



SAR TEST REPORT

No. I17Z61036-SEM02

For

TCL Communication Ltd.

GSM Quad-band/HSPA-UMTS Six-band/LTE 19-band mobile phone

Modelname: BBD100-1

With

Hardware Version: 04

Software Version: AAN966

FCC ID: 2ACCJN019

Issued Date: 2017-9-21



Note:

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REPORT HISTORY

| Report Number | Revision | Issue Date | Description |
|-----------------|----------|------------|---|
| I17Z61036-SEM02 | Rev.0 | 2017-9-7 | Initial creation of test report |
| I17Z61036-SEM02 | Rev.1 | 2017-9-18 | Update the power table of LTE CA on page 63 |
| I17Z61036-SEM02 | Rev.2 | 2017-9-21 | Remove the test results of LTE B40 |

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1 Test Laboratory

1.1 Testing Location

| | |
|---------------|---|
| Company Name: | CTTL(Shouxiang) |
| Address: | No. 51 Shouxiang Science Building, Xueyuan Road, Haidian District, Beijing, P. R. China100191 |

1.2 Testing Environment

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

1.3 Project Data

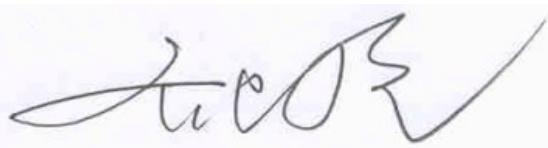
| | |
|---------------------|----------------|
| Project Leader: | Qi Dianyuan |
| Test Engineer: | Lin Xiaojun |
| Testing Start Date: | August4, 2017 |
| Testing End Date: | August15, 2017 |

1.4 Signature



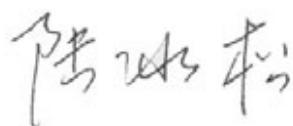
Lin Xiaojun

(Prepared this test report)



Qi Dianyuan

(Reviewed this test report)



Lu Bingsong

Deputy Director of the laboratory

(Approved this test report)

2 Statement of Compliance

This EUT is a variant product and the report of original sample is No.I17Z60970-SEM01. We share the test results of original sample and do spot check. The results of spot check are presented in the annex I. Remove the LTE B30/66 and add the measurements of LTE B4/26.

The maximum results of SAR found during testing for TCL Communication Ltd.GSMQuad-band/HSPA-UMTS Six-band/LTE 19-band mobile phoneBBD100-1are as follows:

Table 2.1: Highest Reported SAR(1g)

| Exposure Configuration | Technology Band | Highest Reported SAR1g(W/kg) | Equipment Class |
|--|-----------------|------------------------------|-----------------|
| Head (Separation Distance 0mm) | GSM 850 | 0.63 | PCE |
| | PCS 1900 | 0.21 | |
| | UMTS FDD 5 | 0.34 | |
| | UMTS FDD 4 | 0.26 | |
| | UMTS FDD 2 | 0.20 | |
| | LTE Band 2 | 0.17 | |
| | LTE Band 5 | 0.43 | |
| | LTE Band 7 | 0.46 | |
| | LTE Band 12 | 0.18 | |
| | LTE Band 13 | 0.33 | |
| | LTE Band 38 | 0.09 | |
| | LTE Band 41 | 0.08 | |
| | LTE Band 4 | 0.25 | |
| | LTE Band 26 | 0.40 | |
| | WLAN 2.4 GHz | 1.16 | DTS |
| | WLAN 5 GHz | 0.95 | UNII |
| Hotspot (Separation Distance 10mm) | GSM 850 | 1.17 | PCE |
| | PCS 1900 | 1.04 | |
| | UMTS FDD 5 | 0.78 | |
| | UMTS FDD 4 | 1.11 | |
| | UMTS FDD 2 | 1.26 | |
| | LTE Band 2 | 0.80 | |
| | LTE Band 5 | 0.68 | |
| | LTE Band 7 | 1.09 | |
| | LTE Band 12 | 0.39 | |
| | LTE Band 13 | 0.50 | |
| | LTE Band 38 | 0.70 | |
| | LTE Band 41 | 1.18 | |
| | LTE Band 4 | 1.12 | |
| | LTE Band 26 | 0.78 | |
| | WLAN 2.4 GHz | 0.53 | DTS |
| | WLAN 5 GHz | 0.25 | UNII |

| | | | |
|--|------------|------|-----|
| Body-worn (Separation Distance 15mm) | UMTS FDD 4 | 0.82 | PCE |
| | LTE Band 4 | 1.03 | |
| | LTE Band 7 | 0.65 | |

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

For body operation, this device has been tested and meets FCC RF exposure guidelines when used with any accessory that contains no metal and which provides a minimum separation distance of 10 mm for hotspot and 15mm for body worn between this device and the body of the user. Use of other accessories may not ensure compliance with FCC RF exposure guidelines.

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

The measurement together with the test system set-up is described in annex C of this test report. A detailed description of the equipment under test can be found in chapter 4 of this test report. The highest reported SAR value is obtained at the case of (**Table 2.1**), and the values are: **1.26W/kg(1g)**.

Table 2.2: The sum of reported SAR values for main antenna and WiFi

| | Position | Main antenna | WiFi | Sum |
|--|-------------------------|--------------|------|-------------|
| Highest reported SAR value for Head | Left hand, Touch cheek | 0.42 | 1.04 | 1.46 |
| | Left hand, Tilt 15° | 0.23 | 1.16 | 1.39 |
| | Right hand, Touch cheek | 0.63 | 0.88 | 1.51 |
| | Right hand, Tilt 15° | 0.33 | 0.95 | 1.28 |
| Highest reported SAR value for Body | Front | 1.26 | 0.31 | 1.57 |
| | Top | / | 0.53 | 0.53 |

Note: we have evaluated and chose the highest value of WiFi 2.4G and 5G in the above table

Table 2.3: The sum of reported SAR values for main antenna and BT

| | Position | Main antenna | BT | Sum |
|--|-------------------------|--------------|---------------------|-------------|
| Maximum reported SAR value for Head | Right hand, Touch cheek | 0.63 | 0.33 ^[1] | 0.96 |
| Maximum reported SAR value for Body | Front | 1.26 | 0.17 ^[1] | 1.43 |

[1] - Estimated SAR for Bluetooth (see the table 13.3)

According to the above tables, the highest sum of reported SAR values is **1.57 W/kg (1g)**. The detail for simultaneous transmission consideration is described in chapter 13.

According to the KDB648474 D04, the UMPC mini-tablet procedures must also be applied to test

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the SAR of all surfaces and edges with an antenna located at ≤ 25 mm from that surface or edge, in direct contact with a flat phantom, for 10-g extremity SAR according to the body-equivalent tissue dielectric parameters in KDB Publication 865664 D01 to address interactive hand use exposure conditions. When hotspot mode applies, 10-g extremity SAR is required only for the surfaces and edges with hotspot mode 1-g reported SAR > 1.2 W/kg

Table 2.4: 0mm Reported SAR for phablet (10g)

| Exposure Configuration | Technology Band | Highest Reported SAR 10g(W/kg) | Limit 10g (W/kg) |
|--------------------------------------|-----------------|--------------------------------|------------------|
| Hotspot (Separation Distance 0mm) | UMTS FDD 2 | 3.14 | 4.0 |
| | UMTS FDD 4 | 3.89 | 4.0 |
| | LTE Band 4 | 1.65 | 4.0 |
| | LTE Band 7 | 3.00 | 4.0 |

3 Client Information

3.1 Applicant Information

| | |
|-----------------|--|
| Company Name: | TCL Communication Ltd. |
| Address/Post: | 5F, C building, No. 232, Liang Jing Road ZhangJiang High-Tech Park, Pudong Area Shanghai, P.R. China. 201203 |
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| Country: | China |
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3.2 Manufacturer Information

| | |
|-----------------|--|
| Company Name: | TCL Communication Ltd. |
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| City: | Shanghai |
| Country: | China |
| Contact Person: | Gong Zhizhou |
| E-mail: | zhizhou.gong@tcl.com |
| Telephone: | 0086-21-31363544 |
| Fax: | 0086-21-61460602 |

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

4.1 About EUT

| | |
|--------------------------------------|--|
| Description: | GSMQuad-band/HSPA-UMTS Six-band/LTE 19-band mobile phone |
| Model name: | BBD100-1 |
| Operating mode(s): | GSM 850/900/1800/1900, UMTS FDD 1/2/4/5/6/8, BT, Wi-Fi LTE Band 1/2/3/4/5/7/8/12/13/17/19/20/26/28/32/38/39/40/41 |
| Tested Tx Frequency: | 825 – 848.8 MHz (GSM 850) 1850.2 – 1910 MHz (GSM 1900) 826.4–846.6 MHz (WCDMA 850 Band V) 1712.4 – 1752.6 MHz (WCDMA 1700 Band IV) 1852.4–1907.6 MHz (WCDMA1900 Band II) 1860 – 1900 MHz (LTE Band 2) 824.7 – 848.3 MHz (LTE Band 5) 2502.5 – 2567.5 MHz (LTE Band 7) 699.7 – 715.3 MHz (LTE Band 12) 779.5 –784.5 MHz (LTE Band 13) 2570 – 2620 MHz (LTE Band 38) 2498.5 – 2687.5 MHz (LTE Band41) 1720 – 1745 MHz (LTE Band 4) 814.7–848.3 MHz (LTE Band 26) 2412 – 2462 MHz (Wi-Fi 2.4G) 5150-5825 MHz(Wi-Fi 5G) |
| GPRS/EGPRS Multislot Class: | 12 |
| GPRS capability Class: | B |
| Test device Production information: | Production unit |
| Device type: | Portable device |
| Antenna type: | Integrated antenna |
| Accessories/Body-wornconfigurations: | Headset |
| Hotspot mode: | Support |
| VoIP: | Support |
| Product Dimension: | L: 155.8mm W: 75.5mm overall diagonal: 173mm |

4.2 Internal Identification of EUT used during the test

| EUT ID* | IMEI | HW | SW Version |
|---------|-----------------|----|------------|
| EUT1 | 359265080002666 | 04 | AAN966 |
| EUT2 | 359265080004290 | 04 | AAN966 |
| EUT3 | 359265080003581 | 04 | AAN966 |
| EUT4 | 359265080003847 | 04 | AAN966 |
| EUT5 | 359265080002948 | 04 | AAN966 |

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

Note: It is performed to test SAR with the EUT1&2&3 and conducted power with the EUT4&5.

4.3 Internal Identification of AE used during the test

| AE ID* | Description | Model | SN | Manufacturer |
|--------|-------------|--------------|----|--------------|
| AE1 | Battery | TLp038B1 | / | BYD |
| AE2 | Headset | CCB0055A11C1 | / | Juwei |

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

5 TEST METHODOLOGY

5.1 Applicable Limit Regulations

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

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

5.2 Applicable Measurement Standards

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

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

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

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

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

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

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

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

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

6 Specific Absorption Rate(SAR)

6.1 Introduction

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

6.2 SAR Definition

The SAR definition is the time derivative (rate) of the incremental energy (dW) absorbed by (dissipated in) an incremental mass (dm) contained in a volume element (dv) of a given density (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

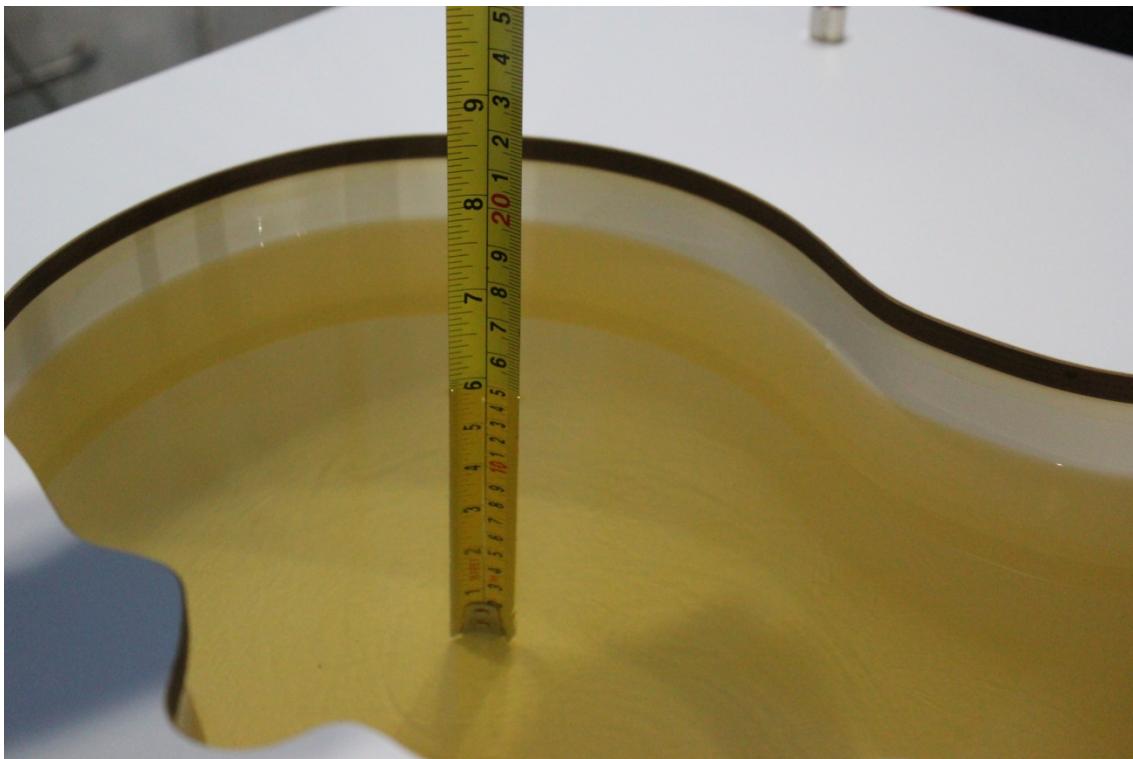
| Frequency(MHz) | Liquid Type | Conductivity(σ) | $\pm 5\%$ Range | Permittivity(ϵ) | $\pm 5\%$ Range |
|----------------|-------------|--------------------------|-----------------|----------------------------|-----------------|
| 750 | Head | 0.89 | 0.85~0.93 | 41.94 | 39.8~44.0 |
| 750 | Body | 0.96 | 0.91~1.01 | 55.5 | 52.7~58.3 |
| 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 |
| 1750 | Head | 1.37 | 1.30~1.44 | 40.08 | 38.1~42.1 |
| 1750 | Body | 1.49 | 1.42~1.56 | 53.4 | 50.7~56.1 |
| 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 | 39.01 | 37.1~41.0 |
| 2600 | Body | 2.16 | 2.05~2.27 | 52.5 | 49.9~55.1 |
| 5200 | Head | 4.66 | 4.43~4.89 | 35.99 | 34.19~37.79 |
| 5200 | Body | 5.30 | 5.04~5.56 | 49.0 | 46.6~51.4 |
| 5300 | Head | 4.76 | 4.52~5.00 | 35.87 | 34.08~37.66 |
| 5300 | Body | 5.42 | 5.15~5.69 | 48.9 | 46.46~51.34 |
| 5600 | Head | 5.07 | 4.82~5.32 | 35.53 | 33.75~37.31 |
| 5600 | Body | 5.77 | 5.48~6.06 | 48.5 | 46.08~50.92 |
| 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 Date (yyyy-mm-dd) | Type | Frequency | Permittivity ϵ | Drift (%) | Conductivity σ (S/m) | Drift (%) |
|----------------------------------|------|-----------|----------------------------|--------------|--------------------------------|--------------|
| 2017-8-10 | Head | 750 MHz | 42.31 | 0.88 | 0.886 | -0.45 |
| | Body | 750 MHz | 56.42 | 1.66 | 0.944 | -1.67 |
| 2017-8-8 | Head | 835 MHz | 41.76 | 0.63 | 0.908 | 0.89 |
| | Body | 835 MHz | 55.91 | 1.29 | 0.979 | 0.93 |
| 2017-8-13 | Head | 1750 MHz | 40.41 | 0.82 | 1.421 | 3.72 |
| | Body | 1750 MHz | 53.72 | 0.60 | 1.506 | 1.07 |
| 2017-8-9 | Head | 1900 MHz | 40.61 | 1.53 | 1.411 | 0.79 |
| | Body | 1900 MHz | 52.71 | -1.11 | 1.527 | 0.46 |
| 2017-8-14 | Head | 2450 MHz | 38.91 | -0.74 | 1.811 | 0.61 |
| | Body | 2450 MHz | 52.09 | -1.16 | 1.982 | 1.64 |
| 2017-8-12 | Head | 2600 MHz | 38.49 | -1.33 | 1.949 | -0.56 |
| | Body | 2600 MHz | 51.81 | -1.31 | 2.14 | -0.93 |
| 2017-8-15 | Head | 5300 MHz | 36 | 0.36 | 4.718 | -0.88 |
| | Body | 5300 MHz | 47.5 | -2.86 | 5.291 | -2.38 |
| | Head | 5600 MHz | 35.3 | -0.65 | 5.06 | -0.20 |
| | Body | 5600 MHz | 46.84 | -3.42 | 5.709 | -1.06 |
| | Head | 5800 MHz | 34.91 | -1.10 | 5.271 | 0.02 |
| | Body | 5800 MHz | 46.44 | -3.65 | 5.988 | -0.20 |
| 2017-8-4 | Head | 835 MHz | 40.89 | -1.47 | 0.903 | 0.33 |
| | Body | 835 MHz | 56.08 | 1.59 | 0.971 | 0.10 |

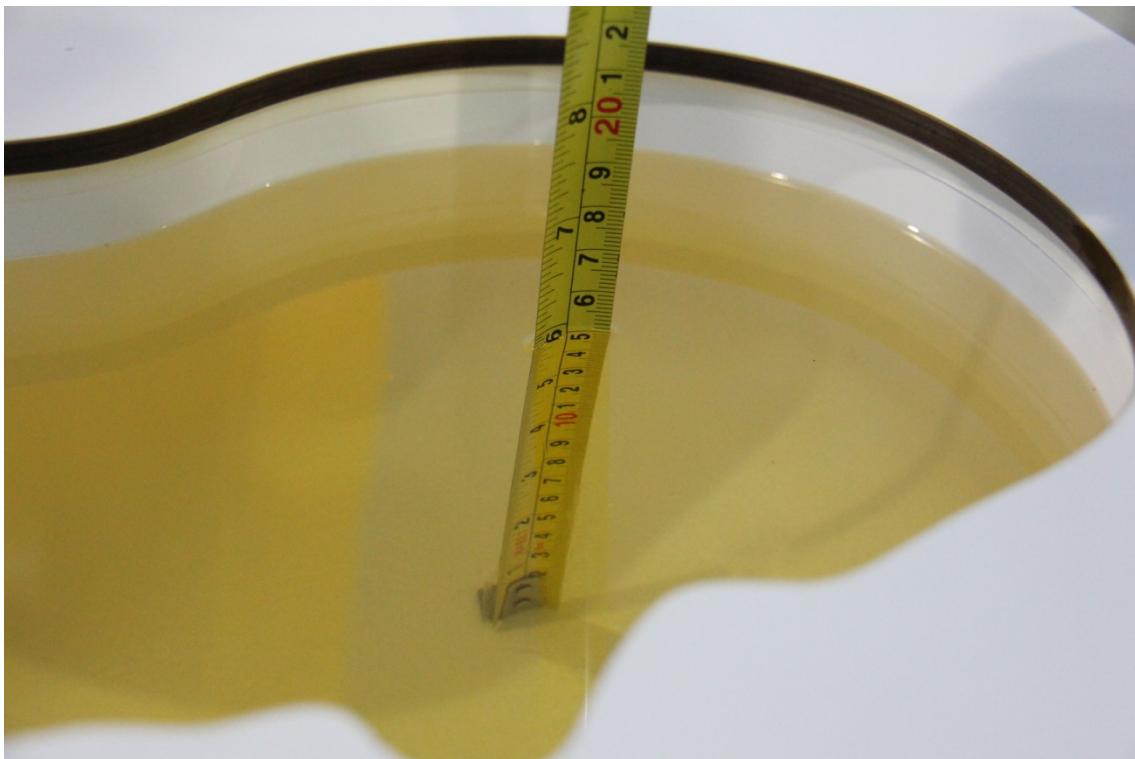
Note: The liquid temperature is 22.0°C



Picture 7-1 Liquid depth in the Head Phantom (750MHz)



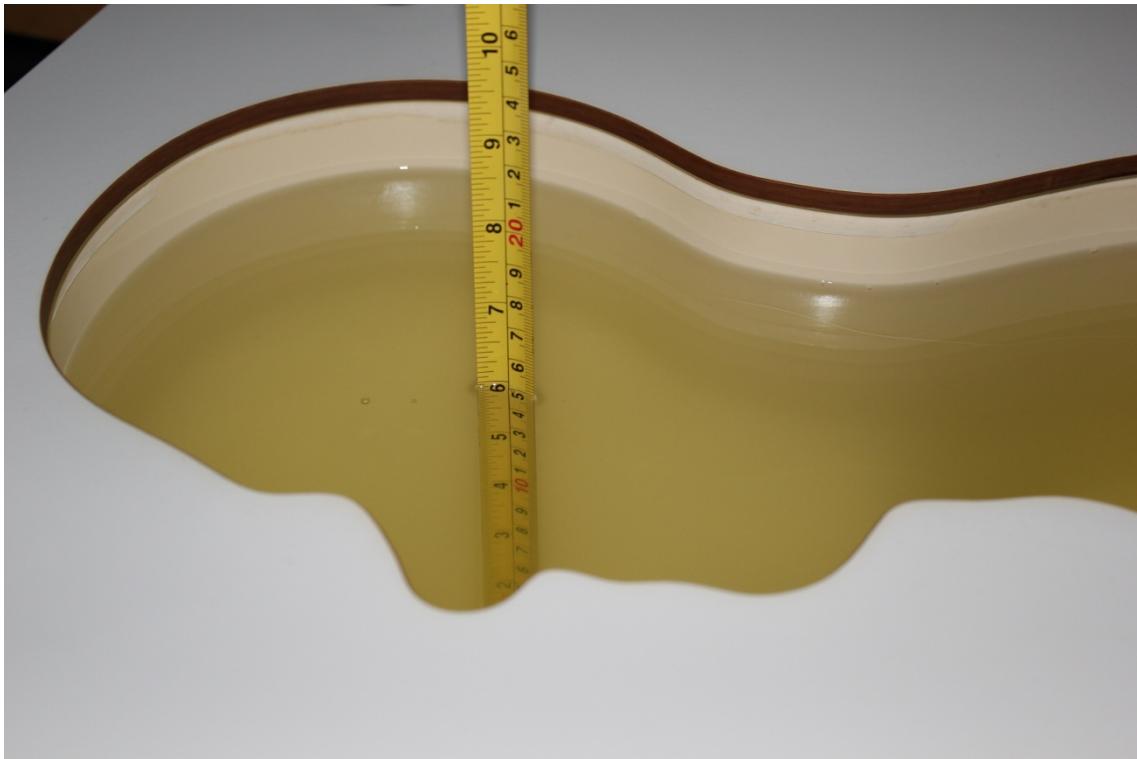
Picture 7-2 Liquid depth in the Flat Phantom (750MHz)



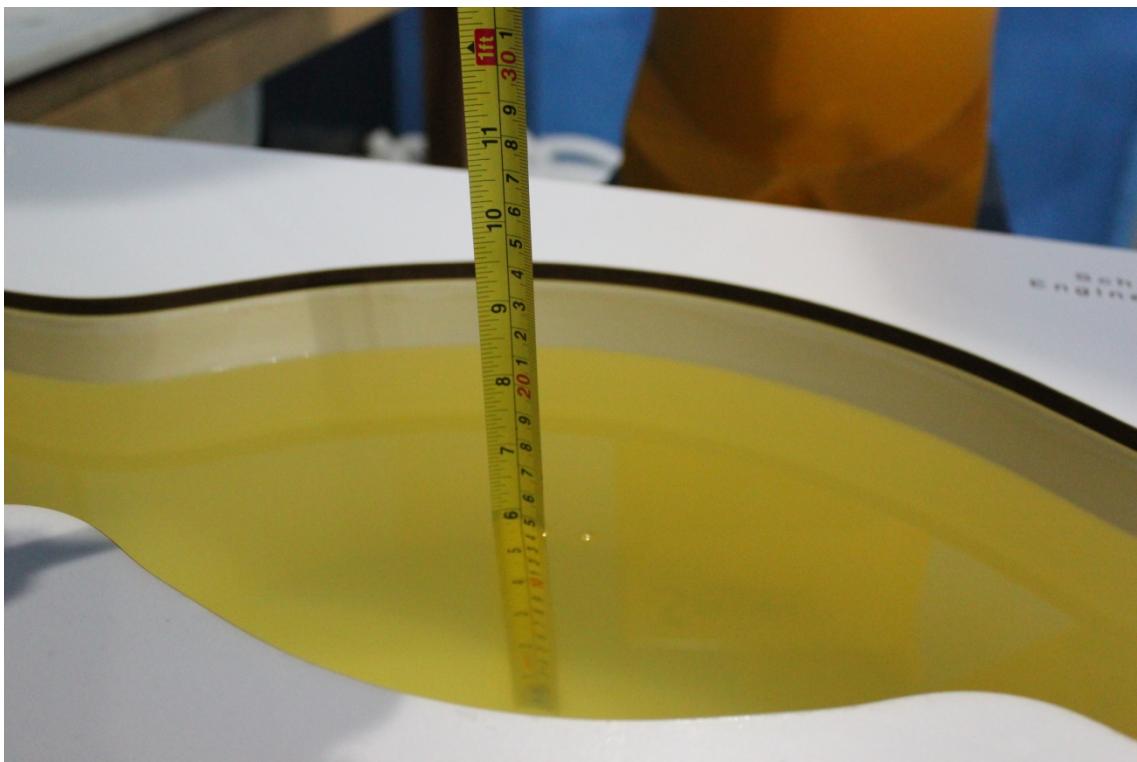
Picture 7-3 Liquid depth in the Head Phantom (835 MHz)



Picture 7-4 Liquid depth in the Flat Phantom (835 MHz)



Picture 7-5 Liquid depth in the Head Phantom (1750 MHz)



Picture 7-6 Liquid depth in the Flat Phantom (1750MHz)



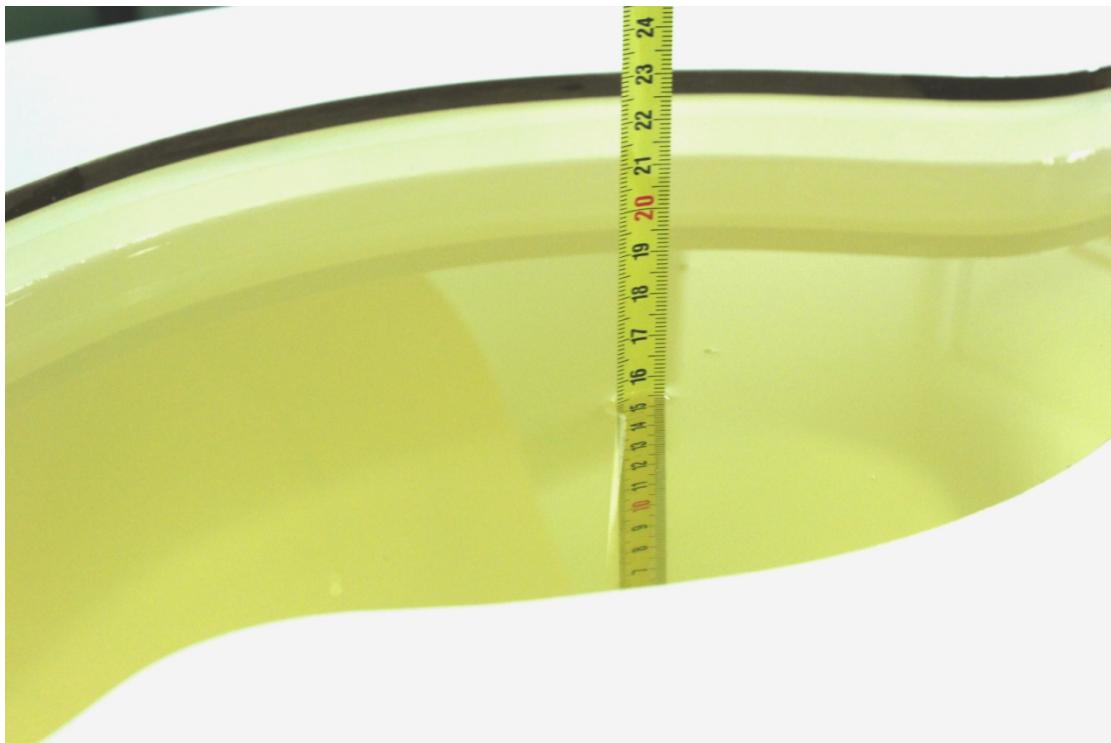
Picture 7-7 Liquid depth in the Head Phantom (1900 MHz)



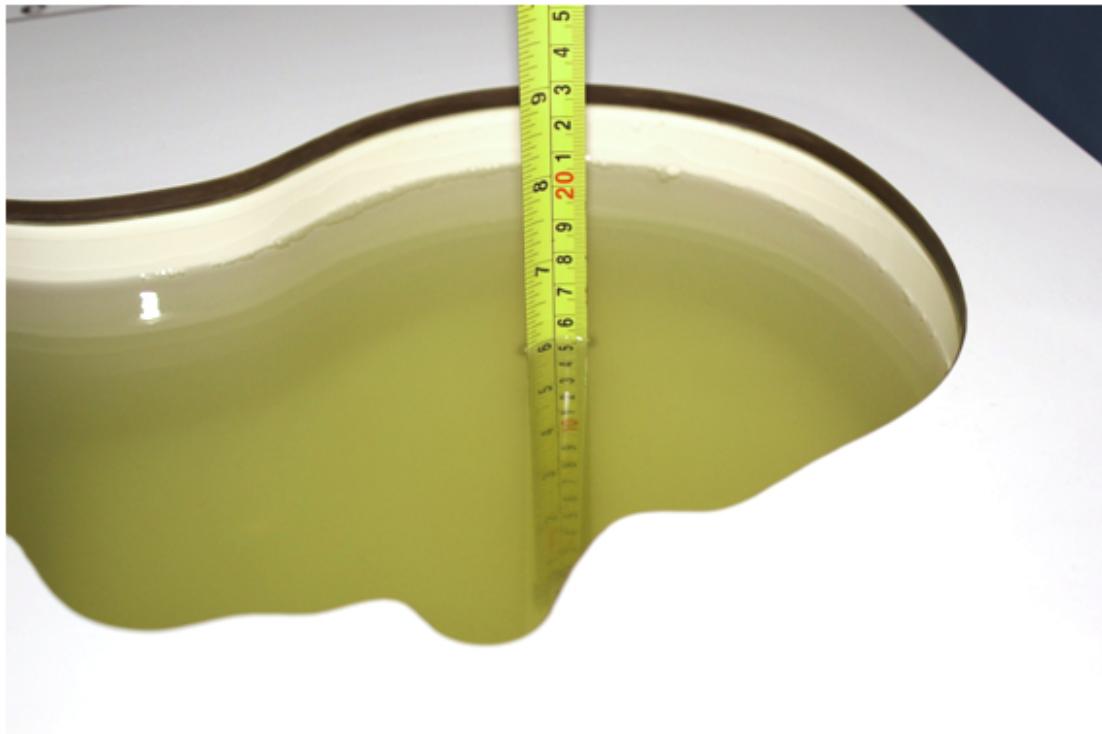
Picture 7-8 Liquid depth in the Flat Phantom (1900MHz)



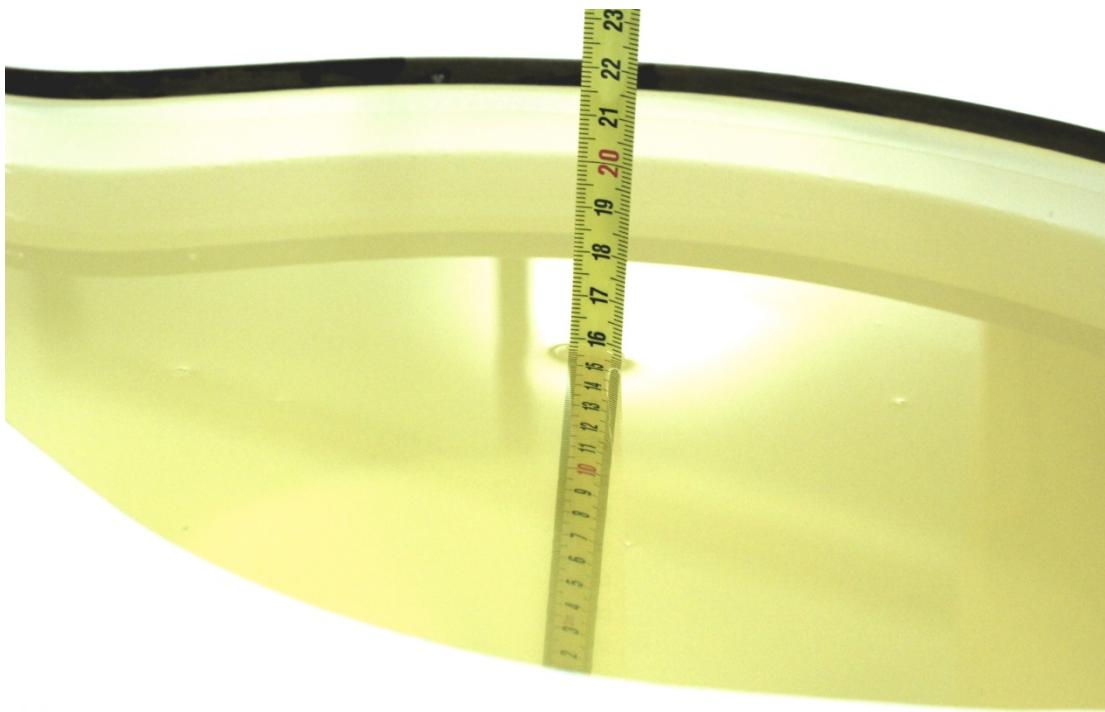
Picture 7-9 Liquid depth in the Head Phantom (2450MHz)



Picture 7-10 Liquid depth in the Flat Phantom (2450MHz)



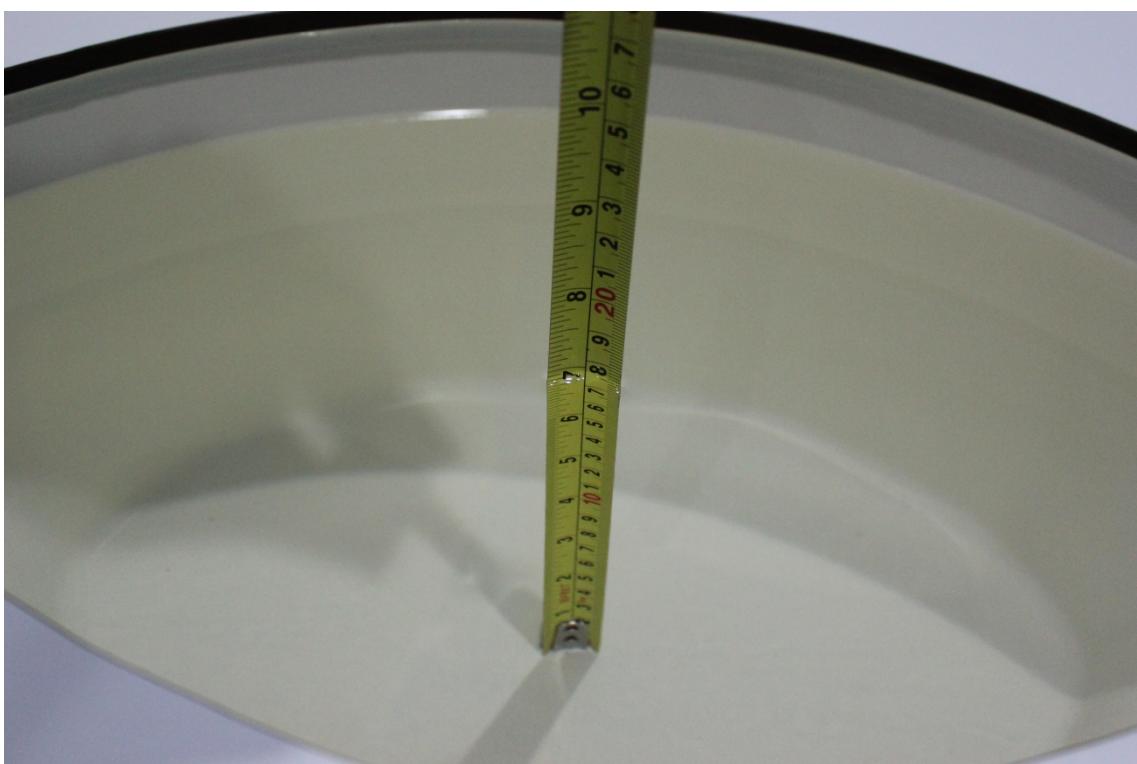
Picture 7-11 Liquid depth in the HeadPhantom (2600 MHz Head)



Picture 7-12 Liquid depth in the Flat Phantom (2600MHz)



Picture 7-13 Liquid depth in the Head Phantom (5GHz)

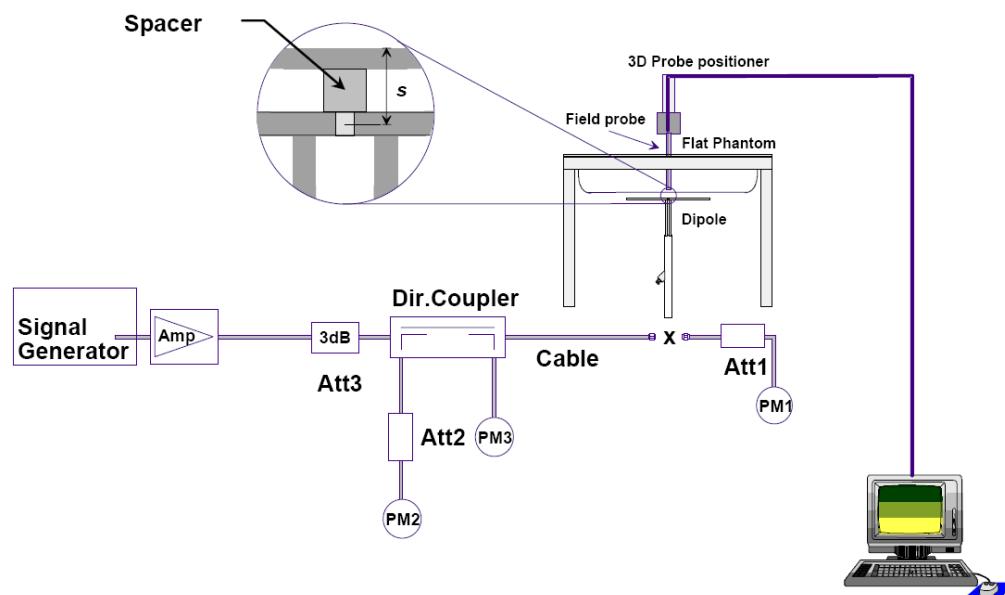


Picture 7-14 Liquid depth in the Flat Phantom (5GHz)

8 System verification

8.1 System Setup

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



Picture 8.1 System Setup for System Evaluation



Picture 8.2 Photo of Dipole Setup

8.2 System Verification

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

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

Table 8.1: System Verification of Head

| Measurement Date (yyyy-mm-dd) | Frequency | Target value (W/kg) | | Measured value(W/kg) | | Deviation | |
|----------------------------------|-----------|---------------------|-------------|----------------------|-------------|--------------|-------------|
| | | 10 g Average | 1 g Average | 10 g Average | 1 g Average | 10 g Average | 1 g Average |
| 2017-8-10 | 750 MHz | 5.42 | 8.32 | 5.52 | 8.20 | 1.85% | -1.44% |
| 2017-8-8 | 835 MHz | 6.06 | 9.37 | 6.12 | 9.48 | 0.99% | 1.17% |
| 2017-8-13 | 1750 MHz | 19.4 | 36.7 | 19.5 | 36.7 | 0.62% | 0.05% |
| 2017-8-9 | 1900 MHz | 21.0 | 40.0 | 21.5 | 40.8 | 2.48% | 2.00% |
| 2017-8-14 | 2450 MHz | 24.7 | 52.2 | 25.1 | 53.2 | 1.54% | 1.92% |
| 2017-8-12 | 2600 MHz | 25.8 | 57.9 | 26.2 | 58.4 | 1.55% | 0.86% |
| 2017-8-15 | 5200 MHz | 24.0 | 83.8 | 23.5 | 80.8 | -2.08% | -3.58% |
| | 5600 MHz | 24.1 | 84.5 | 23.4 | 81.6 | -2.90% | -3.43% |
| | 5800 MHz | 22.9 | 80.9 | 22.5 | 79.7 | -1.75% | -1.48% |
| 2017-8-4 | 835 MHz | 6.06 | 9.37 | 6.08 | 9.4 | 0.33% | 0.32% |

Table 8.2: System Verification of Body

| Measurement Date (yyyy-mm-dd) | Frequency | Target value (W/kg) | | Measured value (W/kg) | | Deviation | |
|----------------------------------|-----------|---------------------|-------------|-----------------------|-------------|--------------|-------------|
| | | 10 g Average | 1 g Average | 10 g Average | 1 g Average | 10 g Average | 1 g Average |
| 2017-8-10 | 750 MHz | 5.68 | 8.66 | 5.76 | 8.76 | 1.41% | 1.15% |
| 2017-8-8 | 835 MHz | 6.12 | 9.41 | 6.36 | 9.72 | 3.92% | 3.29% |
| 2017-8-13 | 1750 MHz | 19.8 | 37.1 | 19.96 | 37.68 | 0.81% | 1.56% |
| 2017-8-9 | 1900 MHz | 21.5 | 40.5 | 21.96 | 41.60 | 2.14% | 2.72% |
| 2017-8-14 | 2450 MHz | 23.8 | 50.4 | 24.32 | 52.00 | 2.18% | 3.17% |
| 2017-8-12 | 2600 MHz | 24.8 | 55.5 | 25.40 | 57.20 | 2.42% | 3.06% |
| 2017-8-15 | 5200 MHz | 21.6 | 77.0 | 21.30 | 75.80 | -1.39% | -1.56% |
| | 5600 MHz | 22.6 | 80.5 | 22.10 | 79.10 | -2.21% | -1.74% |
| | 5800 MHz | 21.7 | 78.0 | 21.20 | 75.50 | -2.30% | -3.21% |
| 2017-8-4 | 835 MHz | 6.12 | 9.41 | 6.2 | 9.4 | 1.31% | -0.11% |

9Measurement Procedures

9.1 Tests to be performed

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

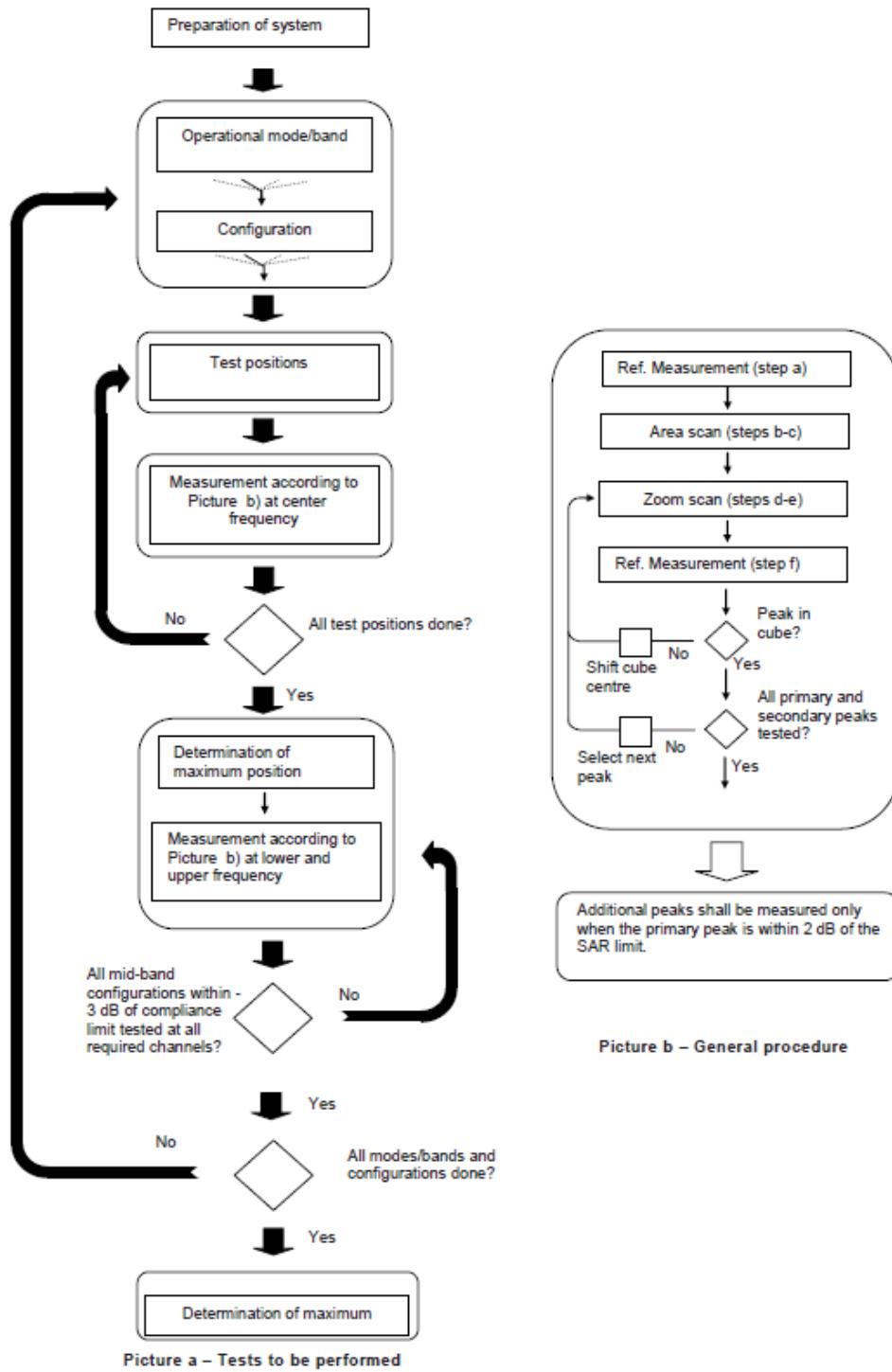
Step 1: The tests described in 9.2 shall be performed at the channel that is closest to the centre of the transmit frequency band (f_c) for:

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

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

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

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


Picture 9.1 Block diagram of the tests to be performed

9.2 General Measurement Procedure

The area and zoom scan resolutions specified in the table below must be applied to the SAR measurements and fully documented in SAR reports to qualify for TCB approval. Probe boundary effect error compensation is required for measurements with the probe tip closer than half a probe tip diameter to the phantom surface. Both the probe tip diameter and sensor offset distance must satisfy measurement protocols; to ensure probe boundary effect errors are minimized and the higher

fields closest to the phantom surface can be correctly measured and extrapolated to the phantom surface for computing 1-g SAR. Tolerances of the post-processing algorithms must be verified by the test laboratory for the scan resolutions used in the SAR measurements, according to the reference distribution functions specified in IEEE Std 1528-2003. The results should be documented as part of the system validation records and may be requested to support test results when all the measurement parameters in the following table are not satisfied.

| | | $\leq 3 \text{ GHz}$ | $> 3 \text{ GHz}$ |
|--|---|--|---|
| Maximum distance from closest measurement point (geometric center of probe sensors) to phantom surface | | $5 \pm 1 \text{ mm}$ | $\frac{1}{2} \cdot \delta \cdot \ln(2) \pm 0.5 \text{ mm}$ |
| Maximum probe angle from probe axis to phantom surface normal at the measurement location | | $30^\circ \pm 1^\circ$ | $20^\circ \pm 1^\circ$ |
| | | $\leq 2 \text{ GHz}: \leq 15 \text{ mm}$ $2 - 3 \text{ GHz}: \leq 12 \text{ mm}$ | $3 - 4 \text{ GHz}: \leq 12 \text{ mm}$ $4 - 6 \text{ GHz}: \leq 10 \text{ mm}$ |
| Maximum area scan spatial resolution: $\Delta x_{\text{Area}}, \Delta y_{\text{Area}}$ | | When the x or y dimension of the test device, in the measurement plane orientation, is smaller than the above, the measurement resolution must be \leq the corresponding x or y dimension of the test device with at least one measurement point on the test device. | |
| Maximum zoom scan spatial resolution: $\Delta x_{\text{Zoom}}, \Delta y_{\text{Zoom}}$ | | $\leq 2 \text{ GHz}: \leq 8 \text{ mm}$ $2 - 3 \text{ GHz}: \leq 5 \text{ mm}^*$ | $3 - 4 \text{ GHz}: \leq 5 \text{ mm}^*$ $4 - 6 \text{ GHz}: \leq 4 \text{ mm}^*$ |
| Maximum zoom scan spatial resolution, normal to phantom surface | uniform grid: $\Delta z_{\text{Zoom}}(n)$ | $\leq 5 \text{ mm}$ | $3 - 4 \text{ GHz}: \leq 4 \text{ mm}$ $4 - 5 \text{ GHz}: \leq 3 \text{ mm}$ $5 - 6 \text{ GHz}: \leq 2 \text{ mm}$ |
| | graded grid | $\Delta z_{\text{Zoom}}(1): \text{between } 1^{\text{st}} \text{ two points closest to phantom surface}$ $\Delta z_{\text{Zoom}}(n > 1): \text{between subsequent points}$ | $\leq 4 \text{ mm}$ $\leq 1.5 \cdot \Delta z_{\text{Zoom}}(n-1)$ |
| Minimum zoom scan volume | x, y, z | $\geq 30 \text{ mm}$ | $3 - 4 \text{ GHz}: \geq 28 \text{ mm}$ $4 - 5 \text{ GHz}: \geq 25 \text{ mm}$ $5 - 6 \text{ GHz}: \geq 22 \text{ mm}$ |
| Note: δ is the penetration depth of a plane-wave at normal incidence to the tissue medium; see draft standard IEEE P1528-2011 for details. | | | |
| * When zoom scan is required and the <u>reported</u> SAR from the area scan based 1-g SAR estimation procedures of KDB 447498 is $\leq 1.4 \text{ W/kg}$, $\leq 8 \text{ mm}$, $\leq 7 \text{ mm}$ and $\leq 5 \text{ mm}$ 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 |
|----------|-----------|-----------|----------------|-------------------|--------------|-------|
| 1 | 2/15 | 15/15 | 64 | 2/15 | 4/15 | 0.0 |
| 2 | 12/15 | 15/15 | 64 | 12/15 | 24/25 | 1.0 |
| 3 | 15/15 | 8/15 | 64 | 15/8 | 30/15 | 1.5 |
| 4 | 15/15 | 4/15 | 64 | 15/4 | 30/15 | 1.5 |

For Release 6 HSPA Data Devices

| Sub-test | 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 | 1.5 | 1.5 | 20 | 75 |
| 2 | 6/15 | 15/15 | 64 | 6/15 | 12/15 | 12/15 | 12/15 | 4 | 1 | 1.5 | 1.5 | 12 | 67 |
| 3 | 15/15 | 9/15 | 64 | 15/9 | 30/15 | 30/15 | $\beta_{ed1}^{47/15}$ | 4 | 2 | 1.5 | 1.5 | 15 | 92 |
| 4 | 2/15 | 15/15 | 64 | 2/15 | 4/15 | 4/15 | 56/75 | 4 | 1 | 1.5 | 1.5 | 17 | 71 |
| 5 | 15/15 | 15/15 | 64 | 15/15 | 24/15 | 30/15 | 134/15 | 4 | 1 | 1.5 | 1.5 | 21 | 81 |

Rel.8 DC-HSDPA (Cat 24)

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

9.4 SAR Measurement for LTE

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

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

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

1) QPSK with 1 RB allocation

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

2) QPSK with 50% RB allocation

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

3) QPSK with 100% RB allocation

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

TDD test:

TDD testing is performed using guidance from FCC KDB 941225 D05v02r05 and the SAR test guidance provided in April 2013 TCB works hop notes. TDD is tested at the highest duty factor using UL-DL configuration 0 with special subframe configuration 6 and applying the FDD LTE procedures in KDB 941225 D05v02r05. SAR testing is performed using the extended cyclic prefix listed in 3GPP TS 36.211.

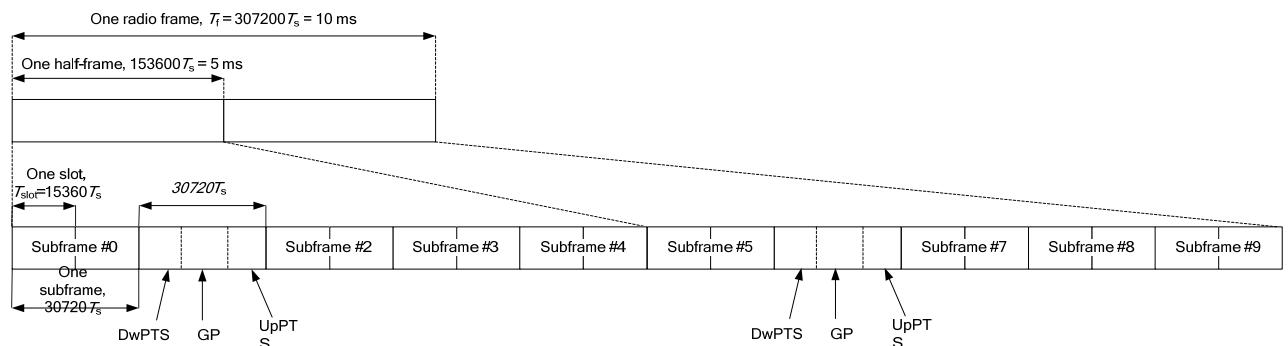


Figure 9.2: Frame structure type 2 (for 5 ms switch-point periodicity)

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

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

Table 9.2: Uplink-downlink configurations

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

Duty factor is calculated by:

Duty factor=uplink frame*6+UpPTS*2/one frame length

$$= (30720 \cdot T_s * 6 + 5120 \cdot T_s * 2) / 307200 \cdot T_s$$

$$= 0.633$$

According to the KDB 447498 D01, SAR should be evaluated at more than 3 frequencies for devices supporting transmit bands wider than 100MHz. Oct.2014 FCC-TCB conference notes (Dec. 2014 rev.) specifies the 5 test channels to use for 3GPP band 41 SAR evaluation.

9.5 Bluetooth & Wi-Fi Measurement Procedures for SAR

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

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

9.6 Power Drift

To control the output power stability during the SAR test, 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 section14 labeled as: (Power Drift [dB]). This ensures that the power drift during one measurement is within 5%.

10Area Scan Based 1-g SAR

10.1Requirement of KDB

According to the KDB447498 D01 v05, when the implementation is based the specific polynomial fit algorithm as presented at the 29th Bioelectromagnetics Society meeting (2007) and the estimated 1-gSAR is $\leq 1.2 \text{ W/kg}$, a zoom scan measurement is not required provided it is also not needed for any otherpurpose; for example, if the peak SAR location required for simultaneous transmission SAR testexclusion 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 concernsidentified 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 alsodemonstrate that the area scan estimated 1-g SAR is within 3% of the zoom scan 1-g SAR (See Annex B). When all theSAR 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.

10.2Fast SAR Algorithms

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

In the initial study, an approximation algorithm based on Linear fit was developed. The accuracyof 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 55wireless handsets. For the sample size studied, the root-mean-squared errors of the algorithmmare 1.2% and 5.8% for 1- and 10-g averaged SAR, respectively. The paper describing thealgorithm in detail is expected to be published in August 2004 within the Special Issue ofTransactions 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 ofthis study can be found in the BEMS 2007 Proceedings.

Both algorithms are implemented in DASY software.

11 Conducted Output Power

For Main antenna, there are two sets of tune-up power, Normal power and Low power, used for different use cases for W1700 and LTE Band4/7. Normal power status is applied for head test and body worn test of above bands. Low power status is applied for hotspot test of above bands. For other bands, Normal power status is applied for both head and body test.

For WiFi antenna, there are two sets of tune-up power, Normal power and Low power, used for different use cases for WiFi-2.4G. Normal power status is applied for body test. Low power status is applied for head test. For WiFi-5G, Normal power status is applied for both head and body test.

The device supports downlinkRelease 10 LTE Carrier Aggregation (CA) only. It supports a maximum of 2 carriers in the downlink. Other Release 10 features are not supported, including Uplink Carrier Aggregation, Enhanced SC-FDMA and Uplink MIMO or other antenna diversity configurations etc. All uplink communications are identical to the Release 8 Specifications. According to KDB 941225 D05A, the downlink LTE CA SAR test is not required and PAG requirements can be excluded.

11.1 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.

Normal Power

Table 11.1-1: The conducted power measurement results for GSM, GPRS and EGPRS

| GSM 850 Speech (GMSK) | Measured Power (dBm) | | | Tune up | calculation | Averaged Power (dBm) | | |
|--------------------------|----------------------|-------|-------|-------------|-------------|----------------------|--------------|--------------|
| 1 Txslot | 32.85 | 32.62 | 32.76 | 33 | / | / | / | / |
| GSM 850 GPRS (GMSK) | Measured Power (dBm) | | | | calculation | Averaged Power (dBm) | | |
| 1 Txslot | 32.88 | 32.65 | 32.74 | 33 | -9.03 | 23.85 | 23.62 | 23.71 |
| 2 Txslots | 32.01 | 31.75 | 31.41 | 32.5 | -6.02 | 25.99 | 25.73 | 25.39 |
| 3Txslots | 30.35 | 30.17 | 29.95 | 30.5 | -4.26 | 26.09 | 25.91 | 25.69 |
| 4 Txslots | 29.02 | 28.76 | 28.34 | 29.5 | -3.01 | 26.01 | 25.75 | 25.33 |
| GSM 850 EGPRS (GMSK) | Measured Power (dBm) | | | | calculation | Averaged Power (dBm) | | |
| 1 Txslot | 32.88 | 32.65 | 32.75 | 33 | -9.03 | 23.85 | 23.62 | 23.72 |
| 2 Txslots | 32.06 | 31.79 | 31.44 | 32.5 | -6.02 | 26.04 | 25.77 | 25.42 |
| 3Txslots | 30.43 | 30.26 | 29.98 | 30.5 | -4.26 | 26.17 | 26.00 | 25.72 |
| 4 Txslots | 29.06 | 28.85 | 28.57 | 29.5 | -3.01 | 26.05 | 25.84 | 25.56 |

| GSM 850 EGPRS (8PSK) | Measured Power (dBm) | | | | calculation | Averaged Power (dBm) | | |
|--------------------------|----------------------|-------|-------|-------------|-------------|----------------------|--------------|--------------|
| | 251 | 190 | 128 | | | 251 | 190 | 128 |
| 1 Txslot | 27.80 | 27.61 | 27.43 | 28 | -9.03 | 18.77 | 18.58 | 18.40 |
| 2 Txslots | 26.76 | 26.61 | 26.45 | 27 | -6.02 | 20.74 | 20.59 | 20.43 |
| 3Txslots | 25.01 | 24.85 | 24.69 | 25.5 | -4.26 | 20.75 | 20.59 | 20.43 |
| 4 Txslots | 23.48 | 23.34 | 23.20 | 24 | -3.01 | 20.47 | 20.33 | 20.19 |
| PCS1900 Speech (GMSK) | Measured Power (dBm) | | | Tune up | calculation | Averaged Power (dBm) | | |
| | 810 | 661 | 512 | | / | 810 | 661 | 512 |
| 1 Txslot | 30.56 | 30.55 | 30.40 | 31 | / | / | / | / |
| PCS1900 GPRS (GMSK) | Measured Power (dBm) | | | | calculation | Averaged Power (dBm) | | |
| | 810 | 661 | 512 | | | 810 | 661 | 512 |
| 1 Txslot | 30.69 | 30.65 | 30.50 | 31 | -9.03 | 21.66 | 21.62 | 21.47 |
| 2 Txslots | 30.28 | 30.27 | 30.03 | 30.5 | -6.02 | 24.26 | 24.25 | 24.01 |
| 3Txslots | 28.84 | 28.70 | 28.38 | 29 | -4.26 | 24.58 | 24.44 | 24.12 |
| 4 Txslots | 27.65 | 27.53 | 27.26 | 28 | -3.01 | 24.64 | 24.52 | 24.25 |
| PCS1900 EGPRS (GMSK) | Measured Power (dBm) | | | | calculation | Averaged Power (dBm) | | |
| | 810 | 661 | 512 | | | 810 | 661 | 512 |
| 1 Txslot | 30.43 | 30.69 | 30.54 | 31 | -9.03 | 21.40 | 21.66 | 21.51 |
| 2 Txslots | 30.29 | 30.27 | 30.08 | 30.5 | -6.02 | 24.27 | 24.25 | 24.06 |
| 3Txslots | 28.87 | 28.76 | 28.40 | 29 | -4.26 | 24.61 | 24.50 | 24.14 |
| 4 Txslots | 27.65 | 27.60 | 27.31 | 28 | -3.01 | 24.64 | 24.59 | 24.30 |
| PCS1900 EGPRS (8PSK) | Measured Power (dBm) | | | | calculation | Averaged Power (dBm) | | |
| | 810 | 661 | 512 | | | 810 | 661 | 512 |
| 1 Txslot | 26.89 | 26.93 | 26.75 | 27 | -9.03 | 17.86 | 17.90 | 17.72 |
| 2 Txslots | 25.84 | 25.88 | 25.67 | 26 | -6.02 | 19.82 | 19.86 | 19.65 |
| 3Txslots | 24.01 | 24.09 | 23.93 | 24.5 | -4.26 | 19.75 | 19.83 | 19.67 |
| 4 Txslots | 22.23 | 22.32 | 22.19 | 22.5 | -3.01 | 19.22 | 19.31 | 19.18 |

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 3Txslots for GSM850 and 4Txslots for GSM1900.

11.2WCDMA Measurement result

Normal power

Table 11.2-1: The conducted Power for WCDMA

| Item | band | FDDV result | | | Tune up |
|----------|------|--------------|-----------------|-----------------|---------|
| | | ARFCN | 4132(826.4MHz) | 4182(836.4MHz) | |
| WCDMA | \ | | 23.76 | 23.71 | 23.86 |
| HSUPA | 1 | | 22.87 | 22.85 | 23.05 |
| | 2 | | 22.44 | 22.35 | 22.45 |
| | 3 | | 22.96 | 22.89 | 22.97 |
| | 4 | | 22.95 | 22.87 | 22.95 |
| | 5 | | 22.97 | 22.88 | 22.99 |
| HSPA+ | 1 | | 23.24 | 23.16 | 23.36 |
| DC-HSDPA | 1 | | 22.47 | 22.41 | 22.49 |
| | 2 | | 22.43 | 22.38 | 22.48 |
| | 3 | | 22.46 | 22.40 | 22.47 |
| | 4 | | 22.44 | 22.39 | 22.48 |
| Item | band | FDDIV result | | | |
| | | ARFCN | 1312(1712.4MHz) | 1412(1732.4MHz) | |
| WCDMA | \ | | 23.68 | 23.57 | 23.50 |
| HSUPA | 1 | | 23.46 | 23.37 | 23.12 |
| | 2 | | 23.06 | 22.84 | 22.54 |
| | 3 | | 23.44 | 23.38 | 23.14 |
| | 4 | | 23.55 | 23.35 | 23.11 |
| | 5 | | 23.58 | 23.37 | 23.15 |
| HSPA+ | 1 | | 23.57 | 23.36 | 23.04 |
| DC-HSDPA | 1 | | 22.90 | 22.76 | 22.59 |
| | 2 | | 22.89 | 22.75 | 22.57 |
| | 3 | | 22.96 | 22.76 | 22.64 |
| | 4 | | 22.99 | 22.79 | 22.58 |
| Item | band | FDDII result | | | |
| | | ARFCN | 9262(1852.4MHz) | 9400(1880MHz) | |
| WCDMA | \ | | 24.35 | 24.26 | 24.24 |
| HSUPA | 1 | | 23.34 | 23.29 | 23.29 |
| | 2 | | 23.36 | 23.34 | 23.35 |
| | 3 | | 23.38 | 23.35 | 23.37 |
| | 4 | | 23.34 | 23.32 | 23.35 |
| | 5 | | 23.41 | 23.35 | 23.36 |
| HSPA+ | 1 | | 22.98 | 22.87 | 23.08 |
| DC-HSDPA | 1 | | 22.95 | 22.93 | 22.97 |
| | 2 | | 22.95 | 22.92 | 22.94 |
| | 3 | | 22.94 | 22.93 | 22.92 |
| | 4 | | 22.96 | 22.94 | 22.95 |

Low power
Table 11.2-2: The conducted Power for WCDMA

| Item | band | FDDIV result | | | | |
|-----------------|------|--------------|-----------------|-----------------|-----------------|-------------|
| | | ARFCN | 1312(1712.4MHz) | 1412(1732.4MHz) | 1513(1752.6MHz) | |
| WCDMA | 1 | | 22.06 | 21.96 | 21.88 | 22.5 |
| HSUPA | 1 | | 21.91 | 21.71 | 21.40 | 22.5 |
| | 2 | | 21.42 | 21.27 | 21.05 | 22 |
| | 3 | | 21.92 | 21.74 | 21.42 | 22.5 |
| | 4 | | 21.89 | 21.73 | 21.52 | 22.5 |
| | 5 | | 21.95 | 21.76 | 21.53 | 22.5 |
| HSPA+ | 1 | | 21.85 | 21.64 | 21.43 | 22.5 |
| DC-HSDPA | 1 | | 21.28 | 21.14 | 20.98 | 21.5 |
| | 2 | | 21.29 | 21.24 | 20.97 | 21.5 |
| | 3 | | 21.27 | 21.16 | 20.98 | 21.5 |
| | 4 | | 21.28 | 21.14 | 20.96 | 21.5 |

11.3 LTE Measurement result
Normal power
Table 11.3-1: The conducted Power for LTE

| Band 2 | | | | | | | |
|-----------------|----------------|-----------------|-------------------------|---------------------------|-----|---------------------------|-----|
| Bandwidth (MHz) | RB allocation | Frequency (MHz) | Max. Target Power (dBm) | QPSK | | 16QAM | |
| | | | | Actual output power (dBm) | MPR | Actual output power (dBm) | MPR |
| 1.4 MHz | 1RB High (5) | 1909.3 | 24 | 23.39 | 0 | 22.39 | 1 |
| | | 1880 | 24 | 23.55 | 0 | 22.72 | 1 |
| | | 1850.7 | 24 | 23.30 | 0 | 22.69 | 1 |
| | 1RB Middle (3) | 1909.3 | 24 | 23.31 | 0 | 22.41 | 1 |
| | | 1880 | 24 | 23.63 | 0 | 22.65 | 1 |
| | | 1850.7 | 24 | 23.35 | 0 | 22.71 | 1 |
| | 1RB Low (0) | 1909.3 | 24 | 23.17 | 0 | 22.34 | 1 |
| | | 1880 | 24 | 23.68 | 0 | 22.73 | 1 |
| | | 1850.7 | 24 | 23.32 | 0 | 22.66 | 1 |
| | 3RB High (3) | 1909.3 | 24 | 23.21 | 0 | 22.55 | 1 |
| | | 1880 | 24 | 23.59 | 0 | 22.59 | 1 |
| | | 1850.7 | 24 | 23.28 | 0 | 22.37 | 1 |
| | 3RB Middle (1) | 1909.3 | 24 | 23.19 | 0 | 22.59 | 1 |
| | | 1880 | 24 | 23.58 | 0 | 22.63 | 1 |
| | | 1850.7 | 24 | 23.32 | 0 | 22.46 | 1 |
| | 3RB Low (0) | 1909.3 | 24 | 23.11 | 0 | 22.52 | 1 |
| | | 1880 | 24 | 23.56 | 0 | 22.74 | 1 |
| | | 1850.7 | 24 | 23.28 | 0 | 22.49 | 1 |
| | 6RB (0) | 1909.3 | 24 | 22.10 | 1 | 21.53 | 2 |
| | | 1880 | 24 | 22.52 | 1 | 21.64 | 2 |
| | | 1850.7 | 24 | 22.30 | 1 | 21.42 | 2 |

| | | | | | | | |
|--------|--------------------|--------|-----------|-------|---|-------|---|
| 3 MHz | 1RB High (14) | 1908.5 | 24 | 23.52 | 0 | 22.45 | 1 |
| | | 1880 | 24 | 23.59 | 0 | 22.43 | 1 |
| | | 1851.5 | 24 | 23.33 | 0 | 22.78 | 1 |
| | 1RB Middle (7) | 1908.5 | 24 | 23.35 | 0 | 22.43 | 1 |
| | | 1880 | 24 | 23.53 | 0 | 22.79 | 1 |
| | | 1851.5 | 24 | 23.24 | 0 | 22.82 | 1 |
| | 1RB Low (0) | 1908.5 | 24 | 23.15 | 0 | 22.33 | 1 |
| | | 1880 | 24 | 23.58 | 0 | 22.50 | 1 |
| | | 1851.5 | 24 | 23.37 | 0 | 22.67 | 1 |
| | 8RB High (7) | 1908.5 | 24 | 22.82 | 1 | 21.90 | 2 |
| | | 1880 | 24 | 22.63 | 1 | 21.76 | 2 |
| | | 1851.5 | 24 | 22.41 | 1 | 21.43 | 2 |
| | 8RB Middle (4) | 1908.5 | 24 | 22.80 | 1 | 21.87 | 2 |
| | | 1880 | 24 | 22.66 | 1 | 21.78 | 2 |
| | | 1851.5 | 24 | 22.41 | 1 | 21.50 | 2 |
| | 8RB Low (0) | 1908.5 | 24 | 22.86 | 1 | 21.93 | 2 |
| | | 1880 | 24 | 22.66 | 1 | 21.74 | 2 |
| | | 1851.5 | 24 | 22.34 | 1 | 21.44 | 2 |
| | 15RB (0) | 1908.5 | 24 | 22.84 | 1 | 21.79 | 2 |
| | | 1880 | 24 | 22.67 | 1 | 21.66 | 2 |
| | | 1851.5 | 24 | 22.39 | 1 | 21.45 | 2 |
| 5 MHz | 1RB High (24) | 1907.5 | 24 | 23.48 | 0 | 22.43 | 1 |
| | | 1880 | 24 | 23.84 | 0 | 22.85 | 1 |
| | | 1852.5 | 24 | 23.37 | 0 | 22.88 | 1 |
| | 1RB Middle (12) | 1907.5 | 24 | 23.31 | 0 | 22.37 | 1 |
| | | 1880 | 24 | 23.75 | 0 | 22.73 | 1 |
| | | 1852.5 | 24 | 23.15 | 0 | 22.88 | 1 |
| | 1RB Low (0) | 1907.5 | 24 | 23.19 | 0 | 22.33 | 1 |
| | | 1880 | 24 | 23.88 | 0 | 22.86 | 1 |
| | | 1852.5 | 24 | 23.56 | 0 | 22.94 | 1 |
| | 12RB High (13) | 1907.5 | 24 | 22.87 | 1 | 21.91 | 2 |
| | | 1880 | 24 | 22.66 | 1 | 21.74 | 2 |
| | | 1852.5 | 24 | 22.44 | 1 | 21.49 | 2 |
| | 12RB Middle (6) | 1907.5 | 24 | 22.90 | 1 | 21.95 | 2 |
| | | 1880 | 24 | 22.70 | 1 | 21.79 | 2 |
| | | 1852.5 | 24 | 22.39 | 1 | 21.52 | 2 |
| | 12RB Low (0) | 1907.5 | 24 | 23.00 | 1 | 21.94 | 2 |
| | | 1880 | 24 | 22.71 | 1 | 21.80 | 2 |
| | | 1852.5 | 24 | 22.48 | 1 | 21.53 | 2 |
| | 25RB (0) | 1907.5 | 24 | 22.92 | 1 | 21.80 | 2 |
| | | 1880 | 24 | 22.73 | 1 | 21.73 | 2 |
| | | 1852.5 | 24 | 22.39 | 1 | 21.48 | 2 |
| 10 MHz | 1RB High (49) | 1905 | 24 | 23.30 | 0 | 22.21 | 1 |
| | | 1880 | 24 | 23.75 | 0 | 22.61 | 1 |
| | | 1855 | 24 | 23.53 | 0 | 22.87 | 1 |
| | 1RB Middle (24) | 1905 | 24 | 23.42 | 0 | 22.50 | 1 |
| | | 1880 | 24 | 23.58 | 0 | 22.54 | 1 |
| | | 1855 | 24 | 23.36 | 0 | 22.64 | 1 |

| | | | | | | | |
|--------|---------------------|--------|-----------|-------|---|-------|---|
| | 1RB Low (0) | 1905 | 24 | 23.45 | 0 | 22.59 | 1 |
| | | 1880 | 24 | 23.68 | 0 | 22.61 | 1 |
| | | 1855 | 24 | 23.45 | 0 | 22.78 | 1 |
| | 25RB High (25) | 1905 | 24 | 22.80 | 1 | 21.91 | 2 |
| | | 1880 | 24 | 22.71 | 1 | 21.75 | 2 |
| | | 1855 | 24 | 22.42 | 1 | 21.40 | 2 |
| | 25RB Middle (12) | 1905 | 24 | 22.77 | 1 | 21.84 | 2 |
| | | 1880 | 24 | 22.67 | 1 | 21.64 | 2 |
| | | 1855 | 24 | 22.37 | 1 | 21.41 | 2 |
| | 25RB Low (0) | 1905 | 24 | 22.78 | 1 | 21.84 | 2 |
| | | 1880 | 24 | 22.61 | 1 | 21.61 | 2 |
| | | 1855 | 24 | 22.40 | 1 | 21.37 | 2 |
| | 50RB (0) | 1905 | 24 | 22.78 | 1 | 21.77 | 2 |
| | | 1880 | 24 | 22.64 | 1 | 21.57 | 2 |
| | | 1855 | 24 | 22.38 | 1 | 21.38 | 2 |
| 15 MHz | 1RB High (74) | 1902.5 | 24 | 23.53 | 0 | 22.75 | 1 |
| | | 1880 | 24 | 23.85 | 0 | 22.70 | 1 |
| | | 1857.5 | 24 | 23.81 | 0 | 22.91 | 1 |
| | 1RB Middle (37) | 1902.5 | 24 | 23.67 | 0 | 22.95 | 1 |
| | | 1880 | 24 | 23.56 | 0 | 22.59 | 1 |
| | | 1857.5 | 24 | 23.52 | 0 | 22.92 | 1 |
| | 1RB Low (0) | 1902.5 | 24 | 23.98 | 0 | 22.98 | 1 |
| | | 1880 | 24 | 23.79 | 0 | 22.71 | 1 |
| | | 1857.5 | 24 | 23.70 | 0 | 22.91 | 1 |
| | 36RB High (38) | 1902.5 | 24 | 22.75 | 1 | 21.75 | 2 |
| | | 1880 | 24 | 22.71 | 1 | 21.60 | 2 |
| | | 1857.5 | 24 | 22.60 | 1 | 21.62 | 2 |
| | 36RB Middle (19) | 1902.5 | 24 | 22.82 | 1 | 21.83 | 2 |
| | | 1880 | 24 | 22.71 | 1 | 21.67 | 2 |
| | | 1857.5 | 24 | 22.60 | 1 | 21.61 | 2 |
| | 36RB Low (0) | 1902.5 | 24 | 22.80 | 1 | 21.76 | 2 |
| | | 1880 | 24 | 22.67 | 1 | 21.57 | 2 |
| | | 1857.5 | 24 | 22.55 | 1 | 21.58 | 2 |
| | 75RB (0) | 1902.5 | 24 | 22.76 | 1 | 21.73 | 2 |
| | | 1880 | 24 | 22.65 | 1 | 21.62 | 2 |
| | | 1857.5 | 24 | 22.54 | 1 | 21.57 | 2 |
| 20 MHz | 1RB High (99) | 1900 | 24 | 23.51 | 0 | 22.95 | 1 |
| | | 1880 | 24 | 23.51 | 0 | 22.96 | 1 |
| | | 1860 | 24 | 23.21 | 0 | 22.65 | 1 |
| | 1RB Middle (50) | 1900 | 24 | 23.75 | 0 | 22.96 | 1 |
| | | 1880 | 24 | 23.46 | 0 | 22.93 | 1 |
| | | 1860 | 24 | 23.46 | 0 | 22.87 | 1 |
| | 1RB Low (0) | 1900 | 24 | 23.76 | 0 | 23.00 | 1 |
| | | 1880 | 24 | 23.52 | 0 | 22.98 | 1 |
| | | 1860 | 24 | 23.43 | 0 | 22.91 | 1 |
| | 50RB High (50) | 1900 | 24 | 22.72 | 1 | 21.77 | 2 |
| | | 1880 | 24 | 22.56 | 1 | 21.58 | 2 |
| | | 1860 | 24 | 22.52 | 1 | 21.47 | 2 |

| | 50RB Middle (25) | 1900 | 24 | 22.85 | 1 | 21.94 | 2 |
|--------------------|-------------------------|--------------------|----------------------------------|------------------------------------|-----|------------------------------------|-----|
| | | 1880 | 24 | 22.70 | 1 | 21.75 | 2 |
| | | 1860 | 24 | 22.59 | 1 | 21.56 | 2 |
| | 50RB Low (0) | 1900 | 24 | 22.77 | 1 | 21.82 | 2 |
| | | 1880 | 24 | 22.63 | 1 | 21.67 | 2 |
| | | 1860 | 24 | 22.56 | 1 | 21.49 | 2 |
| | 100RB (0) | 1900 | 24 | 22.86 | 1 | 21.84 | 2 |
| | | 1880 | 24 | 22.62 | 1 | 21.59 | 2 |
| | | 1860 | 24 | 22.55 | 1 | 21.55 | 2 |
| Band 5 | | | | | | | |
| Bandwidth (MHz) | RB allocation | Frequency (MHz) | Max. Target Power (dBm) | QPSK | | 16QAM | |
| | RB offset (Start RB) | | | Actual output power (dBm) | MPR | Actual output power (dBm) | MPR |
| 1.4 MHz | 1RB High (5) | 848.3 | 24 | 23.43 | 0 | 22.44 | 1 |
| | | 836.5 | 24 | 23.26 | 0 | 22.33 | 1 |
| | | 824.7 | 24 | 23.27 | 0 | 22.72 | 1 |
| | 1RB Middle (3) | 848.3 | 24 | 23.29 | 0 | 22.43 | 1 |
| | | 836.5 | 24 | 23.44 | 0 | 22.37 | 1 |
| | | 824.7 | 24 | 23.34 | 0 | 22.71 | 1 |
| | 1RB Low (0) | 848.3 | 24 | 23.35 | 0 | 22.34 | 1 |
| | | 836.5 | 24 | 23.27 | 0 | 22.28 | 1 |
| | | 824.7 | 24 | 23.33 | 0 | 22.71 | 1 |
| | 3RB High (3) | 848.3 | 24 | 23.28 | 0 | 22.52 | 1 |
| | | 836.5 | 24 | 23.27 | 0 | 22.33 | 1 |
| | | 824.7 | 24 | 23.21 | 0 | 22.38 | 1 |
| | 3RB Middle (1) | 848.3 | 24 | 23.32 | 0 | 22.50 | 1 |
| | | 836.5 | 24 | 23.29 | 0 | 22.33 | 1 |
| | | 824.7 | 24 | 23.32 | 0 | 22.53 | 1 |
| | 3RB Low (0) | 848.3 | 24 | 23.36 | 0 | 22.44 | 1 |
| | | 836.5 | 24 | 23.27 | 0 | 22.34 | 1 |
| | | 824.7 | 24 | 23.27 | 0 | 22.43 | 1 |
| | 6RB (0) | 848.3 | 24 | 22.34 | 1 | 21.46 | 2 |
| | | 836.5 | 24 | 22.27 | 1 | 21.26 | 2 |
| | | 824.7 | 24 | 22.32 | 1 | 21.53 | 2 |
| 3 MHz | 1RB High (14) | 847.5 | 24 | 23.35 | 0 | 22.38 | 1 |
| | | 836.5 | 24 | 23.24 | 0 | 22.08 | 1 |
| | | 825.5 | 24 | 23.35 | 0 | 22.90 | 1 |
| | 1RB Middle (7) | 847.5 | 24 | 23.42 | 0 | 22.39 | 1 |
| | | 836.5 | 24 | 23.31 | 0 | 22.24 | 1 |
| | | 825.5 | 24 | 23.46 | 0 | 22.84 | 1 |
| | 1RB Low (0) | 847.5 | 24 | 23.36 | 0 | 22.39 | 1 |
| | | 836.5 | 24 | 23.25 | 0 | 22.15 | 1 |
| | | 825.5 | 24 | 23.28 | 0 | 22.80 | 1 |
| | 8RB High (7) | 847.5 | 24 | 22.37 | 1 | 21.45 | 2 |
| | | 836.5 | 24 | 22.34 | 1 | 21.45 | 2 |
| | | 825.5 | 24 | 22.44 | 1 | 21.37 | 2 |

| | | | | | | | |
|--------|---------------------|-------|-----------|-------|---|-------|---|
| 5 MHz | 8RB Middle (4) | 847.5 | 24 | 22.43 | 1 | 21.42 | 2 |
| | | 836.5 | 24 | 22.42 | 1 | 21.51 | 2 |
| | | 825.5 | 24 | 22.41 | 1 | 21.56 | 2 |
| | 8RB Low (0) | 847.5 | 24 | 22.35 | 1 | 21.37 | 2 |
| | | 836.5 | 24 | 22.27 | 1 | 21.42 | 2 |
| | | 825.5 | 24 | 22.36 | 1 | 21.41 | 2 |
| | 15RB (0) | 847.5 | 24 | 22.41 | 1 | 21.35 | 2 |
| | | 836.5 | 24 | 22.38 | 1 | 21.40 | 2 |
| | | 825.5 | 24 | 22.39 | 1 | 21.47 | 2 |
| | 1RB High (24) | 846.5 | 24 | 23.55 | 0 | 22.52 | 1 |
| | | 836.5 | 24 | 23.56 | 0 | 22.62 | 1 |
| | | 826.5 | 24 | 23.29 | 0 | 22.90 | 1 |
| | 1RB Middle (12) | 846.5 | 24 | 23.19 | 0 | 22.40 | 1 |
| | | 836.5 | 24 | 23.38 | 0 | 22.24 | 1 |
| | | 826.5 | 24 | 23.33 | 0 | 22.95 | 1 |
| | 1RB Low (0) | 846.5 | 24 | 23.48 | 0 | 22.43 | 1 |
| | | 836.5 | 24 | 23.49 | 0 | 22.54 | 1 |
| | | 826.5 | 24 | 23.31 | 0 | 22.88 | 1 |
| | 12RB High (13) | 846.5 | 24 | 22.46 | 1 | 21.53 | 2 |
| | | 836.5 | 24 | 22.35 | 1 | 21.42 | 2 |
| | | 826.5 | 24 | 22.46 | 1 | 21.39 | 2 |
| | 12RB Middle (6) | 846.5 | 24 | 22.42 | 1 | 21.46 | 2 |
| | | 836.5 | 24 | 22.38 | 1 | 21.47 | 2 |
| | | 826.5 | 24 | 22.49 | 1 | 21.42 | 2 |
| | 12RB Low (0) | 846.5 | 24 | 22.51 | 1 | 21.51 | 2 |
| | | 836.5 | 24 | 22.38 | 1 | 21.43 | 2 |
| | | 826.5 | 24 | 22.40 | 1 | 21.63 | 2 |
| | 25RB (0) | 846.5 | 24 | 22.40 | 1 | 21.33 | 2 |
| | | 836.5 | 24 | 22.42 | 1 | 21.43 | 2 |
| | | 826.5 | 24 | 22.44 | 1 | 21.48 | 2 |
| 10 MHz | 1RB High (49) | 844.0 | 24 | 23.70 | 0 | 22.93 | 1 |
| | | 836.5 | 24 | 23.58 | 0 | 22.55 | 1 |
| | | 829.0 | 24 | 23.72 | 0 | 22.60 | 1 |
| | 1RB Middle (24) | 844.0 | 24 | 23.41 | 0 | 22.74 | 1 |
| | | 836.5 | 24 | 23.37 | 0 | 22.31 | 1 |
| | | 829.0 | 24 | 23.28 | 0 | 22.12 | 1 |
| | 1RB Low (0) | 844.0 | 24 | 23.42 | 0 | 22.63 | 1 |
| | | 836.5 | 24 | 23.47 | 0 | 22.38 | 1 |
| | | 829.0 | 24 | 23.60 | 0 | 22.47 | 1 |
| | 25RB High (25) | 844.0 | 24 | 22.54 | 1 | 21.52 | 2 |
| | | 836.5 | 24 | 22.48 | 1 | 21.59 | 2 |
| | | 829.0 | 24 | 22.48 | 1 | 21.49 | 2 |
| | 25RB Middle (12) | 844.0 | 24 | 22.47 | 1 | 21.48 | 2 |
| | | 836.5 | 24 | 22.44 | 1 | 21.55 | 2 |
| | | 829.0 | 24 | 22.47 | 1 | 21.39 | 2 |
| | 25RB Low (0) | 844.0 | 24 | 22.47 | 1 | 21.45 | 2 |
| | | 836.5 | 24 | 22.32 | 1 | 21.51 | 2 |
| | | 829.0 | 24 | 22.47 | 1 | 21.42 | 2 |

| | 50RB (0) | 844.0 | 24 | 22.48 | 1 | 21.50 | 2 |
|--------------------|---------------------|--------------------|----------------------------------|------------------------------------|-----|------------------------------------|-----|
| | | 836.5 | 24 | 22.48 | 1 | 21.47 | 2 |
| | | 829.0 | 24 | 22.46 | 1 | 21.44 | 2 |
| Band 7 | | | | | | | |
| Bandwidth (MHz) | RB allocation | Frequency (MHz) | Max. Target Power (dBm) | QPSK | | 16QAM | |
| | | | | Actual output power (dBm) | MPR | Actual output power (dBm) | MPR |
| 5 MHz | 1RB High (24) | 2567.5 | 24.5 | 22.97 | 0 | 22.09 | 1 |
| | | 2535 | 24.5 | 22.78 | 0 | 22.27 | 1 |
| | | 2502.5 | 24.5 | 22.86 | 0 | 21.99 | 1 |
| | 1RB Middle (12) | 2567.5 | 24.5 | 22.91 | 0 | 22.07 | 1 |
| | | 2535 | 24.5 | 22.79 | 0 | 22.39 | 1 |
| | | 2502.5 | 24.5 | 22.91 | 0 | 22.03 | 1 |
| | 1RB Low (0) | 2567.5 | 24.5 | 22.94 | 0 | 22.12 | 1 |
| | | 2535 | 24.5 | 22.91 | 0 | 22.38 | 1 |
| | | 2502.5 | 24.5 | 22.93 | 0 | 21.96 | 1 |
| | 12RB High (13) | 2567.5 | 24.5 | 21.94 | 1 | 21.03 | 2 |
| | | 2535 | 24.5 | 21.88 | 1 | 20.98 | 2 |
| | | 2502.5 | 24.5 | 21.89 | 1 | 20.98 | 2 |
| | 12RB Middle (6) | 2567.5 | 24.5 | 21.95 | 1 | 21.02 | 2 |
| | | 2535 | 24.5 | 21.91 | 1 | 21.02 | 2 |
| | | 2502.5 | 24.5 | 21.95 | 1 | 20.95 | 2 |
| | 12RB Low (0) | 2567.5 | 24.5 | 21.95 | 1 | 20.98 | 2 |
| | | 2535 | 24.5 | 21.87 | 1 | 21.02 | 2 |
| | | 2502.5 | 24.5 | 21.92 | 1 | 21.00 | 2 |
| | 25RB (0) | 2567.5 | 24.5 | 21.91 | 1 | 20.98 | 2 |
| | | 2535 | 24.5 | 21.86 | 1 | 20.92 | 2 |
| | | 2502.5 | 24.5 | 21.91 | 1 | 20.85 | 2 |
| 10 MHz | 1RB High (49) | 2565 | 24.5 | 22.92 | 0 | 21.91 | 1 |
| | | 2535 | 24.5 | 22.94 | 0 | 22.35 | 1 |
| | | 2505 | 24.5 | 23.08 | 0 | 22.17 | 1 |
| | 1RB Middle (24) | 2565 | 24.5 | 22.80 | 0 | 21.71 | 1 |
| | | 2535 | 24.5 | 22.86 | 0 | 22.28 | 1 |
| | | 2505 | 24.5 | 22.78 | 0 | 21.82 | 1 |
| | 1RB Low (0) | 2565 | 24.5 | 23.05 | 0 | 21.96 | 1 |
| | | 2535 | 24.5 | 23.11 | 0 | 22.49 | 1 |
| | | 2505 | 24.5 | 23.34 | 0 | 22.02 | 1 |
| | 25RB High (25) | 2565 | 24.5 | 21.88 | 1 | 20.93 | 2 |
| | | 2535 | 24.5 | 21.82 | 1 | 20.87 | 2 |
| | | 2505 | 24.5 | 21.87 | 1 | 20.93 | 2 |
| | 25RB Middle (12) | 2565 | 24.5 | 21.88 | 1 | 20.90 | 2 |
| | | 2535 | 24.5 | 21.87 | 1 | 20.89 | 2 |
| | | 2505 | 24.5 | 21.85 | 1 | 20.93 | 2 |
| | 25RB Low (0) | 2565 | 24.5 | 21.95 | 1 | 20.99 | 2 |
| | | 2535 | 24.5 | 21.90 | 1 | 20.94 | 2 |
| | | 2505 | 24.5 | 21.91 | 1 | 20.98 | 2 |

| | | | | | | | |
|--------|---------------------|--------|-------------|-------|---|-------|---|
| | 50RB (0) | 2565 | 24.5 | 21.87 | 1 | 20.94 | 2 |
| | | 2535 | 24.5 | 21.94 | 1 | 20.92 | 2 |
| | | 2505 | 24.5 | 21.89 | 1 | 20.89 | 2 |
| 15 MHz | 1RB High (74) | 2562.5 | 24.5 | 22.91 | 0 | 22.00 | 1 |
| | | 2535 | 24.5 | 22.86 | 0 | 22.18 | 1 |
| | | 2507.5 | 24.5 | 23.04 | 0 | 22.38 | 1 |
| | 1RB Middle (37) | 2562.5 | 24.5 | 22.86 | 0 | 21.68 | 1 |
| | | 2535 | 24.5 | 23.05 | 0 | 22.41 | 1 |
| | | 2507.5 | 24.5 | 23.05 | 0 | 22.39 | 1 |
| | 1RB Low (0) | 2562.5 | 24.5 | 22.89 | 0 | 21.88 | 1 |
| | | 2535 | 24.5 | 23.04 | 0 | 22.41 | 1 |
| | | 2507.5 | 24.5 | 23.03 | 0 | 22.34 | 1 |
| | 36RB High (38) | 2562.5 | 24.5 | 22.01 | 1 | 21.03 | 2 |
| | | 2535 | 24.5 | 22.07 | 1 | 21.10 | 2 |
| | | 2507.5 | 24.5 | 22.07 | 1 | 21.02 | 2 |
| | 36RB Middle (19) | 2562.5 | 24.5 | 22.01 | 1 | 20.96 | 2 |
| | | 2535 | 24.5 | 22.02 | 1 | 21.11 | 2 |
| | | 2507.5 | 24.5 | 22.13 | 1 | 21.06 | 2 |
| | 36RB Low (0) | 2562.5 | 24.5 | 22.00 | 1 | 20.96 | 2 |
| | | 2535 | 24.5 | 22.01 | 1 | 21.07 | 2 |
| | | 2507.5 | 24.5 | 22.15 | 1 | 21.08 | 2 |
| | 75RB (0) | 2562.5 | 24.5 | 21.92 | 1 | 20.96 | 2 |
| | | 2535 | 24.5 | 21.95 | 1 | 21.05 | 2 |
| | | 2507.5 | 24.5 | 22.05 | 1 | 21.10 | 2 |
| 20 MHz | 1RB High (99) | 2560 | 24.5 | 23.04 | 0 | 22.47 | 1 |
| | | 2535 | 24.5 | 23.01 | 0 | 22.42 | 1 |
| | | 2510 | 24.5 | 23.11 | 0 | 22.50 | 1 |
| | 1RB Middle (50) | 2560 | 24.5 | 22.90 | 0 | 22.40 | 1 |
| | | 2535 | 24.5 | 23.01 | 0 | 22.41 | 1 |
| | | 2510 | 24.5 | 22.99 | 0 | 22.49 | 1 |
| | 1RB Low (0) | 2560 | 24.5 | 22.94 | 0 | 22.50 | 1 |
| | | 2535 | 24.5 | 23.03 | 0 | 22.40 | 1 |
| | | 2510 | 24.5 | 23.26 | 0 | 22.50 | 1 |
| | 50RB High (50) | 2560 | 24.5 | 22.02 | 1 | 21.15 | 2 |
| | | 2535 | 24.5 | 22.04 | 1 | 21.05 | 2 |
| | | 2510 | 24.5 | 22.07 | 1 | 21.07 | 2 |
| | 50RB Middle (25) | 2560 | 24.5 | 21.97 | 1 | 21.07 | 2 |
| | | 2535 | 24.5 | 22.05 | 1 | 21.05 | 2 |
| | | 2510 | 24.5 | 22.10 | 1 | 21.14 | 2 |
| | 50RB Low (0) | 2560 | 24.5 | 21.96 | 1 | 20.99 | 2 |
| | | 2535 | 24.5 | 22.05 | 1 | 21.03 | 2 |
| | | 2510 | 24.5 | 22.13 | 1 | 21.14 | 2 |
| | 100RB (0) | 2560 | 24.5 | 22.13 | 1 | 21.03 | 2 |
| | | 2535 | 24.5 | 22.06 | 1 | 21.00 | 2 |
| | | 2510 | 24.5 | 22.11 | 1 | 21.15 | 2 |

| Band 12 | | | | | | | |
|-----------------|--|--------------------|----------------------------------|---------------------------|-----|---------------------------|-----|
| Bandwidth(MHz) | RB allocation RB offset (Start RB) | Frequency (MHz) | Max. Target Power (dBm) | QPSK | | 16QAM | |
| | | | | Actual output power (dBm) | MPR | Actual output power (dBm) | MPR |
| 1.4 MHz | 1RB High (5) | 715.3 | 24 | 23.24 | 0 | 22.70 | 1 |
| | | 707.5 | 24 | 23.16 | 0 | 22.25 | 1 |
| | | 699.7 | 24 | 23.14 | 0 | 22.15 | 1 |
| | 1RB Middle (3) | 715.3 | 24 | 23.70 | 0 | 22.60 | 1 |
| | | 707.5 | 24 | 23.20 | 0 | 22.27 | 1 |
| | | 699.7 | 24 | 23.15 | 0 | 22.12 | 1 |
| | 1RB Low (0) | 715.3 | 24 | 23.34 | 0 | 22.93 | 1 |
| | | 707.5 | 24 | 23.18 | 0 | 22.27 | 1 |
| | | 699.7 | 24 | 23.10 | 0 | 22.14 | 1 |
| | 3RB High (3) | 715.3 | 24 | 23.32 | 0 | 22.43 | 1 |
| | | 707.5 | 24 | 23.22 | 0 | 22.35 | 1 |
| | | 699.7 | 24 | 23.03 | 0 | 22.04 | 1 |
| | 3RB Middle (1) | 715.3 | 24 | 23.28 | 0 | 22.63 | 1 |
| | | 707.5 | 24 | 23.27 | 0 | 22.36 | 1 |
| | | 699.7 | 24 | 23.37 | 0 | 22.28 | 1 |
| | 3RB Low (0) | 715.3 | 24 | 23.29 | 0 | 22.73 | 1 |
| | | 707.5 | 24 | 23.25 | 0 | 22.37 | 1 |
| | | 699.7 | 24 | 23.16 | 0 | 22.18 | 1 |
| | 6RB (0) | 715.3 | 24 | 22.42 | 1 | 21.43 | 2 |
| | | 707.5 | 24 | 22.25 | 1 | 21.41 | 2 |
| | | 699.7 | 24 | 22.15 | 1 | 21.11 | 2 |
| 3 MHz | 1RB High (14) | 714.5 | 24 | 23.55 | 0 | 22.95 | 1 |
| | | 707.5 | 24 | 23.20 | 0 | 22.23 | 1 |
| | | 700.5 | 24 | 23.06 | 0 | 22.02 | 1 |
| | 1RB Middle (7) | 714.5 | 24 | 23.37 | 0 | 22.66 | 1 |
| | | 707.5 | 24 | 23.21 | 0 | 22.29 | 1 |
| | | 700.5 | 24 | 23.10 | 0 | 22.01 | 1 |
| | 1RB Low (0) | 714.5 | 24 | 23.41 | 0 | 22.90 | 1 |
| | | 707.5 | 24 | 23.22 | 0 | 22.26 | 1 |
| | | 700.5 | 24 | 23.01 | 0 | 21.98 | 1 |
| | 8RB High (7) | 714.5 | 24 | 22.40 | 1 | 21.42 | 2 |
| | | 707.5 | 24 | 22.25 | 1 | 21.27 | 2 |
| | | 700.5 | 24 | 22.11 | 1 | 21.23 | 2 |
| | 8RB Middle (4) | 714.5 | 24 | 22.26 | 1 | 21.42 | 2 |
| | | 707.5 | 24 | 22.23 | 1 | 21.30 | 2 |
| | | 700.5 | 24 | 22.19 | 1 | 21.33 | 2 |
| | 8RB Low (0) | 714.5 | 24 | 22.35 | 1 | 21.41 | 2 |
| | | 707.5 | 24 | 22.24 | 1 | 21.35 | 2 |
| | | 700.5 | 24 | 22.10 | 1 | 21.29 | 2 |
| | 15RB (0) | 714.5 | 24 | 22.39 | 1 | 21.48 | 2 |
| | | 707.5 | 24 | 22.23 | 1 | 21.18 | 2 |
| | | 700.5 | 24 | 22.19 | 1 | 21.21 | 2 |

| | | | | | | | |
|--------|------------------------|-------|-----------|-------|---|-------|---|
| 5 MHz | 1RB High (24) | 713.5 | 24 | 23.41 | 0 | 22.61 | 1 |
| | | 707.5 | 24 | 23.63 | 0 | 22.82 | 1 |
| | | 701.5 | 24 | 23.51 | 0 | 22.26 | 1 |
| | 1RB Middle (12) | 713.5 | 24 | 23.25 | 0 | 22.43 | 1 |
| | | 707.5 | 24 | 23.33 | 0 | 22.74 | 1 |
| | | 701.5 | 24 | 23.45 | 0 | 22.18 | 1 |
| | 1RB Low (0) | 713.5 | 24 | 23.33 | 0 | 22.46 | 1 |
| | | 707.5 | 24 | 23.59 | 0 | 22.78 | 1 |
| | | 701.5 | 24 | 23.19 | 0 | 22.33 | 1 |
| | 12RB High (13) | 713.5 | 24 | 22.33 | 1 | 21.35 | 2 |
| | | 707.5 | 24 | 22.31 | 1 | 21.44 | 2 |
| | | 701.5 | 24 | 22.17 | 1 | 21.18 | 2 |
| | 12RB Middle (6) | 713.5 | 24 | 22.42 | 1 | 21.50 | 2 |
| | | 707.5 | 24 | 22.28 | 1 | 21.38 | 2 |
| | | 701.5 | 24 | 22.25 | 1 | 21.17 | 2 |
| | 12RB Low (0) | 713.5 | 24 | 22.46 | 1 | 21.53 | 2 |
| | | 707.5 | 24 | 22.26 | 1 | 21.38 | 2 |
| | | 701.5 | 24 | 22.21 | 1 | 21.25 | 2 |
| | 25RB (0) | 713.5 | 24 | 22.50 | 1 | 21.41 | 2 |
| | | 707.5 | 24 | 22.25 | 1 | 21.32 | 2 |
| | | 701.5 | 24 | 22.16 | 1 | 21.10 | 2 |
| 10 MHz | 1RB High (49) | 711 | 24 | 23.84 | 0 | 22.96 | 1 |
| | | 707.5 | 24 | 23.51 | 0 | 22.79 | 1 |
| | | 704 | 24 | 23.45 | 0 | 22.37 | 1 |
| | 1RB Middle (24) | 711 | 24 | 23.34 | 0 | 22.83 | 1 |
| | | 707.5 | 24 | 23.25 | 0 | 22.34 | 1 |
| | | 704 | 24 | 23.21 | 0 | 22.29 | 1 |
| | 1RB Low (0) | 711 | 24 | 23.58 | 0 | 22.91 | 1 |
| | | 707.5 | 24 | 23.60 | 0 | 22.54 | 1 |
| | | 704 | 24 | 23.74 | 0 | 22.49 | 1 |
| | 25RB High (25) | 711 | 24 | 22.46 | 1 | 21.38 | 2 |
| | | 707.5 | 24 | 22.37 | 1 | 21.38 | 2 |
| | | 704 | 24 | 22.28 | 1 | 21.31 | 2 |
| | 25RB Middle (12) | 711 | 24 | 22.45 | 1 | 21.45 | 2 |
| | | 707.5 | 24 | 22.27 | 1 | 21.38 | 2 |
| | | 704 | 24 | 22.30 | 1 | 21.33 | 2 |
| | 25RB Low (0) | 711 | 24 | 22.39 | 1 | 21.43 | 2 |
| | | 707.5 | 24 | 22.34 | 1 | 21.48 | 2 |
| | | 704 | 24 | 22.37 | 1 | 21.40 | 2 |
| | 50RB (0) | 711 | 24 | 22.47 | 1 | 21.49 | 2 |
| | | 707.5 | 24 | 22.28 | 1 | 21.33 | 2 |
| | | 704 | 24 | 22.35 | 1 | 21.31 | 2 |

| Band 13 | | | | | | | |
|-----------------|---------------------------------------|-----------------|-------------------------|---------------------------|-----|---------------------------|-----|
| Bandwidth (MHz) | RB allocation RB offset (Start RB) | Frequency (MHz) | Max. Target Power (dBm) | QPSK | | 16QAM | |
| | | | | Actual output power (dBm) | MPR | Actual output power (dBm) | MPR |
| 5 MHz | 1RB High (24) | 784.5 | 24 | 23.30 | 0 | 22.25 | 1 |
| | | 782 | 24 | 23.11 | 0 | 22.34 | 1 |
| | | 779.5 | 24 | 23.64 | 0 | 22.84 | 1 |
| | 1RB Middle (12) | 784.5 | 24 | 23.59 | 0 | 21.99 | 1 |
| | | 782 | 24 | 23.49 | 0 | 22.45 | 1 |
| | | 779.5 | 24 | 23.72 | 0 | 22.95 | 1 |
| | 1RB Low (0) | 784.5 | 24 | 23.30 | 0 | 22.49 | 1 |
| | | 782 | 24 | 23.62 | 0 | 22.67 | 1 |
| | | 779.5 | 24 | 23.40 | 0 | 22.81 | 1 |
| | 12RB High (13) | 784.5 | 24 | 22.31 | 1 | 21.36 | 2 |
| | | 782 | 24 | 22.42 | 1 | 21.42 | 2 |
| | | 779.5 | 24 | 22.36 | 1 | 21.53 | 2 |
| | 12RB Middle (6) | 784.5 | 24 | 22.28 | 1 | 21.43 | 2 |
| | | 782 | 24 | 22.38 | 1 | 21.43 | 2 |
| | | 779.5 | 24 | 22.43 | 1 | 21.59 | 2 |
| | 12RB Low (0) | 784.5 | 24 | 22.32 | 1 | 21.36 | 2 |
| | | 782 | 24 | 22.40 | 1 | 21.49 | 2 |
| | | 779.5 | 24 | 22.39 | 1 | 21.47 | 2 |
| | 25RB (0) | 784.5 | 24 | 22.31 | 1 | 21.35 | 2 |
| | | 782 | 24 | 22.41 | 1 | 21.39 | 2 |
| | | 779.5 | 24 | 22.44 | 1 | 21.49 | 2 |
| 10 MHz | 1RB High (49) | 782 | 24 | 23.48 | 0 | 22.21 | 1 |
| | 1RB Middle (24) | 782 | 24 | 23.36 | 0 | 22.45 | 1 |
| | 1RB Low (0) | 782 | 24 | 23.54 | 0 | 22.43 | 1 |
| | 25RB High (25) | 782 | 24 | 22.44 | 1 | 21.45 | 2 |
| | 25RB Middle (12) | 782 | 24 | 22.39 | 1 | 21.46 | 2 |
| | 25RB Low (0) | 782 | 24 | 22.40 | 1 | 21.38 | 2 |
| | 50RB (0) | 782 | 24 | 22.47 | 1 | 21.42 | 2 |

| Band 38 | | | | | | | |
|-----------------|----------------------|-----------------|-------------------------|---------------------------|-----|---------------------------|-----|
| Bandwidth (MHz) | RB allocation | Frequency (MHz) | Max. Target Power (dBm) | QPSK | | 16QAM | |
| | RB offset (Start RB) | | | Actual output power (dBm) | MPR | Actual output power (dBm) | MPR |
| 5 MHz | 1RB High (24) | 2617.5 | 24 | 23.73 | 0 | 22.94 | 1 |
| | | 2595 | 24 | 23.47 | 0 | 22.44 | 1 |
| | | 2572.5 | 24 | 23.21 | 0 | 22.41 | 1 |
| | 1RB Middle (12) | 2617.5 | 24 | 23.64 | 0 | 22.92 | 1 |
| | | 2595 | 24 | 23.36 | 0 | 22.58 | 1 |
| | | 2572.5 | 24 | 23.18 | 0 | 22.32 | 1 |
| | 1RB Low (0) | 2617.5 | 24 | 23.75 | 0 | 22.91 | 1 |
| | | 2595 | 24 | 23.18 | 0 | 22.51 | 1 |
| | | 2572.5 | 24 | 23.34 | 0 | 22.57 | 1 |
| | 12RB High (13) | 2617.5 | 24 | 22.78 | 1 | 21.50 | 2 |
| | | 2595 | 24 | 22.41 | 1 | 21.26 | 2 |
| | | 2572.5 | 24 | 22.23 | 1 | 21.30 | 2 |
| | 12RB Middle (6) | 2617.5 | 24 | 22.79 | 1 | 21.54 | 2 |
| | | 2595 | 24 | 22.39 | 1 | 21.40 | 2 |
| | | 2572.5 | 24 | 22.21 | 1 | 21.29 | 2 |
| | 12RB Low (0) | 2617.5 | 24 | 22.39 | 1 | 21.83 | 2 |
| | | 2595 | 24 | 22.31 | 1 | 21.36 | 2 |
| | | 2572.5 | 24 | 22.19 | 1 | 21.43 | 2 |
| | 25RB (0) | 2617.5 | 24 | 22.54 | 1 | 21.68 | 2 |
| | | 2595 | 24 | 22.42 | 1 | 21.20 | 2 |
| | | 2572.5 | 24 | 22.07 | 1 | 21.38 | 2 |
| 10 MHz | 1RB High (49) | 2615 | 24 | 23.55 | 0 | 22.96 | 1 |
| | | 2595 | 24 | 23.45 | 0 | 22.94 | 1 |
| | | 2575 | 24 | 23.49 | 0 | 22.99 | 1 |
| | 1RB Middle (24) | 2615 | 24 | 23.99 | 0 | 22.85 | 1 |
| | | 2595 | 24 | 23.23 | 0 | 22.54 | 1 |
| | | 2575 | 24 | 23.15 | 0 | 22.57 | 1 |
| | 1RB Low (0) | 2615 | 24 | 23.68 | 0 | 22.93 | 1 |
| | | 2595 | 24 | 23.31 | 0 | 22.73 | 1 |
| | | 2575 | 24 | 23.28 | 0 | 22.81 | 1 |
| | 25RB High (25) | 2615 | 24 | 22.49 | 1 | 21.85 | 2 |
| | | 2595 | 24 | 22.53 | 1 | 21.53 | 2 |
| | | 2575 | 24 | 22.32 | 1 | 21.15 | 2 |
| | 25RB Middle (12) | 2615 | 24 | 22.73 | 1 | 21.80 | 2 |
| | | 2595 | 24 | 22.43 | 1 | 21.36 | 2 |
| | | 2575 | 24 | 22.24 | 1 | 21.19 | 2 |
| | 25RB Low (0) | 2615 | 24 | 22.63 | 1 | 21.71 | 2 |
| | | 2595 | 24 | 22.38 | 1 | 21.35 | 2 |
| | | 2575 | 24 | 22.23 | 1 | 21.14 | 2 |
| | 50RB (0) | 2615 | 24 | 22.78 | 1 | 21.71 | 2 |
| | | 2595 | 24 | 22.16 | 1 | 21.35 | 2 |
| | | 2575 | 24 | 22.25 | 1 | 21.22 | 2 |
| 15 MHz | 1RB High (74) | 2612.5 | 24 | 23.52 | 0 | 22.98 | 1 |
| | | 2595 | 24 | 23.26 | 0 | 22.66 | 1 |
| | | 2577.5 | 24 | 23.43 | 0 | 22.76 | 1 |

| | | | | | | | |
|--------|---------------------|--------|-----------|-------|---|-------|---|
| | 1RB Middle (37) | 2612.5 | 24 | 23.19 | 0 | 22.95 | 1 |
| | | 2595 | 24 | 23.24 | 0 | 22.59 | 1 |
| | | 2577.5 | 24 | 23.39 | 0 | 22.55 | 1 |
| | 1RB Low (0) | 2612.5 | 24 | 23.32 | 0 | 22.84 | 1 |
| | | 2595 | 24 | 23.31 | 0 | 22.48 | 1 |
| | | 2577.5 | 24 | 23.28 | 0 | 22.59 | 1 |
| | 36RB High (38) | 2612.5 | 24 | 22.66 | 1 | 21.75 | 2 |
| | | 2595 | 24 | 22.31 | 1 | 21.29 | 2 |
| | | 2577.5 | 24 | 22.47 | 1 | 21.43 | 2 |
| | 36RB Middle (19) | 2612.5 | 24 | 22.56 | 1 | 21.67 | 2 |
| | | 2595 | 24 | 22.24 | 1 | 21.21 | 2 |
| | | 2577.5 | 24 | 22.31 | 1 | 21.26 | 2 |
| | 36RB Low (0) | 2612.5 | 24 | 22.59 | 1 | 21.55 | 2 |
| | | 2595 | 24 | 22.12 | 1 | 21.24 | 2 |
| | | 2577.5 | 24 | 22.23 | 1 | 21.19 | 2 |
| | 75RB (0) | 2612.5 | 24 | 22.51 | 1 | 21.63 | 2 |
| | | 2595 | 24 | 22.09 | 1 | 21.25 | 2 |
| | | 2577.5 | 24 | 22.34 | 1 | 21.26 | 2 |
| 20 MHz | 1RB High (99) | 2610 | 24 | 23.61 | 0 | 22.92 | 1 |
| | | 2595 | 24 | 23.61 | 0 | 22.97 | 1 |
| | | 2580 | 24 | 23.47 | 0 | 22.72 | 1 |
| | 1RB Middle (50) | 2610 | 24 | 23.82 | 0 | 22.58 | 1 |
| | | 2595 | 24 | 23.17 | 0 | 22.67 | 1 |
| | | 2580 | 24 | 23.26 | 0 | 22.61 | 1 |
| | 1RB Low (0) | 2610 | 24 | 23.37 | 0 | 22.81 | 1 |
| | | 2595 | 24 | 23.10 | 0 | 22.48 | 1 |
| | | 2580 | 24 | 23.21 | 0 | 22.63 | 1 |
| | 50RB High (50) | 2610 | 24 | 22.61 | 1 | 21.67 | 2 |
| | | 2595 | 24 | 22.41 | 1 | 21.33 | 2 |
| | | 2580 | 24 | 22.35 | 1 | 21.42 | 2 |
| | 50RB Middle (25) | 2610 | 24 | 22.68 | 1 | 21.44 | 2 |
| | | 2595 | 24 | 22.48 | 1 | 21.26 | 2 |
| | | 2580 | 24 | 22.25 | 1 | 21.19 | 2 |
| | 50RB Low (0) | 2610 | 24 | 22.62 | 1 | 21.36 | 2 |
| | | 2595 | 24 | 22.25 | 1 | 21.21 | 2 |
| | | 2580 | 24 | 22.30 | 1 | 21.12 | 2 |
| | 100RB (0) | 2610 | 24 | 22.70 | 1 | 21.65 | 2 |
| | | 2595 | 24 | 22.37 | 1 | 21.37 | 2 |
| | | 2580 | 24 | 22.29 | 1 | 21.35 | 2 |

| Band 41 | | | | | | | |
|--------------------|--|--------------------|-------------------------------|------------------------------|-----|------------------------------|-----|
| Bandwidth (MHz) | RB allocation RB offset (Start RB) | Frequency (MHz) | Max. Target Power (dBm) | QPSK | | 16QAM | |
| | | | | Actual output power (dBm) | MPR | Actual output power (dBm) | MPR |
| 5 MHz | 1RB High (24) | 2687.5 | 24 | 23.35 | 0 | 22.92 | 1 |
| | | 2640.3 | 24 | 23.49 | 0 | 22.69 | 1 |
| | | 2593 | 24 | 22.55 | 0 | 21.92 | 1 |
| | | 2545.8 | 24 | 22.67 | 0 | 22.00 | 1 |
| | | 2498.5 | 24 | 22.37 | 0 | 21.86 | 1 |
| | 1RB Middle (12) | 2687.5 | 24 | 23.40 | 0 | 22.96 | 1 |
| | | 2640.3 | 24 | 22.86 | 0 | 22.39 | 1 |
| | | 2593 | 24 | 22.41 | 0 | 21.99 | 1 |
| | | 2545.8 | 24 | 22.71 | 0 | 21.93 | 1 |
| | | 2498.5 | 24 | 22.38 | 0 | 21.87 | 1 |
| | 1RB Low (0) | 2687.5 | 24 | 23.50 | 0 | 22.97 | 1 |
| | | 2640.3 | 24 | 23.34 | 0 | 22.63 | 1 |
| | | 2593 | 24 | 22.85 | 0 | 22.02 | 1 |
| | | 2545.8 | 24 | 22.66 | 0 | 21.97 | 1 |
| | | 2498.5 | 24 | 22.65 | 0 | 21.98 | 1 |
| | 12RB High (13) | 2687.5 | 24 | 22.44 | 1 | 21.38 | 2 |
| | | 2640.3 | 24 | 22.58 | 1 | 21.53 | 2 |
| | | 2593 | 24 | 21.70 | 1 | 20.73 | 2 |
| | | 2545.8 | 24 | 21.59 | 1 | 20.68 | 2 |
| | | 2498.5 | 24 | 21.45 | 1 | 20.60 | 2 |
| | 12RB Middle (6) | 2687.5 | 24 | 22.45 | 1 | 21.40 | 2 |
| | | 2640.3 | 24 | 22.54 | 1 | 21.60 | 2 |
| | | 2593 | 24 | 21.63 | 1 | 20.83 | 2 |
| | | 2545.8 | 24 | 21.37 | 1 | 20.63 | 2 |
| | | 2498.5 | 24 | 21.52 | 1 | 20.68 | 2 |
| | 12RB Low (0) | 2687.5 | 24 | 22.77 | 1 | 21.74 | 2 |
| | | 2640.3 | 24 | 22.27 | 1 | 21.37 | 2 |
| | | 2593 | 24 | 21.88 | 1 | 20.85 | 2 |
| | | 2545.8 | 24 | 21.28 | 1 | 20.57 | 2 |
| | | 2498.5 | 24 | 21.56 | 1 | 20.73 | 2 |
| | 25RB (0) | 2687.5 | 24 | 22.45 | 1 | 21.45 | 2 |
| | | 2640.3 | 24 | 22.57 | 1 | 21.44 | 2 |
| | | 2593 | 24 | 21.87 | 1 | 20.86 | 2 |
| | | 2545.8 | 24 | 21.60 | 1 | 20.44 | 2 |
| | | 2498.5 | 24 | 21.25 | 1 | 20.65 | 2 |
| 10 MHz | 1RB High (49) | 2685 | 24 | 23.78 | 0 | 22.95 | 1 |
| | | 2639 | 24 | 23.74 | 0 | 22.83 | 1 |
| | | 2593 | 24 | 23.53 | 0 | 22.38 | 1 |

| | | | | | | | |
|---------------------|--------------------|--------|-----------|-------|---|-------|---|
| | | 2547 | 24 | 22.82 | 0 | 22.30 | 1 |
| | | 2501 | 24 | 23.24 | 0 | 22.31 | 1 |
| 1RB Middle (24) | | 2685 | 24 | 23.47 | 0 | 22.91 | 1 |
| | | 2639 | 24 | 23.55 | 0 | 22.90 | 1 |
| | | 2593 | 24 | 23.15 | 0 | 22.05 | 1 |
| | | 2547 | 24 | 22.55 | 0 | 22.27 | 1 |
| | | 2501 | 24 | 22.77 | 0 | 21.85 | 1 |
| | | 2685 | 24 | 23.77 | 0 | 22.97 | 1 |
| 1RB Low (0) | | 2639 | 24 | 23.35 | 0 | 22.93 | 1 |
| | | 2593 | 24 | 22.77 | 0 | 22.22 | 1 |
| | | 2547 | 24 | 22.65 | 0 | 22.32 | 1 |
| | | 2501 | 24 | 22.43 | 0 | 22.14 | 1 |
| | | 2685 | 24 | 22.52 | 1 | 21.75 | 2 |
| 25RB High (25) | | 2639 | 24 | 22.46 | 1 | 21.73 | 2 |
| | | 2593 | 24 | 21.66 | 1 | 20.97 | 2 |
| | | 2547 | 24 | 21.73 | 1 | 20.66 | 2 |
| | | 2501 | 24 | 21.49 | 1 | 20.71 | 2 |
| | | 2685 | 24 | 22.46 | 1 | 21.80 | 2 |
| 25RB Middle (12) | | 2639 | 24 | 22.26 | 1 | 21.65 | 2 |
| | | 2593 | 24 | 21.63 | 1 | 20.88 | 2 |
| | | 2547 | 24 | 21.37 | 1 | 20.57 | 2 |
| | | 2501 | 24 | 21.48 | 1 | 20.57 | 2 |
| | | 2685 | 24 | 22.37 | 1 | 21.70 | 2 |
| 25RB Low (0) | | 2639 | 24 | 22.55 | 1 | 21.64 | 2 |
| | | 2593 | 24 | 21.66 | 1 | 20.84 | 2 |
| | | 2547 | 24 | 21.54 | 1 | 20.35 | 2 |
| | | 2501 | 24 | 21.46 | 1 | 20.67 | 2 |
| | | 2685 | 24 | 22.53 | 1 | 21.72 | 2 |
| 50RB (0) | | 2639 | 24 | 22.26 | 1 | 21.52 | 2 |
| | | 2593 | 24 | 21.69 | 1 | 20.88 | 2 |
| | | 2547 | 24 | 21.42 | 1 | 20.72 | 2 |
| | | 2501 | 24 | 21.44 | 1 | 20.68 | 2 |
| | | 2682.5 | 24 | 23.81 | 0 | 22.99 | 1 |
| 15 MHz | 1RB High (74) | 2637.8 | 24 | 23.49 | 0 | 22.88 | 1 |
| | | 2593 | 24 | 23.00 | 0 | 21.95 | 1 |
| | | 2548.3 | 24 | 22.79 | 0 | 21.98 | 1 |
| | | 2503.5 | 24 | 22.40 | 0 | 21.90 | 1 |
| | | 2682.5 | 24 | 23.37 | 0 | 22.97 | 1 |
| 15 MHz | 1RB Middle (37) | 2637.8 | 24 | 23.29 | 0 | 22.26 | 1 |
| | | 2593 | 24 | 22.59 | 0 | 21.79 | 1 |
| | | 2548.3 | 24 | 22.57 | 0 | 21.84 | 1 |
| | | 2503.5 | 24 | 22.20 | 0 | 21.72 | 1 |

| | | | | | | | |
|--------|---------------------|--------|-----------|-------|---|-------|---|
| | 1RB Low (0) | 2682.5 | 24 | 23.88 | 0 | 22.91 | 1 |
| | | 2637.8 | 24 | 23.27 | 0 | 22.30 | 1 |
| | | 2593 | 24 | 22.58 | 0 | 22.01 | 1 |
| | | 2548.3 | 24 | 22.63 | 0 | 22.22 | 1 |
| | | 2503.5 | 24 | 22.31 | 0 | 22.06 | 1 |
| | 36RB High (38) | 2682.5 | 24 | 22.66 | 1 | 21.85 | 2 |
| | | 2637.8 | 24 | 22.56 | 1 | 21.39 | 2 |
| | | 2593 | 24 | 21.79 | 1 | 20.54 | 2 |
| | | 2548.3 | 24 | 21.63 | 1 | 20.64 | 2 |
| | | 2503.5 | 24 | 21.49 | 1 | 20.58 | 2 |
| | 36RB Middle (19) | 2682.5 | 24 | 22.56 | 1 | 21.70 | 2 |
| | | 2637.8 | 24 | 22.57 | 1 | 21.42 | 2 |
| | | 2593 | 24 | 21.75 | 1 | 20.51 | 2 |
| | | 2548.3 | 24 | 21.41 | 1 | 20.59 | 2 |
| | | 2503.5 | 24 | 21.43 | 1 | 20.59 | 2 |
| | 36RB Low (0) | 2682.5 | 24 | 22.62 | 1 | 21.69 | 2 |
| | | 2637.8 | 24 | 22.14 | 1 | 21.21 | 2 |
| | | 2593 | 24 | 21.74 | 1 | 20.79 | 2 |
| | | 2548.3 | 24 | 21.54 | 1 | 20.44 | 2 |
| | | 2503.5 | 24 | 21.61 | 1 | 20.29 | 2 |
| | 75RB (0) | 2682.5 | 24 | 22.60 | 1 | 21.59 | 2 |
| | | 2637.8 | 24 | 22.54 | 1 | 21.34 | 2 |
| | | 2593 | 24 | 21.83 | 1 | 20.79 | 2 |
| | | 2548.3 | 24 | 21.54 | 1 | 20.58 | 2 |
| | | 2503.5 | 24 | 21.59 | 1 | 20.53 | 2 |
| 20 MHz | 1RB High (99) | 2680 | 24 | 23.79 | 0 | 22.90 | 1 |
| | | 2636.5 | 24 | 23.42 | 0 | 22.81 | 1 |
| | | 2593 | 24 | 23.01 | 0 | 22.37 | 1 |
| | | 2549.5 | 24 | 22.56 | 0 | 21.92 | 1 |
| | | 2506 | 24 | 22.58 | 0 | 21.68 | 1 |
| | 1RB Middle (50) | 2680 | 24 | 23.54 | 0 | 22.78 | 1 |
| | | 2636.5 | 24 | 23.25 | 0 | 22.63 | 1 |
| | | 2593 | 24 | 22.96 | 0 | 21.81 | 1 |
| | | 2549.5 | 24 | 22.29 | 0 | 21.91 | 1 |
| | | 2506 | 24 | 22.41 | 0 | 21.69 | 1 |
| | 1RB Low (0) | 2680 | 24 | 23.43 | 0 | 22.59 | 1 |
| | | 2636.5 | 24 | 23.05 | 0 | 22.23 | 1 |
| | | 2593 | 24 | 22.53 | 0 | 21.71 | 1 |
| | | 2549.5 | 24 | 22.23 | 0 | 21.54 | 1 |
| | | 2506 | 24 | 22.44 | 0 | 21.26 | 1 |
| | 50RB High (50) | 2680 | 24 | 22.53 | 1 | 21.50 | 2 |
| | | 2636.5 | 24 | 22.32 | 1 | 21.29 | 2 |

| | | | | | | | |
|---------------------|--------|-----------|-----------|-------|-------|-------|---|
| | | 2593 | 24 | 21.92 | 1 | 20.76 | 2 |
| | | 2549.5 | 24 | 21.39 | 1 | 20.61 | 2 |
| | | 2506 | 24 | 21.51 | 1 | 20.55 | 2 |
| 50RB Middle (25) | 2680 | 24 | 22.68 | 1 | 21.76 | 2 | |
| | 2636.5 | 24 | 22.63 | 1 | 21.38 | 2 | |
| | 2593 | 24 | 21.72 | 1 | 20.74 | 2 | |
| | 2549.5 | 24 | 21.33 | 1 | 20.49 | 2 | |
| | 2506 | 24 | 21.60 | 1 | 20.50 | 2 | |
| 50RB Low (0) | 2680 | 24 | 22.58 | 1 | 21.40 | 2 | |
| | 2636.5 | 24 | 22.04 | 1 | 21.05 | 2 | |
| | 2593 | 24 | 21.83 | 1 | 20.73 | 2 | |
| | 2549.5 | 24 | 21.45 | 1 | 20.36 | 2 | |
| | 2506 | 24 | 21.38 | 1 | 20.52 | 2 | |
| 100RB (0) | 2680 | 24 | 22.43 | 1 | 21.50 | 2 | |
| | 2636.5 | 24 | 22.05 | 1 | 21.04 | 2 | |
| | 2593 | 24 | 21.77 | 1 | 20.74 | 2 | |
| | 2549.5 | 24 | 21.59 | 1 | 20.53 | 2 | |
| | 2506 | 24 | 21.57 | 1 | 20.55 | 2 | |

| Band 4 | | | | | | | |
|--------------------|-------------------|--------------------|----------------------------------|------------------------------|-----|------------------------------|-----|
| Bandwidth (MHz) | RB allocation | Frequency (MHz) | Max. Target Power (dBm) | QPSK | | 16QAM | |
| | | | | Actual output power (dBm) | MPR | Actual output power (dBm) | MPR |
| 1.4 MHz | 1RB High (5) | 1754.3 | 25 | 23.97 | 0 | 22.99 | 1 |
| | | 1732.5 | 25 | 24.15 | 0 | 23.28 | 1 |
| | | 1710.7 | 25 | 24.34 | 0 | 23.80 | 1 |
| | 1RB Middle (3) | 1754.3 | 25 | 23.96 | 0 | 23.11 | 1 |
| | | 1732.5 | 25 | 24.19 | 0 | 23.27 | 1 |
| | | 1710.7 | 25 | 24.39 | 0 | 23.66 | 1 |
| | 1RB Low (0) | 1754.3 | 25 | 23.92 | 0 | 23.07 | 1 |
| | | 1732.5 | 25 | 24.22 | 0 | 23.27 | 1 |
| | | 1710.7 | 25 | 24.34 | 0 | 23.66 | 1 |
| | 3RB High (3) | 1754.3 | 25 | 23.87 | 0 | 23.09 | 1 |
| | | 1732.5 | 25 | 24.14 | 0 | 23.20 | 1 |
| | | 1710.7 | 25 | 24.28 | 0 | 23.52 | 1 |
| | 3RB Middle (1) | 1754.3 | 25 | 23.95 | 0 | 23.09 | 1 |
| | | 1732.5 | 25 | 24.18 | 0 | 23.24 | 1 |
| | | 1710.7 | 25 | 24.37 | 0 | 23.51 | 1 |
| | 3RB Low (0) | 1754.3 | 25 | 23.95 | 0 | 23.11 | 1 |
| | | 1732.5 | 25 | 24.16 | 0 | 23.22 | 1 |
| | | 1710.7 | 25 | 24.35 | 0 | 23.56 | 1 |
| | 6RB (0) | 1754.3 | 25 | 23.91 | 1 | 22.78 | 2 |
| | | 1732.5 | 25 | 23.86 | 1 | 22.88 | 2 |
| | | 1710.7 | 25 | 24.00 | 1 | 22.99 | 2 |

| | | | | | | | |
|--------|--------------------|--------|-----------|-------|---|-------|---|
| 3 MHz | 1RB High (14) | 1753.5 | 25 | 23.93 | 0 | 23.22 | 1 |
| | | 1732.5 | 25 | 24.22 | 0 | 23.25 | 1 |
| | | 1711.5 | 25 | 24.31 | 0 | 23.22 | 1 |
| | 1RB Middle (7) | 1753.5 | 25 | 24.24 | 0 | 23.41 | 1 |
| | | 1732.5 | 25 | 24.23 | 0 | 23.43 | 1 |
| | | 1711.5 | 25 | 24.41 | 0 | 23.28 | 1 |
| | 1RB Low (0) | 1753.5 | 25 | 24.07 | 0 | 23.49 | 1 |
| | | 1732.5 | 25 | 24.27 | 0 | 23.46 | 1 |
| | | 1711.5 | 25 | 24.36 | 0 | 23.37 | 1 |
| | 8RB High (7) | 1753.5 | 25 | 22.91 | 1 | 22.02 | 2 |
| | | 1732.5 | 25 | 23.11 | 1 | 22.17 | 2 |
| | | 1711.5 | 25 | 23.33 | 1 | 22.38 | 2 |
| | 8RB Middle (4) | 1753.5 | 25 | 22.90 | 1 | 22.02 | 2 |
| | | 1732.5 | 25 | 23.14 | 1 | 22.23 | 2 |
| | | 1711.5 | 25 | 23.32 | 1 | 22.43 | 2 |
| | 8RB Low (0) | 1753.5 | 25 | 22.97 | 1 | 22.09 | 2 |
| | | 1732.5 | 25 | 23.16 | 1 | 22.26 | 2 |
| | | 1711.5 | 25 | 23.37 | 1 | 22.48 | 2 |
| | 15RB (0) | 1753.5 | 25 | 22.97 | 1 | 22.00 | 2 |
| | | 1732.5 | 25 | 23.18 | 1 | 22.12 | 2 |
| | | 1711.5 | 25 | 23.35 | 1 | 22.38 | 2 |
| 5 MHz | 1RB High (24) | 1752.5 | 25 | 24.02 | 0 | 23.12 | 1 |
| | | 1732.5 | 25 | 24.24 | 0 | 23.27 | 1 |
| | | 1712.5 | 25 | 24.35 | 0 | 23.84 | 1 |
| | 1RB Middle (12) | 1752.5 | 25 | 24.03 | 0 | 23.20 | 1 |
| | | 1732.5 | 25 | 24.25 | 0 | 23.35 | 1 |
| | | 1712.5 | 25 | 24.27 | 0 | 23.87 | 1 |
| | 1RB Low (0) | 1752.5 | 25 | 24.18 | 0 | 23.42 | 1 |
| | | 1732.5 | 25 | 24.47 | 0 | 23.48 | 1 |
| | | 1712.5 | 25 | 24.59 | 0 | 24.00 | 1 |
| | 12RB High (13) | 1752.5 | 25 | 22.97 | 1 | 22.08 | 2 |
| | | 1732.5 | 25 | 23.15 | 1 | 22.20 | 2 |
| | | 1712.5 | 25 | 23.23 | 1 | 22.37 | 2 |
| | 12RB Middle (6) | 1752.5 | 25 | 23.06 | 1 | 22.09 | 2 |
| | | 1732.5 | 25 | 23.18 | 1 | 22.27 | 2 |
| | | 1712.5 | 25 | 23.31 | 1 | 22.45 | 2 |
| | 12RB Low (0) | 1752.5 | 25 | 23.08 | 1 | 22.20 | 2 |
| | | 1732.5 | 25 | 23.23 | 1 | 22.32 | 2 |
| | | 1712.5 | 25 | 23.34 | 1 | 22.54 | 2 |
| | 25RB (0) | 1752.5 | 25 | 23.01 | 1 | 21.98 | 2 |
| | | 1732.5 | 25 | 23.18 | 1 | 22.19 | 2 |
| | | 1712.5 | 25 | 23.36 | 1 | 22.36 | 2 |
| 10 MHz | 1RB High (49) | 1750 | 25 | 24.52 | 0 | 23.84 | 1 |
| | | 1732.5 | 25 | 24.61 | 0 | 23.67 | 1 |
| | | 1715 | 25 | 24.58 | 0 | 23.79 | 1 |
| | 1RB Middle (24) | 1750 | 25 | 24.06 | 0 | 23.44 | 1 |
| | | 1732.5 | 25 | 24.09 | 0 | 23.14 | 1 |
| | | 1715 | 25 | 24.29 | 0 | 23.05 | 1 |

| | | | | | | | |
|--------|---------------------|--------|-----------|-------|---|-------|---|
| 15 MHz | 1RB Low (0) | 1750 | 25 | 24.36 | 0 | 23.75 | 1 |
| | | 1732.5 | 25 | 24.58 | 0 | 23.58 | 1 |
| | | 1715 | 25 | 24.63 | 0 | 23.68 | 1 |
| | 25RB High (25) | 1750 | 25 | 23.15 | 1 | 22.13 | 2 |
| | | 1732.5 | 25 | 23.24 | 1 | 22.36 | 2 |
| | | 1715 | 25 | 23.44 | 1 | 22.48 | 2 |
| | 25RB Middle (12) | 1750 | 25 | 23.05 | 1 | 22.08 | 2 |
| | | 1732.5 | 25 | 23.21 | 1 | 22.27 | 2 |
| | | 1715 | 25 | 23.26 | 1 | 22.29 | 2 |
| | 25RB Low (0) | 1750 | 25 | 23.02 | 1 | 22.06 | 2 |
| | | 1732.5 | 25 | 23.23 | 1 | 22.31 | 2 |
| | | 1715 | 25 | 23.32 | 1 | 22.35 | 2 |
| | 50RB (0) | 1750 | 25 | 23.11 | 1 | 22.15 | 2 |
| | | 1732.5 | 25 | 23.28 | 1 | 22.30 | 2 |
| | | 1715 | 25 | 23.36 | 1 | 22.35 | 2 |
| 20 MHz | 1RB High (74) | 1747.5 | 25 | 23.85 | 0 | 23.26 | 1 |
| | | 1732.5 | 25 | 24.17 | 0 | 23.11 | 1 |
| | | 1717.5 | 25 | 24.07 | 0 | 23.46 | 1 |
| | 1RB Middle (37) | 1747.5 | 25 | 23.88 | 0 | 23.24 | 1 |
| | | 1732.5 | 25 | 24.10 | 0 | 22.97 | 1 |
| | | 1717.5 | 25 | 24.19 | 0 | 23.50 | 1 |
| | 1RB Low (0) | 1747.5 | 25 | 24.22 | 0 | 23.61 | 1 |
| | | 1732.5 | 25 | 24.21 | 0 | 23.20 | 1 |
| | | 1717.5 | 25 | 24.43 | 0 | 23.67 | 1 |
| | 36RB High (38) | 1747.5 | 25 | 22.90 | 1 | 21.89 | 2 |
| | | 1732.5 | 25 | 23.05 | 1 | 22.03 | 2 |
| | | 1717.5 | 25 | 23.06 | 1 | 22.11 | 2 |
| | 36RB Middle (19) | 1747.5 | 25 | 22.88 | 1 | 21.80 | 2 |
| | | 1732.5 | 25 | 23.13 | 1 | 22.13 | 2 |
| | | 1717.5 | 25 | 23.15 | 1 | 22.19 | 2 |
| | 36RB Low (0) | 1747.5 | 25 | 22.94 | 1 | 21.92 | 2 |
| | | 1732.5 | 25 | 23.17 | 1 | 22.21 | 2 |
| | | 1717.5 | 25 | 23.15 | 1 | 22.21 | 2 |
| | 75RB (0) | 1747.5 | 25 | 22.83 | 1 | 21.88 | 2 |
| | | 1732.5 | 25 | 23.11 | 1 | 22.09 | 2 |
| | | 1717.5 | 25 | 23.13 | 1 | 22.16 | 2 |
| 25 MHz | 1RB High (99) | 1745 | 25 | 23.94 | 0 | 23.48 | 1 |
| | | 1732.5 | 25 | 24.10 | 0 | 23.54 | 1 |
| | | 1720 | 25 | 24.12 | 0 | 23.70 | 1 |
| | 1RB Middle (50) | 1745 | 25 | 23.81 | 0 | 23.31 | 1 |
| | | 1732.5 | 25 | 24.02 | 0 | 23.55 | 1 |
| | | 1720 | 25 | 23.90 | 0 | 23.65 | 1 |
| | 1RB Low (0) | 1745 | 25 | 24.00 | 0 | 23.39 | 1 |
| | | 1732.5 | 25 | 24.07 | 0 | 23.55 | 1 |
| | | 1720 | 25 | 24.06 | 0 | 23.71 | 1 |
| | 50RB High (50) | 1745 | 25 | 22.89 | 1 | 21.87 | 2 |
| | | 1732.5 | 25 | 22.98 | 1 | 21.94 | 2 |
| | | 1720 | 25 | 22.97 | 1 | 22.00 | 2 |

| | | | | | | | |
|--|---------------------|--------|-----------|-------|---|-------|---|
| | 50RB Middle (25) | 1745 | 25 | 22.92 | 1 | 21.89 | 2 |
| | | 1732.5 | 25 | 23.03 | 1 | 22.06 | 2 |
| | | 1720 | 25 | 23.06 | 1 | 22.16 | 2 |
| | 50RB Low (0) | 1745 | 25 | 22.99 | 1 | 21.96 | 2 |
| | | 1732.5 | 25 | 23.18 | 1 | 22.13 | 2 |
| | | 1720 | 25 | 23.08 | 1 | 22.09 | 2 |
| | 100RB (0) | 1745 | 25 | 22.90 | 1 | 21.91 | 2 |
| | | 1732.5 | 25 | 23.07 | 1 | 22.07 | 2 |
| | | 1720 | 25 | 23.06 | 1 | 22.10 | 2 |

| Band 26 | | | | | | | |
|-----------------|----------------|-----------------|-------------------------|---------------------------|-----|---------------------------|-----|
| Bandwidth (MHz) | RB allocation | Frequency (MHz) | Max. Target Power (dBm) | QPSK | | 16QAM | |
| | | | | Actual output power (dBm) | MPR | Actual output power (dBm) | MPR |
| 1.4 MHz | 1RB High (5) | 848.3 | 24.5 | 23.97 | 0 | 22.97 | 1 |
| | | 831.5 | 24.5 | 24.15 | 0 | 23.49 | 1 |
| | | 814.7 | 24.5 | 23.77 | 0 | 22.76 | 1 |
| | 1RB Middle (3) | 848.3 | 24.5 | 23.80 | 0 | 23.00 | 1 |
| | | 831.5 | 24.5 | 24.13 | 0 | 23.47 | 1 |
| | | 814.7 | 24.5 | 23.77 | 0 | 22.72 | 1 |
| | 1RB Low (0) | 848.3 | 24.5 | 23.94 | 0 | 22.91 | 1 |
| | | 831.5 | 24.5 | 23.98 | 0 | 23.41 | 1 |
| | | 814.7 | 24.5 | 23.76 | 0 | 22.90 | 1 |
| | 3RB High (3) | 848.3 | 24.5 | 23.87 | 0 | 22.80 | 1 |
| | | 831.5 | 24.5 | 24.09 | 0 | 23.06 | 1 |
| | | 814.7 | 24.5 | 23.77 | 0 | 22.71 | 1 |
| | 3RB Middle (1) | 848.3 | 24.5 | 23.96 | 0 | 22.87 | 1 |
| | | 831.5 | 24.5 | 23.99 | 0 | 23.01 | 1 |
| | | 814.7 | 24.5 | 23.82 | 0 | 22.77 | 1 |
| | 3RB Low (0) | 848.3 | 24.5 | 23.87 | 0 | 22.78 | 1 |
| | | 831.5 | 24.5 | 23.83 | 0 | 23.15 | 1 |
| | | 814.7 | 24.5 | 23.77 | 0 | 22.77 | 1 |
| | 6RB (0) | 848.3 | 24.5 | 23.36 | 1 | 22.44 | 2 |
| | | 831.5 | 24.5 | 23.44 | 1 | 22.49 | 2 |
| | | 814.7 | 24.5 | 23.33 | 1 | 22.47 | 2 |
| 3 MHz | 1RB High (14) | 847.5 | 24.5 | 23.86 | 0 | 23.34 | 1 |
| | | 831.5 | 24.5 | 23.90 | 0 | 22.77 | 1 |
| | | 815.5 | 24.5 | 24.03 | 0 | 22.77 | 1 |
| | 1RB Middle (7) | 847.5 | 24.5 | 23.90 | 0 | 23.25 | 1 |
| | | 831.5 | 24.5 | 23.82 | 0 | 22.69 | 1 |
| | | 815.5 | 24.5 | 23.85 | 0 | 22.73 | 1 |
| | 1RB Low (0) | 847.5 | 24.5 | 23.98 | 0 | 23.31 | 1 |
| | | 831.5 | 24.5 | 23.90 | 0 | 23.02 | 1 |
| | | 815.5 | 24.5 | 23.90 | 0 | 22.83 | 1 |
| | 8RB High (7) | 847.5 | 24.5 | 22.96 | 1 | 22.00 | 2 |
| | | 831.5 | 24.5 | 22.98 | 1 | 22.02 | 2 |
| | | 815.5 | 24.5 | 22.99 | 1 | 22.06 | 2 |

| | | | | | | | |
|--------|---------------------|-------|-------------|-------|---|-------|---|
| 5 MHz | 8RB Middle (4) | 847.5 | 24.5 | 23.07 | 1 | 22.00 | 2 |
| | | 831.5 | 24.5 | 22.97 | 1 | 22.08 | 2 |
| | | 815.5 | 24.5 | 22.97 | 1 | 22.04 | 2 |
| | 8RB Low (0) | 847.5 | 24.5 | 22.97 | 1 | 21.95 | 2 |
| | | 831.5 | 24.5 | 22.89 | 1 | 21.94 | 2 |
| | | 815.5 | 24.5 | 22.89 | 1 | 21.98 | 2 |
| | 15RB (0) | 847.5 | 24.5 | 23.04 | 1 | 21.95 | 2 |
| | | 831.5 | 24.5 | 22.92 | 1 | 21.92 | 2 |
| | | 815.5 | 24.5 | 22.93 | 1 | 21.82 | 2 |
| | 1RB High (24) | 846.5 | 24.5 | 23.88 | 0 | 23.49 | 1 |
| | | 831.5 | 24.5 | 23.85 | 0 | 23.08 | 1 |
| | | 816.5 | 24.5 | 24.05 | 0 | 22.96 | 1 |
| | 1RB Middle (12) | 846.5 | 24.5 | 23.93 | 0 | 23.48 | 1 |
| | | 831.5 | 24.5 | 23.95 | 0 | 22.90 | 1 |
| | | 816.5 | 24.5 | 23.85 | 0 | 22.85 | 1 |
| | 1RB Low (0) | 846.5 | 24.5 | 24.07 | 0 | 23.45 | 1 |
| | | 831.5 | 24.5 | 23.92 | 0 | 23.04 | 1 |
| | | 816.5 | 24.5 | 24.12 | 0 | 22.90 | 1 |
| | 12RB High (13) | 846.5 | 24.5 | 23.00 | 1 | 22.16 | 2 |
| | | 831.5 | 24.5 | 23.05 | 1 | 22.15 | 2 |
| | | 816.5 | 24.5 | 23.06 | 1 | 21.85 | 2 |
| | 12RB Middle (6) | 846.5 | 24.5 | 23.22 | 1 | 22.13 | 2 |
| | | 831.5 | 24.5 | 23.03 | 1 | 21.99 | 2 |
| | | 816.5 | 24.5 | 23.08 | 1 | 21.85 | 2 |
| | 12RB Low (0) | 846.5 | 24.5 | 23.04 | 1 | 22.18 | 2 |
| | | 831.5 | 24.5 | 23.04 | 1 | 22.08 | 2 |
| | | 816.5 | 24.5 | 23.17 | 1 | 21.91 | 2 |
| | 25RB (0) | 846.5 | 24.5 | 23.05 | 1 | 22.02 | 2 |
| | | 831.5 | 24.5 | 22.96 | 1 | 21.95 | 2 |
| | | 816.5 | 24.5 | 22.98 | 1 | 21.81 | 2 |
| 10 MHz | 1RB High (49) | 844 | 24.5 | 23.61 | 0 | 22.96 | 1 |
| | | 831.5 | 24.5 | 23.88 | 0 | 22.45 | 1 |
| | | 820 | 24.5 | 23.78 | 0 | 22.23 | 1 |
| | 1RB Middle (24) | 844 | 24.5 | 24.01 | 0 | 23.38 | 1 |
| | | 831.5 | 24.5 | 24.30 | 0 | 22.88 | 1 |
| | | 820 | 24.5 | 24.06 | 0 | 22.69 | 1 |
| | 1RB Low (0) | 844 | 24.5 | 23.74 | 0 | 22.90 | 1 |
| | | 831.5 | 24.5 | 24.06 | 0 | 22.49 | 1 |
| | | 820 | 24.5 | 23.55 | 0 | 22.40 | 1 |
| | 25RB High (25) | 844 | 24.5 | 22.92 | 1 | 21.83 | 2 |
| | | 831.5 | 24.5 | 22.86 | 1 | 21.91 | 2 |
| | | 820 | 24.5 | 22.69 | 1 | 21.72 | 2 |
| | 25RB Middle (12) | 844 | 24.5 | 23.05 | 1 | 22.01 | 2 |
| | | 831.5 | 24.5 | 22.92 | 1 | 21.97 | 2 |
| | | 820 | 24.5 | 22.86 | 1 | 21.88 | 2 |
| | 25RB Low (0) | 844 | 24.5 | 22.79 | 1 | 21.89 | 2 |
| | | 831.5 | 24.5 | 22.88 | 1 | 21.88 | 2 |
| | | 820 | 24.5 | 22.70 | 1 | 21.70 | 2 |

| | | | | | | | |
|--------|---------------------|-------|-------------|-------|---|-------|---|
| | 50RB (0) | 844 | 24.5 | 22.94 | 1 | 21.95 | 2 |
| | | 831.5 | 24.5 | 22.84 | 1 | 21.81 | 2 |
| | | 820 | 24.5 | 22.78 | 1 | 21.75 | 2 |
| 15 MHz | 1RB High (74) | 841.5 | 24.5 | 24.13 | 0 | 23.28 | 1 |
| | | 831.5 | 24.5 | 24.00 | 0 | 22.90 | 1 |
| | | 822.5 | 24.5 | 24.04 | 0 | 23.23 | 1 |
| | 1RB Middle (37) | 841.5 | 24.5 | 23.83 | 0 | 23.35 | 1 |
| | | 831.5 | 24.5 | 23.88 | 0 | 22.73 | 1 |
| | | 822.5 | 24.5 | 23.87 | 0 | 23.48 | 1 |
| | 1RB Low (0) | 841.5 | 24.5 | 24.18 | 0 | 23.43 | 1 |
| | | 831.5 | 24.5 | 23.96 | 0 | 22.98 | 1 |
| | | 822.5 | 24.5 | 24.16 | 0 | 23.24 | 1 |
| | 36RB High (38) | 841.5 | 24.5 | 22.99 | 1 | 22.06 | 2 |
| | | 831.5 | 24.5 | 22.91 | 1 | 21.95 | 2 |
| | | 822.5 | 24.5 | 22.91 | 1 | 21.98 | 2 |
| | 36RB Middle (19) | 841.5 | 24.5 | 23.09 | 1 | 22.03 | 2 |
| | | 831.5 | 24.5 | 22.89 | 1 | 21.88 | 2 |
| | | 822.5 | 24.5 | 22.84 | 1 | 21.93 | 2 |
| | 36RB Low (0) | 841.5 | 24.5 | 23.18 | 1 | 22.16 | 2 |
| | | 831.5 | 24.5 | 23.00 | 1 | 22.01 | 2 |
| | | 822.5 | 24.5 | 22.93 | 1 | 21.97 | 2 |
| | 75RB (0) | 841.5 | 24.5 | 23.12 | 1 | 22.15 | 2 |
| | | 831.5 | 24.5 | 22.87 | 1 | 21.89 | 2 |
| | | 822.5 | 24.5 | 22.89 | 1 | 21.95 | 2 |

Low power

Table 11.3-2: The conducted Power for LTE

| Band 7 | | | | | | | | |
|--------------------|--------------------|-------------------------|--------------------|----------------------------------|------------------------------------|-------|------------------------------------|-----|
| Bandwidth (MHz) | RB allocation | RB offset (Start RB) | Frequency (MHz) | Max. Target Power (dBm) | QPSK | | 16QAM | |
| | | | | | Actual output power (dBm) | MPR | Actual output power (dBm) | MPR |
| 5 MHz | 1RB High (24) | 2567.5 | 20.5 | 20.00 | / | 20.44 | / | |
| | | 2535 | 20.5 | 20.10 | / | 20.22 | / | |
| | | 2502.5 | 20.5 | 19.98 | / | 20.34 | / | |
| | 1RB Middle (12) | 2567.5 | 20.5 | 20.03 | / | 20.24 | / | |
| | | 2535 | 20.5 | 20.17 | / | 20.17 | / | |
| | | 2502.5 | 20.5 | 19.98 | / | 20.33 | / | |
| | 1RB Low (0) | 2567.5 | 20.5 | 20.18 | / | 20.38 | / | |
| | | 2535 | 20.5 | 20.23 | / | 20.35 | / | |
| | | 2502.5 | 20.5 | 20.16 | / | 20.45 | / | |
| | 12RB High (13) | 2567.5 | 20.5 | 20.03 | / | 20.23 | / | |
| | | 2535 | 20.5 | 20.05 | / | 20.21 | / | |
| | | 2502.5 | 20.5 | 20.09 | / | 20.26 | / | |
| | 12RB Middle (6) | 2567.5 | 20.5 | 20.06 | / | 20.25 | / | |
| | | 2535 | 20.5 | 20.06 | / | 20.21 | / | |
| | | 2502.5 | 20.5 | 20.13 | / | 20.31 | / | |

| | | | | | | | |
|--------|---------------------|--------|-------------|-------|---|-------|---|
| 10 MHz | 12RB Low (0) | 2567.5 | 20.5 | 20.05 | / | 20.28 | / |
| | | 2535 | 20.5 | 20.10 | / | 20.25 | / |
| | | 2502.5 | 20.5 | 20.15 | / | 20.33 | / |
| | 25RB (0) | 2567.5 | 20.5 | 20.04 | / | 20.16 | / |
| | | 2535 | 20.5 | 20.12 | / | 20.18 | / |
| | | 2502.5 | 20.5 | 20.16 | / | 20.22 | / |
| | 1RB High (49) | 2565 | 20.5 | 20.13 | / | 20.27 | / |
| | | 2535 | 20.5 | 20.14 | / | 20.13 | / |
| | | 2505 | 20.5 | 20.33 | / | 20.43 | / |
| | 1RB Middle (24) | 2565 | 20.5 | 19.91 | / | 20.11 | / |
| | | 2535 | 20.5 | 19.97 | / | 19.96 | / |
| | | 2505 | 20.5 | 20.04 | / | 20.41 | / |
| | 1RB Low (0) | 2565 | 20.5 | 20.22 | / | 20.30 | / |
| | | 2535 | 20.5 | 20.16 | / | 20.20 | / |
| | | 2505 | 20.5 | 20.31 | / | 20.45 | / |
| | 25RB High (25) | 2565 | 20.5 | 19.99 | / | 20.20 | / |
| | | 2535 | 20.5 | 20.00 | / | 20.10 | / |
| | | 2505 | 20.5 | 20.04 | / | 20.13 | / |
| | 25RB Middle (12) | 2565 | 20.5 | 20.04 | / | 20.15 | / |
| | | 2535 | 20.5 | 20.04 | / | 20.09 | / |
| | | 2505 | 20.5 | 20.07 | / | 20.19 | / |
| | 25RB Low (0) | 2565 | 20.5 | 20.09 | / | 20.31 | / |
| | | 2535 | 20.5 | 20.11 | / | 20.14 | / |
| | | 2505 | 20.5 | 20.14 | / | 20.21 | / |
| | 50RB (0) | 2565 | 20.5 | 20.08 | / | 20.16 | / |
| | | 2535 | 20.5 | 20.08 | / | 20.10 | / |
| | | 2505 | 20.5 | 20.09 | / | 20.14 | / |
| 15 MHz | 1RB High (74) | 2562.5 | 20.5 | 20.18 | / | 20.48 | / |
| | | 2535 | 20.5 | 20.09 | / | 20.11 | / |
| | | 2507.5 | 20.5 | 20.18 | / | 20.41 | / |
| | 1RB Middle (37) | 2562.5 | 20.5 | 20.07 | / | 20.44 | / |
| | | 2535 | 20.5 | 20.08 | / | 20.06 | / |
| | | 2507.5 | 20.5 | 20.20 | / | 20.44 | / |
| | 1RB Low (0) | 2562.5 | 20.5 | 20.15 | / | 20.48 | / |
| | | 2535 | 20.5 | 20.04 | / | 20.09 | / |
| | | 2507.5 | 20.5 | 20.28 | / | 20.48 | / |
| | 36RB High (38) | 2562.5 | 20.5 | 20.26 | / | 20.31 | / |
| | | 2535 | 20.5 | 20.27 | / | 20.27 | / |
| | | 2507.5 | 20.5 | 20.28 | / | 20.33 | / |
| | 36RB Middle (19) | 2562.5 | 20.5 | 20.15 | / | 20.22 | / |
| | | 2535 | 20.5 | 20.22 | / | 20.25 | / |
| | | 2507.5 | 20.5 | 20.30 | / | 20.39 | / |
| | 36RB Low (0) | 2562.5 | 20.5 | 20.11 | / | 20.21 | / |
| | | 2535 | 20.5 | 20.20 | / | 20.24 | / |
| | | 2507.5 | 20.5 | 20.26 | / | 20.38 | / |
| | 75RB (0) | 2562.5 | 20.5 | 20.04 | / | 20.17 | / |
| | | 2535 | 20.5 | 20.19 | / | 20.25 | / |
| | | 2507.5 | 20.5 | 20.28 | / | 20.33 | / |

| | | | | | | | |
|--------|---------------------|------|-------------|-------|---|-------|---|
| 20 MHz | 1RB High (99) | 2560 | 20.5 | 20.17 | / | 20.41 | / |
| | | 2535 | 20.5 | 20.22 | / | 20.49 | / |
| | | 2510 | 20.5 | 20.28 | / | 20.45 | / |
| | 1RB Middle (50) | 2560 | 20.5 | 20.31 | / | 20.48 | / |
| | | 2535 | 20.5 | 20.13 | / | 20.47 | / |
| | | 2510 | 20.5 | 20.22 | / | 20.43 | / |
| | 1RB Low (0) | 2560 | 20.5 | 20.21 | / | 20.47 | / |
| | | 2535 | 20.5 | 20.00 | / | 20.44 | / |
| | | 2510 | 20.5 | 20.26 | / | 20.49 | / |
| | 50RB High (50) | 2560 | 20.5 | 20.21 | / | 20.31 | / |
| | | 2535 | 20.5 | 20.18 | / | 20.23 | / |
| | | 2510 | 20.5 | 20.25 | / | 20.25 | / |
| | 50RB Middle (25) | 2560 | 20.5 | 20.18 | / | 20.29 | / |
| | | 2535 | 20.5 | 20.20 | / | 20.26 | / |
| | | 2510 | 20.5 | 20.36 | / | 20.29 | / |
| | 50RB Low (0) | 2560 | 20.5 | 20.16 | / | 20.16 | / |
| | | 2535 | 20.5 | 20.24 | / | 20.23 | / |
| | | 2510 | 20.5 | 20.29 | / | 20.35 | / |
| | 100RB (0) | 2560 | 20.5 | 20.21 | / | 20.20 | / |
| | | 2535 | 20.5 | 20.21 | / | 20.21 | / |
| | | 2510 | 20.5 | 20.28 | / | 20.38 | / |

| Band 4 | | | | | | | |
|--------------------|-------------------|--------------------|----------------------------------|------------------------------|-----|------------------------------|-----|
| Bandwidth (MHz) | RB allocation | Frequency (MHz) | Max. Target Power (dBm) | QPSK | | 16QAM | |
| | | | | Actual output power (dBm) | MPR | Actual output power (dBm) | MPR |
| 1.4 MHz | 1RB High (5) | 1754.3 | 23.5 | 22.49 | / | 22.48 | / |
| | | 1732.5 | 23.5 | 22.64 | / | 22.74 | / |
| | | 1710.7 | 23.5 | 22.80 | / | 23.21 | / |
| | 1RB Middle (3) | 1754.3 | 23.5 | 22.46 | / | 22.51 | / |
| | | 1732.5 | 23.5 | 22.74 | / | 22.80 | / |
| | | 1710.7 | 23.5 | 22.91 | / | 23.24 | / |
| | 1RB Low (0) | 1754.3 | 23.5 | 22.45 | / | 22.49 | / |
| | | 1732.5 | 23.5 | 22.68 | / | 22.79 | / |
| | | 1710.7 | 23.5 | 22.91 | / | 23.23 | / |
| | 3RB High (3) | 1754.3 | 23.5 | 22.42 | / | 22.58 | / |
| | | 1732.5 | 23.5 | 22.62 | / | 22.68 | / |
| | | 1710.7 | 23.5 | 22.85 | / | 22.97 | / |
| | 3RB Middle (1) | 1754.3 | 23.5 | 22.44 | / | 22.66 | / |
| | | 1732.5 | 23.5 | 22.63 | / | 22.75 | / |
| | | 1710.7 | 23.5 | 22.89 | / | 23.02 | / |
| | 3RB Low (0) | 1754.3 | 23.5 | 22.39 | / | 22.66 | / |
| | | 1732.5 | 23.5 | 22.67 | / | 22.70 | / |
| | | 1710.7 | 23.5 | 22.85 | / | 23.02 | / |
| | 6RB (0) | 1754.3 | 23.5 | 22.40 | / | 22.60 | / |
| | | 1732.5 | 23.5 | 22.66 | / | 22.70 | / |
| | | 1710.7 | 23.5 | 22.87 | / | 23.01 | / |

| | | | | | | | |
|--------|--------------------|--------|-------------|-------|---|-------|---|
| 3 MHz | 1RB High (14) | 1753.5 | 23.5 | 22.40 | / | 22.54 | / |
| | | 1732.5 | 23.5 | 22.60 | / | 22.58 | / |
| | | 1711.5 | 23.5 | 22.83 | / | 23.23 | / |
| | 1RB Middle (7) | 1753.5 | 23.5 | 22.53 | / | 22.64 | / |
| | | 1732.5 | 23.5 | 22.65 | / | 22.67 | / |
| | | 1711.5 | 23.5 | 22.83 | / | 23.23 | / |
| | 1RB Low (0) | 1753.5 | 23.5 | 22.50 | / | 22.76 | / |
| | | 1732.5 | 23.5 | 22.75 | / | 22.73 | / |
| | | 1711.5 | 23.5 | 22.93 | / | 23.33 | / |
| | 8RB High (7) | 1753.5 | 23.5 | 22.46 | / | 22.08 | / |
| | | 1732.5 | 23.5 | 22.62 | / | 22.28 | / |
| | | 1711.5 | 23.5 | 22.85 | / | 22.42 | / |
| | 8RB Middle (4) | 1753.5 | 23.5 | 22.48 | / | 22.15 | / |
| | | 1732.5 | 23.5 | 22.64 | / | 22.33 | / |
| | | 1711.5 | 23.5 | 22.84 | / | 22.47 | / |
| | 8RB Low (0) | 1753.5 | 23.5 | 22.51 | / | 22.16 | / |
| | | 1732.5 | 23.5 | 22.69 | / | 22.29 | / |
| | | 1711.5 | 23.5 | 22.90 | / | 22.46 | / |
| | 15RB (0) | 1753.5 | 23.5 | 22.50 | / | 22.05 | / |
| | | 1732.5 | 23.5 | 22.69 | / | 22.24 | / |
| | | 1711.5 | 23.5 | 22.81 | / | 22.40 | / |
| 5 MHz | 1RB High (24) | 1752.5 | 23.5 | 22.53 | / | 22.64 | / |
| | | 1732.5 | 23.5 | 22.70 | / | 22.92 | / |
| | | 1712.5 | 23.5 | 22.82 | / | 23.31 | / |
| | 1RB Middle (12) | 1752.5 | 23.5 | 22.53 | / | 22.56 | / |
| | | 1732.5 | 23.5 | 22.72 | / | 22.75 | / |
| | | 1712.5 | 23.5 | 22.64 | / | 23.31 | / |
| | 1RB Low (0) | 1752.5 | 23.5 | 22.72 | / | 22.79 | / |
| | | 1732.5 | 23.5 | 22.94 | / | 23.05 | / |
| | | 1712.5 | 23.5 | 23.03 | / | 23.42 | / |
| | 12RB High (13) | 1752.5 | 23.5 | 22.53 | / | 22.04 | / |
| | | 1732.5 | 23.5 | 22.64 | / | 22.21 | / |
| | | 1712.5 | 23.5 | 22.79 | / | 22.44 | / |
| | 12RB Middle (6) | 1752.5 | 23.5 | 22.55 | / | 22.15 | / |
| | | 1732.5 | 23.5 | 22.67 | / | 22.30 | / |
| | | 1712.5 | 23.5 | 22.83 | / | 22.49 | / |
| | 12RB Low (0) | 1752.5 | 23.5 | 22.61 | / | 22.20 | / |
| | | 1732.5 | 23.5 | 22.75 | / | 22.36 | / |
| | | 1712.5 | 23.5 | 22.89 | / | 22.52 | / |
| | 25RB (0) | 1752.5 | 23.5 | 22.59 | / | 22.04 | / |
| | | 1732.5 | 23.5 | 22.70 | / | 22.23 | / |
| | | 1712.5 | 23.5 | 22.84 | / | 22.46 | / |
| 10 MHz | 1RB High (49) | 1750 | 23.5 | 22.95 | / | 22.92 | / |
| | | 1732.5 | 23.5 | 23.09 | / | 23.04 | / |
| | | 1715 | 23.5 | 23.31 | / | 23.47 | / |
| | 1RB Middle (24) | 1750 | 23.5 | 22.56 | / | 22.48 | / |
| | | 1732.5 | 23.5 | 22.59 | / | 22.63 | / |
| | | 1715 | 23.5 | 22.74 | / | 23.11 | / |

| | | | | | | | |
|--------|---------------------|--------|-------------|-------|---|-------|---|
| 15 MHz | 1RB Low (0) | 1750 | 23.5 | 22.88 | / | 22.87 | / |
| | | 1732.5 | 23.5 | 23.03 | / | 22.97 | / |
| | | 1715 | 23.5 | 23.18 | / | 23.45 | / |
| | 25RB High (25) | 1750 | 23.5 | 22.68 | / | 22.23 | / |
| | | 1732.5 | 23.5 | 22.76 | / | 22.32 | / |
| | | 1715 | 23.5 | 22.94 | / | 22.50 | / |
| | 25RB Middle (12) | 1750 | 23.5 | 22.59 | / | 22.14 | / |
| | | 1732.5 | 23.5 | 22.69 | / | 22.18 | / |
| | | 1715 | 23.5 | 22.79 | / | 22.35 | / |
| | 25RB Low (0) | 1750 | 23.5 | 22.54 | / | 22.12 | / |
| | | 1732.5 | 23.5 | 22.74 | / | 22.25 | / |
| | | 1715 | 23.5 | 22.87 | / | 22.40 | / |
| | 50RB (0) | 1750 | 23.5 | 22.64 | / | 22.18 | / |
| | | 1732.5 | 23.5 | 22.76 | / | 22.26 | / |
| | | 1715 | 23.5 | 22.88 | / | 22.39 | / |
| 20 MHz | 1RB High (74) | 1747.5 | 23.5 | 22.40 | / | 22.71 | / |
| | | 1732.5 | 23.5 | 22.43 | / | 22.52 | / |
| | | 1717.5 | 23.5 | 22.58 | / | 22.94 | / |
| | 1RB Middle (37) | 1747.5 | 23.5 | 22.34 | / | 22.73 | / |
| | | 1732.5 | 23.5 | 22.55 | / | 22.53 | / |
| | | 1717.5 | 23.5 | 22.61 | / | 23.02 | / |
| | 1RB Low (0) | 1747.5 | 23.5 | 22.63 | / | 22.98 | / |
| | | 1732.5 | 23.5 | 22.71 | / | 22.63 | / |
| | | 1717.5 | 23.5 | 22.79 | / | 23.22 | / |
| | 36RB High (38) | 1747.5 | 23.5 | 22.40 | / | 21.88 | / |
| | | 1732.5 | 23.5 | 22.57 | / | 22.05 | / |
| | | 1717.5 | 23.5 | 22.64 | / | 22.13 | / |
| | 36RB Middle (19) | 1747.5 | 23.5 | 22.38 | / | 21.87 | / |
| | | 1732.5 | 23.5 | 22.61 | / | 22.13 | / |
| | | 1717.5 | 23.5 | 22.68 | / | 22.26 | / |
| | 36RB Low (0) | 1747.5 | 23.5 | 22.44 | / | 21.86 | / |
| | | 1732.5 | 23.5 | 22.70 | / | 22.20 | / |
| | | 1717.5 | 23.5 | 22.68 | / | 22.22 | / |
| | 75RB (0) | 1747.5 | 23.5 | 22.38 | / | 21.87 | / |
| | | 1732.5 | 23.5 | 22.60 | / | 22.11 | / |
| | | 1717.5 | 23.5 | 22.65 | / | 22.19 | / |
| 25 MHz | 1RB High (99) | 1745 | 23.5 | 22.39 | / | 22.83 | / |
| | | 1732.5 | 23.5 | 22.50 | / | 22.92 | / |
| | | 1720 | 23.5 | 22.63 | / | 23.14 | / |
| | 1RB Middle (50) | 1745 | 23.5 | 22.35 | / | 22.79 | / |
| | | 1732.5 | 23.5 | 22.46 | / | 22.84 | / |
| | | 1720 | 23.5 | 22.88 | / | 23.04 | / |
| | 1RB Low (0) | 1745 | 23.5 | 22.40 | / | 22.81 | / |
| | | 1732.5 | 23.5 | 22.51 | / | 22.92 | / |
| | | 1720 | 23.5 | 22.67 | / | 23.07 | / |
| | 50RB High (50) | 1745 | 23.5 | 22.41 | / | 21.97 | / |
| | | 1732.5 | 23.5 | 22.38 | / | 21.96 | / |
| | | 1720 | 23.5 | 22.48 | / | 22.07 | / |

| | | | | | | | |
|--|---------------------|--------|-------------|-------|---|-------|---|
| | 50RB Middle (25) | 1745 | 23.5 | 22.40 | / | 21.94 | / |
| | | 1732.5 | 23.5 | 22.49 | / | 22.11 | / |
| | | 1720 | 23.5 | 22.60 | / | 22.12 | / |
| | 50RB Low (0) | 1745 | 23.5 | 22.49 | / | 22.00 | / |
| | | 1732.5 | 23.5 | 22.58 | / | 22.15 | / |
| | | 1720 | 23.5 | 22.59 | / | 22.12 | / |
| | 100RB (0) | 1745 | 23.5 | 22.43 | / | 21.94 | / |
| | | 1732.5 | 23.5 | 22.46 | / | 22.08 | / |
| | | 1720 | 23.5 | 22.58 | / | 22.11 | / |

The following conducted power measurement results of downlink LTE carrier aggregation are provided to quantify downlink only carrier aggregation SAR test exclusion per KDB 941225 D05A.

Uplink maximum output power is measured with downlink carrier aggregation active, using the channel with highest measured maximum output power when downlink carrier aggregation is inactive, to confirm that when downlink carrier aggregation is active uplink maximum output power remains within the specified tune-up tolerance limits and not more than 1/4 dB higher than the maximum output power measured when downlink carrier aggregation inactive.

The conducted power measurement results of downlink LTE CA are as below(**LowPower**):

| DL LTE CA Class | PCC | | | | | | | | SCC | | | Power | | |
|--------------------|-------------|--------------------|------------------|---------------------------|-------------------------|---------------------------|-------------------|-------------------|-------------|-----------------------|----------------------|-------------------------------|--------------------------------------|-------------|
| | PCC Band | PCC width(MHz) | PCC B size | PCC ULR B offset | PCC DLR B size | PCC DLR B offset | PCC UL Channel | PCC DL Channel | SCC Band | SCC width (MHz) | SCC DL Channel | Rel 8 LTETx Power(dBm) | Rel 10 DL LTE CATx Power(dB m) | Tune -up |
| 7A-7A | 7 | 20 | 50 | 25 | 100 | 0 | 20850 | 2850 | 7 | 20 | 3350 | 20.36 | 20.44 | 20.5 |
| 7C | 7 | 20 | 50 | 25 | 100 | 0 | 20850 | 2850 | 7 | 20 | 3048 | 20.36 | 20.41 | 20.5 |
| 7A-1A | 7 | 20 | 50 | 25 | 100 | 0 | 20850 | 2850 | 1 | 20 | 300 | 20.36 | 20.44 | 20.5 |
| 7A-3A | 7 | 20 | 50 | 25 | 100 | 0 | 20850 | 2850 | 3 | 20 | 1575 | 20.36 | 20.44 | 20.5 |
| 7A-20A | 7 | 20 | 50 | 25 | 100 | 0 | 20850 | 2850 | 20 | 20 | 6300 | 20.36 | 20.43 | 20.5 |
| 7A-28A | 7 | 20 | 50 | 25 | 100 | 0 | 20850 | 2850 | 28 | 20 | 9460 | 20.36 | 20.42 | 20.5 |

Note: Testing is not required in bands or modes not intended/allowed for US operation.

The conducted power measurement results of downlink LTE CA are as below(**NormalPower**):

| DL LTE CA Class | PCC | | | | | | | | SCC | | | Power | | |
|--------------------|-------------|--------------------|------------------|---------------------------|-------------------------|---------------------------|-------------------|-------------------|-------------|-----------------------|----------------------|-------------------------------|---|-------------|
| | PCC Band | PCC width(MHz) | PCC B size | PCC ULR B offset | PCC DLR B size | PCC DLR B offset | PCC UL Channel | PCC DL Channel | SCC Band | SCC width (MHz) | SCC DL Channel | Rel 8 LTETx Power(dBm) | Rel 10 DL LTE CATx Power(d Bm) | Tune- up |
| 5A-3A | 5 | 10 | 1 | 49 | 50 | 0 | 20450 | 2450 | 3 | 20 | 1575 | 23.72 | 23.65 | 24 |
| 7A-7A | 7 | 10 | 1 | 0 | 50 | 0 | 20800 | 2800 | 7 | 20 | 3350 | 23.34 | 23.37 | 24.5 |
| 7C | 7 | 20 | 1 | 0 | 100 | 0 | 20850 | 2850 | 7 | 20 | 3048 | 23.26 | 23.29 | 24.5 |
| 7A-1A | 7 | 10 | 1 | 0 | 50 | 0 | 20800 | 2800 | 1 | 20 | 300 | 23.34 | 23.36 | 24.5 |
| 7A-3A | 7 | 10 | 1 | 0 | 50 | 0 | 20800 | 2800 | 3 | 20 | 1575 | 23.34 | 23.32 | 24.5 |
| 7A-20A | 7 | 10 | 1 | 0 | 50 | 0 | 20800 | 2800 | 20 | 20 | 6300 | 23.34 | 23.34 | 24.5 |
| 7A-28A | 7 | 10 | 1 | 0 | 50 | 0 | 20800 | 2800 | 28 | 20 | 9460 | 23.34 | 23.33 | 24.5 |
| 38C | 38 | 20 | 1 | 50 | 100 | 0 | 38150 | 38150 | 38 | 20 | 37952 | 23.82 | 23.88 | 24 |
| 40C | 40 | 20 | 1 | 99 | 100 | 0 | 38750 | 38750 | 40 | 20 | 38948 | 24.24 | 24.21 | 24.5 |

Note: Testing is not required in bands or modes not intended/allowed for US operation.

11.4 Wi-Fi and BT Measurement result

The output power of BT antenna is as following:

| Mode | Conducted Power (dBm) | | |
|---------------|-----------------------|----------------------|---------------------|
| | Channel 0 (2402MHz) | Channel 39 (2441MHz) | Channel 78(2480MHz) |
| GFSK | 7.25 | 8.75 | 8.05 |
| Tune up | 7.5 | 9 | 8.5 |
| EDR2M-4_DQPSK | 7.11 | 8.64 | 7.89 |
| Tune up | 7.5 | 9 | 8.5 |
| EDR3M-8DPSK | 7.36 | 8.95 | 8.25 |
| Tune up | 7.5 | 9 | 8.5 |

The average conducted power for Wi-Fi is as following:

NormalPower

802.11b (dBm)

| Channel\data rate | 1Mbps | 2Mbps | 5.5Mbps | 11Mbps |
|-------------------|-----------|-----------|-----------|-----------|
| 1 | 18.16 | / | 18.31 | / |
| 6 | 18.49 | 18.35 | 18.50 | 18.00 |
| 11 | 18.19 | / | 18.29 | / |
| Tune up | 19 | 19 | 19 | 19 |

802.11g (dBm)

| Channel\data rate | 6Mbps | 9Mbps | 12Mbps | 18Mbps | 24Mbps | 36Mbps | 48Mbps | 54Mbps |
|-------------------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|
| 1 | 16.02 | / | / | / | / | / | / | / |
| 6 | 16.19 | 15.97 | 15.76 | 15.37 | 14.99 | 13.38 | 12.87 | 12.70 |
| 11 | 16.06 | / | / | / | / | / | / | / |
| Tune up | 17 | 17 | 17 | 17 | 16 | 15 | 14 | 14 |

802.11n (dBm) - HT20 (2.4G)

| Channel\data rate | MCS0 | MCS1 | MCS2 | MCS3 | MCS4 | MCS5 | MCS6 | MCS7 |
|-------------------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|
| 1 | 15.22 | / | / | / | / | / | / | / |
| 6 | 15.38 | 14.93 | 14.57 | 14.22 | 11.62 | 11.17 | 10.98 | 10.76 |
| 11 | 15.24 | / | / | / | / | / | / | / |
| Tune up | 16 | 16 | 16 | 15 | 12 | 12 | 12 | 12 |

802.11n (dBm) – HT40 (2.4G)

| Channel\data rate | MCS0 | MCS1 | MCS2 | MCS3 | MCS4 | MCS5 | MCS6 | MCS7 |
|-------------------|-----------|-----------|-----------|-----------|----------|----------|----------|----------|
| 3 | 12.81 | / | / | / | / | / | / | / |
| 6 | 13.00 | 12.28 | 11.69 | 11.23 | 8.26 | 7.76 | 7.56 | 7.34 |
| 9 | 12.64 | / | / | / | / | / | / | / |
| Tune up | 14 | 14 | 13 | 13 | 9 | 9 | 9 | 9 |

LowPower

802.11b (dBm)

| Channel\data rate | 1Mbps | 2Mbps | 5.5Mbps | 11Mbps |
|-------------------|-------------|-------------|-------------|-------------|
| 1 | 13.92 | 13.87 | / | / |
| 6 | 14.19 | 14.23 | 14.20 | 14.06 |
| 11 | 13.91 | 13.88 | / | / |
| Tune up | 14.5 | 14.5 | 14.5 | 14.5 |

802.11g (dBm)

| Channel\data rate | 6Mbps | 9Mbps | 12Mbps | 18Mbps | 24Mbps | 36Mbps | 48Mbps | 54Mbps |
|-------------------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|
| 1 | 13.72 | / | / | / | / | / | / | / |
| 6 | 13.96 | 13.91 | 13.84 | 13.70 | 13.55 | 13.92 | 13.11 | 13.03 |
| 11 | 13.86 | / | / | / | / | / | / | / |
| Tune up | 14 |

802.11n (dBm) - HT20 (2.4G)

| Channel\data rate | MCS0 | MCS1 | MCS2 | MCS3 | MCS4 | MCS5 | MCS6 | MCS7 |
|-------------------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|
| 1 | 13.80 | / | / | / | / | / | / | / |
| 6 | 13.94 | 13.87 | 13.73 | 13.56 | 13.31 | 13.08 | 12.99 | 12.87 |
| 11 | 13.93 | / | / | / | / | / | / | / |
| Tune up | 14 |

802.11n (dBm) – HT40 (2.4G)

| Channel\data rate | MCS0 | MCS1 | MCS2 | MCS3 | MCS4 | MCS5 | MCS6 | MCS7 |
|-------------------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|
| 3 | 11.44 | / | / | / | / | / | / | / |
| 6 | 11.70 | 11.46 | 11.22 | 10.94 | 10.50 | 10.15 | 9.97 | 9.85 |
| 9 | 11.33 | / | / | / | / | / | / | / |
| Tune up | 12 | 12 | 12 | 12 | 11 | 11 | 11 | 11 |

802.11a (dBm)

| Channel\data rate | 6Mbps | 9Mbps | 12Mbps | 18Mbps | 24Mbps | 36Mbps | 48Mbps | 54Mbps |
|-------------------|--------------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|
| 36 | 12.66 | / | / | / | / | / | / | / |
| 40 | 12.72 | / | / | / | / | / | / | / |
| 44 | 13.23 | / | / | / | / | / | / | / |
| 48 | 13.37 | 13.09 | 12.87 | 12.48 | 12.11 | 11.51 | 11.01 | 10.82 |
| 52 | 13.64 | 13.16 | 12.95 | 12.55 | 12.17 | 11.57 | 11.06 | 10.87 |
| 56 | 12.75 | / | / | / | / | / | / | / |
| 60 | 13.01 | / | / | / | / | / | / | / |
| 64 | 12.81 | / | / | / | / | / | / | / |
| Tune up | 14 | 14 | 14 | 14 | 14 | 12 | 12 | 12 |
| 100 | 11.27 | / | / | / | / | / | / | / |
| 104 | 11.11 | / | / | / | / | / | / | / |
| 108 | 11.33 | / | / | / | / | / | / | / |
| 112 | 11.76 | / | / | / | / | / | / | / |
| 116 | 11.87 | 11.83 | 11.61 | 11.22 | 10.84 | 9.93 | 9.73 | 9.53 |
| 120 | 11.81 | / | / | / | / | / | / | / |
| 124 | 11.42 | / | / | / | / | / | / | / |
| 128 | 10.77 | / | / | / | / | / | / | / |
| 132 | 10.29 | / | / | / | / | / | / | / |
| 136 | 10.09 | / | / | / | / | / | / | / |
| 140 | 10.41 | / | / | / | / | / | / | / |
| 144 | 11.11 | / | / | / | / | / | / | / |
| Tune up | 12 | 12 | 12 | 12 | 12 | 10 | 10 | 10 |
| 149 | 12.17 | / | / | / | / | / | / | / |
| 153 | 12.45 | 12.10 | 11.86 | 11.47 | 11.09 | 10.49 | 9.98 | 9.80 |
| 157 | 12.10 | / | / | / | / | / | / | / |
| 161 | 11.54 | / | / | / | / | / | / | / |
| 165 | 11.05 | / | / | / | / | / | / | / |
| Tune up | 13 | 13 | 13 | 13 | 13 | 11 | 11 | 11 |

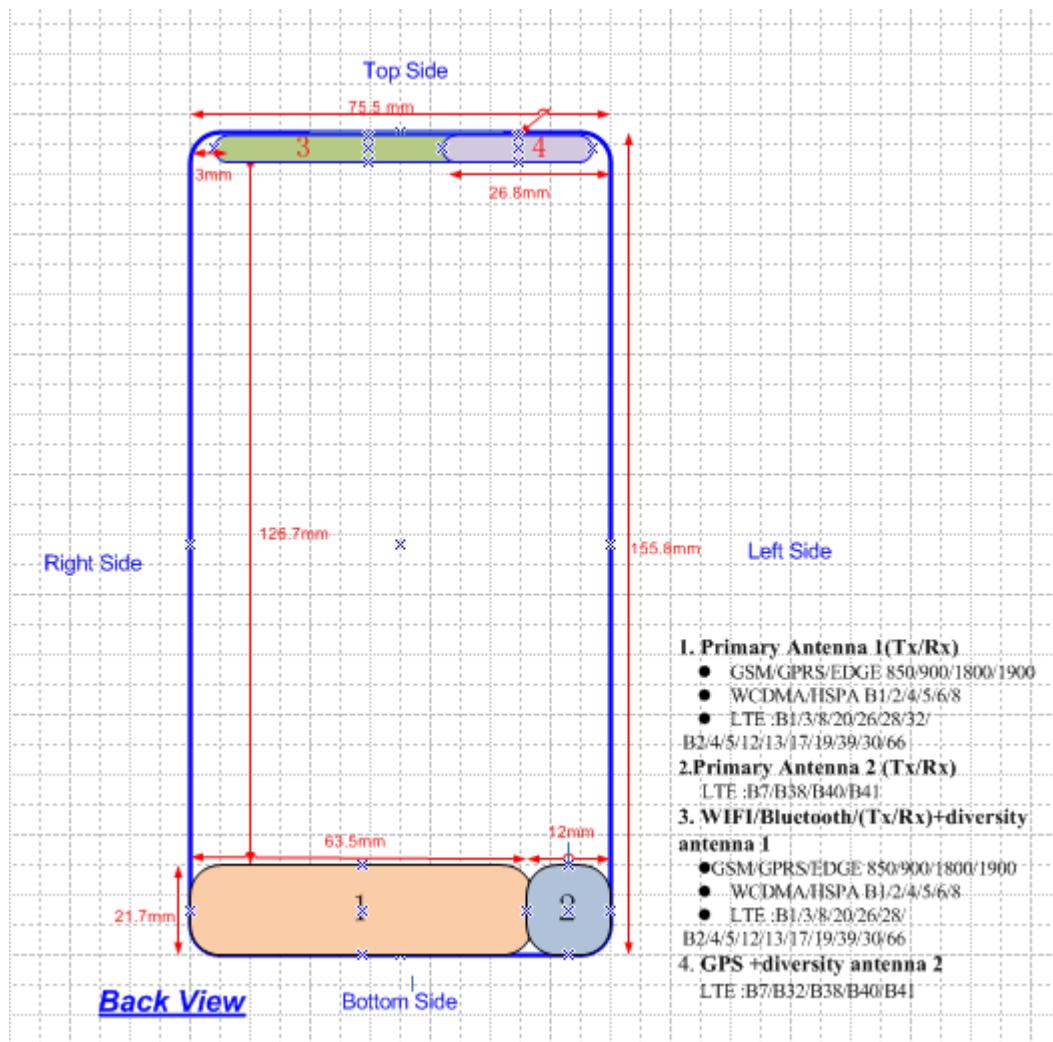
12 Simultaneous TX SAR Considerations

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 Wi-Fi can transmit simultaneous with other transmitters.

12.2 Transmit Antenna Separation Distances



Picture 12.1 Antenna Locations

12.3 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 | | | | | | |
|---------------------------|-------|------|-----------|------------|----------|-------------|
| Mode | Front | Rear | Left edge | Right edge | Top edge | Bottom edge |
| Primary antenna 1 | Yes | Yes | Yes | Yes | No | Yes |
| Primary antenna 2 | Yes | Yes | Yes | No | No | Yes |
| WLAN | Yes | Yes | No | Yes | Yes | No |

12.4 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 \leq 50 mm are determined by:

$$[(\text{max. power of channel, including tune-up tolerance, mW}) / (\text{min. test separation distance, mm})] \cdot [\sqrt{f(\text{GHz})}] \leq 3.0 \text{ for 1-g SAR, where}$$

- $f(\text{GHz})$ 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

Table 12.1: Standalone SAR test exclusion considerations

| Band/Mode | F(GHz) | Position | SAR test exclusion threshold(mW) | RF output power | | SAR test exclusion |
|-------------|--------|----------|----------------------------------|-----------------|-------|--------------------|
| | | | | dBm | mW | |
| Bluetooth | 2.441 | Head | 9.60 | 9 | 7.94 | Yes |
| | | Body | 19.20 | 9 | 7.94 | Yes |
| 2.4GHz WLAN | 2.45 | Head | 9.58 | 19 | 79.43 | No |
| | | Body | 19.17 | 19 | 79.43 | No |

13Evaluation of Simultaneous

Table 13.1: The sum of reported SAR values for main antenna and WiFi

| | Position | Main antenna | WiFi | Sum |
|--|-------------------------|--------------|------|-------------|
| Highest reported SAR value for Head | Left hand, Touch cheek | 0.42 | 1.04 | 1.46 |
| | Left hand, Tilt 15° | 0.23 | 1.16 | 1.39 |
| | Right hand, Touch cheek | 0.63 | 0.88 | 1.51 |
| | Right hand, Tilt 15° | 0.33 | 0.95 | 1.28 |
| Highest reported SAR value for Body | Front | 1.26 | 0.31 | 1.57 |
| | Top | / | 0.53 | 0.53 |

Note: we have evaluated and chose the highest value of WiFi 2.4G and 5G in the above table

Table 13.2: The sum of reported SAR values for main antenna and BT

| | Position | Main antenna | BT | Sum |
|--|-------------------------|--------------|---------------------|-------------|
| Maximum reported SAR value for Head | Right hand, Touch cheek | 0.63 | 0.33 ^[1] | 0.96 |
| Maximum reported SAR value for Body | Front | 1.26 | 0.17 ^[1] | 1.43 |

[1] - Estimated SAR for Bluetooth (see the table 13.3)

Table 13.3: Estimated SAR for Bluetooth

| Mode/Band | F (GHz) | Position | Distance (mm) | Upper limit of power * | | Estimated_{1g} (W/kg) |
|-----------|---------|----------|---------------|------------------------|------|--------------------------------------|
| | | | | dBm | mW | |
| Bluetooth | 2.441 | Head | 5 | 9 | 7.94 | 0.33 |
| Bluetooth | 2.441 | Body | 10 | 9 | 7.94 | 0.17 |

* - Maximum possible output power declared by manufacturer

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

(max. power of channel, including tune-up tolerance, mW)/(min. test separation distance,mm)]·[√f(GHz)/x] W/kg for test separation distances ≤ 50 mm;
where x = 7.5 for 1-g SAR.

When the minimum test separation distance is < 5 mm, a distance of 5 mm is applied to determine SAR test exclusion

Conclusion:

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

14 SAR Test Result

It is determined by user manual for the distance between the EUT and the phantom bottom.
The distance is 10 mm or 15mm and just applied to the condition of body worn accessory.

It is performed for all SAR measurements with area scan based 1-g SAR estimation (Fast SAR). A zoom scan measurement is added when the estimated 1-gSAR is the highest measured SAR in each exposure configuration, wireless mode and frequency band combination or more than 1.2W/kg.

The calculated SAR is obtained by the following formula:

$$\text{Reported SAR} = \text{Measured SAR} \times 10^{(P_{\text{Target}} - P_{\text{Measured}})/10}$$

Where P_{Target} is the power of manufacturing upper limit;

P_{Measured} is the measured power in chapter 11.

Table 14.1: Duty Cycle

| Mode | Duty Cycle |
|------------------------|------------|
| Speech for GSM850 | 1:2.67 |
| Speech for GSM1900 | 1:2 |
| GPRS&EGPRS for GSM850 | 1:2.67 |
| GPRS&EGPRS for GSM1900 | 1:2 |
| WCDMA<E FDD | 1:1 |
| LTE TDD | 1:1.58 |

14.1 SAR results for Fast SAR

Table 14.1-1: SAR Values (GSM 850 MHz Band - Head)

| | | | | Ambient Temperature: 22.9 °C | | Liquid Temperature: 22.5°C | | | | | |
|-----------|-------|-------|---------------|------------------------------|-----------------------|----------------------------|--------------------------|--------------------------|-------------------------|-------------------------|------------------|
| Frequency | | Side | Test Position | Figure No./Note | Conducted Power (dBm) | Max. tune-up Power (dBm) | Measured SAR(10g) (W/kg) | Reported SAR(10g) (W/kg) | Measured SAR(1g) (W/kg) | Reported SAR(1g) (W/kg) | Power Drift (dB) |
| Ch. | MHz | | | | | | | | | | |
| 190 | 836.6 | Left | Touch | / | 30.17 | 30.5 | 0.241 | 0.26 | 0.294 | 0.32 | 0.06 |
| 190 | 836.6 | Left | Tilt | / | 30.17 | 30.5 | 0.175 | 0.19 | 0.217 | 0.23 | -0.03 |
| 251 | 848.8 | Right | Touch | / | 30.35 | 30.5 | 0.350 | 0.36 | 0.453 | 0.47 | -0.07 |
| 190 | 836.6 | Right | Touch | / | 30.17 | 30.5 | 0.401 | 0.43 | 0.525 | 0.57 | 0.02 |
| 128 | 824.2 | Right | Touch | Fig.1 | 29.95 | 30.5 | 0.434 | 0.49 | 0.558 | 0.63 | -0.05 |
| 190 | 836.6 | Right | Tilt | / | 30.17 | 30.5 | 0.239 | 0.26 | 0.308 | 0.33 | 0.01 |

Note: the head SAR of GSM850 is tested with GPRS (3Txslots) mode because of VoIP.

Table 14.1-2: SAR Values (GSM 850 MHz Band - Body)

| | | | | Ambient Temperature: 22.9 °C | | Liquid Temperature: 22.5°C | | | | | |
|-----------|-------|----------------------------|---------------|------------------------------|-----------------------|----------------------------|--------------------------|--------------------------|-------------------------|-------------------------|------------------|
| Frequency | | Mode (number of timeslots) | Test Position | Figure No./N ote | Conducted Power (dBm) | Max. tune-up Power (dBm) | Measured SAR(10g) (W/kg) | Reported SAR(10g) (W/kg) | Measured SAR(1g) (W/kg) | Reported SAR(1g) (W/kg) | Power Drift (dB) |
| Ch. | MHz | | | | | | | | | | |
| 251 | 848.8 | GPRS (3) | Front | / | 30.35 | 30.5 | 0.627 | 0.65 | 0.924 | 0.96 | 0.12 |
| 190 | 836.6 | GPRS (3) | Front | / | 30.17 | 30.5 | 0.697 | 0.75 | 1.02 | 1.10 | 0.04 |
| 128 | 824.2 | GPRS (3) | Front | Fig.2 | 29.95 | 30.5 | 0.724 | 0.82 | 1.03 | 1.17 | 0.04 |
| 251 | 848.8 | GPRS (3) | Rear | / | 30.35 | 30.5 | 0.617 | 0.64 | 0.906 | 0.94 | 0.06 |
| 190 | 836.6 | GPRS (3) | Rear | / | 30.17 | 30.5 | 0.680 | 0.73 | 0.999 | 1.08 | 0.01 |
| 128 | 824.2 | GPRS (3) | Rear | / | 29.95 | 30.5 | 0.688 | 0.78 | 1.01 | 1.15 | 0.03 |
| 190 | 836.6 | GPRS (3) | Left | / | 30.17 | 30.5 | 0.088 | 0.09 | 0.127 | 0.14 | 0.07 |
| 190 | 836.6 | GPRS (3) | Right | / | 30.17 | 30.5 | 0.115 | 0.12 | 0.190 | 0.20 | -0.11 |
| 190 | 836.6 | GPRS (3) | Bottom | / | 30.17 | 30.5 | 0.207 | 0.22 | 0.402 | 0.43 | -0.08 |
| 128 | 824.2 | EGPRS (3) | Front | / | 29.98 | 30.5 | 0.706 | 0.80 | 1.01 | 1.14 | 0.09 |

Note: The distance between the EUT and the phantom bottom is 10mm.

Table 14.1-3: SAR Values(GSM 1900 MHz Band - Head)

| | | | | Ambient Temperature: 22.9 °C | | Liquid Temperature: 22.5°C | | | | | |
|-----------|--------|-------|---------------|------------------------------|-----------------------|----------------------------|--------------------------|--------------------------|-------------------------|-------------------------|------------------|
| Frequency | | Side | Test Position | Figure No./N ote | Conducted Power (dBm) | Max. tune-up Power (dBm) | Measured SAR(10g) (W/kg) | Reported SAR(10g) (W/kg) | Measured SAR(1g) (W/kg) | Reported SAR(1g) (W/kg) | Power Drift (dB) |
| Ch. | MHz | | | | | | | | | | |
| 810 | 1909.8 | Left | Touch | / | 27.65 | 28 | 0.117 | 0.13 | 0.173 | 0.19 | -0.09 |
| 661 | 1880 | Left | Touch | / | 27.53 | 28 | 0.112 | 0.12 | 0.176 | 0.20 | 0.02 |
| 512 | 1850.2 | Left | Touch | Fig.3 | 27.26 | 28 | 0.117 | 0.14 | 0.178 | 0.21 | 0.01 |
| 661 | 1880 | Left | Tilt | / | 27.53 | 28 | 0.031 | 0.03 | 0.053 | 0.06 | 0.12 |
| 661 | 1880 | Right | Touch | / | 27.53 | 28 | 0.112 | 0.12 | 0.173 | 0.19 | 0.01 |
| 661 | 1880 | Right | Tilt | / | 27.53 | 28 | 0.023 | 0.03 | 0.043 | 0.05 | 0.05 |

Note: the head SAR of GSM1900 is tested with GPRS (4Txslots) mode because of VoIP.

Table 14.1-4: SAR Values (GSM 1900 MHz Band - Body)

| | | Ambient Temperature: 22.9 °C | | | Liquid Temperature: 22.5°C | | | | | | |
|-----------|--------|----------------------------------|------------------|------------------------|-----------------------------|-----------------------------|--------------------------------|--------------------------------|-------------------------------|-------------------------------|------------------------|
| Frequency | | Mode (number of timeslots) | Test Position | Figure No./N ote | Conducted Power (dBm) | Max. tune-up Power (dBm) | Measured SAR(10g) (W/kg) | Reported SAR(10g) (W/kg) | Measured SAR(1g) (W/kg) | Reported SAR(1g) (W/kg) | Power Drift (dB) |
| Ch. | MHz | | | | | | | | | | |
| 810 | 1909.8 | GPRS (4) | Front | / | 27.65 | 28 | 0.509 | 0.55 | 0.882 | 0.96 | -0.03 |
| 661 | 1880 | GPRS (4) | Front | Fig.4 | 27.53 | 28 | 0.544 | 0.61 | 0.936 | 1.04 | -0.09 |
| 512 | 1850.2 | GPRS (4) | Front | / | 27.26 | 28 | 0.413 | 0.49 | 0.864 | 1.02 | 0.02 |
| 810 | 1909.8 | GPRS (4) | Rear | / | 27.65 | 28 | 0.468 | 0.51 | 0.794 | 0.86 | 0.08 |
| 661 | 1880 | GPRS (4) | Rear | / | 27.53 | 28 | 0.498 | 0.55 | 0.843 | 0.94 | -0.09 |
| 512 | 1850.2 | GPRS (4) | Rear | / | 27.26 | 28 | 0.459 | 0.54 | 0.778 | 0.92 | -0.07 |
| 661 | 1880 | GPRS (4) | Left | / | 27.53 | 28 | 0.029 | 0.03 | 0.048 | 0.05 | -0.07 |
| 661 | 1880 | GPRS (4) | Right | / | 27.53 | 28 | 0.160 | 0.18 | 0.331 | 0.37 | 0.12 |
| 661 | 1880 | GPRS (4) | Bottom | / | 27.53 | 28 | 0.304 | 0.34 | 0.543 | 0.61 | 0.05 |
| 661 | 1880 | GPRS (4) | Front | / | 27.60 | 28 | 0.526 | 0.58 | 0.920 | 1.01 | 0.05 |

Note: The distance between the EUT and the phantom bottom is 10mm.

Table 14.1-5: SAR Values (WCDMA 850 MHz Band - Head)

| | | Ambient Temperature: 22.9 °C | | | Liquid Temperature: 22.5°C | | | | | | |
|-----------|-------|------------------------------|------------------|--------------------|-----------------------------|-----------------------------------|--------------------------------|--------------------------------|-------------------------------|-------------------------------|------------------------|
| Frequency | | Side | Test Position | Figure No./Note | Conducted Power (dBm) | Max. tune-up Power (dBm) | Measured SAR(10g) (W/kg) | Reported SAR(10g) (W/kg) | Measured SAR(1g) (W/kg) | Reported SAR(1g) (W/kg) | Power Drift (dB) |
| Ch. | MHz | | | | | | | | | | |
| 4182 | 836.4 | Left | Touch | / | 23.68 | 24 | 0.139 | 0.15 | 0.173 | 0.19 | 0.06 |
| 4182 | 836.4 | Left | Tilt | / | 23.68 | 24 | 0.102 | 0.11 | 0.128 | 0.14 | -0.01 |
| 4233 | 846.6 | Right | Touch | Fig.5 | 23.86 | 24 | 0.250 | 0.26 | 0.329 | 0.34 | -0.08 |
| 4182 | 836.4 | Right | Touch | / | 23.68 | 24 | 0.225 | 0.24 | 0.296 | 0.32 | -0.05 |
| 4132 | 826.4 | Right | Touch | / | 23.76 | 24 | 0.237 | 0.25 | 0.310 | 0.33 | 0.03 |
| 4182 | 836.4 | Right | Tilt | / | 23.68 | 24 | 0.136 | 0.15 | 0.179 | 0.19 | 0.01 |

Table 14.1-6: SAR Values (WCDMA 850 MHz Band - Body)

| | | Ambient Temperature: 22.9 °C | | | Liquid Temperature: 22.5°C | | | | | |
|-----------|-------|------------------------------|--------------------|-----------------------------|-----------------------------|--------------------------------|--------------------------------|-------------------------------|-------------------------------|------------------------|
| Frequency | | Test Position | Figure No./Note | Conducted Power (dBm) | Max. tune-up Power (dBm) | Measured SAR(10g) (W/kg) | Reported SAR(10g) (W/kg) | Measured SAR(1g) (W/kg) | Reported SAR(1g) (W/kg) | Power Drift (dB) |
| Ch. | MHz | | | | | | | | | |
| 4182 | 836.4 | Front | / | 23.68 | 24 | 0.493 | 0.53 | 0.719 | 0.77 | 0.02 |
| 4233 | 846.6 | Rear | Fig.6 | 23.86 | 24 | 0.529 | 0.55 | 0.758 | 0.78 | -0.06 |
| 4182 | 836.4 | Rear | / | 23.71 | 24 | 0.510 | 0.55 | 0.733 | 0.78 | 0.07 |
| 4132 | 826.4 | Rear | / | 23.76 | 24 | 0.518 | 0.55 | 0.731 | 0.77 | 0.11 |
| 4182 | 836.4 | Left | / | 23.68 | 24 | 0.073 | 0.08 | 0.106 | 0.11 | 0.02 |
| 4182 | 836.4 | Right | / | 23.68 | 24 | 0.080 | 0.09 | 0.124 | 0.13 | 0.01 |
| 4182 | 836.4 | Bottom | / | 23.68 | 24 | 0.100 | 0.11 | 0.199 | 0.21 | 0.07 |

Note: The distance between the EUT and the phantom bottom is 10mm.

Table 14.1-7: SAR Values(WCDMA 1700 MHz Band - Head)

| Ambient Temperature: 22.9 °C Liquid Temperature: 22.5°C | | | | | | | | | | | |
|---|--------|-------|---------------|-----------------|-----------------------|--------------------------|--------------------------|--------------------------|-------------------------|-------------------------|------------------|
| Frequency | | Side | Test Position | Figure No./Note | Conducted Power (dBm) | Max. tune-up Power (dBm) | Measured SAR(10g) (W/kg) | Reported SAR(10g) (W/kg) | Measured SAR(1g) (W/kg) | Reported SAR(1g) (W/kg) | Power Drift (dB) |
| Ch. | MHz | | | | | | | | | | |
| 1738 | 1752.6 | Left | Touch | / | 23.50 | 24 | 0.152 | 0.17 | 0.222 | 0.25 | -0.02 |
| 1637 | 1732.4 | Left | Touch | / | 23.57 | 24 | 0.129 | 0.14 | 0.194 | 0.21 | 0.09 |
| 1537 | 1712.4 | Left | Touch | Fig.7 | 23.68 | 24 | 0.164 | 0.18 | 0.237 | 0.26 | 0.17 |
| 1637 | 1732.4 | Left | Tilt | / | 23.57 | 24 | 0.049 | 0.05 | 0.071 | 0.08 | 0.13 |
| 1637 | 1732.4 | Right | Touch | / | 23.57 | 24 | 0.105 | 0.12 | 0.162 | 0.18 | 0.12 |
| 1637 | 1732.4 | Right | Tilt | / | 23.57 | 24 | 0.084 | 0.09 | 0.124 | 0.14 | 0.04 |

Table 14.1-8: SAR Values (WCDMA 1700 MHz Band - Body)

| Ambient Temperature: 22.9 °C Liquid Temperature: 22.5°C | | | | | | | | | | |
|---|--------|---------------|------------------|-----------------------|--------------------------|--------------------------|--------------------------|-------------------------|-------------------------|------------------|
| Frequency | | Test Position | Figure No./N ote | Conducted Power (dBm) | Max. tune-up Power (dBm) | Measured SAR(10g) (W/kg) | Reported SAR(10g) (W/kg) | Measured SAR(1g) (W/kg) | Reported SAR(1g) (W/kg) | Power Drift (dB) |
| Ch. | MHz | | | | | | | | | |
| 1738 | 1752.6 | Front | Fig.8 | 21.88 | 22.5 | 0.562 | 0.65 | 0.960 | 1.11 | -0.10 |
| 1637 | 1732.4 | Front | / | 21.96 | 22.5 | 0.490 | 0.55 | 0.874 | 0.99 | 0.05 |
| 1537 | 1712.4 | Front | / | 22.06 | 22.5 | 0.497 | 0.55 | 0.879 | 0.97 | -0.12 |
| 1738 | 1752.6 | Rear | / | 21.88 | 22.5 | 0.432 | 0.50 | 0.803 | 0.93 | 0.06 |
| 1637 | 1732.4 | Rear | / | 21.96 | 22.5 | 0.393 | 0.45 | 0.730 | 0.83 | 0.02 |
| 1537 | 1712.4 | Rear | / | 22.06 | 22.5 | 0.407 | 0.45 | 0.756 | 0.84 | 0.07 |
| 1637 | 1732.4 | Left | / | 21.96 | 22.5 | 0.051 | 0.06 | 0.087 | 0.10 | 0.08 |
| 1637 | 1732.4 | Right | / | 21.96 | 22.5 | 0.131 | 0.15 | 0.269 | 0.30 | 0.02 |
| 1738 | 1752.6 | Bottom | / | 21.88 | 22.5 | 0.405 | 0.47 | 0.855 | 0.99 | -0.05 |
| 1637 | 1732.4 | Bottom | / | 21.96 | 22.5 | 0.369 | 0.42 | 0.777 | 0.88 | 0.01 |
| 1537 | 1712.4 | Bottom | / | 22.06 | 22.5 | 0.378 | 0.42 | 0.797 | 0.88 | 0.04 |

Note1: The distance between the EUT and the phantom bottom is 10mm.

Table 14.1-9: SAR Values (WCDMA 1700 MHz Band - Body)

| Ambient Temperature: 22.9 °C Liquid Temperature: 22.5°C | | | | | | | | | | |
|---|--------|---------------|------------------|-----------------------|--------------------------|--------------------------|--------------------------|-------------------------|-------------------------|------------------|
| Frequency | | Test Position | Figure No./N ote | Conducted Power (dBm) | Max. tune-up Power (dBm) | Measured SAR(10g) (W/kg) | Reported SAR(10g) (W/kg) | Measured SAR(1g) (W/kg) | Reported SAR(1g) (W/kg) | Power Drift (dB) |
| Ch. | MHz | | | | | | | | | |
| 1738 | 1752.6 | Front | / | 23.50 | 24 | 0.341 | 0.38 | 0.693 | 0.78 | -0.04 |
| 1637 | 1732.4 | Front | / | 23.57 | 24 | 0.399 | 0.44 | 0.668 | 0.74 | -0.11 |
| 1537 | 1712.4 | Front | Fig.9 | 23.68 | 24 | 0.468 | 0.50 | 0.759 | 0.82 | -0.17 |
| 1637 | 1732.4 | Rear | / | 23.57 | 24 | 0.343 | 0.38 | 0.588 | 0.65 | 0.06 |

Note1: The distance between the EUT and the phantom bottom is 15mm.

Table 14.1-10: SAR Values(WCDMA 1900 MHz Band - Head)

| Ambient Temperature: 22.9 °C Liquid Temperature: 22.5°C | | | | | | | | | | | |
|---|--------|-------|---------------|-----------------|-----------------------|--------------------------|--------------------------|--------------------------|-------------------------|-------------------------|------------------|
| Frequency | | Side | Test Position | Figure No./Note | Conducted Power (dBm) | Max. tune-up Power (dBm) | Measured SAR(10g) (W/kg) | Reported SAR(10g) (W/kg) | Measured SAR(1g) (W/kg) | Reported SAR(1g) (W/kg) | Power Drift (dB) |
| Ch. | MHz | | | | | | | | | | |
| 9938 | 1907.6 | Left | Touch | Fig.10 | 24.24 | 24.5 | 0.095 | 0.10 | 0.138 | 0.15 | 0.18 |
| 9800 | 1880 | Left | Touch | / | 24.26 | 24.5 | 0.087 | 0.09 | 0.128 | 0.14 | 0.06 |
| 9662 | 1852.4 | Left | Touch | / | 24.15 | 24.5 | 0.087 | 0.09 | 0.131 | 0.14 | 0.05 |
| 9800 | 1880 | Left | Tilt | / | 24.26 | 24.5 | 0.043 | 0.05 | 0.066 | 0.07 | 0.02 |
| 9800 | 1880 | Right | Touch | / | 24.26 | 24.5 | 0.084 | 0.09 | 0.122 | 0.13 | 0.11 |
| 9800 | 1880 | Right | Tilt | / | 24.26 | 24.5 | 0.052 | 0.05 | 0.083 | 0.09 | 0.14 |

Table 14.1-11: SAR Values (WCDMA 1900 MHz Band - Body)

| Ambient Temperature: 22.9 °C Liquid Temperature: 22.5°C | | | | | | | | | | |
|---|--------|---------------|-----------------|-----------------------|--------------------------|--------------------------|--------------------------|-------------------------|-------------------------|------------------|
| Frequency | | Test Position | Figure No./Note | Conducted Power (dBm) | Max. tune-up Power (dBm) | Measured SAR(10g) (W/kg) | Reported SAR(10g) (W/kg) | Measured SAR(1g) (W/kg) | Reported SAR(1g) (W/kg) | Power Drift (dB) |
| Ch. | MHz | | | | | | | | | |
| 9938 | 1907.6 | Front | / | 24.24 | 24.5 | 0.668 | 0.71 | 1.17 | 1.24 | -0.01 |
| 9800 | 1880 | Front | / | 24.26 | 24.5 | 0.678 | 0.72 | 1.18 | 1.25 | 0.04 |
| 9662 | 1852.4 | Front | Fig.11 | 24.35 | 24.5 | 0.708 | 0.73 | 1.22 | 1.26 | -0.08 |
| 9938 | 1907.6 | Rear | / | 24.24 | 24.5 | 0.597 | 0.63 | 1.01 | 1.07 | -0.06 |
| 9800 | 1880 | Rear | / | 24.26 | 24.5 | 0.604 | 0.64 | 1.02 | 1.08 | 0.05 |
| 9662 | 1852.4 | Rear | / | 24.35 | 24.5 | 0.622 | 0.64 | 1.05 | 1.09 | 0.08 |
| 9800 | 1880 | Left | / | 24.26 | 24.5 | 0.061 | 0.06 | 0.095 | 0.10 | -0.13 |
| 9800 | 1880 | Right | / | 24.26 | 24.5 | 0.239 | 0.25 | 0.488 | 0.52 | 0.17 |
| 9800 | 1880 | Bottom | / | 24.26 | 24.5 | 0.332 | 0.35 | 0.584 | 0.62 | 0.03 |
| 9662 | 1852.4 | Front | / | 24.35 | 24.5 | 0.665 | 0.69 | 1.12 | 1.16 | 0.08 |

Note1: The distance between the EUT and the phantom bottom is 10mm.

Table 14.1-12: SAR Values (LTE Band2 - Head)

| Ambient Temperature: 22.9 °C Liquid Temperature: 22.5°C | | | | | | | | | | | | |
|---|------|----------|-------|---------------|-----------------|-----------------------|--------------------------|--------------------------|--------------------------|-------|-------------|-------|
| Frequency | | Mode | Side | Test Position | Figure No./Note | Conducted Power (dBm) | Max. tune-up Power (dBm) | Measured SAR(10g) (W/kg) | Reported SAR(10g) (W/kg) | | | |
| Ch. | MHz | | | | | | | | | | | |
| 19100 | 1900 | 1RB_Low | Left | Touch | Fig.12 | 23.76 | 24 | 0.108 | 0.11 | 0.163 | 0.17 | 0.01 |
| 19100 | 1900 | 1RB_Low | Left | Tilt | / | 23.76 | 24 | 0.041 | 0.04 | 0.060 | 0.06 | 0.08 |
| 19100 | 1900 | 1RB_Low | Right | Touch | / | 23.76 | 24 | 0.095 | 0.10 | 0.122 | 0.13 | 0.14 |
| 19100 | 1900 | 1RB_Low | Right | Tilt | / | 23.76 | 24 | 0.025 | 0.03 | 0.048 | 0.05 | 0.06 |
| 19100 | 1900 | 50RB_Mid | Left | Touch | / | 22.85 | 23 | 0.087 | 0.09 | 0.129 | 0.13 | -0.11 |
| 19100 | 1900 | 50RB_Mid | Left | Tilt | / | 22.85 | 23 | 0.038 | 0.04 | 0.059 | 0.06 | 0.09 |
| 19100 | 1900 | 50RB_Mid | Right | Touch | / | 22.85 | 23 | 0.077 | 0.08 | 0.036 | 0.04 | 0.13 |
| 19100 | 1900 | 50RB_Mid | Right | Tilt | / | 22.85 | 23 | 0.019 | 0.02 | 0.039 | 0.04 | -0.03 |

Note1: The LTE mode is QPSK_20MHz.

Table 14.1-13: SAR Values (LTE Band2 - Body)

| Ambient Temperature: 22.9 °C | | | | Liquid Temperature: 22.5 °C | | | | | | | |
|------------------------------|------|----------|---------------|-----------------------------|-----------------------|--------------------------|--------------------------|--------------------------|-------------------------|-------------------------|------------------|
| Frequency | | Mode | Test Position | Figure No./ Note | Conducted Power (dBm) | Max. tune-up Power (dBm) | Measured SAR(10g) (W/kg) | Reported SAR(10g) (W/kg) | Measured SAR(1g) (W/kg) | Reported SAR(1g) (W/kg) | Power Drift (dB) |
| Ch. | MHz | | | | | | | | | | |
| 19100 | 1900 | 1RB_Low | Front | / | 23.76 | 24 | 0.437 | 0.46 | 0.747 | 0.79 | 0.06 |
| 19100 | 1900 | 1RB_Low | Rear | Fig.13 | 23.76 | 24 | 0.444 | 0.47 | 0.761 | 0.80 | 0.09 |
| 19100 | 1900 | 1RB_Low | Left | / | 23.76 | 24 | 0.038 | 0.04 | 0.057 | 0.06 | -0.03 |
| 19100 | 1900 | 1RB_Low | Right | / | 23.76 | 24 | 0.122 | 0.13 | 0.251 | 0.27 | -0.01 |
| 19100 | 1900 | 1RB_Low | Bottom | / | 23.76 | 24 | 0.237 | 0.25 | 0.394 | 0.42 | 0.07 |
| 19100 | 1900 | 50RB_Mid | Front | / | 22.85 | 23 | 0.327 | 0.34 | 0.557 | 0.58 | 0.02 |
| 19100 | 1900 | 50RB_Mid | Rear | / | 22.85 | 23 | 0.370 | 0.38 | 0.647 | 0.67 | -0.05 |
| 19100 | 1900 | 50RB_Mid | Left | / | 22.85 | 23 | 0.031 | 0.03 | 0.046 | 0.05 | -0.01 |
| 19100 | 1900 | 50RB_Mid | Right | / | 22.85 | 23 | 0.105 | 0.11 | 0.216 | 0.22 | 0.06 |
| 19100 | 1900 | 50RB_Mid | Bottom | / | 22.85 | 23 | 0.203 | 0.21 | 0.352 | 0.36 | 0.02 |

Note1: The distance between the EUT and the phantom bottom is 10mm.

Note2: The LTE mode is QPSK_20MHz.

Table 14.1-14: SAR Values(LTE Band5 - Head)

| Ambient Temperature: 22.9 °C | | | | Liquid Temperature: 22.5 °C | | | | | | | | |
|------------------------------|-----|-----------|-------|-----------------------------|------------|-----------------------|--------------------------|--------------------------|--------------------------|-------------------------|-------------------------|------------------|
| Frequency | | Mode | Side | Test Position | Figure No. | Conducted Power (dBm) | Max. tune-up Power (dBm) | Measured SAR(10g) (W/kg) | Reported SAR(10g) (W/kg) | Measured SAR(1g) (W/kg) | Reported SAR(1g) (W/kg) | Power Drift (dB) |
| Ch. | MHz | | | | | | | | | | | |
| 20450 | 829 | 1RB_High | Left | Touch | / | 23.72 | 24 | 0.190 | 0.20 | 0.241 | 0.26 | 0.06 |
| 20450 | 829 | 1RB_High | Left | Tilt | / | 23.72 | 24 | 0.128 | 0.14 | 0.158 | 0.17 | -0.01 |
| 20450 | 829 | 1RB_High | Right | Touch | Fig.14 | 23.72 | 24 | 0.310 | 0.33 | 0.407 | 0.43 | 0.18 |
| 20450 | 829 | 1RB_High | Right | Tilt | / | 23.72 | 24 | 0.152 | 0.16 | 0.200 | 0.21 | 0.02 |
| 20600 | 844 | 25RB_High | Left | Touch | / | 22.54 | 23 | 0.136 | 0.15 | 0.172 | 0.19 | 0.06 |
| 20600 | 844 | 25RB_High | Left | Tilt | / | 22.54 | 23 | 0.094 | 0.10 | 0.118 | 0.13 | 0.03 |
| 20600 | 844 | 25RB_High | Right | Touch | / | 22.54 | 23 | 0.198 | 0.22 | 0.258 | 0.29 | -0.06 |
| 20600 | 844 | 25RB_High | Right | Tilt | / | 22.54 | 23 | 0.100 | 0.11 | 0.132 | 0.15 | 0.01 |

Note1: The LTE mode is QPSK_10MHz.

Table 14.1-15: SAR Values (LTE Band5-Body)

| Ambient Temperature: 22.9°C | | | | Liquid Temperature: 22.5°C | | | | | | | |
|-----------------------------|-----|-----------|---------------|----------------------------|-----------------------|-------------------------|--------------------------|--------------------------|-------------------------|-------------------------|------------------|
| Frequency | | Mode | Test Position | Figure No. | Conducted Power (dBm) | Max. tune-upPower (dBm) | Measured SAR(10g) (W/kg) | Reported SAR(10g) (W/kg) | Measured SAR(1g) (W/kg) | Reported SAR(1g) (W/kg) | Power Drift (dB) |
| Ch. | MHz | | | | | | | | | | |
| 20450 | 829 | 1RB_High | Front | / | 23.72 | 24 | 0.444 | 0.47 | 0.625 | 0.67 | 0.14 |
| 20450 | 829 | 1RB_High | Rear | Fig.15 | 23.72 | 24 | 0.461 | 0.49 | 0.641 | 0.68 | -0.03 |
| 20450 | 829 | 1RB_High | Left | / | 23.72 | 24 | 0.051 | 0.05 | 0.085 | 0.09 | 0.06 |
| 20450 | 829 | 1RB_High | Right | / | 23.72 | 24 | 0.203 | 0.22 | 0.284 | 0.30 | 0.02 |
| 20450 | 829 | 1RB_High | Bottom | / | 23.72 | 24 | 0.158 | 0.17 | 0.271 | 0.29 | 0.13 |
| 20600 | 844 | 25RB_High | Front | / | 22.54 | 23 | 0.319 | 0.35 | 0.454 | 0.50 | 0.09 |
| 20600 | 844 | 25RB_High | Rear | / | 22.54 | 23 | 0.328 | 0.36 | 0.455 | 0.51 | 0.06 |
| 20600 | 844 | 25RB_High | Left | / | 22.54 | 23 | 0.039 | 0.04 | 0.063 | 0.07 | 0.05 |
| 20600 | 844 | 25RB_High | Right | / | 22.54 | 23 | 0.148 | 0.16 | 0.210 | 0.23 | 0.13 |
| 20600 | 844 | 25RB_High | Bottom | / | 22.54 | 23 | 0.110 | 0.12 | 0.199 | 0.22 | 0.16 |

Note1: The distance between the EUT and the phantom bottom is 10mm.

Note2: The LTE mode is QPSK_10MHz.

Table 14.1-16: SAR Values(LTE Band7 - Head)

| Ambient Temperature: 22.9°C | | | | Liquid Temperature: 22.5°C | | | | | | | | |
|-----------------------------|------|----------|-------|----------------------------|------------------|------------------------|--------------------------|--------------------------|--------------------------|-------------------------|-------------------------|------------------|
| Frequency | | Mode | Side | Test Position | Figure No./ Note | Conduct ed Power (dBm) | Max. tune-up Power (dBm) | Measured SAR(10g) (W/kg) | Reported SAR(10g) (W/kg) | Measured SAR(1g) (W/kg) | Reported SAR(1g) (W/kg) | Power Drift (dB) |
| Ch. | MHz | | | | | | | | | | | |
| 20850 | 2510 | 1RB_Low | Left | Touch | / | 23.26 | 24.5 | 0.170 | 0.23 | 0.316 | 0.42 | 0.06 |
| 20850 | 2510 | 1RB_Low | Left | Tilt | / | 23.26 | 24.5 | 0.047 | 0.06 | 0.100 | 0.13 | 0.02 |
| 20850 | 2510 | 1RB_Low | Right | Touch | Fig.16 | 23.26 | 24.5 | 0.183 | 0.24 | 0.347 | 0.46 | 0.07 |
| 20850 | 2510 | 1RB_Low | Right | Tilt | / | 23.26 | 24.5 | 0.105 | 0.14 | 0.191 | 0.25 | -0.08 |
| 20850 | 2510 | 50RB_Low | Left | Touch | / | 22.13 | 23.5 | 0.141 | 0.19 | 0.262 | 0.36 | 0.02 |
| 20850 | 2510 | 50RB_Low | Left | Tilt | / | 22.13 | 23.5 | 0.043 | 0.06 | 0.078 | 0.11 | -0.01 |
| 20850 | 2510 | 50RB_Low | Right | Touch | / | 22.13 | 23.5 | 0.165 | 0.23 | 0.319 | 0.44 | -0.05 |
| 20850 | 2510 | 50RB_Low | Right | Tilt | / | 22.13 | 23.5 | 0.082 | 0.11 | 0.149 | 0.20 | 0.02 |

Note1: The LTE mode is QPSK_20MHz.

Table 14.1-17: SAR Values (LTE Band7 - Body)

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| Ambient Temperature: 22.9 °C Liquid Temperature: 22.5°C | | | | | | | | | | | |
|--|------|-----------|---------------|-----------------|-----------------------|--------------------------|--------------------------|--------------------------|-------------------------|-------------------------|------------------|
| Frequency | | Mode | Test Position | Figure No./Note | Conducted Power (dBm) | Max. tune-up Power (dBm) | Measured SAR(10g) (W/kg) | Reported SAR(10g) (W/kg) | Measured SAR(1g) (W/kg) | Reported SAR(1g) (W/kg) | Power Drift (dB) |
| Ch. | MHz | | | | | | | | | | |
| 21350 | 2560 | 1RB_Mid | Front | / | 20.31 | 20.5 | 0.231 | 0.24 | 0.412 | 0.43 | 0.05 |
| 21350 | 2560 | 1RB_Mid | Rear | / | 20.31 | 20.5 | 0.252 | 0.26 | 0.454 | 0.47 | 0.01 |
| 21350 | 2560 | 1RB_Mid | Left | / | 20.31 | 20.5 | 0.120 | 0.13 | 0.240 | 0.25 | 0.04 |
| 21350 | 2560 | 1RB_Mid | Bottom | / | 20.31 | 20.5 | 0.477 | 0.50 | 0.937 | 0.98 | 0.01 |
| 21100 | 2535 | 1RB_High | Bottom | Fig.17 | 20.22 | 20.5 | 0.476 | 0.51 | 0.925 | 0.99 | 0.07 |
| 20850 | 2510 | 1RB_High | Bottom | / | 20.28 | 20.5 | 0.517 | 0.54 | 1.00 | 1.06 | 0.11 |
| 20850 | 2510 | 50RB_Mid | Front | / | 20.36 | 20.5 | 0.256 | 0.26 | 0.437 | 0.45 | 0.03 |
| 20850 | 2510 | 50RB_Mid | Rear | / | 20.36 | 20.5 | 0.264 | 0.27 | 0.475 | 0.49 | 0.07 |
| 20850 | 2510 | 50RB_Mid | Left | / | 20.36 | 20.5 | 0.171 | 0.18 | 0.350 | 0.36 | 0.08 |
| 21350 | 2560 | 50RB_High | Bottom | / | 20.21 | 20.5 | 0.467 | 0.50 | 0.911 | 0.97 | 0.07 |
| 21100 | 2535 | 50RB_Low | Bottom | / | 20.24 | 20.5 | 0.504 | 0.54 | 0.978 | 1.04 | 0.11 |
| 20850 | 2510 | 50RB_Mid | Bottom | / | 20.36 | 20.5 | 0.528 | 0.55 | 1.02 | 1.05 | 0.01 |
| 20850 | 2510 | 100RB | Bottom | / | 20.28 | 20.5 | 0.538 | 0.57 | 1.04 | 1.09 | 0.01 |

Note1: The distance between the EUT and the phantom bottom is 10mm.

Note2: The LTE mode is QPSK_20MHz.

Table 14.1-18: SAR Values (LTE Band7 - Body)

| Ambient Temperature: 22.9 °C Liquid Temperature: 22.5°C | | | | | | | | | | | |
|--|------|----------|---------------|-----------------|-----------------------|--------------------------|--------------------------|--------------------------|-------------------------|-------------------------|------------------|
| Frequency | | Mode | Test Position | Figure No./Note | Conducted Power (dBm) | Max. tune-up Power (dBm) | Measured SAR(10g) (W/kg) | Reported SAR(10g) (W/kg) | Measured SAR(1g) (W/kg) | Reported SAR(1g) (W/kg) | Power Drift (dB) |
| Ch. | MHz | | | | | | | | | | |
| 20850 | 2510 | 1RB_Low | Front | Fig.18 | 23.26 | 24.5 | 0.278 | 0.37 | 0.488 | 0.65 | -0.02 |
| 20850 | 2510 | 1RB_Low | Rear | / | 23.26 | 24.5 | 0.258 | 0.34 | 0.467 | 0.62 | 0.03 |
| 20850 | 2510 | 50RB_Low | Front | / | 22.13 | 23.5 | 0.224 | 0.31 | 0.395 | 0.54 | 0.05 |
| 20850 | 2510 | 50RB_Low | Rear | / | 22.13 | 23.5 | 0.206 | 0.28 | 0.372 | 0.51 | -0.07 |

Note1: The distance between the EUT and the phantom bottom is 15mm.

Note2: The LTE mode is QPSK_20MHz.

Table 14.1-19: SAR Values(LTE Band12 - Head)

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| Ambient Temperature: 22.9 °C Liquid Temperature: 22.5°C | | | | | | | | | | | | |
|--|-----|-----------|-------|---------------|------------------|-----------------------|--------------------------|--------------------------|--------------------------|-------------------------|-------------------------|------------------|
| Frequency | | Mode | Side | Test Position | Figure No./ Note | Conducted Power (dBm) | Max. tune-up Power (dBm) | Measured SAR(10g) (W/kg) | Reported SAR(10g) (W/kg) | Measured SAR(1g) (W/kg) | Reported SAR(1g) (W/kg) | Power Drift (dB) |
| Ch. | MHz | | | | | | | | | | | |
| 23130 | 711 | 1RB_High | Left | Touch | / | 23.84 | 24 | 0.052 | 0.05 | 0.060 | 0.06 | 0.06 |
| 23130 | 711 | 1RB_High | Left | Tilt | / | 23.84 | 24 | 0.023 | 0.02 | 0.033 | 0.03 | -0.02 |
| 23130 | 711 | 1RB_High | Right | Touch | Fig.19 | 23.84 | 24 | 0.119 | 0.12 | 0.147 | 0.15 | 0.03 |
| 23130 | 711 | 1RB_High | Right | Tilt | / | 23.84 | 24 | 0.046 | 0.05 | 0.056 | 0.06 | -0.07 |
| 23130 | 711 | 25RB_High | Left | Touch | / | 22.46 | 23 | 0.041 | 0.05 | 0.047 | 0.05 | 0.03 |
| 23130 | 711 | 25RB_High | Left | Tilt | / | 22.46 | 23 | 0.018 | 0.02 | 0.026 | 0.03 | 0.01 |
| 23130 | 711 | 25RB_High | Right | Touch | / | 22.46 | 23 | 0.073 | 0.08 | 0.090 | 0.10 | 0.01 |
| 23130 | 711 | 25RB_High | Right | Tilt | / | 22.46 | 23 | 0.040 | 0.05 | 0.047 | 0.05 | 0.06 |

Note1: The LTE mode is QPSK_10MHz.

Table 14.1-20: SAR Values (LTE Band12 - Body)

| Ambient Temperature: 22.9 °C Liquid Temperature: 22.5°C | | | | | | | | | | | |
|--|-----|-----------|---------------|------------------|-----------------------|--------------------------|--------------------------|--------------------------|-------------------------|-------------------------|------------------|
| Frequency | | Mode | Test Position | Figure No./N ote | Conducted Power (dBm) | Max. tune-up Power (dBm) | Measured SAR(10g) (W/kg) | Reported SAR(10g) (W/kg) | Measured SAR(1g) (W/kg) | Reported SAR(1g) (W/kg) | Power Drift (dB) |
| Ch. | MHz | | | | | | | | | | |
| 23130 | 711 | 1RB_High | Front | / | 23.84 | 24 | 0.185 | 0.19 | 0.262 | 0.27 | 0.04 |
| 23130 | 711 | 1RB_High | Rear | Fig.20 | 23.84 | 24 | 0.200 | 0.21 | 0.281 | 0.29 | 0.02 |
| 23130 | 711 | 1RB_High | Left | / | 23.84 | 24 | 0.044 | 0.05 | 0.061 | 0.06 | 0.05 |
| 23130 | 711 | 1RB_High | Right | / | 23.84 | 24 | 0.092 | 0.10 | 0.131 | 0.14 | 0.09 |
| 23130 | 711 | 1RB_High | Bottom | / | 23.84 | 24 | 0.059 | 0.06 | 0.118 | 0.12 | 0.12 |
| 23130 | 711 | 25RB_High | Front | / | 22.46 | 23 | 0.131 | 0.15 | 0.186 | 0.21 | -0.05 |
| 23130 | 711 | 25RB_High | Rear | / | 22.46 | 23 | 0.159 | 0.18 | 0.223 | 0.25 | 0.09 |
| 23130 | 711 | 25RB_High | Left | / | 22.46 | 23 | 0.034 | 0.04 | 0.049 | 0.06 | -0.04 |
| 23130 | 711 | 25RB_High | Right | / | 22.46 | 23 | 0.074 | 0.08 | 0.105 | 0.12 | 0.11 |
| 23130 | 711 | 25RB_High | Bottom | / | 22.46 | 23 | 0.046 | 0.05 | 0.093 | 0.11 | 0.06 |

Note1: The distance between the EUT and the phantom bottom is 10mm.

Note2: The LTE mode is QPSK_10MHz.

Table 14.1-21: SAR Values(LTE Band13 - Head)

| | | Ambient Temperature: 22.9 °C | | | | Liquid Temperature: 22.5°C | | | | | | |
|-----------|-----|------------------------------|-------|---------------|------------------|----------------------------|--------------------------|--------------------------|--------------------------|-------------------------|-------------------------|------------------|
| Frequency | | Mode | Side | Test Position | Figure No./ Note | Conducted Power (dBm) | Max. tune-up Power (dBm) | Measured SAR(10g) (W/kg) | Reported SAR(10g) (W/kg) | Measured SAR(1g) (W/kg) | Reported SAR(1g) (W/kg) | Power Drift (dB) |
| Ch. | MHz | | | | | | | | | | | |
| 23230 | 782 | 1RB_Low | Left | Touch | / | 23.54 | 24 | 0.154 | 0.17 | 0.189 | 0.21 | 0.07 |
| 23230 | 782 | 1RB_Low | Left | Tilt | / | 23.54 | 24 | 0.090 | 0.10 | 0.107 | 0.12 | -0.09 |
| 23230 | 782 | 1RB_Low | Right | Touch | Fig.21 | 23.54 | 24 | 0.229 | 0.25 | 0.293 | 0.33 | 0.02 |
| 23230 | 782 | 1RB_Low | Right | Tilt | / | 23.54 | 24 | 0.113 | 0.13 | 0.143 | 0.16 | -0.03 |
| 23230 | 782 | 25RB_High | Left | Touch | / | 22.44 | 23 | 0.116 | 0.13 | 0.142 | 0.16 | 0.02 |
| 23230 | 782 | 25RB_High | Left | Tilt | / | 22.44 | 23 | 0.075 | 0.09 | 0.089 | 0.10 | 0.01 |
| 23230 | 782 | 25RB_High | Right | Touch | / | 22.44 | 23 | 0.181 | 0.21 | 0.233 | 0.27 | 0.01 |
| 23230 | 782 | 25RB_High | Right | Tilt | / | 22.44 | 23 | 0.090 | 0.10 | 0.115 | 0.13 | 0.05 |

Note1: The LTE mode is QPSK_10MHz.

Table 14.1-22: SAR Values (LTE Band13 - Body)

| | | Ambient Temperature: 22.9 °C | | | | Liquid Temperature: 22.5°C | | | | | | |
|-----------|-----|------------------------------|---------------|------------------|-----------------------|----------------------------|--------------------------|--------------------------|-------------------------|-------------------------|------------------|--|
| Frequency | | Mode | Test Position | Figure No./N ote | Conducted Power (dBm) | Max. tune-up Power (dBm) | Measured SAR(10g) (W/kg) | Reported SAR(10g) (W/kg) | Measured SAR(1g) (W/kg) | Reported SAR(1g) (W/kg) | Power Drift (dB) | |
| Ch. | MHz | | | | | | | | | | | |
| 23230 | 782 | 1RB_Low | Front | / | 23.54 | 24 | 0.248 | 0.28 | 0.393 | 0.44 | 0.02 | |
| 23230 | 782 | 1RB_Low | Rear | Fig.22 | 23.54 | 24 | 0.284 | 0.32 | 0.446 | 0.50 | 0.05 | |
| 23230 | 782 | 1RB_Low | Left | / | 23.54 | 24 | 0.057 | 0.06 | 0.093 | 0.10 | -0.13 | |
| 23230 | 782 | 1RB_Low | Right | / | 23.54 | 24 | 0.134 | 0.15 | 0.218 | 0.24 | 0.05 | |
| 23230 | 782 | 1RB_Low | Bottom | / | 23.54 | 24 | 0.095 | 0.11 | 0.199 | 0.22 | 0.09 | |
| 23230 | 782 | 25RB_High | Front | / | 22.44 | 23 | 0.196 | 0.22 | 0.312 | 0.35 | 0.04 | |
| 23230 | 782 | 25RB_High | Rear | / | 22.44 | 23 | 0.227 | 0.26 | 0.356 | 0.40 | 0.15 | |
| 23230 | 782 | 25RB_High | Left | / | 22.44 | 23 | 0.042 | 0.05 | 0.068 | 0.08 | -0.09 | |
| 23230 | 782 | 25RB_High | Right | / | 22.44 | 23 | 0.081 | 0.09 | 0.129 | 0.15 | 0.04 | |
| 23230 | 782 | 25RB_High | Bottom | / | 22.44 | 23 | 0.078 | 0.09 | 0.166 | 0.19 | -0.03 | |

Note1: The distance between the EUT and the phantom bottom is 10mm.

Note2: The LTE mode is QPSK_10MHz.

Table 14.1-23: SAR Values(LTE Band38 - Head)

| | | Ambient Temperature: 22.9 °C | | | | Liquid Temperature: 22.5°C | | | | | | |
|-----------|------|------------------------------|-------|---------------|------------------|----------------------------|--------------------------|--------------------------|--------------------------|-------------------------|-------------------------|------------------|
| Frequency | | Mode | Side | Test Position | Figure No./ Note | Conducted Power (dBm) | Max. tune-up Power (dBm) | Measured SAR(10g) (W/kg) | Reported SAR(10g) (W/kg) | Measured SAR(1g) (W/kg) | Reported SAR(1g) (W/kg) | Power Drift (dB) |
| Ch. | MHz | | | | | | | | | | | |
| 38150 | 2610 | 1RB_Mid | Left | Touch | / | 23.82 | 24 | 0.036 | 0.04 | 0.067 | 0.07 | 0.09 |
| 38150 | 2610 | 1RB_Mid | Left | Tilt | / | 23.82 | 24 | 0.020 | 0.02 | 0.039 | 0.04 | 0.01 |
| 38150 | 2610 | 1RB_Mid | Right | Touch | Fig.23 | 23.82 | 24 | 0.044 | 0.05 | 0.083 | 0.09 | 0.06 |
| 38150 | 2610 | 1RB_Mid | Right | Tilt | / | 23.82 | 24 | 0.025 | 0.03 | 0.049 | 0.05 | -0.03 |
| 38150 | 2610 | 50RB_Mid | Left | Touch | / | 22.68 | 23 | 0.028 | 0.03 | 0.052 | 0.06 | 0.01 |
| 38150 | 2610 | 50RB_Mid | Left | Tilt | / | 22.68 | 23 | 0.013 | 0.01 | 0.031 | 0.03 | -0.06 |
| 38150 | 2610 | 50RB_Mid | Right | Touch | / | 22.68 | 23 | 0.039 | 0.04 | 0.076 | 0.08 | -0.04 |
| 38150 | 2610 | 50RB_Mid | Right | Tilt | / | 22.68 | 23 | 0.024 | 0.03 | 0.048 | 0.05 | 0.01 |

Note1: The LTE mode is QPSK_20MHz.

Table 14.1-24: SAR Values (LTE Band38 - Body)

| | | Ambient Temperature: 22.9 °C | | | | Liquid Temperature: 22.5°C | | | | | | |
|-----------|------|------------------------------|---------------|------------------|-----------------------|----------------------------|--------------------------|--------------------------|-------------------------|-------------------------|------------------|--|
| Frequency | | Mode | Test Position | Figure No./N ote | Conducted Power (dBm) | Max. tune-up Power (dBm) | Measured SAR(10g) (W/kg) | Reported SAR(10g) (W/kg) | Measured SAR(1g) (W/kg) | Reported SAR(1g) (W/kg) | Power Drift (dB) | |
| Ch. | MHz | | | | | | | | | | | |
| 38150 | 2610 | 1RB_Mid | Front | / | 23.82 | 24 | 0.167 | 0.17 | 0.298 | 0.31 | 0.03 | |
| 38150 | 2610 | 1RB_Mid | Rear | / | 23.82 | 24 | 0.183 | 0.19 | 0.323 | 0.34 | 0.12 | |
| 38150 | 2610 | 1RB_Mid | Left | / | 23.82 | 24 | 0.081 | 0.08 | 0.163 | 0.17 | 0.06 | |
| 38150 | 2610 | 1RB_Mid | Bottom | Fig.24 | 23.82 | 24 | 0.345 | 0.36 | 0.672 | 0.70 | -0.03 | |
| 38150 | 2610 | 50RB_Mid | Front | / | 22.68 | 23 | 0.142 | 0.15 | 0.255 | 0.27 | 0.05 | |
| 38150 | 2610 | 50RB_Mid | Rear | / | 22.68 | 23 | 0.146 | 0.16 | 0.260 | 0.28 | 0.15 | |
| 38150 | 2610 | 50RB_Mid | Left | / | 22.68 | 23 | 0.068 | 0.07 | 0.139 | 0.15 | 0.02 | |
| 38150 | 2610 | 50RB_Mid | Bottom | / | 22.68 | 23 | 0.282 | 0.30 | 0.550 | 0.59 | -0.11 | |

Note1: The distance between the EUT and the phantom bottom is 10mm.

Note2: The LTE mode is QPSK_20MHz.

Table 14.1-27: SAR Values(LTE Band41 - Head)

| | | Ambient Temperature: 22.9 °C | | | | Liquid Temperature: 22.5°C | | | | | | |
|-----------|------|------------------------------|-------|---------------|------------------|----------------------------|--------------------------|--------------------------|--------------------------|-------------------------|-------------------------|------------------|
| Frequency | | Mode | Side | Test Position | Figure No./ Note | Conducted Power (dBm) | Max. tune-up Power (dBm) | Measured SAR(10g) (W/kg) | Reported SAR(10g) (W/kg) | Measured SAR(1g) (W/kg) | Reported SAR(1g) (W/kg) | Power Drift (dB) |
| Ch. | MHz | | | | | | | | | | | |
| 41490 | 2680 | 1RB_High | Left | Touch | / | 23.79 | 24 | 0.028 | 0.03 | 0.053 | 0.06 | -0.12 |
| 41490 | 2680 | 1RB_High | Left | Tilt | / | 23.79 | 24 | 0.016 | 0.02 | 0.026 | 0.03 | 0.05 |
| 41490 | 2680 | 1RB_High | Right | Touch | Fig.27 | 23.79 | 24 | 0.041 | 0.04 | 0.080 | 0.08 | 0.04 |
| 41490 | 2680 | 1RB_High | Right | Tilt | / | 23.79 | 24 | 0.025 | 0.03 | 0.048 | 0.05 | -0.08 |
| 41490 | 2680 | 50RB_Mid | Left | Touch | / | 22.68 | 23 | 0.020 | 0.02 | 0.035 | 0.04 | 0.05 |
| 41490 | 2680 | 50RB_Mid | Left | Tilt | / | 22.68 | 23 | 0.012 | 0.01 | 0.020 | 0.02 | 0.02 |
| 41490 | 2680 | 50RB_Mid | Right | Touch | / | 22.68 | 23 | 0.032 | 0.03 | 0.061 | 0.07 | 0.01 |
| 41490 | 2680 | 50RB_Mid | Right | Tilt | / | 22.68 | 23 | 0.019 | 0.02 | 0.032 | 0.03 | -0.14 |

Note1: The LTE mode is QPSK_20MHz.

Table 14.1-28: SAR Values (LTE Band41 - Body)

| | | Ambient Temperature: 22.9 °C | | | | Liquid Temperature: 22.5°C | | | | | |
|-----------|--------|------------------------------|---------------|------------------|-----------------------|----------------------------|--------------------------|--------------------------|-------------------------|-------------------------|------------------|
| Frequency | | Mode | Test Position | Figure No./N ote | Conducted Power (dBm) | Max. tune-up Power (dBm) | Measured SAR(10g) (W/kg) | Reported SAR(10g) (W/kg) | Measured SAR(1g) (W/kg) | Reported SAR(1g) (W/kg) | Power Drift (dB) |
| Ch. | MHz | | | | | | | | | | |
| 41490 | 2680 | 1RB_High | Front | / | 23.79 | 24 | 0.186 | 0.20 | 0.345 | 0.36 | 0.13 |
| 41490 | 2680 | 1RB_High | Rear | / | 23.79 | 24 | 0.278 | 0.29 | 0.446 | 0.47 | 0.14 |
| 41490 | 2680 | 1RB_High | Left | / | 23.79 | 24 | 0.083 | 0.09 | 0.175 | 0.18 | 0.05 |
| 41490 | 2680 | 1RB_High | Bottom | / | 23.79 | 24 | 0.399 | 0.42 | 0.804 | 0.84 | 0.07 |
| 41055 | 2636.5 | 1RB_High | Bottom | / | 23.42 | 24 | 0.390 | 0.45 | 0.778 | 0.89 | -0.02 |
| 40620 | 2593 | 1RB_High | Bottom | / | 23.01 | 24 | 0.356 | 0.45 | 0.702 | 0.88 | -0.09 |
| 40185 | 2549.5 | 1RB_High | Bottom | / | 22.56 | 24 | 0.387 | 0.54 | 0.757 | 1.05 | 0.06 |
| 39750 | 2506 | 1RB_High | Bottom | Fig.28 | 22.58 | 24 | 0.443 | 0.61 | 0.853 | 1.18 | -0.14 |
| 41490 | 2680 | 50RB_Mid | Front | / | 22.68 | 23 | 0.151 | 0.16 | 0.280 | 0.30 | 0.13 |
| 41490 | 2680 | 50RB_Mid | Rear | / | 22.68 | 23 | 0.172 | 0.19 | 0.319 | 0.34 | 0.09 |
| 41490 | 2680 | 50RB_Mid | Left | / | 22.68 | 23 | 0.073 | 0.08 | 0.158 | 0.17 | 0.02 |
| 41490 | 2680 | 50RB_Mid | Bottom | / | 22.68 | 23 | 0.289 | 0.31 | 0.586 | 0.63 | 0.01 |
| 41490 | 2680 | 100RB | Bottom | / | 22.43 | 23 | 0.311 | 0.35 | 0.629 | 0.72 | 0.06 |

Note1: The distance between the EUT and the phantom bottom is 10mm.

Note2: The LTE mode is QPSK_20MHz.

Table 14.1-29: SAR Values(LTE Band4 - Head)

| Ambient Temperature: 22.9 °C Liquid Temperature: 22.5°C | | | | | | | | | | | | |
|--|--------|----------|-------|---------------|------------------|-----------------------|--------------------------|--------------------------|--------------------------|-------------------------|-------------------------|------------------|
| Frequency | | Mode | Side | Test Position | Figure No./ Note | Conducted Power (dBm) | Max. tune-up Power (dBm) | Measured SAR(10g) (W/kg) | Reported SAR(10g) (W/kg) | Measured SAR(1g) (W/kg) | Reported SAR(1g) (W/kg) | Power Drift (dB) |
| Ch. | MHz | | | | | | | | | | | |
| 20050 | 1720 | 1RB_High | Left | Touch | Fig.29 | 24.12 | 25 | 0.138 | 0.17 | 0.207 | 0.25 | 0.10 |
| 20050 | 1720 | 1RB_High | Left | Tilt | / | 24.12 | 25 | 0.044 | 0.05 | 0.064 | 0.08 | 0.06 |
| 20050 | 1720 | 1RB_High | Right | Touch | / | 24.12 | 25 | 0.086 | 0.11 | 0.137 | 0.17 | -0.02 |
| 20050 | 1720 | 1RB_High | Right | Tilt | / | 24.12 | 25 | 0.071 | 0.09 | 0.112 | 0.14 | -0.02 |
| 20175 | 1732.5 | 50RB_Low | Left | Touch | / | 23.18 | 24 | 0.121 | 0.15 | 0.181 | 0.22 | 0.01 |
| 20175 | 1732.5 | 50RB_Low | Left | Tilt | / | 23.18 | 24 | 0.035 | 0.04 | 0.051 | 0.06 | 0.05 |
| 20175 | 1732.5 | 50RB_Low | Right | Touch | / | 23.18 | 24 | 0.070 | 0.08 | 0.111 | 0.13 | 0.03 |
| 20175 | 1732.5 | 50RB_Low | Right | Tilt | / | 23.18 | 24 | 0.061 | 0.07 | 0.094 | 0.11 | 0.07 |

Note1: The LTE mode is QPSK_20MHz.

Table 14.1-30: SAR Values (LTE Band4 - Body)

| Ambient Temperature: 22.9 °C Liquid Temperature: 22.5°C | | | | | | | | | | | |
|--|--------|----------|---------------|------------------|-----------------------|--------------------------|--------------------------|--------------------------|-------------------------|-------------------------|------------------|
| Frequency | | Mode | Test Position | Figure No./N ote | Conducted Power (dBm) | Max. tune-up Power (dBm) | Measured SAR(10g) (W/kg) | Reported SAR(10g) (W/kg) | Measured SAR(1g) (W/kg) | Reported SAR(1g) (W/kg) | Power Drift (dB) |
| Ch. | MHz | | | | | | | | | | |
| 20300 | 1745 | 1RB_Low | Front | / | 22.40 | 23.5 | 0.479 | 0.62 | 0.799 | 1.03 | -0.02 |
| 20175 | 1732.5 | 1RB_Low | Front | / | 22.51 | 23.5 | 0.448 | 0.56 | 0.750 | 0.94 | -0.03 |
| 20050 | 1720 | 1RB_Mid | Front | / | 22.88 | 23.5 | 0.443 | 0.51 | 0.789 | 0.91 | -0.02 |
| 20050 | 1720 | 1RB_Mid | Rear | / | 22.88 | 23.5 | 0.378 | 0.44 | 0.664 | 0.77 | -0.01 |
| 20050 | 1720 | 1RB_Mid | Left | / | 22.88 | 23.5 | 0.046 | 0.05 | 0.078 | 0.09 | 0.08 |
| 20050 | 1720 | 1RB_Mid | Right | / | 22.88 | 23.5 | 0.102 | 0.12 | 0.201 | 0.23 | -0.01 |
| 20300 | 1745 | 1RB_Low | Bottom | / | 22.40 | 23.5 | 0.474 | 0.61 | 0.821 | 1.06 | 0.03 |
| 20175 | 1732.5 | 1RB_Low | Bottom | / | 22.51 | 23.5 | 0.471 | 0.59 | 0.817 | 1.03 | 0.02 |
| 20050 | 1720 | 1RB_Mid | Bottom | / | 22.88 | 23.5 | 0.470 | 0.54 | 0.815 | 0.94 | 0.07 |
| 20300 | 1745 | 50RB_Low | Front | / | 22.49 | 23.5 | 0.506 | 0.64 | 0.878 | 1.11 | 0.04 |
| 20175 | 1732.5 | 50RB_Low | Front | / | 22.58 | 23.5 | 0.487 | 0.60 | 0.848 | 1.05 | -0.06 |
| 20050 | 1720 | 50RB_Mid | Front | / | 22.60 | 23.5 | 0.454 | 0.56 | 0.770 | 0.95 | -0.09 |
| 20050 | 1720 | 50RB_Mid | Rear | / | 22.60 | 23.5 | 0.372 | 0.46 | 0.654 | 0.80 | -0.01 |
| 20050 | 1720 | 50RB_Mid | Left | / | 22.60 | 23.5 | 0.047 | 0.06 | 0.080 | 0.10 | 0.03 |
| 20050 | 1720 | 50RB_Mid | Right | / | 22.60 | 23.5 | 0.105 | 0.13 | 0.206 | 0.25 | 0.02 |
| 20300 | 1745 | 50RB_Low | Bottom | Fig.30 | 22.49 | 23.5 | 0.510 | 0.64 | 0.884 | 1.12 | -0.04 |
| 20175 | 1732.5 | 50RB_Low | Bottom | / | 22.58 | 23.5 | 0.496 | 0.61 | 0.871 | 1.08 | 0.08 |
| 20050 | 1720 | 50RB_Mid | Bottom | / | 22.60 | 23.5 | 0.465 | 0.57 | 0.807 | 0.99 | 0.01 |
| 20050 | 1720 | 100RB | Front | / | 22.58 | 23.5 | 0.447 | 0.55 | 0.745 | 0.92 | -0.01 |
| 20050 | 1720 | 100RB | Bottom | / | 22.58 | 23.5 | 0.459 | 0.57 | 0.806 | 1.00 | 0.03 |

Note1: The distance between the EUT and the phantom bottom is 10mm.

Note2: The LTE mode is QPSK_20MHz.

Table 14.1-31: SAR Values (LTE Band4 - Body)

| Ambient Temperature: 22.9 °C | | | | Liquid Temperature: 22.5°C | | | | | | | |
|------------------------------|--------|----------|---------------|----------------------------|-----------------------|--------------------------|--------------------------|--------------------------|-------------------------|-------------------------|------------------|
| Frequency | | Mode | Test Position | Figure No./Note | Conducted Power (dBm) | Max. tune-up Power (dBm) | Measured SAR(10g) (W/kg) | Reported SAR(10g) (W/kg) | Measured SAR(1g) (W/kg) | Reported SAR(1g) (W/kg) | Power Drift (dB) |
| Ch. | MHz | | | | | | | | | | |
| 20300 | 1745 | 1RB_Low | Front | / | 24.00 | 25 | 0.390 | 0.49 | 0.656 | 0.83 | 0.02 |
| 20175 | 1732.5 | 1RB_High | Front | Fig.31 | 24.10 | 25 | 0.505 | 0.62 | 0.838 | 1.03 | 0.04 |
| 20050 | 1720 | 1RB_High | Front | / | 24.12 | 25 | 0.423 | 0.52 | 0.691 | 0.85 | -0.03 |
| 20300 | 1745 | 1RB_Low | Rear | / | 24.00 | 25 | 0.341 | 0.43 | 0.582 | 0.73 | -0.06 |
| 20175 | 1732.5 | 1RB_High | Rear | / | 24.10 | 25 | 0.382 | 0.47 | 0.658 | 0.81 | 0.09 |
| 20050 | 1720 | 1RB_High | Rear | / | 24.12 | 25 | 0.407 | 0.50 | 0.681 | 0.83 | 0.05 |
| 20175 | 1732.5 | 50RB_Low | Front | / | 23.18 | 24 | 0.346 | 0.42 | 0.566 | 0.68 | -0.01 |
| 20175 | 1732.5 | 50RB_Low | Rear | / | 23.18 | 24 | 0.350 | 0.42 | 0.560 | 0.68 | 0.07 |
| 20175 | 1732.5 | 100RB | Front | / | 23.07 | 24 | 0.381 | 0.47 | 0.648 | 0.80 | -0.01 |
| 20175 | 1732.5 | 100RB | Rear | / | 23.07 | 24 | 0.293 | 0.36 | 0.507 | 0.63 | 0.03 |

Note1: The distance between the EUT and the phantom bottom is 15mm.

Note2: The LTE mode is QPSK_20MHz.

Table 14.1-32: SAR Values (LTE band26 - Head)

| Ambient Temperature: 22.9 °C | | | | Liquid Temperature: 22.5°C | | | | | | | | |
|------------------------------|-------|----------|-------|----------------------------|------------|-----------------------|--------------------------|--------------------------|--------------------------|-------------------------|-------------------------|------------------|
| Frequency | | Mode | Side | Test Position | Figure No. | Conducted Power (dBm) | Max. tune-up Power (dBm) | Measured SAR(10g) (W/kg) | Reported SAR(10g) (W/kg) | Measured SAR(1g) (W/kg) | Reported SAR(1g) (W/kg) | Power Drift (dB) |
| Ch. | MHz | | | | | | | | | | | |
| 26965 | 841.5 | 1RB_Low | Left | Touch | / | 24.18 | 24.5 | 0.182 | 0.20 | 0.229 | 0.25 | 0.05 |
| 26965 | 841.5 | 1RB_Low | Left | Tilt | / | 24.18 | 24.5 | 0.123 | 0.13 | 0.154 | 0.17 | -0.08 |
| 26965 | 841.5 | 1RB_Low | Right | Touch | Fig.32 | 24.18 | 24.5 | 0.278 | 0.30 | 0.370 | 0.40 | -0.07 |
| 26965 | 841.5 | 1RB_Low | Right | Tilt | / | 24.18 | 24.5 | 0.157 | 0.17 | 0.208 | 0.22 | 0.01 |
| 26965 | 841.5 | 36RB_Low | Left | Touch | / | 23.18 | 23.5 | 0.145 | 0.16 | 0.182 | 0.20 | 0.02 |
| 26965 | 841.5 | 36RB_Low | Left | Tilt | / | 23.18 | 23.5 | 0.105 | 0.11 | 0.133 | 0.14 | -0.02 |
| 26965 | 841.5 | 36RB_Low | Right | Touch | / | 23.18 | 23.5 | 0.223 | 0.24 | 0.295 | 0.32 | -0.04 |
| 26965 | 841.5 | 36RB_Low | Right | Tilt | / | 23.18 | 23.5 | 0.126 | 0.14 | 0.168 | 0.18 | 0.05 |

Note1: The LTE mode is QPSK_15MHz.

Table 14.1-33: SAR Values (LTE band26 - Body)

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| Ambient Temperature: 22.9 °C Liquid Temperature: 22.5°C | | | | | | | | | | | |
|--|-------|----------|---------------|------------------|-----------------------|--------------------------|--------------------------|--------------------------|-------------------------|-------------------------|------------------|
| Frequency | | Mode | Test Position | Figure No./ Note | Conducted Power (dBm) | Max. tune-up Power (dBm) | Measured SAR(10g) (W/kg) | Reported SAR(10g) (W/kg) | Measured SAR(1g) (W/kg) | Reported SAR(1g) (W/kg) | Power Drift (dB) |
| Ch. | MHz | | | | | | | | | | |
| 26965 | 841.5 | 1RB_Low | Front | / | 24.18 | 24.5 | 0.461 | 0.50 | 0.634 | 0.68 | 0.06 |
| 26965 | 841.5 | 1RB_Low | Rear | Fig.33 | 24.18 | 24.5 | 0.505 | 0.54 | 0.720 | 0.78 | -0.03 |
| 26965 | 841.5 | 1RB_Low | Left | / | 24.18 | 24.5 | 0.063 | 0.07 | 0.107 | 0.12 | -0.01 |
| 26965 | 841.5 | 1RB_Low | Right | / | 24.18 | 24.5 | 0.245 | 0.26 | 0.349 | 0.38 | -0.09 |
| 26965 | 841.5 | 1RB_Low | Bottom | / | 24.18 | 24.5 | 0.205 | 0.22 | 0.360 | 0.39 | 0.04 |
| 26965 | 841.5 | 36RB_Low | Front | / | 23.18 | 23.5 | 0.395 | 0.43 | 0.548 | 0.59 | 0.02 |
| 26965 | 841.5 | 36RB_Low | Rear | / | 23.18 | 23.5 | 0.407 | 0.44 | 0.577 | 0.62 | -0.06 |
| 26965 | 841.5 | 36RB_Low | Left | / | 23.18 | 23.5 | 0.051 | 0.05 | 0.087 | 0.09 | -0.01 |
| 26965 | 841.5 | 36RB_Low | Right | / | 23.18 | 23.5 | 0.195 | 0.21 | 0.278 | 0.30 | 0.01 |
| 26965 | 841.5 | 36RB_Low | Bottom | / | 23.18 | 23.5 | 0.169 | 0.18 | 0.296 | 0.32 | 0.06 |

Note1: The distance between the EUT and the phantom bottom is 10mm.

Note2: The LTE mode is QPSK_15MHz.

14.2 SAR results for Standard procedure

There is zoom scan measurement to be added for the highest measured SAR in each exposure configuration/band.

Table 14.2-1: SAR Values (GSM 850 MHz Band - Head)

| Ambient Temperature: 22.9 °C | | | | Liquid Temperature: 22.5°C | | | | | | | |
|------------------------------|-------|-------|---------------|----------------------------|-----------------------|--------------------------|--------------------------|--------------------------|-------------------------|-------------------------|------------------|
| Frequency | | Side | Test Position | Figure No./Note | Conducted Power (dBm) | Max. tune-up Power (dBm) | Measured SAR(10g) (W/kg) | Reported SAR(10g) (W/kg) | Measured SAR(1g) (W/kg) | Reported SAR(1g) (W/kg) | Power Drift (dB) |
| Ch. | MHz | | | | | | | | | | |
| 128 | 824.2 | Right | Touch | Fig.1 | 29.95 | 30.5 | 0.434 | 0.49 | 0.558 | 0.63 | -0.05 |

Note: the head SAR of GSM850 is tested with GPRS (3Txslots) mode because of VoIP.

Table 14.2-2: SAR Values (GSM 850 MHz Band - Body)

| Ambient Temperature: 22.9 °C | | | | Liquid Temperature: 22.5°C | | | | | | | |
|------------------------------|-------|----------------------------|---------------|----------------------------|-----------------------|--------------------------|--------------------------|--------------------------|-------------------------|-------------------------|------------------|
| Frequency | | Mode (number of timeslots) | Test Position | Figure No./N ote | Conducted Power (dBm) | Max. tune-up Power (dBm) | Measured SAR(10g) (W/kg) | Reported SAR(10g) (W/kg) | Measured SAR(1g) (W/kg) | Reported SAR(1g) (W/kg) | Power Drift (dB) |
| Ch. | MHz | | | | | | | | | | |
| 128 | 824.2 | GPRS (3) | Front | Fig.2 | 29.95 | 30.5 | 0.724 | 0.82 | 1.03 | 1.17 | 0.04 |

Note: The distance between the EUT and the phantom bottom is 10mm.

Table 14.2-3: SAR Values(GSM 1900 MHz Band - Head)

| Ambient Temperature: 22.9 °C | | | | Liquid Temperature: 22.5°C | | | | | | | |
|------------------------------|--------|------|---------------|----------------------------|-----------------------|--------------------------|--------------------------|--------------------------|-------------------------|-------------------------|------------------|
| Frequency | | Side | Test Position | Figure No./N ote | Conducted Power (dBm) | Max. tune-up Power (dBm) | Measured SAR(10g) (W/kg) | Reported SAR(10g) (W/kg) | Measured SAR(1g) (W/kg) | Reported SAR(1g) (W/kg) | Power Drift (dB) |
| Ch. | MHz | | | | | | | | | | |
| 512 | 1850.2 | Left | Touch | Fig.3 | 27.26 | 28 | 0.117 | 0.14 | 0.178 | 0.21 | 0.01 |

Note: the head SAR of GSM1900 is tested with GPRS (4Txslots) mode because of VoIP.

Table 14.2-4: SAR Values (GSM 1900 MHz Band - Body)

| Ambient Temperature: 22.9 °C | | | | Liquid Temperature: 22.5°C | | | | | | | |
|------------------------------|------|----------------------------|---------------|----------------------------|-----------------------|--------------------------|--------------------------|--------------------------|-------------------------|-------------------------|------------------|
| Frequency | | Mode (number of timeslots) | Test Position | Figure No./N ote | Conducted Power (dBm) | Max. tune-up Power (dBm) | Measured SAR(10g) (W/kg) | Reported SAR(10g) (W/kg) | Measured SAR(1g) (W/kg) | Reported SAR(1g) (W/kg) | Power Drift (dB) |
| Ch. | MHz | | | | | | | | | | |
| 661 | 1880 | GPRS (4) | Front | Fig.4 | 27.53 | 28 | 0.544 | 0.61 | 0.936 | 1.04 | -0.09 |

Note: The distance between the EUT and the phantom bottom is 10mm.

Table 14.2-5: SAR Values (WCDMA 850 MHz Band - Head)

| Ambient Temperature: 22.9 °C | | | | Liquid Temperature: 22.5°C | | | | | | | |
|------------------------------|-------|-------|---------------|----------------------------|-----------------------|--------------------------|--------------------------|--------------------------|-------------------------|-------------------------|------------------|
| Frequency | | Side | Test Position | Figure No./N ote | Conducted Power (dBm) | Max. tune-up Power (dBm) | Measured SAR(10g) (W/kg) | Reported SAR(10g) (W/kg) | Measured SAR(1g) (W/kg) | Reported SAR(1g) (W/kg) | Power Drift (dB) |
| Ch. | MHz | | | | | | | | | | |
| 4233 | 846.6 | Right | Touch | Fig.5 | 23.86 | 24 | 0.250 | 0.26 | 0.329 | 0.34 | -0.08 |

Table 14.2-6: SAR Values (WCDMA 850 MHz Band - Body)

| Ambient Temperature: 22.9 °C | | | Liquid Temperature: 22.5°C | | | | | | | |
|------------------------------|-------|---------------|----------------------------|-----------------------|--------------------------|--------------------------|--------------------------|-------------------------|-------------------------|------------------|
| Frequency | | Test Position | Figure No./Note | Conducted Power (dBm) | Max. tune-up Power (dBm) | Measured SAR(10g) (W/kg) | Reported SAR(10g) (W/kg) | Measured SAR(1g) (W/kg) | Reported SAR(1g) (W/kg) | Power Drift (dB) |
| Ch. | MHz | | | | | | | | | |
| 4233 | 846.6 | Rear | Fig.6 | 23.86 | 24 | 0.529 | 0.55 | 0.758 | 0.78 | -0.06 |

Note: The distance between the EUT and the phantom bottom is 10mm.

Table 14.2-7: SAR Values(WCDMA 1700 MHz Band - Head)

| Ambient Temperature: 22.9 °C | | | Liquid Temperature: 22.5°C | | | | | | | | |
|------------------------------|--------|------|----------------------------|-----------------|-----------------------|--------------------------|--------------------------|--------------------------|-------------------------|-------------------------|------------------|
| Frequency | | Side | Test Position | Figure No./Note | Conducted Power (dBm) | Max. tune-up Power (dBm) | Measured SAR(10g) (W/kg) | Reported SAR(10g) (W/kg) | Measured SAR(1g) (W/kg) | Reported SAR(1g) (W/kg) | Power Drift (dB) |
| Ch. | MHz | | | | | | | | | | |
| 1537 | 1712.4 | Left | Touch | Fig.7 | 23.68 | 24 | 0.164 | 0.18 | 0.237 | 0.26 | 0.17 |

Table 14.2-8: SAR Values (WCDMA 1700 MHz Band - Body)

| Ambient Temperature: 22.9 °C | | | Liquid Temperature: 22.5°C | | | | | | | |
|------------------------------|--------|---------------|----------------------------|-----------------------|--------------------------|--------------------------|--------------------------|-------------------------|-------------------------|------------------|
| Frequency | | Test Position | Figure No./N ote | Conducted Power (dBm) | Max. tune-up Power (dBm) | Measured SAR(10g) (W/kg) | Reported SAR(10g) (W/kg) | Measured SAR(1g) (W/kg) | Reported SAR(1g) (W/kg) | Power Drift (dB) |
| Ch. | MHz | | | | | | | | | |
| 1738 | 1752.6 | Front | Fig.8 | 21.88 | 22.5 | 0.562 | 0.65 | 0.960 | 1.11 | -0.10 |

Note1: The distance between the EUT and the phantom bottom is 10mm.

Table 14.2-9: SAR Values (WCDMA 1700 MHz Band - Body)

| Ambient Temperature: 22.9 °C | | | Liquid Temperature: 22.5°C | | | | | | | |
|------------------------------|--------|---------------|----------------------------|-----------------------|--------------------------|--------------------------|--------------------------|-------------------------|-------------------------|------------------|
| Frequency | | Test Position | Figure No./N ote | Conducted Power (dBm) | Max. tune-up Power (dBm) | Measured SAR(10g) (W/kg) | Reported SAR(10g) (W/kg) | Measured SAR(1g) (W/kg) | Reported SAR(1g) (W/kg) | Power Drift (dB) |
| Ch. | MHz | | | | | | | | | |
| 1537 | 1712.4 | Front | Fig.9 | 23.68 | 24 | 0.468 | 0.50 | 0.759 | 0.82 | -0.17 |

Note1: The distance between the EUT and the phantom bottom is 15mm.

Table 14.2-10: SAR Values (WCDMA 1900 MHz Band - Head)

| Ambient Temperature: 22.9 °C | | | Liquid Temperature: 22.5°C | | | | | | | | |
|------------------------------|--------|------|----------------------------|------------------|-----------------------|--------------------------|--------------------------|--------------------------|-------------------------|-------------------------|------------------|
| Frequency | | Side | Test Position | Figure No./N ote | Conducted Power (dBm) | Max. tune-up Power (dBm) | Measured SAR(10g) (W/kg) | Reported SAR(10g) (W/kg) | Measured SAR(1g) (W/kg) | Reported SAR(1g) (W/kg) | Power Drift (dB) |
| Ch. | MHz | | | | | | | | | | |
| 9938 | 1907.6 | Left | Touch | Fig.10 | 24.24 | 24.5 | 0.095 | 0.10 | 0.138 | 0.15 | 0.18 |

Table 14.2-11: SAR Values (WCDMA 1900 MHz Band - Body)

| Ambient Temperature: 22.9 °C | | | Liquid Temperature: 22.5°C | | | | | | | | |
|------------------------------|--------|---------------|----------------------------|-----------------------|--------------------------|--------------------------|--------------------------|-------------------------|-------------------------|------------------|--|
| Frequency | | Test Position | Figure No./N ote | Conducted Power (dBm) | Max. tune-up Power (dBm) | Measured SAR(10g) (W/kg) | Reported SAR(10g) (W/kg) | Measured SAR(1g) (W/kg) | Reported SAR(1g) (W/kg) | Power Drift (dB) | |
| Ch. | MHz | | | | | | | | | | |
| 9662 | 1852.4 | Front | Fig.11 | 24.35 | 24.5 | 0.708 | 0.73 | 1.22 | 1.26 | -0.08 | |

Note1: The distance between the EUT and the phantom bottom is 10mm.

Table 14.2-12: SAR Values (LTE Band2 - Head)

| Ambient Temperature: 22.9 °C | | | | Liquid Temperature: 22.5 °C | | | | | | | | |
|------------------------------|------|---------|------|-----------------------------|------------------|-----------------------|--------------------------|--------------------------|--------------------------|-------------------------|-------------------------|------------------|
| Frequency | | Mode | Side | Test Position | Figure No./ Note | Conducted Power (dBm) | Max. tune-up Power (dBm) | Measured SAR(10g) (W/kg) | Reported SAR(10g) (W/kg) | Measured SAR(1g) (W/kg) | Reported SAR(1g) (W/kg) | Power Drift (dB) |
| Ch. | MHz | | | | | | | | | | | |
| 19100 | 1900 | 1RB_Low | Left | Touch | Fig.12 | 23.76 | 24 | 0.108 | 0.11 | 0.163 | 0.17 | 0.01 |

Note1: The LTE mode is QPSK_20MHz.

Table 14.2-13: SAR Values (LTE Band2 - Body)

| Ambient Temperature: 22.9 °C | | | | Liquid Temperature: 22.5 °C | | | | | | | |
|------------------------------|------|---------|---------------|-----------------------------|-----------------------|--------------------------|--------------------------|--------------------------|-------------------------|-------------------------|------------------|
| Frequency | | Mode | Test Position | Figure No./ Note | Conducted Power (dBm) | Max. tune-up Power (dBm) | Measured SAR(10g) (W/kg) | Reported SAR(10g) (W/kg) | Measured SAR(1g) (W/kg) | Reported SAR(1g) (W/kg) | Power Drift (dB) |
| Ch. | MHz | | | | | | | | | | |
| 19100 | 1900 | 1RB_Low | Rear | Fig.13 | 23.76 | 24 | 0.444 | 0.47 | 0.761 | 0.80 | 0.09 |

Note1: The distance between the EUT and the phantom bottom is 10mm.

Note2: The LTE mode is QPSK_20MHz.

Table 14.2-14: SAR Values (LTE Band5 - Head)

| Ambient Temperature: 22.9 °C | | | | Liquid Temperature: 22.5 °C | | | | | | | | |
|------------------------------|-----|----------|-------|-----------------------------|------------|-----------------------|--------------------------|--------------------------|--------------------------|-------------------------|-------------------------|------------------|
| Frequency | | Mode | Side | Test Position | Figure No. | Conducted Power (dBm) | Max. tune-up Power (dBm) | Measured SAR(10g) (W/kg) | Reported SAR(10g) (W/kg) | Measured SAR(1g) (W/kg) | Reported SAR(1g) (W/kg) | Power Drift (dB) |
| Ch. | MHz | | | | | | | | | | | |
| 20450 | 829 | 1RB_High | Right | Touch | Fig.14 | 23.72 | 24 | 0.310 | 0.33 | 0.407 | 0.43 | 0.18 |

Note1: The LTE mode is QPSK_10MHz.

Table 14.2-15: SAR Values (LTE Band5 - Body)

| Ambient Temperature: 22.9 °C | | | | Liquid Temperature: 22.5 °C | | | | | | | |
|------------------------------|-----|----------|---------------|-----------------------------|-----------------------|---------------------------|--------------------------|--------------------------|-------------------------|-------------------------|------------------|
| Frequency | | Mode | Test Position | Figure No. | Conducted Power (dBm) | Max. tune-up Po wer (dBm) | Measured SAR(10g) (W/kg) | Reported SAR(10g) (W/kg) | Measured SAR(1g) (W/kg) | Reported SAR(1g) (W/kg) | Power Drift (dB) |
| Ch. | MHz | | | | | | | | | | |
| 20450 | 829 | 1RB_High | Rear | Fig.15 | 23.72 | 24 | 0.461 | 0.49 | 0.641 | 0.68 | -0.03 |

Note1: The distance between the EUT and the phantom bottom is 10mm.

Note2: The LTE mode is QPSK_10MHz.

Table 14.2-16: SAR Values(LTE Band7 - Head)

| Ambient Temperature: 22.9 °C | | | | Liquid Temperature: 22.5 °C | | | | | | | | |
|------------------------------|------|---------|-------|-----------------------------|------------------|------------------------|--------------------------|--------------------------|--------------------------|-------------------------|-------------------------|------------------|
| Frequency | | Mode | Side | Test Position | Figure No./ Note | Conduct ed Power (dBm) | Max. tune-up Power (dBm) | Measured SAR(10g) (W/kg) | Reported SAR(10g) (W/kg) | Measured SAR(1g) (W/kg) | Reported SAR(1g) (W/kg) | Power Drift (dB) |
| Ch. | MHz | | | | | | | | | | | |
| 20850 | 2510 | 1RB_Low | Right | Touch | Fig.16 | 23.26 | 24.5 | 0.183 | 0.24 | 0.347 | 0.46 | 0.07 |

Note1: The LTE mode is QPSK_20MHz.

Table 14.2-17: SAR Values (LTE Band7 - Body)

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| Ambient Temperature: 22.9 °C Liquid Temperature: 22.5°C | | | | | | | | | | | |
|--|------|-------|---------------|-----------------|-----------------------|--------------------------|--------------------------|--------------------------|-------------------------|-------------------------|------------------|
| Frequency | | Mode | Test Position | Figure No./Note | Conducted Power (dBm) | Max. tune-up Power (dBm) | Measured SAR(10g) (W/kg) | Reported SAR(10g) (W/kg) | Measured SAR(1g) (W/kg) | Reported SAR(1g) (W/kg) | Power Drift (dB) |
| Ch. | MHz | | | | | | | | | | |
| 20850 | 2510 | 100RB | Bottom | / | 20.28 | 20.5 | 0.538 | 0.57 | 1.04 | 1.09 | 0.01 |

Note1: The distance between the EUT and the phantom bottom is 10mm.

Note2: The LTE mode is QPSK_20MHz.

Table 14.2-18: SAR Values (LTE Band7 - Body)

| Ambient Temperature: 22.9 °C Liquid Temperature: 22.5°C | | | | | | | | | | | |
|--|------|---------|---------------|-----------------|-----------------------|--------------------------|--------------------------|--------------------------|-------------------------|-------------------------|------------------|
| Frequency | | Mode | Test Position | Figure No./Note | Conducted Power (dBm) | Max. tune-up Power (dBm) | Measured SAR(10g) (W/kg) | Reported SAR(10g) (W/kg) | Measured SAR(1g) (W/kg) | Reported SAR(1g) (W/kg) | Power Drift (dB) |
| Ch. | MHz | | | | | | | | | | |
| 20850 | 2510 | 1RB_Low | Front | Fig.18 | 23.26 | 24.5 | 0.278 | 0.37 | 0.488 | 0.65 | -0.02 |

Note1: The distance between the EUT and the phantom bottom is 15mm.

Note2: The LTE mode is QPSK_20MHz.

Table 14.2-19: SAR Values(LTE Band12 - Head)

| Ambient Temperature: 22.9 °C Liquid Temperature: 22.5°C | | | | | | | | | | | | |
|--|-----|----------|-------|---------------|-----------------|-----------------------|--------------------------|--------------------------|--------------------------|-------------------------|-------------------------|------------------|
| Frequency | | Mode | Side | Test Position | Figure No./Note | Conducted Power (dBm) | Max. tune-up Power (dBm) | Measured SAR(10g) (W/kg) | Reported SAR(10g) (W/kg) | Measured SAR(1g) (W/kg) | Reported SAR(1g) (W/kg) | Power Drift (dB) |
| Ch. | MHz | | | | | | | | | | | |
| 23130 | 711 | 1RB_High | Right | Touch | Fig.19 | 23.84 | 24 | 0.119 | 0.12 | 0.147 | 0.15 | 0.03 |

Note1: The LTE mode is QPSK_10MHz.

Table 14.2-20: SAR Values (LTE Band12 - Body)

| Ambient Temperature: 22.9 °C Liquid Temperature: 22.5°C | | | | | | | | | | | |
|--|-----|----------|---------------|-----------------|-----------------------|--------------------------|--------------------------|--------------------------|-------------------------|-------------------------|------------------|
| Frequency | | Mode | Test Position | Figure No./Note | Conducted Power (dBm) | Max. tune-up Power (dBm) | Measured SAR(10g) (W/kg) | Reported SAR(10g) (W/kg) | Measured SAR(1g) (W/kg) | Reported SAR(1g) (W/kg) | Power Drift (dB) |
| Ch. | MHz | | | | | | | | | | |
| 23130 | 711 | 1RB_High | Rear | Fig.20 | 23.84 | 24 | 0.200 | 0.21 | 0.281 | 0.29 | 0.02 |

Note1: The distance between the EUT and the phantom bottom is 10mm.

Note2: The LTE mode is QPSK_10MHz.

Table 14.2-21: SAR Values(LTE Band13 - Head)

| Ambient Temperature: 22.9 °C Liquid Temperature: 22.5°C | | | | | | | | | | | | |
|--|-----|---------|-------|---------------|-----------------|-----------------------|--------------------------|--------------------------|--------------------------|-------------------------|-------------------------|------------------|
| Frequency | | Mode | Side | Test Position | Figure No./Note | Conducted Power (dBm) | Max. tune-up Power (dBm) | Measured SAR(10g) (W/kg) | Reported SAR(10g) (W/kg) | Measured SAR(1g) (W/kg) | Reported SAR(1g) (W/kg) | Power Drift (dB) |
| Ch. | MHz | | | | | | | | | | | |
| 23230 | 782 | 1RB_Low | Right | Touch | Fig.21 | 23.54 | 24 | 0.229 | 0.25 | 0.293 | 0.33 | 0.02 |

Note1: The LTE mode is QPSK_10MHz.

Table 14.2-22: SAR Values (LTE Band13 - Body)

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| Ambient Temperature: 22.9 °C Liquid Temperature: 22.5°C | | | | | | | | | | | |
|--|-----|---------|---------------|-----------------|-----------------------|--------------------------|--------------------------|--------------------------|-------------------------|-------------------------|------------------|
| Frequency | | Mode | Test Position | Figure No./Note | Conducted Power (dBm) | Max. tune-up Power (dBm) | Measured SAR(10g) (W/kg) | Reported SAR(10g) (W/kg) | Measured SAR(1g) (W/kg) | Reported SAR(1g) (W/kg) | Power Drift (dB) |
| Ch. | MHz | | | | | | | | | | |
| 23230 | 782 | 1RB_Low | Rear | Fig.22 | 23.54 | 24 | 0.284 | 0.32 | 0.446 | 0.50 | 0.05 |

Note1: The distance between the EUT and the phantom bottom is 10mm.

Note2: The LTE mode is QPSK_10MHz.

Table 14.2-23: SAR Values(LTE Band38 - Head)

| Ambient Temperature: 22.9 °C Liquid Temperature: 22.5°C | | | | | | | | | | | | |
|--|------|---------|-------|---------------|-----------------|-----------------------|--------------------------|--------------------------|--------------------------|-------------------------|-------------------------|------------------|
| Frequency | | Mode | Side | Test Position | Figure No./Note | Conducted Power (dBm) | Max. tune-up Power (dBm) | Measured SAR(10g) (W/kg) | Reported SAR(10g) (W/kg) | Measured SAR(1g) (W/kg) | Reported SAR(1g) (W/kg) | Power Drift (dB) |
| Ch. | MHz | | | | | | | | | | | |
| 38150 | 2610 | 1RB_Mid | Right | Touch | Fig.23 | 23.82 | 24 | 0.044 | 0.05 | 0.083 | 0.09 | 0.06 |

Note1: The LTE mode is QPSK_20MHz.

Table 14.2-24: SAR Values (LTE Band38 - Body)

| Ambient Temperature: 22.9 °C Liquid Temperature: 22.5°C | | | | | | | | | | | |
|--|------|---------|---------------|-----------------|-----------------------|--------------------------|--------------------------|--------------------------|-------------------------|-------------------------|------------------|
| Frequency | | Mode | Test Position | Figure No./Note | Conducted Power (dBm) | Max. tune-up Power (dBm) | Measured SAR(10g) (W/kg) | Reported SAR(10g) (W/kg) | Measured SAR(1g) (W/kg) | Reported SAR(1g) (W/kg) | Power Drift (dB) |
| Ch. | MHz | | | | | | | | | | |
| 38150 | 2610 | 1RB_Mid | Bottom | Fig.24 | 23.82 | 24 | 0.345 | 0.36 | 0.672 | 0.70 | -0.03 |

Note1: The distance between the EUT and the phantom bottom is 10mm.

Note2: The LTE mode is QPSK_20MHz.

Table 14.2-27: SAR Values(LTE Band41 - Head)

| Ambient Temperature: 22.9 °C Liquid Temperature: 22.5°C | | | | | | | | | | | | |
|--|------|----------|-------|---------------|-----------------|-----------------------|--------------------------|--------------------------|--------------------------|-------------------------|-------------------------|------------------|
| Frequency | | Mode | Side | Test Position | Figure No./Note | Conducted Power (dBm) | Max. tune-up Power (dBm) | Measured SAR(10g) (W/kg) | Reported SAR(10g) (W/kg) | Measured SAR(1g) (W/kg) | Reported SAR(1g) (W/kg) | Power Drift (dB) |
| Ch. | MHz | | | | | | | | | | | |
| 41490 | 2680 | 1RB_High | Right | Touch | Fig.27 | 23.79 | 24 | 0.041 | 0.04 | 0.080 | 0.08 | 0.04 |

Note1: The LTE mode is QPSK_20MHz.

Table 14.2-28: SAR Values (LTE Band41 - Body)

| Ambient Temperature: 22.9 °C Liquid Temperature: 22.5°C | | | | | | | | | | | | |
|--|------|----------|--------|---------------|-----------------|-----------------------|--------------------------|--------------------------|--------------------------|-------------------------|-------------------------|------------------|
| Frequency | | Mode | Side | Test Position | Figure No./Note | Conducted Power (dBm) | Max. tune-up Power (dBm) | Measured SAR(10g) (W/kg) | Reported SAR(10g) (W/kg) | Measured SAR(1g) (W/kg) | Reported SAR(1g) (W/kg) | Power Drift (dB) |
| Ch. | MHz | | | | | | | | | | | |
| 39750 | 2506 | 1RB_High | Bottom | Fig.28 | 22.58 | 24 | 0.443 | 0.61 | 0.853 | 1.18 | -0.14 | |

Note1: The distance between the EUT and the phantom bottom is 10mm.

Note2: The LTE mode is QPSK_20MHz.

Table 14.1-29: SAR Values(LTE Band4 - Head)

| Ambient Temperature: 22.9 °C Liquid Temperature: 22.5°C | | | | | | | | | | | | |
|---|------|----------|------|---------------|------------------|-----------------------|--------------------------|--------------------------|--------------------------|-------------------------|-------------------------|------------------|
| Frequency | | Mode | Side | Test Position | Figure No./ Note | Conducted Power (dBm) | Max. tune-up Power (dBm) | Measured SAR(10g) (W/kg) | Reported SAR(10g) (W/kg) | Measured SAR(1g) (W/kg) | Reported SAR(1g) (W/kg) | Power Drift (dB) |
| Ch. | MHz | | | | | | | | | | | |
| 20050 | 1720 | 1RB_High | Left | Touch | Fig.29 | 24.12 | 25 | 0.138 | 0.17 | 0.207 | 0.25 | 0.10 |

Note1: The LTE mode is QPSK_20MHz.

Table 14.1-30: SAR Values (LTE Band4 - Body)

| Ambient Temperature: 22.9 °C Liquid Temperature: 22.5°C | | | | | | | | | | | |
|---|------|----------|---------------|------------------|-----------------------|--------------------------|--------------------------|--------------------------|-------------------------|-------------------------|------------------|
| Frequency | | Mode | Test Position | Figure No./N ote | Conducted Power (dBm) | Max. tune-up Power (dBm) | Measured SAR(10g) (W/kg) | Reported SAR(10g) (W/kg) | Measured SAR(1g) (W/kg) | Reported SAR(1g) (W/kg) | Power Drift (dB) |
| Ch. | MHz | | | | | | | | | | |
| 20300 | 1745 | 50RB_Low | Bottom | Fig.30 | 22.49 | 23.5 | 0.510 | 0.64 | 0.884 | 1.12 | -0.04 |

Note1: The distance between the EUT and the phantom bottom is 10mm.

Note2: The LTE mode is QPSK_20MHz.

Table 14.1-31: SAR Values (LTE Band4 - Body)

| Ambient Temperature: 22.9 °C Liquid Temperature: 22.5°C | | | | | | | | | | | |
|---|--------|----------|---------------|------------------|-----------------------|--------------------------|--------------------------|--------------------------|-------------------------|-------------------------|------------------|
| Frequency | | Mode | Test Position | Figure No./N ote | Conducted Power (dBm) | Max. tune-up Power (dBm) | Measured SAR(10g) (W/kg) | Reported SAR(10g) (W/kg) | Measured SAR(1g) (W/kg) | Reported SAR(1g) (W/kg) | Power Drift (dB) |
| Ch. | MHz | | | | | | | | | | |
| 20175 | 1732.5 | 1RB_High | Front | Fig.31 | 24.10 | 25 | 0.505 | 0.62 | 0.838 | 1.03 | 0.04 |

Note1: The distance between the EUT and the phantom bottom is 15mm.

Note2: The LTE mode is QPSK_20MHz.

Table 14.1-32: SAR Values (LTE band26 - Head)

| Ambient Temperature: 22.9 °C Liquid Temperature: 22.5°C | | | | | | | | | | | | |
|---|-------|---------|-------|---------------|------------|-----------------------|--------------------------|--------------------------|--------------------------|-------------------------|-------------------------|------------------|
| Frequency | | Mode | Side | Test Position | Figure No. | Conducted Power (dBm) | Max. tune-up Power (dBm) | Measured SAR(10g) (W/kg) | Reported SAR(10g) (W/kg) | Measured SAR(1g) (W/kg) | Reported SAR(1g) (W/kg) | Power Drift (dB) |
| Ch. | MHz | | | | | | | | | | | |
| 26965 | 841.5 | 1RB_Low | Right | Touch | Fig.32 | 24.18 | 24.5 | 0.278 | 0.30 | 0.370 | 0.40 | -0.07 |

Note1: The LTE mode is QPSK_15MHz.

Table 14.1-33: SAR Values (LTE band26 - Body)

| Ambient Temperature: 22.9 °C Liquid Temperature: 22.5°C | | | | | | | | | | | |
|---|-------|---------|---------------|------------------|-----------------------|--------------------------|--------------------------|--------------------------|-------------------------|-------------------------|------------------|
| Frequency | | Mode | Test Position | Figure No./N ote | Conducted Power (dBm) | Max. tune-up Power (dBm) | Measured SAR(10g) (W/kg) | Reported SAR(10g) (W/kg) | Measured SAR(1g) (W/kg) | Reported SAR(1g) (W/kg) | Power Drift (dB) |
| Ch. | MHz | | | | | | | | | | |
| 26965 | 841.5 | 1RB_Low | Rear | Fig.33 | 24.18 | 24.5 | 0.505 | 0.54 | 0.720 | 0.78 | -0.03 |

Note1: The distance between the EUT and the phantom bottom is 10mm.

Note2: The LTE mode is QPSK_15MHz.

14.3 WLAN Evaluation for 2.4G

According to the KDB248227 D01, SAR is measured for 2.4GHz 802.11b DSSS using the initial test position procedure.

Head Evaluation

Table 14.3-1: SAR Values(WLAN - Head)– 802.11b (Fast SAR)

| | | Ambient Temperature: 22.9 °C | | | | Liquid Temperature: 22.5°C | | | | | |
|-----------|-----|------------------------------|---------------|------------------|-----------------------|----------------------------|--------------------------|--------------------------|-------------------------|-------------------------|------------------|
| Frequency | | Side | Test Position | Figure No./ Note | Conducted Power (dBm) | Max. tune-upPower (dBm) | Measured SAR(10g) (W/kg) | Reported SAR(10g) (W/kg) | Measured SAR(1g) (W/kg) | Reported SAR(1g) (W/kg) | Power Drift (dB) |
| MHz | Ch. | | | | | | | | | | |
| 2437 | 6 | Left | Touch | / | 14.23 | 14.5 | 0.397 | 0.42 | 0.869 | 0.92 | -0.19 |
| 2437 | 6 | Left | Tilt | / | 14.23 | 14.5 | 0.431 | 0.46 | 0.932 | 0.99 | 0.06 |
| 2437 | 6 | Right | Touch | / | 14.23 | 14.5 | 0.229 | 0.24 | 0.484 | 0.52 | -0.19 |
| 2437 | 6 | Right | Tilt | / | 14.23 | 14.5 | 0.245 | 0.26 | 0.530 | 0.56 | -0.07 |

As shown above table, the initial test position for head is “LeftTilt”. So the head SAR of WLAN is presented as below:

Table 14.3-2: SAR Values(WLAN - Head)– 802.11b (Full SAR)

| | | Ambient Temperature: 22.9 °C | | | | Liquid Temperature: 22.5°C | | | | | |
|-----------|-----|------------------------------|---------------|------------------|-----------------------|----------------------------|--------------------------|--------------------------|-------------------------|-------------------------|------------------|
| Frequency | | Side | Test Position | Figure No./ Note | Conducted Power (dBm) | Max. tune-upPower (dBm) | Measured SAR(10g) (W/kg) | Reported SAR(10g) (W/kg) | Measured SAR(1g) (W/kg) | Reported SAR(1g) (W/kg) | Power Drift (dB) |
| MHz | Ch. | | | | | | | | | | |
| 2437 | 6 | Left | Tilt | Fig.34 | 14.23 | 14.5 | 0.435 | 0.46 | 1.06 | 1.13 | 0.06 |
| 2437 | 6 | Left | Touch | / | 14.23 | 14.5 | 0.400 | 0.43 | 0.957 | 1.02 | -0.19 |
| 2437 | 6 | Right | Tilt | / | 14.23 | 14.5 | 0.256 | 0.27 | 0.582 | 0.62 | -0.07 |
| 2462 | 11 | Left | Tilt | / | 13.88 | 14.5 | 0.307 | 0.35 | 0.779 | 0.90 | 0.07 |
| 2462 | 11 | Left | Touch | / | 13.88 | 14.5 | 0.270 | 0.31 | 0.677 | 0.78 | 0.07 |

Note1: When the reported SAR of the initial test position is > 0.4 W/kg, SAR is repeated for the 802.11 transmission mode configuration tested in the initial test position using subsequent highest estimated 1-g SAR conditions determined by area scans, on the highest maximum output power channel, until the reported SAR is ≤ 0.8 W/kg.

Note2: For all positions/configurations tested using the initial test position and subsequent test positions, when the reported SAR is > 0.8 W/kg, SAR is measured for these test positions/configurations on the subsequent next highest measured output power channel until the reported SAR is ≤ 1.2 W/kg or all required channels are tested.

According to the KDB248227 D01, The reported SAR must be scaled to 100% transmission duty factor to determine compliance at the maximum tune-up tolerance limit. The scaled reported SAR is presented as below.

Table 14.3-3: SAR Values (WLAN - Head) – 802.11b (Scaled Reported SAR)

| | | Ambient Temperature: 22.9 °C | | | | Liquid Temperature: 22.5°C | | |
|-----------|-----|------------------------------|---------------|--------------------|---------------------|----------------------------|--------------------------------|--|
| Frequency | | Side | Test Position | Actual duty factor | maximum duty factor | Reported SAR (1g)(W/kg) | Scaled reported SAR (1g)(W/kg) | |
| MHz | Ch. | | | | | | | |
| 2437 | 6 | Left | Tilt | 97.63% | 100% | 1.13 | 1.16 | |
| 2437 | 6 | Left | Touch | 97.63% | 100% | 1.02 | 1.04 | |

SAR is not required for OFDM because the 802.11b adjusted SAR ≤ 1.2 W/kg.

Body Evaluation
Table 14.3-4: SAR Values(WLAN - Body)– 802.11b (Fast SAR)

| Ambient Temperature: 22.9 °C | | | | Liquid Temperature: 22.5°C | | | | | | |
|------------------------------|-----|---------------|------------------|----------------------------|-------------------------|--------------------------|--------------------------|-------------------------|------------------------|------------------|
| Frequency | | Test Position | Figure No./ Note | Conducted Power (dBm) | Max. tune-upPower (dBm) | Measured SAR(10g) (W/kg) | Reported SAR(10g) (W/kg) | Measured SAR(1g) (W/kg) | Reported SAR(1g)(W/kg) | Power Drift (dB) |
| MHz | Ch. | | | | | | | | | |
| 2437 | 6 | Front | / | 18.50 | 19 | 0.144 | 0.16 | 0.268 | 0.30 | 0.09 |
| 2437 | 6 | Rear | / | 18.50 | 19 | 0.130 | 0.15 | 0.256 | 0.29 | 0.19 |
| 2437 | 6 | Right | / | 18.50 | 19 | 0.053 | 0.06 | 0.109 | 0.12 | -0.11 |
| 2437 | 6 | Top | / | 18.50 | 19 | 0.204 | 0.23 | 0.435 | 0.49 | -0.03 |

As shown above table, the initial test position for body is “Front”. So the body SAR of WLAN is presented as below:

Table 14.3-5: SAR Values(WLAN - Body)– 802.11b (Full SAR)

| Ambient Temperature: 22.9 °C | | | | Liquid Temperature: 22.5°C | | | | | | |
|------------------------------|-----|---------------|------------------|----------------------------|-------------------------|--------------------------|--------------------------|-------------------------|------------------------|------------------|
| Frequency | | Test Position | Figure No./ Note | Conducted Power (dBm) | Max. tune-upPower (dBm) | Measured SAR(10g) (W/kg) | Reported SAR(10g) (W/kg) | Measured SAR(1g) (W/kg) | Reported SAR(1g)(W/kg) | Power Drift (dB) |
| MHz | Ch. | | | | | | | | | |
| 2437 | 6 | Top | Fig.35 | 18.50 | 19 | 0.228 | 0.26 | 0.463 | 0.52 | -0.03 |

Note1: When the reported SAR of the initial test position is > 0.4 W/kg, SAR is repeated for the 802.11 transmission mode configuration tested in the initial test position using subsequent highest estimated 1-g SAR conditions determined by area scans, on the highest maximum output power channel, until the reported SAR is ≤ 0.8 W/kg.

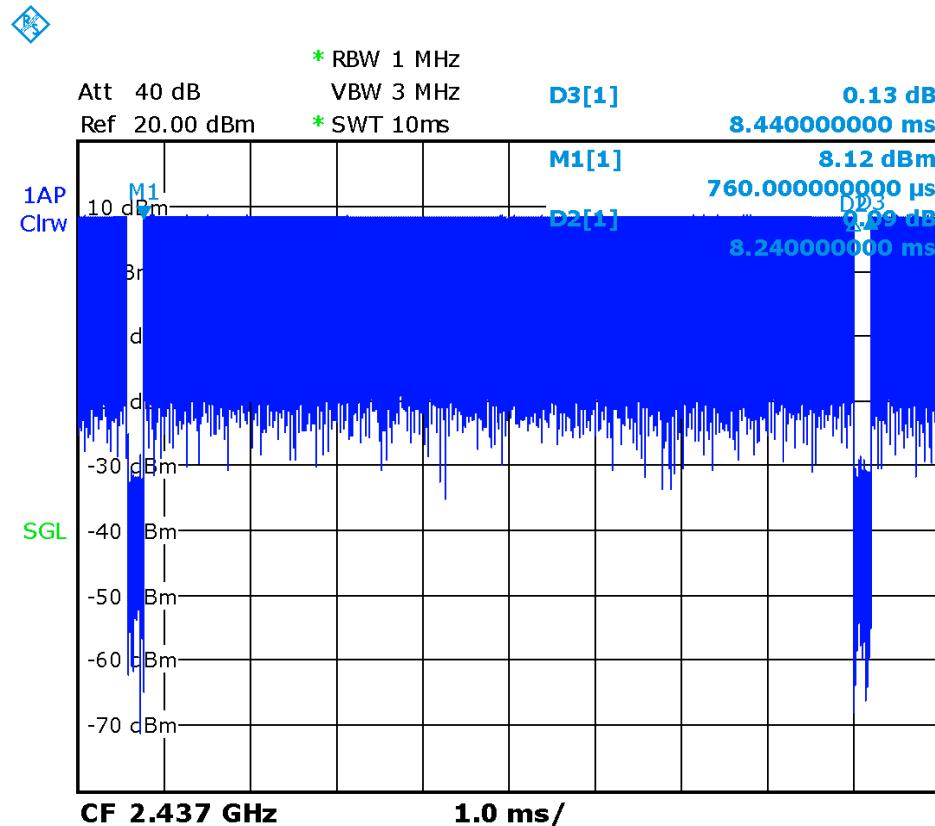
Note2: For all positions/configurations tested using the initial test position and subsequent test positions, when the reported SAR is > 0.8 W/kg, SAR is measured for these test positions/configurations on the subsequent next highest measured output power channel until the reported SAR is ≤ 1.2 W/kg or all required channels are tested.

According to the KDB248227 D01, The reported SAR must be scaled to 100% transmission duty factor to determine compliance at the maximum tune-up tolerance limit. The scaled reported SAR is presented as below.

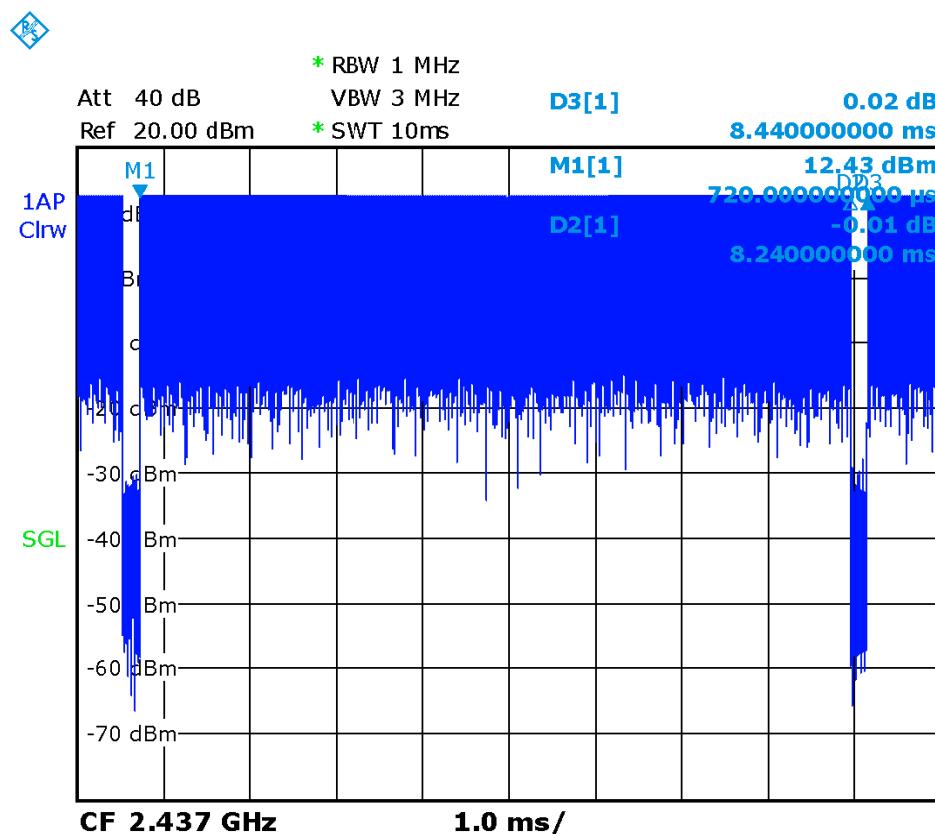
Table 14.3-6: SAR Values (WLAN - Body) – 802.11b (Scaled Reported SAR)

| Ambient Temperature: 22.9 °C | | | | Liquid Temperature: 22.5°C | | |
|------------------------------|-----|---------------|--------------------|----------------------------|-------------------------|--------------------------------|
| Frequency | | Test Position | Actual duty factor | maximum duty factor | Reported SAR (1g)(W/kg) | Scaled reported SAR (1g)(W/kg) |
| MHz | Ch. | | | | | |
| 2437 | 6 | Front | 97.63% | 100% | 0.30 | 0.31 |
| 2437 | 6 | Top | 97.63% | 100% | 0.52 | 0.53 |

SAR is not required for OFDM because the 802.11b adjusted SAR ≤ 1.2 W/kg.



Picture 14.1 Duty factor plot for head



Picture 14.2 Duty factor plot for body

14.4 WLAN Evaluation For 5G

Table 14.4-1: OFDM mode specified maximum output power of WLAN antenna

| 802.11 mode | a | g | n | | ac | | | |
|--------------------|----|----|----|----|----|----|----|-----|
| Ch. BW(MHz) | 20 | 20 | 20 | 40 | 20 | 40 | 80 | 160 |
| U-NII-1 | X | | X | X | X | X | X | |
| U-NII-2A | X | | X | X | X | X | X | |
| U-NII-2C | X | | X | X | X | X | X | |
| U-NII-3 | X | | X | X | X | X | X | |
| § 15.247 (5.8 GHz) | | | | | | | | |

X: maximum(conducted) output power(mW), including tolerance, specified for production units

Table 14.4-2: Maximum output power specified of WLAN antenna

| 802.11 mode | a | g | n | | ac | | | |
|--------------------|----|----|----|----|----|----|----|-----|
| Ch. BW(MHz) | 20 | 20 | 20 | 40 | 20 | 40 | 80 | 160 |
| U-NII-1 | 25 | | 20 | 13 | 16 | 10 | 7 | |
| U-NII-2A | 25 | | 20 | 13 | 16 | 10 | 7 | |
| U-NII-2C | 16 | | 13 | 10 | 11 | 8 | 4 | |
| U-NII-3 | 20 | | 16 | 18 | 13 | 14 | 7 | |
| § 15.247 (5.8 GHz) | | | | | | | | |

- The maximum output power specified for production units is the same for all channels, modulations and data rates in each channel bandwidth configuration of the 802.11a/g/n/ac modes.
- The blue highlighted cells represent highest output configurations in each standalone or aggregated frequency band, with tune-up tolerance included.

Table 14.4-3: Maximum output power measured of WLAN antenna, for the applicable OFDM configurations according to the default power measurement procedures for selection initial test configurations

| 802.11 mode | a | n | | ac | | |
|-------------|--|---|----------------------------|---|----------------------------|--------------------|
| BW(MHz) | 20 | 20 | 40 | 20 | 40 | 80 |
| U-NII-1 | 36/40/44/48 18/19/21/22 | 36/40/44/48 Lower power | 38/46 Lower power | 36/40/44/48 Lower power | 38/46 Lower power | 42 Lower power |
| U-NII-2A | 52/56/60/64 23/19/20/19 | 52/56/60/64 Lower power | 54/62 Lower power | 52/56/60/64 Lower power | 54/62 Lower power | 58 Lower power |
| U-NII-2C | 100/104/108/112 13/13/14/15 116/120/124/128 15/15/14/12 132/136/140/144 11/10/11/13 | 100/104/108/112 116/132/136/140 Lower power | 102/110/134 Lower power | 100/104/108 /112 116/132/136/ 140 Lower power | 102/110/134 Lower power | 106 Lower power |
| U-NII-3 | 149/153/157/161/165 16/18/16/14/13 | 149/153/157/16 1/165 Lower power | 151/159 Lower power | 149/153/157 /161/165 Lower power | 151/159 Lower power | 155 Lower power |

- Channels with measured maximum power within 0.25dB are considered to have the same measured output.

Channels selected for initial test configuration are highlighted in yellow.

Table 14.4-4: Reported SAR of initial test configuration for Head

| 802.11 mode | a | n | | ac | | |
|-------------|--|------------------------------------|-------------------------|------------------------------------|-----------------|-----|
| BW(MHz) | 20 | 20 | 40 | 20 | 40 | 80 |
| U-NII-1 | 36/40/44/48 U-NII-2A exclusion applied | 36/40/44/48 | 38/46 | 36/40/44/48 | 38/46 | 42 |
| U-NII-2A | 52/56/60/64 0.95 / 0.94 | 52/56/60/64 | 54/62 | 52/56/60/64 | 54/62 | 58 |
| U-NII-2C | 100/104/108/112/116/120/12 4/128/132/136/140/144 0.92 / 0.95 | 100/104/108/112 116/132/136/140 | 102/110/118/ 126/134 | 100/104/108/112 116/132/136/140 | 102/110 /134 | 106 |
| U-NII-3 | 149/153/157/161/165 0.73 | 149/153/157/161/ 165 | 151/159 | 149/153/157/161 /165 | 151/159 | 155 |

U-NII-1 and U-NII-2A bands have the same specified maximum output and tolerance; SAR is measured for U-NII-2A band first. Adjusted SAR of U-NII-2A band is $\leq 1.2\text{ W/kg}$, SAR is not required for U-NII-1 band.

Initial test configuration SAR for U-NII-2A band is $> 0.8\text{ W/kg}$, SAR is required for next highest output channel in initial test configuration. The next highest output channel SAR is $\leq 1.2\text{ W/kg}$, SAR is not required for subsequent next highest output channel. Similar circumstances apply to U-NII-2C band and U-NII-3 band.

The green highlighted channels are next highest measured output channel in the initial test configuration. Highest measured output power channel tested initially are in yellow highlight.

Table 14.4-5: Reported SAR of initial test configuration for Body

| 802.11 mode | a | n | | ac | | |
|-------------|---|------------------------------------|-------------------------|------------------------------------|-----------------|-----|
| BW(MHz) | 20 | 20 | 40 | 20 | 40 | 80 |
| U-NII-1 | 36/40/44/48 U-NII-2A exclusion applied | 36/40/44/48 | 38/46 | 36/40/44/48 | 38/46 | 42 |
| U-NII-2A | 52/56/60/64 0.05 | 52/56/60/64 | 54/62 | 52/56/60/64 | 54/62 | 58 |
| U-NII-2C | 100/104/108/112/116/120/12 4/128/132/136/140/144 0.16 | 100/104/108/112 116/132/136/140 | 102/110/118/ 126/134 | 100/104/108/112 116/132/136/140 | 102/110 /134 | 106 |
| U-NII-3 | 149/153/157/161/165 0.16 | 149/153/157/161/ 165 | 151/159 | 149/153/157/161 /165 | 151/159 | 155 |

U-NII-1 and U-NII-2A bands have the same specified maximum output and tolerance; SAR is measured for U-NII-2A band first. Adjusted SAR of U-NII-2A band is $\leq 1.2\text{ W/kg}$, SAR is not required for U-NII-1 band.

Highest measured output power channel tested initially are in yellow highlight.

Table 14.4-6: SAR Values(WLAN - Head)– 802.11a 6Mbps

| Frequency | | Side | Test Position | Figure No. | Conducted Power (dBm) | Max. tune-upPower (dBm) | Measured SAR(10g) (W/kg) | Reported SAR(10g) (W/kg) | Measured SAR(1g) (W/kg) | Reported SAR(1g)(W/kg) | Power Drift (dB) |
|-----------|-----|-------|---------------|------------|-----------------------|-------------------------|--------------------------|--------------------------|-------------------------|------------------------|------------------|
| MHz | Ch. | | | | | | | | | | |
| 5260 | 52 | Left | Touch | / | 13.64 | 14 | 0.169 | 0.18 | 0.646 | 0.70 | 0.08 |
| 5260 | 52 | Left | Tilt | / | 13.64 | 14 | 0.176 | 0.19 | 0.661 | 0.72 | -0.02 |
| 5260 | 52 | Right | Touch | / | 13.64 | 14 | 0.186 | 0.20 | 0.710 | 0.77 | -0.09 |
| 5260 | 52 | Right | Tilt | / | 13.64 | 14 | 0.231 | 0.25 | 0.767 | 0.83 | -0.17 |
| 5300 | 60 | Right | Tilt | / | 13.01 | 14 | 0.192 | 0.24 | 0.655 | 0.82 | -0.02 |
| 5600 | 120 | Left | Touch | / | 11.81 | 12 | 0.216 | 0.23 | 0.765 | 0.80 | 0.05 |
| 5600 | 120 | Left | Tilt | / | 11.81 | 12 | 0.197 | 0.21 | 0.670 | 0.70 | -0.01 |
| 5600 | 120 | Right | Touch | / | 11.81 | 12 | 0.204 | 0.21 | 0.701 | 0.73 | 0.02 |
| 5600 | 120 | Right | Tilt | Fig.36 | 11.81 | 12 | 0.225 | 0.24 | 0.796 | 0.83 | -0.16 |
| 5580 | 116 | Right | Tilt | / | 11.87 | 12 | 0.182 | 0.19 | 0.781 | 0.80 | -0.06 |
| 5765 | 153 | Left | Touch | / | 12.45 | 13 | 0.134 | 0.15 | 0.436 | 0.49 | 0.15 |
| 5765 | 153 | Left | Tilt | / | 12.45 | 13 | 0.138 | 0.16 | 0.407 | 0.46 | -0.05 |
| 5765 | 153 | Right | Touch | / | 12.45 | 13 | 0.132 | 0.15 | 0.439 | 0.50 | 0.02 |
| 5765 | 153 | Right | Tilt | / | 12.45 | 13 | 0.153 | 0.17 | 0.561 | 0.64 | -0.07 |

Table 14.4-7: SAR Values (WLAN - Body)– 802.11a6Mbps

| Frequency | | Test Position | Figure No. | Conducted Power (dBm) | Max. tune-upPower (dBm) | Measured SAR(10g) (W/kg) | Reported SAR(10g) (W/kg) | Measured SAR(1g) (W/kg) | Reported SAR(1g)(W/kg) | Power Drift (dB) |
|-----------|-----|---------------|------------|-----------------------|-------------------------|--------------------------|--------------------------|-------------------------|------------------------|------------------|
| MHz | Ch. | | | | | | | | | |
| 5260 | 52 | Front | / | 13.64 | 14 | 0.008 | 0.01 | 0.024 | 0.03 | 0.01 |
| 5260 | 52 | Rear | / | 13.64 | 14 | 0.020 | 0.02 | 0.038 | 0.04 | 0.01 |
| 5260 | 52 | Right | / | 13.64 | 14 | < 0.01 | < 0.01 | < 0.01 | < 0.01 | -0.08 |
| 5260 | 52 | Top | / | 13.64 | 14 | 0.016 | 0.02 | 0.018 | 0.02 | -0.01 |
| 5600 | 120 | Front | / | 11.81 | 12 | 0.024 | 0.03 | 0.081 | 0.09 | 0.09 |
| 5600 | 120 | Rear | / | 11.81 | 12 | 0.039 | 0.04 | 0.116 | 0.12 | -0.05 |
| 5600 | 120 | Right | / | 11.81 | 12 | 0.016 | 0.02 | 0.045 | 0.05 | 0.05 |
| 5600 | 120 | Top | Fig.37 | 11.81 | 12 | 0.045 | 0.05 | 0.132 | 0.14 | 0.09 |
| 5765 | 153 | Front | / | 12.45 | 13 | 0.024 | 0.03 | 0.081 | 0.09 | 0.05 |
| 5765 | 153 | Rear | / | 12.45 | 13 | 0.033 | 0.04 | 0.098 | 0.11 | 0.05 |
| 5765 | 153 | Right | / | 12.45 | 13 | 0.009 | 0.01 | 0.029 | 0.03 | -0.01 |
| 5765 | 153 | Top | / | 12.45 | 13 | 0.041 | 0.05 | 0.124 | 0.14 | 0.06 |

Note: The distance between the EUT and the phantom bottom is 10mm.

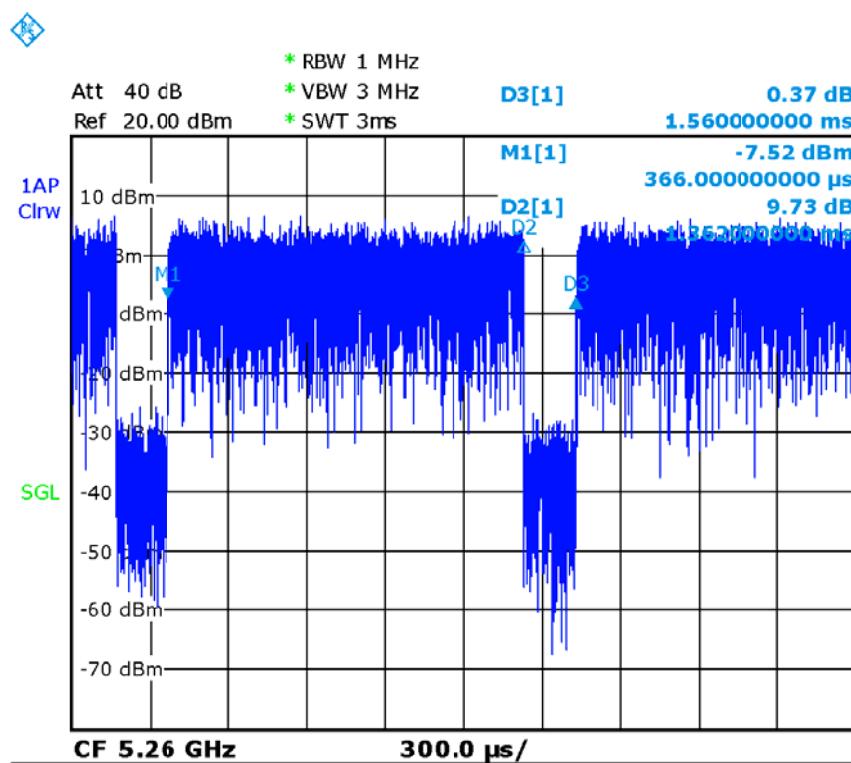
According to the KDB248227 D01, The reported SAR must be scaled to 100% transmission duty factor to determine compliance at the maximum tune-up tolerance limit. The scaled reported SAR is presented as below.

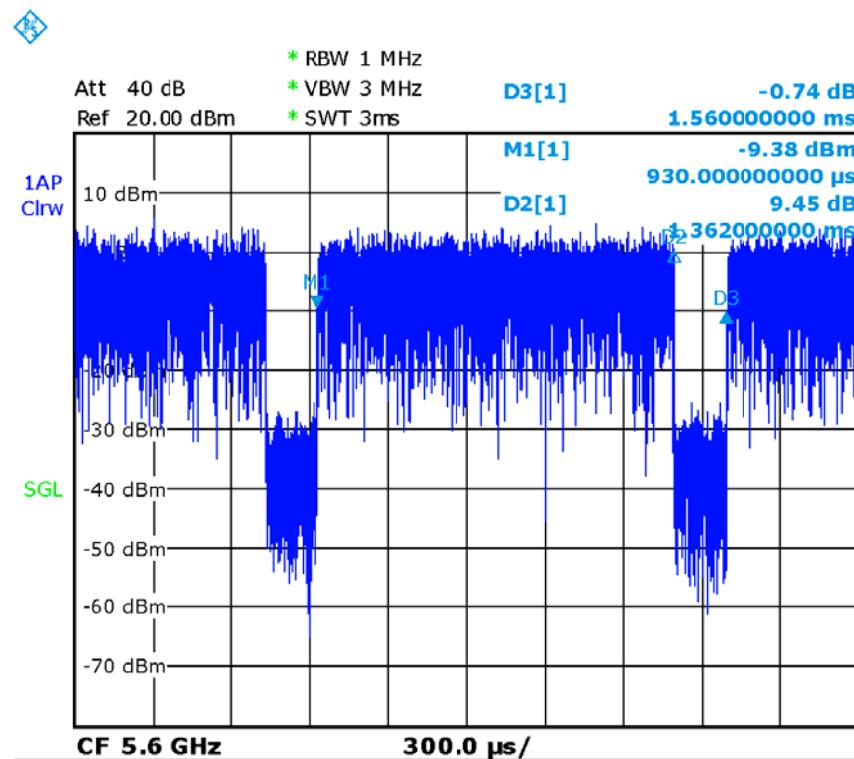
Table 14.4-8: SAR Values (WLAN - Head) – 802.11a 6Mbps (Scaled Reported SAR)

| Frequency | | Side | Test Position | Actual duty factor | maximum duty factor | Reported SAR (1g)(W/kg) | Scaled reported SAR (1g)(W/kg) |
|-----------|-----|-------|---------------|--------------------|---------------------|-------------------------|--------------------------------|
| MHz | Ch. | | | | | | |
| 5260 | 52 | Right | Tilt | 87.31% | 100% | 0.83 | 0.95 |
| 5300 | 60 | Right | Tilt | 87.31% | 100% | 0.82 | 0.94 |
| 5600 | 120 | Right | Tilt | 87.31% | 100% | 0.83 | 0.95 |
| 5580 | 116 | Right | Tilt | 87.31% | 100% | 0.80 | 0.92 |
| 5765 | 153 | Right | Tilt | 87.31% | 100% | 0.64 | 0.73 |
| 5260 | 52 | Right | Touch | 87.31% | 100% | 0.77 | 0.88 |

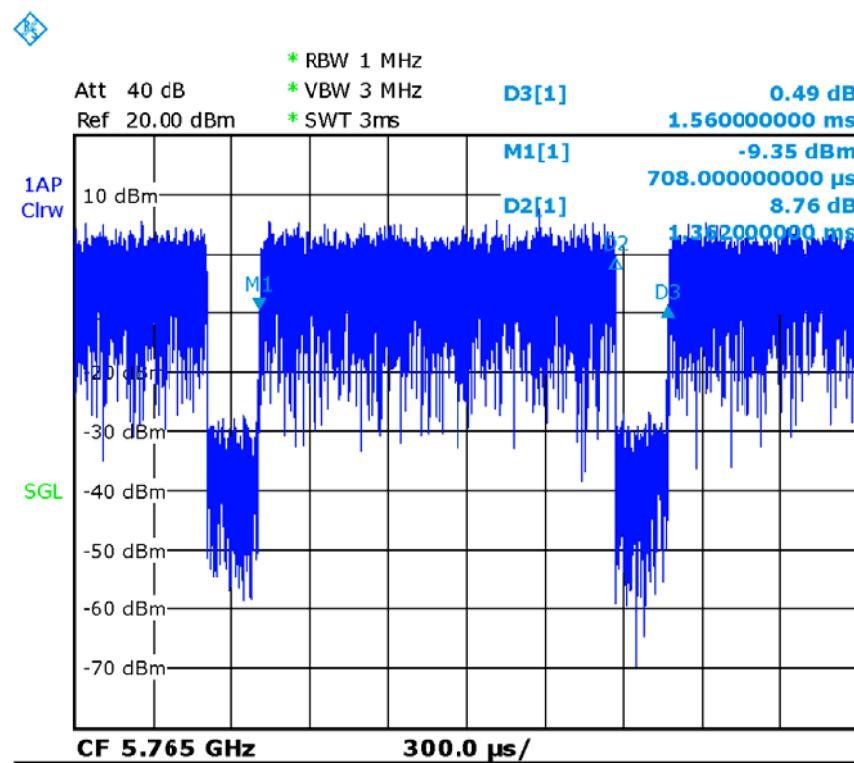
Table 14.4-9: SAR Values (WLAN - Body) – 802.11a 6Mbps (Scaled Reported SAR)

| Frequency | | Test Position | D (mm) | Actual duty factor | maximum duty factor | Reported SAR (1g)(W/kg) | Scaled reported SAR (1g)(W/kg) |
|-----------|-----|---------------|--------|--------------------|---------------------|-------------------------|--------------------------------|
| MHz | Ch. | | | | | | |
| 5260 | 52 | Rear | 10 | 87.31% | 100% | 0.04 | 0.05 |
| 5600 | 120 | Top | 10 | 87.31% | 100% | 0.14 | 0.16 |
| 5765 | 153 | Top | 10 | 87.31% | 100% | 0.14 | 0.16 |


Picture 14.3 The plot of duty factor for U-NII-2A



Picture 14.4 The plot of duty factor for U-NII-2C



Picture 14.5 The plot of duty factor for U-NII-3

15SAR Measurement Variability

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

The following procedures are applied to determine if repeatedmeasurements are required.

- 1) Repeated measurement is not required when the original highest measured SAR is < 0.80 W/kg; steps2) through 4) do not apply.
- 2) When the original highest measured SAR is ≥ 0.80 W/kg, repeat that measurement once.
- 3) Perform a second repeated measurement only if the ratio of largest to smallest SAR for the originaland first repeated measurements is > 1.20 or when the original or repeated measurement is ≥ 1.45 W/kg ($\sim 10\%$ from the 1-g SAR limit).
- 4) Perform a third repeated measurement only if the original, first or second repeated measurement is ≥ 1.5 W/kg and the ratio of largest to smallest SAR for the original, first and second repeatedmeasurements is > 1.20 .

Table 15.1: SAR Measurement Variability for Body GSM850 (1g)

| Frequency | | Test Position | Spacing (mm) | Original SAR (W/kg) | First Repeated SAR (W/kg) | The Ratio | Second Repeated SAR (W/kg) |
|-----------|-------|---------------|--------------|---------------------|---------------------------|-----------|----------------------------|
| Ch. | MHz | | | | | | |
| 128 | 824.2 | Front | 10 | 1.03 | 1.02 | 1.01 | / |

Table 15.2: SAR Measurement Variability for Body PCS1900 (1g)

| Frequency | | Test Position | Spacing (mm) | Original SAR (W/kg) | First Repeated SAR (W/kg) | The Ratio | Second Repeated SAR (W/kg) |
|-----------|------|---------------|--------------|---------------------|---------------------------|-----------|----------------------------|
| Ch. | MHz | | | | | | |
| 661 | 1880 | Front | 10 | 0.936 | 0.927 | 1.01 | / |

Table 15.3: SAR Measurement Variability for Body W1700 (1g)

| Frequency | | Test Position | Spacing (mm) | Original SAR (W/kg) | First Repeated SAR (W/kg) | The Ratio | Second Repeated SAR (W/kg) |
|-----------|--------|---------------|--------------|---------------------|---------------------------|-----------|----------------------------|
| Ch. | MHz | | | | | | |
| 1738 | 1752.6 | Front | 10 | 0.960 | 0.953 | 1.01 | / |

Table 15.4: SAR Measurement Variability for Body W1900 (1g)

| Frequency | | Test Position | Spacing (mm) | Original SAR (W/kg) | First Repeated SAR (W/kg) | The Ratio | Second Repeated SAR (W/kg) |
|-----------|--------|---------------|--------------|---------------------|---------------------------|-----------|----------------------------|
| Ch. | MHz | | | | | | |
| 8662 | 1852.4 | Front | 10 | 1.22 | 1.20 | 1.02 | / |

Table 15.5: SAR Measurement Variability for Body LTE B7 (1g)

| Frequency | | Mode | Test Position | Spacing (mm) | Original SAR (W/kg) | First Repeated SAR (W/kg) | The Ratio | Second Repeated SAR (W/kg) |
|-----------|------|-------|---------------|--------------|---------------------|---------------------------|-----------|----------------------------|
| Ch. | MHz | | | | | | | |
| 20850 | 2510 | 100RB | Bottom | 10 | 1.04 | 1.03 | 1.01 | / |

Table 15.6: SAR Measurement Variability for Body LTE B41 (1g)

| Frequency | | Mode | Test Position | Spacing (mm) | Original SAR (W/kg) | First Repeated SAR (W/kg) | The Ratio | Second Repeated SAR (W/kg) |
|-----------|------|----------|---------------|--------------|---------------------|---------------------------|-----------|----------------------------|
| Ch. | MHz | | | | | | | |
| 39750 | 2506 | 1RB_High | Bottom | 10 | 0.853 | 0.845 | 1.01 | / |

Table 15.7: SAR Measurement Variability for Body LTE B4 (1g)

| Frequency | | Mode | Test Position | Spacing (mm) | Original SAR (W/kg) | First Repeated SAR (W/kg) | The Ratio | Second Repeated SAR (W/kg) |
|-----------|------|----------|---------------|--------------|---------------------|---------------------------|-----------|----------------------------|
| Ch. | MHz | | | | | | | |
| 20300 | 1745 | 50RB_Low | Bottom | 10 | 0.884 | 0.871 | 1.01 | / |

Table 15.8: SAR Measurement Variability for Body LTE B4 (1g)

| Frequency | | Mode | Test Position | Spacing (mm) | Original SAR (W/kg) | First Repeated SAR (W/kg) | The Ratio | Second Repeated SAR (W/kg) |
|-----------|--------|----------|---------------|--------------|---------------------|---------------------------|-----------|----------------------------|
| Ch. | MHz | | | | | | | |
| 20175 | 1732.5 | 1RB_High | Front | 15 | 0.838 | 0.831 | 1.01 | / |

16 Measurement Uncertainty

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

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

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

16.2 Measurement Uncertainty for Normal SAR Tests (3~6GHz)

| No. | Error Description | Type | Uncertainty value | Probably Distribution | Div. | (Ci) 1g | (Ci) 10g | Std. Unc. (1g) | Std. Unc. (10g) | Degree of freedom |
|-----|-------------------|------|-------------------|-----------------------|------|------------|-------------|----------------------|-----------------------|-------------------------|
|-----|-------------------|------|-------------------|-----------------------|------|------------|-------------|----------------------|-----------------------|-------------------------|

Measurement system

| | | | | | | | | | | |
|----|---|---|------|---|------------|-----|-----|------|------|----------|
| 1 | Probe calibration | B | 6.55 | N | 1 | 1 | 1 | 6.55 | 6.55 | ∞ |
| 2 | Isotropy | B | 4.7 | R | $\sqrt{3}$ | 0.7 | 0.7 | 1.9 | 1.9 | ∞ |
| 3 | Boundary effect | B | 2.0 | R | $\sqrt{3}$ | 1 | 1 | 1.2 | 1.2 | ∞ |
| 4 | Linearity | B | 4.7 | R | $\sqrt{3}$ | 1 | 1 | 2.7 | 2.7 | ∞ |
| 5 | Detection limit | B | 1.0 | R | $\sqrt{3}$ | 1 | 1 | 0.6 | 0.6 | ∞ |
| 6 | Readout electronics | B | 0.3 | R | $\sqrt{3}$ | 1 | 1 | 0.3 | 0.3 | ∞ |
| 7 | Response time | B | 0.8 | R | $\sqrt{3}$ | 1 | 1 | 0.5 | 0.5 | ∞ |
| 8 | Integration time | B | 2.6 | R | $\sqrt{3}$ | 1 | 1 | 1.5 | 1.5 | ∞ |
| 9 | RF ambient conditions-noise | B | 0 | R | $\sqrt{3}$ | 1 | 1 | 0 | 0 | ∞ |
| 10 | RF ambient conditions-reflection | B | 0 | R | $\sqrt{3}$ | 1 | 1 | 0 | 0 | ∞ |
| 11 | Probe positioned mech. restrictions | B | 0.8 | R | $\sqrt{3}$ | 1 | 1 | 0.5 | 0.5 | ∞ |
| 12 | Probe positioning with respect to phantom shell | B | 6.7 | R | $\sqrt{3}$ | 1 | 1 | 3.9 | 3.9 | ∞ |
| 13 | Post-processing | B | 4.0 | R | $\sqrt{3}$ | 1 | 1 | 2.3 | 2.3 | ∞ |

Test sample related

| | | | | | | | | | | |
|----|---------------------------|---|-----|---|------------|---|---|-----|-----|----------|
| 14 | Test sample positioning | A | 3.3 | N | 1 | 1 | 1 | 3.3 | 3.3 | 71 |
| 15 | Device holder uncertainty | A | 3.4 | N | 1 | 1 | 1 | 3.4 | 3.4 | 5 |
| 16 | Drift of output power | B | 5.0 | R | $\sqrt{3}$ | 1 | 1 | 2.9 | 2.9 | ∞ |

Phantom and set-up

| | | | | | | | | | | |
|----|------------------------------|---|------|---|------------|------|------|------|------|----------|
| 17 | Phantom uncertainty | B | 4.0 | R | $\sqrt{3}$ | 1 | 1 | 2.3 | 2.3 | ∞ |
| 18 | Liquid conductivity (target) | B | 5.0 | R | $\sqrt{3}$ | 0.64 | 0.43 | 1.8 | 1.2 | ∞ |
| 19 | Liquid conductivity (meas.) | A | 2.06 | N | 1 | 0.64 | 0.43 | 1.32 | 0.89 | 43 |
| 20 | Liquid permittivity | B | 5.0 | R | $\sqrt{3}$ | 0.6 | 0.49 | 1.7 | 1.4 | ∞ |

| | | | | | | | | | | |
|----|--|--|-----|---|---|-----|------|------|------|-----|
| | (target) | | | | | | | | | |
| 21 | Liquid permittivity (meas.) | A | 1.6 | N | 1 | 0.6 | 0.49 | 1.0 | 0.8 | 521 |
| | Combined standard uncertainty | $u_c = \sqrt{\sum_{i=1}^{21} c_i^2 u_i^2}$ | | | | | | 10.7 | 10.6 | 257 |
| | Expanded uncertainty (confidence interval of 95 %) | $u_e = 2u_c$ | | | | | | 21.4 | 21.1 | |

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

| No. | Error Description | Type | Uncertainty value | Probably Distribution | Div. | (Ci) 1g | (Ci) 10g | Std. Unc. (1g) | Std. Unc. (10g) | Degree of freedom |
|-----|-------------------|------|-------------------|-----------------------|------|---------|----------|----------------|-----------------|-------------------|
|-----|-------------------|------|-------------------|-----------------------|------|---------|----------|----------------|-----------------|-------------------|

Measurement system

| | | | | | | | | | | |
|----|---|---|-----|---|------------|-----|-----|-----|-----|----------|
| 1 | Probe calibration | B | 6.0 | N | 1 | 1 | 1 | 6.0 | 6.0 | ∞ |
| 2 | Isotropy | B | 4.7 | R | $\sqrt{3}$ | 0.7 | 0.7 | 1.9 | 1.9 | ∞ |
| 3 | Boundary effect | B | 1.0 | R | $\sqrt{3}$ | 1 | 1 | 0.6 | 0.6 | ∞ |
| 4 | Linearity | B | 4.7 | R | $\sqrt{3}$ | 1 | 1 | 2.7 | 2.7 | ∞ |
| 5 | Detection limit | B | 1.0 | R | $\sqrt{3}$ | 1 | 1 | 0.6 | 0.6 | ∞ |
| 6 | Readout electronics | B | 0.3 | R | $\sqrt{3}$ | 1 | 1 | 0.3 | 0.3 | ∞ |
| 7 | Response time | B | 0.8 | R | $\sqrt{3}$ | 1 | 1 | 0.5 | 0.5 | ∞ |
| 8 | Integration time | B | 2.6 | R | $\sqrt{3}$ | 1 | 1 | 1.5 | 1.5 | ∞ |
| 9 | RF ambient conditions-noise | B | 0 | R | $\sqrt{3}$ | 1 | 1 | 0 | 0 | ∞ |
| 10 | RF ambient conditions-reflection | B | 0 | R | $\sqrt{3}$ | 1 | 1 | 0 | 0 | ∞ |
| 11 | Probe positioned mech. Restrictions | B | 0.4 | R | $\sqrt{3}$ | 1 | 1 | 0.2 | 0.2 | ∞ |
| 12 | Probe positioning with respect to phantom shell | B | 2.9 | R | $\sqrt{3}$ | 1 | 1 | 1.7 | 1.7 | ∞ |
| 13 | Post-processing | B | 1.0 | R | $\sqrt{3}$ | 1 | 1 | 0.6 | 0.6 | ∞ |
| 14 | Fast SAR z-Approximation | B | 7.0 | R | $\sqrt{3}$ | 1 | 1 | 4.0 | 4.0 | ∞ |

Test sample related

| | | | | | | | | | | |
|----|---------------------------|---|-----|---|------------|---|---|-----|-----|----------|
| 15 | Test sample positioning | A | 3.3 | N | 1 | 1 | 1 | 3.3 | 3.3 | 71 |
| 16 | Device holder uncertainty | A | 3.4 | N | 1 | 1 | 1 | 3.4 | 3.4 | 5 |
| 17 | Drift of output power | B | 5.0 | R | $\sqrt{3}$ | 1 | 1 | 2.9 | 2.9 | ∞ |

Phantom and set-up

| | | | | | | | | | | |
|----|---------------------|---|-----|---|------------|---|---|-----|-----|----------|
| 18 | Phantom uncertainty | B | 4.0 | R | $\sqrt{3}$ | 1 | 1 | 2.3 | 2.3 | ∞ |
|----|---------------------|---|-----|---|------------|---|---|-----|-----|----------|

| | | | | | | | | | | |
|--|------------------------------|--|------|---|------------|------|------|------|------|----------|
| 19 | Liquid conductivity (target) | B | 5.0 | R | $\sqrt{3}$ | 0.64 | 0.43 | 1.8 | 1.2 | ∞ |
| 20 | Liquid conductivity (meas.) | A | 2.06 | N | 1 | 0.64 | 0.43 | 1.32 | 0.89 | 43 |
| 21 | Liquid permittivity (target) | B | 5.0 | R | $\sqrt{3}$ | 0.6 | 0.49 | 1.7 | 1.4 | ∞ |
| 22 | Liquid permittivity (meas.) | A | 1.6 | N | 1 | 0.6 | 0.49 | 1.0 | 0.8 | 521 |
| Combined standard uncertainty | | $u_c = \sqrt{\sum_{i=1}^{22} c_i^2 u_i^2}$ | | | | | | 10.4 | 10.3 | 257 |
| Expanded uncertainty (confidence interval of 95 %) | | $u_e = 2u_c$ | | | | | | 20.8 | 20.6 | |

16.4 Measurement Uncertainty for Fast SAR Tests (3~6GHz)

| No. | Error Description | Type | Uncertainty value | Probably Distribution | Div. | (Ci) 1g | (Ci) 10g | Std. Unc. | Std. Unc. (10g) | Degree of freedom |
|-----|-------------------|------|-------------------|-----------------------|------|---------|----------|-----------|-----------------|-------------------|
|-----|-------------------|------|-------------------|-----------------------|------|---------|----------|-----------|-----------------|-------------------|

Measurement system

| | | | | | | | | | | |
|----|---|---|------|---|------------|-----|-----|------|------|----------|
| 1 | Probe calibration | B | 6.55 | N | 1 | 1 | 1 | 6.55 | 6.55 | ∞ |
| 2 | Isotropy | B | 4.7 | R | $\sqrt{3}$ | 0.7 | 0.7 | 1.9 | 1.9 | ∞ |
| 3 | Boundary effect | B | 2.0 | R | $\sqrt{3}$ | 1 | 1 | 1.2 | 1.2 | ∞ |
| 4 | Linearity | B | 4.7 | R | $\sqrt{3}$ | 1 | 1 | 2.7 | 2.7 | ∞ |
| 5 | Detection limit | B | 1.0 | R | $\sqrt{3}$ | 1 | 1 | 0.6 | 0.6 | ∞ |
| 6 | Readout electronics | B | 0.3 | R | $\sqrt{3}$ | 1 | 1 | 0.3 | 0.3 | ∞ |
| 7 | Response time | B | 0.8 | R | $\sqrt{3}$ | 1 | 1 | 0.5 | 0.5 | ∞ |
| 8 | Integration time | B | 2.6 | R | $\sqrt{3}$ | 1 | 1 | 1.5 | 1.5 | ∞ |
| 9 | RF ambient conditions-noise | B | 0 | R | $\sqrt{3}$ | 1 | 1 | 0 | 0 | ∞ |
| 10 | RF ambient conditions-reflection | B | 0 | R | $\sqrt{3}$ | 1 | 1 | 0 | 0 | ∞ |
| 11 | Probe positioned mech. Restrictions | B | 0.8 | R | $\sqrt{3}$ | 1 | 1 | 0.5 | 0.5 | ∞ |
| 12 | Probe positioning with respect to phantom shell | B | 6.7 | R | $\sqrt{3}$ | 1 | 1 | 3.9 | 3.9 | ∞ |
| 13 | Post-processing | B | 1.0 | R | $\sqrt{3}$ | 1 | 1 | 0.6 | 0.6 | ∞ |
| 14 | Fast SAR z-Approximation | B | 14.0 | R | $\sqrt{3}$ | 1 | 1 | 8.1 | 8.1 | ∞ |

Test sample related

| | | | | | | | | | | |
|----|-------------------------|---|-----|---|---|---|---|-----|-----|----|
| 15 | Test sample positioning | A | 3.3 | N | 1 | 1 | 1 | 3.3 | 3.3 | 71 |
| 16 | Device holder | A | 3.4 | N | 1 | 1 | 1 | 3.4 | 3.4 | 5 |

| | | | | | | | | | | |
|--|------------------------------|--|------|---|------------|------|------|------|------|----------|
| | uncertainty | | | | | | | | | |
| 17 | Drift of output power | B | 5.0 | R | $\sqrt{3}$ | 1 | 1 | 2.9 | 2.9 | ∞ |
| Phantom and set-up | | | | | | | | | | |
| 18 | Phantom uncertainty | B | 4.0 | R | $\sqrt{3}$ | 1 | 1 | 2.3 | 2.3 | ∞ |
| 19 | Liquid conductivity (target) | B | 5.0 | R | $\sqrt{3}$ | 0.64 | 0.43 | 1.8 | 1.2 | ∞ |
| 20 | Liquid conductivity (meas.) | A | 2.06 | N | 1 | 0.64 | 0.43 | 1.32 | 0.89 | 43 |
| 21 | Liquid permittivity (target) | B | 5.0 | R | $\sqrt{3}$ | 0.6 | 0.49 | 1.7 | 1.4 | ∞ |
| 22 | Liquid permittivity (meas.) | A | 1.6 | N | 1 | 0.6 | 0.49 | 1.0 | 0.8 | 521 |
| Combined standard uncertainty | | $u_c = \sqrt{\sum_{i=1}^{22} c_i^2 u_i^2}$ | | | | | | 13.5 | 13.4 | 257 |
| Expanded uncertainty (confidence interval of 95 %) | | $u_e = 2u_c$ | | | | | | 27.0 | 26.8 | |

17 MAIN TEST INSTRUMENTS

Table 17.1: List of Main Instruments

| No. | Name | Type | Serial Number | Calibration Date | Valid Period |
|-----|-----------------------|---------------|---------------|--------------------------|--------------|
| 01 | Network analyzer | E5071C | MY46110673 | January 13, 2017 | One year |
| 02 | Power meter | NRVD | 102083 | September 22, 2016 | One year |
| 03 | Power sensor | NRV-Z5 | 100595 | | |
| 04 | Signal Generator | E4438C | MY49071430 | January13,2017 | One Year |
| 05 | Amplifier | 60S1G4 | 0331848 | No Calibration Requested | |
| 06 | BTS | E5515C | MY50263375 | January 16, 2017 | One year |
| 07 | BTS | CMW500 | 159890 | November 25, 2016 | One year |
| 08 | E-field Probe | SPEAG EX3DV4 | 3846 | January13, 2017 | One year |
| 09 | DAE | SPEAG DAE4 | 1331 | January19, 2017 | One year |
| 10 | Dipole Validation Kit | SPEAG D750V3 | 1017 | July 19,2017 | One year |
| 11 | Dipole Validation Kit | SPEAG D835V2 | 4d069 | July 19,2017 | One year |
| 12 | Dipole Validation Kit | SPEAG D1750V2 | 1003 | July 21,2017 | One year |
| 13 | Dipole Validation Kit | SPEAG D1900V2 | 5d101 | July 26,2017 | One year |
| 14 | Dipole Validation Kit | SPEAG D2300V2 | 1018 | July 21,2017 | One year |
| 15 | Dipole Validation Kit | SPEAG D2450V2 | 853 | July 21,2017 | One year |
| 16 | Dipole Validation Kit | SPEAG D2600V2 | 1012 | July 21,2017 | One year |
| 17 | Dipole Validation Kit | SPEAG D5GHzV2 | 1060 | July 25,2017 | One year |

END OF REPORT BODY

ANNEX A Graph Results

850 Right Cheek Low

Date: 2017-8-8

Electronics: DAE4 Sn1331

Medium: Head 850 MHz

Medium parameters used: $f = 825 \text{ MHz}$; $\sigma = 0.889 \text{ mho/m}$; $\epsilon_r = 42.02$; $\rho = 1000 \text{ kg/m}^3$

Ambient Temperature: 22.9°C Liquid Temperature: 22.5°C

Communication System: GSM 850 GPRS Frequency: 824.2 MHz Duty Cycle: 1:2.67

Probe: EX3DV4 –SN3846ConvF(9.33, 9.33, 9.33)

Area Scan (81x131x1): Interpolated grid: $dx=1.000 \text{ mm}$, $dy=1.000 \text{ mm}$

Maximum value of SAR (interpolated) = 0.618 W/kg

Zoom Scan (7x7x7)/Cube 0: Measurement grid: $dx=5\text{mm}$, $dy=5\text{mm}$, $dz=5\text{mm}$

Reference Value = 5.729 V/m; Power Drift = -0.05 dB

Peak SAR (extrapolated) = 0.727 W/kg

SAR(1 g) = 0.558 W/kg; SAR(10 g) = 0.434 W/kg

Maximum value of SAR (measured) = 0.604 W/kg

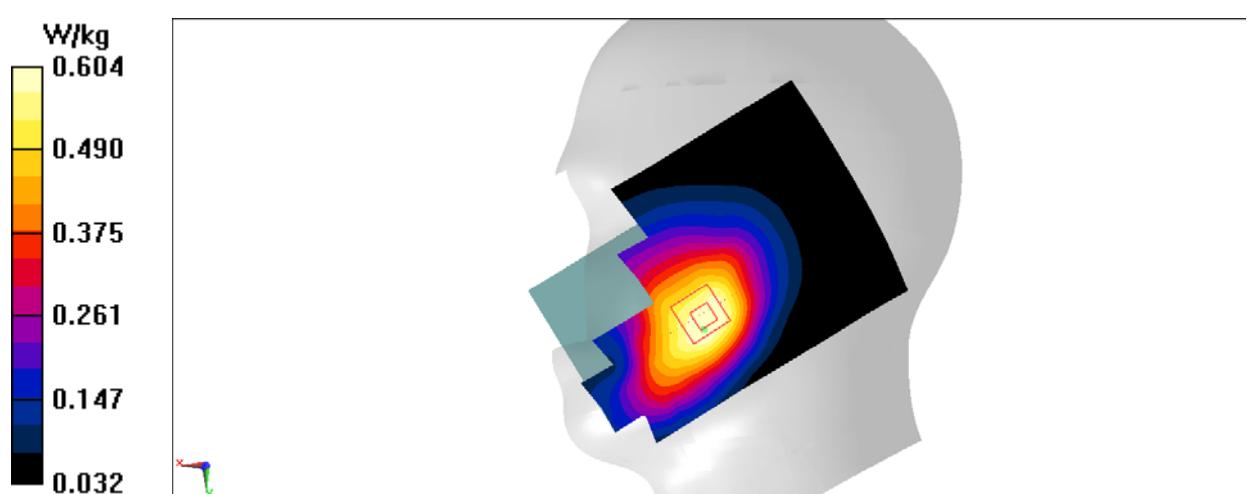


Fig.1 850MHz

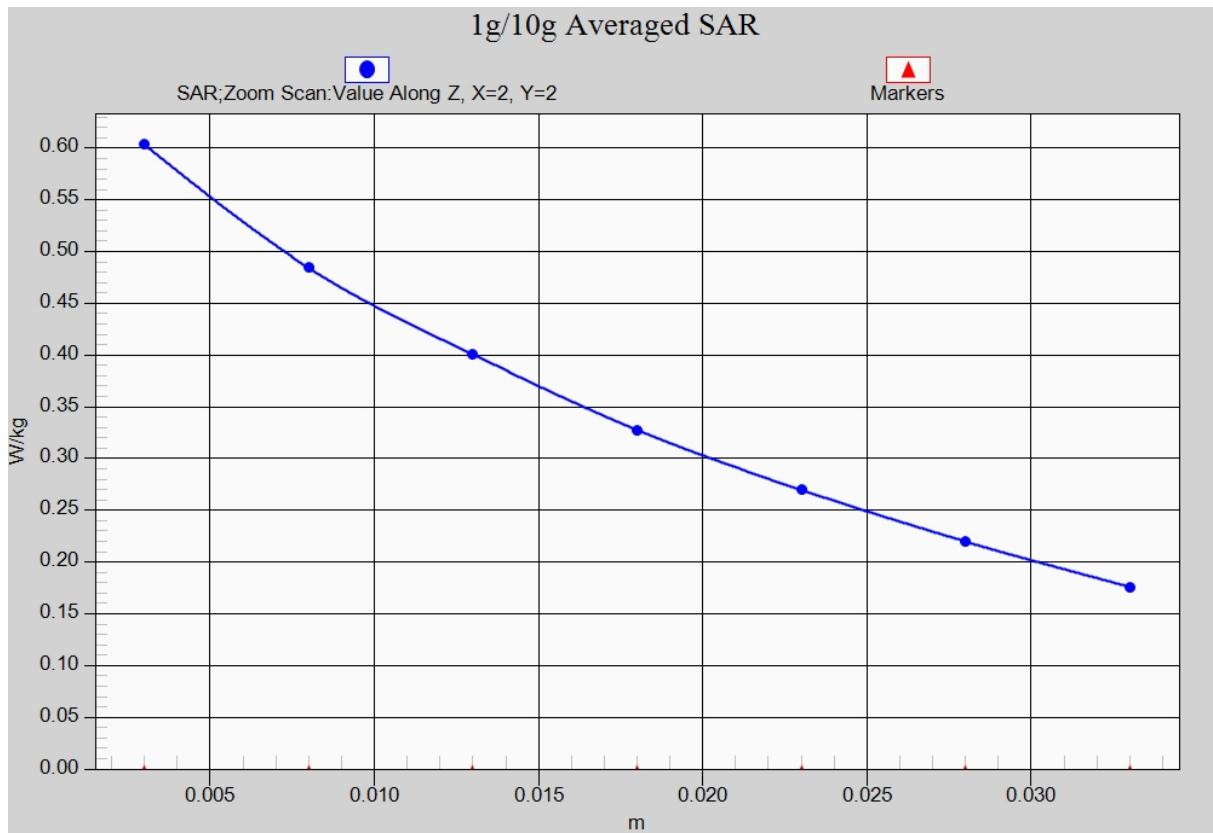


Fig. 1-1 Z-Scan at power reference point (850 MHz)

850Body FrontLow

Date: 2017-8-8

Electronics: DAE4 Sn1331

Medium: Body 850 MHz

Medium parameters used: $f = 825$ MHz; $\sigma = 0.96$ mho/m; $\epsilon_r = 56.1$; $\rho = 1000$ kg/m 3

Ambient Temperature: 22.9°C Liquid Temperature: 22.5°C

Communication System: GSM 850 GPRS Frequency: 824.2 MHz Duty Cycle: 1:2.67

Probe: EX3DV4 –SN3846ConvF(9.52, 9.52, 9.52)

Area Scan (131x81x1): Interpolated grid: dx=1.000 mm, dy=1.000 mm

Maximum value of SAR (interpolated) = 1.21 W/kg

Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 22.42 V/m; Power Drift = 0.04 dB

Peak SAR (extrapolated) = 1.39 W/kg

SAR(1 g) = 1.03 W/kg; SAR(10 g) = 0.724 W/kg

Maximum value of SAR (measured) = 1.08 W/kg

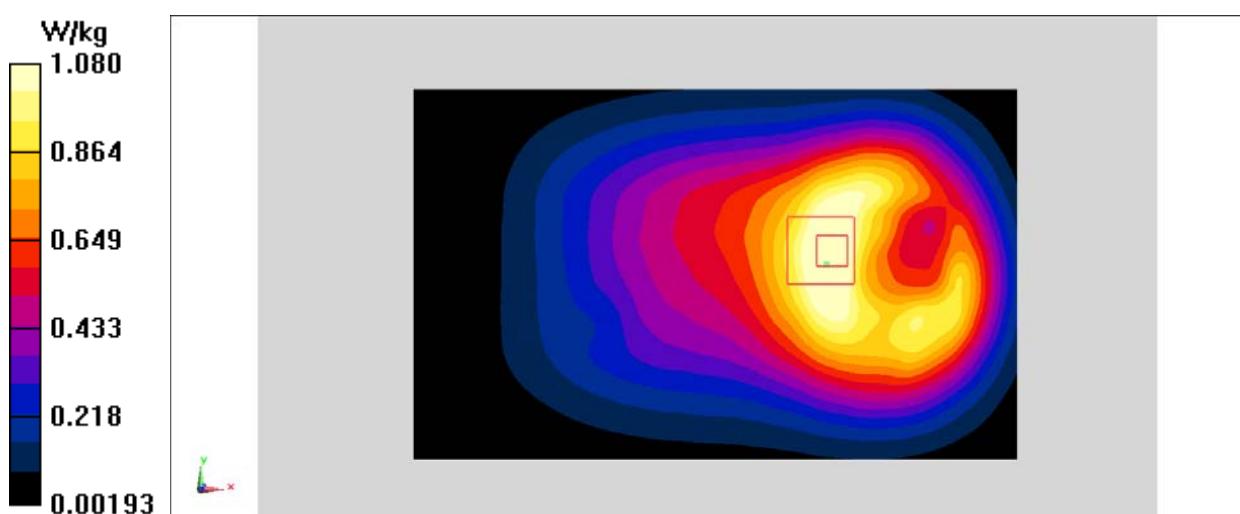


Fig.2 850 MHz

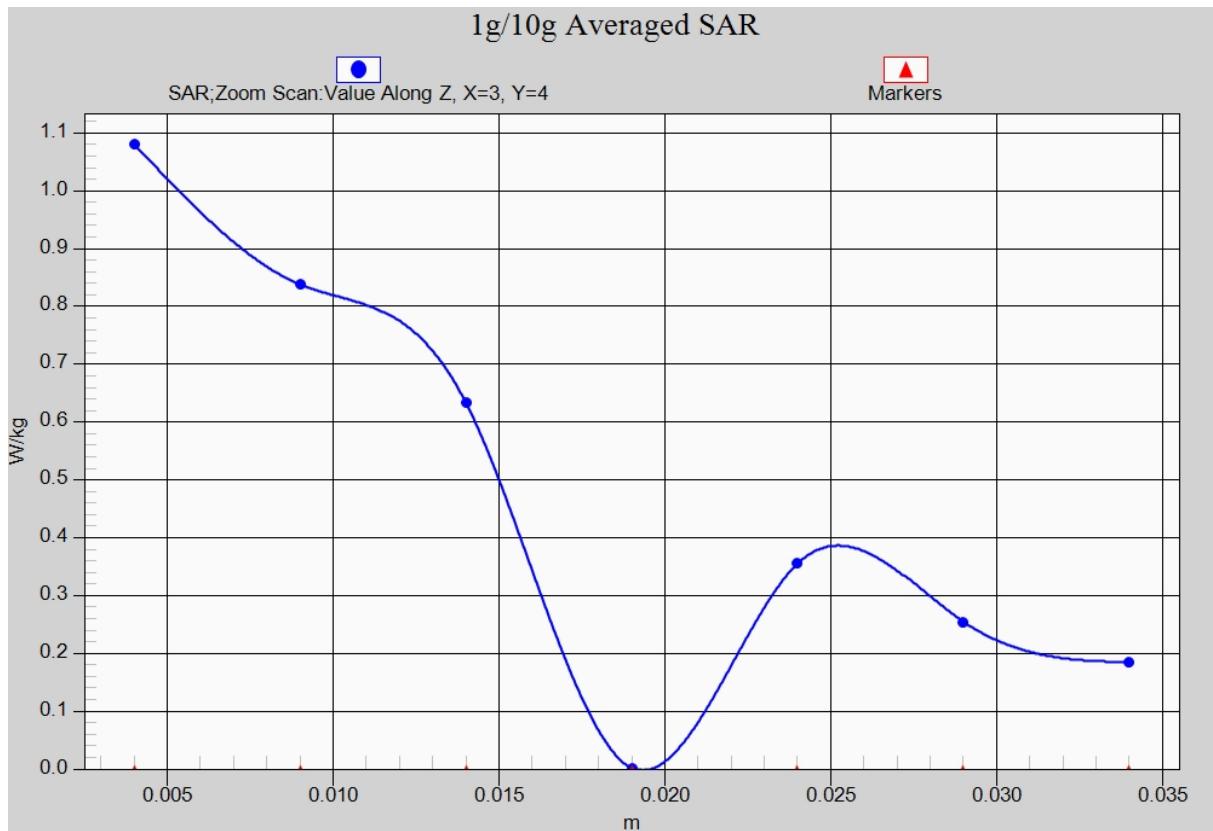


Fig. 2-1Z-Scan at power reference point (850 MHz)

1900 LeftCheek Low

Date: 2017-8-9

Electronics: DAE4 Sn1331

Medium: Head 1900 MHz

Medium parameters used (interpolated): $f = 1850.2$ MHz; $\sigma = 1.399$ mho/m; $\epsilon_r = 40.66$; $\rho = 1000$ kg/m³

Ambient Temperature: 22.9°C Liquid Temperature: 22.5°C

Communication System: GSM 1900MHz Frequency: 1850.2 MHz Duty Cycle: 1:2

Probe: EX3DV4–SN3846 ConvF(7.89, 7.89, 7.89)

Area Scan (71x121x1): Interpolated grid: dx=1.000 mm, dy=1.000 mm

Maximum value of SAR (interpolated) = 0.373 W/kg

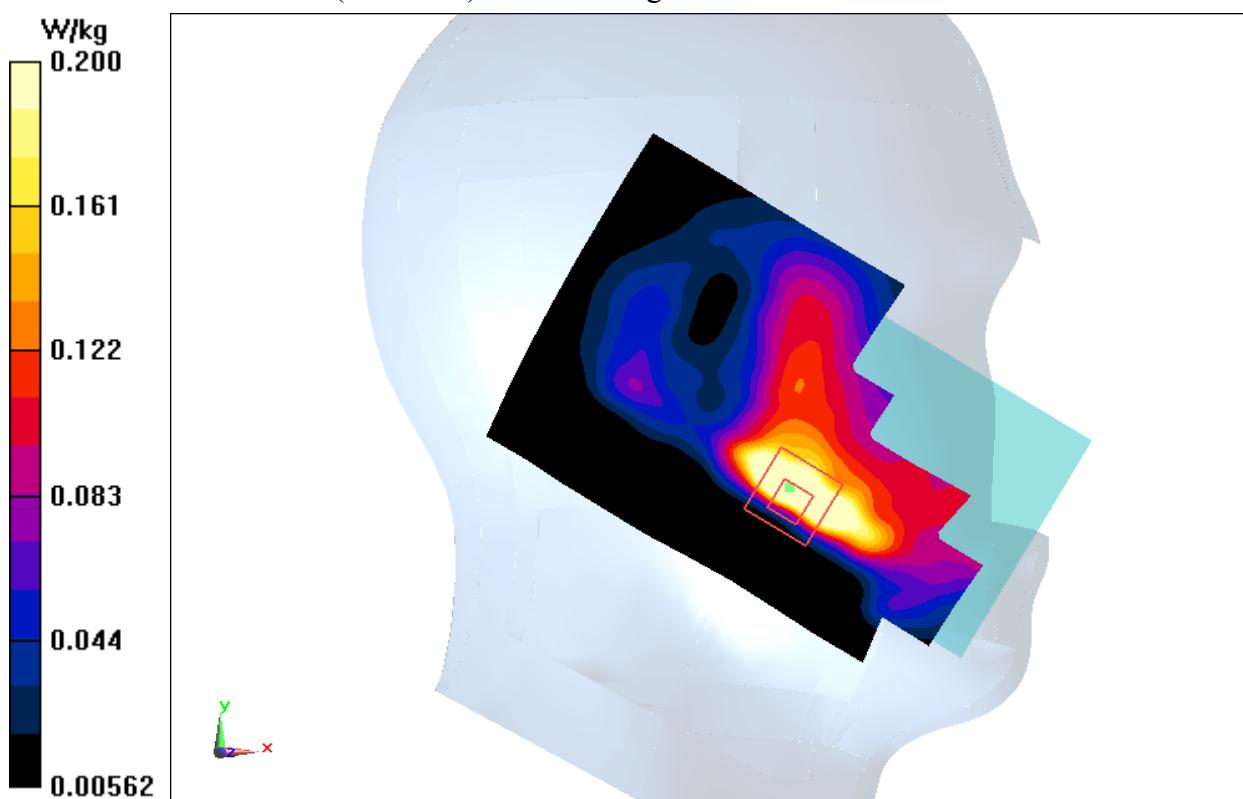
Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 5.867 V/m; Power Drift = 0.01 dB

Peak SAR (extrapolated) = 0.251 W/kg

SAR(1 g) = 0.178 W/kg; SAR(10 g) = 0.117 W/kg

Maximum value of SAR (measured) = 0.200 W/kg

**Fig.3 1900 MHz**

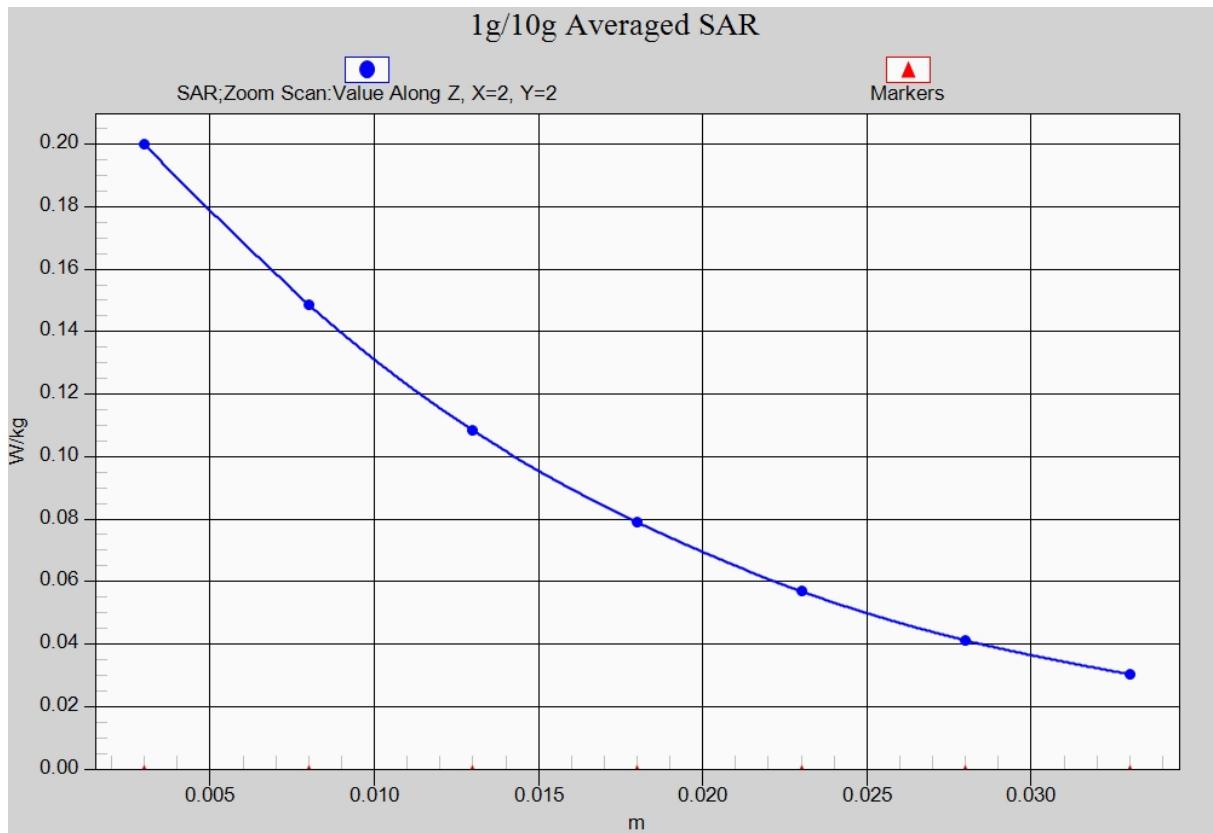


Fig. 3-1Z-Scan at power reference point (1900 MHz)

1900 Body FrontMiddle

Date: 2017-8-9

Electronics: DAE4 Sn1331

Medium: Body 1900 MHz

Medium parameters used: $f = 1880$ MHz; $\sigma = 1.545$ mho/m; $\epsilon_r = 52.73$; $\rho = 1000$ kg/m³

Ambient Temperature: 22.9°C Liquid Temperature: 22.5°C

Communication System: GSM 1900MHz GPRS Frequency: 1880 MHz Duty Cycle: 1:2

Probe: EX3DV4–SN3846 ConvF(7.57, 7.57, 7.57)

Area Scan (131x81x1): Interpolated grid: dx=1.000 mm, dy=1.000 mm

Maximum value of SAR (interpolated) = 1.22 W/kg

Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 12.75 V/m; Power Drift = -0.09 dB

Peak SAR (extrapolated) = 1.53 W/kg

SAR(1 g) = 0.936 W/kg; SAR(10 g) = 0.544 W/kg

Maximum value of SAR (measured) = 1.02 W/kg

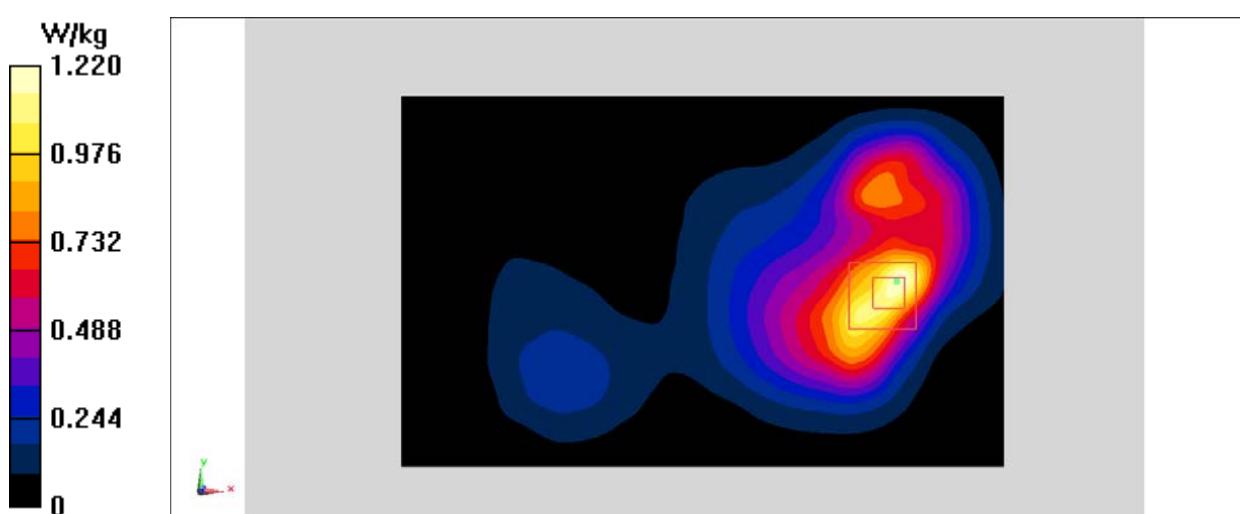


Fig.4 1900 MHz

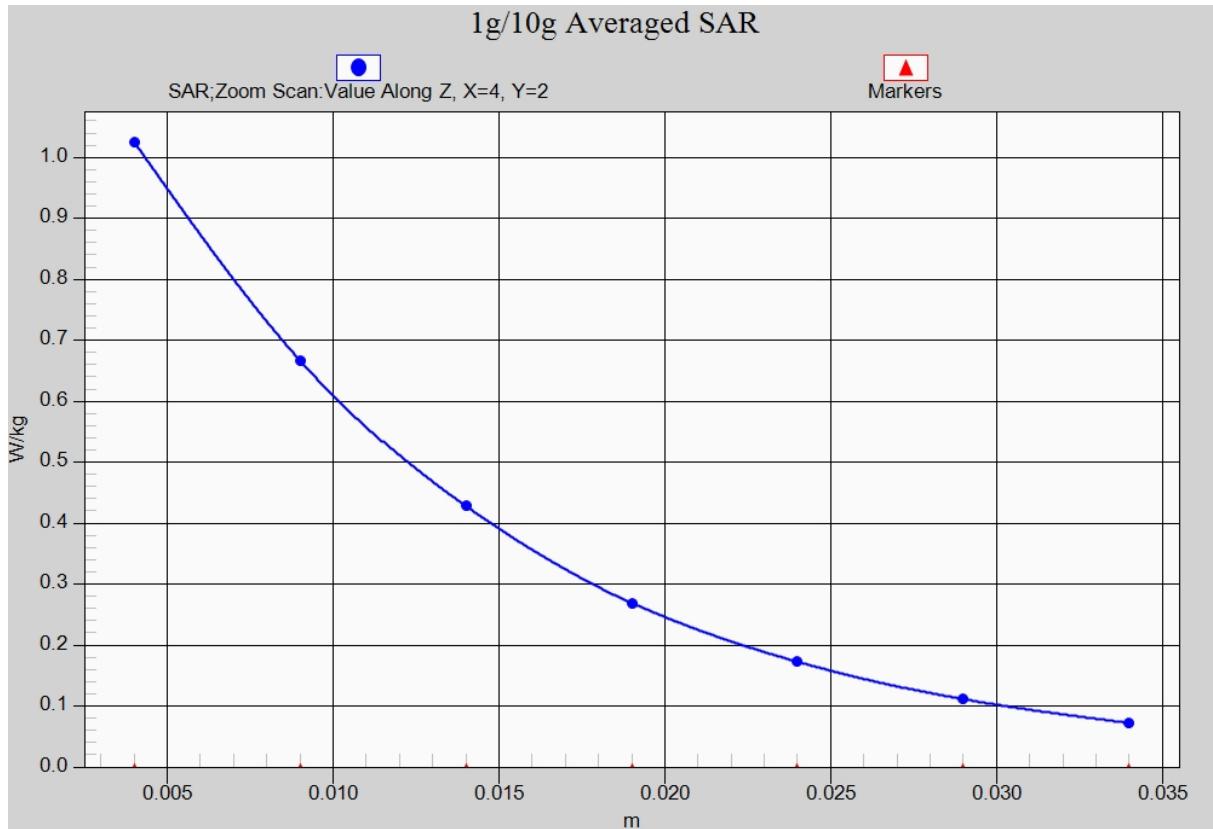


Fig. 4-1Z-Scan at power reference point (1900 MHz)

WCDMA 850 Right Cheek High

Date: 2017-8-8

Electronics: DAE4 Sn1331

Medium: Head 850 MHz

Medium parameters used (interpolated): $f = 846.6$ MHz; $\sigma = 0.909$ mho/m; $\epsilon_r = 41.725$; $\rho = 1000$ kg/m³

Ambient Temperature: 22.9°C Liquid Temperature: 22.5°C

Communication System: WCDMA; Frequency: 846.6 MHz; Duty Cycle: 1:1

Probe: EX3DV4 –SN3846ConvF(9.33, 9.33, 9.33)

Area Scan (81x131x1): Interpolated grid: dx=1.000 mm, dy=1.000 mm

Maximum value of SAR (interpolated) = 0.378 W/kg

Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 6.155 V/m; Power Drift = -0.08 dB

Peak SAR (extrapolated) = 0.430 W/kg

SAR(1 g) = 0.329 W/kg; SAR(10 g) = 0.250 W/kg

Maximum value of SAR (measured) = 0.362 W/kg

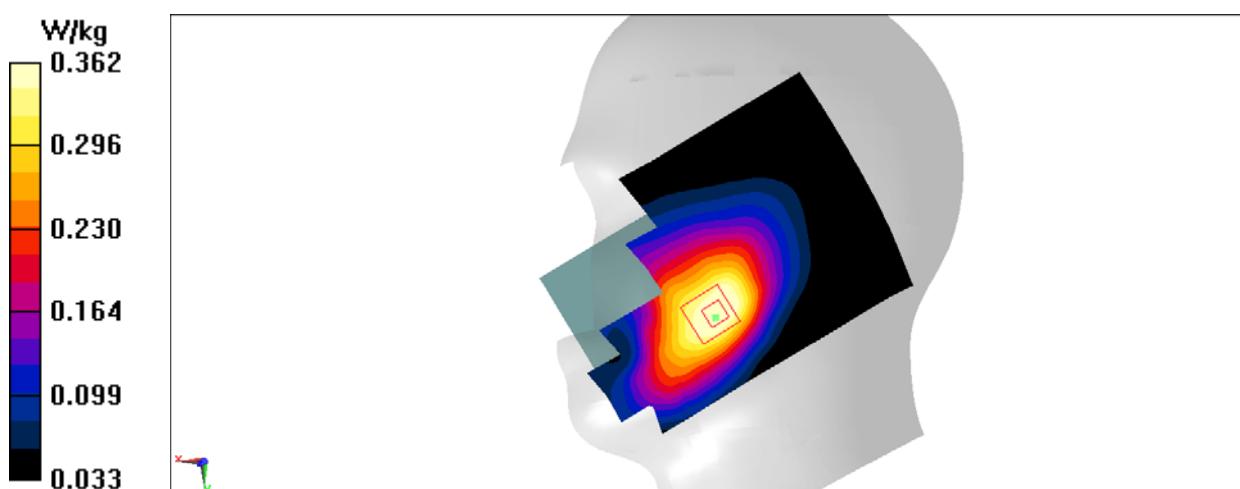


Fig.5 WCDMA 850

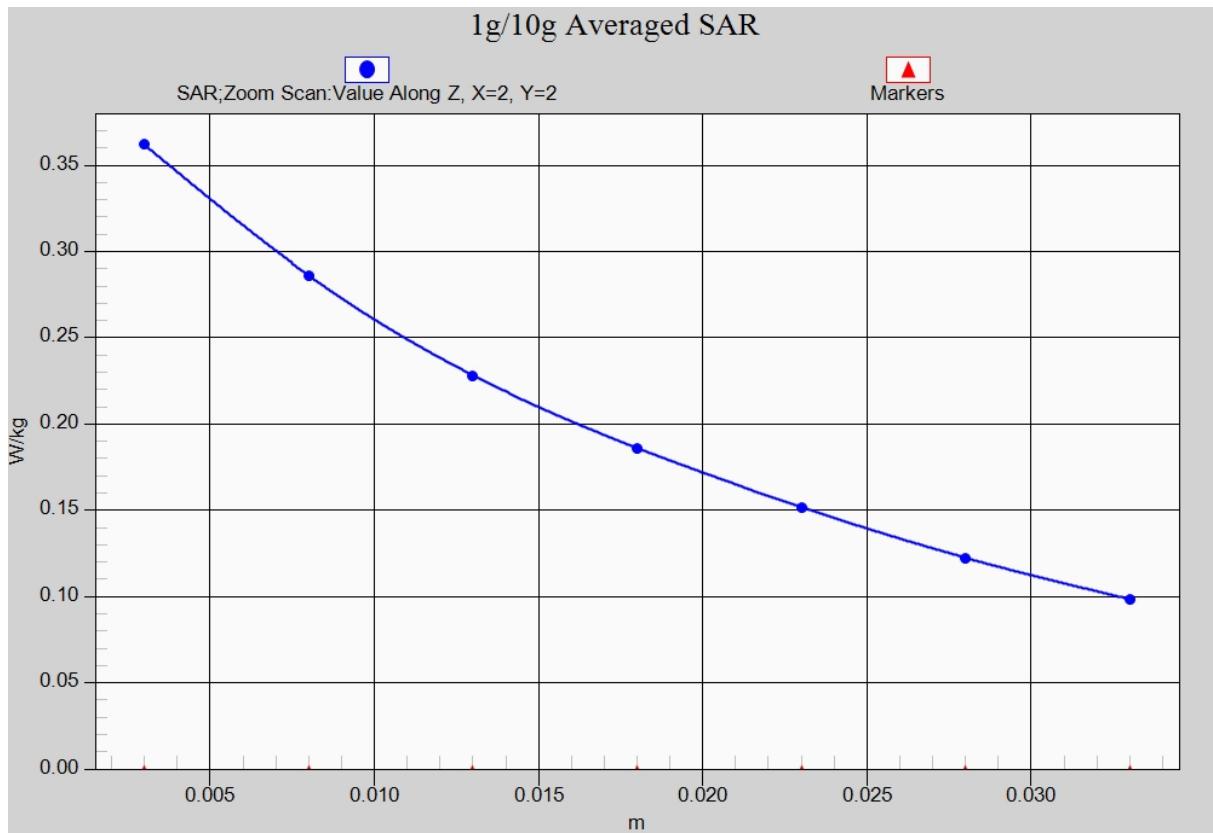


Fig. 5-1Z-Scan at power reference point (850 MHz)

WCDMA 850Body RearHigh

Date: 2017-8-8

Electronics: DAE4 Sn1331

Medium: Body 850 MHz

Medium parameters used (interpolated): $f = 846.6$ MHz; $\sigma = 0.981$ mho/m; $\epsilon_r = 55.876$; $\rho = 1000$ kg/m³

Ambient Temperature: 22.9°C Liquid Temperature: 22.5°C

Communication System: WCDMA; Frequency: 846.6 MHz; Duty Cycle: 1:1

Probe: EX3DV4 –SN3846ConvF(9.52, 9.52, 9.52)

Area Scan (131x81x1): Interpolated grid: dx=1.000 mm, dy=1.000 mm

Maximum value of SAR (interpolated) = 0.903 W/kg

Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 18.82 V/m; Power Drift = -0.06 dB

Peak SAR (extrapolated) = 1.05 W/kg

SAR(1 g) = 0.758 W/kg; SAR(10 g) = 0.529 W/kg

Maximum value of SAR (measured) = 0.811 W/kg

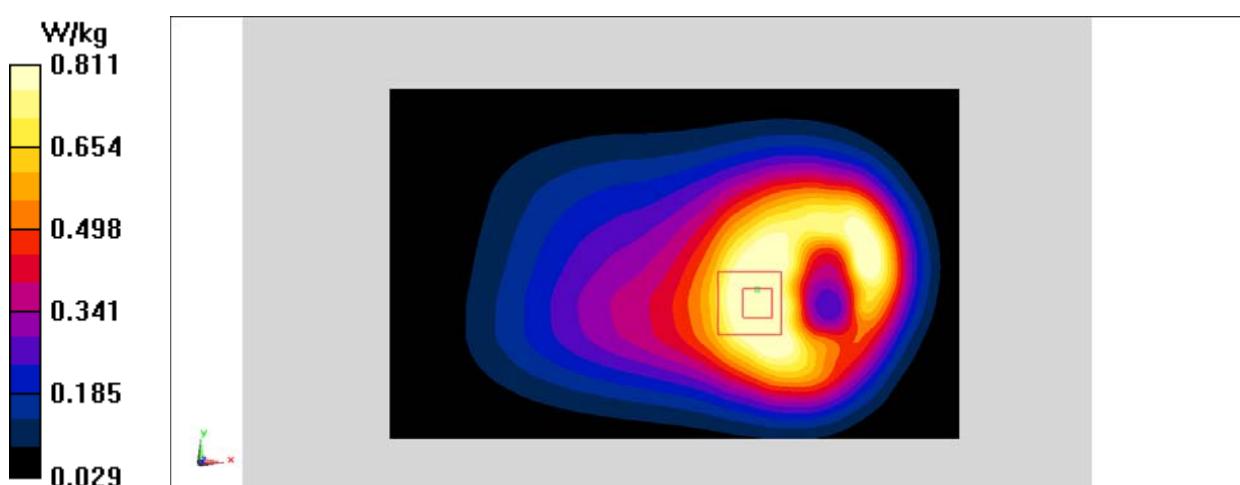


Fig.6 WCDMA 850

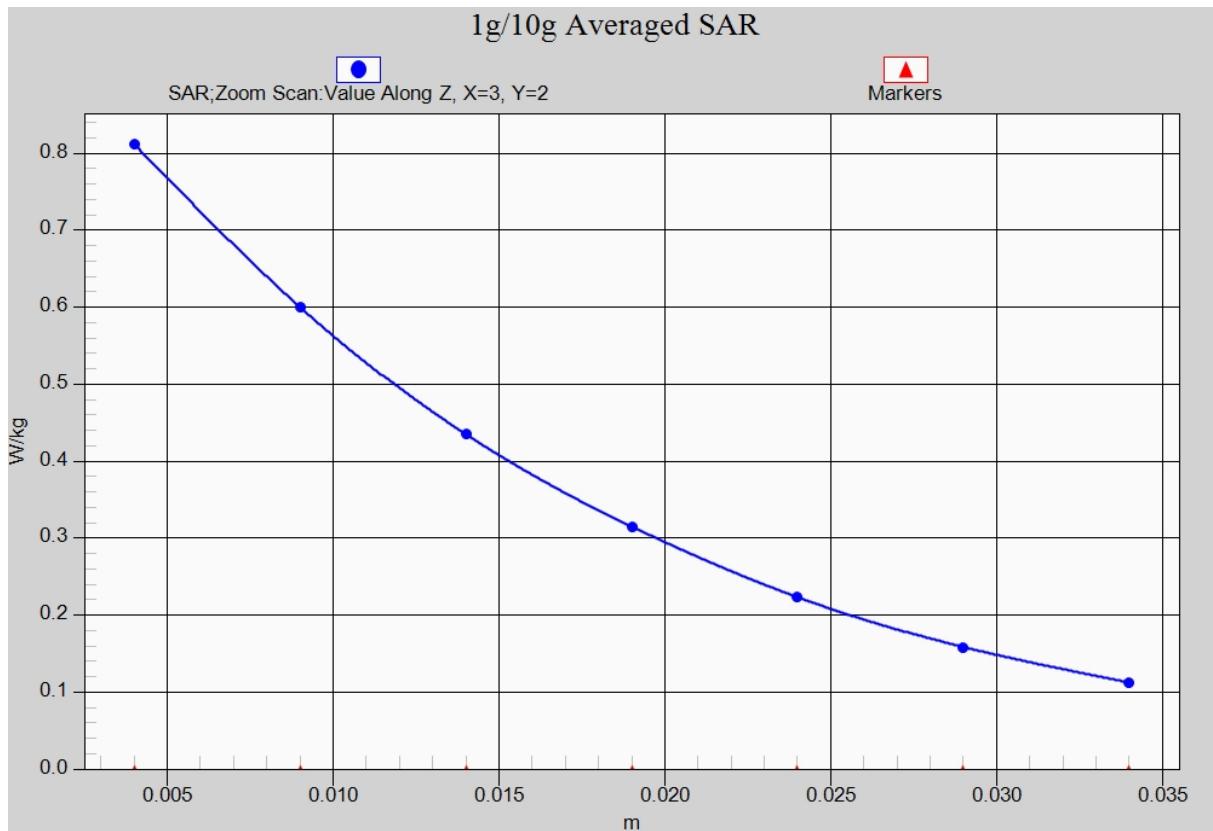


Fig. 6-1 Z-Scan at power reference point (WCDMA850)

WCDMA 1700 Left Cheek Low

Date: 2017-8-13

Electronics: DAE4 Sn1331

Medium: Head 1750 MHz

Medium parameters used (interpolated): $f = 1712.4$ MHz; $\sigma = 1.307$ mho/m; $\epsilon_r = 40.677$; $\rho = 1000$ kg/m³

Ambient Temperature: 22.9°C Liquid Temperature: 22.5°C

Communication System: WCDMA 1750 Frequency: 1712.4 MHz Duty Cycle: 1:1

Probe: EX3DV4– SN3846 ConvF(8.16, 8.16, 8.16)

Area Scan (71x121x1): Interpolated grid: dx=1.000 mm, dy=1.000 mm

Maximum value of SAR (interpolated) = 0.263 W/kg

Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=4mm, dy=4mm, dz=5mm

Reference Value = 5.815 V/m; Power Drift = 0.17 dB

Peak SAR (extrapolated) = 0.317 W/kg

SAR(1 g) = 0.237 W/kg; SAR(10 g) = 0.164 W/kg

Maximum value of SAR (measured) = 0.268 W/kg

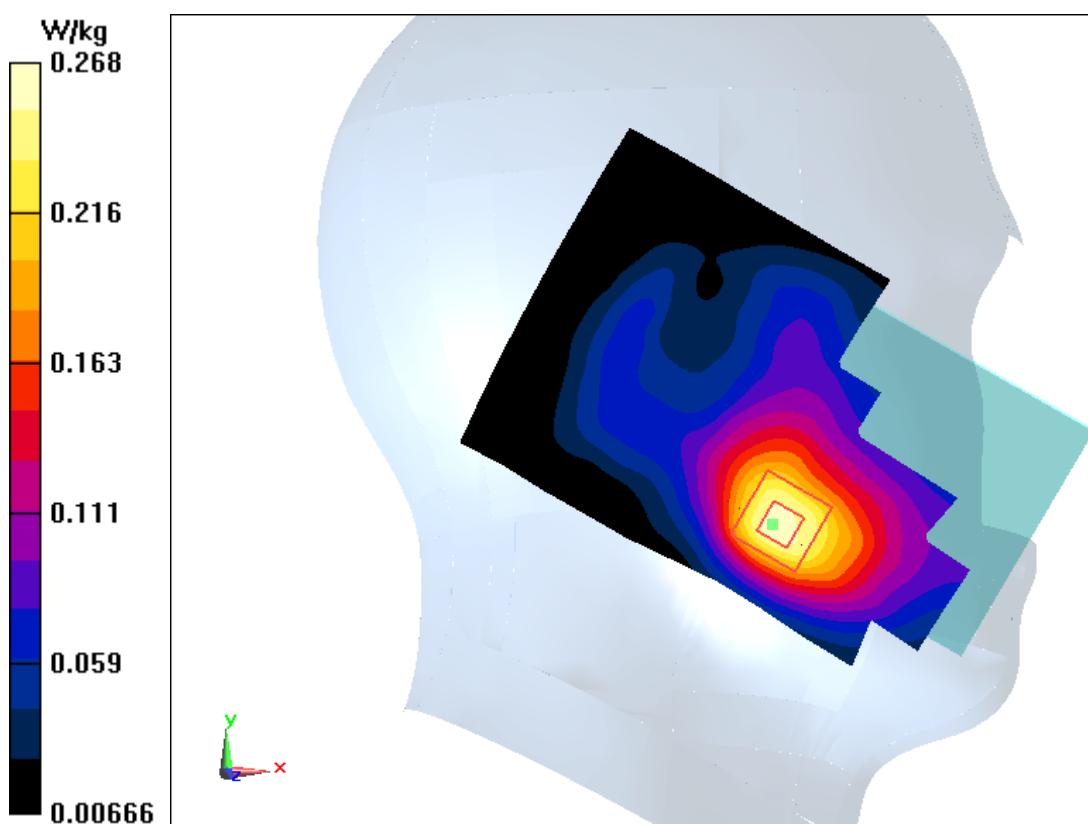


Fig.7WCDMA1700

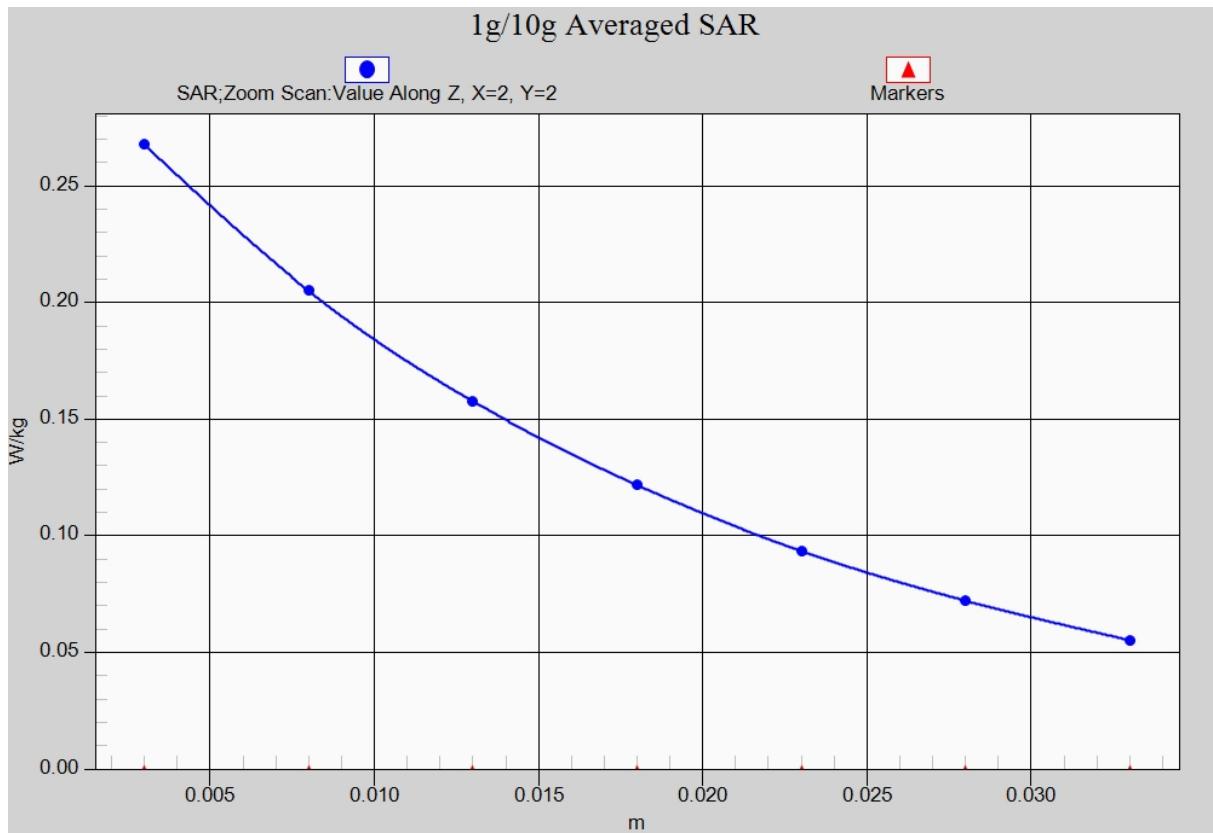


Fig. 7-1 Z-Scan at power reference point (WCDMA1700)

WCDMA 1700 Body FrontHigh – 10mm

Date: 2017-8-13

Electronics: DAE4 Sn1331

Medium: Body 1750 MHz

Medium parameters used (interpolated): $f = 1752.6$ MHz; $\sigma = 1.509$ mho/m; $\epsilon_r = 53.718$; $\rho = 1000$ kg/m³

Ambient Temperature: 22.9°C Liquid Temperature: 22.5°C

Communication System: WCDMA 1900 Frequency: 1752.6 MHz Duty Cycle: 1:1

Probe: EX3DV4– SN3846 ConvF(7.90, 7.90, 7.90)

Area Scan (131x81x1): Interpolated grid: dx=1.000 mm, dy=1.000 mm

Maximum value of SAR (interpolated) = 1.25 W/kg

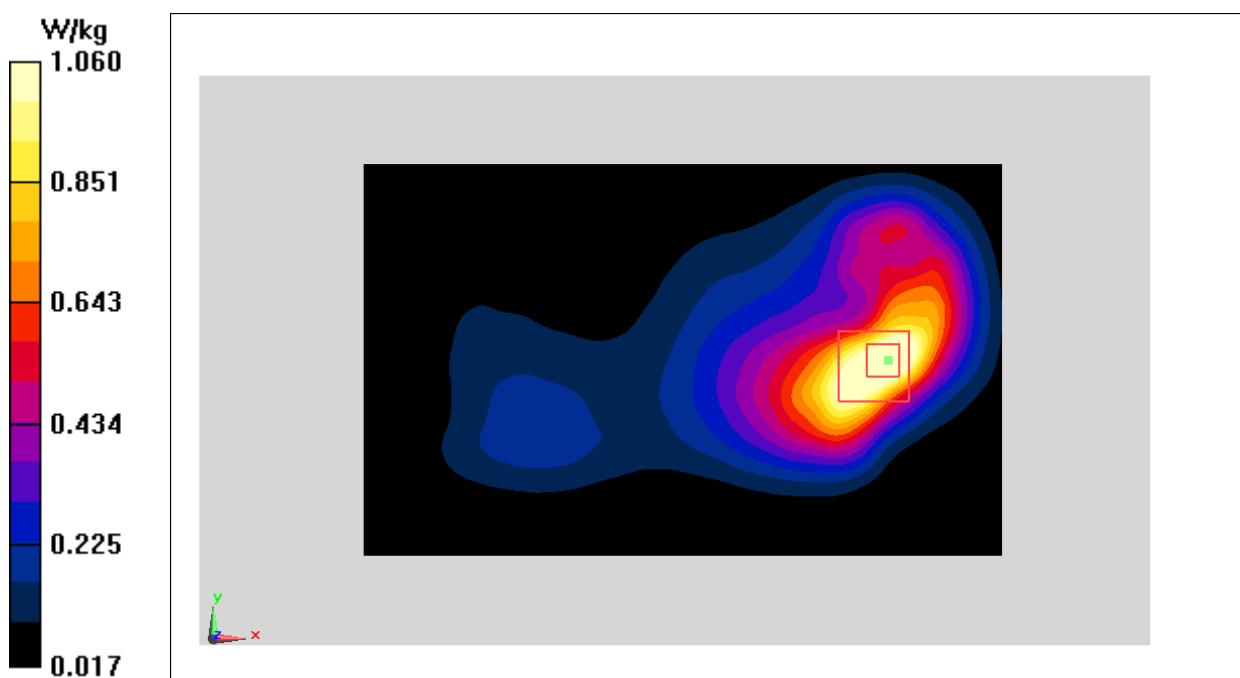
Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 9.901 V/m; Power Drift = -0.10 dB

Peak SAR (extrapolated) = 1.54 W/kg

SAR(1 g) = 0.960 W/kg; SAR(10 g) = 0.562 W/kg

Maximum value of SAR (measured) = 1.06 W/kg

**Fig.8WCDMA1700**

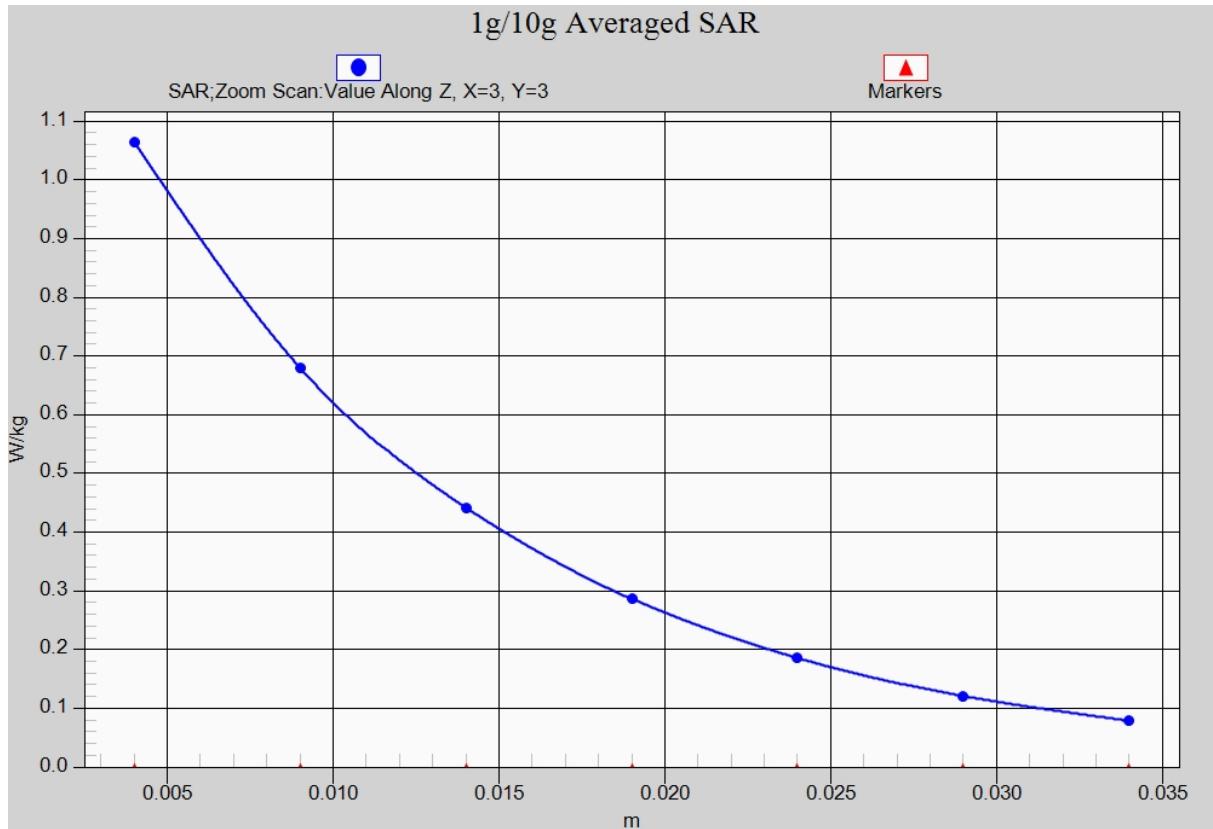


Fig. 8-1 Z-Scan at power reference point (WCDMA1700)

WCDMA 1700 Body Front Low – 15mm

Date: 2017-8-13

Electronics: DAE4 Sn1331

Medium: Body 1750 MHz

Medium parameters used (interpolated): $f = 1712.4$ MHz; $\sigma = 1.481$ mho/m; $\epsilon_r = 53.828$; $\rho = 1000$ kg/m³

Ambient Temperature: 22.9°C Liquid Temperature: 22.5°C

Communication System: WCDMA 1900 Frequency: 1712.4 MHz Duty Cycle: 1:1

Probe: EX3DV4– SN3846 ConvF(7.90, 7.90, 7.90)

Area Scan (131x81x1): Interpolated grid: dx=1.000 mm, dy=1.000 mm

Maximum value of SAR (interpolated) = 0.991 W/kg

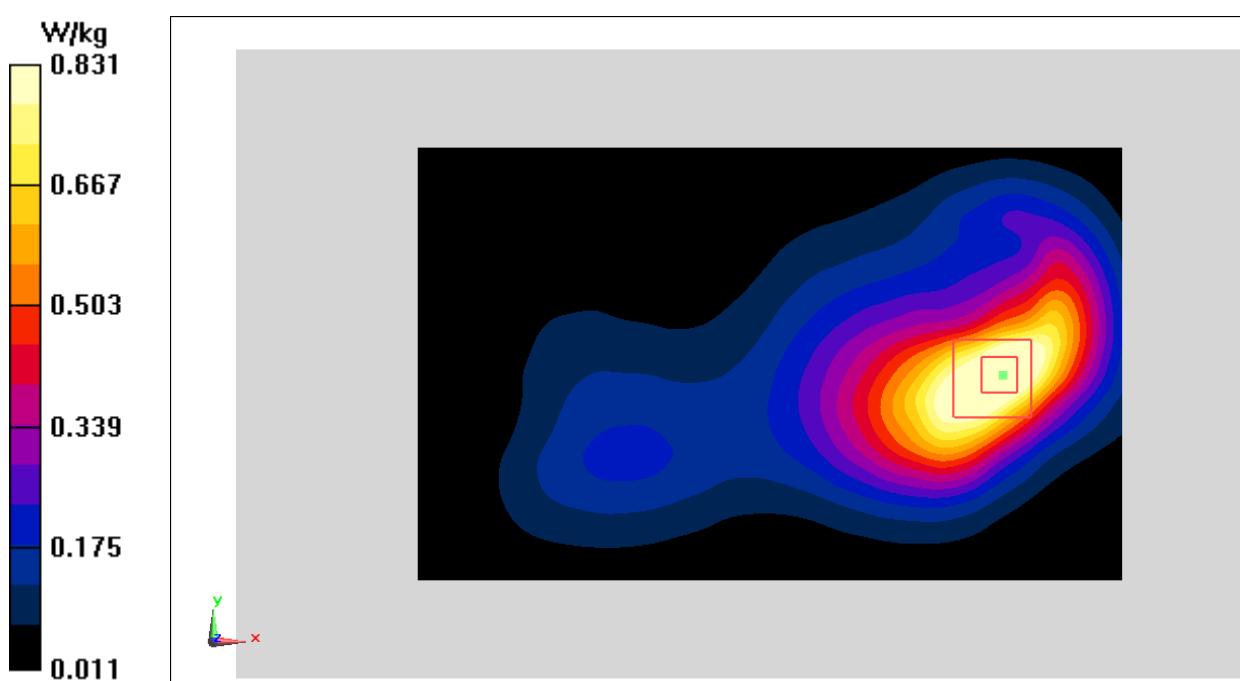
Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 9.206 V/m; Power Drift = -0.17 dB

Peak SAR (extrapolated) = 1.18 W/kg

SAR(1 g) = 0.759 W/kg; SAR(10 g) = 0.468 W/kg

Maximum value of SAR (measured) = 0.831 W/kg

**Fig.9WCDMA1700**

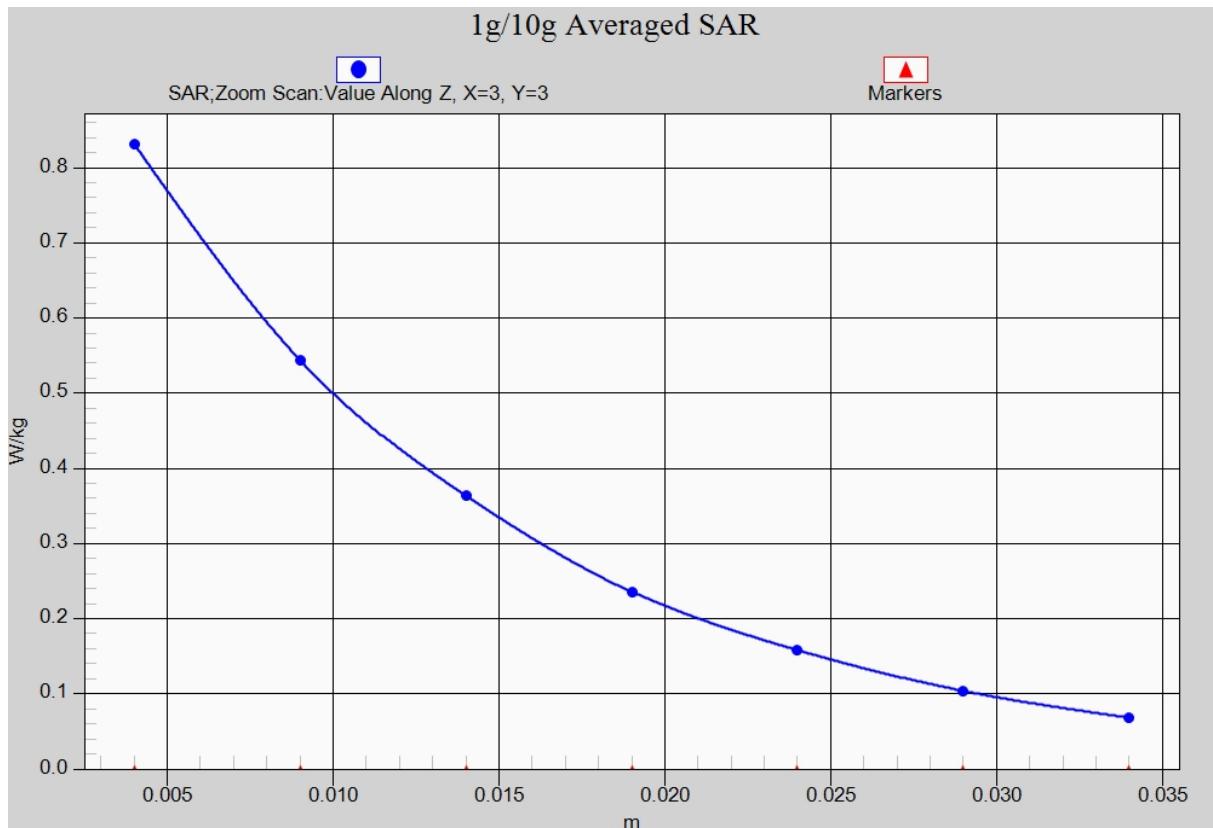


Fig. 9-1 Z-Scan at power reference point (WCDMA1700)

WCDMA 1900 Left Cheek High

Date: 2017-8-9

Electronics: DAE4 Sn1331

Medium: Head 1900 MHz

Medium parameters used (interpolated): $f = 1907.6$ MHz; $\sigma = 1.465$ mho/m; $\epsilon_r = 40.806$; $\rho = 1000$ kg/m³

Ambient Temperature: 22.9°C Liquid Temperature: 22.5°C

Communication System: WCDMA 1900 Frequency: 1907.6 MHz Duty Cycle: 1:1

Probe: EX3DV4–SN3846 ConvF(7.89, 7.89, 7.89)

Area Scan (71x121x1): Interpolated grid: dx=1.000 mm, dy=1.000 mm

Maximum value of SAR (interpolated) = 0.183 W/kg

Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 4.674 V/m; Power Drift = 0.18 dB

Peak SAR (extrapolated) = 0.194 W/kg

SAR(1 g) = 0.138 W/kg; SAR(10 g) = 0.095 W/kg

Maximum value of SAR (measured) = 0.157 W/kg

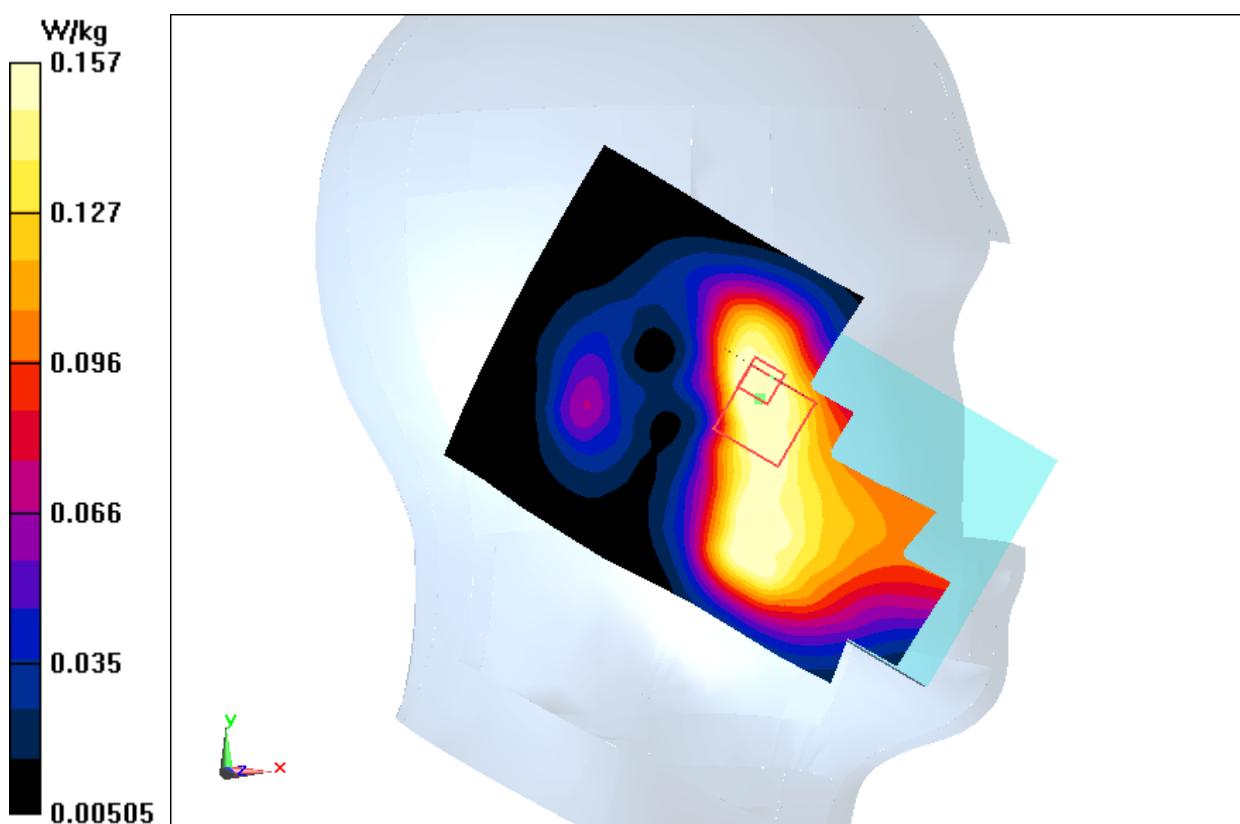


Fig.10WCDMA1900