



SAR Test Report

Report No.: AGC00907130801FH01

FCC ID : ZFN-R091B

APPLICATION PURPOSE : Original Equipment

PRODUCT DESIGNATION : Mobile Internet Device

BRAND NAME : HKC, ODYS, Xelio, Proscan, KLU, exper, MEDIACOM, Teach pad, artes, Advan, plaisio, XENO, Smart Touch, GHIA

MODEL NAME : R071A,P096R,R071B,A072A,A072B,A072C,A072D,A072E,MV072A,MV072B,MV072C,MV072D
RXXXXX(Where X would any Arabian numerals or letters or blank or symbols)

CLIENT : HuiKe Electronics (shenzhen) Co., Ltd.

DATE OF ISSUE : Aug.12, 2013

STANDARD(S) : FCC Oet65 Supplement C June 2001
IEEE Std. 1528-2003
47CFR § 2.1093

REPORT VERSION : V1.0

Attestation of Global Compliance(Shenzhen) Co., Ltd.



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Report Revise Record

| Report Version | Revise Time | Issued Date | Valid Version | Notes |
|----------------|-------------|--------------|---------------|-----------------|
| V1.0 | / | Aug.12, 2013 | Valid | Original Report |

Test Report Certification

| | |
|-----------------------|---|
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| Manufacturer Address | Building 1, 2, 3, Huike Industrial Park, Minying Industrial Zone, ShuiTian, ShiYan, Baoan, Shenzhen, China |
| Product Designation | Mobile Internet Device |
| Brand Name | HKC, ODYS, Xelio, Proscan, KLU, exper, MEDIACOM, Teach pad, artes, Advan, plaisio, XENO, Smart Touch, GHIA |
| Model Name | R071A,P096R,R071B,A072A,A072B,A072C,A072D,A072E,MV072A,MV072B,MV072C,MV072D,RXXXXX(Where X would any Arabian numerals or letters or blank or symbols) |
| Different Description | N/A |
| EUT Voltage | DC3.7V by battery |
| Applicable Standard | FCC Oet65 Supplement C June 2001 IEEE Std. 1528-2003 47CFR § 2.1093 |
| Test Date | Aug.09, 2013 |
| Test Results | MAX SAR MEASUREMENT(1g) 0.544 W/Kg |
| Performed Location | Attestation of Global Compliance(Shenzhen) Co., Ltd. 2 F, Building 2, No.1-No.4, Chaxi Sanwei Technical Industrial Park, Gushu, Xixiang Street, Bao'an District, Shenzhen, China |
| Report Template | AGCRT-US-2G/SAR (2013-03-01) |

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TABLE OF CONTENTS

| | |
|---|-----------|
| 1. GENERAL INFORMATION..... | 5 |
| 1.1. EUT DESCRIPTION..... | 5 |
| 1.2. TEST PROCEDURE | 6 |
| 1.3. TEST ENVIRONMENT | 6 |
| 2. SAR MEASUREMENT SYSTEM..... | 7 |
| 2.1. COMOSAR SYSTEM DESCRIPTION | 7 |
| 2.2. COMOSAR E-FIELD PROBE | 9 |
| 2.3. ROBOT..... | 9 |
| 2.4. VIDEO POSITIONING SYSTEM | 10 |
| 2.5. DEVICE HOLDER | 10 |
| 2.6. SAM TWIN PHANTOM..... | 11 |
| 3. TISSUE SIMULATING LIQUID | 12 |
| 3.1. THE COMPOSITION OF THE TISSUE SIMULATING LIQUID..... | 12 |
| 3.2. TISSUE CALIBRATION RESULT | 13 |
| 3.3. TISSUE DIELECTRIC PARAMETERS FOR HEAD AND BODY PHANTOMS | 14 |
| 4. SAR MEASUREMENT PROCEDURE..... | 15 |
| 4.1. SAR SYSTEM VALIDATION | 15 |
| 4.2. SAR MEASUREMENT PROCEDURE..... | 17 |
| 5. SAR EXPOSURE LIMITS | 18 |
| 6. TEST EQUIPMENT LIST | 19 |
| 7. MEASUREMENT UNCERTAINTY | 20 |
| 8. CONDUCTED POWER MEASUREMENT..... | 21 |
| 9. TEST RESULTS | 22 |
| 9.1. SAR TEST RESULTS SUMMARY..... | 22 |
| APPENDIX A. SAR SYSTEM VALIDATION DATA | 27 |
| APPENDIX B. SAR MEASUREMENT DATA..... | 29 |
| APPENDIX C. TEST SETUP PHOTOGRAPHS &EUT PHOTOGRAPHS..... | 71 |
| APPENDIX D. PROBE CALIBRATION DATA | 80 |
| APPENDIX E. DIPOLE CALIBRATION DATA | 90 |

1. General Information

1.1. EUT Description

| General Information | |
|-------------------------|---|
| Product Designation | Mobile Internet Device |
| Test Model | R091B |
| Hardware Version | R98_130712_V32 |
| Software Version | Android 4.1 |
| Device Category | Portable |
| RF Exposure Environment | Uncontrolled |
| Antenna Type | Internal |
| WIFI | |
| Frequency Range | 802.11b/g/n:2412-2462 MHz |
| Channel Number | 802.11b/g/n:11 |
| Type of modulation | DSSS(BPSK/QPSK/CCK);OFDM(16-QAM/64-QAM) |
| Data Rate | DSSS(1/2/5.5/11),OFDM(6/9/12/18/24/36/48/54) |
| Antenna Gain | 0.82dBi |
| Accessories | |
| Battery | Brand name: N/A Model No. : 3590120 Voltage and Capacitance: 3.7 V & 3600mAh |
| Adapter | Brand name: N/A Model No. : GQ15-050200-CU Input: AC 100-240V, 50/60Hz Output: DC 5V, 2A |
| Earphone | Brand name: N/A Model No. : N/A |

Note:

1. The EUT is a model of tablet pc. It just supports WWAN (WIFI and HOTSPOT).
2. The sample used for testing is end product.

1.2. Test Procedure

| | |
|---|---|
| 1 | Setup the EUT and simulators as shown on above. |
| 2 | Turn on the power of all equipment. |
| 3 | Make EUT into engineering mode for transmission, and test them respectively at U.S. bands |

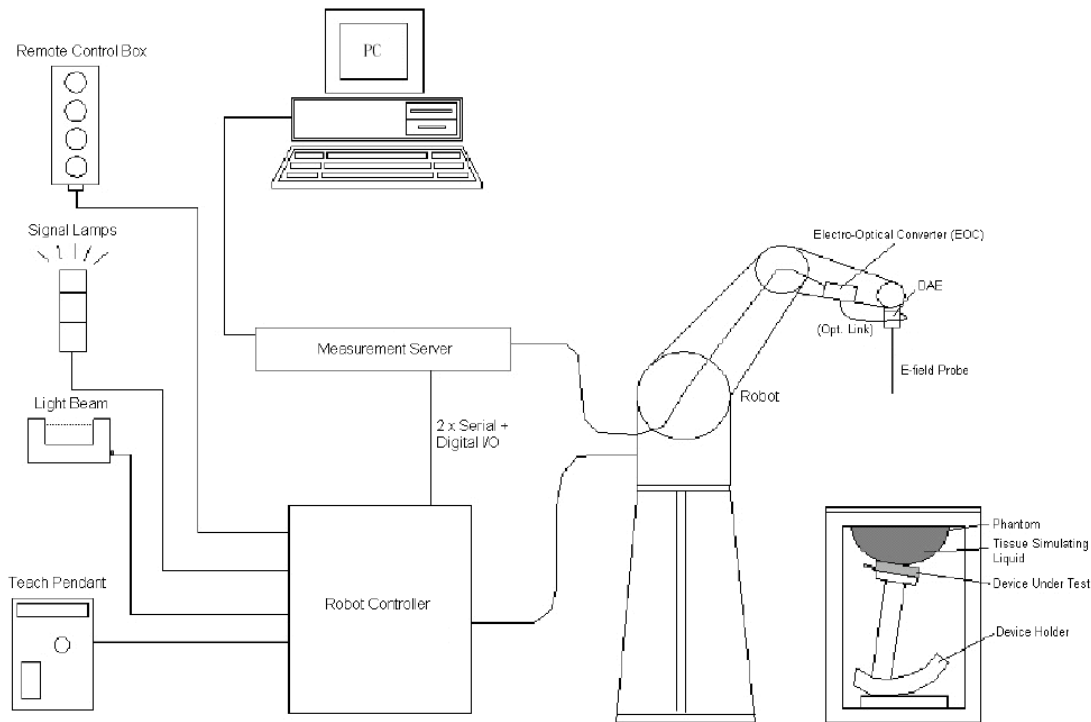
1.3. Test Environment

Ambient conditions in the laboratory:

| Items | Required | Actual |
|------------------|----------|--------|
| Temperature (°C) | 18-25 | 21± 2 |
| Humidity (%RH) | 30-70 | 55±2 |

2. SAR Measurement System

2.1. COMOSAR System Description



The COMOSAR system for performing compliance tests consists of the following items:

- ☐ A standard high precision 6axis robot with controller, teach pendant and software. An arm extension for accommodating the data acquisition electronics (DAE).
- ☐ A data acquisition electronics (DAE) which performs the signal amplification, signal multiplexing, AD-conversion, offset measurements, mechanical surface detection, collision detection, etc. The unit is battery powered with standard or rechargeable batteries. The signal is optically transmitted to the EOC.
- ☐ The Electro-optical converter (EOC) performs the conversion from optical to electrical signals for the digital Communicate Mobile to the DAE. To use optical surface detection, a special version of the EOC is required. The EOC signal is transmitted to the measurement server.
- ☐ The Light Beam used is for probe alignment. This improves the (absolute) accuracy of the probe positioning.
- ☐ A computer running WinXP and the Opensar software.
- ☐ Remote control and teach pendant as well as additional circuitry for robot safety such as warning lamps, etc.
- ☐ The phantom, the device holder and other accessories according to the targeted measurement.

2.1.1. Applications

Predefined procedures and evaluations for automated compliance testing with all worldwide standards, e.g., IEEE 1528, OET 65, IEC 62209-1, IEC 62209-2, EN 50360, EN 50383 and others.

2.1.2. Area Scans

Area scans are defined prior to the measurement process being executed with a user defined variable spacing between each measurement point (integral) allowing low uncertainty measurements to be conducted. Scans defined for FCC applications utilize a 10mm² step integral, with 1mm interpolation used to locate the peak SAR area used for zoom scan assessments.

When an Area Scan has measured all reachable points, it computes the field maxima found in the scanned area, within a range of the global maximum. The range (in dB) is specified in the standards for compliance testing. For example, a 2 dB range is required in IEEE 1528-2003, EN 50361 and IEC 62209 standards, whereby 3 dB is a requirement when compliance is assessed in accordance with the ARIB standard (Japan).

2.1.3. Zoom Scan (Cube Scan Averaging)

Zoom Scans are used to assess the peak spatial SAR values within a cubic averaging volume containing 1 g and 10 g of simulated tissue. A density of 1000 kg/m³ is used to represent the head and body tissue density and not the phantom liquid density, in order to be consistent with the definition of the liquid dielectric properties, i.e. the side length of the 1 g cube is 10mm, with the side length of the 10 g cube 21,5mm.

The zoom scan integer steps can be user defined so as to reduce uncertainty, but normal practice for typical test applications utilize a physical step of 7x7x7 (5mmx5mmx5mm) providing a volume of 30mm in the X & Y axis, and 30mm in the Z axis.

2.1.4. Uncertainty of Inter-/Extrapolation and Averaging

In order to evaluate the uncertainty of the interpolation, extrapolation and averaged SAR calculation algorithms of the Post processor, COMOSAR allows the generation of measurement grids which are artificially predefined by analytically based test functions. Therefore, the grids of area scans and zoom scans can be filled with uncertainty test data, according to the SAR benchmark functions of IEEE 1528. The three analytical functions shown in equations as below are used to describe the possible range of the expected SAR distributions for the tested handsets. The field gradients are covered by the spatially flat distribution f1, the spatially steep distribution f3 and f2 accounts for H-field cancellation on the phantom/tissue surface.

$$f_1(x, y, z) = Ae^{-\frac{z}{2a}} \cos^2 \left(\frac{\pi}{2} \frac{\sqrt{x'^2 + y'^2}}{5a} \right)$$

$$f_2(x, y, z) = Ae^{-\frac{z}{a}} \frac{a^2}{a^2 + x'^2} \left(3 - e^{-\frac{2z}{a}} \right) \cos^2 \left(\frac{\pi}{2} \frac{y'}{3a} \right)$$

$$f_3(x, y, z) = A \frac{a^2}{\frac{a^2}{4} + x'^2 + y'^2} \left(e^{-\frac{2z}{a}} + \frac{a^2}{2(a + 2z)^2} \right)$$

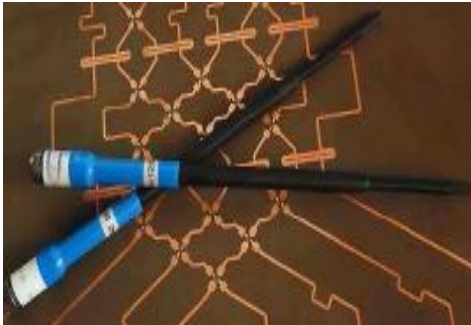
2.2. COMOSAR E-Field Probe

The SAR measurement is conducted with the dissymmetric probe manufactured by SATIMO.

The probe is specially designed and calibrated for use in liquid with high permittivity. The dissymmetric probe has special calibration in liquid at different frequency.

SATIMO conducts the probe calibration in compliance with international and national standards (e.g. IEEE 1528, EN62209-1, IEC 62209, etc.) Under ISO17025. The calibration data are in Appendix D.

2.2.1. Isotropic E-Field Probe Specification

| | | |
|---------------|--|---|
| Model | EP165 | |
| Manufacture | SATIMO | |
| Frequency | 0.03GHz-3 GHz Linearity:±0.2dB(30 MHz-3 GHz) |  |
| Dynamic Range | 0.01W/Kg-100W/Kg Linearity:±0.2dB | |
| Dimensions | Overall length:330mm Length of individual dipoles:4.5mm Maximum external diameter:8mm Probe Tip external diameter:5mm Distance between dipoles/ probe extremity:2.7mm | |
| Application | High precision dosimetric measurements in any exposure scenario (e.g., very strong gradient fields). Only probe which enables compliance testing for frequencies up to 3 GHz with precision of better 30%. | |

2.3. Robot

The COMOSAR system uses the KUKA robot from SATIMO SA (France). For the 6-axis controller COMOSAR system, the KUKA robot controller version from SATIMO is used.

The XL robot series have many features that are important for our application:

- ☐ High precision (repeatability 0.02 mm)
- ☐ High reliability (industrial design)
- ☐ Jerk-free straight movements
- ☐ Low ELF interference (the closed metallic construction shields against motor control fields)
- ☐ 6-axis controller

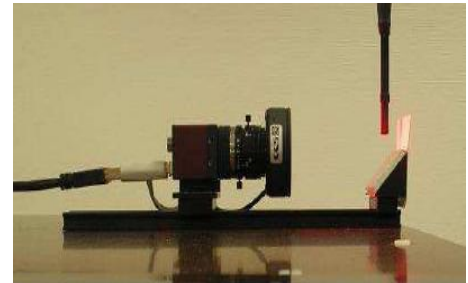


2.4. Video Positioning System

The video positioning system is used in OpenSAR to check the probe. Which is composed of a camera, LED, mirror and mechanical parts. The camera is piloted by the main computer with firewire link.

During the process, the actual position of the probe tip with respect to the robot arm is measured, as well as the probe length and the horizontal probe offset. The software then corrects all movements, such that the robot coordinates are valid for the probe tip.

The repeatability of this process is better than 0.1 mm. If a position has been taught with an aligned probe, the same position will be reached with another aligned probe within 0.1 mm, even if the other probe has different dimensions. During probe rotations, the probe tip will keep its actual position.

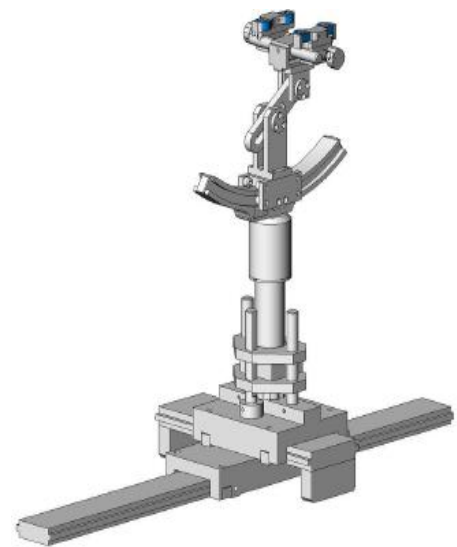


2.5. Device Holder

The COMOSAR device holder is designed to cope with different positions given in the standard. It has two scales for the device rotation (with respect to the body axis) and the device inclination (with respect to the line between the ear reference points). The rotation center for both scales is the ear reference point (EPR).

Thus the device needs no repositioning when changing the angles.

The COMOSAR device holder has been made out of low-loss POM material having the following dielectric parameters: relative permittivity $\epsilon_r = 3$ and loss tangent $\delta = 0.02$. The amount of dielectric material has been reduced in the closest vicinity of the device, since measurements have suggested that the influence of the clamp on the test results could thus be lowered.



2.6. SAM Twin Phantom

The Elliptic Phantom is a fiberglass shell flat phantom with 2mm+/- 0.2 mm shell thickness. It has only one measurement area for Flat phantom



3. Tissue Simulating Liquid

3.1. The composition of the tissue simulating liquid

| | |
|------------------|---------|
| Ingredient | 2450MHz |
| (% Weight) | Body |
| Water | 73.2 |
| Salt | 0.04 |
| Sugar | 0.00 |
| HEC | 0.00 |
| Preventol | 0.00 |
| DGBE | 26.7 |
| TWEEN | 48.34 |

3.2. Tissue Calibration Result

The dielectric parameters of the liquids were verified prior to the SAR evaluation using COMOSAR Dielectric Probe Kit and R&S Network Analyzer ZVL6 .

| Tissue Stimulant Measurement for 2450 | | | | | |
|---------------------------------------|-------|--------------------------------|---------------------------------------|---|------------------|
| Frequency (MHz) | Parts | Description | Dielectric Parameters | | Tissue Temp [°C] |
| 2450MHz | Body | Reference result ±5% window | ϵ_r 52.7 50.065-55.335 | δ [s/m] 1.95 1.8525-2.0475 | N/A |
| | | Aug.09, 2013 | 52.91 | 1.93 | 21 |

3.3. Tissue Dielectric Parameters for Head and Body Phantoms

The head tissue dielectric parameters recommended by the IEEE SCC-34/SC-2 in P1528 have been incorporated in the following table. These head parameters are derived from planar layer models simulating the highest expected SAR for the dielectric properties and tissue thickness variations in a human head. Other head and body tissue parameters that have not been specified in P1528 are derived from the tissue dielectric parameters computed from the 4-Cole-Cole equations described in Reference [12] and extrapolated according to the head parameters specified in P1528.

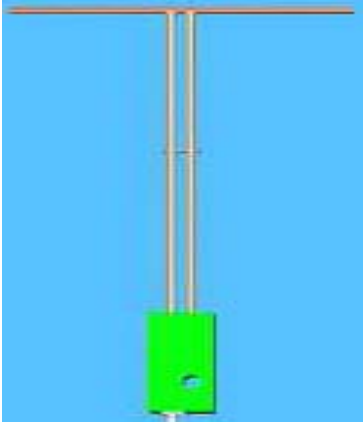
| Target Frequency (MHz) | head | | body | |
|---------------------------|--------------|----------------|--------------|----------------|
| | ϵ_r | σ (S/m) | ϵ_r | σ (S/m) |
| 300 | 45.3 | 0.87 | 58.2 | 0.92 |
| 450 | 43.5 | 0.87 | 56.7 | 0.94 |
| 850 | 41.5 | 0.90 | 55.2 | 0.97 |
| 900 | 41.5 | 0.97 | 55.0 | 1.05 |
| 915 | 41.5 | 1.01 | 55.0 | 1.06 |
| 1450 | 40.5 | 1.20 | 54.0 | 1.30 |
| 1610 | 40.3 | 1.29 | 53.8 | 1.40 |
| 1800 – 2000 | 40.0 | 1.40 | 53.3 | 1.52 |
| 2450 | 39.2 | 1.80 | 52.7 | 1.95 |
| 3000 | 38.5 | 2.40 | 52.0 | 2.73 |
| 5800 | 35.3 | 5.27 | 48.2 | 6.00 |

(ϵ_r = relative permittivity, σ = conductivity and ρ = 1000 kg/m³)

4. SAR Measurement Procedure

4.1. SAR System Validation

4.1.1. Validation Dipoles

| | |
|---|---|
|  | <p>The dipoles used is based on the IEEE-1528 standard, and is complied with mechanical and electrical specifications in line with the requirements of both IEEE and FCC Supplement C. the table below provides details for the mechanical and electrical Specifications for the dipoles.</p> |
|---|---|

| Frequency | L (mm) | h (mm) | d (mm) |
|-----------|--------|--------|--------|
| 2450MHz | 51.5 | 30.4 | 3.6 |

4.1.2. Validation Result

| System Performance Check at 850 MHz &1900MHz & 2450MHz for Body | | | | |
|---|-----------------------------------|------------------------|----------------------|------------------|
| Frequency [MHz] | Description | SAR [w/kg] 1g | SAR [w/kg] 10g | Tissue Temp.[°C] |
| 2450 MHz | Reference result \pm 10% window | 52.4 47.16 to 57.64 | 24.0 21.6 to 26.4 | N/A |
| | Aug.09, 2013 | 47.54 | 23.11 | 21 |
| Note: All SAR values are normalized to 1W forward power. | | | | |

4.2. SAR Measurement Procedure

The COMOSAR calculates SAR using the following equation,

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

σ : represents the simulated tissue conductivity

ρ : represents the tissue density

The EUT is set to transmit at the required power in line with product specification, at each frequency relating to the LOW, MID, and HIGH channel settings.

Pre-scans are made on the device to establish the location for the transmitting antenna, using a large area scan in either air or tissue simulation fluid.

The EUT is placed against the Universal Phantom where the maximum area scan dimensions are larger than the physical size of the resonating antenna. When the scan size is not large enough to cover the peak SAR distribution, it is modified by either extending the area scan size in both the X and Y directions, or the device is shifted within the predefined area.

The area scan is then run to establish the peak SAR location (interpolated resolution set at 1mm²) which is then used to orient the center of the zoom scan. The zoom scan is then executed and the 1g and 10g averages are derived from the zoom scan volume (interpolated resolution set at 1mm³).

When multiple peak SAR location were found during the same configuration or test mode, Zoom scan shall performed on each peak SAR location, only the peak point with maximum SAR value will be reported for the configuration or test mode.

5. SAR Exposure Limits

SAR assessments have been made in line with the requirements of IEEE-1528, FCC Supplement C, and comply with ANSI/IEEE C95.1-1992 “Uncontrolled Environments” limits. These limits apply to a location which is deemed as “Uncontrolled Environment” which can be described as a situation where the general public may be exposed to an RF source with no prior knowledge or control over their exposure.

Limits for General Population/Uncontrolled Exposure (W/kg)

| Type Exposure | Uncontrolled Environment Limit |
|---|--------------------------------|
| Spatial Peak SAR (1g cube tissue for brain or body) | 1.60 W/kg |

6. Test Equipment List

| Equipment description | Manufacturer/Model | Identification No. | Current calibration date | Next calibration date |
|-----------------------|---------------------|-----------------------|-----------------------------|-----------------------------|
| SAR Probe | SATIMO | SN 04/13 EP165 | 01/31/2013 | 01/30/2014 |
| Phantom | SATIMO | SN_4511_SAM90 | Validated. No cal required. | Validated. No cal required. |
| Liquid | SATIMO | - | Validated. No cal required. | Validated. No cal required. |
| Comm Tester | R&S - CMU200 | 069Y7-158-13-712 | 02/28/2013 | 02/27/2014 |
| Comm Tester | Agilent-8960 | GB46310822 | 10/22/2012 | 10/21/2013 |
| Multimeter | Keithley 2000 | 1188656 | 02/28/2013 | 02/27/2014 |
| Dipole | SATIMO SID2450 | SN46/11 DIP 2G450-189 | 12/09/2011 | 12/08/2013 |
| Amplifier | Aethercomm | SN 046 | 12/08/2012 | 12/07/2013 |
| Signal Generator | Agilent-E4421B | MY43351603 | 05/13/2013 | 05/12/2014 |
| Power Probe | NRP-Z23 | US38261498 | 02/28/2013 | 02/27/2014 |
| SPECTRUM ANALYZER | Agilent | E4440A | 07/18/2012 | 07/17/2013 |
| Power Attenuator | BED | DLA-5W | 07/30/2013 | 07/29/2014 |
| Network Analyzer | Rhode & Schwarz ZVA | SN100132 | 02/28/2013 | 02/27/2014 |

Note: Per KDB 50824 Dipole SAR Validation Verification, AGC Lab has adopted 3 years calibration intervals. On annual basis, every measurement dipole has been evaluated and is in compliance with the following criteria:

1. There is no physical damage on the dipole;
2. System validation with specific dipole is within 10% of calibrated value;
3. Return-loss is within 20% of calibrated measurement;
4. Impedance is within 5Ω of calibrated measurement.

7. Measurement Uncertainty

| SATIMO Uncertainty | | | | | | | | | |
|--|---------|-------------|----------------|------------|-----------------|-----------------|---------------------------|---------------------------|--------------|
| Measurement uncertainty for 30 MHz to 3 GHz averaged over 1 gram / 10 gram. | | | | | | | | | |
| Error Description | Sec | Tol (±%) | Prob. Dist. | Div. | (Ci) 1g | (Ci) 10g | Std. Unc. (1g) (±%) | Std. Unc. (10g)(±%) | (Vi) Veff |
| Measurement System | | | | | | | | | |
| Probe Calibration | E.2.1 | 6 | N | 1 | 1 | 1 | 6 | 6 | ∞ |
| Axial Isotropy | E.2.2 | 3 | R | $\sqrt{3}$ | $(1-c_p)^{1/2}$ | $(1-c_p)^{1/2}$ | 1.22474 | 1.22474 | ∞ |
| Hemispherical Isotropy | E.2.2 | 5 | R | $\sqrt{3}$ | $\sqrt{C_p}$ | $\sqrt{C_p}$ | 2.04124 | 2.04124 | ∞ |
| Boundary Effects | E.2.3 | 1 | R | $\sqrt{3}$ | 1 | 1 | 0.57735 | 0.57735 | ∞ |
| Linearity | E.2.4 | 5 | R | $\sqrt{3}$ | 1 | 1 | 2.88675 | 2.88675 | ∞ |
| System Detection Limits | E.2.5 | 1 | R | $\sqrt{3}$ | 1 | 1 | 0.57735 | 0.57735 | ∞ |
| Readout Electronics | E.2.6 | 0.5 | N | 1 | 1 | 1 | 0.5 | 0.5 | ∞ |
| Response Time | E.2.7 | 0.2 | R | $\sqrt{3}$ | 1 | 1 | 0.11547 | 0.11547 | ∞ |
| Integration Time | E.2.8 | 2 | R | $\sqrt{3}$ | 1 | 1 | 1.1547 | 1.1547 | ∞ |
| RF Ambient Noise | E.6.1 | 3 | R | $\sqrt{3}$ | 1 | 1 | 1.73205 | 1.73205 | ∞ |
| Probe Positioner Mechanical Tolerance | E.6.2 | 2 | R | $\sqrt{3}$ | 1 | 1 | 1.1547 | 1.1547 | ∞ |
| Probe Positioning with Respect to Phantom Shell | E.6..3 | 1 | R | $\sqrt{3}$ | 1 | 1 | 0.57735 | 0.57735 | ∞ |
| Extrapolation,interpolation and Integration Algorithms for Max. SAR Evaluation | E.5.2 | 1.5 | R | $\sqrt{3}$ | 1 | 1 | 0.86603 | 0.86603 | ∞ |
| Dipole | | | | | | | | | |
| Device Positioning | 8,E.4.2 | 1 | N | $\sqrt{3}$ | 1 | 1 | 0.57735 | 0.57735 | N-1 |
| Power Drift | 8.6.6.2 | 2 | R | $\sqrt{3}$ | 1 | 1 | 1.1547 | 1.1547 | ∞ |
| Phantom and Tissue Parameters | | | | | | | | | |
| Phantom Uncertainty | E.3.1 | 4 | R | $\sqrt{3}$ | 1 | 1 | 2.3094 | 2.3094 | ∞ |
| Liquid Conductivity (target) | E.3.2 | 5 | R | $\sqrt{3}$ | 0.64 | 0.43 | 1.84752 | 1.2413 | ∞ |
| Liquid Conductivity (meas.) | E.3.3 | 2.5 | N | 1 | 0.64 | 0.43 | 1.6 | 1.075 | ∞ |
| Liquid Permittivity (target) | E.3.2 | 3 | R | $\sqrt{3}$ | 0.6 | 0.49 | 1.03923 | 0.8487 | ∞ |
| Liquid Permittivity (meas.) | E.3.3 | 2.5 | N | 1 | 0.6 | 0.49 | 1.5 | 1.225 | M |
| Combined Standard Uncertainty | | | RSS | | | | 8.09272 | 7.9296 | |
| Expanded Uncertainty (95%CONFIDENCE INTERVAL) | | | k | | | | 16.18544 | 15.8592 | |

8. Conducted Power Measurement

WIFI

| Mode | Data Rate (Mbps) | Channel | Frequency(MHz) | Peak Power (dBm) | Avg. Burst Power(dBm) |
|-------------|------------------|---------|----------------|------------------|-----------------------|
| 802.11b | 1 | 01 | 2412 | 16.08 | 14.21 |
| | | 06 | 2437 | 17.49 | 15.64 |
| | | 11 | 2462 | 18.22 | 16.36 |
| 802.11g | 6 | 01 | 2412 | 13.28 | 11.45 |
| | | 06 | 2437 | 14.26 | 12.42 |
| | | 11 | 2462 | 14.74 | 12.86 |
| 802.11n(20) | 6.5 | 01 | 2412 | 14.30 | 12.45 |
| | | 06 | 2437 | 15.38 | 13.46 |
| | | 11 | 2462 | 15.84 | 13.92 |
| 802.11n(40) | 13.5 | 03 | 2.422 | 10.43 | 8.56 |
| | | 06 | 2.437 | 10.82 | 8.96 |
| | | 09 | 2.452 | 11.08 | 9.15 |

9. Test Results

9.1. SAR Test Results Summary

9.1.1. Test position and configuration

Body SAR was performed with the device configured in the positions according to IEEE 1528. SAR test was performed with the device 0mm from the phantom for the worst case due to antenna position.

Test position :body touch, front touch, horizontal near antenna, horizontal away from antenna, vertical near antenna, vertical away from antenna

9.1.2. Test Result

| SAR MEASUREMENT | | | | | | |
|--|------------------|-----------|------|---------------------------|-----------------|--------------|
| Ambient Temperature (°C) : 21 ± 2 | | | | Relative Humidity (%): 55 | | |
| Liquid Temperature (°C) : 21 ± 2 | | | | Depth of Liquid (cm):>15 | | |
| Product: Mobile Internet Device | | | | | | |
| Test Mode: 802.11b | | | | | | |
| Test Position Body | Antenna Position | Frequency | | Power Drift (<±5%) | SAR (1g) (W/kg) | Limit (W/kg) |
| | | channel | MHz | | | |
| Body touch | Fixed | 6 | 2437 | 0.12 | 0.471 | 1.6 |
| Front touch | Fixed | 6 | 2437 | 0.63 | 0.544 | 1.6 |
| Horizontal near antenna (1) | Fixed | 6 | 2437 | -0.29 | 0.140 | 1.6 |
| Horizontal away from antenna(2) | Fixed | 6 | 2437 | 0.63 | 0.042 | 1.6 |
| Vertical near antenna (3) | Fixed | 6 | 2437 | -0.54 | 0.009 | 1.6 |
| Vertical away from antenna (4) | Fixed | 6 | 2437 | 0.17 | 0.021 | 1.6 |
| Note 1: when the 1-g SAR is ≤ 0.8W/kg, testing for low and high channel is optional. | | | | | | |
| Note 2: IEEE802.11b support DBPSK, DQPSK, CCK modulation mode, IEEE802.11g/n support OFDM, 16-QAM, 64-QAM modulation mode. | | | | | | |
| Note 3: above test model see the Photographs | | | | | | |

| SAR MEASUREMENT | | | | | | |
|--|------------------|-----------|------|----------------------------|-----------------|--------------|
| Ambient Temperature (°C) : 21 ± 2 | | | | Relative Humidity (%) : 55 | | |
| Liquid Temperature (°C) : 21 ± 2 | | | | Depth of Liquid (cm):>15 | | |
| Product: Mobile Internet Device | | | | | | |
| Test Mode: 802.11g | | | | | | |
| Test Position Body | Antenna Position | Frequency | | Power Drift (<±5%) | SAR (1g) (W/kg) | Limit (W/kg) |
| | | channel | MHz | | | |
| Body touch | Fixed | 6 | 2437 | 0.16 | 0.297 | 1.6 |
| Front touch | Fixed | 6 | 2437 | 0.74 | 0.105 | 1.6 |
| Horizontal near antenna (1) | Fixed | 6 | 2437 | -0.63 | 0.032 | 1.6 |
| Horizontal away from antenna(2) | Fixed | 6 | 2437 | -0.23 | 0.003 | 1.6 |
| Vertical near antenna (3) | Fixed | 6 | 2437 | 0.41 | 0.116 | 1.6 |
| Vertical away from antenna (4) | Fixed | 6 | 2437 | -0.43 | 0.073 | 1.6 |
| Note 1: when the 1-g SAR is ≤ 0.8W/kg, testing for low and high channel is optional. | | | | | | |
| Note 2: IEEE802.11b support DBPSK, DQPSK, CCK modulation mode, IEEE802.11g/n support OFDM, 16-QAM, 64-QAM modulation mode. | | | | | | |
| Note 3: above test model see the Photographs | | | | | | |

| SAR MEASUREMENT | | | | | | |
|--|------------------|-----------|------|----------------------------|-----------------|--------------|
| Ambient Temperature (°C) : 21 ± 2 | | | | Relative Humidity (%) : 55 | | |
| Liquid Temperature (°C) : 21 ± 2 | | | | Depth of Liquid (cm):>15 | | |
| Product: Mobile Internet Device | | | | | | |
| Test Mode: 802.11n(20) | | | | | | |
| Test Position Body | Antenna Position | Frequency | | Power Drift (<±5%) | SAR (1g) (W/kg) | Limit (W/kg) |
| | | channel | MHz | | | |
| Body touch | Fixed | 6 | 2437 | 0.11 | 0.307 | 1.6 |
| Front touch | Fixed | 6 | 2437 | -0.63 | 0.075 | 1.6 |
| Horizontal near antenna (1) | Fixed | 6 | 2437 | 0.49 | 0.098 | 1.6 |
| Horizontal away from antenna(2) | Fixed | 6 | 2437 | 0.25 | 0.036 | 1.6 |
| Vertical near antenna (3) | Fixed | 6 | 2437 | -0.51 | 0.027 | 1.6 |
| Vertical away from antenna (4) | Fixed | 6 | 2437 | 0.62 | 0.010 | 1.6 |
| Note 1: when the 1-g SAR is ≤ 0.8W/kg, testing for low and high channel is optional. | | | | | | |
| Note 2: IEEE802.11b support DBPSK, DQPSK, CCK modulation mode, IEEE802.11g/n support OFDM, 16-QAM, 64-QAM modulation mode. | | | | | | |
| Note 3: above test model see the Photographs | | | | | | |

| SAR MEASUREMENT | | | | | | | |
|--|-------------|------------------|-----------|------|---------------------------|-----------------|--------------|
| Ambient Temperature (°C) : 21 ± 2 | | | | | Relative Humidity (%): 55 | | |
| Liquid Temperature (°C) : 21 ± 2 | | | | | Depth of Liquid (cm):>15 | | |
| Product: Mobile Internet Device | | | | | | | |
| Test Mode: Hotspot | | | | | | | |
| Test Position Body | | Antenna Position | Frequency | | Power Drift (<±5%) | SAR (1g) (W/kg) | Limit (W/kg) |
| | | | channel | MHz | | | |
| 802.11b | Front touch | Fixed | 6 | 2437 | 0.23 | 0.524 | 1.6 |
| 802.11g | Body touch | Fixed | 6 | 2437 | -0.42 | 0.135 | 1.6 |
| 802.11n (20) | Body touch | Fixed | 6 | 2437 | 0.61 | 0.301 | 1.6 |
| Note 1: when the 1-g SAR is ≤ 0.8W/kg, testing for low and high channel is optional. Note 3: above test model see the Photographs | | | | | | | |

Appendix A. SAR System Validation Data

Test Laboratory: AGC Lab

Date: Aug.09, 2013

System Check Body 2450 MHz

DUT: Dipole 2450 MHz Type: SID 2450

Communication System: CW; Communication System Band: D2450 (2450.0 MHz); Duty Cycle: 1:1; Conv.F=4.32

Frequency: 2450 MHz; Medium parameters used: $f = 2450$ MHz; $\sigma = 1.93$ mho/m; $\epsilon_r = 52.91$; $\rho = 1000$ kg/m³ ;

Phantom section: Flat Section; Input Power=10dBm

Ambient temperature (°C): 21, Liquid temperature (°C): 21

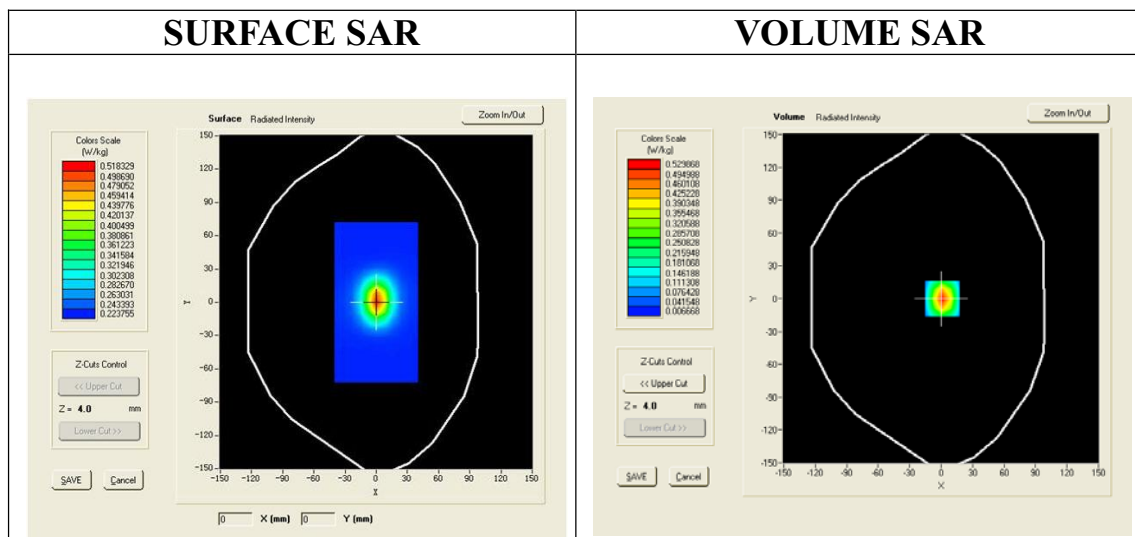
SATIMO Configuration:

Probe: EP165; Calibrated: 01/31/2013

- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Phantom: Flat Phantom; Type: Elliptical Phantom
- Measurement SW: OpenSAR V4_02_01

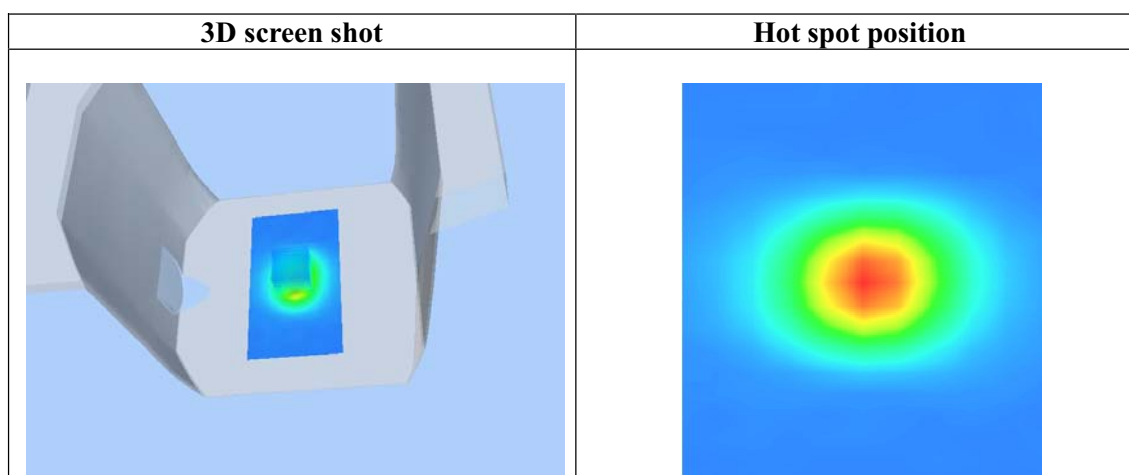
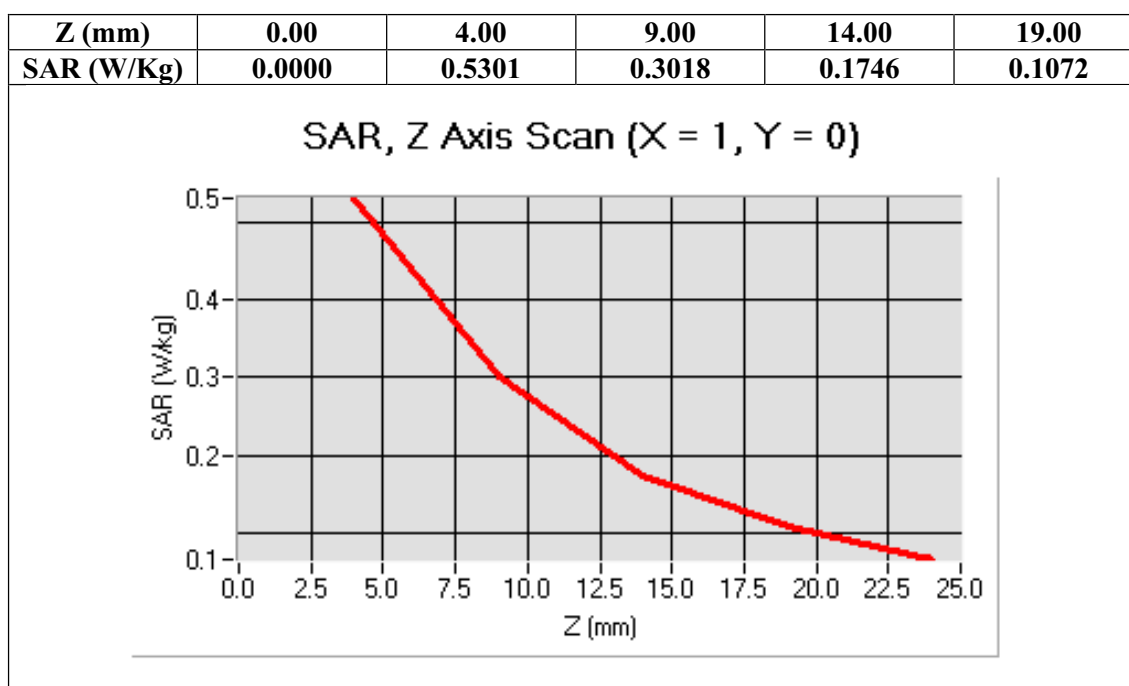
Configuration/System Check 2450 MHz Body /Area Scan: Measurement grid: dx=8mm,dy=8mm

Configuration/System Check 2450 MHz Body /Zoom Scan: Measurement grid: dx=8mm, dy=8mm, dz=5mm



Maximum location: X=1.00, Y=0.00

| | |
|----------------|----------|
| SAR 10g (W/Kg) | 0.231053 |
| SAR 1g (W/Kg) | 0.475411 |



Appendix B. SAR measurement Data

Test Laboratory: AGC Lab
802.11b Mid-Body-Worn- Touch

Date: Aug.09, 2013

DUT: Mobile Internet Device; Type: R091B

Communication System: Wi-Fi; Communication System Band: 802.11b; Duty Cycle: 1:1; Conv.F=4.32;
Frequency: 2437 MHz; Medium parameters used: $f = 2450$ MHz; $\sigma = 1.93$ mho/m; $\epsilon_r = 52.91$; $\rho = 1000$ kg/m³ ;
Phantom section: Flat Section
Ambient temperature (°C):21, Liquid temperature (°C):21

SATIMO Configuration:

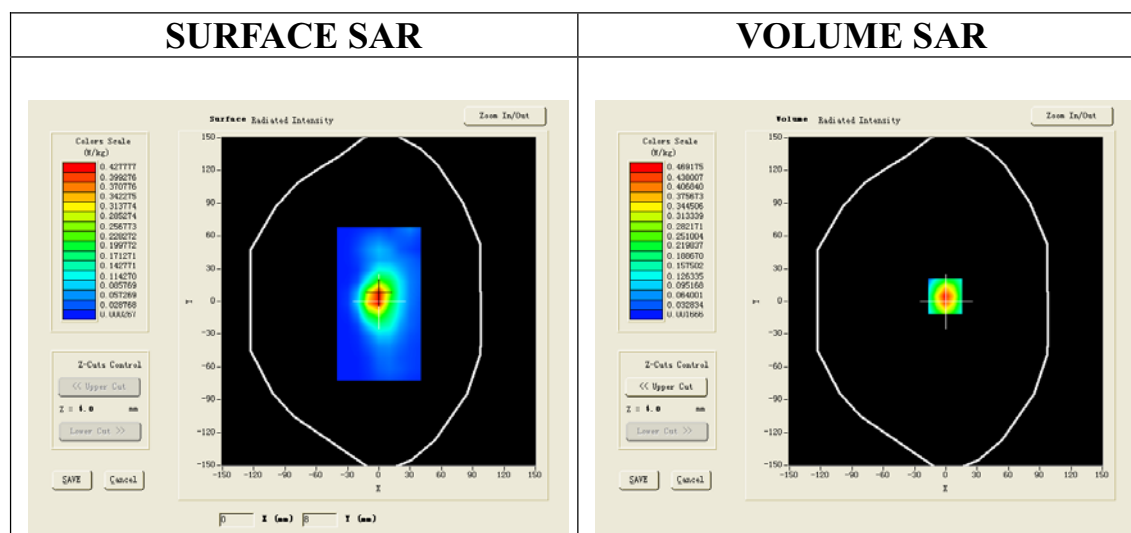
Probe: EP165; Calibrated: 01/31/2013

- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Phantom: Flat Phantom; Type: Elliptical Phantom
- Measurement SW: OpenSAR V4_02_01

Configuration/802.11b Mid- Body- Touch /Area Scan (6x8x1): Measurement grid: dx=8mm, dy=8mm

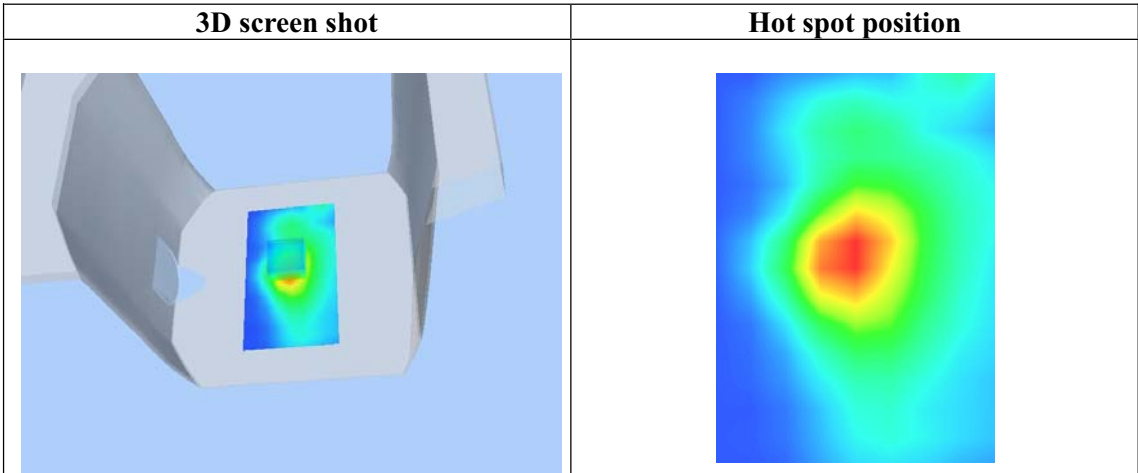
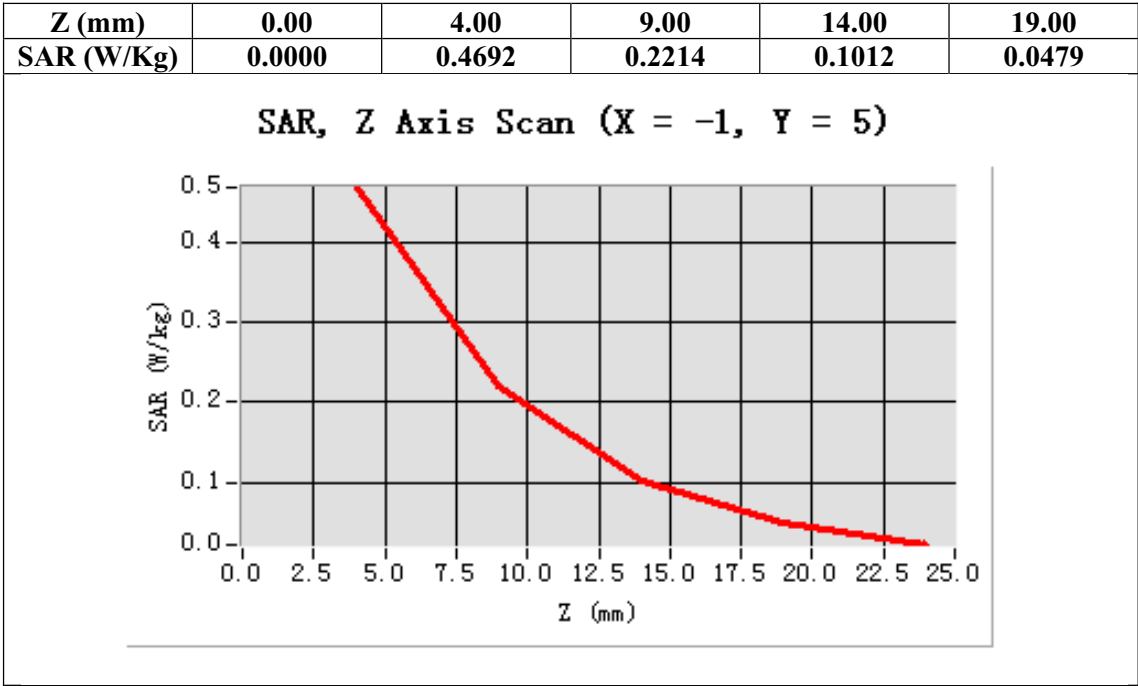
Configuration/802.11b Mid- Body- Touch /Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm;

| | |
|-----------------|--------------------------------------|
| Area Scan | surf_sam_plan.txt |
| ZoomScan | 5x5x7,dx=8mm dy=8mm dz=5mm,Very fast |
| Phantom | Validation plane |
| Device Position | Body Touch |
| Band | 2450MHz |
| Channels | Middle |
| Signal | TDMA (Crest factor: 8.0) |



Maximum location: X=-1.00, Y=5.00

| | |
|----------------|----------|
| SAR 10g (W/Kg) | 0.216838 |
| SAR 1g (W/Kg) | 0.471009 |



Test Laboratory: AGC Lab
802.11b Mid- Body- Front

Date: Aug.09, 2013

DUT: Mobile Internet Device; Type: R091B

Communication System: Wi-Fi; Communication System Band: 802.11b; Duty Cycle: 1:1; Conv.F=4.32;
Frequency: 2437 MHz; Medium parameters used: $f = 2450$ MHz; $\sigma = 1.93$ mho/m; $\epsilon_r = 52.91$; $\rho = 1000$ kg/m³ ;
Phantom section: Flat Section
Ambient temperature (°C): 21.0, Liquid temperature (°C): 21.0

SATIMO Configuration:

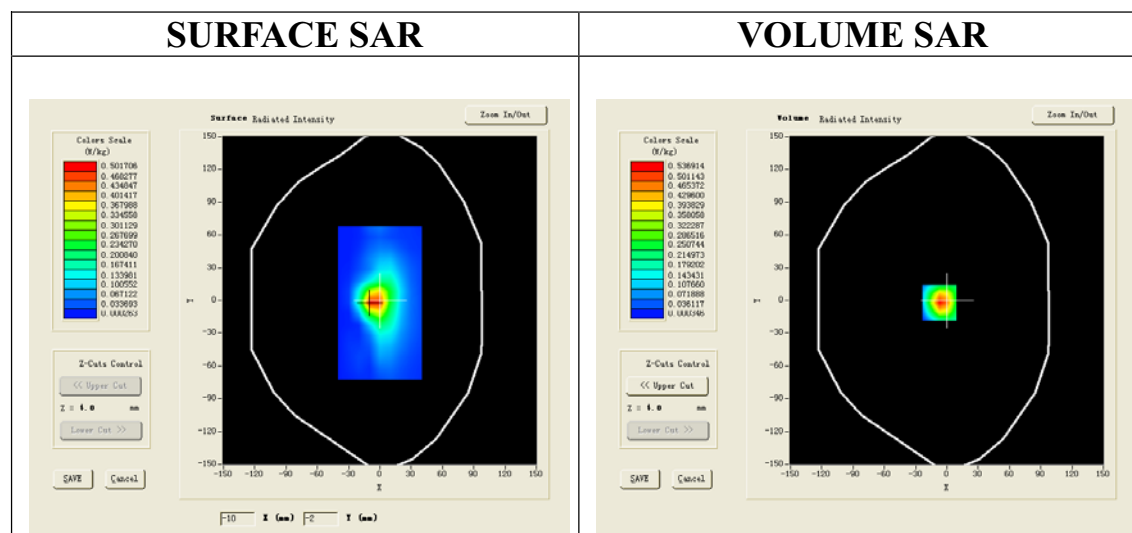
Probe: EP165; Calibrated: 01/31/2013

- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Phantom: Flat Phantom; Type: Elliptical Phantom
- Measurement SW: OpenSAR V4_02_01

Configuration/802.11b Mid-Body- Front /Area Scan (6x8x1): Measurement grid: dx=8mm, dy=8mm

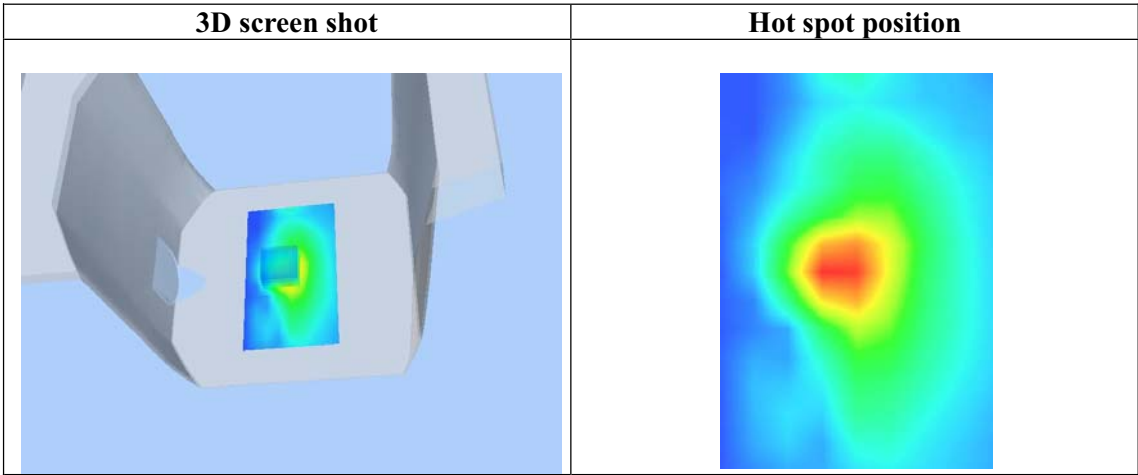
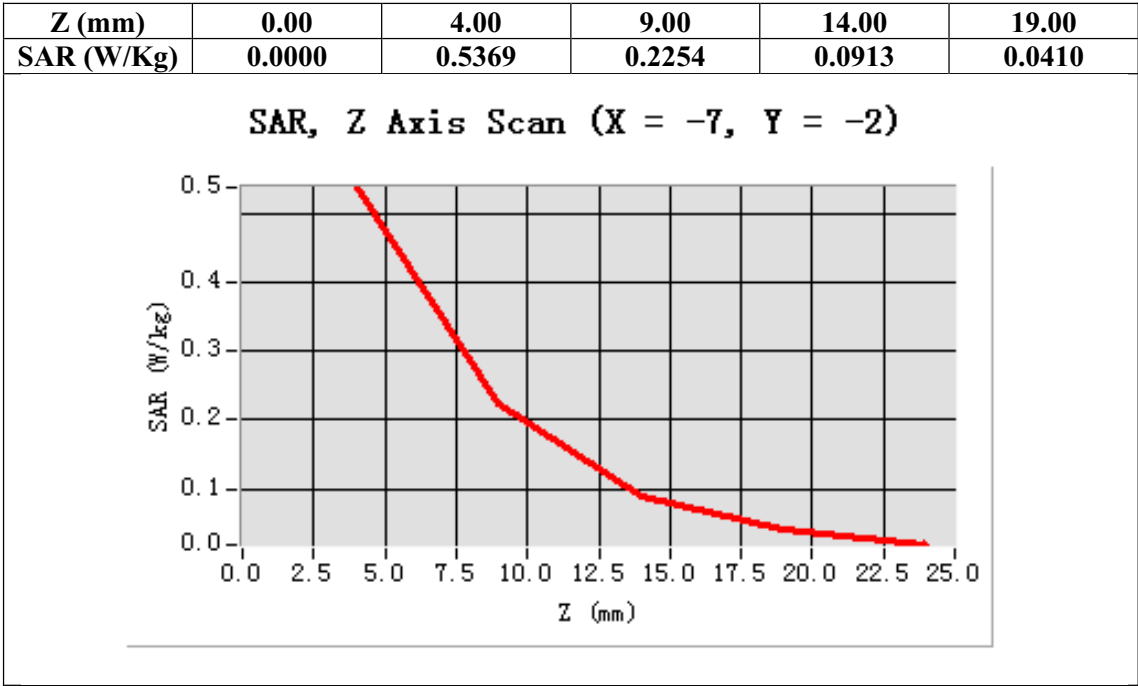
Configuration/802.11b Mid-Body- Front Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm;

| | |
|-----------------|--------------------------------------|
| Area Scan | surf_sam_plan.txt |
| ZoomScan | 5x5x7,dx=8mm dy=8mm dz=5mm,Very fast |
| Phantom | Validation plane |
| Device Position | Body Front |
| Band | 2450MHz |
| Channels | Middle |
| Signal | TDMA (Crest factor: 8.0) |



Maximum location: X=-7.00, Y=-2.00

| | |
|----------------|----------|
| SAR 10g (W/Kg) | 0.234909 |
| SAR 1g (W/Kg) | 0.544046 |



Test Laboratory: AGC Lab

Date: Aug.09, 2013

802.11b Mid -Horizontal near antenna

DUT: Mobile Internet Device; Type: R091B

Communication System: Wi-Fi; Communication System Band: 802.11b; Duty Cycle: 1:1; Conv.F=4.32;
Frequency: 2437 MHz; Medium parameters used: $f = 2450$ MHz; $\sigma = 1.93$ mho/m; $\epsilon_r = 52.91$; $\rho = 1000$ kg/m³ ;
Phantom section: Flat Section

Ambient temperature (°C): 21.0, Liquid temperature (°C): 21.0

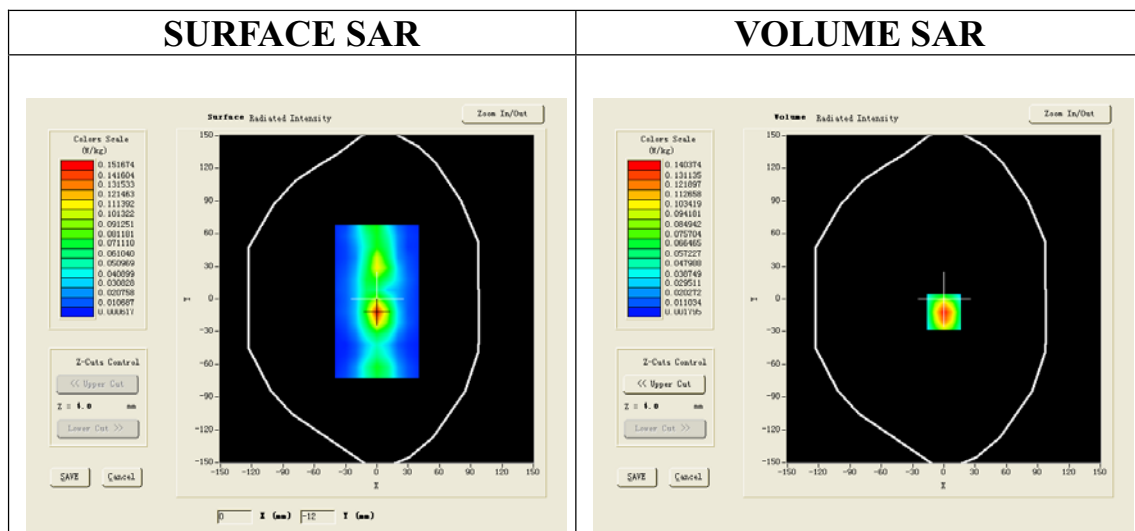
SATIMO Configuration:

Probe: EP165; Calibrated: 01/31/2013

- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Phantom: Flat Phantom; Type: Elliptical Phantom
- Measurement SW: OpenSAR V4_02_01

Configuration/802.11b Mid -Horizontal near antenna /Area Scan (6x8x1): Measurement grid: dx=8mm, dy=8mm
Configuration/802.11b Mid-Horizontal near antenna /Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm,dy=8mm, dz=5mm;

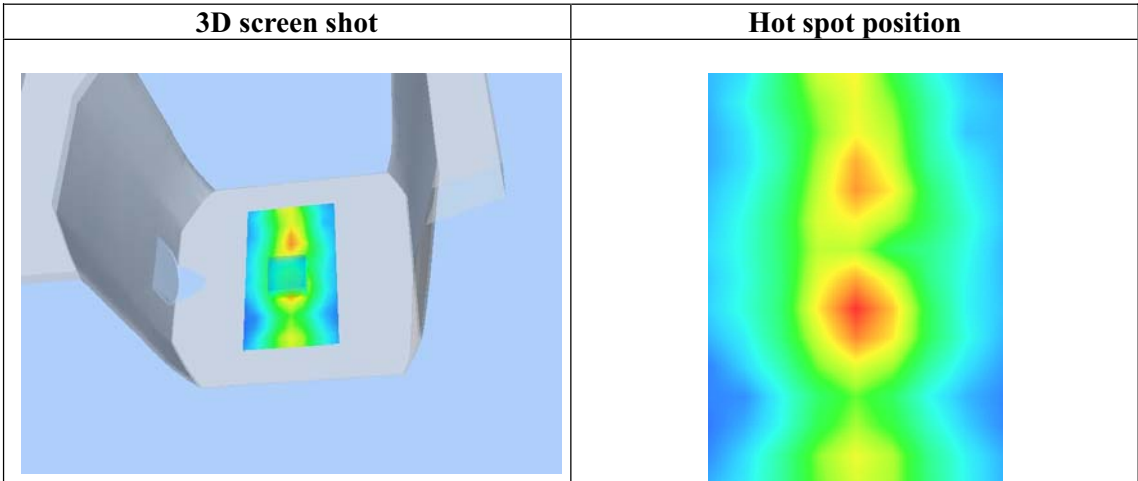
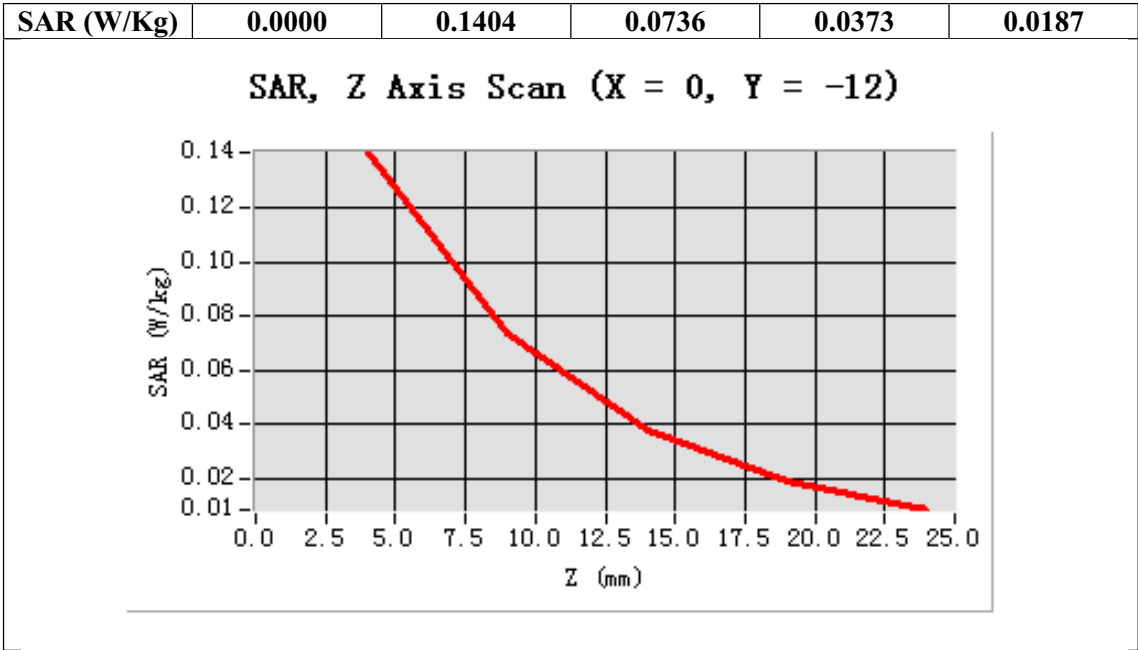
| | |
|-----------------|--------------------------------------|
| Area Scan | surf_sam_plan.txt |
| ZoomScan | 5x5x7,dx=8mm dy=8mm dz=5mm,Very fast |
| Phantom | Validation plane |
| Device Position | Horizontal |
| Band | 2450MHz |
| Channels | Middle |
| Signal | TDMA (Crest factor: 1.0) |



Maximum location: X=0.00, Y=-12.00

| | |
|----------------|----------|
| SAR 10g (W/Kg) | 0.068484 |
| SAR 1g (W/Kg) | 0.140289 |

| | | | | | |
|--------|------|------|------|-------|-------|
| Z (mm) | 0.00 | 4.00 | 9.00 | 14.00 | 19.00 |
|--------|------|------|------|-------|-------|



Test Laboratory: AGC Lab
802.11b Mid -Horizontal away from antenna
DUT: Mobile Internet Device; Type: R091B

Date: Aug.09, 2013

Communication System: Wi-Fi; Communication System Band: 802.11b; Duty Cycle: 1:1; Conv.F=4.32;
Frequency: 2437 MHz; Medium parameters used: $f = 2450$ MHz; $\sigma = 1.93$ mho/m; $\epsilon_r = 52.91$; $\rho = 1000$ kg/m³ ;
Phantom section: Flat Section
Ambient temperature (°C): 21.0, Liquid temperature (°C): 21.0

Satimo Configuration:

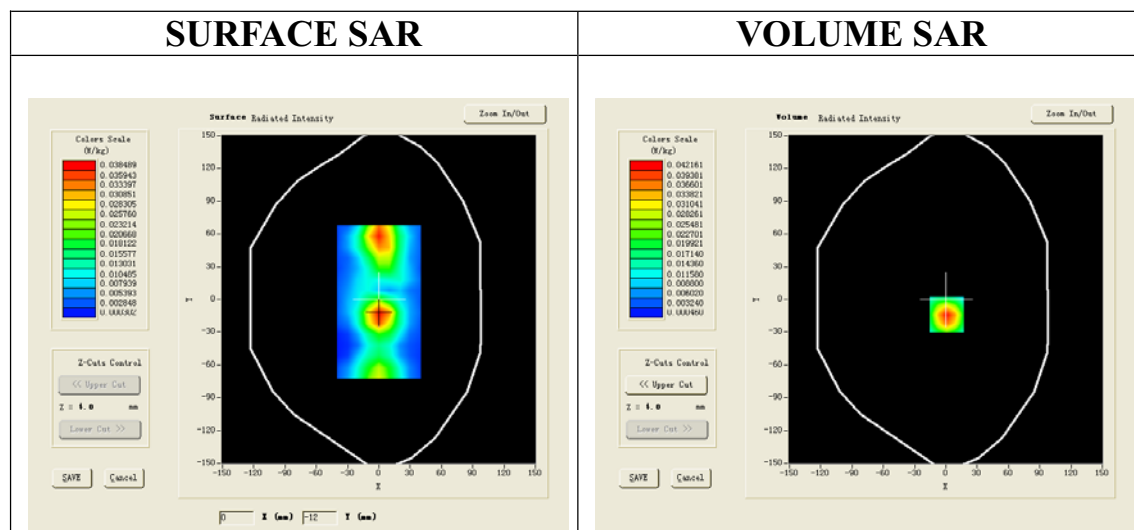
Probe: EP165; Calibrated: 01/31/2013

- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Phantom: Flat Phantom; Type: Elliptical Phantom
- Measurement SW: OpenSAR V4_02_01

Configuration/802.11b Mid -Horizontal away from antenna /Area Scan (6x8x1): Measurement grid: dx=8mm, dy=8mm

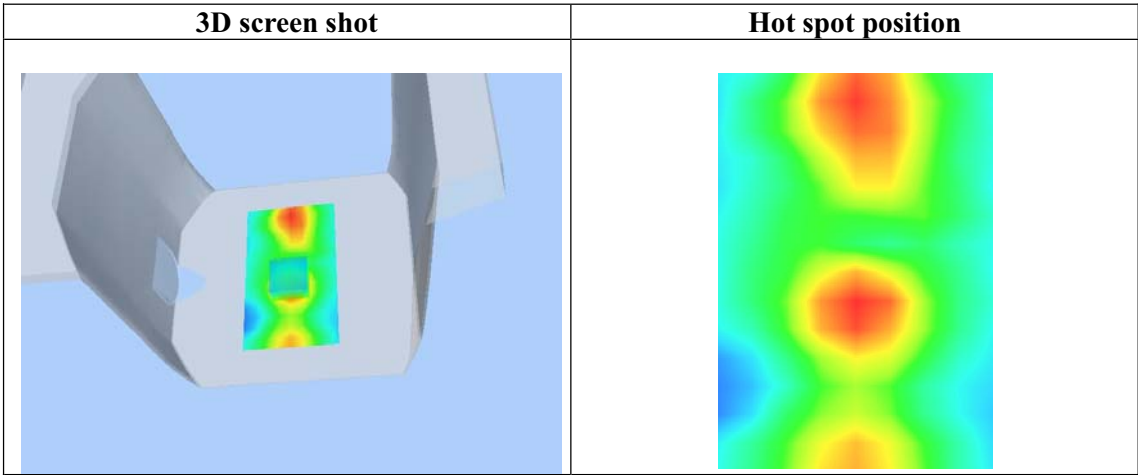
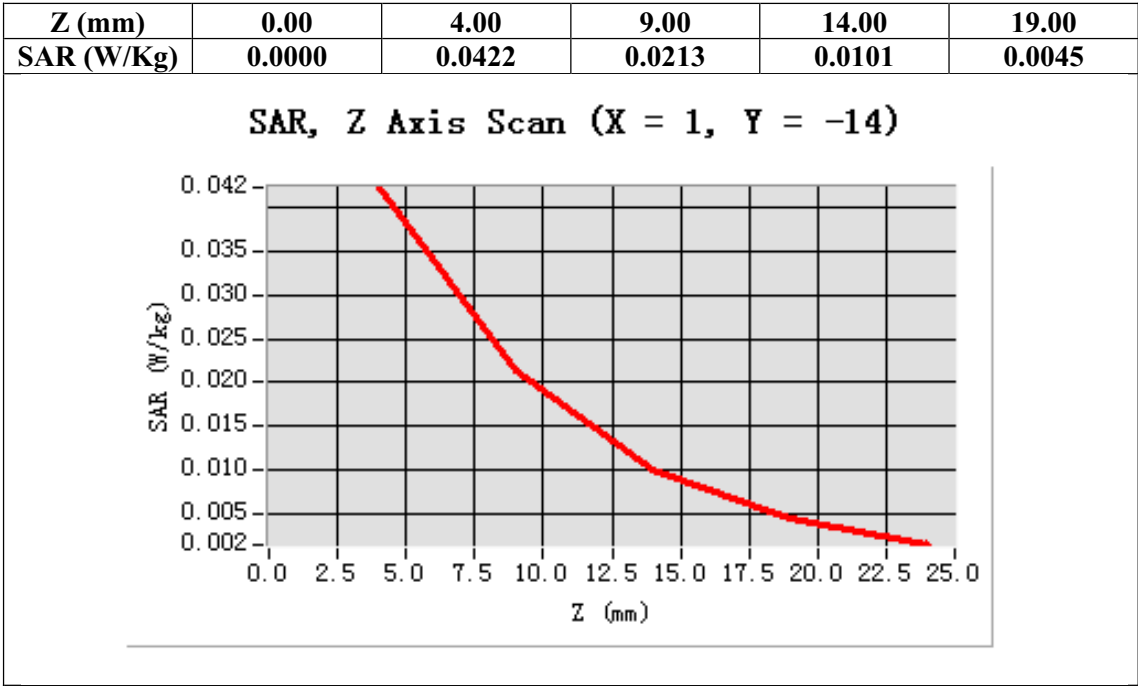
Configuration/802.11b Mid-Horizontal away from antenna /Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm,dy=8mm, dz=5mm;

| | |
|------------------------|--------------------------------------|
| Area Scan | surf_sam_plan.txt |
| ZoomScan | 5x5x7,dx=8mm dy=8mm dz=5mm,Very fast |
| Phantom | Validation plane |
| Device Position | Horizontal |
| Band | 2450MHz |
| Channels | Middle |
| Signal | TDMA (Crest factor: 1.0) |



Maximum location: X=1.00, Y=-14.00

| | |
|-----------------------|----------|
| SAR 10g (W/Kg) | 0.020398 |
| SAR 1g (W/Kg) | 0.042474 |



Test Laboratory: AGC Lab

Date: Aug.09, 2013

802.11b Mid -Vertical near antenna

DUT: Mobile Internet Device; Type: R091B

Communication System: Wi-Fi; Communication System Band: 802.11b; Duty Cycle: 1:1; Conv.F=4.32;
Frequency: 2437 MHz; Medium parameters used: $f = 2450$ MHz; $\sigma = 1.93$ mho/m; $\epsilon_r = 52.91$; $\rho = 1000$ kg/m³ ;
Phantom section: Flat Section
Ambient temperature (°C): 21.0, Liquid temperature (°C): 21.0

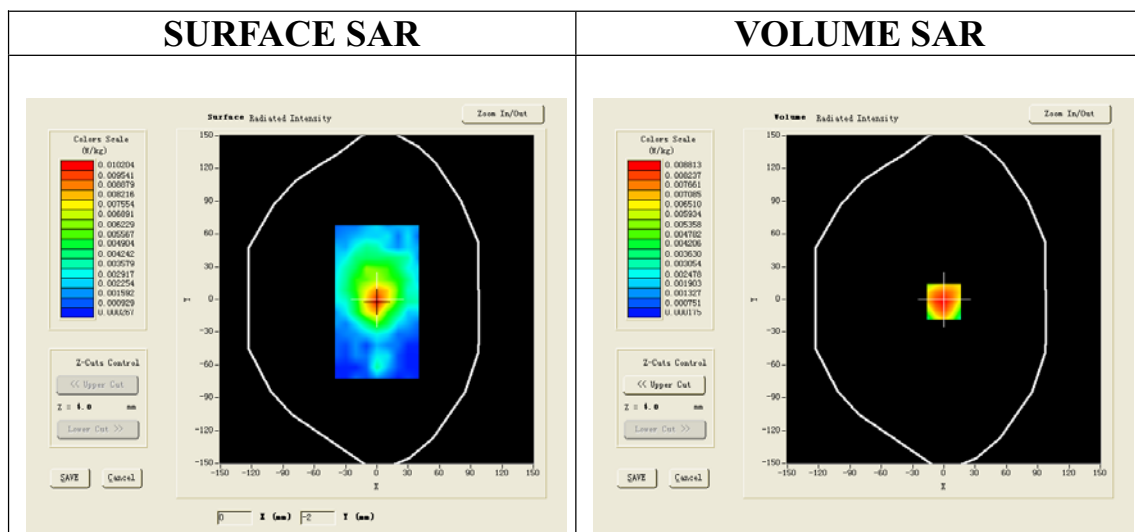
Satimo Configuration:

Probe: EP165; Calibrated: 01/31/2013

- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Phantom: Flat Phantom; Type: Elliptical Phantom
- Measurement SW: OpenSAR V4_02_01

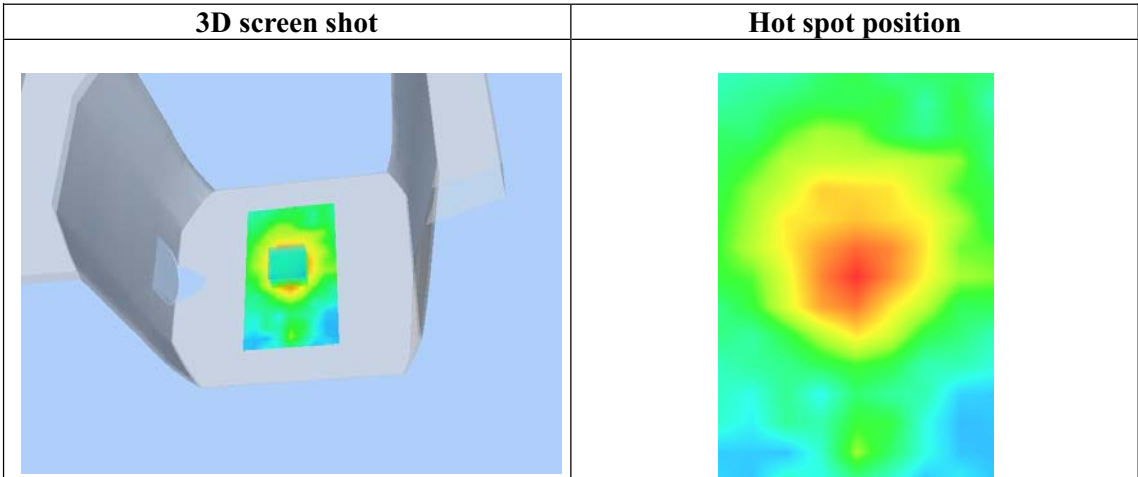
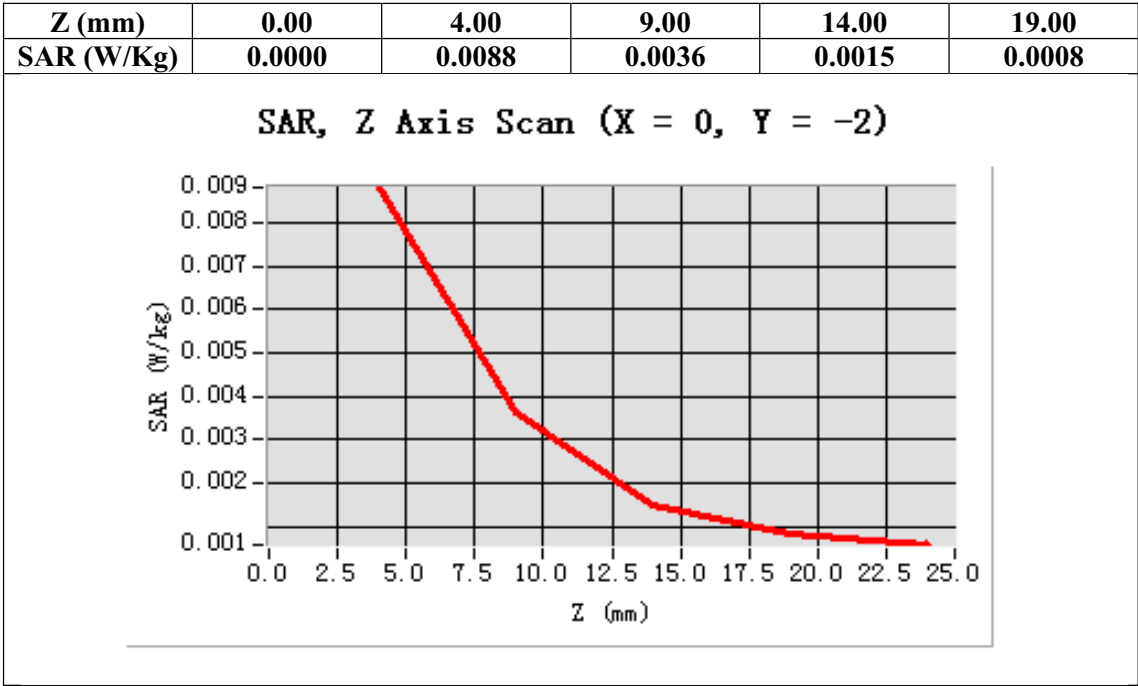
Configuration/802.11b Mid-Vertical near antenna /Area Scan (6x8x1): Measurement grid: dx=8mm, dy=8mm
Configuration/802.11b Mid -Vertical near antenna /Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm;

| | |
|------------------------|--------------------------------------|
| Area Scan | surf_sam_plan.txt |
| ZoomScan | 5x5x7,dx=8mm dy=8mm dz=5mm,Very fast |
| Phantom | Validation plane |
| Device Position | Vertical |
| Band | 2450MHz |
| Channels | Middle |
| Signal | TDMA (Crest factor: 1.0) |



Maximum location: X=0.00, Y=-2.00

| | |
|-----------------------|----------|
| SAR 10g (W/Kg) | 0.004675 |
| SAR 1g (W/Kg) | 0.009231 |



Test Laboratory: AGC Lab

Date: Aug.09, 2013

802.11b Mid -Vertical away from antenna

DUT: Mobile Internet Device; Type: R091B

Communication System: Wi-Fi; Communication System Band: 802.11b; Duty Cycle: 1:1; Conv.F=4.32;
Frequency: 2437 MHz; Medium parameters used: $f = 2450$ MHz; $\sigma = 1.93$ mho/m; $\epsilon_r = 52.91$; $\rho = 1000$ kg/m³ ;
Phantom section: Flat Section
Ambient temperature (°C): 21.0, Liquid temperature (°C): 21.0

Satimo Configuration:

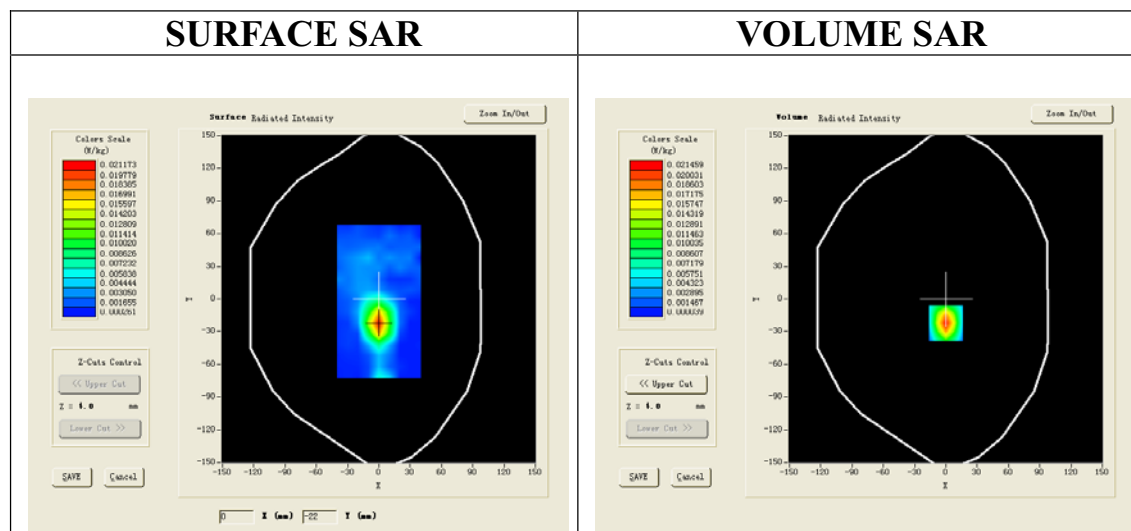
Probe: EP165; Calibrated: 01/31/2013

- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Phantom: Flat Phantom; Type: Elliptical Phantom
- Measurement SW: OpenSAR V4_02_01

Configuration/802.11b Mid-Vertical away from antenna /Area Scan (6x8x1): Measurement grid: dx=8mm, dy=8mm

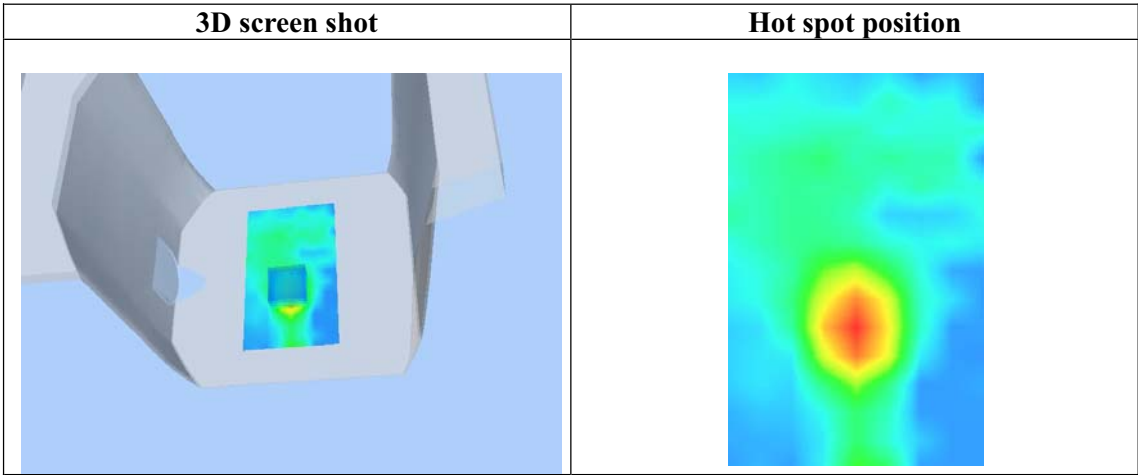
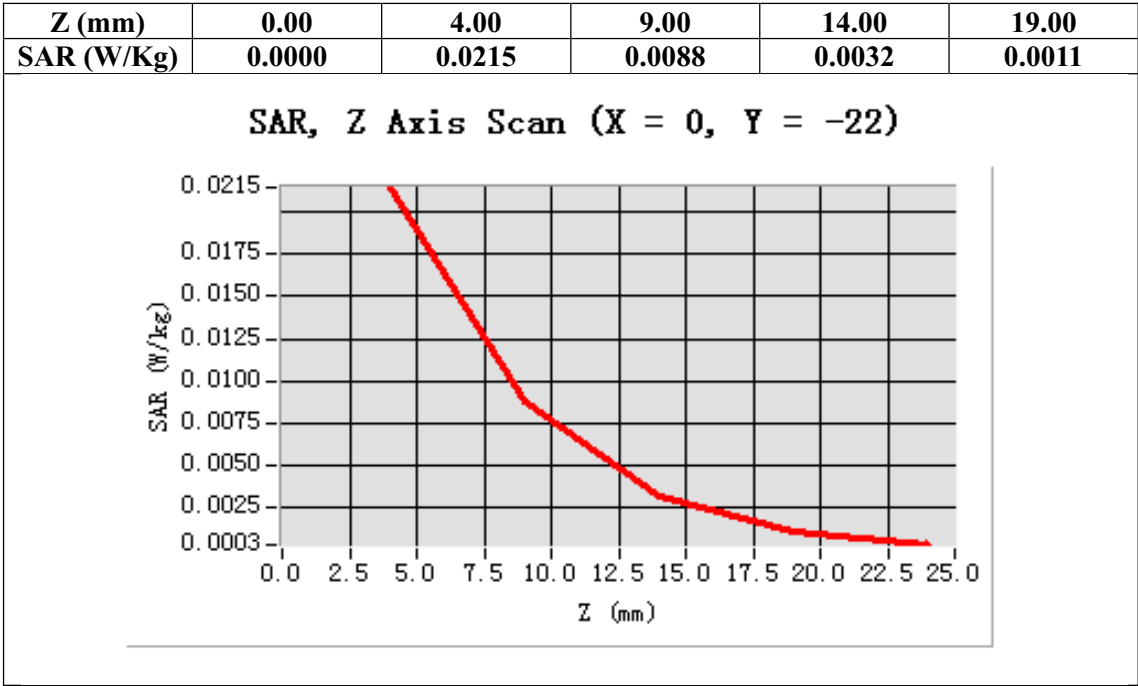
Configuration/802.11b Mid -Vertical away from antenna /Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm,dy=8mm, dz=5mm;

| | |
|------------------------|--------------------------------------|
| Area Scan | surf_sam_plan.txt |
| ZoomScan | 5x5x7,dx=8mm dy=8mm dz=5mm,Very fast |
| Phantom | Validation plane |
| Device Position | Vertical |
| Band | 2450MHz |
| Channels | Middle |
| Signal | TDMA (Crest factor: 1.0) |



Maximum location: X=0.00, Y=-22.00

| | |
|-----------------------|----------|
| SAR 10g (W/Kg) | 0.008932 |
| SAR 1g (W/Kg) | 0.021269 |



Test Laboratory: AGC Lab
802.11g Mid-Body-Worn- Touch

Date: Aug.09, 2013

DUT: Mobile Internet Device; Type: R091B

Communication System: Wi-Fi; Communication System Band: 802.11g; Duty Cycle: 1:1; Conv.F=4.32;
Frequency: 2437 MHz; Medium parameters used: $f = 2450$ MHz; $\sigma = 1.93$ mho/m; $\epsilon_r = 52.91$; $\rho = 1000$ kg/m³ ;
Phantom section: Flat Section
Ambient temperature (°C):21, Liquid temperature (°C):21

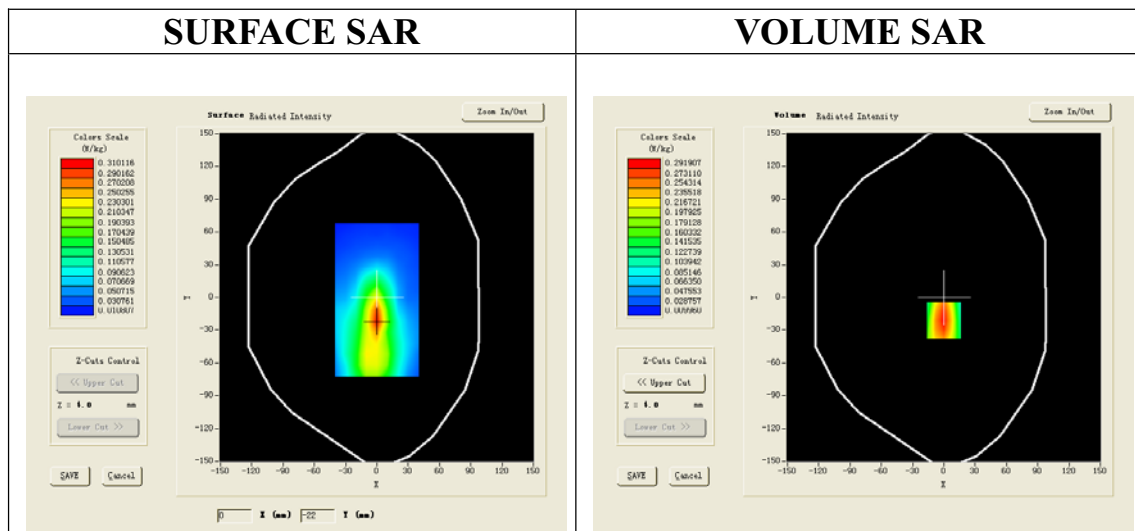
SATIMO Configuration:

Probe: EP165; Calibrated: 01/31/2013

- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Phantom: Flat Phantom; Type: Elliptical Phantom
- Measurement SW: OpenSAR V4_02_01

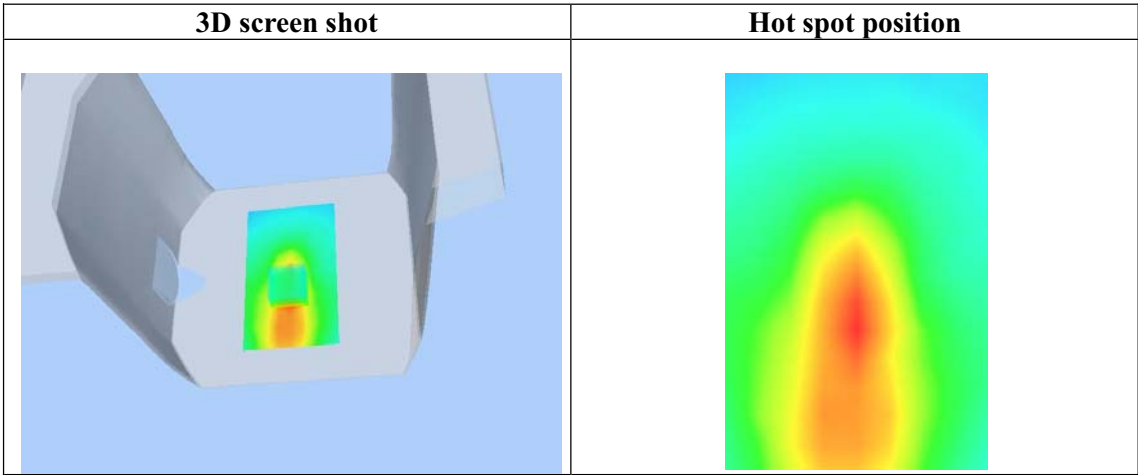
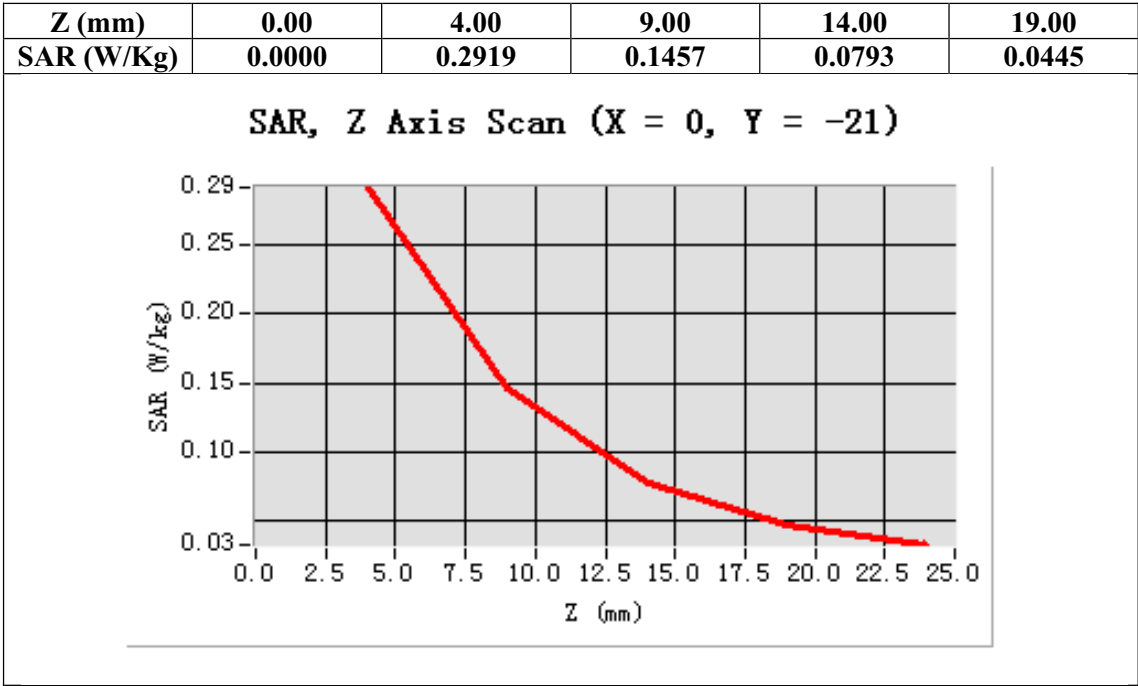
Configuration/802.11g Mid- Body- Touch /Area Scan (6x8x1): Measurement grid: dx=8mm, dy=8mm
Configuration/802.11g Mid- Body- Touch /Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm;

| | |
|-----------------|--------------------------------------|
| Area Scan | surf_sam_plan.txt |
| ZoomScan | 5x5x7,dx=8mm dy=8mm dz=5mm,Very fast |
| Phantom | Validation plane |
| Device Position | Body Touch |
| Band | 2450MHz |
| Channels | Middle |
| Signal | TDMA (Crest factor: 8.0) |



Maximum location: X=0.00, Y=-21.00

| | |
|----------------|----------|
| SAR 10g (W/Kg) | 0.158739 |
| SAR 1g (W/Kg) | 0.296673 |



Test Laboratory: AGC Lab
802.11g Mid- Body- Front
DUT: Mobile Internet Device; Type: R091B

Date: Aug.09, 2013

Communication System: Wi-Fi; Communication System Band: 802.11g; Duty Cycle: 1:1; Conv.F=4.32;
Frequency: 2437 MHz; Medium parameters used: $f = 2450$ MHz; $\sigma = 1.93$ mho/m; $\epsilon_r = 52.91$; $\rho = 1000$ kg/m³ ;
Phantom section: Flat Section
Ambient temperature (°C): 21.0, Liquid temperature (°C): 21.0

SATIMO Configuration:

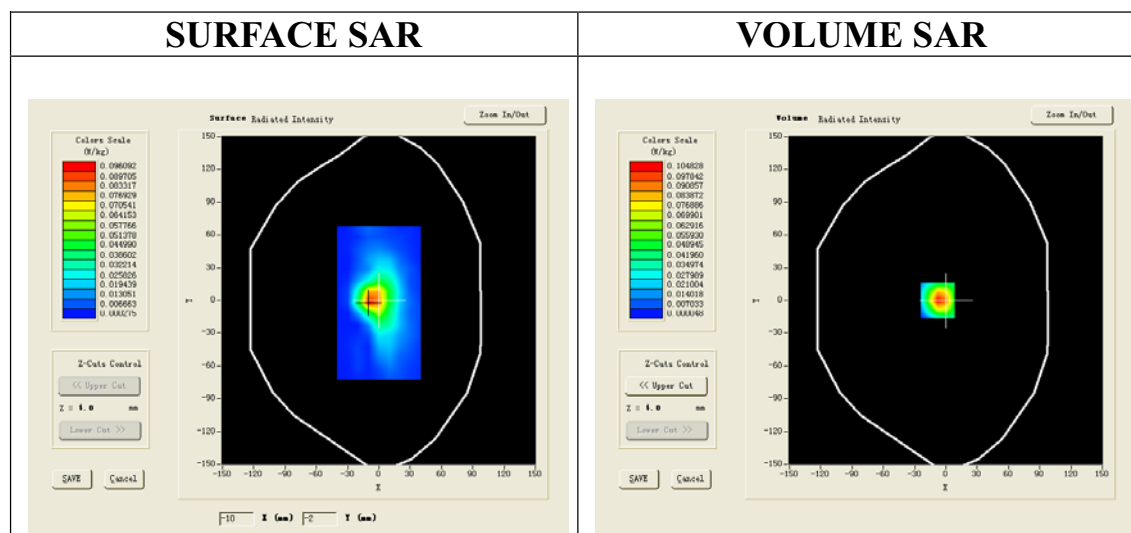
Probe: EP165; Calibrated: 01/31/2013

- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Phantom: Flat Phantom; Type: Elliptical Phantom
- Measurement SW: OpenSAR V4_02_01

Configuration/802.11g Mid-Body- Front /Area Scan (6x8x1): Measurement grid: dx=8mm, dy=8mm

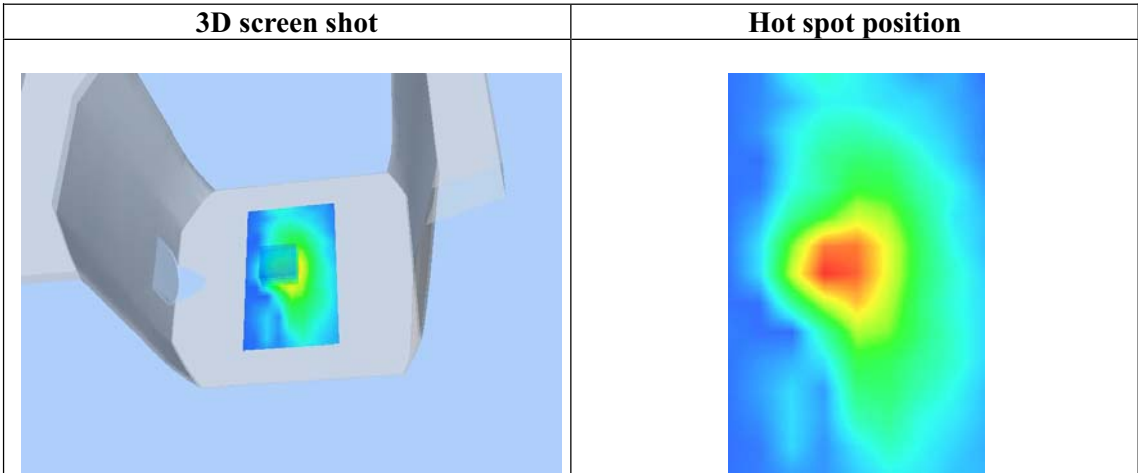
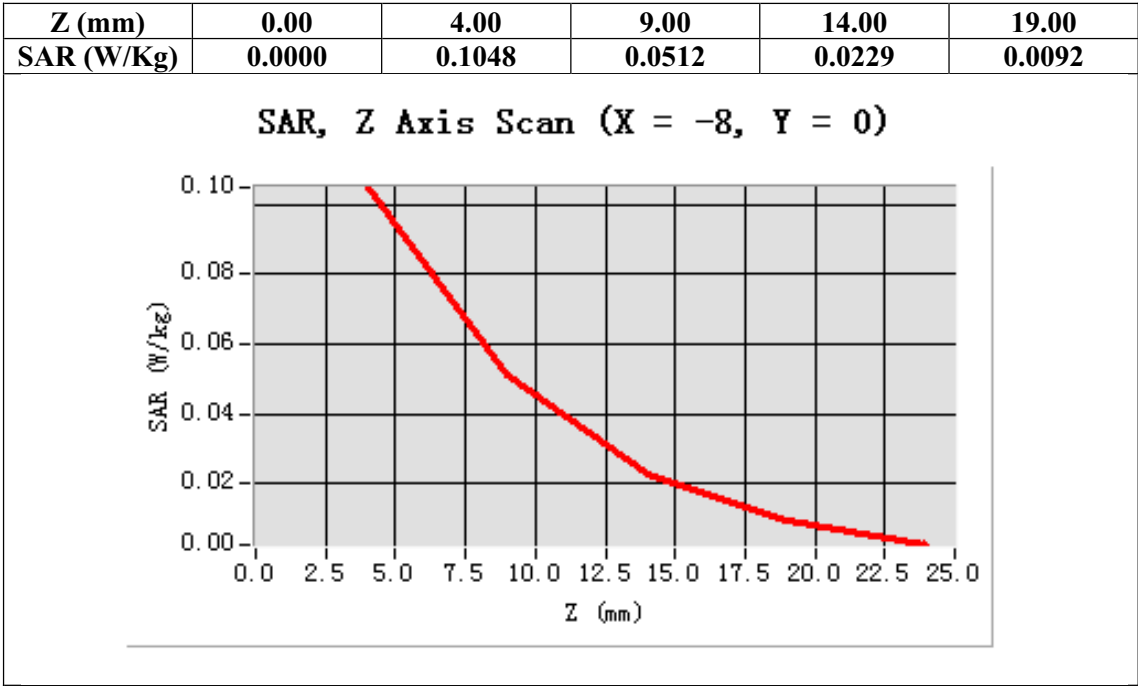
Configuration/802.11g Mid-Body- Front Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm;

| | |
|------------------------|--------------------------------------|
| Area Scan | surf_sam_plan.txt |
| ZoomScan | 5x5x7,dx=8mm dy=8mm dz=5mm,Very fast |
| Phantom | Validation plane |
| Device Position | Body Front |
| Band | 2450MHz |
| Channels | Middle |
| Signal | TDMA (Crest factor: 8.0) |



Maximum location: X=-8.00, Y=0.00

| | |
|-----------------------|----------|
| SAR 10g (W/Kg) | 0.046895 |
| SAR 1g (W/Kg) | 0.104996 |



Test Laboratory: AGC Lab

Date: Aug.09, 2013

802.11g Mid -Horizontal near antenna

DUT: Mobile Internet Device; Type: R091B

Communication System: Wi-Fi; Communication System Band: 802.11g; Duty Cycle: 1:1; Conv.F=4.32;
Frequency: 2437 MHz; Medium parameters used: $f = 2450$ MHz; $\sigma = 1.93$ mho/m; $\epsilon_r = 52.91$; $\rho = 1000$ kg/m³ ;
Phantom section: Flat Section

Ambient temperature (°C): 21.0, Liquid temperature (°C): 21.0

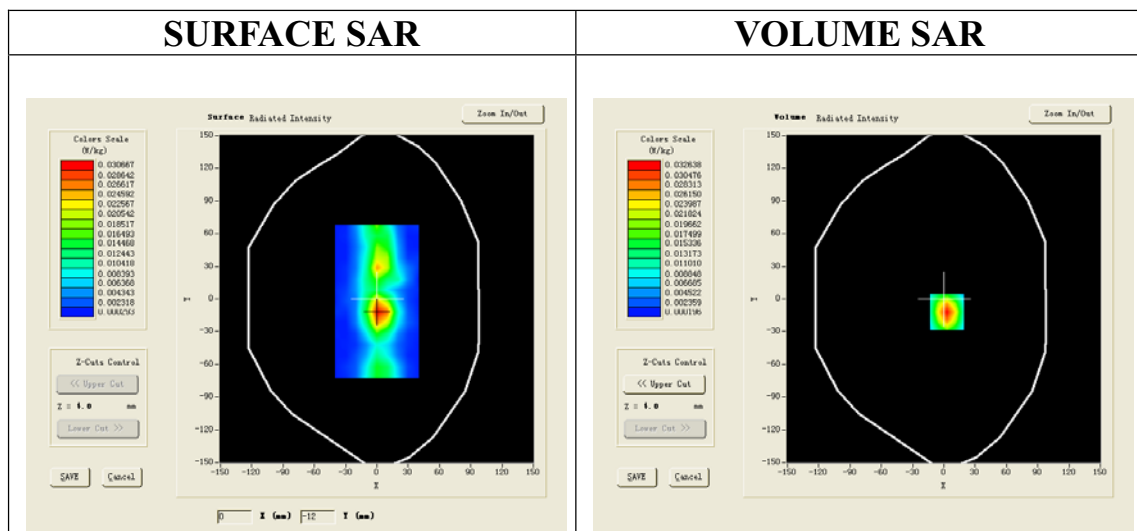
SATIMO Configuration:

Probe: EP165; Calibrated: 01/31/2013

- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Phantom: Flat Phantom; Type: Elliptical Phantom
- Measurement SW: OpenSAR V4_02_01

Configuration/802.11g Mid -Horizontal near antenna /Area Scan (6x8x1): Measurement grid: dx=8mm, dy=8mm
Configuration/802.11g Mid-Horizontal near antenna /Zoom Scan (5x5x7)/Cube 0: Measurement grid:
dx=8mm,dy=8mm, dz=5mm;

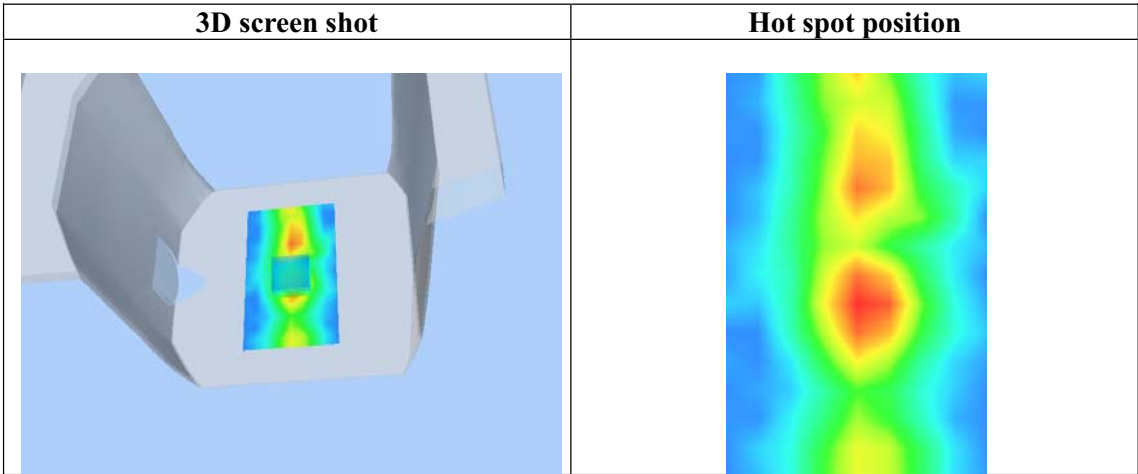
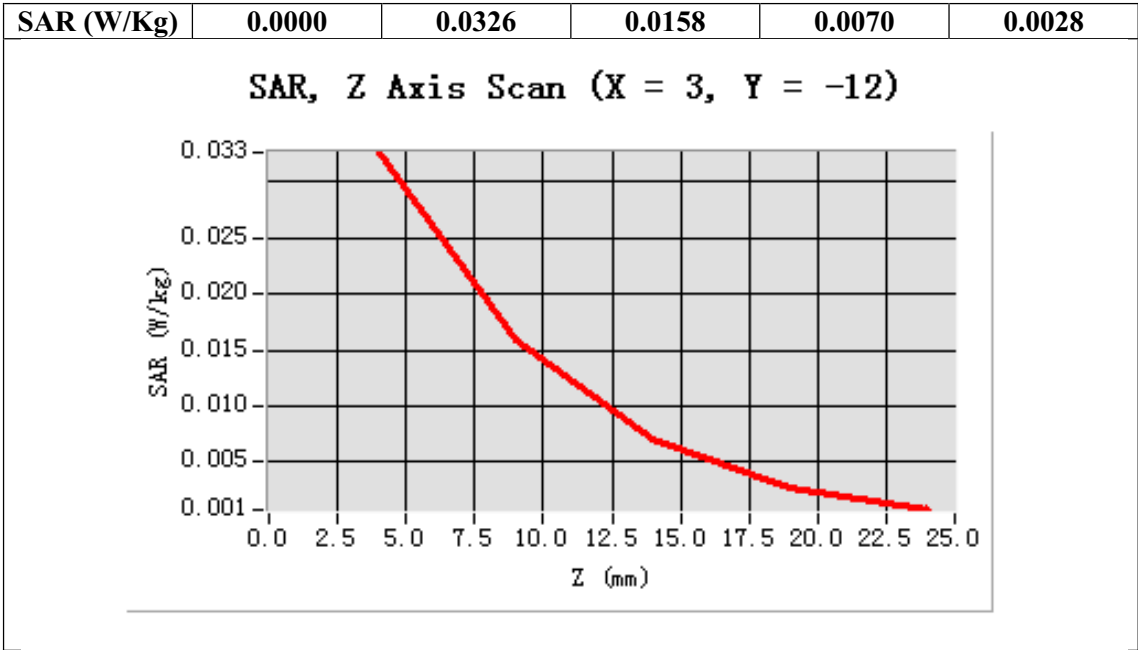
| | |
|-----------------|--------------------------------------|
| Area Scan | surf_sam_plan.txt |
| ZoomScan | 5x5x7,dx=8mm dy=8mm dz=5mm,Very fast |
| Phantom | Validation plane |
| Device Position | Horizontal |
| Band | 2450MHz |
| Channels | Middle |
| Signal | TDMA (Crest factor: 1.0) |



Maximum location: X=3.00, Y=-12.00

| | |
|----------------|----------|
| SAR 10g (W/Kg) | 0.014815 |
| SAR 1g (W/Kg) | 0.032411 |

| | | | | | |
|--------|------|------|------|-------|-------|
| Z (mm) | 0.00 | 4.00 | 9.00 | 14.00 | 19.00 |
|--------|------|------|------|-------|-------|



Test Laboratory: AGC Lab
802.11g Mid -Horizontal away from antenna
DUT: Mobile Internet Device; Type: R091B

Date: Aug.09, 2013

Communication System: Wi-Fi; Communication System Band: 802.11g; Duty Cycle: 1:1; Conv.F=4.32;
Frequency: 2437 MHz; Medium parameters used: $f = 2450$ MHz; $\sigma = 1.93$ mho/m; $\epsilon_r = 52.91$; $\rho = 1000$ kg/m³ ;
Phantom section: Flat Section
Ambient temperature (°C): 21.0, Liquid temperature (°C): 21.0

Satimo Configuration:

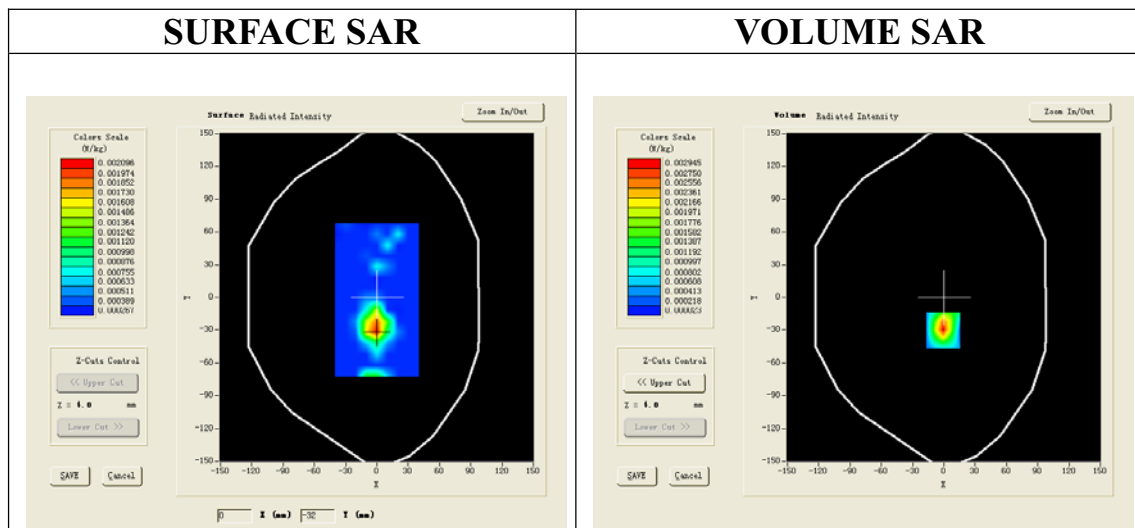
Probe: EP165; Calibrated: 01/31/2013

- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Phantom: Flat Phantom; Type: Elliptical Phantom
- Measurement SW: OpenSAR V4_02_01

Configuration/802.11g Mid -Horizontal away from antenna /Area Scan (6x8x1): Measurement grid: dx=8mm, dy=8mm

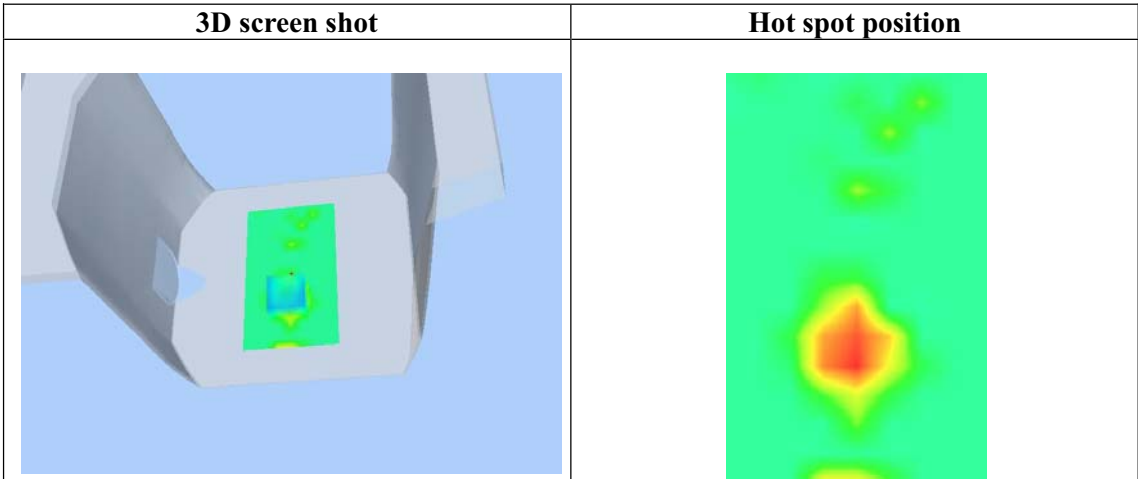
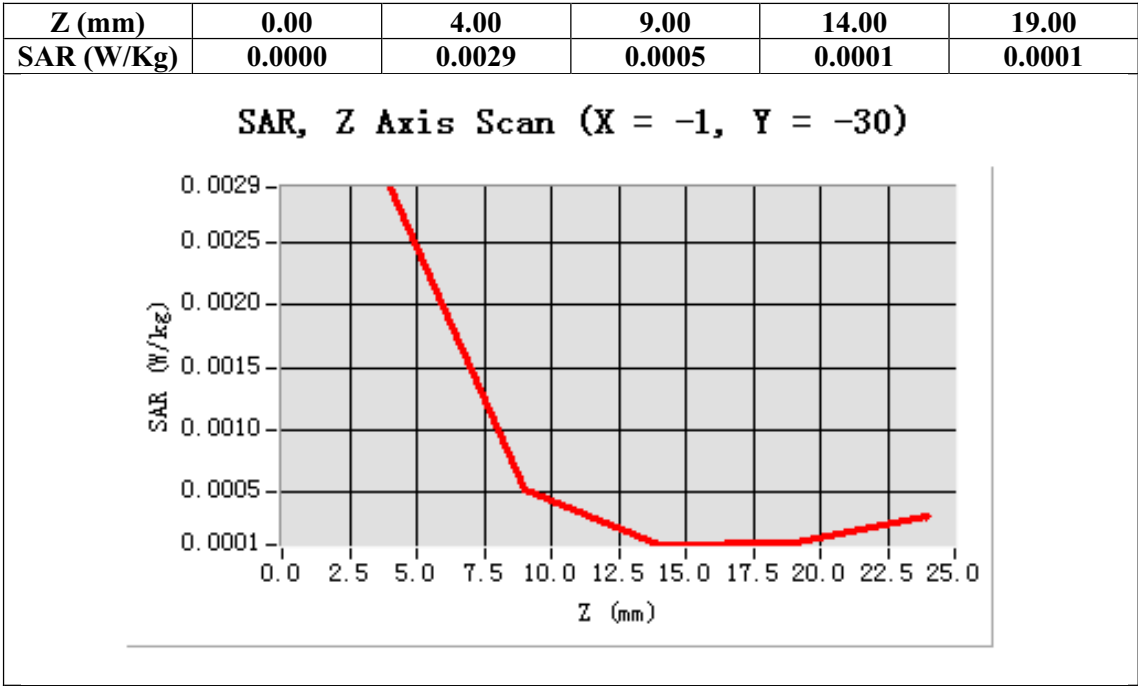
Configuration/802.11g Mid-Horizontal away from antenna /Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm,dy=8mm, dz=5mm;

| | |
|------------------------|--------------------------------------|
| Area Scan | surf_sam_plan.txt |
| ZoomScan | 5x5x7,dx=8mm dy=8mm dz=5mm,Very fast |
| Phantom | Validation plane |
| Device Position | Horizontal |
| Band | 2450MHz |
| Channels | Middle |
| Signal | TDMA (Crest factor: 1.0) |



Maximum location: X=-1.00, Y=-30.00

| | |
|-----------------------|----------|
| SAR 10g (W/Kg) | 0.001202 |
| SAR 1g (W/Kg) | 0.003223 |



Test Laboratory: AGC Lab

Date: Aug.09, 2013

802.11g Mid -Vertical near antenna

DUT: Mobile Internet Device; Type: R091B

Communication System: Wi-Fi; Communication System Band: 802.11g; Duty Cycle: 1:1; Conv.F=4.32;

Frequency: 2437 MHz; Medium parameters used: $f = 2450$ MHz; $\sigma = 1.93$ mho/m; $\epsilon_r = 52.91$; $\rho = 1000$ kg/m³ ;

Phantom section: Flat Section

Ambient temperature (°C): 21.0, Liquid temperature (°C): 21.0

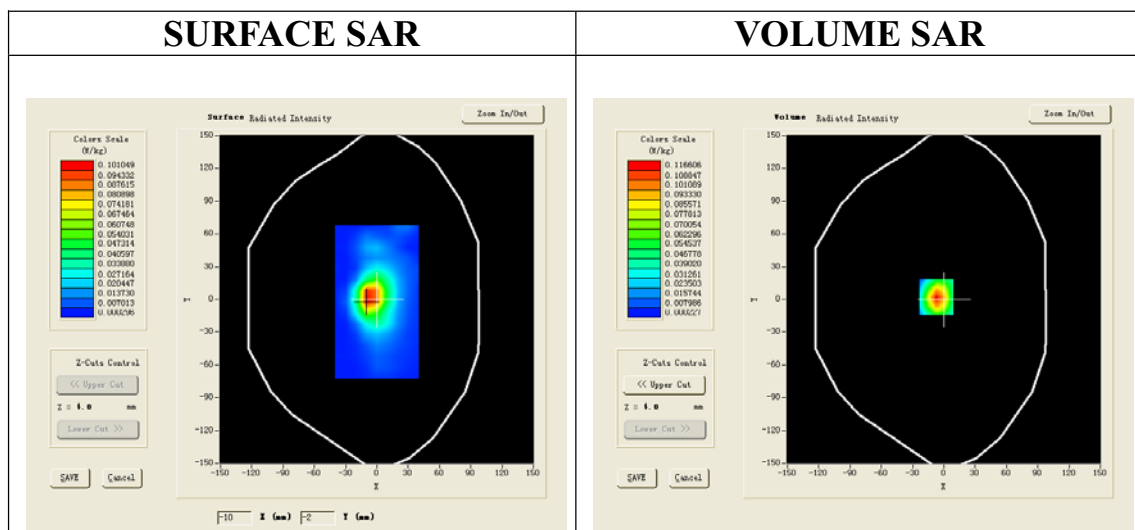
Satimo Configuration:

Probe: EP165; Calibrated: 01/31/2013

- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Phantom: Flat Phantom; Type: Elliptical Phantom
- Measurement SW: OpenSAR V4_02_01

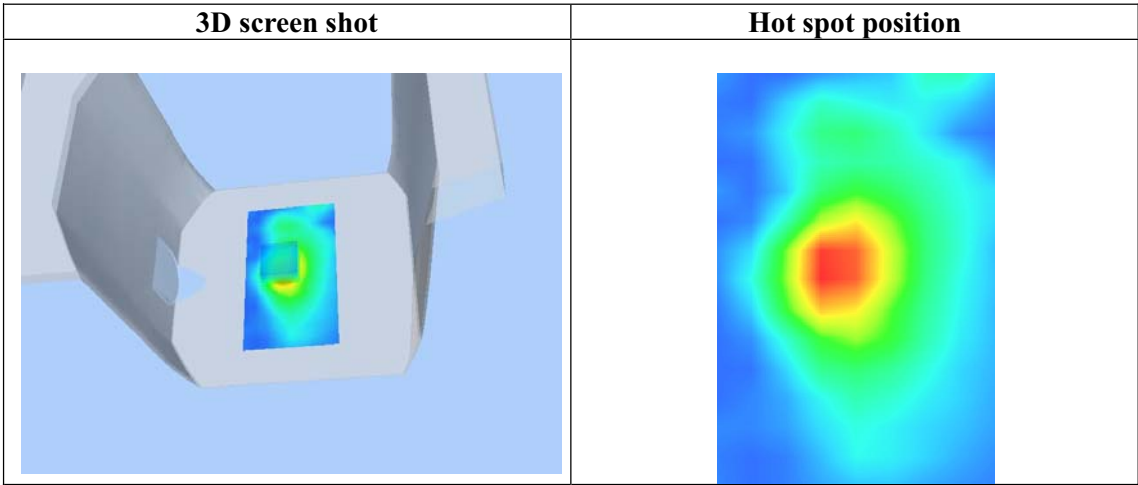
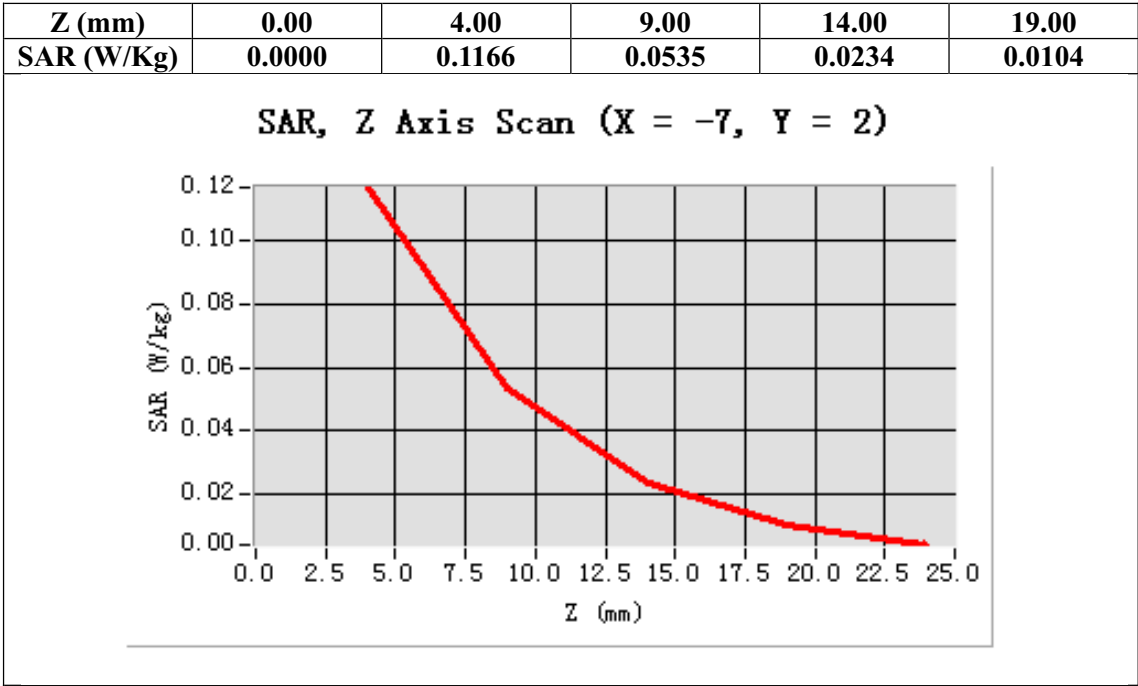
Configuration/802.11g Mid-Vertical near antenna /Area Scan (6x8x1): Measurement grid: dx=8mm, dy=8mm
Configuration/802.11g Mid -Vertical near antenna /Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm;

| | |
|------------------------|--------------------------------------|
| Area Scan | surf_sam_plan.txt |
| ZoomScan | 5x5x7,dx=8mm dy=8mm dz=5mm,Very fast |
| Phantom | Validation plane |
| Device Position | Vertical |
| Band | 2450MHz |
| Channels | Middle |
| Signal | TDMA (Crest factor: 1.0) |



Maximum location: X=-7.00, Y=2.00

| | |
|-----------------------|----------|
| SAR 10g (W/Kg) | 0.052434 |
| SAR 1g (W/Kg) | 0.116371 |



Test Laboratory: AGC Lab
802.11g Mid -Vertical away from antenna
DUT: Mobile Internet Device; Type: R091B

Date: Aug.09, 2013

Communication System: Wi-Fi; Communication System Band: 802.11g; Duty Cycle: 1:1; Conv.F=4.32;
Frequency: 2437 MHz; Medium parameters used: $f = 2450$ MHz; $\sigma = 1.93$ mho/m; $\epsilon_r = 52.91$; $\rho = 1000$ kg/m³ ;
Phantom section: Flat Section
Ambient temperature (°C): 21.0, Liquid temperature (°C): 21.0

Satimo Configuration:

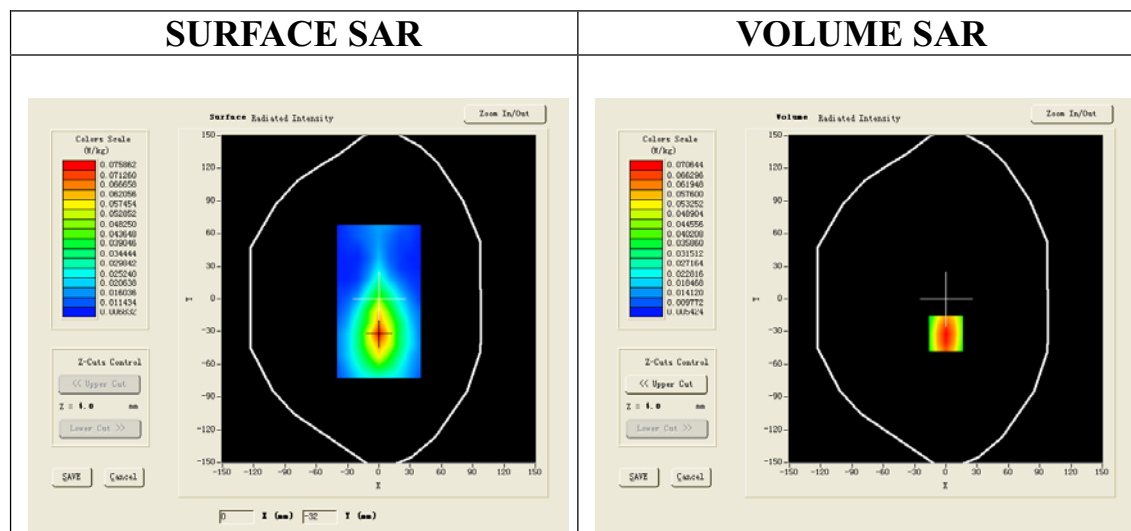
Probe: EP165; Calibrated: 01/31/2013

- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Phantom: Flat Phantom; Type: Elliptical Phantom
- Measurement SW: OpenSAR V4_02_01

Configuration/802.11g Mid-Vertical away from antenna /Area Scan (6x8x1): Measurement grid: dx=8mm, dy=8mm

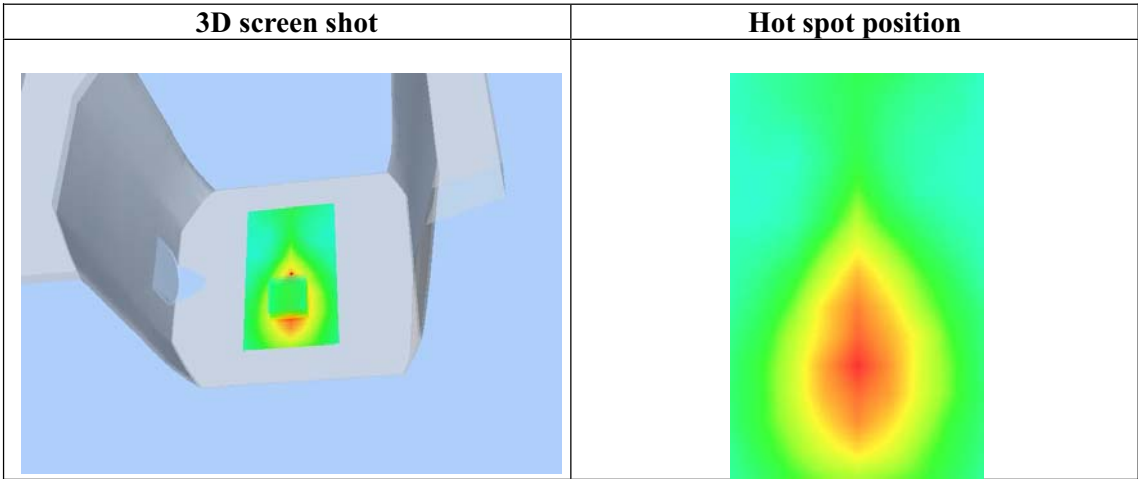
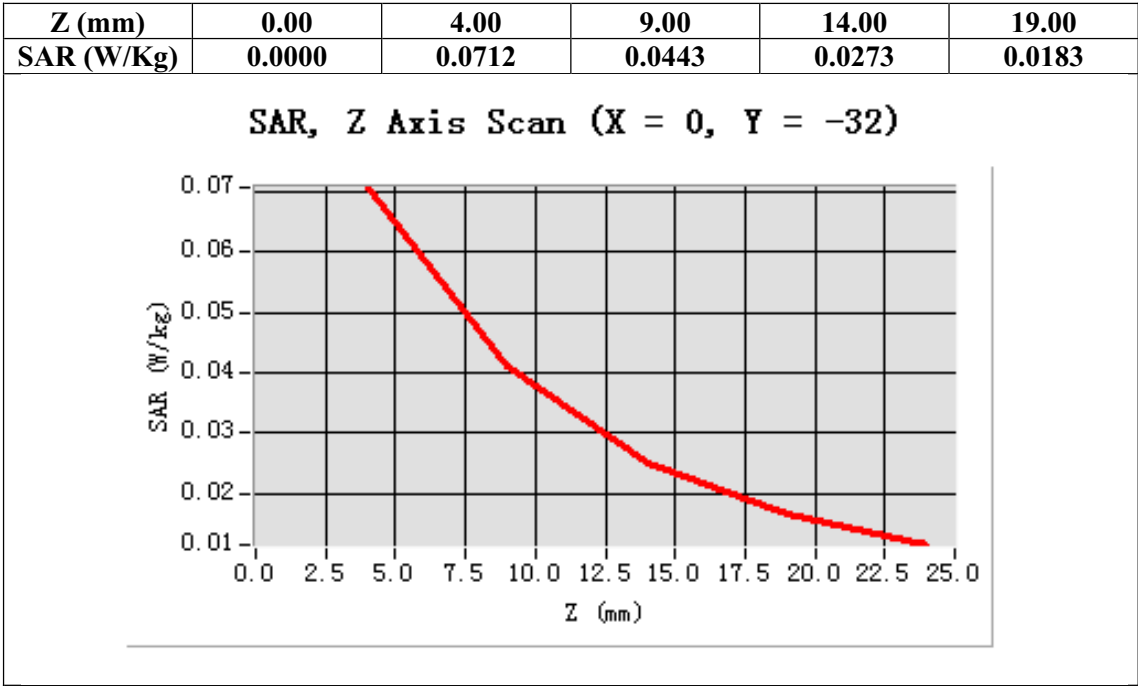
Configuration/802.11g Mid -Vertical away from antenna /Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm,dy=8mm, dz=5mm;

| | |
|------------------------|--------------------------------------|
| Area Scan | surf_sam_plan.txt |
| ZoomScan | 5x5x7,dx=8mm dy=8mm dz=5mm,Very fast |
| Phantom | Validation plane |
| Device Position | Vertical |
| Band | 2450MHz |
| Channels | Middle |
| Signal | TDMA (Crest factor: 1.0) |



Maximum location: X=0.00, Y=-32.00

| | |
|-----------------------|----------|
| SAR 10g (W/Kg) | 0.041754 |
| SAR 1g (W/Kg) | 0.073169 |



Test Laboratory: AGC Lab
802.11n(20) Mid-Body-Worn- Touch
DUT: Mobile Internet Device; Type: R091B

Date: Aug.09, 2013

Communication System: Wi-Fi; Communication System Band: 802.11n(20); Duty Cycle: 1:1; Conv.F=4.32;
Frequency: 2437 MHz; Medium parameters used: $f = 2450$ MHz; $\sigma = 1.93$ mho/m; $\epsilon_r = 52.91$; $\rho = 1000$ kg/m³ ;
Phantom section: Flat Section
Ambient temperature (°C):21, Liquid temperature (°C):21

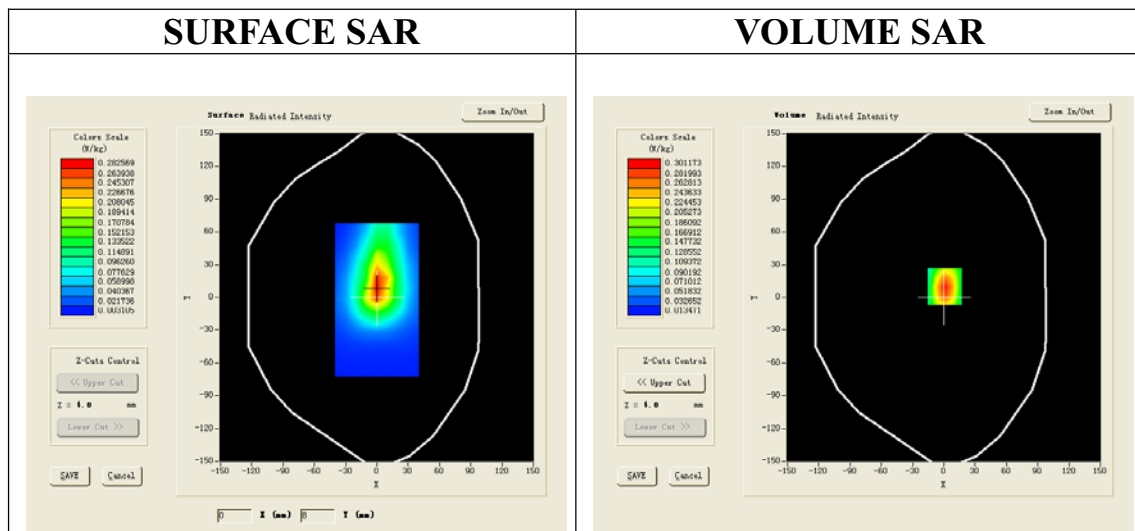
SATIMO Configuration:

Probe: EP165; Calibrated: 01/31/2013

- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Phantom: Flat Phantom; Type: Elliptical Phantom
- Measurement SW: OpenSAR V4_02_01

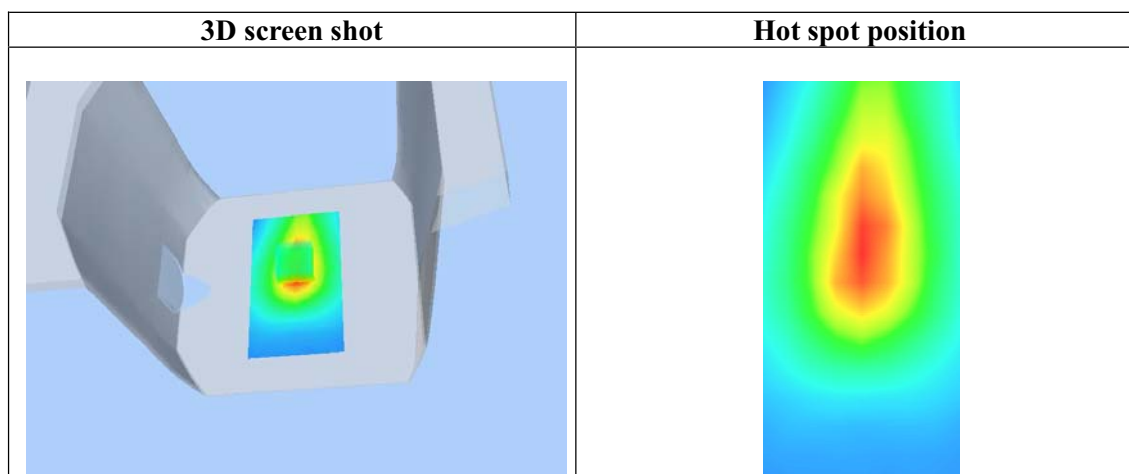
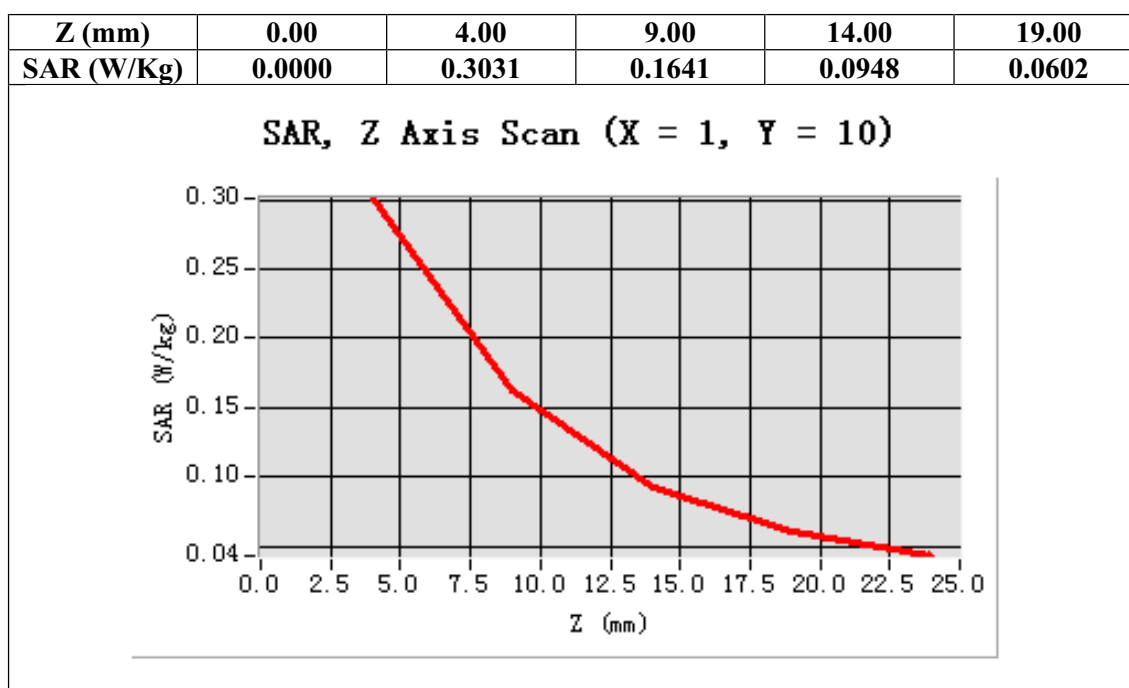
Configuration/802.11n(20) Mid- Body- Touch /Area Scan (6x8x1): Measurement grid: dx=8mm, dy=8mm
Configuration/802.11n(20) Mid- Body- Touch /Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm;

| | |
|------------------------|--------------------------------------|
| Area Scan | surf_sam_plan.txt |
| ZoomScan | 5x5x7,dx=8mm dy=8mm dz=5mm,Very fast |
| Phantom | Validation plane |
| Device Position | Body Touch |
| Band | 2450MHz |
| Channels | Middle |
| Signal | TDMA (Crest factor: 8.0) |



Maximum location: X=1.00, Y=10.00

| | |
|-----------------------|----------|
| SAR 10g (W/Kg) | 0.169352 |
| SAR 1g (W/Kg) | 0.306638 |



Test Laboratory: AGC Lab
802.11n(20) Mid- Body- Front

Date: Aug.09, 2013

DUT: Mobile Internet Device; Type: R091B

Communication System: Wi-Fi; Communication System Band: 802.11n(20); Duty Cycle: 1:1; Conv.F=4.32;
Frequency: 2437 MHz; Medium parameters used: $f = 2450$ MHz; $\sigma = 1.93$ mho/m; $\epsilon_r = 52.91$; $\rho = 1000$ kg/m³ ;
Phantom section: Flat Section
Ambient temperature (°C): 21.0, Liquid temperature (°C): 21.0

SATIMO Configuration:

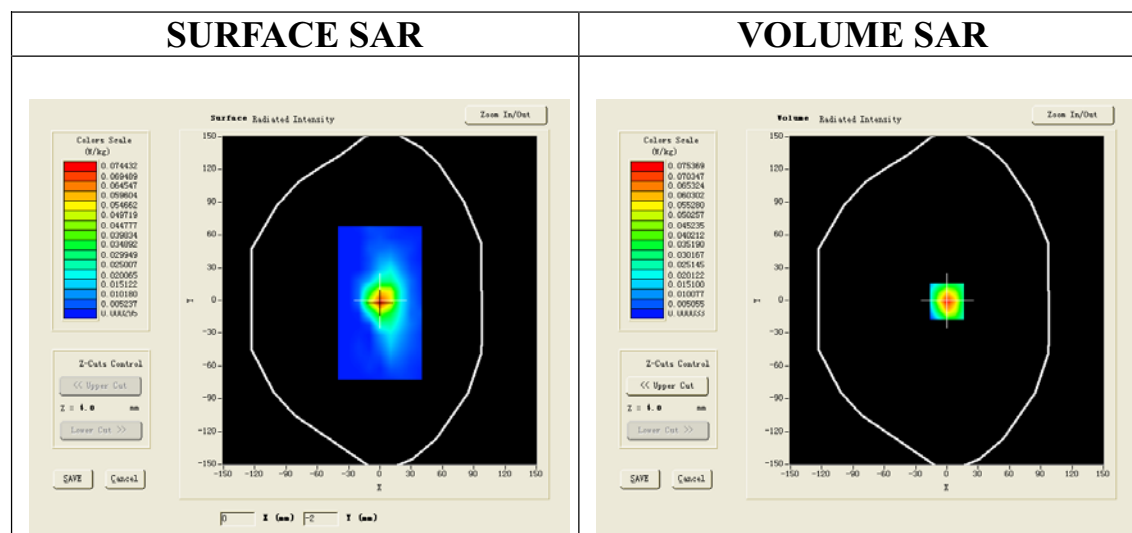
Probe: EP165; Calibrated: 01/31/2013

- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Phantom: Flat Phantom; Type: Elliptical Phantom
- Measurement SW: OpenSAR V4_02_01

Configuration/802.11n(20) Mid-Body- Front /Area Scan (6x8x1): Measurement grid: dx=8mm, dy=8mm

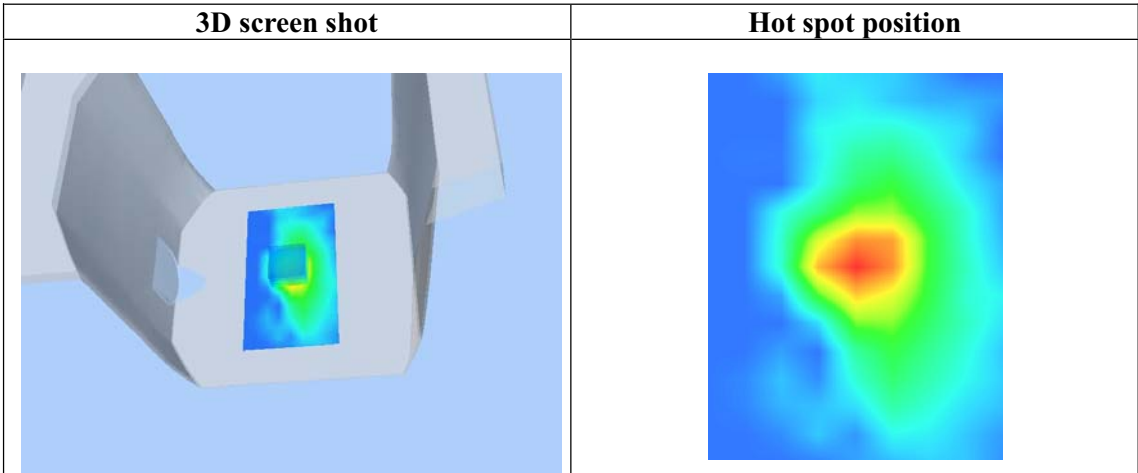
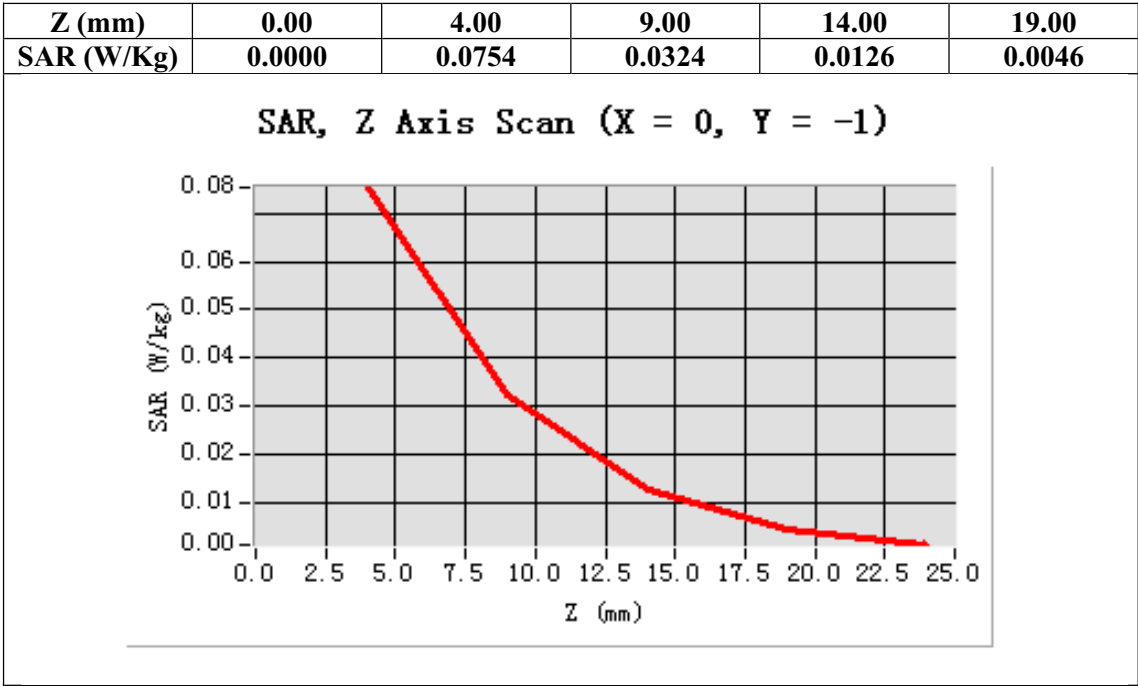
Configuration/802.11n(20) Mid-Body- Front Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm;

| | |
|-----------------|--------------------------------------|
| Area Scan | surf_sam_plan.txt |
| ZoomScan | 5x5x7,dx=8mm dy=8mm dz=5mm,Very fast |
| Phantom | Validation plane |
| Device Position | Body Front |
| Band | 2450MHz |
| Channels | Middle |
| Signal | TDMA (Crest factor: 8.0) |



Maximum location: X=0.00, Y=-1.00

| | |
|----------------|----------|
| SAR 10g (W/Kg) | 0.032566 |
| SAR 1g (W/Kg) | 0.075166 |



Test Laboratory: AGC Lab
802.11n(20) Mid -Horizontal near antenna
DUT: Mobile Internet Device; Type: R091B

Date: Aug.09, 2013

Communication System: Wi-Fi; Communication System Band: 802.11n(20); Duty Cycle: 1:1; Conv.F=4.32;
Frequency: 2437 MHz; Medium parameters used: $f = 2450$ MHz; $\sigma = 1.93$ mho/m; $\epsilon_r = 52.91$; $\rho = 1000$ kg/m³ ;
Phantom section: Flat Section

Ambient temperature (°C): 21.0, Liquid temperature (°C): 21.0

SATIMO Configuration:

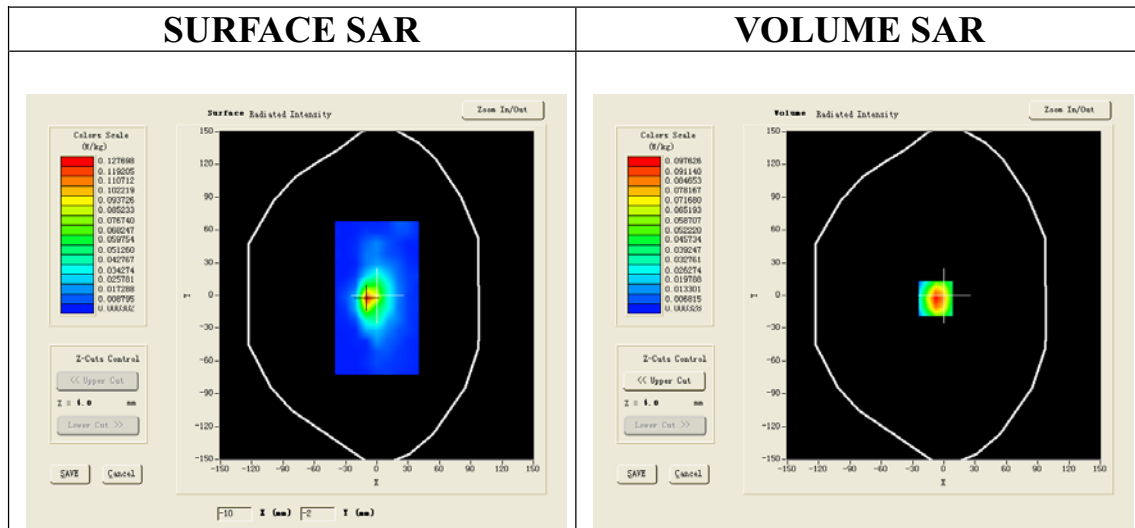
Probe: EP165; Calibrated: 01/31/2013

- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Phantom: Flat Phantom; Type: Elliptical Phantom
- Measurement SW: OpenSAR V4_02_01

Configuration/802.11n(20) Mid -Horizontal near antenna /Area Scan (6x8x1): Measurement grid: dx=8mm, dy=8mm

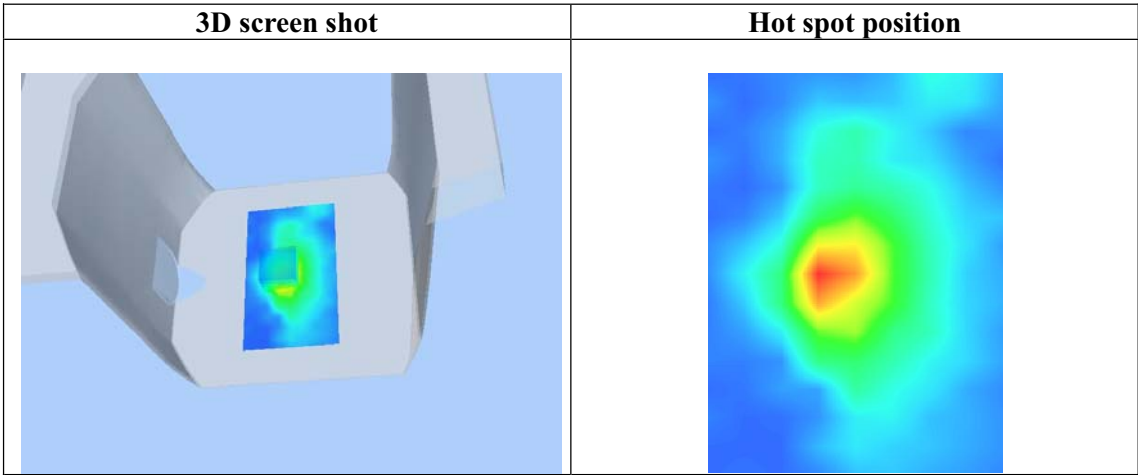
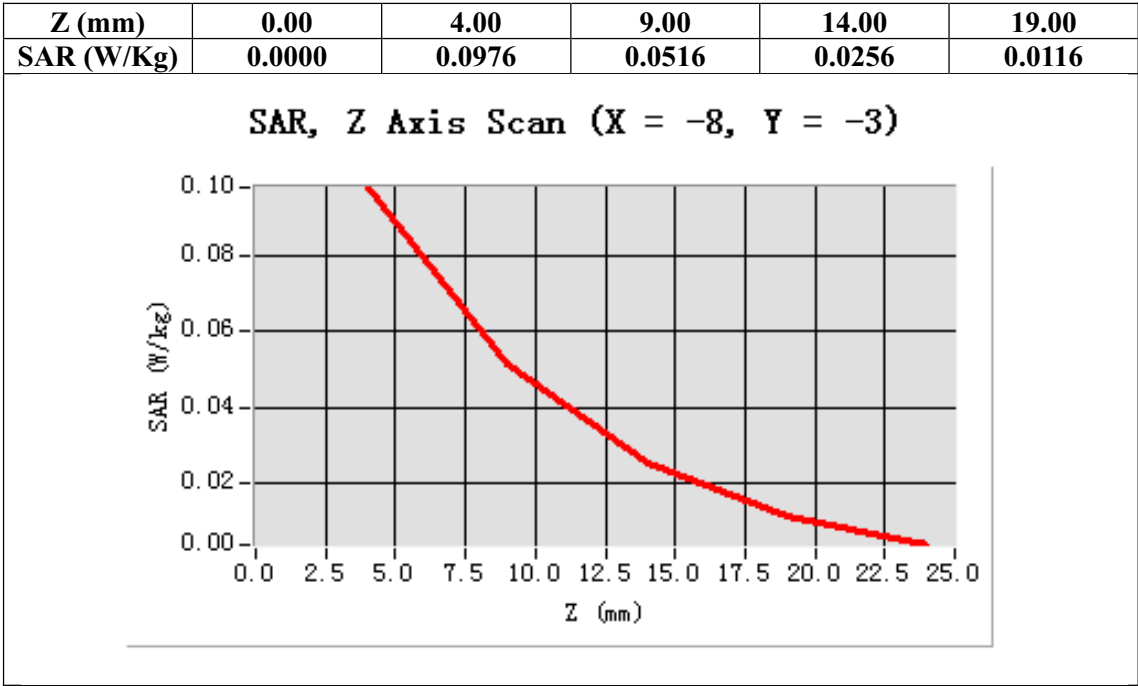
Configuration/802.11n(20) Mid-Horizontal near antenna /Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm,dy=8mm, dz=5mm;

| | |
|------------------------|--------------------------------------|
| Area Scan | surf_sam_plan.txt |
| ZoomScan | 5x5x7,dx=8mm dy=8mm dz=5mm,Very fast |
| Phantom | Validation plane |
| Device Position | Horizontal |
| Band | 2450MHz |
| Channels | Middle |
| Signal | TDMA (Crest factor: 1.0) |



Maximum location: X=-8.00, Y=-3.00

| | |
|-----------------------|----------|
| SAR 10g (W/Kg) | 0.047000 |
| SAR 1g (W/Kg) | 0.097709 |



Test Laboratory: AGC Lab
802.11n(20) Mid -Horizontal away from antenna
DUT: Mobile Internet Device; Type: R091B

Date: Aug.09, 2013

Communication System: Wi-Fi; Communication System Band: 802.11n(20); Duty Cycle: 1:1; Conv.F=4.32;
Frequency: 2437 MHz; Medium parameters used: $f = 2450$ MHz; $\sigma = 1.93$ mho/m; $\epsilon_r = 52.91$; $\rho = 1000$ kg/m³ ;
Phantom section: Flat Section
Ambient temperature (°C): 21.0, Liquid temperature (°C): 21.0

Satimo Configuration:

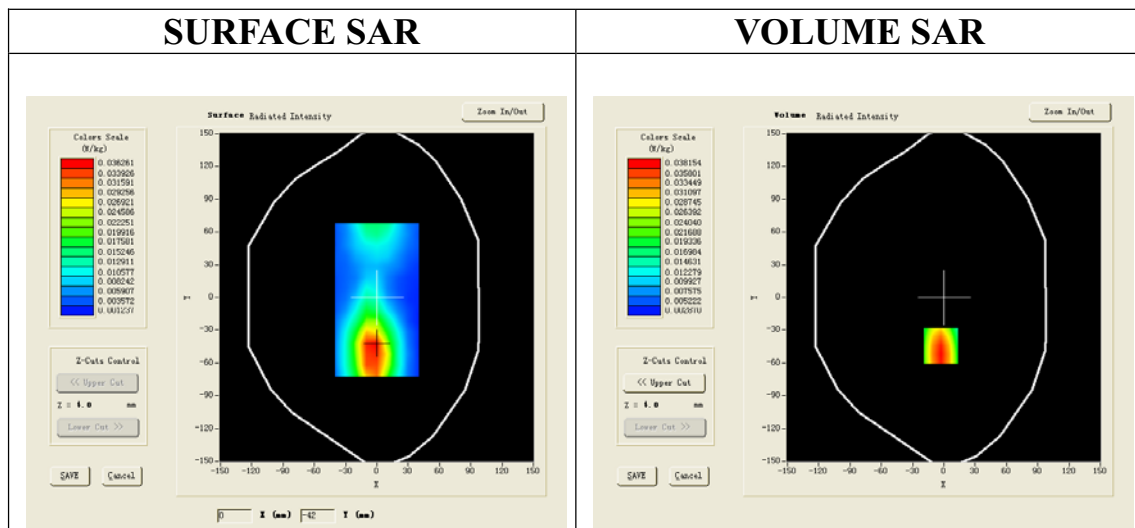
Probe: EP165; Calibrated: 01/31/2013

- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Phantom: Flat Phantom; Type: Elliptical Phantom
- Measurement SW: OpenSAR V4_02_01

Configuration/802.11n(20) Mid -Horizontal away from antenna /Area Scan (6x8x1): Measurement grid: dx=8mm, dy=8mm

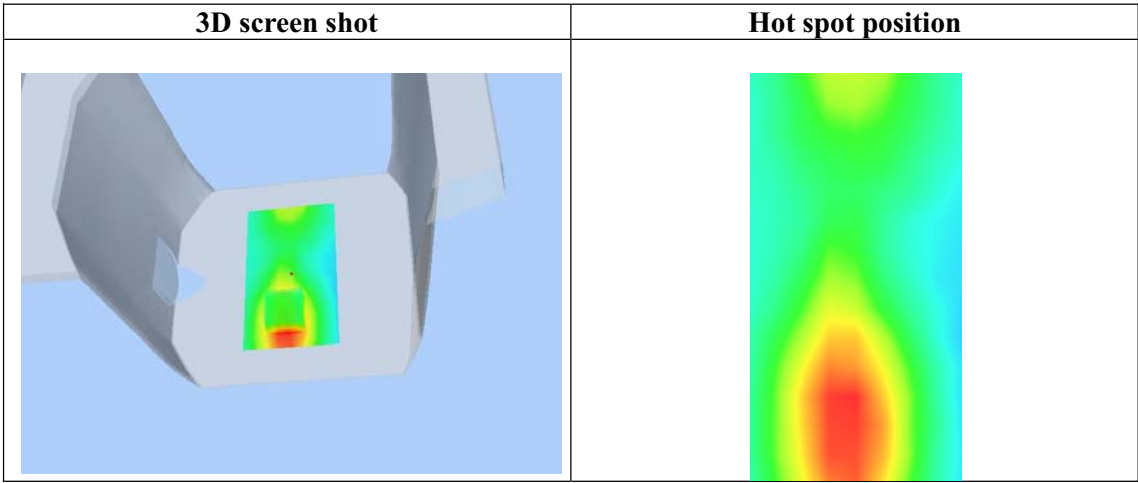
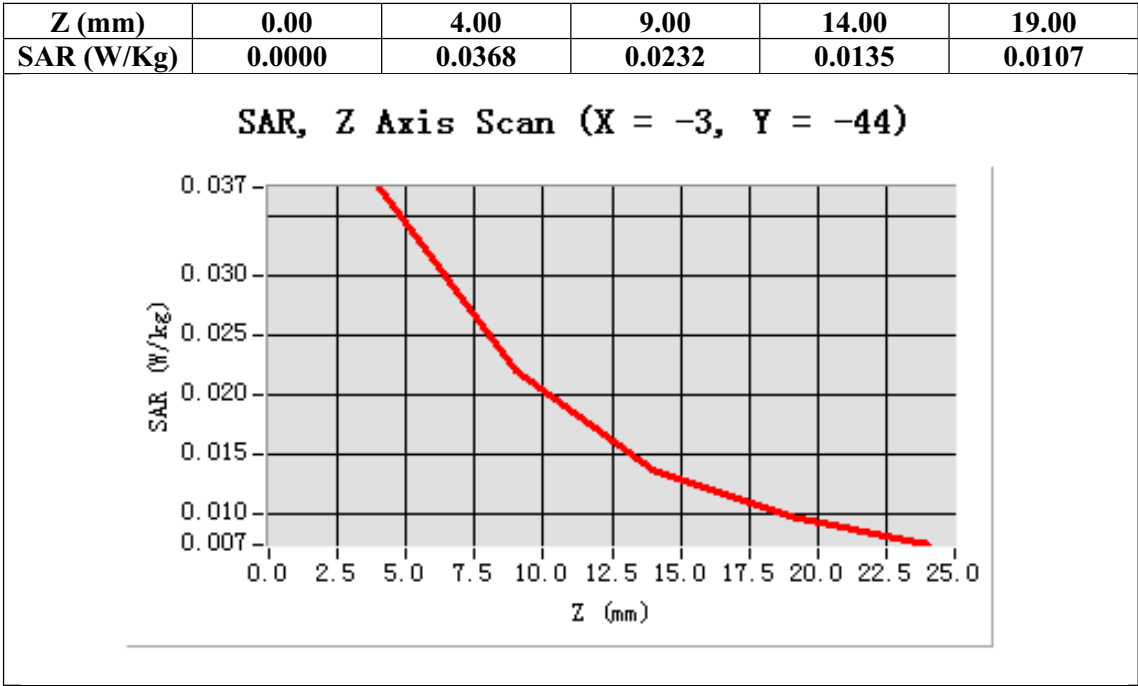
Configuration/802.11n(20) Mid-Horizontal away from antenna /Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm,dy=8mm, dz=5mm;

| | |
|------------------------|--------------------------------------|
| Area Scan | surf_sam_plan.txt |
| ZoomScan | 5x5x7,dx=8mm dy=8mm dz=5mm,Very fast |
| Phantom | Validation plane |
| Device Position | Horizontal |
| Band | 2450MHz |
| Channels | Middle |
| Signal | TDMA (Crest factor: 1.0) |



Maximum location: X=-3.00, Y=-44.00

| | |
|-----------------------|----------|
| SAR 10g (W/Kg) | 0.024127 |
| SAR 1g (W/Kg) | 0.035557 |



Test Laboratory: AGC Lab

Date: Aug.09, 2013

802.11n(20) Mid -Vertical near antenna

DUT: Mobile Internet Device; Type: R091B

Communication System: Wi-Fi; Communication System Band: 802.11n(20); Duty Cycle: 1:1; Conv.F=4.32;
Frequency: 2437 MHz; Medium parameters used: $f = 2450$ MHz; $\sigma = 1.93$ mho/m; $\epsilon_r = 52.91$; $\rho = 1000$ kg/m³ ;
Phantom section: Flat Section
Ambient temperature (°C): 21.0, Liquid temperature (°C): 21.0

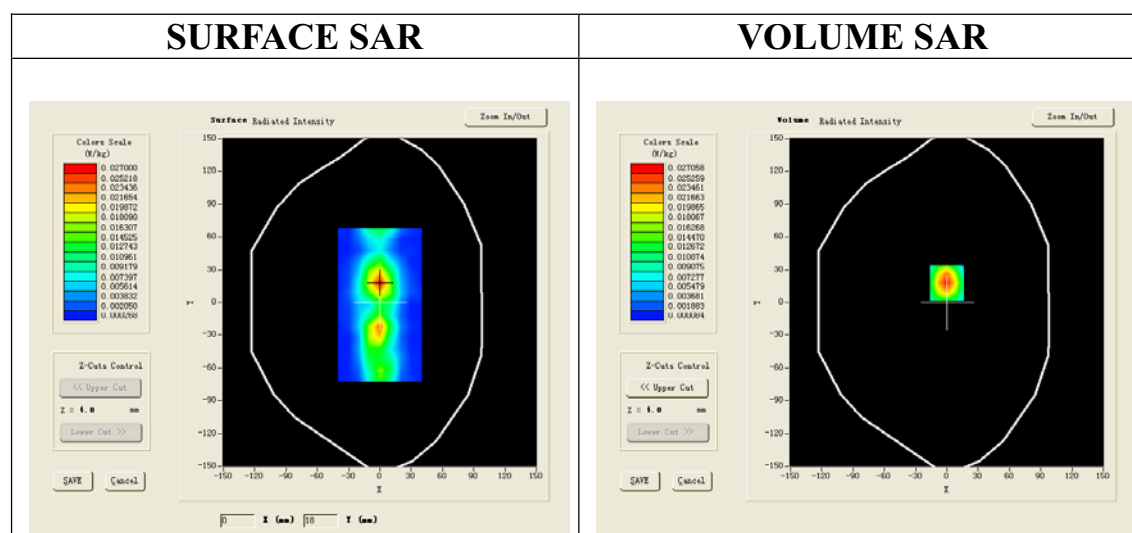
Satimo Configuration:

Probe: EP165; Calibrated: 01/31/2013

- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Phantom: Flat Phantom; Type: Elliptical Phantom
- Measurement SW: OpenSAR V4_02_01

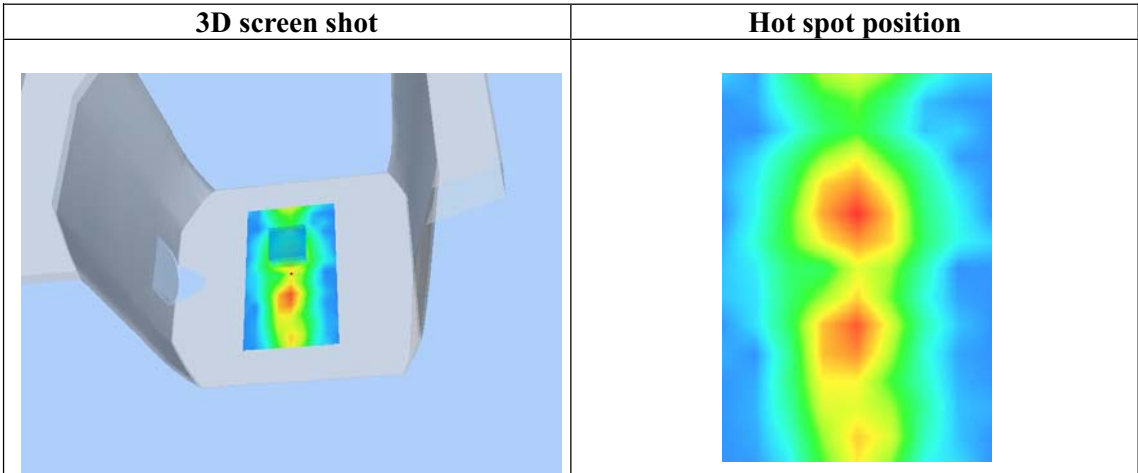
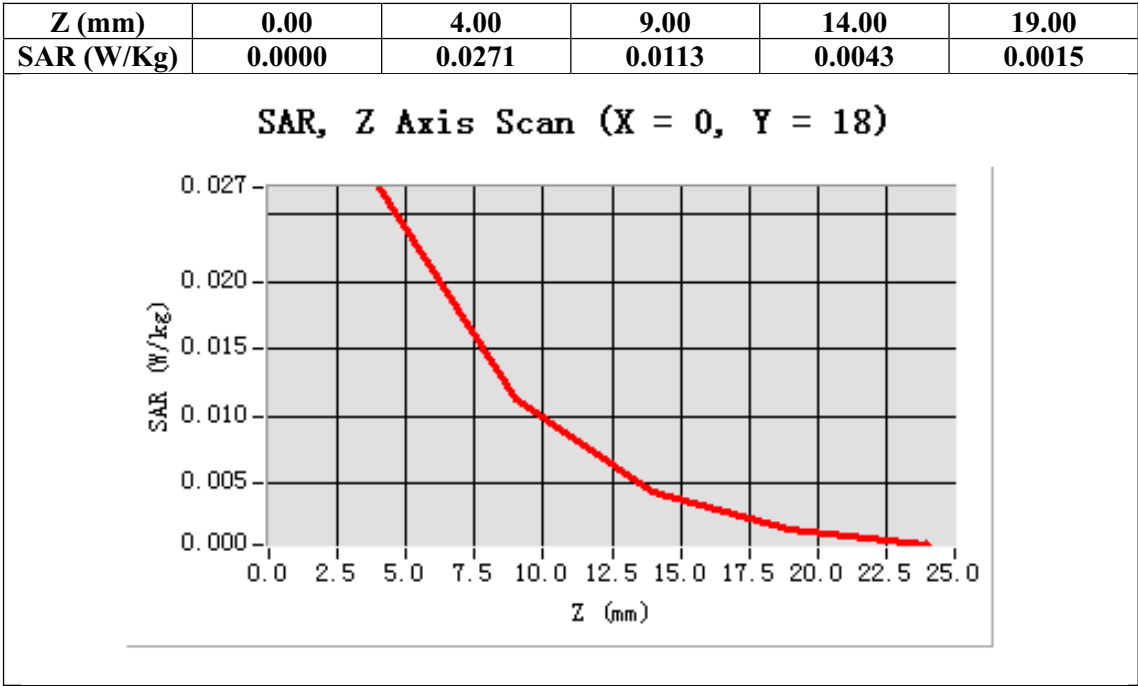
Configuration/802.11n(20) Mid-Vertical near antenna /Area Scan (6x8x1): Measurement grid: dx=8mm, dy=8mm
Configuration/802.11n(20) Mid -Vertical near antenna /Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm;

| | |
|-----------------|--------------------------------------|
| Area Scan | surf_sam_plan.txt |
| ZoomScan | 5x5x7,dx=8mm dy=8mm dz=5mm,Very fast |
| Phantom | Validation plane |
| Device Position | Vertical |
| Band | 2450MHz |
| Channels | Middle |
| Signal | TDMA (Crest factor: 1.0) |



Maximum location: X=0.00, Y=18.00

| | |
|----------------|----------|
| SAR 10g (W/Kg) | 0.012159 |
| SAR 1g (W/Kg) | 0.027349 |



Test Laboratory: AGC Lab
802.11n(20) Mid -Vertical away from antenna
DUT: Mobile Internet Device; Type: R091B

Date: Aug.09, 2013

Communication System: Wi-Fi; Communication System Band: 802.11n(20); Duty Cycle: 1:1; Conv.F=4.32;
Frequency: 2437 MHz; Medium parameters used: $f = 2450$ MHz; $\sigma = 1.93$ mho/m; $\epsilon_r = 52.91$; $\rho = 1000$ kg/m³ ;
Phantom section: Flat Section
Ambient temperature (°C): 21.0, Liquid temperature (°C): 21.0

Satimo Configuration:

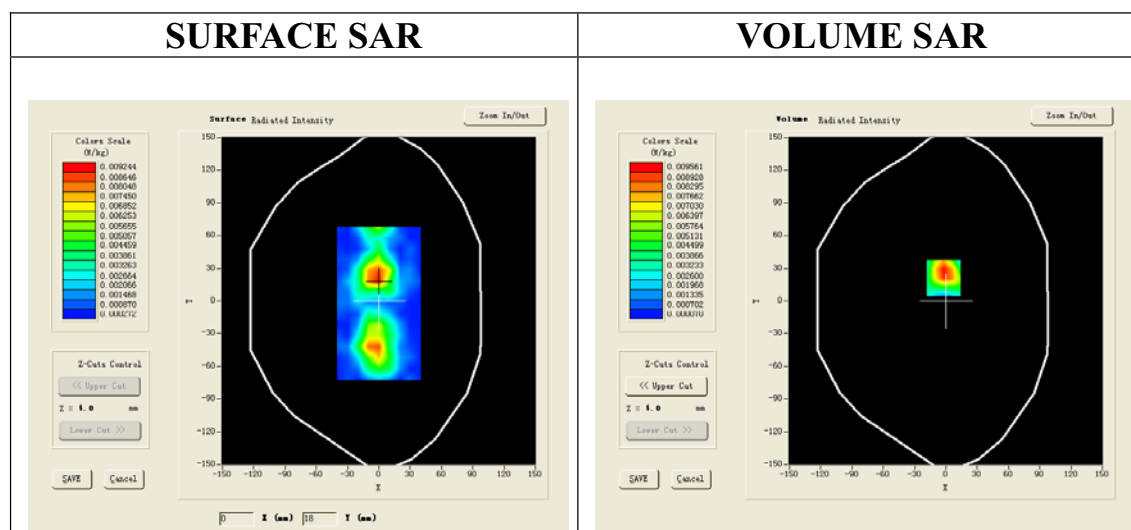
Probe: EP165; Calibrated: 01/31/2013

- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Phantom: Flat Phantom; Type: Elliptical Phantom
- Measurement SW: OpenSAR V4_02_01

Configuration/802.11n(20) Mid-Vertical away from antenna /Area Scan (6x8x1): Measurement grid: dx=8mm, dy=8mm

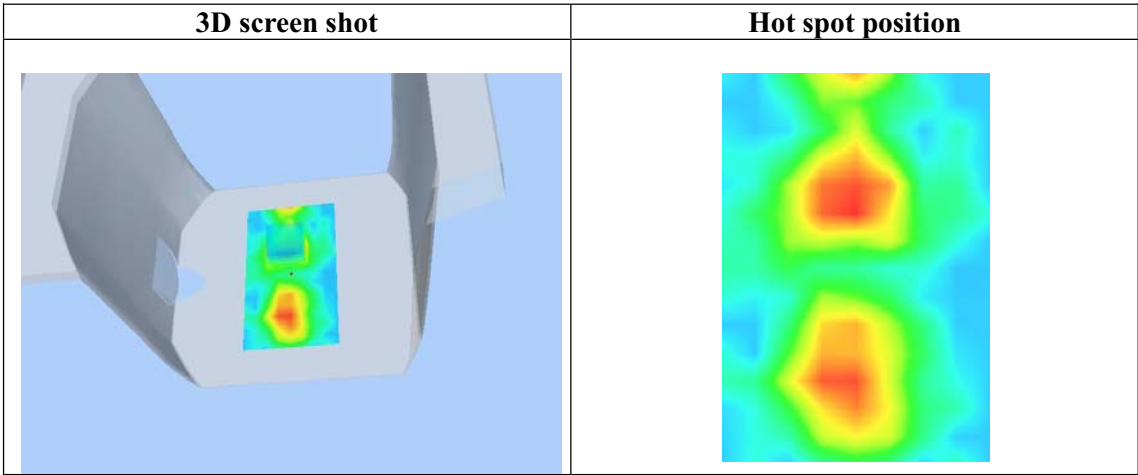
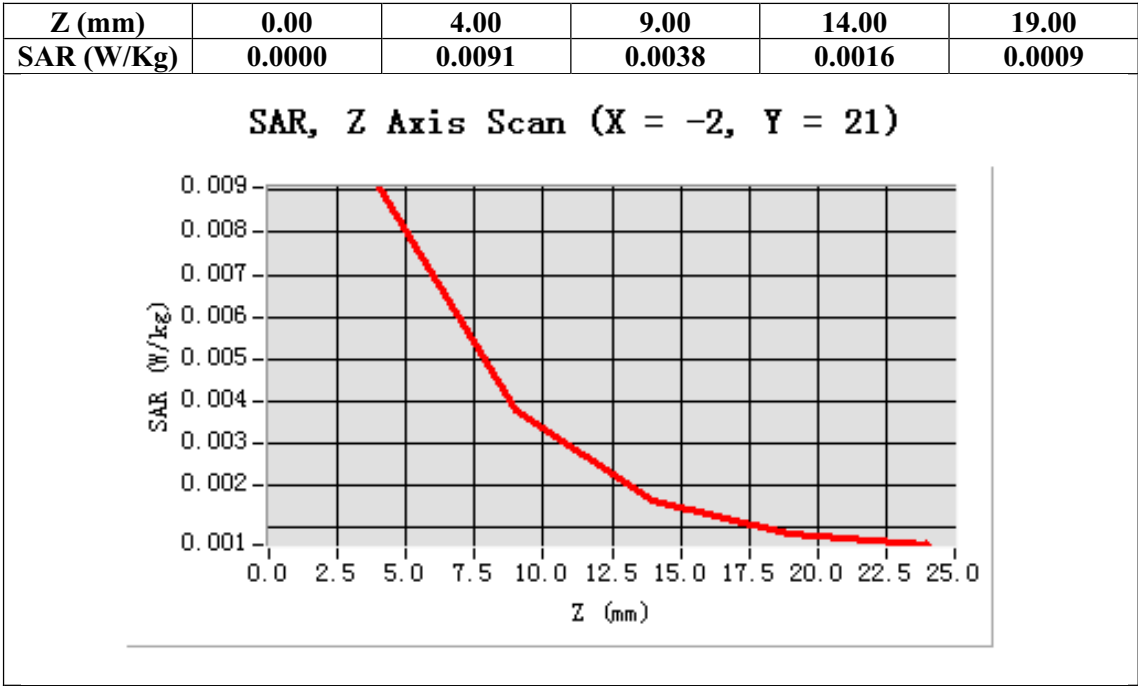
Configuration/802.11n(20) Mid -Vertical away from antenna /Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm,dy=8mm, dz=5mm;

| | |
|------------------------|--------------------------------------|
| Area Scan | surf_sam_plan.txt |
| ZoomScan | 5x5x7,dx=8mm dy=8mm dz=5mm,Very fast |
| Phantom | Validation plane |
| Device Position | Vertical |
| Band | 2450MHz |
| Channels | Middle |
| Signal | TDMA (Crest factor: 1.0) |



Maximum location: X=-2.00, Y=21.00

| | |
|-----------------------|----------|
| SAR 10g (W/Kg) | 0.004650 |
| SAR 1g (W/Kg) | 0.009952 |



HOTSPOT MODE

Test Laboratory: AGC Lab

802.11b Mid- Body- Front

DUT: Mobile Internet Device; Type: R091B

Date: Aug.09, 2013

Communication System: Wi-Fi; Communication System Band: 802.11b; Duty Cycle: 1:1; Conv.F=4.32;
Frequency: 2437 MHz; Medium parameters used: $f = 2450$ MHz; $\sigma = 1.93$ mho/m; $\epsilon_r = 52.91$; $\rho = 1000$ kg/m³ ;
Phantom section: Flat Section
Ambient temperature (°C): 21.0, Liquid temperature (°C): 21.0

SATIMO Configuration:

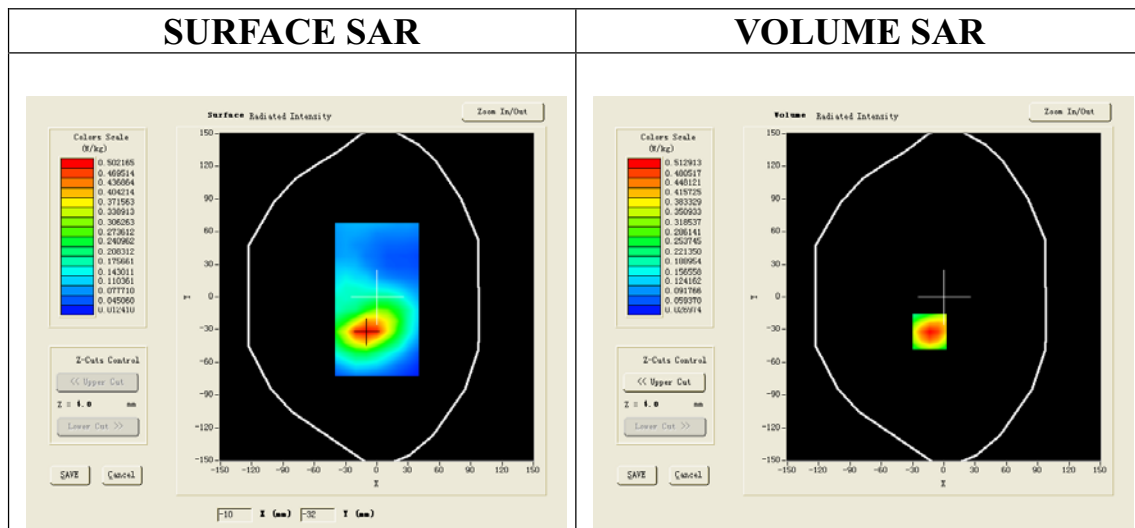
Probe: EP165; Calibrated: 01/31/2013

- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Phantom: Flat Phantom; Type: Elliptical Phantom
- Measurement SW: OpenSAR V4_02_01

Configuration/802.11b Mid-Body- Front /Area Scan (6x8x1): Measurement grid: dx=8mm, dy=8mm

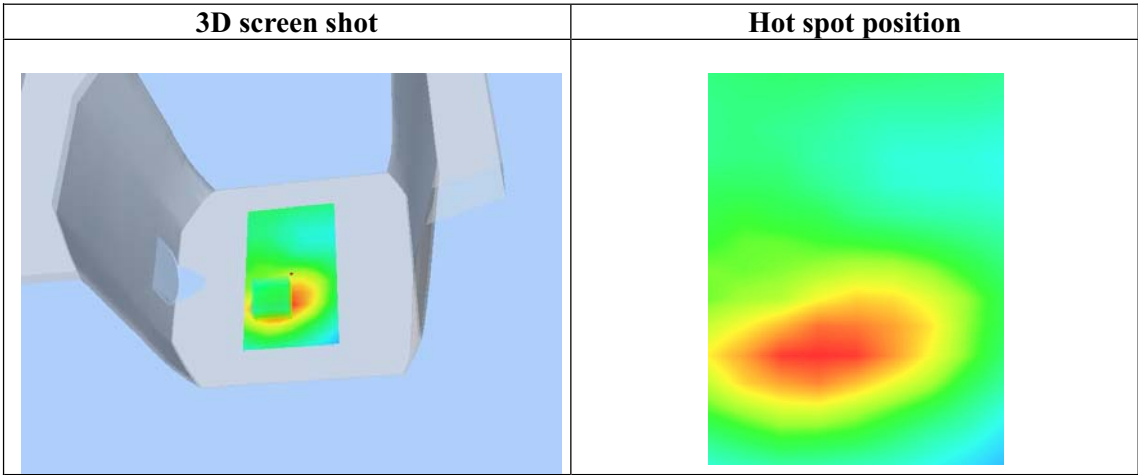
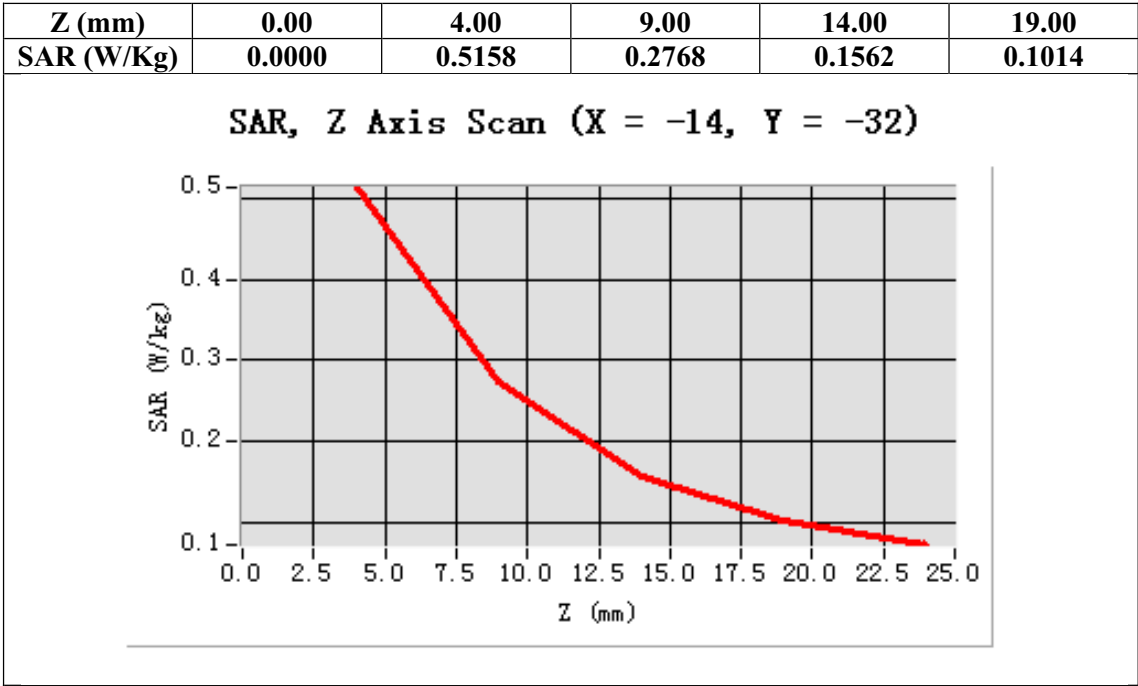
Configuration/802.11b Mid-Body- Front Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm;

| | |
|-----------------|--------------------------------------|
| Area Scan | surf_sam_plan.txt |
| ZoomScan | 5x5x7,dx=8mm dy=8mm dz=5mm,Very fast |
| Phantom | Validation plane |
| Device Position | Body Front |
| Band | 2450MHz |
| Channels | Middle |
| Signal | TDMA (Crest factor: 8.0) |



Maximum location: X=-14.00, Y=-32.00

| | |
|----------------|----------|
| SAR 10g (W/Kg) | 0.296270 |
| SAR 1g (W/Kg) | 0.524281 |



Test Laboratory: AGC Lab
802.11g Mid-Body-Worn- Touch

Date: Aug.09, 2013

DUT: Mobile Internet Device; Type: R091B

Communication System: Wi-Fi; Communication System Band: 802.11g; Duty Cycle: 1:1; Conv.F=4.32;
Frequency: 2437 MHz; Medium parameters used: $f = 2450$ MHz; $\sigma = 1.93$ mho/m; $\epsilon_r = 52.91$; $\rho = 1000$ kg/m³ ;
Phantom section: Flat Section
Ambient temperature (°C):21, Liquid temperature (°C):21

SATIMO Configuration:

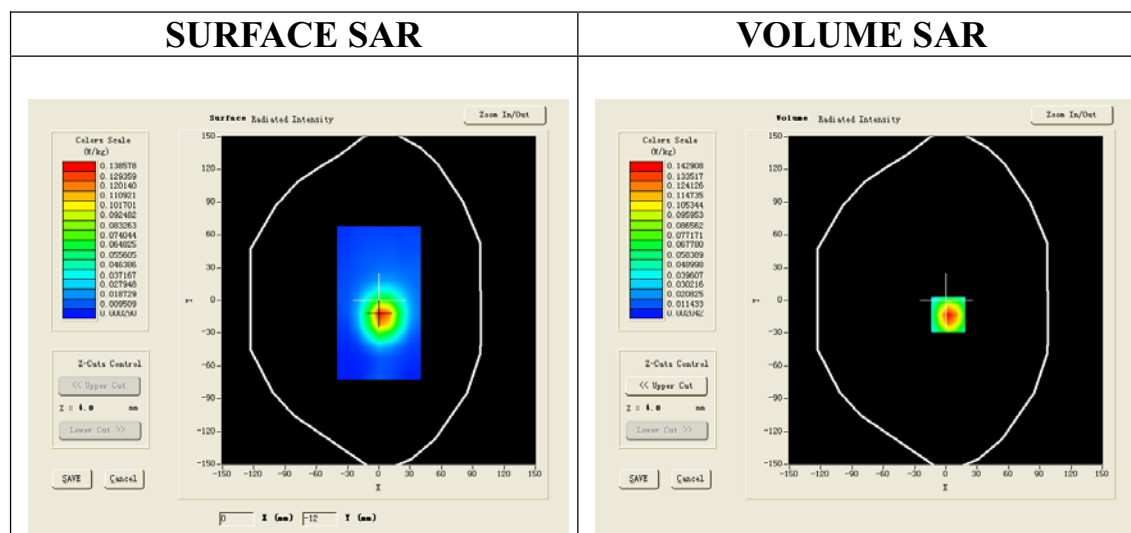
Probe: EP165; Calibrated: 01/31/2013

- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Phantom: Flat Phantom; Type: Elliptical Phantom
- Measurement SW: OpenSAR V4_02_01

Configuration/802.11g Mid- Body- Touch /Area Scan (6x8x1): Measurement grid: dx=8mm, dy=8mm

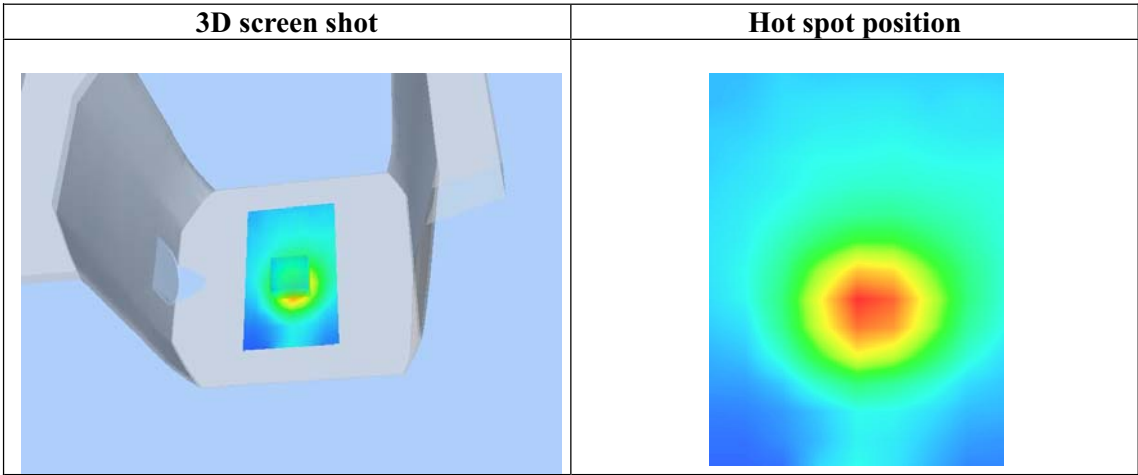
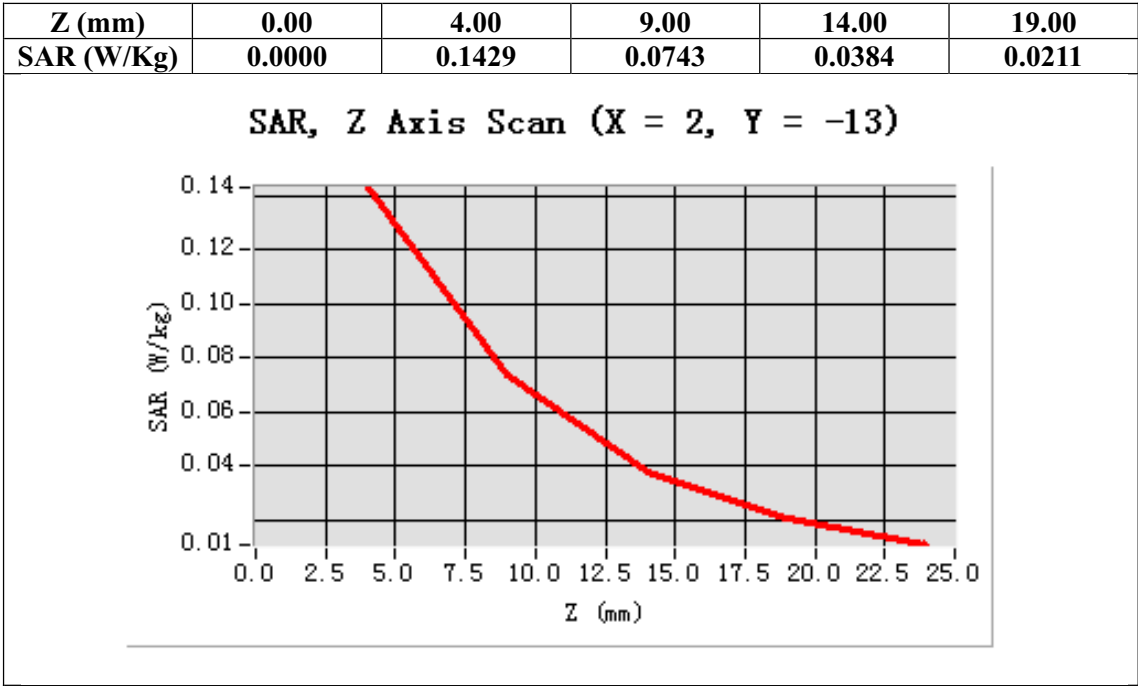
Configuration/802.11g Mid- Body- Touch /Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm;

| | |
|-----------------|--------------------------------------|
| Area Scan | surf_sam_plan.txt |
| ZoomScan | 5x5x7,dx=8mm dy=8mm dz=5mm,Very fast |
| Phantom | Validation plane |
| Device Position | Body Touch |
| Band | 2450MHz |
| Channels | Middle |
| Signal | TDMA (Crest factor: 8.0) |



Maximum location: X=2.00, Y=-13.00

| | |
|----------------|----------|
| SAR 10g (W/Kg) | 0.064581 |
| SAR 1g (W/Kg) | 0.135381 |



Test Laboratory: AGC Lab
802.11n(20) Mid-Body-Worn- Touch
DUT: Mobile Internet Device; Type: R091B

Date: Aug.09, 2013

Communication System: Wi-Fi; Communication System Band: 802.11n(20); Duty Cycle: 1:1; Conv.F=4.32;
Frequency: 2437 MHz; Medium parameters used: $f = 2450$ MHz; $\sigma = 1.93$ mho/m; $\epsilon_r = 52.91$; $\rho = 1000$ kg/m³ ;
Phantom section: Flat Section
Ambient temperature (°C):21, Liquid temperature (°C):21

SATIMO Configuration:

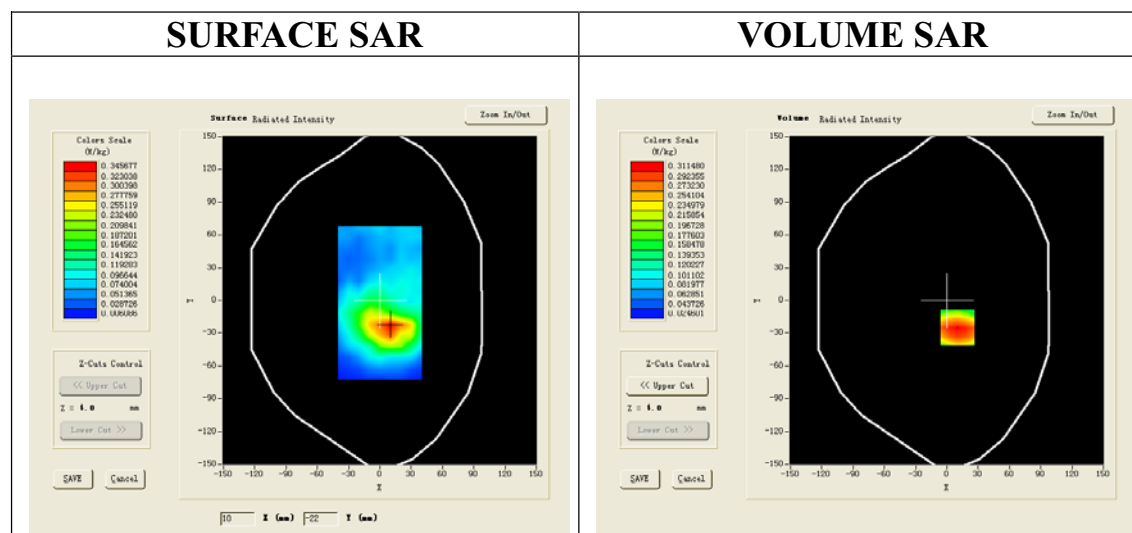
Probe: EP165; Calibrated: 01/31/2013

- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Phantom: Flat Phantom; Type: Elliptical Phantom
- Measurement SW: OpenSAR V4_02_01

Configuration/802.11n(20) Mid- Body- Touch /Area Scan (6x8x1): Measurement grid: dx=8mm, dy=8mm

Configuration/802.11n(20) Mid- Body- Touch /Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm;

| | |
|------------------------|--------------------------------------|
| Area Scan | surf_sam_plan.txt |
| ZoomScan | 5x5x7,dx=8mm dy=8mm dz=5mm,Very fast |
| Phantom | Validation plane |
| Device Position | Body Touch |
| Band | 2450MHz |
| Channels | Middle |
| Signal | TDMA (Crest factor: 8.0) |



Maximum location: X=10.00, Y=-25.00

| | |
|-----------------------|----------|
| SAR 10g (W/Kg) | 0.197281 |
| SAR 1g (W/Kg) | 0.301382 |

