



TEST REPORT

No. I19D00091-SAR01

For

Client: Datalogic S.r.l.

Production: Smartphone

Model Name: MEMOR 10

Brand Name: Datalogic

FCC ID: U4GDL35US

Hardware Version: V00 (US)

Software Version: 2.00.05.20190726

Issued date: 2019-09-09

NOTE

1. The test results in this test report relate only to the devices specified in this report.
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3. KDB has not been approved by A2LA.
4. For the test results, the uncertainty of measurement is not taken into account when judging the compliance with specification, and the results of measurement or the average value of measurement results are taken as the criterion of the compliance with specification directly.

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Revision Version

| Report Number | Revision | Date | Memo |
|-----------------|----------|------------|---------------------------------|
| I19D00091-SAR01 | 00 | 2019-09-05 | Initial creation of test report |
| I19D00091-SAR01 | 01 | 2019-09-09 | Second creation of test report |

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1. Test Laboratory

1.1. Testing Location

| | |
|----------------------|---|
| Company Name: | ECIT Shanghai, East China Institute of Telecommunications |
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| Telephone: | (+86)-021-63843300 |
| Fax: | (+86)-021-63843301 |
| FCC registration No: | 958356 |

1.2. Testing Environment

| | |
|-----------------------------|--------------|
| Normal Temperature: | 18-25℃ |
| Relative Humidity: | 25-75% |
| Ambient noise & Reflection: | < 0.012 W/kg |

1.3. Project Data

| | |
|---------------------|------------|
| Project Leader: | Yu Anlu |
| Testing Start Date: | 2019-07-28 |
| Testing End Date: | 2019-08-03 |

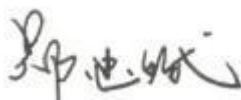
1.4. Signature



Yan Hang
(Prepared this test report)



Fu Erliang
(Reviewed this test report)



Zheng Zhongbin
(Approved this test report)

2. Statement of Compliance

The maximum results of Specific Absorption Rate (SAR) found during testing for **MEMOR 10** are as follows .

Table 2.1: Max. Reported SAR (1g)

| Band | SAR 1g(W/Kg) | | |
|-------------|-----------------|-------------------------|-------------------------|
| | Head | Body worn(10mm) | Hotspot(10mm) |
| GSM 850 | 0.248(Original) | 0.607(Current) | 0.607(Current) |
| GSM 1900 | 0.509(Original) | 0.563(Original) | 1.106(Original) |
| WCDMA Band2 | 0.313(Original) | 0.478(Original) | 0.526(Original) |
| WCDMA Band4 | 0.454(Original) | 0.663(Original) | 0.663(Original) |
| WCDMA Band5 | 0.210(Original) | 0.293(Current) | 0.293(Current) |
| CDMA BC0 | 0.278(Original) | 0.441(Original) | 0.441(Original) |
| CDMA BC1 | 0.412(Original) | 0.715(Original) | 1.499(Current) |
| LTE Band4 | 0.801(Original) | 1.172(Original) | 1.172(Original) |
| LTE Band5 | 0.226(Original) | 0.324(Original) | 0.324(Original) |
| LTE Band7 | 0.029(Original) | 0.311(Original) | 1.245(Current) |
| LTE Band12 | 0.165(Original) | 0.225(Original) | 0.225(Original) |
| LTE Band13 | 0.216(Original) | 0.324(Original) | 0.324(Original) |
| LTE Band25 | 0.507(Original) | 0.787(Original) | 1.283(Original) |
| LTE Band26 | 0.189(Original) | 0.224(Current) | 0.224(Current) |
| 2.4G WiFi | 0.357(Original) | 0.340(Original) | 0.491(Original) |
| 5G WiFi | 0.770(Original) | 0.762(Original) | -- |

Table 2.2: Max. Reported SAR (10g)

| Band | Position/Distance | SAR 10g (W/Kg) |
|-------------|-------------------|-------------------------|
| GSM 850 | Limb | 1.851(Current) |
| GSM 1900 | Limb | 0.917(Current) |
| WCDMA Band2 | Limb | 1.063(Current) |
| WCDMA Band4 | Limb | 1.26(Original) |
| WCDMA Band5 | Limb | 0.742(Current) |
| CDMA BC0 | Limb | 1.187(Original) |
| CDMA BC1 | Limb | 1.993(Current) |
| LTE Band4 | Limb | 2.052(Original) |
| LTE Band5 | Limb | 0.732(Current) |
| LTE Band7 | Limb | 0.935(Current) |
| LTE Band12 | Limb | 0.484(Current) |
| LTE Band13 | Limb | 0.539(Current) |
| LTE Band25 | Limb | 1.647(Original) |

| | | |
|------------|------|-------------------------|
| LTE Band26 | Limb | 0.756(Current) |
| 2.4G WiFi | Limb | 0.964(Original) |
| 5G WiFi | Limb | 0.901(Original) |

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, 4.0 W/Kg as averaged over any 10g tissue according to the ANSI C95.1-1999.

For body worn operation, this device has been tested and meets FCC RF exposure guidelines when used with any accessory that contains no metal. Use of other accessories may not ensure compliance with FCC RF exposure guidelines.

Note: Original 5G test results are obtained from the **TA Technology (Shanghai) Co., Ltd.** Report and report No. is **R1807A0326-S1V6**.

Note: The **MEMOR 10**, supporting GSM/WCDMA/LTE/WLAN, manufactured by **Datalogic S.r.l.** is a variant product for testing. According to the Product Change Description, SAR test is only required in worse case. Test data are reflected from test report **I18D00022-SAR01**, which is the test report for the initial product.

Table 2.3: Simultaneous SAR

| Simultaneous multi-band transmission | | | | | | | | | | |
|--------------------------------------|--------------|----------|----------------------------|--------------------|-------|--------|-------|-------|--------------------|--------------------|
| Test Position | | | 2G | 3G | 4G | 2.4GHz | | 5GHz | SUM | |
| | | | | | | BT | WiFi | WiFi | 2.4GHz | 5GHz |
| Head(1g) | Left | Cheek | 0.509 | 0.454 | 0.801 | 0.133 | 0.357 | 0.747 | 1.158 | 1.548 |
| | | Tilt 15° | 0.141 | 0.192 | 0.277 | 0.133 | 0.251 | 0.58 | 0.528 | 0.857 |
| | Right | Cheek | 0.248 | 0.412 | 0.509 | 0.133 | 0.155 | 0.737 | 0.664 | 1.246 |
| | | Tilt 15° | 0.151 | 0.191 | 0.205 | 0.133 | 0.126 | 0.617 | 0.331 | 0.822 |
| Hotspot &Body-worn 10 mm(1g) | Phantom Side | | 0.607 (Current) | 0.714 | 1.172 | 0.066 | 0.105 | 0.396 | 1.277 | 1.568 |
| | Ground Side | | 0.526 | 0.715 | 0.854 | 0.066 | 0.340 | 0.737 | 1.194 | 1.591 |
| Hotspot 10 mm(1g) | Left Side | | 0.306 | 0.418 | 0.599 | 0.066 | 0.007 | -- | 0.606 | 0.599 |
| | Right Side | | 0.391 | 0.441 | 0.363 | 0.066 | 0.491 | 0.762 | 0.932 | 1.203 |
| | Top Side | | -- | -- | | 0.066 | 0.141 | 0.491 | 0.141 | 0.491 |
| | Bottom Side | | 1.106 | 1.499 (Current) | 1.283 | 0.066 | -- | -- | 1.565 (Current) | 1.499 (Current) |
| Limb (10g) | -- | | 1.851 (Current) | 1.993 (Current) | 2.052 | 0.027 | 0.964 | 0.901 | 3.016 | 2.953 |

According to the above table, the maximum sum of reported SAR values for GSM/WCDMA/LTE/CDMA and BT/WiFi is **1.591 W/kg** (1g). GSM/WCDMA/LTE/CDMA and BT/WiFi is **3.016 W/kg** (10g)

3. Client Information

3.1. Applicant Information

Company Name: Datalogic S.r.l.
Address: Via San Vitalino no. 13, Calderara di Reno - 40012 (BO) - Italy
Telephone: +39 051 314 72 16
Postcode: /

3.2. Manufacturer Information

Company Name: Datalogic S.r.l.
Address: Via San Vitalino no. 13, Calderara di Reno - 40012 (BO) - Italy
Telephone: +39 051 314 72 16
Postcode: /

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

4.1. About EUT

| | |
|-------------------------------------|--|
| Description: | Smartphone |
| Model name: | MEMOR 10 |
| Operation Model(s): | GSM850/GSM900/GSM1800/GSM1900 WCDMA Band I/Band II/Band IV/Band V/BandVIII LTE 2/4/5/7/12/13/17/25/26;CDMA BC0/BC1 BT4.2,BLE;WiFi 802.11a,b,g,n,ac GPS;GLONASS;Beidou;WLC |
| Tx Frequency: | 824.2-848.8MHz(GSM850) 1850.2-1909.8MHz (GSM1900) 1852.4-1907.6 MHz (WCDMA Band II) 1712.4-1752.6 MHz (WCDMA Band IV) 826.4-846.6MHz (WCDMA Band V) 1850.7 -1909.3 MHz (LTE Band 2) 1710.7 -1754.3 MHz (LTE Band 4) 824.7 -848.3 MHz (LTE Band 5) 2502.5 – 2567.5 MHz (LTE Band 7) 699.7 -715.3 MHz (LTE Band 12) 779.7 -784.5 MHz (LTE Band 13) 706.5 -713.5 MHz (LTE Band 17) 1850.7 -1914.3 MHz (LTE Band 25) 814.7 -848.3 MHz (LTE Band 26) 824.7-848.31MHz(CDMA BC0) 1851.25-1908.75MHz(CDMA BC1) 2412- 2462 MHz (WiFi) 5150~5250 MHz(U-NII-1) 5250~5350 MHz(U-NII-2A) 5470~5725 MHz(U-NII-2C) 5745~5825 MHz(U-NII-3) 2402 – 2480 MHz (BT) |
| Test device Production information: | Production unit |
| GPRS/EGPRS Class Mode: | B |
| GPRS/ EGPRS Multislot Class: | 12 |
| Device type: | Portable device |
| UE category: | 3 |
| Antenna type: | Inner antenna |
| Accessories/Body-worn | Battery |

| | |
|---|---------------|
| configurations: | |
| Dimensions: | 155x78x18.7mm |
| Hotspot Mode: | Support |
| The EUT SAR Test without the charging battery cover is not applicable since no way to have this battery cover removed and replaced by normal battery cover. | |

4.2. Internal Identification of EUT used during the test

| EUT ID* | SN or IMEI | HW Version | SW Version | Receive Date |
|---------|-----------------|------------|------------------|--------------|
| N14 | 359737090084215 | V00 (US) | 2.00.05.20190726 | 2019-07-25 |

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

4.3. Internal Identification of AE used during the test

| AE ID* | Description | Model | SN | Manufacturer |
|--------|-------------|-------|-----|--------------|
| BA03 | Battery | N/A | N/A | N/A |

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

Battery using wireless charging battery cover.

5. TEST METHODOLOGY

5.1. Applicable Limit Regulations

ANSI C95.1–1999: 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 and **4.0 W/kg** as averaged over any 10 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 Body Due to Wireless Communications Devices:

Experimental Techniques.

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

KDB248227 D01 802.11 WiFi SAR v02r02: SAR measurement procedures for 802.112abg transmitters.

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

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: provides general reporting requirements as well as certain specific information required to support MPE and SAR compliance.

KDB941225 D01 3G SAR Procedures v03r01: 3G SAR Measurement Procedures.

KDB 941225 D05 SAR for LTE Devices v02r04: SAR Evaluation Considerations for LTE Devices

KDB 648474 D03 Wireless Chargers Battery Cover v01r04: Evaluation and approval considerations for handsets with specific wireless charging battery covers

KDB941225 D06 hotspot SAR v02r01: SAR Evaluation Procedures for Portable Devices with Wireless Router Capabilities.

NOTE: KDB is not in A2LA Scope List.

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 (ρ). 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, δT is the temperature rise and δt is the exposure duration, or related to the electrical field in the tissue by

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

Where: σ is the conductivity of the tissue, ρ 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

Table 7.1: Targets for tissue simulating liquid

| Frequency(MHz) | Liquid Type | Conductivity(σ) | $\pm 5\%$ Range | Permittivity(ϵ) | $\pm 5\%$ Range |
|----------------|-------------|--------------------------|-----------------|----------------------------|-----------------|
| 835 | Head | 0.90 | 0.86~0.95 | 41.5 | 39.4~43.6 |
| 835 | Body | 0.97 | 0.92~1.02 | 55.2 | 52.4~58.0 |
| 1800 | Head | 1.40 | 1.33~1.47 | 40.0 | 38.0~42.0 |
| 1800 | Body | 1.52 | 1.44~1.60 | 53.3 | 50.6~56.0 |
| 1900 | Head | 1.40 | 1.33~1.47 | 40.0 | 38.0~42.0 |
| 1900 | Body | 1.52 | 1.44~1.60 | 53.3 | 50.6~56.0 |
| 2450 | Head | 1.80 | 1.71~1.89 | 39.2 | 37.2~41.2 |
| 2450 | Body | 1.95 | 1.85~2.05 | 52.7 | 50.1~55.3 |
| 2600 | Head | 1.96 | 1.86~2.06 | 39.0 | 37.1~40.9 |
| 2600 | Body | 2.16 | 2.05~2.27 | 52.5 | 50.9~55.1 |
| 5200 | Head | 4.66 | 4.43~4.89 | 36.0 | 34.2~37.8 |
| 5200 | Body | 5.30 | 5.04~5.57 | 49.0 | 46.6~51.5 |
| 5800 | Head | 5.27 | 5.01~5.53 | 35.3 | 33.5~37.1 |
| 5800 | Body | 6.00 | 5.70~6.30 | 48.2 | 45.8~50.6 |

7.2. Dielectric Performance

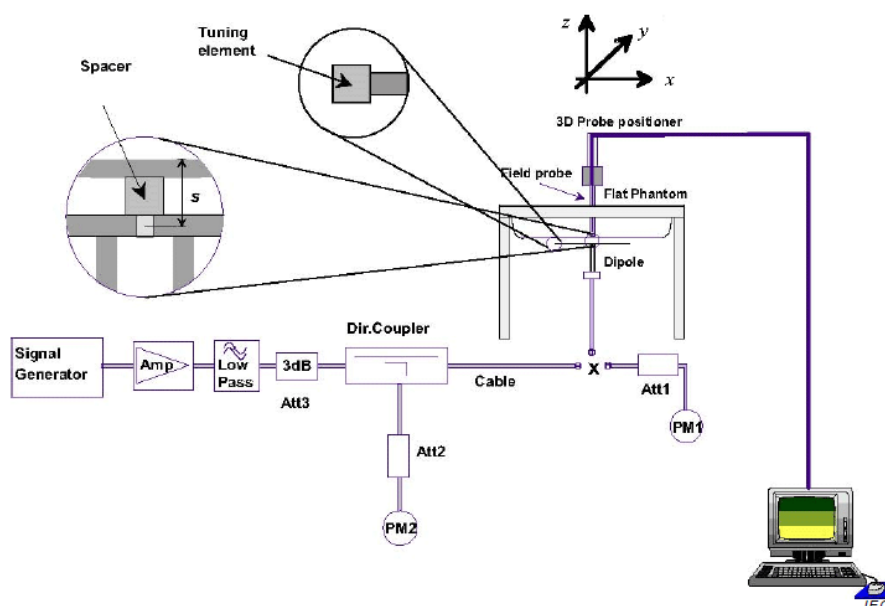
Table 7.2: Dielectric Performance of Tissue Simulating Liquid

| Measurement Value | | | | | | |
|-----------------------------|-----------|-------------------------|-----------|-----------------------|-----------|-----------|
| Liquid Temperature: 22.5 °C | | | | | | |
| Type | Frequency | Permittivity ϵ | Drift (%) | Conductivity σ | Drift (%) | Test Date |
| Body | 750 MHz | 57.696 | 3.96% | 0.965 | 0.52% | 2019/7/28 |
| Body | 835 MHz | 56.715 | 2.74% | 0.998 | 2.89% | 2019/7/29 |
| Body | 1800 MHz | 54.985 | 3.16% | 1.488 | -2.11% | 2019/7/30 |
| Body | 1900 MHz | 51.929 | -2.57% | 1.550 | 1.97% | 2019/7/31 |
| Body | 2450 MHz | 54.120 | 2.69% | 1.932 | -0.92% | 2019/8/1 |
| Body | 2600 MHz | 51.750 | -1.43% | 2.084 | -3.52% | 2019/8/2 |
| Head | 5500 MHz | 36.592 | 2.79% | 4.970 | 0.20% | 2019/8/3 |
| Body | 5500 MHz | 49.486 | 1.82% | 5.657 | 0.12% | 2019/8/3 |
| Body | 5800 MHz | 48.844 | 1.34% | 6.090 | 1.50% | 2019/8/3 |

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 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 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.

Table 8.1: System Verification

| Verification Results | | | | | | | | |
|-----------------------|-----------|---------------------|-------------|-----------------------|-------------|--------------|-------------|-----------|
| Input power level: 1W | | | | | | | | |
| Type | Frequency | Target value (W/kg) | | Measured value (W/kg) | | Deviation | | Test date |
| | | 10 g Average | 1 g Average | 10 g Average | 1 g Average | 10 g Average | 1 g Average | |
| Body | 750 MHz | 5.7 | 8.55 | 5.68 | 8.44 | -0.35% | -1.29% | 2019/7/28 |
| Body | 835 MHz | 6.4 | 9.75 | 6.64 | 10.16 | 3.75% | 4.21% | 2019/7/29 |
| Body | 1750 MHz | 19.9 | 37.4 | 19.92 | 36.6 | 0.10% | -2.14% | 2019/7/30 |
| Body | 1900 MHz | 21.2 | 40.4 | 21.64 | 41.6 | 2.08% | 2.97% | 2019/7/31 |
| Body | 2450 MHz | 23.5 | 50.5 | 24.28 | 53.6 | 3.32% | 6.14% | 2019/8/1 |
| Body | 2600 MHz | 24.1 | 54.3 | 23.56 | 54.4 | -2.24% | 0.18% | 2019/8/2 |
| Head | 5500MHz | 22.6 | 80 | 21.5 | 77.1 | -4.87% | -3.63% | 2019/8/3 |
| Body | 5500 MHz | 21.4 | 77.1 | 21.5 | 77.6 | 0.47% | 0.65% | 2019/8/3 |
| Body | 5800 MHz | 20.2 | 72.6 | 20 | 72.6 | -0.99% | 0.00% | 2019/8/3 |

9. Measurement Procedures

9.1. Tests to be performed

According to the SAR test standard, the recommended procedure for assessing the peak spatial-average SAR value consists of the following steps:

- (a) Power reference measurement
- (b) Area scan
- (c) Zoom scan
- (d) Power drift measurement

The SAR measurement procedures for each of test conditions are as follows:

- (a) Make EUT to transmit its maximum output power
- (b) Measure conducted output power through RF cable
- (c) Place the EUT in the specific position of phantom as Appendix D demonstrates.
- (d) Measure SAR results for Middle channel or the highest power channel on each testing position.
- (e) Measure SAR results for other channels in worst SAR testing position if the reported SAR of highest power channel is larger than 0.8 W/kg
- (f) Record the SAR value

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 Std 1528-2013. 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.

| | | | ≤ 3 GHz | > 3 GHz |
|---|------------------------------------|--|--|---|
| Maximum distance from closest measurement point (geometric center of probe sensors) to phantom surface | | | 5 mm \pm 1 mm | $\frac{1}{2} \cdot \delta \cdot \ln(2)$ mm \pm 0.5 mm |
| Maximum probe angle from probe axis to phantom surface normal at the measurement location | | | 30° \pm 1° | 20° \pm 1° |
| Maximum area scan spatial resolution: Δx_{Area} , Δy_{Area} | | | ≤ 2 GHz: ≤ 15 mm 2 – 3 GHz: ≤ 12 mm | 3 – 4 GHz: ≤ 12 mm 4 – 6 GHz: ≤ 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: Δx_{Zoom} , Δy_{Zoom} | | | ≤ 2 GHz: ≤ 8 mm 2 – 3 GHz: ≤ 5 mm* | 3 – 4 GHz: ≤ 5 mm* 4 – 6 GHz: ≤ 4 mm* |
| Maximum zoom scan spatial resolution, normal to phantom surface | uniform grid: $\Delta z_{Zoom}(n)$ | | ≤ 5 mm | 3 – 4 GHz: ≤ 4 mm 4 – 5 GHz: ≤ 3 mm 5 – 6 GHz: ≤ 2 mm |
| | graded grid | $\Delta z_{Zoom}(1)$: between 1 st two points closest to phantom surface | ≤ 4 mm | 3 – 4 GHz: ≤ 3 mm 4 – 5 GHz: ≤ 2.5 mm 5 – 6 GHz: ≤ 2 mm |
| | | $\Delta z_{Zoom}(n>1)$: between subsequent points | $\leq 1.5 \cdot \Delta z_{Zoom}(n-1)$ mm | |
| Minimum zoom scan volume | x, y, z | | ≥ 30 mm | 3 – 4 GHz: ≥ 28 mm 4 – 5 GHz: ≥ 25 mm 5 – 6 GHz: ≥ 22 mm |
| Note: δ is the penetration depth of a plane-wave at normal incidence to the tissue medium; see IEEE Std 1528-2013 for details. | | | | |
| * When zoom scan is required and the <u>reported</u> SAR from the <i>area scan based 1-g SAR estimation</i> procedures of KDB Publication 447498 is ≤ 1.4 W/kg, ≤ 8 mm, ≤ 7 mm and ≤ 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_n), 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 | β_c | β_d | β_d (SF) | β_c / β_d | β_{hs} | CM/dB | MPR (dB) |
|----------|-----------|-----------|----------------|---------------------|--------------|-------|----------|
| 1 | 2/15 | 15/15 | 64 | 2/15 | 4/15 | 1.5 | 0.5 |
| 2 | 12/15 | 15/15 | 64 | 12/15 | 24/25 | 2.0 | 1 |
| 3 | 15/15 | 8/15 | 64 | 15/8 | 30/15 | 2.0 | 1 |
| 4 | 15/15 | 4/15 | 64 | 15/4 | 30/15 | 2.0 | 1 |

For Release 6 HSUPA Data Devices

| Sub-test | β_c | β_d | β_d (SF) | β_c / β_d | β_{hs} | β_{ec} | β_{ed} | β_{ed} (SF) | β_{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 | 2.0 | 1.0 | 20 | 75 |
| 2 | 6/15 | 15/15 | 64 | 6/15 | 12/15 | 12/15 | 12/15 | 4 | 1 | 3.0 | 2.0 | 12 | 67 |
| 3 | 15/15 | 9/15 | 64 | 15/9 | 30/15 | 30/15 | $\beta_{ed1}:47/15$ $\beta_{ed2}:47/15$ | 4 | 2 | 3.0 | 2.0 | 15 | 92 |
| 4 | 2/15 | 15/15 | 64 | 2/15 | 4/15 | 4/15 | 56/75 | 4 | 1 | 2.0 | 1.0 | 17 | 71 |
| 5 | 15/15 | 15/15 | 64 | 15/15 | 24/15 | 30/15 | 134/15 | 4 | 1 | 2.0 | 1.0 | 21 | 81 |

9.4. Bluetooth & WiFi 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.

9.5. Power Drift

To control the output power stability during the SAR test, DASY4 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 Section 13 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 v06, when the implementation is based the specific polynomial fit algorithm as presented at the 29th Bioelectromagnetics Society meeting (2007) and the estimated 1-g SAR is ≤ 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

11.1. Manufacturing toleranc

Table 11.1: GSM Speech

| GSM 850 | | | |
|----------------------------|-------------|-------------|-------------|
| Channel | Channel 128 | Channel 190 | Channel 251 |
| Maximum Target Value (dBm) | 34.0 | 34.0 | 34.0 |
| GSM1900 | | | |
| Channel | Channel 512 | Channel 661 | Channel 810 |
| Maximum Target Value (dBm) | 31.5 | 31.5 | 31.5 |

Table 11.2: GPRS (GMSK Modulation)

| GSM 850 | | | | |
|-----------|----------------------------|------|------|------|
| Channel | | 128 | 190 | 251 |
| 1 Txslots | Maximum Target Value (dBm) | 34.0 | 34.0 | 34.0 |
| 2 Txslots | Maximum Target Value (dBm) | 33.5 | 33.5 | 33.5 |
| 3 Txslots | Maximum Target Value (dBm) | 31.5 | 31.5 | 31.5 |
| 4 Txslots | Maximum Target Value (dBm) | 30.5 | 30.5 | 30.5 |
| GSM 1900 | | | | |
| Channel | | 512 | 661 | 810 |
| 1 Txslots | Maximum Target Value (dBm) | 31.5 | 31.5 | 31.5 |
| 2 Txslots | Maximum Target Value (dBm) | 30.5 | 30.5 | 30.5 |
| 3 Txslots | Maximum Target Value (dBm) | 29.0 | 29.0 | 29.0 |
| 4 Txslots | Maximum Target Value (dBm) | 27.5 | 27.5 | 27.5 |

Table 11.3: EGPRS (8-PSK Modulation)

| GSM 850 | | | | |
|-----------|----------------------------|------|------|------|
| Channel | | 128 | 190 | 251 |
| 1 Txslots | Maximum Target Value (dBm) | 28.0 | 28.0 | 28.0 |
| 2 Txslots | Maximum Target Value (dBm) | 27.0 | 27.0 | 27.0 |
| 3 Txslots | Maximum Target Value (dBm) | 25.0 | 25.0 | 25.0 |
| 4 Txslots | Maximum Target Value (dBm) | 24.0 | 24.0 | 24.0 |
| GSM 1900 | | | | |
| Channel | | 512 | 661 | 810 |
| 1 Txslots | Maximum Target Value (dBm) | 27.5 | 27.5 | 27.5 |
| 2 Txslots | Maximum Target Value (dBm) | 26.5 | 26.5 | 26.5 |
| 3 Txslots | Maximum Target Value (dBm) | 24.0 | 24.0 | 24.0 |
| 4 Txslots | Maximum Target Value (dBm) | 23.5 | 23.5 | 23.5 |

Table 11.4: WCDMA

| WCDMA Band II | | | |
|----------------------------|--------------|--------------|--------------|
| Channel | Channel 9262 | Channel 9400 | Channel 9538 |
| Maximum Target Value (dBm) | 24 | 24 | 24 |

| WCDMA Band II HSDPA | | | | | MPR (dB) |
|---------------------|----------------------------|------|------|------|----------|
| Channel | | 9262 | 9400 | 9538 | |
| 1 | Maximum Target Value (dBm) | 23 | 23 | 23 | 0 |
| 2 | Maximum Target Value (dBm) | 23 | 23 | 23 | 1 |
| 3 | Maximum Target Value (dBm) | 23 | 23 | 23 | 1 |
| 4 | Maximum Target Value (dBm) | 23 | 23 | 23 | 1 |
| WCDMA Band II HSUPA | | | | | MPR (dB) |
| Channel | | 9262 | 9400 | 9538 | |
| 1 | Maximum Target Value (dBm) | 22.5 | 22.5 | 22.5 | 1 |
| 2 | Maximum Target Value (dBm) | 22.5 | 22.5 | 22.5 | 0 |
| 3 | Maximum Target Value (dBm) | 22.5 | 22.5 | 22.5 | 1 |
| 4 | Maximum Target Value (dBm) | 22.5 | 22.5 | 22.5 | 1 |
| 5 | Maximum Target Value (dBm) | 22.5 | 22.5 | 22.5 | 1 |

Table 11.5: WCDMA

| WCDMA Band IV | | | |
|----------------------------|------|------|------|
| Channel | 1312 | 1413 | 1513 |
| Maximum Target Value (dBm) | 24 | 24 | 24 |

| WCDMA Band IV HSDPA | | | | | MPR (dB) |
|----------------------------|----------------------------|------|------|------|----------|
| Channel | | 1312 | 1413 | 1513 | |
| 1 | Maximum Target Value (dBm) | 23.5 | 23.5 | 23.5 | 1 |
| 2 | Maximum Target Value (dBm) | 23.5 | 23.5 | 23.5 | 1 |
| 3 | Maximum Target Value (dBm) | 23 | 23 | 23 | 1 |
| 4 | Maximum Target Value (dBm) | 23 | 23 | 23 | 1 |
| WCDMA Band IV HSUPA | | | | | MPR (dB) |
| Channel | | 1312 | 1413 | 1513 | |
| 1 | Maximum Target Value (dBm) | 23 | 23 | 23 | 1 |
| 2 | Maximum Target Value (dBm) | 22 | 22 | 22 | 1 |
| 3 | Maximum Target Value (dBm) | 22 | 22 | 22 | 1 |
| 4 | Maximum Target Value (dBm) | 23 | 23 | 23 | 1 |
| 5 | Maximum Target Value (dBm) | 22.5 | 22.5 | 22.5 | 1 |

Table 11.6: WCDMA

| WCDMA Band V | | | |
|----------------------------|------|------|------|
| Channel | 4132 | 4183 | 4233 |
| Maximum Target Value (dBm) | 24.0 | 24.0 | 24.0 |

| WCDMA Band V HSDPA | | | | | MPR (dB) |
|---------------------------|----------------------------|------|------|------|----------|
| Channel | | 4132 | 4183 | 4233 | |
| 1 | Maximum Target Value (dBm) | 23 | 23 | 23 | 1 |
| 2 | Maximum Target Value (dBm) | 23 | 23 | 23 | 1 |
| 3 | Maximum Target Value (dBm) | 23 | 23 | 23 | 1 |
| 4 | Maximum Target Value (dBm) | 23 | 23 | 23 | 1 |
| WCDMA Band V HSUPA | | | | | MPR (dB) |
| Channel | | 4132 | 4183 | 4233 | |
| 1 | Maximum Target Value (dBm) | 23 | 23 | 23 | 1 |
| 2 | Maximum Target Value (dBm) | 22 | 22 | 22 | 1 |
| 3 | Maximum Target Value (dBm) | 22 | 22 | 22 | 1 |
| 4 | Maximum Target Value (dBm) | 23 | 23 | 23 | 1 |
| 5 | Maximum Target Value (dBm) | 22.5 | 22.5 | 22.5 | 1 |

Table 11.7: LTE

| LTE Band2 | | | |
|----------------------------|------|------|------|
| RB Size | 1 | 50% | 100% |
| Maximum Target Value (dBm) | 24 | 24 | 23.5 |
| LTE Band4 | | | |
| RB Size | 1 | 50% | 100% |
| Maximum Target Value (dBm) | 23.5 | 23 | 22.5 |
| LTE Band5 | | | |
| RB Size | 1 | 50% | 100% |
| Maximum Target Value (dBm) | 24.5 | 24 | 23.5 |
| LTE Band7 | | | |
| RB Size | 1 | 50% | 100% |
| Maximum Target Value (dBm) | 23.5 | 23.0 | 22.5 |
| LTE Band12 | | | |
| RB Size | 1 | 50% | 100% |
| Maximum Target Value (dBm) | 24 | 23.5 | 23 |
| LTE Band13 | | | |
| RB Size | 1 | 50% | 100% |
| Maximum Target Value (dBm) | 23.5 | 23.0 | 22.5 |
| LTE Band17 | | | |
| RB Size | 1 | 50% | 100% |
| Maximum Target Value (dBm) | 23.5 | 22.5 | 22.5 |
| LTE Band25 | | | |
| RB Size | 1 | 50% | 100% |
| Maximum Target Value (dBm) | 24 | 23.5 | 23.5 |
| LTE Band26 | | | |
| RB Size | 1 | 50% | 100% |
| Maximum Target Value (dBm) | 24.0 | 24.0 | 24.0 |

Table 11.8: WiFi

| WiFi 802.11b 2.4G | | | |
|----------------------------|-----------|-----------|------------|
| Channel | Channel 1 | Channel 6 | Channel 11 |
| Maximum Target Value (dBm) | 16.5 | 17.0 | 17.5 |
| WiFi 802.11g 2.4G | | | |
| Channel | Channel 1 | Channel 6 | Channel 11 |
| Maximum Target Value (dBm) | 14.0 | 14.0 | 14.0 |
| WiFi 802.11n 20M 2.4G | | | |
| Channel | Channel 1 | Channel 6 | Channel 11 |
| Maximum Target Value (dBm) | 14.0 | 14.0 | 14.0 |
| WiFi 802.11n 40M 2.4G | | | |
| Channel | Channel 3 | Channel 6 | Channel 9 |
| Maximum Target Value (dBm) | 12.0 | 12.0 | 12.0 |

Table 11.9: Bluetooth

| Bluetooth | | | |
|----------------------------|-----------|------------|------------|
| Channel | Channel 0 | Channel 39 | Channel 78 |
| Maximum Target Value (dBm) | 6.0 | 6.0 | 6.0 |

Table 11.10: BLE

| Bluetooth | | | |
|----------------------------|-----------|------------|------------|
| Channel | Channel 0 | Channel 19 | Channel 39 |
| Maximum Target Value (dBm) | 2.5 | 2.5 | 2.5 |

Table 11.11: CDMA

| Band | CDMA2000 BC0 | | | CDMA2000 BC1 | | |
|-------------------------|--------------|--------|--------|--------------|---------|---------|
| Channel | 1013 | 384 | 777 | 25 | 600 | 1175 |
| Frequency (MHz) | 824.7 | 836.52 | 848.31 | 1851.25 | 1880.00 | 1908.75 |
| 1xRTT RC1 SO55 | 25 | 25 | 25 | 24.5 | 24.5 | 24.5 |
| 1xRTT RC3 SO55 | 25 | 25 | 25 | 24.5 | 24.5 | 24.5 |
| 1xRTT RC3 SO32(+ F-SCH) | 25 | 25 | 25 | 24.5 | 24.5 | 24.5 |
| 1xRTT RC3 SO32(+SCH) | 25 | 25 | 25 | 24.5 | 24.5 | 24.5 |
| 1xEVDO RTAP 153.6Kbps | 25 | 25 | 25 | 24.5 | 24.5 | 24.5 |
| 1xEVDO RETAP 4096Bits | 24 | 24 | 24 | 24.5 | 24.5 | 24.5 |

11.2. GSM Measurement result

During the process of testing, the EUT was controlled via Agilent Digital Radio Communication tester (E5515C) to ensure the maximum power transmission and proper modulation. This result contains conducted output power for the EUT. In all cases, the measured peak output power should be greater and within 5% than EMI measurement.

Table 11.12: The conducted power measurement results for GSM

| GSM 850MHZ | Conducted Power (dBm) | | |
|----------------|------------------------|-----------------------|------------------------|
| | Channel 128(824.2MHz) | Channel 190(826.6MHz) | Channel 251(848.8MHz) |
| | 33.66 | 33.73 | 33.78 |
| GSM 1900MHZ | Conducted Power(dBm) | | |
| | Channel 512(1850.2MHz) | Channel 661(1880 MHz) | Channel 810(1909.8MHz) |
| | 31.04 | 31.15 | 31.02 |

Table 11.13: The conducted power measurement results for GPRS/EGPRS

| GSM 850 GMSK | Measured Power (dBm) | | | calculation | Averaged Power (dBm) | | |
|------------------|----------------------|-------|-------|-------------|----------------------|-------|-------|
| | 128 | 190 | 251 | | 128 | 190 | 251 |
| 1 Txslot | 33.65 | 33.7 | 33.78 | -9.03dB | 24.62 | 24.67 | 24.75 |
| 2 Txslots | 32.91 | 33.17 | 33.07 | -6.02dB | 26.89 | 27.15 | 27.05 |
| 3 Txslots | 31.08 | 31.38 | 31.31 | -4.26dB | 26.82 | 27.12 | 27.05 |
| 4 Txslots | 30.14 | 30.28 | 30.21 | -3.01dB | 27.13 | 27.27 | 27.2 |
| GSM 1900 GMSK | Measured Power (dBm) | | | calculation | Averaged Power (dBm) | | |
| | 512 | 661 | 810 | | 512 | 661 | 810 |
| 1 Txslot | 31.04 | 31.15 | 31.02 | -9.03dB | 22.01 | 22.12 | 21.99 |
| 2 Txslots | 30.22 | 30.15 | 29.71 | -6.02dB | 24.2 | 24.13 | 23.69 |
| 3 Txslots | 28.37 | 28.18 | 27.74 | -4.26dB | 24.11 | 23.92 | 23.48 |
| 4 Txslots | 27.23 | 27.02 | 26.56 | -3.01dB | 24.22 | 24.01 | 23.55 |

Table 11.14: The conducted power measurement results for E-GPRS

| GSM 850 8-PSK | Measured Power (dBm) | | | calculation | Averaged Power (dBm) | | |
|-------------------|----------------------|-------|-------|-------------|----------------------|-------|-------|
| | 128 | 190 | 251 | | 128 | 190 | 251 |
| 1 Txslot | 27.42 | 27.3 | 27.68 | -9.03dB | 18.39 | 18.27 | 18.65 |
| 2 Txslots | 26.4 | 26.42 | 26.49 | -6.02dB | 20.38 | 20.4 | 20.47 |
| 3 Txslots | 24.63 | 24.83 | 24.85 | -4.26dB | 20.37 | 20.57 | 20.59 |
| 4 Txslots | 23.25 | 23.41 | 23.44 | -3.01dB | 20.24 | 20.4 | 20.43 |
| GSM 1900 8-PSK | Measured Power (dBm) | | | calculation | Averaged Power (dBm) | | |
| | 512 | 661 | 810 | | 512 | 661 | 810 |
| 1 Txslot | 27.13 | 26.88 | 26.44 | -9.03dB | 18.1 | 17.85 | 17.41 |
| 2 Txslots | 26.11 | 25.46 | 25.37 | -6.02dB | 20.09 | 19.44 | 19.35 |
| 3 Txslots | 23.92 | 23.29 | 23.4 | -4.26dB | 19.66 | 19.03 | 19.14 |
| 4 Txslots | 23.03 | 22.54 | 22.64 | -3.01dB | 20.02 | 19.53 | 19.63 |

NOTES:
1) Division Factors

To average the power, the division factor is as follows:

1TX-slot = 1 transmit time slot out of 8 time slots=> conducted power divided by (8/1) => -9.03dB

2TX-slots = 2 transmit time slots out of 8 time slots=> conducted power divided by (8/2) => -6.02dB

3TX-slots = 3 transmit time slots out of 8 time slots=> conducted power divided by (8/3) => -4.26dB

4TX-slots = 4 transmit time slots out of 8 time slots=> conducted power divided by (8/4) => -3.01dB

According to the conducted power as above, the body measurements are performed with 4Txslots for 850MHz ; 4Txslots for1900MHz;

11.3. WCDMA Measurement result

Table 11.15: The conducted Power for WCDMA

| Item | band | WCDMA BAND II result(dBm) | | |
|-------|-------|-----------------------------|-----------------------------|-----------------------------|
| | ARFCN | 9262 (1852.4MHz) | 9400 (1880.0MHz) | 9538 (1907.6MHz) |
| WCDMA | \ | 23.38 | 23.4 | 23.42 |
| HSDPA | 1 | 22.66 | 22.67 | 22.78 |
| | 2 | 22.44 | 22.47 | 22.6 |
| | 3 | 22.11 | 22.17 | 22.31 |
| | 4 | 22.03 | 22.07 | 22.18 |
| HSUPA | 1 | 22.01 | 22.07 | 22.17 |
| | 2 | 21.06 | 21.01 | 21.21 |
| | 3 | 21.05 | 21.15 | 21.14 |
| | 4 | 21.86 | 21.85 | 22.05 |
| | 5 | 21.66 | 21.75 | 21.94 |
| Item | band | WCDMA BAND V result(dBm) | | |
| | ARFCN | Channel 4132 (826.4MHz) | Channel 4183 (836.6MHz) | Channel 4233 (846.6MHz) |
| WCDMA | \ | 23.71 | 23.59 | 23.24 |
| HSDPA | 1 | 22.96 | 22.85 | 22.52 |
| | 2 | 22.76 | 22.67 | 22.28 |
| | 3 | 22.49 | 22.36 | 22.03 |
| | 4 | 22.39 | 22.29 | 21.93 |
| HSUPA | 1 | 22.39 | 22.26 | 21.86 |
| | 2 | 21.36 | 21.27 | 20.87 |
| | 3 | 21.36 | 21.32 | 20.91 |
| | 4 | 22.29 | 22.09 | 21.79 |
| | 5 | 22 | 21.92 | 21.62 |
| Item | band | WCDMA BAND IV result(dBm) | | |
| | ARFCN | Channel 1312 (1712.4MHz) | Channel 1413 (1732.6MHz) | Channel 1513 (1752.6MHz) |
| WCDMA | \ | 23.7 | 23.6 | 23.94 |
| HSDPA | 1 | 22.98 | 22.87 | 23.2 |
| | 2 | 22.76 | 22.67 | 23.02 |
| | 3 | 22.43 | 22.37 | 22.73 |
| | 4 | 22.35 | 22.27 | 22.6 |
| HSUPA | 1 | 22.33 | 22.27 | 22.59 |
| | 2 | 21.38 | 21.21 | 21.63 |
| | 3 | 21.37 | 21.35 | 21.56 |
| | 4 | 22.18 | 22.05 | 22.47 |
| | 5 | 21.98 | 21.95 | 22.36 |

11.4. LTE Measurement result

Table 11.16: The conducted Power for LTE BAND 2/4/5/7/12/13/17/25/26

| Band2 | | | | | | |
|-----------|-------|---------|-----------|-------------------------------|-----------------------------|-------------------------------|
| Bandwidth | Mode | RB Size | RB Offset | Actual output power(dBm) | | |
| | | | | Channel 18625 1852.5MHz | Channel 18900 1880MHz | Channel 19175 1907.5MHz |
| 5MHz | QPSK | 1 | 0 | 22.81 | 22.71 | 22.55 |
| | | 1 | 13 | 22.88 | 22.85 | 22.69 |
| | | 1 | 24 | 22.75 | 22.70 | 22.55 |
| | | 12 | 0 | 21.96 | 21.84 | 21.69 |
| | | 12 | 6 | 21.99 | 21.89 | 21.74 |
| | | 12 | 13 | 21.90 | 21.79 | 21.68 |
| | | 25 | 0 | 21.98 | 21.87 | 21.72 |
| | 16QAM | 1 | 0 | 21.98 | 21.94 | 21.82 |
| | | 1 | 13 | 22.10 | 22.07 | 21.94 |
| | | 1 | 24 | 21.98 | 21.93 | 21.77 |
| | | 12 | 0 | 20.90 | 20.84 | 20.70 |
| | | 12 | 6 | 20.93 | 20.86 | 20.75 |
| | | 12 | 13 | 20.85 | 20.78 | 20.68 |
| | | 25 | 0 | 20.91 | 20.80 | 20.69 |
| Bandwidth | Mode | RB Size | RB Offset | Actual output power(dBm) | | |
| | | | | Channel 18650 1855MHz | Channel 18900 1880MHz | Channel 19150 1905MHz |
| 10MHz | QPSK | 1 | 0 | 22.95 | 22.87 | 22.72 |
| | | 1 | 25 | 22.92 | 22.94 | 22.79 |
| | | 1 | 49 | 22.84 | 22.80 | 22.66 |
| | | 25 | 0 | 22.09 | 21.99 | 21.81 |
| | | 25 | 13 | 22.05 | 21.93 | 21.81 |
| | | 25 | 25 | 22.03 | 21.88 | 21.78 |
| | | 50 | 0 | 22.06 | 21.96 | 21.84 |
| | 16QAM | 1 | 0 | 22.05 | 22.00 | 21.89 |
| | | 1 | 25 | 22.11 | 22.10 | 21.98 |
| | | 1 | 49 | 22.00 | 21.96 | 21.90 |
| | | 25 | 0 | 20.96 | 20.92 | 20.80 |
| | | 25 | 13 | 20.89 | 20.86 | 20.72 |

| | | | | | | |
|-----------|-------|---------|-----------|-------------------------------|-----------------------------|-------------------------------|
| | | 25 | 25 | 20.91 | 20.79 | 20.74 |
| | | 50 | 0 | 20.95 | 20.86 | 20.76 |
| Bandwidth | Mode | RB Size | RB Offset | Actual output power(dBm) | | |
| | | | | Channel 18675 1857.5MHz | Channel 18900 1880MHz | Channel 19125 1902.5MHz |
| 15MHz | QPSK | 1 | 0 | 22.95 | 22.90 | 22.72 |
| | | 1 | 37 | 22.93 | 22.90 | 22.75 |
| | | 1 | 74 | 22.77 | 22.76 | 22.65 |
| | | 36 | 0 | 22.07 | 21.98 | 21.80 |
| | | 36 | 19 | 22.01 | 21.94 | 21.79 |
| | | 36 | 38 | 21.98 | 21.86 | 21.75 |
| | | 75 | 0 | 22.06 | 21.96 | 21.82 |
| | 16QAM | 1 | 0 | 22.09 | 22.07 | 21.94 |
| | | 1 | 37 | 22.17 | 22.07 | 21.94 |
| | | 1 | 74 | 21.98 | 21.96 | 21.86 |
| | | 36 | 0 | 20.98 | 20.93 | 20.78 |
| | | 36 | 19 | 20.94 | 20.87 | 20.77 |
| | | 36 | 38 | 20.91 | 20.80 | 20.72 |
| | | 75 | 0 | 20.96 | 20.86 | 20.75 |
| Bandwidth | Mode | RB Size | RB Offset | Actual output power(dBm) | | |
| | | | | Channel 18700 1860MHz | Channel 18900 1880MHz | Channel 19100 1900MHz |
| 20MHz | QPSK | 1 | 0 | 22.93 | 22.88 | 22.75 |
| | | 1 | 50 | 22.96 | 22.98 | 22.84 |
| | | 1 | 99 | 22.70 | 22.66 | 22.59 |
| | | 50 | 0 | 22.05 | 22.10 | 21.84 |
| | | 50 | 25 | 22.02 | 21.98 | 21.85 |
| | | 50 | 50 | 22.03 | 21.79 | 21.75 |
| | | 100 | 0 | 22.02 | 21.96 | 21.79 |
| | 16QAM | 1 | 0 | 22.10 | 22.09 | 21.99 |
| | | 1 | 50 | 22.24 | 22.16 | 22.06 |
| | | 1 | 99 | 21.94 | 21.92 | 21.86 |
| | | 50 | 0 | 20.99 | 21.02 | 20.81 |
| | | 50 | 25 | 20.95 | 20.92 | 20.79 |
| | | 50 | 50 | 20.96 | 20.74 | 20.70 |
| | | 100 | 0 | 20.96 | 20.88 | 20.77 |
| Bandwidth | Mode | RB Size | RB Offset | Actual output power(dBm) | | |
| | | | | Channel 18615 1851.5MHz | Channel 18900 1880MHz | Channel 19185 1908.5MHz |

| | | | | | | |
|-----------|-------|---------|-----------|-------------------------------|-----------------------------|-------------------------------|
| 3MHz | QPSK | 1 | 0 | 22.92 | 22.81 | 22.66 |
| | | 1 | 7 | 22.91 | 22.84 | 22.68 |
| | | 1 | 14 | 22.87 | 22.83 | 22.66 |
| | | 8 | 0 | 21.98 | 21.86 | 21.69 |
| | | 8 | 4 | 21.98 | 21.87 | 21.72 |
| | | 8 | 7 | 21.96 | 21.85 | 21.69 |
| | | 15 | 0 | 21.97 | 21.83 | 21.70 |
| | 16QAM | 1 | 0 | 22.02 | 22.02 | 21.89 |
| | | 1 | 7 | 22.09 | 22.02 | 21.88 |
| | | 1 | 14 | 22.04 | 22.00 | 21.85 |
| | | 8 | 0 | 20.91 | 20.87 | 20.74 |
| | | 8 | 4 | 20.97 | 20.88 | 20.78 |
| | | 8 | 7 | 20.91 | 20.85 | 20.75 |
| | | 15 | 0 | 20.88 | 20.82 | 20.70 |
| Bandwidth | Mode | RB Size | RB Offset | Actual output power(dBm) | | |
| | | | | Channel 18607 1850.7MHz | Channel 18900 1880MHz | Channel 19193 1909.3MHz |
| 1.4MHz | QPSK | 1 | 0 | 22.87 | 22.79 | 22.61 |
| | | 1 | 3 | 23.00 | 22.89 | 22.73 |
| | | 1 | 5 | 22.86 | 22.80 | 22.62 |
| | | 3 | 0 | 22.93 | 22.87 | 22.70 |
| | | 3 | 1 | 23.01 | 22.92 | 22.76 |
| | | 3 | 3 | 22.99 | 22.92 | 22.75 |
| | | 6 | 0 | 21.99 | 21.89 | 21.72 |
| | 16QAM | 1 | 0 | 21.99 | 21.99 | 21.86 |
| | | 1 | 3 | 22.13 | 22.11 | 22.01 |
| | | 1 | 5 | 22.03 | 22.01 | 21.84 |
| | | 3 | 0 | 21.87 | 21.84 | 21.67 |
| | | 3 | 1 | 21.95 | 21.88 | 21.74 |
| | | 3 | 3 | 21.92 | 21.85 | 21.71 |
| | | 6 | 0 | 20.96 | 20.92 | 20.78 |

| Band4 | | | | | | |
|-----------|------|---------|-----------|-------------------------------|-------------------------------|-------------------------------|
| Bandwidth | Mode | RB Size | RB Offset | Actual output power(dBm) | | |
| | | | | Channel 19975 1712.5MHz | Channel 20175 1732.5MHz | Channel 20375 1752.5MHz |

| | | | | | | |
|-----------|-------|---------|-----------|-------------------------------|-------------------------------|-------------------------------|
| 5MHz | QPSK | 1 | 0 | 22.29 | 22.22 | 22.23 |
| | | 1 | 13 | 22.35 | 22.31 | 22.32 |
| | | 1 | 24 | 22.26 | 22.19 | 22.17 |
| | | 12 | 0 | 21.39 | 21.31 | 21.29 |
| | | 12 | 6 | 21.44 | 21.35 | 21.36 |
| | | 12 | 13 | 21.35 | 21.28 | 21.30 |
| | | 25 | 0 | 21.42 | 21.34 | 21.35 |
| | 16QAM | 1 | 0 | 21.55 | 21.45 | 21.46 |
| | | 1 | 13 | 21.57 | 21.54 | 21.51 |
| | | 1 | 24 | 21.48 | 21.42 | 21.38 |
| | | 12 | 0 | 20.36 | 20.32 | 20.27 |
| | | 12 | 6 | 20.42 | 20.35 | 20.35 |
| | | 12 | 13 | 20.36 | 20.27 | 20.29 |
| | | 25 | 0 | 20.39 | 20.31 | 20.28 |
| Bandwidth | Mode | RB Size | RB Offset | Actual output power(dBm) | | |
| | | | | Channel 20000 1715MHz | Channel 20175 1732.5MHz | Channel 20350 1750MHz |
| 10MHz | QPSK | 1 | 0 | 22.43 | 22.37 | 22.39 |
| | | 1 | 25 | 22.49 | 22.47 | 22.45 |
| | | 1 | 49 | 22.35 | 22.30 | 22.29 |
| | | 25 | 0 | 21.48 | 21.44 | 21.40 |
| | | 25 | 13 | 21.48 | 21.43 | 21.42 |
| | | 25 | 25 | 21.49 | 21.38 | 21.45 |
| | | 50 | 0 | 21.47 | 21.44 | 21.46 |
| | 16QAM | 1 | 0 | 21.63 | 21.56 | 21.55 |
| | | 1 | 25 | 21.65 | 21.62 | 21.62 |
| | | 1 | 49 | 21.54 | 21.48 | 21.43 |
| | | 25 | 0 | 20.38 | 20.37 | 20.32 |
| | | 25 | 13 | 20.37 | 20.32 | 20.33 |
| | | 25 | 25 | 20.38 | 20.30 | 20.34 |
| | | 50 | 0 | 20.37 | 20.32 | 20.34 |
| Bandwidth | Mode | RB Size | RB Offset | Actual output power(dBm) | | |
| | | | | Channel 20025 1717.5MHz | Channel 20175 1732.5MHz | Channel 20325 1747.5MHz |
| 15MHz | QPSK | 1 | 0 | 22.47 | 22.47 | 22.44 |
| | | 1 | 38 | 22.50 | 22.46 | 22.47 |
| | | 1 | 74 | 22.35 | 22.31 | 22.29 |
| | | 36 | 0 | 21.50 | 21.54 | 21.48 |
| | | 36 | 18 | 21.54 | 21.48 | 21.49 |
| | | 36 | 39 | 21.51 | 21.43 | 21.48 |

| | 16QAM | 75 | 0 | 21.53 | 21.50 | 21.50 |
|-----------|-------|---------|-----------|-------------------------------|-------------------------------|-------------------------------|
| | | 1 | 0 | 21.68 | 21.62 | 21.61 |
| | | 1 | 38 | 21.70 | 21.65 | 21.64 |
| | | 1 | 74 | 21.50 | 21.51 | 21.45 |
| | | 36 | 0 | 20.45 | 20.48 | 20.41 |
| | | 36 | 18 | 20.49 | 20.42 | 20.44 |
| | | 36 | 39 | 20.43 | 20.37 | 20.40 |
| | | 75 | 0 | 20.42 | 20.42 | 20.41 |
| Bandwidth | Mode | RB Size | RB Offset | Actual output power(dBm) | | |
| | | | | Channel 20050 1720MHz | Channel 20175 1732.5MHz | Channel 20300 1745MHz |
| 20MHz | QPSK | 1 | 0 | 22.46 | 22.43 | 22.39 |
| | | 1 | 50 | 22.55 | 22.58 | 22.50 |
| | | 1 | 99 | 22.23 | 22.25 | 22.23 |
| | | 50 | 0 | 21.50 | 21.60 | 21.55 |
| | | 50 | 25 | 21.57 | 21.53 | 21.54 |
| | | 50 | 50 | 21.45 | 21.45 | 21.51 |
| | | 100 | 0 | 21.49 | 21.48 | 21.50 |
| | 16QAM | 1 | 0 | 21.68 | 21.64 | 21.65 |
| | | 1 | 50 | 21.81 | 21.75 | 21.76 |
| | | 1 | 99 | 21.46 | 21.50 | 21.42 |
| | | 50 | 0 | 20.46 | 20.54 | 20.46 |
| | | 50 | 25 | 20.50 | 20.47 | 20.46 |
| | | 50 | 50 | 20.40 | 20.39 | 20.45 |
| | | 100 | 0 | 20.44 | 20.46 | 20.44 |
| Bandwidth | Mode | RB Size | RB Offset | Actual output power(dBm) | | |
| | | | | Channel 19965 1711.5MHz | Channel 20175 1732.5MHz | Channel 20385 1753.5MHz |
| 3MHz | QPSK | 1 | 0 | 22.38 | 22.32 | 22.30 |
| | | 1 | 8 | 22.35 | 22.29 | 22.29 |
| | | 1 | 14 | 22.33 | 22.29 | 22.28 |
| | | 8 | 0 | 21.41 | 21.32 | 21.31 |
| | | 8 | 4 | 21.45 | 21.37 | 21.36 |
| | | 8 | 7 | 21.41 | 21.30 | 21.29 |
| | | 15 | 0 | 21.41 | 21.31 | 21.31 |
| | 16QAM | 1 | 0 | 21.58 | 21.53 | 21.46 |
| | | 1 | 8 | 21.55 | 21.52 | 21.47 |
| | | 1 | 15 | 21.57 | 21.52 | 21.42 |
| | | 8 | 0 | 20.44 | 20.34 | 20.32 |
| | | 8 | 4 | 20.44 | 20.36 | 20.34 |

| | | | | | | |
|-----------|-------|---------|-----------|-------------------------------|-------------------------------|-------------------------------|
| | | 8 | 7 | 20.42 | 20.35 | 20.32 |
| | | 15 | 0 | 20.41 | 20.28 | 20.28 |
| Bandwidth | Mode | RB Size | RB Offset | Actual output power(dBm) | | |
| | | | | Channel 19957 1710.7MHz | Channel 20175 1732.5MHz | Channel 20393 1754.3MHz |
| 1.4MHz | QPSK | 1 | 0 | 22.35 | 22.28 | 22.26 |
| | | 1 | 2 | 22.48 | 22.41 | 22.41 |
| | | 1 | 5 | 22.34 | 22.28 | 22.26 |
| | | 3 | 0 | 22.43 | 22.36 | 22.37 |
| | | 3 | 1 | 22.49 | 22.41 | 22.42 |
| | | 3 | 2 | 22.47 | 22.42 | 22.39 |
| | | 6 | 0 | 21.44 | 21.36 | 21.39 |
| | 16QAM | 1 | 0 | 21.61 | 21.50 | 21.46 |
| | | 1 | 2 | 21.72 | 21.64 | 21.58 |
| | | 1 | 5 | 21.59 | 21.48 | 21.44 |
| | | 3 | 0 | 21.41 | 21.34 | 21.32 |
| | | 3 | 1 | 21.47 | 21.42 | 21.39 |
| | | 3 | 2 | 21.47 | 21.41 | 21.34 |
| | | 6 | 0 | 20.49 | 20.40 | 20.39 |

| Band5 | | | | | | |
|-----------|-------|---------|-----------|---------------------------|------------------------------|---------------------------|
| Bandwidth | Mode | RB Size | RB Offset | Actual output power(dBm) | | |
| | | | | Channel 20425 826.5MHz | Channel 20525 836.5MHz | Channel 20625 846.5MHz |
| 5MHz | QPSK | 1 | 0 | 23.33 | 23.45 | 23.48 |
| | | 1 | 12 | 23.50 | 23.62 | 23.65 |
| | | 1 | 24 | 23.35 | 23.49 | 23.58 |
| | | 12 | 0 | 22.42 | 22.60 | 22.75 |
| | | 12 | 6 | 22.50 | 22.64 | 22.74 |
| | | 12 | 13 | 22.49 | 22.58 | 22.69 |
| | | 25 | 0 | 22.45 | 22.60 | 22.75 |
| | 16QAM | 1 | 0 | 22.67 | 22.79 | 22.88 |
| | | 1 | 12 | 22.83 | 22.96 | 23.08 |
| | | 1 | 24 | 22.71 | 22.87 | 22.98 |
| | | 12 | 0 | 21.44 | 21.62 | 21.77 |
| | | 12 | 6 | 21.54 | 21.68 | 21.81 |
| | | 12 | 13 | 21.49 | 21.61 | 21.73 |
| | | 25 | 0 | 21.46 | 21.60 | 21.74 |
| Bandwidth | Mode | RB Size | RB Offset | Actual output power(dBm) | | |
| | | | | Channel 20450 829MHz | Channel 20525 836.5MHz | Channel 20600 844MHz |
| 10MHz | QPSK | 1 | 0 | 23.40 | 23.52 | 23.62 |
| | | 1 | 25 | 23.58 | 23.67 | 23.66 |
| | | 1 | 49 | 23.50 | 23.54 | 23.66 |
| | | 25 | 0 | 22.43 | 22.69 | 22.67 |
| | | 25 | 13 | 22.55 | 22.64 | 22.67 |
| | | 25 | 25 | 22.52 | 22.64 | 22.57 |
| | | 50 | 0 | 22.50 | 22.68 | 22.64 |
| | 16QAM | 1 | 0 | 22.77 | 22.87 | 22.99 |
| | | 1 | 25 | 22.88 | 23.03 | 23.10 |
| | | 1 | 49 | 22.84 | 22.95 | 23.09 |
| | | 25 | 0 | 21.45 | 21.65 | 21.70 |
| | | 25 | 13 | 21.52 | 21.62 | 21.71 |
| | | 25 | 25 | 21.51 | 21.65 | 21.59 |
| | | 50 | 0 | 21.49 | 21.64 | 21.68 |
| Bandwidth | Mode | RB Size | RB Offset | Channel 20415 825.5MHz | Channel 20525 836.5MHz | Channel 20635 847.5MHz |
| | | | | Channel 20415 825.5MHz | Channel 20525 836.5MHz | Channel 20635 847.5MHz |

| | | | | | | |
|-----------|-------|---------|-----------|------------------------------|------------------------------|------------------------------|
| 3MHz | QPSK | 1 | 0 | 23.45 | 23.56 | 23.59 |
| | | 1 | 7 | 23.45 | 23.63 | 23.65 |
| | | 1 | 14 | 23.47 | 23.60 | 23.67 |
| | | 8 | 0 | 22.44 | 22.60 | 22.63 |
| | | 8 | 4 | 22.53 | 22.67 | 22.69 |
| | | 8 | 7 | 22.47 | 22.65 | 22.68 |
| | | 15 | 0 | 22.43 | 22.60 | 22.64 |
| | 16QAM | 1 | 0 | 22.75 | 22.82 | 22.96 |
| | | 1 | 7 | 22.81 | 22.89 | 23.00 |
| | | 1 | 14 | 22.77 | 22.93 | 23.03 |
| | | 8 | 0 | 21.50 | 21.65 | 21.82 |
| | | 8 | 4 | 21.58 | 21.74 | 21.88 |
| | | 8 | 7 | 21.55 | 21.71 | 21.84 |
| | | 15 | 0 | 21.43 | 21.62 | 21.79 |
| Bandwidth | Mode | RB Size | RB Offset | Actual output power(dBm) | | |
| | | | | Channel 20407 824.7MHz | Channel 20525 836.5MHz | Channel 20643 848.3MHz |
| 1.4MHz | QPSK | 1 | 0 | 23.36 | 23.50 | 23.56 |
| | | 1 | 2 | 23.47 | 23.61 | 23.60 |
| | | 1 | 5 | 23.38 | 23.49 | 23.63 |
| | | 3 | 0 | 23.41 | 23.55 | 23.67 |
| | | 3 | 2 | 23.46 | 23.61 | 23.70 |
| | | 3 | 3 | 23.45 | 23.58 | 23.71 |
| | | 6 | 0 | 22.43 | 22.57 | 22.74 |
| | 16QAM | 1 | 0 | 22.72 | 22.81 | 22.97 |
| | | 1 | 2 | 22.84 | 22.95 | 23.12 |
| | | 1 | 5 | 22.72 | 22.82 | 23.00 |
| | | 3 | 0 | 22.50 | 22.62 | 22.80 |
| | | 3 | 2 | 22.55 | 22.71 | 22.83 |
| | | 3 | 3 | 22.52 | 22.66 | 22.87 |
| | | 6 | 0 | 21.50 | 21.66 | 21.86 |

| Band7 | | | | | | |
|-----------|------|---------|-----------|-------------------------------|-----------------------------|-------------------------------|
| Bandwidth | Mode | RB Size | RB Offset | Actual output power(dBm) | | |
| | | | | Channel 20775 2502.5MHz | Channel 21100 2535MHz | Channel 21425 2567.5MHz |
| 5MHz | QPSK | 1 | 0 | 22.41 | 22.55 | 22.63 |

| | | 1 | 13 | 22.55 | 22.68 | 22.81 |
|-----------|-------|---------|-----------|-------------------------------|-----------------------------|-------------------------------|
| | | 1 | 24 | 22.45 | 22.58 | 22.68 |
| | | 12 | 0 | 21.51 | 21.67 | 21.79 |
| | | 12 | 6 | 21.59 | 21.74 | 21.86 |
| | | 12 | 13 | 21.56 | 21.67 | 21.79 |
| | | 25 | 0 | 21.58 | 21.73 | 21.84 |
| | | 25 | 0 | 21.51 | 20.63 | 20.77 |
| | 16QAM | 1 | 0 | 21.56 | 21.70 | 21.84 |
| | | 1 | 13 | 21.71 | 21.88 | 22.01 |
| | | 1 | 24 | 21.61 | 21.74 | 21.87 |
| | | 12 | 0 | 20.46 | 20.63 | 20.76 |
| | | 12 | 6 | 20.55 | 20.67 | 20.82 |
| | | 12 | 13 | 20.52 | 20.63 | 20.77 |
| | | 25 | 0 | 20.51 | 20.63 | 20.77 |
| Bandwidth | Mode | RB Size | RB Offset | Actual output power(dBm) | | |
| | | | | Channel 20800 2505MHz | Channel 21100 2535MHz | Channel 21400 2565MHz |
| 10MHz | QPSK | 1 | 0 | 22.48 | 22.62 | 22.73 |
| | | 1 | 25 | 22.60 | 22.76 | 22.84 |
| | | 1 | 49 | 22.58 | 22.69 | 22.78 |
| | | 25 | 0 | 21.58 | 21.75 | 21.89 |
| | | 25 | 13 | 21.64 | 21.75 | 21.85 |
| | | 25 | 25 | 21.67 | 21.79 | 21.85 |
| | | 50 | 0 | 21.65 | 21.79 | 21.88 |
| | 16QAM | 1 | 0 | 21.63 | 21.77 | 21.90 |
| | | 1 | 25 | 21.79 | 21.92 | 22.03 |
| | | 1 | 49 | 21.72 | 21.87 | 21.96 |
| | | 25 | 0 | 20.49 | 20.68 | 20.81 |
| | | 25 | 13 | 20.54 | 20.66 | 20.76 |
| | | 25 | 25 | 20.58 | 20.72 | 20.77 |
| | | 50 | 0 | 20.55 | 20.71 | 20.80 |
| Bandwidth | Mode | RB Size | RB Offset | Actual output power(dBm) | | |
| | | | | Channel 20825 2507.5MHz | Channel 21100 2535MHz | Channel 21375 2562.5MHz |
| 15MHz | QPSK | 1 | 0 | 22.49 | 22.62 | 22.73 |
| | | 1 | 38 | 22.67 | 22.76 | 22.84 |
| | | 1 | 74 | 22.63 | 22.75 | 22.81 |
| | | 36 | 0 | 21.61 | 21.75 | 21.88 |
| | | 36 | 18 | 21.68 | 21.77 | 21.91 |
| | | 36 | 39 | 21.74 | 21.82 | 21.88 |
| | | 75 | 0 | 21.68 | 21.82 | 21.92 |

| | 16QAM | 1 | 0 | 21.61 | 21.73 | 21.88 |
|-----------|-------|---------|-----------|-----------------------------|-----------------------------|-----------------------------|
| | | 1 | 38 | 21.78 | 21.87 | 22.00 |
| | | 1 | 74 | 21.75 | 21.85 | 21.96 |
| | | 36 | 0 | 20.50 | 20.67 | 20.79 |
| | | 36 | 18 | 20.56 | 20.68 | 20.81 |
| | | 36 | 39 | 20.64 | 20.73 | 20.79 |
| | | 75 | 0 | 20.56 | 20.70 | 20.80 |
| Bandwidth | Mode | RB Size | RB Offset | Actual output power(dBm) | | |
| | | | | Channel 20850 2510MHz | Channel 21100 2535MHz | Channel 21350 2560MHz |
| 20MHz | QPSK | 1 | 0 | 22.44 | 22.54 | 22.69 |
| | | 1 | 50 | 22.72 | 22.80 | 22.93 |
| | | 1 | 99 | 22.59 | 22.74 | 22.80 |
| | | 50 | 0 | 21.63 | 21.78 | 21.91 |
| | | 50 | 25 | 21.72 | 21.85 | 21.94 |
| | | 50 | 50 | 21.76 | 21.84 | 21.89 |
| | | 100 | 0 | 21.66 | 21.81 | 21.88 |
| | 16QAM | 1 | 0 | 21.60 | 21.73 | 21.89 |
| | | 1 | 50 | 21.92 | 22.00 | 22.10 |
| | | 1 | 99 | 21.79 | 21.92 | 21.99 |
| | | 50 | 0 | 20.51 | 20.69 | 20.82 |
| | | 50 | 25 | 20.61 | 20.76 | 20.85 |
| | | 50 | 50 | 20.69 | 20.75 | 20.81 |
| | | 100 | 0 | 20.56 | 20.74 | 20.80 |

| Band12 | | | | | | |
|-----------|-------|---------|-----------|------------------------------|------------------------------|------------------------------|
| Bandwidth | Mode | RB Size | RB Offset | Actual output power(dBm) | | |
| | | | | Channel 23035 701.5MHz | Channel 23095 707.5MHz | Channel 23155 713.5MHz |
| 5MHz | QPSK | 1 | 0 | 22.97 | 22.90 | 22.85 |
| | | 1 | 12 | 23.11 | 23.07 | 22.96 |
| | | 1 | 24 | 22.94 | 22.95 | 22.83 |
| | | 12 | 0 | 22.01 | 22.05 | 21.84 |
| | | 12 | 6 | 22.13 | 22.08 | 21.99 |
| | | 12 | 13 | 22.00 | 22.03 | 21.90 |
| | | 25 | 0 | 22.02 | 22.04 | 21.91 |
| | 16QAM | 1 | 0 | 22.27 | 22.19 | 22.16 |
| | | 1 | 12 | 22.41 | 22.38 | 22.26 |

| | | | | | | |
|-----------|-------|---------|-----------|------------------------------|------------------------------|------------------------------|
| | | 1 | 24 | 22.21 | 22.22 | 22.09 |
| | | 12 | 0 | 21.10 | 21.12 | 20.90 |
| | | 12 | 6 | 21.19 | 21.15 | 21.07 |
| | | 12 | 13 | 21.10 | 21.09 | 20.97 |
| | | 25 | 0 | 21.05 | 21.08 | 20.93 |
| Bandwidth | Mode | RB Size | RB Offset | Actual output power(dBm) | | |
| | | | | Channel 23060 704MHz | Channel 23095 707.5MHz | Channel 23130 711MHz |
| 10MHz | QPSK | 1 | 0 | 23.04 | 22.99 | 22.99 |
| | | 1 | 25 | 23.14 | 23.17 | 23.11 |
| | | 1 | 49 | 23.03 | 23.03 | 22.93 |
| | | 25 | 0 | 22.06 | 22.14 | 22.03 |
| | | 25 | 13 | 22.12 | 22.10 | 22.11 |
| | | 25 | 25 | 22.08 | 22.12 | 22.12 |
| | | 50 | 0 | 22.05 | 22.16 | 22.12 |
| | 16QAM | 1 | 0 | 22.35 | 22.28 | 22.29 |
| | | 1 | 25 | 22.43 | 22.45 | 22.38 |
| | | 1 | 49 | 22.33 | 22.30 | 22.22 |
| | | 25 | 0 | 21.08 | 21.16 | 21.07 |
| | | 25 | 13 | 21.15 | 21.13 | 21.11 |
| | | 25 | 25 | 21.07 | 21.21 | 21.17 |
| | | 50 | 0 | 21.09 | 21.18 | 21.16 |
| Bandwidth | Mode | RB Size | RB Offset | Actual output power(dBm) | | |
| | | | | Channel 23025 700.5MHz | Channel 23095 707.5MHz | Channel 23165 714.5MHz |
| 3MHz | QPSK | 1 | 0 | 23.10 | 23.03 | 22.94 |
| | | 1 | 7 | 23.12 | 23.08 | 22.99 |
| | | 1 | 14 | 23.11 | 23.05 | 22.94 |
| | | 8 | 0 | 22.10 | 22.06 | 21.95 |
| | | 8 | 4 | 22.12 | 22.08 | 21.99 |
| | | 8 | 7 | 22.15 | 22.06 | 21.96 |
| | | 15 | 0 | 22.09 | 22.03 | 21.94 |
| | 16QAM | 1 | 0 | 22.39 | 22.31 | 22.17 |
| | | 1 | 7 | 22.40 | 22.36 | 22.22 |
| | | 1 | 14 | 22.35 | 22.29 | 22.17 |
| | | 8 | 0 | 21.23 | 21.17 | 21.03 |
| | | 8 | 4 | 21.29 | 21.17 | 21.09 |
| | | 8 | 7 | 21.27 | 21.14 | 21.02 |
| | | 15 | 0 | 21.17 | 21.08 | 20.97 |
| Bandwidth | Mode | RB Size | RB Offset | Actual output power(dBm) | | |

| | | | | Channel 23017 699.7MHz | Channel 23095 707.5MHz | Channel 23173 715.3MHz |
|--------|-------|---|---|------------------------------|------------------------------|------------------------------|
| 1.4MHz | QPSK | 1 | 0 | 23.06 | 22.99 | 22.90 |
| | | 1 | 2 | 23.16 | 23.11 | 22.98 |
| | | 1 | 5 | 23.04 | 22.95 | 22.87 |
| | | 3 | 0 | 22.35 | 22.25 | 22.13 |
| | | 3 | 2 | 22.48 | 22.40 | 22.26 |
| | | 3 | 3 | 22.35 | 22.23 | 22.14 |
| | | 6 | 0 | 22.14 | 22.05 | 21.95 |
| | 16QAM | 1 | 0 | 22.35 | 22.25 | 22.13 |
| | | 1 | 2 | 22.48 | 22.40 | 22.26 |
| | | 1 | 5 | 22.35 | 22.23 | 22.14 |
| | | 3 | 0 | 22.16 | 22.09 | 21.94 |
| | | 3 | 2 | 22.21 | 22.16 | 21.97 |
| | | 3 | 3 | 22.17 | 22.13 | 21.98 |
| | | 6 | 0 | 21.26 | 21.13 | 21.04 |

| Band13 | | | | | | |
|-----------|-------|---------|-----------|-------------------------------|-----------------------------|------------------------------|
| Bandwidth | Mode | RB Size | RB Offset | Actual output power(dBm) | | |
| | | | | Channel 23205 779.5 MHz | Channel 23230 782 MHz | Channel 23255 784.5MHz |
| 5MHz | QPSK | 1 | 0 | 22.57 | 22.51 | 22.58 |
| | | 1 | 12 | 22.64 | 22.68 | 22.71 |
| | | 1 | 24 | 22.62 | 22.61 | 22.64 |
| | | 12 | 0 | 21.62 | 21.64 | 21.65 |
| | | 12 | 6 | 21.69 | 21.74 | 21.73 |
| | | 12 | 13 | 21.70 | 21.77 | 21.69 |
| | | 25 | 0 | 21.66 | 21.70 | 21.68 |
| | 16QAM | 1 | 0 | 21.84 | 21.84 | 21.86 |
| | | 1 | 12 | 21.91 | 21.98 | 21.95 |
| | | 1 | 24 | 21.88 | 21.89 | 21.89 |
| | | 12 | 0 | 20.69 | 20.67 | 20.70 |
| | | 12 | 6 | 20.75 | 20.79 | 20.79 |
| | | 12 | 13 | 20.76 | 20.81 | 20.74 |
| | | 25 | 0 | 20.70 | 20.73 | 20.70 |
| Bandwidth | Mode | RB Size | RB Offset | Actual output power(dBm) | | |
| | | | | Channel 23230 782MHz | Channel 23230 782 MHz | Channel 23230 782 MHz |

| | | | | | | |
|-------|-------|----|----|-------|-------|--------------|
| 10MHz | QPSK | 1 | 0 | 22.64 | 22.65 | 22.64 |
| | | 1 | 25 | 22.80 | 22.79 | 22.80 |
| | | 1 | 49 | 22.75 | 22.74 | 22.73 |
| | | 25 | 0 | 21.67 | 21.65 | 21.67 |
| | | 25 | 13 | 21.77 | 21.77 | 21.78 |
| | | 25 | 25 | 21.81 | 21.82 | 21.84 |
| | | 50 | 0 | 21.75 | 21.77 | 21.78 |
| | 16QAM | 1 | 0 | 21.93 | 21.90 | 21.93 |
| | | 1 | 25 | 22.12 | 22.10 | 22.08 |
| | | 1 | 49 | 22.01 | 22.00 | 22.01 |
| | | 25 | 0 | 20.68 | 20.69 | 20.69 |
| | | 25 | 13 | 20.80 | 20.78 | 20.79 |
| | | 25 | 25 | 20.83 | 20.81 | 20.83 |
| | | 50 | 0 | 20.79 | 20.79 | 20.77 |

| Band17 | | | | | | |
|-----------|-------|---------|-----------|-------------------------------|-----------------------------|------------------------------|
| Bandwidth | Mode | RB Size | RB Offset | Actual output power(dBm) | | |
| | | | | Channel 23755 706.5 MHz | Channel 23790 710 MHz | Channel 23825 713.5MHz |
| 5MHz | QPSK | 1 | 0 | 23.02 | 22.96 | 22.91 |
| | | 1 | 12 | 23.10 | 23.08 | 23.02 |
| | | 1 | 24 | 23.02 | 22.99 | 22.94 |
| | | 12 | 0 | 22.10 | 22.04 | 21.91 |
| | | 12 | 6 | 22.14 | 22.12 | 22.06 |
| | | 12 | 13 | 22.07 | 22.12 | 21.94 |
| | | 25 | 0 | 22.12 | 22.12 | 21.97 |
| | 16QAM | 1 | 0 | 22.30 | 22.22 | 22.18 |
| | | 1 | 12 | 22.35 | 22.32 | 22.26 |
| | | 1 | 24 | 22.25 | 22.21 | 22.16 |
| | | 12 | 0 | 21.17 | 21.10 | 20.94 |
| | | 12 | 6 | 21.19 | 21.18 | 21.09 |
| | | 12 | 13 | 21.12 | 21.15 | 20.99 |
| | | 25 | 0 | 21.14 | 21.14 | 20.99 |
| Bandwidth | Mode | RB Size | RB Offset | Actual output power(dBm) | | |
| | | | | Channel 23780 709MHz | Channel 23790 710 MHz | Channel 23800 711 MHz |
| 10MHz | QPSK | 1 | 0 | 23.06 | 23.02 | 23.03 |
| | | 1 | 25 | 23.16 | 23.17 | 23.12 |
| | | 1 | 49 | 23.04 | 23.03 | 23.00 |

| | | | | | | |
|--|-------|----|----|-------|--------------|-------|
| | | 25 | 0 | 22.18 | 22.15 | 22.10 |
| | | 25 | 13 | 22.15 | 22.15 | 22.10 |
| | | 25 | 25 | 22.28 | 22.30 | 22.22 |
| | | 50 | 0 | 22.26 | 22.24 | 22.16 |
| | 16QAM | 1 | 0 | 22.32 | 22.29 | 22.27 |
| | | 1 | 25 | 22.44 | 22.42 | 22.36 |
| | | 1 | 49 | 22.30 | 22.26 | 22.23 |
| | | 25 | 0 | 21.20 | 21.16 | 21.10 |
| | | 25 | 13 | 21.17 | 21.16 | 21.12 |
| | | 25 | 25 | 21.30 | 21.30 | 21.23 |
| | | 50 | 0 | 21.27 | 21.25 | 21.17 |

| Band25 | | | | | | |
|-----------|-------|---------|-----------|-------------------------------|-------------------------------|-------------------------------|
| Bandwidth | Mode | RB Size | RB Offset | Actual output power(dBm) | | |
| | | | | Channel 26065 1852.5MHz | Channel 26365 1882.5MHz | Channel 26665 1912.5MHz |
| 5MHz | QPSK | 1 | 0 | 22.89 | 22.77 | 22.69 |
| | | 1 | 13 | 23.01 | 22.91 | 22.82 |
| | | 1 | 24 | 22.86 | 22.77 | 22.66 |
| | | 12 | 0 | 22.07 | 21.95 | 21.83 |
| | | 12 | 6 | 22.09 | 21.99 | 21.86 |
| | | 12 | 13 | 22.03 | 21.90 | 21.74 |
| | | 25 | 0 | 22.07 | 21.97 | 21.84 |
| | 16QAM | 1 | 0 | 22.06 | 22.04 | 21.94 |
| | | 1 | 13 | 22.22 | 22.15 | 21.99 |
| | | 1 | 24 | 22.08 | 22.02 | 21.80 |
| | | 12 | 0 | 20.99 | 20.92 | 20.83 |
| | | 12 | 6 | 21.03 | 20.96 | 20.85 |
| | | 12 | 13 | 20.97 | 20.89 | 20.71 |
| | | 25 | 0 | 21.00 | 20.92 | 20.80 |
| Bandwidth | Mode | RB Size | RB Offset | Actual output power(dBm) | | |
| | | | | Channel 26090 1855MHz | Channel 26365 1882.5MHz | Channel 26640 1910MHz |
| 10MHz | QPSK | 1 | 0 | 22.99 | 22.87 | 22.74 |
| | | 1 | 25 | 23.08 | 22.99 | 22.86 |
| | | 1 | 49 | 22.90 | 22.78 | 22.69 |
| | | 25 | 0 | 22.15 | 22.05 | 21.86 |
| | | 25 | 13 | 22.14 | 22.02 | 21.85 |

| | | | | | | |
|-----------|-------|---------|-----------|-------------------------------|-------------------------------|-------------------------------|
| | 16QAM | 25 | 25 | 22.12 | 21.92 | 21.79 |
| | | 50 | 0 | 22.16 | 22.03 | 21.85 |
| | | 1 | 0 | 22.11 | 22.08 | 21.95 |
| | | 1 | 25 | 22.26 | 22.18 | 22.04 |
| | | 1 | 49 | 22.13 | 22.01 | 21.83 |
| | | 25 | 0 | 21.05 | 21.01 | 20.83 |
| | | 25 | 13 | 21.03 | 20.93 | 20.80 |
| | | 25 | 25 | 21.04 | 20.84 | 20.74 |
| | | 50 | 0 | 21.07 | 20.95 | 20.80 |
| Bandwidth | Mode | RB Size | RB Offset | Actual output power(dBm) | | |
| | | | | Channel 26115 1857.5MHz | Channel 26365 1882.5MHz | Channel 26615 1907.5MHz |
| 15MHz | QPSK | 1 | 0 | 23.05 | 22.96 | 22.82 |
| | | 1 | 38 | 23.05 | 22.96 | 22.85 |
| | | 1 | 74 | 22.89 | 22.82 | 22.73 |
| | | 36 | 0 | 22.16 | 22.11 | 21.92 |
| | | 36 | 18 | 22.13 | 22.06 | 21.86 |
| | | 36 | 39 | 22.13 | 21.95 | 21.82 |
| | | 75 | 0 | 22.16 | 22.06 | 21.90 |
| | 16QAM | 1 | 0 | 22.20 | 22.14 | 22.03 |
| | | 1 | 38 | 22.28 | 22.17 | 22.06 |
| | | 1 | 74 | 22.12 | 22.07 | 21.87 |
| | | 36 | 0 | 21.08 | 21.04 | 20.89 |
| | | 36 | 18 | 21.08 | 20.96 | 20.86 |
| | | 36 | 39 | 21.05 | 20.91 | 20.80 |
| | | 75 | 0 | 21.05 | 20.99 | 20.84 |
| Bandwidth | Mode | RB Size | RB Offset | Actual output power(dBm) | | |
| | | | | Channel 26140 1860MHz | Channel 26365 1882.5MHz | Channel 26590 1905MHz |
| 20MHz | QPSK | 1 | 0 | 23.02 | 22.94 | 22.84 |
| | | 1 | 50 | 23.05 | 23.13 | 22.93 |
| | | 1 | 99 | 22.80 | 22.75 | 22.71 |
| | | 50 | 0 | 22.19 | 22.21 | 22.03 |
| | | 50 | 25 | 22.16 | 22.08 | 21.94 |
| | | 50 | 50 | 22.15 | 21.96 | 21.83 |
| | | 100 | 0 | 22.16 | 22.08 | 21.92 |
| | 16QAM | 1 | 0 | 22.22 | 22.18 | 22.02 |
| | | 1 | 50 | 22.39 | 22.28 | 22.13 |
| | | 1 | 99 | 22.05 | 22.04 | 21.84 |
| | | 50 | 0 | 21.10 | 21.14 | 20.97 |

| | | 50 | 25 | 21.10 | 21.01 | 20.90 |
|-----------|-------|---------|-----------|-------------------------------|-------------------------------|-------------------------------|
| | | 50 | 50 | 21.09 | 20.94 | 20.81 |
| | | 100 | 0 | 21.08 | 21.02 | 20.87 |
| Bandwidth | Mode | RB Size | RB Offset | Actual output power(dBm) | | |
| | | | | Channel 26055 1851.5MHz | Channel 26365 1882.5MHz | Channel 26675 1913.5MHz |
| 3MHz | QPSK | 1 | 0 | 23.01 | 22.90 | 22.81 |
| | | 1 | 8 | 23.00 | 22.89 | 22.83 |
| | | 1 | 14 | 23.00 | 22.90 | 22.78 |
| | | 8 | 0 | 22.09 | 21.96 | 21.83 |
| | | 8 | 4 | 22.11 | 22.01 | 21.86 |
| | | 8 | 7 | 22.07 | 21.94 | 21.81 |
| | | 15 | 0 | 22.06 | 21.97 | 21.84 |
| | 16QAM | 1 | 0 | 22.14 | 22.09 | 22.00 |
| | | 1 | 8 | 22.16 | 22.14 | 21.93 |
| | | 1 | 15 | 22.16 | 22.13 | 21.88 |
| | | 8 | 0 | 21.03 | 20.98 | 20.84 |
| | | 8 | 4 | 21.05 | 20.99 | 20.86 |
| | | 8 | 7 | 21.01 | 20.97 | 20.81 |
| | | 15 | 0 | 20.99 | 20.93 | 20.79 |
| Bandwidth | Mode | RB Size | RB Offset | Actual output power(dBm) | | |
| | | | | Channel 26047 1850.7MHz | Channel 26365 1882.5MHz | Channel 26683 1914.3MHz |
| 1.4MHz | QPSK | 1 | 0 | 22.99 | 22.87 | 22.77 |
| | | 1 | 2 | 23.11 | 23.03 | 22.90 |
| | | 1 | 5 | 22.99 | 22.89 | 22.77 |
| | | 3 | 0 | 22.09 | 21.96 | 21.83 |
| | | 3 | 1 | 22.11 | 22.01 | 21.86 |
| | | 3 | 2 | 22.07 | 21.94 | 21.81 |
| | | 6 | 0 | 22.06 | 21.97 | 21.84 |
| | 16QAM | 1 | 0 | 22.15 | 22.13 | 21.95 |
| | | 1 | 2 | 22.32 | 22.29 | 22.08 |
| | | 1 | 5 | 22.17 | 22.13 | 21.89 |
| | | 3 | 0 | 21.13 | 20.92 | 20.83 |
| | | 3 | 1 | 21.01 | 20.92 | 20.82 |
| | | 3 | 2 | 21.03 | 20.92 | 20.80 |
| | | 6 | 0 | 20.92 | 20.91 | 20.72 |

Band26

| Bandwidth | Mode | RB Size | RB Offset | Actual output power(dBm) | | |
|-----------|-------|---------|-----------|------------------------------|------------------------------|------------------------------|
| | | | | Channel 26715 816.5MHz | Channel 26865 831.5MHz | Channel 27015 846.5MHz |
| 5MHz | QPSK | 1 | 0 | 23.25 | 23.43 | 23.56 |
| | | 1 | 13 | 23.43 | 23.65 | 23.71 |
| | | 1 | 24 | 23.38 | 23.51 | 23.66 |
| | | 12 | 0 | 22.36 | 22.56 | 22.82 |
| | | 12 | 6 | 22.46 | 22.65 | 22.82 |
| | | 12 | 13 | 22.40 | 22.61 | 22.75 |
| | | 25 | 0 | 22.43 | 22.61 | 22.85 |
| | 16QAM | 1 | 0 | 22.52 | 22.73 | 22.91 |
| | | 1 | 13 | 22.74 | 22.93 | 23.09 |
| | | 1 | 24 | 22.71 | 22.79 | 23.00 |
| | | 12 | 0 | 21.42 | 21.59 | 21.90 |
| | | 12 | 6 | 21.50 | 21.68 | 21.86 |
| | | 12 | 13 | 21.44 | 21.65 | 21.82 |
| | | 25 | 0 | 21.40 | 21.60 | 21.85 |
| Bandwidth | Mode | RB Size | RB Offset | Actual output power(dBm) | | |
| | | | | Channel 26740 819MHz | Channel 26865 831.5MHz | Channel 26990 844MHz |
| 10MHz | QPSK | 1 | 0 | 23.33 | 23.52 | 23.63 |
| | | 1 | 25 | 23.57 | 23.70 | 23.70 |
| | | 1 | 49 | 23.53 | 23.60 | 23.69 |
| | | 25 | 0 | 22.52 | 22.60 | 22.80 |
| | | 25 | 13 | 22.51 | 22.66 | 22.82 |
| | | 25 | 25 | 22.56 | 22.65 | 22.66 |
| | | 50 | 0 | 22.56 | 22.64 | 22.76 |
| | 16QAM | 1 | 0 | 22.60 | 22.87 | 23.08 |
| | | 1 | 25 | 22.90 | 23.04 | 23.14 |
| | | 1 | 49 | 22.89 | 23.00 | 23.10 |
| | | 25 | 0 | 21.50 | 21.60 | 21.83 |
| | | 25 | 13 | 21.52 | 21.64 | 21.83 |
| | | 25 | 25 | 21.57 | 21.64 | 21.68 |
| | | 50 | 0 | 21.56 | 21.62 | 21.76 |
| Bandwidth | Mode | RB Size | RB Offset | Actual output power(dBm) | | |
| | | | | Channel 26765 821.5MHz | Channel 26865 831.5MHz | Channel 26965 841.5MHz |
| 15MHz | QPSK | 1 | 0 | 23.33 | 23.53 | 23.61 |
| | | 1 | 38 | 23.67 | 23.77 | 23.82 |

| | | | | | | |
|-----------|-------|---------|-----------|------------------------------|------------------------------|------------------------------|
| | | 1 | 74 | 23.52 | 23.64 | 23.70 |
| | | 36 | 0 | 22.51 | 22.56 | 22.87 |
| | | 36 | 18 | 22.57 | 22.65 | 22.79 |
| | | 36 | 39 | 22.63 | 22.66 | 22.70 |
| | | 75 | 0 | 22.60 | 22.63 | 22.80 |
| | 16QAM | 1 | 0 | 22.20 | 22.14 | 22.03 |
| | | 1 | 38 | 22.28 | 22.17 | 22.06 |
| | | 1 | 74 | 22.12 | 22.07 | 21.87 |
| | | 36 | 0 | 21.08 | 21.04 | 20.89 |
| | | 36 | 18 | 21.08 | 20.96 | 20.86 |
| | | 36 | 39 | 21.05 | 20.91 | 20.80 |
| | | 75 | 0 | 21.05 | 20.99 | 20.84 |
| Bandwidth | Mode | RB Size | RB Offset | Actual output power(dBm) | | |
| | | | | Channel 26705 815.5MHz | Channel 26865 831.5MHz | Channel 27025 847.5MHz |
| 3MHz | QPSK | 1 | 0 | 23.35 | 23.61 | 23.66 |
| | | 1 | 8 | 23.38 | 23.65 | 23.74 |
| | | 1 | 14 | 23.40 | 23.62 | 23.75 |
| | | 8 | 0 | 22.37 | 22.64 | 22.81 |
| | | 8 | 4 | 22.44 | 22.70 | 22.85 |
| | | 8 | 7 | 22.38 | 22.63 | 22.84 |
| | | 15 | 0 | 22.38 | 22.65 | 22.83 |
| | 16QAM | 1 | 0 | 22.61 | 22.91 | 22.99 |
| | | 1 | 8 | 22.67 | 22.90 | 23.08 |
| | | 1 | 15 | 22.71 | 22.91 | 23.09 |
| | | 8 | 0 | 21.44 | 21.68 | 21.89 |
| | | 8 | 4 | 21.47 | 21.75 | 21.96 |
| | | 8 | 7 | 21.46 | 21.70 | 21.92 |
| | | 15 | 0 | 21.37 | 21.66 | 21.84 |
| Bandwidth | Mode | RB Size | RB Offset | Actual output power(dBm) | | |
| | | | | Channel 26697 814.7MHz | Channel 26865 831.5MHz | Channel 27033 848.3MHz |
| 1.4MHz | QPSK | 1 | 0 | 23.31 | 23.55 | 23.67 |
| | | 1 | 2 | 23.42 | 23.71 | 23.82 |
| | | 1 | 5 | 23.34 | 23.57 | 23.72 |
| | | 3 | 0 | 22.37 | 22.64 | 22.81 |
| | | 3 | 1 | 22.44 | 22.70 | 22.85 |
| | | 3 | 2 | 22.38 | 22.63 | 22.84 |
| | | 6 | 0 | 22.40 | 22.64 | 22.87 |
| | 16QAM | 1 | 0 | 22.60 | 22.86 | 23.07 |

| | | | | | | |
|--|--|---|---|-------|-------|-------|
| | | 1 | 2 | 22.75 | 23.03 | 23.23 |
| | | 1 | 5 | 22.66 | 22.92 | 23.09 |
| | | 3 | 0 | 22.39 | 22.65 | 22.88 |
| | | 3 | 1 | 22.47 | 22.73 | 22.93 |
| | | 3 | 2 | 22.43 | 22.71 | 22.95 |
| | | 6 | 0 | 21.45 | 21.70 | 21.98 |

11.5. WiFi and BT Measurement result

Table 11.17: The conducted power for Bluetooth

| GFSK | | | |
|---------------------------------|----------------|----------------|----------------|
| Channel | Ch0 (2402 MHz) | Ch39 (2441MHz) | CH78 (2480MHz) |
| Conducted Output Power (dBm) | 3.5 | 3.1 | 3.7 |
| $\pi/4$ DQPSK | | | |
| Channel | Ch0 (2402 MHz) | Ch39 (2441MHz) | CH78 (2480MHz) |
| Conducted Output Power (dBm) | 2.7 | 2.4 | 2.9 |
| 8DPSK | | | |
| Channel | Ch0 (2402 MHz) | Ch39 (2441MHz) | CH78 (2480MHz) |
| Conducted Output Power (dBm) | 2.6 | 2.4 | 3.0 |

Table 11.18: The conducted power for BLE

| GFSK | | | |
|------------------------------|----------------|----------------|----------------|
| Channel | Ch0 (2402 MHz) | Ch19 (2440MHz) | CH39 (2480MHz) |
| Conducted Output Power (dBm) | 0.92 | 0.45 | -0.79 |

NOTE: According to KDB447498 D01 BT standalone SAR are not required, because maximum average output power is less than 10mW.

When the standalone SAR test exclusion is applied to an antenna that transmits simultaneously with other antennas, the standalone SAR must be estimated according to the following to determine simultaneous transmission SAR test exclusion:

$(\text{max. power of channel, including tune-up tolerance, mW}) / (\text{min. test separation distance, mm}) \cdot [\sqrt{f(\text{GHz})/x}] \text{ W/kg}$ for test separation distances $\leq 50 \text{ mm}$;
where $x = 7.5$ for 1-g SAR, and $x = 18.75$ for 10-g SAR.

SAR head value of BT is 0.133 W/Kg. SAR body value of BT is 0.066 W/Kg for 1g.
SAR body value of BT is 0.053 W/Kg for 10g

The default power measurement procedures are:

a) Power must be measured at each transmit antenna port according to the DSSS and OFDM transmission configurations in each standalone and aggregated frequency band.

b) Power measurement is required for the transmission mode configuration with the highest maximum output power specified for production units.

1) When the same highest maximum output power specification applies to multiple transmission modes, the largest channel bandwidth configuration with the lowest order modulation and lowest data rate is measured.

2) When the same highest maximum output power is specified for multiple largest channel bandwidth configurations with the same lowest order modulation or lowest order modulation and lowest data rate, power measurement is required for all equivalent 802.11 configurations with the same maximum output power.

c) For each transmission mode configuration, power must be measured for the highest and lowest channels; and at the mid-band channel(s) when there are at least 3 channels. For configurations with multiple mid-band channels, due to an even number of channels, both channels should be measured.

During WLAN SAR testing EUT is configured with the WLAN continuous TX tool, and the transmission duty factor was monitored on the spectrum analyzer with zero-span setting, the duty cycle is 100%.

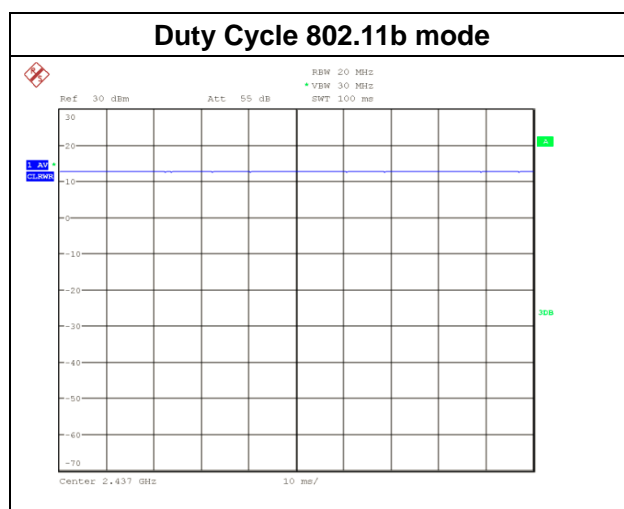


Table 11.19: The average conducted power for WiFi

| Mode | Channel | Frequency | Average power(dBm) |
|----------|---------|-----------|--------------------|
| 802.11 b | 1 | 2412 MHZ | 16.37 |
| | 6 | 2437 MHZ | 16.58 |
| | 11 | 2462 MHZ | 17.14 |
| 802.11 g | 1 | 2412 MHZ | 12.81 |
| | 6 | 2437 MHZ | 13.03 |
| | 11 | 2462 MHZ | 13.70 |
| 802.11 n | 1 | 2412 MHZ | 12,75 |

| | | | |
|-----------------|----|----------|-------|
| 20M | 6 | 2437 MHZ | 12.96 |
| | 11 | 2462 MHZ | 13.62 |
| 802.11 n 40M | 3 | 2422 MHZ | 11.44 |
| | 6 | 2437 MHZ | 11.49 |
| | 9 | 2452 MHZ | 11.67 |

2.4 GHz 802.11g/n OFDM SAR Test Exclusion Requirements

When SAR measurement is required for 2.4 GHz 802.11g/n OFDM configurations, the measurement and test reduction procedures for OFDM are applied. SAR is not required for the following 2.4 GHz OFDM conditions.

- a) When KDB Publication 447498 D01 SAR test exclusion applies to the OFDM configuration.
- b) When the highest *reported* SAR for DSSS is adjusted by the ratio of OFDM to DSSS specified maximum output power and the adjusted SAR is ≤ 1.2 W/kg.

11.6. CDMA Measurement result

Table 11.20: The conducted Power for CDMA

| Band | CDMA2000 BC0 | | | CDMA2000 BC1 | | |
|-------------------------|--------------|--------|--------|--------------|---------|---------|
| Channel | 1013 | 384 | 777 | 25 | 600 | 1175 |
| Frequency (MHz) | 824.7 | 836.52 | 848.31 | 1851.25 | 1880.00 | 1908.75 |
| 1xRTT RC1 SO55 | 24.31 | 24.32 | 24.36 | 23.64 | 23.67 | 23.63 |
| 1xRTT RC3 SO55 | 24.35 | 24.35 | 24.39 | 23.62 | 23.69 | 23.67 |
| 1xRTT RC3 SO32(+ F-SCH) | 24.28 | 24.31 | 24.32 | 23.57 | 23.53 | 23.54 |
| 1xRTT RC3 SO32(+SCH) | 24.24 | 24.25 | 24.27 | 23.58 | 23.55 | 23.51 |
| 1xEVDO RTAP 153.6Kbps | 24.51 | 24.55 | 24.51 | 23.79 | 23.81 | 23.78 |
| 1xEVDO RETAP 4096Bits | 23.39 | 23.43 | 23.21 | 23.69 | 23.61 | 23.68 |

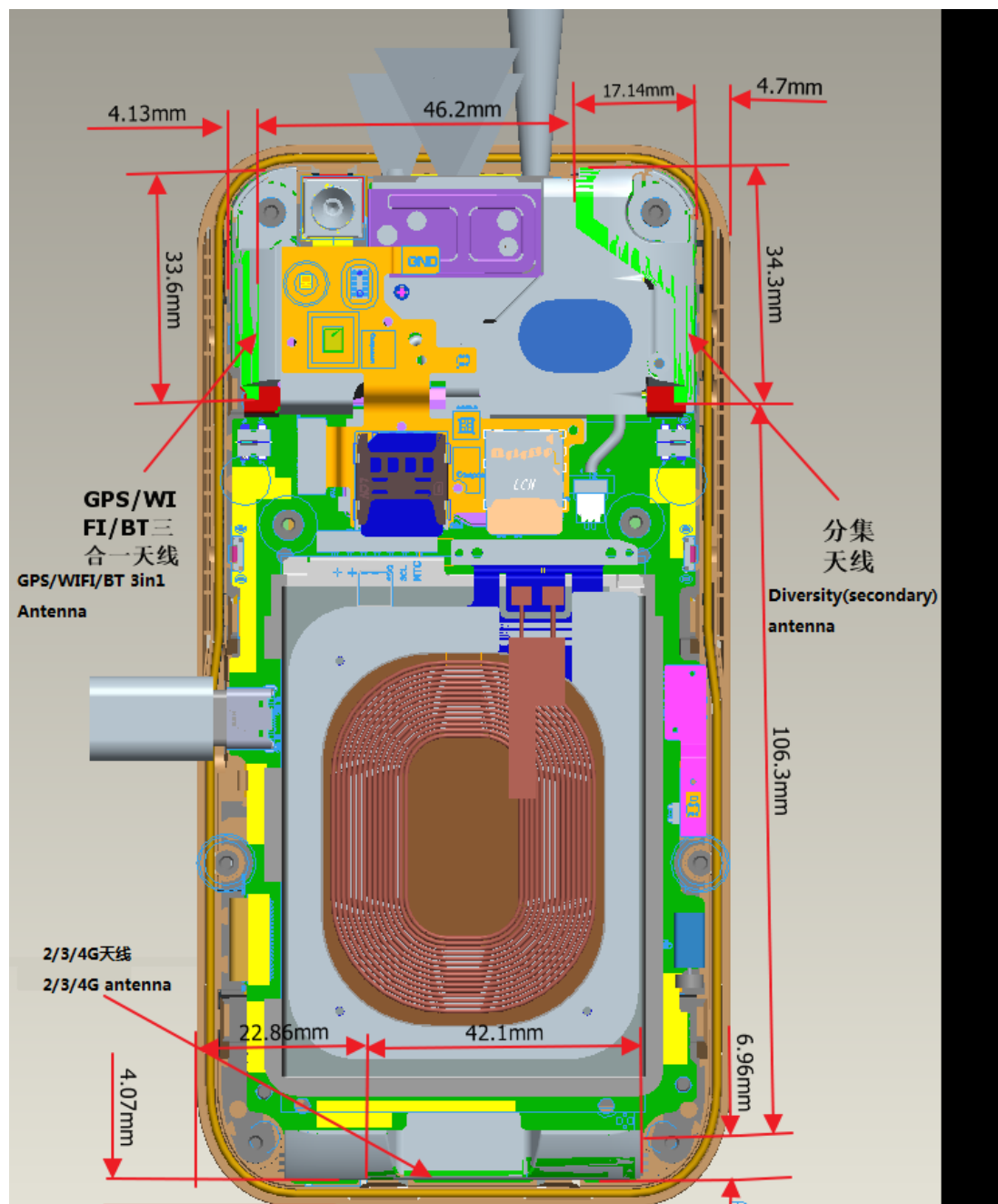
12. Simultaneous TX SAR Considerations

12.1. Introduction

The following procedures adopted from “FCC SAR Considerations for Cell Phones with Multiple Transmitters” are applicable to handsets with built-in unlicensed transmitters such as 802.11 a/b/g and Bluetooth devices which may simultaneously transmit with the licensed transmitter.

For this device, the BT and WiFi can transmit simultaneous with other transmitters.

12.2. Transmit Antenna Separation Distances



Picture 12.1 Antenna Locations

12.3. Standalone SAR Test Exclusion Considerations

Standalone 1-g head or body SAR evaluation by measurement or numerical simulation is not required when the corresponding SAR Exclusion Threshold condition, listed below, is satisfied.

The 1-g SAR test exclusion threshold for 100 MHz to 6 GHz at test separation distances ≤ 50 mm are determined by:

$$\left[\frac{\text{(max. power of channel, including tune-up tolerance, mW)}}{\text{(min. test separation distance, mm)}} \right] \cdot$$

$$[\sqrt{f(\text{GHz})}] \leq 3.0$$
 for 1-g SAR, where

- $f(\text{GHz})$ is the RF channel transmit frequency in GHz
- Power and distance are rounded to the nearest mW and mm before calculation
- The result is rounded to one decimal place for comparison

According to the KDB447498 appendix A, the SAR test exclusion threshold for 2450MHz at 5mm test separation distances is 10mW.

$$\frac{\text{(max. power of channel, including tune-up tolerance, mW)}}{\text{(min. test separation distance, mm)}} * \sqrt{\text{Frequency (GHz)}} \leq 3.0$$

Based on the above equation, Bluetooth SAR was not required:

Evaluation=1.254 < 3.0

12.4. SAR Measurement Positions

According to the KDB941225 D06 Hot Spot SAR v01, the edges with less than 2.5 cm distance to the antennas need to be tested for SAR.

| SAR Measurement Positions | | | | | | |
|---------------------------|---------|--------|------|-------|-----|--------|
| Antenna Mode | Phantom | Ground | Left | Right | Top | Bottom |
| WWAN | Yes | Yes | Yes | Yes | No | Yes |
| WLAN | Yes | Yes | No | Yes | Yes | No |

13. SAR Test Result

13.1 SAR Result for I18D00022-SAR01

Table 13.1: SAR Values(GSM 850 MHz Band-Head)

| Frequency | | Mode /Band | Side | Test Position | Figure No. | Measured average power (dBm) | Maximum allowed Power (dBm) | Scaling factor | Measured SAR(1g) (W/kg) | Reported SAR(1g) (W/kg) | Power Drift (dB) |
|-----------|-----|------------|-------|---------------|------------|------------------------------|-----------------------------|----------------|-------------------------|-------------------------|------------------|
| MHz | Ch. | | | | | | | | | | |
| 836.6 | 190 | GSM850 | Left | Touch | / | 33.73 | 34 | 1.064 | 0.193 | 0.205 | -0.09 |
| 836.6 | 190 | GSM850 | Left | Tilt | / | 33.73 | 34 | 1.064 | 0.128 | 0.136 | 0.10 |
| 836.6 | 190 | GSM850 | Right | Touch | 1 | 33.73 | 34 | 1.064 | 0.233 | 0.248 | 0.17 |
| 836.6 | 190 | GSM850 | Right | Tilt | / | 33.73 | 34 | 1.064 | 0.142 | 0.151 | 0.13 |

Table 13.2: SAR Values (GSM 850 MHz Band-Body)

| Frequency | | Mode /Band | Service /Headset | Test Position | Spacing (mm) | Figure No. | Measured average power (dBm) | Maximum allowed Power (dBm) | Scaling factor | Measured SAR(1g) (W/kg) | Reported SAR(1g) (W/kg) | Power Drift (dB) |
|---------------------|-----|------------|------------------|----------------|--------------|------------|------------------------------|-----------------------------|----------------|-------------------------|-------------------------|------------------|
| MHz | Ch. | | | | | | | | | | | |
| Hotspot & Body worn | | | | | | | | | | | | |
| 836.6 | 190 | GPRS 4TS | Class12 | Toward Phantom | 10 | 2 | 30.28 | 30.5 | 1.052 | 0.442 | 0.465 | -0.03 |
| 836.6 | 190 | GPRS 4TS | Class12 | Toward Ground | 10 | / | 30.28 | 30.5 | 1.052 | 0.441 | 0.464 | -0.06 |
| Hotspot | | | | | | | | | | | | |
| 836.6 | 190 | GPRS 4TS | Class12 | Toward Left | 10 | / | 30.28 | 30.5 | 1.052 | 0.193 | 0.203 | -0.16 |
| 836.6 | 190 | GPRS 4TS | Class12 | Toward Right | 10 | / | 30.28 | 30.5 | 1.052 | 0.372 | 0.391 | 0.04 |
| 836.6 | 190 | GPRS 4TS | Class12 | Toward Bottom | 10 | / | 30.28 | 30.5 | 1.052 | 0.321 | 0.338 | 0.05 |

Table 13.3: SAR Values(GSM 1900 MHz Band-Head)

| Frequency | | Mode /Band | Side | Test Position | Figure No. | Measured average power (dBm) | Maximum allowed Power (dBm) | Scaling factor | Measured SAR(1g) (W/kg) | Reported SAR(1g) (W/kg) | Power Drift (dB) |
|-----------|-----|------------|-------|---------------|------------|------------------------------|-----------------------------|----------------|-------------------------|-------------------------|------------------|
| MHz | Ch. | | | | | | | | | | |
| 1880 | 661 | GSM1900 | Left | Touch | 3 | 31.15 | 31.5 | 1.084 | 0.47 | 0.509 | -0.04 |
| 1880 | 661 | GSM1900 | Left | Tilt | / | 31.15 | 31.5 | 1.084 | 0.13 | 0.141 | -0.07 |
| 1880 | 661 | GSM1900 | Right | Touch | / | 31.15 | 31.5 | 1.084 | 0.17 | 0.184 | 0.04 |
| 1880 | 661 | GSM1900 | Right | Tilt | / | 31.15 | 31.5 | 1.084 | 0.0858 | 0.093 | 0.12 |

Table 13.4: SAR Values (GSM 1900 MHz Band-Body)

| Frequency | | Mode /Band | Service /Headset | Test Position | Spacing (mm) | Figure No. | Measured average power (dBm) | Maximum allowed Power (dBm) | Scaling factor | Measured SAR(1g) (W/kg) | Reported SAR(1g) (W/kg) | Power Drift (dB) |
|---------------------|-----|------------|------------------|----------------|--------------|------------|------------------------------|-----------------------------|----------------|-------------------------|-------------------------|------------------|
| MHz | Ch. | | | | | | | | | | | |
| Hotspot & Body worn | | | | | | | | | | | | |
| 1880 | 661 | GPRS 4TS | Class12 | Toward Phantom | 10 | / | 27.02 | 27.5 | 1.117 | 0.504 | 0.563 | -0.03 |
| 1880 | 661 | GPRS 4TS | Class12 | Toward Ground | 10 | / | 27.02 | 27.5 | 1.117 | 0.471 | 0.526 | 0.19 |
| Hotspot | | | | | | | | | | | | |
| 1880 | 661 | GPRS 4TS | Class12 | Toward Left | 10 | / | 27.02 | 27.5 | 1.117 | 0.274 | 0.306 | 0.08 |
| 1880 | 661 | GPRS 4TS | Class12 | Toward Right | 10 | / | 27.02 | 27.5 | 1.117 | 0.136 | 0.152 | 0.12 |
| 1880 | 661 | GPRS 4TS | Class12 | Toward Bottom | 10 | / | 27.02 | 27.5 | 1.117 | 0.806 | 0.900 | 0.05 |
| 1850.2 | 512 | GPRS 4TS | Class12 | Toward Bottom | 10 | / | 27.23 | 27.5 | 1.064 | 0.839 | 0.893 | -0.04 |
| 1909.8 | 810 | GPRS 4TS | Class12 | Toward Bottom | 10 | 4 | 26.56 | 27.5 | 1.242 | 0.891 | 1.106 | 0.06 |
| Repeated | | | | | | | | | | | | |
| 1909.8 | 810 | GPRS 4TS | Class12 | Toward Bottom | 10 | / | 26.56 | 27.5 | 1.242 | 0.89 | 1.105 | -0.03 |

Table 13.5: SAR Values(WCDMA Band II-Head)

| Frequency | | Mode /Band | Side | Test Position | Figure No. | Measured average power (dBm) | Maximum allowed Power (dBm) | Scaling factor | Measured SAR(1g) (W/kg) | Reported SAR(1g) (W/kg) | Power Drift (dB) |
|-----------|------|------------|-------|---------------|------------|------------------------------|-----------------------------|----------------|-------------------------|-------------------------|------------------|
| MHz | Ch. | | | | | | | | | | |
| 1880 | 9400 | Band II | Left | Touch | 5 | 23.4 | 24 | 1.148 | 0.273 | 0.313 | 0.09 |
| 1880 | 9400 | Band II | Left | Tilt | / | 23.4 | 24 | 1.148 | 0.0484 | 0.056 | -0.06 |
| 1880 | 9400 | Band II | Right | Touch | / | 23.4 | 24 | 1.148 | 0.116 | 0.133 | 0.02 |
| 1880 | 9400 | Band II | Right | Tilt | / | 23.4 | 24 | 1.148 | 0.0473 | 0.054 | 0.02 |

Table 13.6: SAR Values (WCDMA Band II-Body)

| Frequency | | Mode /Band | Service /Headset | Test Position | Spacing (mm) | Figure No. | Measured average power (dBm) | Maximum allowed Power (dBm) | Scaling factor | Measured SAR(1g) (W/kg) | Reported SAR(1g) (W/kg) | Power Drift (dB) |
|---------------------|------|------------|------------------|----------------|--------------|------------|------------------------------|-----------------------------|----------------|-------------------------|-------------------------|------------------|
| MHz | Ch. | | | | | | | | | | | |
| Hotspot & Body worn | | | | | | | | | | | | |
| 1880 | 9400 | Band II | 12.2kbps RMC | Toward Phantom | 10 | / | 23.4 | 24 | 1.148 | 0.416 | 0.478 | -0.12 |
| 1880 | 9400 | Band II | 12.2kbps RMC | Toward Ground | 10 | / | 23.4 | 24 | 1.148 | 0.314 | 0.361 | 0.01 |
| Hotspot | | | | | | | | | | | | |
| 1880 | 9400 | Band II | 12.2kbps RMC | Toward Left | 10 | / | 23.4 | 24 | 1.148 | 0.189 | 0.217 | 0.03 |
| 1880 | 9400 | Band II | 12.2kbps RMC | Toward Right | 10 | / | 23.4 | 24 | 1.148 | 0.0909 | 0.104 | 0.11 |
| 1880 | 9400 | Band II | 12.2kbps RMC | Toward Bottom | 10 | 6 | 23.4 | 24 | 1.148 | 0.458 | 0.526 | 0.04 |

Table 13.7: SAR Values(WCDMA Band IV-Head)

| Frequency | | Mode /Band | Side | Test Position | Figure No. | Measured average power (dBm) | Maximum allowed Power (dBm) | Scaling factor | Measured SAR(1g) (W/kg) | Reported SAR(1g) (W/kg) | Power Drift (dB) |
|-----------|------|------------|-------|---------------|------------|------------------------------|-----------------------------|----------------|-------------------------|-------------------------|------------------|
| MHz | Ch. | | | | | | | | | | |
| 1732.6 | 1413 | Band IV | Left | Touch | 7 | 23.6 | 24 | 1.096 | 0.414 | 0.454 | -0.01 |
| 1732.6 | 1413 | Band IV | Left | Tilt | / | 23.6 | 24 | 1.096 | 0.175 | 0.192 | -0.06 |
| 1732.6 | 1413 | Band IV | Right | Touch | / | 23.6 | 24 | 1.096 | 0.238 | 0.261 | 0.02 |
| 1732.6 | 1413 | Band IV | Right | Tilt | / | 23.6 | 24 | 1.096 | 0.126 | 0.138 | 0.02 |

Table 13.8: SAR Values (WCDMA Band IV-Body)

| Frequency | | Mode /Band | Service /Headset | Test Position | Spacing (mm) | Figure No. | Measured average power (dBm) | Maximum allowed Power (dBm) | Scaling factor | Measured SAR(1g) (W/kg) | Reported SAR(1g) (W/kg) | Power Drift (dB) |
|---------------------|------|------------|------------------|----------------|--------------|------------|------------------------------|-----------------------------|----------------|-------------------------|-------------------------|------------------|
| MHz | Ch. | | | | | | | | | | | |
| Hotspot & Body worn | | | | | | | | | | | | |
| 1732.6 | 1413 | Band IV | 12.2kbps RMC | Toward Phantom | 10 | 8 | 23.6 | 24 | 1.096 | 0.605 | 0.663 | -0.19 |
| 1732.6 | 1413 | Band IV | 12.2kbps RMC | Toward Ground | 10 | / | 23.6 | 24 | 1.096 | 0.414 | 0.454 | 0.01 |
| Hotspot | | | | | | | | | | | | |
| 1732.6 | 1413 | Band IV | 12.2kbps RMC | Toward Left | 10 | / | 23.6 | 24 | 1.096 | 0.381 | 0.418 | 0.03 |
| 1732.6 | 1413 | Band IV | 12.2kbps RMC | Toward Right | 10 | / | 23.6 | 24 | 1.096 | 0.201 | 0.220 | 0.11 |
| 1732.6 | 1413 | Band IV | 12.2kbps RMC | Toward Bottom | 10 | / | 23.6 | 24 | 1.096 | 0.338 | 0.371 | 0.04 |

Table 13.9: SAR Values (WCDMA Band V-Head)

| Frequency | | Mode /Band | Side | Test Position | Figure No. | Measured average power (dBm) | Maximum allowed Power (dBm) | Scaling factor | Measured SAR(1g) (W/kg) | Reported SAR(1g) (W/kg) | Power Drift (dB) |
|-----------|------|------------|-------|---------------|------------|------------------------------|-----------------------------|----------------|-------------------------|-------------------------|------------------|
| MHz | Ch. | | | | | | | | | | |
| 836.6 | 4183 | Band V | Left | Touch | / | 23.59 | 24 | 1.099 | 0.15 | 0.165 | 0.01 |
| 836.6 | 4183 | Band V | Left | Tilt | / | 23.59 | 24 | 1.099 | 0.104 | 0.114 | -0.03 |
| 836.6 | 4183 | Band V | Right | Touch | 9 | 23.59 | 24 | 1.099 | 0.191 | 0.210 | 0.11 |
| 836.6 | 4183 | Band V | Right | Tilt | / | 23.59 | 24 | 1.099 | 0.104 | 0.114 | 0.11 |

Table 13.10: SAR Values (WCDMA Band V-Body)

| Frequency | | Mode /Band | Service /Headset | Test Position | Spacing (mm) | Figure No. | Measured average power (dBm) | Maximum allowed Power (dBm) | Scaling factor | Measured SAR(1g) (W/kg) | Reported SAR(1g) (W/kg) | Power Drift (dB) |
|---------------------|------|------------|------------------|----------------|--------------|------------|------------------------------|-----------------------------|----------------|-------------------------|-------------------------|------------------|
| MHz | Ch. | | | | | | | | | | | |
| Hotspot & Body worn | | | | | | | | | | | | |
| 836.6 | 4183 | Band V | 12.2kbps RMC | Toward Phantom | 10 | 10 | 23.59 | 24 | 1.099 | 0.175 | 0.192 | 0.09 |
| 836.6 | 4183 | Band V | 12.2kbps RMC | Toward Ground | 10 | / | 23.59 | 24 | 1.099 | 0.155 | 0.170 | 0.09 |
| Hotspot | | | | | | | | | | | | |
| 836.6 | 4183 | Band V | 12.2kbps RMC | Toward Left | 10 | / | 23.59 | 24 | 1.099 | 0.0792 | 0.087 | 0.07 |
| 836.6 | 4183 | Band V | 12.2kbps RMC | Toward Right | 10 | / | 23.59 | 24 | 1.099 | 0.171 | 0.188 | 0.17 |
| 836.6 | 4183 | Band V | 12.2kbps RMC | Toward Bottom | 10 | / | 23.59 | 24 | 1.099 | 0.123 | 0.135 | 0.01 |

Table 13.11: SAR Values(LTE Band 4-Head)

| Frequency | | Configuration | Side | Test Position | Figure No. | Measured average power (dBm) | Maximum allowed Power (dBm) | Scaling factor | Measured SAR(1g) (W/kg) | Reported SAR(1g) (W/kg) | Power Drift (dB) |
|-----------|-------|----------------------------------|-------|---------------|------------|------------------------------|-----------------------------|----------------|-------------------------|-------------------------|------------------|
| MHz | Ch. | | | | | | | | | | |
| 1732.5 | 20175 | QPSK_20MHz_1RB_50 offset Middle | Left | Touch | 11 | 22.58 | 23.5 | 1.236 | 0.648 | 0.801 | 0.19 |
| 1720 | 20050 | QPSK_20MHz_1RB_50 offset Low | Left | Touch | / | 22.55 | 23.5 | 1.245 | 0.534 | 0.665 | 0.12 |
| 1745 | 20300 | QPSK_20MHz_1RB_50 offset High | Left | Touch | / | 22.50 | 23.5 | 1.259 | 0.525 | 0.661 | 0.02 |
| 1732.5 | 20175 | QPSK_20MHz_1RB_50 offset Middle | Left | Tilt | / | 22.58 | 23.5 | 1.236 | 0.224 | 0.277 | 0.13 |
| 1732.5 | 20175 | QPSK_20MHz_1RB_50 offset Middle | Right | Touch | / | 22.58 | 23.5 | 1.236 | 0.412 | 0.509 | 0.13 |
| 1732.5 | 20175 | QPSK_20MHz_1RB_50 offset Middle | Right | Tilt | / | 22.58 | 23.5 | 1.236 | 0.166 | 0.205 | 0.03 |
| 1732.5 | 20175 | QPSK_20MHz_50RB_0 offset Middle | Left | Touch | / | 21.60 | 23 | 1.380 | 0.505 | 0.697 | 0.03 |
| 1732.5 | 20175 | QPSK_20MHz_50RB_0 offset Middle | Left | Tilt | / | 21.60 | 23 | 1.380 | 0.182 | 0.251 | -0.16 |
| 1732.5 | 20175 | QPSK_20MHz_50RB_0 offset Middle | Right | Touch | / | 21.60 | 23 | 1.380 | 0.299 | 0.413 | 0.17 |
| 1732.5 | 20175 | QPSK_20MHz_50RB_0 offset Middle | Right | Tilt | / | 21.60 | 23 | 1.380 | 0.13 | 0.179 | 0.13 |
| 1732.5 | 20175 | QPSK_20MHz_100RB_0 offset Middle | Left | Touch | / | 21.48 | 22.5 | 1.265 | 0.567 | 0.717 | 0.12 |

Table 13.12: SAR Values (LTE Band 4-Body)

| Frequency | | Configuration | Test Position | Spacing (mm) | Figure No. | Measured average power (dBm) | Maximum allowed Power (dBm) | Scaling factor | Measured SAR(1g) (W/kg) | Reported SAR(1g) (W/kg) | Power Drift (dB) |
|---------------------|-------|----------------------------------|----------------|--------------|------------|------------------------------|-----------------------------|----------------|-------------------------|-------------------------|------------------|
| MHz | Ch. | | | | | | | | | | |
| Hotspot & Body worn | | | | | | | | | | | |
| 1732.5 | 20175 | QPSK_20MHz_1RB_50 offset Middle | Toward Phantom | 10 | / | 22.58 | 23.5 | 1.236 | 0.929 | 1.148 | -0.14 |
| 1720 | 20050 | QPSK_20MHz_1RB_50 offset Low | Toward Phantom | 10 | / | 22.55 | 23.5 | 1.245 | 0.911 | 1.134 | 0.04 |
| 1745 | 20300 | QPSK_20MHz_1RB_50 offset High | Toward Phantom | 10 | / | 22.50 | 23.5 | 1.259 | 0.834 | 1.050 | 0.19 |
| 1732.5 | 20175 | QPSK_20MHz_1RB_50 offset Middle | Toward Ground | 10 | / | 22.58 | 23.5 | 1.236 | 0.691 | 0.854 | 0.15 |
| 1732.5 | 20175 | QPSK_20MHz_50RB_0 offset Middle | Toward Phantom | 10 | / | 21.60 | 23 | 1.380 | 0.747 | 1.031 | 0.08 |
| 1720 | 20050 | QPSK_20MHz_50RB_0 offset Low | Toward Phantom | 10 | / | 21.50 | 23 | 1.413 | 0.715 | 1.010 | 0.09 |
| 1745 | 20300 | QPSK_20MHz_50RB_0 offset High | Toward Phantom | 10 | / | 21.55 | 23 | 1.396 | 0.728 | 1.017 | 0.01 |
| 1732.5 | 20175 | QPSK_20MHz_50RB_0 offset Middle | Toward Ground | 10 | / | 21.60 | 23 | 1.380 | 0.548 | 0.756 | -0.04 |
| 1732.5 | 20175 | QPSK_20MHz_100RB_0 offset Middle | Toward Phantom | 10 | / | 21.48 | 22.5 | 1.265 | 0.812 | 1.027 | -0.15 |
| Hotspot | | | | | | | | | | | |
| 1732.5 | 20175 | QPSK_20MHz_1RB_50 offset Middle | Toward Left | 10 | / | 22.58 | 23.5 | 1.236 | 0.485 | 0.599 | -0.14 |
| 1732.5 | 20175 | QPSK_20MHz_1RB_50 offset Middle | Toward Right | 10 | / | 22.58 | 23.5 | 1.236 | 0.294 | 0.363 | -0.07 |
| 1732.5 | 20175 | QPSK_20MHz_1RB_50 offset Middle | Toward Bottom | 10 | / | 22.58 | 23.5 | 1.236 | 0.722 | 0.892 | 0.01 |
| 1720 | 20050 | QPSK_20MHz_1RB_50 offset Low | Toward Bottom | 10 | / | 22.55 | 23.5 | 1.245 | 0.712 | 0.886 | -0.07 |
| 1745 | 20300 | QPSK_20MHz_1RB_50 offset High | Toward Bottom | 10 | / | 22.50 | 23.5 | 1.259 | 0.702 | 0.884 | 0.01 |
| 1732.5 | 20175 | QPSK_20MHz_50RB_0 offset Middle | Toward Left | 10 | / | 21.60 | 23 | 1.380 | 0.384 | 0.530 | -0.15 |
| 1732.5 | 20175 | QPSK_20MHz_50RB_0 offset Middle | Toward Right | 10 | / | 21.60 | 23 | 1.380 | 0.24 | 0.331 | -0.11 |
| 1732.5 | 20175 | QPSK_20MHz_50RB_0 offset Middle | Toward Bottom | 10 | / | 21.60 | 23 | 1.380 | 0.577 | 0.796 | -0.04 |

| Repeated | | | | | | | | | | | |
|----------|-------|-------------------------------------|-------------------|----|----|-------|------|-------|-------|-------|-------|
| 1732.5 | 20175 | QPSK_20MHz_1RB_ 50 offset Middle | Toward Phantom | 10 | 12 | 22.98 | 23.5 | 1.127 | 1.040 | 1.172 | -0.17 |

Table 13.13: SAR Values(LTE Band 5-Head)

| Frequency | | Configuration | Side | Test Position | Figure No. | Measured average power (dBm) | Maximum allowed Power (dBm) | Scaling factor | Measured SAR(1g) (W/kg) | Reported SAR(1g) (W/kg) | Power Drift (dB) |
|-----------|-------|---------------------------------|-------|---------------|------------|------------------------------|-----------------------------|----------------|-------------------------|-------------------------|------------------|
| MHz | Ch. | | | | | | | | | | |
| 836.5 | 20525 | QPSK_10MHz_1RB_25 offset Middle | Left | Touch | / | 23.67 | 24.5 | 1.211 | 0.138 | 0.167 | 0.13 |
| 836.5 | 20525 | QPSK_10MHz_1RB_25 offset Middle | Left | Tilt | / | 23.67 | 24.5 | 1.211 | 0.126 | 0.153 | 0.04 |
| 836.5 | 20525 | QPSK_10MHz_1RB_25 offset Middle | Right | Touch | 13 | 23.67 | 24.5 | 1.211 | 0.187 | 0.226 | -0.19 |
| 836.5 | 20525 | QPSK_10MHz_1RB_25 offset Middle | Right | Tilt | / | 23.67 | 24.5 | 1.211 | 0.12 | 0.145 | -0.05 |
| 836.5 | 20525 | QPSK_10MHz_25RB_0 offset Middle | Left | Touch | / | 22.69 | 24 | 1.352 | 0.11 | 0.149 | 0.17 |
| 836.5 | 20525 | QPSK_10MHz_25RB_0 offset Middle | Left | Tilt | / | 22.69 | 24 | 1.352 | 0.1 | 0.135 | 0.04 |
| 836.5 | 20525 | QPSK_10MHz_25RB_0 offset Middle | Right | Touch | / | 22.69 | 24 | 1.352 | 0.152 | 0.206 | -0.18 |
| 836.5 | 20525 | QPSK_10MHz_25RB_0 offset Middle | Right | Tilt | / | 22.69 | 24 | 1.352 | 0.096 | 0.130 | 0.08 |

Table 13.14: SAR Values (LTE Band 5-Body)

| Frequency | | Configuration | Test Position | Spacing (mm) | Figure No. | Measured average power (dBm) | Maximum allowed Power (dBm) | Scaling factor | Measured SAR(1g) (W/kg) | Reported SAR(1g) (W/kg) | Power Drift (dB) |
|---------------------|-------|---------------------------------|----------------|--------------|------------|------------------------------|-----------------------------|----------------|-------------------------|-------------------------|------------------|
| MHz | Ch. | | | | | | | | | | |
| Hotspot & Body worn | | | | | | | | | | | |
| 836.5 | 20525 | QPSK_10MHz_1RB_25 offset Middle | Toward Phantom | 10 | 14 | 23.67 | 24.5 | 1.211 | 0.268 | 0.324 | 0.05 |
| 836.5 | 20525 | QPSK_10MHz_1RB_25 offset Middle | Toward Ground | 10 | / | 23.67 | 24.5 | 1.211 | 0.263 | 0.318 | -0.03 |
| 836.5 | 20525 | QPSK_10MHz_25RB_0 offset Middle | Toward Phantom | 10 | / | 22.69 | 24 | 1.352 | 0.214 | 0.289 | 0.06 |
| 836.5 | 20525 | QPSK_10MHz_25RB_0 offset Middle | Toward Ground | 10 | / | 22.69 | 24 | 1.352 | 0.205 | 0.277 | -0.02 |
| Hotspot | | | | | | | | | | | |
| 836.5 | 20525 | QPSK_10MHz_1RB_25 offset Middle | Toward Left | 10 | / | 23.67 | 24.5 | 1.211 | 0.13 | 0.157 | 0.13 |

| | | | | | | | | | | | |
|-------|-------|-------------------------------------|------------------|----|---|-------|------|-------|-------|-------|------|
| 836.5 | 20525 | QPSK_10MHz_1RB_ 25 offset Middle | Toward Right | 10 | / | 23.67 | 24.5 | 1.211 | 0.222 | 0.269 | 0.06 |
| 836.5 | 20525 | QPSK_10MHz_1RB_ 25 offset Middle | Toward Bottom | 10 | / | 23.67 | 24.5 | 1.211 | 0.177 | 0.214 | 0.16 |
| 836.5 | 20525 | QPSK_10MHz_25RB_ 0 offset Middle | Toward Left | 10 | / | 22.69 | 24 | 1.352 | 0.105 | 0.142 | 0.18 |
| 836.5 | 20525 | QPSK_10MHz_25RB_ 0 offset Middle | Toward Right | 10 | / | 22.69 | 24 | 1.352 | 0.177 | 0.239 | 0.16 |
| 836.5 | 20525 | QPSK_10MHz_25RB_ 0 offset Middle | Toward Bottom | 10 | / | 22.69 | 24 | 1.352 | 0.137 | 0.185 | 0.12 |

Table 13.15: SAR Values(LTE Band 7-Head)

| Frequency | | Configuration | Side | Test Position | Figure No. | Measured average power (dBm) | Maximum allowed Power (dBm) | Scaling factor | Measured SAR(1g) (W/kg) | Reported SAR(1g) (W/kg) | Power Drift (dB) |
|-----------|-------|--------------------------------|-------|---------------|------------|------------------------------|-----------------------------|----------------|-------------------------|-------------------------|------------------|
| MHz | Ch. | | | | | | | | | | |
| 2560 | 21350 | QPSK_20MHz_1RB_50 offset High | Left | Touch | 15 | 22.93 | 23.5 | 1.140 | 0.025 | 0.029 | -0.04 |
| 2560 | 21350 | QPSK_20MHz_1RB_50 offset High | Left | Tilt | / | 22.93 | 23.5 | 1.140 | 0.0114 | 0.013 | 0.09 |
| 2560 | 21350 | QPSK_20MHz_1RB_50 offset High | Right | Touch | / | 22.93 | 23.5 | 1.140 | 0.022 | 0.025 | 0.03 |
| 2560 | 21350 | QPSK_20MHz_1RB_50 offset High | Right | Tilt | / | 22.93 | 23.5 | 1.140 | 0.0134 | 0.015 | 0.01 |
| 2560 | 21350 | QPSK_20MHz_50RB_25 offset High | Left | Touch | / | 21.94 | 23 | 1.276 | 0.0231 | 0.029 | 0.13 |
| 2560 | 21350 | QPSK_20MHz_50RB_25 offset High | Left | Tilt | / | 21.94 | 23 | 1.276 | 0.0095 | 0.012 | 0.16 |
| 2560 | 21350 | QPSK_20MHz_50RB_25 offset High | Right | Touch | / | 21.94 | 23 | 1.276 | 0.016 | 0.020 | 0.04 |
| 2560 | 21350 | QPSK_20MHz_50RB_25 offset High | Right | Tilt | / | 21.94 | 23 | 1.276 | 0.006 | 0.008 | 0.03 |

Table 13.16: SAR Values (LTE Band 7-Body)

| Frequency | | Configuration | Test Position | Spacing (mm) | Figure No. | Measured average power (dBm) | Maximum allowed Power (dBm) | Scaling factor | Measured SAR(1g) (W/kg) | Reported SAR(1g) (W/kg) | Power Drift (dB) |
|---------------------|-------|--------------------------------|----------------|--------------|------------|------------------------------|-----------------------------|----------------|-------------------------|-------------------------|------------------|
| MHz | Ch. | | | | | | | | | | |
| Hotspot & Body worn | | | | | | | | | | | |
| 2560 | 21350 | QPSK_20MHz_1RB_50 offset High | Toward Phantom | 10 | / | 22.93 | 23.5 | 1.140 | 0.113 | 0.129 | 0.08 |
| 2560 | 21350 | QPSK_20MHz_1RB_50 offset High | Toward Ground | 10 | / | 22.93 | 23.5 | 1.140 | 0.273 | 0.311 | 0.11 |
| 2560 | 21350 | QPSK_20MHz_50RB_25 offset High | Toward Phantom | 10 | / | 21.94 | 23 | 1.276 | 0.0902 | 0.115 | -0.04 |
| 2560 | 21350 | QPSK_20MHz_50RB_25 offset High | Toward Ground | 10 | / | 21.94 | 23 | 1.276 | 0.203 | 0.259 | 0.08 |
| Hotspot | | | | | | | | | | | |
| 2560 | 21350 | QPSK_20MHz_1RB_50 offset High | Toward Left | 10 | / | 22.93 | 23.5 | 1.140 | 0.0194 | 0.022 | 0.05 |
| 2560 | 21350 | QPSK_20MHz_1RB_50 offset High | Toward Right | 10 | / | 22.93 | 23.5 | 1.140 | 0.0103 | 0.012 | 0.13 |
| 2560 | 21350 | QPSK_20MHz_1RB_50 offset High | Toward Bottom | 10 | 16 | 22.93 | 23.5 | 1.140 | 0.671 | 0.765 | 0.04 |
| 2560 | 21350 | QPSK_20MHz_50RB_25 offset High | Toward Left | 10 | / | 21.94 | 23 | 1.276 | 0.0106 | 0.014 | 0.08 |
| 2560 | 21350 | QPSK_20MHz_50RB_25 offset High | Toward Right | 10 | / | 21.94 | 23 | 1.276 | 0.008 | 0.010 | -0.04 |
| 2560 | 21350 | QPSK_20MHz_50RB_25 offset High | Toward Bottom | 10 | / | 21.94 | 23 | 1.276 | 0.328 | 0.419 | 0.08 |

Table 13.17: SAR Values(LTE Band 12-Head)

| Frequency | | Configuration | Side | Test Position | Figure No. | Measured average power (dBm) | Maximum allowed Power (dBm) | Scaling factor | Measured SAR(1g) (W/kg) | Reported SAR(1g) (W/kg) | Power Drift (dB) |
|-----------|-------|---------------------------------|-------|---------------|------------|------------------------------|-----------------------------|----------------|-------------------------|-------------------------|------------------|
| MHz | Ch. | | | | | | | | | | |
| 707.5 | 23095 | QPSK_10MHz_1RB_25 offset Middle | Left | Touch | 17 | 23.17 | 24 | 1.211 | 0.136 | 0.165 | 0.12 |
| 707.5 | 23095 | QPSK_10MHz_1RB_25 offset Middle | Left | Tilt | / | 23.17 | 24 | 1.211 | 0.0979 | 0.119 | 0.04 |
| 707.5 | 23095 | QPSK_10MHz_1RB_25 offset Middle | Right | Touch | / | 23.17 | 24 | 1.211 | 0.129 | 0.156 | 0.13 |
| 707.5 | 23095 | QPSK_10MHz_1RB_25 offset Middle | Right | Tilt | / | 23.17 | 24 | 1.211 | 0.0874 | 0.106 | 0.02 |
| 707.5 | 23095 | QPSK_10MHz_25RB_0 offset Middle | Left | Touch | / | 22.14 | 23.5 | 1.368 | 0.111 | 0.152 | 0.18 |
| 707.5 | 23095 | QPSK_10MHz_25RB_0 offset Middle | Left | Tilt | / | 22.14 | 23.5 | 1.368 | 0.0807 | 0.110 | 0.03 |
| 707.5 | 23095 | QPSK_10MHz_25RB_0 offset Middle | Right | Touch | / | 22.14 | 23.5 | 1.368 | 0.105 | 0.144 | 0.15 |
| 707.5 | 23095 | QPSK_10MHz_25RB_0 offset Middle | Right | Tilt | / | 22.14 | 23.5 | 1.368 | 0.0719 | 0.098 | 0.06 |

Table 13.18: SAR Values (LTE Band 12-Body)

| Frequency | | Configuration | Test Position | Spacing (mm) | Figure No. | Measured average power (dBm) | Maximum allowed Power (dBm) | Scaling factor | Measured SAR(1g) (W/kg) | Reported SAR(1g) (W/kg) | Power Drift (dB) |
|---------------------|-------|---------------------------------|----------------|--------------|------------|------------------------------|-----------------------------|----------------|-------------------------|-------------------------|------------------|
| MHz | Ch. | | | | | | | | | | |
| Hotspot & Body worn | | | | | | | | | | | |
| 707.5 | 23095 | QPSK_10MHz_1RB_25 offset Middle | Toward Phantom | 10 | / | 23.17 | 24 | 1.211 | 0.163 | 0.197 | 0.02 |
| 707.5 | 23095 | QPSK_10MHz_1RB_25 offset Middle | Toward Ground | 10 | 18 | 23.17 | 24 | 1.211 | 0.186 | 0.225 | 0.02 |
| 707.5 | 23095 | QPSK_10MHz_25RB_0 offset Middle | Toward Phantom | 10 | / | 22.14 | 23.5 | 1.368 | 0.133 | 0.182 | 0.01 |
| 707.5 | 23095 | QPSK_10MHz_25RB_0 offset Middle | Toward Ground | 10 | / | 22.14 | 23.5 | 1.368 | 0.152 | 0.208 | 0.03 |
| Hotspot | | | | | | | | | | | |
| 707.5 | 23095 | QPSK_10MHz_1RB_25 offset Middle | Toward Left | 10 | / | 23.17 | 24 | 1.211 | 0.133 | 0.161 | -0.16 |
| 707.5 | 23095 | QPSK_10MHz_1RB_25 offset Middle | Toward Right | 10 | / | 23.17 | 24 | 1.211 | 0.148 | 0.179 | 0.01 |
| 707.5 | 23095 | QPSK_10MHz_1RB_25 offset Middle | Toward Bottom | 10 | / | 23.17 | 24 | 1.211 | 0.0354 | 0.043 | 0.06 |
| 707.5 | 23095 | QPSK_10MHz_25RB_0 offset Middle | Toward Left | 10 | / | 22.14 | 23.5 | 1.368 | 0.11 | 0.150 | -0.12 |
| 707.5 | 23095 | QPSK_10MHz_25RB_0 offset Middle | Toward Right | 10 | / | 22.14 | 23.5 | 1.368 | 0.123 | 0.168 | 0.01 |
| 707.5 | 23095 | QPSK_10MHz_25RB_0 offset Middle | Toward Bottom | 10 | / | 22.14 | 23.5 | 1.368 | 0.0287 | 0.039 | 0.08 |

Table 13.19: SAR Values(LTE Band 13-Head)

| Frequency | | Configuration | Side | Test Position | Figure No. | Measured average power (dBm) | Maximum allowed Power (dBm) | Scaling factor | Measured SAR(1g) (W/kg) | Reported SAR(1g) (W/kg) | Power Drift (dB) |
|-----------|-------|----------------------------------|-------|---------------|------------|------------------------------|-----------------------------|----------------|-------------------------|-------------------------|------------------|
| MHz | Ch. | | | | | | | | | | |
| 782 | 23230 | QPSK_10MHz_1RB_25 offset Middle | Left | Touch | / | 22.80 | 23.5 | 1.175 | 0.16 | 0.188 | 0.10 |
| 782 | 23230 | QPSK_10MHz_1RB_25 offset Middle | Left | Tilt | / | 22.80 | 23.5 | 1.175 | 0.138 | 0.162 | 0.07 |
| 782 | 23230 | QPSK_10MHz_1RB_25 offset Middle | Right | Touch | 19 | 22.80 | 23.5 | 1.175 | 0.184 | 0.216 | 0.14 |
| 782 | 23230 | QPSK_10MHz_1RB_25 offset Middle | Right | Tilt | / | 22.80 | 23.5 | 1.175 | 0.133 | 0.156 | 0.02 |
| 782 | 23230 | QPSK_10MHz_25RB_25 offset Middle | Left | Touch | / | 21.84 | 23 | 1.306 | 0.124 | 0.162 | 0.00 |
| 782 | 23230 | QPSK_10MHz_25RB_25 offset Middle | Left | Tilt | / | 21.84 | 23 | 1.306 | 0.108 | 0.141 | 0.07 |
| 782 | 23230 | QPSK_10MHz_25RB_25 offset Middle | Right | Touch | / | 21.84 | 23 | 1.306 | 0.143 | 0.187 | 0.18 |
| 782 | 23230 | QPSK_10MHz_25RB_25 offset Middle | Right | Tilt | / | 21.84 | 23 | 1.306 | 0.103 | 0.135 | 0.02 |

Table 13.20: SAR Values (LTE Band 13-Body)

| Frequency | | Configuration | Test Position | Spacing (mm) | Figure No. | Measured average power (dBm) | Maximum allowed Power (dBm) | Scaling factor | Measured SAR(1g) (W/kg) | Reported SAR(1g) (W/kg) | Power Drift (dB) |
|---------------------|-------|----------------------------------|----------------|--------------|------------|------------------------------|-----------------------------|----------------|-------------------------|-------------------------|------------------|
| MHz | Ch. | | | | | | | | | | |
| Hotspot & Body worn | | | | | | | | | | | |
| 782 | 23230 | QPSK_10MHz_1RB_25 offset Middle | Toward Phantom | 10 | / | 22.80 | 23.5 | 1.175 | 0.269 | 0.316 | 0.04 |
| 782 | 23230 | QPSK_10MHz_1RB_25 offset Middle | Toward Ground | 10 | 20 | 22.80 | 23.5 | 1.175 | 0.276 | 0.324 | -0.01 |
| 782 | 23230 | QPSK_10MHz_25RB_25 offset Middle | Toward Phantom | 10 | / | 21.84 | 23 | 1.306 | 0.214 | 0.280 | 0.03 |
| 782 | 23230 | QPSK_10MHz_25RB_25 offset Middle | Toward Ground | 10 | / | 21.84 | 23 | 1.306 | 0.219 | 0.286 | -0.00 |
| Hotspot | | | | | | | | | | | |
| 782 | 23230 | QPSK_10MHz_1RB_25 offset Middle | Toward Left | 10 | / | 22.80 | 23.5 | 1.175 | 0.139 | 0.163 | 0.09 |
| 782 | 23230 | QPSK_10MHz_1RB_25 offset Middle | Toward Right | 10 | / | 22.80 | 23.5 | 1.175 | 0.267 | 0.314 | -0.02 |
| 782 | 23230 | QPSK_10MHz_1RB_25 offset Middle | Toward Bottom | 10 | / | 22.80 | 23.5 | 1.175 | 0.0845 | 0.099 | 0.12 |
| 782 | 23230 | QPSK_10MHz_25RB_25 offset Middle | Toward Left | 10 | / | 21.84 | 23 | 1.306 | 0.132 | 0.172 | 0.04 |
| 782 | 23230 | QPSK_10MHz_25RB_25 offset Middle | Toward Right | 10 | / | 21.84 | 23 | 1.306 | 0.208 | 0.272 | 0.02 |
| 782 | 23230 | QPSK_10MHz_25RB_25 offset Middle | Toward Bottom | 10 | / | 21.84 | 23 | 1.306 | 0.066 | 0.086 | 0.15 |

Table 13.21: SAR Values(LTE Band 25-Head)

| Frequency | | Configuration | Side | Test Position | Figure No. | Measured average power (dBm) | Maximum allowed Power (dBm) | Scaling factor | Measured SAR(1g) (W/kg) | Reported SAR(1g) (W/kg) | Power Drift (dB) |
|-----------|-------|---------------------------------|-------|---------------|------------|------------------------------|-----------------------------|----------------|-------------------------|-------------------------|------------------|
| MHz | Ch. | | | | | | | | | | |
| 1882.5 | 26365 | QPSK_20MHz_1RB_50 offset Middle | Left | Touch | 21 | 23.17 | 24 | 1.211 | 0.419 | 0.507 | 0.15 |
| 1882.5 | 26365 | QPSK_20MHz_1RB_50 offset Middle | Left | Tilt | / | 23.17 | 24 | 1.211 | 0.0861 | 0.104 | 0.19 |
| 1882.5 | 26365 | QPSK_20MHz_1RB_50 offset Middle | Right | Touch | / | 23.17 | 24 | 1.211 | 0.176 | 0.213 | 0.19 |
| 1882.5 | 26365 | QPSK_20MHz_1RB_50 offset Middle | Right | Tilt | / | 23.17 | 24 | 1.211 | 0.0788 | 0.095 | 0.10 |
| 1882.5 | 26365 | QPSK_20MHz_50RB_0 offset Middle | Left | Touch | / | 22.30 | 23.5 | 1.318 | 0.344 | 0.453 | 0.18 |
| 1882.5 | 26365 | QPSK_20MHz_50RB_0 offset Middle | Left | Tilt | / | 22.30 | 23.5 | 1.318 | 0.0897 | 0.118 | 0.10 |
| 1882.5 | 26365 | QPSK_20MHz_50RB_0 offset Middle | Right | Touch | / | 22.30 | 23.5 | 1.318 | 0.144 | 0.190 | 0.15 |
| 1882.5 | 26365 | QPSK_20MHz_50RB_0 offset Middle | Right | Tilt | / | 22.30 | 23.5 | 1.318 | 0.0644 | 0.085 | 0.13 |

Table 13.22: SAR Values (LTE Band 25-Body)

| Frequency | | Configuration | Test Position | Spacing (mm) | Figure No. | Measured average power (dBm) | Maximum allowed Power (dBm) | Scaling factor | Measured SAR(1g) (W/kg) | Reported SAR(1g) (W/kg) | Power Drift (dB) |
|---------------------|-------|---------------------------------|----------------|--------------|------------|------------------------------|-----------------------------|----------------|-------------------------|-------------------------|------------------|
| MHz | Ch. | | | | | | | | | | |
| Hotspot & Body worn | | | | | | | | | | | |
| 1882.5 | 26365 | QPSK_20MHz_1RB_50 offset Middle | Toward Phantom | 10 | / | 23.17 | 24 | 1.211 | 0.526 | 0.637 | 0.12 |
| 1882.5 | 26365 | QPSK_20MHz_1RB_50 offset Middle | Toward Ground | 10 | / | 23.17 | 24 | 1.211 | 0.625 | 0.757 | 0.02 |
| 1882.5 | 26365 | QPSK_20MHz_50RB_0 offset Middle | Toward Phantom | 10 | / | 22.30 | 23.5 | 1.318 | 0.597 | 0.787 | -0.12 |
| 1882.5 | 26365 | QPSK_20MHz_50RB_0 offset Middle | Toward Ground | 10 | / | 22.30 | 23.5 | 1.318 | 0.513 | 0.676 | 0.15 |
| Hotspot | | | | | | | | | | | |
| 1882.5 | 26365 | QPSK_20MHz_1RB_50 offset Middle | Toward Left | 10 | / | 23.17 | 24 | 1.211 | 0.246 | 0.298 | -0.01 |

| | | | | | | | | | | | |
|----------|-------|--------------------------------------|------------------|----|----|-------|------|-------|--------|-------|-------|
| 1882.5 | 26365 | QPSK_20MHz_1RB_ 50 offset Middle | Toward Right | 10 | / | 23.17 | 24 | 1.211 | 0.112 | 0.136 | -0.13 |
| 1882.5 | 26365 | QPSK_20MHz_1RB_ 50 offset Middle | Toward Bottom | 10 | 22 | 23.17 | 24 | 1.211 | 1.06 | 1.283 | -0.19 |
| 1860 | 26140 | QPSK_20MHz_1RB_ 50 offset Low | Toward Bottom | 10 | / | 23.16 | 24 | 1.213 | 0.907 | 1.101 | 0.08 |
| 1905 | 26590 | QPSK_20MHz_1RB_ 50 offset High | Toward Bottom | 10 | / | 23.12 | 24 | 1.225 | 1.03 | 1.261 | 0.07 |
| 1882.5 | 26365 | QPSK_20MHz_50RB_ 0 offset Middle | Toward Left | 10 | / | 22.30 | 23.5 | 1.318 | 0.206 | 0.272 | -0.04 |
| 1882.5 | 26365 | QPSK_20MHz_50RB_ 0 offset Middle | Toward Right | 10 | / | 22.30 | 23.5 | 1.318 | 0.0935 | 0.123 | 0.13 |
| 1882.5 | 26365 | QPSK_20MHz_50RB_ 0 offset Middle | Toward Bottom | 10 | / | 22.30 | 23.5 | 1.318 | 0.917 | 1.209 | 0.07 |
| 1860 | 26140 | QPSK_20MHz_50RB_ 0 offset Low | Toward Bottom | 10 | / | 22.28 | 23.5 | 1.324 | 0.94 | 1.245 | 0.00 |
| 1905 | 26590 | QPSK_20MHz_50RB_ 0 offset High | Toward Bottom | 10 | / | 22.22 | 23.5 | 1.343 | 0.808 | 1.085 | 0.03 |
| 1882.5 | 26365 | QPSK_20MHz_100RB_ 0 offset Middle | Toward Bottom | 10 | / | 22.24 | 23.5 | 1.337 | 0.759 | 1.014 | -0.01 |
| Repeated | | | | | | | | | | | |
| 1882.5 | 26365 | QPSK_20MHz_1RB_ 50 offset Middle | Toward Bottom | 10 | / | 23.17 | 24 | 1.211 | 0.953 | 1.154 | 0.07 |

Table 13.23: SAR Values(LTE Band 26-Head)

| Frequency | | Configuration | Side | Test Position | Figure No. | Measured average power (dBm) | Maximum allowed Power (dBm) | Scaling factor | Measured SAR(1g) (W/kg) | Reported SAR(1g) (W/kg) | Power Drift (dB) |
|-----------|-------|-----------------------------------|-------|------------------|---------------|---------------------------------------|--------------------------------------|-------------------|-------------------------------|-------------------------------|------------------------|
| MHz | Ch. | | | | | | | | | | |
| 841.5 | 26965 | QPSK_15MHz_1RB_ 38 offset High | Left | Touch | / | 23.82 | 24 | 1.042 | 0.145 | 0.151 | -0.03 |
| 841.5 | 26965 | QPSK_15MHz_1RB_ 38 offset High | Left | Tilt | / | 23.82 | 24 | 1.042 | 0.114 | 0.119 | 0.05 |
| 841.5 | 26965 | QPSK_15MHz_1RB_ 38 offset High | Right | Touch | 23 | 23.82 | 24 | 1.042 | 0.181 | 0.189 | 0.13 |
| 841.5 | 26965 | QPSK_15MHz_1RB_ 38 offset High | Right | Tilt | / | 23.82 | 24 | 1.042 | 0.101 | 0.105 | 0.08 |
| 841.5 | 26965 | QPSK_15MHz_36RB_ 0 offset High | Left | Touch | / | 22.87 | 24 | 1.297 | 0.113 | 0.147 | 0.12 |
| 841.5 | 26965 | QPSK_15MHz_36RB_ 0 offset High | Left | Tilt | / | 22.87 | 24 | 1.297 | 0.0883 | 0.115 | 0.07 |
| 841.5 | 26965 | QPSK_15MHz_36RB_ 0 offset High | Right | Touch | / | 22.87 | 24 | 1.297 | 0.135 | 0.175 | 0.13 |

| | | | | | | | | | | | |
|-------|-------|-----------------------------------|-------|------|---|-------|----|-------|--------|-------|------|
| 841.5 | 26965 | QPSK_15MHz_36RB_ 0 offset High | Right | Tilt | / | 22.87 | 24 | 1.297 | 0.0772 | 0.100 | 0.06 |
|-------|-------|-----------------------------------|-------|------|---|-------|----|-------|--------|-------|------|

Table 13.24: SAR Values (LTE Band 26-Body)

| Frequency | | Configuration | Test Position | Spacing (mm) | Figure No. | Measured average power (dBm) | Maximum allowed Power (dBm) | Scaling factor | Measured SAR(1g) (W/kg) | Reported SAR(1g) (W/kg) | Power Drift (dB) |
|---------------------|-------|-------------------------------|----------------|--------------|------------|------------------------------|-----------------------------|----------------|-------------------------|-------------------------|------------------|
| MHz | Ch. | | | | | | | | | | |
| Hotspot & Body worn | | | | | | | | | | | |
| 841.5 | 26965 | QPSK_15MHz_1RB_38 offset High | Toward Phantom | 10 | / | 23.82 | 24 | 1.042 | 0.195 | 0.203 | 0.06 |
| 841.5 | 26965 | QPSK_15MHz_1RB_38 offset High | Toward Ground | 10 | 24 | 23.82 | 24 | 1.042 | 0.199 | 0.207 | -0.04 |
| 841.5 | 26965 | QPSK_15MHz_36RB_0 offset High | Toward Phantom | 10 | / | 22.87 | 24 | 1.297 | 0.146 | 0.189 | 0.04 |
| 841.5 | 26965 | QPSK_15MHz_36RB_0 offset High | Toward Ground | 10 | / | 22.87 | 24 | 1.297 | 0.147 | 0.191 | -0.03 |
| Hotspot | | | | | | | | | | | |
| 841.5 | 26965 | QPSK_15MHz_1RB_38 offset High | Toward Left | 10 | / | 23.82 | 24 | 1.042 | 0.113 | 0.118 | 0.11 |
| 841.5 | 26965 | QPSK_15MHz_1RB_38 offset High | Toward Right | 10 | / | 23.82 | 24 | 1.042 | 0.159 | 0.166 | 0.10 |
| 841.5 | 26965 | QPSK_15MHz_1RB_38 offset High | Toward Bottom | 10 | / | 23.82 | 24 | 1.042 | 0.148 | 0.154 | 0.19 |
| 841.5 | 26965 | QPSK_15MHz_36RB_0 offset High | Toward Left | 10 | / | 22.87 | 24 | 1.297 | 0.0878 | 0.114 | 0.14 |
| 841.5 | 26965 | QPSK_15MHz_36RB_0 offset High | Toward Right | 10 | / | 22.87 | 24 | 1.297 | 0.123 | 0.160 | 0.08 |
| 841.5 | 26965 | QPSK_15MHz_36RB_0 offset High | Toward Bottom | 10 | / | 22.87 | 24 | 1.297 | 0.109 | 0.141 | 0.14 |