



# FCC REPORT

For LTE

Report No. .... : CHTEW23110073 Report Verification: 

Project No..... : SHT2306080101EW

FCC ID..... : 2A8OE-F8926-GW-02

Applicant ..... : Xiamen Four-Faith Communication Technology Co., Ltd.

Address..... : 11th Floor,A-06 Area,No.370,Chengyi Street,Jimei,Xiamen,Fujian,China.

Product Name ..... : LoRaWAN Gateway

Trade Mark ..... : 

Model No. .... : F8926-GW-02

Listed Model(s) ..... : -

Standard ..... : FCC CFR Title 47 Part 2  
FCC CFR Title 47 Part 22 Subpart H  
FCC CFR Title 47 Part 24 Subpart E  
FCC CFR Title 47 Part 27

Date of receipt of test sample..... : Aug. 07, 2023

Date of testing..... : Aug. 14, 2023- Nov. 24, 2023

Date of issue..... : Nov. 27, 2023

Result..... : Pass

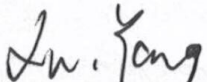
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Testing Laboratory Name ..... : Shenzhen Huatongwei International Inspection Co., Ltd.

Address..... : 1/F, Bldg 3, Hongfa Hi-tech Industrial Park, Genyu Road, Tianliao, Gongming, Shenzhen, China

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*The test report merely correspond to the test sample.*

## Contents

|                  |                                                       |                  |
|------------------|-------------------------------------------------------|------------------|
| <b><u>1.</u></b> | <b><u>TEST STANDARDS AND REPORT VERSION</u></b>       | <b><u>3</u></b>  |
| 1.1.             | Applicable Standards                                  | 3                |
| 1.2.             | Report version information                            | 3                |
| <b><u>2.</u></b> | <b><u>TEST DESCRIPTION</u></b>                        | <b><u>4</u></b>  |
| <b><u>3.</u></b> | <b><u>SUMMARY</u></b>                                 | <b><u>5</u></b>  |
| 3.1.             | Client Information                                    | 5                |
| 3.2.             | Product Description                                   | 5                |
| 3.3.             | Radio Specification Description                       | 5                |
| 3.4.             | Testing Laboratory Information                        | 7                |
| <b><u>4.</u></b> | <b><u>TEST CONFIGURATION</u></b>                      | <b><u>8</u></b>  |
| 4.1.             | Test frequency list                                   | 8                |
| 4.2.             | Test mode                                             | 9                |
| 4.3.             | Test sample information                               | 10               |
| 4.4.             | Support unit used in test configuration and system    | 10               |
| 4.5.             | Testing environmental condition                       | 10               |
| 4.6.             | Statement of the measurement uncertainty              | 11               |
| 4.7.             | Equipments Used during the Test                       | 12               |
| <b><u>5.</u></b> | <b><u>TEST CONDITIONS AND RESULTS</u></b>             | <b><u>13</u></b> |
| 5.1.             | ERP and EIRP                                          | 13               |
| 5.2.             | Radiated Spurious Emission                            | 14               |
| <b><u>6.</u></b> | <b><u>TEST SETUP PHOTOS OF THE EUT</u></b>            | <b><u>32</u></b> |
| <b><u>7.</u></b> | <b><u>EXTERNAL AND INTERNAL PHOTOS OF THE EUT</u></b> | <b><u>32</u></b> |
| <b><u>8.</u></b> | <b><u>APPENDIX REPORT</u></b>                         | <b><u>32</u></b> |

## 1. TEST STANDARDS AND REPORT VERSION

### 1.1. Applicable Standards

The tests were performed according to following standards:

[FCC CFR Title 47 Part 2:](#) Frequency Allocations and Radio Treaty Matters; General Rules and Regulations

[FCC CFR Title 47 Part 22 Subpart H:](#) Cellular Radiotelephone Service

[FCC CFR Title 47 Part 24 Subpart E:](#) Broadband PCS

[FCC CFR Title 47 Part 27:](#) Miscellaneous Wireless Communications Services

[ANSI C63.26-2015:](#) American National Standard for Compliance Testing of Transmitters Used in Licensed Radio Services

[KDB 971168 D01 Power Meas License Digital Systems v03:](#) MEASUREMENT GUIDANCE FOR CERTIFICATION OF LICENSED DIGITAL TRANSMITTERS

### 1.2. Report version information

| Revision No. | Date of issue | Description |
|--------------|---------------|-------------|
| N/A          | 2023-11-27    | Original    |
|              |               |             |
|              |               |             |
|              |               |             |
|              |               |             |

## 2. TEST DESCRIPTION

| Section | Test Item                                   | Section in CFR 47                                                | Result <sup>#1</sup> | Test Engineer |
|---------|---------------------------------------------|------------------------------------------------------------------|----------------------|---------------|
| -       | Conducted Output Power                      | Part 2.1046<br>Part 22.913(a)<br>Part 24.232(c)<br>Part 27.50    | Pass*                | -             |
| -       | Peak-to-Average Ratio                       | Part 24.232<br>Part 27.50                                        | Pass*                | -             |
| -       | 99% Occupied Bandwidth &<br>26 dB Bandwidth | Part 2.1049<br>Part 22.917(b)<br>Part 24.238(b)<br>Part 27.53    | Pass*                | -             |
| -       | Band Edge                                   | Part 2.1051<br>Part 22.917<br>Part 24.238<br>Part 27.53          | Pass*                | -             |
| -       | Conducted Spurious Emissions                | Part 2.1051<br>Part 22.917<br>Part 24.238<br>Part 27.53          | Pass*                | -             |
| -       | Frequency stability vs temperature          | Part 2.1055(a)(1)(b)<br>Part 22.355<br>Part 24.235<br>Part 27.54 | Pass*                | -             |
| -       | Frequency stability vs voltage              | Part 2.1055(d)(1)(2)<br>Part 22.355<br>Part 24.235<br>Part 27.54 | Pass*                | -             |
| 5.8     | ERP and EIRP                                | Part 22.913(a)<br>Part 24.232(b)<br>Part 27.50                   | Pass                 | Caspar Chen   |
| 5.9     | Radiated Spurious Emissions                 | Part 2.1053<br>Part 22.917<br>Part 24.238<br>Part 27.53          | Pass                 | Yifan Wang    |

Note:

- 1) <sup>#1</sup>: The test result does not include measurement uncertainty value
- 2) \*: Refer to module FCC ID: ZMONL668LA05.

### 3. SUMMARY

#### 3.1. Client Information

|               |                                                                       |
|---------------|-----------------------------------------------------------------------|
| Applicant:    | Xiamen Four-Faith Communication Technology Co., Ltd.                  |
| Address:      | 11th Floor,A-06 Area,No.370,Chengyi Street,Jimei,Xiamen,Fujian,China. |
| Manufacturer: | Xiamen Four-Faith Communication Technology Co., Ltd.                  |
| Address:      | 11th Floor,A-06 Area,No.370,Chengyi Street,Jimei,Xiamen,Fujian,China. |

#### 3.2. Product Description

| Main unit information:      |                                                                                   |
|-----------------------------|-----------------------------------------------------------------------------------|
| Product Name:               | LoRaWAN Gateway                                                                   |
| Trade Mark:                 |  |
| Model No.:                  | F8926-GW-02                                                                       |
| Listed Model(s):            | -                                                                                 |
| Power supply:               | DC 12V from Adapter                                                               |
| Hardware version:           | V 1.0.0.2                                                                         |
| Software version:           | F8926GW-V2-IOTGW-32M-STD-VPN-20230313.flash                                       |
| Accessory unit information: |                                                                                   |
| Adapter information:        | MODEL: KL-AD3060VA<br>INPUT: 100-240V~50/60Hz 0.7A<br>OUTPUT: DC 12V, 1.5A        |

#### 3.3. Radio Specification Description

|                              |                                                 |                                                 |                                                                           |
|------------------------------|-------------------------------------------------|-------------------------------------------------|---------------------------------------------------------------------------|
| Support Operating Band:      | <input checked="" type="checkbox"/> LTE Band 2  | <input checked="" type="checkbox"/> LTE Band 4  | <input checked="" type="checkbox"/> LTE Band 5                            |
|                              | <input checked="" type="checkbox"/> LTE Band 7  | <input checked="" type="checkbox"/> LTE Band 12 | <input checked="" type="checkbox"/> LTE Band 17                           |
|                              | <input checked="" type="checkbox"/> LTE Band 38 | <input checked="" type="checkbox"/> LTE Band 66 |                                                                           |
| Operating Frequency Range:   | Please refer to note #2                         |                                                 |                                                                           |
| Channel bandwidth:           | Please refer to note #3                         |                                                 |                                                                           |
| Uplink Modulation type:      | <input checked="" type="checkbox"/> QPSK        | <input checked="" type="checkbox"/> 16QAM       | <input type="checkbox"/> 64QAM <input type="checkbox"/> 256QAM            |
| Downlink Modulation type:    | <input checked="" type="checkbox"/> QPSK        | <input checked="" type="checkbox"/> 16QAM       | <input checked="" type="checkbox"/> 64QAM <input type="checkbox"/> 256QAM |
| Antenna type:                | Stick Antenna                                   |                                                 |                                                                           |
| Antenna gain <sup>#4</sup> : | 1.74dBi                                         |                                                 |                                                                           |

Note:

○ ☒: means that this feature is supported; ☐: means that this feature is not supported

○ #2: Operating frequency range is as follow:

| LTE Band    | Uplink frequency    | Downlink frequency  |
|-------------|---------------------|---------------------|
| LTE Band 2  | 1850.7 – 1909.3 MHz | 1930.7 – 1989.3 MHz |
| LTE Band 4  | 1710.7 – 1754.3 MHz | 2110.7 – 2154.3 MHz |
| LTE Band 5  | 824.7 – 848.3 MHz   | 869.7 – 893.3 MHz   |
| LTE Band 7  | 2502.5 – 2567.5 MHz | 2622.5 – 2687.5 MHz |
| LTE Band 12 | 699.7 – 715.3 MHz   | 729.7 – 745.3 MHz   |
| LTE Band 17 | 706.5 – 713.5 MHz   | 736.5 – 743.5 MHz   |
| LTE Band 38 | 2572.5 – 2617.5 MHz | 2572.5 – 2617.5 MHz |
| LTE Band 66 | 1710.7 – 1779.3 MHz | 2110.7 – 2179.3 MHz |

○ Supported channel bandwidth is as follow:

| LTE Band    | 1.4MHz | 3MHz | 5MHz | 10MHz | 15MHz | 20MHz |
|-------------|--------|------|------|-------|-------|-------|
| LTE Band 2  | √      | √    | √    | √     | √     | √     |
| LTE Band 4  | √      | √    | √    | √     | √     | √     |
| LTE Band 5  | √      | √    | √    | √     | -     | -     |
| LTE Band 7  | -      | -    | √    | √     | √     | √     |
| LTE Band 12 | √      | √    | √    | √     | -     | -     |
| LTE Band 17 | -      | -    | √    | √     | -     | -     |
| LTE Band 38 | -      | -    | √    | √     | √     | √     |
| LTE Band 66 | √      | √    | √    | √     | √     | √     |

√: means that this feature is supported; -: means that this feature is not supported

○ #4: The antenna gain is provided by the applicant, and the applicant should be responsible for its authenticity, HTW lab has not verified the authenticity of its information

### 3.4. Testing Laboratory Information

|                      |                                                                                                                                                       |                      |
|----------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------|
| Laboratory Name      | Shenzhen Huatongwei International Inspection Co., Ltd.                                                                                                |                      |
| Laboratory Location  | 1/F, Bldg 3, Hongfa Hi-tech Industrial Park, Genyu Road, Tianliao, Gongming, Shenzhen, China                                                          |                      |
| Contact information: | Tel: 86-755-26715499<br>E-mail: <a href="mailto:cs@szhtw.com.cn">cs@szhtw.com.cn</a><br><a href="http://www.szhtw.com.cn">http://www.szhtw.com.cn</a> |                      |
| Qualifications       | Type                                                                                                                                                  | Accreditation Number |
|                      | FCC                                                                                                                                                   | 762235               |

## 4. TEST CONFIGURATION

### 4.1. Test frequency list

| LTE Band 2        | <table><tr><th>Test Frequency ID</th><th>Bandwidth [MHz]</th><th>N<sub>UL</sub></th><th>Frequency of Uplink [MHz]</th><th>N<sub>DL</sub></th><th>Frequency of Downlink [MHz]</th></tr><tr><td rowspan="6">Low Range</td><td>1.4</td><td>18607</td><td>1850.7</td><td>607</td><td>1930.7</td></tr><tr><td>3</td><td>18615</td><td>1851.5</td><td>615</td><td>1931.5</td></tr><tr><td>5</td><td>18625</td><td>1852.5</td><td>625</td><td>1932.5</td></tr><tr><td>10</td><td>18650</td><td>1855</td><td>650</td><td>1935</td></tr><tr><td>15<sup>[1]</sup></td><td>18675</td><td>1857.5</td><td>675</td><td>1937.5</td></tr><tr><td>20<sup>[1]</sup></td><td>18700</td><td>1860</td><td>700</td><td>1940</td></tr><tr><td>Mid Range</td><td>1.4/3/5/10/15<sup>[1]</sup>/20<sup>[1]</sup></td><td>18900</td><td>1880</td><td>900</td><td>1960</td></tr><tr><td rowspan="6">High Range</td><td>1.4</td><td>19193</td><td>1909.3</td><td>1193</td><td>1989.3</td></tr><tr><td>3</td><td>19185</td><td>1908.5</td><td>1185</td><td>1988.5</td></tr><tr><td>5</td><td>19175</td><td>1907.5</td><td>1175</td><td>1987.5</td></tr><tr><td>10</td><td>19150</td><td>1905</td><td>1150</td><td>1985</td></tr><tr><td>15<sup>[1]</sup></td><td>19125</td><td>1902.5</td><td>1125</td><td>1982.5</td></tr><tr><td>20<sup>[1]</sup></td><td>19100</td><td>1900</td><td>1100</td><td>1980</td></tr></table> <p>NOTE 1: Bandwidth for which a relaxation of the specified UE receiver sensitivity requirement (TS 36.101 [27] Clause 7.3) is allowed.</p> | Test Frequency ID | Bandwidth [MHz]           | N <sub>UL</sub> | Frequency of Uplink [MHz]   | N <sub>DL</sub> | Frequency of Downlink [MHz] | Low Range | 1.4              | 18607 | 1850.7 | 607  | 1930.7 | 3                 | 18615 | 1851.5 | 615  | 1931.5 | 5                | 18625                               | 1852.5 | 625  | 1932.5 | 10                | 18650      | 1855             | 650   | 1935  | 15 <sup>[1]</sup> | 18675                                     | 1857.5            | 675   | 1937.5 | 20 <sup>[1]</sup> | 18700      | 1860 | 700   | 1940   | Mid Range | 1.4/3/5/10/15 <sup>[1]</sup> /20 <sup>[1]</sup> | 18900 | 1880   | 900   | 1960   | High Range | 1.4              | 19193 | 1909.3 | 1193 | 1989.3 | 3                 | 19185 | 1908.5 | 1185 | 1988.5 | 5 | 19175 | 1907.5 | 1175 | 1987.5 | 10 | 19150 | 1905 | 1150 | 1985 | 15 <sup>[1]</sup> | 19125 | 1902.5 | 1125 | 1982.5 | 20 <sup>[1]</sup> | 19100 | 1900 | 1100 | 1980 |
|-------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------|---------------------------|-----------------|-----------------------------|-----------------|-----------------------------|-----------|------------------|-------|--------|------|--------|-------------------|-------|--------|------|--------|------------------|-------------------------------------|--------|------|--------|-------------------|------------|------------------|-------|-------|-------------------|-------------------------------------------|-------------------|-------|--------|-------------------|------------|------|-------|--------|-----------|-------------------------------------------------|-------|--------|-------|--------|------------|------------------|-------|--------|------|--------|-------------------|-------|--------|------|--------|---|-------|--------|------|--------|----|-------|------|------|------|-------------------|-------|--------|------|--------|-------------------|-------|------|------|------|
| Test Frequency ID | Bandwidth [MHz]                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          | N <sub>UL</sub>   | Frequency of Uplink [MHz] | N <sub>DL</sub> | Frequency of Downlink [MHz] |                 |                             |           |                  |       |        |      |        |                   |       |        |      |        |                  |                                     |        |      |        |                   |            |                  |       |       |                   |                                           |                   |       |        |                   |            |      |       |        |           |                                                 |       |        |       |        |            |                  |       |        |      |        |                   |       |        |      |        |   |       |        |      |        |    |       |      |      |      |                   |       |        |      |        |                   |       |      |      |      |
| Low Range         | 1.4                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      | 18607             | 1850.7                    | 607             | 1930.7                      |                 |                             |           |                  |       |        |      |        |                   |       |        |      |        |                  |                                     |        |      |        |                   |            |                  |       |       |                   |                                           |                   |       |        |                   |            |      |       |        |           |                                                 |       |        |       |        |            |                  |       |        |      |        |                   |       |        |      |        |   |       |        |      |        |    |       |      |      |      |                   |       |        |      |        |                   |       |      |      |      |
|                   | 3                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        | 18615             | 1851.5                    | 615             | 1931.5                      |                 |                             |           |                  |       |        |      |        |                   |       |        |      |        |                  |                                     |        |      |        |                   |            |                  |       |       |                   |                                           |                   |       |        |                   |            |      |       |        |           |                                                 |       |        |       |        |            |                  |       |        |      |        |                   |       |        |      |        |   |       |        |      |        |    |       |      |      |      |                   |       |        |      |        |                   |       |      |      |      |
|                   | 5                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        | 18625             | 1852.5                    | 625             | 1932.5                      |                 |                             |           |                  |       |        |      |        |                   |       |        |      |        |                  |                                     |        |      |        |                   |            |                  |       |       |                   |                                           |                   |       |        |                   |            |      |       |        |           |                                                 |       |        |       |        |            |                  |       |        |      |        |                   |       |        |      |        |   |       |        |      |        |    |       |      |      |      |                   |       |        |      |        |                   |       |      |      |      |
|                   | 10                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       | 18650             | 1855                      | 650             | 1935                        |                 |                             |           |                  |       |        |      |        |                   |       |        |      |        |                  |                                     |        |      |        |                   |            |                  |       |       |                   |                                           |                   |       |        |                   |            |      |       |        |           |                                                 |       |        |       |        |            |                  |       |        |      |        |                   |       |        |      |        |   |       |        |      |        |    |       |      |      |      |                   |       |        |      |        |                   |       |      |      |      |
|                   | 15 <sup>[1]</sup>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        | 18675             | 1857.5                    | 675             | 1937.5                      |                 |                             |           |                  |       |        |      |        |                   |       |        |      |        |                  |                                     |        |      |        |                   |            |                  |       |       |                   |                                           |                   |       |        |                   |            |      |       |        |           |                                                 |       |        |       |        |            |                  |       |        |      |        |                   |       |        |      |        |   |       |        |      |        |    |       |      |      |      |                   |       |        |      |        |                   |       |      |      |      |
|                   | 20 <sup>[1]</sup>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        | 18700             | 1860                      | 700             | 1940                        |                 |                             |           |                  |       |        |      |        |                   |       |        |      |        |                  |                                     |        |      |        |                   |            |                  |       |       |                   |                                           |                   |       |        |                   |            |      |       |        |           |                                                 |       |        |       |        |            |                  |       |        |      |        |                   |       |        |      |        |   |       |        |      |        |    |       |      |      |      |                   |       |        |      |        |                   |       |      |      |      |
| Mid Range         | 1.4/3/5/10/15 <sup>[1]</sup> /20 <sup>[1]</sup>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          | 18900             | 1880                      | 900             | 1960                        |                 |                             |           |                  |       |        |      |        |                   |       |        |      |        |                  |                                     |        |      |        |                   |            |                  |       |       |                   |                                           |                   |       |        |                   |            |      |       |        |           |                                                 |       |        |       |        |            |                  |       |        |      |        |                   |       |        |      |        |   |       |        |      |        |    |       |      |      |      |                   |       |        |      |        |                   |       |      |      |      |
| High Range        | 1.4                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      | 19193             | 1909.3                    | 1193            | 1989.3                      |                 |                             |           |                  |       |        |      |        |                   |       |        |      |        |                  |                                     |        |      |        |                   |            |                  |       |       |                   |                                           |                   |       |        |                   |            |      |       |        |           |                                                 |       |        |       |        |            |                  |       |        |      |        |                   |       |        |      |        |   |       |        |      |        |    |       |      |      |      |                   |       |        |      |        |                   |       |      |      |      |
|                   | 3                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        | 19185             | 1908.5                    | 1185            | 1988.5                      |                 |                             |           |                  |       |        |      |        |                   |       |        |      |        |                  |                                     |        |      |        |                   |            |                  |       |       |                   |                                           |                   |       |        |                   |            |      |       |        |           |                                                 |       |        |       |        |            |                  |       |        |      |        |                   |       |        |      |        |   |       |        |      |        |    |       |      |      |      |                   |       |        |      |        |                   |       |      |      |      |
|                   | 5                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        | 19175             | 1907.5                    | 1175            | 1987.5                      |                 |                             |           |                  |       |        |      |        |                   |       |        |      |        |                  |                                     |        |      |        |                   |            |                  |       |       |                   |                                           |                   |       |        |                   |            |      |       |        |           |                                                 |       |        |       |        |            |                  |       |        |      |        |                   |       |        |      |        |   |       |        |      |        |    |       |      |      |      |                   |       |        |      |        |                   |       |      |      |      |
|                   | 10                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       | 19150             | 1905                      | 1150            | 1985                        |                 |                             |           |                  |       |        |      |        |                   |       |        |      |        |                  |                                     |        |      |        |                   |            |                  |       |       |                   |                                           |                   |       |        |                   |            |      |       |        |           |                                                 |       |        |       |        |            |                  |       |        |      |        |                   |       |        |      |        |   |       |        |      |        |    |       |      |      |      |                   |       |        |      |        |                   |       |      |      |      |
|                   | 15 <sup>[1]</sup>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        | 19125             | 1902.5                    | 1125            | 1982.5                      |                 |                             |           |                  |       |        |      |        |                   |       |        |      |        |                  |                                     |        |      |        |                   |            |                  |       |       |                   |                                           |                   |       |        |                   |            |      |       |        |           |                                                 |       |        |       |        |            |                  |       |        |      |        |                   |       |        |      |        |   |       |        |      |        |    |       |      |      |      |                   |       |        |      |        |                   |       |      |      |      |
|                   | 20 <sup>[1]</sup>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        | 19100             | 1900                      | 1100            | 1980                        |                 |                             |           |                  |       |        |      |        |                   |       |        |      |        |                  |                                     |        |      |        |                   |            |                  |       |       |                   |                                           |                   |       |        |                   |            |      |       |        |           |                                                 |       |        |       |        |            |                  |       |        |      |        |                   |       |        |      |        |   |       |        |      |        |    |       |      |      |      |                   |       |        |      |        |                   |       |      |      |      |
| LTE Band 4        | <table><tr><th>Test Frequency ID</th><th>Bandwidth [MHz]</th><th>N<sub>UL</sub></th><th>Frequency of Uplink [MHz]</th><th>N<sub>DL</sub></th><th>Frequency of Downlink [MHz]</th></tr><tr><td rowspan="6">Low Range</td><td>1.4</td><td>19957</td><td>1710.7</td><td>1957</td><td>2110.7</td></tr><tr><td>3</td><td>19965</td><td>1711.5</td><td>1965</td><td>2111.5</td></tr><tr><td>5</td><td>19975</td><td>1712.5</td><td>1975</td><td>2112.5</td></tr><tr><td>10</td><td>20000</td><td>1715</td><td>2000</td><td>2115</td></tr><tr><td>15</td><td>20025</td><td>1717.5</td><td>2025</td><td>2117.5</td></tr><tr><td>20</td><td>20050</td><td>1720</td><td>2050</td><td>2120</td></tr><tr><td>Mid Range</td><td>1.4/3/5/10/15/20</td><td>20175</td><td>1732.5</td><td>2175</td><td>2132.5</td></tr><tr><td rowspan="6">High Range</td><td>1.4</td><td>20393</td><td>1754.3</td><td>2393</td><td>2154.3</td></tr><tr><td>3</td><td>20385</td><td>1753.5</td><td>2385</td><td>2153.5</td></tr><tr><td>5</td><td>20375</td><td>1752.5</td><td>2375</td><td>2152.5</td></tr><tr><td>10</td><td>20350</td><td>1750</td><td>2350</td><td>2150</td></tr><tr><td>15</td><td>20325</td><td>1747.5</td><td>2325</td><td>2147.5</td></tr><tr><td>20</td><td>20300</td><td>1745</td><td>2300</td><td>2145</td></tr></table>                                                                                                                                                                                                                       | Test Frequency ID | Bandwidth [MHz]           | N <sub>UL</sub> | Frequency of Uplink [MHz]   | N <sub>DL</sub> | Frequency of Downlink [MHz] | Low Range | 1.4              | 19957 | 1710.7 | 1957 | 2110.7 | 3                 | 19965 | 1711.5 | 1965 | 2111.5 | 5                | 19975                               | 1712.5 | 1975 | 2112.5 | 10                | 20000      | 1715             | 2000  | 2115  | 15                | 20025                                     | 1717.5            | 2025  | 2117.5 | 20                | 20050      | 1720 | 2050  | 2120   | Mid Range | 1.4/3/5/10/15/20                                | 20175 | 1732.5 | 2175  | 2132.5 | High Range | 1.4              | 20393 | 1754.3 | 2393 | 2154.3 | 3                 | 20385 | 1753.5 | 2385 | 2153.5 | 5 | 20375 | 1752.5 | 2375 | 2152.5 | 10 | 20350 | 1750 | 2350 | 2150 | 15                | 20325 | 1747.5 | 2325 | 2147.5 | 20                | 20300 | 1745 | 2300 | 2145 |
| Test Frequency ID | Bandwidth [MHz]                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          | N <sub>UL</sub>   | Frequency of Uplink [MHz] | N <sub>DL</sub> | Frequency of Downlink [MHz] |                 |                             |           |                  |       |        |      |        |                   |       |        |      |        |                  |                                     |        |      |        |                   |            |                  |       |       |                   |                                           |                   |       |        |                   |            |      |       |        |           |                                                 |       |        |       |        |            |                  |       |        |      |        |                   |       |        |      |        |   |       |        |      |        |    |       |      |      |      |                   |       |        |      |        |                   |       |      |      |      |
| Low Range         | 1.4                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      | 19957             | 1710.7                    | 1957            | 2110.7                      |                 |                             |           |                  |       |        |      |        |                   |       |        |      |        |                  |                                     |        |      |        |                   |            |                  |       |       |                   |                                           |                   |       |        |                   |            |      |       |        |           |                                                 |       |        |       |        |            |                  |       |        |      |        |                   |       |        |      |        |   |       |        |      |        |    |       |      |      |      |                   |       |        |      |        |                   |       |      |      |      |
|                   | 3                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        | 19965             | 1711.5                    | 1965            | 2111.5                      |                 |                             |           |                  |       |        |      |        |                   |       |        |      |        |                  |                                     |        |      |        |                   |            |                  |       |       |                   |                                           |                   |       |        |                   |            |      |       |        |           |                                                 |       |        |       |        |            |                  |       |        |      |        |                   |       |        |      |        |   |       |        |      |        |    |       |      |      |      |                   |       |        |      |        |                   |       |      |      |      |
|                   | 5                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        | 19975             | 1712.5                    | 1975            | 2112.5                      |                 |                             |           |                  |       |        |      |        |                   |       |        |      |        |                  |                                     |        |      |        |                   |            |                  |       |       |                   |                                           |                   |       |        |                   |            |      |       |        |           |                                                 |       |        |       |        |            |                  |       |        |      |        |                   |       |        |      |        |   |       |        |      |        |    |       |      |      |      |                   |       |        |      |        |                   |       |      |      |      |
|                   | 10                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       | 20000             | 1715                      | 2000            | 2115                        |                 |                             |           |                  |       |        |      |        |                   |       |        |      |        |                  |                                     |        |      |        |                   |            |                  |       |       |                   |                                           |                   |       |        |                   |            |      |       |        |           |                                                 |       |        |       |        |            |                  |       |        |      |        |                   |       |        |      |        |   |       |        |      |        |    |       |      |      |      |                   |       |        |      |        |                   |       |      |      |      |
|                   | 15                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       | 20025             | 1717.5                    | 2025            | 2117.5                      |                 |                             |           |                  |       |        |      |        |                   |       |        |      |        |                  |                                     |        |      |        |                   |            |                  |       |       |                   |                                           |                   |       |        |                   |            |      |       |        |           |                                                 |       |        |       |        |            |                  |       |        |      |        |                   |       |        |      |        |   |       |        |      |        |    |       |      |      |      |                   |       |        |      |        |                   |       |      |      |      |
|                   | 20                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       | 20050             | 1720                      | 2050            | 2120                        |                 |                             |           |                  |       |        |      |        |                   |       |        |      |        |                  |                                     |        |      |        |                   |            |                  |       |       |                   |                                           |                   |       |        |                   |            |      |       |        |           |                                                 |       |        |       |        |            |                  |       |        |      |        |                   |       |        |      |        |   |       |        |      |        |    |       |      |      |      |                   |       |        |      |        |                   |       |      |      |      |
| Mid Range         | 1.4/3/5/10/15/20                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         | 20175             | 1732.5                    | 2175            | 2132.5                      |                 |                             |           |                  |       |        |      |        |                   |       |        |      |        |                  |                                     |        |      |        |                   |            |                  |       |       |                   |                                           |                   |       |        |                   |            |      |       |        |           |                                                 |       |        |       |        |            |                  |       |        |      |        |                   |       |        |      |        |   |       |        |      |        |    |       |      |      |      |                   |       |        |      |        |                   |       |      |      |      |
| High Range        | 1.4                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      | 20393             | 1754.3                    | 2393            | 2154.3                      |                 |                             |           |                  |       |        |      |        |                   |       |        |      |        |                  |                                     |        |      |        |                   |            |                  |       |       |                   |                                           |                   |       |        |                   |            |      |       |        |           |                                                 |       |        |       |        |            |                  |       |        |      |        |                   |       |        |      |        |   |       |        |      |        |    |       |      |      |      |                   |       |        |      |        |                   |       |      |      |      |
|                   | 3                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        | 20385             | 1753.5                    | 2385            | 2153.5                      |                 |                             |           |                  |       |        |      |        |                   |       |        |      |        |                  |                                     |        |      |        |                   |            |                  |       |       |                   |                                           |                   |       |        |                   |            |      |       |        |           |                                                 |       |        |       |        |            |                  |       |        |      |        |                   |       |        |      |        |   |       |        |      |        |    |       |      |      |      |                   |       |        |      |        |                   |       |      |      |      |
|                   | 5                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        | 20375             | 1752.5                    | 2375            | 2152.5                      |                 |                             |           |                  |       |        |      |        |                   |       |        |      |        |                  |                                     |        |      |        |                   |            |                  |       |       |                   |                                           |                   |       |        |                   |            |      |       |        |           |                                                 |       |        |       |        |            |                  |       |        |      |        |                   |       |        |      |        |   |       |        |      |        |    |       |      |      |      |                   |       |        |      |        |                   |       |      |      |      |
|                   | 10                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       | 20350             | 1750                      | 2350            | 2150                        |                 |                             |           |                  |       |        |      |        |                   |       |        |      |        |                  |                                     |        |      |        |                   |            |                  |       |       |                   |                                           |                   |       |        |                   |            |      |       |        |           |                                                 |       |        |       |        |            |                  |       |        |      |        |                   |       |        |      |        |   |       |        |      |        |    |       |      |      |      |                   |       |        |      |        |                   |       |      |      |      |
|                   | 15                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       | 20325             | 1747.5                    | 2325            | 2147.5                      |                 |                             |           |                  |       |        |      |        |                   |       |        |      |        |                  |                                     |        |      |        |                   |            |                  |       |       |                   |                                           |                   |       |        |                   |            |      |       |        |           |                                                 |       |        |       |        |            |                  |       |        |      |        |                   |       |        |      |        |   |       |        |      |        |    |       |      |      |      |                   |       |        |      |        |                   |       |      |      |      |
|                   | 20                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       | 20300             | 1745                      | 2300            | 2145                        |                 |                             |           |                  |       |        |      |        |                   |       |        |      |        |                  |                                     |        |      |        |                   |            |                  |       |       |                   |                                           |                   |       |        |                   |            |      |       |        |           |                                                 |       |        |       |        |            |                  |       |        |      |        |                   |       |        |      |        |   |       |        |      |        |    |       |      |      |      |                   |       |        |      |        |                   |       |      |      |      |
| LTE Band 5        | <table><tr><th>Test Frequency ID</th><th>Bandwidth [MHz]</th><th>N<sub>UL</sub></th><th>Frequency of Uplink [MHz]</th><th>N<sub>DL</sub></th><th>Frequency of Downlink [MHz]</th></tr><tr><td rowspan="4">Low Range</td><td>1.4</td><td>20407</td><td>824.7</td><td>2407</td><td>869.7</td></tr><tr><td>3</td><td>20415</td><td>825.5</td><td>2415</td><td>870.5</td></tr><tr><td>5</td><td>20425</td><td>826.5</td><td>2425</td><td>871.5</td></tr><tr><td>10<sup>[1]</sup></td><td>20450</td><td>829</td><td>2450</td><td>874</td></tr><tr><td>Mid Range</td><td>1.4/3/5/10<sup>[1]</sup></td><td>20525</td><td>836.5</td><td>2525</td><td>881.5</td></tr><tr><td rowspan="4">High Range</td><td>1.4</td><td>20643</td><td>848.3</td><td>2643</td><td>893.3</td></tr><tr><td>3</td><td>20635</td><td>847.5</td><td>2635</td><td>892.5</td></tr><tr><td>5</td><td>20625</td><td>846.5</td><td>2625</td><td>891.5</td></tr><tr><td>10<sup>[1]</sup></td><td>20600</td><td>844</td><td>2600</td><td>889</td></tr></table> <p>NOTE 1: Bandwidth for which a relaxation of the specified UE receiver sensitivity requirement (TS 36.101 [27] Clause 7.3) is allowed.</p>                                                                                                                                                                                                                                                                                                                                                                    | Test Frequency ID | Bandwidth [MHz]           | N <sub>UL</sub> | Frequency of Uplink [MHz]   | N <sub>DL</sub> | Frequency of Downlink [MHz] | Low Range | 1.4              | 20407 | 824.7  | 2407 | 869.7  | 3                 | 20415 | 825.5  | 2415 | 870.5  | 5                | 20425                               | 826.5  | 2425 | 871.5  | 10 <sup>[1]</sup> | 20450      | 829              | 2450  | 874   | Mid Range         | 1.4/3/5/10 <sup>[1]</sup>                 | 20525             | 836.5 | 2525   | 881.5             | High Range | 1.4  | 20643 | 848.3  | 2643      | 893.3                                           | 3     | 20635  | 847.5 | 2635   | 892.5      | 5                | 20625 | 846.5  | 2625 | 891.5  | 10 <sup>[1]</sup> | 20600 | 844    | 2600 | 889    |   |       |        |      |        |    |       |      |      |      |                   |       |        |      |        |                   |       |      |      |      |
| Test Frequency ID | Bandwidth [MHz]                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          | N <sub>UL</sub>   | Frequency of Uplink [MHz] | N <sub>DL</sub> | Frequency of Downlink [MHz] |                 |                             |           |                  |       |        |      |        |                   |       |        |      |        |                  |                                     |        |      |        |                   |            |                  |       |       |                   |                                           |                   |       |        |                   |            |      |       |        |           |                                                 |       |        |       |        |            |                  |       |        |      |        |                   |       |        |      |        |   |       |        |      |        |    |       |      |      |      |                   |       |        |      |        |                   |       |      |      |      |
| Low Range         | 1.4                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      | 20407             | 824.7                     | 2407            | 869.7                       |                 |                             |           |                  |       |        |      |        |                   |       |        |      |        |                  |                                     |        |      |        |                   |            |                  |       |       |                   |                                           |                   |       |        |                   |            |      |       |        |           |                                                 |       |        |       |        |            |                  |       |        |      |        |                   |       |        |      |        |   |       |        |      |        |    |       |      |      |      |                   |       |        |      |        |                   |       |      |      |      |
|                   | 3                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        | 20415             | 825.5                     | 2415            | 870.5                       |                 |                             |           |                  |       |        |      |        |                   |       |        |      |        |                  |                                     |        |      |        |                   |            |                  |       |       |                   |                                           |                   |       |        |                   |            |      |       |        |           |                                                 |       |        |       |        |            |                  |       |        |      |        |                   |       |        |      |        |   |       |        |      |        |    |       |      |      |      |                   |       |        |      |        |                   |       |      |      |      |
|                   | 5                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        | 20425             | 826.5                     | 2425            | 871.5                       |                 |                             |           |                  |       |        |      |        |                   |       |        |      |        |                  |                                     |        |      |        |                   |            |                  |       |       |                   |                                           |                   |       |        |                   |            |      |       |        |           |                                                 |       |        |       |        |            |                  |       |        |      |        |                   |       |        |      |        |   |       |        |      |        |    |       |      |      |      |                   |       |        |      |        |                   |       |      |      |      |
|                   | 10 <sup>[1]</sup>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        | 20450             | 829                       | 2450            | 874                         |                 |                             |           |                  |       |        |      |        |                   |       |        |      |        |                  |                                     |        |      |        |                   |            |                  |       |       |                   |                                           |                   |       |        |                   |            |      |       |        |           |                                                 |       |        |       |        |            |                  |       |        |      |        |                   |       |        |      |        |   |       |        |      |        |    |       |      |      |      |                   |       |        |      |        |                   |       |      |      |      |
| Mid Range         | 1.4/3/5/10 <sup>[1]</sup>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                | 20525             | 836.5                     | 2525            | 881.5                       |                 |                             |           |                  |       |        |      |        |                   |       |        |      |        |                  |                                     |        |      |        |                   |            |                  |       |       |                   |                                           |                   |       |        |                   |            |      |       |        |           |                                                 |       |        |       |        |            |                  |       |        |      |        |                   |       |        |      |        |   |       |        |      |        |    |       |      |      |      |                   |       |        |      |        |                   |       |      |      |      |
| High Range        | 1.4                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      | 20643             | 848.3                     | 2643            | 893.3                       |                 |                             |           |                  |       |        |      |        |                   |       |        |      |        |                  |                                     |        |      |        |                   |            |                  |       |       |                   |                                           |                   |       |        |                   |            |      |       |        |           |                                                 |       |        |       |        |            |                  |       |        |      |        |                   |       |        |      |        |   |       |        |      |        |    |       |      |      |      |                   |       |        |      |        |                   |       |      |      |      |
|                   | 3                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        | 20635             | 847.5                     | 2635            | 892.5                       |                 |                             |           |                  |       |        |      |        |                   |       |        |      |        |                  |                                     |        |      |        |                   |            |                  |       |       |                   |                                           |                   |       |        |                   |            |      |       |        |           |                                                 |       |        |       |        |            |                  |       |        |      |        |                   |       |        |      |        |   |       |        |      |        |    |       |      |      |      |                   |       |        |      |        |                   |       |      |      |      |
|                   | 5                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        | 20625             | 846.5                     | 2625            | 891.5                       |                 |                             |           |                  |       |        |      |        |                   |       |        |      |        |                  |                                     |        |      |        |                   |            |                  |       |       |                   |                                           |                   |       |        |                   |            |      |       |        |           |                                                 |       |        |       |        |            |                  |       |        |      |        |                   |       |        |      |        |   |       |        |      |        |    |       |      |      |      |                   |       |        |      |        |                   |       |      |      |      |
|                   | 10 <sup>[1]</sup>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        | 20600             | 844                       | 2600            | 889                         |                 |                             |           |                  |       |        |      |        |                   |       |        |      |        |                  |                                     |        |      |        |                   |            |                  |       |       |                   |                                           |                   |       |        |                   |            |      |       |        |           |                                                 |       |        |       |        |            |                  |       |        |      |        |                   |       |        |      |        |   |       |        |      |        |    |       |      |      |      |                   |       |        |      |        |                   |       |      |      |      |
| LTE Band 7        | <table><tr><th>Test Frequency ID</th><th>Bandwidth [MHz]</th><th>N<sub>UL</sub></th><th>Frequency of Uplink [MHz]</th><th>N<sub>DL</sub></th><th>Frequency of Downlink [MHz]</th></tr><tr><td rowspan="4">Low Range</td><td>5</td><td>20775</td><td>2502.5</td><td>2775</td><td>2622.5</td></tr><tr><td>10</td><td>20800</td><td>2505</td><td>2800</td><td>2625</td></tr><tr><td>15</td><td>20825</td><td>2507.5</td><td>2825</td><td>2627.5</td></tr><tr><td>20<sup>[1]</sup></td><td>20850</td><td>2510</td><td>2850</td><td>2630</td></tr><tr><td>Mid Range</td><td>5/10/15/20<sup>[1]</sup></td><td>21100</td><td>2535</td><td>3100</td><td>2655</td></tr><tr><td rowspan="4">High Range</td><td>5</td><td>21425</td><td>2567.5</td><td>3425</td><td>2687.5</td></tr><tr><td>10</td><td>21400</td><td>2565</td><td>3400</td><td>2685</td></tr><tr><td>15</td><td>21375</td><td>2562.5</td><td>3375</td><td>2682.5</td></tr><tr><td>20<sup>[1]</sup></td><td>21350</td><td>2560</td><td>3350</td><td>2680</td></tr></table> <p>NOTE 1: Bandwidth for which a relaxation of the specified UE receiver sensitivity requirement (TS 36.101 [27] Clause 7.3) is allowed.</p>                                                                                                                                                                                                                                                                                                                                                              | Test Frequency ID | Bandwidth [MHz]           | N <sub>UL</sub> | Frequency of Uplink [MHz]   | N <sub>DL</sub> | Frequency of Downlink [MHz] | Low Range | 5                | 20775 | 2502.5 | 2775 | 2622.5 | 10                | 20800 | 2505   | 2800 | 2625   | 15               | 20825                               | 2507.5 | 2825 | 2627.5 | 20 <sup>[1]</sup> | 20850      | 2510             | 2850  | 2630  | Mid Range         | 5/10/15/20 <sup>[1]</sup>                 | 21100             | 2535  | 3100   | 2655              | High Range | 5    | 21425 | 2567.5 | 3425      | 2687.5                                          | 10    | 21400  | 2565  | 3400   | 2685       | 15               | 21375 | 2562.5 | 3375 | 2682.5 | 20 <sup>[1]</sup> | 21350 | 2560   | 3350 | 2680   |   |       |        |      |        |    |       |      |      |      |                   |       |        |      |        |                   |       |      |      |      |
| Test Frequency ID | Bandwidth [MHz]                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          | N <sub>UL</sub>   | Frequency of Uplink [MHz] | N <sub>DL</sub> | Frequency of Downlink [MHz] |                 |                             |           |                  |       |        |      |        |                   |       |        |      |        |                  |                                     |        |      |        |                   |            |                  |       |       |                   |                                           |                   |       |        |                   |            |      |       |        |           |                                                 |       |        |       |        |            |                  |       |        |      |        |                   |       |        |      |        |   |       |        |      |        |    |       |      |      |      |                   |       |        |      |        |                   |       |      |      |      |
| Low Range         | 5                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        | 20775             | 2502.5                    | 2775            | 2622.5                      |                 |                             |           |                  |       |        |      |        |                   |       |        |      |        |                  |                                     |        |      |        |                   |            |                  |       |       |                   |                                           |                   |       |        |                   |            |      |       |        |           |                                                 |       |        |       |        |            |                  |       |        |      |        |                   |       |        |      |        |   |       |        |      |        |    |       |      |      |      |                   |       |        |      |        |                   |       |      |      |      |
|                   | 10                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       | 20800             | 2505                      | 2800            | 2625                        |                 |                             |           |                  |       |        |      |        |                   |       |        |      |        |                  |                                     |        |      |        |                   |            |                  |       |       |                   |                                           |                   |       |        |                   |            |      |       |        |           |                                                 |       |        |       |        |            |                  |       |        |      |        |                   |       |        |      |        |   |       |        |      |        |    |       |      |      |      |                   |       |        |      |        |                   |       |      |      |      |
|                   | 15                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       | 20825             | 2507.5                    | 2825            | 2627.5                      |                 |                             |           |                  |       |        |      |        |                   |       |        |      |        |                  |                                     |        |      |        |                   |            |                  |       |       |                   |                                           |                   |       |        |                   |            |      |       |        |           |                                                 |       |        |       |        |            |                  |       |        |      |        |                   |       |        |      |        |   |       |        |      |        |    |       |      |      |      |                   |       |        |      |        |                   |       |      |      |      |
|                   | 20 <sup>[1]</sup>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        | 20850             | 2510                      | 2850            | 2630                        |                 |                             |           |                  |       |        |      |        |                   |       |        |      |        |                  |                                     |        |      |        |                   |            |                  |       |       |                   |                                           |                   |       |        |                   |            |      |       |        |           |                                                 |       |        |       |        |            |                  |       |        |      |        |                   |       |        |      |        |   |       |        |      |        |    |       |      |      |      |                   |       |        |      |        |                   |       |      |      |      |
| Mid Range         | 5/10/15/20 <sup>[1]</sup>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                | 21100             | 2535                      | 3100            | 2655                        |                 |                             |           |                  |       |        |      |        |                   |       |        |      |        |                  |                                     |        |      |        |                   |            |                  |       |       |                   |                                           |                   |       |        |                   |            |      |       |        |           |                                                 |       |        |       |        |            |                  |       |        |      |        |                   |       |        |      |        |   |       |        |      |        |    |       |      |      |      |                   |       |        |      |        |                   |       |      |      |      |
| High Range        | 5                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        | 21425             | 2567.5                    | 3425            | 2687.5                      |                 |                             |           |                  |       |        |      |        |                   |       |        |      |        |                  |                                     |        |      |        |                   |            |                  |       |       |                   |                                           |                   |       |        |                   |            |      |       |        |           |                                                 |       |        |       |        |            |                  |       |        |      |        |                   |       |        |      |        |   |       |        |      |        |    |       |      |      |      |                   |       |        |      |        |                   |       |      |      |      |
|                   | 10                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       | 21400             | 2565                      | 3400            | 2685                        |                 |                             |           |                  |       |        |      |        |                   |       |        |      |        |                  |                                     |        |      |        |                   |            |                  |       |       |                   |                                           |                   |       |        |                   |            |      |       |        |           |                                                 |       |        |       |        |            |                  |       |        |      |        |                   |       |        |      |        |   |       |        |      |        |    |       |      |      |      |                   |       |        |      |        |                   |       |      |      |      |
|                   | 15                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       | 21375             | 2562.5                    | 3375            | 2682.5                      |                 |                             |           |                  |       |        |      |        |                   |       |        |      |        |                  |                                     |        |      |        |                   |            |                  |       |       |                   |                                           |                   |       |        |                   |            |      |       |        |           |                                                 |       |        |       |        |            |                  |       |        |      |        |                   |       |        |      |        |   |       |        |      |        |    |       |      |      |      |                   |       |        |      |        |                   |       |      |      |      |
|                   | 20 <sup>[1]</sup>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        | 21350             | 2560                      | 3350            | 2680                        |                 |                             |           |                  |       |        |      |        |                   |       |        |      |        |                  |                                     |        |      |        |                   |            |                  |       |       |                   |                                           |                   |       |        |                   |            |      |       |        |           |                                                 |       |        |       |        |            |                  |       |        |      |        |                   |       |        |      |        |   |       |        |      |        |    |       |      |      |      |                   |       |        |      |        |                   |       |      |      |      |
| LTE Band 12       | <p>Table 4.3.1.1.12-1: Test frequencies for E-UTRA channel bandwidth for operating band 12</p> <table><tr><th>Test Frequency ID</th><th>Bandwidth [MHz]</th><th>N<sub>UL</sub></th><th>Frequency of Uplink [MHz]</th><th>N<sub>DL</sub></th><th>Frequency of Downlink [MHz]</th></tr><tr><td rowspan="4">Low Range</td><td>1.4</td><td>23017</td><td>699.7</td><td>5017</td><td>729.7</td></tr><tr><td>3</td><td>23025</td><td>700.5</td><td>5025</td><td>730.5</td></tr><tr><td>5<sup>[1]</sup></td><td>23035</td><td>701.5</td><td>5035</td><td>731.5</td></tr><tr><td>10<sup>[1]</sup></td><td>23060</td><td>704</td><td>5060</td><td>734</td></tr><tr><td>Mid Range</td><td>1.4/3/5<sup>[1]</sup>/10<sup>[1]</sup></td><td>23095</td><td>707.5</td><td>5095</td><td>737.5</td></tr><tr><td rowspan="4">High Range</td><td>1.4</td><td>23173</td><td>715.3</td><td>5173</td><td>745.3</td></tr><tr><td>3</td><td>23165</td><td>714.5</td><td>5165</td><td>744.5</td></tr><tr><td>5<sup>[1]</sup></td><td>23155</td><td>713.5</td><td>5155</td><td>743.5</td></tr><tr><td>10<sup>[1]</sup></td><td>23130</td><td>711</td><td>5130</td><td>741</td></tr></table> <p>NOTE 1: Bandwidth for which a relaxation of the specified UE receiver sensitivity requirement (TS 36.101 [27] Clause 7.3) is allowed.</p>                                                                                                                                                                                                                           | Test Frequency ID | Bandwidth [MHz]           | N <sub>UL</sub> | Frequency of Uplink [MHz]   | N <sub>DL</sub> | Frequency of Downlink [MHz] | Low Range | 1.4              | 23017 | 699.7  | 5017 | 729.7  | 3                 | 23025 | 700.5  | 5025 | 730.5  | 5 <sup>[1]</sup> | 23035                               | 701.5  | 5035 | 731.5  | 10 <sup>[1]</sup> | 23060      | 704              | 5060  | 734   | Mid Range         | 1.4/3/5 <sup>[1]</sup> /10 <sup>[1]</sup> | 23095             | 707.5 | 5095   | 737.5             | High Range | 1.4  | 23173 | 715.3  | 5173      | 745.3                                           | 3     | 23165  | 714.5 | 5165   | 744.5      | 5 <sup>[1]</sup> | 23155 | 713.5  | 5155 | 743.5  | 10 <sup>[1]</sup> | 23130 | 711    | 5130 | 741    |   |       |        |      |        |    |       |      |      |      |                   |       |        |      |        |                   |       |      |      |      |
| Test Frequency ID | Bandwidth [MHz]                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          | N <sub>UL</sub>   | Frequency of Uplink [MHz] | N <sub>DL</sub> | Frequency of Downlink [MHz] |                 |                             |           |                  |       |        |      |        |                   |       |        |      |        |                  |                                     |        |      |        |                   |            |                  |       |       |                   |                                           |                   |       |        |                   |            |      |       |        |           |                                                 |       |        |       |        |            |                  |       |        |      |        |                   |       |        |      |        |   |       |        |      |        |    |       |      |      |      |                   |       |        |      |        |                   |       |      |      |      |
| Low Range         | 1.4                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      | 23017             | 699.7                     | 5017            | 729.7                       |                 |                             |           |                  |       |        |      |        |                   |       |        |      |        |                  |                                     |        |      |        |                   |            |                  |       |       |                   |                                           |                   |       |        |                   |            |      |       |        |           |                                                 |       |        |       |        |            |                  |       |        |      |        |                   |       |        |      |        |   |       |        |      |        |    |       |      |      |      |                   |       |        |      |        |                   |       |      |      |      |
|                   | 3                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        | 23025             | 700.5                     | 5025            | 730.5                       |                 |                             |           |                  |       |        |      |        |                   |       |        |      |        |                  |                                     |        |      |        |                   |            |                  |       |       |                   |                                           |                   |       |        |                   |            |      |       |        |           |                                                 |       |        |       |        |            |                  |       |        |      |        |                   |       |        |      |        |   |       |        |      |        |    |       |      |      |      |                   |       |        |      |        |                   |       |      |      |      |
|                   | 5 <sup>[1]</sup>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         | 23035             | 701.5                     | 5035            | 731.5                       |                 |                             |           |                  |       |        |      |        |                   |       |        |      |        |                  |                                     |        |      |        |                   |            |                  |       |       |                   |                                           |                   |       |        |                   |            |      |       |        |           |                                                 |       |        |       |        |            |                  |       |        |      |        |                   |       |        |      |        |   |       |        |      |        |    |       |      |      |      |                   |       |        |      |        |                   |       |      |      |      |
|                   | 10 <sup>[1]</sup>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        | 23060             | 704                       | 5060            | 734                         |                 |                             |           |                  |       |        |      |        |                   |       |        |      |        |                  |                                     |        |      |        |                   |            |                  |       |       |                   |                                           |                   |       |        |                   |            |      |       |        |           |                                                 |       |        |       |        |            |                  |       |        |      |        |                   |       |        |      |        |   |       |        |      |        |    |       |      |      |      |                   |       |        |      |        |                   |       |      |      |      |
| Mid Range         | 1.4/3/5 <sup>[1]</sup> /10 <sup>[1]</sup>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                | 23095             | 707.5                     | 5095            | 737.5                       |                 |                             |           |                  |       |        |      |        |                   |       |        |      |        |                  |                                     |        |      |        |                   |            |                  |       |       |                   |                                           |                   |       |        |                   |            |      |       |        |           |                                                 |       |        |       |        |            |                  |       |        |      |        |                   |       |        |      |        |   |       |        |      |        |    |       |      |      |      |                   |       |        |      |        |                   |       |      |      |      |
| High Range        | 1.4                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      | 23173             | 715.3                     | 5173            | 745.3                       |                 |                             |           |                  |       |        |      |        |                   |       |        |      |        |                  |                                     |        |      |        |                   |            |                  |       |       |                   |                                           |                   |       |        |                   |            |      |       |        |           |                                                 |       |        |       |        |            |                  |       |        |      |        |                   |       |        |      |        |   |       |        |      |        |    |       |      |      |      |                   |       |        |      |        |                   |       |      |      |      |
|                   | 3                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        | 23165             | 714.5                     | 5165            | 744.5                       |                 |                             |           |                  |       |        |      |        |                   |       |        |      |        |                  |                                     |        |      |        |                   |            |                  |       |       |                   |                                           |                   |       |        |                   |            |      |       |        |           |                                                 |       |        |       |        |            |                  |       |        |      |        |                   |       |        |      |        |   |       |        |      |        |    |       |      |      |      |                   |       |        |      |        |                   |       |      |      |      |
|                   | 5 <sup>[1]</sup>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         | 23155             | 713.5                     | 5155            | 743.5                       |                 |                             |           |                  |       |        |      |        |                   |       |        |      |        |                  |                                     |        |      |        |                   |            |                  |       |       |                   |                                           |                   |       |        |                   |            |      |       |        |           |                                                 |       |        |       |        |            |                  |       |        |      |        |                   |       |        |      |        |   |       |        |      |        |    |       |      |      |      |                   |       |        |      |        |                   |       |      |      |      |
|                   | 10 <sup>[1]</sup>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        | 23130             | 711                       | 5130            | 741                         |                 |                             |           |                  |       |        |      |        |                   |       |        |      |        |                  |                                     |        |      |        |                   |            |                  |       |       |                   |                                           |                   |       |        |                   |            |      |       |        |           |                                                 |       |        |       |        |            |                  |       |        |      |        |                   |       |        |      |        |   |       |        |      |        |    |       |      |      |      |                   |       |        |      |        |                   |       |      |      |      |
| LTE Band 17       | <table><tr><th>Test Frequency ID</th><th>Bandwidth [MHz]</th><th>N<sub>UL</sub></th><th>Frequency of Uplink [MHz]</th><th>N<sub>DL</sub></th><th>Frequency of Downlink [MHz]</th></tr><tr><td rowspan="2">Low Range</td><td>5<sup>[1]</sup></td><td>23755</td><td>706.5</td><td>5755</td><td>736.5</td></tr><tr><td>10<sup>[1]</sup></td><td>23780</td><td>709</td><td>5780</td><td>739</td></tr><tr><td>Mid Range</td><td>5<sup>[1]</sup>/10<sup>[1]</sup></td><td>23790</td><td>710</td><td>5790</td><td>740</td></tr><tr><td rowspan="2">High Range</td><td>5<sup>[1]</sup></td><td>23825</td><td>713.5</td><td>5825</td><td>743.5</td></tr><tr><td>10<sup>[1]</sup></td><td>23800</td><td>711</td><td>5800</td><td>741</td></tr></table> <p>NOTE 1: Bandwidth for which a relaxation of the specified UE receiver sensitivity requirement (TS 36.101 [27] Clause 7.3) is allowed.</p>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                | Test Frequency ID | Bandwidth [MHz]           | N <sub>UL</sub> | Frequency of Uplink [MHz]   | N <sub>DL</sub> | Frequency of Downlink [MHz] | Low Range | 5 <sup>[1]</sup> | 23755 | 706.5  | 5755 | 736.5  | 10 <sup>[1]</sup> | 23780 | 709    | 5780 | 739    | Mid Range        | 5 <sup>[1]</sup> /10 <sup>[1]</sup> | 23790  | 710  | 5790   | 740               | High Range | 5 <sup>[1]</sup> | 23825 | 713.5 | 5825              | 743.5                                     | 10 <sup>[1]</sup> | 23800 | 711    | 5800              | 741        |      |       |        |           |                                                 |       |        |       |        |            |                  |       |        |      |        |                   |       |        |      |        |   |       |        |      |        |    |       |      |      |      |                   |       |        |      |        |                   |       |      |      |      |
| Test Frequency ID | Bandwidth [MHz]                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          | N <sub>UL</sub>   | Frequency of Uplink [MHz] | N <sub>DL</sub> | Frequency of Downlink [MHz] |                 |                             |           |                  |       |        |      |        |                   |       |        |      |        |                  |                                     |        |      |        |                   |            |                  |       |       |                   |                                           |                   |       |        |                   |            |      |       |        |           |                                                 |       |        |       |        |            |                  |       |        |      |        |                   |       |        |      |        |   |       |        |      |        |    |       |      |      |      |                   |       |        |      |        |                   |       |      |      |      |
| Low Range         | 5 <sup>[1]</sup>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         | 23755             | 706.5                     | 5755            | 736.5                       |                 |                             |           |                  |       |        |      |        |                   |       |        |      |        |                  |                                     |        |      |        |                   |            |                  |       |       |                   |                                           |                   |       |        |                   |            |      |       |        |           |                                                 |       |        |       |        |            |                  |       |        |      |        |                   |       |        |      |        |   |       |        |      |        |    |       |      |      |      |                   |       |        |      |        |                   |       |      |      |      |
|                   | 10 <sup>[1]</sup>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        | 23780             | 709                       | 5780            | 739                         |                 |                             |           |                  |       |        |      |        |                   |       |        |      |        |                  |                                     |        |      |        |                   |            |                  |       |       |                   |                                           |                   |       |        |                   |            |      |       |        |           |                                                 |       |        |       |        |            |                  |       |        |      |        |                   |       |        |      |        |   |       |        |      |        |    |       |      |      |      |                   |       |        |      |        |                   |       |      |      |      |
| Mid Range         | 5 <sup>[1]</sup> /10 <sup>[1]</sup>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      | 23790             | 710                       | 5790            | 740                         |                 |                             |           |                  |       |        |      |        |                   |       |        |      |        |                  |                                     |        |      |        |                   |            |                  |       |       |                   |                                           |                   |       |        |                   |            |      |       |        |           |                                                 |       |        |       |        |            |                  |       |        |      |        |                   |       |        |      |        |   |       |        |      |        |    |       |      |      |      |                   |       |        |      |        |                   |       |      |      |      |
| High Range        | 5 <sup>[1]</sup>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         | 23825             | 713.5                     | 5825            | 743.5                       |                 |                             |           |                  |       |        |      |        |                   |       |        |      |        |                  |                                     |        |      |        |                   |            |                  |       |       |                   |                                           |                   |       |        |                   |            |      |       |        |           |                                                 |       |        |       |        |            |                  |       |        |      |        |                   |       |        |      |        |   |       |        |      |        |    |       |      |      |      |                   |       |        |      |        |                   |       |      |      |      |
|                   | 10 <sup>[1]</sup>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        | 23800             | 711                       | 5800            | 741                         |                 |                             |           |                  |       |        |      |        |                   |       |        |      |        |                  |                                     |        |      |        |                   |            |                  |       |       |                   |                                           |                   |       |        |                   |            |      |       |        |           |                                                 |       |        |       |        |            |                  |       |        |      |        |                   |       |        |      |        |   |       |        |      |        |    |       |      |      |      |                   |       |        |      |        |                   |       |      |      |      |

|             |                   |                 |        |                             |  |
|-------------|-------------------|-----------------|--------|-----------------------------|--|
| LTE Band 38 | Test Frequency ID | Bandwidth [MHz] | EARFCN | Frequency (UL and DL) [MHz] |  |
|             | Low Range         | 5               | 37775  | 2572.5                      |  |
|             |                   | 10              | 37800  | 2575                        |  |
|             |                   | 15              | 37825  | 2577.5                      |  |
|             |                   | 20              | 37850  | 2580                        |  |
|             | Mid Range         | 5/10/15/20      | 38000  | 2595                        |  |
|             | High Range        | 5               | 38225  | 2617.5                      |  |
|             |                   | 10              | 38200  | 2615                        |  |
|             |                   | 15              | 38175  | 2612.5                      |  |
|             |                   | 20              | 38150  | 2610                        |  |

|             |                                                                                         |                  |                 |                           |                 |                             |
|-------------|-----------------------------------------------------------------------------------------|------------------|-----------------|---------------------------|-----------------|-----------------------------|
| LTE Band 66 | Table 4.3.1.1.66-1: Test frequencies for E-UTRA channel bandwidth for operating band 66 |                  |                 |                           |                 |                             |
|             | Test Frequency ID                                                                       | Bandwidth [MHz]  | N <sub>UL</sub> | Frequency of Uplink [MHz] | N <sub>DL</sub> | Frequency of Downlink [MHz] |
|             | Low Range                                                                               | 1.4              | 131979          | 1710.7                    | 66443           | 2110.7                      |
|             |                                                                                         | 3                | 131987          | 1711.5                    | 66451           | 2111.5                      |
|             |                                                                                         | 5                | 131997          | 1712.5                    | 66461           | 2112.5                      |
|             |                                                                                         | 10               | 132022          | 1715                      | 66486           | 2115                        |
|             |                                                                                         | 15               | 132047          | 1717.5                    | 66511           | 2117.5                      |
|             |                                                                                         | 20               | 132072          | 1720                      | 66536           | 2120                        |
|             | Mid Range Tx <sup>1</sup>                                                               | 1.4/3/5/10/15/20 | 132322          | 1745                      | 66786           | 2145                        |
|             | Mid Range                                                                               | 1.4/3/5/10/15/20 | 132422          | 1755                      | 66886           | 2155                        |
|             | Paired High Range <sup>2</sup>                                                          | 1.4              | 132665          | 1779.3                    | 67129           | 2179.3                      |
|             |                                                                                         | 3                | 132657          | 1778.5                    | 67121           | 2178.5                      |
|             |                                                                                         | 5                | 132647          | 1777.5                    | 67111           | 2177.5                      |
|             |                                                                                         | 10               | 132622          | 1775                      | 67086           | 2175                        |
|             |                                                                                         | 15               | 132597          | 1772.5                    | 67061           | 2172.5                      |
|             |                                                                                         | 20               | 132572          | 1770                      | 67036           | 2170                        |
|             | High Range <sup>3</sup>                                                                 | 1.4              | NA              | NA                        | 67329           | 2199.3                      |
|             |                                                                                         | 3                | NA              | NA                        | 67321           | 2198.5                      |
|             |                                                                                         | 5                | NA              | NA                        | 67311           | 2197.5                      |
|             |                                                                                         | 10               | NA              | NA                        | 67286           | 2195                        |
|             |                                                                                         | 15               | NA              | NA                        | 67261           | 2192.5                      |
|             |                                                                                         | 20               | NA              | NA                        | 67236           | 2190                        |

## 4.2. Test mode

|           |           |
|-----------|-----------|
| Test mode | Link mode |
|-----------|-----------|

- 1) Antenna port conducted and radiated test items were performed according to KDB 971168 D01 Power Meas. License Digital Systems and ANSI C63.26 with maximum output power.
- 2) Radiated measurements were performed with rotating EUT in different three orthogonal test planes to find the maximum emission.

Test configuration is as follow:

| Test Items                 | Bandwidth | Modulation | RB # |      |      |
|----------------------------|-----------|------------|------|------|------|
|                            |           |            | 1    | Half | Full |
| Radiated Spurious Emission | #5        | #6         | ○    | -    | -    |

Note:

- #5: Test all kind of bandwidth in section 3.3
- #6: Test all kind of uplink modulation in section 3.3
- ○: means that this configuration is chosen for testing
- -: means that this configuration is not test.
- The device is investigated from 30MHz to 10 times of fundamental signal for radiated spurious emission test under different bandwidth, modulations and RB size/offset in exploratory test. Subsequently, only the worst case emissions (highest bandwidth, QPSK, and 1RB0) are reported.

### 4.3. Test sample information

| Test item           | HTW sample no.  |
|---------------------|-----------------|
| Radiated test items | YPHT23060801007 |

Note:

Radiated test items: Radiated Spurious Emission

### 4.4. Support unit used in test configuration and system

The EUT has been associated with peripherals and configuration operated in a manner tended to maximize its emission characteristics in a typical application.

The following peripheral devices and interface cables were connected during the measurement:

| Whether support unit is used? |           |            |           |       |
|-------------------------------|-----------|------------|-----------|-------|
| ✓ No                          |           |            |           |       |
| Item                          | Equipment | Trade Name | Model No. | Other |
| 1                             |           |            |           |       |
| 2                             |           |            |           |       |

### 4.5. Testing environmental condition

|              |                       |         |
|--------------|-----------------------|---------|
| Voltage      | VN=Nominal Voltage    | AC 120V |
| Temperature  | TN=Normal Temperature | 25 °C   |
| Humidity     | 30~60 %               |         |
| Air Pressure | 950-1050 hPa          |         |

#### 4.6. Statement of the measurement uncertainty

| No. | Test Items                 | Measurement Uncertainty                        |
|-----|----------------------------|------------------------------------------------|
| 1   | Radiated Spurious Emission | 4.54dB for 30MHz-1GHz<br>5.10dB for above 1GHz |

This uncertainty represents an expanded uncertainty expressed at approximately the 95% confidence level using a coverage factor of  $k=1.96$ .

#### 4.7. Equipments Used during the Test

| ● Radiated Spurious Emission |                         |                    |               |            |            |                           |                           |
|------------------------------|-------------------------|--------------------|---------------|------------|------------|---------------------------|---------------------------|
| Used                         | Test Equipment          | Manufacturer       | Equipment No. | Model No.  | Serial No. | Last Cal. Date (YY-MM-DD) | Next Cal. Date (YY-MM-DD) |
| ●                            | Semi-Anechoic Chamber   | Albatross projects | HTWE0122      | SAC-3m-01  | C11121     | 2023/4/17                 | 2026/4/16                 |
| ●                            | Spectrum Analyzer       | R&S                | HTWE0098      | FSP40      | 100597     | 2023/08/22                | 2024/08/21                |
| ●                            | Spectrum Analyzer       | R&S                | HTWE0385      | N9020A     | MY54486658 | 2023/08/22                | 2024/08/21                |
| ●                            | Ultra-Broadband Antenna | SCHWARZBECK        | HTWE0123      | VULB9163   | 538        | 2021/4/6                  | 2024/4/5                  |
| ●                            | Horn Antenna            | SCHWARZBECK        | HTWE0126      | BBHA 9120D | 1011       | 2023/2/14                 | 2026/2/13                 |
| ●                            | Pre-Amplifier           | CD                 | HTWE0071      | PAP-0102   | 12004      | 2023/5/25                 | 2024/5/24                 |
| ●                            | Broadband Pre-amplifier | SCHWARZBECK        | HTWE0201      | BBV 9718   | 9718-248   | 2023/5/25                 | 2024/5/24                 |
| ●                            | Test Software           | Audix              | N/A           | E3         | N/A        | N/A                       | N/A                       |

| ● Auxiliary Equipment |                            |              |               |                  |            |                           |                           |
|-----------------------|----------------------------|--------------|---------------|------------------|------------|---------------------------|---------------------------|
| Used                  | Test Equipment             | Manufacturer | Equipment No. | Model No.        | Serial No. | Last Cal. Date (YY-MM-DD) | Next Cal. Date (YY-MM-DD) |
| ●                     | Radio communication tester | R&S          | HTWE0287      | CMW500           | 137688-Lv  | 2023/08/25                | 2024/08/24                |
| ●                     | High pass filter           | Wainwright   | HTWE0297      | WHKX3.0/18G-10SS | 38         | 2023/05/15                | 2024/05/14                |
| ○                     | Band Stop filter           | -            | HTWE0039      | N/A              | N/A        | 2023/01/26                | 2024/01/25                |

## **5. TEST CONDITIONS AND RESULTS**

### **5.1. ERP and EIRP**

#### **LIMIT**

LTE Band 2/7/25/38/41: 2W(33dBm) EIRP

LTE Band 4/66: 1W(30dBm) EIRP

LTE Band 5/26: 7W(38.50dBm) ERP

LTE Band 12/13/17/71: 3W(34.77dBm) ERP

#### **TEST PROCEDURE**

1. According to the power tested in section 5.1, select the maximum power in each mode, and use the following formula to calculate the corresponding ERP/EIRP.
2.  $ERP = \text{conducted power} + \text{Gain(dBd)}$
3.  $EIRP = \text{conducted power} + \text{Gain(dBi)}$   
 $ERP = EIRP - 2.15$

#### **TEST RESULTS**

☒ **Passed**      ☐ **Not Applicable**

#### **TEST DATA**

Refer to the appendix report

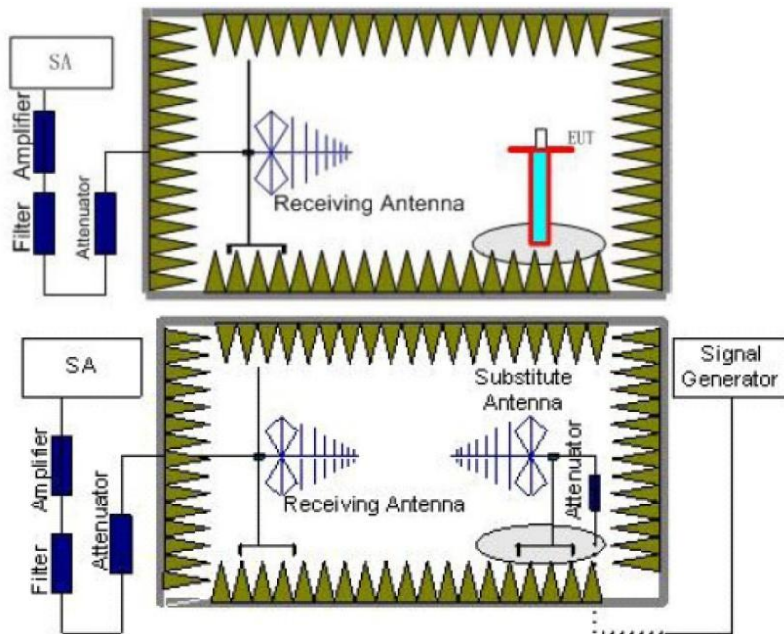
## 5.2. Radiated Spurious Emission

### LIMIT

LTE Band 2/4/5/12/13/17/25/26/66/71: -13dBm;

LTE Band 7/38/41: -25dBm

### TEST CONFIGURATION



### TEST PROCEDURE

1. Place the EUT in the center of the turntable.
  - a) For radiated emissions measurements performed at frequencies less than or equal to 1 GHz, the EUT shall be placed on a RF-transparent table at a nominal height of 80 cm above the reference ground plane
  - b) For radiated measurements performed at frequencies above 1 GHz, the EUT shall be placed on an RF transparent table at a nominal height of 1.5 m above the ground plane.
2. Unless the EUT uses an integral antenna, the EUT shall be terminated with a non-radiating transmitter load. In cases where the EUT uses an adjustable antenna, the antenna shall be adjusted through typical positions and lengths to maximize emissions levels.
3. The EUT shall be tested while operating on the frequency per manufacturer specification. Set the transmitter to operate in continuous transmit mode.
4. Receiver or Spectrum set as follow:
 

Below 1GHz, RBW=100kHz, VBW=300kHz, Detector=Peak, Sweep time=Auto

Above 1GHz, RBW=1MHz, VBW=3MHz, Detector=Peck, Sweep time=Auto
5. Each emission under consideration shall be evaluated:
  - a) Raise and lower the measurement antenna from 1 m to 4 m, as necessary to enable detection of the maximum emission amplitude relative to measurement antenna height.
  - b) Rotate the EUT through 360° to determine the maximum emission level relative to the axial position.
  - c) Return the turntable to the azimuth where the highest emission amplitude level was observed.
  - d) Vary the measurement antenna height again through 1 m to 4 m again to find the height associated with the maximum emission amplitude.
  - e) Record the measured emission amplitude level and frequency
6. Repeat step 5 for each emission frequency with the measurement antenna oriented in both the horizontal and vertical polarizations to determine the orientation that gives the maximum emissions amplitude.

7. Set-up the substitution measurement with the reference point of the substitution antenna located as near as possible to where the center of the EUT radiating element was located during the initial EUT measurement.
8. Maintain the previous measurement instrument settings and test set-up, with the exception that the EUT is removed and replaced by the substitution antenna.
9. Connect a signal generator to the substitution antenna; locate the signal generator so as to minimize any potential influences on the measurement results. Set the signal generator to the frequency where emissions are detected, and set an output power level such that the radiated signal can be detected by the measurement instrument, with sufficient dynamic range relative to the noise floor.
10. For each emission that was detected and measured in the initial test
  - a) Vary the measurement antenna height between 1 m to 4 m to maximize the received (measured) signal amplitude.
  - b) Adjust the signal generator output power level until the amplitude detected by the measurement instrument equals the amplitude level of the emission previously measured directly in step 5 and step 6.
  - c) Record the output power level of the signal generator when equivalence is achieved in step b).
11. Repeat step 8 through step 10 with the measurement antenna oriented in the opposite polarization.
12. Calculate the emission power in dBm referenced to a half-wave dipole using the following equation:  
$$P_e = P_s(\text{dBm}) - \text{cable loss (dB)} + \text{antenna gain (dBd)}$$
where  
 $P_e$  = equivalent emission power in dBm  
 $P_s$  = source (signal generator) power in dBm  
*NOTE—dBd refers to the measured antenna gain in decibels relative to a half-wave dipole.*
13. Correct the antenna gain of the substitution antenna if necessary to reference the emission power to a half-wave dipole. When using measurement antennas with the gain specified in dBi, the equivalent dipole-referenced gain can be determined from:  
$$\text{gain (dBd)} = \text{gain (dBi)} - 2.15 \text{ dB}.$$
If necessary, the antenna gain can be calculated from calibrated antenna factor information
14. Provide the complete measurement results as a part of the test report.

### **TEST MODE**

Please refer to the clause 4.2

### **TEST RESULTS**

☒ **Passed**      ☐ **Not Applicable**

Note: only show the worse case for QPSK modulation.

| LTE Band 2    |                  |                |               |             |               |              |              |               |        |
|---------------|------------------|----------------|---------------|-------------|---------------|--------------|--------------|---------------|--------|
| Test channel: |                  | Low            |               |             | Polarization: |              | Horizontal   |               |        |
| Mark          | Frequency<br>MHz | Reading<br>dBm | Antenna<br>dB | Cable<br>dB | Preamp<br>dB  | Level<br>dBm | Limit<br>dBm | Over<br>limit | Remark |
| 1             | 44.64            | -66.95         | 25.69         | 1.22        | 30.54         | -70.58       | -13.00       | -57.58        | Peak   |
| 2             | 171.04           | -69.19         | 21.23         | 2.48        | 30.37         | -75.85       | -13.00       | -62.85        | Peak   |
| 3             | 1521.46          | -70.25         | 36.41         | 8.28        | 28.83         | -54.39       | -13.00       | -41.39        | Peak   |
| 4             | 2141.14          | -70.31         | 40.44         | 10.11       | 28.89         | -48.65       | -13.00       | -35.65        | Peak   |
| 5             | 3719.15          | -55.80         | 42.27         | 5.20        | 36.98         | -45.31       | -13.00       | -32.31        | Peak   |
| 6             | 5574.67          | -53.28         | 43.76         | 6.51        | 35.21         | -38.22       | -13.00       | -25.22        | Peak   |
| Test channel: |                  | Low            |               |             | Polarization: |              | Vertical     |               |        |
| Mark          | Frequency<br>MHz | Reading<br>dBm | Antenna<br>dB | Cable<br>dB | Preamp<br>dB  | Level<br>dBm | Limit<br>dBm | Over<br>limit | Remark |
| 1             | 45.75            | -70.61         | 21.68         | 1.24        | 30.55         | -78.24       | -13.00       | -65.24        | Peak   |
| 2             | 125.96           | -68.72         | 21.62         | 2.11        | 30.61         | -75.60       | -13.00       | -62.60        | Peak   |
| 3             | 1529.84          | -69.97         | 37.76         | 8.31        | 28.80         | -52.70       | -13.00       | -39.70        | Peak   |
| 4             | 2426.82          | -68.69         | 39.30         | 10.87       | 27.83         | -46.35       | -13.00       | -33.35        | Peak   |
| 5             | 3719.15          | -55.33         | 42.26         | 5.20        | 36.98         | -44.85       | -13.00       | -31.85        | Peak   |
| 6             | 5574.67          | -51.64         | 43.93         | 6.51        | 35.21         | -36.41       | -13.00       | -23.41        | Peak   |

| Test channel: |                  | Mid            |               |             | Polarization: |              | Horizontal   |               |        |
|---------------|------------------|----------------|---------------|-------------|---------------|--------------|--------------|---------------|--------|
| Mark          | Frequency<br>MHz | Reading<br>dBm | Antenna<br>dB | Cable<br>dB | Preamp<br>dB  | Level<br>dBm | Limit<br>dBm | Over<br>limit | Remark |
| 1             | 39.75            | -69.60         | 27.74         | 1.15        | 30.61         | -71.32       | -13.00       | -58.32        | Peak   |
| 2             | 540.11           | -72.79         | 25.31         | 4.63        | 29.88         | -72.73       | -13.00       | -59.73        | Peak   |
| 3             | 1385.81          | -69.23         | 37.13         | 7.85        | 29.03         | -53.28       | -13.00       | -40.28        | Peak   |
| 4             | 2220.19          | -70.31         | 40.85         | 10.30       | 28.97         | -48.13       | -13.00       | -35.13        | Peak   |
| 5             | 3757.21          | -56.05         | 42.23         | 5.18        | 37.03         | -45.67       | -13.00       | -32.67        | Peak   |
| 6             | 5646.08          | -54.74         | 43.79         | 6.55        | 35.20         | -39.60       | -13.00       | -26.60        | Peak   |
| Test channel: |                  | Mid            |               |             | Polarization: |              | Vertical     |               |        |
| Mark          | Frequency<br>MHz | Reading<br>dBm | Antenna<br>dB | Cable<br>dB | Preamp<br>dB  | Level<br>dBm | Limit<br>dBm | Over<br>limit | Remark |
| 1             | 125.96           | -68.55         | 21.62         | 2.11        | 30.61         | -75.43       | -13.00       | -62.43        | Peak   |
| 2             | 800.80           | -76.59         | 29.40         | 5.77        | 29.66         | -71.08       | -13.00       | -58.08        | Peak   |
| 3             | 1443.31          | -70.22         | 37.76         | 8.03        | 28.80         | -53.23       | -13.00       | -40.23        | Peak   |
| 4             | 2257.08          | -70.13         | 41.02         | 10.43       | 28.58         | -47.26       | -13.00       | -34.26        | Peak   |
| 5             | 3757.21          | -53.30         | 42.15         | 5.18        | 37.03         | -43.00       | -13.00       | -30.00        | Peak   |
| 6             | 5646.08          | -52.14         | 43.95         | 6.55        | 35.20         | -36.84       | -13.00       | -23.84        | Peak   |

|               |                  |                |               |             |               |              |              |               |        |
|---------------|------------------|----------------|---------------|-------------|---------------|--------------|--------------|---------------|--------|
| Test channel: | High             |                |               |             | Polarization: |              | Horizontal   |               |        |
| Mark          | Frequency<br>MHz | Reading<br>dBm | Antenna<br>dB | Cable<br>dB | Preamp<br>dB  | Level<br>dBm | Limit<br>dBm | Over<br>limit | Remark |
| 1             | 39.75            | -72.09         | 27.74         | 1.15        | 30.61         | -73.81       | -13.00       | -60.81        | Peak   |
| 2             | 632.71           | -80.14         | 28.77         | 5.05        | 29.79         | -76.11       | -13.00       | -63.11        | Peak   |
| 3             | 1398.05          | -69.69         | 37.16         | 7.90        | 29.08         | -53.71       | -13.00       | -40.71        | Peak   |
| 4             | 2129.41          | -68.32         | 40.33         | 10.03       | 28.88         | -46.84       | -13.00       | -33.84        | Peak   |
| 5             | 3795.66          | -55.96         | 42.19         | 5.24        | 37.08         | -45.61       | -13.00       | -32.61        | Peak   |
| 6             | 5703.86          | -52.87         | 43.87         | 6.63        | 35.34         | -37.71       | -13.00       | -24.71        | Peak   |
| Test channel: | High             |                |               |             | Polarization: |              | Vertical     |               |        |
| Mark          | Frequency<br>MHz | Reading<br>dBm | Antenna<br>dB | Cable<br>dB | Preamp<br>dB  | Level<br>dBm | Limit<br>dBm | Over<br>limit | Remark |
| 1             | 46.72            | -70.22         | 21.78         | 1.25        | 30.57         | -77.76       | -13.00       | -64.76        | Peak   |
| 2             | 125.96           | -72.50         | 21.62         | 2.11        | 30.61         | -79.38       | -13.00       | -66.38        | Peak   |
| 3             | 1491.67          | -71.01         | 37.76         | 8.18        | 28.82         | -53.89       | -13.00       | -40.89        | Peak   |
| 4             | 2188.71          | -70.92         | 41.55         | 10.25       | 29.04         | -48.16       | -13.00       | -35.16        | Peak   |
| 5             | 3795.66          | -55.16         | 42.03         | 5.24        | 37.08         | -44.97       | -13.00       | -31.97        | Peak   |
| 6             | 5703.86          | -51.52         | 44.02         | 6.63        | 35.34         | -36.21       | -13.00       | -23.21        | Peak   |

| LTE Band 4    |                  |                |               |               |              |              |              |               |        |
|---------------|------------------|----------------|---------------|---------------|--------------|--------------|--------------|---------------|--------|
| Test channel: | Low              |                |               | Polarization: |              |              | Horizontal   |               |        |
| Mark          | Frequency<br>MHz | Reading<br>dBm | Antenna<br>dB | Cable<br>dB   | Preamp<br>dB | Level<br>dBm | Limit<br>dBm | Over<br>limit | Remark |
| 1             | 39.75            | -79.54         | 27.74         | 1.15          | 30.61        | -81.26       | -13.00       | -68.26        | Peak   |
| 2             | 746.42           | -81.20         | 29.38         | 5.54          | 29.51        | -75.79       | -13.00       | -62.79        | Peak   |
| 3             | 1391.92          | -71.29         | 37.14         | 7.88          | 29.08        | -55.35       | -13.00       | -42.35        | Peak   |
| 4             | 2322.48          | -70.61         | 40.25         | 10.60         | 28.85        | -48.61       | -13.00       | -35.61        | Peak   |
| 5             | 3436.94          | -56.91         | 40.11         | 4.95          | 37.60        | -49.45       | -13.00       | -36.45        | Peak   |
| 6             | 5164.81          | -46.89         | 44.02         | 6.32          | 35.30        | -31.85       | -13.00       | -18.85        | Peak   |
| Test channel: | Low              |                |               | Polarization: |              |              | Vertical     |               |        |
| Mark          | Frequency<br>MHz | Reading<br>dBm | Antenna<br>dB | Cable<br>dB   | Preamp<br>dB | Level<br>dBm | Limit<br>dBm | Over<br>limit | Remark |
| 1             | 80.02            | -77.18         | 21.30         | 1.66          | 30.60        | -84.82       | -13.00       | -71.82        | Peak   |
| 2             | 751.69           | -79.73         | 29.29         | 5.56          | 29.45        | -74.33       | -13.00       | -61.33        | Peak   |
| 3             | 1496.59          | -70.95         | 37.76         | 8.20          | 28.83        | -53.82       | -13.00       | -40.82        | Peak   |
| 4             | 2220.19          | -70.02         | 41.48         | 10.30         | 28.97        | -47.21       | -13.00       | -34.21        | Peak   |
| 5             | 3436.94          | -60.35         | 40.15         | 4.95          | 37.60        | -52.85       | -13.00       | -39.85        | Peak   |
| 6             | 5164.81          | -57.29         | 44.02         | 6.32          | 35.30        | -42.25       | -13.00       | -29.25        | Peak   |

|               |                  |                |               |               |              |              |              |               |        |
|---------------|------------------|----------------|---------------|---------------|--------------|--------------|--------------|---------------|--------|
| Test channel: | Mid              |                |               | Polarization: |              |              | Horizontal   |               |        |
| Mark          | Frequency<br>MHz | Reading<br>dBm | Antenna<br>dB | Cable<br>dB   | Preamp<br>dB | Level<br>dBm | Limit<br>dBm | Over<br>limit | Remark |
| 1             | 37.84            | -80.11         | 27.46         | 1.12          | 30.64        | -82.17       | -13.00       | -69.17        | Peak   |
| 2             | 829.47           | -80.65         | 29.92         | 5.88          | 29.31        | -74.16       | -13.00       | -61.16        | Peak   |
| 3             | 1449.66          | -70.97         | 36.85         | 8.06          | 28.86        | -54.92       | -13.00       | -41.92        | Peak   |
| 4             | 2379.30          | -71.07         | 39.93         | 10.78         | 28.08        | -48.44       | -13.00       | -35.44        | Peak   |
| 5             | 3463.29          | -55.38         | 40.49         | 4.97          | 37.52        | -47.44       | -13.00       | -34.44        | Peak   |
| 6             | 5191.17          | -43.39         | 43.97         | 6.31          | 35.44        | -28.55       | -13.00       | -15.55        | Peak   |
| Test channel: | Mid              |                |               | Polarization: |              |              | Vertical     |               |        |
| Mark          | Frequency<br>MHz | Reading<br>dBm | Antenna<br>dB | Cable<br>dB   | Preamp<br>dB | Level<br>dBm | Limit<br>dBm | Over<br>limit | Remark |
| 1             | 58.52            | -79.87         | 23.54         | 1.41          | 30.82        | -85.74       | -13.00       | -72.74        | Peak   |
| 2             | 908.88           | -80.54         | 29.82         | 6.19          | 29.43        | -73.96       | -13.00       | -60.96        | Peak   |
| 3             | 1533.21          | -70.37         | 37.76         | 8.32          | 28.79        | -53.08       | -13.00       | -40.08        | Peak   |
| 4             | 2234.87          | -70.61         | 41.29         | 10.38         | 28.71        | -47.65       | -13.00       | -34.65        | Peak   |
| 5             | 3463.29          | -58.40         | 40.55         | 4.97          | 37.52        | -50.40       | -13.00       | -37.40        | Peak   |
| 6             | 5191.17          | -57.12         | 43.95         | 6.31          | 35.44        | -42.30       | -13.00       | -29.30        | Peak   |

|               |                  |                |               |               |              |              |              |               |        |
|---------------|------------------|----------------|---------------|---------------|--------------|--------------|--------------|---------------|--------|
| Test channel: | High             |                |               | Polarization: |              |              | Horizontal   |               |        |
| Mark          | Frequency<br>MHz | Reading<br>dBm | Antenna<br>dB | Cable<br>dB   | Preamp<br>dB | Level<br>dBm | Limit<br>dBm | Over<br>limit | Remark |
| 1             | 41.75            | -79.57         | 26.96         | 1.18          | 30.58        | -82.01       | -13.00       | -69.01        | Peak   |
| 2             | 847.15           | -80.71         | 29.80         | 5.96          | 29.33        | -74.28       | -13.00       | -61.28        | Peak   |
| 3             | 1493.31          | -70.51         | 36.58         | 8.19          | 28.83        | -54.57       | -13.00       | -41.57        | Peak   |
| 4             | 2387.15          | -70.93         | 39.89         | 10.80         | 27.93        | -48.17       | -13.00       | -35.17        | Peak   |
| 5             | 3489.84          | -59.24         | 40.86         | 5.04          | 37.48        | -50.82       | -13.00       | -37.82        | Peak   |
| 6             | 5230.96          | -43.31         | 43.97         | 6.33          | 35.61        | -28.62       | -13.00       | -15.62        | Peak   |
| Test channel: | High             |                |               | Polarization: |              |              | Vertical     |               |        |
| Mark          | Frequency<br>MHz | Reading<br>dBm | Antenna<br>dB | Cable<br>dB   | Preamp<br>dB | Level<br>dBm | Limit<br>dBm | Over<br>limit | Remark |
| 1             | 89.87            | -81.01         | 25.83         | 1.77          | 30.69        | -84.10       | -13.00       | -71.10        | Peak   |
| 2             | 868.26           | -80.68         | 29.82         | 6.05          | 29.27        | -74.08       | -13.00       | -61.08        | Peak   |
| 3             | 1567.27          | -71.27         | 37.76         | 8.43          | 28.83        | -53.91       | -13.00       | -40.91        | Peak   |
| 4             | 2212.88          | -69.97         | 41.57         | 10.30         | 29.05        | -47.15       | -13.00       | -34.15        | Peak   |
| 5             | 3489.84          | -57.92         | 40.96         | 5.04          | 37.48        | -49.40       | -13.00       | -36.40        | Peak   |
| 6             | 5230.96          | -56.32         | 43.95         | 6.33          | 35.61        | -41.65       | -13.00       | -28.65        | Peak   |

| LTE Band 5    |                  |                |               |               |              |              |              |               |        |
|---------------|------------------|----------------|---------------|---------------|--------------|--------------|--------------|---------------|--------|
| Test channel: | Low              |                |               | Polarization: |              |              | Horizontal   |               |        |
| Mark          | Frequency<br>MHz | Reading<br>dBm | Antenna<br>dB | Cable<br>dB   | Preamp<br>dB | Level<br>dBm | Limit<br>dBm | Over<br>limit | Remark |
| 1             | 51.56            | -76.94         | 23.70         | 1.32          | 30.67        | -82.59       | -13.00       | -69.59        | Peak   |
| 2             | 593.90           | -73.55         | 27.59         | 4.88          | 29.79        | -70.87       | -13.00       | -57.87        | Peak   |
| 3             | 1402.66          | -70.48         | 37.14         | 7.92          | 29.04        | -54.46       | -13.00       | -41.46        | Peak   |
| 4             | 2229.97          | -70.06         | 40.79         | 10.35         | 28.80        | -47.72       | -13.00       | -34.72        | Peak   |
| 5             | 6868.65          | -69.03         | 47.06         | 7.34          | 34.20        | -48.83       | -13.00       | -35.83        | Peak   |
| 6             | 9809.40          | -71.87         | 50.59         | 9.50          | 33.53        | -45.31       | -13.00       | -32.31        | Peak   |
| Test channel: | Low              |                |               | Polarization: |              |              | Vertical     |               |        |
| Mark          | Frequency<br>MHz | Reading<br>dBm | Antenna<br>dB | Cable<br>dB   | Preamp<br>dB | Level<br>dBm | Limit<br>dBm | Over<br>limit | Remark |
| 1             | 86.76            | -79.05         | 24.46         | 1.74          | 30.66        | -83.51       | -13.00       | -70.51        | Peak   |
| 2             | 623.87           | -79.72         | 27.93         | 5.02          | 29.90        | -76.67       | -13.00       | -63.67        | Peak   |
| 3             | 1440.14          | -70.32         | 37.76         | 8.02          | 28.76        | -53.30       | -13.00       | -40.30        | Peak   |
| 4             | 2200.76          | -71.05         | 41.72         | 10.29         | 29.11        | -48.15       | -13.00       | -35.15        | Peak   |
| 5             | 6992.14          | -68.92         | 47.35         | 7.34          | 34.22        | -48.45       | -13.00       | -35.45        | Peak   |
| 6             | 10534.09         | -69.83         | 52.35         | 9.77          | 36.04        | -43.75       | -13.00       | -30.75        | Peak   |

|               |                  |                |               |               |              |              |              |               |        |
|---------------|------------------|----------------|---------------|---------------|--------------|--------------|--------------|---------------|--------|
| Test channel: | Mid              |                |               | Polarization: |              |              | Horizontal   |               |        |
| Mark          | Frequency<br>MHz | Reading<br>dBm | Antenna<br>dB | Cable<br>dB   | Preamp<br>dB | Level<br>dBm | Limit<br>dBm | Over<br>limit | Remark |
| 1             | 39.75            | -69.67         | 27.74         | 1.15          | 30.61        | -71.39       | -13.00       | -58.39        | Peak   |
| 2             | 126.85           | -69.79         | 16.30         | 2.12          | 30.61        | -81.98       | -13.00       | -68.98        | Peak   |
| 3             | 1330.61          | -70.93         | 37.02         | 7.68          | 28.86        | -55.09       | -13.00       | -42.09        | Peak   |
| 4             | 2269.51          | -69.23         | 40.56         | 10.48         | 28.63        | -46.82       | -13.00       | -33.82        | Peak   |
| 5             | 4299.89          | -67.61         | 42.61         | 5.80          | 36.43        | -55.63       | -13.00       | -42.63        | Peak   |
| 6             | 6851.19          | -67.96         | 46.98         | 7.29          | 34.05        | -47.74       | -13.00       | -34.74        | Peak   |
| Test channel: | Mid              |                |               | Polarization: |              |              | Vertical     |               |        |
| Mark          | Frequency<br>MHz | Reading<br>dBm | Antenna<br>dB | Cable<br>dB   | Preamp<br>dB | Level<br>dBm | Limit<br>dBm | Over<br>limit | Remark |
| 1             | 44.64            | -69.63         | 21.58         | 1.22          | 30.54        | -77.37       | -13.00       | -64.37        | Peak   |
| 2             | 124.20           | -70.78         | 21.75         | 2.10          | 30.61        | -77.54       | -13.00       | -64.54        | Peak   |
| 3             | 1432.25          | -70.75         | 37.76         | 7.99          | 28.94        | -53.94       | -13.00       | -40.94        | Peak   |
| 4             | 2259.56          | -69.71         | 40.99         | 10.44         | 28.57        | -46.85       | -13.00       | -33.85        | Peak   |
| 5             | 4159.93          | -64.29         | 42.33         | 5.71          | 36.78        | -53.03       | -13.00       | -40.03        | Peak   |
| 6             | 6851.19          | -67.77         | 47.39         | 7.29          | 34.05        | -47.14       | -13.00       | -34.14        | Peak   |

|               |                  |                |               |               |              |              |              |               |        |
|---------------|------------------|----------------|---------------|---------------|--------------|--------------|--------------|---------------|--------|
| Test channel: | High             |                |               | Polarization: |              |              | Horizontal   |               |        |
| <hr/>         |                  |                |               |               |              |              |              |               |        |
| Mark          | Frequency<br>MHz | Reading<br>dBm | Antenna<br>dB | Cable<br>dB   | Preamp<br>dB | Level<br>dBm | Limit<br>dBm | Over<br>limit | Remark |
| 1             | 38.78            | -80.67         | 27.60         | 1.13          | 30.62        | -82.56       | -13.00       | -69.56        | Peak   |
| 2             | 593.90           | -73.57         | 27.59         | 4.88          | 29.79        | -70.89       | -13.00       | -57.89        | Peak   |
| 3             | 1300.27          | -70.41         | 36.95         | 7.57          | 29.05        | -54.94       | -13.00       | -41.94        | Peak   |
| 4             | 2203.18          | -70.47         | 40.95         | 10.29         | 29.13        | -48.36       | -13.00       | -35.36        | Peak   |
| 5             | 6974.36          | -69.09         | 47.53         | 7.34          | 34.15        | -48.37       | -13.00       | -35.37        | Peak   |
| 6             | 9859.47          | -69.76         | 50.54         | 9.50          | 34.73        | -44.45       | -13.00       | -31.45        | Peak   |

|               |                  |                |               |               |              |              |              |               |        |
|---------------|------------------|----------------|---------------|---------------|--------------|--------------|--------------|---------------|--------|
| Test channel: | High             |                |               | Polarization: |              |              | Vertical     |               |        |
| <hr/>         |                  |                |               |               |              |              |              |               |        |
| Mark          | Frequency<br>MHz | Reading<br>dBm | Antenna<br>dB | Cable<br>dB   | Preamp<br>dB | Level<br>dBm | Limit<br>dBm | Over<br>limit | Remark |
| 1             | 90.82            | -80.42         | 25.88         | 1.78          | 30.69        | -83.45       | -13.00       | -70.45        | Peak   |
| 2             | 593.90           | -73.56         | 27.20         | 4.88          | 29.79        | -71.27       | -13.00       | -58.27        | Peak   |
| 3             | 1480.24          | -69.96         | 37.76         | 8.15          | 28.88        | -52.93       | -13.00       | -39.93        | Peak   |
| 4             | 2186.30          | -70.61         | 41.51         | 10.24         | 29.08        | -47.94       | -13.00       | -34.94        | Peak   |
| 5             | 6974.36          | -67.49         | 47.36         | 7.34          | 34.15        | -46.94       | -13.00       | -33.94        | Peak   |
| 6             | 10560.94         | -70.25         | 52.38         | 9.79          | 36.03        | -44.11       | -13.00       | -31.11        | Peak   |

| LTE Band 7    |                  |                |               |               |              |              |              |               |        |
|---------------|------------------|----------------|---------------|---------------|--------------|--------------|--------------|---------------|--------|
| Test channel: | Low              |                |               | Polarization: |              |              | Horizontal   |               |        |
| Mark          | Frequency<br>MHz | Reading<br>dBm | Antenna<br>dB | Cable<br>dB   | Preamp<br>dB | Level<br>dBm | Limit<br>dBm | Over<br>limit | Remark |
| 1             | 38.78            | -79.25         | 27.60         | 1.13          | 30.62        | -81.14       | -25.00       | -56.14        | Peak   |
| 2             | 593.90           | -76.39         | 27.59         | 4.88          | 29.79        | -73.71       | -25.00       | -48.71        | Peak   |
| 3             | 2168.08          | -68.86         | 40.68         | 3.95          | 37.65        | -61.88       | -25.00       | -36.88        | Peak   |
| 4             | 4688.62          | -68.21         | 43.55         | 5.88          | 36.06        | -54.84       | -25.00       | -29.84        | Peak   |
| 5             | 7527.83          | -47.81         | 47.96         | 7.75          | 33.97        | -26.07       | -25.00       | -1.07         | Peak   |
| 6             | 11341.14         | -71.66         | 52.96         | 10.25         | 36.08        | -44.53       | -25.00       | -19.53        | Peak   |
| Test channel: | Low              |                |               | Polarization: |              |              | Vertical     |               |        |
| Mark          | Frequency<br>MHz | Reading<br>dBm | Antenna<br>dB | Cable<br>dB   | Preamp<br>dB | Level<br>dBm | Limit<br>dBm | Over<br>limit | Remark |
| 1             | 90.82            | -80.32         | 25.88         | 1.78          | 30.69        | -83.35       | -25.00       | -58.35        | Peak   |
| 2             | 593.90           | -76.28         | 27.20         | 4.88          | 29.79        | -73.99       | -25.00       | -48.99        | Peak   |
| 3             | 2179.15          | -68.20         | 41.39         | 3.97          | 37.69        | -60.53       | -25.00       | -35.53        | Peak   |
| 4             | 4971.32          | -69.09         | 44.39         | 6.08          | 35.85        | -54.47       | -25.00       | -29.47        | Peak   |
| 5             | 7527.83          | -59.89         | 48.37         | 7.75          | 33.97        | -37.74       | -25.00       | -12.74        | Peak   |
| 6             | 11283.55         | -72.45         | 53.03         | 10.20         | 36.05        | -45.27       | -25.00       | -20.27        | Peak   |

| Test channel: | Mid              |                |               | Polarization: |              |              | Horizontal   |               |        |
|---------------|------------------|----------------|---------------|---------------|--------------|--------------|--------------|---------------|--------|
| Mark          | Frequency<br>MHz | Reading<br>dBm | Antenna<br>dB | Cable<br>dB   | Preamp<br>dB | Level<br>dBm | Limit<br>dBm | Over<br>limit | Remark |
| 1             | 59.35            | -79.20         | 24.46         | 1.42          | 30.84        | -84.16       | -25.00       | -59.16        | Peak   |
| 2             | 593.90           | -75.69         | 27.59         | 4.88          | 29.79        | -73.01       | -25.00       | -48.01        | Peak   |
| 3             | 1786.72          | -65.07         | 36.67         | 3.55          | 37.90        | -62.75       | -25.00       | -37.75        | Peak   |
| 4             | 4332.85          | -66.79         | 42.72         | 5.86          | 36.50        | -54.71       | -25.00       | -29.71        | Peak   |
| 5             | 7604.87          | -49.31         | 47.64         | 7.83          | 34.07        | -27.91       | -25.00       | -2.91         | Peak   |
| 6             | 9784.47          | -69.41         | 50.54         | 9.48          | 33.44        | -42.83       | -25.00       | -17.83        | Peak   |
| Test channel: | Mid              |                |               | Polarization: |              |              | Vertical     |               |        |
| Mark          | Frequency<br>MHz | Reading<br>dBm | Antenna<br>dB | Cable<br>dB   | Preamp<br>dB | Level<br>dBm | Limit<br>dBm | Over<br>limit | Remark |
| 1             | 89.87            | -79.92         | 25.83         | 1.77          | 30.69        | -83.01       | -25.00       | -58.01        | Peak   |
| 2             | 593.90           | -72.56         | 27.20         | 4.88          | 29.79        | -70.27       | -25.00       | -45.27        | Peak   |
| 3             | 2076.26          | -67.60         | 39.65         | 3.77          | 37.95        | -62.13       | -25.00       | -37.13        | Peak   |
| 4             | 5284.50          | -68.18         | 44.00         | 6.34          | 35.35        | -53.19       | -25.00       | -28.19        | Peak   |
| 5             | 7604.87          | -57.73         | 48.26         | 7.83          | 34.07        | -35.71       | -25.00       | -10.71        | Peak   |
| 6             | 10534.09         | -69.14         | 52.35         | 9.77          | 36.04        | -43.06       | -25.00       | -18.06        | Peak   |

|               |                  |                |               |             |               |              |              |               |        |
|---------------|------------------|----------------|---------------|-------------|---------------|--------------|--------------|---------------|--------|
| Test channel: | High             |                |               |             | Polarization: |              | Horizontal   |               |        |
| Mark          | Frequency<br>MHz | Reading<br>dBm | Antenna<br>dB | Cable<br>dB | Preamp<br>dB  | Level<br>dBm | Limit<br>dBm | Over<br>limit | Remark |
| 1             | 43.71            | -80.42         | 26.09         | 1.21        | 30.55         | -83.67       | -25.00       | -58.67        | Peak   |
| 2             | 593.90           | -76.10         | 27.59         | 4.88        | 29.79         | -73.42       | -25.00       | -48.42        | Peak   |
| 3             | 2437.41          | -66.95         | 39.61         | 4.22        | 37.62         | -60.74       | -25.00       | -35.74        | Peak   |
| 4             | 4478.63          | -68.79         | 43.14         | 5.94        | 36.13         | -55.84       | -25.00       | -30.84        | Peak   |
| 5             | 7682.70          | -48.15         | 47.73         | 7.78        | 33.74         | -26.38       | -25.00       | -1.38         | Peak   |
| 6             | 11545.04         | -72.34         | 52.94         | 10.39       | 36.18         | -45.19       | -25.00       | -20.19        | Peak   |
| Test channel: | High             |                |               |             | Polarization: |              | Vertical     |               |        |
| Mark          | Frequency<br>MHz | Reading<br>dBm | Antenna<br>dB | Cable<br>dB | Preamp<br>dB  | Level<br>dBm | Limit<br>dBm | Over<br>limit | Remark |
| 1             | 87.68            | -79.94         | 24.87         | 1.75        | 30.67         | -83.99       | -25.00       | -58.99        | Peak   |
| 2             | 593.90           | -75.26         | 27.20         | 4.88        | 29.79         | -72.97       | -25.00       | -47.97        | Peak   |
| 3             | 2195.85          | -69.88         | 41.66         | 4.00        | 37.75         | -61.97       | -25.00       | -36.97        | Peak   |
| 4             | 4388.35          | -69.31         | 42.98         | 5.81        | 36.27         | -56.79       | -25.00       | -31.79        | Peak   |
| 5             | 7682.70          | -56.28         | 48.38         | 7.78        | 33.74         | -33.86       | -25.00       | -8.86         | Peak   |
| 6             | 11283.55         | -71.78         | 53.03         | 10.20       | 36.05         | -44.60       | -25.00       | -19.60        | Peak   |

| LTE Band 12   |                  |                |               |               |              |              |              |               |        |
|---------------|------------------|----------------|---------------|---------------|--------------|--------------|--------------|---------------|--------|
| Test channel: | Low              |                |               | Polarization: |              |              | Horizontal   |               |        |
| Mark          | Frequency<br>MHz | Reading<br>dBm | Antenna<br>dB | Cable<br>dB   | Preamp<br>dB | Level<br>dBm | Limit<br>dBm | Over<br>limit | Remark |
| 1             | 38.78            | -96.86         | 27.60         | 1.13          | 0.00         | -68.13       | -13.00       | -55.13        | Peak   |
| 2             | 410.54           | -94.00         | 25.71         | 3.99          | 0.00         | -64.30       | -13.00       | -51.30        | Peak   |
| 3             | 1399.35          | -46.36         | 37.16         | 3.08          | 37.33        | -43.45       | -13.00       | -30.45        | Peak   |
| 4             | 2102.85          | -28.38         | 40.09         | 3.78          | 37.85        | -22.36       | -13.00       | -9.36         | Peak   |
| 5             | 3507.65          | -45.54         | 41.11         | 5.11          | 37.47        | -36.79       | -13.00       | -23.79        | Peak   |
| 6             | 7009.96          | -68.97         | 47.66         | 7.35          | 34.24        | -48.20       | -13.00       | -35.20        | Peak   |
| Test channel: | Low              |                |               | Polarization: |              |              | Vertical     |               |        |
| Mark          | Frequency<br>MHz | Reading<br>dBm | Antenna<br>dB | Cable<br>dB   | Preamp<br>dB | Level<br>dBm | Limit<br>dBm | Over<br>limit | Remark |
| 1             | 93.74            | -95.67         | 25.84         | 1.81          | 0.00         | -68.02       | -13.00       | -55.02        | Peak   |
| 2             | 425.24           | -94.81         | 25.43         | 4.06          | 0.00         | -65.32       | -13.00       | -52.32        | Peak   |
| 3             | 1399.35          | -47.13         | 37.76         | 3.08          | 37.33        | -43.62       | -13.00       | -30.62        | Peak   |
| 4             | 2102.85          | -32.81         | 40.11         | 3.78          | 37.85        | -26.77       | -13.00       | -13.77        | Peak   |
| 5             | 3507.65          | -47.17         | 41.23         | 5.11          | 37.47        | -38.30       | -13.00       | -25.30        | Peak   |
| 6             | 6974.36          | -68.16         | 47.36         | 7.34          | 34.15        | -47.61       | -13.00       | -34.61        | Peak   |

|               |                  |                |               |               |              |              |              |               |        |
|---------------|------------------|----------------|---------------|---------------|--------------|--------------|--------------|---------------|--------|
| Test channel: | Mid              |                |               | Polarization: |              |              | Horizontal   |               |        |
| Mark          | Frequency<br>MHz | Reading<br>dBm | Antenna<br>dB | Cable<br>dB   | Preamp<br>dB | Level<br>dBm | Limit<br>dBm | Over<br>limit | Remark |
| 1             | 39.75            | -94.50         | 27.74         | 1.15          | 0.00         | -65.61       | -13.00       | -52.61        | Peak   |
| 2             | 434.30           | -94.42         | 26.02         | 4.11          | 0.00         | -64.29       | -13.00       | -51.29        | Peak   |
| 3             | 1406.50          | -48.44         | 37.12         | 3.09          | 37.34        | -45.57       | -13.00       | -32.57        | Peak   |
| 4             | 2108.21          | -27.34         | 40.14         | 3.78          | 37.82        | -21.24       | -13.00       | -8.24         | Peak   |
| 5             | 3516.59          | -54.74         | 41.24         | 5.14          | 37.46        | -45.82       | -13.00       | -32.82        | Peak   |
| 6             | 6974.36          | -68.89         | 47.53         | 7.34          | 34.15        | -48.17       | -13.00       | -35.17        | Peak   |
| Test channel: | Mid              |                |               | Polarization: |              |              | Vertical     |               |        |
| Mark          | Frequency<br>MHz | Reading<br>dBm | Antenna<br>dB | Cable<br>dB   | Preamp<br>dB | Level<br>dBm | Limit<br>dBm | Over<br>limit | Remark |
| 1             | 94.74            | -95.40         | 25.82         | 1.82          | 0.00         | -67.76       | -13.00       | -54.76        | Peak   |
| 2             | 438.91           | -94.99         | 25.60         | 4.13          | 0.00         | -65.26       | -13.00       | -52.26        | Peak   |
| 3             | 1406.50          | -51.63         | 37.76         | 3.09          | 37.34        | -48.12       | -13.00       | -35.12        | Peak   |
| 4             | 2108.21          | -33.40         | 40.20         | 3.78          | 37.82        | -27.24       | -13.00       | -14.24        | Peak   |
| 5             | 3516.59          | -59.11         | 41.37         | 5.14          | 37.46        | -50.06       | -13.00       | -37.06        | Peak   |
| 6             | 6921.30          | -67.70         | 47.37         | 7.39          | 34.41        | -47.35       | -13.00       | -34.35        | Peak   |

|               |                  |                |               |             |               |              |              |               |        |
|---------------|------------------|----------------|---------------|-------------|---------------|--------------|--------------|---------------|--------|
| Test channel: | High             |                |               |             | Polarization: |              | Horizontal   |               |        |
| Mark          | Frequency<br>MHz | Reading<br>dBm | Antenna<br>dB | Cable<br>dB | Preamp<br>dB  | Level<br>dBm | Limit<br>dBm | Over<br>limit | Remark |
| 1             | 36.92            | -94.76         | 27.32         | 1.10        | 0.00          | -66.34       | -13.00       | -53.34        | Peak   |
| 2             | 426.73           | -94.93         | 26.00         | 4.07        | 0.00          | -64.86       | -13.00       | -51.86        | Peak   |
| 3             | 1413.67          | -51.19         | 37.07         | 3.09        | 37.35         | -48.38       | -13.00       | -35.38        | Peak   |
| 4             | 2118.97          | -37.50         | 40.24         | 3.79        | 37.77         | -31.24       | -13.00       | -18.24        | Peak   |
| 5             | 3525.56          | -53.46         | 41.36         | 5.15        | 37.45         | -44.40       | -13.00       | -31.40        | Peak   |
| 6             | 6851.19          | -67.83         | 46.98         | 7.29        | 34.05         | -47.61       | -13.00       | -34.61        | Peak   |
| Test channel: | High             |                |               |             | Polarization: |              | Vertical     |               |        |
| Mark          | Frequency<br>MHz | Reading<br>dBm | Antenna<br>dB | Cable<br>dB | Preamp<br>dB  | Level<br>dBm | Limit<br>dBm | Over<br>limit | Remark |
| 1             | 100.57           | -94.87         | 25.67         | 1.88        | 0.00          | -67.32       | -13.00       | -54.32        | Peak   |
| 2             | 419.30           | -94.04         | 25.37         | 4.04        | 0.00          | -64.63       | -13.00       | -51.63        | Peak   |
| 3             | 1413.67          | -48.11         | 37.76         | 3.09        | 37.35         | -44.61       | -13.00       | -31.61        | Peak   |
| 4             | 2118.97          | -35.00         | 40.38         | 3.79        | 37.77         | -28.60       | -13.00       | -15.60        | Peak   |
| 5             | 3525.56          | -54.92         | 41.50         | 5.15        | 37.45         | -45.72       | -13.00       | -32.72        | Peak   |
| 6             | 6730.19          | -68.90         | 47.23         | 7.27        | 34.18         | -48.58       | -13.00       | -35.58        | Peak   |

| LTE Band 17   |                  |                |               |               |              |              |              |               |        |
|---------------|------------------|----------------|---------------|---------------|--------------|--------------|--------------|---------------|--------|
| Test channel: | Low              |                |               | Polarization: |              |              | Horizontal   |               |        |
| Mark          | Frequency<br>MHz | Reading<br>dBm | Antenna<br>dB | Cable<br>dB   | Preamp<br>dB | Level<br>dBm | Limit<br>dBm | Over<br>limit | Remark |
| 1             | 40.03            | -96.03         | 27.77         | 1.15          | 0.00         | -67.11       | -13.00       | -54.11        | Peak   |
| 2             | 419.30           | -95.30         | 25.96         | 4.04          | 0.00         | -65.30       | -13.00       | -52.30        | Peak   |
| 3             | 1410.08          | -51.25         | 37.10         | 3.09          | 37.35        | -48.41       | -13.00       | -35.41        | Peak   |
| 4             | 2113.59          | -32.07         | 40.19         | 3.79          | 37.80        | -25.89       | -13.00       | -12.89        | Peak   |
| 5             | 7009.96          | -68.59         | 47.66         | 7.35          | 34.24        | -47.82       | -13.00       | -34.82        | Peak   |
| 6             | 10805.68         | -69.89         | 52.44         | 9.91          | 35.96        | -43.50       | -13.00       | -30.50        | Peak   |
| Test channel: | Low              |                |               | Polarization: |              |              | Vertical     |               |        |
| Mark          | Frequency<br>MHz | Reading<br>dBm | Antenna<br>dB | Cable<br>dB   | Preamp<br>dB | Level<br>dBm | Limit<br>dBm | Over<br>limit | Remark |
| 1             | 107.52           | -94.93         | 24.75         | 1.94          | 0.00         | -68.24       | -13.00       | -55.24        | Peak   |
| 2             | 417.82           | -95.04         | 25.36         | 4.03          | 0.00         | -65.65       | -13.00       | -52.65        | Peak   |
| 3             | 1410.08          | -54.02         | 37.76         | 3.09          | 37.35        | -50.52       | -13.00       | -37.52        | Peak   |
| 4             | 2113.59          | -29.10         | 40.29         | 3.79          | 37.80        | -22.82       | -13.00       | -9.82         | Peak   |
| 5             | 6938.94          | -68.14         | 47.37         | 7.37          | 34.30        | -47.70       | -13.00       | -34.70        | Peak   |
| 6             | 10860.83         | -70.44         | 52.66         | 9.93          | 35.94        | -43.79       | -13.00       | -30.79        | Peak   |

| Test channel: | Mid              |                |               | Polarization: |              |              | Horizontal   |               |        |
|---------------|------------------|----------------|---------------|---------------|--------------|--------------|--------------|---------------|--------|
| Mark          | Frequency<br>MHz | Reading<br>dBm | Antenna<br>dB | Cable<br>dB   | Preamp<br>dB | Level<br>dBm | Limit<br>dBm | Over<br>limit | Remark |
| 1             | 41.75            | -95.44         | 26.96         | 1.18          | 0.00         | -67.30       | -13.00       | -54.30        | Peak   |
| 2             | 470.89           | -95.05         | 25.48         | 4.30          | 0.00         | -65.27       | -13.00       | -52.27        | Peak   |
| 3             | 1410.08          | -50.49         | 37.10         | 3.09          | 37.35        | -47.65       | -13.00       | -34.65        | Peak   |
| 4             | 2113.59          | -29.07         | 40.19         | 3.79          | 37.80        | -22.89       | -13.00       | -9.89         | Peak   |
| 5             | 2825.19          | -59.16         | 40.77         | 4.49          | 37.75        | -51.65       | -13.00       | -38.65        | Peak   |
| 6             | 7009.96          | -67.11         | 47.66         | 7.35          | 34.24        | -46.34       | -13.00       | -33.34        | Peak   |
| Test channel: | Mid              |                |               | Polarization: |              |              | Vertical     |               |        |
| Mark          | Frequency<br>MHz | Reading<br>dBm | Antenna<br>dB | Cable<br>dB   | Preamp<br>dB | Level<br>dBm | Limit<br>dBm | Over<br>limit | Remark |
| 1             | 100.57           | -95.76         | 25.67         | 1.88          | 0.00         | -68.21       | -13.00       | -55.21        | Peak   |
| 2             | 406.23           | -93.83         | 25.29         | 3.97          | 0.00         | -64.57       | -13.00       | -51.57        | Peak   |
| 3             | 1410.08          | -50.34         | 37.76         | 3.09          | 37.35        | -46.84       | -13.00       | -33.84        | Peak   |
| 4             | 2113.59          | -29.64         | 40.29         | 3.79          | 37.80        | -23.36       | -13.00       | -10.36        | Peak   |
| 5             | 3525.56          | -57.03         | 41.50         | 5.15          | 37.45        | -47.83       | -13.00       | -34.83        | Peak   |
| 6             | 6799.06          | -67.39         | 47.41         | 7.23          | 34.42        | -47.17       | -13.00       | -34.17        | Peak   |

|               |                  |                |               |             |               |              |              |               |        |
|---------------|------------------|----------------|---------------|-------------|---------------|--------------|--------------|---------------|--------|
| Test channel: | High             |                |               |             | Polarization: |              |              | Horizontal    |        |
| Mark          | Frequency<br>MHz | Reading<br>dBm | Antenna<br>dB | Cable<br>dB | Preamp<br>dB  | Level<br>dBm | Limit<br>dBm | Over<br>limit | Remark |
| 1             | 38.78            | -95.87         | 27.60         | 1.13        | 0.00          | -67.14       | -13.00       | -54.14        | Peak   |
| 2             | 404.81           | -94.26         | 25.55         | 3.96        | 0.00          | -64.75       | -13.00       | -51.75        | Peak   |
| 3             | 1410.08          | -54.59         | 37.10         | 3.09        | 37.35         | -51.75       | -13.00       | -38.75        | Peak   |
| 4             | 2113.59          | -31.11         | 40.19         | 3.79        | 37.80         | -24.93       | -13.00       | -11.93        | Peak   |
| 5             | 6974.36          | -67.90         | 47.53         | 7.34        | 34.15         | -47.18       | -13.00       | -34.18        | Peak   |
| 6             | 9784.47          | -70.78         | 50.54         | 9.48        | 33.44         | -44.20       | -13.00       | -31.20        | Peak   |
| Test channel: | High             |                |               |             | Polarization: |              |              | Vertical      |        |
| Mark          | Frequency<br>MHz | Reading<br>dBm | Antenna<br>dB | Cable<br>dB | Preamp<br>dB  | Level<br>dBm | Limit<br>dBm | Over<br>limit | Remark |
| 1             | 112.16           | -93.14         | 23.91         | 1.99        | 0.00          | -67.24       | -13.00       | -54.24        | Peak   |
| 2             | 394.97           | -93.76         | 25.14         | 3.91        | 0.00          | -64.71       | -13.00       | -51.71        | Peak   |
| 3             | 1410.08          | -54.27         | 37.76         | 3.09        | 37.35         | -50.77       | -13.00       | -37.77        | Peak   |
| 4             | 2113.59          | -29.84         | 40.29         | 3.79        | 37.80         | -23.56       | -13.00       | -10.56        | Peak   |
| 5             | 6833.77          | -68.19         | 47.40         | 7.27        | 34.22         | -47.74       | -13.00       | -34.74        | Peak   |
| 6             | 10860.83         | -71.56         | 52.66         | 9.93        | 35.94         | -44.91       | -13.00       | -31.91        | Peak   |

| LTE Band 38   |                  |                |               |               |              |              |              |               |        |
|---------------|------------------|----------------|---------------|---------------|--------------|--------------|--------------|---------------|--------|
| Test channel: | Low              |                |               | Polarization: |              |              | Horizontal   |               |        |
| Mark          | Frequency<br>MHz | Reading<br>dBm | Antenna<br>dB | Cable<br>dB   | Preamp<br>dB | Level<br>dBm | Limit<br>dBm | Over<br>limit | Remark |
| 1             | 170.43           | -71.85         | 21.25         | 2.48          | 30.38        | -78.50       | -13.00       | -65.50        | Peak   |
| 2             | 593.90           | -75.91         | 27.59         | 4.88          | 29.79        | -73.23       | -13.00       | -60.23        | Peak   |
| 3             | 1276.82          | -66.72         | 36.90         | 2.90          | 37.31        | -64.23       | -13.00       | -51.23        | Peak   |
| 4             | 3662.78          | -67.11         | 42.33         | 5.09          | 37.07        | -56.76       | -13.00       | -43.76        | Peak   |
| 5             | 7741.59          | -50.71         | 47.81         | 7.89          | 33.76        | -28.77       | -13.00       | -15.77        | Peak   |
| 6             | 11197.71         | -71.90         | 52.94         | 10.14         | 36.00        | -44.82       | -13.00       | -31.82        | Peak   |
| Test channel: | Low              |                |               | Polarization: |              |              | Vertical     |               |        |
| Mark          | Frequency<br>MHz | Reading<br>dBm | Antenna<br>dB | Cable<br>dB   | Preamp<br>dB | Level<br>dBm | Limit<br>dBm | Over<br>limit | Remark |
| 1             | 121.18           | -68.36         | 21.97         | 2.07          | 30.61        | -74.93       | -13.00       | -61.93        | Peak   |
| 2             | 847.15           | -80.65         | 29.82         | 5.96          | 29.33        | -74.20       | -13.00       | -61.20        | Peak   |
| 3             | 1417.28          | -66.71         | 37.76         | 3.10          | 37.35        | -63.20       | -13.00       | -50.20        | Peak   |
| 4             | 3616.45          | -66.52         | 42.57         | 5.07          | 37.26        | -56.14       | -13.00       | -43.14        | Peak   |
| 5             | 7741.59          | -57.63         | 48.47         | 7.89          | 33.76        | -35.03       | -13.00       | -22.03        | Peak   |
| 6             | 10723.47         | -71.30         | 52.53         | 9.87          | 35.98        | -44.88       | -13.00       | -31.88        | Peak   |

| Test channel: | Mid              |                |               | Polarization: |              |              | Horizontal   |               |        |
|---------------|------------------|----------------|---------------|---------------|--------------|--------------|--------------|---------------|--------|
| Mark          | Frequency<br>MHz | Reading<br>dBm | Antenna<br>dB | Cable<br>dB   | Preamp<br>dB | Level<br>dBm | Limit<br>dBm | Over<br>limit | Remark |
| 1             | 171.04           | -72.16         | 21.23         | 2.48          | 30.37        | -78.82       | -13.00       | -65.82        | Peak   |
| 2             | 786.85           | -80.05         | 29.81         | 5.73          | 29.61        | -74.12       | -13.00       | -61.12        | Peak   |
| 3             | 1350.36          | -67.17         | 37.06         | 4.09          | 37.45        | -63.47       | -13.00       | -50.47        | Peak   |
| 4             | 5177.97          | -62.85         | 43.99         | 6.32          | 35.37        | -47.91       | -13.00       | -34.91        | Peak   |
| 5             | 7781.10          | -48.41         | 47.86         | 7.82          | 33.73        | -26.46       | -13.00       | -13.46        | Peak   |
| 6             | 11197.71         | -70.08         | 52.94         | 10.14         | 36.00        | -43.00       | -13.00       | -30.00        | Peak   |
| Test channel: | Mid              |                |               | Polarization: |              |              | Vertical     |               |        |
| Mark          | Frequency<br>MHz | Reading<br>dBm | Antenna<br>dB | Cable<br>dB   | Preamp<br>dB | Level<br>dBm | Limit<br>dBm | Over<br>limit | Remark |
| 1             | 119.06           | -69.32         | 22.27         | 2.05          | 30.61        | -75.61       | -13.00       | -62.61        | Peak   |
| 2             | 803.62           | -78.89         | 29.46         | 5.78          | 29.63        | -73.28       | -13.00       | -60.28        | Peak   |
| 3             | 3525.56          | -65.42         | 41.50         | 5.15          | 37.45        | -56.22       | -13.00       | -43.22        | Peak   |
| 4             | 4760.78          | -67.33         | 43.60         | 5.92          | 35.95        | -53.76       | -13.00       | -40.76        | Peak   |
| 5             | 7781.10          | -58.52         | 48.53         | 7.82          | 33.73        | -35.90       | -13.00       | -22.90        | Peak   |
| 6             | 11226.25         | -70.67         | 52.98         | 10.16         | 36.02        | -43.55       | -13.00       | -30.55        | Peak   |

| Test channel: |                  | High           |               |             | Polarization: |              |              | Horizontal    |        |  |
|---------------|------------------|----------------|---------------|-------------|---------------|--------------|--------------|---------------|--------|--|
| Mark          | Frequency<br>MHz | Reading<br>dBm | Antenna<br>dB | Cable<br>dB | Preamp<br>dB  | Level<br>dBm | Limit<br>dBm | Over<br>limit | Remark |  |
| 1             | 40.74            | -74.58         | 27.43         | 1.16        | 30.59         | -76.58       | -13.00       | -63.58        | Peak   |  |
| 2             | 179.67           | -72.28         | 20.95         | 2.55        | 30.19         | -78.97       | -13.00       | -65.97        | Peak   |  |
| 3             | 1402.92          | -66.47         | 37.14         | 3.08        | 37.34         | -63.59       | -13.00       | -50.59        | Peak   |  |
| 4             | 3844.28          | -66.45         | 41.97         | 5.35        | 37.01         | -56.14       | -13.00       | -43.14        | Peak   |  |
| 5             | 7820.82          | -50.49         | 47.91         | 7.83        | 33.79         | -28.54       | -13.00       | -15.54        | Peak   |  |
| 6             | 11341.14         | -72.37         | 52.96         | 10.25       | 36.08         | -45.24       | -13.00       | -32.24        | Peak   |  |

| Test channel: |                  | High           |               |             | Polarization: |              |              | Vertical      |        |  |
|---------------|------------------|----------------|---------------|-------------|---------------|--------------|--------------|---------------|--------|--|
| Mark          | Frequency<br>MHz | Reading<br>dBm | Antenna<br>dB | Cable<br>dB | Preamp<br>dB  | Level<br>dBm | Limit<br>dBm | Over<br>limit | Remark |  |
| 1             | 120.33           | -67.70         | 22.04         | 2.06        | 30.61         | -74.21       | -13.00       | -61.21        | Peak   |  |
| 2             | 175.30           | -70.45         | 20.14         | 2.52        | 30.28         | -78.07       | -13.00       | -65.07        | Peak   |  |
| 3             | 1385.18          | -67.11         | 37.70         | 3.07        | 37.31         | -63.65       | -13.00       | -50.65        | Peak   |  |
| 4             | 3607.26          | -67.70         | 42.60         | 5.07        | 37.26         | -57.29       | -13.00       | -44.29        | Peak   |  |
| 5             | 7820.82          | -56.86         | 48.46         | 7.83        | 33.79         | -34.36       | -13.00       | -21.36        | Peak   |  |
| 6             | 11226.25         | -71.52         | 52.98         | 10.16       | 36.02         | -44.40       | -13.00       | -31.40        | Peak   |  |

| LTE Band 66   |                  |                |               |               |              |              |              |               |        |
|---------------|------------------|----------------|---------------|---------------|--------------|--------------|--------------|---------------|--------|
| Test channel: | Low              |                |               | Polarization: |              |              | Horizontal   |               |        |
| Mark          | Frequency<br>MHz | Reading<br>dBm | Antenna<br>dB | Cable<br>dB   | Preamp<br>dB | Level<br>dBm | Limit<br>dBm | Over<br>limit | Remark |
| 1             | 37.84            | -76.99         | 27.46         | 1.12          | 30.64        | -79.05       | -13.00       | -66.05        | Peak   |
| 2             | 762.33           | -73.31         | 29.22         | 5.62          | 29.45        | -67.92       | -13.00       | -54.92        | Peak   |
| 3             | 1809.86          | -65.61         | 36.84         | 9.14          | 29.02        | -48.65       | -13.00       | -35.65        | Peak   |
| 4             | 2418.83          | -69.83         | 39.72         | 10.87         | 27.87        | -47.11       | -13.00       | -34.11        | Peak   |
| 5             | 5297.97          | -65.89         | 44.01         | 6.36          | 40.97        | -56.49       | -13.00       | -43.49        | Peak   |
| 6             | 11574.46         | -66.77         | 52.92         | 10.41         | 42.30        | -45.74       | -13.00       | -32.74        | Peak   |
| Test channel: | Low              |                |               | Polarization: |              |              | Vertical     |               |        |
| Mark          | Frequency<br>MHz | Reading<br>dBm | Antenna<br>dB | Cable<br>dB   | Preamp<br>dB | Level<br>dBm | Limit<br>dBm | Over<br>limit | Remark |
| 1             | 97.78            | -79.87         | 25.78         | 1.85          | 30.65        | -82.89       | -13.00       | -69.89        | Peak   |
| 2             | 765.02           | -76.34         | 29.11         | 5.63          | 29.45        | -71.05       | -13.00       | -58.05        | Peak   |
| 3             | 1809.86          | -65.26         | 36.57         | 9.14          | 29.02        | -48.57       | -13.00       | -35.57        | Peak   |
| 4             | 2410.87          | -68.99         | 39.31         | 10.85         | 27.87        | -46.70       | -13.00       | -33.70        | Peak   |
| 5             | 7432.62          | -65.24         | 48.53         | 7.84          | 41.03        | -49.90       | -13.00       | -36.90        | Peak   |
| 6             | 10587.85         | -66.73         | 52.40         | 9.80          | 41.21        | -45.74       | -13.00       | -32.74        | Peak   |

|               |                  |                |               |               |              |              |              |               |        |
|---------------|------------------|----------------|---------------|---------------|--------------|--------------|--------------|---------------|--------|
| Test channel: | Mid              |                |               | Polarization: |              |              | Horizontal   |               |        |
| Mark          | Frequency<br>MHz | Reading<br>dBm | Antenna<br>dB | Cable<br>dB   | Preamp<br>dB | Level<br>dBm | Limit<br>dBm | Over<br>limit | Remark |
| 1             | 36.92            | -78.88         | 27.32         | 1.10          | 30.65        | -81.11       | -13.00       | -68.11        | Peak   |
| 2             | 770.42           | -78.93         | 29.48         | 5.66          | 29.48        | -73.27       | -13.00       | -60.27        | Peak   |
| 3             | 1809.86          | -67.05         | 36.84         | 9.14          | 29.02        | -50.09       | -13.00       | -37.09        | Peak   |
| 4             | 2617.93          | -72.66         | 38.93         | 11.39         | 25.94        | -48.28       | -13.00       | -35.28        | Peak   |
| 5             | 7432.62          | -65.53         | 48.40         | 7.84          | 41.03        | -50.32       | -13.00       | -37.32        | Peak   |
| 6             | 10374.42         | -66.41         | 51.37         | 9.69          | 40.65        | -46.00       | -13.00       | -33.00        | Peak   |
| Test channel: | Mid              |                |               | Polarization: |              |              | Vertical     |               |        |
| Mark          | Frequency<br>MHz | Reading<br>dBm | Antenna<br>dB | Cable<br>dB   | Preamp<br>dB | Level<br>dBm | Limit<br>dBm | Over<br>limit | Remark |
| 1             | 90.82            | -79.70         | 25.88         | 1.78          | 30.69        | -82.73       | -13.00       | -69.73        | Peak   |
| 2             | 775.86           | -79.62         | 29.24         | 5.69          | 29.50        | -74.19       | -13.00       | -61.19        | Peak   |
| 3             | 1811.85          | -63.82         | 36.58         | 9.15          | 29.05        | -47.14       | -13.00       | -34.14        | Peak   |
| 4             | 2673.15          | -73.52         | 39.72         | 11.55         | 25.74        | -47.99       | -13.00       | -34.99        | Peak   |
| 5             | 7489.60          | -66.73         | 48.44         | 7.63          | 41.08        | -51.74       | -13.00       | -38.74        | Peak   |
| 6             | 11994.38         | -66.86         | 52.96         | 10.70         | 42.30        | -45.50       | -13.00       | -32.50        | Peak   |

| Test channel: |                  | High           |               |             | Polarization: |              | Horizontal   |               |        |
|---------------|------------------|----------------|---------------|-------------|---------------|--------------|--------------|---------------|--------|
| Mark          | Frequency<br>MHz | Reading<br>dBm | Antenna<br>dB | Cable<br>dB | Preamp<br>dB  | Level<br>dBm | Limit<br>dBm | Over<br>limit | Remark |
| 1             | 59.35            | -79.74         | 24.46         | 1.42        | 30.84         | -84.70       | -13.00       | -71.70        | Peak   |
| 2             | 759.66           | -77.88         | 29.15         | 5.60        | 29.45         | -72.58       | -13.00       | -59.58        | Peak   |
| 3             | 1807.88          | -65.12         | 36.82         | 9.13        | 28.98         | -48.15       | -13.00       | -35.15        | Peak   |
| 4             | 2530.27          | -71.88         | 39.11         | 11.18       | 26.84         | -48.43       | -13.00       | -35.43        | Peak   |
| 5             | 7508.69          | -65.75         | 48.05         | 7.69        | 41.09         | -51.10       | -13.00       | -38.10        | Peak   |
| 6             | 10534.09         | -67.12         | 51.77         | 9.77        | 41.04         | -46.62       | -13.00       | -33.62        | Peak   |
| Test channel: |                  | High           |               |             | Polarization: |              | Vertical     |               |        |
| Mark          | Frequency<br>MHz | Reading<br>dBm | Antenna<br>dB | Cable<br>dB | Preamp<br>dB  | Level<br>dBm | Limit<br>dBm | Over<br>limit | Remark |
| 1             | 89.87            | -79.43         | 25.83         | 1.77        | 30.69         | -82.52       | -13.00       | -69.52        | Peak   |
| 2             | 759.66           | -77.39         | 29.06         | 5.60        | 29.45         | -72.18       | -13.00       | -59.18        | Peak   |
| 3             | 1807.88          | -65.89         | 36.55         | 9.13        | 28.98         | -49.19       | -13.00       | -36.19        | Peak   |
| 4             | 2212.88          | -71.39         | 41.57         | 10.30       | 29.05         | -48.57       | -13.00       | -35.57        | Peak   |
| 5             | 4971.32          | -66.08         | 44.39         | 6.08        | 41.14         | -56.75       | -13.00       | -43.75        | Peak   |
| 6             | 10480.59         | -67.47         | 52.25         | 9.75        | 40.86         | -46.33       | -13.00       | -33.33        | Peak   |

## **6. TEST SETUP PHOTOS OF THE EUT**

Refer to the test report No.: CHTEW23110072

## **7. EXTERNAL AND INTERNAL PHOTOS OF THE EUT**

Refer to the test report No.: CHTEW23110070

## **8. APPENDIX REPORT**

# APPENDIX REPORT

|                 |                    |                     |                      |
|-----------------|--------------------|---------------------|----------------------|
| Project No.     | SHT2306080101EW    | Radio Specification | LTE                  |
| Test sample No. | YPHT23060801007    | Model No.           | F8926-GW-02          |
| Start test date | 2023-08-14         | Finish date         | 2023-08-18           |
| Temperature     | 25.4℃              | Humidity            | 49%                  |
| Test Engineer   | <i>Casper Chen</i> | Auditor             | <i>Xiaodong Zhao</i> |

| Appendix clause | Test item    | Result |
|-----------------|--------------|--------|
| A               | ERP and EIRP | PASS   |

## 8.1 Appendix A: ERP and EIRP

### Test Result

| Band   | Bandwidth | Mode  | Conducted Power (dBm) | Antenna Gain (dBi) | EIRP  |        | Limit (W) | Verdict |
|--------|-----------|-------|-----------------------|--------------------|-------|--------|-----------|---------|
|        |           |       |                       |                    | (dBm) | (W)    |           |         |
| Band 2 | 1.4MHz    | QPSK  | 22.43                 | 1.74               | 24.17 | 0.2612 | 2         | PASS    |
|        |           | 16QAM | 21.95                 | 1.74               | 23.69 | 0.2339 | 2         | PASS    |
|        | 3MHz      | QPSK  | 22.53                 | 1.74               | 24.27 | 0.2673 | 2         | PASS    |
|        |           | 16QAM | 22.43                 | 1.74               | 24.17 | 0.2612 | 2         | PASS    |
|        | 5MHz      | QPSK  | 22.46                 | 1.74               | 24.20 | 0.2630 | 2         | PASS    |
|        |           | 16QAM | 21.15                 | 1.74               | 22.89 | 0.1945 | 2         | PASS    |
|        | 10MHz     | QPSK  | 23.02                 | 1.74               | 24.76 | 0.2992 | 2         | PASS    |
|        |           | 16QAM | 22.18                 | 1.74               | 23.92 | 0.2466 | 2         | PASS    |
|        | 15MHz     | QPSK  | 22.90                 | 1.74               | 24.64 | 0.2911 | 2         | PASS    |
|        |           | 16QAM | 22.63                 | 1.74               | 24.37 | 0.2735 | 2         | PASS    |
| Band 4 | 1.4MHz    | QPSK  | 22.12                 | 1.74               | 23.86 | 0.2432 | 1         | PASS    |
|        |           | 16QAM | 21.36                 | 1.74               | 23.10 | 0.2042 | 1         | PASS    |
|        | 3MHz      | QPSK  | 22.20                 | 1.74               | 23.94 | 0.2477 | 1         | PASS    |
|        |           | 16QAM | 21.44                 | 1.74               | 23.18 | 0.2080 | 1         | PASS    |
|        | 5MHz      | QPSK  | 22.08                 | 1.74               | 23.82 | 0.2410 | 1         | PASS    |
|        |           | 16QAM | 20.90                 | 1.74               | 22.64 | 0.1837 | 1         | PASS    |
|        | 10MHz     | QPSK  | 22.37                 | 1.74               | 24.11 | 0.2576 | 1         | PASS    |
|        |           | 16QAM | 21.97                 | 1.74               | 23.71 | 0.2350 | 1         | PASS    |
|        | 15MHz     | QPSK  | 22.41                 | 1.74               | 24.15 | 0.2600 | 1         | PASS    |
|        |           | 16QAM | 21.73                 | 1.74               | 23.47 | 0.2223 | 1         | PASS    |
|        | 20MHz     | QPSK  | 22.18                 | 1.74               | 23.92 | 0.2466 | 1         | PASS    |
|        |           | 16QAM | 21.08                 | 1.74               | 22.82 | 0.1914 | 1         | PASS    |

|         |        |       |       |      |       |        |   |      |
|---------|--------|-------|-------|------|-------|--------|---|------|
| Band 7  | 5MHz   | QPSK  | 22.42 | 1.74 | 24.16 | 0.2606 | 2 | PASS |
|         |        | 16QAM | 21.30 | 1.74 | 23.04 | 0.2014 | 2 | PASS |
|         | 10MHz  | QPSK  | 22.89 | 1.74 | 24.63 | 0.2904 | 2 | PASS |
|         |        | 16QAM | 22.16 | 1.74 | 23.90 | 0.2455 | 2 | PASS |
|         | 15MHz  | QPSK  | 22.89 | 1.74 | 24.63 | 0.2904 | 2 | PASS |
|         |        | 16QAM | 22.73 | 1.74 | 24.47 | 0.2799 | 2 | PASS |
|         | 20MHz  | QPSK  | 22.63 | 1.74 | 24.37 | 0.2735 | 2 | PASS |
|         |        | 16QAM | 21.58 | 1.74 | 23.32 | 0.2148 | 2 | PASS |
| Band 38 | 5MHz   | QPSK  | 21.75 | 1.74 | 23.49 | 0.2234 | 2 | PASS |
|         |        | 16QAM | 20.52 | 1.74 | 22.26 | 0.1683 | 2 | PASS |
|         | 10MHz  | QPSK  | 21.78 | 1.74 | 23.52 | 0.2249 | 2 | PASS |
|         |        | 16QAM | 21.38 | 1.74 | 23.12 | 0.2051 | 2 | PASS |
|         | 15MHz  | QPSK  | 21.65 | 1.74 | 23.39 | 0.2183 | 2 | PASS |
|         |        | 16QAM | 21.36 | 1.74 | 23.10 | 0.2042 | 2 | PASS |
|         | 20MHz  | QPSK  | 22.01 | 1.74 | 23.75 | 0.2371 | 2 | PASS |
|         |        | 16QAM | 20.87 | 1.74 | 22.61 | 0.1824 | 2 | PASS |
| Band 66 | 1.4MHz | QPSK  | 22.55 | 1.74 | 24.29 | 0.2685 | 1 | PASS |
|         |        | 16QAM | 22.09 | 1.74 | 23.83 | 0.2415 | 1 | PASS |
|         | 3MHz   | QPSK  | 22.76 | 1.74 | 24.50 | 0.2818 | 1 | PASS |
|         |        | 16QAM | 21.66 | 1.74 | 23.40 | 0.2188 | 1 | PASS |
|         | 5MHz   | QPSK  | 22.31 | 1.74 | 24.05 | 0.2541 | 1 | PASS |
|         |        | 16QAM | 21.38 | 1.74 | 23.12 | 0.2051 | 1 | PASS |
|         | 10MHz  | QPSK  | 22.66 | 1.74 | 24.40 | 0.2754 | 1 | PASS |
|         |        | 16QAM | 21.58 | 1.74 | 23.32 | 0.2148 | 1 | PASS |
|         | 15MHz  | QPSK  | 22.95 | 1.74 | 24.69 | 0.2944 | 1 | PASS |
|         |        | 16QAM | 22.25 | 1.74 | 23.99 | 0.2506 | 1 | PASS |
|         | 20MHz  | QPSK  | 22.60 | 1.74 | 24.34 | 0.2716 | 1 | PASS |
|         |        | 16QAM | 21.84 | 1.74 | 23.58 | 0.2280 | 1 | PASS |

| Band    | Bandwidth | Mode  | Conducted Power (dBm) | Antenna Gain (dBi) | ERP   |        | Limit (W) | Verdict |
|---------|-----------|-------|-----------------------|--------------------|-------|--------|-----------|---------|
|         |           |       |                       |                    | (dBm) | (W)    |           |         |
| Band 5  | 1.4MHz    | QPSK  | 22.77                 | 1.74               | 22.36 | 0.1722 | 7         | PASS    |
|         |           | 16QAM | 22.09                 | 1.74               | 21.68 | 0.1472 | 7         | PASS    |
|         | 3MHz      | QPSK  | 22.90                 | 1.74               | 22.49 | 0.1774 | 7         | PASS    |
|         |           | 16QAM | 22.26                 | 1.74               | 21.85 | 0.1531 | 7         | PASS    |
|         | 5MHz      | QPSK  | 22.75                 | 1.74               | 22.34 | 0.1714 | 7         | PASS    |
|         |           | 16QAM | 22.00                 | 1.74               | 21.59 | 0.1442 | 7         | PASS    |
|         | 10MHz     | QPSK  | 22.81                 | 1.74               | 22.40 | 0.1738 | 7         | PASS    |
|         |           | 16QAM | 22.05                 | 1.74               | 21.64 | 0.1459 | 7         | PASS    |
| Band 12 | 1.4MHz    | QPSK  | 22.77                 | 1.74               | 22.36 | 0.1722 | 3         | PASS    |
|         |           | 16QAM | 22.07                 | 1.74               | 21.66 | 0.1466 | 3         | PASS    |
|         | 3MHz      | QPSK  | 22.91                 | 1.74               | 22.50 | 0.1778 | 3         | PASS    |
|         |           | 16QAM | 22.23                 | 1.74               | 21.82 | 0.1521 | 3         | PASS    |
|         | 5MHz      | QPSK  | 22.66                 | 1.74               | 22.25 | 0.1679 | 3         | PASS    |
|         |           | 16QAM | 21.97                 | 1.74               | 21.56 | 0.1432 | 3         | PASS    |
|         | 10MHz     | QPSK  | 22.89                 | 1.74               | 22.48 | 0.1770 | 3         | PASS    |
|         |           | 16QAM | 22.21                 | 1.74               | 21.80 | 0.1514 | 3         | PASS    |
| Band 17 | 5MHz      | QPSK  | 23.23                 | 1.74               | 22.82 | 0.1914 | 3         | PASS    |
|         |           | 16QAM | 22.19                 | 1.74               | 21.78 | 0.1507 | 3         | PASS    |
|         | 10MHz     | QPSK  | 23.35                 | 1.74               | 22.94 | 0.1968 | 3         | PASS    |
|         |           | 16QAM | 22.27                 | 1.74               | 21.86 | 0.1535 | 3         | PASS    |

-----End of the Report -----