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SAR Test Report

Report No.: AGC00850130701FH01

FCC ID : UOSAM83Z

PRODUCT DESIGNATION: Mobile Phone

APPLICATION PURPOSE: Original Equipment

BRAND NAME: AMGOO

MODEL NAME : AM83Z

CLIENT: AMGOO TELECOM (Shenzhen) CO., LTD.

DATE OF ISSUE : Jul.25, 2013

FCC Oet65 Supplement C June 2001

STANDARD(S) : IEEE Std. 1528-2003

47CFR § 2.1093

REPORT VERSION: V1.0

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

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Report Revise Record

Report Version	Revise Time	Issued Date	Valid Version	Notes
V1.0	/	Jul.25, 2013	Valid	Original Report

Т	est Report Certification
Applicant Name	AMGOO TELECOM (Shenzhen) CO., LTD.
Applicant Address	3/F, Block R2-A(North), Gaoxin S. Ave. 4th, Hi-Tech Industrial Park, Nanshan District, Shenzhen, China
Manufacturer Name	AMGOO TELECOM (Shenzhen) CO., LTD.
Manufacturer Address	3/F, Block R2-A(North), Gaoxin S. Ave. 4th, Hi-Tech Industrial Park, Nanshan District, Shenzhen, China
Product Designation	Mobile Phone
Brand Name	AMGOO
Model Name	AM83Z
Different Description	N/A
EUT Voltage	DC3.7V by battery
Applicable Standard	FCC Oet65 Supplement C June 2001 IEEE Std. 1528-2003 47CFR § 2.1093
Test Date	Jul.23, 2013
Test Results	MAX SAR MEASUREMENT(1g) Head: 1.274 W/Kg Body: 1.366 W/Kg (Maximum Scaling SAR =1.568 W/Kg) simultaneous transmission: 1.446 W/Kg
Performed Location	Attestation of Global Compliance(Shenzhen) Co., Ltd.
i enomieu Location	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-2.5G2/SAR (2013-03-01)

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1. General Information

1.1. EUT Description

General Information			
Product Designation	Mobile Phone		
Test Model	AM83Z		
Hardware Version	F092-MB-V0.1		
Software Version	N/A		
Device Category	Portable		
RF Exposure Environment	Uncontrolled		
Antenna Type	Internal		
GSM and GPRS			
Support Band	□GSM 850□GSM 900□DCS 1800 (Non-U.S. Bands)		
GPRS Type	Class B		
GPRS Class	Class 8,10 ,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		
Max. Output Power (Avg. Burst Power)	GSM850: 32.41dBm(31.76dBm- Avg. Burst Power) PCS1900: 29.58dBm(28.13dBm- Avg. Burst Power)		
Max. Output Power (Radiated)	GSM850: 30.72dBm- ERP PCS1900: 28.55dBm- EIRP		
Bluetooth			
Bluetooth Version	□V2.0 □V2.1 □V2.1+EDR □V3.0 □V3.0+EDR □V4.0		
Operation Frequency	2402~2480MHz		
Type of modulation	⊠GFSK □Π/4-DQPSK □8-DPSK		

Avg. Burst Power	2.85dBm	
Antenna Gain	0.8dBi	
Accessories		
Battery	Brand name: AMGOO Model No. : AM-5BB Voltage and Capacitance: 3.7 V & 600mAh	
Adapter	Brand name: AMGOO Model No. : CH4 Input: AC 100-240V Output: DC 5V, 500mA	
Earphone	Brand name: AMGOO Model No. : AM83Z	

Note:

- 1. The EUT is a model of GSM Portable Mobile Station (MS). It supports GSM/GPRS, BT.
- 2. The sample used for testing is end product.

1.2. Test Procedure

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

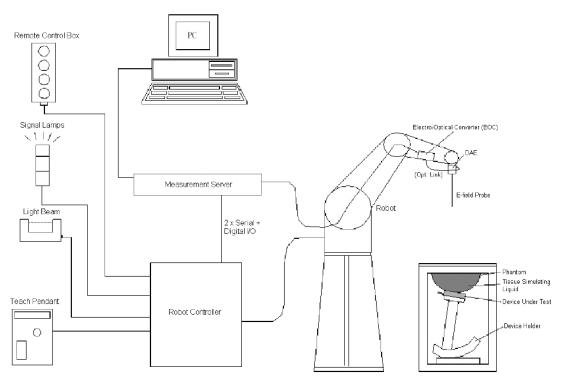
1.3. Test Environment

Ambient conditions in the laboratory:

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

2. SAR Measurement System

2.1. COMOSAR System Description



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

☐ A standard high precision 6axis robot with controller, teach pendant and software.

An arm extension for accommodating the data acquisition electronics (DAE).

A data acquisition electronics (DAE) which performs the signal amplification, signal multiplexing, AD-conversion, offset measurements, mechanical surface detection,

collision detection, etc. The unit is battery powered with standard or rechargeable batteries. The signal is optically transmitted to the EOC.

- □ The Electro-optical converter (EOC) performs the conversion from optical to electrical signals for the digital Communicate Mobile to the DAE. To use optical surface detection, a special version of the EOC is required. The EOC signal is transmitted to the measurement server.
- The Light Beam used is for probe alignment. This improves the (absolute) accuracy of the probe positioning.
- A computer running WinXP and the Opensar software.
- Remote control and teach pendant as well as additional circuitry for robot safety such as warning lamps, etc.
- The phantom, the device holder and other accessories according to the targetedmeasurement.

2.1.1. Applications

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

2.1.2. Area Scans

Area scans are defined prior to the measurement process being executed with a user

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

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

2.1.3. Zoom Scan (Cube Scan Averaging)

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

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

2.1.4. Uncertainty of Inter-/Extrapolation and Averaging

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

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

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

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

2.2. COMOSAR E-Field Probe

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

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

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

2.2.1. Isotropic E-Field Probe Specification

Model	EP165	
Manufacture	SATIMO	
Frequency	0.03GHz-3 GHz Linearity:±0.2dB(30 MHz-3 GHz)	5×15×3
Dynamic Range	0.01W/Kg-100W/Kg Linearity:±0.2dB	15C5C5
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	Application High precision dosimetric measurements in any exposure scenario (e.g., very strong gradient fields). Only probe which enables compliance testing for frequencies up to 3 GHz with precision of better 30%.	

2.3. Robot

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

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

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

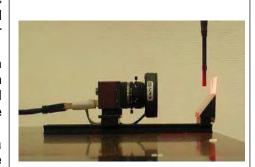


2.4. Video Positioning System

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

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

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

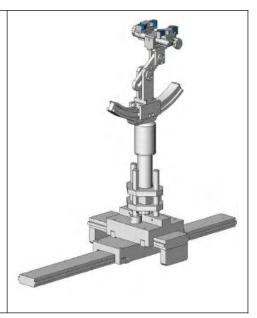


2.5. Device Holder

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

Thus the device needs no repositioning when changing the angles.

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



2.6. SAM Twin Phantom

The 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.

3. Tissue Simulating Liquid

3.1. The composition of the tissue simulating liquid

Ingredient	850MHz	850MHz	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

3.2. Tissue Calibration Result

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

Tissue Stimulant Measurement for GSM 850						
Frequency (MHz)	Parts	Description	Dielectric F	Parameters	Tissue Temp [°C]	
850MHz	Head	Reference result ±5% window	er 41.50 39.425-43.575	δ[s/m] 0.90 0.855-0.945	N/A	
		Jul.23, 2013	41.55	0.94	21	
850MHz	Body	Reference result ±5% window	εr 55.20 52.44-57.96	δ[s/m] 0.97 0.9215-1.0185	N/A	
		Jul.23, 2013	54.26	0.97	21	

	Tissue Stimulant Measurement for PCS 1900						
Frequency (MHz)	Parts	Description	Dielectric F	Dielectric Parameters			
1900MHz	Head	Reference result ±5% window	εr 40.00 38.00-42.00	δ[s/m] 1.40 1.33-1.47	N/A		
		Jul.23, 2013	40.50	1.41	21		
1900MHz	Body Reference result ±5% window Jul.23, 2013		er 53.30 50.635-55.965	δ[s/m] 1.52 1.444-1.596	N/A		
		52.66	1.48	21			

3.3. Tissue Dielectric Parameters for Head and Body Phantoms

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

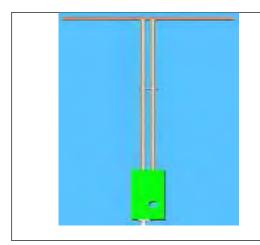
Target Frequency	head		bo	dy
(MHz)	εr	σ (S/m)	εr	σ (S/m)
300	45.3	0.87	58.2	0.92
450	43.5	0.87	56.7	0.94
850	41.5	0.90	55.2	0.97
900	41.5	0.97	55.0	1.05
915	41.5	1.01	55.0	1.06
1450	40.5	1.20	54.0	1.30
1610	40.3	1.29	53.8	1.40
1800 – 2000	40.0	1.40	53.3	1.52
2450	39.2	1.80	52.7	1.95
3000	38.5	2.40	52.0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

($\epsilon r = relative permittivity$, $\sigma = conductivity$ and $\rho = 1000 \text{ kg/m}3$)

4. SAR Measurement Procedure

4.1. SAR System Validation

4.1.1. 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)
900 MHz	149.0	83.3	3.6
1900MHz	68	39.5	3.6

4.1.2. Validation Result

System Performance Check at 850 MHz &1900MHz for Head								
Validation Kit: SN 46/11DIP 0G900-185								
Frequency [MHz] Description SAR [w/kg] 1g SAR [w/kg] 10g Tissue Temp.[°C]								
850 MHz	Reference result ± 10% window	10.9 9.81 to 11.99	6.99 6.29 to 7.69	N/A				
	Jul.23, 2013	10.99	6.81	21.0				
Validation Kit	t: SN 46/11DIP 1G900-1	187						
Frequency [MHz]	Description	SAR [w/kg] 1g	SAR [w/kg] 10g	Tissue Temp.[°C]				
1900 MHz	Reference result ± 10% window	39.7 35.73 to 43.67	20.5 18.45 to 22.55	N/A				
	Jul.23, 2013	39.86	20.64	21.0				
Note: All SAR values are normalized to 1W forward power.								

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4.2. SAR Measurement Procedure

The COMOSAR calculates SAR using the following equation,

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

σ: represents the simulated tissue conductivity

p: represents the tissue density

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

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

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

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

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

5. SAR Exposure Limits

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

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

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

6. Test Equipment List

Equipment description	Manufacturer/ Model	Identification No.	Current calibration date	Next calibration date	
SAR Probe	SATIMO	SN 04/13 EP165	01/31/2013	01/30/2014	
Phantom	SATIMO	SN_4511_SAM90	Validated. No cal required.	Validated. No cal required.	
Liquid	SATIMO	-	Validated. No cal required.	Validated. No cal required.	
Comm Tester	R&S - CMU200	069Y7-158-13-712	02/28/2013	02/27/2014	
Comm Tester	Agilent-8960	GB46310822	10/22/2012	10/21/2013	
Multimeter	Keithley 2000	1188656	02/28/2013	02/27/2014	
Dipole	SATIMO SID900	SN46/11 DIP 0G900-185	12/09/2011	12/08/2013	
Dipole	SATIMO SID1900	SN46/11 DIP 1G900-187	12/09/2011	12/08/2013	
Amplifier	Aethercomm	SN 046	12/08/2012	12/07/2013	
Signal Generator	Agilent-E4421B	MY43351603	05/13/2013	05/12/2014	
Power Probe	HP E4418A	US38261498	02/28/2013	02/27/2014	
SPECTRUM ANALYZER	Agilent/E4440A	MY44303916	10/22/2012	10/21/2013	
Power Attenuator	BED	DLA-5W	07/16/2013	07/15/2014	
Network Analyzer	Rhode & Schwarz ZVA	SN100132	02/28/2013	02/27/2014	

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

1. There is no physical damage on the dipole;

- 2. System validation with specific dipole is within 10% of calibrated value;
- 3. Return-loss is within 20% of calibrated measurement;
- 4. Impedance is within 5Ω of calibrated measurement.

7. Measurement Uncertainty

CATIMO I Incortainty									
Measurem	SATIMO Uncertainty Measurement uncertainty for 30 MHz to 3 GHz averaged over 1 gram / 10 gram.								
Error Description	Sec	Tol (±%)	Prob. Dist.	Div.	(Ci)	(Ci) 10g	Std. Unc. (1g) (±%)	Std. Unc. (10g)(±%)	(Vi) Veff
	Measurement System								
Probe Calibration	E.2.1	6	N	1	1	1	6	6	00
Axial Isotropy	E.2.2	3	R	√3	$(1-c_p)^{1/2}$	$(1-c_p)^{1/2}$	1.22474	1.22474	00
Hemispherical Isotropy	E.2.2	5	R	√3	√Cp	√Cp	2.04124	2.04124	00
Boundary Effects	E.2.3	1	R	√3	1	1	0.57735	0.57735	00
Linearity	E.2.4	5	R	√3	1	1	2.88675	2.88675	00
System Detection Limits	E.2.5	1	R	√3	1	1	0.57735	0.57735	00
Readout Electronics	E.2.6	0.5	N	1	1	1	0.5	0.5	00
Response Time	E.2.7	0.2	R	√3	1	1	0.11547	0.11547	00
Integration Time	E.2.8	2	R	√3	1	1	1.1547	1.1547	00
RF Ambient Noise	E.6.1	3	R	√3	1	1	1.73205	1.73205	00
Probe Positioner Mechanical Tolerance	E.6.2	2	R	√3	1	1	1.1547	1.1547	00
Probe Positioning with Respect to Phantom Shell	E.63	1	R	√3	1	1	0.57735	0.57735	00
Extrapolation,interpolation and Integration Algorithms for Max. SAR Evaluation	E.5.2	1.5	R	√3	1	1	0.86603	0.86603	00
Dipole									
Device Positioning	8,E.4.2	1	N	√3	1	1	0.57735	0.57735	N-1
Power Drift	8.6.6.2	2	R	√3	1	1	1.1547	1.1547	00
Phantom and Tissue Parameters									
Phantom Uncertainty	E.3.1	4	R	√3	1	1	2.3094	2.3094	00
Liquid Conductivity (target)	E.3.2	5	R	√3	0.64	0.43	1.84752	1.2413	00
Liquid Conductivity (meas.)	E.3.3	2.5	N	1	0.64	0.43	1.6	1.075	00
Liquid Permittivity (target)	E.3.2	3	R	√3	0.6	0.49	1.03923	0.8487	00
Liquid Permittivity (meas.)	E.3.3	2.5	N	1	0.6	0.49	1.5	1.225	M
Combined Standard Uncertainty			RSS				8.09272	7.9296	
Expanded Uncertainty (95%CONFIDENCE INTERVAL)			k				16.18544	15.8592	

8. Conducted Power Measurement

Mode	Frequency(MHz)	Peak Power(dBm)	Avg. Burst Power(dBm)	Duty cycle Factor(dBm)	Frame Power(dBm)
Maximum Po	wer <1>			•	
	824.2	32.41	31.76	-9	22.76
GSM 850	836.6	32.37	31.69	-9	22.69
	848.8	32.32	31.62	-9	22.62
0000000	824.2	32.39	31.64	-9	22.64
GPRS 850	836.6	32.34	31.57	-9	22.57
(1 Slot)	848.8	32.27	31.51	-9	22.51
GPRS 850	824.2	29.43	28.57	-6	22.57
	836.6	29.36	28.47	-6	22.47
(2 Slot)	848.8	29.33	28.35	-6	22.35
0000 050	824.2	27.65	27.56	-4.26	23.3
GPRS 850	836.6	27.57	27.47	-4.26	23.21
(3 Slot)	848.8	27.54	27.41	-4.26	23.15
0000 050	824.2	26.45	26.75	-3	23.75
GPRS 850	836.6	26.34	25.66	-3	22.66
(4 Slot)	848.8	26.32	25.54	-3	22.54
	1850.2	29.58	29.13	-9	20.13
PCS1900	1880	29.52	29.04	-9	20.04
	1909.8	29.47	28.89	-9	19.89
00004000	1850.2	29.53	28.95	-9	19.95
GPRS1900 (1 Slot)	1880	29.46	28.87	-9	19.87
(1 3101)	1909.8	29.41	28.84	-9	19.84
ODD04000	1850.2	26.55	26.35	-6	20.35
GPRS1900 (2 Slot)	1880	26.45	26.12	-6	20.12
(2 3101)	1909.8	26.33	26.01	-6	20.01
ODD04000	1850.2	24.63	24.37	-4.26	20.11
GPRS1900 (3 Slot)	1880	24.53	24.24	-4.26	19.98
(3 5101)	1909.8	24.66	24.24	-4.26	19.98
ODD04000	1850.2	23.56	23.22	-3	20.22
GPRS1900 (4 Slot)	1880	23.43	23.16	-3	20.16
(4 5101)	1909.8	23.41	23.12	-3	20.12
Maximum Pov	wer <2>				
GSM 850	824.2	32.37	31.66	-9	22.66
PCS1900	1850.2	29.53	29.02	-9	20.02

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) -4.26dB

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

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9. Test Results

9.1. SAR Test Results Summary

9.1.1. 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 5mm from the phantom. Body SAR was also performed with the headset attached and without.

9.1.2. Operation Mode

- •According to KDB 447498 D01 v05r01 ,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 v01r01,for each frequency band, if the measured SAR is \ge 0.8W/Kg, testing for repeated SAR measurement is required .
- •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 v01r01,when the reported SAR for a body-worn accessory measured without a headset connected to the handset is ≤1.2W/Kg, SAR testing with a headset connected is not required.

9.1.3. Test Result

SAR MEASUREMENT	
Ambient Temperature (°C) : 21 ± 2	Relative Humidity (%): 55
Liquid Temperature (°C) : 21 ± 2	Depth of Liquid (cm):>15
Product: Mobile Phone	

Test Mode: GSM850 with GMSK modulation

Configuration		Antenna			Power Drift	SAR (1g)	Limit	
SIM	Position	Status	Position	channel	MHz	(<±5%)	(W/kg)	(W/kg)
				128	824.2	0.25	0.759	1.6
		Cheek	Fixed	190	836.6	1.63	0.989	1.6
	Left			251	848.8	-0.62	1.099	1.6
	Head	Tilted		128	824.2			
			Fixed	190	836.6	0.87	0.631	1.6
.4.				251	848.8			
<1>		Cheek	Fixed	128	824.2	-1.63	0.723	1.6
				190	836.6	-0.22	0.909	1.6
	Right			251	848.8	-0.46	1.145	1.6
	Head			128	824.2			
		Tilted	Fixed	190	836.6	-1.47	0.641	1.6
				251	848.8			
<2>	Right	Cheek	Fixed	251	848.8	1.06	0.967	1.6

Note: when the 1-g SAR is ≤ 0.8 W/kg, testing for low and high channel is optional. refer to KDB 941225.

SAR M	EASUR	EMENT
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Ambient Temperature (°C): 21 ± 2 Relative Humidity (%): 55

Liquid Temperature (°C): 21 ± 2 Depth of Liquid (cm):>15

Product: Mobile Phone

Test Mode: GSM850 with GMSK modulation

Configuration		Antenna Freque		uency	Power Drift	SAR (1g)	Limit	
SIM	Position	Status	Position	channel	MHz	(<±5%)	(W/kg)	(W/kg)
				128	824.2	0.13	0.969	1.6
	Body back	MS	Fixed	190	836.6	1.22	1.366	1.6
				251	848.8	-0.63	1.163	1.6
		MS	Fixed	128	824.2			
<1>	Body Front			190	836.6	1.24	0.774	1.6
				251	848.8			
		Body MS with Earphone	Fixed	128	824.2			
Body back	,			190	836.6	-0.25	0.592	1.6
			Earphone	251	848.8			

Note: when the 1-g SAR is ≤ 0.8 W/kg, testing for low and high channel is optional. refer to KDB 941225.

SAR MEASUREMENT	
Ambient Temperature (°C) : 21 ± 2	Relative Humidity (%): 55
Liquid Temperature (°C) : 21 ± 2	Depth of Liquid (cm):>15

Product: Mobile Phone

Test Mode: PCS1900 with GMSK modulation

Configuration		7 111011110		uency	Power Drift	SAR (1g)	Limit	
SIM	Position	Status	Position	channel	MHz	(<±5%)	(W/kg)	(W/kg)
				512	1850.2	0.63	0.746	1.6
		Cheek	Fixed	661	1880.0	-0.24	0.901	1.6
	Left			810	1909.8	-0.45	0.859	1.6
	Head	Tilted	Fixed	512	1850.2	-1.63	0.692	1.6
				661	1880.0	0.87	0.851	1.6
<1>				810	1909.8	-0.62	0.765	1.6
<1>		Cheek	Fixed	512	1850.2	0.46	0.954	1.6
				661	1880.0	-1.14	1.274	1.6
	Right			810	1909.8	0.63	1.198	1.6
	Head			512	1850.2	0.22	0.961	1.6
		Tilted	Fixed	661	1880.0	1.46	1.032	1.6
				810	1909.8	0.63	1.075	1.6
<2>	Right	Cheek	Fixed	661	1880.0	-2.62	1.060	1.6

Note: when the 1-g SAR is \leq 0.8 W/kg, testing for low and high channel is optional. refer to KDB 941225.

SAR MEASUREMENT	
Ambient Temperature (°C) : 21 ± 2	Relative Humidity (%): 55
Liquid Temperature (°C) : 21 ± 2	Depth of Liquid (cm):>15
Product: Mobile Phone	

Test Mode: PCS1900 with GMSK modulation

Configuration		Antenna Position	Frequency		Power Drift	SAR (1g)	Limit	
SIM	Position	Status	Position	channel	MHz	(<±5%)	(W/kg)	(W/kg)
	Body Back		Fixed	512	1850.2	0.36	0.759	1.6
		, IVI.		661	1880.0	1.13	0.860	1.6
<1>				810	1909.8	0.22	0.818	1.6
\ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \	Body front			512	1850.2			
		, IVIS	Fixed	661	1880.0	1.63	0.507	1.6
				810	1909.8			

Note: when the 1-g SAR is ≤ 0.8 W/kg, testing for low and high channel is optional. refer to KDB 941225.

Repeated	SAR
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Ambient Temperature (°C): 21 ± 2 Relative Humidity (%): 55 Liquid Temperature (°C): 21 ± 2 Depth of Liquid (cm):>15

Product: Mobile Phone

Test Mode: GSM850 with GMSK modulation

Configuration		Antenna	Frequency		Power Drift	SAR (1g)	Limit	
SIM	Position	Status	Position	channel	MHz	(<±5%)	(W/kg)	(W/kg)
<1>		Cheek	Fixed	128	824.2			
	Left Head			190	836.6	-0.14	0.916	1.6
				251	848.8	-0.29	1.018	1.6
	Right Head	Cheek	Fixed	128	824.2			
				190	836.6	-0.47	0.881	1.6
				251	848.8	1.62	1.047	1.6
<2>	Right	Cheek	Fixed	251	848.8	1.06	0.824	1.6

Repeated SAR	
Ambient Temperature (°C) : 21 ± 2	Relative Humidity (%): 55
Liquid Temperature (°C) : 21 ± 2	Depth of Liquid (cm):>15
Product: Mobile Phone	

Test Mode: GSM850 with GMSK modulation

Configuration		Antenna Position	Freq	Frequency		SAR (1g)	Limit	
SIM	Position	Status	Position	channel	MHz	(<±5%)	(W/kg)	(W/kg)
				128	824.2	1.47	0.909	1.6
<1>	Body back	MS	Fixed	190	836.6	-0.59	1.278	1.6
	Jack			251	848.8	-0.48	1.147	1.6

Repeated SAR	
Ambient Temperature (°C) : 21 ± 2	Relative Humidity (%): 55
Liquid Temperature (°C) : 21 ± 2	Depth of Liquid (cm):>15
Liquid Temperature (°C) : 21 ± 2	Depth of Liquid (cm):>15

Product: Mobile Phone

Test Mode: PCS1900 with GMSK modulation

Configuration		Antenna	Frequency		Power Drift	SAR (1g)	Limit	
SIM	Position	Status	Position	channel	MHz	(<±5%)	(W/kg)	(W/kg)
				512	1850.2			
		Cheek	Fixed	661	1880.0	1.22	0.801	1.6
	Left			810	1909.8	-0.36	0.801	1.6
	Head	Tilted	Fixed	512	1850.2			
				661	1880.0	0.85	0.820	1.6
<1>				810	1909.8			
<1>		Cheek	Fixed	512	1850.2	-0.62	0.942	1.6
				661	1880.0	0.55	1.179	1.6
	Right			810	1909.8	1.24	1.127	1.6
	Head			512	1850.2	0.84	0.897	1.6
		Tilted	Fixed	661	1880.0	-0.93	0.997	1.6
				810	1909.8	0.87	1.056	1.6
<2>	Right	Cheek	Fixed	661	1880.0	1.23	1.057	1.6

Repeated SAR	
Ambient Temperature (°C) : 21 ± 2	Relative Humidity (%): 55
Liquid Temperature (°C) : 21 ± 2	Depth of Liquid (cm):>15
Product: Mobile Phone	

Test Mode: PCS1900 with GMSK modulation

Configuration		/ litterina		iency	Power Drift	SAR (1g)	Limit	
SIM	Position	Status	Position	channel	MHz	(<±5%)	(W/kg)	(W/kg)
	Body Back		Fixed	512	1850.2			
<1>		MS		661	1880.0	-0.23	0.844	1.6
				810	1909.8	0.18	0.810	1.6

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

Position	Simultaneous state	
Head	WWAN(voice)+Bluetooth	
Body	WWAN(voice)+Bluetooth	

NOTE:

- 1. For simultaneous transmission at head and body exposure position, 2 transmitters simultaneous transmission was the worst state.
- 2. Based upon KDB 447498 D01 v05, BT SAR is excluded as below table.
- 3. 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 5mm for body-worn SAR.
- 4. If the test separation distance is <5mm, 5mm is used for excluded SAR calculation.
- 5. For minimum test separation distance \leq 50mm, Bluetooth standalone SAR is excluded according to [(max. power of channel, including tune-up tolerance, mW)/ (min. test separation distance, mm) $\cdot \lceil \sqrt{f} (GHz)/x \rceil \leq 3.0$ for 1-g SAR and \leq 7.5 for 10-g extremity SAR
- 6. 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) (max. power of channel, including tune-up tolerance, mW)/(min. test separation distance, mm)]· $[\sqrt{f} (GHz)/x]$ W/kg for test separation distances 50 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 >50mm.

		Maximum Average Power		Antenna to user SAR		SAR testing required	Head	Body
		dBm	mW	(mm)	threshold (mW)	(Yes/No)	(0mm gap)	(5mm gap)
ВТ	Head	2 95	1.928	5	10	NO	0.0797	0.0797 W/kg
В	Body	2.85	1.920	5	10	NO	W/kg	

Maximum test results (WWAN) with BT Simultaneous Transmission SAR:

BT: Head (0 cm gap): 0.0797 W/kg and Body (0.5 cm gap): 0.0797 W/kg

Head (WWAN (voice) +BT):1.274 W/kg+ 0.0797 W/kg = 1.3537 W/kg Body (WWAN (voice) +BT): 1.366 W/kg +0.0797 W/kg = 1.4457 W/kg

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Appendix A. SAR System Validation Data

Test Laboratory: AGC Lab Date: Jul.23, 2013

System Check Head 850 MHz

DUT: Dipole 900 MHz Type: SID 900

Communication System CW; Communication System Band: D850 (850.0 MHz); Duty Cycle: 1:1; Conv.F=5.30 Frequency: 850 MHz; Medium parameters used: f = 850 MHz; $\sigma = 0.94 \text{ mho/m}$; $\epsilon = 41.55$; $\rho = 1000 \text{ kg/m}^3$;

Phantom section: Flat Section; Input Power=10dBm Ambient temperature ($^{\circ}$ C): 21, Liquid temperature ($^{\circ}$ C): 21

SATIMO Configuration:

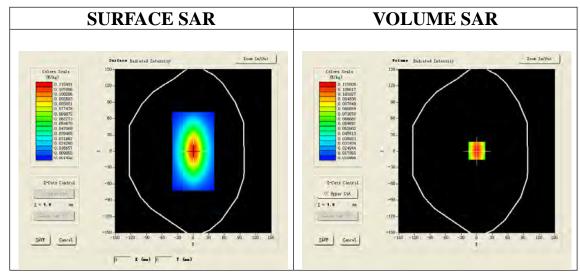
Probe: EP165; Calibrated: 01/31/2013

· Sensor-Surface: 4mm (Mechanical Surface Detection)

• Phantom: Flat Phantom; Type: Elliptical Phantom

· Measurement SW: OpenSAR V4_02_01

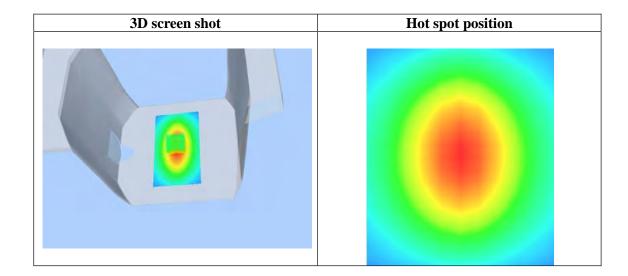
Configuration/System Check GSM 850 Head/Area Scan: Measurement grid: dx=8mm,dy=8mm Configuration/System Check GSM 850 Head/Zoom Scan: Measurement grid: dx=8mm, dy=8mm, dz=5mm



Maximum location: X=0.00, Y=1.00

SAR 10g (W/Kg)	0.068125
SAR 1g (W/Kg)	0.109937

Z (mm)	0.00	4.00	9.00	14.00	19.00		
SAR (W/Kg)	0.0000	0.1163	0.0727	0.0469	0.0314		
SAR, Z Axis Scan (X = 0, Y = 1)							
	1. 12 -						
1 è). 08 –						
). 06 -						
	1. 02 -			+			
	0.0 2.5 5		12.5 15.0 17. Z (mm)	5 20.0 22.5 25	5.0		



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Test Laboratory: AGC Lab

Date: Jul.23, 2013

System Check Head 1900MHz

DUT: Dipole 1900 MHz; Type: SID 1900

Communication System: CW; Communication System Band: D1900 (1900.0 MHz); Duty Cycle:1:1; Conv.F=4.72 Frequency: 1900 MHz; Medium parameters used: f = 1900 MHz; $\sigma = 1.41$ mho/m; $\epsilon r = 40.50$; $\rho = 1000$ kg/m³;

Phantom section: Flat Section; Input Power=10dBm Ambient temperature ($^{\circ}$): 21, Liquid temperature ($^{\circ}$): 21

SATIMO Configuration:

Probe: EP165; Calibrated: 01/31/2013

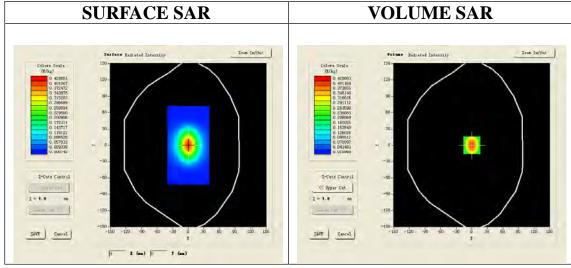
Sensor-Surface: 4mm (Mechanical Surface Detection)

· Phantom: Flat Phantom; Type: Elliptical Phantom

· Measurement SW: OpenSAR V4_02_01

 $\label{lem:configuration/System Check PCS1900 Head/Area Scan:} Measurement grid: dx=8mm, dy=8mm \\ \textbf{Configuration/System Check PCS1900 Head/Zoom Scan:} \\ Measurement grid: dx=8mm, dy=8mm, dy=8mm,$

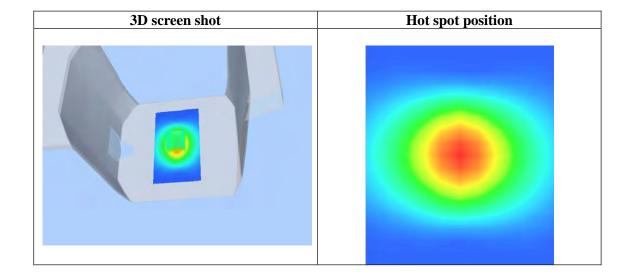
dy=8mm, dz=5mm



Maximum location: X=0.00, Y=0.00

SAR 10g (W/Kg)	0.206399
SAR 1g (W/Kg)	0.398570

Z (mm)	0.00	4.00	9.00	14.00	19.00		
SAR (W/Kg)	0.0000	0.4278	0.2463	0.1375	0.0851		
SAR, Z Axis Scan (X = 0, Y = 0)							
0). 43 –						
0). 35 –						
, kg)). 30 -	+			-		
<u></u>). 25 -	++	 		-		
). 20 -	++	+		-		
, 0). 15 -	+++	\rightarrow		-		
0). 10 –	\perp	\rightarrow				
o	0.05-		10.5.15.0.17	5 20.0 22.5 25			
	0.0 2.5 5		12.5 15.0 17. Z (mm)	5 20.0 22.5 25	0.0		



Appendix B. SAR measurement Data

Test Laboratory: AGC Lab Date: Jul.23, 2013

GSM 850 Low-Touch-Left <SIM 1> DUT: Mobile Phone; Type: AM83Z

Communication System: Generic GSM; Communication System Band: GSM 850; Duty Cycle: 1:8.3; Conv.F=5.30 Frequency: 824.2 MHz; Medium parameters used: f = 850 MHz; $\sigma = 0.94 \text{ mho/m}$; $\epsilon = 41.55$; $\rho = 1000 \text{ kg/m}^3$;

Phantom section: Left Section

Ambient temperature ($^{\circ}$ C): 21.0, Liquid temperature ($^{\circ}$ C): 21.0

SATIMO Configuration:

Probe: EP165; Calibrated: 01/31/2013

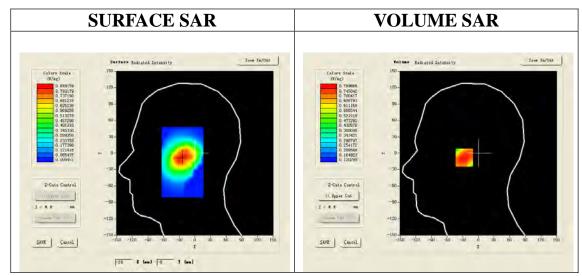
· Sensor-Surface: 4mm (Mechanical Surface Detection)

· Phantom: Flat Phantom; Type: Elliptical Phantom

· Measurement SW: OpenSAR V4 02 01

Configuration/GSM 850 Low-Touch-Left/Area Scan (6x8x1): Measurement grid: dx=20mm, dy=20mm Configuration/GSM 850 Low-Touch-Left/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm

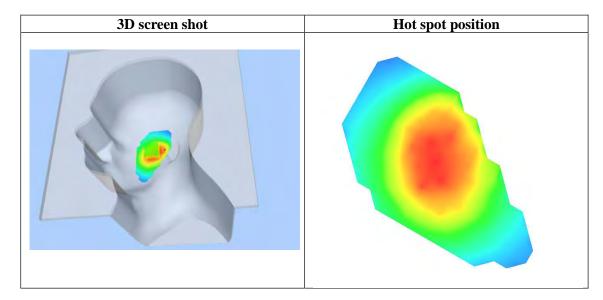
Area Scan	sam_direct_droit2_surf8mm.txt			
ZoomScan	5x5x7,dx=8mm dy=8mm dz=5mm,Very fast			
Phantom	Left head			
Device Position	Cheek			
Band	GSM 850			
Channels	Low			
Signal	TDMA (Crest factor: 8.0)			



Maximum location: X=-24.00, Y=-8.00

SAR 10g (W/Kg)	0.541404
SAR 1g (W/Kg)	0.759428

Z (mm)	0.00	4.00	9.00	14.00	19.00			
SAR (W/Kg)	0.0000	0.7897	0.5917	0.4430	0.3311			
	SAR, Z Axis Scan $(X = -24, Y = -8)$							
0	1.8-							
0	. 7 –							
(§)	.6-				-			
∑€,	5							
SAR (#/kg)	. 5 -							
ν, ο	. 4 -		+		-			
_	_							
	.3-							
"	0.0 2.5 5		12 5 15 0 17 5	5 20.0 22.5 25	: n			
	Z (mm)							



GSM 850 Mid-Touch-Left <SIM 1> **DUT: Mobile Phone**; **Type: AM83Z**

Communication System: Generic GSM; Communication System Band: GSM 850; Duty Cycle: 1:8.3; Conv.F=5.30 Frequency: 836.6 MHz; Medium parameters used: f = 850 MHz; $\sigma = 0.94$ mho/m; $\epsilon = 41.55$; $\rho = 1000$ kg/m³;

Phantom section: Left Section

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

SATIMO Configuration:

Probe: EP165; Calibrated: 01/31/2013

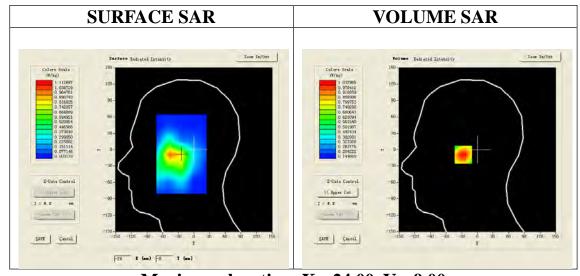
· Sensor-Surface: 4mm (Mechanical Surface Detection)

· Phantom: Flat Phantom; Type: Elliptical Phantom

· Measurement SW: OpenSAR V4_02_01

Configuration/GSM 850 Mid-Touch-Left/Area Scan (6x8x1): Measurement grid: dx=20mm, dy=20mm Configuration/GSM 850 Mid-Touch-Left/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm

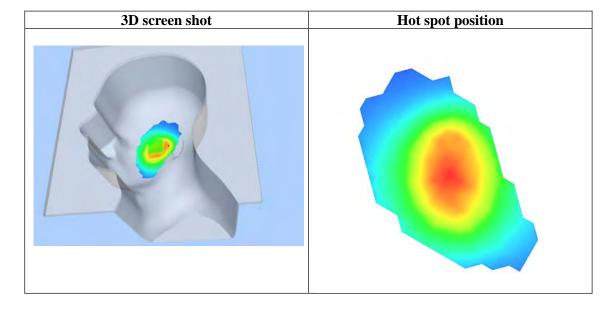
Area Scan	sam_direct_droit2_surf8mm.txt		
ZoomScan	5x5x7,dx=8mm dy=8mm dz=5mm,Very fast		
Phantom	Left head		
Device Position	Cheek		
Band	GSM 850		
Channels	Middle		
Signal	TDMA (Crest factor: 8.0)		



Maximum location: X=-24.00, Y=-9.00

SAR 10g (W/Kg)	0.671859
SAR 1g (W/Kg)	0.989276

Z (mm)	0.00	4.00	9.00	14.00	19.00
SAR (W/Kg)	0.0000	1.0380	0.7609	0.5580	0.4095
	SAR, Z	Axis Scan	(X = -24,	₹ = −9)	
1	.0-				
	. 9 –	$\backslash \! \! \! \! \! \! \! \! \! \! \! \! \! \! \! \! \! \! \!$			
_ 0	. 8 –				
(#/kg)	. 7 –				
E					
SAR 0					
0	.5-				
0	. 4-				-
0	. 3 -				-
	0.0 2.5 5			5 20.0 22.5 25	5.0
Z (mm)					



GSM 850 High-Touch-Left <SIM 1> **DUT: Mobile Phone; Type: AM83Z**

Communication System: Generic GSM; Communication System Band: GSM 850; Duty Cycle: 1:8.3; Conv.F=5.30 Frequency: 848.8 MHz; Medium parameters used: f = 850 MHz; $\sigma = 0.94$ mho/m; $\epsilon = 41.55$; $\rho = 1000$ kg/m³;

Phantom section: Left Section

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

SATIMO Configuration:

Probe: EP165; Calibrated: 01/31/2013

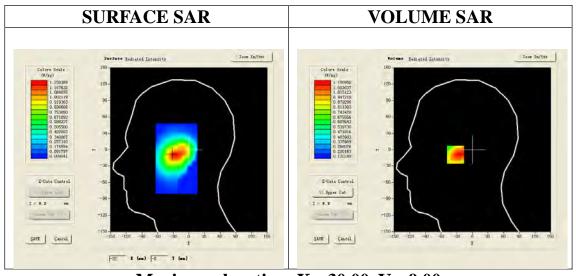
· Sensor-Surface: 4mm (Mechanical Surface Detection)

· Phantom: Flat Phantom; Type: Elliptical Phantom

· Measurement SW: OpenSAR V4_02_01

Configuration/GSM 850 High-Touch-Left/Area Scan (6x8x1): Measurement grid: dx=20mm, dy=20mm Configuration/GSM 850 High-Touch-Left/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm

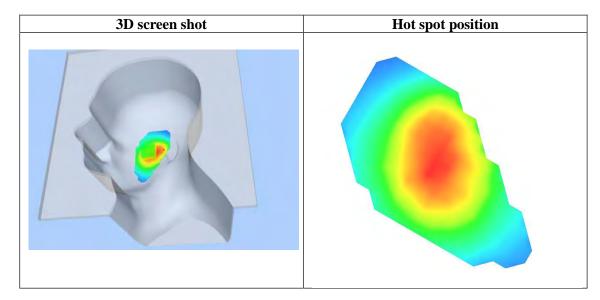
Area Scan	sam_direct_droit2_surf8mm.txt		
ZoomScan	5x5x7,dx=8mm dy=8mm dz=5mm,Very fast		
Phantom	Left head		
Device Position	Cheek		
Band	GSM 850		
Channels	High		
Signal	TDMA (Crest factor: 8.0)		



Maximum location: X=-30.00, Y=-9.00

SAR 10g (W/Kg)	0.748358
SAR 1g (W/Kg)	1.099245

Z (mm)	0.00	4.00	9.00	14.00	19.00	
SAR (W/Kg)	0.0000	1.1151	0.7870	0.5640	0.4134	
		Axis Scan	(X = -30,	₹ = −9)		
1	. 1 -		1 1 1		-	
1	.0-	\longrightarrow	+		_	
0	. 9 -					
(#/kg)	.8-		+		-	
≥ 0	. 7 –		+		-	
SAR o	. 6 –		\longrightarrow		_	
	.5-		+		_	
0	. 4 -					
	.3-					
		.0 7.5 10.0	12.5 15.0 17.5	5 20.0 22.5 25	5.0	
	Z (mm)					



GSM 850 Mid-Tilt-Left <SIM 1>

DUT: Mobile Phone; Type: AM83Z

Communication System: Generic GSM; Communication System Band: GSM 850; Duty Cycle: 1:8.3; Conv.F=5.30; Frequency: 836.6 MHz; Medium parameters used: f = 850 MHz; $\sigma = 0.94 \text{ mho/m}$; $\epsilon r = 41.55$; $\rho = 1000 \text{ kg/m}^3$;

Phantom section: Left Section

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

SATIMO Configuration:

Probe: EP165; Calibrated: 01/31/2013

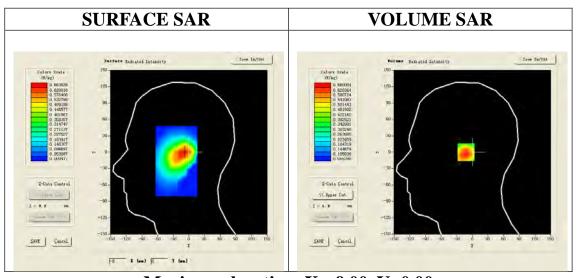
· Sensor-Surface: 4mm (Mechanical Surface Detection)

· Phantom: Flat Phantom; Type: Elliptical Phantom

· Measurement SW: OpenSAR V4_02_01

Configuration/GSM 850 Mid-Tilt-Left/Area Scan (6x8x1): Measurement grid: dx=20mm, dy=20mm Configuration/GSM 850 Mid-Tilt-Left/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm,dz=5mm;

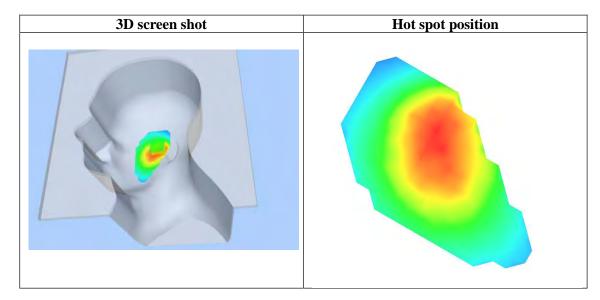
Area Scan	sam_direct_droit2_surf8mm.txt			
ZoomScan	5x5x7,dx=8mm dy=8mm dz=5mm,Very fast			
Phantom	Left head			
Device Position	Tilt			
Band	GSM 850			
Channels	Middle			
Signal	TDMA (Crest factor: 8.0)			



Maximum location: X=-9.00, Y=0.00

SAR 10g (W/Kg)	0.402920	
SAR 1g (W/Kg)	0.630617	

Z (mm)	0.00	4.00	9.00	14.00	19.00			
SAR (W/Kg)	0.0000	0.6600	0.4231	0.2878	0.2149			
	SAR, Z Axis Scan $(X = -9, Y = 0)$							
	. 7 -							
0	. 6 -							
	_							
, kg)	.5-							
≥ 0	. 4 -							
SAR (W/kg)								
0 %	.3-		\rightarrow		_			
	.2-			-	-			
		.0 7.5 10.0	12.5 15.0 17.5	5 20.0 22.5 25	5.0			
Z (mm)								



GSM 850 Low- Touch-Right <SIM 1> **DUT: Mobile Phone; Type: AM83Z**

Communication System: Generic GSM; Communication System Band: GSM 850; Duty Cycle: 1:8.3; Conv.F=5.30; Frequency: 824.2 MHz; Medium parameters used: f = 850 MHz; $\sigma = 0.94 \text{ mho/m}$; $\epsilon = 41.55$; $\rho = 1000 \text{ kg/m}^3$;

Phantom section: Right Section

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

SATIMO Configuration:

Probe: EP165; Calibrated: 01/31/2013

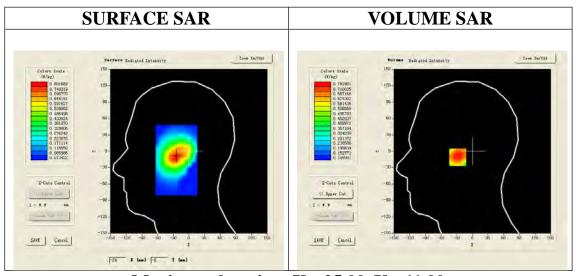
· Sensor-Surface: 4mm (Mechanical Surface Detection)

· Phantom: Flat Phantom; Type: Elliptical Phantom

· Measurement SW: OpenSAR V4_02_01

Configuration/GSM 850 Low-Touch-Right/Area Scan: Measurement grid: dx=20mm, dy=20mm Configuration/GSM 850 Low-Touch-Right/Zoom Scan: Measurement grid: dx=8mm, dy=8mm, dz=5mm;

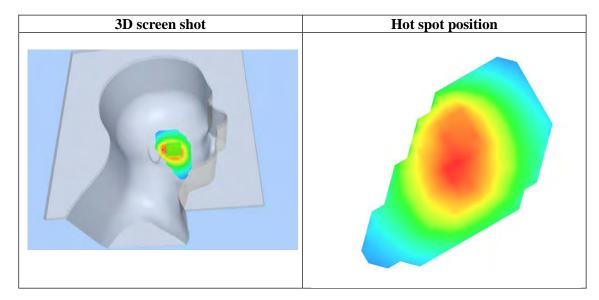
Area Scan	sam_direct_droit2_surf8mm.txt			
ZoomScan	5x5x7,dx=8mm dy=8mm dz=5mm,Very fast			
Phantom	Right head			
Device Position	Cheek			
Band	GSM 850			
Channels	Low			
Signal	TDMA (Crest factor: 8.0)			



Maximum location: X=-25.00, Y=-11.00

SAR 10g (W/Kg)	0.508165	
SAR 1g (W/Kg)	0.723445	

Z (mm)	0.00	4.00	9.00	14.00	19.00		
SAR (W/Kg)	0.0000	0.7529	0.5717	0.4245	0.3058		
	SAR, Z Axis Scan (X = -25, Y = -11)						
	1.8-						
U). 7 –				1		
o	1.6-						
(23	1.5-						
SAR ()							
	1.3-						
	0.0 2.5 5	.0 7.5 10.0	12.5 15.0 17.5	5 20.0 22.5 25			
Z (mm)							



GSM 850 Mid- Touch-Right <SIM 1> **DUT: Mobile Phone; Type: AM83Z**

Communication System: Generic GSM; Communication System Band: GSM 850; Duty Cycle: 1:8.3; Conv.F=5.30; Frequency: 836.6 MHz; Medium parameters used: f = 850 MHz; $\sigma = 0.94 \text{ mho/m}$; $\epsilon = 41.55$; $\rho = 1000 \text{ kg/m}^3$;

Phantom section: Right Section

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

SATIMO Configuration:

Probe: EP165; Calibrated: 01/31/2013

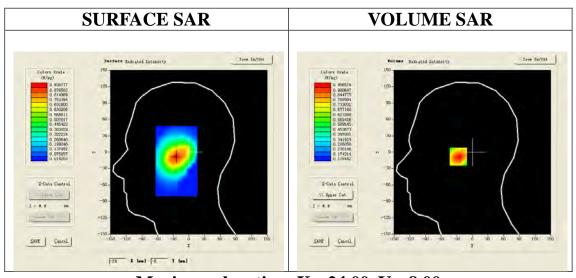
· Sensor-Surface: 4mm (Mechanical Surface Detection)

· Phantom: Flat Phantom; Type: Elliptical Phantom

· Measurement SW: OpenSAR V4_02_01

Configuration/GSM 850 Mid-Touch-Right/Area Scan: Measurement grid: dx=20mm, dy=20mm **Configuration/GSM 850 Mid-Touch-Right/Zoom Scan:** Measurement grid: dx=8mm, dy=8mm, dz=5mm;

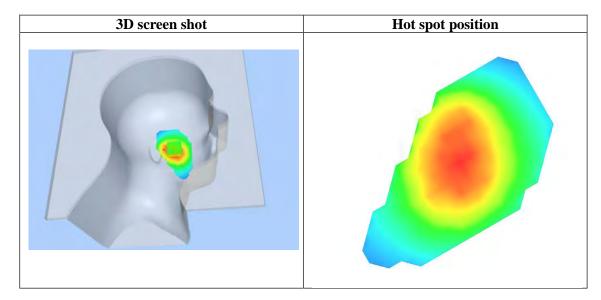
Area Scan	sam_direct_droit2_surf8mm.txt			
ZoomScan	5x5x7,dx=8mm dy=8mm dz=5mm,Very fast			
Phantom	Right head			
Device Position	Cheek			
Band	GSM 850			
Channels	Middle			
Signal	TDMA (Crest factor: 8.0)			



Maximum location: X=-24.00, Y=-8.00

SAR 10g (W/Kg)	0.595390	
SAR 1g (W/Kg)	0.909426	

Z (mm)	0.00	4.00	9.00	14.00	19.00		
SAR (W/Kg)	0.0000	0.9565	0.6608	0.4616	0.3285		
	SAR, Z Axis Scan (X = -24, Y = -8)						
1	.0-						
o	1.8-	\longrightarrow					
ಾಂ). 7 –	$+\lambda$					
(#/kg)	1.6-						
SAR (
0	1.4-						
	1.3-		+ + +		-		
0	1.2- 0.0 2.5 5	0 75 10 0	12 5 15 0 17 9	5 20 0 22 5 25			
	0.0 2.5 5.0 7.5 10.0 12.5 15.0 17.5 20.0 22.5 25.0 Z (mm)						



GSM 850 High- Touch-Right <SIM 1> **DUT: Mobile Phone; Type: AM83Z**

Communication System: Generic GSM; Communication System Band: GSM 850; Duty Cycle: 1:8.3; Conv.F=5.30; Frequency: 848.8 MHz; Medium parameters used: f = 850 MHz; $\sigma = 0.94 \text{ mho/m}$; $\epsilon = 41.55$; $\rho = 1000 \text{ kg/m}^3$;

Phantom section: Right Section

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

SATIMO Configuration:

Probe: EP165; Calibrated: 01/31/2013

· Sensor-Surface: 4mm (Mechanical Surface Detection)

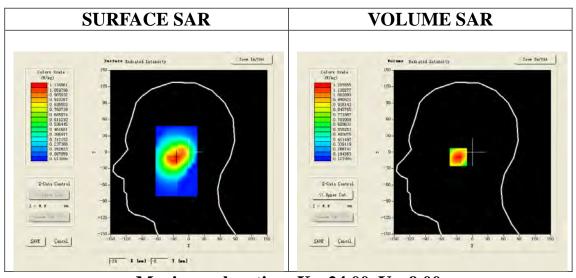
· Phantom: Flat Phantom; Type: Elliptical Phantom

· Measurement SW: OpenSAR V4_02_01

Configuration/GSM 850 High-Touch-Right/Area Scan: Measurement grid: dx=20mm, dy=20mm Configuration/GSM 850 High-Touch-Right/Zoom Scan: Measurement grid: dx=8mm,

dy=8mm, dz=5mm;

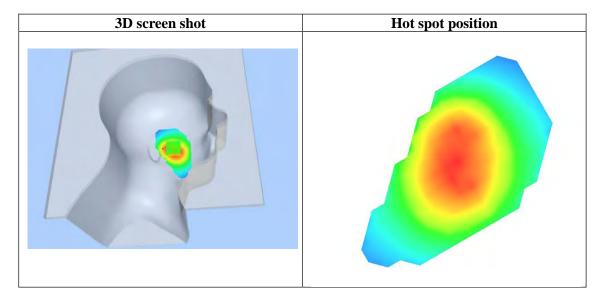
Area Scan	sam_direct_droit2_surf8mm.txt			
ZoomScan	5x5x7,dx=8mm dy=8mm dz=5mm,Very fast			
Phantom	Right head			
Device Position	Cheek			
Band	GSM 850			
Channels	High			
Signal	TDMA (Crest factor: 8.0)			



Maximum location: X=-24.00, Y=-9.00

SAR 10g (W/Kg)	0.723189	
SAR 1g (W/Kg)	1.144663	

Z (mm)	0.00	4.00	9.00	14.00	19.00		
SAR (W/Kg)	0.0000	1.2077	0.7752	0.5219	0.3796		
	SAR, Z Axis Scan (X = -24, Y = -9)						
	.0-						
SAR (W/kg)	1.8-						
SAR). 6 -						
	1. 4 -			+	-		
0.0 2.5 5.0 7.5 10.0 12.5 15.0 17.5 20.0 22.5 25.0 Z (mm)							



GSM 850 Mid-Tilt-Right <SIM 1> **DUT: Mobile Phone;** Type: AM83Z

Communication System: Generic GSM; Communication System Band: GSM 850; Duty Cycle: 1:8.3; Conv.F=5.30; Frequency: 836.6 MHz; Medium parameters used: f = 850 MHz; $\sigma = 0.94 \text{ mho/m}$; $\epsilon r = 41.55$; $\rho = 1000 \text{ kg/m}^3$;

Phantom section: Right Section

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

SATIMO Configuration:

Probe: EP165; Calibrated: 01/31/2013

Sensor-Surface: 4mm (Mechanical Surface Detection)

· Phantom: Flat Phantom; Type: Elliptical Phantom

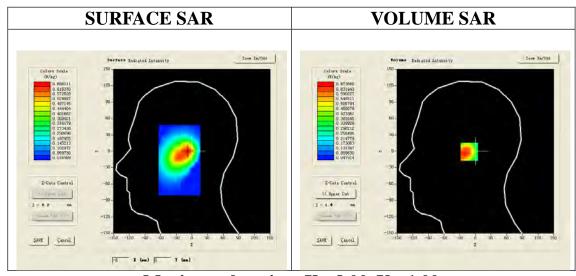
· Measurement SW: OpenSAR V4_02_01

Configuration/GSM 850 Mid-Tilt-Right/Area Scan: Measurement grid: dx=20mm, dy=20mm

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

dy=8mm, dz=5mm;

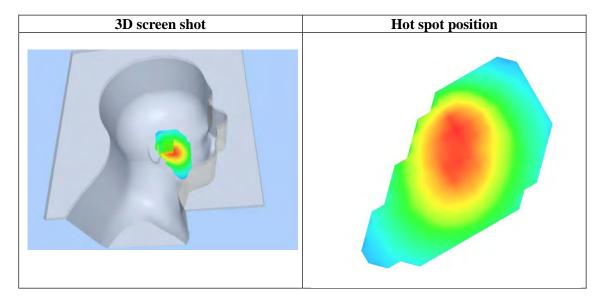
Area Scan	sam_direct_droit2_surf8mm.txt		
Zoom Scan	5x5x7,dx=8mm dy=8mm dz=5mm,Very fast		
Phantom	Right head		
Device Position	Tilt		
Band	GSM 850		
Channels	Middle		
Signal	TDMA (Crest factor: 8.0)		



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

SAR 10g (W/Kg)	0.407490	
SAR 1g (W/Kg)	0.641135	

Z (mm)	0.00	4.00	9.00	14.00	19.00		
SAR (W/Kg)	0.0000	0.6417	0.4174	0.2806	0.1993		
	SAR, Z Axis Scan ($X = -8$, $Y = -1$)						
	1.6-						
		$\backslash $					
_ 0	.5-		+ + + +		-		
(#/kg)							
			+				
SAR AR			\downarrow				
	.2-						
0	0.1- 0.0 2.5 5	0 75 10 0	12 5 15 0 17	5 20 0 22 5 25	.		
	0.0 2.5 5.0 7.5 10.0 12.5 15.0 17.5 20.0 22.5 25.0 Z (mm)						



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GSM 850 High-Touch-Right <SIM 2> **DUT: Mobile Phone; Type: AM83Z**

Communication System: Generic GSM; Communication System Band: GSM 850; Duty Cycle: 1:8.3; Conv.F=5.30 Frequency: 848.8 MHz; Medium parameters used: f = 850 MHz; $\sigma = 0.94$ mho/m; $\epsilon = 41.55$; $\rho = 1000$ kg/m³;

Phantom section: Right Section

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

SATIMO Configuration:

Probe: EP165; Calibrated: 01/31/2013

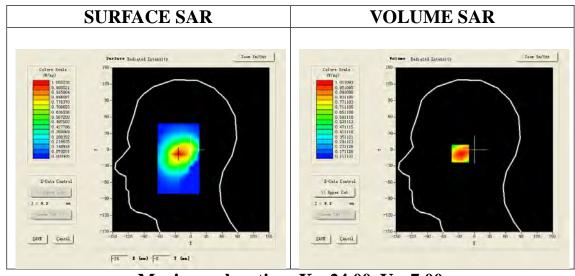
· Sensor-Surface: 4mm (Mechanical Surface Detection)

· Phantom: Flat Phantom; Type: Elliptical Phantom

· Measurement SW: OpenSAR V4_02_01

Configuration/GSM 850 High-Touch-Right/Area Scan (6x8x1): Measurement grid: dx=20mm, dy=20mm Configuration/GSM 850 High-Touch-Right/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm

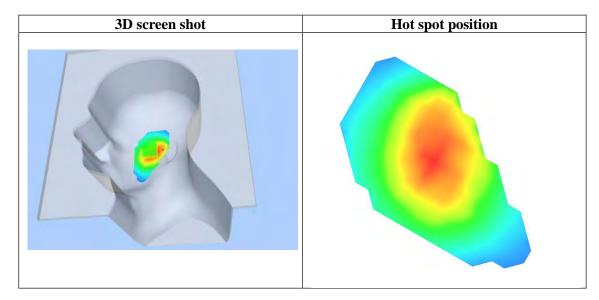
Area Scan	sam_direct_droit2_surf8mm.txt		
ZoomScan	5x5x7,dx=8mm dy=8mm dz=5mm,Very fast		
Phantom	Right head		
Device Position	Cheek		
Band	GSM 850		
Channels	High		
Signal	TDMA (Crest factor: 8.0)		



Maximum location: X=-24.00, Y=-7.00

SAR 10g (W/Kg)	0.632761
SAR 1g (W/Kg)	0.966658

Z (mm)	0.00	4.00	9.00	14.00	19.00			
SAR (W/Kg)	0.0000	1.0111	0.6676	0.4595	0.3373			
	SAR, Z Axis Scan $(X = -24, Y = -7)$							
1	.0-				•			
0	. 9 –	$\overline{}$	+		-			
0	. 8 –							
SAR (W/kg)	1. 7 -							
\ \S								
a 3	. 0 -							
N ()	1.5-							
0	. 4 -				-			
_		+-+-	+		-			
0	0.0 2.5 5	0 75 10 0	12 5 15 0 17	5 20.0 22.5 25				
	Z (nm)							



GSM 850 Low- Body- Back <SIM 1> **DUT: Mobile Phone**; **Type: AM83Z**

Communication System: Generic GSM; Communication System Band: GSM 850; Duty Cycle: 1:8.3; Conv.F=5.46; Frequency: 824.2 MHz; Medium parameters used: f = 850 MHz; $\sigma = 0.97$ mho/m; $\epsilon r = 54.26$; $\rho = 1000$ kg/m³;

Phantom section: Flat Section

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

SATIMO Configuration:

Probe: EP165; Calibrated: 01/31/2013

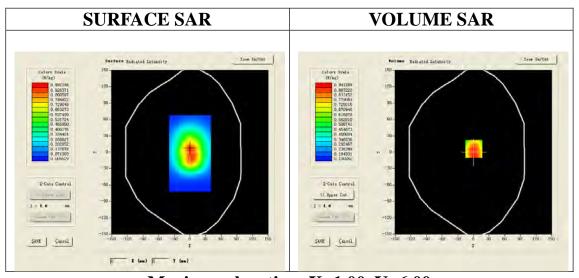
· Sensor-Surface: 4mm (Mechanical Surface Detection)

· Phantom: Flat Phantom; Type: Elliptical Phantom

· Measurement SW: OpenSAR V4_02_01

Configuration/GSM 850 Low-Body-Back/Area Scan (6x8x1): Measurement grid: dx=20mm, dy=20mm Configuration/GSM 850 Low-Body-Back/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm;

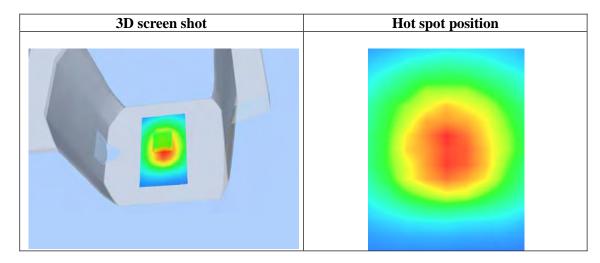
Area Scan	surf_sam_plan.txt		
ZoomScan	5x5x7,dx=8mm dy=8mm dz=5mm,Very fast		
Phantom	Validation plane		
Device Position	Body Back		
Band	GSM 850		
Channels	Low		
Signal	TDMA (Crest factor: 8.0)		



Maximum location: X=1.00, Y=6.00

SAR 10g (W/Kg)	0.659648
SAR 1g (W/Kg)	0.969466

Z (mm)	0.00	4.00	9.00	14.00	19.00		
SAR (W/Kg)	0.0000	0.9252	0.6581	0.4706	0.3393		
	SAR, Z Axis Scan (X = 1, Y = 6)						
	. 9-				1		
0	.8-				-		
್ 0	. 7 -	$\overline{}$	+		-		
(#/kg) 0 0	. 6 -				-		
SAR o	.5-				-		
0	. 4 –			+	-		
	.3-						
	0.0 2.5 5.	0 7.5 10.0	12.5 15.0 17.5	5 20.0 22.5 25	š. o		
		7	(mm)				



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GSM 850 Mid- Body- Back <SIM 1> DUT: Mobile Phone; Type: AM83Z

Communication System: Generic GSM; Communication System Band: GSM 850; Duty Cycle: 1:8.3; Conv.F=5.46; Frequency: 836.6 MHz; Medium parameters used: f = 850 MHz; $\sigma = 0.97$ mho/m; $\epsilon r = 54.26$; $\rho = 1000$ kg/m³;

Phantom section: Flat Section

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

SATIMO Configuration:

Probe: EP165; Calibrated: 01/31/2013

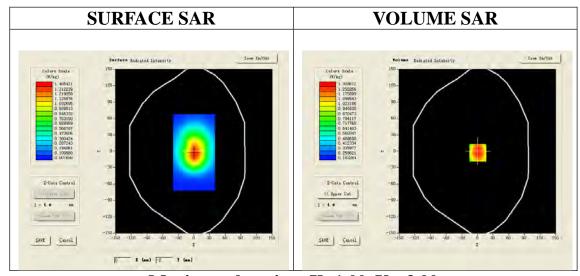
· Sensor-Surface: 4mm (Mechanical Surface Detection)

· Phantom: Flat Phantom; Type: Elliptical Phantom

· Measurement SW: OpenSAR V4_02_01

Configuration/GSM 850 Mid-Body-Back/Area Scan (6x8x1): Measurement grid: dx=20mm, dy=20mm Configuration/GSM 850 Mid-Body-Back/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm;

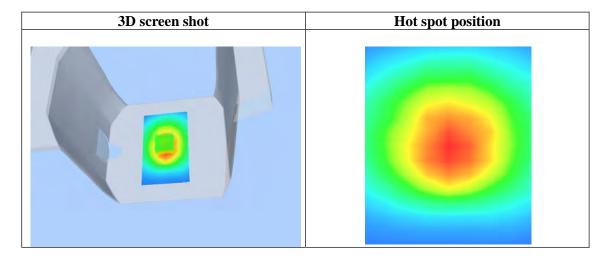
Area Scan	surf_sam_plan.txt		
ZoomScan	5x5x7,dx=8mm dy=8mm dz=5mm,Very fast		
Phantom	Validation plane		
Device Position	Body Back		
Band	GSM 850		
Channels	Middle		
Signal	TDMA (Crest factor: 8.0)		



Maximum location: X=1.00, Y=-3.00

SAR 10g (W/Kg)	0.916163	
SAR 1g (W/Kg)	1.366477	

Z (mm)	0.00	4.00	9.00	14.00	19.00			
SAR (W/Kg)	0.0000	1.3286	0.9569	0.6807	0.4763			
	SAR, Z Axis Scan ($X = 1$, $Y = -3$)							
	. 3-							
1	.2-							
	.0-							
[32 t	.0-							
0 (¥/kg)	. 8 -							
SAR								
, o	. 6 -		+		-			
	2				-			
	.3- 0.0 2.5 5	.0 7.5 10.0	12.5 15.0 17.5	5 20.0 22.5 25	l			
	Z (mm)							



GSM 850 High- Body- Back <SIM 1> **DUT: Mobile Phone; Type: AM83Z**

Communication System: Generic GSM; Communication System Band: GSM 850; Duty Cycle: 1:8.3; Conv.F=5.46; Frequency: 848.8 MHz; Medium parameters used: f = 850 MHz; $\sigma = 0.97$ mho/m; $\epsilon r = 54.26$; $\rho = 1000$ kg/m³;

Phantom section: Flat Section

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

SATIMO Configuration:

Probe: EP165; Calibrated: 01/31/2013

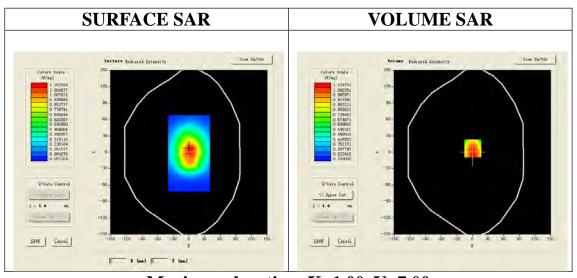
· Sensor-Surface: 4mm (Mechanical Surface Detection)

· Phantom: Flat Phantom; Type: Elliptical Phantom

· Measurement SW: OpenSAR V4_02_01

Configuration/GSM 850 High-Body-Back/Area Scan (6x8x1): Measurement grid: dx=20mm, dy=20mm Configuration/GSM 850 High-Body-Back/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm;

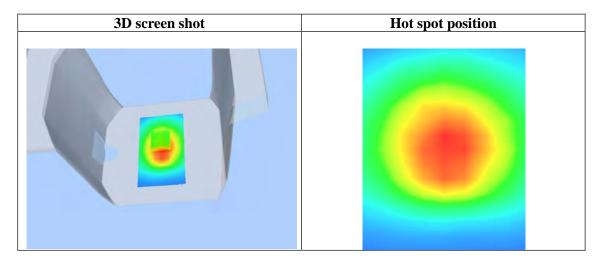
Area Scan	surf_sam_plan.txt		
ZoomScan	5x5x7,dx=8mm dy=8mm dz=5mm,Very fast		
Phantom	Validation plane		
Device Position	Body Back		
Band	GSM 850		
Channels	High		
Signal	TDMA (Crest factor: 8.0)		



Maximum location: X=1.00, Y=7.00

SAR 10g (W/Kg)	0.786337	
SAR 1g (W/Kg)	1.163264	

Z (mm)	0.00	4.00	9.00	14.00	19.00			
SAR (W/Kg)	0.0000	1.0962	0.7544	0.5344	0.3950			
	SAR, Z Axis Scan (X = 1, Y = 7)							
	. 1 -							
	.0-							
	1.9-	+	+ + + +		1			
(#/kg)	1.8-				-			
≥ 0). 7 –				-			
SAR o	1.6-	 	\longrightarrow		-			
	1.5-							
0	1. 4							
	1.3-							
		i. 0 7.5 10.0	12.5 15.0 17.	5 20.0 22.5 25	5.0			
	Z (mm)							



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GSM 850 Mid- Body- Front (MS) <SIM 1> **DUT: Mobile Phone; Type: AM83Z**

Communication System: Generic GSM; Communication System Band: GSM 850; Duty Cycle: 1:8.3; Conv.F=5.46; Frequency: 836.6 MHz; Medium parameters used: f = 850 MHz; $\sigma = 0.97$ mho/m; $\epsilon r = 54.26$; $\rho = 1000$ kg/m³;

Phantom section: Flat Section

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

SATIMO Configuration:

Probe: EP165; Calibrated: 01/31/2013

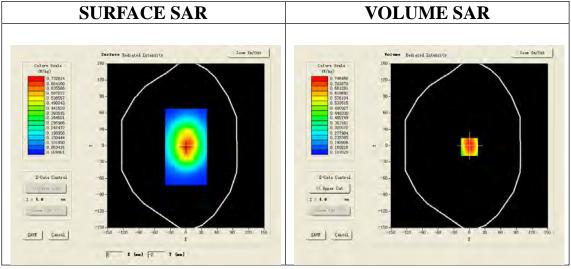
· Sensor-Surface: 4mm (Mechanical Surface Detection)

· Phantom: Flat Phantom; Type: Elliptical Phantom

· Measurement SW: OpenSAR V4_02_01

Configuration/GSM 850 Mid-Body- Front /Area Scan (6x8x1): Measurement grid: dx=20mm, dy=20mm Configuration/GSM 850 Mid-Body- Front Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm;

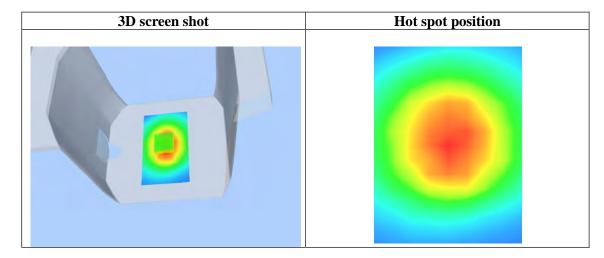
Area Scan	surf_sam_plan.txt			
ZoomScan	5x5x7,dx=8mm dy=8mm dz=5mm,Very fast			
Phantom	Validation plane			
Device Position	Body Front			
Band	GSM 850			
Channels	Middle			
Signal	TDMA (Crest factor: 8.0)			



Maximum location: X=0.00, Y=-2.00

SAR 10g (W/Kg)	0.496199	
SAR 1g (W/Kg)	0.773726	

Z (mm)	0.00	4.00	9.00	14.00	19.00			
SAR (W/Kg)	0.0000	0.7465	0.4606	0.2999	0.2145			
	SAR, Z Axis Scan $(X = 0, Y = -2)$							
0	. 7 -							
0	. 6 -	$\backslash \! \! \! \! \perp \! \! \! \! \! \! \! \! \! \! \! \! \! \! $						
(#/kg)	. 5 -	$\vdash \setminus \vdash$						
SAR (. 4-							
0	.3-							
0	.2- 0.0 2.5 5	.0 7.5 10.0	12.5 15.0 17.	5 20.0 22.5 25	5.0			
Z (mm)								



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GSM 850 Mid- Body- Back (MS) -with earphone <SIM 1>

DUT: Mobile Phone; Type: AM83Z

Communication System: Generic GSM; Communication System Band: GSM 850; Duty Cycle: 1:8.3; Conv.F=5.46; Frequency: 836.6 MHz; Medium parameters used: f = 850 MHz; $\sigma = 0.97$ mho/m; $\epsilon r = 54.26$; $\rho = 1000$ kg/m³;

Phantom section: Flat Section

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

SATIMO Configuration:

Probe: EP165; Calibrated: 01/31/2013

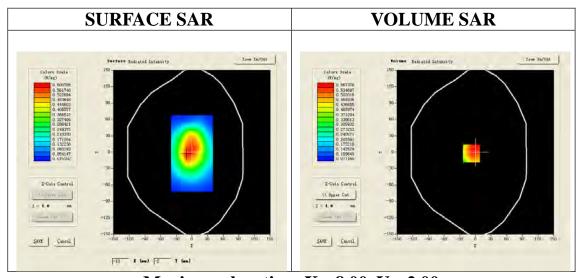
Sensor-Surface: 4mm (Mechanical Surface Detection)

· Phantom: Flat Phantom; Type: Elliptical Phantom

· Measurement SW: OpenSAR V4_02_01

Configuration/GSM 850 Mid-Body-Back/Area Scan (6x8x1): Measurement grid: dx=20mm, dy=20mm Configuration/GSM 850 Mid-Body-Back/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm;

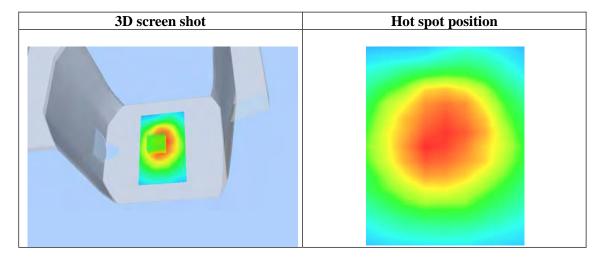
Area Scan	surf_sam_plan.txt			
ZoomScan	5x5x7,dx=8mm dy=8mm dz=5mm,Very fast			
Phantom	Validation plane			
Device Position	Body Back			
Band	GSM 850			
Channels	Middle			
Signal	TDMA (Crest factor: 8.0)			



Maximum location: X=-8.00, Y=-2.00

SAR 10g (W/Kg)	0.411460	
SAR 1g (W/Kg)	0.591901	

Z (mm)	0.00	4.00	9.00	14.00	19.00
SAR (W/Kg)	0.0000	0.5430	0.4114	0.3004	0.2084
		Axis Scan	(X = -8,	Y = -2)	
). 54 -				
0). 50 -	\wedge			-
0). 45 -	+	+ + +		-
್ಥಾಂ). 40 –	++	+		-
\\$`0). 40 –). 35 –		\longrightarrow		_
8), 30 -				
٠). 20 -				
0	0.13-				
	0.0 2.5 5	5.0 7.5 10.0	12.5 15.0 17.	5 20.0 22.5 25	5.0
Z (mm)					



PCS 1900 Low-Touch- Left <SIM 1> **DUT: Mobile Phone; Type: AM83Z**

Communication System: Generic GSM; Communication System Band: PCS 1900; Duty Cycle: 1:8.3; Conv.F=4.72; Frequency: 1850.2 MHz; Medium parameters used: f = 1900 MHz; $\sigma = 1.41 \text{ mho/m}$; $\epsilon = 40.50$; $\rho = 1000 \text{ kg/m}^3$;

Phantom section: Left Section

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

SATIMO Configuration:

Probe: EP165; Calibrated: 01/31/2013

· Sensor-Surface: 4mm (Mechanical Surface Detection)

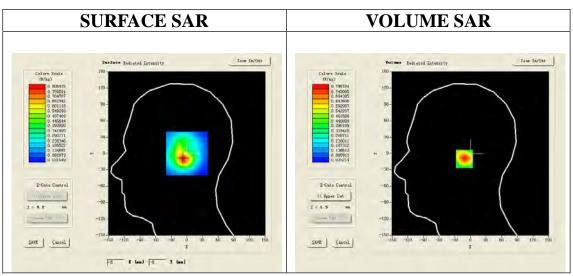
· Phantom: Flat Phantom; Type: Elliptical Phantom

· Measurement SW: OpenSAR V4_02_01

Configuration/PCS1900 Low-Touch-Left/Area Scan: Measurement grid: dx=20mm, dy=20mm Configuration/PCS1900 Low-Touch-Left/Zoom Scan: Measurement grid: dx=8mm,

dy=8mm, dz=5mm;

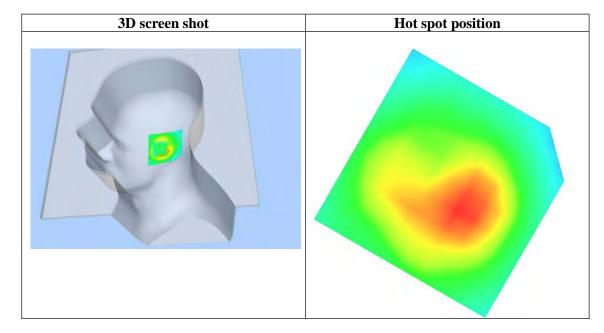
Area Scan	sam_direct_droit2_surf8mm.txt			
ZoomScan	5x5x7,dx=8mm dy=8mm dz=5mm,Very fast			
Phantom	Left head			
Device Position	Cheek			
Band	PCS 1900			
Channels	Low			
Signal	TDMA (Crest factor: 8.0)			



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

SAR 10g (W/Kg)	0.419859	
SAR 1g (W/Kg)	0.745664	

Z (mm)	0.00	4.00	9.00	14.00	19.00
SAR (W/Kg)	0.0000	0.7957	0.4756	0.2858	0.1765
		Axis Scan	(X = -7,	Y = -10)	
	1.8-	J			
0	. 7 –	$\overline{}$			-
	. 6 -	+			-
SAR (W/kg)	. 5 -				
§	. 4 -				
SAR					
	1.3-				
0	1.2-		1 1 7		
0	.1-				,
	0.0 2.5 5		12.5 15.U 17. (mm)	5 20.0 22.5 25	5. 0



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Test Laboratory: AGC Lab Date: Jul.23, 2013

PCS 1900 Mid-Touch- Left <SIM 1> **DUT: Mobile Phone; Type: AM83Z**

Communication System: Generic GSM; Communication System Band: PCS 1900; Duty Cycle: 1:8.3; Conv.F=4.72; Frequency: 1880 MHz; Medium parameters used: f = 1900 MHz; $\sigma = 1.41$ mho/m; $\epsilon = 40.50$; $\rho = 1000$ kg/m³;

Phantom section: Left Section

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

SATIMO Configuration:

Probe: EP165; Calibrated: 01/31/2013

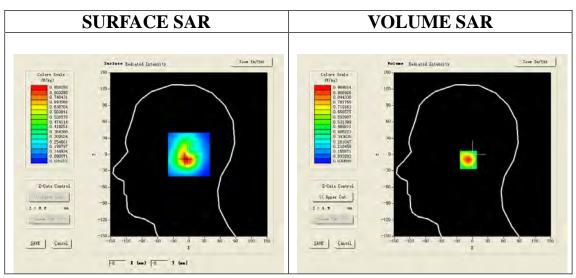
· Sensor-Surface: 4mm (Mechanical Surface Detection)

· Phantom: Flat Phantom; Type: Elliptical Phantom

· Measurement SW: OpenSAR V4_02_01

Configuration/PCS1900 Mid-Touch-Left/Area Scan: Measurement grid: dx=20mm, dy=20mm Configuration/PCS1900 Mid-Touch-Left/Zoom Scan: Measurement grid: dx=8mm, dy=8mm, dz=5mm;

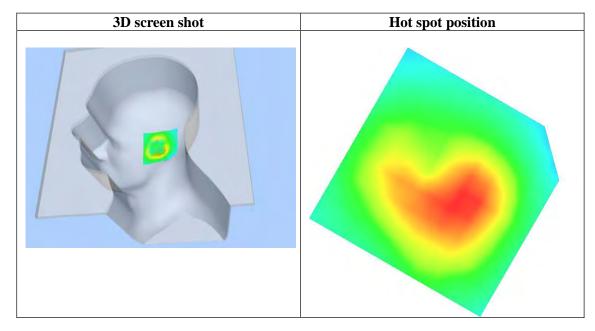
Area Scan	sam_direct_droit2_surf8mm.txt			
ZoomScan	5x5x7,dx=8mm dy=8mm dz=5mm,Very fast			
Phantom	Left head			
Device Position	Cheek			
Band	PCS 1900			
Channels	Middle			
Signal	TDMA (Crest factor: 8.0)			



Maximum location: X=-3.00, Y=-10.00

SAR 10g (W/Kg)	0.483276
SAR 1g (W/Kg)	0.900961

Z (mm)	0.00	4.00	9.00	14.00	19.00		
SAR (W/Kg)	0.0000	0.9695	0.5440	0.3106	0.1886		
	SAR, Z Axis Scan ($X = -3$, $Y = -10$)						
1	.0-						
0	1.8-	\longrightarrow			-		
(#/kg)). 6 -				_		
SAR 0	1. 4 -		$\downarrow \downarrow \downarrow \downarrow$				
0	1.2-						
0	0.0 2.5 5	0 7.5 10.0	12.5 15.0 17.	5 20.0 22.5 25	5.0		
		7	(mm)				



PCS 1900 High-Touch- Left <SIM 1> **DUT: Mobile Phone**; **Type: AM83Z**

Communication System: Generic GSM; Communication System Band: PCS 1900; Duty Cycle: 1:8.3; Conv.F=4.72; Frequency: 1909.8 MHz; Medium parameters used: f = 1900 MHz; $\sigma = 1.41 \text{ mho/m}$; $\epsilon = 40.50$; $\rho = 1000 \text{ kg/m}^3$;

Phantom section: Left Section

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

SATIMO Configuration:

Probe: EP165; Calibrated: 01/31/2013

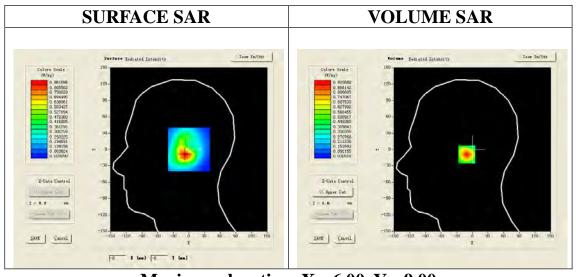
Sensor-Surface: 4mm (Mechanical Surface Detection)

· Phantom: Flat Phantom; Type: Elliptical Phantom

· Measurement SW: OpenSAR V4_02_01

Configuration/PCS1900 High-Touch-Left/Area Scan: Measurement grid: dx=20mm, dy=20mm Configuration/PCS1900 High-Touch-Left/Zoom Scan: Measurement grid: dx=8mm, dy=8mm, dz=5mm;

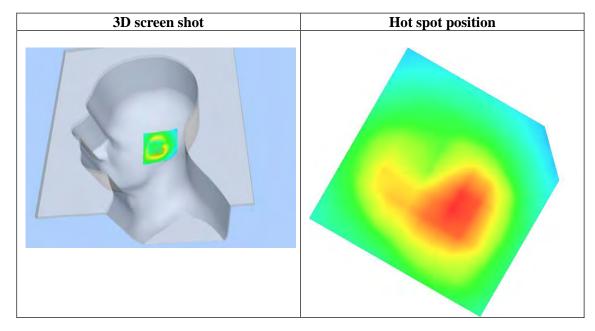
Area Scan	sam_direct_droit2_surf8mm.txt			
ZoomScan	5x5x7,dx=8mm dy=8mm dz=5mm,Very fast			
Phantom	Left head			
Device Position	Cheek			
Band	PCS 1900			
Channels	High			
Signal	TDMA (Crest factor: 8.0)			



Maximum location: X=-6.00, Y=-9.00

SAR 10g (W/Kg)	0.468508	
SAR 1g (W/Kg)	0.858774	

Z (mm)	0.00	4.00	9.00	14.00	19.00	
SAR (W/Kg)	0.0000	0.9257	0.5440	0.3211	0.1952	
	SAR, Z Axis Scan $(X = -6, Y = -9)$					
0	. 9-		1 1 1			
0	.8-	\longrightarrow	+++			
	. 7 –				-	
(∦/kg)	. 6 -				-	
≥0	.5-		+		-	
SAR o	. 4 -		$\downarrow \downarrow \downarrow \downarrow$		-	
0	.3-		\rightarrow		-	
0	.2-		++			
0	. 1 –					
	0.0 2.5 5			5 20.0 22.5 25	5.0	
Z (mm)						



PCS 1900 Low-Tilt-Left <SIM 1> **DUT: Mobile Phone;** Type: AM83Z

Communication System: Generic GSM; Communication System Band: PCS 1900; Duty Cycle: 1:8.3; Conv.F=4.72; Frequency: 1850.2 MHz; Medium parameters used: f = 1900 MHz; $\sigma = 1.41 \text{ mho/m}$; $\epsilon = 40.50$; $\rho = 1000 \text{ kg/m}^3$;

Phantom section: Left Section

Ambient temperature ($^{\circ}$ C): 21.0, Liquid temperature ($^{\circ}$ C): 21.0

SATIMO Configuration:

Probe: EP165; Calibrated: 01/31/2013

Sensor-Surface: 4mm (Mechanical Surface Detection)

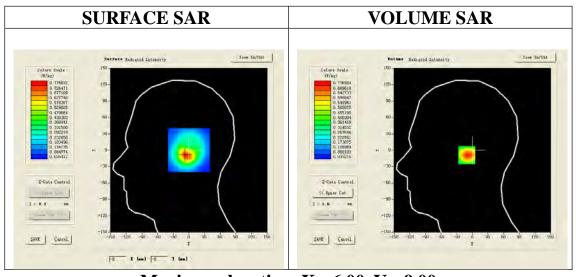
· Phantom: Flat Phantom; Type: Elliptical Phantom

· Measurement SW: OpenSAR V4_02_01

 $\label{lem:configuration} \textbf{Configuration/PCS1900 Low-Tilt-Left/Area Scan: Measurement grid: } dx=20mm, dy=20mm \\ \textbf{Configuration/PCS1900 Low-Tilt-Left/Zoom Scan: Measurement grid: } dx=8mm, \\ dx=8mm, dx=$

dy=8mm,dz=5mm;

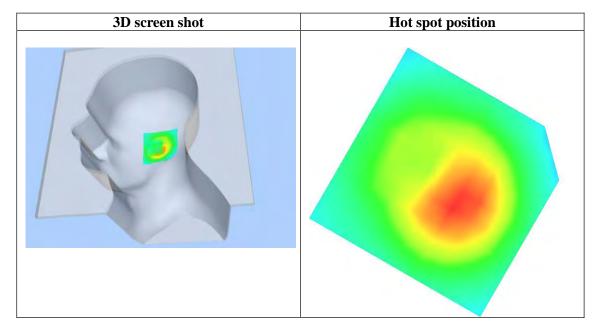
Area Scan	sam_direct_droit2_surf8mm.txt		
ZoomScan	5x5x7,dx=8mm dy=8mm dz=5mm,Very fast		
Phantom	Left head		
Device Position	Tilt		
Band	PCS 1900		
Channels	Low		
Signal	TDMA (Crest factor: 8.0)		



Maximum location: X=-6.00, Y=-9.00

SAR 10g (W/Kg)	0.389054	
SAR 1g (W/Kg)	0.692074	

Z (mm)	0.00	4.00	9.00	14.00	19.00		
SAR (W/Kg)	0.0000	0.7365	0.4339	0.2584	0.1601		
	SAR, Z Axis Scan $(X = -6, Y = -9)$						
0	. 7 -						
0	. 6 -						
(%/kg) 0	.5-	+	+				
O SAR	3		\downarrow				
0	.2-						
0	0.0 2.5 5	0 75 10 0	12 5 15 0 17	5 20 0 22 5 25	-		
0.0 2.5 5.0 7.5 10.0 12.5 15.0 17.5 20.0 22.5 25.0 Z (mm)							



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Test Laboratory: AGC Lab Date: Jul.23, 2013

PCS 1900 Mid-Tilt-Left <SIM 1> **DUT: Mobile Phone;** Type: AM83Z

Communication System: Generic GSM; Communication System Band: PCS 1900; Duty Cycle: 1:8.3; Conv.F=4.72; Frequency: 1880 MHz; Medium parameters used: f = 1900 MHz; $\sigma = 1.41$ mho/m; $\epsilon = 40.50$; $\rho = 1000$ kg/m³;

Phantom section: Left Section

Ambient temperature ($^{\circ}$ C): 21.0, Liquid temperature ($^{\circ}$ C): 21.0

SATIMO Configuration:

Probe: EP165; Calibrated: 01/31/2013

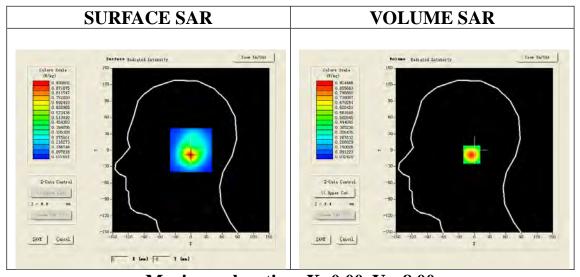
Sensor-Surface: 4mm (Mechanical Surface Detection)

· Phantom: Flat Phantom; Type: Elliptical Phantom

· Measurement SW: OpenSAR V4_02_01

Configuration/PCS1900 Mid-Tilt-Left/Area Scan: Measurement grid: dx=20mm, dy=20mm Configuration/PCS1900 Mid-Tilt-Left/Zoom Scan: Measurement grid: dx=8mm,

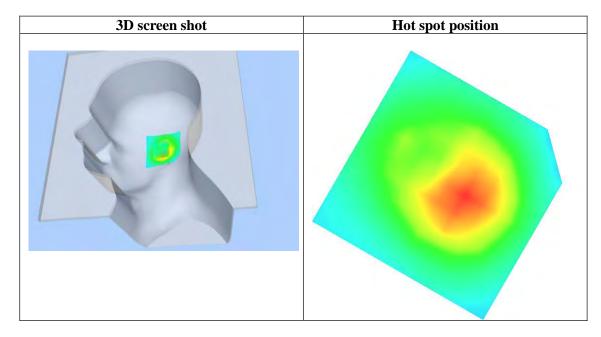
Area Scan	sam_direct_droit2_surf8mm.txt		
ZoomScan	5x5x7,dx=8mm dy=8mm dz=5mm,Very fast		
Phantom	Left head		
Device Position	Tilt		
Band	PCS 1900		
Channels	Middle		
Signal	TDMA (Crest factor: 8.0)		



Maximum location: X=0.00, Y=-8.00

SAR 10g (W/Kg)	0.455854	
SAR 1g (W/Kg)	0.851222	

Z (mm)	0.00	4.00	9.00	14.00	19.00	
SAR (W/Kg)	0.0000	0.9145	0.5257	0.3023	0.1786	
	SAR, Z	Axis Scar	(X = 0,	¥ = -8)		
0	.9-		1 1		-	
0	.8-	\longrightarrow			-	
0	. 7 –					
(%) o	. 6 –	$+\lambda$				
(%//kg)	.5-					
SAR 0	. 4 -		$\downarrow \downarrow \downarrow \downarrow$			
	. 3 –		\rightarrow			
0	. 2 -		+	\rightarrow		
0	. 1 -					
		.0 7.5 10.0	12.5 15.0 17.	5 20.0 22.5 25	5.0	
	Z (mm)					



PCS 1900 High-Tilt-Left <SIM 1> **DUT: Mobile Phone;** Type: AM83Z

Communication System: Generic GSM; Communication System Band: PCS 1900; Duty Cycle: 1:8.3; Conv.F=4.72; Frequency: 1909.8 MHz; Medium parameters used: f = 1900 MHz; $\sigma = 1.41 \text{ mho/m}$; $\epsilon = 40.50$; $\rho = 1000 \text{ kg/m}^3$;

Phantom section: Left Section

Ambient temperature ($^{\circ}$ C): 21.0, Liquid temperature ($^{\circ}$ C): 21.0

SATIMO Configuration:

Probe: EP165; Calibrated: 01/31/2013

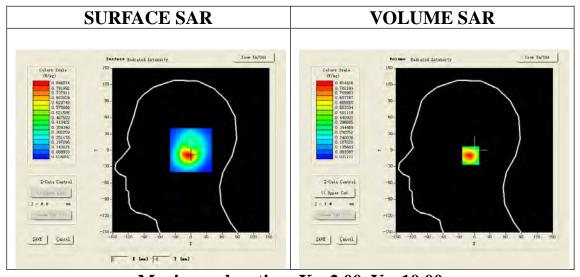
Sensor-Surface: 4mm (Mechanical Surface Detection)

· Phantom: Flat Phantom; Type: Elliptical Phantom

· Measurement SW: OpenSAR V4_02_01

Configuration/PCS1900 High-Tilt-Left/Area Scan: Measurement grid: dx=20mm, dy=20mm Configuration/PCS1900 High-Tilt-Left/Zoom Scan: Measurement grid: dx=8mm, dy=8mm,dz=5mm;

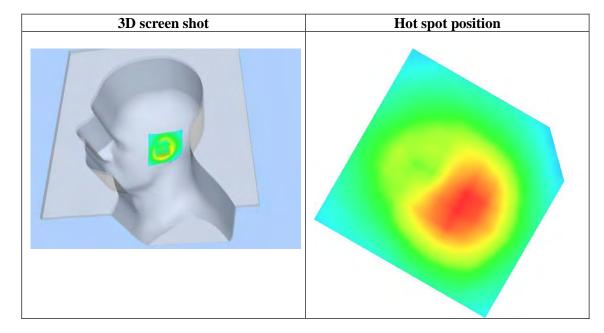
Area Scan	sam_direct_droit2_surf8mm.txt			
ZoomScan	5x5x7,dx=8mm dy=8mm dz=5mm,Very fast			
Phantom	Left head			
Device Position	Tilt			
Band	PCS 1900			
Channels	High			
Signal	TDMA (Crest factor: 8.0)			



Maximum location: X=-2.00, Y=-10.00

SAR 10g (W/Kg)	0.436053	
SAR 1g (W/Kg)	0.765142	

Z (mm)	0.00	4.00	9.00	14.00	19.00	
SAR (W/Kg)	0.0000	0.8144	0.5237	0.3268	0.1959	
		Axis Scan	(X = -2,	Y = -10)		
0	0.8-				•	
0	1. 7 –	\longrightarrow				
	1.6-					
₩						
(%)	1.5-					
SAR 0	1.4-		+		-	
ν, (1.3-		\rightarrow		_	
	1.2-					
	0.1- 0.0 2.5 5	.0 7.5 10.0	12.5 15.0 17.	5 20.0 22.5 25	5.0	
	Z (mm)					



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Test Laboratory: AGC Lab Date: Jul.23, 2013

PCS 1900 Low-Touch-Right <SIM 1> **DUT: Mobile Phone; Type: AM83Z**

Communication System: Generic GSM; Communication System Band: PCS 1900; Duty Cycle: 1:8.3; Conv.F=4.72; Frequency: 1850.2 MHz; Medium parameters used: f = 1900 MHz; $\sigma = 1.41$ mho/m; $\epsilon r = 40.50$; $\rho = 1000$ kg/m³;

Phantom section: Right Section

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

SATIMO Configuration:

Probe: EP165; Calibrated: 01/31/2013

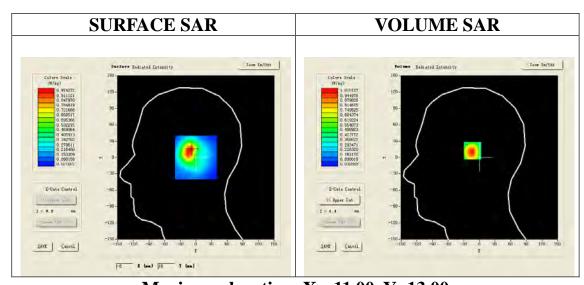
· Sensor-Surface: 4mm (Mechanical Surface Detection)

· Phantom: Flat Phantom; Type: Elliptical Phantom

· Measurement SW: OpenSAR V4_02_01

Configuration/PCS1900 Low-Touch-Right/Area Scan: Measurement grid: dx=20mm, dy=20mm **Configuration/PCS1900 Low-Touch-Right/Zoom Scan:** Measurement grid: dx=8mm, dy=8mm, dz=5mm;

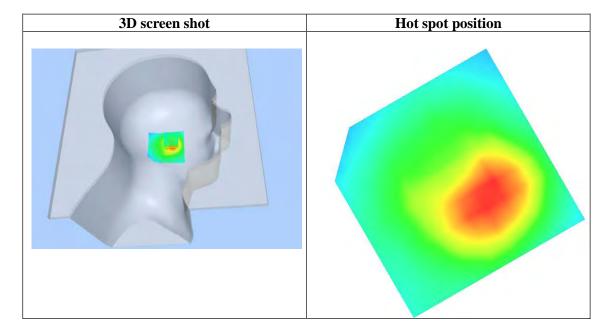
Area Scan	sam_direct_droit2_surf8mm.txt			
ZoomScan	5x5x7,dx=8mm dy=8mm dz=5mm,Very fast			
Phantom	Right head			
Device Position	Cheek			
Band	PCS 1900			
Channels	Low			
Signal	TDMA (Crest factor: 8.0)			



Maximum location: X=-11.00, Y=13.00

SAR 10g (W/Kg)	0.522867	
SAR 1g (W/Kg)	0.953743	

Z (mm)	0.00	4.00	9.00	14.00	19.00			
SAR (W/Kg)	0.0000	1.0101	0.6087	0.3624	0.2150			
1	SAR, Z Axis Scan (X = -11, Y = 13)							
	.0-							
SAR (W/kg)). 6 -							
SAR 0	1. 4 -							
	0.0 2.5 5	0. 7.5. 10.0	10 5 15 0 17 5	5 20 0 22 5 25				
0.0 2.5 5.0 7.5 10.0 12.5 15.0 17.5 20.0 22.5 25.0 Z (mm)								



PCS 1900 Mid-Touch-Right <SIM 1> **DUT: Mobile Phone; Type: AM83Z**

Communication System: Generic GSM; Communication System Band: PCS 1900; Duty Cycle: 1:8.3; Conv.F=4.72; Frequency: 1880 MHz; Medium parameters used: f = 1900 MHz; $\sigma = 1.41$ mho/m; $\epsilon = 40.50$; $\rho = 1000$ kg/m³;

Phantom section: Right Section

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

SATIMO Configuration:

Probe: EP165; Calibrated: 01/31/2013

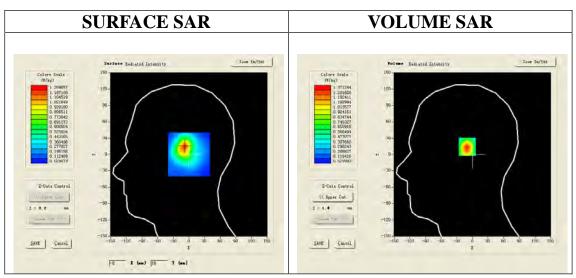
· Sensor-Surface: 4mm (Mechanical Surface Detection)

· Phantom: Flat Phantom; Type: Elliptical Phantom

· Measurement SW: OpenSAR V4_02_01

Configuration/PCS1900 Mid-Touch-Right/Area Scan: Measurement grid: dx=20mm, dy=20mm Configuration/PCS1900 Mid-Touch-Right/Zoom Scan: Measurement grid: dx=8mm, dy=8mm, dz=5mm;

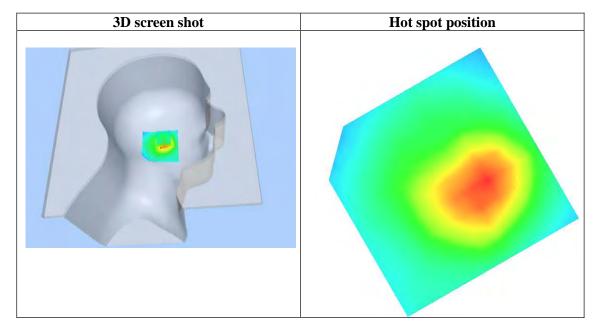
Area Scan	sam_direct_droit2_surf8mm.txt			
ZoomScan	5x5x7,dx=8mm dy=8mm dz=5mm,Very fast			
Phantom	Right head			
Device Position	Cheek			
Band	PCS 1900			
Channels	Middle			
Signal	TDMA (Crest factor: 8.0)			



Maximum location: X=-8.00, Y=15.00

SAR 10g (W/Kg)	0.671582	
SAR 1g (W/Kg)	1.273913	

Z (mm)	0.00	4.00	9.00	14.00	19.00		
SAR (W/Kg)	0.0000	1.3712	0.7944	0.4570	0.2663		
	SAR, Z Axis Scan (X = -8, Y = 15)						
	. 4 -						
	.0-						
. Kg	.8-						
	.6-						
	. 4 -						
0	.1- 0.0 2.5 5	.0 7.5 10.0	12.5 15.0 17.	5 20.0 22.5 25	5.0		
	Z (mm)						



PCS 1900 High-Touch-Right <SIM 1> **DUT: Mobile Phone**; **Type: AM83Z**

Communication System: Generic GSM; Communication System Band: PCS 1900; Duty Cycle: 1:8.3; Conv.F=4.72; Frequency: 1909.8 MHz; Medium parameters used: f = 1900 MHz; $\sigma = 1.41 \text{ mho/m}$; $\epsilon = 40.50$; $\rho = 1000 \text{ kg/m}^3$;

Phantom section: Right Section

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

SATIMO Configuration:

Probe: EP165; Calibrated: 01/31/2013

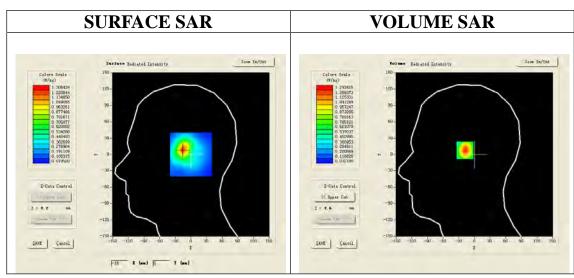
· Sensor-Surface: 4mm (Mechanical Surface Detection)

· Phantom: Flat Phantom; Type: Elliptical Phantom

· Measurement SW: OpenSAR V4_02_01

Configuration/PCS1900 High-Touch-Right/Area Scan: Measurement grid: dx=20mm, dy=20mm **Configuration/PCS1900 High-Touch-Right/Zoom Scan:** Measurement grid: dx=8mm,

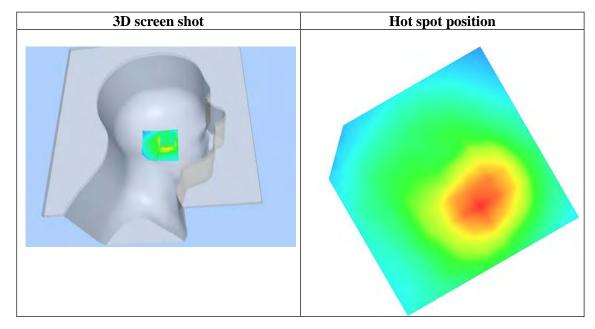
Area Scan	sam_direct_droit2_surf8mm.txt			
ZoomScan	5x5x7,dx=8mm dy=8mm dz=5mm,Very fast			
Phantom	Right head			
Device Position	Cheek			
Band	PCS 1900			
Channels	High			
Signal	TDMA (Crest factor: 8.0)			



Maximum location: X=-16.00, Y=8.00

SAR 10g (W/Kg)	0.635335
SAR 1g (W/Kg)	1.197602

Z (mm)	0.00	4.00	9.00	14.00	19.00			
SAR (W/Kg)	0.0000	1.2934	0.7339	0.4191	0.2493			
	SAR, Z Axis Scan $(X = -16, Y = 8)$							
1	.3-							
1	.0-							
(#/kg)	. 8 -							
SAR (. 6 -		$\downarrow \downarrow \downarrow \downarrow$		-			
0	. 4 -							
0	0.0 2.5 5	.0 7.5 10.0	12.5 15.0 17.5	5 20.0 22.5 25	5.0			
			(mm)					



PCS 1900 Low-Tilt-Right <SIM 1> **DUT: Mobile Phone;** Type: AM83Z

Communication System: Generic GSM; Communication System Band: PCS 1900; Duty Cycle: 1:8.3; Conv.F=4.72; Frequency: 1850.2 MHz; Medium parameters used: f = 1900 MHz; $\sigma = 1.41 \text{ mho/m}$; $\epsilon = 40.50$; $\rho = 1000 \text{ kg/m}^3$;

Phantom section: Right Section

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

SATIMO Configuration:

Probe: EP165; Calibrated: 01/31/2013

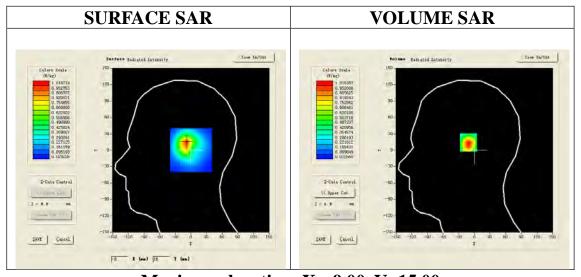
Sensor-Surface: 4mm (Mechanical Surface Detection)

· Phantom: Flat Phantom; Type: Elliptical Phantom

· Measurement SW: OpenSAR V4_02_01

Configuration/PCS1900 Low-Tilt-Right/Area Scan: Measurement grid: dx=20mm, dy=20mm **Configuration/PCS1900 Low-Tilt-Right/Zoom Scan:** Measurement grid: dx=8mm, dy=8mm, dz=5mm;

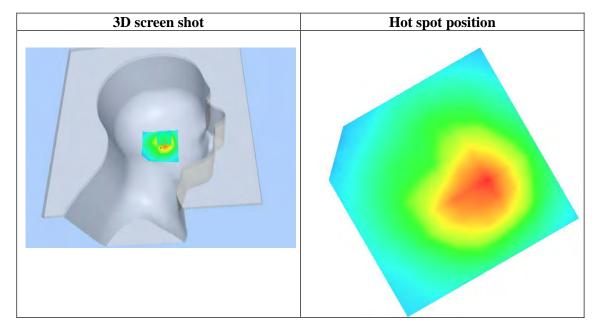
Area Scan	sam_direct_droit2_surf8mm.txt			
ZoomScan	5x5x7,dx=8mm dy=8mm dz=5mm,Very fast			
Phantom	Right head			
Device Position	Tilt			
Band	PCS 1900			
Channels	Low			
Signal	TDMA (Crest factor: 8.0)			



Maximum location: X=-9.00, Y=15.00

SAR 10g (W/Kg)	0.503361	
SAR 1g (W/Kg)	0.960766	

Z (mm)	0.00	4.00	9.00	14.00	19.00	
SAR (W/Kg)	0.0000	1.0184	0.5689	0.3191	0.1862	
	SAR, Z	Axis Scan	(X = -9,	Y = 15)		
	.0-					
	. 8 -		+ + +		-	
(#/kg)	. 6 -					
SAR ()						
	.2-					
"	.1- 0.0 2.5 5	i i i .0 7.5 10.0	12.5 15.0 17.5	 	5.0	
	Z (mm)					



PCS 1900 Mid-Tilt-Right <SIM 1> **DUT: Mobile Phone;** Type: AM83Z

Communication System: Generic GSM; Communication System Band: PCS 1900; Duty Cycle: 1:8.3; Conv.F=4.72; Frequency: 1880 MHz; Medium parameters used: f = 1900 MHz; $\sigma = 1.41$ mho/m; $\epsilon = 40.50$; $\rho = 1000$ kg/m³;

Phantom section: Right Section

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

SATIMO Configuration:

Probe: EP165; Calibrated: 01/31/2013

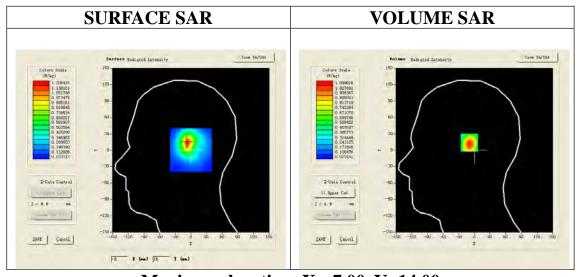
Sensor-Surface: 4mm (Mechanical Surface Detection)

· Phantom: Flat Phantom; Type: Elliptical Phantom

· Measurement SW: OpenSAR V4_02_01

Configuration/PCS1900 Mid-Tilt-Right/Area Scan: Measurement grid: dx=20mm, dy=20mm **Configuration/PCS1900 Mid-Tilt-Right/Zoom Scan:** Measurement grid: dx=8mm,

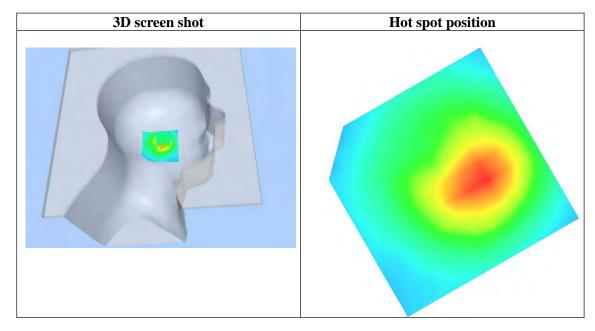
Area Scan	sam_direct_droit2_surf8mm.txt		
ZoomScan	5x5x7,dx=8mm dy=8mm dz=5mm,Very fast		
Phantom	Right head		
Device Position	Tilt		
Band	PCS 1900		
Channels	Middle		
Signal	TDMA (Crest factor: 8.0)		



Maximum location: X=-7.00, Y=14.00

SAR 10g (W/Kg)	0.565861	
SAR 1g (W/Kg)	1.031742	

Z (mm)	0.00	4.00	9.00	14.00	19.00
SAR (W/Kg)	0.0000	1.0990	0.6541	0.3868	0.2308
		Axis Scan	(X = -7,	Y = 14)	
	. 1 -				
1.	.0-				-
	_				
	. 8 -		+ + +		-
(#/kg)	_				
	. 6 -				1
SAR			\setminus		
0.	. 4 -				
0.	. 1 –				
	0.0 2.5 5	.0 7.5 10.0	12.5 15.0 17.	5 20.0 22.5 25	5.0
		Z	(mm)		



PCS 1900 High-Tilt-Right <SIM 1> **DUT: Mobile Phone;** Type: AM83Z

Communication System: Generic GSM; Communication System Band: PCS 1900; Duty Cycle: 1:8.3; Conv.F=4.72; Frequency: 1909.8 MHz; Medium parameters used: f = 1900 MHz; $\sigma = 1.41 \text{ mho/m}$; $\epsilon = 40.50$; $\rho = 1000 \text{ kg/m}^3$;

Phantom section: Right Section

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

SATIMO Configuration:

Probe: EP165; Calibrated: 01/31/2013

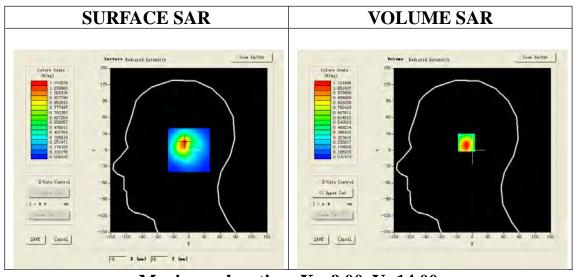
Sensor-Surface: 4mm (Mechanical Surface Detection)

· Phantom: Flat Phantom; Type: Elliptical Phantom

· Measurement SW: OpenSAR V4_02_01

Configuration/PCS1900 High-Tilt-Right/Area Scan: Measurement grid: dx=20mm, dy=20mm **Configuration/PCS1900 High-Tilt-Right/Zoom Scan:** Measurement grid: dx=8mm, dy=8mm, dz=5mm;

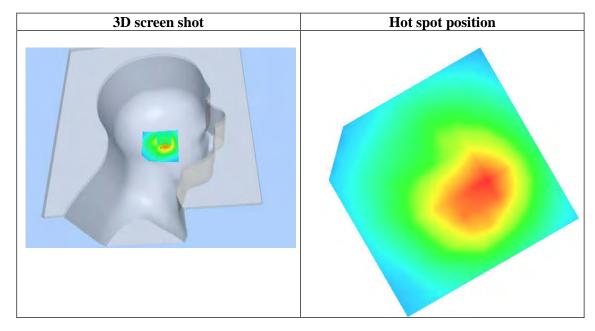
Area Scan	sam_direct_droit2_surf8mm.txt		
ZoomScan	5x5x7,dx=8mm dy=8mm dz=5mm,Very fast		
Phantom	Right head		
Device Position	Tilt		
Band	PCS 1900		
Channels	High		
Signal	TDMA (Crest factor: 8.0)		



Maximum location: X=-9.00, Y=14.00

SAR 10g (W/Kg)	0.590466
SAR 1g (W/Kg)	1.074651

Z (mm)	0.00	4.00	9.00	14.00	19.00			
SAR (W/Kg)	0.0000	1.1236	0.6762	0.4005	0.2349			
	SAR, Z Axis Scan $(X = -9, Y = 14)$							
1.	. 1 -							
1.	.0-				-			
(#/kg)	. 8 -		+		-			
/kg								
≥ 0.	.6-	+	\perp		-			
SAR								
۰° 0.	. 4 -		\rightarrow					
0.	. 1 –				ī			
	0.0 2.5 5	.0 7.5 10.0	12.5 15.0 17.	5 20.0 22.5 25	5.0			
	Z (mm)							



PCS 1900 Mid-Touch-Right <SIM 2> **DUT: Mobile Phone; Type: AM83Z**

Communication System: Generic GSM; Communication System Band: PCS 1900; Duty Cycle: 1:8.3; Conv.F=4.72; Frequency: 1880 MHz; Medium parameters used: f = 1900 MHz; $\sigma = 1.41$ mho/m; $\epsilon = 40.50$; $\rho = 1000$ kg/m³;

Phantom section: Right Section

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

SATIMO Configuration:

Probe: EP165; Calibrated: 01/31/2013

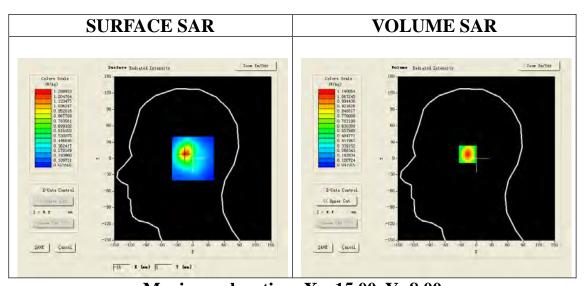
· Sensor-Surface: 4mm (Mechanical Surface Detection)

· Phantom: Flat Phantom; Type: Elliptical Phantom

· Measurement SW: OpenSAR V4_02_01

Configuration/PCS1900 Mid-Touch-Right/Area Scan: Measurement grid: dx=20mm, dy=20mm Configuration/PCS1900 Mid-Touch-Right/Zoom Scan: Measurement grid: dx=8mm, dy=8mm, dz=5mm;

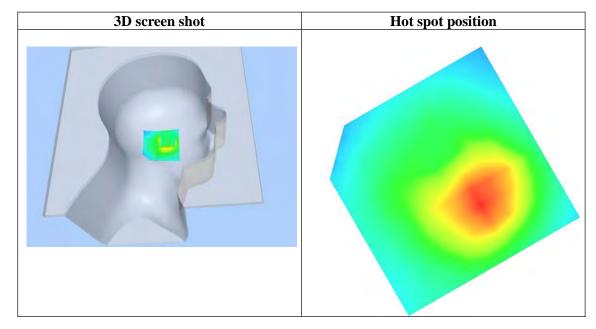
Area Scan	sam_direct_droit2_surf8mm.txt		
ZoomScan	5x5x7,dx=8mm dy=8mm dz=5mm,Very fast		
Phantom	Right head		
Device Position	Cheek		
Band	PCS 1900		
Channels	Middle		
Signal	TDMA (Crest factor: 8.0)		



Maximum location: X=-15.00, Y=8.00

SAR 10g (W/Kg)	0.603275	
SAR 1g (W/Kg)	1.060430	

Z (mm)	0.00	4.00	9.00	14.00	19.00		
SAR (W/Kg)	0.0000	1.1401	0.7231	0.4545	0.2845		
	SAR, Z Axis Scan $(X = -15, Y = 8)$						
1.	. 1 -						
1.	.0-	\backslash					
ా 0.	.8-	$+\lambda$	\perp				
SAR (W/kg)							
ຼິ 0.	. 6 -		+		-		
N.S.							
0.	. 4 -		+		-		
0.	.2-		+		-		
		0 7.5 10.0	12.5 15.0 17.5	5 20.0 22.5 25	5.0		
Z (mm)							



PCS 1900 Low-Body-Back <SIM 1> **DUT: Mobile Phone;** Type: AM83Z

Communication System: Generic GSM; Communication System Band: PCS 1900; Duty Cycle: 1:8.3; Conv.F=4.84; Frequency: 1850.2 MHz; Medium parameters used: f = 1900 MHz; $\sigma = 1.48 \text{ mho/m}$; $\epsilon = 52.66$; $\rho = 1000 \text{ kg/m}^3$;

Phantom section: Flat Section

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

SATIMO Configuration:

Probe: EP165; Calibrated: 01/31/2013

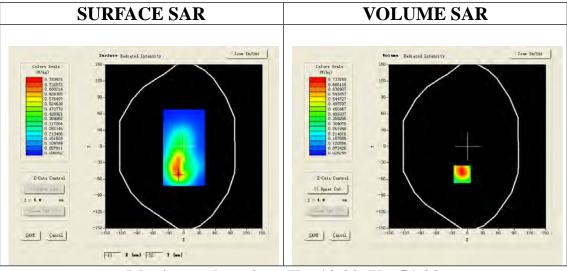
Sensor-Surface: 4mm (Mechanical Surface Detection)

· Phantom: Flat Phantom; Type: Elliptical Phantom

· Measurement SW: OpenSAR V4_02_01

Configuration/PCS1900 Low-Body-Back/Area Scan: Measurement grid: dx=20mm, dy=20mm Configuration/PCS1900 Low-Body-Back/Zoom Scan: Measurement grid: dx=8mm,

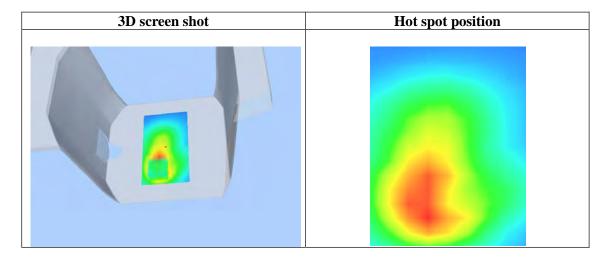
Area Scan	surf_sam_plan.txt		
ZoomScan	5x5x7,dx=8mm dy=8mm dz=5mm,Very fast		
Phantom	Validation plane		
Device Position	Body Back		
Band	PCS 1900		
Channels	Low		
Signal	TDMA (Crest factor: 8.0)		



Maximum location: X=-10.00, Y=-51.00

SAR 10g (W/Kg)	0.434277
SAR 1g (W/Kg)	0.758884

Z (mm)	0.00	4.00	9.00	14.00	19.00			
SAR (W/Kg)	0.0000	0.7193	0.4187	0.2484	0.1556			
	SAR, Z Axis Scan ($X = -10$, $Y = -51$)							
0	0.7-		1 1 1		-			
0	1.6-	\longrightarrow						
(%/kg)). 5 -	+			-			
€ 0	1.4-	+	+		-			
SAR 0	1. 3 -							
	1, 2-							
0	0.0 2.5 5	.0 7.5 10.0	12.5 15.0 17.5	5 20.0 22.5 25	5.0			
	Z (mm)							



PCS 1900 Mid-Body-Back <SIM 1> **DUT: Mobile Phone; Type: AM83Z**

Communication System: Generic GSM; Communication System Band: PCS 1900; Duty Cycle: 1:8.3; Conv.F=4.84; Frequency: 1880 MHz; Medium parameters used: f = 1900 MHz; $\sigma = 1.48$ mho/m; $\epsilon = 52.66$; $\rho = 1000$ kg/m³;

Phantom section: Flat Section

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

SATIMO Configuration:

Probe: EP165; Calibrated: 01/31/2013

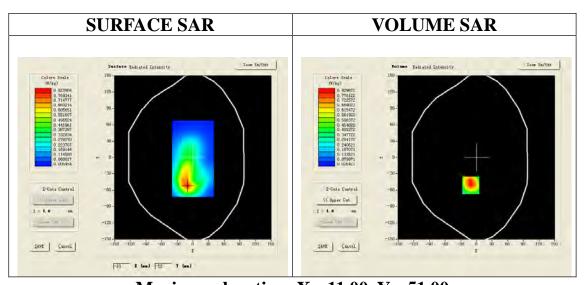
Sensor-Surface: 4mm (Mechanical Surface Detection)

· Phantom: Flat Phantom; Type: Elliptical Phantom

· Measurement SW: OpenSAR V4_02_01

Configuration/PCS1900 Mid-Body-Back/Area Scan: Measurement grid: dx=20mm, dy=20mm Configuration/PCS1900 Mid-Body-Back/Zoom Scan: Measurement grid: dx=8mm, dy=8mm, dz=5mm;

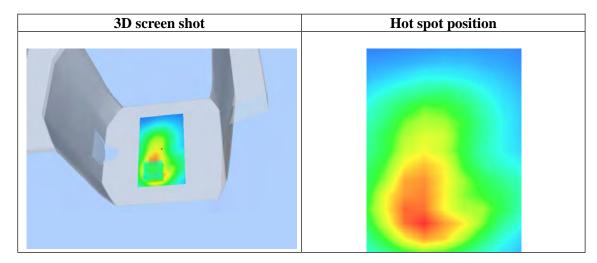
Area Scan	surf_sam_plan.txt			
ZoomScan	5x5x7,dx=8mm dy=8mm dz=5mm,Very fast			
Phantom	Validation plane			
Device Position	Body Back			
Band	PCS 1900			
Channels	Middle			
Signal	TDMA (Crest factor: 8.0)			



Maximum location: X=-11.00, Y=-51.00

SAR 10g (W/Kg)	0.481389	
SAR 1g (W/Kg)	0.860450	

Z (mm)	0.00	4.00	9.00	14.00	19.00
SAR (W/Kg)	0.0000	0.8297	0.4839	0.2837	0.1718
	1.8-	axis Scan	(X = -11,	Y = -51)	
(#/kg)	1.6-				
SAR 0	1.4-				
o	1.3-				
	0.0 2.5 5		12.5 15.0 17.5 (mm)	5 20.0 22.5 25	s. o



PCS 1900 High-Body-Back <SIM 1> **DUT: Mobile Phone; Type: AM83Z**

Communication System: Generic GSM; Communication System Band: PCS 1900; Duty Cycle: 1:8.3; Conv.F=4.84; Frequency: 1909.8 MHz; Medium parameters used: f = 1900 MHz; $\sigma = 1.48 \text{ mho/m}$; $\epsilon = 52.66$; $\rho = 1000 \text{ kg/m}^3$;

Phantom section: Flat Section

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

SATIMO Configuration:

Probe: EP165; Calibrated: 01/31/2013

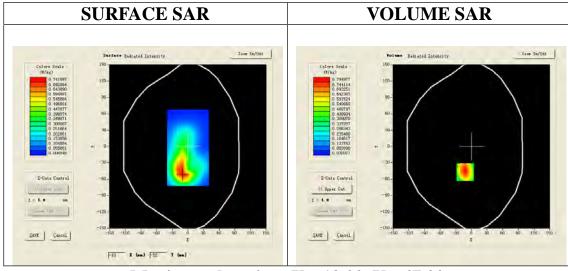
· Sensor-Surface: 4mm (Mechanical Surface Detection)

· Phantom: Flat Phantom; Type: Elliptical Phantom

· Measurement SW: OpenSAR V4_02_01

Configuration/PCS1900 High-Body-Back/Area Scan: Measurement grid: dx=20mm, dy=20mm Configuration/PCS1900 High-Body-Back/Zoom Scan: Measurement grid: dx=8mm,

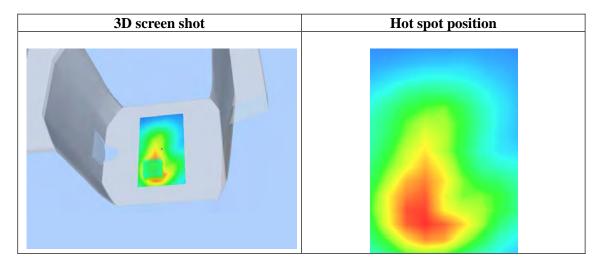
Area Scan	surf_sam_plan.txt			
ZoomScan	5x5x7,dx=8mm dy=8mm dz=5mm,Very fast			
Phantom	Validation plane			
Device Position	Body Back			
Band	PCS 1900			
Channels	High			
Signal	TDMA (Crest factor: 8.0)			



Maximum location: X=-12.00, Y=-47.00

SAR 10g (W/Kg)	0.457552
SAR 1g (W/Kg)	0.817911

Z (mm)	0.00	4.00	9.00	14.00	19.00		
SAR (W/Kg)	0.0000	0.7950	0.4414	0.2521	0.1564		
	SAR, Z Axis Scan $(X = -12, Y = -47)$						
	0.8-						
). 7 -						
). 6 -						
SAR (W/kg)	1.5-						
# °	1.4-						
0 % ا	1.3-				-		
o	1.2-				-		
0	0.1-				J.		
	0.0 2.5 5		12.5 15.0 17.9 (mm)	5 20.0 22.5 25	5. 0		



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Test Laboratory: AGC Lab Date: Jul.23, 2013

PCS 1900 Mid-Body -Front (MS) <SIM 1> **DUT: Mobile Phone; Type: AM83Z**

Communication System: Generic GSM; Communication System Band: PCS 1900; Duty Cycle: 1:8.3; Conv.F=4.84; Frequency: 1880 MHz; Medium parameters used: f = 1900 MHz; $\sigma = 1.48$ mho/m; $\epsilon = 52.66$; $\rho = 1000$ kg/m³;

Phantom section: Flat Section

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

SATIMO Configuration:

Probe: EP165; Calibrated: 01/31/2013

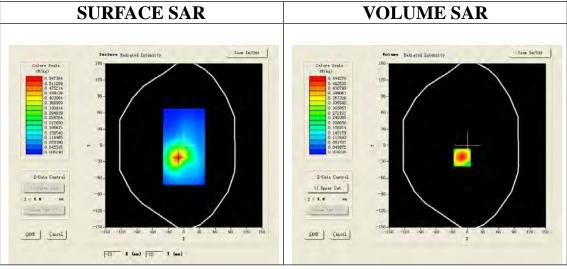
Sensor-Surface: 4mm (Mechanical Surface Detection)

· Phantom: Flat Phantom; Type: Elliptical Phantom

· Measurement SW: OpenSAR V4_02_01

 $\label{lem:configuration} \textbf{Configuration/PCS1900 Mid-Body- Front /Area Scan: Measurement grid: } dx=20mm, dy=20mm \\ \textbf{Configuration/PCS1900 Mid-Body- Front /Zoom Scan: Measurement grid: } dx=8mm, \\ dx=8mm, dx=8m$

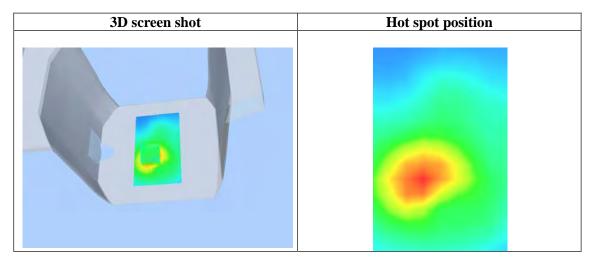
Area Scan	surf_sam_plan.txt			
ZoomScan	5x5x7,dx=8mm dy=8mm dz=5mm,Very fast			
Phantom	Validation plane			
Device Position	Body Front			
Band	PCS 1900			
Channels	Middle			
Signal	TDMA (Crest factor: 8.0)			



Maximum location: X=-10.00, Y=-22.00

SAR 10g (W/Kg)	0.294445
SAR 1g (W/Kg)	0.506903

Z (mm)	0.00	4.00	9.00	14.00	19.00		
SAR (W/Kg)	0.0000	0.4943	0.2983	0.1820	0.1150		
	SAR, Z Axis Scan ($X = -10$, $Y = -22$)						
0	1. 49 –						
0	1. 45 –	\longrightarrow			-		
0	. 40 -	+	\perp		-		
20	1. 35 -	+					
1 %	1. 35 -						
<u>ව</u>	25_						
SAR). 25 -). 20 -						
	. 20 -						
0	1. 15-						
0	0.07-						
	0.0 2.5 5	5.0 7.5 10.0	12.5 15.0 17.	5 20.0 22.5 25	l		
	Z (mm)						



Repeated SAR

Test Laboratory: AGC Lab Date: Jul.23, 2013

GSM 850 Mid-Touch-Left <SIM 1> **DUT: Mobile Phone**; **Type: AM83Z**

Communication System: Generic GSM; Communication System Band: GSM 850; Duty Cycle: 1:8.3; Conv.F=5.30 Frequency: 836.6 MHz; Medium parameters used: f = 850 MHz; $\sigma = 0.94$ mho/m; $\epsilon = 41.55$; $\rho = 1000$ kg/m³;

Phantom section: Left Section

Ambient temperature ($^{\circ}$ C): 21.0, Liquid temperature ($^{\circ}$ C): 21.0

SATIMO Configuration:

Probe: EP165; Calibrated: 01/31/2013

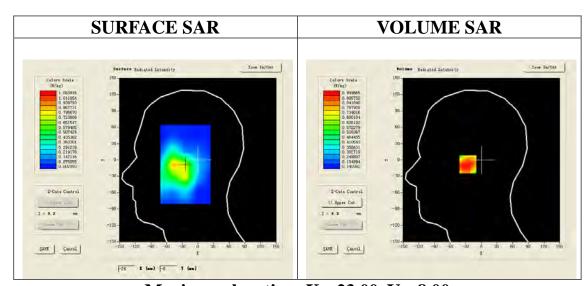
 ${\boldsymbol \cdot}$ Sensor-Surface: 4mm (Mechanical Surface Detection)

· Phantom: Flat Phantom; Type: Elliptical Phantom

· Measurement SW: OpenSAR V4_02_01

Configuration/GSM 850 Mid-Touch-Left/Area Scan (6x8x1): Measurement grid: dx=20mm, dy=20mm Configuration/GSM 850 Mid-Touch-Left/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm

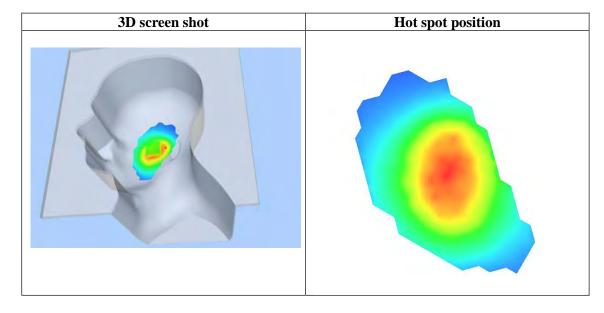
Area Scan	sam_direct_droit2_surf8mm.txt			
ZoomScan	5x5x7,dx=8mm dy=8mm dz=5mm,Very fast			
Phantom	Left head			
Device Position	Cheek			
Band	GSM 850			
Channels	Middle			
Signal	TDMA (Crest factor: 8.0)			



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

SAR 10g (W/Kg)	0.639438
SAR 1g (W/Kg)	0.916413

Z (mm)	0.00	4.00	9.00	14.00	19.00			
SAR (W/Kg)	0.0000	0.9497	0.6968	0.5101	0.3723			
	SAR, Z Axis Scan $(X = -23, Y = -8)$							
0	0.9-							
o	1.8-	\mathbb{N}						
ଉଡ଼	1.7-	+						
(W/kg)			\longrightarrow					
SAR 0	1.5-		\rightarrow					
C). 4-		++	\leftarrow	-			
o	1.3-							
	0.0 2.5 5.0 7.5 10.0 12.5 15.0 17.5 20.0 22.5 25.0 Z (mm)							



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Test Laboratory: AGC Lab Date: Jul.23, 2013

GSM 850 High-Touch-Left <SIM 1> **DUT: Mobile Phone; Type: AM83Z**

Communication System: Generic GSM; Communication System Band: GSM 850; Duty Cycle: 1:8.3; Conv.F=5.30 Frequency: 848.8 MHz; Medium parameters used: f = 850 MHz; $\sigma = 0.94$ mho/m; $\epsilon = 41.55$; $\rho = 1000$ kg/m³;

Phantom section: Left Section

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

SATIMO Configuration:

Probe: EP165; Calibrated: 01/31/2013

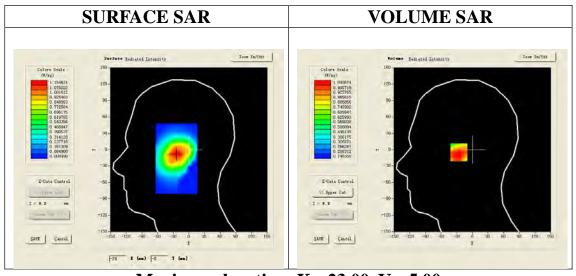
· Sensor-Surface: 4mm (Mechanical Surface Detection)

· Phantom: Flat Phantom; Type: Elliptical Phantom

· Measurement SW: OpenSAR V4_02_01

Configuration/GSM 850 High-Touch-Left/Area Scan (6x8x1): Measurement grid: dx=20mm, dy=20mm Configuration/GSM 850 High-Touch-Left/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm

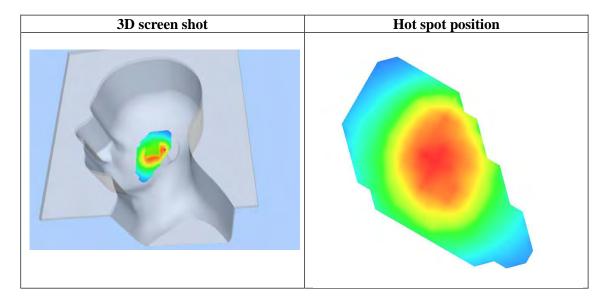
Area Scan	sam_direct_droit2_surf8mm.txt			
ZoomScan	5x5x7,dx=8mm dy=8mm dz=5mm,Very fast			
Phantom	Left head			
Device Position	Cheek			
Band	GSM 850			
Channels	High			
Signal	TDMA (Crest factor: 8.0)			



Maximum location: X=-23.00, Y=-5.00

SAR 10g (W/Kg)	0.711780
SAR 1g (W/Kg)	1.018052

Z (mm)	0.00	4.00	9.00	14.00	19.00
SAR (W/Kg)	0.0000	1.0415	0.7466	0.5458	0.4098
		Axis Scan	(X = -23,	∀ = −5)	
1	.0-				
0	. 9 -	$\backslash \! \! \! \! \! \! \! \! \! \! \! \! \! \! \! \! \! \! \!$	\perp		
_ 0	. 8 -				
(W/kg)	7_				
SAR 0	. 6-				
0	.5-				-
0	. 4 -		+	\leftarrow	-
0	. 3 -				
	0.0 2.5 5	.0 7.5 10.0	12.5 15.0 17.5	5 20.0 22.5 25	5.0
Z (mm)					



GSM 850 Mid- Touch-Right <SIM 1> **DUT: Mobile Phone; Type: AM83Z**

Communication System: Generic GSM; Communication System Band: GSM 850; Duty Cycle: 1:8.3; Conv.F=5.30; Frequency: 836.6 MHz; Medium parameters used: f = 850 MHz; $\sigma = 0.94 \text{ mho/m}$; $\epsilon = 41.55$; $\rho = 1000 \text{ kg/m}^3$;

Phantom section: Right Section

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

SATIMO Configuration:

Probe: EP165; Calibrated: 01/31/2013

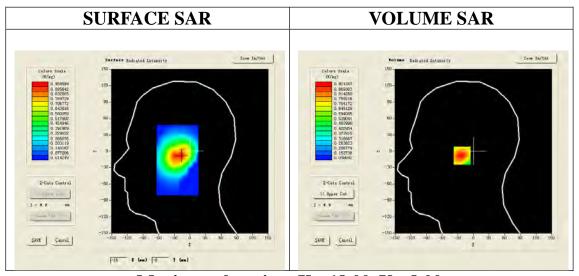
· Sensor-Surface: 4mm (Mechanical Surface Detection)

· Phantom: Flat Phantom; Type: Elliptical Phantom

· Measurement SW: OpenSAR V4_02_01

Configuration/GSM 850 Mid-Touch-Right/Area Scan: Measurement grid: dx=20mm, dy=20mm Configuration/GSM 850 Mid-Touch-Right/Zoom Scan: Measurement grid: dx=8mm, dy=8mm, dz=5mm;

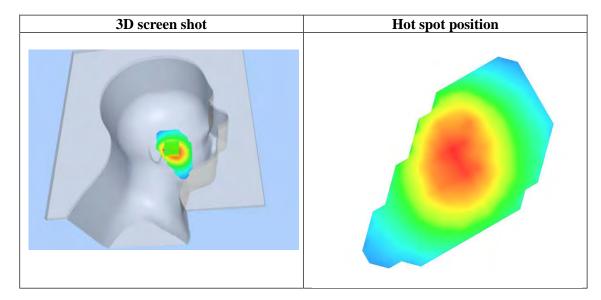
Area Scan	sam_direct_droit2_surf8mm.txt			
ZoomScan	5x5x7,dx=8mm dy=8mm dz=5mm,Very fast			
Phantom	Right head			
Device Position	Cheek			
Band	GSM 850			
Channels	Middle			
Signal	TDMA (Crest factor: 8.0)			



Maximum location: X=-18.00, Y=-8.00

SAR 10g (W/Kg)	0.575384	
SAR 1g (W/Kg)	0.881333	

Z (mm)	0.00	4.00	9.00	14.00	19.00			
SAR (W/Kg)	0.0000	0.9243	0.6183	0.4305	0.3185			
	SAR, Z Axis Scan (X = -18, Y = -8)							
). 9-				-			
0). 8 -	\longrightarrow	\perp		1			
್ಯ). 7 -	+						
(#/kg)). 6 -	+	+		-			
SAR).5-		+		-			
0). 4 -		+		-			
	0.3-				-			
	0.0 2.5 5			5 20.0 22.5 25	5.0			
Z (mm)								



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Test Laboratory: AGC Lab Date: Jul.23, 2013

GSM 850 High- Touch-Right <SIM 1> **DUT: Mobile Phone; Type: AM83Z**

Communication System: Generic GSM; Communication System Band: GSM 850; Duty Cycle: 1:8.3; Conv.F=5.30; Frequency: 848.8 MHz; Medium parameters used: f = 850 MHz; $\sigma = 0.94 \text{ mho/m}$; $\epsilon = 41.55$; $\rho = 1000 \text{ kg/m}^3$;

Phantom section: Right Section

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

SATIMO Configuration:

Probe: EP165; Calibrated: 01/31/2013

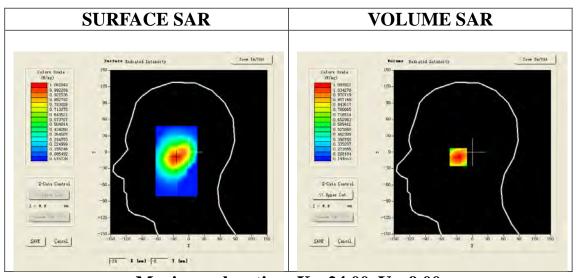
· Sensor-Surface: 4mm (Mechanical Surface Detection)

· Phantom: Flat Phantom; Type: Elliptical Phantom

· Measurement SW: OpenSAR V4_02_01

Configuration/GSM 850 High-Touch-Right/Area Scan: Measurement grid: dx=20mm, dy=20mm Configuration/GSM 850 High-Touch-Right/Zoom Scan: Measurement grid: dx=8mm,

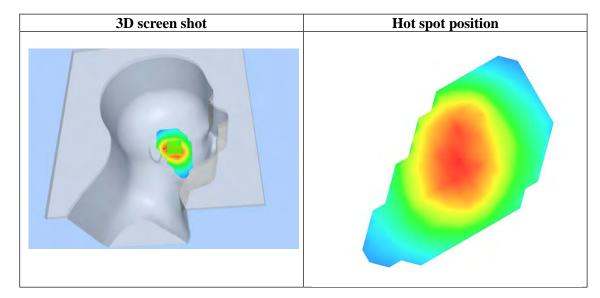
Area Scan	sam_direct_droit2_surf8mm.txt		
ZoomScan	5x5x7,dx=8mm dy=8mm dz=5mm,Very fast		
Phantom	Right head		
Device Position	Cheek		
Band	GSM 850		
Channels	High		
Signal	TDMA (Crest factor: 8.0)		



Maximum location: X=-24.00, Y=-9.00

SAR 10g (W/Kg)	0.696637	
SAR 1g (W/Kg)	1.047488	

Z (mm)	0.00	4.00	9.00	14.00	19.00	
SAR (W/Kg)	0.0000	1.0978	0.7441	0.5220	0.3856	
SAR, Z Axis Scan (X = -24, Y = -9)						
	. 1 -					
	.0-	$\overline{}$			1	
	. 9-					
(#/kg) 0 0	.8-				1	
					-	
SAR o	. 6 -	 	$\overline{}$		-	
	.5-		+		-	
0	. 4 -		+			
0	.3-				Ļ	
_		.0 7.5 10.0	12.5 15.0 17.	5 20.0 22.5 25	5.0	
Z (mm)						



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Test Laboratory: AGC Lab Date: Jul.23, 2013

GSM 850 High-Touch-Right <SIM 2> **DUT: Mobile Phone; Type: AM83Z**

Communication System: Generic GSM; Communication System Band: GSM 850; Duty Cycle: 1:8.3; Conv.F=5.30 Frequency: 848.8 MHz; Medium parameters used: f = 850 MHz; $\sigma = 0.94$ mho/m; $\epsilon = 41.55$; $\rho = 1000$ kg/m³;

Phantom section: Right Section

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

SATIMO Configuration:

Probe: EP165; Calibrated: 01/31/2013

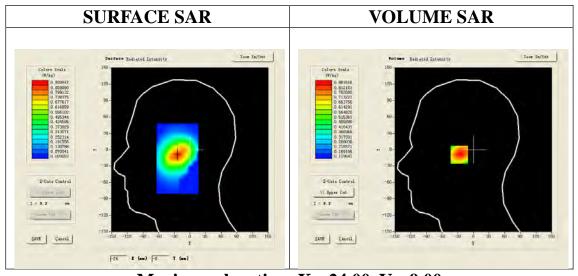
· Sensor-Surface: 4mm (Mechanical Surface Detection)

· Phantom: Flat Phantom; Type: Elliptical Phantom

· Measurement SW: OpenSAR V4_02_01

Configuration/GSM 850 High-Touch-Right/Area Scan (6x8x1): Measurement grid: dx=20mm, dy=20mm Configuration/GSM 850 High-Touch-Right/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm

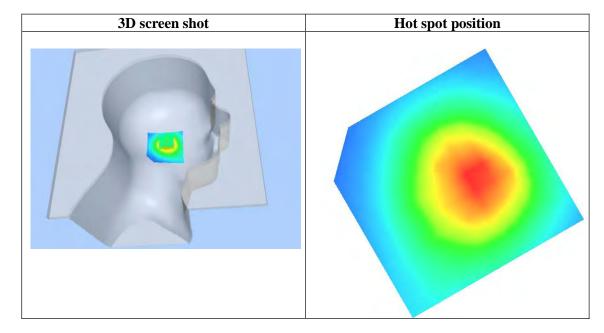
Area Scan	sam_direct_droit2_surf8mm.txt		
ZoomScan	5x5x7,dx=8mm dy=8mm dz=5mm,Very fast		
Phantom	Right head		
Device Position	Cheek		
Band	GSM 850		
Channels	High		
Signal	TDMA (Crest factor: 8.0)		



Maximum location: X=-24.00, Y=-9.00

SAR 10g (W/Kg)	0.551588	
SAR 1g (W/Kg)	0.823690	

Z (mm)	0.00	4.00	9.00	14.00	19.00	
SAR (W/Kg)	0.0000	0.8616	0.5976	0.4245	0.3123	
	SAR, Z Axis Scan (X = -24, Y = -9)					
	1.8-					
		$\backslash \backslash \backslash $				
	0.7-		+ + +		-	
SAR (W/kg)	1.6-	\longrightarrow	+			
(€						
, and a second	1.5-					
	1.4-	+	+		-	
	1.3-					
	1.2-					
		.0 7.5 10.0	12.5 15.0 17.5	5 20.0 22.5 25	5.0	
Z (mm)						



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GSM 850 Low- Body- Back <SIM 1> **DUT: Mobile Phone; Type: AM83Z**

Communication System: Generic GSM; Communication System Band: GSM 850; Duty Cycle: 1:8.3; Conv.F=5.46; Frequency: 824.2 MHz; Medium parameters used: f = 850 MHz; $\sigma = 0.97$ mho/m; $\epsilon r = 54.26$; $\rho = 1000$ kg/m³;

Phantom section: Flat Section

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

SATIMO Configuration:

Probe: EP165; Calibrated: 01/31/2013

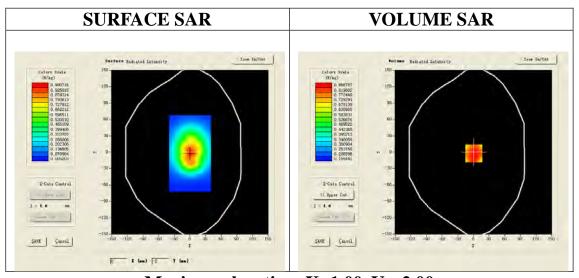
Sensor-Surface: 4mm (Mechanical Surface Detection)

· Phantom: Flat Phantom; Type: Elliptical Phantom

· Measurement SW: OpenSAR V4_02_01

Configuration/GSM 850 Low-Body-Back/Area Scan (6x8x1): Measurement grid: dx=20mm, dy=20mm Configuration/GSM 850 Low-Body-Back/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm;

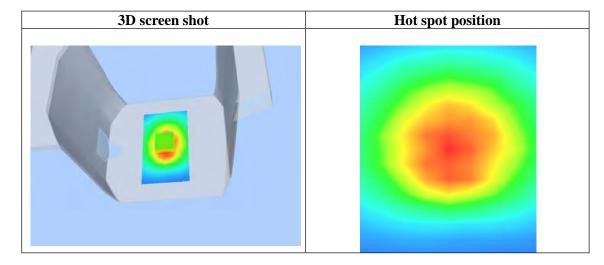
Area Scan	surf_sam_plan.txt			
ZoomScan	5x5x7,dx=8mm dy=8mm dz=5mm,Very fast			
Phantom	Validation plane			
Device Position	Body Back			
Band	GSM 850			
Channels	Low			
Signal	TDMA (Crest factor: 8.0)			



Maximum location: X=1.00, Y=-2.00

SAR 10g (W/Kg)	0.649041	
SAR 1g (W/Kg)	0.908578	

Z (mm)	0.00	4.00	9.00	14.00	19.00		
SAR (W/Kg)	0.0000	0.8659	0.6728	0.5008	0.3518		
	SAR, Z Axis Scan (X = 1, Y = -2)						
	. 9-						
٥	.8-						
0	. 7 –		+ + +		-		
SAR (W/kg)	. 6 -						
) €			\setminus				
88.	.5-						
0 0	. 4 -		+		-		
n	.3-						
	.2-						
		.0 7.5 10.0	12.5 15.0 17.5	5 20.0 22.5 25	i.o		
Z (mm)							



GSM 850 Mid- Body- Back <SIM 1> **DUT: Mobile Phone**; **Type: AM83Z**

Communication System: Generic GSM; Communication System Band: GSM 850; Duty Cycle: 1:8.3; Conv.F=5.46; Frequency: 836.6 MHz; Medium parameters used: f = 850 MHz; $\sigma = 0.97$ mho/m; $\epsilon r = 54.26$; $\rho = 1000$ kg/m³;

Phantom section: Flat Section

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

SATIMO Configuration:

Probe: EP165; Calibrated: 01/31/2013

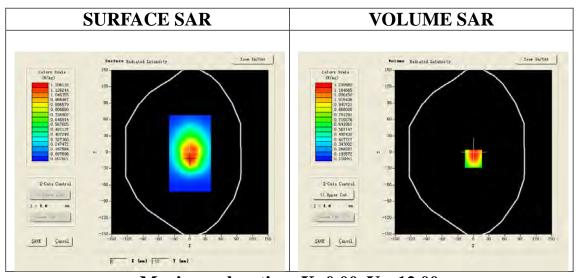
· Sensor-Surface: 4mm (Mechanical Surface Detection)

· Phantom: Flat Phantom; Type: Elliptical Phantom

· Measurement SW: OpenSAR V4_02_01

Configuration/GSM 850 Mid-Body-Back/Area Scan (6x8x1): Measurement grid: dx=20mm, dy=20mm Configuration/GSM 850 Mid-Body-Back/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm;

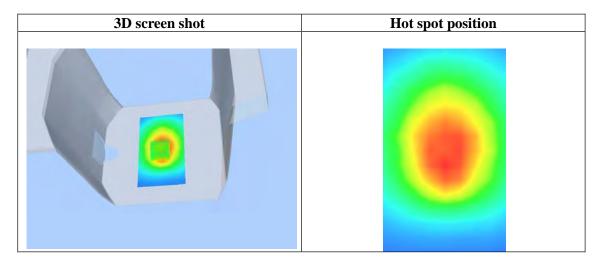
Area Scan	surf_sam_plan.txt			
ZoomScan	5x5x7,dx=8mm dy=8mm dz=5mm,Very fast			
Phantom	Validation plane			
Device Position	Body Back			
Band	GSM 850			
Channels	Middle			
Signal	TDMA (Crest factor: 8.0)			



Maximum location: X=0.00, Y=-12.00

SAR 10g (W/Kg)	0.846757	
SAR 1g (W/Kg)	1.278060	

Z (mm)	0.00	4.00	9.00	14.00	19.00			
SAR (W/Kg)	0.0000	1.1973	0.8890	0.6358	0.4315			
	SAR, Z Axis Scan ($X = 0$, $Y = -12$)							
1	.2-							
1	.0-	\rightarrow			-			
(W/kg)	1.8-							
SAR	. 6 -				-			
О	1. 4 -		++1					
0	0.0 2.5 5	.0 7.5 10.0	 12.5 15.0 17.	5 20.0 22.5 25	s. o			
	Z (mm)							



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GSM 850 High- Body- Back <SIM 1> **DUT: Mobile Phone; Type: AM83Z**

Communication System: Generic GSM; Communication System Band: GSM 850; Duty Cycle: 1:8.3; Conv.F=5.46; Frequency: 848.8 MHz; Medium parameters used: f = 850 MHz; $\sigma = 0.97$ mho/m; $\epsilon r = 54.26$; $\rho = 1000$ kg/m³;

Phantom section: Flat Section

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

SATIMO Configuration:

Probe: EP165; Calibrated: 01/31/2013

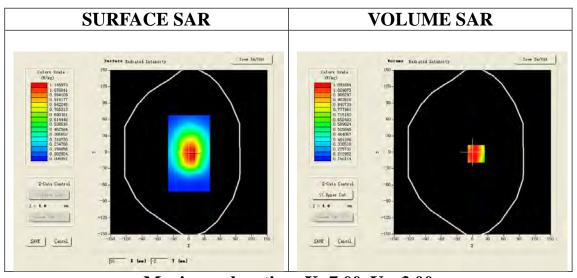
Sensor-Surface: 4mm (Mechanical Surface Detection)

· Phantom: Flat Phantom; Type: Elliptical Phantom

· Measurement SW: OpenSAR V4_02_01

Configuration/GSM 850 High-Body-Back/Area Scan (6x8x1): Measurement grid: dx=20mm, dy=20mm Configuration/GSM 850 High-Body-Back/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm;

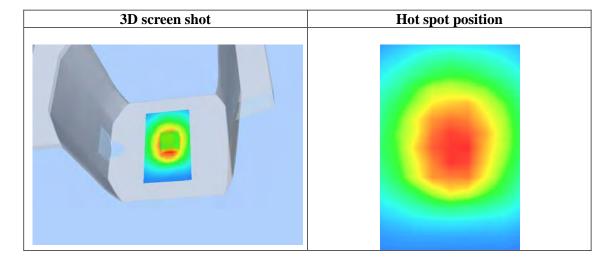
Area Scan	surf_sam_plan.txt			
ZoomScan	5x5x7,dx=8mm dy=8mm dz=5mm,Very fast			
Phantom	Validation plane			
Device Position	Body Back			
Band	GSM 850			
Channels	High			
Signal	TDMA (Crest factor: 8.0)			



Maximum location: X=7.00, Y=-3.00

SAR 10g (W/Kg)	0.788240
SAR 1g (W/Kg)	1.147117

Z (mm)	0.00	4.00	9.00	14.00	19.00		
SAR (W/Kg)	0.0000	1.0841	0.7835	0.5690	0.4162		
	SAR, Z Axis Scan $(X = 7, Y = -3)$						
	. 1 -	1					
1	.0-						
0	. 9 -	+	+		-		
	.8-		+		_		
(#/kg)	. 7 -						
	. 6 -		\setminus				
vi vi							
	.5-						
0	. 4 -		+ + +		-		
0	.3-						
	0.0 2.5 5			5 20.0 22.5 25	5.0		
Z (mm)							



PCS 1900 Mid-Touch- Left <SIM 1> **DUT: Mobile Phone;** Type: AM83Z

Communication System: Generic GSM; Communication System Band: PCS 1900; Duty Cycle: 1:8.3; Conv.F=4.72; Frequency: 1880 MHz; Medium parameters used: f = 1900 MHz; $\sigma = 1.41$ mho/m; $\epsilon = 40.50$; $\rho = 1000$ kg/m³;

Phantom section: Left Section

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

SATIMO Configuration:

Probe: EP165; Calibrated: 01/31/2013

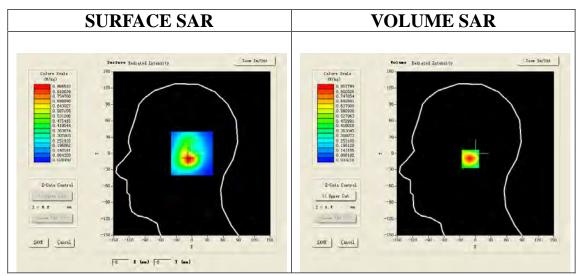
· Sensor-Surface: 4mm (Mechanical Surface Detection)

· Phantom: Flat Phantom; Type: Elliptical Phantom

· Measurement SW: OpenSAR V4_02_01

Configuration/PCS1900 Mid-Touch-Left/Area Scan: Measurement grid: dx=20mm, dy=20mm Configuration/PCS1900 Mid-Touch-Left/Zoom Scan: Measurement grid: dx=8mm, dy=8mm, dz=5mm;

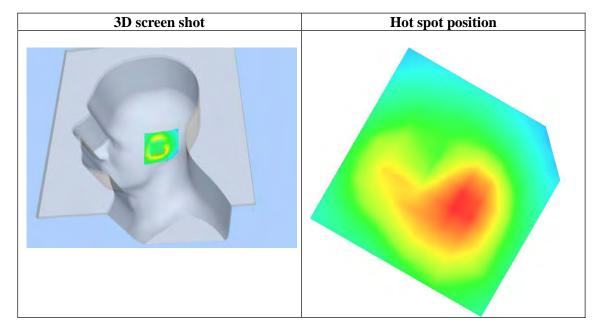
Area Scan	sam_direct_droit2_surf8mm.txt			
ZoomScan	5x5x7,dx=8mm dy=8mm dz=5mm,Very fast			
Phantom	Left head			
Device Position	Cheek			
Band	PCS 1900			
Channels	Middle			
Signal	TDMA (Crest factor: 8.0)			



Maximum location: X=-5.00, Y=-10.00

SAR 10g (W/Kg)	0.439929
SAR 1g (W/Kg)	0.800660

Z (mm)	0.00	4.00	9.00	14.00	19.00	
SAR (W/Kg)	0.0000	0.8578	0.4891	0.2867	0.1811	
	SAR, Z	Axis Scan	(X = -5,	Y = -10)		
O	0.9-					
0	1. 7 –					
		$\perp \downarrow \perp$				
(#/kg)	1.5-			-	-	
SA.). 4 -		+		-	
	1.3-				-	
). 2 -). 1 -				-	
	0.0 2.5 5	.0 7.5 10.0	12.5 15.0 17.	5 20.0 22.5 25	5.0	
	Z (mm)					



PCS 1900 High-Touch- Left <SIM 1> **DUT: Mobile Phone**; **Type: AM83Z**

Communication System: Generic GSM; Communication System Band: PCS 1900; Duty Cycle: 1:8.3; Conv.F=4.72; Frequency: 1909.8 MHz; Medium parameters used: f = 1900 MHz; $\sigma = 1.41 \text{ mho/m}$; $\epsilon = 40.50$; $\rho = 1000 \text{ kg/m}^3$;

Phantom section: Left Section

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

SATIMO Configuration:

Probe: EP165; Calibrated: 01/31/2013

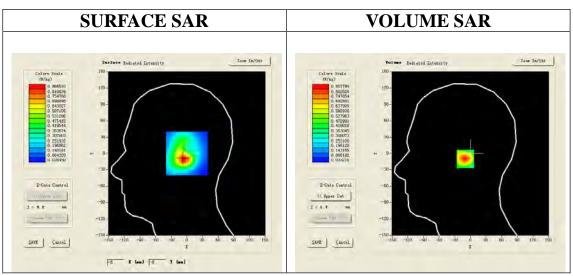
· Sensor-Surface: 4mm (Mechanical Surface Detection)

· Phantom: Flat Phantom; Type: Elliptical Phantom

· Measurement SW: OpenSAR V4_02_01

Configuration/PCS1900 High-Touch-Left/Area Scan: Measurement grid: dx=20mm, dy=20mm Configuration/PCS1900 High-Touch-Left/Zoom Scan: Measurement grid: dx=8mm, dy=8mm, dz=5mm;

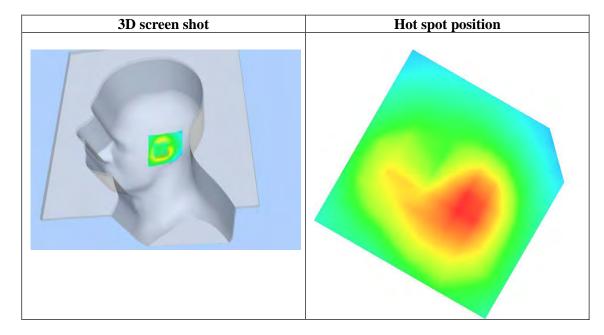
Area Scan	sam_direct_droit2_surf8mm.txt			
ZoomScan	5x5x7,dx=8mm dy=8mm dz=5mm,Very fast			
Phantom	Left head			
Device Position	Cheek			
Band	PCS 1900			
Channels	High			
Signal	TDMA (Crest factor: 8.0)			



Maximum location: X=-5.00, Y=-10.00

SAR 10g (W/Kg)	0.439779	
SAR 1g (W/Kg)	0.800587	

Z (mm)	0.00	4.00	9.00	14.00	19.00		
SAR (W/Kg)	0.0000	0.8569	0.4890	0.2865	0.1812		
		Axis Scan	(X = -5,	Y = -10)			
0	1.9-						
0	1.7-						
ಎಂ	1.6-						
(#/kg)	5-						
SAR o	1.4-						
0	1.3-				-		
0	1.2-	+	\rightarrow	\rightarrow	-		
0	. 1 -						
	0.0 2.5 5	.0 7.5 10.0	12.5 15.0 17.	5 20.0 22.5 25	5.0		
	Z (mm)						



PCS 1900 Mid-Tilt-Left <SIM 1> **DUT: Mobile Phone;** Type: AM83Z

Communication System: Generic GSM; Communication System Band: PCS 1900; Duty Cycle: 1:8.3; Conv.F=4.72; Frequency: 1880 MHz; Medium parameters used: f = 1900 MHz; $\sigma = 1.41$ mho/m; $\epsilon = 40.50$; $\rho = 1000$ kg/m³;

Phantom section: Left Section

Ambient temperature ($^{\circ}$ C): 21.0, Liquid temperature ($^{\circ}$ C): 21.0

SATIMO Configuration:

Probe: EP165; Calibrated: 01/31/2013

Sensor-Surface: 4mm (Mechanical Surface Detection)

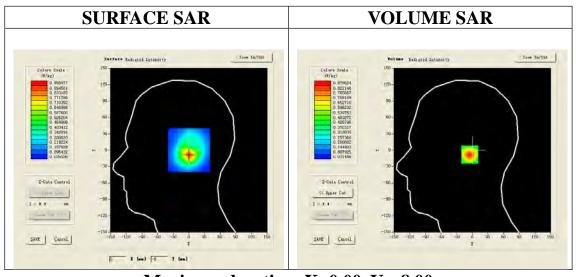
· Phantom: Flat Phantom; Type: Elliptical Phantom

· Measurement SW: OpenSAR V4_02_01

Configuration/PCS1900 Mid-Tilt-Left/Area Scan: Measurement grid: dx=20mm, dy=20mm Configuration/PCS1900 Mid-Tilt-Left/Zoom Scan: Measurement grid: dx=8mm,

dy=8mm,dz=5mm;

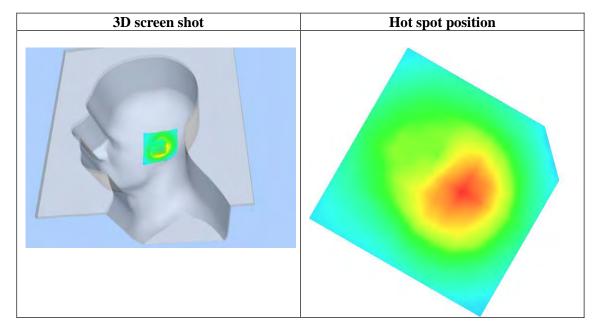
Area Scan	sam_direct_droit2_surf8mm.txt			
ZoomScan	5x5x7,dx=8mm dy=8mm dz=5mm,Very fast			
Phantom	Left head			
Device Position	Tilt			
Band	PCS 1900			
Channels	Middle			
Signal	TDMA (Crest factor: 8.0)			



Maximum location: X=0.00, Y=-8.00

SAR 10g (W/Kg)	0.443818	
SAR 1g (W/Kg)	0.820089	

Z (mm)	0.00	4.00	9.00	14.00	19.00			
SAR (W/Kg)	0.0000	0.8786	0.4996	0.2853	0.1691			
	SAR, Z Axis Scan $(X = 0, Y = -8)$							
0	.9-		1 1 1	1 1				
0	.8-		+	-	-			
0	. 7 –		\perp					
Po	. 6 -	$\perp \downarrow \perp$	+					
(#/kg)	.5-		\perp					
SAR 0			\Box					
	.3-							
	.2-							
"	.1- 0.0 2.5 5	1 0 75 10 0	12 5 15 0 17 !	5 20.0 22.5 25	; n			
	Z (mm)							



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PCS 1900 Low-Touch-Right <SIM 1> **DUT: Mobile Phone; Type: AM83Z**

Communication System: Generic GSM; Communication System Band: PCS 1900; Duty Cycle: 1:8.3; Conv.F=4.72; Frequency: 1850.2 MHz; Medium parameters used: f = 1900 MHz; $\sigma = 1.41 \text{ mho/m}$; $\epsilon = 40.50$; $\rho = 1000 \text{ kg/m}^3$;

Phantom section: Right Section

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

SATIMO Configuration:

Probe: EP165; Calibrated: 01/31/2013

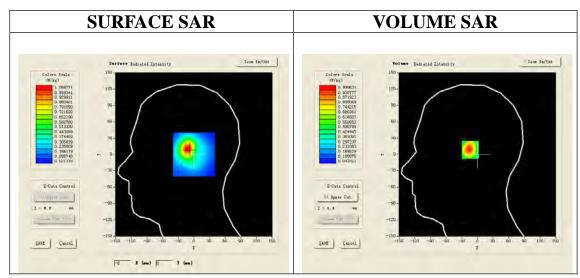
Sensor-Surface: 4mm (Mechanical Surface Detection)

· Phantom: Flat Phantom; Type: Elliptical Phantom

· Measurement SW: OpenSAR V4_02_01

Configuration/PCS1900 Low-Touch-Right/Area Scan: Measurement grid: dx=20mm, dy=20mm **Configuration/PCS1900 Low-Touch-Right/Zoom Scan:** Measurement grid: dx=8mm, dy=8mm, dz=5mm;

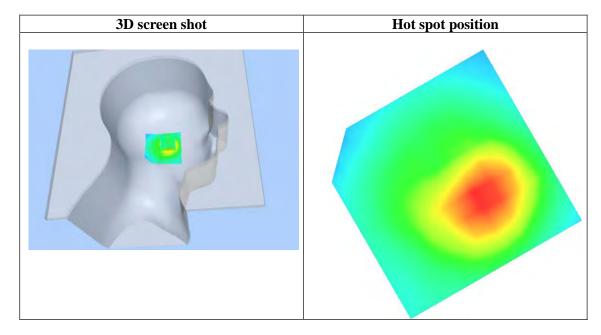
Area Scan	sam_direct_droit2_surf8mm.txt			
ZoomScan	5x5x7,dx=8mm dy=8mm dz=5mm,Very fast			
Phantom	Right head			
Device Position	Cheek			
Band	PCS 1900			
Channels	Low			
Signal	TDMA (Crest factor: 8.0)			



Maximum location: X=-11.00, Y=9.00

SAR 10g (W/Kg)	0.521277	
SAR 1g (W/Kg)	0.942205	

Z (mm)	0.00	4.00	9.00	14.00	19.00			
SAR (W/Kg)	0.0000	0.9996	0.6049	0.3653	0.2234			
	SAR, Z Axis Scan $(X = -11, Y = 9)$							
	1.8-							
SAR (W/kg)	1. 4 -		$\downarrow \downarrow \downarrow$					
			+					
U	0.0 2.5 5		12.5 15.0 17.5 (mm)	5 20.0 22.5 25	5.0			



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PCS 1900 Mid-Touch-Right <SIM 1> **DUT: Mobile Phone; Type: AM83Z**

Communication System: Generic GSM; Communication System Band: PCS 1900; Duty Cycle: 1:8.3; Conv.F=4.72; Frequency: 1880 MHz; Medium parameters used: f = 1900 MHz; $\sigma = 1.41$ mho/m; $\epsilon = 40.50$; $\rho = 1000$ kg/m³;

Phantom section: Right Section

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

SATIMO Configuration:

Probe: EP165; Calibrated: 01/31/2013

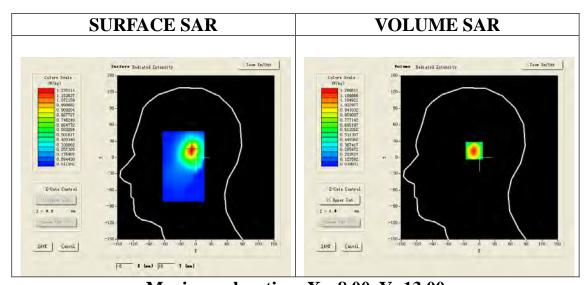
· Sensor-Surface: 4mm (Mechanical Surface Detection)

· Phantom: Flat Phantom; Type: Elliptical Phantom

· Measurement SW: OpenSAR V4_02_01

Configuration/PCS1900 Mid-Touch-Right/Area Scan: Measurement grid: dx=20mm, dy=20mm Configuration/PCS1900 Mid-Touch-Right/Zoom Scan: Measurement grid: dx=8mm, dy=8mm, dz=5mm;

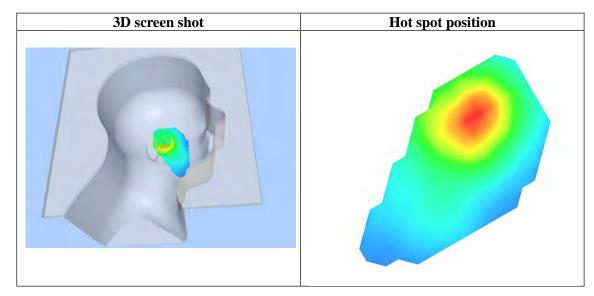
Area Scan	sam_direct_droit2_surf8mm.txt			
ZoomScan	5x5x7,dx=8mm dy=8mm dz=5mm,Very fast			
Phantom	Right head			
Device Position	Cheek			
Band	PCS 1900			
Channels	Middle			
Signal	TDMA (Crest factor: 8.0)			



Maximum location: X=-8.00, Y=13.00

SAR 10g (W/Kg)	0.652668
SAR 1g (W/Kg)	1.178964

Z (mm)	0.00	4.00	9.00	14.00	19.00	
SAR (W/Kg)	0.0000	1.2688	0.7964	0.4859	0.2861	
	SAR, Z	Axis Scan	(X = -8,	¥ = 13)		
1	.3-					
1	.0-		+++			
(W/kg)	. 8 -	$\vdash \bigvee$				
SAR 0	. 6 -				-	
0	. 4 -					
0	0.0 2.5 5	.0 7.5 10.0	12.5 15.0 17.5	5 20.0 22.5 25	5.0	
	Z (mm)					



PCS 1900 High-Touch-Right <SIM 1> **DUT: Mobile Phone; Type: AM83Z**

Communication System: Generic GSM; Communication System Band: PCS 1900; Duty Cycle: 1:8.3; Conv.F=4.72; Frequency: 1909.8 MHz; Medium parameters used: f = 1900 MHz; $\sigma = 1.41 \text{ mho/m}$; $\epsilon = 40.50$; $\rho = 1000 \text{ kg/m}^3$;

Phantom section: Right Section

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

SATIMO Configuration:

Probe: EP165; Calibrated: 01/31/2013

· Sensor-Surface: 4mm (Mechanical Surface Detection)

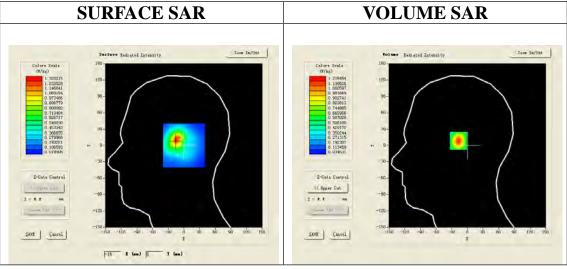
· Phantom: Flat Phantom; Type: Elliptical Phantom

· Measurement SW: OpenSAR V4_02_01

Configuration/PCS1900 High-Touch-Right/Area Scan: Measurement grid: dx=20mm, dy=20mm Configuration/PCS1900 High-Touch-Right/Zoom Scan: Measurement grid: dx=8mm,

dy=8mm, dz=5mm;

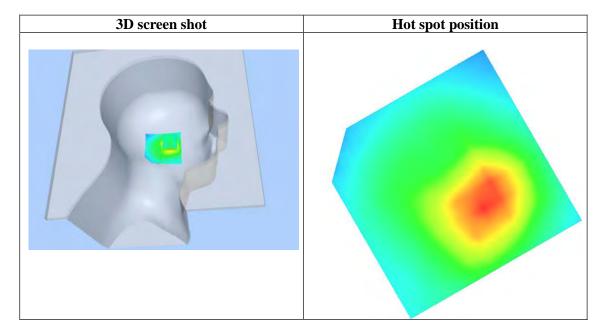
Area Scan	sam_direct_droit2_surf8mm.txt			
ZoomScan	5x5x7,dx=8mm dy=8mm dz=5mm,Very fast			
Phantom	Right head			
Device Position	Cheek			
Band	PCS 1900			
Channels	High			
Signal	TDMA (Crest factor: 8.0)			



Maximum location: X=-15.00, Y=9.00

SAR 10g (W/Kg)	0.594041
SAR 1g (W/Kg)	1.126690

Z (mm)	0.00	4.00	9.00	14.00	19.00			
SAR (W/Kg)	0.0000	1.2185	0.6860	0.3911	0.2351			
	SAR, Z Axis Scan $(X = -15, Y = 9)$							
	.0-							
	1.8-							
S.A.	. 6 -							
	1.4-							
U	0.0 2.5 5		12.5 15.0 17.5 (mm)	5 20.0 22.5 25	5.0			



PCS 1900 Low-Tilt-Right <SIM 1> **DUT: Mobile Phone; Type: AM83Z**

Communication System: Generic GSM; Communication System Band: PCS 1900; Duty Cycle: 1:8.3; Conv.F=4.72; Frequency: 1850.2 MHz; Medium parameters used: f = 1900 MHz; $\sigma = 1.41 \text{ mho/m}$; $\epsilon = 40.50$; $\rho = 1000 \text{ kg/m}^3$;

Phantom section: Right Section

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

SATIMO Configuration:

Probe: EP165; Calibrated: 01/31/2013

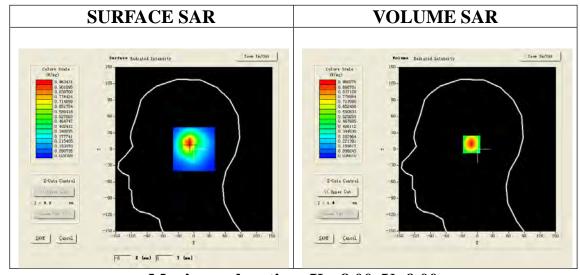
Sensor-Surface: 4mm (Mechanical Surface Detection)

· Phantom: Flat Phantom; Type: Elliptical Phantom

· Measurement SW: OpenSAR V4_02_01

Configuration/PCS1900 Low-Tilt-Right/Area Scan: Measurement grid: dx=20mm, dy=20mm **Configuration/PCS1900 Low-Tilt-Right/Zoom Scan:** Measurement grid: dx=8mm, dy=8mm, dz=5mm;

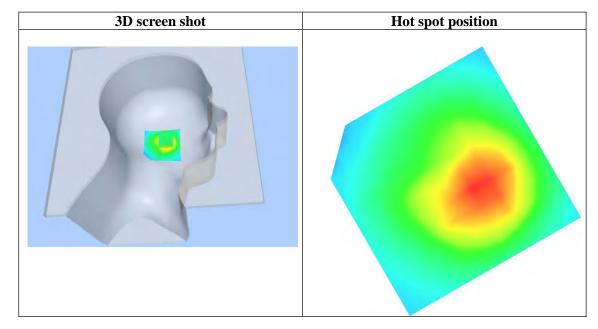
Area Scan	sam_direct_droit2_surf8mm.txt		
ZoomScan	5x5x7,dx=8mm dy=8mm dz=5mm,Very fast		
Phantom	Right head		
Device Position	Tilt		
Band	PCS 1900		
Channels	Low		
Signal	TDMA (Crest factor: 8.0)		



Maximum location: X=-8.00, Y=9.00

SAR 10g (W/Kg)	0.499675	
SAR 1g (W/Kg)	0.896676	

Z (mm)	0.00	4.00	9.00	14.00	19.00
SAR (W/Kg)	0.0000	0.9603	0.5913	0.3563	0.2100
		Axis Scan	(X = -8,	¥ = 9)	
1.	.0-				
	.8-				
	7-				
ĺ ĺ	6-				
) S	_				
₩ 0.	4				
	3-				
	2-				
	1-				
		.0 7.5 10.0	12.5 15.0 17.5	5 20.0 22.5 25	5.0
		7	(mm)		



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Test Laboratory: AGC Lab
PCS 1900 Mid-Tilt-Right <SIM 1>

Date: Jul.23, 2013

DUT: Mobile Phone; Type: AM83Z

Communication System: Generic GSM; Communication System Band: PCS 1900; Duty Cycle: 1:8.3; Conv.F=4.72; Frequency: 1880 MHz; Medium parameters used: f = 1900 MHz; $\sigma = 1.41$ mho/m; $\epsilon = 40.50$; $\rho = 1000$ kg/m³;

Phantom section: Right Section

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

SATIMO Configuration:

Probe: EP165; Calibrated: 01/31/2013

Sensor-Surface: 4mm (Mechanical Surface Detection)

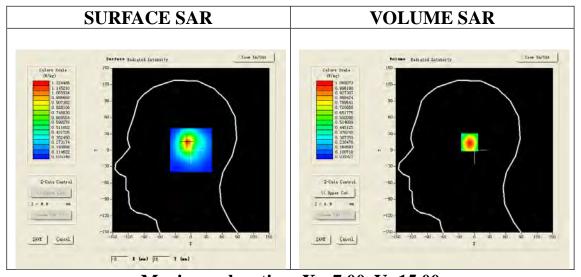
· Phantom: Flat Phantom; Type: Elliptical Phantom

· Measurement SW: OpenSAR V4_02_01

Configuration/PCS1900 Mid-Tilt-Right/Area Scan: Measurement grid: dx=20mm, dy=20mm **Configuration/PCS1900 Mid-Tilt-Right/Zoom Scan:** Measurement grid: dx=8mm,

dy=8mm, dz=5mm;

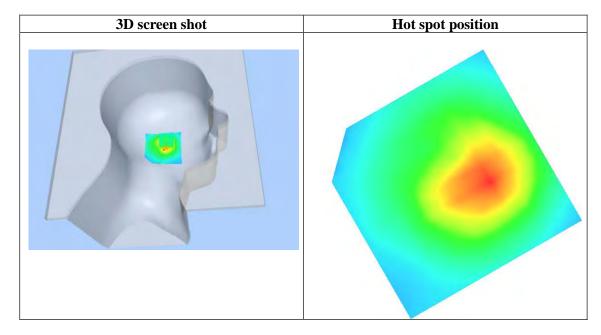
Area Scan	sam_direct_droit2_surf8mm.txt			
ZoomScan	5x5x7,dx=8mm dy=8mm dz=5mm,Very fast			
Phantom	Right head			
Device Position	Tilt			
Band	PCS 1900			
Channels	Middle			
Signal	TDMA (Crest factor: 8.0)			



Maximum location: X=-7.00, Y=15.00

SAR 10g (W/Kg)	0.557449	
SAR 1g (W/Kg)	0.997105	

Z (mm)	0.00	4.00	9.00	14.00	19.00			
SAR (W/Kg)	0.0000	1.0651	0.6498	0.3926	0.2370			
	SAR, Z Axis Scan (X = -7, Y = 15)							
1	. 1 -							
		$\backslash \mid \mid \mid$						
	. 8 -							
(#/kg)								
	. 0 -							
SAR	. 4 -							
0	. 1 –							
	0.0 2.5 5	.0 7.5 10.0	12.5 15.0 17.	5 20.0 22.5 25	5.0			
Z (mm)								



PCS 1900 High-Tilt-Right <SIM 1> **DUT: Mobile Phone;** Type: AM83Z

Communication System: Generic GSM; Communication System Band: PCS 1900; Duty Cycle: 1:8.3; Conv.F=4.72; Frequency: 1909.8 MHz; Medium parameters used: f = 1900 MHz; $\sigma = 1.41 \text{ mho/m}$; $\epsilon = 40.50$; $\rho = 1000 \text{ kg/m}^3$;

Phantom section: Right Section

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

SATIMO Configuration:

Probe: EP165; Calibrated: 01/31/2013

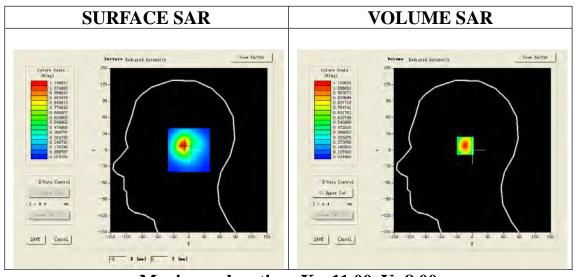
Sensor-Surface: 4mm (Mechanical Surface Detection)

· Phantom: Flat Phantom; Type: Elliptical Phantom

· Measurement SW: OpenSAR V4_02_01

Configuration/PCS1900 High-Tilt-Right/Area Scan: Measurement grid: dx=20mm, dy=20mm **Configuration/PCS1900 High-Tilt-Right/Zoom Scan:** Measurement grid: dx=8mm, dy=8mm, dz=5mm;

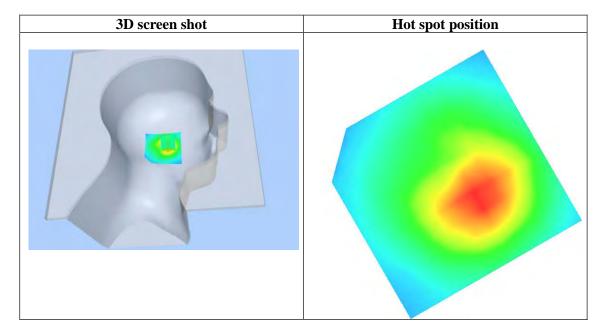
Area Scan	sam_direct_droit2_surf8mm.txt		
ZoomScan	5x5x7,dx=8mm dy=8mm dz=5mm,Very fast		
Phantom	Right head		
Device Position	Tilt		
Band	PCS 1900		
Channels	High		
Signal	TDMA (Crest factor: 8.0)		



Maximum location: X=-11.00, Y=8.00

SAR 10g (W/Kg)	0.557159	
SAR 1g (W/Kg)	1.056406	

Z (mm)	0.00	4.00	9.00	14.00	19.00			
SAR (W/Kg)	0.0000	1.1296	0.6028	0.3323	0.2030			
	SAR, Z Axis Scan (X = -11, Y = 8)							
1	. 1 -							
1	.0-	$\overline{}$	+ + +		-			
		$ \setminus $						
(%)	1.8-							
(#/kg)	. 6							
SAR	. 0 -							
ν, ο	. 4 -		\downarrow					
0	. 1 –							
	0.0 2.5 5	.0 7.5 10.0	12.5 15.0 17.5	5 20.0 22.5 25	5.0			
Z (mm)								



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Test Laboratory: AGC Lab Date: Jul.23, 2013

PCS 1900 Mid-Touch-Right <SIM 2> **DUT: Mobile Phone; Type: AM83Z**

Communication System: Generic GSM; Communication System Band: PCS 1900; Duty Cycle: 1:8.3; Conv.F=4.72; Frequency: 1880 MHz; Medium parameters used: f = 1900 MHz; $\sigma = 1.41$ mho/m; $\epsilon = 40.50$; $\rho = 1000$ kg/m³;

Phantom section: Right Section

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

SATIMO Configuration:

Probe: EP165; Calibrated: 01/31/2013

· Sensor-Surface: 4mm (Mechanical Surface Detection)

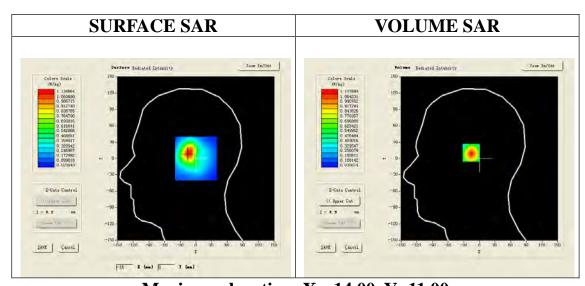
· Phantom: Flat Phantom; Type: Elliptical Phantom

· Measurement SW: OpenSAR V4_02_01

 $\label{lem:configuration} \textbf{Configuration/PCS1900 Mid-Touch-Right/Area Scan: Measurement grid: } dx=20mm, \ dy=20mm \\ \textbf{Configuration/PCS1900 Mid-Touch-Right/Zoom Scan: Measurement grid: } dx=8mm, \\ dx=8m$

dy=8mm, dz=5mm;

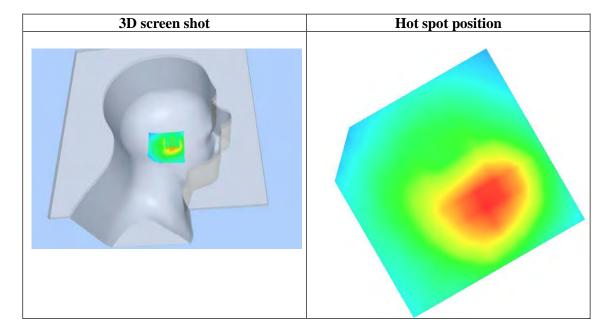
Area Scan	sam_direct_droit2_surf8mm.txt			
ZoomScan	5x5x7,dx=8mm dy=8mm dz=5mm,Very fast			
Phantom	Right head			
Device Position	Cheek			
Band	PCS 1900			
Channels	Middle			
Signal	TDMA (Crest factor: 8.0)			



Maximum location: X=-14.00, Y=11.00

SAR 10g (W/Kg)	0.601407	
SAR 1g (W/Kg)	1.057324	

Z (mm)	0.00	4.00	9.00	14.00	19.00		
SAR (W/Kg)	0.0000	1.1377	0.7532	0.4761	0.2811		
	SAR, Z Axis Scan (X = -14, Y = 11)						
1	. 1 -						
1	.0-	$\overline{}$			-		
		$ $ $ $					
 [kg]	1.8-						
} €	1.6-						
SAR (W/kg)			1				
	1.4-		+		-		
0	0.1-				-		
		.0 7.5 10.0	12.5 15.0 17.5	5 20.0 22.5 25	5.0		
Z (mm)							



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Test Laboratory: AGC Lab Date: Jul.23, 2013

PCS 1900 Mid-Body-Back <SIM 1> **DUT: Mobile Phone; Type: AM83Z**

Communication System: Generic GSM; Communication System Band: PCS 1900; Duty Cycle: 1:8.3; Conv.F=4.84; Frequency: 1880 MHz; Medium parameters used: f = 1900 MHz; $\sigma = 1.48$ mho/m; $\epsilon = 52.66$; $\rho = 1000$ kg/m³;

Phantom section: Flat Section

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

SATIMO Configuration:

Probe: EP165; Calibrated: 01/31/2013

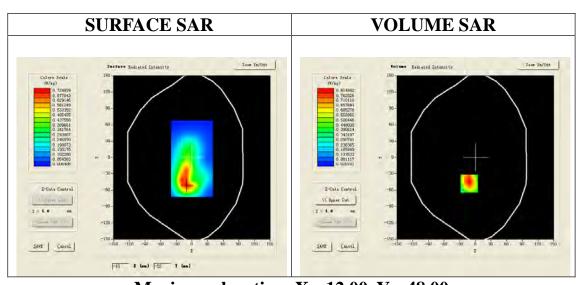
· Sensor-Surface: 4mm (Mechanical Surface Detection)

· Phantom: Flat Phantom; Type: Elliptical Phantom

· Measurement SW: OpenSAR V4_02_01

Configuration/PCS1900 Mid-Body-Back/Area Scan: Measurement grid: dx=20mm, dy=20mm Configuration/PCS1900 Mid-Body-Back/Zoom Scan: Measurement grid: dx=8mm, dy=8mm, dz=5mm;

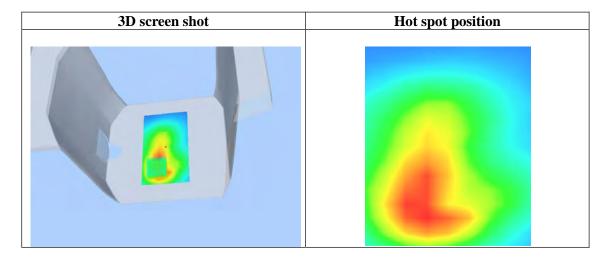
Area Scan	surf_sam_plan.txt			
ZoomScan	5x5x7,dx=8mm dy=8mm dz=5mm,Very fast			
Phantom	Validation plane			
Device Position	Body Back			
Band	PCS 1900			
Channels	Middle			
Signal	TDMA (Crest factor: 8.0)			



Maximum location: X=-12.00, Y=-48.00

SAR 10g (W/Kg)	0.477092	
SAR 1g (W/Kg)	0.843510	

Z (mm)	0.00	4.00	9.00	14.00	19.00	
SAR (W/Kg)	0.0000	0.8086	0.4688	0.2737	0.1657	
	SAR, Z	Axis Scan	(X = -12,	Y = -48)		
0	1.8-				-	
	. 7 -					
_ ~ ~	.6-					
SAR (W/kg)	.5-	+	+		-	
	. 4 -					
WS.			\			
٠	.3-					
0	.2-		 		-	
0	. 1 –					
		.0 7.5 10.0	12.5 15.0 17.	5 20.0 22.5 25	5.0	
	Z (mm)					



PCS 1900 High-Body-Back <SIM 1> **DUT: Mobile Phone; Type: AM83Z**

Communication System: Generic GSM; Communication System Band: PCS 1900; Duty Cycle: 1:8.3; Conv.F=4.84; Frequency: 1909.8 MHz; Medium parameters used: f = 1900 MHz; $\sigma = 1.48 \text{ mho/m}$; $\epsilon = 52.66$; $\rho = 1000 \text{ kg/m}^3$;

Phantom section: Flat Section

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

SATIMO Configuration:

Probe: EP165; Calibrated: 01/31/2013

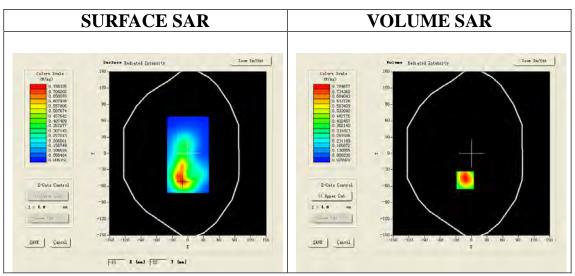
· Sensor-Surface: 4mm (Mechanical Surface Detection)

· Phantom: Flat Phantom; Type: Elliptical Phantom

· Measurement SW: OpenSAR V4_02_01

Configuration/PCS1900 High-Body-Back/Area Scan: Measurement grid: dx=20mm, dy=20mm **Configuration/PCS1900 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	PCS 1900			
Channels	High			
Signal	TDMA (Crest factor: 8.0)			



Maximum location: X=-12.00, Y=-49.00

SAR 10g (W/Kg)	0.476370	
SAR 1g (W/Kg)	0.810124	

Z (mm)	0.00	4.00	9.00	14.00	19.00
SAR (W/Kg)	0.0000	0.7847	0.5055	0.3162	0.1902
_		Axis Scan	(X = −12,	Y = -49)	ı
	1.8-				
0	1. 7 –	$\overline{}$			
	. 6 -	+			
(%)	.5-				
(€	. 4 -				
18					
0	.3-				
0	. 2 -		+		-
0	. 1 -				
	0.0 2.5 5	0 7.5 10.0	12.5 15.0 17.	5 20.0 22.5 25	6.0
Z (mm)					

