69      | 233.88    | 2         |
| 21350   | 2560.0          | 23.24                 | 0.45                                | 23.69      | 233.88    | 2         |

**CHANNEL BANDWIDTH: 20MHz 64QAM**

| Channel | Frequency (MHz) | Conducted Power (dBm) | G <sub>T</sub> -L <sub>c</sub> (dB) | EIRP (dBm) | EIRP (mW) | Limit (W) |
|---------|-----------------|-----------------------|-------------------------------------|------------|-----------|-----------|
| 20850   | 2510            | 22.3                  | 0.45                                | 22.75      | 188.36    | 2         |
| 21100   | 2535            | 22.22                 | 0.45                                | 22.67      | 184.93    | 2         |
| 21350   | 2560            | 22.25                 | 0.45                                | 22.7       | 186.21    | 2         |

**REMARKS:** ERP Output Power (dBm) = EIRP (dBm) -2.15(dB).

**LTE BAND 38**

**CHANNEL BANDWIDTH: 5MHz QPSK**

| Channel | Frequency (MHz) | Conducted Power (dBm) | G <sub>T</sub> -L <sub>c</sub> (dB) | EIRP (dBm) | EIRP (mW) | Limit (W) |
|---------|-----------------|-----------------------|-------------------------------------|------------|-----------|-----------|
| 37775   | 2572.5          | 24.06                 | 0.96                                | 25.02      | 317.69    | 2         |
| 38000   | 2595.0          | 24.04                 | 0.96                                | 25         | 316.23    | 2         |
| 38225   | 2617.5          | 24.09                 | 0.96                                | 25.05      | 319.89    | 2         |

**CHANNEL BANDWIDTH: 5MHz 16QAM**

| Channel | Frequency (MHz) | Conducted Power (dBm) | G <sub>T</sub> -L <sub>c</sub> (dB) | EIRP (dBm) | EIRP (mW) | Limit (W) |
|---------|-----------------|-----------------------|-------------------------------------|------------|-----------|-----------|
| 37775   | 2572.5          | 22.76                 | 0.96                                | 23.72      | 235.5     | 2         |
| 38000   | 2595.0          | 22.76                 | 0.96                                | 23.72      | 235.5     | 2         |
| 38225   | 2617.5          | 22.84                 | 0.96                                | 23.8       | 239.88    | 2         |

**CHANNEL BANDWIDTH: 5MHz 64QAM**

| Channel | Frequency (MHz) | Conducted Power (dBm) | G <sub>T</sub> -L <sub>c</sub> (dB) | EIRP (dBm) | EIRP (mW) | Limit (W) |
|---------|-----------------|-----------------------|-------------------------------------|------------|-----------|-----------|
| 37775   | 2572.5          | 21.87                 | 0.96                                | 22.83      | 191.87    | 2         |
| 38000   | 2595            | 21.89                 | 0.96                                | 22.85      | 192.75    | 2         |
| 38225   | 2617.5          | 21.83                 | 0.96                                | 22.79      | 190.11    | 2         |



**BUREAU  
VERITAS**

Test Report No.: W7L-P23030004RF06

**CHANNEL BANDWIDTH: 10MHz QPSK**

| Channel | Frequency (MHz) | Conducted Power (dBm) | G <sub>T</sub> -L <sub>c</sub> (dB) | EIRP (dBm) | EIRP (mW) | Limit (W) |
|---------|-----------------|-----------------------|-------------------------------------|------------|-----------|-----------|
| 37800   | 2575.0          | 24.04                 | 0.96                                | 25         | 316.23    | 2         |
| 38000   | 2595.0          | 24.07                 | 0.96                                | 25.03      | 318.42    | 2         |
| 38200   | 2615.0          | 24.09                 | 0.96                                | 25.05      | 319.89    | 2         |

**CHANNEL BANDWIDTH: 10MHz 16QAM**

| Channel | Frequency (MHz) | Conducted Power (dBm) | G <sub>T</sub> -L <sub>c</sub> (dB) | EIRP (dBm) | EIRP (mW) | Limit (W) |
|---------|-----------------|-----------------------|-------------------------------------|------------|-----------|-----------|
| 37800   | 2575.0          | 22.78                 | 0.96                                | 23.74      | 236.59    | 2         |
| 38000   | 2595.0          | 22.75                 | 0.96                                | 23.71      | 234.96    | 2         |
| 38200   | 2615.0          | 22.87                 | 0.96                                | 23.83      | 241.55    | 2         |

**CHANNEL BANDWIDTH: 10MHz 64QAM**

| Channel | Frequency (MHz) | Conducted Power (dBm) | G <sub>T</sub> -L <sub>c</sub> (dB) | EIRP (dBm) | EIRP (mW) | Limit (W) |
|---------|-----------------|-----------------------|-------------------------------------|------------|-----------|-----------|
| 37800   | 2575            | 21.85                 | 0.96                                | 22.81      | 190.99    | 2         |
| 38000   | 2595            | 21.92                 | 0.96                                | 22.88      | 194.09    | 2         |
| 38200   | 2615            | 21.88                 | 0.96                                | 22.84      | 192.31    | 2         |



**BUREAU  
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Test Report No.: W7L-P23030004RF06

**CHANNEL BANDWIDTH: 15MHz QPSK**

| Channel | Frequency (MHz) | Conducted Power (dBm) | G <sub>T</sub> -L <sub>c</sub> (dB) | EIRP (dBm) | EIRP (mW) | Limit (W) |
|---------|-----------------|-----------------------|-------------------------------------|------------|-----------|-----------|
| 37825   | 2577.5          | 24.08                 | 0.96                                | 25.04      | 319.15    | 2         |
| 38000   | 2595.0          | 24.02                 | 0.96                                | 24.98      | 314.77    | 2         |
| 38175   | 2612.5          | 24.09                 | 0.96                                | 25.05      | 319.89    | 2         |

**CHANNEL BANDWIDTH: 15MHz 16QAM**

| Channel | Frequency (MHz) | Conducted Power (dBm) | G <sub>T</sub> -L <sub>c</sub> (dB) | EIRP (dBm) | EIRP (mW) | Limit (W) |
|---------|-----------------|-----------------------|-------------------------------------|------------|-----------|-----------|
| 37825   | 2577.5          | 22.82                 | 0.96                                | 23.78      | 238.78    | 2         |
| 38000   | 2595.0          | 22.74                 | 0.96                                | 23.7       | 234.42    | 2         |
| 38175   | 2612.5          | 22.91                 | 0.96                                | 23.87      | 243.78    | 2         |

**CHANNEL BANDWIDTH: 15MHz 64QAM**

| Channel | Frequency (MHz) | Conducted Power (dBm) | G <sub>T</sub> -L <sub>c</sub> (dB) | EIRP (dBm) | EIRP (mW) | Limit (W) |
|---------|-----------------|-----------------------|-------------------------------------|------------|-----------|-----------|
| 37825   | 2577.5          | 21.9                  | 0.96                                | 22.86      | 193.2     | 2         |
| 38000   | 2595            | 21.92                 | 0.96                                | 22.88      | 194.09    | 2         |
| 38175   | 2612.5          | 21.83                 | 0.96                                | 22.79      | 190.11    | 2         |



**BUREAU  
VERITAS**

Test Report No.: W7L-P23030004RF06

**CHANNEL BANDWIDTH: 20MHz QPSK**

| Channel | Frequency (MHz) | Conducted Power (dBm) | G <sub>T</sub> -L <sub>C</sub> (dB) | EIRP (dBm) | EIRP (mW) | Limit (W) |
|---------|-----------------|-----------------------|-------------------------------------|------------|-----------|-----------|
| 37850   | 2580.0          | 24.12                 | 0.96                                | 25.08      | 322.11    | 2         |
| 38000   | 2595.0          | 24.11                 | 0.96                                | 25.07      | 321.37    | 2         |
| 38150   | 2610.0          | 24.16                 | 0.96                                | 25.12      | 325.09    | 2         |

**CHANNEL BANDWIDTH: 20MHz 16QAM**

| Channel | Frequency (MHz) | Conducted Power (dBm) | G <sub>T</sub> -L <sub>C</sub> (dB) | EIRP (dBm) | EIRP (mW) | Limit (W) |
|---------|-----------------|-----------------------|-------------------------------------|------------|-----------|-----------|
| 37850   | 2580.0          | 22.86                 | 0.96                                | 23.82      | 240.99    | 2         |
| 38000   | 2595.0          | 22.84                 | 0.96                                | 23.8       | 239.88    | 2         |
| 38150   | 2610.0          | 22.94                 | 0.96                                | 23.9       | 245.47    | 2         |

**CHANNEL BANDWIDTH: 20MHz 64QAM**

| Channel | Frequency (MHz) | Conducted Power (dBm) | G <sub>T</sub> -L <sub>C</sub> (dB) | EIRP (dBm) | EIRP (mW) | Limit (W) |
|---------|-----------------|-----------------------|-------------------------------------|------------|-----------|-----------|
| 37850   | 2580            | 21.93                 | 0.96                                | 22.89      | 194.54    | 2         |
| 38000   | 2595            | 21.96                 | 0.96                                | 22.92      | 195.88    | 2         |
| 38150   | 2610            | 21.93                 | 0.96                                | 22.89      | 194.54    | 2         |



**BUREAU  
VERITAS**

Test Report No.: W7L-P23030004RF06

**LTE BAND 41**

**CHANNEL BANDWIDTH: 5MHz QPSK**

| Channel | Frequency (MHz) | Conducted Power (dBm) | G <sub>T</sub> -L <sub>c</sub> (dB) | EIRP (dBm) | EIRP (mW) | Limit (W) |
|---------|-----------------|-----------------------|-------------------------------------|------------|-----------|-----------|
| 39675   | 2498.5          | 24.07                 | 0.96                                | 25.03      | 318.42    | 2         |
| 40620   | 2593.0          | 24.07                 | 0.96                                | 25.03      | 318.42    | 2         |
| 41565   | 2687.5          | 24.12                 | 0.96                                | 25.08      | 322.11    | 2         |

**CHANNEL BANDWIDTH: 5MHz 16QAM**

| Channel | Frequency (MHz) | Conducted Power (dBm) | G <sub>T</sub> -L <sub>c</sub> (dB) | EIRP (dBm) | EIRP (mW) | Limit (W) |
|---------|-----------------|-----------------------|-------------------------------------|------------|-----------|-----------|
| 39675   | 2498.5          | 22.76                 | 0.96                                | 23.72      | 235.5     | 2         |
| 40620   | 2593.0          | 22.83                 | 0.96                                | 23.79      | 239.33    | 2         |
| 41565   | 2687.5          | 22.88                 | 0.96                                | 23.84      | 242.1     | 2         |

**CHANNEL BANDWIDTH: 5MHz 64QAM**

| Channel | Frequency (MHz) | Conducted Power (dBm) | G <sub>T</sub> -L <sub>c</sub> (dB) | EIRP (dBm) | EIRP (mW) | Limit (W) |
|---------|-----------------|-----------------------|-------------------------------------|------------|-----------|-----------|
| 39675   | 2498.5          | 21.77                 | 0.96                                | 22.73      | 187.5     | 2         |
| 40620   | 2593.0          | 21.78                 | 0.96                                | 22.74      | 187.93    | 2         |
| 41565   | 2687.5          | 21.82                 | 0.96                                | 22.78      | 189.67    | 2         |