
SAR Test Report

Report No.:AGC01665141102FH01

FCC ID : 2ADN6S42

APPLICATION PURPOSE : Original Equipment

PRODUCT DESIGNATION : 3G Smart Phone

BRAND NAME : TIGER

MODEL NAME : S42

CLIENT : Tiger International Electronic Company

DATE OF ISSUE : Nov. 21,2014

STANDARD(S) : IEEE Std. 1528:2003
47CFR § 2.1093
IEEE/ANSI C95.1

REPORT VERSION : V1.0

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

CAUTION:

This report shall not be reproduced except in full without the written permission of the test laboratory and shall not be quoted out of context.



Report Revise Record

Report Version	Revise Time	Issued Date	Valid Version	Notes
V1.0	/	Nov. 21,2014	Valid	Original Report

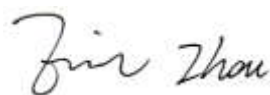
The test plans were performed in accordance with IEEE Std. 1528:2003; 47CFR § 2.1093; IEEE/ANSI C95.1 and the following specific FCC Test Procedures:

- KDB 447498 D01 General RF Exposure Guidance v05r02
- KDB 648474 D04 SAR Handsets Multi Xmitter and Ant v01
- KDB 865664 D01 SAR measurement 100 MHz to 6 GHz v01r03
- KDB 941225 D01 SAR test for 3G devices v03
- KDB 941225 D06 Hot Spot SAR v02
- KDB 248227 D01 SAR meas for 802 11 a b g v01r02

Test Report Certification

Applicant Name	Tiger International Electronic Company
Applicant Address	Dera, Naif Satellite Market, Nakhil Road, Dubai, UAE
Manufacturer Name	SHENZHEN ELECTRONICAL TECHNOLOGY CO., LTD.
Manufacturer Address	C028 Third Floor, Foreign Trade Wholesale Market, Huaqiangbei, Futian District Shenzhen, China
Product Designation	3G Smart Phone
Brand Name	TIGER
Model Name	S42
Different Description	N/A
EUT Voltage	DC3.7V by battery
Applicable Standard	IEEE Std. 1528:2003 47CFR § 2.1093 IEEE/ANSI C95.1
Test Date	Nov. 20,2014
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-3G3/SAR (2014-04-01)

Tested By



Eric Zhou

Nov. 21,2014

Checked By



Angela Li

Nov. 21,2014

Authorized By



Solger Zhang

Nov. 21,2014

TABLE OF CONTENTS

1. SUMMARY OF MAXIMUM SAR VALUE	5
2. GENERAL INFORMATION.....	6
2.1. EUT DESCRIPTION.....	6
2.2. TEST PROCEDURE	7
2.3. TEST ENVIRONMENT.....	7
2.4. TEST CONFIGURATION AND SETTING	8
3. SAR MEASUREMENT SYSTEM	10
3.1. SPECIFIC ABSORPTION RATE (SAR)	10
3.2. SAR MEASUREMENT PROCEDURE	11
3.3. COMOSAR SYSTEM DESCRIPTION.....	12
3.4. COMOSAR E-FIELD PROBE	14
3.5. ISOTROPIC E-FIELD PROBE SPECIFICATION	14
3.6. ROBOT.....	14
3.7. VIDEO POSITIONING SYSTEM	15
3.8. DEVICE HOLDER	15
3.9. SAM TWIN PHANTOM.....	16
4. TISSUE SIMULATING LIQUID	17
4.1. THE COMPOSITION OF THE TISSUE SIMULATING LIQUID.....	17
4.2. TISSUE CALIBRATION RESULT	18
4.3. TISSUE DIELECTRIC PARAMETERS FOR HEAD AND BODY PHANTOMS.....	19
5. SAR MEASUREMENT PROCEDURE	20
5.1. SAR SYSTEM VALIDATION PROCEDURES	20
5.2. SAR SYSTEM VALIDATION.....	21
6. EUT TEST POSITION	23
6.1. DEFINE TWO IMAGINARY LINES ON THE HANDSET	23
6.2. CHEEK POSITION	24
6.3. TITLE POSITION	24
6.4. BODY WORN POSITION.....	25
7. SAR EXPOSURE LIMITS	26
8. TEST EQUIPMENT LIST	27
9. MEASUREMENT UNCERTAINTY	28
10. CONDUCTED POWER MEASUREMENT	29
11. TEST RESULTS	36
11.1. SAR TEST RESULTS SUMMARY	36
APPENDIX A. SAR SYSTEM VALIDATION DATA	46
APPENDIX B. SAR MEASUREMENT DATA.....	54
APPENDIX C. TEST SETUP PHOTOGRAPHS &EUT PHOTOGRAPHS	176
APPENDIX D. PROBE CALIBRATION DATA	188
APPENDIX E. DIPOLE CALIBRATION DATA.....	198

1. SUMMARY OF MAXIMUM SAR VALUE

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

Highest tested and scaled SAR Summary

Exposure Position	Frequency Band	Highest Tested 1g-SAR(W/Kg)	Highest Scaled Maximum SAR(W/Kg)
Head	GSM 850	0.394	0.509
	PCS 1900	0.464	0.610
	WCDMA Band II	0.754	0.799
	WCDMA Band V	0.993	1.018
Body- worn	GSM 850	0.772	0.997
	PCS 1900	0.483	0.635
	WCDMA Band II	0.914	0.955
	WCDMA Band V	1.003	1.029

Highest Simultaneous transmission SAR Summary

Exposure Position	Frequency Band	Highest Simultaneous SAR(W/Kg)
Head	GSM 850 +WLAN	0.923
	PCS 1900+ WLAN	1.024
	WCDMA Band II + WLAN	1.213
	WCDMA Band V + WLAN	1.432
Body- worn	GSM 850 +WLAN	1.204
	PCS 1900+ WLAN	0.842
	WCDMA Band II + WLAN	1.162
	WCDMA Band V + WLAN	1.236

This device is compliance with Specific Absorption Rate (SAR) for general population/uncontrolled exposure limits (1.6W/Kg) specified in FCC 47 CFR part 2 (2.1093) and ANSI/IEEE C95.1, and had been tested in accordance with measurement methods and procedures specified in IEEE 1528-2003 and the relevant KDB files like KDB 941225 D01 ,KDB 865664 D02....etc.

2. GENERAL INFORMATION

2.1. EUT Description

General Information	
Product Designation	3G Smart Phone
Test Model	S42
Hardware Version	S135_MB_V1.5
Software Version	N/A
Device Category	Portable
RF Exposure Environment	Uncontrolled
Antenna Type	Internal
GSM and GPRS	
Support Band	☒ GSM 850 ☒ PCS 1900 (U.S. Bands) ☒ GSM 900 ☒ DCS 1800 (Non-U.S. Bands)
GPRS Type	Class B
GPRS Class	Class 12(1Tx+4Rx, 2Tx+3Rx, 3Tx+2Rx, 4Tx+1Rx)
TX Frequency Range	GSM 850 : 824.2~848.8MHz; PCS 1900: 1850.2~1909.8MHz;
RX Frequency Range	GSM 850 : 869~894MHz PCS 1900: 1930~1990MHz
Release Version	R99
Type of modulation	GMSK for GSM/GPRS
Antenna Gain	-1.0dBi(GSM 850), -0.8dBi (PCS 1900)
Max. Average Power (Max. Peak Power)	GSM850: 31.98dBm(32.61dBm- Peak Power) PCS1900: 28.85dBm9(29.52dBm-Peak Power)
WCDMA	
Support Band	U.S. Bands: ☒ UMTS FDD Band II ☒ UMTS FDD Band V Non-U.S. Bands: ☐ UMTS FDD Band I ☐ UMTS FDD Band III ☐ UMTS FDD Band VIII
HS Type	HSPA(HSUPA/HSDPA)
TX Frequency Range	WCDMA FDD Band II: 1852.4 -1907.6MHz WCDMA FDD Band V: 826.4-846.6MHz
RX Frequency Range	WCDMA FDD Band II: 1930-1990MHz WCDMA FDD Band V: 869-894MHz
Release Version	Rel-6
Type of modulation	QPSK
Antenna Gain	-1.0dBi(WCDMA 850), -0.8dBi (WCDMA 1900)
Max. Average Power (Max. Peak Power)	Band II: 22.81dBm (23.43Bm- Peak Power) Band V: 22.89dBm (23.53dBm- Peak Power)

EUT Description(Continue)

Bluetooth	
Bluetooth Version	☐ V2.0 ☐ V2.1 ☐ V2.1+EDR ☒ V3.0 ☐ V3.0+HS ☒ V4.0
Operation Frequency	2402~2480MHz
Type of modulation	☒ GFSK ☒ π/4-DQPSK ☒ 8-DPSK
Avg. Burst Power	3.74dBm
Antenna Gain	0.8dBi
WIFI	
WIFI Specification	☐ 802.11a ☒ 802.11b ☒ 802.11g ☒ 802.11n(20) ☒ 802.11n(40)
Operation Frequency	2412~2462MHz
Avg. Burst Power	11b: 9.47dBm,11g: 7.58dBm,11n(20): 7.48dBm,11n(40): 4.61dBm
Antenna Gain	0.8dBi
Accessories	
Battery	Brand name: TIGER Model No. :S42 Voltage and Capacitance: 3.7 V & 1400mAh
Adapter	Brand name: TIGER Model No. : GMT-050120A Input: AC 100-240V, 50/60Hz, 0.2A Output: DC 5V, 1200mA
Earphone	Brand name: N/A Model No. : N/A
Note:CMU200 can measure the average power and Peak power at the same time	
Product	Type ☒ Production unit ☐ Identical Prototype

2.2. Test Procedure

1	Setup the EUT and simulators as shown on above.
2	Turn on the power of all equipment.
3	EUT Communicate with 8960, and test them respectively at U.S. bands

2.3. Test Environment

Ambient conditions in the laboratory:

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

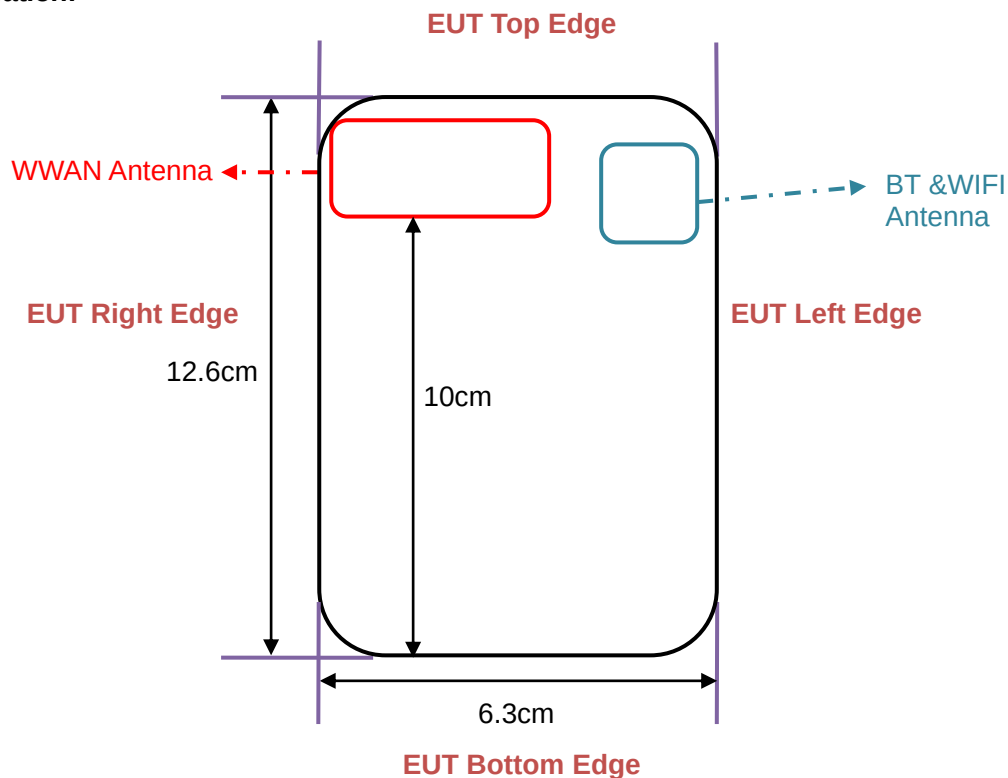
2.4. Test Configuration and setting

The EUT is a model of GSM Portable Mobile Station (MS). It supports GSM/GPRS, WCDMA/HSPA, BT, WIFI, and support hot spot mode.

For WWAN SAR testing, the device was controlled by using a base station emulator. Communication between the device and the emulator were established by air link. The distance between the EUT and the antenna is larger than 50cm, and the output power radiated from the emulator antenna is at least 30db smaller than the output power of EUT.

For WLAN testing, the EUT is configured with the WLAN continuous TX tool through engineering command.

Antenna Location:



For WWAN mode:

Test Configurations	Antenna to edges/surface	SAR required
Back	<25mm	Yes
Front	<25mm	Yes
Edge 1 (Top)	2	Yes
Edge 2 (Right)	2	Yes
Edge 3 (Bottom)	100	No
Edge 4 (Left)	25	Yes

Note: SAR is not required for the distance between the antenna and the edge is <25mm as per KDB 941225D06 Hotspot SAR

For WLAN mode:

Test Configurations	Antenna to edges/surface	SAR required
Back	<25mm	Yes
Front	<25mm	Yes
Edge 1 (Top)	8	Yes
Edge 2 (Right)	47	No
Edge 3 (Bottom)	95	No
Edge 4 (Left)	3	Yes

The simultaneous transmission possibilities are listed as below:

Simultaneous TX Combination	Configuration	Head	Body	Hotspot
1	GSM850(Voice)+WLAN/BT	Yes	Yes	Yes
2	PCS 1900(Voice)+WLAN/BT	Yes	Yes	Yes
3	WCDMA Band II+WLAN/BT	Yes	Yes	Yes
4	WCDMA Band V +WLAN/BT	Yes	Yes	Yes

3. SAR MEASUREMENT SYSTEM

3.1. Specific Absorption Rate (SAR)

SAR is related to the rate at which energy is absorbed per unit mass in 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 occupational/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.

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 (dv) of given mass density (ρ). The equation description is as below:

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

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

SAR can be obtained using either of the following equations:

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

$$SAR = c_h \left. \frac{dT}{dt} \right|_{t=0}$$

Where

SAR	is the specific absorption rate in watts per kilogram;
E	is the r.m.s. value of the electric field strength in the tissue in volts per meter;
σ	is the conductivity of the tissue in siemens per metre;
ρ	is the density of the tissue in kilograms per cubic metre;
c_h	is the heat capacity of the tissue in joules per kilogram and Kelvin;

$\left. \frac{dT}{dt} \right|_{t=0}$ is the initial time derivative of temperature in the tissue in kelvins per second

3.2. SAR Measurement Procedure

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.

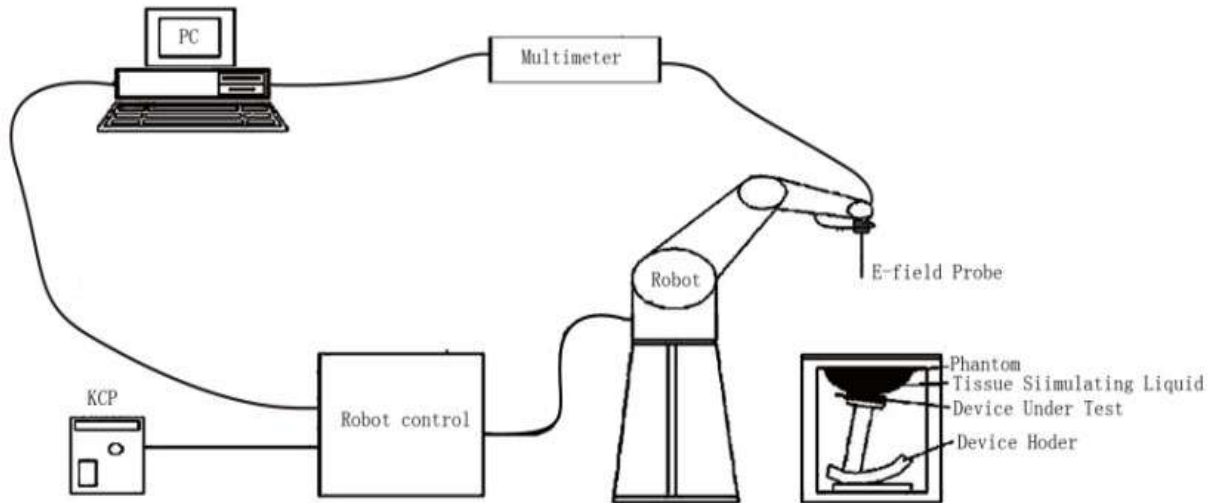
Pre-scans are made on the device to establish the location for the transmitting antenna, using a large area scan in either air or tissue simulation fluid.

The EUT is placed against the SAM twin 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 1mm^2) 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 1mm^3).

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.

3.3. COMOSAR System Description



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

- The PC. It controls most of the bench devices and stores measurement data. A computer running WinXP and the Opensar software.
- The E-Field probe. The probe is a 3-axis system made of 3 distinct dipoles. Each dipole returns a voltage in function of the ambient electric field.
- The Keithley multimeter measures each probe dipole voltages.
- The SAM phantom simulates a human head. The measurement of the electric field is made inside the phantom.
- The liquids simulate the dielectric properties of the human head tissues.
- The network emulator controls the mobile phone under test.
- The validation dipoles are used to measure a reference SAR. They are used to periodically check the bench to make sure that there is no drift of the system characteristics over time.
- The phantom, the device holder and other accessories according to the targeted measurement.

3.3.1. Applications

Predefined procedures and evaluations for automated compliance testing with all worldwide standards, e.g., IEEE 1528, IEC 62209 and others.

3.3.2. 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 IEC 62209 standards, whereby 3 dB is a requirement when compliance is assessed in accordance with the ARIB standard (Japan).

3.3.3. 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.

3.3.4. 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.

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

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

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

3.4. COMOSAR E-Field Probe

The SAR measurement is conducted with the dosimetric 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, IEC 62209, etc.) The calibration data are in Appendix D.

3.5. Isotropic E-Field Probe Specification

Model	SSE5	
Manufacture	SATIMO	
Frequency	0.3GHz-3GHz Linearity:±0.09dB(300MHz-3GHz)	
Dynamic Range	0.01W/Kg-100W/Kg Linearity:±0.09dB	
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%.	

3.6. Robot

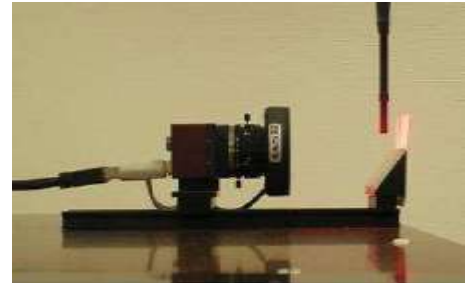
The COMOSAR system uses the KUKA robot from SATIMO SA (France).For the 6-axis controller COMOSAR system, the KUKA robot controller version from SATIMO is used. The XL robot series have many features that are important for our application: ☐ High precision (repeatability 0.02 mm) ☐ High reliability (industrial design) ☐ Jerk-free straight movements ☐ Low ELF interference (the closed metallic construction shields against motor control fields) ☐ 6-axis controller	
---	---

3.7. 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.

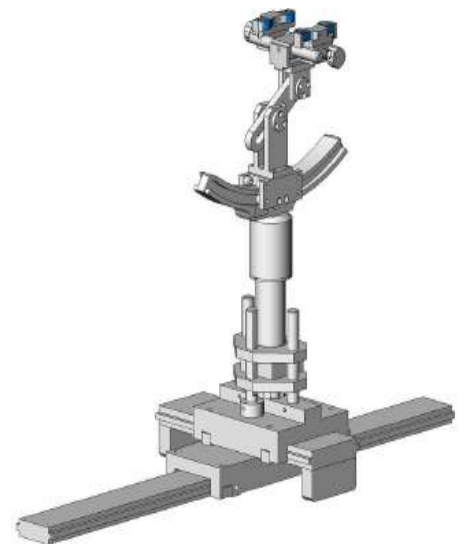


3.8. Device Holder

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.



3.9. SAM Twin Phantom

The SAM twin phantom is a fiberglass shell phantom with 2mm shell thickness (except the ear region where shell thickness increases to 6mm). It has three measurement areas:

- ☐ Left head
- ☐ Right head
- ☐ Flat phantom



The bottom plate contains three pair of bolts for locking the device holder. The device holder positions are adjusted to the standard measurement positions in the three sections. A white cover is provided to tap the phantom during off-periods to prevent water evaporation and changes in the liquid parameters. On the phantom top, three reference markers are provided to identify the phantom position with respect to the robot.

4. TISSUE SIMULATING LIQUID

For SAR measurement of the field distribution inside the phantom, the phantom must be filled with homogeneous tissue simulating liquid to a depth of at least 15cm. For head SAR testing the liquid height from the ear reference point (ERP) of the phantom to the liquid top surface is larger than 15cm For body SAR testing, the liquid height from the center of the flat phantom to the liquid top surface is larger than 15cm. The nominal dielectric values of the tissue simulating liquids in the phantom and the tolerance of 5% are listed in 4.2

4.1. The composition of the tissue simulating liquid

Ingredient	835MHz	835MHz	1900MHz	1900MHz
(% Weight)	Head	Body	Head	Body
Water	40.45	52.4	54.90	40.5
Salt	1.42	1.40	0.18	0.50
Sugar	57.6	45.0	0.00	58.0
HEC	0.40	1.00	0.00	0.50
Preventol	0.10	0.20	0.00	0.50
DGBE	0.00	0.00	44.92	0.00
TWEEN	0.00	0.00	0.00	0.00

4.2. 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 835MHz						
Fr. (MHz)	Dielectric Parameters (±5%)				Tissue Temp [°C]	Test time
	head		body			
	εr	δ[s/m]	εr	δ[s/m]		
	41.5 39.425-43.575	0.90 0.855-0.945	55.20 52.44-57-96	0.97 0.9215-1.0185		
824.2	41.18	0.91	55.66	0.98	21	Nov. 20,2014
826.4	41.11	0.89	55.63	0.95	21	Nov. 20,2014
836.6	41.73	0.90	54.73	0.98	21	Nov. 20,2014
846.6	41.28	0.90	55.64	0.96	21	Nov. 20,2014
848.8	41.25	0.93	55.67	0.93	21	Nov. 20,2014

Tissue Stimulant Measurement for 1900MHz						
Fr. (MHz)	Dielectric Parameters (±5%)				Tissue Temp [°C]	Test time
	head		body			
	εr	δ[s/m]	εr	δ[s/m]		
	40.00 38.00-42.00	1.40 1.33-1.47	53.30 50.635-55.965	1.52 1.444-1.596		
1850.2	40.13	1.36	53.57	1.48	21	Nov. 20,2014
1852.4	40.11	1.38	53.52	1.49	21	Nov. 20,2014
1880	40.69	1.43	53.44	1.54	21	Nov. 20,2014
1907.6	39.76	1.40	53.76	1.50	21	Nov. 20,2014
1909.8	39.86	1.42	53.73	1.51	21	Nov. 20,2014

4.3. 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
835	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

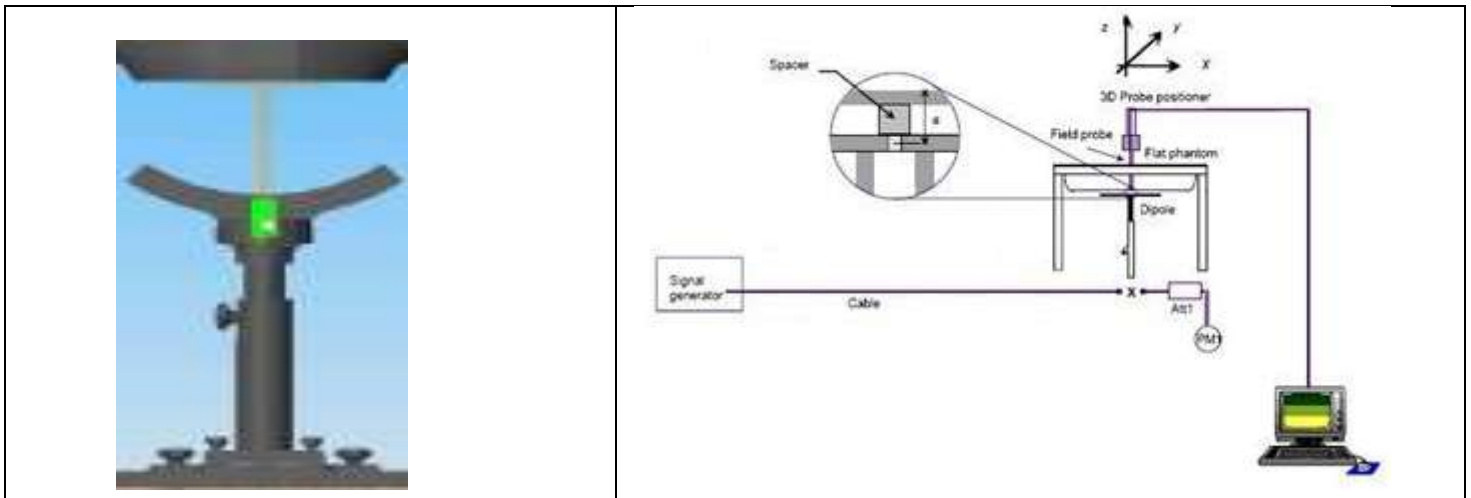
(ϵ_r = relative permittivity, σ = conductivity and ρ = 1000 kg/m³)

5. SAR MEASUREMENT PROCEDURE

5.1. SAR System Validation Procedures

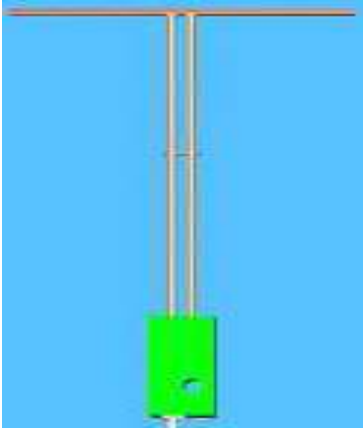
Each SATIMO system is equipped with one or more system validation kits. These units, together with the predefined measurement procedures within the SATIMO software, enable the user to conduct the system performance check and system validation. System kit includes a dipole, and dipole device holder.

The system check verifies that the system operates within its specifications. It's performed daily or before every SAR measurement. The system check uses normal SAR measurement in the flat section of the phantom with a matched dipole at a specified distance. The system validation setup is shown as below.



5.2. SAR System Validation

5.2.1. Validation Dipoles



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.

Frequency	L (mm)	h (mm)	d (mm)
835MHz	161.0	89.8	3.6
1900MHz	68	39.5	3.6

5.2.2. Validation Result

System Performance Check at 835 MHz &1900MHz for Head								
Validation Kit: SN 46/11DIP 0G835-190 & SN 46/11DIP 1G900-187								
Frequency [MHz]	Target Value(W/Kg)		Reference Result ($\pm 10\%$)		Tested Value(W/Kg)		Tissue Temp. [°C]	Test time
	1g	10g	1g	10g	1g	10g		
835	9.60	6.20	8.64-10.56	5.58-6.82	9.763	6.361	21	Nov. 20,2014
1900	39.65	20.24	35.685-43.615	18.216-22.264	39.14	19.30	21	Nov. 20,2014

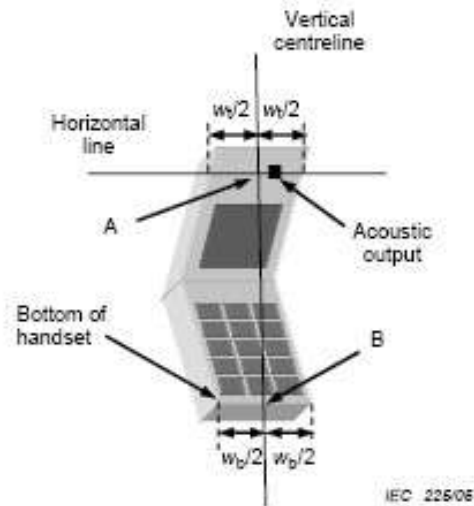
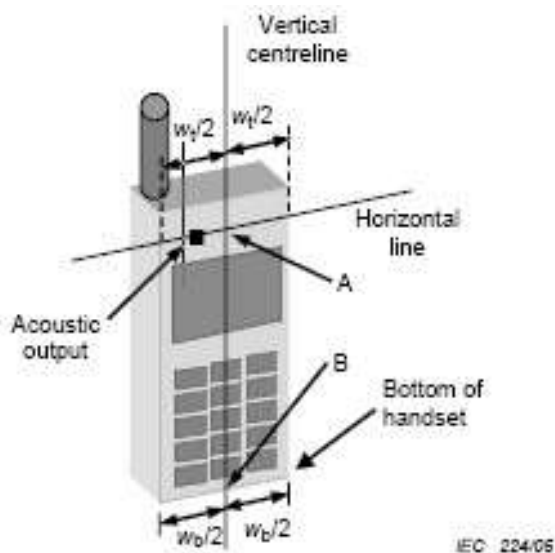
System Performance Check at 835 MHz &1900MHz for Body								
Validation Kit: SN 46/11DIP 0G835-190 & SN 46/11DIP 1G900-187								
Frequency [MHz]	Target Value(W/Kg)		Reference Result ($\pm 10\%$)		Tested Value(W/Kg)		Tissue Temp. [°C]	Test time
	1g	10g	1g	10g	1g	10g		
835	9.90	6.39	8.91-10.89	5.75-7.03	9.766	6.209	21	Nov. 20,2014
1900	40.74	21.43	36.666-44.814	19.287-23.573	39.19	19.36	21	Nov. 20,2014

6. EUT TEST POSITION

This EUT was tested in **Right Cheek, Right Titled, Left Cheek, Left Titled, Front Face and Rear Face and 4 edges.**

6.1. Define Two Imaginary Lines on the Handset

- (1) 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 handset.
- (2) 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.
- (3) 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 to the front face of the handset, especially for clamshell handsets, handsets with flip covers, and other irregularly shaped handsets.



6.2. Cheek Position

- (1) 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 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.
- (2) To move the device towards the phantom with the ear piece aligned with the the line LE-RE until the phone touched the ear. While maintaining the device in the reference plane and maintaining the phone contact with 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



6.3. Title Position

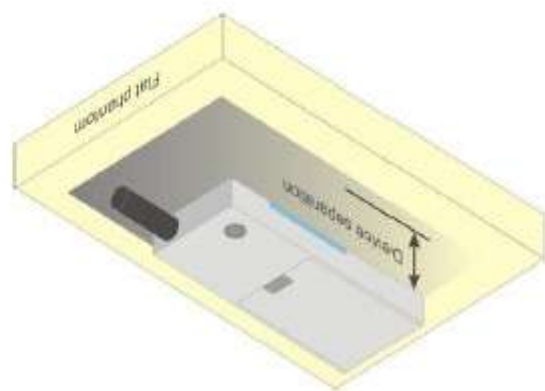
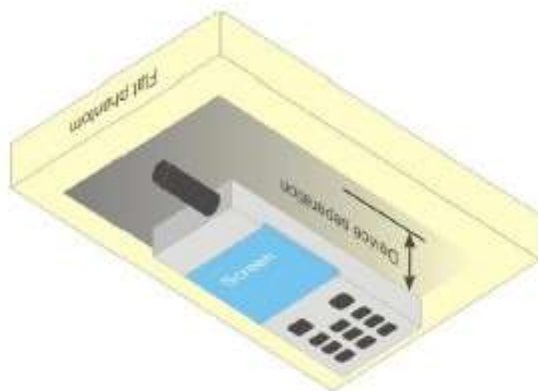
- (1) To position the device in the “cheek” position described above.
- (2) While maintaining the device in the reference plane described above and pivoting against the ear, moves it outward away from the mouth by an angle of 15 degrees or until with the ear is lost.



6.4. Body Worn Position

- (1) To position the EUT parallel to the phantom surface.
- (2) To adjust the EUT parallel to the flat phantom.
- (3) To adjust the distance between the EUT surface and the flat phantom to **10mm**. (Hotspot mode the distance of **10mm**).

General Note: Referring KDB941225 D06 v02, when the overall device length and width are $\geq 9\text{cm} * 5\text{cm}$, the test distance is 10mm. SAR must be measured for all sides and surfaces with a transmitting antenna within 25mm from that surface or edge.



7. 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

8. TEST EQUIPMENT LIST

Equipment description	Manufacturer/ Model	Identification No.	Current calibration date	Next calibration date
SAR Probe	SATIMO	SN 22/12 EP159	01/12/2014	01/11/2015
TISSUE Probe	SATIMO	SN 45/11 OCPG45	11/14/2013	11/13/2015
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	02/17/2014	02/16/2015
Comm Tester	Agilent-8960	GB46310822	02/17/2014	02/16/2015
Multimeter	Keithley 2000	1188656	02/17/2014	02/16/2015
Dipole	SATIMO SID835	SN46/11 DIP 0G835-190	10/02/2014	10/02/2017
Dipole	SATIMO SID1900	SN46/11 DIP 1G900-187	11/14/2013	11/13/2016
Signal Generator	Agilent-E4438C	MY44260051	02/23/2014	02/22/2015
Power Sensor	NRP-Z23	US38261498	02/17/2014	02/16/2015
Spectrum Analyzer E4440	Agilent	US41421290	05/27/2014	05/26/2015
Network Analyzer	Rhode & Schwarz ZVL6	SN100132	02/17/2014	02/16/2015

Note: Per KDB 865664 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.

9. MEASUREMENT UNCERTAINTY

SATIMO Uncertainty									
Measurement uncertainty for 300MHz to 3GHz averaged over 1 gram / 10 gram.									
Error Description	Sec	Sec	Tol (±%)	Prob. Dist.	(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	

10. CONDUCTED POWER MEASUREMENT

GSM BAND

Mode	Frequency(MHz)	Avg. Burst Power(dBm)	Duty cycle Factor(dBm)	Frame Power(dBm)
Maximum Power <1>				
GSM 850	824.2	31.98	-9	22.98
	836.6	31.89	-9	22.89
	848.8	31.87	-9	22.87
GPRS 850 (1 Slot)	824.2	31.78	-9	22.78
	836.6	31.72	-9	22.72
	848.8	31.66	-9	22.66
GPRS 850 (2 Slot)	824.2	28.96	-6	22.96
	836.6	28.88	-6	22.88
	848.8	28.82	-6	22.82
GPRS 850 (3 Slot)	824.2	26.96	-4.26	22.7
	836.6	26.91	-4.26	22.65
	848.8	26.89	-4.26	22.63
GPRS 850 (4 Slot)	824.2	25.97	-3	22.97
	836.6	25.94	-3	22.94
	848.8	25.85	-3	22.85
PCS1900	1850.2	28.85	-9	19.85
	1880	28.81	-9	19.81
	1909.8	28.76	-9	19.76
GPRS1900 (1 Slot)	1850.2	28.54	-9	19.54
	1880	28.51	-9	19.51
	1909.8	28.48	-9	19.48
GPRS1900 (2 Slot)	1850.2	25.96	-6	19.96
	1880	25.85	-6	19.85
	1909.8	25.82	-6	19.82
GPRS1900 (3 Slot)	1850.2	23.93	-4.26	19.67
	1880	23.91	-4.26	19.65
	1909.8	23.85	-4.26	19.59
GPRS1900 (4 Slot)	1850.2	22.87	-3	19.87
	1880	22.85	-3	19.85
	1909.8	22.81	-3	19.81
Maximum Power <2>				
GSM850	824.2	31.62	-9	22.62
PCS1900	1850.2	28.46	-9	19.46

Note 1:

The Frame Power (Source-based time-averaged Power) is scaled the maximum burst average power based on time slots. The calculated methods are show as following:

Frame Power = Max burst power (1 Up Slot) – 9 dB

Frame Power = Max burst power (2 Up Slot) – 6 dB

Frame Power = Max burst power (3 Up Slot) – 4.26 dB

Frame Power = Max burst power (4 Up Slot) – 3 dB

UMTS BAND HSDPA Setup Configuration:

- The EUT was connected to Base Station Agilent E5515C referred to the Setup Configuration.
- The RF path losses were compensated into the measurements.
- A call was established between EUT and Based Station with following setting:
 - (1) Set Gain Factors(β_c and β_d)parameters set according to each
 - (2) Set RMC 12.2Kbps+HSDPA mode.
 - (3) Set Cell Power=-86dBm
 - (4) Set HS-DSCH Configuration Type to FRC(H-set 1,QPSK
 - (5) Select HSDPA Uplink Parameters
 - (6) Set Delta ACK, Delta NACK and Delta CQI=8
 - (7) Set Ack - Nack Repetition Factor to 3
 - (8) Set CQI Feedback Cycle(k) to 4ms
 - (9) Set CQI Repetition Factor to 2
 - (10) Power Ctrl Mode=All Up bits
- The transmitted maximum output power was recorded.

Table C.10.2.4: β values for transmitter characteristics tests with HS-DPCCH

Sub-test	β_c (Note5)	β_d	β_d (SF)	β_c/β_d	β_{HS} (Note1, Note 2)	CM (dB) (Note 3)	MPR (dB) (Note 3)
1	2/15	15/15	64	2/15	4/15	0.0	0.0
2	12/15(Note 4)	15/15(Note 4)	64	12/15(Note 4)	24/15	1.0	0.0
3	15/15	8/15	64	15/8	30/15	1.5	0.5
4	15/15	4/15	64	15/4	30/15	1.5	0.5

Note 1: Δ_{ACK} , Δ_{NACK} and $\Delta_{CQI} = 30/15$ with $\beta_{HS} = 30/15 * \beta_c$.

Note 2: For the HS-DPCCH power mask requirement test in clause 5.2C, 5.7A, and the Error Vector Magnitude (EVM) with HS-DPCCH test in clause 5.13.1A, and HSDPA EVM with phase discontinuity in clause 5.13.1AA, Δ_{ACK} and $\Delta_{NACK} = 30/15$ with $\beta_{HS} = 30/15 * \beta_c$, and $\Delta_{CQI} = 24/15$ with $\beta_{HS} = 24/15 * \beta_c$.

Note 3: CM = 1 for $\beta_c/\beta_d = 12/15$, $\beta_{HS}/\beta_c = 24/15$. For all other combinations of DPDCH, DPCCH and HS-DPCCH the MPR is based on the relative CM difference. This is applicable for only UEs that support HSDPA in release 6 and later releases.

Note 4: For subtest 2 the β_c/β_d ratio of 12/15 for the TFC during the measurement period (TF1, TF0) is achieved by setting the signalled gain factors for the reference TFC (TF1, TF1) to $\beta_c = 11/15$ and $\beta_d = 15/15$.

HSUPA Setup Configuration:

- The EUT was connected to Base Station Agilent E5515C referred to the Setup Configuration.
- The RF path losses were compensated into the measurements.
- A call was established between EUT and Base Station with following setting * :
 - (1) Call Configs = 5.2B, 5.9B, 5.10B, and 5.13.2B with QPSK
 - (2) Set the Gain Factors (β_c and β_d) and parameters (AG Index) were set according to each specific sub-test in the following table, C11.1.3, quoted from the TS 34.121
 - (3) Set Cell Power = -86 dBm
 - (4) Set Channel Type = 12.2k + HSPA
 - (5) Set UE Target Power
 - (6) Power Ctrl Mode= Alternating bits
 - (7) Set and observe the E-TFCI
 - (8) Confirm that E-TFCI is equal to the target E-TFCI of 75 for sub-test 1, and other subtest's E-TFCI
- The transmitted maximum output power was recorded.

Table C.11.1.3: β values for transmitter characteristics tests with HS-DPCCH and E-DCH

Sub-t est	β_c	β_d	β_d (SF)	β_c/β_d	β_{HS} (Note1)	β_{ec}	β_{ed} (Note 4) (Note 5)	β_{ed} (SF)	β_{ed} (Codes)	CM (dB) (Note 2)	MPR (dB) (Note 2) (Note 6)	AG Index (Note 5)	E-TFCI
1	11/15 (Note 3)	15/15 (Note 3)	64	11/15 (Note 3)	22/15	209/225	1309/225	4	1	1.0	0.0	20	75
2	6/15	15/15	64	6/15	12/15	12/15	94/75	4	1	3.0	2.0	12	67
3	15/15	9/15	64	15/9	30/15	30/15	β_{ed1} : 47/15 β_{ed2} : 47/15	4 4	2	2.0	1.0	15	92
4	2/15	15/15	64	2/15	4/15	2/15	56/75	4	1	3.0	2.0	17	71
5	15/15	0	-	-	5/15	5/15	47/15	4	1	1.0	0.0	12	67

Note 1: For sub-test 1 to 4, Δ_{ACK} , Δ_{NACK} and $\Delta_{CQI} = 30/15$ with $\beta_{hs} = 30/15 * \beta_c$. For sub-test 5, Δ_{ACK} , Δ_{NACK} and $\Delta_{CQI} = 5/15$ with $\beta_{hs} = 5/15 * \beta_c$.

Note 2: CM = 1 for $\beta_c/\beta_d = 12/15$, $\beta_{hs}/\beta_c = 24/15$. For all other combinations of DPDCH, DPCCH, HS- DPCCH, E-DPDCH and E-DPCCH the MPR is based on the relative CM difference.

Note 3: For subtest 1 the β_c/β_d ratio of 11/15 for the TFC during the measurement period (TF1, TF0) is achieved by setting the signalled gain factors for the reference TFC (TF1, TF1) to $\beta_c = 10/15$ and $\beta_d = 15/15$.

Note 4: In case of testing by UE using E-DPDCH Physical Layer category 1, Sub-test 3 is omitted according to TS25.306 Table 5.1g.

Note 5: β_{ed} can not be set directly; it is set by Absolute Grant Value.

Note 6: For subtests 2, 3 and 4, UE may perform E-DPDCH power scaling at max power which could results in slightly smaller MPR values.

UMTS BAND II

Mode	Frequency (MHz)	Avg. Burst Power (dBm)
WCDMA 1900 RMC	1852.4	22.81
	1880	22.75
	1907.6	22.72
WCDMA 1900 AMR	1852.4	22.29
	1880	22.25
	1907.6	22.23
HSDPA Subtest 1	1852.4	22.19
	1880	22.17
	1907.6	22.12
HSDPA Subtest 2	1852.4	22.16
	1880	22.15
	1907.6	22.08
HSDPA Subtest 3	1852.4	22.13
	1880	22.07
	1907.6	22.05
HSDPA Subtest 4	1852.4	22.24
	1880	22.16
	1907.6	22.13
HSUPA Subtest 1	1852.4	22.27
	1880	22.15
	1907.6	22.11
HSUPA Subtest 2	1852.4	22.24
	1880	22.22
	1907.6	22.18
HSUPA Subtest 3	1852.4	22.25
	1880	22.19
	1907.6	22.13
HSUPA Subtest 4	1852.4	22.34
	1880	22.31
	1907.6	22.17
HSUPA Subtest 5	1852.4	22.16
	1880	22.14
	1907.6	22.12

UMTS BAND V

Mode	Frequency (MHz)	Avg. Burst Power (dBm)
WCDMA 850 RMC	826.4	22.89
	836.6	22.83
	846.6	22.78
WCDMA 850 AMR	826.4	22.39
	836.6	22.32
	846.6	22.31
HSDPA Subtest 1	826.4	22.35
	836.6	22.27
	846.6	22.18
HSDPA Subtest 2	826.4	22.27
	836.6	22.23
	846.6	22.19
HSDPA Subtest 3	826.4	22.28
	836.6	22.25
	846.6	22.24
HSDPA Subtest 4	826.4	22.29
	836.6	22.26
	846.6	22.18
HSUPA Subtest 1	826.4	22.28
	836.6	22.19
	846.6	22.13
HSUPA Subtest 2	826.4	22.19
	836.6	22.09
	846.6	22.05
HSUPA Subtest 3	826.4	22.29
	836.6	22.18
	846.6	22.12
HSUPA Subtest 4	826.4	22.33
	836.6	22.25
	846.6	22.23
HSUPA Subtest 5	826.4	22.24
	836.6	22.19
	846.6	22.12

WIFI

Mode	Data Rate (Mbps)	Channel	Frequency(MHz)	Avg. Burst Power(dBm)
802.11b	1	01	2412	9.47
		06	2437	9.4
		11	2462	9.36
802.11g	6	01	2412	7.58
		06	2437	7.5
		11	2462	7.39
802.11n(20)	6.5	01	2412	7.48
		06	2437	7.44
		11	2462	7.36
802.11n(40)	13.5	03	2422	4.61
		06	2437	4.5
		09	2452	4.41

Bluetooth_V3.0

Modulation	Channel	Frequency(MHz)	Average Power (dBm)
GFSK	0	2402	0.48
	39	2441	2.72
	78	2480	3.74
$\pi/4$ -DQPSK	0	2402	-0.39
	39	2441	1.83
	78	2480	2.81
8-DPSK	0	2402	-0.4
	39	2441	1.83
	78	2480	2.83

According to 3GPP 25.101 sub-clause 6.2.2 , the maximum output power is allowed to be reduced by following the table.

Table 6.1aA: UE maximum output power with HS-DPCCH and E-DCH

UE Transmit Channel Configuration	CM(db)	MPR(db)
For all combinations of ,DPDCH,DPCCH HS-DPDCH,E-DPDCH and E-DPCCH	$0 \leq CM \leq 3.5$	$\text{MAX}(CM-1,0)$
Note: CM=1 for $\beta_c/\beta_d=12/15$, $\beta_{hs}/\beta_c=24/15$.For all other combinations of DPDCH, DPCCH, HS-DPCCH, E-DPDCH and E-DPCCH the MPR is based on the relative CM difference.		

The device supports MPR to solve linearity issues (ACLR or SEM) due to the higher peak-to average ratios (PAR) of the HSUPA signal. This prevents saturating the full range of the TX DAC inside of device and provides a reduced power output to the RF transceiver chip according to the Cubic Metric (a function of the combinations of DPDCH, DPCCH, HS-DPCCH, E-DPDCH and E-DPCCH).

When E-DPDCH channels are present the beta gains on those channels are reduced firsts to try to get the power under the allowed limit. If the beta gains are lowered as far as possible, then a hard limiting is applied at the maximum allowed level.

The SW currently recalculates the cubic metric every time the beta gains on the E-DPDCH are reduced. The cubic metric will likely get lower each time this is done .However, there is no reported reduction of maximum output power in the HSUPA mode since the device also provides a compensation for the power back-off by increasing the gain of TX_AGC in the transceiver (PA) device.

The end effect is that the DUT output power is identical to the case where there is no MPR in the device.

11. TEST RESULTS

11.1. SAR Test Results Summary

11.1.1. Test position and configuration

Head SAR was performed with the device configured in the positions according to IEEE1528, and Body SAR was performed with the device 10mm from the phantom; The overall device length and width(12.6cm×6.3cm) are >9cm×5cm, Hotspot mode with a test separation distance of 10mm.

11.1.2. Operation Mode

- According to KDB 447498 D01 v05r02 ,for each exposure position, if the highest 1-g SAR is ≤ 0.8 W/kg, testing for low and high channel is optional.
- Per KDB 865664 D01 v01r03,for each frequency band, if the measured SAR is ≥ 0.8 W/Kg, testing for repeated SAR measurement is required , that the highest measured SAR is only to be tested. When the SAR results are near the limit, the following procedures are required for each device to verify these types of SAR measurement related variation concerns by repeating the highest measured SAR configuration in each frequency band.
 - (1) When the original highest measured SAR is ≥ 0.8 W/Kg, repeat that measurement once.
 - (2) Perform a second repeated measurement only if the ratio of largest to smallest SAR for the original and first repeated measurements is > 1.20 or when the original or repeated measurement is ≥ 1.45 W/Kg.
 - (3) Perform a third repeated measurement only if the original, first and second repeated measurement is ≥ 1.5 W/Kg and ratio of largest to smallest SAR for the original, first and second measurement is ≥ 1.20 .
- Body-worn exposure conditions are intended to voice call operations, therefore GSM voice call mode is selected to be test.
- According to KDB 648474 D04 ,when the reported SAR for a body-worn accessory measured without a headset connected to the handset is ≤ 1.2 W/Kg, SAR testing with a headset connected is not required.
- According to 941225 D06, when the overall device length and width are >9cm×5cm, Hotspot mode with a test separation distance of 10mm. For device with form factors smaller than 9cm×5cm, Hotspot mode with a test separation distance of 5mm. Body SAR was also performed with the headset attached and without. Hotspot mode SAR is measured for all edges and surfaces of the device within a transmitting antenna located within 25 mm from that surface or edge; for the data modes, wireless technologies and frequency bands supporting hotspot mode
- According to 248227 D01, SAR is not required for 802.11g channels when the maximum average output power is less than 1/4dB higher than measured on the corresponding 802.11b channels.
- Maximum Scaling SAR in order to calculate the Maximum SAR values to test under the standard Peak Power, Calculation method is as follows:
Maximum Scaling SAR =tested SAR (Max.) $\times$ [maximum turn-up power (mw)/ maximum measurement output power(mw)]

11.1.3. Test Result

SAR MEASUREMENT									
Ambient Temperature (°C) : 21 ± 2					Relative Humidity (%): 55				
Liquid Temperature (°C) : 21 ± 2					Depth of Liquid (cm):>15				
Product: 3G Smart Phone									
Test Mode: GSM850 with GMSK modulation									
Position	Mode	Ch.	Fr. (MHz)	Power Drift (<±5%)	SAR (1g) (W/kg)	Max. Turn-up Power (dBm)	Meas. output Power (dBm)	Scaled SAR (W/Kg)	Limit W/kg
SIM 1 Card									
voice									
Left Cheek	voice	190	836.6	0.25	0.342	33.00	31.89	0.442	1.6
Left Tilt	voice	190	836.6	-0.45	0.226	33.00	31.89	0.292	1.6
Right Cheek	voice	190	836.6	0.29	0.394	33.00	31.89	0.509	1.6
Right Tilt	voice	190	836.6	-0.87	0.304	33.00	31.89	0.393	1.6
Body back	voice	128	824.2	0.27	0.771	33.00	31.98	0.975	1.6
Body back	voice	190	836.6	-0.31	0.772	33.00	31.89	0.997	1.6
Body back	voice	251	848.8	0.34	0.768	33.00	31.87	0.996	1.6
Body front	voice	190	836.6	0.54	0.455	33.00	31.89	0.588	1.6
VoIP									
Left Cheek	GPRS 4 Slot	190	836.6	0.25	0.275	26.00	25.94	0.279	1.6
Left Tilt	GPRS 4 Slot	190	836.6	-1.14	0.198	26.00	25.94	0.201	1.6
Right Cheek	GPRS 4 Slot	190	836.6	0.23	0.365	26.00	25.94	0.370	1.6
Right Tilt	GPRS 4 Slot	190	836.6	0.89	0.213	26.00	25.94	0.216	1.6
Body back	GPRS 4 Slot	190	836.6	-1.14	0.306	26.00	25.94	0.310	1.6
Body front	GPRS 4 Slot	190	836.6	0.23	0.139	26.00	25.94	0.141	1.6
Edge1 (Top)	GPRS 4 Slot	190	836.6	0.31	0.287	26.00	25.94	0.291	1.6
Edge 2(Right)	GPRS 4 Slot	190	836.6	-1.21	0.150	26.00	25.94	0.152	1.6
Edge 4(Left)	GPRS 4 Slot	190	836.6	0.32	0.235	26.00	25.94	0.238	1.6
SIM 2 Card									
Right Cheek	voice	190	836.6	-0.57	0.372	33.00	31.89	0.480	1.6

Note:

- When the report 1-g SAR is ≤ 0.8 W/kg, testing for low and high channel is optional. Refer to KDB 447498.
- The test separation for body is 10mm of all above table.

SAR MEASUREMENT									
Ambient Temperature (°C) : 21 ± 2					Relative Humidity (%): 55				
Liquid Temperature (°C) : 21 ± 2					Depth of Liquid (cm):>15				
Product: 3G Smart Phone									
Test Mode: PCS1900 with GMSK modulation									
Position	Mode	Ch.	Fr. (MHz)	Power Drift (<±5%)	SAR (1g) (W/kg)	Max. Turn-up Power (dBm)	Meas. output Power (dBm)	Scaled SAR (W/Kg)	Limit W/kg
SIM 1 Card									
voice									
Left Cheek	voice	661	1880.0	0.86	0.273	30.00	28.81	0.359	1.6
Left Tilt	voice	661	1880.0	-0.59	0.243	30.00	28.81	0.320	1.6
Right Cheek	voice	661	1880.0	0.31	0.464	30.00	28.81	0.610	1.6
Right Tilt	voice	661	1880.0	-0.27	0.292	30.00	28.81	0.384	1.6
Body back	voice	661	1880.0	-0.25	0.483	30.00	28.81	0.635	1.6
Body front	voice	661	1880.0	0.34	0.263	30.00	28.81	0.346	1.6
VoIP									
Left Cheek	GPRS 2 Slot	661	1880.0	0.31	0.240	26.00	25.85	0.248	1.6
Left Tilt	GPRS 2 Slot	661	1880.0	-0.25	0.382	26.00	25.85	0.395	1.6
Right Cheek	GPRS 2 Slot	661	1880.0	0.32	0.296	26.00	25.85	0.306	1.6
Right Tilt	GPRS 2 Slot	661	1880.0	-0.29	0.426	26.00	25.85	0.441	1.6
Body back	GPRS 2 Slot	661	1880.0	-0.31	0.316	26.00	25.85	0.327	1.6
Body front	GPRS 2 Slot	661	1880.0	1.14	0.155	26.00	25.85	0.160	1.6
Edge1 (Top)	GPRS 2 Slot	661	1880.0	0.32	0.203	26.00	25.85	0.210	1.6
Edge 2(Right)	GPRS 2 Slot	661	1880.0	-0.29	0.143	26.00	25.85	0.148	1.6
Edge 4(Left)	GPRS 2 Slot	661	1880.0	0.31	0.259	26.00	25.85	0.268	1.6
SIM 2 Card									
Right Cheek	voice	661	1880.0	0.46	0.463	30.00	28.81	0.609	1.6

Note:

- When the report 1-g SAR is ≤ 0.8 W/kg, testing for low and high channel is optional. Refer to KDB 447498.
- The test separation for body is 10mm of all above table.

SAR MEASUREMENT									
Ambient Temperature (°C) : 21 ± 2					Relative Humidity (%): 55				
Liquid Temperature (°C) : 21 ± 2					Depth of Liquid (cm):>15				
Product: 3G Smart Phone									
Test Mode: WCDMA Band II with QPSK modulation									
Position	Mode	Ch.	Fr. (MHz)	Power Drift (<±5%)	SAR (1g) (W/kg)	Max. Turn-up Power (dBm)	Meas. output Power (dBm)	Scaled SAR (W/Kg)	Limit W/kg
SIM 1 Card									
Left Cheek	RMC 12.2kbps	9400	1880	0.25	0.754	23.00	22.75	0.799	1.6
Left Tilt	RMC 12.2kbps	9400	1880	-0.89	0.503	23.00	22.75	0.533	1.6
Right Cheek	RMC 12.2kbps	9400	1880	0.75	0.723	23.00	22.75	0.766	1.6
Right Tilt	RMC 12.2kbps	9400	1880	1.14	0.502	23.00	22.75	0.532	1.6
Body back	RMC 12.2kbps	9262	1852.4	-0.35	0.914	23.00	22.81	0.955	1.6
Body back	RMC 12.2kbps	9400	1880	0.26	0.902	23.00	22.75	0.955	1.6
Body back	RMC 12.2kbps	9538	1907.6	-0.74	0.762	23.00	22.72	0.813	1.6
Body front	RMC 12.2kbps	9400	1880	-0.12	0.472	23.00	22.75	0.500	1.6
Edge1 (Top)	RMC 12.2kbps	9400	1880	-0.25	0.381	23.00	22.75	0.404	1.6
Edge 2(Right)	RMC 12.2kbps	9400	1880	1.14	0.146	23.00	22.75	0.155	1.6
Edge 4(Left)	RMC 12.2kbps	9400	1880	0.35	0.203	23.00	22.75	0.215	1.6

Note:

- When the report 1-g SAR is ≤ 0.8 W/kg, testing for low and high channel is optional. Refer to KDB 447498.
- The test separation for body is 10mm of all above table.

SAR MEASUREMENT									
Ambient Temperature (°C) : 21 ± 2					Relative Humidity (%): 55				
Liquid Temperature (°C) : 21 ± 2					Depth of Liquid (cm):>15				
Product: 3G Smart Phone									
Test Mode: WCDMA Band V with QPSK modulation									
Position	Mode	Ch.	Fr. (MHz)	Power Drift (<±5%)	SAR (1g) (W/kg)	Max. Turn-up Power (dBm)	Meas. output Power (dBm)	Scaled SAR (W/Kg)	Limit W/kg
SIM 1 Card									
Left Cheek	RMC 12.2kbps	4183	836.6	0.86	0.763	23.00	22.83	0.793	1.6
Left Tilt	RMC 12.2kbps	4183	836.6	-0.37	0.487	23.00	22.83	0.506	1.6
Right Cheek	RMC 12.2kbps	4132	826.4	0.18	0.993	23.00	22.89	1.018	1.6
Right Cheek	RMC 12.2kbps	4183	836.6	-0.43	0.823	23.00	22.83	0.856	1.6
Right Cheek	RMC 12.2kbps	4233	846.6	0.25	0.635	23.00	22.78	0.668	1.6
Right Tilt	RMC 12.2kbps	4183	836.6	-0.15	0.463	23.00	22.83	0.481	1.6
Body back	RMC 12.2kbps	4132	826.4	1.16	1.003	23.00	22.89	1.029	1.6
Body back	RMC 12.2kbps	4183	836.6	-0.34	0.962	23.00	22.83	1.000	1.6
Body back	RMC 12.2kbps	4233	846.6	-0.25	0.774	23.00	22.78	0.814	1.6
Body front	RMC 12.2kbps	4183	836.6	0.34	0.483	23.00	22.83	0.502	1.6
Edge1 (Top)	RMC 12.2kbps	4132	826.4	-0.34	0.645	23.00	22.83	0.671	1.6
Edge 2(Right)	RMC 12.2kbps	4183	836.6	1.14	0.336	23.00	22.83	0.349	1.6
Edge 4(Left)	RMC 12.2kbps	4233	846.6	0.25	0.578	23.00	22.83	0.601	1.6

Note:

- When the report 1-g SAR is ≤ 0.8 W/kg, testing for low and high channel is optional. Refer to KDB 447498.
- The test separation for body is 10mm of all above table.

Repeated SAR								
Ambient Temperature (°C) : 21 ± 2					Relative Humidity (%): 55			
Liquid Temperature (°C) : 21 ± 2					Depth of Liquid (cm):>15			
Product: 3G Smart Phone								
Test Mode: WCDMA Band II& WCDMA Band V with QPSK modulation								
Position	Mode	Ch.	Fr. (MHz)	Power Drift ($\leq \pm 5\%$)	Once SAR (1g) (W/kg)	Twice SAR (1g) (W/kg)	Third SAR (1g) (W/kg)	Limit W/kg
Body back	RMC 12.2kbps	9262	1852.4	0.78	0.912	--	--	1.6
Right Cheek	RMC 12.2kbps	4132	826.4	-0.86	0.992	--	--	1.6
Body back	RMC 12.2kbps	4132	826.4	-0.34	1.001	--	--	1.6

Simultaneous Multi-band Transmission Evaluation: Application Simultaneous Transmission information:

NO	Simultaneous state	Portable Handset			Note
		Head	Body-worn	Hotspot	
1	GSM(voice)+WLAN 2.4GHz (data)	Yes	Yes	-	-
2	WCDMA(voice)+WLAN 2.4GHz (data)	Yes	Yes	-	-
3	GSM(voice)+Bluetooth(data)	-	Yes	-	-
4	WCDMA(voice)+Bluetooth(data)	-	Yes	-	-
5	GSM(voice)+WLAN 2.4GHz (data)	-	Yes	Yes	2.4GHz Hotspot
6	WCDMA(voice)+WLAN 2.4GHz (data)	-	Yes	Yes	2.4GHz Hotspot

NOTE:

1. WLAN and BT share the same antenna, and cannot transmit simultaneously.
2. Simultaneous with every transmitter must be the same test position.
3. Based upon KDB 447498 D01 v05, BT SAR is excluded as below table.
4. Based upon KDB 447498 D01 v05, for handsets the test separation distance is determined by the smallest distance between the outer surface of the device and the user; which is 0mm for head SAR AND 10mm for body-worn SAR.
5. If the test separation distance is <5mm, 5mm is used for excluded SAR calculation.
6. For minimum test separation distance $\leq 50\text{mm}$, Bluetooth standalone SAR is excluded according to $[(\text{max. power of channel, including tune-up tolerance, mW}) / (\text{min. test separation distance, mm}) \cdot \sqrt{f \text{ (GHz)}} / x] \leq 3.0$ for 1-g SAR and ≤ 7.5 for 10-g extremity SAR
7. KDB 447498 / 4.3.2 (2) when standalone SAR test exclusion applies to an antenna that transmits simultaneously with other antennas, the standalone SAR must be estimated according to following to determine simultaneous transmission SAR test exclusion:
 - a) $(\text{max. power of channel, including tune-up tolerance, mW}) / (\text{min. test separation distance, mm}) \cdot \sqrt{f \text{ (GHz)}} / x$ W/kg for test separation distances $\leq 50 \text{ mm}$;
Where $x = 7.5$ for 1-g SAR, and $x = 18.75$ for 10-g SAR.
 - b) 0.4W/Kg for 1-g SAR and 1.0W/Kg for 10-g SAR, when the separation distance is $>50\text{mm}$.

Estimated SAR		Maximum Average Power		Antenna to user (mm)	SAR exclusion threshold (mW)	SAR testing required (Yes/No)	Head (0mm gap)	Body (10mm gap)
		dBm	mW					
BT	Head	4	2.512	0	10	NO	0.105 W/kg	0.053 W/kg
	Body			10	10	NO		
WIFI	Head	10	10	0	10	NO	0.414 W/kg	0.207 W/kg
	Body			10	10	NO		

Maximum test results (WWAN) with BT and WIFI/ HOTSPOT SAR:

BT: Head (0 cm gap): 0.105W/kg and Body (1.0cm gap): 0.053W/kg

WIFI: Head (0 cm gap): 0.414 W/kg and Body (1.0cm gap): 0.207 W/kg

Sum of the SAR for GSM 850 & Wi-Fi & BT:

RF Exposure Conditions	Test Position	Simultaneous Transmission Scenario			Σ 1-g SAR (W/Kg)	SPLSR (Yes/No)
		GSM 850 Band	Wi-Fi DTS Band	Bluetooth		
Head (voice)	Left Touch	0.442	0.414		0.856	No
	Left Tilt	0.292	0.414		0.706	No
	Right Touch	0.509	0.414		0.923	No
	Right Tilt	0.393	0.414		0.807	No
Body-worn	Rear	0.997	0.207		1.204	No
		0.997		0.053	1.050	No
	Front	0.588	0.207		0.795	No
		0.588		0.053	0.641	No
Head (VoIP)	Left Touch	0.279	0.414		0.693	No
	Left Tilt	0.201	0.414		0.615	No
	Right Touch	0.370	0.414		0.784	No
	Right Tilt	0.216	0.414		0.630	No
Hotspot	Rear	0.310		0.053	0.363	No
		0.310	0.207		0.517	No
	Front	0.141		0.053	0.194	No
		0.141	0.207		0.348	No
	Edge 1	0.291	0.207		0.498	No
	Edge 2	0.152	0.207		0.359	No
	Edge 4	0.238	0.207		0.445	No

Note:

- According to KDB 447498 D01 General RF Exposure Guidance, when the simultaneous transmission SAR is less than 1.6 W/Kg, SPLSR assessment is not required.
- SPLSR mean is “The SAR to Peak Location Separation Ratio “

Sum of the SAR for GSM 1900 & Wi-Fi & BT:

RF Exposure Conditions	Test Position	Simultaneous Transmission Scenario			Σ 1-g SAR (W/Kg)	SPLSR (Yes/No)
		GSM 1900 Band	Wi-Fi DTS Band	Bluetooth		
Head (voice)	Left Touch	0.359	0.414		0.773	No
	Left Tilt	0.320	0.414		0.734	No
	Right Touch	0.610	0.414		1.024	No
	Right Tilt	0.384	0.414		0.798	No
Body-worn	Rear	0.635	0.207		0.842	No
		0.635		0.053	0.688	No
	Front	0.346	0.207		0.553	No
		0.346		0.053	0.399	No
Head (VoIP)	Left Touch	0.248	0.414		0.662	No
	Left Tilt	0.395	0.414		0.809	No
	Right Touch	0.306	0.414		0.720	No
	Right Tilt	0.441	0.414		0.855	No
Hotspot	Rear	0.327		0.053	0.380	No
		0.327	0.207		0.534	No
	Front	0.160		0.053	0.213	No
		0.160	0.207		0.367	No
	Edge 1	0.210	0.207		0.417	No
	Edge 2	0.148	0.207		0.355	No
	Edge 4	0.268	0.207		0.475	No

Note:

- According to KDB 447498 D01 General RF Exposure Guidance, when the simultaneous transmission SAR is less than 1.6 W/Kg, SPLSR assessment is not required.
- SPLSR mean is “The SAR to Peak Location Separation Ratio “

Sum of the SAR for WCDMA Band II & Wi-Fi & BT:

RF Exposure Conditions	Test Position	Simultaneous Transmission Scenario			Σ 1-g SAR (W/Kg)	SPLSR (Yes/No)
		WCDMA Band II	Wi-Fi DTS Band	Bluetooth		
Head	Left Touch	0.799	0.414		1.213	No
	Left Tilt	0.533	0.414		0.947	No
	Right Touch	0.766	0.414		1.180	No
	Right Tilt	0.532	0.414		0.946	No
Body-worn	Rear	0.955	0.207		1.162	No
		0.955		0.053	1.008	No
	Front	0.500	0.207		0.707	No
		0.500		0.053	0.553	No
	Edge 1	0.404	0.207		0.611	No
	Edge 2	0.155	0.207		0.362	No
	Edge 4	0.215	0.207		0.422	No

Note:

- According to KDB 447498 D01 General RF Exposure Guidance, when the simultaneous transmission SAR is less than 1.6 W/Kg, SPLSR assessment is not required.
- SPLSR mean is “The SAR to Peak Location Separation Ratio “

Sum of the SAR for WCDMA Band V & Wi-Fi & BT:

RF Exposure Conditions	Test Position	Simultaneous Transmission Scenario			Σ 1-g SAR (W/Kg)	SPLSR (Yes/No)
		WCDMA Band V	Wi-Fi DTS Band	Bluetooth		
Head	Left Touch	0.793	0.414		1.207	No
	Left Tilt	0.506	0.414		0.920	No
	Right Touch	1.018	0.414		1.432	No
	Right Tilt	0.481	0.414		0.895	No
Body-worn	Rear	1.029	0.207		1.236	No
		1.029		0.053	1.082	No
	Front	0.502	0.207		0.709	No
		0.502		0.053	0.555	No
	Edge 1	0.671	0.207		0.878	No
	Edge 2	0.349	0.207		0.556	No
	Edge 4	0.601	0.207		0.808	No

Note:

- According to KDB 447498 D01 General RF Exposure Guidance, when the simultaneous transmission SAR is less than 1.6 W/Kg, SPLSR assessment is not required.
- SPLSR mean is “The SAR to Peak Location Separation Ratio “

APPENDIX A. SAR SYSTEM VALIDATION DATA

Test Laboratory: AGC Lab

Date: Nov. 20,2014

System Check Head 835 MHz

DUT: Dipole 835MHz Type: SID 835

Communication System CW; Communication System Band: D835 (835.0 MHz); Duty Cycle: 1:1; Conv.F=5.27

Frequency: 835MHz; Medium parameters used: $f = 835$ MHz; $\sigma=0.90$ mho/m; $\epsilon_r=41.73$; $\rho= 1000$ kg/m³ ;

Phantom section: Flat Section; Input Power=18dBm

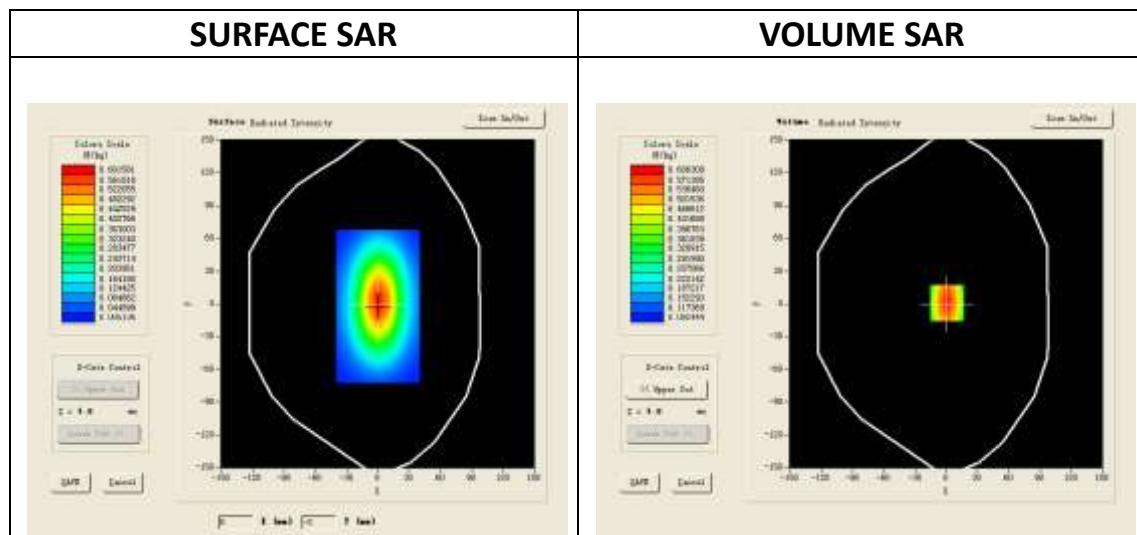
Ambient temperature (°C): 21, Liquid temperature (°C): 21

SATIMO Configuration:

- Probe: SSE5; Calibrated: 01/12/2014; Serial No.:SN 22/12 EP159
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Phantom: Flat Phantom; Type: Elliptical Phantom
- Measurement SW: OpenSAR V4_02_01

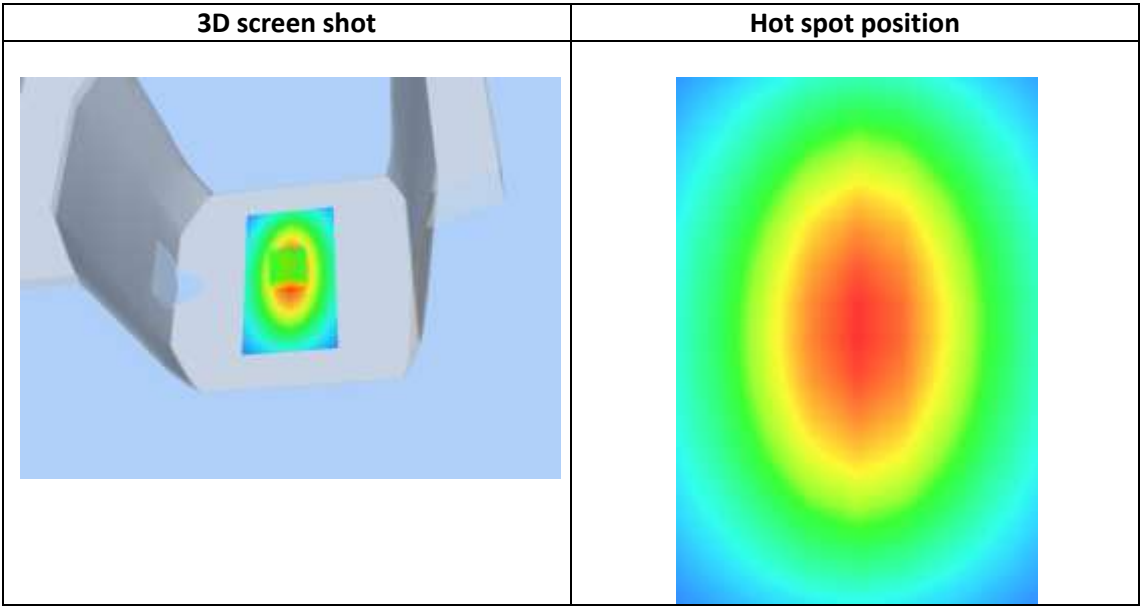
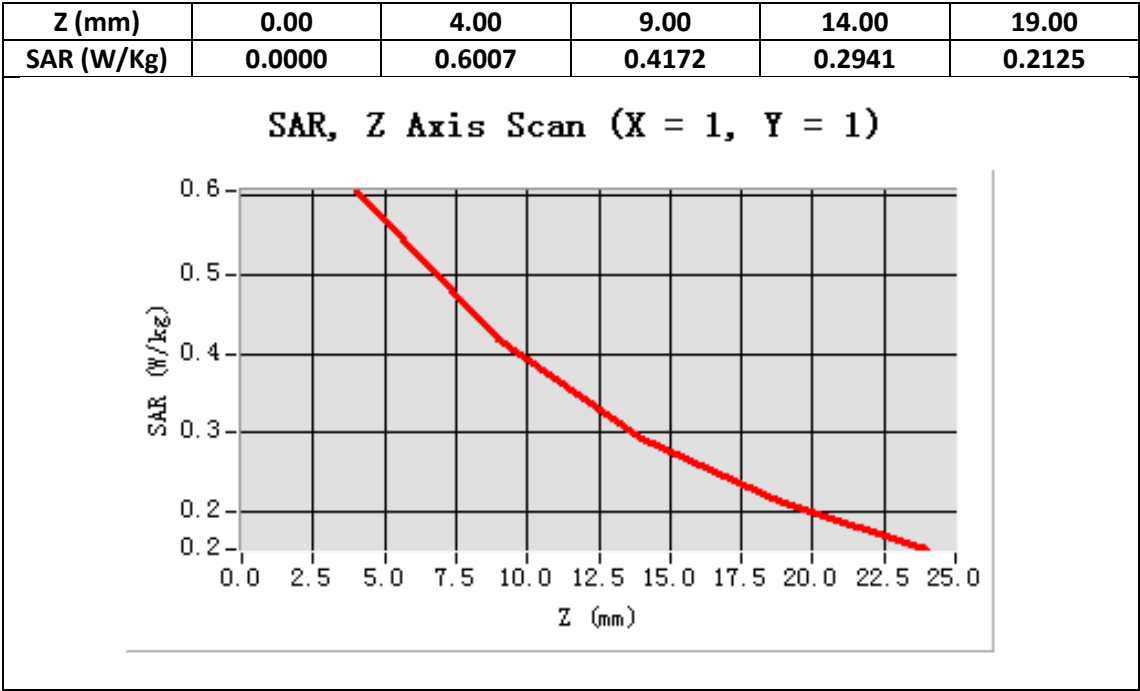
Configuration/System Check GSM 835 Head/Area Scan: Measurement grid: dx=8mm, dy=8mm

Configuration/System Check GSM 835 Head/Zoom Scan: Measurement grid: dx=8mm,dy=8mm, dz=5mm



Maximum location: X=1.00, Y=1.00

SAR 10g (W/Kg)	0.397564
SAR 1g (W/Kg)	0.610157



Test Laboratory: AGC Lab
System Check Body 835 MHz
DUT: Dipole 835 MHz Type: SID 835

Date: Nov. 20,2014

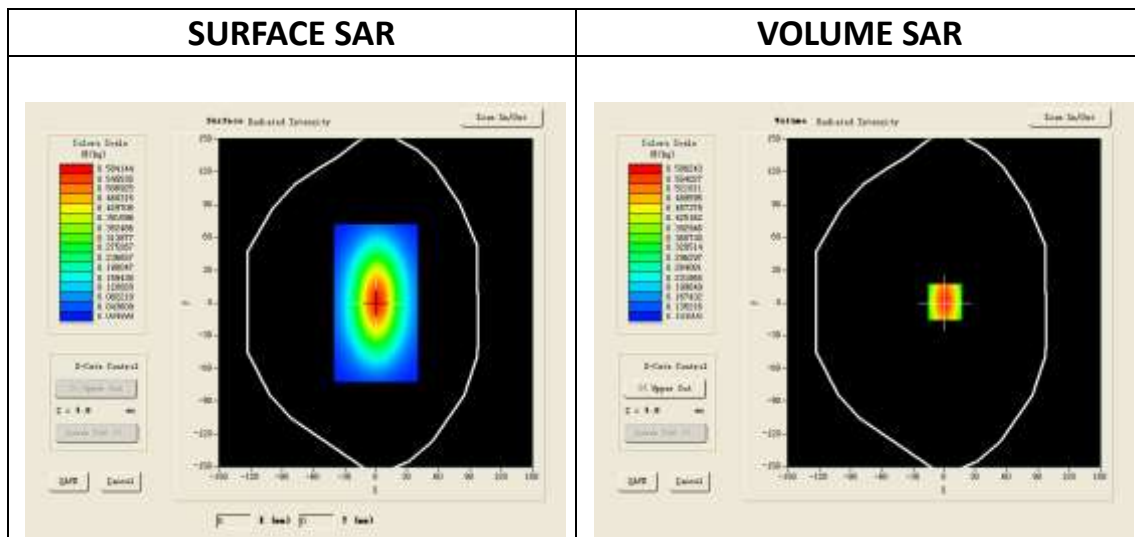
Communication System CW; Communication System Band: D835 (835.0 MHz); Duty Cycle: 1:1; Conv.F=5.48
Frequency: 835 MHz; Medium parameters used: $f = 835$ MHz; $\sigma=0.98$ mho/m; $\epsilon_r=54.73$; $\rho= 1000$ kg/m³ ;
Phantom section: Flat Section; Input Power=18dBm
Ambient temperature (°C): 21, Liquid temperature (°C): 21

SATIMO Configuration:

- Probe: SSE5; Calibrated: 01/12/2014; Serial No.:SN 22/12 EP159
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Phantom: Flat Phantom; Type: Elliptical Phantom
- Measurement SW: OpenSAR V4_02_01

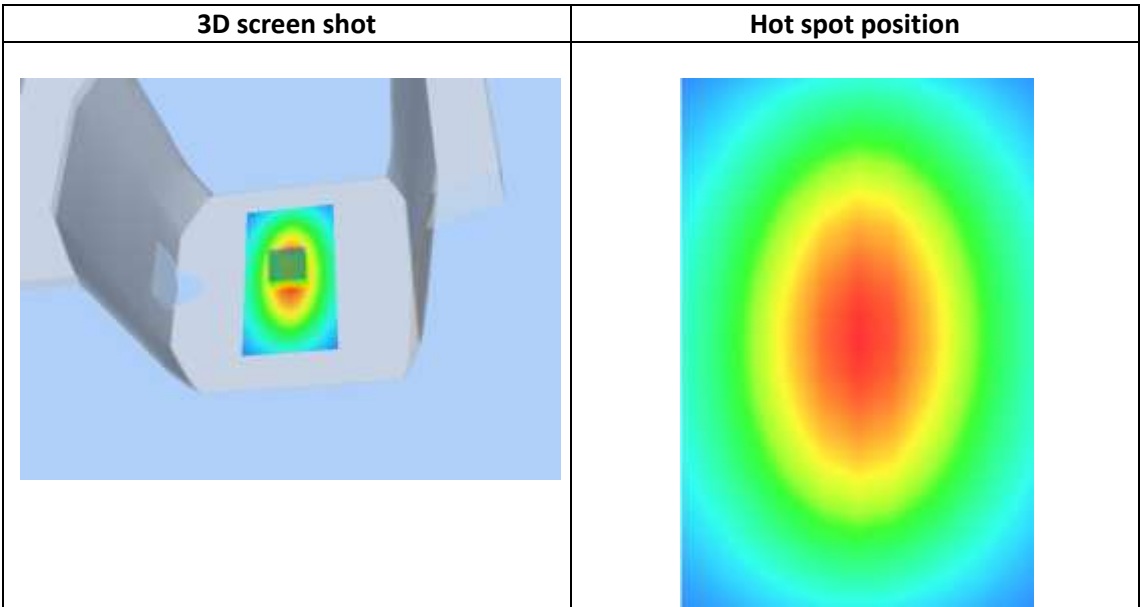
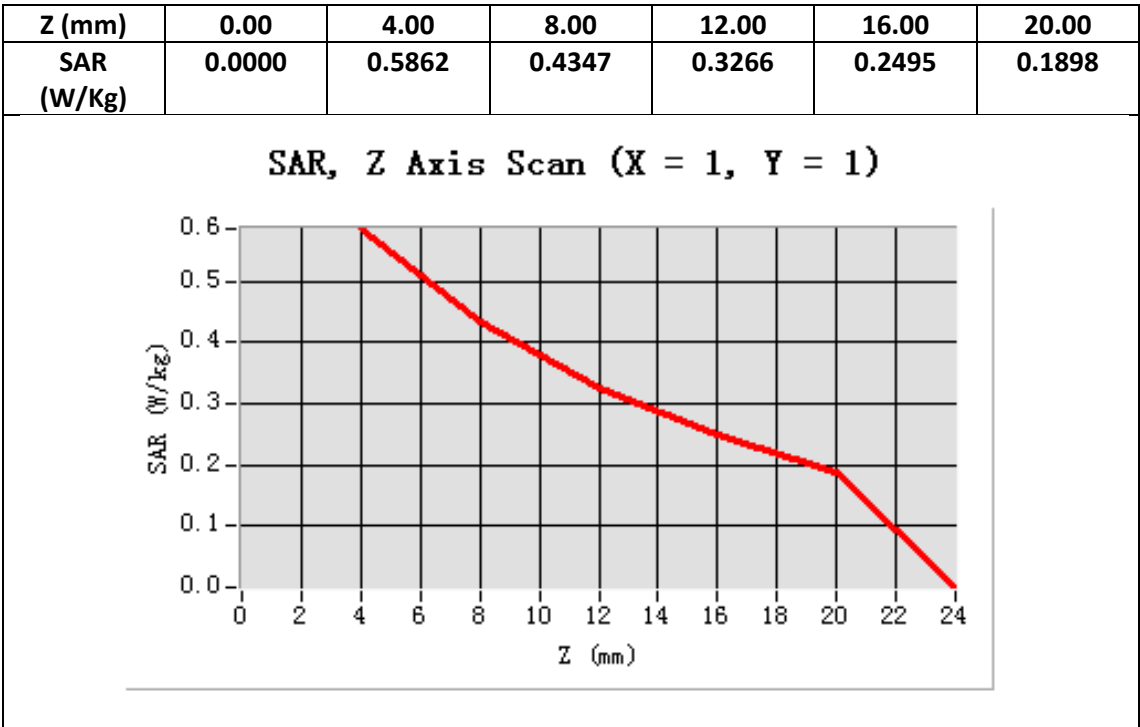
Configuration/System Check GSM 835 Body/Area Scan: Measurement grid: dx=8mm, dy=8mm

Configuration/System Check GSM 835 Body/Zoom Scan: Measurement grid: dx=8mm,dy=8mm, dz=5mm



Maximum location: X=1.00, Y=1.00

SAR 10g (W/Kg)	0.3880523
SAR 1g (W/Kg)	0.6103854



Test Laboratory: AGC Lab
System Check Head 1900MHz
DUT: Dipole 1900 MHz; Type: SID 1900

Date: Nov. 20,2014

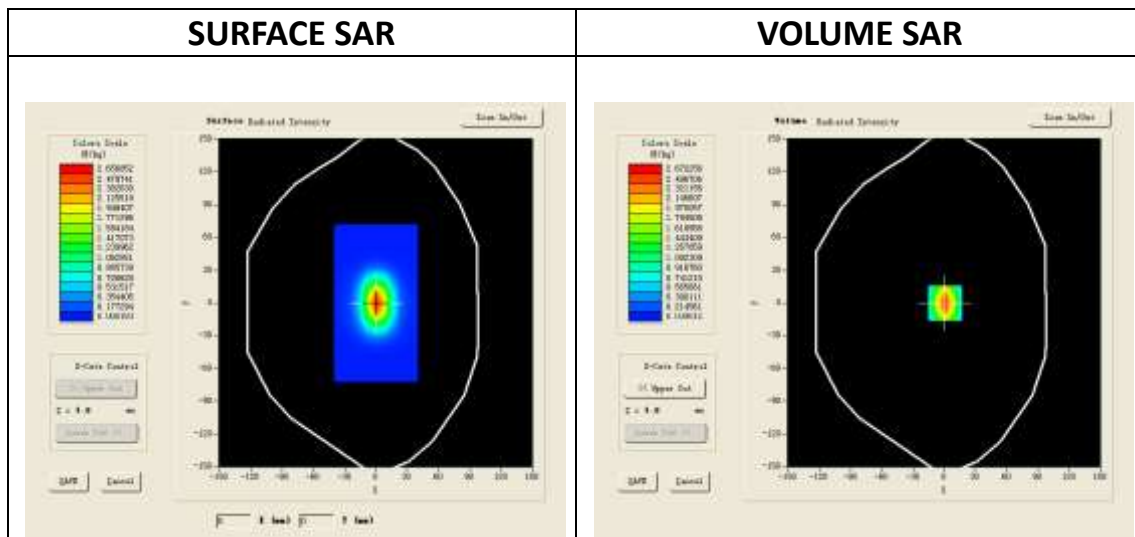
Communication System: CW; Communication System Band: D1900 (1900.0 MHz); Duty Cycle:1:1; Conv.F=4.51
Frequency: 1900 MHz; Medium parameters used: $f = 1900$ MHz; $\sigma = 1.43$ mho/m; $\epsilon_r = 40.69$; $\rho = 1000$ kg/m³ ;
Phantom section: Flat Section; Input Power=18dBm
Ambient temperature (°C): 21, Liquid temperature (°C): 21

SATIMO Configuration:

- Probe: SSE5; Calibrated: 01/12/2014; Serial No.:SN 22/12 EP159
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Phantom: Flat Phantom; Type: Elliptical Phantom
- Measurement SW: OpenSAR V4_02_01

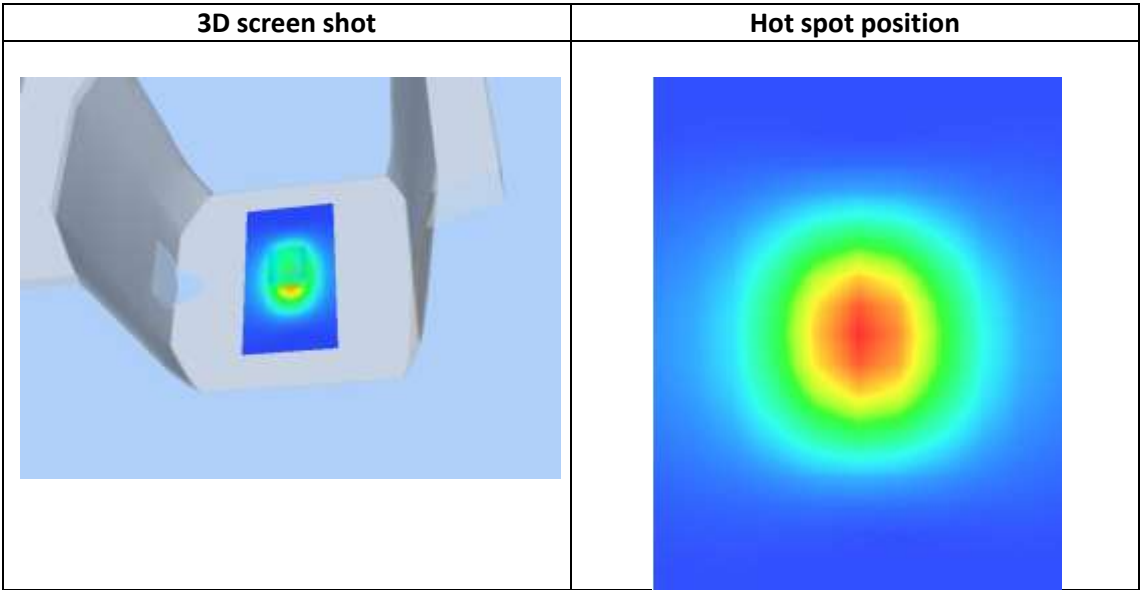
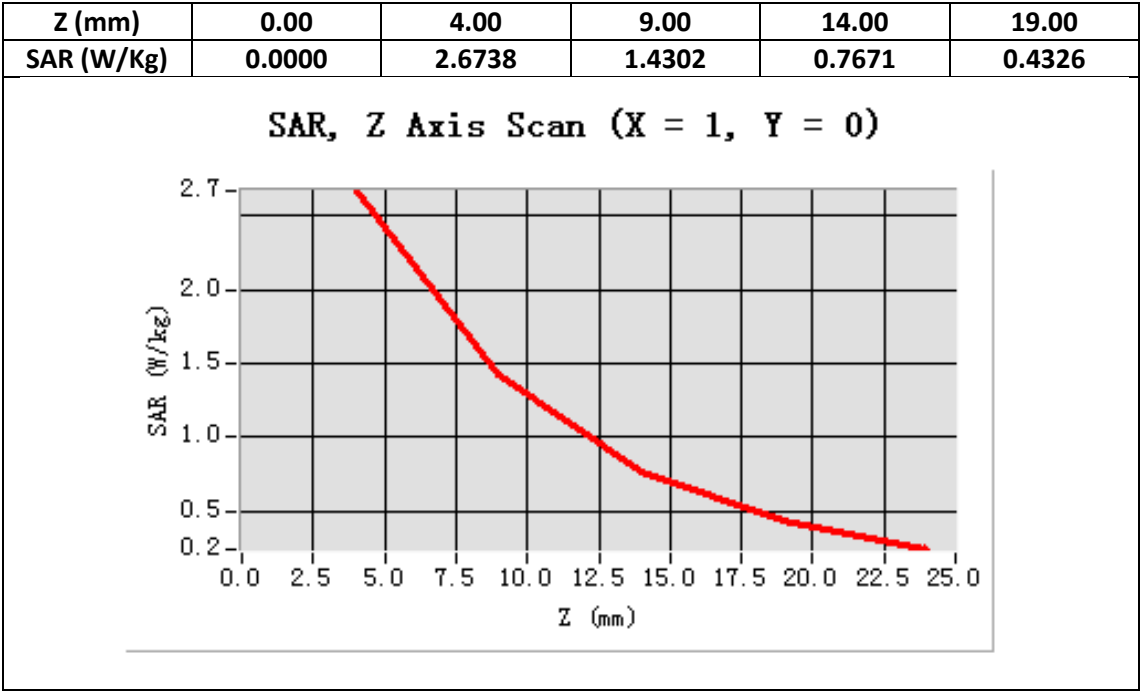
Configuration/System Check PCS1900 Head/Area Scan: Measurement grid: dx=8mm,dy=8mm

Configuration/System Check PCS1900 Head/Zoom Scan: Measurement grid: dx=8mm,dy=8mm, dz=5mm



Maximum location: X=1.00, Y=0.00

SAR 10g (W/Kg)	1.206751
SAR 1g (W/Kg)	2.446442



Test Laboratory: AGC Lab
System Check Body 1900MHz
DUT: Dipole 1900 MHz; Type: SID 1900

Date: Nov. 20,2014

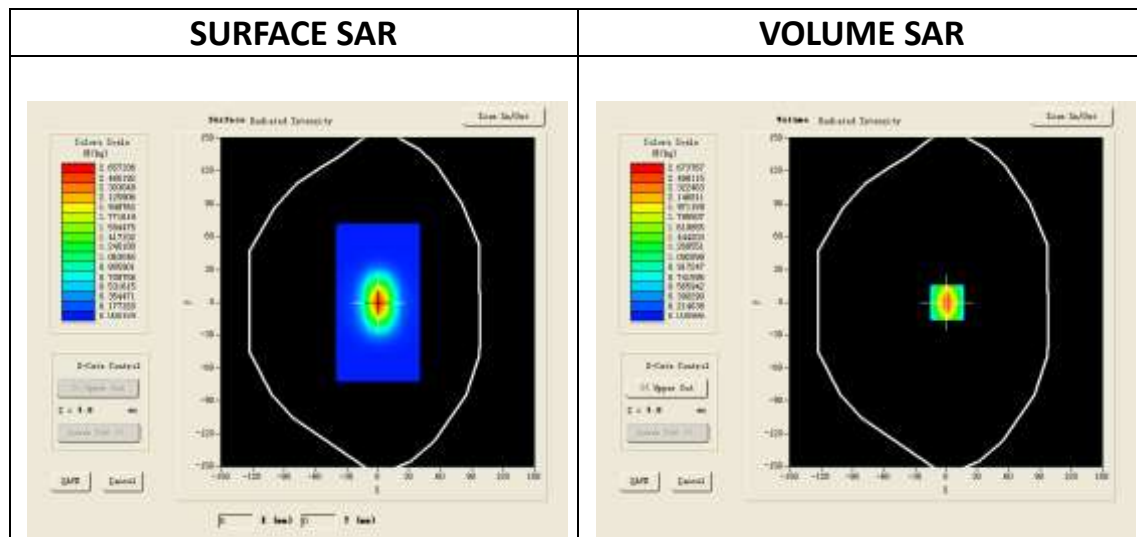
Communication System: CW; Communication System Band: D1900 (1900.0 MHz); Duty Cycle:1:1; Conv.F=4.45
Frequency: 1900 MHz; Medium parameters used: $f = 1900$ MHz; $\sigma = 1.54$ mho/m; $\epsilon_r = 53.44$; $\rho = 1000$ kg/m³ ;
Phantom section: Flat Section; Input Power=18dBm
Ambient temperature (°C): 21, Liquid temperature (°C): 21

SATIMO Configuration:

- Probe: SSE5; Calibrated: 01/12/2014; Serial No.:SN 22/12 EP159
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Phantom: Flat Phantom; Type: Elliptical Phantom
- Measurement SW: OpenSAR V4_02_01

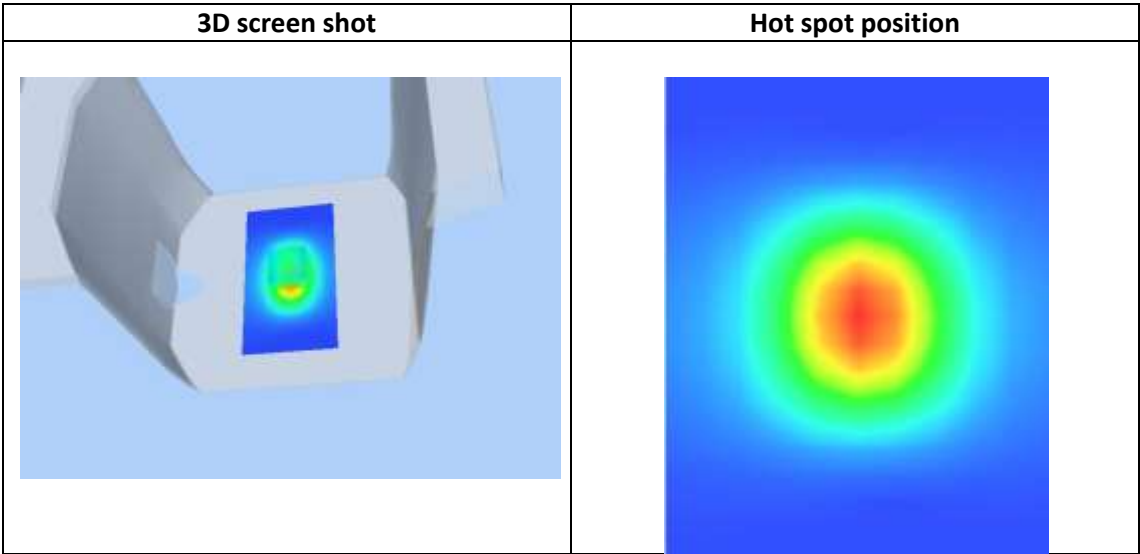
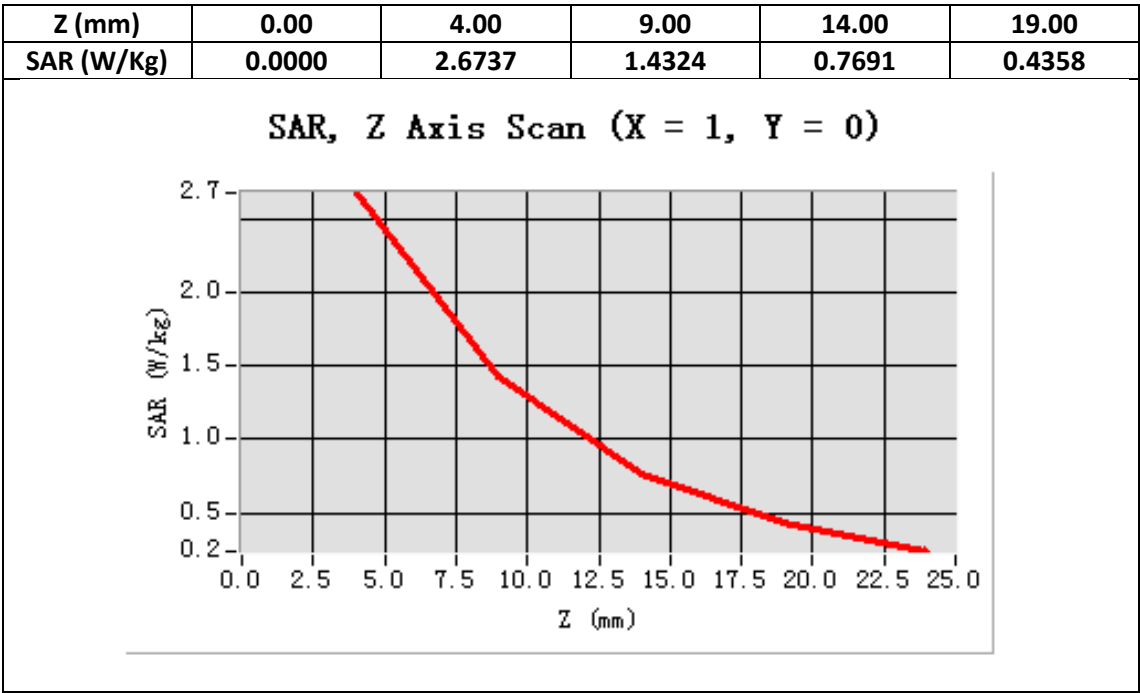
Configuration/System Check PCS1900 Body/Area Scan: Measurement grid: dx=8mm,dy=8mm

Configuration/System Check PCS1900 Body/Zoom Scan: Measurement grid: dx=8mm,dy=8mm, dz=5mm



Maximum location: X=1.00, Y=0.00

SAR 10g (W/Kg)	1.210014
SAR 1g (W/Kg)	2.449471



APPENDIX B. SAR MEASUREMENT DATA

Test Laboratory: AGC Lab

Date: Nov. 20,2014

GSM 850 Mid-Touch-Left <SIM 1>

DUT: 3G Smart Phone; Type: S42

Communication System: Generic GSM; Communication System Band: GSM 850; Duty Cycle: 1:8.3; Conv.F=5.27
Frequency: 836.6 MHz; Medium parameters used: $f = 835$ MHz; $\sigma = 0.90$ mho/m; $\epsilon_r = 41.73$; $\rho = 1000$ kg/m³ ;
Phantom section: Left Section
Ambient temperature (°C): 21.0, Liquid temperature (°C): 21.0

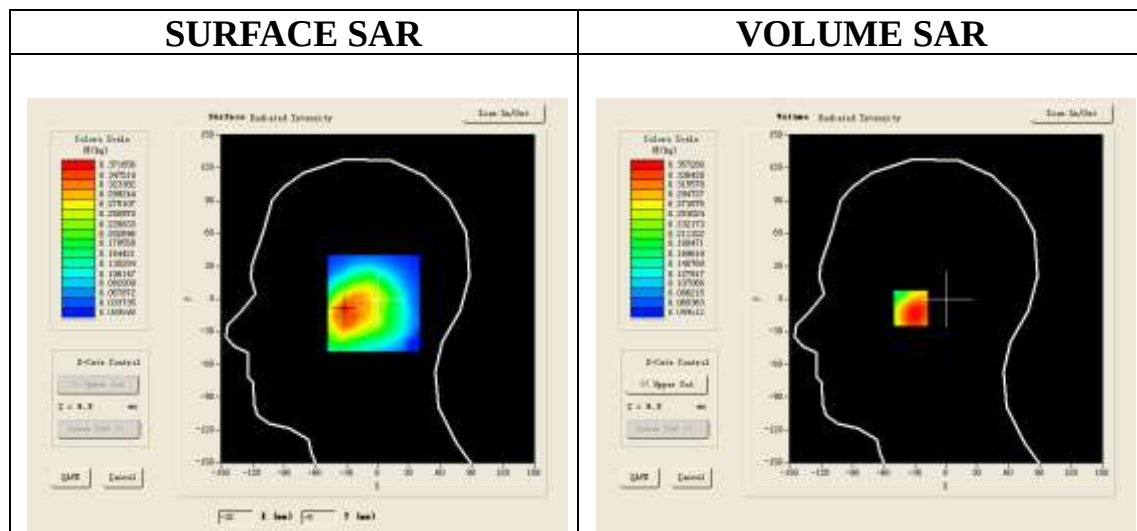
SATIMO Configuration:

- Probe: SSE5; Calibrated: 01/12/2014; Serial No.:SN 22/12 EP159
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Phantom: Flat Phantom; Type: Elliptical Phantom
- Measurement SW: OpenSAR V4_02_01

Configuration/GSM 850 Mid-Touch-Left/Area Scan: Measurement grid: dx=8mm, dy=8mm

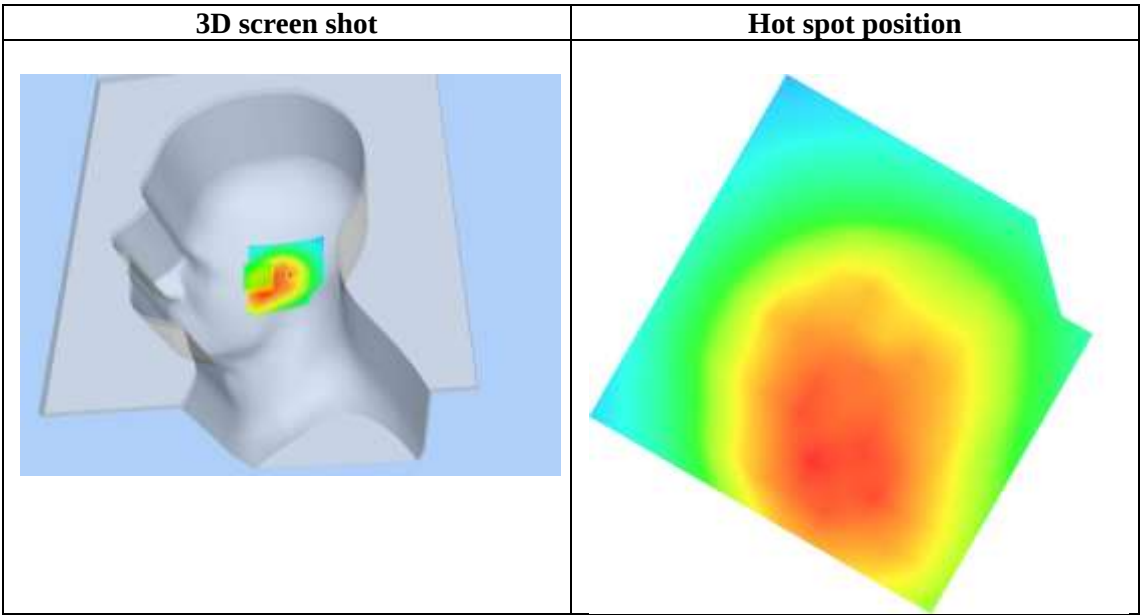
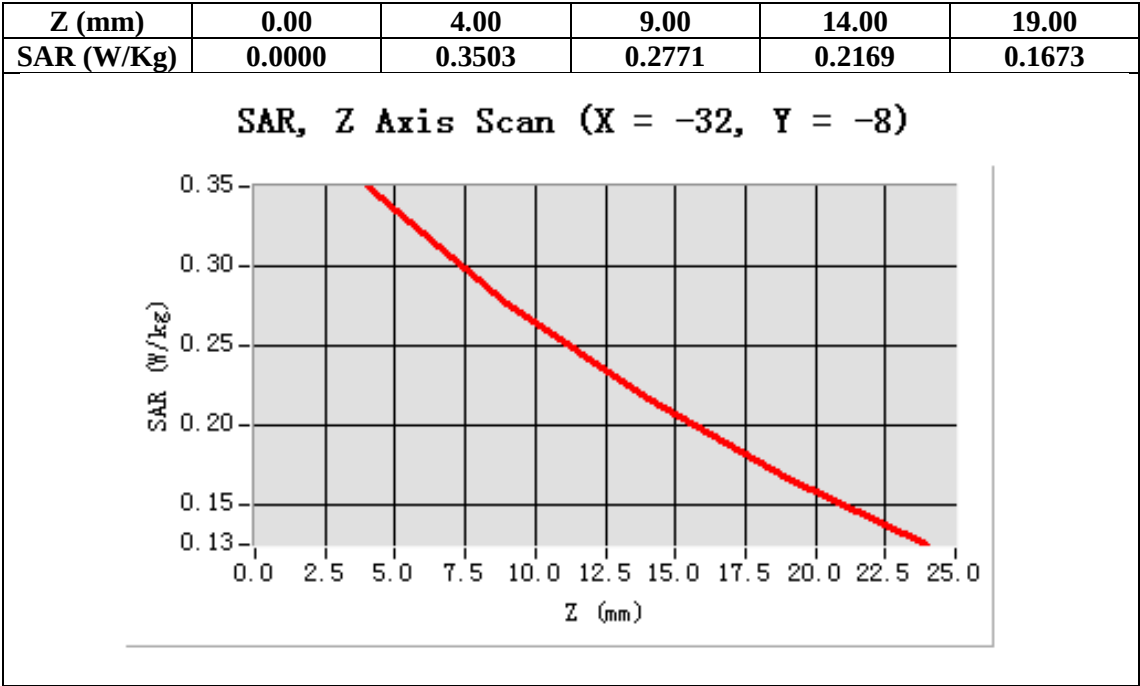
Configuration/GSM 850 Mid-Touch-Left/Zoom Scan: Measurement grid: dx=8mm,dy=8mm, dz=5mm

Area Scan	sam_direct_droit2_surf8mm.txt
ZoomScan	5x5x7,dx=8mm dy=8mm dz=5mm,Very fast
Phantom	Left head
Device Position	Cheek
Band	GSM 850
Channels	Middle
Signal	TDMA (Crest factor: 8.0)



Maximum location: X=-32.00, Y=-8.00

SAR 10g (W/Kg)	0.253576
SAR 1g (W/Kg)	0.342451



Test Laboratory: AGC Lab
GSM 850 Mid-Tilt-Left <SIM 1>
DUT: 3G Smart Phone; Type: S42

Date: Nov. 20,2014

Communication System: Generic GSM; Communication System Band: GSM 850; Duty Cycle: 1:8.3; Conv.F=5.27;
Frequency: 836.6 MHz; Medium parameters used: $f = 835$ MHz; $\sigma = 0.90$ mho/m; $\epsilon_r = 41.73$; $\rho = 1000$ kg/m³ ;
Phantom section: Left Section
Ambient temperature (°C): 21.0, Liquid temperature(°C): 21.0

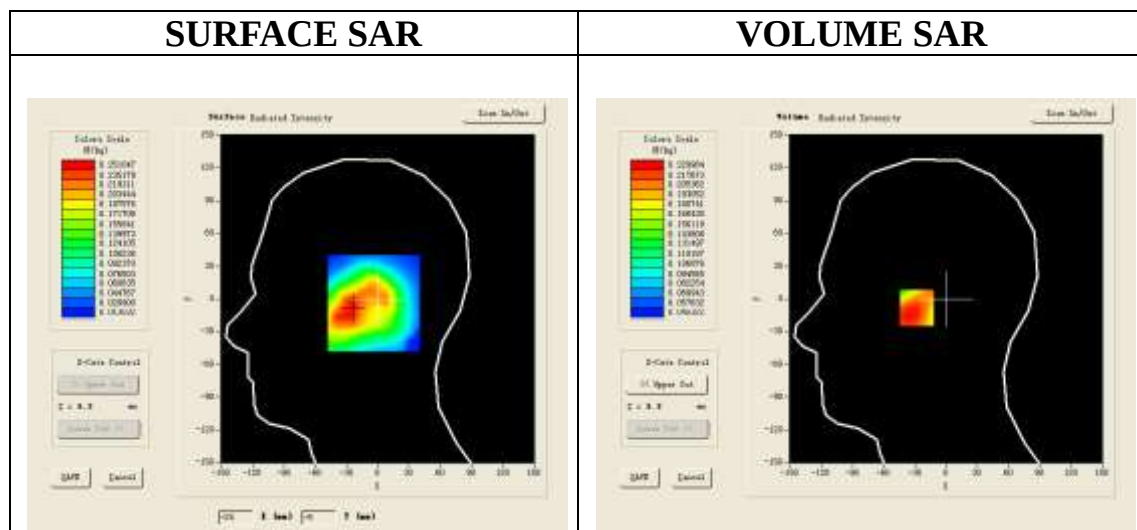
SATIMO Configuration:

- Probe: SSE5; Calibrated: 01/12/2014; Serial No.:SN 22/12 EP159
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Phantom: Flat Phantom; Type: Elliptical Phantom
- Measurement SW: OpenSAR V4_02_01

Configuration/GSM 850 Mid-Tilt-Left/Area Scan: Measurement grid: dx=8mm, dy=8mm

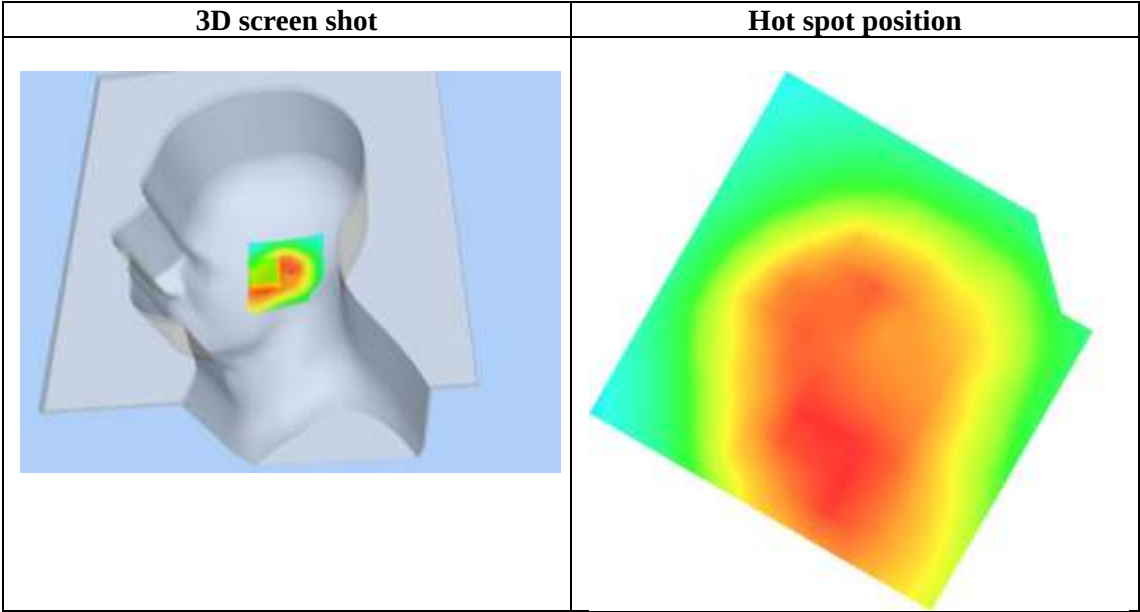
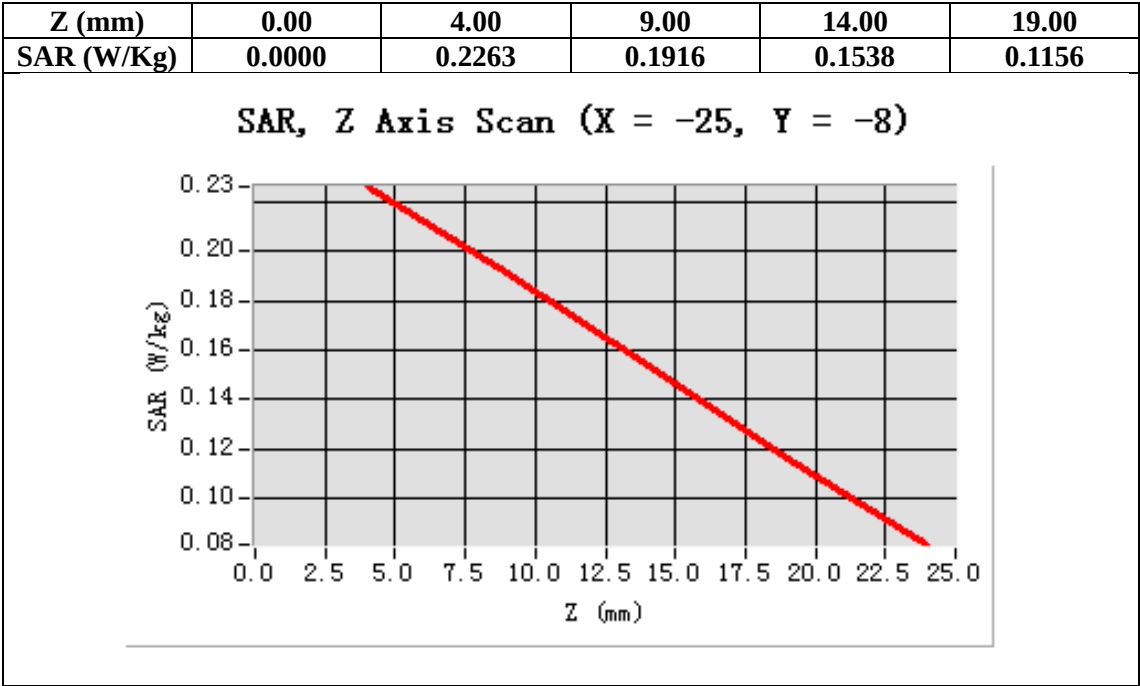
Configuration/GSM 850 Mid-Tilt-Left/Zoom Scan: Measurement grid: dx=8mm, dy=8mm,dz=5mm;

Area Scan	sam_direct_droit2_surf8mm.txt
ZoomScan	5x5x7,dx=8mm dy=8mm dz=5mm,Very fast
Phantom	Left head
Device Position	Tilt
Band	GSM 850
Channels	Middle
Signal	TDMA (Crest factor: 8.0)



Maximum location: X=-25.00, Y=-8.00

SAR 10g (W/Kg)	0.164157
SAR 1g (W/Kg)	0.226281



Test Laboratory: AGC Lab
GSM 850 Mid-Touch-Right <SIM 1>
DUT: 3G Smart Phone; Type: S42

Date: Nov. 20,2014

Communication System: Generic GSM; Communication System Band: GSM 850; Duty Cycle: 1:8.3; Conv.F=5.27;
Frequency: 836.6 MHz; Medium parameters used: $f = 835$ MHz; $\sigma = 0.90$ mho/m; $\epsilon_r = 41.73$; $\rho = 1000$ kg/m³ ;
Phantom section: Right Section
Ambient temperature (°C): 21.0, Liquid temperature (°C): 21.0

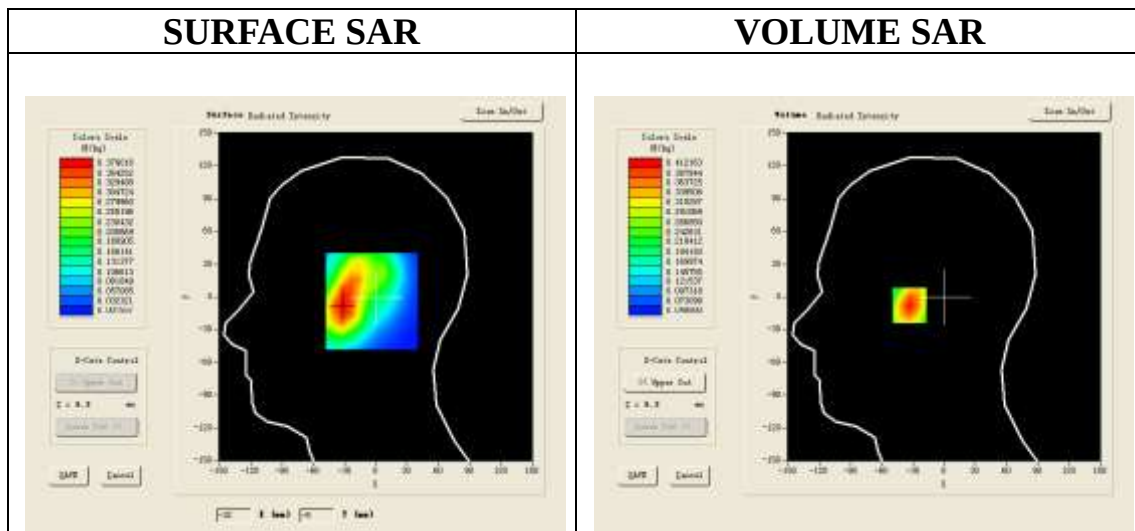
SATIMO Configuration:

- Probe: SSE5; Calibrated: 01/12/2014; Serial No.:SN 22/12 EP159
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Phantom: Flat Phantom; Type: Elliptical Phantom
- Measurement SW: OpenSAR V4_02_01

Configuration/GSM 850 Mid-Touch-Right/Area Scan: Measurement grid: dx=8mm, dy=8mm

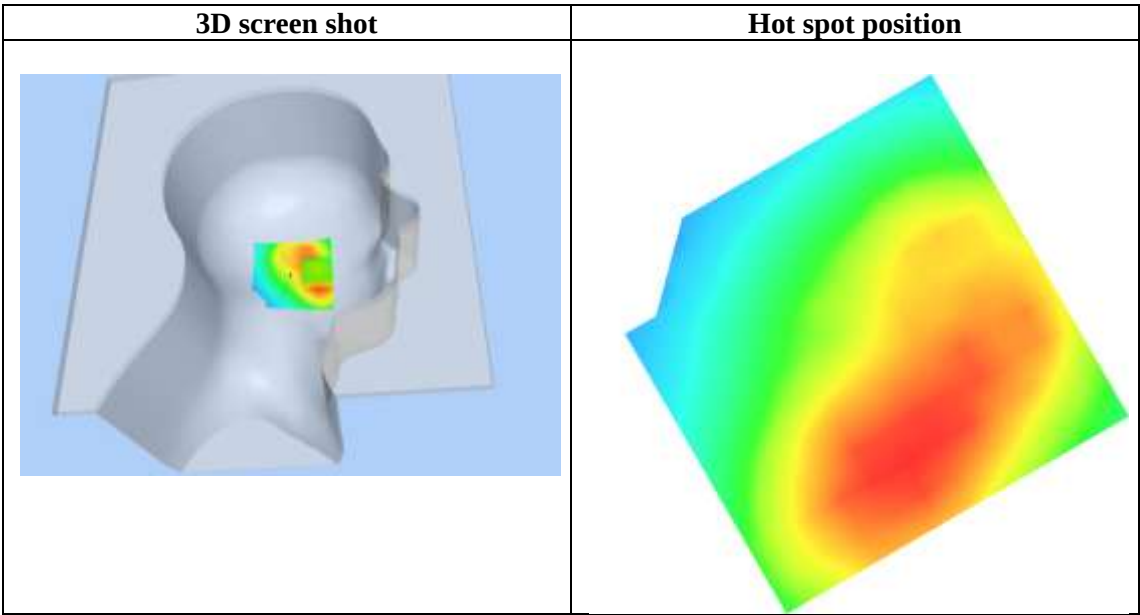
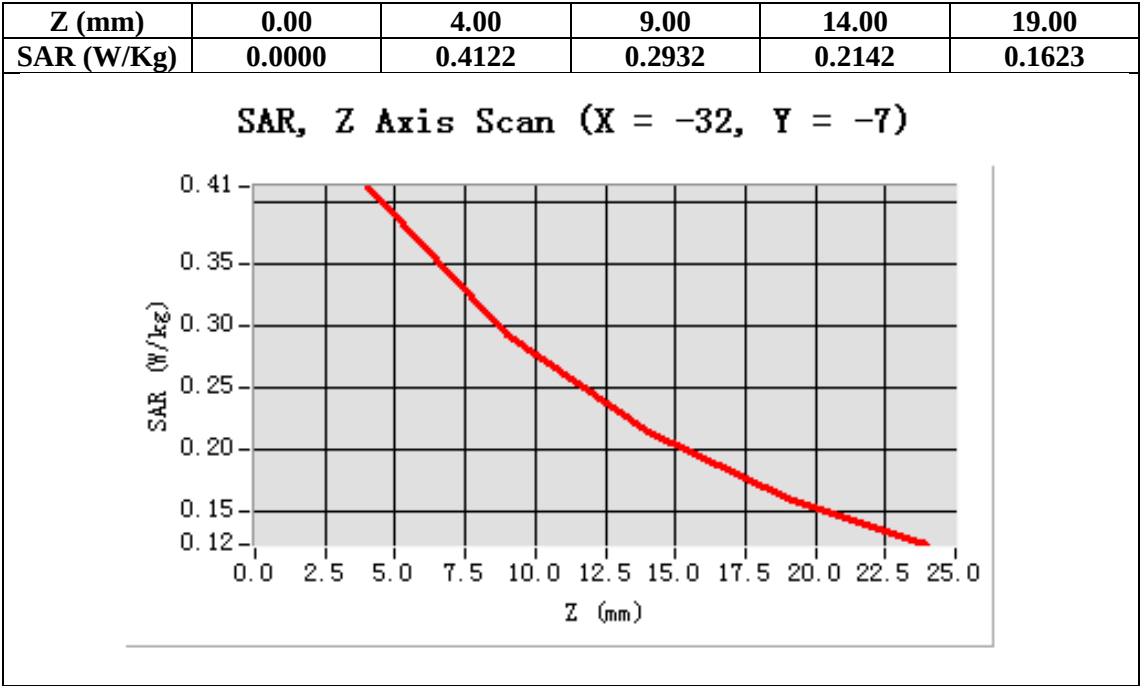
Configuration/GSM 850 Mid-Touch-Right/Zoom Scan: Measurement grid: dx=8mm,dy=8mm, dz=5mm;

Area Scan	sam_direct_droit2_surf8mm.txt
ZoomScan	5x5x7,dx=8mm dy=8mm dz=5mm,Very fast
Phantom	Right head
Device Position	Cheek
Band	GSM 850
Channels	Middle
Signal	TDMA (Crest factor: 8.0)



Maximum location: X=-32.00, Y=-7.00

SAR 10g (W/Kg)	0.262781
SAR 1g (W/Kg)	0.393967



Test Laboratory: AGC Lab
GSM 850 Mid-Tilt-Right <SIM 1>
DUT: 3G Smart Phone; Type: S42

Date: Nov. 20,2014

Communication System: Generic GSM; Communication System Band: GSM 850; Duty Cycle: 1:8.3; Conv.F=5.27;
Frequency: 836.6 MHz; Medium parameters used: $f = 835$ MHz; $\sigma = 0.90$ mho/m; $\epsilon_r = 41.73$; $\rho = 1000$ kg/m³ ;
Phantom section: Right Section
Ambient temperature (°C): 21.0, Liquid temperature (°C): 21.0

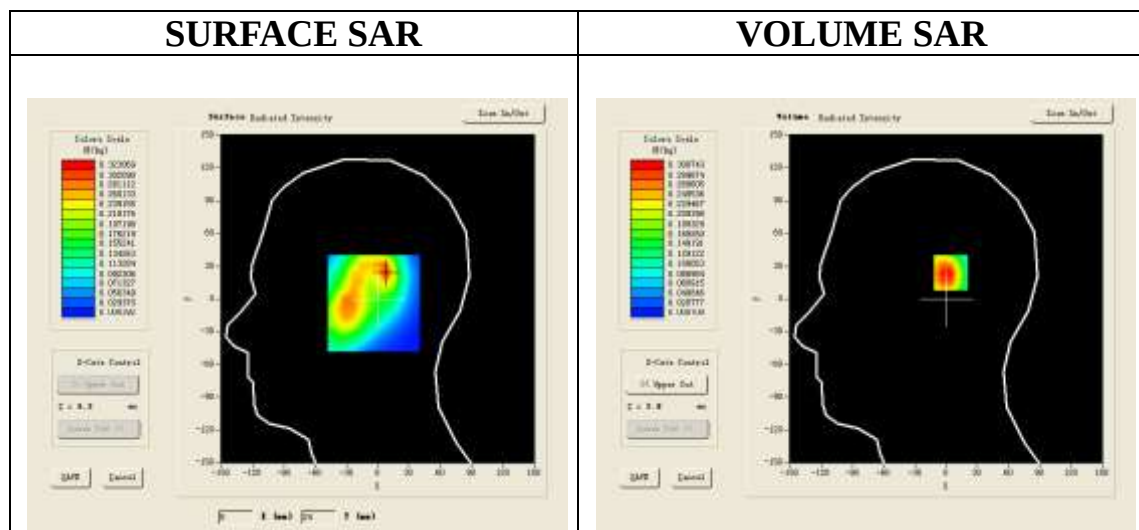
SATIMO Configuration:

- Probe: SSE5; Calibrated: 01/12/2014; Serial No.:SN 22/12 EP159
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Phantom: Flat Phantom; Type: Elliptical Phantom
- Measurement SW: OpenSAR V4_02_01

Configuration/GSM 850 Mid-Tilt-Right/Area Scan: Measurement grid: dx=8mm, dy=8mm

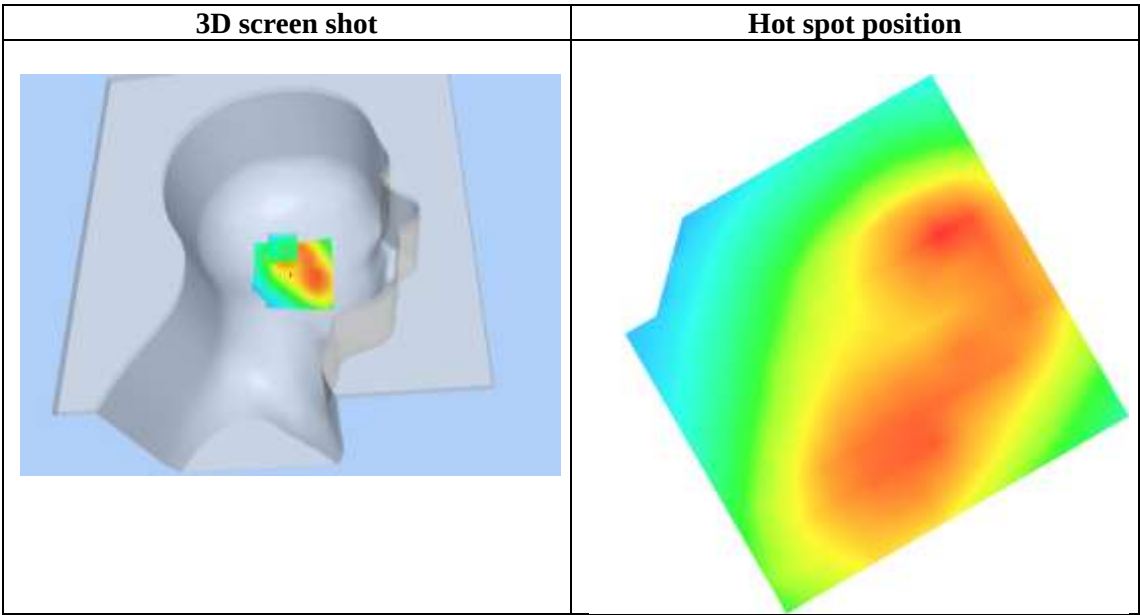
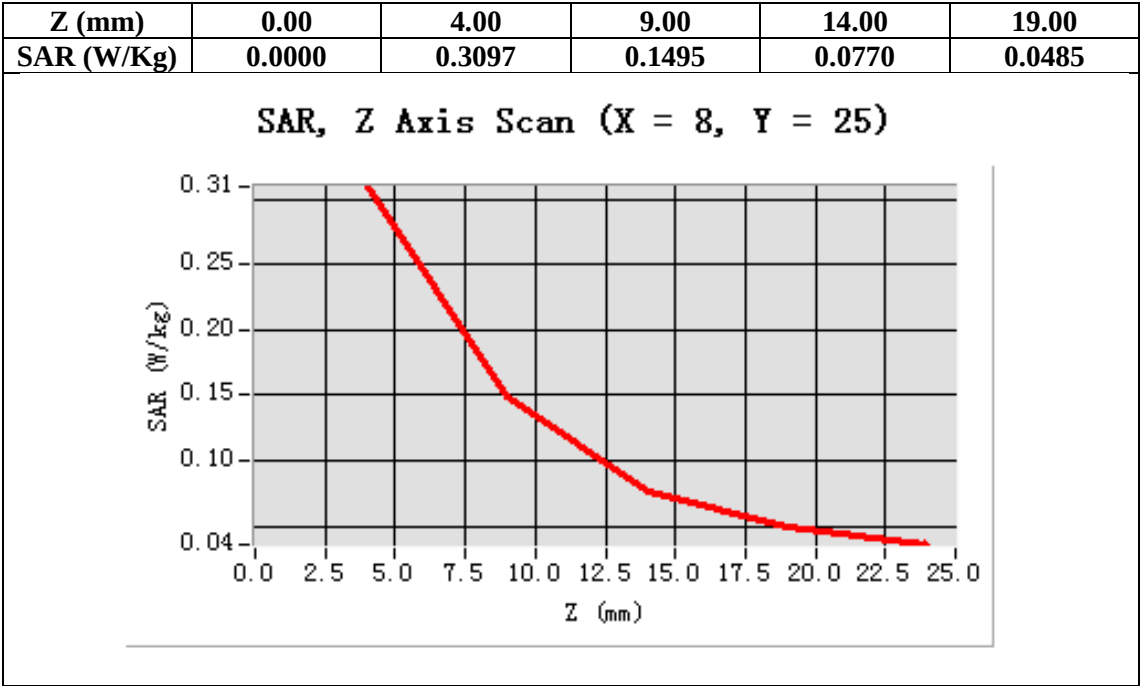
Configuration/GSM 850 Mid-Tilt-Right/Zoom Scan: Measurement grid: dx=8mm,dy=8mm, dz=5mm;

Area Scan	sam_direct droit2_surf8mm.txt
Zoom Scan	5x5x7,dx=8mm dy=8mm dz=5mm,Very fast
Phantom	Right head
Device Position	Tilt
Band	GSM 850
Channels	Middle
Signal	TDMA (Crest factor: 8.0)



Maximum location: X=8.00, Y=25.00

SAR 10g (W/Kg)	0.167251
SAR 1g (W/Kg)	0.303625



Test Laboratory: AGC Lab
GSM 850 Mid-Touch-Right <SIM 2>
DUT: 3G Smart Phone; Type: S42

Date: Nov. 20,2014

Communication System: Generic GSM; Communication System Band: GSM 850; Duty Cycle: 1:8.3; Conv.F=5.27;
Frequency: 836.6 MHz; Medium parameters used: $f = 835$ MHz; $\sigma = 0.90$ mho/m; $\epsilon_r = 41.73$; $\rho = 1000$ kg/m³ ;
Phantom section: Right Section
Ambient temperature (°C): 21.0, Liquid temperature (°C): 21.0

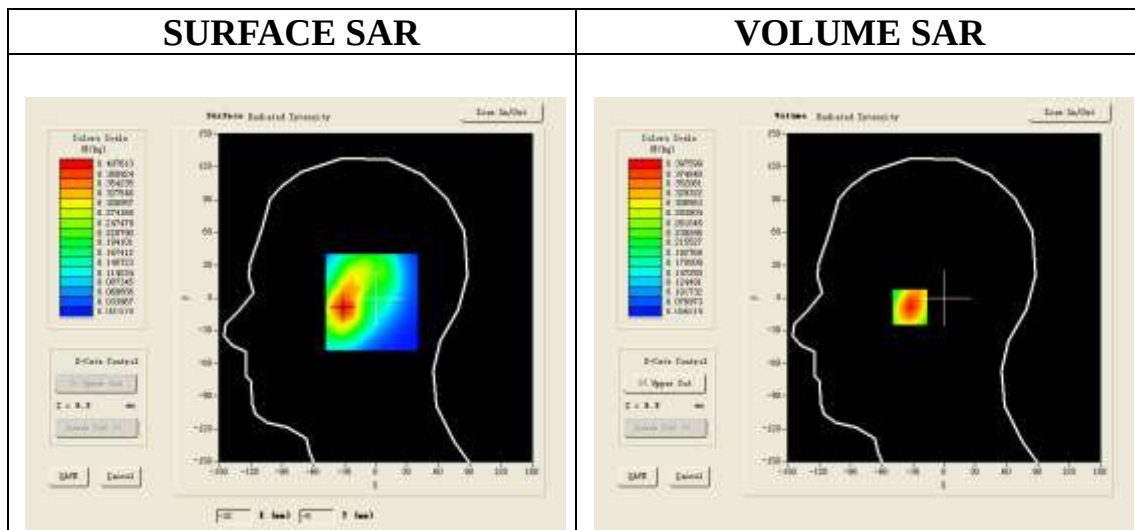
SATIMO Configuration:

- Probe: SSE5; Calibrated: 01/12/2014; Serial No.:SN 22/12 EP159
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Phantom: Flat Phantom; Type: Elliptical Phantom
- Measurement SW: OpenSAR V4_02_01

Configuration/GSM 850 Mid-Touch-Right/Area Scan: Measurement grid: dx=8mm, dy=8mm

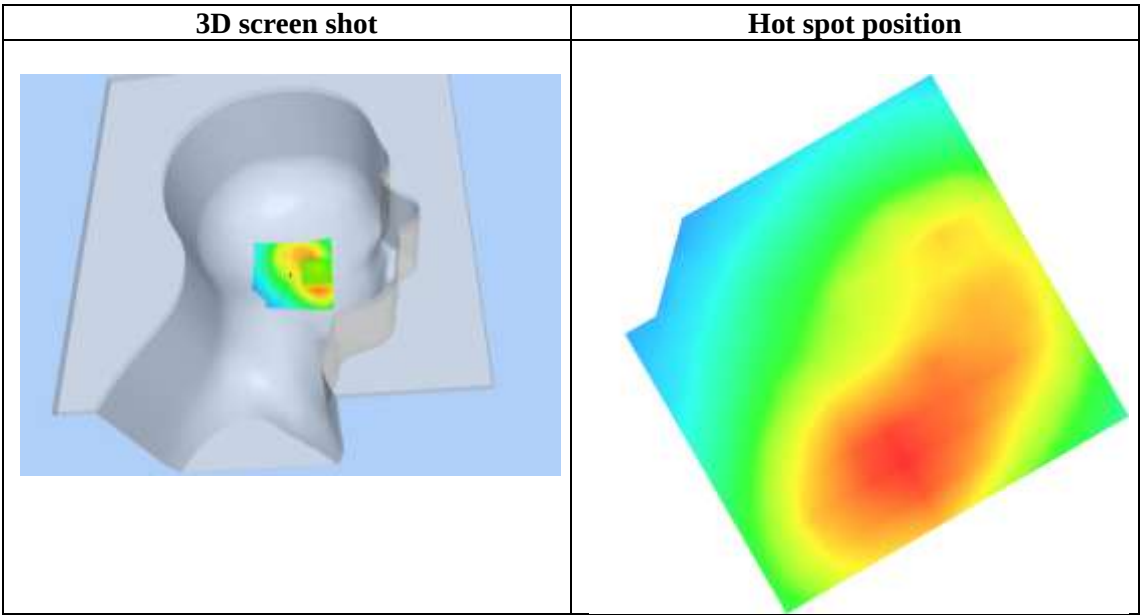
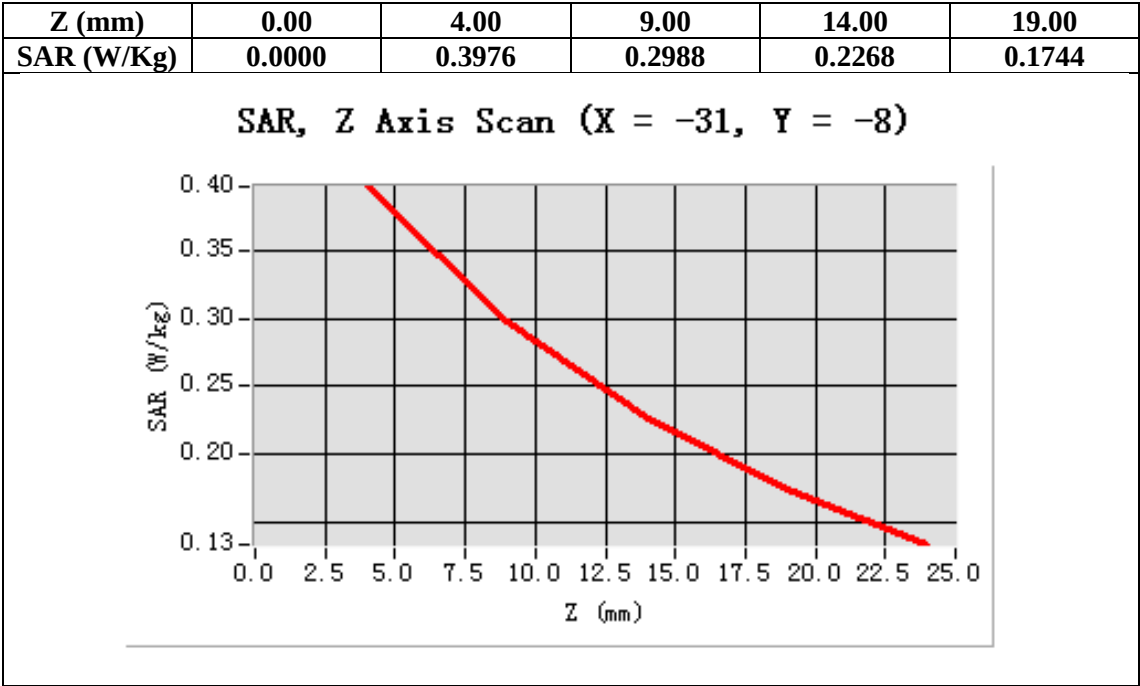
Configuration/GSM 850 Mid-Touch-Right/Zoom Scan: Measurement grid: dx=8mm,dy=8mm, dz=5mm;

Area Scan	sam_direct_droit2_surf8mm.txt
ZoomScan	5x5x7,dx=8mm dy=8mm dz=5mm,Very fast
Phantom	Right head
Device Position	Cheek
Band	GSM 850
Channels	Middle
Signal	TDMA (Crest factor: 8.0)



Maximum location: X=-31.00, Y=-8.00

SAR 10g (W/Kg)	0.264122
SAR 1g (W/Kg)	0.372378



Test Laboratory: AGC Lab
GSM 850 Low- Body- Back <SIM 1>
DUT: 3G Smart Phone; Type: S42

Date: Nov. 20,2014

Communication System: Generic GSM; Communication System Band: GSM 850; Duty Cycle: 1:8.3; Conv.F=5.48;
Frequency: 824.2 MHz; Medium parameters used: $f = 835$ MHz; $\sigma = 0.98$ mho/m; $\epsilon_r = 55.66$; $\rho = 1000$ kg/m³ ;
Phantom section: Flat Section
Ambient temperature (°C): 21.0, Liquid temperature (°C): 21.0

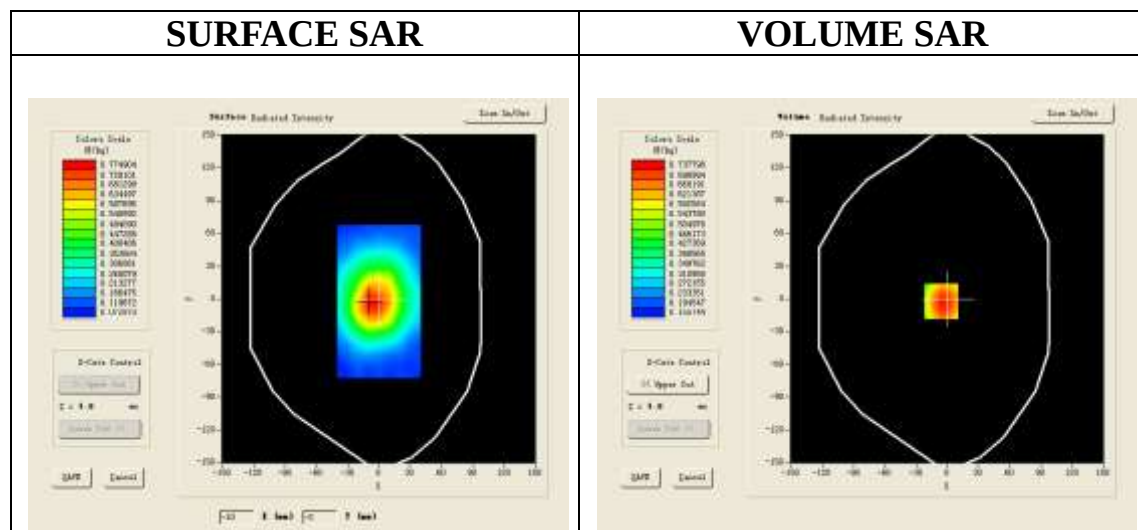
SATIMO Configuration:

- Probe: SSE5; Calibrated: 01/12/2014; Serial No.:SN 22/12 EP159
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Phantom: Flat Phantom; Type: Elliptical Phantom
- Measurement SW: OpenSAR V4_02_01

Configuration/GSM 850 Low -Body-Back/Area Scan: Measurement grid: dx=8mm, dy=8mm

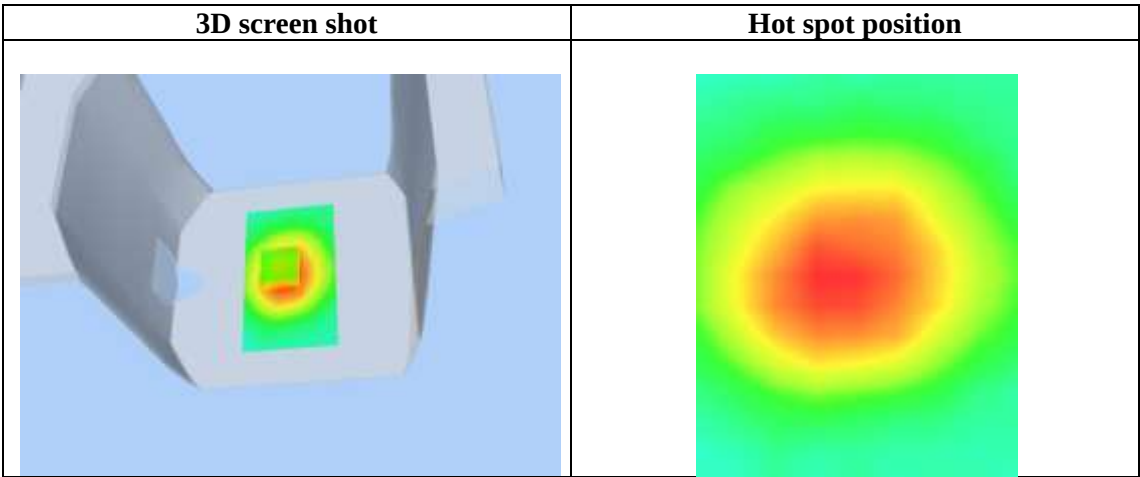
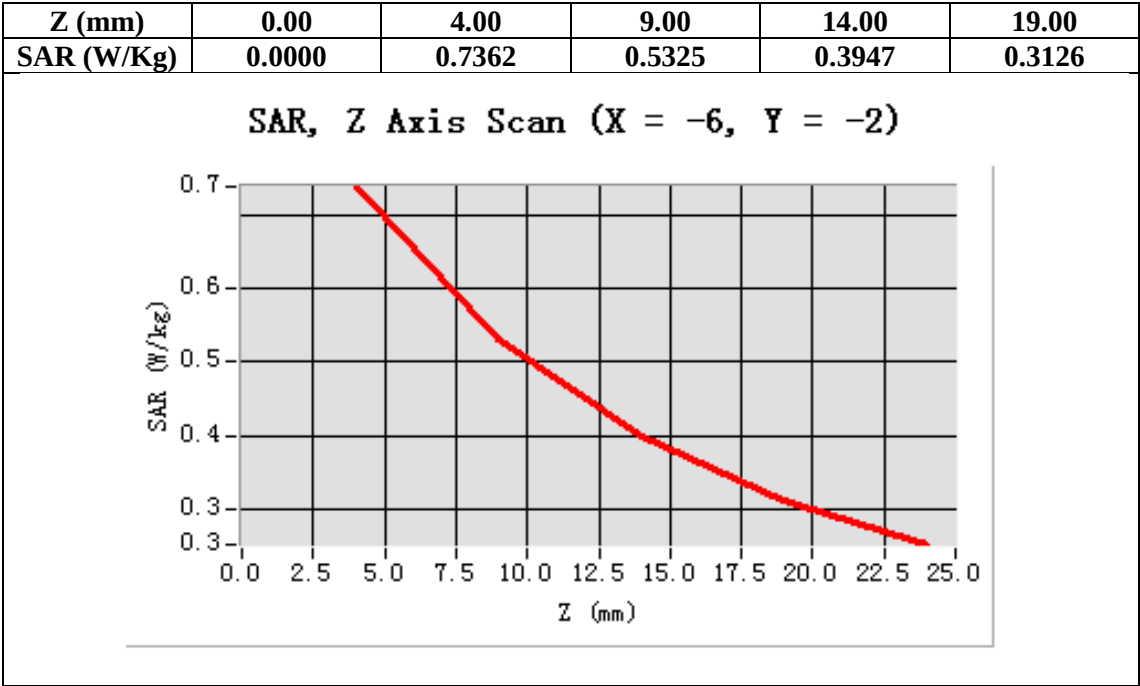
Configuration/GSM 850 Low -Body-Back/Zoom Scan: Measurement grid: dx=8mm,dy=8mm, dz=5mm;

Area Scan	surf_sam_plan.txt
ZoomScan	5x5x7,dx=8mm dy=8mm dz=5mm,Very fast
Phantom	Validation plane
Device Position	Body Back
Band	GSM 850
Channels	Low
Signal	TDMA (Crest factor: 8.0)



Maximum location: X=-6.00, Y=-2.00

SAR 10g (W/Kg)	0.542874
SAR 1g (W/Kg)	0.771457



Test Laboratory: AGC Lab
GSM 850 Mid- Body- Back <SIM 1>
DUT: 3G Smart Phone; Type: S42

Date: Nov. 20,2014

Communication System: Generic GSM; Communication System Band: GSM 850; Duty Cycle: 1:8.3; Conv.F=5.48;
Frequency: 836.6 MHz; Medium parameters used: $f = 835$ MHz; $\sigma = 0.98$ mho/m; $\epsilon_r = 54.73$; $\rho = 1000$ kg/m³ ;
Phantom section: Flat Section
Ambient temperature (°C): 21.0, Liquid temperature (°C): 21.0

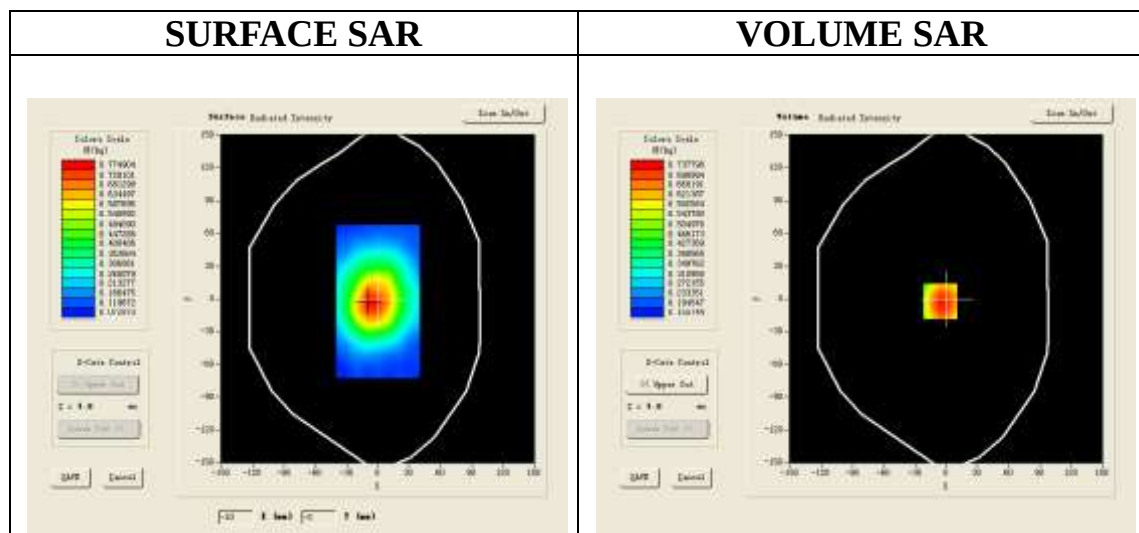
SATIMO Configuration:

- Probe: SSE5; Calibrated: 01/12/2014; Serial No.:SN 22/12 EP159
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Phantom: Flat Phantom; Type: Elliptical Phantom
- Measurement SW: OpenSAR V4_02_01

Configuration/GSM 850 Mid-Body-Back/Area Scan: Measurement grid: dx=8mm, dy=8mm

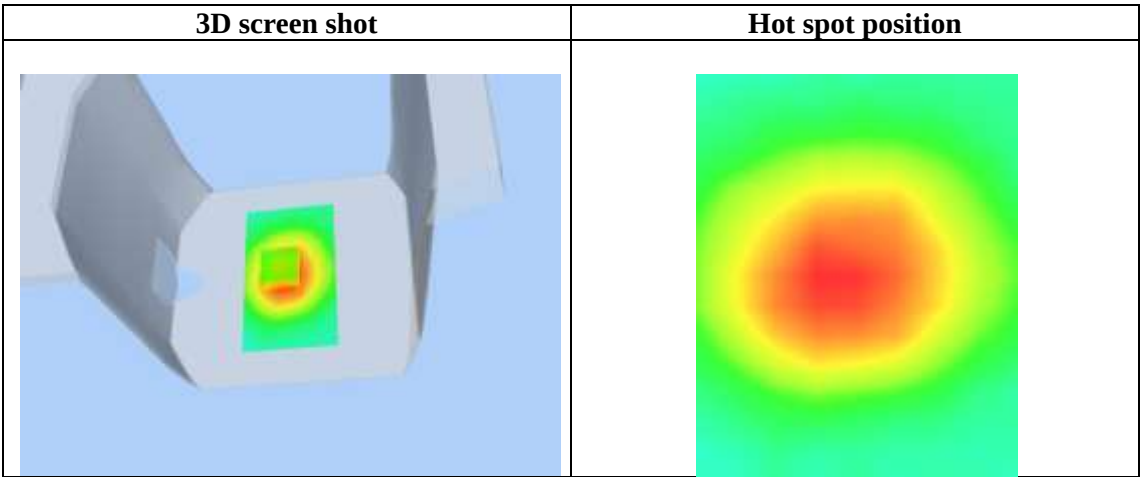
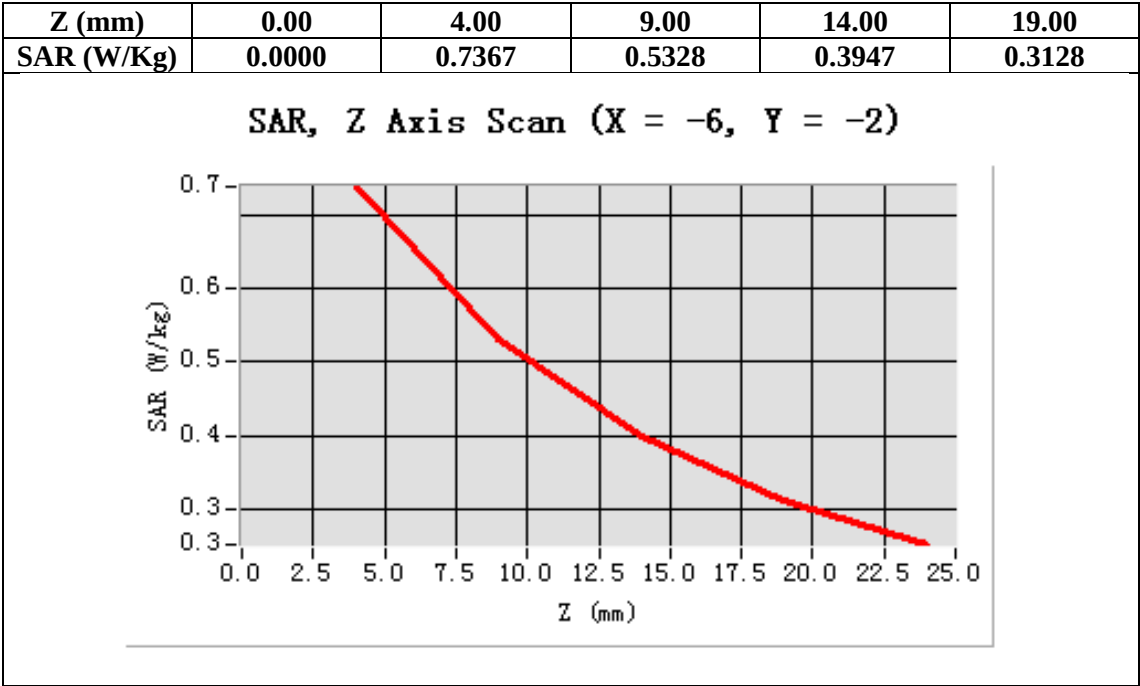
Configuration/GSM 850 Mid-Body-Back/Zoom Scan: Measurement grid: dx=8mm,dy=8mm, dz=5mm;

Area Scan	surf_sam_plan.txt
ZoomScan	5x5x7,dx=8mm dy=8mm dz=5mm,Very fast
Phantom	Validation plane
Device Position	Body Back
Band	GSM 850
Channels	Middle
Signal	TDMA (Crest factor: 8.0)



Maximum location: X=-6.00, Y=-2.00

SAR 10g (W/Kg)	0.543157
SAR 1g (W/Kg)	0.772035



Test Laboratory: AGC Lab
GSM 850High- Body- Back <SIM 1>
DUT: 3G Smart Phone; Type: S42

Date: Nov. 20,2014

Communication System: Generic GSM; Communication System Band: GSM 850; Duty Cycle: 1:8.3; Conv.F=5.48;
Frequency: 848.8 MHz; Medium parameters used: $f = 835$ MHz; $\sigma = 0.93$ mho/m; $\epsilon_r = 55.67$; $\rho = 1000$ kg/m³ ;
Phantom section: Flat Section
Ambient temperature (°C): 21.0, Liquid temperature (°C): 21.0

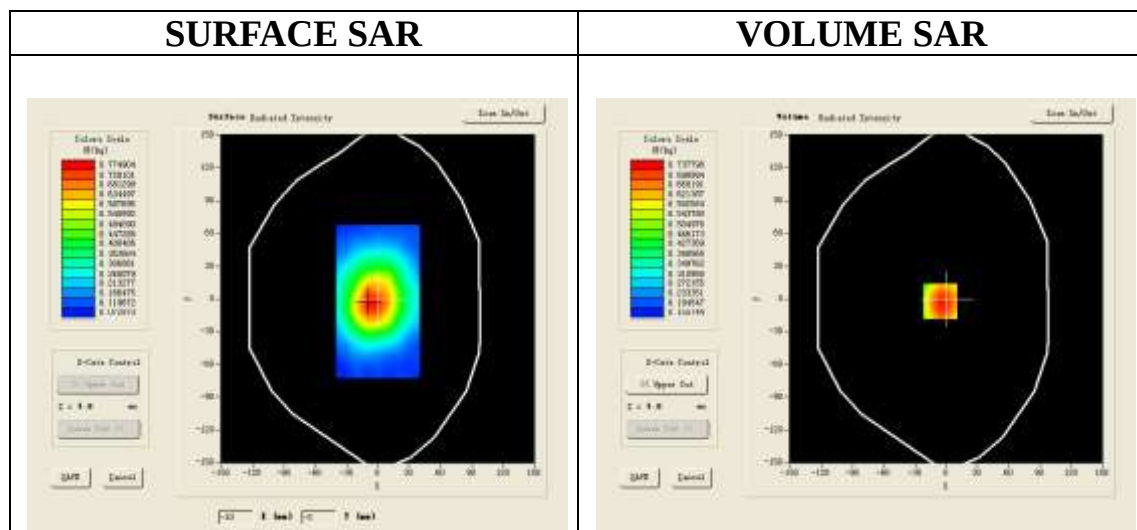
SATIMO Configuration:

- Probe: SSE5; Calibrated: 01/12/2014; Serial No.:SN 22/12 EP159
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Phantom: Flat Phantom; Type: Elliptical Phantom
- Measurement SW: OpenSAR V4_02_01

Configuration/GSM 850 High -Body-Back/Area Scan: Measurement grid: dx=8mm, dy=8mm

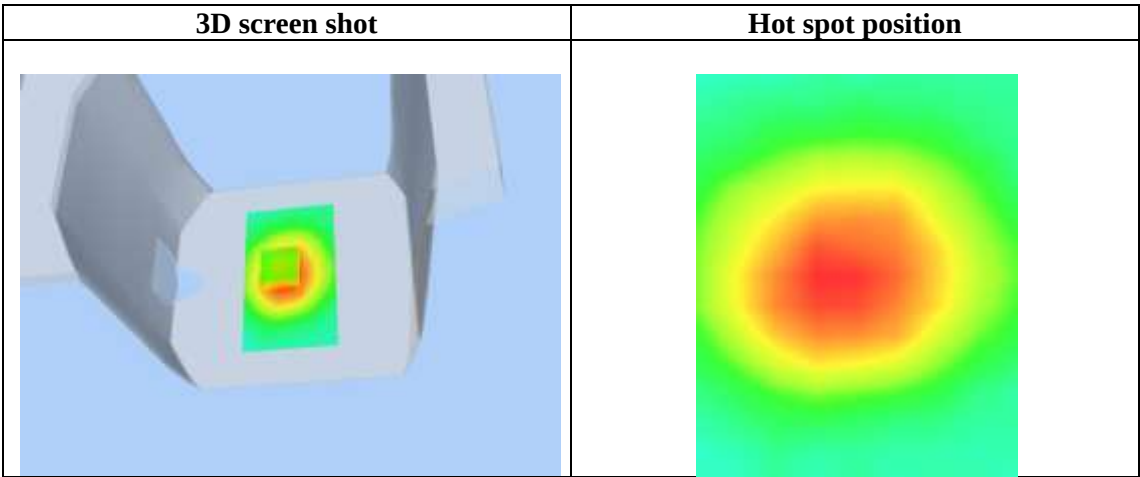
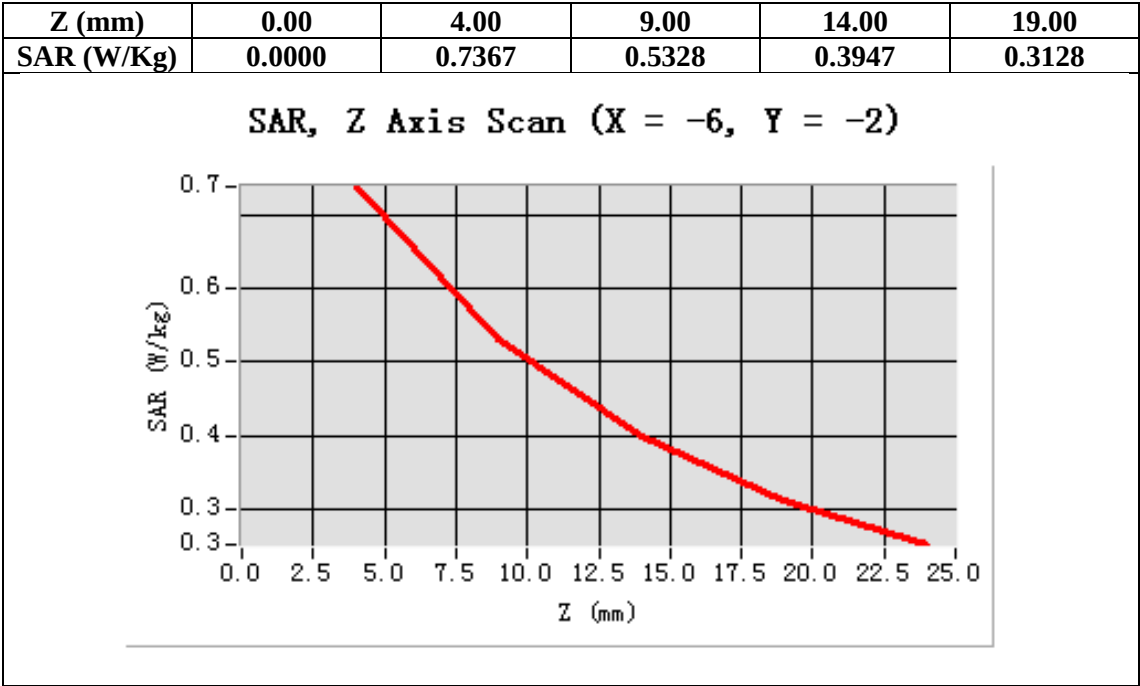
Configuration/GSM 850 High -Body-Back/Zoom Scan: Measurement grid: dx=8mm,dy=8mm, dz=5mm;

Area Scan	surf_sam_plan.txt
ZoomScan	5x5x7,dx=8mm dy=8mm dz=5mm,Very fast
Phantom	Validation plane
Device Position	Body Back
Band	GSM 850
Channels	High
Signal	TDMA (Crest factor: 8.0)



Maximum location: X=-6.00, Y=-2.00

SAR 10g (W/Kg)	0.545721
SAR 1g (W/Kg)	0.768432



Test Laboratory: AGC Lab
GSM 850 Mid- Body- Front (MS) <SIM 1>
DUT: 3G Smart Phone; Type: S42

Date: Nov. 20,2014

Communication System: Generic GSM; Communication System Band: GSM 850; Duty Cycle: 1:8.3; Conv.F=5.48;
Frequency: 836.6 MHz; Medium parameters used: $f = 835$ MHz; $\sigma = 0.98$ mho/m; $\epsilon_r = 54.73$; $\rho = 1000$ kg/m³ ;
Phantom section: Flat Section
Ambient temperature (°C): 21.0, Liquid temperature (°C): 21.0

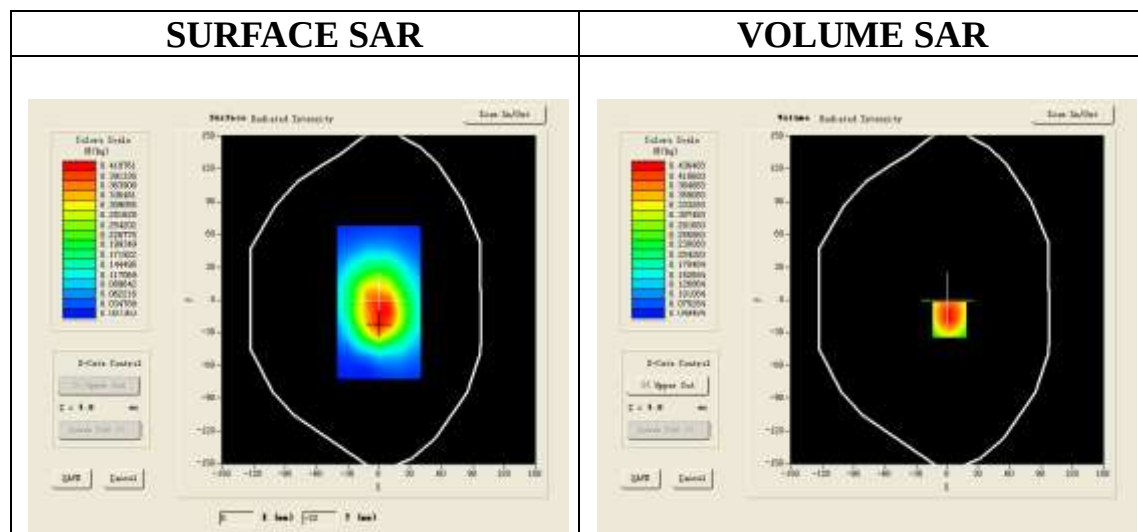
SATIMO Configuration:

- Probe: SSE5; Calibrated: 01/12/2014; Serial No.:SN 22/12 EP159
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Phantom: Flat Phantom; Type: Elliptical Phantom
- Measurement SW: OpenSAR V4_02_01

Configuration/GSM 850 Mid-Body- Front /Area Scan: Measurement grid: dx=8mm, dy=8mm

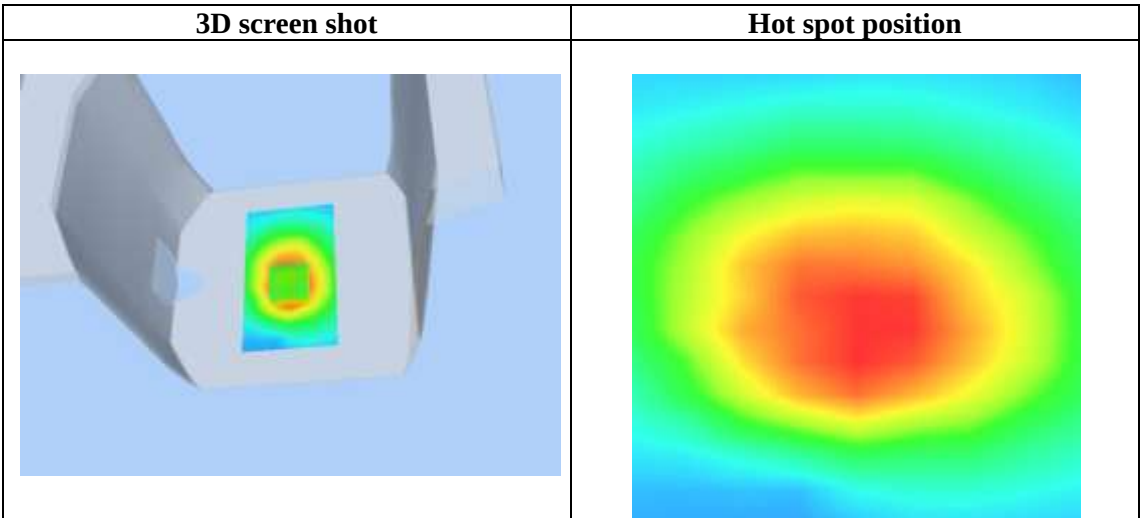
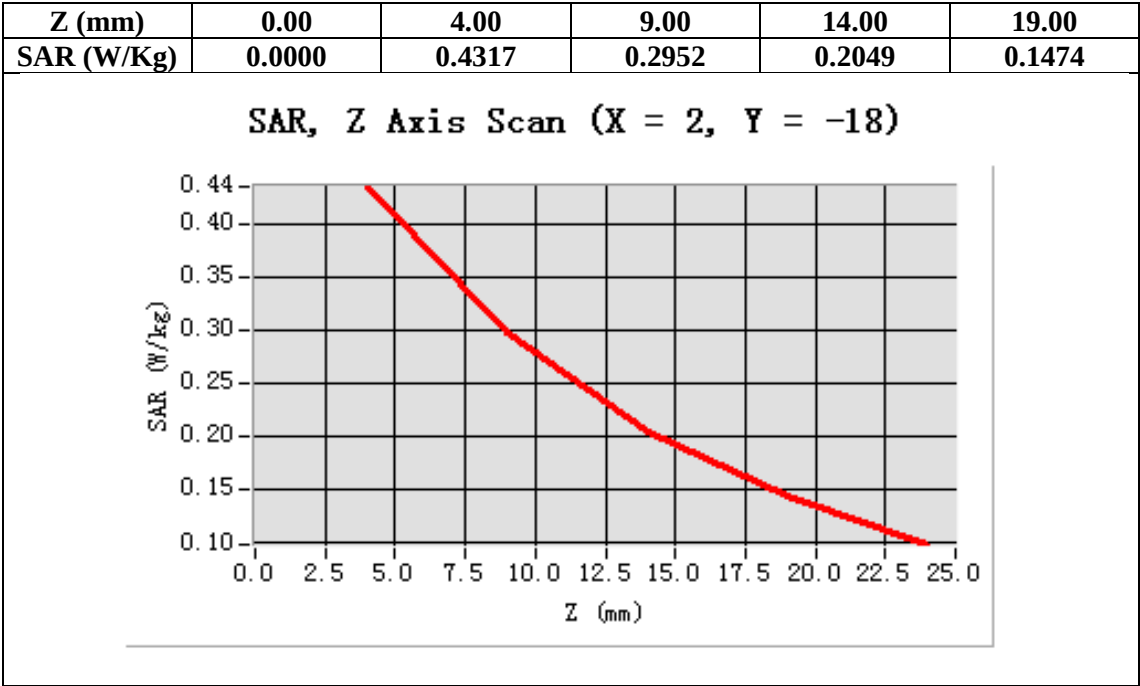
Configuration/GSM 850 Mid-Body- Front Zoom Scan: Measurement grid: dx=8mm,dy=8mm, dz=5mm;

Area Scan	surf_sam_plan.txt
ZoomScan	5x5x7,dx=8mm dy=8mm dz=5mm,Very fast
Phantom	Validation plane
Device Position	Body Front
Band	GSM 850
Channels	Middle
Signal	TDMA (Crest factor: 8.0)



Maximum location: X=2.00, Y=-18.00

SAR 10g (W/Kg)	0.293694
SAR 1g (W/Kg)	0.455206



Test Laboratory: AGC Lab
GPRS 850 Mid-Touch-Left <SIM 1>
DUT: 3G Smart Phone; Type: S42

Date: Nov. 20,2014

Communication System: Generic GPRS; Communication System Band: GPRS 850; Duty Cycle: 1:8.3; Conv.F=5.27
Frequency: 836.6 MHz; Medium parameters used: $f = 835$ MHz; $\sigma = 0.90$ mho/m; $\epsilon_r = 41.73$; $\rho = 1000$ kg/m³ ;
Phantom section: Left Section
Ambient temperature (°C): 21.0, Liquid temperature (°C): 21.0

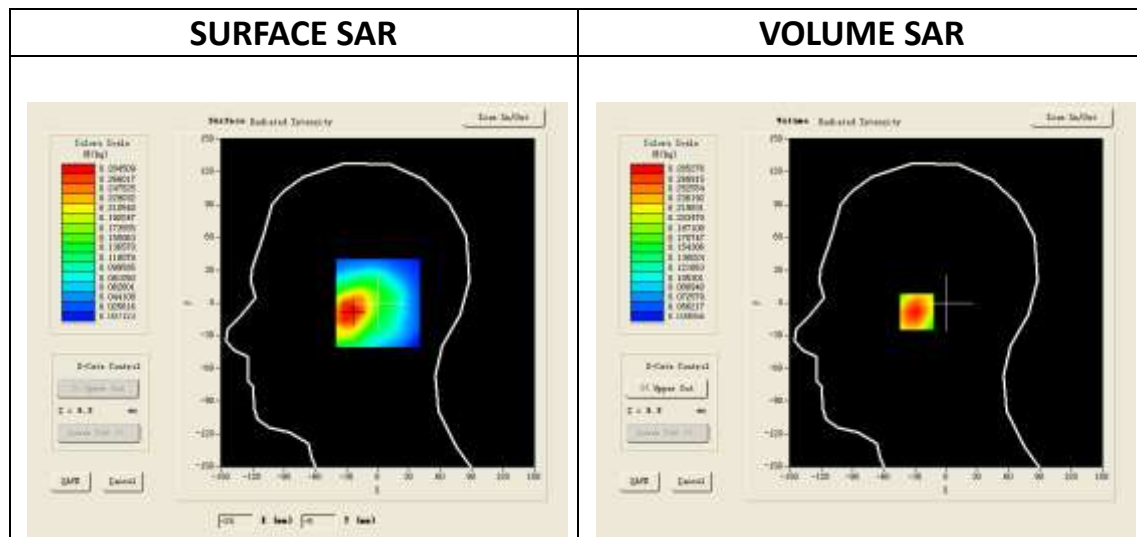
SATIMO Configuration:

- Probe: SSE5; Calibrated: 01/12/2014; Serial No.:SN 22/12 EP159
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Phantom: Flat Phantom; Type: Elliptical Phantom
- Measurement SW: OpenSAR V4_02_01

Configuration/GPRS 850 Mid-Touch-Left/Area Scan: Measurement grid: dx=8mm, dy=8mm

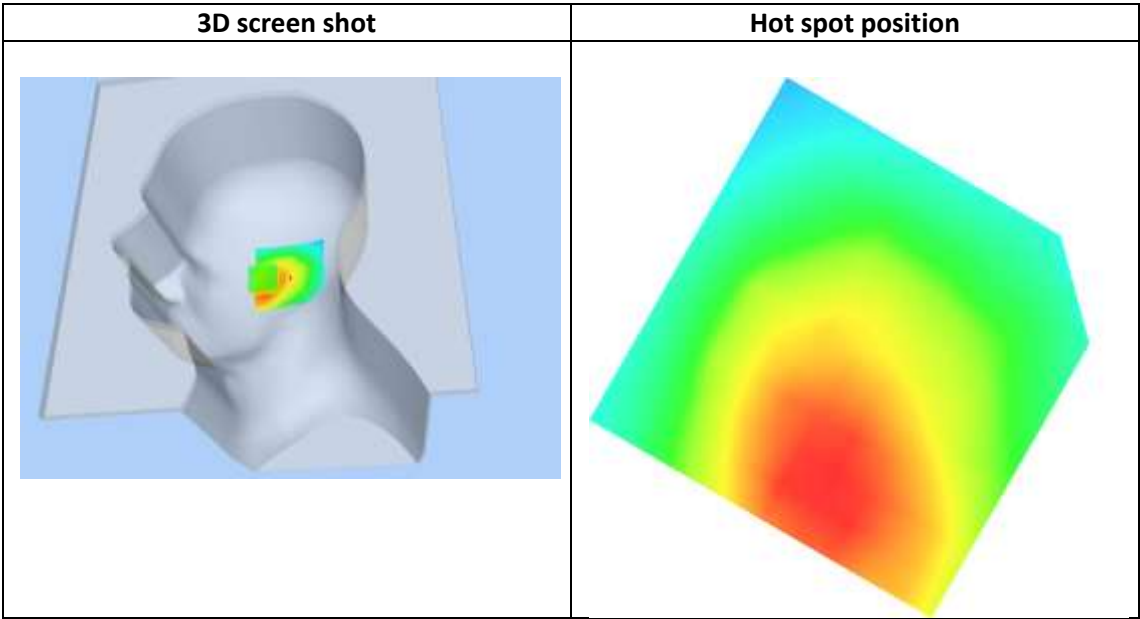
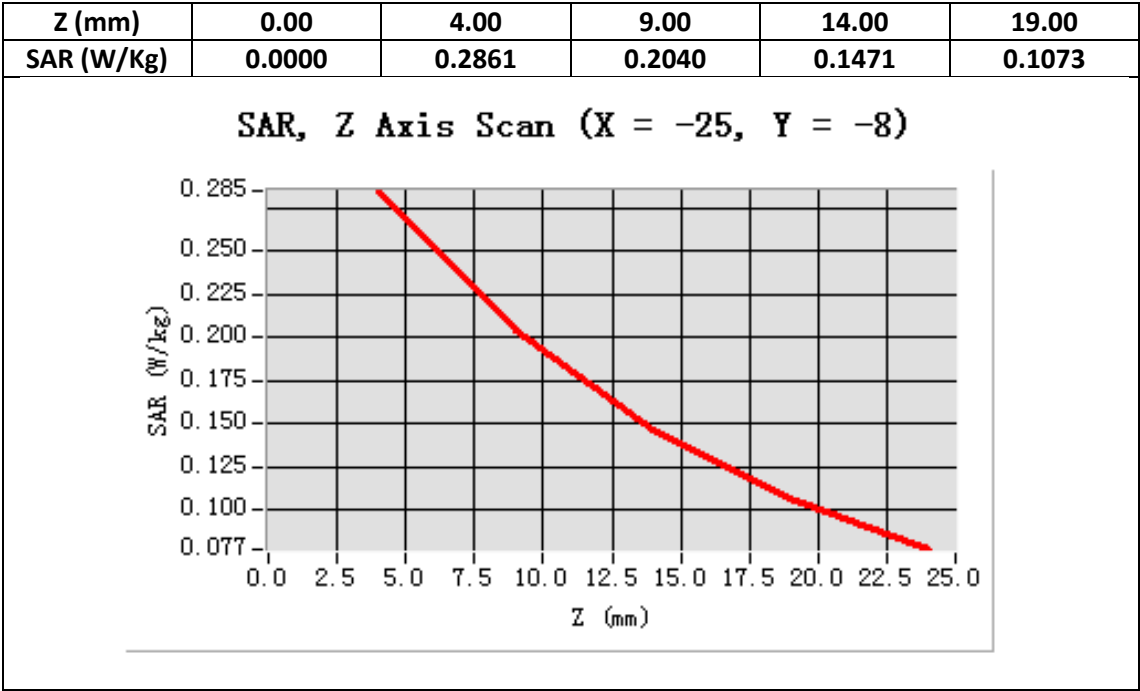
Configuration/GPRS 850 Mid-Touch-Left/Zoom Scan: Measurement grid: dx=8mm,dy=8mm, dz=5mm

Area Scan	sam_direct droit2_surf8mm.txt
ZoomScan	5x5x7,dx=8mm dy=8mm dz=5mm,Very fast
Phantom	Left head
Device Position	Cheek
Band	GPRS 850
Channels	Middle
Signal	TDMA (Crest factor: 8.0)



Maximum location: X=-25.00, Y=-8.00

SAR 10g (W/Kg)	0.184940
SAR 1g (W/Kg)	0.275309



Test Laboratory: AGC Lab
GPRS 850 Mid-Tilt-Left <SIM 1>
DUT: 3G Smart Phone; Type: S42

Date: Nov. 20,2014

Communication System: Generic GPRS; Communication System Band: GPRS 850; Duty Cycle: 1:8.3; Conv.F=5.27;
Frequency: 836.6 MHz; Medium parameters used: $f = 835$ MHz; $\sigma = 0.90$ mho/m; $\epsilon_r = 41.73$; $\rho = 1000$ kg/m³ ;
Phantom section: Left Section
Ambient temperature (°C): 21.0, Liquid temperature(°C): 21.0

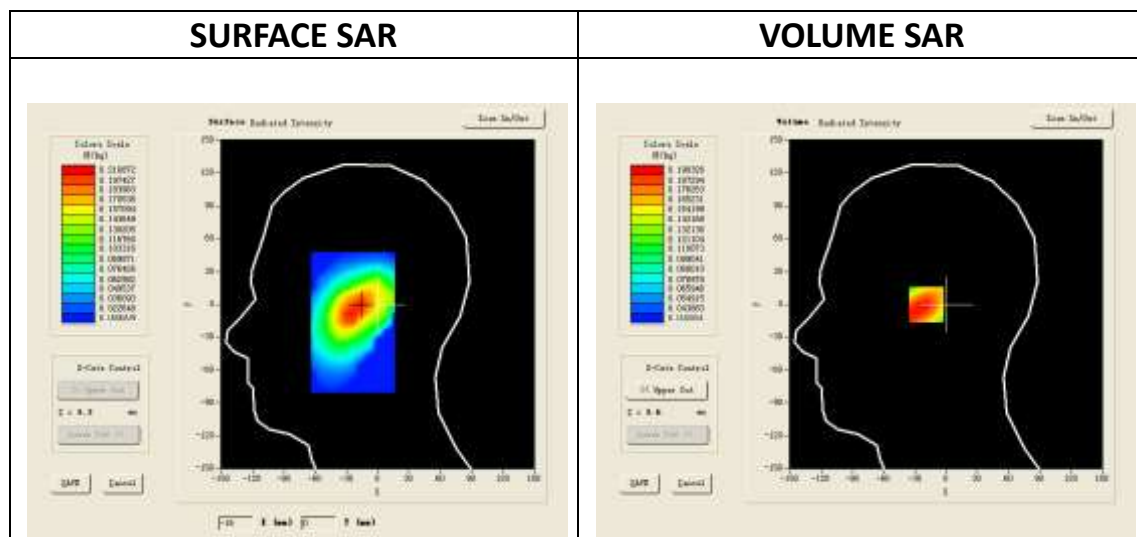
SATIMO Configuration:

- Probe: SSE5; Calibrated: 01/12/2014; Serial No.:SN 22/12 EP159
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Phantom: Flat Phantom; Type: Elliptical Phantom
- Measurement SW: OpenSAR V4_02_01

Configuration/GPRS 850 Mid-Tilt-Left/Area Scan: Measurement grid: dx=8mm, dy=8mm

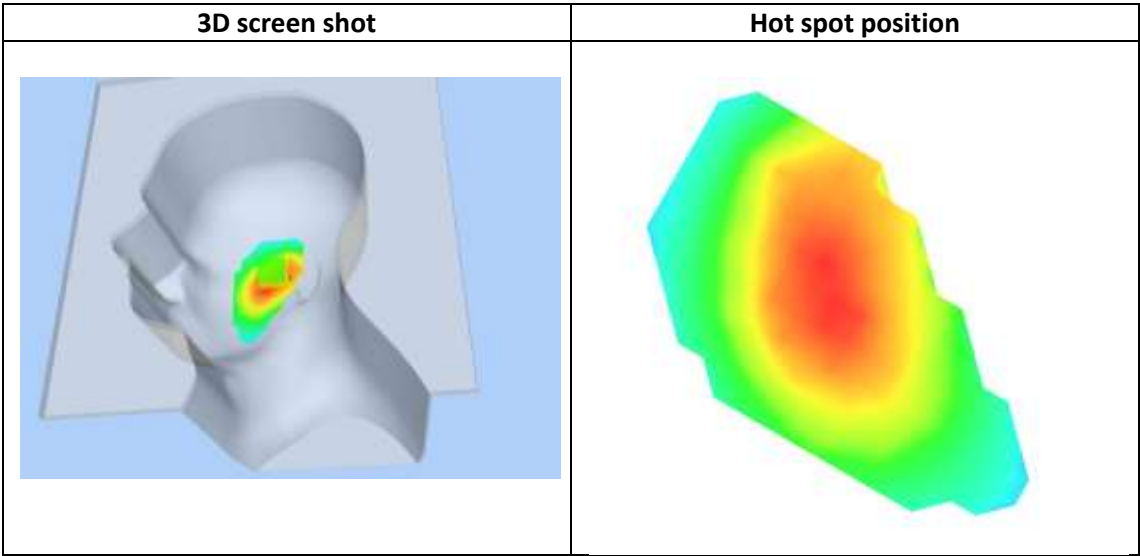
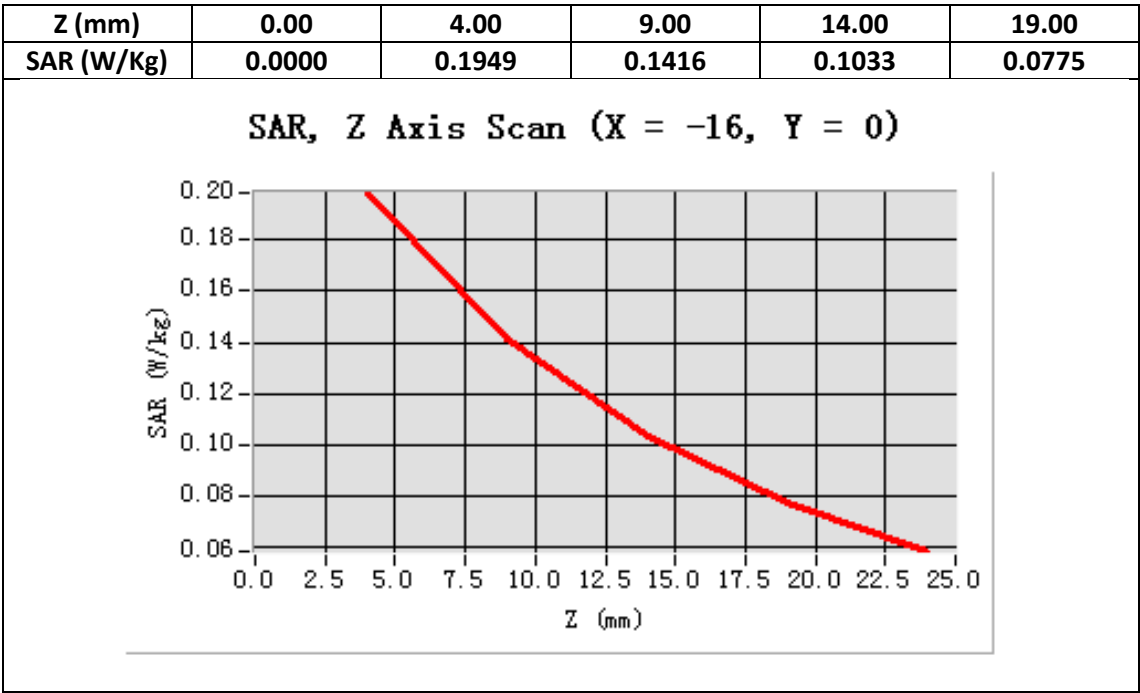
Configuration/GPRS 850 Mid-Tilt-Left/Zoom Scan: Measurement grid: dx=8mm, dy=8mm,dz=5mm;

Area Scan	sam_direct_droit2_surf8mm.txt
ZoomScan	5x5x7,dx=8mm dy=8mm dz=5mm,Very fast
Phantom	Left head
Device Position	Tilt
Band	GPRS 850
Channels	Middle
Signal	TDMA (Crest factor: 8.0)



Maximum location: X=-16.00, Y=0.00

SAR 10g (W/Kg)	0.134196
SAR 1g (W/Kg)	0.198442



Test Laboratory: AGC Lab
GPRS 850 Mid-Touch-Right <SIM 1>
DUT: 3G Smart Phone; Type: S42

Date: Nov. 20,2014

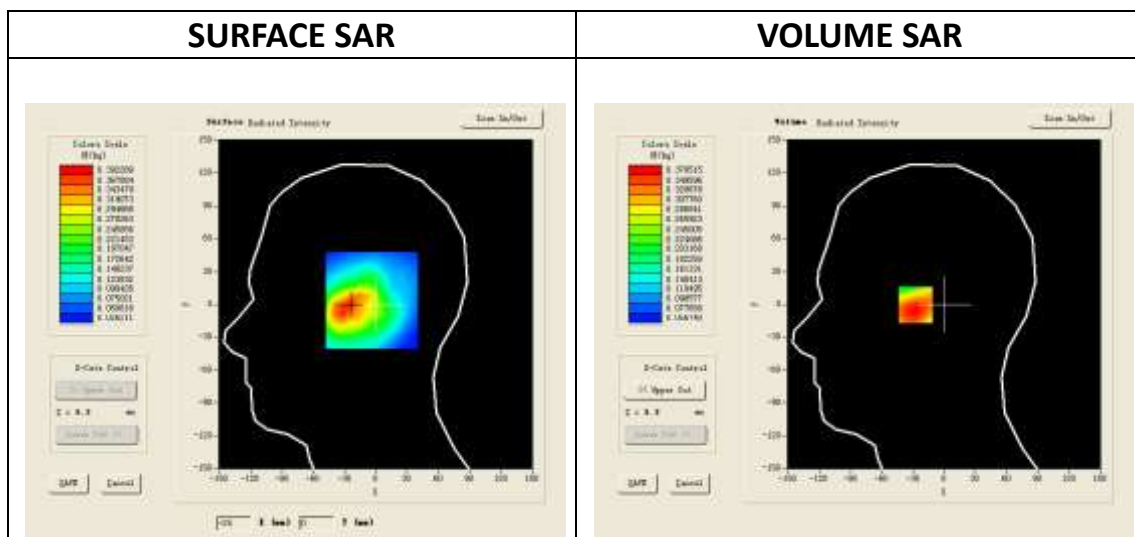
Communication System: Generic GPRS; Communication System Band: GPRS 850; Duty Cycle: 1:8.3; Conv.F=5.27;
Frequency: 836.6 MHz; Medium parameters used: $f = 835$ MHz; $\sigma = 0.90$ mho/m; $\epsilon_r = 41.73$; $\rho = 1000$ kg/m³ ;
Phantom section: Right Section
Ambient temperature (°C): 21.0, Liquid temperature (°C): 21.0

SATIMO Configuration:

- Probe: SSE5; Calibrated: 01/12/2014; Serial No.:SN 22/12 EP159
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Phantom: Flat Phantom; Type: Elliptical Phantom
- Measurement SW: OpenSAR V4_02_01

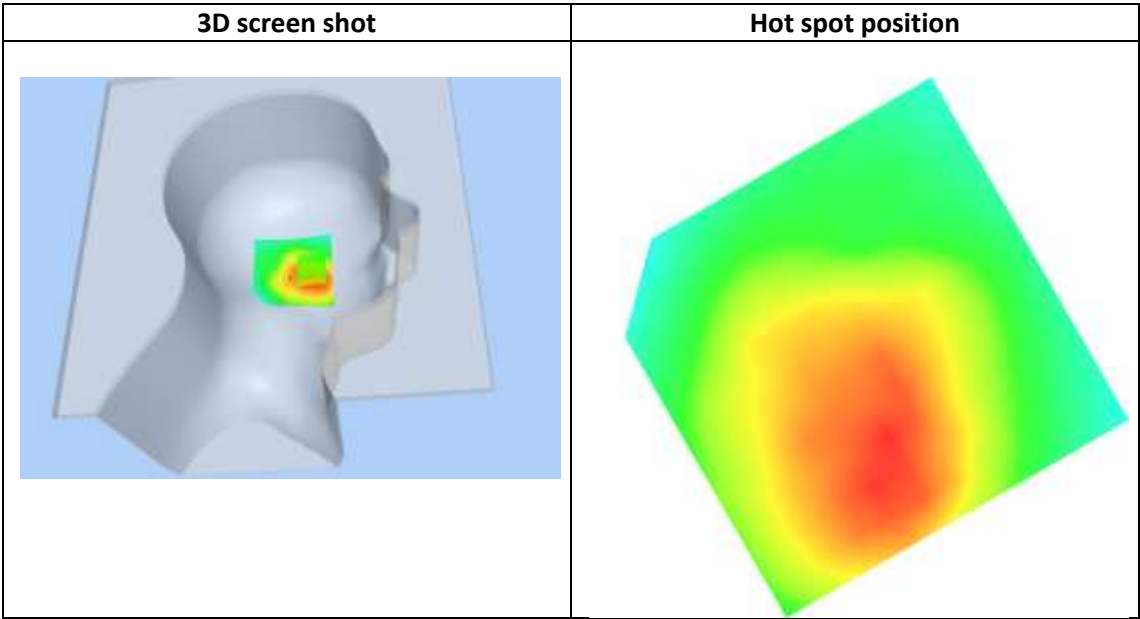
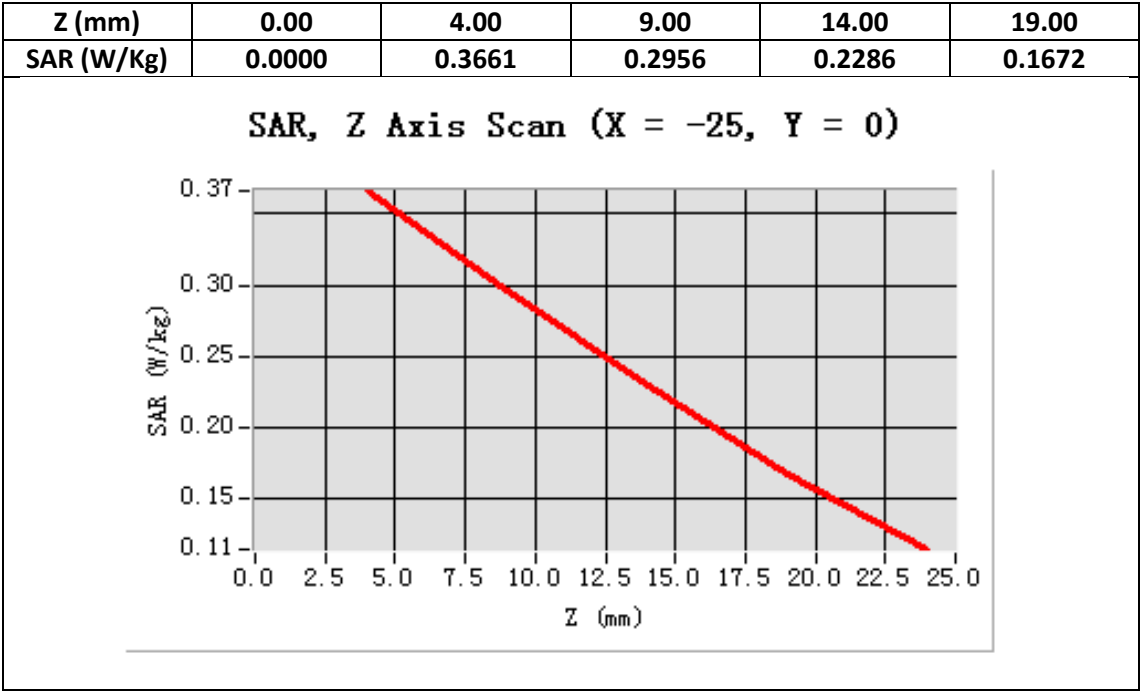
Configuration/GPRS 850 Mid-Touch-Right/Area Scan: Measurement grid: dx=8mm, dy=8mm
Configuration/GPRS 850 Mid-Touch-Right/Zoom Scan: Measurement grid: dx=8mm,dy=8mm, dz=5mm;

Area Scan	sam_direct_droit2_surf8mm.txt
ZoomScan	5x5x7,dx=8mm dy=8mm dz=5mm,Very fast
Phantom	Right head
Device Position	Cheek
Band	GPRS 850
Channels	Middle
Signal	TDMA (Crest factor: 8.0)



Maximum location: X=-25.00, Y=0.00

SAR 10g (W/Kg)	0.266906
SAR 1g (W/Kg)	0.365309



Test Laboratory: AGC Lab
GPRS 850 Mid-Tilt-Right <SIM 1>
DUT: 3G Smart Phone; Type: S42

Date: Nov. 20,2014

Communication System: Generic GPRS; Communication System Band: GPRS 850; Duty Cycle: 1:8.3; Conv.F=5.27;
Frequency: 836.6 MHz; Medium parameters used: $f = 835$ MHz; $\sigma = 0.90$ mho/m; $\epsilon_r = 41.73$; $\rho = 1000$ kg/m³ ;
Phantom section: Right Section
Ambient temperature (°C): 21.0, Liquid temperature (°C): 21.0

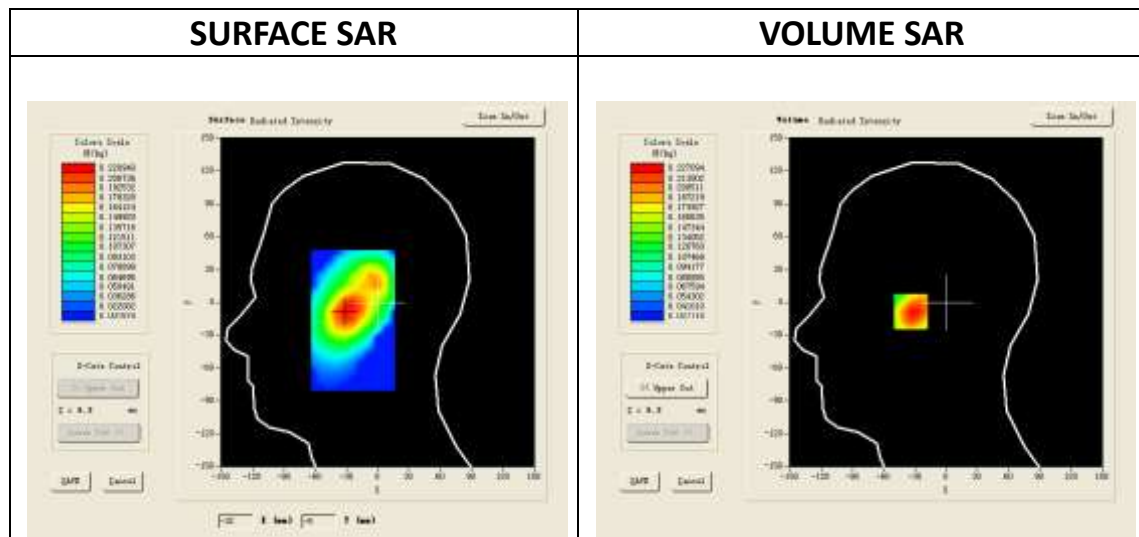
SATIMO Configuration:

- Probe: SSE5; Calibrated: 01/12/2014; Serial No.:SN 22/12 EP159
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Phantom: Flat Phantom; Type: Elliptical Phantom
- Measurement SW: OpenSAR V4_02_01

Configuration/GPRS 850 Mid-Tilt-Right/Area Scan: Measurement grid: dx=8mm, dy=8mm

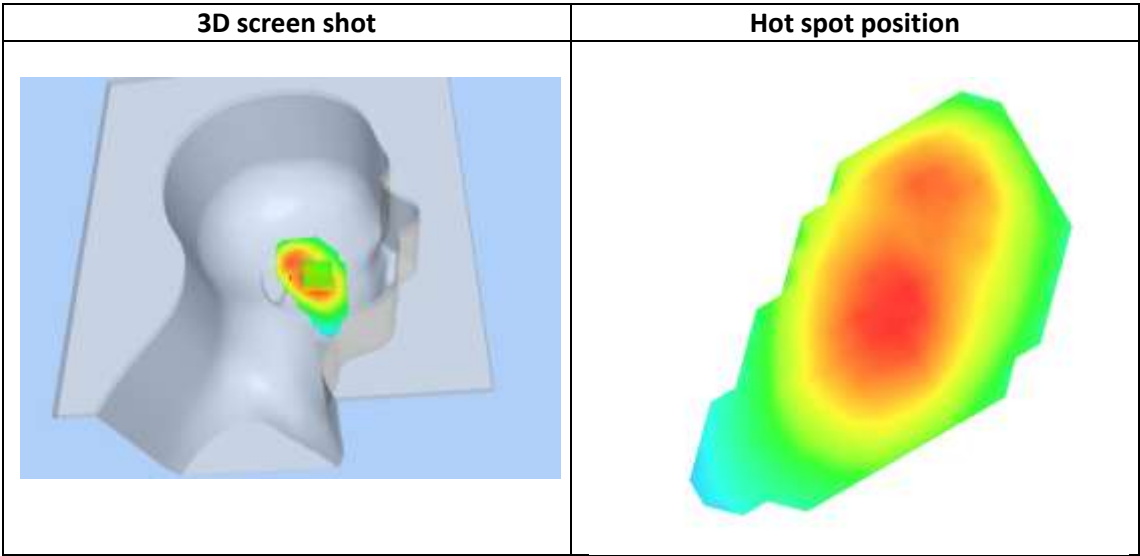
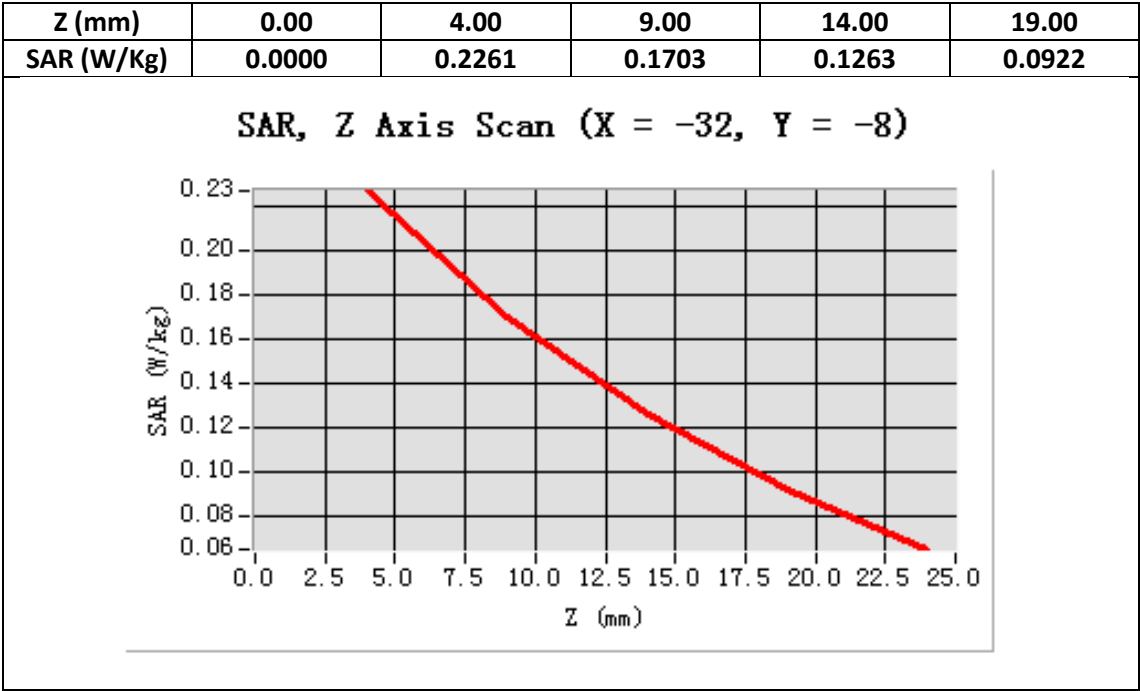
Configuration/GPRS 850 Mid-Tilt-Right/Zoom Scan: Measurement grid: dx=8mm,dy=8mm, dz=5mm;

Area Scan	sam_direct droit2_surf8mm.txt
Zoom Scan	5x5x7,dx=8mm dy=8mm dz=5mm,Very fast
Phantom	Right head
Device Position	Tilt
Band	GPRS 850
Channels	Middle
Signal	TDMA (Crest factor: 8.0)



Maximum location: X=-32.00, Y=-8.00

SAR 10g (W/Kg)	0.155093
SAR 1g (W/Kg)	0.213175



Test Laboratory: AGC Lab
GPRS 850 Mid- Body- Back <SIM 1>
DUT: 3G Smart Phone; Type: S42

Date: Nov. 20,2014

Communication System: Generic GPRS; Communication System Band: GPRS 850; Duty Cycle: 1:8.3; Conv.F=5.48;
Frequency: 836.6 MHz; Medium parameters used: $f = 835$ MHz; $\sigma = 0.98$ mho/m; $\epsilon_r = 54.73$; $\rho = 1000$ kg/m³ ;
Phantom section: Flat Section
Ambient temperature (°C): 21.0, Liquid temperature (°C): 21.0

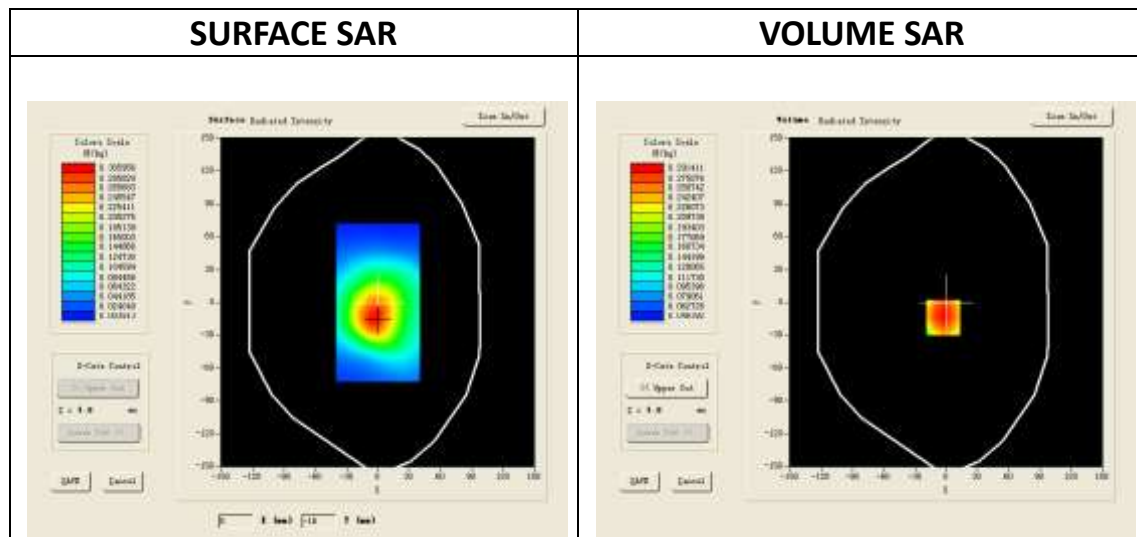
SATIMO Configuration:

- Probe: SSE5; Calibrated: 01/12/2014; Serial No.:SN 22/12 EP159
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Phantom: Flat Phantom; Type: Elliptical Phantom
- Measurement SW: OpenSAR V4_02_01

Configuration/GPRS 850 Mid-Body-Back/Area Scan: Measurement grid: dx=8mm, dy=8mm

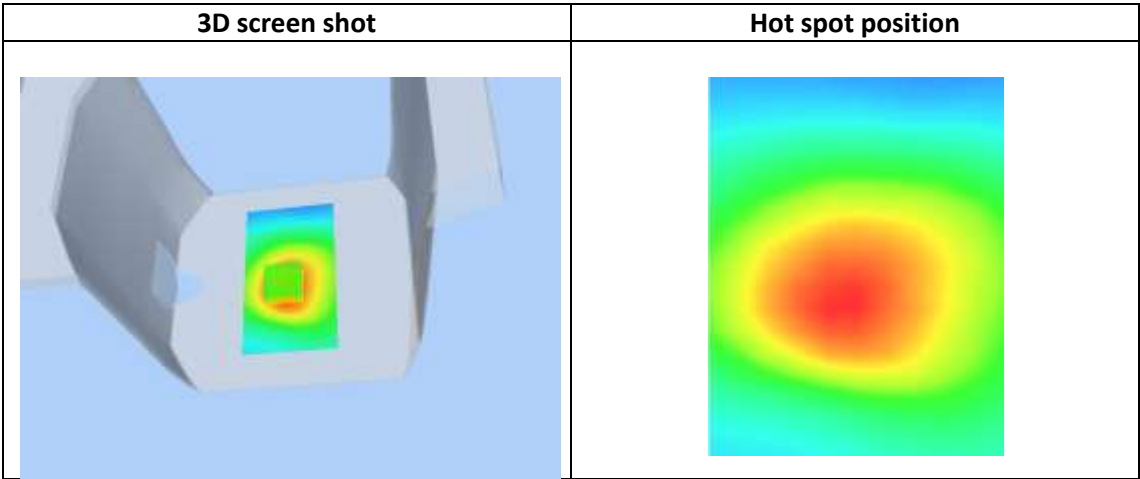
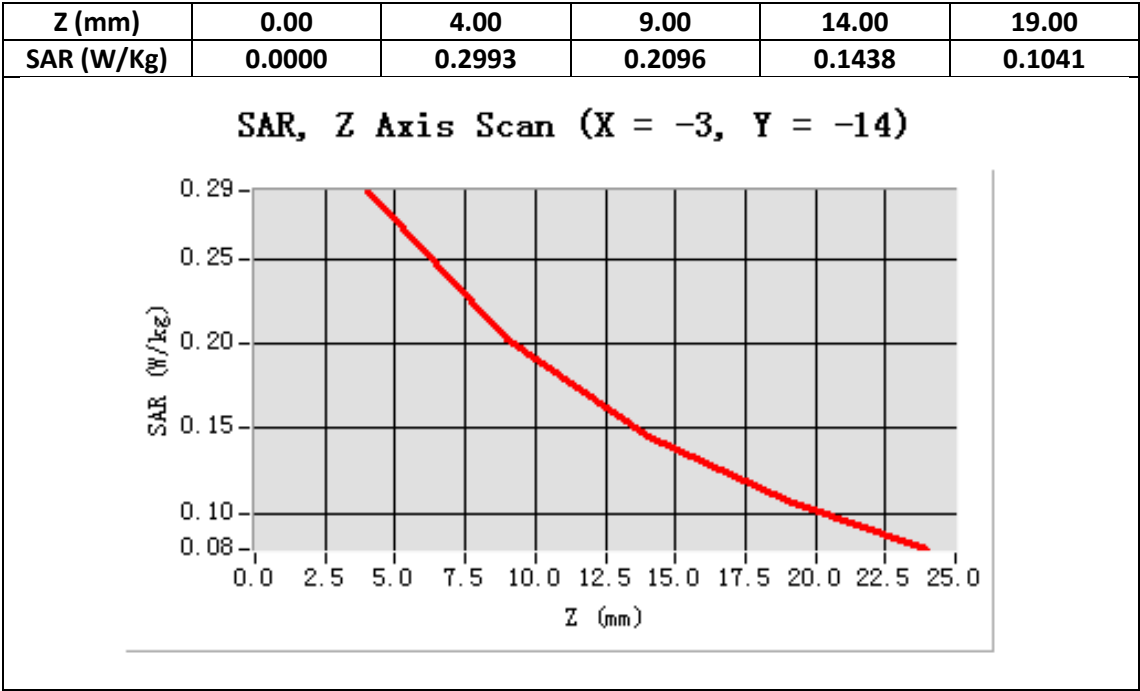
Configuration/GPRS 850 Mid-Body-Back/Zoom Scan: Measurement grid: dx=8mm,dy=8mm, dz=5mm;

Area Scan	surf_sam_plan.txt
ZoomScan	5x5x7,dx=8mm dy=8mm dz=5mm,Very fast
Phantom	Validation plane
Device Position	Body Back
Band	GPRS 850
Channels	Middle
Signal	TDMA (Crest factor: 8.0)



Maximum location: X=-3.00, Y=-14.00

SAR 10g (W/Kg)	0.206943
SAR 1g (W/Kg)	0.305572



Test Laboratory: AGC Lab
GPRS 850 Mid- Body- Front (MS) <SIM 1>
DUT: 3G Smart Phone; Type: S42

Date: Nov. 20,2014

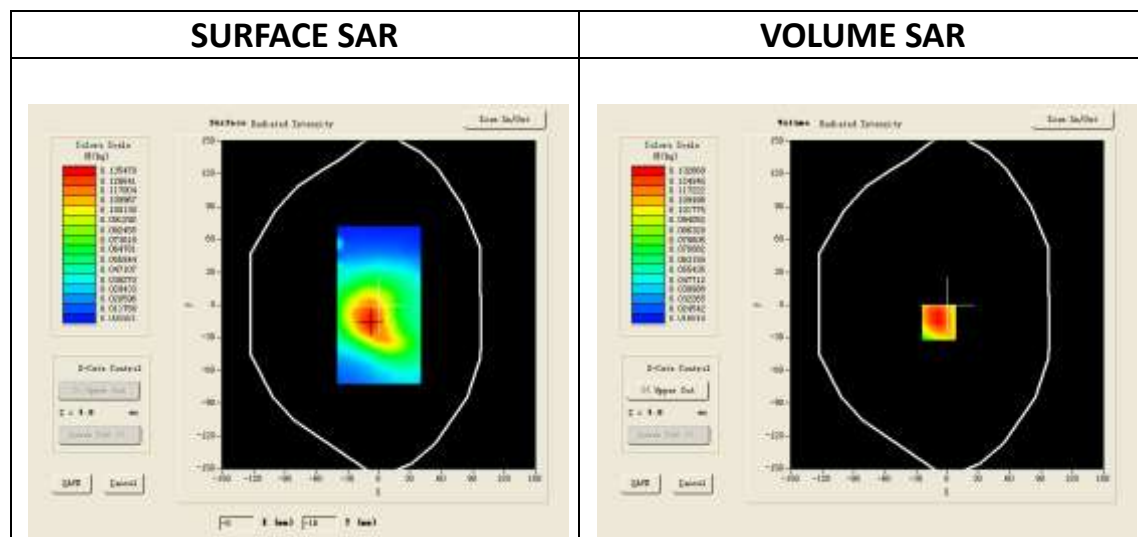
Communication System: Generic GPRS; Communication System Band: GPRS 850; Duty Cycle: 1:8.3; Conv.F=5.48;
Frequency: 836.6 MHz; Medium parameters used: $f = 835$ MHz; $\sigma = 0.98$ mho/m; $\epsilon_r = 54.73$; $\rho = 1000$ kg/m³ ;
Phantom section: Flat Section
Ambient temperature (°C): 21.0, Liquid temperature (°C): 21.0

SATIMO Configuration:

- Probe: SSE5; Calibrated: 01/12/2014; Serial No.:SN 22/12 EP159
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Phantom: Flat Phantom; Type: Elliptical Phantom
- Measurement SW: OpenSAR V4_02_01

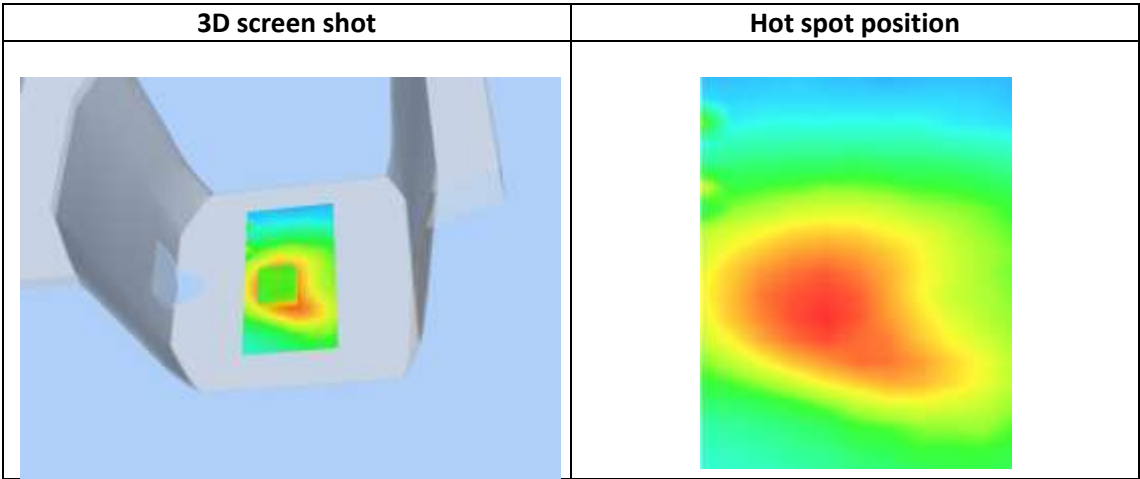
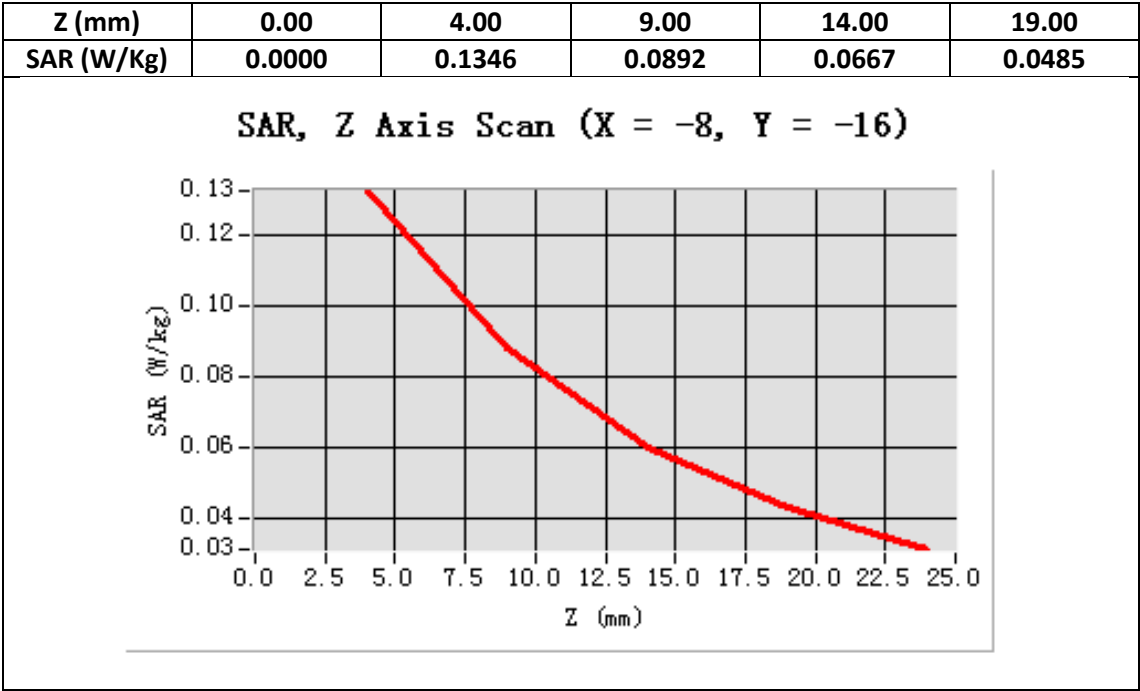
Configuration/GPRS 850 Mid-Body- Front /Area Scan: Measurement grid: dx=8mm, dy=8mm
Configuration/GPRS 850 Mid-Body- Front Zoom Scan: Measurement grid: dx=8mm,dy=8mm, dz=5mm;

Area Scan	surf_sam_plan.txt
ZoomScan	5x5x7,dx=8mm dy=8mm dz=5mm,Very fast
Phantom	Validation plane
Device Position	Body Front
Band	GPRS 850
Channels	Middle
Signal	TDMA (Crest factor: 8.0)



Maximum location: X=-8.00, Y=-16.00

SAR 10g (W/Kg)	0.095826
SAR 1g (W/Kg)	0.139470



Test Laboratory: AGC Lab
GPRS 850 Mid- Edge1 (MS) <SIM 1>
DUT: 3G Smart Phone; Type: S42

Date: Nov. 20,2014

Communication System: GPRS-4 Slot; Communication System Band: GPRS 850;Duty Cycle:1:2.1;Conv.F=5.48;
Frequency: 836.6 MHz; Medium parameters used: $f = 835$ MHz; $\sigma = 0.98$ mho/m; $\epsilon_r = 54.73$; $\rho = 1000$ kg/m³ ;
Phantom section: Flat Section
Ambient temperature (°C): 21.0, Liquid temperature (°C): 21.0

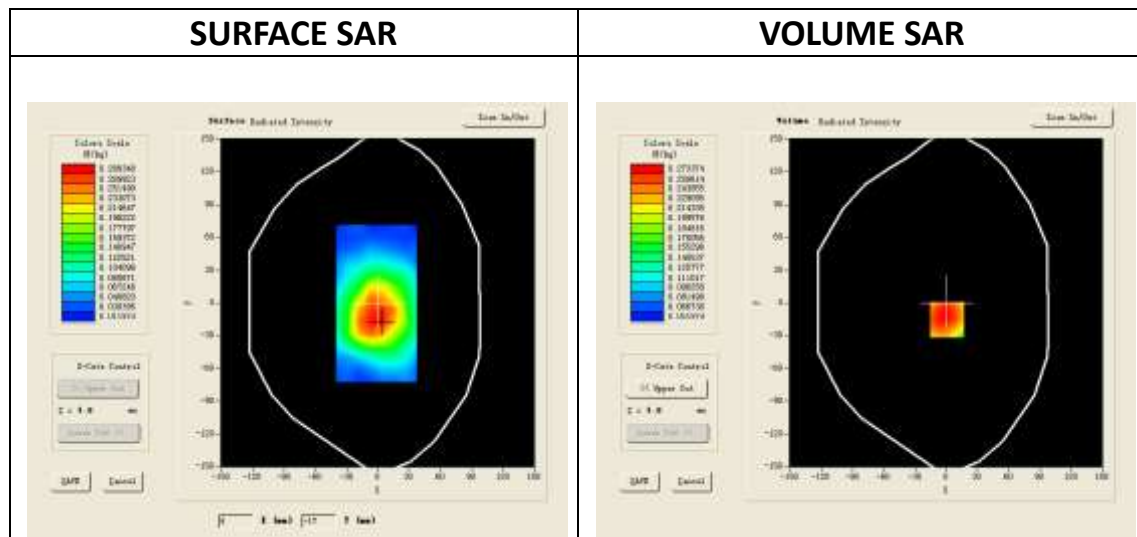
SATIMO Configuration:

- Probe: SSE5; Calibrated: 01/12/2014; Serial No.:SN 22/12 EP159
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Phantom: Flat Phantom; Type: Elliptical Phantom
- Measurement SW: OpenSAR V4_02_01

Configuration/GPRS 850 Mid- Edge1 /Area Scan: Measurement grid: dx=8mm, dy=8mm

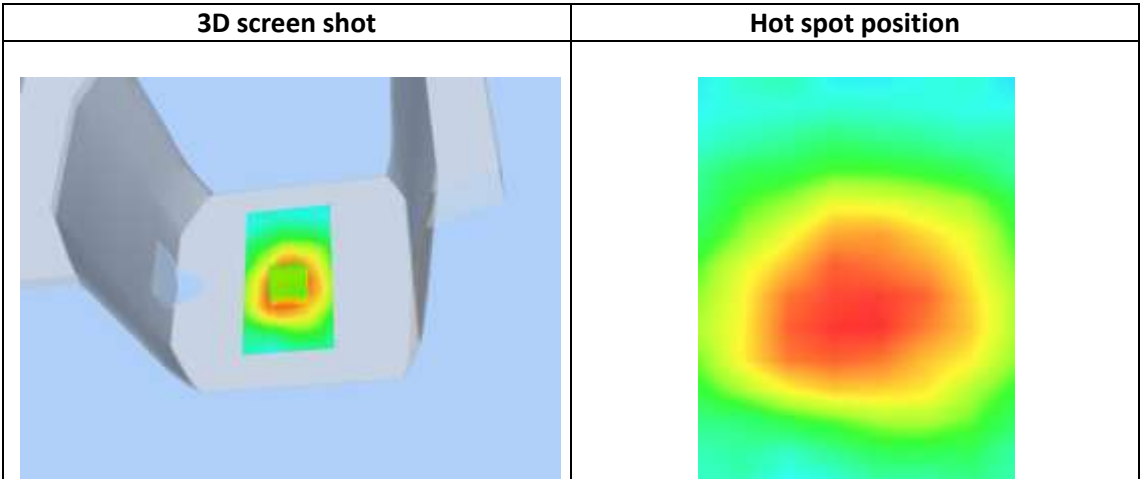
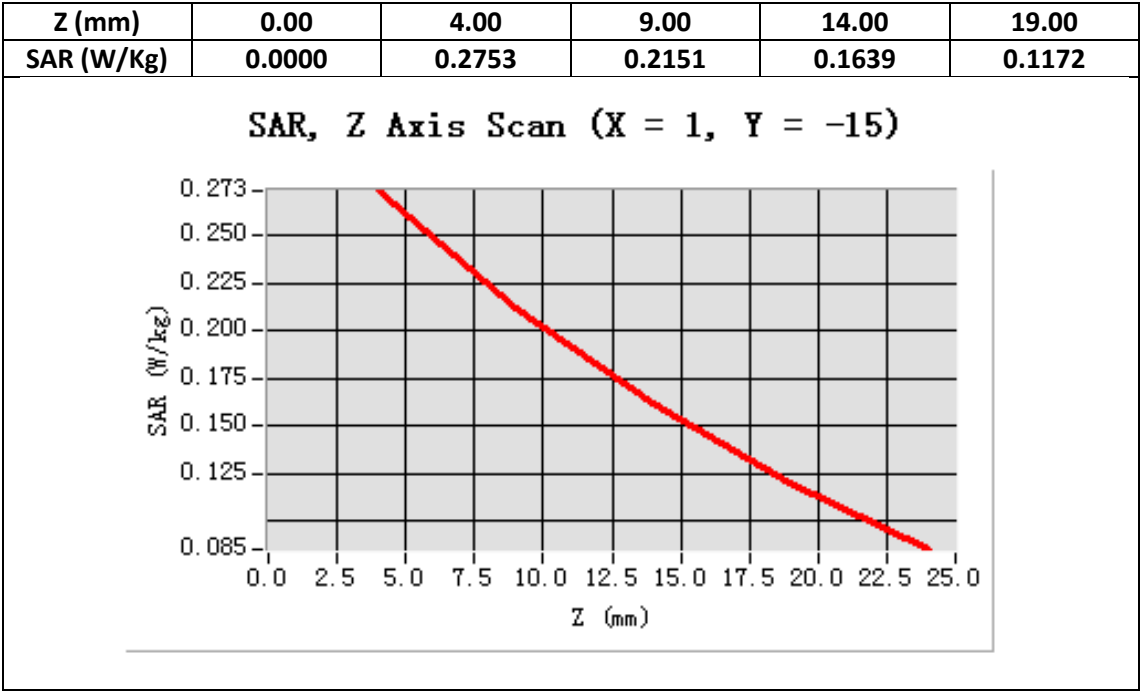
Configuration/GPRS 850 Mid- Edge1/ Zoom Scan: Measurement grid: dx=8mm,dy=8mm, dz=5mm;

Area Scan	surf_sam_plan.txt
ZoomScan	5x5x7,dx=8mm dy=8mm dz=5mm,Very fast
Phantom	Validation plane
Device Position	Edge1
Band	GPRS 850
Channels	Middle
Signal	TDMA (Crest factor: 8.0)



Maximum location: X=1.00, Y=-15.00

SAR 10g (W/Kg)	0.207093
SAR 1g (W/Kg)	0.286940



Test Laboratory: AGC Lab
GPRS 850 Mid- Edge2 (MS) <SIM 1>
DUT: 3G Smart Phone; Type: S42

Date: Nov. 20,2014

Communication System: GPRS-4 Slot; Communication System Band: GPRS 850;Duty Cycle:1:2.1;Conv.F=5.48;
Frequency: 836.6 MHz; Medium parameters used: $f = 835$ MHz; $\sigma = 0.98$ mho/m; $\epsilon_r = 54.73$; $\rho = 1000$ kg/m³ ;
Phantom section: Flat Section
Ambient temperature (°C): 21.0, Liquid temperature (°C): 21.0

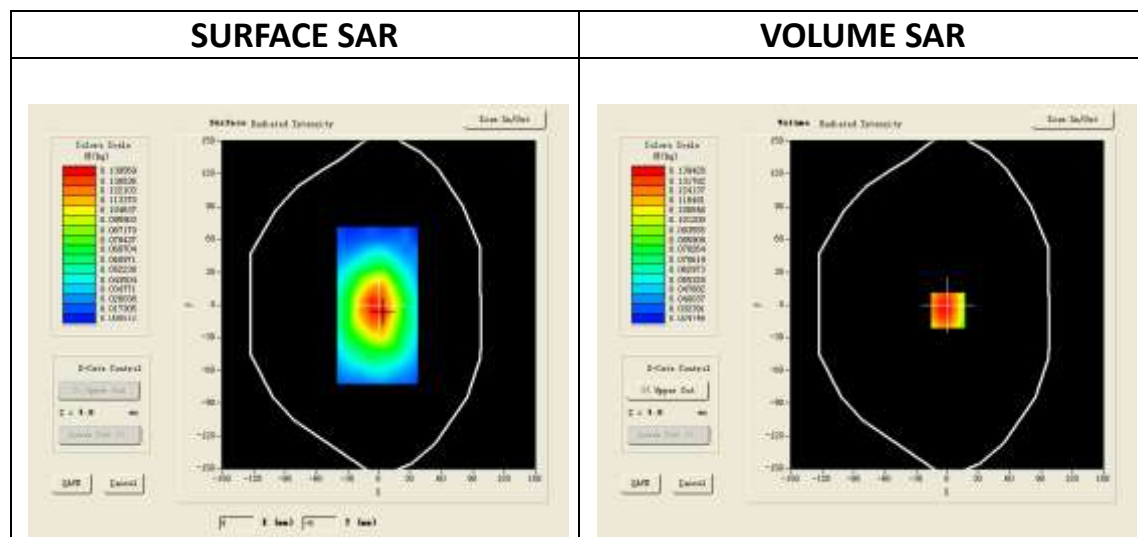
SATIMO Configuration:

- Probe: SSE5; Calibrated: 01/12/2014; Serial No.:SN 22/12 EP159
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Phantom: Flat Phantom; Type: Elliptical Phantom
- Measurement SW: OpenSAR V4_02_01

Configuration/GPRS 850 Mid- Edge2 /Area Scan: Measurement grid: dx=8mm, dy=8mm

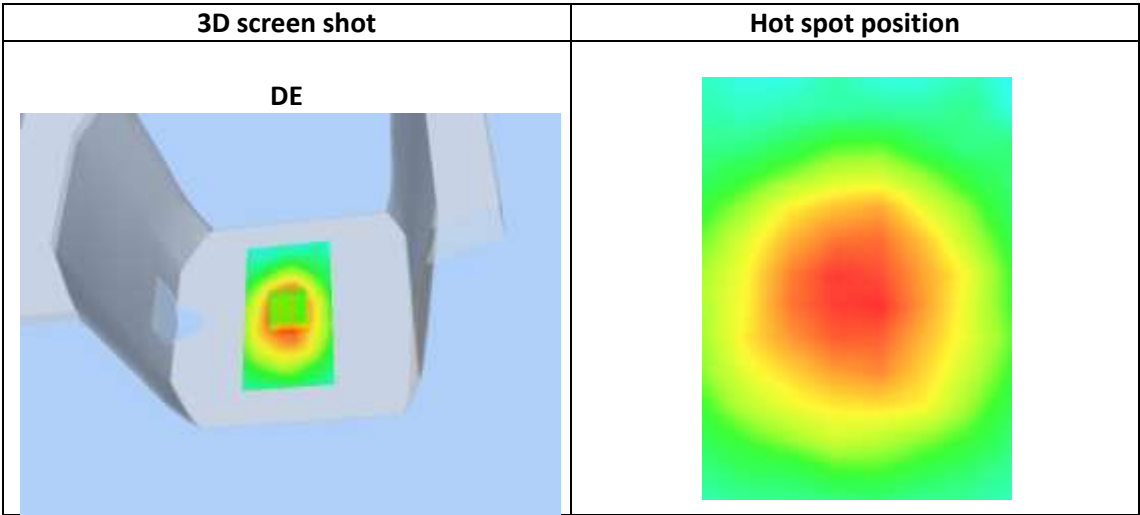
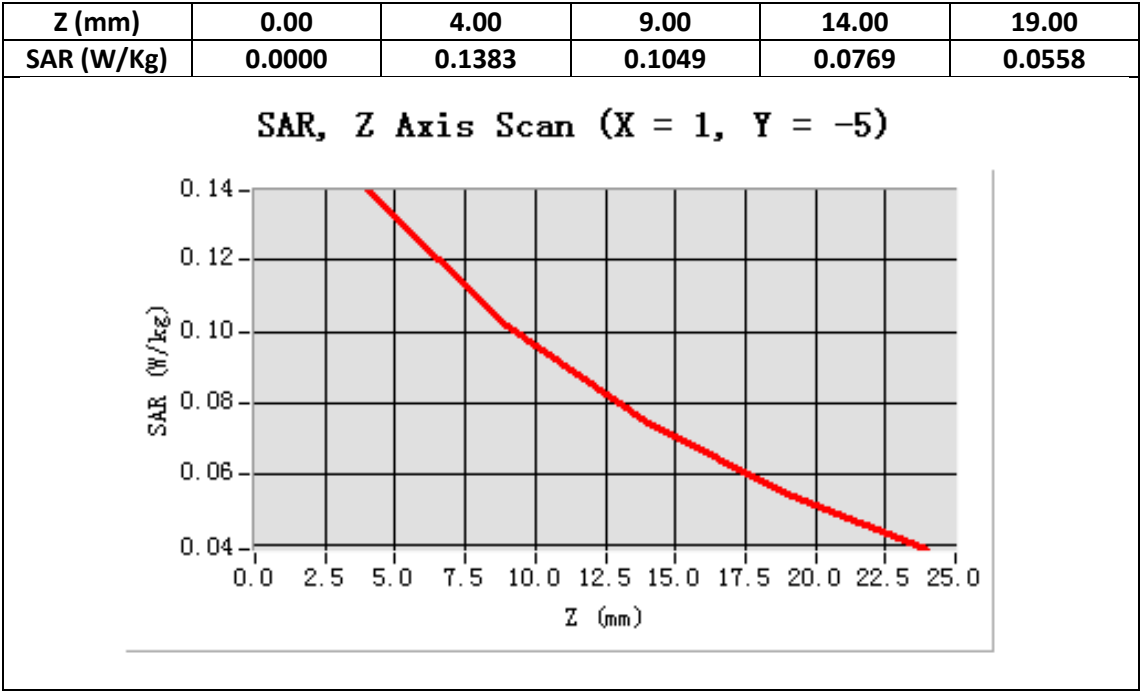
Configuration/GPRS 850 Mid- Edge2/ Zoom Scan: Measurement grid: dx=8mm,dy=8mm, dz=5mm;

Area Scan	surf_sam_plan.txt
ZoomScan	5x5x7,dx=8mm dy=8mm dz=5mm,Very fast
Phantom	Validation plane
Device Position	Edge2
Band	GPRS 850
Channels	Middle
Signal	TDMA (Crest factor: 8.0)



Maximum location: X=1.00, Y=-5.00

SAR 10g (W/Kg)	0.106508
SAR 1g (W/Kg)	0.149637



Test Laboratory: AGC Lab
GPRS 850 Mid- Edge4 (MS) <SIM 1>
DUT: 3G Smart Phone; Type: S42

Date: Nov. 20,2014

Communication System: GPRS-4 Slot; Communication System Band: GPRS 850;Duty Cycle:1:2.1;Conv.F=5.48;
Frequency: 836.6 MHz; Medium parameters used: $f = 835$ MHz; $\sigma = 0.98$ mho/m; $\epsilon_r = 54.73$; $\rho = 1000$ kg/m³ ;
Phantom section: Flat Section
Ambient temperature (°C): 21.0, Liquid temperature (°C): 21.0

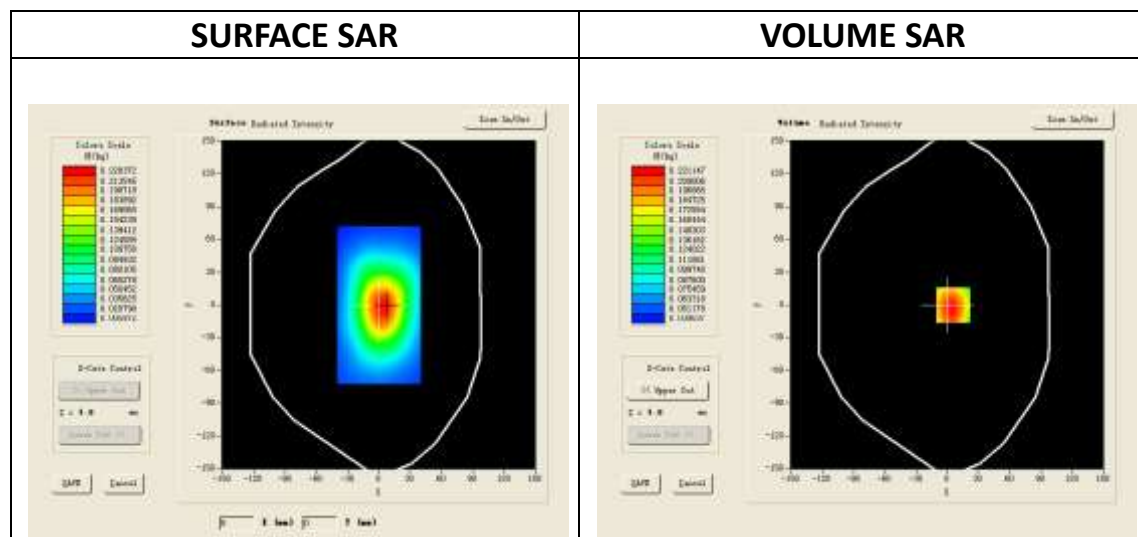
SATIMO Configuration:

- Probe: SSE5; Calibrated: 01/12/2014; Serial No.:SN 22/12 EP159
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Phantom: Flat Phantom; Type: Elliptical Phantom
- Measurement SW: OpenSAR V4_02_01

Configuration/GPRS 850 Mid- Edge4 /Area Scan: Measurement grid: dx=8mm, dy=8mm

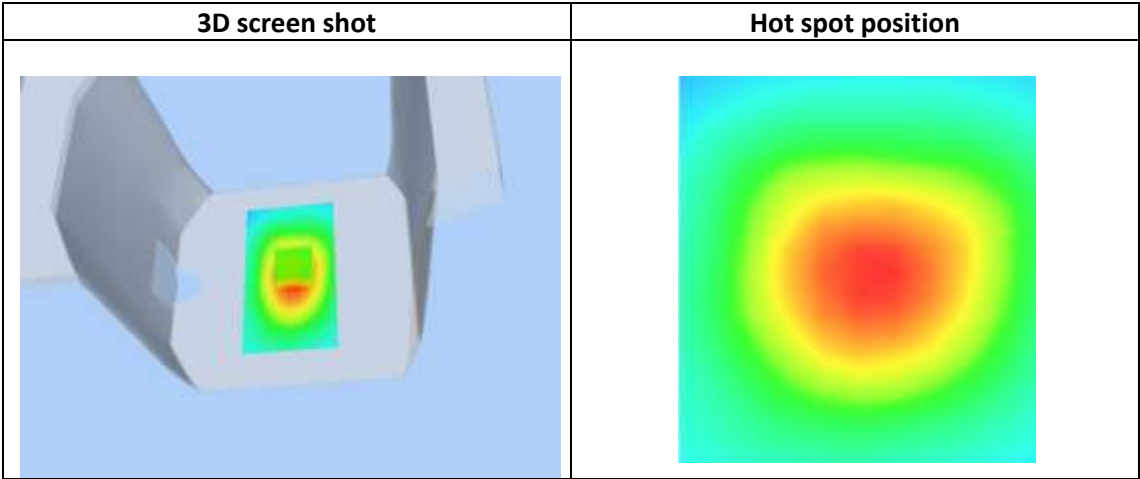
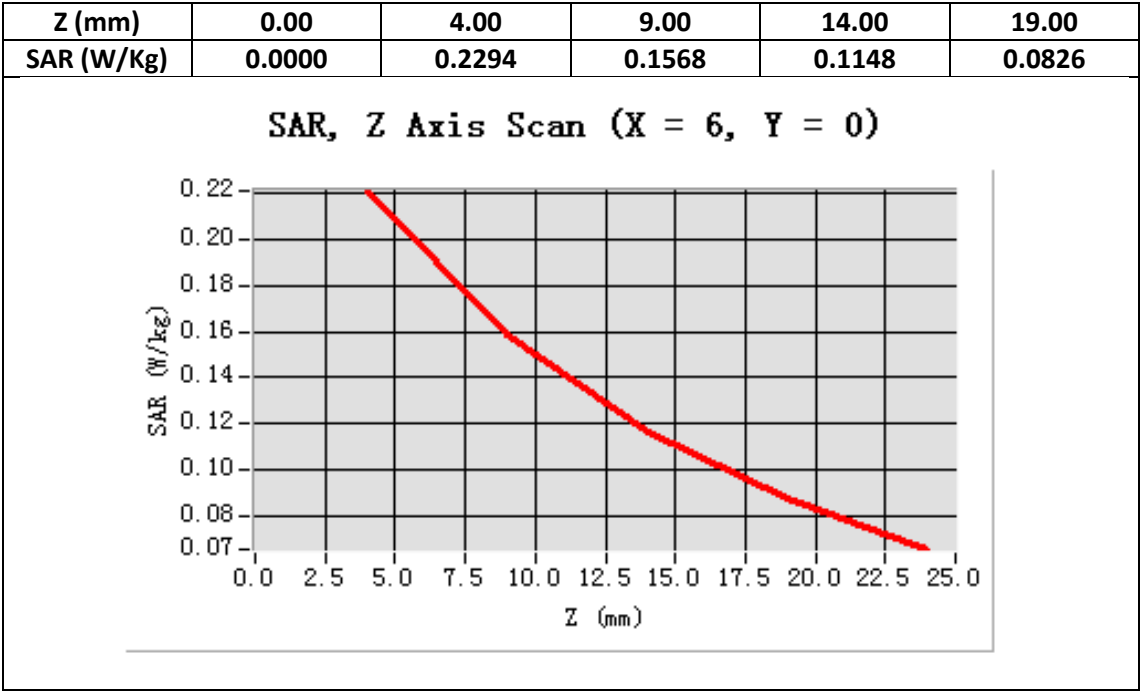
Configuration/GPRS 850 Mid- Edge4/ Zoom Scan: Measurement grid: dx=8mm,dy=8mm, dz=5mm;

Area Scan	surf_sam_plan.txt
ZoomScan	5x5x7,dx=8mm dy=8mm dz=5mm,Very fast
Phantom	Validation plane
Device Position	Edge4
Band	GPRS 850
Channels	Middle
Signal	TDMA (Crest factor: 8.0)



Maximum location: X=6.00, Y=0.00

SAR 10g (W/Kg)	0.152479
SAR 1g (W/Kg)	0.234538



Test Laboratory: AGC Lab
PCS 1900 Mid-Touch-Left <SIM 1>
DUT: 3G Smart Phone; Type: S42

Date: Nov. 20,2014

Communication System: Generic GSM; Communication System Band: PCS 1900; Duty Cycle: 1:8.3; Conv.F=4.51;
Frequency: 1880 MHz; Medium parameters used: $f = 1900$ MHz; $\sigma = 1.43$ mho/m; $\epsilon_r = 40.69$; $\rho = 1000$ kg/m³ ;
Phantom section: Left Section
Ambient temperature (°C): 21.0, Liquid temperature (°C): 21.0

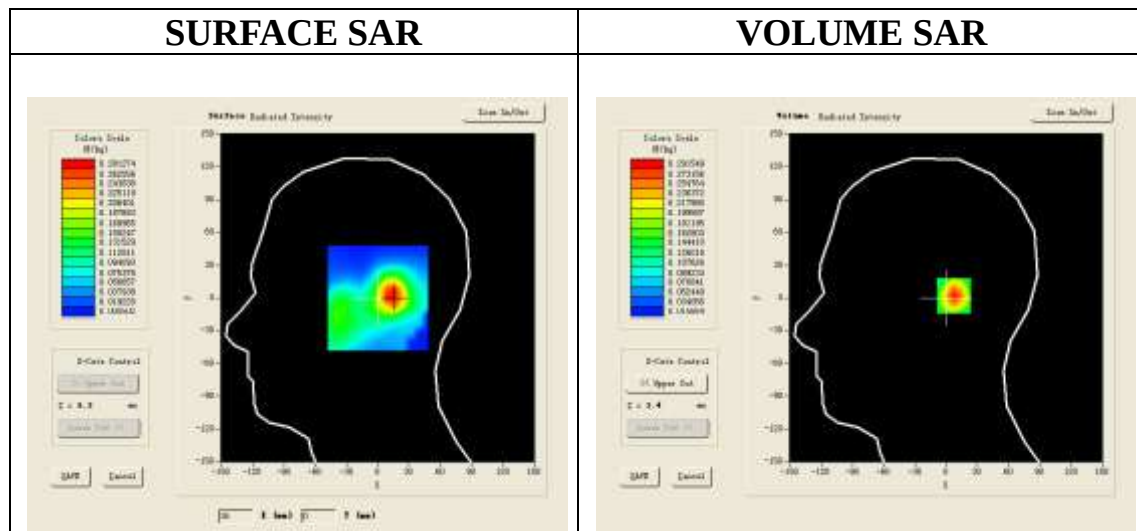
SATIMO Configuration:

- Probe: SSE5; Calibrated: 01/12/2014; Serial No.:SN 22/12 EP159
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Phantom: Flat Phantom; Type: Elliptical Phantom
- Measurement SW: OpenSAR V4_02_01

Configuration/PCS1900 Mid-Touch-Left/Area Scan: Measurement grid: dx=8mm, dy=8mm

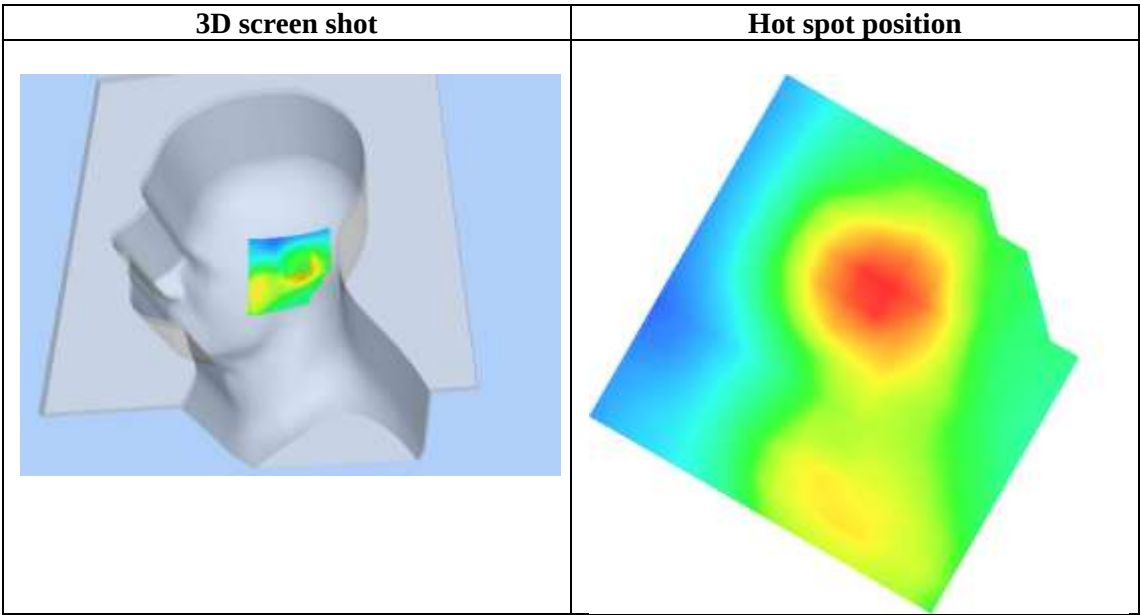
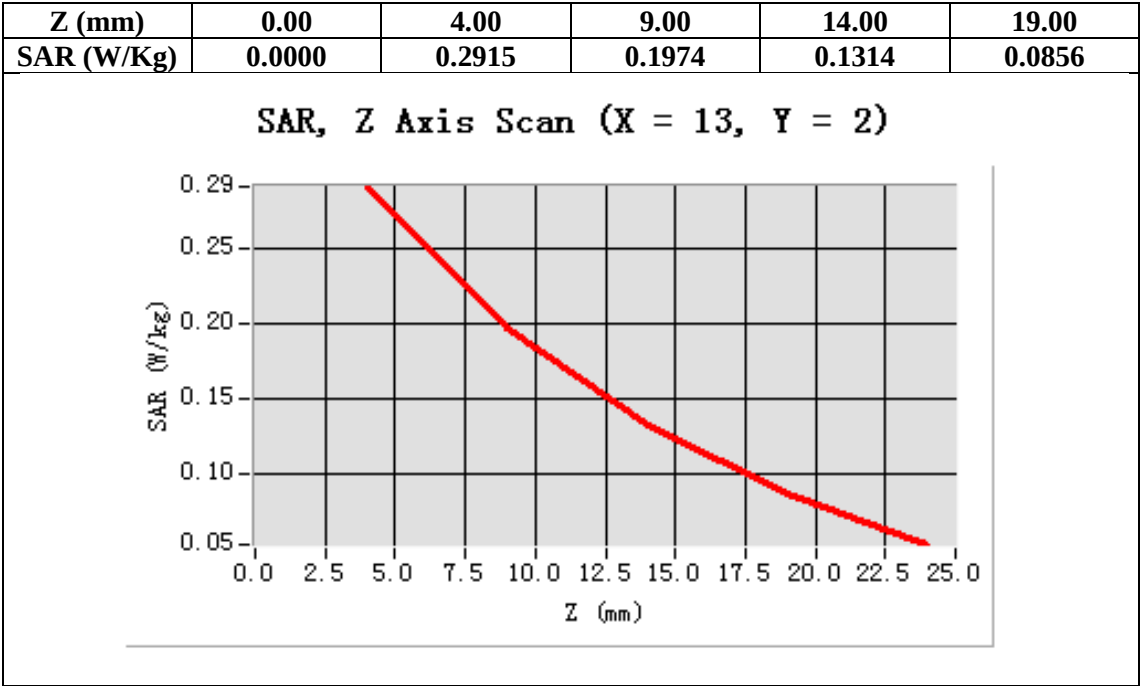
Configuration/PCS1900 Mid-Touch-Left/Zoom Scan: Measurement grid: dx=8mm,dy=8mm, dz=5mm;

Area Scan	sam_direct_droit2_surf8mm.txt
ZoomScan	5x5x7,dx=8mm dy=8mm dz=5mm,Very fast
Phantom	Left head
Device Position	Cheek
Band	PCS 1900
Channels	Middle
Signal	TDMA (Crest factor: 8.0)



Maximum location: X=13.00, Y=2.00

SAR 10g (W/Kg)	0.164127
SAR 1g (W/Kg)	0.273206



Test Laboratory: AGC Lab
PCS 1900 Mid-Tilt-Left <SIM 1>
DUT: 3G Smart Phone; Type: S42

Date: Nov. 20,2014

Communication System: Generic GSM; Communication System Band: PCS 1900; Duty Cycle: 1:8.3; Conv.F=4.51;
Frequency: 1880 MHz; Medium parameters used: $f = 1900$ MHz; $\sigma = 1.43$ mho/m; $\epsilon_r = 40.69$; $\rho = 1000$ kg/m³ ;
Phantom section: Left Section
Ambient temperature (°C): 21.0, Liquid temperature (°C): 21.0

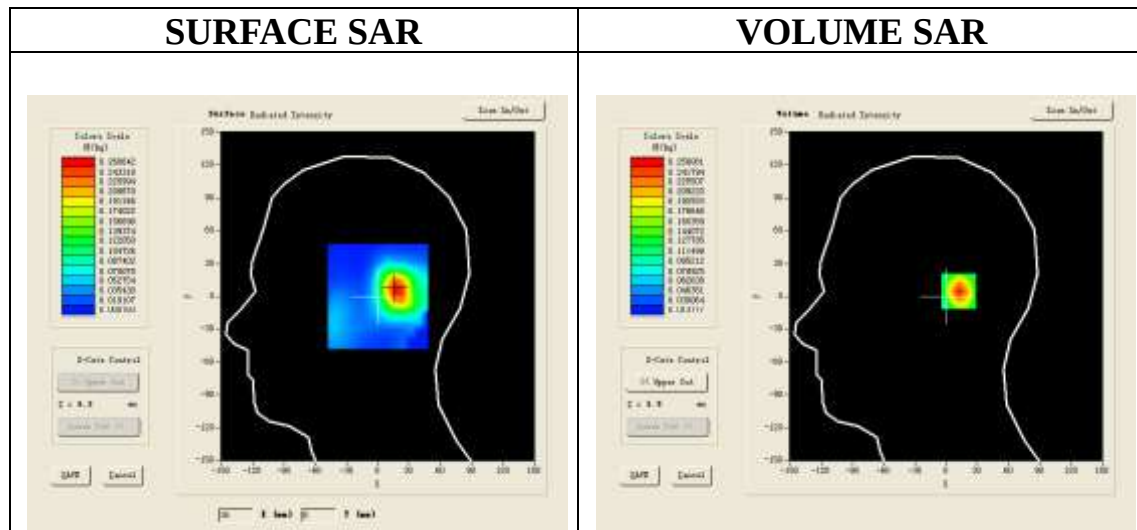
SATIMO Configuration:

- Probe: SSE5; Calibrated: 01/12/2014; Serial No.:SN 22/12 EP159
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Phantom: Flat Phantom; Type: Elliptical Phantom
- Measurement SW: OpenSAR V4_02_01

Configuration/PCS1900 Mid-Tilt-Left/Area Scan: Measurement grid: dx=8mm, dy=8mm

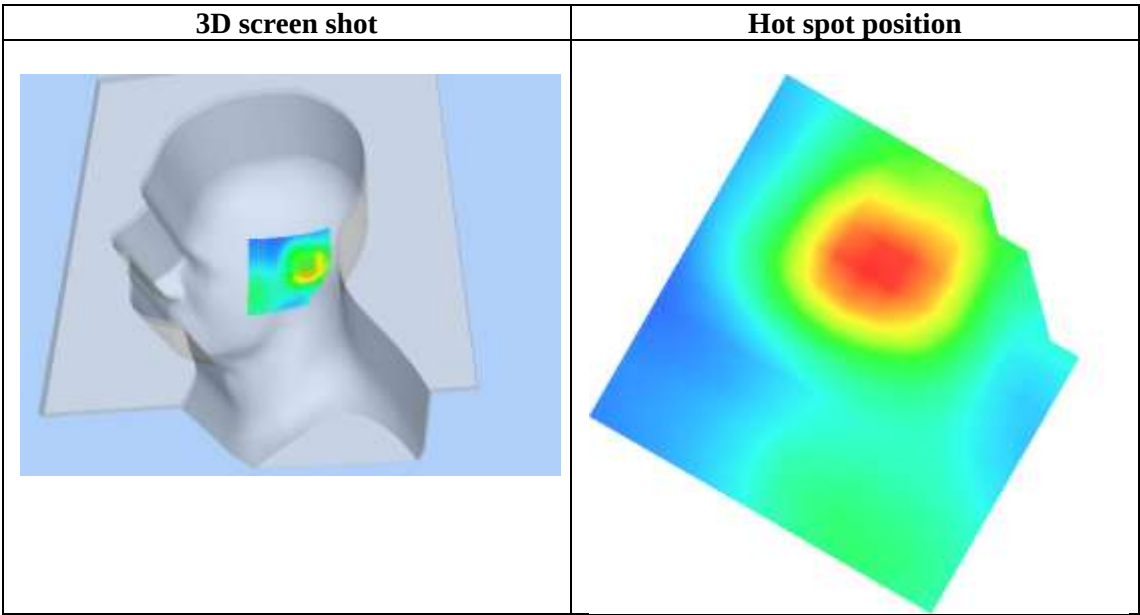
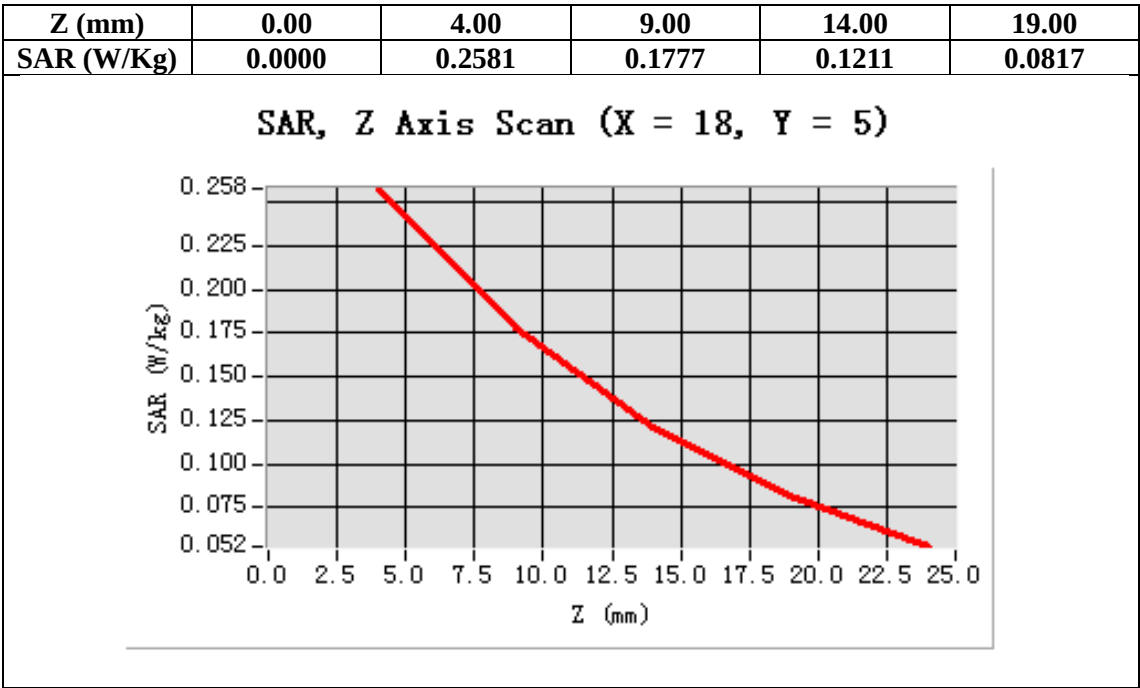
Configuration/PCS1900 Mid-Tilt-Left/Zoom Scan: Measurement grid: dx=8mm,dy=8mm,dz=5mm;

Area Scan	sam_direct_droit2_surf8mm.txt
ZoomScan	5x5x7,dx=8mm dy=8mm dz=5mm,Very fast
Phantom	Left head
Device Position	Tilt
Band	PCS 1900
Channels	Middle
Signal	TDMA (Crest factor: 8.0)



Maximum location: X=18.00, Y=5.00

SAR 10g (W/Kg)	0.141754
SAR 1g (W/Kg)	0.243026



Test Laboratory: AGC Lab
PCS 1900 Mid-Touch-Right <SIM 1>
DUT: 3G Smart Phone; Type: S42

Date: Nov. 20,2014

Communication System: Generic GSM; Communication System Band: PCS 1900; Duty Cycle: 1:8.3; Conv.F=4.51;
Frequency: 1880 MHz; Medium parameters used: $f = 1900$ MHz; $\sigma = 1.43$ mho/m; $\epsilon_r = 40.69$; $\rho = 1000$ kg/m³ ;
Phantom section: Right Section
Ambient temperature (°C): 21.0, Liquid temperature (°C): 21.0

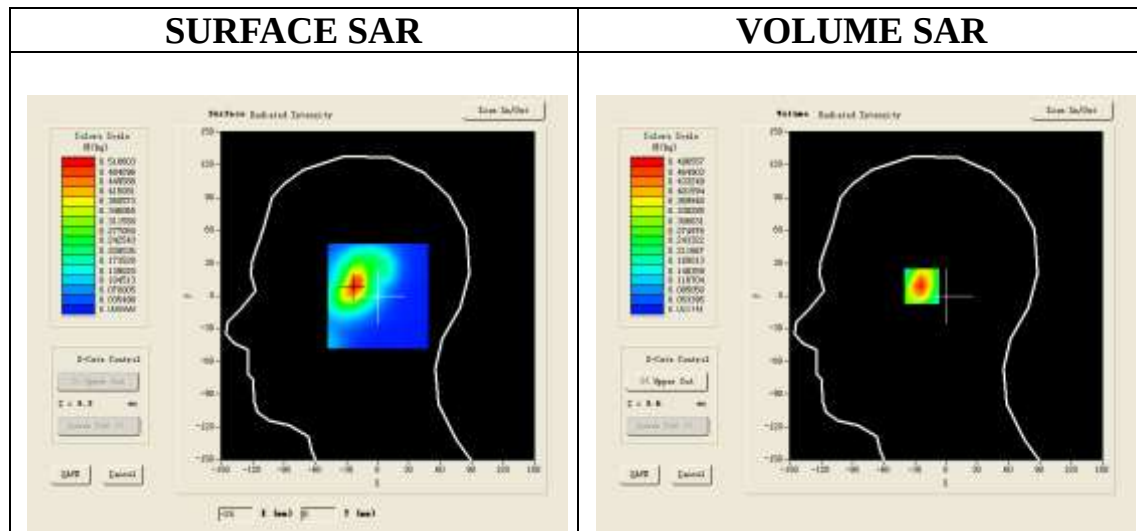
SATIMO Configuration:

- Probe: SSE5; Calibrated: 01/12/2014; Serial No.:SN 22/12 EP159
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Phantom: Flat Phantom; Type: Elliptical Phantom
- Measurement SW: OpenSAR V4_02_01

Configuration/PCS1900 Mid-Touch-Right/Area Scan: Measurement grid: dx=8mm, dy=8mm

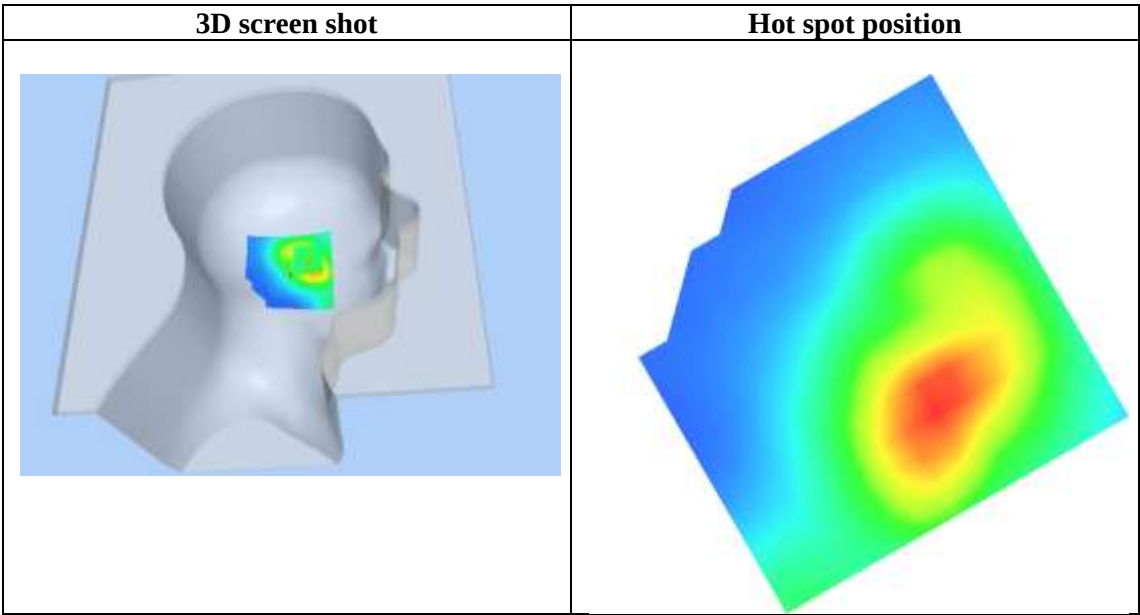
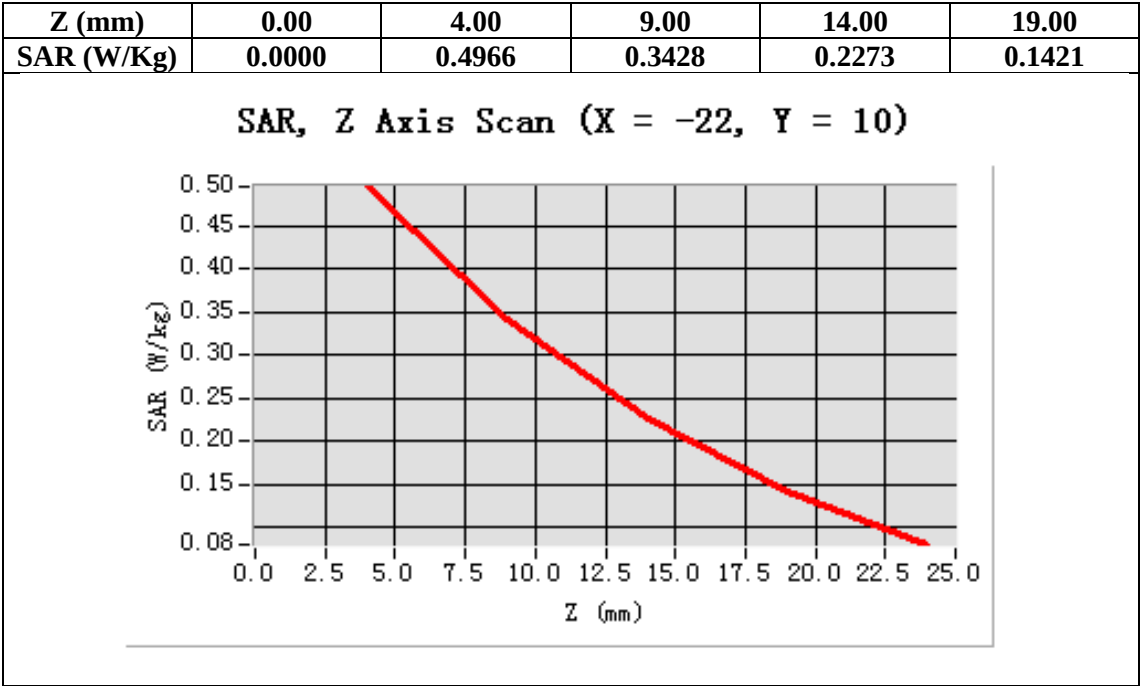
Configuration/PCS1900 Mid-Touch-Right/Zoom Scan: Measurement grid: dx=8mm,dy=8mm, dz=5mm;

Area Scan	sam_direct_droit2_surf8mm.txt
ZoomScan	5x5x7,dx=8mm dy=8mm dz=5mm,Very fast
Phantom	Right head
Device Position	Cheek
Band	PCS 1900
Channels	Middle
Signal	TDMA (Crest factor: 8.0)



Maximum location: X=-22.00, Y=10.00

SAR 10g (W/Kg)	0.263751
SAR 1g (W/Kg)	0.463512



Test Laboratory: AGC Lab
PCS 1900 Mid-Tilt-Right <SIM 1>
DUT: 3G Smart Phone; Type: S42

Date: Nov. 20,2014

Communication System: Generic GSM; Communication System Band: PCS 1900; Duty Cycle: 1:8.3; Conv.F=4.51;
Frequency: 1880 MHz; Medium parameters used: $f = 1900$ MHz; $\sigma = 1.43$ mho/m; $\epsilon_r = 40.69$; $\rho = 1000$ kg/m³ ;
Phantom section: Right Section
Ambient temperature (°C): 21.0, Liquid temperature (°C): 21.0

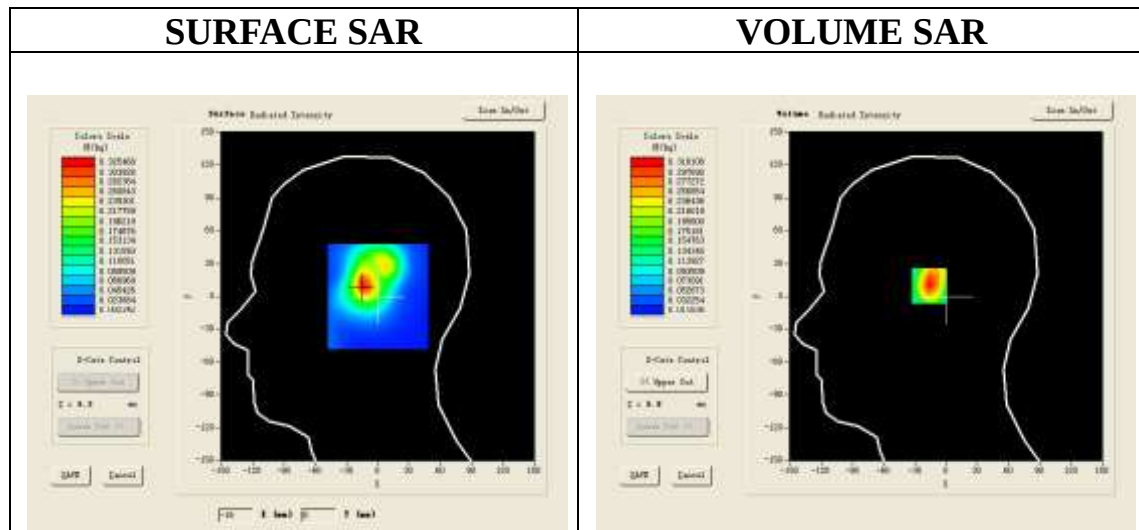
SATIMO Configuration:

- Probe: SSE5; Calibrated: 01/12/2014; Serial No.:SN 22/12 EP159
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Phantom: Flat Phantom; Type: Elliptical Phantom
- Measurement SW: OpenSAR V4_02_01

Configuration/PCS1900 Mid-Tilt-Right/Area Scan: Measurement grid: dx=8mm, dy=8mm

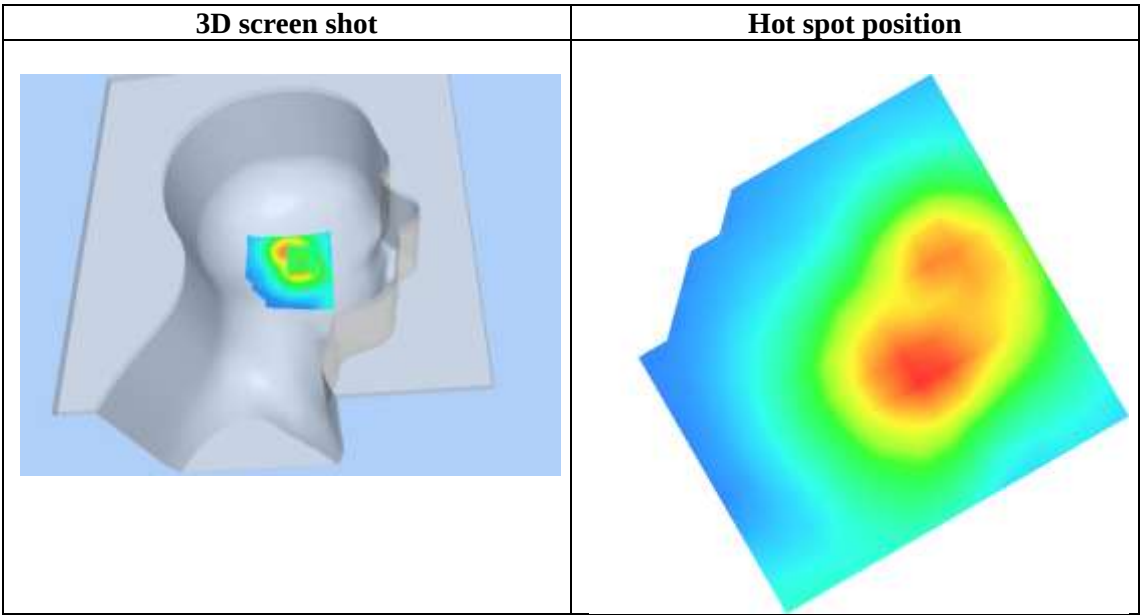
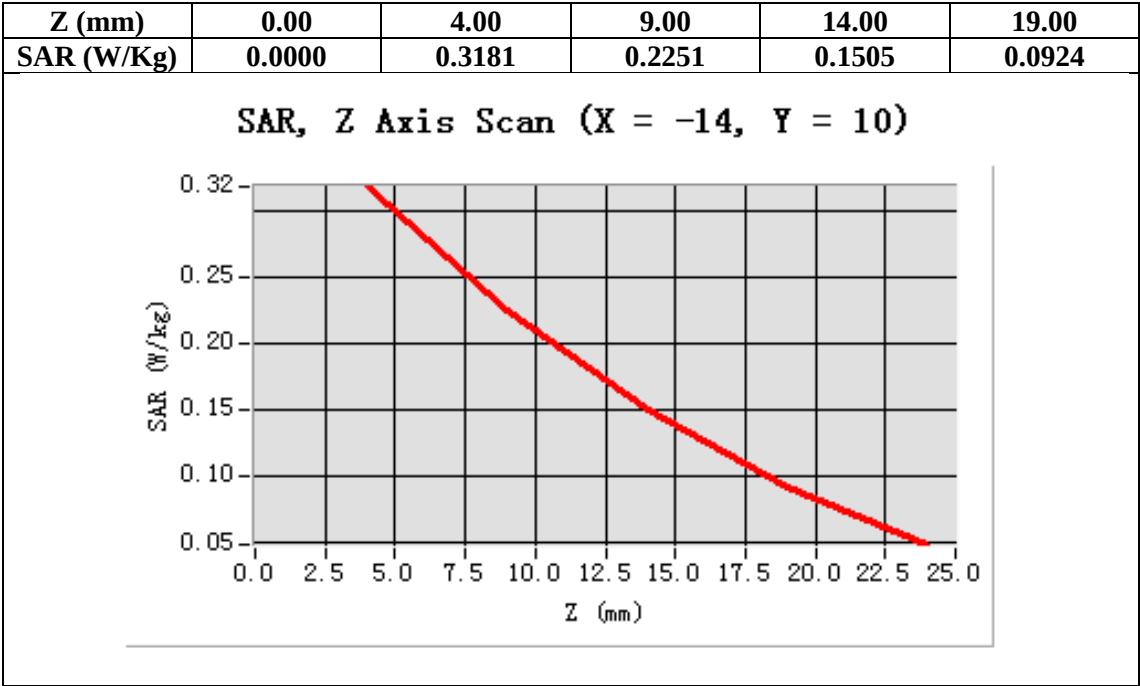
Configuration/PCS1900 Mid-Tilt-Right/Zoom Scan: Measurement grid: dx=8mm,dy=8mm, dz=5mm;

Area Scan	sam_direct_droit2_surf8mm.txt
ZoomScan	5x5x7,dx=8mm dy=8mm dz=5mm,Very fast
Phantom	Right head
Device Position	Tilt
Band	PCS 1900
Channels	Middle
Signal	TDMA (Crest factor: 8.0)



Maximum location: X=-14.00, Y=10.00

SAR 10g (W/Kg)	0.171796
SAR 1g (W/Kg)	0.292037



Test Laboratory: AGC Lab
PCS 1900 Mid-Touch-Right <SIM 2>
DUT: 3G Smart Phone; Type: S42

Date: Nov. 20,2014

Communication System: Generic GSM; Communication System Band: PCS 1900; Duty Cycle: 1:8.3; Conv.F=4.51;
Frequency: 1880 MHz; Medium parameters used: $f = 1900$ MHz; $\sigma = 1.43$ mho/m; $\epsilon_r = 40.69$; $\rho = 1000$ kg/m³ ;
Phantom section: Right Section
Ambient temperature (°C): 21.0, Liquid temperature (°C): 21.0

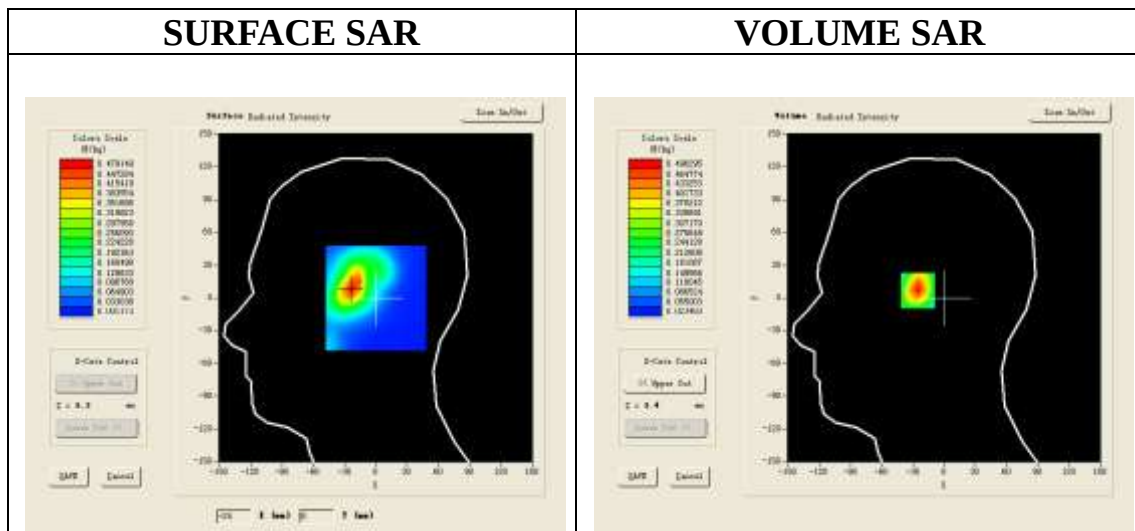
SATIMO Configuration:

- Probe: SSE5; Calibrated: 01/12/2014; Serial No.:SN 22/12 EP159
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Phantom: Flat Phantom; Type: Elliptical Phantom
- Measurement SW: OpenSAR V4_02_01

Configuration/PCS1900 Mid-Touch-Right/Area Scan: Measurement grid: dx=8mm, dy=8mm

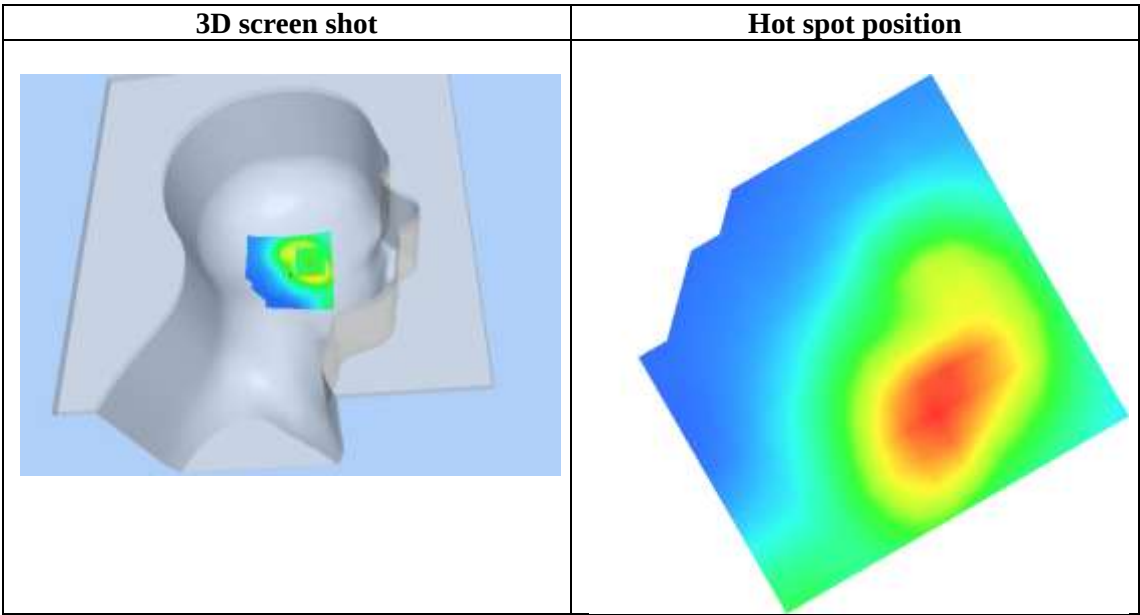
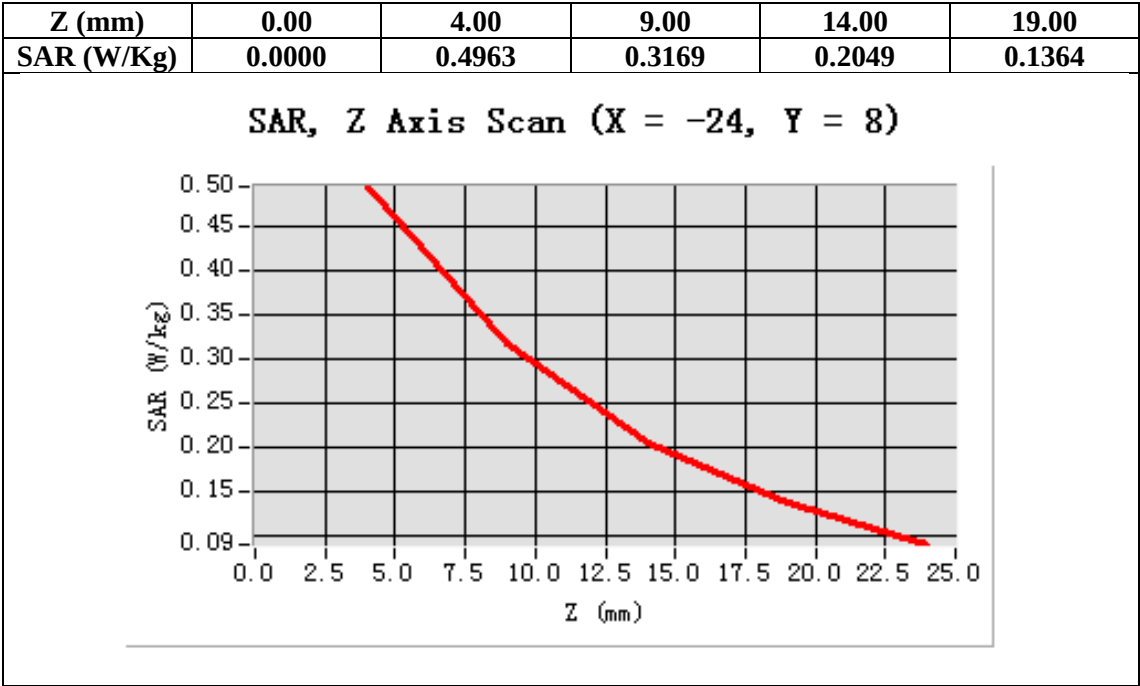
Configuration/PCS1900 Mid-Touch-Right/Zoom Scan: Measurement grid: dx=8mm,dy=8mm, dz=5mm;

Area Scan	sam_direct_droit2_surf8mm.txt
ZoomScan	5x5x7,dx=8mm dy=8mm dz=5mm,Very fast
Phantom	Right head
Device Position	Cheek
Band	PCS 1900
Channels	Middle
Signal	TDMA (Crest factor: 8.0)



Maximum location: X=-24.00, Y=8.00

SAR 10g (W/Kg)	0.261795
SAR 1g (W/Kg)	0.463205



Test Laboratory: AGC Lab
PCS 1900 Mid-Body- Back <SIM 1>
DUT: 3G Smart Phone; Type: S42

Date: Nov. 20,2014

Communication System: Generic GSM; Communication System Band: PCS 1900; Duty Cycle: 1:8.3; Conv.F=4.45;
Frequency: 1880 MHz; Medium parameters used: $f = 1900$ MHz; $\sigma = 1.54$ mho/m; $\epsilon_r = 53.44$; $\rho = 1000$ kg/m³ ;
Phantom section: Flat Section
Ambient temperature (°C): 21.0, Liquid temperature (°C): 21.0

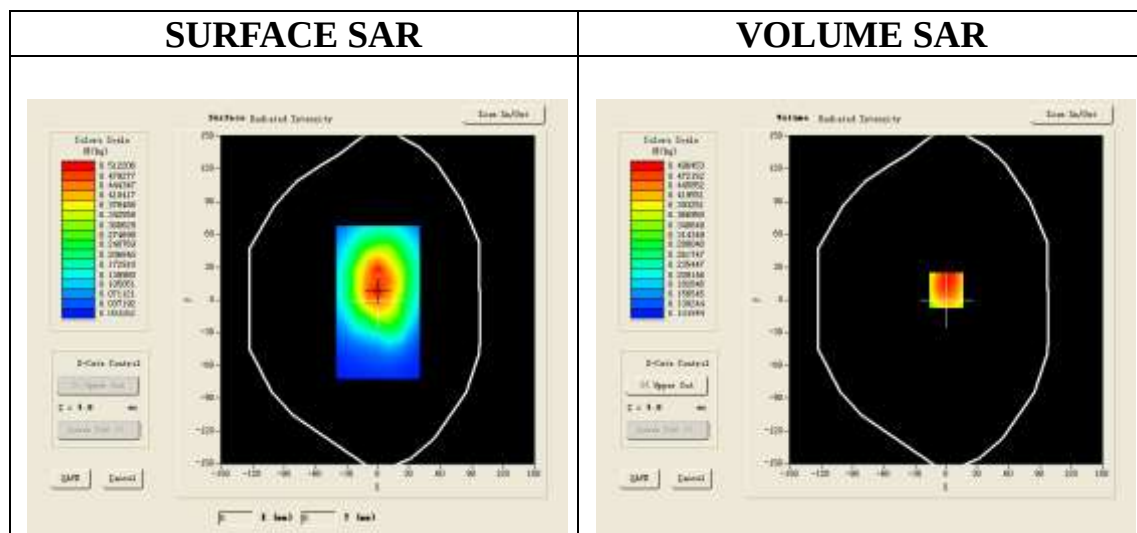
SATIMO Configuration:

- Probe: SSE5; Calibrated: 01/12/2014; Serial No.:SN 22/12 EP159
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Phantom: Flat Phantom; Type: Elliptical Phantom
- Measurement SW: OpenSAR V4_02_01

Configuration/PCS1900 Mid-Body-Back/Area Scan: Measurement grid: dx=8mm, dy=8mm

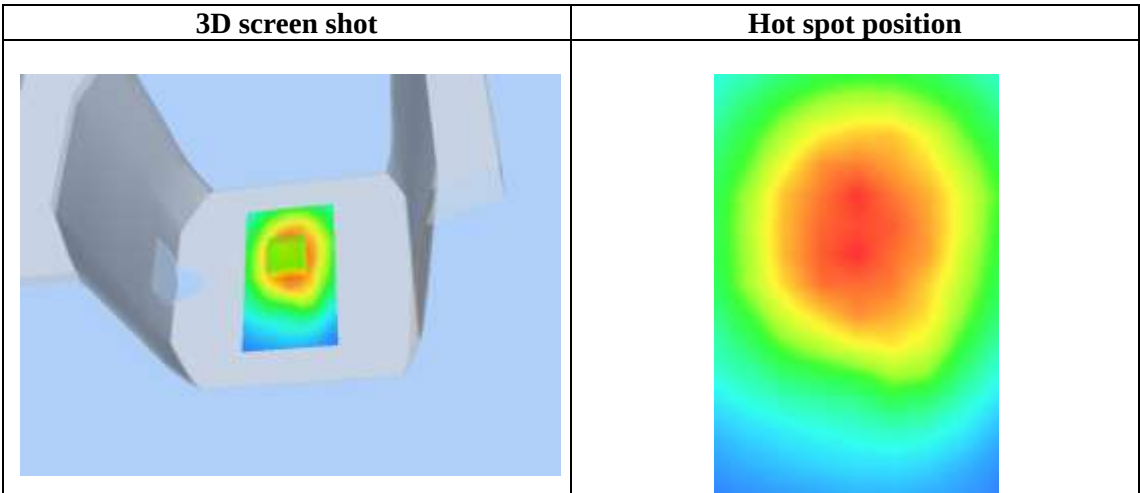
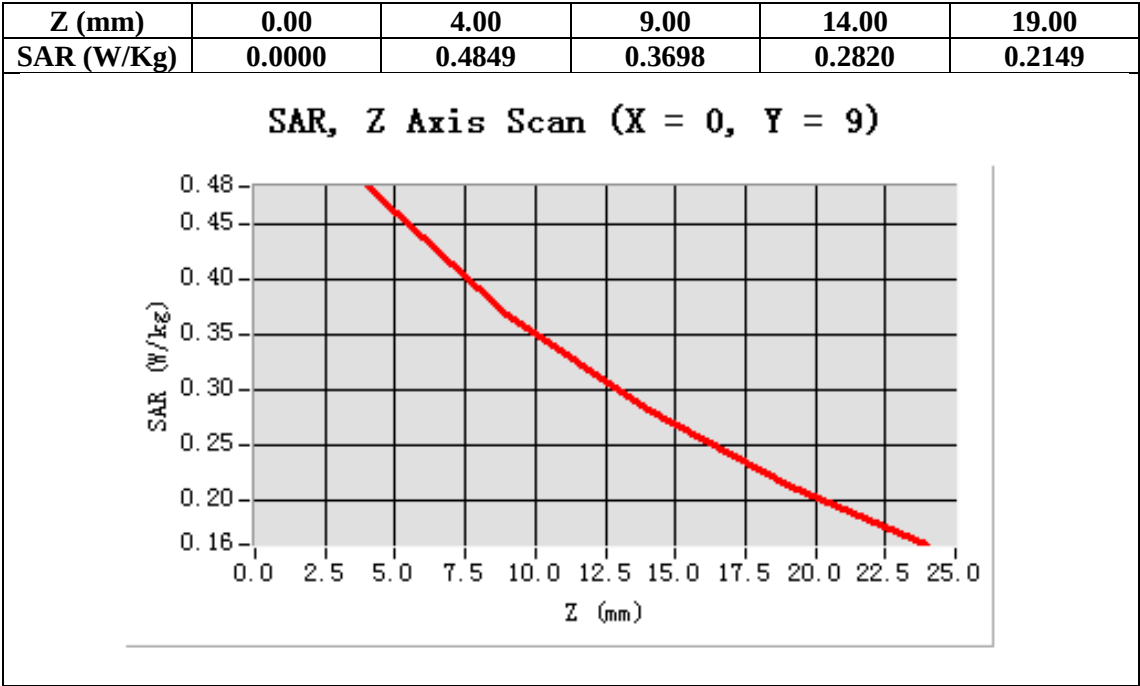
Configuration/PCS1900 Mid-Body-Back/Zoom Scan: Measurement grid: dx=8mm,dy=8mm, dz=5mm;

Area Scan	surf_sam_plan.txt
ZoomScan	5x5x7,dx=8mm dy=8mm dz=5mm,Very fast
Phantom	Validation plane
Device Position	Body Back
Band	PCS 1900
Channels	Middle
Signal	TDMA (Crest factor: 8.0)



Maximum location: X=0.00, Y=9.00

SAR 10g (W/Kg)	0.342786
SAR 1g (W/Kg)	0.483029



Test Laboratory: AGC Lab
PCS 1900 Mid-Body -Front (MS) <SIM 1>
DUT: 3G Smart Phone; Type: S42

Date: Nov. 20,2014

Communication System: Generic GSM; Communication System Band: PCS 1900; Duty Cycle: 1:8.3; Conv.F=4.45;
Frequency: 1880 MHz; Medium parameters used: $f = 1900$ MHz; $\sigma = 1.54$ mho/m; $\epsilon_r = 53.44$; $\rho = 1000$ kg/m³ ;
Phantom section: Flat Section
Ambient temperature (°C): 21.0, Liquid temperature (°C): 21.0

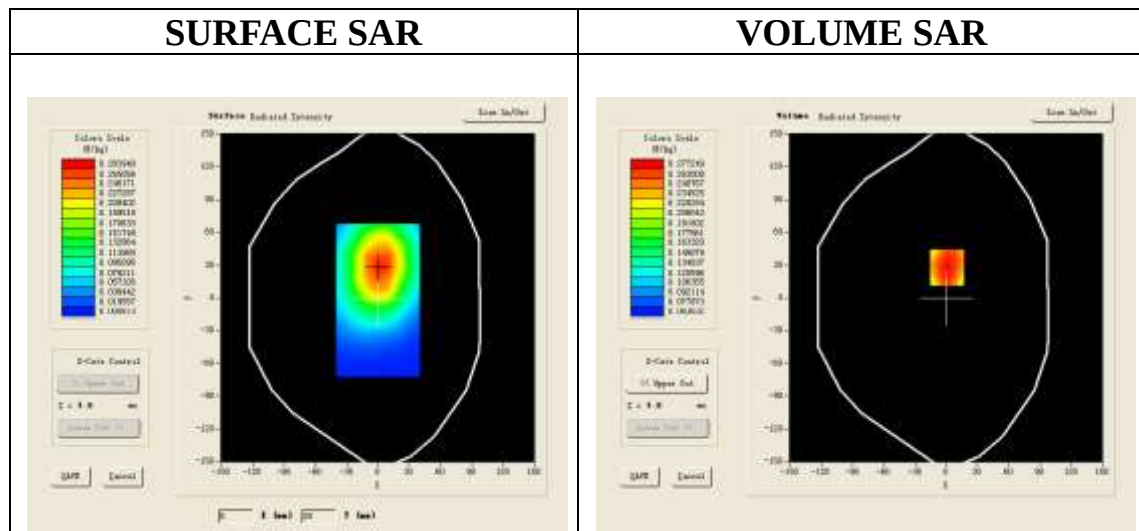
SATIMO Configuration:

- Probe: SSE5; Calibrated: 01/12/2014; Serial No.:SN 22/12 EP159
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Phantom: Flat Phantom; Type: Elliptical Phantom
- Measurement SW: OpenSAR V4_02_01

Configuration/PCS1900 Mid-Body- Front /Area Scan: Measurement grid: dx=8mm, dy=8mm

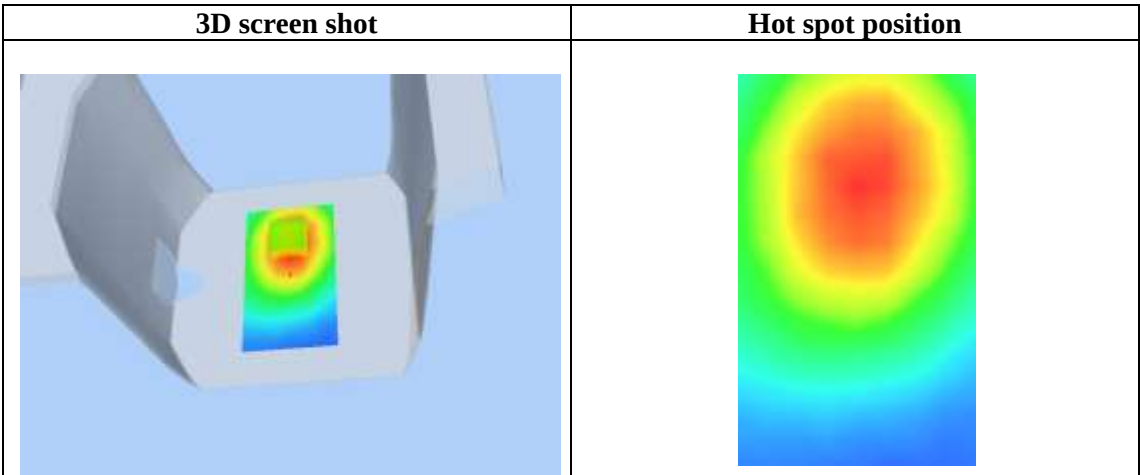
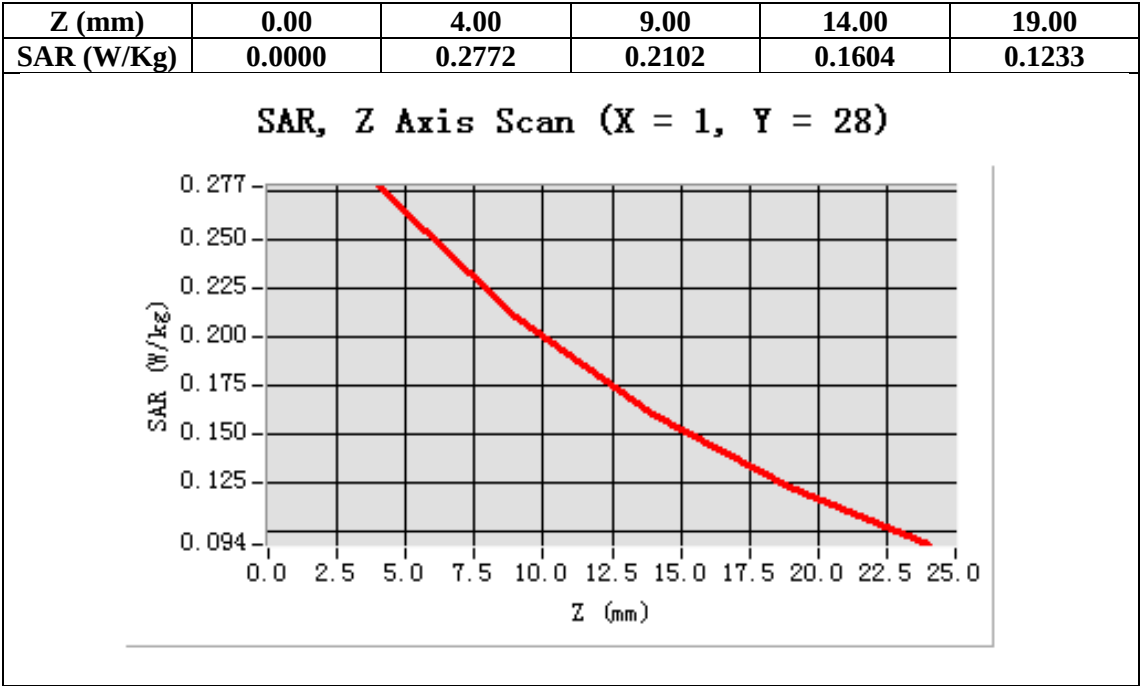
Configuration/PCS1900 Mid-Body- Front /Zoom Scan: Measurement grid: dx=8mm,dy=8mm, dz=5mm;

Area Scan	surf_sam_plan.txt
ZoomScan	5x5x7,dx=8mm dy=8mm dz=5mm,Very fast
Phantom	Validation plane
Device Position	Body Front
Band	PCS 1900
Channels	Middle
Signal	TDMA (Crest factor: 8.0)



Maximum location: X=1.00, Y=28.00

SAR 10g (W/Kg)	0.193612
SAR 1g (W/Kg)	0.262795



Test Laboratory: AGC Lab
GPRS 1900 Mid-Touch-Left <SIM 1>
DUT: 3G Smart Phone; Type: S42

Date: Nov. 20,2014

Communication System: Generic GPRS; Communication System Band: GPRS 1900; Duty Cycle: 1:8.3;
Conv.F=4.51;
Frequency: 1880 MHz; Medium parameters used: $f = 1900$ MHz; $\sigma = 1.43$ mho/m; $\epsilon_r = 40.69$; $\rho = 1000$ kg/m³ ;
Phantom section: Left Section
Ambient temperature (°C): 21.0, Liquid temperature (°C): 21.0

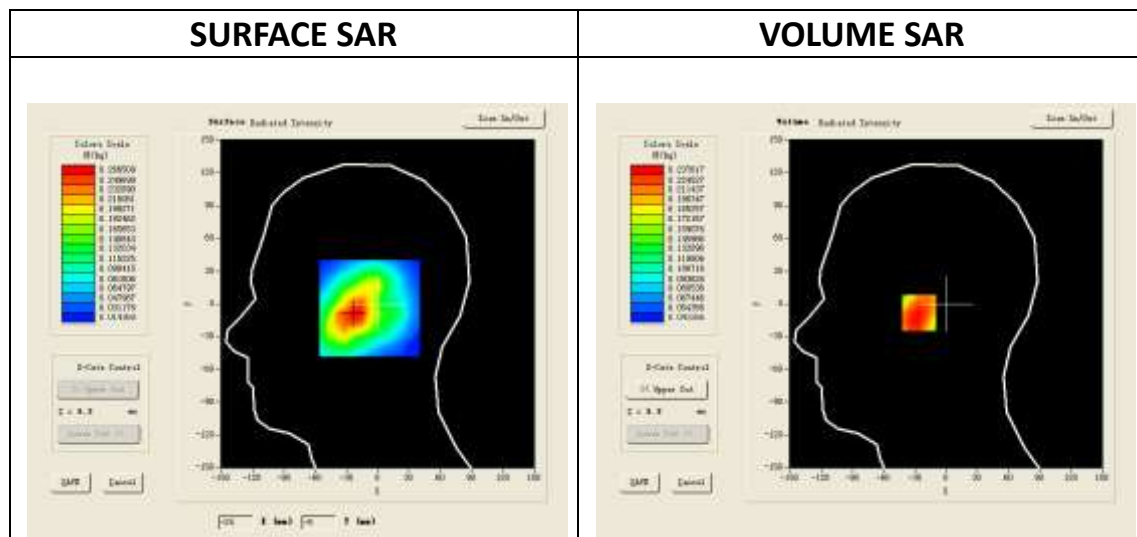
SATIMO Configuration:

- Probe: SSE5; Calibrated: 01/12/2014; Serial No.:SN 22/12 EP159
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Phantom: Flat Phantom; Type: Elliptical Phantom
- Measurement SW: OpenSAR V4_02_01

Configuration/GPRS1900 Mid-Touch-Left/Area Scan: Measurement grid: dx=8mm, dy=8mm

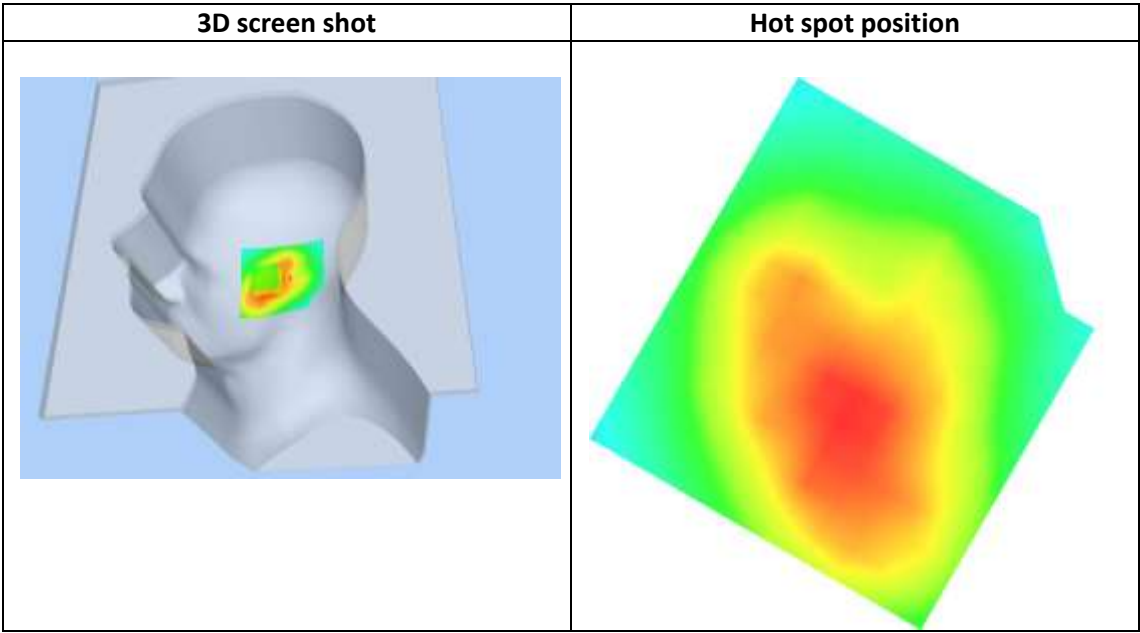
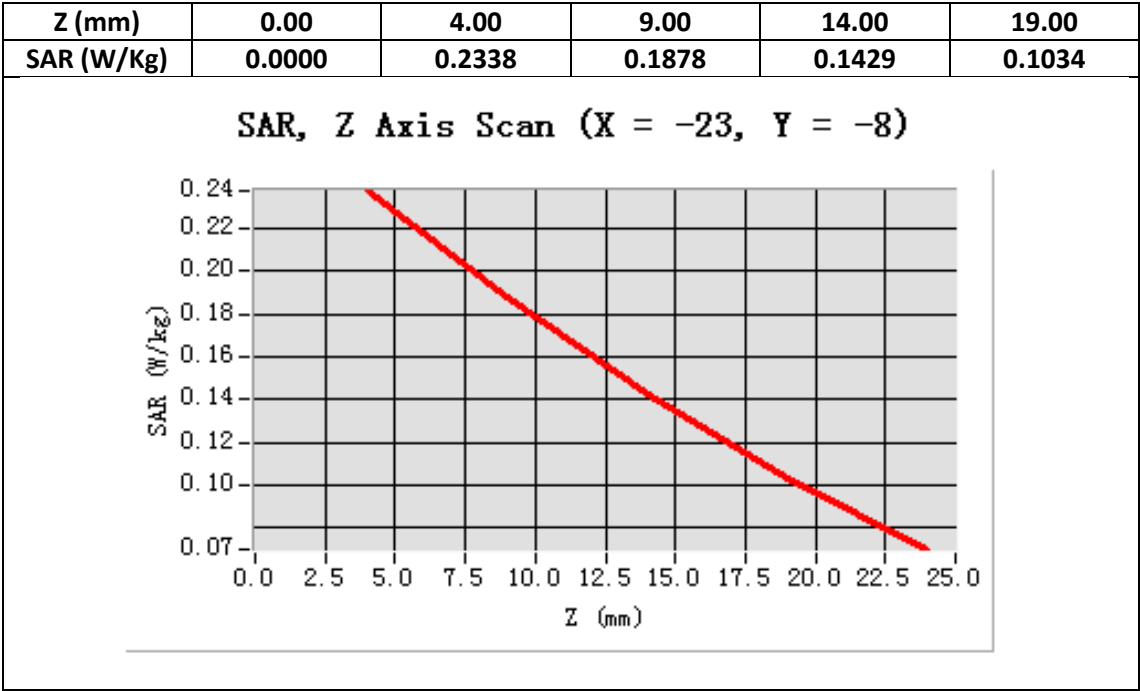
Configuration/GPRS1900 Mid-Touch-Left/Zoom Scan: Measurement grid: dx=8mm,dy=8mm, dz=5mm;

Area Scan	sam_direct_droit2_surf8mm.txt
ZoomScan	5x5x7,dx=8mm dy=8mm dz=5mm,Very fast
Phantom	Left head
Device Position	Cheek
Band	GPRS 1900
Channels	Middle
Signal	TDMA (Crest factor: 8.0)



Maximum location: X=-23.00, Y=-8.00

SAR 10g (W/Kg)	0.166930
SAR 1g (W/Kg)	0.239603



Test Laboratory: AGC Lab
GPRS 1900 Mid-Tilt-Left <SIM 1>
DUT: 3G Smart Phone; Type: S42

Date: Nov. 20,2014

Communication System: Generic GPRS; Communication System Band: GPRS 1900; Duty Cycle: 1:8.3;
Conv.F=4.51;
Frequency: 1880 MHz; Medium parameters used: $f = 1900$ MHz; $\sigma = 1.43$ mho/m; $\epsilon_r = 40.69$; $\rho = 1000$ kg/m³ ;
Phantom section: Left Section
Ambient temperature (°C): 21.0, Liquid temperature (°C): 21.0

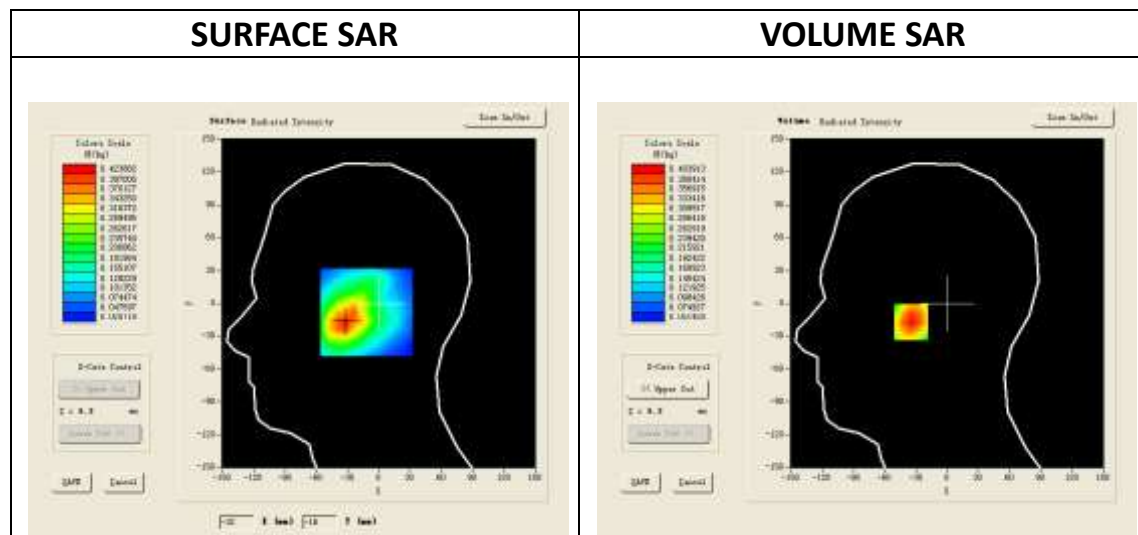
SATIMO Configuration:

- Probe: SSE5; Calibrated: 01/12/2014; Serial No.:SN 22/12 EP159
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Phantom: Flat Phantom; Type: Elliptical Phantom
- Measurement SW: OpenSAR V4_02_01

Configuration/GPRS1900 Mid-Tilt-Left/Area Scan: Measurement grid: dx=8mm, dy=8mm

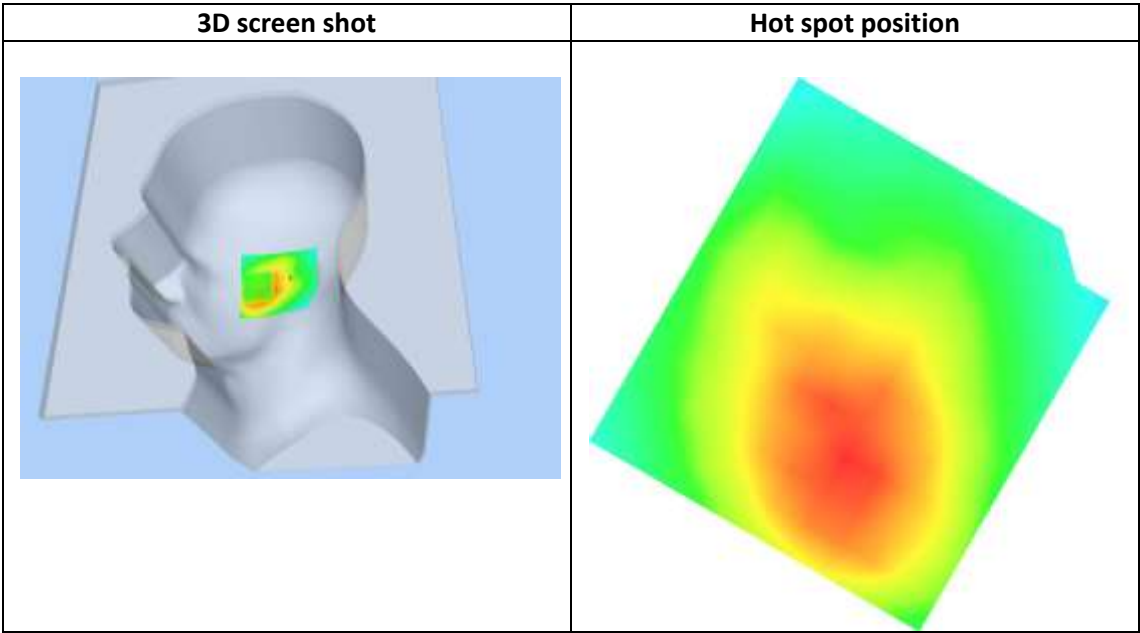
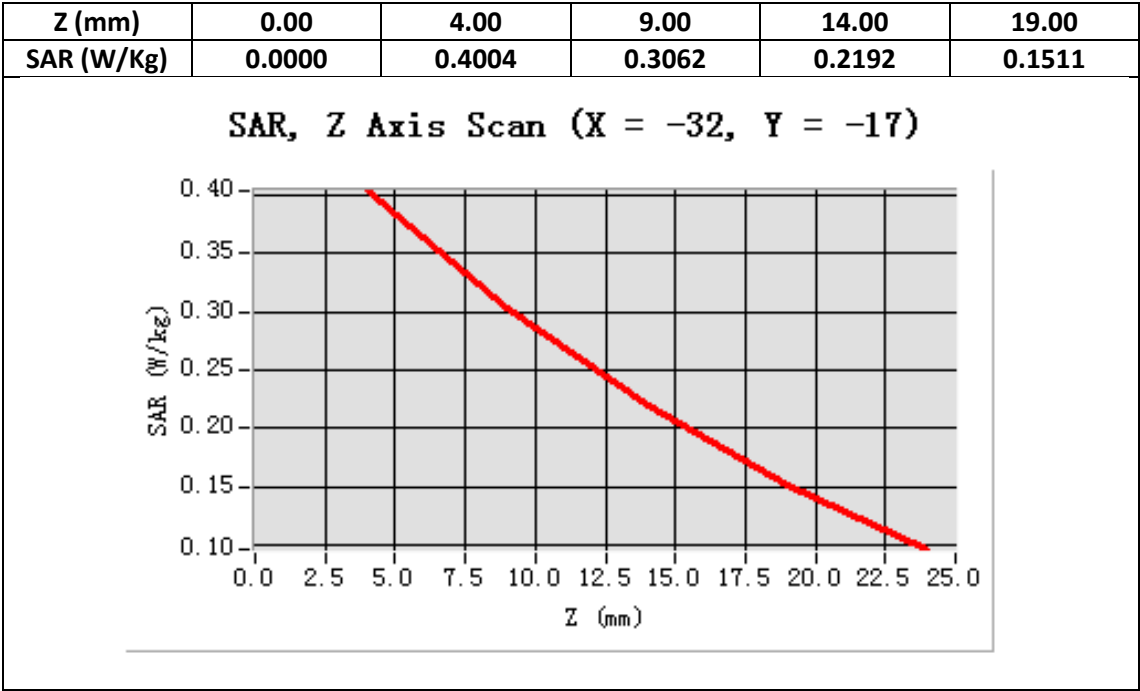
Configuration/GPRS1900 Mid-Tilt-Left/Zoom Scan: Measurement grid: dx=8mm,dy=8mm,dz=5mm;

Area Scan	sam_direct_droit2_surf8mm.txt
ZoomScan	5x5x7,dx=8mm dy=8mm dz=5mm,Very fast
Phantom	Left head
Device Position	Tilt
Band	GPRS 1900
Channels	Middle
Signal	TDMA (Crest factor: 8.0)



Maximum location: X=-32.00, Y=-17.00

SAR 10g (W/Kg)	0.257629
SAR 1g (W/Kg)	0.382184



Test Laboratory: AGC Lab
GPRS 1900 Mid-Touch-Right <SIM 1>
DUT: 3G Smart Phone; **Type:** S42

Date: Nov. 20,2014

Communication System: Generic GPRS; Communication System Band: GPRS 1900; Duty Cycle: 1:8.3;
Conv.F=4.51;
Frequency: 1880 MHz; Medium parameters used: $f = 1900$ MHz; $\sigma = 1.43$ mho/m; $\epsilon_r = 40.69$; $\rho = 1000$ kg/m³ ;
Phantom section: Right Section
Ambient temperature (°C): 21.0, Liquid temperature (°C): 21.0

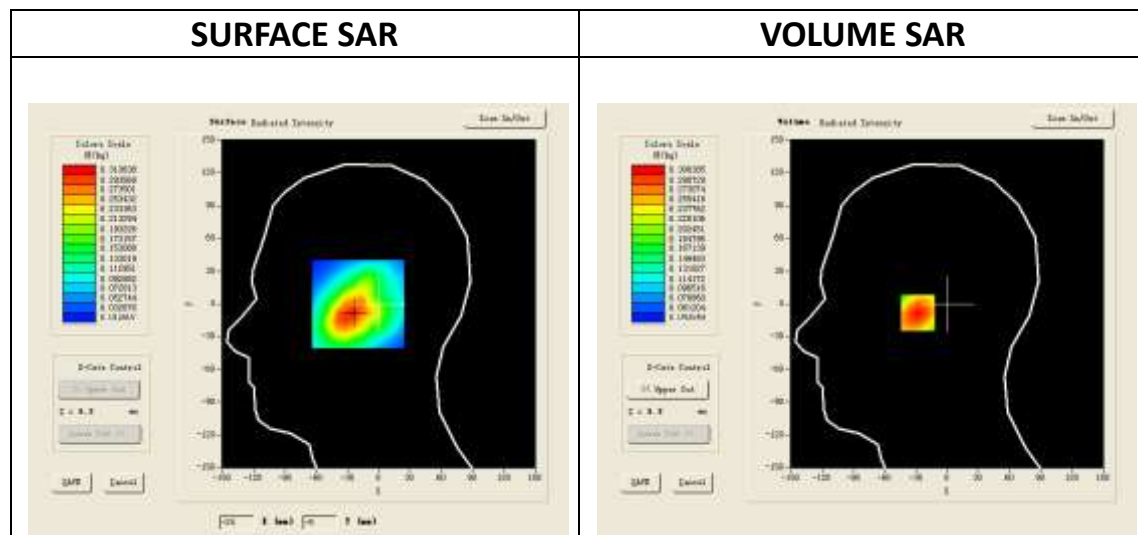
SATIMO Configuration:

- Probe: SSE5; Calibrated: 01/12/2014; Serial No.:SN 22/12 EP159
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Phantom: Flat Phantom; Type: Elliptical Phantom
- Measurement SW: OpenSAR V4_02_01

Configuration/GPRS1900 Mid-Touch-Right/Area Scan: Measurement grid: dx=8mm, dy=8mm

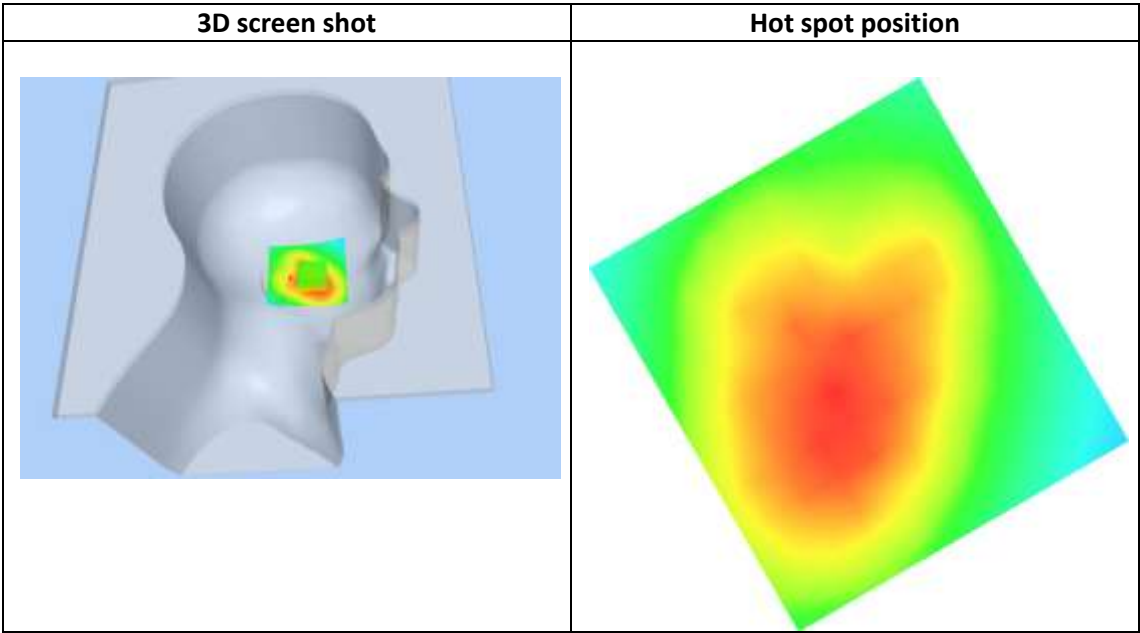
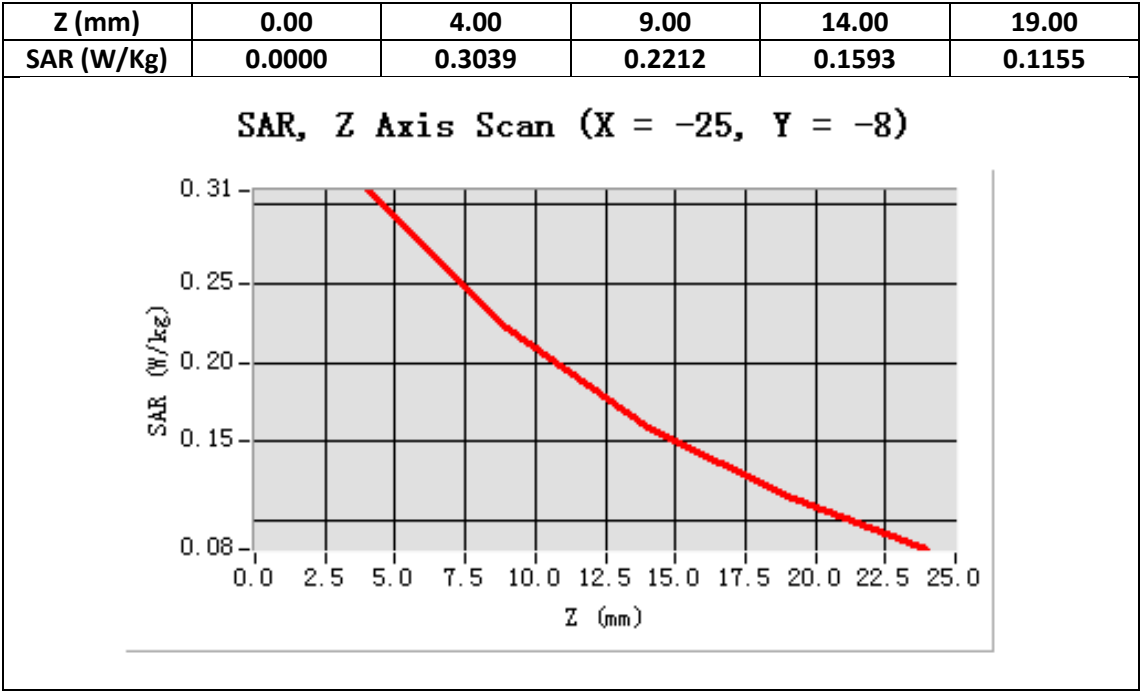
Configuration/GPRS1900 Mid-Touch-Right/Zoom Scan: Measurement grid: dx=8mm,dy=8mm, dz=5mm;

Area Scan	sam_direct_droit2_surf8mm.txt
ZoomScan	5x5x7,dx=8mm dy=8mm dz=5mm,Very fast
Phantom	Right head
Device Position	Cheek
Band	GPRS 1900
Channels	Middle
Signal	TDMA (Crest factor: 8.0)



Maximum location: X=-25.00, Y=-8.00

SAR 10g (W/Kg)	0.206936
SAR 1g (W/Kg)	0.295854



Test Laboratory: AGC Lab
GPRS 1900 Mid-Tilt-Right <SIM 1>
DUT: 3G Smart Phone; Type: S42

Date: Nov. 20,2014

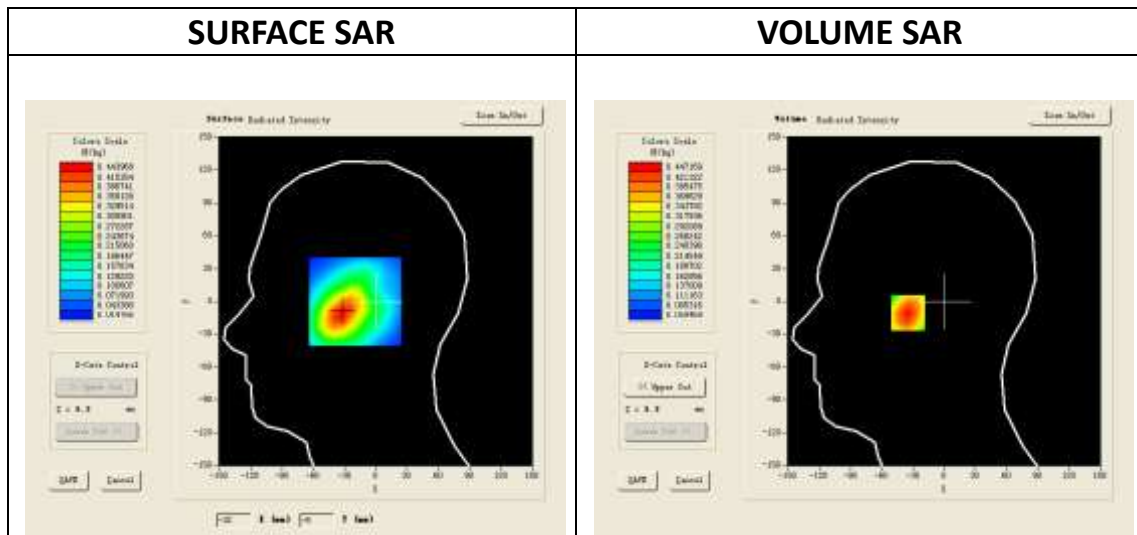
Communication System: Generic GPRS; Communication System Band: GPRS 1900; Duty Cycle: 1:8.3;
Conv.F=4.51; Frequency: 1880 MHz; Medium parameters used: $f = 1900$ MHz; $\sigma = 1.43$ mho/m; $\epsilon_r = 40.69$; $\rho = 1000$ kg/m³ ;
Phantom section: Right Section
Ambient temperature (°C): 21.0, Liquid temperature (°C): 21.0

SATIMO Configuration:

- Probe: SSE5; Calibrated: 01/12/2014; Serial No.:SN 22/12 EP159
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Phantom: Flat Phantom; Type: Elliptical Phantom
- Measurement SW: OpenSAR V4_02_01

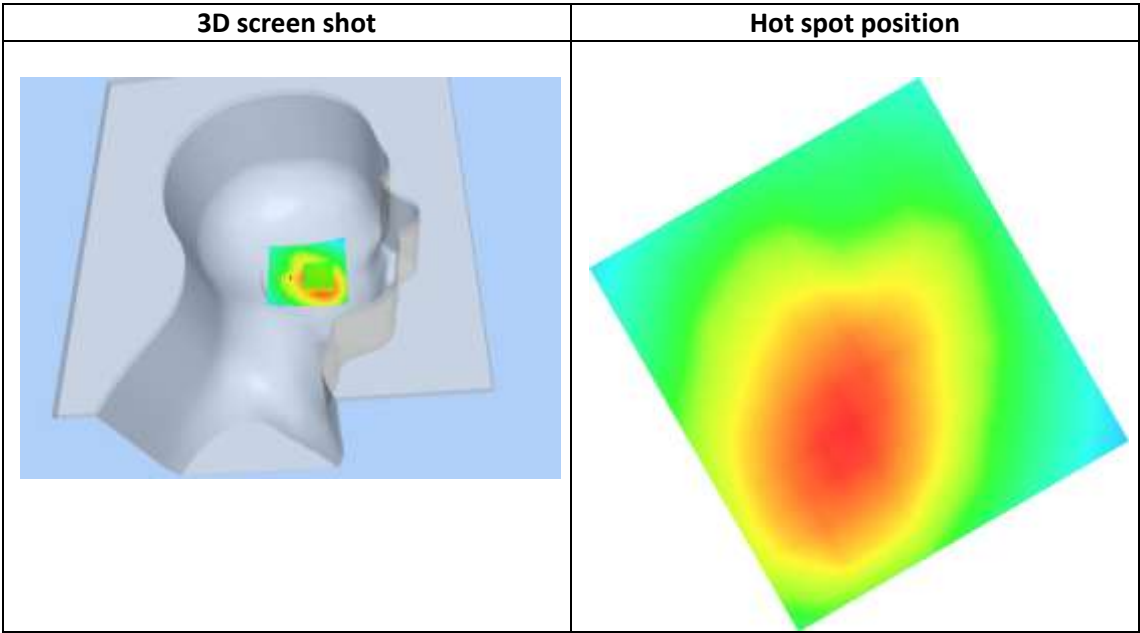
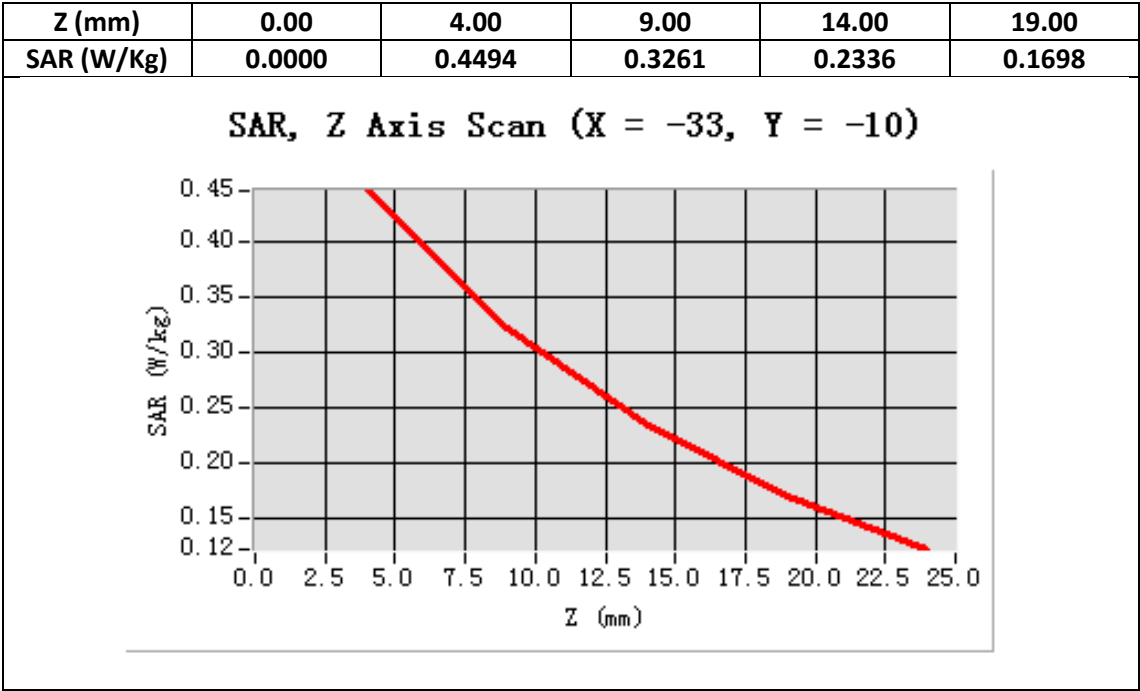
Configuration/GPRS1900 Mid-Tilt-Right/Area Scan: Measurement grid: dx=8mm, dy=8mm
Configuration/GPRS1900 Mid-Tilt-Right/Zoom Scan: Measurement grid: dx=8mm,dy=8mm, dz=5mm;

Area Scan	sam_direct_droit2_surf8mm.txt
ZoomScan	5x5x7,dx=8mm dy=8mm dz=5mm,Very fast
Phantom	Right head
Device Position	Tilt
Band	GPRS 1900
Channels	Middle
Signal	TDMA (Crest factor: 8.0)



Maximum location: X=-33.00, Y=-10.00

SAR 10g (W/Kg)	0.289036
SAR 1g (W/Kg)	0.425873



Test Laboratory: AGC Lab
GPRS 1900 Mid-Body- Back <SIM 1>
DUT: 3G Smart Phone; Type: S42

Date: Nov. 20,2014

Communication System: Generic GPRS; Communication System Band: GPRS 1900; Duty Cycle: 1:8.3;
Conv.F=4.45;
Frequency: 1880 MHz; Medium parameters used: $f = 1900$ MHz; $\sigma = 1.54$ mho/m; $\epsilon_r = 53.44$; $\rho = 1000$ kg/m³ ;
Phantom section: Flat Section
Ambient temperature (°C): 21.0, Liquid temperature (°C): 21.0

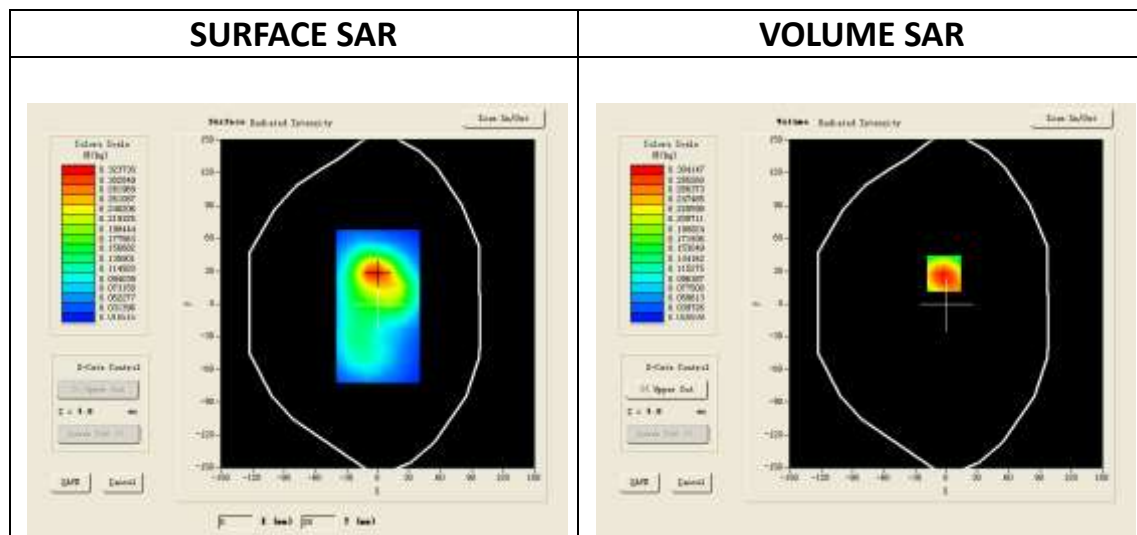
SATIMO Configuration:

- Probe: SSE5; Calibrated: 01/12/2014; Serial No.:SN 22/12 EP159
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Phantom: Flat Phantom; Type: Elliptical Phantom
- Measurement SW: OpenSAR V4_02_01

Configuration/GPRS1900 Mid-Body-Back/Area Scan: Measurement grid: dx=8mm, dy=8mm

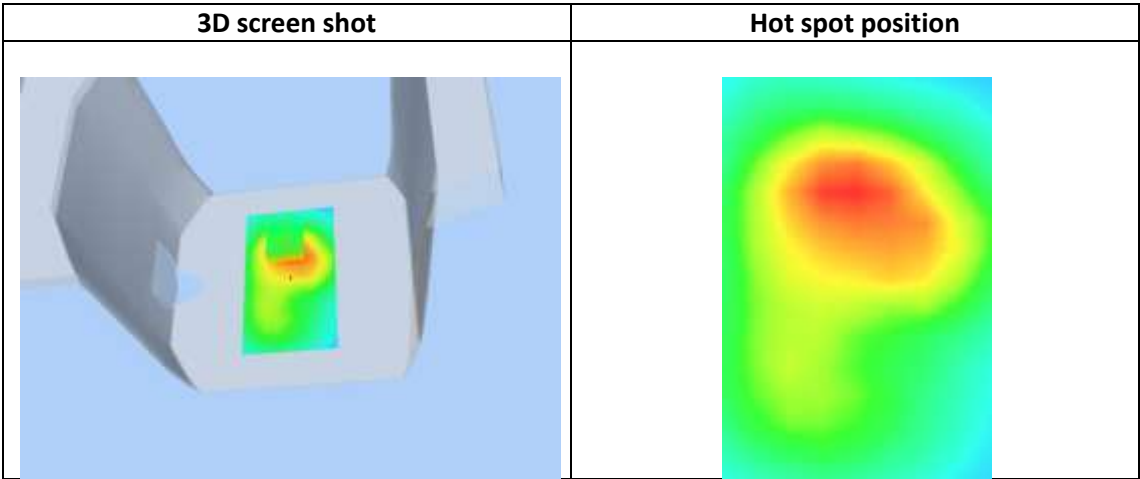
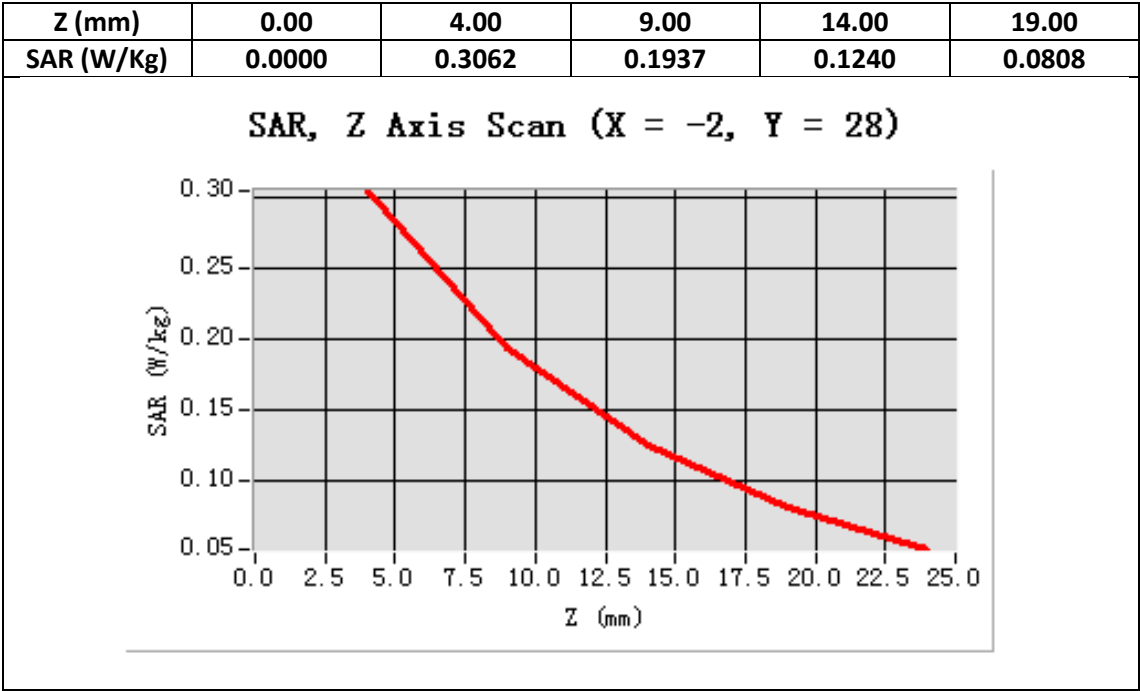
Configuration/GPRS1900 Mid-Body-Back/Zoom Scan: Measurement grid: dx=8mm,dy=8mm, dz=5mm;

Area Scan	surf_sam_plan.txt
ZoomScan	5x5x7,dx=8mm dy=8mm dz=5mm,Very fast
Phantom	Validation plane
Device Position	Body Back
Band	GPRS 1900
Channels	Middle
Signal	TDMA (Crest factor: 8.0)



Maximum location: X=-2.00, Y=28.00

SAR 10g (W/Kg)	0.196742
SAR 1g (W/Kg)	0.315940



Test Laboratory: AGC Lab
GPRS 1900 Mid-Body -Front (MS) <SIM 1>
DUT: 3G Smart Phone; **Type:** S42

Date: Nov. 20,2014

Communication System: Generic GPRS; Communication System Band: GPRS 1900; Duty Cycle: 1:8.3;
Conv.F=4.45;
Frequency: 1880 MHz; Medium parameters used: $f = 1900$ MHz; $\sigma = 1.54$ mho/m; $\epsilon_r = 53.44$; $\rho = 1000$ kg/m³ ;
Phantom section: Flat Section
Ambient temperature (°C): 21.0, Liquid temperature (°C): 21.0

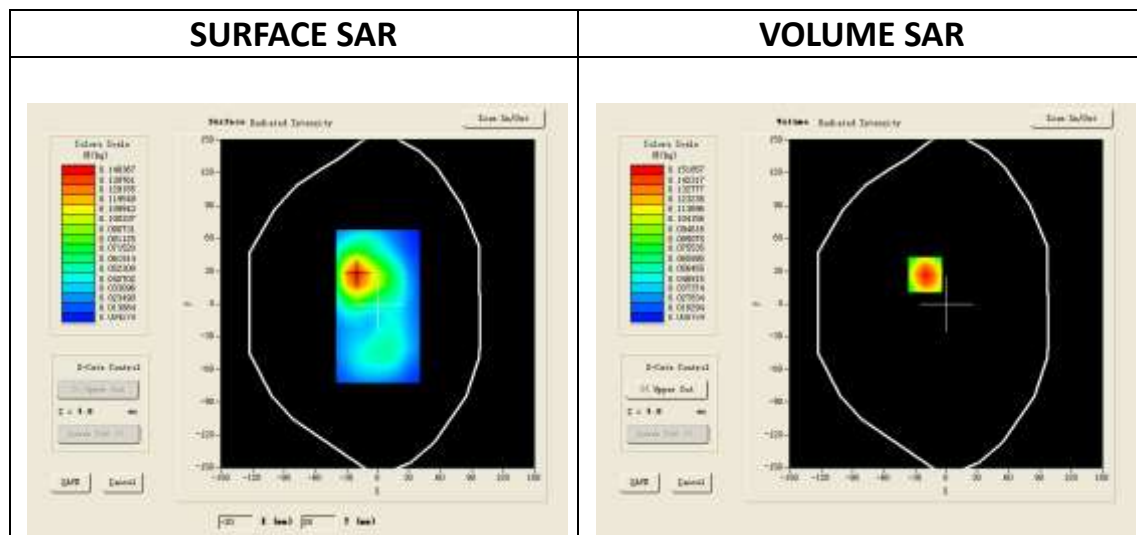
SATIMO Configuration:

- Probe: SSE5; Calibrated: 01/12/2014; Serial No.:SN 22/12 EP159
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Phantom: Flat Phantom; Type: Elliptical Phantom
- Measurement SW: OpenSAR V4_02_01

Configuration/GPRS1900 Mid-Body- Front /Area Scan: Measurement grid: dx=8mm, dy=8mm

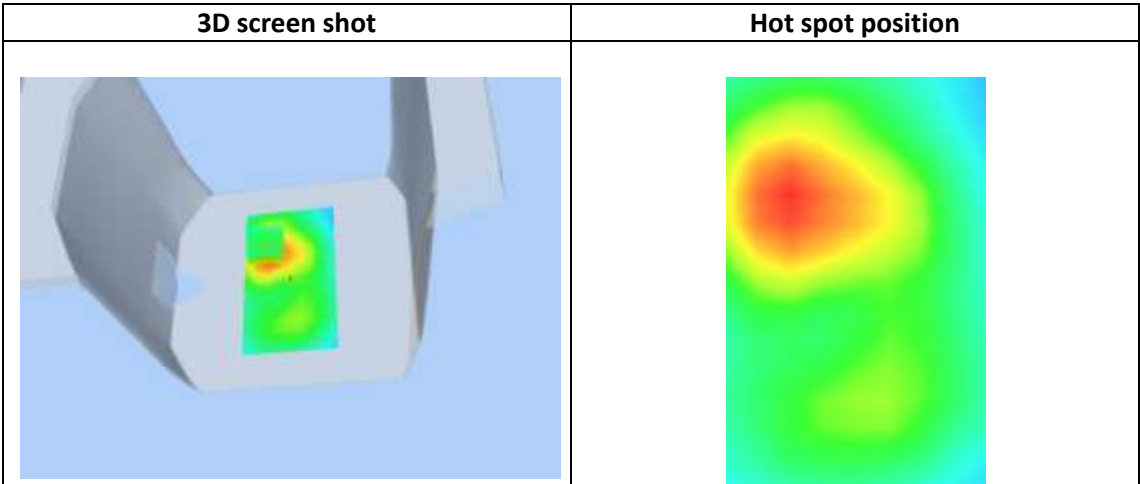
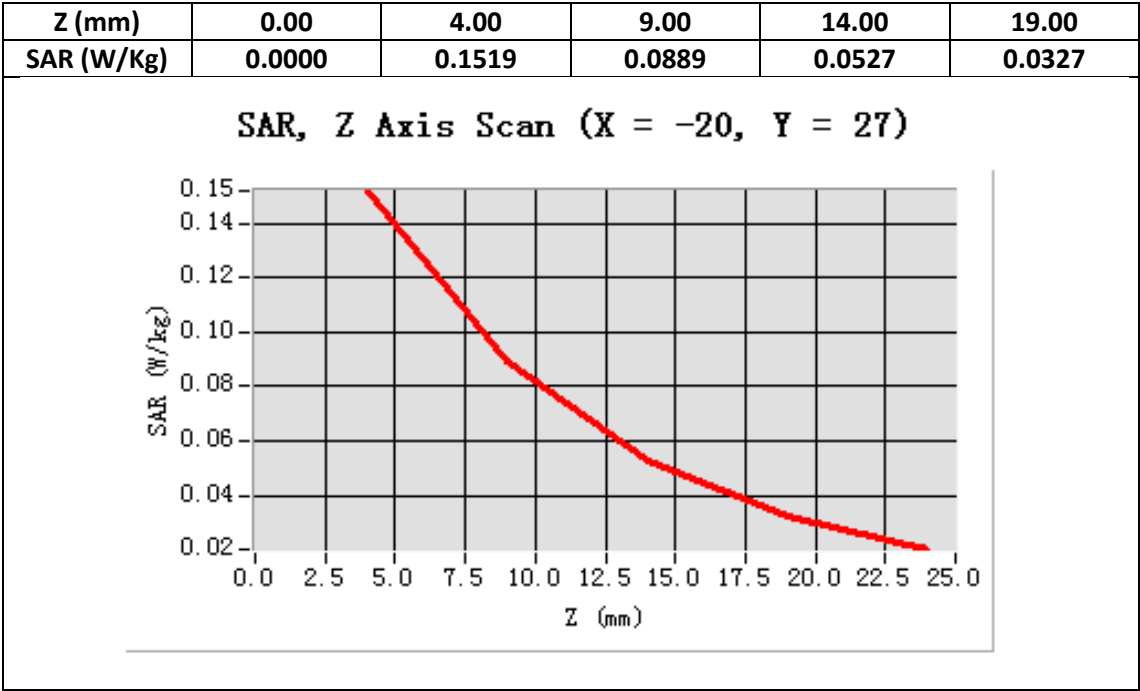
Configuration/GPRS1900 Mid-Body- Front /Zoom Scan: Measurement grid: dx=8mm,dy=8mm, dz=5mm;

Area Scan	surf_sam_plan.txt
ZoomScan	5x5x7,dx=8mm dy=8mm dz=5mm,Very fast
Phantom	Validation plane
Device Position	Body Front
Band	GPRS 1900
Channels	Middle
Signal	TDMA (Crest factor: 8.0)



Maximum location: X=-20.00, Y=27.00

SAR 10g (W/Kg)	0.087165
SAR 1g (W/Kg)	0.155117



Test Laboratory: AGC Lab
GPRS 1900 Mid- Edge1 (MS) <SIM 1>
DUT: 3G Smart Phone; Type: S42

Date: Nov. 20,2014

Communication System: GPRS-2 Slot; Communication System Band: GPRS 1900;Duty Cycle:1:4.2; Conv.F=4.45;
Frequency: 1880 MHz; Medium parameters used: $f = 1900$ MHz; $\sigma = 1.54$ mho/m; $\epsilon_r = 53.44$; $\rho = 1000$ kg/m³ ;
Phantom section: Flat Section
Ambient temperature (°C): 21.0, Liquid temperature (°C): 21.0

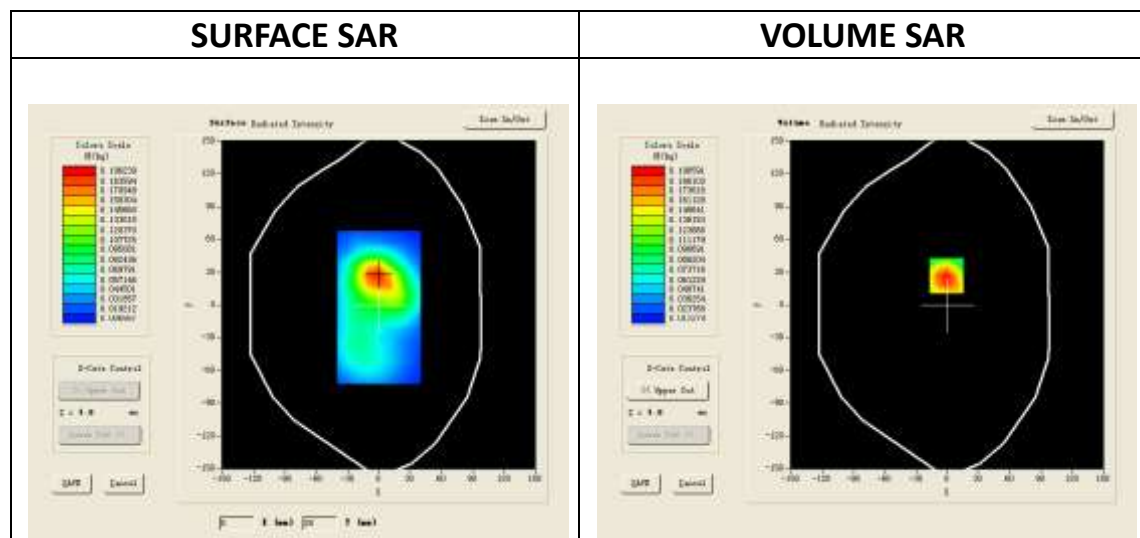
SATIMO Configuration:

- Probe: SSE5; Calibrated: 01/12/2014; Serial No.:SN 22/12 EP159
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Phantom: Flat Phantom; Type: Elliptical Phantom
- Measurement SW: OpenSAR V4_02_01

Configuration/GPRS1900 Mid- Edge1/Area Scan: Measurement grid: dx=8mm, dy=8mm

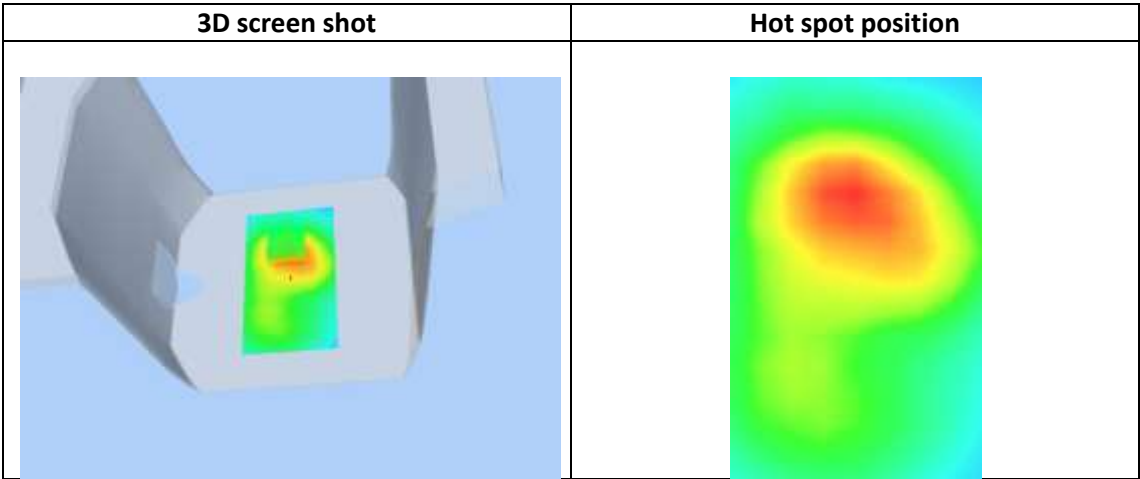
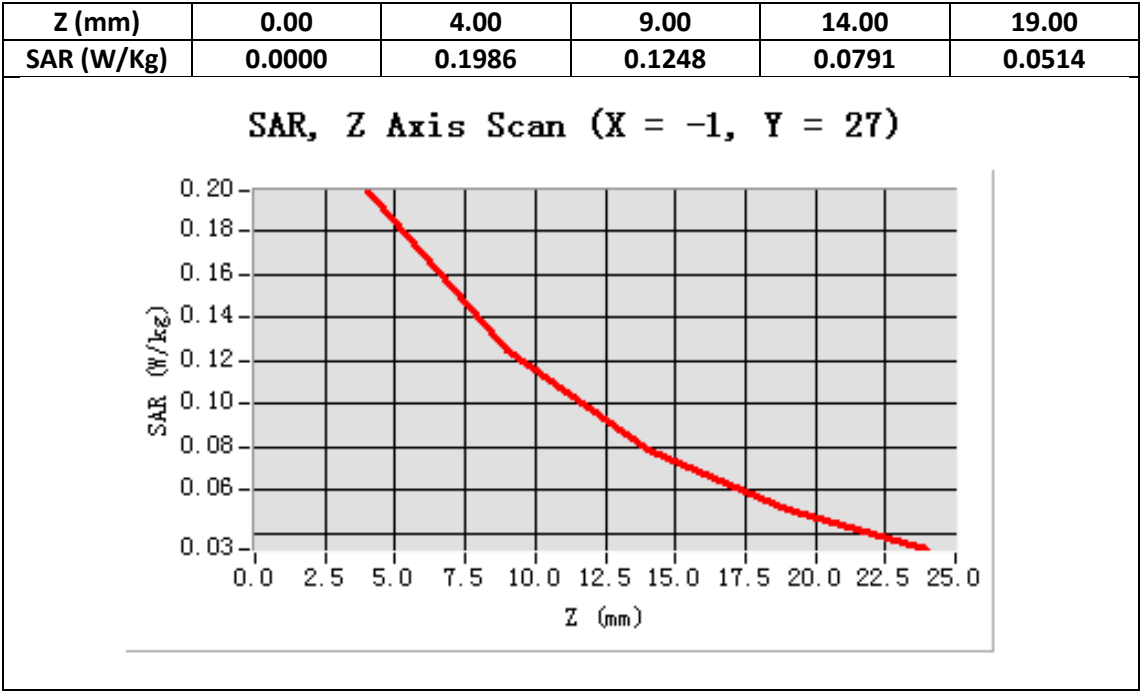
Configuration/GPRS1900 Mid- Edge1/Zoom Scan: Measurement grid: dx=8mm,dy=8mm, dz=5mm;

Area Scan	surf_sam_plan.txt
ZoomScan	5x5x7,dx=8mm dy=8mm dz=5mm,Very fast
Phantom	Validation plane
Device Position	Edge1
Band	GPRS 1900
Channels	Middle
Signal	TDMA (Crest factor: 8.0)



Maximum location: X=-1.00, Y=27.00

SAR 10g (W/Kg)	0.122745
SAR 1g (W/Kg)	0.203176



Test Laboratory: AGC Lab
GPRS 1900 Mid- Edge2 (MS) <SIM 1>
DUT: 3G Smart Phone; Type: S42

Date: Nov. 20,2014

Communication System: GPRS-2 Slot; Communication System Band: GPRS 1900;Duty Cycle:1:4.2; Conv.F=4.45;
Frequency: 1880 MHz; Medium parameters used: $f = 1900$ MHz; $\sigma = 1.54$ mho/m; $\epsilon_r = 53.44$; $\rho = 1000$ kg/m³ ;
Phantom section: Flat Section
Ambient temperature (°C): 21.0, Liquid temperature (°C): 21.0

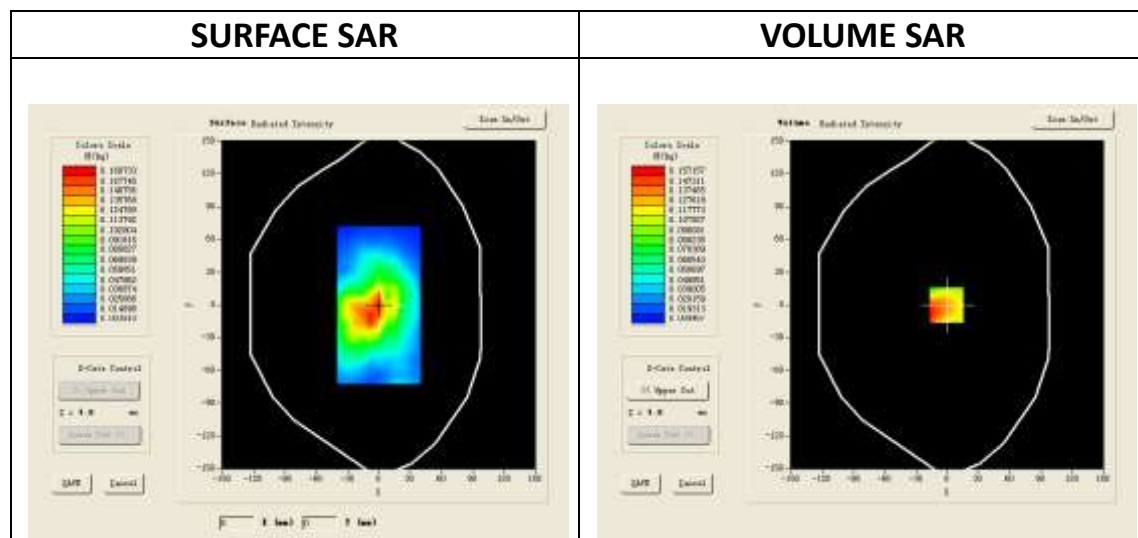
SATIMO Configuration:

- Probe: SSE5; Calibrated: 01/12/2014; Serial No.:SN 22/12 EP159
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Phantom: Flat Phantom; Type: Elliptical Phantom
- Measurement SW: OpenSAR V4_02_01

Configuration/GPRS1900 Mid- Edge2/Area Scan: Measurement grid: dx=8mm, dy=8mm

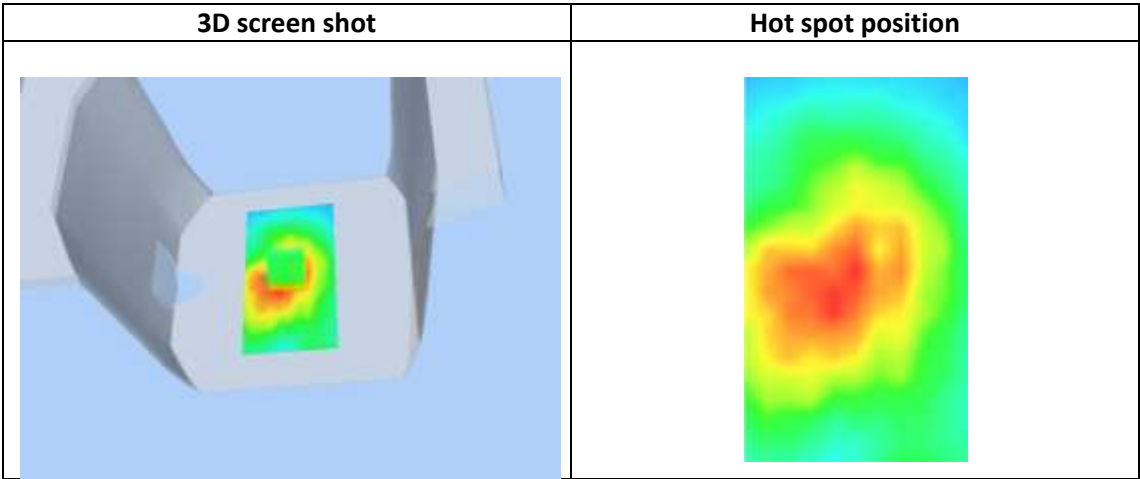
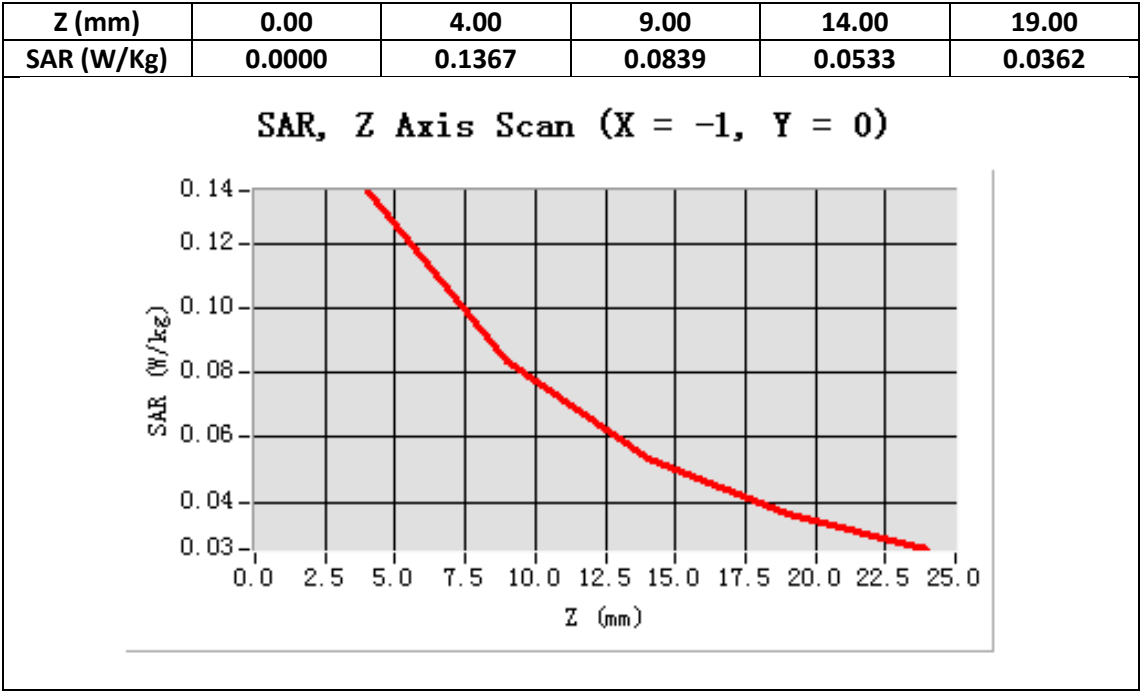
Configuration/GPRS1900 Mid- Edge2/Zoom Scan: Measurement grid: dx=8mm,dy=8mm, dz=5mm;

Area Scan	surf_sam_plan.txt
ZoomScan	5x5x7,dx=8mm dy=8mm dz=5mm,Very fast
Phantom	Validation plane
Device Position	Edge2
Band	GPRS 1900
Channels	Middle
Signal	TDMA (Crest factor: 8.0)



Maximum location: X=-1.00, Y=0.00

SAR 10g (W/Kg)	0.087464
SAR 1g (W/Kg)	0.143326



Test Laboratory: AGC Lab
GPRS 1900 Mid- Edge4 (MS) <SIM 1>
DUT: 3G Smart Phone; Type: S42

Date: Nov. 20,2014

Communication System: GPRS-2 Slot; Communication System Band: GPRS 1900;Duty Cycle:1:4.2; Conv.F=4.45;
Frequency: 1880 MHz; Medium parameters used: $f = 1900$ MHz; $\sigma = 1.54$ mho/m; $\epsilon_r = 53.44$; $\rho = 1000$ kg/m³ ;
Phantom section: Flat Section
Ambient temperature (°C): 21.0, Liquid temperature (°C): 21.0

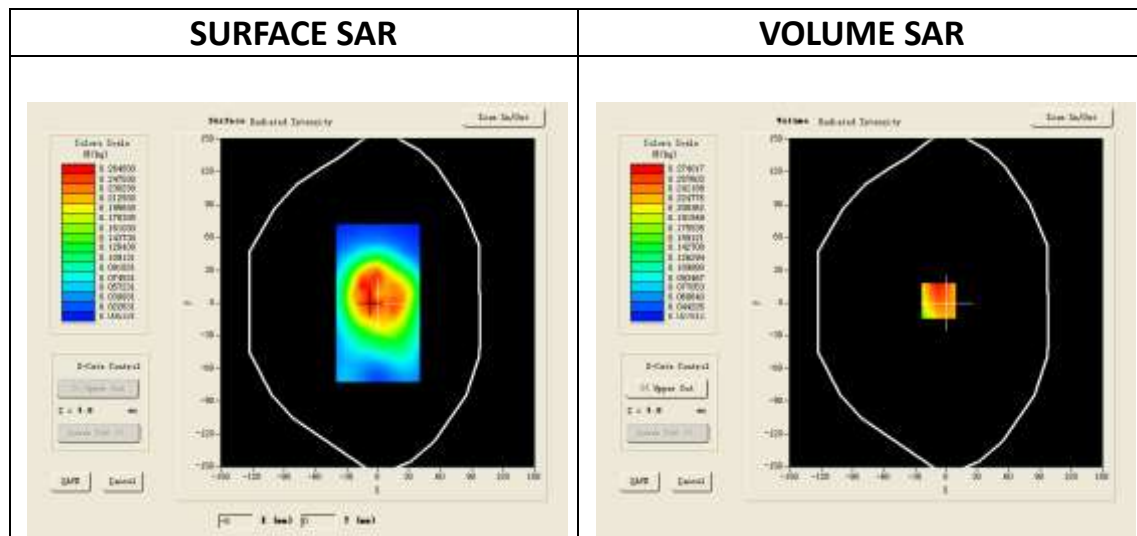
SATIMO Configuration:

- Probe: SSE5; Calibrated: 01/12/2014; Serial No.:SN 22/12 EP159
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Phantom: Flat Phantom; Type: Elliptical Phantom
- Measurement SW: OpenSAR V4_02_01

Configuration/GPRS1900 Mid- Edge4/Area Scan: Measurement grid: dx=8mm, dy=8mm

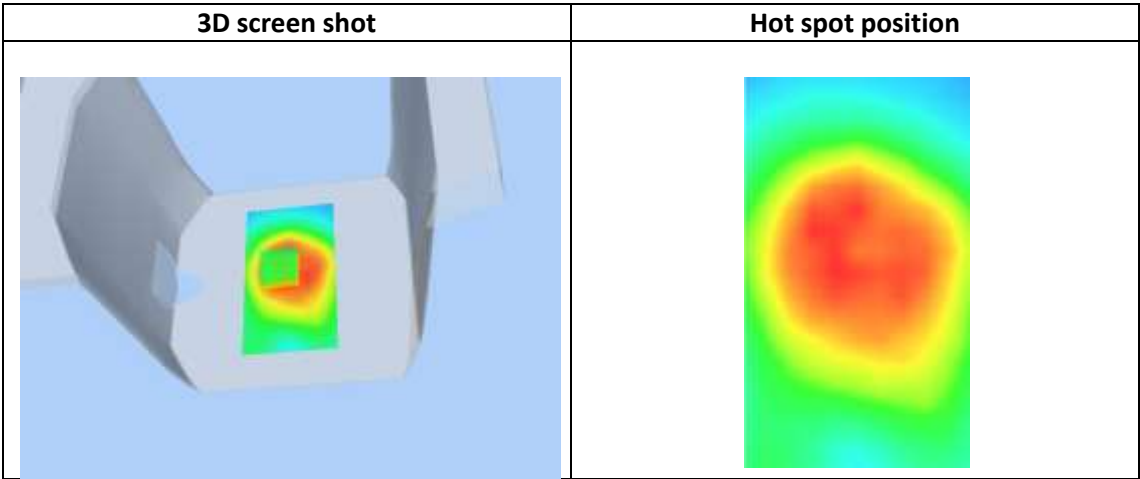
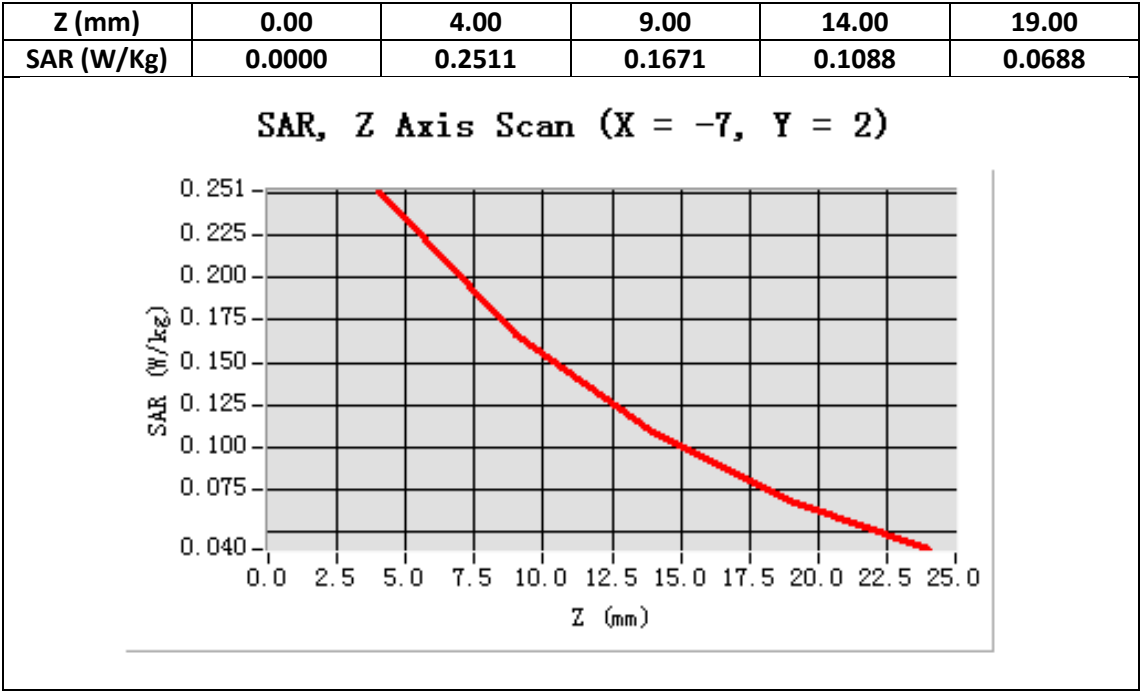
Configuration/GPRS1900 Mid- Edge4/Zoom Scan: Measurement grid: dx=8mm,dy=8mm, dz=5mm;

Area Scan	surf_sam_plan.txt
ZoomScan	5x5x7,dx=8mm dy=8mm dz=5mm,Very fast
Phantom	Validation plane
Device Position	Edge4
Band	GPRS 1900
Channels	Middle
Signal	TDMA (Crest factor: 8.0)



Maximum location: X=-7.00, Y=2.00

SAR 10g (W/Kg)	0.160435
SAR 1g (W/Kg)	0.258908



Test Laboratory: AGC Lab
WCDMA Band II Mid-Touch-Left (RMC)
DUT: 3G Smart Phone; Type: S42

Date: Nov. 20,2014

Communication System: UMTS; Communication System Band: Band II UTRA/FDD ;Duty Cycle:1:1;Conv.F=4.51
Frequency: 1880 MHz; Medium parameters used: $f = 1900$ MHz; $\sigma = 1.43$ mho/m; $\epsilon_r = 40.69$; $\rho = 1000$ kg/m³ ;
Phantom section: Left Section
Ambient temperature (°C):21, Liquid temperature (°C):21

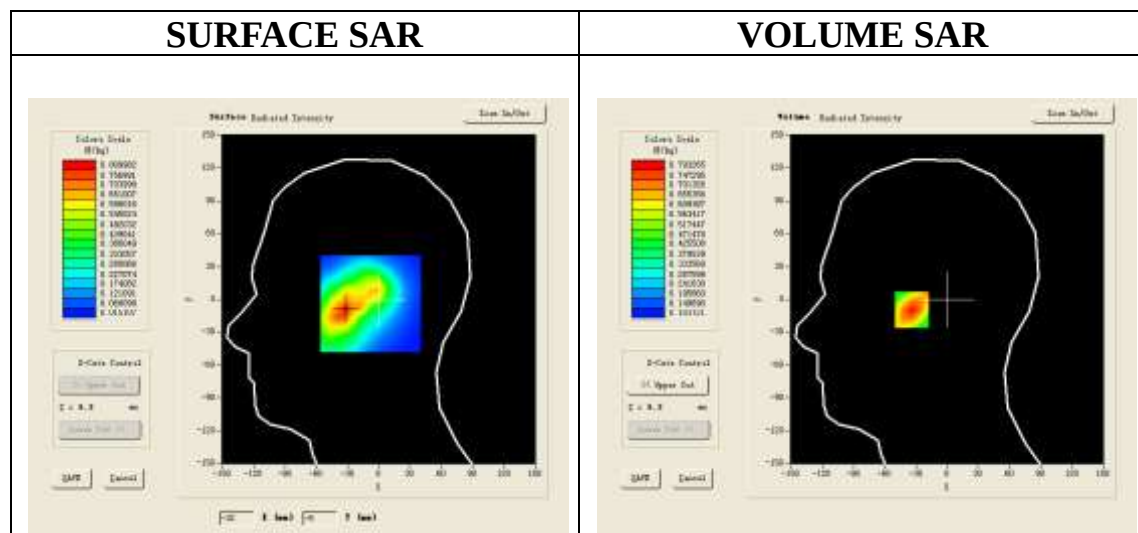
SATIMO Configuration:

- Probe: SSE5; Calibrated: 01/12/2014; Serial No.:SN 22/12 EP159
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Phantom: Flat Phantom; Type: Elliptical Phantom
- Measurement SW: OpenSAR V4_02_01

Configuration/ WCDMA Band II Mid-Touch-Left/Area Scan: Measurement grid: dx=8mm, dy=8mm

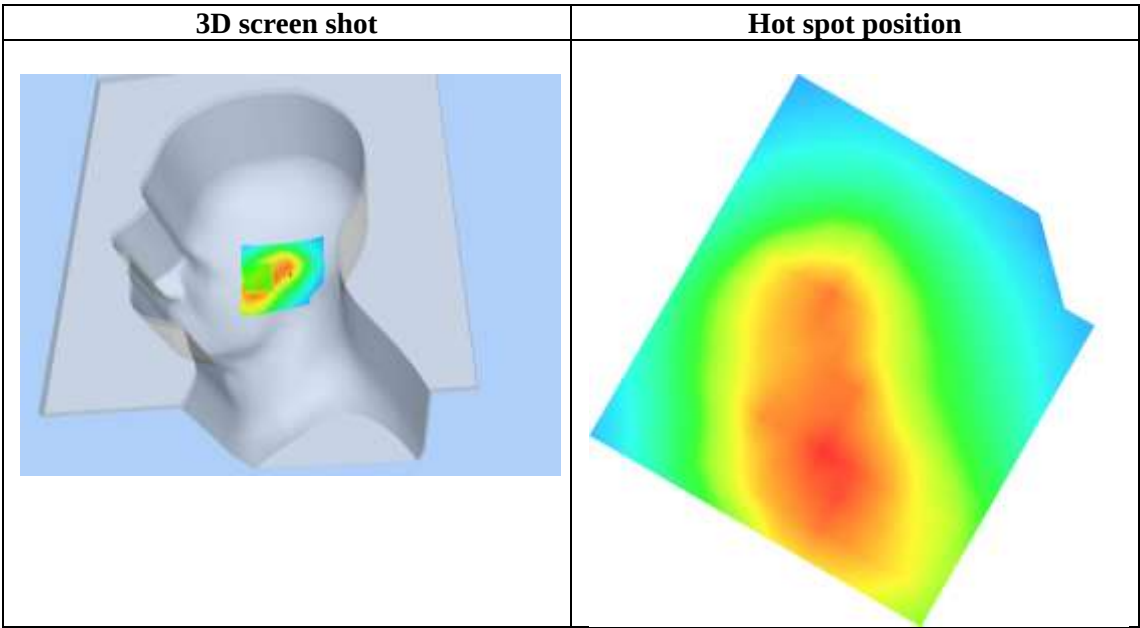
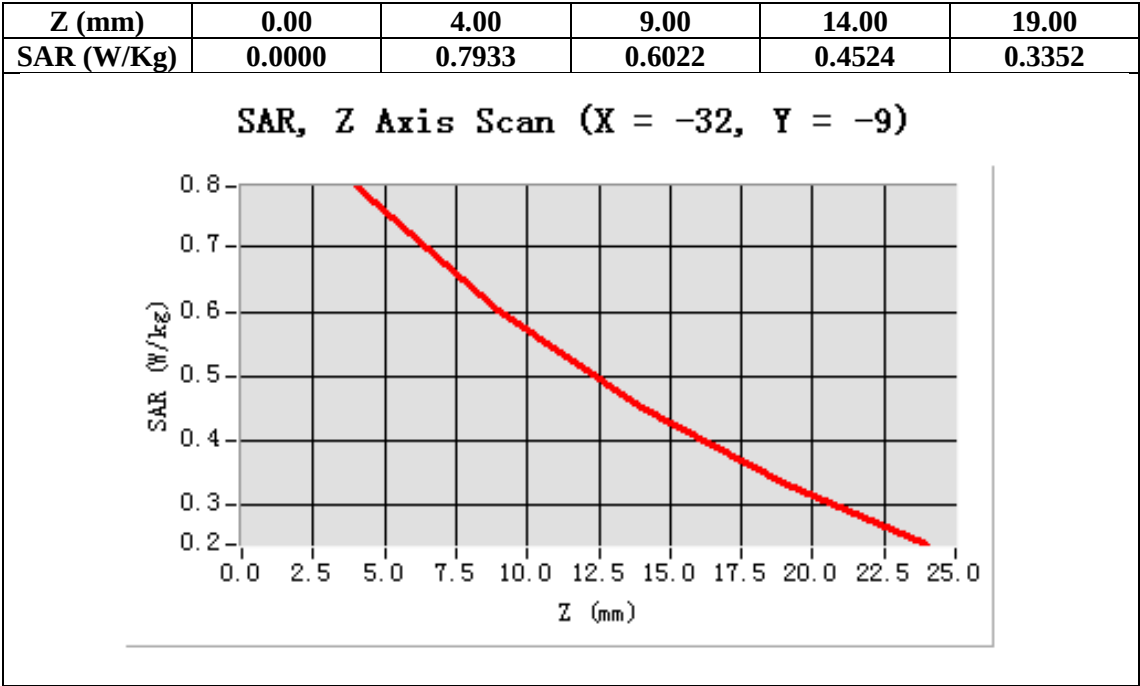
Configuration/ WCDMA Band II Mid-Touch-Left/Zoom Scan: Measurement grid:dx=8mm,dy=8mm,dz=5mm;

Area Scan	sam_direct_droit2_surf8mm.txt
ZoomScan	5x5x7,dx=8mm dy=8mm dz=5mm,Very fast
Phantom	Left head
Device Position	Cheek
Band	WCDMA Band II
Channels	Middle
Signal	CDMA (Crest factor: 1.0)



Maximum location: X=-32.00, Y=-9.00

SAR 10g (W/Kg)	0.511278
SAR 1g (W/Kg)	0.753692



Test Laboratory: AGC Lab
WCDMA Band II Mid-Tilt-Left (RMC)
DUT: 3G Smart Phone; Type: S42

Date: Nov. 20,2014

Communication System: UMTS; Communication System Band: Band II UTRA/FDD ;Duty Cycle:1:1; Conv.F=4.51
Frequency: 1880 MHz; Medium parameters used: $f = 1900$ MHz; $\sigma = 1.43$ mho/m; $\epsilon_r = 40.69$; $\rho = 1000$ kg/m³ ;
Phantom section: Left Section
Ambient temperature (°C):21, Liquid temperature (°C):21

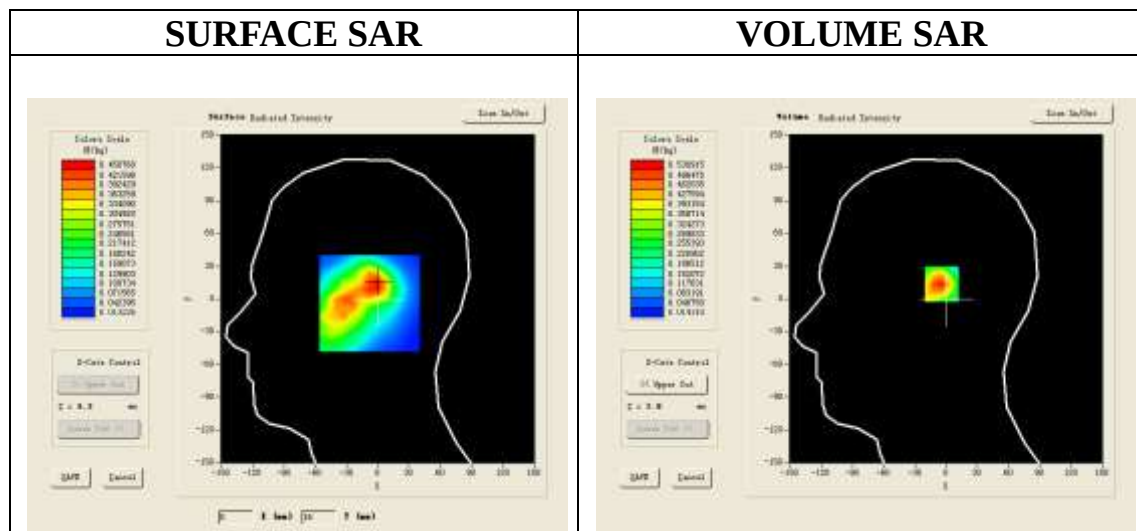
SATIMO Configuration:

- Probe: SSE5; Calibrated: 01/12/2014; Serial No.:SN 22/12 EP159
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Phantom: Flat Phantom; Type: Elliptical Phantom
- Measurement SW: OpenSAR V4_02_01

Configuration/ WCDMA Band II Mid-Tilt-Left/Area Scan: Measurement grid: dx=8mm, dy=8mm

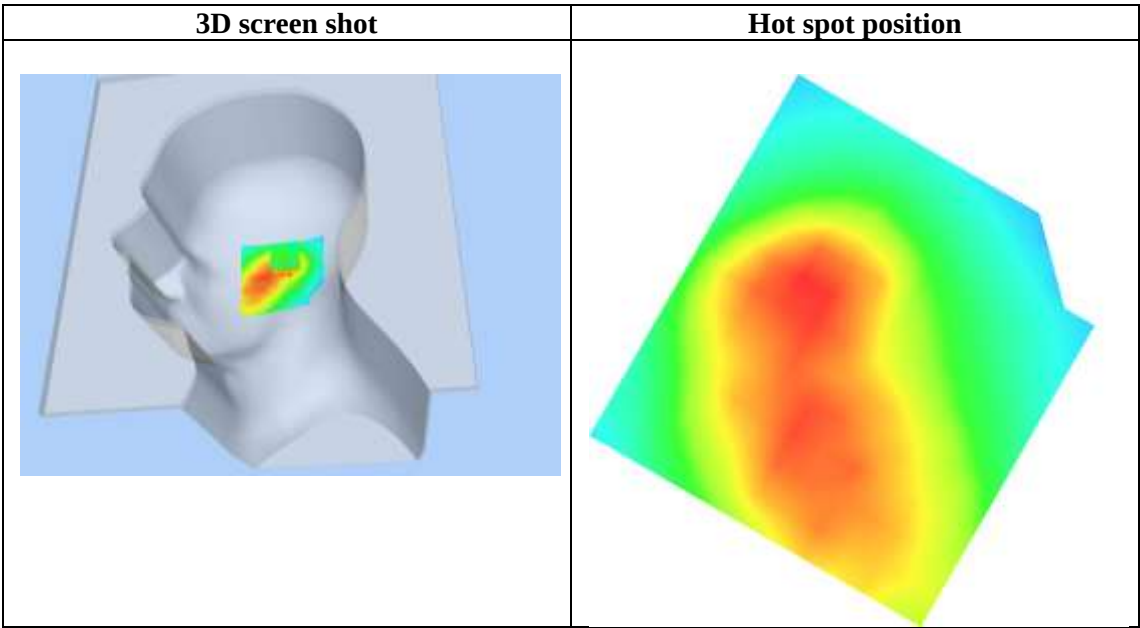
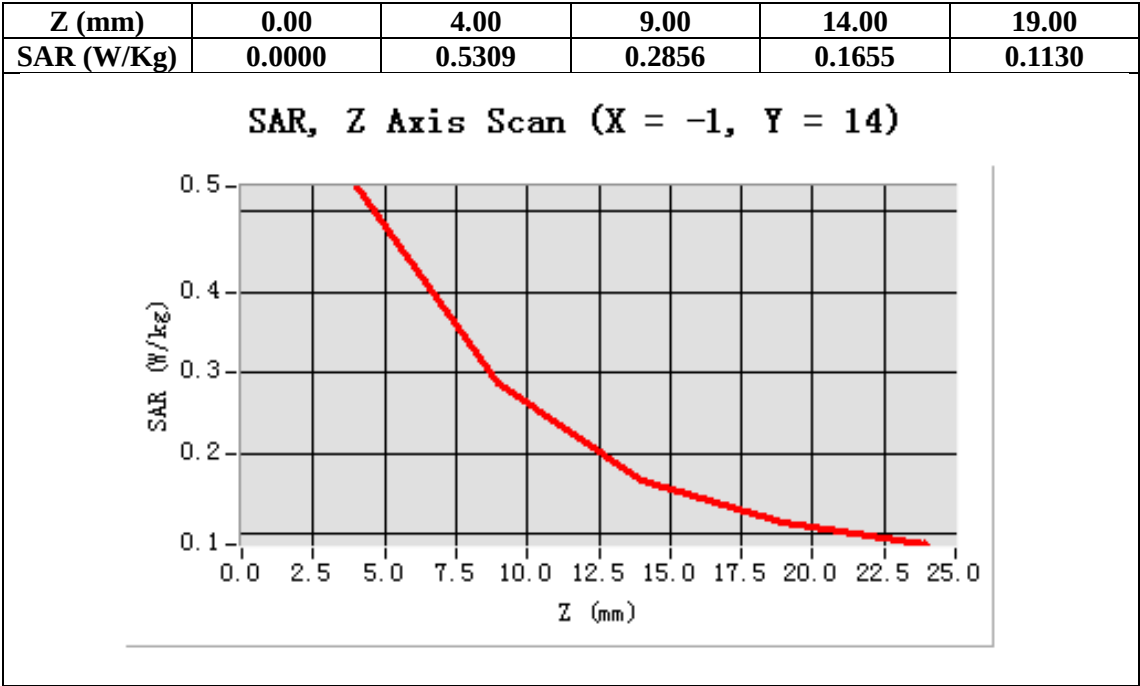
Configuration/ WCDMA Band II Mid-Tilt-Left/Zoom Scan: Measurement grid: dx=8mm,dy=8mm, dz=5mm;

Area Scan	sam_direct_droit2_surf8mm.txt
ZoomScan	5x5x7,dx=8mm dy=8mm dz=5mm,Very fast
Phantom	Left head
Device Position	Tilt
Band	WCDMA Band II
Channels	Middle
Signal	CDMA (Crest factor: 1.0)



Maximum location: X=-1.00, Y=14.00

SAR 10g (W/Kg)	0.271279
SAR 1g (W/Kg)	0.503205



Test Laboratory: AGC Lab
WCDMA Band II Mid-Touch-Right (RMC)
DUT: 3G Smart Phone; Type: S42

Date: Nov. 20,2014

Communication System: UMTS; Communication System Band: Band II UTRA/FDD ;Duty Cycle:1:1; Conv.F=4.51
Frequency: 1880 MHz; Medium parameters used: $f = 1900$ MHz; $\sigma = 1.43$ mho/m; $\epsilon_r = 40.69$; $\rho = 1000$ kg/m³ ;
Phantom section: Right Section
Ambient temperature (°C):21, Liquid temperature (°C):21

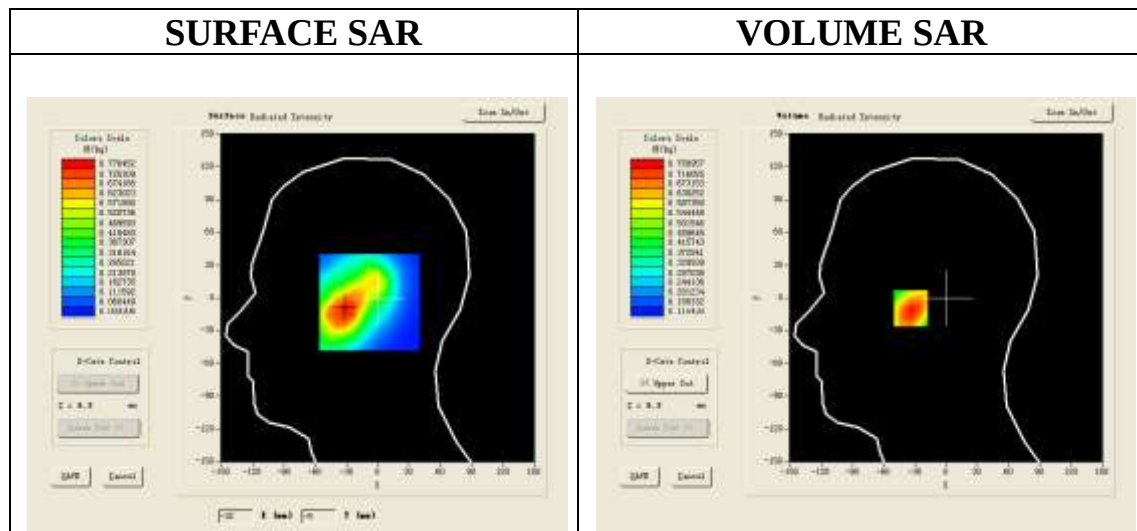
SATIMO Configuration:

- Probe: SSE5; Calibrated: 01/12/2014; Serial No.:SN 22/12 EP159
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Phantom: Flat Phantom; Type: Elliptical Phantom
- Measurement SW: OpenSAR V4_02_01

Configuration/WCDMA band II Mid-Touch-Right/Area Scan: Measurement grid: dx=8mm, dy=8mm

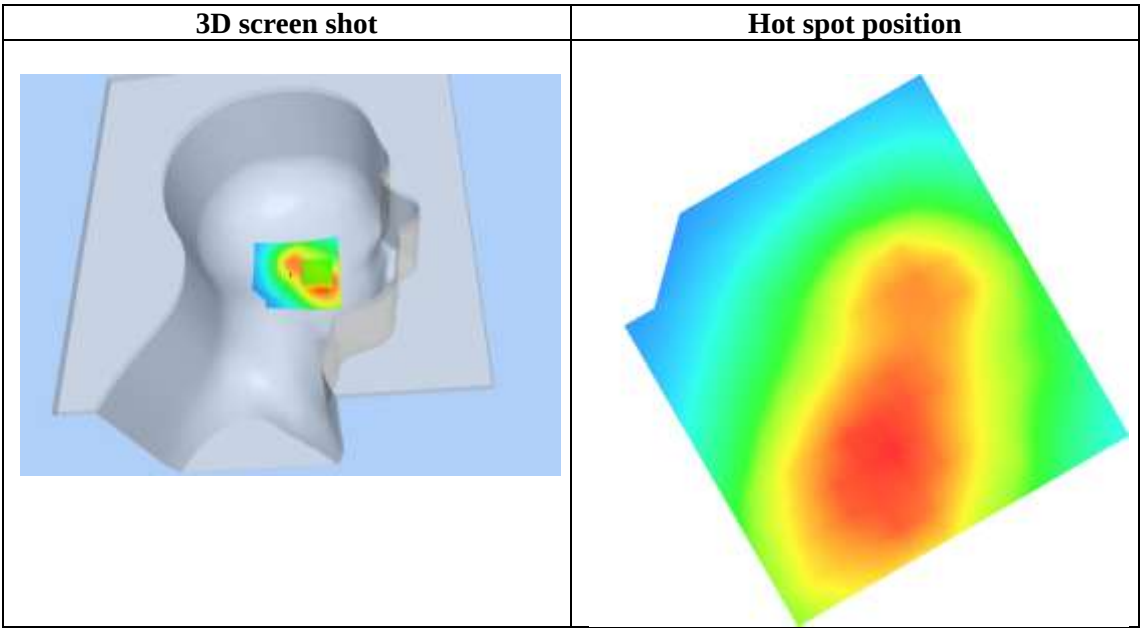
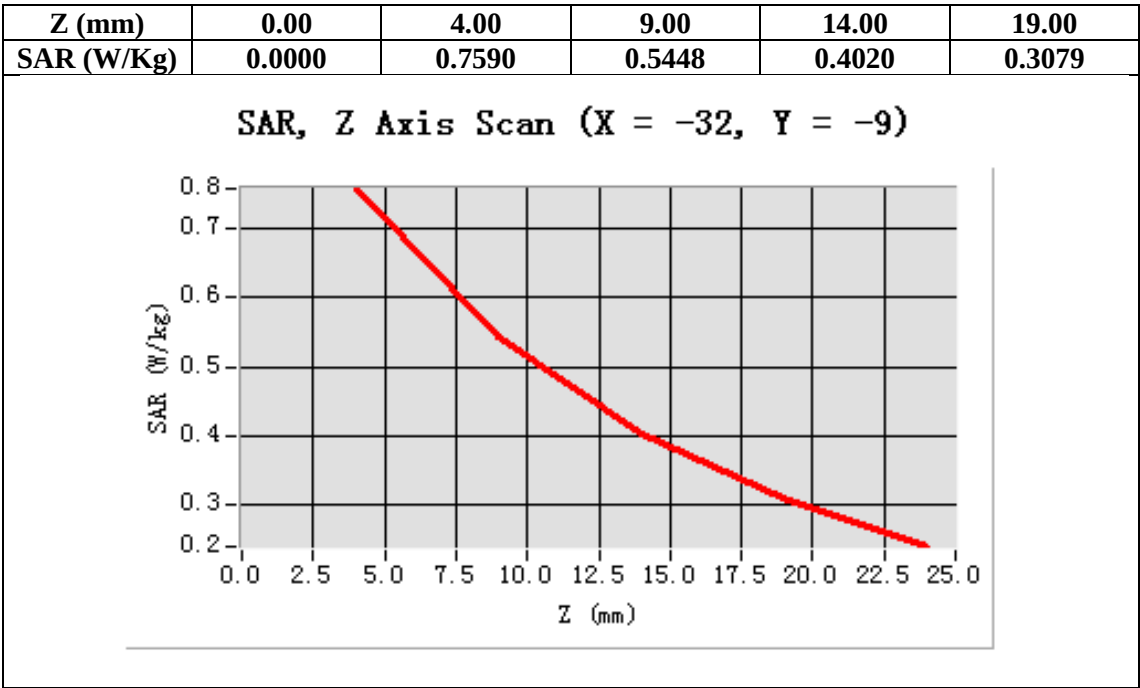
Configuration/WCDMA band II Mid-Touch-Right/Zoom Scan: Measurement grid: dx=8mm,dy=8mm, dz=5mm;

Area Scan	sam_direct_droit2_surf8mm.txt
ZoomScan	5x5x7,dx=8mm dy=8mm dz=5mm,Very fast
Phantom	Right head
Device Position	Cheek
Band	WCDMA band II
Channels	Middle
Signal	CDMA (Crest factor: 1.0)



Maximum location: X=-32.00, Y=-9.00

SAR 10g (W/Kg)	0.501279
SAR 1g (W/Kg)	0.723224



Test Laboratory: AGC Lab
WCDMA Band II Mid-Tilt-Right <RMC>
DUT: 3G Smart Phone; Type: S42

Date: Nov. 20,2014

Communication System: UMTS; Communication System Band: Band II UTRA/FDD ;Duty Cycle:1:1; Conv.F=4.51
Frequency: 1880 MHz; Medium parameters used: $f = 1900$ MHz; $\sigma = 1.43$ mho/m; $\epsilon_r = 40.69$; $\rho = 1000$ kg/m³ ;
Phantom section: Right Section
Ambient temperature (°C):21, Liquid temperature (°C):21

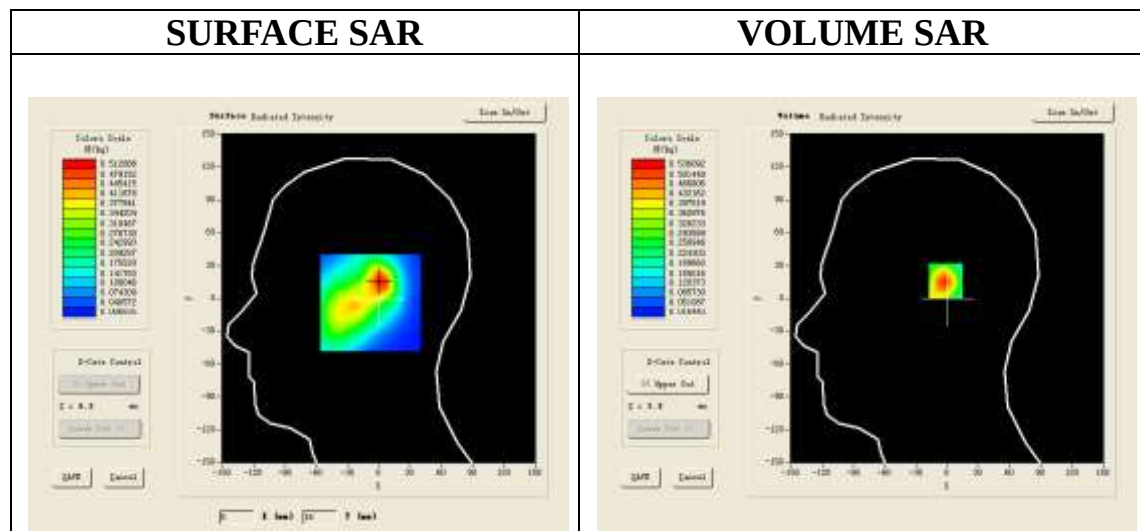
SATIMO Configuration:

- Probe: SSE5; Calibrated: 01/12/2014; Serial No.:SN 22/12 EP159
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Phantom: Flat Phantom; Type: Elliptical Phantom
- Measurement SW: OpenSAR V4_02_01

Configuration/WCDMA Band II Mid-Tilt-Right/Area Scan: Measurement grid: dx=8mm, dy=8mm

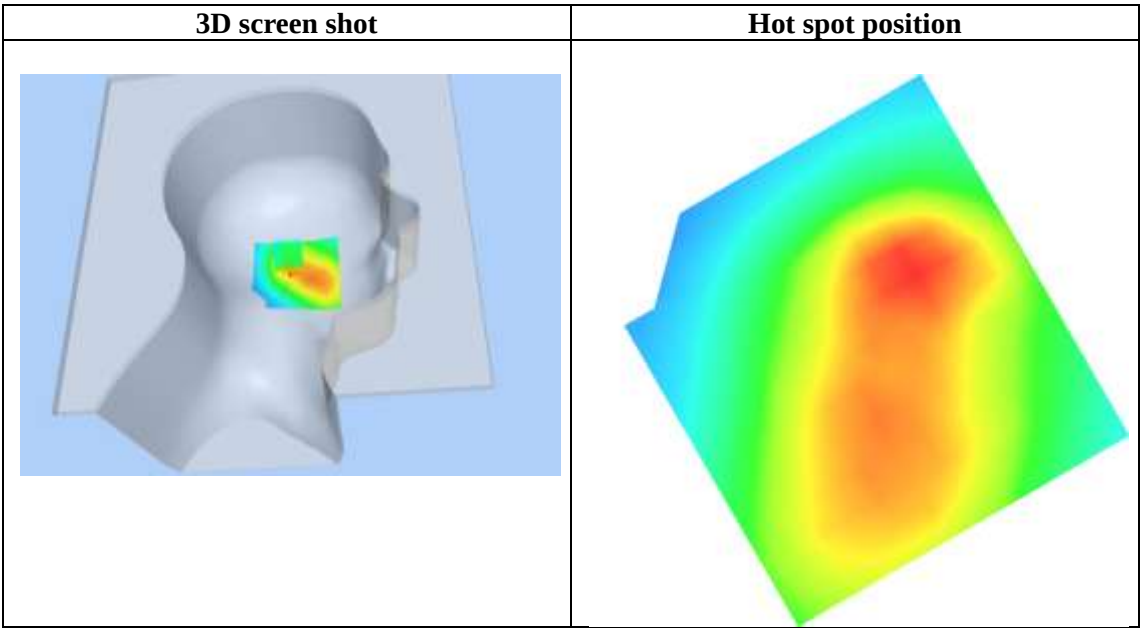
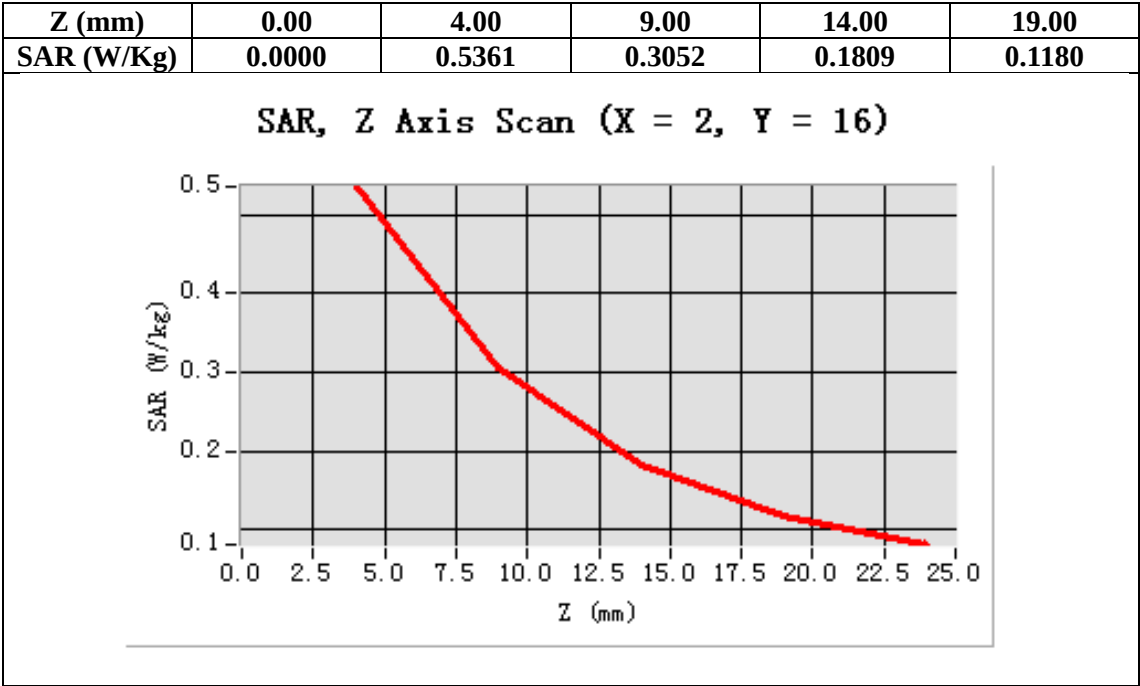
Configuration/WCDMA Band II Mid-Tilt-Right/Zoom Scan: Measurement grid: dx=8mm,dy=8mm, dz=5mm;

Area Scan	sam_direct_droit2_surf8mm.txt
ZoomScan	5x5x7,dx=8mm dy=8mm dz=5mm,Very fast
Phantom	Right head
Device Position	Tilt
Band	WCDMA band II
Channels	Middle
Signal	CDMA (Crest factor: 1.0)



Maximum location: X=2.00, Y=16.00

SAR 10g (W/Kg)	0.277562
SAR 1g (W/Kg)	0.501949



Test Laboratory: AGC Lab
WCDMA Band II Low-Body-Towards Grounds (RMC 12.2kbps)
DUT: 3G Smart Phone; Type: S42

Date: Nov. 20,2014

Communication System: UMTS; Communication System Band: Band II UTRA/FDD ;Duty Cycle:1:1; Conv.F=4.45
Frequency: 1852.4 MHz; Medium parameters used: $f = 1900$ MHz; $\sigma = 1.49$ mho/m; $\epsilon_r = 53.52$; $\rho = 1000$ kg/m³ ;
Phantom section: Flat Section
Ambient temperature (°C):21, Liquid temperature (°C):21

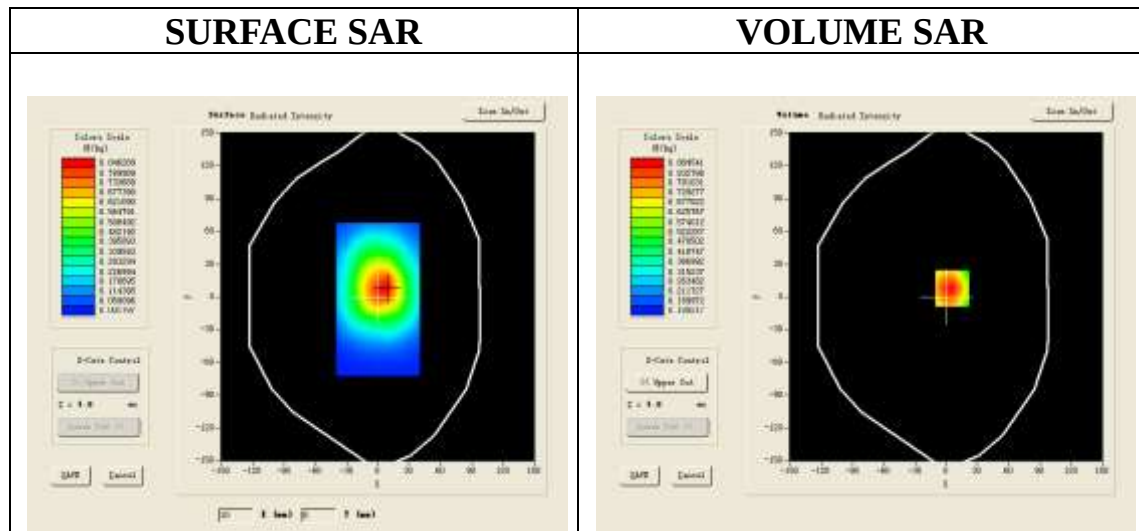
SATIMO Configuration:

- Probe: SSE5; Calibrated: 01/12/2014; Serial No.:SN 22/12 EP159
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Phantom: Flat Phantom; Type: Elliptical Phantom
- Measurement SW: OpenSAR V4_02_01

Configuration/ WCDMA band II Low -Body-back/Area Scan: Measurement grid: dx=8mm, dy=8mm

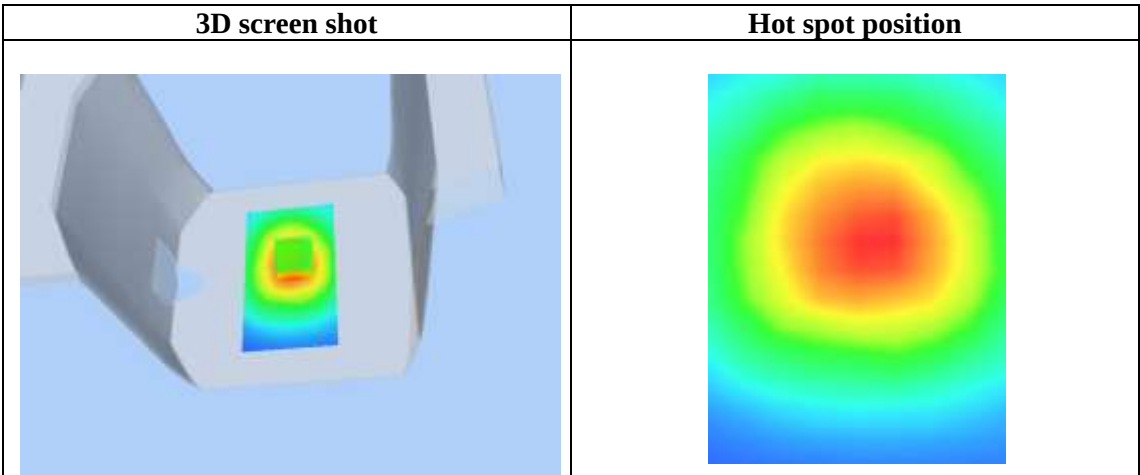
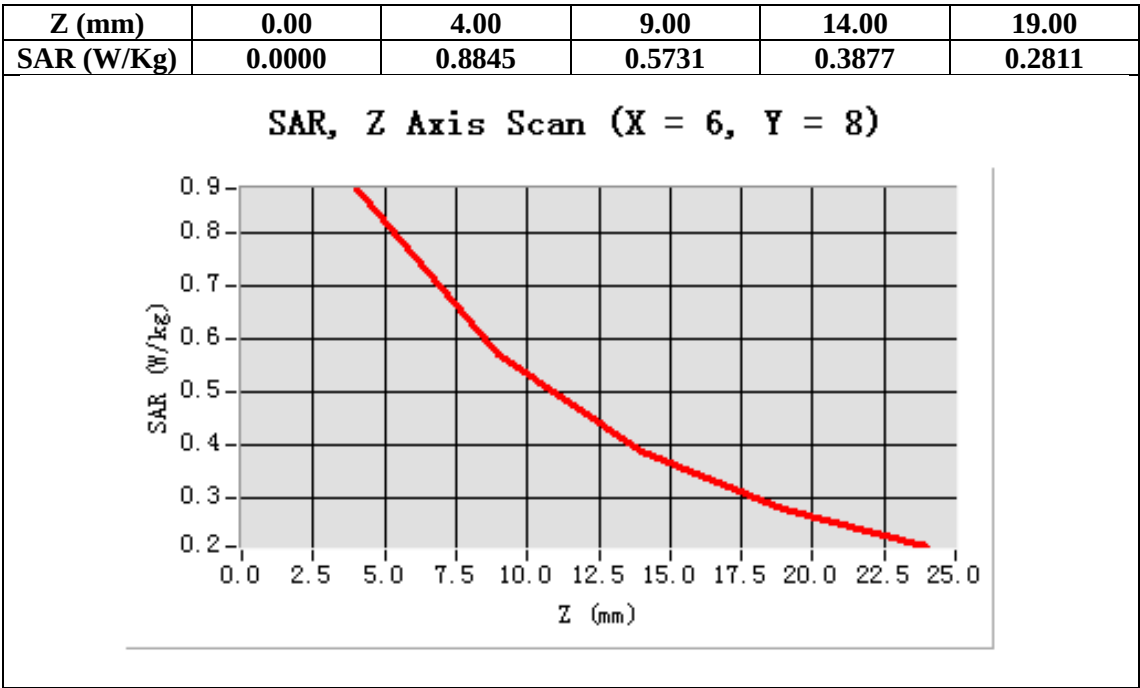
Configuration/ WCDMA band II Low -Body-back/Zoom Scan: Measurement grid: dx=8mm,dy=8mm, dz=5mm;

Area Scan	surf_sam_plan.txt
ZoomScan	5x5x7,dx=8mm dy=8mm dz=5mm,Very fast
Phantom	Validation plane
Device Position	Body Back
Band	WCDMA band II
Channels	Low
Signal	CDMA (Crest factor: 1.0)



Maximum location: X=6.00, Y=8.00

SAR 10g (W/Kg)	0.581276
SAR 1g (W/Kg)	0.913659



Test Laboratory: AGC Lab
WCDMA Band II Mid-Body-Towards Grounds (RMC 12.2kbps)
DUT: 3G Smart Phone; Type: S42

Date: Nov. 20,2014

Communication System: UMTS; Communication System Band: Band II UTRA/FDD ;Duty Cycle:1:1; Conv.F=4.45
Frequency: 1880 MHz; Medium parameters used: $f = 1900$ MHz; $\sigma = 1.54$ mho/m; $\epsilon_r = 53.44$; $\rho = 1000$ kg/m³ ;
Phantom section: Flat Section
Ambient temperature (°C):21, Liquid temperature (°C):21

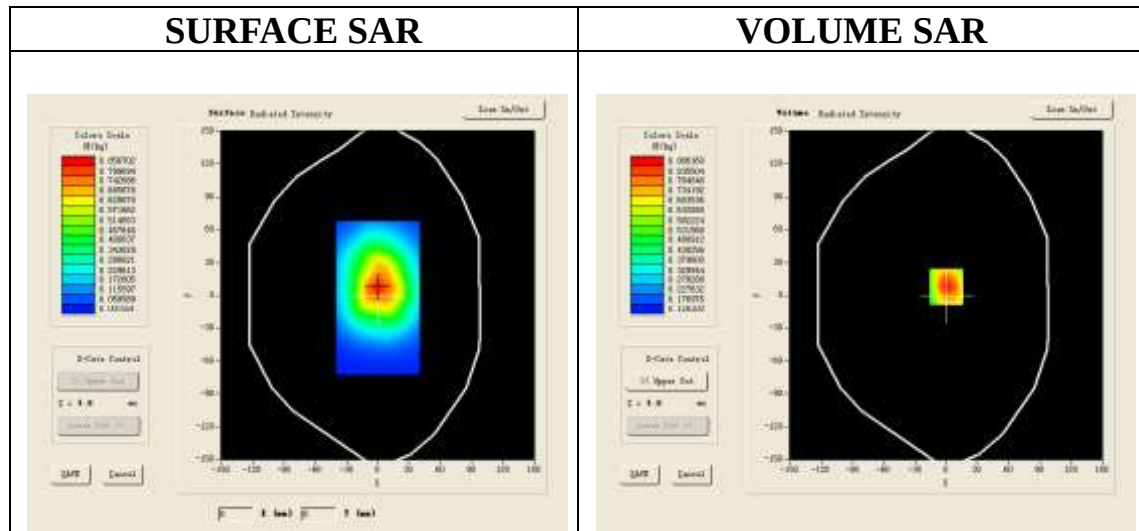
SATIMO Configuration:

- Probe: SSE5; Calibrated: 01/12/2014; Serial No.:SN 22/12 EP159
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Phantom: Flat Phantom; Type: Elliptical Phantom
- Measurement SW: OpenSAR V4_02_01

Configuration/ WCDMA band II Mid-Body-back/Area Scan: Measurement grid: dx=8mm, dy=8mm

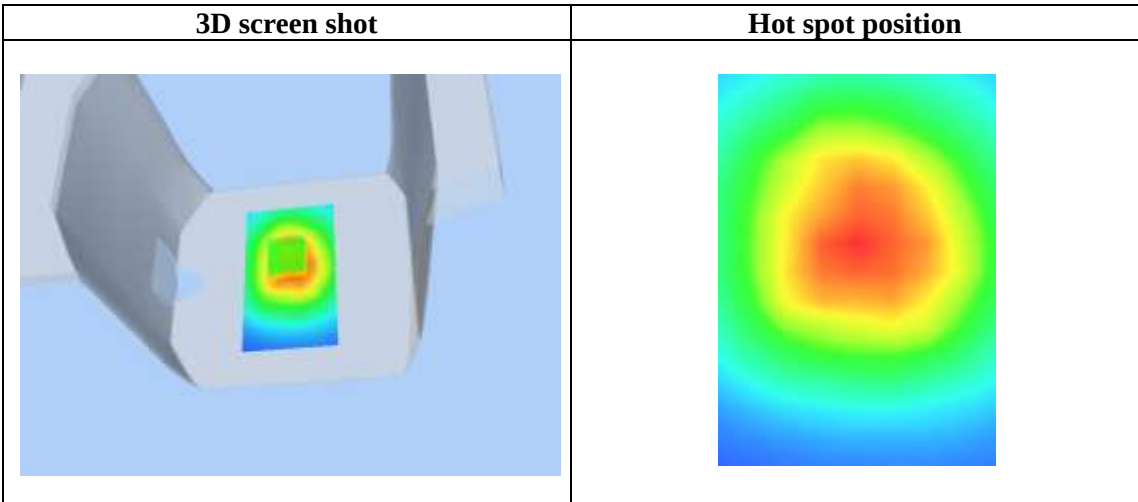
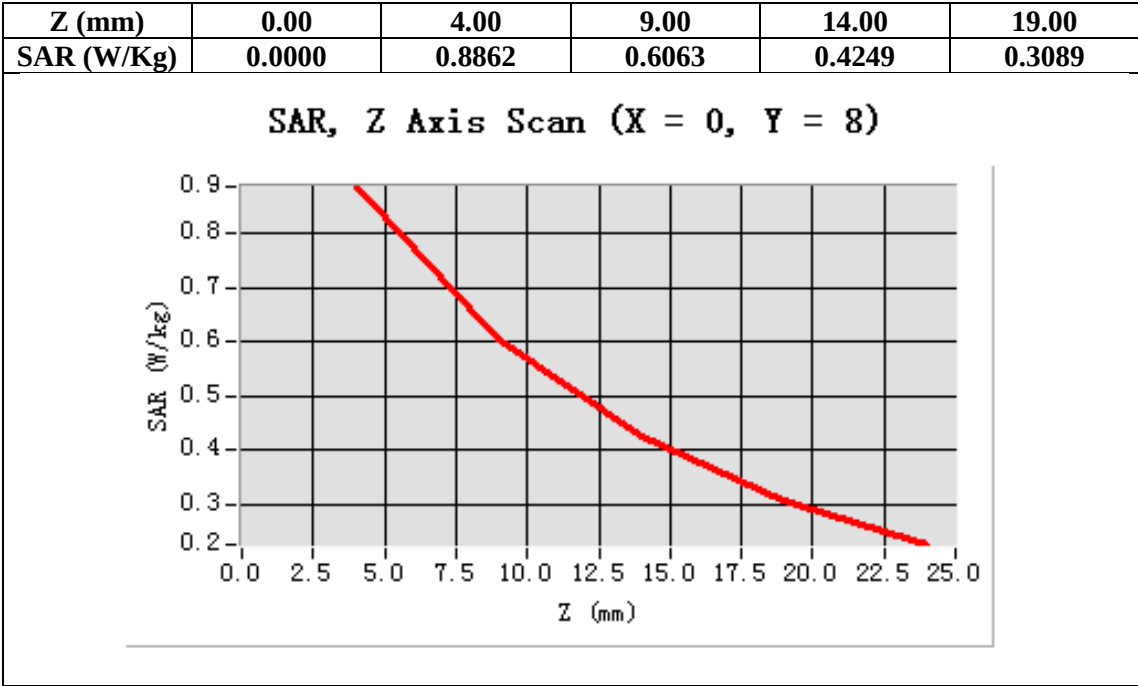
Configuration/ WCDMA band II Mid-Body-back/Zoom Scan: Measurement grid: dx=8mm,dy=8mm, dz=5mm;

Area Scan	surf_sam_plan.txt
ZoomScan	5x5x7,dx=8mm dy=8mm dz=5mm,Very fast
Phantom	Validation plane
Device Position	Body Back
Band	WCDMA band II
Channels	Middle
Signal	CDMA (Crest factor: 1.0)



Maximum location: X=0.00, Y=8.00

SAR 10g (W/Kg)	0.592765
SAR 1g (W/Kg)	0.901983



Test Laboratory: AGC Lab
WCDMA Band II High-Body-Towards Grounds (RMC 12.2kbps)
DUT: 3G Smart Phone; Type: S42

Date: Nov. 20,2014

Communication System: UMTS; Communication System Band: Band II UTRA/FDD ;Duty Cycle:1:1; Conv.F=4.45
Frequency: 1907.6 MHz; Medium parameters used: $f = 1900$ MHz; $\sigma = 1.50$ mho/m; $\epsilon_r = 53.76$; $\rho = 1000$ kg/m³ ;
Phantom section: Flat Section
Ambient temperature (°C):21, Liquid temperature (°C):21

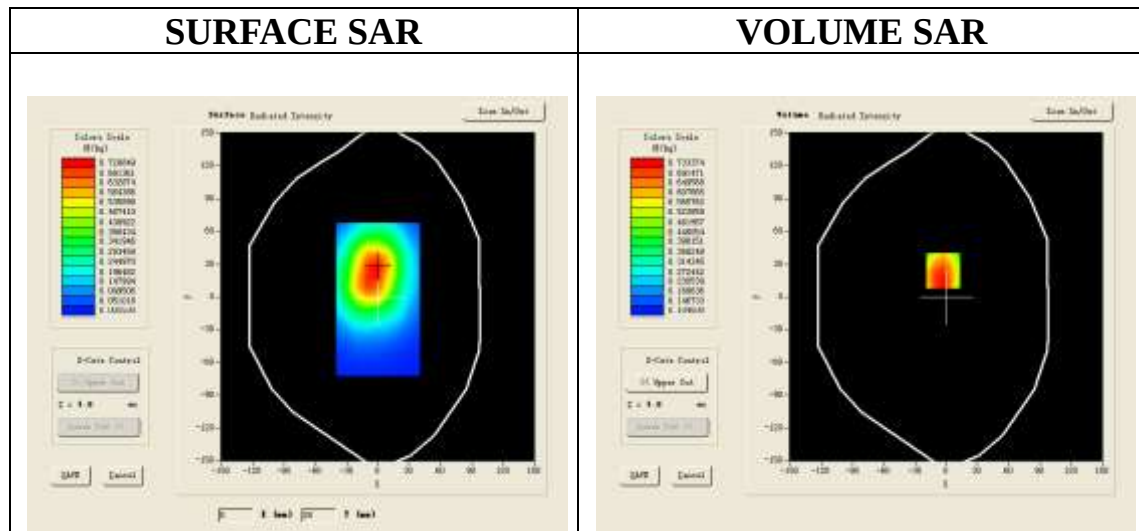
SATIMO Configuration:

- Probe: SSE5; Calibrated: 01/12/2014; Serial No.:SN 22/12 EP159
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Phantom: Flat Phantom; Type: Elliptical Phantom
- Measurement SW: OpenSAR V4_02_01

Configuration/ WCDMA band II High -Body-back/Area Scan: Measurement grid: dx=8mm, dy=8mm

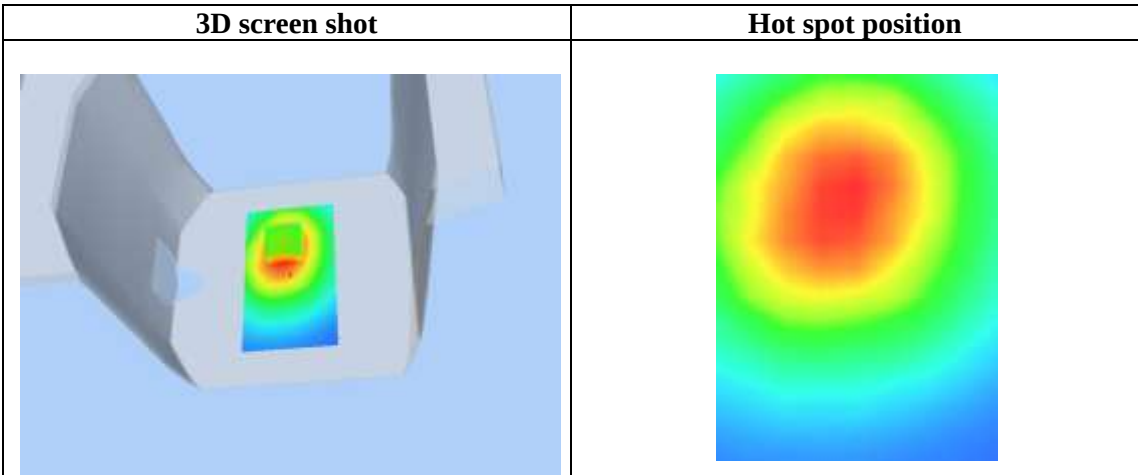
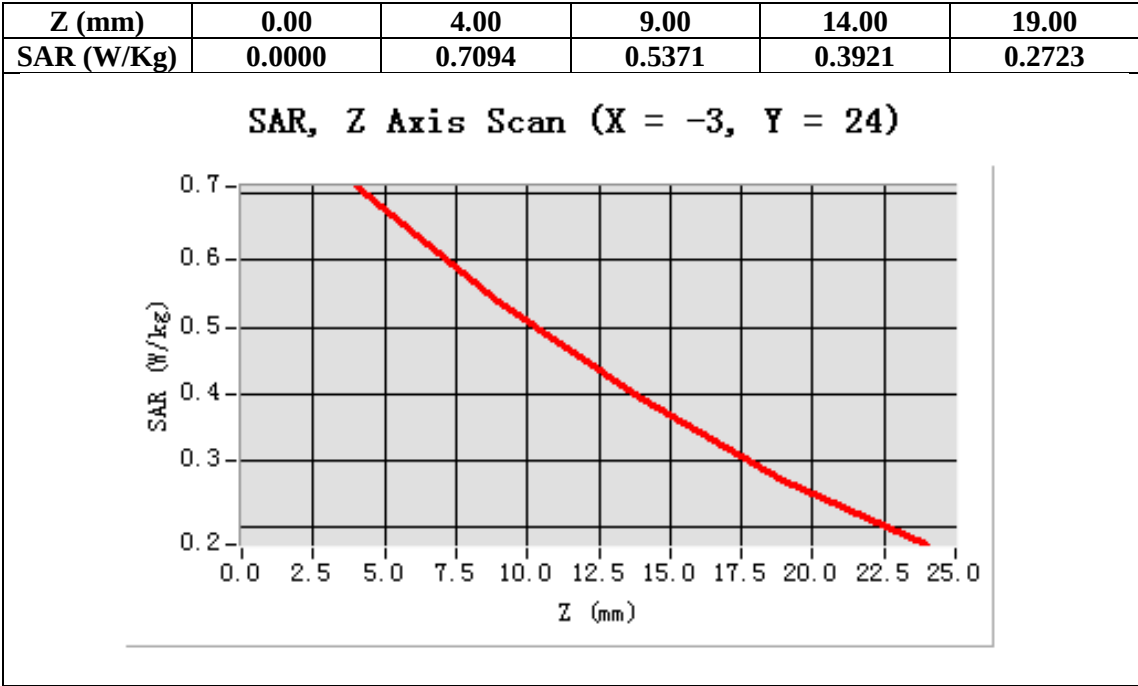
Configuration/ WCDMA band II High -Body-back/Zoom Scan: Measurement grid: dx=8mm,dy=8mm, dz=5mm;

Area Scan	surf_sam_plan.txt
ZoomScan	5x5x7,dx=8mm dy=8mm dz=5mm,Very fast
Phantom	Validation plane
Device Position	Body Back
Band	WCDMA band II
Channels	High
Signal	CDMA (Crest factor: 1.0)



Maximum location: X=-3.00, Y=24.00

SAR 10g (W/Kg)	0.523795
SAR 1g (W/Kg)	0.761564



Test Laboratory: AGC Lab
WCDMA Band II Mid-Body-Towards Phantom (RMC 12.2kbps)
DUT: 3G Smart Phone; Type: S42

Date: Nov. 20,2014

Communication System: UMTS; Communication System Band: Band II UTRA/FDD ;Duty Cycle:1:1; Conv.F=4.45
Frequency: 1880 MHz; Medium parameters used: $f = 1900$ MHz; $\sigma = 1.54$ mho/m; $\epsilon_r = 53.44$; $\rho = 1000$ kg/m³ ;
Phantom section: Flat Section
Ambient temperature (°C):21, Liquid temperature (°C):21

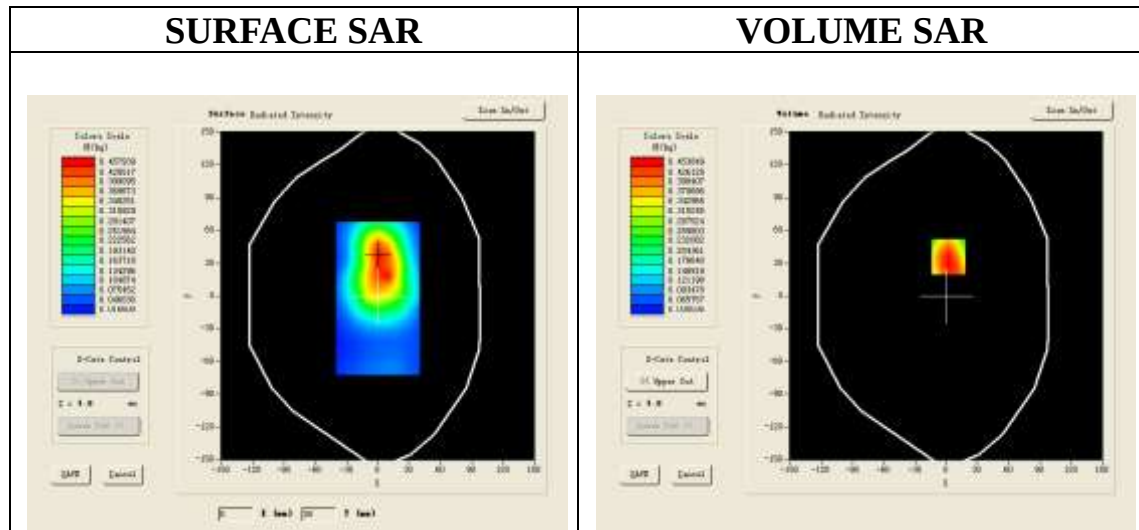
SATIMO Configuration:

- Probe: SSE5; Calibrated: 01/12/2014; Serial No.:SN 22/12 EP159
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Phantom: Flat Phantom; Type: Elliptical Phantom
- Measurement SW: OpenSAR V4_02_01

Configuration/ WCDMA band II Mid-Body-Front/Area Scan: Measurement grid: dx=8mm, dy=8mm

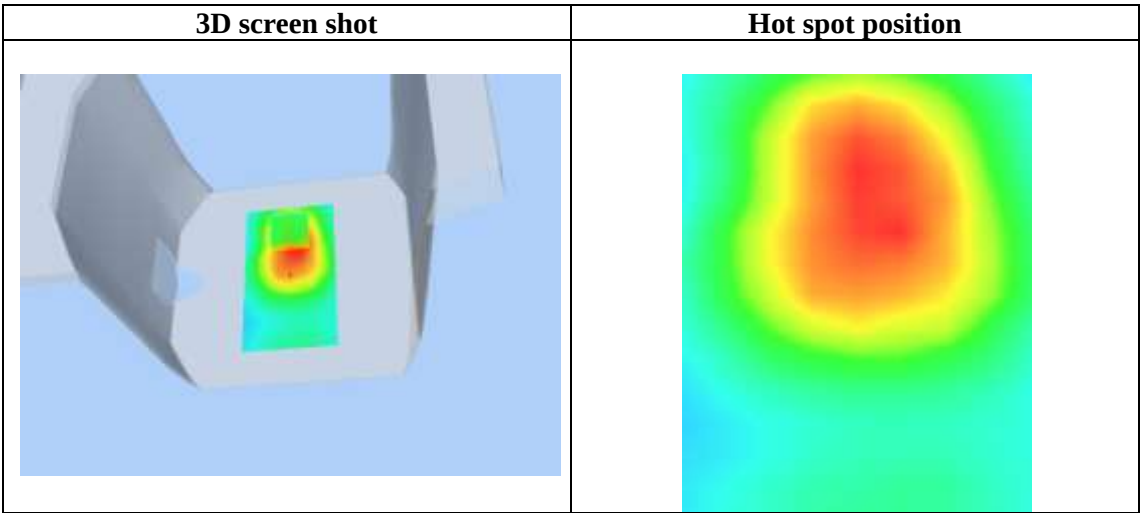
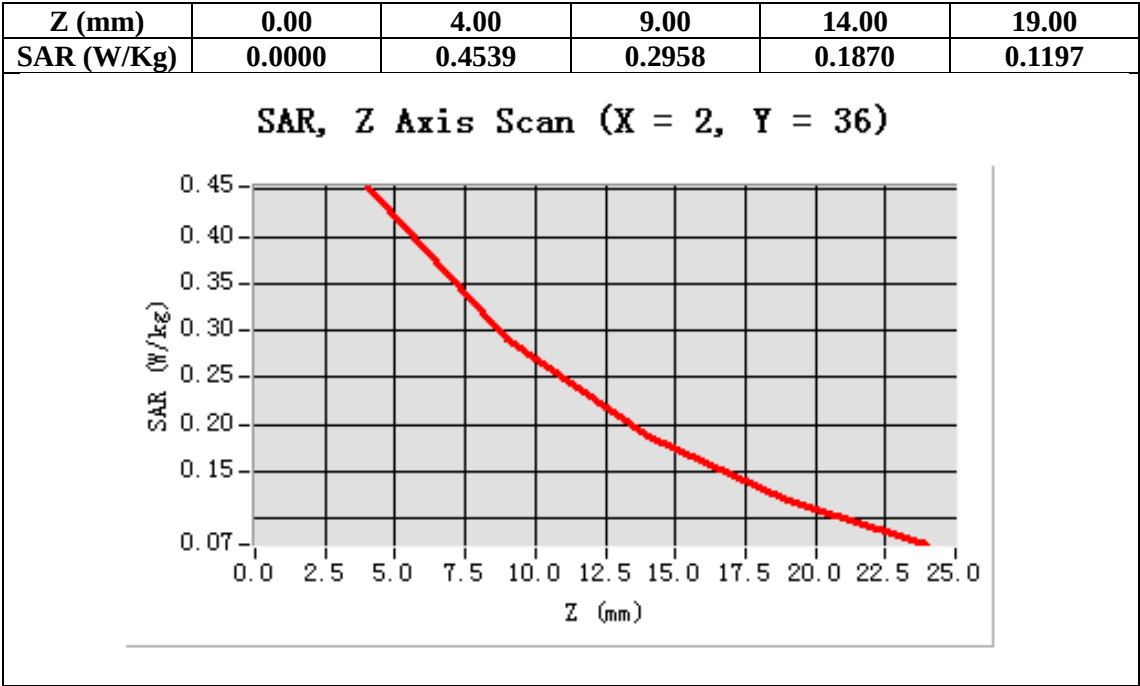
Configuration/ WCDMA band II Mid-Body-Front/Zoom Scan: Measurement grid: dx=8mm,dy=8mm, dz=5mm;

Area Scan	surf_sam_plan.txt
ZoomScan	5x5x7,dx=8mm dy=8mm dz=5mm,Very fast
Phantom	Validation plane
Device Position	Body Front
Band	WCDMA band II
Channels	Middle
Signal	CDMA (Crest factor: 1.0)



Maximum location: X=2.00, Y=36.00

SAR 10g (W/Kg)	0.293781
SAR 1g (W/Kg)	0.471865



Test Laboratory: AGC Lab
WCDMA Band II Mid- Edge1 (RMC 12.2kbps)
DUT: 3G Smart Phone; Type: S42

Date: Nov. 20,2014

Communication System: UMTS; Communication System Band: Band II UTRA/FDD ;Duty Cycle:1:1; Conv.F=4.45
Frequency: 1880 MHz; Medium parameters used: $f = 1900$ MHz; $\sigma=1.54$ mho/m; $\epsilon_r=53.44$; $\rho= 1000$ kg/m³ ;
Phantom section: Flat Section
Ambient temperature (°C):21, Liquid temperature (°C):21

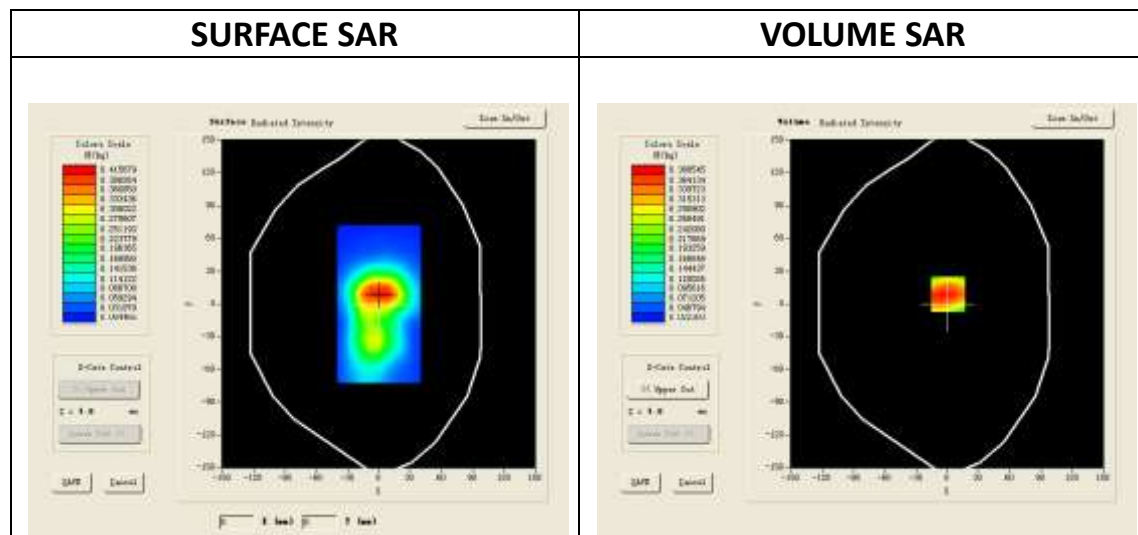
SATIMO Configuration:

- Probe: SSE5; Calibrated: 01/12/2014; Serial No.:SN 22/12 EP159
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Phantom: Flat Phantom; Type: Elliptical Phantom
- Measurement SW: OpenSAR V4_02_01

Configuration/ WCDMA band II Mid- Edge1 /Area Scan: Measurement grid: dx=8mm, dy=8mm

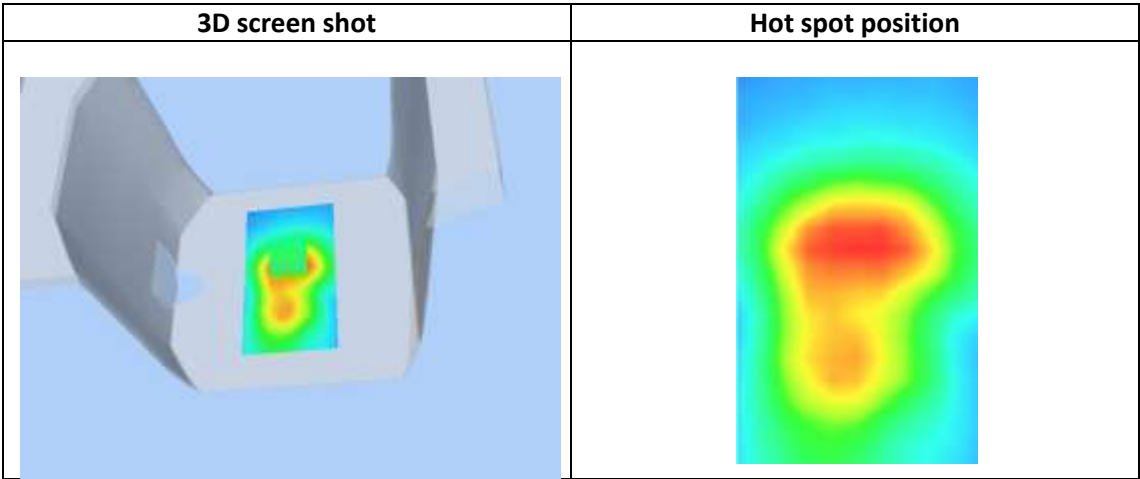
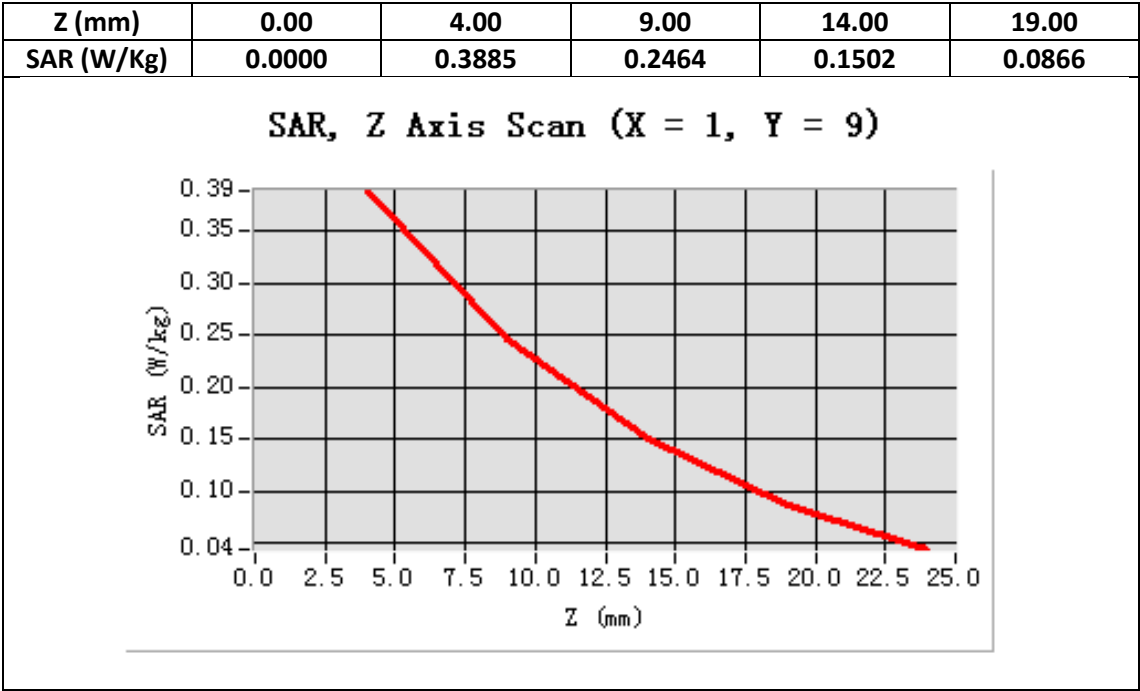
Configuration/ WCDMA band II Mid- Edge1 /Zoom Scan: Measurement grid: dx=8mm,dy=8mm, dz=5mm;

Area Scan	surf_sam_plan.txt
ZoomScan	5x5x7,dx=8mm dy=8mm dz=5mm,Very fast
Phantom	Validation plane
Device Position	Edge1
Band	WCDMA band II
Channels	Middle
Signal	CDMA (Crest factor: 1.0)



Maximum location: X=1.00, Y=9.00

SAR 10g (W/Kg)	0.228808
SAR 1g (W/Kg)	0.381017



Test Laboratory: AGC Lab
WCDMA Band II Mid- Edge2 (RMC 12.2kbps)
DUT: 3G Smart Phone; Type: S42

Date: Nov. 20,2014

Communication System: UMTS; Communication System Band: Band II UTRA/FDD ;Duty Cycle:1:1; Conv.F=4.45
Frequency: 1880 MHz; Medium parameters used: $f = 1900$ MHz; $\sigma=1.54$ mho/m; $\epsilon_r=53.44$; $\rho= 1000$ kg/m³ ;
Phantom section: Flat Section
Ambient temperature (°C):21, Liquid temperature (°C):21

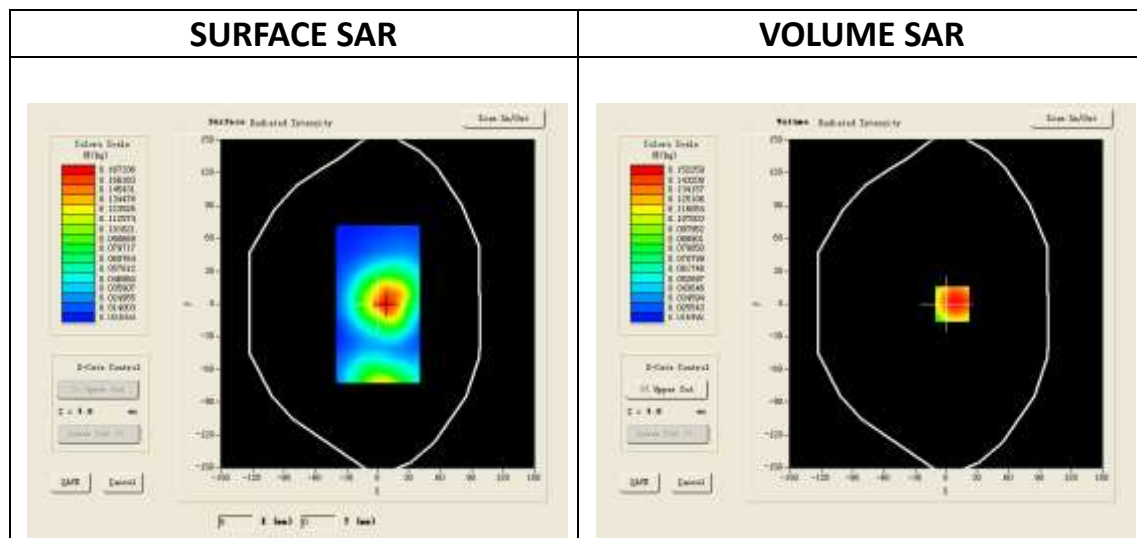
SATIMO Configuration:

- Probe: SSE5; Calibrated: 01/12/2014; Serial No.:SN 22/12 EP159
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Phantom: Flat Phantom; Type: Elliptical Phantom
- Measurement SW: OpenSAR V4_02_01

Configuration/ WCDMA band II Mid- Edge2 /Area Scan: Measurement grid: dx=8mm, dy=8mm

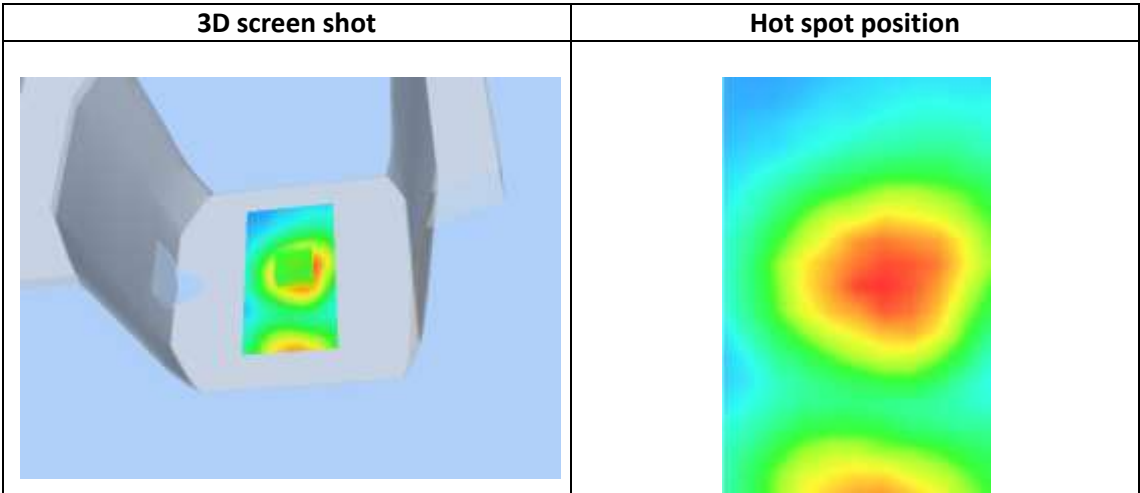
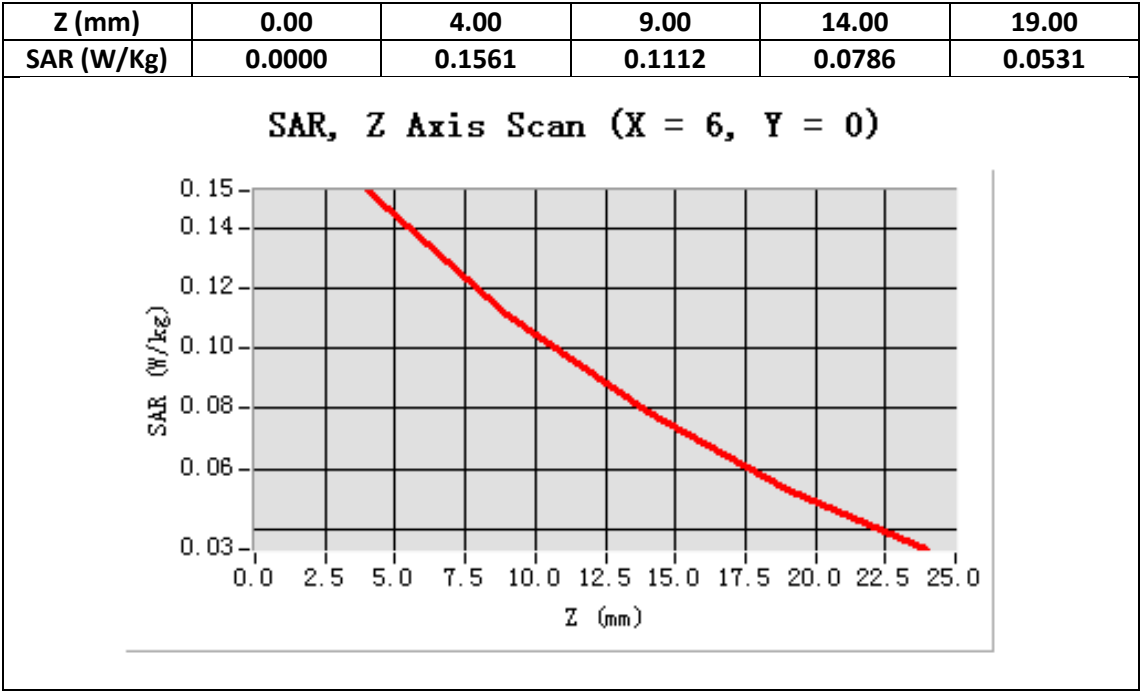
Configuration/ WCDMA band II Mid- Edge2 /Zoom Scan: Measurement grid: dx=8mm,dy=8mm, dz=5mm;

Area Scan	surf_sam_plan.txt
ZoomScan	5x5x7,dx=8mm dy=8mm dz=5mm,Very fast
Phantom	Validation plane
Device Position	Edge2
Band	WCDMA band II
Channels	Middle
Signal	CDMA (Crest factor: 1.0)



Maximum location: X=6.00, Y=0.00

SAR 10g (W/Kg)	0.098017
SAR 1g (W/Kg)	0.145928



Test Laboratory: AGC Lab
WCDMA Band II Mid- Edge4 (RMC 12.2kbps)
DUT: 3G Smart Phone; **Type:** S42

Date: Nov. 20,2014

Communication System: UMTS; Communication System Band: Band II UTRA/FDD ;Duty Cycle:1:1; Conv.F=4.45
Frequency: 1880 MHz; Medium parameters used: $f = 1900$ MHz; $\sigma=1.54$ mho/m; $\epsilon_r=53.44$; $\rho= 1000$ kg/m³ ;
Phantom section: Flat Section
Ambient temperature (°C):21, Liquid temperature (°C):21

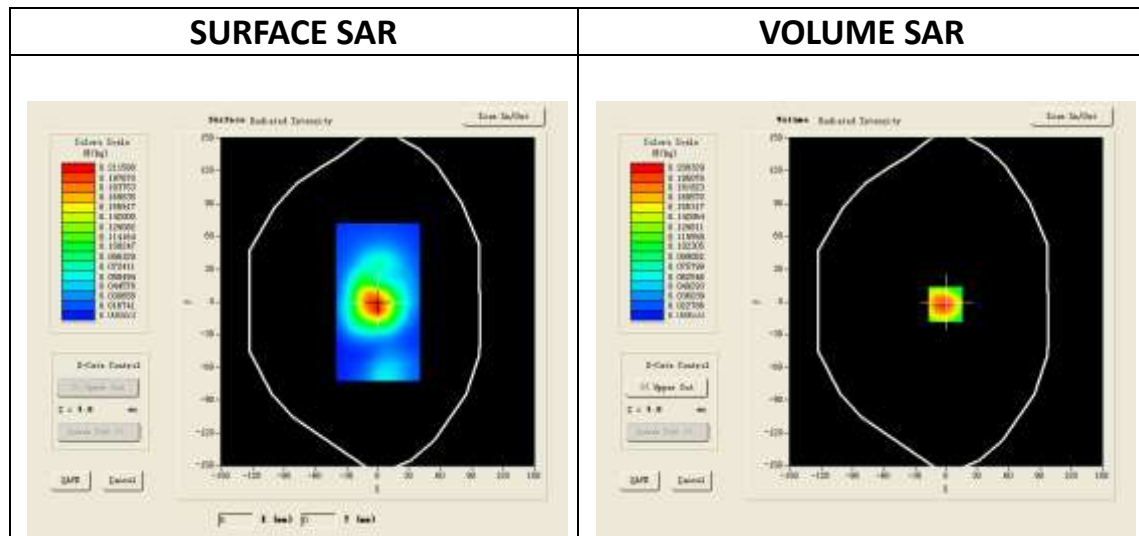
SATIMO Configuration:

- Probe: SSE5; Calibrated: 01/12/2014; Serial No.:SN 22/12 EP159
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Phantom: Flat Phantom; Type: Elliptical Phantom
- Measurement SW: OpenSAR V4_02_01

Configuration/ WCDMA band II Mid- Edge4 /Area Scan: Measurement grid: dx=8mm, dy=8mm

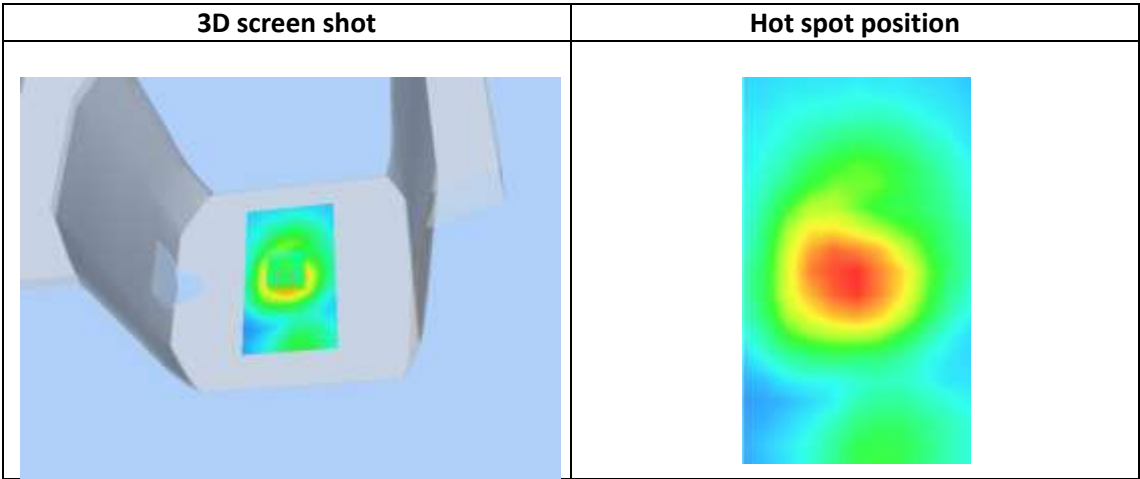
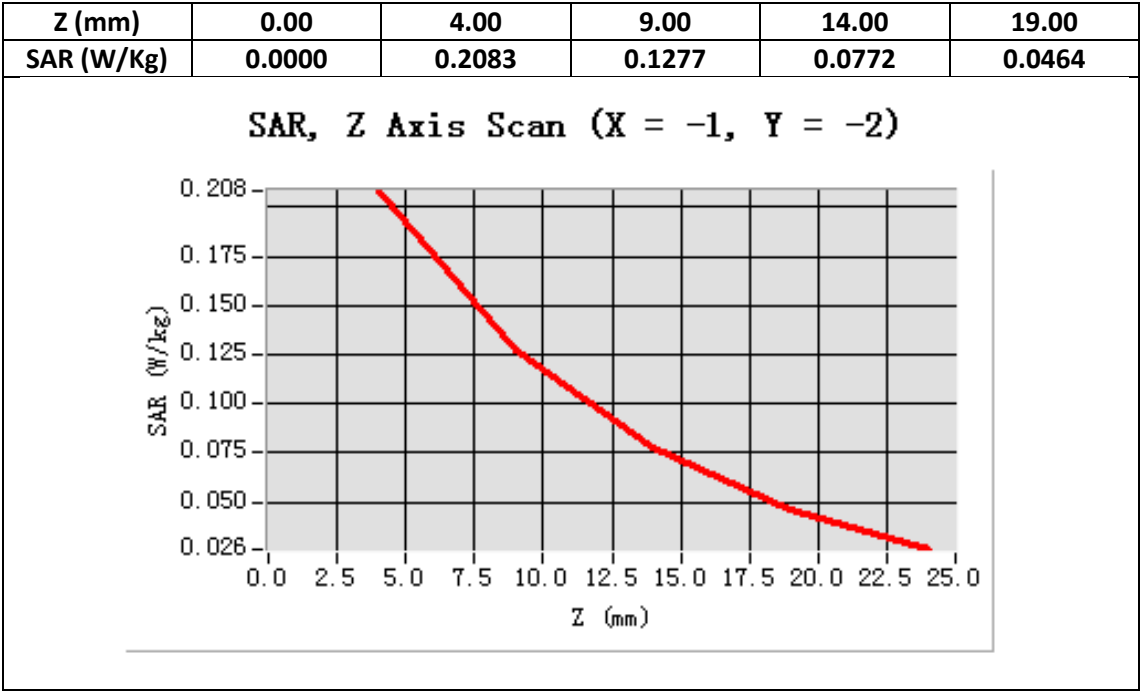
Configuration/ WCDMA band II Mid- Edge4 /Zoom Scan: Measurement grid: dx=8mm,dy=8mm, dz=5mm;

Area Scan	surf_sam_plan.txt
ZoomScan	5x5x7,dx=8mm dy=8mm dz=5mm,Very fast
Phantom	Validation plane
Device Position	Edge4
Band	WCDMA band II
Channels	Middle
Signal	CDMA (Crest factor: 1.0)



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

SAR 10g (W/Kg)	0.115863
SAR 1g (W/Kg)	0.202512



Test Laboratory: AGC Lab

Date: Nov. 20,2014

WCDMA Band V Mid-Touch-Left (RMC)

DUT: 3G Smart Phone; Type: S42

Communication System: UMTS; Communication System Band: BAND V UTRA/FDD ; Duty Cycle:1: 1; Conv.F=5.27
Frequency: 836.6 MHz; Medium parameters used: $f = 835\text{MHz}$; $\sigma = 0.90\text{ mho/m}$; $\epsilon_r = 41.73$; $\rho = 1000\text{ kg/m}^3$;
Phantom section: Left Section
Ambient temperature ($^{\circ}\text{C}$): 21, Liquid temperature ($^{\circ}\text{C}$): 21

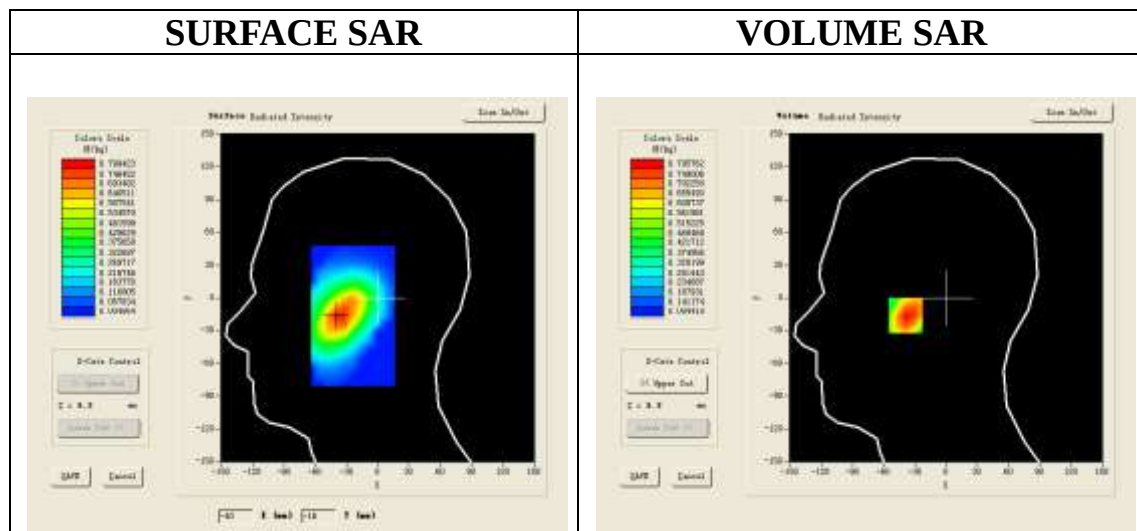
SATIMO Configuration:

- Probe: SSE5; Calibrated: 01/12/2014; Serial No.:SN 22/12 EP159
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Phantom: Flat Phantom; Type: Elliptical Phantom
- Measurement SW: OpenSAR V4_02_01

Configuration/ WCDMA Band V Mid-Touch-Left/Area Scan: Measurement grid: $dx=8\text{mm}$, $dy=8\text{mm}$

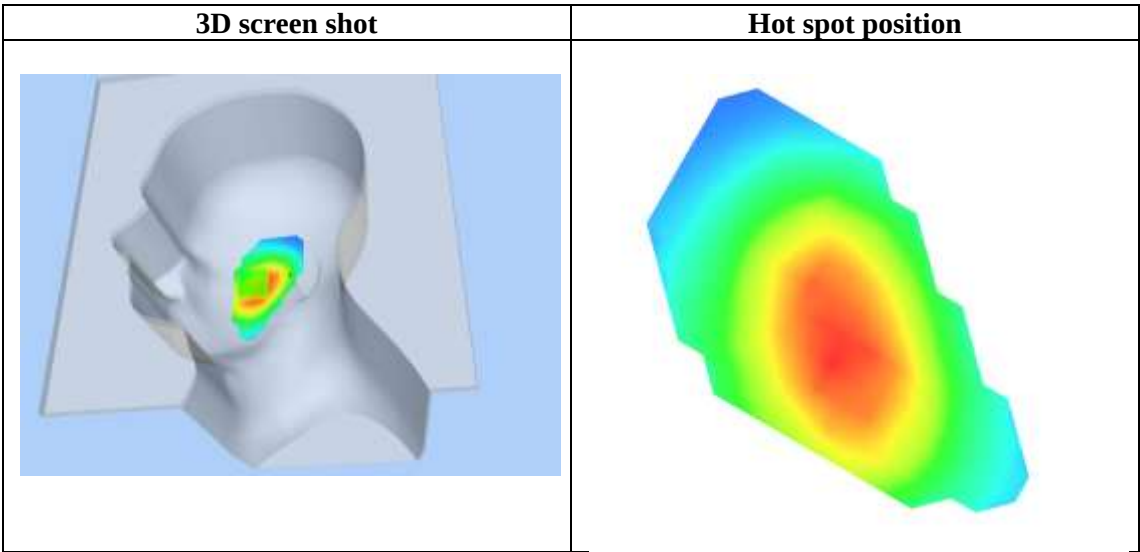
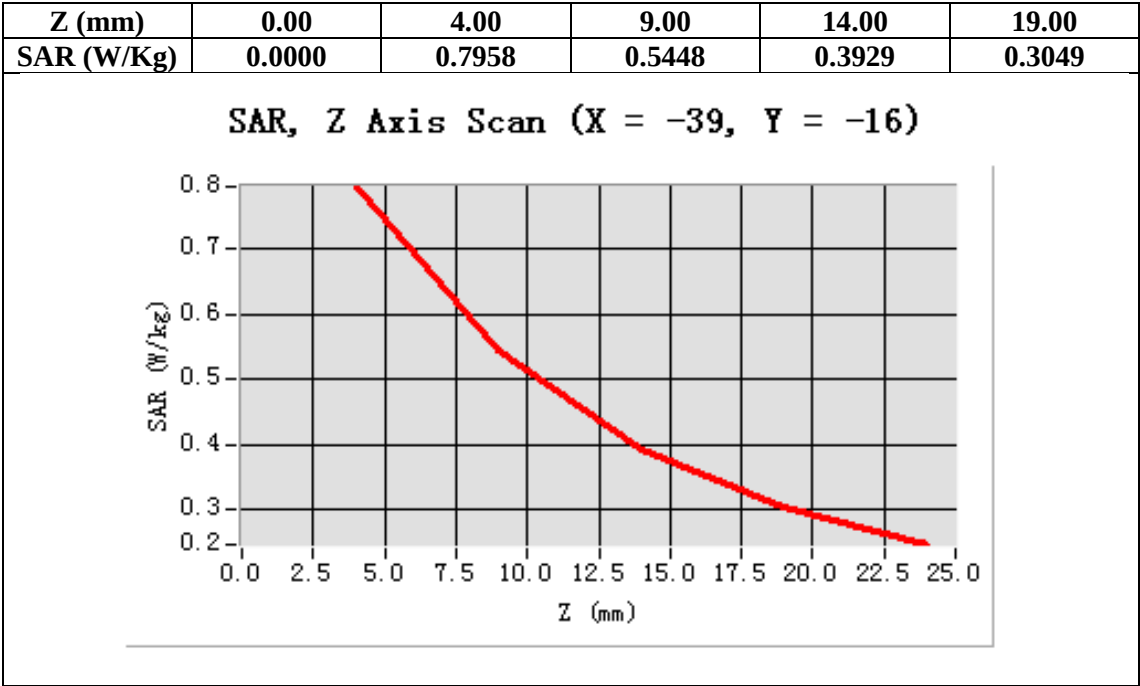
Configuration/ WCDMA Band V Mid-Touch-Left/Zoom Scan: Measurement grid: $dx=8\text{mm}$, $dy=8\text{mm}$, $dz=5\text{mm}$

Area Scan	sam_direct_droit2_surf8mm.txt
ZoomScan	5x5x7,dx=8mm dy=8mm dz=5mm,Very fast
Phantom	Left head
Device Position	Cheek
Band	WCDMA Band V
Channels	Middle
Signal	CDMA (Crest factor: 1.0)



Maximum location: X=-39.00, Y=-16.00

SAR 10g (W/Kg)	0.511678
SAR 1g (W/Kg)	0.762964



Test Laboratory: AGC Lab

Date: Nov. 20,2014

WCDMA Band V Mid-Tilt-Left (RMC)

DUT: 3G Smart Phone; Type: S42

Communication System: UMTS; Communication System Band: BAND V UTRA/FDD ; Duty Cycle:1: 1; Conv.F=5.27
Frequency: 836.6 MHz; Medium parameters used: $f = 835\text{MHz}$; $\sigma = 0.90\text{ mho/m}$; $\epsilon_r = 41.73$; $\rho = 1000\text{ kg/m}^3$;
Phantom section: Left Section
Ambient temperature ($^{\circ}\text{C}$): 21, Liquid temperature ($^{\circ}\text{C}$): 21

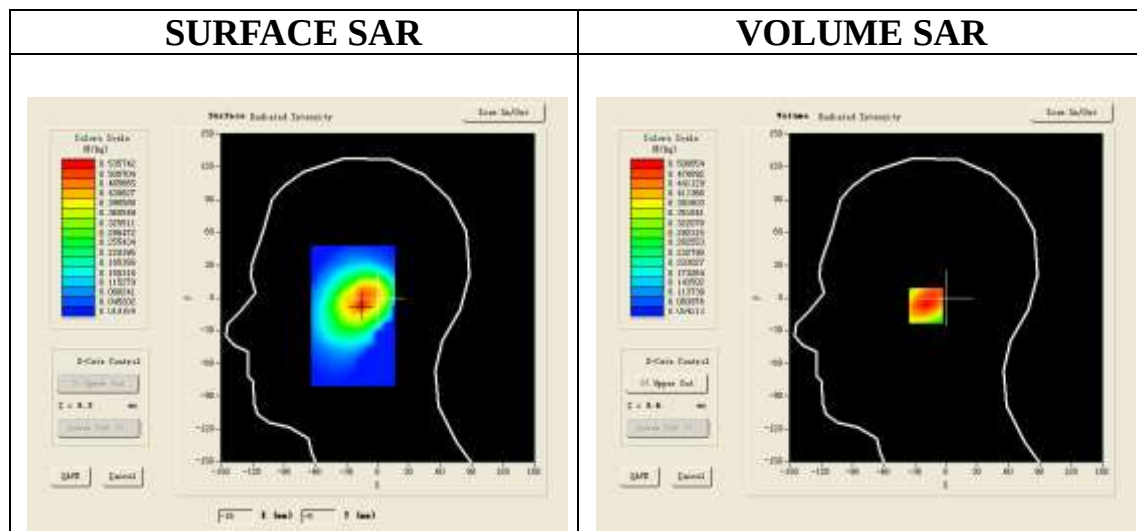
SATIMO Configuration:

- Probe: SSE5; Calibrated: 01/12/2014; Serial No.:SN 22/12 EP159
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Phantom: Flat Phantom; Type: Elliptical Phantom
- Measurement SW: OpenSAR V4_02_01

Configuration/ WCDMA Band V Mid-Tilt-Left/Area Scan: Measurement grid: $dx=8\text{mm}$, $dy=8\text{mm}$

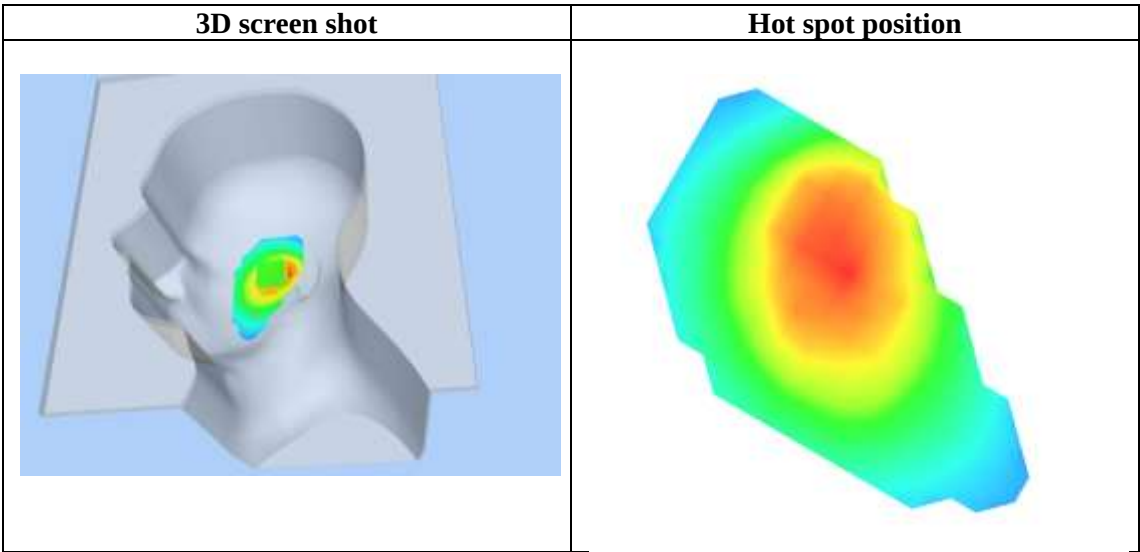
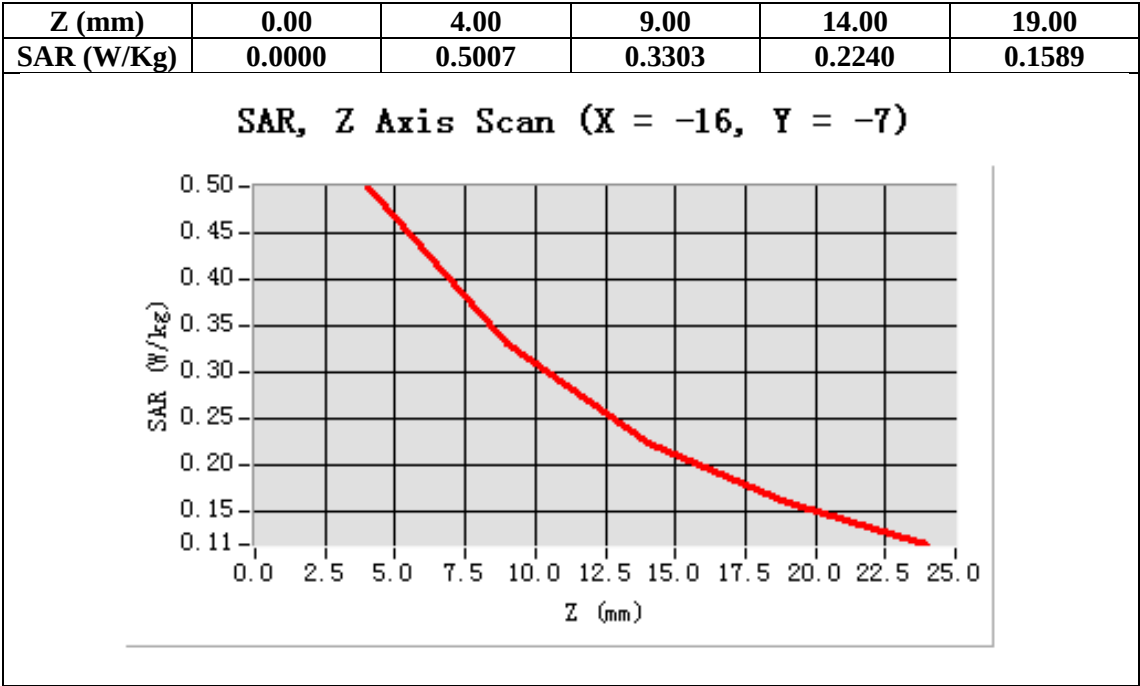
Configuration/ WCDMA Band V Mid-Tilt-Left/Zoom Scan: Measurement grid: $dx=8\text{mm}$, $dy=8\text{mm}$, $dz=5\text{mm}$;

Area Scan	sam_direct_droit2_surf8mm.txt
ZoomScan	5x5x7,dx=8mm dy=8mm dz=5mm,Very fast
Phantom	Left head
Device Position	Tilt
Band	WCDMA Band V
Channels	Middle
Signal	CDMA (Crest factor: 1.0)



Maximum location: X=-16.00, Y=-7.00

SAR 10g (W/Kg)	0.311637
SAR 1g (W/Kg)	0.486920



Test Laboratory: AGC Lab

Date: Nov. 20,2014

WCDMA Band V Low- Touch-Right (RMC)

DUT: 3G Smart Phone; Type: S42

Communication System: UMTS; Communication System Band: BAND V UTRA/FDD ; Duty Cycle:1: 1; Conv.F=5.27
Frequency: 826.4MHz; Medium parameters used: $f = 835\text{MHz}$; $\sigma = 0.89 \text{ mho/m}$; $\epsilon_r = 41.11$; $\rho = 1000 \text{ kg/m}^3$;
Phantom section: Right Section
Ambient temperature ($^{\circ}\text{C}$): 21, Liquid temperature ($^{\circ}\text{C}$): 21

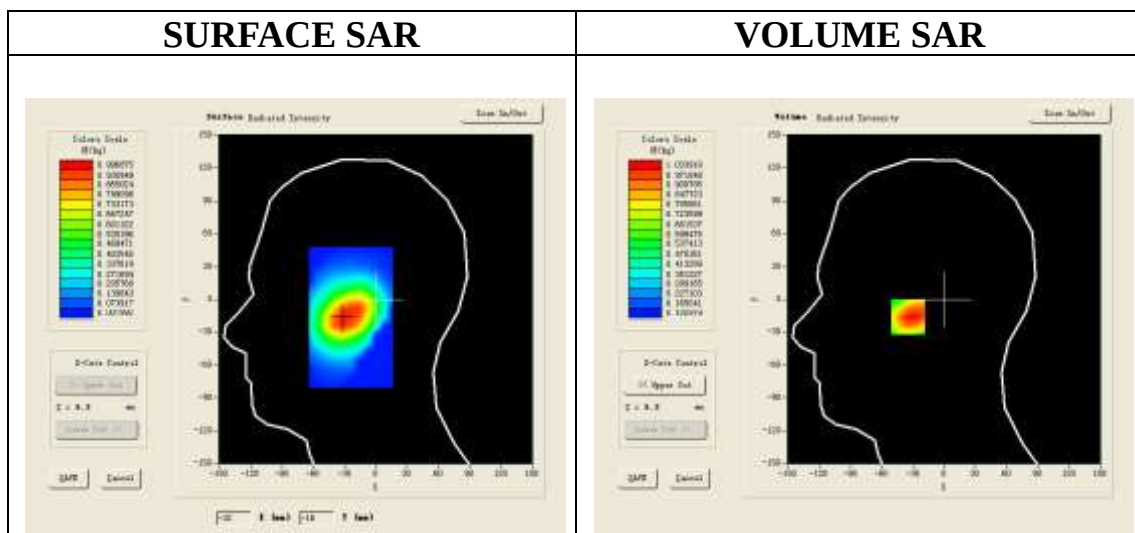
SATIMO Configuration:

- Probe: SSE5; Calibrated: 01/12/2014; Serial No.:SN 22/12 EP159
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Phantom: Flat Phantom; Type: Elliptical Phantom
- Measurement SW: OpenSAR V4_02_01

Configuration/ WCDMA Band V Low -Touch-Right/Area Scan: Measurement grid: $dx=8\text{mm}$, $dy=8\text{mm}$

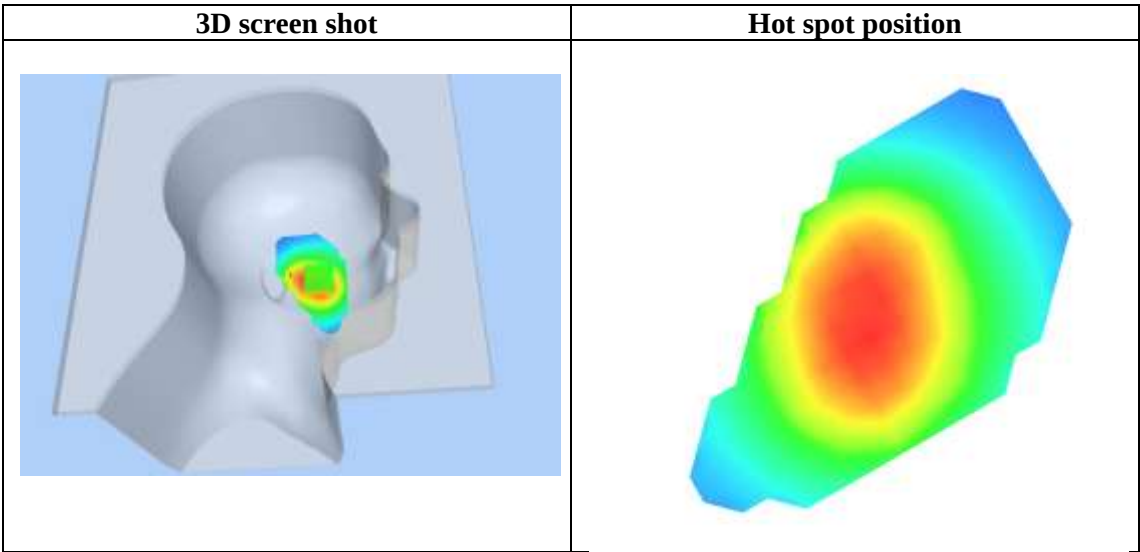
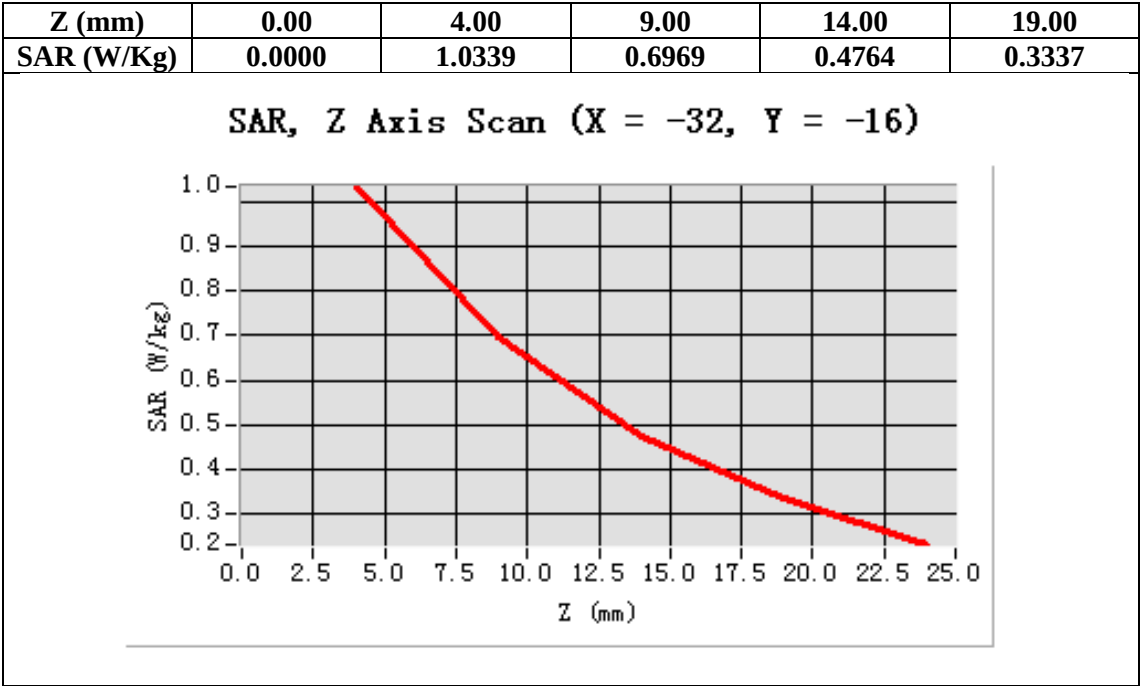
Configuration/ WCDMA Band V Low -Touch-Right/Zoom Scan: Measurement grid: $dx=8\text{mm}$, $dy=8\text{mm}$, $dz=5\text{mm}$;

Area Scan	sam_direct_droit2_surf8mm.txt
ZoomScan	5x5x7, $dx=8\text{mm}$ $dy=8\text{mm}$ $dz=5\text{mm}$, Very fast
Phantom	Right head
Device Position	Cheek
Band	WCDMA Band V
Channels	Low
Signal	CDMA (Crest factor: 1.0)



Maximum location: X=-32.00, Y=-16.00

SAR 10g (W/Kg)	0.641785
SAR 1g (W/Kg)	0.993026



Test Laboratory: AGC Lab

Date: Nov. 20,2014

WCDMA Band V Mid- Touch-Right (RMC)

DUT: 3G Smart Phone; Type: S42

Communication System: UMTS; Communication System Band: BAND V UTRA/FDD ; Duty Cycle:1: 1; Conv.F=5.27
Frequency: 836.6 MHz; Medium parameters used: $f = 835\text{MHz}$; $\sigma = 0.90\text{ mho/m}$; $\epsilon_r = 41.73$; $\rho = 1000\text{ kg/m}^3$;
Phantom section: Right Section
Ambient temperature ($^{\circ}\text{C}$): 21, Liquid temperature ($^{\circ}\text{C}$): 21

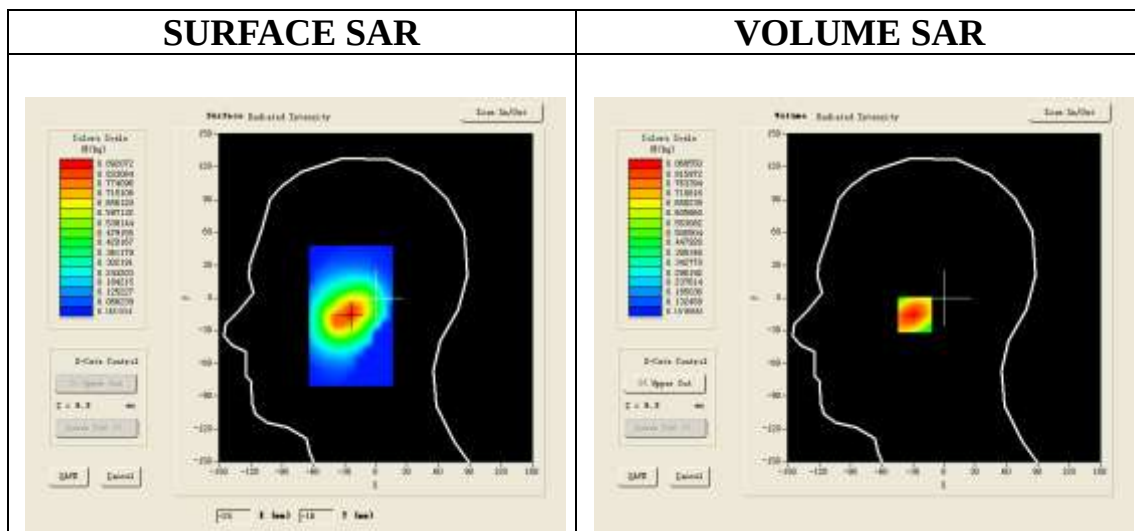
SATIMO Configuration:

- Probe: SSE5; Calibrated: 01/12/2014; Serial No.:SN 22/12 EP159
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Phantom: Flat Phantom; Type: Elliptical Phantom
- Measurement SW: OpenSAR V4_02_01

Configuration/ WCDMA Band V Mid-Touch-Right/Area Scan: Measurement grid: $dx=8\text{mm}$, $dy=8\text{mm}$

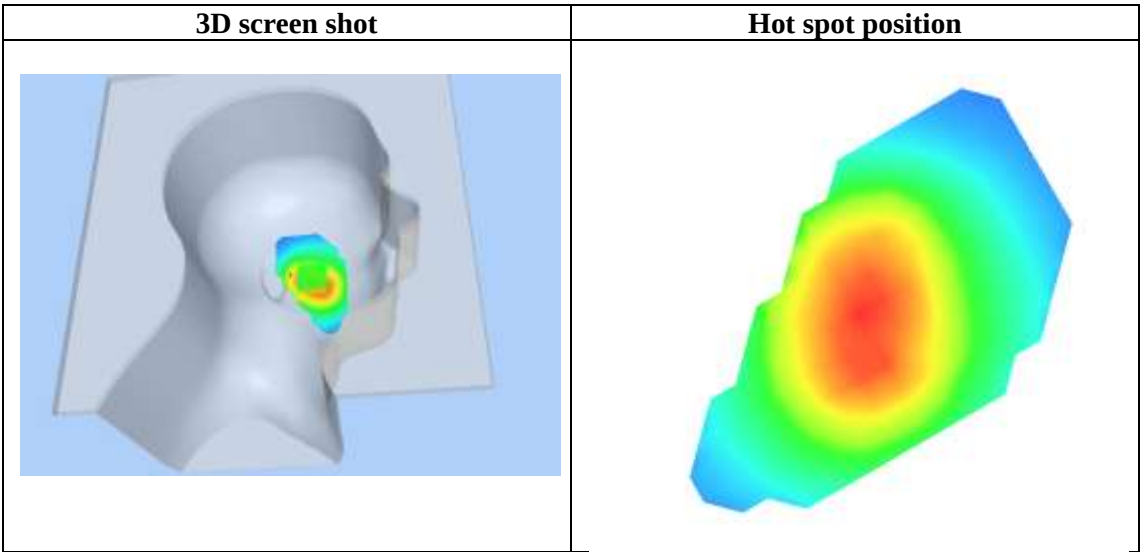
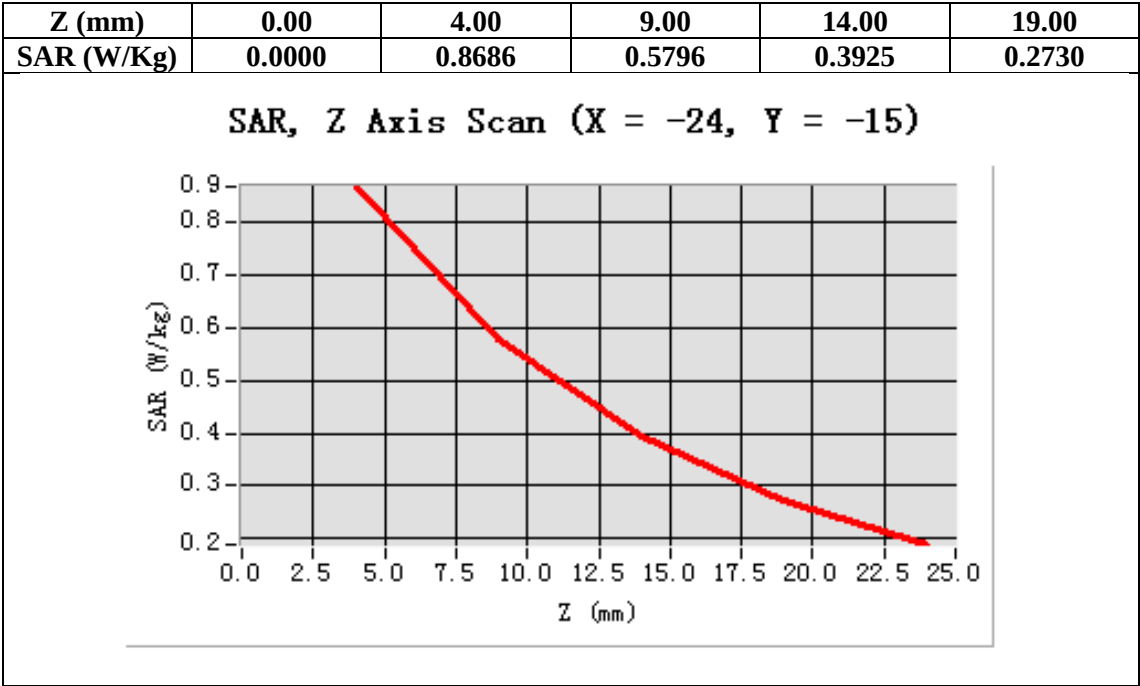
Configuration/ WCDMA Band V Mid-Touch-Right/Zoom Scan: Measurement grid: $dx=8\text{mm}$, $dy=8\text{mm}$, $dz=5\text{mm}$;

Area Scan	sam_direct_droit2_surf8mm.txt
ZoomScan	5x5x7,dx=8mm dy=8mm dz=5mm,Very fast
Phantom	Right head
Device Position	Cheek
Band	WCDMA Band V
Channels	Middle
Signal	CDMA (Crest factor: 1.0)



Maximum location: X=-24.00, Y=-15.00

SAR 10g (W/Kg)	0.531785
SAR 1g (W/Kg)	0.822691



Test Laboratory: AGC Lab

Date: Nov. 20,2014

WCDMA Band V High- Touch-Right (RMC)

DUT: 3G Smart Phone; Type: S42

Communication System: UMTS; Communication System Band: BAND V UTRA/FDD ; Duty Cycle:1: 1; Conv.F=5.27
Frequency: 846.6 MHz; Medium parameters used: $f = 835\text{MHz}$; $\sigma = 0.90\text{ mho/m}$; $\epsilon_r = 41.28$; $\rho = 1000\text{ kg/m}^3$;
Phantom section: Right Section
Ambient temperature ($^{\circ}\text{C}$): 21, Liquid temperature ($^{\circ}\text{C}$): 21

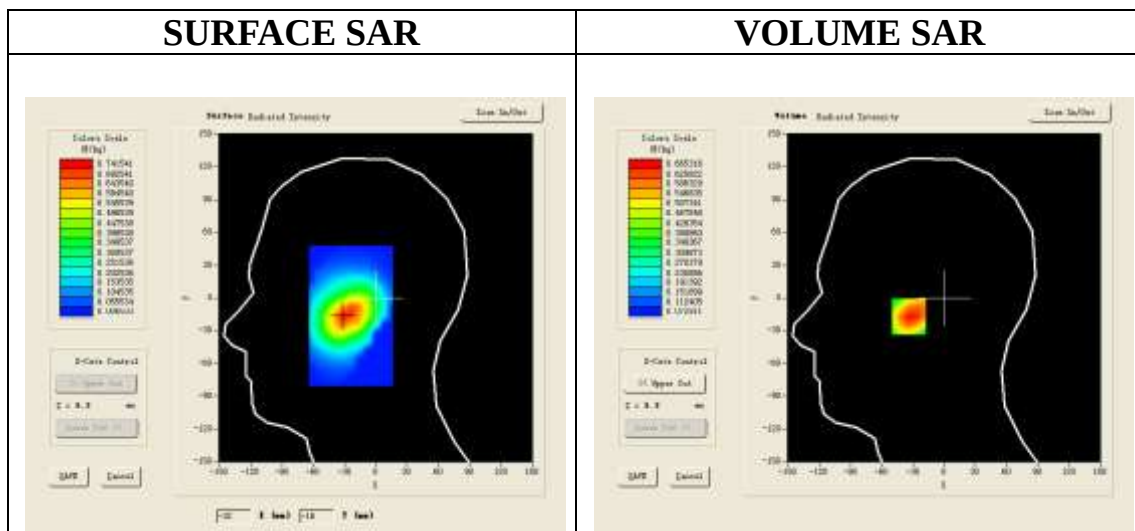
SATIMO Configuration:

- Probe: SSE5; Calibrated: 01/12/2014; Serial No.:SN 22/12 EP159
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Phantom: Flat Phantom; Type: Elliptical Phantom
- Measurement SW: OpenSAR V4_02_01

Configuration/ WCDMA Band V High -Touch-Right/Area Scan: Measurement grid: $dx=8\text{mm}$, $dy=8\text{mm}$

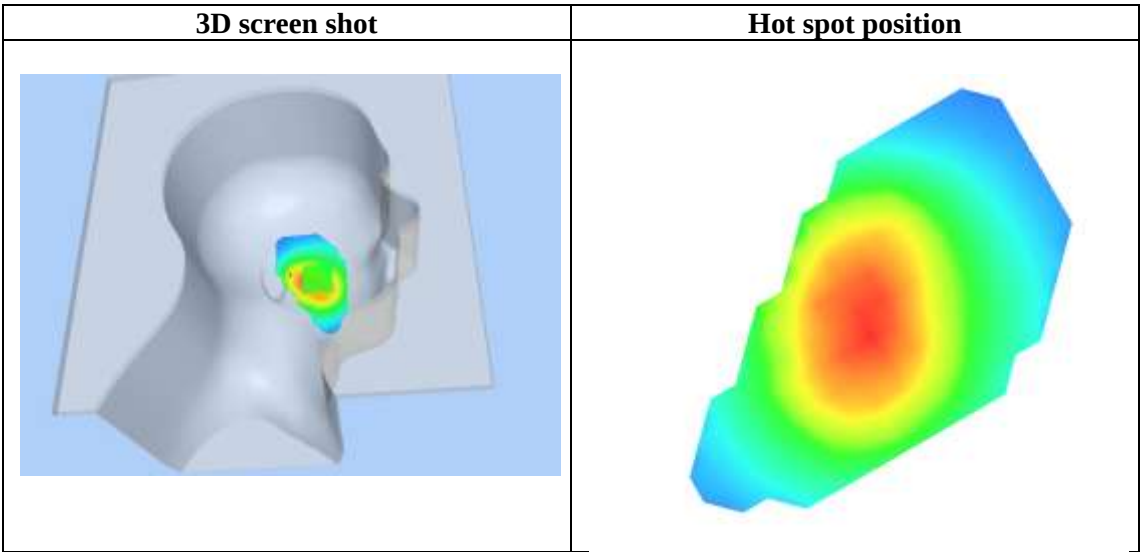
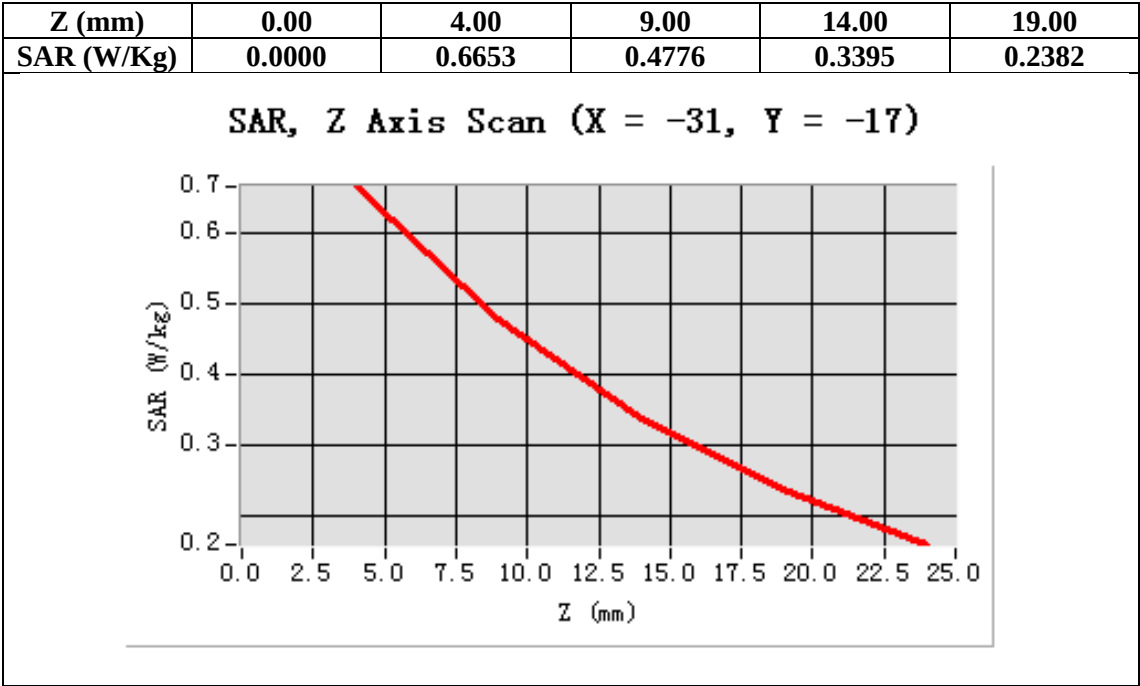
Configuration/ WCDMA Band V High -Touch-Right/Zoom Scan: Measurement grid: $dx=8\text{mm}$, $dy=8\text{mm}$, $dz=5\text{mm}$;

Area Scan	sam_direct_droit2_surf8mm.txt
ZoomScan	5x5x7,dx=8mm dy=8mm dz=5mm,Very fast
Phantom	Right head
Device Position	Cheek
Band	WCDMA Band V
Channels	High
Signal	CDMA (Crest factor: 1.0)



Maximum location: X=-31.00, Y=-17.00

SAR 10g (W/Kg)	0.412820
SAR 1g (W/Kg)	0.634693



Test Laboratory: AGC Lab

Date: Nov. 20,2014

WCDMA Band V Mid-Tilt-Right (RMC)

DUT: 3G Smart Phone; Type: S42

Communication System: UMTS; Communication System Band: BAND V UTRA/FDD ; Duty Cycle:1: 1; Conv.F=5.27
Frequency: 836.6 MHz; Medium parameters used: $f = 835\text{MHz}$; $\sigma = 0.90\text{ mho/m}$; $\epsilon_r = 41.73$; $\rho = 1000\text{ kg/m}^3$;
Phantom section: Right Section
Ambient temperature ($^{\circ}\text{C}$): 21, Liquid temperature ($^{\circ}\text{C}$): 21

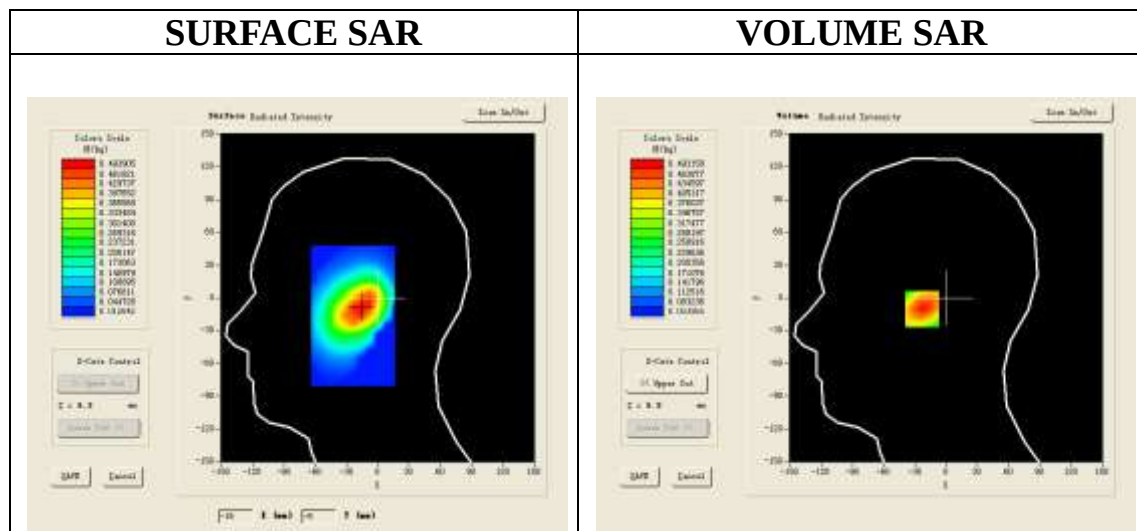
SATIMO Configuration:

- Probe: SSE5; Calibrated: 01/12/2014; Serial No.:SN 22/12 EP159
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Phantom: Flat Phantom; Type: Elliptical Phantom
- Measurement SW: OpenSAR V4_02_01

Configuration/ WCDMA Band V Mid-Tilt-Right/Area Scan: Measurement grid: $dx=8\text{mm}$, $dy=8\text{mm}$

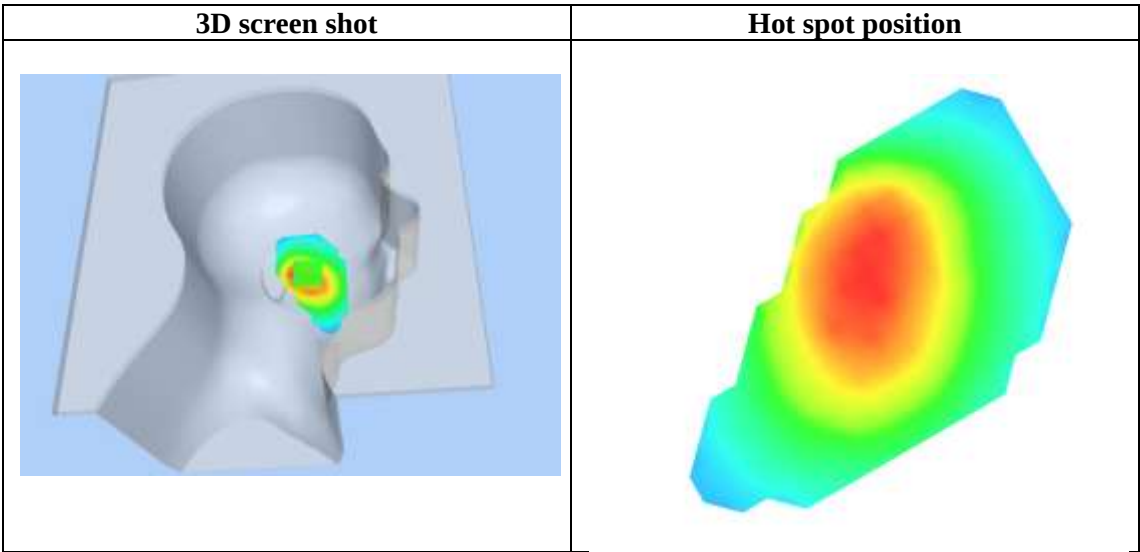
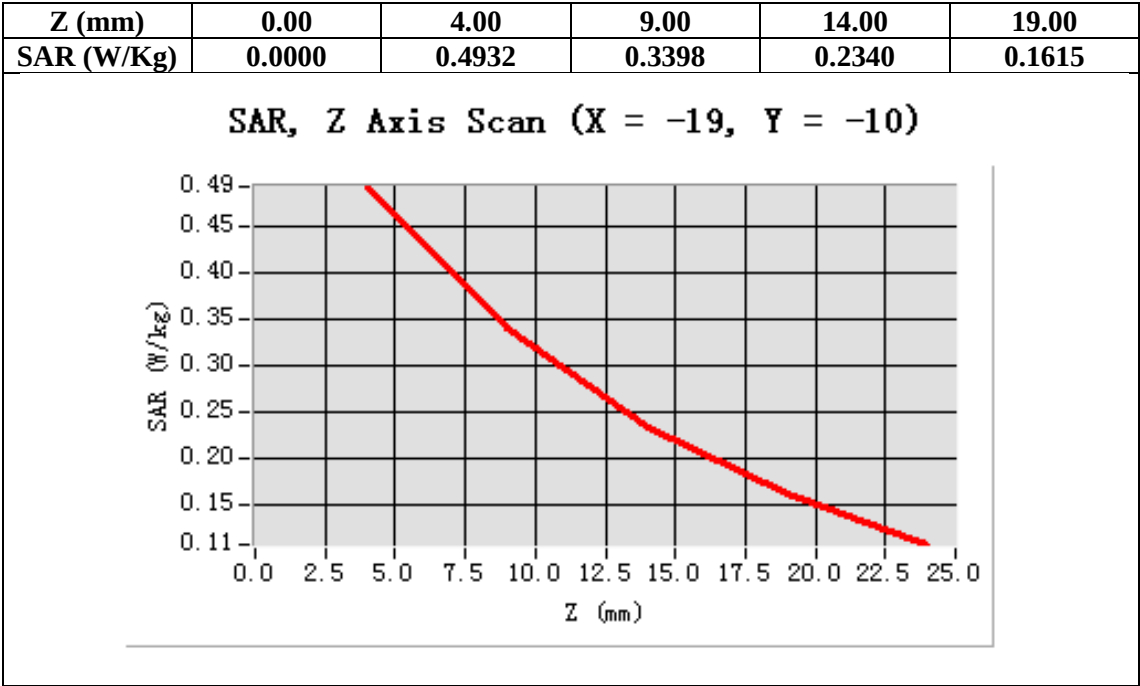
Configuration/ WCDMA Band V Mid-Tilt-Right/Zoom Scan: Measurement grid: $dx=8\text{mm}$, $dy=8\text{mm}$, $dz=5\text{mm}$;

Area Scan	sam_direct_droit2_surf8mm.txt
Zoom Scan	5x5x7, $dx=8\text{mm}$ $dy=8\text{mm}$ $dz=5\text{mm}$, Very fast
Phantom	Right head
Device Position	Tilt
Band	WCDMA Band V
Channels	Middle
Signal	CDMA (Crest factor: 1.0)



Maximum location: X=-19.00, Y=-10.00

SAR 10g (W/Kg)	0.301139
SAR 1g (W/Kg)	0.462637



Test Laboratory: AGC Lab

Date: Nov. 20,2014

WCDMA Band V Low-Body-Towards Grounds (RMC)

DUT: 3G Smart Phone; Type: S42

Communication System: UMTS; Communication System Band: BAND V UTRA/FDD; Duty Cycle:1: 1; Conv.F=5.48
Frequency: 826.4 MHz; Medium parameters used: $f = 835\text{MHz}$; $\sigma = 0.95\text{ mho/m}$; $\epsilon_r = 55.63$; $\rho = 1000\text{ kg/m}^3$;
Phantom section: Flat Section
Ambient temperature ($^{\circ}\text{C}$):21, Liquid temperature ($^{\circ}\text{C}$):21

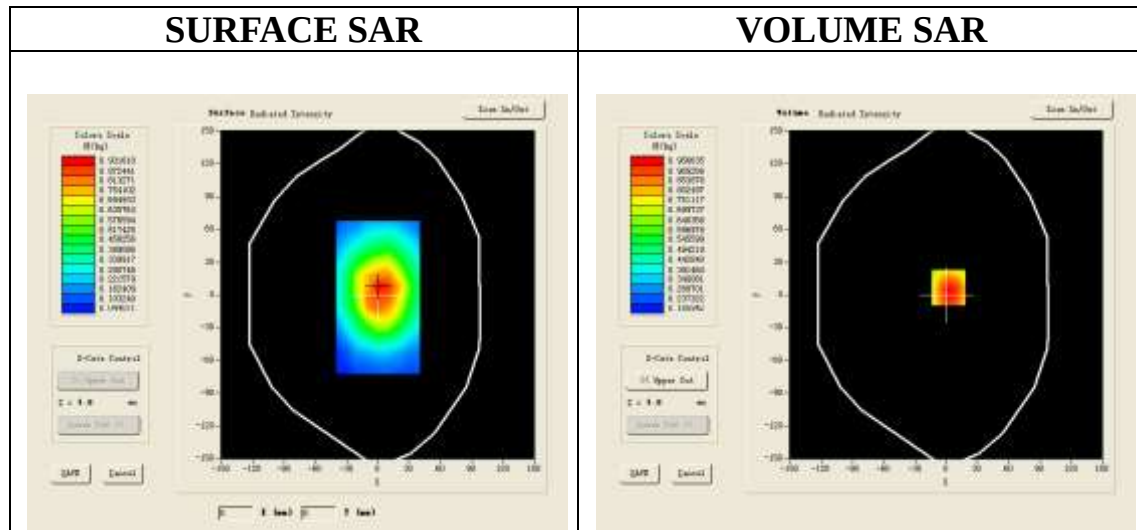
SATIMO Configuration:

- Probe: SSE5; Calibrated: 01/12/2014; Serial No.:SN 22/12 EP159
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Phantom: Flat Phantom; Type: Elliptical Phantom
- Measurement SW: OpenSAR V4_02_01

Configuration/ WCDMA Band V Low -Body-Back/Area Scan: Measurement grid: $dx=8\text{mm}$, $dy=8\text{mm}$

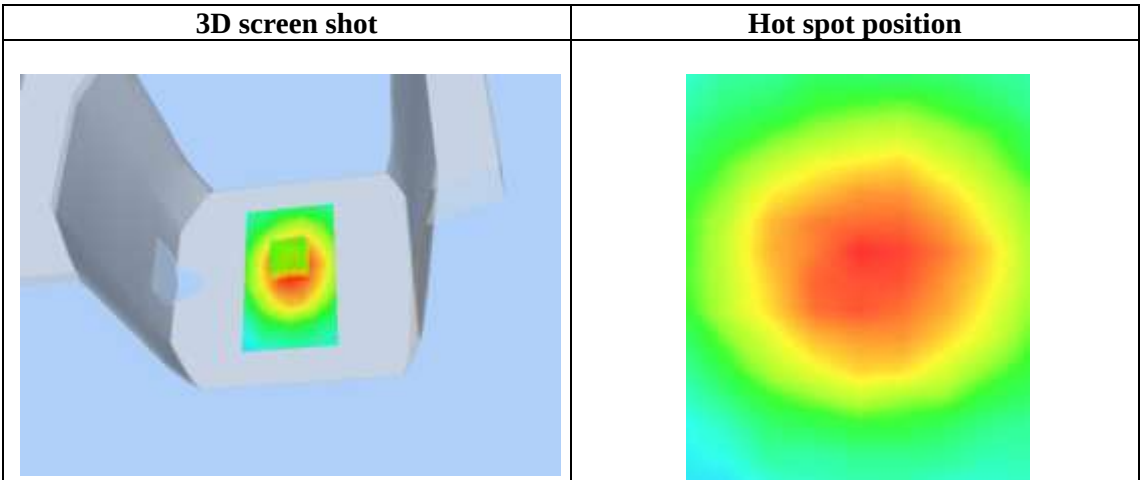
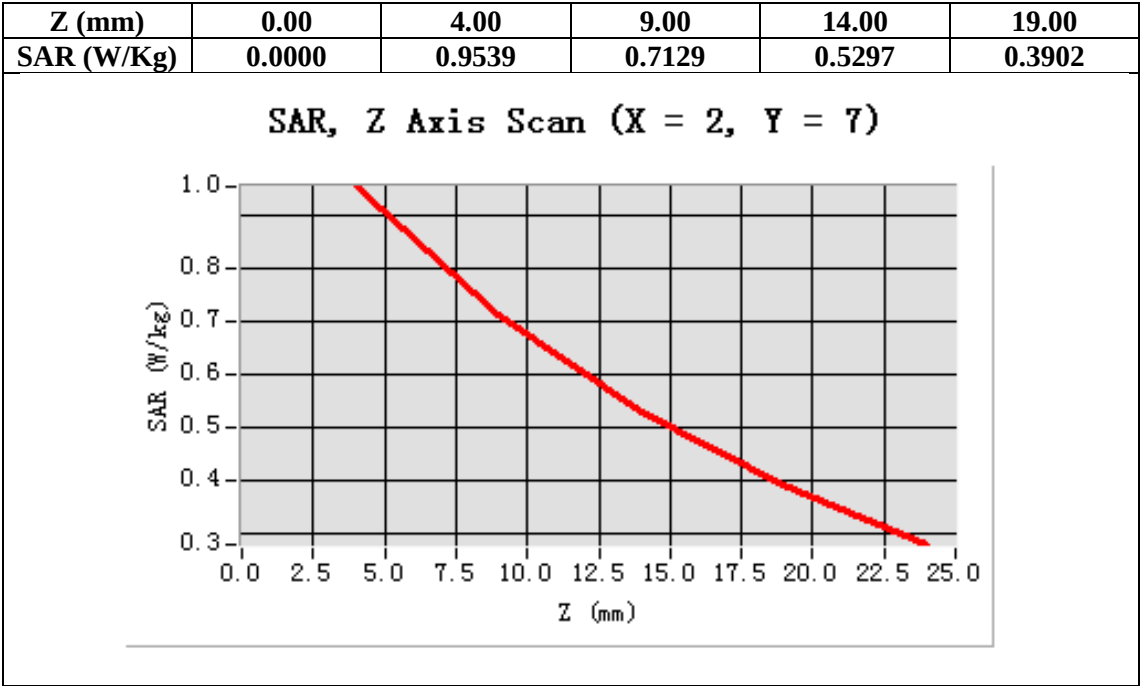
Configuration/ WCDMA Band V Low -Body-Back/Zoom Scan: Measurement grid: $dx=8\text{mm}$, $dy=8\text{mm}$, $dz=5\text{mm}$;

Area Scan	surf_sam_plan.txt
ZoomScan	5x5x7, $dx=8\text{mm}$ $dy=8\text{mm}$ $dz=5\text{mm}$, Very fast
Phantom	Validation plane
Device Position	Body Back
Band	WCDMA Band V
Channels	Low
Signal	CDMA (Crest factor: 1.0)



Maximum location: X=2.00, Y=7.00

SAR 10g (W/Kg)	0.701573
SAR 1g (W/Kg)	1.002689



Test Laboratory: AGC Lab

Date: Nov. 20,2014

WCDMA Band V Mid-Body-Towards Grounds (RMC)

DUT: 3G Smart Phone; Type: S42

Communication System: UMTS; Communication System Band: BAND V UTRA/FDD; Duty Cycle:1: 1; Conv.F=5.48
Frequency: 836.6 MHz; Medium parameters used: $f = 835\text{MHz}$; $\sigma = 0.98\text{ mho/m}$; $\epsilon_r = 54.73$; $\rho = 1000\text{ kg/m}^3$;
Phantom section: Flat Section
Ambient temperature ($^{\circ}\text{C}$):21, Liquid temperature ($^{\circ}\text{C}$):21

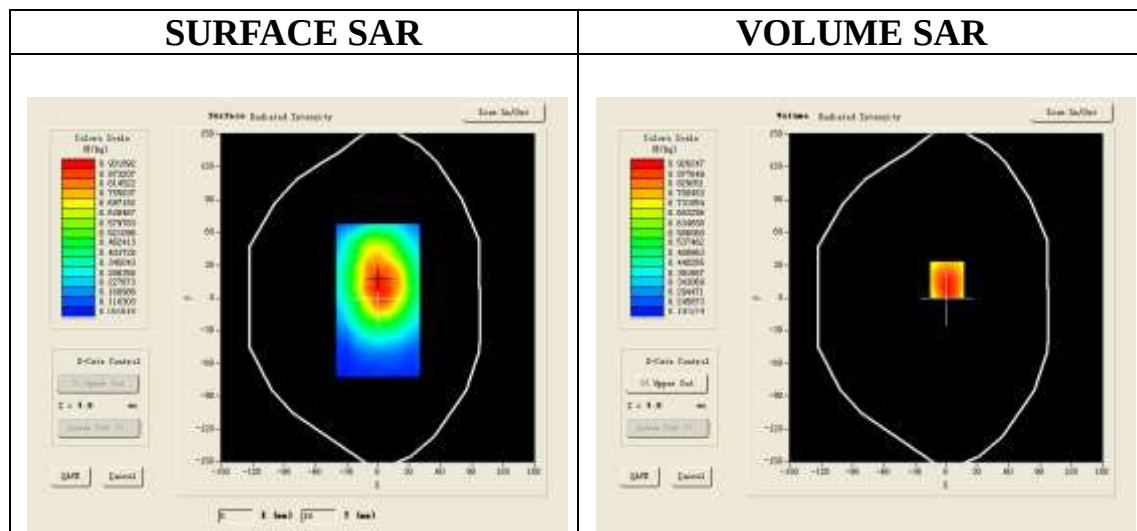
SATIMO Configuration:

- Probe: SSE5; Calibrated: 01/12/2014; Serial No.:SN 22/12 EP159
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Phantom: Flat Phantom; Type: Elliptical Phantom
- Measurement SW: OpenSAR V4_02_01

Configuration/ WCDMA Band V Mid-Body-Back/Area Scan: Measurement grid: $dx=8\text{mm}$, $dy=8\text{mm}$

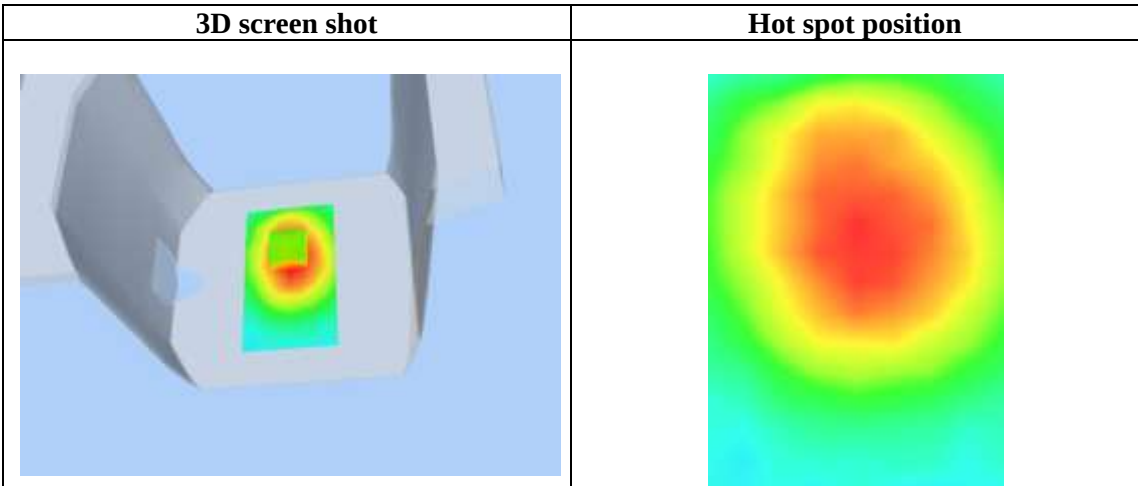
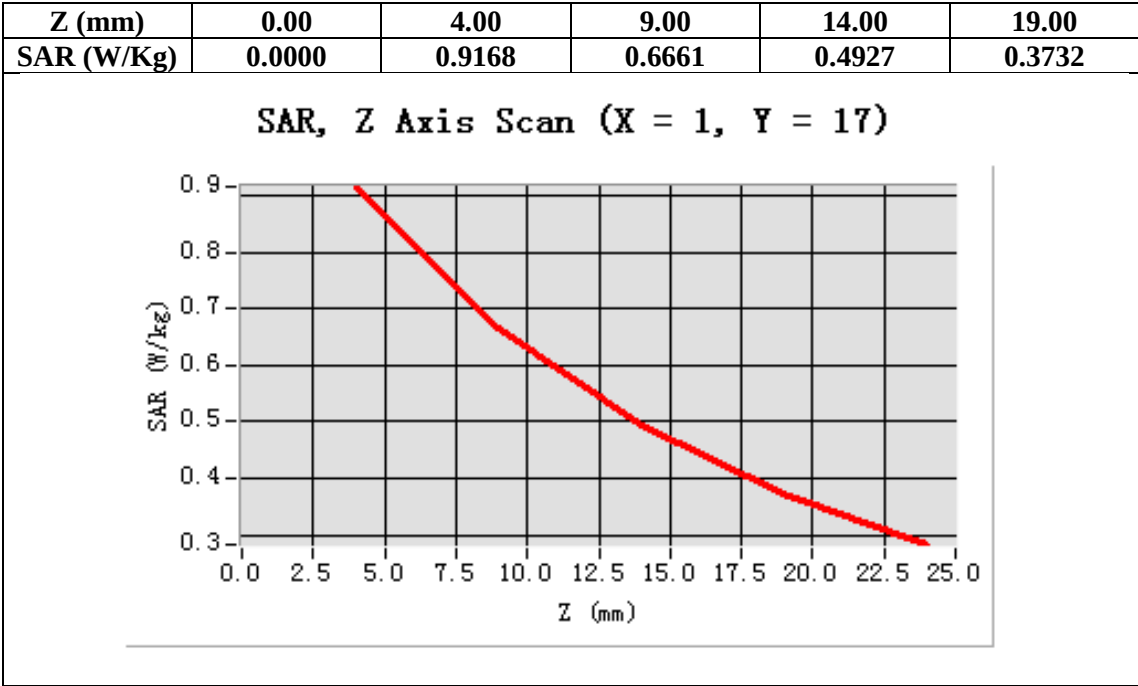
Configuration/ WCDMA Band V Mid-Body-Back/Zoom Scan: Measurement grid: $dx=8\text{mm}$, $dy=8\text{mm}$, $dz=5\text{mm}$;

Area Scan	surf_sam_plan.txt
ZoomScan	5x5x7,dx=8mm dy=8mm dz=5mm,Very fast
Phantom	Validation plane
Device Position	Body Back
Band	WCDMA Band V
Channels	Middle
Signal	CDMA (Crest factor: 1.0)



Maximum location: X=1.00, Y=17.00

SAR 10g (W/Kg)	0.681395
SAR 1g (W/Kg)	0.962016



Test Laboratory: AGC Lab

Date: Nov. 20,2014

WCDMA Band V High-Body-Towards Grounds (RMC)

DUT: 3G Smart Phone; Type: S42

Communication System: UMTS; Communication System Band: BAND V UTRA/FDD; Duty Cycle:1: 1; Conv.F=5.48
Frequency: 846.6 MHz; Medium parameters used: $f = 835\text{MHz}$; $\sigma = 0.96\text{ mho/m}$; $\epsilon_r = 55.64\rho = 1000\text{ kg/m}^3$;
Phantom section: Flat Section
Ambient temperature ($^{\circ}\text{C}$):21, Liquid temperature ($^{\circ}\text{C}$):21

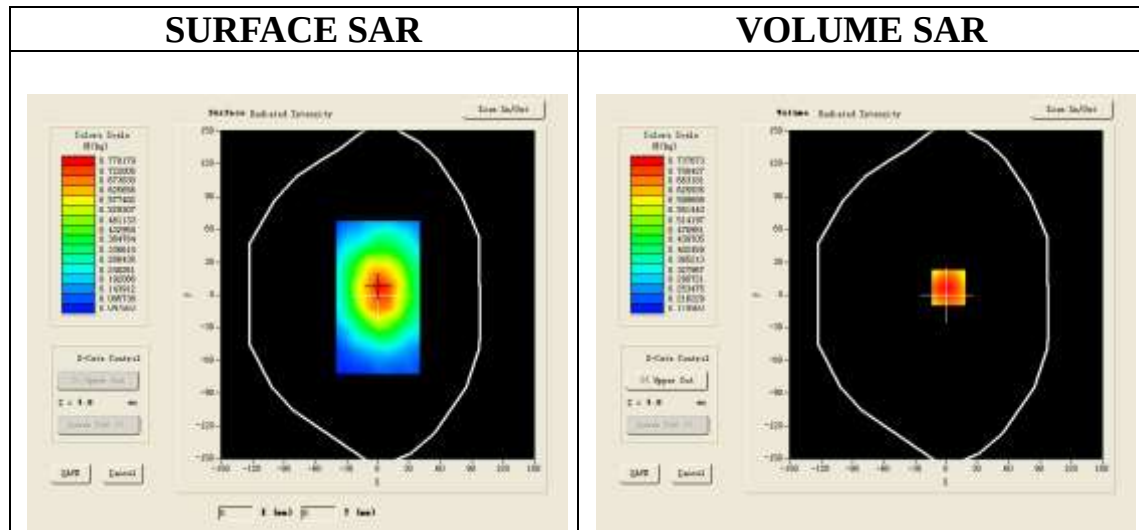
SATIMO Configuration:

- Probe: SSE5; Calibrated: 01/12/2014; Serial No.:SN 22/12 EP159
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Phantom: Flat Phantom; Type: Elliptical Phantom
- Measurement SW: OpenSAR V4_02_01

Configuration/ WCDMA Band V High Body-Back/Area Scan: Measurement grid: $dx=8\text{mm}$, $dy=8\text{mm}$

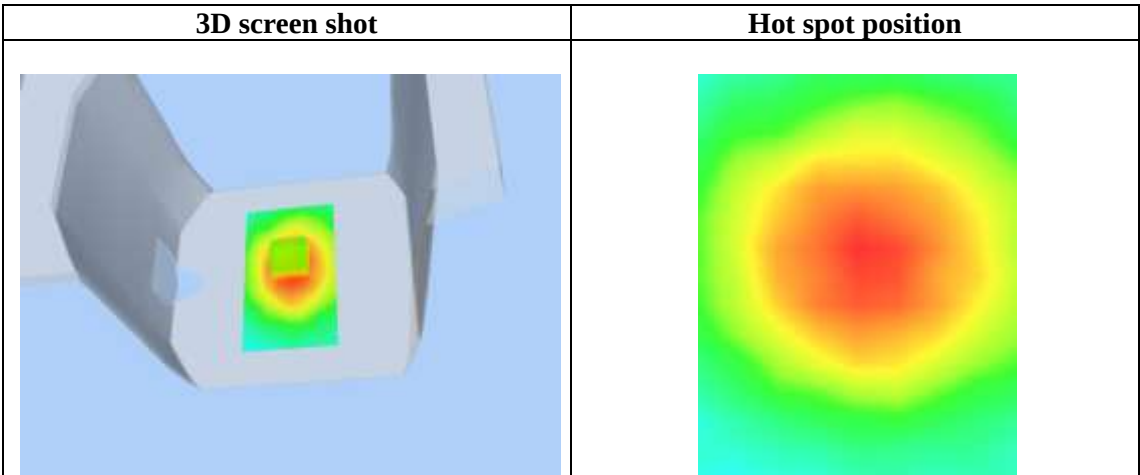
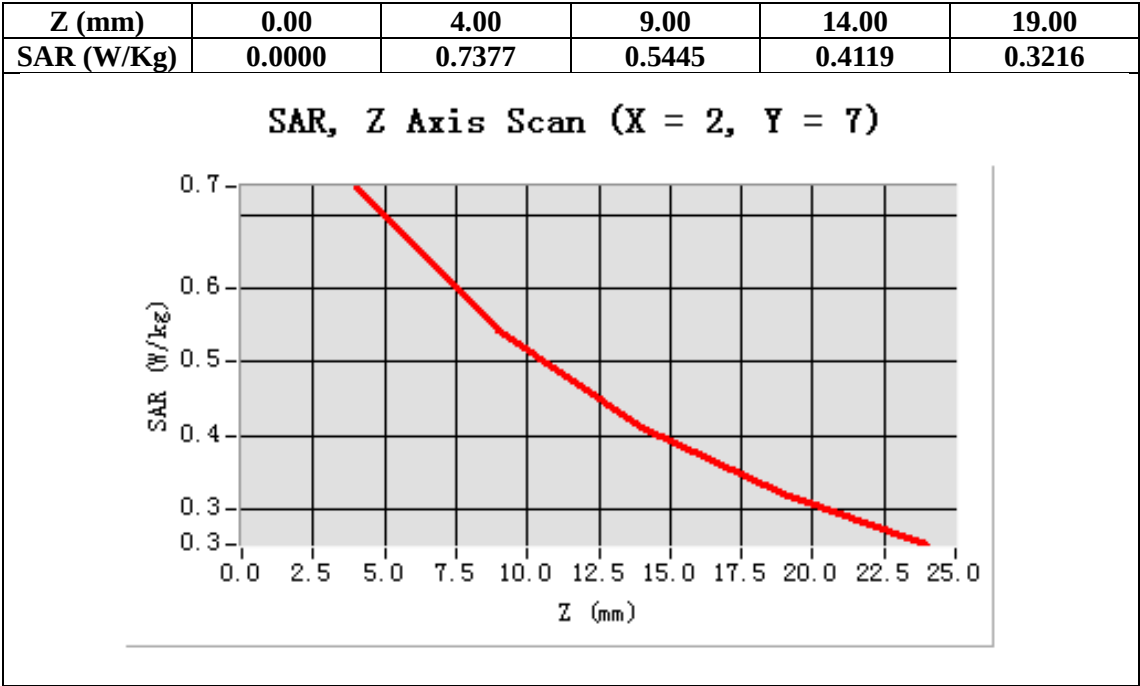
Configuration/ WCDMA Band V High -Body-Back/Zoom Scan: Measurement grid: $dx=8\text{mm}$, $dy=8\text{mm}$, $dz=5\text{mm}$;

Area Scan	surf_sam_plan.txt
ZoomScan	5x5x7,dx=8mm dy=8mm dz=5mm,Very fast
Phantom	Validation plane
Device Position	Body Back
Band	WCDMA Band V
Channels	High
Signal	CDMA (Crest factor: 1.0)



Maximum location: X=2.00, Y=7.00

SAR 10g (W/Kg)	0.551679
SAR 1g (W/Kg)	0.773642



Test Laboratory: AGC Lab

Date: Nov. 20,2014

WCDMA Band V Mid- Body - Towards Phantom (RMC)

DUT: 3G Smart Phone; Type: S42

Communication System: UMTS; Communication System Band: BAND V UTRA/FDD ; Duty Cycle:1: 1; Conv.F=5.48
Frequency: 836.6 MHz; Medium parameters used: $f = 835\text{MHz}$; $\sigma = 0.98\text{ mho/m}$; $\epsilon_r = 54.73$; $\rho = 1000\text{kg/m}^3$;
Phantom section: Flat Section
Ambient temperature ($^{\circ}\text{C}$):21, Liquid temperature ($^{\circ}\text{C}$):21

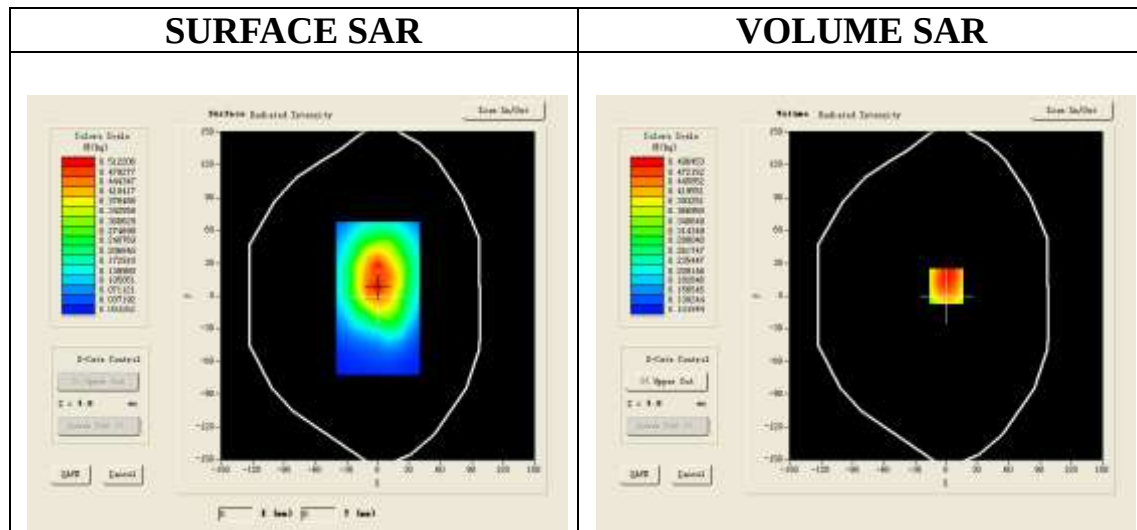
SATIMO Configuration:

- Probe: SSE5; Calibrated: 01/12/2014; Serial No.:SN 22/12 EP159
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Phantom: Flat Phantom; Type: Elliptical Phantom
- Measurement SW: OpenSAR V4_02_01

Configuration/ WCDMA Band V Mid-Body-Front/Area Scan: Measurement grid: $dx=8\text{mm}$, $dy=8\text{mm}$

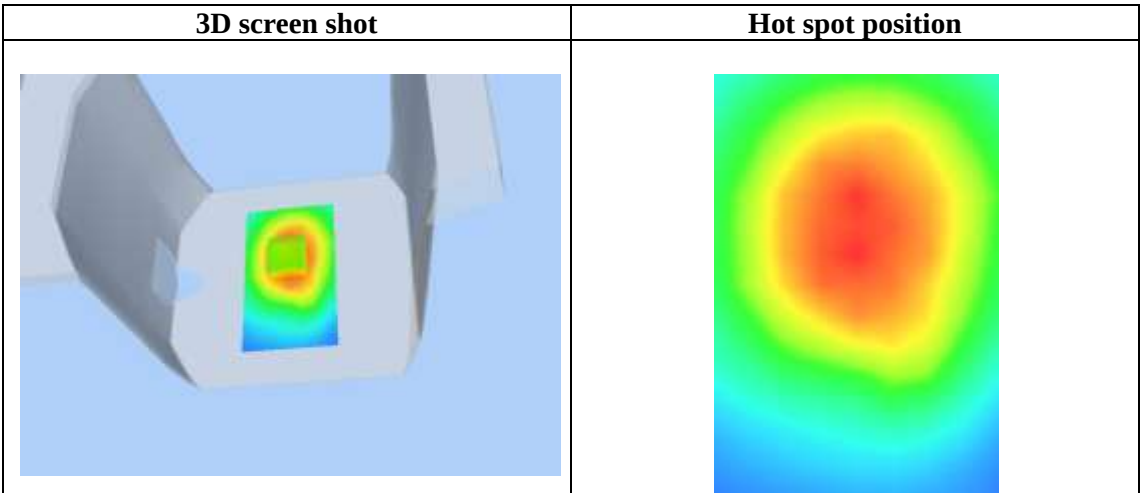
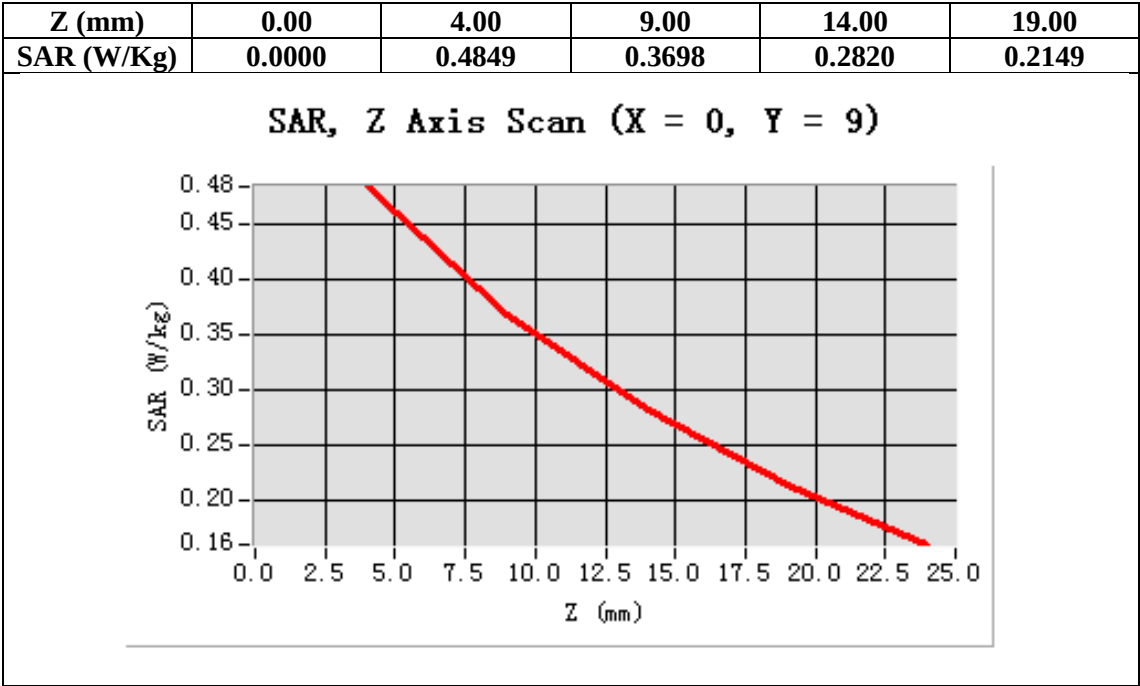
Configuration/ WCDMA Band V Mid-Body-Front/Zoom Scan: Measurement grid: $dx=8\text{mm}$, $dy=8\text{mm}$, $dz=5\text{mm}$;

Area Scan	surf_sam_plan.txt
ZoomScan	5x5x7, $dx=8\text{mm}$ $dy=8\text{mm}$ $dz=5\text{mm}$,Very fast
Phantom	Validation plane
Device Position	Body Front
Band	WCDMA Band V
Channels	Middle
Signal	CDMA (Crest factor: 1.0)



Maximum location: X=0.00, Y=9.00

SAR 10g (W/Kg)	0.341275
SAR 1g (W/Kg)	0.483026



Test Laboratory: AGC Lab

Date: Nov. 20,2014

WCDMA Band V Mid- Edge1 (RMC)

DUT: 3G Smart Phone; Type: S42

Communication System: UMTS; Communication System Band: BAND V UTRA/FDD ; Duty Cycle:1: 1; Conv.F=5.48
Frequency: 836.6 MHz; Medium parameters used: $f = 835\text{MHz}$; $\sigma=0.98\text{ mho/m}$; $\epsilon_r=54.73$; $\rho=1000\text{kg/m}^3$;
Phantom section: Flat Section
Ambient temperature ($^{\circ}\text{C}$):21, Liquid temperature ($^{\circ}\text{C}$):21

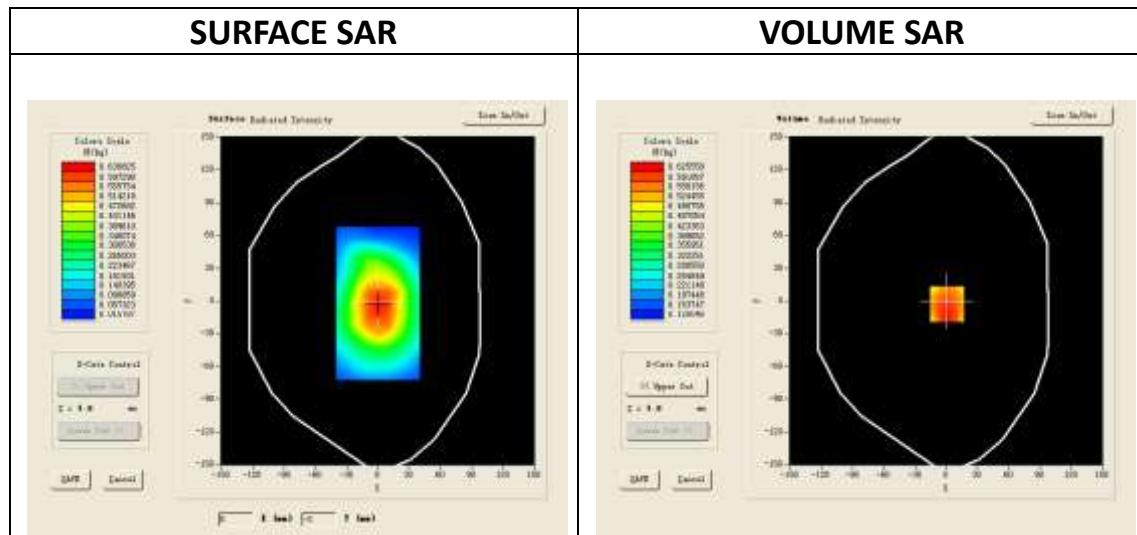
SATIMO Configuration:

- Probe: SSE5; Calibrated: 01/12/2014; Serial No.:SN 22/12 EP159
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Phantom: Flat Phantom; Type: Elliptical Phantom
- Measurement SW: OpenSAR V4_02_01

Configuration/ WCDMA Band V Mid- Edge1/Area Scan: Measurement grid: $dx=8\text{mm}$, $dy=8\text{mm}$

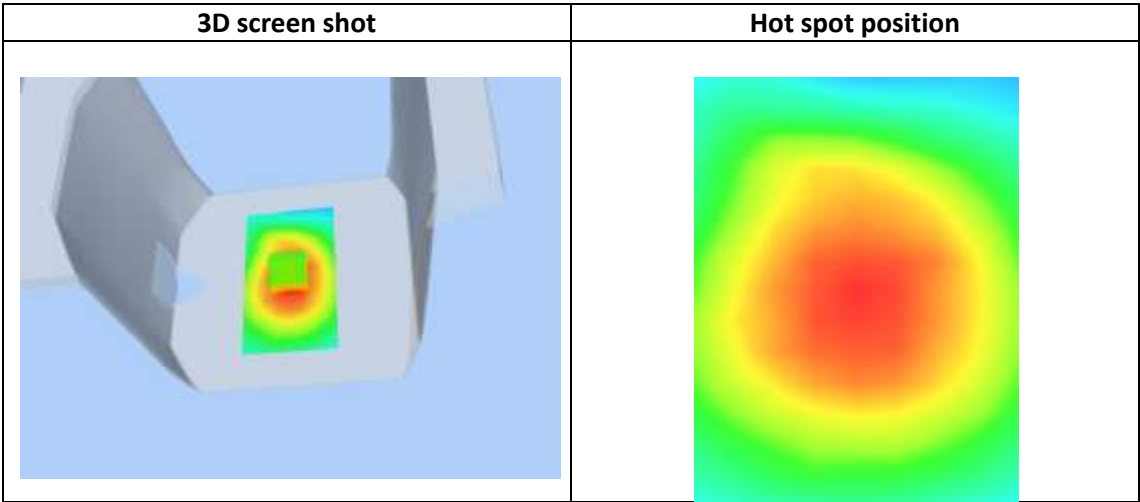
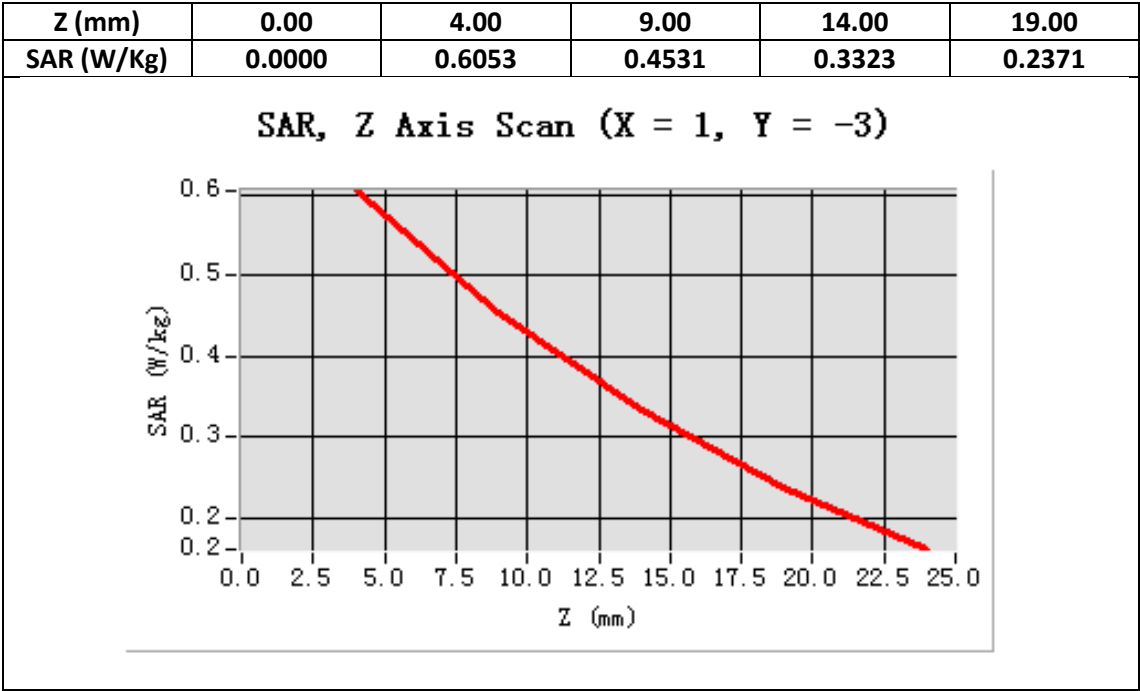
Configuration/ WCDMA Band V Mid- Edge1/Zoom Scan: Measurement grid: $dx=8\text{mm}$, $dy=8\text{mm}$, $dz=5\text{mm}$;

Area Scan	surf_sam_plan.txt
ZoomScan	5x5x7, $dx=8\text{mm}$ $dy=8\text{mm}$ $dz=5\text{mm}$,Very fast
Phantom	Validation plane
Device Position	Edge1
Band	WCDMA Band V
Channels	Middle
Signal	CDMA (Crest factor: 1.0)



Maximum location: X=1.00, Y=-3.00

SAR 10g (W/Kg)	0.459460
SAR 1g (W/Kg)	0.645470



Test Laboratory: AGC Lab

Date: Nov. 20,2014

WCDMA Band V Mid- Edge2 (RMC)

DUT: 3G Smart Phone; Type: S42

Communication System: UMTS; Communication System Band: BAND V UTRA/FDD ; Duty Cycle:1: 1; Conv.F=5.48
Frequency: 836.6 MHz; Medium parameters used: $f = 835\text{MHz}$; $\sigma = 0.98\text{ mho/m}$; $\epsilon_r = 54.73$; $\rho = 1000\text{kg/m}^3$;
Phantom section: Flat Section
Ambient temperature ($^{\circ}\text{C}$):21, Liquid temperature ($^{\circ}\text{C}$):21

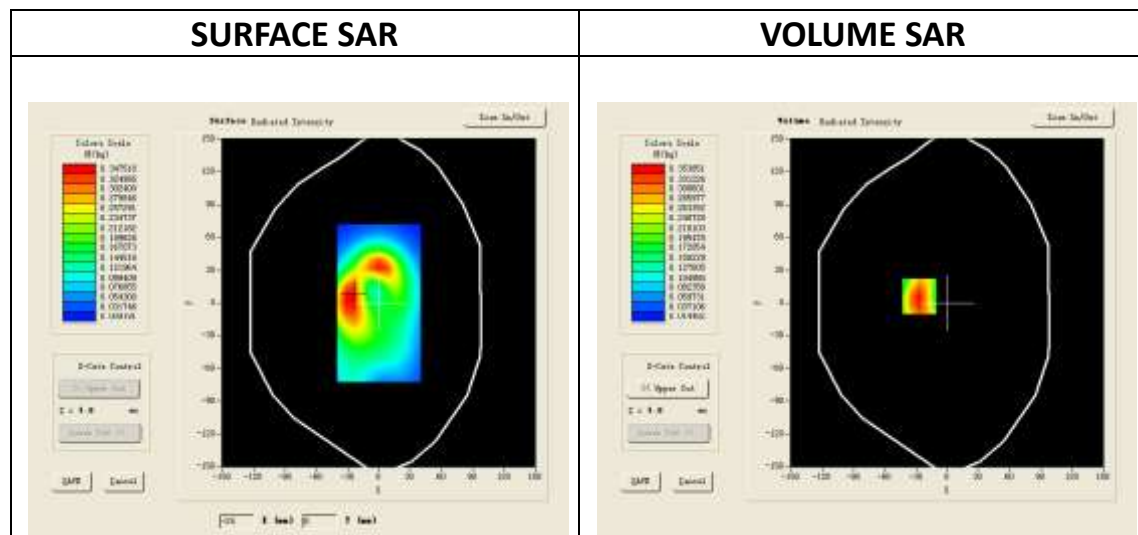
SATIMO Configuration:

- Probe: SSE5; Calibrated: 01/12/2014; Serial No.:SN 22/12 EP159
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Phantom: Flat Phantom; Type: Elliptical Phantom
- Measurement SW: OpenSAR V4_02_01

Configuration/ WCDMA Band V Mid- Edge2/Area Scan: Measurement grid: $dx=8\text{mm}$, $dy=8\text{mm}$

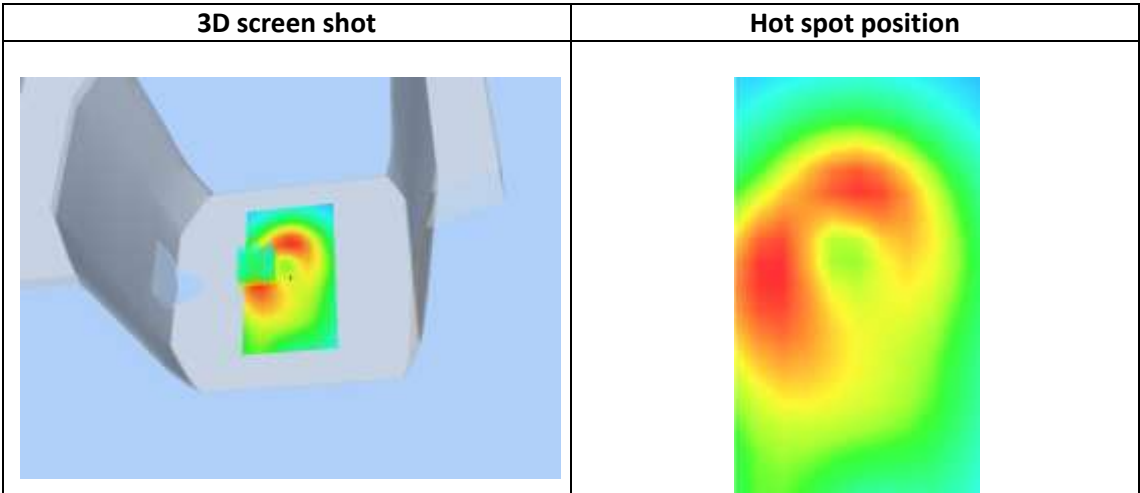
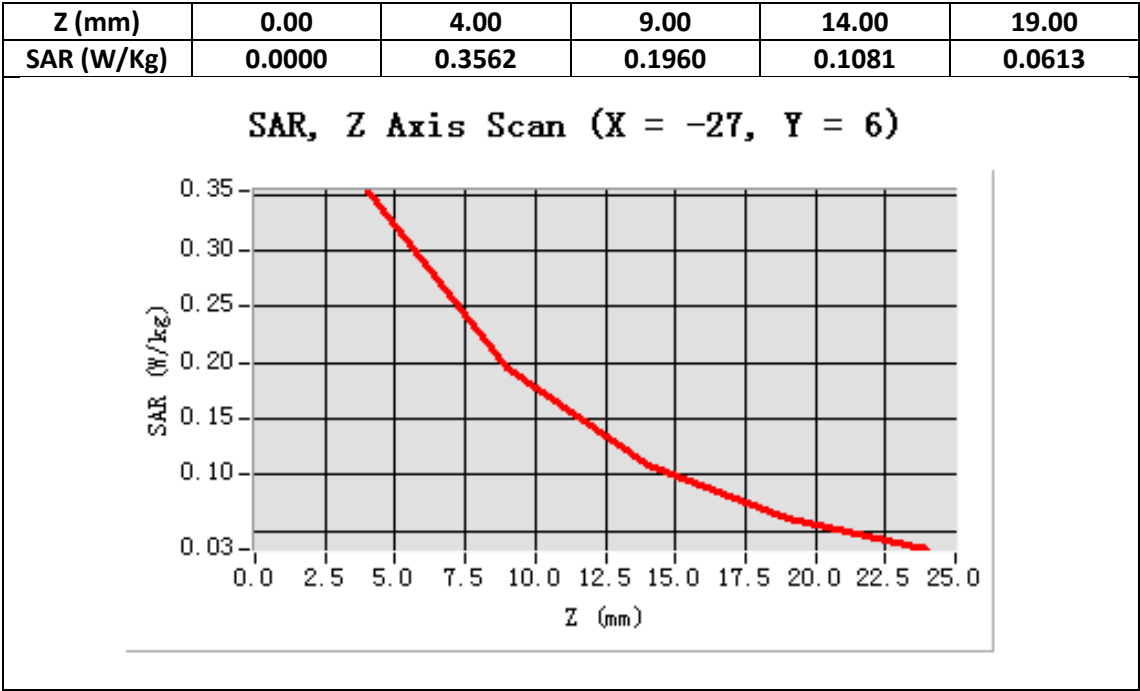
Configuration/ WCDMA Band V Mid- Edge2/Zoom Scan: Measurement grid: $dx=8\text{mm}$, $dy=8\text{mm}$, $dz=5\text{mm}$;

Area Scan	surf_sam_plan.txt
ZoomScan	5x5x7,dx=8mm dy=8mm dz=5mm,Very fast
Phantom	Validation plane
Device Position	Edge2
Band	WCDMA Band V
Channels	Middle
Signal	CDMA (Crest factor: 1.0)



Maximum location: X=-27.00, Y=6.00

SAR 10g (W/Kg)	0.187381
SAR 1g (W/Kg)	0.336450



Test Laboratory: AGC Lab

Date: Nov. 20,2014

WCDMA Band V Mid- Edge4 (RMC)

DUT: 3G Smart Phone; Type: S42

Communication System: UMTS; Communication System Band: BAND V UTRA/FDD ; Duty Cycle:1: 1; Conv.F=5.48
Frequency: 836.6 MHz; Medium parameters used: $f = 835\text{MHz}$; $\sigma=0.98\text{ mho/m}$; $\epsilon_r=54.73$; $\rho=1000\text{kg/m}^3$;
Phantom section: Flat Section
Ambient temperature ($^{\circ}\text{C}$):21, Liquid temperature ($^{\circ}\text{C}$):21

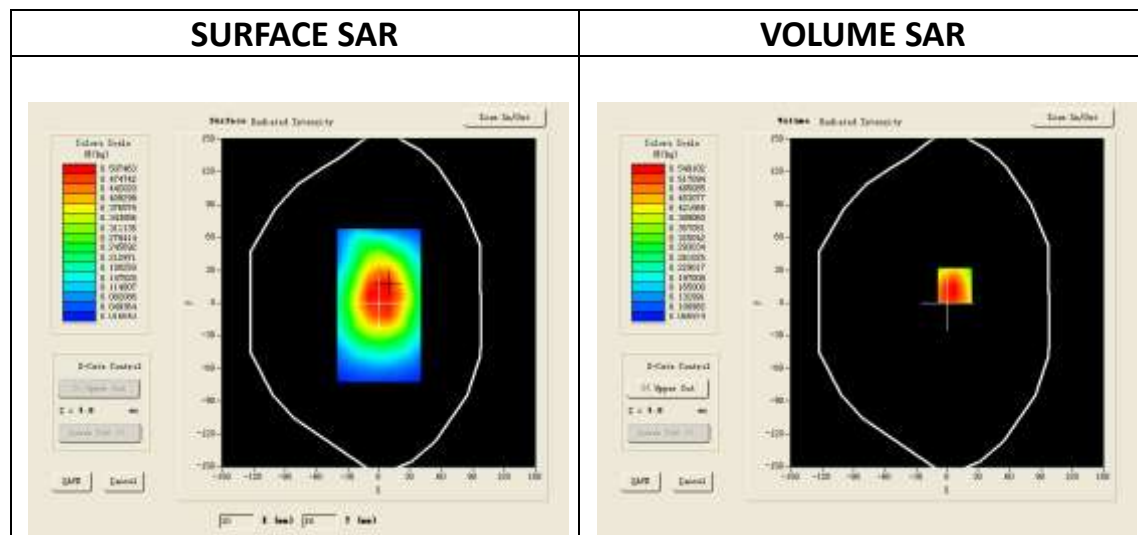
SATIMO Configuration:

- Probe: SSE5; Calibrated: 01/12/2014; Serial No.:SN 22/12 EP159
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Phantom: Flat Phantom; Type: Elliptical Phantom
- Measurement SW: OpenSAR V4_02_01

Configuration/ WCDMA Band V Mid- Edge4/Area Scan: Measurement grid: $dx=8\text{mm}$, $dy=8\text{mm}$

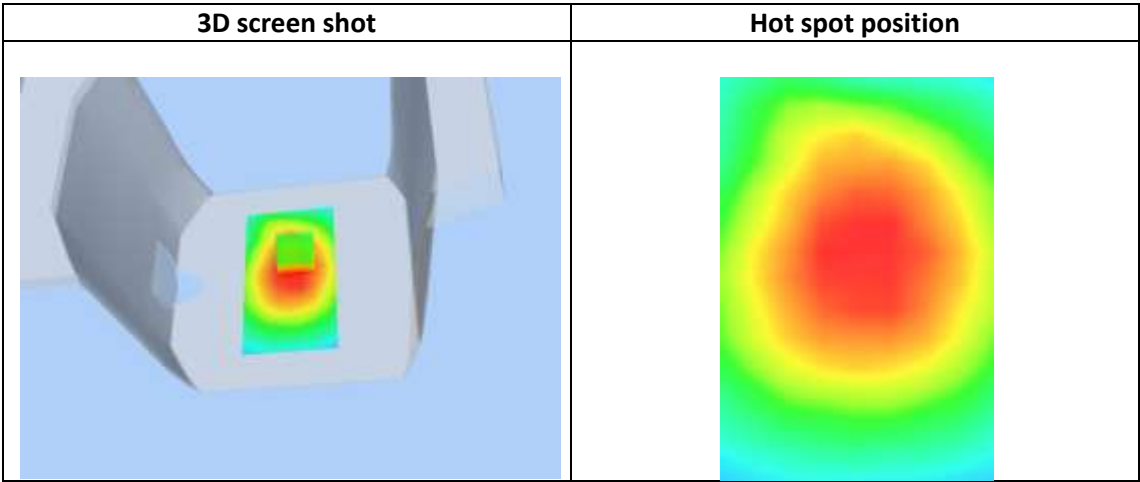
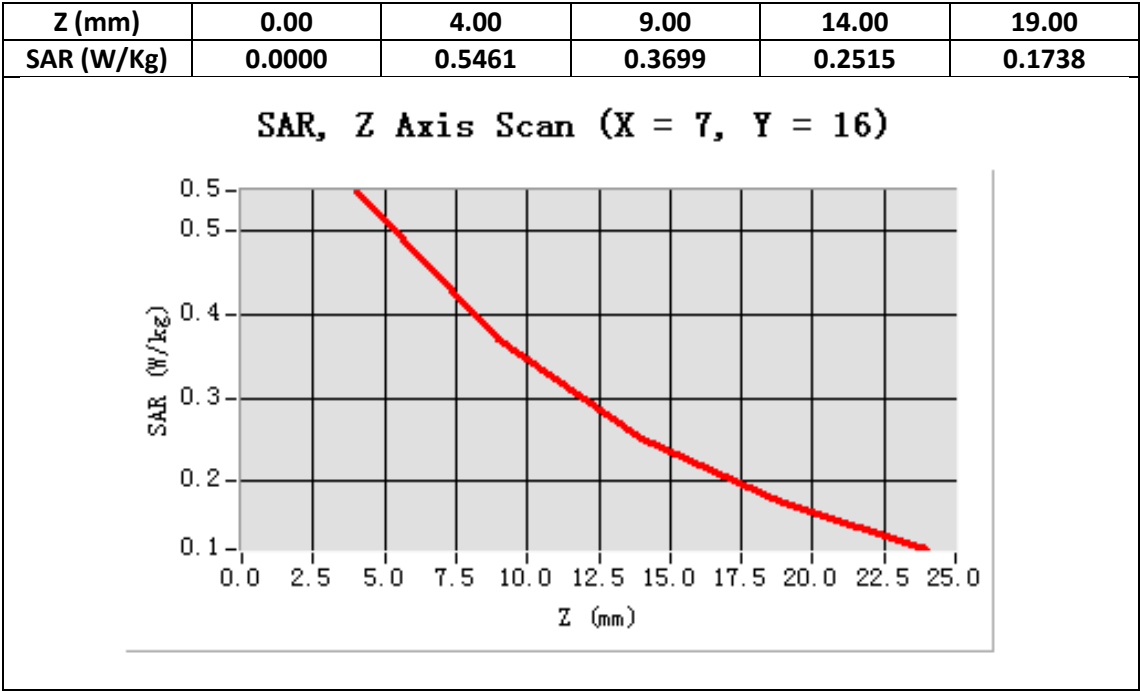
Configuration/ WCDMA Band V Mid- Edge4/Zoom Scan: Measurement grid: $dx=8\text{mm}$, $dy=8\text{mm}$, $dz=5\text{mm}$;

Area Scan	surf_sam_plan.txt
ZoomScan	5x5x7, $dx=8\text{mm}$ $dy=8\text{mm}$ $dz=5\text{mm}$,Very fast
Phantom	Validation plane
Device Position	Edge4
Band	WCDMA Band V
Channels	Middle
Signal	CDMA (Crest factor: 1.0)



Maximum location: X=7.00, Y=16.00

SAR 10g (W/Kg)	0.375482
SAR 1g (W/Kg)	0.577903



Repeated SAR

Test Laboratory: AGC Lab

Date: Nov. 20,2014

WCDMA Band II Low-Body-Towards Grounds (RMC 12.2kbps)

DUT: 3G Smart Phone; Type: S42

Communication System: UMTS; Communication System Band: Band II UTRA/FDD ;Duty Cycle:1:1; Conv.F=4.45
Frequency: 1852.4 MHz; Medium parameters used: $f = 1900$ MHz; $\sigma = 1.49$ mho/m; $\epsilon_r = 53.52$; $\rho = 1000$ kg/m³ ;
Phantom section: Flat Section
Ambient temperature (°C):21, Liquid temperature (°C):21

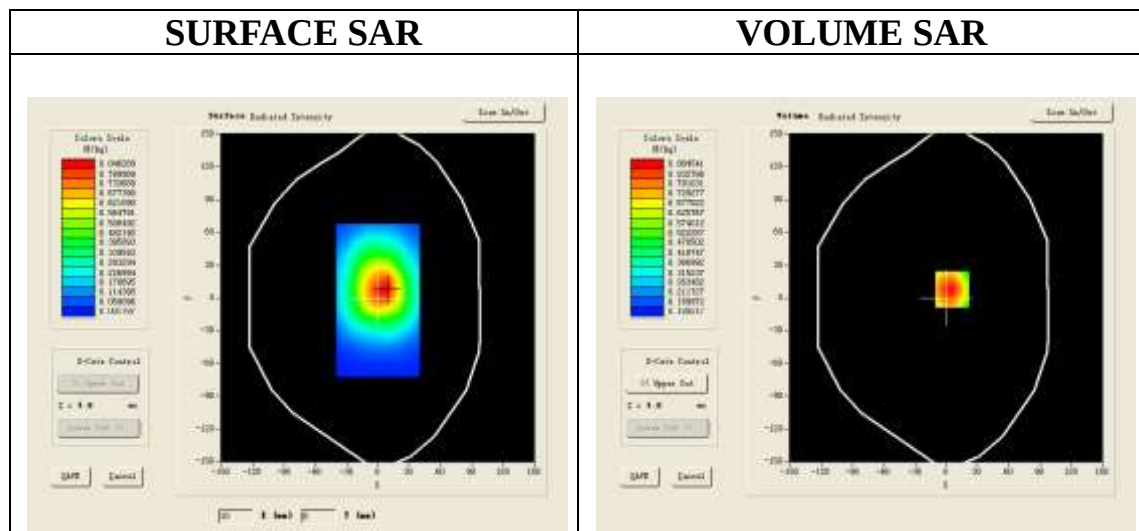
SATIMO Configuration:

- Probe: SSE5; Calibrated: 01/12/2014; Serial No.:SN 22/12 EP159
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Phantom: Flat Phantom; Type: Elliptical Phantom
- Measurement SW: OpenSAR V4_02_01

Configuration/ WCDMA band II Low -Body-back/Area Scan: Measurement grid: dx=8mm, dy=8mm

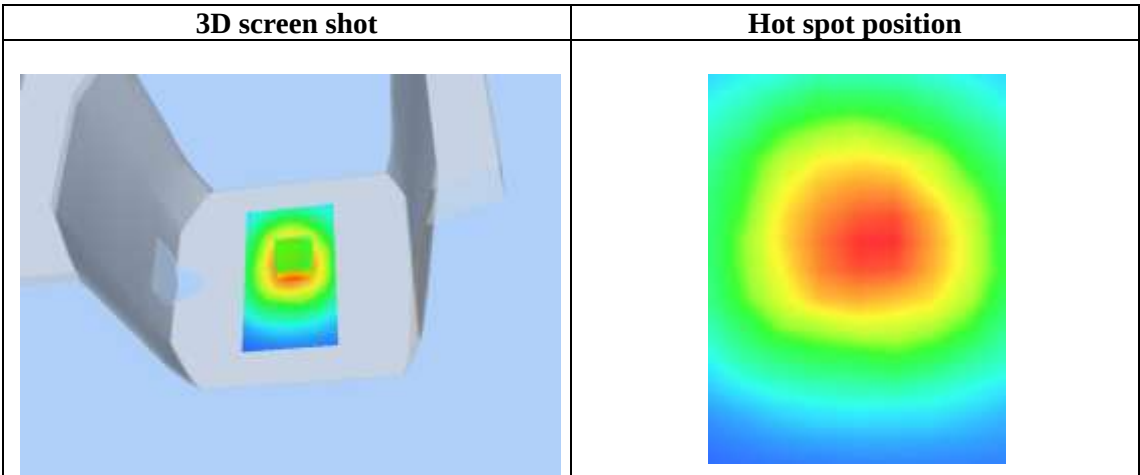
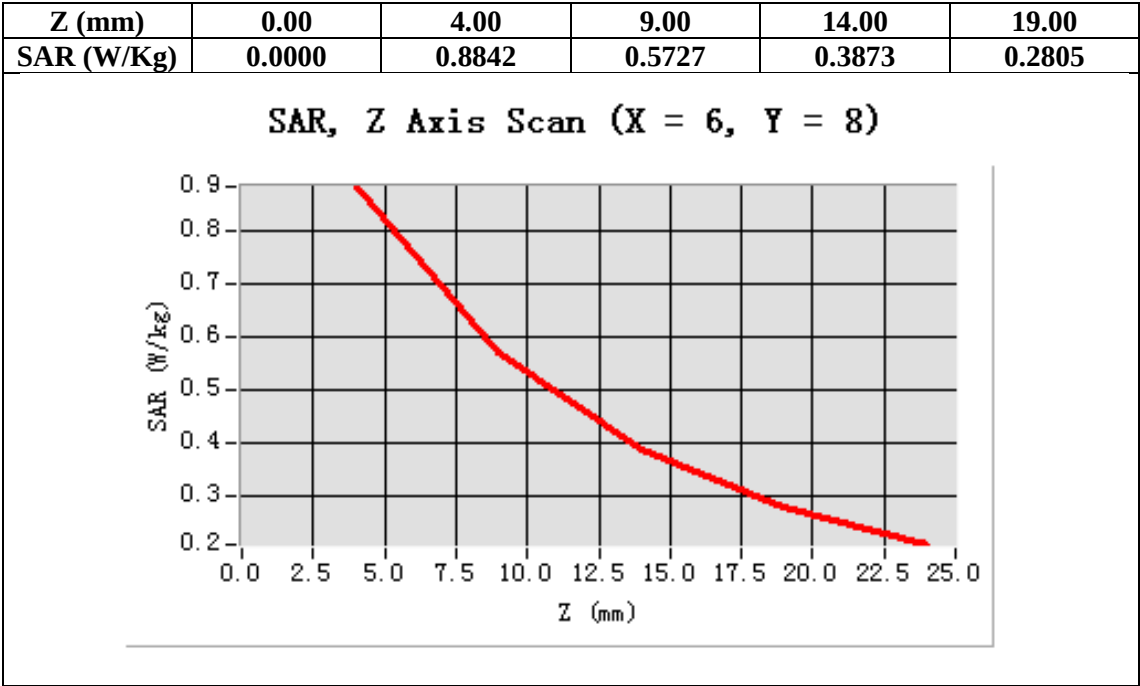
Configuration/ WCDMA band II Low -Body-back/Zoom Scan: Measurement grid: dx=8mm,dy=8mm, dz=5m;

Area Scan	surf_sam_plan.txt
ZoomScan	5x5x7,dx=8mm dy=8mm dz=5mm,Very fast
Phantom	Validation plane
Device Position	Body Back
Band	WCDMA band II
Channels	Low
Signal	CDMA (Crest factor: 1.0)



Maximum location: X=6.00, Y=8.00

SAR 10g (W/Kg)	0.581247
SAR 1g (W/Kg)	0.912427



Test Laboratory: AGC Lab

Date: Nov. 20,2014

WCDMA Band V Low- Touch-Right (RMC)

DUT: 3G Smart Phone; Type: S42

Communication System: UMTS; Communication System Band: BAND V UTRA/FDD ; Duty Cycle:1: 1; Conv.F=5.27
Frequency: 826.4MHz; Medium parameters used: $f = 835\text{MHz}$; $\sigma = 0.89 \text{ mho/m}$; $\epsilon_r = 41.11$; $\rho = 1000 \text{ kg/m}^3$;
Phantom section: Right Section
Ambient temperature ($^{\circ}\text{C}$): 21, Liquid temperature ($^{\circ}\text{C}$): 21

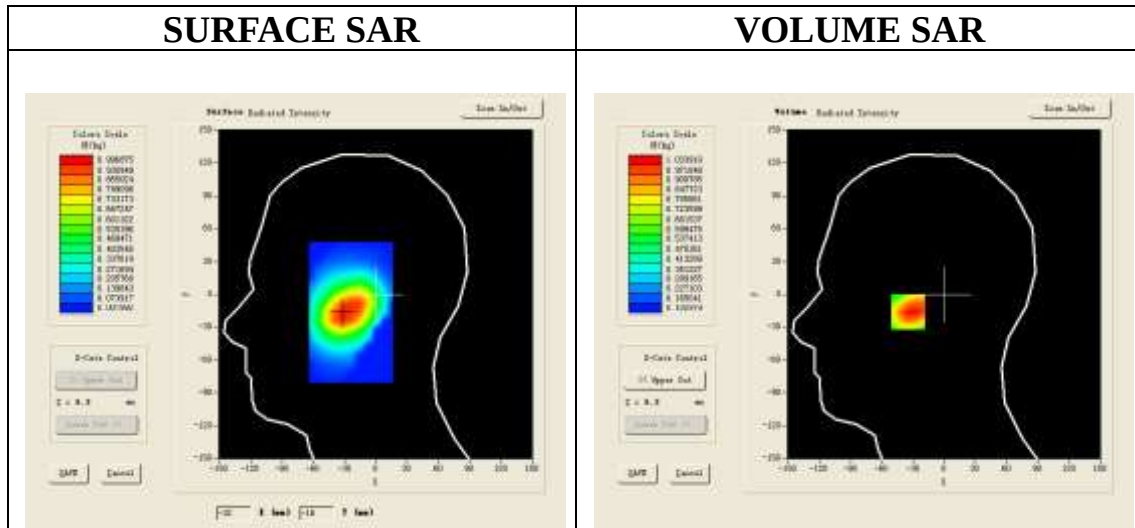
SATIMO Configuration:

- Probe: SSE5; Calibrated: 01/12/2014; Serial No.:SN 22/12 EP159
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Phantom: Flat Phantom; Type: Elliptical Phantom
- Measurement SW: OpenSAR V4_02_01

Configuration/ WCDMA Band V Low -Touch-Right/Area Scan: Measurement grid: $dx=8\text{mm}$, $dy=8\text{mm}$

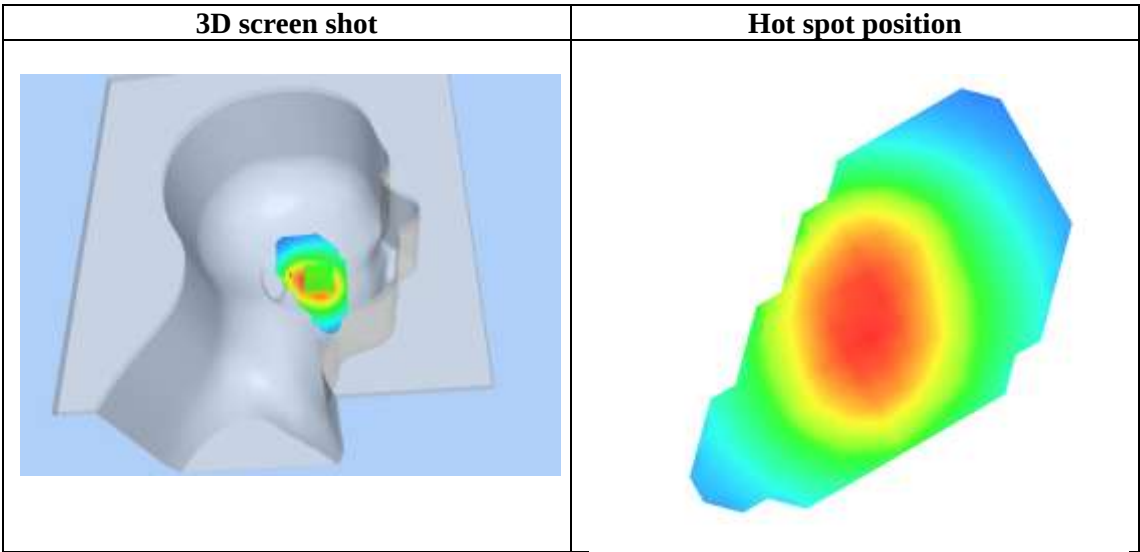
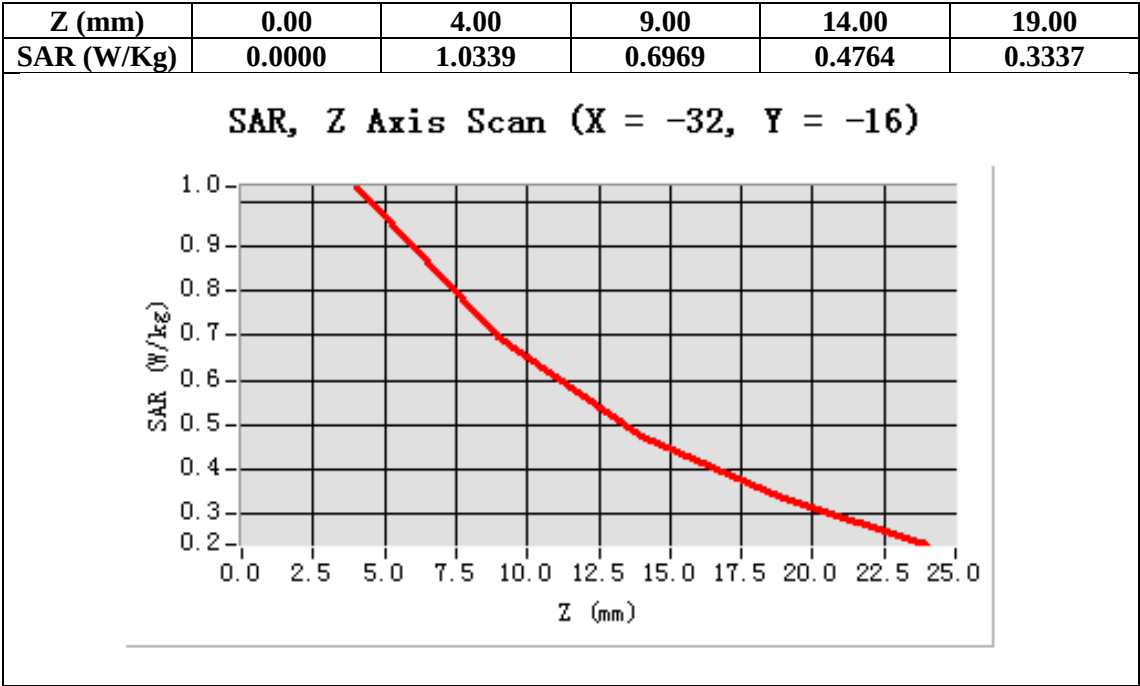
Configuration/ WCDMA Band V Low -Touch-Right/Zoom Scan: Measurement grid: $dx=8\text{mm}$, $dy=8\text{mm}$, $dz=5\text{mm}$;

Area Scan	sam_direct_droit2_surf8mm.txt
ZoomScan	5x5x7, $dx=8\text{mm}$ $dy=8\text{mm}$ $dz=5\text{mm}$, Very fast
Phantom	Right head
Device Position	Cheek
Band	WCDMA Band V
Channels	Low
Signal	CDMA (Crest factor: 1.0)



Maximum location: X=-32.00, Y=-16.00

SAR 10g (W/Kg)	0.641524
SAR 1g (W/Kg)	0.992007



Test Laboratory: AGC Lab

Date: Nov. 20,2014

WCDMA Band V Low-Body-Towards Grounds (RMC)

DUT: 3G Smart Phone; Type: S42

Communication System: UMTS; Communication System Band: BAND V UTRA/FDD; Duty Cycle:1: 1; Conv.F=5.48
Frequency: 826.4 MHz; Medium parameters used: $f = 835\text{MHz}$; $\sigma = 0.95\text{ mho/m}$; $\epsilon_r = 55.63$; $\rho = 1000\text{ kg/m}^3$;
Phantom section: Flat Section
Ambient temperature ($^{\circ}\text{C}$):21, Liquid temperature ($^{\circ}\text{C}$):21

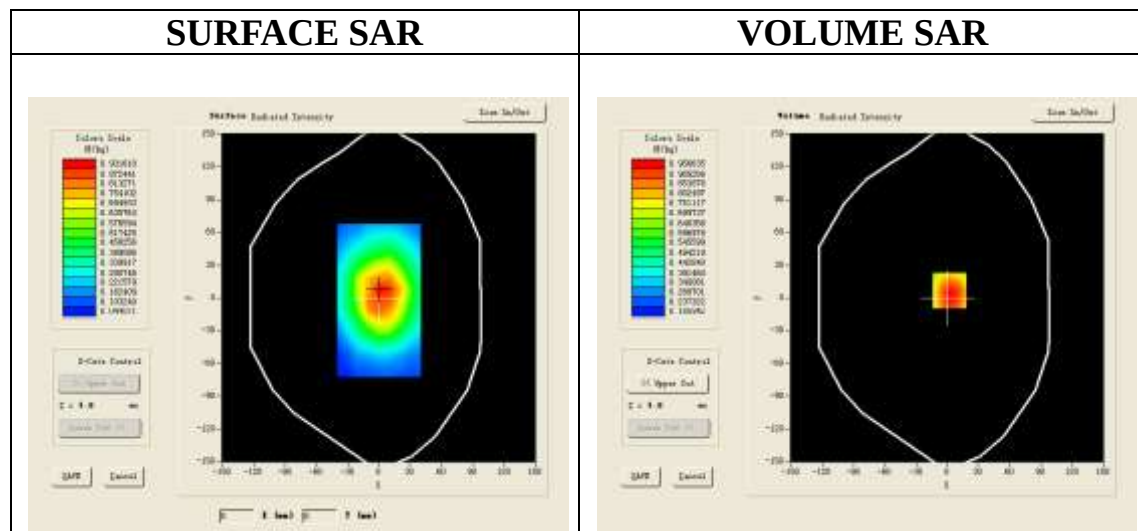
SATIMO Configuration:

- Probe: SSE5; Calibrated: 01/12/2014; Serial No.:SN 22/12 EP159
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Phantom: Flat Phantom; Type: Elliptical Phantom
- Measurement SW: OpenSAR V4_02_01

Configuration/ WCDMA Band V Low -Body-Back/Area Scan: Measurement grid: $dx=8\text{mm}$, $dy=8\text{mm}$

Configuration/ WCDMA Band V Low -Body-Back/Zoom Scan: Measurement grid: $dx=8\text{mm}$, $dy=8\text{mm}$, $dz=5\text{mm}$;

Area Scan	surf_sam_plan.txt
ZoomScan	5x5x7, $dx=8\text{mm}$ $dy=8\text{mm}$ $dz=5\text{mm}$, Very fast
Phantom	Validation plane
Device Position	Body Back
Band	WCDMA Band V
Channels	Low
Signal	CDMA (Crest factor: 1.0)



Maximum location: X=2.00, Y=7.00

SAR 10g (W/Kg)	0.701214
SAR 1g (W/Kg)	1.001487

