



# TEST REPORT

**Reference No.** : WTX23X05117108W009

**Manufacturer** : Xontel Technology Company

**Address** : Kuwait City Aladel Tower,F21 QIBLA

**Product Name** : WIFI Phone

**Model No.** : XT-16W

**EN 50663:2017**

**Standards** : EN 62209-1:2016 EN 62209-2:2010+AMD1:2019

EN 50360:2017 EN 50566:2017

**Date of Receipt sample** : 2023-05-30

**Date of Test** : 2023-05-30 to 2023-07-04

**Date of Issue** : 2023-07-05

**Test Report Form No.** : WTX\_EN50360\_EN50566\_2017W

**Test Result** : Pass

**Remarks:**

The results shown in this test report refer only to the sample(s) tested, this test report cannot be reproduced, except in full, without prior written permission of the company. The report would be invalid without specific stamp of test institute and the signatures of approver.

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## Report version

| Version No. | Date of issue | Description |
|-------------|---------------|-------------|
| Rev.00      | 2023-07-05    | Original    |
| /           | /             | /           |

# WALTEK



## 1. General Information

### 1.1 Product Description for Equipment Under Test (EUT)

| General Description of EUT |   |
|----------------------------|---|
| Product Name:              | WIFI Phone  |
| Trade Name:                | Xontel  |
| Model No.:                 | XT-16W  |
| Adding Model(s):           | /   |
| Rated Voltage:             | DC3.7V  |
| Battery Capacity:          | 2000mAh   |
| Adapter Model:             | CT-083<br>Input:AC110-240 50/60Hz 0.2A<br>Output:DC5V1.0A |
| Software Version:          | /   |
| Hardware Version:          | /   |

*Note: The test data is gathered from a production sample provided by the manufacturer.*

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| <b>Technical Characteristics of EUT</b> |  |
|---|--|
| <b>2G</b>                               |  |
| Support Networks:                       | GSM, GPRS, EDGE  |
| Support Bands:                          | GSM900, DCS1800  |
| Frequency Range:                        | GSM900: Tx: 880-915MHz, Rx: 925-960MHz<br>DCS1800: Tx: 1710-1785MHz, Rx: 1805-1880MHz  |
| RF Output Power:                        | GSM900: 32.34dBm, GSM1800: 29.20dBm<br>EDGE900: 27.20dBm, EDGE1800: 25.92dBm   |
| Modulation Type:                        | GMSK, 8PSK   |
| Type of Antenna:                        | Integral Antenna   |
| Antenna Gain:                           | GSM900: 0.48dBi, DCS1800: 1.17dBi  |
| GPRS/EDGE Class:                        | Class 12   |
| <b>3G</b>                               |  |
| Support Networks:                       | WCDMA, HSDPA, HSUPA  |
| Support Bands:                          | WCDMA Band 1, WCDMA Band 8   |
| Frequency Range:                        | WCDMA Band 1: Tx: 1920-1980MHz, Rx: 2110-2170MHz<br>WCDMA Band 8: Tx: 880-915MHz, Rx: 925-960MHz   |
| RF Output Power:                        | WCDMA Band 1: 23.56dBm, WCDMA Band 8: 23.27dBm   |
| Modulation Type:                        | BPSK, QPSK, 16QAM  |
| Antenna Type:                           | Integral Antenna   |
| Antenna Gain:                           | WCDMA Band 1: 1.17dBi, WCDMA Band 8: 0.48dBi   |
| <b>4G</b>                               |  |
| Support Bands:                          | FDD-LTE Band 1, 3, 7, 8, 20, 28, TDD-LTE Band 38, 40   |
| Frequency Range:                        | FDD-LTE Band 1: Tx: 1920-1980MHz, Rx: 2110-2170MHz<br>FDD-LTE Band 3: Tx: 1710-1785MHz, Rx: 1805-1880MHz<br>FDD-LTE Band 7: Tx: 2500-2570MHz, Rx: 2620-2690MHz<br>FDD-LTE Band 8: Tx: 880-915MHz, Rx: 925-960MHz<br>FDD-LTE Band 20: Tx: 832-862MHz, Rx: 791-821MHz<br>FDD-LTE Band 28: Tx: 703-748MHz, Rx: 758-803MHz<br>TDD-LTE Band 38: Tx: 2570-2620MHz, Rx: 2570-2620MHz<br>TDD-LTE Band 40: Tx: 2300-2400MHz, Rx: 2300-2400MHz |
| Max. RF Output Power:                   | FDD-LTE Band 1: 22.43dBm, FDD-LTE Band 3: 22.89dBm,<br>FDD-LTE Band 7: 23.89dBm, FDD-LTE Band 8: 22.95dBm,<br>FDD-LTE Band 20: 22.45dBm, FDD-LTE Band 28: 22.99dBm,<br>TDD-LTE Band 38: 21.75dBm, TDD-LTE Band 40: 21.72dBm,   |
| Modulation Type:                        | QPSK, 16QAM  |
| Antenna Type:                           | Integral Antenna   |
| Antenna Gain:                           | FDD-LTE Band 1: 1.14dBi, FDD-LTE Band 3: 1.14dBi,<br>FDD-LTE Band 7: 1.32dBi, FDD-LTE Band 8: 0.29dBi,<br>FDD-LTE Band 20: 0.37dBi, FDD-LTE Band 28: 1.34dBi,<br>TDD-LTE Band 38: 1.31dBi, TDD-LTE Band 40: 2.29dBi,   |



| <b>Bluetooth</b>  |  |
|---|--|
| Bluetooth Version:  | Bluetooth V4.2   |
| Frequency Range:  | 2402-2480MHz   |
| Max.RF Output Power:  | 8.64dBm (EIRP)   |
| Type of Modulation:   | GFSK, π/4 DQPSK, 8DPSK   |
| Data Rate:  | 1Mbps, 2Mbps, 3Mbps  |
| Quantity of Channels  | 79/40  |
| Channel Separation:   | 1MHz/2MHz  |
| Type of Antenna:  | Integral Antenna   |
| Antenna Gain:   | 2.19dBi  |
| <b>Wi-Fi (2.4GHz)</b>   |  |
| Support Standards:  | 802.11b, 802.11g, 802.11n-HT20/40                                    |
| Frequency Range:  | 2412-2472MHz for 802.11b/g/n(HT20)<br>2422-2462MHz for 802.11n(HT40) |
| Max. RF Output Power:   | 15.49dBm (EIRP)  |
| Type of Modulation:   | CCK, OFDM, QPSK, BPSK, 16QAM, 64QAM                                  |
| Quantity of Channels  | 13 for 802.11b/g/n(HT20), 9 for 802.11n(HT40)                        |
| Channel Separation:   | 5MHz   |
| Type of Antenna:  | Integral Antenna   |
| Antenna Gain:   | 2.19dBi  |
| <b>GPS</b>  |  |
| Frequency Range:  | 1575.42MHz   |
| <b>FM</b>   |  |
| Frequency Range:  | 87.5~108.0MHz Receiving  |
| <i>Note: The Antenna Gain is provided by the customer and can affect the validity of results.</i> |  |



## 1.2 Test Standards

**EN 50360:2017:** Product standard to demonstrate the compliance of GSM phones with the basic restrictions related to human exposure to electromagnetic fields (300 MHz - 3 GHz).

**EN 62209-1:2016:** Human exposure to radio frequency fields from hand-held and body-mounted wireless communication devices – Human models, instrumentation, and procedures –Part 1: Procedure to determine the specific absorption rate (SAR) for hand-held devices used in close proximity to the ear (frequency range of 300 MHz to 3 GHz).

**EN 62209-2:2010+AMD1:2019:** Human exposure to radio frequency fields from hand-held and body mounted wireless communication devices-Human models, instrumentation, and procedures. Part 2: Procedure to determine the specific absorption rate (SAR) for wireless communication devices used in close proximity to the human body (frequency range of 30 MHz to 6 GHz).

**EN 50663:2017:** Generic standard for assessment of low power electronic and electrical equipment related to human exposure to electromagnetic fields (10 MHz to 300 GHz).

**EN50566:2017:** Product standard to demonstrate compliance of radio frequency fields from handheld and body-mounted wireless communication devices used by the general public (30 MHz - 6 GHz).

**Maintenance of compliance** is the responsibility of the manufacturer. Any modification of the product, which is result in lowering the emission, should be checked to ensure compliance has been maintained.

## 1.3 Test Methodology

All measurements contained in this report were conducted with standards EN 62209-2 for SAR Measurement Procedure.



## 1.4 Test Facility

Address of the test laboratory

Laboratory: Waltek Testing Group (Shenzhen) Co., Ltd.

Address: 1/F., Room 101, Building 1, Hongwei Industrial Park, Liuxian 2nd Road, Block 70 Bao'an District, Shenzhen, Guangdong, China

### FCC – Registration No.: 125990

Waltek Testing Group (Shenzhen) Co., Ltd. EMC Laboratory has been registered and fully described in a report filed with the FCC (Federal Communications Commission). The acceptance letter from the FCC is maintained in our files. The Designation Number is CN5010. Test Firm Registration Number is 125990.

### Industry Canada (IC) Registration No.: 11464A

The 3m Semi-anechoic chamber of Waltek Testing Group (Shenzhen) Co., Ltd. has been registered by Certification and Engineering Bureau of Industry Canada for radio equipment testing with Registration No.: 11464A.

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## 2. Summary of Test Results

The maximum results of Specific Absorption Rate (SAR) have found during testing are as follows:

| Frequency Band            | Head SAR                   | Body (5mm Gap)             | $SAR_{10g}$ Limit (W/kg) |
|---------------------------|----------------------------|----------------------------|--------------------------|
|                           | Maximum $SAR_{10g}$ (W/kg) | Maximum $SAR_{10g}$ (W/kg) |                          |
| GSM                       | <b>0.386</b>               | <b>1.119</b>               | 2.0                      |
| WCDMA                     | 0.277                      | 0.402                      | 2.0                      |
| LTE                       | 0.359                      | 0.662                      | 2.0                      |
| WLAN 2.4GHz               | 0.044                      | 0.038                      | 2.0                      |
| Simultaneous Transmission | <b>0.416</b>               | <b>1.157</b>               | 2.0                      |

| Frequency Band            | Limb (0mm Gap)             | $SAR_{10g}$ Limit (W/kg) |
|---------------------------|----------------------------|--------------------------|
|                           | Maximum $SAR_{10g}$ (W/kg) |                          |
| GSM                       | <b>1.577</b>               | 4.0                      |
| WCDMA                     | 0.578                      | 4.0                      |
| LTE                       | 0.941                      | 4.0                      |
| WLAN 2.4GHz               | 0.070                      | 4.0                      |
| Simultaneous Transmission | <b>1.647</b>               | 4.0                      |

The device is in compliance with Specific Absorption Rate (SAR) for general population/uncontrolled exposure limits (2.0 W/kg for Head and Body, 4.0W/kg for Limb) specified in Annex II of Council Recommendation 1999/519/EC, and had been tested in accordance with the measurement methods and procedure specified in IEC/IEEE 62209-1528:2020 and EN 62209-2.



### 3. Specific Absorption Rate (SAR)

#### 3.1 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.

#### 3.2 SAR Definition

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

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

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

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

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

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

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

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

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

## 4. SAR Measurement System

### 4.1 The Measurement System

Comosar is a system that is able to determine the SAR distribution inside a phantom of human being according to different standards. The Comosar system consists of the following items:

- Main computer to control all the system
- 6 axis robot
- Data acquisition system
- Miniature E-field probe
- Phone holder
- Head simulating tissue

The following figure shows the system.

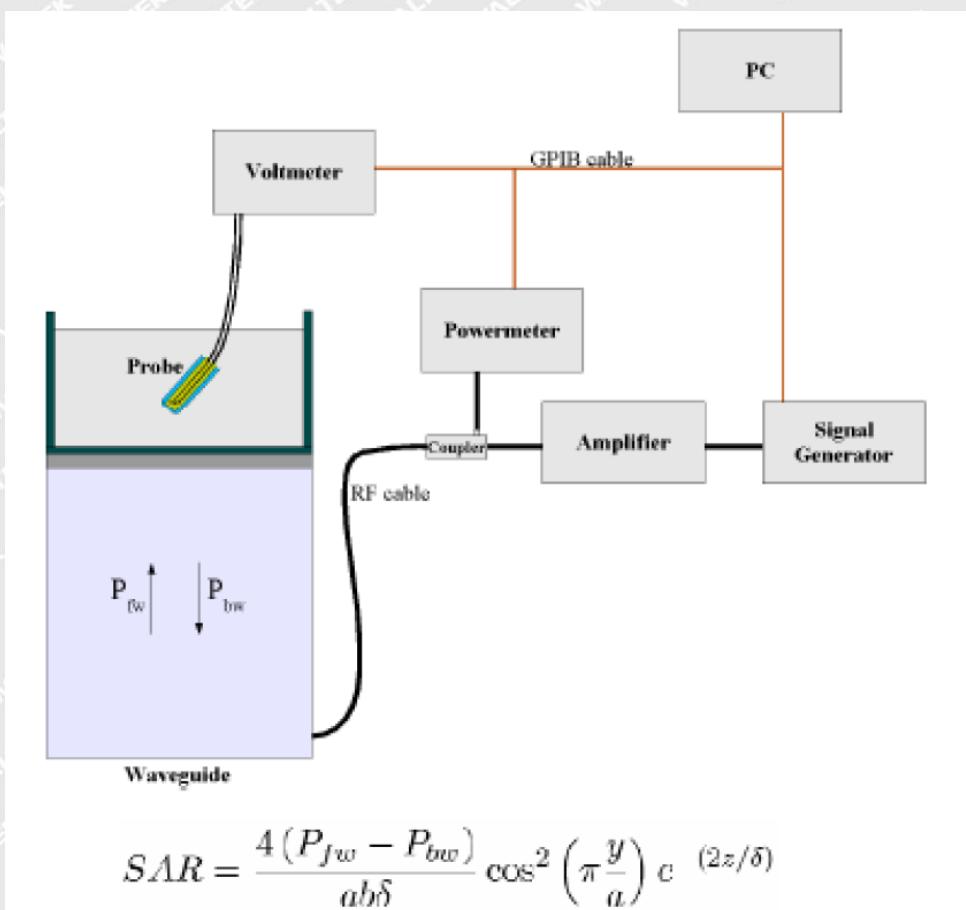


The EUT under test operating at the maximum power level is placed in the phone holder, under the phantom, which is filled with head simulating liquid. The E-Field probe measures the electric field inside the phantom. The OpenSAR software computes the results to give a SAR value in a 1g or 10g mass.

### 4.2 Probe

For the measurements the Specific Dosimetric E-Field Probe SSE2 SN 18/21 EPGO356, and refer to the calibration report for probe parameters.

Probe calibration is realized, in compliance with EN 62209-1, with CALISAR, Antennas proprietary calibration system. The calibration is performed with the EN 62209-1 annexes technique using reference guide at the five frequencies.



$$SAR = \frac{4(P_{fw} - P_{bw})}{ab\delta} \cos^2\left(\pi \frac{y}{a}\right) e^{-(2z/\delta)}$$

Where :

P<sub>fw</sub> = Forward Power

P<sub>bw</sub> = Backward Power

a and b = Waveguide dimensions

$\delta$  = Skin depth

Keithley configuration:

Rate = Medium; Filter = ON; RDGS = 10; Filter type = Moving Average; Range auto after each calibration, a SAR measurement is performed on a validation dipole and compared with a NPL calibrated probe, to verify it.

The calibration factors, CF(N), for the 3 sensors corresponding to dipole 1, dipole 2 and dipole 3 are:

$$CF(N)=SAR(N)/Vlin(N) \quad (N=1,2,3)$$

The linearised output voltage Vlin(N) is obtained from the displayed output voltage V(N) using

$$Vlin(N)=V(N)*(1+V(N)/DCP(N)) \quad (N=1,2,3)$$

where DCP is the diode compression point in mV.



## 4.3 Probe Calibration Process

### Dosimetric Assessment Procedure

Each E-Probe/Probe Amplifier combination has unique calibration parameters. SATIMO Probe calibration procedure is conducted to determine the proper amplifier settings to enter in the probe parameters. The amplifier settings are determined for a given frequency by subjecting the probe to a known E-field density (1 mW/cm<sup>2</sup>) using an with CALISAR, Antenna proprietary calibration system.

### Free Space Assessment Procedure

The free space E-field from amplified probe outputs is determined in a test chamber. This calibration can be performed in a TEM cell if the frequency is below 1 GHz and in a waveguide or other methodologies above 1 GHz for free space. For the free space calibration, the probe is placed in the volumetric center of the cavity and at the proper orientation with the field. The probe is rotated 360 degrees until the three channels show the maximum reading. The power density readings equates to 1mW/cm<sup>2</sup>.

### Temperature Assessment Procedure

E-field temperature correlation calibration is performed in a flat phantom filled with the appropriate simulated head tissue. The E-field in the medium correlates with the temperature rise in the dielectric medium. For temperature correlation calibration a RF transparent thermistor-based temperature probe is used in conjunction with the E-field probe.

Where:

$$\text{SAR} = C \frac{\Delta T}{\Delta t}$$

$\Delta t$  = exposure time (30 seconds),  
 $C$  = heat capacity of tissue (brain or muscle),  
 $\Delta T$  = temperature increase due to RF exposure.

SAR is proportional to  $\Delta T/\Delta t$ , the initial rate of tissue heating, before thermal diffusion takes place. The electric field in the simulated tissue can be used to estimate SAR by equating the thermally derived SAR to that with the E- field component.

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

Where:

$\sigma$  = simulated tissue conductivity,  
 $\rho$  = Tissue density (1.25 g/cm<sup>3</sup> for brain tissue)

## 4.4 Phantom

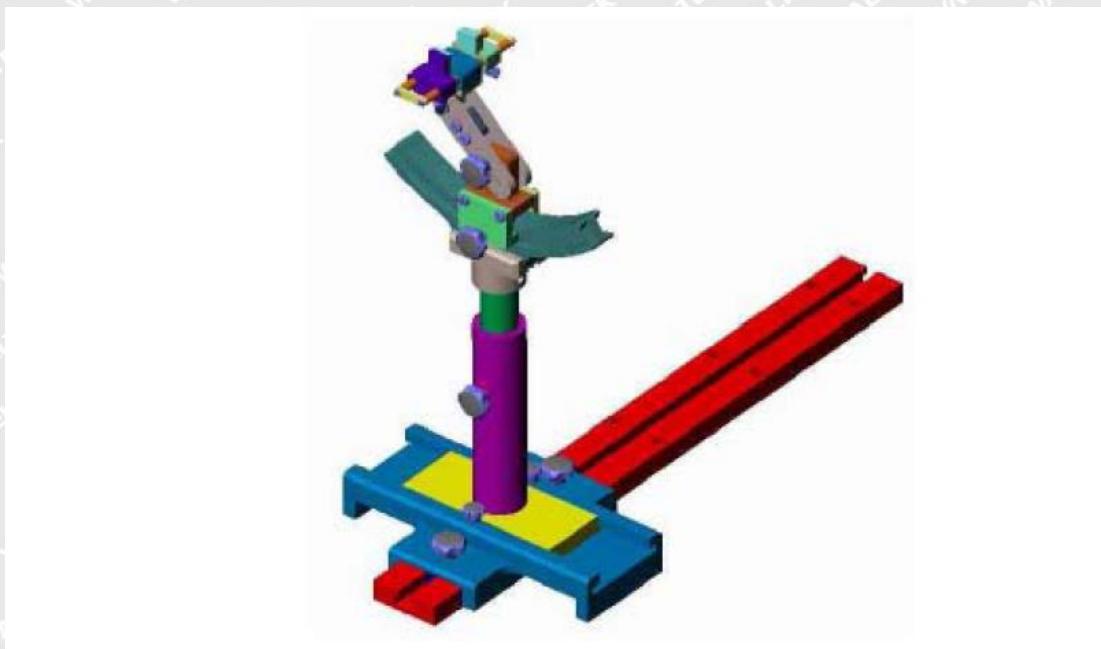
For the measurements the Specific Anthropomorphic Mannequin (SAM) defined by the IEEE SCC-34/SC2 group is used. The phantom is a polyurethane shell integrated in a wooden table. The thickness of the phantom amounts to 2mm +/- 0.2mm. It enables the dosimetric evaluation of left and right phone usage and



includes an additional flat phantom part for the simplified performance check. The phantom set-up includes a cover, which prevents the evaporation of the liquid.

#### 4.5 Device Holder

The positioning system allows obtaining cheek and tilting position with a very good accuracy. In compliance with CENELEC, the tilt angle uncertainty is lower than 1°.



| System Material | Permittivity | Loss Tangent |
|-----------------|--------------|--------------|
| Delrin          | 3.7          | 0.005        |



## 4.6 Test Equipment List

| Description                          | Manufacturer    | Model         | Serial Number             | Cal. Date  | Due. Date  |
|--------------------------------------|-----------------|---------------|---------------------------|------------|------------|
| E-Field Probe                        | MVG             | SSE2          | SN 18/21 EPGO356          | 2022-07-08 | 2023-07-07 |
| 835MHz Dipole                        | MVG             | SID835        | SN 09/15 DIP<br>0G835-358 | 2020-08-29 | 2023-08-28 |
| 900MHz Dipole                        | MVG             | SID900        | SN 09/15 DIP<br>0G900-359 | 2020-08-29 | 2023-08-28 |
| 1800MHz Dipole                       | MVG             | SID1800       | SN 09/15 DIP<br>1G800-360 | 2020-08-29 | 2023-08-28 |
| 1900MHz Dipole                       | MVG             | SID1900       | SN 09/15 DIP<br>1G900-361 | 2020-08-29 | 2023-08-28 |
| 2300 MHz Dipole                      | MVG             | SID2300       | SN 50/20 DIP<br>2G300-513 | 2021-01-14 | 2024-01-13 |
| 2450MHz Dipole                       | MVG             | SID2450       | SN 09/15 DIP<br>2G450-363 | 2020-08-29 | 2023-08-28 |
| 2600MHz Dipole                       | MVG             | SID2600       | SN 28/21 DIP<br>2G600-590 | 2021-07-19 | 2024-07-18 |
| Dielectric Probe                     | SATIMO          | SCLMP         | SN 47/12 OCPG49           | 2023-02-25 | 2024-02-24 |
| SAM Phantom                          | SATIMO          | SAM           | SN/ 47/12 SAM95           | N/A        | N/A        |
| Multi Meter                          | Keithley        | Keithley 2000 | 4006367                   | 2023-02-25 | 2024-02-24 |
| Power meter                          | Keithley        | 3500          | JC-2017-09-001            | 2023-02-25 | 2024-02-24 |
| Power meter                          | Keithley        | 3500          | JC-2017-09-001            | 2023-02-25 | 2024-02-24 |
| Power Sensor                         | HP              | 11636B        | JC-2017-10-002            | 2023-02-25 | 2024-02-24 |
| EXG Analog Signal Generator          | KEYSIGHT        | N5173B        | MY61252892                | 2023-02-25 | 2024-02-24 |
| Universal Tester                     | Rohde & Schwarz | CMU200        | 112315                    | 2023-02-25 | 2024-02-24 |
| Universal Radio Communication Tester | Rohde & Schwarz | CMW500        | 148650                    | 2023-02-25 | 2024-02-24 |
| Network Analyzer                     | HP              | 8753C         | 2901A00831                | 2023-02-25 | 2024-02-24 |

## 5. Tissue Simulating Liquids

### 5.1 Composition of Tissue Simulating Liquid

For the measurement of the field distribution inside the SAM phantom with SMTIMO, the phantom must be filled with around 25 liters of homogeneous body tissue simulating liquid. For head SAR testing, the liquid height from the ear reference point (ERP) of the phantom to the liquid top surface is larger than 15 cm. For body SAR testing, the liquid height from the center of the flat phantom to the liquid top surface is larger than 15 cm. Please see the following photos for the liquid height.



Liquid Height for Body SAR

The Composition of Tissue Simulating Liquid

| Frequency (MHz) | Water (%) | Salt (%) | 1,2-Propane diol (%) | HEC (%) | Preventol (%) | DGBE (%) |
|-----------------|-----------|----------|----------------------|---------|---------------|----------|
| Head/Body       |           |          |                      |         |               |          |
| 835             | 40.3      | 1.4      | 57.9                 | 0.2     | 0.2           | 0        |
| 900             | 40.3      | 1.4      | 57.9                 | 0.2     | 0.2           | 0        |
| 1800-2000       | 55.2      | 0.3      | 0                    | 0       | 0             | 44.5     |
| 2300            | 55.6      | 0.2      | 0                    | 0       | 0             | 44.2     |
| 2450            | 55.0      | 0.1      | 0                    | 0       | 0             | 44.9     |
| 2600            | 54.9      | 0.1      | 0                    | 0       | 0             | 45.0     |



## 5.2 Tissue Dielectric Parameters for Head and Body Phantoms

According to EN 62209-2, nominal dielectric values of the tissue-equivalent liquid in the phantom are specified in Table 1, for discrete frequencies ranging between 30 MHz and 6 GHz. For other frequencies within this range, the nominal dielectric values shall be obtained by linear interpolation between the higher and lower tabulated figures.

| Target Frequency<br>(MHz) | Head                         |                                  | Body                         |                                  |
|---------------------------|------------------------------|----------------------------------|------------------------------|----------------------------------|
|                           | Conductivity<br>( $\sigma$ ) | Permittivity<br>( $\epsilon_r$ ) | Conductivity<br>( $\sigma$ ) | Permittivity<br>( $\epsilon_r$ ) |
| 150                       | 0.76                         | 52.3                             | 0.80                         | 61.9                             |
| 300                       | 0.87                         | 45.3                             | 0.92                         | 58.2                             |
| 450                       | 0.87                         | 43.5                             | 0.94                         | 56.7                             |
| <b>750</b>                | <b>0.89</b>                  | <b>41.9</b>                      | <b>0.96</b>                  | <b>55.5</b>                      |
| <b>835</b>                | <b>0.90</b>                  | <b>41.5</b>                      | <b>0.97</b>                  | <b>55.2</b>                      |
| <b>900</b>                | <b>0.97</b>                  | <b>41.5</b>                      | <b>1.05</b>                  | <b>55.0</b>                      |
| 915                       | 0.98                         | 41.5                             | 1.06                         | 55.0                             |
| 1450                      | 1.20                         | 40.5                             | 1.30                         | 54.0                             |
| 1610                      | 1.29                         | 40.3                             | 1.40                         | 53.8                             |
| <b>1800-2000</b>          | <b>1.40</b>                  | <b>40.0</b>                      | <b>1.52</b>                  | <b>53.3</b>                      |
| <b>2300</b>               | <b>1.67</b>                  | <b>39.5</b>                      | <b>1.81</b>                  | <b>52.9</b>                      |
| <b>2450</b>               | <b>1.80</b>                  | <b>39.2</b>                      | <b>1.95</b>                  | <b>52.7</b>                      |
| <b>2600</b>               | <b>1.96</b>                  | <b>39.0</b>                      | <b>2.16</b>                  | <b>52.5</b>                      |
| 3000                      | 2.40                         | 38.5                             | 2.73                         | 52.0                             |
| 5200                      | 4.66                         | 36.0                             | 5.30                         | 49.0                             |
| 5400                      | 4.86                         | 35.8                             | 5.53                         | 48.7                             |
| 5600                      | 5.07                         | 35.5                             | 5.77                         | 48.5                             |
| 5800                      | 5.27                         | 35.3                             | 6.00                         | 48.2                             |



### 5.3 Tissue Calibration Result

The dielectric parameters of the liquids were verified prior to the SAR evaluation using an Agilent 85033E Dielectric Probe Kit and an Agilent Network Analyzer.

#### Calibration Result for Dielectric Parameters of Tissue Simulating Liquid

| Head Tissue Simulating Liquid |               |                |               |              |                  |                 |              |              |            |
|-------------------------------|---------------|----------------|---------------|--------------|------------------|-----------------|--------------|--------------|------------|
| Freq.<br>MHz                  | Temp.<br>(°C) | Conductivity   |               |              | Permittivity     |                 |              | Limit<br>(%) | Date       |
|                               |               | Reading<br>(σ) | Target<br>(σ) | Delta<br>(%) | Reading<br>(ε r) | Target<br>(ε r) | Delta<br>(%) |              |            |
| 750                           | 22.2          | 0.87           | 0.89          | -2.25        | 41.46            | 41.9            | -1.05        | ±5           | 2023-06-23 |
| 835                           | 22.2          | 0.89           | 0.90          | -1.11        | 41.37            | 41.5            | -0.31        | ±5           | 2023-06-23 |
| 900                           | 22.2          | 1.01           | 0.97          | 4.12         | 40.28            | 41.5            | -2.94        | ±5           | 2023-06-23 |
| 1800                          | 22.5          | 1.38           | 1.40          | -1.43        | 39.36            | 40.0            | -1.60        | ±5           | 2023-06-25 |
| 1900                          | 22.5          | 1.38           | 1.40          | -1.43        | 39.48            | 40.0            | -1.30        | ±5           | 2023-06-25 |
| 2300                          | 22.4          | 1.68           | 1.67          | 0.60         | 39.16            | 39.5            | -0.86        | ±5           | 2023-06-27 |
| 2450                          | 22.4          | 1.78           | 1.80          | -1.11        | 38.57            | 39.2            | -1.61        | ±5           | 2023-06-28 |
| 2600                          | 22.2          | 1.94           | 1.96          | -1.02        | 39.44            | 39.0            | 1.13         | ±5           | 2023-06-27 |



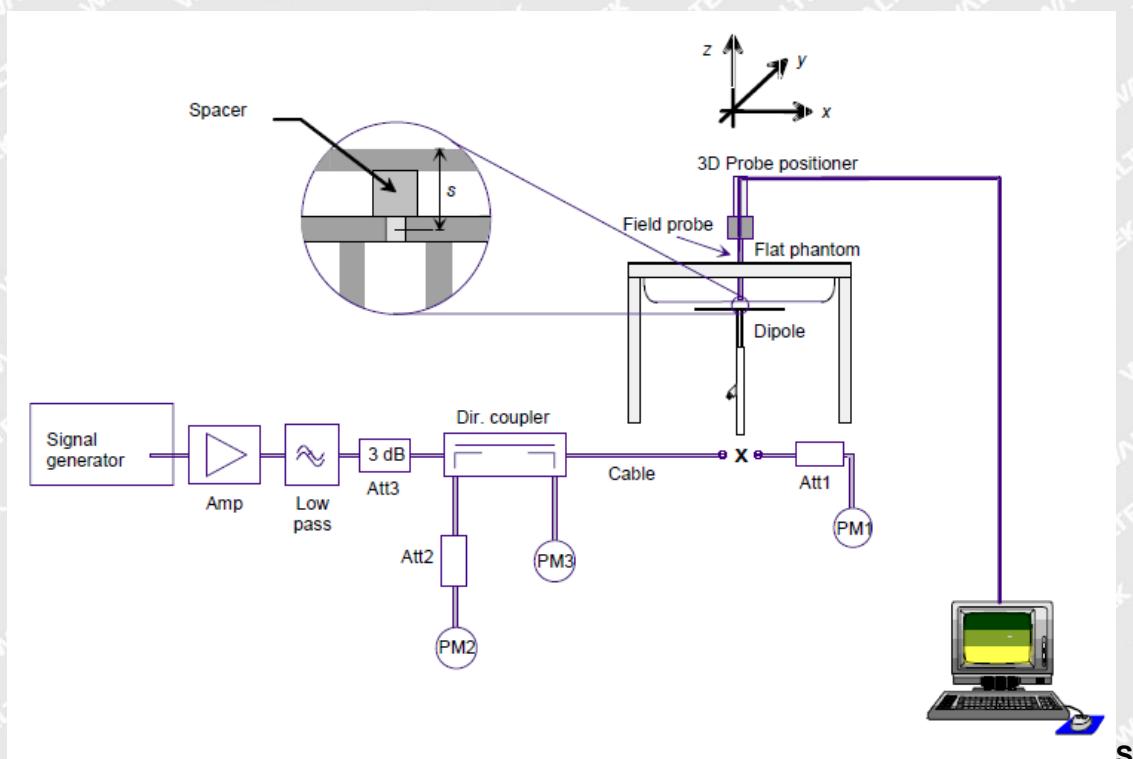
## 6. SAR Measurement Evaluation

### 6.1 Purpose of System Performance Check

at the device test frequencies. System check verifies the measurement repeatability of a SAR system before compliance testing and is not a validation of all system specifications. The latter is not required for testing a device but is mandatory before the system is deployed. The system check detects possible short-term drift and unacceptable measurement errors or uncertainties in the system

### 6.2 System Setup

In the simplified setup for system evaluation, the EUT is replaced by a calibrated dipole and the power source is replaced by a continuous wave which comes from a signal generator at frequency 850MHz, 900 MHz, 1800MHz, 2000MHz, 2450MHz, 2600MHz. 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.



Verification Setup Block Diagram

**Setup Photo of Dipole Antenna**

The output power on dipole port must be calibrated to 24 dBm (250 mW) before dipole is connected.

The output power on 5 GHz Waveguide must be calibrated to 20 dBm (100mW) before 5 GHz Waveguide is connected.

### **6.3 Validation Results**

Comparing to the original SAR value provided by SATIMO, the validation data should be within its specification of 10 %. The following table shows the target SAR and measured SAR after normalized to 1W input power. The table below indicates the system performance check can meet the variation criterion.

| Frequency | Liquid | Power (mw) | Targeted SAR10g | Measured SAR10g | Normalized SAR10g | Tolerance | Date       |
|-----------|--------|------------|-----------------|-----------------|-------------------|-----------|------------|
| 750       | Head   | 250        | 5.72            | 1.34            | 5.36              | -6.29     | 2023-06-23 |
| 835       | Head   | 250        | 6.10            | 1.47            | 5.88              | -3.61     | 2023-06-23 |
| 900       | Head   | 250        | 6.98            | 1.70            | 6.80              | -2.58     | 2023-06-23 |
| 1800      | Head   | 250        | 20.29           | 5.00            | 20.00             | -1.43     | 2023-06-25 |
| 1900      | Head   | 250        | 20.25           | 5.17            | 20.68             | 2.12      | 2023-06-25 |
| 2300      | Head   | 250        | 22.91           | 5.68            | 22.72             | -0.83     | 2023-06-27 |
| 2450      | Head   | 250        | 24.20           | 6.15            | 24.60             | 1.65      | 2023-06-28 |
| 2600      | Head   | 250        | 24.63           | 6.17            | 24.68             | 0.20      | 2023-06-27 |

#### **Targeted and Measurement SAR**

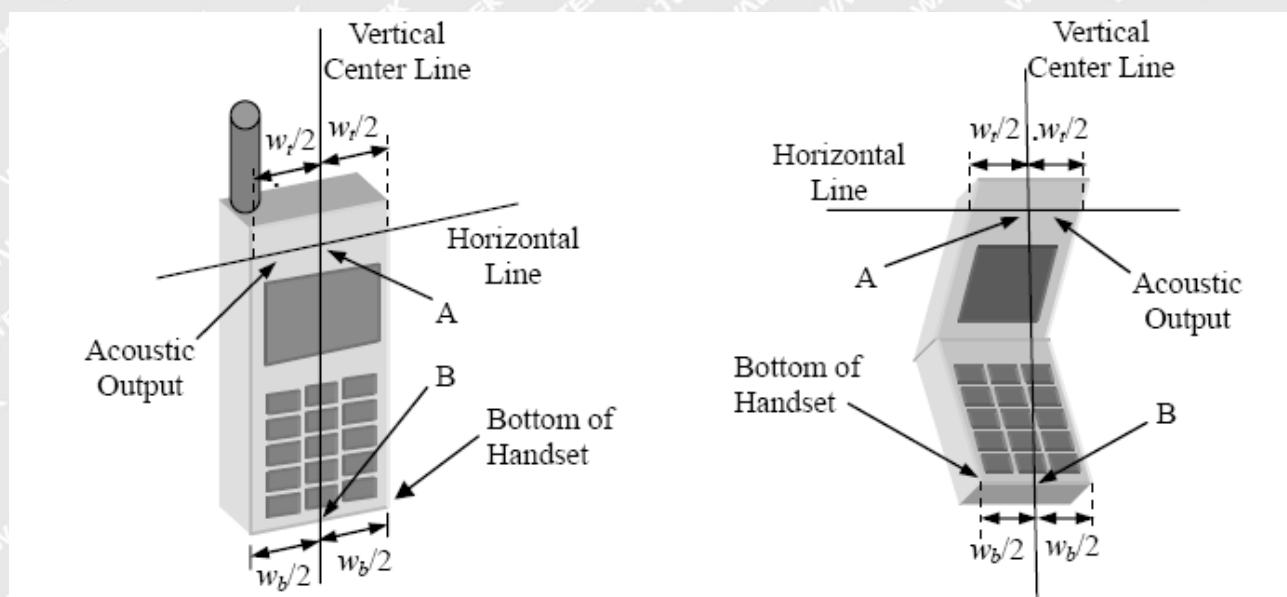
**Please refer to Annex A for the plots of system performance check.**



## 7. EUT Testing Position

### 7.1 Define Two Imaginary Lines on The Handset

- (a) The vertical centerline passes through two points on the front side of the handset - the midpoint of the width  $w_t$  of the handset at the level of the acoustic output, and the midpoint of the width  $w_b$  of the bottom of the handset.
- (b) The horizontal line is perpendicular to the vertical centerline and passes through the center of the acoustic output. The horizontal line is also tangential to the face of the handset at point A.
- (c) The two lines intersect at point A. Note that for many handsets, point A coincides with the center of the acoustic output; however, the acoustic output may be located elsewhere on the horizontal line. Also note that the vertical centerline is not necessarily parallel to the front face of the handset, especially for clamshell handsets, handsets with flip covers, and other irregularly shaped handsets.

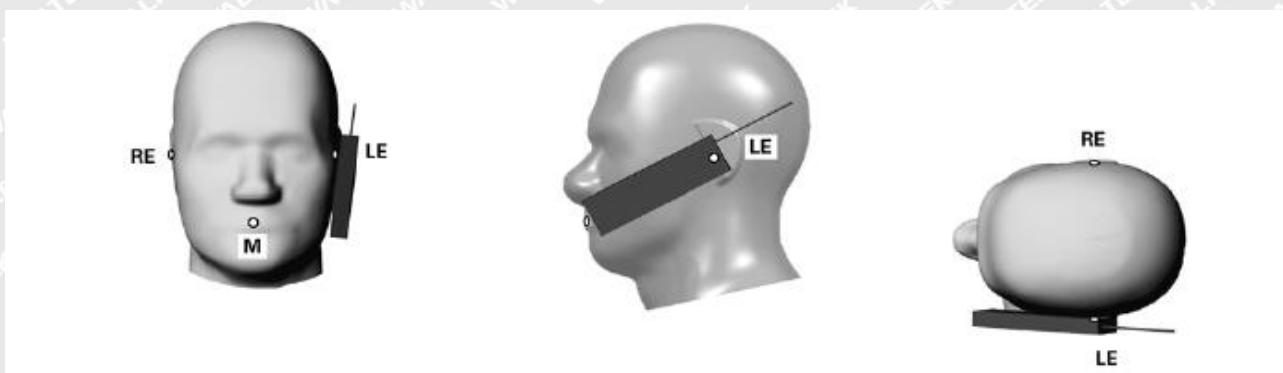


**Fig 7.1 Illustration for Handset Vertical and Horizontal Reference Lines**



## 7.2 Cheek Position

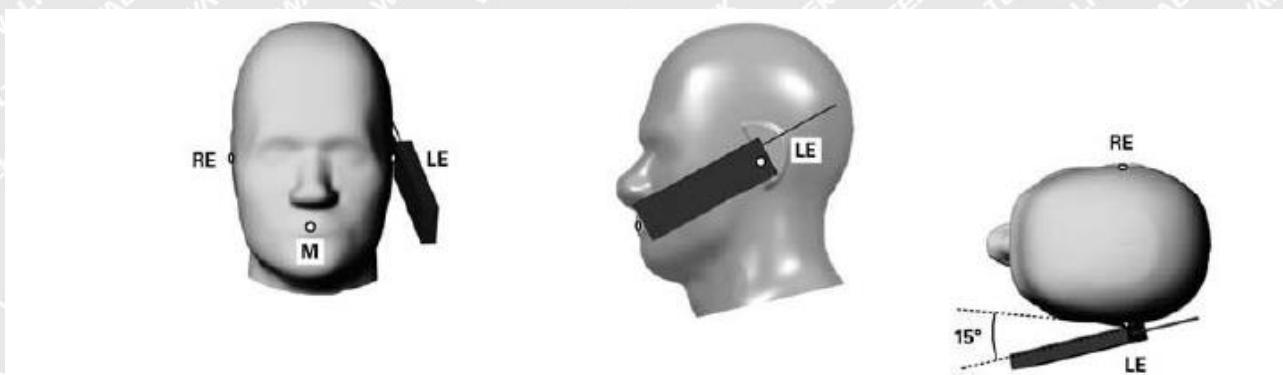
- (a) To position the device with the vertical center line of the body of the device and the horizontal line crossing the center piece in a plane parallel to the sagittal plane of the phantom. While maintaining the device in this plane, align the vertical center line with the reference plane containing the three ear and mouth reference point (M: Mouth, RE: Right Ear, and LE: Left Ear) and align the center of the ear piece with the line RE-LE.
- (b) To move the device towards the phantom with the ear piece aligned with the line LE-RE until the phone touched the ear. While maintaining the device in the reference plane and maintaining the phone contact with the ear, move the bottom of the phone until any point on the front side is in contact with the cheek of the phantom or until contact with the ear is lost (see Fig. 7.2).



**Fig 7.2 Illustration for Cheek Position**

## 7.3 Tilted Position

- (a) To position the device in the "cheek" position described above.
- (b) While maintaining the device in the reference plane described above and pivoting against the ear, moves it outward away from the mouth by an angle of 15 degrees or until contact with the ear is lost (see Fig. 7.3).



**Fig 7.3 Illustration for Tilted Position**



## 7.4 Body Position

- (a) To position the device parallel to the phantom surface with each side.
- (b) To adjust the device parallel to the flat phantom.
- (c) To adjust the distance between the device surface and the flat phantom to 5mm. a separation distance of 5mm between the phone and the body is used in the measurement conducted for body SAR. This distance represents a typical phone-skin distance when the phone is close to the body e.g. located in pants pocket taking into consideration typical average clothing fabric thickness.

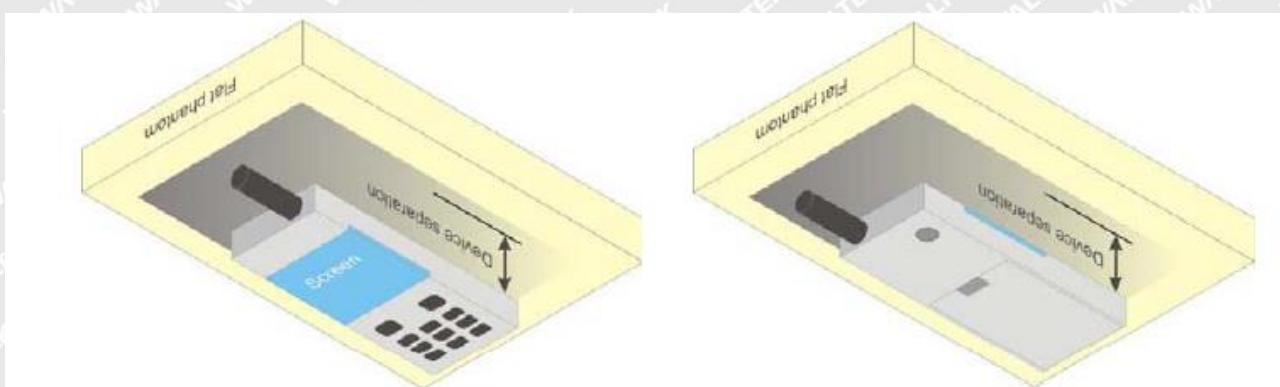


Fig 7.4 Illustration for Body Worn Position

## 7.5 EUT Antenna Position

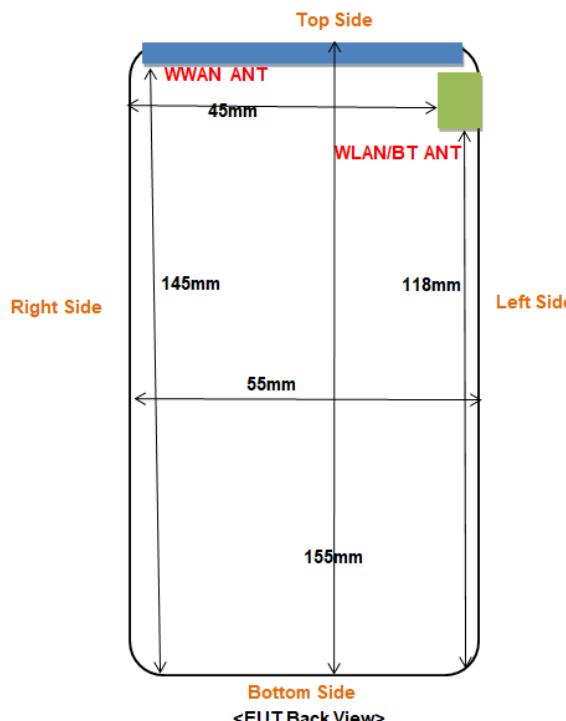


Fig 7.2 Block Diagram for EUT Antenna Position



| Distance of EUT antenna-to-edge/surface(mm),<br>Test distance:0mm/5mm |           |            |           |            |          |             |
|---|-----------|------------|-----------|------------|----------|-------------|
| Antennas  | Back side | Front side | Left Edge | Right Edge | Top Edge | Bottom Edge |
| WWAN  | <25       | <25        | <25       | <25        | <25      | 145         |
| WLAN/BT   | <25       | <25        | <25       | 45         | <25      | 118         |

## 7.4 EUT Testing Position

Head/Body mode SAR assessments are required for this device. This EUT was tested in different positions for different SAR test modes, more information as below:

| Head SAR tests |             |            |              |             |
|----------------|-------------|------------|--------------|-------------|
| Antennas       | Right Cheek | Left Cheek | Right Tilted | Left Tilted |
| WWAN           | Yes         | Yes        | Yes          | Yes         |
| WLAN/BT        | Yes         | Yes        | Yes          | Yes         |

| Body SAR tests, Test distance: 5mm |       |      |            |           |          |             |
|------------------------------------|-------|------|------------|-----------|----------|-------------|
| Antennas                           | Front | Back | Right Side | Left Side | Top Side | Bottom Side |
| WWAN                               | Yes   | Yes  | Yes        | Yes       | Yes      | No          |
| WLAN/BT                            | Yes   | Yes  | No         | Yes       | Yes      | No          |

| Limb SAR tests, Test distance: 0mm |       |      |            |           |          |             |
|------------------------------------|-------|------|------------|-----------|----------|-------------|
| Antennas                           | Front | Back | Right Side | Left Side | Top Side | Bottom Side |
| WWAN                               | Yes   | Yes  | Yes        | Yes       | Yes      | No          |
| WLAN/BT                            | Yes   | Yes  | No         | Yes       | Yes      | No          |

Please refer to Annex D for the EUT test setup photos.



## 8. SAR Measurement Procedures

### 8.1 Measurement Procedures

The measurement procedures are as follows:

- (a) Use base station simulator (if applicable) or engineering software to transmit RF power continuously (continuous Tx) in the highest power channel.
- (b) Keep EUT to radiate maximum output power or 100% factor (if applicable)
- (c) Measure output power through RF cable and power meter.
- (d) Place the EUT in the positions as Annex D demonstrates.
- (e) Set scan area, grid size and other setting on the SATIMO software.
- (f) Measure SAR results for the highest power channel on each testing position.
- (g) Find out the largest SAR result on these testing positions of each band
- (h) Measure SAR results for other channels in worst SAR testing position if the SAR of highest power channel is larger than 0.8 W/kg

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

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

### 8.2 Spatial Peak SAR Evaluation

The procedure for spatial peak SAR evaluation has been implemented according to the test standard. It can be conducted for 1g and 10g, as well as for user-specific masses. The SATIMO software includes all numerical procedures necessary to evaluate the spatial peak SAR value.

The base for the evaluation is a "cube" measurement. The measured volume must include the 1g and 10g cubes with the highest averaged SAR values. For that purpose, the center of the measured volume is aligned to the interpolated peak SAR value of a previously performed area scan.

The entire evaluation of the spatial peak values is performed within the post-processing engine. The system always gives the maximum values for the 1g and 10g cubes. The algorithm to find the cube with highest averaged SAR is divided into the following stages:

- (a) Extraction of the measured data (grid and values) from the Zoom Scan
- (b) Calculation of the SAR value at every measurement point based on all stored data
- (c) Generation of a high-resolution mesh within the measured volume
- (d) Interpolation of all measured values form the measurement grid to the high-resolution grid
- (e) Extrapolation of the entire 3D field distribution to the phantom surface over the distance from sensor to surface
- (f) Calculation of the averaged SAR within masses of 1g and 10g



## 8.3 Area & Zoom Scan Procedures

First Area Scan is used to locate the approximate location(s) of the local peak SAR value(s). The measurement grid within an Area Scan is defined by the grid extent, grid step size and grid offset. Next, in order to determine the EM field distribution in a three-dimensional spatial extension, Zoom Scan is required. The Zoom Scan measures 5x5x7 points with step size 8, 8 and 5 mm for 300 MHz to 3 GHz, and 8x8x8 points with step size 4, 4 and 2.5 mm for 3 GHz to 6 GHz. The Zoom Scan is performed around the highest E-field value to determine the averaged SAR-distribution over 10 g.

## 8.4 Volume Scan Procedures

The volume scan is used for assess overlapping SAR distributions for antennas transmitting in different frequency bands. It is equivalent to an oversized zoom scan used in standalone measurements. The measurement volume will be used to enclose all the simultaneous transmitting antennas. For antennas transmitting simultaneously in different frequency bands, the volume scan is measured separately in each frequency band. In order to sum correctly to compute the 1g aggregate SAR, the EUT remain in the same test position for all measurements and all volume scan use the same spatial resolution and grid spacing (step-size is 4, 4 and 2.5 mm). When all volume scan were completed, the software can combine and subsequently superpose these measurement data to calculating the multiband SAR.

## 8.5 SAR Averaged Methods

The local SAR inside the phantom is measured using small dipole sensing elements inside a probe body. The probe tip must not be in contact with the phantom surface in order to minimize measurements errors, but the highest local SAR will occur at the surface of the phantom.

An extrapolation is using to determinate this highest local SAR values. The extrapolation is based on a fourth-order least-square polynomial fit of measured data. The local SAR value is then extrapolated from the liquid surface with a 1mm step.

The measurements have to be performed over a limited time (due to the duration of the battery) so the step of measurement is high. It could vary between 5 and 8 mm. To obtain an accurate assessment of the maximum SAR averaged over 10g and 1 g requires a very fine resolution in the three dimensional scanned data array.

## 8.6 Power Drift Monitoring

All SAR testing is under the EUT install full charged battery and transmit maximum output power. In SATIMO measurement software, the power reference measurement and power drift measurement procedures are used for monitoring the power drift of EUT during SAR test. Both these procedures measure the field at a specified reference position before and after the SAR testing. The software will calculate the field difference in dB. If the power drift more than 5%, the SAR will be retested.



## 9. SAR Test Result

### 9.1 Conducted RF Output Power

| GSM - Burst Average Power (dBm) |              |              |              |               |               |               |
|---------------------------------|--------------|--------------|--------------|---------------|---------------|---------------|
| Band                            | GSM900       |              |              | GSM1800       |               |               |
| Channel                         | 975          | 60           | 124          | 513           | 698           | 880           |
| <b>Frequency (MHz)</b>          | <b>880.2</b> | <b>902.0</b> | <b>914.8</b> | <b>1710.4</b> | <b>1747.4</b> | <b>1783.8</b> |
| GSM                             | <b>32.20</b> | 32.00        | 31.90        | 28.20         | 28.60         | <b>29.20</b>  |
| GPRS (1 slot)                   | 32.34        | 32.09        | 32.01        | 28.22         | 28.60         | 29.17         |
| GPRS (2 slots)                  | 31.83        | 31.51        | 31.41        | 27.45         | 27.82         | 28.47         |
| GPRS (3 slots)                  | 30.35        | 29.97        | 29.84        | 25.69         | 26.04         | 26.71         |
| GPRS (4 slots)                  | <b>29.24</b> | 28.89        | 28.72        | 24.51         | 24.86         | <b>25.53</b>  |
| EGPRS (1 slot)                  | 27.20        | 27.16        | 27.05        | 25.91         | 25.92         | 24.70         |
| EGPRS (2 slots)                 | 24.94        | 25.14        | 25.17        | 23.51         | 23.73         | 23.96         |
| EGPRS (3 slots)                 | 24.32        | 24.35        | 24.26        | 23.27         | 23.60         | 23.87         |
| EGPRS (4 slots)                 | 21.77        | 21.78        | 21.78        | 21.25         | 21.57         | 21.84         |

| GSM - Source-Based Time-Average Power (dBm) |              |              |              |               |               |               |
|---|--------------|--------------|--------------|---------------|---------------|---------------|
| Band  | GSM900       |              |              | GSM1800       |               |               |
| Channel                                     | 975          | 60           | 124          | 513           | 698           | 880           |
| <b>Frequency (MHz)</b>                      | <b>880.2</b> | <b>902.0</b> | <b>914.8</b> | <b>1710.4</b> | <b>1747.4</b> | <b>1783.8</b> |
| GSM   | 23.20        | 23.00        | 22.90        | 19.20         | 19.60         | 20.20         |
| GPRS (1 slot)                               | 23.34        | 23.09        | 23.01        | 19.22         | 19.60         | 20.17         |
| GPRS (2 slots)                              | 25.83        | 25.51        | 25.41        | 21.45         | 21.82         | 22.47         |
| GPRS (3 slots)                              | 26.10        | 25.72        | 25.59        | 21.44         | 21.79         | 22.46         |
| GPRS (4 slots)                              | <b>26.24</b> | 25.89        | 25.72        | 21.51         | 21.86         | <b>22.53</b>  |
| EGPRS (1 slot)                              | 18.20        | 18.16        | 18.05        | 16.91         | 16.92         | 15.70         |
| EGPRS (2 slots)                             | 18.94        | 19.14        | 19.17        | 17.51         | 17.73         | 17.96         |
| EGPRS (3 slots)                             | 20.07        | 20.10        | 20.01        | 19.02         | 19.35         | 19.62         |
| EGPRS (4 slots)                             | 18.77        | 18.78        | 18.78        | 18.25         | 18.57         | 18.84         |

Note: The source-based time-averaged power is linearly scaled the maximum burst averaged power based on time slots. The calculated method are shown as below:

Source based time-average power = Burst averaged power - Duty cycle factor in dB

Duty cycle factor = 9 dB for 1 Tx slot, 6 dB for 2 Tx slots, 4.25 dB for 3 Tx slots, 3 dB for 4 Tx slots

#### Remark:

- For Body SAR testing, GPRS should be evaluated, therefore the EUT was set in GPRS (2Tx slots) for GSM900 and GPRS (3Tx slots) for GSM1800 due to its highest source-based time-average power.
- The DUT do not support DTM function.



| WCDMA - Average Power (dBm) |              |       |        |                 |       |       |
|-----------------------------|--------------|-------|--------|-----------------|-------|-------|
| Band                        | WCDMA Band I |       |        | WCDMA Band VIII |       |       |
| Channel                     | 9613         | 9750  | 9887   | 2713            | 2788  | 2862  |
| Frequency (MHz)             | 1922.6       | 1950  | 1977.4 | 882.6           | 897.6 | 912.4 |
| RMC                         | 23.33        | 23.41 | 23.56  | 23.27           | 23.21 | 23.11 |
| HSDPA Subtest-1             | 22.42        | 22.98 | 22.59  | 21.83           | 22.68 | 22.46 |
| HSDPA Subtest-2             | 22.39        | 22.96 | 22.53  | 21.80           | 22.62 | 22.43 |
| HSDPA Subtest-3             | 22.37        | 22.97 | 22.56  | 21.82           | 22.65 | 22.40 |
| HSDPA Subtest-4             | 22.40        | 22.95 | 22.55  | 21.79           | 22.66 | 22.41 |
| HSUPA Subtest-1             | 22.38        | 22.96 | 22.54  | 21.67           | 22.65 | 22.38 |
| HSUPA Subtest-2             | 22.35        | 22.91 | 22.51  | 21.62           | 22.60 | 22.35 |
| HSUPA Subtest-3             | 22.36        | 22.90 | 22.53  | 21.64           | 22.62 | 22.33 |
| HSUPA Subtest-4             | 22.37        | 22.92 | 22.49  | 21.63           | 22.59 | 22.34 |
| HSUPA Subtest-5             | 22.34        | 22.89 | 22.50  | 21.66           | 22.61 | 22.31 |

**WALTEK**

**LTE Band 1:**

| Condition | Band  | Channel Bandwidth | Modulation | Channel | RB Configure | Result (dBm) | Verdict |
|-----------|-------|-------------------|------------|---------|--------------|--------------|---------|
| NTNV      | Band1 | 5MHz              | QPSK       | 18025   | 1RB#0        | 22.25        | PASS    |
| NTNV      | Band1 | 5MHz              | QPSK       | 18025   | 8RB#0        | 22.22        | PASS    |
| NTNV      | Band1 | 5MHz              | QPSK       | 18300   | 1RB#0        | 21.83        | PASS    |
| NTNV      | Band1 | 5MHz              | QPSK       | 18300   | 8RB#0        | 21.85        | PASS    |
| NTNV      | Band1 | 5MHz              | QPSK       | 18575   | 1RB#24       | 21.74        | PASS    |
| NTNV      | Band1 | 5MHz              | QPSK       | 18575   | 8RB#17       | 21.72        | PASS    |
| NTNV      | Band1 | 20MHz             | QPSK       | 18100   | 1RB#0        | <b>22.43</b> | PASS    |
| NTNV      | Band1 | 20MHz             | QPSK       | 18100   | 18RB#0       | 21.40        | PASS    |
| NTNV      | Band1 | 20MHz             | QPSK       | 18300   | 1RB#0        | 21.24        | PASS    |
| NTNV      | Band1 | 20MHz             | QPSK       | 18300   | 18RB#0       | 21.30        | PASS    |
| NTNV      | Band1 | 20MHz             | QPSK       | 18500   | 1RB#99       | 20.98        | PASS    |
| NTNV      | Band1 | 20MHz             | QPSK       | 18500   | 18RB#82      | 20.97        | PASS    |

**LTE Band 3:**

| Condition | Band  | Channel Bandwidth | Modulation | Channel | RB Configure | Result (dBm) | Verdict |
|-----------|-------|-------------------|------------|---------|--------------|--------------|---------|
| NTNV      | Band3 | 1.4MHz            | QPSK       | 19207   | 1RB#0        | 22.72        | PASS    |
| NTNV      | Band3 | 1.4MHz            | QPSK       | 19575   | 1RB#0        | 22.39        | PASS    |
| NTNV      | Band3 | 1.4MHz            | QPSK       | 19575   | 5RB#0        | 22.67        | PASS    |
| NTNV      | Band3 | 1.4MHz            | QPSK       | 19943   | 1RB#0        | 22.31        | PASS    |
| NTNV      | Band3 | 5MHz              | QPSK       | 19225   | 1RB#0        | 22.26        | PASS    |
| NTNV      | Band3 | 5MHz              | QPSK       | 19225   | 1RB#24       | 22.22        | PASS    |
| NTNV      | Band3 | 5MHz              | QPSK       | 19575   | 1RB#0        | 22.53        | PASS    |
| NTNV      | Band3 | 5MHz              | QPSK       | 19575   | 1RB#24       | 22.37        | PASS    |
| NTNV      | Band3 | 5MHz              | QPSK       | 19575   | 8RB#0        | 22.49        | PASS    |
| NTNV      | Band3 | 5MHz              | QPSK       | 19925   | 1RB#0        | 21.94        | PASS    |
| NTNV      | Band3 | 5MHz              | QPSK       | 19925   | 1RB#24       | 21.83        | PASS    |
| NTNV      | Band3 | 20MHz             | QPSK       | 19300   | 1RB#0        | 22.42        | PASS    |
| NTNV      | Band3 | 20MHz             | QPSK       | 19300   | 1RB#99       | 21.90        | PASS    |
| NTNV      | Band3 | 20MHz             | QPSK       | 19575   | 1RB#0        | 22.31        | PASS    |
| NTNV      | Band3 | 20MHz             | QPSK       | 19575   | 1RB#99       | 22.10        | PASS    |
| NTNV      | Band3 | 20MHz             | QPSK       | 19575   | 18RB#0       | <b>22.89</b> | PASS    |
| NTNV      | Band3 | 20MHz             | QPSK       | 19850   | 1RB#0        | 21.98        | PASS    |
| NTNV      | Band3 | 20MHz             | QPSK       | 19850   | 1RB#99       | 21.60        | PASS    |

**LTE Band 7:**

| Condition | Band  | Channel Bandwidth | Modulation | Channel | RB Configure | Result (dBm) | Verdict |
|-----------|-------|-------------------|------------|---------|--------------|--------------|---------|
| NTNV      | Band7 | 5MHz              | QPSK       | 20775   | 1RB#0        | 23.42        | PASS    |
| NTNV      | Band7 | 5MHz              | QPSK       | 20775   | 1RB#24       | 23.47        | PASS    |
| NTNV      | Band7 | 5MHz              | QPSK       | 21100   | 1RB#0        | 23.69        | PASS    |
| NTNV      | Band7 | 5MHz              | QPSK       | 21100   | 1RB#24       | 23.68        | PASS    |
| NTNV      | Band7 | 5MHz              | QPSK       | 21100   | 8RB#0        | 23.60        | PASS    |
| NTNV      | Band7 | 5MHz              | QPSK       | 21425   | 1RB#0        | 23.88        | PASS    |
| NTNV      | Band7 | 5MHz              | QPSK       | 21425   | 1RB#24       | 23.79        | PASS    |
| NTNV      | Band7 | 20MHz             | QPSK       | 20850   | 1RB#0        | 23.75        | PASS    |
| NTNV      | Band7 | 20MHz             | QPSK       | 20850   | 1RB#99       | 23.53        | PASS    |
| NTNV      | Band7 | 20MHz             | QPSK       | 21100   | 1RB#0        | 23.65        | PASS    |
| NTNV      | Band7 | 20MHz             | QPSK       | 21100   | 1RB#99       | 23.85        | PASS    |
| NTNV      | Band7 | 20MHz             | QPSK       | 21100   | 18RB#0       | 23.60        | PASS    |
| NTNV      | Band7 | 20MHz             | QPSK       | 21350   | 1RB#0        | 23.83        | PASS    |
| NTNV      | Band7 | 20MHz             | QPSK       | 21350   | 1RB#99       | <b>23.89</b> | PASS    |

**LTE Band 8:**

| Condition | Band  | Channel Bandwidth | Modulation | Channel | RB Configure | Result (dBm) | Verdict |
|-----------|-------|-------------------|------------|---------|--------------|--------------|---------|
| NTNV      | Band8 | 1.4MHz            | QPSK       | 21457   | 1RB#0        | 22.56        | PASS    |
| NTNV      | Band8 | 1.4MHz            | QPSK       | 21625   | 1RB#0        | 22.69        | PASS    |
| NTNV      | Band8 | 1.4MHz            | QPSK       | 21625   | 5RB#0        | 22.77        | PASS    |
| NTNV      | Band8 | 1.4MHz            | QPSK       | 21793   | 1RB#0        | 22.88        | PASS    |
| NTNV      | Band8 | 5MHz              | QPSK       | 21475   | 1RB#0        | 22.03        | PASS    |
| NTNV      | Band8 | 5MHz              | QPSK       | 21475   | 1RB#24       | 22.13        | PASS    |
| NTNV      | Band8 | 5MHz              | QPSK       | 21625   | 1RB#0        | 22.21        | PASS    |
| NTNV      | Band8 | 5MHz              | QPSK       | 21625   | 1RB#24       | 22.13        | PASS    |
| NTNV      | Band8 | 5MHz              | QPSK       | 21625   | 8RB#0        | 22.24        | PASS    |
| NTNV      | Band8 | 5MHz              | QPSK       | 21775   | 1RB#0        | 22.29        | PASS    |
| NTNV      | Band8 | 5MHz              | QPSK       | 21775   | 1RB#24       | 22.32        | PASS    |
| NTNV      | Band8 | 10MHz             | QPSK       | 21500   | 1RB#0        | 22.41        | PASS    |
| NTNV      | Band8 | 10MHz             | QPSK       | 21500   | 1RB#49       | 22.27        | PASS    |
| NTNV      | Band8 | 10MHz             | QPSK       | 21625   | 1RB#0        | 22.27        | PASS    |
| NTNV      | Band8 | 10MHz             | QPSK       | 21625   | 1RB#49       | 22.13        | PASS    |
| NTNV      | Band8 | 10MHz             | QPSK       | 21625   | 12RB#0       | 22.25        | PASS    |
| NTNV      | Band8 | 10MHz             | QPSK       | 21750   | 1RB#0        | <b>22.95</b> | PASS    |
| NTNV      | Band8 | 10MHz             | QPSK       | 21750   | 1RB#49       | 22.29        | PASS    |

**LTE Band 20:**

| Condition | Band   | Channel Bandwidth | Modulation | Channel | RB Configure | Result (dBm) | Verdict |
|-----------|--------|-------------------|------------|---------|--------------|--------------|---------|
| NTNV      | Band20 | 5MHz              | QPSK       | 24175   | 1RB#0        | 22.38        | PASS    |
| NTNV      | Band20 | 5MHz              | QPSK       | 24175   | 1RB#24       | 22.27        | PASS    |
| NTNV      | Band20 | 5MHz              | QPSK       | 24300   | 1RB#0        | 22.38        | PASS    |
| NTNV      | Band20 | 5MHz              | QPSK       | 24300   | 1RB#24       | 22.39        | PASS    |
| NTNV      | Band20 | 5MHz              | QPSK       | 24300   | 8RB#0        | 22.36        | PASS    |
| NTNV      | Band20 | 5MHz              | QPSK       | 24425   | 1RB#0        | 22.41        | PASS    |
| NTNV      | Band20 | 5MHz              | QPSK       | 24425   | 1RB#24       | 22.37        | PASS    |
| NTNV      | Band20 | 20MHz             | QPSK       | 24250   | 1RB#0        | <b>22.45</b> | PASS    |
| NTNV      | Band20 | 20MHz             | QPSK       | 24250   | 1RB#99       | 22.20        | PASS    |
| NTNV      | Band20 | 20MHz             | QPSK       | 24300   | 1RB#0        | 22.02        | PASS    |
| NTNV      | Band20 | 20MHz             | QPSK       | 24300   | 1RB#99       | 22.05        | PASS    |
| NTNV      | Band20 | 20MHz             | QPSK       | 24300   | 18RB#0       | 22.15        | PASS    |
| NTNV      | Band20 | 20MHz             | QPSK       | 24350   | 1RB#0        | 22.09        | PASS    |
| NTNV      | Band20 | 20MHz             | QPSK       | 24350   | 1RB#99       | 22.10        | PASS    |

**LTE Band 28:**

| Condition | Band   | Channel Bandwidth | Modulation | Channel | RB Configure | Result (dBm) | Verdict |
|-----------|--------|-------------------|------------|---------|--------------|--------------|---------|
| NTNV      | Band28 | 3MHz              | QPSK       | 27225   | 1RB#0        | 22.55        | PASS    |
| NTNV      | Band28 | 3MHz              | QPSK       | 27225   | 4RB#0        | 22.56        | PASS    |
| NTNV      | Band28 | 3MHz              | QPSK       | 27375   | 1RB#0        | 22.75        | PASS    |
| NTNV      | Band28 | 3MHz              | QPSK       | 27375   | 4RB#0        | 22.68        | PASS    |
| NTNV      | Band28 | 3MHz              | QPSK       | 27645   | 1RB#14       | 22.84        | PASS    |
| NTNV      | Band28 | 3MHz              | QPSK       | 27645   | 4RB#11       | 22.97        | PASS    |
| NTNV      | Band28 | 5MHz              | QPSK       | 27235   | 1RB#24       | 22.04        | PASS    |
| NTNV      | Band28 | 5MHz              | QPSK       | 27235   | 8RB#17       | 21.99        | PASS    |
| NTNV      | Band28 | 5MHz              | QPSK       | 27385   | 1RB#24       | 22.55        | PASS    |
| NTNV      | Band28 | 5MHz              | QPSK       | 27385   | 8RB#17       | 22.30        | PASS    |
| NTNV      | Band28 | 5MHz              | QPSK       | 27635   | 1RB#24       | 22.27        | PASS    |
| NTNV      | Band28 | 5MHz              | QPSK       | 27635   | 8RB#17       | 22.19        | PASS    |
| NTNV      | Band28 | 20MHz             | QPSK       | 27310   | 1RB#0        | <b>22.99</b> | PASS    |
| NTNV      | Band28 | 20MHz             | QPSK       | 27310   | 18RB#0       | 22.00        | PASS    |
| NTNV      | Band28 | 20MHz             | QPSK       | 27460   | 1RB#0        | 21.91        | PASS    |
| NTNV      | Band28 | 20MHz             | QPSK       | 27460   | 18RB#0       | 21.95        | PASS    |
| NTNV      | Band28 | 20MHz             | QPSK       | 27560   | 1RB#99       | 21.87        | PASS    |
| NTNV      | Band28 | 20MHz             | QPSK       | 27560   | 18RB#82      | 21.93        | PASS    |

**LTE Band 38:**

| Condition | Band   | Channel Bandwidth | Modulation | Channel | RB Configure | Result (dBm) | Verdict |
|-----------|--------|-------------------|------------|---------|--------------|--------------|---------|
| NTNV      | Band38 | 5MHz              | QPSK       | 37775   | 1RB#0        | 21.31        | PASS    |
| NTNV      | Band38 | 5MHz              | QPSK       | 37775   | 8RB#0        | 21.39        | PASS    |
| NTNV      | Band38 | 5MHz              | QPSK       | 38000   | 1RB#0        | 21.56        | PASS    |
| NTNV      | Band38 | 5MHz              | QPSK       | 38000   | 8RB#0        | 21.63        | PASS    |
| NTNV      | Band38 | 5MHz              | QPSK       | 38225   | 1RB#24       | 21.62        | PASS    |
| NTNV      | Band38 | 5MHz              | QPSK       | 38225   | 8RB#17       | 21.66        | PASS    |
| NTNV      | Band38 | 20MHz             | QPSK       | 37850   | 1RB#0        | 21.22        | PASS    |
| NTNV      | Band38 | 20MHz             | QPSK       | 37850   | 18RB#0       | 21.33        | PASS    |
| NTNV      | Band38 | 20MHz             | QPSK       | 38000   | 1RB#0        | 21.50        | PASS    |
| NTNV      | Band38 | 20MHz             | QPSK       | 38000   | 18RB#0       | <b>21.75</b> | PASS    |
| NTNV      | Band38 | 20MHz             | QPSK       | 38150   | 1RB#99       | 21.39        | PASS    |
| NTNV      | Band38 | 20MHz             | QPSK       | 38150   | 18RB#82      | 21.46        | PASS    |

**LTE Band 40:**

| Condition | Band   | Channel Bandwidth | Modulation | Channel | RB Configure | Result (dBm) | Verdict |
|-----------|--------|-------------------|------------|---------|--------------|--------------|---------|
| NTNV      | Band40 | 5MHz              | QPSK       | 38675   | 1RB#0        | 21.08        | PASS    |
| NTNV      | Band40 | 5MHz              | QPSK       | 38675   | 8RB#0        | 21.19        | PASS    |
| NTNV      | Band40 | 5MHz              | QPSK       | 39150   | 1RB#0        | 21.63        | PASS    |
| NTNV      | Band40 | 5MHz              | QPSK       | 39150   | 8RB#0        | 21.65        | PASS    |
| NTNV      | Band40 | 5MHz              | QPSK       | 39625   | 1RB#24       | 21.47        | PASS    |
| NTNV      | Band40 | 5MHz              | QPSK       | 39625   | 8RB#17       | 21.57        | PASS    |
| NTNV      | Band40 | 20MHz             | QPSK       | 38750   | 1RB#0        | 20.90        | PASS    |
| NTNV      | Band40 | 20MHz             | QPSK       | 38750   | 18RB#0       | 21.05        | PASS    |
| NTNV      | Band40 | 20MHz             | QPSK       | 39150   | 1RB#0        | 21.38        | PASS    |
| NTNV      | Band40 | 20MHz             | QPSK       | 39150   | 18RB#0       | <b>21.72</b> | PASS    |
| NTNV      | Band40 | 20MHz             | QPSK       | 39550   | 1RB#99       | 21.29        | PASS    |
| NTNV      | Band40 | 20MHz             | QPSK       | 39550   | 18RB#82      | 21.37        | PASS    |



| WLAN(2.4GHz)    |           |         |                 |                       |
|-----------------|-----------|---------|-----------------|-----------------------|
| Test Mode       | Data Rate | Channel | Frequency (MHz) | Conducted Power (dBm) |
| 802.11b         | 11Mbps    | CH 01   | 2412            | 13.03                 |
|                 |           | CH 07   | 2442            | <b>13.30</b>          |
|                 |           | CH 13   | 2472            | 13.02                 |
| 802.11g         | 54Mbps    | CH 01   | 2412            | 12.43                 |
|                 |           | CH 07   | 2442            | 12.43                 |
|                 |           | CH 13   | 2472            | 12.65                 |
| 802.11n (20MHz) | MCS7      | CH 01   | 2412            | 10.80                 |
|                 |           | CH 07   | 2442            | 11.75                 |
|                 |           | CH 13   | 2472            | 11.28                 |
| 802.11n (40MHz) | MCS7      | CH 03   | 2422            | 10.76                 |
|                 |           | CH 07   | 2442            | 10.05                 |
|                 |           | CH 11   | 2462            | 10.32                 |

Note: Conducted Power = EIRP - Antenna gain (x dBi) - Cable loss (x dB)

| Bluetooth     |           |                  |
|---------------|-----------|------------------|
| Test Mode     | Data Rate | EIRP Power (dBm) |
| GFSK          | 1Mbps     | 6.50             |
| $\pi/4$ DQPSK | 2Mbps     | 5.02             |
| 8DPSK         | 3Mbps     | 5.92             |

| Bluetooth |           |         |                 |                  |
|-----------|-----------|---------|-----------------|------------------|
| Test Mode | Data Rate | Channel | Frequency (MHz) | EIRP Power (dBm) |
| BLE       | 1Mbps     | CH 00   | 2402            | 8.58             |
|           |           | CH 19   | 2440            | <b>8.64</b>      |
|           |           | CH 39   | 2480            | 8.48             |

#### Remark:

- Since EIRP power of BT at worse case is: 8.64dBm(7.31mW) which not exceed the exempt condition, 20mW specified in EN 50663. It is deemed to full fit the requirement of RF exposure basic restriction specified in EC Council Recommendation (1999/519/EC).



## 9.2 Test Results for Standalone SAR Test

### Head SAR

| GSM900 -Head SAR Test |        |               |           |       |                    |                   |                |               |                      |
|-----------------------|--------|---------------|-----------|-------|--------------------|-------------------|----------------|---------------|----------------------|
| Plot No.              | Mode   | Test Position | Frequency |       | Output Power (dBm) | Rated Limit (dBm) | Scaling Factor | SAR10g (W/kg) | Scaled SAR10g (W/kg) |
|                       |        |               | CH.       | MHz   |                    |                   |                |               |                      |
|                       | GSM900 | Right Cheek   | 60        | 902.0 | 32.00              | 32.5              | 1.122          | 0.035         | 0.039                |
|                       | GSM900 | Right Tilted  | 60        | 902.0 | 32.00              | 32.5              | 1.122          | 0.032         | 0.036                |
|                       | GSM900 | Left Cheek    | 60        | 902.0 | 32.00              | 32.5              | 1.122          | 0.081         | 0.091                |
|                       | GSM900 | Left Tilted   | 60        | 902.0 | 32.00              | 32.5              | 1.122          | 0.078         | 0.088                |
| 1.                    | GSM900 | Left Cheek    | 975       | 880.2 | 32.20              | 32.5              | 1.072          | 0.155         | <b>0.166</b>         |
|                       | GSM900 | Left Cheek    | 124       | 914.8 | 31.90              | 32.5              | 1.148          | 0.049         | 0.056                |

| GSM1800 -Head SAR Test |         |               |           |        |                    |                   |                |               |                      |
|------------------------|---------|---------------|-----------|--------|--------------------|-------------------|----------------|---------------|----------------------|
| Plot No.               | Mode    | Test Position | Frequency |        | Output Power (dBm) | Rated Limit (dBm) | Scaling Factor | SAR10g (W/kg) | Scaled SAR10g (W/kg) |
|                        |         |               | CH.       | MHz    |                    |                   |                |               |                      |
|                        | GSM1800 | Right Cheek   | 698       | 1747.4 | 28.60              | 29.5              | 1.230          | 0.302         | 0.372                |
|                        | GSM1800 | Right Tilted  | 698       | 1747.4 | 28.60              | 29.5              | 1.230          | 0.285         | 0.351                |
| 2.                     | GSM1800 | Left Cheek    | 698       | 1747.4 | 28.60              | 29.5              | 1.230          | 0.314         | <b>0.386</b>         |
|                        | GSM1800 | Left Tilted   | 698       | 1747.4 | 28.60              | 29.5              | 1.230          | 0.289         | 0.356                |
|                        | GSM1800 | Left Cheek    | 513       | 1710.4 | 28.20              | 29.5              | 1.349          | 0.283         | 0.382                |
|                        | GSM1800 | Left Cheek    | 880       | 1783.8 | 29.20              | 29.5              | 1.072          | 0.348         | 0.373                |

| WCDMA Band I-Head SAR Test |      |               |           |        |                    |                   |                |               |                      |
|----------------------------|------|---------------|-----------|--------|--------------------|-------------------|----------------|---------------|----------------------|
| Plot No.                   | Mode | Test Position | Frequency |        | Output Power (dBm) | Rated Limit (dBm) | Scaling Factor | SAR10g (W/kg) | Scaled SAR10g (W/kg) |
|                            |      |               | CH.       | MHz    |                    |                   |                |               |                      |
|                            | RMC  | Right Cheek   | 9750      | 1950   | 23.41              | 24.0              | 1.146          | 0.205         | 0.235                |
|                            | RMC  | Right Tilted  | 9750      | 1950   | 23.41              | 24.0              | 1.146          | 0.185         | 0.212                |
|                            | RMC  | Left Cheek    | 9750      | 1950   | 23.41              | 24.0              | 1.146          | 0.089         | 0.102                |
|                            | RMC  | Left Tilted   | 9750      | 1950   | 23.41              | 24.0              | 1.146          | 0.081         | 0.093                |
| 3.                         | RMC  | Right Cheek   | 9613      | 1922.6 | 23.33              | 24.0              | 1.167          | 0.237         | <b>0.277</b>         |
|                            | RMC  | Right Cheek   | 9887      | 1977.4 | 23.56              | 24.0              | 1.107          | 0.180         | 0.199                |



| WCDMA Band VIII –Head SAR Test |      |               |           |       |                    |                   |                |               |                      |
|--------------------------------|------|---------------|-----------|-------|--------------------|-------------------|----------------|---------------|----------------------|
| Plot No.                       | Mode | Test Position | Frequency |       | Output Power (dBm) | Rated Limit (dBm) | Scaling Factor | SAR10g (W/kg) | Scaled SAR10g (W/kg) |
|                                |      |               | CH.       | MHz   |                    |                   |                |               |                      |
|                                | RMC  | Right Cheek   | 2788      | 897.6 | 23.21              | 23.5              | 1.069          | 0.076         | 0.081                |
|                                | RMC  | Right Tilted  | 2788      | 897.6 | 23.21              | 23.5              | 1.069          | 0.071         | 0.076                |
|                                | RMC  | Left Cheek    | 2788      | 897.6 | 23.21              | 23.5              | 1.069          | 0.098         | 0.105                |
|                                | RMC  | Left Tilted   | 2788      | 897.6 | 23.21              | 23.5              | 1.069          | 0.086         | 0.092                |
| 4.                             | RMC  | Left Cheek    | 2713      | 882.6 | 23.27              | 23.5              | 1.054          | 0.177         | <b>0.187</b>         |
|                                | RMC  | Left Cheek    | 2862      | 912.4 | 23.11              | 23.5              | 1.094          | 0.071         | 0.078                |

| FDD-LTE Band 1–Head SAR Test |            |               |                       |       |                    |                   |                |               |                      |
|------------------------------|------------|---------------|-----------------------|-------|--------------------|-------------------|----------------|---------------|----------------------|
| Plot No.                     | Mode       | Test Position | Frequency (MHz)       |       | Output Power (dBm) | Rated Limit (dBm) | Scaling Factor | SAR10g (W/kg) | Scaled SAR10g (W/kg) |
|                              |            |               | Modulation, Bandwidth | (MHz) |                    |                   |                |               |                      |
| 5.                           | QPSK,20MHz | Right Cheek   | 1950                  |       | 21.30              | 22.5              | 1.318          | 0.210         | <b>0.277</b>         |
|                              | QPSK,20MHz | Right Tilted  | 1950                  |       | 21.30              | 22.5              | 1.318          | 0.186         | 0.245                |
|                              | QPSK,20MHz | Left Cheek    | 1950                  |       | 21.30              | 22.5              | 1.318          | 0.133         | 0.175                |
|                              | QPSK,20MHz | Left Tilted   | 1950                  |       | 21.30              | 22.5              | 1.318          | 0.124         | 0.163                |
|                              | QPSK,20MHz | Right Cheek   | 1930                  |       | 22.43              | 22.5              | 1.016          | 0.213         | 0.216                |
|                              | QPSK,20MHz | Right Cheek   | 1970                  |       | 20.97              | 22.5              | 1.422          | 0.170         | 0.242                |

| FDD-LTE Band 3–Head SAR Test |            |               |                       |       |                    |                   |                |               |                      |
|------------------------------|------------|---------------|-----------------------|-------|--------------------|-------------------|----------------|---------------|----------------------|
| Plot No.                     | Mode       | Test Position | Frequency (MHz)       |       | Output Power (dBm) | Rated Limit (dBm) | Scaling Factor | SAR10g (W/kg) | Scaled SAR10g (W/kg) |
|                              |            |               | Modulation, Bandwidth | (MHz) |                    |                   |                |               |                      |
|                              | QPSK,20MHz | Right Cheek   | 1747.5                |       | 22.89              | 23.0              | 1.026          | 0.250         | 0.256                |
|                              | QPSK,20MHz | Right Tilted  | 1747.5                |       | 22.89              | 23.0              | 1.026          | 0.237         | 0.243                |
|                              | QPSK,20MHz | Left Cheek    | 1747.5                |       | 22.89              | 23.0              | 1.026          | 0.253         | 0.259                |
|                              | QPSK,20MHz | Left Tilted   | 1747.5                |       | 22.89              | 23.0              | 1.026          | 0.239         | 0.245                |
|                              | QPSK,20MHz | Right Cheek   | 1720                  |       | 22.42              | 23.0              | 1.143          | 0.264         | 0.302                |
| 6.                           | QPSK,20MHz | Right Cheek   | 1775                  |       | 21.98              | 23.0              | 1.265          | 0.260         | <b>0.329</b>         |



| FDD-LTE Band 7-Head SAR Test |                       |               |                 |                    |                   |                |               |                      |
|------------------------------|-----------------------|---------------|-----------------|--------------------|-------------------|----------------|---------------|----------------------|
| Plot No.                     | Mode                  | Test Position | Frequency (MHz) | Output Power (dBm) | Rated Limit (dBm) | Scaling Factor | SAR10g (W/kg) | Scaled SAR10g (W/kg) |
|                              | Modulation, Bandwidth |               |                 |                    |                   |                |               |                      |
| 7.                           | QPSK,20MHz            | Right Cheek   | 2535            | 23.85              | 24.0              | 1.035          | 0.218         | 0.226                |
|                              | QPSK,20MHz            | Right Tilted  | 2535            | 23.85              | 24.0              | 1.035          | 0.196         | 0.203                |
|                              | QPSK,20MHz            | Left Cheek    | 2535            | 23.85              | 24.0              | 1.035          | 0.116         | 0.120                |
|                              | QPSK,20MHz            | Left Tilted   | 2535            | 23.85              | 24.0              | 1.035          | 0.102         | 0.106                |
|                              | QPSK,20MHz            | Right Cheek   | 2510            | 23.75              | 24.0              | 1.059          | 0.142         | 0.150                |
|                              | QPSK,20MHz            | Right Cheek   | 2560            | 23.89              | 24.0              | 1.026          | 0.124         | 0.127                |

| FDD-LTE Band 8-Head SAR Test |                       |               |                 |                    |                   |                |               |                      |
|------------------------------|-----------------------|---------------|-----------------|--------------------|-------------------|----------------|---------------|----------------------|
| Plot No.                     | Mode                  | Test Position | Frequency (MHz) | Output Power (dBm) | Rated Limit (dBm) | Scaling Factor | SAR10g (W/kg) | Scaled SAR10g (W/kg) |
|                              | Modulation, Bandwidth |               |                 |                    |                   |                |               |                      |
|                              | QPSK,10MHz            | Right Cheek   | 897.5           | 22.27              | 23.0              | 1.183          | 0.124         | 0.147                |
|                              | QPSK,10MHz            | Right Tilted  | 897.5           | 22.27              | 23.0              | 1.183          | 0.103         | 0.122                |
| 8.                           | QPSK,10MHz            | Left Cheek    | 897.5           | 22.27              | 23.0              | 1.183          | 0.132         | 0.156                |
|                              | QPSK,10MHz            | Left Tilted   | 897.5           | 22.27              | 23.0              | 1.183          | 0.109         | 0.129                |
|                              | QPSK,10MHz            | Left Cheek    | 885.0           | 22.41              | 23.0              | 1.146          | 0.133         | 0.152                |
|                              | QPSK,10MHz            | Left Cheek    | 910.0           | 22.95              | 23.0              | 1.012          | 0.063         | 0.064                |

| FDD-LTE Band 20-Head SAR Test |                       |               |                 |                    |                   |                |               |                      |
|-------------------------------|-----------------------|---------------|-----------------|--------------------|-------------------|----------------|---------------|----------------------|
| Plot No.                      | Mode                  | Test Position | Frequency (MHz) | Output Power (dBm) | Rated Limit (dBm) | Scaling Factor | SAR10g (W/kg) | Scaled SAR10g (W/kg) |
|                               | Modulation, Bandwidth |               |                 |                    |                   |                |               |                      |
| 9.                            | QPSK,20MHz            | Right Cheek   | 847             | 22.15              | 22.5              | 1.084          | 0.331         | 0.359                |
|                               | QPSK,20MHz            | Right Tilted  | 847             | 22.15              | 22.5              | 1.084          | 0.301         | 0.326                |
|                               | QPSK,20MHz            | Left Cheek    | 847             | 22.15              | 22.5              | 1.084          | 0.295         | 0.320                |
|                               | QPSK,20MHz            | Left Tilted   | 847             | 22.15              | 22.5              | 1.084          | 0.275         | 0.298                |
|                               | QPSK,20MHz            | Right Cheek   | 842             | 22.45              | 22.5              | 1.012          | 0.274         | 0.277                |
|                               | QPSK,20MHz            | Right Cheek   | 852             | 22.10              | 22.5              | 1.096          | 0.285         | 0.312                |



| FDD-LTE Band 28-Head SAR Test |                       |               |                 |                    |                   |                |               |                      |
|-------------------------------|-----------------------|---------------|-----------------|--------------------|-------------------|----------------|---------------|----------------------|
| Plot No.                      | Mode                  | Test Position | Frequency (MHz) | Output Power (dBm) | Rated Limit (dBm) | Scaling Factor | SAR10g (W/kg) | Scaled SAR10g (W/kg) |
| Plot No.                      | Modulation, Bandwidth |               |                 |                    |                   |                |               |                      |
|                               | QPSK,20MHz            | Right Cheek   | 725             | 21.95              | 23.0              | 1.274          | 0.102         | 0.130                |
|                               | QPSK,20MHz            | Right Tilted  | 725             | 21.95              | 23.0              | 1.274          | 0.085         | 0.108                |
|                               | QPSK,20MHz            | Left Cheek    | 725             | 21.95              | 23.0              | 1.274          | 0.089         | 0.113                |
|                               | QPSK,20MHz            | Left Tilted   | 725             | 21.95              | 23.0              | 1.274          | 0.072         | 0.092                |
|                               | QPSK,20MHz            | Right Cheek   | 713             | 22.99              | 23.0              | 1.002          | 0.090         | 0.090                |
| 10.                           | QPSK,20MHz            | Right Cheek   | 738             | 21.93              | 23.0              | 1.279          | 0.121         | <b>0.155</b>         |

| TDD-LTE Band 38-Head SAR Test |                       |               |                 |                    |                   |                |               |                      |
|-------------------------------|-----------------------|---------------|-----------------|--------------------|-------------------|----------------|---------------|----------------------|
| Plot No.                      | Mode                  | Test Position | Frequency (MHz) | Output Power (dBm) | Rated Limit (dBm) | Scaling Factor | SAR10g (W/kg) | Scaled SAR10g (W/kg) |
| Plot No.                      | Modulation, Bandwidth |               |                 |                    |                   |                |               |                      |
|                               | QPSK,20MHz            | Right Cheek   | 2595            | 21.75              | 22.0              | 1.059          | 0.075         | 0.079                |
|                               | QPSK,20MHz            | Right Tilted  | 2595            | 21.75              | 22.0              | 1.059          | 0.072         | 0.076                |
|                               | QPSK,20MHz            | Left Cheek    | 2595            | 21.75              | 22.0              | 1.059          | 0.047         | 0.050                |
|                               | QPSK,20MHz            | Left Tilted   | 2595            | 21.75              | 22.0              | 1.059          | 0.046         | 0.049                |
|                               | QPSK,20MHz            | Right Cheek   | 2580            | 21.22              | 22.0              | 1.197          | 0.071         | 0.085                |
| 11.                           | QPSK,20MHz            | Right Cheek   | 2610            | 21.46              | 22.0              | 1.132          | 0.080         | <b>0.091</b>         |

| TDD-LTE Band 40-Head SAR Test |                       |               |                 |                    |                   |                |               |                      |
|-------------------------------|-----------------------|---------------|-----------------|--------------------|-------------------|----------------|---------------|----------------------|
| Plot No.                      | Mode                  | Test Position | Frequency (MHz) | Output Power (dBm) | Rated Limit (dBm) | Scaling Factor | SAR10g (W/kg) | Scaled SAR10g (W/kg) |
| Plot No.                      | Modulation, Bandwidth |               |                 |                    |                   |                |               |                      |
|                               | QPSK,20MHz            | Right Cheek   | 2350            | 21.72              | 22.0              | 1.067          | 0.078         | 0.083                |
|                               | QPSK,20MHz            | Right Tilted  | 2350            | 21.72              | 22.0              | 1.067          | 0.072         | 0.077                |
|                               | QPSK,20MHz            | Left Cheek    | 2350            | 21.72              | 22.0              | 1.067          | 0.041         | 0.044                |
|                               | QPSK,20MHz            | Left Tilted   | 2350            | 21.72              | 22.0              | 1.067          | 0.038         | 0.041                |
| 12.                           | QPSK,20MHz            | Right Cheek   | 2310            | 21.05              | 22.0              | 1.245          | 0.079         | <b>0.098</b>         |
|                               | QPSK,20MHz            | Right Cheek   | 2390            | 21.37              | 22.0              | 1.156          | 0.079         | 0.091                |



### WLAN 2.4GHz-Head SAR Test

| Plot<br>No. | Mode    | Test<br>Position | Frequency |      | Output<br>Power<br>(dBm) | Rated<br>Limit<br>(dBm) | Scaling<br>Factor | SAR10g<br>(W/kg) | Scaled<br>SAR10g<br>(W/kg) |
|-------------|---------|------------------|-----------|------|--------------------------|-------------------------|-------------------|------------------|----------------------------|
|             |         |                  | CH.       | MHz  |                          |                         |                   |                  |                            |
|             | 802.11b | Right Cheek      | 07        | 2442 | 13.30                    | 13.5                    | 1.047             | 0.026            | 0.027                      |
|             | 802.11b | Right Tilted     | 07        | 2442 | 13.30                    | 13.5                    | 1.047             | 0.024            | 0.025                      |
|             | 802.11b | Left Cheek       | 07        | 2442 | 13.30                    | 13.5                    | 1.047             | 0.012            | 0.013                      |
|             | 802.11b | Left Tilted      | 07        | 2442 | 13.30                    | 13.5                    | 1.047             | 0.010            | 0.010                      |
|             | 802.11b | Right Cheek      | 01        | 2412 | 13.03                    | 13.5                    | 1.114             | 0.030            | 0.033                      |
| 13.         | 802.11b | Right Cheek      | 13        | 2472 | 13.02                    | 13.5                    | 1.117             | 0.039            | <b>0.044</b>               |

WALTEK

**Body SAR: 5mm**

| GSM900 -Body SAR Test(5mm) |          |               |           |       |                    |                   |                |               |                      |
|----------------------------|----------|---------------|-----------|-------|--------------------|-------------------|----------------|---------------|----------------------|
| Plot No.                   | Mode     | Test Position | Frequency |       | Output Power (dBm) | Rated Limit (dBm) | Scaling Factor | SAR10g (W/kg) | Scaled SAR10g (W/kg) |
|                            |          |               | CH.       | MHz   |                    |                   |                |               |                      |
|                            | GSM      | Back Face     | 60        | 902.0 | 32.00              | 32.5              | 1.122          | 0.249         | 0.279                |
|                            | GSM      | Front Face    | 60        | 902.0 | 32.00              | 32.5              | 1.122          | 0.059         | 0.066                |
|                            | GSM      | Back Face     | 975       | 880.2 | 32.20              | 32.5              | 1.072          | 0.277         | 0.297                |
|                            | GSM      | Back Face     | 124       | 914.8 | 31.90              | 32.5              | 1.148          | 0.193         | 0.222                |
|                            | GPRS_4TX | Back Face     | 60        | 902.0 | 28.89              | 29.5              | 1.151          | 0.532         | 0.612                |
|                            | GPRS_4TX | Front Face    | 60        | 902.0 | 28.89              | 29.5              | 1.151          | 0.164         | 0.189                |
|                            | GPRS_4TX | Right Side    | 60        | 902.0 | 28.89              | 29.5              | 1.151          | 0.123         | 0.142                |
|                            | GPRS_4TX | Left Side     | 60        | 902.0 | 28.89              | 29.5              | 1.151          | 0.108         | 0.124                |
|                            | GPRS_4TX | Top Side      | 60        | 902.0 | 28.89              | 29.5              | 1.151          | 0.142         | 0.163                |
| 14.                        | GPRS_4TX | Back Face     | 975       | 880.2 | 29.24              | 29.5              | 1.062          | 1.042         | <b>1.106</b>         |
|                            | GPRS_4TX | Back Face     | 124       | 914.8 | 28.72              | 29.5              | 1.197          | 0.395         | 0.473                |

| GSM1800 -Body SAR Test(5mm) |          |               |           |        |                    |                   |                |               |                      |
|-----------------------------|----------|---------------|-----------|--------|--------------------|-------------------|----------------|---------------|----------------------|
| Plot No.                    | Mode     | Test Position | Frequency |        | Output Power (dBm) | Rated Limit (dBm) | Scaling Factor | SAR10g (W/kg) | Scaled SAR10g (W/kg) |
|                             |          |               | CH.       | MHz    |                    |                   |                |               |                      |
|                             | GSM      | Back Face     | 698       | 1747.4 | 28.60              | 29.5              | 1.230          | 0.537         | 0.661                |
|                             | GSM      | Front Face    | 698       | 1747.4 | 28.60              | 29.5              | 1.230          | 0.241         | 0.296                |
|                             | GSM      | Back Face     | 513       | 1710.4 | 28.20              | 29.5              | 1.349          | 0.543         | 0.732                |
|                             | GSM      | Back Face     | 880       | 1783.8 | 29.20              | 29.5              | 1.072          | 0.412         | 0.441                |
|                             | GPRS_4TX | Back Face     | 698       | 1747.4 | 24.86              | 26.0              | 1.300          | 0.839         | 1.091                |
|                             | GPRS_4TX | Front Face    | 698       | 1747.4 | 24.86              | 26.0              | 1.300          | 0.357         | 0.464                |
|                             | GPRS_4TX | Right Side    | 698       | 1747.4 | 24.86              | 26.0              | 1.300          | 0.254         | 0.330                |
|                             | GPRS_4TX | Left Side     | 698       | 1747.4 | 24.86              | 26.0              | 1.300          | 0.286         | 0.372                |
|                             | GPRS_4TX | Top Side      | 698       | 1747.4 | 24.86              | 26.0              | 1.300          | 0.417         | 0.542                |
|                             | GPRS_4TX | Back Face     | 513       | 1710.4 | 24.51              | 26.0              | 1.409          | 0.718         | 1.012                |
| 15.                         | GPRS_4TX | Back Face     | 880       | 1783.8 | 25.53              | 26.0              | 1.114          | 1.004         | <b>1.119</b>         |



| WCDMA Band I– Body SAR Test(5mm) |      |               |           |        |                    |                   |                |               |                      |
|----------------------------------|------|---------------|-----------|--------|--------------------|-------------------|----------------|---------------|----------------------|
| Plot No.                         | Mode | Test Position | Frequency |        | Output Power (dBm) | Rated Limit (dBm) | Scaling Factor | SAR10g (W/kg) | Scaled SAR10g (W/kg) |
|                                  |      |               | CH.       | MHz    |                    |                   |                |               |                      |
|                                  | RMC  | Back Face     | 9750      | 1950   | 23.41              | 24.0              | 1.146          | 0.344         | 0.394                |
|                                  | RMC  | Front Face    | 9750      | 1950   | 23.41              | 24.0              | 1.146          | 0.124         | 0.142                |
|                                  | RMC  | Right Side    | 9750      | 1950   | 23.41              | 24.0              | 1.146          | 0.085         | 0.097                |
|                                  | RMC  | Left Side     | 9750      | 1950   | 23.41              | 24.0              | 1.146          | 0.096         | 0.110                |
|                                  | RMC  | Top Side      | 9750      | 1950   | 23.41              | 24.0              | 1.146          | 0.108         | 0.124                |
|                                  | RMC  | Back Face     | 9613      | 1922.6 | 23.33              | 24.0              | 1.167          | 0.322         | 0.376                |
| 16.                              | RMC  | Back Face     | 9887      | 1977.4 | 23.56              | 24.0              | 1.107          | 0.363         | <b>0.402</b>         |

| WCDMA Band VIII– Body SAR Test(5mm) |      |               |           |       |                    |                   |                |               |                      |
|-------------------------------------|------|---------------|-----------|-------|--------------------|-------------------|----------------|---------------|----------------------|
| Plot No.                            | Mode | Test Position | Frequency |       | Output Power (dBm) | Rated Limit (dBm) | Scaling Factor | SAR10g (W/kg) | Scaled SAR10g (W/kg) |
|                                     |      |               | CH.       | MHz   |                    |                   |                |               |                      |
|                                     | RMC  | Back Face     | 2788      | 897.6 | 23.21              | 23.5              | 1.069          | 0.196         | 0.210                |
|                                     | RMC  | Front Face    | 2788      | 897.6 | 23.21              | 23.5              | 1.069          | 0.062         | 0.066                |
|                                     | RMC  | Right Side    | 2788      | 897.6 | 23.21              | 23.5              | 1.069          | 0.087         | 0.093                |
|                                     | RMC  | Left Side     | 2788      | 897.6 | 23.21              | 23.5              | 1.069          | 0.098         | 0.105                |
|                                     | RMC  | Top Side      | 2788      | 897.6 | 23.21              | 23.5              | 1.069          | 0.110         | 0.118                |
| 17.                                 | RMC  | Back Face     | 2713      | 882.6 | 23.27              | 23.5              | 1.054          | 0.281         | <b>0.296</b>         |
|                                     | RMC  | Back Face     | 2862      | 912.4 | 23.11              | 23.5              | 1.094          | 0.198         | 0.217                |

| FDD-LTE Band 1– Body SAR Test(5mm) |             |            |               |                 |                    |                   |                |               |                      |
|------------------------------------|-------------|------------|---------------|-----------------|--------------------|-------------------|----------------|---------------|----------------------|
| Plot No.                           | Mode        |            | Test Position | Frequency (MHz) | Output Power (dBm) | Rated Limit (dBm) | Scaling Factor | SAR10g (W/kg) | Scaled SAR10g (W/kg) |
|                                    | Modulation, | Bandwidth  |               |                 |                    |                   |                |               |                      |
|                                    | QPSK,20MHz  | Back Face  | 1950          | 21.30           | 22.5               | 1.318             | 0.219          | 0.289         |                      |
|                                    | QPSK,20MHz  | Front Face | 1950          | 21.30           | 22.5               | 1.318             | 0.122          | 0.161         |                      |
|                                    | QPSK,20MHz  | Right Side | 1950          | 21.30           | 22.5               | 1.318             | 0.089          | 0.117         |                      |
|                                    | QPSK,20MHz  | Left Side  | 1950          | 21.30           | 22.5               | 1.318             | 0.101          | 0.133         |                      |
|                                    | QPSK,20MHz  | Top Side   | 1950          | 21.30           | 22.5               | 1.318             | 0.113          | 0.149         |                      |
|                                    | QPSK,20MHz  | Back Face  | 1930          | 22.43           | 22.5               | 1.016             | 0.223          | 0.227         |                      |
| 18.                                | QPSK,20MHz  | Back Face  | 1970          | 20.97           | 22.5               | 1.422             | 0.222          | <b>0.316</b>  |                      |



| FDD-LTE Band 3– Body SAR Test(5mm) |                       |               |                 |                    |                   |                |               |                      |
|------------------------------------|-----------------------|---------------|-----------------|--------------------|-------------------|----------------|---------------|----------------------|
| Plot No.                           | Mode                  | Test Position | Frequency (MHz) | Output Power (dBm) | Rated Limit (dBm) | Scaling Factor | SAR10g (W/kg) | Scaled SAR10g (W/kg) |
|                                    | Modulation, Bandwidth |               |                 |                    |                   |                |               |                      |
| 18.                                | QPSK,20MHz            | Back Face     | 1747.5          | 22.89              | 23.0              | 1.026          | 0.483         | 0.495                |
|                                    | QPSK,20MHz            | Front Face    | 1747.5          | 22.89              | 23.0              | 1.026          | 0.184         | 0.189                |
|                                    | QPSK,20MHz            | Right Side    | 1747.5          | 22.89              | 23.0              | 1.026          | 0.096         | 0.098                |
|                                    | QPSK,20MHz            | Left Side     | 1747.5          | 22.89              | 23.0              | 1.026          | 0.108         | 0.111                |
|                                    | QPSK,20MHz            | Top Side      | 1747.5          | 22.89              | 23.0              | 1.026          | 0.231         | 0.237                |
| 19.                                | QPSK,20MHz            | Back Face     | 1720            | 22.42              | 23.0              | 1.143          | 0.579         | <b>0.662</b>         |
|                                    | QPSK,20MHz            | Back Face     | 1775            | 21.98              | 23.0              | 1.265          | 0.404         | 0.511                |

| FDD-LTE Band 7– Body SAR Test(5mm) |                       |               |                 |                    |                   |                |               |                      |
|------------------------------------|-----------------------|---------------|-----------------|--------------------|-------------------|----------------|---------------|----------------------|
| Plot No.                           | Mode                  | Test Position | Frequency (MHz) | Output Power (dBm) | Rated Limit (dBm) | Scaling Factor | SAR10g (W/kg) | Scaled SAR10g (W/kg) |
|                                    | Modulation, Bandwidth |               |                 |                    |                   |                |               |                      |
| 20.                                | QPSK,20MHz            | Back Face     | 2535            | 23.85              | 24                | 1.035          | 0.234         | <b>0.242</b>         |
|                                    | QPSK,20MHz            | Front Face    | 2535            | 23.85              | 24                | 1.035          | 0.111         | 0.115                |
|                                    | QPSK,20MHz            | Right Side    | 2535            | 23.85              | 24                | 1.035          | 0.049         | 0.051                |
|                                    | QPSK,20MHz            | Left Side     | 2535            | 23.85              | 24                | 1.035          | 0.085         | 0.088                |
|                                    | QPSK,20MHz            | Top Side      | 2535            | 23.85              | 24                | 1.035          | 0.150         | 0.155                |
|                                    | QPSK,20MHz            | Back Face     | 2510            | 23.75              | 24                | 1.059          | 0.213         | 0.226                |
|                                    | QPSK,20MHz            | Back Face     | 2560            | 23.89              | 24                | 1.026          | 0.156         | 0.160                |

| FDD-LTE Band 8– Body SAR Test(5mm) |                       |               |                 |                    |                   |                |               |                      |
|------------------------------------|-----------------------|---------------|-----------------|--------------------|-------------------|----------------|---------------|----------------------|
| Plot No.                           | Mode                  | Test Position | Frequency (MHz) | Output Power (dBm) | Rated Limit (dBm) | Scaling Factor | SAR10g (W/kg) | Scaled SAR10g (W/kg) |
|                                    | Modulation, Bandwidth |               |                 |                    |                   |                |               |                      |
|                                    | QPSK,10MHz            | Back Face     | 897.5           | 22.27              | 23.0              | 1.183          | 0.154         | 0.182                |
|                                    | QPSK,10MHz            | Front Face    | 897.5           | 22.27              | 23.0              | 1.183          | 0.026         | 0.031                |
|                                    | QPSK,10MHz            | Right Side    | 897.5           | 22.27              | 23.0              | 1.183          | 0.035         | 0.041                |
|                                    | QPSK,10MHz            | Left Side     | 897.5           | 22.27              | 23.0              | 1.183          | 0.078         | 0.092                |
|                                    | QPSK,10MHz            | Top Side      | 897.5           | 22.27              | 23.0              | 1.183          | 0.127         | 0.150                |
| 21.                                | QPSK,10MHz            | Back Face     | 885.0           | 22.41              | 23.0              | 1.146          | 0.321         | <b>0.368</b>         |
|                                    | QPSK,10MHz            | Back Face     | 910.0           | 22.95              | 23.0              | 1.012          | 0.125         | 0.126                |



| FDD-LTE Band 20– Body SAR Test(5mm) |                       |               |                 |                    |                   |                |               |                      |
|-------------------------------------|-----------------------|---------------|-----------------|--------------------|-------------------|----------------|---------------|----------------------|
| Plot No.                            | Mode                  | Test Position | Frequency (MHz) | Output Power (dBm) | Rated Limit (dBm) | Scaling Factor | SAR10g (W/kg) | Scaled SAR10g (W/kg) |
| Plot No.                            | Modulation, Bandwidth |               |                 |                    |                   |                |               |                      |
| 22.                                 | QPSK,20MHz            | Back Face     | 847             | 22.15              | 22.5              | 1.084          | 0.276         | <b>0.299</b>         |
|                                     | QPSK,20MHz            | Front Face    | 847             | 22.15              | 22.5              | 1.084          | 0.264         | 0.286                |
|                                     | QPSK,20MHz            | Right Side    | 847             | 22.15              | 22.5              | 1.084          | 0.154         | 0.167                |
|                                     | QPSK,20MHz            | Left Side     | 847             | 22.15              | 22.5              | 1.084          | 0.129         | 0.140                |
|                                     | QPSK,20MHz            | Top Side      | 847             | 22.15              | 22.5              | 1.084          | 0.090         | 0.098                |
|                                     | QPSK,20MHz            | Back Face     | 842             | 22.45              | 22.5              | 1.012          | 0.271         | 0.274                |
|                                     | QPSK,20MHz            | Back Face     | 852             | 22.10              | 22.5              | 1.096          | 0.257         | 0.282                |

| FDD-LTE Band 28– Body SAR Test(5mm) |                       |               |                 |                    |                   |                |               |                      |
|-------------------------------------|-----------------------|---------------|-----------------|--------------------|-------------------|----------------|---------------|----------------------|
| Plot No.                            | Mode                  | Test Position | Frequency (MHz) | Output Power (dBm) | Rated Limit (dBm) | Scaling Factor | SAR10g (W/kg) | Scaled SAR10g (W/kg) |
| Plot No.                            | Modulation, Bandwidth |               |                 |                    |                   |                |               |                      |
| 23.                                 | QPSK,20MHz            | Back Face     | 725             | 21.95              | 23.0              | 1.274          | 0.163         | <b>0.208</b>         |
|                                     | QPSK,20MHz            | Front Face    | 725             | 21.95              | 23.0              | 1.274          | 0.089         | 0.113                |
|                                     | QPSK,20MHz            | Right Side    | 725             | 21.95              | 23.0              | 1.274          | 0.097         | 0.124                |
|                                     | QPSK,20MHz            | Left Side     | 725             | 21.95              | 23.0              | 1.274          | 0.102         | 0.130                |
|                                     | QPSK,20MHz            | Top Side      | 725             | 21.95              | 23.0              | 1.274          | 0.121         | 0.154                |
|                                     | QPSK,20MHz            | Back Face     | 713             | 22.99              | 23.0              | 1.002          | 0.116         | 0.116                |
|                                     | QPSK,20MHz            | Back Face     | 738             | 21.93              | 23.0              | 1.279          | 0.153         | 0.196                |

| TDD-LTE Band 38– Body SAR Test(5mm) |                       |               |                 |                    |                   |                |               |                      |
|-------------------------------------|-----------------------|---------------|-----------------|--------------------|-------------------|----------------|---------------|----------------------|
| Plot No.                            | Mode                  | Test Position | Frequency (MHz) | Output Power (dBm) | Rated Limit (dBm) | Scaling Factor | SAR10g (W/kg) | Scaled SAR10g (W/kg) |
| Plot No.                            | Modulation, Bandwidth |               |                 |                    |                   |                |               |                      |
|                                     | QPSK,20MHz            | Back Face     | 2595            | 21.75              | 22.0              | 1.059          | 0.086         | 0.091                |
|                                     | QPSK,20MHz            | Front Face    | 2595            | 21.75              | 22.0              | 1.059          | 0.049         | 0.052                |
|                                     | QPSK,20MHz            | Right Side    | 2595            | 21.75              | 22.0              | 1.059          | 0.020         | 0.021                |
|                                     | QPSK,20MHz            | Left Side     | 2595            | 21.75              | 22.0              | 1.059          | 0.082         | 0.087                |
|                                     | QPSK,20MHz            | Top Side      | 2595            | 21.75              | 22.0              | 1.059          | 0.056         | 0.059                |
|                                     | QPSK,20MHz            | Back Face     | 2580            | 21.22              | 22.0              | 1.197          | 0.084         | 0.101                |
| 24.                                 | QPSK,20MHz            | Back Face     | 2610            | 21.46              | 22.0              | 1.132          | 0.089         | <b>0.101</b>         |



| TDD-LTE Band 40– Body SAR Test(5mm) |                       |            |               |                 |                    |                   |                |               |                      |
|-------------------------------------|-----------------------|------------|---------------|-----------------|--------------------|-------------------|----------------|---------------|----------------------|
| Plot No.                            | Mode                  |            | Test Position | Frequency (MHz) | Output Power (dBm) | Rated Limit (dBm) | Scaling Factor | SAR10g (W/kg) | Scaled SAR10g (W/kg) |
|                                     | Modulation, Bandwidth |            |               |                 |                    |                   |                |               |                      |
| 1                                   | QPSK,20MHz            | Back Face  | 2350          | 21.72           | 22.0               | 1.067             | 0.123          | 0.131         |                      |
| 2                                   | QPSK,20MHz            | Front Face | 2350          | 21.72           | 22.0               | 1.067             | 0.027          | 0.029         |                      |
| 3                                   | QPSK,20MHz            | Right Side | 2350          | 21.72           | 22.0               | 1.067             | 0.028          | 0.030         |                      |
| 4                                   | QPSK,20MHz            | Left Side  | 2350          | 21.72           | 22.0               | 1.067             | 0.073          | 0.078         |                      |
| 5                                   | QPSK,20MHz            | Top Side   | 2350          | 21.72           | 22.0               | 1.067             | 0.118          | 0.126         |                      |
| 6                                   | QPSK,20MHz            | Back Face  | 2310          | 21.05           | 22.0               | 1.245             | 0.185          | 0.230         |                      |
| 25.                                 | QPSK,20MHz            | Back Face  | 2390          | 21.37           | 22.0               | 1.156             | 0.208          | <b>0.240</b>  |                      |

| WLAN 2.4GHz– Body SAR Test(5mm) |         |               |           |      |                    |                   |                |               |                      |
|---------------------------------|---------|---------------|-----------|------|--------------------|-------------------|----------------|---------------|----------------------|
| Plot No.                        | Mode    | Test Position | Frequency |      | Output Power (dBm) | Rated Limit (dBm) | Scaling Factor | SAR10g (W/kg) | Scaled SAR10g (W/kg) |
|                                 |         |               | CH.       | MHz  |                    |                   |                |               |                      |
| 1                               | 802.11b | Back Face     | 07        | 2442 | 13.30              | 13.5              | 1.047          | 0.022         | 0.023                |
| 2                               | 802.11b | Front Face    | 07        | 2442 | 13.30              | 13.5              | 1.047          | 0.016         | 0.017                |
| 3                               | 802.11b | Left Side     | 07        | 2442 | 13.30              | 13.5              | 1.047          | 0.019         | 0.020                |
| 4                               | 802.11b | Top Side      | 07        | 2442 | 13.30              | 13.5              | 1.047          | 0.007         | 0.007                |
| 26.                             | 802.11b | Back Face     | 01        | 2412 | 13.03              | 13.5              | 1.114          | 0.034         | <b>0.038</b>         |
| 27.                             | 802.11b | Back Face     | 13        | 2472 | 13.02              | 13.5              | 1.117          | 0.029         | 0.032                |



Limb SAR: 0mm

**GSM900 -Limb SAR Test(0mm)**

| Plot No. | Mode     | Test Position | Frequency |       | Output Power (dBm) | Rated Limit (dBm) | Scaling Factor | SAR10g (W/kg) | Scaled SAR10g (W/kg) |
|----------|----------|---------------|-----------|-------|--------------------|-------------------|----------------|---------------|----------------------|
|          |          |               | CH.       | MHz   |                    |                   |                |               |                      |
|          | GSM      | Back Face     | 60        | 902.0 | 32.00              | 32.5              | 1.122          | 0.281         | 0.315                |
|          | GSM      | Front Face    | 60        | 902.0 | 32.00              | 32.5              | 1.122          | 0.044         | 0.049                |
|          | GSM      | Back Face     | 975       | 880.2 | 32.20              | 32.5              | 1.072          | 0.378         | 0.405                |
|          | GSM      | Back Face     | 124       | 914.8 | 31.90              | 32.5              | 1.148          | 0.223         | 0.256                |
|          | GPRS_4TX | Back Face     | 60        | 902.0 | 28.89              | 29.5              | 1.151          | 0.622         | 0.716                |
|          | GPRS_4TX | Front Face    | 60        | 902.0 | 28.89              | 29.5              | 1.151          | 0.315         | 0.363                |
|          | GPRS_4TX | Right Side    | 60        | 902.0 | 28.89              | 29.5              | 1.151          | 0.264         | 0.304                |
|          | GPRS_4TX | Left Side     | 60        | 902.0 | 28.89              | 29.5              | 1.151          | 0.247         | 0.284                |
|          | GPRS_4TX | Top Side      | 60        | 902.0 | 28.89              | 29.5              | 1.151          | 0.291         | 0.335                |
| 27.      | GPRS_4TX | Back Face     | 975       | 880.2 | 29.24              | 29.5              | 1.062          | 1.216         | <b>1.291</b>         |
|          | GPRS_4TX | Back Face     | 124       | 914.8 | 28.72              | 29.5              | 1.197          | 0.451         | 0.540                |

**GSM1800 -Limb SAR Test(0mm)**

| Plot No. | Mode     | Test Position | Frequency |        | Output Power (dBm) | Rated Limit (dBm) | Scaling Factor | SAR10g (W/kg) | Scaled SAR10g (W/kg) |
|----------|----------|---------------|-----------|--------|--------------------|-------------------|----------------|---------------|----------------------|
|          |          |               | CH.       | MHz    |                    |                   |                |               |                      |
|          | GSM      | Back Face     | 698       | 1747.4 | 28.60              | 29.5              | 1.230          | 0.793         | 0.976                |
|          | GSM      | Front Face    | 698       | 1747.4 | 28.60              | 29.5              | 1.230          | 0.416         | 0.512                |
|          | GSM      | Back Face     | 513       | 1710.4 | 28.20              | 29.5              | 1.349          | 0.712         | 0.960                |
|          | GSM      | Back Face     | 880       | 1783.8 | 29.20              | 29.5              | 1.072          | 0.696         | 0.746                |
| 28.      | GPRS_4TX | Back Face     | 698       | 1747.4 | 24.86              | 26.0              | 1.300          | 1.213         | <b>1.577</b>         |
|          | GPRS_4TX | Front Face    | 698       | 1747.4 | 24.86              | 26.0              | 1.300          | 0.935         | 1.216                |
|          | GPRS_4TX | Right Side    | 698       | 1747.4 | 24.86              | 26.0              | 1.300          | 0.636         | 0.827                |
|          | GPRS_4TX | Left Side     | 698       | 1747.4 | 24.86              | 26.0              | 1.300          | 0.768         | 0.999                |
|          | GPRS_4TX | Top Side      | 698       | 1747.4 | 24.86              | 26.0              | 1.300          | 1.018         | 1.324                |
|          | GPRS_4TX | Back Face     | 513       | 1710.4 | 24.51              | 26.0              | 1.409          | 1.116         | 1.573                |
|          | GPRS_4TX | Back Face     | 880       | 1783.8 | 25.53              | 26.0              | 1.114          | 1.181         | 1.316                |



| WCDMA Band I-Limb SAR Test(0mm) |      |               |           |        |                    |                   |                |               |                      |
|---------------------------------|------|---------------|-----------|--------|--------------------|-------------------|----------------|---------------|----------------------|
| Plot No.                        | Mode | Test Position | Frequency |        | Output Power (dBm) | Rated Limit (dBm) | Scaling Factor | SAR10g (W/kg) | Scaled SAR10g (W/kg) |
|                                 |      |               | CH.       | MHz    |                    |                   |                |               |                      |
|                                 | RMC  | Back Face     | 9750      | 1950   | 23.41              | 24.0              | 1.146          | 0.496         | 0.568                |
|                                 | RMC  | Front Face    | 9750      | 1950   | 23.41              | 24.0              | 1.146          | 0.384         | 0.440                |
|                                 | RMC  | Right Side    | 9750      | 1950   | 23.41              | 24.0              | 1.146          | 0.175         | 0.200                |
|                                 | RMC  | Left Side     | 9750      | 1950   | 23.41              | 24.0              | 1.146          | 0.189         | 0.217                |
|                                 | RMC  | Top Side      | 9750      | 1950   | 23.41              | 24.0              | 1.146          | 0.304         | 0.348                |
| 29.                             | RMC  | Back Face     | 9613      | 1922.6 | 23.33              | 24.0              | 1.167          | 0.495         | <b>0.578</b>         |
|                                 | RMC  | Back Face     | 9887      | 1977.4 | 23.56              | 24.0              | 1.107          | 0.491         | 0.543                |

| WCDMA Band VIII-Limb SAR Test(0mm) |      |               |           |       |                    |                   |                |               |                      |
|------------------------------------|------|---------------|-----------|-------|--------------------|-------------------|----------------|---------------|----------------------|
| Plot No.                           | Mode | Test Position | Frequency |       | Output Power (dBm) | Rated Limit (dBm) | Scaling Factor | SAR10g (W/kg) | Scaled SAR10g (W/kg) |
|                                    |      |               | CH.       | MHz   |                    |                   |                |               |                      |
| 30.                                | RMC  | Back Face     | 2788      | 897.6 | 23.21              | 23.5              | 1.069          | 0.310         | <b>0.331</b>         |
|                                    | RMC  | Front Face    | 2788      | 897.6 | 23.21              | 23.5              | 1.069          | 0.075         | 0.080                |
|                                    | RMC  | Right Side    | 2788      | 897.6 | 23.21              | 23.5              | 1.069          | 0.165         | 0.176                |
|                                    | RMC  | Left Side     | 2788      | 897.6 | 23.21              | 23.5              | 1.069          | 0.189         | 0.202                |
|                                    | RMC  | Top Side      | 2788      | 897.6 | 23.21              | 23.5              | 1.069          | 0.221         | 0.236                |
|                                    | RMC  | Back Face     | 2713      | 882.6 | 23.27              | 23.5              | 1.054          | 0.293         | 0.309                |
|                                    | RMC  | Back Face     | 2862      | 912.4 | 23.11              | 23.5              | 1.094          | 0.233         | 0.255                |

| FDD-LTE Band 1– Limb SAR Test(0mm) |            |               |                 |                    |                   |                |               |                      |
|------------------------------------|------------|---------------|-----------------|--------------------|-------------------|----------------|---------------|----------------------|
| Plot No.                           | Mode       | Test Position | Frequency (MHz) | Output Power (dBm) | Rated Limit (dBm) | Scaling Factor | SAR10g (W/kg) | Scaled SAR10g (W/kg) |
|                                    |            |               |                 |                    |                   |                |               |                      |
|                                    | QPSK,20MHz | Back Face     | 1950            | 21.30              | 22.5              | 1.318          | 0.362         | 0.477                |
|                                    | QPSK,20MHz | Front Face    | 1950            | 21.30              | 22.5              | 1.318          | 0.252         | 0.332                |
|                                    | QPSK,20MHz | Right Side    | 1950            | 21.30              | 22.5              | 1.318          | 0.195         | 0.257                |
|                                    | QPSK,20MHz | Left Side     | 1950            | 21.30              | 22.5              | 1.318          | 0.209         | 0.276                |
|                                    | QPSK,20MHz | Top Side      | 1950            | 21.30              | 22.5              | 1.318          | 0.234         | 0.308                |
|                                    | QPSK,20MHz | Back Face     | 1930            | 22.43              | 22.5              | 1.016          | 0.386         | 0.392                |
| 31.                                | QPSK,20MHz | Back Face     | 1970            | 20.97              | 22.5              | 1.422          | 0.352         | <b>0.501</b>         |



| FDD-LTE Band 3– Limb SAR Test(0mm) |                       |               |                 |                    |                   |                |               |                      |
|------------------------------------|-----------------------|---------------|-----------------|--------------------|-------------------|----------------|---------------|----------------------|
| Plot No.                           | Mode                  | Test Position | Frequency (MHz) | Output Power (dBm) | Rated Limit (dBm) | Scaling Factor | SAR10g (W/kg) | Scaled SAR10g (W/kg) |
|                                    | Modulation, Bandwidth |               |                 |                    |                   |                |               |                      |
|                                    | QPSK,20MHz            | Back Face     | 1747.5          | 22.89              | 23.0              | 1.026          | 0.680         | 0.697                |
|                                    | QPSK,20MHz            | Front Face    | 1747.5          | 22.89              | 23.0              | 1.026          | 0.344         | 0.353                |
|                                    | QPSK,20MHz            | Right Side    | 1747.5          | 22.89              | 23.0              | 1.026          | 0.208         | 0.213                |
|                                    | QPSK,20MHz            | Left Side     | 1747.5          | 22.89              | 23.0              | 1.026          | 0.223         | 0.229                |
|                                    | QPSK,20MHz            | Top Side      | 1747.5          | 22.89              | 23.0              | 1.026          | 0.462         | 0.474                |
| 32.                                | QPSK,20MHz            | Back Face     | 1720            | 22.42              | 23.0              | 1.143          | 0.823         | <b>0.941</b>         |
|                                    | QPSK,20MHz            | Back Face     | 1775            | 21.98              | 23.0              | 1.265          | 0.605         | 0.765                |

| FDD-LTE Band 7– Limb SAR Test(0mm) |                       |               |                 |                    |                   |                |               |                      |
|------------------------------------|-----------------------|---------------|-----------------|--------------------|-------------------|----------------|---------------|----------------------|
| Plot No.                           | Mode                  | Test Position | Frequency (MHz) | Output Power (dBm) | Rated Limit (dBm) | Scaling Factor | SAR10g (W/kg) | Scaled SAR10g (W/kg) |
|                                    | Modulation, Bandwidth |               |                 |                    |                   |                |               |                      |
|                                    | QPSK,20MHz            | Back Face     | 2535            | 23.85              | 24                | 1.035          | 0.267         | 0.276                |
|                                    | QPSK,20MHz            | Front Face    | 2535            | 23.85              | 24                | 1.035          | 0.218         | 0.226                |
|                                    | QPSK,20MHz            | Right Side    | 2535            | 23.85              | 24                | 1.035          | 0.091         | 0.094                |
|                                    | QPSK,20MHz            | Left Side     | 2535            | 23.85              | 24                | 1.035          | 0.172         | 0.178                |
|                                    | QPSK,20MHz            | Top Side      | 2535            | 23.85              | 24                | 1.035          | 0.214         | 0.222                |
| 33.                                | QPSK,20MHz            | Back Face     | 2510            | 23.75              | 24                | 1.059          | 0.373         | <b>0.395</b>         |
|                                    | QPSK,20MHz            | Back Face     | 2560            | 23.89              | 24                | 1.026          | 0.258         | 0.265                |

| FDD-LTE Band 8– Limb SAR Test(0mm) |                       |               |                 |                    |                   |                |               |                      |
|------------------------------------|-----------------------|---------------|-----------------|--------------------|-------------------|----------------|---------------|----------------------|
| Plot No.                           | Mode                  | Test Position | Frequency (MHz) | Output Power (dBm) | Rated Limit (dBm) | Scaling Factor | SAR10g (W/kg) | Scaled SAR10g (W/kg) |
|                                    | Modulation, Bandwidth |               |                 |                    |                   |                |               |                      |
|                                    | QPSK,10MHz            | Back Face     | 897.5           | 22.27              | 23.0              | 1.183          | 0.221         | 0.261                |
|                                    | QPSK,10MHz            | Front Face    | 897.5           | 22.27              | 23.0              | 1.183          | 0.068         | 0.080                |
|                                    | QPSK,10MHz            | Right Side    | 897.5           | 22.27              | 23.0              | 1.183          | 0.067         | 0.079                |
|                                    | QPSK,10MHz            | Left Side     | 897.5           | 22.27              | 23.0              | 1.183          | 0.103         | 0.122                |
|                                    | QPSK,10MHz            | Top Side      | 897.5           | 22.27              | 23.0              | 1.183          | 0.197         | 0.233                |
| 34.                                | QPSK,10MHz            | Back Face     | 885.0           | 22.41              | 23.0              | 1.146          | 0.254         | <b>0.291</b>         |
|                                    | QPSK,10MHz            | Back Face     | 910.0           | 22.95              | 23.0              | 1.012          | 0.187         | 0.189                |



| FDD-LTE Band 20– Limb SAR Test(0mm) |                       |               |                 |                    |                   |                |               |                      |
|-------------------------------------|-----------------------|---------------|-----------------|--------------------|-------------------|----------------|---------------|----------------------|
| Plot No.                            | Mode                  | Test Position | Frequency (MHz) | Output Power (dBm) | Rated Limit (dBm) | Scaling Factor | SAR10g (W/kg) | Scaled SAR10g (W/kg) |
| Plot No.                            | Modulation, Bandwidth |               |                 |                    |                   |                |               |                      |
|                                     | QPSK,20MHz            | Back Face     | 847             | 22.15              | 22.5              | 1.084          | 0.337         | 0.365                |
|                                     | QPSK,20MHz            | Front Face    | 847             | 22.15              | 22.5              | 1.084          | 0.231         | 0.250                |
|                                     | QPSK,20MHz            | Right Side    | 847             | 22.15              | 22.5              | 1.084          | 0.217         | 0.235                |
|                                     | QPSK,20MHz            | Left Side     | 847             | 22.15              | 22.5              | 1.084          | 0.208         | 0.225                |
|                                     | QPSK,20MHz            | Top Side      | 847             | 22.15              | 22.5              | 1.084          | 0.158         | 0.171                |
|                                     | QPSK,20MHz            | Back Face     | 842             | 22.45              | 22.5              | 1.012          | 0.321         | 0.325                |
| 35.                                 | QPSK,20MHz            | Back Face     | 852             | 22.10              | 22.5              | 1.096          | 0.335         | <b>0.367</b>         |

| FDD-LTE Band 28– Limb SAR Test(0mm) |                       |               |                 |                    |                   |                |               |                      |
|-------------------------------------|-----------------------|---------------|-----------------|--------------------|-------------------|----------------|---------------|----------------------|
| Plot No.                            | Mode                  | Test Position | Frequency (MHz) | Output Power (dBm) | Rated Limit (dBm) | Scaling Factor | SAR10g (W/kg) | Scaled SAR10g (W/kg) |
| Plot No.                            | Modulation, Bandwidth |               |                 |                    |                   |                |               |                      |
|                                     | QPSK,20MHz            | Back Face     | 725             | 21.95              | 23.0              | 1.274          | 0.201         | 0.256                |
|                                     | QPSK,20MHz            | Front Face    | 725             | 21.95              | 23.0              | 1.274          | 0.057         | 0.073                |
|                                     | QPSK,20MHz            | Right Side    | 725             | 21.95              | 23.0              | 1.274          | 0.152         | 0.194                |
|                                     | QPSK,20MHz            | Left Side     | 725             | 21.95              | 23.0              | 1.274          | 0.186         | 0.237                |
|                                     | QPSK,20MHz            | Top Side      | 725             | 21.95              | 23.0              | 1.274          | 0.169         | 0.215                |
|                                     | QPSK,20MHz            | Back Face     | 713             | 22.99              | 23.0              | 1.002          | 0.242         | 0.243                |
| 36.                                 | QPSK,20MHz            | Back Face     | 738             | 21.93              | 23.0              | 1.279          | 0.306         | <b>0.391</b>         |

| TDD-LTE Band 38– Limb SAR Test(0mm) |                       |               |                 |                    |                   |                |               |                      |
|-------------------------------------|-----------------------|---------------|-----------------|--------------------|-------------------|----------------|---------------|----------------------|
| Plot No.                            | Mode                  | Test Position | Frequency (MHz) | Output Power (dBm) | Rated Limit (dBm) | Scaling Factor | SAR10g (W/kg) | Scaled SAR10g (W/kg) |
| Plot No.                            | Modulation, Bandwidth |               |                 |                    |                   |                |               |                      |
|                                     | QPSK,20MHz            | Back Face     | 2595            | 21.75              | 22.0              | 1.059          | 0.160         | 0.169                |
|                                     | QPSK,20MHz            | Front Face    | 2595            | 21.75              | 22.0              | 1.059          | 0.102         | 0.108                |
|                                     | QPSK,20MHz            | Right Side    | 2595            | 21.75              | 22.0              | 1.059          | 0.053         | 0.056                |
|                                     | QPSK,20MHz            | Left Side     | 2595            | 21.75              | 22.0              | 1.059          | 0.156         | 0.165                |
|                                     | QPSK,20MHz            | Top Side      | 2595            | 21.75              | 22.0              | 1.059          | 0.108         | 0.114                |
|                                     | QPSK,20MHz            | Back Face     | 2580            | 21.22              | 22.0              | 1.197          | 0.148         | 0.177                |
| 37.                                 | QPSK,20MHz            | Back Face     | 2610            | 21.46              | 22.0              | 1.132          | 0.168         | <b>0.190</b>         |



| TDD-LTE Band 40-Limb SAR Test(0mm) |                       |               |                 |                    |                   |                |               |                      |
|------------------------------------|-----------------------|---------------|-----------------|--------------------|-------------------|----------------|---------------|----------------------|
| Plot No.                           | Mode                  | Test Position | Frequency (MHz) | Output Power (dBm) | Rated Limit (dBm) | Scaling Factor | SAR10g (W/kg) | Scaled SAR10g (W/kg) |
|                                    | Modulation, Bandwidth |               |                 |                    |                   |                |               |                      |
|                                    | QPSK,20MHz            | Back Face     | 2350            | 21.72              | 22.0              | 1.067          | 0.260         | 0.277                |
|                                    | QPSK,20MHz            | Front Face    | 2350            | 21.72              | 22.0              | 1.067          | 0.062         | 0.066                |
|                                    | QPSK,20MHz            | Right Side    | 2350            | 21.72              | 22.0              | 1.067          | 0.066         | 0.070                |
|                                    | QPSK,20MHz            | Left Side     | 2350            | 21.72              | 22.0              | 1.067          | 0.143         | 0.153                |
|                                    | QPSK,20MHz            | Top Side      | 2350            | 21.72              | 22.0              | 1.067          | 0.231         | 0.246                |
| 38.                                | QPSK,20MHz            | Back Face     | 2310            | 21.05              | 22.0              | 1.245          | 0.270         | <b>0.336</b>         |
|                                    | QPSK,20MHz            | Back Face     | 2390            | 21.37              | 22.0              | 1.156          | 0.244         | 0.282                |

| WLAN 2.4GHz-Limb SAR Test(0mm) |         |               |           |      |                    |                   |                |               |                      |
|--------------------------------|---------|---------------|-----------|------|--------------------|-------------------|----------------|---------------|----------------------|
| Plot No.                       | Mode    | Test Position | Frequency |      | Output Power (dBm) | Rated Limit (dBm) | Scaling Factor | SAR10g (W/kg) | Scaled SAR10g (W/kg) |
|                                |         |               | CH.       | MHz  |                    |                   |                |               |                      |
|                                | 802.11b | Back Face     | 07        | 2442 | 13.30              | 13.5              | 1.047          | 0.033         | 0.035                |
|                                | 802.11b | Front Face    | 07        | 2442 | 13.30              | 13.5              | 1.047          | 0.021         | 0.022                |
|                                | 802.11b | Left Side     | 07        | 2442 | 13.30              | 13.5              | 1.047          | 0.029         | 0.030                |
|                                | 802.11b | Top Side      | 07        | 2442 | 13.30              | 13.5              | 1.047          | 0.010         | 0.010                |
| 39.                            | 802.11b | Back Face     | 01        | 2412 | 13.03              | 13.5              | 1.114          | 0.063         | <b>0.070</b>         |
|                                | 802.11b | Back Face     | 13        | 2472 | 13.02              | 13.5              | 1.117          | 0.047         | 0.052                |



### 9.3 Simultaneous Multi-band Transmission SAR Analysis

#### List of Mode for Simultaneous Multi-band Transmission

| No. | Configurations                         | Head SAR | Body SAR | Limb SAR |
|-----|--|----------|----------|----------|
| 1   | GSM(Voice/Data) + WLAN(2.4GHz)(Data)   | Yes      | Yes      | Yes      |
| 2   | WCDMA (Voice/Data)+ WLAN(2.4GHz)(Data) | Yes      | Yes      | Yes      |
| 3   | LTE(Data) + WLAN(2.4GHz)(Data)         | Yes      | Yes      | Yes      |
| 4   | GSM(Voice/Data) + Bluetooth(Data)      | Yes      | Yes      | Yes      |
| 5   | WCDMA (Voice/Data) + Bluetooth(Data)   | Yes      | Yes      | Yes      |
| 6   | LTE(Data) + Bluetooth(Data)            | Yes      | Yes      | Yes      |

s

#### Remark:

1. GSM, WCDMA and LTE share the same antenna, and cannot transmit simultaneously.
2. WLAN and Bluetooth share the same antenna, and cannot transmit simultaneously.
3. The maximum SAR summation is calculated based on the same configuration and test position.
4. If 10g-SAR scalar summation < 2.0W/kg, simultaneous SAR measurement is not necessary.
5. One way of determining the threshold power level available to the secondary transmitter ( $P_{\text{available}}$ ) is to calculate it from the measured peak spatial-average SAR of the primary transmitter (SAR<sub>1</sub>) according to the equation:

$$P_{\text{available}} = P_{\text{th,m}} \times (\text{SAR}_{\text{lim}} - \text{SAR}_1) / \text{SAR}_{\text{lim}}$$

where  $P_{\text{th,m}}$  is the threshold exclusion power level taken from IEC/IEEE 62209-1528:2020 for the frequency of the secondary transmitter at the separation distance used in the testing.

For simultaneous transmission analysis, Bluetooth SAR is below:

#### Bluetooth:

| Average Power (dBm) | Output Power (mW) | P <sub>th,m</sub> (mw) | SAR <sub>lim</sub> (W/kg) | SAR <sub>1</sub> (W/kg) | P <sub>available</sub> (mw) |
|---------------------|-------------------|------------------------|---------------------------|-------------------------|-----------------------------|
| 8.64                | 7.31              | 20                     | 2.0                       | 1.119                   | 8.81                        |

#### Bluetooth:

| Average Power (dBm) | Output Power (mW) | P <sub>th,m</sub> (mw) | SAR <sub>lim</sub> (W/kg) | SAR <sub>1</sub> (W/kg) | P <sub>available</sub> (mw) |
|---------------------|-------------------|------------------------|---------------------------|-------------------------|-----------------------------|
| 8.64                | 7.31              | 20                     | 4.0                       | 1.577                   | 12.115                      |

The Bluetooth output power of the secondary transmitter is less than  $P_{\text{available}}$ , So SAR measurement for the secondary transmitter is not necessary.

**Head SAR**

| Position     | Band  | WWAN                 |                      | Summed SAR<br>(W/kg) |
|--------------|-------|----------------------|----------------------|----------------------|
|              |       | Scaled SAR<br>(W/kg) | Scaled SAR<br>(W/kg) |                      |
| Right Cheek  | GSM   | 0.372                | <b>0.044</b>         | <b>0.416</b>         |
| Right Tilted | GSM   | 0.351                | 0.025                | 0.376                |
| Left Cheek   | GSM   | <b>0.386</b>         | 0.013                | 0.399                |
| Left Tilted  | GSM   | 0.356                | 0.010                | 0.366                |
| Right Cheek  | WCDMA | <b>0.277</b>         | <b>0.044</b>         | 0.321                |
| Right Tilted | WCDMA | 0.212                | 0.025                | 0.237                |
| Left Cheek   | WCDMA | 0.187                | 0.013                | 0.200                |
| Left Tilted  | WCDMA | 0.093                | 0.010                | 0.103                |
| Right Cheek  | LTE   | <b>0.359</b>         | <b>0.044</b>         | 0.403                |
| Right Tilted | LTE   | 0.326                | 0.025                | 0.351                |
| Left Cheek   | LTE   | 0.320                | 0.013                | 0.333                |
| Left Tilted  | LTE   | 0.298                | 0.010                | 0.308                |

**Body SAR: 5mm****WWAN and WLAN**

| Position    | Band  | WWAN                 |                      | Summed SAR<br>(W/kg) |
|-------------|-------|----------------------|----------------------|----------------------|
|             |       | Scaled SAR<br>(W/kg) | Scaled SAR<br>(W/kg) |                      |
| Back        | GSM   | <b>1.119</b>         | <b>0.038</b>         | <b>1.157</b>         |
| Front       | GSM   | 0.464                | 0.017                | 0.481                |
| Right side  | GSM   | 0.330                | --                   | 0.330                |
| Left side   | GSM   | 0.372                | 0.020                | 0.392                |
| Top side    | GSM   | 0.542                | 0.007                | 0.549                |
| Bottom side | GSM   | --                   | --                   | --                   |
| Back        | WCDMA | <b>0.402</b>         | <b>0.038</b>         | 0.440                |
| Front       | WCDMA | 0.142                | 0.017                | 0.159                |
| Right side  | WCDMA | 0.097                | --                   | 0.097                |
| Left side   | WCDMA | 0.110                | 0.020                | 0.130                |
| Top side    | WCDMA | 0.124                | 0.007                | 0.131                |
| Bottom side | WCDMA | --                   | --                   | --                   |
| Back        | LTE   | <b>0.662</b>         | <b>0.038</b>         | 0.700                |
| Front       | LTE   | 0.286                | 0.017                | 0.303                |
| Right side  | LTE   | 0.167                | --                   | 0.167                |
| Left side   | LTE   | 0.140                | 0.020                | 0.160                |
| Top side    | LTE   | 0.237                | 0.007                | 0.244                |
| Bottom side | LTE   | --                   | --                   | --                   |



Limb SAR: 0mm

**WWAN and WLAN**

| Position    | Band  | WWAN                 |                      | Summed SAR<br>(W/kg) |
|-------------|-------|----------------------|----------------------|----------------------|
|             |       | Scaled SAR<br>(W/kg) | Scaled SAR<br>(W/kg) |                      |
| Back        | GSM   | <b>1.577</b>         | <b>0.070</b>         | <b>1.647</b>         |
| Front       | GSM   | 1.216                | 0.022                | 1.238                |
| Right side  | GSM   | 0.827                | --                   | 0.827                |
| Left side   | GSM   | 0.999                | 0.030                | 1.029                |
| Top side    | GSM   | 1.324                | 0.010                | 1.334                |
| Bottom side | GSM   | --                   | --                   | --                   |
| Back        | WCDMA | <b>0.578</b>         | <b>0.070</b>         | 0.648                |
| Front       | WCDMA | 0.440                | 0.022                | 0.462                |
| Right side  | WCDMA | 0.200                | --                   | 0.200                |
| Left side   | WCDMA | 0.217                | 0.030                | 0.247                |
| Top side    | WCDMA | 0.348                | 0.010                | 0.358                |
| Bottom side | WCDMA | --                   | --                   | --                   |
| Back        | LTE   | <b>0.941</b>         | <b>0.070</b>         | 1.011                |
| Front       | LTE   | 0.353                | 0.022                | 0.375                |
| Right side  | LTE   | 0.257                | --                   | 0.257                |
| Left side   | LTE   | 0.276                | 0.030                | 0.306                |
| Top side    | LTE   | 0.474                | 0.010                | 0.484                |
| Bottom side | LTE   | --                   | --                   | --                   |

**Note:**

1. BT output power is less than WIFI2.4GHz, so the simultaneous transmission is not evaluated;



## 10. Measurement Uncertainty

### 10.1 Uncertainty for SAR Test

| Input quantity $X_i$<br>(source of uncertainty)                          | Ref.     | Prob.<br>Dist<br>$PDF_i$ | Unc.<br>$a(x_i)$ | Div.<br>$q_i$ | $u(x_i) =$<br>$a(x_i)/q_i$ | $c_i (1 \text{ g}; 10 \text{ g})$ | $u(y) = c_i \cdot u(x_i)$ | $v_i \text{ or } v_{\text{eff}}$ |
|--|----------|--------------------------|------------------|---------------|----------------------------|-----------------------------------|---------------------------|----------------------------------|
| <b>Measurement System errors</b>   |          |                          |                  |               |                            |                                   |                           |                                  |
| Probe calibration  | 8.4.1.1  | N                        | 7.00             | 2             | 3.5                        | 1                                 | 3.5                       | $\infty$                         |
| Probe calibration drift  | 8.4.1.2  | R                        | 0                | $\sqrt{3}$    | 0                          | 1                                 | 0                         | $\infty$                         |
| Probe linearity and detection limit                                      | 8.4.1.3  | R                        | 5.00             | $\sqrt{3}$    | 2.89                       | 1                                 | 2.89                      | $\infty$                         |
| Broadband signal   | 8.4.1.4  | R                        | 0                | $\sqrt{3}$    | 0                          | 1                                 | 0                         | $\infty$                         |
| Probe isotropy   | 8.4.1.5  | R                        | 2.50             | $\sqrt{3}$    | 1.44                       | 1                                 | 1.44                      | $\infty$                         |
| Other probe and data acquisition errors                                  | 8.4.1.6  | N                        | 0.02             | 1             | 0.02                       | 1                                 | 0.02                      | $\infty$                         |
| RF ambient and noise   | 8.4.1.7  | N                        | 0                | 1             | 0                          | 1                                 | 0                         | $\infty$                         |
| Probe positioning errors   | 8.4.1.8  | N                        | 1.40             | 1             | 1.40                       | $2/\text{TM}$                     | 0.70                      |                                  |
| Data processing errors   | 8.4.1.9  | N                        | 0.05             | 1             | 0.05                       | 1                                 | 0.05                      | $\infty$                         |
| <b>Phantom and device (DUT or validation antenna) errors</b>             |          |                          |                  |               |                            |                                   |                           |                                  |
| Measurement of phantom conductivity( $\sigma$ )                          | 8.4.2.1  | N                        | 4.00             | 1             | 4.00                       | $c_e, c_\sigma$                   | 4.00                      | $\infty$                         |
| Temperature effects (medium)   | 8.4.2.2  | R                        | 2.50             | $\sqrt{3}$    | 1.44                       | $c_e, c_\sigma$                   | 1.44                      | $\infty$                         |
| Shell permittivity   | 8.4.2.3  | R                        | 5.00             | $\sqrt{3}$    | 2.88                       | See<br>8.4.2.3                    | 2.88                      | $\infty$                         |
| Distance between the radiating element of the DUT and the phantom medium | 8.4.2.4  | N                        | 0.03             | 1             | 0.03                       | 2                                 | 0.02                      | $\infty$                         |
| Repeatability of positioning the DUT or source against the phantom       | 8.4.2.5  | N                        | 0.05             | 1             | 0.05                       | 1                                 | 0.05                      | 5                                |
| Device holder effects  | 8.4.2.6  | N                        | 5.00             | 1             | 5.00                       | 1                                 | 5.00                      |                                  |
| Effect of operating mode on probe sensitivity                            | 8.4.2.7  | R                        | 0                | $\sqrt{3}$    | 0                          | 1                                 | 0                         | $\infty$                         |
| Time-average SAR   | 8.4.2.8  | R                        | 0                | $\sqrt{3}$    | 0                          | 1                                 | 0                         | $\infty$                         |
| Variation in SAR due to drift in output of DUT                           | 8.4.2.9  | N                        | 5.00             | 1             | 5.00                       | 1                                 | 5.00                      |                                  |
| Validation antenna uncertainty (validation measurement only)             | 8.4.2.10 | N                        | 0                | 1             | 0                          | 1                                 | 0                         |                                  |
| Uncertainty in accepted power  | 8.4.2.11 | N                        | 0                | 1             | 0                          | 1                                 | 0                         |                                  |



|  |         |     |      |            |       |   |       |             |
|--|---------|-----|------|------------|-------|---|-------|-------------|
| (validation measurement only)                                  |         |     |      |            |       |   |       |             |
| <b>Corrections to the SAR result</b>                           |         |     |      |            |       |   |       |             |
| Phantom deviation from target<br>( $\varepsilon'$ , $\sigma$ ) | 8.4.3.1 | N   | 0.05 | 1          | 0.05  | 1 | 0.05  |             |
| SAR scaling  | 8.4.3.2 | R   | 2.00 | $\sqrt{3}$ | 1.15  | 1 | 1.15  |             |
| Combined Standard Uncertainty                                  |         | RSS |      |            | 10.11 |   | 10.11 | $v_{eff} =$ |
| Expanded uncertainty, U  |         | K=2 |      |            | 20.23 |   | 20.23 |             |

**WALTEK**



## Annex A. Plots of System Performance Check

# MEASUREMENT 1

Type: Validation measurement (Fast, 75.00 %)

Date of measurement: 2023-06-23

Measurement duration: 7 minutes 21 seconds

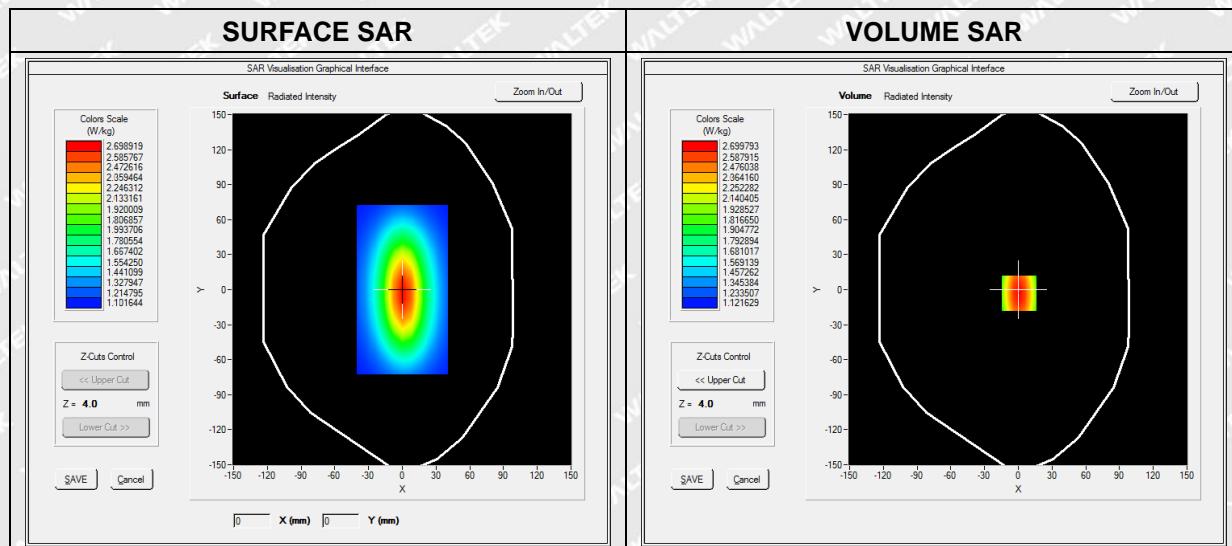
E-field Probe: SSE2 - SN 18/21 EPGO356; ConvF: 1.66; Calibrated: 2022-07-08

### A. Experimental conditions

|                        |                      |
|------------------------|----------------------|
| <b>Area Scan</b>       | dx=8mm dy=8mm        |
| <b>Zoom Scan</b>       | dx=5mm dy=5mm dz=4mm |
| <b>Phantom</b>         | Validation plane     |
| <b>Device Position</b> | Dipole               |
| <b>Band</b>            | CW750                |
| <b>Signal</b>          | Duty Cycle 1:1       |

### B. SAR Measurement Results

|  |            |
|--|------------|
| <b>Frequency (MHz)</b>                   | 750.000000 |
| <b>Relative Permittivity (real part)</b> | 41.462574  |
| <b>Conductivity (S/m)</b>                | 0.872373   |
| <b>Power Variation (%)</b>               | 0.383630   |
| <b>Ambient Temperature</b>               | 22.2       |
| <b>Liquid Temperature</b>                | 22.2       |

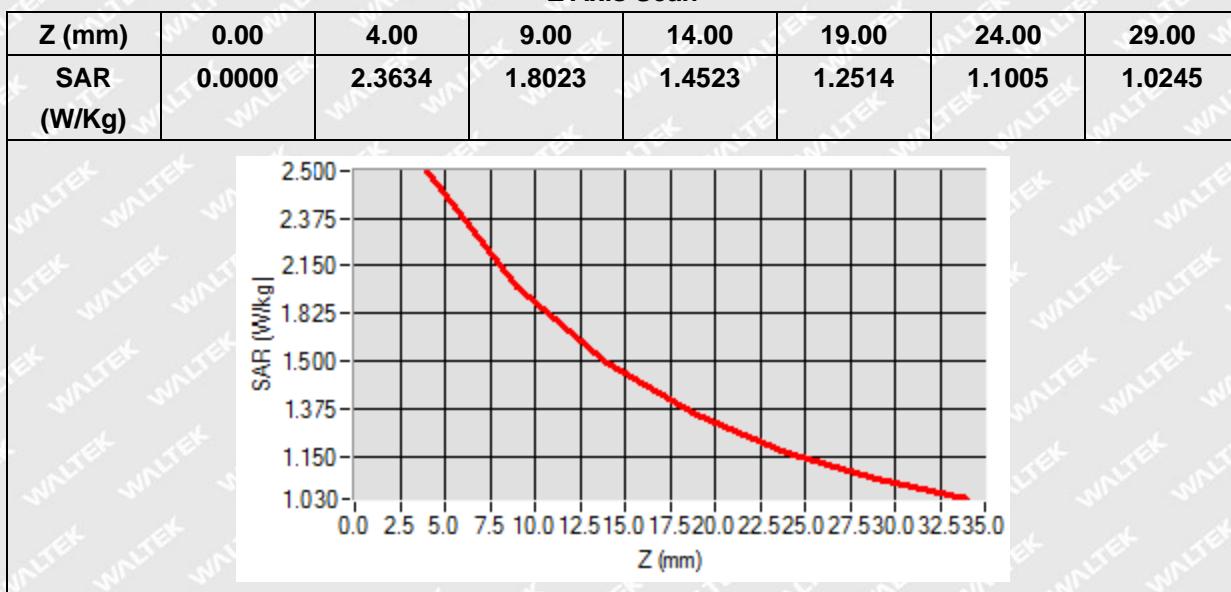




Maximum location: X=0.00, Y=0.00

|                |          |
|----------------|----------|
| SAR 10g (W/Kg) | 1.342744 |
| SAR 1g (W/Kg)  | 2.164534 |

## Z Axis Scan





## MEASUREMENT 2

Type: Validation measurement (Fast, 75.00 %)

Date of measurement: 2023-06-23

Measurement duration: 12 minutes 21 seconds

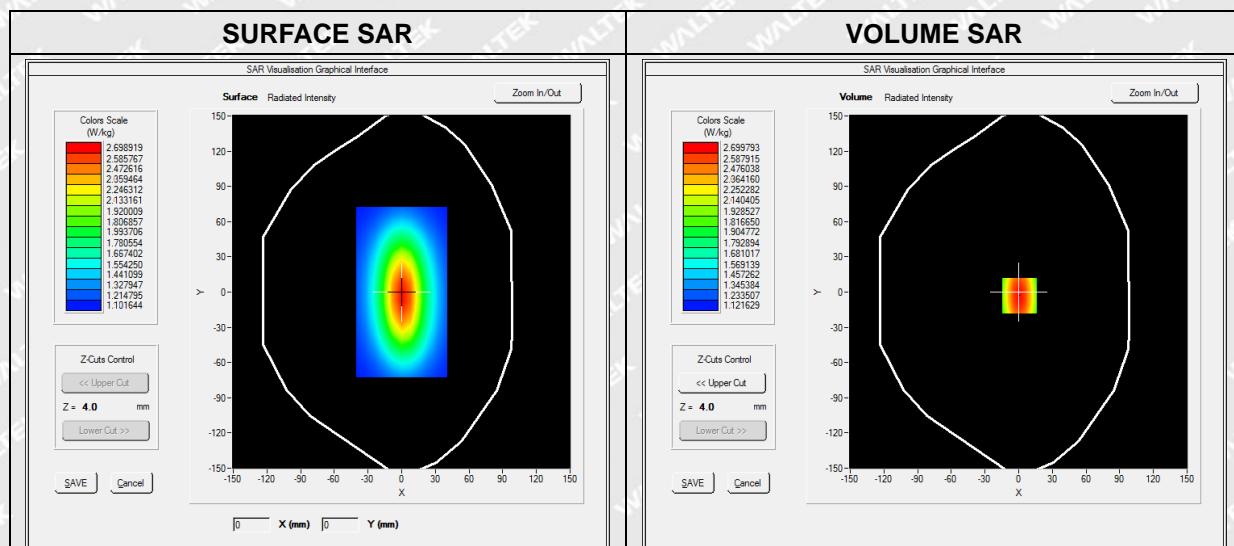
E-field Probe: SSE2 - SN 18/21 EPGO356; ConvF: 1.71; Calibrated: 2022-07-08

### A. Experimental conditions

|                        |                      |
|------------------------|----------------------|
| <b>Area Scan</b>       | dx=8mm dy=8mm        |
| <b>Zoom Scan</b>       | dx=5mm dy=5mm dz=4mm |
| <b>Phantom</b>         | Validation plane     |
| <b>Device Position</b> | Dipole               |
| <b>Band</b>            | CW835                |
| <b>Signal</b>          | Duty Cycle 1:1       |

### B. SAR Measurement Results

|  |            |
|--|------------|
| <b>Frequency (MHz)</b>                   | 835.000000 |
| <b>Relative Permittivity (real part)</b> | 41.371255  |
| <b>Conductivity (S/m)</b>                | 0.894514   |
| <b>Power Variation (%)</b>               | 1.818750   |
| <b>Ambient Temperature</b>               | 22.2       |
| <b>Liquid Temperature</b>                | 22.2       |

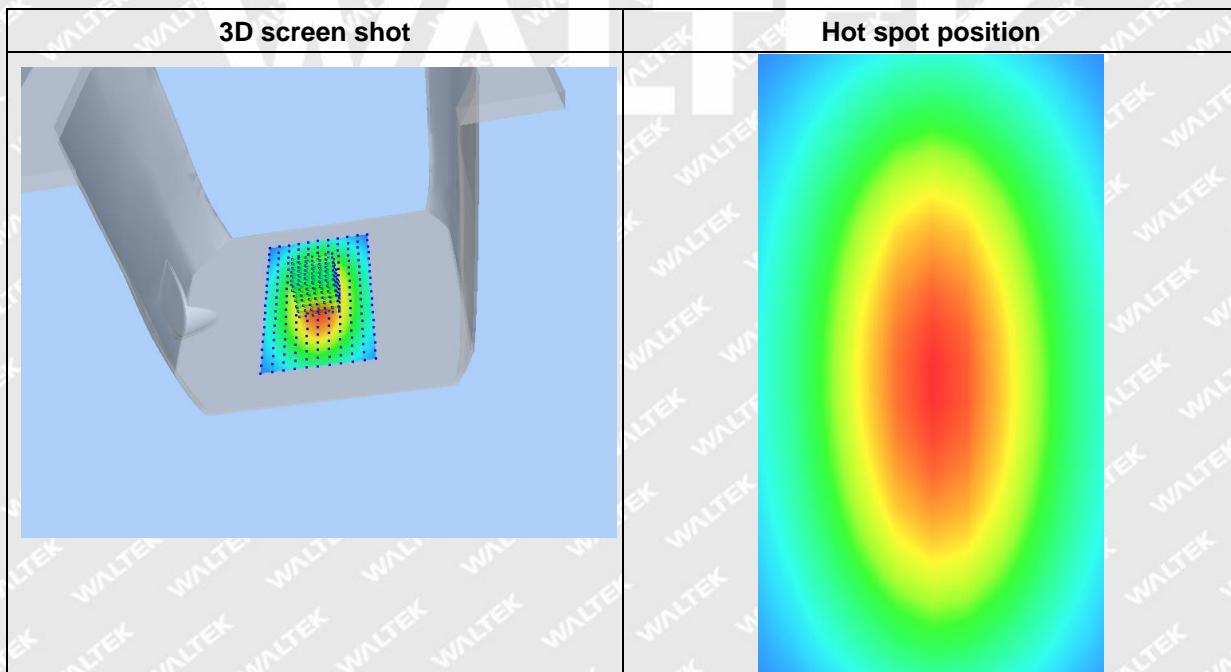
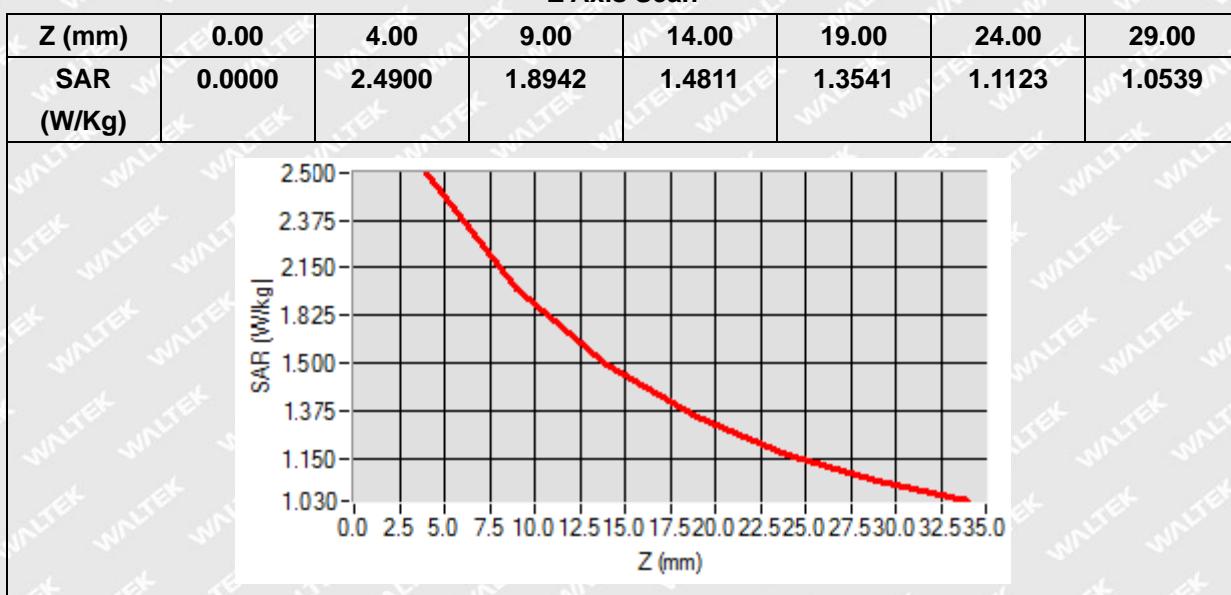




Maximum location: X=0.00, Y=0.00

|                |          |
|----------------|----------|
| SAR 10g (W/Kg) | 1.471263 |
| SAR 1g (W/Kg)  | 2.401250 |

## Z Axis Scan





# MEASUREMENT 3

Type: Validation measurement (Fast, 75.00 %)

Date of measurement: 2023-06-23

Measurement duration: 12 minutes 21 seconds

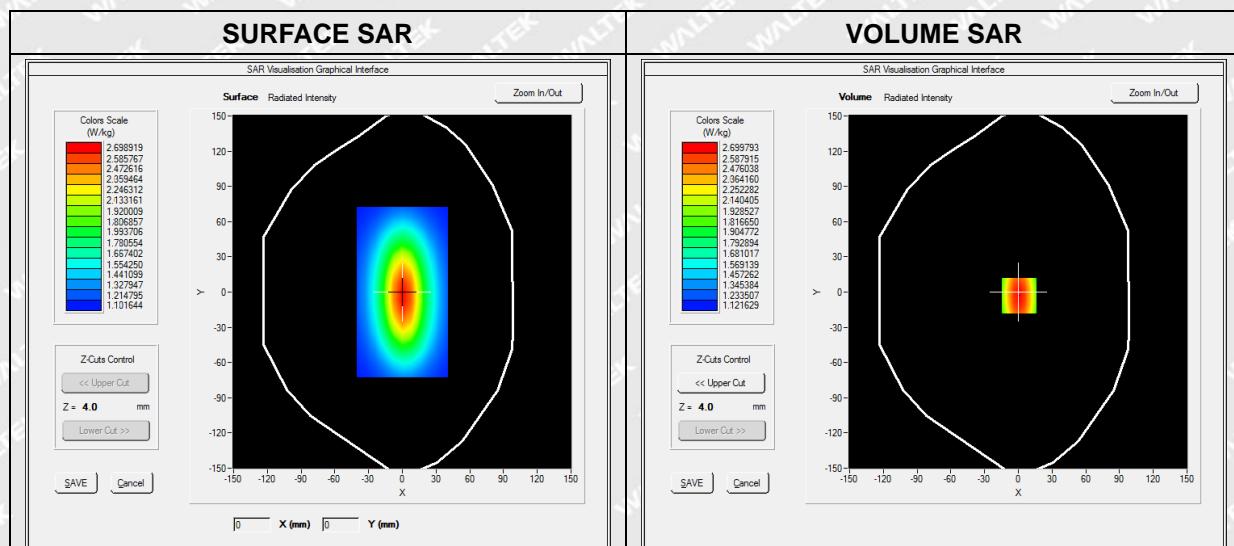
E-field Probe: SSE2 - SN 18/21 EPGO356; ConvF: 1.88; Calibrated: 2022-07-08

## A. Experimental conditions

|                        |                        |
|------------------------|------------------------|
| <b>Area Scan</b>       | dx=8mm dy=8mm          |
| <b>Zoom Scan</b>       | dx=5mm dy=5mm dz=4mm   |
| <b>Phantom</b>         | Validation plane       |
| <b>Device Position</b> | Dipole                 |
| <b>Band</b>            | CW900                  |
| <b>Signal</b>          | CW (Crest factor: 1.0) |

## B. SAR Measurement Results

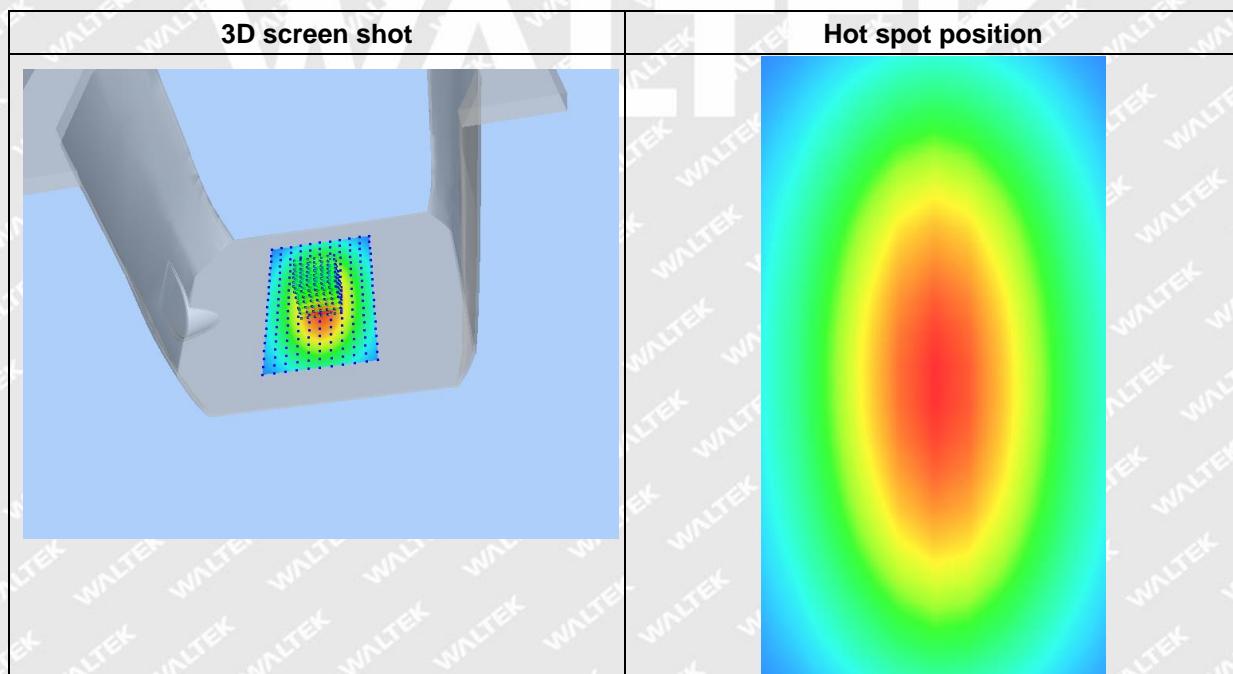
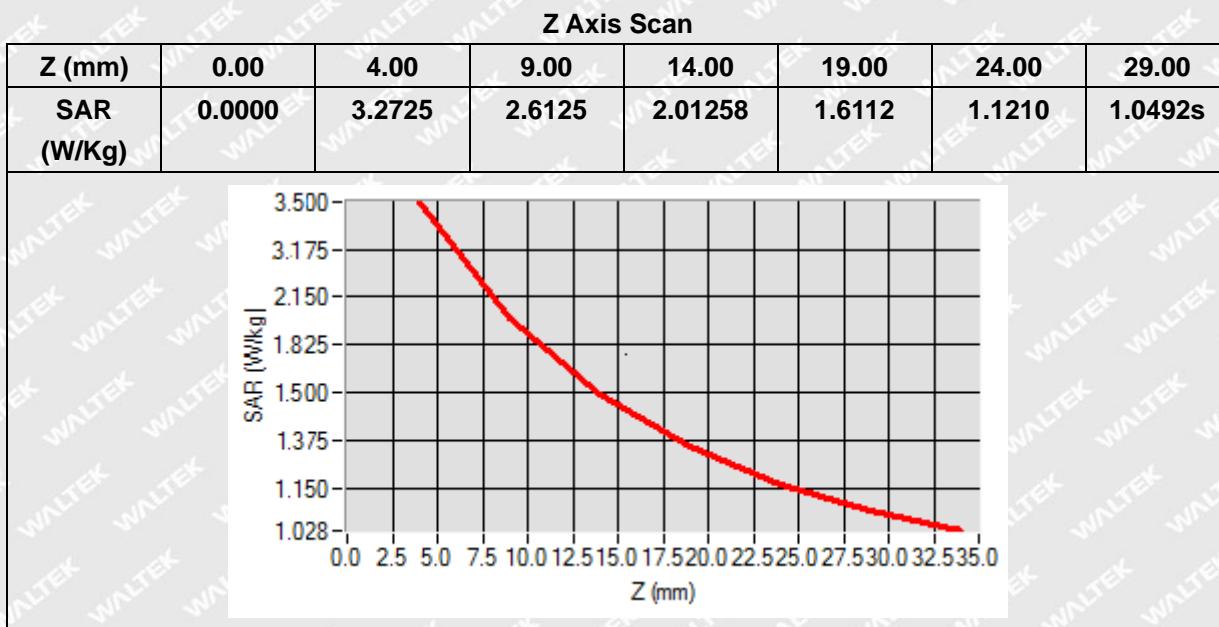
|  |            |
|--|------------|
| <b>Frequency (MHz)</b>                   | 900.000000 |
| <b>Relative Permittivity (real part)</b> | 40.279501  |
| <b>Conductivity (S/m)</b>                | 1.014541   |
| <b>Power Variation (%)</b>               | 1.843900   |
| <b>Ambient Temperature</b>               | 22.2       |
| <b>Liquid Temperature</b>                | 22.2       |



Maximum location: X=0.00, Y=0.00



|                       |                 |
|-----------------------|-----------------|
| <b>SAR 10g (W/Kg)</b> | <b>1.702021</b> |
| <b>SAR 1g (W/Kg)</b>  | <b>2.742150</b> |





# MEASUREMENT 4

Type: Validation measurement (Fast, 75.00 %)

Date of measurement: 2023-06-25

Measurement duration: 12 minutes 21 seconds

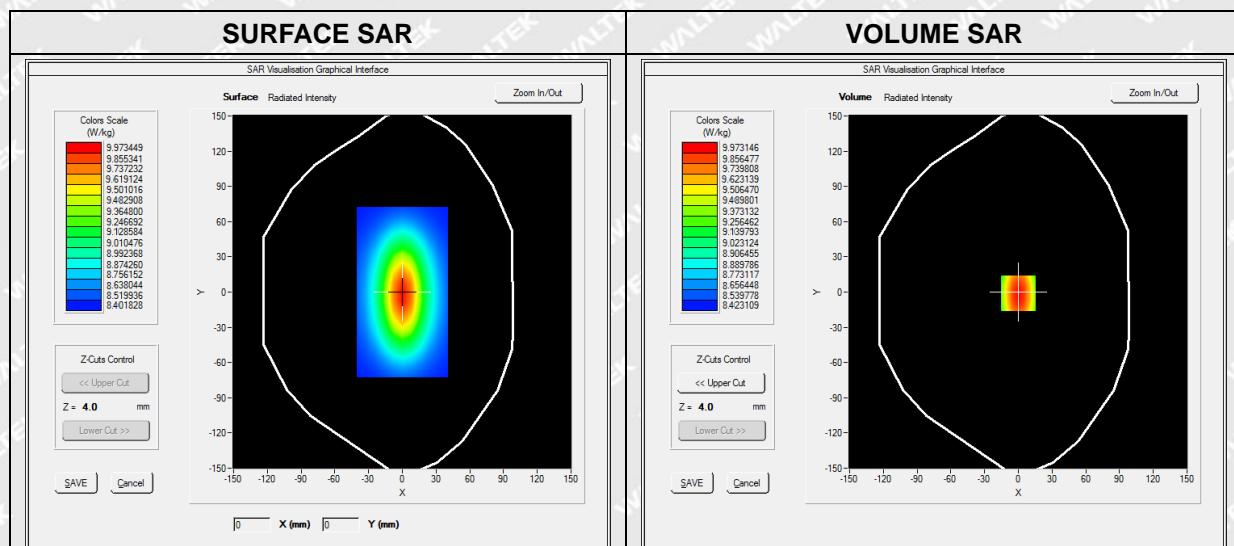
E-field Probe: SSE2 - SN 18/21 EPGO356; ConvF: 2.11; Calibrated: 2022-07-08

## A. Experimental conditions

|                        |                        |
|------------------------|------------------------|
| <b>Area Scan</b>       | dx=8mm dy=8mm          |
| <b>Zoom Scan</b>       | dx=5mm dy=5mm dz=4mm   |
| <b>Phantom</b>         | Validation plane       |
| <b>Device Position</b> | Dipole                 |
| <b>Band</b>            | CW1800                 |
| <b>Signal</b>          | CW (Crest factor: 1.0) |

## B. SAR Measurement Results

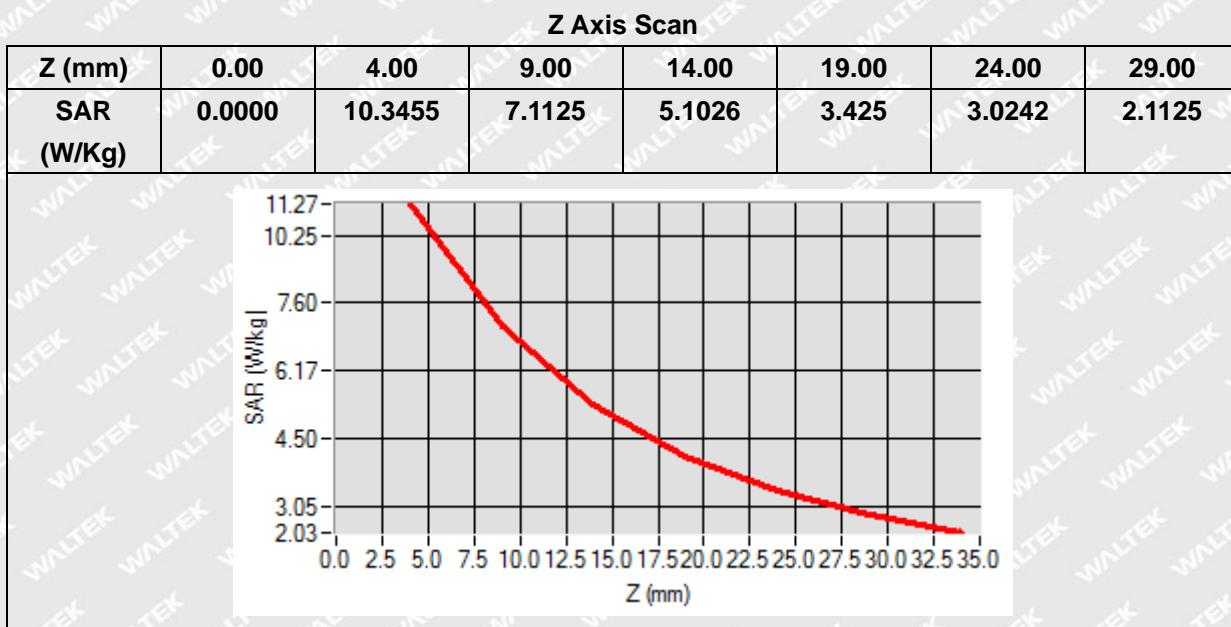
|  |             |
|--|-------------|
| <b>Frequency (MHz)</b>                   | 1800.000000 |
| <b>Relative Permittivity (real part)</b> | 39.358914   |
| <b>Conductivity (S/m)</b>                | 1.381047    |
| <b>Power Variation (%)</b>               | 1.403200    |
| <b>Ambient Temperature</b>               | 22.5        |
| <b>Liquid Temperature</b>                | 22.5        |



Maximum location: X=0.00, Y=0.00



|                       |                 |
|-----------------------|-----------------|
| <b>SAR 10g (W/Kg)</b> | <b>5.001252</b> |
| <b>SAR 1g (W/Kg)</b>  | <b>9.701250</b> |





# MEASUREMENT 5

Type: Validation measurement (Fast, 75.00 %)

Date of measurement: 2023-06-25

Measurement duration: 12 minutes 21 seconds

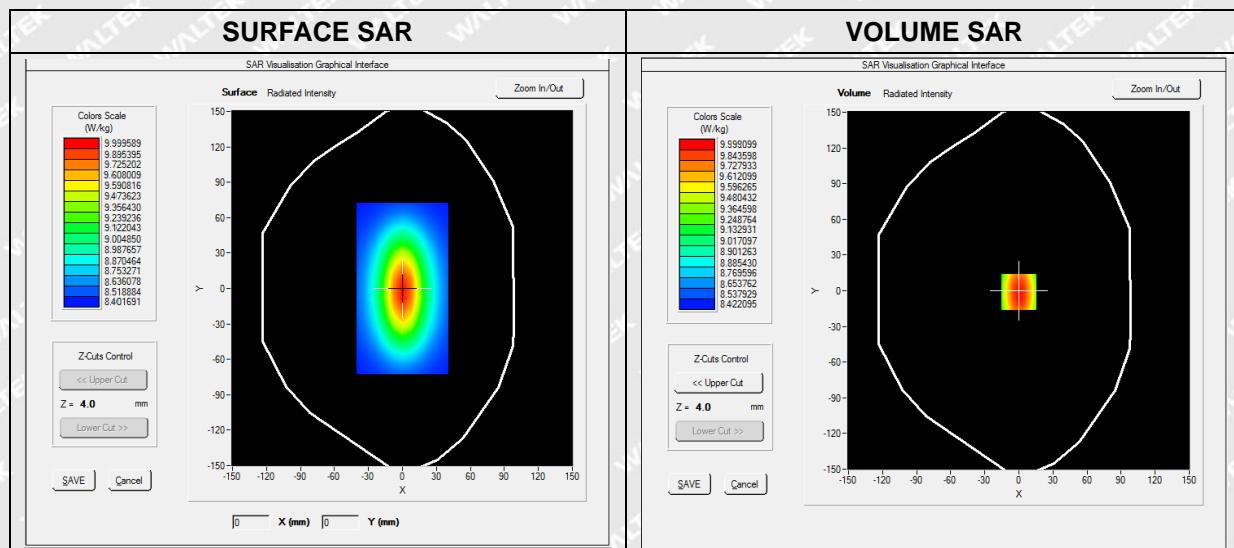
E-field Probe: SSE2 - SN 18/21 EPGO356; ConvF: 2.21; Calibrated: 2022-07-08

## A. Experimental conditions

|                        |                      |
|------------------------|----------------------|
| <b>Area Scan</b>       | dx=8mm dy=8mm        |
| <b>Zoom Scan</b>       | dx=5mm dy=5mm dz=4mm |
| <b>Phantom</b>         | Validation plane     |
| <b>Device Position</b> | Dipole               |
| <b>Band</b>            | CW1900               |
| <b>Signal</b>          | Duty Cycle 1:1       |

## B. SAR Measurement Results

|  |             |
|--|-------------|
| <b>Frequency (MHz)</b>                   | 1900.000000 |
| <b>Relative Permittivity (real part)</b> | 39.482424   |
| <b>Conductivity (S/m)</b>                | 1.381695    |
| <b>Power Variation (%)</b>               | 1.251400    |
| <b>Ambient Temperature</b>               | 22.5        |
| <b>Liquid Temperature</b>                | 22.5        |

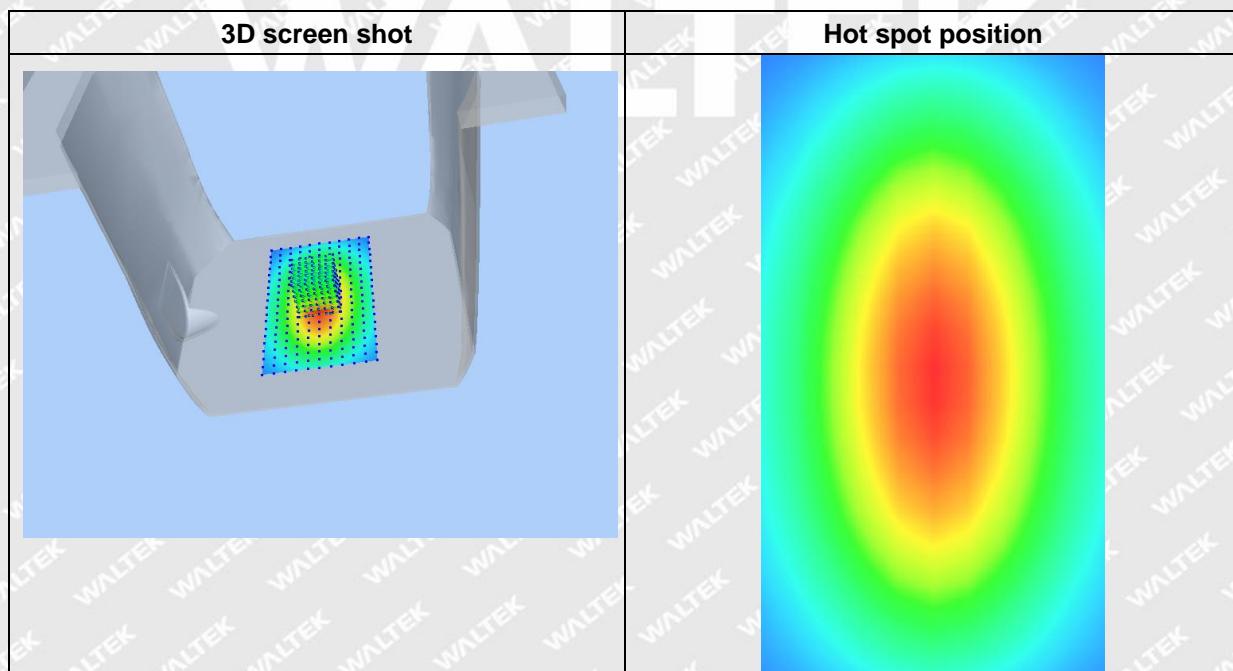
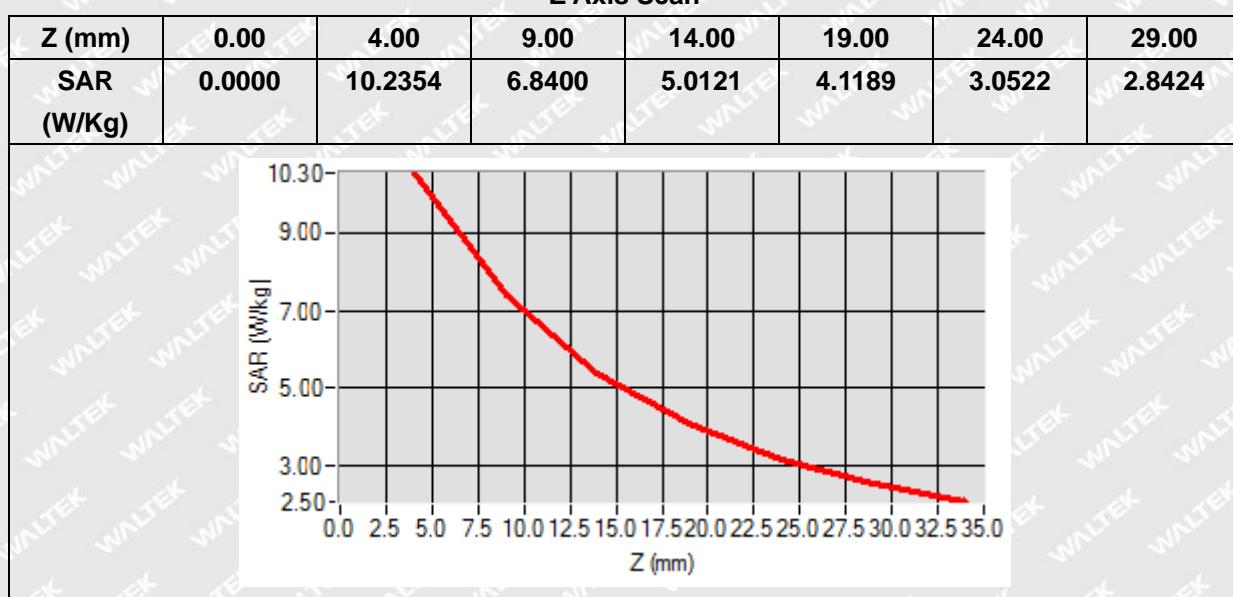




Maximum location: X=0.00, Y=0.00

|                |          |
|----------------|----------|
| SAR 10g (W/Kg) | 5.174526 |
| SAR 1g (W/Kg)  | 9.913214 |

## Z Axis Scan





# MEASUREMENT 6

Type: Validation measurement (Fast, 75.00 %)

Date of measurement: 2023-06-27

Measurement duration: 12 minutes 21 seconds

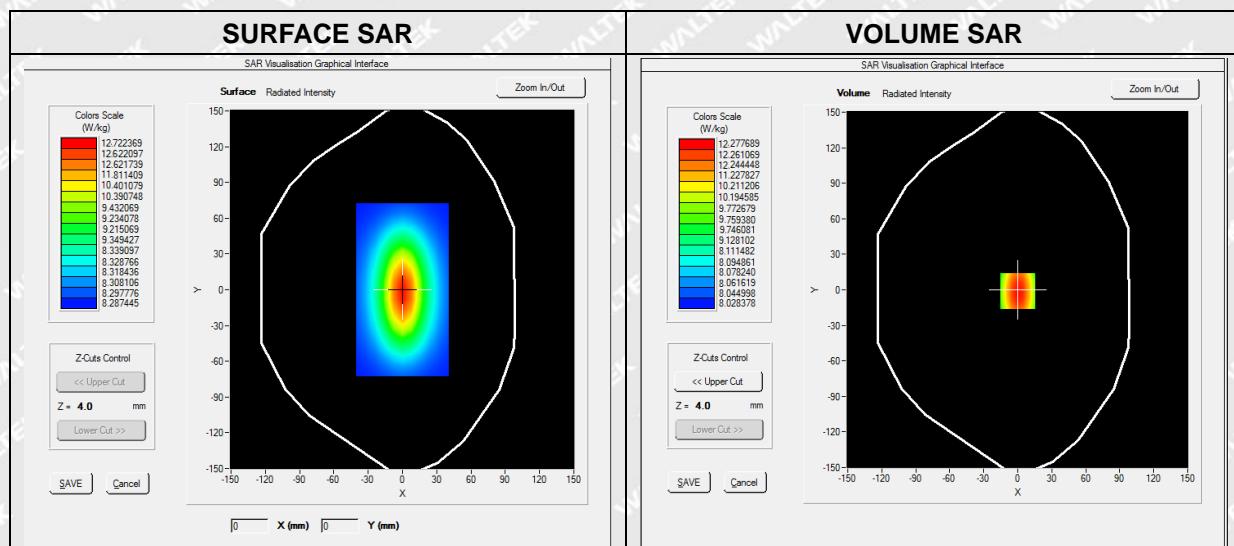
E-field Probe: SSE2 - SN 18/21 EPGO356; ConvF: 2.34; Calibrated: 2022-07-08

## A. Experimental conditions

|                        |                        |
|------------------------|------------------------|
| <b>Area Scan</b>       | dx=8mm dy=8mm          |
| <b>Zoom Scan</b>       | dx=5mm dy=5mm dz=4mm   |
| <b>Phantom</b>         | Validation plane       |
| <b>Device Position</b> | Dipole                 |
| <b>Band</b>            | CW2300                 |
| <b>Signal</b>          | CW (Crest factor: 1.0) |

## B. SAR Measurement Results

|  |             |
|--|-------------|
| <b>Frequency (MHz)</b>                   | 2300.000000 |
| <b>Relative Permittivity (real part)</b> | 39.161964   |
| <b>Conductivity (S/m)</b>                | 1.680285    |
| <b>Power Variation (%)</b>               | 1.144201    |
| <b>Ambient Temperature</b>               | 22.4        |
| <b>Liquid Temperature</b>                | 22.4        |

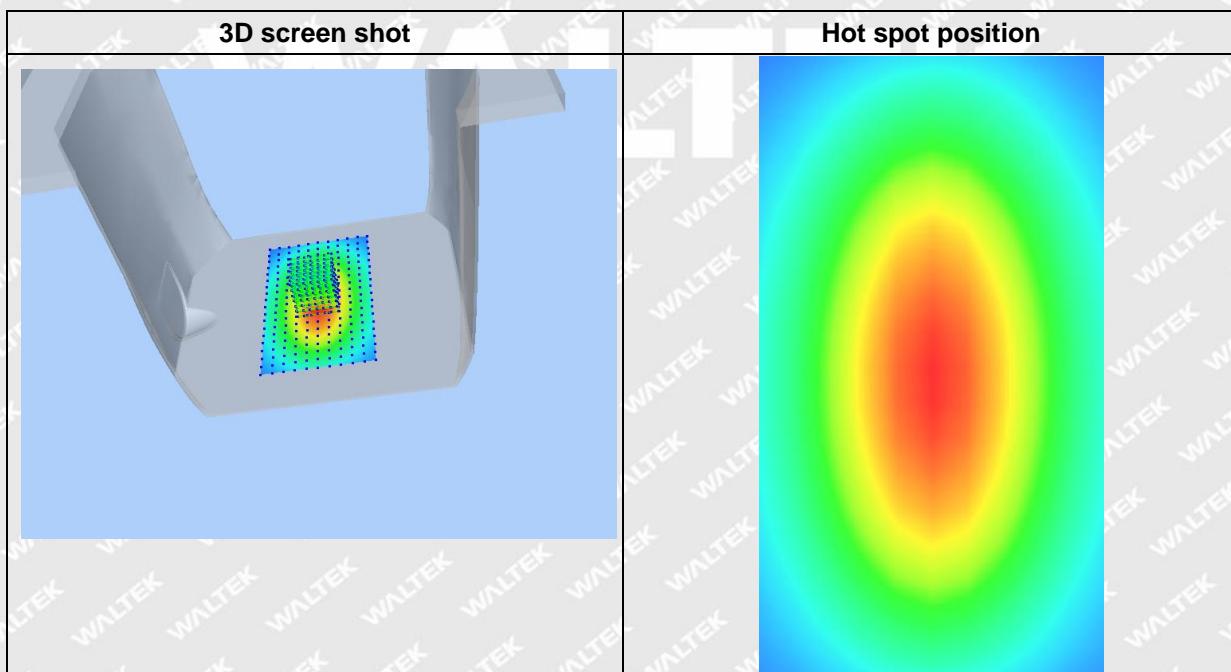




Maximum location: X=0.00, Y=0.00

|                |          |
|----------------|----------|
| SAR 10g (W/Kg) | 5.683461 |
| SAR 1g (W/Kg)  | 10.12815 |

## Z Axis Scan





# MEASUREMENT 7

Type: Validation measurement (Fast, 75.00 %)

Date of measurement: 2023-06-28

Measurement duration: 12 minutes 21 seconds

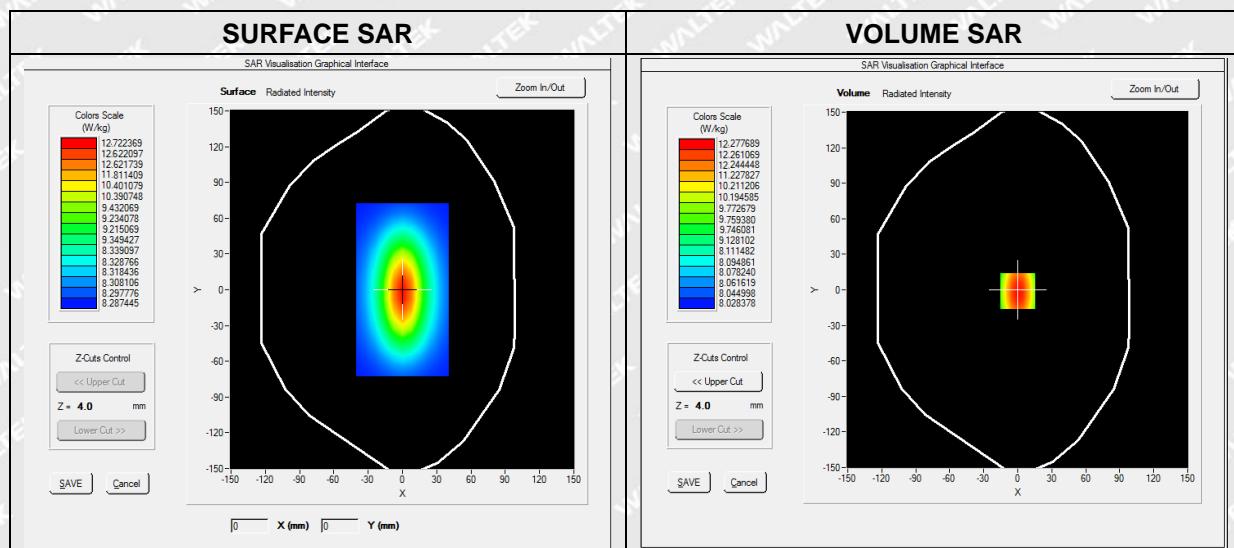
E-field Probe: SSE2 - SN 18/21 EPGO356; ConvF: 2.29; Calibrated: 2022-07-08

## A. Experimental conditions

|                        |                        |
|------------------------|------------------------|
| <b>Area Scan</b>       | dx=8mm dy=8mm          |
| <b>Zoom Scan</b>       | dx=5mm dy=5mm dz=4mm   |
| <b>Phantom</b>         | Validation plane       |
| <b>Device Position</b> | Dipole                 |
| <b>Band</b>            | CW2450                 |
| <b>Signal</b>          | CW (Crest factor: 1.0) |

## B. SAR Measurement Results

|  |             |
|--|-------------|
| <b>Frequency (MHz)</b>                   | 2450.000000 |
| <b>Relative Permittivity (real part)</b> | 38.571841   |
| <b>Conductivity (S/m)</b>                | 1.781096    |
| <b>Power Variation (%)</b>               | 1.112400    |
| <b>Ambient Temperature</b>               | 22.4        |
| <b>Liquid Temperature</b>                | 22.4        |

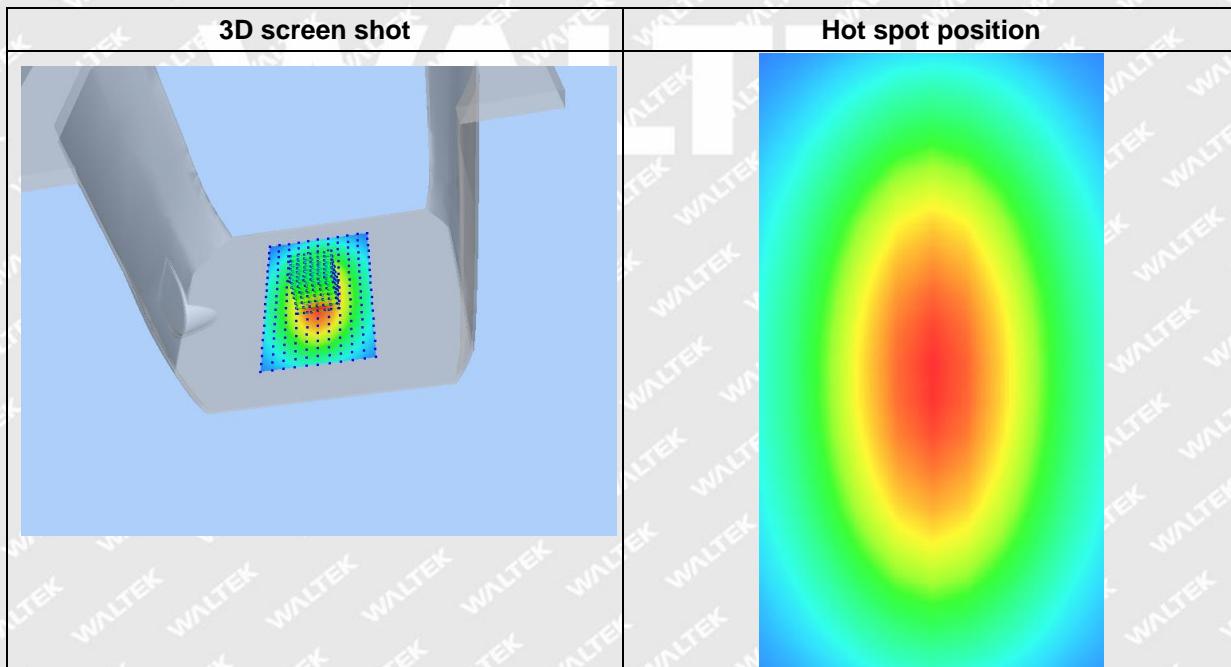
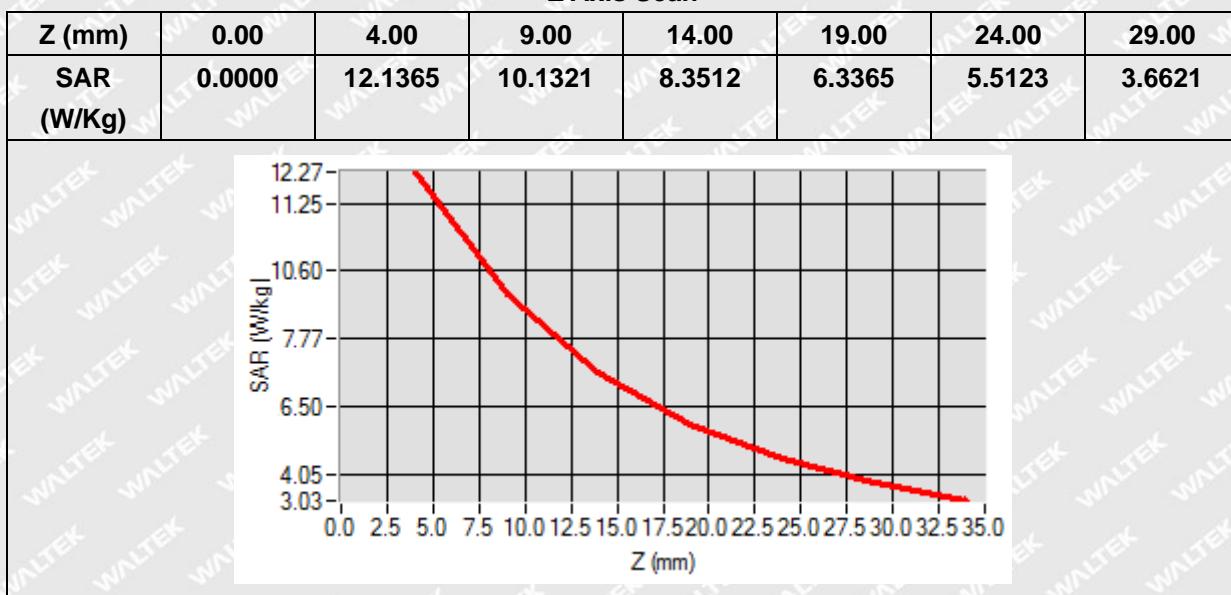




Maximum location: X=0.00, Y=0.00

|                |           |
|----------------|-----------|
| SAR 10g (W/Kg) | 6.152122  |
| SAR 1g (W/Kg)  | 12.131201 |

## Z Axis Scan





# MEASUREMENT 8

Type: Validation measurement (Fast, 75.00 %)

Date of measurement: 2023-06-27

Measurement duration: 12 minutes 21 seconds

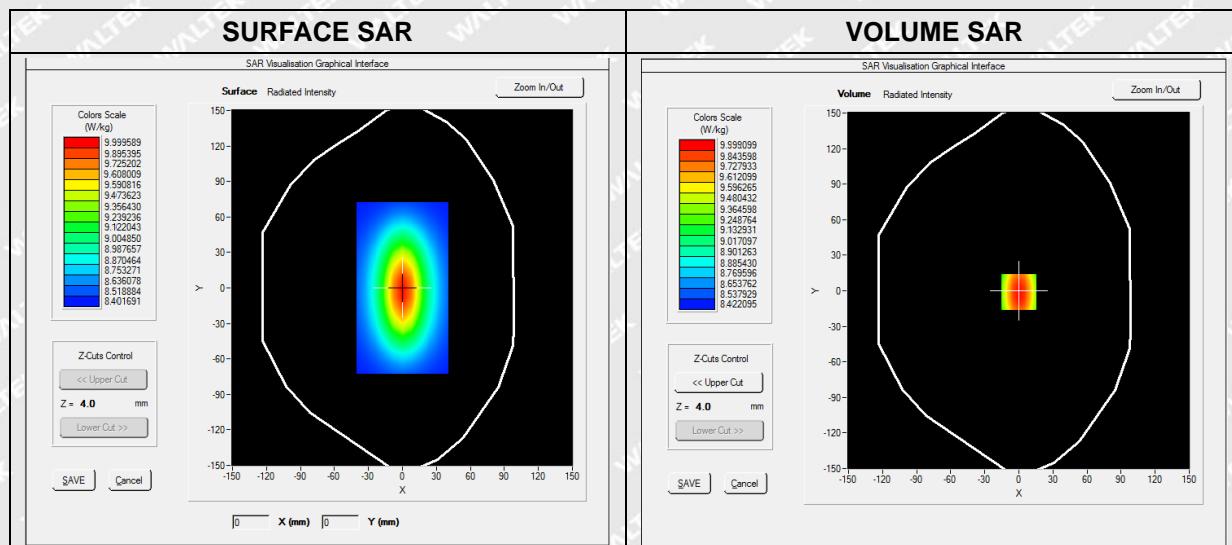
E-field Probe: SSE2 - SN 18/21 EPGO356; ConvF: 2.22; Calibrated: 2022-07-08

## A. Experimental conditions

|                        |                        |
|------------------------|------------------------|
| <b>Area Scan</b>       | dx=8mm dy=8mm          |
| <b>Zoom Scan</b>       | dx=5mm dy=5mm dz=4mm   |
| <b>Phantom</b>         | Validation plane       |
| <b>Device Position</b> | Dipole                 |
| <b>Band</b>            | CW2600                 |
| <b>Signal</b>          | CW (Crest factor: 1.0) |

## B. SAR Measurement Results

|  |             |
|--|-------------|
| <b>Frequency (MHz)</b>                   | 2600.000000 |
| <b>Relative Permittivity (real part)</b> | 39.443625   |
| <b>Conductivity (S/m)</b>                | 1.944224    |
| <b>Power Variation (%)</b>               | -0.365400   |
| <b>Ambient Temperature</b>               | 22.2        |
| <b>Liquid Temperature</b>                | 22.2        |

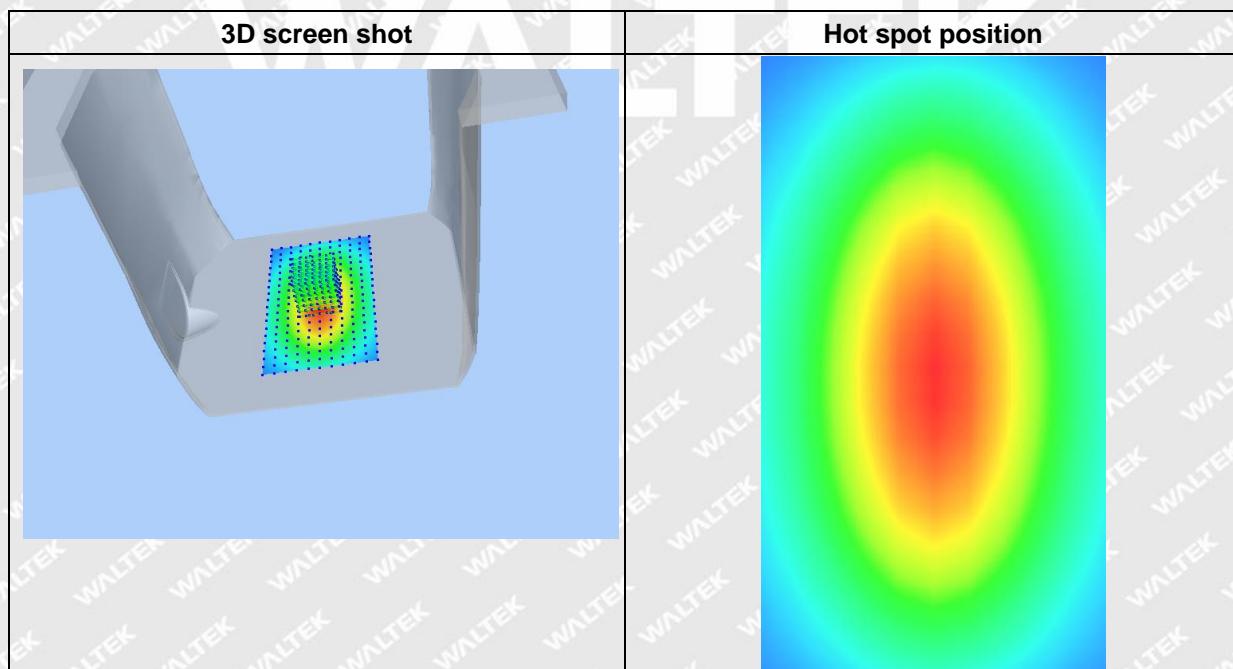
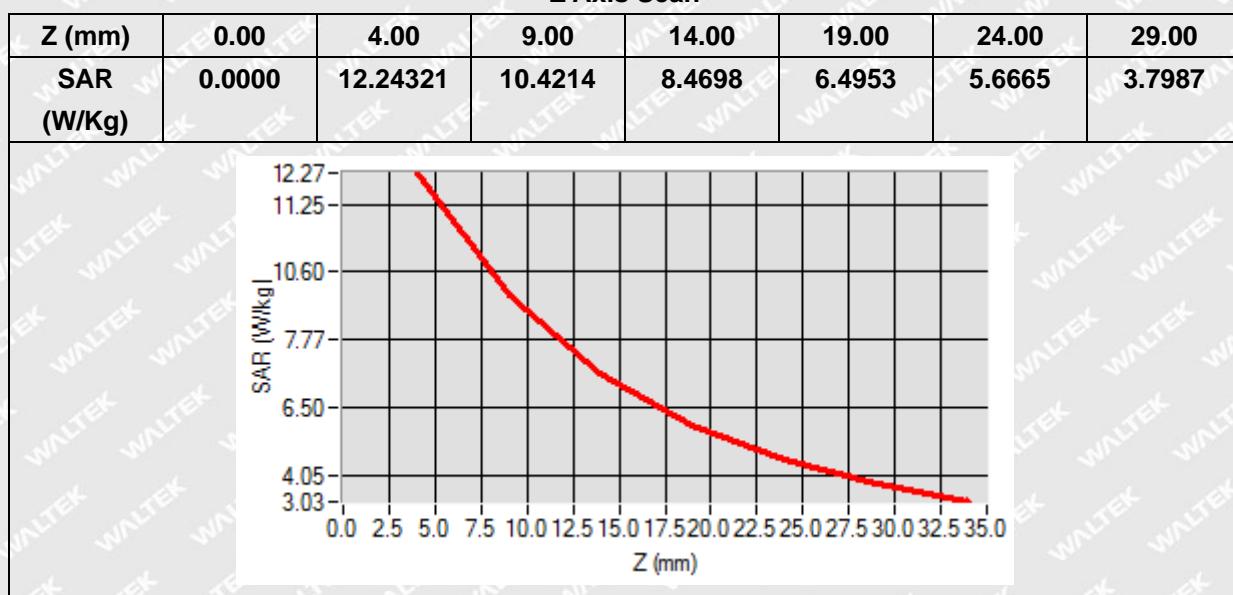




Maximum location: X=0.00, Y=0.00

|                |           |
|----------------|-----------|
| SAR 10g (W/Kg) | 6.173156  |
| SAR 1g (W/Kg)  | 12.113311 |

## Z Axis Scan





## Annex B. Plots of SAR Measurement

# MEASUREMENT 1

Type: Phone measurement (Complete)

Date of measurement: 2023-06-23

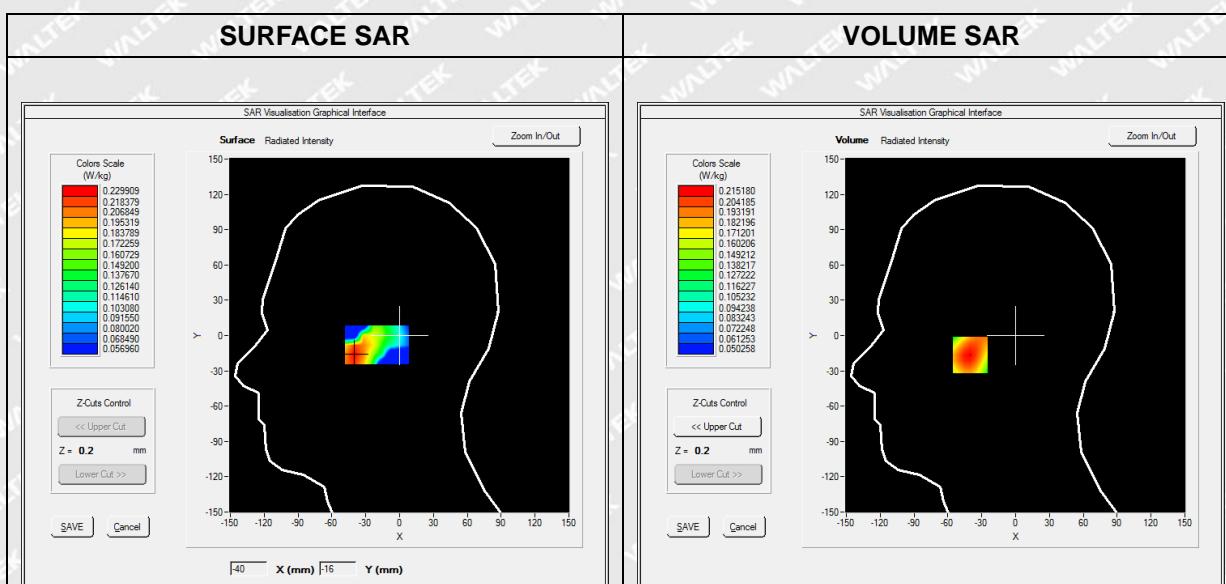
Measurement duration: 12 minutes 3 seconds

### A. Experimental conditions

|                        |                          |
|------------------------|--------------------------|
| <b>Area Scan</b>       | dx=8mm dy=8mm            |
| <b>Zoom Scan</b>       | dx=5mm dy=5mm dz=4mm     |
| <b>Phantom</b>         | Left head                |
| <b>Device Position</b> | Cheek                    |
| <b>Band</b>            | GSM900                   |
| <b>Channels</b>        | Low                      |
| <b>Signal</b>          | TDMA (Crest factor: 8.0) |

### B. SAR Measurement Results

|  |            |
|--|------------|
| <b>Frequency (MHz)</b>                   | 880.200000 |
| <b>Relative Permittivity (real part)</b> | 41.372485  |
| <b>Conductivity (S/m)</b>                | 0.894623   |
| <b>Power Variation (%)</b>               | -2.414700  |
| <b>Ambient Temperature</b>               | 22.2       |
| <b>Liquid Temperature</b>                | 22.2       |

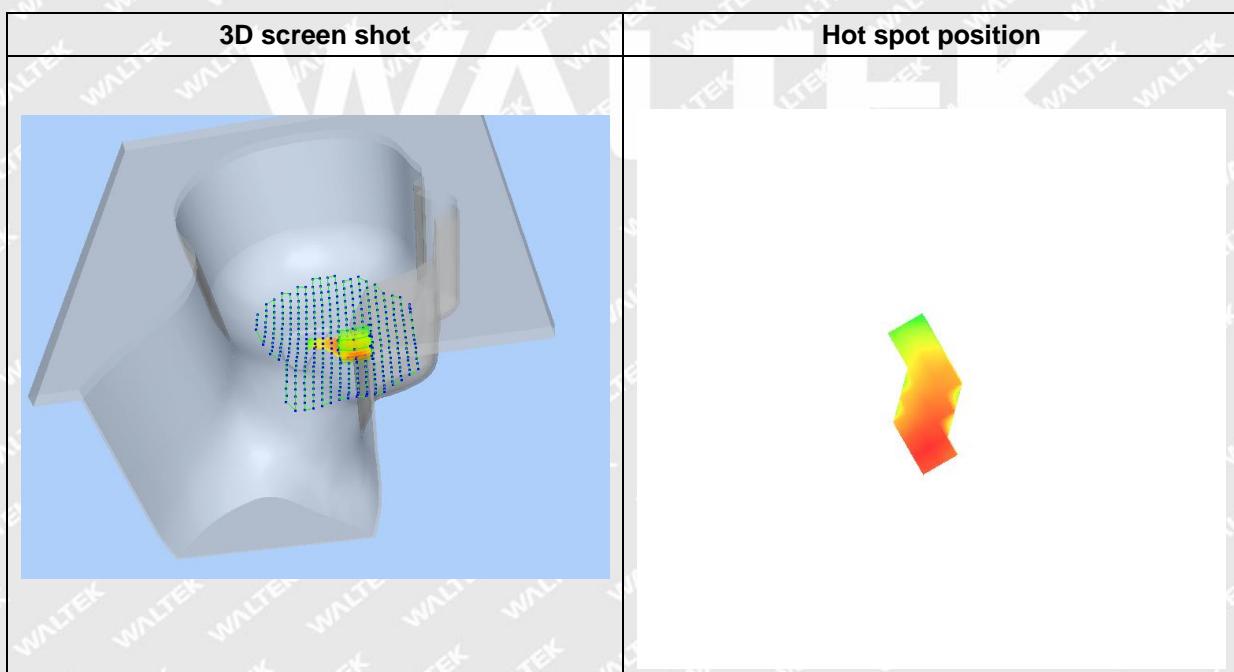
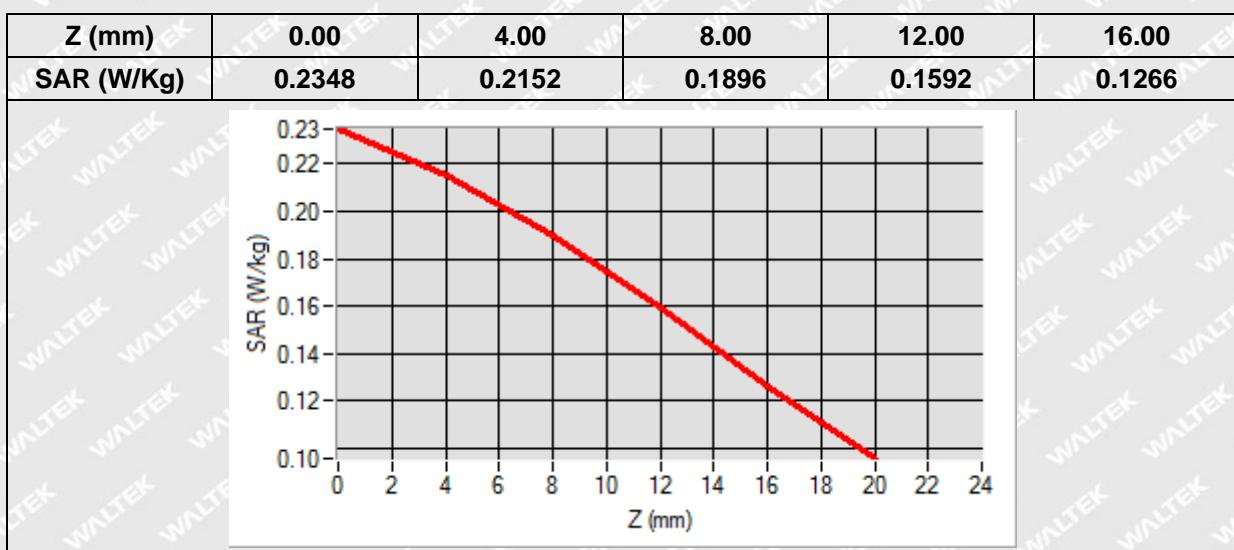


Maximum location: X=-40.00, Y=-16.00



SAR Peak: 0.28 W/kg

|                |          |
|----------------|----------|
| SAR 10g (W/Kg) | 0.154637 |
| SAR 1g (W/Kg)  | 0.208666 |





# MEASUREMENT 2

Type: Phone measurement (Complete)

Date of measurement: 2023-06-25

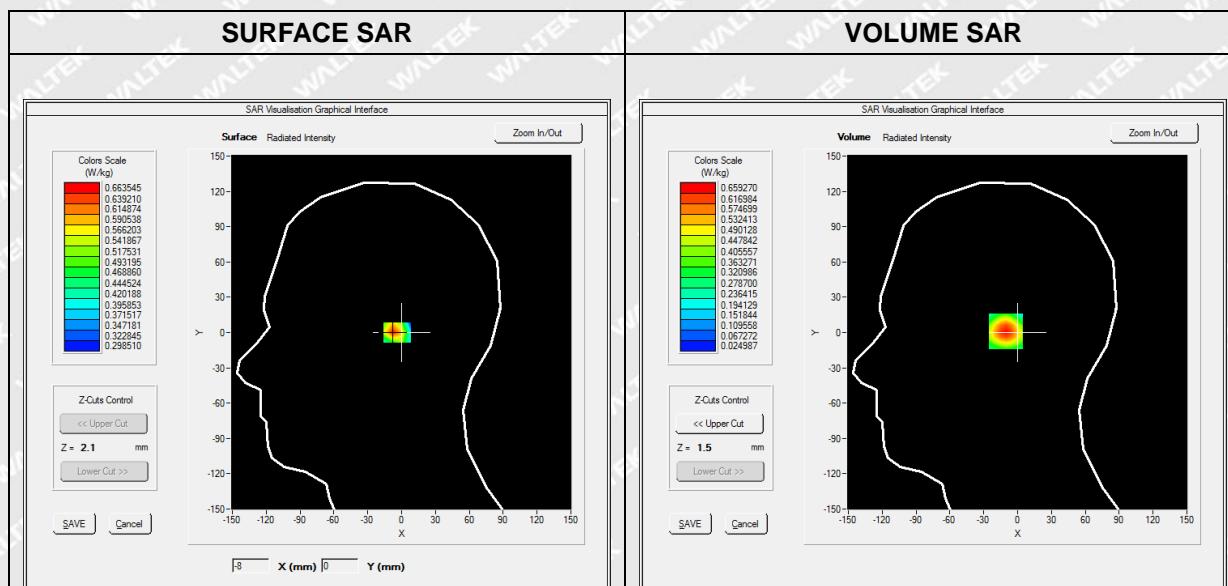
Measurement duration: 12 minutes 3 seconds

## A. Experimental conditions

|                        |                          |
|------------------------|--------------------------|
| <b>Area Scan</b>       | dx=8mm dy=8mm            |
| <b>Zoom Scan</b>       | dx=5mm dy=5mm dz=4mm     |
| <b>Phantom</b>         | Left head                |
| <b>Device Position</b> | Cheek                    |
| <b>Band</b>            | GSM1800                  |
| <b>Channels</b>        | Middle                   |
| <b>Signal</b>          | TDMA (Crest factor: 8.0) |

## B. SAR Measurement Results

|  |             |
|--|-------------|
| <b>Frequency (MHz)</b>                   | 1747.400000 |
| <b>Relative permittivity (real part)</b> | 39.361874   |
| <b>Conductivity (S/m)</b>                | 1.382410    |
| <b>Power Variation (%)</b>               | 1.614700    |
| <b>Ambient Temperature</b>               | 22.5        |
| <b>Liquid Temperature</b>                | 22.5        |



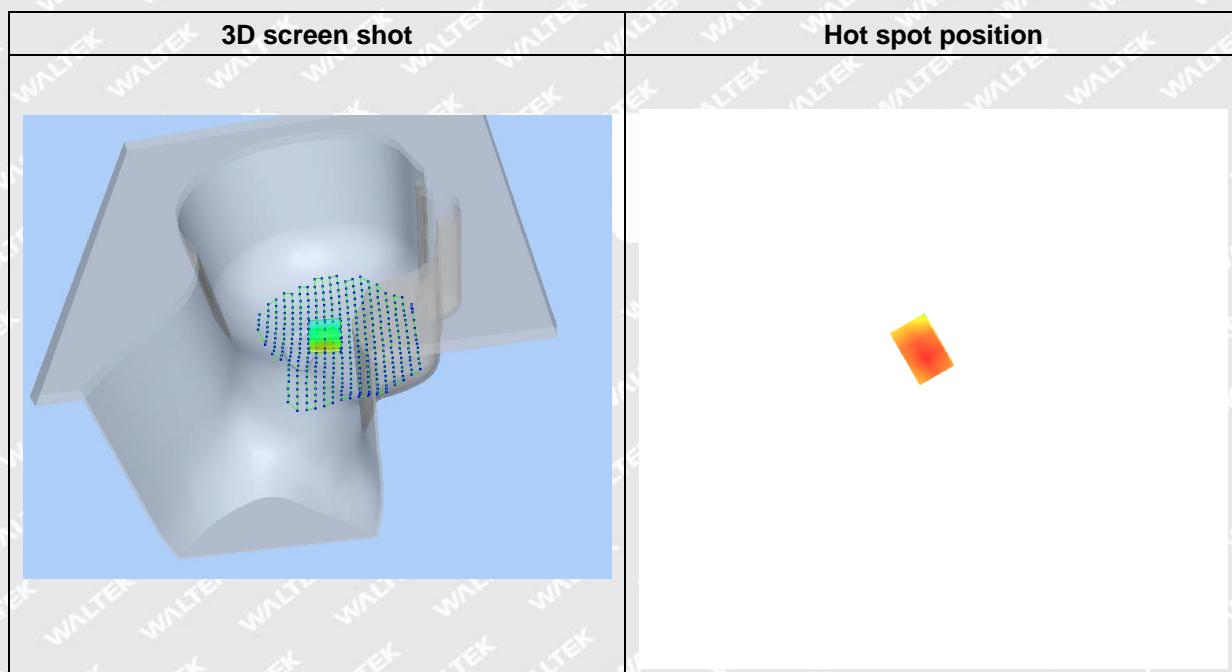
Maximum location: X=-8.00, Y=1.00

SAR Peak: 1.08 W/kg



|                       |                 |
|-----------------------|-----------------|
| <b>SAR 10g (W/Kg)</b> | <b>0.313929</b> |
| <b>SAR 1g (W/Kg)</b>  | <b>0.606933</b> |

| Z (mm)  | 0.00       | 4.00   | 8.00   | 12.00  | 16.00  |        |            |      |        |      |        |      |        |       |        |       |        |       |      |
|---|------------|--------|--------|--------|--------|--------|------------|------|--------|------|--------|------|--------|-------|--------|-------|--------|-------|------|
| SAR (W/Kg)  | 1.0765     | 0.6593 | 0.3925 | 0.2308 | 0.1356 |        |            |      |        |      |        |      |        |       |        |       |        |       |      |
| <table border="1"> <caption>Data points estimated from the graph</caption> <thead> <tr> <th>Z (mm)</th> <th>SAR (W/kg)</th> </tr> </thead> <tbody> <tr><td>0.00</td><td>1.0765</td></tr> <tr><td>4.00</td><td>0.6593</td></tr> <tr><td>8.00</td><td>0.3925</td></tr> <tr><td>12.00</td><td>0.2308</td></tr> <tr><td>16.00</td><td>0.1356</td></tr> <tr><td>20.00</td><td>0.10</td></tr> </tbody> </table> |            |        |        |        |        | Z (mm) | SAR (W/kg) | 0.00 | 1.0765 | 4.00 | 0.6593 | 8.00 | 0.3925 | 12.00 | 0.2308 | 16.00 | 0.1356 | 20.00 | 0.10 |
| Z (mm)  | SAR (W/kg) |        |        |        |        |        |            |      |        |      |        |      |        |       |        |       |        |       |      |
| 0.00  | 1.0765     |        |        |        |        |        |            |      |        |      |        |      |        |       |        |       |        |       |      |
| 4.00  | 0.6593     |        |        |        |        |        |            |      |        |      |        |      |        |       |        |       |        |       |      |
| 8.00  | 0.3925     |        |        |        |        |        |            |      |        |      |        |      |        |       |        |       |        |       |      |
| 12.00   | 0.2308     |        |        |        |        |        |            |      |        |      |        |      |        |       |        |       |        |       |      |
| 16.00   | 0.1356     |        |        |        |        |        |            |      |        |      |        |      |        |       |        |       |        |       |      |
| 20.00   | 0.10       |        |        |        |        |        |            |      |        |      |        |      |        |       |        |       |        |       |      |





# MEASUREMENT 3

Type: Phone measurement (Complete)

Date of measurement: 2023-06-25

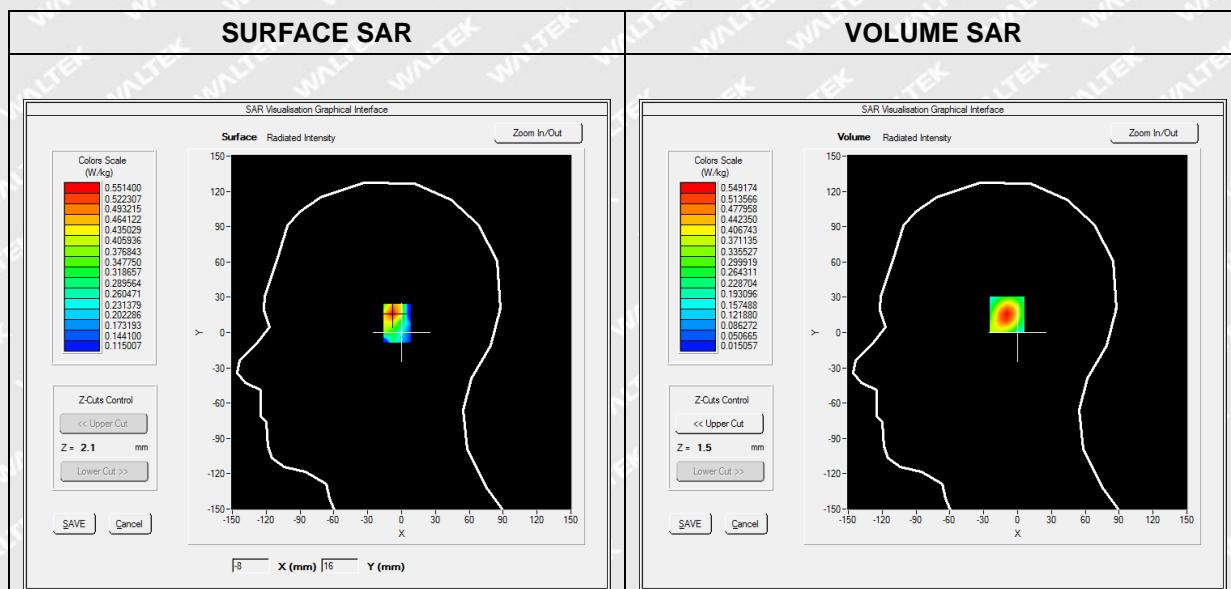
Measurement duration: 12 minutes 3 seconds

## A. Experimental conditions

|                        |                      |
|------------------------|----------------------|
| <b>Area Scan</b>       | dx=8mm dy=8mm        |
| <b>Zoom Scan</b>       | dx=5mm dy=5mm dz=4mm |
| <b>Phantom</b>         | Right Cheek          |
| <b>Device Position</b> | Cheek                |
| <b>Band</b>            | WCDMA2100_RMC        |
| <b>Channels</b>        | Low                  |
| <b>Signal</b>          | Duty Cycle: 1:1      |

## B. SAR Measurement Results

|  |             |
|--|-------------|
| <b>Frequency (MHz)</b>                   | 1922.600000 |
| <b>Relative Permittivity (real part)</b> | 39.483654   |
| <b>Conductivity (S/m)</b>                | 1.382488    |
| <b>Power Variation (%)</b>               | 2.148600    |
| <b>Ambient Temperature</b>               | 22.5        |
| <b>Liquid Temperature</b>                | 22.5        |

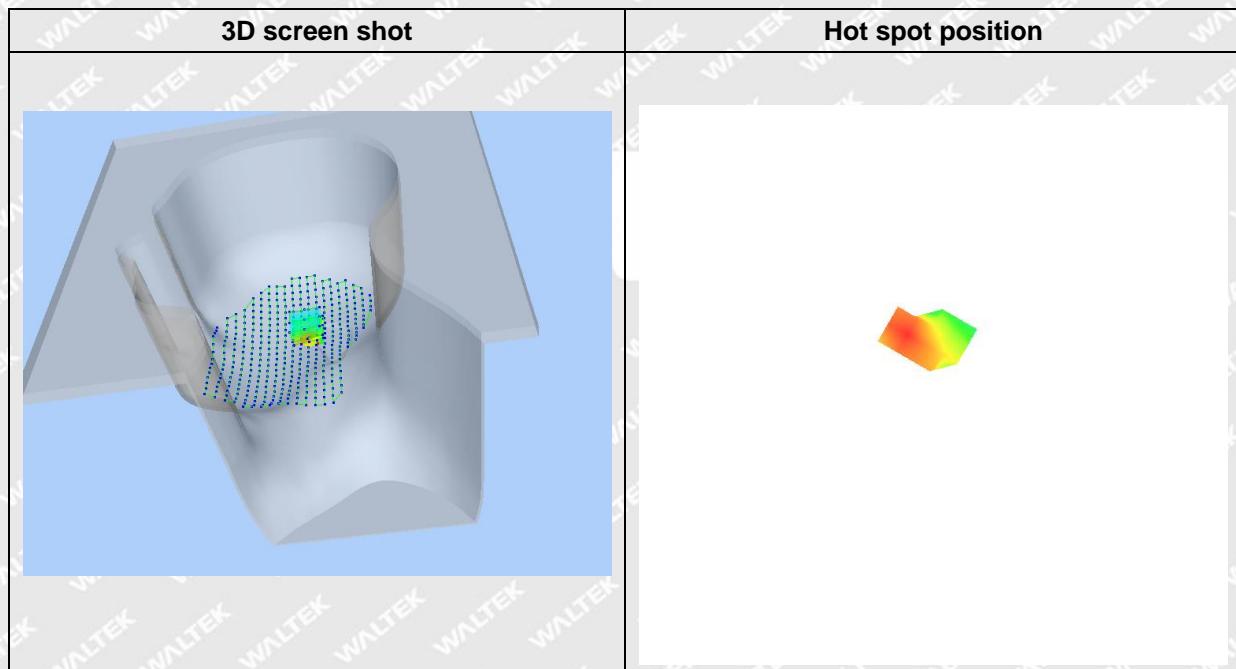
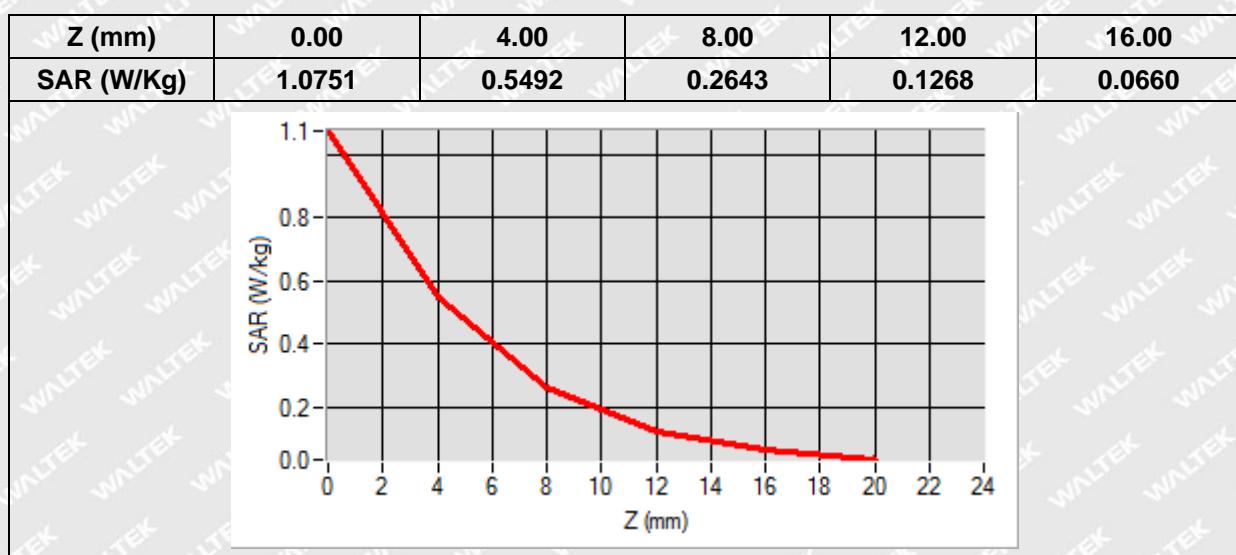


Maximum location: X=-8.00, Y=16.00

SAR Peak: 1.07 W/kg



|                       |                 |
|-----------------------|-----------------|
| <b>SAR 10g (W/Kg)</b> | <b>0.236535</b> |
| <b>SAR 1g (W/Kg)</b>  | <b>0.507864</b> |





# MEASUREMENT 4

Type: Phone measurement (Complete)

Date of measurement: 2023-06-23

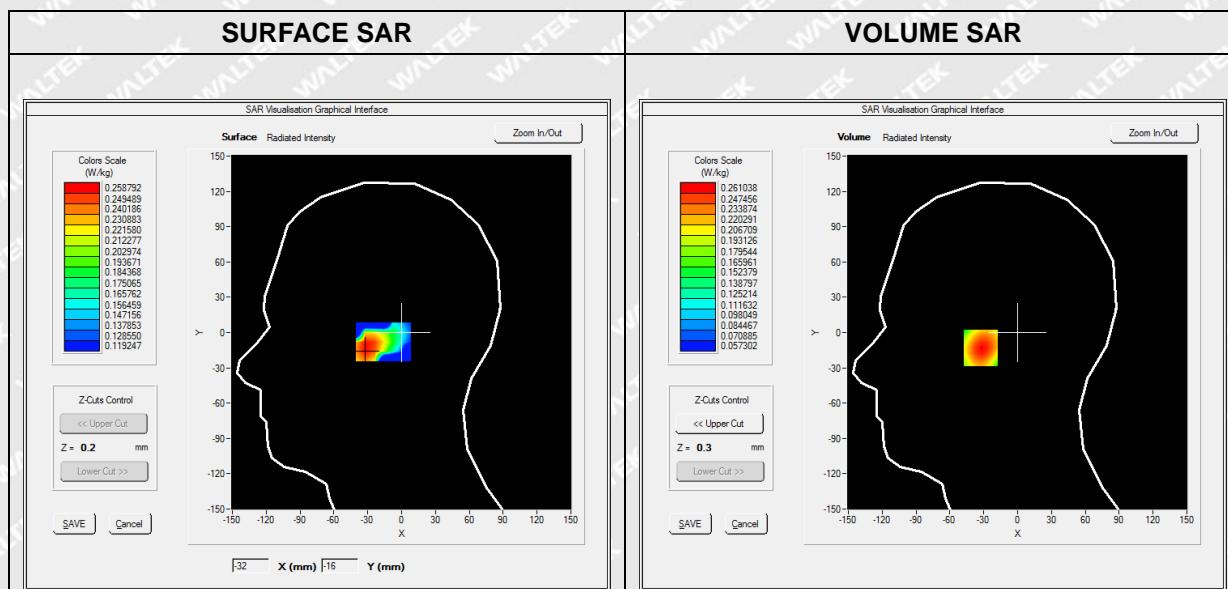
Measurement duration: 12 minutes 3 seconds

## A. Experimental conditions

|                        |                      |
|------------------------|----------------------|
| <b>Area Scan</b>       | dx=8mm dy=8mm        |
| <b>Zoom Scan</b>       | dx=5mm dy=5mm dz=4mm |
| <b>Phantom</b>         | Left Cheek           |
| <b>Device Position</b> | Cheek                |
| <b>Band</b>            | WCDMA900_RMC         |
| <b>Channels</b>        | Low                  |
| <b>Signal</b>          | Duty Cycle: 1:1      |

## B. SAR Measurement Results

|  |            |
|--|------------|
| <b>Frequency (MHz)</b>                   | 882.600000 |
| <b>Relative Permittivity (real part)</b> | 40.282651  |
| <b>Conductivity (S/m)</b>                | 1.013129   |
| <b>Power Variation (%)</b>               | 2.628100   |
| <b>Ambient Temperature</b>               | 22.2       |
| <b>Liquid Temperature</b>                | 22.2       |

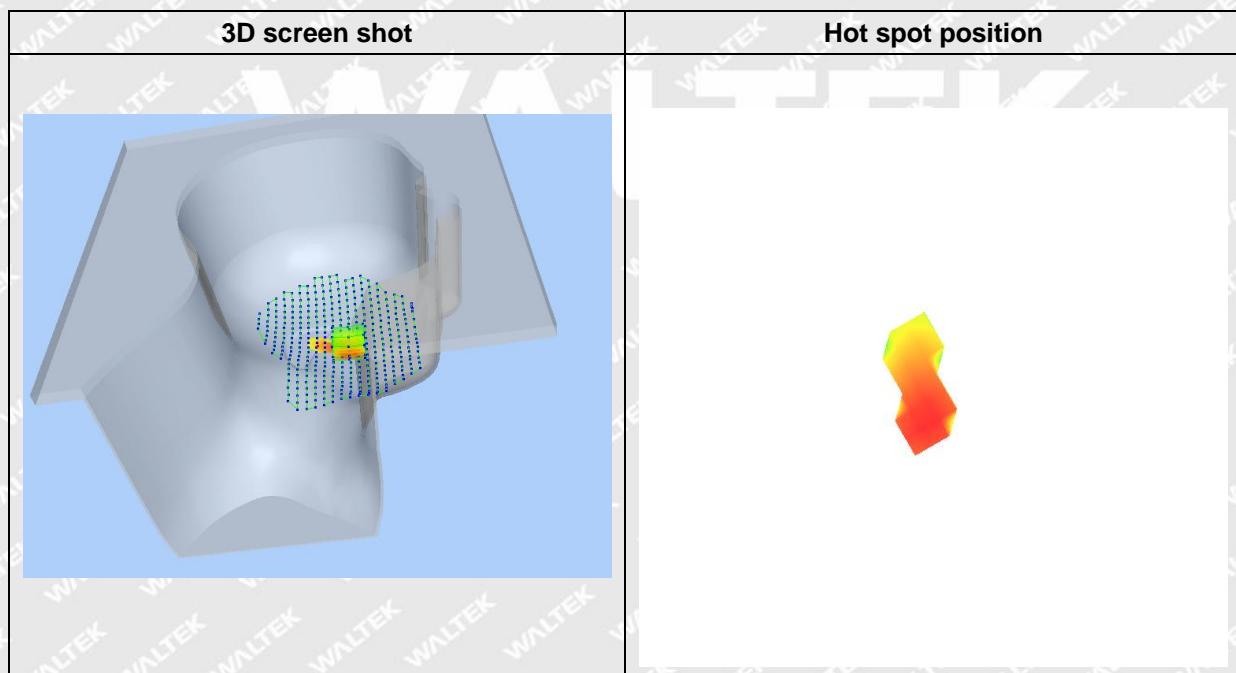
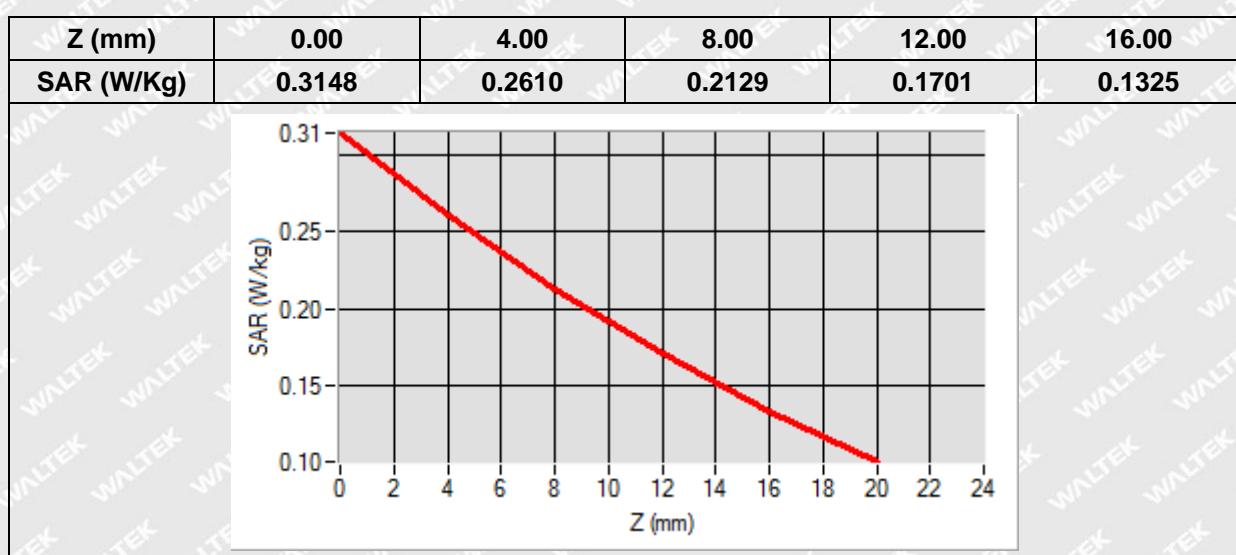


Maximum location: X=-31.00, Y=-13.00

SAR Peak: 0.32 W/kg



|                       |                 |
|-----------------------|-----------------|
| <b>SAR 10g (W/Kg)</b> | <b>0.177301</b> |
| <b>SAR 1g (W/Kg)</b>  | <b>0.248961</b> |





# MEASUREMENT 5

Type: Phone measurement (Complete)

Date of measurement: 2023-06-25

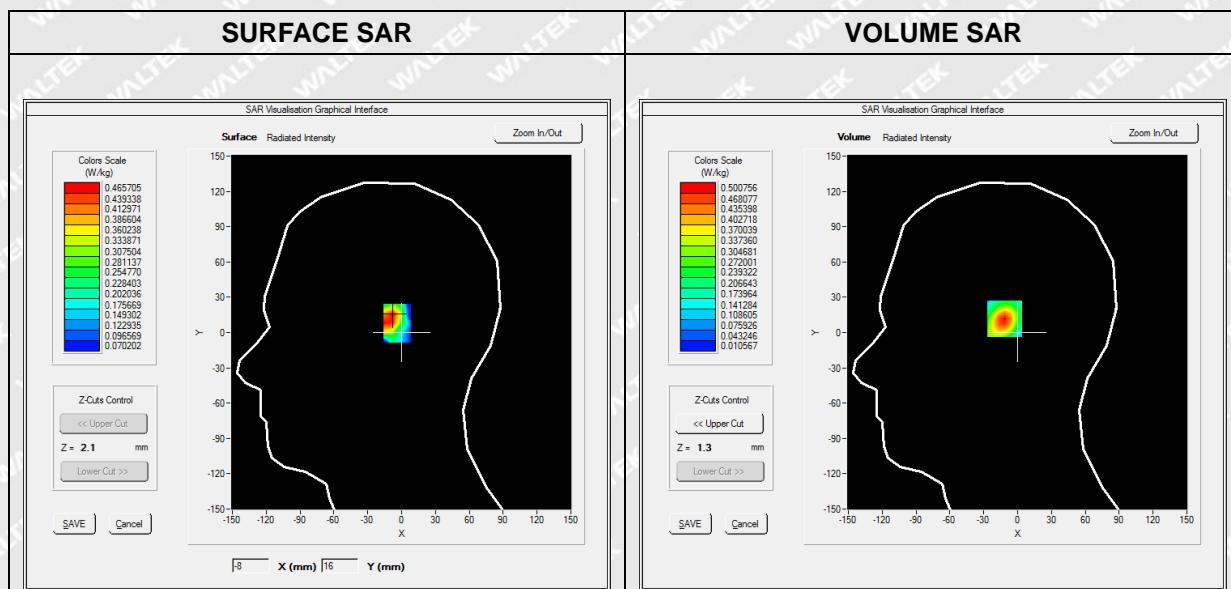
Measurement duration: 12 minutes 3 seconds

## A. Experimental conditions

|                        |                            |
|------------------------|----------------------------|
| <b>Area Scan</b>       | dx=8mm dy=8mm              |
| <b>Zoom Scan</b>       | dx=5mm dy=5mm dz=4mm       |
| <b>Phantom</b>         | Left head                  |
| <b>Device Position</b> | Cheek                      |
| <b>Band</b>            | FDD-LTE Band 1_QPSK, 20MHz |
| <b>Channels</b>        | Middle                     |
| <b>Signal</b>          | Duty Cycle: 1:1            |

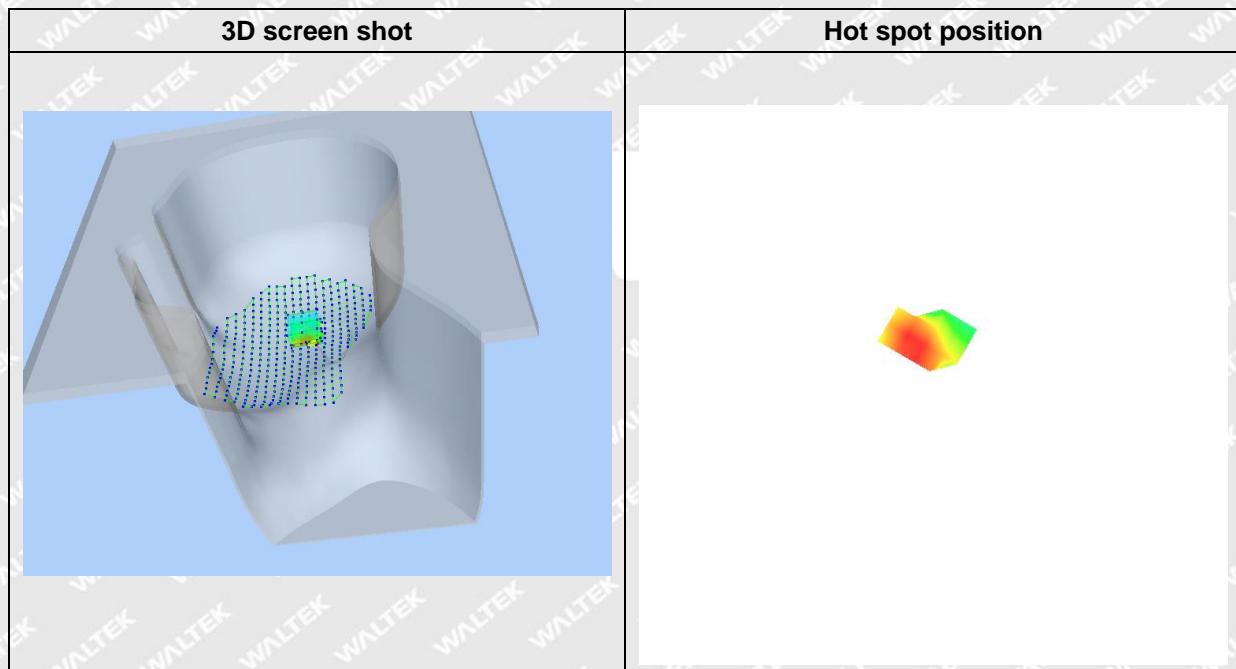
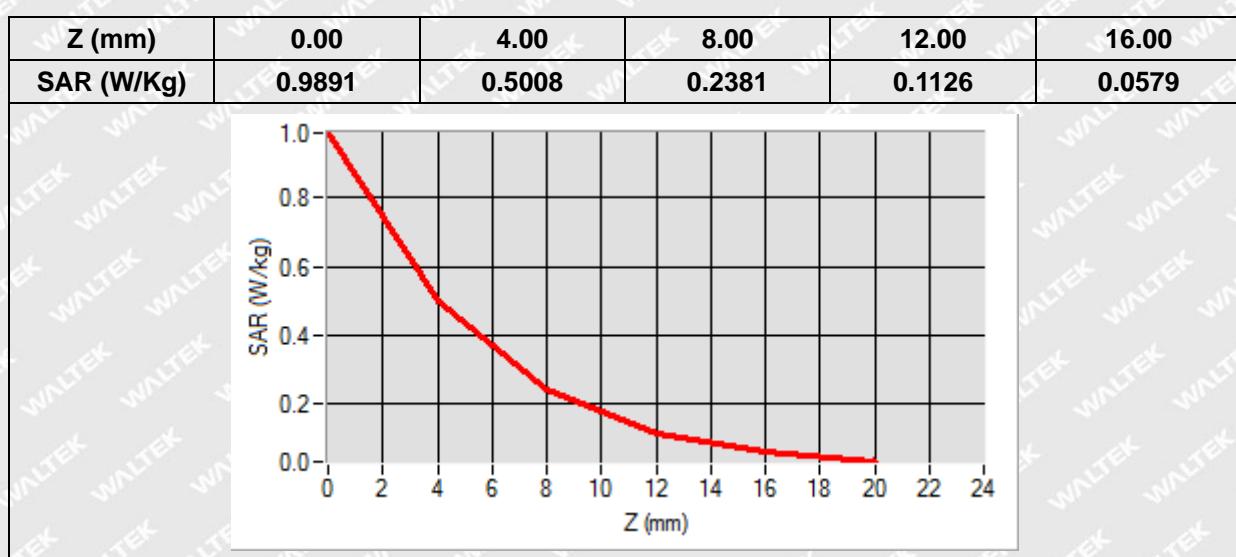
## B. SAR Measurement Results

|  |             |
|--|-------------|
| <b>Frequency (MHz)</b>                   | 1950.000000 |
| <b>Relative Permittivity (real part)</b> | 39.482684   |
| <b>Conductivity (S/m)</b>                | 1.381489    |
| <b>Power Variation (%)</b>               | -1.279100   |
| <b>Ambient Temperature</b>               | 22.5        |
| <b>Liquid Temperature</b>                | 22.5        |





|                       |                 |
|-----------------------|-----------------|
| <b>SAR 10g (W/Kg)</b> | <b>0.209980</b> |
| <b>SAR 1g (W/Kg)</b>  | <b>0.462773</b> |





# MEASUREMENT 6

Type: Phone measurement (Complete)

Date of measurement: 2023-06-25

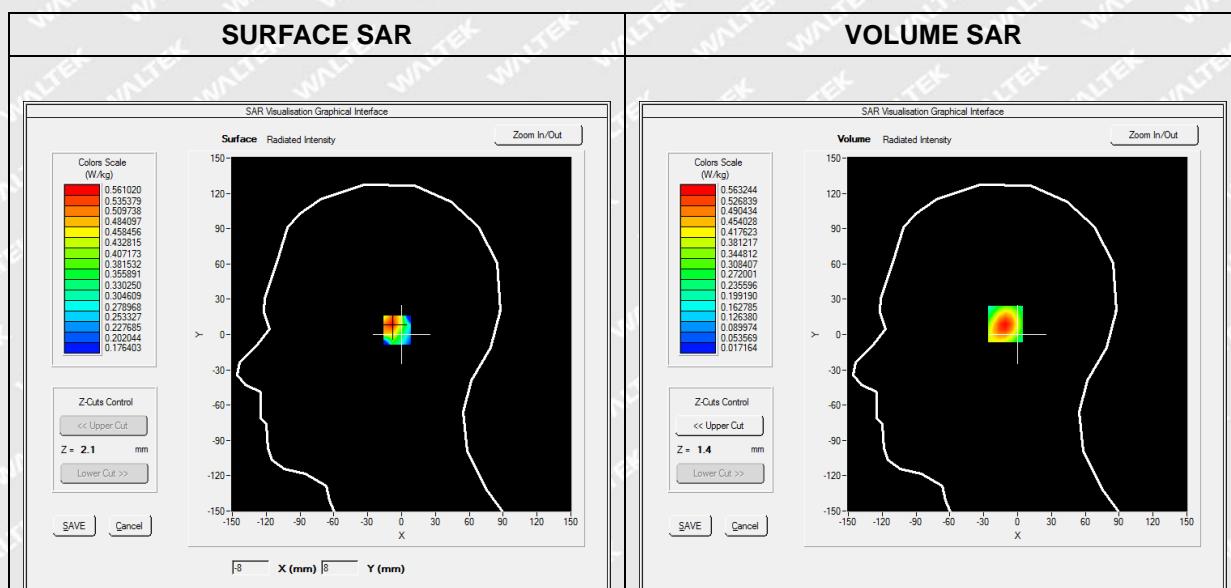
Measurement duration: 12 minutes 3 seconds

## A. Experimental conditions

|                        |                            |
|------------------------|----------------------------|
| <b>Area Scan</b>       | dx=8mm dy=8mm              |
| <b>Zoom Scan</b>       | dx=5mm dy=5mm dz=4mm       |
| <b>Phantom</b>         | Right head                 |
| <b>Device Position</b> | Cheek                      |
| <b>Band</b>            | FDD-LTE Band 3_QPSK, 20MHz |
| <b>Channels</b>        | High                       |
| <b>Signal</b>          | Duty Cycle: 1:1            |

## B. SAR Measurement Results

|  |             |
|--|-------------|
| <b>Frequency (MHz)</b>                   | 1775.000000 |
| <b>Relative Permittivity (real part)</b> | 39.364641   |
| <b>Conductivity (S/m)</b>                | 1.382417    |
| <b>Power Variation (%)</b>               | -1.497700   |
| <b>Ambient Temperature</b>               | 22.5        |
| <b>Liquid Temperature</b>                | 22.5        |

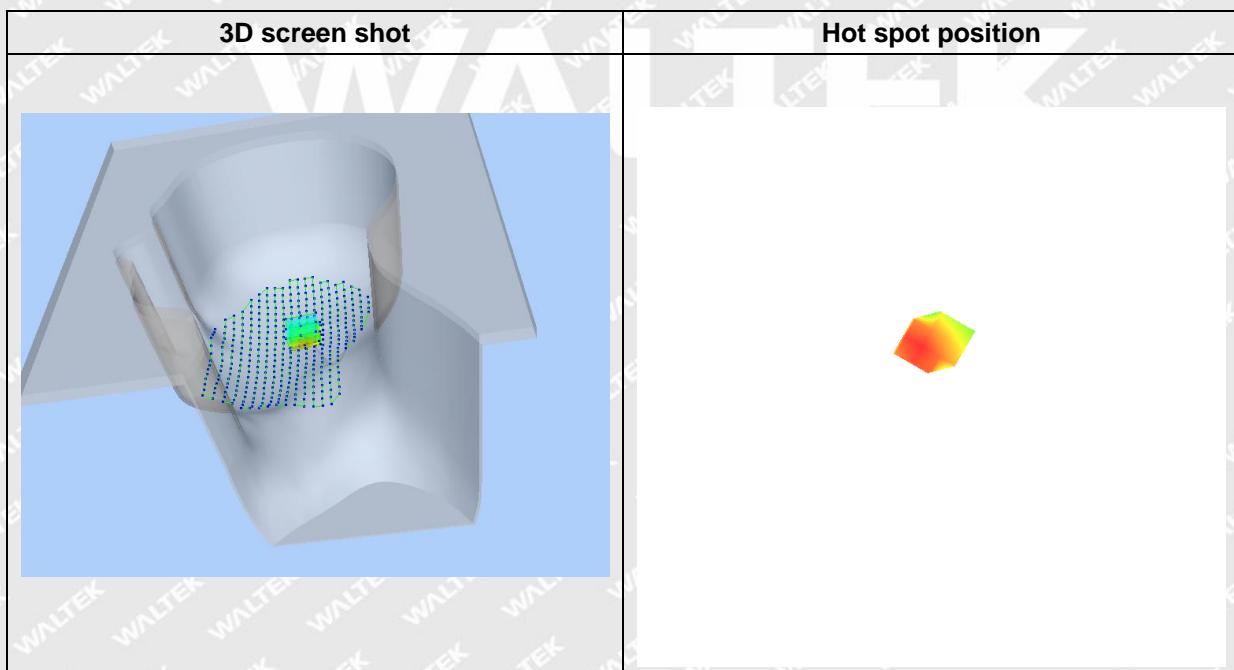
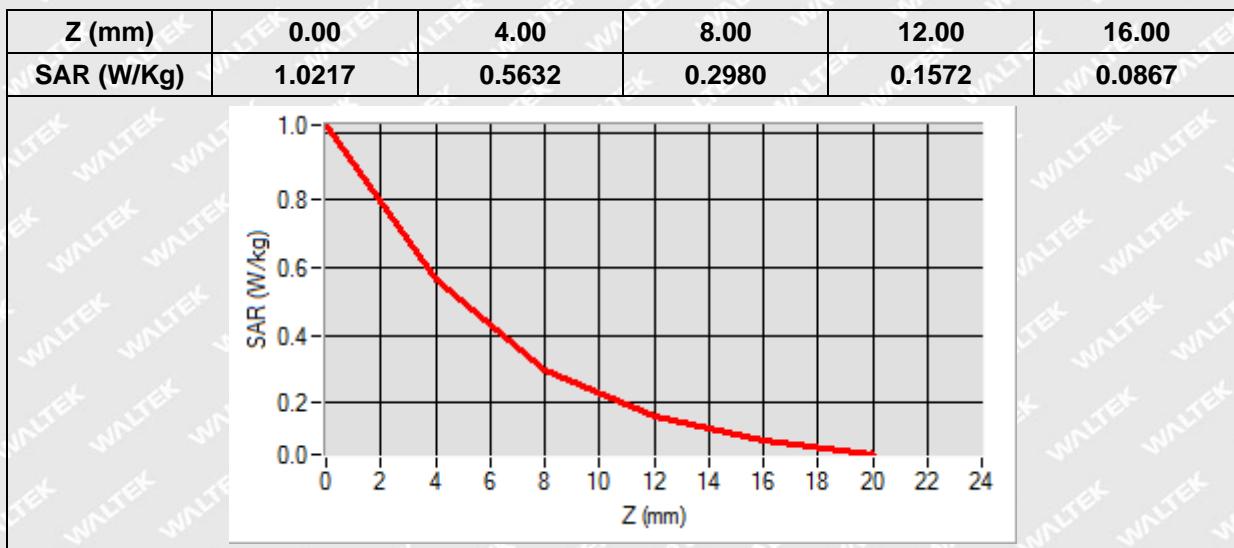


Maximum location: X=-9.00, Y=9.00

SAR Peak: 1.02 W/kg



|                       |                 |
|-----------------------|-----------------|
| <b>SAR 10g (W/Kg)</b> | <b>0.260331</b> |
| <b>SAR 1g (W/Kg)</b>  | <b>0.523342</b> |





# MEASUREMENT 7

Type: Phone measurement (Complete)

Date of measurement: 2023-06-27

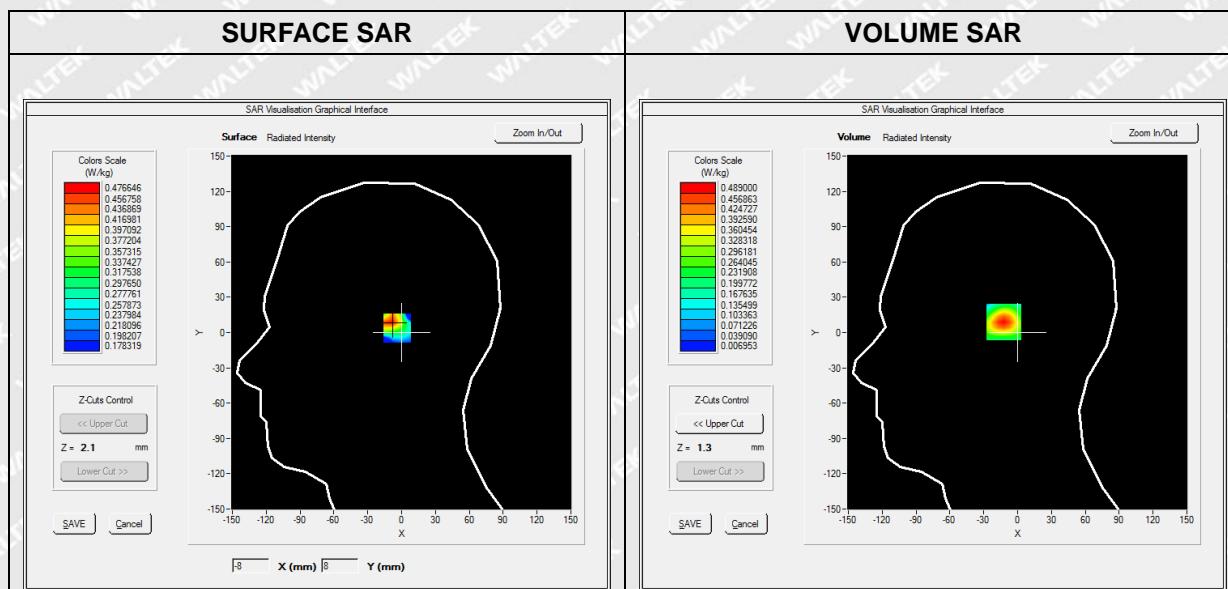
Measurement duration: 12 minutes 3 seconds

## A. Experimental conditions

|                        |                            |
|------------------------|----------------------------|
| <b>Area Scan</b>       | dx=8mm dy=8mm              |
| <b>Zoom Scan</b>       | dx=5mm dy=5mm dz=4mm       |
| <b>Phantom</b>         | Right head                 |
| <b>Device Position</b> | Cheek                      |
| <b>Band</b>            | FDD-LTE Band 7_QPSK, 20MHz |
| <b>Channels</b>        | Middle                     |
| <b>Signal</b>          | Duty Cycle: 1:1            |

## B. SAR Measurement Results

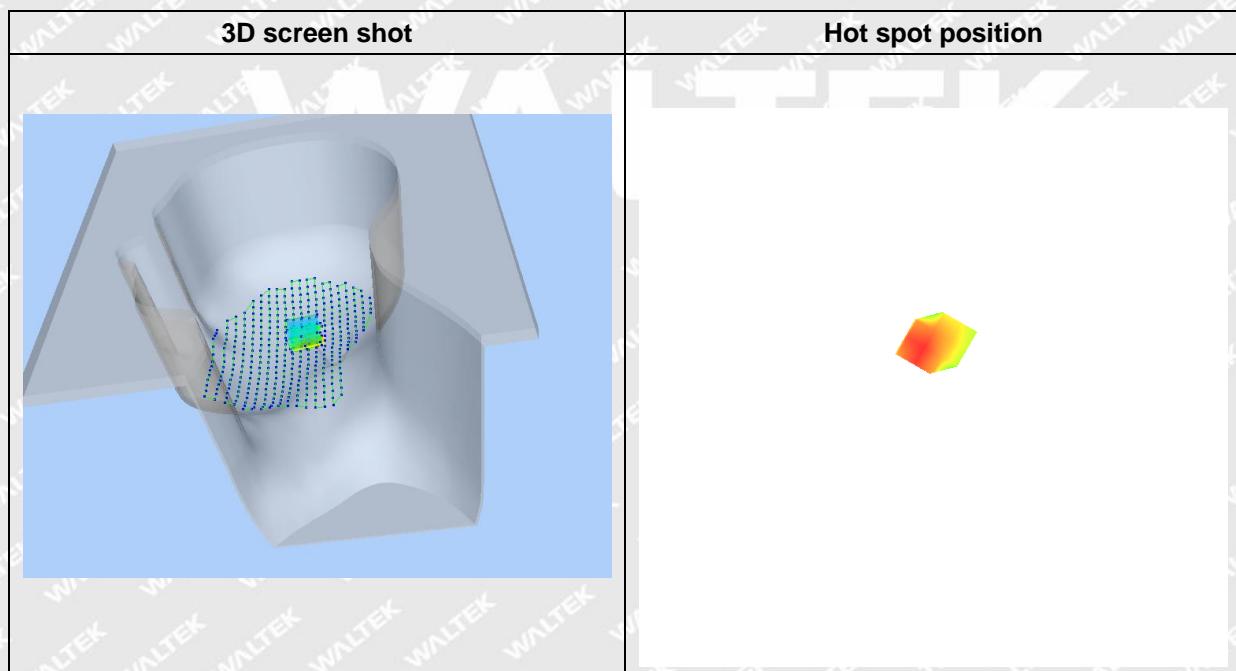
|  |             |
|--|-------------|
| <b>Frequency (MHz)</b>                   | 2535.000000 |
| <b>Relative Permittivity (real part)</b> | 39.441276   |
| <b>Conductivity (S/m)</b>                | 1.943859    |
| <b>Power Variation (%)</b>               | -1.146900   |
| <b>Ambient Temperature</b>               | 22.2        |
| <b>Liquid Temperature</b>                | 22.2        |





|                       |                 |
|-----------------------|-----------------|
| <b>SAR 10g (W/Kg)</b> | <b>0.218562</b> |
| <b>SAR 1g (W/Kg)</b>  | <b>0.459834</b> |

| Z (mm)     | 0.00          | 4.00          | 8.00          | 12.00         | 16.00         |
|------------|---------------|---------------|---------------|---------------|---------------|
| SAR (W/Kg) | <b>1.0877</b> | <b>0.4890</b> | <b>0.1958</b> | <b>0.0745</b> | <b>0.0317</b> |
|            |               |               |               |               |               |





# MEASUREMENT 8

Type: Phone measurement (Complete)

Date of measurement: 2023-06-23

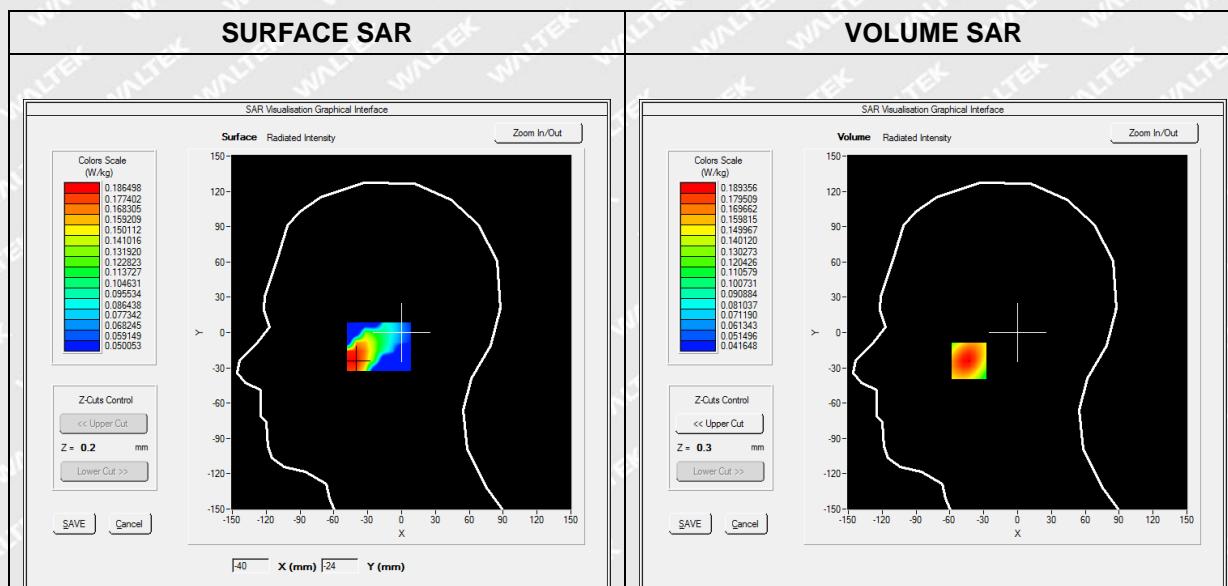
Measurement duration: 12 minutes 3 seconds

## A. Experimental conditions

|                        |                            |
|------------------------|----------------------------|
| <b>Area Scan</b>       | dx=8mm dy=8mm              |
| <b>Zoom Scan</b>       | dx=5mm dy=5mm dz=4mm       |
| <b>Phantom</b>         | Left Cheek                 |
| <b>Device Position</b> | Cheek                      |
| <b>Band</b>            | FDD-LTE Band 8_QPSK, 10MHz |
| <b>Channels</b>        | Middle                     |
| <b>Signal</b>          | Duty Cycle: 1:1            |

## B. SAR Measurement Results

|  |            |
|--|------------|
| <b>Frequency (MHz)</b>                   | 897.500000 |
| <b>Relative Permittivity (real part)</b> | 40.281283  |
| <b>Conductivity (S/m)</b>                | 1.012861   |
| <b>Power Variation (%)</b>               | -1.914900  |
| <b>Ambient Temperature</b>               | 22.2       |
| <b>Liquid Temperature</b>                | 22.2       |

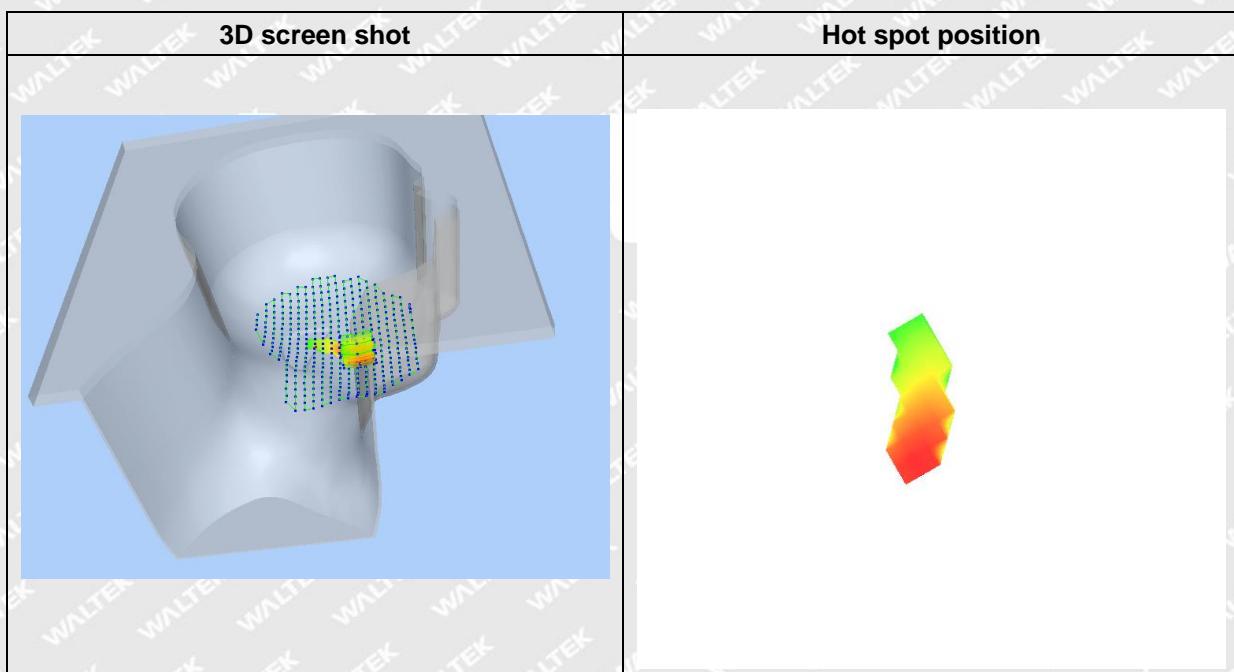
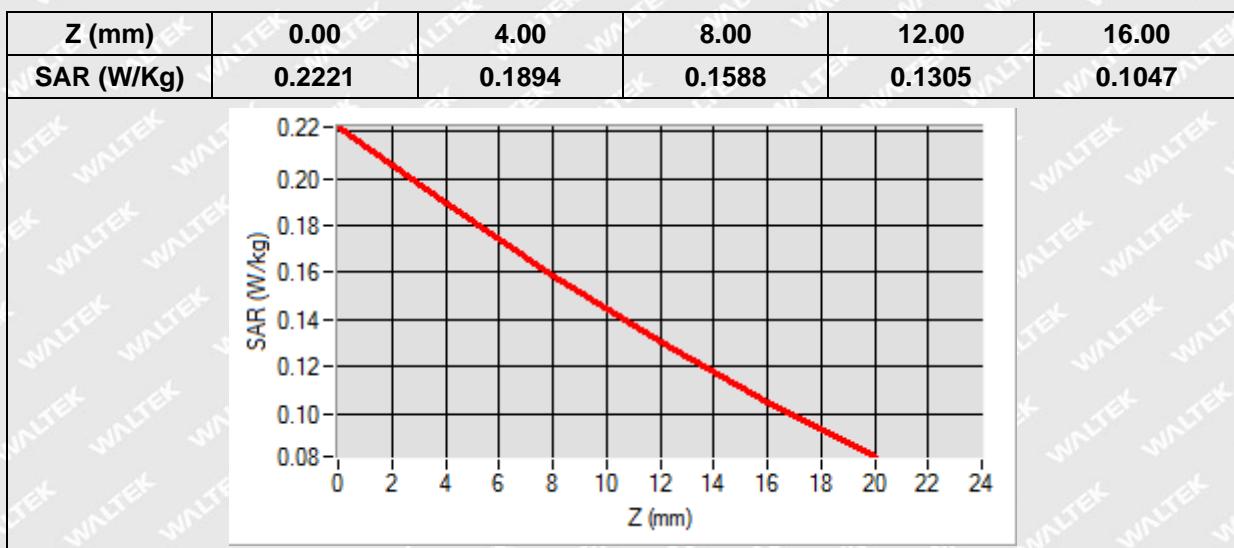


Maximum location: X=-43.00, Y=-24.00

SAR Peak: 0.22 W/kg



|                       |                 |
|-----------------------|-----------------|
| <b>SAR 10g (W/Kg)</b> | <b>0.132406</b> |
| <b>SAR 1g (W/Kg)</b>  | <b>0.181416</b> |





# MEASUREMENT 9

Type: Phone measurement (Complete)

Date of measurement: 2023-06-23

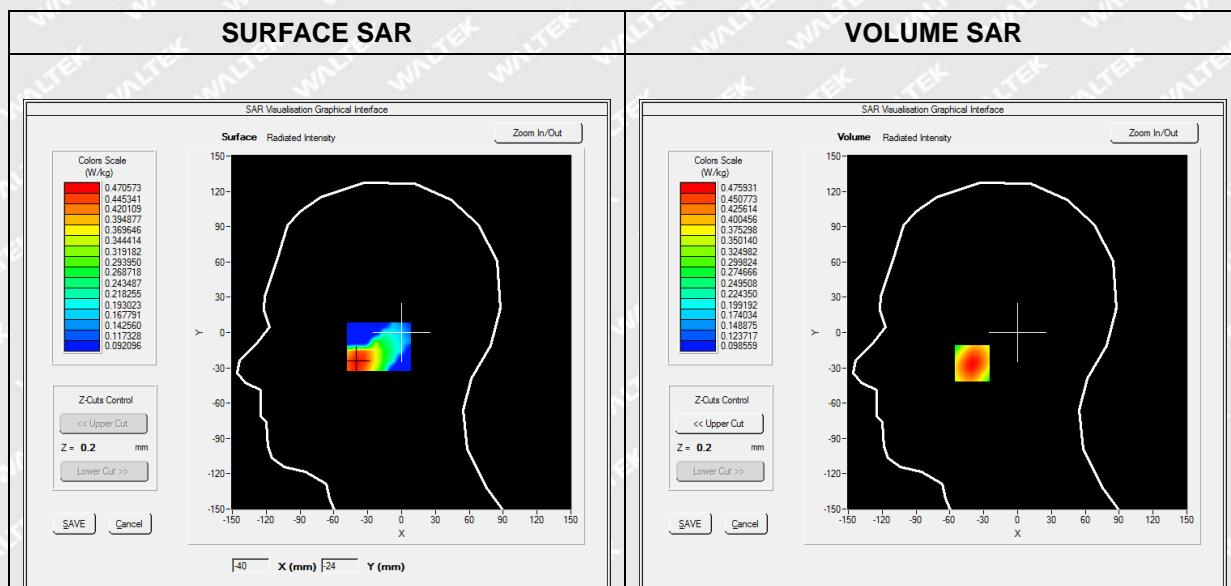
Measurement duration: 12 minutes 3 seconds

## A. Experimental conditions

|                        |                             |
|------------------------|-----------------------------|
| <b>Area Scan</b>       | dx=8mm dy=8mm               |
| <b>Zoom Scan</b>       | dx=5mm dy=5mm dz=4mm        |
| <b>Phantom</b>         | Right Cheek                 |
| <b>Device Position</b> | Cheek                       |
| <b>Band</b>            | FDD-LTE Band 20_QPSK, 20MHz |
| <b>Channels</b>        | Middle                      |
| <b>Signal</b>          | Duty Cycle: 1:1             |

## B. SAR Measurement Results

|  |            |
|--|------------|
| <b>Frequency (MHz)</b>                   | 847.000000 |
| <b>Relative Permittivity (real part)</b> | 41.374538  |
| <b>Conductivity (S/m)</b>                | 0.892591   |
| <b>Power Variation (%)</b>               | -1.292800  |
| <b>Ambient Temperature</b>               | 22.2       |
| <b>Liquid Temperature</b>                | 22.2       |

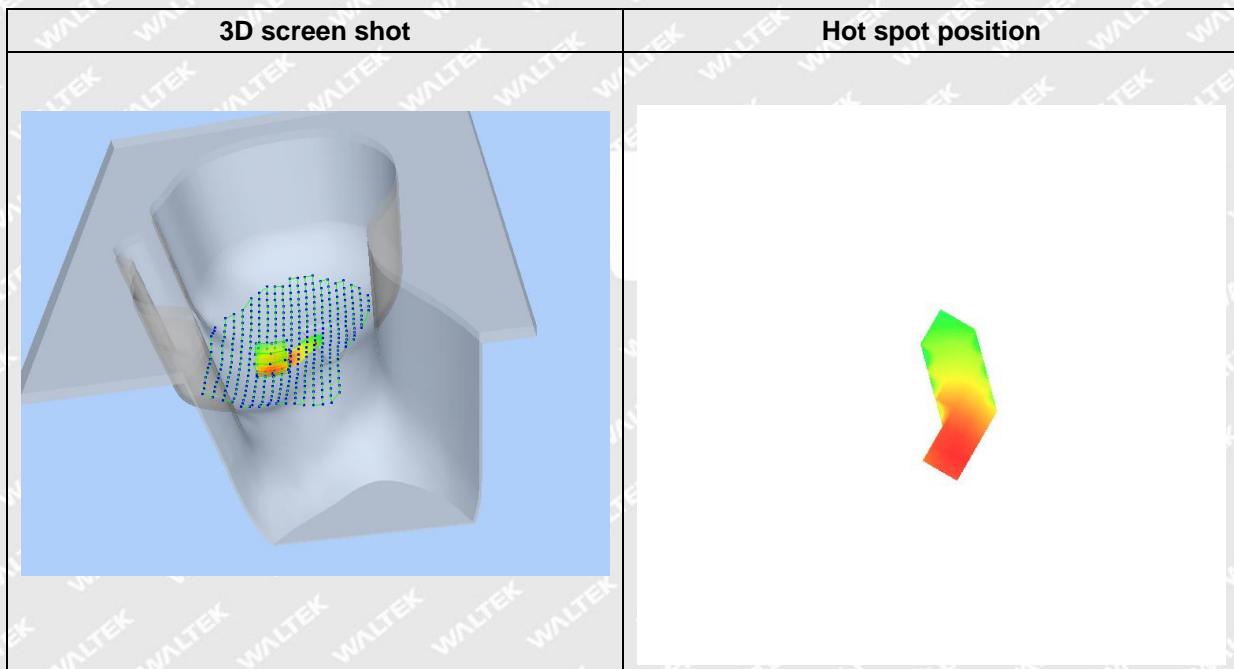
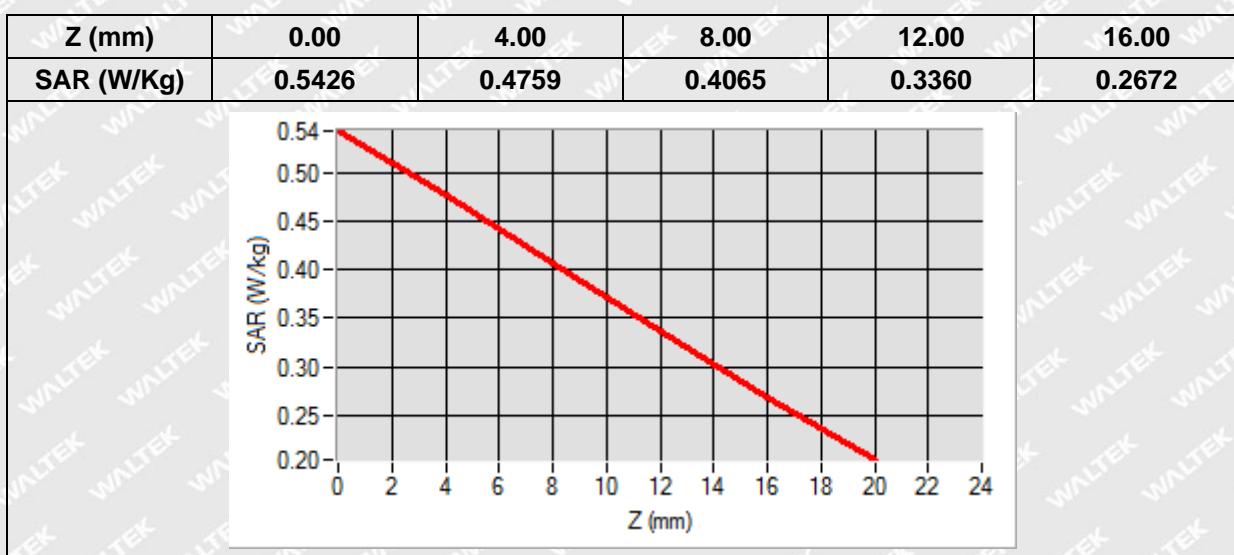


Maximum location: X=-40.00, Y=-26.00

SAR Peak: 0.54 W/kg



|                       |                 |
|-----------------------|-----------------|
| <b>SAR 10g (W/Kg)</b> | <b>0.331029</b> |
| <b>SAR 1g (W/Kg)</b>  | <b>0.453939</b> |





# MEASUREMENT 10

Type: Phone measurement (Complete)

Date of measurement: 2023-06-23

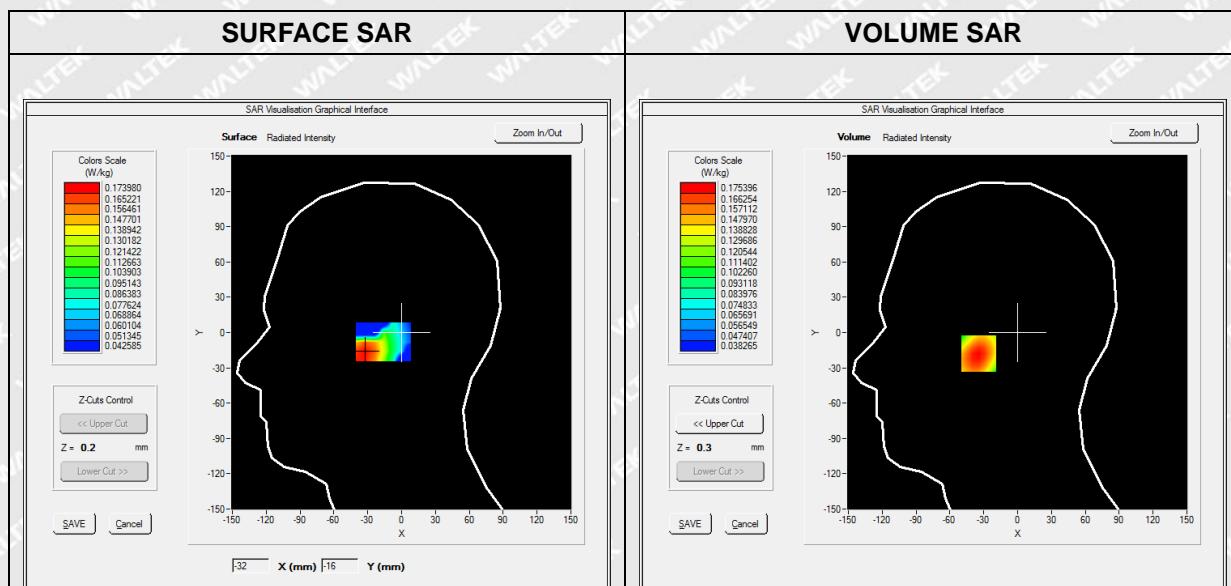
Measurement duration: 12 minutes 3 seconds

## A. Experimental conditions

|                        |                             |
|------------------------|-----------------------------|
| <b>Area Scan</b>       | dx=8mm dy=8mm               |
| <b>Zoom Scan</b>       | dx=5mm dy=5mm dz=4mm        |
| <b>Phantom</b>         | Right Cheek                 |
| <b>Device Position</b> | Cheek                       |
| <b>Band</b>            | FDD-LTE Band 28_QPSK, 20MHz |
| <b>Channels</b>        | High                        |
| <b>Signal</b>          | Duty Cycle: 1:1             |

## B. SAR Measurement Results

|  |            |
|--|------------|
| <b>Frequency (MHz)</b>                   | 738.000000 |
| <b>Relative Permittivity (real part)</b> | 41.462381  |
| <b>Conductivity (S/m)</b>                | 0.872579   |
| <b>Power Variation (%)</b>               | -1.275800  |
| <b>Ambient Temperature</b>               | 22.2       |
| <b>Liquid Temperature</b>                | 22.2       |

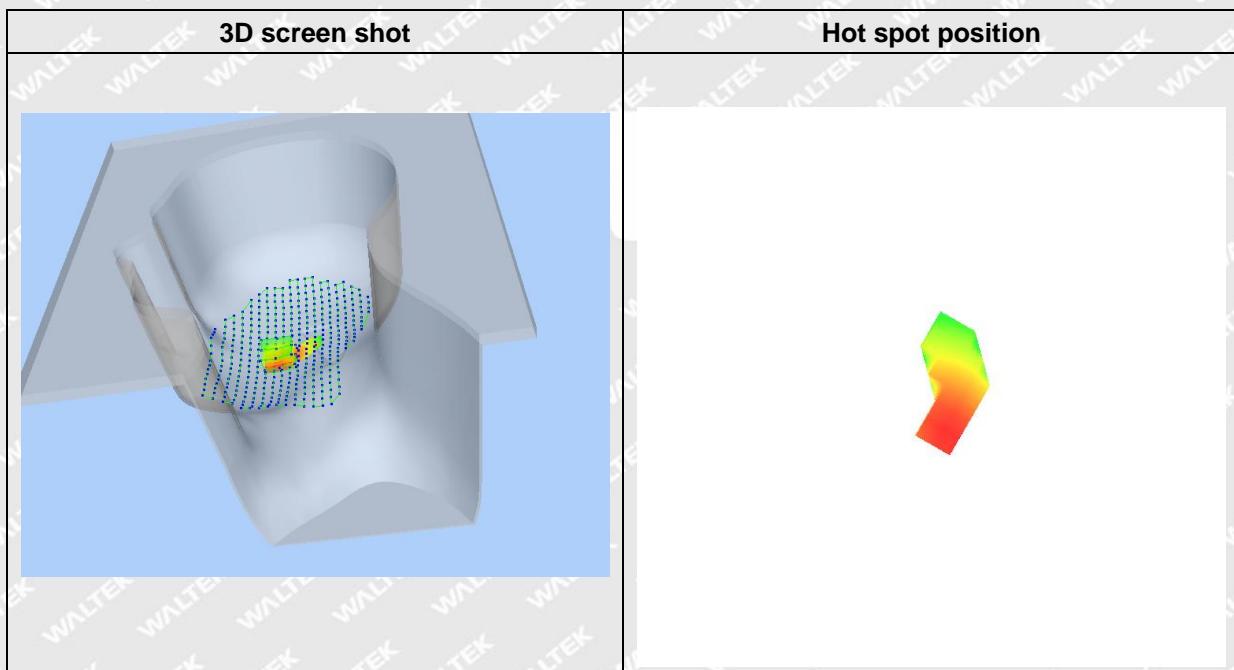
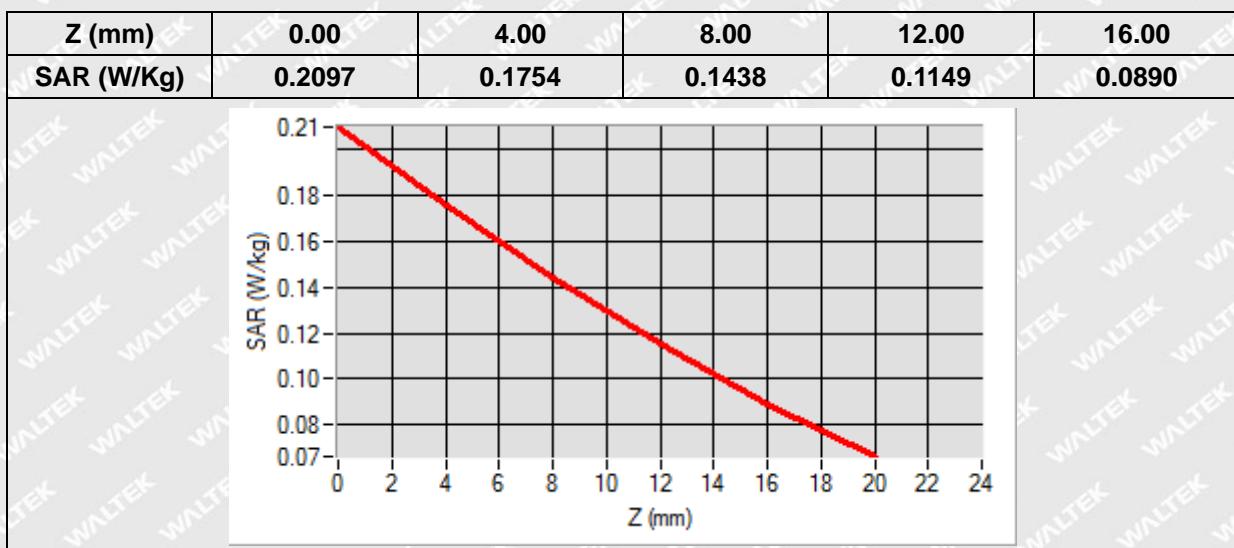


Maximum location: X=-33.00, Y=-18.00

SAR Peak: 0.21 W/kg



|                       |                 |
|-----------------------|-----------------|
| <b>SAR 10g (W/Kg)</b> | <b>0.121187</b> |
| <b>SAR 1g (W/Kg)</b>  | <b>0.170415</b> |





# MEASUREMENT 11

Type: Phone measurement (Complete)

Date of measurement: 2023-06-27

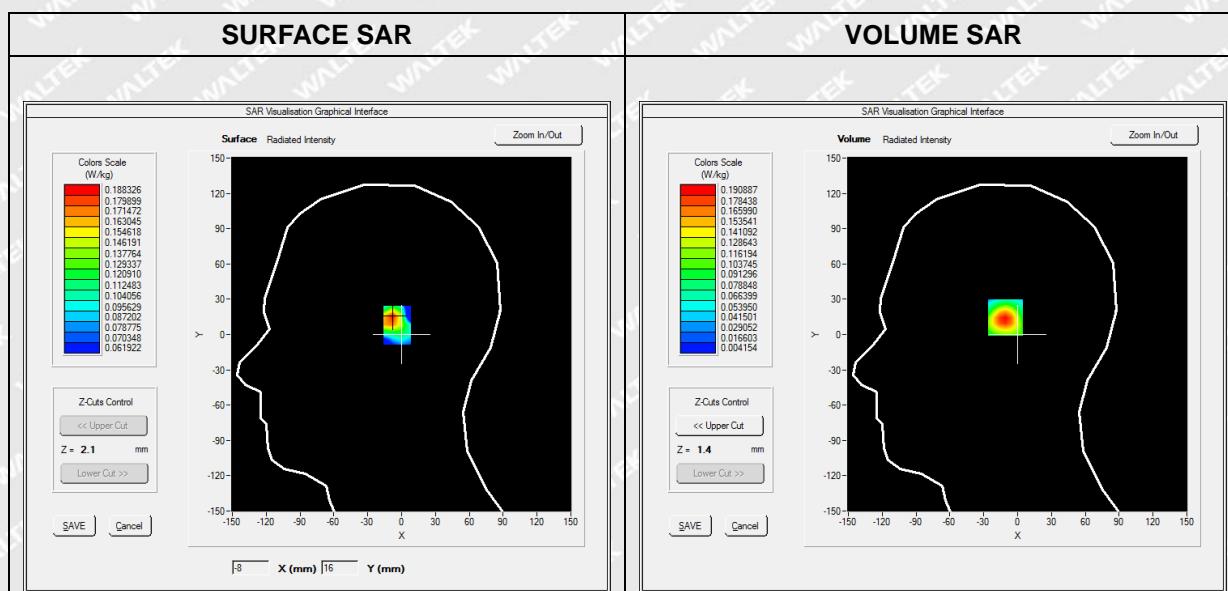
Measurement duration: 12 minutes 3 seconds

## A. Experimental conditions

|                        |                             |
|------------------------|-----------------------------|
| <b>Area Scan</b>       | dx=8mm dy=8mm               |
| <b>Zoom Scan</b>       | dx=5mm dy=5mm dz=4mm        |
| <b>Phantom</b>         | Right Cheek                 |
| <b>Device Position</b> | Cheek                       |
| <b>Band</b>            | TDD-LTE Band 38_QPSK, 20MHz |
| <b>Channels</b>        | High                        |
| <b>Signal</b>          | Duty Cycle: 1:1             |

## B. SAR Measurement Results

|  |             |
|--|-------------|
| <b>Frequency (MHz)</b>                   | 2610.000000 |
| <b>Relative Permittivity (real part)</b> | 39.442643   |
| <b>Conductivity (S/m)</b>                | 1.944365    |
| <b>Power Variation (%)</b>               | -1.392800   |
| <b>Ambient Temperature</b>               | 22.2        |
| <b>Liquid Temperature</b>                | 22.2        |

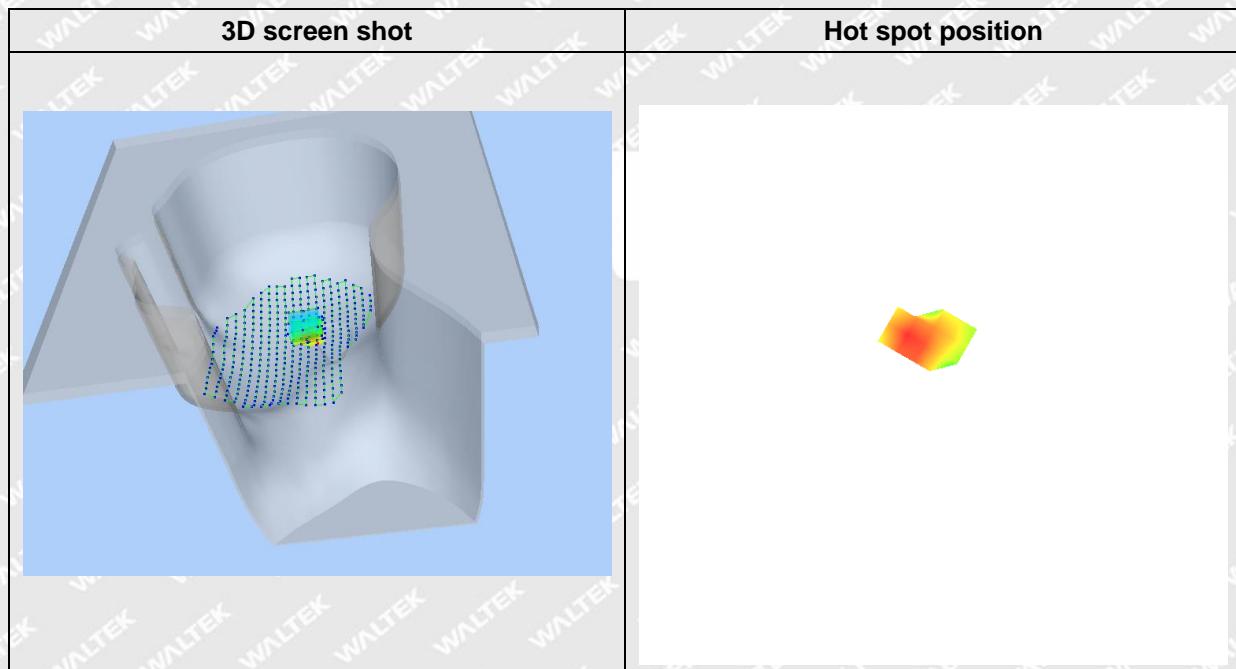
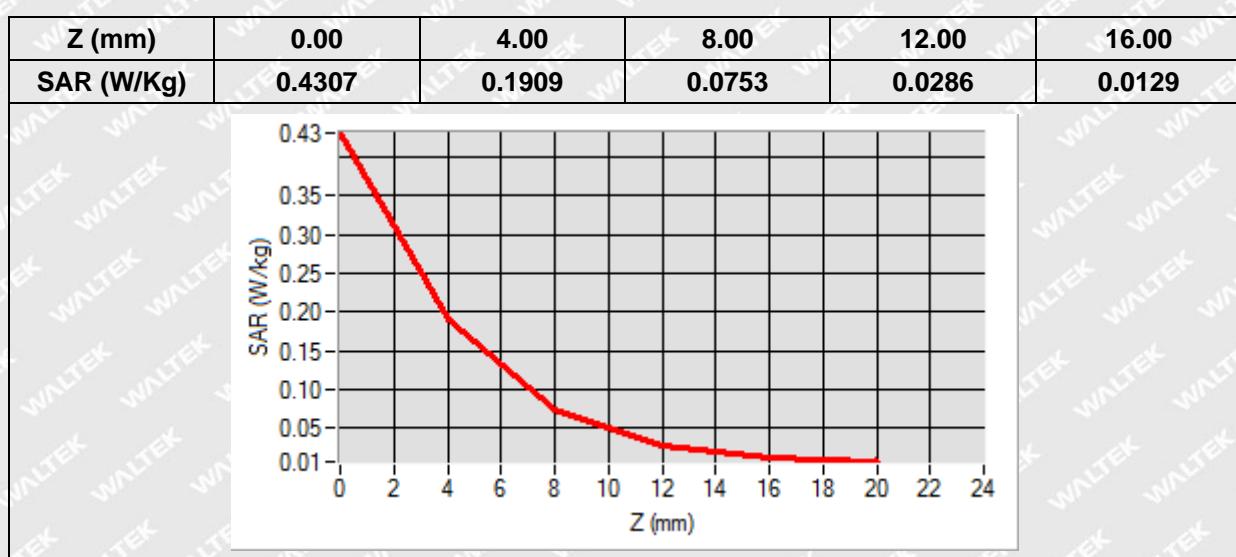


Maximum location: X=-9.00, Y=15.00

SAR Peak: 0.43 W/kg



|                       |                 |
|-----------------------|-----------------|
| <b>SAR 10g (W/Kg)</b> | <b>0.079503</b> |
| <b>SAR 1g (W/Kg)</b>  | <b>0.185215</b> |





# MEASUREMENT 12

Type: Phone measurement (Complete)

Date of measurement: 2023-06-27

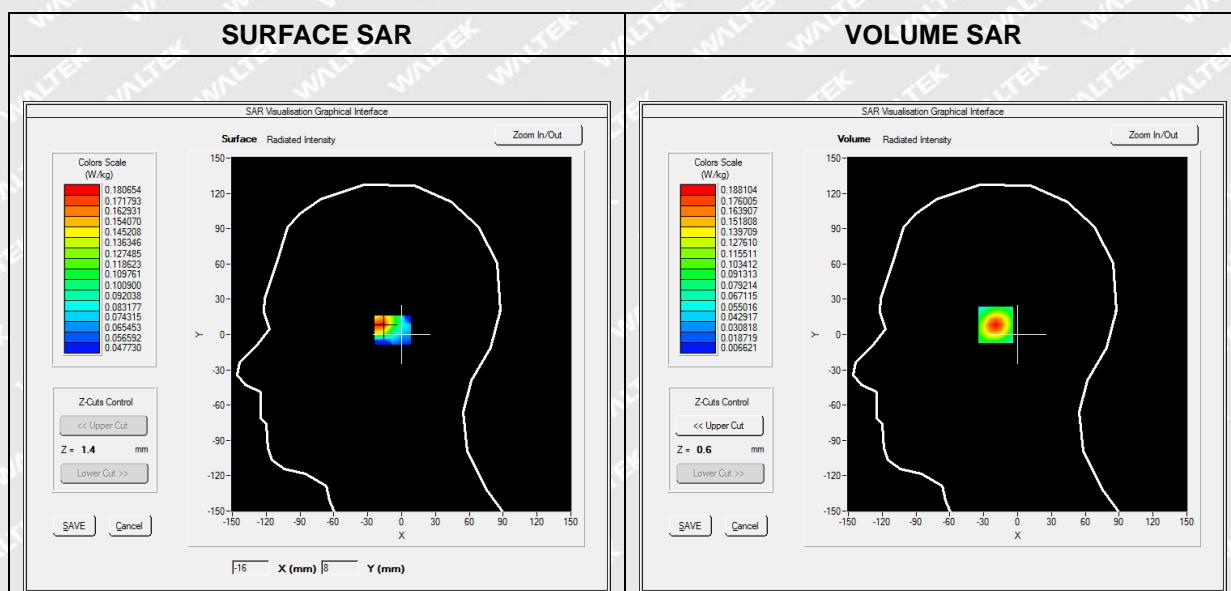
Measurement duration: 12 minutes 3 seconds

## A. Experimental conditions

|                        |                             |
|------------------------|-----------------------------|
| <b>Area Scan</b>       | dx=8mm dy=8mm               |
| <b>Zoom Scan</b>       | dx=5mm dy=5mm dz=4mm        |
| <b>Phantom</b>         | Right Cheek                 |
| <b>Device Position</b> | Cheek                       |
| <b>Band</b>            | TDD-LTE Band 40_QPSK, 20MHz |
| <b>Channels</b>        | Low                         |
| <b>Signal</b>          | Duty Cycle: 1:1             |

## B. SAR Measurement Results

|  |             |
|--|-------------|
| <b>Frequency (MHz)</b>                   | 2310.000000 |
| <b>Relative Permittivity (real part)</b> | 39.163412   |
| <b>Conductivity (S/m)</b>                | 1.684165    |
| <b>Power Variation (%)</b>               | -1.276900   |
| <b>Ambient Temperature</b>               | 22.4        |
| <b>Liquid Temperature</b>                | 22.4        |

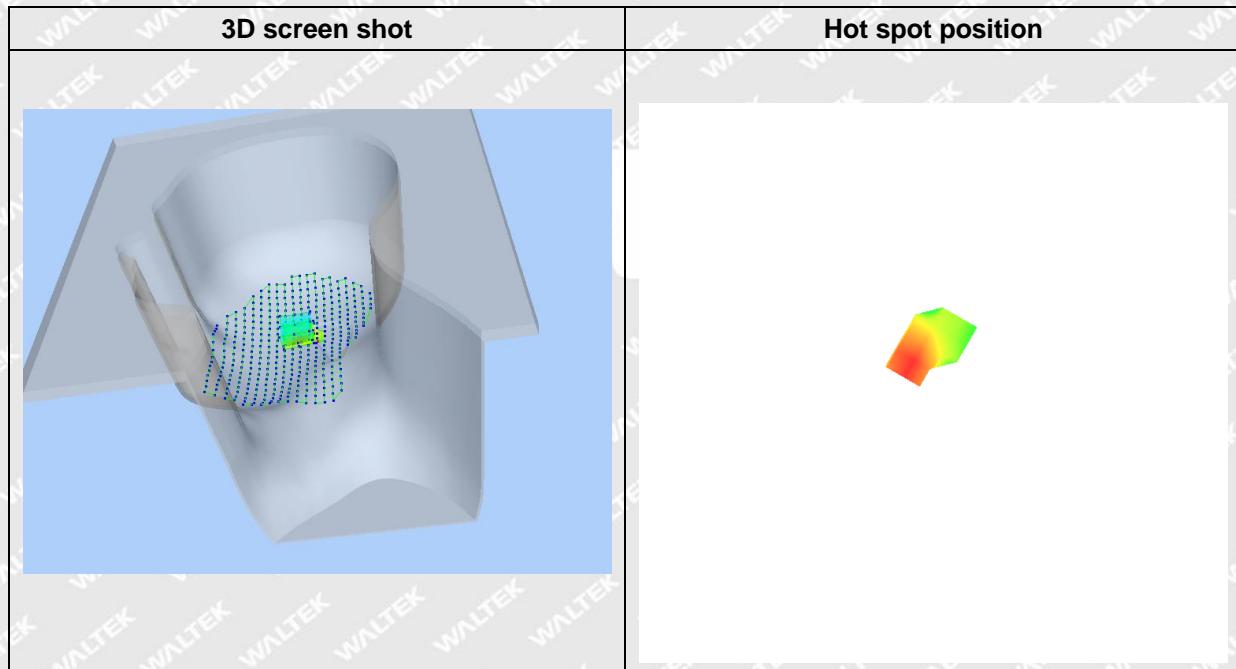


Maximum location: X=-18.00, Y=9.00

SAR Peak: 0.38 W/kg



| <b>SAR 10g (W/Kg)</b>  | <b>0.079208</b> |               |               |               |               |            |      |        |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |       |      |       |       |       |       |       |      |       |       |       |       |
|--|-----------------|---------------|---------------|---------------|---------------|------------|------|--------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|-------|------|-------|-------|-------|-------|-------|------|-------|-------|-------|-------|
| <b>SAR 1g (W/Kg)</b>   | <b>0.174590</b> |               |               |               |               |            |      |        |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |       |      |       |       |       |       |       |      |       |       |       |       |
| <b>Z (mm)</b>  | <b>0.00</b>     | <b>4.00</b>   | <b>8.00</b>   | <b>12.00</b>  | <b>16.00</b>  |            |      |        |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |       |      |       |       |       |       |       |      |       |       |       |       |
| <b>SAR (W/Kg)</b>  | <b>0.3842</b>   | <b>0.1881</b> | <b>0.0860</b> | <b>0.0396</b> | <b>0.0209</b> |            |      |        |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |       |      |       |       |       |       |       |      |       |       |       |       |
| <table border="1"> <caption>Data points estimated from the graph</caption> <thead> <tr> <th>Z (mm)</th> <th>SAR (W/kg)</th> </tr> </thead> <tbody> <tr><td>0.00</td><td>0.3842</td></tr> <tr><td>1.00</td><td>0.25</td></tr> <tr><td>2.00</td><td>0.18</td></tr> <tr><td>3.00</td><td>0.14</td></tr> <tr><td>4.00</td><td>0.11</td></tr> <tr><td>5.00</td><td>0.08</td></tr> <tr><td>6.00</td><td>0.06</td></tr> <tr><td>7.00</td><td>0.05</td></tr> <tr><td>8.00</td><td>0.04</td></tr> <tr><td>10.00</td><td>0.02</td></tr> <tr><td>12.00</td><td>0.015</td></tr> <tr><td>14.00</td><td>0.012</td></tr> <tr><td>16.00</td><td>0.01</td></tr> <tr><td>18.00</td><td>0.008</td></tr> <tr><td>20.00</td><td>0.006</td></tr> </tbody> </table> |                 |               |               |               | Z (mm)        | SAR (W/kg) | 0.00 | 0.3842 | 1.00 | 0.25 | 2.00 | 0.18 | 3.00 | 0.14 | 4.00 | 0.11 | 5.00 | 0.08 | 6.00 | 0.06 | 7.00 | 0.05 | 8.00 | 0.04 | 10.00 | 0.02 | 12.00 | 0.015 | 14.00 | 0.012 | 16.00 | 0.01 | 18.00 | 0.008 | 20.00 | 0.006 |
| Z (mm)   | SAR (W/kg)      |               |               |               |               |            |      |        |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |       |      |       |       |       |       |       |      |       |       |       |       |
| 0.00   | 0.3842          |               |               |               |               |            |      |        |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |       |      |       |       |       |       |       |      |       |       |       |       |
| 1.00   | 0.25            |               |               |               |               |            |      |        |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |       |      |       |       |       |       |       |      |       |       |       |       |
| 2.00   | 0.18            |               |               |               |               |            |      |        |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |       |      |       |       |       |       |       |      |       |       |       |       |
| 3.00   | 0.14            |               |               |               |               |            |      |        |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |       |      |       |       |       |       |       |      |       |       |       |       |
| 4.00   | 0.11            |               |               |               |               |            |      |        |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |       |      |       |       |       |       |       |      |       |       |       |       |
| 5.00   | 0.08            |               |               |               |               |            |      |        |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |       |      |       |       |       |       |       |      |       |       |       |       |
| 6.00   | 0.06            |               |               |               |               |            |      |        |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |       |      |       |       |       |       |       |      |       |       |       |       |
| 7.00   | 0.05            |               |               |               |               |            |      |        |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |       |      |       |       |       |       |       |      |       |       |       |       |
| 8.00   | 0.04            |               |               |               |               |            |      |        |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |       |      |       |       |       |       |       |      |       |       |       |       |
| 10.00  | 0.02            |               |               |               |               |            |      |        |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |       |      |       |       |       |       |       |      |       |       |       |       |
| 12.00  | 0.015           |               |               |               |               |            |      |        |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |       |      |       |       |       |       |       |      |       |       |       |       |
| 14.00  | 0.012           |               |               |               |               |            |      |        |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |       |      |       |       |       |       |       |      |       |       |       |       |
| 16.00  | 0.01            |               |               |               |               |            |      |        |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |       |      |       |       |       |       |       |      |       |       |       |       |
| 18.00  | 0.008           |               |               |               |               |            |      |        |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |       |      |       |       |       |       |       |      |       |       |       |       |
| 20.00  | 0.006           |               |               |               |               |            |      |        |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |       |      |       |       |       |       |       |      |       |       |       |       |





# MEASUREMENT 13

Type: Phone measurement (Complete)

Date of measurement: 2023-06-28

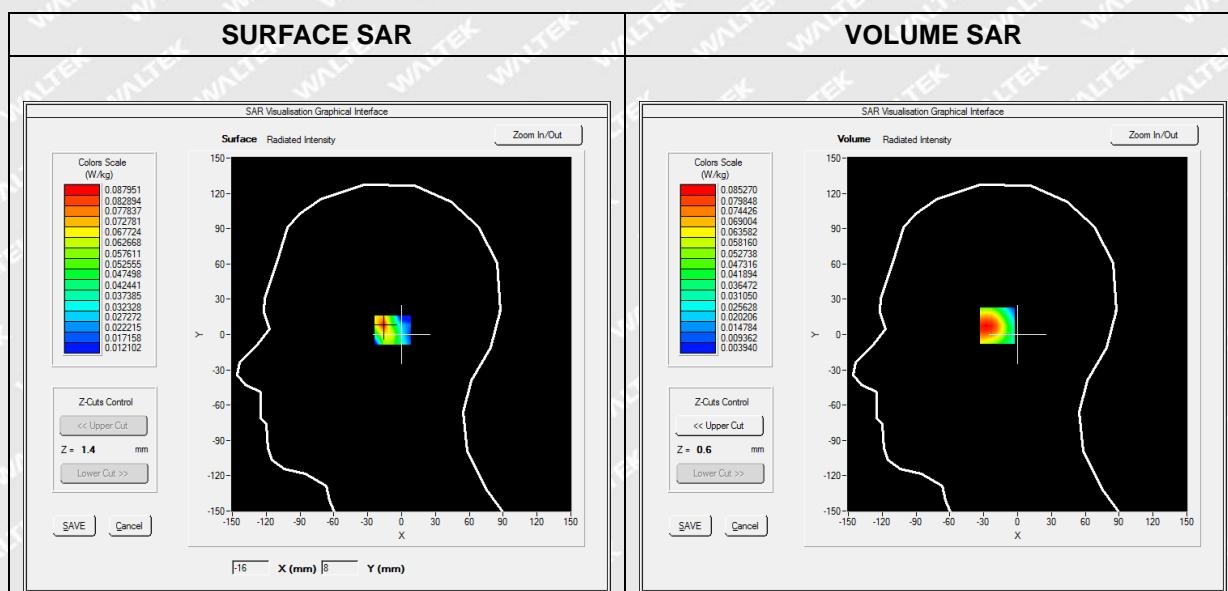
Measurement duration: 12 minutes 3 seconds

## A. Experimental conditions

|                        |                      |
|------------------------|----------------------|
| <b>Area Scan</b>       | dx=8mm dy=8mm        |
| <b>Zoom Scan</b>       | dx=5mm dy=5mm dz=4mm |
| <b>Phantom</b>         | Right head           |
| <b>Device Position</b> | Cheek                |
| <b>Band</b>            | WiFi_802.11b         |
| <b>Channels</b>        | High                 |
| <b>Signal</b>          | Duty Cycle: 1:1      |

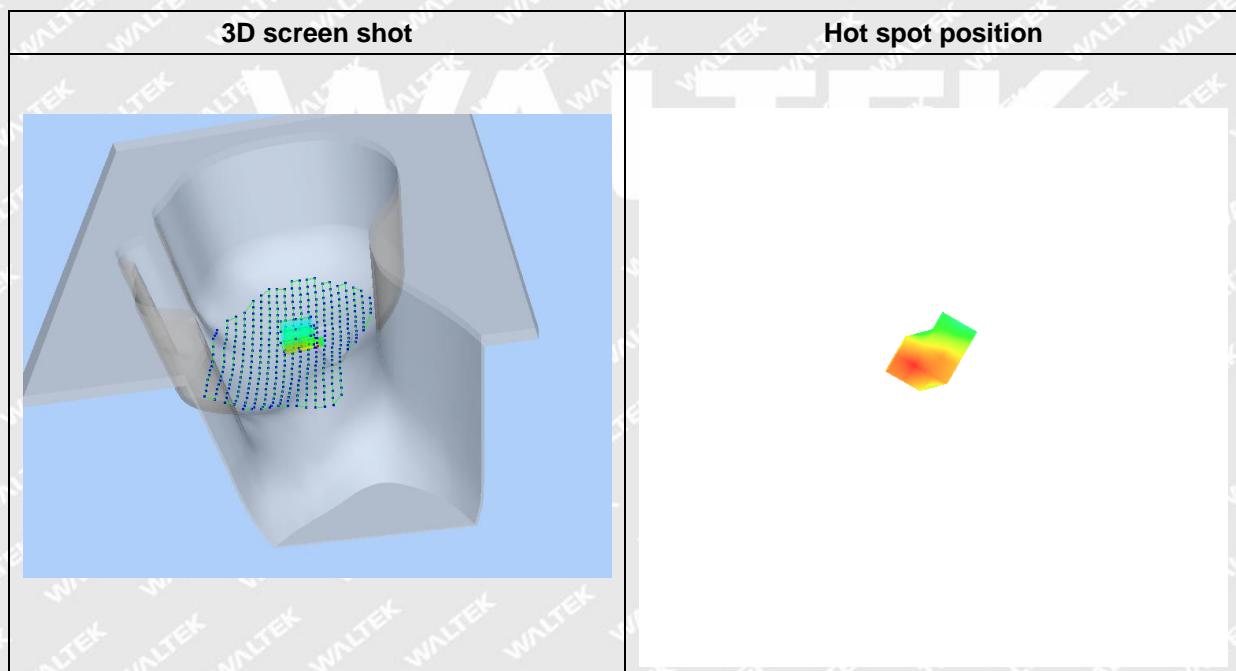
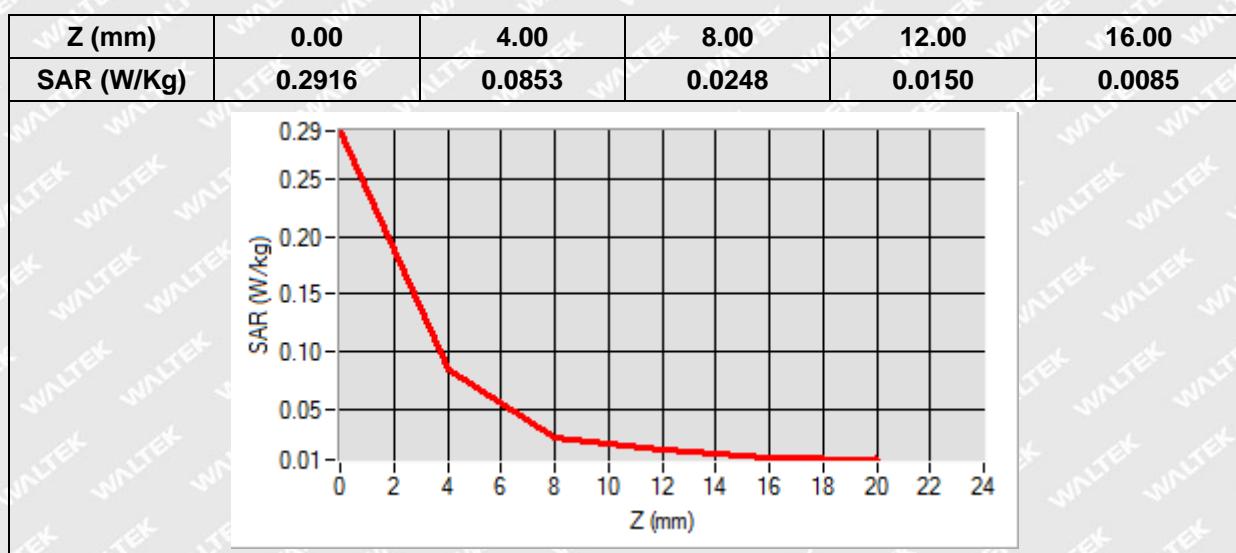
## B. SAR Measurement Results

|  |             |
|--|-------------|
| <b>Frequency (MHz)</b>                   | 2472.000000 |
| <b>Relative Permittivity (real part)</b> | 38.571587   |
| <b>Conductivity (S/m)</b>                | 1.783625    |
| <b>Power Variation (%)</b>               | 1.346800    |
| <b>Ambient Temperature</b>               | 22.4        |
| <b>Liquid Temperature</b>                | 22.4        |





|                       |                 |
|-----------------------|-----------------|
| <b>SAR 10g (W/Kg)</b> | <b>0.039024</b> |
| <b>SAR 1g (W/Kg)</b>  | <b>0.083616</b> |





# MEASUREMENT 14

Type: Phone measurement (Complete)

Date of measurement: 2023-06-23

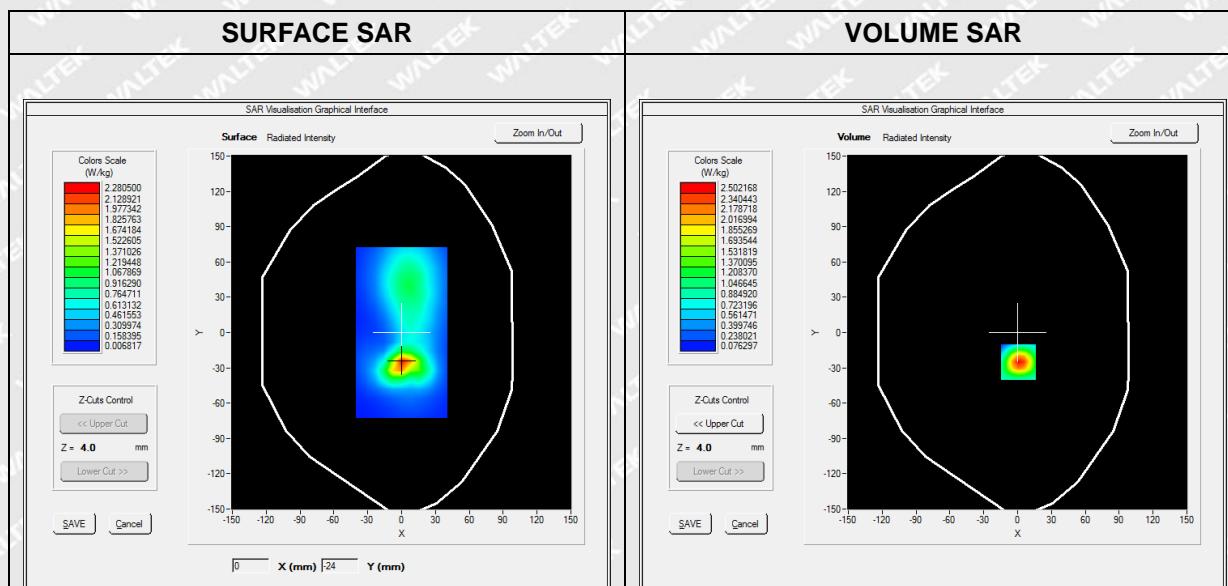
Measurement duration: 12 minutes 3 seconds

## A. Experimental conditions

|                        |                      |
|------------------------|----------------------|
| <b>Area Scan</b>       | dx=8mm dy=8mm        |
| <b>Zoom Scan</b>       | dx=5mm dy=5mm dz=4mm |
| <b>Phantom</b>         | Flat Phantom         |
| <b>Device Position</b> | Back                 |
| <b>Band</b>            | GPRS900_4TX          |
| <b>Channels</b>        | Low                  |
| <b>Signal</b>          | Duty Cycle: 1:2      |

## B. SAR Measurement Results

|  |            |
|--|------------|
| <b>Frequency (MHz)</b>                   | 880.200000 |
| <b>Relative Permittivity (real part)</b> | 41.372485  |
| <b>Conductivity (S/m)</b>                | 0.894623   |
| <b>Power Variation (%)</b>               | 1.521300   |
| <b>Ambient Temperature</b>               | 22.2       |
| <b>Liquid Temperature</b>                | 22.2       |

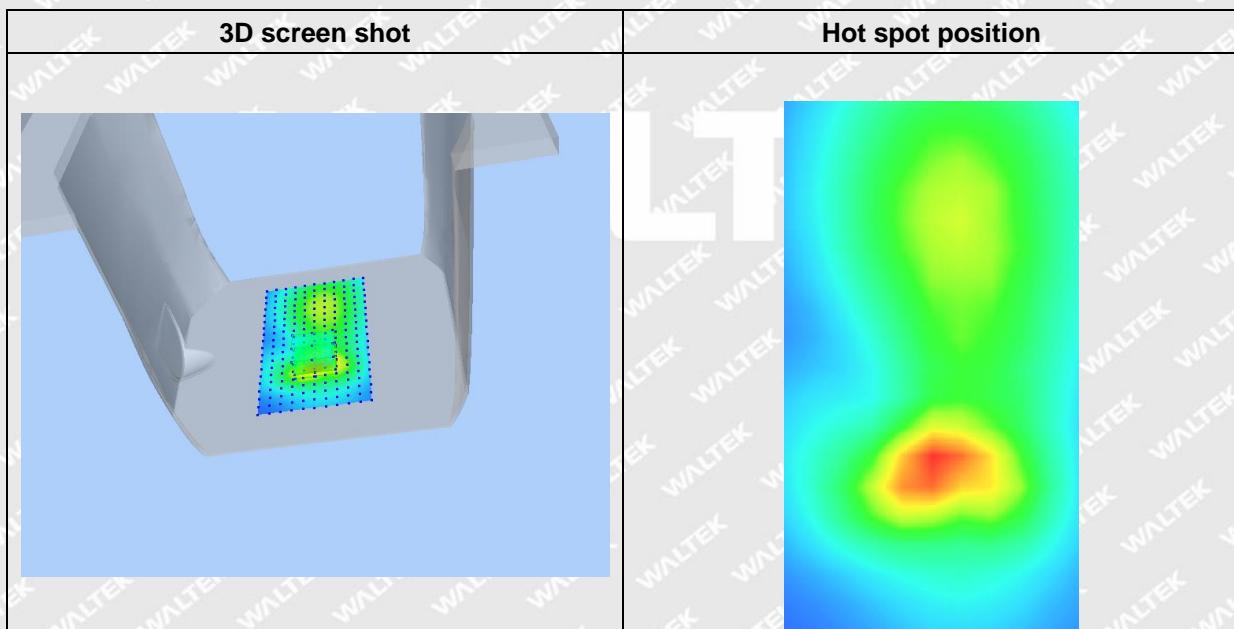
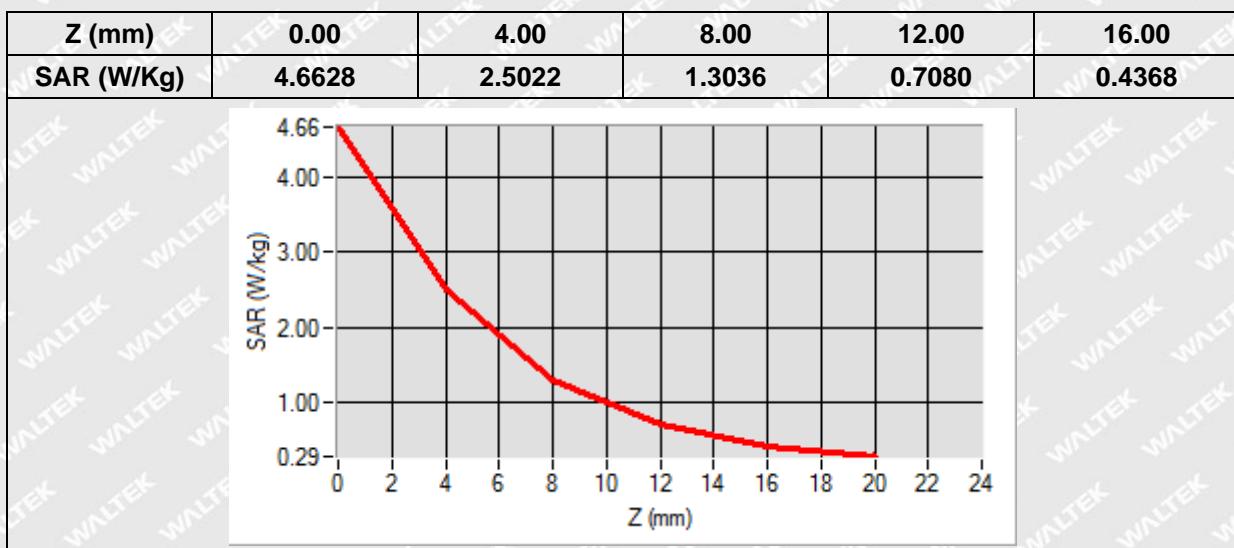


Maximum location: X=1.00, Y=-25.00

SAR Peak: 4.70 W/kg



|                |          |
|----------------|----------|
| SAR 10g (W/Kg) | 1.042316 |
| SAR 1g (W/Kg)  | 2.263176 |





# MEASUREMENT 15

Type: Phone measurement (Complete)

Date of measurement: 2023-06-25

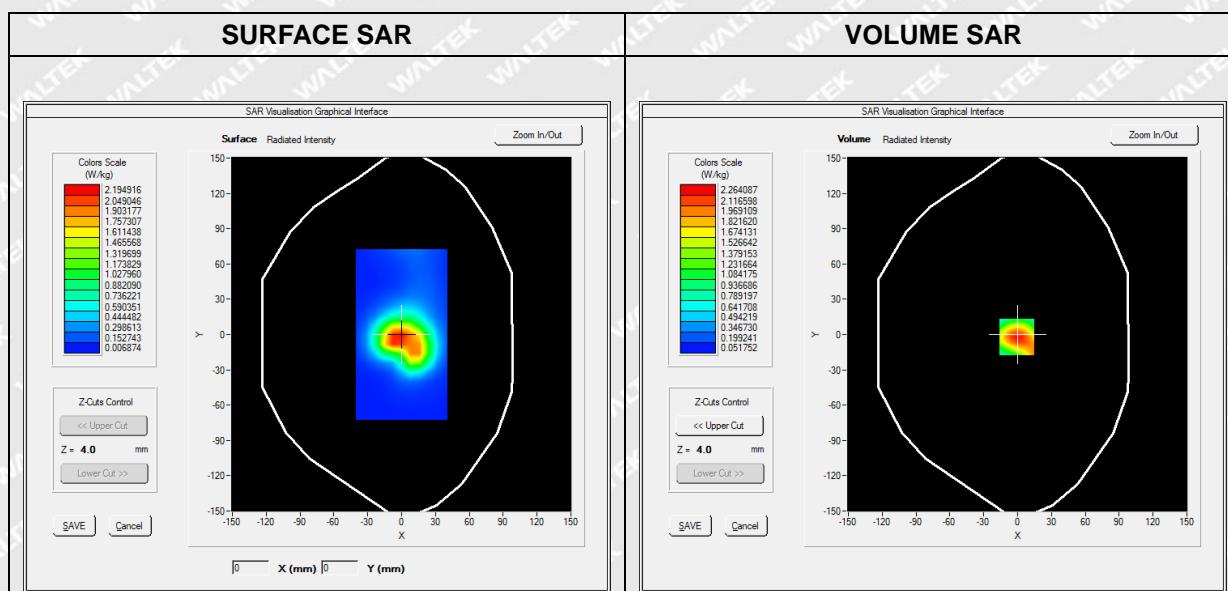
Measurement duration: 12 minutes 3 seconds

## A. Experimental conditions

|                        |                      |
|------------------------|----------------------|
| <b>Area Scan</b>       | dx=8mm dy=8mm        |
| <b>Zoom Scan</b>       | dx=5mm dy=5mm dz=4mm |
| <b>Phantom</b>         | Flat Plane           |
| <b>Device Position</b> | Back                 |
| <b>Band</b>            | GPRS1800_4TX         |
| <b>Channels</b>        | High                 |
| <b>Signal</b>          | Duty Cycle: 1:2      |

## B. SAR Measurement Results

|  |             |
|--|-------------|
| <b>Frequency (MHz)</b>                   | 1783.800000 |
| <b>Relative Permittivity (real part)</b> | 39.363741   |
| <b>Conductivity (S/m)</b>                | 1.382419    |
| <b>Power Variation (%)</b>               | -0.649900   |
| <b>Ambient Temperature</b>               | 22.5        |
| <b>Liquid Temperature</b>                | 22.5        |

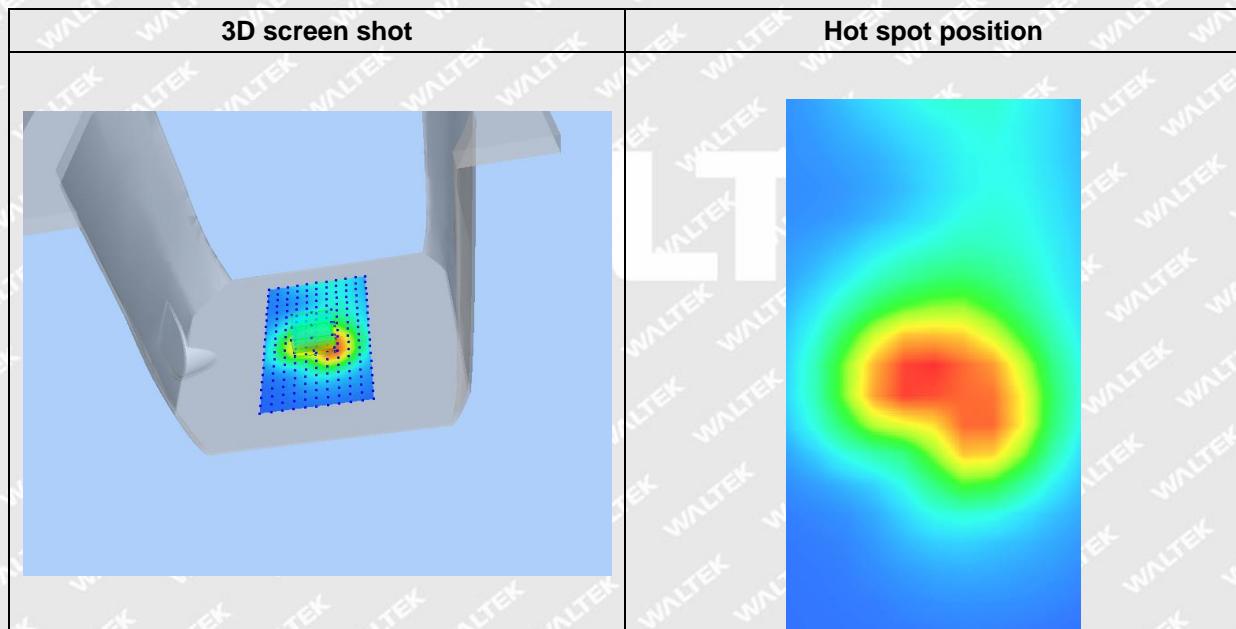
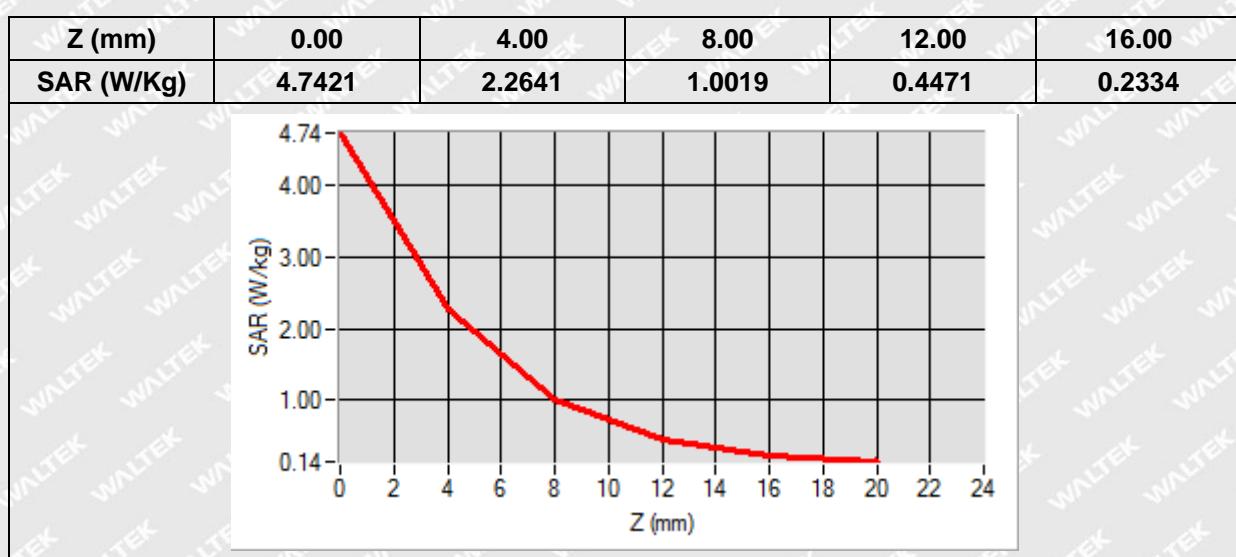


Maximum location: X=-1.00, Y=-2.00

SAR Peak: 4.75 W/kg



|                       |                 |
|-----------------------|-----------------|
| <b>SAR 10g (W/Kg)</b> | <b>1.004279</b> |
| <b>SAR 1g (W/Kg)</b>  | <b>2.143620</b> |





# MEASUREMENT 16

Type: Phone measurement (Complete)

Date of measurement: 2023-06-25

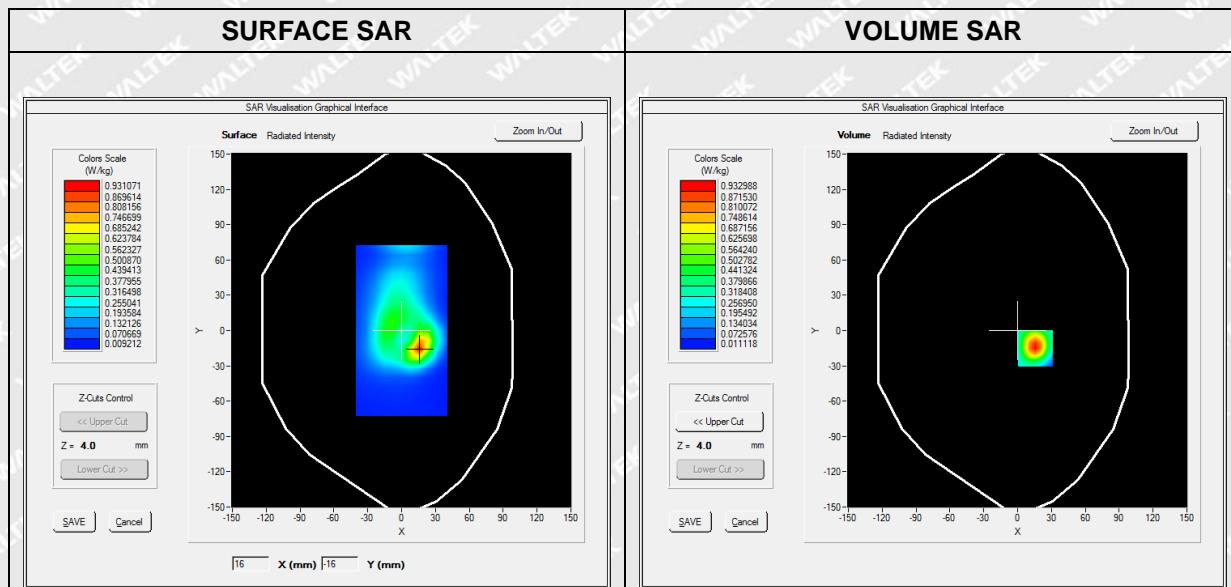
Measurement duration: 12 minutes 3 seconds

## A. Experimental conditions

|                        |                      |
|------------------------|----------------------|
| <b>Area Scan</b>       | dx=8mm dy=8mm        |
| <b>Zoom Scan</b>       | dx=5mm dy=5mm dz=4mm |
| <b>Phantom</b>         | Flat Plane           |
| <b>Device Position</b> | Back                 |
| <b>Band</b>            | WCDMA2100_RMC        |
| <b>Channels</b>        | High                 |
| <b>Signal</b>          | Duty Cycle: 1:1      |

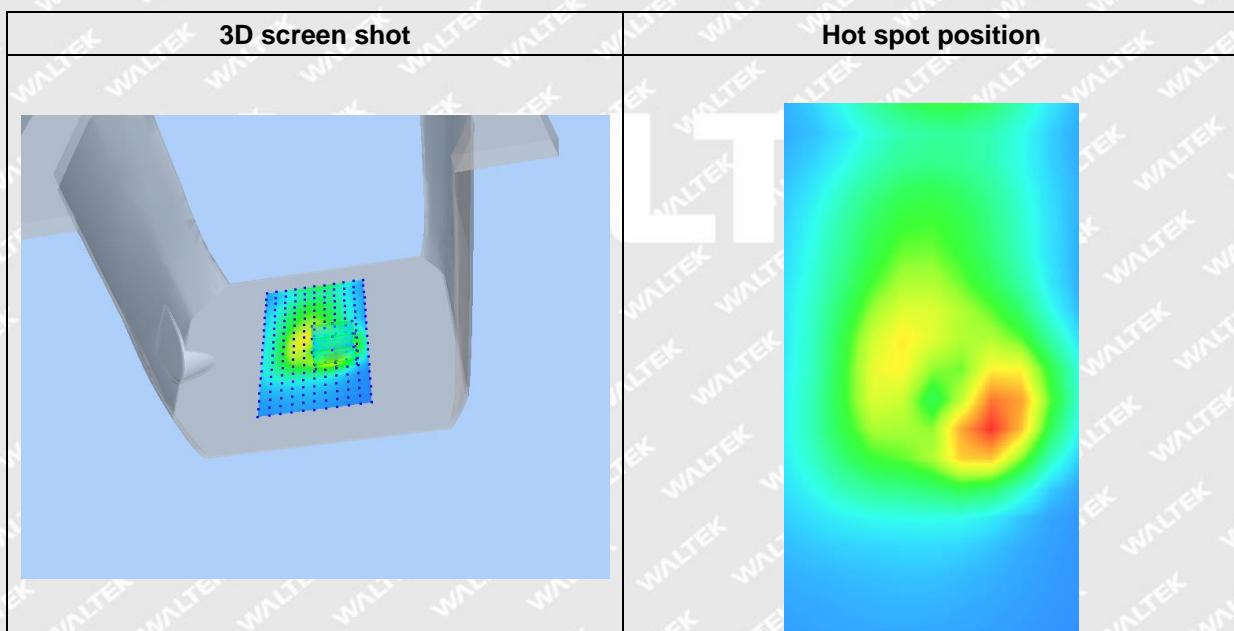
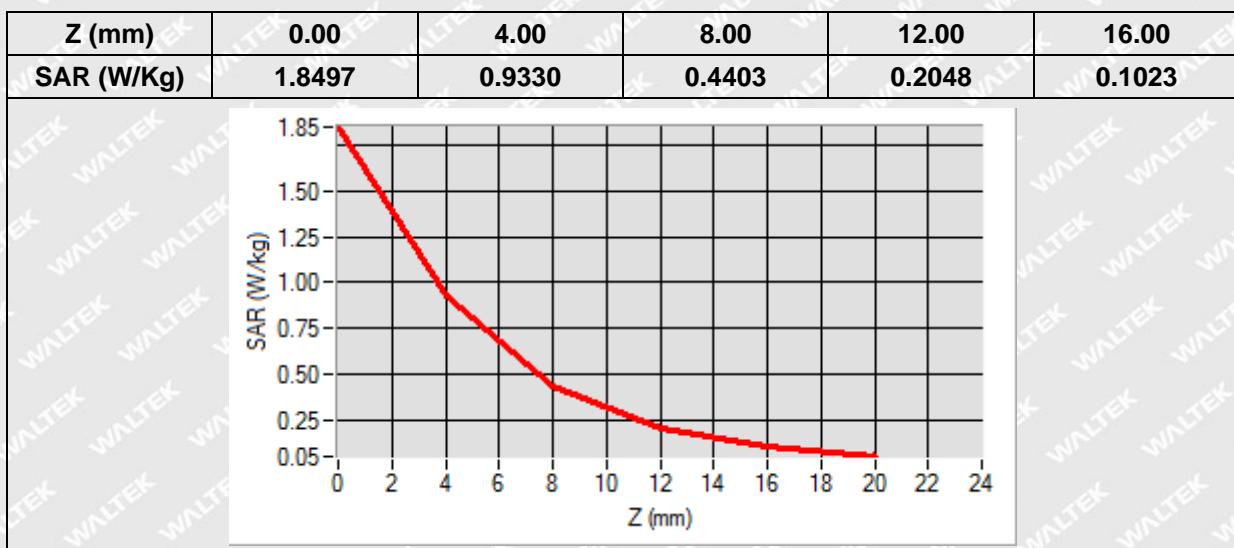
## B. SAR Measurement Results

|  |             |
|--|-------------|
| <b>Frequency (MHz)</b>                   | 1977.400000 |
| <b>Relative permittivity (real part)</b> | 39.483661   |
| <b>Conductivity (S/m)</b>                | 1.382489    |
| <b>Variation (%)</b>                     | 1.174800    |
| <b>Ambient Temperature</b>               | 22.5        |
| <b>Liquid Temperature</b>                | 22.5        |





|                       |                 |
|-----------------------|-----------------|
| <b>SAR 10g (W/Kg)</b> | <b>0.362652</b> |
| <b>SAR 1g (W/Kg)</b>  | <b>0.850092</b> |





# MEASUREMENT 17

Type: Phone measurement (Complete)

Date of measurement: 2023-06-23

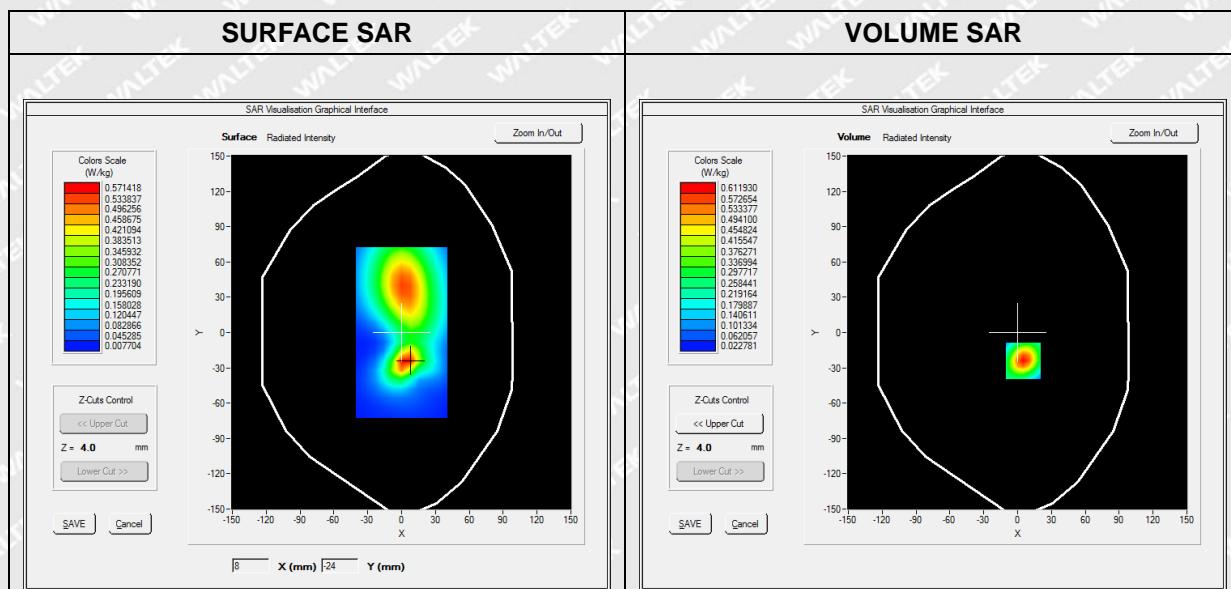
Measurement duration: 12 minutes 3 seconds

## A. Experimental conditions

|                        |                      |
|------------------------|----------------------|
| <b>Area Scan</b>       | dx=8mm dy=8mm        |
| <b>Zoom Scan</b>       | dx=5mm dy=5mm dz=4mm |
| <b>Phantom</b>         | Flat Plane           |
| <b>Device Position</b> | Back                 |
| <b>Band</b>            | WCDMA900_RMC         |
| <b>Channels</b>        | Low                  |
| <b>Signal</b>          | Duty Cycle: 1:1      |

## B. SAR Measurement Results

|  |            |
|--|------------|
| <b>Frequency (MHz)</b>                   | 882.600000 |
| <b>Relative Permittivity (real part)</b> | 40.282651  |
| <b>Conductivity (S/m)</b>                | 1.013129   |
| <b>Power Variation (%)</b>               | -1.413800  |
| <b>Ambient Temperature</b>               | 22.2       |
| <b>Liquid Temperature</b>                | 22.2       |

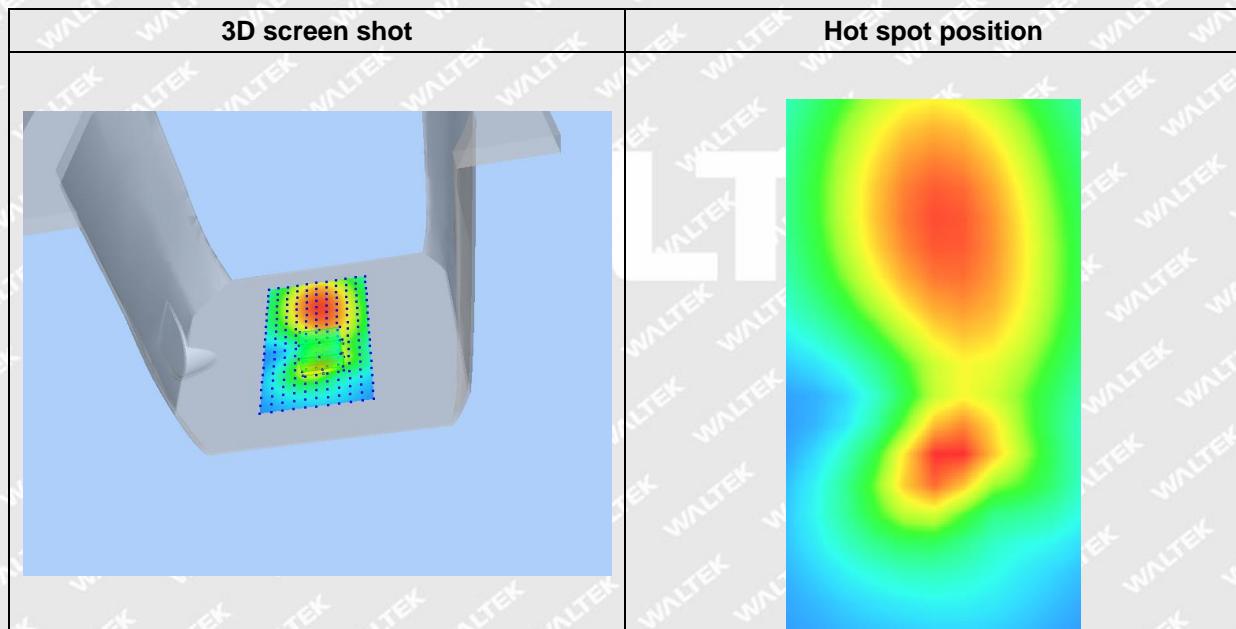
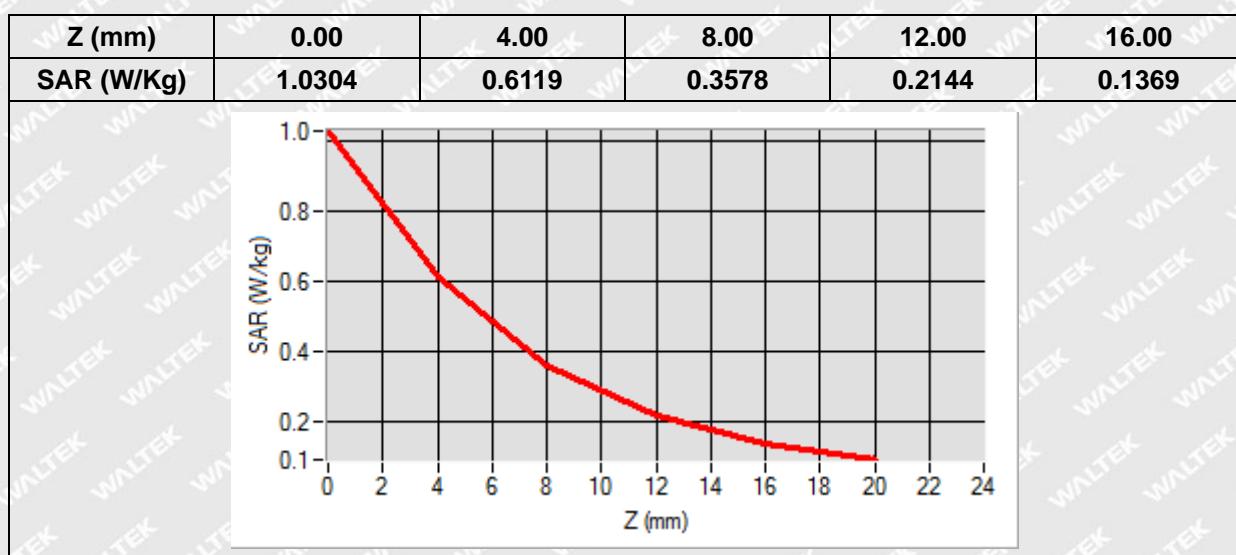


Maximum location: X=5.00, Y=-24.00

SAR Peak: 1.03 W/kg



|                       |                 |
|-----------------------|-----------------|
| <b>SAR 10g (W/Kg)</b> | <b>0.281275</b> |
| <b>SAR 1g (W/Kg)</b>  | <b>0.555345</b> |





# MEASUREMENT 18

Type: Phone measurement (Complete)

Date of measurement: 2023-06-25

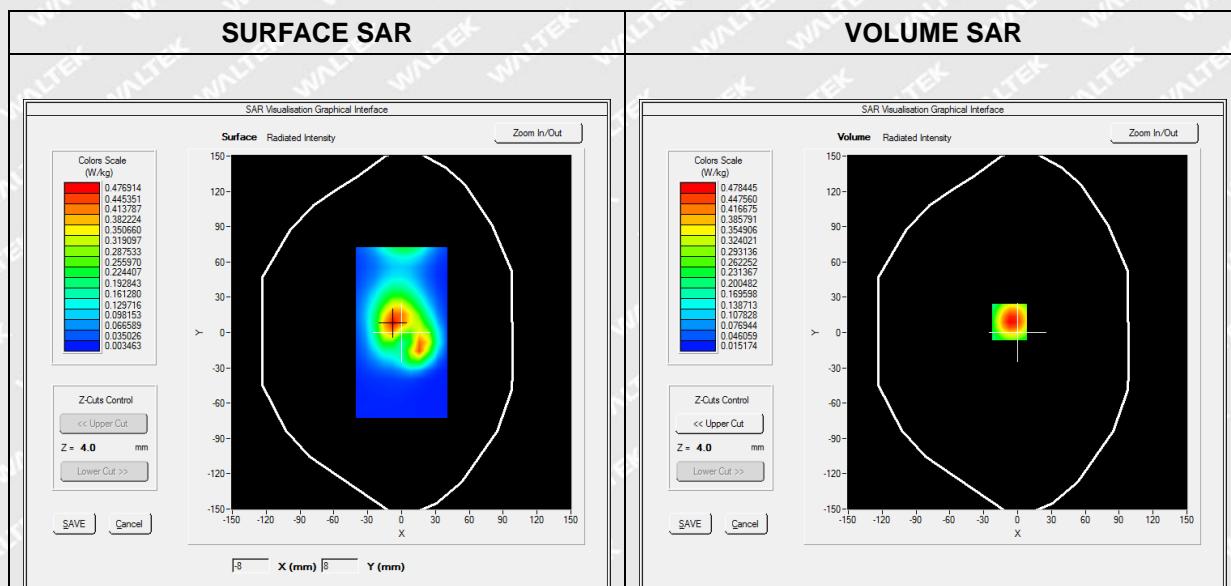
Measurement duration: 12 minutes 3 seconds

## A. Experimental conditions

|                        |                            |
|------------------------|----------------------------|
| <b>Area Scan</b>       | dx=8mm dy=8mm              |
| <b>Zoom Scan</b>       | dx=5mm dy=5mm dz=4mm       |
| <b>Phantom</b>         | Flat Plane                 |
| <b>Device Position</b> | Back                       |
| <b>Band</b>            | FDD-LTE Band 1_QPSK, 20MHz |
| <b>Channels</b>        | High                       |
| <b>Signal</b>          | Duty Cycle: 1:1            |

## B. SAR Measurement Results

|  |             |
|--|-------------|
| <b>Frequency (MHz)</b>                   | 1970.000000 |
| <b>Relative Permittivity (real part)</b> | 39.482641   |
| <b>Conductivity (S/m)</b>                | 1.381482    |
| <b>Power Variation (%)</b>               | 1.187500    |
| <b>Ambient Temperature</b>               | 22.5        |
| <b>Liquid Temperature</b>                | 22.5        |

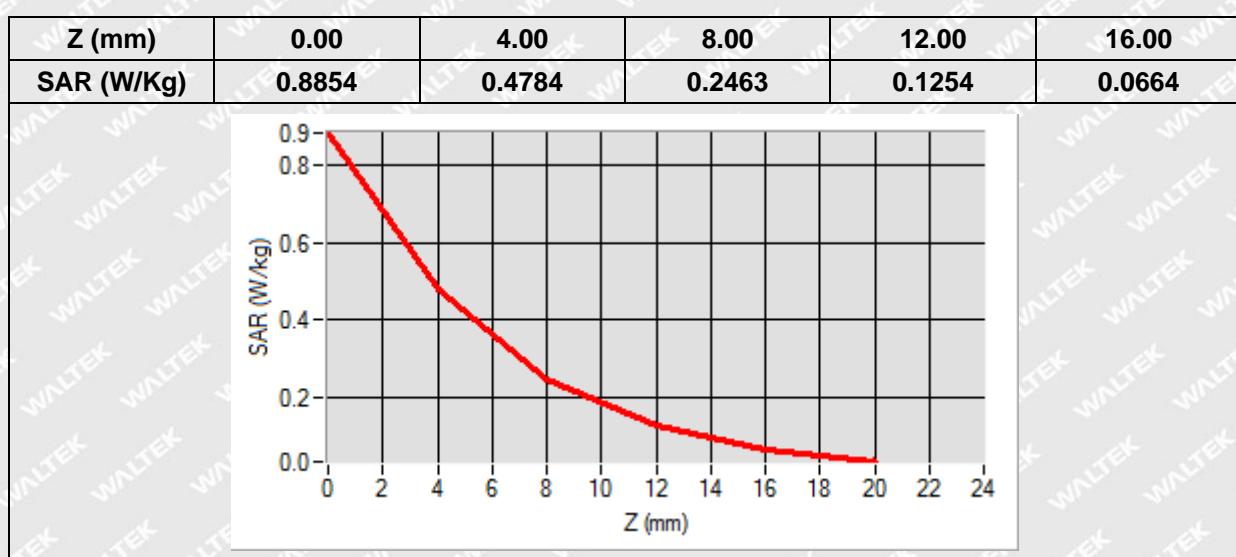


Maximum location: X=-7.00, Y=9.00

SAR Peak: 0.89 W/kg



|                       |                 |
|-----------------------|-----------------|
| <b>SAR 10g (W/Kg)</b> | <b>0.222742</b> |
| <b>SAR 1g (W/Kg)</b>  | <b>0.453572</b> |





# MEASUREMENT 19

Type: Phone measurement (Complete)

Date of measurement: 2023-06-25

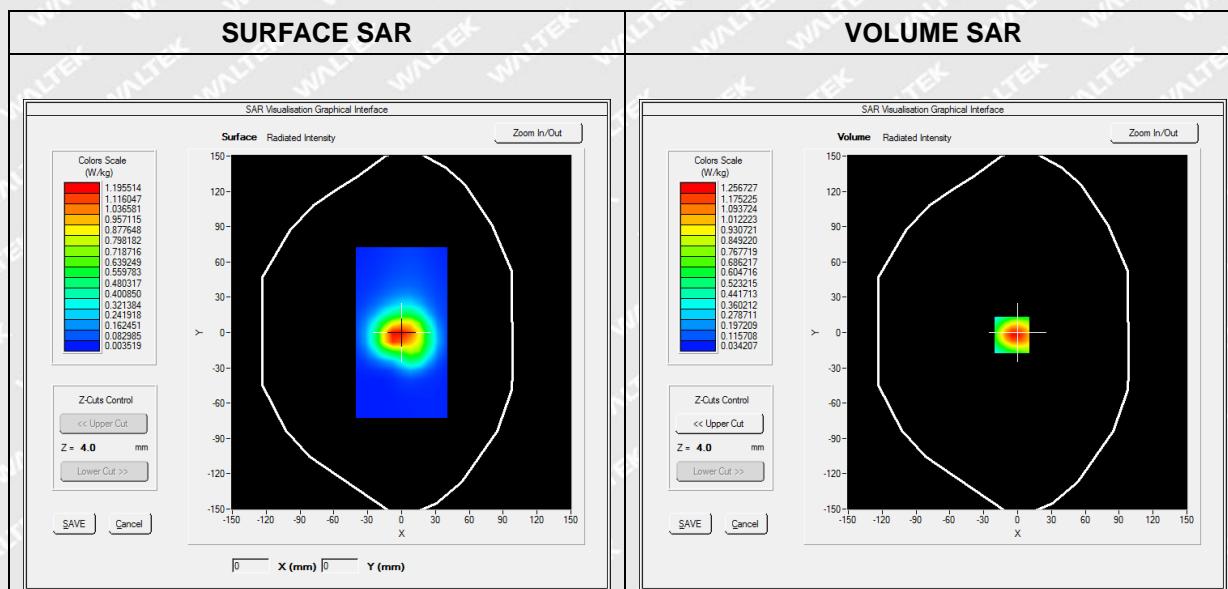
Measurement duration: 12 minutes 3 seconds

## A. Experimental conditions

|                        |                            |
|------------------------|----------------------------|
| <b>Area Scan</b>       | dx=8mm dy=8mm              |
| <b>Zoom Scan</b>       | dx=5mm dy=5mm dz=4mm       |
| <b>Phantom</b>         | Flat Plane                 |
| <b>Device Position</b> | Back                       |
| <b>Band</b>            | FDD-LTE Band 3_QPSK, 20MHz |
| <b>Channels</b>        | Low                        |
| <b>Signal</b>          | Duty Cycle: 1:1            |

## B. SAR Measurement Results

|  |             |
|--|-------------|
| <b>Frequency (MHz)</b>                   | 1720.000000 |
| <b>Relative Permittivity (real part)</b> | 39.361464   |
| <b>Conductivity (S/m)</b>                | 1.382190    |
| <b>Power Variation (%)</b>               | 2.641100    |
| <b>Ambient Temperature</b>               | 22.5        |
| <b>Liquid Temperature</b>                | 22.5        |

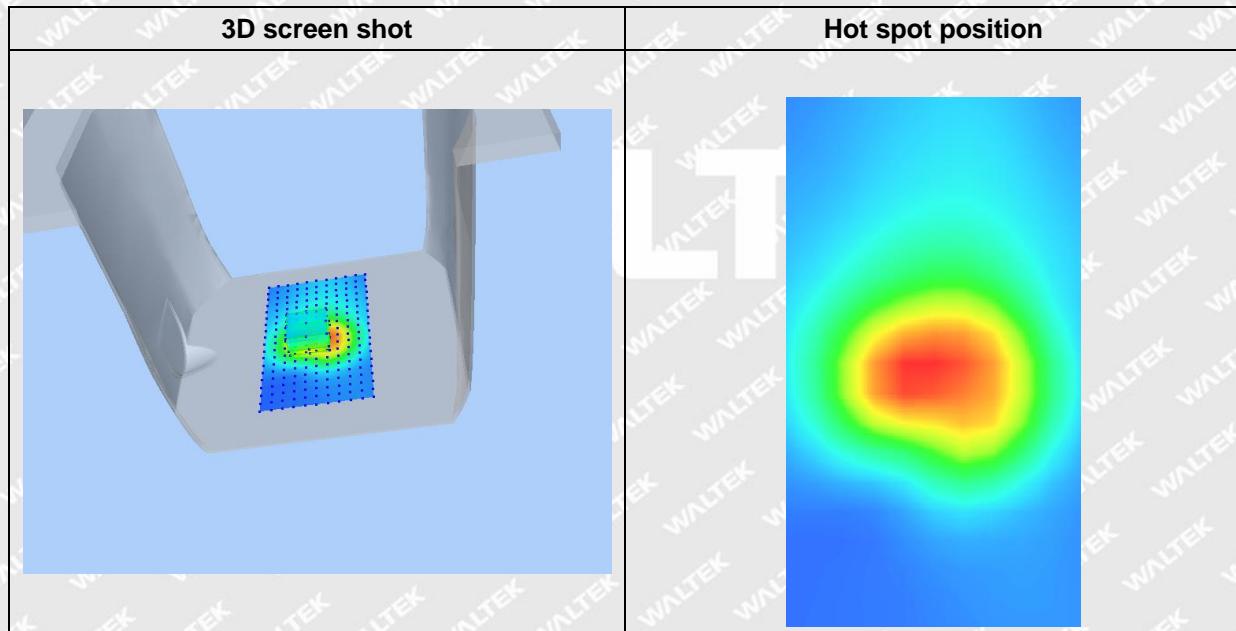
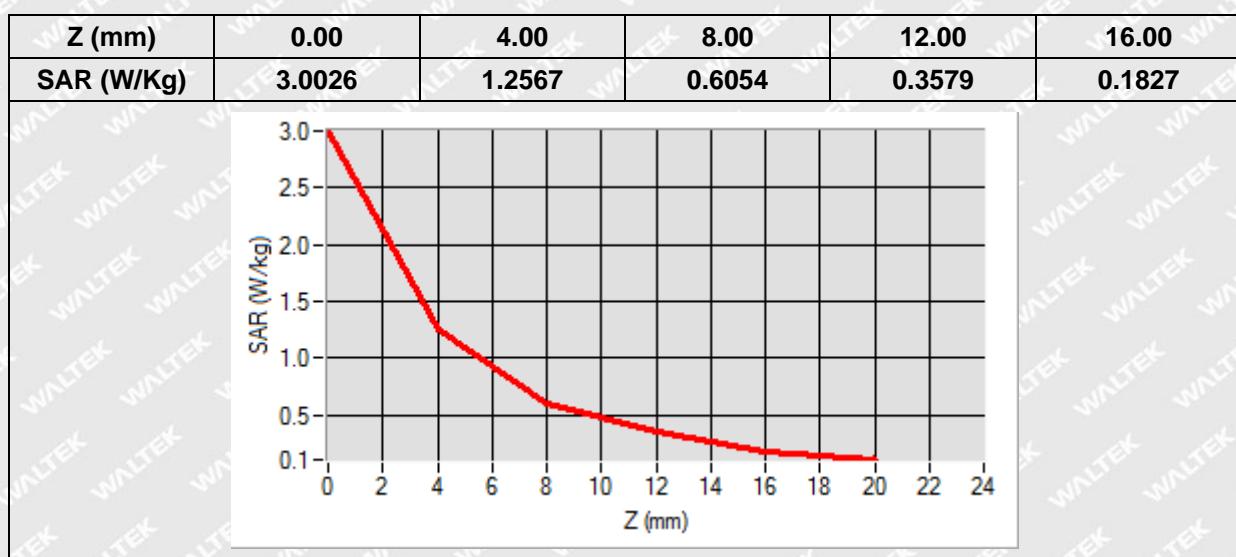


Maximum location: X=-5.00, Y=-2.00

SAR Peak: 2.28 W/kg



|                       |                 |
|-----------------------|-----------------|
| <b>SAR 10g (W/Kg)</b> | <b>0.579382</b> |
| <b>SAR 1g (W/Kg)</b>  | <b>1.177853</b> |





# MEASUREMENT 20

Type: Phone measurement (Complete)

Date of measurement: 2023-06-27

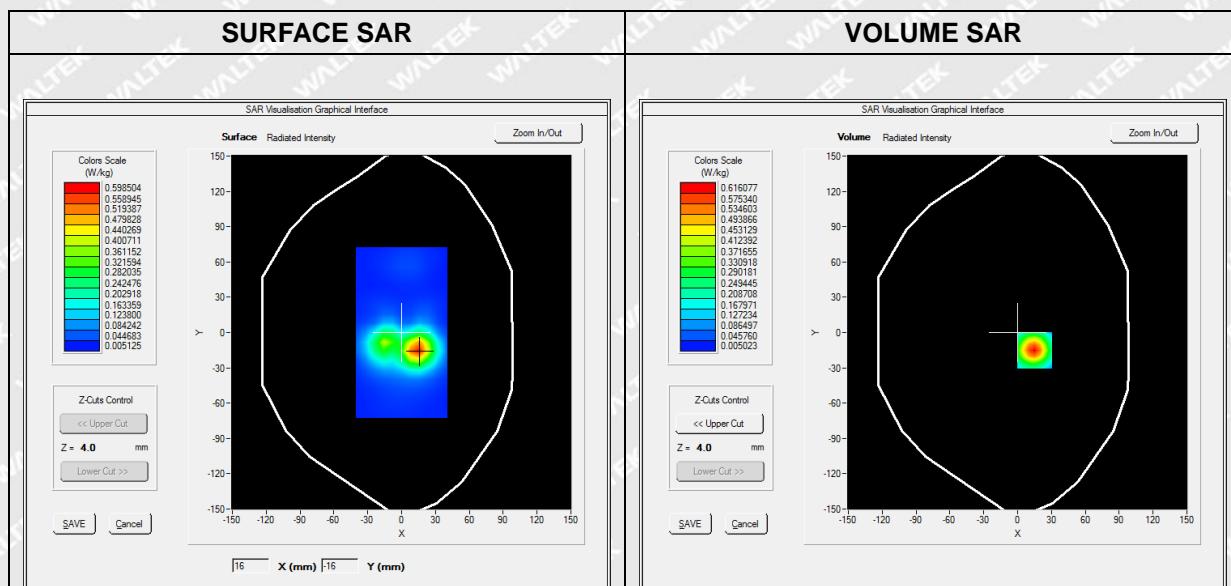
Measurement duration: 12 minutes 3 seconds

## A. Experimental conditions

|                        |                            |
|------------------------|----------------------------|
| <b>Area Scan</b>       | dx=8mm dy=8mm              |
| <b>Zoom Scan</b>       | dx=5mm dy=5mm dz=4mm       |
| <b>Phantom</b>         | Flat Plane                 |
| <b>Device Position</b> | Back                       |
| <b>Band</b>            | FDD-LTE Band 7_QPSK, 20MHz |
| <b>Channels</b>        | Middle                     |
| <b>Signal</b>          | Duty Cycle: 1:1            |

## B. SAR Measurement Results

|  |             |
|--|-------------|
| <b>Frequency (MHz)</b>                   | 2535.000000 |
| <b>Relative Permittivity (real part)</b> | 39.441276   |
| <b>Conductivity (S/m)</b>                | 1.943859    |
| <b>Power Variation (%)</b>               | 1.569100    |
| <b>Ambient Temperature</b>               | 22.2        |
| <b>Liquid Temperature</b>                | 22.2        |

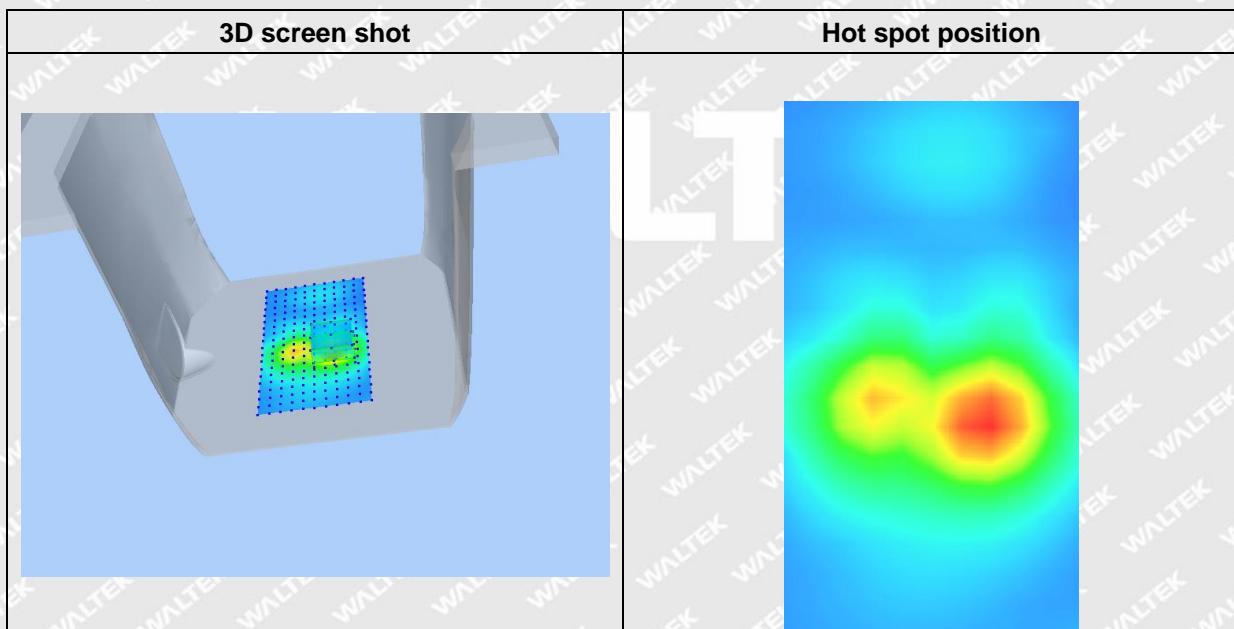
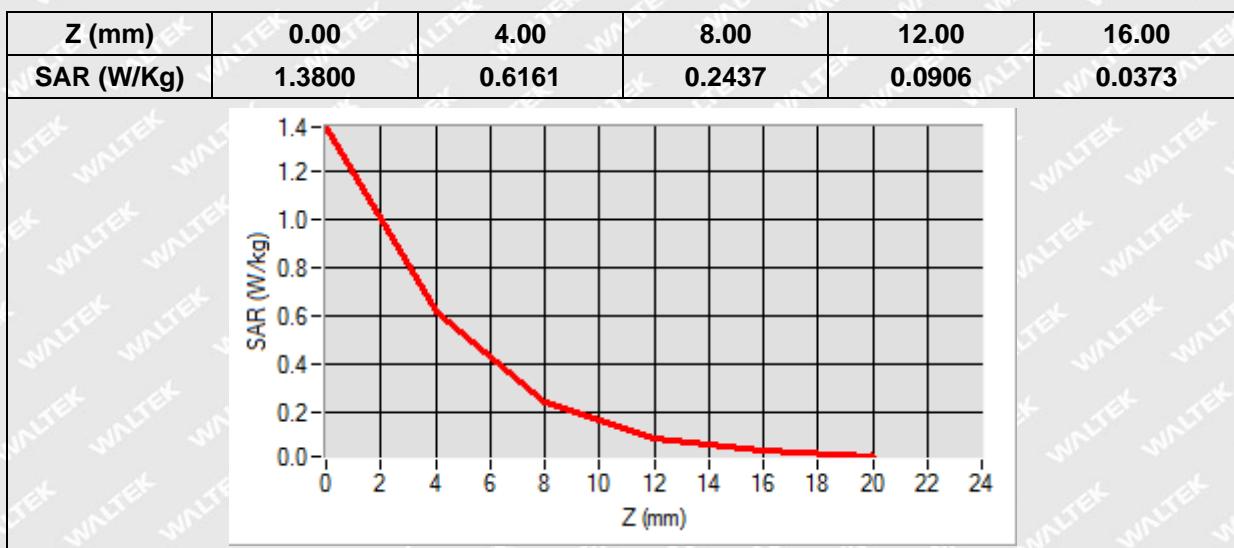


Maximum location: X=15.00, Y=-15.00

SAR Peak: 1.38 W/kg



|                       |                 |
|-----------------------|-----------------|
| <b>SAR 10g (W/Kg)</b> | <b>0.234179</b> |
| <b>SAR 1g (W/Kg)</b>  | <b>0.573964</b> |





# MEASUREMENT 21

Type: Phone measurement (Complete)

Date of measurement: 2023-06-23

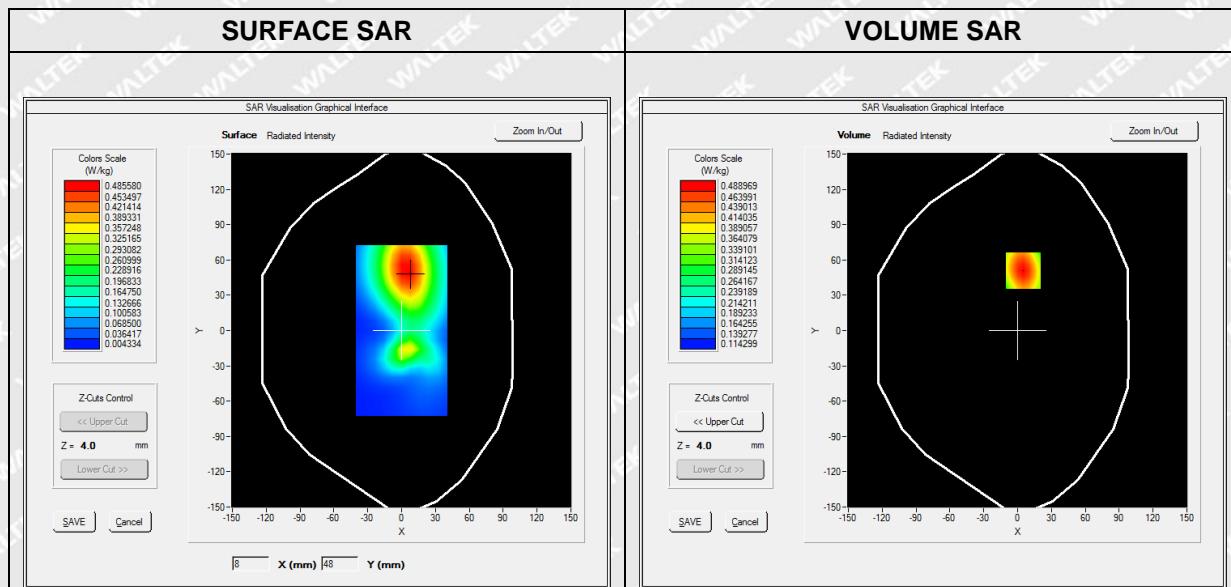
Measurement duration: 12 minutes 3 seconds

## A. Experimental conditions

|                        |                            |
|------------------------|----------------------------|
| <b>Area Scan</b>       | dx=8mm dy=8mm              |
| <b>Zoom Scan</b>       | dx=5mm dy=5mm dz=4mm       |
| <b>Phantom</b>         | Flat Plane                 |
| <b>Device Position</b> | Back                       |
| <b>Band</b>            | FDD-LTE Band 8_QPSK, 10MHz |
| <b>Channels</b>        | Low                        |
| <b>Signal</b>          | Duty Cycle: 1:1            |

## B. SAR Measurement Results

|  |            |
|--|------------|
| <b>Frequency (MHz)</b>                   | 885.000000 |
| <b>Relative Permittivity (real part)</b> | 41.373914  |
| <b>Conductivity (S/m)</b>                | 0.892861   |
| <b>Power Variation (%)</b>               | 2.261100   |
| <b>Ambient Temperature</b>               | 22.2       |
| <b>Liquid Temperature</b>                | 22.2       |

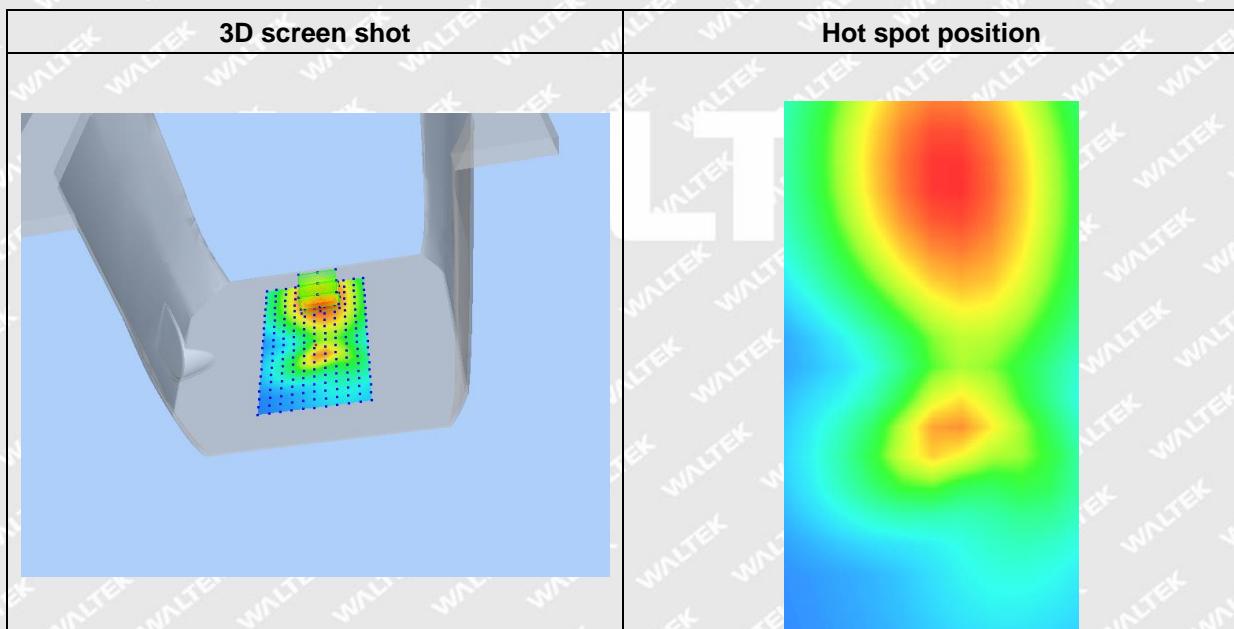
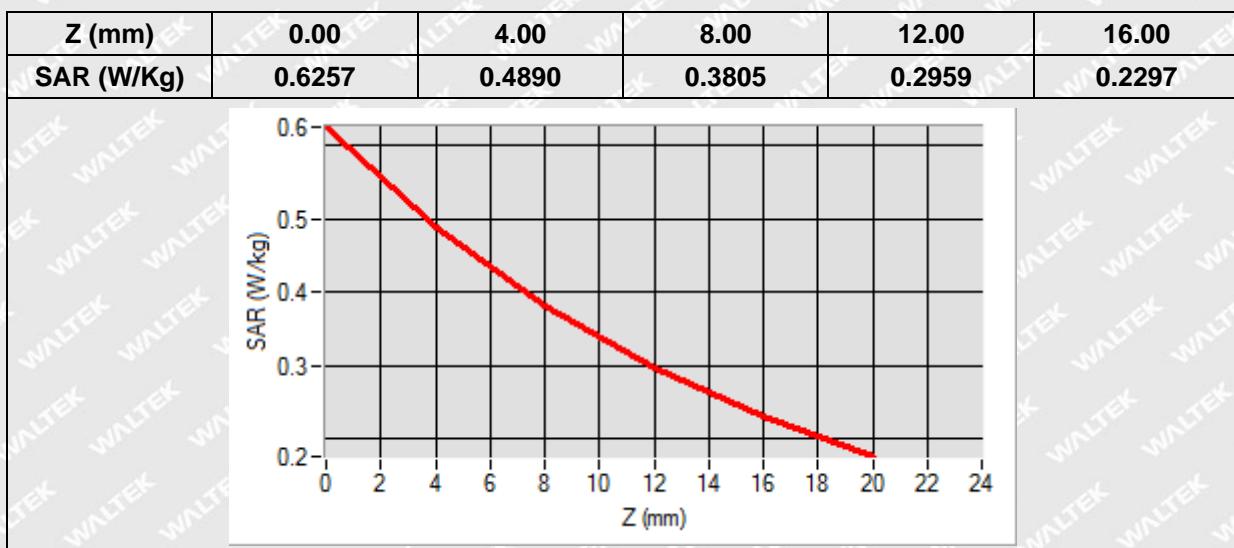


Maximum location: X=5.00, Y=51.00

SAR Peak: 0.63 W/kg



|                       |                 |
|-----------------------|-----------------|
| <b>SAR 10g (W/Kg)</b> | <b>0.320739</b> |
| <b>SAR 1g (W/Kg)</b>  | <b>0.464104</b> |





# MEASUREMENT 22

Type: Phone measurement (Complete)

Date of measurement: 2023-06-23

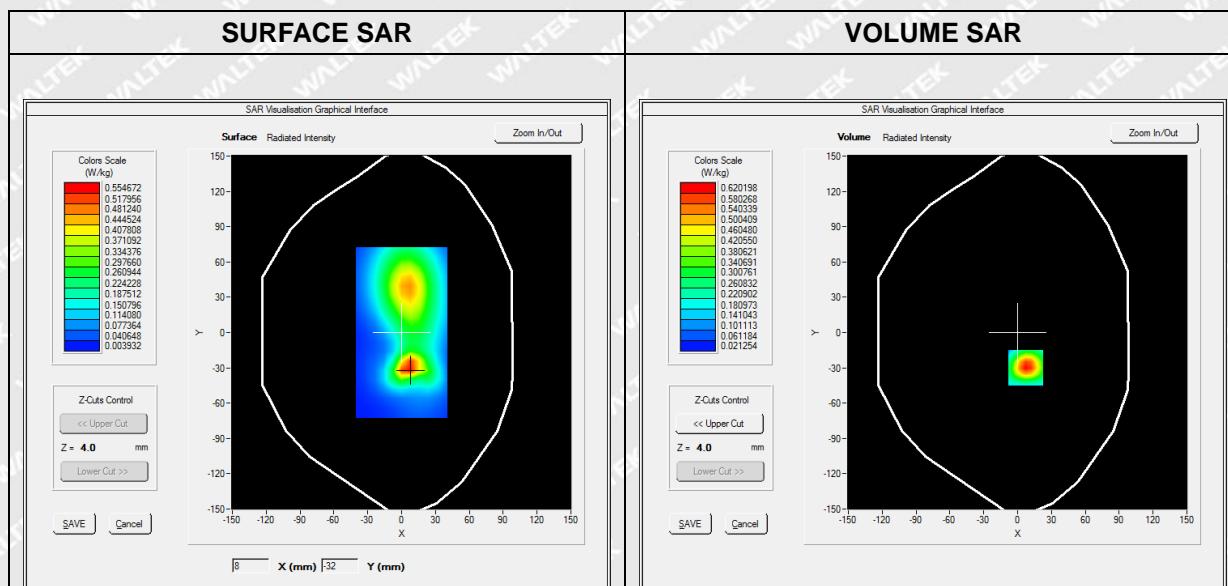
Measurement duration: 12 minutes 3 seconds

## A. Experimental conditions

|                        |                             |
|------------------------|-----------------------------|
| <b>Area Scan</b>       | dx=8mm dy=8mm               |
| <b>Zoom Scan</b>       | dx=5mm dy=5mm dz=4mm        |
| <b>Phantom</b>         | Flat Plane                  |
| <b>Device Position</b> | Back                        |
| <b>Band</b>            | FDD-LTE Band 20_QPSK, 20MHz |
| <b>Channels</b>        | Middle                      |
| <b>Signal</b>          | Duty Cycle: 1:1.58          |

## B. SAR Measurement Results

|  |            |
|--|------------|
| <b>Frequency (MHz)</b>                   | 847.000000 |
| <b>Relative Permittivity (real part)</b> | 41.374538  |
| <b>Conductivity (S/m)</b>                | 0.892591   |
| <b>Power Variation (%)</b>               | -1.144500  |
| <b>Ambient Temperature</b>               | 22.2       |
| <b>Liquid Temperature</b>                | 22.2       |

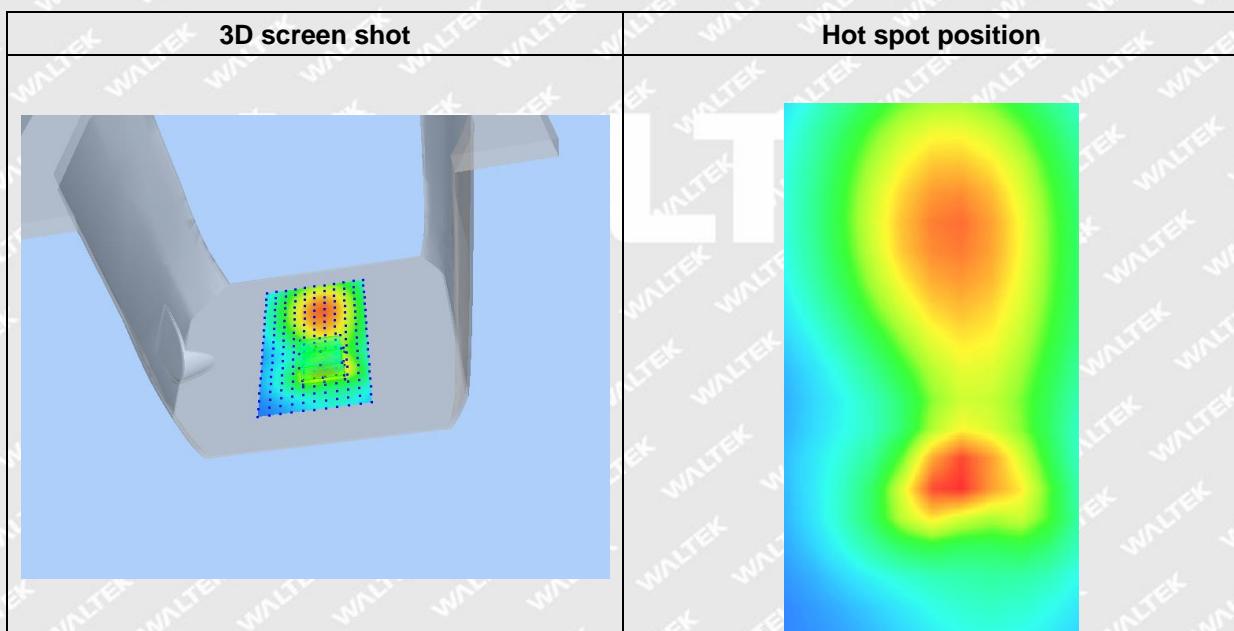
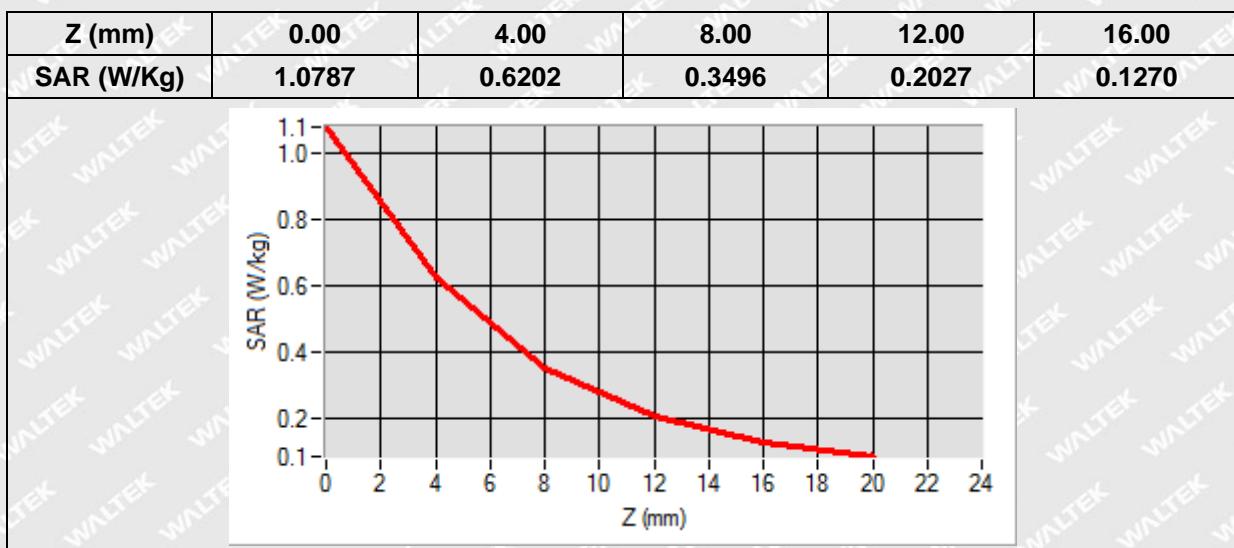


Maximum location: X=7.00, Y=-30.00

SAR Peak: 1.09 W/kg



|                       |                 |
|-----------------------|-----------------|
| <b>SAR 10g (W/Kg)</b> | <b>0.276228</b> |
| <b>SAR 1g (W/Kg)</b>  | <b>0.566460</b> |





# MEASUREMENT 23

Type: Phone measurement (Complete)

Date of measurement: 2023-06-23

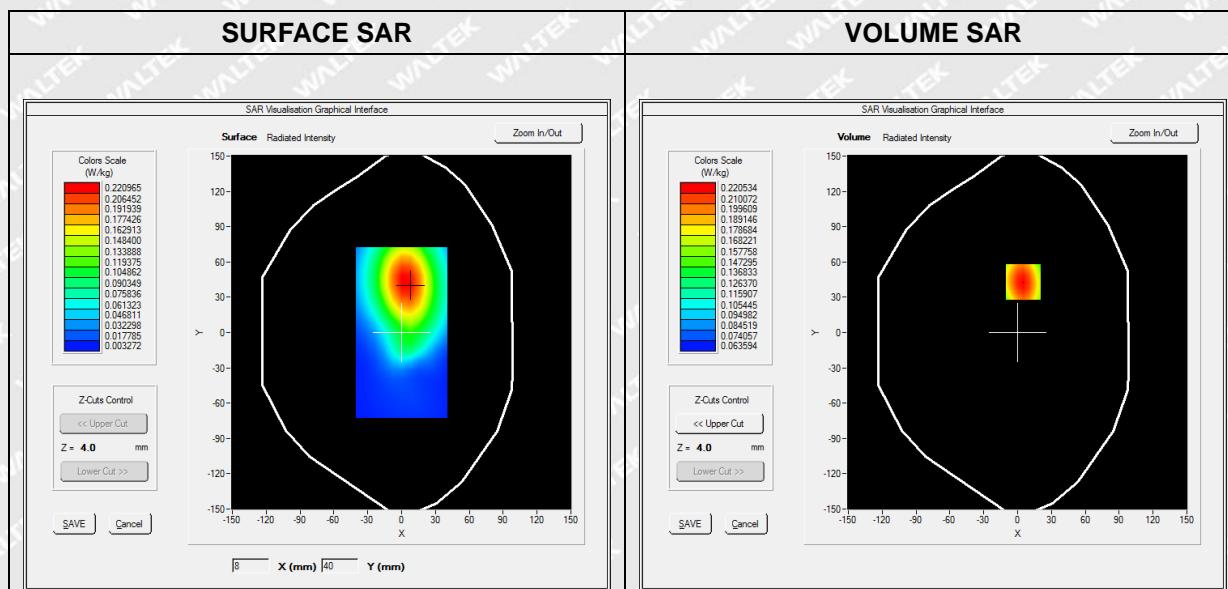
Measurement duration: 12 minutes 3 seconds

## A. Experimental conditions

|                        |                             |
|------------------------|-----------------------------|
| <b>Area Scan</b>       | dx=8mm dy=8mm               |
| <b>Zoom Scan</b>       | dx=5mm dy=5mm dz=4mm        |
| <b>Phantom</b>         | Flat Plane                  |
| <b>Device Position</b> | Back                        |
| <b>Band</b>            | FDD-LTE Band 28_QPSK, 20MHz |
| <b>Channels</b>        | Middle                      |
| <b>Signal</b>          | Duty Cycle: 1:1.58          |

## B. SAR Measurement Results

|  |            |
|--|------------|
| <b>Frequency (MHz)</b>                   | 725.000000 |
| <b>Relative Permittivity (real part)</b> | 41.463547  |
| <b>Conductivity (S/m)</b>                | 0.872541   |
| <b>Power Variation (%)</b>               | -1.174500  |
| <b>Ambient Temperature</b>               | 22.2       |
| <b>Liquid Temperature</b>                | 22.2       |

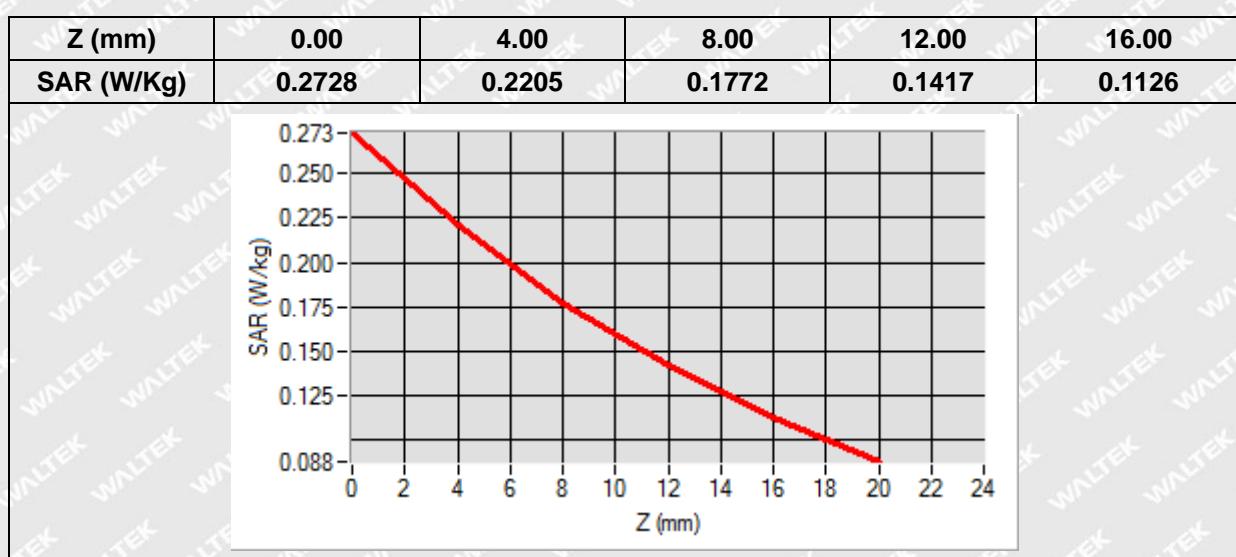


Maximum location: X=5.00, Y=43.00

SAR Peak: 0.27 W/kg



|                       |                 |
|-----------------------|-----------------|
| <b>SAR 10g (W/Kg)</b> | <b>0.163271</b> |
| <b>SAR 1g (W/Kg)</b>  | <b>0.214523</b> |





# MEASUREMENT 24

Type: Phone measurement (Complete)

Date of measurement: 2023-06-27

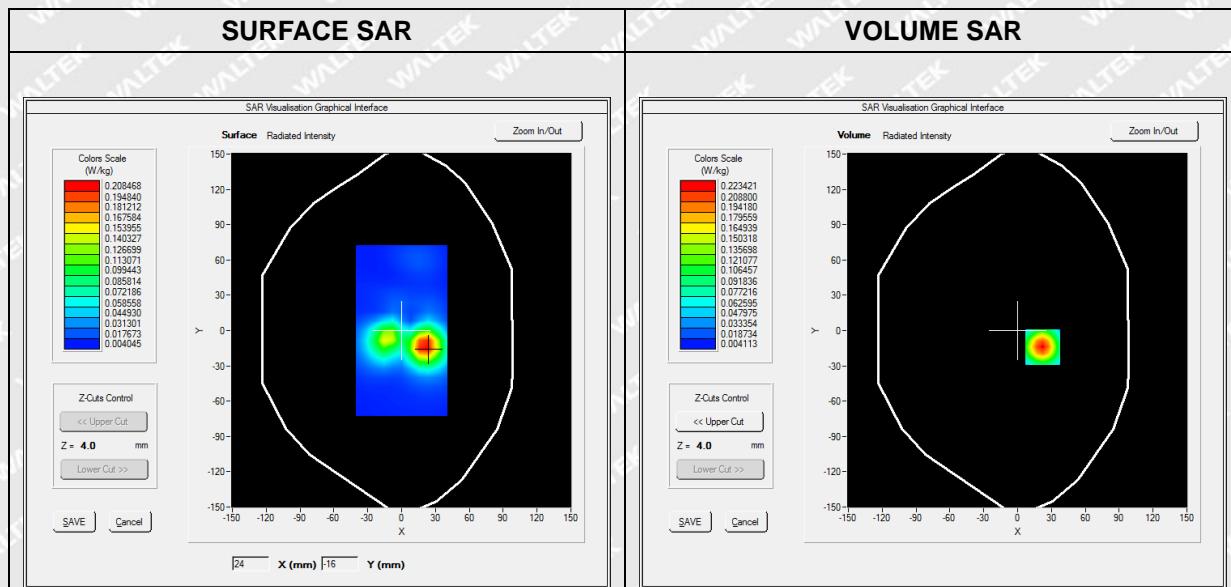
Measurement duration: 12 minutes 3 seconds

## A. Experimental conditions

|                        |                             |
|------------------------|-----------------------------|
| <b>Area Scan</b>       | dx=8mm dy=8mm               |
| <b>Zoom Scan</b>       | dx=5mm dy=5mm dz=4mm        |
| <b>Phantom</b>         | Flat Plane                  |
| <b>Device Position</b> | Back                        |
| <b>Band</b>            | TDD-LTE Band 38_QPSK, 20MHz |
| <b>Channels</b>        | High                        |
| <b>Signal</b>          | Duty Cycle: 1:1.58          |

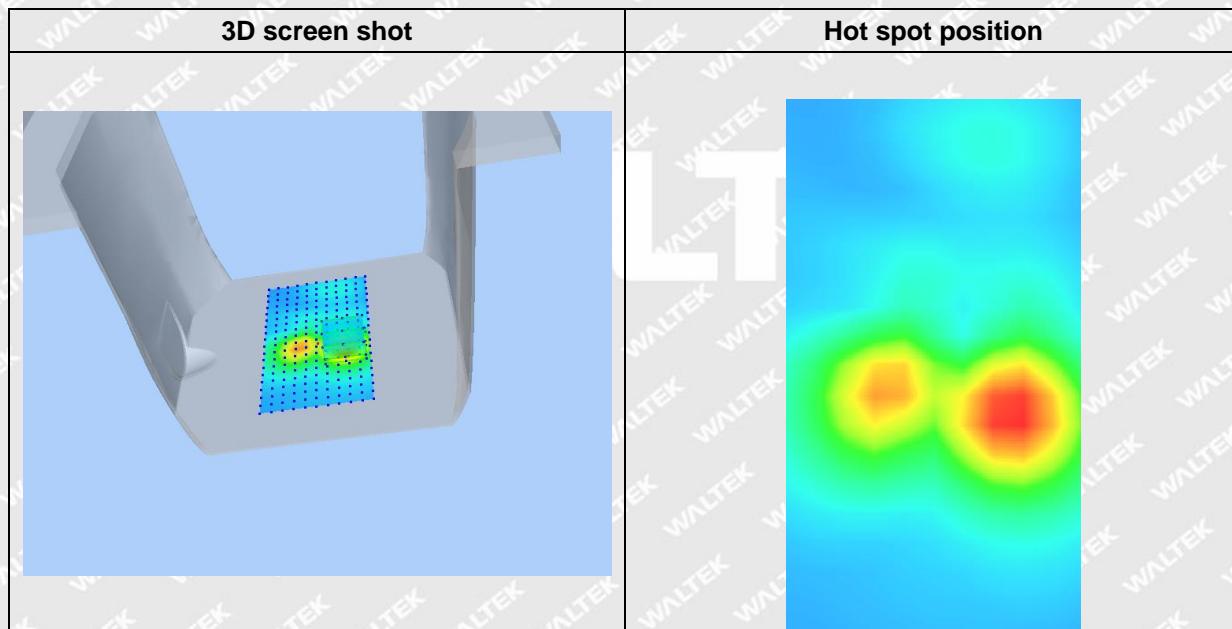
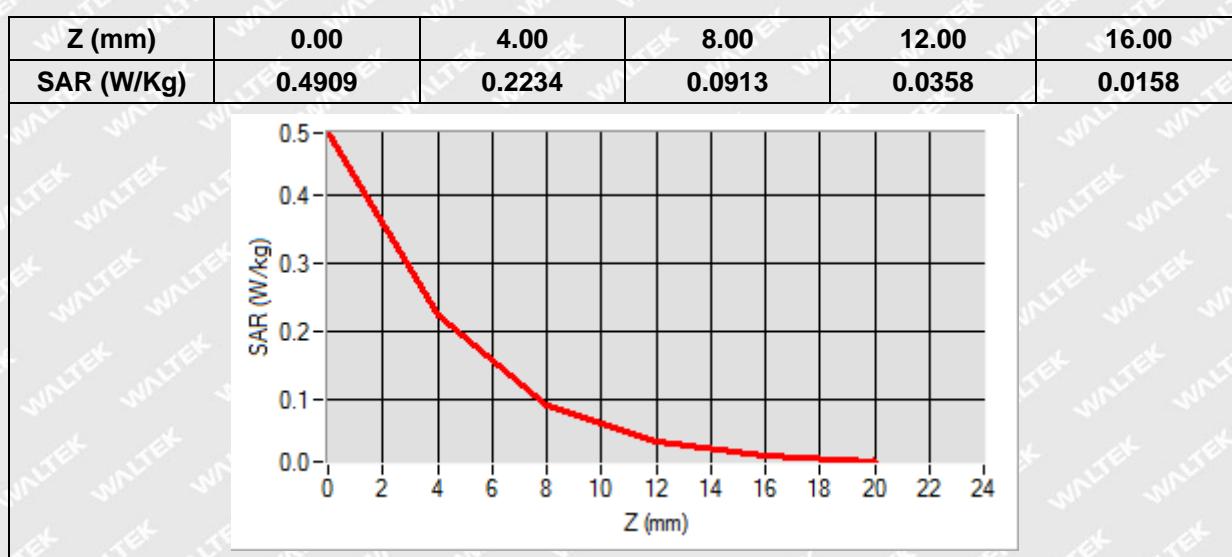
## B. SAR Measurement Results

|  |             |
|--|-------------|
| <b>Frequency (MHz)</b>                   | 2610.000000 |
| <b>Relative Permittivity (real part)</b> | 39.442643   |
| <b>Conductivity (S/m)</b>                | 1.944365    |
| <b>Power Variation (%)</b>               | 1.351800    |
| <b>Ambient Temperature</b>               | 22.2        |
| <b>Liquid Temperature</b>                | 22.2        |





|                       |                 |
|-----------------------|-----------------|
| <b>SAR 10g (W/Kg)</b> | <b>0.089048</b> |
| <b>SAR 1g (W/Kg)</b>  | <b>0.213073</b> |





# MEASUREMENT 25

Type: Phone measurement (Complete)

Date of measurement: 2023-06-27

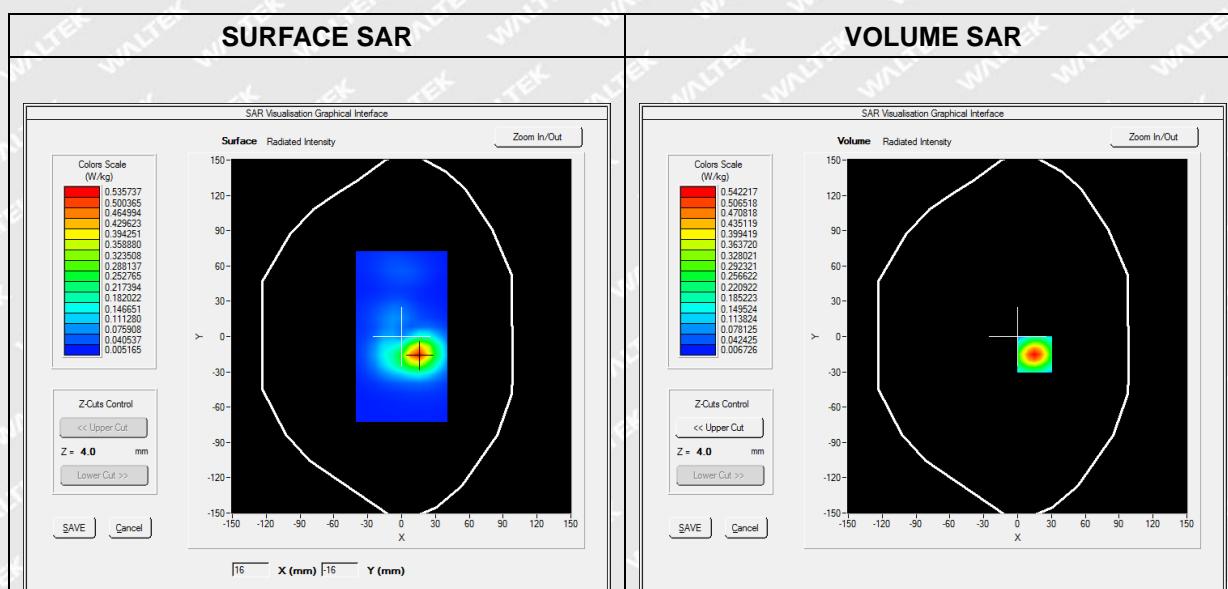
Measurement duration: 12 minutes 3 seconds

## A. Experimental conditions

|                        |                             |
|------------------------|-----------------------------|
| <b>Area Scan</b>       | dx=8mm dy=8mm               |
| <b>Zoom Scan</b>       | dx=5mm dy=5mm dz=4mm        |
| <b>Phantom</b>         | Flat Plane                  |
| <b>Device Position</b> | Back                        |
| <b>Band</b>            | TDD-LTE Band 40_QPSK, 20MHz |
| <b>Channels</b>        | High                        |
| <b>Signal</b>          | Duty Cycle: 1:1.58          |

## B. SAR Measurement Results

|  |             |
|--|-------------|
| <b>Frequency (MHz)</b>                   | 2390.000000 |
| <b>Relative Permittivity (real part)</b> | 39.163541   |
| <b>Conductivity (S/m)</b>                | 1.684281    |
| <b>Power Variation (%)</b>               | -1.093000   |
| <b>Ambient Temperature</b>               | 22.4        |
| <b>Liquid Temperature</b>                | 22.4        |

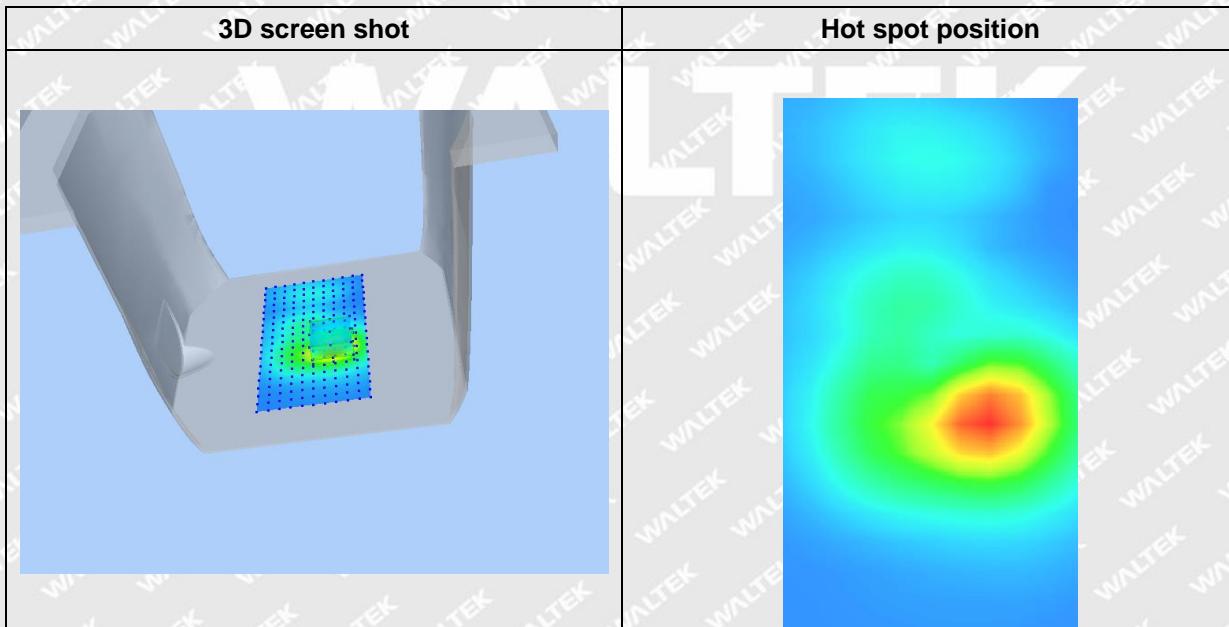
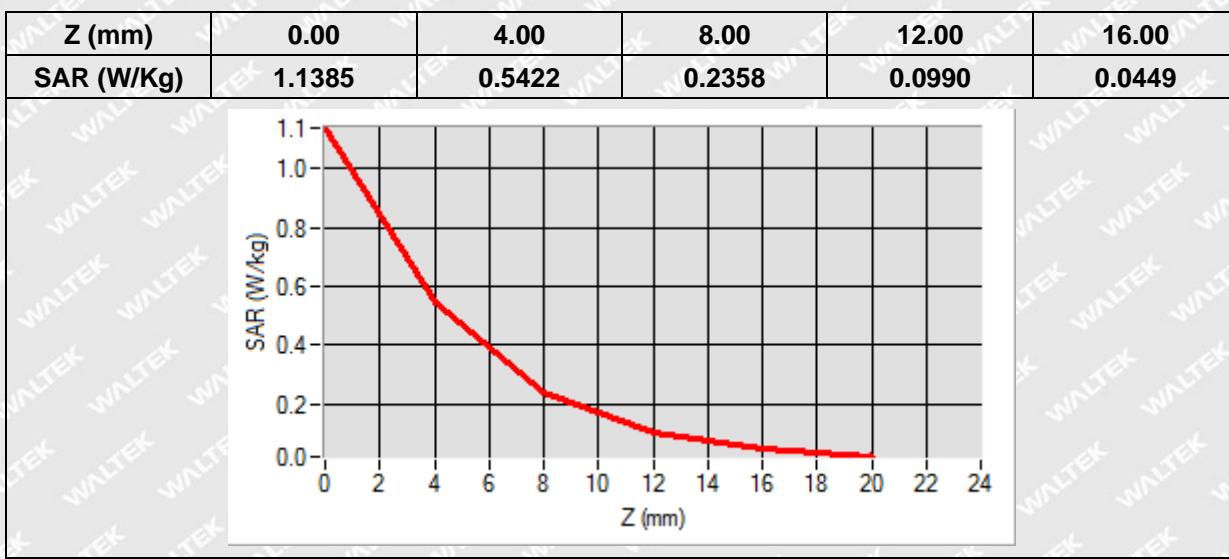


Maximum location: X=15.00, Y=-15.00



SAR Peak: 1.14 W/kg

|                |                 |
|----------------|-----------------|
| SAR 10g (W/Kg) | <b>0.208238</b> |
| SAR 1g (W/Kg)  | <b>0.496119</b> |





# MEASUREMENT 26

Type: Phone measurement (Complete)

Date of measurement: 2023-06-28

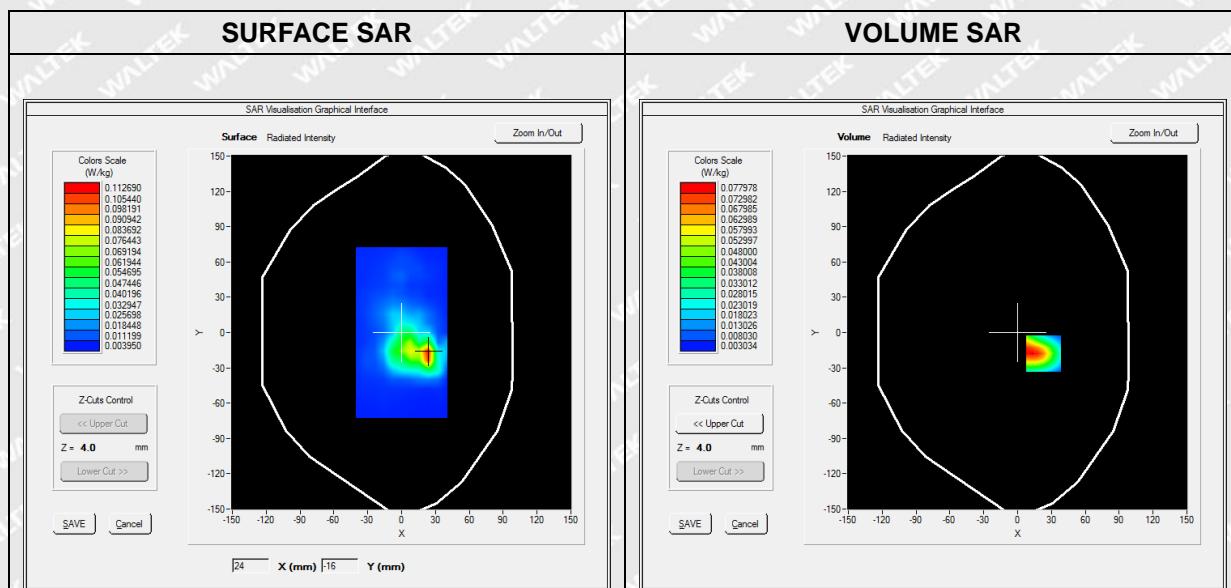
Measurement duration: 12 minutes 3 seconds

## A. Experimental conditions

|                        |                      |
|------------------------|----------------------|
| <b>Area Scan</b>       | dx=8mm dy=8mm        |
| <b>Zoom Scan</b>       | dx=5mm dy=5mm dz=4mm |
| <b>Phantom</b>         | Flat Plane           |
| <b>Device Position</b> | Back                 |
| <b>Band</b>            | WiFi_802.11b         |
| <b>Channels</b>        | Middle               |
| <b>Signal</b>          | Duty Cycle: 1:1      |

## B. SAR Measurement Results

|  |             |
|--|-------------|
| <b>Frequency (MHz)</b>                   | 2412.000000 |
| <b>Relative Permittivity (real part)</b> | 38.571558   |
| <b>Conductivity (S/m)</b>                | 1.783765    |
| <b>Power Variation (%)</b>               | 1.374700    |
| <b>Ambient Temperature</b>               | 22.4        |
| <b>Liquid Temperature</b>                | 22.4        |

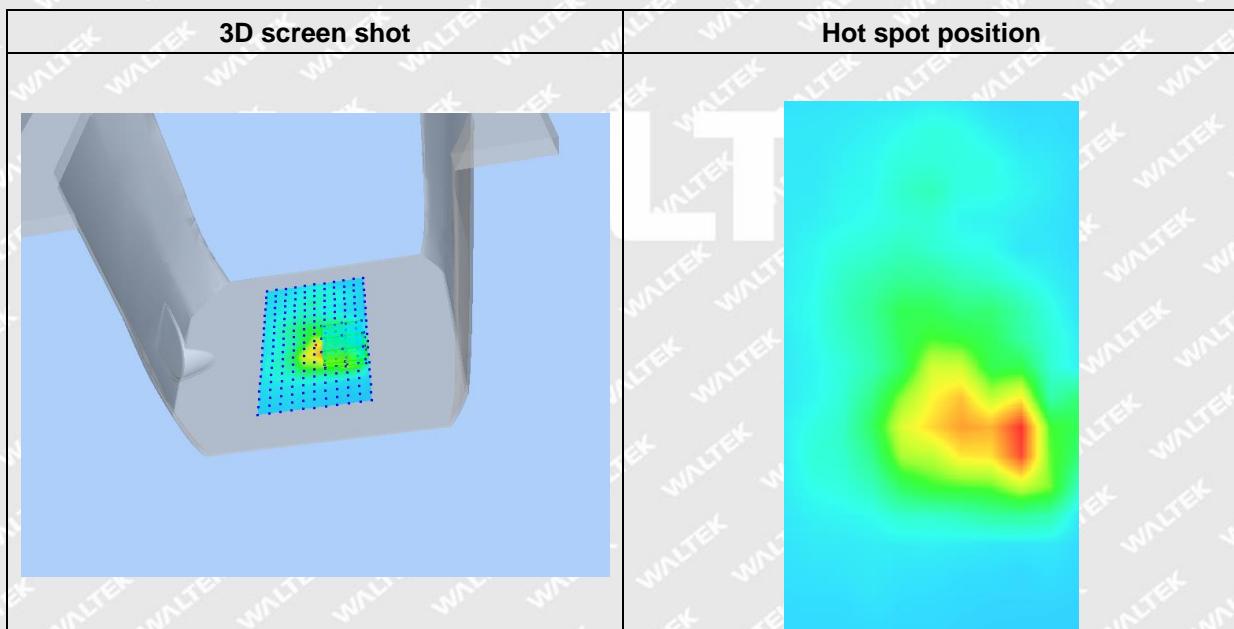
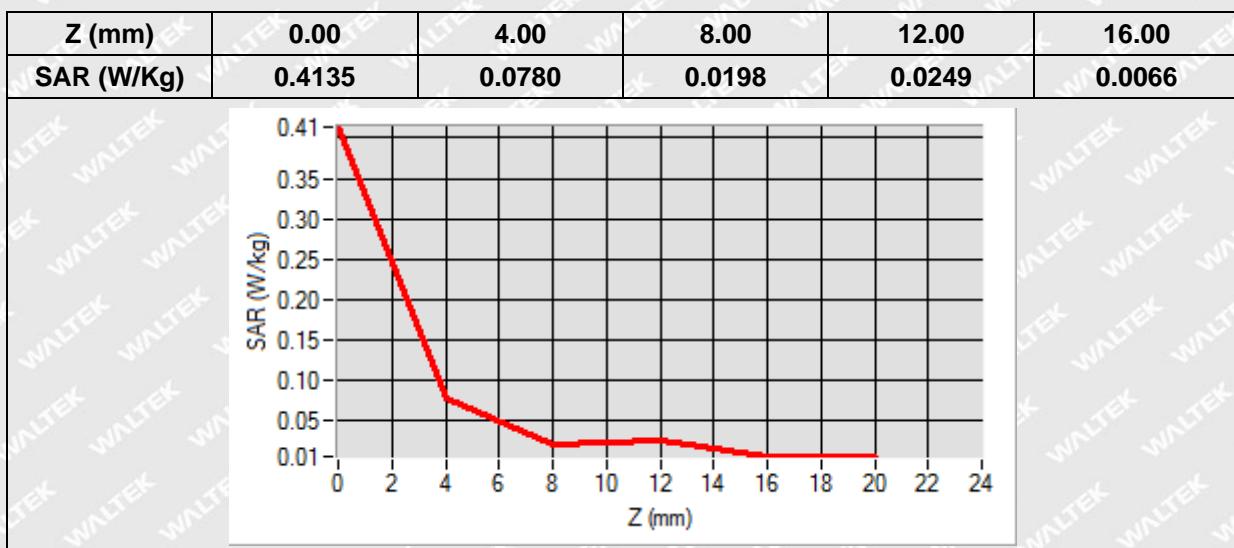


Maximum location: X=23.00, Y=-18.00

SAR Peak: 0.13 W/kg



|                       |                 |
|-----------------------|-----------------|
| <b>SAR 10g (W/Kg)</b> | <b>0.033842</b> |
| <b>SAR 1g (W/Kg)</b>  | <b>0.071441</b> |





# MEASUREMENT 27

Type: Phone measurement (Complete)

Date of measurement: 2023-06-23

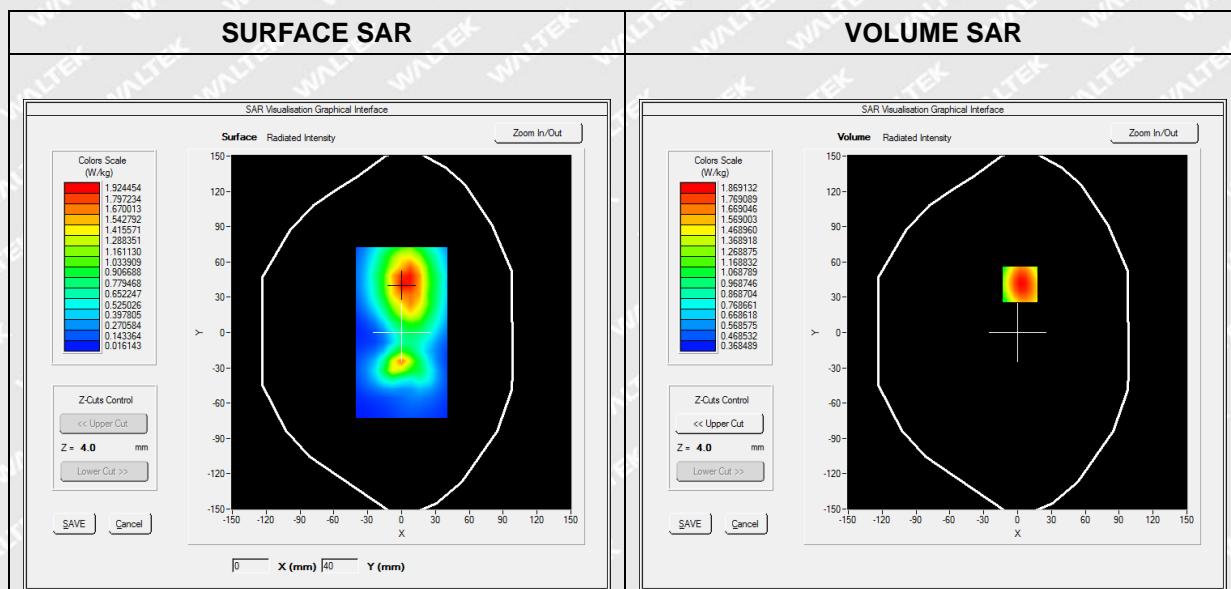
Measurement duration: 12 minutes 3 seconds

## A. Experimental conditions

|                        |                      |
|------------------------|----------------------|
| <b>Area Scan</b>       | dx=8mm dy=8mm        |
| <b>Zoom Scan</b>       | dx=5mm dy=5mm dz=4mm |
| <b>Phantom</b>         | Flat Plane           |
| <b>Device Position</b> | Back                 |
| <b>Band</b>            | GPRS900_4TX          |
| <b>Channels</b>        | Low                  |
| <b>Signal</b>          | Duty Cycle: 1:2      |

## B. SAR Measurement Results

|  |            |
|--|------------|
| <b>Frequency (MHz)</b>                   | 880.200000 |
| <b>Relative Permittivity (real part)</b> | 41.372485  |
| <b>Conductivity (S/m)</b>                | 0.894623   |
| <b>Power Variation (%)</b>               | 1.691100   |
| <b>Ambient Temperature</b>               | 22.2       |
| <b>Liquid Temperature</b>                | 22.2       |

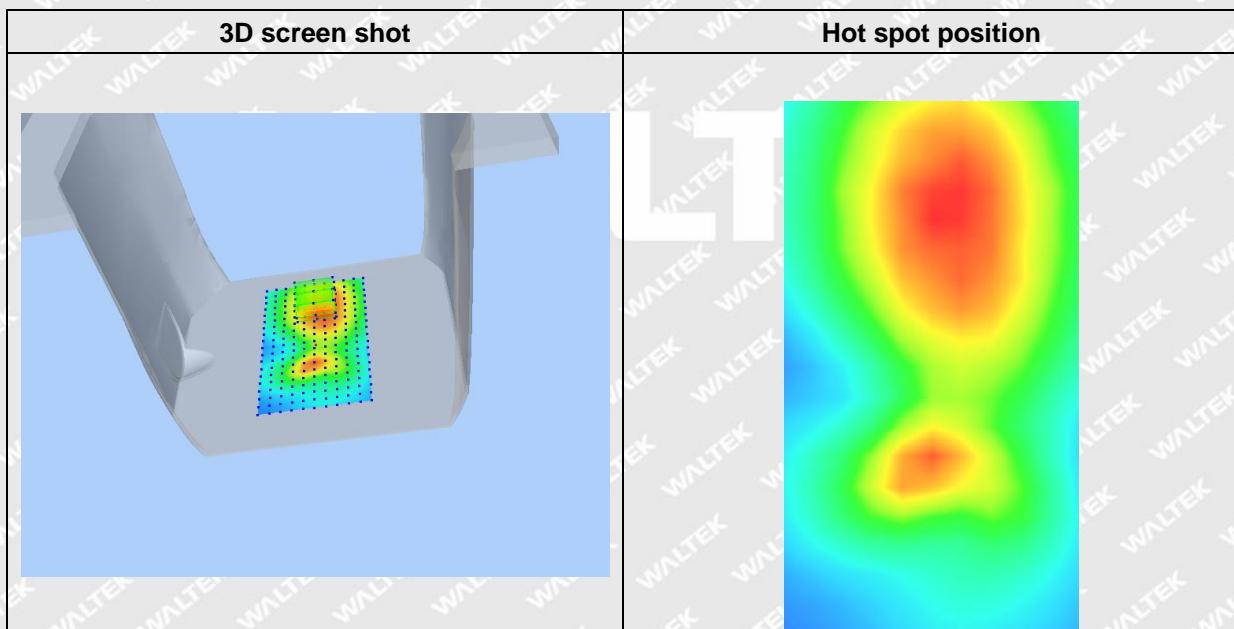
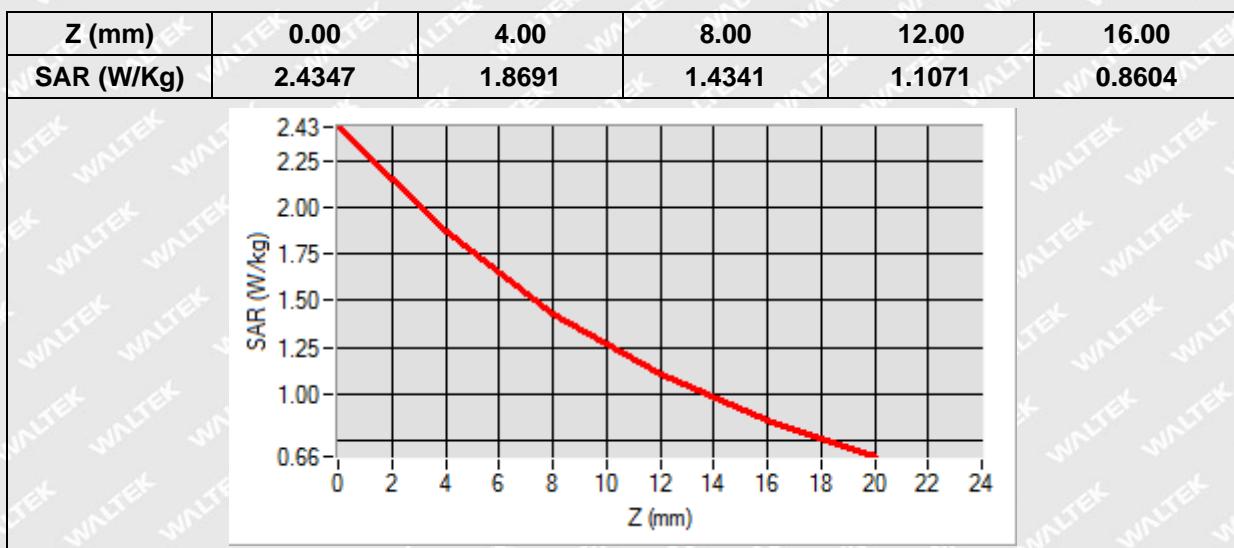


Maximum location: X=2.00, Y=41.00

SAR Peak: 2.45 W/kg



|                       |                 |
|-----------------------|-----------------|
| <b>SAR 10g (W/Kg)</b> | <b>1.216450</b> |
| <b>SAR 1g (W/Kg)</b>  | <b>1.782594</b> |





# MEASUREMENT 28

Type: Phone measurement (Complete)

Date of measurement: 2023-06-25

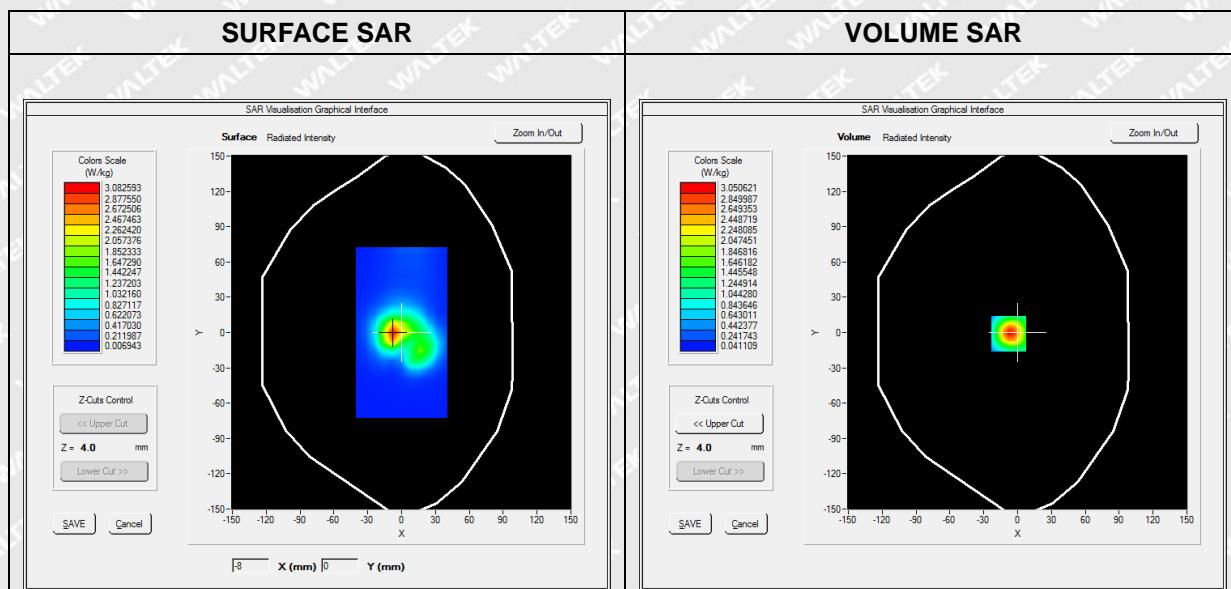
Measurement duration: 12 minutes 3 seconds

## A. Experimental conditions

|                        |                      |
|------------------------|----------------------|
| <b>Area Scan</b>       | dx=8mm dy=8mm        |
| <b>Zoom Scan</b>       | dx=5mm dy=5mm dz=4mm |
| <b>Phantom</b>         | Flat Plane           |
| <b>Device Position</b> | Back                 |
| <b>Band</b>            | GPRS1800_4TX         |
| <b>Channels</b>        | Middle               |
| <b>Signal</b>          | Duty Cycle: 1:2      |

## B. SAR Measurement Results

|  |             |
|--|-------------|
| <b>Frequency (MHz)</b>                   | 1747.400000 |
| <b>Relative Permittivity (real part)</b> | 39.361874   |
| <b>Conductivity (S/m)</b>                | 1.382410    |
| <b>Power Variation (%)</b>               | 1.641900    |
| <b>Ambient Temperature</b>               | 22.5        |
| <b>Liquid Temperature</b>                | 22.5        |

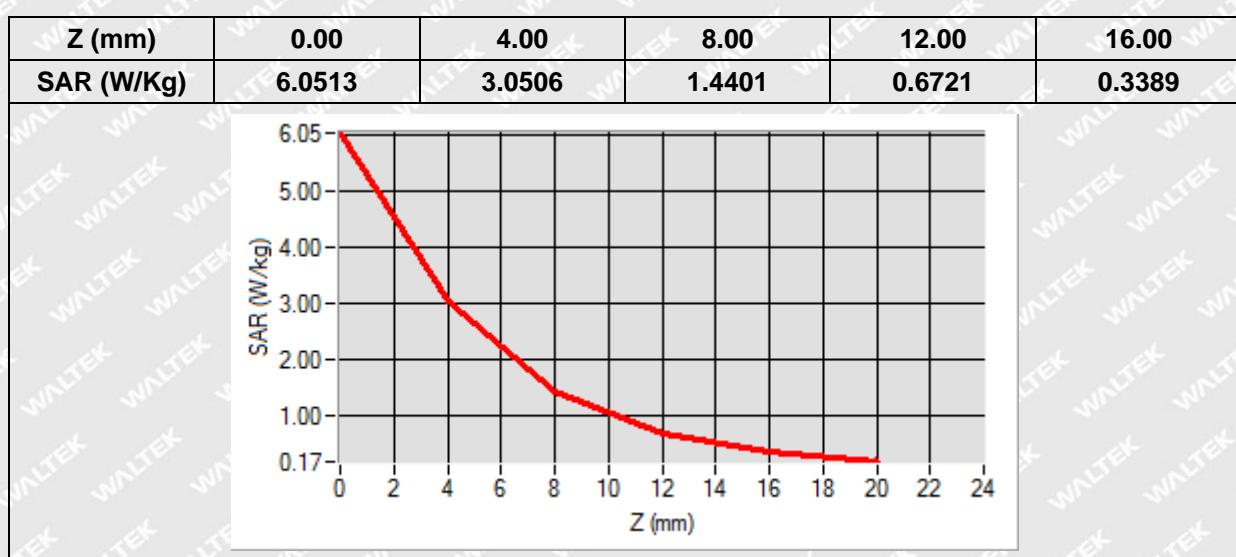


Maximum location: X=-8.00, Y=-1.00

SAR Peak: 6.09 W/kg



|                       |                 |
|-----------------------|-----------------|
| <b>SAR 10g (W/Kg)</b> | <b>1.213417</b> |
| <b>SAR 1g (W/Kg)</b>  | <b>2.802685</b> |





# MEASUREMENT 29

Type: Phone measurement (Complete)

Date of measurement: 2023-06-25

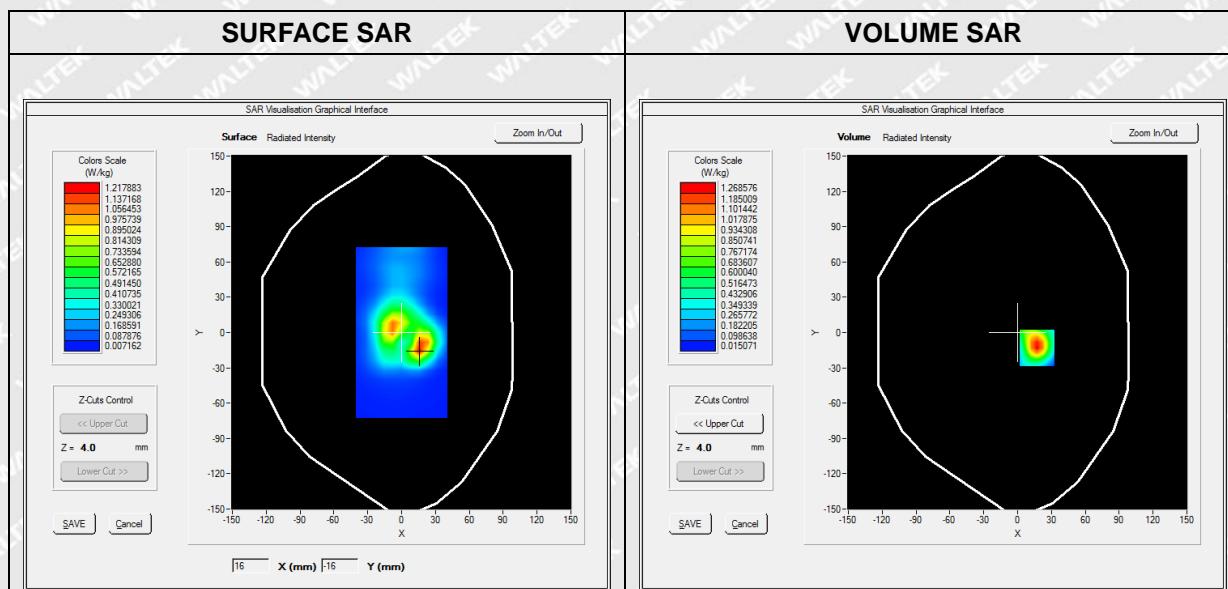
Measurement duration: 12 minutes 3 seconds

## A. Experimental conditions

|                        |                      |
|------------------------|----------------------|
| <b>Area Scan</b>       | dx=8mm dy=8mm        |
| <b>Zoom Scan</b>       | dx=5mm dy=5mm dz=4mm |
| <b>Phantom</b>         | Flat Plane           |
| <b>Device Position</b> | Back                 |
| <b>Band</b>            | WCDMA2100_RMC        |
| <b>Channels</b>        | Low                  |
| <b>Signal</b>          | Duty Cycle: 1:1      |

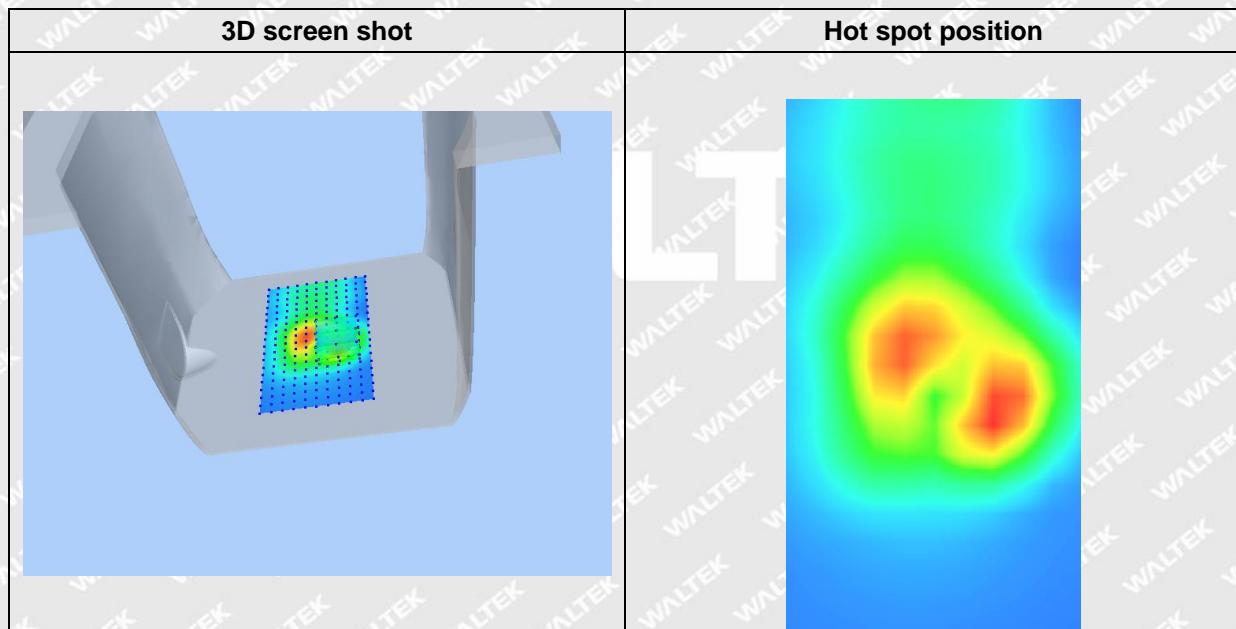
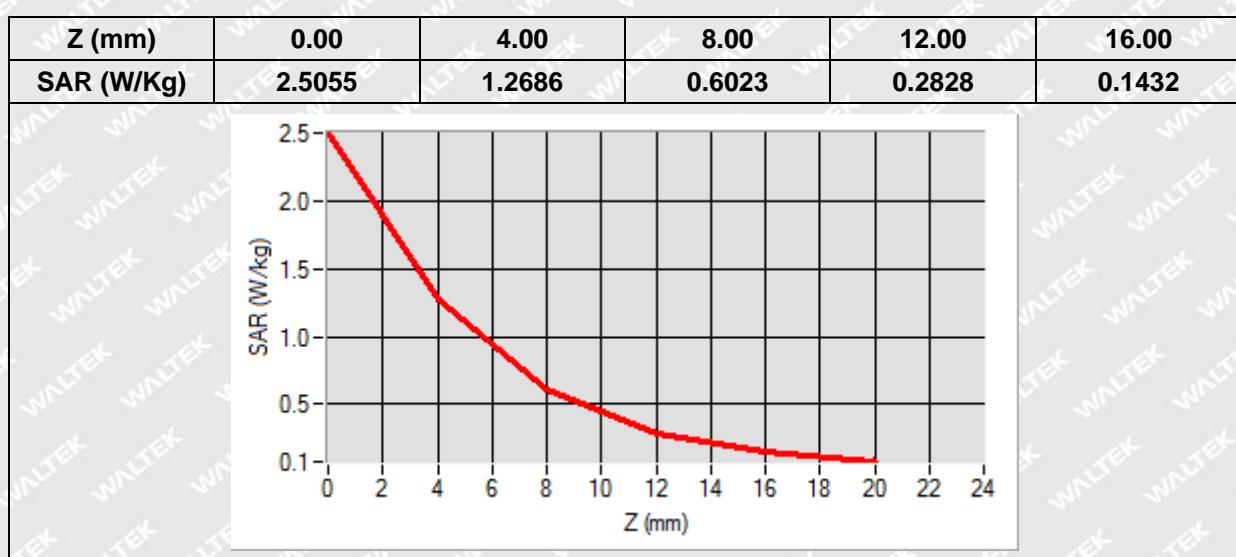
## B. SAR Measurement Results

|  |             |
|--|-------------|
| <b>Frequency (MHz)</b>                   | 1922.600000 |
| <b>Relative Permittivity (real part)</b> | 39.483654   |
| <b>Conductivity (S/m)</b>                | 1.382488    |
| <b>Power Variation (%)</b>               | 1.152300    |
| <b>Ambient Temperature</b>               | 22.5        |
| <b>Liquid Temperature</b>                | 22.5        |





|                       |                 |
|-----------------------|-----------------|
| <b>SAR 10g (W/Kg)</b> | <b>0.495059</b> |
| <b>SAR 1g (W/Kg)</b>  | <b>1.161290</b> |





# MEASUREMENT 30

Type: Phone measurement (Complete)

Date of measurement: 2023-06-23

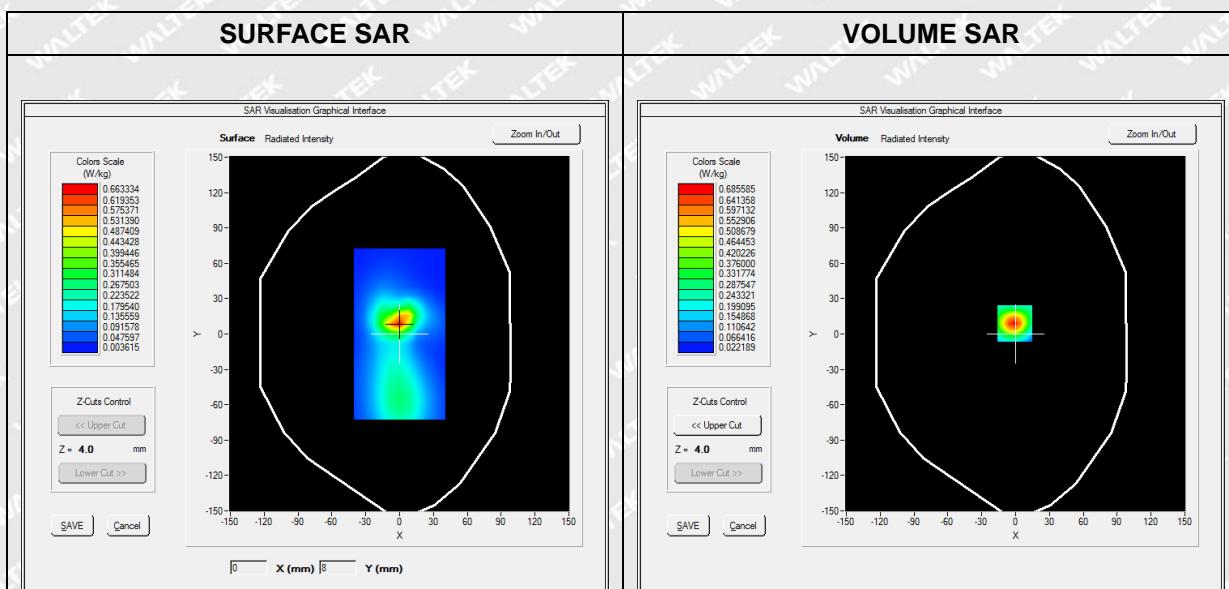
Measurement duration: 12 minutes 3 seconds

## A. Experimental conditions

|                        |                      |
|------------------------|----------------------|
| <b>Area Scan</b>       | dx=8mm dy=8mm        |
| <b>Zoom Scan</b>       | dx=5mm dy=5mm dz=4mm |
| <b>Phantom</b>         | Flat Plane           |
| <b>Device Position</b> | Back                 |
| <b>Band</b>            | WCDMA900_RMC         |
| <b>Channels</b>        | Middle               |
| <b>Signal</b>          | Duty Cycle: 1:1      |

## B. SAR Measurement Results

|  |            |
|--|------------|
| <b>Frequency (MHz)</b>                   | 897.600000 |
| <b>Relative Permittivity (real part)</b> | 40.283741  |
| <b>Conductivity (S/m)</b>                | 1.014126   |
| <b>Power Variation (%)</b>               | -1.124900  |
| <b>Ambient Temperature</b>               | 22.2       |
| <b>Liquid Temperature</b>                | 22.2       |



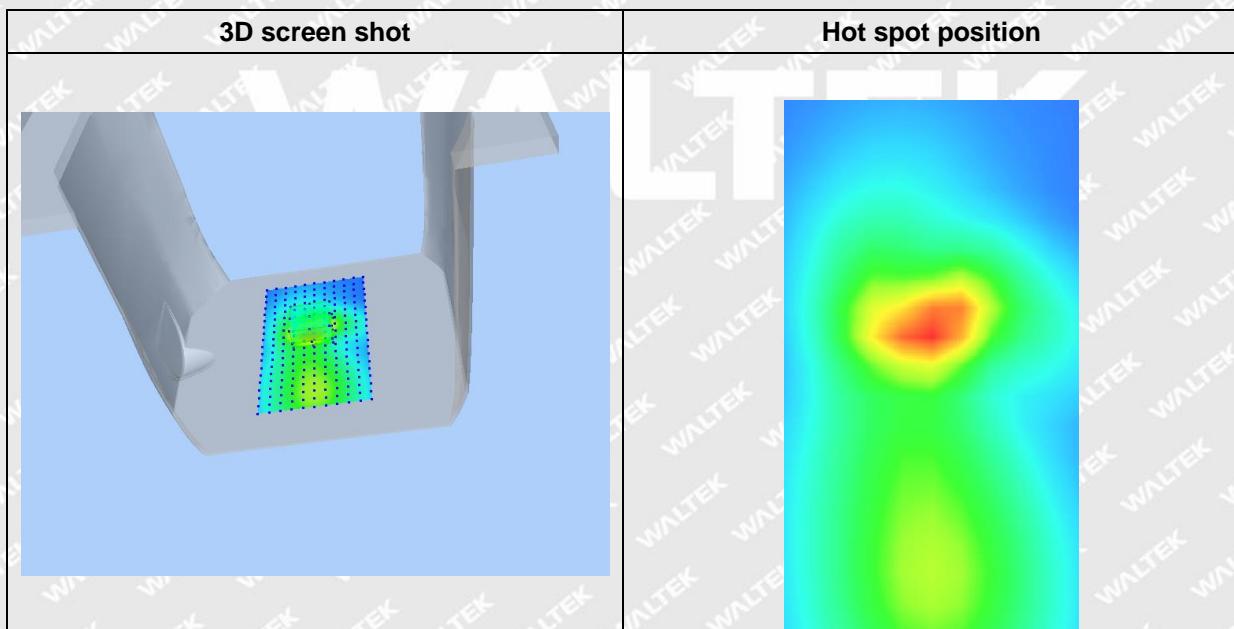
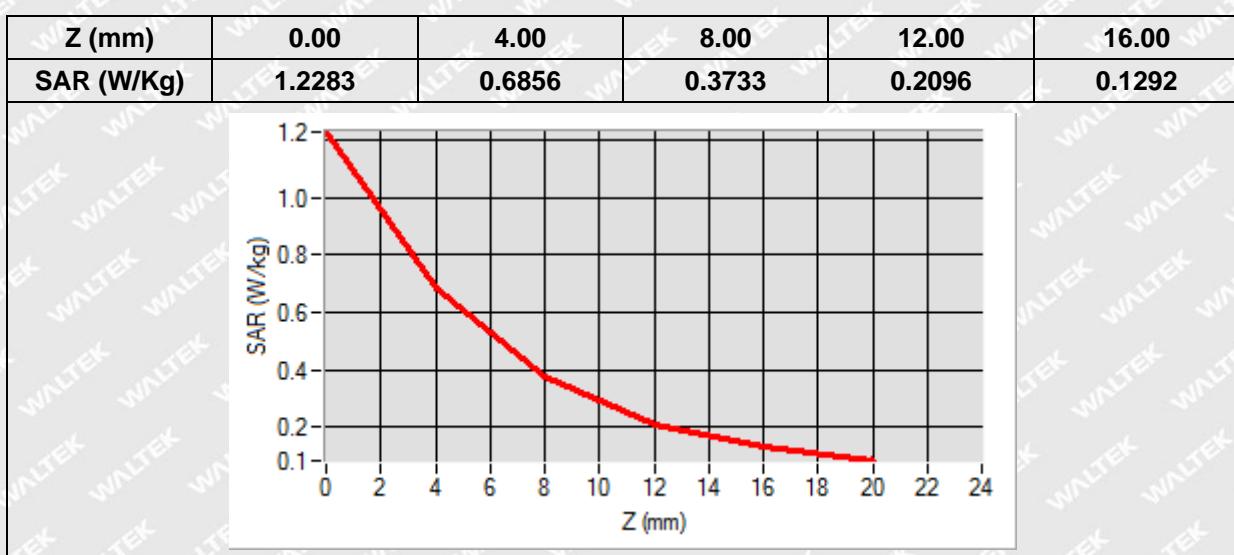
Maximum location: X=-1.00, Y=9.00

SAR Peak: 1.24 W/kg

|                       |                 |
|-----------------------|-----------------|
| <b>SAR 10g (W/Kg)</b> | <b>0.310389</b> |
|-----------------------|-----------------|



|                      |                 |
|----------------------|-----------------|
| <b>SAR 1g (W/Kg)</b> | <b>0.618866</b> |
|----------------------|-----------------|





# MEASUREMENT 31

Type: Phone measurement (Complete)

Date of measurement: 2023-06-25

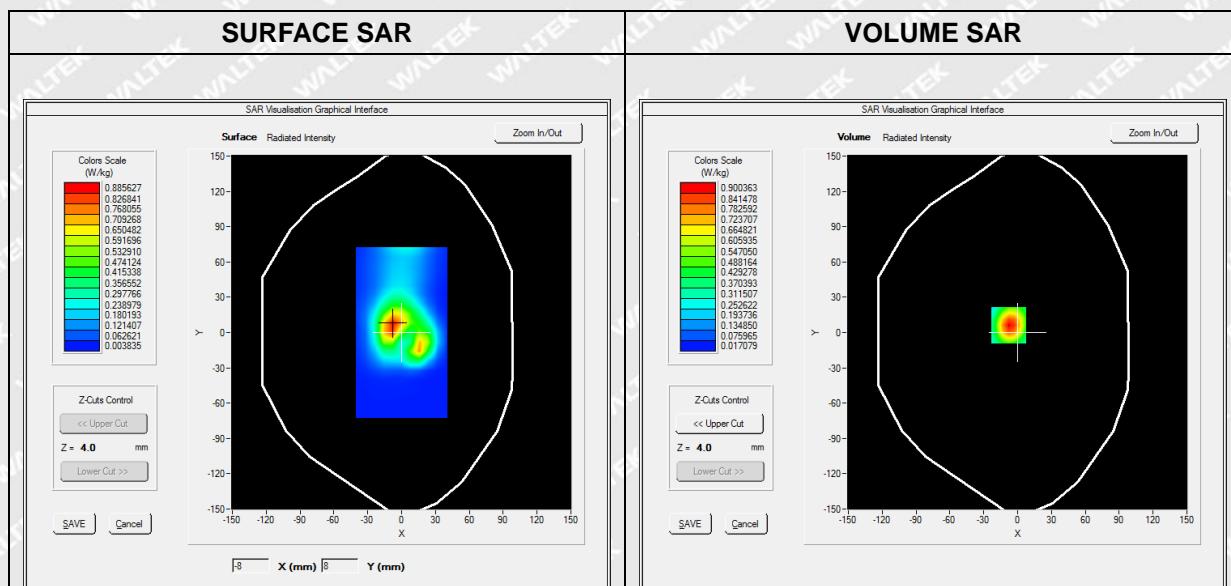
Measurement duration: 12 minutes 3 seconds

## A. Experimental conditions

|                        |                            |
|------------------------|----------------------------|
| <b>Area Scan</b>       | dx=8mm dy=8mm              |
| <b>Zoom Scan</b>       | dx=5mm dy=5mm dz=4mm       |
| <b>Phantom</b>         | Flat Plane                 |
| <b>Device Position</b> | Back                       |
| <b>Band</b>            | FDD-LTE Band 1_QPSK, 20MHz |
| <b>Channels</b>        | High                       |
| <b>Signal</b>          | Duty Cycle: 1:1            |

## B. SAR Measurement Results

|  |             |
|--|-------------|
| <b>Frequency (MHz)</b>                   | 1970.000000 |
| <b>Relative Permittivity (real part)</b> | 39.482641   |
| <b>Conductivity (S/m)</b>                | 1.381482    |
| <b>Power Variation (%)</b>               | 1.425140    |
| <b>Ambient Temperature</b>               | 22.5        |
| <b>Liquid Temperature</b>                | 22.5        |

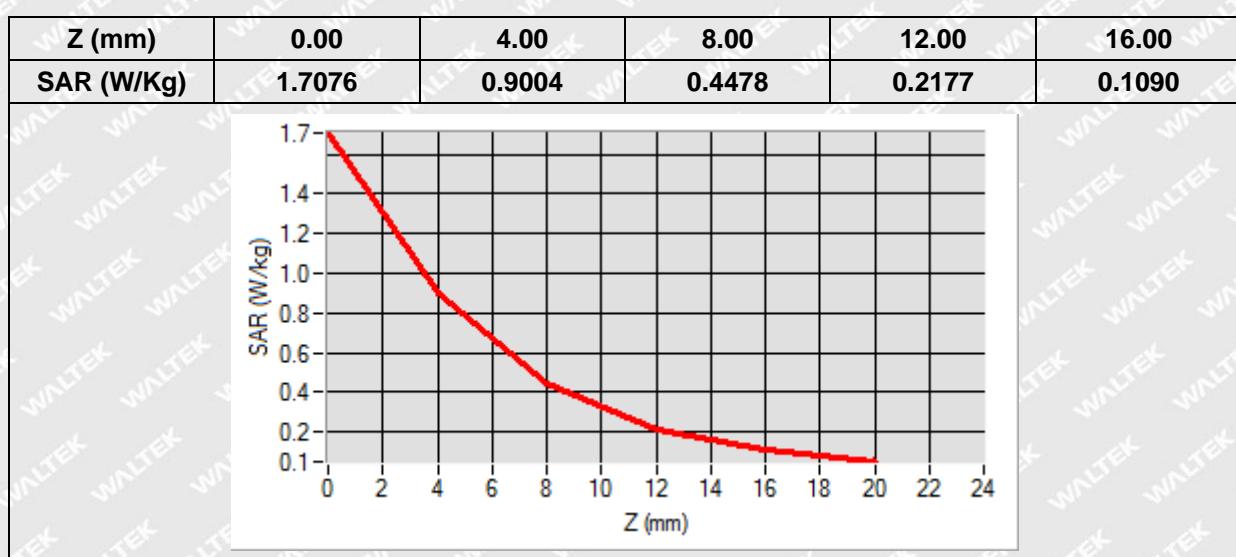


Maximum location: X=-8.00, Y=6.00

SAR Peak: 1.72 W/kg



|                       |                 |
|-----------------------|-----------------|
| <b>SAR 10g (W/Kg)</b> | <b>0.351412</b> |
| <b>SAR 1g (W/Kg)</b>  | <b>0.815767</b> |





# MEASUREMENT 32

Type: Phone measurement (Complete)

Date of measurement: 2023-06-25

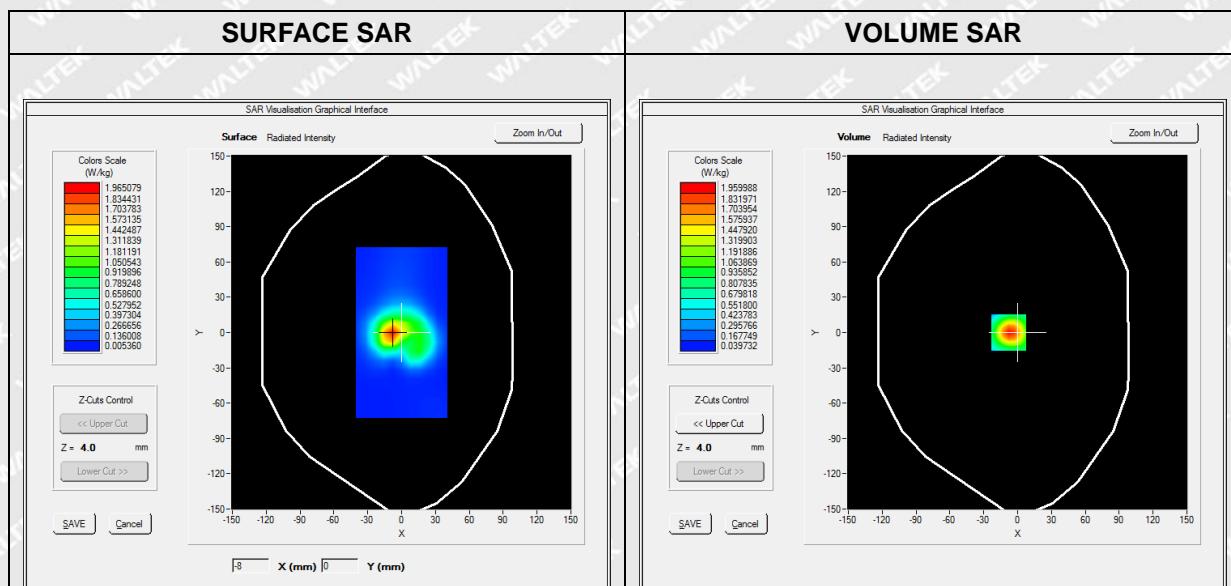
Measurement duration: 12 minutes 3 seconds

## A. Experimental conditions

|                        |                            |
|------------------------|----------------------------|
| <b>Area Scan</b>       | dx=8mm dy=8mm              |
| <b>Zoom Scan</b>       | dx=5mm dy=5mm dz=4mm       |
| <b>Phantom</b>         | Flat Plane                 |
| <b>Device Position</b> | Back                       |
| <b>Band</b>            | FDD-LTE Band 3_QPSK, 20MHz |
| <b>Channels</b>        | Low                        |
| <b>Signal</b>          | Duty Cycle: 1:1            |

## B. SAR Measurement Results

|  |             |
|--|-------------|
| <b>Frequency (MHz)</b>                   | 1720.000000 |
| <b>Relative Permittivity (real part)</b> | 39.361464   |
| <b>Conductivity (S/m)</b>                | 1.382190    |
| <b>Power Variation (%)</b>               | 2.521700    |
| <b>Ambient Temperature</b>               | 22.5        |
| <b>Liquid Temperature</b>                | 22.5        |

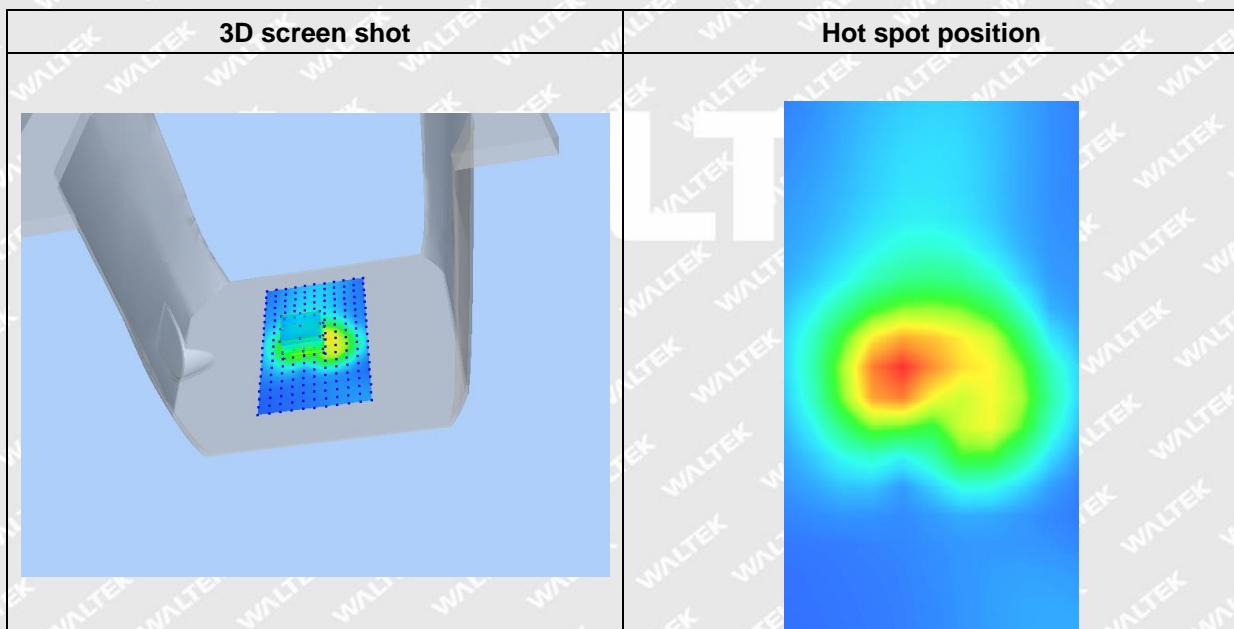
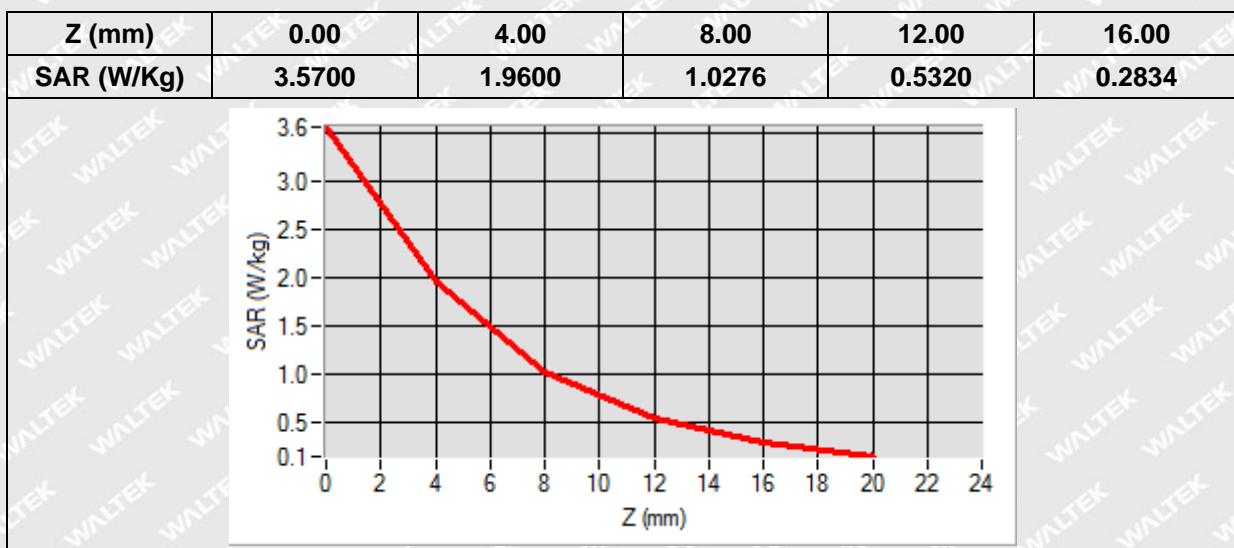


Maximum location: X=-8.00, Y=0.00

SAR Peak: 3.59 W/kg



|                       |                 |
|-----------------------|-----------------|
| <b>SAR 10g (W/Kg)</b> | <b>0.822866</b> |
| <b>SAR 1g (W/Kg)</b>  | <b>1.788641</b> |





# MEASUREMENT 33

Type: Phone measurement (Complete)

Date of measurement: 2023-06-27

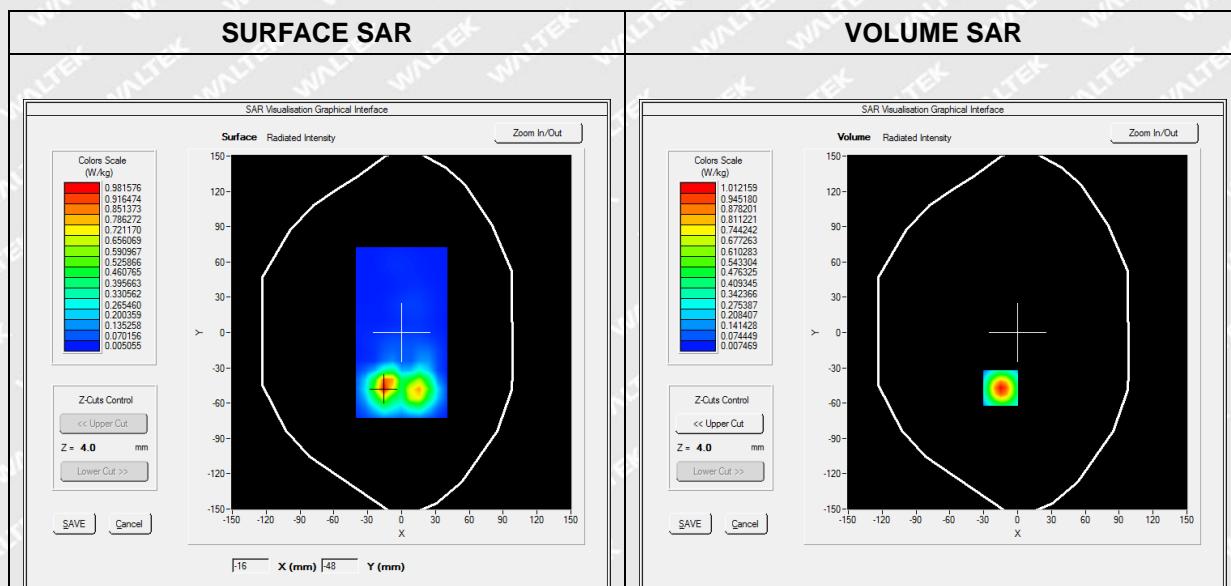
Measurement duration: 12 minutes 3 seconds

## A. Experimental conditions

|                        |                            |
|------------------------|----------------------------|
| <b>Area Scan</b>       | dx=8mm dy=8mm              |
| <b>Zoom Scan</b>       | dx=5mm dy=5mm dz=4mm       |
| <b>Phantom</b>         | Flat Plane                 |
| <b>Device Position</b> | Back                       |
| <b>Band</b>            | FDD-LTE Band 7_QPSK, 20MHz |
| <b>Channels</b>        | Low                        |
| <b>Signal</b>          | Duty Cycle: 1:1            |

## B. SAR Measurement Results

|  |             |
|--|-------------|
| <b>Frequency (MHz)</b>                   | 2510.000000 |
| <b>Relative Permittivity (real part)</b> | 39.442919   |
| <b>Conductivity (S/m)</b>                | 1.941452    |
| <b>Power Variation (%)</b>               | 2.447400    |
| <b>Ambient Temperature</b>               | 22.2        |
| <b>Liquid Temperature</b>                | 22.2        |

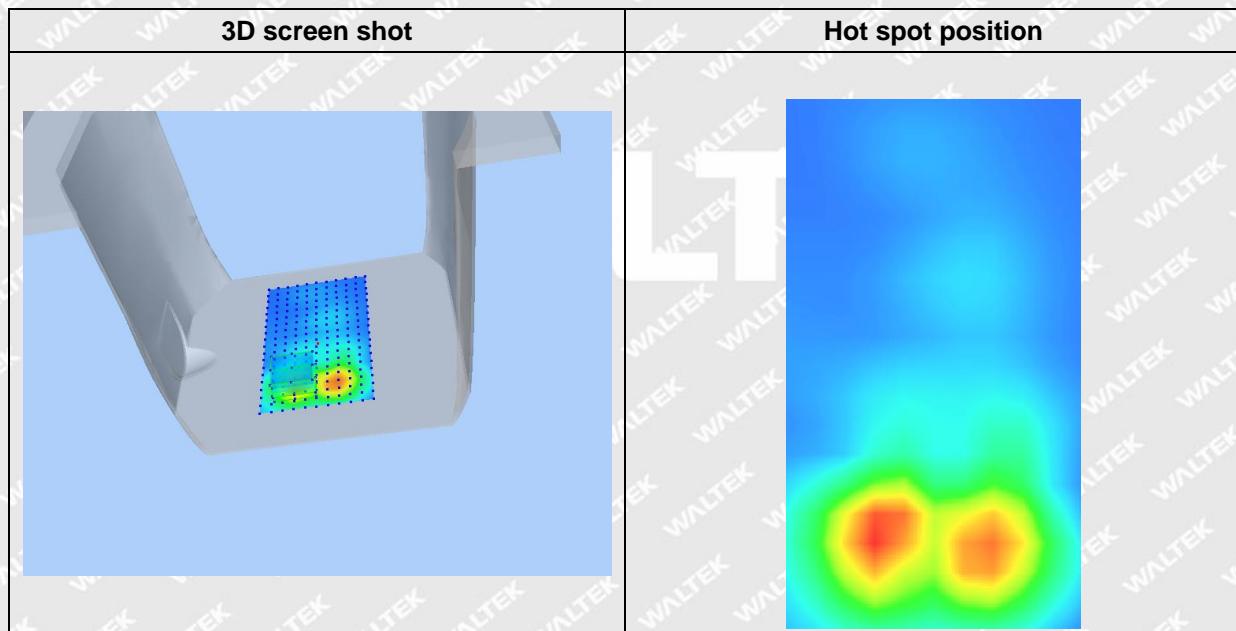
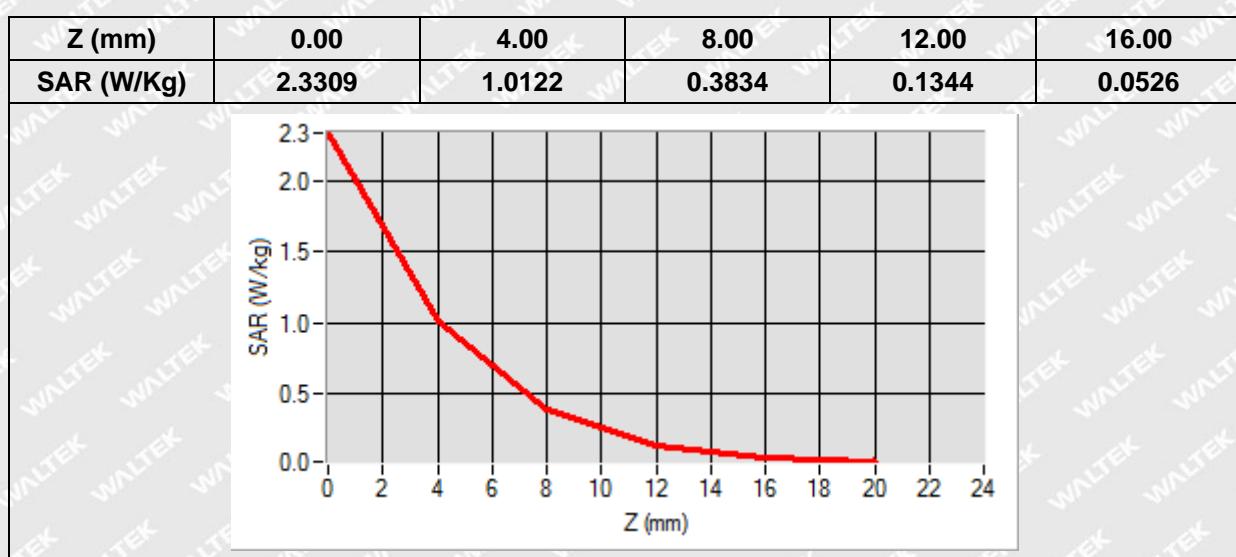


Maximum location: X=-15.00, Y=-47.00

SAR Peak: 2.33 W/kg



|                       |                 |
|-----------------------|-----------------|
| <b>SAR 10g (W/Kg)</b> | <b>0.372755</b> |
| <b>SAR 1g (W/Kg)</b>  | <b>0.940365</b> |





# MEASUREMENT 34

Type: Phone measurement (Complete)

Date of measurement: 2023-06-23

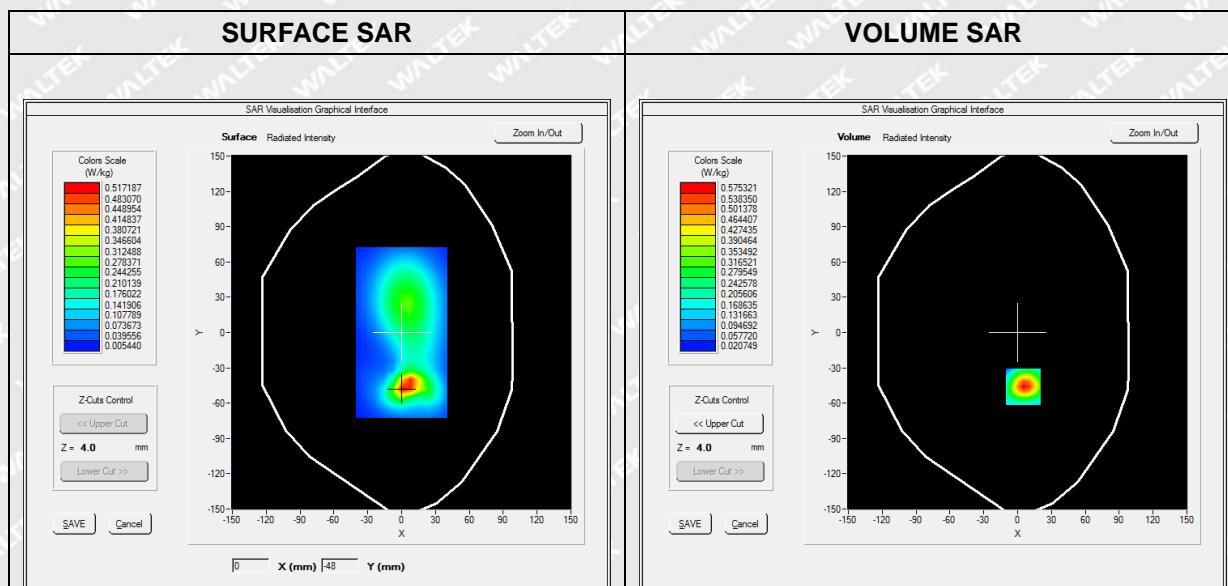
Measurement duration: 12 minutes 3 seconds

## A. Experimental conditions

|                        |                            |
|------------------------|----------------------------|
| <b>Area Scan</b>       | dx=8mm dy=8mm              |
| <b>Zoom Scan</b>       | dx=5mm dy=5mm dz=4mm       |
| <b>Phantom</b>         | Flat Plane                 |
| <b>Device Position</b> | Back                       |
| <b>Band</b>            | FDD-LTE Band 8_QPSK, 10MHz |
| <b>Channels</b>        | Low                        |
| <b>Signal</b>          | Duty Cycle: 1:1            |

## B. SAR Measurement Results

|  |            |
|--|------------|
| <b>Frequency (MHz)</b>                   | 885.000000 |
| <b>Relative Permittivity (real part)</b> | 41.373914  |
| <b>Conductivity (S/m)</b>                | 0.892861   |
| <b>Power Variation (%)</b>               | 2.467300   |
| <b>Ambient Temperature</b>               | 22.2       |
| <b>Liquid Temperature</b>                | 22.2       |

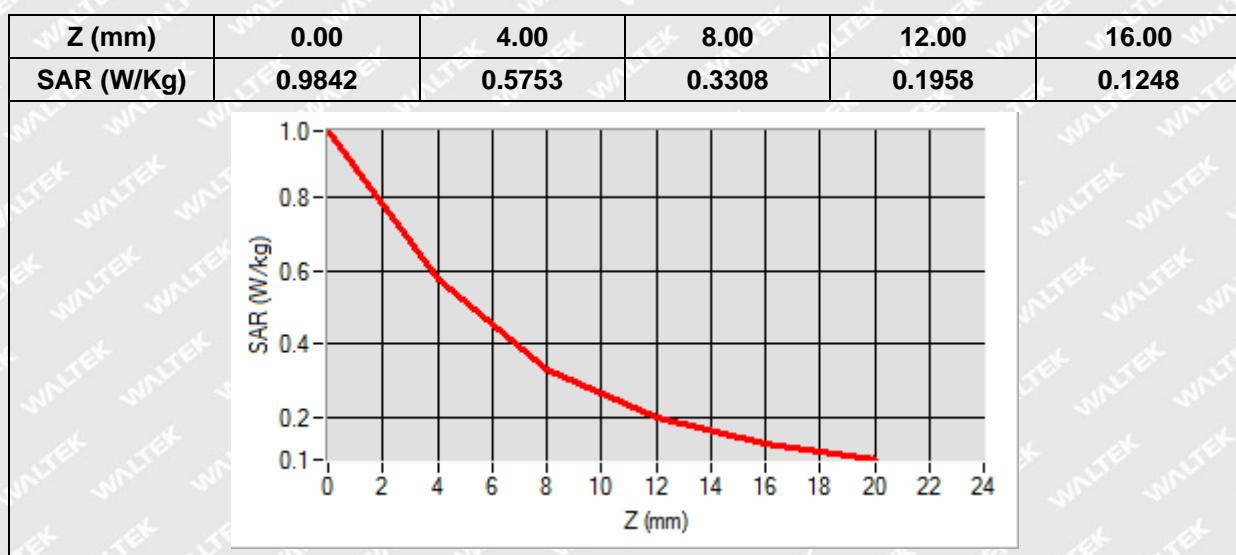


Maximum location: X=5.00, Y=-46.00

SAR Peak: 1.00 W/kg



|                       |                 |
|-----------------------|-----------------|
| <b>SAR 10g (W/Kg)</b> | <b>0.253574</b> |
| <b>SAR 1g (W/Kg)</b>  | <b>0.523431</b> |





# MEASUREMENT 35

Type: Phone measurement (Complete)

Date of measurement: 2023-06-23

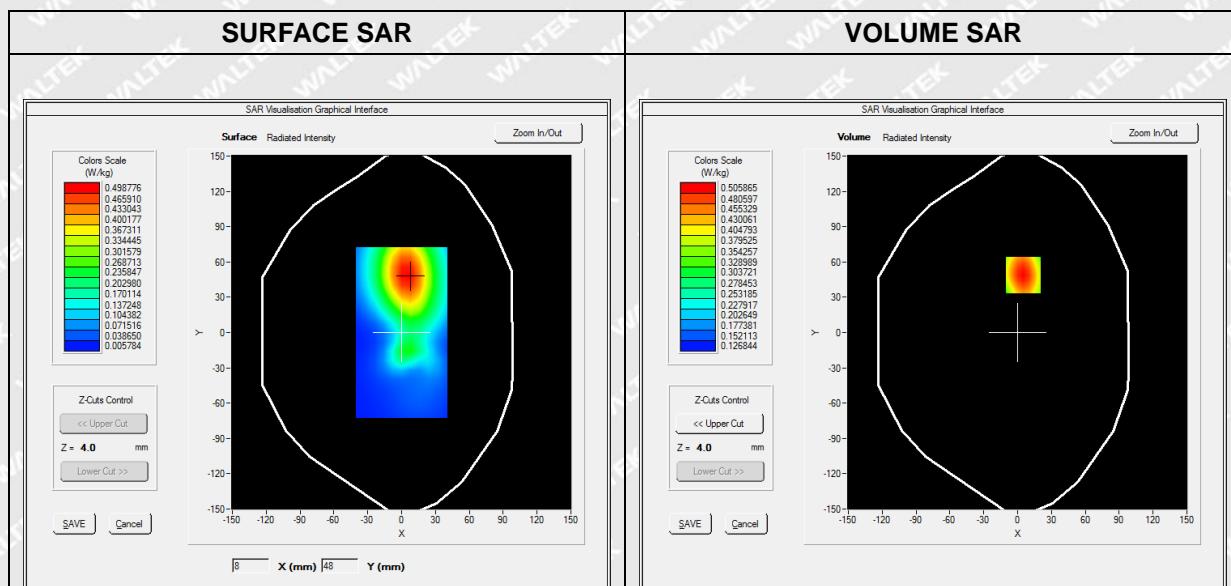
Measurement duration: 12 minutes 3 seconds

## A. Experimental conditions

|                        |                             |
|------------------------|-----------------------------|
| <b>Area Scan</b>       | dx=8mm dy=8mm               |
| <b>Zoom Scan</b>       | dx=5mm dy=5mm dz=4mm        |
| <b>Phantom</b>         | Flat Plane                  |
| <b>Device Position</b> | Back                        |
| <b>Band</b>            | FDD-LTE Band 20_QPSK, 20MHz |
| <b>Channels</b>        | High                        |
| <b>Signal</b>          | Duty Cycle: 1:1.58          |

## B. SAR Measurement Results

|  |            |
|--|------------|
| <b>Frequency (MHz)</b>                   | 852.000000 |
| <b>Relative Permittivity (real part)</b> | 41.372381  |
| <b>Conductivity (S/m)</b>                | 0.892914   |
| <b>Power Variation (%)</b>               | 1.328500   |
| <b>Ambient Temperature</b>               | 22.2       |
| <b>Liquid Temperature</b>                | 22.2       |

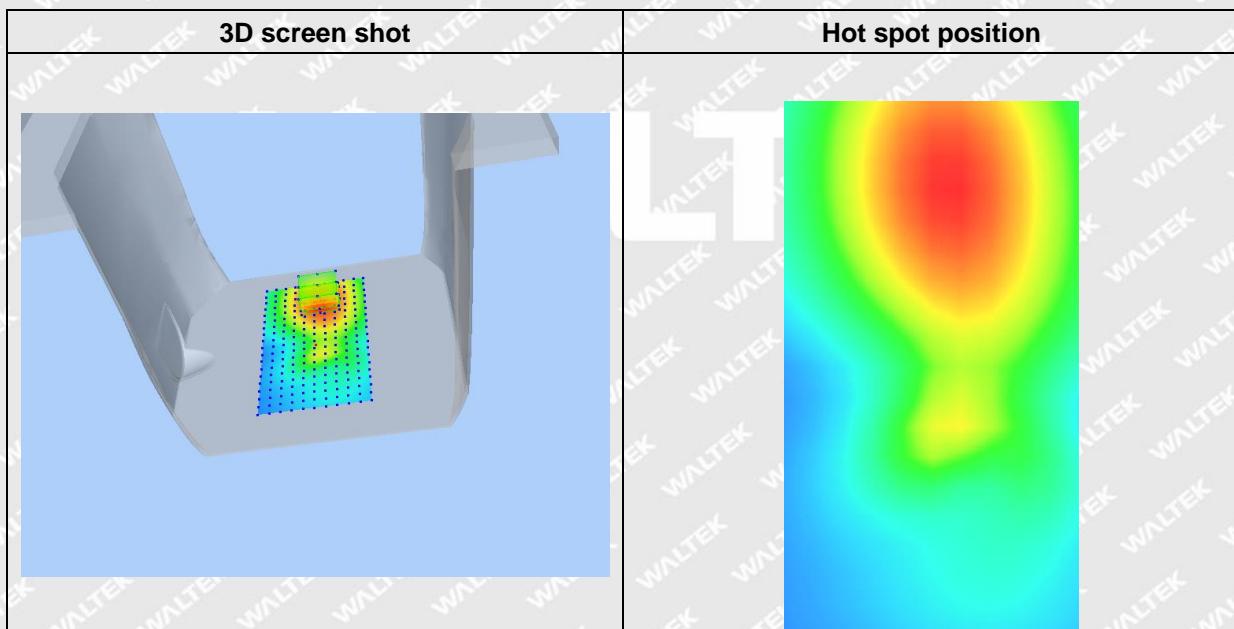
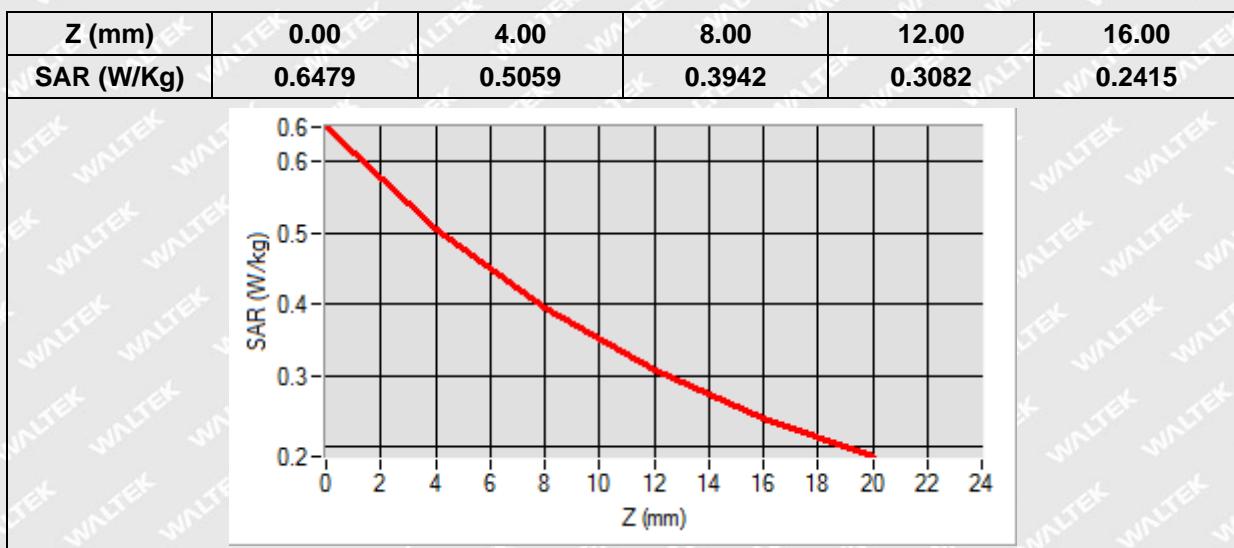


Maximum location: X=5.00, Y=49.00

SAR Peak: 0.65 W/kg



|                       |                 |
|-----------------------|-----------------|
| <b>SAR 10g (W/Kg)</b> | <b>0.335311</b> |
| <b>SAR 1g (W/Kg)</b>  | <b>0.480975</b> |





# MEASUREMENT 36

Type: Phone measurement (Complete)

Date of measurement: 2023-06-23

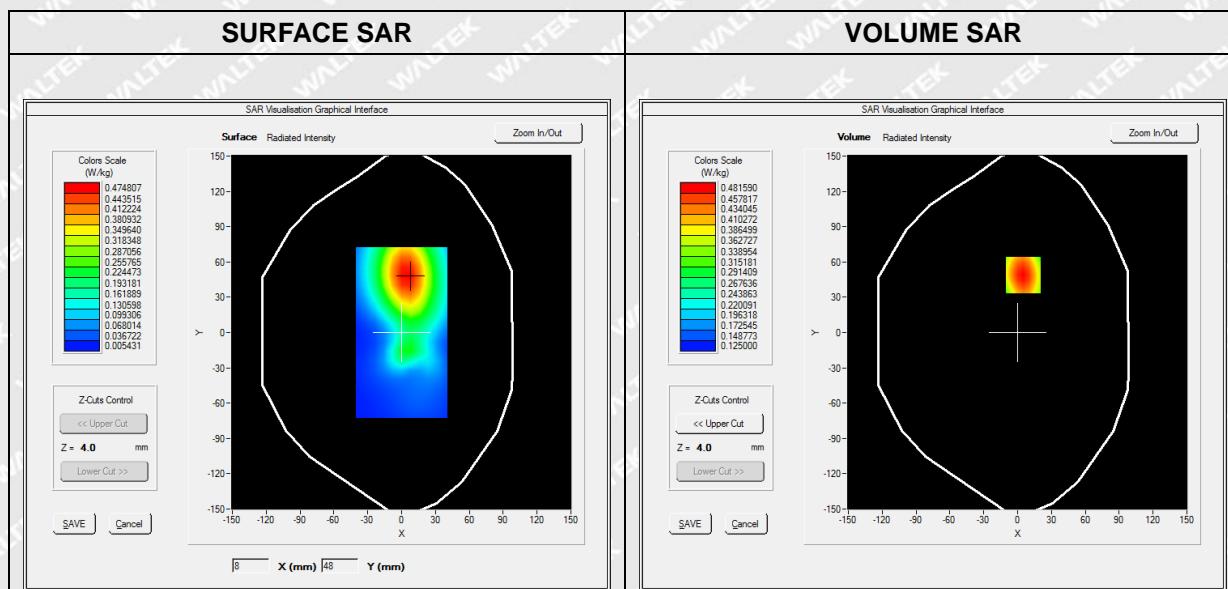
Measurement duration: 12 minutes 3 seconds

## A. Experimental conditions

|                        |                             |
|------------------------|-----------------------------|
| <b>Area Scan</b>       | dx=8mm dy=8mm               |
| <b>Zoom Scan</b>       | dx=5mm dy=5mm dz=4mm        |
| <b>Phantom</b>         | Flat Plane                  |
| <b>Device Position</b> | Back                        |
| <b>Band</b>            | FDD-LTE Band 28_QPSK, 20MHz |
| <b>Channels</b>        | High                        |
| <b>Signal</b>          | Duty Cycle: 1:1             |

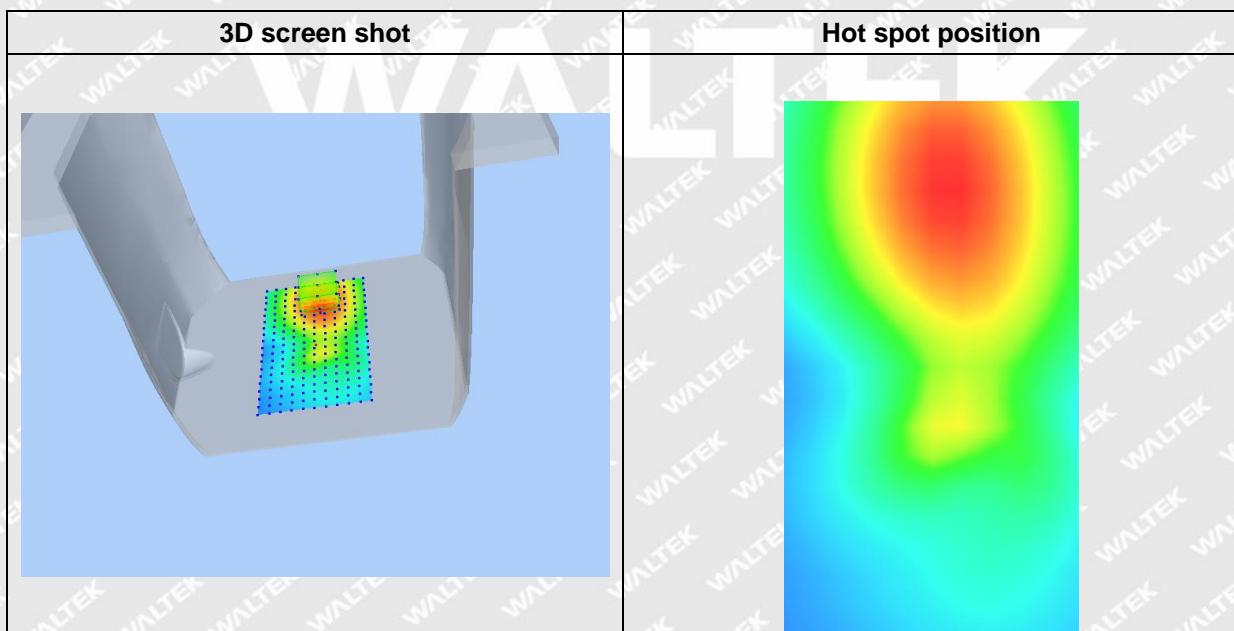
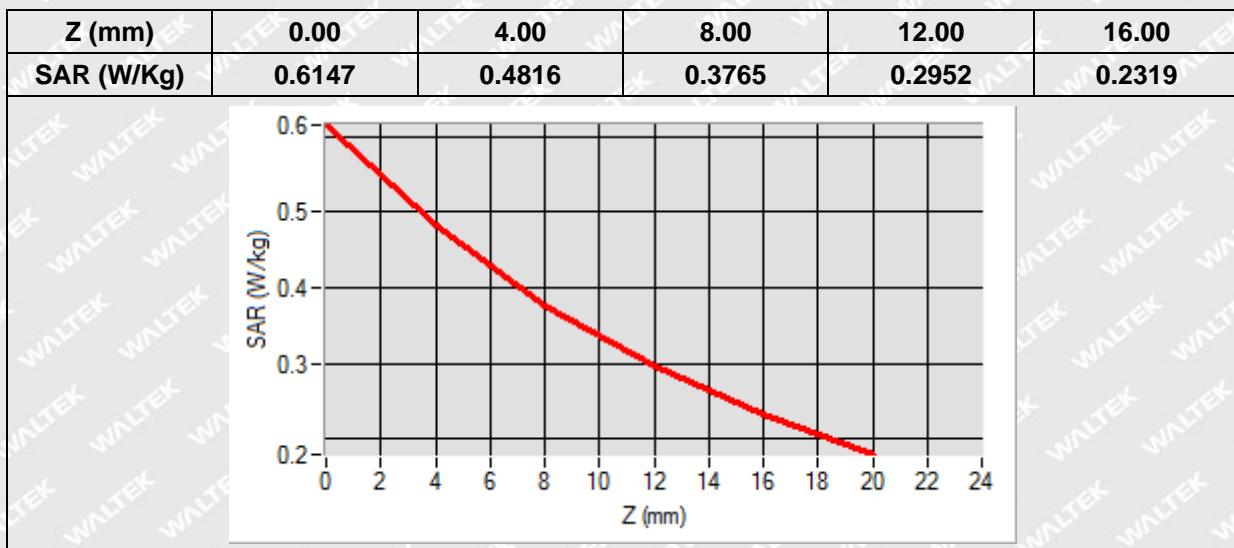
## B. SAR Measurement Results

|  |            |
|--|------------|
| <b>Frequency (MHz)</b>                   | 738.000000 |
| <b>Relative Permittivity (real part)</b> | 41.462381  |
| <b>Conductivity (S/m)</b>                | 0.872579   |
| <b>Power Variation (%)</b>               | 2.548900   |
| <b>Ambient Temperature</b>               | 22.2       |
| <b>Liquid Temperature</b>                | 22.2       |





|                       |                 |
|-----------------------|-----------------|
| <b>SAR 10g (W/Kg)</b> | <b>0.305575</b> |
| <b>SAR 1g (W/Kg)</b>  | <b>0.457891</b> |





# MEASUREMENT 37

Type: Phone measurement (Complete)

Date of measurement: 2023-06-27

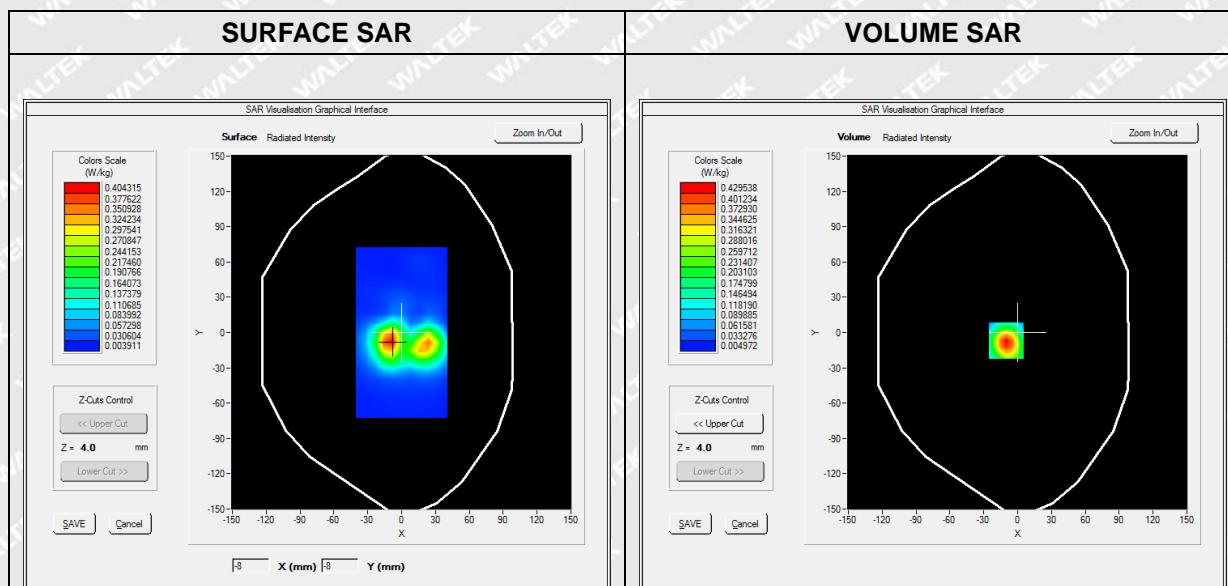
Measurement duration: 12 minutes 3 seconds

## A. Experimental conditions

|                        |                             |
|------------------------|-----------------------------|
| <b>Area Scan</b>       | dx=8mm dy=8mm               |
| <b>Zoom Scan</b>       | dx=5mm dy=5mm dz=4mm        |
| <b>Phantom</b>         | Flat Plane                  |
| <b>Device Position</b> | Back                        |
| <b>Band</b>            | TDD-LTE Band 38_QPSK, 20MHz |
| <b>Channels</b>        | High                        |
| <b>Signal</b>          | Duty Cycle: 1:1.58          |

## B. SAR Measurement Results

|  |             |
|--|-------------|
| <b>Frequency (MHz)</b>                   | 2610.000000 |
| <b>Relative Permittivity (real part)</b> | 39.442643   |
| <b>Conductivity (S/m)</b>                | 1.944365    |
| <b>Power Variation (%)</b>               | 1.392400    |
| <b>Ambient Temperature</b>               | 22.2        |
| <b>Liquid Temperature</b>                | 22.2        |

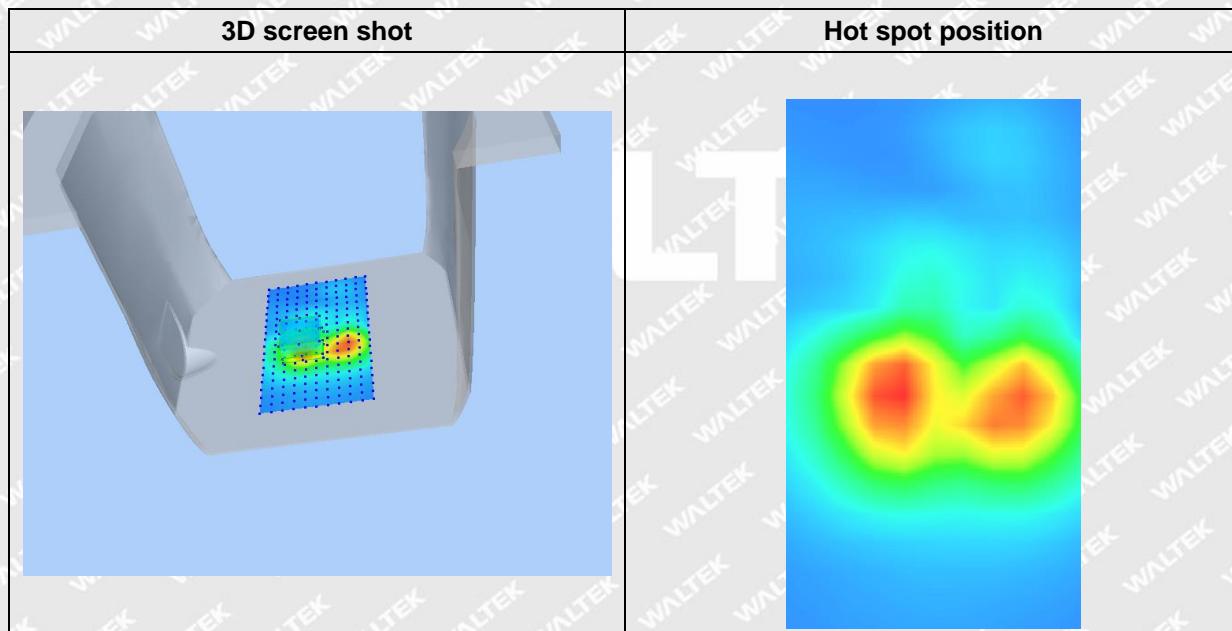
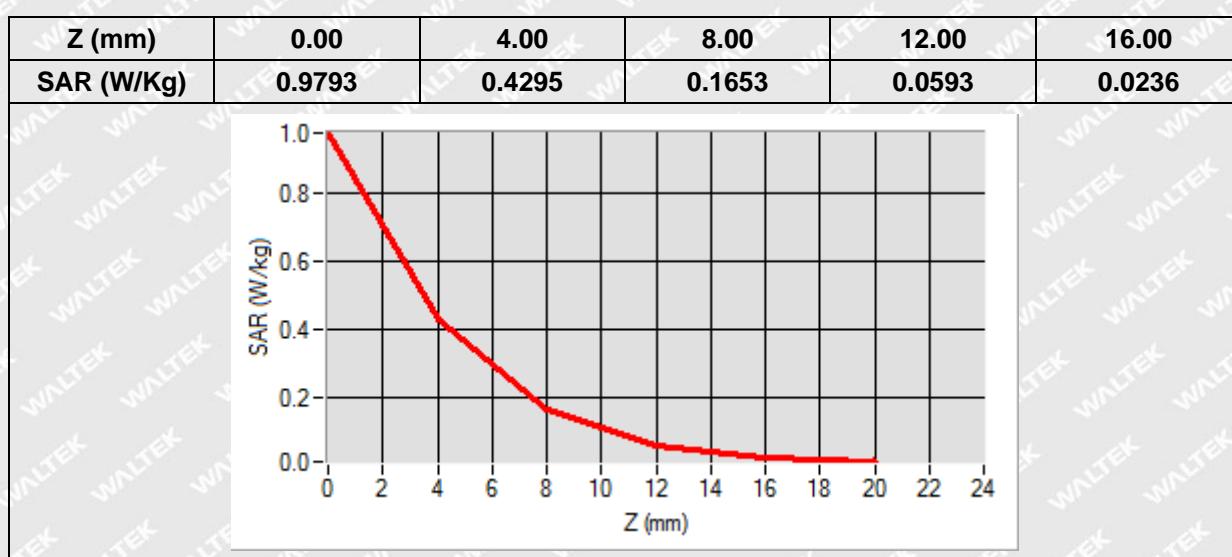


Maximum location: X=-10.00, Y=-7.00

SAR Peak: 0.99 W/kg



|                       |                 |
|-----------------------|-----------------|
| <b>SAR 10g (W/Kg)</b> | <b>0.168312</b> |
| <b>SAR 1g (W/Kg)</b>  | <b>0.414746</b> |





# MEASUREMENT 38

Type: Phone measurement (Complete)

Date of measurement: 2023-06-27

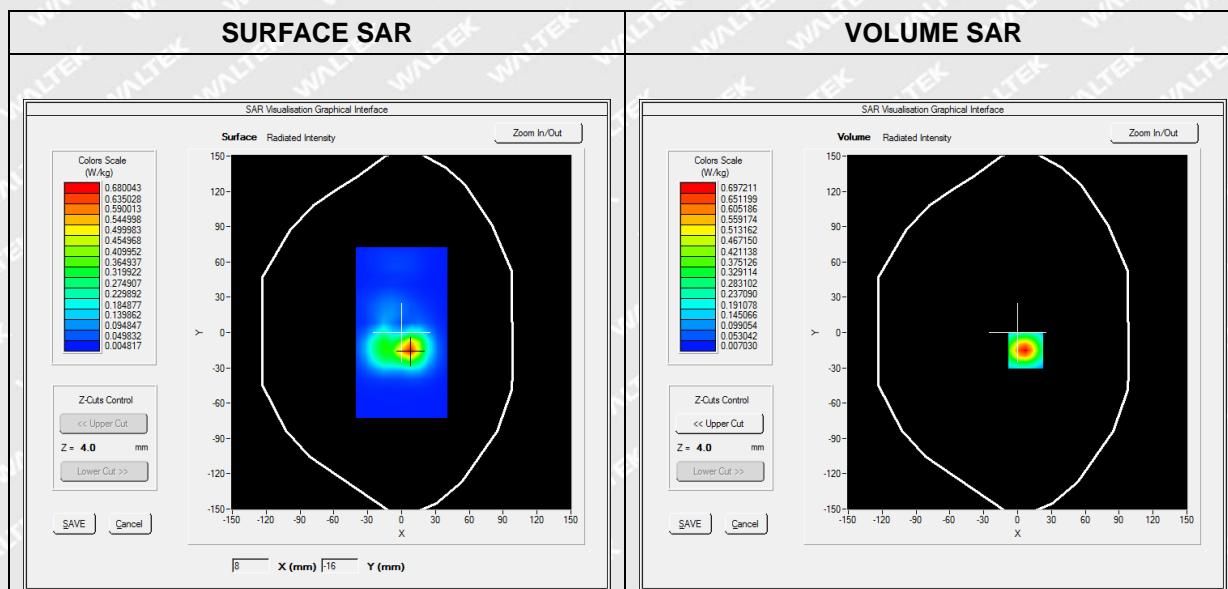
Measurement duration: 12 minutes 3 seconds

## A. Experimental conditions

|                        |                             |
|------------------------|-----------------------------|
| <b>Area Scan</b>       | dx=8mm dy=8mm               |
| <b>Zoom Scan</b>       | dx=5mm dy=5mm dz=4mm        |
| <b>Phantom</b>         | Flat Plane                  |
| <b>Device Position</b> | Back                        |
| <b>Band</b>            | TDD-LTE Band 40_QPSK, 20MHz |
| <b>Channels</b>        | Low                         |
| <b>Signal</b>          | Duty Cycle: 1:1.58          |

## B. SAR Measurement Results

|  |             |
|--|-------------|
| <b>Frequency (MHz)</b>                   | 2310.000000 |
| <b>Relative Permittivity (real part)</b> | 39.163941   |
| <b>Conductivity (S/m)</b>                | 1.684765    |
| <b>Power Variation (%)</b>               | -2.611700   |
| <b>Ambient Temperature</b>               | 22.4        |
| <b>Liquid Temperature</b>                | 22.4        |

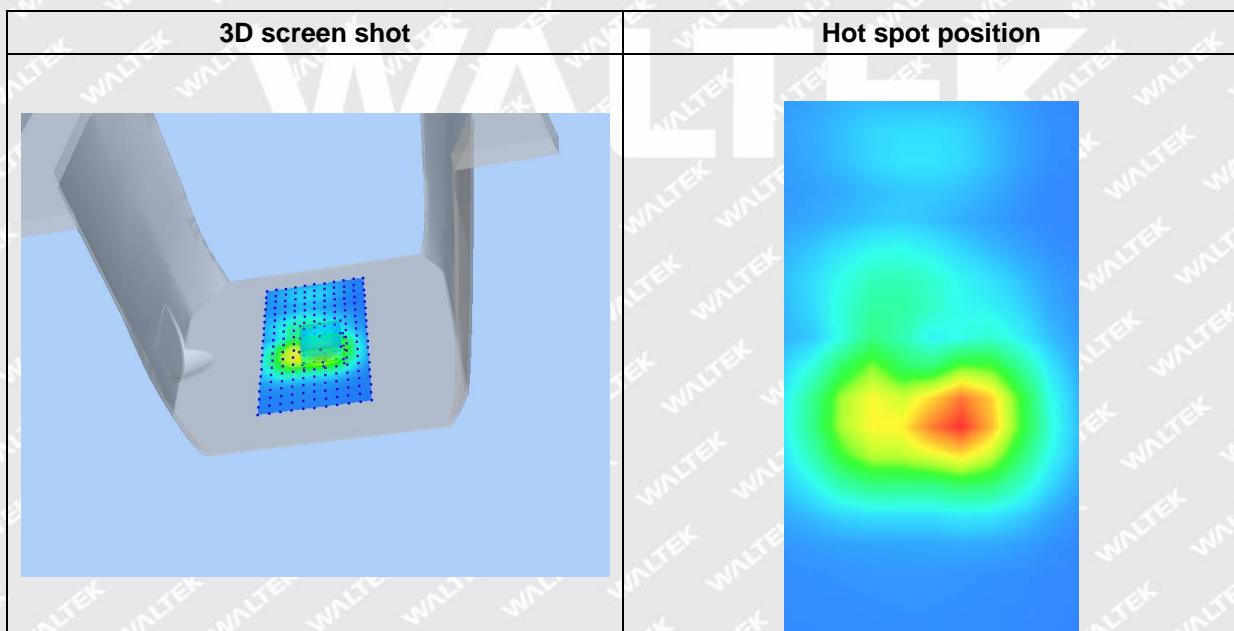
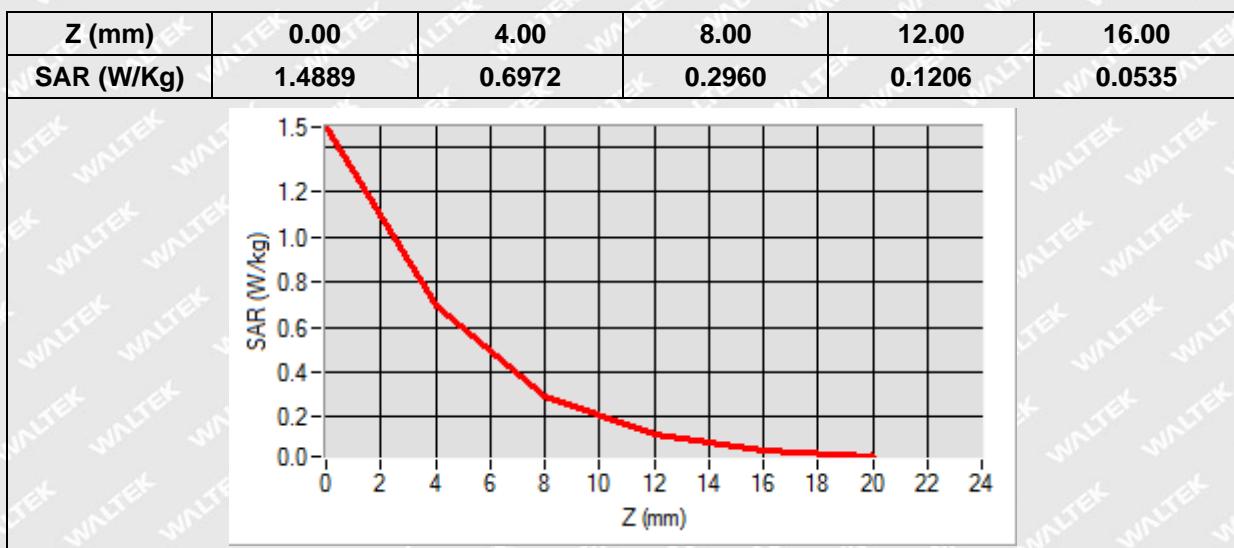


Maximum location: X=7.00, Y=-15.00

SAR Peak: 1.49 W/kg



|                       |                 |
|-----------------------|-----------------|
| <b>SAR 10g (W/Kg)</b> | <b>0.269608</b> |
| <b>SAR 1g (W/Kg)</b>  | <b>0.638492</b> |





# MEASUREMENT 39

Type: Phone measurement (Complete)

Date of measurement: 2023-06-28

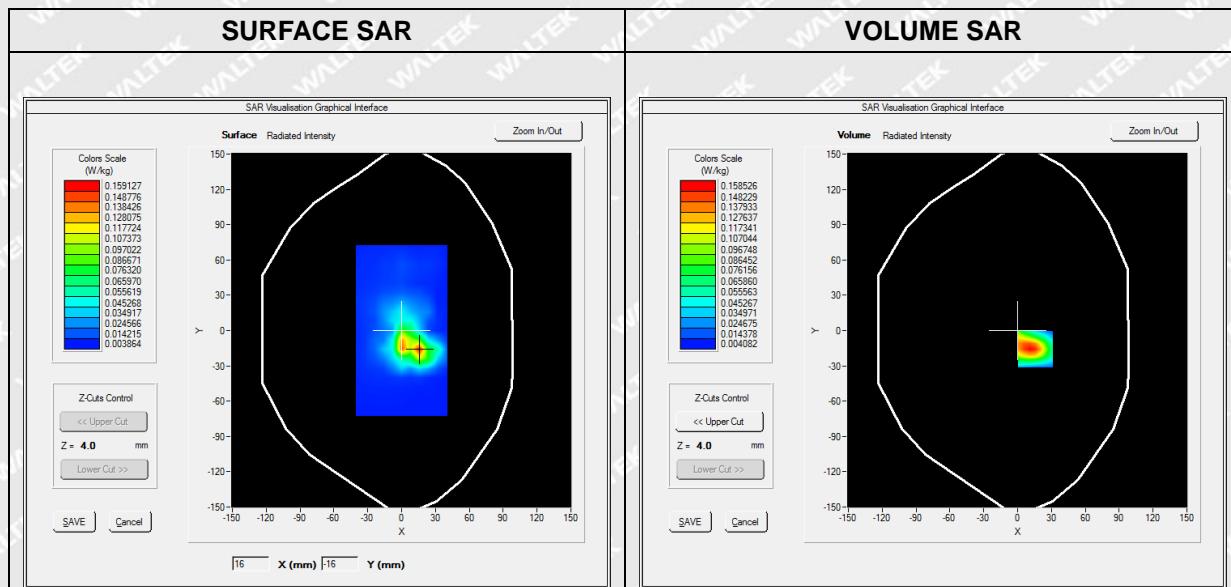
Measurement duration: 12 minutes 3 seconds

## A. Experimental conditions

|                        |                      |
|------------------------|----------------------|
| <b>Area Scan</b>       | dx=8mm dy=8mm        |
| <b>Zoom Scan</b>       | dx=5mm dy=5mm dz=4mm |
| <b>Phantom</b>         | Flat Plane           |
| <b>Device Position</b> | Back                 |
| <b>Band</b>            | WiFi_802.11b         |
| <b>Channels</b>        | Low                  |
| <b>Signal</b>          | Duty Cycle: 1:1      |

## B. SAR Measurement Results

|  |             |
|--|-------------|
| <b>Frequency (MHz)</b>                   | 2412.000000 |
| <b>Relative Permittivity (real part)</b> | 38.571558   |
| <b>Conductivity (S/m)</b>                | 1.783765    |
| <b>Power Variation (%)</b>               | 2.561400    |
| <b>Ambient Temperature</b>               | 22.4        |
| <b>Liquid Temperature</b>                | 22.4        |

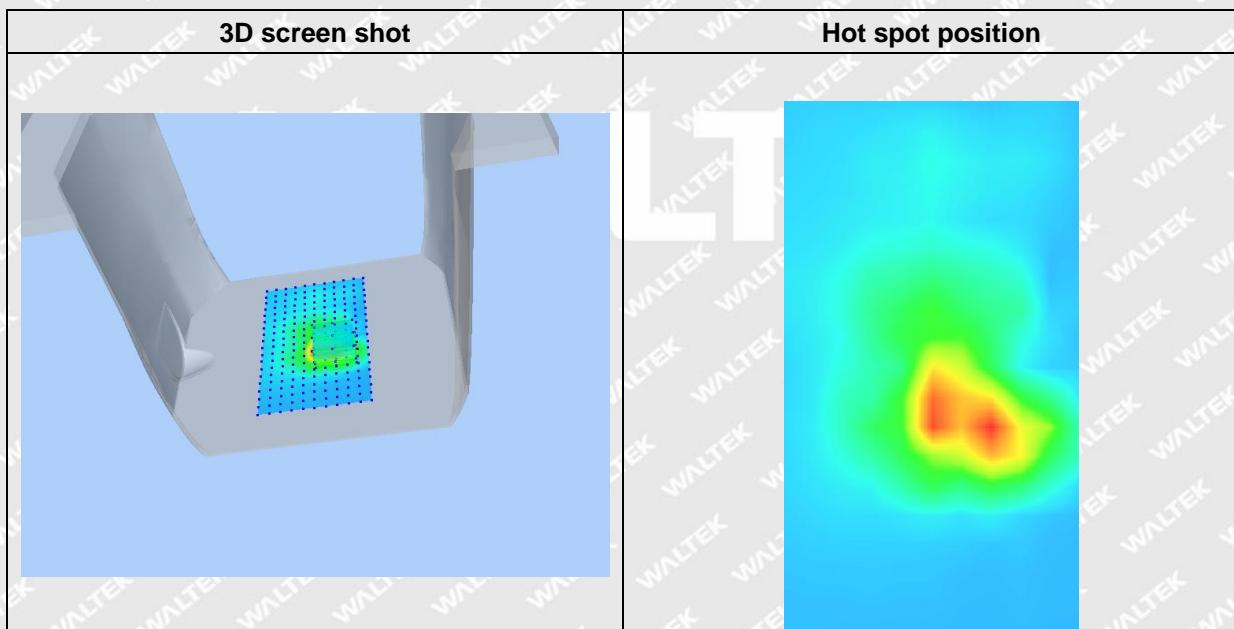
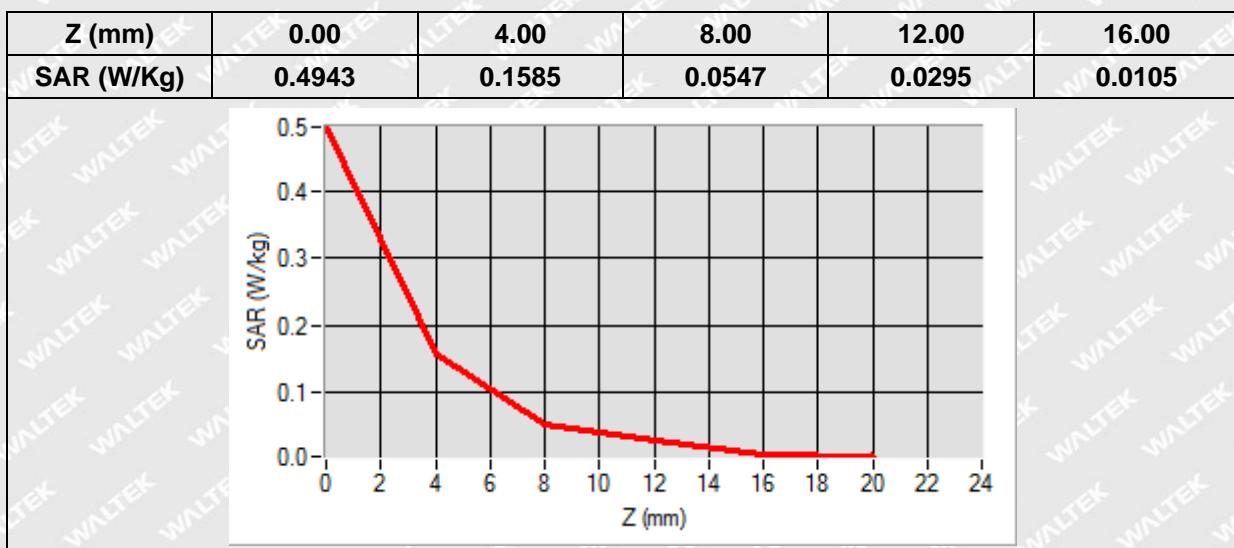


Maximum location: X=16.00, Y=-16.00

SAR Peak: 0.33 W/kg



|                       |                 |
|-----------------------|-----------------|
| <b>SAR 10g (W/Kg)</b> | <b>0.062911</b> |
| <b>SAR 1g (W/Kg)</b>  | <b>0.147843</b> |





## Annex C. EUT Photos

### EUT View 1



### EUT View 2



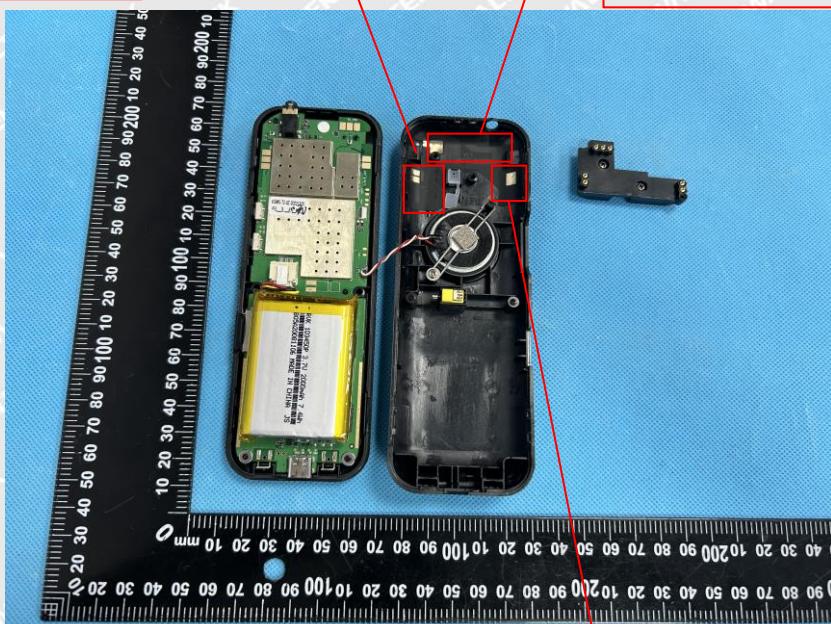


## Antenna View

WIFI/BT/GPS Ant

GSM/WCDMA/LTE Ant.

Div Ant.



## Annex D. Test Setup Photos

### Head Exposure Conditions

Right Cheek



Tilt

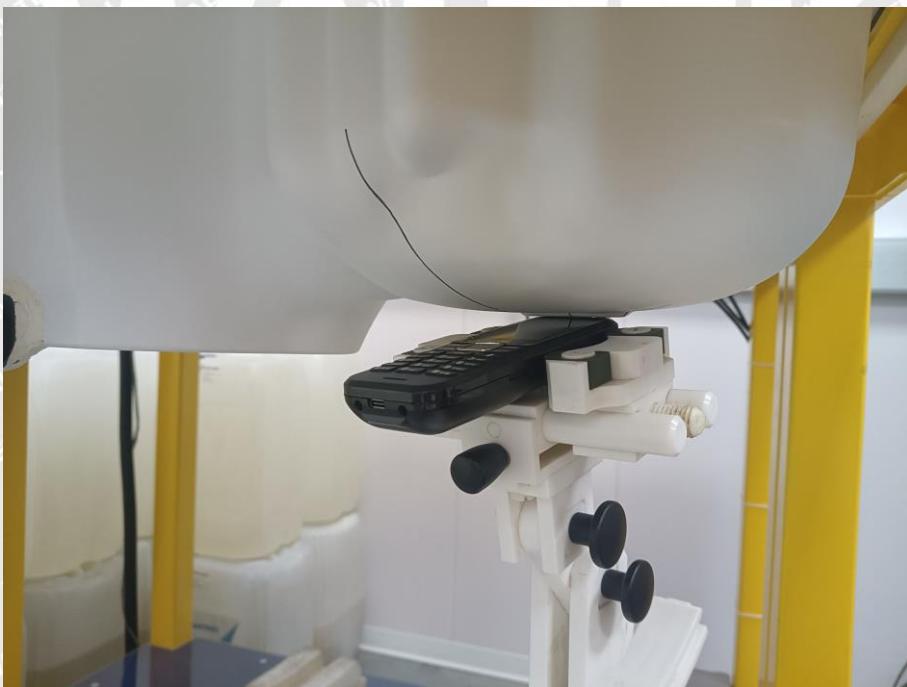




**Left Cheek**



**Tilt**





**Body mode Exposure Conditions**  
**Test distance: 5mm**

**Body Front**



**Body Back**





**Body Left**



**Body Right**





**Body Top**



**Limb mode Exposure Conditions**

**Test distance: 0mm**

**Front**





Back



Left





Right



Top





## Annex E. Calibration Certificate

**Please refer to the Exhibit for the Calibration Certificate**

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