



# SAR TEST REPORT

No. I22Z61923-SEM01

For

**HONOR Device Co., Ltd.**

**Smart Phone**

**Model Name: VNA-LX3**

with

**Hardware Version: HL2VNEM**

**Software Version: VNA-LX3 6.1.0.29(C605E1R1P1)**

**FCC ID: 2AYGCVNA-LX3**

**Issued Date: 2022-10-31**

**Note:**

The report must not be used by the client to claim product certification, approval, or endorsement by NVLAP, NIST, or any agency of the U.S. Government.

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No.I22Z61923-SEM01

## **REPORT HISTORY**

| <b>Report Number</b> | <b>Revision</b> | <b>Issue Date</b> | <b>Description</b>              |
|----------------------|-----------------|-------------------|---------------------------------|
| I22Z61923-SEM01      | Rev.0           | 2022-10-31        | Initial creation of test report |

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## 1 Test Laboratory

### 1.1 Testing Location

|               |                                                                            |
|---------------|----------------------------------------------------------------------------|
| Company Name: | CTTL(Shouxiang)                                                            |
| Address:      | No. 52, Huayuan North Road, Haidian District, Beijing, P. R. China 100191. |

### 1.2 Testing Environment

|                             |                |
|-----------------------------|----------------|
| Temperature:                | 18°C~25°C,     |
| Relative humidity:          | 30%~ 70%       |
| Ground system resistance:   | < 0.5 $\Omega$ |
| Ambient noise & Reflection: | < 0.012 W/kg   |

### 1.3 Project Data

|                     |                  |
|---------------------|------------------|
| Project Leader:     | Qi Dianyuan      |
| Test Engineer:      | Lin Xiaojun      |
| Testing Start Date: | October 13, 2022 |
| Testing End Date:   | October 26, 2022 |

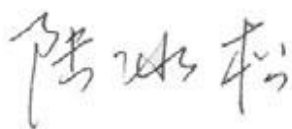
### 1.4 Signature



Lin xiaojun  
(Prepared this test report)



Qi Dianyuan  
(Reviewed this test report)



Lu Bingsong  
Deputy Director of the laboratory  
(Approved this test report)

## 2 Statement of Compliance

The maximum results of Specific Absorption Rate (SAR) found during testing for HONOR Device Co., Ltd. Smart Phone VNA-LX3 is as follows:

**Table 2.1: Highest Reported SAR (1g)**

| Mode         |               | Antenna | Highest Reported SAR (1g) |                |                  |                  |
|--------------|---------------|---------|---------------------------|----------------|------------------|------------------|
|              |               |         | 1g SAR Head               | 1g SAR Hotspot | 1g SAR Body-worn | 10-g SAR Phablet |
| GSM          | GSM 850       | ANT0    | 0.25                      | 0.44           | 0.25             | /                |
|              | PCS 1900      | ANT1    | 0.09                      | 0.24           | 0.19             | /                |
|              | GSM 850       | ANT2    | 0.61                      | 0.13           | 0.16             | /                |
|              | PCS 1900      | ANT2    | 0.21                      | 0.26           | 0.24             | /                |
| WCDMA        | UMTS FDD 5    | ANT0    | 0.30                      | 0.35           | 0.28             | /                |
|              | UMTS FDD 4    | ANT1    | 0.15                      | 0.28           | 0.24             | /                |
|              | UMTS FDD 2    | ANT1    | 0.23                      | 0.25           | 0.34             | /                |
|              | UMTS FDD 5    | ANT2    | 0.56                      | 0.25           | 0.16             | /                |
|              | UMTS FDD 4    | ANT2    | 0.91                      | 0.22           | 0.26             | /                |
|              | UMTS FDD 2    | ANT2    | 0.59                      | 0.24           | 0.24             | /                |
| LTE          | LTE Band 2    | ANT1    | 0.32                      | 0.28           | 0.39             | /                |
|              | LTE Band 4    | ANT1    | 0.13                      | 0.28           | 0.23             | /                |
|              | LTE Band 7    | ANT1    | 0.45                      | 0.20           | 0.20             | /                |
|              | LTE Band 13   | ANT0    | 0.13                      | 0.14           | 0.12             | /                |
|              | LTE Band 5/26 | ANT0    | 0.31                      | 0.24           | 0.27             | /                |
|              | LTE Band 66   | ANT1    | 0.11                      | 0.24           | 0.31             | /                |
|              | LTE Band 38   | ANT1    | 0.28                      | 0.13           | 0.17             | /                |
|              | LTE Band 2    | ANT2    | 0.71                      | 0.28           | 0.22             | /                |
|              | LTE Band 4    | ANT2    | 0.86                      | 0.36           | 0.21             | /                |
|              | LTE Band 7    | ANT2    | 0.85                      | 0.20           | 0.21             | /                |
|              | LTE Band 13   | ANT2    | 0.34                      | 0.14           | 0.26             | /                |
|              | LTE Band 5/26 | ANT2    | 0.35                      | 0.16           | 0.11             | /                |
|              | LTE Band 66   | ANT2    | 0.80                      | 0.40           | 0.24             | /                |
|              | LTE Band 38   | ANT2    | 0.60                      | 0.17           | 0.17             | /                |
| WLAN 2.4 GHz |               | 7       | 0.23                      | 0.16           | 0.16             | /                |
| BT           |               | 7       | 0.09                      | 0.05           | 0.05             | /                |

The SAR values found for the Mobile Phone are below the maximum recommended levels of 1.6 W/kg as averaged over any 1g tissue according to the ANSI C95.1-1992.

For body operation, this device has been tested and meets FCC RF exposure guidelines when used with any accessory that contains no metal and which provides a minimum separation distance of 10 mm between this device and the body of the user. Use of other accessories may not ensure compliance with FCC RF exposure guidelines.

The EUT battery must be fully charged and checked periodically during the test to ascertain uniform power output.

The measurement together with the test system set-up is described in annex C of this test report. A detailed description of the equipment under test can be found in chapter 4 of this test report. The highest reported SAR value is obtained at the case of **(Table 2.1)**, and the values are: **0.91 W/kg(1g)**.

#### Remark:

This device supports both LTE B5 and LTE B26. Since the supported frequency span for LTE B5 falls completely within the supported frequency span for LTE B26, both LTE bands have the same target power, and both LTE bands share the same transmission path; therefore, SAR was only assessed for LTE B26.

**Table 2.2: The sum of SAR values for Main antenna + WiFi**

|                          | Position         | Main antenna             | WiFi                    | Sum         |
|--------------------------|------------------|--------------------------|-------------------------|-------------|
| <b>Highest SAR value</b> | Right head, Tilt | 0.91<br>(WCDMA1700 ANT2) | 0.05<br>(WiFi2.4G ANT7) | <b>0.96</b> |
|                          | Rear 10mm        | 0.44<br>(GSM850 ANT0)    | 0.16<br>(WiFi2.4G ANT7) | <b>0.60</b> |

**Table 2.3: The sum of SAR values for Main antenna + BT**

|                          | Position         | Main antenna             | BT                 | Sum         |
|--------------------------|------------------|--------------------------|--------------------|-------------|
| <b>Highest SAR value</b> | Right head, Tilt | 0.91<br>(WCDMA1700 ANT2) | <0.01<br>(BT ANT7) | <b>0.91</b> |
|                          | Rear 15mm        | 0.39<br>(LTEB2 ANT1)     | 0.05<br>(BT ANT7)  | <b>0.44</b> |

According to the above tables, the highest sum of reported SAR values is **0.96 W/kg (1g)**. The detail for simultaneous transmission consideration is described in chapter 13.

#### Conclusion:

According to the above tables, the sum of reported SAR values is <1.6W/kg. So the simultaneous transmission SAR with volume scans is not required.

### 3 Client Information

#### 3.1 Applicant Information

|                 |                                                                |
|-----------------|----------------------------------------------------------------|
| Company Name:   | HONOR Device Co., Ltd.                                         |
| Address/Post:   | Shum Yip Sky Park, No. 8089, Hongli West Road, Shenzhen, China |
| Contact Person: | /                                                              |
| Contact Email:  | /                                                              |
| Telephone:      | /                                                              |
| Fax             | /                                                              |

#### 3.2 Manufacturer Information

|                 |                                                                |
|-----------------|----------------------------------------------------------------|
| Company Name:   | HONOR Device Co., Ltd.                                         |
| Address/Post:   | Shum Yip Sky Park, No. 8089, Hongli West Road, Shenzhen, China |
| Contact Person: | /                                                              |
| Contact Email:  | /                                                              |
| Telephone:      | /                                                              |
| Fax             | /                                                              |

## 4 Equipment Under Test (EUT) and Ancillary Equipment (AE)

### 4.1 About EUT

|                                     |                                                                                |
|-------------------------------------|--------------------------------------------------------------------------------|
| Description:                        | Smart Phone                                                                    |
| Model name:                         | VNA-LX3                                                                        |
| Tested Band:                        | GSM850/1900,<br>WCDMA B2/4/5<br>LTE Band2/4/5/7/13/26/66/38<br>BT, Wi-Fi(2.4G) |
| Tx Frequency:                       | 824 – 849 MHz (GSM 850)                                                        |
|                                     | 1850 – 1910 MHz (GSM 1900)                                                     |
|                                     | 824–849 MHz (WCDMA 850 Band V)                                                 |
|                                     | 1850 – 1910 MHz (WCDMA1900 Band IV)                                            |
|                                     | 1850–1910 MHz (WCDMA1900 Band II)                                              |
|                                     | 1850.7 – 1909.3 MHz (LTE Band 2)                                               |
|                                     | 1710 – 1755 MHz (LTE Band 4)                                                   |
|                                     | 824.7 – 848.3 MHz (LTE Band 5)                                                 |
|                                     | 2500 – 2570 MHz(LTE Band 7)                                                    |
|                                     | 779.5 – 784.5 MHz (LTE Band 13)                                                |
|                                     | 814.7 – 848.3 MHz (LTE Band 26)                                                |
|                                     | 2570 – 2620 MHz (LTE Band 38)                                                  |
|                                     | 1710.7 –1779.3 MHz (LTE Band 66)                                               |
|                                     | 2412 – 2462 MHz (Wi-Fi 2.4G)                                                   |
|                                     | 2400 – 2483.5 MHz (Bluetooth)                                                  |
| GPRS/EGPRS Multislot Class:         | 12                                                                             |
| Test device production information: | Production unit                                                                |
| Device type:                        | Portable device                                                                |
| Antenna type:                       | Integrated antenna                                                             |
| Hotspot mode:                       | Support                                                                        |

#### 4.2 Internal Identification of EUT used during the test

| EUT ID* | IMEI/SN         | HW Version | SW Version                   |
|---------|-----------------|------------|------------------------------|
| EUT1    | 868254060007659 | HL2VNEM    | VNA-LX3 6.1.0.29(C605E1R1P1) |
| EUT2    | 868254060008327 | HL2VNEM    | VNA-LX3 6.1.0.29(C605E1R1P1) |
| EUT3    | 868254060007048 | HL2VNEM    | VNA-LX3 6.1.0.29(C605E1R1P1) |
| EUT4    | 868254060007105 | HL2VNEM    | VNA-LX3 6.1.0.29(C605E1R1P1) |
| EUT5    | 868254060008046 | HL2VNEM    | VNA-LX3 6.1.0.29(C605E1R1P1) |
| EUT6    | 868254060007691 | HL2VNEM    | VNA-LX3 6.1.0.29(C605E1R1P1) |
| EUT7    | 868254060007790 | HL2VNEM    | VNA-LX3 6.1.0.29(C605E1R1P1) |

\*EUT ID: is used to identify the test sample in the lab internally.

**Note:** It is performed to test SAR with the EUT1~5 and conducted power with the EUT6~7.

#### 4.3 Internal Identification of AE used during the test

| AE ID* | Description | Model               | SN | Manufacturer                                      |
|--------|-------------|---------------------|----|---------------------------------------------------|
| AE1    | Battery     | HB496590EFW         | /  | Honor Device Co., Ltd. (Factory: SCUD)            |
| AE2    | Battery     | HB496590EFW         | /  | Honor Device Co., Ltd.(Factory: NVT)              |
| AE3    | Battery     | HB496590EFW-F       |    | Honor Device Co., Ltd. (Factory: SCUD)            |
| AE4    | Battery     | HB496590EFW-F       |    | Honor Device Co., Ltd.(Factory: NVT)              |
| AE5    | Headset     | MEND1532B528C00     | /  | Jiangxi Lianchuang Hongsheng Electronic Co., LTD. |
| AE6    | Headset     | 1293-3283-3.5MM-339 |    | BOLUO COUNTY QUANCHENG ELECTRONIC CO.,LTD.        |

\*AE ID: is used to identify the test sample in the lab internally.

## 5 TEST METHODOLOGY

### 5.1 Applicable Limit Regulations

**ANSI C95.1–1992:**IEEE Standard for Safety Levels with Respect to Human Exposure to Radio Frequency Electromagnetic Fields, 3 kHz to 300 GHz.

It specifies the maximum exposure limit of **1.6 W/kg** as averaged over any 1 gram of tissue for portable devices being used within 20 cm of the user in the uncontrolled environment.

### 5.2 Applicable Measurement Standards

**IEEE 1528–2013:** Recommended Practice for Determining the Peak Spatial-Average Specific Absorption Rate (SAR) in the Human Head from Wireless Communications Devices: Measurement Techniques.

**KDB447498 D01: General RF Exposure Guidance v06:** Mobile and Portable Devices RF Exposure Procedures and Equipment Authorization Policies.

**KDB648474 D04 Handset SAR v01r03:** SAR Evaluation Considerations for Wireless Handsets.

**KDB941225 D01 SAR test for 3G devices v03r01:** SAR Measurement Procedures for 3G Devices

**KDB941225 D05 SAR for LTE Devices v02r05:** SAR Evaluation Considerations for LTE Devices

**KDB941225 D06 Hotspot Mode SAR v02r01:** SAR Evaluation Procedures for Portable Devices with Wireless Router Capabilities

**KDB248227 D01 802.11 Wi-Fi SAR v02r02:** SAR GUIDANCE FOR IEEE 802.11 (Wi-Fi) TRANSMITTERS

**KDB865664 D01 SAR measurement 100 MHz to 6 GHz v01r04:** SAR Measurement Requirements for 100 MHz to 6 GHz.

**KDB865664 D02 RF Exposure Reporting v01r02:** RF Exposure Compliance Reporting and Documentation Considerations

## 6 Specific Absorption Rate (SAR)

### 6.1 Introduction

SAR is related to the rate at which energy is absorbed per unit mass in an object exposed to a radio field. The SAR distribution in a biological body is complicated and is usually carried out by experimental techniques or numerical modeling. The standard recommends limits for two tiers of groups, occupational/controlled and general population/uncontrolled, based on a person's awareness and ability to exercise control over his or her exposure. In general, occupational/controlled exposure limits are higher than the limits for general population/uncontrolled.

### 6.2 SAR Definition

The SAR definition is the time derivative (rate) of the incremental energy (  $dW$  ) absorbed by (dissipated in) an incremental mass (  $dm$  ) contained in a volume element (  $dv$  ) of a given density (  $\rho$  ). The equation description is as below:

$$SAR = \frac{d}{dt} \left( \frac{dW}{dm} \right) = \frac{d}{dt} \left( \frac{dW}{\rho dv} \right)$$

SAR is expressed in units of Watts per kilogram (W/kg)

SAR measurement can be either related to the temperature elevation in tissue by

$$SAR = c \left( \frac{\delta T}{\delta t} \right)$$

Where:  $C$  is the specific heat capacity,  $\delta T$  is the temperature rise and  $\delta t$  is the exposure duration, or related to the electrical field in the tissue by

$$SAR = \frac{\sigma |E|^2}{\rho}$$

Where:  $\sigma$  is the conductivity of the tissue,  $\rho$  is the mass density of tissue and  $E$  is the RMS electrical field strength.

However for evaluating SAR of low power transmitter, electrical field measurement is typically applied.

## 7 Tissue Simulating Liquids

### 7.1 Targets for tissue simulating liquid

The dielectric constant ( $\epsilon_r$ ) and conductivity( $\sigma$ ) of typical tissue-equivalent media recipes are expected to be within  $\pm 5\%$  of the required target values; but for SAR measurement systems that have implemented the SAR error compensation algorithms documented in IEEE Std 1528-2013, to automatically compensate the measured SAR results for deviations between the measured and required tissue dielectric parameters the tolerance for  $\epsilon_r$  and  $\sigma$  may be relaxed to  $\pm 10\%$ . This is limited to frequencies  $\leq 3$  GHz.

**Table 7.1: Targets for tissue simulating liquid**

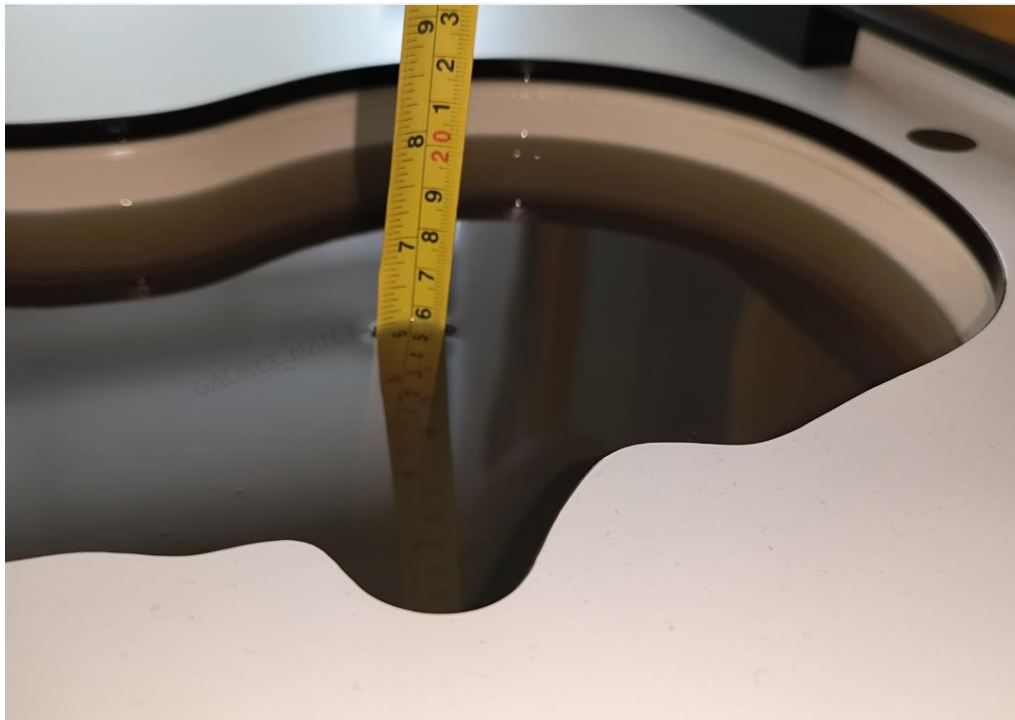
| Frequency(MHz) | Liquid Type | Conductivity( $\sigma$ ) | $\pm 10\%$ Range | Permittivity( $\epsilon$ ) | $\pm 10\%$ Range |
|----------------|-------------|--------------------------|------------------|----------------------------|------------------|
| 750            | Head        | 0.89                     | 0.80~0.98        | 41.94                      | 37.75~46.13      |
| 835            | Head        | 0.90                     | 0.81~0.99        | 41.5                       | 37.35~45.65      |
| 1750           | Head        | 1.40                     | 1.26~1.54        | 40.0                       | 36~44            |
| 1900           | Head        | 1.40                     | 1.26~1.54        | 40.0                       | 36~44            |
| 2450           | Head        | 1.80                     | 1.62~1.98        | 39.2                       | 35.28~43.12      |
| 2600           | Head        | 1.96                     | 1.76~2.16        | 39.01                      | 35.11~42.91      |

### 7.2 Dielectric Performance

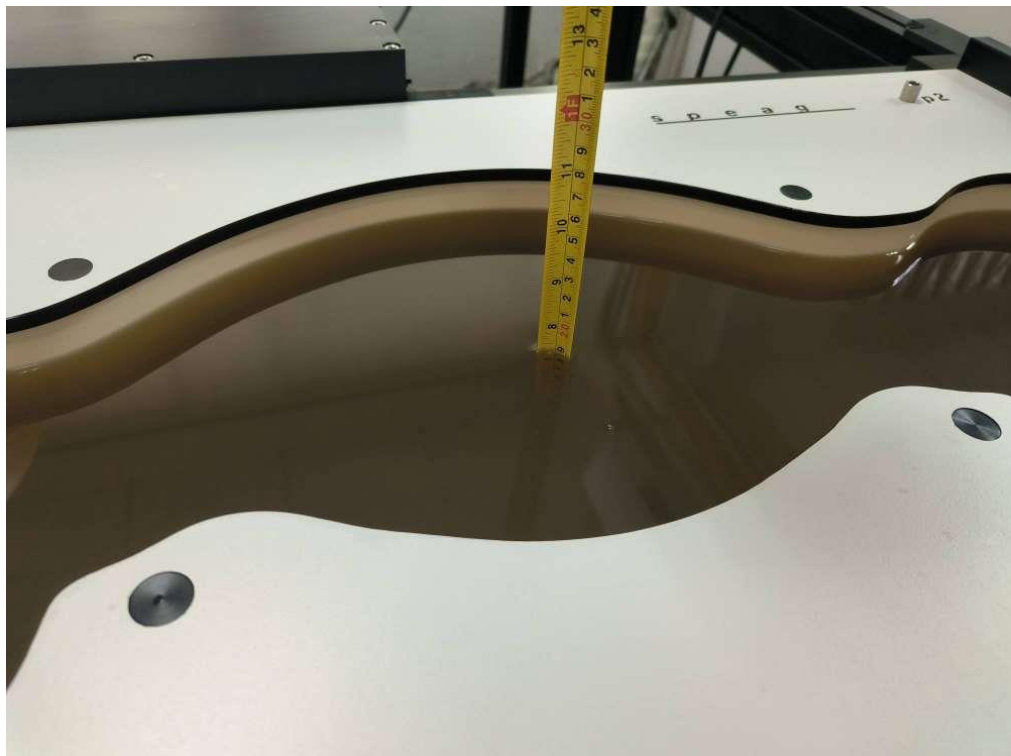
**Table 7.2: Dielectric Performance of Tissue Simulating Liquid**

| Measurement Date<br>(yyyy-mm-dd) | Type     | Frequency | Permittivity<br>$\epsilon$ | Drift<br>(%) | Conductivity<br>$\sigma$ (S/m) | Drift<br>(%) |
|----------------------------------|----------|-----------|----------------------------|--------------|--------------------------------|--------------|
| 2022/10/13                       | 750MHz   | Head      | 43.98                      | 4.86%        | 0.8872                         | 0.31%        |
| 2022/10/16                       | 835 MHz  | Head      | 43.48                      | 4.77%        | 0.9172                         | 1.91%        |
| 2022/10/18                       | 1750MHz  | Head      | 42.06                      | 4.94%        | 1.363                          | 0.51%        |
| 2022/10/20                       | 1900 MHz | Head      | 41.69                      | 4.22%        | 1.444                          | 3.14%        |
| 2022/10/24                       | 2450 MHz | Head      | 41.06                      | 4.74%        | 1.841                          | 2.28%        |
| 2022/10/26                       | 2600 MHz | Head      | 40.86                      | 4.74%        | 1.973                          | 0.66%        |

Note: The liquid temperature is 22.0°C



**Picture 18-1: Liquid depth in the Head Phantom**

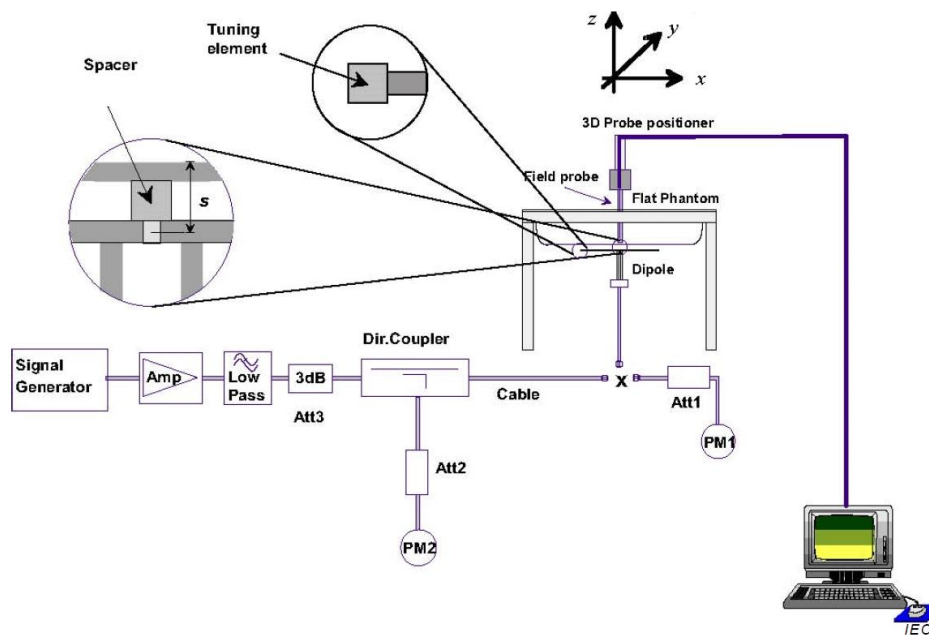


**Picture Liquid depth in the Flat Phantom**

## 8 System verification

### 8.1 System Setup

In the simplified setup for system evaluation, the DUT is replaced by a calibrated dipole and the power source is replaced by a continuous wave that comes from a signal generator. The calibrated dipole must be placed beneath the flat phantom section of the SAM twin phantom with the correct distance holder. The distance holder should touch the phantom surface with a light pressure at the reference marking and be oriented parallel to the long side of the phantom. The equipment setup is shown below:



Picture 8-1 System Setup for System Evaluation



Picture 8-2 Photo of Dipole Setup

## 8.2 System Verification

SAR system verification is required to confirm measurement accuracy, according to the tissue dielectric media, probe calibration points and other system operating parameters required for measuring the SAR of a test device. The system verification must be performed for each frequency band and within the valid range of each probe calibration point required for testing the device.

The system verification results are required that the area scan estimated 1-g SAR is within 3% of the zoom scan 1-g SAR. The details are presented in annex B.

**Table 8.1: System Verification of Head**

| Measurement<br>Date<br>(yyyy-mm-dd) | Frequency | Target value (W/kg) |                | Measured value(W/kg) |                | Deviation       |                |
|-------------------------------------|-----------|---------------------|----------------|----------------------|----------------|-----------------|----------------|
|                                     |           | 10 g<br>Average     | 1 g<br>Average | 10 g<br>Average      | 1 g<br>Average | 10 g<br>Average | 1 g<br>Average |
| 2022/10/13                          | 750MHz    | 5.64                | 8.63           | 5.56                 | 8.44           | -1.42%          | -2.20%         |
| 2022/10/16                          | 835 MHz   | 6.34                | 9.73           | 6.08                 | 9.32           | -4.10%          | -4.21%         |
| 2022/10/18                          | 1750MHz   | 19.3                | 36.8           | 19.8                 | 36.7           | 2.38%           | -0.22%         |
| 2022/10/20                          | 1900 MHz  | 20.7                | 39.7           | 21.2                 | 40.8           | 2.61%           | 2.77%          |
| 2022/10/24                          | 2450 MHz  | 24.9                | 52.7           | 24.5                 | 52.0           | -1.69%          | -1.33%         |
| 2022/10/26                          | 2600 MHz  | 25.2                | 55.8           | 25.5                 | 56.8           | 1.27%           | 1.79%          |

## 9 Measurement Procedures

### 9.1 Tests to be performed

In order to determine the highest value of the peak spatial-average SAR of a handset, all device positions, configurations and operational modes shall be tested for each frequency band according to steps 1 to 3 below. A flowchart of the test process is shown in picture 9.1.

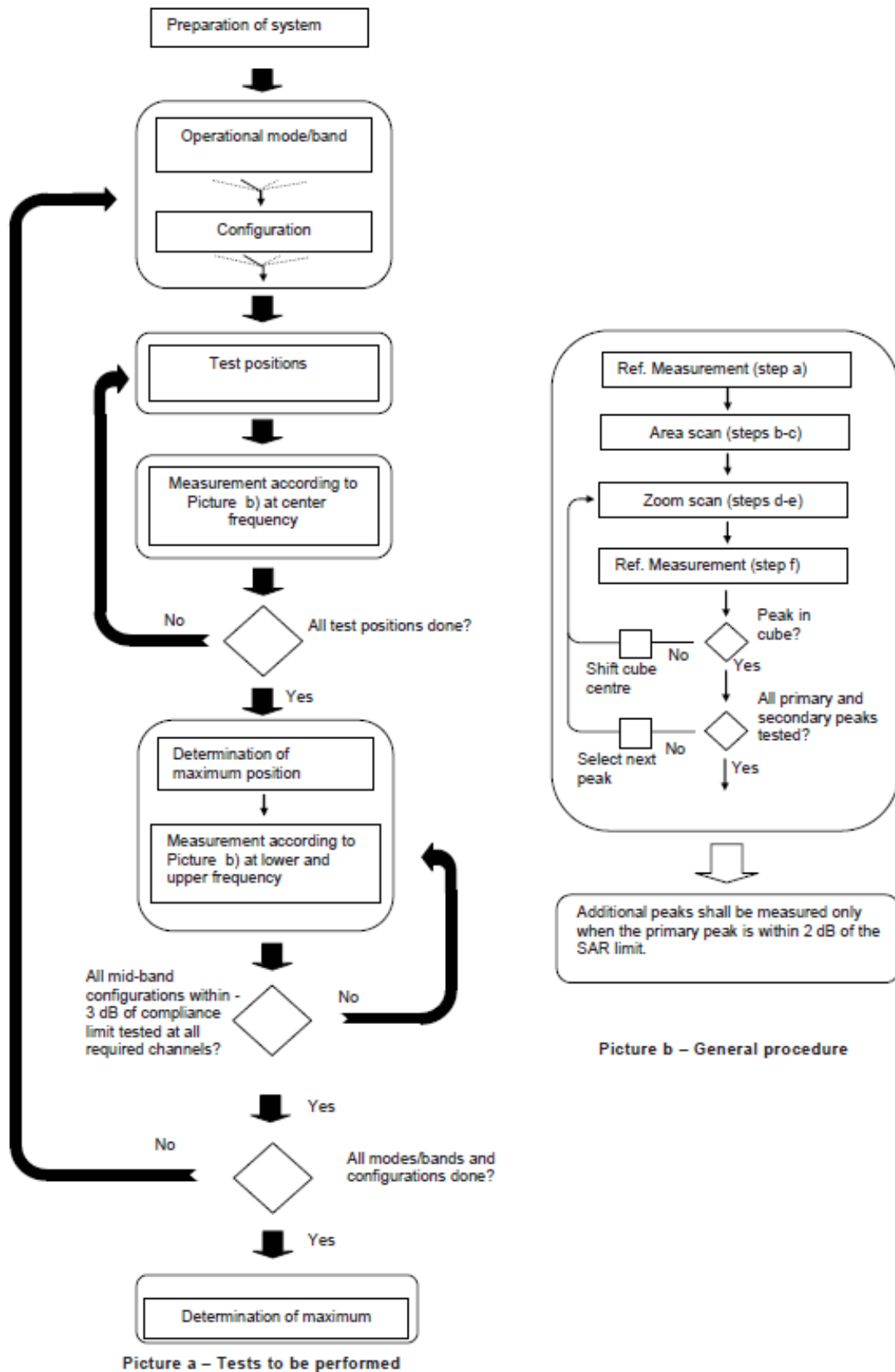
**Step 1:** The tests described in 9.2 shall be performed at the channel that is closest to the centre of the transmit frequency band ( $f_c$ ) for:

- a) all device positions (cheek and tilt, for both left and right sides of the SAM phantom, as described in annex D),
- b) all configurations for each device position in a), e.g., antenna extended and retracted, and
- c) all operational modes, e.g., analogue and digital, for each device position in a) and configuration in b) in each frequency band.

If more than three frequencies need to be tested according to 11.1 (i.e.,  $N_c > 3$ ), then all frequencies, configurations and modes shall be tested for all of the above test conditions.

**Step 2:** For the condition providing highest peak spatial-average SAR determined in Step 1, perform all tests described in 9.2 at all other test frequencies, i.e., lowest and highest frequencies. In addition, for all other conditions (device position, configuration and operational mode) where the peak spatial-average SAR value determined in Step 1 is within 3 dB of the applicable SAR limit, it is recommended that all other test frequencies shall be tested as well.

**Step 3:** Examine all data to determine the highest value of the peak spatial-average SAR found in Steps 1 to 2.



**Picture 10-1** Block diagram of the tests to be performed

## 9.2 General Measurement Procedure

The area and zoom scan resolutions specified in the table below must be applied to the SAR measurements and fully documented in SAR reports to qualify for TCB approval. Probe boundary effect error compensation is required for measurements with the probe tip closer than half a probe tip diameter to the phantom surface. Both the probe tip diameter and sensor offset distance must satisfy measurement protocols; to ensure probe boundary effect errors are minimized and the higher fields closest to the phantom surface can be correctly measured and extrapolated to the phantom surface for computing 1-g SAR. Tolerances of the post-processing algorithms must be verified by the test laboratory for the scan resolutions used in the SAR measurements, according to the reference distribution functions specified in IEEE standard 1528 and IEC 62209 standards. The results should be documented as part of the system validation records and may be requested to support test results when all the measurement parameters in the following table are not satisfied.

|                                                                                                                                                                                                                                                                                                      |                                    |                                                                                      | $\leq 3$ GHz                                                                                                                                                                                                                                                           | $> 3$ GHz                                                                     |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------|--------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------|
| Maximum distance from closest measurement point (geometric center of probe sensors) to phantom surface                                                                                                                                                                                               |                                    |                                                                                      | $5 \pm 1$ mm                                                                                                                                                                                                                                                           | $\frac{1}{2} \cdot \delta \cdot \ln(2) \pm 0.5$ mm                            |
| Maximum probe angle from probe axis to phantom surface normal at the measurement location                                                                                                                                                                                                            |                                    |                                                                                      | $30^\circ \pm 1^\circ$                                                                                                                                                                                                                                                 | $20^\circ \pm 1^\circ$                                                        |
| Maximum area scan spatial resolution: $\Delta x_{Area}$ , $\Delta y_{Area}$                                                                                                                                                                                                                          |                                    |                                                                                      | $\leq 2$ GHz: $\leq 15$ mm<br>2 – 3 GHz: $\leq 12$ mm                                                                                                                                                                                                                  | 3 – 4 GHz: $\leq 12$ mm<br>4 – 6 GHz: $\leq 10$ mm                            |
|                                                                                                                                                                                                                                                                                                      |                                    |                                                                                      | When the x or y dimension of the test device, in the measurement plane orientation, is smaller than the above, the measurement resolution must be $\leq$ the corresponding x or y dimension of the test device with at least one measurement point on the test device. |                                                                               |
| Maximum zoom scan spatial resolution: $\Delta x_{Zoom}$ , $\Delta y_{Zoom}$                                                                                                                                                                                                                          |                                    |                                                                                      | $\leq 2$ GHz: $\leq 8$ mm<br>2 – 3 GHz: $\leq 5$ mm*                                                                                                                                                                                                                   | 3 – 4 GHz: $\leq 5$ mm*<br>4 – 6 GHz: $\leq 4$ mm*                            |
| Maximum zoom scan spatial resolution, normal to phantom surface                                                                                                                                                                                                                                      | uniform grid: $\Delta z_{Zoom}(n)$ |                                                                                      | $\leq 5$ mm                                                                                                                                                                                                                                                            | 3 – 4 GHz: $\leq 4$ mm<br>4 – 5 GHz: $\leq 3$ mm<br>5 – 6 GHz: $\leq 2$ mm    |
|                                                                                                                                                                                                                                                                                                      | graded grid                        | $\Delta z_{Zoom}(1)$ : between 1 <sup>st</sup> two points closest to phantom surface | $\leq 4$ mm                                                                                                                                                                                                                                                            | 3 – 4 GHz: $\leq 3$ mm<br>4 – 5 GHz: $\leq 2.5$ mm<br>5 – 6 GHz: $\leq 2$ mm  |
|                                                                                                                                                                                                                                                                                                      |                                    | $\Delta z_{Zoom}(n>1)$ : between subsequent points                                   | $\leq 1.5 \cdot \Delta z_{Zoom}(n-1)$                                                                                                                                                                                                                                  |                                                                               |
| Minimum zoom scan volume                                                                                                                                                                                                                                                                             | x, y, z                            |                                                                                      | $\geq 30$ mm                                                                                                                                                                                                                                                           | 3 – 4 GHz: $\geq 28$ mm<br>4 – 5 GHz: $\geq 25$ mm<br>5 – 6 GHz: $\geq 22$ mm |
| Note: $\delta$ is the penetration depth of a plane-wave at normal incidence to the tissue medium; see draft standard IEEE P1528-2011 for details.                                                                                                                                                    |                                    |                                                                                      |                                                                                                                                                                                                                                                                        |                                                                               |
| * When zoom scan is required and the <u>reported</u> SAR from the area scan based 1-g SAR estimation procedures of KDB 447498 is $\leq 1.4$ W/kg, $\leq 8$ mm, $\leq 7$ mm and $\leq 5$ mm zoom scan resolution may be applied, respectively, for 2 GHz to 3 GHz, 3 GHz to 4 GHz and 4 GHz to 6 GHz. |                                    |                                                                                      |                                                                                                                                                                                                                                                                        |                                                                               |

### 9.3 WCDMA Measurement Procedures for SAR

The following procedures are applicable to WCDMA handsets operating under 3GPP Release99, Release 5 and Release 6. The default test configuration is to measure SAR with an established radio link between the DUT and a communication test set using a 12.2kbps RMC (reference measurement channel) configured in Test Loop Mode 1. SAR is selectively confirmed for other physical channel configurations (DPCCH & DPDCH<sub>n</sub>), HSDPA and HSPA (HSUPA/HSDPA) modes according to output power, exposure conditions and device operating capabilities. Both uplink and downlink should be configured with the same RMC or AMR, when required. SAR for Release 5 HSDPA and Release 6 HSPA are measured using the applicable FRC (fixed reference channel) and E-DCH reference channel configurations. Maximum output power is verified according to applicable versions of 3GPP TS 34.121 and SAR must be measured according to these maximum output conditions. When Maximum Power Reduction (MPR) is not implemented according to Cubic Metric (CM) requirements for Release 6 HSPA, the following procedures do not apply.

#### For Release 5 HSDPA Data Devices:

| Sub-test | $\beta_c$ | $\beta_d$ | $\beta_d$ (SF) | $\beta_c / \beta_d$ | $\beta_{hs}$ | CM/dB |
|----------|-----------|-----------|----------------|---------------------|--------------|-------|
| 1        | 2/15      | 15/15     | 64             | 2/15                | 4/15         | 0.0   |
| 2        | 12/15     | 15/15     | 64             | 12/15               | 24/25        | 1.0   |
| 3        | 15/15     | 8/15      | 64             | 15/8                | 30/15        | 1.5   |
| 4        | 15/15     | 4/15      | 64             | 15/4                | 30/15        | 1.5   |

#### For Release 6 HSPA Data Devices

| Sub-test | $\beta_c$ | $\beta_d$ | $\beta_d$ (SF) | $\beta_c / \beta_d$ | $\beta_{hs}$ | $\beta_{ec}$ | $\beta_{ed}$                               | $\beta_{ed}$ (SF) | $\beta_{ed}$ (codes) | CM (dB) | MPR (dB) | AG Index | E-TFCI |
|----------|-----------|-----------|----------------|---------------------|--------------|--------------|--------------------------------------------|-------------------|----------------------|---------|----------|----------|--------|
| 1        | 11/15     | 15/15     | 64             | 11/15               | 22/15        | 209/225      | 1039/225                                   | 4                 | 1                    | 1.5     | 1.5      | 20       | 75     |
| 2        | 6/15      | 15/15     | 64             | 6/15                | 12/15        | 12/15        | 12/15                                      | 4                 | 1                    | 1.5     | 1.5      | 12       | 67     |
| 3        | 15/15     | 9/15      | 64             | 15/9                | 30/15        | 30/15        | $\beta_{ed1}:47/15$<br>$\beta_{ed2}:47/15$ | 4                 | 2                    | 1.5     | 1.5      | 15       | 92     |
| 4        | 2/15      | 15/15     | 64             | 2/15                | 4/15         | 4/15         | 56/75                                      | 4                 | 1                    | 1.5     | 1.5      | 17       | 71     |
| 5        | 15/15     | 15/15     | 64             | 15/15               | 24/15        | 30/15        | 134/15                                     | 4                 | 1                    | 1.5     | 1.5      | 21       | 81     |

#### Rel.8 DC-HSDPA (Cat 24)

SAR test exclusion for Rel.8 DC-HSDPA must satisfy the SAR test exclusion requirements of Rel.5 HSDPA. SAR test exclusion for DC-HSDPA devices is determined by power measurements according to the H-Set 12, Fixed Reference Channel (FRC) configuration in Table C.8.1.12 of 3GPP TS 34.121-1. A primary and a secondary serving HS-DSCH Cell are required to perform the power measurement and for the results to qualify for SAR test exclusion.

## 9.4 SAR Measurement for LTE

SAR tests for LTE are performed with a base station simulator, Rohde & Schwarz CMW500. Closed loop power control was used so the UE transmits with maximum output power during SAR testing. All powers were measured with the CMW 500.

It is performed for conducted power and SAR based on the KDB941225 D05.

SAR is evaluated separately according to the following procedures for the different test positions in each exposure condition – head, body, body-worn accessories and other use conditions. The procedures in the following subsections are applied separately to test each LTE frequency band.

### 1) QPSK with 1 RB allocation

Start with the largest channel bandwidth and measure SAR for QPSK with 1 RB allocation, using the RB offset and required test channel combination with the highest maximum output power among RB offsets at the upper edge, middle and lower edge of each required test channel. When the reported SAR is  $\leq 0.8$  W/kg, testing of the remaining RB offset configurations and required test channels is not required for 1 RB allocation; otherwise, SAR is required for the remaining required test channels and only for the RB offset configuration with the highest output power for that channel. When the reported SAR of a required test channel is  $> 1.45$  W/kg, SAR is required for all three RB offset configurations for that required test channel.

### 2) QPSK with 50% RB allocation

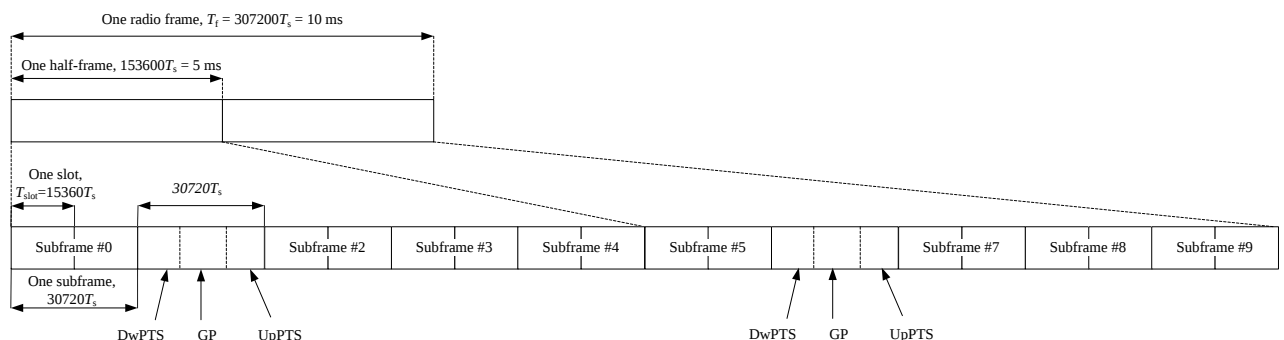
The procedures required for 1 RB allocation in 1) are applied to measure the SAR for QPSK with 50% RB allocation.

### 3) QPSK with 100% RB allocation

For QPSK with 100% RB allocation, SAR is not required when the highest maximum output power for 100 % RB allocation is less than the highest maximum output power in 50% and 1 RB allocations and the highest reported SAR for 1 RB and 50% RB allocation in 1) and 2) are  $\leq 0.8$  W/kg. Otherwise, SAR is measured for the highest output power channel; and if the reported SAR is  $> 1.45$  W/kg, the remaining required test channels must also be tested.

## TDD test:

TDD testing is performed using guidance from FCC KDB 941225 D05 and the SAR test guidance provided in April 2013 TCB works hop notes. TDD is tested at the highest duty factor using UL-DL configuration 0 with special subframe configuration 6 and applying the FDD LTE procedures in KDB 941225 D05. SAR testing is performed using the extended cyclic prefix listed in 3GPP TS 36.211.



**Figure 9.2: Frame structure type 2 (for 5 ms switch-point periodicity)**

**Table 9.1: Configuration of special subframe (lengths of DwPTS/GP/UpPTS)**

| Special subframe configuration | Normal cyclic prefix in downlink |                                |                                  | Extended cyclic prefix in downlink |                                |                                  |
|--------------------------------|----------------------------------|--------------------------------|----------------------------------|------------------------------------|--------------------------------|----------------------------------|
|                                | DwPTS                            | UpPTS                          |                                  | DwPTS                              | UpPTS                          |                                  |
|                                |                                  | Normal cyclic prefix in uplink | Extended cyclic prefix in uplink |                                    | Normal cyclic prefix in uplink | Extended cyclic prefix in uplink |
| 0                              | $6592 \cdot T_s$                 | $2192 \cdot T_s$               | $2560 \cdot T_s$                 | $7680 \cdot T_s$                   | $2192 \cdot T_s$               | $2560 \cdot T_s$                 |
| 1                              | $19760 \cdot T_s$                |                                |                                  | $20480 \cdot T_s$                  |                                |                                  |
| 2                              | $21952 \cdot T_s$                |                                |                                  | $23040 \cdot T_s$                  |                                |                                  |
| 3                              | $24144 \cdot T_s$                |                                |                                  | $25600 \cdot T_s$                  |                                |                                  |
| 4                              | $26336 \cdot T_s$                | $4384 \cdot T_s$               | $5120 \cdot T_s$                 | $7680 \cdot T_s$                   | $4384 \cdot T_s$               | $5120 \cdot T_s$                 |
| 5                              | $6592 \cdot T_s$                 |                                |                                  | $20480 \cdot T_s$                  |                                |                                  |
| 6                              | $19760 \cdot T_s$                |                                |                                  | $23040 \cdot T_s$                  |                                |                                  |
| 7                              | $21952 \cdot T_s$                |                                |                                  | $12800 \cdot T_s$                  |                                |                                  |
| 8                              | $24144 \cdot T_s$                |                                |                                  | -                                  | -                              | -                                |
| 9                              | $13168 \cdot T_s$                |                                |                                  | -                                  | -                              | -                                |

**Table 9.2: Uplink-downlink configurations**

| Uplink-downlink configuration | Downlink-to-Uplink Switch-point periodicity | Subframe number |   |   |   |   |   |   |   |   |   |
|-------------------------------|---------------------------------------------|-----------------|---|---|---|---|---|---|---|---|---|
|                               |                                             | 0               | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 |
| 0                             | 5 ms                                        | D               | S | U | U | U | D | S | U | U | U |
| 1                             | 5 ms                                        | D               | S | U | U | D | D | S | U | U | D |
| 2                             | 5 ms                                        | D               | S | U | D | D | D | S | U | D | D |
| 3                             | 10 ms                                       | D               | S | U | U | U | D | D | D | D | D |
| 4                             | 10 ms                                       | D               | S | U | U | D | D | D | D | D | D |
| 5                             | 10 ms                                       | D               | S | U | D | D | D | D | D | D | D |
| 6                             | 5 ms                                        | D               | S | U | U | U | D | S | U | U | D |

Duty factor is calculated by:

$$\begin{aligned}
 \text{Duty factor} &= \text{uplink frame} \cdot 6 + \text{UpPTS} \cdot 2 / \text{one frame length} \\
 &= (30720 \cdot T_s \cdot 6 + 5120 \cdot T_s \cdot 2) / 307200 \cdot T_s \\
 &= 0.633
 \end{aligned}$$

## 9.5 Bluetooth & Wi-Fi Measurement Procedures for SAR

Normal network operating configurations are not suitable for measuring the SAR of 802.11 transmitters in general. Unpredictable fluctuations in network traffic and antenna diversity conditions can introduce undesirable variations in SAR results. The SAR for these devices should be measured using chipset based test mode software to ensure that the results are consistent and reliable.

Chipset based test mode software is hardware dependent and generally varies among manufacturers. The device operating parameters established in a test mode for SAR measurements must be identical to those programmed in production units, including output power levels, amplifier gain settings and other RF performance tuning parameters. The test frequencies should correspond to actual channel frequencies defined for domestic use. SAR for devices with switched diversity should be measured with only one antenna transmitting at a time during each SAR measurement, according to a fixed modulation and data rate. The same data pattern should be used for all measurements.

## 9.6 Power Drift

To control the output power stability during the SAR test, DASY5 system calculates the power drift by measuring the E-field at the same location at the beginning and at the end of the measurement for each test position. These drift values can be found in section14 labeled as: (Power Drift [dB]). This ensures that the power drift during one measurement is within 5%.

## 10 Area Scan Based 1-g SAR

### 10.1 Requirement of KDB

According to the KDB447498 D01, when the implementation is based the specific polynomial fit algorithm as presented at the 29th Bioelectromagnetics Society meeting (2007) and the estimated 1-gSAR is  $\leq 1.2$  W/kg, a zoom scan measurement is not required provided it is also not needed for any other purpose; for example, if the peak SAR location required for simultaneous transmission SAR test exclusion can be determined accurately by the SAR system or manually to discriminate between distinctive peaks and scattered noisy SAR distributions from area scans.

There must not be any warning or alert messages due to various measurement concerns identified by the SAR system; for example, noise in measurements, peaks too close to scan boundary, peaks are too sharp, spatial resolution and uncertainty issues etc. The SAR system verification must also demonstrate that the area scan estimated 1-g SAR is within 3% of the zoom scan 1-g SAR (See Annex B). When all the SAR results for each exposure condition in a frequency band and wireless mode are based on estimated 1-g SAR, the 1-g SAR for the highest SAR configuration must be determined by a zoom scan.

### 10.2 Fast SAR Algorithms

The approach is based on the area scan measurement applying a frequency dependent attenuation parameter. This attenuation parameter was empirically determined by analyzing a large number of phones. The MOTOROLA FAST SAR was developed and validated by the MOTOROLA Research Group in Ft. Lauderdale.

In the initial study, an approximation algorithm based on Linear fit was developed. The accuracy of the algorithm has been demonstrated across a broad frequency range (136-2450 MHz) and for both 1- and 10-g averaged SAR using a sample of 264 SAR measurements from 55 wireless handsets. For the sample size studied, the root-mean-squared errors of the algorithm are 1.2% and 5.8% for 1- and 10-g averaged SAR, respectively. The paper describing the algorithm in detail is expected to be published in August 2004 within the Special Issue of Transactions on MTT.

In the second step, the same research group optimized the fitting algorithm to an Polynomial fit whereby the frequency validity was extended to cover the range 30-6000MHz. Details of this study can be found in the BEMS 2007 Proceedings.

Both algorithms are implemented in DASY software.

## 11 Conducted Output Power

The details of test scenarios categorization in the table below

| Head        | Body worn    | Body    |
|-------------|--------------|---------|
| receiver on | receiver off | Hostpot |

|                |      |                  |
|----------------|------|------------------|
| Main antenna   | ANT0 | LB Main          |
|                | ANT1 | MHB Main         |
| Second antenna | ANT2 | LB_DIV /+MHB_DIV |

### 11.1 GSM Measurement result

#### Maximum Target Power for Production Unit

| Antenna     | Main antenna        |                    |               |          |          |      |
|-------------|---------------------|--------------------|---------------|----------|----------|------|
| GSM Band    | GSM850              |                    |               |          |          |      |
| EUT State   | rev on              |                    |               |          |          |      |
| Test Mode   | TUNE-UP Information |                    |               |          |          |      |
|             | Power Reduce (dB)   | Target Power (dBm) | Tolerance(dB) | Min(dBm) | Max(dBm) |      |
| GSM (CS)    | 0.0                 | 32.7               | -1.5          | 1        | 31.2     | 33.7 |
| GPRS (GMSK) | 1 Tx Slot           | 0.0                | 32.7          | -1.5     | 1        | 31.2 |
|             | 2 Tx Slots          | 0.0                | 30.1          | -1.5     | 1        | 28.6 |
|             | 3 Tx Slots          | 0.0                | 28.3          | -1.5     | 1        | 26.8 |
|             | 4 Tx Slots          | 0.0                | 27.0          | -1.5     | 1        | 25.5 |
| EDGE (GMSK) | 1 Tx Slot           | 0.0                | 32.7          | -1.5     | 1        | 31.2 |
|             | 2 Tx Slots          | 0.0                | 30.1          | -1.5     | 1        | 28.6 |
|             | 3 Tx Slots          | 0.0                | 28.3          | -1.5     | 1        | 26.8 |
|             | 4 Tx Slots          | 0.0                | 27.0          | -1.5     | 1        | 25.5 |
| EDGE (8PSK) | 1 Tx Slot           | 0.0                | 25.9          | -1.5     | 1        | 24.4 |
|             | 2 Tx Slots          | 0.0                | 22.8          | -1.5     | 1        | 21.3 |
|             | 3 Tx Slots          | 0.0                | 20.8          | -1.5     | 1        | 19.3 |
|             | 4 Tx Slots          | 0.0                | 19.1          | -1.5     | 1        | 17.6 |

| Antenna     | Main antenna        |                    |               |          |          |      |
|-------------|---------------------|--------------------|---------------|----------|----------|------|
| GSM Band    | GSM850              |                    |               |          |          |      |
| EUT State   | rev off             |                    |               |          |          |      |
| Test Mode   | TUNE-UP Information |                    |               |          |          |      |
|             | Power Reduce (dB)   | Target Power (dBm) | Tolerance(dB) | Min(dBm) | Max(dBm) |      |
| GSM (CS)    | 0.0                 | 32.7               | -1.5          | 1        | 31.2     | 33.7 |
| GPRS (GMSK) | 1 Tx Slot           | 0.0                | 32.7          | -1.5     | 1        | 31.2 |
|             | 2 Tx Slots          | 0.0                | 30.1          | -1.5     | 1        | 28.6 |
|             | 3 Tx Slots          | 0.0                | 28.3          | -1.5     | 1        | 26.8 |
|             | 4 Tx Slots          | 0.0                | 27.0          | -1.5     | 1        | 25.5 |
| EDGE (GMSK) | 1 Tx Slot           | 0.0                | 32.7          | -1.5     | 1        | 31.2 |
|             | 2 Tx Slots          | 0.0                | 30.1          | -1.5     | 1        | 28.6 |
|             | 3 Tx Slots          | 0.0                | 28.3          | -1.5     | 1        | 26.8 |
|             | 4 Tx Slots          | 0.0                | 27.0          | -1.5     | 1        | 25.5 |
| EDGE (8PSK) | 1 Tx Slot           | 0.0                | 25.9          | -1.5     | 1        | 24.4 |
|             | 2 Tx Slots          | 0.0                | 22.8          | -1.5     | 1        | 21.3 |
|             | 3 Tx Slots          | 0.0                | 20.8          | -1.5     | 1        | 19.3 |
|             | 4 Tx Slots          | 0.0                | 19.1          | -1.5     | 1        | 17.6 |

| Antenna     | Main antenna        |                    |               |          |          |      |
|-------------|---------------------|--------------------|---------------|----------|----------|------|
| GSM Band    | GSM850              |                    |               |          |          |      |
| EUT State   | hotspot             |                    |               |          |          |      |
| Test Mode   | TUNE-UP Information |                    |               |          |          |      |
|             | Power Reduce (dB)   | Target Power (dBm) | Tolerance(dB) | Min(dBm) | Max(dBm) |      |
| GSM (CS)    | 1.0                 | 31.7               | -1.5          | 1        | 30.2     | 32.7 |
| GPRS (GMSK) | 1 Tx Slot           | 1.0                | 31.7          | -1.5     | 1        | 30.2 |
|             | 2 Tx Slots          | 1.0                | 29.1          | -1.5     | 1        | 27.6 |
|             | 3 Tx Slots          | 1.0                | 27.3          | -1.5     | 1        | 25.8 |
|             | 4 Tx Slots          | 1.0                | 26.0          | -1.5     | 1        | 24.5 |
| EDGE (GMSK) | 1 Tx Slot           | 1.0                | 31.7          | -1.5     | 1        | 30.2 |
|             | 2 Tx Slots          | 1.0                | 29.1          | -1.5     | 1        | 27.6 |
|             | 3 Tx Slots          | 1.0                | 27.3          | -1.5     | 1        | 25.8 |
|             | 4 Tx Slots          | 1.0                | 26.0          | -1.5     | 1        | 24.5 |
| EDGE (8PSK) | 1 Tx Slot           | 1.0                | 24.9          | -1.5     | 1        | 23.4 |
|             | 2 Tx Slots          | 1.0                | 21.8          | -1.5     | 1        | 20.3 |
|             | 3 Tx Slots          | 1.0                | 19.8          | -1.5     | 1        | 18.3 |
|             | 4 Tx Slots          | 1.0                | 18.1          | -1.5     | 1        | 16.6 |

| Antenna     | Second antenna      |                    |               |          |          |      |
|-------------|---------------------|--------------------|---------------|----------|----------|------|
| GSM Band    | GSM850              |                    |               |          |          |      |
| EUT State   | rev on              |                    |               |          |          |      |
| Test Mode   | TUNE-UP Information |                    |               |          |          |      |
|             | Power Reduce (dB)   | Target Power (dBm) | Tolerance(dB) | Min(dBm) | Max(dBm) |      |
| GSM (CS)    | 0.0                 | 32.7               | -1.5          | 1        | 31.2     | 33.7 |
| GPRS (GMSK) | 1 Tx Slot           | 0.0                | 32.7          | -1.5     | 1        | 31.2 |
|             | 2 Tx Slots          | 0.0                | 30.1          | -1.5     | 1        | 28.6 |
|             | 3 Tx Slots          | 0.0                | 28.3          | -1.5     | 1        | 26.8 |
|             | 4 Tx Slots          | 0.0                | 27.0          | -1.5     | 1        | 25.5 |
| EDGE (GMSK) | 1 Tx Slot           | 0.0                | 32.7          | -1.5     | 1        | 31.2 |
|             | 2 Tx Slots          | 0.0                | 30.1          | -1.5     | 1        | 28.6 |
|             | 3 Tx Slots          | 0.0                | 28.3          | -1.5     | 1        | 26.8 |
|             | 4 Tx Slots          | 0.0                | 27.0          | -1.5     | 1        | 25.5 |
| EDGE (8PSK) | 1 Tx Slot           | 0.0                | 25.9          | -1.5     | 1        | 24.4 |
|             | 2 Tx Slots          | 0.0                | 22.8          | -1.5     | 1        | 21.3 |
|             | 3 Tx Slots          | 0.0                | 20.8          | -1.5     | 1        | 19.3 |
|             | 4 Tx Slots          | 0.0                | 19.1          | -1.5     | 1        | 17.6 |

| Antenna     | Second antenna      |                    |               |          |          |      |
|-------------|---------------------|--------------------|---------------|----------|----------|------|
| GSM Band    | GSM850              |                    |               |          |          |      |
| EUT State   | rev off             |                    |               |          |          |      |
| Test Mode   | TUNE-UP Information |                    |               |          |          |      |
|             | Power Reduce (dB)   | Target Power (dBm) | Tolerance(dB) | Min(dBm) | Max(dBm) |      |
| GSM (CS)    | 0.0                 | 32.7               | -1.5          | 1        | 31.2     | 33.7 |
| GPRS (GMSK) | 1 Tx Slot           | 0.0                | 32.7          | -1.5     | 1        | 31.2 |
|             | 2 Tx Slots          | 0.0                | 30.1          | -1.5     | 1        | 28.6 |
|             | 3 Tx Slots          | 0.0                | 28.3          | -1.5     | 1        | 26.8 |
|             | 4 Tx Slots          | 0.0                | 27.0          | -1.5     | 1        | 25.5 |
| EDGE (GMSK) | 1 Tx Slot           | 0.0                | 32.7          | -1.5     | 1        | 31.2 |
|             | 2 Tx Slots          | 0.0                | 30.1          | -1.5     | 1        | 28.6 |
|             | 3 Tx Slots          | 0.0                | 28.3          | -1.5     | 1        | 26.8 |
|             | 4 Tx Slots          | 0.0                | 27.0          | -1.5     | 1        | 25.5 |
| EDGE (8PSK) | 1 Tx Slot           | 0.0                | 25.9          | -1.5     | 1        | 24.4 |
|             | 2 Tx Slots          | 0.0                | 22.8          | -1.5     | 1        | 21.3 |
|             | 3 Tx Slots          | 0.0                | 20.8          | -1.5     | 1        | 19.3 |
|             | 4 Tx Slots          | 0.0                | 19.1          | -1.5     | 1        | 17.6 |

| Antenna     | Second antenna      |                    |               |          |          |      |
|-------------|---------------------|--------------------|---------------|----------|----------|------|
| GSM Band    | GSM850              |                    |               |          |          |      |
| EUT State   | hotspot             |                    |               |          |          |      |
| Test Mode   | TUNE-UP Information |                    |               |          |          |      |
|             | Power Reduce (dB)   | Target Power (dBm) | Tolerance(dB) | Min(dBm) | Max(dBm) |      |
| GSM (CS)    | 3.0                 | 29.7               | -1.5          | 1        | 28.2     | 30.7 |
| GPRS (GMSK) | 1 Tx Slot           | 3.0                | 29.7          | -1.5     | 1        | 28.2 |
|             | 2 Tx Slots          | 3.0                | 27.1          | -1.5     | 1        | 25.6 |
|             | 3 Tx Slots          | 3.0                | 25.3          | -1.5     | 1        | 23.8 |
|             | 4 Tx Slots          | 3.0                | 24.0          | -1.5     | 1        | 22.5 |
| EDGE (GMSK) | 1 Tx Slot           | 3.0                | 29.7          | -1.5     | 1        | 28.2 |
|             | 2 Tx Slots          | 3.0                | 27.1          | -1.5     | 1        | 25.6 |
|             | 3 Tx Slots          | 3.0                | 25.3          | -1.5     | 1        | 23.8 |
|             | 4 Tx Slots          | 3.0                | 24.0          | -1.5     | 1        | 22.5 |
| EDGE (8PSK) | 1 Tx Slot           | 3.0                | 22.9          | -1.5     | 1        | 21.4 |
|             | 2 Tx Slots          | 3.0                | 19.8          | -1.5     | 1        | 18.3 |
|             | 3 Tx Slots          | 3.0                | 17.8          | -1.5     | 1        | 16.3 |
|             | 4 Tx Slots          | 3.0                | 16.1          | -1.5     | 1        | 14.6 |

| Antenna     | Main antenna        |                    |               |          |          |      |
|-------------|---------------------|--------------------|---------------|----------|----------|------|
| GSM Band    | GSM1900             |                    |               |          |          |      |
| EUT State   | rev on              |                    |               |          |          |      |
| Test Mode   | TUNE-UP Information |                    |               |          |          |      |
|             | Power Reduce (dB)   | Target Power (dBm) | Tolerance(dB) | Min(dBm) | Max(dBm) |      |
| GSM (CS)    | 0.0                 | 29.7               | -1.5          | 1        | 28.2     | 30.7 |
| GPRS (GMSK) | 1 Tx Slot           | 0.0                | 29.7          | -1.5     | 1        | 28.2 |
|             | 2 Tx Slots          | 0.0                | 27.3          | -1.5     | 1        | 25.8 |
|             | 3 Tx Slots          | 0.0                | 25.5          | -1.5     | 1        | 24.0 |
|             | 4 Tx Slots          | 0.0                | 24.2          | -1.5     | 1        | 22.7 |
| EDGE (GMSK) | 1 Tx Slot           | 0.0                | 29.7          | -1.5     | 1        | 28.2 |
|             | 2 Tx Slots          | 0.0                | 27.2          | -1.5     | 1        | 25.7 |
|             | 3 Tx Slots          | 0.0                | 25.5          | -1.5     | 1        | 24.0 |
|             | 4 Tx Slots          | 0.0                | 24.2          | -1.5     | 1        | 22.7 |
| EDGE (8PSK) | 1 Tx Slot           | 0.0                | 25.1          | -1.5     | 1        | 23.6 |
|             | 2 Tx Slots          | 0.0                | 22.3          | -1.5     | 1        | 20.8 |
|             | 3 Tx Slots          | 0.0                | 20.3          | -1.5     | 1        | 18.8 |
|             | 4 Tx Slots          | 0.0                | 18.9          | -1.5     | 1        | 17.4 |

| Antenna     | Second antenna      |                    |               |          |          |      |
|-------------|---------------------|--------------------|---------------|----------|----------|------|
| GSM Band    | GSM1900             |                    |               |          |          |      |
| EUT State   | rev on              |                    |               |          |          |      |
| Test Mode   | TUNE-UP Information |                    |               |          |          |      |
|             | Power Reduce (dB)   | Target Power (dBm) | Tolerance(dB) | Min(dBm) | Max(dBm) |      |
| GSM (CS)    | 5.0                 | 24.7               | -1.5          | 1.0      | 23.2     | 25.7 |
| GPRS (GMSK) | 1 Tx Slot           | 5.0                | 24.7          | -1.5     | 1.0      | 23.2 |
|             | 2 Tx Slots          | 5.0                | 22.3          | -1.5     | 1.0      | 20.8 |
|             | 3 Tx Slots          | 5.0                | 20.5          | -1.5     | 1.0      | 19.0 |
|             | 4 Tx Slots          | 5.0                | 19.2          | -1.5     | 1.0      | 17.7 |
| EDGE (GMSK) | 1 Tx Slot           | 5.0                | 24.7          | -1.5     | 1.0      | 23.2 |
|             | 2 Tx Slots          | 5.0                | 22.2          | -1.5     | 1.0      | 20.7 |
|             | 3 Tx Slots          | 5.0                | 20.5          | -1.5     | 1.0      | 19.0 |
|             | 4 Tx Slots          | 5.0                | 19.2          | -1.5     | 1.0      | 17.7 |
| EDGE (8PSK) | 1 Tx Slot           | 5.0                | 20.1          | -1.5     | 1.0      | 18.6 |
|             | 2 Tx Slots          | 5.0                | 17.3          | -1.5     | 1.0      | 15.8 |
|             | 3 Tx Slots          | 5.0                | 15.3          | -1.5     | 1.0      | 13.8 |
|             | 4 Tx Slots          | 5.0                | 13.9          | -1.5     | 1.0      | 12.4 |

| Antenna     | Main antenna        |                    |               |          |          |      |
|-------------|---------------------|--------------------|---------------|----------|----------|------|
| GSM Band    | GSM1900             |                    |               |          |          |      |
| EUT State   | rev off             |                    |               |          |          |      |
| Test Mode   | TUNE-UP Information |                    |               |          |          |      |
|             | Power Reduce (dB)   | Target Power (dBm) | Tolerance(dB) | Min(dBm) | Max(dBm) |      |
| GSM (CS)    | 0.0                 | 29.7               | -1.5          | 1        | 28.2     | 30.7 |
| GPRS (GMSK) | 1 Tx Slot           | 0.0                | 29.7          | -1.5     | 1        | 28.2 |
|             | 2 Tx Slots          | 0.0                | 27.3          | -1.5     | 1        | 25.8 |
|             | 3 Tx Slots          | 0.0                | 25.5          | -1.5     | 1        | 24.0 |
|             | 4 Tx Slots          | 0.0                | 24.2          | -1.5     | 1        | 22.7 |
| EDGE (GMSK) | 1 Tx Slot           | 0.0                | 29.7          | -1.5     | 1        | 28.2 |
|             | 2 Tx Slots          | 0.0                | 27.2          | -1.5     | 1        | 25.7 |
|             | 3 Tx Slots          | 0.0                | 25.5          | -1.5     | 1        | 24.0 |
|             | 4 Tx Slots          | 0.0                | 24.2          | -1.5     | 1        | 22.7 |
| EDGE (8PSK) | 1 Tx Slot           | 0.0                | 25.1          | -1.5     | 1        | 23.6 |
|             | 2 Tx Slots          | 0.0                | 22.3          | -1.5     | 1        | 20.8 |
|             | 3 Tx Slots          | 0.0                | 20.3          | -1.5     | 1        | 18.8 |
|             | 4 Tx Slots          | 0.0                | 18.9          | -1.5     | 1        | 17.4 |

| Antenna     | Second antenna      |                    |               |          |          |      |
|-------------|---------------------|--------------------|---------------|----------|----------|------|
| GSM Band    | GSM1900             |                    |               |          |          |      |
| EUT State   | rev off             |                    |               |          |          |      |
| Test Mode   | TUNE-UP Information |                    |               |          |          |      |
|             | Power Reduce (dB)   | Target Power (dBm) | Tolerance(dB) | Min(dBm) | Max(dBm) |      |
| GSM (CS)    | 2.0                 | 27.7               | -1.5          | 1.0      | 26.2     | 28.7 |
| GPRS (GMSK) | 1 Tx Slot           | 2.0                | 27.7          | -1.5     | 1.0      | 26.2 |
|             | 2 Tx Slots          | 2.0                | 25.3          | -1.5     | 1.0      | 23.8 |
|             | 3 Tx Slots          | 2.0                | 23.5          | -1.5     | 1.0      | 22.0 |
|             | 4 Tx Slots          | 2.0                | 22.2          | -1.5     | 1.0      | 20.7 |
| EDGE (GMSK) | 1 Tx Slot           | 2.0                | 27.7          | -1.5     | 1.0      | 26.2 |
|             | 2 Tx Slots          | 2.0                | 25.2          | -1.5     | 1.0      | 23.7 |
|             | 3 Tx Slots          | 2.0                | 23.5          | -1.5     | 1.0      | 22.0 |
|             | 4 Tx Slots          | 2.0                | 22.2          | -1.5     | 1.0      | 20.7 |
| EDGE (8PSK) | 1 Tx Slot           | 2.0                | 23.1          | -1.5     | 1.0      | 21.6 |
|             | 2 Tx Slots          | 2.0                | 20.3          | -1.5     | 1.0      | 18.8 |
|             | 3 Tx Slots          | 2.0                | 18.3          | -1.5     | 1.0      | 16.8 |
|             | 4 Tx Slots          | 2.0                | 16.9          | -1.5     | 1.0      | 15.4 |

| Antenna     | Main antenna        |                    |               |          |          |      |
|-------------|---------------------|--------------------|---------------|----------|----------|------|
| GSM Band    | GSM1900             |                    |               |          |          |      |
| EUT State   | hotspot             |                    |               |          |          |      |
| Test Mode   | TUNE-UP Information |                    |               |          |          |      |
|             | Power Reduce (dB)   | Target Power (dBm) | Tolerance(dB) | Min(dBm) | Max(dBm) |      |
| GSM (CS)    | 3.0                 | 26.7               | -1.5          | 1        | 25.2     | 27.7 |
| GPRS (GMSK) | 1 Tx Slot           | 3.0                | 26.7          | -1.5     | 1        | 25.2 |
|             | 2 Tx Slots          | 3.0                | 24.3          | -1.5     | 1        | 22.8 |
|             | 3 Tx Slots          | 3.0                | 22.5          | -1.5     | 1        | 21.0 |
|             | 4 Tx Slots          | 3.0                | 21.2          | -1.5     | 1        | 19.7 |
| EDGE (GMSK) | 1 Tx Slot           | 3.0                | 26.7          | -1.5     | 1        | 25.2 |
|             | 2 Tx Slots          | 3.0                | 24.2          | -1.5     | 1        | 22.7 |
|             | 3 Tx Slots          | 3.0                | 22.5          | -1.5     | 1        | 21.0 |
|             | 4 Tx Slots          | 3.0                | 21.2          | -1.5     | 1        | 19.7 |
| EDGE (8PSK) | 1 Tx Slot           | 3.0                | 22.1          | -1.5     | 1        | 20.6 |
|             | 2 Tx Slots          | 3.0                | 19.3          | -1.5     | 1        | 17.8 |
|             | 3 Tx Slots          | 3.0                | 17.3          | -1.5     | 1        | 15.8 |
|             | 4 Tx Slots          | 3.0                | 15.9          | -1.5     | 1        | 14.4 |

| Antenna     | Second antenna      |                    |               |          |          |      |
|-------------|---------------------|--------------------|---------------|----------|----------|------|
| GSM Band    | GSM1900             |                    |               |          |          |      |
| EUT State   | hotspot             |                    |               |          |          |      |
| Test Mode   | TUNE-UP Information |                    |               |          |          |      |
|             | Power Reduce (dB)   | Target Power (dBm) | Tolerance(dB) | Min(dBm) | Max(dBm) |      |
| GSM (CS)    | 5.5                 | 24.2               | -1.5          | 1.0      | 22.7     | 25.2 |
| GPRS (GMSK) | 1 Tx Slot           | 5.5                | 24.2          | -1.5     | 1.0      | 22.7 |
|             | 2 Tx Slots          | 5.5                | 21.8          | -1.5     | 1.0      | 20.3 |
|             | 3 Tx Slots          | 5.5                | 20.0          | -1.5     | 1.0      | 18.5 |
|             | 4 Tx Slots          | 5.5                | 18.7          | -1.5     | 1.0      | 17.2 |
| EDGE (GMSK) | 1 Tx Slot           | 5.5                | 24.2          | -1.5     | 1.0      | 22.7 |
|             | 2 Tx Slots          | 5.5                | 21.7          | -1.5     | 1.0      | 20.2 |
|             | 3 Tx Slots          | 5.5                | 20.0          | -1.5     | 1.0      | 18.5 |
|             | 4 Tx Slots          | 5.5                | 18.7          | -1.5     | 1.0      | 17.2 |
| EDGE (8PSK) | 1 Tx Slot           | 5.5                | 19.6          | -1.5     | 1.0      | 18.1 |
|             | 2 Tx Slots          | 5.5                | 16.8          | -1.5     | 1.0      | 15.3 |
|             | 3 Tx Slots          | 5.5                | 14.8          | -1.5     | 1.0      | 13.3 |
|             | 4 Tx Slots          | 5.5                | 13.4          | -1.5     | 1.0      | 11.9 |

## 11.1.1 Main antenna

### GSM850(receiver on/off)

| GSM850       | Conducted Power (dBm) |                       |                       |                  |                   |       |       |
|--------------|-----------------------|-----------------------|-----------------------|------------------|-------------------|-------|-------|
|              | Channel 251(848.8MHz) | Channel 190(836.6MHz) | Channel 128(824.2MHz) |                  |                   |       |       |
|              | 32.61                 | 32.64                 | 32.70                 |                  |                   |       |       |
| GSM 850      | Burst Power (dBm)     |                       |                       | calculation (dB) | Frame Power (dBm) |       |       |
| GPRS (GMSK)  | 251                   | 190                   | 128                   |                  | 251               | 190   | 128   |
| 1 Txslot     | 32.63                 | 32.64                 | 32.68                 | -9.03            | 23.60             | 23.61 | 23.65 |
| 2 Txslots    | 30.00                 | 30.01                 | 30.05                 | -6.02            | 23.98             | 23.99 | 24.03 |
| 3Txslots     | 28.28                 | 28.29                 | 28.33                 | -4.26            | 24.02             | 24.03 | 24.07 |
| 4 Txslots    | 26.95                 | 26.96                 | 27.00                 | -3.01            | 23.94             | 23.95 | 23.99 |
| GSM 850      | Burst Power (dBm)     |                       |                       | calculation (dB) | Frame Power (dBm) |       |       |
| EGPRS (GMSK) | 251                   | 190                   | 128                   |                  | 251               | 190   | 128   |
| 1 Txslot     | 32.57                 | 32.60                 | 32.66                 | -9.03            | 23.54             | 23.57 | 23.63 |
| 2 Txslots    | 29.95                 | 29.97                 | 30.03                 | -6.02            | 23.93             | 23.95 | 24.01 |
| 3Txslots     | 28.23                 | 28.25                 | 28.31                 | -4.26            | 23.97             | 23.99 | 24.05 |
| 4 Txslots    | 26.90                 | 26.92                 | 26.96                 | -3.01            | 23.89             | 23.91 | 23.97 |
| GSM 850      | Burst Power (dBm)     |                       |                       | calculation (dB) | Frame Power (dBm) |       |       |
| EGPRS (8PSK) | 251                   | 190                   | 128                   |                  | 251               | 190   | 128   |
| 1 Txslot     | 28.15                 | 25.88                 | 25.98                 | -9.03            | 19.12             | 16.85 | 16.95 |
| 2 Txslots    | 22.78                 | 22.98                 | 23.08                 | -6.02            | 16.76             | 16.96 | 17.06 |
| 3Txslots     | 20.88                 | 21.07                 | 21.20                 | -4.26            | 16.62             | 16.81 | 16.94 |
| 4 Txslots    | 19.29                 | 19.47                 | 19.60                 | -3.01            | 16.28             | 16.46 | 16.59 |

### GSM850(Hostpot)

| GSM850       | Conducted Power (dBm) |                       |                       | calculation (dB) | Frame Power (dBm) |       |       |
|--------------|-----------------------|-----------------------|-----------------------|------------------|-------------------|-------|-------|
|              | Channel 251(848.8MHz) | Channel 190(836.6MHz) | Channel 128(824.2MHz) |                  | 251               | 190   | 128   |
|              | 31.81                 | 31.84                 | 31.89                 |                  |                   |       |       |
| GSM 850      | Burst Power (dBm)     |                       |                       |                  | Frame Power (dBm) |       |       |
| GPRS (GMSK)  | 251                   | 190                   | 128                   |                  | 251               | 190   | 128   |
| 1 Txslot     | 31.78                 | 31.81                 | 31.86                 | -9.03            | 22.75             | 22.78 | 22.83 |
| 2 Txslots    | 28.92                 | 28.94                 | 29.00                 | -6.02            | 22.90             | 22.92 | 22.98 |
| 3Txslots     | 27.23                 | 27.25                 | 27.31                 | -4.26            | 22.97             | 22.99 | 23.05 |
| 4 Txslots    | 25.99                 | 26.01                 | 26.07                 | -3.01            | 22.98             | 23.00 | 23.06 |
| GSM 850      | Burst Power (dBm)     |                       |                       |                  | Frame Power (dBm) |       |       |
| EGPRS (GMSK) | 251                   | 190                   | 128                   |                  | 251               | 190   | 128   |
| 1 Txslot     | 31.76                 | 31.80                 | 31.86                 | -9.03            | 22.73             | 22.77 | 22.83 |
| 2 Txslots    | 28.91                 | 28.94                 | 29.00                 | -6.02            | 22.89             | 22.92 | 22.98 |
| 3Txslots     | 27.22                 | 27.25                 | 27.31                 | -4.26            | 22.96             | 22.99 | 23.05 |
| 4 Txslots    | 25.98                 | 26.01                 | 26.06                 | -3.01            | 22.97             | 23.00 | 23.05 |
| GSM 850      | Burst Power (dBm)     |                       |                       |                  | Frame Power (dBm) |       |       |
| EGPRS (BPSK) | 251                   | 190                   | 128                   |                  | 251               | 190   | 128   |
| 1 Txslot     | 24.73                 | 24.92                 | 25.02                 | -9.03            | 15.70             | 15.89 | 15.99 |
| 2 Txslots    | 21.77                 | 21.91                 | 22.12                 | -6.02            | 15.75             | 15.89 | 16.10 |
| 3Txslots     | 19.76                 | 19.93                 | 20.05                 | -4.26            | 15.50             | 15.67 | 15.79 |
| 4 Txslots    | 18.10                 | 18.53                 | 18.62                 | -3.01            | 15.09             | 15.52 | 15.61 |

### GSM1900(receiver on/off)

| PCS1900      | Conducted Power (dBm)  |                      |                        | calculation (dB) | Frame Power (dBm) |       |       |
|--------------|------------------------|----------------------|------------------------|------------------|-------------------|-------|-------|
|              | Channel 810(1909.8MHz) | Channel 661(1880MHz) | Channel 512(1850.2MHz) |                  | 810               | 661   | 512   |
|              | 29.65                  | 29.77                | 29.92                  |                  |                   |       |       |
| PCS1900      | Burst Power (dBm)      |                      |                        |                  | Frame Power (dBm) |       |       |
| GPRS (GMSK)  | 810                    | 661                  | 512                    |                  | 810               | 661   | 512   |
| 1 Txslot     | 29.68                  | 29.76                | 29.91                  | -9.03            | 20.65             | 20.73 | 20.88 |
| 2 Txslots    | 27.28                  | 27.38                | 27.50                  | -6.02            | 21.26             | 21.36 | 21.48 |
| 3Txslots     | 25.54                  | 25.62                | 25.75                  | -4.26            | 21.28             | 21.36 | 21.49 |
| 4 Txslots    | 24.25                  | 24.31                | 24.45                  | -3.01            | 21.24             | 21.30 | 21.44 |
| PCS1900      | Burst Power (dBm)      |                      |                        |                  | Frame Power (dBm) |       |       |
| EGPRS (GMSK) | 810                    | 661                  | 512                    |                  | 810               | 661   | 512   |
| 1 Txslot     | 29.61                  | 29.73                | 29.88                  | -9.03            | 20.58             | 20.70 | 20.85 |
| 2 Txslots    | 27.24                  | 27.35                | 27.47                  | -6.02            | 21.22             | 21.33 | 21.45 |
| 3Txslots     | 25.51                  | 25.60                | 25.73                  | -4.26            | 21.25             | 21.34 | 21.47 |
| 4 Txslots    | 24.22                  | 24.29                | 24.42                  | -3.01            | 21.21             | 21.28 | 21.41 |
| PCS1900      | Burst Power (dBm)      |                      |                        |                  | Frame Power (dBm) |       |       |
| EGPRS (BPSK) | 810                    | 661                  | 512                    |                  | 810               | 661   | 512   |
| 1 Txslot     | 25.37                  | 25.38                | 25.15                  | -9.03            | 16.34             | 16.35 | 16.12 |
| 2 Txslots    | 23.97                  | 22.63                | 22.31                  | -6.02            | 17.95             | 16.61 | 16.29 |
| 3Txslots     | 20.73                  | 20.81                | 20.56                  | -4.26            | 16.47             | 16.55 | 16.30 |
| 4 Txslots    | 19.40                  | 19.48                | 19.22                  | -3.01            | 16.39             | 16.47 | 16.21 |

### GSM1900(Hostpot)

| PCS1900      | Conducted Power (dBm)  |                      |                        | calculation (dB) | Frame Power (dBm) |       |       |
|--------------|------------------------|----------------------|------------------------|------------------|-------------------|-------|-------|
|              | Channel 810(1909.8MHz) | Channel 661(1880MHz) | Channel 512(1850.2MHz) |                  | 810               | 661   | 512   |
|              | 27.27                  | 27.37                | 27.50                  |                  |                   |       |       |
| PCS1900      | Burst Power (dBm)      |                      |                        |                  | Frame Power (dBm) |       |       |
| GPRS (GMSK)  | 810                    | 661                  | 512                    |                  | 810               | 661   | 512   |
| 1 Txslot     | 27.24                  | 27.36                | 27.48                  | -9.03            | 18.21             | 18.33 | 18.45 |
| 2 Txslots    | 24.23                  | 24.31                | 24.45                  | -6.02            | 18.21             | 18.29 | 18.43 |
| 3Txslots     | 22.52                  | 22.61                | 22.75                  | -4.26            | 18.26             | 18.35 | 18.49 |
| 4 Txslots    | 21.30                  | 21.40                | 21.53                  | -3.01            | 18.29             | 18.39 | 18.52 |
| PCS1900      | Burst Power (dBm)      |                      |                        |                  | Frame Power (dBm) |       |       |
| EGPRS (GMSK) | 810                    | 661                  | 512                    |                  | 810               | 661   | 512   |
| 1 Txslot     | 27.24                  | 27.36                | 27.49                  | -9.03            | 18.21             | 18.33 | 18.46 |
| 2 Txslots    | 24.22                  | 24.30                | 24.45                  | -6.02            | 18.20             | 18.28 | 18.43 |
| 3Txslots     | 22.52                  | 22.61                | 22.76                  | -4.26            | 18.26             | 18.35 | 18.50 |
| 4 Txslots    | 21.30                  | 21.39                | 21.54                  | -3.01            | 18.29             | 18.38 | 18.53 |
| PCS1900      | Burst Power (dBm)      |                      |                        |                  | Frame Power (dBm) |       |       |
| EGPRS (BPSK) | 810                    | 661                  | 512                    |                  | 810               | 661   | 512   |
| 1 Txslot     | 22.61                  | 22.63                | 22.28                  | -9.03            | 13.58             | 13.60 | 13.25 |
| 2 Txslots    | 19.64                  | 19.69                | 19.45                  | -6.02            | 13.62             | 13.67 | 13.43 |
| 3Txslots     | 17.83                  | 17.89                | 17.64                  | -4.26            | 13.57             | 13.63 | 13.38 |
| 4 Txslots    | 16.49                  | 16.54                | 16.29                  | -3.01            | 13.48             | 13.53 | 13.28 |

## 11.1.2 Second antenna

### GSM850(receiver on/off)

| GSM850       | Conducted Power (dBm) |                       |                       | calculation (dB) | Frame Power (dBm) |       |       |
|--------------|-----------------------|-----------------------|-----------------------|------------------|-------------------|-------|-------|
|              | Channel 251(848.8MHz) | Channel 190(836.6MHz) | Channel 128(824.2MHz) |                  | 251               | 190   | 128   |
|              | 32.71                 | 32.72                 | 32.70                 |                  |                   |       |       |
| GSM 850      | Burst Power (dBm)     |                       |                       |                  | Frame Power (dBm) |       |       |
| GPRS (GMSK)  | 251                   | 190                   | 128                   |                  | 251               | 190   | 128   |
| 1 Txslot     | 32.77                 | 32.74                 | 32.70                 | -9.03            | 23.74             | 23.71 | 23.67 |
| 2 Txslots    | 30.13                 | 30.10                 | 30.05                 | -6.02            | 24.11             | 24.08 | 24.03 |
| 3Txslots     | 28.40                 | 28.36                 | 28.30                 | -4.26            | 24.14             | 24.10 | 24.04 |
| 4 Txslots    | 27.05                 | 27.00                 | 26.93                 | -3.01            | 24.04             | 23.99 | 23.92 |
| GSM 850      | Burst Power (dBm)     |                       |                       |                  | Frame Power (dBm) |       |       |
| EGPRS (GMSK) | 251                   | 190                   | 128                   |                  | 251               | 190   | 128   |
| 1 Txslot     | 32.68                 | 32.69                 | 32.67                 | -9.03            | 23.65             | 23.66 | 23.64 |
| 2 Txslots    | 30.07                 | 30.05                 | 30.01                 | -6.02            | 24.05             | 24.03 | 23.99 |
| 3Txslots     | 28.34                 | 28.31                 | 28.27                 | -4.26            | 24.08             | 24.05 | 24.01 |
| 4 Txslots    | 27.01                 | 26.96                 | 26.90                 | -3.01            | 24.00             | 23.95 | 23.89 |
| GSM 850      | Burst Power (dBm)     |                       |                       |                  | Frame Power (dBm) |       |       |
| EGPRS (BPSK) | 251                   | 190                   | 128                   |                  | 251               | 190   | 128   |
| 1 Txslot     | 25.80                 | 25.74                 | 26.43                 | -9.03            | 16.77             | 16.71 | 17.40 |
| 2 Txslots    | 22.91                 | 23.31                 | 23.35                 | -6.02            | 16.89             | 17.29 | 17.33 |
| 3Txslots     | 20.98                 | 20.97                 | 20.78                 | -4.26            | 16.72             | 16.71 | 16.52 |
| 4 Txslots    | 19.39                 | 19.32                 | 19.18                 | -3.01            | 16.38             | 16.31 | 16.17 |

### GSM850(Hostpot)

| GSM850       | Conducted Power (dBm) |                       |                       | calculation (dB) | Frame Power (dBm) |       |       |
|--------------|-----------------------|-----------------------|-----------------------|------------------|-------------------|-------|-------|
|              | Channel 251(848.8MHz) | Channel 190(836.6MHz) | Channel 128(824.2MHz) |                  | 251               | 190   | 128   |
|              | 30.09                 | 30.09                 | 30.07                 |                  |                   |       |       |
| GSM 850      |                       | Burst Power (dBm)     |                       |                  |                   |       |       |
| GPRS (GMSK)  | 251                   | 190                   | 128                   |                  |                   |       |       |
| 1 Txslot     | 30.07                 | 30.06                 | 30.03                 | -9.03            | 21.04             | 21.03 | 21.00 |
| 2 Txslots    | 27.06                 | 27.02                 | 26.98                 | -6.02            | 21.04             | 21.00 | 20.96 |
| 3Txslots     | 25.44                 | 25.38                 | 25.39                 | -4.26            | 21.18             | 21.12 | 21.13 |
| 4 Txslots    | 24.07                 | 24.00                 | 23.89                 | -3.01            | 21.06             | 20.99 | 20.88 |
| GSM 850      |                       | Burst Power (dBm)     |                       |                  |                   |       |       |
| EGPRS (GMSK) | 251                   | 190                   | 128                   |                  |                   |       |       |
| 1 Txslot     | 30.00                 | 30.02                 | 30.03                 | -9.03            | 20.97             | 20.99 | 21.00 |
| 2 Txslots    | 27.00                 | 26.99                 | 26.98                 | -6.02            | 20.98             | 20.97 | 20.96 |
| 3Txslots     | 25.29                 | 25.26                 | 25.37                 | -4.26            | 21.03             | 21.00 | 21.11 |
| 4 Txslots    | 24.03                 | 23.97                 | 23.88                 | -3.01            | 21.02             | 20.96 | 20.87 |
| GSM 850      |                       | Burst Power (dBm)     |                       |                  |                   |       |       |
| EGPRS (BPSK) | 251                   | 190                   | 128                   |                  |                   |       |       |
| 1 Txslot     | 23.04                 | 22.87                 | 22.68                 | -9.03            | 14.01             | 13.84 | 13.65 |
| 2 Txslots    | 19.82                 | 19.73                 | 19.60                 | -6.02            | 13.80             | 13.71 | 13.58 |
| 3Txslots     | 17.94                 | 17.69                 | 17.55                 | -4.26            | 13.68             | 13.43 | 13.29 |
| 4 Txslots    | 16.26                 | 16.26                 | 16.10                 | -3.01            | 13.25             | 13.25 | 13.09 |

### GSM1900(receiver on)

| PCS1900      | Conducted Power (dBm)  |                      |                        | calculation (dB) | Frame Power (dBm) |       |       |
|--------------|------------------------|----------------------|------------------------|------------------|-------------------|-------|-------|
|              | Channel 810(1909.8MHz) | Channel 661(1880MHz) | Channel 512(1850.2MHz) |                  | 810               | 661   | 512   |
|              | 25.20                  | 25.31                | 25.45                  |                  |                   |       |       |
| PCS1900      |                        | Burst Power (dBm)    |                        |                  |                   |       |       |
| GPRS (GMSK)  | 810                    | 661                  | 512                    |                  |                   |       |       |
| 1 Txslot     | 25.24                  | 25.33                | 25.48                  | -9.03            | 16.21             | 16.30 | 16.45 |
| 2 Txslots    | 22.22                  | 22.30                | 22.45                  | -6.02            | 16.20             | 16.28 | 16.43 |
| 3Txslots     | 20.52                  | 20.57                | 20.73                  | -4.26            | 16.26             | 16.31 | 16.47 |
| 4 Txslots    | 19.28                  | 19.38                | 19.51                  | -3.01            | 16.27             | 16.37 | 16.50 |
| PCS1900      |                        | Burst Power (dBm)    |                        |                  |                   |       |       |
| EGPRS (GMSK) | 810                    | 661                  | 512                    |                  |                   |       |       |
| 1 Txslot     | 25.21                  | 25.32                | 25.46                  | -9.03            | 16.18             | 16.29 | 16.43 |
| 2 Txslots    | 22.20                  | 22.29                | 22.44                  | -6.02            | 16.18             | 16.27 | 16.42 |
| 3Txslots     | 20.51                  | 20.57                | 20.72                  | -4.26            | 16.25             | 16.31 | 16.46 |
| 4 Txslots    | 19.27                  | 19.38                | 19.50                  | -3.01            | 16.26             | 16.37 | 16.49 |
| PCS1900      |                        | Burst Power (dBm)    |                        |                  |                   |       |       |
| EGPRS (BPSK) | 810                    | 661                  | 512                    |                  |                   |       |       |
| 1 Txslot     | 20.50                  | 20.55                | 20.66                  | -9.03            | 11.47             | 11.52 | 11.63 |
| 2 Txslots    | 17.57                  | 18.04                | 17.39                  | -6.02            | 11.55             | 12.02 | 11.37 |
| 3Txslots     | 15.75                  | 15.78                | 15.57                  | -4.26            | 11.49             | 11.52 | 11.31 |
| 4 Txslots    | 14.79                  | 14.44                | 14.23                  | -3.01            | 11.78             | 11.43 | 11.22 |

### GSM1900(receiver off)

| PCS1900      | Conducted Power (dBm)  |                      |                        | calculation (dB) | Frame Power (dBm) |       |       |
|--------------|------------------------|----------------------|------------------------|------------------|-------------------|-------|-------|
|              | Channel 810(1909.8MHz) | Channel 661(1880MHz) | Channel 512(1850.2MHz) |                  | 810               | 661   | 512   |
|              | 28.31                  | 28.23                | 28.21                  |                  |                   |       |       |
| PCS1900      |                        | Burst Power (dBm)    |                        |                  |                   |       |       |
| GPRS (GMSK)  | 810                    | 661                  | 512                    |                  |                   |       |       |
| 1 Txslot     | 28.13                  | 28.23                | 28.39                  | -9.03            | 19.10             | 19.20 | 19.36 |
| 2 Txslots    | 25.24                  | 25.33                | 25.47                  | -6.02            | 19.22             | 19.31 | 19.45 |
| 3Txslots     | 23.51                  | 23.58                | 23.75                  | -4.26            | 19.25             | 19.32 | 19.49 |
| 4 Txslots    | 22.21                  | 22.29                | 22.44                  | -3.01            | 19.20             | 19.28 | 19.43 |
| PCS1900      |                        | Burst Power (dBm)    |                        |                  |                   |       |       |
| EGPRS (GMSK) | 810                    | 661                  | 512                    |                  |                   |       |       |
| 1 Txslot     | 28.10                  | 28.22                | 28.38                  | -9.03            | 19.07             | 19.19 | 19.35 |
| 2 Txslots    | 25.21                  | 25.31                | 25.46                  | -6.02            | 19.19             | 19.29 | 19.44 |
| 3Txslots     | 23.49                  | 23.56                | 23.75                  | -4.26            | 19.23             | 19.30 | 19.49 |
| 4 Txslots    | 22.19                  | 22.27                | 22.43                  | -3.01            | 19.18             | 19.26 | 19.42 |
| PCS1900      |                        | Burst Power (dBm)    |                        |                  |                   |       |       |
| EGPRS (BPSK) | 810                    | 661                  | 512                    |                  |                   |       |       |
| 1 Txslot     | 23.44                  | 23.46                | 23.25                  | -9.03            | 14.41             | 14.43 | 14.22 |
| 2 Txslots    | 20.48                  | 20.53                | 20.83                  | -6.02            | 14.46             | 14.51 | 14.81 |
| 3Txslots     | 18.68                  | 18.74                | 19.05                  | -4.26            | 14.42             | 14.48 | 14.79 |
| 4 Txslots    | 17.29                  | 17.31                | 17.26                  | -3.01            | 14.28             | 14.30 | 14.25 |

### GSM1900(Hostpot)

| PCS1900      | Conducted Power (dBm)  |                      |                        | calculation (dB) | Frame Power (dBm) |       |       |
|--------------|------------------------|----------------------|------------------------|------------------|-------------------|-------|-------|
|              | Channel 810(1909.8MHz) | Channel 661(1880MHz) | Channel 512(1850.2MHz) |                  | 810               | 661   | 512   |
|              | 24.74                  | 24.83                | 24.99                  |                  |                   |       |       |
| PCS1900      |                        | Burst Power (dBm)    |                        |                  |                   |       |       |
| GPRS (GMSK)  | 810                    | 661                  | 512                    |                  |                   |       |       |
| 1 Txslot     | 24.70                  | 24.81                | 24.97                  | -9.03            | 15.67             | 15.78 | 15.94 |
| 2 Txslots    | 21.73                  | 21.82                | 21.99                  | -6.02            | 15.71             | 15.80 | 15.97 |
| 3Txslots     | 20.05                  | 20.25                | 20.41                  | -4.26            | 15.79             | 15.99 | 16.15 |
| 4 Txslots    | 18.77                  | 18.88                | 19.06                  | -3.01            | 15.76             | 15.87 | 16.05 |
| PCS1900      |                        | Burst Power (dBm)    |                        |                  |                   |       |       |
| EGPRS (GMSK) | 810                    | 661                  | 512                    |                  |                   |       |       |
| 1 Txslot     | 24.69                  | 24.79                | 24.95                  | -9.03            | 15.66             | 15.76 | 15.92 |
| 2 Txslots    | 21.73                  | 21.80                | 21.97                  | -6.02            | 15.71             | 15.78 | 15.95 |
| 3Txslots     | 20.24                  | 20.23                | 20.39                  | -4.26            | 15.98             | 15.97 | 16.13 |
| 4 Txslots    | 18.76                  | 18.85                | 19.04                  | -3.01            | 15.75             | 15.84 | 16.03 |
| PCS1900      |                        | Burst Power (dBm)    |                        |                  |                   |       |       |
| EGPRS (BPSK) | 810                    | 661                  | 512                    |                  |                   |       |       |
| 1 Txslot     | 20.08                  | 20.06                | 19.82                  | -9.03            | 11.05             | 11.03 | 10.79 |
| 2 Txslots    | 17.07                  | 17.09                | 16.87                  | -6.02            | 11.05             | 11.07 | 10.85 |
| 3Txslots     | 15.24                  | 15.30                | 15.08                  | -4.26            | 10.98             | 11.04 | 10.82 |
| 4 Txslots    | 13.86                  | 13.92                | 14.24                  | -3.01            | 10.85             | 10.91 | 11.23 |

# 11.2 WCDMA Measurement result

## Maximum Target Power for Production Unit

| Antenna   |              | Main antenna        |                    |               |          |          |
|-----------|--------------|---------------------|--------------------|---------------|----------|----------|
| UMTS Band | UMTS Band II | rev on              |                    |               |          |          |
| EUT State |              | TUNE-UP Information |                    |               |          |          |
| Test Mode |              | Power Reduce (dB)   | Target Power (dBm) | Tolerance(dB) | Min(dBm) | Max(dBm) |
| WCDMA     | 12.2kbps RMC | 0.0                 | 24.0               | -1.5          | 1.0      | 22.5     |
|           | 12.2kbps AMR | 0.0                 | 24.0               | -1.5          | 1.0      | 22.5     |
|           | Subtest 1    | 0.0                 | 22.3               | -1.5          | 1.0      | 20.8     |
| HSDPA     | Subtest 2    | 0.0                 | 22.3               | -1.5          | 1.0      | 20.8     |
|           | Subtest 3    | 0.0                 | 21.8               | -1.5          | 1.0      | 20.3     |
|           | Subtest 4    | 0.0                 | 21.8               | -1.5          | 1.0      | 20.3     |
| HSUPA     | Subtest 1    | 0.0                 | 22.3               | -1.5          | 1.0      | 20.8     |
|           | Subtest 2    | 0.0                 | 20.3               | -1.5          | 1.0      | 18.8     |
|           | Subtest 3    | 0.0                 | 21.3               | -1.5          | 1.0      | 19.8     |
| DC-HSDPA  | Subtest 4    | 0.0                 | 20.3               | -1.5          | 1.0      | 18.8     |
|           | Subtest 5    | 0.0                 | 22.3               | -1.5          | 1.0      | 20.8     |
|           | Subtest 1    | 0.0                 | 22.3               | -1.5          | 1.0      | 20.8     |
| HSPA+     | Subtest 2    | 0.0                 | 22.3               | -1.5          | 1.0      | 20.8     |
|           | Subtest 3    | 0.0                 | 21.8               | -1.5          | 1.0      | 20.3     |
|           | Subtest 4    | 0.0                 | 21.8               | -1.5          | 1.0      | 20.3     |

| Antenna   |              | Main antenna        |                    |               |          |          |
|-----------|--------------|---------------------|--------------------|---------------|----------|----------|
| UMTS Band | UMTS Band II | rev off             |                    |               |          |          |
| EUT State |              | TUNE-UP Information |                    |               |          |          |
| Test Mode |              | Power Reduce (dB)   | Target Power (dBm) | Tolerance(dB) | Min(dBm) | Max(dBm) |
| WCDMA     | 12.2kbps RMC | 1.5                 | 22.5               | -1.5          | 1.0      | 21.0     |
|           | 12.2kbps AMR | 1.5                 | 22.5               | -1.5          | 1.0      | 21.0     |
|           | Subtest 1    | 1.5                 | 20.8               | -1.5          | 1.0      | 19.3     |
| HSDPA     | Subtest 2    | 1.5                 | 20.8               | -1.5          | 1.0      | 19.3     |
|           | Subtest 3    | 1.5                 | 20.3               | -1.5          | 1.0      | 18.8     |
|           | Subtest 4    | 1.5                 | 20.3               | -1.5          | 1.0      | 18.8     |
| HSUPA     | Subtest 1    | 1.5                 | 20.8               | -1.5          | 1.0      | 19.3     |
|           | Subtest 2    | 1.5                 | 19.8               | -1.5          | 1.0      | 17.8     |
|           | Subtest 3    | 1.5                 | 19.8               | -1.5          | 1.0      | 17.8     |
| DC-HSDPA  | Subtest 4    | 1.5                 | 20.8               | -1.5          | 1.0      | 19.3     |
|           | Subtest 5    | 1.5                 | 20.8               | -1.5          | 1.0      | 19.3     |
|           | Subtest 1    | 1.5                 | 20.8               | -1.5          | 1.0      | 19.3     |
| HSPA+     | Subtest 2    | 1.5                 | 20.8               | -1.5          | 1.0      | 19.3     |
|           | Subtest 3    | 1.5                 | 20.3               | -1.5          | 1.0      | 18.8     |
|           | Subtest 4    | 1.5                 | 20.3               | -1.5          | 1.0      | 18.8     |

| Antenna   |              | Main antenna        |                    |               |          |          |
|-----------|--------------|---------------------|--------------------|---------------|----------|----------|
| UMTS Band | UMTS Band II | hotspot             |                    |               |          |          |
| EUT State |              | TUNE-UP Information |                    |               |          |          |
| Test Mode |              | Power Reduce (dB)   | Target Power (dBm) | Tolerance(dB) | Min(dBm) | Max(dBm) |
| WCDMA     | 12.2kbps RMC | 5.0                 | 19.0               | -1.5          | 1.0      | 17.5     |
|           | 12.2kbps AMR | 5.0                 | 19.0               | -1.5          | 1.0      | 17.5     |
|           | Subtest 1    | 5.0                 | 17.3               | -1.5          | 1.0      | 15.8     |
| HSDPA     | Subtest 2    | 5.0                 | 17.3               | -1.5          | 1.0      | 15.8     |
|           | Subtest 3    | 5.0                 | 16.8               | -1.5          | 1.0      | 15.3     |
|           | Subtest 4    | 5.0                 | 16.8               | -1.5          | 1.0      | 15.3     |
| HSUPA     | Subtest 1    | 5.0                 | 17.3               | -1.5          | 1.0      | 15.8     |
|           | Subtest 2    | 5.0                 | 15.3               | -1.5          | 1.0      | 13.8     |
|           | Subtest 3    | 5.0                 | 16.3               | -1.5          | 1.0      | 14.8     |
| DC-HSDPA  | Subtest 4    | 5.0                 | 15.3               | -1.5          | 1.0      | 13.8     |
|           | Subtest 5    | 5.0                 | 17.3               | -1.5          | 1.0      | 15.8     |
|           | Subtest 1    | 5.0                 | 17.3               | -1.5          | 1.0      | 15.8     |
| HSPA+     | Subtest 2    | 5.0                 | 17.3               | -1.5          | 1.0      | 15.8     |
|           | Subtest 3    | 5.0                 | 16.8               | -1.5          | 1.0      | 15.3     |
|           | Subtest 4    | 5.0                 | 16.8               | -1.5          | 1.0      | 15.3     |

| Antenna   |              | Main antenna        |                    |               |          |          |
|-----------|--------------|---------------------|--------------------|---------------|----------|----------|
| UMTS Band | UMTS Band IV | rev on              |                    |               |          |          |
| EUT State |              | TUNE-UP Information |                    |               |          |          |
| Test Mode |              | Power Reduce (dB)   | Target Power (dBm) | Tolerance(dB) | Min(dBm) | Max(dBm) |
| WCDMA     | 12.2kbps RMC | 0.0                 | 23.9               | -1.5          | 1.0      | 22.4     |
|           | 12.2kbps AMR | 0.0                 | 23.9               | -1.5          | 1.0      | 22.4     |
|           | Subtest 1    | 0.0                 | 22.8               | -1.5          | 1.0      | 21.3     |
| HSDPA     | Subtest 2    | 0.0                 | 22.8               | -1.5          | 1.0      | 21.3     |
|           | Subtest 3    | 0.0                 | 22.3               | -1.5          | 1.0      | 20.8     |
|           | Subtest 4    | 0.0                 | 22.3               | -1.5          | 1.0      | 20.8     |
| HSUPA     | Subtest 1    | 0.0                 | 21.8               | -1.5          | 1.0      | 20.3     |
|           | Subtest 2    | 0.0                 | 21.0               | -1.5          | 1.0      | 19.5     |
|           | Subtest 3    | 0.0                 | 21.0               | -1.5          | 1.0      | 19.5     |
| DC-HSDPA  | Subtest 4    | 0.0                 | 21.2               | -1.5          | 1.0      | 19.7     |
|           | Subtest 5    | 0.0                 | 22.8               | -1.5          | 1.0      | 21.3     |
|           | Subtest 1    | 0.0                 | 22.8               | -1.5          | 1.0      | 21.3     |
| HSPA+     | Subtest 2    | 0.0                 | 22.8               | -1.5          | 1.0      | 21.3     |
|           | Subtest 3    | 0.0                 | 22.3               | -1.5          | 1.0      | 20.8     |
|           | Subtest 4    | 0.0                 | 22.3               | -1.5          | 1.0      | 20.8     |

| Antenna   |              | Main antenna        |                    |               |          |          |
|-----------|--------------|---------------------|--------------------|---------------|----------|----------|
| UMTS Band | UMTS Band IV | rev off             |                    |               |          |          |
| EUT State |              | TUNE-UP Information |                    |               |          |          |
| Test Mode |              | Power Reduce (dB)   | Target Power (dBm) | Tolerance(dB) | Min(dBm) | Max(dBm) |
| WCDMA     | 12.2kbps RMC | 1.5                 | 22.4               | -1.5          | 1.0      | 20.9     |
|           | 12.2kbps AMR | 1.5                 | 22.4               | -1.5          | 1.0      | 20.9     |
|           | Subtest 1    | 1.5                 | 21.3               | -1.5          | 1.0      | 19.8     |
| HSDPA     | Subtest 2    | 1.5                 | 21.3               | -1.5          | 1.0      | 19.8     |
|           | Subtest 3    | 1.5                 | 20.8               | -1.5          | 1.0      | 19.3     |
|           | Subtest 4    | 1.5                 | 20.8               | -1.5          | 1.0      | 19.3     |
| HSUPA     | Subtest 1    | 1.5                 | 20.3               | -1.5          | 1.0      | 18.8     |
|           | Subtest 2    | 1.5                 | 19.5               | -1.5          | 1.0      | 18.0     |
|           | Subtest 3    | 1.5                 | 19.7               | -1.5          | 1.0      | 18.2     |
| DC-HSDPA  | Subtest 4    | 1.5                 | 21.3               | -1.5          | 1.0      | 19.8     |
|           | Subtest 5    | 1.5                 | 21.3               | -1.5          | 1.0      | 19.8     |
|           | Subtest 1    | 1.5                 | 21.3               | -1.5          | 1.0      | 19.8     |
| HSPA+     | Subtest 2    | 1.5                 | 20.8               | -1.5          | 1.0      | 19.3     |
|           | Subtest 3    | 1.5                 | 20.8               | -1.5          | 1.0      | 19.3     |
|           | Subtest 4    | 1.5                 | 20.8               | -1.5          | 1.0      | 19.3     |

| Antenna   |              | Main antenna        |                    |               |          |          |
|-----------|--------------|---------------------|--------------------|---------------|----------|----------|
| UMTS Band | UMTS Band IV | hotspot             |                    |               |          |          |
| EUT State |              | TUNE-UP Information |                    |               |          |          |
| Test Mode |              | Power Reduce (dB)   | Target Power (dBm) | Tolerance(dB) | Min(dBm) | Max(dBm) |
| WCDMA     | 12.2kbps RMC | 4.0                 | 19.9               | -1.5          | 1.0      | 18.4     |
|           | 12.2kbps AMR | 4.0                 | 19.9               | -1.5          | 1.0      | 18.4     |
|           | Subtest 1    | 4.0                 | 18.8               | -1.5          | 1.0      | 17.3     |
| HSDPA     | Subtest 2    | 4.0                 | 18.8               | -1.5          | 1.0      | 17.3     |
|           | Subtest 3    | 4.0                 | 18.3               | -1.5          | 1.0      | 16.8     |
|           | Subtest 4    | 4.0                 | 18.3               | -1.5          | 1.0      | 16.8     |
| HSUPA     | Subtest 1    | 4.0                 | 17.6               | -1.5          | 1.0      | 16.3     |
|           | Subtest 2    | 4.0                 | 17.0               | -1.5          | 1.0      | 15.5     |
|           | Subtest 3    | 4.0                 | 17.0               | -1.5          | 1.0      | 15.5     |
| DC-HSDPA  | Subtest 4    | 4.0                 | 17.2               | -1.5          | 1.0      | 15.7     |
|           | Subtest 5    | 4.0                 | 18.8               | -1.5          | 1.0      | 17.3     |
|           | Subtest 1    | 4.0                 | 18.8               | -1.5          | 1.0      | 17.3     |
| HSPA+     | Subtest 2    | 4.0                 | 18.8               | -1.5          | 1.0      | 17.3     |
|           | Subtest 3    | 4.0                 | 18.3               | -1.5          | 1.0      | 16.8     |
|           | Subtest 4    | 4.0                 | 18.3               | -1.5          | 1.0      | 16.8     |

| Antenna   |              | Second antenna      |                    |               |          |          |
|-----------|--------------|---------------------|--------------------|---------------|----------|----------|
| UMTS Band | UMTS Band II | rev on              |                    |               |          |          |
| EUT State |              | TUNE-UP Information |                    |               |          |          |
| Test Mode |              | Power Reduce (dB)   | Target Power (dBm) | Tolerance(dB) | Min(dBm) | Max(dBm) |
| WCDMA     | 12.2kbps RMC | 8.0                 | 16.0               | -1.5          | 1.0      | 14.5     |
|           | 12.2kbps AMR | 8.0                 | 16.0               | -1.5          | 1.0      | 14.5     |
|           | Subtest 1    | 8.0                 | 14.3               | -1.5          | 1.0      | 12.8     |
| HSDPA     | Subtest 2    | 8.0                 | 14.3               | -1.5          | 1.0      | 12.8     |
|           | Subtest 3    | 8.0                 | 13.8               | -1.5          | 1.0      | 12.3     |
|           | Subtest 4    | 8.0                 | 13.8               | -1.5          | 1.0      | 12.3     |
| HSUPA     | Subtest 1    | 8.0                 | 14.3               | -1.5          | 1.0      | 12.8     |
|           | Subtest 2    | 8.0                 | 12.3               | -1.5          | 1.0      | 10.8     |
|           | Subtest 3    | 8.0                 | 13.3               | -1.5          | 1.0      | 11.8     |
| DC-HSDPA  | Subtest 4    | 8.0                 | 12.3               | -1.5          | 1.0      | 10.8     |
|           | Subtest 5    | 8.0                 | 14.3               | -1.5          | 1.0      | 12.8     |
|           | Subtest 1    | 8.0                 | 14.3               | -1.5          | 1.0      | 12.8     |
| HSPA+     | Subtest 2    | 8.0                 | 14.3               | -1.5          | 1.0      | 12.8     |
|           | Subtest 3    | 8.0                 | 13.8               | -1.5          | 1.0      | 12.3     |
|           | Subtest 4    | 8.0                 | 13.8               | -1.5          | 1.0      | 12.3     |

| Antenna   |              | Second antenna      |                    |               |          |          |
|-----------|--------------|---------------------|--------------------|---------------|----------|----------|
| UMTS Band | UMTS Band II | rev off             |                    |               |          |          |
| EUT State |              | TUNE-UP Information |                    |               |          |          |
| Test Mode |              | Power Reduce (dB)   | Target Power (dBm) | Tolerance(dB) | Min(dBm) | Max(dBm) |
| WCDMA     | 12.2kbps RMC | 5.0                 | 19.0               | -1.5          | 1.0      | 17.5     |
|           | 12.2kbps AMR | 5.0                 | 19.0               | -1.5          | 1.0      | 17.5     |
|           | Subtest 1    | 5.0                 | 17.3               | -1.5          | 1.0      | 15.8     |
| HSDPA     | Subtest 2    | 5.0                 | 17.3               | -1.5          | 1.0      | 15.8     |
|           | Subtest 3    | 5.0                 | 16.8               | -1.5          | 1.0      | 15.3     |
|           | Subtest 4    | 5.0                 | 16.8               | -1.5          | 1.0      | 15.3     |
| HSUPA     | Subtest 1    | 5.0                 | 17.3               | -1.5          | 1.0      | 15.8     |
|           | Subtest 2    | 5.0                 | 15.3               | -1.5          | 1.0      | 13.8     |
|           | Subtest 3    | 5.0                 | 16.3               | -1.5          | 1.0      | 14.8     |
| DC-HSDPA  | Subtest 4    | 5.0                 | 15.3               | -1.5          | 1.0      | 13.8     |
|           | Subtest 5    | 5.0                 | 17.3               | -1.5          | 1.0      | 15.8     |
|           | Subtest 1    | 5.0                 | 17.3               | -1.5          | 1.0      | 15.8     |
| HSPA+     | Subtest 2    | 5.0                 | 17.3               | -1.5          | 1.0      | 15.8     |
|           | Subtest 3    | 5.0                 | 16.8               | -1.5          | 1.0      | 15.3     |
|           | Subtest 4    | 5.0                 | 16.8               | -1.5          | 1.0      | 15.3     |

| Antenna   |                 | Second antenna      |                    |               |          |          |
|-----------|-----------------|---------------------|--------------------|---------------|----------|----------|
| UMTS Band |                 | UMTS Band II        |                    |               |          |          |
| EUT State |                 | hotspot             |                    |               |          |          |
| Test Mode |                 | TUNE-UP Information |                    |               |          |          |
|           |                 | Power Reduce (dB)   | Target Power (dBm) | Tolerance(dB) | Min(dBm) | Max(dBm) |
| WCDMA     | 12.2kbps RMC    | 8.5                 | 15.5               | -1.5          | 1.0      | 14.0     |
|           | 12.2kbps AMR    | 8.5                 | 15.5               | -1.5          | 1.0      | 14.0     |
|           | Subtest 1       | 8.5                 | 13.8               | -1.5          | 1.0      | 12.3     |
| HSDPA     | Subtest 2       | 8.5                 | 13.8               | -1.5          | 1.0      | 12.3     |
|           | Subtest 3       | 8.5                 | 13.3               | -1.5          | 1.0      | 11.8     |
|           | Subtest 4       | 8.5                 | 13.3               | -1.5          | 1.0      | 11.8     |
| HSUPA     | Subtest 1       | 8.5                 | 13.8               | -1.5          | 1.0      | 12.3     |
|           | Subtest 2       | 8.5                 | 11.8               | -1.5          | 1.0      | 10.3     |
|           | Subtest 3       | 8.5                 | 12.8               | -1.5          | 1.0      | 11.3     |
|           | Subtest 4       | 8.5                 | 11.8               | -1.5          | 1.0      | 10.3     |
|           | Subtest 5       | 8.5                 | 13.8               | -1.5          | 1.0      | 12.3     |
|           | Subtest 1       | 8.5                 | 13.8               | -1.5          | 1.0      | 12.3     |
| DC-HSDPA  | Subtest 2       | 8.5                 | 13.8               | -1.5          | 1.0      | 12.3     |
|           | Subtest 3       | 8.5                 | 13.3               | -1.5          | 1.0      | 11.8     |
|           | Subtest 4       | 8.5                 | 13.3               | -1.5          | 1.0      | 11.8     |
| HSPA+     | Subtest 1 (UL 1 | 8.5                 | 12.3               | -1.5          | 1.0      | 10.8     |

| Antenna   |                  | Main antenna        |                    |               |          |          |      |
|-----------|------------------|---------------------|--------------------|---------------|----------|----------|------|
| UMTS Band |                  | UMTS Band V         |                    |               |          |          |      |
| EUT State |                  | rev on              |                    |               |          |          |      |
| Test Mode |                  | TUNE-UP information |                    |               |          |          |      |
|           |                  | Power Reduce (dB)   | Target Power (dBm) | Tolerance(dB) | Min(dBm) | Max(dBm) |      |
| WCDMA     | 12.2kbps RMC     | 0.0                 | 24.0               | -1.5          | 1.0      | 22.5     | 25.0 |
|           | 12.2kbps AMR     | 0.0                 | 24.0               | -1.5          | 1.0      | 22.5     | 25.0 |
| HSDPA     | Subtest 1        | 0.0                 | 23.5               | -1.5          | 1.0      | 22.0     | 24.5 |
|           | Subtest 2        | 0.0                 | 23.5               | -1.5          | 1.0      | 22.0     | 24.5 |
|           | Subtest 3        | 0.0                 | 23.0               | -1.5          | 1.0      | 21.5     | 24.0 |
|           | Subtest 4        | 0.0                 | 23.0               | -1.5          | 1.0      | 21.5     | 24.0 |
| HSUPA     | Subtest 1        | 0.0                 | 23.0               | -1.5          | 1.0      | 21.5     | 24.0 |
|           | Subtest 2        | 0.0                 | 21.5               | -1.5          | 1.0      | 20.0     | 22.5 |
|           | Subtest 3        | 0.0                 | 22.3               | -1.5          | 1.0      | 20.8     | 23.3 |
|           | Subtest 4        | 0.0                 | 21.8               | -1.5          | 1.0      | 20.3     | 22.8 |
|           | Subtest 5        | 0.0                 | 23.6               | -1.5          | 1.0      | 22.1     | 24.6 |
| DC-HSDPA  | Subtest 1        | 0.0                 | 23.5               | -1.5          | 1.0      | 22.0     | 24.5 |
|           | Subtest 2        | 0.0                 | 23.5               | -1.5          | 1.0      | 22.0     | 24.5 |
|           | Subtest 3        | 0.0                 | 23.0               | -1.5          | 1.0      | 21.5     | 24.0 |
|           | Subtest 4        | 0.0                 | 23.0               | -1.5          | 1.0      | 21.5     | 24.0 |
| HSPA+     | Subtest 1(U/L 1) | 0.0                 | 20.8               | -1.5          | 1.0      | 19.3     | 21.8 |

| Antenna   |                  | Main antenna        |                    |               |          |          |      |
|-----------|------------------|---------------------|--------------------|---------------|----------|----------|------|
| UMTS Band |                  | UMTS Band V         |                    |               |          |          |      |
| EUT State |                  | rev off             |                    |               |          |          |      |
| Test Mode |                  | TUNE-UP information |                    |               |          |          |      |
|           |                  | Power Reduce (dB)   | Target Power (dBm) | Tolerance(dB) | Min(dBm) | Max(dBm) |      |
| WCDMA     | 12.2kbps RMC     | 0.0                 | 24.0               | -1.5          | 1.0      | 22.5     | 25.0 |
|           | 12.2kbps AMR     | 0.0                 | 24.0               | -1.5          | 1.0      | 22.5     | 25.0 |
| HSDPA     | Subtest 1        | 0.0                 | 23.5               | -1.5          | 1.0      | 22.0     | 24.5 |
|           | Subtest 2        | 0.0                 | 23.5               | -1.5          | 1.0      | 22.0     | 24.5 |
|           | Subtest 3        | 0.0                 | 23.0               | -1.5          | 1.0      | 21.5     | 24.0 |
|           | Subtest 4        | 0.0                 | 23.0               | -1.5          | 1.0      | 21.5     | 24.0 |
| HSUPA     | Subtest 1        | 0.0                 | 23.0               | -1.5          | 1.0      | 21.5     | 24.0 |
|           | Subtest 2        | 0.0                 | 21.5               | -1.5          | 1.0      | 20.0     | 22.5 |
|           | Subtest 3        | 0.0                 | 22.3               | -1.5          | 1.0      | 20.8     | 23.3 |
|           | Subtest 4        | 0.0                 | 21.8               | -1.5          | 1.0      | 20.3     | 22.8 |
|           | Subtest 5        | 0.0                 | 23.6               | -1.5          | 1.0      | 22.1     | 24.6 |
| DC-HSDPA  | Subtest 1        | 0.0                 | 23.5               | -1.5          | 1.0      | 22.0     | 24.5 |
|           | Subtest 2        | 0.0                 | 23.5               | -1.5          | 1.0      | 22.0     | 24.5 |
|           | Subtest 3        | 0.0                 | 23.0               | -1.5          | 1.0      | 21.5     | 24.0 |
|           | Subtest 4        | 0.0                 | 23.0               | -1.5          | 1.0      | 21.5     | 24.0 |
| HSPA+     | Subtest 1(U/L 1) | 0.0                 | 20.8               | -1.5          | 1.0      | 19.3     | 21.8 |

| Antenna   |                  | Main antenna        |                    |               |          |          |      |
|-----------|------------------|---------------------|--------------------|---------------|----------|----------|------|
| UMTS Band |                  | UMTS Band V         |                    |               |          |          |      |
| EUT State |                  | hotspot             |                    |               |          |          |      |
| Test Mode |                  | TUNE-UP information |                    |               |          |          |      |
|           |                  | Power Reduce (dB)   | Target Power (dBm) | Tolerance(dB) | Min(dBm) | Max(dBm) |      |
| WCDMA     | 12.2kbps RMC     | 1.0                 | 23.0               | -1.5          | 1.0      | 21.5     | 24.0 |
|           | 12.2kbps AMR     | 1.0                 | 23.0               | -1.5          | 1.0      | 21.5     | 24.0 |
| HSDPA     | Subtest 1        | 1.0                 | 22.5               | -1.5          | 1.0      | 21.0     | 23.5 |
|           | Subtest 2        | 1.0                 | 22.5               | -1.5          | 1.0      | 21.0     | 23.5 |
|           | Subtest 3        | 1.0                 | 22.0               | -1.5          | 1.0      | 20.5     | 23.0 |
|           | Subtest 4        | 1.0                 | 22.0               | -1.5          | 1.0      | 20.5     | 23.0 |
| HSUPA     | Subtest 1        | 1.0                 | 22.0               | -1.5          | 1.0      | 20.5     | 23.0 |
|           | Subtest 2        | 1.0                 | 20.5               | -1.5          | 1.0      | 19.0     | 21.5 |
|           | Subtest 3        | 1.0                 | 21.3               | -1.5          | 1.0      | 19.8     | 22.3 |
|           | Subtest 4        | 1.0                 | 20.8               | -1.5          | 1.0      | 19.3     | 21.8 |
|           | Subtest 5        | 1.0                 | 22.6               | -1.5          | 1.0      | 21.1     | 23.6 |
| DC-HSDPA  | Subtest 1        | 1.0                 | 22.5               | -1.5          | 1.0      | 21.0     | 23.5 |
|           | Subtest 2        | 1.0                 | 22.5               | -1.5          | 1.0      | 21.0     | 23.5 |
|           | Subtest 3        | 1.0                 | 22.0               | -1.5          | 1.0      | 20.5     | 23.0 |
|           | Subtest 4        | 1.0                 | 22.0               | -1.5          | 1.0      | 20.5     | 23.0 |
| HSPA+     | Subtest 1(U/L 1) | 1.0                 | 19.8               | -1.5          | 1.0      | 18.3     | 20.8 |

| Antenna   |                  | Second antenna      |                    |               |          |          |      |
|-----------|------------------|---------------------|--------------------|---------------|----------|----------|------|
| UMTS Band |                  | UMTS Band V         |                    |               |          |          |      |
| EUT State |                  | rev on              |                    |               |          |          |      |
| Test Mode |                  | TUNE-UP information |                    |               |          |          |      |
|           |                  | Power Reduce (dB)   | Target Power (dBm) | Tolerance(dB) | Min(dBm) | Max(dBm) |      |
| WCDMA     | 12.2kbps RMC     | 1.0                 | 23.0               | -1.5          | 1.0      | 21.5     | 24.0 |
|           | 12.2kbps AMR     | 1.0                 | 23.0               | -1.5          | 1.0      | 21.5     | 24.0 |
| HSDPA     | Subtest 1        | 1.0                 | 22.5               | -1.5          | 1.0      | 21.0     | 23.5 |
|           | Subtest 2        | 1.0                 | 22.5               | -1.5          | 1.0      | 21.0     | 23.5 |
|           | Subtest 3        | 1.0                 | 22.0               | -1.5          | 1.0      | 20.5     | 23.0 |
|           | Subtest 4        | 1.0                 | 22.0               | -1.5          | 1.0      | 20.5     | 23.0 |
| HSUPA     | Subtest 1        | 1.0                 | 22.0               | -1.5          | 1.0      | 20.5     | 23.0 |
|           | Subtest 2        | 1.0                 | 20.5               | -1.5          | 1.0      | 19.0     | 21.5 |
|           | Subtest 3        | 1.0                 | 21.3               | -1.5          | 1.0      | 19.8     | 22.3 |
|           | Subtest 4        | 1.0                 | 20.8               | -1.5          | 1.0      | 19.3     | 21.8 |
|           | Subtest 5        | 1.0                 | 22.6               | -1.5          | 1.0      | 21.1     | 23.6 |
| DC-HSDPA  | Subtest 1        | 1.0                 | 22.5               | -1.5          | 1.0      | 21.0     | 23.5 |
|           | Subtest 2        | 1.0                 | 22.5               | -1.5          | 1.0      | 21.0     | 23.5 |
|           | Subtest 3        | 1.0                 | 22.0               | -1.5          | 1.0      | 20.5     | 23.0 |
|           | Subtest 4        | 1.0                 | 22.0               | -1.5          | 1.0      | 20.5     | 23.0 |
| HSPA+     | Subtest 1(U/L 1) | 1.0                 | 19.8               | -1.5          | 1.0      | 18.3     | 20.8 |

| Antenna   |                  | Second antenna      |                    |               |          |          |      |
|-----------|------------------|---------------------|--------------------|---------------|----------|----------|------|
| UMTS Band |                  | UMTS Band V         |                    |               |          |          |      |
| EUT State |                  | rev off             |                    |               |          |          |      |
| Test Mode |                  | TUNE-UP information |                    |               |          |          |      |
|           |                  | Power Reduce (dB)   | Target Power (dBm) | Tolerance(dB) | Min(dBm) | Max(dBm) |      |
| WCDMA     | 12.2kbps RMC     | 0.0                 | 24.0               | -1.5          | 1.0      | 22.5     | 25.0 |
|           | 12.2kbps AMR     | 0.0                 | 24.0               | -1.5          | 1.0      | 22.5     | 25.0 |
| HSDPA     | Subtest 1        | 0.0                 | 23.5               | -1.5          | 1.0      | 22.0     | 24.5 |
|           | Subtest 2        | 0.0                 | 23.5               | -1.5          | 1.0      | 22.0     | 24.5 |
|           | Subtest 3        | 0.0                 | 23.0               | -1.5          | 1.0      | 21.5     | 24.0 |
|           | Subtest 4        | 0.0                 | 23.0               | -1.5          | 1.0      | 21.5     | 24.0 |
| HSUPA     | Subtest 1        | 0.0                 | 23.0               | -1.5          | 1.0      | 21.5     | 24.0 |
|           | Subtest 2        | 0.0                 | 21.5               | -1.5          | 1.0      | 20.0     | 22.5 |
|           | Subtest 3        | 0.0                 | 22.3               | -1.5          | 1.0      | 20.8     | 23.3 |
|           | Subtest 4        | 0.0                 | 21.8               | -1.5          | 1.0      | 20.3     | 22.8 |
|           | Subtest 5        | 0.0                 | 23.6               | -1.5          | 1.0      | 22.1     | 24.6 |
| DC-HSDPA  | Subtest 1        | 0.0                 | 23.5               | -1.5          | 1.0      | 22.0     | 24.5 |
|           | Subtest 2        | 0.0                 | 23.5               | -1.5          | 1.0      | 22.0     | 24.5 |
|           | Subtest 3        | 0.0                 | 23.0               | -1.5          | 1.0      | 21.5     | 24.0 |
|           | Subtest 4        | 0.0                 | 23.0               | -1.5          | 1.0      | 21.5     | 24.0 |
| HSPA+     | Subtest 1(U/L 1) | 0.0                 | 20.8               | -1.5          | 1.0      | 19.3     | 21.8 |

| Antenna   |                  | Second antenna      |                    |               |          |          |      |
|-----------|------------------|---------------------|--------------------|---------------|----------|----------|------|
| UMTS Band |                  | UMTS Band V         |                    |               |          |          |      |
| EUT State |                  | hotspot             |                    |               |          |          |      |
| Test Mode |                  | TUNE-UP information |                    |               |          |          |      |
|           |                  | Power Reduce (dB)   | Target Power (dBm) | Tolerance(dB) | Min(dBm) | Max(dBm) |      |
| WCDMA     | 12.2kbps RMC     | 1.5                 | 22.5               | -1.5          | 1.0      | 21.0     | 23.5 |
|           | 12.2kbps AMR     | 1.5                 | 22.5               | -1.5          | 1.0      | 21.0     | 23.5 |
| HSDPA     | Subtest 1        | 1.5                 | 22.0               | -1.5          | 1.0      | 20.5     | 23.0 |
|           | Subtest 2        | 1.5                 | 22.0               | -1.5          | 1.0      | 20.5     | 23.0 |
|           | Subtest 3        | 1.5                 | 21.5               | -1.5          | 1.0      | 20.0     | 22.5 |
|           | Subtest 4        | 1.5                 | 21.5               | -1.5          | 1.0      | 20.0     | 22.5 |
| HSUPA     | Subtest 1        | 1.5                 | 21.5               | -1.5          | 1.0      | 20.0     | 22.5 |
|           | Subtest 2        | 1.5                 | 20.0               | -1.5          | 1.0      | 18.5     | 21.0 |
|           | Subtest 3        | 1.5                 | 20.8               | -1.5          | 1.0      | 19.3     | 21.8 |
|           | Subtest 4        | 1.5                 | 20.3               | -1.5          | 1.0      | 18.8     | 21.3 |
|           | Subtest 5        | 1.5                 | 22.1               | -1.5          | 1.0      | 20.6     | 23.1 |
| DC-HSDPA  | Subtest 1        | 1.5                 | 22.0               | -1.5          | 1.0      | 20.5     | 23.0 |
|           | Subtest 2        | 1.5                 | 22.0               | -1.5          | 1.0      | 20.5     | 23.0 |
|           | Subtest 3        | 1.5                 | 21.5               | -1.5          | 1.0      | 20.0     | 22.5 |
|           | Subtest 4        | 1.5                 | 21.5               | -1.5          | 1.0      | 20.0     | 22.5 |
| HSPA+     | Subtest 1(U/L 1) | 1.5                 | 19.3               | -1.5          | 1.0      | 17.8     | 20.3 |

## 11.2.1 Main antenna

### WCDMA1900(receiver on)

| WCDMA1900 | FDDII result (dBm)       |                        |                          |
|-----------|--------------------------|------------------------|--------------------------|
|           | 9538/9938<br>(1907.6MHz) | 9400/9800<br>(1880MHz) | 9262/9662<br>(1852.4MHz) |
|           | 24.16                    | 24.08                  | 24.13                    |
| HSUPA     | 21.33                    | 21.35                  | 21.34                    |
|           | 21.25                    | 21.28                  | 21.24                    |
|           | 22.24                    | 22.29                  | 22.26                    |
|           | 20.76                    | 20.79                  | 20.78                    |
| HSPA+     | 22.21                    | 22.24                  | 22.19                    |
|           | 20.63                    | 20.74                  | 20.71                    |
| DC-HSDPA  | 23.18                    | 22.85                  | 23.24                    |
|           | 23.04                    | 23.18                  | 23.11                    |
|           | 22.72                    | 22.71                  | 22.65                    |
|           | 22.67                    | 22.75                  | 22.69                    |

**WCDMA1900 (receiver off)**

| WCDMA1900 | FDDII result (dBm) |           |             |
|-----------|--------------------|-----------|-------------|
|           | 9538/9938          | 9400/9800 | 9262/9662   |
|           | (1907.6MHz)        | (1880MHz) | (1852.4MHz) |
|           | 22.56              | 22.62     | 22.58       |
| HSUPA     | 20.67              | 20.69     | 20.68       |
|           | 19.53              | 19.61     | 19.58       |
|           | 20.61              | 20.54     | 20.63       |
|           | 19.73              | 19.75     | 19.72       |
|           | 21.65              | 21.68     | 21.63       |
| HSPA+     | 19.62              | 19.78     | 19.74       |
| DC-HSDPA  | 21.72              | 21.39     | 21.78       |
|           | 21.58              | 21.72     | 21.65       |
|           | 21.26              | 21.25     | 21.19       |
|           | 21.21              | 21.29     | 21.23       |

**WCDMA1900 (Hostpot)**

| WCDMA1900 | FDDII result (dBm) |           |             |
|-----------|--------------------|-----------|-------------|
|           | 9538/9938          | 9400/9800 | 9262/9662   |
|           | (1907.6MHz)        | (1880MHz) | (1852.4MHz) |
|           | 19.12              | 19.22     | 19.17       |
| HSUPA     | 17.15              | 17.17     | 17.16       |
|           | 16.11              | 16.09     | 16.12       |
|           | 17.13              | 17.15     | 17.12       |
|           | 16.08              | 16.12     | 16.01       |
|           | 18.13              | 18.16     | 18.11       |
| HSPA+     | 16.05              | 16.12     | 16.08       |
| DC-HSDPA  | 18.16              | 17.83     | 18.22       |
|           | 18.02              | 18.16     | 18.09       |
|           | 17.7               | 17.69     | 17.63       |
|           | 17.65              | 17.73     | 17.67       |

**WCDMA1700(receiver on)**

| WCDMA1700 | FDDIV result (dBm) |             |             |
|-----------|--------------------|-------------|-------------|
|           | 1513/1738          | 1412/1637   | 1312/1537   |
|           | (1752.6MHz)        | (1732.4MHz) | (1712.4MHz) |
|           | 24.07              | 24.02       | 24.11       |
| HSUPA     | 21.06              | 21.06       | 21.07       |
|           | 21.1               | 21.04       | 21.10       |
|           | 21.98              | 21.93       | 21.92       |
|           | 20.58              | 20.59       | 20.53       |
|           | 22.03              | 22.04       | 22.03       |
| HSPA+     | 20.56              | 20.68       | 20.41       |
| DC-HSDPA  | 23.02              | 23.03       | 23.02       |
|           | 22.92              | 22.87       | 22.96       |
|           | 22.44              | 22.50       | 22.49       |
|           | 22.45              | 22.47       | 22.49       |

**WCDMA1700 (receiver off)**

| WCDMA1700 | FDDIV result (dBm) |             |             |
|-----------|--------------------|-------------|-------------|
|           | 1513/1738          | 1412/1637   | 1312/1537   |
|           | (1752.6MHz)        | (1732.4MHz) | (1712.4MHz) |
|           | 22.53              | 22.56       | 22.52       |
| HSUPA     | 19.59              | 19.59       | 19.60       |
|           | 19.63              | 19.57       | 19.63       |
|           | 20.41              | 20.46       | 20.45       |
|           | 19.11              | 19.12       | 19.06       |
|           | 20.56              | 20.57       | 20.56       |
| HSPA+     | 19.03              | 19.12       | 18.96       |
| DC-HSDPA  | 20.61              | 20.62       | 20.61       |
|           | 20.51              | 20.46       | 20.55       |
|           | 20.03              | 20.09       | 20.08       |
|           | 20.04              | 20.06       | 20.08       |

**WCDMA1700 (Hostpot)**

| WCDMA1700 | FDDIV result (dBm) |             |             |
|-----------|--------------------|-------------|-------------|
|           | 1513/1738          | 1412/1637   | 1312/1537   |
|           | (1752.6MHz)        | (1732.4MHz) | (1712.4MHz) |
|           | 19.89              | 20.04       | 19.98       |
| HSUPA     | 16.97              | 16.97       | 16.98       |
|           | 17.01              | 16.95       | 17.01       |
|           | 17.99              | 17.94       | 17.93       |
|           | 16.49              | 16.50       | 16.44       |
|           | 17.94              | 17.95       | 17.94       |
| HSPA+     | 16.02              | 16.03       | 16.01       |
| DC-HSDPA  | 17.96              | 17.97       | 17.96       |
|           | 17.86              | 17.81       | 17.90       |
|           | 17.38              | 17.44       | 17.43       |
|           | 17.39              | 17.41       | 17.43       |

**WCDMA850(receiver on/off)**

| WCDMA850 | FDDV result (dBm) |            |            |
|----------|-------------------|------------|------------|
|          | 4233/4458         | 4183/4408  | 4132/4357  |
|          | (846.6MHz)        | (836.6MHz) | (826.4MHz) |
|          | 24.06             | 24.03      | 24.09      |
| HSUPA    | 21.58             | 21.56      | 21.52      |
|          | 21.17             | 21.15      | 21.21      |
|          | 22.18             | 22.14      | 22.22      |
|          | 20.7              | 20.71      | 20.68      |
|          | 22.12             | 22.13      | 22.18      |
| HSPA+    | 20.58             | 20.61      | 20.49      |
| DC-HSDPA | 23.4              | 23.41      | 23.50      |
|          | 22.99             | 23.27      | 23.43      |
|          | 22.85             | 22.89      | 23.01      |
|          | 22.86             | 22.57      | 22.61      |

### WCDMA850 (Hostpot)

| WCDMA850 | FDDV result (dBm) |            |            |
|----------|-------------------|------------|------------|
|          | 4233/4458         | 4183/4408  | 4132/4357  |
|          | (846.6MHz)        | (836.6MHz) | (826.4MHz) |
|          | 23.09             | 23.12      | 23.10      |
| HSUPA    | 21.1              | 21.08      | 21.12      |
|          | 21.09             | 21.07      | 21.13      |
|          | 20.41             | 20.66      | 20.34      |
|          | 19.92             | 19.93      | 19.96      |
|          | 21.64             | 21.65      | 21.61      |
| HSPA+    | 19.82             | 19.71      | 19.83      |
| DC-HSDPA | 21.64             | 21.65      | 21.54      |
|          | 21.63             | 21.71      | 21.67      |
|          | 21.09             | 21.03      | 21.05      |
|          | 20.9              | 20.61      | 20.65      |

## 11.2.2 Second antenna

### WCDMA1900(receiver on)

| WCDMA1900 | FDDII result (dBm) |           |             |
|-----------|--------------------|-----------|-------------|
|           | 9538/9938          | 9400/9800 | 9262/9662   |
|           | (1907.6MHz)        | (1880MHz) | (1852.4MHz) |
|           | 16.05              | 16.12     | 15.94       |
| HSUPA     | 14.04              | 14.07     | 14.05       |
|           | 13.01              | 13.06     | 13.08       |
|           | 14.11              | 14.05     | 14.03       |
|           | 13.25              | 13.26     | 13.28       |
|           | 15.02              | 15.04     | 15.03       |
| HSPA+     | 13.39              | 13.32     | 13.51       |
| DC-HSDPA  | 15.05              | 15.14     | 15.17       |
|           | 14.99              | 15.04     | 14.81       |
|           | 14.58              | 14.60     | 14.67       |
|           | 14.59              | 14.66     | 14.64       |

### WCDMA1900 (receiver off)

| WCDMA1900 | FDDII result (dBm) |           |             |
|-----------|--------------------|-----------|-------------|
|           | 9538/9938          | 9400/9800 | 9262/9662   |
|           | (1907.6MHz)        | (1880MHz) | (1852.4MHz) |
|           | 18.97              | 19.05     | 18.94       |
| HSUPA     | 16.19              | 16.22     | 16.20       |
|           | 16.17              | 16.25     | 16.23       |
|           | 17.2               | 17.22     | 17.23       |
|           | 15.7               | 15.71     | 15.73       |
|           | 17.15              | 17.19     | 17.18       |
| HSPA+     | 16.42              | 16.41     | 16.34       |
| DC-HSDPA  | 18.22              | 18.21     | 18.24       |
|           | 18.26              | 18.24     | 18.28       |
|           | 17.75              | 17.72     | 17.74       |
|           | 17.76              | 17.74     | 17.73       |

**WCDMA1900 (Hostpot)**

| WCDMA1900 | FDDII result (dBm) |           |             |
|-----------|--------------------|-----------|-------------|
|           | 9538/9938          | 9400/9800 | 9262/9662   |
|           | (1907.6MHz)        | (1880MHz) | (1852.4MHz) |
|           | 15.53              | 15.49     | 15.58       |
| HSUPA     | 13.56              | 13.59     | 13.57       |
|           | 12.35              | 12.42     | 12.38       |
|           | 13.46              | 13.51     | 13.49       |
|           | 13.07              | 13.08     | 13.10       |
|           | 14.52              | 14.56     | 14.55       |
| HSPA+     | 12.96              | 12.98     | 13.04       |
| DC-HSDPA  | 14.49              | 14.58     | 14.61       |
|           | 14.43              | 14.48     | 14.25       |
|           | 14.02              | 14.04     | 14.11       |
|           | 14.03              | 14.10     | 14.08       |

**WCDMA1700(receiver on)**

| WCDMA1700 | FDDIV result (dBm) |             |             |
|-----------|--------------------|-------------|-------------|
|           | 1513/1738          | 1412/1637   | 1312/1537   |
|           | (1752.6MHz)        | (1732.4MHz) | (1712.4MHz) |
|           | 17.53              | 17.49       | 17.56       |
| HSUPA     | 14.55              | 14.57       | 14.58       |
|           | 14.59              | 14.57       | 14.59       |
|           | 15.48              | 15.46       | 15.49       |
|           | 14.11              | 14.07       | 14.05       |
|           | 15.57              | 15.55       | 15.54       |
| HSPA+     | 14.03              | 14.06       | 14.02       |
| DC-HSDPA  | 15.54              | 15.63       | 15.66       |
|           | 15.4               | 15.58       | 15.50       |
|           | 15.05              | 15.13       | 15.12       |
|           | 15.04              | 15.10       | 15.12       |

**WCDMA1700 (receiver off)**

| WCDMA1700 | FDDIV result (dBm) |             |             |
|-----------|--------------------|-------------|-------------|
|           | 1513/1738          | 1412/1637   | 1312/1537   |
|           | (1752.6MHz)        | (1732.4MHz) | (1712.4MHz) |
|           | 21.04              | 20.97       | 21.06       |
| HSUPA     | 17.33              | 17.35       | 17.36       |
|           | 17.37              | 17.35       | 17.37       |
|           | 18.36              | 18.34       | 18.37       |
|           | 16.89              | 16.85       | 16.83       |
|           | 18.35              | 18.33       | 18.32       |
| HSPA+     | 17.53              | 17.56       | 17.71       |
| DC-HSDPA  | 20.07              | 20.16       | 20.19       |
|           | 19.93              | 20.11       | 20.03       |
|           | 19.58              | 19.66       | 19.65       |
|           | 19.57              | 19.63       | 19.65       |

**WCDMA1700 (Hostpot)**

| WCDMA1700 | FDDIV result (dBm) |             |             |
|-----------|--------------------|-------------|-------------|
|           | 1513/1738          | 1412/1637   | 1312/1537   |
|           | (1752.6MHz)        | (1732.4MHz) | (1712.4MHz) |
|           | 17.05              | 16.97       | 17.02       |
| HSUPA     | 14.05              | 14.07       | 14.08       |
|           | 14.09              | 14.07       | 14.09       |
|           | 14.98              | 14.96       | 14.89       |
|           | 13.61              | 13.57       | 13.55       |
|           | 15.07              | 15.05       | 15.04       |
| HSPA+     | 13.62              | 13.68       | 13.59       |
| DC-HSDPA  | 15.04              | 15.13       | 15.16       |
|           | 14.9               | 15.08       | 15.00       |
|           | 14.55              | 14.63       | 14.62       |
|           | 14.54              | 14.60       | 14.62       |

**WCDMA850(receiver on)**

| WCDMA850 | FDDV result (dBm) |            |            |
|----------|-------------------|------------|------------|
|          | 4233/4458         | 4183/4408  | 4132/4357  |
|          | (846.6MHz)        | (836.6MHz) | (826.4MHz) |
|          | 22.91             | 23.02      | 22.97      |
| HSUPA    | 20.55             | 20.59      | 20.53      |
|          | 19.45             | 19.88      | 19.90      |
|          | 20.93             | 20.89      | 20.96      |
|          | 19.49             | 19.39      | 19.44      |
|          | 21.53             | 21.87      | 21.92      |
| HSPA+    | 19.33             | 19.34      | 19.36      |
| DC-HSDPA | 21.25             | 21.18      | 21.01      |
|          | 21.04             | 21.02      | 21.02      |
|          | 20.62             | 20.63      | 20.68      |
|          | 20.51             | 20.54      | 20.55      |

**WCDMA850 (receiver off)**

| WCDMA850 | FDDV result (dBm) |            |            |
|----------|-------------------|------------|------------|
|          | 4233/4458         | 4183/4408  | 4132/4357  |
|          | (846.6MHz)        | (836.6MHz) | (826.4MHz) |
|          | 23.92             | 23.97      | 23.95      |
| HSUPA    | 22.08             | 22.14      | 22.12      |
|          | 20.55             | 20.88      | 20.90      |
|          | 21.93             | 21.89      | 21.96      |
|          | 20.49             | 20.39      | 20.44      |
|          | 22.63             | 22.77      | 22.62      |
| HSPA+    | 20.58             | 20.62      | 20.61      |
| DC-HSDPA | 22.05             | 22.08      | 22.01      |
|          | 22.04             | 22.02      | 22.06      |
|          | 21.62             | 21.63      | 21.68      |
|          | 21.61             | 21.64      | 21.55      |

**WCDMA850 (Hostpot)**

| WCDMA850 | FDDV result (dBm) |            |            |
|----------|-------------------|------------|------------|
|          | 4233/4458         | 4183/4408  | 4132/4357  |
|          | (846.6MHz)        | (836.6MHz) | (826.4MHz) |
|          | 22.43             | 22.47      | 22.34      |
| HSUPA    | 20.53             | 20.61      | 20.57      |
|          | 18.99             | 19.42      | 19.44      |
|          | 20.47             | 20.43      | 20.50      |
|          | 19.03             | 18.93      | 18.98      |
|          | 21.47             | 21.41      | 21.46      |
| HSPA+    | 18.69             | 18.74      | 18.73      |
| DC-HSDPA | 20.56             | 20.59      | 20.52      |
|          | 20.55             | 20.53      | 20.53      |
|          | 20.03             | 20.04      | 20.09      |
|          | 20.02             | 20.01      | 20.06      |

# 11.3 LTE Measurement result

## Maximum Target Power for Production Unit

| Antenna    |    | Main antenna |       |       |        |        |        |                   |                    |                |                          |
|------------|----|--------------|-------|-------|--------|--------|--------|-------------------|--------------------|----------------|--------------------------|
| LTE Band   |    | LTE B2       |       |       |        |        |        |                   |                    |                |                          |
| EUT State  |    | rev on       |       |       |        |        |        |                   |                    |                |                          |
| Modulation |    | 1.4MHz       | 3 MHz | 5 MHz | 10 MHz | 15 MHz | 20 MHz | Power Reduce (dB) | Target Power (dBm) | Tolerance (dB) | MPR allowed by 3GPP (dB) |
| QPSK       | 1  | 1            | 1     | 1     | 1      | 1      | 1      | 0.0               | 23.5               | -1.5 1.0       | 24.5 0                   |
| QPSK       | ≤5 | ≤4           | ≤8    | ≤12   | ≤16    | ≤18    | 1      | 0.0               | 23.5               | -1.5 1.0       | 24.5 0                   |
| QPSK       | >5 | >4           | >8    | >12   | >16    | >18    | 1      | 0.0               | 22.5               | -1.5 1.0       | 23.5 1                   |
| 16 QAM     | 1  | 1            | 1     | 1     | 1      | 1      | 1      | 0.0               | 22.5               | -1.5 1.0       | 23.5 1                   |
| 16 QAM     | ≤5 | ≤4           | ≤8    | ≤12   | ≤16    | ≤18    | 1      | 0.0               | 22.5               | -1.5 1.0       | 23.5 1                   |
| 16 QAM     | >5 | >4           | >8    | >12   | >16    | >18    | 1      | 0.0               | 21.5               | -1.5 1.0       | 22.5 2                   |

| Antenna    |    | Main antenna |       |       |        |        |        |                   |                    |                |                          |
|------------|----|--------------|-------|-------|--------|--------|--------|-------------------|--------------------|----------------|--------------------------|
| LTE Band   |    | LTE B2       |       |       |        |        |        |                   |                    |                |                          |
| EUT State  |    | rev off      |       |       |        |        |        |                   |                    |                |                          |
| Modulation |    | 1.4MHz       | 3 MHz | 5 MHz | 10 MHz | 15 MHz | 20 MHz | Power Reduce (dB) | Target Power (dBm) | Tolerance (dB) | MPR allowed by 3GPP (dB) |
| QPSK       | 1  | 1            | 1     | 1     | 1      | 1      | 1      | 0.5               | 23.0               | -1.5 1.0       | 24.0 0                   |
| QPSK       | ≤5 | ≤4           | ≤8    | ≤12   | ≤16    | ≤18    | 1      | 0.5               | 23.0               | -1.5 1.0       | 24.0 0                   |
| QPSK       | >5 | >4           | >8    | >12   | >16    | >18    | 1      | 0.5               | 22.5               | -1.5 1.0       | 23.5 1                   |
| 16 QAM     | 1  | 1            | 1     | 1     | 1      | 1      | 1      | 0.5               | 22.5               | -1.5 1.0       | 23.5 1                   |
| 16 QAM     | ≤5 | ≤4           | ≤8    | ≤12   | ≤16    | ≤18    | 1      | 0.5               | 22.5               | -1.5 1.0       | 23.5 1                   |
| 16 QAM     | >5 | >4           | >8    | >12   | >16    | >18    | 1      | 0.5               | 21.5               | -1.5 1.0       | 22.5 2                   |

| Antenna    |    | Main antenna |       |       |        |        |        |                   |                    |                |                          |
|------------|----|--------------|-------|-------|--------|--------|--------|-------------------|--------------------|----------------|--------------------------|
| LTE Band   |    | LTE B2       |       |       |        |        |        |                   |                    |                |                          |
| EUT State  |    | hotspot      |       |       |        |        |        |                   |                    |                |                          |
| Modulation |    | 1.4MHz       | 3 MHz | 5 MHz | 10 MHz | 15 MHz | 20 MHz | Power Reduce (dB) | Target Power (dBm) | Tolerance (dB) | MPR allowed by 3GPP (dB) |
| QPSK       | 1  | 1            | 1     | 1     | 1      | 1      | 1      | 4.5               | 19.0               | -1.5 1.0       | 20.0 0                   |
| QPSK       | ≤5 | ≤4           | ≤8    | ≤12   | ≤16    | ≤18    | 1      | 4.5               | 19.0               | -1.5 1.0       | 20.0 0                   |
| QPSK       | >5 | >4           | >8    | >12   | >16    | >18    | 1      | 4.5               | 19.0               | -1.5 1.0       | 20.0 1                   |
| 16 QAM     | 1  | 1            | 1     | 1     | 1      | 1      | 1      | 4.5               | 19.0               | -1.5 1.0       | 20.0 1                   |
| 16 QAM     | ≤5 | ≤4           | ≤8    | ≤12   | ≤16    | ≤18    | 1      | 4.5               | 19.0               | -1.5 1.0       | 20.0 1                   |
| 16 QAM     | >5 | >4           | >8    | >12   | >16    | >18    | 1      | 4.5               | 19.0               | -1.5 1.0       | 20.0 2                   |

| Antenna    |    | Main antenna |       |       |        |        |        |                   |                    |                |                          |
|------------|----|--------------|-------|-------|--------|--------|--------|-------------------|--------------------|----------------|--------------------------|
| LTE Band   |    | LTE B4       |       |       |        |        |        |                   |                    |                |                          |
| EUT State  |    | rev on       |       |       |        |        |        |                   |                    |                |                          |
| Modulation |    | 1.4MHz       | 3 MHz | 5 MHz | 10 MHz | 15 MHz | 20 MHz | Power Reduce (dB) | Target Power (dBm) | Tolerance (dB) | MPR allowed by 3GPP (dB) |
| QPSK       | 1  | 1            | 1     | 1     | 1      | 1      | 1      | 0.0               | 23.5               | -1.5 1.0       | 24.5 0                   |
| QPSK       | ≤5 | ≤4           | ≤8    | ≤12   | ≤16    | ≤18    | 1      | 0.0               | 23.5               | -1.5 1.0       | 24.5 0                   |
| QPSK       | >5 | >4           | >8    | >12   | >16    | >18    | 1      | 0.0               | 22.5               | -1.5 1.0       | 23.5 1                   |
| 16 QAM     | 1  | 1            | 1     | 1     | 1      | 1      | 1      | 0.0               | 22.5               | -1.5 1.0       | 23.5 1                   |
| 16 QAM     | ≤5 | ≤4           | ≤8    | ≤12   | ≤16    | ≤18    | 1      | 0.0               | 22.5               | -1.5 1.0       | 23.5 1                   |
| 16 QAM     | >5 | >4           | >8    | >12   | >16    | >18    | 1      | 0.0               | 21.5               | -1.5 1.0       | 22.5 2                   |

| Antenna    |    | Main antenna |       |       |        |        |        |                   |                    |                |                          |
|------------|----|--------------|-------|-------|--------|--------|--------|-------------------|--------------------|----------------|--------------------------|
| LTE Band   |    | LTE B4       |       |       |        |        |        |                   |                    |                |                          |
| EUT State  |    | rev off      |       |       |        |        |        |                   |                    |                |                          |
| Modulation |    | 1.4MHz       | 3 MHz | 5 MHz | 10 MHz | 15 MHz | 20 MHz | Power Reduce (dB) | Target Power (dBm) | Tolerance (dB) | MPR allowed by 3GPP (dB) |
| QPSK       | 1  | 1            | 1     | 1     | 1      | 1      | 1      | 0.0               | 23.5               | -1.5 1.0       | 24.5 0                   |
| QPSK       | ≤5 | ≤4           | ≤8    | ≤12   | ≤16    | ≤18    | 1      | 0.0               | 23.5               | -1.5 1.0       | 24.5 0                   |
| QPSK       | >5 | >4           | >8    | >12   | >16    | >18    | 1      | 0.0               | 22.5               | -1.5 1.0       | 23.5 1                   |
| 16 QAM     | 1  | 1            | 1     | 1     | 1      | 1      | 1      | 0.0               | 22.5               | -1.5 1.0       | 23.5 1                   |
| 16 QAM     | ≤5 | ≤4           | ≤8    | ≤12   | ≤16    | ≤18    | 1      | 0.0               | 22.5               | -1.5 1.0       | 23.5 1                   |
| 16 QAM     | >5 | >4           | >8    | >12   | >16    | >18    | 1      | 0.0               | 21.5               | -1.5 1.0       | 22.5 2                   |

| Antenna    |    | Main antenna |       |       |        |        |        |                   |                    |                |                          |
|------------|----|--------------|-------|-------|--------|--------|--------|-------------------|--------------------|----------------|--------------------------|
| LTE Band   |    | LTE B4       |       |       |        |        |        |                   |                    |                |                          |
| EUT State  |    | hotspot      |       |       |        |        |        |                   |                    |                |                          |
| Modulation |    | 1.4MHz       | 3 MHz | 5 MHz | 10 MHz | 15 MHz | 20 MHz | Power Reduce (dB) | Target Power (dBm) | Tolerance (dB) | MPR allowed by 3GPP (dB) |
| QPSK       | 1  | 1            | 1     | 1     | 1      | 1      | 1      | 3.0               | 20.5               | -1.5 1.0       | 21.5 0                   |
| QPSK       | ≤5 | ≤4           | ≤8    | ≤12   | ≤16    | ≤18    | 1      | 3.0               | 20.5               | -1.5 1.0       | 21.5 0                   |
| QPSK       | >5 | >4           | >8    | >12   | >16    | >18    | 1      | 3.0               | 20.5               | -1.5 1.0       | 21.5 1                   |
| 16 QAM     | 1  | 1            | 1     | 1     | 1      | 1      | 1      | 3.0               | 20.5               | -1.5 1.0       | 21.5 1                   |
| 16 QAM     | ≤5 | ≤4           | ≤8    | ≤12   | ≤16    | ≤18    | 1      | 3.0               | 20.5               | -1.5 1.0       | 21.5 1                   |
| 16 QAM     | >5 | >4           | >8    | >12   | >16    | >18    | 1      | 3.0               | 20.5               | -1.5 1.0       | 21.5 2                   |

| Antenna    |    | Main antenna |       |       |        |  |  |                   |                    |                |                          |
|------------|----|--------------|-------|-------|--------|--|--|-------------------|--------------------|----------------|--------------------------|
| LTE Band   |    | LTE B5       |       |       |        |  |  |                   |                    |                |                          |
| EUT State  |    | rev on       |       |       |        |  |  |                   |                    |                |                          |
| Modulation |    | 1.4 MHz      | 3 MHz | 5 MHz | 10 MHz |  |  | Power Reduce (dB) | Target Power (dBm) | Tolerance (dB) | MPR allowed by 3GPP (dB) |
| QPSK       | 1  | 1            | 1     | 1     | 1      |  |  | 0.0               | 24.0               | -1.5 1.0       | 25.0 0                   |
| QPSK       | ≤5 | ≤4           | ≤8    | ≤12   | ≤16    |  |  | 0.0               | 24.0               | -1.5 1.0       | 25.0 0                   |
| QPSK       | >5 | >4           | >8    | >12   | ≤16    |  |  | 0.0               | 23.0               | -1.5 1.0       | 24.0 1                   |
| 16 QAM     | 1  | 1            | 1     | 1     | 1      |  |  | 0.0               | 23.0               | -1.5 1.0       | 24.0 1                   |
| 16 QAM     | ≤5 | ≤4           | ≤8    | ≤12   | ≤16    |  |  | 0.0               | 23.0               | -1.5 1.0       | 24.0 1                   |
| 16 QAM     | >5 | >4           | >8    | >12   | ≤16    |  |  | 0.0               | 22.0               | -1.5 1.0       | 23.0 2                   |

| Antenna    |    | Main antenna |       |       |        |  |  |                   |                    |                |                          |
|------------|----|--------------|-------|-------|--------|--|--|-------------------|--------------------|----------------|--------------------------|
| LTE Band   |    | LTE B5       |       |       |        |  |  |                   |                    |                |                          |
| EUT State  |    | rev off      |       |       |        |  |  |                   |                    |                |                          |
| Modulation |    | 1.4 MHz      | 3 MHz | 5 MHz | 10 MHz |  |  | Power Reduce (dB) | Target Power (dBm) | Tolerance (dB) | MPR allowed by 3GPP (dB) |
| QPSK       | 1  | 1            | 1     | 1     | 1      |  |  | 0.0               | 24.0               | -1.5 1.0       | 25.0 0                   |
| QPSK       | ≤5 | ≤4           | ≤8    | ≤12   | ≤16    |  |  | 0.0               | 24.0               | -1.5 1.0       | 25.0 0                   |
| QPSK       | >5 | >4           | >8    | >12   | ≤16    |  |  | 0.0               | 23.0               | -1.5 1.0       | 24.0 1                   |
| 16 QAM     | 1  | 1            | 1     | 1     | 1      |  |  | 0.0               | 23.0               | -1.5 1.0       | 24.0 1                   |
| 16 QAM     | ≤5 | ≤4           | ≤8    | ≤12   | ≤16    |  |  | 0.0               | 23.0               | -1.5 1.0       | 24.0 1                   |
| 16 QAM     | >5 | >4           | >8    | >12   | ≤16    |  |  | 0.0               | 22.0               | -1.5 1.0       | 23.0 2                   |

| Antenna    |    | Main antenna |       |       |        |  |  |                   |                    |                |                          |
|------------|----|--------------|-------|-------|--------|--|--|-------------------|--------------------|----------------|--------------------------|
| LTE Band   |    | LTE B5       |       |       |        |  |  |                   |                    |                |                          |
| EUT State  |    | hotspot      |       |       |        |  |  |                   |                    |                |                          |
| Modulation |    | 1.4 MHz      | 3 MHz | 5 MHz | 10 MHz |  |  | Power Reduce (dB) | Target Power (dBm) | Tolerance (dB) | MPR allowed by 3GPP (dB) |
| QPSK       | 1  | 1            | 1     | 1     | 1      |  |  | 1.0               | 23.0               | -1.5 1.0       | 24.0 0                   |
| QPSK       | ≤5 | ≤4           | ≤8    | ≤12   | ≤16    |  |  | 1.0               | 23.0               | -1.5 1.0       | 24.0 0                   |
| QPSK       | >5 | >4           | >8    | >12   | ≤16    |  |  | 1.0               | 23.0               | -1.5 1.0       | 24.0 1                   |
| 16 QAM     | 1  | 1            | 1     | 1     | 1      |  |  | 1.0               | 23.0               | -1.5 1.0       | 24.0 1                   |
| 16 QAM     | ≤5 | ≤4           | ≤8    | ≤12   | ≤16    |  |  | 1.0               | 23.0               | -1.5 1.0       | 24.0 1                   |
| 16 QAM     | >5 | >4           | >8    | >12   | ≤16    |  |  | 1.0               | 22.0               | -1.5 1.0       | 23.0 2                   |

| Antenna    |    | Second antenna |       |       |        |        |        |                   |                    |                |                          |
|------------|----|----------------|-------|-------|--------|--------|--------|-------------------|--------------------|----------------|--------------------------|
| LTE Band   |    | LTE B2         |       |       |        |        |        |                   |                    |                |                          |
| EUT State  |    | rev on         |       |       |        |        |        |                   |                    |                |                          |
| Modulation |    | 1.4MHz         | 3 MHz | 5 MHz | 10 MHz | 15 MHz | 20 MHz | Power Reduce (dB) | Target Power (dBm) | Tolerance (dB) | MPR allowed by 3GPP (dB) |
| QPSK       | 1  | 1              | 1     | 1     | 1      | 1      | 1      | 7.0               | 16.5               | -1.5 1.0       | 17.5 0                   |
| QPSK       | ≤5 | ≤4             | ≤8    | ≤12   | ≤16    | ≤18    | 1      | 7.0               | 16.5               | -1.5 1.0       | 17.5 0                   |
| QPSK       | >5 | >4             | >8    | >12   | >16    | >18    | 1      | 7.0               | 16.5               | -1.5 1.0       | 17.5 1                   |
| 16 QAM     | 1  | 1              | 1     | 1     | 1      | 1      | 1      | 7.0               | 16.5               | -1.5 1.0       | 17.5 1                   |
| 16 QAM     | ≤5 | ≤4             | ≤8    | ≤12   | ≤16    | ≤18    | 1      | 7.0               | 16.5               | -1.5 1.0       | 17.5 1                   |
| 16 QAM     | >5 | >4             | >8    | >12   | >16    | >18    | 1      | 7.0               | 16.5               | -1.5 1.0       | 17.5 2                   |

| Antenna    |    | Second antenna      |       |       |        |        |        |                   |                 |           |           |                          |      |   |
|------------|----|---------------------|-------|-------|--------|--------|--------|-------------------|-----------------|-----------|-----------|--------------------------|------|---|
| LTE Band   |    | LTE B2              |       |       |        |        |        |                   |                 |           |           |                          |      |   |
| EUT State  |    | rev off             |       |       |        |        |        |                   |                 |           |           |                          |      |   |
| Modulation |    | TUNE-UP Information |       |       |        |        |        | Power Reduce (dB) | Tolerance (dBm) | Min (dBm) | Max (dBm) | MPR allowed by 3GPP (dB) |      |   |
|            |    | 1.4MHz              | 3 MHz | 5 MHz | 10 MHz | 15 MHz | 20 MHz |                   |                 |           |           |                          |      |   |
| QPSK       | 1  | 1                   | 1     | 1     | 1      | 1      | 1      | 4.0               | 19.5            | -1.5      | 1.0       | 18.0                     | 20.5 | 0 |
| QPSK       | ≤5 | ≤4                  | ≤8    | ≤12   | ≤16    | ≤18    | 1      | 4.0               | 19.5            | -1.5      | 1.0       | 18.0                     | 20.5 | 0 |
| QPSK       | >5 | >4                  | >8    | >12   | >16    | >18    | 4.0    | 4.0               | 19.5            | -1.5      | 1.0       | 18.0                     | 20.5 | 1 |
| 16 QAM     | 1  | 1                   | 1     | 1     | 1      | 1      | 1      | 4.0               | 19.5            | -1.5      | 1.0       | 18.0                     | 20.5 | 1 |
| 16 QAM     | ≤5 | ≤4                  | ≤8    | ≤12   | ≤16    | ≤18    | 1      | 4.0               | 19.5            | -1.5      | 1.0       | 18.0                     | 20.5 | 1 |
| 16 QAM     | >5 | >4                  | >8    | >12   | >16    | >18    | 4.0    | 4.0               | 19.5            | -1.5      | 1.0       | 18.0                     | 20.5 | 2 |

| Antenna    |          |           |           |           | Second antenna       |                       |                   |             |             |      |   |                           |
|------------|----------|-----------|-----------|-----------|----------------------|-----------------------|-------------------|-------------|-------------|------|---|---------------------------|
| LTE Band   |          |           |           |           | LTE B7               |                       |                   |             |             |      |   |                           |
| EUT Sate   |          |           |           |           | rev on               |                       |                   |             |             |      |   |                           |
| Modulation |          |           |           |           | TUNE-UP Information  |                       |                   |             |             |      |   | MPR<br>allowed by<br>3GPP |
|            | 5<br>MHz | 10<br>MHz | 15<br>MHz | 20<br>MHz | Power Reduce<br>(dB) | Target Power<br>(dBm) | Tolerance<br>(dB) | Min<br>(dB) | Max<br>(dB) |      |   |                           |
| QPSK       | 1        | 1         | 1         | 1         | 2.0                  | 20.9                  | -1.5              | 1.0         | 19.4        | 21.9 | 0 |                           |
| QPSK       | $\leq 8$ | $\leq 12$ | $\leq 16$ | $\leq 18$ | 2.0                  | 20.9                  | -1.5              | 1.0         | 19.4        | 21.9 | 0 |                           |
| QPSK       | $> 8$    | $> 12$    | $> 16$    | $> 18$    | 2.0                  | 20.9                  | -1.5              | 1.0         | 19.4        | 21.9 | 1 |                           |
| 16 QAM     | 1        | 1         | 1         | 1         | 2.0                  | 20.9                  | -1.5              | 1.0         | 19.4        | 21.9 | 1 |                           |
| 16 QAM     | $\leq 8$ | $\leq 12$ | $\leq 16$ | $\leq 18$ | 2.0                  | 20.9                  | -1.5              | 1.0         | 19.4        | 21.9 | 1 |                           |
| 16 QAM     | $> 8$    | $> 12$    | $> 16$    | $> 18$    | 2.0                  | 20.9                  | -1.5              | 1.0         | 19.4        | 21.9 | 2 |                           |

| Antenna    |                     |        |        |        | Second antenna    |                    |                |           |           | MRR allowed by 3GPP |   |
|------------|---------------------|--------|--------|--------|-------------------|--------------------|----------------|-----------|-----------|---------------------|---|
| LTE Band   |                     |        |        |        | LTE B7            |                    |                |           |           |                     |   |
| EUT State  |                     |        |        |        | rev off           |                    |                |           |           |                     |   |
| Modulation | TUNE-UP information |        |        |        | Power Reduce (dB) | Target Power (dBm) | Tolerance (dB) | Min (dBm) | Max (dBm) |                     |   |
|            | 5 MHz               | 10 MHz | 15 MHz | 20 MHz |                   |                    |                |           |           |                     |   |
| QPSK       | 1                   | 1      | 1      | 1      | 3.0               | 19.9               | -1.5           | 1.0       | 18.4      | 20.9                | 0 |
| QPSK       | <8                  | <12    | <16    | <18    | 3.0               | 19.9               | -1.5           | 1.0       | 18.4      | 20.9                | 0 |
| QPSK       | >8                  | >12    | >16    | >18    | 3.0               | 19.9               | -1.5           | 1.0       | 18.4      | 20.9                | 1 |
| 16 QAM     | 1                   | 1      | 1      | 1      | 3.0               | 19.9               | -1.5           | 1.0       | 18.4      | 20.9                | 1 |
| 16 QAM     | <8                  | <12    | <16    | <18    | 3.0               | 19.9               | -1.5           | 1.0       | 18.4      | 20.9                | 1 |
| 16 QAM     | >8                  | >12    | >16    | >18    | 3.0               | 19.9               | -1.5           | 1.0       | 18.4      | 20.9                | 2 |

| Antenna    |                 |        |        |        | Second Antenna       |                    |                |           |           |      |                     |
|------------|-----------------|--------|--------|--------|----------------------|--------------------|----------------|-----------|-----------|------|---------------------|
| LTE Band   |                 |        |        |        | LTE B7               |                    |                |           |           |      |                     |
| EUT State  |                 |        |        |        | hotspot              |                    |                |           |           |      |                     |
| Modulation | Power Reduction |        |        |        | TUNE-UP Information  |                    |                |           |           |      | MPR allowed by 3GPP |
|            | 5 MHz           | 10 MHz | 15 MHz | 20 MHz | Power Reduction (dB) | Target Power (dBm) | Tolerance (dB) | Min (dBm) | Max (dBm) |      |                     |
| QPSK       | 1               | 1      | 1      | 1      | 5.5                  | 17.4               | -1.5           | 1.0       | 15.9      | 18.4 | 0                   |
| QPSK       | <8              | <12    | <16    | <18    | 5.5                  | 17.4               | -1.5           | 1.0       | 15.9      | 18.4 | 0                   |
| QPSK       | >8              | >12    | >16    | >18    | 5.5                  | 17.4               | -1.5           | 1.0       | 15.9      | 18.4 | 1                   |
| 16 QAM     | 1               | 1      | 1      | 1      | 5.5                  | 17.4               | -1.5           | 1.0       | 15.9      | 18.4 | 1                   |
| 16 QAM     | <8              | <12    | <16    | <18    | 5.5                  | 17.4               | -1.5           | 1.0       | 15.9      | 18.4 | 1                   |
| 16 QAM     | >8              | >12    | >16    | >18    | 5.5                  | 17.4               | -1.5           | 1.0       | 15.9      | 18.4 | 2                   |

| Antenna    |          |           | Second antenna      |                    |                |           |           |                          |
|------------|----------|-----------|---------------------|--------------------|----------------|-----------|-----------|--------------------------|
| LTE Band   |          |           | LTE B13             |                    |                |           |           |                          |
| EUT State  |          |           | rev on              |                    |                |           |           |                          |
| Modulation |          |           | TUNE-UP Information |                    |                |           |           | MPR allowed by 3GPP (dB) |
|            | 5 MHz    | 10 MHz    | Power Reduce (dB)   | Target Power (dBm) | Tolerance (dB) | Min (dBm) | Max (dBm) |                          |
| QPSK       | 1        | 1         | 1.0                 | 22.8               | -1.5           | 1.0       | 21.3      | 23.8                     |
| QPSK       | $\leq 8$ | $\leq 12$ | 1.0                 | 22.8               | -1.5           | 1.0       | 21.3      | 23.8                     |
| QPSK       | $> 8$    | $> 12$    | 1.0                 | 22.8               | -1.5           | 1.0       | 21.3      | 23.8                     |
| 16 QAM     | 1        | 1         | 1.0                 | 22.8               | -1.5           | 1.0       | 21.3      | 23.8                     |
| 16 QAM     | $\leq 8$ | $\leq 12$ | 1.0                 | 22.8               | -1.5           | 1.0       | 21.3      | 23.8                     |
| 16 QAM     | $> 8$    | $> 12$    | 1.0                 | 21.8               | -1.5           | 1.0       | 20.3      | 22.8                     |

| Antenna    |       |        | Second antenna      |                    |                |           |           |                          |
|------------|-------|--------|---------------------|--------------------|----------------|-----------|-----------|--------------------------|
| LTE Band   |       |        | LTE B13             |                    |                |           |           |                          |
| EUT State  |       |        | rev off             |                    |                |           |           |                          |
| Modulation |       |        | TUNE-UP Information |                    |                |           |           | MPR allowed by 3GPP (dB) |
|            | 5 MHz | 10 MHz | Power Reduce (dB)   | Target Power (dBm) | Tolerance (dB) | Min (dBm) | Max (dBm) |                          |
| QPSK       | 1     | 1      | 0.0                 | 23.8               | -1.5           | 1.0       | 22.3      | 24.8                     |
| QPSK       | ≤ 8   | ≤ 12   | 0.0                 | 23.8               | -1.5           | 1.0       | 22.3      | 24.8                     |
| QPSK       | > 8   | > 12   | 0.0                 | 22.8               | -1.5           | 1.0       | 21.3      | 23.8                     |
| 16 QAM     | 1     | 1      | 0.0                 | 22.8               | -1.5           | 1.0       | 21.3      | 23.8                     |
| 16 QAM     | ≤ 8   | ≤ 12   | 0.0                 | 22.8               | -1.5           | 1.0       | 21.3      | 23.8                     |
| 16 QAM     | > 8   | > 12   | 0.0                 | 21.8               | -1.5           | 1.0       | 20.3      | 22.8                     |

| Antenna    |          |           | Second antenna      |                    |                |           |                          |      |           |
|------------|----------|-----------|---------------------|--------------------|----------------|-----------|--------------------------|------|-----------|
| LTE Band   |          |           | LTE B13             |                    |                |           |                          |      |           |
| EUT State  |          |           | hotspot             |                    |                |           |                          |      |           |
| Modulation |          |           | TUNE-UP Information |                    |                |           | MPR allowed by 3GPP (dB) |      |           |
|            | 5 MHz    | 10 MHz    | Power Reduce (dB)   | Target Power (dBm) | Tolerance (dB) | Min (dBm) |                          |      | Max (dBm) |
| QPSK       | 1        | 1         | 1.5                 | 22.3               | -1.5           | 1.0       | 20.8                     | 23.3 | 0         |
| QPSK       | $\leq 8$ | $\leq 12$ | 1.5                 | 22.3               | -1.5           | 1.0       | 20.8                     | 23.3 | 0         |
| QPSK       | $> 8$    | $> 12$    | 1.5                 | 22.3               | -1.5           | 1.0       | 20.8                     | 23.3 | 1         |
| 16 QAM     | 1        | 1         | 1.5                 | 22.3               | -1.5           | 1.0       | 20.8                     | 23.3 | 1         |
| 16 QAM     | $\leq 8$ | $\leq 12$ | 1.5                 | 22.3               | -1.5           | 1.0       | 20.8                     | 23.3 | 1         |
| 16 QAM     | $> 8$    | $> 12$    | 1.5                 | 21.8               | -1.5           | 1.0       | 20.3                     | 22.8 | 2         |

| Antenna    |                     |       |       |        |        | Second antenna    |                     |                |           |           |                          |   |
|------------|---------------------|-------|-------|--------|--------|-------------------|---------------------|----------------|-----------|-----------|--------------------------|---|
| LTE Band   |                     |       |       |        |        | LTE B26           |                     |                |           |           |                          |   |
| EUT State  |                     |       |       |        |        | rev on            |                     |                |           |           |                          |   |
| Modulation | TUNE-UP Information |       |       |        |        | Power Reduce (dB) | TUNE-UP Information |                |           |           | MPR allowed by 3GPP (dB) |   |
|            | 1.4MHz              | 3 MHz | 5 MHz | 10 MHz | 15 MHz |                   | Target Power (dBm)  | Tolerance (dB) | Min (dBm) | Max (dBm) |                          |   |
| QPSK       | 1                   | 1     | 1     | 1      | 1      | 1.0               | 23.0                | -1.5           | 1.0       | 21.5      | 24.0                     | 0 |
| QPSK       | ≤ 5                 | ≤ 4   | ≤ 8   | ≤ 12   | ≤ 16   | 1.0               | 23.0                | -1.5           | 1.0       | 21.5      | 24.0                     | 0 |
| QPSK       | ≤ 5                 | ≤ 4   | ≤ 8   | ≤ 12   | ≤ 16   | 1.0               | 23.0                | -1.5           | 1.0       | 21.5      | 24.0                     | 0 |
| 16 QAM     | 1                   | 1     | 1     | 1      | 1      | 1.0               | 23.0                | -1.5           | 1.0       | 21.5      | 24.0                     | 1 |
| 16 QAM     | ≤ 5                 | ≤ 4   | ≤ 8   | ≤ 12   | ≤ 16   | 1.0               | 23.0                | -1.5           | 1.0       | 21.5      | 24.0                     | 1 |
| 16 QAM     | ≤ 5                 | ≤ 4   | ≤ 8   | ≤ 12   | ≤ 16   | 1.0               | 23.0                | -1.5           | 1.0       | 21.5      | 24.0                     | 1 |
| 16 QAM     | ≤ 5                 | ≤ 4   | ≤ 8   | ≤ 12   | ≤ 16   | 1.0               | 22.0                | -1.5           | 1.0       | 20.5      | 23.0                     | 2 |

|            |       | Antenna  |       |        |        |                      | Second antenna        |                   |              |              |                        |   |
|------------|-------|----------|-------|--------|--------|----------------------|-----------------------|-------------------|--------------|--------------|------------------------|---|
|            |       | LTE Band |       |        |        |                      | LTE B26               |                   |              |              |                        |   |
|            |       | EUT STA  |       |        |        |                      | rev off               |                   |              |              |                        |   |
| Modulation |       |          |       |        |        | Power Reduce<br>(dB) | TUNE-Up Information   |                   |              |              | MPR allowed<br>by 3GPP |   |
|            | 14MHz | 3 MHz    | 5 MHz | 10 MHz | 15 MHz |                      | Target Power<br>(dBm) | Tolerance<br>(dB) | Min<br>(dBm) | Max<br>(dBm) |                        |   |
| QPSK       | 1     | 1        | 1     | 1      | 1      | 0.0                  | 24.0                  | -1.5              | 1.0          | 22.5         | 25.0                   | 0 |
| QPSK       | <5    | <4       | <8    | <12    | <16    | 0.0                  | 24.0                  | -1.5              | 1.0          | 22.5         | 25.0                   | 0 |
| QPSK       | >5    | >4       | >8    | >12    | >16    | 0.0                  | 23.0                  | -1.5              | 1.0          | 21.5         | 24.0                   | 1 |
| 16 QAM     | 1     | 1        | 1     | 1      | 1      | 0.0                  | 23.0                  | -1.5              | 1.0          | 21.5         | 24.0                   | 1 |
| 16 QAM     | <5    | <4       | <8    | <12    | <16    | 0.0                  | 23.0                  | -1.5              | 1.0          | 21.5         | 24.0                   | 1 |
| 16 QAM     | >5    | >4       | >8    | >12    | >16    | 0.0                  | 22.0                  | -1.5              | 1.0          | 20.5         | 23.0                   | 2 |

|            |                     | Antenna  |       |        |        |                   | Second antenna     |                |           |           |              |   |
|------------|---------------------|----------|-------|--------|--------|-------------------|--------------------|----------------|-----------|-----------|--------------|---|
|            |                     | LTE Band |       |        |        |                   | LTE B26            |                |           |           |              |   |
|            |                     | EUT SA   |       |        |        |                   | hospot             |                |           |           |              |   |
| Modulation | TUNE-UP information |          |       |        |        | MPR allowed       |                    |                |           |           |              |   |
|            | 1.4MHz              | 3MHz     | 5 MHz | 10 MHz | 15 MHz | Power Reduce (dB) | Target Power (dBm) | Tolerance (dB) | Min (dBm) | Max (dBm) | by 3GPP (dB) |   |
| QPSK       | 1                   | 1        | 1     | 1      | 1      | 1.5               | 22.5               | -1.5           | 1.0       | 21.0      | 23.5         | 0 |
| QPSK       | <5                  | <4       | <8    | <12    | <16    | 1.5               | 22.5               | -1.5           | 1.0       | 21.0      | 23.5         | 0 |
| QPSK       | >5                  | >4       | >8    | >12    | >16    | 1.5               | 22.5               | -1.5           | 1.0       | 21.0      | 23.5         | 1 |
| 16 QAM     | 1                   | 1        | 1     | 1      | 1      | 1.5               | 22.5               | -1.5           | 1.0       | 21.0      | 23.5         | 1 |
| 16 QAM     | <5                  | <4       | <8    | <12    | <16    | 1.5               | 22.5               | -1.5           | 1.0       | 21.0      | 23.5         | 1 |
| 16 QAM     | >5                  | >4       | >8    | >12    | >16    | 1.5               | 22.5               | -1.5           | 1.0       | 21.0      | 23.5         | 1 |

| Antenna    |        |       |       |        |        |              |                   |                    |                |                          |
|------------|--------|-------|-------|--------|--------|--------------|-------------------|--------------------|----------------|--------------------------|
| LTE Band   |        |       |       |        |        | Main antenna |                   |                    |                |                          |
| EUT State  |        |       |       |        |        | LTE B66      |                   |                    |                |                          |
|            |        |       |       |        |        | rev on       |                   |                    |                |                          |
| Modulation | 1.4MHz | 3 MHz | 5 MHz | 10 MHz | 15 MHz | 20 MHz       | Power Reduce (dB) | Target Power (dBm) | Tolerance (dB) | MPR allowed by 3GPP (dB) |
| QPSK       | 1      | 1     | 1     | 1      | 1      | 1            | 0.0               | 22.5               | -1.5           | 1.0                      |
| QPSK       | ≤5     | ≤4    | ≤8    | ≤12    | ≤16    | ≤18          | 0.0               | 22.5               | -1.5           | 1.0                      |
| QPSK       | >5     | >4    | >8    | >12    | >16    | >18          | 0.0               | 22.5               | -1.5           | 1.0                      |
| 16 QAM     | 1      | 1     | 1     | 1      | 1      | 1            | 0.0               | 22.5               | -1.5           | 1.0                      |
| 16 QAM     | ≤5     | ≤4    | ≤8    | ≤12    | ≤16    | ≤18          | 0.0               | 22.5               | -1.5           | 1.0                      |
| 16 QAM     | >5     | >4    | >8    | >12    | >16    | >18          | 0.0               | 21.5               | -1.5           | 1.0                      |

| Antenna    |        |       |       |        |        |                |                   |                    |                |                          |
|------------|--------|-------|-------|--------|--------|----------------|-------------------|--------------------|----------------|--------------------------|
| LTE Band   |        |       |       |        |        | Second antenna |                   |                    |                |                          |
| EUT State  |        |       |       |        |        | LTE B66        |                   |                    |                |                          |
|            |        |       |       |        |        | rev on         |                   |                    |                |                          |
| Modulation | 1.4MHz | 3 MHz | 5 MHz | 10 MHz | 15 MHz | 20 MHz         | Power Reduce (dB) | Target Power (dBm) | Tolerance (dB) | MPR allowed by 3GPP (dB) |
| QPSK       | 1      | 1     | 1     | 1      | 1      | 1              | 5.5               | 18.0               | -1.5           | 1.0                      |
| QPSK       | ≤5     | ≤4    | ≤8    | ≤12    | ≤16    | ≤18            | 5.5               | 18.0               | -1.5           | 1.0                      |
| QPSK       | >5     | >4    | >8    | >12    | >16    | >18            | 5.5               | 18.0               | -1.5           | 1.0                      |
| 16 QAM     | 1      | 1     | 1     | 1      | 1      | 1              | 5.5               | 18.0               | -1.5           | 1.0                      |
| 16 QAM     | ≤5     | ≤4    | ≤8    | ≤12    | ≤16    | ≤18            | 5.5               | 18.0               | -1.5           | 1.0                      |
| 16 QAM     | >5     | >4    | >8    | >12    | >16    | >18            | 5.5               | 18.0               | -1.5           | 1.0                      |

| Antenna    |       |        |        |        |                   |                    |                |           |           |                          |
|------------|-------|--------|--------|--------|-------------------|--------------------|----------------|-----------|-----------|--------------------------|
| LTE Band   |       |        |        |        |                   | Main antenna       |                |           |           |                          |
| EUT State  |       |        |        |        |                   | LTE B38            |                |           |           |                          |
|            |       |        |        |        |                   | rev on             |                |           |           |                          |
| Modulation | 5 MHz | 10 MHz | 15 MHz | 20 MHz | Power Reduce (dB) | Target Power (dBm) | Tolerance (dB) | Min (dBm) | Max (dBm) | MPR allowed by 3GPP (dB) |
| QPSK       | 1     | 1      | 1      | 1      | 0.0               | 23.0               | -1.5           | 1.0       | 21.5      | 24.0                     |
| QPSK       | ≤8    | ≤12    | ≤16    | ≤18    | 0.0               | 23.0               | -1.5           | 1.0       | 21.5      | 24.0                     |
| QPSK       | >8    | >12    | >16    | >18    | 0.0               | 22.0               | -1.5           | 1.0       | 20.5      | 23.0                     |
| 16 QAM     | 1     | 1      | 1      | 1      | 0.0               | 22.0               | -1.5           | 1.0       | 20.5      | 23.0                     |
| 16 QAM     | ≤8    | ≤12    | ≤16    | ≤18    | 0.0               | 22.0               | -1.5           | 1.0       | 20.5      | 23.0                     |
| 16 QAM     | >8    | >12    | >16    | >18    | 0.0               | 21.0               | -1.5           | 1.0       | 19.5      | 22.0                     |

| Antenna    |       |        |        |        |                   |                    |                |           |           |                          |
|------------|-------|--------|--------|--------|-------------------|--------------------|----------------|-----------|-----------|--------------------------|
| LTE Band   |       |        |        |        |                   | Second antenna     |                |           |           |                          |
| EUT State  |       |        |        |        |                   | LTE B38            |                |           |           |                          |
|            |       |        |        |        |                   | rev on             |                |           |           |                          |
| Modulation | 5 MHz | 10 MHz | 15 MHz | 20 MHz | Power Reduce (dB) | Target Power (dBm) | Tolerance (dB) | Min (dBm) | Max (dBm) | MPR allowed by 3GPP (dB) |
| QPSK       | 1     | 1      | 1      | 1      | 0.0               | 23.0               | -1.5           | 1.0       | 21.5      | 24.0                     |
| QPSK       | ≤8    | ≤12    | ≤16    | ≤18    | 0.0               | 23.0               | -1.5           | 1.0       | 21.5      | 24.0                     |
| QPSK       | >8    | >12    | >16    | >18    | 0.0               | 22.0               | -1.5           | 1.0       | 20.5      | 23.0                     |
| 16 QAM     | 1     | 1      | 1      | 1      | 0.0               | 22.0               | -1.5           | 1.0       | 20.5      | 23.0                     |
| 16 QAM     | ≤8    | ≤12    | ≤16    | ≤18    | 0.0               | 22.0               | -1.5           | 1.0       | 20.5      | 23.0                     |
| 16 QAM     | >8    | >12    | >16    | >18    | 0.0               | 21.0               | -1.5           | 1.0       | 19.5      | 22.0                     |

## 11.3.1 Main antenna

### LTEB2(receiver on)

| BANDWIDTH | Number of RBs  | Frequency      | QPSK  | 16QAM |
|-----------|----------------|----------------|-------|-------|
| 1.4MHz    | 1RB-High (5)   | 1909.3 (19193) | 23.32 | 22.40 |
|           |                | 1880 (18900)   | 23.30 | 22.56 |
|           |                | 1850.7 (18607) | 23.26 | 22.54 |
|           | 1RB-Middle (3) | 1909.3 (19193) | 23.40 | 22.54 |
|           |                | 1880 (18900)   | 23.43 | 22.56 |
|           |                |                |       |       |

|  |                |                |       |       |
|--|----------------|----------------|-------|-------|
|  |                | 1850.7 (18607) | 23.35 | 22.70 |
|  | 1RB-Low (0)    | 1909.3 (19193) | 23.27 | 22.45 |
|  |                | 1880 (18900)   | 23.29 | 22.57 |
|  |                | 1850.7 (18607) | 23.26 | 22.60 |
|  | 3RB-High (3)   | 1909.3 (19193) | 23.39 | 22.27 |
|  |                | 1880 (18900)   | 23.42 | 22.32 |
|  |                | 1850.7 (18607) | 23.38 | 22.35 |
|  | 3RB-Middle (1) | 1909.3 (19193) | 23.41 | 22.36 |
|  |                | 1880 (18900)   | 23.47 | 22.40 |
|  |                | 1850.7 (18607) | 23.43 | 22.40 |
|  | 3RB-Low (0)    | 1909.3 (19193) | 23.37 | 22.27 |
|  |                | 1880 (18900)   | 23.42 | 22.36 |
|  |                | 1850.7 (18607) | 23.35 | 22.36 |
|  | 6RB (0)        | 1909.3 (19193) | 22.35 | 21.45 |
|  |                | 1880 (18900)   | 22.40 | 21.50 |
|  |                | 1850.7 (18607) | 22.39 | 21.43 |

|      |                |                |       |       |
|------|----------------|----------------|-------|-------|
| 3MHz | 1RB-High (14)  | 1908.5 (19185) | 23.40 | 22.51 |
|      |                | 1880 (18900)   | 23.38 | 22.63 |
|      |                | 1851.5 (18615) | 23.31 | 22.63 |
|      | 1RB-Middle (7) | 1908.5 (19185) | 23.56 | 22.77 |

|  |                |                |       |       |
|--|----------------|----------------|-------|-------|
|  |                | 1880 (18900)   | 23.49 | 22.73 |
|  |                | 1851.5 (18615) | 23.49 | 22.79 |
|  | 1RB-Low (0)    | 1908.5 (19185) | 23.43 | 22.58 |
|  |                | 1880 (18900)   | 23.39 | 22.61 |
|  |                | 1851.5 (18615) | 23.35 | 22.61 |
|  | 8RB-High (7)   | 1908.5 (19185) | 22.38 | 21.37 |
|  |                | 1880 (18900)   | 22.43 | 21.46 |
|  |                | 1851.5 (18615) | 22.33 | 21.41 |
|  | 8RB-Middle (4) | 1908.5 (19185) | 22.47 | 21.44 |
|  |                | 1880 (18900)   | 22.44 | 21.50 |
|  |                | 1851.5 (18615) | 22.39 | 21.46 |
|  | 8RB-Low (0)    | 1908.5 (19185) | 22.39 | 21.42 |
|  |                | 1880 (18900)   | 22.42 | 21.49 |
|  |                | 1851.5 (18615) | 22.36 | 21.42 |
|  | 15RB (0)       | 1908.5 (19185) | 22.39 | 21.37 |
|  |                | 1880 (18900)   | 22.43 | 21.42 |
|  |                | 1851.5 (18615) | 22.34 | 21.36 |

|      |               |                |       |       |
|------|---------------|----------------|-------|-------|
| 5MHz | 1RB-High (24) | 1907.5 (19175) | 23.30 | 22.49 |
|      |               | 1880 (18900)   | 23.25 | 22.45 |
|      |               | 1852.5 (18625) | 23.26 | 22.44 |

|       |                 |                |       |       |
|-------|-----------------|----------------|-------|-------|
|       | 1RB-Middle (12) | 1907.5 (19175) | 23.58 | 22.81 |
|       |                 | 1880 (18900)   | 23.47 | 22.73 |
|       |                 | 1852.5 (18625) | 23.50 | 22.85 |
|       | 1RB-Low (0)     | 1907.5 (19175) | 23.30 | 22.55 |
|       |                 | 1880 (18900)   | 23.27 | 22.51 |
|       |                 | 1852.5 (18625) | 23.25 | 22.46 |
|       | 12RB-High (13)  | 1907.5 (19175) | 22.37 | 21.34 |
|       |                 | 1880 (18900)   | 22.45 | 21.42 |
|       |                 | 1852.5 (18625) | 22.35 | 21.33 |
|       | 12RB-Middle (6) | 1907.5 (19175) | 22.46 | 21.43 |
|       |                 | 1880 (18900)   | 22.48 | 21.46 |
|       |                 | 1852.5 (18625) | 22.38 | 21.40 |
|       | 12RB-Low (0)    | 1907.5 (19175) | 22.45 | 21.39 |
|       |                 | 1880 (18900)   | 22.44 | 21.41 |
|       |                 | 1852.5 (18625) | 22.29 | 21.25 |
|       | 25RB (0)        | 1907.5 (19175) | 22.43 | 21.41 |
|       |                 | 1880 (18900)   | 22.48 | 21.45 |
|       |                 | 1852.5 (18625) | 22.35 | 21.34 |
| 10MHz | 1RB-High (49)   | 1905 (19150)   | 23.38 | 22.55 |
|       |                 | 1880 (18900)   | 23.36 | 22.67 |

|       |                  |                |       |       |
|-------|------------------|----------------|-------|-------|
|       |                  | 1855 (18650)   | 23.31 | 22.69 |
|       | 1RB-Middle (24)  | 1905 (19150)   | 23.57 | 22.73 |
|       |                  | 1880 (18900)   | 23.51 | 22.67 |
|       |                  | 1855 (18650)   | 23.44 | 22.68 |
|       | 1RB-Low (0)      | 1905 (19150)   | 23.41 | 22.58 |
|       |                  | 1880 (18900)   | 23.36 | 22.60 |
|       |                  | 1855 (18650)   | 23.35 | 22.65 |
|       | 25RB-High (25)   | 1905 (19150)   | 22.49 | 21.42 |
|       |                  | 1880 (18900)   | 22.50 | 21.48 |
|       |                  | 1855 (18650)   | 22.40 | 21.40 |
|       | 25RB-Middle (12) | 1905 (19150)   | 22.53 | 21.45 |
|       |                  | 1880 (18900)   | 22.50 | 21.46 |
|       |                  | 1855 (18650)   | 22.41 | 21.40 |
|       | 25RB-Low (0)     | 1905 (19150)   | 22.49 | 21.47 |
|       |                  | 1880 (18900)   | 22.49 | 21.45 |
|       |                  | 1855 (18650)   | 22.35 | 21.35 |
|       | 50RB (0)         | 1905 (19150)   | 22.47 | 21.43 |
|       |                  | 1880 (18900)   | 22.47 | 21.45 |
|       |                  | 1855 (18650)   | 22.38 | 21.38 |
| 15MHz | 1RB-High (74)    | 1902.5 (19125) | 23.25 | 22.39 |

|  |                  |                |       |       |
|--|------------------|----------------|-------|-------|
|  |                  | 1880 (18900)   | 23.36 | 22.52 |
|  |                  | 1857.5 (18675) | 23.29 | 22.61 |
|  | 1RB-Middle (37)  | 1902.5 (19125) | 23.35 | 22.61 |
|  |                  | 1880 (18900)   | 23.40 | 22.70 |
|  |                  | 1857.5 (18675) | 23.34 | 22.73 |
|  | 1RB-Low (0)      | 1902.5 (19125) | 23.33 | 22.58 |
|  |                  | 1880 (18900)   | 23.25 | 22.53 |
|  |                  | 1857.5 (18675) | 23.31 | 22.65 |
|  | 36RB-High (38)   | 1902.5 (19125) | 22.40 | 21.33 |
|  |                  | 1880 (18900)   | 22.46 | 21.40 |
|  |                  | 1857.5 (18675) | 22.38 | 21.39 |
|  | 36RB-Middle (19) | 1902.5 (19125) | 22.47 | 21.41 |
|  |                  | 1880 (18900)   | 22.46 | 21.40 |
|  |                  | 1857.5 (18675) | 22.39 | 21.38 |
|  | 36RB-Low (0)     | 1902.5 (19125) | 22.46 | 21.43 |
|  |                  | 1880 (18900)   | 22.46 | 21.40 |
|  |                  | 1857.5 (18675) | 22.38 | 21.35 |
|  | 75RB (0)         | 1902.5 (19125) | 22.45 | 21.42 |
|  |                  | 1880 (18900)   | 22.49 | 21.47 |
|  |                  | 1857.5 (18675) | 22.36 | 21.39 |

|       |                  |              |       |       |
|-------|------------------|--------------|-------|-------|
| 20MHz | 1RB-High (99)    | 1900 (19100) | 23.10 | 22.31 |
|       |                  | 1880 (18900) | 23.16 | 22.39 |
|       |                  | 1860 (18700) | 23.08 | 22.39 |
|       | 1RB-Middle (50)  | 1900 (19100) | 23.42 | 22.72 |
|       |                  | 1880 (18900) | 23.46 | 22.67 |
|       |                  | 1860 (18700) | 23.39 | 22.74 |
|       | 1RB-Low (0)      | 1900 (19100) | 23.22 | 22.48 |
|       |                  | 1880 (18900) | 23.13 | 22.50 |
|       |                  | 1860 (18700) | 23.14 | 22.41 |
|       | 50RB-High (50)   | 1900 (19100) | 22.30 | 21.32 |
|       |                  | 1880 (18900) | 22.48 | 21.44 |
|       |                  | 1860 (18700) | 22.44 | 21.42 |
|       | 50RB-Middle (25) | 1900 (19100) | 22.46 | 21.47 |
|       |                  | 1880 (18900) | 22.44 | 21.42 |
|       |                  | 1860 (18700) | 22.39 | 21.41 |
|       | 50RB-Low (0)     | 1900 (19100) | 22.55 | 21.53 |
|       |                  | 1880 (18900) | 22.33 | 21.31 |
|       |                  | 1860 (18700) | 22.36 | 21.34 |
|       | 100RB (0)        | 1900 (19100) | 22.40 | 21.43 |
|       |                  | 1880 (18900) | 22.40 | 21.39 |

|  |  |              |       |       |
|--|--|--------------|-------|-------|
|  |  | 1860 (18700) | 22.39 | 21.37 |
|--|--|--------------|-------|-------|

**LTEB2 (receiver off)**

| BANDWIDTH | Number of RBs  | Frequency      | QPSK  | 16QAM |
|-----------|----------------|----------------|-------|-------|
| 1.4MHz    | 1RB-High (5)   | 1909.3 (19193) | 22.77 | 22.49 |
|           |                | 1880 (18900)   | 22.81 | 22.57 |
|           |                | 1850.7 (18607) | 22.80 | 22.57 |
|           | 1RB-Middle (3) | 1909.3 (19193) | 22.90 | 22.56 |
|           |                | 1880 (18900)   | 22.93 | 22.64 |
|           |                | 1850.7 (18607) | 22.94 | 22.66 |
|           | 1RB-Low (0)    | 1909.3 (19193) | 22.76 | 22.53 |
|           |                | 1880 (18900)   | 22.82 | 22.48 |
|           |                | 1850.7 (18607) | 22.81 | 22.59 |
|           | 3RB-High (3)   | 1909.3 (19193) | 22.88 | 22.28 |
|           |                | 1880 (18900)   | 22.91 | 22.37 |
|           |                | 1850.7 (18607) | 22.90 | 22.37 |
|           | 3RB-Middle (1) | 1909.3 (19193) | 22.93 | 22.32 |
|           |                | 1880 (18900)   | 22.97 | 22.43 |
|           |                | 1850.7 (18607) | 22.98 | 22.36 |
|           | 3RB-Low (0)    | 1909.3 (19193) | 22.87 | 22.34 |
|           |                | 1880 (18900)   | 22.91 | 22.30 |

|  |         |                |       |       |
|--|---------|----------------|-------|-------|
|  | 6RB (0) | 1850.7 (18607) | 22.88 | 22.36 |
|  |         | 1909.3 (19193) | 22.39 | 21.47 |
|  |         | 1880 (18900)   | 22.41 | 21.48 |
|  |         | 1850.7 (18607) | 22.40 | 21.49 |

|      |                |                |       |       |
|------|----------------|----------------|-------|-------|
| 3MHz | 1RB-High (14)  | 1908.5 (19185) | 22.85 | 22.54 |
|      |                | 1880 (18900)   | 22.88 | 22.62 |
|      |                | 1851.5 (18615) | 22.82 | 22.54 |
|      | 1RB-Middle (7) | 1908.5 (19185) | 22.97 | 22.73 |
|      |                | 1880 (18900)   | 23.01 | 22.83 |
|      |                | 1851.5 (18615) | 23.00 | 22.78 |
|      | 1RB-Low (0)    | 1908.5 (19185) | 22.85 | 22.59 |
|      |                | 1880 (18900)   | 22.89 | 22.59 |
|      |                | 1851.5 (18615) | 22.84 | 22.70 |
|      | 8RB-High (7)   | 1908.5 (19185) | 22.38 | 21.40 |
|      |                | 1880 (18900)   | 22.42 | 21.43 |
|      |                | 1851.5 (18615) | 22.37 | 21.45 |
|      | 8RB-Middle (4) | 1908.5 (19185) | 22.40 | 21.47 |
|      |                | 1880 (18900)   | 22.45 | 21.47 |
|      |                | 1851.5 (18615) | 22.37 | 21.48 |
|      | 8RB-Low (0)    | 1908.5 (19185) | 22.38 | 21.46 |

|  |          |                |       |       |
|--|----------|----------------|-------|-------|
|  |          | 1880 (18900)   | 22.40 | 21.48 |
|  |          | 1851.5 (18615) | 22.37 | 21.45 |
|  | 15RB (0) | 1908.5 (19185) | 22.39 | 21.38 |
|  |          | 1880 (18900)   | 22.40 | 21.41 |
|  |          | 1851.5 (18615) | 22.35 | 21.37 |
|  |          |                |       |       |

|      |                 |                |       |       |
|------|-----------------|----------------|-------|-------|
| 5MHz | 1RB-High (24)   | 1907.5 (19175) | 22.73 | 22.40 |
|      |                 | 1880 (18900)   | 22.77 | 22.47 |
|      |                 | 1852.5 (18625) | 22.72 | 22.45 |
|      | 1RB-Middle (12) | 1907.5 (19175) | 23.06 | 22.81 |
|      |                 | 1880 (18900)   | 23.04 | 22.79 |
|      |                 | 1852.5 (18625) | 23.04 | 22.83 |
|      | 1RB-Low (0)     | 1907.5 (19175) | 22.76 | 22.50 |
|      |                 | 1880 (18900)   | 22.78 | 22.54 |
|      |                 | 1852.5 (18625) | 22.77 | 22.48 |
|      | 12RB-High (13)  | 1907.5 (19175) | 22.34 | 21.31 |
|      |                 | 1880 (18900)   | 22.41 | 21.33 |
|      |                 | 1852.5 (18625) | 22.37 | 21.39 |
|      | 12RB-Middle (6) | 1907.5 (19175) | 22.42 | 21.40 |
|      |                 | 1880 (18900)   | 22.48 | 21.43 |
|      |                 | 1852.5 (18625) | 22.41 | 21.39 |

|  |              |                |       |       |
|--|--------------|----------------|-------|-------|
|  | 12RB-Low (0) | 1907.5 (19175) | 22.42 | 21.40 |
|  |              | 1880 (18900)   | 22.39 | 21.41 |
|  |              | 1852.5 (18625) | 22.31 | 21.31 |
|  | 25RB (0)     | 1907.5 (19175) | 22.41 | 21.40 |
|  |              | 1880 (18900)   | 22.43 | 21.44 |
|  |              | 1852.5 (18625) | 22.35 | 21.37 |

|       |                  |              |       |       |
|-------|------------------|--------------|-------|-------|
| 10MHz | 1RB-High (49)    | 1905 (19150) | 22.80 | 22.60 |
|       |                  | 1880 (18900) | 22.83 | 22.65 |
|       |                  | 1855 (18650) | 22.82 | 22.54 |
|       | 1RB-Middle (24)  | 1905 (19150) | 22.99 | 22.77 |
|       |                  | 1880 (18900) | 22.97 | 22.63 |
|       |                  | 1855 (18650) | 22.95 | 22.71 |
|       | 1RB-Low (0)      | 1905 (19150) | 22.84 | 22.67 |
|       |                  | 1880 (18900) | 22.87 | 22.67 |
|       |                  | 1855 (18650) | 22.86 | 22.67 |
|       | 25RB-High (25)   | 1905 (19150) | 22.40 | 21.42 |
|       |                  | 1880 (18900) | 22.47 | 21.44 |
|       |                  | 1855 (18650) | 22.40 | 21.42 |
|       | 25RB-Middle (12) | 1905 (19150) | 22.46 | 21.44 |
|       |                  | 1880 (18900) | 22.46 | 21.45 |

|  |              |              |       |       |
|--|--------------|--------------|-------|-------|
|  | 25RB-Low (0) | 1855 (18650) | 22.42 | 21.43 |
|  |              | 1905 (19150) | 22.48 | 21.45 |
|  |              | 1880 (18900) | 22.44 | 21.43 |
|  |              | 1855 (18650) | 22.38 | 21.39 |
|  | 50RB (0)     | 1905 (19150) | 22.44 | 21.43 |
|  |              | 1880 (18900) | 22.44 | 21.44 |
|  |              | 1855 (18650) | 22.40 | 21.40 |

|       |                  |                |       |       |
|-------|------------------|----------------|-------|-------|
| 15MHz | 1RB-High (74)    | 1902.5 (19125) | 22.75 | 22.50 |
|       |                  | 1880 (18900)   | 22.80 | 22.58 |
|       |                  | 1857.5 (18675) | 22.75 | 22.61 |
|       | 1RB-Middle (37)  | 1902.5 (19125) | 22.85 | 22.64 |
|       |                  | 1880 (18900)   | 22.91 | 22.68 |
|       |                  | 1857.5 (18675) | 22.86 | 22.63 |
|       | 1RB-Low (0)      | 1902.5 (19125) | 22.83 | 22.63 |
|       |                  | 1880 (18900)   | 22.78 | 22.51 |
|       |                  | 1857.5 (18675) | 22.80 | 22.56 |
|       | 36RB-High (38)   | 1902.5 (19125) | 22.38 | 21.38 |
|       |                  | 1880 (18900)   | 22.45 | 21.39 |
|       |                  | 1857.5 (18675) | 22.38 | 21.34 |
|       | 36RB-Middle (19) | 1902.5 (19125) | 22.44 | 21.40 |

|  |              |                |       |       |
|--|--------------|----------------|-------|-------|
|  |              | 1880 (18900)   | 22.42 | 21.39 |
|  |              | 1857.5 (18675) | 22.40 | 21.39 |
|  | 36RB-Low (0) | 1902.5 (19125) | 22.47 | 21.42 |
|  |              | 1880 (18900)   | 22.43 | 21.36 |
|  |              | 1857.5 (18675) | 22.37 | 21.34 |
|  | 75RB (0)     | 1902.5 (19125) | 22.41 | 21.42 |
|  |              | 1880 (18900)   | 22.43 | 21.41 |
|  |              | 1857.5 (18675) | 22.38 | 21.38 |

|       |                 |              |       |       |
|-------|-----------------|--------------|-------|-------|
| 20MHz | 1RB-High (99)   | 1900 (19100) | 22.64 | 22.37 |
|       |                 | 1880 (18900) | 22.67 | 22.50 |
|       |                 | 1860 (18700) | 22.61 | 22.40 |
|       | 1RB-Middle (50) | 1900 (19100) | 22.95 | 22.75 |
|       |                 | 1880 (18900) | 22.98 | 22.74 |
|       |                 | 1860 (18700) | 22.90 | 22.67 |
|       | 1RB-Low (0)     | 1900 (19100) | 22.75 | 22.58 |
|       |                 | 1880 (18900) | 22.64 | 22.38 |
|       |                 | 1860 (18700) | 22.65 | 22.36 |
|       | 50RB-High (50)  | 1900 (19100) | 22.36 | 21.37 |
|       |                 | 1880 (18900) | 22.46 | 21.46 |
|       |                 | 1860 (18700) | 22.44 | 21.46 |

|  |                  |              |       |       |
|--|------------------|--------------|-------|-------|
|  | 50RB-Middle (25) | 1900 (19100) | 22.48 | 21.47 |
|  |                  | 1880 (18900) | 22.46 | 21.46 |
|  |                  | 1860 (18700) | 22.42 | 21.43 |
|  | 50RB-Low (0)     | 1900 (19100) | 22.54 | 21.54 |
|  |                  | 1880 (18900) | 22.33 | 21.32 |
|  |                  | 1860 (18700) | 22.37 | 21.38 |
|  | 100RB (0)        | 1900 (19100) | 22.47 | 21.44 |
|  |                  | 1880 (18900) | 22.42 | 21.38 |
|  |                  | 1860 (18700) | 22.38 | 21.38 |

#### LTEB2 (Hostpot)

| BANDWIDTH | Number of RBs  | Frequency      | QPSK  | 16QAM |
|-----------|----------------|----------------|-------|-------|
| 1.4MHz    | 1RB-High (5)   | 1909.3 (19193) | 18.87 | 19.24 |
|           |                | 1880 (18900)   | 18.88 | 19.22 |
|           |                | 1850.7 (18607) | 18.86 | 19.22 |
|           | 1RB-Middle (3) | 1909.3 (19193) | 18.97 | 19.36 |
|           |                | 1880 (18900)   | 19.00 | 19.38 |
|           |                | 1850.7 (18607) | 18.94 | 19.29 |
|           | 1RB-Low (0)    | 1909.3 (19193) | 18.84 | 19.08 |
|           |                | 1880 (18900)   | 18.82 | 19.30 |
|           |                | 1850.7 (18607) | 18.83 | 19.12 |

|  |                |                |       |       |
|--|----------------|----------------|-------|-------|
|  | 3RB-High (3)   | 1909.3 (19193) | 18.98 | 19.01 |
|  |                | 1880 (18900)   | 18.97 | 18.95 |
|  |                | 1850.7 (18607) | 18.96 | 18.93 |
|  | 3RB-Middle (1) | 1909.3 (19193) | 19.02 | 18.99 |
|  |                | 1880 (18900)   | 19.00 | 18.97 |
|  |                | 1850.7 (18607) | 18.97 | 18.98 |
|  | 3RB-Low (0)    | 1909.3 (19193) | 18.95 | 18.97 |
|  |                | 1880 (18900)   | 18.96 | 18.98 |
|  |                | 1850.7 (18607) | 18.96 | 18.98 |
|  | 6RB (0)        | 1909.3 (19193) | 18.93 | 19.06 |
|  |                | 1880 (18900)   | 18.95 | 19.10 |
|  |                | 1850.7 (18607) | 18.96 | 19.10 |

|      |                |                |       |       |
|------|----------------|----------------|-------|-------|
| 3MHz | 1RB-High (14)  | 1908.5 (19185) | 18.94 | 19.22 |
|      |                | 1880 (18900)   | 18.92 | 19.19 |
|      |                | 1851.5 (18615) | 18.89 | 19.16 |
|      | 1RB-Middle (7) | 1908.5 (19185) | 19.08 | 19.33 |
|      |                | 1880 (18900)   | 19.14 | 19.55 |
|      |                | 1851.5 (18615) | 19.06 | 19.40 |
|      | 1RB-Low (0)    | 1908.5 (19185) | 18.92 | 19.22 |
|      |                | 1880 (18900)   | 18.92 | 19.29 |

|  |                |                |       |       |
|--|----------------|----------------|-------|-------|
|  | 8RB-High (7)   | 1851.5 (18615) | 18.92 | 19.34 |
|  |                | 1908.5 (19185) | 18.95 | 19.04 |
|  |                | 1880 (18900)   | 18.97 | 19.06 |
|  |                | 1851.5 (18615) | 18.92 | 19.02 |
|  | 8RB-Middle (4) | 1908.5 (19185) | 18.98 | 19.05 |
|  |                | 1880 (18900)   | 19.01 | 19.09 |
|  |                | 1851.5 (18615) | 18.95 | 19.07 |
|  | 8RB-Low (0)    | 1908.5 (19185) | 18.95 | 19.06 |
|  |                | 1880 (18900)   | 18.96 | 19.07 |
|  |                | 1851.5 (18615) | 18.93 | 19.03 |
|  | 15RB (0)       | 1908.5 (19185) | 18.94 | 18.97 |
|  |                | 1880 (18900)   | 18.96 | 19.00 |
|  |                | 1851.5 (18615) | 18.92 | 18.95 |

|      |                 |                |       |       |
|------|-----------------|----------------|-------|-------|
| 5MHz | 1RB-High (24)   | 1907.5 (19175) | 18.82 | 19.07 |
|      |                 | 1880 (18900)   | 18.83 | 19.17 |
|      |                 | 1852.5 (18625) | 18.81 | 19.15 |
|      | 1RB-Middle (12) | 1907.5 (19175) | 19.10 | 19.30 |
|      |                 | 1880 (18900)   | 19.08 | 19.33 |
|      |                 | 1852.5 (18625) | 19.09 | 19.40 |
|      | 1RB-Low (0)     | 1907.5 (19175) | 18.83 | 19.21 |

|  |                 |                |       |       |
|--|-----------------|----------------|-------|-------|
|  |                 | 1880 (18900)   | 18.86 | 19.24 |
|  |                 | 1852.5 (18625) | 18.85 | 19.13 |
|  | 12RB-High (13)  | 1907.5 (19175) | 18.92 | 18.93 |
|  |                 | 1880 (18900)   | 18.96 | 18.98 |
|  |                 | 1852.5 (18625) | 18.95 | 19.00 |
|  | 12RB-Middle (6) | 1907.5 (19175) | 19.00 | 19.01 |
|  |                 | 1880 (18900)   | 19.03 | 19.05 |
|  |                 | 1852.5 (18625) | 18.96 | 19.00 |
|  | 12RB-Low (0)    | 1907.5 (19175) | 19.02 | 19.02 |
|  |                 | 1880 (18900)   | 18.99 | 19.00 |
|  |                 | 1852.5 (18625) | 18.93 | 18.97 |
|  | 25RB (0)        | 1907.5 (19175) | 18.96 | 18.99 |
|  |                 | 1880 (18900)   | 18.98 | 19.02 |
|  |                 | 1852.5 (18625) | 18.96 | 19.01 |

|       |                 |              |       |       |
|-------|-----------------|--------------|-------|-------|
| 10MHz | 1RB-High (49)   | 1905 (19150) | 18.90 | 19.22 |
|       |                 | 1880 (18900) | 18.88 | 19.17 |
|       |                 | 1855 (18650) | 18.87 | 19.26 |
|       | 1RB-Middle (24) | 1905 (19150) | 19.07 | 19.41 |
|       |                 | 1880 (18900) | 19.08 | 19.46 |
|       |                 | 1855 (18650) | 19.00 | 19.41 |

|  |                  |              |       |       |
|--|------------------|--------------|-------|-------|
|  | 1RB-Low (0)      | 1905 (19150) | 18.91 | 19.29 |
|  |                  | 1880 (18900) | 18.91 | 19.28 |
|  |                  | 1855 (18650) | 18.90 | 19.24 |
|  | 25RB-High (25)   | 1905 (19150) | 18.87 | 18.90 |
|  |                  | 1880 (18900) | 18.98 | 18.99 |
|  |                  | 1855 (18650) | 18.89 | 19.01 |
|  | 25RB-Middle (12) | 1905 (19150) | 19.00 | 19.04 |
|  |                  | 1880 (18900) | 18.98 | 19.02 |
|  |                  | 1855 (18650) | 18.96 | 19.00 |
|  | 25RB-Low (0)     | 1905 (19150) | 18.98 | 19.02 |
|  |                  | 1880 (18900) | 18.94 | 18.98 |
|  |                  | 1855 (18650) | 18.89 | 18.98 |
|  | 50RB (0)         | 1905 (19150) | 18.91 | 18.97 |
|  |                  | 1880 (18900) | 18.95 | 18.95 |
|  |                  | 1855 (18650) | 18.88 | 19.01 |

|       |                 |                |       |       |
|-------|-----------------|----------------|-------|-------|
| 15MHz | 1RB-High (74)   | 1902.5 (19125) | 18.84 | 19.13 |
|       |                 | 1880 (18900)   | 18.87 | 19.13 |
|       |                 | 1857.5 (18675) | 18.82 | 19.23 |
|       | 1RB-Middle (37) | 1902.5 (19125) | 18.95 | 19.32 |
|       |                 | 1880 (18900)   | 18.94 | 19.23 |

|  |                  |                |       |       |
|--|------------------|----------------|-------|-------|
|  |                  | 1857.5 (18675) | 18.89 | 19.28 |
|  | 1RB-Low (0)      | 1902.5 (19125) | 18.89 | 19.30 |
|  |                  | 1880 (18900)   | 18.82 | 19.23 |
|  |                  | 1857.5 (18675) | 18.85 | 19.19 |
|  | 36RB-High (38)   | 1902.5 (19125) | 18.90 | 18.89 |
|  |                  | 1880 (18900)   | 18.97 | 18.97 |
|  |                  | 1857.5 (18675) | 18.92 | 18.98 |
|  | 36RB-Middle (19) | 1902.5 (19125) | 18.99 | 19.00 |
|  |                  | 1880 (18900)   | 18.97 | 18.96 |
|  |                  | 1857.5 (18675) | 18.95 | 18.98 |
|  | 36RB-Low (0)     | 1902.5 (19125) | 19.00 | 18.99 |
|  |                  | 1880 (18900)   | 18.93 | 18.94 |
|  |                  | 1857.5 (18675) | 18.92 | 18.95 |
|  | 75RB (0)         | 1902.5 (19125) | 18.94 | 18.98 |
|  |                  | 1880 (18900)   | 18.97 | 18.97 |
|  |                  | 1857.5 (18675) | 18.91 | 18.98 |

|       |                 |              |       |       |
|-------|-----------------|--------------|-------|-------|
| 20MHz | 1RB-High (99)   | 1900 (19100) | 18.59 | 19.32 |
|       |                 | 1880 (18900) | 18.76 | 19.27 |
|       |                 | 1860 (18700) | 18.58 | 19.19 |
|       | 1RB-Middle (50) | 1900 (19100) | 19.02 | 19.67 |

|  |                  |              |       |       |
|--|------------------|--------------|-------|-------|
|  |                  | 1880 (18900) | 19.09 | 19.60 |
|  |                  | 1860 (18700) | 18.90 | 19.56 |
|  | 1RB-Low (0)      | 1900 (19100) | 18.72 | 19.20 |
|  |                  | 1880 (18900) | 18.65 | 19.21 |
|  |                  | 1860 (18700) | 18.60 | 19.15 |
|  | 50RB-High (50)   | 1900 (19100) | 18.90 | 18.91 |
|  |                  | 1880 (18900) | 18.98 | 19.02 |
|  |                  | 1860 (18700) | 18.90 | 18.99 |
|  | 50RB-Middle (25) | 1900 (19100) | 19.01 | 19.00 |
|  |                  | 1880 (18900) | 18.92 | 18.99 |
|  |                  | 1860 (18700) | 18.86 | 18.95 |
|  | 50RB-Low (0)     | 1900 (19100) | 19.12 | 19.12 |
|  |                  | 1880 (18900) | 18.82 | 18.88 |
|  |                  | 1860 (18700) | 18.84 | 18.91 |
|  | 100RB (0)        | 1900 (19100) | 19.01 | 19.04 |
|  |                  | 1880 (18900) | 18.92 | 18.98 |
|  |                  | 1860 (18700) | 18.87 | 18.95 |

**LTEB4(receiver on/off)**

| BANDWIDTH | Number of RBs | Frequency      | QPSK  | 16QAM |
|-----------|---------------|----------------|-------|-------|
| 1.4MHz    | 1RB-High (5)  | 1754.3 (20393) | 23.24 | 22.47 |

|  |                |                |       |       |
|--|----------------|----------------|-------|-------|
|  |                | 1732.5 (20175) | 23.24 | 22.43 |
|  |                | 1710.7 (19957) | 23.27 | 22.45 |
|  | 1RB-Middle (3) | 1754.3 (20393) | 23.37 | 22.67 |
|  |                | 1732.5 (20175) | 23.37 | 22.61 |
|  |                | 1710.7 (19957) | 23.37 | 22.52 |
|  | 1RB-Low (0)    | 1754.3 (20393) | 23.20 | 22.39 |
|  |                | 1732.5 (20175) | 23.22 | 22.48 |
|  |                | 1710.7 (19957) | 23.27 | 22.59 |
|  | 3RB-High (3)   | 1754.3 (20393) | 23.35 | 22.35 |
|  |                | 1732.5 (20175) | 23.32 | 22.24 |
|  |                | 1710.7 (19957) | 23.42 | 22.26 |
|  | 3RB-Middle (1) | 1754.3 (20393) | 23.39 | 22.31 |
|  |                | 1732.5 (20175) | 23.39 | 22.30 |
|  |                | 1710.7 (19957) | 23.42 | 22.45 |
|  | 3RB-Low (0)    | 1754.3 (20393) | 23.33 | 22.30 |
|  |                | 1732.5 (20175) | 23.33 | 22.27 |
|  |                | 1710.7 (19957) | 23.41 | 22.32 |
|  | 6RB (0)        | 1754.3 (20393) | 22.34 | 21.47 |
|  |                | 1732.5 (20175) | 22.31 | 21.42 |
|  |                | 1710.7 (19957) | 22.38 | 21.49 |

|      |                |                |       |       |
|------|----------------|----------------|-------|-------|
| 3MHz | 1RB-High (14)  | 1753.5 (20385) | 23.24 | 22.47 |
|      |                | 1732.5 (20175) | 23.26 | 22.50 |
|      |                | 1711.5 (19965) | 23.28 | 22.53 |
|      | 1RB-Middle (7) | 1753.5 (20385) | 23.38 | 22.59 |
|      |                | 1732.5 (20175) | 23.40 | 22.69 |
|      |                | 1711.5 (19965) | 23.45 | 22.56 |
|      | 1RB-Low (0)    | 1753.5 (20385) | 23.24 | 22.48 |
|      |                | 1732.5 (20175) | 23.29 | 22.57 |
|      |                | 1711.5 (19965) | 23.31 | 22.46 |
|      | 8RB-High (7)   | 1753.5 (20385) | 22.25 | 21.32 |
|      |                | 1732.5 (20175) | 22.29 | 21.35 |
|      |                | 1711.5 (19965) | 22.33 | 21.37 |
|      | 8RB-Middle (4) | 1753.5 (20385) | 22.27 | 21.32 |
|      |                | 1732.5 (20175) | 22.32 | 21.40 |
|      |                | 1711.5 (19965) | 22.37 | 21.38 |
|      | 8RB-Low (0)    | 1753.5 (20385) | 22.27 | 21.33 |
|      |                | 1732.5 (20175) | 22.30 | 21.36 |
|      |                | 1711.5 (19965) | 22.31 | 21.37 |
|      | 15RB (0)       | 1753.5 (20385) | 22.26 | 21.25 |
|      |                | 1732.5 (20175) | 22.29 | 21.29 |

|  |  |                |       |       |
|--|--|----------------|-------|-------|
|  |  | 1711.5 (19965) | 22.32 | 21.30 |
|--|--|----------------|-------|-------|

|      |                 |                |       |       |
|------|-----------------|----------------|-------|-------|
| 5MHz | 1RB-High (24)   | 1752.5 (20375) | 23.16 | 22.46 |
|      |                 | 1732.5 (20175) | 23.19 | 22.39 |
|      |                 | 1712.5 (19975) | 23.24 | 22.40 |
|      | 1RB-Middle (12) | 1752.5 (20375) | 23.32 | 22.57 |
|      |                 | 1732.5 (20175) | 23.44 | 22.65 |
|      |                 | 1712.5 (19975) | 23.42 | 22.64 |
|      | 1RB-Low (0)     | 1752.5 (20375) | 23.17 | 22.39 |
|      |                 | 1732.5 (20175) | 23.22 | 22.47 |
|      |                 | 1712.5 (19975) | 23.22 | 22.47 |
|      | 12RB-High (13)  | 1752.5 (20375) | 22.24 | 21.21 |
|      |                 | 1732.5 (20175) | 22.33 | 21.27 |
|      |                 | 1712.5 (19975) | 22.33 | 21.30 |
|      | 12RB-Middle (6) | 1752.5 (20375) | 22.30 | 21.28 |
|      |                 | 1732.5 (20175) | 22.36 | 21.30 |
|      |                 | 1712.5 (19975) | 22.37 | 21.34 |
|      | 12RB-Low (0)    | 1752.5 (20375) | 22.28 | 21.25 |
|      |                 | 1732.5 (20175) | 22.28 | 21.24 |
|      |                 | 1712.5 (19975) | 22.30 | 21.27 |
|      | 25RB (0)        | 1752.5 (20375) | 22.27 | 21.27 |

|  |                |       |       |
|--|----------------|-------|-------|
|  | 1732.5 (20175) | 22.30 | 21.30 |
|  | 1712.5 (19975) | 22.34 | 21.33 |

|       |                  |                |       |       |
|-------|------------------|----------------|-------|-------|
| 10MHz | 1RB-High (49)    | 1750 (20350)   | 23.27 | 22.53 |
|       |                  | 1732.5 (20175) | 23.26 | 22.56 |
|       |                  | 1715 (20000)   | 23.33 | 22.59 |
|       | 1RB-Middle (24)  | 1750 (20350)   | 23.34 | 22.50 |
|       |                  | 1732.5 (20175) | 23.39 | 22.68 |
|       |                  | 1715 (20000)   | 23.45 | 22.73 |
|       | 1RB-Low (0)      | 1750 (20350)   | 23.27 | 22.43 |
|       |                  | 1732.5 (20175) | 23.34 | 22.62 |
|       |                  | 1715 (20000)   | 23.33 | 22.60 |
|       | 25RB-High (25)   | 1750 (20350)   | 22.31 | 21.29 |
|       |                  | 1732.5 (20175) | 22.39 | 21.41 |
|       |                  | 1715 (20000)   | 22.42 | 21.42 |
|       | 25RB-Middle (12) | 1750 (20350)   | 22.32 | 21.32 |
|       |                  | 1732.5 (20175) | 22.38 | 21.41 |
|       |                  | 1715 (20000)   | 22.39 | 21.40 |
|       | 25RB-Low (0)     | 1750 (20350)   | 22.37 | 21.37 |
|       |                  | 1732.5 (20175) | 22.35 | 21.40 |
|       |                  | 1715 (20000)   | 22.36 | 21.38 |

|  |          |                |       |       |
|--|----------|----------------|-------|-------|
|  | 50RB (0) | 1750 (20350)   | 22.34 | 21.31 |
|  |          | 1732.5 (20175) | 22.40 | 21.41 |
|  |          | 1715 (20000)   | 22.39 | 21.38 |

|       |                  |                |       |       |
|-------|------------------|----------------|-------|-------|
| 15MHz | 1RB-High (74)    | 1747.5 (20325) | 23.15 | 22.45 |
|       |                  | 1732.5 (20175) | 23.16 | 22.47 |
|       |                  | 1717.5 (20025) | 23.24 | 22.47 |
|       | 1RB-Middle (37)  | 1747.5 (20325) | 23.27 | 22.39 |
|       |                  | 1732.5 (20175) | 23.32 | 22.65 |
|       |                  | 1717.5 (20025) | 23.35 | 22.67 |
|       | 1RB-Low (0)      | 1747.5 (20325) | 23.21 | 22.49 |
|       |                  | 1732.5 (20175) | 23.26 | 22.49 |
|       |                  | 1717.5 (20025) | 23.26 | 22.48 |
|       | 36RB-High (38)   | 1747.5 (20325) | 22.25 | 21.21 |
|       |                  | 1732.5 (20175) | 22.38 | 21.34 |
|       |                  | 1717.5 (20025) | 22.40 | 21.34 |
|       | 36RB-Middle (19) | 1747.5 (20325) | 22.34 | 21.29 |
|       |                  | 1732.5 (20175) | 22.38 | 21.36 |
|       |                  | 1717.5 (20025) | 22.43 | 21.40 |
|       | 36RB-Low (0)     | 1747.5 (20325) | 22.37 | 21.33 |
|       |                  | 1732.5 (20175) | 22.37 | 21.32 |

|  |          |                |       |       |
|--|----------|----------------|-------|-------|
|  | 75RB (0) | 1717.5 (20025) | 22.36 | 21.33 |
|  |          | 1747.5 (20325) | 22.33 | 21.29 |
|  |          | 1732.5 (20175) | 22.37 | 21.35 |
|  |          | 1717.5 (20025) | 22.38 | 21.38 |

|       |                  |                |       |       |
|-------|------------------|----------------|-------|-------|
| 20MHz | 1RB-High (99)    | 1745 (20300)   | 23.07 | 22.20 |
|       |                  | 1732.5 (20175) | 23.08 | 22.32 |
|       |                  | 1720 (20050)   | 23.05 | 22.36 |
|       | 1RB-Middle (50)  | 1745 (20300)   | 23.42 | 22.56 |
|       |                  | 1732.5 (20175) | 23.46 | 22.65 |
|       |                  | 1720 (20050)   | 23.44 | 22.66 |
|       | 1RB-Low (0)      | 1745 (20300)   | 23.07 | 22.27 |
|       |                  | 1732.5 (20175) | 23.09 | 22.40 |
|       |                  | 1720 (20050)   | 23.05 | 22.36 |
|       | 50RB-High (50)   | 1745 (20300)   | 22.25 | 21.24 |
|       |                  | 1732.5 (20175) | 22.34 | 21.35 |
|       |                  | 1720 (20050)   | 22.39 | 21.37 |
|       | 50RB-Middle (25) | 1745 (20300)   | 22.41 | 21.39 |
|       |                  | 1732.5 (20175) | 22.39 | 21.36 |
|       |                  | 1720 (20050)   | 22.39 | 21.40 |
|       | 50RB-Low (0)     | 1745 (20300)   | 22.35 | 21.33 |

|  |           |                |       |       |
|--|-----------|----------------|-------|-------|
|  |           | 1732.5 (20175) | 22.29 | 21.30 |
|  |           | 1720 (20050)   | 22.29 | 21.28 |
|  | 100RB (0) | 1745 (20300)   | 22.33 | 21.30 |
|  |           | 1732.5 (20175) | 22.34 | 21.32 |
|  |           | 1720 (20050)   | 22.34 | 21.33 |

#### LTEB4 (Hostpot)

| BANDWIDTH | Number of RBs  | Frequency      | QPSK  | 16QAM |
|-----------|----------------|----------------|-------|-------|
| 1.4MHz    | 1RB-High (5)   | 1754.3 (20393) | 20.20 | 20.56 |
|           |                | 1732.5 (20175) | 20.24 | 20.63 |
|           |                | 1710.7 (19957) | 20.25 | 20.64 |
|           | 1RB-Middle (3) | 1754.3 (20393) | 20.31 | 20.63 |
|           |                | 1732.5 (20175) | 20.33 | 20.63 |
|           |                | 1710.7 (19957) | 20.36 | 20.75 |
|           | 1RB-Low (0)    | 1754.3 (20393) | 20.18 | 20.51 |
|           |                | 1732.5 (20175) | 20.25 | 20.55 |
|           |                | 1710.7 (19957) | 20.27 | 20.64 |
|           | 3RB-High (3)   | 1754.3 (20393) | 20.27 | 20.29 |
|           |                | 1732.5 (20175) | 20.33 | 20.35 |
|           |                | 1710.7 (19957) | 20.34 | 20.29 |
|           | 3RB-Middle (1) | 1754.3 (20393) | 20.32 | 20.35 |

|  |             |                |       |       |
|--|-------------|----------------|-------|-------|
|  |             | 1732.5 (20175) | 20.37 | 20.39 |
|  |             | 1710.7 (19957) | 20.38 | 20.39 |
|  | 3RB-Low (0) | 1754.3 (20393) | 20.27 | 20.35 |
|  |             | 1732.5 (20175) | 20.34 | 20.39 |
|  |             | 1710.7 (19957) | 20.35 | 20.38 |
|  | 6RB (0)     | 1754.3 (20393) | 20.30 | 20.40 |
|  |             | 1732.5 (20175) | 20.34 | 20.44 |
|  |             | 1710.7 (19957) | 20.33 | 20.46 |

|      |                |                |       |       |
|------|----------------|----------------|-------|-------|
| 3MHz | 1RB-High (14)  | 1753.5 (20385) | 20.29 | 20.63 |
|      |                | 1732.5 (20175) | 20.30 | 20.55 |
|      |                | 1711.5 (19965) | 20.33 | 20.68 |
|      | 1RB-Middle (7) | 1753.5 (20385) | 20.42 | 20.67 |
|      |                | 1732.5 (20175) | 20.41 | 20.81 |
|      |                | 1711.5 (19965) | 20.41 | 20.76 |
|      | 1RB-Low (0)    | 1753.5 (20385) | 20.26 | 20.55 |
|      |                | 1732.5 (20175) | 20.31 | 20.74 |
|      |                | 1711.5 (19965) | 20.34 | 20.69 |
|      | 8RB-High (7)   | 1753.5 (20385) | 20.29 | 20.38 |
|      |                | 1732.5 (20175) | 20.33 | 20.42 |
|      |                | 1711.5 (19965) | 20.35 | 20.43 |

|  |                |                |       |       |
|--|----------------|----------------|-------|-------|
|  | 8RB-Middle (4) | 1753.5 (20385) | 20.31 | 20.41 |
|  |                | 1732.5 (20175) | 20.36 | 20.42 |
|  |                | 1711.5 (19965) | 20.38 | 20.48 |
|  | 8RB-Low (0)    | 1753.5 (20385) | 20.29 | 20.38 |
|  |                | 1732.5 (20175) | 20.32 | 20.40 |
|  |                | 1711.5 (19965) | 20.33 | 20.44 |
|  | 15RB (0)       | 1753.5 (20385) | 20.29 | 20.33 |
|  |                | 1732.5 (20175) | 20.33 | 20.33 |
|  |                | 1711.5 (19965) | 20.37 | 20.37 |

|      |                 |                |       |       |
|------|-----------------|----------------|-------|-------|
| 5MHz | 1RB-High (24)   | 1752.5 (20375) | 20.19 | 20.51 |
|      |                 | 1732.5 (20175) | 20.21 | 20.49 |
|      |                 | 1712.5 (19975) | 20.23 | 20.62 |
|      | 1RB-Middle (12) | 1752.5 (20375) | 20.42 | 20.77 |
|      |                 | 1732.5 (20175) | 20.42 | 20.76 |
|      |                 | 1712.5 (19975) | 20.48 | 20.81 |
|      | 1RB-Low (0)     | 1752.5 (20375) | 20.17 | 20.60 |
|      |                 | 1732.5 (20175) | 20.22 | 20.53 |
|      |                 | 1712.5 (19975) | 20.24 | 20.64 |
|      | 12RB-High (13)  | 1752.5 (20375) | 20.26 | 20.31 |
|      |                 | 1732.5 (20175) | 20.35 | 20.36 |

|  |                 |                |       |       |
|--|-----------------|----------------|-------|-------|
|  | 12RB-Middle (6) | 1712.5 (19975) | 20.36 | 20.39 |
|  |                 | 1752.5 (20375) | 20.35 | 20.34 |
|  |                 | 1732.5 (20175) | 20.38 | 20.41 |
|  |                 | 1712.5 (19975) | 20.39 | 20.42 |
|  | 12RB-Low (0)    | 1752.5 (20375) | 20.32 | 20.33 |
|  |                 | 1732.5 (20175) | 20.32 | 20.34 |
|  |                 | 1712.5 (19975) | 20.32 | 20.35 |
|  | 25RB (0)        | 1752.5 (20375) | 20.33 | 20.33 |
|  |                 | 1732.5 (20175) | 20.33 | 20.38 |
|  |                 | 1712.5 (19975) | 20.36 | 20.37 |

|       |                 |                |       |       |
|-------|-----------------|----------------|-------|-------|
| 10MHz | 1RB-High (49)   | 1750 (20350)   | 20.29 | 20.64 |
|       |                 | 1732.5 (20175) | 20.29 | 20.61 |
|       |                 | 1715 (20000)   | 20.35 | 20.66 |
|       | 1RB-Middle (24) | 1750 (20350)   | 20.38 | 20.63 |
|       |                 | 1732.5 (20175) | 20.44 | 20.80 |
|       |                 | 1715 (20000)   | 20.44 | 20.86 |
|       | 1RB-Low (0)     | 1750 (20350)   | 20.32 | 20.60 |
|       |                 | 1732.5 (20175) | 20.35 | 20.68 |
|       |                 | 1715 (20000)   | 20.36 | 20.70 |
|       | 25RB-High (25)  | 1750 (20350)   | 20.33 | 20.37 |

|  |                  |                |       |       |
|--|------------------|----------------|-------|-------|
|  |                  | 1732.5 (20175) | 20.44 | 20.48 |
|  |                  | 1715 (20000)   | 20.48 | 20.48 |
|  | 25RB-Middle (12) | 1750 (20350)   | 20.31 | 20.36 |
|  |                  | 1732.5 (20175) | 20.40 | 20.40 |
|  |                  | 1715 (20000)   | 20.42 | 20.44 |
|  | 25RB-Low (0)     | 1750 (20350)   | 20.39 | 20.41 |
|  |                  | 1732.5 (20175) | 20.39 | 20.42 |
|  |                  | 1715 (20000)   | 20.38 | 20.39 |
|  | 50RB (0)         | 1750 (20350)   | 20.35 | 20.37 |
|  |                  | 1732.5 (20175) | 20.42 | 20.45 |
|  |                  | 1715 (20000)   | 20.40 | 20.43 |

|       |                 |                |       |       |
|-------|-----------------|----------------|-------|-------|
| 15MHz | 1RB-High (74)   | 1747.5 (20325) | 20.18 | 20.48 |
|       |                 | 1732.5 (20175) | 20.20 | 20.49 |
|       |                 | 1717.5 (20025) | 20.26 | 20.67 |
|       | 1RB-Middle (37) | 1747.5 (20325) | 20.29 | 20.65 |
|       |                 | 1732.5 (20175) | 20.34 | 20.71 |
|       |                 | 1717.5 (20025) | 20.37 | 20.76 |
|       | 1RB-Low (0)     | 1747.5 (20325) | 20.25 | 20.46 |
|       |                 | 1732.5 (20175) | 20.27 | 20.71 |
|       |                 | 1717.5 (20025) | 20.27 | 20.61 |

|  |                  |                |       |       |
|--|------------------|----------------|-------|-------|
|  | 36RB-High (38)   | 1747.5 (20325) | 20.30 | 20.28 |
|  |                  | 1732.5 (20175) | 20.43 | 20.39 |
|  |                  | 1717.5 (20025) | 20.42 | 20.40 |
|  | 36RB-Middle (19) | 1747.5 (20325) | 20.34 | 20.34 |
|  |                  | 1732.5 (20175) | 20.42 | 20.40 |
|  |                  | 1717.5 (20025) | 20.44 | 20.42 |
|  | 36RB-Low (0)     | 1747.5 (20325) | 20.41 | 20.38 |
|  |                  | 1732.5 (20175) | 20.40 | 20.37 |
|  |                  | 1717.5 (20025) | 20.40 | 20.34 |
|  | 75RB (0)         | 1747.5 (20325) | 20.34 | 20.39 |
|  |                  | 1732.5 (20175) | 20.40 | 20.43 |
|  |                  | 1717.5 (20025) | 20.41 | 20.42 |

|       |                 |                |       |       |
|-------|-----------------|----------------|-------|-------|
| 20MHz | 1RB-High (99)   | 1745 (20300)   | 19.93 | 20.50 |
|       |                 | 1732.5 (20175) | 19.96 | 20.41 |
|       |                 | 1720 (20050)   | 20.00 | 20.52 |
|       | 1RB-Middle (50) | 1745 (20300)   | 20.42 | 20.86 |
|       |                 | 1732.5 (20175) | 20.38 | 20.86 |
|       |                 | 1720 (20050)   | 20.46 | 20.96 |
|       | 1RB-Low (0)     | 1745 (20300)   | 20.03 | 20.60 |
|       |                 | 1732.5 (20175) | 20.07 | 20.52 |

|  |                  |                |       |       |
|--|------------------|----------------|-------|-------|
|  | 50RB-High (50)   | 1720 (20050)   | 20.05 | 20.58 |
|  |                  | 1745 (20300)   | 20.12 | 20.15 |
|  |                  | 1732.5 (20175) | 20.37 | 20.36 |
|  |                  | 1720 (20050)   | 20.29 | 20.38 |
|  | 50RB-Middle (25) | 1745 (20300)   | 20.27 | 20.33 |
|  |                  | 1732.5 (20175) | 20.34 | 20.35 |
|  |                  | 1720 (20050)   | 20.35 | 20.38 |
|  | 50RB-Low (0)     | 1745 (20300)   | 20.27 | 20.30 |
|  |                  | 1732.5 (20175) | 20.28 | 20.31 |
|  |                  | 1720 (20050)   | 20.25 | 20.30 |
|  | 100RB (0)        | 1745 (20300)   | 20.22 | 20.26 |
|  |                  | 1732.5 (20175) | 20.34 | 20.33 |
|  |                  | 1720 (20050)   | 20.30 | 20.33 |

**LTEB7(receiver on)**

| BANDWIDTH | Number of RBs   | Frequency      | QPSK  | 16QAM |
|-----------|-----------------|----------------|-------|-------|
| 5MHz      | 1RB-High (24)   | 2567.5 (21425) | 23.03 | 22.27 |
|           |                 | 2535 (21100)   | 23.07 | 22.34 |
|           |                 | 2502.5 (20775) | 22.99 | 22.31 |
|           | 1RB-Middle (12) | 2567.5 (21425) | 23.30 | 22.53 |
|           |                 | 2535 (21100)   | 23.30 | 22.54 |

|  |                 |                |       |       |
|--|-----------------|----------------|-------|-------|
|  |                 | 2502.5 (20775) | 23.22 | 22.46 |
|  | 1RB-Low (0)     | 2567.5 (21425) | 23.04 | 22.30 |
|  |                 | 2535 (21100)   | 23.13 | 22.38 |
|  |                 | 2502.5 (20775) | 22.91 | 22.30 |
|  | 12RB-High (13)  | 2567.5 (21425) | 22.15 | 21.18 |
|  |                 | 2535 (21100)   | 22.26 | 21.26 |
|  |                 | 2502.5 (20775) | 22.12 | 21.12 |
|  | 12RB-Middle (6) | 2567.5 (21425) | 22.22 | 21.25 |
|  |                 | 2535 (21100)   | 22.29 | 21.28 |
|  |                 | 2502.5 (20775) | 22.17 | 21.10 |
|  | 12RB-Low (0)    | 2567.5 (21425) | 22.20 | 21.20 |
|  |                 | 2535 (21100)   | 22.26 | 21.24 |
|  |                 | 2502.5 (20775) | 22.07 | 21.05 |
|  | 25RB (0)        | 2567.5 (21425) | 22.23 | 21.22 |
|  |                 | 2535 (21100)   | 22.31 | 21.28 |
|  |                 | 2502.5 (20775) | 22.12 | 21.14 |

|       |                 |              |       |       |
|-------|-----------------|--------------|-------|-------|
| 10MHz | 1RB-High (49)   | 2565 (21400) | 23.08 | 22.23 |
|       |                 | 2535 (21100) | 23.16 | 22.49 |
|       |                 | 2505 (20800) | 23.08 | 22.45 |
|       | 1RB-Middle (24) | 2565 (21400) | 23.20 | 22.35 |

|  |                  |              |       |       |
|--|------------------|--------------|-------|-------|
|  |                  | 2535 (21100) | 23.28 | 22.55 |
|  |                  | 2505 (20800) | 23.18 | 22.52 |
|  | 1RB-Low (0)      | 2565 (21400) | 23.21 | 22.33 |
|  |                  | 2535 (21100) | 23.22 | 22.40 |
|  |                  | 2505 (20800) | 23.00 | 22.24 |
|  | 25RB-High (25)   | 2565 (21400) | 22.24 | 21.25 |
|  |                  | 2535 (21100) | 22.34 | 21.33 |
|  |                  | 2505 (20800) | 22.25 | 21.26 |
|  | 25RB-Middle (12) | 2565 (21400) | 22.28 | 21.26 |
|  |                  | 2535 (21100) | 22.31 | 21.30 |
|  |                  | 2505 (20800) | 22.19 | 21.18 |
|  | 25RB-Low (0)     | 2565 (21400) | 22.25 | 21.24 |
|  |                  | 2535 (21100) | 22.33 | 21.31 |
|  |                  | 2505 (20800) | 22.16 | 21.12 |
|  | 50RB (0)         | 2565 (21400) | 22.28 | 21.29 |
|  |                  | 2535 (21100) | 22.38 | 21.33 |
|  |                  | 2505 (20800) | 22.19 | 21.18 |

|       |               |                |       |       |
|-------|---------------|----------------|-------|-------|
| 15MHz | 1RB-High (74) | 2562.5 (21375) | 23.00 | 22.21 |
|       |               | 2535 (21100)   | 23.08 | 22.33 |
|       |               | 2507.5 (20825) | 23.10 | 22.43 |

|       |                  |                |       |       |
|-------|------------------|----------------|-------|-------|
|       | 1RB-Middle (37)  | 2562.5 (21375) | 23.16 | 22.36 |
|       |                  | 2535 (21100)   | 23.23 | 22.46 |
|       |                  | 2507.5 (20825) | 23.10 | 22.40 |
|       | 1RB-Low (0)      | 2562.5 (21375) | 23.08 | 22.36 |
|       |                  | 2535 (21100)   | 23.16 | 22.40 |
|       |                  | 2507.5 (20825) | 22.98 | 22.23 |
|       | 36RB-High (38)   | 2562.5 (21375) | 22.24 | 21.21 |
|       |                  | 2535 (21100)   | 22.31 | 21.26 |
|       |                  | 2507.5 (20825) | 22.22 | 21.20 |
|       | 36RB-Middle (19) | 2562.5 (21375) | 22.27 | 21.21 |
|       |                  | 2535 (21100)   | 22.33 | 21.31 |
|       |                  | 2507.5 (20825) | 22.20 | 21.15 |
|       | 36RB-Low (0)     | 2562.5 (21375) | 22.27 | 21.22 |
|       |                  | 2535 (21100)   | 22.30 | 21.28 |
|       |                  | 2507.5 (20825) | 22.13 | 21.10 |
|       | 75RB (0)         | 2562.5 (21375) | 22.28 | 21.22 |
|       |                  | 2535 (21100)   | 22.32 | 21.27 |
|       |                  | 2507.5 (20825) | 22.18 | 21.17 |
| 20MHz | 1RB-High (99)    | 2560 (21350)   | 22.75 | 22.03 |
|       |                  | 2535 (21100)   | 22.69 | 21.89 |

|  |                  |              |       |       |
|--|------------------|--------------|-------|-------|
|  |                  | 2510 (20850) | 22.65 | 21.96 |
|  | 1RB-Middle (50)  | 2560 (21350) | 23.13 | 22.35 |
|  |                  | 2535 (21100) | 22.98 | 22.27 |
|  |                  | 2510 (20850) | 23.03 | 22.21 |
|  | 1RB-Low (0)      | 2560 (21350) | 22.84 | 22.15 |
|  |                  | 2535 (21100) | 22.71 | 21.97 |
|  |                  | 2510 (20850) | 22.79 | 21.99 |
|  | 50RB-High (50)   | 2560 (21350) | 22.12 | 21.15 |
|  |                  | 2535 (21100) | 21.97 | 21.00 |
|  |                  | 2510 (20850) | 22.05 | 21.08 |
|  | 50RB-Middle (25) | 2560 (21350) | 22.17 | 21.18 |
|  |                  | 2535 (21100) | 22.06 | 21.06 |
|  |                  | 2510 (20850) | 22.05 | 21.06 |
|  | 50RB-Low (0)     | 2560 (21350) | 22.08 | 21.13 |
|  |                  | 2535 (21100) | 21.98 | 20.99 |
|  |                  | 2510 (20850) | 21.94 | 20.98 |
|  | 100RB (0)        | 2560 (21350) | 22.11 | 21.11 |
|  |                  | 2535 (21100) | 21.98 | 20.99 |
|  |                  | 2510 (20850) | 21.97 | 20.99 |

**LTEB7 (receiver off)**

| BANDWIDTH | Number of RBs   | Frequency      | QPSK  | 16QAM |
|-----------|-----------------|----------------|-------|-------|
| 5MHz      | 1RB-High (24)   | 2567.5 (21425) | 20.87 | 21.04 |
|           |                 | 2535 (21100)   | 20.93 | 21.17 |
|           |                 | 2502.5 (20775) | 20.92 | 21.22 |
|           | 1RB-Middle (12) | 2567.5 (21425) | 21.10 | 21.27 |
|           |                 | 2535 (21100)   | 21.20 | 21.45 |
|           |                 | 2502.5 (20775) | 21.11 | 21.49 |
|           | 1RB-Low (0)     | 2567.5 (21425) | 20.89 | 21.04 |
|           |                 | 2535 (21100)   | 20.96 | 21.29 |
|           |                 | 2502.5 (20775) | 20.91 | 21.20 |
|           | 12RB-High (13)  | 2567.5 (21425) | 21.02 | 20.91 |
|           |                 | 2535 (21100)   | 21.04 | 21.03 |
|           |                 | 2502.5 (20775) | 21.05 | 20.99 |
|           | 12RB-Middle (6) | 2567.5 (21425) | 21.02 | 21.00 |
|           |                 | 2535 (21100)   | 21.09 | 21.11 |
|           |                 | 2502.5 (20775) | 21.11 | 21.02 |
|           | 12RB-Low (0)    | 2567.5 (21425) | 20.98 | 20.96 |
|           |                 | 2535 (21100)   | 21.05 | 21.03 |
|           |                 | 2502.5 (20775) | 21.02 | 20.97 |
|           | 25RB (0)        | 2567.5 (21425) | 21.02 | 21.00 |

|  |  |                |       |       |
|--|--|----------------|-------|-------|
|  |  | 2535 (21100)   | 21.08 | 21.08 |
|  |  | 2502.5 (20775) | 21.03 | 21.02 |

|       |                  |              |       |       |
|-------|------------------|--------------|-------|-------|
| 10MHz | 1RB-High (49)    | 2565 (21400) | 20.96 | 21.08 |
|       |                  | 2535 (21100) | 21.00 | 21.25 |
|       |                  | 2505 (20800) | 21.04 | 21.40 |
|       | 1RB-Middle (24)  | 2565 (21400) | 21.12 | 21.37 |
|       |                  | 2535 (21100) | 21.12 | 21.54 |
|       |                  | 2505 (20800) | 21.15 | 21.34 |
|       | 1RB-Low (0)      | 2565 (21400) | 20.99 | 21.22 |
|       |                  | 2535 (21100) | 21.09 | 21.34 |
|       |                  | 2505 (20800) | 20.98 | 21.22 |
|       | 25RB-High (25)   | 2565 (21400) | 21.11 | 21.02 |
|       |                  | 2535 (21100) | 21.13 | 21.12 |
|       |                  | 2505 (20800) | 21.14 | 21.13 |
|       | 25RB-Middle (12) | 2565 (21400) | 21.09 | 21.00 |
|       |                  | 2535 (21100) | 21.11 | 21.15 |
|       |                  | 2505 (20800) | 21.08 | 21.08 |
|       | 25RB-Low (0)     | 2565 (21400) | 21.09 | 21.06 |
|       |                  | 2535 (21100) | 21.15 | 21.16 |
|       |                  | 2505 (20800) | 21.07 | 21.08 |

|  |          |              |       |       |
|--|----------|--------------|-------|-------|
|  | 50RB (0) | 2565 (21400) | 21.05 | 21.03 |
|  |          | 2535 (21100) | 21.15 | 21.17 |
|  |          | 2505 (20800) | 21.09 | 21.06 |

|       |                  |                |       |       |
|-------|------------------|----------------|-------|-------|
| 15MHz | 1RB-High (74)    | 2562.5 (21375) | 20.87 | 21.11 |
|       |                  | 2535 (21100)   | 20.93 | 21.15 |
|       |                  | 2507.5 (20825) | 20.96 | 21.32 |
|       | 1RB-Middle (37)  | 2562.5 (21375) | 21.00 | 21.21 |
|       |                  | 2535 (21100)   | 21.06 | 21.38 |
|       |                  | 2507.5 (20825) | 21.01 | 21.38 |
|       | 1RB-Low (0)      | 2562.5 (21375) | 20.95 | 21.16 |
|       |                  | 2535 (21100)   | 21.07 | 21.30 |
|       |                  | 2507.5 (20825) | 20.96 | 21.24 |
|       | 36RB-High (38)   | 2562.5 (21375) | 21.04 | 21.02 |
|       |                  | 2535 (21100)   | 21.10 | 21.07 |
|       |                  | 2507.5 (20825) | 21.12 | 21.09 |
|       | 36RB-Middle (19) | 2562.5 (21375) | 21.04 | 21.03 |
|       |                  | 2535 (21100)   | 21.15 | 21.13 |
|       |                  | 2507.5 (20825) | 21.12 | 21.09 |
|       | 36RB-Low (0)     | 2562.5 (21375) | 21.05 | 21.00 |
|       |                  | 2535 (21100)   | 21.17 | 21.13 |

|  |          |                |       |       |
|--|----------|----------------|-------|-------|
|  | 75RB (0) | 2507.5 (20825) | 21.10 | 21.06 |
|  |          | 2562.5 (21375) | 21.05 | 21.03 |
|  |          | 2535 (21100)   | 21.11 | 21.10 |
|  |          | 2507.5 (20825) | 21.10 | 21.08 |

|       |                  |              |       |       |
|-------|------------------|--------------|-------|-------|
| 20MHz | 1RB-High (99)    | 2560 (21350) | 20.72 | 21.07 |
|       |                  | 2535 (21100) | 20.80 | 21.06 |
|       |                  | 2510 (20850) | 20.78 | 21.09 |
|       | 1RB-Middle (50)  | 2560 (21350) | 21.34 | 21.36 |
|       |                  | 2535 (21100) | 21.17 | 21.35 |
|       |                  | 2510 (20850) | 21.04 | 21.37 |
|       | 1RB-Low (0)      | 2560 (21350) | 20.92 | 21.15 |
|       |                  | 2535 (21100) | 20.87 | 21.20 |
|       |                  | 2510 (20850) | 20.69 | 21.00 |
|       | 50RB-High (50)   | 2560 (21350) | 21.09 | 21.07 |
|       |                  | 2535 (21100) | 21.07 | 21.11 |
|       |                  | 2510 (20850) | 21.08 | 21.08 |
|       | 50RB-Middle (25) | 2560 (21350) | 21.24 | 21.13 |
|       |                  | 2535 (21100) | 21.18 | 21.20 |
|       |                  | 2510 (20850) | 21.05 | 21.04 |
|       | 50RB-Low (0)     | 2560 (21350) | 21.09 | 21.09 |

|  |           |              |       |       |
|--|-----------|--------------|-------|-------|
|  |           | 2535 (21100) | 21.09 | 21.11 |
|  |           | 2510 (20850) | 20.85 | 20.91 |
|  | 100RB (0) | 2560 (21350) | 21.10 | 21.09 |
|  |           | 2535 (21100) | 21.11 | 21.11 |
|  |           | 2510 (20850) | 20.97 | 20.96 |
|  |           |              |       |       |

**LTEB7 (Hostpot)**

| BANDWIDTH | Number of RBs   | Frequency      | QPSK  | 16QAM |
|-----------|-----------------|----------------|-------|-------|
| 5MHz      | 1RB-High (24)   | 2567.5 (21425) | 17.89 | 18.27 |
|           |                 | 2535 (21100)   | 17.99 | 18.32 |
|           |                 | 2502.5 (20775) | 18.00 | 18.34 |
|           | 1RB-Middle (12) | 2567.5 (21425) | 18.19 | 18.41 |
|           |                 | 2535 (21100)   | 18.24 | 18.48 |
|           |                 | 2502.5 (20775) | 18.19 | 18.56 |
|           | 1RB-Low (0)     | 2567.5 (21425) | 17.91 | 18.19 |
|           |                 | 2535 (21100)   | 18.05 | 18.35 |
|           |                 | 2502.5 (20775) | 17.96 | 18.33 |
|           | 12RB-High (13)  | 2567.5 (21425) | 17.99 | 17.99 |
|           |                 | 2535 (21100)   | 18.10 | 18.12 |
|           |                 | 2502.5 (20775) | 18.08 | 18.10 |
|           | 12RB-Middle (6) | 2567.5 (21425) | 18.07 | 18.08 |

|  |              |                |       |       |
|--|--------------|----------------|-------|-------|
|  |              | 2535 (21100)   | 18.16 | 18.17 |
|  |              | 2502.5 (20775) | 18.14 | 18.16 |
|  | 12RB-Low (0) | 2567.5 (21425) | 18.05 | 18.06 |
|  |              | 2535 (21100)   | 18.14 | 18.13 |
|  |              | 2502.5 (20775) | 18.06 | 18.09 |
|  | 25RB (0)     | 2567.5 (21425) | 18.04 | 18.04 |
|  |              | 2535 (21100)   | 18.11 | 18.16 |
|  |              | 2502.5 (20775) | 18.11 | 18.14 |

|       |                 |              |       |       |
|-------|-----------------|--------------|-------|-------|
| 10MHz | 1RB-High (49)   | 2565 (21400) | 18.02 | 18.28 |
|       |                 | 2535 (21100) | 18.05 | 18.45 |
|       |                 | 2505 (20800) | 18.06 | 18.35 |
|       | 1RB-Middle (24) | 2565 (21400) | 18.14 | 18.44 |
|       |                 | 2535 (21100) | 18.21 | 18.46 |
|       |                 | 2505 (20800) | 18.16 | 18.59 |
|       | 1RB-Low (0)     | 2565 (21400) | 18.04 | 18.35 |
|       |                 | 2535 (21100) | 18.16 | 18.49 |
|       |                 | 2505 (20800) | 18.03 | 18.30 |
|       | 25RB-High (25)  | 2565 (21400) | 18.05 | 18.05 |
|       |                 | 2535 (21100) | 18.09 | 18.11 |
|       |                 | 2505 (20800) | 18.13 | 18.17 |

|  |                  |              |       |       |
|--|------------------|--------------|-------|-------|
|  | 25RB-Middle (12) | 2565 (21400) | 18.09 | 18.10 |
|  |                  | 2535 (21100) | 18.17 | 18.17 |
|  |                  | 2505 (20800) | 18.15 | 18.12 |
|  | 25RB-Low (0)     | 2565 (21400) | 18.04 | 18.06 |
|  |                  | 2535 (21100) | 18.17 | 18.17 |
|  |                  | 2505 (20800) | 18.07 | 18.15 |
|  | 50RB (0)         | 2565 (21400) | 18.03 | 18.05 |
|  |                  | 2535 (21100) | 18.14 | 18.17 |
|  |                  | 2505 (20800) | 18.09 | 18.17 |

|       |                 |                |       |       |
|-------|-----------------|----------------|-------|-------|
| 15MHz | 1RB-High (74)   | 2562.5 (21375) | 17.95 | 18.13 |
|       |                 | 2535 (21100)   | 18.00 | 18.38 |
|       |                 | 2507.5 (20825) | 18.04 | 18.36 |
|       | 1RB-Middle (37) | 2562.5 (21375) | 18.06 | 18.32 |
|       |                 | 2535 (21100)   | 18.13 | 18.38 |
|       |                 | 2507.5 (20825) | 18.11 | 18.39 |
|       | 1RB-Low (0)     | 2562.5 (21375) | 18.03 | 18.40 |
|       |                 | 2535 (21100)   | 18.12 | 18.51 |
|       |                 | 2507.5 (20825) | 18.02 | 18.39 |
|       | 36RB-High (38)  | 2562.5 (21375) | 18.11 | 18.07 |
|       |                 | 2535 (21100)   | 18.16 | 18.14 |

|  |                  |                |       |       |
|--|------------------|----------------|-------|-------|
|  | 36RB-Middle (19) | 2507.5 (20825) | 18.18 | 18.18 |
|  |                  | 2562.5 (21375) | 18.13 | 18.10 |
|  |                  | 2535 (21100)   | 18.23 | 18.22 |
|  |                  | 2507.5 (20825) | 18.18 | 18.13 |
|  | 36RB-Low (0)     | 2562.5 (21375) | 18.09 | 18.06 |
|  |                  | 2535 (21100)   | 18.23 | 18.20 |
|  |                  | 2507.5 (20825) | 18.12 | 18.11 |
|  | 75RB (0)         | 2562.5 (21375) | 18.11 | 18.09 |
|  |                  | 2535 (21100)   | 18.14 | 18.14 |
|  |                  | 2507.5 (20825) | 18.12 | 18.13 |

|       |                 |              |       |       |
|-------|-----------------|--------------|-------|-------|
| 20MHz | 1RB-High (99)   | 2560 (21350) | 17.82 | 18.34 |
|       |                 | 2535 (21100) | 17.79 | 18.32 |
|       |                 | 2510 (20850) | 17.75 | 18.24 |
|       | 1RB-Middle (50) | 2560 (21350) | 18.20 | 18.70 |
|       |                 | 2535 (21100) | 18.20 | 18.74 |
|       |                 | 2510 (20850) | 18.22 | 18.64 |
|       | 1RB-Low (0)     | 2560 (21350) | 17.98 | 18.48 |
|       |                 | 2535 (21100) | 17.90 | 18.44 |
|       |                 | 2510 (20850) | 17.90 | 18.40 |
|       | 50RB-High (50)  | 2560 (21350) | 18.09 | 18.14 |

|  |                  |              |       |       |
|--|------------------|--------------|-------|-------|
|  |                  | 2535 (21100) | 18.09 | 18.14 |
|  |                  | 2510 (20850) | 18.17 | 18.22 |
|  | 50RB-Middle (25) | 2560 (21350) | 18.14 | 18.14 |
|  |                  | 2535 (21100) | 18.16 | 18.20 |
|  |                  | 2510 (20850) | 18.15 | 18.13 |
|  | 50RB-Low (0)     | 2560 (21350) | 18.10 | 18.16 |
|  |                  | 2535 (21100) | 18.12 | 18.19 |
|  |                  | 2510 (20850) | 18.07 | 18.07 |
|  | 100RB (0)        | 2560 (21350) | 18.12 | 18.18 |
|  |                  | 2535 (21100) | 18.12 | 18.14 |
|  |                  | 2510 (20850) | 18.15 | 18.19 |

**LTEB13(receiver on/off)**

| BANDWIDTH | Number of RBs   | Frequency     | QPSK  | 16QAM |
|-----------|-----------------|---------------|-------|-------|
| 5MHz      | 1RB-High (24)   | 784.5 (23255) | 23.59 | 22.81 |
|           |                 | 782 (23230)   | 23.49 | 22.76 |
|           |                 | 779.5 (23205) | 23.47 | 22.71 |
|           | 1RB-Middle (12) | 784.5 (23255) | 23.80 | 23.13 |
|           |                 | 782 (23230)   | 23.70 | 23.00 |
|           |                 | 779.5 (23205) | 23.74 | 22.96 |
|           | 1RB-Low (0)     | 784.5 (23255) | 23.49 | 22.83 |

|  |                 |               |       |       |
|--|-----------------|---------------|-------|-------|
|  |                 | 782 (23230)   | 23.48 | 22.80 |
|  |                 | 779.5 (23205) | 23.53 | 22.83 |
|  | 12RB-High (13)  | 784.5 (23255) | 22.65 | 21.61 |
|  |                 | 782 (23230)   | 22.63 | 21.62 |
|  |                 | 779.5 (23205) | 22.57 | 21.59 |
|  | 12RB-Middle (6) | 784.5 (23255) | 22.71 | 21.75 |
|  |                 | 782 (23230)   | 22.63 | 21.65 |
|  |                 | 779.5 (23205) | 22.64 | 21.65 |
|  | 12RB-Low (0)    | 784.5 (23255) | 22.64 | 21.68 |
|  |                 | 782 (23230)   | 22.61 | 21.63 |
|  |                 | 779.5 (23205) | 22.62 | 21.63 |
|  | 25RB (0)        | 784.5 (23255) | 22.66 | 21.67 |
|  |                 | 782 (23230)   | 22.60 | 21.61 |
|  |                 | 779.5 (23205) | 22.59 | 21.63 |

|       |                  |             |       |       |
|-------|------------------|-------------|-------|-------|
| 10MHz | 1RB-High (49)    | 782 (23230) | 23.65 | 22.99 |
|       | 1RB-Middle (24)  | 782 (23230) | 23.72 | 23.03 |
|       | 1RB-Low (0)      | 782 (23230) | 23.62 | 22.94 |
|       | 25RB-High (25)   | 782 (23230) | 22.70 | 21.73 |
|       | 25RB-Middle (12) | 782 (23230) | 22.77 | 21.70 |
|       | 25RB-Low (0)     | 782 (23230) | 22.69 | 21.71 |

|  |          |             |       |       |
|--|----------|-------------|-------|-------|
|  | 50RB (0) | 782 (23230) | 22.71 | 21.72 |
|--|----------|-------------|-------|-------|

**LTEB13 (Hostpot)**

| BANDWIDTH | Number of RBs   | Frequency     | QPSK  | 16QAM |
|-----------|-----------------|---------------|-------|-------|
| 5MHz      | 1RB-High (24)   | 784.5 (23255) | 22.62 | 22.90 |
|           |                 | 782 (23230)   | 22.52 | 22.82 |
|           |                 | 779.5 (23205) | 22.49 | 22.78 |
|           | 1RB-Middle (12) | 784.5 (23255) | 22.82 | 23.10 |
|           |                 | 782 (23230)   | 22.74 | 23.02 |
|           |                 | 779.5 (23205) | 22.70 | 23.02 |
|           | 1RB-Low (0)     | 784.5 (23255) | 22.52 | 22.72 |
|           |                 | 782 (23230)   | 22.50 | 22.81 |
|           |                 | 779.5 (23205) | 22.53 | 22.85 |
|           | 12RB-High (13)  | 784.5 (23255) | 22.69 | 21.68 |
|           |                 | 782 (23230)   | 22.62 | 21.66 |
|           |                 | 779.5 (23205) | 22.62 | 21.65 |
|           | 12RB-Middle (6) | 784.5 (23255) | 22.75 | 21.73 |
|           |                 | 782 (23230)   | 22.64 | 21.68 |
|           |                 | 779.5 (23205) | 22.67 | 21.74 |
|           | 12RB-Low (0)    | 784.5 (23255) | 22.68 | 21.66 |
|           |                 | 782 (23230)   | 22.63 | 21.66 |

|  |          |               |       |       |
|--|----------|---------------|-------|-------|
|  |          | 779.5 (23205) | 22.66 | 21.73 |
|  | 25RB (0) | 784.5 (23255) | 22.66 | 21.68 |
|  |          | 782 (23230)   | 22.61 | 21.66 |
|  |          | 779.5 (23205) | 22.64 | 21.71 |

|       |                  |             |       |       |
|-------|------------------|-------------|-------|-------|
| 10MHz | 1RB-High (49)    | 782 (23230) | 22.65 | 22.98 |
|       | 1RB-Middle (24)  | 782 (23230) | 22.75 | 23.05 |
|       | 1RB-Low (0)      | 782 (23230) | 22.64 | 22.88 |
|       | 25RB-High (25)   | 782 (23230) | 22.72 | 21.72 |
|       | 25RB-Middle (12) | 782 (23230) | 22.71 | 21.69 |
|       | 25RB-Low (0)     | 782 (23230) | 22.70 | 21.76 |
|       | 50RB (0)         | 782 (23230) | 22.71 | 21.72 |

**LTEB26(receiver on/off)**

| BANDWIDTH | Number of RBs  | Frequency     | QPSK  | 16QAM |
|-----------|----------------|---------------|-------|-------|
| 1.4MHz    | 1RB-High (5)   | 848.3 (27033) | 23.53 | 22.76 |
|           |                | 831.5 (26865) | 23.58 | 22.76 |
|           |                | 814.7 (26697) | 23.62 | 22.85 |
|           | 1RB-Middle (3) | 848.3 (27033) | 23.65 | 22.81 |
|           |                | 831.5 (26865) | 23.75 | 22.98 |
|           |                | 814.7 (26697) | 23.70 | 22.92 |
|           | 1RB-Low (0)    | 848.3 (27033) | 23.51 | 22.76 |

|  |                |               |       |       |
|--|----------------|---------------|-------|-------|
|  |                | 831.5 (26865) | 23.56 | 22.75 |
|  |                | 814.7 (26697) | 23.62 | 22.80 |
|  | 3RB-High (3)   | 848.3 (27033) | 23.62 | 22.57 |
|  |                | 831.5 (26865) | 23.67 | 22.64 |
|  |                | 814.7 (26697) | 23.74 | 22.66 |
|  | 3RB-Middle (1) | 848.3 (27033) | 23.70 | 22.69 |
|  |                | 831.5 (26865) | 23.73 | 22.71 |
|  |                | 814.7 (26697) | 23.79 | 22.76 |
|  | 3RB-Low (0)    | 848.3 (27033) | 23.59 | 22.55 |
|  |                | 831.5 (26865) | 23.68 | 22.65 |
|  |                | 814.7 (26697) | 23.75 | 22.69 |
|  | 6RB (0)        | 848.3 (27033) | 22.68 | 21.75 |
|  |                | 831.5 (26865) | 22.70 | 21.78 |
|  |                | 814.7 (26697) | 22.74 | 21.81 |

|      |                |               |       |       |
|------|----------------|---------------|-------|-------|
| 3MHz | 1RB-High (14)  | 847.5 (27025) | 23.56 | 22.83 |
|      |                | 831.5 (26865) | 23.61 | 22.86 |
|      |                | 815.5 (26705) | 23.60 | 22.80 |
|      | 1RB-Middle (7) | 847.5 (27025) | 23.72 | 22.89 |
|      |                | 831.5 (26865) | 23.80 | 23.01 |
|      |                | 815.5 (26705) | 23.82 | 22.92 |

|  |                |               |       |       |
|--|----------------|---------------|-------|-------|
|  | 1RB-Low (0)    | 847.5 (27025) | 23.57 | 22.80 |
|  |                | 831.5 (26865) | 23.59 | 22.87 |
|  |                | 815.5 (26705) | 23.62 | 22.92 |
|  | 8RB-High (7)   | 847.5 (27025) | 22.55 | 21.60 |
|  |                | 831.5 (26865) | 22.62 | 21.67 |
|  |                | 815.5 (26705) | 22.65 | 21.71 |
|  | 8RB-Middle (4) | 847.5 (27025) | 22.59 | 21.66 |
|  |                | 831.5 (26865) | 22.69 | 21.72 |
|  |                | 815.5 (26705) | 22.68 | 21.71 |
|  | 8RB-Low (0)    | 847.5 (27025) | 22.59 | 21.67 |
|  |                | 831.5 (26865) | 22.63 | 21.70 |
|  |                | 815.5 (26705) | 22.64 | 21.73 |
|  | 15RB (0)       | 847.5 (27025) | 22.60 | 21.62 |
|  |                | 831.5 (26865) | 22.63 | 21.63 |
|  |                | 815.5 (26705) | 22.64 | 21.69 |

|      |                 |               |       |       |
|------|-----------------|---------------|-------|-------|
| 5MHz | 1RB-High (24)   | 846.5 (27015) | 23.43 | 22.60 |
|      |                 | 831.5 (26865) | 23.54 | 22.76 |
|      |                 | 816.5 (26715) | 23.55 | 22.83 |
|      | 1RB-Middle (12) | 846.5 (27015) | 23.68 | 22.95 |
|      |                 | 831.5 (26865) | 23.77 | 22.99 |

|  |                 |               |       |       |
|--|-----------------|---------------|-------|-------|
|  |                 | 816.5 (26715) | 23.77 | 23.05 |
|  | 1RB-Low (0)     | 846.5 (27015) | 23.48 | 22.73 |
|  |                 | 831.5 (26865) | 23.52 | 22.80 |
|  |                 | 816.5 (26715) | 23.59 | 22.87 |
|  | 12RB-High (13)  | 846.5 (27015) | 22.54 | 21.53 |
|  |                 | 831.5 (26865) | 22.62 | 21.61 |
|  |                 | 816.5 (26715) | 22.67 | 21.66 |
|  | 12RB-Middle (6) | 846.5 (27015) | 22.64 | 21.60 |
|  |                 | 831.5 (26865) | 22.68 | 21.69 |
|  |                 | 816.5 (26715) | 22.72 | 21.70 |
|  | 12RB-Low (0)    | 846.5 (27015) | 22.64 | 21.64 |
|  |                 | 831.5 (26865) | 22.64 | 21.64 |
|  |                 | 816.5 (26715) | 22.64 | 21.64 |
|  | 25RB (0)        | 846.5 (27015) | 22.62 | 21.63 |
|  |                 | 831.5 (26865) | 22.65 | 21.65 |
|  |                 | 816.5 (26715) | 22.68 | 21.70 |

|       |                 |               |       |       |
|-------|-----------------|---------------|-------|-------|
| 10MHz | 1RB-High (49)   | 844 (26990)   | 23.54 | 22.81 |
|       |                 | 831.5 (26865) | 23.59 | 22.75 |
|       |                 | 820 (26750)   | 23.59 | 22.82 |
|       | 1RB-Middle (24) | 844 (26990)   | 23.66 | 23.01 |

|  |                  |               |       |       |
|--|------------------|---------------|-------|-------|
|  |                  | 831.5 (26865) | 23.68 | 22.92 |
|  |                  | 820 (26750)   | 23.76 | 23.00 |
|  | 1RB-Low (0)      | 844 (26990)   | 23.64 | 22.95 |
|  |                  | 831.5 (26865) | 23.62 | 22.79 |
|  |                  | 820 (26750)   | 23.66 | 22.96 |
|  | 25RB-High (25)   | 844 (26990)   | 22.56 | 21.57 |
|  |                  | 831.5 (26865) | 22.67 | 21.70 |
|  |                  | 820 (26750)   | 22.69 | 21.73 |
|  | 25RB-Middle (12) | 844 (26990)   | 22.64 | 21.65 |
|  |                  | 831.5 (26865) | 22.70 | 21.69 |
|  |                  | 820 (26750)   | 22.72 | 21.70 |
|  | 25RB-Low (0)     | 844 (26990)   | 22.70 | 21.72 |
|  |                  | 831.5 (26865) | 22.72 | 21.72 |
|  |                  | 820 (26750)   | 22.70 | 21.66 |
|  | 50RB (0)         | 844 (26990)   | 22.65 | 21.66 |
|  |                  | 831.5 (26865) | 22.70 | 21.69 |
|  |                  | 820 (26750)   | 22.69 | 21.70 |

|       |               |               |       |       |
|-------|---------------|---------------|-------|-------|
| 15MHz | 1RB-High (74) | 841.5 (26965) | 23.33 | 22.56 |
|       |               | 831.5 (26865) | 23.40 | 22.69 |
|       |               | 822.5 (26775) | 23.43 | 22.72 |

|  |                  |               |       |       |
|--|------------------|---------------|-------|-------|
|  | 1RB-Middle (37)  | 841.5 (26965) | 23.50 | 22.81 |
|  |                  | 831.5 (26865) | 23.51 | 22.65 |
|  |                  | 822.5 (26775) | 23.55 | 22.76 |
|  | 1RB-Low (0)      | 841.5 (26965) | 23.50 | 22.68 |
|  |                  | 831.5 (26865) | 23.49 | 22.80 |
|  |                  | 822.5 (26775) | 23.50 | 22.76 |
|  | 36RB-High (38)   | 841.5 (26965) | 22.46 | 21.45 |
|  |                  | 831.5 (26865) | 22.56 | 21.49 |
|  |                  | 822.5 (26775) | 22.58 | 21.55 |
|  | 36RB-Middle (19) | 841.5 (26965) | 22.58 | 21.55 |
|  |                  | 831.5 (26865) | 22.58 | 21.59 |
|  |                  | 822.5 (26775) | 22.61 | 21.58 |
|  | 36RB-Low (0)     | 841.5 (26965) | 22.59 | 21.55 |
|  |                  | 831.5 (26865) | 22.58 | 21.57 |
|  |                  | 822.5 (26775) | 22.60 | 21.57 |
|  | 75RB (0)         | 841.5 (26965) | 22.53 | 21.54 |
|  |                  | 831.5 (26865) | 22.58 | 21.56 |
|  |                  | 822.5 (26775) | 22.56 | 21.59 |

**LTEB26 (Hostpot)**

| BANDWIDTH | Number of RBs | Frequency | QPSK | 16QAM |
|-----------|---------------|-----------|------|-------|
|-----------|---------------|-----------|------|-------|

|        |                |               |       |       |
|--------|----------------|---------------|-------|-------|
| 1.4MHz | 1RB-High (5)   | 848.3 (27033) | 22.44 | 22.65 |
|        |                | 831.5 (26865) | 22.52 | 22.75 |
|        |                | 814.7 (26697) | 22.59 | 22.84 |
|        | 1RB-Middle (3) | 848.3 (27033) | 22.54 | 22.84 |
|        |                | 831.5 (26865) | 22.63 | 22.78 |
|        |                | 814.7 (26697) | 22.69 | 22.94 |
|        | 1RB-Low (0)    | 848.3 (27033) | 22.44 | 22.70 |
|        |                | 831.5 (26865) | 22.50 | 22.67 |
|        |                | 814.7 (26697) | 22.59 | 22.71 |
|        | 3RB-High (3)   | 848.3 (27033) | 22.55 | 22.48 |
|        |                | 831.5 (26865) | 22.62 | 22.59 |
|        |                | 814.7 (26697) | 22.67 | 22.56 |
|        | 3RB-Middle (1) | 848.3 (27033) | 22.61 | 22.55 |
|        |                | 831.5 (26865) | 22.71 | 22.64 |
|        |                | 814.7 (26697) | 22.73 | 22.67 |
|        | 3RB-Low (0)    | 848.3 (27033) | 22.54 | 22.50 |
|        |                | 831.5 (26865) | 22.63 | 22.51 |
|        |                | 814.7 (26697) | 22.68 | 22.65 |
|        | 6RB (0)        | 848.3 (27033) | 22.54 | 21.62 |
|        |                | 831.5 (26865) | 22.66 | 21.72 |

|  |  |               |       |       |
|--|--|---------------|-------|-------|
|  |  | 814.7 (26697) | 22.69 | 21.75 |
|--|--|---------------|-------|-------|

|      |                |               |       |       |
|------|----------------|---------------|-------|-------|
| 3MHz | 1RB-High (14)  | 847.5 (27025) | 22.47 | 22.68 |
|      |                | 831.5 (26865) | 22.53 | 22.77 |
|      |                | 815.5 (26705) | 22.57 | 22.74 |
|      | 1RB-Middle (7) | 847.5 (27025) | 22.61 | 22.86 |
|      |                | 831.5 (26865) | 22.67 | 22.83 |
|      |                | 815.5 (26705) | 22.63 | 22.82 |
|      | 1RB-Low (0)    | 847.5 (27025) | 22.49 | 22.78 |
|      |                | 831.5 (26865) | 22.56 | 22.75 |
|      |                | 815.5 (26705) | 22.55 | 22.72 |
|      | 8RB-High (7)   | 847.5 (27025) | 22.50 | 21.54 |
|      |                | 831.5 (26865) | 22.57 | 21.63 |
|      |                | 815.5 (26705) | 22.54 | 21.63 |
|      | 8RB-Middle (4) | 847.5 (27025) | 22.51 | 21.57 |
|      |                | 831.5 (26865) | 22.61 | 21.63 |
|      |                | 815.5 (26705) | 22.59 | 21.66 |
|      | 8RB-Low (0)    | 847.5 (27025) | 22.51 | 21.57 |
|      |                | 831.5 (26865) | 22.57 | 21.66 |
|      |                | 815.5 (26705) | 22.56 | 21.64 |
|      | 15RB (0)       | 847.5 (27025) | 22.52 | 21.51 |

|  |  |               |       |       |
|--|--|---------------|-------|-------|
|  |  | 831.5 (26865) | 22.59 | 21.57 |
|  |  | 815.5 (26705) | 22.59 | 21.57 |

|      |                 |               |       |       |
|------|-----------------|---------------|-------|-------|
| 5MHz | 1RB-High (24)   | 846.5 (27015) | 22.38 | 22.57 |
|      |                 | 831.5 (26865) | 22.47 | 22.59 |
|      |                 | 816.5 (26715) | 22.49 | 22.81 |
|      | 1RB-Middle (12) | 846.5 (27015) | 22.62 | 22.91 |
|      |                 | 831.5 (26865) | 22.69 | 22.83 |
|      |                 | 816.5 (26715) | 22.71 | 22.85 |
|      | 1RB-Low (0)     | 846.5 (27015) | 22.42 | 22.71 |
|      |                 | 831.5 (26865) | 22.47 | 22.71 |
|      |                 | 816.5 (26715) | 22.53 | 22.71 |
|      | 12RB-High (13)  | 846.5 (27015) | 22.45 | 21.43 |
|      |                 | 831.5 (26865) | 22.57 | 21.55 |
|      |                 | 816.5 (26715) | 22.61 | 21.63 |
|      | 12RB-Middle (6) | 846.5 (27015) | 22.57 | 21.56 |
|      |                 | 831.5 (26865) | 22.63 | 21.62 |
|      |                 | 816.5 (26715) | 22.68 | 21.66 |
|      | 12RB-Low (0)    | 846.5 (27015) | 22.55 | 21.55 |
|      |                 | 831.5 (26865) | 22.59 | 21.58 |
|      |                 | 816.5 (26715) | 22.61 | 21.59 |

|  |          |               |       |       |
|--|----------|---------------|-------|-------|
|  | 25RB (0) | 846.5 (27015) | 22.54 | 21.55 |
|  |          | 831.5 (26865) | 22.61 | 21.58 |
|  |          | 816.5 (26715) | 22.63 | 21.65 |

|       |                  |               |       |       |
|-------|------------------|---------------|-------|-------|
| 10MHz | 1RB-High (49)    | 844 (26990)   | 22.48 | 22.71 |
|       |                  | 831.5 (26865) | 22.52 | 22.76 |
|       |                  | 820 (26750)   | 22.54 | 22.78 |
|       | 1RB-Middle (24)  | 844 (26990)   | 22.59 | 22.95 |
|       |                  | 831.5 (26865) | 22.65 | 22.94 |
|       |                  | 820 (26750)   | 22.70 | 22.84 |
|       | 1RB-Low (0)      | 844 (26990)   | 22.59 | 22.86 |
|       |                  | 831.5 (26865) | 22.57 | 22.87 |
|       |                  | 820 (26750)   | 22.60 | 22.85 |
|       | 25RB-High (25)   | 844 (26990)   | 22.46 | 21.48 |
|       |                  | 831.5 (26865) | 22.65 | 21.62 |
|       |                  | 820 (26750)   | 22.65 | 21.66 |
|       | 25RB-Middle (12) | 844 (26990)   | 22.56 | 21.56 |
|       |                  | 831.5 (26865) | 22.65 | 21.62 |
|       |                  | 820 (26750)   | 22.66 | 21.69 |
|       | 25RB-Low (0)     | 844 (26990)   | 22.61 | 21.63 |
|       |                  | 831.5 (26865) | 22.67 | 21.69 |

|  |          |               |       |       |
|--|----------|---------------|-------|-------|
|  | 50RB (0) | 820 (26750)   | 22.67 | 21.65 |
|  |          | 844 (26990)   | 22.56 | 21.56 |
|  |          | 831.5 (26865) | 22.63 | 21.63 |
|  |          | 820 (26750)   | 22.65 | 21.65 |

|       |                  |               |       |       |
|-------|------------------|---------------|-------|-------|
| 15MHz | 1RB-High (74)    | 841.5 (26965) | 23.41 | 22.62 |
|       |                  | 831.5 (26865) | 23.50 | 22.67 |
|       |                  | 822.5 (26775) | 23.48 | 22.66 |
|       | 1RB-Middle (37)  | 841.5 (26965) | 23.57 | 22.78 |
|       |                  | 831.5 (26865) | 23.60 | 22.77 |
|       |                  | 822.5 (26775) | 23.66 | 22.89 |
|       | 1RB-Low (0)      | 841.5 (26965) | 23.55 | 22.77 |
|       |                  | 831.5 (26865) | 23.55 | 22.82 |
|       |                  | 822.5 (26775) | 23.54 | 22.81 |
|       | 36RB-High (38)   | 841.5 (26965) | 22.52 | 21.51 |
|       |                  | 831.5 (26865) | 22.59 | 21.56 |
|       |                  | 822.5 (26775) | 22.60 | 21.61 |
|       | 36RB-Middle (19) | 841.5 (26965) | 22.64 | 21.62 |
|       |                  | 831.5 (26865) | 22.65 | 21.62 |
|       |                  | 822.5 (26775) | 22.68 | 21.62 |
|       | 36RB-Low (0)     | 841.5 (26965) | 22.67 | 21.64 |

|  |          |               |       |       |
|--|----------|---------------|-------|-------|
|  |          | 831.5 (26865) | 22.57 | 21.64 |
|  |          | 822.5 (26775) | 22.62 | 21.62 |
|  | 75RB (0) | 841.5 (26965) | 22.60 | 21.60 |
|  |          | 831.5 (26865) | 22.61 | 21.62 |
|  |          | 822.5 (26775) | 22.61 | 21.64 |
|  |          |               |       |       |

**LTEB38(receiver on)**

| BANDWIDTH | Number of RBs   | Frequency      | QPSK  | 16QAM |
|-----------|-----------------|----------------|-------|-------|
| 5MHz      | 1RB-High (24)   | 2617.5 (38225) | 23.29 | 22.37 |
|           |                 | 2595 (38000)   | 23.26 | 22.32 |
|           |                 | 2572.5 (37775) | 23.21 | 22.23 |
|           | 1RB-Middle (12) | 2617.5 (38225) | 23.46 | 22.55 |
|           |                 | 2595 (38000)   | 23.52 | 22.59 |
|           |                 | 2572.5 (37775) | 23.42 | 22.47 |
|           | 1RB-Low (0)     | 2617.5 (38225) | 23.34 | 22.42 |
|           |                 | 2595 (38000)   | 23.29 | 22.38 |
|           |                 | 2572.5 (37775) | 23.23 | 22.28 |
|           | 12RB-High (13)  | 2617.5 (38225) | 22.44 | 21.33 |
|           |                 | 2595 (38000)   | 22.41 | 21.33 |
|           |                 | 2572.5 (37775) | 22.33 | 21.30 |
|           | 12RB-Middle (6) | 2617.5 (38225) | 22.51 | 21.44 |

|  |              |                |       |       |
|--|--------------|----------------|-------|-------|
|  |              | 2595 (38000)   | 22.47 | 21.39 |
|  |              | 2572.5 (37775) | 22.42 | 21.32 |
|  | 12RB-Low (0) | 2617.5 (38225) | 22.46 | 21.34 |
|  |              | 2595 (38000)   | 22.42 | 21.30 |
|  |              | 2572.5 (37775) | 22.36 | 21.22 |
|  | 25RB (0)     | 2617.5 (38225) | 22.37 | 21.46 |
|  |              | 2595 (38000)   | 22.38 | 21.40 |
|  |              | 2572.5 (37775) | 22.31 | 21.34 |

|       |                 |              |       |       |
|-------|-----------------|--------------|-------|-------|
| 10MHz | 1RB-High (49)   | 2615 (38200) | 23.33 | 22.40 |
|       |                 | 2595 (38000) | 23.37 | 22.39 |
|       |                 | 2575 (37800) | 23.30 | 22.34 |
|       | 1RB-Middle (24) | 2615 (38200) | 23.55 | 22.58 |
|       |                 | 2595 (38000) | 23.53 | 22.57 |
|       |                 | 2575 (37800) | 23.45 | 22.53 |
|       | 1RB-Low (0)     | 2615 (38200) | 23.45 | 22.47 |
|       |                 | 2595 (38000) | 23.42 | 22.40 |
|       |                 | 2575 (37800) | 23.38 | 22.43 |
|       | 25RB-High (25)  | 2615 (38200) | 22.43 | 21.41 |
|       |                 | 2595 (38000) | 22.41 | 21.38 |
|       |                 | 2575 (37800) | 22.43 | 21.38 |

|  |                  |              |       |       |
|--|------------------|--------------|-------|-------|
|  | 25RB-Middle (12) | 2615 (38200) | 22.45 | 21.50 |
|  |                  | 2595 (38000) | 22.46 | 21.39 |
|  |                  | 2575 (37800) | 22.45 | 21.40 |
|  | 25RB-Low (0)     | 2615 (38200) | 22.49 | 21.49 |
|  |                  | 2595 (38000) | 22.43 | 21.42 |
|  |                  | 2575 (37800) | 22.38 | 21.32 |
|  | 50RB (0)         | 2615 (38200) | 22.40 | 21.38 |
|  |                  | 2595 (38000) | 22.35 | 21.40 |
|  |                  | 2575 (37800) | 22.30 | 21.35 |

|       |                 |                |       |       |
|-------|-----------------|----------------|-------|-------|
| 15MHz | 1RB-High (74)   | 2612.5 (38175) | 23.20 | 22.30 |
|       |                 | 2595 (38000)   | 23.25 | 22.29 |
|       |                 | 2577.5 (37825) | 23.21 | 22.28 |
|       | 1RB-Middle (37) | 2612.5 (38175) | 23.42 | 22.49 |
|       |                 | 2595 (38000)   | 23.40 | 22.45 |
|       |                 | 2577.5 (37825) | 23.39 | 22.46 |
|       | 1RB-Low (0)     | 2612.5 (38175) | 23.36 | 22.39 |
|       |                 | 2595 (38000)   | 23.30 | 22.37 |
|       |                 | 2577.5 (37825) | 23.29 | 22.35 |
|       | 36RB-High (38)  | 2612.5 (38175) | 22.41 | 21.28 |
|       |                 | 2595 (38000)   | 22.44 | 21.33 |

|  |                  |                |       |       |
|--|------------------|----------------|-------|-------|
|  | 36RB-Middle (19) | 2577.5 (37825) | 22.34 | 21.33 |
|  |                  | 2612.5 (38175) | 22.46 | 21.35 |
|  |                  | 2595 (38000)   | 22.47 | 21.33 |
|  |                  | 2577.5 (37825) | 22.44 | 21.35 |
|  | 36RB-Low (0)     | 2612.5 (38175) | 22.43 | 21.39 |
|  |                  | 2595 (38000)   | 22.41 | 21.36 |
|  |                  | 2577.5 (37825) | 22.35 | 21.31 |
|  | 75RB (0)         | 2612.5 (38175) | 22.38 | 21.41 |
|  |                  | 2595 (38000)   | 22.32 | 21.33 |
|  |                  | 2577.5 (37825) | 22.31 | 21.33 |

|       |                 |              |       |       |
|-------|-----------------|--------------|-------|-------|
| 20MHz | 1RB-High (99)   | 2610 (38150) | 23.16 | 22.18 |
|       |                 | 2595 (38000) | 23.18 | 22.23 |
|       |                 | 2580 (37850) | 23.23 | 22.28 |
|       | 1RB-Middle (50) | 2610 (38150) | 23.53 | 22.56 |
|       |                 | 2595 (38000) | 23.64 | 22.52 |
|       |                 | 2580 (37850) | 23.67 | 22.72 |
|       | 1RB-Low (0)     | 2610 (38150) | 23.32 | 22.34 |
|       |                 | 2595 (38000) | 23.40 | 22.39 |
|       |                 | 2580 (37850) | 23.43 | 22.45 |
|       | 50RB-High (50)  | 2610 (38150) | 22.32 | 21.40 |

|  |                  |              |       |       |
|--|------------------|--------------|-------|-------|
|  |                  | 2595 (38000) | 22.33 | 21.43 |
|  |                  | 2580 (37850) | 22.46 | 21.51 |
|  | 50RB-Middle (25) | 2610 (38150) | 22.40 | 21.45 |
|  |                  | 2595 (38000) | 22.38 | 21.51 |
|  |                  | 2580 (37850) | 22.49 | 21.58 |
|  | 50RB-Low (0)     | 2610 (38150) | 22.39 | 21.43 |
|  |                  | 2595 (38000) | 22.47 | 21.50 |
|  |                  | 2580 (37850) | 22.44 | 21.54 |
|  | 100RB (0)        | 2610 (38150) | 22.44 | 21.53 |
|  |                  | 2595 (38000) | 22.51 | 21.54 |
|  |                  | 2580 (37850) | 22.55 | 21.56 |

**LTEB38 (receiver off)**

| BANDWIDTH | Number of RBs   | Frequency      | QPSK  | 16QAM |
|-----------|-----------------|----------------|-------|-------|
| 5MHz      | 1RB-High (24)   | 2617.5 (38225) | 23.26 | 22.36 |
|           |                 | 2595 (38000)   | 23.27 | 22.28 |
|           |                 | 2572.5 (37775) | 23.21 | 22.30 |
|           | 1RB-Middle (12) | 2617.5 (38225) | 23.45 | 22.43 |
|           |                 | 2595 (38000)   | 23.46 | 22.43 |
|           |                 | 2572.5 (37775) | 23.41 | 22.47 |
|           | 1RB-Low (0)     | 2617.5 (38225) | 23.32 | 22.41 |

|  |                 |                |       |       |
|--|-----------------|----------------|-------|-------|
|  |                 | 2595 (38000)   | 23.31 | 22.39 |
|  |                 | 2572.5 (37775) | 23.21 | 22.28 |
|  | 12RB-High (13)  | 2617.5 (38225) | 22.41 | 21.33 |
|  |                 | 2595 (38000)   | 22.43 | 21.33 |
|  |                 | 2572.5 (37775) | 22.36 | 21.27 |
|  | 12RB-Middle (6) | 2617.5 (38225) | 22.50 | 21.40 |
|  |                 | 2595 (38000)   | 22.50 | 21.39 |
|  |                 | 2572.5 (37775) | 22.40 | 21.33 |
|  | 12RB-Low (0)    | 2617.5 (38225) | 22.43 | 21.31 |
|  |                 | 2595 (38000)   | 22.44 | 21.32 |
|  |                 | 2572.5 (37775) | 22.33 | 21.21 |
|  | 25RB (0)        | 2617.5 (38225) | 22.41 | 21.37 |
|  |                 | 2595 (38000)   | 22.43 | 21.39 |
|  |                 | 2572.5 (37775) | 22.31 | 21.35 |

|       |                 |              |       |       |
|-------|-----------------|--------------|-------|-------|
| 10MHz | 1RB-High (49)   | 2615 (38200) | 23.32 | 22.42 |
|       |                 | 2595 (38000) | 23.31 | 22.41 |
|       |                 | 2575 (37800) | 23.32 | 22.37 |
|       | 1RB-Middle (24) | 2615 (38200) | 23.42 | 22.38 |
|       |                 | 2595 (38000) | 23.43 | 22.35 |
|       |                 | 2575 (37800) | 23.45 | 22.49 |

|  |                  |              |       |       |
|--|------------------|--------------|-------|-------|
|  | 1RB-Low (0)      | 2615 (38200) | 23.43 | 22.42 |
|  |                  | 2595 (38000) | 23.39 | 22.48 |
|  |                  | 2575 (37800) | 23.37 | 22.45 |
|  | 25RB-High (25)   | 2615 (38200) | 22.43 | 21.39 |
|  |                  | 2595 (38000) | 22.42 | 21.46 |
|  |                  | 2575 (37800) | 22.40 | 21.39 |
|  | 25RB-Middle (12) | 2615 (38200) | 22.44 | 21.46 |
|  |                  | 2595 (38000) | 22.46 | 21.48 |
|  |                  | 2575 (37800) | 22.44 | 21.45 |
|  | 25RB-Low (0)     | 2615 (38200) | 22.47 | 21.44 |
|  |                  | 2595 (38000) | 22.43 | 21.43 |
|  |                  | 2575 (37800) | 22.33 | 21.32 |
|  | 50RB (0)         | 2615 (38200) | 22.40 | 21.45 |
|  |                  | 2595 (38000) | 22.31 | 21.41 |
|  |                  | 2575 (37800) | 22.31 | 21.35 |

|       |                 |                |       |       |
|-------|-----------------|----------------|-------|-------|
| 15MHz | 1RB-High (74)   | 2612.5 (38175) | 23.23 | 22.29 |
|       |                 | 2595 (38000)   | 23.25 | 22.31 |
|       |                 | 2577.5 (37825) | 23.19 | 22.28 |
|       | 1RB-Middle (37) | 2612.5 (38175) | 23.40 | 22.44 |
|       |                 | 2595 (38000)   | 23.39 | 22.45 |

|  |                  |                |       |       |
|--|------------------|----------------|-------|-------|
|  |                  | 2577.5 (37825) | 23.39 | 22.45 |
|  | 1RB-Low (0)      | 2612.5 (38175) | 23.33 | 22.40 |
|  |                  | 2595 (38000)   | 23.32 | 22.38 |
|  |                  | 2577.5 (37825) | 23.29 | 22.38 |
|  | 36RB-High (38)   | 2612.5 (38175) | 22.37 | 21.32 |
|  |                  | 2595 (38000)   | 22.48 | 21.35 |
|  |                  | 2577.5 (37825) | 22.34 | 21.23 |
|  | 36RB-Middle (19) | 2612.5 (38175) | 22.46 | 21.34 |
|  |                  | 2595 (38000)   | 22.45 | 21.36 |
|  |                  | 2577.5 (37825) | 22.48 | 21.36 |
|  | 36RB-Low (0)     | 2612.5 (38175) | 22.45 | 21.40 |
|  |                  | 2595 (38000)   | 22.43 | 21.36 |
|  |                  | 2577.5 (37825) | 22.41 | 21.24 |
|  | 75RB (0)         | 2612.5 (38175) | 22.40 | 21.39 |
|  |                  | 2595 (38000)   | 22.35 | 21.33 |
|  |                  | 2577.5 (37825) | 22.35 | 21.36 |

|       |                 |              |       |       |
|-------|-----------------|--------------|-------|-------|
| 20MHz | 1RB-High (99)   | 2610 (38150) | 22.69 | 22.24 |
|       |                 | 2595 (38000) | 22.68 | 22.21 |
|       |                 | 2580 (37850) | 22.69 | 22.23 |
|       | 1RB-Middle (50) | 2610 (38150) | 23.12 | 22.42 |

|  |                  |              |       |       |
|--|------------------|--------------|-------|-------|
|  |                  | 2595 (38000) | 23.04 | 22.48 |
|  |                  | 2580 (37850) | 23.16 | 22.49 |
|  | 1RB-Low (0)      | 2610 (38150) | 22.84 | 22.33 |
|  |                  | 2595 (38000) | 22.79 | 22.35 |
|  |                  | 2580 (37850) | 22.81 | 22.35 |
|  | 50RB-High (50)   | 2610 (38150) | 22.37 | 21.43 |
|  |                  | 2595 (38000) | 22.33 | 21.41 |
|  |                  | 2580 (37850) | 22.33 | 21.41 |
|  | 50RB-Middle (25) | 2610 (38150) | 22.43 | 21.43 |
|  |                  | 2595 (38000) | 22.44 | 21.46 |
|  |                  | 2580 (37850) | 22.47 | 21.47 |
|  | 50RB-Low (0)     | 2610 (38150) | 22.42 | 21.45 |
|  |                  | 2595 (38000) | 22.37 | 21.45 |
|  |                  | 2580 (37850) | 22.35 | 21.39 |
|  | 100RB (0)        | 2610 (38150) | 22.49 | 21.44 |
|  |                  | 2595 (38000) | 22.48 | 21.41 |
|  |                  | 2580 (37850) | 22.41 | 21.47 |

**LTEB38 (Hostpot)**

| BANDWIDTH | Number of RBs | Frequency      | QPSK  | 16QAM |
|-----------|---------------|----------------|-------|-------|
| 5MHz      | 1RB-High (24) | 2617.5 (38225) | 20.38 | 20.42 |

|  |                 |                |       |       |
|--|-----------------|----------------|-------|-------|
|  |                 | 2595 (38000)   | 20.37 | 20.41 |
|  |                 | 2572.5 (37775) | 20.30 | 20.36 |
|  | 1RB-Middle (12) | 2617.5 (38225) | 20.67 | 20.56 |
|  |                 | 2595 (38000)   | 20.51 | 20.69 |
|  |                 | 2572.5 (37775) | 20.61 | 20.57 |
|  | 1RB-Low (0)     | 2617.5 (38225) | 20.44 | 20.51 |
|  |                 | 2595 (38000)   | 20.44 | 20.55 |
|  |                 | 2572.5 (37775) | 20.42 | 20.43 |
|  | 12RB-High (13)  | 2617.5 (38225) | 20.48 | 20.38 |
|  |                 | 2595 (38000)   | 20.50 | 20.38 |
|  |                 | 2572.5 (37775) | 20.47 | 20.36 |
|  | 12RB-Middle (6) | 2617.5 (38225) | 20.50 | 20.43 |
|  |                 | 2595 (38000)   | 20.50 | 20.42 |
|  |                 | 2572.5 (37775) | 20.42 | 20.41 |
|  | 12RB-Low (0)    | 2617.5 (38225) | 20.49 | 20.42 |
|  |                 | 2595 (38000)   | 20.55 | 20.37 |
|  |                 | 2572.5 (37775) | 20.39 | 20.37 |
|  | 25RB (0)        | 2617.5 (38225) | 20.44 | 20.47 |
|  |                 | 2595 (38000)   | 20.41 | 20.46 |
|  |                 | 2572.5 (37775) | 20.45 | 20.47 |

|       |                  |              |       |       |
|-------|------------------|--------------|-------|-------|
| 10MHz | 1RB-High (49)    | 2615 (38200) | 20.45 | 20.52 |
|       |                  | 2595 (38000) | 20.43 | 20.51 |
|       |                  | 2575 (37800) | 20.45 | 20.51 |
|       | 1RB-Middle (24)  | 2615 (38200) | 20.48 | 20.64 |
|       |                  | 2595 (38000) | 20.57 | 20.63 |
|       |                  | 2575 (37800) | 20.42 | 20.62 |
|       | 1RB-Low (0)      | 2615 (38200) | 20.56 | 20.60 |
|       |                  | 2595 (38000) | 20.51 | 20.59 |
|       |                  | 2575 (37800) | 20.52 | 20.57 |
|       | 25RB-High (25)   | 2615 (38200) | 20.48 | 20.49 |
|       |                  | 2595 (38000) | 20.47 | 20.54 |
|       |                  | 2575 (37800) | 20.57 | 20.47 |
|       | 25RB-Middle (12) | 2615 (38200) | 20.52 | 20.50 |
|       |                  | 2595 (38000) | 20.50 | 20.53 |
|       |                  | 2575 (37800) | 20.49 | 20.51 |
|       | 25RB-Low (0)     | 2615 (38200) | 20.50 | 20.56 |
|       |                  | 2595 (38000) | 20.51 | 20.51 |
|       |                  | 2575 (37800) | 20.52 | 20.50 |
|       | 50RB (0)         | 2615 (38200) | 20.47 | 20.46 |
|       |                  | 2595 (38000) | 20.43 | 20.51 |

|  |  |              |       |       |
|--|--|--------------|-------|-------|
|  |  | 2575 (37800) | 20.45 | 20.47 |
|--|--|--------------|-------|-------|

|       |                  |                |       |       |
|-------|------------------|----------------|-------|-------|
| 15MHz | 1RB-High (74)    | 2612.5 (38175) | 20.35 | 20.41 |
|       |                  | 2595 (38000)   | 20.36 | 20.42 |
|       |                  | 2577.5 (37825) | 20.39 | 20.42 |
|       | 1RB-Middle (37)  | 2612.5 (38175) | 20.44 | 20.59 |
|       |                  | 2595 (38000)   | 20.48 | 20.53 |
|       |                  | 2577.5 (37825) | 20.48 | 20.61 |
|       | 1RB-Low (0)      | 2612.5 (38175) | 20.50 | 20.59 |
|       |                  | 2595 (38000)   | 20.44 | 20.54 |
|       |                  | 2577.5 (37825) | 20.45 | 20.51 |
|       | 36RB-High (38)   | 2612.5 (38175) | 20.45 | 20.37 |
|       |                  | 2595 (38000)   | 20.55 | 20.37 |
|       |                  | 2577.5 (37825) | 20.50 | 20.40 |
|       | 36RB-Middle (19) | 2612.5 (38175) | 20.45 | 20.44 |
|       |                  | 2595 (38000)   | 20.52 | 20.45 |
|       |                  | 2577.5 (37825) | 20.50 | 20.42 |
|       | 36RB-Low (0)     | 2612.5 (38175) | 20.49 | 20.50 |
|       |                  | 2595 (38000)   | 20.51 | 20.46 |
|       |                  | 2577.5 (37825) | 20.46 | 20.44 |
|       | 75RB (0)         | 2612.5 (38175) | 20.45 | 20.46 |

|  |  |                |       |       |
|--|--|----------------|-------|-------|
|  |  | 2595 (38000)   | 20.44 | 20.43 |
|  |  | 2577.5 (37825) | 20.45 | 20.49 |

|       |                  |              |       |       |
|-------|------------------|--------------|-------|-------|
| 20MHz | 1RB-High (99)    | 2610 (38150) | 20.11 | 20.42 |
|       |                  | 2595 (38000) | 20.20 | 20.37 |
|       |                  | 2580 (37850) | 20.23 | 20.65 |
|       | 1RB-Middle (50)  | 2610 (38150) | 20.59 | 20.94 |
|       |                  | 2595 (38000) | 20.72 | 20.85 |
|       |                  | 2580 (37850) | 20.77 | 20.86 |
|       | 1RB-Low (0)      | 2610 (38150) | 20.21 | 20.54 |
|       |                  | 2595 (38000) | 20.36 | 20.51 |
|       |                  | 2580 (37850) | 20.39 | 20.77 |
|       | 50RB-High (50)   | 2610 (38150) | 20.32 | 20.33 |
|       |                  | 2595 (38000) | 20.43 | 20.42 |
|       |                  | 2580 (37850) | 20.52 | 20.56 |
|       | 50RB-Middle (25) | 2610 (38150) | 20.39 | 20.44 |
|       |                  | 2595 (38000) | 20.49 | 20.50 |
|       |                  | 2580 (37850) | 20.50 | 20.59 |
|       | 50RB-Low (0)     | 2610 (38150) | 20.41 | 20.41 |
|       |                  | 2595 (38000) | 20.46 | 20.51 |
|       |                  | 2580 (37850) | 20.42 | 20.53 |

|  |           |              |       |       |
|--|-----------|--------------|-------|-------|
|  | 100RB (0) | 2610 (38150) | 20.39 | 20.38 |
|  |           | 2595 (38000) | 20.49 | 20.46 |
|  |           | 2580 (37850) | 20.48 | 20.52 |

**LTEB66(receiver on)**

| BANDWIDTH | Number of RBs  | Frequency       | QPSK  | 16QAM |
|-----------|----------------|-----------------|-------|-------|
| 1.4MHz    | 1RB-High (5)   | 1779.3 (132665) | 23.24 | 22.45 |
|           |                | 1745 (132322)   | 23.21 | 22.41 |
|           |                | 1710.7 (131979) | 23.32 | 22.50 |
|           | 1RB-Middle (3) | 1779.3 (132665) | 23.38 | 22.68 |
|           |                | 1745 (132322)   | 23.33 | 22.50 |
|           |                | 1710.7 (131979) | 23.42 | 22.61 |
|           | 1RB-Low (0)    | 1779.3 (132665) | 23.25 | 22.55 |
|           |                | 1745 (132322)   | 23.18 | 22.38 |
|           |                | 1710.7 (131979) | 23.33 | 22.51 |
|           | 3RB-High (3)   | 1779.3 (132665) | 23.34 | 22.28 |
|           |                | 1745 (132322)   | 23.27 | 22.24 |
|           |                | 1710.7 (131979) | 23.40 | 22.41 |
|           | 3RB-Middle (1) | 1779.3 (132665) | 23.43 | 22.40 |
|           |                | 1745 (132322)   | 23.33 | 22.25 |
|           |                | 1710.7 (131979) | 23.45 | 22.39 |

|  |             |                 |       |       |
|--|-------------|-----------------|-------|-------|
|  | 3RB-Low (0) | 1779.3 (132665) | 23.36 | 22.22 |
|  |             | 1745 (132322)   | 23.28 | 22.27 |
|  |             | 1710.7 (131979) | 23.41 | 22.31 |
|  | 6RB (0)     | 1779.3 (132665) | 22.34 | 21.44 |
|  |             | 1745 (132322)   | 22.31 | 21.40 |
|  |             | 1710.7 (131979) | 22.42 | 21.52 |

|      |                |                 |       |       |
|------|----------------|-----------------|-------|-------|
| 3MHz | 1RB-High (14)  | 1778.5 (132657) | 23.30 | 22.46 |
|      |                | 1745 (132322)   | 23.23 | 22.38 |
|      |                | 1711.5 (131987) | 23.33 | 22.60 |
|      | 1RB-Middle (7) | 1778.5 (132657) | 23.43 | 22.58 |
|      |                | 1745 (132322)   | 23.34 | 22.57 |
|      |                | 1711.5 (131987) | 23.47 | 22.72 |
|      | 1RB-Low (0)    | 1778.5 (132657) | 23.31 | 22.53 |
|      |                | 1745 (132322)   | 23.23 | 22.40 |
|      |                | 1711.5 (131987) | 23.35 | 22.66 |
|      | 8RB-High (7)   | 1778.5 (132657) | 22.30 | 21.39 |
|      |                | 1745 (132322)   | 22.25 | 21.31 |
|      |                | 1711.5 (131987) | 22.39 | 21.45 |
|      | 8RB-Middle (4) | 1778.5 (132657) | 22.36 | 21.39 |
|      |                | 1745 (132322)   | 22.27 | 21.35 |

|  |             |                 |       |       |
|--|-------------|-----------------|-------|-------|
|  | 8RB-Low (0) | 1711.5 (131987) | 22.40 | 21.46 |
|  |             | 1778.5 (132657) | 22.37 | 21.41 |
|  |             | 1745 (132322)   | 22.27 | 21.33 |
|  |             | 1711.5 (131987) | 22.34 | 21.41 |
|  | 15RB (0)    | 1778.5 (132657) | 22.34 | 21.33 |
|  |             | 1745 (132322)   | 22.26 | 21.25 |
|  |             | 1711.5 (131987) | 22.38 | 21.40 |

|      |                 |                 |       |       |
|------|-----------------|-----------------|-------|-------|
| 5MHz | 1RB-High (24)   | 1777.5 (132647) | 23.21 | 22.53 |
|      |                 | 1745 (132322)   | 23.13 | 22.44 |
|      |                 | 1712.5 (131997) | 23.23 | 22.44 |
|      | 1RB-Middle (12) | 1777.5 (132647) | 23.45 | 22.73 |
|      |                 | 1745 (132322)   | 23.44 | 22.70 |
|      |                 | 1712.5 (131997) | 23.48 | 22.73 |
|      | 1RB-Low (0)     | 1777.5 (132647) | 23.22 | 22.53 |
|      |                 | 1745 (132322)   | 23.15 | 22.31 |
|      |                 | 1712.5 (131997) | 23.26 | 22.46 |
|      | 12RB-High (13)  | 1777.5 (132647) | 22.31 | 21.29 |
|      |                 | 1745 (132322)   | 22.24 | 21.26 |
|      |                 | 1712.5 (131997) | 22.37 | 21.33 |
|      | 12RB-Middle (6) | 1777.5 (132647) | 22.41 | 21.39 |

|  |              |                 |       |       |
|--|--------------|-----------------|-------|-------|
|  |              | 1745 (132322)   | 22.32 | 21.31 |
|  |              | 1712.5 (131997) | 22.43 | 21.39 |
|  | 12RB-Low (0) | 1777.5 (132647) | 22.38 | 21.36 |
|  |              | 1745 (132322)   | 22.27 | 21.24 |
|  |              | 1712.5 (131997) | 22.34 | 21.31 |
|  | 25RB (0)     | 1777.5 (132647) | 22.36 | 21.35 |
|  |              | 1745 (132322)   | 22.28 | 21.27 |
|  |              | 1712.5 (131997) | 22.40 | 21.39 |

|       |                 |               |       |       |
|-------|-----------------|---------------|-------|-------|
| 10MHz | 1RB-High (49)   | 1775 (132622) | 23.28 | 22.59 |
|       |                 | 1745 (132322) | 23.22 | 22.42 |
|       |                 | 1715 (132022) | 23.31 | 22.65 |
|       | 1RB-Middle (24) | 1775 (132622) | 23.44 | 22.71 |
|       |                 | 1745 (132322) | 23.37 | 22.60 |
|       |                 | 1715 (132022) | 23.43 | 22.68 |
|       | 1RB-Low (0)     | 1775 (132622) | 23.25 | 22.53 |
|       |                 | 1745 (132322) | 23.30 | 22.45 |
|       |                 | 1715 (132022) | 23.33 | 22.65 |
|       | 25RB-High (25)  | 1775 (132622) | 22.34 | 21.33 |
|       |                 | 1745 (132322) | 22.30 | 21.26 |
|       |                 | 1715 (132022) | 22.44 | 21.41 |

|  |                  |               |       |       |
|--|------------------|---------------|-------|-------|
|  | 25RB-Middle (12) | 1775 (132622) | 22.42 | 21.38 |
|  |                  | 1745 (132322) | 22.35 | 21.34 |
|  |                  | 1715 (132022) | 22.43 | 21.42 |
|  | 25RB-Low (0)     | 1775 (132622) | 22.38 | 21.39 |
|  |                  | 1745 (132322) | 22.40 | 21.38 |
|  |                  | 1715 (132022) | 22.42 | 21.40 |
|  | 50RB (0)         | 1775 (132622) | 22.38 | 21.38 |
|  |                  | 1745 (132322) | 22.36 | 21.35 |
|  |                  | 1715 (132022) | 22.44 | 21.44 |

|       |                 |                 |       |       |
|-------|-----------------|-----------------|-------|-------|
| 15MHz | 1RB-High (74)   | 1772.5 (132597) | 23.25 | 22.41 |
|       |                 | 1745 (132322)   | 23.14 | 22.40 |
|       |                 | 1717.5 (132047) | 23.26 | 22.57 |
|       | 1RB-Middle (37) | 1772.5 (132597) | 23.32 | 22.59 |
|       |                 | 1745 (132322)   | 23.27 | 22.52 |
|       |                 | 1717.5 (132047) | 23.35 | 22.58 |
|       | 1RB-Low (0)     | 1772.5 (132597) | 23.25 | 22.57 |
|       |                 | 1745 (132322)   | 23.28 | 22.52 |
|       |                 | 1717.5 (132047) | 23.32 | 22.52 |
|       | 36RB-High (38)  | 1772.5 (132597) | 22.35 | 21.30 |
|       |                 | 1745 (132322)   | 22.27 | 21.27 |

|  |                  |                 |       |       |
|--|------------------|-----------------|-------|-------|
|  | 36RB-Middle (19) | 1717.5 (132047) | 22.41 | 21.40 |
|  |                  | 1772.5 (132597) | 22.37 | 21.36 |
|  |                  | 1745 (132322)   | 22.37 | 21.36 |
|  |                  | 1717.5 (132047) | 22.45 | 21.40 |
|  | 36RB-Low (0)     | 1772.5 (132597) | 22.35 | 21.35 |
|  |                  | 1745 (132322)   | 22.41 | 21.37 |
|  |                  | 1717.5 (132047) | 22.45 | 21.39 |
|  | 75RB (0)         | 1772.5 (132597) | 22.34 | 21.34 |
|  |                  | 1745 (132322)   | 22.33 | 21.30 |
|  |                  | 1717.5 (132047) | 22.42 | 21.42 |

|       |                 |               |       |       |
|-------|-----------------|---------------|-------|-------|
| 20MHz | 1RB-High (99)   | 1770 (132572) | 23.16 | 22.38 |
|       |                 | 1745 (132322) | 23.04 | 22.29 |
|       |                 | 1720 (132072) | 23.14 | 22.51 |
|       | 1RB-Middle (50) | 1770 (132572) | 23.42 | 22.72 |
|       |                 | 1745 (132322) | 23.38 | 22.62 |
|       |                 | 1720 (132072) | 23.41 | 22.72 |
|       | 1RB-Low (0)     | 1770 (132572) | 23.16 | 22.43 |
|       |                 | 1745 (132322) | 23.16 | 22.41 |
|       |                 | 1720 (132072) | 23.10 | 22.40 |
|       | 50RB-High (50)  | 1770 (132572) | 22.39 | 21.35 |

|  |                  |               |       |       |
|--|------------------|---------------|-------|-------|
|  |                  | 1745 (132322) | 22.27 | 21.30 |
|  |                  | 1720 (132072) | 22.39 | 21.43 |
|  | 50RB-Middle (25) | 1770 (132572) | 22.49 | 21.47 |
|  |                  | 1745 (132322) | 22.47 | 21.43 |
|  |                  | 1720 (132072) | 22.41 | 21.41 |
|  | 50RB-Low (0)     | 1770 (132572) | 22.45 | 21.44 |
|  |                  | 1745 (132322) | 22.43 | 21.42 |
|  |                  | 1720 (132072) | 22.37 | 21.38 |
|  | 100RB (0)        | 1770 (132572) | 22.39 | 21.39 |
|  |                  | 1745 (132322) | 22.38 | 21.35 |
|  |                  | 1720 (132072) | 22.35 | 21.38 |

**LTEB66 (receiver off)**

| BANDWIDTH | Number of RBs  | Frequency       | QPSK  | 16QAM |
|-----------|----------------|-----------------|-------|-------|
| 1.4MHz    | 1RB-High (5)   | 1779.3 (132665) | 22.25 | 22.43 |
|           |                | 1745 (132322)   | 22.16 | 22.36 |
|           |                | 1710.7 (131979) | 22.30 | 22.47 |
|           | 1RB-Middle (3) | 1779.3 (132665) | 22.32 | 22.63 |
|           |                | 1745 (132322)   | 22.27 | 22.50 |
|           |                | 1710.7 (131979) | 22.43 | 22.67 |
|           | 1RB-Low (0)    | 1779.3 (132665) | 22.24 | 22.37 |

|  |                |                 |       |       |
|--|----------------|-----------------|-------|-------|
|  |                | 1745 (132322)   | 22.18 | 22.35 |
|  |                | 1710.7 (131979) | 22.28 | 22.57 |
|  | 3RB-High (3)   | 1779.3 (132665) | 22.34 | 22.23 |
|  |                | 1745 (132322)   | 22.25 | 22.19 |
|  |                | 1710.7 (131979) | 22.41 | 22.34 |
|  | 3RB-Middle (1) | 1779.3 (132665) | 22.39 | 22.29 |
|  |                | 1745 (132322)   | 22.32 | 22.21 |
|  |                | 1710.7 (131979) | 22.47 | 22.44 |
|  | 3RB-Low (0)    | 1779.3 (132665) | 22.33 | 22.22 |
|  |                | 1745 (132322)   | 22.27 | 22.18 |
|  |                | 1710.7 (131979) | 22.39 | 22.39 |
|  | 6RB (0)        | 1779.3 (132665) | 22.29 | 21.36 |
|  |                | 1745 (132322)   | 22.28 | 21.33 |
|  |                | 1710.7 (131979) | 22.39 | 21.49 |

|      |                |                 |       |       |
|------|----------------|-----------------|-------|-------|
| 3MHz | 1RB-High (14)  | 1778.5 (132657) | 22.29 | 22.49 |
|      |                | 1745 (132322)   | 22.20 | 22.45 |
|      |                | 1711.5 (131987) | 22.29 | 22.50 |
|      | 1RB-Middle (7) | 1778.5 (132657) | 22.47 | 22.60 |
|      |                | 1745 (132322)   | 22.41 | 22.60 |
|      |                | 1711.5 (131987) | 22.46 | 22.63 |

|  |                |                 |       |       |
|--|----------------|-----------------|-------|-------|
|  | 1RB-Low (0)    | 1778.5 (132657) | 22.27 | 22.49 |
|  |                | 1745 (132322)   | 22.24 | 22.44 |
|  |                | 1711.5 (131987) | 22.32 | 22.62 |
|  | 8RB-High (7)   | 1778.5 (132657) | 22.31 | 21.36 |
|  |                | 1745 (132322)   | 22.22 | 21.27 |
|  |                | 1711.5 (131987) | 22.38 | 21.41 |
|  | 8RB-Middle (4) | 1778.5 (132657) | 22.30 | 21.36 |
|  |                | 1745 (132322)   | 22.29 | 21.32 |
|  |                | 1711.5 (131987) | 22.41 | 21.44 |
|  | 8RB-Low (0)    | 1778.5 (132657) | 22.30 | 21.38 |
|  |                | 1745 (132322)   | 22.25 | 21.33 |
|  |                | 1711.5 (131987) | 22.36 | 21.40 |
|  | 15RB (0)       | 1778.5 (132657) | 22.31 | 21.33 |
|  |                | 1745 (132322)   | 22.23 | 21.26 |
|  |                | 1711.5 (131987) | 22.35 | 21.35 |

|      |                 |                 |       |       |
|------|-----------------|-----------------|-------|-------|
| 5MHz | 1RB-High (24)   | 1777.5 (132647) | 22.18 | 22.44 |
|      |                 | 1745 (132322)   | 22.11 | 22.29 |
|      |                 | 1712.5 (131997) | 22.21 | 22.51 |
|      | 1RB-Middle (12) | 1777.5 (132647) | 22.43 | 22.67 |
|      |                 | 1745 (132322)   | 22.45 | 22.63 |

|  |                 |                 |       |       |
|--|-----------------|-----------------|-------|-------|
|  |                 | 1712.5 (131997) | 22.44 | 22.59 |
|  | 1RB-Low (0)     | 1777.5 (132647) | 22.22 | 22.48 |
|  |                 | 1745 (132322)   | 22.16 | 22.42 |
|  |                 | 1712.5 (131997) | 22.24 | 22.48 |
|  | 12RB-High (13)  | 1777.5 (132647) | 22.26 | 21.20 |
|  |                 | 1745 (132322)   | 22.23 | 21.18 |
|  |                 | 1712.5 (131997) | 22.32 | 21.31 |
|  | 12RB-Middle (6) | 1777.5 (132647) | 22.37 | 21.32 |
|  |                 | 1745 (132322)   | 22.29 | 21.26 |
|  |                 | 1712.5 (131997) | 22.41 | 21.34 |
|  | 12RB-Low (0)    | 1777.5 (132647) | 22.35 | 21.30 |
|  |                 | 1745 (132322)   | 22.25 | 21.23 |
|  |                 | 1712.5 (131997) | 22.32 | 21.31 |
|  | 25RB (0)        | 1777.5 (132647) | 22.32 | 21.33 |
|  |                 | 1745 (132322)   | 22.25 | 21.24 |
|  |                 | 1712.5 (131997) | 22.37 | 21.36 |

|       |                 |               |       |       |
|-------|-----------------|---------------|-------|-------|
| 10MHz | 1RB-High (49)   | 1775 (132622) | 22.28 | 22.46 |
|       |                 | 1745 (132322) | 22.19 | 22.38 |
|       |                 | 1715 (132022) | 22.28 | 22.56 |
|       | 1RB-Middle (24) | 1775 (132622) | 22.44 | 22.68 |

|  |                  |               |       |       |
|--|------------------|---------------|-------|-------|
|  |                  | 1745 (132322) | 22.33 | 22.50 |
|  |                  | 1715 (132022) | 22.40 | 22.67 |
|  | 1RB-Low (0)      | 1775 (132622) | 22.24 | 22.58 |
|  |                  | 1745 (132322) | 22.25 | 22.53 |
|  |                  | 1715 (132022) | 22.31 | 22.58 |
|  | 25RB-High (25)   | 1775 (132622) | 22.31 | 21.33 |
|  |                  | 1745 (132322) | 22.29 | 21.26 |
|  |                  | 1715 (132022) | 22.40 | 21.40 |
|  | 25RB-Middle (12) | 1775 (132622) | 22.40 | 21.40 |
|  |                  | 1745 (132322) | 22.34 | 21.32 |
|  |                  | 1715 (132022) | 22.38 | 21.39 |
|  | 25RB-Low (0)     | 1775 (132622) | 22.38 | 21.36 |
|  |                  | 1745 (132322) | 22.37 | 21.34 |
|  |                  | 1715 (132022) | 22.38 | 21.37 |
|  | 50RB (0)         | 1775 (132622) | 22.37 | 21.36 |
|  |                  | 1745 (132322) | 22.34 | 21.32 |
|  |                  | 1715 (132022) | 22.41 | 21.40 |

|       |               |                 |       |       |
|-------|---------------|-----------------|-------|-------|
| 15MHz | 1RB-High (74) | 1772.5 (132597) | 22.22 | 22.51 |
|       |               | 1745 (132322)   | 22.18 | 22.36 |
|       |               | 1717.5 (132047) | 22.20 | 22.41 |

|       |                  |                 |       |       |
|-------|------------------|-----------------|-------|-------|
|       | 1RB-Middle (37)  | 1772.5 (132597) | 22.32 | 22.52 |
|       |                  | 1745 (132322)   | 22.27 | 22.45 |
|       |                  | 1717.5 (132047) | 22.33 | 22.48 |
|       | 1RB-Low (0)      | 1772.5 (132597) | 22.21 | 22.53 |
|       |                  | 1745 (132322)   | 22.23 | 22.53 |
|       |                  | 1717.5 (132047) | 22.31 | 22.55 |
|       | 36RB-High (38)   | 1772.5 (132597) | 22.35 | 21.30 |
|       |                  | 1745 (132322)   | 22.28 | 21.24 |
|       |                  | 1717.5 (132047) | 22.39 | 21.36 |
|       | 36RB-Middle (19) | 1772.5 (132597) | 22.37 | 21.32 |
|       |                  | 1745 (132322)   | 22.37 | 21.33 |
|       |                  | 1717.5 (132047) | 22.43 | 21.37 |
|       | 36RB-Low (0)     | 1772.5 (132597) | 22.36 | 21.32 |
|       |                  | 1745 (132322)   | 22.38 | 21.34 |
|       |                  | 1717.5 (132047) | 22.40 | 21.38 |
|       | 75RB (0)         | 1772.5 (132597) | 22.34 | 21.31 |
|       |                  | 1745 (132322)   | 22.30 | 21.27 |
|       |                  | 1717.5 (132047) | 22.40 | 21.38 |
| 20MHz | 1RB-High (99)    | 1770 (132572)   | 22.13 | 22.41 |
|       |                  | 1745 (132322)   | 22.03 | 22.33 |

|  |                  |               |       |       |
|--|------------------|---------------|-------|-------|
|  |                  | 1720 (132072) | 22.14 | 22.39 |
|  | 1RB-Middle (50)  | 1770 (132572) | 22.44 | 22.42 |
|  |                  | 1745 (132322) | 22.35 | 22.47 |
|  |                  | 1720 (132072) | 22.50 | 22.47 |
|  | 1RB-Low (0)      | 1770 (132572) | 22.11 | 22.36 |
|  |                  | 1745 (132322) | 22.16 | 22.48 |
|  |                  | 1720 (132072) | 22.20 | 22.41 |
|  | 50RB-High (50)   | 1770 (132572) | 22.30 | 21.30 |
|  |                  | 1745 (132322) | 22.22 | 21.22 |
|  |                  | 1720 (132072) | 22.42 | 21.43 |
|  | 50RB-Middle (25) | 1770 (132572) | 22.42 | 21.43 |
|  |                  | 1745 (132322) | 22.42 | 21.37 |
|  |                  | 1720 (132072) | 22.47 | 21.47 |
|  | 50RB-Low (0)     | 1770 (132572) | 22.37 | 21.37 |
|  |                  | 1745 (132322) | 22.39 | 21.38 |
|  |                  | 1720 (132072) | 22.41 | 21.40 |
|  | 100RB (0)        | 1770 (132572) | 22.33 | 21.34 |
|  |                  | 1745 (132322) | 22.29 | 21.29 |
|  |                  | 1720 (132072) | 22.41 | 21.41 |

**LTEB66 (Hostpot)**

| BANDWIDTH | Number of RBs  | Frequency       | QPSK  | 16QAM |
|-----------|----------------|-----------------|-------|-------|
| 1.4MHz    | 1RB-High (5)   | 1779.3 (132665) | 19.31 | 19.55 |
|           |                | 1745 (132322)   | 19.21 | 19.53 |
|           |                | 1710.7 (131979) | 19.32 | 19.71 |
|           | 1RB-Middle (3) | 1779.3 (132665) | 19.41 | 19.63 |
|           |                | 1745 (132322)   | 19.33 | 19.57 |
|           |                | 1710.7 (131979) | 19.46 | 19.78 |
|           | 1RB-Low (0)    | 1779.3 (132665) | 19.29 | 19.60 |
|           |                | 1745 (132322)   | 19.20 | 19.48 |
|           |                | 1710.7 (131979) | 19.34 | 19.58 |
|           | 3RB-High (3)   | 1779.3 (132665) | 19.38 | 19.35 |
|           |                | 1745 (132322)   | 19.33 | 19.30 |
|           |                | 1710.7 (131979) | 19.43 | 19.39 |
|           | 3RB-Middle (1) | 1779.3 (132665) | 19.44 | 19.39 |
|           |                | 1745 (132322)   | 19.36 | 19.31 |
|           |                | 1710.7 (131979) | 19.49 | 19.46 |
|           | 3RB-Low (0)    | 1779.3 (132665) | 19.38 | 19.42 |
|           |                | 1745 (132322)   | 19.32 | 19.23 |
|           |                | 1710.7 (131979) | 19.42 | 19.39 |
|           | 6RB (0)        | 1779.3 (132665) | 19.38 | 19.49 |

|  |  |                 |       |       |
|--|--|-----------------|-------|-------|
|  |  | 1745 (132322)   | 19.29 | 19.37 |
|  |  | 1710.7 (131979) | 19.39 | 19.52 |

|      |                |                 |       |       |
|------|----------------|-----------------|-------|-------|
| 3MHz | 1RB-High (14)  | 1778.5 (132657) | 19.31 | 19.74 |
|      |                | 1745 (132322)   | 19.27 | 19.61 |
|      |                | 1711.5 (131987) | 19.33 | 19.58 |
|      | 1RB-Middle (7) | 1778.5 (132657) | 19.50 | 19.79 |
|      |                | 1745 (132322)   | 19.51 | 19.65 |
|      |                | 1711.5 (131987) | 19.48 | 19.80 |
|      | 1RB-Low (0)    | 1778.5 (132657) | 19.31 | 19.73 |
|      |                | 1745 (132322)   | 19.25 | 19.66 |
|      |                | 1711.5 (131987) | 19.39 | 19.65 |
|      | 8RB-High (7)   | 1778.5 (132657) | 19.36 | 19.45 |
|      |                | 1745 (132322)   | 19.26 | 19.34 |
|      |                | 1711.5 (131987) | 19.41 | 19.46 |
|      | 8RB-Middle (4) | 1778.5 (132657) | 19.39 | 19.47 |
|      |                | 1745 (132322)   | 19.31 | 19.38 |
|      |                | 1711.5 (131987) | 19.42 | 19.51 |
|      | 8RB-Low (0)    | 1778.5 (132657) | 19.36 | 19.46 |
|      |                | 1745 (132322)   | 19.30 | 19.37 |
|      |                | 1711.5 (131987) | 19.39 | 19.49 |

|  |          |                 |       |       |
|--|----------|-----------------|-------|-------|
|  | 15RB (0) | 1778.5 (132657) | 19.34 | 19.38 |
|  |          | 1745 (132322)   | 19.29 | 19.31 |
|  |          | 1711.5 (131987) | 19.39 | 19.39 |

|      |                 |                 |       |       |
|------|-----------------|-----------------|-------|-------|
| 5MHz | 1RB-High (24)   | 1777.5 (132647) | 19.25 | 19.59 |
|      |                 | 1745 (132322)   | 19.18 | 19.44 |
|      |                 | 1712.5 (131997) | 19.25 | 19.50 |
|      | 1RB-Middle (12) | 1777.5 (132647) | 19.50 | 19.77 |
|      |                 | 1745 (132322)   | 19.37 | 19.73 |
|      |                 | 1712.5 (131997) | 19.50 | 19.87 |
|      | 1RB-Low (0)     | 1777.5 (132647) | 19.24 | 19.55 |
|      |                 | 1745 (132322)   | 19.18 | 19.56 |
|      |                 | 1712.5 (131997) | 19.29 | 19.64 |
|      | 12RB-High (13)  | 1777.5 (132647) | 19.36 | 19.34 |
|      |                 | 1745 (132322)   | 19.23 | 19.28 |
|      |                 | 1712.5 (131997) | 19.39 | 19.38 |
|      | 12RB-Middle (6) | 1777.5 (132647) | 19.43 | 19.43 |
|      |                 | 1745 (132322)   | 19.33 | 19.37 |
|      |                 | 1712.5 (131997) | 19.45 | 19.46 |
|      | 12RB-Low (0)    | 1777.5 (132647) | 19.39 | 19.43 |
|      |                 | 1745 (132322)   | 19.31 | 19.31 |

|  |          |                 |       |       |
|--|----------|-----------------|-------|-------|
|  | 25RB (0) | 1712.5 (131997) | 19.35 | 19.37 |
|  |          | 1777.5 (132647) | 19.39 | 19.38 |
|  |          | 1745 (132322)   | 19.30 | 19.34 |
|  |          | 1712.5 (131997) | 19.42 | 19.44 |

|       |                  |               |       |       |
|-------|------------------|---------------|-------|-------|
| 10MHz | 1RB-High (49)    | 1775 (132622) | 19.34 | 19.58 |
|       |                  | 1745 (132322) | 19.25 | 19.60 |
|       |                  | 1715 (132022) | 19.33 | 19.68 |
|       | 1RB-Middle (24)  | 1775 (132622) | 19.45 | 19.81 |
|       |                  | 1745 (132322) | 19.42 | 19.70 |
|       |                  | 1715 (132022) | 19.49 | 19.70 |
|       | 1RB-Low (0)      | 1775 (132622) | 19.32 | 19.70 |
|       |                  | 1745 (132322) | 19.32 | 19.70 |
|       |                  | 1715 (132022) | 19.34 | 19.72 |
|       | 25RB-High (25)   | 1775 (132622) | 19.38 | 19.41 |
|       |                  | 1745 (132322) | 19.34 | 19.36 |
|       |                  | 1715 (132022) | 19.45 | 19.46 |
|       | 25RB-Middle (12) | 1775 (132622) | 19.43 | 19.49 |
|       |                  | 1745 (132322) | 19.37 | 19.39 |
|       |                  | 1715 (132022) | 19.42 | 19.44 |
|       | 25RB-Low (0)     | 1775 (132622) | 19.43 | 19.44 |

|  |          |               |       |       |
|--|----------|---------------|-------|-------|
|  |          | 1745 (132322) | 19.42 | 19.42 |
|  |          | 1715 (132022) | 19.41 | 19.41 |
|  | 50RB (0) | 1775 (132622) | 19.41 | 19.44 |
|  |          | 1745 (132322) | 19.39 | 19.44 |
|  |          | 1715 (132022) | 19.44 | 19.46 |
|  |          |               |       |       |

|       |                  |                 |       |       |
|-------|------------------|-----------------|-------|-------|
| 15MHz | 1RB-High (74)    | 1772.5 (132597) | 19.31 | 19.66 |
|       |                  | 1745 (132322)   | 19.21 | 19.59 |
|       |                  | 1717.5 (132047) | 19.30 | 19.66 |
|       | 1RB-Middle (37)  | 1772.5 (132597) | 19.35 | 19.77 |
|       |                  | 1745 (132322)   | 19.30 | 19.61 |
|       |                  | 1717.5 (132047) | 19.38 | 19.74 |
|       | 1RB-Low (0)      | 1772.5 (132597) | 19.29 | 19.56 |
|       |                  | 1745 (132322)   | 19.32 | 19.59 |
|       |                  | 1717.5 (132047) | 19.36 | 19.71 |
|       | 36RB-High (38)   | 1772.5 (132597) | 19.44 | 19.41 |
|       |                  | 1745 (132322)   | 19.34 | 19.32 |
|       |                  | 1717.5 (132047) | 19.45 | 19.44 |
|       | 36RB-Middle (19) | 1772.5 (132597) | 19.41 | 19.41 |
|       |                  | 1745 (132322)   | 19.40 | 19.42 |
|       |                  | 1717.5 (132047) | 19.47 | 19.46 |

|  |              |                 |       |       |
|--|--------------|-----------------|-------|-------|
|  | 36RB-Low (0) | 1772.5 (132597) | 19.42 | 19.39 |
|  |              | 1745 (132322)   | 19.38 | 19.42 |
|  |              | 1717.5 (132047) | 19.45 | 19.42 |
|  | 75RB (0)     | 1772.5 (132597) | 19.39 | 19.41 |
|  |              | 1745 (132322)   | 19.34 | 19.36 |
|  |              | 1717.5 (132047) | 19.44 | 19.44 |

|       |                  |               |       |       |
|-------|------------------|---------------|-------|-------|
| 20MHz | 1RB-High (99)    | 1770 (132572) | 19.12 | 19.66 |
|       |                  | 1745 (132322) | 19.05 | 19.50 |
|       |                  | 1720 (132072) | 19.18 | 19.74 |
|       | 1RB-Middle (50)  | 1770 (132572) | 19.44 | 20.01 |
|       |                  | 1745 (132322) | 19.41 | 19.83 |
|       |                  | 1720 (132072) | 19.54 | 20.08 |
|       | 1RB-Low (0)      | 1770 (132572) | 19.12 | 19.66 |
|       |                  | 1745 (132322) | 19.18 | 19.62 |
|       |                  | 1720 (132072) | 19.24 | 19.75 |
|       | 50RB-High (50)   | 1770 (132572) | 19.38 | 19.35 |
|       |                  | 1745 (132322) | 19.25 | 19.25 |
|       |                  | 1720 (132072) | 19.40 | 19.42 |
|       | 50RB-Middle (25) | 1770 (132572) | 19.40 | 19.45 |
|       |                  | 1745 (132322) | 19.40 | 19.40 |

|  |              |               |       |       |
|--|--------------|---------------|-------|-------|
|  | 50RB-Low (0) | 1720 (132072) | 19.43 | 19.53 |
|  |              | 1770 (132572) | 19.41 | 19.43 |
|  |              | 1745 (132322) | 19.40 | 19.42 |
|  | 100RB (0)    | 1720 (132072) | 19.42 | 19.45 |
|  |              | 1770 (132572) | 19.40 | 19.38 |
|  |              | 1745 (132322) | 19.32 | 19.34 |
|  |              | 1720 (132072) | 19.44 | 19.46 |

### 11.3.2 Second antenna

#### LTEB2(receiver on)

| BANDWIDTH | Number of RBs  | Frequency      | QPSK  | 16QAM |
|-----------|----------------|----------------|-------|-------|
| 1.4MHz    | 1RB-High (5)   | 1909.3 (19193) | 16.39 | 16.80 |
|           |                | 1880 (18900)   | 16.41 | 16.84 |
|           |                | 1850.7 (18607) | 16.39 | 16.79 |
|           | 1RB-Middle (3) | 1909.3 (19193) | 16.52 | 16.77 |
|           |                | 1880 (18900)   | 16.56 | 17.00 |
|           |                | 1850.7 (18607) | 16.55 | 16.84 |
|           | 1RB-Low (0)    | 1909.3 (19193) | 16.38 | 16.69 |
|           |                | 1880 (18900)   | 16.39 | 16.84 |
|           |                | 1850.7 (18607) | 16.43 | 16.83 |
|           | 3RB-High (3)   | 1909.3 (19193) | 16.49 | 16.57 |

|  |                |                |       |       |
|--|----------------|----------------|-------|-------|
|  |                | 1880 (18900)   | 16.50 | 16.53 |
|  |                | 1850.7 (18607) | 16.51 | 16.53 |
|  | 3RB-Middle (1) | 1909.3 (19193) | 16.54 | 16.53 |
|  |                | 1880 (18900)   | 16.57 | 16.65 |
|  |                | 1850.7 (18607) | 16.54 | 16.61 |
|  | 3RB-Low (0)    | 1909.3 (19193) | 16.50 | 16.56 |
|  |                | 1880 (18900)   | 16.51 | 16.51 |
|  |                | 1850.7 (18607) | 16.52 | 16.55 |
|  | 6RB (0)        | 1909.3 (19193) | 16.49 | 16.60 |
|  |                | 1880 (18900)   | 16.52 | 16.66 |
|  |                | 1850.7 (18607) | 16.53 | 16.68 |

|      |                |                |       |       |
|------|----------------|----------------|-------|-------|
| 3MHz | 1RB-High (14)  | 1908.5 (19185) | 16.47 | 16.87 |
|      |                | 1880 (18900)   | 16.49 | 16.78 |
|      |                | 1851.5 (18615) | 16.48 | 16.78 |
|      | 1RB-Middle (7) | 1908.5 (19185) | 16.59 | 16.96 |
|      |                | 1880 (18900)   | 16.65 | 16.98 |
|      |                | 1851.5 (18615) | 16.65 | 17.10 |
|      | 1RB-Low (0)    | 1908.5 (19185) | 16.49 | 16.88 |
|      |                | 1880 (18900)   | 16.49 | 16.89 |
|      |                | 1851.5 (18615) | 16.49 | 16.88 |

|  |                |                |       |       |
|--|----------------|----------------|-------|-------|
|  | 8RB-High (7)   | 1908.5 (19185) | 16.51 | 16.62 |
|  |                | 1880 (18900)   | 16.51 | 16.63 |
|  |                | 1851.5 (18615) | 16.48 | 16.59 |
|  | 8RB-Middle (4) | 1908.5 (19185) | 16.54 | 16.63 |
|  |                | 1880 (18900)   | 16.55 | 16.65 |
|  |                | 1851.5 (18615) | 16.50 | 16.62 |
|  | 8RB-Low (0)    | 1908.5 (19185) | 16.51 | 16.58 |
|  |                | 1880 (18900)   | 16.52 | 16.64 |
|  |                | 1851.5 (18615) | 16.54 | 16.63 |
|  | 15RB (0)       | 1908.5 (19185) | 16.50 | 16.57 |
|  |                | 1880 (18900)   | 16.54 | 16.57 |
|  |                | 1851.5 (18615) | 16.50 | 16.56 |

|      |                 |                |       |       |
|------|-----------------|----------------|-------|-------|
| 5MHz | 1RB-High (24)   | 1907.5 (19175) | 16.36 | 16.74 |
|      |                 | 1880 (18900)   | 16.38 | 16.81 |
|      |                 | 1852.5 (18625) | 16.37 | 16.80 |
|      | 1RB-Middle (12) | 1907.5 (19175) | 16.60 | 16.95 |
|      |                 | 1880 (18900)   | 16.67 | 17.05 |
|      |                 | 1852.5 (18625) | 16.59 | 17.07 |
|      | 1RB-Low (0)     | 1907.5 (19175) | 16.38 | 16.74 |
|      |                 | 1880 (18900)   | 16.38 | 16.83 |

|  |                 |                |       |       |
|--|-----------------|----------------|-------|-------|
|  | 12RB-High (13)  | 1852.5 (18625) | 16.40 | 16.82 |
|  |                 | 1907.5 (19175) | 16.51 | 16.52 |
|  |                 | 1880 (18900)   | 16.53 | 16.57 |
|  |                 | 1852.5 (18625) | 16.54 | 16.57 |
|  | 12RB-Middle (6) | 1907.5 (19175) | 16.56 | 16.57 |
|  |                 | 1880 (18900)   | 16.59 | 16.62 |
|  |                 | 1852.5 (18625) | 16.57 | 16.59 |
|  | 12RB-Low (0)    | 1907.5 (19175) | 16.56 | 16.62 |
|  |                 | 1880 (18900)   | 16.53 | 16.56 |
|  |                 | 1852.5 (18625) | 16.54 | 16.57 |
|  | 25RB (0)        | 1907.5 (19175) | 16.56 | 16.60 |
|  |                 | 1880 (18900)   | 16.59 | 16.61 |
|  |                 | 1852.5 (18625) | 16.57 | 16.59 |

|       |                 |              |       |       |
|-------|-----------------|--------------|-------|-------|
| 10MHz | 1RB-High (49)   | 1905 (19150) | 16.44 | 16.70 |
|       |                 | 1880 (18900) | 16.47 | 16.88 |
|       |                 | 1855 (18650) | 16.42 | 16.84 |
|       | 1RB-Middle (24) | 1905 (19150) | 16.61 | 16.98 |
|       |                 | 1880 (18900) | 16.61 | 16.98 |
|       |                 | 1855 (18650) | 16.60 | 16.90 |
|       | 1RB-Low (0)     | 1905 (19150) | 16.45 | 16.75 |

|  |                  |              |       |       |
|--|------------------|--------------|-------|-------|
|  |                  | 1880 (18900) | 16.45 | 16.90 |
|  |                  | 1855 (18650) | 16.50 | 16.75 |
|  | 25RB-High (25)   | 1905 (19150) | 16.46 | 16.50 |
|  |                  | 1880 (18900) | 16.53 | 16.55 |
|  |                  | 1855 (18650) | 16.46 | 16.52 |
|  | 25RB-Middle (12) | 1905 (19150) | 16.58 | 16.61 |
|  |                  | 1880 (18900) | 16.57 | 16.62 |
|  |                  | 1855 (18650) | 16.55 | 16.60 |
|  | 25RB-Low (0)     | 1905 (19150) | 16.56 | 16.61 |
|  |                  | 1880 (18900) | 16.50 | 16.55 |
|  |                  | 1855 (18650) | 16.48 | 16.53 |
|  | 50RB (0)         | 1905 (19150) | 16.51 | 16.55 |
|  |                  | 1880 (18900) | 16.48 | 16.54 |
|  |                  | 1855 (18650) | 16.48 | 16.52 |

|       |                 |                |       |       |
|-------|-----------------|----------------|-------|-------|
| 15MHz | 1RB-High (74)   | 1902.5 (19125) | 16.35 | 16.77 |
|       |                 | 1880 (18900)   | 16.42 | 16.82 |
|       |                 | 1857.5 (18675) | 16.37 | 16.75 |
|       | 1RB-Middle (37) | 1902.5 (19125) | 16.49 | 16.80 |
|       |                 | 1880 (18900)   | 16.50 | 16.95 |
|       |                 | 1857.5 (18675) | 16.47 | 16.79 |

|  |                  |                |       |       |
|--|------------------|----------------|-------|-------|
|  | 1RB-Low (0)      | 1902.5 (19125) | 16.44 | 16.84 |
|  |                  | 1880 (18900)   | 16.39 | 16.71 |
|  |                  | 1857.5 (18675) | 16.44 | 16.81 |
|  | 36RB-High (38)   | 1902.5 (19125) | 16.47 | 16.48 |
|  |                  | 1880 (18900)   | 16.52 | 16.54 |
|  |                  | 1857.5 (18675) | 16.50 | 16.51 |
|  | 36RB-Middle (19) | 1902.5 (19125) | 16.55 | 16.57 |
|  |                  | 1880 (18900)   | 16.53 | 16.51 |
|  |                  | 1857.5 (18675) | 16.53 | 16.54 |
|  | 36RB-Low (0)     | 1902.5 (19125) | 16.57 | 16.60 |
|  |                  | 1880 (18900)   | 16.51 | 16.53 |
|  |                  | 1857.5 (18675) | 16.50 | 16.51 |
|  | 75RB (0)         | 1902.5 (19125) | 16.51 | 16.54 |
|  |                  | 1880 (18900)   | 16.52 | 16.57 |
|  |                  | 1857.5 (18675) | 16.49 | 16.53 |

|       |                 |              |       |       |
|-------|-----------------|--------------|-------|-------|
| 20MHz | 1RB-High (99)   | 1900 (19100) | 15.56 | 16.05 |
|       |                 | 1880 (18900) | 15.62 | 15.93 |
|       |                 | 1860 (18700) | 15.56 | 15.82 |
|       | 1RB-Middle (50) | 1900 (19100) | 15.86 | 16.29 |
|       |                 | 1880 (18900) | 15.87 | 16.20 |

|  |                  |              |       |       |
|--|------------------|--------------|-------|-------|
|  | 1RB-Low (0)      | 1860 (18700) | 15.89 | 16.32 |
|  |                  | 1900 (19100) | 15.67 | 16.06 |
|  |                  | 1880 (18900) | 15.56 | 16.03 |
|  |                  | 1860 (18700) | 15.62 | 16.00 |
|  | 50RB-High (50)   | 1900 (19100) | 15.81 | 15.86 |
|  |                  | 1880 (18900) | 15.90 | 15.91 |
|  |                  | 1860 (18700) | 15.86 | 15.92 |
|  | 50RB-Middle (25) | 1900 (19100) | 15.90 | 15.98 |
|  |                  | 1880 (18900) | 15.89 | 15.93 |
|  |                  | 1860 (18700) | 15.85 | 15.90 |
|  | 50RB-Low (0)     | 1900 (19100) | 16.02 | 16.10 |
|  |                  | 1880 (18900) | 15.78 | 15.82 |
|  |                  | 1860 (18700) | 15.87 | 15.92 |
|  | 100RB (0)        | 1900 (19100) | 15.91 | 15.94 |
|  |                  | 1880 (18900) | 15.86 | 15.86 |
|  |                  | 1860 (18700) | 15.86 | 15.90 |

**LTEB2 (receiver off)**

| BANDWIDTH | Number of RBs | Frequency      | QPSK  | 16QAM |
|-----------|---------------|----------------|-------|-------|
| 1.4MHz    | 1RB-High (5)  | 1909.3 (19193) | 19.40 | 19.72 |
|           |               | 1880 (18900)   | 19.41 | 19.79 |

|      |                |                |       |       |
|------|----------------|----------------|-------|-------|
|      |                | 1850.7 (18607) | 19.39 | 19.75 |
|      | 1RB-Middle (3) | 1909.3 (19193) | 19.51 | 19.76 |
|      |                | 1880 (18900)   | 19.54 | 19.82 |
|      |                | 1850.7 (18607) | 19.55 | 19.92 |
|      | 1RB-Low (0)    | 1909.3 (19193) | 19.36 | 19.64 |
|      |                | 1880 (18900)   | 19.43 | 19.67 |
|      |                | 1850.7 (18607) | 19.41 | 19.70 |
|      | 3RB-High (3)   | 1909.3 (19193) | 19.47 | 19.53 |
|      |                | 1880 (18900)   | 19.56 | 19.54 |
|      |                | 1850.7 (18607) | 19.49 | 19.59 |
|      | 3RB-Middle (1) | 1909.3 (19193) | 19.55 | 19.53 |
|      |                | 1880 (18900)   | 19.55 | 19.61 |
|      |                | 1850.7 (18607) | 19.55 | 19.58 |
|      | 3RB-Low (0)    | 1909.3 (19193) | 19.49 | 19.42 |
|      |                | 1880 (18900)   | 19.52 | 19.54 |
|      |                | 1850.7 (18607) | 19.50 | 19.55 |
|      | 6RB (0)        | 1909.3 (19193) | 19.48 | 19.61 |
|      |                | 1880 (18900)   | 19.53 | 19.60 |
|      |                | 1850.7 (18607) | 19.49 | 19.58 |
| 3MHz | 1RB-High (14)  | 1908.5 (19185) | 19.50 | 19.81 |

|  |                |                |       |       |
|--|----------------|----------------|-------|-------|
|  |                | 1880 (18900)   | 19.51 | 19.80 |
|  |                | 1851.5 (18615) | 19.47 | 19.80 |
|  | 1RB-Middle (7) | 1908.5 (19185) | 19.60 | 19.89 |
|  |                | 1880 (18900)   | 19.58 | 19.96 |
|  |                | 1851.5 (18615) | 19.63 | 19.93 |
|  | 1RB-Low (0)    | 1908.5 (19185) | 19.47 | 19.74 |
|  |                | 1880 (18900)   | 19.49 | 19.81 |
|  |                | 1851.5 (18615) | 19.49 | 19.83 |
|  | 8RB-High (7)   | 1908.5 (19185) | 19.52 | 19.59 |
|  |                | 1880 (18900)   | 19.54 | 19.61 |
|  |                | 1851.5 (18615) | 19.50 | 19.60 |
|  | 8RB-Middle (4) | 1908.5 (19185) | 19.53 | 19.57 |
|  |                | 1880 (18900)   | 19.55 | 19.64 |
|  |                | 1851.5 (18615) | 19.51 | 19.61 |
|  | 8RB-Low (0)    | 1908.5 (19185) | 19.51 | 19.58 |
|  |                | 1880 (18900)   | 19.54 | 19.58 |
|  |                | 1851.5 (18615) | 19.53 | 19.60 |
|  | 15RB (0)       | 1908.5 (19185) | 19.49 | 19.52 |
|  |                | 1880 (18900)   | 19.53 | 19.53 |
|  |                | 1851.5 (18615) | 19.49 | 19.51 |

|      |                 |                |       |       |
|------|-----------------|----------------|-------|-------|
| 5MHz | 1RB-High (24)   | 1907.5 (19175) | 19.38 | 19.74 |
|      |                 | 1880 (18900)   | 19.40 | 19.74 |
|      |                 | 1852.5 (18625) | 19.36 | 19.72 |
|      | 1RB-Middle (12) | 1907.5 (19175) | 19.70 | 20.00 |
|      |                 | 1880 (18900)   | 19.71 | 19.92 |
|      |                 | 1852.5 (18625) | 19.63 | 19.92 |
|      | 1RB-Low (0)     | 1907.5 (19175) | 19.38 | 19.75 |
|      |                 | 1880 (18900)   | 19.40 | 19.76 |
|      |                 | 1852.5 (18625) | 19.40 | 19.73 |
|      | 12RB-High (13)  | 1907.5 (19175) | 19.50 | 19.53 |
|      |                 | 1880 (18900)   | 19.56 | 19.53 |
|      |                 | 1852.5 (18625) | 19.50 | 19.54 |
|      | 12RB-Middle (6) | 1907.5 (19175) | 19.54 | 19.54 |
|      |                 | 1880 (18900)   | 19.59 | 19.59 |
|      |                 | 1852.5 (18625) | 19.51 | 19.56 |
|      | 12RB-Low (0)    | 1907.5 (19175) | 19.57 | 19.57 |
|      |                 | 1880 (18900)   | 19.53 | 19.51 |
|      |                 | 1852.5 (18625) | 19.49 | 19.50 |
|      | 25RB (0)        | 1907.5 (19175) | 19.56 | 19.58 |
|      |                 | 1880 (18900)   | 19.54 | 19.55 |

|  |  |                |       |       |
|--|--|----------------|-------|-------|
|  |  | 1852.5 (18625) | 19.53 | 19.54 |
|--|--|----------------|-------|-------|

|       |                  |              |       |       |
|-------|------------------|--------------|-------|-------|
| 10MHz | 1RB-High (49)    | 1905 (19150) | 19.47 | 19.79 |
|       |                  | 1880 (18900) | 19.48 | 19.81 |
|       |                  | 1855 (18650) | 19.43 | 19.72 |
|       | 1RB-Middle (24)  | 1905 (19150) | 19.58 | 19.85 |
|       |                  | 1880 (18900) | 19.61 | 19.82 |
|       |                  | 1855 (18650) | 19.60 | 20.01 |
|       | 1RB-Low (0)      | 1905 (19150) | 19.46 | 19.83 |
|       |                  | 1880 (18900) | 19.47 | 19.77 |
|       |                  | 1855 (18650) | 19.47 | 19.74 |
|       | 25RB-High (25)   | 1905 (19150) | 19.47 | 19.55 |
|       |                  | 1880 (18900) | 19.51 | 19.53 |
|       |                  | 1855 (18650) | 19.52 | 19.58 |
|       | 25RB-Middle (12) | 1905 (19150) | 19.56 | 19.61 |
|       |                  | 1880 (18900) | 19.56 | 19.56 |
|       |                  | 1855 (18650) | 19.52 | 19.58 |
|       | 25RB-Low (0)     | 1905 (19150) | 19.56 | 19.58 |
|       |                  | 1880 (18900) | 19.49 | 19.53 |
|       |                  | 1855 (18650) | 19.46 | 19.52 |
|       | 50RB (0)         | 1905 (19150) | 19.50 | 19.60 |

|  |  |              |       |       |
|--|--|--------------|-------|-------|
|  |  | 1880 (18900) | 19.52 | 19.50 |
|  |  | 1855 (18650) | 19.48 | 19.55 |

|       |                  |                |       |       |
|-------|------------------|----------------|-------|-------|
| 15MHz | 1RB-High (74)    | 1902.5 (19125) | 19.38 | 19.71 |
|       |                  | 1880 (18900)   | 19.43 | 19.67 |
|       |                  | 1857.5 (18675) | 19.45 | 19.80 |
|       | 1RB-Middle (37)  | 1902.5 (19125) | 19.47 | 19.90 |
|       |                  | 1880 (18900)   | 19.50 | 19.86 |
|       |                  | 1857.5 (18675) | 19.44 | 19.92 |
|       | 1RB-Low (0)      | 1902.5 (19125) | 19.45 | 19.69 |
|       |                  | 1880 (18900)   | 19.38 | 19.77 |
|       |                  | 1857.5 (18675) | 19.42 | 19.77 |
|       | 36RB-High (38)   | 1902.5 (19125) | 19.46 | 19.50 |
|       |                  | 1880 (18900)   | 19.51 | 19.51 |
|       |                  | 1857.5 (18675) | 19.51 | 19.51 |
|       | 36RB-Middle (19) | 1902.5 (19125) | 19.55 | 19.55 |
|       |                  | 1880 (18900)   | 19.55 | 19.52 |
|       |                  | 1857.5 (18675) | 19.52 | 19.54 |
|       | 36RB-Low (0)     | 1902.5 (19125) | 19.57 | 19.57 |
|       |                  | 1880 (18900)   | 19.50 | 19.46 |
|       |                  | 1857.5 (18675) | 19.49 | 19.49 |

|  |          |                |       |       |
|--|----------|----------------|-------|-------|
|  | 75RB (0) | 1902.5 (19125) | 19.49 | 19.56 |
|  |          | 1880 (18900)   | 19.52 | 19.53 |
|  |          | 1857.5 (18675) | 19.46 | 19.53 |

|       |                  |              |       |       |
|-------|------------------|--------------|-------|-------|
| 20MHz | 1RB-High (99)    | 1900 (19100) | 19.20 | 19.45 |
|       |                  | 1880 (18900) | 19.24 | 19.58 |
|       |                  | 1860 (18700) | 19.18 | 19.56 |
|       | 1RB-Middle (50)  | 1900 (19100) | 19.50 | 19.90 |
|       |                  | 1880 (18900) | 19.58 | 19.87 |
|       |                  | 1860 (18700) | 19.48 | 19.92 |
|       | 1RB-Low (0)      | 1900 (19100) | 19.28 | 19.55 |
|       |                  | 1880 (18900) | 19.21 | 19.53 |
|       |                  | 1860 (18700) | 19.22 | 19.53 |
|       | 50RB-High (50)   | 1900 (19100) | 19.42 | 19.49 |
|       |                  | 1880 (18900) | 19.48 | 19.53 |
|       |                  | 1860 (18700) | 19.53 | 19.57 |
|       | 50RB-Middle (25) | 1900 (19100) | 19.54 | 19.58 |
|       |                  | 1880 (18900) | 19.48 | 19.50 |
|       |                  | 1860 (18700) | 19.48 | 19.51 |
|       | 50RB-Low (0)     | 1900 (19100) | 19.66 | 19.66 |
|       |                  | 1880 (18900) | 19.39 | 19.39 |

|  |           |              |       |       |
|--|-----------|--------------|-------|-------|
|  | 100RB (0) | 1860 (18700) | 19.45 | 19.47 |
|  |           | 1900 (19100) | 19.53 | 19.55 |
|  |           | 1880 (18900) | 19.47 | 19.46 |
|  |           | 1860 (18700) | 19.48 | 19.49 |

**LTEB2 (Hostpot)**

| BANDWIDTH | Number of RBs  | Frequency      | QPSK  | 16QAM |
|-----------|----------------|----------------|-------|-------|
| 1.4MHz    | 1RB-High (5)   | 1909.3 (19193) | 15.83 | 16.20 |
|           |                | 1880 (18900)   | 15.82 | 16.17 |
|           |                | 1850.7 (18607) | 15.84 | 16.19 |
|           | 1RB-Middle (3) | 1909.3 (19193) | 15.94 | 16.31 |
|           |                | 1880 (18900)   | 15.99 | 16.41 |
|           |                | 1850.7 (18607) | 15.97 | 16.30 |
|           | 1RB-Low (0)    | 1909.3 (19193) | 15.80 | 16.16 |
|           |                | 1880 (18900)   | 15.85 | 16.15 |
|           |                | 1850.7 (18607) | 15.86 | 16.15 |
|           | 3RB-High (3)   | 1909.3 (19193) | 15.89 | 15.98 |
|           |                | 1880 (18900)   | 15.92 | 15.98 |
|           |                | 1850.7 (18607) | 15.95 | 15.92 |
|           | 3RB-Middle (1) | 1909.3 (19193) | 15.95 | 16.02 |
|           |                | 1880 (18900)   | 15.97 | 16.04 |

|  |             |                |       |       |
|--|-------------|----------------|-------|-------|
|  | 3RB-Low (0) | 1850.7 (18607) | 15.96 | 15.94 |
|  |             | 1909.3 (19193) | 15.94 | 15.99 |
|  |             | 1880 (18900)   | 15.94 | 16.02 |
|  |             | 1850.7 (18607) | 15.95 | 16.01 |
|  | 6RB (0)     | 1909.3 (19193) | 15.91 | 16.09 |
|  |             | 1880 (18900)   | 15.95 | 16.11 |
|  |             | 1850.7 (18607) | 15.92 | 16.08 |

|      |                |                |       |       |
|------|----------------|----------------|-------|-------|
| 3MHz | 1RB-High (14)  | 1908.5 (19185) | 15.90 | 16.32 |
|      |                | 1880 (18900)   | 15.90 | 16.34 |
|      |                | 1851.5 (18615) | 15.89 | 16.21 |
|      | 1RB-Middle (7) | 1908.5 (19185) | 16.04 | 16.38 |
|      |                | 1880 (18900)   | 16.06 | 16.36 |
|      |                | 1851.5 (18615) | 16.09 | 16.51 |
|      | 1RB-Low (0)    | 1908.5 (19185) | 15.92 | 16.20 |
|      |                | 1880 (18900)   | 15.93 | 16.21 |
|      |                | 1851.5 (18615) | 15.94 | 16.33 |
|      | 8RB-High (7)   | 1908.5 (19185) | 15.92 | 16.05 |
|      |                | 1880 (18900)   | 15.95 | 16.07 |
|      |                | 1851.5 (18615) | 15.93 | 16.04 |
|      | 8RB-Middle (4) | 1908.5 (19185) | 15.96 | 16.07 |

|  |             |                |       |       |
|--|-------------|----------------|-------|-------|
|  |             | 1880 (18900)   | 15.98 | 16.10 |
|  |             | 1851.5 (18615) | 15.93 | 16.06 |
|  | 8RB-Low (0) | 1908.5 (19185) | 15.95 | 16.06 |
|  |             | 1880 (18900)   | 15.95 | 16.07 |
|  |             | 1851.5 (18615) | 15.95 | 16.07 |
|  | 15RB (0)    | 1908.5 (19185) | 15.91 | 15.99 |
|  |             | 1880 (18900)   | 15.96 | 16.00 |
|  |             | 1851.5 (18615) | 15.91 | 15.98 |

|      |                 |                |       |       |
|------|-----------------|----------------|-------|-------|
| 5MHz | 1RB-High (24)   | 1907.5 (19175) | 15.78 | 16.19 |
|      |                 | 1880 (18900)   | 15.83 | 16.13 |
|      |                 | 1852.5 (18625) | 15.78 | 16.14 |
|      | 1RB-Middle (12) | 1907.5 (19175) | 16.10 | 16.33 |
|      |                 | 1880 (18900)   | 16.10 | 16.45 |
|      |                 | 1852.5 (18625) | 16.05 | 16.43 |
|      | 1RB-Low (0)     | 1907.5 (19175) | 15.79 | 16.14 |
|      |                 | 1880 (18900)   | 15.85 | 16.16 |
|      |                 | 1852.5 (18625) | 15.83 | 16.18 |
|      | 12RB-High (13)  | 1907.5 (19175) | 15.93 | 15.98 |
|      |                 | 1880 (18900)   | 15.97 | 16.01 |
|      |                 | 1852.5 (18625) | 15.96 | 16.00 |

|  |                 |                |       |       |
|--|-----------------|----------------|-------|-------|
|  | 12RB-Middle (6) | 1907.5 (19175) | 16.00 | 16.03 |
|  |                 | 1880 (18900)   | 16.02 | 16.05 |
|  |                 | 1852.5 (18625) | 15.98 | 16.01 |
|  | 12RB-Low (0)    | 1907.5 (19175) | 15.98 | 16.02 |
|  |                 | 1880 (18900)   | 15.98 | 16.02 |
|  |                 | 1852.5 (18625) | 15.96 | 16.00 |
|  | 25RB (0)        | 1907.5 (19175) | 15.99 | 16.02 |
|  |                 | 1880 (18900)   | 15.96 | 16.00 |
|  |                 | 1852.5 (18625) | 15.99 | 16.02 |

|       |                 |              |       |       |
|-------|-----------------|--------------|-------|-------|
| 10MHz | 1RB-High (49)   | 1905 (19150) | 15.87 | 16.31 |
|       |                 | 1880 (18900) | 15.92 | 16.27 |
|       |                 | 1855 (18650) | 15.88 | 16.23 |
|       | 1RB-Middle (24) | 1905 (19150) | 16.05 | 16.42 |
|       |                 | 1880 (18900) | 16.06 | 16.48 |
|       |                 | 1855 (18650) | 15.99 | 16.33 |
|       | 1RB-Low (0)     | 1905 (19150) | 15.91 | 16.20 |
|       |                 | 1880 (18900) | 15.88 | 16.16 |
|       |                 | 1855 (18650) | 15.92 | 16.28 |
|       | 25RB-High (25)  | 1905 (19150) | 15.87 | 15.90 |
|       |                 | 1880 (18900) | 15.95 | 16.00 |

|  |                  |              |       |       |
|--|------------------|--------------|-------|-------|
|  | 25RB-Middle (12) | 1855 (18650) | 15.89 | 15.94 |
|  |                  | 1905 (19150) | 15.99 | 16.03 |
|  |                  | 1880 (18900) | 15.97 | 16.05 |
|  |                  | 1855 (18650) | 15.96 | 16.03 |
|  | 25RB-Low (0)     | 1905 (19150) | 15.97 | 16.01 |
|  |                  | 1880 (18900) | 15.92 | 15.98 |
|  |                  | 1855 (18650) | 15.92 | 15.97 |
|  | 50RB (0)         | 1905 (19150) | 15.93 | 15.97 |
|  |                  | 1880 (18900) | 15.94 | 15.98 |
|  |                  | 1855 (18650) | 15.89 | 15.96 |

|       |                 |                |       |       |
|-------|-----------------|----------------|-------|-------|
| 15MHz | 1RB-High (74)   | 1902.5 (19125) | 15.81 | 16.09 |
|       |                 | 1880 (18900)   | 15.87 | 16.12 |
|       |                 | 1857.5 (18675) | 15.83 | 16.14 |
|       | 1RB-Middle (37) | 1902.5 (19125) | 15.89 | 16.27 |
|       |                 | 1880 (18900)   | 15.96 | 16.30 |
|       |                 | 1857.5 (18675) | 15.90 | 16.35 |
|       | 1RB-Low (0)     | 1902.5 (19125) | 15.89 | 16.26 |
|       |                 | 1880 (18900)   | 15.85 | 16.15 |
|       |                 | 1857.5 (18675) | 15.89 | 16.29 |
|       | 36RB-High (38)  | 1902.5 (19125) | 15.90 | 15.92 |

|  |                  |                |       |       |
|--|------------------|----------------|-------|-------|
|  |                  | 1880 (18900)   | 15.94 | 15.97 |
|  |                  | 1857.5 (18675) | 15.90 | 15.95 |
|  | 36RB-Middle (19) | 1902.5 (19125) | 15.98 | 15.99 |
|  |                  | 1880 (18900)   | 15.98 | 15.99 |
|  |                  | 1857.5 (18675) | 15.96 | 15.98 |
|  | 36RB-Low (0)     | 1902.5 (19125) | 16.02 | 16.01 |
|  |                  | 1880 (18900)   | 15.92 | 15.95 |
|  |                  | 1857.5 (18675) | 15.95 | 15.94 |
|  | 75RB (0)         | 1902.5 (19125) | 15.94 | 15.98 |
|  |                  | 1880 (18900)   | 15.96 | 15.98 |
|  |                  | 1857.5 (18675) | 15.90 | 15.95 |

|       |                 |              |       |       |
|-------|-----------------|--------------|-------|-------|
| 20MHz | 1RB-High (99)   | 1900 (19100) | 15.68 | 16.19 |
|       |                 | 1880 (18900) | 15.74 | 16.21 |
|       |                 | 1860 (18700) | 15.68 | 16.12 |
|       | 1RB-Middle (50) | 1900 (19100) | 16.03 | 16.45 |
|       |                 | 1880 (18900) | 16.08 | 16.36 |
|       |                 | 1860 (18700) | 15.98 | 16.40 |
|       | 1RB-Low (0)     | 1900 (19100) | 15.84 | 16.20 |
|       |                 | 1880 (18900) | 15.72 | 16.14 |
|       |                 | 1860 (18700) | 15.74 | 16.05 |

|  |                  |              |       |       |
|--|------------------|--------------|-------|-------|
|  | 50RB-High (50)   | 1900 (19100) | 15.94 | 15.99 |
|  |                  | 1880 (18900) | 16.02 | 16.05 |
|  |                  | 1860 (18700) | 16.02 | 16.07 |
|  | 50RB-Middle (25) | 1900 (19100) | 16.06 | 16.09 |
|  |                  | 1880 (18900) | 16.01 | 16.05 |
|  |                  | 1860 (18700) | 15.98 | 16.05 |
|  | 50RB-Low (0)     | 1900 (19100) | 16.15 | 16.20 |
|  |                  | 1880 (18900) | 15.89 | 15.94 |
|  |                  | 1860 (18700) | 16.00 | 16.04 |
|  | 100RB (0)        | 1900 (19100) | 16.06 | 16.08 |
|  |                  | 1880 (18900) | 15.97 | 16.00 |
|  |                  | 1860 (18700) | 15.98 | 16.02 |

**LTEB4(receiver on)**

| BANDWIDTH | Number of RBs  | Frequency      | QPSK  | 16QAM |
|-----------|----------------|----------------|-------|-------|
| 1.4MHz    | 1RB-High (5)   | 1754.3 (20393) | 18.26 | 18.69 |
|           |                | 1732.5 (20175) | 18.29 | 18.62 |
|           |                | 1710.7 (19957) | 18.28 | 18.60 |
|           | 1RB-Middle (3) | 1754.3 (20393) | 18.31 | 18.74 |
|           |                | 1732.5 (20175) | 18.39 | 18.79 |
|           |                | 1710.7 (19957) | 18.41 | 18.76 |

|  |                |                |       |       |
|--|----------------|----------------|-------|-------|
|  | 1RB-Low (0)    | 1754.3 (20393) | 18.23 | 18.69 |
|  |                | 1732.5 (20175) | 18.27 | 18.62 |
|  |                | 1710.7 (19957) | 18.26 | 18.58 |
|  | 3RB-High (3)   | 1754.3 (20393) | 18.33 | 18.38 |
|  |                | 1732.5 (20175) | 18.38 | 18.35 |
|  |                | 1710.7 (19957) | 18.40 | 18.36 |
|  | 3RB-Middle (1) | 1754.3 (20393) | 18.38 | 18.43 |
|  |                | 1732.5 (20175) | 18.40 | 18.44 |
|  |                | 1710.7 (19957) | 18.44 | 18.40 |
|  | 3RB-Low (0)    | 1754.3 (20393) | 18.30 | 18.29 |
|  |                | 1732.5 (20175) | 18.40 | 18.42 |
|  |                | 1710.7 (19957) | 18.40 | 18.34 |
|  | 6RB (0)        | 1754.3 (20393) | 18.32 | 18.45 |
|  |                | 1732.5 (20175) | 18.37 | 18.50 |
|  |                | 1710.7 (19957) | 18.39 | 18.53 |

|      |                |                |       |       |
|------|----------------|----------------|-------|-------|
| 3MHz | 1RB-High (14)  | 1753.5 (20385) | 18.32 | 18.67 |
|      |                | 1732.5 (20175) | 18.33 | 18.62 |
|      |                | 1711.5 (19965) | 18.38 | 18.80 |
|      | 1RB-Middle (7) | 1753.5 (20385) | 18.45 | 18.75 |
|      |                | 1732.5 (20175) | 18.47 | 18.86 |

|  |                |                |       |       |
|--|----------------|----------------|-------|-------|
|  | 1RB-Low (0)    | 1711.5 (19965) | 18.57 | 18.81 |
|  |                | 1753.5 (20385) | 18.32 | 18.70 |
|  |                | 1732.5 (20175) | 18.36 | 18.67 |
|  |                | 1711.5 (19965) | 18.36 | 18.79 |
|  | 8RB-High (7)   | 1753.5 (20385) | 18.33 | 18.45 |
|  |                | 1732.5 (20175) | 18.38 | 18.49 |
|  |                | 1711.5 (19965) | 18.41 | 18.53 |
|  | 8RB-Middle (4) | 1753.5 (20385) | 18.36 | 18.49 |
|  |                | 1732.5 (20175) | 18.41 | 18.51 |
|  |                | 1711.5 (19965) | 18.42 | 18.51 |
|  | 8RB-Low (0)    | 1753.5 (20385) | 18.34 | 18.46 |
|  |                | 1732.5 (20175) | 18.37 | 18.50 |
|  |                | 1711.5 (19965) | 18.39 | 18.49 |
|  | 15RB (0)       | 1753.5 (20385) | 18.33 | 18.38 |
|  |                | 1732.5 (20175) | 18.38 | 18.42 |
|  |                | 1711.5 (19965) | 18.39 | 18.46 |

|      |                 |                |       |       |
|------|-----------------|----------------|-------|-------|
| 5MHz | 1RB-High (24)   | 1752.5 (20375) | 18.25 | 18.68 |
|      |                 | 1732.5 (20175) | 18.27 | 18.72 |
|      |                 | 1712.5 (19975) | 18.29 | 18.68 |
|      | 1RB-Middle (12) | 1752.5 (20375) | 18.40 | 18.91 |

|  |                 |                |       |       |
|--|-----------------|----------------|-------|-------|
|  |                 | 1732.5 (20175) | 18.49 | 18.89 |
|  |                 | 1712.5 (19975) | 18.52 | 18.80 |
|  | 1RB-Low (0)     | 1752.5 (20375) | 18.22 | 18.56 |
|  |                 | 1732.5 (20175) | 18.28 | 18.62 |
|  |                 | 1712.5 (19975) | 18.30 | 18.67 |
|  | 12RB-High (13)  | 1752.5 (20375) | 18.33 | 18.38 |
|  |                 | 1732.5 (20175) | 18.38 | 18.44 |
|  |                 | 1712.5 (19975) | 18.42 | 18.45 |
|  | 12RB-Middle (6) | 1752.5 (20375) | 18.39 | 18.45 |
|  |                 | 1732.5 (20175) | 18.42 | 18.46 |
|  |                 | 1712.5 (19975) | 18.45 | 18.49 |
|  | 12RB-Low (0)    | 1752.5 (20375) | 18.38 | 18.44 |
|  |                 | 1732.5 (20175) | 18.37 | 18.40 |
|  |                 | 1712.5 (19975) | 18.38 | 18.42 |
|  | 25RB (0)        | 1752.5 (20375) | 18.38 | 18.42 |
|  |                 | 1732.5 (20175) | 18.41 | 18.45 |
|  |                 | 1712.5 (19975) | 18.39 | 18.47 |

|       |               |                |       |       |
|-------|---------------|----------------|-------|-------|
| 10MHz | 1RB-High (49) | 1750 (20350)   | 18.37 | 18.72 |
|       |               | 1732.5 (20175) | 18.38 | 18.78 |
|       |               | 1715 (20000)   | 18.40 | 18.77 |

|       |                  |                |       |       |
|-------|------------------|----------------|-------|-------|
|       | 1RB-Middle (24)  | 1750 (20350)   | 18.45 | 18.83 |
|       |                  | 1732.5 (20175) | 18.51 | 18.95 |
|       |                  | 1715 (20000)   | 18.50 | 18.96 |
|       | 1RB-Low (0)      | 1750 (20350)   | 18.37 | 18.70 |
|       |                  | 1732.5 (20175) | 18.41 | 18.79 |
|       |                  | 1715 (20000)   | 18.40 | 18.69 |
|       | 25RB-High (25)   | 1750 (20350)   | 18.35 | 18.46 |
|       |                  | 1732.5 (20175) | 18.44 | 18.55 |
|       |                  | 1715 (20000)   | 18.52 | 18.57 |
|       | 25RB-Middle (12) | 1750 (20350)   | 18.42 | 18.45 |
|       |                  | 1732.5 (20175) | 18.45 | 18.52 |
|       |                  | 1715 (20000)   | 18.47 | 18.52 |
|       | 25RB-Low (0)     | 1750 (20350)   | 18.44 | 18.50 |
|       |                  | 1732.5 (20175) | 18.43 | 18.50 |
|       |                  | 1715 (20000)   | 18.43 | 18.47 |
|       | 50RB (0)         | 1750 (20350)   | 18.37 | 18.46 |
|       |                  | 1732.5 (20175) | 18.42 | 18.55 |
|       |                  | 1715 (20000)   | 18.45 | 18.52 |
| 15MHz | 1RB-High (74)    | 1747.5 (20325) | 18.26 | 18.64 |
|       |                  | 1732.5 (20175) | 18.25 | 18.56 |

|       |                  |                |       |       |
|-------|------------------|----------------|-------|-------|
|       |                  | 1717.5 (20025) | 18.30 | 18.70 |
|       | 1RB-Middle (37)  | 1747.5 (20325) | 18.31 | 18.63 |
|       |                  | 1732.5 (20175) | 18.39 | 18.80 |
|       |                  | 1717.5 (20025) | 18.43 | 18.69 |
|       | 1RB-Low (0)      | 1747.5 (20325) | 18.30 | 18.62 |
|       |                  | 1732.5 (20175) | 18.34 | 18.78 |
|       |                  | 1717.5 (20025) | 18.31 | 18.67 |
|       | 36RB-High (38)   | 1747.5 (20325) | 18.33 | 18.37 |
|       |                  | 1732.5 (20175) | 18.44 | 18.46 |
|       |                  | 1717.5 (20025) | 18.46 | 18.48 |
|       | 36RB-Middle (19) | 1747.5 (20325) | 18.39 | 18.43 |
|       |                  | 1732.5 (20175) | 18.45 | 18.46 |
|       |                  | 1717.5 (20025) | 18.51 | 18.51 |
|       | 36RB-Low (0)     | 1747.5 (20325) | 18.45 | 18.42 |
|       |                  | 1732.5 (20175) | 18.43 | 18.48 |
|       |                  | 1717.5 (20025) | 18.43 | 18.43 |
|       | 75RB (0)         | 1747.5 (20325) | 18.40 | 18.45 |
|       |                  | 1732.5 (20175) | 18.43 | 18.49 |
|       |                  | 1717.5 (20025) | 18.47 | 18.51 |
| 20MHz | 1RB-High (99)    | 1745 (20300)   | 17.59 | 17.84 |

|  |                  |                |       |       |
|--|------------------|----------------|-------|-------|
|  |                  | 1732.5 (20175) | 17.54 | 18.29 |
|  |                  | 1720 (20050)   | 17.53 | 18.36 |
|  | 1RB-Middle (50)  | 1745 (20300)   | 17.81 | 18.27 |
|  |                  | 1732.5 (20175) | 17.83 | 18.64 |
|  |                  | 1720 (20050)   | 17.91 | 18.74 |
|  | 1RB-Low (0)      | 1745 (20300)   | 17.54 | 18.00 |
|  |                  | 1732.5 (20175) | 17.57 | 18.35 |
|  |                  | 1720 (20050)   | 17.55 | 18.27 |
|  | 50RB-High (50)   | 1745 (20300)   | 17.66 | 17.69 |
|  |                  | 1732.5 (20175) | 17.85 | 18.34 |
|  |                  | 1720 (20050)   | 17.84 | 18.36 |
|  | 50RB-Middle (25) | 1745 (20300)   | 17.83 | 17.84 |
|  |                  | 1732.5 (20175) | 17.82 | 18.33 |
|  |                  | 1720 (20050)   | 17.85 | 18.35 |
|  | 50RB-Low (0)     | 1745 (20300)   | 17.85 | 17.85 |
|  |                  | 1732.5 (20175) | 17.81 | 18.29 |
|  |                  | 1720 (20050)   | 17.79 | 18.28 |
|  | 100RB (0)        | 1745 (20300)   | 17.77 | 17.76 |
|  |                  | 1732.5 (20175) | 17.84 | 18.32 |
|  |                  | 1720 (20050)   | 17.84 | 18.33 |

**LTEB4 (receiver off)**

| BANDWIDTH | Number of RBs  | Frequency      | QPSK  | 16QAM |
|-----------|----------------|----------------|-------|-------|
| 1.4MHz    | 1RB-High (5)   | 1754.3 (20393) | 21.24 | 21.49 |
|           |                | 1732.5 (20175) | 21.28 | 21.54 |
|           |                | 1710.7 (19957) | 21.31 | 21.50 |
|           | 1RB-Middle (3) | 1754.3 (20393) | 21.34 | 21.71 |
|           |                | 1732.5 (20175) | 21.36 | 21.69 |
|           |                | 1710.7 (19957) | 21.41 | 21.68 |
|           | 1RB-Low (0)    | 1754.3 (20393) | 21.26 | 21.56 |
|           |                | 1732.5 (20175) | 21.31 | 21.51 |
|           |                | 1710.7 (19957) | 21.32 | 21.63 |
|           | 3RB-High (3)   | 1754.3 (20393) | 21.34 | 21.33 |
|           |                | 1732.5 (20175) | 21.39 | 21.42 |
|           |                | 1710.7 (19957) | 21.40 | 21.40 |
|           | 3RB-Middle (1) | 1754.3 (20393) | 21.38 | 21.36 |
|           |                | 1732.5 (20175) | 21.40 | 21.44 |
|           |                | 1710.7 (19957) | 21.43 | 21.42 |
|           | 3RB-Low (0)    | 1754.3 (20393) | 21.34 | 21.31 |
|           |                | 1732.5 (20175) | 21.37 | 21.36 |
|           |                | 1710.7 (19957) | 21.40 | 21.39 |
|           | 6RB (0)        | 1754.3 (20393) | 21.33 | 21.43 |

|  |  |                |       |       |
|--|--|----------------|-------|-------|
|  |  | 1732.5 (20175) | 21.36 | 21.45 |
|  |  | 1710.7 (19957) | 21.40 | 21.45 |

|      |                |                |       |       |
|------|----------------|----------------|-------|-------|
| 3MHz | 1RB-High (14)  | 1753.5 (20385) | 21.36 | 21.51 |
|      |                | 1732.5 (20175) | 21.37 | 21.66 |
|      |                | 1711.5 (19965) | 21.38 | 21.68 |
|      | 1RB-Middle (7) | 1753.5 (20385) | 21.47 | 21.77 |
|      |                | 1732.5 (20175) | 21.59 | 21.75 |
|      |                | 1711.5 (19965) | 21.47 | 21.80 |
|      | 1RB-Low (0)    | 1753.5 (20385) | 21.33 | 21.66 |
|      |                | 1732.5 (20175) | 21.37 | 21.58 |
|      |                | 1711.5 (19965) | 21.36 | 21.67 |
|      | 8RB-High (7)   | 1753.5 (20385) | 21.34 | 21.40 |
|      |                | 1732.5 (20175) | 21.39 | 21.43 |
|      |                | 1711.5 (19965) | 21.38 | 21.44 |
|      | 8RB-Middle (4) | 1753.5 (20385) | 21.36 | 21.46 |
|      |                | 1732.5 (20175) | 21.43 | 21.48 |
|      |                | 1711.5 (19965) | 21.44 | 21.45 |
|      | 8RB-Low (0)    | 1753.5 (20385) | 21.36 | 21.43 |
|      |                | 1732.5 (20175) | 21.37 | 21.45 |
|      |                | 1711.5 (19965) | 21.39 | 21.46 |

|  |          |                |       |       |
|--|----------|----------------|-------|-------|
|  | 15RB (0) | 1753.5 (20385) | 21.33 | 21.36 |
|  |          | 1732.5 (20175) | 21.37 | 21.37 |
|  |          | 1711.5 (19965) | 21.38 | 21.40 |

|      |                 |                |       |       |
|------|-----------------|----------------|-------|-------|
| 5MHz | 1RB-High (24)   | 1752.5 (20375) | 21.27 | 21.57 |
|      |                 | 1732.5 (20175) | 21.27 | 21.64 |
|      |                 | 1712.5 (19975) | 21.29 | 21.52 |
|      | 1RB-Middle (12) | 1752.5 (20375) | 21.44 | 21.80 |
|      |                 | 1732.5 (20175) | 21.54 | 21.87 |
|      |                 | 1712.5 (19975) | 21.47 | 21.82 |
|      | 1RB-Low (0)     | 1752.5 (20375) | 21.25 | 21.50 |
|      |                 | 1732.5 (20175) | 21.28 | 21.54 |
|      |                 | 1712.5 (19975) | 21.28 | 21.53 |
|      | 12RB-High (13)  | 1752.5 (20375) | 21.34 | 21.34 |
|      |                 | 1732.5 (20175) | 21.41 | 21.39 |
|      |                 | 1712.5 (19975) | 21.43 | 21.40 |
|      | 12RB-Middle (6) | 1752.5 (20375) | 21.42 | 21.41 |
|      |                 | 1732.5 (20175) | 21.45 | 21.43 |
|      |                 | 1712.5 (19975) | 21.45 | 21.46 |
|      | 12RB-Low (0)    | 1752.5 (20375) | 21.40 | 21.35 |
|      |                 | 1732.5 (20175) | 21.37 | 21.38 |

|  |          |                |       |       |
|--|----------|----------------|-------|-------|
|  | 25RB (0) | 1712.5 (19975) | 21.36 | 21.37 |
|  |          | 1752.5 (20375) | 21.37 | 21.39 |
|  |          | 1732.5 (20175) | 21.39 | 21.41 |
|  |          | 1712.5 (19975) | 21.41 | 21.42 |

|       |                  |                |       |       |
|-------|------------------|----------------|-------|-------|
| 10MHz | 1RB-High (49)    | 1750 (20350)   | 21.39 | 21.62 |
|       |                  | 1732.5 (20175) | 21.36 | 21.72 |
|       |                  | 1715 (20000)   | 21.40 | 21.59 |
|       | 1RB-Middle (24)  | 1750 (20350)   | 21.45 | 21.76 |
|       |                  | 1732.5 (20175) | 21.53 | 21.75 |
|       |                  | 1715 (20000)   | 21.52 | 21.89 |
|       | 1RB-Low (0)      | 1750 (20350)   | 21.35 | 21.66 |
|       |                  | 1732.5 (20175) | 21.43 | 21.77 |
|       |                  | 1715 (20000)   | 21.41 | 21.71 |
|       | 25RB-High (25)   | 1750 (20350)   | 21.42 | 21.40 |
|       |                  | 1732.5 (20175) | 21.50 | 21.48 |
|       |                  | 1715 (20000)   | 21.53 | 21.54 |
|       | 25RB-Middle (12) | 1750 (20350)   | 21.41 | 21.43 |
|       |                  | 1732.5 (20175) | 21.45 | 21.49 |
|       |                  | 1715 (20000)   | 21.48 | 21.47 |
|       | 25RB-Low (0)     | 1750 (20350)   | 21.46 | 21.48 |

|  |          |                |       |       |
|--|----------|----------------|-------|-------|
|  |          | 1732.5 (20175) | 21.46 | 21.46 |
|  |          | 1715 (20000)   | 21.44 | 21.44 |
|  | 50RB (0) | 1750 (20350)   | 21.44 | 21.42 |
|  |          | 1732.5 (20175) | 21.49 | 21.49 |
|  |          | 1715 (20000)   | 21.48 | 21.50 |
|  |          |                |       |       |

|       |                  |                |       |       |
|-------|------------------|----------------|-------|-------|
| 15MHz | 1RB-High (74)    | 1747.5 (20325) | 21.25 | 21.54 |
|       |                  | 1732.5 (20175) | 21.26 | 21.60 |
|       |                  | 1717.5 (20025) | 21.31 | 21.68 |
|       | 1RB-Middle (37)  | 1747.5 (20325) | 21.36 | 21.55 |
|       |                  | 1732.5 (20175) | 21.44 | 21.63 |
|       |                  | 1717.5 (20025) | 21.45 | 21.61 |
|       | 1RB-Low (0)      | 1747.5 (20325) | 21.33 | 21.58 |
|       |                  | 1732.5 (20175) | 21.35 | 21.63 |
|       |                  | 1717.5 (20025) | 21.33 | 21.61 |
|       | 36RB-High (38)   | 1747.5 (20325) | 21.36 | 21.32 |
|       |                  | 1732.5 (20175) | 21.47 | 21.46 |
|       |                  | 1717.5 (20025) | 21.50 | 21.44 |
|       | 36RB-Middle (19) | 1747.5 (20325) | 21.42 | 21.37 |
|       |                  | 1732.5 (20175) | 21.46 | 21.46 |
|       |                  | 1717.5 (20025) | 21.49 | 21.49 |

|  |              |                |       |       |
|--|--------------|----------------|-------|-------|
|  | 36RB-Low (0) | 1747.5 (20325) | 21.46 | 21.45 |
|  |              | 1732.5 (20175) | 21.46 | 21.43 |
|  |              | 1717.5 (20025) | 21.43 | 21.40 |
|  | 75RB (0)     | 1747.5 (20325) | 21.44 | 21.43 |
|  |              | 1732.5 (20175) | 21.46 | 21.46 |
|  |              | 1717.5 (20025) | 21.48 | 21.48 |

|       |                  |                |       |       |
|-------|------------------|----------------|-------|-------|
| 20MHz | 1RB-High (99)    | 1745 (20300)   | 21.02 | 21.30 |
|       |                  | 1732.5 (20175) | 21.04 | 21.36 |
|       |                  | 1720 (20050)   | 21.08 | 21.36 |
|       | 1RB-Middle (50)  | 1745 (20300)   | 21.37 | 21.73 |
|       |                  | 1732.5 (20175) | 21.39 | 21.71 |
|       |                  | 1720 (20050)   | 21.52 | 21.75 |
|       | 1RB-Low (0)      | 1745 (20300)   | 21.11 | 21.49 |
|       |                  | 1732.5 (20175) | 21.12 | 21.46 |
|       |                  | 1720 (20050)   | 21.16 | 21.35 |
|       | 50RB-High (50)   | 1745 (20300)   | 21.26 | 21.25 |
|       |                  | 1732.5 (20175) | 21.42 | 21.40 |
|       |                  | 1720 (20050)   | 21.39 | 21.40 |
|       | 50RB-Middle (25) | 1745 (20300)   | 21.39 | 21.39 |
|       |                  | 1732.5 (20175) | 21.39 | 21.44 |

|  |              |                |       |       |
|--|--------------|----------------|-------|-------|
|  | 50RB-Low (0) | 1720 (20050)   | 21.43 | 21.47 |
|  |              | 1745 (20300)   | 21.37 | 21.39 |
|  |              | 1732.5 (20175) | 21.32 | 21.36 |
|  |              | 1720 (20050)   | 21.32 | 21.34 |
|  | 100RB (0)    | 1745 (20300)   | 21.35 | 21.29 |
|  |              | 1732.5 (20175) | 21.38 | 21.36 |
|  |              | 1720 (20050)   | 21.39 | 21.38 |
|  |              |                |       |       |

#### LTEB4 (Hostpot)

| BANDWIDTH | Number of RBs  | Frequency      | QPSK  | 16QAM |
|-----------|----------------|----------------|-------|-------|
| 1.4MHz    | 1RB-High (5)   | 1754.3 (20393) | 17.72 | 18.04 |
|           |                | 1732.5 (20175) | 17.77 | 18.02 |
|           |                | 1710.7 (19957) | 17.75 | 18.08 |
|           | 1RB-Middle (3) | 1754.3 (20393) | 17.83 | 18.12 |
|           |                | 1732.5 (20175) | 17.85 | 18.21 |
|           |                | 1710.7 (19957) | 17.91 | 18.34 |
|           | 1RB-Low (0)    | 1754.3 (20393) | 17.70 | 18.07 |
|           |                | 1732.5 (20175) | 17.74 | 18.21 |
|           |                | 1710.7 (19957) | 17.76 | 18.11 |
|           | 3RB-High (3)   | 1754.3 (20393) | 17.79 | 17.88 |
|           |                | 1732.5 (20175) | 17.84 | 17.86 |

|  |                |                |       |       |
|--|----------------|----------------|-------|-------|
|  | 3RB-Middle (1) | 1710.7 (19957) | 17.86 | 17.88 |
|  |                | 1754.3 (20393) | 17.88 | 17.85 |
|  |                | 1732.5 (20175) | 17.89 | 17.93 |
|  |                | 1710.7 (19957) | 17.89 | 18.01 |
|  | 3RB-Low (0)    | 1754.3 (20393) | 17.80 | 17.85 |
|  |                | 1732.5 (20175) | 17.85 | 17.84 |
|  |                | 1710.7 (19957) | 17.88 | 17.87 |
|  | 6RB (0)        | 1754.3 (20393) | 17.80 | 17.94 |
|  |                | 1732.5 (20175) | 17.84 | 17.92 |
|  |                | 1710.7 (19957) | 17.84 | 18.02 |

|      |                |                |       |       |
|------|----------------|----------------|-------|-------|
| 3MHz | 1RB-High (14)  | 1753.5 (20385) | 17.80 | 18.08 |
|      |                | 1732.5 (20175) | 17.83 | 18.22 |
|      |                | 1711.5 (19965) | 17.84 | 18.24 |
|      | 1RB-Middle (7) | 1753.5 (20385) | 17.93 | 18.22 |
|      |                | 1732.5 (20175) | 17.94 | 18.42 |
|      |                | 1711.5 (19965) | 17.99 | 18.29 |
|      | 1RB-Low (0)    | 1753.5 (20385) | 17.79 | 18.13 |
|      |                | 1732.5 (20175) | 17.85 | 18.30 |
|      |                | 1711.5 (19965) | 17.84 | 18.24 |
|      | 8RB-High (7)   | 1753.5 (20385) | 17.82 | 17.90 |

|  |                |                |       |       |
|--|----------------|----------------|-------|-------|
|  |                | 1732.5 (20175) | 17.85 | 17.98 |
|  |                | 1711.5 (19965) | 17.87 | 17.97 |
|  | 8RB-Middle (4) | 1753.5 (20385) | 17.84 | 17.94 |
|  |                | 1732.5 (20175) | 17.87 | 17.99 |
|  |                | 1711.5 (19965) | 17.88 | 18.00 |
|  | 8RB-Low (0)    | 1753.5 (20385) | 17.84 | 17.92 |
|  |                | 1732.5 (20175) | 17.86 | 17.99 |
|  |                | 1711.5 (19965) | 17.87 | 17.95 |
|  | 15RB (0)       | 1753.5 (20385) | 17.81 | 17.84 |
|  |                | 1732.5 (20175) | 17.85 | 17.91 |
|  |                | 1711.5 (19965) | 17.87 | 17.92 |

|      |                 |                |       |       |
|------|-----------------|----------------|-------|-------|
| 5MHz | 1RB-High (24)   | 1752.5 (20375) | 17.75 | 18.06 |
|      |                 | 1732.5 (20175) | 17.74 | 18.20 |
|      |                 | 1712.5 (19975) | 17.75 | 18.13 |
|      | 1RB-Middle (12) | 1752.5 (20375) | 17.97 | 18.33 |
|      |                 | 1732.5 (20175) | 17.98 | 18.44 |
|      |                 | 1712.5 (19975) | 18.06 | 18.33 |
|      | 1RB-Low (0)     | 1752.5 (20375) | 17.71 | 18.13 |
|      |                 | 1732.5 (20175) | 17.77 | 18.19 |
|      |                 | 1712.5 (19975) | 17.79 | 18.24 |

|  |                 |                |       |       |
|--|-----------------|----------------|-------|-------|
|  | 12RB-High (13)  | 1752.5 (20375) | 17.79 | 17.84 |
|  |                 | 1732.5 (20175) | 17.88 | 17.90 |
|  |                 | 1712.5 (19975) | 17.88 | 17.94 |
|  | 12RB-Middle (6) | 1752.5 (20375) | 17.87 | 17.90 |
|  |                 | 1732.5 (20175) | 17.90 | 17.95 |
|  |                 | 1712.5 (19975) | 17.93 | 17.98 |
|  | 12RB-Low (0)    | 1752.5 (20375) | 17.87 | 17.90 |
|  |                 | 1732.5 (20175) | 17.87 | 17.88 |
|  |                 | 1712.5 (19975) | 17.83 | 17.84 |
|  | 25RB (0)        | 1752.5 (20375) | 17.83 | 17.89 |
|  |                 | 1732.5 (20175) | 17.87 | 17.92 |
|  |                 | 1712.5 (19975) | 17.89 | 17.93 |

|       |                 |                |       |       |
|-------|-----------------|----------------|-------|-------|
| 10MHz | 1RB-High (49)   | 1750 (20350)   | 17.81 | 18.09 |
|       |                 | 1732.5 (20175) | 17.83 | 18.10 |
|       |                 | 1715 (20000)   | 17.92 | 18.30 |
|       | 1RB-Middle (24) | 1750 (20350)   | 17.90 | 18.16 |
|       |                 | 1732.5 (20175) | 17.94 | 18.23 |
|       |                 | 1715 (20000)   | 17.99 | 18.36 |
|       | 1RB-Low (0)     | 1750 (20350)   | 17.83 | 18.26 |
|       |                 | 1732.5 (20175) | 17.87 | 18.30 |

|  |                  |                |       |       |
|--|------------------|----------------|-------|-------|
|  | 25RB-High (25)   | 1715 (20000)   | 17.88 | 18.30 |
|  |                  | 1750 (20350)   | 17.81 | 17.85 |
|  |                  | 1732.5 (20175) | 17.90 | 17.96 |
|  | 25RB-Middle (12) | 1715 (20000)   | 17.92 | 18.05 |
|  |                  | 1750 (20350)   | 17.87 | 17.92 |
|  |                  | 1732.5 (20175) | 17.90 | 17.96 |
|  | 25RB-Low (0)     | 1715 (20000)   | 17.94 | 17.98 |
|  |                  | 1750 (20350)   | 17.92 | 17.93 |
|  |                  | 1732.5 (20175) | 17.89 | 17.92 |
|  | 50RB (0)         | 1715 (20000)   | 17.87 | 17.95 |
|  |                  | 1750 (20350)   | 17.85 | 17.86 |
|  |                  | 1732.5 (20175) | 17.91 | 17.92 |

|       |                 |                |       |       |
|-------|-----------------|----------------|-------|-------|
| 15MHz | 1RB-High (74)   | 1747.5 (20325) | 17.69 | 18.18 |
|       |                 | 1732.5 (20175) | 17.75 | 18.02 |
|       |                 | 1717.5 (20025) | 17.79 | 18.18 |
|       | 1RB-Middle (37) | 1747.5 (20325) | 17.82 | 18.13 |
|       |                 | 1732.5 (20175) | 17.88 | 18.21 |
|       |                 | 1717.5 (20025) | 17.92 | 18.16 |
|       | 1RB-Low (0)     | 1747.5 (20325) | 17.75 | 18.15 |

|  |                  |                |       |       |
|--|------------------|----------------|-------|-------|
|  |                  | 1732.5 (20175) | 17.80 | 18.09 |
|  |                  | 1717.5 (20025) | 17.79 | 18.22 |
|  | 36RB-High (38)   | 1747.5 (20325) | 17.79 | 17.80 |
|  |                  | 1732.5 (20175) | 17.90 | 17.92 |
|  |                  | 1717.5 (20025) | 17.90 | 17.92 |
|  | 36RB-Middle (19) | 1747.5 (20325) | 17.87 | 17.87 |
|  |                  | 1732.5 (20175) | 17.91 | 17.93 |
|  |                  | 1717.5 (20025) | 17.96 | 17.97 |
|  | 36RB-Low (0)     | 1747.5 (20325) | 17.91 | 17.95 |
|  |                  | 1732.5 (20175) | 17.90 | 17.92 |
|  |                  | 1717.5 (20025) | 17.88 | 17.91 |
|  | 75RB (0)         | 1747.5 (20325) | 17.87 | 17.88 |
|  |                  | 1732.5 (20175) | 17.89 | 17.93 |
|  |                  | 1717.5 (20025) | 17.92 | 17.98 |

|       |                 |                |       |       |
|-------|-----------------|----------------|-------|-------|
| 20MHz | 1RB-High (99)   | 1745 (20300)   | 17.60 | 18.05 |
|       |                 | 1732.5 (20175) | 17.57 | 17.93 |
|       |                 | 1720 (20050)   | 17.63 | 17.35 |
|       | 1RB-Middle (50) | 1745 (20300)   | 17.96 | 18.26 |
|       |                 | 1732.5 (20175) | 17.96 | 18.24 |
|       |                 | 1720 (20050)   | 18.00 | 17.69 |

|  |                  |                |       |       |
|--|------------------|----------------|-------|-------|
|  | 1RB-Low (0)      | 1745 (20300)   | 17.64 | 18.11 |
|  |                  | 1732.5 (20175) | 17.67 | 18.08 |
|  |                  | 1720 (20050)   | 17.65 | 17.41 |
|  | 50RB-High (50)   | 1745 (20300)   | 17.78 | 17.84 |
|  |                  | 1732.5 (20175) | 17.95 | 17.98 |
|  |                  | 1720 (20050)   | 17.97 | 17.43 |
|  | 50RB-Middle (25) | 1745 (20300)   | 17.92 | 17.96 |
|  |                  | 1732.5 (20175) | 17.93 | 17.99 |
|  |                  | 1720 (20050)   | 17.97 | 17.48 |
|  | 50RB-Low (0)     | 1745 (20300)   | 17.94 | 17.97 |
|  |                  | 1732.5 (20175) | 17.93 | 17.95 |
|  |                  | 1720 (20050)   | 17.90 | 17.32 |
|  | 100RB (0)        | 1745 (20300)   | 17.89 | 17.91 |
|  |                  | 1732.5 (20175) | 17.95 | 17.97 |
|  |                  | 1720 (20050)   | 17.95 | 17.37 |

**LTEB7(receiver on)**

| BANDWIDTH | Number of RBs | Frequency      | QPSK  | 16QAM |
|-----------|---------------|----------------|-------|-------|
| 5MHz      | 1RB-High (24) | 2567.5 (21425) | 20.97 | 21.22 |
|           |               | 2535 (21100)   | 20.86 | 21.14 |
|           |               | 2502.5 (20775) | 20.91 | 21.24 |

|       |                 |                |       |       |
|-------|-----------------|----------------|-------|-------|
|       | 1RB-Middle (12) | 2567.5 (21425) | 21.20 | 21.41 |
|       |                 | 2535 (21100)   | 21.10 | 21.25 |
|       |                 | 2502.5 (20775) | 21.19 | 21.49 |
|       | 1RB-Low (0)     | 2567.5 (21425) | 21.00 | 21.22 |
|       |                 | 2535 (21100)   | 20.88 | 21.06 |
|       |                 | 2502.5 (20775) | 20.98 | 21.31 |
|       | 12RB-High (13)  | 2567.5 (21425) | 21.10 | 21.03 |
|       |                 | 2535 (21100)   | 21.01 | 20.97 |
|       |                 | 2502.5 (20775) | 21.03 | 21.00 |
|       | 12RB-Middle (6) | 2567.5 (21425) | 21.17 | 21.11 |
|       |                 | 2535 (21100)   | 21.05 | 21.04 |
|       |                 | 2502.5 (20775) | 21.08 | 21.06 |
|       | 12RB-Low (0)    | 2567.5 (21425) | 21.12 | 21.10 |
|       |                 | 2535 (21100)   | 20.99 | 20.96 |
|       |                 | 2502.5 (20775) | 21.02 | 20.99 |
|       | 25RB (0)        | 2567.5 (21425) | 21.16 | 21.10 |
|       |                 | 2535 (21100)   | 21.04 | 21.02 |
|       |                 | 2502.5 (20775) | 21.08 | 21.04 |
| 10MHz | 1RB-High (49)   | 2565 (21400)   | 21.05 | 21.22 |
|       |                 | 2535 (21100)   | 20.96 | 21.20 |

|       |                  |                |       |       |
|-------|------------------|----------------|-------|-------|
|       |                  | 2505 (20800)   | 20.96 | 21.31 |
|       | 1RB-Middle (24)  | 2565 (21400)   | 21.18 | 21.40 |
|       |                  | 2535 (21100)   | 21.10 | 21.36 |
|       |                  | 2505 (20800)   | 21.10 | 21.40 |
|       | 1RB-Low (0)      | 2565 (21400)   | 21.09 | 21.40 |
|       |                  | 2535 (21100)   | 21.00 | 21.30 |
|       |                  | 2505 (20800)   | 21.00 | 21.35 |
|       | 25RB-High (25)   | 2565 (21400)   | 21.21 | 21.14 |
|       |                  | 2535 (21100)   | 21.09 | 21.06 |
|       |                  | 2505 (20800)   | 21.09 | 21.10 |
|       | 25RB-Middle (12) | 2565 (21400)   | 21.18 | 21.15 |
|       |                  | 2535 (21100)   | 21.07 | 21.06 |
|       |                  | 2505 (20800)   | 21.06 | 21.08 |
|       | 25RB-Low (0)     | 2565 (21400)   | 21.16 | 21.14 |
|       |                  | 2535 (21100)   | 21.10 | 21.07 |
|       |                  | 2505 (20800)   | 21.06 | 21.09 |
|       | 50RB (0)         | 2565 (21400)   | 21.18 | 21.16 |
|       |                  | 2535 (21100)   | 21.10 | 21.11 |
|       |                  | 2505 (20800)   | 21.05 | 21.06 |
| 15MHz | 1RB-High (74)    | 2562.5 (21375) | 21.01 | 21.15 |

|  |                  |                |       |       |
|--|------------------|----------------|-------|-------|
|  |                  | 2535 (21100)   | 20.93 | 21.19 |
|  |                  | 2507.5 (20825) | 20.90 | 21.14 |
|  | 1RB-Middle (37)  | 2562.5 (21375) | 21.10 | 21.30 |
|  |                  | 2535 (21100)   | 20.98 | 21.25 |
|  |                  | 2507.5 (20825) | 20.99 | 21.36 |
|  | 1RB-Low (0)      | 2562.5 (21375) | 21.04 | 21.31 |
|  |                  | 2535 (21100)   | 20.94 | 21.29 |
|  |                  | 2507.5 (20825) | 20.98 | 21.19 |
|  | 36RB-High (38)   | 2562.5 (21375) | 21.20 | 21.15 |
|  |                  | 2535 (21100)   | 21.08 | 21.01 |
|  |                  | 2507.5 (20825) | 21.09 | 21.05 |
|  | 36RB-Middle (19) | 2562.5 (21375) | 21.19 | 21.17 |
|  |                  | 2535 (21100)   | 21.13 | 21.03 |
|  |                  | 2507.5 (20825) | 21.08 | 21.04 |
|  | 36RB-Low (0)     | 2562.5 (21375) | 21.17 | 21.13 |
|  |                  | 2535 (21100)   | 21.08 | 21.05 |
|  |                  | 2507.5 (20825) | 21.07 | 21.04 |
|  | 75RB (0)         | 2562.5 (21375) | 21.17 | 21.19 |
|  |                  | 2535 (21100)   | 21.08 | 21.05 |
|  |                  | 2507.5 (20825) | 21.05 | 21.05 |

|       |                  |              |       |       |
|-------|------------------|--------------|-------|-------|
| 20MHz | 1RB-High (99)    | 2560 (21350) | 21.05 | 21.20 |
|       |                  | 2535 (21100) | 20.96 | 21.24 |
|       |                  | 2510 (20850) | 20.92 | 21.27 |
|       | 1RB-Middle (50)  | 2560 (21350) | 21.36 | 21.60 |
|       |                  | 2535 (21100) | 21.25 | 21.55 |
|       |                  | 2510 (20850) | 21.31 | 21.48 |
|       | 1RB-Low (0)      | 2560 (21350) | 21.10 | 21.32 |
|       |                  | 2535 (21100) | 21.05 | 21.33 |
|       |                  | 2510 (20850) | 21.03 | 21.26 |
|       | 50RB-High (50)   | 2560 (21350) | 21.37 | 21.33 |
|       |                  | 2535 (21100) | 21.24 | 21.18 |
|       |                  | 2510 (20850) | 21.27 | 21.28 |
|       | 50RB-Middle (25) | 2560 (21350) | 21.36 | 21.33 |
|       |                  | 2535 (21100) | 21.30 | 21.27 |
|       |                  | 2510 (20850) | 21.26 | 21.26 |
|       | 50RB-Low (0)     | 2560 (21350) | 21.28 | 21.30 |
|       |                  | 2535 (21100) | 21.20 | 21.18 |
|       |                  | 2510 (20850) | 21.18 | 21.18 |
|       | 100RB (0)        | 2560 (21350) | 21.36 | 21.32 |
|       |                  | 2535 (21100) | 21.22 | 21.19 |

|  |  |              |       |       |
|--|--|--------------|-------|-------|
|  |  | 2510 (20850) | 21.21 | 21.21 |
|--|--|--------------|-------|-------|

**LTEB7 (receiver off)**

| BANDWIDTH | Number of RBs   | Frequency      | QPSK  | 16QAM |
|-----------|-----------------|----------------|-------|-------|
| 5MHz      | 1RB-High (24)   | 2567.5 (21425) | 20.26 | 20.47 |
|           |                 | 2535 (21100)   | 20.16 | 20.41 |
|           |                 | 2502.5 (20775) | 20.22 | 20.57 |
|           | 1RB-Middle (12) | 2567.5 (21425) | 20.53 | 20.76 |
|           |                 | 2535 (21100)   | 20.36 | 20.65 |
|           |                 | 2502.5 (20775) | 20.37 | 20.71 |
|           | 1RB-Low (0)     | 2567.5 (21425) | 20.25 | 20.51 |
|           |                 | 2535 (21100)   | 20.18 | 20.50 |
|           |                 | 2502.5 (20775) | 20.24 | 20.52 |
|           | 12RB-High (13)  | 2567.5 (21425) | 20.38 | 20.37 |
|           |                 | 2535 (21100)   | 20.28 | 20.27 |
|           |                 | 2502.5 (20775) | 20.33 | 20.34 |
|           | 12RB-Middle (6) | 2567.5 (21425) | 20.43 | 20.44 |
|           |                 | 2535 (21100)   | 20.34 | 20.32 |
|           |                 | 2502.5 (20775) | 20.38 | 20.40 |
|           | 12RB-Low (0)    | 2567.5 (21425) | 20.36 | 20.35 |
|           |                 | 2535 (21100)   | 20.27 | 20.25 |

|  |          |                |       |       |
|--|----------|----------------|-------|-------|
|  | 25RB (0) | 2502.5 (20775) | 20.32 | 20.32 |
|  |          | 2567.5 (21425) | 20.40 | 20.41 |
|  |          | 2535 (21100)   | 20.30 | 20.30 |
|  |          | 2502.5 (20775) | 20.36 | 20.38 |

|       |                  |              |       |       |
|-------|------------------|--------------|-------|-------|
| 10MHz | 1RB-High (49)    | 2565 (21400) | 20.38 | 20.66 |
|       |                  | 2535 (21100) | 20.29 | 20.61 |
|       |                  | 2505 (20800) | 20.30 | 20.67 |
|       | 1RB-Middle (24)  | 2565 (21400) | 20.55 | 20.75 |
|       |                  | 2535 (21100) | 20.44 | 20.79 |
|       |                  | 2505 (20800) | 20.43 | 20.81 |
|       | 1RB-Low (0)      | 2565 (21400) | 20.41 | 20.73 |
|       |                  | 2535 (21100) | 20.34 | 20.63 |
|       |                  | 2505 (20800) | 20.35 | 20.73 |
|       | 25RB-High (25)   | 2565 (21400) | 20.56 | 20.53 |
|       |                  | 2535 (21100) | 20.42 | 20.36 |
|       |                  | 2505 (20800) | 20.46 | 20.43 |
|       | 25RB-Middle (12) | 2565 (21400) | 20.52 | 20.49 |
|       |                  | 2535 (21100) | 20.37 | 20.36 |
|       |                  | 2505 (20800) | 20.41 | 20.42 |
|       | 25RB-Low (0)     | 2565 (21400) | 20.48 | 20.46 |

|  |          |              |       |       |
|--|----------|--------------|-------|-------|
|  |          | 2535 (21100) | 20.40 | 20.40 |
|  |          | 2505 (20800) | 20.40 | 20.42 |
|  | 50RB (0) | 2565 (21400) | 20.51 | 20.50 |
|  |          | 2535 (21100) | 20.44 | 20.43 |
|  |          | 2505 (20800) | 20.43 | 20.41 |
|  |          |              |       |       |

|       |                  |                |       |       |
|-------|------------------|----------------|-------|-------|
| 15MHz | 1RB-High (74)    | 2562.5 (21375) | 20.42 | 20.70 |
|       |                  | 2535 (21100)   | 20.34 | 20.53 |
|       |                  | 2507.5 (20825) | 20.31 | 20.55 |
|       | 1RB-Middle (37)  | 2562.5 (21375) | 20.54 | 20.75 |
|       |                  | 2535 (21100)   | 20.43 | 20.74 |
|       |                  | 2507.5 (20825) | 20.41 | 20.67 |
|       | 1RB-Low (0)      | 2562.5 (21375) | 20.45 | 20.79 |
|       |                  | 2535 (21100)   | 20.37 | 20.65 |
|       |                  | 2507.5 (20825) | 20.41 | 20.63 |
|       | 36RB-High (38)   | 2562.5 (21375) | 20.65 | 20.53 |
|       |                  | 2535 (21100)   | 20.44 | 20.39 |
|       |                  | 2507.5 (20825) | 20.51 | 20.47 |
|       | 36RB-Middle (19) | 2562.5 (21375) | 20.61 | 20.52 |
|       |                  | 2535 (21100)   | 20.50 | 20.43 |
|       |                  | 2507.5 (20825) | 20.49 | 20.45 |

|  |              |                |       |       |
|--|--------------|----------------|-------|-------|
|  | 36RB-Low (0) | 2562.5 (21375) | 20.58 | 20.52 |
|  |              | 2535 (21100)   | 20.49 | 20.42 |
|  |              | 2507.5 (20825) | 20.51 | 20.44 |
|  | 75RB (0)     | 2562.5 (21375) | 20.60 | 20.55 |
|  |              | 2535 (21100)   | 20.45 | 20.41 |
|  |              | 2507.5 (20825) | 20.48 | 20.42 |

|       |                  |              |       |       |
|-------|------------------|--------------|-------|-------|
| 20MHz | 1RB-High (99)    | 2560 (21350) | 19.91 | 20.25 |
|       |                  | 2535 (21100) | 19.85 | 20.22 |
|       |                  | 2510 (20850) | 19.84 | 20.20 |
|       | 1RB-Middle (50)  | 2560 (21350) | 20.22 | 20.58 |
|       |                  | 2535 (21100) | 20.18 | 20.56 |
|       |                  | 2510 (20850) | 20.20 | 20.59 |
|       | 1RB-Low (0)      | 2560 (21350) | 20.00 | 20.41 |
|       |                  | 2535 (21100) | 19.92 | 20.24 |
|       |                  | 2510 (20850) | 19.97 | 20.29 |
|       | 50RB-High (50)   | 2560 (21350) | 20.30 | 20.28 |
|       |                  | 2535 (21100) | 20.17 | 20.15 |
|       |                  | 2510 (20850) | 20.27 | 20.22 |
|       | 50RB-Middle (25) | 2560 (21350) | 20.28 | 20.30 |
|       |                  | 2535 (21100) | 20.24 | 20.22 |

|  |              |              |       |       |
|--|--------------|--------------|-------|-------|
|  | 50RB-Low (0) | 2510 (20850) | 20.20 | 20.24 |
|  |              | 2560 (21350) | 20.23 | 20.24 |
|  |              | 2535 (21100) | 20.15 | 20.14 |
|  |              | 2510 (20850) | 20.12 | 20.17 |
|  | 100RB (0)    | 2560 (21350) | 20.27 | 20.25 |
|  |              | 2535 (21100) | 20.17 | 20.16 |
|  |              | 2510 (20850) | 20.17 | 20.18 |
|  |              |              |       |       |

### LTEB7 (Hostpot)

| BANDWIDTH | Number of RBs   | Frequency      | QPSK  | 16QAM |
|-----------|-----------------|----------------|-------|-------|
| 5MHz      | 1RB-High (24)   | 2567.5 (21425) | 17.46 | 17.86 |
|           |                 | 2535 (21100)   | 17.39 | 17.66 |
|           |                 | 2502.5 (20775) | 17.40 | 17.76 |
|           | 1RB-Middle (12) | 2567.5 (21425) | 17.82 | 18.14 |
|           |                 | 2535 (21100)   | 17.53 | 17.96 |
|           |                 | 2502.5 (20775) | 17.62 | 17.98 |
|           | 1RB-Low (0)     | 2567.5 (21425) | 17.50 | 17.86 |
|           |                 | 2535 (21100)   | 17.36 | 17.73 |
|           |                 | 2502.5 (20775) | 17.45 | 17.68 |
|           | 12RB-High (13)  | 2567.5 (21425) | 17.61 | 17.58 |
|           |                 | 2535 (21100)   | 17.48 | 17.50 |
|           |                 |                |       |       |

|  |                 |                |       |       |
|--|-----------------|----------------|-------|-------|
|  | 12RB-Middle (6) | 2502.5 (20775) | 17.50 | 17.54 |
|  |                 | 2567.5 (21425) | 17.68 | 17.68 |
|  |                 | 2535 (21100)   | 17.53 | 17.58 |
|  |                 | 2502.5 (20775) | 17.59 | 17.58 |
|  | 12RB-Low (0)    | 2567.5 (21425) | 17.63 | 17.63 |
|  |                 | 2535 (21100)   | 17.49 | 17.54 |
|  |                 | 2502.5 (20775) | 17.54 | 17.55 |
|  | 25RB (0)        | 2567.5 (21425) | 17.63 | 17.68 |
|  |                 | 2535 (21100)   | 17.51 | 17.53 |
|  |                 | 2502.5 (20775) | 17.56 | 17.58 |

|       |                 |              |       |       |
|-------|-----------------|--------------|-------|-------|
| 10MHz | 1RB-High (49)   | 2565 (21400) | 17.58 | 17.79 |
|       |                 | 2535 (21100) | 17.48 | 17.87 |
|       |                 | 2505 (20800) | 17.47 | 17.88 |
|       | 1RB-Middle (24) | 2565 (21400) | 17.71 | 18.04 |
|       |                 | 2535 (21100) | 17.60 | 18.00 |
|       |                 | 2505 (20800) | 17.59 | 18.05 |
|       | 1RB-Low (0)     | 2565 (21400) | 17.59 | 17.96 |
|       |                 | 2535 (21100) | 17.49 | 17.75 |
|       |                 | 2505 (20800) | 17.53 | 17.81 |
|       | 25RB-High (25)  | 2565 (21400) | 17.67 | 17.69 |

|  |                  |              |       |       |
|--|------------------|--------------|-------|-------|
|  |                  | 2535 (21100) | 17.51 | 17.53 |
|  |                  | 2505 (20800) | 17.52 | 17.57 |
|  | 25RB-Middle (12) | 2565 (21400) | 17.66 | 17.68 |
|  |                  | 2535 (21100) | 17.56 | 17.58 |
|  |                  | 2505 (20800) | 17.55 | 17.57 |
|  | 25RB-Low (0)     | 2565 (21400) | 17.58 | 17.61 |
|  |                  | 2535 (21100) | 17.52 | 17.55 |
|  |                  | 2505 (20800) | 17.51 | 17.55 |
|  | 50RB (0)         | 2565 (21400) | 17.62 | 17.63 |
|  |                  | 2535 (21100) | 17.50 | 17.56 |
|  |                  | 2505 (20800) | 17.49 | 17.55 |

|       |                 |                |       |       |
|-------|-----------------|----------------|-------|-------|
| 15MHz | 1RB-High (74)   | 2562.5 (21375) | 17.53 | 17.76 |
|       |                 | 2535 (21100)   | 17.41 | 17.79 |
|       |                 | 2507.5 (20825) | 17.39 | 17.74 |
|       | 1RB-Middle (37) | 2562.5 (21375) | 17.63 | 18.00 |
|       |                 | 2535 (21100)   | 17.49 | 17.73 |
|       |                 | 2507.5 (20825) | 17.51 | 17.74 |
|       | 1RB-Low (0)     | 2562.5 (21375) | 17.50 | 17.93 |
|       |                 | 2535 (21100)   | 17.46 | 17.77 |
|       |                 | 2507.5 (20825) | 17.48 | 17.86 |

|  |                  |                |       |       |
|--|------------------|----------------|-------|-------|
|  | 36RB-High (38)   | 2562.5 (21375) | 17.66 | 17.66 |
|  |                  | 2535 (21100)   | 17.52 | 17.51 |
|  |                  | 2507.5 (20825) | 17.53 | 17.53 |
|  | 36RB-Middle (19) | 2562.5 (21375) | 17.66 | 17.61 |
|  |                  | 2535 (21100)   | 17.56 | 17.57 |
|  |                  | 2507.5 (20825) | 17.55 | 17.53 |
|  | 36RB-Low (0)     | 2562.5 (21375) | 17.61 | 17.63 |
|  |                  | 2535 (21100)   | 17.52 | 17.50 |
|  |                  | 2507.5 (20825) | 17.55 | 17.52 |
|  | 75RB (0)         | 2562.5 (21375) | 17.63 | 17.66 |
|  |                  | 2535 (21100)   | 17.50 | 17.51 |
|  |                  | 2507.5 (20825) | 17.51 | 17.51 |

|       |                 |              |       |       |
|-------|-----------------|--------------|-------|-------|
| 20MHz | 1RB-High (99)   | 2560 (21350) | 17.28 | 17.74 |
|       |                 | 2535 (21100) | 17.15 | 17.67 |
|       |                 | 2510 (20850) | 17.24 | 17.83 |
|       | 1RB-Middle (50) | 2560 (21350) | 17.59 | 18.17 |
|       |                 | 2535 (21100) | 17.52 | 18.05 |
|       |                 | 2510 (20850) | 17.70 | 18.25 |
|       | 1RB-Low (0)     | 2560 (21350) | 17.32 | 17.87 |
|       |                 | 2535 (21100) | 17.34 | 17.80 |

|  |                  |              |       |       |
|--|------------------|--------------|-------|-------|
|  | 50RB-High (50)   | 2510 (20850) | 17.41 | 17.98 |
|  |                  | 2560 (21350) | 17.55 | 17.64 |
|  |                  | 2535 (21100) | 17.50 | 17.52 |
|  |                  | 2510 (20850) | 17.63 | 17.70 |
|  | 50RB-Middle (25) | 2560 (21350) | 17.57 | 17.62 |
|  |                  | 2535 (21100) | 17.61 | 17.60 |
|  |                  | 2510 (20850) | 17.59 | 17.71 |
|  | 50RB-Low (0)     | 2560 (21350) | 17.56 | 17.59 |
|  |                  | 2535 (21100) | 17.54 | 17.54 |
|  |                  | 2510 (20850) | 17.59 | 17.63 |
|  | 100RB (0)        | 2560 (21350) | 17.61 | 17.61 |
|  |                  | 2535 (21100) | 17.54 | 17.54 |
|  |                  | 2510 (20850) | 17.61 | 17.71 |

**LTEB13(receiver on)**

| BANDWIDTH | Number of RBs   | Frequency     | QPSK  | 16QAM |
|-----------|-----------------|---------------|-------|-------|
| 5MHz      | 1RB-High (24)   | 784.5 (23255) | 22.67 | 23.00 |
|           |                 | 782 (23230)   | 22.58 | 22.90 |
|           |                 | 779.5 (23205) | 22.56 | 22.89 |
|           | 1RB-Middle (12) | 784.5 (23255) | 22.81 | 23.15 |
|           |                 | 782 (23230)   | 22.85 | 23.10 |

|  |                 |               |       |       |
|--|-----------------|---------------|-------|-------|
|  |                 | 779.5 (23205) | 22.81 | 23.11 |
|  | 1RB-Low (0)     | 784.5 (23255) | 22.59 | 22.88 |
|  |                 | 782 (23230)   | 22.59 | 22.87 |
|  |                 | 779.5 (23205) | 22.59 | 22.88 |
|  | 12RB-High (13)  | 784.5 (23255) | 22.75 | 21.75 |
|  |                 | 782 (23230)   | 22.71 | 21.72 |
|  |                 | 779.5 (23205) | 22.65 | 21.67 |
|  | 12RB-Middle (6) | 784.5 (23255) | 22.81 | 21.82 |
|  |                 | 782 (23230)   | 22.72 | 21.76 |
|  |                 | 779.5 (23205) | 22.73 | 21.74 |
|  | 12RB-Low (0)    | 784.5 (23255) | 22.75 | 21.75 |
|  |                 | 782 (23230)   | 22.71 | 21.69 |
|  |                 | 779.5 (23205) | 22.71 | 21.75 |
|  | 25RB (0)        | 784.5 (23255) | 22.75 | 21.74 |
|  |                 | 782 (23230)   | 22.70 | 21.72 |
|  |                 | 779.5 (23205) | 22.69 | 21.73 |

|       |                 |             |       |       |
|-------|-----------------|-------------|-------|-------|
| 10MHz | 1RB-High (49)   | 782 (23230) | 22.73 | 22.97 |
|       | 1RB-Middle (24) | 782 (23230) | 22.78 | 23.01 |
|       | 1RB-Low (0)     | 782 (23230) | 22.71 | 22.96 |
|       | 25RB-High (25)  | 782 (23230) | 22.81 | 21.81 |

|  |                  |             |       |       |
|--|------------------|-------------|-------|-------|
|  | 25RB-Middle (12) | 782 (23230) | 22.77 | 21.78 |
|  | 25RB-Low (0)     | 782 (23230) | 22.79 | 21.80 |
|  | 50RB (0)         | 782 (23230) | 22.80 | 21.81 |

**LTEB13 (receiver off)**

| BANDWIDTH | Number of RBs   | Frequency     | QPSK  | 16QAM |
|-----------|-----------------|---------------|-------|-------|
| 5MHz      | 1RB-High (24)   | 784.5 (23255) | 23.70 | 23.02 |
|           |                 | 782 (23230)   | 23.60 | 22.88 |
|           |                 | 779.5 (23205) | 23.60 | 22.88 |
|           | 1RB-Middle (12) | 784.5 (23255) | 23.90 | 23.24 |
|           |                 | 782 (23230)   | 23.84 | 23.10 |
|           |                 | 779.5 (23205) | 23.81 | 23.00 |
|           | 1RB-Low (0)     | 784.5 (23255) | 23.60 | 22.89 |
|           |                 | 782 (23230)   | 23.61 | 22.94 |
|           |                 | 779.5 (23205) | 23.62 | 22.85 |
|           | 12RB-High (13)  | 784.5 (23255) | 22.77 | 21.79 |
|           |                 | 782 (23230)   | 22.74 | 21.76 |
|           |                 | 779.5 (23205) | 22.70 | 21.66 |
|           | 12RB-Middle (6) | 784.5 (23255) | 22.83 | 21.83 |
|           |                 | 782 (23230)   | 22.79 | 21.75 |
|           |                 | 779.5 (23205) | 22.75 | 21.76 |

|  |              |               |       |       |
|--|--------------|---------------|-------|-------|
|  | 12RB-Low (0) | 784.5 (23255) | 22.78 | 21.80 |
|  |              | 782 (23230)   | 22.74 | 21.75 |
|  |              | 779.5 (23205) | 22.76 | 21.74 |
|  | 25RB (0)     | 784.5 (23255) | 22.78 | 21.78 |
|  |              | 782 (23230)   | 22.73 | 21.74 |
|  |              | 779.5 (23205) | 22.73 | 21.72 |

|       |                  |             |       |       |
|-------|------------------|-------------|-------|-------|
| 10MHz | 1RB-High (49)    | 782 (23230) | 23.77 | 22.95 |
|       | 1RB-Middle (24)  | 782 (23230) | 23.84 | 23.18 |
|       | 1RB-Low (0)      | 782 (23230) | 23.72 | 22.95 |
|       | 25RB-High (25)   | 782 (23230) | 22.83 | 21.83 |
|       | 25RB-Middle (12) | 782 (23230) | 22.81 | 21.83 |
|       | 25RB-Low (0)     | 782 (23230) | 22.81 | 21.81 |
|       | 50RB (0)         | 782 (23230) | 22.83 | 21.84 |

### LTEB13 (Hostpot)

| BANDWIDTH | Number of RBs   | Frequency     | QPSK  | 16QAM |
|-----------|-----------------|---------------|-------|-------|
| 5MHz      | 1RB-High (24)   | 784.5 (23255) | 22.21 | 22.54 |
|           |                 | 782 (23230)   | 22.16 | 22.39 |
|           |                 | 779.5 (23205) | 22.13 | 22.40 |
|           | 1RB-Middle (12) | 784.5 (23255) | 22.46 | 22.72 |
|           |                 | 782 (23230)   | 22.34 | 22.65 |

|  |                 |               |       |       |
|--|-----------------|---------------|-------|-------|
|  |                 | 779.5 (23205) | 22.41 | 22.74 |
|  | 1RB-Low (0)     | 784.5 (23255) | 22.17 | 22.52 |
|  |                 | 782 (23230)   | 22.14 | 22.38 |
|  |                 | 779.5 (23205) | 22.16 | 22.50 |
|  | 12RB-High (13)  | 784.5 (23255) | 22.31 | 21.82 |
|  |                 | 782 (23230)   | 22.28 | 21.76 |
|  |                 | 779.5 (23205) | 22.22 | 21.75 |
|  | 12RB-Middle (6) | 784.5 (23255) | 22.39 | 21.87 |
|  |                 | 782 (23230)   | 22.30 | 21.82 |
|  |                 | 779.5 (23205) | 22.32 | 21.83 |
|  | 12RB-Low (0)    | 784.5 (23255) | 22.30 | 21.77 |
|  |                 | 782 (23230)   | 22.27 | 21.79 |
|  |                 | 779.5 (23205) | 22.30 | 21.80 |
|  | 25RB (0)        | 784.5 (23255) | 22.31 | 21.81 |
|  |                 | 782 (23230)   | 22.26 | 21.77 |
|  |                 | 779.5 (23205) | 22.27 | 21.80 |

|       |                 |             |       |       |
|-------|-----------------|-------------|-------|-------|
| 10MHz | 1RB-High (49)   | 782 (23230) | 22.18 | 22.10 |
|       | 1RB-Middle (24) | 782 (23230) | 22.15 | 22.19 |
|       | 1RB-Low (0)     | 782 (23230) | 22.21 | 22.03 |
|       | 25RB-High (25)  | 782 (23230) | 22.24 | 21.78 |

|  |                  |             |       |       |
|--|------------------|-------------|-------|-------|
|  | 25RB-Middle (12) | 782 (23230) | 22.16 | 21.73 |
|  | 25RB-Low (0)     | 782 (23230) | 22.18 | 21.76 |
|  | 50RB (0)         | 782 (23230) | 22.20 | 21.72 |

**LTEB26(receiver on)**

| BANDWIDTH | Number of RBs  | Frequency     | QPSK  | 16QAM |
|-----------|----------------|---------------|-------|-------|
| 1.4MHz    | 1RB-High (5)   | 848.3 (27033) | 22.56 | 22.75 |
|           |                | 831.5 (26865) | 22.64 | 22.81 |
|           |                | 814.7 (26697) | 22.65 | 22.85 |
|           | 1RB-Middle (3) | 848.3 (27033) | 22.71 | 22.88 |
|           |                | 831.5 (26865) | 22.76 | 22.96 |
|           |                | 814.7 (26697) | 22.78 | 22.97 |
|           | 1RB-Low (0)    | 848.3 (27033) | 22.56 | 22.83 |
|           |                | 831.5 (26865) | 22.57 | 22.79 |
|           |                | 814.7 (26697) | 22.67 | 22.89 |
|           | 3RB-High (3)   | 848.3 (27033) | 22.67 | 22.59 |
|           |                | 831.5 (26865) | 22.70 | 22.62 |
|           |                | 814.7 (26697) | 22.75 | 22.64 |
|           | 3RB-Middle (1) | 848.3 (27033) | 22.74 | 22.72 |
|           |                | 831.5 (26865) | 22.75 | 22.71 |
|           |                | 814.7 (26697) | 22.81 | 22.80 |

|  |             |               |       |       |
|--|-------------|---------------|-------|-------|
|  | 3RB-Low (0) | 848.3 (27033) | 22.64 | 22.64 |
|  |             | 831.5 (26865) | 22.69 | 22.66 |
|  |             | 814.7 (26697) | 22.76 | 22.76 |
|  | 6RB (0)     | 848.3 (27033) | 22.68 | 21.74 |
|  |             | 831.5 (26865) | 22.73 | 21.78 |
|  |             | 814.7 (26697) | 22.79 | 21.86 |

|      |                |               |       |       |
|------|----------------|---------------|-------|-------|
| 3MHz | 1RB-High (14)  | 847.5 (27025) | 22.59 | 22.84 |
|      |                | 831.5 (26865) | 22.67 | 22.87 |
|      |                | 815.5 (26705) | 22.68 | 22.92 |
|      | 1RB-Middle (7) | 847.5 (27025) | 22.72 | 23.00 |
|      |                | 831.5 (26865) | 22.77 | 23.02 |
|      |                | 815.5 (26705) | 22.72 | 23.05 |
|      | 1RB-Low (0)    | 847.5 (27025) | 22.61 | 22.91 |
|      |                | 831.5 (26865) | 22.63 | 22.85 |
|      |                | 815.5 (26705) | 22.63 | 22.91 |
|      | 8RB-High (7)   | 847.5 (27025) | 22.59 | 21.64 |
|      |                | 831.5 (26865) | 22.65 | 21.71 |
|      |                | 815.5 (26705) | 22.65 | 21.73 |
|      | 8RB-Middle (4) | 847.5 (27025) | 22.65 | 21.70 |
|      |                | 831.5 (26865) | 22.71 | 21.74 |

|  |             |               |       |       |
|--|-------------|---------------|-------|-------|
|  | 8RB-Low (0) | 815.5 (26705) | 22.69 | 21.76 |
|  |             | 847.5 (27025) | 22.62 | 21.73 |
|  |             | 831.5 (26865) | 22.65 | 21.70 |
|  |             | 815.5 (26705) | 22.64 | 21.72 |
|  | 15RB (0)    | 847.5 (27025) | 22.62 | 21.64 |
|  |             | 831.5 (26865) | 22.65 | 21.69 |
|  |             | 815.5 (26705) | 22.66 | 21.68 |

|      |                 |               |       |       |
|------|-----------------|---------------|-------|-------|
| 5MHz | 1RB-High (24)   | 846.5 (27015) | 22.48 | 22.76 |
|      |                 | 831.5 (26865) | 22.54 | 22.72 |
|      |                 | 816.5 (26715) | 22.58 | 22.82 |
|      | 1RB-Middle (12) | 846.5 (27015) | 22.79 | 22.95 |
|      |                 | 831.5 (26865) | 22.77 | 22.95 |
|      |                 | 816.5 (26715) | 22.81 | 23.07 |
|      | 1RB-Low (0)     | 846.5 (27015) | 22.54 | 22.73 |
|      |                 | 831.5 (26865) | 22.54 | 22.82 |
|      |                 | 816.5 (26715) | 22.62 | 22.85 |
|      | 12RB-High (13)  | 846.5 (27015) | 22.59 | 21.57 |
|      |                 | 831.5 (26865) | 22.68 | 21.62 |
|      |                 | 816.5 (26715) | 22.70 | 21.71 |
|      | 12RB-Middle (6) | 846.5 (27015) | 22.68 | 21.68 |

|  |              |               |       |       |
|--|--------------|---------------|-------|-------|
|  |              | 831.5 (26865) | 22.71 | 21.67 |
|  |              | 816.5 (26715) | 22.77 | 21.74 |
|  | 12RB-Low (0) | 846.5 (27015) | 22.68 | 21.68 |
|  |              | 831.5 (26865) | 22.67 | 21.65 |
|  |              | 816.5 (26715) | 22.68 | 21.67 |
|  | 25RB (0)     | 846.5 (27015) | 22.67 | 21.65 |
|  |              | 831.5 (26865) | 22.69 | 21.65 |
|  |              | 816.5 (26715) | 22.71 | 21.73 |

|       |                 |               |       |       |
|-------|-----------------|---------------|-------|-------|
| 10MHz | 1RB-High (49)   | 844 (26990)   | 22.58 | 22.77 |
|       |                 | 831.5 (26865) | 22.61 | 22.90 |
|       |                 | 820 (26750)   | 22.63 | 22.99 |
|       | 1RB-Middle (24) | 844 (26990)   | 22.72 | 22.92 |
|       |                 | 831.5 (26865) | 22.71 | 23.01 |
|       |                 | 820 (26750)   | 22.79 | 23.00 |
|       | 1RB-Low (0)     | 844 (26990)   | 22.67 | 22.91 |
|       |                 | 831.5 (26865) | 22.63 | 22.85 |
|       |                 | 820 (26750)   | 22.69 | 22.87 |
|       | 25RB-High (25)  | 844 (26990)   | 22.62 | 21.61 |
|       |                 | 831.5 (26865) | 22.72 | 21.73 |
|       |                 | 820 (26750)   | 22.73 | 21.73 |

|  |                  |               |       |       |
|--|------------------|---------------|-------|-------|
|  | 25RB-Middle (12) | 844 (26990)   | 22.69 | 21.67 |
|  |                  | 831.5 (26865) | 22.71 | 21.70 |
|  |                  | 820 (26750)   | 22.78 | 21.77 |
|  | 25RB-Low (0)     | 844 (26990)   | 22.76 | 21.76 |
|  |                  | 831.5 (26865) | 22.74 | 21.78 |
|  |                  | 820 (26750)   | 22.73 | 21.75 |
|  | 50RB (0)         | 844 (26990)   | 22.68 | 21.67 |
|  |                  | 831.5 (26865) | 22.75 | 21.72 |
|  |                  | 820 (26750)   | 22.74 | 21.76 |

|       |                 |               |       |       |
|-------|-----------------|---------------|-------|-------|
| 15MHz | 1RB-High (74)   | 841.5 (26965) | 22.42 | 22.61 |
|       |                 | 831.5 (26865) | 22.49 | 22.73 |
|       |                 | 822.5 (26775) | 22.45 | 22.67 |
|       | 1RB-Middle (37) | 841.5 (26965) | 22.57 | 22.87 |
|       |                 | 831.5 (26865) | 22.56 | 22.77 |
|       |                 | 822.5 (26775) | 22.59 | 22.93 |
|       | 1RB-Low (0)     | 841.5 (26965) | 22.57 | 22.75 |
|       |                 | 831.5 (26865) | 22.51 | 22.75 |
|       |                 | 822.5 (26775) | 22.55 | 22.86 |
|       | 36RB-High (38)  | 841.5 (26965) | 22.52 | 21.51 |
|       |                 | 831.5 (26865) | 22.58 | 21.57 |

|  |                  |               |       |       |
|--|------------------|---------------|-------|-------|
|  | 36RB-Middle (19) | 822.5 (26775) | 22.60 | 21.58 |
|  |                  | 841.5 (26965) | 22.64 | 21.61 |
|  |                  | 831.5 (26865) | 22.65 | 21.62 |
|  |                  | 822.5 (26775) | 22.66 | 21.64 |
|  | 36RB-Low (0)     | 841.5 (26965) | 22.64 | 21.61 |
|  |                  | 831.5 (26865) | 22.63 | 21.60 |
|  |                  | 822.5 (26775) | 22.65 | 21.64 |
|  | 75RB (0)         | 841.5 (26965) | 22.58 | 21.57 |
|  |                  | 831.5 (26865) | 22.62 | 21.61 |
|  |                  | 822.5 (26775) | 22.63 | 21.61 |

**LTEB26 (receiver off)**

| BANDWIDTH | Number of RBs  | Frequency     | QPSK  | 16QAM |
|-----------|----------------|---------------|-------|-------|
| 1.4MHz    | 1RB-High (5)   | 848.3 (27033) | 23.57 | 22.68 |
|           |                | 831.5 (26865) | 23.61 | 22.81 |
|           |                | 814.7 (26697) | 23.64 | 22.86 |
|           | 1RB-Middle (3) | 848.3 (27033) | 23.70 | 22.95 |
|           |                | 831.5 (26865) | 23.73 | 22.92 |
|           |                | 814.7 (26697) | 23.80 | 22.93 |
|           | 1RB-Low (0)    | 848.3 (27033) | 23.55 | 22.78 |
|           |                | 831.5 (26865) | 23.60 | 22.72 |

|  |                |               |       |       |
|--|----------------|---------------|-------|-------|
|  | 3RB-High (3)   | 814.7 (26697) | 23.68 | 22.97 |
|  |                | 848.3 (27033) | 23.62 | 22.59 |
|  |                | 831.5 (26865) | 23.72 | 22.61 |
|  |                | 814.7 (26697) | 23.79 | 22.75 |
|  | 3RB-Middle (1) | 848.3 (27033) | 23.74 | 22.70 |
|  |                | 831.5 (26865) | 23.77 | 22.70 |
|  |                | 814.7 (26697) | 23.84 | 22.80 |
|  | 3RB-Low (0)    | 848.3 (27033) | 23.66 | 22.64 |
|  |                | 831.5 (26865) | 23.72 | 22.68 |
|  |                | 814.7 (26697) | 23.78 | 22.68 |
|  | 6RB (0)        | 848.3 (27033) | 22.69 | 21.77 |
|  |                | 831.5 (26865) | 22.72 | 21.83 |
|  |                | 814.7 (26697) | 22.79 | 21.81 |

|      |                |               |       |       |
|------|----------------|---------------|-------|-------|
| 3MHz | 1RB-High (14)  | 847.5 (27025) | 23.59 | 22.83 |
|      |                | 831.5 (26865) | 23.65 | 22.86 |
|      |                | 815.5 (26705) | 23.67 | 22.81 |
|      | 1RB-Middle (7) | 847.5 (27025) | 23.81 | 22.93 |
|      |                | 831.5 (26865) | 23.78 | 23.01 |
|      |                | 815.5 (26705) | 23.74 | 23.01 |
|      | 1RB-Low (0)    | 847.5 (27025) | 23.62 | 22.81 |

|  |                |               |       |       |
|--|----------------|---------------|-------|-------|
|  |                | 831.5 (26865) | 23.63 | 22.83 |
|  |                | 815.5 (26705) | 23.64 | 22.93 |
|  | 8RB-High (7)   | 847.5 (27025) | 22.63 | 21.67 |
|  |                | 831.5 (26865) | 22.68 | 21.73 |
|  |                | 815.5 (26705) | 22.68 | 21.72 |
|  | 8RB-Middle (4) | 847.5 (27025) | 22.69 | 21.71 |
|  |                | 831.5 (26865) | 22.70 | 21.76 |
|  |                | 815.5 (26705) | 22.69 | 21.78 |
|  | 8RB-Low (0)    | 847.5 (27025) | 22.64 | 21.71 |
|  |                | 831.5 (26865) | 22.65 | 21.72 |
|  |                | 815.5 (26705) | 22.66 | 21.73 |
|  | 15RB (0)       | 847.5 (27025) | 22.65 | 21.65 |
|  |                | 831.5 (26865) | 22.66 | 21.69 |
|  |                | 815.5 (26705) | 22.68 | 21.69 |

|      |                 |               |       |       |
|------|-----------------|---------------|-------|-------|
| 5MHz | 1RB-High (24)   | 846.5 (27015) | 23.57 | 22.67 |
|      |                 | 831.5 (26865) | 23.56 | 22.79 |
|      |                 | 816.5 (26715) | 23.62 | 22.94 |
|      | 1RB-Middle (12) | 846.5 (27015) | 23.72 | 22.98 |
|      |                 | 831.5 (26865) | 23.86 | 23.14 |
|      |                 | 816.5 (26715) | 23.83 | 23.03 |

|  |                 |               |       |       |
|--|-----------------|---------------|-------|-------|
|  | 1RB-Low (0)     | 846.5 (27015) | 23.56 | 22.76 |
|  |                 | 831.5 (26865) | 23.55 | 22.80 |
|  |                 | 816.5 (26715) | 23.64 | 22.93 |
|  | 12RB-High (13)  | 846.5 (27015) | 22.60 | 21.58 |
|  |                 | 831.5 (26865) | 22.66 | 21.68 |
|  |                 | 816.5 (26715) | 22.74 | 21.74 |
|  | 12RB-Middle (6) | 846.5 (27015) | 22.70 | 21.71 |
|  |                 | 831.5 (26865) | 22.72 | 21.76 |
|  |                 | 816.5 (26715) | 22.80 | 21.77 |
|  | 12RB-Low (0)    | 846.5 (27015) | 22.70 | 21.71 |
|  |                 | 831.5 (26865) | 22.67 | 21.70 |
|  |                 | 816.5 (26715) | 22.70 | 21.67 |
|  | 25RB (0)        | 846.5 (27015) | 22.69 | 21.67 |
|  |                 | 831.5 (26865) | 22.71 | 21.73 |
|  |                 | 816.5 (26715) | 22.74 | 21.74 |

|       |                 |               |       |       |
|-------|-----------------|---------------|-------|-------|
| 10MHz | 1RB-High (49)   | 844 (26990)   | 23.63 | 22.87 |
|       |                 | 831.5 (26865) | 23.64 | 22.89 |
|       |                 | 820 (26750)   | 23.67 | 22.89 |
|       | 1RB-Middle (24) | 844 (26990)   | 23.77 | 22.96 |
|       |                 | 831.5 (26865) | 23.78 | 22.99 |

|  |                  |               |       |       |
|--|------------------|---------------|-------|-------|
|  | 1RB-Low (0)      | 820 (26750)   | 23.80 | 23.11 |
|  |                  | 844 (26990)   | 23.71 | 23.04 |
|  |                  | 831.5 (26865) | 23.67 | 22.84 |
|  |                  | 820 (26750)   | 23.75 | 22.96 |
|  | 25RB-High (25)   | 844 (26990)   | 22.63 | 21.63 |
|  |                  | 831.5 (26865) | 22.76 | 21.74 |
|  |                  | 820 (26750)   | 22.76 | 21.77 |
|  | 25RB-Middle (12) | 844 (26990)   | 22.73 | 21.71 |
|  |                  | 831.5 (26865) | 22.75 | 21.74 |
|  |                  | 820 (26750)   | 22.80 | 21.81 |
|  | 25RB-Low (0)     | 844 (26990)   | 22.81 | 21.79 |
|  |                  | 831.5 (26865) | 22.78 | 21.75 |
|  |                  | 820 (26750)   | 22.78 | 21.80 |
|  | 50RB (0)         | 844 (26990)   | 22.73 | 21.72 |
|  |                  | 831.5 (26865) | 22.78 | 21.74 |
|  |                  | 820 (26750)   | 22.78 | 21.77 |

|       |                 |               |       |       |
|-------|-----------------|---------------|-------|-------|
| 15MHz | 1RB-High (74)   | 841.5 (26965) | 23.41 | 22.70 |
|       |                 | 831.5 (26865) | 23.49 | 22.72 |
|       |                 | 822.5 (26775) | 23.48 | 22.67 |
|       | 1RB-Middle (37) | 841.5 (26965) | 23.58 | 22.88 |

|  |                  |               |       |       |
|--|------------------|---------------|-------|-------|
|  |                  | 831.5 (26865) | 23.57 | 22.80 |
|  |                  | 822.5 (26775) | 23.59 | 22.82 |
|  | 1RB-Low (0)      | 841.5 (26965) | 23.54 | 22.72 |
|  |                  | 831.5 (26865) | 23.51 | 22.90 |
|  |                  | 822.5 (26775) | 23.56 | 22.77 |
|  | 36RB-High (38)   | 841.5 (26965) | 22.53 | 21.51 |
|  |                  | 831.5 (26865) | 22.62 | 21.58 |
|  |                  | 822.5 (26775) | 22.64 | 21.61 |
|  | 36RB-Middle (19) | 841.5 (26965) | 22.67 | 21.63 |
|  |                  | 831.5 (26865) | 22.67 | 21.63 |
|  |                  | 822.5 (26775) | 22.66 | 21.64 |
|  | 36RB-Low (0)     | 841.5 (26965) | 22.68 | 21.61 |
|  |                  | 831.5 (26865) | 22.66 | 21.62 |
|  |                  | 822.5 (26775) | 22.67 | 21.66 |
|  | 75RB (0)         | 841.5 (26965) | 22.58 | 21.58 |
|  |                  | 831.5 (26865) | 22.65 | 21.63 |
|  |                  | 822.5 (26775) | 22.64 | 21.64 |

**LTEB26 (Hostpot)**

| BANDWIDTH | Number of RBs | Frequency     | QPSK  | 16QAM |
|-----------|---------------|---------------|-------|-------|
| 1.4MHz    | 1RB-High (5)  | 848.3 (27033) | 22.08 | 22.36 |

|  |                |               |       |       |
|--|----------------|---------------|-------|-------|
|  |                | 831.5 (26865) | 22.11 | 22.29 |
|  |                | 814.7 (26697) | 22.14 | 22.33 |
|  | 1RB-Middle (3) | 848.3 (27033) | 22.21 | 22.50 |
|  |                | 831.5 (26865) | 22.22 | 22.55 |
|  |                | 814.7 (26697) | 22.29 | 22.54 |
|  | 1RB-Low (0)    | 848.3 (27033) | 22.06 | 22.38 |
|  |                | 831.5 (26865) | 22.08 | 22.39 |
|  |                | 814.7 (26697) | 22.17 | 22.43 |
|  | 3RB-High (3)   | 848.3 (27033) | 22.18 | 22.09 |
|  |                | 831.5 (26865) | 22.19 | 22.11 |
|  |                | 814.7 (26697) | 22.25 | 22.26 |
|  | 3RB-Middle (1) | 848.3 (27033) | 22.21 | 22.20 |
|  |                | 831.5 (26865) | 22.25 | 22.24 |
|  |                | 814.7 (26697) | 22.32 | 22.26 |
|  | 3RB-Low (0)    | 848.3 (27033) | 22.17 | 22.07 |
|  |                | 831.5 (26865) | 22.19 | 22.18 |
|  |                | 814.7 (26697) | 22.30 | 22.24 |
|  | 6RB (0)        | 848.3 (27033) | 22.18 | 21.72 |
|  |                | 831.5 (26865) | 22.20 | 21.74 |
|  |                | 814.7 (26697) | 22.25 | 21.86 |

|      |                |               |       |       |
|------|----------------|---------------|-------|-------|
| 3MHz | 1RB-High (14)  | 847.5 (27025) | 22.06 | 22.39 |
|      |                | 831.5 (26865) | 22.12 | 22.45 |
|      |                | 815.5 (26705) | 22.15 | 22.44 |
|      | 1RB-Middle (7) | 847.5 (27025) | 22.28 | 22.51 |
|      |                | 831.5 (26865) | 22.22 | 22.57 |
|      |                | 815.5 (26705) | 22.28 | 22.44 |
|      | 1RB-Low (0)    | 847.5 (27025) | 22.10 | 22.33 |
|      |                | 831.5 (26865) | 22.10 | 22.41 |
|      |                | 815.5 (26705) | 22.14 | 22.37 |
|      | 8RB-High (7)   | 847.5 (27025) | 22.05 | 21.66 |
|      |                | 831.5 (26865) | 22.15 | 21.71 |
|      |                | 815.5 (26705) | 22.15 | 21.73 |
|      | 8RB-Middle (4) | 847.5 (27025) | 22.15 | 21.71 |
|      |                | 831.5 (26865) | 22.16 | 21.75 |
|      |                | 815.5 (26705) | 22.17 | 21.75 |
|      | 8RB-Low (0)    | 847.5 (27025) | 22.11 | 21.71 |
|      |                | 831.5 (26865) | 22.12 | 21.69 |
|      |                | 815.5 (26705) | 22.14 | 21.71 |
|      | 15RB (0)       | 847.5 (27025) | 22.08 | 21.63 |
|      |                | 831.5 (26865) | 22.14 | 21.65 |

|  |  |               |       |       |
|--|--|---------------|-------|-------|
|  |  | 815.5 (26705) | 22.16 | 21.67 |
|--|--|---------------|-------|-------|

|      |                 |               |       |       |
|------|-----------------|---------------|-------|-------|
| 5MHz | 1RB-High (24)   | 846.5 (27015) | 22.03 | 22.24 |
|      |                 | 831.5 (26865) | 22.02 | 22.22 |
|      |                 | 816.5 (26715) | 22.09 | 22.37 |
|      | 1RB-Middle (12) | 846.5 (27015) | 22.31 | 22.55 |
|      |                 | 831.5 (26865) | 22.27 | 22.58 |
|      |                 | 816.5 (26715) | 22.28 | 22.48 |
|      | 1RB-Low (0)     | 846.5 (27015) | 22.02 | 22.26 |
|      |                 | 831.5 (26865) | 22.01 | 22.27 |
|      |                 | 816.5 (26715) | 22.10 | 22.41 |
|      | 12RB-High (13)  | 846.5 (27015) | 22.06 | 21.59 |
|      |                 | 831.5 (26865) | 22.14 | 21.62 |
|      |                 | 816.5 (26715) | 22.19 | 21.69 |
|      | 12RB-Middle (6) | 846.5 (27015) | 22.15 | 21.68 |
|      |                 | 831.5 (26865) | 22.17 | 21.68 |
|      |                 | 816.5 (26715) | 22.25 | 21.75 |
|      | 12RB-Low (0)    | 846.5 (27015) | 22.17 | 21.68 |
|      |                 | 831.5 (26865) | 22.13 | 21.64 |
|      |                 | 816.5 (26715) | 22.18 | 21.66 |
|      | 25RB (0)        | 846.5 (27015) | 22.15 | 21.64 |

|  |  |               |       |       |
|--|--|---------------|-------|-------|
|  |  | 831.5 (26865) | 22.15 | 21.64 |
|  |  | 816.5 (26715) | 22.20 | 21.71 |

|       |                  |               |       |       |
|-------|------------------|---------------|-------|-------|
| 10MHz | 1RB-High (49)    | 844 (26990)   | 22.06 | 22.27 |
|       |                  | 831.5 (26865) | 22.09 | 22.32 |
|       |                  | 820 (26750)   | 22.10 | 22.40 |
|       | 1RB-Middle (24)  | 844 (26990)   | 22.19 | 22.43 |
|       |                  | 831.5 (26865) | 22.21 | 22.38 |
|       |                  | 820 (26750)   | 22.28 | 22.59 |
|       | 1RB-Low (0)      | 844 (26990)   | 22.16 | 22.36 |
|       |                  | 831.5 (26865) | 22.11 | 22.43 |
|       |                  | 820 (26750)   | 22.20 | 22.52 |
|       | 25RB-High (25)   | 844 (26990)   | 22.08 | 21.58 |
|       |                  | 831.5 (26865) | 22.19 | 21.70 |
|       |                  | 820 (26750)   | 22.18 | 21.74 |
|       | 25RB-Middle (12) | 844 (26990)   | 22.16 | 21.66 |
|       |                  | 831.5 (26865) | 22.19 | 21.69 |
|       |                  | 820 (26750)   | 22.23 | 21.75 |
|       | 25RB-Low (0)     | 844 (26990)   | 22.25 | 21.75 |
|       |                  | 831.5 (26865) | 22.20 | 21.69 |
|       |                  | 820 (26750)   | 22.22 | 21.76 |

|  |          |               |       |       |
|--|----------|---------------|-------|-------|
|  | 50RB (0) | 844 (26990)   | 22.15 | 21.68 |
|  |          | 831.5 (26865) | 22.18 | 21.68 |
|  |          | 820 (26750)   | 22.20 | 21.72 |

|       |                  |               |       |       |
|-------|------------------|---------------|-------|-------|
| 15MHz | 1RB-High (74)    | 841.5 (26965) | 21.93 | 22.22 |
|       |                  | 831.5 (26865) | 22.17 | 22.00 |
|       |                  | 822.5 (26775) | 22.11 | 22.18 |
|       | 1RB-Middle (37)  | 841.5 (26965) | 22.01 | 22.18 |
|       |                  | 831.5 (26865) | 22.12 | 21.93 |
|       |                  | 822.5 (26775) | 22.20 | 22.01 |
|       | 1RB-Low (0)      | 841.5 (26965) | 21.98 | 22.05 |
|       |                  | 831.5 (26865) | 22.00 | 22.20 |
|       |                  | 822.5 (26775) | 21.95 | 21.94 |
|       | 36RB-High (38)   | 841.5 (26965) | 22.12 | 21.43 |
|       |                  | 831.5 (26865) | 22.01 | 21.44 |
|       |                  | 822.5 (26775) | 22.00 | 21.55 |
|       | 36RB-Middle (19) | 841.5 (26965) | 21.90 | 21.47 |
|       |                  | 831.5 (26865) | 22.14 | 21.42 |
|       |                  | 822.5 (26775) | 22.03 | 21.58 |
|       | 36RB-Low (0)     | 841.5 (26965) | 22.22 | 21.41 |
|       |                  | 831.5 (26865) | 22.18 | 21.43 |

|  |          |               |       |       |
|--|----------|---------------|-------|-------|
|  | 75RB (0) | 822.5 (26775) | 21.93 | 21.57 |
|  |          | 841.5 (26965) | 22.19 | 21.49 |
|  |          | 831.5 (26865) | 22.22 | 21.58 |
|  |          | 822.5 (26775) | 22.07 | 21.58 |

**LTEB38(receiver on)**

| BANDWIDTH | Number of RBs   | Frequency      | QPSK  | 16QAM |
|-----------|-----------------|----------------|-------|-------|
| 5MHz      | 1RB-High (24)   | 2617.5 (38225) | 23.40 | 22.42 |
|           |                 | 2595 (38000)   | 23.41 | 22.44 |
|           |                 | 2572.5 (37775) | 23.44 | 22.47 |
|           | 1RB-Middle (12) | 2617.5 (38225) | 23.58 | 22.66 |
|           |                 | 2595 (38000)   | 23.61 | 22.65 |
|           |                 | 2572.5 (37775) | 23.55 | 22.57 |
|           | 1RB-Low (0)     | 2617.5 (38225) | 23.44 | 22.47 |
|           |                 | 2595 (38000)   | 23.50 | 22.55 |
|           |                 | 2572.5 (37775) | 23.52 | 22.54 |
|           | 12RB-High (13)  | 2617.5 (38225) | 22.48 | 21.44 |
|           |                 | 2595 (38000)   | 22.50 | 21.44 |
|           |                 | 2572.5 (37775) | 22.56 | 21.46 |
|           | 12RB-Middle (6) | 2617.5 (38225) | 22.48 | 21.45 |
|           |                 | 2595 (38000)   | 22.52 | 21.48 |

|  |              |                |       |       |
|--|--------------|----------------|-------|-------|
|  | 12RB-Low (0) | 2572.5 (37775) | 22.61 | 21.54 |
|  |              | 2617.5 (38225) | 22.50 | 21.42 |
|  |              | 2595 (38000)   | 22.58 | 21.52 |
|  |              | 2572.5 (37775) | 22.60 | 21.51 |
|  | 25RB (0)     | 2617.5 (38225) | 22.49 | 21.51 |
|  |              | 2595 (38000)   | 22.49 | 21.56 |
|  |              | 2572.5 (37775) | 22.53 | 21.58 |

|       |                  |              |       |       |
|-------|------------------|--------------|-------|-------|
| 10MHz | 1RB-High (49)    | 2615 (38200) | 23.47 | 22.46 |
|       |                  | 2595 (38000) | 23.49 | 22.50 |
|       |                  | 2575 (37800) | 23.52 | 22.56 |
|       | 1RB-Middle (24)  | 2615 (38200) | 23.54 | 22.57 |
|       |                  | 2595 (38000) | 23.62 | 22.56 |
|       |                  | 2575 (37800) | 23.63 | 22.70 |
|       | 1RB-Low (0)      | 2615 (38200) | 23.54 | 22.59 |
|       |                  | 2595 (38000) | 23.60 | 22.65 |
|       |                  | 2575 (37800) | 23.58 | 22.65 |
|       | 25RB-High (25)   | 2615 (38200) | 22.54 | 21.56 |
|       |                  | 2595 (38000) | 22.56 | 21.53 |
|       |                  | 2575 (37800) | 22.59 | 21.62 |
|       | 25RB-Middle (12) | 2615 (38200) | 22.49 | 21.56 |

|  |              |              |       |       |
|--|--------------|--------------|-------|-------|
|  |              | 2595 (38000) | 22.59 | 21.64 |
|  |              | 2575 (37800) | 22.65 | 21.63 |
|  | 25RB-Low (0) | 2615 (38200) | 22.57 | 21.58 |
|  |              | 2595 (38000) | 22.61 | 21.58 |
|  |              | 2575 (37800) | 22.61 | 21.64 |
|  | 50RB (0)     | 2615 (38200) | 22.50 | 21.50 |
|  |              | 2595 (38000) | 22.50 | 21.54 |
|  |              | 2575 (37800) | 22.54 | 21.55 |

|       |                 |                |       |       |
|-------|-----------------|----------------|-------|-------|
| 15MHz | 1RB-High (74)   | 2612.5 (38175) | 23.37 | 22.39 |
|       |                 | 2595 (38000)   | 23.37 | 22.43 |
|       |                 | 2577.5 (37825) | 23.48 | 22.50 |
|       | 1RB-Middle (37) | 2612.5 (38175) | 23.55 | 22.56 |
|       |                 | 2595 (38000)   | 23.53 | 22.60 |
|       |                 | 2577.5 (37825) | 23.58 | 22.63 |
|       | 1RB-Low (0)     | 2612.5 (38175) | 23.50 | 22.54 |
|       |                 | 2595 (38000)   | 23.53 | 22.58 |
|       |                 | 2577.5 (37825) | 23.58 | 22.56 |
|       | 36RB-High (38)  | 2612.5 (38175) | 22.47 | 21.46 |
|       |                 | 2595 (38000)   | 22.51 | 21.46 |
|       |                 | 2577.5 (37825) | 22.65 | 21.51 |

|  |                  |                |       |       |
|--|------------------|----------------|-------|-------|
|  | 36RB-Middle (19) | 2612.5 (38175) | 22.52 | 21.47 |
|  |                  | 2595 (38000)   | 22.60 | 21.53 |
|  |                  | 2577.5 (37825) | 22.63 | 21.59 |
|  | 36RB-Low (0)     | 2612.5 (38175) | 22.52 | 21.48 |
|  |                  | 2595 (38000)   | 22.56 | 21.52 |
|  |                  | 2577.5 (37825) | 22.61 | 21.59 |
|  | 75RB (0)         | 2612.5 (38175) | 22.44 | 21.46 |
|  |                  | 2595 (38000)   | 22.46 | 21.48 |
|  |                  | 2577.5 (37825) | 22.53 | 21.55 |

|       |                 |              |       |       |
|-------|-----------------|--------------|-------|-------|
| 20MHz | 1RB-High (99)   | 2610 (38150) | 23.30 | 22.34 |
|       |                 | 2595 (38000) | 23.33 | 22.35 |
|       |                 | 2580 (37850) | 23.38 | 22.42 |
|       | 1RB-Middle (50) | 2610 (38150) | 23.69 | 22.71 |
|       |                 | 2595 (38000) | 23.71 | 22.70 |
|       |                 | 2580 (37850) | 23.77 | 22.74 |
|       | 1RB-Low (0)     | 2610 (38150) | 23.48 | 22.52 |
|       |                 | 2595 (38000) | 23.50 | 22.53 |
|       |                 | 2580 (37850) | 23.54 | 22.53 |
|       | 50RB-High (50)  | 2610 (38150) | 22.47 | 21.58 |
|       |                 | 2595 (38000) | 22.44 | 21.57 |

|  |                  |              |       |       |
|--|------------------|--------------|-------|-------|
|  | 50RB-Middle (25) | 2580 (37850) | 22.59 | 21.66 |
|  |                  | 2610 (38150) | 22.54 | 21.60 |
|  |                  | 2595 (38000) | 22.56 | 21.62 |
|  | 50RB-Low (0)     | 2580 (37850) | 22.63 | 21.70 |
|  |                  | 2610 (38150) | 22.54 | 21.56 |
|  |                  | 2595 (38000) | 22.55 | 21.65 |
|  | 100RB (0)        | 2580 (37850) | 22.57 | 21.62 |
|  |                  | 2610 (38150) | 22.63 | 21.64 |
|  |                  | 2595 (38000) | 22.64 | 21.67 |
|  |                  | 2580 (37850) | 22.63 | 21.71 |
|  |                  |              |       |       |
|  |                  |              |       |       |

**LTEB38 (receiver off)**

| BANDWIDTH | Number of RBs   | Frequency      | QPSK  | 16QAM |
|-----------|-----------------|----------------|-------|-------|
| 5MHz      | 1RB-High (24)   | 2617.5 (38225) | 21.93 | 21.97 |
|           |                 | 2595 (38000)   | 21.91 | 22.01 |
|           |                 | 2572.5 (37775) | 21.94 | 21.98 |
|           | 1RB-Middle (12) | 2617.5 (38225) | 22.06 | 22.10 |
|           |                 | 2595 (38000)   | 22.11 | 22.16 |
|           |                 | 2572.5 (37775) | 22.18 | 22.24 |
|           | 1RB-Low (0)     | 2617.5 (38225) | 21.97 | 22.01 |
|           |                 | 2595 (38000)   | 22.03 | 22.05 |
|           |                 |                |       |       |

|  |                 |                |       |       |
|--|-----------------|----------------|-------|-------|
|  | 12RB-High (13)  | 2572.5 (37775) | 22.02 | 22.07 |
|  |                 | 2617.5 (38225) | 21.97 | 21.49 |
|  |                 | 2595 (38000)   | 22.01 | 21.47 |
|  |                 | 2572.5 (37775) | 22.05 | 21.46 |
|  | 12RB-Middle (6) | 2617.5 (38225) | 22.12 | 21.49 |
|  |                 | 2595 (38000)   | 22.08 | 21.54 |
|  |                 | 2572.5 (37775) | 22.12 | 21.59 |
|  | 12RB-Low (0)    | 2617.5 (38225) | 22.02 | 21.47 |
|  |                 | 2595 (38000)   | 22.04 | 21.50 |
|  |                 | 2572.5 (37775) | 22.10 | 21.50 |
|  | 25RB (0)        | 2617.5 (38225) | 22.02 | 21.53 |
|  |                 | 2595 (38000)   | 22.02 | 21.61 |
|  |                 | 2572.5 (37775) | 22.06 | 21.61 |

|       |                 |              |       |       |
|-------|-----------------|--------------|-------|-------|
| 10MHz | 1RB-High (49)   | 2615 (38200) | 21.96 | 22.01 |
|       |                 | 2595 (38000) | 22.01 | 22.07 |
|       |                 | 2575 (37800) | 22.08 | 22.14 |
|       | 1RB-Middle (24) | 2615 (38200) | 22.12 | 22.18 |
|       |                 | 2595 (38000) | 22.18 | 22.18 |
|       |                 | 2575 (37800) | 22.18 | 22.08 |
|       | 1RB-Low (0)     | 2615 (38200) | 22.05 | 22.09 |

|  |                  |              |       |       |
|--|------------------|--------------|-------|-------|
|  |                  | 2595 (38000) | 22.15 | 22.16 |
|  |                  | 2575 (37800) | 22.13 | 22.20 |
|  | 25RB-High (25)   | 2615 (38200) | 22.04 | 21.58 |
|  |                  | 2595 (38000) | 22.09 | 21.61 |
|  |                  | 2575 (37800) | 22.18 | 21.68 |
|  | 25RB-Middle (12) | 2615 (38200) | 22.09 | 21.55 |
|  |                  | 2595 (38000) | 22.09 | 21.64 |
|  |                  | 2575 (37800) | 22.16 | 21.68 |
|  | 25RB-Low (0)     | 2615 (38200) | 22.08 | 21.61 |
|  |                  | 2595 (38000) | 22.12 | 21.67 |
|  |                  | 2575 (37800) | 22.16 | 21.67 |
|  | 50RB (0)         | 2615 (38200) | 21.95 | 21.52 |
|  |                  | 2595 (38000) | 21.97 | 21.65 |
|  |                  | 2575 (37800) | 22.06 | 21.61 |

|       |                 |                |       |       |
|-------|-----------------|----------------|-------|-------|
| 15MHz | 1RB-High (74)   | 2612.5 (38175) | 21.88 | 21.95 |
|       |                 | 2595 (38000)   | 21.92 | 22.01 |
|       |                 | 2577.5 (37825) | 22.00 | 21.99 |
|       | 1RB-Middle (37) | 2612.5 (38175) | 22.07 | 22.12 |
|       |                 | 2595 (38000)   | 22.07 | 22.13 |
|       |                 | 2577.5 (37825) | 22.15 | 22.18 |

|  |                  |                |       |       |
|--|------------------|----------------|-------|-------|
|  | 1RB-Low (0)      | 2612.5 (38175) | 21.96 | 22.05 |
|  |                  | 2595 (38000)   | 22.06 | 22.07 |
|  |                  | 2577.5 (37825) | 22.09 | 22.15 |
|  | 36RB-High (38)   | 2612.5 (38175) | 22.01 | 21.50 |
|  |                  | 2595 (38000)   | 22.04 | 21.47 |
|  |                  | 2577.5 (37825) | 22.09 | 21.61 |
|  | 36RB-Middle (19) | 2612.5 (38175) | 22.09 | 21.48 |
|  |                  | 2595 (38000)   | 22.10 | 21.59 |
|  |                  | 2577.5 (37825) | 22.16 | 21.58 |
|  | 36RB-Low (0)     | 2612.5 (38175) | 22.08 | 21.50 |
|  |                  | 2595 (38000)   | 22.11 | 21.61 |
|  |                  | 2577.5 (37825) | 22.12 | 21.57 |
|  | 75RB (0)         | 2612.5 (38175) | 22.00 | 21.50 |
|  |                  | 2595 (38000)   | 22.01 | 21.51 |
|  |                  | 2577.5 (37825) | 22.09 | 21.61 |

|       |                 |              |       |       |
|-------|-----------------|--------------|-------|-------|
| 20MHz | 1RB-High (99)   | 2610 (38150) | 21.80 | 21.87 |
|       |                 | 2595 (38000) | 21.82 | 21.88 |
|       |                 | 2580 (37850) | 21.85 | 21.91 |
|       | 1RB-Middle (50) | 2610 (38150) | 22.20 | 22.21 |
|       |                 | 2595 (38000) | 22.19 | 22.25 |

|  |                  |              |       |       |
|--|------------------|--------------|-------|-------|
|  |                  | 2580 (37850) | 22.31 | 22.32 |
|  | 1RB-Low (0)      | 2610 (38150) | 21.92 | 22.04 |
|  |                  | 2595 (38000) | 22.03 | 22.10 |
|  |                  | 2580 (37850) | 22.03 | 22.09 |
|  | 50RB-High (50)   | 2610 (38150) | 21.97 | 21.55 |
|  |                  | 2595 (38000) | 21.97 | 21.54 |
|  |                  | 2580 (37850) | 22.06 | 21.67 |
|  | 50RB-Middle (25) | 2610 (38150) | 22.04 | 21.59 |
|  |                  | 2595 (38000) | 22.13 | 21.65 |
|  |                  | 2580 (37850) | 22.06 | 21.68 |
|  | 50RB-Low (0)     | 2610 (38150) | 21.98 | 21.59 |
|  |                  | 2595 (38000) | 22.03 | 21.64 |
|  |                  | 2580 (37850) | 22.07 | 21.64 |
|  | 100RB (0)        | 2610 (38150) | 22.09 | 21.65 |
|  |                  | 2595 (38000) | 22.12 | 21.73 |
|  |                  | 2580 (37850) | 22.14 | 21.74 |

#### LTEB38 (Hostpot)

| BANDWIDTH | Number of RBs | Frequency      | QPSK  | 16QAM |
|-----------|---------------|----------------|-------|-------|
| 5MHz      | 1RB-High (24) | 2617.5 (38225) | 19.43 | 19.49 |
|           |               | 2595 (38000)   | 19.44 | 19.49 |

|       |                 |                |       |       |
|-------|-----------------|----------------|-------|-------|
|       |                 | 2572.5 (37775) | 19.36 | 19.51 |
|       | 1RB-Middle (12) | 2617.5 (38225) | 19.57 | 19.61 |
|       |                 | 2595 (38000)   | 19.61 | 19.64 |
|       |                 | 2572.5 (37775) | 19.63 | 19.68 |
|       | 1RB-Low (0)     | 2617.5 (38225) | 19.45 | 19.51 |
|       |                 | 2595 (38000)   | 19.46 | 19.56 |
|       |                 | 2572.5 (37775) | 19.52 | 19.57 |
|       | 12RB-High (13)  | 2617.5 (38225) | 19.50 | 19.43 |
|       |                 | 2595 (38000)   | 19.53 | 19.44 |
|       |                 | 2572.5 (37775) | 19.54 | 19.46 |
|       | 12RB-Middle (6) | 2617.5 (38225) | 19.52 | 19.44 |
|       |                 | 2595 (38000)   | 19.56 | 19.46 |
|       |                 | 2572.5 (37775) | 19.62 | 19.51 |
|       | 12RB-Low (0)    | 2617.5 (38225) | 19.49 | 19.43 |
|       |                 | 2595 (38000)   | 19.58 | 19.42 |
|       |                 | 2572.5 (37775) | 19.57 | 19.49 |
|       | 25RB (0)        | 2617.5 (38225) | 19.50 | 19.51 |
|       |                 | 2595 (38000)   | 19.48 | 19.52 |
|       |                 | 2572.5 (37775) | 19.60 | 19.60 |
| 10MHz | 1RB-High (49)   | 2615 (38200)   | 19.42 | 19.47 |

|  |                  |              |       |       |
|--|------------------|--------------|-------|-------|
|  |                  | 2595 (38000) | 19.44 | 19.53 |
|  |                  | 2575 (37800) | 19.51 | 19.63 |
|  | 1RB-Middle (24)  | 2615 (38200) | 19.64 | 19.67 |
|  |                  | 2595 (38000) | 19.64 | 19.66 |
|  |                  | 2575 (37800) | 19.64 | 19.75 |
|  | 1RB-Low (0)      | 2615 (38200) | 19.54 | 19.63 |
|  |                  | 2595 (38000) | 19.59 | 19.67 |
|  |                  | 2575 (37800) | 19.61 | 19.66 |
|  | 25RB-High (25)   | 2615 (38200) | 19.49 | 19.48 |
|  |                  | 2595 (38000) | 19.56 | 19.51 |
|  |                  | 2575 (37800) | 19.62 | 19.61 |
|  | 25RB-Middle (12) | 2615 (38200) | 19.57 | 19.53 |
|  |                  | 2595 (38000) | 19.62 | 19.63 |
|  |                  | 2575 (37800) | 19.64 | 19.61 |
|  | 25RB-Low (0)     | 2615 (38200) | 19.53 | 19.50 |
|  |                  | 2595 (38000) | 19.57 | 19.54 |
|  |                  | 2575 (37800) | 19.63 | 19.63 |
|  | 50RB (0)         | 2615 (38200) | 19.50 | 19.44 |
|  |                  | 2595 (38000) | 19.57 | 19.52 |
|  |                  | 2575 (37800) | 19.57 | 19.59 |

|       |                  |                |       |       |
|-------|------------------|----------------|-------|-------|
| 15MHz | 1RB-High (74)    | 2612.5 (38175) | 19.39 | 19.43 |
|       |                  | 2595 (38000)   | 19.41 | 19.44 |
|       |                  | 2577.5 (37825) | 19.44 | 19.54 |
|       | 1RB-Middle (37)  | 2612.5 (38175) | 19.54 | 19.56 |
|       |                  | 2595 (38000)   | 19.57 | 19.56 |
|       |                  | 2577.5 (37825) | 19.63 | 19.63 |
|       | 1RB-Low (0)      | 2612.5 (38175) | 19.51 | 19.59 |
|       |                  | 2595 (38000)   | 19.53 | 19.60 |
|       |                  | 2577.5 (37825) | 19.50 | 19.65 |
|       | 36RB-High (38)   | 2612.5 (38175) | 19.52 | 19.45 |
|       |                  | 2595 (38000)   | 19.56 | 19.47 |
|       |                  | 2577.5 (37825) | 19.62 | 19.46 |
|       | 36RB-Middle (19) | 2612.5 (38175) | 19.52 | 19.46 |
|       |                  | 2595 (38000)   | 19.59 | 19.53 |
|       |                  | 2577.5 (37825) | 19.65 | 19.55 |
|       | 36RB-Low (0)     | 2612.5 (38175) | 19.53 | 19.43 |
|       |                  | 2595 (38000)   | 19.56 | 19.48 |
|       |                  | 2577.5 (37825) | 19.63 | 19.57 |
|       | 75RB (0)         | 2612.5 (38175) | 19.46 | 19.44 |
|       |                  | 2595 (38000)   | 19.49 | 19.45 |

|  |  |                |       |       |
|--|--|----------------|-------|-------|
|  |  | 2577.5 (37825) | 19.58 | 19.53 |
|--|--|----------------|-------|-------|

|       |                  |              |       |       |
|-------|------------------|--------------|-------|-------|
| 20MHz | 1RB-High (99)    | 2610 (38150) | 19.22 | 19.35 |
|       |                  | 2595 (38000) | 19.23 | 19.59 |
|       |                  | 2580 (37850) | 19.19 | 19.51 |
|       | 1RB-Middle (50)  | 2610 (38150) | 19.74 | 19.85 |
|       |                  | 2595 (38000) | 19.76 | 19.87 |
|       |                  | 2580 (37850) | 19.74 | 19.85 |
|       | 1RB-Low (0)      | 2610 (38150) | 19.30 | 19.47 |
|       |                  | 2595 (38000) | 19.38 | 19.70 |
|       |                  | 2580 (37850) | 19.27 | 19.61 |
|       | 50RB-High (50)   | 2610 (38150) | 19.44 | 19.45 |
|       |                  | 2595 (38000) | 19.48 | 19.52 |
|       |                  | 2580 (37850) | 19.50 | 19.46 |
|       | 50RB-Middle (25) | 2610 (38150) | 19.48 | 19.49 |
|       |                  | 2595 (38000) | 19.53 | 19.54 |
|       |                  | 2580 (37850) | 19.49 | 19.47 |
|       | 50RB-Low (0)     | 2610 (38150) | 19.43 | 19.41 |
|       |                  | 2595 (38000) | 19.50 | 19.49 |
|       |                  | 2580 (37850) | 19.48 | 19.43 |
|       | 100RB (0)        | 2610 (38150) | 19.46 | 19.46 |

|  |  |              |       |       |
|--|--|--------------|-------|-------|
|  |  | 2595 (38000) | 19.52 | 19.48 |
|  |  | 2580 (37850) | 19.52 | 19.47 |

**LTEB66(receiver on)**

| BANDWIDTH | Number of RBs  | Frequency       | QPSK  | 16QAM |
|-----------|----------------|-----------------|-------|-------|
| 1.4MHz    | 1RB-High (5)   | 1779.3 (132665) | 17.97 | 18.25 |
|           |                | 1745 (132322)   | 17.90 | 18.21 |
|           |                | 1710.7 (131979) | 17.95 | 18.38 |
|           | 1RB-Middle (3) | 1779.3 (132665) | 18.06 | 18.44 |
|           |                | 1745 (132322)   | 18.01 | 18.31 |
|           |                | 1710.7 (131979) | 18.07 | 18.33 |
|           | 1RB-Low (0)    | 1779.3 (132665) | 17.94 | 18.32 |
|           |                | 1745 (132322)   | 17.88 | 18.29 |
|           |                | 1710.7 (131979) | 17.94 | 18.36 |
|           | 3RB-High (3)   | 1779.3 (132665) | 18.02 | 18.04 |
|           |                | 1745 (132322)   | 17.96 | 17.89 |
|           |                | 1710.7 (131979) | 18.09 | 18.08 |
|           | 3RB-Middle (1) | 1779.3 (132665) | 18.07 | 18.11 |
|           |                | 1745 (132322)   | 18.02 | 18.12 |
|           |                | 1710.7 (131979) | 18.13 | 18.18 |
|           | 3RB-Low (0)    | 1779.3 (132665) | 18.03 | 18.08 |

|  |         |                 |       |       |
|--|---------|-----------------|-------|-------|
|  |         | 1745 (132322)   | 17.98 | 17.98 |
|  |         | 1710.7 (131979) | 18.05 | 18.10 |
|  | 6RB (0) | 1779.3 (132665) | 18.04 | 18.16 |
|  |         | 1745 (132322)   | 17.97 | 18.07 |
|  |         | 1710.7 (131979) | 18.01 | 18.18 |

|      |                |                 |       |       |
|------|----------------|-----------------|-------|-------|
| 3MHz | 1RB-High (14)  | 1778.5 (132657) | 17.99 | 18.37 |
|      |                | 1745 (132322)   | 17.89 | 18.24 |
|      |                | 1711.5 (131987) | 17.95 | 18.38 |
|      | 1RB-Middle (7) | 1778.5 (132657) | 18.06 | 18.48 |
|      |                | 1745 (132322)   | 18.02 | 18.32 |
|      |                | 1711.5 (131987) | 18.17 | 18.50 |
|      | 1RB-Low (0)    | 1778.5 (132657) | 18.01 | 18.30 |
|      |                | 1745 (132322)   | 17.93 | 18.27 |
|      |                | 1711.5 (131987) | 18.01 | 18.45 |
|      | 8RB-High (7)   | 1778.5 (132657) | 17.98 | 18.12 |
|      |                | 1745 (132322)   | 17.90 | 18.02 |
|      |                | 1711.5 (131987) | 18.03 | 18.15 |
|      | 8RB-Middle (4) | 1778.5 (132657) | 18.01 | 18.14 |
|      |                | 1745 (132322)   | 17.97 | 18.08 |
|      |                | 1711.5 (131987) | 18.05 | 18.17 |

|  |             |                 |       |       |
|--|-------------|-----------------|-------|-------|
|  | 8RB-Low (0) | 1778.5 (132657) | 18.00 | 18.10 |
|  |             | 1745 (132322)   | 17.93 | 18.04 |
|  |             | 1711.5 (131987) | 18.01 | 18.14 |
|  | 15RB (0)    | 1778.5 (132657) | 17.98 | 18.05 |
|  |             | 1745 (132322)   | 17.93 | 17.97 |
|  |             | 1711.5 (131987) | 18.00 | 18.06 |

|      |                 |                 |       |       |
|------|-----------------|-----------------|-------|-------|
| 5MHz | 1RB-High (24)   | 1777.5 (132647) | 17.87 | 18.13 |
|      |                 | 1745 (132322)   | 17.81 | 18.09 |
|      |                 | 1712.5 (131997) | 17.87 | 18.13 |
|      | 1RB-Middle (12) | 1777.5 (132647) | 18.15 | 18.45 |
|      |                 | 1745 (132322)   | 18.13 | 18.47 |
|      |                 | 1712.5 (131997) | 18.15 | 18.42 |
|      | 1RB-Low (0)     | 1777.5 (132647) | 17.93 | 18.34 |
|      |                 | 1745 (132322)   | 17.84 | 18.20 |
|      |                 | 1712.5 (131997) | 17.90 | 18.30 |
|      | 12RB-High (13)  | 1777.5 (132647) | 17.99 | 18.01 |
|      |                 | 1745 (132322)   | 17.90 | 17.93 |
|      |                 | 1712.5 (131997) | 17.98 | 18.04 |
|      | 12RB-Middle (6) | 1777.5 (132647) | 18.08 | 18.08 |
|      |                 | 1745 (132322)   | 17.97 | 17.99 |

|  |              |                 |       |       |
|--|--------------|-----------------|-------|-------|
|  | 12RB-Low (0) | 1712.5 (131997) | 18.07 | 18.11 |
|  |              | 1777.5 (132647) | 18.06 | 18.06 |
|  |              | 1745 (132322)   | 17.96 | 17.96 |
|  |              | 1712.5 (131997) | 18.00 | 18.03 |
|  | 25RB (0)     | 1777.5 (132647) | 18.01 | 18.08 |
|  |              | 1745 (132322)   | 17.95 | 17.98 |
|  |              | 1712.5 (131997) | 18.02 | 18.10 |

|       |                  |               |       |       |
|-------|------------------|---------------|-------|-------|
| 10MHz | 1RB-High (49)    | 1775 (132622) | 17.94 | 18.22 |
|       |                  | 1745 (132322) | 17.88 | 18.33 |
|       |                  | 1715 (132022) | 17.95 | 18.39 |
|       | 1RB-Middle (24)  | 1775 (132622) | 18.08 | 18.43 |
|       |                  | 1745 (132322) | 18.04 | 18.38 |
|       |                  | 1715 (132022) | 18.09 | 18.45 |
|       | 1RB-Low (0)      | 1775 (132622) | 17.93 | 18.23 |
|       |                  | 1745 (132322) | 17.94 | 18.26 |
|       |                  | 1715 (132022) | 18.00 | 18.31 |
|       | 25RB-High (25)   | 1775 (132622) | 18.03 | 18.07 |
|       |                  | 1745 (132322) | 17.89 | 17.92 |
|       |                  | 1715 (132022) | 18.01 | 18.13 |
|       | 25RB-Middle (12) | 1775 (132622) | 18.07 | 18.09 |

|  |              |               |       |       |
|--|--------------|---------------|-------|-------|
|  |              | 1745 (132322) | 17.97 | 18.03 |
|  |              | 1715 (132022) | 18.03 | 18.07 |
|  | 25RB-Low (0) | 1775 (132622) | 18.07 | 18.11 |
|  |              | 1745 (132322) | 18.01 | 18.01 |
|  |              | 1715 (132022) | 17.97 | 18.07 |
|  | 50RB (0)     | 1775 (132622) | 18.08 | 18.11 |
|  |              | 1745 (132322) | 17.96 | 18.00 |
|  |              | 1715 (132022) | 18.00 | 18.11 |

|       |                 |                 |       |       |
|-------|-----------------|-----------------|-------|-------|
| 15MHz | 1RB-High (74)   | 1772.5 (132597) | 17.91 | 18.21 |
|       |                 | 1745 (132322)   | 17.86 | 18.22 |
|       |                 | 1717.5 (132047) | 17.90 | 18.33 |
|       | 1RB-Middle (37) | 1772.5 (132597) | 17.98 | 18.36 |
|       |                 | 1745 (132322)   | 17.97 | 18.28 |
|       |                 | 1717.5 (132047) | 18.01 | 18.38 |
|       | 1RB-Low (0)     | 1772.5 (132597) | 17.90 | 18.35 |
|       |                 | 1745 (132322)   | 17.91 | 18.37 |
|       |                 | 1717.5 (132047) | 17.98 | 18.37 |
|       | 36RB-High (38)  | 1772.5 (132597) | 18.03 | 18.03 |
|       |                 | 1745 (132322)   | 17.93 | 17.91 |
|       |                 | 1717.5 (132047) | 18.03 | 18.08 |

|  |                  |                 |       |       |
|--|------------------|-----------------|-------|-------|
|  | 36RB-Middle (19) | 1772.5 (132597) | 18.04 | 18.06 |
|  |                  | 1745 (132322)   | 18.03 | 18.02 |
|  |                  | 1717.5 (132047) | 18.04 | 18.07 |
|  | 36RB-Low (0)     | 1772.5 (132597) | 18.02 | 18.06 |
|  |                  | 1745 (132322)   | 18.04 | 18.02 |
|  |                  | 1717.5 (132047) | 18.02 | 18.06 |
|  | 75RB (0)         | 1772.5 (132597) | 17.98 | 18.05 |
|  |                  | 1745 (132322)   | 17.94 | 17.96 |
|  |                  | 1717.5 (132047) | 18.01 | 18.10 |

|       |                 |               |       |       |
|-------|-----------------|---------------|-------|-------|
| 20MHz | 1RB-High (99)   | 1770 (132572) | 17.60 | 18.01 |
|       |                 | 1745 (132322) | 17.49 | 17.90 |
|       |                 | 1720 (132072) | 17.64 | 17.90 |
|       | 1RB-Middle (50) | 1770 (132572) | 17.86 | 18.31 |
|       |                 | 1745 (132322) | 17.84 | 18.24 |
|       |                 | 1720 (132072) | 17.90 | 18.32 |
|       | 1RB-Low (0)     | 1770 (132572) | 17.59 | 18.00 |
|       |                 | 1745 (132322) | 17.62 | 18.00 |
|       |                 | 1720 (132072) | 17.64 | 17.91 |
|       | 50RB-High (50)  | 1770 (132572) | 17.80 | 17.82 |
|       |                 | 1745 (132322) | 17.70 | 17.75 |

|  |                  |               |       |       |
|--|------------------|---------------|-------|-------|
|  | 50RB-Middle (25) | 1720 (132072) | 17.86 | 17.92 |
|  |                  | 1770 (132572) | 17.83 | 17.93 |
|  |                  | 1745 (132322) | 17.83 | 17.86 |
|  |                  | 1720 (132072) | 17.87 | 17.92 |
|  | 50RB-Low (0)     | 1770 (132572) | 17.89 | 17.92 |
|  |                  | 1745 (132322) | 17.87 | 17.88 |
|  |                  | 1720 (132072) | 17.89 | 17.89 |
|  | 100RB (0)        | 1770 (132572) | 17.85 | 17.87 |
|  |                  | 1745 (132322) | 17.78 | 17.79 |
|  |                  | 1720 (132072) | 17.87 | 17.90 |

**LTEB66 (receiver off)**

| BANDWIDTH | Number of RBs  | Frequency       | QPSK  | 16QAM |
|-----------|----------------|-----------------|-------|-------|
| 1.4MHz    | 1RB-High (5)   | 1779.3 (132665) | 20.94 | 21.29 |
|           |                | 1745 (132322)   | 20.88 | 21.08 |
|           |                | 1710.7 (131979) | 20.95 | 21.25 |
|           | 1RB-Middle (3) | 1779.3 (132665) | 21.02 | 21.35 |
|           |                | 1745 (132322)   | 20.96 | 21.23 |
|           |                | 1710.7 (131979) | 21.07 | 21.36 |
|           | 1RB-Low (0)    | 1779.3 (132665) | 20.95 | 21.22 |
|           |                | 1745 (132322)   | 20.85 | 21.17 |

|  |                |                 |       |       |
|--|----------------|-----------------|-------|-------|
|  |                | 1710.7 (131979) | 20.96 | 21.31 |
|  | 3RB-High (3)   | 1779.3 (132665) | 21.03 | 20.94 |
|  |                | 1745 (132322)   | 20.95 | 20.87 |
|  |                | 1710.7 (131979) | 21.05 | 21.06 |
|  | 3RB-Middle (1) | 1779.3 (132665) | 21.03 | 21.07 |
|  |                | 1745 (132322)   | 21.02 | 21.02 |
|  |                | 1710.7 (131979) | 21.13 | 21.01 |
|  | 3RB-Low (0)    | 1779.3 (132665) | 21.00 | 20.96 |
|  |                | 1745 (132322)   | 20.94 | 20.98 |
|  |                | 1710.7 (131979) | 21.05 | 20.98 |
|  | 6RB (0)        | 1779.3 (132665) | 20.99 | 21.08 |
|  |                | 1745 (132322)   | 20.94 | 21.07 |
|  |                | 1710.7 (131979) | 21.07 | 21.12 |

|      |                |                 |       |       |
|------|----------------|-----------------|-------|-------|
| 3MHz | 1RB-High (14)  | 1778.5 (132657) | 20.97 | 21.28 |
|      |                | 1745 (132322)   | 20.91 | 21.19 |
|      |                | 1711.5 (131987) | 20.96 | 21.31 |
|      | 1RB-Middle (7) | 1778.5 (132657) | 21.12 | 21.48 |
|      |                | 1745 (132322)   | 21.03 | 21.17 |
|      |                | 1711.5 (131987) | 21.21 | 21.36 |
|      | 1RB-Low (0)    | 1778.5 (132657) | 20.97 | 21.30 |

|  |                |                 |       |       |
|--|----------------|-----------------|-------|-------|
|  |                | 1745 (132322)   | 20.91 | 21.20 |
|  |                | 1711.5 (131987) | 21.00 | 21.33 |
|  | 8RB-High (7)   | 1778.5 (132657) | 20.94 | 21.02 |
|  |                | 1745 (132322)   | 20.94 | 20.99 |
|  |                | 1711.5 (131987) | 21.02 | 21.09 |
|  | 8RB-Middle (4) | 1778.5 (132657) | 21.01 | 21.07 |
|  |                | 1745 (132322)   | 20.96 | 21.03 |
|  |                | 1711.5 (131987) | 21.05 | 21.10 |
|  | 8RB-Low (0)    | 1778.5 (132657) | 20.98 | 21.05 |
|  |                | 1745 (132322)   | 20.93 | 21.01 |
|  |                | 1711.5 (131987) | 21.02 | 21.09 |
|  | 15RB (0)       | 1778.5 (132657) | 20.96 | 21.01 |
|  |                | 1745 (132322)   | 20.93 | 20.93 |
|  |                | 1711.5 (131987) | 21.01 | 21.00 |

|      |                 |                 |       |       |
|------|-----------------|-----------------|-------|-------|
| 5MHz | 1RB-High (24)   | 1777.5 (132647) | 20.88 | 21.12 |
|      |                 | 1745 (132322)   | 20.81 | 21.05 |
|      |                 | 1712.5 (131997) | 20.86 | 21.17 |
|      | 1RB-Middle (12) | 1777.5 (132647) | 21.10 | 21.42 |
|      |                 | 1745 (132322)   | 21.00 | 21.30 |
|      |                 | 1712.5 (131997) | 21.16 | 21.38 |

|  |                 |                 |       |       |
|--|-----------------|-----------------|-------|-------|
|  | 1RB-Low (0)     | 1777.5 (132647) | 20.90 | 21.10 |
|  |                 | 1745 (132322)   | 20.81 | 21.18 |
|  |                 | 1712.5 (131997) | 20.92 | 21.26 |
|  | 12RB-High (13)  | 1777.5 (132647) | 20.97 | 20.91 |
|  |                 | 1745 (132322)   | 20.94 | 20.88 |
|  |                 | 1712.5 (131997) | 21.03 | 21.00 |
|  | 12RB-Middle (6) | 1777.5 (132647) | 21.04 | 21.07 |
|  |                 | 1745 (132322)   | 20.98 | 20.98 |
|  |                 | 1712.5 (131997) | 21.08 | 21.07 |
|  | 12RB-Low (0)    | 1777.5 (132647) | 21.02 | 20.97 |
|  |                 | 1745 (132322)   | 20.96 | 20.94 |
|  |                 | 1712.5 (131997) | 21.00 | 21.02 |
|  | 25RB (0)        | 1777.5 (132647) | 20.98 | 21.01 |
|  |                 | 1745 (132322)   | 20.94 | 20.96 |
|  |                 | 1712.5 (131997) | 21.02 | 21.03 |

|       |                 |               |       |       |
|-------|-----------------|---------------|-------|-------|
| 10MHz | 1RB-High (49)   | 1775 (132622) | 20.94 | 21.12 |
|       |                 | 1745 (132322) | 20.86 | 21.17 |
|       |                 | 1715 (132022) | 20.97 | 21.18 |
|       | 1RB-Middle (24) | 1775 (132622) | 21.14 | 21.44 |
|       |                 | 1745 (132322) | 21.02 | 21.34 |

|  |                  |               |       |       |
|--|------------------|---------------|-------|-------|
|  |                  | 1715 (132022) | 21.10 | 21.44 |
|  | 1RB-Low (0)      | 1775 (132622) | 20.91 | 21.27 |
|  |                  | 1745 (132322) | 20.96 | 21.23 |
|  |                  | 1715 (132022) | 21.00 | 21.26 |
|  | 25RB-High (25)   | 1775 (132622) | 21.01 | 21.00 |
|  |                  | 1745 (132322) | 20.97 | 20.97 |
|  |                  | 1715 (132022) | 21.08 | 21.09 |
|  | 25RB-Middle (12) | 1775 (132622) | 21.06 | 21.07 |
|  |                  | 1745 (132322) | 20.99 | 21.00 |
|  |                  | 1715 (132022) | 21.04 | 21.09 |
|  | 25RB-Low (0)     | 1775 (132622) | 21.06 | 21.08 |
|  |                  | 1745 (132322) | 21.06 | 21.07 |
|  |                  | 1715 (132022) | 21.04 | 21.04 |
|  | 50RB (0)         | 1775 (132622) | 21.05 | 21.07 |
|  |                  | 1745 (132322) | 21.03 | 21.06 |
|  |                  | 1715 (132022) | 21.05 | 21.08 |

|       |                 |                 |       |       |
|-------|-----------------|-----------------|-------|-------|
| 15MHz | 1RB-High (74)   | 1772.5 (132597) | 20.91 | 21.14 |
|       |                 | 1745 (132322)   | 20.82 | 21.18 |
|       |                 | 1717.5 (132047) | 20.89 | 21.26 |
|       | 1RB-Middle (37) | 1772.5 (132597) | 20.99 | 21.22 |

|  |                  |                 |       |       |
|--|------------------|-----------------|-------|-------|
|  |                  | 1745 (132322)   | 20.95 | 21.18 |
|  |                  | 1717.5 (132047) | 20.98 | 21.21 |
|  | 1RB-Low (0)      | 1772.5 (132597) | 20.89 | 21.15 |
|  |                  | 1745 (132322)   | 20.93 | 21.28 |
|  |                  | 1717.5 (132047) | 20.96 | 21.28 |
|  | 36RB-High (38)   | 1772.5 (132597) | 21.01 | 21.00 |
|  |                  | 1745 (132322)   | 20.97 | 20.95 |
|  |                  | 1717.5 (132047) | 21.07 | 21.08 |
|  | 36RB-Middle (19) | 1772.5 (132597) | 21.05 | 21.03 |
|  |                  | 1745 (132322)   | 21.02 | 21.03 |
|  |                  | 1717.5 (132047) | 21.08 | 21.07 |
|  | 36RB-Low (0)     | 1772.5 (132597) | 21.04 | 21.03 |
|  |                  | 1745 (132322)   | 21.06 | 21.03 |
|  |                  | 1717.5 (132047) | 21.06 | 21.05 |
|  | 75RB (0)         | 1772.5 (132597) | 21.01 | 21.02 |
|  |                  | 1745 (132322)   | 20.99 | 20.98 |
|  |                  | 1717.5 (132047) | 21.06 | 21.09 |

|       |               |               |       |       |
|-------|---------------|---------------|-------|-------|
| 20MHz | 1RB-High (99) | 1770 (132572) | 20.73 | 21.08 |
|       |               | 1745 (132322) | 20.61 | 21.00 |
|       |               | 1720 (132072) | 20.71 | 21.06 |

|  |                  |               |       |       |
|--|------------------|---------------|-------|-------|
|  | 1RB-Middle (50)  | 1770 (132572) | 21.01 | 21.38 |
|  |                  | 1745 (132322) | 20.96 | 21.14 |
|  |                  | 1720 (132072) | 21.06 | 21.30 |
|  | 1RB-Low (0)      | 1770 (132572) | 20.69 | 21.06 |
|  |                  | 1745 (132322) | 20.72 | 20.94 |
|  |                  | 1720 (132072) | 20.74 | 20.99 |
|  | 50RB-High (50)   | 1770 (132572) | 20.88 | 20.88 |
|  |                  | 1745 (132322) | 20.85 | 20.82 |
|  |                  | 1720 (132072) | 20.98 | 21.00 |
|  | 50RB-Middle (25) | 1770 (132572) | 20.99 | 21.03 |
|  |                  | 1745 (132322) | 20.98 | 20.98 |
|  |                  | 1720 (132072) | 20.99 | 21.01 |
|  | 50RB-Low (0)     | 1770 (132572) | 20.98 | 21.00 |
|  |                  | 1745 (132322) | 21.00 | 20.98 |
|  |                  | 1720 (132072) | 20.95 | 20.97 |
|  | 100RB (0)        | 1770 (132572) | 20.94 | 20.95 |
|  |                  | 1745 (132322) | 20.93 | 20.89 |
|  |                  | 1720 (132072) | 20.98 | 20.96 |

### LTEB66 (Hostpot)

| BANDWIDTH | Number of RBs | Frequency | QPSK | 16QAM |
|-----------|---------------|-----------|------|-------|
|-----------|---------------|-----------|------|-------|

|        |                |                 |       |       |
|--------|----------------|-----------------|-------|-------|
| 1.4MHz | 1RB-High (5)   | 1779.3 (132665) | 17.88 | 18.19 |
|        |                | 1745 (132322)   | 17.77 | 18.16 |
|        |                | 1710.7 (131979) | 17.92 | 18.22 |
|        | 1RB-Middle (3) | 1779.3 (132665) | 17.97 | 18.34 |
|        |                | 1745 (132322)   | 17.91 | 18.24 |
|        |                | 1710.7 (131979) | 18.05 | 18.41 |
|        | 1RB-Low (0)    | 1779.3 (132665) | 17.90 | 18.17 |
|        |                | 1745 (132322)   | 17.83 | 18.08 |
|        |                | 1710.7 (131979) | 17.90 | 18.31 |
|        | 3RB-High (3)   | 1779.3 (132665) | 18.01 | 17.98 |
|        |                | 1745 (132322)   | 17.89 | 17.89 |
|        |                | 1710.7 (131979) | 17.99 | 18.03 |
|        | 3RB-Middle (1) | 1779.3 (132665) | 18.00 | 18.01 |
|        |                | 1745 (132322)   | 17.93 | 17.95 |
|        |                | 1710.7 (131979) | 18.06 | 18.05 |
|        | 3RB-Low (0)    | 1779.3 (132665) | 17.96 | 18.04 |
|        |                | 1745 (132322)   | 17.89 | 17.88 |
|        |                | 1710.7 (131979) | 17.99 | 18.00 |
|        | 6RB (0)        | 1779.3 (132665) | 17.96 | 18.05 |
|        |                | 1745 (132322)   | 17.87 | 18.03 |

|  |  |                 |       |       |
|--|--|-----------------|-------|-------|
|  |  | 1710.7 (131979) | 17.95 | 18.15 |
|--|--|-----------------|-------|-------|

|      |                |                 |       |       |
|------|----------------|-----------------|-------|-------|
| 3MHz | 1RB-High (14)  | 1778.5 (132657) | 17.93 | 18.22 |
|      |                | 1745 (132322)   | 17.86 | 18.16 |
|      |                | 1711.5 (131987) | 17.93 | 18.31 |
|      | 1RB-Middle (7) | 1778.5 (132657) | 18.07 | 18.44 |
|      |                | 1745 (132322)   | 18.04 | 18.32 |
|      |                | 1711.5 (131987) | 18.08 | 18.44 |
|      | 1RB-Low (0)    | 1778.5 (132657) | 17.95 | 18.35 |
|      |                | 1745 (132322)   | 17.84 | 18.17 |
|      |                | 1711.5 (131987) | 17.93 | 18.38 |
|      | 8RB-High (7)   | 1778.5 (132657) | 17.94 | 18.02 |
|      |                | 1745 (132322)   | 17.86 | 17.95 |
|      |                | 1711.5 (131987) | 17.98 | 18.11 |
|      | 8RB-Middle (4) | 1778.5 (132657) | 17.96 | 18.08 |
|      |                | 1745 (132322)   | 17.91 | 17.99 |
|      |                | 1711.5 (131987) | 18.00 | 18.09 |
|      | 8RB-Low (0)    | 1778.5 (132657) | 17.95 | 18.07 |
|      |                | 1745 (132322)   | 17.88 | 17.98 |
|      |                | 1711.5 (131987) | 17.95 | 18.06 |
|      | 15RB (0)       | 1778.5 (132657) | 17.91 | 17.97 |

|  |  |                 |       |       |
|--|--|-----------------|-------|-------|
|  |  | 1745 (132322)   | 17.85 | 17.91 |
|  |  | 1711.5 (131987) | 17.95 | 18.03 |

|      |                 |                 |       |       |
|------|-----------------|-----------------|-------|-------|
| 5MHz | 1RB-High (24)   | 1777.5 (132647) | 17.81 | 18.25 |
|      |                 | 1745 (132322)   | 17.72 | 18.12 |
|      |                 | 1712.5 (131997) | 17.80 | 18.15 |
|      | 1RB-Middle (12) | 1777.5 (132647) | 18.12 | 18.34 |
|      |                 | 1745 (132322)   | 17.96 | 18.40 |
|      |                 | 1712.5 (131997) | 18.04 | 18.36 |
|      | 1RB-Low (0)     | 1777.5 (132647) | 17.82 | 18.15 |
|      |                 | 1745 (132322)   | 17.76 | 18.14 |
|      |                 | 1712.5 (131997) | 17.86 | 18.18 |
|      | 12RB-High (13)  | 1777.5 (132647) | 17.93 | 17.95 |
|      |                 | 1745 (132322)   | 17.84 | 17.87 |
|      |                 | 1712.5 (131997) | 17.95 | 17.99 |
|      | 12RB-Middle (6) | 1777.5 (132647) | 17.99 | 18.04 |
|      |                 | 1745 (132322)   | 17.92 | 17.95 |
|      |                 | 1712.5 (131997) | 18.02 | 18.06 |
|      | 12RB-Low (0)    | 1777.5 (132647) | 17.95 | 18.01 |
|      |                 | 1745 (132322)   | 17.90 | 17.91 |
|      |                 | 1712.5 (131997) | 17.95 | 18.00 |

|  |          |                 |       |       |
|--|----------|-----------------|-------|-------|
|  | 25RB (0) | 1777.5 (132647) | 17.95 | 17.99 |
|  |          | 1745 (132322)   | 17.86 | 17.91 |
|  |          | 1712.5 (131997) | 17.97 | 18.03 |

|       |                  |               |       |       |
|-------|------------------|---------------|-------|-------|
| 10MHz | 1RB-High (49)    | 1775 (132622) | 17.88 | 18.20 |
|       |                  | 1745 (132322) | 17.81 | 18.15 |
|       |                  | 1715 (132022) | 17.90 | 18.25 |
|       | 1RB-Middle (24)  | 1775 (132622) | 18.03 | 18.43 |
|       |                  | 1745 (132322) | 18.00 | 18.36 |
|       |                  | 1715 (132022) | 18.05 | 18.43 |
|       | 1RB-Low (0)      | 1775 (132622) | 17.86 | 18.29 |
|       |                  | 1745 (132322) | 17.86 | 18.19 |
|       |                  | 1715 (132022) | 17.94 | 18.37 |
|       | 25RB-High (25)   | 1775 (132622) | 17.96 | 18.01 |
|       |                  | 1745 (132322) | 17.83 | 17.87 |
|       |                  | 1715 (132022) | 17.97 | 18.08 |
|       | 25RB-Middle (12) | 1775 (132622) | 18.00 | 18.02 |
|       |                  | 1745 (132322) | 17.92 | 17.96 |
|       |                  | 1715 (132022) | 17.96 | 18.02 |
|       | 25RB-Low (0)     | 1775 (132622) | 17.97 | 18.05 |
|       |                  | 1745 (132322) | 17.93 | 17.98 |

|  |          |               |       |       |
|--|----------|---------------|-------|-------|
|  | 50RB (0) | 1715 (132022) | 17.93 | 18.01 |
|  |          | 1775 (132622) | 17.99 | 18.05 |
|  |          | 1745 (132322) | 17.91 | 17.95 |
|  |          | 1715 (132022) | 17.95 | 18.04 |

|       |                  |                 |       |       |
|-------|------------------|-----------------|-------|-------|
| 15MHz | 1RB-High (74)    | 1772.5 (132597) | 17.85 | 18.30 |
|       |                  | 1745 (132322)   | 17.81 | 18.14 |
|       |                  | 1717.5 (132047) | 17.84 | 18.21 |
|       | 1RB-Middle (37)  | 1772.5 (132597) | 17.88 | 18.28 |
|       |                  | 1745 (132322)   | 17.90 | 18.25 |
|       |                  | 1717.5 (132047) | 17.94 | 18.30 |
|       | 1RB-Low (0)      | 1772.5 (132597) | 17.84 | 18.25 |
|       |                  | 1745 (132322)   | 17.87 | 18.29 |
|       |                  | 1717.5 (132047) | 17.93 | 18.23 |
|       | 36RB-High (38)   | 1772.5 (132597) | 17.93 | 17.99 |
|       |                  | 1745 (132322)   | 17.86 | 17.85 |
|       |                  | 1717.5 (132047) | 17.98 | 18.03 |
|       | 36RB-Middle (19) | 1772.5 (132597) | 17.97 | 17.98 |
|       |                  | 1745 (132322)   | 17.95 | 17.97 |
|       |                  | 1717.5 (132047) | 18.00 | 18.00 |
|       | 36RB-Low (0)     | 1772.5 (132597) | 17.96 | 17.98 |

|  |          |                 |       |       |
|--|----------|-----------------|-------|-------|
|  |          | 1745 (132322)   | 17.96 | 17.96 |
|  |          | 1717.5 (132047) | 17.98 | 18.03 |
|  | 75RB (0) | 1772.5 (132597) | 17.92 | 17.99 |
|  |          | 1745 (132322)   | 17.89 | 17.92 |
|  |          | 1717.5 (132047) | 17.95 | 18.02 |
|  |          |                 |       |       |

|       |                  |               |       |       |
|-------|------------------|---------------|-------|-------|
| 20MHz | 1RB-High (99)    | 1770 (132572) | 17.55 | 18.16 |
|       |                  | 1745 (132322) | 17.47 | 17.96 |
|       |                  | 1720 (132072) | 17.65 | 18.19 |
|       | 1RB-Middle (50)  | 1770 (132572) | 17.92 | 18.49 |
|       |                  | 1745 (132322) | 17.86 | 18.39 |
|       |                  | 1720 (132072) | 17.98 | 18.56 |
|       | 1RB-Low (0)      | 1770 (132572) | 17.54 | 18.13 |
|       |                  | 1745 (132322) | 17.59 | 18.06 |
|       |                  | 1720 (132072) | 17.66 | 18.21 |
|       | 50RB-High (50)   | 1770 (132572) | 17.77 | 17.83 |
|       |                  | 1745 (132322) | 17.68 | 17.69 |
|       |                  | 1720 (132072) | 17.85 | 17.98 |
|       | 50RB-Middle (25) | 1770 (132572) | 17.82 | 17.89 |
|       |                  | 1745 (132322) | 17.81 | 17.84 |
|       |                  | 1720 (132072) | 17.87 | 17.96 |

|  |              |               |       |       |
|--|--------------|---------------|-------|-------|
|  | 50RB-Low (0) | 1770 (132572) | 17.87 | 17.93 |
|  |              | 1745 (132322) | 17.86 | 17.88 |
|  |              | 1720 (132072) | 17.89 | 17.97 |
|  | 100RB (0)    | 1770 (132572) | 17.80 | 17.80 |
|  |              | 1745 (132322) | 17.77 | 17.80 |
|  |              | 1720 (132072) | 17.88 | 17.93 |

## 11.4 WIFI and BT Measurement result

### 11.4.1 WIFI2.4G receiver off

| 2.4GHz        |              |       |       |         |        |        |        |        |        |         |
|---------------|--------------|-------|-------|---------|--------|--------|--------|--------|--------|---------|
| FCC           |              |       |       |         |        |        |        |        |        | tune up |
| 802.11b       | Channel\data | 1Mbps | 2Mbps | 5.5Mbps | 11Mbps |        |        |        |        |         |
| WLAN2450      | 11(2462MHz)  | 17.75 | /     | /       | /      |        |        |        |        | 19.00   |
|               | 6(2437(MHz)  | 18.07 | 17.98 | 18.06   | 18.03  |        |        |        |        | 19.00   |
|               | 1(2412MHz)   | 17.96 | /     | /       | /      |        |        |        |        | 19.00   |
| 802.11g       | Channel\data | 6Mbps | 9Mbps | 12Mbps  | 18Mbps | 24Mbps | 36Mbps | 48Mbps | 54Mbps |         |
| WLAN2450      | 11(2462MHz)  | 11.49 | /     | /       | /      | /      | /      | /      | /      | 13.00   |
|               | 6(2437(MHz)  | 17.78 | 17.56 | 17.54   | 17.55  | 17.42  | 17.32  | 17.69  | 17.68  | 19.00   |
|               | 1(2412MHz)   | 12.67 |       |         |        |        |        |        |        | 14.00   |
| 802.11n-20MHz | Channel\data | MCS0  | MCS1  | MCS2    | MCS3   | MCS4   | MCS5   | MCS6   | MCS7   |         |
| WLAN2450      | 11(2462MHz)  | 11.29 |       |         |        |        |        | 11.35  |        | 13.00   |
|               | 6(2437(MHz)  | 17.39 | 17.38 | 17.41   | 17.38  | 17.37  | 17.52  | 17.57  | 17.55  | 19.00   |
|               | 1(2412MHz)   | 12.56 |       |         |        |        |        | 11.63  |        | 14.00   |

### 11.4.2 WIFI2.4G receiver on

| 2.4GHz        |              |       |       |         |        |        |        |        |        | tune up |
|---------------|--------------|-------|-------|---------|--------|--------|--------|--------|--------|---------|
| FCC           |              |       |       |         |        |        |        |        |        |         |
| 802.11b       | Channel\data | 1Mbps | 2Mbps | 5.5Mbps | 11Mbps |        |        |        |        |         |
| WLAN2450      | 11(2462MHz)  | 12.79 | 12.76 | /       | /      |        |        |        |        | 14.00   |
|               | 6(2437(MHz)  | 13.06 | 13.08 | 12.91   | 12.88  |        |        |        |        | 14.00   |
|               | 1(2412MHz)   | 12.94 | 12.94 | /       | /      |        |        |        |        | 14.00   |
| 802.11g       | Channel\data | 6Mbps | 9Mbps | 12Mbps  | 18Mbps | 24Mbps | 36Mbps | 48Mbps | 54Mbps |         |
| WLAN2450      | 11(2462MHz)  | 11.37 | /     | /       | /      | /      | /      | /      | /      | 13.00   |
|               | 6(2437(MHz)  | 12.75 | /     | /       | /      | /      | /      | /      | /      | 14.00   |
|               | 1(2412MHz)   | 12.83 | 12.54 | 12.65   | 12.63  | 12.59  | 12.55  | 12.68  | 12.74  | 14.00   |
| 802.11n-20MHz | Channel\data | MCS0  | MCS1  | MCS2    | MCS3   | MCS4   | MCS5   | MCS6   | MCS7   |         |
| WLAN2450      | 11(2462MHz)  | 11.35 |       |         |        |        |        |        |        | 13.00   |
|               | 6(2437(MHz)  | 12.75 | 12.42 | 12.46   | 12.53  | 12.45  | 12.69  | 12.71  | 12.68  | 14.00   |
|               | 1(2412MHz)   | 12.46 |       |         |        |        |        |        |        | 14.00   |

### 11.4.3 WIFI2.4G hotspot on

| 2.4GHz        |              |       |       |         |        |        |        |        |        |         |
|---------------|--------------|-------|-------|---------|--------|--------|--------|--------|--------|---------|
| FCC           |              |       |       |         |        |        |        |        |        | tune up |
| 802.11b       | Channel\data | 1Mbps | 2Mbps | 5.5Mbps | 11Mbps |        |        |        |        |         |
| WLAN2450      | 11(2462MHz)  | 15.87 | /     | 15.68   | /      |        |        |        |        | 17      |
|               | 6(2437(MHz)  | 15.95 |       | 16.00   |        |        |        |        |        | 17      |
|               | 1(2412MHz)   | 15.98 | 15.96 | 16.01   | 15.98  |        |        |        |        | 17      |
| 802.11g       | Channel\data | 6Mbps | 9Mbps | 12Mbps  | 18Mbps | 24Mbps | 36Mbps | 48Mbps | 54Mbps |         |
| WLAN2450      | 11(2462MHz)  | 11.35 | /     | /       | /      | /      | /      | /      | /      | 13      |
|               | 6(2437(MHz)  | 15.76 | 15.72 | 15.69   | 15.41  | 15.48  | 15.51  | 15.72  | 15.69  | 17      |
|               | 1(2412MHz)   | 12.77 |       |         |        |        |        |        |        | 14      |
| 802.11n-20MHz | Channel\data | MCS0  | MCS1  | MCS2    | MCS3   | MCS4   | MCS5   | MCS6   | MCS7   |         |
| WLAN2450      | 11(2462MHz)  | 11.29 |       |         |        |        |        |        |        | 13      |
|               | 6(2437(MHz)  | 15.57 | 15.45 | 15.34   | 15.37  | 15.39  | 15.56  | 15.55  | 15.54  | 17      |
|               | 1(2412MHz)   | 12.72 |       |         |        |        |        |        |        | 14      |

### 11.4.4 BT

| GFSK      |            |            | EDR2M-4_DQPSK |            |            | EDR3M-8DPSK |            |            | Tune up |
|-----------|------------|------------|---------------|------------|------------|-------------|------------|------------|---------|
| Channel 0 | Channel 39 | Channel 78 | Channel 0     | Channel 39 | Channel 78 | Channel 0   | Channel 39 | Channel 78 |         |
| 11.32     | 10.96      | 10.77      | 10.74         | 10.14      | 10.93      | 10.98       | 10.36      | 10.94      | 12.00   |

## 12 Simultaneous TX SAR Considerations

### 12.1 Transmit Antenna Separation Distances

The detail for transmit antenna separation distances is described in the additional document:

Appendix to test report No.I22Z61923-SEM01

The photos of SAR test

### 12.2 SAR Measurement Positions

According to the KDB941225 D06 Hot Spot SAR, the edges with less than 2.5 cm distance to the antennas need to be tested for SAR.

| SAR measurement positions |        |        |           |            |          |             |
|---------------------------|--------|--------|-----------|------------|----------|-------------|
| Mode                      | Front  | Rear   | Left edge | Right edge | Top edge | Bottom edge |
| ANT0                      | < 25mm | < 25mm | < 25mm    | > 25mm     | > 25mm   | < 25mm      |
| ANT1                      | < 25mm | < 25mm | >25mm     | < 25mm     | > 25mm   | < 25mm      |
| ANT2                      | < 25mm | < 25mm | < 25mm    | > 25mm     | < 25mm   | > 25mm      |
| ANT7                      | < 25mm | < 25mm | > 25mm    | < 25mm     | < 25mm   | > 25mm      |

### 13 Evaluation of Simultaneous

All the Simultaneous Transmission Possibilities are as below table:

| NO. | Simultaneous Tx Combination | Head | Body |
|-----|-----------------------------|------|------|
| 1   | GSM Voice(Ant 1) + BT       | Yes  | Yes  |
| 2   | GSM DATA(Ant 1) + BT        | N/A  | Yes  |
| 3   | GSM Voice(Ant 2) + BT       | Yes  | Yes  |
| 4   | GSM DATA (Ant 2)+ BT        | N/A  | Yes  |
| 5   | GSM Voice(Ant 1) + WiFi2.4G | Yes  | Yes  |
| 6   | GSM DATA(Ant 1) + WiFi2.4G  | N/A  | Yes  |
| 7   | GSM Voice(Ant 2) + WiFi2.4G | Yes  | Yes  |
| 8   | GSM DATA(Ant 2) + WiFi2.4G  | N/A  | Yes  |
| 9   | UMTS (Ant 1) + BT           | Yes  | Yes  |
| 10  | UMTS (Ant 2) + BT           | Yes  | Yes  |
| 11  | UMTS (Ant 1) + WiFi2.4G     | Yes  | Yes  |
| 12  | UMTS (Ant 2) + WiFi2.4G     | Yes  | Yes  |
| 13  | LTE (Ant 1) + WiFi2.4G      | Yes* | Yes* |
| 14  | LTE (Ant 1) + BT            | Yes  | Yes* |
| 15  | LTE (Ant 2) + WiFi2.4G      | Yes* | Yes* |
| 16  | LTE (Ant 2) + BT            | Yes  | Yes* |

- 1) WiFi 2.4G and Bluetooth can't transmit simultaneously.
- 2) 2G&3G&4G main antenna(Ant1) and second antenna(Ant2) can't transmit simultaneously
- 3) \* VoLTE or pre-installed VOIP applications are considered
- 4) Held to ear configurations are not applicable to Bluetooth and therefore were not considered for simultaneous transmission.
- 5) The device does not support DTM function.

### 13.1 Main antenna

| Reported SAR 1g (W/kg) |      |      |       |       |       |      |        |        |        |         |         |         |         |           |      |      |
|------------------------|------|------|-------|-------|-------|------|--------|--------|--------|---------|---------|---------|---------|-----------|------|------|
| State                  |      | 1    |       |       |       |      |        |        |        |         |         |         |         | 2         | 3    |      |
| Head                   |      | G850 | G1900 | W1900 | W1700 | W850 | LTE B2 | LTE B4 | LTE B7 | LTE B13 | LTE B26 | LTE B38 | LTE B66 | WiFi 2.4G | BT   | 1+2  |
| Cheek                  | L    | 0.25 | 0.09  | 0.23  | 0.13  | 0.30 | 0.32   | 0.13   | 0.27   | 0.13    | 0.31    | 0.13    | 0.08    | 0.23      | 0.09 | 0.55 |
| Tilt                   | L    | 0.14 | 0.00  | 0.11  | 0.07  | 0.16 | 0.14   | 0.07   | 0.22   | 0.09    | 0.21    | 0.13    | 0.03    | 0.10      | 0.00 | 0.32 |
| Cheek                  | R    | 0.15 | 0.00  | 0.19  | 0.15  | 0.18 | 0.29   | 0.07   | 0.45   | 0.09    | 0.17    | 0.28    | 0.11    | 0.06      | 0.06 | 0.51 |
| Tilt                   | R    | 0.08 | 0.00  | 0.12  | 0.08  | 0.12 | 0.17   | 0.06   | 0.19   | 0.00    | 0.10    | 0.14    | 0.07    | 0.05      | 0.00 | 0.24 |
| State                  |      | 1    |       |       |       |      |        |        |        |         |         |         |         | 2         | 3    |      |
| Body                   |      | G850 | G1900 | W1900 | W1700 | W850 | LTE B2 | LTE B4 | LTE B7 | LTE B13 | LTE B26 | LTE B38 | LTE B66 | WiFi 2.4G | BT   | 1+2  |
| Front                  | 10mm | 0.21 | 0.14  | 0.13  | 0.12  | 0.29 | 0.16   | 0.15   | 0.12   | 0.11    | 0.13    | 0.08    | 0.10    | 0.08      | 0.03 | 0.37 |
| Rear                   | 10mm | 0.44 | 0.23  | 0.25  | 0.26  | 0.35 | 0.28   | 0.25   | 0.20   | 0.14    | 0.24    | 0.13    | 0.20    | 0.16      | 0.05 | 0.60 |
| Left                   | 10mm | 0.30 | 0.00  | 0.04  | 0.04  | 0.30 | 0.05   | 0.06   | 0.05   | 0.12    | 0.07    | 0.12    | 0.05    | 0.00      | 0.00 | 0.30 |
| Right                  | 10mm | 0.11 | 0.08  | 0.10  | 0.06  | 0.10 | 0.11   | 0.08   | 0.17   | 0.07    | 0.09    | 0.00    | 0.08    | 0.09      | 0.03 | 0.26 |
| Bottom                 | 10mm | 0.14 | 0.24  | 0.23  | 0.28  | 0.13 | 0.28   | 0.28   | 0.10   | 0.07    | 0.13    | 0.07    | 0.24    |           | 0.00 | 0.28 |
| Top                    | 10mm |      |       |       |       |      |        |        |        |         |         |         |         | 0.03      | 0.00 | 0.03 |
| State                  |      | 1    |       |       |       |      |        |        |        |         |         |         |         | 2         | 3    |      |
| Body                   |      | G850 | G1900 | W1900 | W1700 | W850 | LTE B2 | LTE B4 | LTE B7 | LTE B13 | LTE B26 | LTE B38 | LTE B66 | WiFi 2.4G | BT   | 1+2  |
| Front                  | 15mm | 0.20 | 0.12  | 0.18  | 0.12  | 0.18 | 0.25   | 0.12   | 0.14   | 0.08    | 0.21    | 0.10    | 0.15    | 0.08      | 0.03 | 0.33 |
| Rear                   | 15mm | 0.25 | 0.19  | 0.34  | 0.24  | 0.28 | 0.39   | 0.23   | 0.20   | 0.12    | 0.27    | 0.17    | 0.31    | 0.16      | 0.05 | 0.55 |

### 13.2 Second antenna

| Reported SAR 1g (W/kg) |      |      |       |       |       |      |        |        |        |         |         |         |         |           |      |      |
|------------------------|------|------|-------|-------|-------|------|--------|--------|--------|---------|---------|---------|---------|-----------|------|------|
| State                  |      | 1    |       |       |       |      |        |        |        |         |         |         |         | 2         | 3    |      |
| Head                   |      | G850 | G1900 | W1900 | W1700 | W850 | LTE B2 | LTE B4 | LTE B7 | LTE B13 | LTE B26 | LTE B38 | LTE B66 | WiFi 2.4G | BT   | 1+2  |
| Cheek                  | L    | 0.61 | 0.16  | 0.37  | 0.53  | 0.56 | 0.32   | 0.47   | 0.32   | 0.31    | 0.35    | 0.20    | 0.40    | 0.23      | 0.09 | 0.84 |
| Tilt                   | L    | 0.39 | 0.21  | 0.45  | 0.75  | 0.40 | 0.38   | 0.71   | 0.39   | 0.31    | 0.25    | 0.20    | 0.57    | 0.10      | 0.00 | 0.85 |
| Cheek                  | R    | 0.41 | 0.14  | 0.43  | 0.69  | 0.40 | 0.44   | 0.61   | 0.85   | 0.34    | 0.32    | 0.60    | 0.55    | 0.06      | 0.06 | 0.91 |
| Tilt                   | R    | 0.39 | 0.21  | 0.59  | 0.91  | 0.37 | 0.71   | 0.85   | 0.85   | 0.30    | 0.26    | 0.37    | 0.80    | 0.05      | 0.00 | 0.96 |
| State                  |      | 1    |       |       |       |      |        |        |        |         |         |         |         | 2         | 3    |      |
| Body                   |      | G850 | G1900 | W1900 | W1700 | W850 | LTE B2 | LTE B4 | LTE B7 | LTE B13 | LTE B26 | LTE B38 | LTE B66 | WiFi 2.4G | BT   | 1+2  |
| Front                  | 10mm | 0.09 | 0.07  | 0.08  | 0.08  | 0.14 | 0.11   | 0.17   | 0.08   | 0.09    | 0.09    | 0.04    | 0.18    | 0.08      | 0.03 | 0.26 |
| Rear                   | 10mm | 0.13 | 0.14  | 0.17  | 0.12  | 0.25 | 0.21   | 0.21   | 0.20   | 0.14    | 0.16    | 0.17    | 0.31    | 0.16      | 0.05 | 0.47 |
| Left                   | 10mm | 0.00 | 0.00  | 0.05  | 0.04  | 0.00 | 0.06   | 0.08   | 0.19   | 0.05    | 0.00    | 0.17    | 0.09    | 0.00      | 0.00 | 0.19 |
| Right                  | 10mm | 0.00 | 0.00  | 0.00  | 0.00  | 0.08 | 0.00   | 0.11   | 0.05   | 0.07    | 0.00    | 0.00    | 0.00    | 0.09      | 0.03 | 0.20 |
| Bottom                 | 10mm |      |       |       |       |      |        |        |        |         |         |         |         |           | 0.00 | 0.00 |
| Top                    | 10mm | 0.07 | 0.26  | 0.24  | 0.22  | 0.15 | 0.28   | 0.36   | 0.12   | 0.07    | 0.09    | 0.05    | 0.40    | 0.03      | 0.00 | 0.43 |
| State                  |      | 1    |       |       |       |      |        |        |        |         |         |         |         | 2         | 3    |      |
| Body                   |      | G850 | G1900 | W1900 | W1700 | W850 | LTE B2 | LTE B4 | LTE B7 | LTE B13 | LTE B26 | LTE B38 | LTE B66 | WiFi 2.4G | BT   | 1+2  |
| Front                  | 15mm | 0.07 | 0.10  | 0.12  | 0.19  | 0.09 | 0.12   | 0.16   | 0.11   | 0.18    | 0.07    | 0.05    | 0.17    | 0.08      | 0.03 | 0.27 |
| Rear                   | 15mm | 0.16 | 0.24  | 0.24  | 0.26  | 0.16 | 0.22   | 0.21   | 0.21   | 0.26    | 0.11    | 0.17    | 0.24    | 0.16      | 0.05 | 0.42 |

Note: VoLTE or pre-installed VOIP applications are considered.

#### Conclusion:

According to the above tables, the sum of reported SAR values is <1.6W/kg. So the simultaneous transmission SAR with volume scans is not required.

## 14 SAR Test Result

### Note:

#### KDB 447498 D01 General RF Exposure Guidance:

For WWAN: Reported SAR(W/kg)= Measured SAR(W/kg)\*Tune-up Scaling Factor

For BT/WLAN: Reported SAR(W/kg)= Measured SAR(W/kg)\* Duty Cycle scaling factor \* Tune-up scaling factor

Testing of other required channels within the operating mode of a frequency band is not required when the reported 1-g or 10-g SAR for the mid-band or highest output power channel is:

$\leq 0.8$  W/kg or  $2.0$  W/kg, for 1-g or 10-g respectively, when the transmission band is  $\leq 100$  MHz

$\leq 0.6$  W/kg or  $1.5$  W/kg, for 1-g or 10-g respectively, when the transmission band is between  $100$  MHz and  $200$  MHz

$\leq 0.4$  W/kg or  $1.0$  W/kg, for 1-g or 10-g respectively, when the transmission band is  $\geq 200$  MHz

#### KDB 648474 D04 Handset SAR:

With headset attached, when the reported SAR for body-worn accessory, measured without a headset connected to the handset, is  $> 1.2$  W/kg, the highest reported SAR configuration for that wireless mode and frequency band should be repeated for that body-worn accessory with a headset attached to the handset.

#### KDB 941225 D01 SAR test for 3G devices:

When the maximum output power and tune-up tolerance specified for production units in a secondary mode is  $\leq \frac{1}{4}$  dB higher than the primary mode or when the highest reported SAR of the primary mode is scaled by the ratio of specified maximum output power and tune-up tolerance of secondary to primary mode and the adjusted SAR is  $\leq 1.2$  W/kg, SAR measurement is not required for the secondary mode.

#### KDB 941225 D05 SAR for LTE Devices:

SAR test reduction is applied using the following criteria:

Start with the largest channel bandwidth and measure SAR for QPSK with 1 RB, and 50% RB allocation, using the RB offset and required test channel combination with the highest maximum output power among RB offsets at the upper edge, middle and lower edge of each required test channel.

When the reported SAR is  $> 0.8$  W/kg, testing for other Channels is performed at the highest output power level for 1RB, and 50% RB configuration for that channel.

Testing for 100% RB configuration is performed at the highest output power level for 100% RB configuration across the Low, Mid and High Channel when the highest reported SAR for 1 RB and 50% RB are  $> 0.8$  W/kg. Testing for the remaining required channels is not needed because the reported SAR for 100% RB Allocation  $< 1.45$  W/kg.

Testing for 16-QAM modulation is not required because the reported SAR for QPSK is  $< 1.45$  W/Kg and its output power is not more than  $0.5$  dB higher than that of QPSK.

Testing for the other channel bandwidths is not required because the reported SAR for the highest channel bandwidth is  $< 1.45$  W/Kg and its output power is not more than  $0.5$  dB higher than that of the highest channel bandwidth.

For LTE bands that do not support at least three non-overlapping channels in certain channel bandwidths, test the available non-overlapping channels instead. When a device supports overlapping channel assignment in a channel bandwidth configuration, the middle channel of the

group of overlapping channels should be selected for testing; therefore, the requirement for H, M and L channels may not fully apply.

**KDB 248227 D01 SAR meas for 802.11:**

SAR test reduction for 802.11 Wi-Fi transmission mode configurations are considered separately for DSSS and OFDM. An initial test position is determined to reduce the number of tests required for certain exposure configurations with multiple test positions. An initial test configuration is determined for each frequency band and aggregated band according to maximum output power, channel bandwidth, wireless mode configurations and other operating parameters to streamline the measurement requirements. For 2.4 GHz DSSS, either the initial test position or DSSS procedure is applied to reduce the number of SAR tests; these are mutually exclusive. For OFDM, an initial test position is only applicable to next to the ear, UMPC mini-tablet and hotspot mode configurations, which is tested using the initial test configuration to facilitate test reduction. For other exposure conditions with a fixed test position, SAR test reduction is determined using only the initial test configuration.

To determine the initial test position, Area Scans were performed to determine the position with the Maximum Value of SAR (measured). The position that produced the highest Maximum Value of SAR is considered the worst case position; thus used as the initial test position.

The multiple test positions require SAR measurements in head, hotspot mode or UMPC mini-tablet configurations may be reduced according to the highest reported SAR determined using the initial test position(s) by applying the DSSS or OFDM SAR measurement procedures in the required wireless mode test configuration(s). The initial test position(s) is measured using the highest measured maximum output power channel in the required wireless mode test configuration(s).

When the reported SAR for the initial test position is:

$\leq 0.4$  W/kg, further SAR measurement is not required for the other test positions in that exposure configuration and wireless mode combination within the frequency band or aggregated band. DSSS and OFDM configurations are considered separately according to the required SAR procedures.

$> 0.4$  W/kg, SAR is repeated using the same wireless mode test configuration tested in the initial test position to measure the subsequent next closet/smallest test separation distance and maximum coupling test position, on the highest maximum output power channel, until the reported SAR is  $\leq 0.8$  W/kg or all required test positions are tested.

- For subsequent test positions with equivalent test separation distance or when exposure is dominated by coupling conditions, the position for maximum coupling condition should be tested.
- When it is unclear, all equivalent conditions must be tested.

For all positions/configurations tested using the initial test position and subsequent test positions, when the reported SAR is  $> 0.8$  W/kg, measure the SAR for these positions/configurations on the subsequent next highest measured output power channel(s) until the reported SAR is  $\leq 1.2$  W/kg or all required test channels are considered.

- The additional power measurements required for this step should be limited to those necessary for identifying subsequent highest output power channels to apply the test reduction.

When the specified maximum output power is the same for both UNII 1 and UNII 2A, begin SAR measurements in UNII 2A with the channel with the highest measured output power. If the reported SAR for UNII 2A is  $\leq 1.2$  W/kg, SAR is not required for UNII 1; otherwise treat the remaining bands separately and test them independently for SAR.

When the specified maximum output power is different between UNII 1 and UNII 2A, begin SAR with the band that has the higher specified maximum output. If the highest reported SAR for the band with the highest specified power is  $\leq 1.2$  W/kg, testing for the band with the lower specified output power is not required; otherwise test the remaining bands independently for SAR.

**Table 15.1: Duty Cycle**

| Mode              | Duty Cycle |
|-------------------|------------|
| Speech for GSM    | 1:8.3      |
| GPRS&EGPRS 1 Slot | 1:8.3      |
| GPRS&EGPRS 2 Slot | 1:4        |
| GPRS&EGPRS 3 Slot | 1:2.67     |
| GPRS&EGPRS 4 Slot | 1:2        |
| WCDMA&LTE FDD     | 1:1        |
| TDD PC3           | 1:1.58     |
| TDD PC2           | 1:2.309    |

## 14.1 SAR results for 2G/3G/4G-Main antenna

B2=NVT HB496590EFW-F

B3=SCUD HB496590EFW

B4=SCUD HB496590EFW-F

| BUT State | RF Exposure Conditions | Frequency Band | Channel Number | Frequency (MHz) | Mode/RB    | Test setup | Distance | Figure No./Note | BUT Measured Power (dBm) | Tune up (dBm) | Measured SAR 1g (W/kg) | Calculated SAR 1g (W/kg) | Measured SAR 10g (W/kg) | Calculated SAR 10g (W/kg) | Power Drift |
|-----------|------------------------|----------------|----------------|-----------------|------------|------------|----------|-----------------|--------------------------|---------------|------------------------|--------------------------|-------------------------|---------------------------|-------------|
| REV on    | Head                   | GSM850         | 251            | 848.8           | Voice      | Cheek      | 0mm      | \               | 32.61                    | 33.70         | 0.141                  | 0.18                     | 0.111                   | 0.14                      | 0.04        |
| REV on    | Head                   | GSM850         | 190            | 836.6           | Voice      | Cheek      | 0mm      | \               | 32.64                    | 33.70         | 0.179                  | 0.23                     | 0.142                   | 0.18                      | -0.08       |
| REV on    | Head                   | GSM850         | 128            | 824.2           | Voice      | Cheek      | 0mm      | F.1             | 32.70                    | 33.70         | 0.201                  | 0.25                     | 0.159                   | 0.20                      | 0.16        |
| REV on    | Head                   | GSM850         | 190            | 836.6           | Voice      | Tilt Left  | 0mm      | \               | 32.64                    | 33.70         | 0.108                  | 0.14                     | 0.089                   | 0.11                      | -0.07       |
| REV on    | Head                   | GSM850         | 190            | 836.6           | Voice      | Cheek      | 0mm      | \               | 32.64                    | 33.70         | 0.118                  | 0.15                     | 0.093                   | 0.12                      | 0.14        |
| REV on    | Head                   | GSM850         | 190            | 836.6           | Voice      | Tilt       | 0mm      | \               | 32.64                    | 33.70         | 0.061                  | 0.08                     | 0.045                   | 0.06                      | 0.18        |
| Hotspot   | Body                   | GSM850         | 190            | 836.6           | GPRS(4TX)  | Front      | 10mm     | \               | 26.01                    | 27.00         | 0.165                  | 0.21                     | 0.106                   | 0.13                      | 0.12        |
| Hotspot   | Body                   | GSM850         | 251            | 848.8           | GPRS(4TX)  | Rear       | 10mm     | \               | 25.99                    | 27.00         | 0.263                  | 0.33                     | 0.162                   | 0.20                      | -0.14       |
| Hotspot   | Body                   | GSM850         | 190            | 836.6           | GPRS(4TX)  | Rear       | 10mm     | \               | 26.01                    | 27.00         | 0.325                  | 0.41                     | 0.202                   | 0.25                      | -0.17       |
| Hotspot   | Body                   | GSM850         | 128            | 824.2           | GPRS(4TX)  | Rear       | 10mm     | F.2             | 26.07                    | 27.00         | 0.354                  | 0.44                     | 0.216                   | 0.27                      | 0.02        |
| Hotspot   | Body                   | GSM850         | 190            | 836.6           | GPRS(4TX)  | Left       | 10mm     | \               | 26.01                    | 27.00         | 0.241                  | 0.30                     | 0.138                   | 0.17                      | 0.1         |
| Hotspot   | Body                   | GSM850         | 190            | 836.6           | GPRS(4TX)  | Right      | 10mm     | \               | 26.01                    | 27.00         | 0.087                  | 0.11                     | 0.058                   | 0.07                      | 0.03        |
| Hotspot   | Body                   | GSM850         | 190            | 836.6           | GPRS(4TX)  | Bottom     | 10mm     | \               | 26.01                    | 27.00         | 0.114                  | 0.14                     | 0.070                   | 0.09                      | -0.19       |
| Hotspot   | Body                   | GSM850         | 251            | 848.8           | EGPRS(4TX) | Rear       | 10mm     | \               | 18.10                    | 19.10         | 0.256                  | 0.32                     | 0.140                   | 0.18                      | 0.04        |
| Hotspot   | Body                   | GSM850         | 128            | 824.2           | GPRS(4TX)  | Rear       | 10mm     | SIM2            | 26.07                    | 27.00         | 0.306                  | 0.38                     | 0.185                   | 0.23                      | -0.09       |
| Hotspot   | Body                   | GSM850         | 128            | 824.2           | GPRS(4TX)  | Rear       | 10mm     | B2              | 26.07                    | 27.00         | 0.311                  | 0.39                     | 0.193                   | 0.24                      | 0.17        |
| Hotspot   | Body                   | GSM850         | 128            | 824.2           | GPRS(4TX)  | Rear       | 10mm     | B3              | 26.07                    | 27.00         | 0.304                  | 0.38                     | 0.182                   | 0.23                      | -0.06       |
| Hotspot   | Body                   | GSM850         | 128            | 824.2           | GPRS(4TX)  | Rear       | 10mm     | B4              | 26.07                    | 27.00         | 0.323                  | 0.40                     | 0.207                   | 0.26                      | -0.11       |
| REV off   | Body                   | GSM850         | 190            | 836.6           | GPRS(3TX)  | Front      | 15mm     | \               | 28.29                    | 29.30         | 0.162                  | 0.20                     | 0.113                   | 0.14                      | -0.13       |
| REV off   | Body                   | GSM850         | 251            | 848.8           | GPRS(3TX)  | Rear       | 15mm     | \               | 28.28                    | 29.30         | 0.155                  | 0.20                     | 0.101                   | 0.13                      | -0.14       |
| REV off   | Body                   | GSM850         | 190            | 836.6           | GPRS(3TX)  | Rear       | 15mm     | \               | 28.29                    | 29.30         | 0.191                  | 0.24                     | 0.125                   | 0.16                      | 0.16        |
| REV off   | Body                   | GSM850         | 128            | 824.2           | GPRS(3TX)  | Rear       | 15mm     | F.3             | 28.33                    | 29.30         | 0.199                  | 0.25                     | 0.129                   | 0.16                      | -0.03       |
| REV off   | Body                   | GSM850         | 251            | 848.8           | EGPRS(3TX) | Rear       | 15mm     | \               | 20.88                    | 21.80         | 0.171                  | 0.21                     | 0.112                   | 0.14                      | 0.04        |
| REV on    | Head                   | GSM1900        | 810            | 1909.8          | Voice      | Cheek      | 0mm      | \               | 29.65                    | 30.70         | 0.057                  | 0.07                     | 0.033                   | 0.04                      | -0.11       |
| REV on    | Head                   | GSM1900        | 661            | 1880            | Voice      | Cheek      | 0mm      | \               | 29.77                    | 30.70         | 0.052                  | 0.06                     | 0.031                   | 0.04                      | 0.09        |
| REV on    | Head                   | GSM1900        | 512            | 1850.2          | Voice      | Cheek      | 0mm      | F.4             | 29.92                    | 30.70         | 0.073                  | 0.09                     | 0.049                   | 0.06                      | 0.05        |
| REV on    | Head                   | GSM1900        | 661            | 1880            | Voice      | Tilt Left  | 0mm      | \               | 29.77                    | 30.70         | <0.01                  | <0.01                    | <0.01                   | <0.01                     | \           |
| REV on    | Head                   | GSM1900        | 661            | 1880            | Voice      | Cheek      | 0mm      | \               | 29.77                    | 30.70         | <0.01                  | <0.01                    | <0.01                   | <0.01                     | \           |
| REV on    | Head                   | GSM1900        | 661            | 1880            | Voice      | Tilt       | 0mm      | \               | 29.77                    | 30.70         | <0.01                  | <0.01                    | <0.01                   | <0.01                     | \           |
| Hotspot   | Body                   | GSM1900        | 661            | 1880            | GPRS(4TX)  | Front      | 10mm     | \               | 21.40                    | 22.20         | 0.117                  | 0.14                     | 0.074                   | 0.09                      | 0.11        |
| Hotspot   | Body                   | GSM1900        | 661            | 1880            | GPRS(4TX)  | Rear       | 10mm     | \               | 21.40                    | 22.20         | 0.194                  | 0.23                     | 0.110                   | 0.13                      | 0.16        |
| Hotspot   | Body                   | GSM1900        | 661            | 1880            | GPRS(4TX)  | Left       | 10mm     | \               | 21.40                    | 22.20         | <0.01                  | <0.01                    | <0.01                   | <0.01                     | \           |
| Hotspot   | Body                   | GSM1900        | 661            | 1880            | GPRS(4TX)  | Right      | 10mm     | \               | 21.40                    | 22.20         | 0.067                  | 0.08                     | 0.042                   | 0.05                      | 0.14        |
| Hotspot   | Body                   | GSM1900        | 810            | 1909.8          | GPRS(4TX)  | Bottom     | 10mm     | \               | 21.30                    | 22.20         | 0.188                  | 0.23                     | 0.105                   | 0.13                      | 0.12        |
| Hotspot   | Body                   | GSM1900        | 661            | 1880            | GPRS(4TX)  | Bottom     | 10mm     | \               | 21.40                    | 22.20         | 0.195                  | 0.23                     | 0.102                   | 0.12                      | 0.16        |
| Hotspot   | Body                   | GSM1900        | 512            | 1850.2          | GPRS(4TX)  | Bottom     | 10mm     | F.5             | 21.53                    | 22.20         | 0.209                  | 0.24                     | 0.115                   | 0.13                      | -0.08       |
| Hotspot   | Body                   | GSM1900        | 810            | 1909.8          | EGPRS(4TX) | Bottom     | 10mm     | \               | 21.30                    | 22.20         | 0.188                  | 0.23                     | 0.101                   | 0.12                      | 0.08        |
| REV off   | Body                   | GSM1900        | 661            | 1880            | GPRS(3TX)  | Front      | 15mm     | \               | 24.31                    | 25.20         | 0.096                  | 0.12                     | 0.059                   | 0.07                      | 0.15        |
| REV off   | Body                   | GSM1900        | 810            | 1909.8          | GPRS(3TX)  | Rear       | 15mm     | \               | 24.25                    | 25.20         | 0.146                  | 0.18                     | 0.089                   | 0.11                      | 0.12        |
| REV off   | Body                   | GSM1900        | 661            | 1880            | GPRS(3TX)  | Rear       | 15mm     | \               | 24.31                    | 25.20         | 0.140                  | 0.17                     | 0.093                   | 0.11                      | 0.04        |
| REV off   | Body                   | GSM1900        | 512            | 1850.2          | GPRS(3TX)  | Rear       | 15mm     | F.6             | 24.45                    | 25.20         | 0.164                  | 0.19                     | 0.100                   | 0.12                      | 0.04        |
| REV off   | Body                   | GSM1900        | 810            | 1909.8          | EGPRS(3TX) | Rear       | 15mm     | \               | 24.22                    | 25.20         | 0.145                  | 0.18                     | 0.090                   | 0.11                      | -0.18       |
| REV on    | Head                   | WCDMA1900      | 9538           | 1907.6          | RMC        | Cheek      | 0mm      | \               | 24.16                    | 25.00         | 0.161                  | 0.20                     | 0.098                   | 0.12                      | 0.19        |
| REV on    | Head                   | WCDMA1900      | 9400           | 1880            | RMC        | Cheek      | 0mm      | \               | 24.08                    | 25.00         | 0.180                  | 0.22                     | 0.105                   | 0.13                      | 0.05        |
| REV on    | Head                   | WCDMA1900      | 9262           | 1852.4          | RMC        | Cheek      | 0mm      | F.7             | 24.13                    | 25.00         | 0.190                  | 0.23                     | 0.117                   | 0.14                      | -0.08       |
| REV on    | Head                   | WCDMA1900      | 9400           | 1880            | RMC        | Tilt Left  | 0mm      | \               | 24.08                    | 25.00         | 0.088                  | 0.11                     | 0.056                   | 0.07                      | 0.05        |
| REV on    | Head                   | WCDMA1900      | 9400           | 1880            | RMC        | Cheek      | 0mm      | \               | 24.08                    | 25.00         | 0.154                  | 0.19                     | 0.101                   | 0.12                      | -0.13       |
| REV on    | Head                   | WCDMA1900      | 9400           | 1880            | RMC        | Tilt       | 0mm      | \               | 24.08                    | 25.00         | 0.099                  | 0.12                     | 0.063                   | 0.08                      | 0.04        |
| Hotspot   | Body                   | WCDMA1900      | 9400           | 1880            | RMC        | Front      | 10mm     | \               | 19.22                    | 20.00         | 0.110                  | 0.13                     | 0.068                   | 0.08                      | -0.01       |
| Hotspot   | Body                   | WCDMA1900      | 9538           | 1907.6          | RMC        | Rear       | 10mm     | \               | 19.12                    | 20.00         | 0.200                  | 0.24                     | 0.115                   | 0.14                      | -0.04       |
| Hotspot   | Body                   | WCDMA1900      | 9400           | 1880            | RMC        | Rear       | 10mm     | F.8             | 19.22                    | 20.00         | 0.210                  | 0.25                     | 0.123                   | 0.15                      | -0.14       |
| Hotspot   | Body                   | WCDMA1900      | 9262           | 1852.4          | RMC        | Rear       | 10mm     | \               | 19.17                    | 20.00         | 0.206                  | 0.25                     | 0.118                   | 0.14                      | -0.01       |
| Hotspot   | Body                   | WCDMA1900      | 9400           | 1880            | RMC        | Left       | 10mm     | \               | 19.22                    | 20.00         | 0.032                  | 0.04                     | 0.020                   | 0.02                      | -0.12       |
| Hotspot   | Body                   | WCDMA1900      | 9400           | 1880            | RMC        | Right      | 10mm     | \               | 19.22                    | 20.00         | 0.084                  | 0.10                     | 0.048                   | 0.06                      | 0.04        |
| Hotspot   | Body                   | WCDMA1900      | 9538           | 1907.6          | RMC        | Bottom     | 10mm     | \               | 19.12                    | 20.00         | 0.187                  | 0.23                     | 0.108                   | 0.13                      | -0.02       |
| Hotspot   | Body                   | WCDMA1900      | 9400           | 1880            | RMC        | Bottom     | 10mm     | \               | 19.22                    | 20.00         | 0.183                  | 0.22                     | 0.106                   | 0.13                      | -0.05       |
| Hotspot   | Body                   | WCDMA1900      | 9262           | 1852.4          | RMC        | Bottom     | 10mm     | \               | 19.17                    | 20.00         | 0.186                  | 0.23                     | 0.108                   | 0.13                      | -0.19       |
| REV off   | Body                   | WCDMA1900      | 9400           | 1880            | RMC        | Front      | 15mm     | \               | 22.62                    | 23.50         | 0.146                  | 0.18                     | 0.092                   | 0.11                      | 0.07        |
| REV off   | Body                   | WCDMA1900      | 9538           | 1907.6          | RMC        | Rear       | 15mm     | F.9             | 22.56                    | 23.50         | 0.276                  | 0.34                     | 0.165                   | 0.20                      | 0.13        |
| REV off   | Body                   | WCDMA1900      | 9400           | 1880            | RMC        | Rear       | 15mm     | \               | 22.62                    | 23.50         | 0.274                  | 0.34                     | 0.163                   | 0.20                      | 0.05        |
| REV off   | Body                   | WCDMA1900      | 9262           | 1852.4          | RMC        | Rear       | 15mm     | \               | 22.58                    | 23.50         | 0.256                  | 0.32                     | 0.154                   | 0.19                      | 0.17        |
| REV on    | Head                   | WCDMA1700      | 1513           | 1752.6          | RMC        | Cheek      | 0mm      | \               | 24.07                    | 24.90         | 0.098                  | 0.12                     | 0.062                   | 0.08                      | 0.18        |
| REV on    | Head                   | WCDMA1700      | 1412           | 1732.4          | RMC        | Cheek      | 0mm      | \               | 24.02                    | 24.90         | 0.106                  | 0.13                     | 0.067                   | 0.08                      | -0.19       |
| REV on    | Head                   | WCDMA1700      | 1312           | 1712.4          | RMC        | Cheek      | 0mm      | \               | 24.11                    | 24.90         | 0.096                  | 0.12                     | 0.060                   | 0.07                      | 0.04        |
| REV on    | Head                   | WCDMA1700      | 1412           | 1732.4          | RMC        | Tilt Left  | 0mm      | \               | 24.02                    | 24.90         | 0.057                  | 0.07                     | 0.036                   | 0.04                      | 0           |
| REV on    | Head                   | WCDMA1700      | 15.13          | 1752.6          | RMC        | Cheek      | 0mm      | F.10            | 24.07                    | 24.90         | 0.120                  | 0.15                     | 0.078                   | 0.09                      | 0.01        |
| REV on    | Head                   | WCDMA1700      | 1412           | 1732.4          | RMC        | Cheek      | 0mm      | \               | 24.02                    | 24.90         | 0.113                  | 0.14                     | 0.074                   | 0.09                      | -0.19       |
| REV on    | Head                   | WCDMA1700      | 1312           | 1712.4          | RMC        | Cheek      | 0mm      | \               | 24.11                    | 24.90         | 0.107                  | 0.13                     | 0.070                   | 0.08                      | 0.02        |
| REV on    | Head                   | WCDMA1700      | 1412           | 1732.4          | RMC        | Tilt       | 0mm      | \               | 24.02                    | 24.90         | 0.068                  | 0.08                     | 0.042                   | 0.05                      | -0.13       |
| Hotspot   | Body                   | WCDMA1700      | 1412           | 1732.4          | RMC        | Front      | 10mm     | \               | 20.04                    | 20.90         | 0.100                  | 0.12                     | 0.066                   | 0.08                      | -0.15       |
| Hotspot   | Body                   | WCDMA1700      | 15.13          | 1752.6          | RMC        | Rear       | 10mm     | \               | 19.89                    | 20.90         | 0.210                  | 0.26                     | 0.120                   | 0.15                      | -0.12       |
| Hotspot   | Body                   | WCDMA1700      | 1412           | 1732.4          | RMC        | Rear       | 10mm     | \               | 20.04                    | 20.90         | 0.192                  | 0.23                     | 0.117                   | 0.14                      | 0.03        |
| Hotspot   | Body                   | WCDMA1700      | 1312           | 1712.4          | RMC        | Rear       | 10mm     | \               | 19.98                    | 20.90         | 0.181                  | 0.22                     | 0.111                   | 0.14                      | -0.14       |
| Hotspot   | Body                   | WCDMA1700      | 1412           | 1732.4          | RMC        | Left       | 10mm     | \               | 20.04                    | 20.90         | 0.035                  | 0.04                     | 0.022                   | 0.03                      | -0.07       |
| Hotspot   | Body                   | WCDMA1700      | 1412           | 1732.4          | RMC        | Right      | 10mm     | \               | 20.04                    | 20.90         | 0.047                  | 0.06                     | 0.028                   | 0.03                      | -0.1        |
| Hotspot   | Body                   | WCDMA1700      | 15.13          | 1752.6          | RMC        | Bottom     | 10mm     | F.11            | 19.89                    | 20.90         | 0.218                  | 0.28                     | 0.123                   | 0.16                      | 0.07        |
| Hotspot   | Body                   | WCDMA1700      | 1412           | 1732.4          | RMC        | Bottom     | 10mm     | \               | 20.04                    | 20.90         | 0.200                  | 0.24                     | 0.113                   | 0.14                      | 0.03        |
| Hotspot   | Body                   | WCDMA1700      | 1312           | 1712.4          | RMC        | Bottom     | 10mm     | \               | 19.98                    | 20.90         | 0.184                  | 0.23                     | 0.103                   | 0.13                      | -0.14       |
| REV off   | Body                   | WCDMA1700      | 1412           | 1732.4          | RMC        | Front      | 15mm     | \               | 22.56                    | 23.40         | 0.096                  | 0.12                     | 0.064                   | 0.08                      | -0.02       |
| REV off   | Body                   | WCDMA1700      | 15.13          | 1752.6          | RMC        | Rear       | 15mm     | F.12            | 22.53                    | 23.40         | 0.198                  | 0.24                     | 0.124                   | 0.15                      | 0.05        |
| REV off   | Body                   | WCDMA1700      | 1412           | 1732.4          | RMC        | Rear       | 15mm     | \               | 22.56                    | 23.40         | 0.177                  | 0.21                     | 0.111                   | 0.13                      | -0.18       |
| REV off   | Body                   | WCDMA1700      | 1312           | 1712.4          | RMC        | Rear       | 15mm     | \               | 22.52                    | 23.40         | 0.165                  | 0.20                     | 0.105                   | 0.13                      | -0.04       |



|         |      |          |       |        |             |           |      |      |       |       |       |      |       |      |       |
|---------|------|----------|-------|--------|-------------|-----------|------|------|-------|-------|-------|------|-------|------|-------|
| REV on  | Head | WCDMA850 | 4233  | 846.6  | RMC         | Cheek     | 0mm  | \    | 24.06 | 25.00 | 0.216 | 0.27 | 0.164 | 0.20 | 0     |
| REV on  | Head | WCDMA850 | 4183  | 836.6  | RMC         | Cheek     | 0mm  | \    | 24.03 | 25.00 | 0.235 | 0.29 | 0.177 | 0.22 | 0.15  |
| REV on  | Head | WCDMA850 | 4132  | 826.4  | RMC         | Cheek     | 0mm  | F.13 | 24.09 | 25.00 | 0.246 | 0.30 | 0.187 | 0.23 | 0.02  |
| REV on  | Head | WCDMA850 | 4183  | 836.6  | RMC         | Tilt Left | 0mm  | \    | 24.03 | 25.00 | 0.130 | 0.16 | 0.105 | 0.13 | -0.12 |
| REV on  | Head | WCDMA850 | 4183  | 836.6  | RMC         | Cheek     | 0mm  | \    | 24.03 | 25.00 | 0.144 | 0.18 | 0.109 | 0.14 | -0.05 |
| REV on  | Head | WCDMA850 | 4183  | 836.6  | RMC         | Tilt      | 0mm  | \    | 24.03 | 25.00 | 0.092 | 0.12 | 0.072 | 0.09 | 0.11  |
| Hotspot | Body | WCDMA850 | 4183  | 836.6  | RMC         | Front     | 10mm | \    | 23.12 | 24.00 | 0.233 | 0.29 | 0.153 | 0.19 | -0.02 |
| Hotspot | Body | WCDMA850 | 4233  | 846.6  | RMC         | Rear      | 10mm | \    | 23.09 | 24.00 | 0.249 | 0.31 | 0.156 | 0.19 | 0.09  |
| Hotspot | Body | WCDMA850 | 4183  | 836.6  | RMC         | Rear      | 10mm | \    | 23.12 | 24.00 | 0.275 | 0.34 | 0.174 | 0.21 | -0.08 |
| Hotspot | Body | WCDMA850 | 4132  | 826.4  | RMC         | Rear      | 10mm | F.14 | 23.10 | 24.00 | 0.285 | 0.35 | 0.178 | 0.22 | 0.05  |
| Hotspot | Body | WCDMA850 | 4183  | 836.6  | RMC         | Left      | 10mm | \    | 23.12 | 24.00 | 0.249 | 0.30 | 0.138 | 0.17 | 0.09  |
| Hotspot | Body | WCDMA850 | 4183  | 836.6  | RMC         | Right     | 10mm | \    | 23.12 | 24.00 | 0.082 | 0.10 | 0.057 | 0.07 | 0.04  |
| Hotspot | Body | WCDMA850 | 4183  | 836.6  | RMC         | Bottom    | 10mm | \    | 23.12 | 24.00 | 0.110 | 0.13 | 0.070 | 0.09 | 0.18  |
| REV off | Body | WCDMA850 | 4183  | 836.6  | RMC         | Front     | 15mm | \    | 24.03 | 25.00 | 0.144 | 0.18 | 0.105 | 0.13 | 0.01  |
| REV off | Body | WCDMA850 | 4233  | 846.6  | RMC         | Rear      | 15mm | \    | 24.06 | 25.00 | 0.200 | 0.25 | 0.130 | 0.16 | -0.11 |
| REV off | Body | WCDMA850 | 4183  | 836.6  | RMC         | Rear      | 15mm | \    | 24.03 | 25.00 | 0.219 | 0.27 | 0.140 | 0.18 | -0.01 |
| REV off | Body | WCDMA850 | 4132  | 826.4  | RMC         | Rear      | 15mm | F.15 | 24.09 | 25.00 | 0.225 | 0.28 | 0.147 | 0.18 | 0.12  |
| REV on  | Head | LTE B2   | 18900 | 1880   | 1RB-Mid     | Cheek     | 0mm  | F.16 | 23.46 | 24.50 | 0.252 | 0.32 | 0.153 | 0.19 | -0.15 |
| REV on  | Head | LTE B2   | 18900 | 1880   | 1RB-Mid     | Tilt Left | 0mm  | \    | 23.46 | 24.50 | 0.110 | 0.14 | 0.072 | 0.09 | 0.19  |
| REV on  | Head | LTE B2   | 18900 | 1880   | 1RB-Mid     | Cheek     | 0mm  | \    | 23.46 | 24.50 | 0.232 | 0.29 | 0.147 | 0.19 | -0.16 |
| REV on  | Head | LTE B2   | 18900 | 1880   | 1RB-Mid     | Tilt      | 0mm  | \    | 23.46 | 24.50 | 0.135 | 0.17 | 0.085 | 0.11 | 0     |
| REV on  | Head | LTE B2   | 19100 | 1900   | 50RB-Low    | Cheek     | 0mm  | \    | 22.55 | 23.50 | 0.139 | 0.17 | 0.082 | 0.10 | 0.19  |
| REV on  | Head | LTE B2   | 19100 | 1900   | 50RB-Low    | Tilt Left | 0mm  | \    | 22.55 | 23.50 | 0.083 | 0.10 | 0.052 | 0.06 | -0.06 |
| REV on  | Head | LTE B2   | 19100 | 1900   | 50RB-Low    | Cheek     | 0mm  | \    | 22.55 | 23.50 | 0.202 | 0.25 | 0.128 | 0.16 | -0.16 |
| REV on  | Head | LTE B2   | 19100 | 1900   | 50RB-Low    | Tilt      | 0mm  | \    | 22.55 | 23.50 | 0.099 | 0.12 | 0.062 | 0.08 | 0.01  |
| Hotspot | Body | LTE B2   | 18900 | 1880   | 1RB-Mid     | Front     | 10mm | \    | 19.09 | 20.00 | 0.132 | 0.16 | 0.087 | 0.11 | -0.13 |
| Hotspot | Body | LTE B2   | 18900 | 1880   | 1RB-Mid     | Rear      | 10mm | \    | 19.09 | 20.00 | 0.224 | 0.28 | 0.123 | 0.15 | 0.12  |
| Hotspot | Body | LTE B2   | 18900 | 1880   | 1RB-Mid     | Left      | 10mm | \    | 19.09 | 20.00 | 0.042 | 0.05 | 0.022 | 0.03 | -0.05 |
| Hotspot | Body | LTE B2   | 18900 | 1880   | 1RB-Mid     | Right     | 10mm | \    | 19.09 | 20.00 | 0.086 | 0.11 | 0.052 | 0.06 | 0.13  |
| Hotspot | Body | LTE B2   | 18900 | 1880   | 1RB-Mid     | Bottom    | 10mm | F.17 | 19.09 | 20.00 | 0.230 | 0.28 | 0.130 | 0.16 | 0.12  |
| Hotspot | Body | LTE B2   | 19100 | 1900   | 50RB-Low    | Front     | 10mm | \    | 19.12 | 20.00 | 0.140 | 0.17 | 0.091 | 0.11 | -0.02 |
| Hotspot | Body | LTE B2   | 19100 | 1900   | 50RB-Low    | Rear      | 10mm | \    | 19.12 | 20.00 | 0.140 | 0.17 | 0.129 | 0.16 | 0.12  |
| Hotspot | Body | LTE B2   | 19100 | 1900   | 50RB-Low    | Left      | 10mm | \    | 19.12 | 20.00 | 0.041 | 0.05 | 0.026 | 0.03 | -0.12 |
| Hotspot | Body | LTE B2   | 19100 | 1900   | 50RB-Low    | Right     | 10mm | \    | 19.12 | 20.00 | 0.090 | 0.11 | 0.055 | 0.07 | -0.1  |
| Hotspot | Body | LTE B2   | 19100 | 1900   | 50RB-Low    | Bottom    | 10mm | \    | 19.12 | 20.00 | 0.228 | 0.28 | 0.129 | 0.16 | -0.14 |
| REV off | Body | LTE B2   | 18900 | 1880   | 1RB-Mid     | Front     | 15mm | \    | 22.98 | 24.00 | 0.134 | 0.17 | 0.080 | 0.10 | -0.11 |
| REV off | Body | LTE B2   | 18900 | 1880   | 1RB-Mid     | Rear      | 15mm | F.18 | 22.98 | 24.00 | 0.307 | 0.39 | 0.183 | 0.23 | -0.05 |
| REV off | Body | LTE B2   | 19100 | 1900   | 50RB-Low    | Front     | 15mm | \    | 22.54 | 24.00 | 0.177 | 0.25 | 0.109 | 0.15 | -0.05 |
| REV off | Body | LTE B2   | 19100 | 1900   | 50RB-Low    | Rear      | 15mm | \    | 22.54 | 24.00 | 0.262 | 0.37 | 0.157 | 0.22 | -0.07 |
| REV on  | Head | LTE B4   | 20175 | 1732.5 | 1RB-Mid     | Cheek     | 0mm  | F.19 | 23.46 | 24.50 | 0.102 | 0.13 | 0.065 | 0.08 | 0.06  |
| REV on  | Head | LTE B4   | 20175 | 1732.5 | 1RB-Mid     | Tilt Left | 0mm  | \    | 23.46 | 24.50 | 0.057 | 0.07 | 0.038 | 0.05 | -0.13 |
| REV on  | Head | LTE B4   | 20175 | 1732.5 | 1RB-Mid     | Cheek     | 0mm  | \    | 23.46 | 24.50 | 0.055 | 0.07 | 0.036 | 0.05 | 0.09  |
| REV on  | Head | LTE B4   | 20175 | 1732.5 | 1RB-Mid     | Tilt      | 0mm  | \    | 23.46 | 24.50 | 0.049 | 0.06 | 0.032 | 0.04 | -0.15 |
| REV on  | Head | LTE B4   | 20300 | 1745   | 50RB-Middle | Cheek     | 0mm  | \    | 22.41 | 23.50 | 0.073 | 0.09 | 0.048 | 0.06 | 0.04  |
| REV on  | Head | LTE B4   | 20300 | 1745   | 50RB-Middle | Tilt Left | 0mm  | \    | 22.41 | 23.50 | 0.054 | 0.07 | 0.035 | 0.04 | -0.13 |
| REV on  | Head | LTE B4   | 20300 | 1745   | 50RB-Middle | Cheek     | 0mm  | \    | 22.41 | 23.50 | 0.047 | 0.06 | 0.031 | 0.04 | 0.07  |
| REV on  | Head | LTE B4   | 20300 | 1745   | 50RB-Middle | Tilt      | 0mm  | \    | 22.41 | 23.50 | 0.038 | 0.05 | 0.025 | 0.03 | -0.14 |
| Hotspot | Body | LTE B4   | 20050 | 1720   | 1RB-Mid     | Front     | 10mm | \    | 20.46 | 21.50 | 0.097 | 0.12 | 0.064 | 0.08 | -0.16 |
| Hotspot | Body | LTE B4   | 20050 | 1720   | 1RB-Mid     | Rear      | 10mm | \    | 20.46 | 21.50 | 0.195 | 0.25 | 0.118 | 0.15 | 0.03  |
| Hotspot | Body | LTE B4   | 20050 | 1720   | 1RB-Mid     | Left      | 10mm | \    | 20.46 | 21.50 | 0.044 | 0.06 | 0.027 | 0.03 | -0.19 |
| Hotspot | Body | LTE B4   | 20050 | 1720   | 1RB-Mid     | Right     | 10mm | \    | 20.46 | 21.50 | 0.064 | 0.08 | 0.039 | 0.05 | 0.17  |
| Hotspot | Body | LTE B4   | 20050 | 1720   | 1RB-Mid     | Bottom    | 10mm | \    | 20.46 | 21.50 | 0.214 | 0.27 | 0.120 | 0.15 | 0.02  |
| Hotspot | Body | LTE B4   | 20175 | 1732.5 | 50RB-High   | Front     | 10mm | \    | 20.37 | 21.50 | 0.116 | 0.15 | 0.076 | 0.10 | -0.07 |
| Hotspot | Body | LTE B4   | 20175 | 1732.5 | 50RB-High   | Rear      | 10mm | \    | 20.37 | 21.50 | 0.192 | 0.25 | 0.118 | 0.15 | -0.05 |
| Hotspot | Body | LTE B4   | 20175 | 1732.5 | 50RB-High   | Left      | 10mm | \    | 20.37 | 21.50 | 0.044 | 0.06 | 0.025 | 0.03 | 0.09  |
| Hotspot | Body | LTE B4   | 20175 | 1732.5 | 50RB-High   | Right     | 10mm | \    | 20.37 | 21.50 | 0.062 | 0.08 | 0.038 | 0.05 | 0.16  |
| Hotspot | Body | LTE B4   | 20175 | 1732.5 | 50RB-High   | Bottom    | 10mm | F.20 | 20.37 | 21.50 | 0.216 | 0.28 | 0.122 | 0.16 | 0.18  |
| REV off | Body | LTE B4   | 20175 | 1732.5 | 1RB-Mid     | Front     | 15mm | \    | 23.46 | 24.50 | 0.097 | 0.12 | 0.064 | 0.08 | 0.07  |
| REV off | Body | LTE B4   | 20175 | 1732.5 | 1RB-Mid     | Rear      | 15mm | F.21 | 23.46 | 24.50 | 0.182 | 0.23 | 0.113 | 0.14 | -0.1  |
| REV off | Body | LTE B4   | 20300 | 1745   | 50RB-Mid    | Front     | 15mm | \    | 22.41 | 23.50 | 0.084 | 0.11 | 0.054 | 0.07 | -0.05 |
| REV off | Body | LTE B4   | 20300 | 1745   | 50RB-Mid    | Rear      | 15mm | \    | 22.41 | 23.50 | 0.149 | 0.19 | 0.093 | 0.12 | 0.11  |
| REV on  | Head | LTE B7   | 21350 | 2560   | 1RB-Mid     | Cheek     | 0mm  | \    | 23.13 | 23.90 | 0.229 | 0.27 | 0.134 | 0.16 | -0.16 |
| REV on  | Head | LTE B7   | 21350 | 2560   | 1RB-Mid     | Tilt Left | 0mm  | \    | 23.13 | 23.90 | 0.184 | 0.22 | 0.100 | 0.12 | -0.01 |
| REV on  | Head | LTE B7   | 21350 | 2560   | 1RB-Mid     | Cheek     | 0mm  | F.22 | 23.13 | 23.90 | 0.378 | 0.45 | 0.203 | 0.24 | 0.03  |
| REV on  | Head | LTE B7   | 21350 | 2560   | 1RB-Mid     | Tilt      | 0mm  | \    | 23.13 | 23.90 | 0.157 | 0.19 | 0.083 | 0.10 | -0.11 |
| REV on  | Head | LTE B7   | 21350 | 2560   | 50RB-Middle | Cheek     | 0mm  | \    | 22.17 | 22.90 | 0.159 | 0.19 | 0.093 | 0.11 | -0.03 |
| REV on  | Head | LTE B7   | 21350 | 2560   | 50RB-Middle | Tilt Left | 0mm  | \    | 22.17 | 22.90 | 0.157 | 0.19 | 0.083 | 0.10 | 0.18  |
| REV on  | Head | LTE B7   | 21350 | 2560   | 50RB-Middle | Cheek     | 0mm  | \    | 22.17 | 22.90 | 0.307 | 0.36 | 0.163 | 0.19 | -0.07 |
| REV on  | Head | LTE B7   | 21350 | 2560   | 50RB-Middle | Tilt      | 0mm  | \    | 22.17 | 22.90 | 0.121 | 0.14 | 0.062 | 0.07 | 0.12  |
| Hotspot | Body | LTE B7   | 20850 | 2510   | 1RB-Mid     | Front     | 10mm | \    | 18.22 | 18.90 | 0.106 | 0.12 | 0.057 | 0.07 | -0.11 |
| Hotspot | Body | LTE B7   | 20850 | 2510   | 1RB-Mid     | Rear      | 10mm | F.23 | 18.22 | 18.90 | 0.168 | 0.20 | 0.093 | 0.11 | -0.03 |
| Hotspot | Body | LTE B7   | 20850 | 2510   | 1RB-Mid     | Left      | 10mm | \    | 18.22 | 18.90 | 0.042 | 0.05 | 0.014 | 0.02 | -0.03 |
| Hotspot | Body | LTE B7   | 20850 | 2510   | 1RB-Mid     | Right     | 10mm | \    | 18.22 | 18.90 | 0.144 | 0.17 | 0.072 | 0.08 | -0.01 |
| Hotspot | Body | LTE B7   | 20850 | 2510   | 1RB-Mid     | Bottom    | 10mm | \    | 18.22 | 18.90 | 0.084 | 0.10 | 0.037 | 0.04 | 0.16  |
| Hotspot | Body | LTE B7   | 20850 | 2510   | 50RB-High   | Front     | 10mm | \    | 18.17 | 18.90 | 0.104 | 0.12 | 0.056 | 0.07 | -0.06 |
| Hotspot | Body | LTE B7   | 20850 | 2510   | 50RB-High   | Rear      | 10mm | \    | 18.17 | 18.90 | 0.164 | 0.19 | 0.091 | 0.11 | -0.09 |
| Hotspot | Body | LTE B7   | 20850 | 2510   | 50RB-High   | Left      | 10mm | \    | 18.17 | 18.90 | 0.045 | 0.05 | 0.014 | 0.02 | 0.19  |
| Hotspot | Body | LTE B7   | 20850 | 2510   | 50RB-High   | Right     | 10mm | \    | 18.17 | 18.90 | 0.146 | 0.17 | 0.072 | 0.09 | -0.11 |
| Hotspot | Body | LTE B7   | 20850 | 2510   | 50RB-High   | Bottom    | 10mm | \    | 18.17 | 18.90 | 0.082 | 0.10 | 0.042 | 0.05 | 0.19  |
| REV off | Body | LTE B7   | 21350 | 2560   | 1RB-Mid     | Front     | 15mm | \    | 21.34 | 21.90 | 0.120 | 0.14 | 0.071 | 0.08 | 0.15  |
| REV off | Body | LTE B7   | 21350 | 2560   | 1RB-Mid     | Rear      | 15mm | F.24 | 21.34 | 21.90 | 0.177 | 0.20 | 0.099 | 0.11 | -0.12 |
| REV off | Body | LTE B7   | 21350 | 2560   | 50RB-Mid    | Front     | 15mm | \    | 21.24 | 21.90 | 0.115 | 0.13 | 0.067 | 0.08 | 0.08  |
| REV off | Body | LTE B7   | 21350 | 2560   | 50RB-Mid    | Rear      | 15mm | \    | 21.24 | 21.90 | 0.165 | 0.19 | 0.090 | 0.10 | -0.1  |



|         |      |         |        |       |             |           |      |      |       |       |       |       |       |       |       |
|---------|------|---------|--------|-------|-------------|-----------|------|------|-------|-------|-------|-------|-------|-------|-------|
| REV on  | Head | LTE B13 | 23230  | 782   | 1RB-Mid     | Cheek     | 0mm  | F.25 | 23.72 | 24.80 | 0.102 | 0.13  | 0.079 | 0.10  | -0.07 |
| REV on  | Head | LTE B13 | 23230  | 782   | 1RB-Mid     | Tilt Left | 0mm  | \    | 23.72 | 24.80 | 0.068 | 0.09  | 0.054 | 0.07  | -0.02 |
| REV on  | Head | LTE B13 | 23230  | 782   | 1RB-Mid     | Cheek     | 0mm  | \    | 23.72 | 24.80 | 0.073 | 0.09  | 0.054 | 0.07  | 0.18  |
| REV on  | Head | LTE B13 | 23230  | 782   | 1RB-Mid     | Tilt      | 0mm  | \    | 23.72 | 24.80 | <0.01 | <0.01 | <0.01 | <0.01 | \     |
| REV on  | Head | LTE B13 | 23230  | 782   | 25RB-Mid    | Cheek     | 0mm  | \    | 22.77 | 23.80 | 0.075 | 0.10  | 0.058 | 0.07  | 0.07  |
| REV on  | Head | LTE B13 | 23230  | 782   | 25RB-Mid    | Tilt Left | 0mm  | \    | 22.77 | 23.80 | <0.01 | <0.01 | <0.01 | <0.01 | \     |
| REV on  | Head | LTE B13 | 23230  | 782   | 25RB-Mid    | Cheek     | 0mm  | \    | 22.77 | 23.80 | 0.059 | 0.07  | 0.044 | 0.06  | 0.09  |
| REV on  | Head | LTE B13 | 23230  | 782   | 25RB-Mid    | Tilt      | 0mm  | \    | 22.77 | 23.80 | <0.01 | <0.01 | <0.01 | <0.01 | \     |
| Hotspot | Body | LTE B13 | 23230  | 782   | 1RB-Mid     | Front     | 10mm | \    | 22.75 | 23.80 | 0.086 | 0.11  | 0.054 | 0.07  | -0.16 |
| Hotspot | Body | LTE B13 | 23230  | 782   | 1RB-Mid     | Rear      | 10mm | F.26 | 22.75 | 23.80 | 0.110 | 0.14  | 0.071 | 0.09  | -0.19 |
| Hotspot | Body | LTE B13 | 23230  | 782   | 1RB-Mid     | Left      | 10mm | \    | 22.75 | 23.80 | 0.097 | 0.12  | 0.065 | 0.08  | 0.16  |
| Hotspot | Body | LTE B13 | 23230  | 782   | 1RB-Mid     | Right     | 10mm | \    | 22.75 | 23.80 | 0.053 | 0.07  | 0.034 | 0.04  | -0.16 |
| Hotspot | Body | LTE B13 | 23230  | 782   | 1RB-Mid     | Bottom    | 10mm | \    | 22.75 | 23.80 | 0.055 | 0.07  | 0.033 | 0.04  | 0.12  |
| Hotspot | Body | LTE B13 | 23230  | 782   | 25RB-High   | Front     | 10mm | \    | 22.72 | 23.80 | 0.083 | 0.11  | 0.053 | 0.07  | -0.02 |
| Hotspot | Body | LTE B13 | 23230  | 782   | 25RB-High   | Rear      | 10mm | \    | 22.72 | 23.80 | 0.105 | 0.13  | 0.068 | 0.09  | -0.04 |
| Hotspot | Body | LTE B13 | 23230  | 782   | 25RB-High   | Left      | 10mm | \    | 22.72 | 23.80 | 0.095 | 0.12  | 0.064 | 0.08  | -0.08 |
| Hotspot | Body | LTE B13 | 23230  | 782   | 25RB-High   | Right     | 10mm | \    | 22.72 | 23.80 | 0.050 | 0.06  | 0.033 | 0.04  | 0.03  |
| Hotspot | Body | LTE B13 | 23230  | 782   | 25RB-High   | Bottom    | 10mm | \    | 22.72 | 23.80 | 0.052 | 0.07  | 0.030 | 0.04  | -0.04 |
| REV off | Body | LTE B13 | 23230  | 782   | 1RB-Mid     | Front     | 15mm | \    | 23.72 | 24.80 | 0.066 | 0.08  | 0.045 | 0.06  | 0.03  |
| REV off | Body | LTE B13 | 23230  | 782   | 1RB-Mid     | Rear      | 15mm | F.27 | 23.72 | 24.80 | 0.095 | 0.12  | 0.065 | 0.08  | 0.05  |
| REV off | Body | LTE B13 | 23230  | 782   | 25RB-Mid    | Front     | 15mm | \    | 22.77 | 23.80 | 0.051 | 0.06  | 0.034 | 0.04  | -0.03 |
| REV off | Body | LTE B13 | 23230  | 782   | 25RB-Mid    | Rear      | 15mm | \    | 22.77 | 23.80 | 0.073 | 0.09  | 0.050 | 0.06  | -0.11 |
| REV on  | Head | LTE B26 | 26775  | 822.5 | 1RB-Mid     | Cheek     | 0mm  | F.28 | 23.55 | 25.00 | 0.223 | 0.31  | 0.169 | 0.24  | 0.19  |
| REV on  | Head | LTE B26 | 26775  | 822.5 | 1RB-Mid     | Tilt Left | 0mm  | \    | 23.55 | 25.00 | 0.147 | 0.21  | 0.111 | 0.15  | -0.13 |
| REV on  | Head | LTE B26 | 26775  | 822.5 | 1RB-Mid     | Cheek     | 0mm  | \    | 23.55 | 25.00 | 0.125 | 0.17  | 0.093 | 0.13  | -0.05 |
| REV on  | Head | LTE B26 | 26775  | 822.5 | 1RB-Mid     | Tilt      | 0mm  | \    | 23.55 | 25.00 | 0.070 | 0.10  | 0.056 | 0.08  | 0.09  |
| REV on  | Head | LTE B26 | 26775  | 822.5 | 36RB-Middle | Cheek     | 0mm  | \    | 22.61 | 24.00 | 0.157 | 0.22  | 0.121 | 0.17  | 0     |
| REV on  | Head | LTE B26 | 26775  | 822.5 | 36RB-Middle | Tilt Left | 0mm  | \    | 22.61 | 24.00 | 0.109 | 0.15  | 0.083 | 0.11  | -0.13 |
| REV on  | Head | LTE B26 | 26775  | 822.5 | 36RB-Middle | Cheek     | 0mm  | \    | 22.61 | 24.00 | 0.102 | 0.14  | 0.076 | 0.10  | 0.14  |
| REV on  | Head | LTE B26 | 26775  | 822.5 | 36RB-Middle | Tilt      | 0mm  | \    | 22.61 | 24.00 | 0.064 | 0.09  | 0.050 | 0.07  | 0.1   |
| Hotspot | Body | LTE B26 | 26775  | 822.5 | 1RB-Mid     | Front     | 10mm | \    | 23.66 | 24.00 | 0.119 | 0.13  | 0.078 | 0.09  | -0.07 |
| Hotspot | Body | LTE B26 | 26775  | 822.5 | 1RB-Mid     | Rear      | 10mm | \    | 23.66 | 24.00 | 0.221 | 0.24  | 0.136 | 0.15  | -0.16 |
| Hotspot | Body | LTE B26 | 26775  | 822.5 | 1RB-Mid     | Left      | 10mm | \    | 23.66 | 24.00 | 0.064 | 0.07  | 0.043 | 0.05  | 0.01  |
| Hotspot | Body | LTE B26 | 26775  | 822.5 | 1RB-Mid     | Right     | 10mm | \    | 23.66 | 24.00 | 0.085 | 0.09  | 0.058 | 0.06  | -0.16 |
| Hotspot | Body | LTE B26 | 26775  | 822.5 | 1RB-Mid     | Bottom    | 10mm | \    | 23.66 | 24.00 | 0.121 | 0.13  | 0.073 | 0.08  | 0.02  |
| Hotspot | Body | LTE B26 | 26775  | 822.5 | 36RB-Middle | Front     | 10mm | \    | 22.68 | 23.00 | 0.123 | 0.13  | 0.082 | 0.09  | -0.05 |
| Hotspot | Body | LTE B26 | 26775  | 822.5 | 36RB-Middle | Rear      | 10mm | F.29 | 22.68 | 23.00 | 0.224 | 0.24  | 0.138 | 0.15  | -0.11 |
| Hotspot | Body | LTE B26 | 26775  | 822.5 | 36RB-Middle | Left      | 10mm | \    | 22.68 | 23.00 | 0.062 | 0.07  | 0.041 | 0.04  | 0.15  |
| Hotspot | Body | LTE B26 | 26775  | 822.5 | 36RB-Middle | Right     | 10mm | \    | 22.68 | 23.00 | 0.069 | 0.07  | 0.046 | 0.05  | 0.08  |
| Hotspot | Body | LTE B26 | 26775  | 822.5 | 36RB-Middle | Bottom    | 10mm | \    | 22.68 | 23.00 | 0.097 | 0.10  | 0.058 | 0.06  | 0.03  |
| REV off | Body | LTE B26 | 26775  | 822.5 | 1RB-Mid     | Front     | 15mm | \    | 23.55 | 25.00 | 0.148 | 0.21  | 0.107 | 0.15  | 0.19  |
| REV off | Body | LTE B26 | 26775  | 822.5 | 1RB-Mid     | Rear      | 15mm | F.30 | 23.55 | 25.00 | 0.195 | 0.27  | 0.127 | 0.18  | -0.05 |
| REV off | Body | LTE B26 | 26775  | 822.5 | 36RB-Mid    | Front     | 15mm | \    | 22.61 | 24.00 | 0.126 | 0.17  | 0.091 | 0.13  | 0.13  |
| REV off | Body | LTE B26 | 26775  | 822.5 | 36RB-Mid    | Rear      | 15mm | \    | 22.61 | 24.00 | 0.158 | 0.22  | 0.102 | 0.14  | 0.06  |
| REV on  | Head | LTE B38 | 37850  | 2580  | 1RB-Mid     | Cheek     | 0mm  | \    | 23.67 | 24.00 | 0.120 | 0.13  | 0.067 | 0.07  | -0.14 |
| REV on  | Head | LTE B38 | 37850  | 2580  | 1RB-Mid     | Tilt Left | 0mm  | \    | 23.67 | 24.00 | 0.122 | 0.13  | 0.062 | 0.07  | 0.17  |
| REV on  | Head | LTE B38 | 38150  | 2610  | 1RB-Mid     | Cheek     | 0mm  | F.31 | 23.53 | 24.00 | 0.250 | 0.28  | 0.133 | 0.15  | 0.08  |
| REV on  | Head | LTE B38 | 38000  | 2595  | 1RB-Mid     | Cheek     | 0mm  | \    | 23.64 | 24.00 | 0.242 | 0.26  | 0.129 | 0.14  | -0.05 |
| REV on  | Head | LTE B38 | 37850  | 2580  | 1RB-Mid     | Cheek     | 0mm  | \    | 23.67 | 24.00 | 0.221 | 0.24  | 0.129 | 0.14  | 0.16  |
| REV on  | Head | LTE B38 | 37850  | 2580  | 1RB-Mid     | Tilt      | 0mm  | \    | 23.67 | 24.00 | 0.127 | 0.14  | 0.064 | 0.07  | 0.08  |
| REV on  | Head | LTE B38 | 37850  | 2580  | 50RB-Middle | Cheek     | 0mm  | \    | 22.49 | 23.00 | 0.085 | 0.10  | 0.049 | 0.06  | -0.02 |
| REV on  | Head | LTE B38 | 37850  | 2580  | 50RB-Middle | Tilt Left | 0mm  | \    | 22.49 | 23.00 | 0.097 | 0.11  | 0.049 | 0.06  | 0.1   |
| REV on  | Head | LTE B38 | 38150  | 2610  | 50RB-Middle | Cheek     | 0mm  | \    | 22.40 | 23.00 | 0.176 | 0.20  | 0.094 | 0.11  | 0.13  |
| REV on  | Head | LTE B38 | 38000  | 2595  | 50RB-Middle | Cheek     | 0mm  | \    | 22.38 | 23.00 | 0.173 | 0.20  | 0.093 | 0.11  | -0.01 |
| REV on  | Head | LTE B38 | 37850  | 2580  | 50RB-Middle | Cheek     | 0mm  | \    | 22.49 | 23.00 | 0.162 | 0.18  | 0.086 | 0.10  | 0.11  |
| REV on  | Head | LTE B38 | 37850  | 2580  | 50RB-Middle | Tilt      | 0mm  | \    | 22.49 | 23.00 | 0.103 | 0.12  | 0.052 | 0.06  | 0     |
| Hotspot | Body | LTE B38 | 37850  | 2580  | 1RB-Mid     | Front     | 10mm | \    | 20.77 | 21.00 | 0.070 | 0.07  | 0.042 | 0.04  | 0.15  |
| Hotspot | Body | LTE B38 | 37850  | 2580  | 1RB-Mid     | Rear      | 10mm | F.32 | 20.77 | 21.00 | 0.119 | 0.13  | 0.066 | 0.07  | -0.1  |
| Hotspot | Body | LTE B38 | 37850  | 2580  | 1RB-Mid     | Left      | 10mm | \    | 20.77 | 21.00 | 0.109 | 0.11  | 0.063 | 0.07  | 0.13  |
| Hotspot | Body | LTE B38 | 37850  | 2580  | 1RB-Mid     | Right     | 10mm | \    | 20.77 | 21.00 | <0.01 | <0.01 | <0.01 | <0.01 | \     |
| Hotspot | Body | LTE B38 | 37850  | 2580  | 1RB-Mid     | Top       | 10mm | \    | 20.77 | 21.00 | 0.066 | 0.07  | 0.035 | 0.04  | 0.06  |
| Hotspot | Body | LTE B38 | 37850  | 2580  | 50RB-High   | Front     | 10mm | \    | 20.52 | 21.00 | 0.068 | 0.08  | 0.041 | 0.05  | 0     |
| Hotspot | Body | LTE B38 | 37850  | 2580  | 50RB-High   | Rear      | 10mm | \    | 20.52 | 21.00 | 0.103 | 0.12  | 0.058 | 0.06  | 0.06  |
| Hotspot | Body | LTE B38 | 37850  | 2580  | 50RB-High   | Left      | 10mm | \    | 20.52 | 21.00 | 0.109 | 0.12  | 0.061 | 0.07  | -0.09 |
| Hotspot | Body | LTE B38 | 37850  | 2580  | 50RB-High   | Right     | 10mm | \    | 20.52 | 21.00 | <0.01 | <0.01 | <0.01 | <0.01 | \     |
| Hotspot | Body | LTE B38 | 37850  | 2580  | 50RB-High   | Top       | 10mm | \    | 20.52 | 21.00 | 0.063 | 0.07  | 0.034 | 0.04  | 0.18  |
| REV off | Body | LTE B38 | 37850  | 2580  | 1RB-Mid     | Front     | 15mm | \    | 23.16 | 23.50 | 0.095 | 0.10  | 0.056 | 0.06  | 0.15  |
| REV off | Body | LTE B38 | 37850  | 2580  | 1RB-Mid     | Rear      | 15mm | F.33 | 23.16 | 23.50 | 0.153 | 0.17  | 0.086 | 0.09  | -0.17 |
| REV off | Body | LTE B38 | 37850  | 2580  | 50RB-Middle | Front     | 15mm | \    | 22.47 | 23.00 | 0.084 | 0.09  | 0.048 | 0.05  | -0.19 |
| REV off | Body | LTE B38 | 37850  | 2580  | 50RB-Middle | Rear      | 15mm | \    | 22.47 | 23.00 | 0.131 | 0.15  | 0.074 | 0.08  | 0.11  |
| REV on  | Head | LTE B66 | 132572 | 1770  | 1RB-Mid     | Cheek     | 0mm  | \    | 23.42 | 24.50 | 0.065 | 0.08  | 0.041 | 0.05  | -0.15 |
| REV on  | Head | LTE B66 | 132572 | 1770  | 1RB-Mid     | Tilt Left | 0mm  | \    | 23.42 | 24.50 | 0.027 | 0.03  | 0.017 | 0.02  | -0.12 |
| REV on  | Head | LTE B66 | 132572 | 1770  | 1RB-Mid     | Cheek     | 0mm  | F.34 | 23.42 | 24.50 | 0.086 | 0.11  | 0.055 | 0.07  | 0.02  |
| REV on  | Head | LTE B66 | 132572 | 1770  | 1RB-Mid     | Tilt      | 0mm  | \    | 23.42 | 24.50 | 0.053 | 0.07  | 0.033 | 0.04  | 0.06  |
| REV on  | Head | LTE B66 | 132572 | 1770  | 50RB-Middle | Cheek     | 0mm  | \    | 22.49 | 23.50 | 0.032 | 0.04  | 0.021 | 0.03  | 0.02  |
| REV on  | Head | LTE B66 | 132572 | 1770  | 50RB-Middle | Tilt Left | 0mm  | \    | 22.49 | 23.50 | 0.021 | 0.03  | 0.013 | 0.02  | 0.14  |
| REV on  | Head | LTE B66 | 132572 | 1770  | 50RB-Middle | Cheek     | 0mm  | \    | 22.49 | 23.50 | 0.045 | 0.06  | 0.030 | 0.04  | 0.06  |
| REV on  | Head | LTE B66 | 132572 | 1770  | 50RB-Middle | Tilt      | 0mm  | \    | 22.49 | 23.50 | 0.040 | 0.05  | 0.025 | 0.03  | 0.12  |
| Hotspot | Body | LTE B66 | 132072 | 1720  | 1RB-Mid     | Front     | 10mm | \    | 19.54 | 20.50 | 0.080 | 0.10  | 0.049 | 0.06  | -0.18 |
| Hotspot | Body | LTE B66 | 132072 | 1720  | 1RB-Mid     | Rear      | 10mm | \    | 19.54 | 20.50 | 0.157 | 0.20  | 0.092 | 0.11  | -0.08 |
| Hotspot | Body | LTE B66 | 132072 | 1720  | 1RB-Mid     | Left      | 10mm | \    | 19.54 | 20.50 | 0.044 | 0.05  | 0.026 | 0.03  | 0.04  |
| Hotspot | Body | LTE B66 | 132072 | 1720  | 1RB-Mid     | Right     | 10mm | \    | 19.54 | 20.50 | 0.064 | 0.08  | 0.039 | 0.05  | 0.05  |
| Hotspot | Body | LTE B66 | 132072 | 1720  | 1RB-Mid     | Bottom    | 10mm | F.35 | 19.54 | 20.50 | 0.191 | 0.24  | 0.107 | 0.13  | 0.18  |
| Hotspot | Body | LTE B66 | 132072 | 1720  | 50RB-Middle | Front     | 10mm | \    | 19.43 | 20.50 | 0.077 | 0.10  | 0.048 | 0.06  | -0.17 |
| Hotspot | Body | LTE B66 | 132072 | 1720  | 50RB-Middle | Rear      | 10mm | \    | 19.43 | 20.50 | 0.152 | 0.19  | 0.090 | 0.12  | 0.12  |
| Hotspot | Body | LTE B66 | 132072 | 1720  | 50RB-Middle | Left      | 10mm | \    | 19.43 | 20.50 | 0.041 | 0.05  | 0.026 | 0.03  | 0.08  |
| Hotspot | Body | LTE B66 | 132072 | 1720  | 50RB-Middle | Right     | 10mm | \    | 19.43 | 20.50 | 0.064 | 0.08  | 0.038 |       |       |

## 14.2 SAR results for 2G/3G/4G-Second antenna

| EUT State | RF Exposure Conditions | Frequency Band | Channel Number | Frequency (MHz) | Mode/RB    | Test setup  | Distance | Figure No./Note | EUT Measured Power (dBm) | Tune up (dBm) | Measured SAR 1g (W/kg) | Calculated SAR 1g (W/kg) | Measured SAR 10g (W/kg) | Calculated SAR 10g (W/kg) | Power Drift |
|-----------|------------------------|----------------|----------------|-----------------|------------|-------------|----------|-----------------|--------------------------|---------------|------------------------|--------------------------|-------------------------|---------------------------|-------------|
| REV on    | Head                   | GSM850         | 251            | 848.8           | Voice      | Cheek Left  | 0mm      | F.37            | 32.71                    | 33.70         | 0.482                  | 0.61                     | 0.332                   | 0.42                      | -0.09       |
| REV on    | Head                   | GSM850         | 190            | 836.6           | Voice      | Cheek Left  | 0mm      | \               | 32.72                    | 33.70         | 0.344                  | 0.43                     | 0.238                   | 0.30                      | 0.12        |
| REV on    | Head                   | GSM850         | 128            | 824.2           | Voice      | Cheek Left  | 0mm      | \               | 32.70                    | 33.70         | 0.234                  | 0.29                     | 0.163                   | 0.21                      | 0.13        |
| REV on    | Head                   | GSM850         | 190            | 836.6           | Voice      | Tilt Left   | 0mm      | \               | 32.72                    | 33.70         | 0.308                  | 0.39                     | 0.193                   | 0.24                      | -0.02       |
| REV on    | Head                   | GSM850         | 190            | 836.6           | Voice      | Cheek Right | 0mm      | \               | 32.72                    | 33.70         | 0.328                  | 0.41                     | 0.217                   | 0.27                      | 0.14        |
| REV on    | Head                   | GSM850         | 190            | 836.6           | Voice      | Tilt Right  | 0mm      | \               | 32.72                    | 33.70         | 0.309                  | 0.39                     | 0.179                   | 0.22                      | 0.08        |
| Hotspot   | Body                   | GSM850         | 190            | 836.6           | GPRS(3TX)  | Front       | 10mm     | \               | 25.38                    | 26.30         | 0.069                  | 0.09                     | 0.048                   | 0.06                      | 0.05        |
| Hotspot   | Body                   | GSM850         | 251            | 848.8           | GPRS(3TX)  | Rear        | 10mm     | F.38            | 25.44                    | 26.30         | 0.108                  | 0.13                     | 0.0723                  | 0.09                      | -0.09       |
| Hotspot   | Body                   | GSM850         | 190            | 836.6           | GPRS(3TX)  | Rear        | 10mm     | \               | 25.38                    | 26.30         | 0.072                  | 0.09                     | 0.05                    | 0.06                      | 0.13        |
| Hotspot   | Body                   | GSM850         | 128            | 824.2           | GPRS(3TX)  | Rear        | 10mm     | \               | 25.39                    | 26.30         | 0.053                  | 0.07                     | 0.036                   | 0.04                      | -0.09       |
| Hotspot   | Body                   | GSM850         | 190            | 836.6           | GPRS(3TX)  | Left        | 10mm     | \               | 25.38                    | 26.30         | <0.01                  | <0.01                    | <0.01                   | <0.01                     | \           |
| Hotspot   | Body                   | GSM850         | 190            | 836.6           | GPRS(3TX)  | Right       | 10mm     | \               | 25.38                    | 26.30         | <0.01                  | <0.01                    | <0.01                   | <0.01                     | \           |
| Hotspot   | Body                   | GSM850         | 190            | 836.6           | GPRS(3TX)  | Top         | 10mm     | \               | 25.38                    | 26.30         | 0.056                  | 0.07                     | 0.03                    | 0.04                      | 0.17        |
| Hotspot   | Body                   | GSM850         | 251            | 848.8           | EGPRS(3TX) | Rear        | 10mm     | \               | 25.29                    | 26.30         | 0.069                  | 0.09                     | 0.049                   | 0.06                      | 0.05        |
| REV off   | Body                   | GSM850         | 190            | 836.6           | GPRS(3TX)  | Front       | 15mm     | \               | 28.36                    | 29.30         | 0.053                  | 0.07                     | 0.039                   | 0.05                      | 0.1         |
| REV off   | Body                   | GSM850         | 251            | 848.8           | GPRS(3TX)  | Rear        | 15mm     | F.39            | 28.40                    | 29.30         | 0.126                  | 0.16                     | 0.089                   | 0.11                      | -0.1        |
| REV off   | Body                   | GSM850         | 190            | 836.6           | GPRS(3TX)  | Rear        | 15mm     | \               | 28.36                    | 29.30         | 0.090                  | 0.11                     | 0.067                   | 0.08                      | 0.05        |
| REV off   | Body                   | GSM850         | 128            | 824.2           | GPRS(3TX)  | Rear        | 15mm     | \               | 28.30                    | 29.30         | 0.066                  | 0.08                     | 0.048                   | 0.06                      | -0.18       |
| REV off   | Body                   | GSM850         | 251            | 848.8           | EGPRS(3TX) | Rear        | 15mm     | \               | 28.36                    | 29.30         | 0.079                  | 0.10                     | 0.058                   | 0.07                      | -0.04       |
| REV on    | Head                   | GSM1900        | 661            | 1880            | Voice      | Cheek Left  | 0mm      | \               | 25.31                    | 25.70         | 0.133                  | 0.15                     | 0.065                   | 0.07                      | 0.01        |
| REV on    | Head                   | GSM1900        | 810            | 1909.8          | Voice      | Tilt Left   | 0mm      | \               | 25.20                    | 25.70         | 0.139                  | 0.16                     | 0.067                   | 0.08                      | 0.11        |
| REV on    | Head                   | GSM1900        | 661            | 1880            | Voice      | Tilt Left   | 0mm      | F.40            | 25.31                    | 25.70         | 0.194                  | 0.21                     | 0.094                   | 0.10                      | 0.04        |
| REV on    | Head                   | GSM1900        | 512            | 1850.2          | Voice      | Tilt Left   | 0mm      | \               | 25.45                    | 25.70         | 0.135                  | 0.14                     | 0.068                   | 0.07                      | 0.01        |
| REV on    | Head                   | GSM1900        | 661            | 1880            | Voice      | Cheek Right | 0mm      | \               | 25.31                    | 25.70         | 0.127                  | 0.14                     | 0.059                   | 0.06                      | -0.14       |
| REV on    | Head                   | GSM1900        | 661            | 1880            | Voice      | Tilt Right  | 0mm      | \               | 25.31                    | 25.70         | 0.190                  | 0.21                     | 0.087                   | 0.10                      | -0.18       |
| Hotspot   | Body                   | GSM1900        | 661            | 1880            | GPRS(3TX)  | Front       | 10mm     | \               | 20.25                    | 21.00         | 0.062                  | 0.07                     | 0.031                   | 0.04                      | 0.01        |
| Hotspot   | Body                   | GSM1900        | 661            | 1880            | GPRS(3TX)  | Rear        | 10mm     | \               | 20.25                    | 21.00         | 0.120                  | 0.14                     | 0.06                    | 0.07                      | 0           |
| Hotspot   | Body                   | GSM1900        | 661            | 1880            | GPRS(3TX)  | Left        | 10mm     | \               | 20.25                    | 21.00         | <0.01                  | <0.01                    | <0.01                   | <0.01                     | \           |
| Hotspot   | Body                   | GSM1900        | 661            | 1880            | GPRS(3TX)  | Right       | 10mm     | \               | 20.25                    | 21.00         | <0.01                  | <0.01                    | <0.01                   | <0.01                     | \           |
| Hotspot   | Body                   | GSM1900        | 810            | 1909.8          | GPRS(3TX)  | Top         | 10mm     | F.41            | 20.05                    | 21.00         | 0.210                  | 0.26                     | 0.097                   | 0.12                      | -0.02       |
| Hotspot   | Body                   | GSM1900        | 661            | 1880            | GPRS(3TX)  | Top         | 10mm     | \               | 20.25                    | 21.00         | 0.169                  | 0.20                     | 0.08                    | 0.10                      | 0.02        |
| Hotspot   | Body                   | GSM1900        | 512            | 1850.2          | GPRS(3TX)  | Top         | 10mm     | \               | 20.41                    | 21.00         | 0.167                  | 0.19                     | 0.081                   | 0.09                      | 0.13        |
| Hotspot   | Body                   | GSM1900        | 810            | 1909.8          | EGPRS(3TX) | Top         | 10mm     | \               | 20.24                    | 21.00         | 0.184                  | 0.22                     | 0.093                   | 0.11                      | -0.12       |
| REV off   | Body                   | GSM1900        | 661            | 1880            | GPRS(3TX)  | Front       | 15mm     | \               | 23.58                    | 24.50         | 0.082                  | 0.10                     | 0.044                   | 0.05                      | 0.19        |
| REV off   | Body                   | GSM1900        | 810            | 1909.8          | GPRS(3TX)  | Rear        | 15mm     | F.42            | 23.51                    | 24.50         | 0.193                  | 0.24                     | 0.1                     | 0.13                      | 0.03        |
| REV off   | Body                   | GSM1900        | 661            | 1880            | GPRS(3TX)  | Rear        | 15mm     | \               | 23.58                    | 24.50         | 0.163                  | 0.20                     | 0.085                   | 0.11                      | 0.02        |
| REV off   | Body                   | GSM1900        | 512            | 1850.2          | GPRS(3TX)  | Rear        | 15mm     | \               | 23.75                    | 24.50         | 0.166                  | 0.20                     | 0.084                   | 0.10                      | -0.15       |
| REV off   | Body                   | GSM1900        | 810            | 1909.8          | EGPRS(3TX) | Rear        | 15mm     | \               | 23.49                    | 24.50         | 0.174                  | 0.22                     | 0.089                   | 0.11                      | 0.04        |
| REV on    | Head                   | WCDMA1900      | 9400           | 1880            | RMC        | Cheek Left  | 0mm      | \               | 16.12                    | 17.00         | 0.303                  | 0.37                     | 0.143                   | 0.18                      | -0.03       |
| REV on    | Head                   | WCDMA1900      | 9400           | 1880            | RMC        | Tilt Left   | 0mm      | \               | 16.12                    | 17.00         | 0.366                  | 0.45                     | 0.171                   | 0.21                      | 0.08        |
| REV on    | Head                   | WCDMA1900      | 9400           | 1880            | RMC        | Cheek Right | 0mm      | \               | 16.12                    | 17.00         | 0.351                  | 0.43                     | 0.161                   | 0.20                      | 0.19        |
| REV on    | Head                   | WCDMA1900      | 9538           | 1907.6          | RMC        | Tilt Right  | 0mm      | \               | 16.05                    | 17.00         | 0.416                  | 0.52                     | 0.184                   | 0.23                      | 0.08        |
| REV on    | Head                   | WCDMA1900      | 9400           | 1880            | RMC        | Tilt Right  | 0mm      | F.43            | 16.12                    | 17.00         | 0.480                  | 0.59                     | 0.215                   | 0.26                      | -0.02       |
| REV on    | Head                   | WCDMA1900      | 9262           | 1852.4          | RMC        | Tilt Right  | 0mm      | \               | 15.94                    | 17.00         | 0.433                  | 0.55                     | 0.194                   | 0.25                      | -0.12       |
| Hotspot   | Body                   | WCDMA1900      | 9400           | 1880            | RMC        | Front       | 10mm     | \               | 15.49                    | 16.50         | 0.062                  | 0.08                     | 0.032                   | 0.04                      | -0.17       |
| Hotspot   | Body                   | WCDMA1900      | 9538           | 1907.6          | RMC        | Rear        | 10mm     | \               | 15.53                    | 16.50         | 0.136                  | 0.17                     | 0.071                   | 0.09                      | 0.18        |
| Hotspot   | Body                   | WCDMA1900      | 9400           | 1880            | RMC        | Rear        | 10mm     | \               | 15.49                    | 16.50         | 0.127                  | 0.16                     | 0.066                   | 0.08                      | -0.19       |
| Hotspot   | Body                   | WCDMA1900      | 9262           | 1852.4          | RMC        | Rear        | 10mm     | \               | 15.58                    | 16.50         | 0.119                  | 0.15                     | 0.061                   | 0.08                      | 0.04        |
| Hotspot   | Body                   | WCDMA1900      | 9400           | 1880            | RMC        | Left        | 10mm     | \               | 15.49                    | 16.50         | 0.037                  | 0.05                     | 0.019                   | 0.02                      | -0.12       |
| Hotspot   | Body                   | WCDMA1900      | 9400           | 1880            | RMC        | Right       | 10mm     | \               | 15.49                    | 16.50         | <0.01                  | <0.01                    | <0.01                   | <0.01                     | \           |
| Hotspot   | Body                   | WCDMA1900      | 9538           | 1907.6          | RMC        | Top         | 10mm     | F.44            | 15.53                    | 16.50         | 0.188                  | 0.24                     | 0.09                    | 0.11                      | -0.17       |
| Hotspot   | Body                   | WCDMA1900      | 9400           | 1880            | RMC        | Top         | 10mm     | \               | 15.49                    | 16.50         | 0.183                  | 0.23                     | 0.088                   | 0.11                      | 0.11        |
| Hotspot   | Body                   | WCDMA1900      | 9262           | 1852.4          | RMC        | Top         | 10mm     | \               | 15.58                    | 16.50         | 0.174                  | 0.22                     | 0.086                   | 0.11                      | 0.19        |
| REV off   | Body                   | WCDMA1900      | 9400           | 1880            | RMC        | Front       | 15mm     | \               | 19.05                    | 20.00         | 0.098                  | 0.12                     | 0.054                   | 0.07                      | -0.04       |
| REV off   | Body                   | WCDMA1900      | 9538           | 1907.6          | RMC        | Rear        | 15mm     | \               | 18.97                    | 20.00         | 0.150                  | 0.19                     | 0.052                   | 0.07                      | -0.04       |
| REV off   | Body                   | WCDMA1900      | 9400           | 1880            | RMC        | Rear        | 15mm     | F.45            | 19.05                    | 20.00         | 0.189                  | 0.24                     | 0.101                   | 0.13                      | 0.03        |
| REV off   | Body                   | WCDMA1900      | 9262           | 1852.4          | RMC        | Rear        | 15mm     | \               | 18.94                    | 20.00         | 0.172                  | 0.22                     | 0.092                   | 0.12                      | 0.02        |
| REV on    | Head                   | WCDMA1700      | 1412           | 1732.4          | RMC        | Cheek Left  | 0mm      | \               | 17.49                    | 18.40         | 0.414                  | 0.51                     | 0.237                   | 0.29                      | -0.15       |
| REV on    | Head                   | WCDMA1700      | 1412           | 1732.4          | RMC        | Tilt Left   | 0mm      | \               | 17.49                    | 18.40         | 0.607                  | 0.75                     | 0.330                   | 0.41                      | 0.09        |
| REV on    | Head                   | WCDMA1700      | 1412           | 1732.4          | RMC        | Cheek Right | 0mm      | \               | 17.49                    | 18.40         | 0.527                  | 0.65                     | 0.281                   | 0.35                      | 0.1         |
| REV on    | Head                   | WCDMA1700      | 1513           | 1752.6          | RMC        | Tilt Right  | 0mm      | \               | 17.53                    | 18.40         | 0.712                  | 0.87                     | 0.364                   | 0.44                      | -0.11       |
| REV on    | Head                   | WCDMA1700      | 1412           | 1732.4          | RMC        | Tilt Right  | 0mm      | F.46            | 17.49                    | 18.40         | 0.735                  | 0.91                     | 0.373                   | 0.46                      | 0.12        |
| REV on    | Head                   | WCDMA1700      | 1312           | 1712.4          | RMC        | Tilt Right  | 0mm      | \               | 17.56                    | 18.40         | 0.693                  | 0.84                     | 0.352                   | 0.43                      | -0.16       |
| REV on    | Head                   | WCDMA1700      | 1412           | 1732.4          | RMC        | Tilt Right  | 0mm      | SIM2            | 17.49                    | 18.40         | 0.647                  | 0.80                     | 0.323                   | 0.40                      | 0.06        |
| REV on    | Head                   | WCDMA1700      | 1412           | 1732.4          | RMC        | Tilt Right  | 0mm      | B2              | 17.49                    | 18.40         | 0.651                  | 0.80                     | 0.336                   | 0.41                      | 0.01        |
| REV on    | Head                   | WCDMA1700      | 1412           | 1732.4          | RMC        | Tilt Right  | 0mm      | B3              | 17.49                    | 18.40         | 0.672                  | 0.83                     | 0.343                   | 0.42                      | -0.11       |
| REV on    | Head                   | WCDMA1700      | 1412           | 1732.4          | RMC        | Tilt Right  | 0mm      | B4              | 17.49                    | 18.40         | 0.649                  | 0.80                     | 0.328                   | 0.40                      | -0.19       |
| Hotspot   | Body                   | WCDMA1700      | 1412           | 1732.4          | RMC        | Front       | 10mm     | \               | 16.97                    | 17.90         | 0.064                  | 0.08                     | 0.037                   | 0.05                      | -0.04       |
| Hotspot   | Body                   | WCDMA1700      | 1513           | 1752.6          | RMC        | Rear        | 10mm     | \               | 17.05                    | 17.90         | 0.096                  | 0.12                     | 0.054                   | 0.07                      | -0.1        |
| Hotspot   | Body                   | WCDMA1700      | 1412           | 1732.4          | RMC        | Rear        | 10mm     | \               | 16.97                    | 17.90         | 0.086                  | 0.11                     | 0.048                   | 0.06                      | 0.02        |
| Hotspot   | Body                   | WCDMA1700      | 1312           | 1712.4          | RMC        | Rear        | 10mm     | \               | 17.02                    | 17.90         | 0.077                  | 0.09                     | 0.047                   | 0.06                      | 0.13        |
| Hotspot   | Body                   | WCDMA1700      | 1412           | 1732.4          | RMC        | Left        | 10mm     | \               | 16.97                    | 17.90         | 0.032                  | 0.04                     | 0.019                   | 0.02                      | -0.05       |
| Hotspot   | Body                   | WCDMA1700      | 1412           | 1732.4          | RMC        | Right       | 10mm     | \               | 16.97                    | 17.90         | <0.01                  | <0.01                    | <0.01                   | <0.01                     | \           |
| Hotspot   | Body                   | WCDMA1700      | 1513           | 1752.6          | RMC        | Top         | 10mm     | \               | 17.05                    | 17.90         | 0.146                  | 0.18                     | 0.074                   | 0.09                      | 0.18        |
| Hotspot   | Body                   | WCDMA1700      | 1412           | 1732.4          | RMC        | Top         | 10mm     | F.47            | 16.97                    | 17.90         | 0.180                  | 0.22                     | 0.093                   | 0.12                      | -0.08       |
| Hotspot   | Body                   | WCDMA1700      | 1312           | 1712.4          | RMC        | Top         | 10mm     | \               | 17.02                    | 17.90         | 0.121                  | 0.15                     | 0.063                   | 0.08                      | 0.09        |
| REV off   | Body                   | WCDMA1700      | 1412           | 1732.4          | RMC        | Front       | 15mm     | \               | 20.97                    | 21.90         | 0.151                  | 0.19                     | 0.09                    | 0.11                      | -0.06       |
| REV off   | Body                   | WCDMA1700      | 1513           | 1752.6          | RMC        | Rear        | 15mm     | F.48            | 21.04                    | 21.90         | 0.211                  | 0.26                     | 0.12                    | 0.15                      | 0.07        |
| REV off   | Body                   | WCDMA1700      | 1412           | 1732.4          | RMC        | Rear        | 15mm     | \               | 20.97                    | 21.90         | 0.190                  | 0.24                     | 0.113                   | 0.14                      | 0.14        |
| REV off   | Body                   | WCDMA1700      | 1312           | 1712.4          | RMC        | Rear        | 15mm     | \               | 21.06                    | 21.90         | 0.201                  | 0.24                     | 0.126                   | 0.15                      | 0.1         |



|         |      |          |       |        |             |             |      |      |       |       |       |       |       |       |       |
|---------|------|----------|-------|--------|-------------|-------------|------|------|-------|-------|-------|-------|-------|-------|-------|
| REV on  | Head | WCDMA850 | 4233  | 846.6  | RMC         | Cheek Left  | 0mm  | F.49 | 22.91 | 24.00 | 0.437 | 0.56  | 0.294 | 0.38  | -0.05 |
| REV on  | Head | WCDMA850 | 4183  | 836.6  | RMC         | Cheek Left  | 0mm  | \    | 23.02 | 24.00 | 0.369 | 0.46  | 0.249 | 0.31  | -0.06 |
| REV on  | Head | WCDMA850 | 4132  | 826.4  | RMC         | Cheek Left  | 0mm  | \    | 22.97 | 24.00 | 0.301 | 0.38  | 0.203 | 0.26  | -0.16 |
| REV on  | Head | WCDMA850 | 4183  | 836.6  | RMC         | Tilt Left   | 0mm  | \    | 23.02 | 24.00 | 0.322 | 0.40  | 0.203 | 0.25  | 0.06  |
| REV on  | Head | WCDMA850 | 4183  | 836.6  | RMC         | Cheek Right | 0mm  | \    | 23.02 | 24.00 | 0.322 | 0.40  | 0.209 | 0.26  | -0.05 |
| REV on  | Head | WCDMA850 | 4183  | 836.6  | RMC         | Tilt Right  | 0mm  | \    | 23.02 | 24.00 | 0.295 | 0.37  | 0.167 | 0.21  | -0.17 |
| Hotspot | Body | WCDMA850 | 4183  | 836.6  | RMC         | Front       | 10mm | \    | 22.47 | 23.50 | 0.107 | 0.14  | 0.069 | 0.09  | -0.1  |
| Hotspot | Body | WCDMA850 | 4233  | 846.6  | RMC         | Rear        | 10mm | F.50 | 22.43 | 23.50 | 0.192 | 0.25  | 0.124 | 0.16  | -0.19 |
| Hotspot | Body | WCDMA850 | 4183  | 836.6  | RMC         | Rear        | 10mm | \    | 22.47 | 23.50 | 0.166 | 0.21  | 0.107 | 0.14  | -0.11 |
| Hotspot | Body | WCDMA850 | 4132  | 826.4  | RMC         | Rear        | 10mm | \    | 22.34 | 23.50 | 0.138 | 0.18  | 0.091 | 0.12  | -0.15 |
| Hotspot | Body | WCDMA850 | 4183  | 836.6  | RMC         | Left        | 10mm | \    | 22.47 | 23.50 | <0.01 | <0.01 | <0.01 | <0.01 | \     |
| Hotspot | Body | WCDMA850 | 4183  | 836.6  | RMC         | Right       | 10mm | \    | 22.47 | 23.50 | 0.066 | 0.08  | 0.044 | 0.06  | -0.15 |
| Hotspot | Body | WCDMA850 | 4183  | 836.6  | RMC         | Top         | 10mm | \    | 22.47 | 23.50 | 0.120 | 0.15  | 0.065 | 0.08  | -0.01 |
| REV off | Body | WCDMA850 | 4183  | 836.6  | RMC         | Front       | 15mm | \    | 23.97 | 25.00 | 0.068 | 0.09  | 0.042 | 0.05  | 0.04  |
| REV off | Body | WCDMA850 | 4233  | 846.6  | RMC         | Rear        | 15mm | F.51 | 23.92 | 25.00 | 0.121 | 0.16  | 0.083 | 0.11  | 0.03  |
| REV off | Body | WCDMA850 | 4183  | 836.6  | RMC         | Rear        | 15mm | \    | 23.97 | 25.00 | 0.109 | 0.14  | 0.079 | 0.10  | -0.08 |
| REV off | Body | WCDMA850 | 4132  | 826.4  | RMC         | Rear        | 15mm | \    | 23.95 | 25.00 | 0.096 | 0.12  | 0.072 | 0.09  | 0.07  |
| REV on  | Head | LTE B2   | 18700 | 1860   | 1RB-Mid     | Cheek Left  | 0mm  | \    | 15.89 | 17.50 | 0.218 | 0.32  | 0.103 | 0.15  | -0.1  |
| REV on  | Head | LTE B2   | 18700 | 1860   | 1RB-Mid     | Tilt Left   | 0mm  | \    | 15.89 | 17.50 | 0.260 | 0.38  | 0.123 | 0.18  | 0.11  |
| REV on  | Head | LTE B2   | 18700 | 1860   | 1RB-Mid     | Cheek Right | 0mm  | \    | 15.89 | 17.50 | 0.302 | 0.44  | 0.137 | 0.20  | -0.03 |
| REV on  | Head | LTE B2   | 18700 | 1860   | 1RB-Mid     | Tilt Right  | 0mm  | F.52 | 15.89 | 17.50 | 0.490 | 0.71  | 0.214 | 0.31  | -0.16 |
| REV on  | Head | LTE B2   | 19100 | 1900   | 50RB-Low    | Cheek Left  | 0mm  | \    | 16.02 | 17.50 | 0.150 | 0.21  | 0.072 | 0.10  | -0.14 |
| REV on  | Head | LTE B2   | 19100 | 1900   | 50RB-Low    | Tilt Left   | 0mm  | \    | 16.02 | 17.50 | 0.245 | 0.34  | 0.116 | 0.16  | -0.17 |
| REV on  | Head | LTE B2   | 19100 | 1900   | 50RB-Low    | Cheek Right | 0mm  | \    | 16.02 | 17.50 | 0.310 | 0.44  | 0.137 | 0.19  | -0.09 |
| REV on  | Head | LTE B2   | 19100 | 1900   | 50RB-Low    | Tilt Right  | 0mm  | \    | 16.02 | 17.50 | 0.471 | 0.66  | 0.205 | 0.29  | 0.04  |
| Hotspot | Body | LTE B2   | 18900 | 1880   | 1RB-Mid     | Front       | 10mm | \    | 16.08 | 17.00 | 0.085 | 0.11  | 0.045 | 0.06  | -0.09 |
| Hotspot | Body | LTE B2   | 18900 | 1880   | 1RB-Mid     | Rear        | 10mm | \    | 16.08 | 17.00 | 0.169 | 0.21  | 0.089 | 0.11  | -0.12 |
| Hotspot | Body | LTE B2   | 18900 | 1880   | 1RB-Mid     | Left        | 10mm | \    | 16.08 | 17.00 | 0.052 | 0.06  | 0.027 | 0.03  | \     |
| Hotspot | Body | LTE B2   | 18900 | 1880   | 1RB-Mid     | Right       | 10mm | \    | 16.08 | 17.00 | <0.01 | <0.01 | <0.01 | <0.01 | \     |
| Hotspot | Body | LTE B2   | 18900 | 1880   | 1RB-Mid     | Top         | 10mm | F.53 | 16.08 | 17.00 | 0.227 | 0.28  | 0.11  | 0.14  | 0.15  |
| Hotspot | Body | LTE B2   | 19100 | 1900   | 50RB-Low    | Front       | 10mm | \    | 16.15 | 17.00 | 0.089 | 0.11  | 0.047 | 0.06  | 0.08  |
| Hotspot | Body | LTE B2   | 19100 | 1900   | 50RB-Low    | Rear        | 10mm | \    | 16.15 | 17.00 | 0.160 | 0.19  | 0.082 | 0.10  | -0.17 |
| Hotspot | Body | LTE B2   | 19100 | 1900   | 50RB-Low    | Left        | 10mm | \    | 16.15 | 17.00 | 0.044 | 0.05  | 0.024 | 0.03  | -0.05 |
| Hotspot | Body | LTE B2   | 19100 | 1900   | 50RB-Low    | Right       | 10mm | \    | 16.15 | 17.00 | <0.01 | <0.01 | <0.01 | <0.01 | \     |
| Hotspot | Body | LTE B2   | 19100 | 1900   | 50RB-Low    | Top         | 10mm | \    | 16.15 | 17.00 | 0.219 | 0.27  | 0.106 | 0.13  | -0.15 |
| REV off | Body | LTE B2   | 18900 | 1880   | 1RB-Mid     | Front       | 15mm | \    | 19.58 | 20.50 | 0.096 | 0.12  | 0.053 | 0.07  | -0.08 |
| REV off | Body | LTE B2   | 18900 | 1880   | 1RB-Mid     | Rear        | 15mm | F.54 | 19.58 | 20.50 | 0.181 | 0.22  | 0.097 | 0.12  | -0.14 |
| REV off | Body | LTE B2   | 19100 | 1900   | 50RB-Low    | Front       | 15mm | \    | 19.66 | 20.50 | 0.087 | 0.11  | 0.048 | 0.06  | 0.02  |
| REV off | Body | LTE B2   | 19100 | 1900   | 50RB-Low    | Rear        | 15mm | \    | 19.66 | 20.50 | 0.179 | 0.22  | 0.096 | 0.12  | -0.13 |
| REV on  | Head | LTE B4   | 20050 | 1720   | 1RB-Mid     | Cheek Left  | 0mm  | \    | 17.91 | 19.50 | 0.259 | 0.37  | 0.139 | 0.20  | 0.1   |
| REV on  | Head | LTE B4   | 20050 | 1720   | 1RB-Mid     | Tilt Left   | 0mm  | \    | 17.91 | 19.50 | 0.488 | 0.70  | 0.258 | 0.37  | -0.04 |
| REV on  | Head | LTE B4   | 20050 | 1720   | 1RB-Mid     | Cheek Right | 0mm  | \    | 17.91 | 19.50 | 0.369 | 0.53  | 0.181 | 0.26  | -0.13 |
| REV on  | Head | LTE B4   | 20300 | 1745   | 1RB-Mid     | Tilt Right  | 0mm  | \    | 17.81 | 19.50 | 0.504 | 0.74  | 0.233 | 0.34  | -0.06 |
| REV on  | Head | LTE B4   | 20175 | 1732.5 | 1RB-Mid     | Tilt Right  | 0mm  | \    | 17.83 | 19.50 | 0.532 | 0.78  | 0.249 | 0.37  | -0.16 |
| REV on  | Head | LTE B4   | 20050 | 1720   | 1RB-Mid     | Tilt Right  | 0mm  | F.55 | 17.91 | 19.50 | 0.593 | 0.86  | 0.283 | 0.41  | 0.05  |
| REV on  | Head | LTE B4   | 20300 | 1745   | 50RB-Low    | Cheek Left  | 0mm  | \    | 17.85 | 19.50 | 0.321 | 0.47  | 0.171 | 0.25  | 0.19  |
| REV on  | Head | LTE B4   | 20300 | 1745   | 50RB-Low    | Tilt Left   | 0mm  | \    | 17.85 | 19.50 | 0.484 | 0.71  | 0.253 | 0.37  | -0.14 |
| REV on  | Head | LTE B4   | 20300 | 1745   | 50RB-Low    | Cheek Right | 0mm  | \    | 17.85 | 19.50 | 0.414 | 0.61  | 0.210 | 0.31  | -0.01 |
| REV on  | Head | LTE B4   | 20300 | 1745   | 50RB-Low    | Tilt Right  | 0mm  | \    | 17.85 | 19.50 | 0.580 | 0.85  | 0.275 | 0.40  | 0.12  |
| REV on  | Head | LTE B4   | 20050 | 1720   | 100RB       | Tilt Right  | 0mm  | \    | 17.84 | 19.50 | 0.498 | 0.73  | 0.216 | 0.32  | -0.08 |
| Hotspot | Body | LTE B4   | 20050 | 1720   | 1RB-Mid     | Front       | 10mm | \    | 18.00 | 19.00 | 0.132 | 0.17  | 0.077 | 0.10  | 0.15  |
| Hotspot | Body | LTE B4   | 20050 | 1720   | 1RB-Mid     | Rear        | 10mm | \    | 18.00 | 19.00 | 0.168 | 0.21  | 0.099 | 0.12  | 0.08  |
| Hotspot | Body | LTE B4   | 20050 | 1720   | 1RB-Mid     | Left        | 10mm | \    | 18.00 | 19.00 | 0.057 | 0.07  | 0.032 | 0.04  | 0.09  |
| Hotspot | Body | LTE B4   | 20050 | 1720   | 1RB-Mid     | Right       | 10mm | \    | 18.00 | 19.00 | 0.085 | 0.11  | 0.05  | 0.06  | -0.09 |
| Hotspot | Body | LTE B4   | 20050 | 1720   | 1RB-Mid     | Top         | 10mm | \    | 18.00 | 19.00 | 0.271 | 0.34  | 0.144 | 0.18  | 0.02  |
| Hotspot | Body | LTE B4   | 20050 | 1720   | 50RB-Middle | Front       | 10mm | \    | 17.97 | 19.00 | 0.098 | 0.12  | 0.062 | 0.08  | 0.09  |
| Hotspot | Body | LTE B4   | 20050 | 1720   | 50RB-Middle | Rear        | 10mm | \    | 17.97 | 19.00 | 0.151 | 0.19  | 0.088 | 0.11  | 0.08  |
| Hotspot | Body | LTE B4   | 20050 | 1720   | 50RB-Middle | Left        | 10mm | \    | 17.97 | 19.00 | 0.061 | 0.08  | 0.033 | 0.04  | 0.02  |
| Hotspot | Body | LTE B4   | 20050 | 1720   | 50RB-Middle | Right       | 10mm | \    | 17.97 | 19.00 | 0.073 | 0.09  | 0.043 | 0.05  | 0.19  |
| Hotspot | Body | LTE B4   | 20050 | 1720   | 50RB-Middle | Top         | 10mm | F.56 | 17.97 | 19.00 | 0.282 | 0.36  | 0.149 | 0.19  | 0.05  |
| REV off | Body | LTE B4   | 20050 | 1720   | 1RB-Mid     | Front       | 15mm | \    | 21.52 | 22.50 | 0.127 | 0.16  | 0.065 | 0.08  | 0.16  |
| REV off | Body | LTE B4   | 20050 | 1720   | 1RB-Mid     | Rear        | 15mm | F.57 | 21.52 | 22.50 | 0.168 | 0.21  | 0.096 | 0.12  | 0.04  |
| REV off | Body | LTE B4   | 20050 | 1720   | 50RB-Mid    | Front       | 15mm | \    | 21.43 | 22.50 | 0.115 | 0.15  | 0.061 | 0.08  | -0.17 |
| REV off | Body | LTE B4   | 20050 | 1720   | 50RB-Mid    | Rear        | 15mm | \    | 21.43 | 22.50 | 0.150 | 0.19  | 0.082 | 0.10  | -0.02 |
| REV on  | Head | LTE B7   | 21350 | 2560   | 1RB-Mid     | Cheek Left  | 0mm  | \    | 21.36 | 21.90 | 0.280 | 0.32  | 0.144 | 0.16  | 0.15  |
| REV on  | Head | LTE B7   | 21350 | 2560   | 1RB-Mid     | Tilt Left   | 0mm  | \    | 21.36 | 21.90 | 0.346 | 0.39  | 0.167 | 0.19  | 0.04  |
| REV on  | Head | LTE B7   | 21350 | 2560   | 1RB-Mid     | Cheek Right | 0mm  | F.58 | 21.36 | 21.90 | 0.752 | 0.85  | 0.354 | 0.40  | 0.01  |
| REV on  | Head | LTE B7   | 21100 | 2535   | 1RB-Mid     | Cheek Right | 0mm  | \    | 21.25 | 21.90 | 0.708 | 0.82  | 0.311 | 0.36  | -0.06 |
| REV on  | Head | LTE B7   | 20850 | 2510   | 1RB-Mid     | Cheek Right | 0mm  | \    | 21.31 | 21.90 | 0.694 | 0.79  | 0.289 | 0.33  | -0.12 |
| REV on  | Head | LTE B7   | 21350 | 2560   | 1RB-Mid     | Tilt Right  | 0mm  | \    | 21.36 | 21.90 | 0.751 | 0.85  | 0.332 | 0.38  | 0.18  |
| REV on  | Head | LTE B7   | 21350 | 2560   | 50RB-High   | Cheek Left  | 0mm  | \    | 21.37 | 21.90 | 0.277 | 0.31  | 0.140 | 0.16  | -0.11 |
| REV on  | Head | LTE B7   | 21350 | 2560   | 50RB-High   | Tilt Left   | 0mm  | \    | 21.37 | 21.90 | 0.332 | 0.38  | 0.159 | 0.18  | 0.05  |
| REV on  | Head | LTE B7   | 21350 | 2560   | 50RB-High   | Cheek Right | 0mm  | \    | 21.37 | 21.90 | 0.724 | 0.82  | 0.340 | 0.38  | 0.07  |
| REV on  | Head | LTE B7   | 21350 | 2560   | 50RB-High   | Tilt Right  | 0mm  | \    | 21.37 | 21.90 | 0.729 | 0.82  | 0.325 | 0.37  | -0.18 |
| REV on  | Head | LTE B7   | 21350 | 2560   | 100RB       | Cheek Right | 0mm  | \    | 21.36 | 21.90 | 0.711 | 0.81  | 0.317 | 0.36  | -0.14 |
| Hotspot | Body | LTE B7   | 20850 | 2510   | 1RB-Mid     | Front       | 10mm | \    | 17.70 | 18.40 | 0.072 | 0.08  | 0.043 | 0.05  | -0.05 |
| Hotspot | Body | LTE B7   | 20850 | 2510   | 1RB-Mid     | Rear        | 10mm | F.59 | 17.70 | 18.40 | 0.166 | 0.20  | 0.091 | 0.11  | -0.17 |
| Hotspot | Body | LTE B7   | 20850 | 2510   | 1RB-Mid     | Left        | 10mm | \    | 17.70 | 18.40 | 0.159 | 0.19  | 0.086 | 0.10  | 0.03  |
| Hotspot | Body | LTE B7   | 20850 | 2510   | 1RB-Mid     | Right       | 10mm | \    | 17.70 | 18.40 | 0.039 | 0.05  | 0.013 | 0.02  | 0.04  |
| Hotspot | Body | LTE B7   | 20850 | 2510   | 1RB-Mid     | Top         | 10mm | \    | 17.70 | 18.40 | 0.105 | 0.12  | 0.052 | 0.06  | -0.08 |
| Hotspot | Body | LTE B7   | 20850 | 2510   | 50RB-High   | Front       | 10mm | \    | 17.63 | 18.40 | 0.071 | 0.08  | 0.042 | 0.05  | 0.01  |
| Hotspot | Body | LTE B7   | 20850 | 2510   | 50RB-High   | Rear        | 10mm | \    | 17.63 | 18.40 | 0.155 | 0.19  | 0.085 | 0.10  | 0.11  |
| Hotspot | Body | LTE B7   | 20850 | 2510   | 50RB-High   | Left        | 10mm | \    | 17.63 | 18.40 | 0.160 | 0.19  | 0.086 | 0.10  | 0.13  |
| Hotspot | Body | LTE B7   | 20850 | 2510   | 50RB-High   | Right       | 10mm | \    | 17.63 | 18.40 | <0.01 | <0.01 | <0.01 | <0.01 | \     |
| Hotspot | Body | LTE B7   | 20850 | 2510   | 50RB-High   | Top         | 10mm | \    | 17.63 | 18.40 | 0.100 | 0.12  | 0.052 | 0.06  | -0.18 |
| REV off | Body | LTE B7   | 21350 | 2560   | 1RB-Mid     | Front       | 15mm | \    | 20.22 | 20.90 | 0.096 | 0.11  | 0.053 | 0.06  | 0.19  |
| REV off | Body | LTE B7   | 21350 | 2560   | 1RB-Mid     | Rear        | 15mm | F.60 | 20.22 | 20.90 | 0.178 | 0.21  | 0.095 | 0.11  | 0.11  |
| REV off | Body | LTE B7   | 21350 | 2560   | 50RB-High   | Front       | 15mm |      |       |       |       |       |       |       |       |



|         |      |         |        |       |             |             |      |      |       |       |       |       |       |       |       |
|---------|------|---------|--------|-------|-------------|-------------|------|------|-------|-------|-------|-------|-------|-------|-------|
| REV on  | Head | LTE B13 | 23230  | 782   | 1RB-Mid     | Cheek Left  | 0mm  | \    | 22.78 | 23.80 | 0.244 | 0.31  | 0.131 | 0.17  | 0.16  |
| REV on  | Head | LTE B13 | 23230  | 782   | 1RB-Mid     | Tilt Left   | 0mm  | \    | 22.78 | 23.80 | 0.242 | 0.31  | 0.135 | 0.17  | -0.02 |
| REV on  | Head | LTE B13 | 23230  | 782   | 1RB-Mid     | Cheek Right | 0mm  | \    | 22.78 | 23.80 | 0.257 | 0.33  | 0.140 | 0.18  | -0.16 |
| REV on  | Head | LTE B13 | 23230  | 782   | 1RB-Mid     | Tilt Right  | 0mm  | \    | 22.78 | 23.80 | 0.237 | 0.30  | 0.117 | 0.15  | -0.15 |
| REV on  | Head | LTE B13 | 23230  | 782   | 25RB-High   | Cheek Left  | 0mm  | \    | 22.81 | 23.80 | 0.232 | 0.29  | 0.127 | 0.16  | -0.06 |
| REV on  | Head | LTE B13 | 23230  | 782   | 25RB-High   | Tilt Left   | 0mm  | \    | 22.81 | 23.80 | 0.204 | 0.26  | 0.101 | 0.13  | -0.1  |
| REV on  | Head | LTE B13 | 23230  | 782   | 25RB-High   | Cheek Right | 0mm  | F.61 | 22.81 | 23.80 | 0.267 | 0.34  | 0.145 | 0.18  | -0.01 |
| REV on  | Head | LTE B13 | 23230  | 782   | 25RB-High   | Tilt Right  | 0mm  | \    | 22.81 | 23.80 | 0.230 | 0.29  | 0.113 | 0.14  | 0.12  |
| Hotspot | Body | LTE B13 | 23230  | 782   | 1RB-Low     | Front       | 10mm | \    | 22.21 | 23.30 | 0.068 | 0.09  | 0.045 | 0.06  | -0.06 |
| Hotspot | Body | LTE B13 | 23230  | 782   | 1RB-Low     | Rear        | 10mm | F.62 | 22.21 | 23.30 | 0.109 | 0.14  | 0.07  | 0.09  | -0.01 |
| Hotspot | Body | LTE B13 | 23230  | 782   | 1RB-Low     | Left        | 10mm | \    | 22.21 | 23.30 | 0.041 | 0.05  | 0.026 | 0.03  | 0     |
| Hotspot | Body | LTE B13 | 23230  | 782   | 1RB-Low     | Right       | 10mm | \    | 22.21 | 23.30 | 0.055 | 0.07  | 0.036 | 0.05  | -0.15 |
| Hotspot | Body | LTE B13 | 23230  | 782   | 1RB-Low     | Top         | 10mm | \    | 22.21 | 23.30 | 0.065 | 0.07  | 0.031 | 0.04  | -0.16 |
| Hotspot | Body | LTE B13 | 23230  | 782   | 25RB-High   | Front       | 10mm | \    | 22.24 | 23.30 | 0.065 | 0.08  | 0.042 | 0.05  | 0.12  |
| Hotspot | Body | LTE B13 | 23230  | 782   | 25RB-High   | Rear        | 10mm | \    | 22.24 | 23.30 | 0.103 | 0.13  | 0.067 | 0.09  | 0.04  |
| Hotspot | Body | LTE B13 | 23230  | 782   | 25RB-High   | Left        | 10mm | \    | 22.24 | 23.30 | 0.040 | 0.05  | 0.026 | 0.03  | -0.02 |
| Hotspot | Body | LTE B13 | 23230  | 782   | 25RB-High   | Right       | 10mm | \    | 22.24 | 23.30 | 0.065 | 0.07  | 0.035 | 0.04  | -0.19 |
| Hotspot | Body | LTE B13 | 23230  | 782   | 25RB-High   | Top         | 10mm | \    | 22.24 | 23.30 | 0.053 | 0.07  | 0.03  | 0.04  | -0.14 |
| REV off | Body | LTE B13 | 23230  | 782   | 1RB-Mid     | Front       | 15mm | \    | 23.84 | 24.80 | 0.145 | 0.18  | 0.105 | 0.13  | 0.14  |
| REV off | Body | LTE B13 | 23230  | 782   | 1RB-Mid     | Rear        | 15mm | F.63 | 23.84 | 24.80 | 0.207 | 0.26  | 0.151 | 0.19  | -0.06 |
| REV off | Body | LTE B13 | 23230  | 782   | 25RB-Mid    | Front       | 15mm | \    | 22.83 | 23.80 | 0.112 | 0.14  | 0.081 | 0.10  | -0.05 |
| REV off | Body | LTE B13 | 23230  | 782   | 25RB-Mid    | Rear        | 15mm | \    | 22.83 | 23.80 | 0.159 | 0.16  | 0.116 | 0.12  | 0.04  |
| REV on  | Head | LTE B26 | 26775  | 822.5 | 1RB-Mid     | Cheek Left  | 0mm  | \    | 22.59 | 24.00 | 0.235 | 0.33  | 0.157 | 0.22  | 0.11  |
| REV on  | Head | LTE B26 | 26775  | 822.5 | 1RB-Mid     | Tilt Left   | 0mm  | \    | 22.59 | 24.00 | 0.182 | 0.25  | 0.111 | 0.15  | 0.16  |
| REV on  | Head | LTE B26 | 26775  | 822.5 | 1RB-Mid     | Cheek Right | 0mm  | \    | 22.59 | 24.00 | 0.229 | 0.32  | 0.145 | 0.20  | -0.1  |
| REV on  | Head | LTE B26 | 26775  | 822.5 | 1RB-Mid     | Tilt Right  | 0mm  | \    | 22.59 | 24.00 | 0.186 | 0.26  | 0.104 | 0.14  | -0.06 |
| REV on  | Head | LTE B26 | 26775  | 822.5 | 36RB-Middle | Cheek Left  | 0mm  | F.64 | 22.66 | 24.00 | 0.259 | 0.35  | 0.173 | 0.24  | -0.04 |
| REV on  | Head | LTE B26 | 26775  | 822.5 | 36RB-Middle | Tilt Left   | 0mm  | \    | 22.66 | 24.00 | 0.183 | 0.25  | 0.112 | 0.15  | -0.05 |
| REV on  | Head | LTE B26 | 26775  | 822.5 | 36RB-Middle | Cheek Right | 0mm  | \    | 22.66 | 24.00 | 0.192 | 0.26  | 0.121 | 0.16  | -0.09 |
| REV on  | Head | LTE B26 | 26775  | 822.5 | 36RB-Middle | Tilt Right  | 0mm  | \    | 22.66 | 24.00 | 0.159 | 0.22  | 0.087 | 0.12  | 0.18  |
| Hotspot | Body | LTE B26 | 26775  | 822.5 | 1RB-Mid     | Front       | 10mm | \    | 22.20 | 23.50 | 0.069 | 0.09  | 0.047 | 0.06  | 0.07  |
| Hotspot | Body | LTE B26 | 26775  | 822.5 | 1RB-Mid     | Rear        | 10mm | \    | 22.20 | 23.50 | 0.107 | 0.14  | 0.075 | 0.10  | -0.06 |
| Hotspot | Body | LTE B26 | 26775  | 822.5 | 1RB-Mid     | Left        | 10mm | \    | 22.20 | 23.50 | <0.01 | <0.01 | <0.01 | <0.01 | \     |
| Hotspot | Body | LTE B26 | 26775  | 822.5 | 1RB-Mid     | Right       | 10mm | \    | 22.20 | 23.50 | <0.01 | <0.01 | <0.01 | <0.01 | \     |
| Hotspot | Body | LTE B26 | 26775  | 822.5 | 1RB-Mid     | Top         | 10mm | \    | 22.20 | 23.50 | 0.067 | 0.09  | 0.039 | 0.05  | -0.03 |
| Hotspot | Body | LTE B26 | 26956  | 841.5 | 36RB-Low    | Front       | 10mm | \    | 22.22 | 23.50 | 0.070 | 0.09  | 0.047 | 0.06  | 0.04  |
| Hotspot | Body | LTE B26 | 26956  | 841.5 | 36RB-Low    | Rear        | 10mm | F.65 | 22.22 | 23.50 | 0.117 | 0.16  | 0.079 | 0.11  | 0.05  |
| Hotspot | Body | LTE B26 | 26956  | 841.5 | 36RB-Low    | Left        | 10mm | \    | 22.22 | 23.50 | <0.01 | <0.01 | <0.01 | <0.01 | \     |
| Hotspot | Body | LTE B26 | 26956  | 841.5 | 36RB-Low    | Right       | 10mm | \    | 22.22 | 23.50 | <0.01 | <0.01 | <0.01 | <0.01 | \     |
| Hotspot | Body | LTE B26 | 26956  | 841.5 | 36RB-Low    | Top         | 10mm | \    | 22.22 | 23.50 | 0.065 | 0.09  | 0.041 | 0.06  | 0.16  |
| REV off | Body | LTE B26 | 26775  | 822.5 | 1RB-Mid     | Front       | 15mm | \    | 23.59 | 25.00 | 0.054 | 0.07  | 0.004 | 0.01  | -0.08 |
| REV off | Body | LTE B26 | 26775  | 822.5 | 1RB-Mid     | Rear        | 15mm | F.66 | 23.59 | 25.00 | 0.081 | 0.11  | 0.057 | 0.08  | 0.09  |
| REV off | Body | LTE B26 | 26956  | 841.5 | 36RB-Low    | Front       | 15mm | \    | 22.68 | 24.00 | <0.01 | <0.01 | <0.01 | <0.01 | \     |
| REV off | Body | LTE B26 | 26956  | 841.5 | 36RB-Low    | Rear        | 15mm | \    | 22.68 | 24.00 | 0.065 | 0.09  | 0.005 | 0.01  | 0.18  |
| REV on  | Head | LTE B38 | 37850  | 2580  | 1RB-Mid     | Cheek Left  | 0mm  | \    | 23.77 | 24.00 | 0.194 | 0.20  | 0.111 | 0.12  | 0.08  |
| REV on  | Head | LTE B38 | 37850  | 2580  | 1RB-Mid     | Tilt Left   | 0mm  | \    | 23.77 | 24.00 | 0.194 | 0.20  | 0.099 | 0.10  | -0.1  |
| REV on  | Head | LTE B38 | 38150  | 2610  | 1RB-Mid     | Cheek Right | 0mm  | \    | 23.69 | 24.00 | 0.544 | 0.58  | 0.290 | 0.31  | -0.02 |
| REV on  | Head | LTE B38 | 38000  | 2595  | 1RB-Mid     | Cheek Right | 0mm  | F.67 | 23.71 | 24.00 | 0.561 | 0.60  | 0.301 | 0.32  | -0.05 |
| REV on  | Head | LTE B38 | 37850  | 2580  | 1RB-Mid     | Cheek Right | 0mm  | \    | 23.77 | 24.00 | 0.530 | 0.56  | 0.283 | 0.30  | 0.13  |
| REV on  | Head | LTE B38 | 37850  | 2580  | 1RB-Mid     | Tilt Right  | 0mm  | \    | 23.77 | 24.00 | 0.353 | 0.37  | 0.186 | 0.20  | 0.12  |
| REV on  | Head | LTE B38 | 37850  | 2580  | 50RB-Middle | Cheek Left  | 0mm  | \    | 22.63 | 23.00 | 0.155 | 0.17  | 0.087 | 0.09  | -0.18 |
| REV on  | Head | LTE B38 | 37850  | 2580  | 50RB-Middle | Tilt Left   | 0mm  | \    | 22.63 | 23.00 | 0.150 | 0.16  | 0.076 | 0.08  | -0.07 |
| REV on  | Head | LTE B38 | 38150  | 2610  | 50RB-Middle | Cheek Right | 0mm  | \    | 22.54 | 23.00 | 0.412 | 0.46  | 0.218 | 0.24  | -0.18 |
| REV on  | Head | LTE B38 | 38000  | 2595  | 50RB-Middle | Cheek Right | 0mm  | \    | 22.56 | 23.00 | 0.419 | 0.46  | 0.223 | 0.25  | 0.05  |
| REV on  | Head | LTE B38 | 37850  | 2580  | 50RB-Middle | Cheek Right | 0mm  | \    | 22.63 | 23.00 | 0.436 | 0.47  | 0.234 | 0.25  | 0.09  |
| REV on  | Head | LTE B38 | 37850  | 2580  | 50RB-Middle | Tilt Right  | 0mm  | \    | 22.63 | 23.00 | 0.291 | 0.32  | 0.151 | 0.16  | 0.14  |
| Hotspot | Body | LTE B38 | 38000  | 2595  | 1RB-Mid     | Front       | 10mm | \    | 19.76 | 20.00 | 0.042 | 0.04  | 0.028 | 0.03  | 0.03  |
| Hotspot | Body | LTE B38 | 38000  | 2595  | 1RB-Mid     | Rear        | 10mm | F.68 | 19.76 | 20.00 | 0.161 | 0.17  | 0.09  | 0.10  | -0.17 |
| Hotspot | Body | LTE B38 | 38000  | 2595  | 1RB-Mid     | Left        | 10mm | \    | 19.76 | 20.00 | 0.158 | 0.17  | 0.089 | 0.09  | 0.07  |
| Hotspot | Body | LTE B38 | 38000  | 2595  | 1RB-Mid     | Right       | 10mm | \    | 19.76 | 20.00 | <0.01 | <0.01 | <0.01 | <0.01 | \     |
| Hotspot | Body | LTE B38 | 38000  | 2595  | 1RB-Mid     | Top         | 10mm | \    | 19.76 | 20.00 | 0.047 | 0.05  | 0.027 | 0.03  | 0.11  |
| Hotspot | Body | LTE B38 | 38000  | 2595  | 50RB-Middle | Front       | 10mm | \    | 19.53 | 20.00 | 0.039 | 0.04  | 0.026 | 0.03  | 0.11  |
| Hotspot | Body | LTE B38 | 38000  | 2595  | 50RB-Middle | Rear        | 10mm | \    | 19.53 | 20.00 | 0.152 | 0.17  | 0.082 | 0.09  | 0.16  |
| Hotspot | Body | LTE B38 | 38000  | 2595  | 50RB-Middle | Left        | 10mm | \    | 19.53 | 20.00 | 0.136 | 0.15  | 0.075 | 0.08  | -0.13 |
| Hotspot | Body | LTE B38 | 38000  | 2595  | 50RB-Middle | Right       | 10mm | \    | 19.53 | 20.00 | <0.01 | <0.01 | <0.01 | <0.01 | \     |
| Hotspot | Body | LTE B38 | 38000  | 2595  | 50RB-Middle | Top         | 10mm | \    | 19.53 | 20.00 | 0.043 | 0.05  | 0.025 | 0.03  | 0.07  |
| REV off | Body | LTE B38 | 37850  | 2580  | 1RB-Mid     | Front       | 15mm | \    | 22.31 | 22.50 | 0.052 | 0.05  | 0.032 | 0.03  | -0.02 |
| REV off | Body | LTE B38 | 37850  | 2580  | 1RB-Mid     | Rear        | 15mm | F.69 | 22.31 | 22.50 | 0.166 | 0.17  | 0.091 | 0.10  | -0.09 |
| REV off | Body | LTE B38 | 38000  | 2595  | 50RB-Middle | Front       | 15mm | \    | 22.13 | 22.50 | 0.048 | 0.05  | 0.03  | 0.03  | 0.06  |
| REV off | Body | LTE B38 | 38000  | 2595  | 50RB-Middle | Rear        | 15mm | \    | 22.13 | 22.50 | 0.150 | 0.16  | 0.08  | 0.09  | -0.09 |
| REV on  | Head | LTE B66 | 132072 | 1720  | 1RB-Mid     | Cheek Left  | 0mm  | \    | 17.90 | 19.00 | 0.307 | 0.40  | 0.143 | 0.18  | 0.04  |
| REV on  | Head | LTE B66 | 132072 | 1720  | 1RB-Mid     | Tilt Left   | 0mm  | \    | 17.90 | 19.00 | 0.441 | 0.57  | 0.207 | 0.27  | 0.03  |
| REV on  | Head | LTE B66 | 132072 | 1720  | 1RB-Mid     | Cheek Right | 0mm  | \    | 17.90 | 19.00 | 0.428 | 0.55  | 0.199 | 0.26  | -0.16 |
| REV on  | Head | LTE B66 | 132072 | 1720  | 1RB-Mid     | Tilt Right  | 0mm  | F.70 | 17.90 | 19.00 | 0.619 | 0.797 | 0.279 | 0.36  | 0.09  |
| REV on  | Head | LTE B66 | 132572 | 1770  | 50RB-Low    | Cheek Left  | 0mm  | \    | 17.89 | 19.00 | 0.287 | 0.37  | 0.137 | 0.18  | 0     |
| REV on  | Head | LTE B66 | 132572 | 1770  | 50RB-Low    | Tilt Left   | 0mm  | \    | 17.89 | 19.00 | 0.433 | 0.56  | 0.202 | 0.26  | -0.03 |
| REV on  | Head | LTE B66 | 132572 | 1770  | 50RB-Low    | Cheek Right | 0mm  | \    | 17.89 | 19.00 | 0.419 | 0.54  | 0.196 | 0.25  | 0.14  |
| REV on  | Head | LTE B66 | 132572 | 1770  | 50RB-Low    | Tilt Right  | 0mm  | \    | 17.89 | 19.00 | 0.607 | 0.78  | 0.273 | 0.35  | -0.06 |
| Hotspot | Body | LTE B66 | 132072 | 1720  | 1RB-Mid     | Front       | 10mm | \    | 17.98 | 19.00 | 0.134 | 0.17  | 0.077 | 0.10  | 0.05  |
| Hotspot | Body | LTE B66 | 132072 | 1720  | 1RB-Mid     | Rear        | 10mm | \    | 17.98 | 19.00 | 0.203 | 0.26  | 0.112 | 0.14  | -0.05 |
| Hotspot | Body | LTE B66 | 132072 | 1720  | 1RB-Mid     | Left        | 10mm | \    | 17.98 | 19.00 | 0.072 | 0.09  | 0.04  | 0.05  | 0     |
| Hotspot | Body | LTE B66 | 132072 | 1720  | 1RB-Mid     | Right       | 10mm | \    | 17.98 | 19.00 | <0.01 | <0.01 | <0.01 | <0.01 | \     |
| Hotspot | Body | LTE B66 | 132072 | 1720  | 1RB-Mid     | Top         | 10mm | F.71 | 17.98 | 19.00 | 0.314 | 0.40  | 0.162 | 0.20  | 0.03  |
| Hotspot | Body | LTE B66 | 132072 | 1720  | 50RB-Low    | Front       | 10mm | \    | 17.89 | 19.00 | 0.136 | 0.18  | 0.077 | 0.10  | 0.05  |
| Hotspot | Body | LTE B66 | 132072 | 1720  | 50RB-Low    | Rear        | 10mm | \    | 17.89 | 19.00 | 0.242 | 0.31  | 0.142 | 0.18  | -0.07 |
| Hotspot | Body | LTE B66 | 132072 | 1720  | 50RB-Low    | Left        | 10mm | \    | 17.89 | 19.00 | 0.070 | 0.09  | 0.038 | 0.05  | 0.17  |
| Hotspot | Body | LTE B66 | 132072 | 1720  | 50RB-Low    | Right       | 10mm | \    | 17.89 | 19.00 |       |       |       |       |       |

### 14.3 SAR results for WLAN and BT

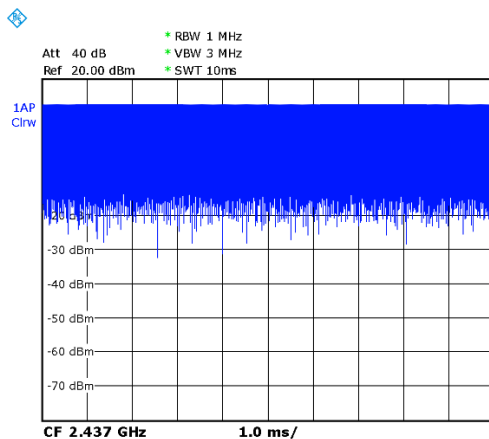
The maximum output power specified for production units are determined for all applicable 802.11 transmission modes in each standalone and aggregated frequency band. Maximum output power is measured for the highest maximum output power configuration(s) in each frequency band according to the default power measurement procedures.

When the same transmission mode configurations have the same maximum output power on the same channel for the 802.11 a/g/n/ac/ax modes, the channel in the lower order/sequence 802.11 mode (i.e. a, g, n ac then ax) is selected.

SAR Test reduction was applied from KDB 248227 guidance, when the same maximum power is specified for multiple transmission modes in a frequency band, the largest channel bandwidth, lowest order modulation, lowest data rate and lowest order 802.11a/g/n/ac mode is used for SAR measurement, on the highest measured output power channel in the initial test configuration, for each frequency band. Additional output power measurements were not deemed necessary.

#### Duty factor plot

##### CH6



#### WLAN 2.4G

| EUT State | RF Exposure Conditions | Frequency Band | Channel Number | Frequency (MHz) | Mode/RB  | Test setup  | Distance | Figure No./Note | EUT Measured Power (dBm) | Tune up (dBm) | Measured SAR 1g (W/kg) | Calculated SAR 1g (W/kg) | Measured SAR 10g (W/kg) | Calculated SAR 10g (W/kg) | Power Drift |
|-----------|------------------------|----------------|----------------|-----------------|----------|-------------|----------|-----------------|--------------------------|---------------|------------------------|--------------------------|-------------------------|---------------------------|-------------|
| REV on    | Head                   | WIFI2.4G       | 6              | 2437            | 11B-2M   | Cheek Left  | 0mm      | F.73            | 13.08                    | 14.00         | 0.183                  | <b>0.23</b>              | 0.087                   | <b>0.11</b>               | 0.17        |
| REV on    | Head                   | WIFI2.4G       | 6              | 2437            | 11B-2M   | Tilt Left   | 0mm      | \               | 13.08                    | 14.00         | 0.079                  | <b>0.10</b>              | 0.040                   | <b>0.05</b>               | -0.14       |
| REV on    | Head                   | WIFI2.4G       | 6              | 2437            | 11B-2M   | Cheek Right | 0mm      | \               | 13.08                    | 14.00         | 0.047                  | <b>0.06</b>              | 0.026                   | <b>0.03</b>               | 0.17        |
| REV on    | Head                   | WIFI2.4G       | 6              | 2437            | 11B-2M   | Tilt Right  | 0mm      | \               | 13.08                    | 14.00         | 0.038                  | <b>0.05</b>              | 0.020                   | <b>0.02</b>               | -0.04       |
| Hotspot   | Body                   | WIFI2.4G       | 1              | 2412            | 11B-5.5M | Front       | 10mm     | \               | 16.01                    | 17.00         | 0.061                  | <b>0.08</b>              | 0.032                   | <b>0.04</b>               | 0.06        |
| Hotspot   | Body                   | WIFI2.4G       | 1              | 2412            | 11B-5.5M | Rear        | 10mm     | F.74            | 16.01                    | 17.00         | 0.131                  | <b>0.16</b>              | 0.067                   | <b>0.08</b>               | 0.12        |
| Hotspot   | Body                   | WIFI2.4G       | 1              | 2412            | 11B-5.5M | Left        | 10mm     | \               | 16.01                    | 17.00         | <0.01                  | <b>&lt;0.01</b>          | <0.01                   | <b>&lt;0.01</b>           | \           |
| Hotspot   | Body                   | WIFI2.4G       | 1              | 2412            | 11B-5.5M | Right       | 10mm     | \               | 16.01                    | 17.00         | 0.072                  | <b>0.09</b>              | 0.037                   | <b>0.05</b>               | 0.05        |
| Hotspot   | Body                   | WIFI2.4G       | 1              | 2412            | 11B-5.5M | Top         | 10mm     | \               | 16.01                    | 17.00         | 0.020                  | <b>0.03</b>              | 0.006                   | <b>0.01</b>               | -0.16       |
| REV off   | Body                   | WIFI2.4G       | 6              | 2437            | 11B-1M   | Front       | 15mm     | \               | 18.07                    | 19.00         | 0.066                  | <b>0.08</b>              | 0.035                   | <b>0.04</b>               | 0.1         |
| REV off   | Body                   | WIFI2.4G       | 6              | 2437            | 11B-1M   | Rear        | 15mm     | F.75            | 18.07                    | 19.00         | 0.130                  | <b>0.16</b>              | 0.068                   | <b>0.08</b>               | 0.17        |

#### BT

| EUT State | RF Exposure Conditions | Frequency Band | Channel Number | Frequency (MHz) | Mode/RB | Test setup  | Distance | Figure No./Note | EUT Measured Power (dBm) | Tune up (dBm) | Measured SAR 1g (W/kg) | Calculated SAR 1g (W/kg) | Measured SAR 10g (W/kg) | Calculated SAR 10g (W/kg) | Power Drift |
|-----------|------------------------|----------------|----------------|-----------------|---------|-------------|----------|-----------------|--------------------------|---------------|------------------------|--------------------------|-------------------------|---------------------------|-------------|
| REV on    | Head                   | BT             | 0              | 2402            |         | Cheek Left  | 0mm      | F.76            | 11.32                    | 12.00         | 0.081                  | <b>0.09</b>              | 0.039                   | <b>0.05</b>               | -0.15       |
| REV on    | Head                   | BT             | 0              | 2402            |         | Tilt Left   | 0mm      | \               | 11.32                    | 12.00         | <0.01                  | <b>&lt;0.01</b>          | <0.01                   | <b>&lt;0.01</b>           | \           |
| REV on    | Head                   | BT             | 0              | 2402            |         | Cheek Right | 0mm      | \               | 11.32                    | 12.00         | 0.052                  | <b>0.06</b>              | 0.023                   | <b>0.03</b>               | -0.11       |
| REV on    | Head                   | BT             | 0              | 2402            |         | Tilt Right  | 0mm      | \               | 11.32                    | 12.00         | <0.01                  | <b>&lt;0.01</b>          | <0.01                   | <b>&lt;0.01</b>           | \           |
| Hotspot   | Body                   | BT             | 0              | 2402            |         | Front       | 10mm     | \               | 11.32                    | 12.00         | 0.022                  | <b>0.03</b>              | 0.012                   | <b>0.01</b>               | 0.07        |
| Hotspot   | Body                   | BT             | 0              | 2402            |         | Rear        | 10mm     | F.77            | 11.32                    | 12.00         | 0.046                  | <b>0.05</b>              | 0.023                   | <b>0.03</b>               | 0.13        |
| Hotspot   | Body                   | BT             | 0              | 2402            |         | Left        | 10mm     | \               | 11.32                    | 12.00         | <0.01                  | <b>&lt;0.01</b>          | <0.01                   | <b>&lt;0.01</b>           | \           |
| Hotspot   | Body                   | BT             | 0              | 2402            |         | Right       | 10mm     | \               | 11.32                    | 12.00         | 0.025                  | <b>0.03</b>              | 0.016                   | <b>0.02</b>               | -0.12       |
| Hotspot   | Body                   | BT             | 0              | 2402            |         | Top         | 10mm     | \               | 11.32                    | 12.00         | <0.01                  | <b>&lt;0.01</b>          | <0.01                   | <b>&lt;0.01</b>           | \           |

Note: The 15mm sar results refer to 10mm results, which is more conservative.

#### 14.4 SAR results for 10-g extremity SAR

According to the KDB648474 D04, the UMPC mini-tablet procedures must also be applied to test the SAR of all surfaces and edges with an antenna located at  $\leq 25$  mm from that surface or edge, in direct contact with a flat phantom, for 10-g extremity SAR according to the body-equivalent tissue dielectric parameters in KDB Publication 865664 D01 to address interactive hand use exposure conditions. When hotspot mode applies, 10-g extremity SAR is required only for the surfaces and edges with hotspot mode 1-g reported SAR  $> 1.2$  W/kg

For this device, SAR is not required for 10-g extremity SAR because the scaled SAR is  $\leq 1.2$  W/kg.

#### 15 SAR Measurement Variability

SAR measurement variability must be assessed for each frequency band, which is determined by the SAR probe calibration point and tissue-equivalent medium used for the device measurements. When both head and body tissue-equivalent media are required for SAR measurements in a frequency band, the variability measurement procedures should be applied to the tissue medium with the highest measured SAR, using the highest measured SAR configuration for that tissue-equivalent medium.

The following procedures are applied to determine if repeated measurements are required.

- 1) Repeated measurement is not required when the original highest measured SAR is  $< 0.80$  W/kg; steps 2) through 4) do not apply.
- 2) When the original highest measured SAR is  $\geq 0.80$  W/kg, repeat that measurement once.
- 3) Perform a second repeated measurement only if the ratio of largest to smallest SAR for the original and first repeated measurements is  $> 1.20$  or when the original or repeated measurement is  $\geq 1.45$  W/kg ( $\sim 10\%$  from the 1-g SAR limit).
- 4) Perform a third repeated measurement only if the original, first or second repeated measurement is  $\geq 1.5$  W/kg and the ratio of largest to smallest SAR for the original, first and second repeated measurements is  $> 1.20$

## 16 Measurement Uncertainty

### 16.1 Measurement Uncertainty for Normal SAR Tests (300MHz~3GHz)

| No.                        | Error Description                               | Type | Uncertainty value | Probably Distribution | Div.       | (Ci) 1g | (Ci) 10g | Std. Unc. (1g) | Std. Unc. (10g) | Degree of freedom |
|----------------------------|-------------------------------------------------|------|-------------------|-----------------------|------------|---------|----------|----------------|-----------------|-------------------|
| <b>Measurement system</b>  |                                                 |      |                   |                       |            |         |          |                |                 |                   |
| 1                          | Probe calibration                               | B    | 6.0               | N                     | 1          | 1       | 1        | 6.0            | 6.0             | $\infty$          |
| 2                          | Isotropy                                        | B    | 4.7               | R                     | $\sqrt{3}$ | 0.7     | 0.7      | 1.9            | 1.9             | $\infty$          |
| 3                          | Boundary effect                                 | B    | 1.0               | R                     | $\sqrt{3}$ | 1       | 1        | 0.6            | 0.6             | $\infty$          |
| 4                          | Linearity                                       | B    | 4.7               | R                     | $\sqrt{3}$ | 1       | 1        | 2.7            | 2.7             | $\infty$          |
| 5                          | Detection limit                                 | B    | 1.0               | N                     | 1          | 1       | 1        | 0.6            | 0.6             | $\infty$          |
| 6                          | Readout electronics                             | B    | 0.3               | R                     | $\sqrt{3}$ | 1       | 1        | 0.3            | 0.3             | $\infty$          |
| 7                          | Response time                                   | B    | 0.8               | R                     | $\sqrt{3}$ | 1       | 1        | 0.5            | 0.5             | $\infty$          |
| 8                          | Integration time                                | B    | 2.6               | R                     | $\sqrt{3}$ | 1       | 1        | 1.5            | 1.5             | $\infty$          |
| 9                          | RF ambient conditions-noise                     | B    | 0                 | R                     | $\sqrt{3}$ | 1       | 1        | 0              | 0               | $\infty$          |
| 10                         | RF ambient conditions-reflection                | B    | 0                 | R                     | $\sqrt{3}$ | 1       | 1        | 0              | 0               | $\infty$          |
| 11                         | Probe positioned mech. restrictions             | B    | 0.4               | R                     | $\sqrt{3}$ | 1       | 1        | 0.2            | 0.2             | $\infty$          |
| 12                         | Probe positioning with respect to phantom shell | B    | 2.9               | R                     | $\sqrt{3}$ | 1       | 1        | 1.7            | 1.7             | $\infty$          |
| 13                         | Post-processing                                 | B    | 1.0               | R                     | $\sqrt{3}$ | 1       | 1        | 0.6            | 0.6             | $\infty$          |
| <b>Test sample related</b> |                                                 |      |                   |                       |            |         |          |                |                 |                   |
| 14                         | Test sample positioning                         | A    | 3.3               | N                     | 1          | 1       | 1        | 3.3            | 3.3             | 71                |
| 15                         | Device holder uncertainty                       | A    | 3.4               | N                     | 1          | 1       | 1        | 3.4            | 3.4             | 5                 |
| 16                         | Drift of output power                           | B    | 5.0               | R                     | $\sqrt{3}$ | 1       | 1        | 2.9            | 2.9             | $\infty$          |
| <b>Phantom and set-up</b>  |                                                 |      |                   |                       |            |         |          |                |                 |                   |
| 17                         | Phantom uncertainty                             | B    | 4.0               | R                     | $\sqrt{3}$ | 1       | 1        | 2.3            | 2.3             | $\infty$          |
| 18                         | Liquid conductivity (target)                    | B    | 5.0               | R                     | $\sqrt{3}$ | 0.64    | 0.43     | 1.8            | 1.2             | $\infty$          |
| 19                         | Liquid conductivity (meas.)                     | A    | 2.06              | N                     | 1          | 0.64    | 0.43     | 1.32           | 0.89            | 43                |
| 20                         | Liquid permittivity (target)                    | B    | 5.0               | R                     | $\sqrt{3}$ | 0.6     | 0.49     | 1.7            | 1.4             | $\infty$          |
| 21                         | Liquid permittivity (meas.)                     | A    | 1.6               | N                     | 1          | 0.6     | 0.49     | 1.0            | 0.8             | 521               |

|                                                    |                                             |  |  |  |  |      |      |     |
|----------------------------------------------------|---------------------------------------------|--|--|--|--|------|------|-----|
| Combined standard uncertainty                      | $u_c' = \sqrt{\sum_{i=1}^{21} c_i^2 u_i^2}$ |  |  |  |  | 9.55 | 9.43 | 257 |
| Expanded uncertainty (confidence interval of 95 %) | $u_e = 2u_c$                                |  |  |  |  | 19.1 | 18.9 |     |

### 16.2 Measurement Uncertainty for Fast SAR Tests (300MHz~3GHz)

| No.                        | Error Description                               | Type | Uncertainty value | Probably Distribution | Div.       | (Ci) 1g | (Ci) 10g | Std. Unc. (1g) | Std. Unc. (10g) | Degree of freedom |
|----------------------------|-------------------------------------------------|------|-------------------|-----------------------|------------|---------|----------|----------------|-----------------|-------------------|
| <b>Measurement system</b>  |                                                 |      |                   |                       |            |         |          |                |                 |                   |
| 1                          | Probe calibration                               | B    | 6.0               | N                     | 1          | 1       | 1        | 6.0            | 6.0             | $\infty$          |
| 2                          | Isotropy                                        | B    | 4.7               | R                     | $\sqrt{3}$ | 0.7     | 0.7      | 1.9            | 1.9             | $\infty$          |
| 3                          | Boundary effect                                 | B    | 1.0               | R                     | $\sqrt{3}$ | 1       | 1        | 0.6            | 0.6             | $\infty$          |
| 4                          | Linearity                                       | B    | 4.7               | R                     | $\sqrt{3}$ | 1       | 1        | 2.7            | 2.7             | $\infty$          |
| 5                          | Detection limit                                 | B    | 1.0               | R                     | $\sqrt{3}$ | 1       | 1        | 0.6            | 0.6             | $\infty$          |
| 6                          | Readout electronics                             | B    | 0.3               | R                     | $\sqrt{3}$ | 1       | 1        | 0.3            | 0.3             | $\infty$          |
| 7                          | Response time                                   | B    | 0.8               | R                     | $\sqrt{3}$ | 1       | 1        | 0.5            | 0.5             | $\infty$          |
| 8                          | Integration time                                | B    | 2.6               | R                     | $\sqrt{3}$ | 1       | 1        | 1.5            | 1.5             | $\infty$          |
| 9                          | RF ambient conditions-noise                     | B    | 0                 | R                     | $\sqrt{3}$ | 1       | 1        | 0              | 0               | $\infty$          |
| 10                         | RFambient conditions-reflection                 | B    | 0                 | R                     | $\sqrt{3}$ | 1       | 1        | 0              | 0               | $\infty$          |
| 11                         | Probe positioned mech. Restrictions             | B    | 0.4               | R                     | $\sqrt{3}$ | 1       | 1        | 0.2            | 0.2             | $\infty$          |
| 12                         | Probe positioning with respect to phantom shell | B    | 2.9               | R                     | $\sqrt{3}$ | 1       | 1        | 1.7            | 1.7             | $\infty$          |
| 13                         | Post-processing                                 | B    | 1.0               | R                     | $\sqrt{3}$ | 1       | 1        | 0.6            | 0.6             | $\infty$          |
| 14                         | Fast SAR z-Approximation                        | B    | 7.0               | R                     | $\sqrt{3}$ | 1       | 1        | 4.0            | 4.0             | $\infty$          |
| <b>Test sample related</b> |                                                 |      |                   |                       |            |         |          |                |                 |                   |
| 15                         | Test sample positioning                         | A    | 3.3               | N                     | 1          | 1       | 1        | 3.3            | 3.3             | 71                |
| 16                         | Device holder uncertainty                       | A    | 3.4               | N                     | 1          | 1       | 1        | 3.4            | 3.4             | 5                 |
| 17                         | Drift of output power                           | B    | 5.0               | R                     | $\sqrt{3}$ | 1       | 1        | 2.9            | 2.9             | $\infty$          |
| <b>Phantom and set-up</b>  |                                                 |      |                   |                       |            |         |          |                |                 |                   |
| 18                         | Phantom uncertainty                             | B    | 4.0               | R                     | $\sqrt{3}$ | 1       | 1        | 2.3            | 2.3             | $\infty$          |
| 19                         | Liquid conductivity (target)                    | B    | 5.0               | R                     | $\sqrt{3}$ | 0.64    | 0.43     | 1.8            | 1.2             | $\infty$          |
| 20                         | Liquid conductivity (meas.)                     | A    | 2.06              | N                     | 1          | 0.64    | 0.43     | 1.32           | 0.89            | 43                |

|                                                    |                              |                                             |     |   |            |     |      |      |      |          |
|----------------------------------------------------|------------------------------|---------------------------------------------|-----|---|------------|-----|------|------|------|----------|
| 21                                                 | Liquid permittivity (target) | B                                           | 5.0 | R | $\sqrt{3}$ | 0.6 | 0.49 | 1.7  | 1.4  | $\infty$ |
| 22                                                 | Liquid permittivity (meas.)  | A                                           | 1.6 | N | 1          | 0.6 | 0.49 | 1.0  | 0.8  | 521      |
| Combined standard uncertainty                      |                              | $u_c' = \sqrt{\sum_{i=1}^{22} c_i^2 u_i^2}$ |     |   |            |     |      | 10.4 | 10.3 | 257      |
| Expanded uncertainty (confidence interval of 95 %) |                              | $u_e = 2u_c$                                |     |   |            |     |      | 20.8 | 20.6 |          |

## 17 MAIN TEST INSTRUMENTS

**Table 17.1: List of Main Instruments**

| No. | Name                  | Type          | Serial Number | Calibration Date         | Valid Period |
|-----|-----------------------|---------------|---------------|--------------------------|--------------|
| 01  | Network analyzer      | E5071C        | MY46110673    | January 4, 2022          | One year     |
| 02  | Power meter           | NRP110T       | 101139        | January 13, 2022         | One year     |
| 03  | Power sensor          | NRP110T       | 101159        |                          |              |
| 04  | Signal Generator      | E4438C        | MY49071430    | January 13, 2022         | One Year     |
| 05  | Amplifier             | 60S1G4        | 0331848       | No Calibration Requested |              |
| 06  | BTS                   | CMW500        | 159890        | January 24, 2022         | One year     |
| 07  | E-field Probe         | SPEAG EX3DV4  | 7517          | January 19, 2022         | One year     |
| 08  | DAE                   | SPEAG DAE4    | 1525          | September 15, 2022       | One year     |
| 09  | Dipole Validation Kit | SPEAG D750V3  | 1017          | July 20, 2022            | One year     |
| 10  | Dipole Validation Kit | SPEAG D900V2  | 1d051         | July 26, 2022            | One year     |
| 11  | Dipole Validation Kit | SPEAG D1800V2 | 2d145         | July 18, 2022            | One year     |
| 12  | Dipole Validation Kit | SPEAG D1900V2 | 5d101         | July 26, 2022            | One year     |
| 13  | Dipole Validation Kit | SPEAG D2450V2 | 853           | July 20, 2022            | One year     |
| 14  | Dipole Validation Kit | SPEAG D2600V2 | 1012          | July 20, 2022            | One year     |

\*\*\*END OF REPORT BODY\*\*\*

## **Appendixes**

Refer to separated files for the following appendixes

**ANNEX A Graph Results**

**ANNEX B System Verification Results**

**ANNEX C SAR Measurement Setup**

**ANNEX D Position of the wireless device in relation to the phantom**

**ANNEX E Equivalent Media Recipes**

**ANNEX F System Validation**

**ANNEX G Probe Calibration Certificate**

**ANNEX H Dipole Calibration Certificate**

**ANNEX I Accreditation Certificate**