



OET 65

TEST REPORT

Product Name	HSUPA/HSDPA/UMTS triband / GSM quadband mobile phone
Model	Mojitolite A
Marketing Name	ONE TOUCH 991A
FCC ID	RAD254
Client	TCT Mobile Limited


TA Technology (Shanghai) Co., Ltd.

TA Technology (Shanghai) Co., Ltd.
Test Report

Report No.: RXA1204-0067SAR01R1

Page 2 of 220

GENERAL SUMMARY

Product Name	HSUPA/HSDPA/UMTS triband / GSM quadband mobile phone	Model	Mojitolite A
Report No.	RXA1204-0067SAR01R1	FCC ID	RAD254
Client	TCT Mobile Limited		
Manufacturer	TCT Mobile Limited		
Reference Standard(s)	<p>IEEE Std C95.1, 1999: IEEE Standard for Safety Levels with Respect to Human Exposure to Radiofrequency Electromagnetic Fields, 3 kHz to 300 GHz.</p> <p>IEEE Std 1528™-2003: IEEE Recommended Practice for Determining the Peak Spatial-Average Specific Absorption Rate (SAR) in the Human Head from Wireless Communications Devices: Measurement Techniques.</p> <p>SUPPLEMENT C Edition 01-01 to OET BULLETIN 65 Edition 97-01 June 2001 including DA 02-1438, published June 2002: Evaluating Compliance with FCC Guidelines for Human Exposure to Radiofrequency Electromagnetic Fields Additional Information for Evaluation Compliance of Mobile and Portable Devices with FCC Limits for Human Exposure to Radiofrequency Emissions.</p> <p>KDB941225 D01 SAR test for 3G devices v02: SAR Measurement Procedures CDMA 20001x RTT, 1x Ev-Do, WCDMA, HSDPA/HSPA</p> <p>KDB 941225 D06 Hot Spot SAR v01 SAR Evaluation Procedures for Portable Devices with Wireless Router Capabilities</p> <p>KDB 648474 D01 SAR Handsets Multi Xmitter and Ant, v01r05: SAR Evaluation Considerations for Handsets with Multiple Transmitters and Antennas.</p>		
Conclusion	<p>This portable wireless equipment has been measured in all cases requested by the relevant standards. Test results in Chapter 7 of this test report are below limits specified in the relevant standards.</p> <p>General Judgment: Pass</p> <div style="text-align: right;">  <p>(Stamp) Date of issue: April 28th, 2012</p> </div>		
Comment	The test result only responds to the measured sample.		

Approved by 杨伟中
Director

Revised by 凌敏定
SAR Manager

Performed by 杨如蔚
SAR Engineer

TABLE OF CONTENT

1. General Information	5
1.1. Notes of the Test Report.....	5
1.2. Testing Laboratory	5
1.3. Applicant Information	6
1.4. Manufacturer Information.....	6
1.5. Information of EUT.....	7
1.6. The Maximum SAR _{1g} Values	9
1.7. Test Date	9
2. SAR Measurements System Configuration.....	10
2.1. SAR Measurement Set-up.....	10
2.2. DASY4 E-field Probe System	11
2.2.1. EX3DV4 Probe Specification	11
2.2.2. E-field Probe Calibration.....	12
2.3. Other Test Equipment	12
2.3.1. Device Holder for Transmitters	12
2.3.2. Phantom	13
2.4. Scanning Procedure	13
2.5. Data Storage and Evaluation	15
2.5.1. Data Storage.....	15
2.5.2. Data Evaluation by SEMCAD	15
3. Laboratory Environment.....	17
4. Tissue-equivalent Liquid	18
4.1. Tissue-equivalent Liquid Ingredients.....	18
4.2. Tissue-equivalent Liquid Properties	20
5. System Check.....	21
5.1. Description of System Check.....	21
5.2. System Check Results.....	22
6. Operational Conditions during Test.....	23
6.1. General Description of Test Procedures	23
6.2. Test Positions.....	23
6.2.1. Against Phantom Head.....	23
6.2.2. Body Worn Configuration.....	23
6.3. Test Configuration	24
6.3.1. GSM Test Configuration.....	24
6.3.2. WCDMA Test Configuration.....	24
6.3.3. HSDPA Test Configuration	25
6.3.4. HSUPA Test Configuration	27
6.3.5. WIFI Test Configuration	29
7. Test Results	30
7.1. Conducted Power Results	30

TA Technology (Shanghai) Co., Ltd.
Test Report

Report No.: RXA1204-0067SAR01R1

Page 4 of 220

7.2. SAR Test Results	32
7.2.1. GSM 850 (GPRS/EGPRS).....	32
7.2.2. GSM 1900 (GPRS/EGPRS).....	34
7.2.3. WCDMA Band II (WCDMA)	36
7.2.4. WCDMA Band V (WCDMA).....	38
7.2.5. Bluetooth/WiFi Function.....	40
8. Measurement Uncertainty	46
9. Main Test Instruments	48
ANNEX A: Test Layout	49
ANNEX B: System Check Results	53
ANNEX C: Graph Results	59
ANNEX D: Probe Calibration Certificate	169
ANNEX E: D835V2 Dipole Calibration Certificate	180
ANNEX F: D1900V2 Dipole Calibration Certificate	188
ANNEX G: D2450V2 Dipole Calibration Certificate.....	196
ANNEX H: DAE4 Calibration Certificate.....	204
ANNEX I: The EUT Appearances and Test Configuration	209

TA Technology (Shanghai) Co., Ltd. Test Report

Report No.: RXA1204-0067SAR01R1

Page 5 of 220

1. General Information

1.1. Notes of the Test Report

TA Technology (Shanghai) Co., Ltd. guarantees the reliability of the data presented in this test report, which is the results of measurements and tests performed for the items under test on the date and under the conditions stated in this test report and is based on the knowledge and technical facilities available at TA Technology (Shanghai) Co., Ltd. at the time of execution of the test.

TA Technology (Shanghai) Co., Ltd. is liable to the client for the maintenance by its personnel of the confidentiality of all information related to the items under test and the results of the test. This report only refers to the item that has undergone the test.

This report standalone dose not constitute or imply by its own an approval of the product by the certification Bodies or competent Authorities. This report cannot be used partially or in full for publicity and/or promotional purposes without previous written approval of **TA Technology (Shanghai) Co., Ltd.** and the Accreditation Bodies, if it applies.

If the electrical report is inconsistent with the printed one, it should be subject to the latter.

1.2. Testing Laboratory

Company: TA Technology (Shanghai) Co., Ltd.
Address: No.145, Jintang Rd, Tangzhen Industry Park, Pudong Shanghai, China
City: Shanghai
Post code: 201201
Country: P. R. China
Contact: Yang Weizhong
Telephone: +86-021-50791141/2/3
Fax: +86-021-50791141/2/3-8000
Website: <http://www.ta-shanghai.com>
E-mail: yangweizhong@ta-shanghai.com

TA Technology (Shanghai) Co., Ltd.

Test Report

Report No.: RXA1204-0067SAR01R1

Page 6 of 220

1.3. Applicant Information

Company: TCT Mobile Limited
Address: 5F, E building, No. 232, Liang Jing Road ZhangJiang High-Tech Park, Pudong Area Shanghai, P.R. China. 201203
City: Shanghai
Postal Code: 201203
Country: P.R. China
Contact: Gong Zhizhou
Telephone: 0086-21-61460890
Fax: 0086-21-61460602

1.4. Manufacturer Information

Company: TCT Mobile Limited
Address: 5F, E building, No. 232, Liang Jing Road ZhangJiang High-Tech Park, Pudong Area Shanghai, P.R. China. 201203
City: Shanghai
Postal Code: 201203
Country: P.R. China
Telephone: 0086-21-61460890
Fax: 0086-21-61460602

TA Technology (Shanghai) Co., Ltd.

Test Report

Report No.: RXA1204-0067SAR01R1

Page 7 of 220

1.5. Information of EUT

General Information

Device Type:	Portable Device		
Exposure Category:	Uncontrolled Environment / General Population		
State of Sample:	Prototype Unit		
Product Name:	HSUPA/HSDPA/UMTS triband / GSM quadband mobile phone		
IMEI:	013111000020248		
Hardware Version:	PIO02		
Software Version:	vF1I_US		
Antenna Type:	Internal Antenna		
Device Operating Configurations :			
Supporting Mode(s):	GSM 850/GSM 1900; (tested) WCDMA Band II /WCDMA Band V; (tested) GSM 900/GSM 1800/WCDMA Band I; (untested) 802.11b/g/n HT20; (tested) Bluetooth; (untested)		
Test Modulation:	(GSM)GMSK; (WCDMA)QPSK		
Device Class:	B		
HSDPA UE Category:	8		
HSUPA UE Category:	6		
GPRS Multislot Class(12):	Max Number of Timeslots in Uplink	4	
	Max Number of Timeslots in Downlink	4	
	Max Total Timeslot	5	
EGPRS Multislot Class(12):	Max Number of Timeslots in Uplink	4	
	Max Number of Timeslots in Downlink	4	
	Max Total Timeslot	5	
Operating Frequency Range(s):	Mode	Tx (MHz)	Rx (MHz)
	GSM 850	824.2 ~ 848.8	869.2 ~ 893.8
	GSM 1900	1850.2 ~ 1909.8	1930.2 ~ 1989.8
	WCDMA Band II	1852.4 ~ 1907.6	1932.4 ~ 1987.6
	WCDMA Band V	826.4 ~ 846.6	871.4 ~ 891.6
Power Class:	GSM 850: 4, tested with power level 5		
	GSM 1900: 1, tested with power level 0		
	WCDMA Band II: 3, tested with power control all up bits		
	WCDMA Band V: 3, tested with power control all up bits		
Test Channel: (Low - Middle - High)	128 - 190 - 251	(GSM 850)	(tested)
	512 - 661 - 810	(GSM 1900)	(tested)
	9262 - 9400 - 9538	(WCDMA Band II)	(tested)
	4132 - 4183 - 4233	(WCDMA Band V)	(tested)
	1-6-11	(WIFI)	(tested)

TA Technology (Shanghai) Co., Ltd.

Test Report

Report No.: RXA1204-0067SAR01R1

Page 8 of 220

Auxiliary Equipment Details

Name	Model	Manufacturer	S/N
Battery 1	CAB32A0000C1	BYD	B36211047EA
Battery 2	CAB32A0000C2	SCUD	FMTMMBC17004036
Stereo Headset 1	CCB3160A11C1	Juwei	/
Stereo Headset 2	CCB3160A11C4	Meihao	/
Stereo Headset 3	CCB3001A15C1	SHUNDA	/
Stereo Headset 4	CCB3160A15C1	Juwei	/
Stereo Headset 5	CCB3160A15C4	Meihao	/
Stereo Headset 6	CCB3001A14C1	SHUNDA	/

Note: 1. Stereo Headset 1 and Stereo Headset 2 and Stereo Headset 3, non-REACH, need test.
2. Stereo Headset 4 and Stereo Headset 5 and Stereo Headset 6, REACH, no need test.

Equipment Under Test (EUT) is a HSUPA/HSDPA/UMTS triband / GSM quadband mobile phone. The EUT has a GSM/WCDMA antenna that is used for Tx/Rx, the second is GPS/WIFI/BT antenna that can be used for Tx/Rx. It has Personal Wireless Routers (hot spots) function and Proximity Sensor function.

The proximity sensor is a sensor able to detect the presence of nearby objects without any physical contact. It can transmit a kind of light pulse, and measure the time from launching and responding, then calculate the distance through the time. It only shut off the LCD and will not reduce the transmit power. Software update need special software tool in a computer and it is not available to the user.

The detail about EUT and Lithium Battery is in chapter 1.5 in this report. SAR are tested for GSM 850, GSM 1900, WCDMA Band II, WCDMA Band V and WIFI.

The sample under test was selected by the Client.

Components list please refer to documents of the manufacturer.

TA Technology (Shanghai) Co., Ltd.

Test Report

Report No.: RXA1204-0067SAR01R1

Page 9 of 220

1.6. The Maximum SAR_{1g} Values

Head SAR Configuration

Mode	Channel	Position	SAR _{1g} (W/kg)
GSM 850	High /251	Right, Cheek	0.355
GSM 1900	Middle/661	Left, Cheek	0.462
WCDMA Band II	Low/9262	Left, Cheek	0.932
WCDMA Band V	High/4233	Right, Cheek	0.349
WiFi(802.11b)	Low/1	Right, Cheek	0.080

Body Worn Configuration

Mode	Channel	Position	Separation distance	SAR _{1g} (W/kg)
2Txslots GPRS 850	Low/128	Back Side	10mm	1.060
4Txslots EGPRS 1900	High/810	Back Side	10mm	1.050
WCDMA Band II	Low/9262	Back Side	10mm	1.080
WCDMA Band V	Low/4132	Back Side	10mm	0.676
WiFi(802.11b)	Low/1	Back Side	10mm	0.288

Hotspot SAR Configuration

Mode	Channel	Position	Separation distance	SAR _{1g} (W/kg)
2Txslots GPRS 850	Low/128	Back Side	10mm	1.060
4Txslots EGPRS 1900	High/810	Back Side	10mm	1.050
WCDMA Band II	Low/9262	Back Side	10mm	1.080
WCDMA Band V	Low/4132	Back Side	10mm	0.676
WiFi(802.11b)	Low/1	Back Side	10mm	0.288

Simultaneous SAR

SAR _{1g} (W/kg)	WCDMA Band II	WIFI(802.11b)	MAX. ΣSAR _{1g}
Test Position			
Body, Back Side	1.080	0.288	1.368

1.7. Test Date

The test performed from April 24, 2012 to April 26, 2012.

2. SAR Measurements System Configuration

2.1. SAR Measurement Set-up

The DASY4 system for performing compliance tests consists of the following items:

- A standard high precision 6-axis robot (Stäubli RX family) with controller and software. An arm extension for accommodating the data acquisition electronics (DAE).
- A dosimetric probe, i.e. an isotropic E-field probe optimized and calibrated for usage in tissue simulating liquid. The probe is equipped with an optical surface detector system.
- A data acquisition electronic (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.
- A unit to operate the optical surface detector which is connected to the EOC.
- The Electro-Optical Coupler (EOC) performs the conversion from the optical into a digital electric signal of the DAE. The EOC is connected to the DASY4 measurement server.
- The DASY4 measurement server, which performs all real-time data evaluation for field measurements and surface detection, controls robot movements and handles safety operation. A computer operating Windows 2003
- DASY4 software and SEMCAD data evaluation software.
- Remote control with teach panel and additional circuitry for robot safety such as warning lamps, etc.
- The generic twin phantom enabling the testing of left-hand and right-hand usage.
- The device holder for handheld mobile phones.
- Tissue simulating liquid mixed according to the given recipes.
- System validation dipoles allowing to validate the proper functioning of the system.

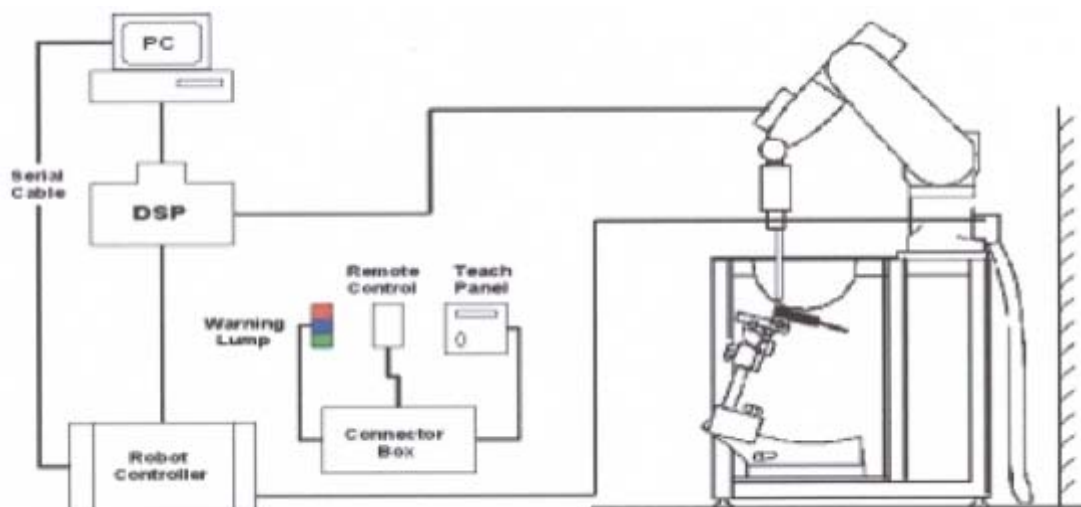


Figure 1 SAR Lab Test Measurement Set-up

2.2. DASY4 E-field Probe System

The SAR measurements were conducted with the dosimetric probe EX3DV4 (manufactured by SPEAG), designed in the classical triangular configuration and optimized for dosimetric evaluation.

2.2.1. EX3DV4 Probe Specification

Construction	Symmetrical design with triangular core Built-in shielding against static charges PEEK enclosure material (resistant to organic solvents, e.g., DGBE)
Calibration	ISO/IEC 17025 calibration service available
Frequency	10 MHz to > 6 GHz Linearity: ± 0.2 dB (30 MHz to 6 GHz)
Directivity	± 0.3 dB in HSL (rotation around probe axis) ± 0.5 dB in tissue material (rotation normal to probe axis)
Dynamic Range	10 μ W/g to > 100 mW/g Linearity: ± 0.2 dB (noise: typically < 1 μ W/g)
Dimensions	Overall length: 330 mm (Tip: 20 mm) Tip diameter: 2.5 mm (Body: 12 mm) Typical distance from probe tip to dipole centers: 1 mm
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 6 GHz with precision of better 30%.



Figure 2. EX3DV4 E-field Probe



Figure 3. EX3DV4 E-field probe

2.2.2. E-field Probe Calibration

Each probe is calibrated according to a dosimetric assessment procedure with accuracy better than $\pm 10\%$. The spherical isotropy was evaluated and found to be better than $\pm 0.25\text{dB}$. The sensitivity parameters (NormX, NormY, NormZ), the diode compression parameter (DCP) and the conversion factor (ConvF) of the probe are tested.

The free space E-field from amplified probe outputs is determined in a test chamber. This is performed in a TEM cell for frequencies below 1 GHz, and in a wave guide above 1 GHz for free space. For the free space calibration, the probe is placed in the volumetric center of the cavity and at the proper orientation with the field. The probe is then rotated 360 degrees.

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

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

Where: Δt = Exposure time (30 seconds),
C = Heat capacity of tissue (brain or muscle),
 ΔT = Temperature increase due to RF exposure.
Or

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

Where:
 σ = Simulated tissue conductivity,
 ρ = Tissue density (kg/m³).

2.3. Other Test Equipment

2.3.1. Device Holder for Transmitters

The DASY device holder is designed to cope with the different positions given in the standard.

It has two scales for device rotation (with respect to the body axis) and device inclination (with respect to the line between the ear reference points). The rotation centers for both scales is the ear reference point (ERP). Thus the device needs no repositioning when changing the angles.

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.



Figure 4 Device Holder

2.3.2. Phantom

The Generic Twin Phantom is constructed of a fiberglass shell integrated in a wooden Figure. The shape of the shell is based on data from an anatomical study designed to determine the maximum exposure in at least 90% of all users. It enables the dosimetric evaluation of left and right hand phone usage as well as body mounted usage at the flat phantom region. A cover prevents the evaporation of the liquid. Reference markings on the Phantom allow the complete setup of all predefined phantom positions and measurement grids by manually teaching three points in the robot.

Shell Thickness	2±0.1 mm
Filling Volume	Approx. 20 liters
Dimensions	810 x 1000 x 500 mm (H x L x W)
Available	Special



Figure 5 Generic Twin Phantom

2.4. Scanning Procedure

The DASY4 installation includes predefined files with recommended procedures for measurements and validation. They are read-only document files and destined as fully defined but unmeasured masks. All test positions (head or body-worn) are tested with the same configuration of test steps differing only in the grid definition for the different test positions.

- The “reference” and “drift” measurements are located at the beginning and end of the batch process. They measure the field drift at one single point in the liquid over the complete procedure. The indicated drift is mainly the variation of the DUT’s output power and should vary max. ± 5 %.
- The “surface check” measurement tests the optical surface detection system of the DASY4 system by repeatedly detecting the surface with the optical and mechanical surface detector and comparing the results. The output gives the detecting heights of both systems, the difference between the two systems and the standard deviation of the detection repeatability. Air bubbles or refraction in the liquid due to separation of the sugar-water mixture gives poor repeatability (above ± 0.1mm). To prevent wrong results tests are only executed when the liquid is free of air bubbles. The difference between the optical surface detection and the actual surface depends on the probe and is specified with each probe. (It does not depend on the surface reflectivity or the probe angle to the surface within ± 30°.)
- Area Scan
The Area Scan is used as a fast scan in two dimensions to find the area of high field values before running a detailed measurement around the hot spot. Before starting the area scan a grid

TA Technology (Shanghai) Co., Ltd.

Test Report

Report No.: RXA1204-0067SAR01R1

Page 14 of 220

spacing of 15 mm x 15 mm is set. During the scan the distance of the probe to the phantom remains unchanged.

After finishing area scan, the field maxima within a range of 2 dB will be ascertained.

- Zoom Scan

Zoom Scans are used to estimate the peak spatial SAR values within a cubic averaging volume containing 1 g and 10 g of simulated tissue. The default Zoom Scan is done by 5x5x7 points within a cube whose base is centered around the maxima found in the preceding area scan.

- Spatial Peak Detection

The procedure for spatial peak SAR evaluation has been implemented and can determine values of masses of 1g and 10g, as well as for user-specific masses. The DASY4 system allows evaluations that combine measured data and robot positions, such as:

- maximum search
- extrapolation
- boundary correction
- peak search for averaged SAR

During a maximum search, global and local maxima searches are automatically performed in 2-D after each Area Scan measurement with at least 6 measurement points. It is based on the evaluation of the local SAR gradient calculated by the Quadratic Shepard's method. The algorithm will find the global maximum and all local maxima within -2 dB of the global maxima for all SAR distributions.

Extrapolation routines are used to obtain SAR values between the lowest measurement points and the inner phantom surface. The extrapolation distance is determined by the surface detection distance and the probe sensor offset. Several measurements at different distances are necessary for the extrapolation. Extrapolation routines require at least 10 measurement points in 3-D space. They are used in the Zoom Scan to obtain SAR values between the lowest measurement points and the inner phantom surface. The routine uses the modified Quadratic Shepard's method for extrapolation. For a grid using 5x5x7 measurement points with 8 mm resolution amounting to 175 measurement points, the uncertainty of the extrapolation routines is less than 1% for 1g and 10g cubes.

- A Z-axis scan measures the total SAR value at the x-and y-position of the maximum SAR value found during the cube 5x5x7 scan. The probe is moved away in z-direction from the bottom of the SAM phantom in 5mm steps.

2.5. Data Storage and Evaluation

2.5.1. Data Storage

The DASY4 software stores the acquired data from the data acquisition electronics as raw data (in microvolt readings from the probe sensors), together with all necessary software parameters for the data evaluation (probe calibration data, liquid parameters and device frequency and modulation data) in measurement files with the extension “.DA4”. The software evaluates the desired unit and format for output each time the data is visualized or exported. This allows verification of the complete software setup even after the measurement and allows correction of incorrect parameter settings. For example, if a measurement has been performed with a wrong crest factor parameter in the device setup, the parameter can be corrected afterwards and the data can be re-evaluated.

The measured data can be visualized or exported in different units or formats, depending on the selected probe type ([V/m], [A/m], [°C], [mW/g], [mW/cm²], [dBrel], etc.). Some of these units are not available in certain situations or show meaningless results, e.g., a SAR output in a lossless media will always be zero. Raw data can also be exported to perform the evaluation with other software packages.

2.5.2. Data Evaluation by SEMCAD

The SEMCAD software automatically executes the following procedures to calculate the field units from the microvolt readings at the probe connector. The parameters used in the evaluation are stored in the configuration modules of the software:

Probe parameters:	- Sensitivity	Normi, a _{i0} , a _{i1} , a _{i2}
	- Conversion factor	ConvF _i
	- Diode compression point	Dcp _i
Device parameters:	- Frequency	f
	- Crest factor	cf
Media parameters:	- Conductivity	
	- Density	

These parameters must be set correctly in the software. They can be found in the component documents or they can be imported into the software from the configuration files issued for the DASY4 components. In the direct measuring mode of the multimeter option, the parameters of the actual system setup are used. In the scan visualization and export modes, the parameters stored in the corresponding document files are used.

The first step of the evaluation is a linearization of the filtered input signal to account for the compression characteristics of the detector diode. The compensation depends on the input signal, the diode type and the DC-transmission factor from the diode to the evaluation electronics.

TA Technology (Shanghai) Co., Ltd.
Test Report

Report No.: RXA1204-0067SAR01R1

Page 16 of 220

If the exciting field is pulsed, the crest factor of the signal must be known to correctly compensate for peak power. The formula for each channel can be given as:

$$V_i = U_i + U_i^2 \cdot c f / d c p_i$$

With V_i = compensated signal of channel i (i = x, y, z)

U_i = input signal of channel i (i = x, y, z)

cf = crest factor of exciting field (DASY parameter)

dcp_i = diode compression point (DASY parameter)

From the compensated input signals the primary field data for each channel can be evaluated:

E-field probes: $E_i = (V_i / Norm_i \cdot ConvF)^{1/2}$

H-field probes: $H_i = (V_i)^{1/2} \cdot (a_{i0} + a_{i1} f + a_{i2} f^2) / f$

With V_i = compensated signal of channel i (i = x, y, z)

$Norm_i$ = sensor sensitivity of channel i (i = x, y, z)
[mV/(V/m)²] for E-field Probes

$ConvF$ = sensitivity enhancement in solution

a_{ij} = sensor sensitivity factors for H-field probes

f = carrier frequency [GHz]

E_i = electric field strength of channel i in V/m

H_i = magnetic field strength of channel i in A/m

The RSS value of the field components gives the total field strength (Hermitian magnitude):

$$E_{tot} = (E_x^2 + E_y^2 + E_z^2)^{1/2}$$

The primary field data are used to calculate the derived field units.

$$SAR = (E_{tot})^2 \cdot \sigma / (\rho \cdot 1000)$$

with **SAR** = local specific absorption rate in mW/g

E_{tot} = total field strength in V/m

σ = conductivity in [mho/m] or [Siemens/m]

ρ = equivalent tissue density in g/cm³

Note that the density is normally set to 1 (or 1.06), to account for actual brain density rather than the density of the simulation liquid. The power flow density is calculated assuming the excitation field to be a free space field.

$$P_{pwe} = E_{tot}^2 / 3770 \quad \text{or} \quad P_{pwe} = H_{tot}^2 \cdot 37.7$$

with **P_{pwe}** = equivalent power density of a plane wave in mW/cm²

E_{tot} = total electric field strength in V/m

H_{tot} = total magnetic field strength in A/m

3. Laboratory Environment

Table 1: The Requirements of the Ambient Conditions

Temperature	Min. = 18°C, Max. = 25 °C
Relative humidity	Min. = 30%, Max. = 70%
Ground system resistance	< 0.5 Ω
Ambient noise is checked and found very low and in compliance with requirement of standards.	
Reflection of surrounding objects is minimized and in compliance with requirement of standards.	

4. Tissue-equivalent Liquid

4.1. Tissue-equivalent Liquid Ingredients

The liquid is consisted of water, salt, Glycol, Sugar, Preventol and Cellulose. The liquid has previously been proven to be suited for worst-case. The table 2 and table 3 show the detail solution. It's satisfying the latest tissue dielectric parameters requirements proposed by the OET 65.

Table 2: Composition of the Head Tissue Equivalent Matter

MIXTURE%	FREQUENCY(Brain) 835MHz
Water	41.45
Sugar	56
Salt	1.45
Preventol	0.1
Cellulose	1.0
Dielectric Parameters Target Value	f=835MHz $\epsilon=41.5$ $\sigma=0.9$

MIXTURE%	FREQUENCY(Brain) 1900MHz
Water	55.242
Glycol monobutyl	44.452
Salt	0.306
Dielectric Parameters Target Value	f=1900MHz $\epsilon=40.0$ $\sigma=1.40$

MIXTURE%	FREQUENCY(Brain) 2450MHz
Water	62.7
Glycol	36.8
Salt	0.5
Dielectric Parameters Target Value	f=2450MHz $\epsilon=39.20$ $\sigma=1.80$

TA Technology (Shanghai) Co., Ltd.
Test Report

Report No.: RXA1204-0067SAR01R1

Page 19 of 220

Table 3: Composition of the Body Tissue Equivalent Matter

MIXTURE%	FREQUENCY(Body) 835MHz
Water	52.5
Sugar	45
Salt	1.4
Preventol	0.1
Cellulose	1.0
Dielectric Parameters Target Value	f=835MHz $\epsilon=55.2$ $\sigma=0.97$

MIXTURE%	FREQUENCY (Body) 1900MHz
Water	69.91
Glycol monobutyl	29.96
Salt	0.13
Dielectric Parameters Target Value	f=1900MHz $\epsilon=53.3$ $\sigma=1.52$

MIXTURE%	FREQUENCY(Body) 2450MHz
Water	73.2
Glycol	26.7
Salt	0.1
Dielectric Parameters Target Value	f=2450MHz $\epsilon=52.70$ $\sigma=1.95$

TA Technology (Shanghai) Co., Ltd.
Test Report

Report No.: RXA1204-0067SAR01R1

Page 20 of 220

4.2. Tissue-equivalent Liquid Properties

Table 4: Dielectric Performance of Head Tissue Simulating Liquid

Frequency	Description	Dielectric Parameters		Temp °C
		ϵ_r	σ (s/m)	
835MHz (head)	Target value ± 5% window	41.50 39.43 — 43.58	0.90 0.86 — 0.95	22.0
	Measurement value 2012-4-24	42.3	0.888	21.5
1900MHz (head)	Target value ±5% window	40.00 38.00 — 42.00	1.40 1.33 — 1.47	22.0
	Measurement value 2012-4-25	40.1	1.39	21.5
2450MHz (head)	Target value ±5% window	39.20 37.24 — 41.16	1.80 1.71 — 1.89	22.0
	Measurement value 2012-4-26	38.3	1.88	21.5

Table 5: Dielectric Performance of Body Tissue Simulating Liquid

Frequency	Description	Dielectric Parameters		Temp °C
		ϵ_r	σ (s/m)	
835MHz (body)	Target value ±5% window	55.20 52.44 — 57.96	0.97 0.92 — 1.02	22.0
	Measurement value 2012-4-25	54.3	0.986	21.5
1900MHz (body)	Target value ±5% window	53.30 50.64 — 55.97	1.52 1.44 — 1.60	22.0
	Measurement value 2012-4-24	52	1.56	21.5
2450MHz (body)	Target value ±5% window	52.70 50.07 — 55.34	1.95 1.85 — 2.05	22.0
	Measurement value 2012-4-25	51.7	1.9	21.5

5. System Check

5.1. Description of System Check

The manufacturer calibrates the probes annually. Dielectric parameters of the tissue simulates were measured every day using the dielectric probe kit and the network analyzer. A system check measurement was made following the determination of the dielectric parameters of the simulates, using the dipole validation kit. A power level of 250 mW was supplied to the dipole antenna, which was placed under the flat section of the twin SAM phantom. The system check results (dielectric parameters and SAR values) are given in the table 6 and table 7.

System check results have to be equal or near the values determined during dipole calibration with the relevant liquids and test system ($\pm 10\%$).

System check is performed regularly on all frequency bands where tests are performed with the DASY4 system.

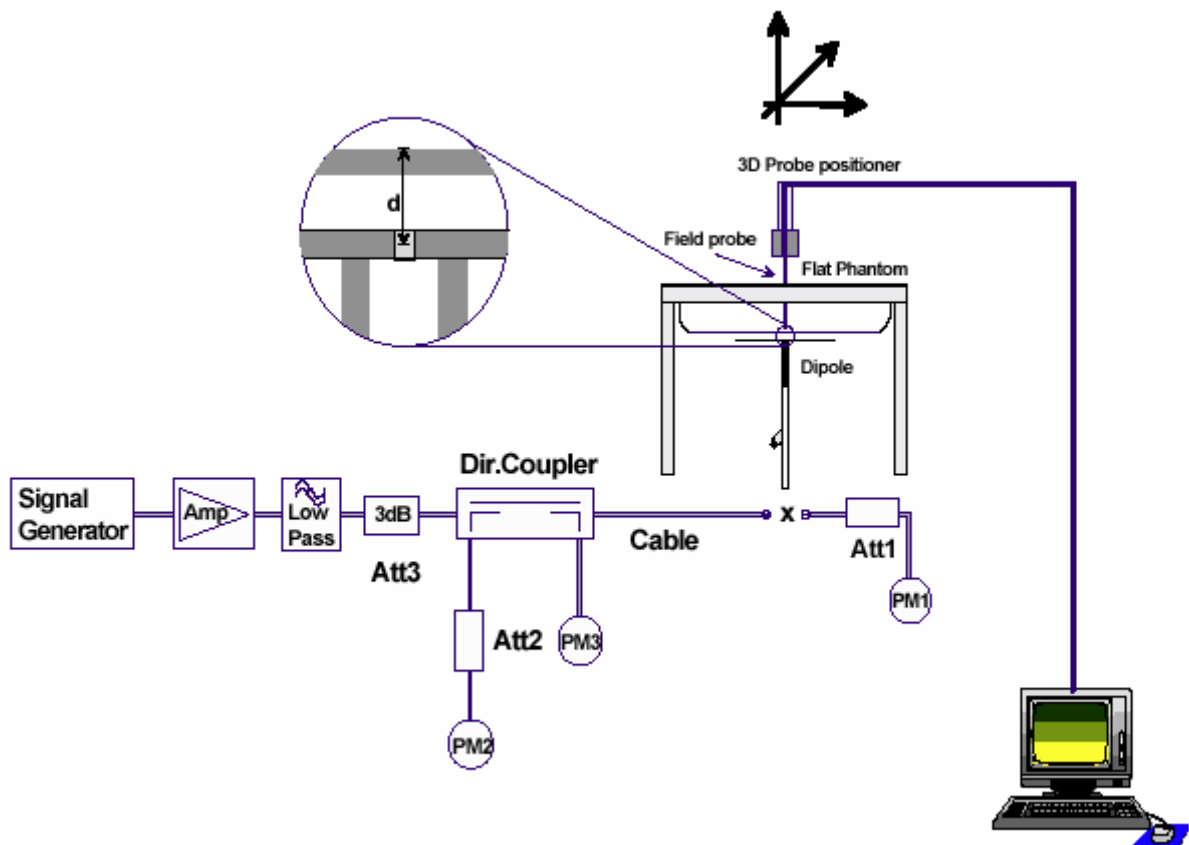


Figure 6 System Check Set-up

TA Technology (Shanghai) Co., Ltd.
Test Report

Report No.: RXA1204-0067SAR01R1

Page 22 of 220

5.2. System Check Results

Table 6: System Check in Head Tissue Simulating Liquid

Frequency	Test Date	Dielectric Parameters		Temp (°C)	250mW Measured SAR _{1g}	1W Normalized SAR _{1g}	1W Target SAR _{1g} (±10% deviation)
		ϵ_r	σ (s/m)				
835MHz	2012-4-24	42.3	0.888	21.5	2.38	9.52	9.34 (8.41~10.27)
1900MHz	2012-4-25	40.1	1.39	21.5	9.69	38.76	40.30 (36.27~ 44.33)
2450MHz	2012-4-26	38.3	1.88	21.5	14.6	58.4	53.80 (48.42~ 59.18)

Note: 1. The graph results see ANNEX B.
2. Target Values derive from the calibration certificate

Table 7: System Check in Body Tissue Simulating Liquid

Frequency	Test Date	Dielectric Parameters		Temp (°C)	250mW Measured SAR _{1g}	1W Normalized SAR _{1g}	1W Target SAR _{1g} (±10% deviation)
		ϵ_r	σ (s/m)				
835MHz	2012-4-25	54.3	0.986	21.5	2.4	9.6	9.46 (8.51~10.41)
1900MHz	2012-4-24	52.0	1.56	21.5	10.2	40.8	41.70 (37.53~45.87)
2450MHz	2012-4-25	51.7	1.9	21.5	12.2	48.8	51.70 (46.53~56.87)

Note: 1. The graph results see ANNEX B.
2. Target Values derive from the calibration certificate

6. Operational Conditions during Test

6.1. General Description of Test Procedures

A communication link is set up with a System Simulator (SS) by air link, and a call is established. The Absolute Radiofrequency Channel Number (ARFCN) is allocated to 128, 190 and 251 in the case of GSM 850, to 512, 661 and 810 in the case of GSM 1900, to 9262, 9400 and 9538 in the case of WCDMA Band II, to 4132, 4183 and 4233 in the case of WCDMA Band V. The EUT is commanded to operate at maximum transmitting power.

Connection to the EUT is established via air interface with E5515C, and the EUT is set to maximum output power by E5515C. The EUT battery must be fully charged and checked periodically during the test to ascertain uniform power output. The antenna connected to the output of the base station simulator shall be placed at least 50 cm away from the EUT. The signal transmitted by the simulator to the antenna feeding point shall be lower than the output power level of the EUT by at least 30 dB.

6.2. Test Positions

6.2.1. Against Phantom Head

Measurements were made in "cheek" and "tilt" positions on both the left hand and right hand sides of the phantom.

The positions used in the measurements were according to IEEE 1528 - 2003 "IEEE Recommended Practice for Determining the Peak Spatial-Average Specific Absorption Rate(SAR) in the Human Head from Wireless Communications Devices: Measurement Techniques".

6.2.2. Body Worn Configuration

Body-worn operating configurations should be tested with the belt-clips and holsters attached to the device and positioned against a flat phantom in normal use configurations. Devices with a headset output should be tested with a headset connected to the device.

Based upon KDB941225 D06 V01, when the antenna-to-edge distance is greater than 2.5cm, such position does not need to be tested. The distance between the device and the phantom was kept 10mm of wireless routers.

6.3. Test Configuration

6.3.1. GSM Test Configuration

SAR tests for GSM 850 and GSM 1900, a communication link is set up with a System Simulator (SS) by air link. Using E5515C the power lever is set to “5” for GSM 850, set to “0” for GSM 1900. Since the GPRS class is 12 for this EUT, it has at most 4 timeslots in uplink and at most 4 timeslots in downlink, the maximum total timeslots is 5; the EGPRS class is 12 for this EUT, it has at most 4 timeslots in uplink and at most 4 timeslots in downlink, the maximum total timeslots is 5.

When SAR tests for EGPRS mode is necessary, GMSK modulation should be used to minimize SAR measurement error due to higher peak-to-average power (PAR) ratios inherent in 8-PSK.

According to specification 3GPP TS 51.010, the maximum power of the GSM can do the power reduction for the multi-slot. The allowed power reduction in the multi-slot configuration is as following:

Table 8: The allowed power reduction in the multi-slot configuration

Number of timeslots in uplink assignment	Permissible nominal reduction of maximum output power,(dB)
1	0
2	0 to 3,0
3	1,8 to 4,8
4	3,0 to 6,0

6.3.2. WCDMA Test Configuration

6.3.2.1. Output power Verification

Maximum output power is verified on the High, Middle and Low channel according to the procedures described in section 5.2 of 3GPP TS 34. 121, using the appropriate RMC or AMR with TPC(transmit power control) set to all up bits for WCDMA/HSDPA or applying the required inner loop power control procedures to the maximum output power while HSUPA is active. Results for all applicable physical channel configuration (DPCCH, DPDCH_n and spreading codes, HSDPA, HSPA) should be tabulated in the SAR report. All configuration that are not supported by the DUT or can not be measured due to technical or equipment limitations should be clearly identified.

6.3.2.2. Head SAR Measurements

SAR for head exposure configurations in voice mode is measured using a 12.2kbps RMC with TPC bits configured to all up bits. SAR in AMR configurations is not required when the maximum average output of each RF channel for 12.2kbps AMR is less than 1/4 dB higher than that measured in 12.2 kbps RMC. Otherwise, SAR is measured on the maximum output channel in 12.2kbps AMR with a 3.4 kbps SRB(Signaling radio bearer) using the exposure configuration that results in the highest SAR in 12.2kbps RMC for that RF channel.

6.3.2.3. Body SAR Measurements

SAR for body exposure configurations in voice and data modes is measured using 12.2kbps RMC with TPC bits configured to all up bits. SAR for other spreading codes and multiple DPDCH_n, when supported by the DUT, are not required when the maximum average output of each RF channel, for each spreading code and DPDCH_n configuration, are less than 1/4 dB higher than those measured in 12.2kbps RMC. Otherwise, SAR is measured on the maximum output channel with an applicable RMC configuration for the corresponding spreading code or DPDCH_n using the exposure configuration that results in the highest SAR with 12.2 kbps RMC. When more than 2 DPDCH_n are supported by the DUT, it may be necessary to configure additional DPDCH_n for a DUT using FTM (Factory Test Mode) or other chipset based test approaches with parameters similar to those used in 384 kbps and 768 kbps RMC.

6.3.3. HSDPA Test Configuration

SAR for body exposure configurations is measured according to the ‘Body SAR Measurements’ procedures of that section. In addition, body SAR is also measured for HSDPA when the maximum average output of each RF channel with HSDPA active is at least ¼ dB higher than that measured without HSDPA using 12.2 kbps RMC or the maximum SAR for 12.2 kbps RMC is above 75% of the SAR limit.³⁰ Body SAR for HSDPA is measured using an FRC with H-Set 1 in Sub-test 1 and a 12.2 kbps RMC configured in Test Loop Mode 1, using the highest body SAR configuration in 12.2 kbps RMC without HSDPA.

HSDPA should be configured according to the UE category of a test device. The number of HSDSCH/ HS-PDSCHs, HARQ processes, minimum inter-TTI interval, transport block sizes and RV coding sequence are defined by the H-set. To maintain a consistent test configuration and stable transmission conditions, QPSK is used in the H-set for SAR testing. HS-DPCCH should be configured with a CQI feedback cycle of 4 ms with a CQI repetition factor of 2 to maintain a constant rate of active CQI slots. DPCCH and DPDCH gain factors (β_c , β_d), and HS-DPCCH power offset parameters (Δ_{ACK} , Δ_{NACK} , Δ_{CQI}) should be set according to values indicated in the Table below.³² The CQI value is determined by the UE category, transport block size, number of HS-PDSCHs and modulation used in the H-set.

Table 9: Subtests for UMTS Release 5 HSDPA

Sub-set	β_c	β_d	β_d (SF)	β_c/β_d	β_{hs} (note 1, note 2)	CM(dB) (note 3)	MPR(dB)
1	2/15	15/15	64	2/15	4/15	0.0	0.0
2	12/15 (note 4)	15/15 (note 4)	64	12/15 (note 4)	24/15	1.0	0.0
3	15/15	8/15	64	15/8	30/15	1.5	0.5
4	15/15	4/15	64	15/4	30/15	1.5	0.5

Note1: Δ_{ACK} , Δ_{NACK} and $\Delta_{CQI} = 8 \Leftrightarrow A_{hs} = \beta_{hs}/\beta_c = 30/15 \Leftrightarrow \beta_{hs} = 30/15 * \beta_c$

Note2: For the HS-DPCCH power mask requirement test in clause 5.2C, 5.7A, and the Error Vector Magnitude (EVM) with HS-DPCCH test in clause 5.13.1.A, and HSDPA EVM with phase discontinuity in clause 5.13.1AA, Δ_{ACK} and $\Delta_{NACK} = 8$ ($A_{hs} = 30/15$) with $\beta_{hs} = 30/15 * \beta_c$, and $\Delta_{CQI} =$

TA Technology (Shanghai) Co., Ltd.

Test Report

7 ($A_{HS}=24/15$) with $\beta_{HS}=24/15*\beta_c$.

Note3: CM=1 for $\beta_c/\beta_d = 12/15$, $\beta_{HS}/\beta_c=24/15$. For all other combinations of DPDCH, DPCCH and HS-DPCCH the MPR is based on the relative CM difference. This is applicable for only UEs that support HSDPA in release 6 and later releases.

Note 4: For subtest 2 the β_c/β_d ratio of 12/15 for the TFC during the measurement period(TF1,TF0) is achieved by setting the signaled gain factors for the reference TFC (TFC1,TF1) to $\beta_c=11/15$ and $\beta_d=15/15$.

Table 10: Settings of required H-Set 1 QPSK in HSDPA mode

Parameter	Unit	Value
Nominal Avg. Inf. Bit Rate	kbps	534
Inter-TTI Distance	TTI's	3
Number of HARQ Processes	Processes	2
Information Bit Payload (N_{INF})	Bits	3202
Number Code Blocks	Blocks	1
Binary Channel Bits Per TTI	Bits	4800
Total Available SML's in UE	SML's	19200
Number of SML's per HARQ Proc.	SML's	9600
Coding Rate	/	0.67
Number of Physical Channel Codes	Codes	5
Modulation	/	QPSK

Table 11: HSDPA UE category

HS-DSCH Category	Maximum HS-DSCH Codes Received	Minimum Inter-TTI Interval	Maximum Transport Bits/HS-DSCH	Total Channel
1	5	3	7298	19200
2	5	3	7298	28800
3	5	2	7298	28800
4	5	2	7298	38400
5	5	1	7298	57600
6	5	1	7298	67200
7	10	1	14411	115200
8	10	1	14411	134400
9	15	1	25251	172800
10	15	1	27952	172800
11	5	2	3630	14400
12	5	1	3630	28800
13	15	1	34800	259200
14	15	1	42196	259200
15	15	1	23370	345600
16	15	1	27952	345600

6.3.4. HSUPA Test Configuration

Body SAR is also measured for HSPA when the maximum average output of each RF channel with HSPA active is at least ¼ dB higher than that measured without HSPA using 12.2 kbps RMC or the maximum SAR for 12.2 kbps RMC is above 75% of the SAR limit. Body SAR for HSPA is measured with E-DCH Sub-test 5, using H-Set 1 and QPSK for FRC and a 12.2 kbps RMC configured in Test Loop Mode 1 with power control algorithm 2, according to the highest body SAR configuration in 12.2 kbps RMC without HSPA.⁴⁰

Due to inner loop power control requirements in HSPA, a commercial communication test set should be used for the output power and SAR tests.⁴¹ The 12.2 kbps RMC, FRC H-set 1 and E-DCH configurations for HSPA should be configured according to the β values indicated below as well as other applicable procedures described in the 'WCDMA Handset' and 'Release 5 HSDPA Data Devices' sections of 3 G device.

Table 12: Sub-Test 5 Setup for Release 6 HSUPA

Sub-set	β_c	β_d	β_d (SF)	β_c/β_d	$\beta_{hs}^{(1)}$	β_{ec}	β_{ed}	β_{ed} (SF)	β_{ed} (codes)	CM ⁽²⁾ (dB)	MPR (dB)	AG ⁽⁴⁾ Index	E-TFCI
1	11/15 ⁽³⁾	15/15 ⁽³⁾	64	11/15 ⁽³⁾	22/15	209/225	1039/225	4	1	1.0	0.0	20	75
2	6/15	15/15	64	6/15	12/15	12/15	94/75	4	1	3.0	2.0	12	67
3	15/15	9/15	64	15/9	30/15	30/15	β_{ed1} : 47/15 β_{ed2} : 47/15	4	2	2.0	1.0	15	92
4	2/15	15/15	64	2/15	4/15	2/15	56/75	4	1	3.0	2.0	17	71
5	15/15 ⁽⁴⁾	15/15 ⁽⁴⁾	64	15/15 ⁽⁴⁾	30/15	24/15	134/15	4	1	1.0	0.0	21	81

Note 1: $\Delta_{ACK}, \Delta_{NACK}$ and $\Delta_{CQI} = 8 \Leftrightarrow A_{hs} = \beta_{hs}/\beta_c = 30/15 \Leftrightarrow \beta_{hs} = 30/15 * \beta_c$.

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

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

Note 4: For subtest 5 the β_c/β_d ratio of 15/15 for the TFC during the measurement period (TF1, TF0) is achieved by setting the signaled gain factors for the reference TFC (TF1, TF1) to $\beta_c = 14/15$ and $\beta_d = 15/15$.

Note 5: Testing UE using E-DPDCH Physical Layer category 1 Sub-test 3 is not required according to TS 25.306 Figure 5.1g.

Note 6: β_{ed} can not be set directly; it is set by Absolute Grant Value.

TA Technology (Shanghai) Co., Ltd.
Test Report

Table 13: HSUPA UE category

UE E-DCH Category	Maximum E-DCH Codes Transmitted	Number of HARQ Processes	E-DCH TTI (ms)	Minimum Spreading Factor	Maximum E-DCH Transport Block Bits	Max Rate (Mbps)
1	1	4	10	4	7110	0.7296
2	2	8	2	4	2798	1.4592
	2	4	10	4	14484	
3	2	4	10	4	14484	1.4592
4	2	8	2	2	5772	2.9185
	2	4	10	2	20000	2.00
5	2	4	10	2	20000	2.00
6 (No DPDCH)	4	8	2	2 SF2 & 2 SF4	11484	5.76
	4	4	10		20000	2.00
7 (No DPDCH)	4	8	2	2 SF2 & 2 SF4	22996	?
	4	4	10		20000	?

NOTE: When 4 codes are transmitted in parallel, two codes shall be transmitted with SF2 and two with SF4.
 UE Categories 1 to 6 supports QPSK only. UE Category 7 supports QPSK and 16QAM.
 (TS25.306-7.3.0)

TA Technology (Shanghai) Co., Ltd.

Test Report

6.3.5. WIFI Test Configuration

For WLAN SAR testing, WLAN engineering testing software installed on the EUT can provide continuous transmitting RF signal. This RF signal utilized in SAR measurement has almost 100% duty cycle and its crest factor is 1.

For the 802.11b/g SAR tests, a communication link is set up with the test mode software for WIFI mode test. The Absolute Radio Frequency Channel Number (ARFCN) is allocated to 1, 6 and 11 respectively in the case of 2450 MHz. During the test, at the each test frequency channel, the EUT is operated at the RF continuous emission mode.

802.11b/g operating modes are tested independently according to the service requirements in each frequency band. 802.11b/g modes are tested on channels 1, 6, 11; however, if output power reduction is necessary for channels 1 and /or 11 to meet restricted band requirements the highest output channels closest to each of these channels must be tested instead.

SAR is not required for 802.11g channels when the maximum average output power is less than 0.25dB higher than that measured on the corresponding 802.11b channels. When the maximum average output channel in each frequency band is not included in the “default test channels”, the maximum channel should be tested instead of an adjacent “default test channels”, these are referred to as the “required test channels” and are illustrated in table 14.

Table 14: “Default Test Channels”

Mode	GHz	Channel	Turbo Channel	“Default Test Channels”			
				15.247		UNII	
				802.11b	802.11g		
802.11b/g	2.412	1 [#]		√	*		
	2.437	6	6	√	*		
	2.462	11 [#]		√	*		

Note: [#]=when output power is reduced for channel 1 and /or 11 to meet restricted band requirements the highest out put channels closet to each of these channels should be tested.
 √= “default test channels”
 * =possible 802.11g channels with maximum average output 0.25dB>=the “default test channels”

”

TA Technology (Shanghai) Co., Ltd.
Test Report

7. Test Results

7.1. Conducted Power Results

Table 15: Conducted Power Measurement Results

GSM 850		Burst Conducted Power(dBm)				Average power(dBm)		
		Channel 128	Channel 190	Channel 251		Channel 128	Channel 190	Channel 251
GSM		33.05	32.45	32.17	-9.03dB	24.02	23.42	23.14
GPRS (GMSK)	1Txslot	32.93	32.31	32.03	-9.03dB	23.90	23.28	23.00
	2Txslots	31.58	30.76	30.42	-6.02dB	25.56	24.74	24.40
	3Txslots	29.50	28.60	28.23	-4.26dB	25.24	24.34	23.97
	4Txslots	28.56	27.63	27.26	-3.01dB	25.55	24.62	24.25
EGPRS (GMSK)	1Txslot	32.96	32.33	32.05	-9.03dB	23.93	23.30	23.02
	2Txslots	31.62	30.78	30.45	-6.02dB	25.60	24.76	24.43
	3Txslots	29.53	28.62	28.25	-4.26dB	25.27	24.36	23.99
	4Txslots	28.6	27.64	27.29	-3.01dB	25.59	24.63	24.28
GSM 1900		Burst Conducted Power(dBm)				Average power(dBm)		
		Channel 512	Channel 661	Channel 810		Channel 512	Channel 661	Channel 810
GSM		29.38	29.52	29.78	-9.03dB	20.35	20.49	20.75
GPRS (GMSK)	1Txslot	29.44	29.51	29.76	-9.03dB	20.41	20.48	20.73
	2Txslots	28.41	28.59	28.94	-6.02dB	22.39	22.57	22.92
	3Txslots	26.60	26.84	27.28	-4.26dB	22.34	22.58	23.02
	4Txslots	25.41	25.67	26.12	-3.01dB	22.40	22.66	23.11
EGPRS (GMSK)	1Txslot	29.46	29.53	29.78	-9.03dB	20.43	20.50	20.75
	2Txslots	28.43	28.62	28.97	-6.02dB	22.41	22.60	22.95
	3Txslots	26.63	26.86	27.32	-4.26dB	22.37	22.60	23.06
	4Txslots	25.44	25.71	26.17	-3.01dB	22.43	22.70	23.16

Note:

1) Division Factors

To average the power, the division factor is as follows:

1Txslot = 1 transmit time slot out of 8 time slots

=> conducted power divided by (8/1) => -9.03 dB

2Txslots = 2 transmit time slots out of 8 time slots

=> conducted power divided by (8/2) => -6.02 dB

3Txslots = 3 transmit time slots out of 8 time slots

TA Technology (Shanghai) Co., Ltd.
Test Report

Report No.: RXA1204-0067SAR01R1

Page 31 of 220

=> conducted power divided by (8/3) => -4.26 dB
 4Txslots = 4 transmit time slots out of 8 time slots
 => conducted power divided by (8/4) => -3.01 dB

2) Average power numbers
 The maximum power numbers are marks in bold.

WCDMA Band II		Conducted Power (dBm)		
		Channel 9262	Channel 9400	Channel 9538
RMC		22.52	22.61	22.63
HSDPA	Sub - Test 1	22.66	22.76	22.70
	Sub - Test 2	21.43	21.63	21.66
	Sub - Test 3	21.11	21.27	21.30
	Sub - Test 4	21.10	21.25	21.25
HSUPA	Sub - Test 1	21.03	21.13	21.16
	Sub - Test 2	20.36	20.56	20.55
	Sub - Test 3	20.73	20.85	20.83
	Sub - Test 4	20.38	20.51	20.52
	Sub - Test 5	21.06	21.19	21.23
WCDMA Band V		Conducted Power (dBm)		
		Channel 4132	Channel 4183	Channel 4233
RMC		23.10	21.37	22.64
HSDPA	Sub - Test 1	23.14	21.30	22.68
	Sub - Test 2	22.14	20.19	21.65
	Sub - Test 3	21.67	19.79	21.22
	Sub - Test 4	21.67	19.78	21.12
HSUPA	Sub - Test 1	21.65	19.85	21.22
	Sub - Test 2	21.02	19.21	20.59
	Sub - Test 3	21.25	19.46	20.81
	Sub - Test 4	20.99	19.22	20.56
	Sub - Test 5	21.7	19.83	21.26

TA Technology (Shanghai) Co., Ltd.

Test Report

Report No.: RXA1204-0067SAR01R1

Page 32 of 220

7.2. SAR Test Results

7.2.1. GSM 850 (GPRS/EGPRS)

Table 16: SAR Values [GSM 850 (GPRS/EGPRS)]

Limit of SAR		10 g Average	1 g Average	Power Drift	Graph Results
		2.0 W/kg	1.6 W/kg	± 0.21 dB	
Different Test Position	Channel	Measurement Result(W/kg)		Power Drift (dB)	
		10 g Average	1 g Average		
Test Position of Head with Battery 1					
Left hand, Touch Cheek	High/251	0.275	0.353	0.084	Figure 13
	Middle/190	0.255	0.328	0.092	Figure 14
	Low/128	0.222	0.286	0.197	Figure 15
Left hand, Tilt 15 Degree	High/251	0.195	0.253	0.004	Figure 16
	Middle/190	0.175	0.226	0.003	Figure 17
	Low/128	0.138	0.177	-0.016	Figure 18
Right hand, Touch Cheek	High/251	0.276	0.355	0.025	Figure 19
	Middle/190	0.237	0.305	0.000	Figure 20
	Low/128	0.199	0.255	0.024	Figure 21
Right hand, Tilt 15 Degree	High/251	0.193	0.251	0.003	Figure 22
	Middle/190	0.165	0.213	0.025	Figure 23
	Low/128	0.145	0.187	0.013	Figure 24
Test position of Body with Battery 1 (Distance 10mm)					
Back Side (2Txslots)	High/251	0.636(max.cube)	0.845(max.cube)	-0.153	Figure 25
	Middle/190	0.720(max.cube)	0.946(max.cube)	0.058	Figure 26
	Low/128	0.801(max.cube)	1.060(max.cube)	0.160	Figure 27
Front Side (2Txslots)	Low/128	0.435	0.575	0.187	Figure 28
Left Edge(2Txslots)	Low/128	0.293	0.431	0.013	Figure 29
Right Edge(2Txslots)	Low/128	0.294	0.421	0.043	Figure 30
Top Edge(2Txslots)	N/A	N/A	N/A	N/A	N/A
Bottom Edge(2Txslots)	Low/128	0.044	0.071	0.035	Figure 31
Worst Case Position of Body with EGPRS (Battery 1, GMSK, Distance 10mm)					
Back Side (2Txslots)	Low/128	0.730(max.cube)	0.971(max.cube)	0.004	Figure 32
Worst Case Position of Body with Stereo Headset 1 and Battery 1 (Distance 10mm)					
Back Side(GSM)	Low/128	0.375	0.490	-0.002	Figure 33

TA Technology (Shanghai) Co., Ltd.

Test Report

Report No.: RXA1204-0067SAR01R1

Page 33 of 220

Worst Case Position of Body with Stereo Headset 2 and Battery 1 (Distance 10mm)					
Back Side(GSM)	Low/128	0.416(max.cube)	0.551(max.cube)	-0.005	Figure 34
Worst Case Position of Body with Stereo Headset 3 and Battery 1 (Distance 10mm)					
Back Side(GSM)	Low/128	0.418(max.cube)	0.555(max.cube)	-0.031	Figure 35

- Note: 1. The value with blue color is the maximum SAR Value of each test band.
2. The Head SAR test shall be performed at the high, middle and low frequency channels of each operating mode.
 3. The Body SAR test firstly shall be performed at the maximum source-based time-averaged output power channel of each operating mode. If the SAR measured at highest output power channel for each test configuration is at least 3.0 dB lower than the SAR limit ($< 0.8W/kg$), testing at the other channels is optional, and also other channel were measured at the worst case
 4. WWAN antenna is located at bottom edge; antenna-to-top edge distance is more than 2.5 cm (see ANNEX I). Based upon KDB941225 D06, when the antenna-to-edge distance is greater than 2.5cm, such position does not need to be tested.
 5. When SAR tests for EGPRS mode is necessary, GMSK modulation should be used to minimize SAR measurement error due to higher peak-to-average power (PAR) ratios inherent in 8-PSK.
 6. The (max.cube) labeling indicates that during the grid scanning an additional peak was found which was within 2.0dB of the highest peak. The value of the highest cube is given in the table above.

TA Technology (Shanghai) Co., Ltd.
Test Report

Report No.: RXA1204-0067SAR01R1

Page 34 of 220

7.2.2. GSM 1900 (GPRS/EGPRS)

Table 17: SAR Values [GSM 1900(GPRS/EGPRS)]

Limit of SAR		10 g Average	1 g Average	Power Drift	Graph Results
		2.0 W/kg	1.6 W/kg	± 0.21 dB	
Different Test Position	Channel	Measurement Result(W/kg)		Power Drift (dB)	
		10 g Average	1 g Average		
Test Position of Head with Battery 1					
Left hand, Touch Cheek	High/810	0.277	0.453	0.033	Figure 36
	Middle/661	0.285	0.462	0.077	Figure 37
	Low/512	0.281	0.450	0.059	Figure 38
Left hand, Tilt 15 Degree	High/810	0.120	0.220	0.035	Figure 39
	Middle/661	0.111	0.201	-0.016	Figure 40
	Low/512	0.115	0.206	0.044	Figure 41
Right hand, Touch Cheek	High/810	0.171	0.265	0.008	Figure 42
	Middle/661	0.180	0.295	0.036	Figure 43
	Low/512	0.189	0.304	0.120	Figure 44
Right hand, Tilt 15 Degree	High/810	0.126	0.230	0.029	Figure 45
	Middle/661	0.127	0.228	0.031	Figure 46
	Low/512	0.129	0.229	0.013	Figure 47
Test position of Body with Battery 1 (Distance 10mm)					
Back Side (4Txslots)	High/810	0.575	0.981	-0.020	Figure 48
	Middle/661	0.496	0.802	0.185	Figure 49
	Low/512	0.499	0.799	-0.196	Figure 50
Front Side (4Txslots)	High/810	0.451	0.725	0.029	Figure 51
Left Edge(4Txslots)	High/810	0.158	0.260	0.044	Figure 52
Right Edge(4Txslots)	High/810	0.095	0.157	-0.006	Figure 53
Top Edge(4Txslots)	N/A	N/A	N/A	N/A	N/A
Bottom Edge(4Txslots)	High/810	0.369	0.702	-0.028	Figure 54
Worst Case Position of Body with EGPRS (Battery 1, GMSK, Distance 10mm)					
Back Side (4Txslots)	High/810	0.619	1.050	-0.007	Figure 55
Worst Case Position of Body with Stereo Headset 1 and Battery 1 (Distance 10mm)					
Back Side (GSM)	High/810	0.356	0.596	0.023	Figure 56
Worst Case Position of Body with Stereo Headset 2 and Battery 1 (Distance 10mm)					

TA Technology (Shanghai) Co., Ltd.

Test Report

Report No.: RXA1204-0067SAR01R1

Page 35 of 220

Back Side (GSM)	High/810	0.334(max.cube)	0.574(max.cube)	0.017	Figure 57
Worst Case Position of Body with Stereo Headset 3 and Battery 1 (Distance 10mm)					
Back Side (GSM)	High/810	0.355	0.595	-0.010	Figure 58

Note: 1. The value with blue color is the maximum SAR Value of each test band.

2. The Head SAR test shall be performed at the high, middle and low frequency channels of each operating mode.
3. The Body SAR test firstly shall be performed at the maximum source-based time-averaged output power channel of each operating mode. If the SAR measured at highest output power channel for each test configuration is at least 3.0 dB lower than the SAR limit ($< 0.8W/kg$), testing at the other channels is optional, and also other channel were measured at the worst case
4. WWAN antenna is located at bottom edge; antenna-to-top edge distance is more than 2.5 cm (see ANNEX I). Based upon KDB941225 D06, when the antenna-to-edge distance is greater than 2.5cm, such position does not need to be tested.
5. When SAR tests for EGPRS mode is necessary, GMSK modulation should be used to minimize SAR measurement error due to higher peak-to-average power (PAR) ratios inherent in 8-PSK.
6. The (max.cube) labeling indicates that during the grid scanning an additional peak was found which was within 2.0dB of the highest peak. The value of the highest cube is given in the table above.

TA Technology (Shanghai) Co., Ltd.

Test Report

7.2.3. WCDMA Band II (WCDMA)

Table 18: SAR Values [WCDMA Band II (WCDMA)]

Limit of SAR		10 g Average	1 g Average	Power Drift	Graph Results
		2.0 W/kg	1.6 W/kg	± 0.21 dB	
Different Test Position	Channel	Measurement Result(W/kg)		Power Drift (dB)	
		10 g Average	1 g Average		
Test Position of Head with Battery 1					
Left hand, Touch Cheek	High/9538	0.474	0.780	0.053	Figure 59
	Middle/9400	0.524	0.858	0.043	Figure 60
	Low/9262	0.574	0.932	0.026	Figure 61
Left hand, Tilt 15 Degree	High/9538	0.199	0.364	0.031	Figure 62
	Middle/9400	0.202	0.367	0.009	Figure 63
	Low/9262	0.215	0.384	0.014	Figure 64
Right hand, Touch Cheek	High/9538	0.268	0.407	0.044	Figure 65
	Middle/9400	0.310(max.cube)	0.509(max.cube)	0.048	Figure 66
	Low/9262	0.340(max.cube)	0.548(max.cube)	0.062	Figure 67
Right hand, Tilt 15 Degree	High/9538	0.200	0.365	0.053	Figure 68
	Middle/9400	0.221	0.399	0.040	Figure 69
	Low/9262	0.235	0.421	0.037	Figure 70
Worst Case Position of Head with Battery 2					
Left hand, Touch Cheek	Low/9262	0.535	0.868	0.063	Figure 71
Test position of Body with Battery 1 (Distance 10mm)					
Back Side	High/9538	0.567	0.938	0.030	Figure 72
	Middle/9400	0.602(max.cube)	0.968(max.cube)	0.008	Figure 73
	Low/9262	0.602	0.976	0.007	Figure 74
Front Side	High/9538	0.476	0.762	0.084	Figure 75
Left Edge	High/9538	0.159	0.264	-0.003	Figure 76
Right Edge	High/9538	0.084	0.142	0.000	Figure 77
Top Edge	N/A	N/A	N/A	N/A	N/A
Bottom Edge	High/9538	0.379	0.719	-0.001	Figure 78
Worst Case Position of Body with Stereo Headset 1 and Battery 1 (Distance 10mm)					
Back Side	Low/9262	0.659	1.080	0.030	Figure 79
Worst Case Position of Body with Stereo Headset 2 and Battery 1 (Distance 10mm)					

TA Technology (Shanghai) Co., Ltd.

Test Report

Report No.: RXA1204-0067SAR01R1

Page 37 of 220

Back Side	Low/9262	0.629	1.020	0.030	Figure 80
Worst Case Position of Body with Stereo Headset 3 and Battery 1 (Distance 10mm)					
Back Side	Low/9262	0.637	1.040	0.028	Figure 81
Worst Case Position of Body with Stereo Headset 1 and Battery 2 (Distance 10mm)					
Back Side	Low/9262	0.650	1.060	0.021	Figure 82

Note: 1. The value with blue color is the maximum SAR Value of each test band.

2. The Head SAR test shall be performed at the high, middle and low frequency channels of each operating mode.
3. The Body SAR test firstly shall be performed at the highest output power channel of each operating mode. If the SAR measured at highest output power channel for each test configuration is at least 3.0 dB lower than the SAR limit ($< 0.8\text{W/kg}$), testing at the other channels is optional, and also other channel were measured at the worst case
4. WCDMA mode were tested under RMC 12.2kbps with HSPA (HSDPA/HSUPA) inactive per KDB Publication 941225 D01. HSPA (HSDPA/HSUPA) SAR for body was not required since the average output power of the HSPA (HSDPA/HSUPA) subtests was not more than 0.25 dB higher than the RMC level and the maximum SAR for 12.2kbps RMC was less than 75% SAR limit.
5. WWAN antenna is located at bottom edge; antenna-to-top edge distance is more than 2.5 cm (see ANNEX I). Based upon KDB941225 D06, when the antenna-to-edge distance is greater than 2.5cm, such position does not need to be tested.
6. The (max.cube) labeling indicates that during the grid scanning an additional peak was found which was within 2.0dB of the highest peak. The value of the highest cube is given in the table above.

TA Technology (Shanghai) Co., Ltd.
Test Report

Report No.: RXA1204-0067SAR01R1

Page 38 of 220

7.2.4. WCDMA Band V (WCDMA)

Table 19: SAR Values [WCDMA Band V (WCDMA)]

Limit of SAR		10 g Average	1 g Average	Power Drift	Graph Results
		2.0 W/kg	1.6 W/kg	± 0.21 dB	
Different Test Position	Channel	Measurement Result(W/kg)		Power Drift (dB)	
		10 g Average	1 g Average		
Test Position of Head with Battery 1					
Left hand, Touch Cheek	High/4233	0.257	0.332	0.098	Figure 83
	Middle/4183	0.168	0.217	0.053	Figure 84
	Low/4132	0.188	0.243	0.092	Figure 85
Left hand, Tilt 15 Degree	High/4233	0.156	0.202	0.054	Figure 86
	Middle/4183	0.106	0.137	0.173	Figure 87
	Low/4132	0.113	0.146	0.100	Figure 88
Right hand, Touch Cheek	High/4233	0.270	0.349	-0.101	Figure 89
	Middle/4183	0.183	0.237	0.106	Figure 90
	Low/4132	0.208	0.267	0.188	Figure 91
Right hand, Tilt 15 Degree	High/4233	0.176	0.229	0.053	Figure 92
	Middle/4183	0.121	0.158	0.031	Figure 93
	Low/4132	0.138	0.179	0.044	Figure 94
Test position of Body with Battery 1 (Distance 10mm)					
Back Side	High/4233	0.489(max.cube)	0.649(max.cube)	-0.007	Figure 95
	Middle/4183	0.360	0.478	0.001	Figure 96
	Low/4132	0.506(max.cube)	0.676(max.cube)	-0.004	Figure 97
Front Side	Low/4132	0.238	0.309	0.017	Figure 98
Left Edge	Low/4132	0.158	0.229	0.014	Figure 99
Right Edge	Low/4132	0.170	0.244	0.011	Figure 100
Top Edge	N/A	N/A	N/A	N/A	N/A
Bottom Edge	Low/4132	0.022	0.036	0.062	Figure 101
Worst Case Position of Body with Stereo Headset 1 and Battery 1 (Distance 10mm)					
Back Side	Low/4132	0.388	0.509	0.003	Figure 102
Worst Case Position of Body with Stereo Headset 2 and Battery 1 (Distance 10mm)					
Back Side	Low/4132	0.397	0.525	0.007	Figure 103
Worst Case Position of Body with Stereo Headset 3 and Battery 1 (Distance 10mm)					

TA Technology (Shanghai) Co., Ltd.

Test Report

Report No.: RXA1204-0067SAR01R1

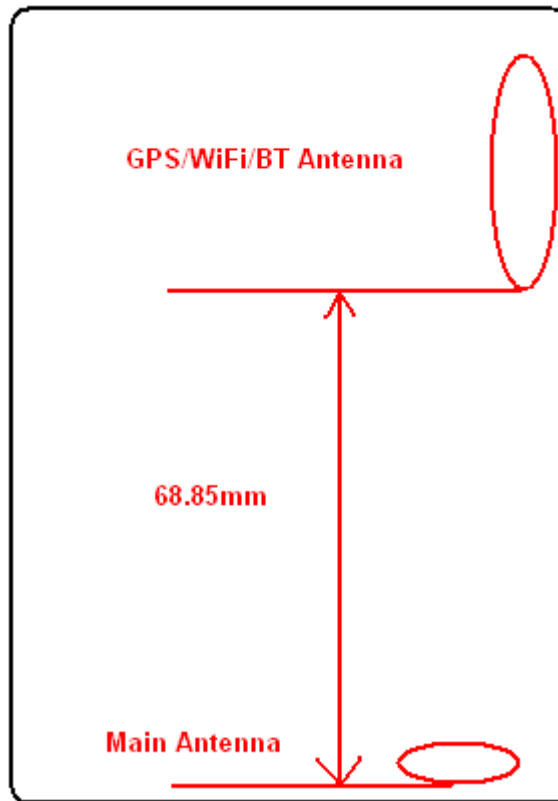
Page 39 of 220

Back Side	Low/4132	0.297	0.456	0.021	Figure 104
<p>Note: 1. The value with blue color is the maximum SAR Value of each test band.</p> <ol style="list-style-type: none">The Head SAR test shall be performed at the high, middle and low frequency channels of each operating mode.The Body SAR test firstly shall be performed at the highest output power channel of each operating mode. If the SAR measured at highest output power channel for each test configuration is at least 3.0 dB lower than the SAR limit ($< 0.8\text{W/kg}$), testing at the other channels is optional, and also other channel were measured at the worst caseWCDMA mode were tested under RMC 12.2kbps with HSPA (HSDPA/HSUPA) inactive per KDB Publication 941225 D01. HSPA (HSDPA/HSUPA) SAR for body was not required since the average output power of the HSPA (HSDPA/HSUPA) subtests was not more than 0.25 dB higher than the RMC level and the maximum SAR for 12.2kbps RMC was less than 75% SAR limit.WWAN antenna is located at bottom edge; antenna-to-top edge distance is more than 2.5 cm (see ANNEX I). Based upon KDB941225 D06, when the antenna-to-edge distance is greater than 2.5cm, such position does not need to be tested.The (max.cube) labeling indicates that during the grid scanning an additional peak was found which was within 2.0dB of the highest peak. The value of the highest cube is given in the table above.					

TA Technology (Shanghai) Co., Ltd. Test Report

7.2.5. Bluetooth/WiFi Function

The distance between BT/WIFI antenna and GSM/WCDMA antenna is $>5\text{cm}$. The location of the antennas inside EUT is shown in Annex I:



The output power of BT antenna is as following:

Channel	Ch 0 2402 MHz	Ch 39 2441 MHz	Ch 78 2480 MHz
GFSK(dBm)	7.62	7.16	8.30
EDR2M-4_DQPSK(dBm)	6.76	6.33	7.58
EDR3M-8DPSK(dBm)	8.38	7.73	8.95

The output power of WIFI antenna is as following:

Mode	Channel	Data rate	AV Power (dBm)
11b	1	1 Mbps	17.00
		2 Mbps	17.04
		5.5 Mbps	17.05
		11 Mbps	17.03
	6	1 Mbps	16.94
		2 Mbps	16.93

TA Technology (Shanghai) Co., Ltd. Test Report

Report No.: RXA1204-0067SAR01R1

Page 41 of 220

	11	5.5 Mbps	16.88
		11 Mbps	16.60
		1 Mbps	16.93
		2 Mbps	16.89
		5.5 Mbps	16.91
		11 Mbps	16.81
		6 Mbps	14.15
11g	1	9 Mbps	14.11
		12 Mbps	14.04
		18 Mbps	14.07
		24 Mbps	13.9
		36 Mbps	14.42
		48 Mbps	13.48
		54 Mbps	13.43
		6	6 Mbps
	9 Mbps		13.6
	12 Mbps		13.58
	18 Mbps		13.62
	24 Mbps		13.53
	36 Mbps		13.47
	48 Mbps		13.53
	54 Mbps		13.5
	11	6 Mbps	13.64
		9 Mbps	13.61
		12 Mbps	13.62
		18 Mbps	13.58
		24 Mbps	13.57
		36 Mbps	13.49
		48 Mbps	13.55
		54 Mbps	13.51
	11n HT20	1	MCS0
MCS1			13.45
MCS2			13.48
MCS3			13.45

TA Technology (Shanghai) Co., Ltd.

Test Report

		MCS4	13.26
		MCS5	13.59
		MCS6	13.65
		MCS7	13.52
	6	MCS0	13.17
		MCS1	13.57
		MCS2	13.19
		MCS3	13.66
		MCS4	13.64
		MCS5	13.65
		MCS6	13.18
		MCS7	13.17
	11	MCS0	13.65
		MCS1	13.46
		MCS2	13.5
		MCS3	13.44
		MCS4	13.46
		MCS5	13.45
		MCS6	13.43
		MCS7	13.42
	Note: 1. KDB 248227-SAR is not required for 802.11g/n HT20 channels when the maximum average output power is less than ¼ dB higher than measured on the corresponding 802.11b channels.		

Output Power Thresholds for Unlicensed Transmitters

	2.45	5.15 - 5.35	5.47 - 5.85	GHz
P_{Ref}	12	6	5	mW
Device output power should be rounded to the nearest mW to compare with values specified in this table.				

Stand-alone SAR

According to the output power measurement result and the distance between BT/WIFI antenna and GSM/WCDMA antenna we can draw the conclusion that:

Stand-alone SAR are required for WIFI, because WIFI antenna is >5cm from other antennas and the output power of WIFI transmitter is $>2P_{Ref} = 13.8\text{dBm}$

TA Technology (Shanghai) Co., Ltd.
Test Report

Report No.: RXA1204-0067SAR01R1

Page 43 of 220

Table 20: SAR Values (802.11b)

Limit of SAR (W/kg)		10 g Average	1g Average	Power Drift (dB)	Graph Results
		2.0	1.6	± 0.21	
Different Test Position	Channel	Measurement Result(W/kg)		Power Drift (dB)	
		10 g Average	1g Average		
Test Position of Head with Battery 1					
Left hand, Touch cheek	Low/1	0.014	0.028	0.040	Figure 105
Left hand, Tilt 15 Degree	Low/1	0.021	0.040	0.095	Figure 106
Right hand, Touch cheek	Low/1	0.035	0.080	0.020	Figure 107
Right hand, Tilt 15 Degree	Low/1	0.028	0.059	0.275	Figure 108
Test position of Body with Battery 1 (Distance 10mm)					
Back Side	Low/1	0.126	0.288	0.071	Figure 109
Front Side	Low/1	0.008	0.015	0.006	Figure 110
Left Edge	Low/1	0.084	0.185	0.025	Figure 111
Right Edge	N/A	N/A	N/A	N/A	N/A
Top Edge	Low/1	0.017	0.030	0.094	Figure 112
Bottom Edge	N/A	N/A	N/A	N/A	N/A

Note: 1. The value with blue color is the maximum SAR Value of each test band.

2. SAR test at the channel with maximum averaged output power, if the SAR value is at least 3.0 dB lower than the SAR limit (< 0.8W/kg), testing at the other channels is optional.
3. WLAN antenna is located at Left edge, near to Top edge; antenna-to- Right/Bottom edge distance are more than 2.5 cm (see ANNEX I). Based upon KDB941225 D06, when the antenna-to-edge distance is greater than 2.5cm, such position does not need to be tested.
4. KDB 248227-SAR is not required for 802.11g/n HT20 channels when the maximum average output power is less than ¼ dB higher than measured on the corresponding 802.11b channels.

TA Technology (Shanghai) Co., Ltd.

Test Report

Report No.: RXA1204-0067SAR01R1

Page 44 of 220

BT antenna is $>5\text{cm}$ from GSM/WCDMA antenna, stand-alone SAR is not required for BT, because the output power of BT transmitter is $\leq 2P_{\text{Ref}} = 13.8\text{dBm}$.

BT antenna is $<2.5\text{cm}$ from WIFI antenna and the output power of BT transmitter is $\leq P_{\text{Ref}} = 10.8\text{dBm}$, stand-alone SAR is not required for BT, because $\text{SAR}_{\text{MAX.WIFI}} \leq 1.2\text{W/Kg}$.

Simultaneous SAR

About WIFI and GSM/WCDMA Antenna,

SAR _{1g} (W/kg)						
Test Position	GSM850	GSM1900	WCDMA Band II	WCDMA Band V	WIFI (802.11b)	MAX. ΣSAR_{1g}
Left hand, Touch cheek	0.353	0.462	0.932	0.332	0.028	0.960
Left hand, Tilt 15 Degree	0.253	0.220	0.384	0.202	0.040	0.424
Right hand, Touch cheek	0.355	0.304	0.548	0.349	0.080	0.628
Right hand, Tilt 15 Degree	0.251	0.230	0.421	0.229	0.059	0.480
Body, Back Side	1.060	1.050	1.080	0.676	0.288	1.368
Body, Front Side	0.575	0.725	0.762	0.309	0.015	0.777
Body, Left Edge	0.431	0.260	0.264	0.229	0.185	0.616
Body, Right Edge	0.421	0.157	0.142	0.244	N/A	0.421
Body, Top Edge	N/A	N/A	N/A	N/A	0.030	0.030
Body, Bottom Edge	0.071	0.702	0.719	0.036	N/A	0.719

Note: 1. The value with blue color is the maximum ΣSAR_{1g} Value.
 2. MAX. $\Sigma\text{SAR}_{1g} = \text{Unlicensed SAR}_{\text{MAX}} + \text{Licensed SAR}_{\text{MAX}}$

WIFI antenna is $>5\text{cm}$ from GSM/WCDMA Antenna. $(\text{GSM/WCDMA Antenna SAR}_{\text{MAX}}) 1.080 + (\text{WIFI Antenna SAR}_{\text{MAX}}) 0.288 = 1.368 < 1.6$. So the Simultaneous SAR are not required for BT and GSM/WCDMA antenna.

TA Technology (Shanghai) Co., Ltd.

Test Report

Report No.: RXA1204-0067SAR01R1

Page 45 of 220

About BT and GSM/WCDMA Antenna,

SAR _{1g} (W/kg) Test Position	GSM850	GSM1900	WCDMA Band II	WCDMA Band V	BT	MAX. ΣSAR _{1g}
Left hand, Touch cheek	0.353	0.462	0.932	0.332	0	0.932
Left hand, Tilt 15 Degree	0.253	0.220	0.384	0.202	0	0.384
Right hand, Touch cheek	0.355	0.304	0.548	0.349	0	0.548
Right hand, Tilt 15 Degree	0.251	0.230	0.421	0.229	0	0.421
Body, Back Side	1.060	1.050	1.080	0.676	0	1.080
Body, Front Side	0.575	0.725	0.762	0.309	0	0.762
Body, Left Edge	0.431	0.260	0.264	0.229	0	0.431
Body, Right Edge	0.421	0.157	0.142	0.244	0	0.421
Body, Top Edge	N/A	N/A	N/A	N/A	0	0
Body, Bottom Edge	0.071	0.702	0.719	0.036	0	0.719

Note: 1. The value with blue color is the maximum ΣSAR_{1g} Value.

2. MAX. ΣSAR_{1g} = Unlicensed SAR_{MAX} + Licensed SAR_{MAX}

3. Stand alone SAR for BT is not required. Its SAR is considered 0 in the 1-g SAR summing process to determine simultaneous transmission SAR evaluation requirements.

BT antenna is >5cm from GSM/WCDMA Antenna. (GSM/WCDMA Antenna SAR_{MAX})1.080 +(BT Antenna SAR_{MAX})0 =1.080 < 1.6. So the Simultaneous SAR are not required for BT and GSM/WCDMA antenna.

About BT and WIFI Antenna, BT antenna is <2.5cm from WIFI Antenna. (BT Antenna SAR_{MAX}) 0 +(WIFI Antenna SAR_{MAX})0.288 =0.288 < 1.6, So the Simultaneous SAR are not required for WIFI and BT Antenna.

TA Technology (Shanghai) Co., Ltd.
Test Report

Report No.: RXA1204-0067SAR01R1

Page 46 of 220

8. Measurement Uncertainty

No.	source	Type	Uncertainty Value (%)	Probability Distribution	k	c _i	Standard uncertainty u _i (%)	Degree of freedom V _{eff} or V _i
1	System repetivity	A	0.5	N	1	1	0.5	9
Measurement system								
2	-probe calibration	B	6.0	N	1	1	6.0	∞
3	-axial isotropy of the probe	B	4.7	R	$\sqrt{3}$	$\sqrt{0.5}$	1.9	∞
4	- Hemispherical isotropy of the probe	B	9.4	R	$\sqrt{3}$	$\sqrt{0.5}$	3.9	∞
6	-boundary effect	B	1.9	R	$\sqrt{3}$	1	1.1	∞
7	-probe linearity	B	4.7	R	$\sqrt{3}$	1	2.7	∞
8	- System detection limits	B	1.0	R	$\sqrt{3}$	1	0.6	∞
9	-readout Electronics	B	1.0	N	1	1	1.0	∞
10	-response time	B	0	R	$\sqrt{3}$	1	0	∞
11	-integration time	B	4.32	R	$\sqrt{3}$	1	2.5	∞
12	-noise	B	0	R	$\sqrt{3}$	1	0	∞
13	-RF Ambient Conditions	B	3	R	$\sqrt{3}$	1	1.73	∞
14	-Probe Positioner Mechanical Tolerance	B	0.4	R	$\sqrt{3}$	1	0.2	∞
15	-Probe Positioning with respect to Phantom Shell	B	2.9	R	$\sqrt{3}$	1	1.7	∞
16	-Extrapolation, interpolation and Integration Algorithms for Max. SAR Evaluation	B	3.9	R	$\sqrt{3}$	1	2.3	∞
Test sample Related								
17	-Test Sample Positioning	A	2.9	N	1	1	2.9	71
18	-Device Holder Uncertainty	A	4.1	N	1	1	4.1	5
19	-Output Power Variation - SAR drift measurement	B	5.0	R	$\sqrt{3}$	1	2.9	∞
Physical parameter								
20	-phantom	B	4.0	R	$\sqrt{3}$	1	2.3	∞

TA Technology (Shanghai) Co., Ltd.
Test Report

Report No.: RXA1204-0067SAR01R1

Page 47 of 220

21	-liquid conductivity (deviation from target)	B	5.0	R	$\sqrt{3}$	0.64	1.8	∞
22	-liquid conductivity (measurement uncertainty)	B	2.5	N	1	0.64	1.6	9
23	-liquid permittivity (deviation from target)	B	5.0	R	$\sqrt{3}$	0.6	1.7	∞
24	-liquid permittivity (measurement uncertainty)	B	2.5	N	1	0.6	1.5	9
Combined standard uncertainty		$u_c = \sqrt{\sum_{i=1}^{21} c_i^2 u_i^2}$					12.16	
Expanded uncertainty (confidence interval of 95 %)		$u_e = 2u_c$		N	k=2	23.00		

TA Technology (Shanghai) Co., Ltd.
Test Report

Report No.: RXA1204-0067SAR01R1

Page 48 of 220

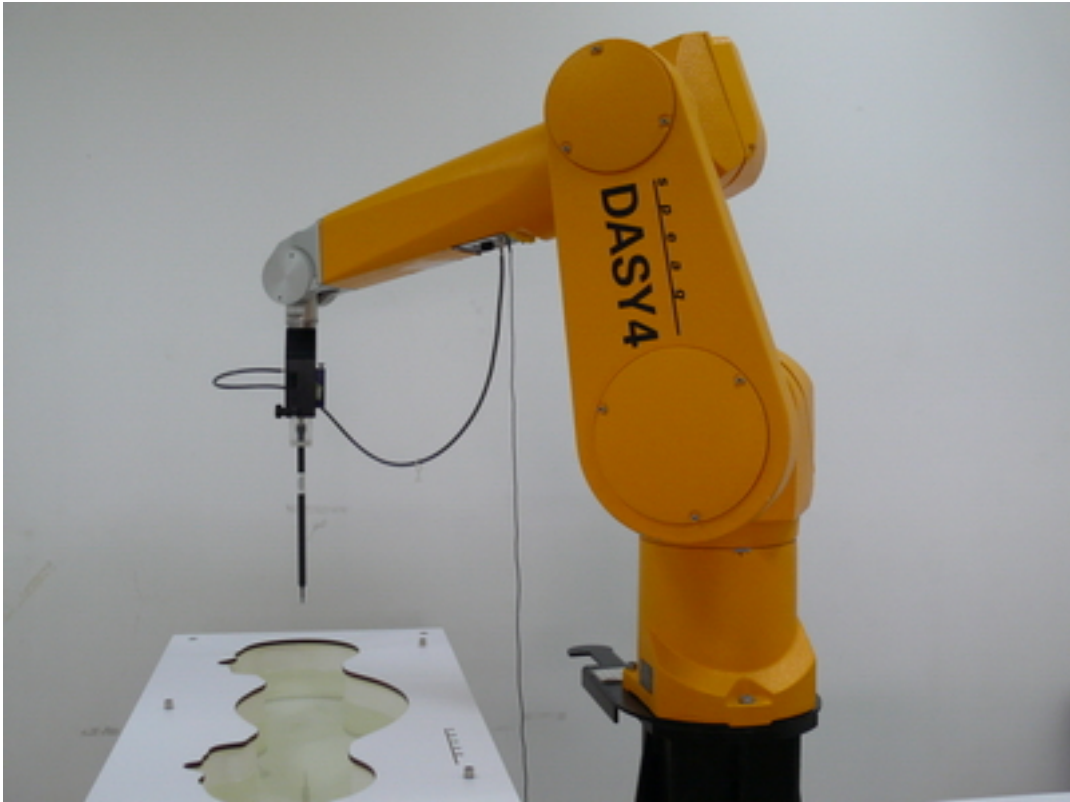
9. Main Test Instruments

Table 21: List of Main Instruments

No.	Name	Type	Serial Number	Calibration Date	Valid Period
01	Network analyzer	Agilent 8753E	US37390326	September 12, 2011	One year
02	Dielectric Probe Kit	Agilent 85070E	US44020115	No Calibration Requested	
03	Power meter	Agilent E4417A	GB41291714	March 11, 2012	One year
04	Power sensor	Agilent N8481H	MY50350004	September 25, 2011	One year
05	Power sensor	E9327A	US40441622	September 24, 2011	One year
06	Signal Generator	HP 8341B	2730A00804	September 12, 2011	One year
07	Dual directional coupler	778D-012	50519	March 26, 2012	One year
08	Dual directional coupler	777D	50146	March 26, 2012	One year
09	Amplifier	IXA-020	0401	No Calibration Requested	
10	BTS	E5515C	MY48360988	December 2, 2011	One year
11	E-field Probe	EX3DV4	3816	October 3, 2011	One year
12	DAE	DAE4	1317	January 23, 2012	One year
13	Validation Kit 835MHz	D835V2	4d020	August 26, 2011	One year
14	Validation Kit 1900MHz	D1900V2	5d060	August 31, 2011	One year
15	Validation Kit 2450MHz	D2450V2	786	August 29, 2011	One year
16	Temperature Probe	JM222	AA1009129	March 15, 2012	One year
17	Hygrothermograph	WS-1	64591	September 28, 2011	One year

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

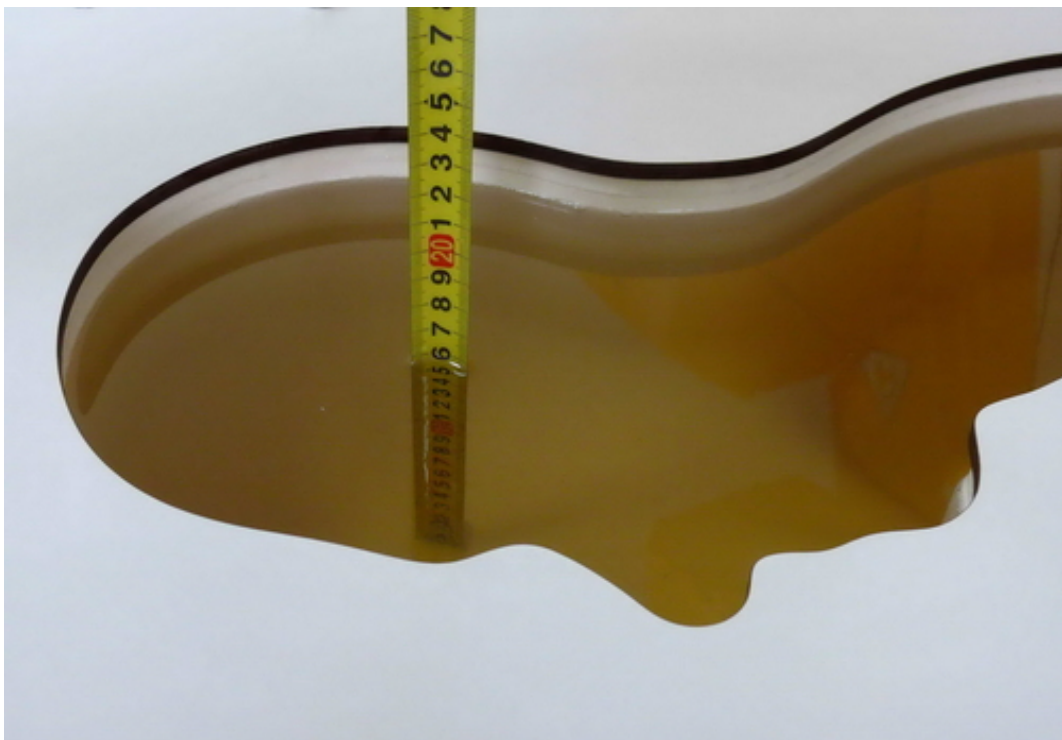
ANNEX A: Test Layout



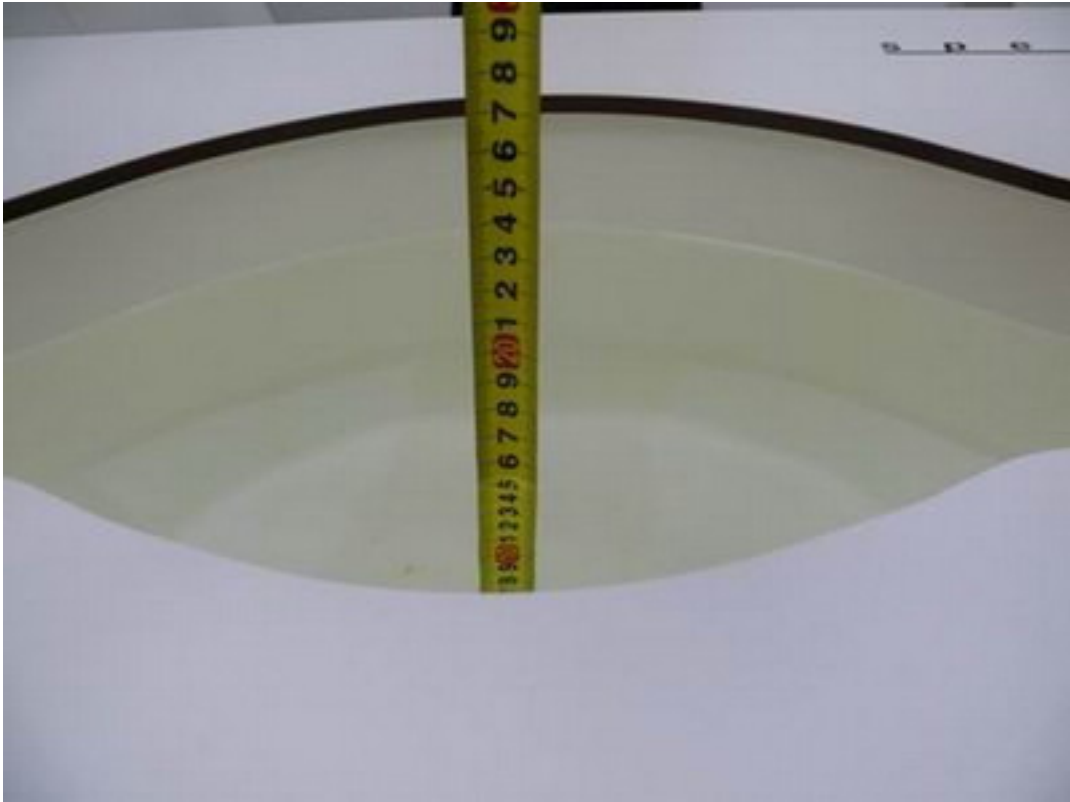
Picture 1: Specific Absorption Rate Test Layout



Picture 2: Liquid depth in the flat Phantom (835MHz, 15.4cm depth)



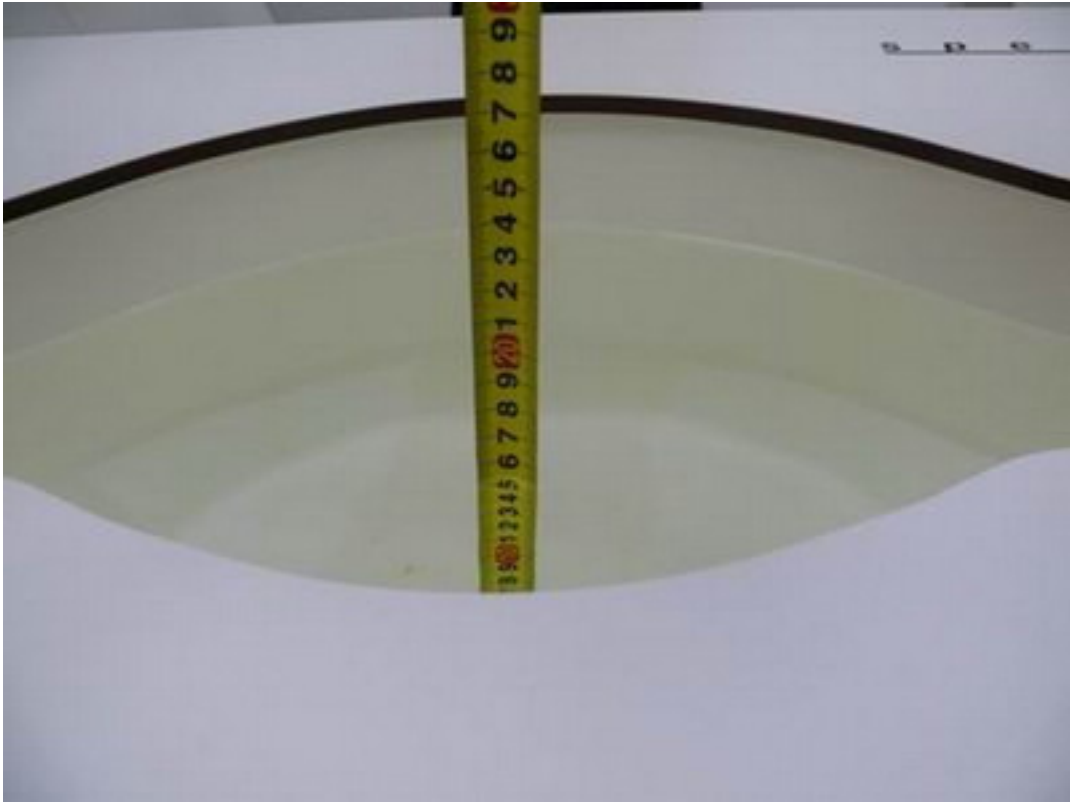
Picture 3: Liquid depth in the head Phantom (835MHz, 15.3cm depth)



Picture 4: Liquid depth in the flat Phantom (1900 MHz, 15.2cm depth)



Picture 5: liquid depth in the head Phantom (1900 MHz, 15.3cm depth)



Picture 6: Liquid depth in the flat Phantom (2450 MHz, 15.4cm depth)



Picture 7: liquid depth in the head Phantom (2450 MHz, 15.2cm depth)

ANNEX B: System Check Results

System Performance Check at 835 MHz Head TSL

DUT: Dipole 835 MHz; Type: D835V2; Serial: D835V2 - SN: 4d020

Date/Time: 4/24/2012 1:28:49 PM

Communication System: CW; Frequency: 835 MHz; Duty Cycle: 1:1

Medium parameters used: $f = 835$ MHz; $\sigma = 0.888$ mho/m; $\epsilon_r = 42.3$; $\rho = 1000$ kg/m³

Ambient Temperature: 22.3 °C Liquid Temperature: 21.5 °C

Phantom section: Flat Section

DASY4 Configuration:

Probe: EX3DV4 - SN3816; ConvF(9.22, 9.22, 9.22); Calibrated: 10/3/2011

Electronics: DAE4 Sn1317; Calibrated: 1/23/2012

Phantom: SAM 12; Type: SAM V4.0; Serial: TP-1246

Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 186

d=15mm, Pin=250mW/Area Scan (41x121x1): Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (interpolated) = 2.57 mW/g

d=15mm, Pin=250mW/Zoom Scan (7x7x7) /Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 53.9 V/m; Power Drift = -0.019 dB

Peak SAR (extrapolated) = 3.57 W/kg

SAR(1 g) = 2.38 mW/g; SAR(10 g) = 1.57 mW/g

Maximum value of SAR (measured) = 2.56 mW/g

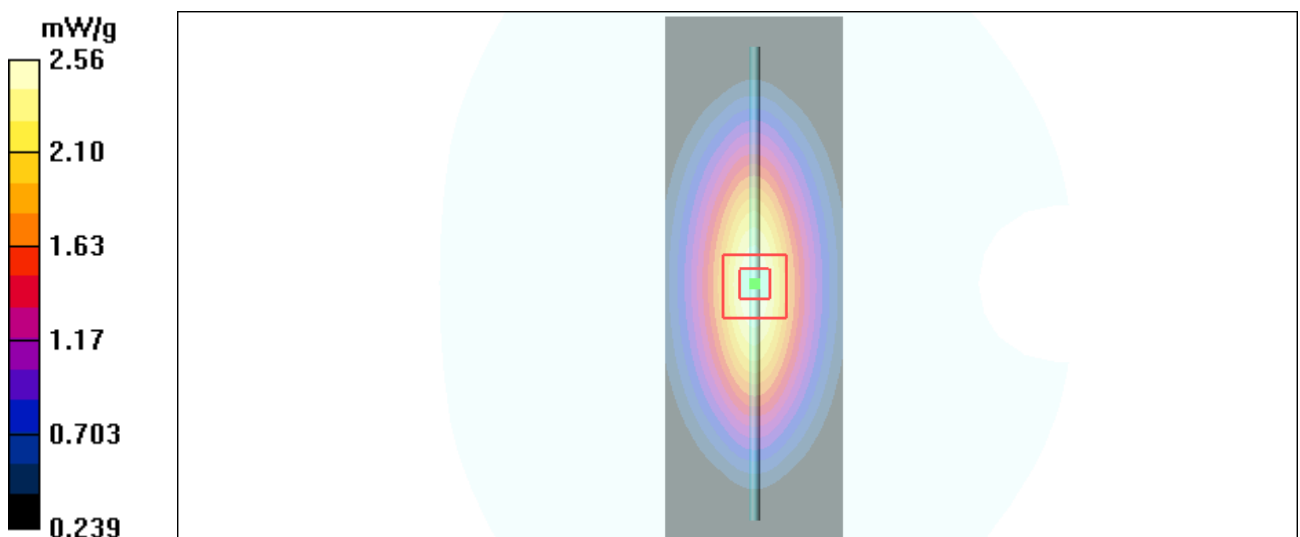


Figure 7 System Performance Check 835MHz 250mW

System Performance Check at 835 MHz Body TSL

DUT: Dipole 835 MHz; Type: D835V2; Serial: D835V2 - SN: 4d020

Date/Time: 4/25/2012 6:15:34 AM

Communication System: CW; Frequency: 835 MHz; Duty Cycle: 1:1

Medium parameters used: $f = 835 \text{ MHz}$; $\sigma = 0.986 \text{ mho/m}$; $\epsilon_r = 54.3$; $\rho = 1000 \text{ kg/m}^3$

Ambient Temperature: 22.3 °C Liquid Temperature: 21.5 °C

Phantom section: Flat Section

DASY4 Configuration:

Probe: EX3DV4 - SN3816; ConvF(9.38, 9.38, 9.38); Calibrated: 10/3/2011

Electronics: DAE4 Sn1317; Calibrated: 1/23/2012

Phantom: SAM 12; Type: SAM V4.0; Serial: TP-1246

Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 186

d=15mm, Pin=250mW/Area Scan (41x121x1): Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (interpolated) = 2.66 mW/g

d=15mm, Pin=250mW/Zoom Scan (7x7x7) /Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 52.1 V/m; Power Drift = -0.015 dB

Peak SAR (extrapolated) = 3.58 W/kg

SAR(1 g) = 2.4 mW/g; SAR(10 g) = 1.58 mW/g

Maximum value of SAR (measured) = 2.58 mW/g

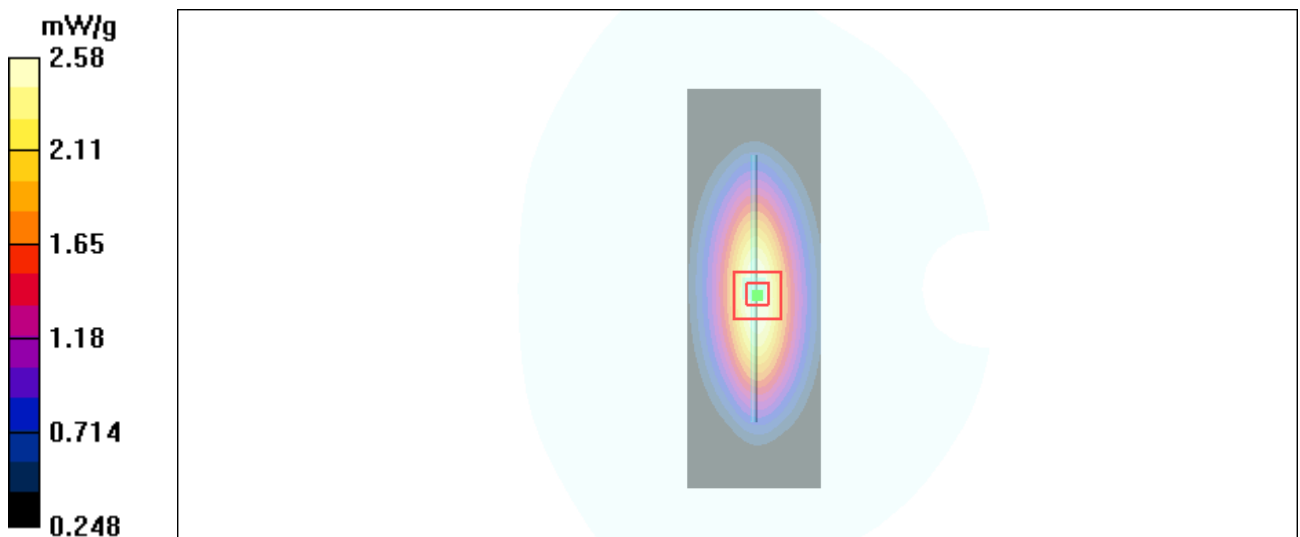


Figure 8 System Performance Check 835MHz 250mW

System Performance Check at 1900 MHz Head TSL

DUT: Dipole 1900 MHz; Type: D1900V2; Serial: D1900V2 - SN: 5d060

Date/Time: 4/25/2012 1:40:39 PM

Communication System: CW; Frequency: 1900 MHz; Duty Cycle: 1:1

Medium parameters used: $f = 1900$ MHz; $\sigma = 1.39$ mho/m; $\epsilon_r = 40.1$; $\rho = 1000$ kg/m³

Ambient Temperature: 22.3 °C Liquid Temperature: 21.5 °C

Phantom section: Flat Section

DASY4 Configuration:

Probe: EX3DV4 - SN3816; ConvF(7.9, 7.9, 7.9); Calibrated: 10/3/2011

Electronics: DAE4 Sn1317; Calibrated: 1/23/2012

Phantom: SAM000 T01; Type: SAM V4.0; Serial: TP-1246

Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 186

d=10mm, Pin=250mW /Area Scan (61x81x1): Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (interpolated) = 11.3 mW/g

d=10mm, Pin=250mW /Zoom Scan (7x7x7) /Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 88.6 V/m; Power Drift = -0.016 dB

Peak SAR (extrapolated) = 17.8 W/kg

SAR(1 g) = 9.69 mW/g; SAR(10 g) = 5.08 mW/g

Maximum value of SAR (measured) = 10.9 mW/g

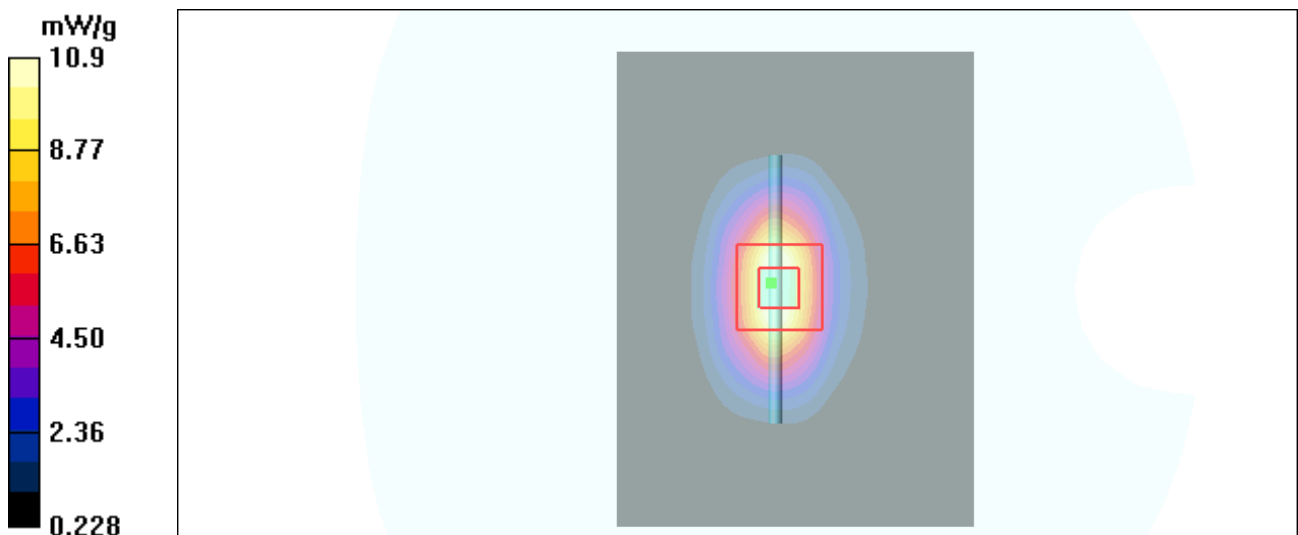


Figure 9 System Performance Check 1900MHz 250mW

System Performance Check at 1900 MHz Body TSL

DUT: Dipole 1900 MHz; Type: D1900V2; Serial: D1900V2 - SN: 5d060

Date/Time: 4/24/2012 11:06:33 AM

Communication System: CW; Frequency: 1900 MHz; Duty Cycle: 1:1

Medium parameters used: $f = 1900$ MHz; $\sigma = 1.56$ mho/m; $\epsilon_r = 52$; $\rho = 1000$ kg/m³

Ambient Temperature: 22.3 °C Liquid Temperature: 21.5 °C

Phantom section: Flat Section

DASY4 Configuration:

Probe: EX3DV4 - SN3816; ConvF(7.51, 7.51, 7.51); Calibrated: 10/3/2011

Electronics: DAE4 Sn1317; Calibrated: 1/23/2012

Phantom: SAM000 T01; Type: SAM V4.0; Serial: TP-1246

Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 186

d=10mm, Pin=250mW/Area Scan (41x81x1): Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (interpolated) = 12.1 mW/g

d=10mm, Pin=250mW/Zoom Scan (7x7x7) /Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 85.3 V/m; Power Drift = -0.006 dB

Peak SAR (extrapolated) = 18.7 W/kg

SAR(1 g) = 10.2 mW/g; SAR(10 g) = 5.35 mW/g

Maximum value of SAR (measured) = 11.5 mW/g

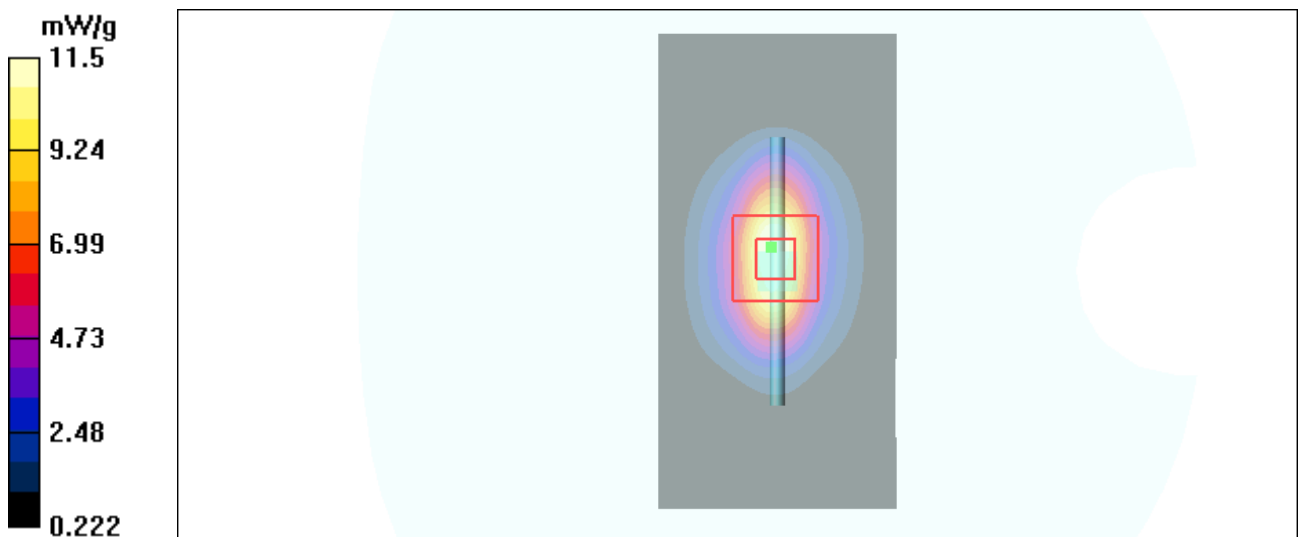


Figure 10 System Performance Check 1900MHz 250Mw

System Performance Check at 2450 MHz Head TSL

DUT: Dipole 2450 MHz; Type: D2450V2; Serial: D2450V2 - SN: 786

Date/Time: 4/26/2012 2:02:47 AM

Communication System: CW; Frequency: 2450 MHz; Duty Cycle: 1:1

Medium parameters used: $f = 2450$ MHz; $\sigma = 1.88$ mho/m; $\epsilon_r = 38.3$; $\rho = 1000$ kg/m³

Ambient Temperature: 22.3 °C Liquid Temperature: 21.5 °C

Phantom section: Flat Section

DASY4 Configuration:

Probe: EX3DV4 - SN3816; ConvF(7.17, 7.17, 7.17); Calibrated: 10/3/2011

Electronics: DAE4 Sn1317; Calibrated: 1/23/2012

Phantom: SAM000 T01; Type: SAM V4.0; Serial: TP-1246

Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 186

d=10mm, Pin=250mW/Area Scan (41x71x1): Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (interpolated) = 18.1 mW/g

d=10mm, Pin=250mW/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 92.1 V/m; Power Drift = 0.068 dB

Peak SAR (extrapolated) = 31.0 W/kg

SAR(1 g) = 14.6 mW/g; SAR(10 g) = 6.67 mW/g

Maximum value of SAR (measured) = 16.5 mW/g

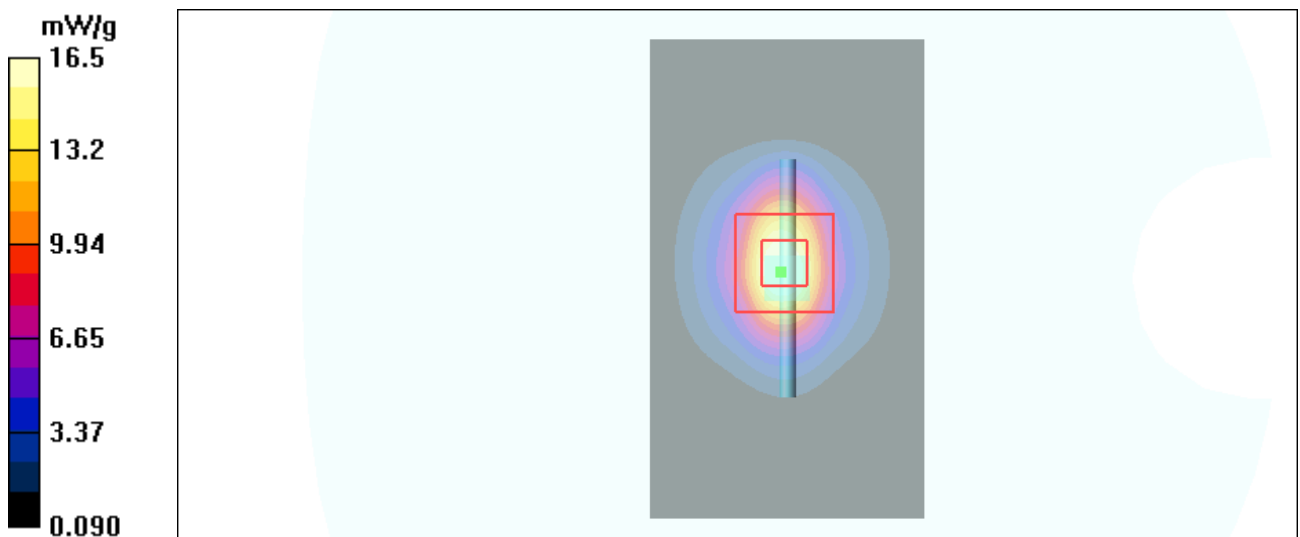


Figure 11 System Performance Check 2450MHz 250mW

System Performance Check at 2450 MHz Body TSL

DUT: Dipole 2450 MHz; Type: D2450V2; Serial: D2450V2 - SN: 786

Date/Time: 4/25/2012 10:46:59 PM

Communication System: CW; Frequency: 2450 MHz; Duty Cycle: 1:1

Medium parameters used: $f = 2450$ MHz; $\sigma = 1.9$ mho/m; $\epsilon_r = 51.7$; $\rho = 1000$ kg/m³

Ambient Temperature: 22.3 °C Liquid Temperature: 21.5 °C

Phantom section: Flat Section

DASY4 Configuration:

Probe: EX3DV4 - SN3816; ConvF(7.19, 7.19, 7.19); Calibrated: 10/3/2011

Electronics: DAE4 Sn1317; Calibrated: 1/23/2012

Phantom: SAM000 T01; Type: SAM V4.0; Serial: TP-1246

Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 186

d=10mm, Pin=250mW/Area Scan (71x71x1): Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (interpolated) = 15.4 mW/g

d=10mm, Pin=250mW/Zoom Scan (7x7x7) /Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 87.9 V/m; Power Drift = -0.005 dB

Peak SAR (extrapolated) = 23.6 W/kg

SAR(1 g) = 12.2 mW/g; SAR(10 g) = 5.84 mW/g

Maximum value of SAR (measured) = 14.1 mW/g

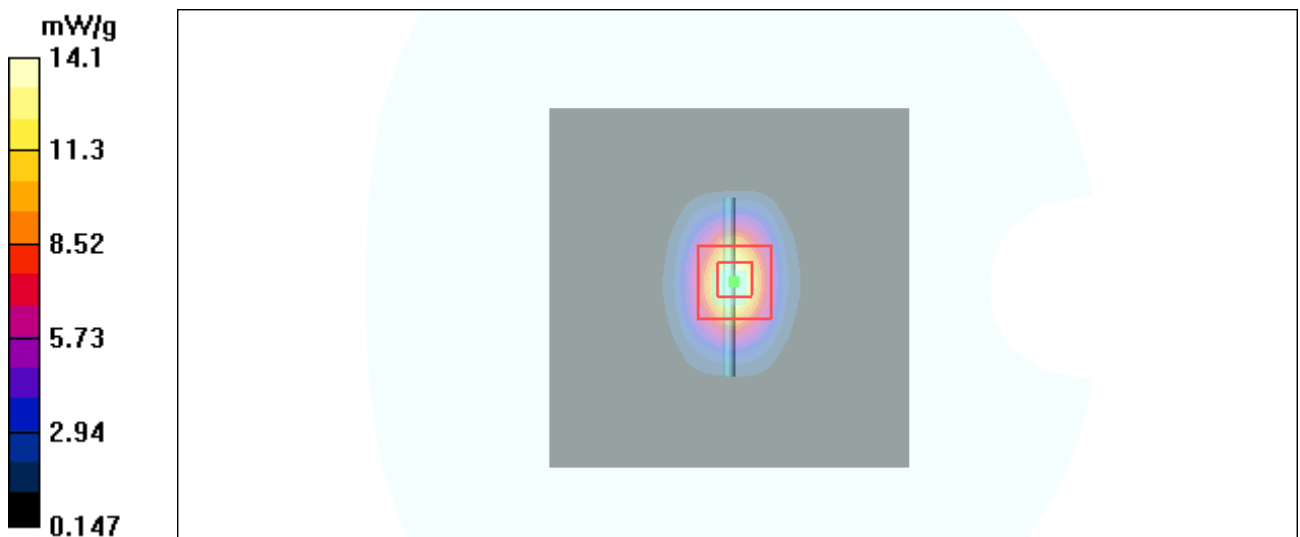


Figure 12 System Performance Check 2450MHz 250mW

ANNEX C: Graph Results

GSM 850 Left Cheek High (Battery 1)

Date/Time: 4/24/2012 2:22:58 PM

Communication System: GSM850; Frequency: 848.8 MHz; Duty Cycle: 1:8.3

Medium parameters used: $f = 849$ MHz; $\sigma = 0.901$ mho/m; $\epsilon_r = 42.1$; $\rho = 1000$ kg/m³

Ambient Temperature: 22.3 °C Liquid Temperature: 21.5°C

Phantom section: Left Section

DASY4 Configuration:

Probe: EX3DV4 - SN3816; ConvF(9.22, 9.22, 9.22); Calibrated: 10/3/2011

Electronics: DAE4 Sn1317; Calibrated: 1/23/2012

Phantom: SAM 12; Type: SAM V4.0; Serial: TP-1246

Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 186

Cheek High/Area Scan (61x101x1): Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (interpolated) = 0.373 mW/g

Cheek High/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 6.37 V/m; Power Drift = 0.084 dB

Peak SAR (extrapolated) = 0.428 W/kg

SAR(1 g) = 0.353 mW/g; SAR(10 g) = 0.275 mW/g

Maximum value of SAR (measured) = 0.369 mW/g

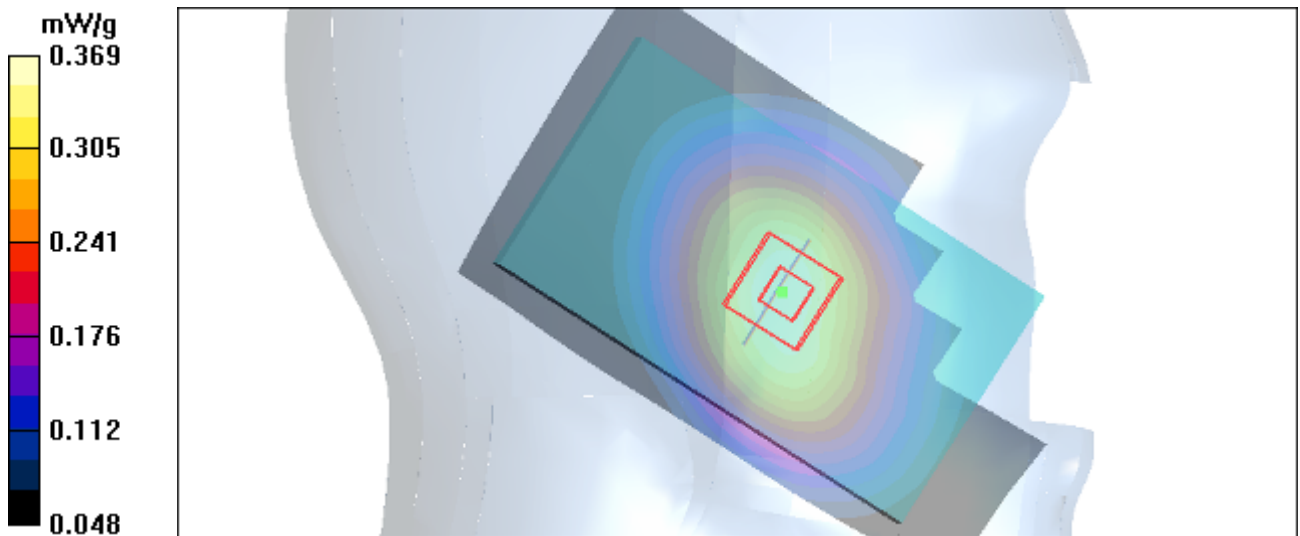


Figure 13 Left Hand Touch Cheek GSM 850 Channel 251

GSM 850 Left Cheek Middle (Battery 1)

Date/Time: 4/24/2012 2:38:36 PM

Communication System: GSM850; Frequency: 836.6 MHz; Duty Cycle: 1:8.3

Medium parameters used: $f = 837$ MHz; $\sigma = 0.89$ mho/m; $\epsilon_r = 42.3$; $\rho = 1000$ kg/m³

Ambient Temperature: 22.3 °C Liquid Temperature: 21.5°C

Phantom section: Left Section

DASY4 Configuration:

Probe: EX3DV4 - SN3816; ConvF(9.22, 9.22, 9.22); Calibrated: 10/3/2011

Electronics: DAE4 Sn1317; Calibrated: 1/23/2012

Phantom: SAM 12; Type: SAM V4.0; Serial: TP-1246

Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 186

Cheek Middle/Area Scan (61x101x1): Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (interpolated) = 0.348 mW/g

Cheek Middle/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 6.14 V/m; Power Drift = 0.092 dB

Peak SAR (extrapolated) = 0.396 W/kg

SAR(1 g) = 0.328 mW/g; SAR(10 g) = 0.255 mW/g

Maximum value of SAR (measured) = 0.344 mW/g

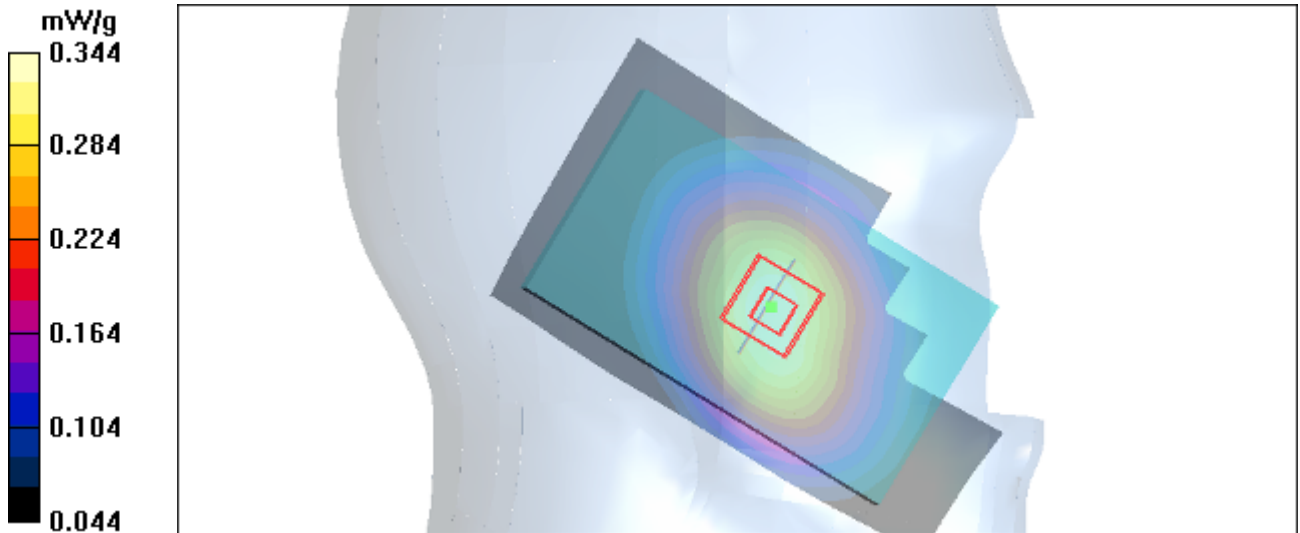


Figure 14 Left Hand Touch Cheek GSM 850 Channel 190

GSM 850 Left Cheek Low (Battery 1)

Date/Time: 4/24/2012 2:06:25 PM

Communication System: GSM850; Frequency: 824.2 MHz; Duty Cycle: 1:8.3

Medium parameters used (interpolated): $f = 824.2$ MHz; $\sigma = 0.878$ mho/m; $\epsilon_r = 42.4$; $\rho = 1000$ kg/m³

Ambient Temperature: 22.3 °C Liquid Temperature: 21.5°C

Phantom section: Left Section

DASY4 Configuration:

Probe: EX3DV4 - SN3816; ConvF(9.22, 9.22, 9.22); Calibrated: 10/3/2011

Electronics: DAE4 Sn1317; Calibrated: 1/23/2012

Phantom: SAM 12; Type: SAM V4.0; Serial: TP-1246

Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 186

Cheek Low/Area Scan (61x101x1): Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (interpolated) = 0.305 mW/g

Cheek Low/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 5.65 V/m; Power Drift = 0.197 dB

Peak SAR (extrapolated) = 0.346 W/kg

SAR(1 g) = 0.286 mW/g; SAR(10 g) = 0.222 mW/g

Maximum value of SAR (measured) = 0.298 mW/g

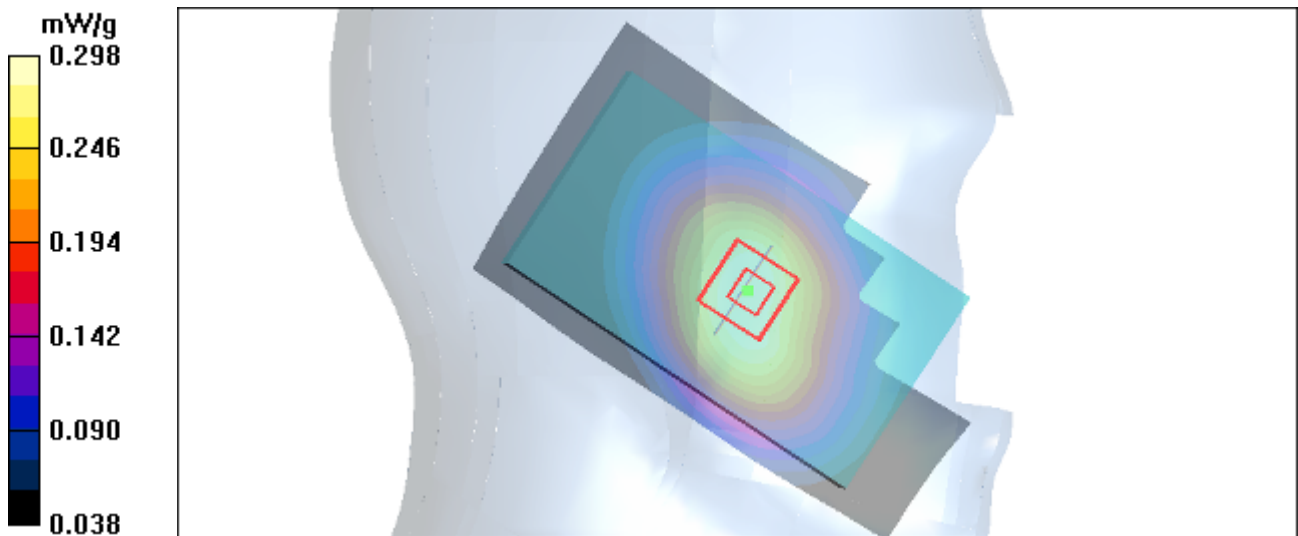


Figure 15 Left Hand Touch Cheek GSM 850 Channel 128

GSM 850 Left Tilt High (Battery 1)

Date/Time: 4/24/2012 3:10:53 PM

Communication System: GSM850; Frequency: 848.8 MHz; Duty Cycle: 1:8.3

Medium parameters used: $f = 849$ MHz; $\sigma = 0.901$ mho/m; $\epsilon_r = 42.1$; $\rho = 1000$ kg/m³

Ambient Temperature: 22.3 °C Liquid Temperature: 21.5°C

Phantom section: Left Section

DASY4 Configuration:

Probe: EX3DV4 - SN3816; ConvF(9.22, 9.22, 9.22); Calibrated: 10/3/2011

Electronics: DAE4 Sn1317; Calibrated: 1/23/2012

Phantom: SAM 12; Type: SAM V4.0; Serial: TP-1246

Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 186

Tilt High/Area Scan (61x101x1): Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (interpolated) = 0.265 mW/g

Tilt High/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 10.3 V/m; Power Drift = 0.004 dB

Peak SAR (extrapolated) = 0.311 W/kg

SAR(1 g) = 0.253 mW/g; SAR(10 g) = 0.195 mW/g

Maximum value of SAR (measured) = 0.265 mW/g

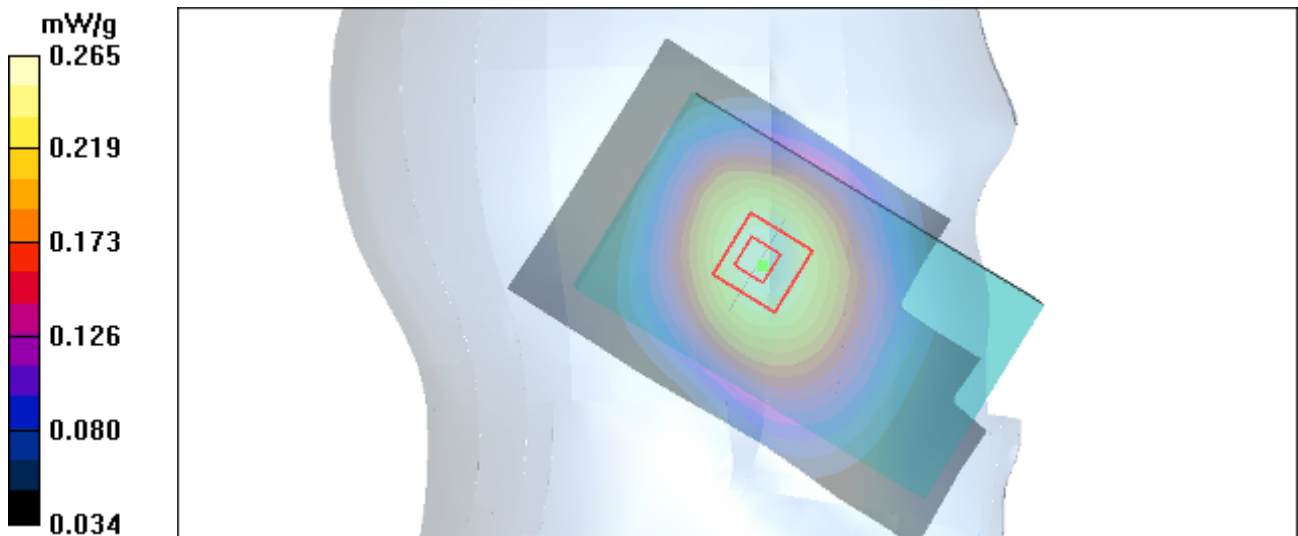


Figure 16 Left Hand Tilt 15° GSM 850 Channel 251

GSM 850 Left Tilt Middle (Battery 1)

Date/Time: 4/24/2012 2:54:00 PM

Communication System: GSM850; Frequency: 836.6 MHz; Duty Cycle: 1:8.3

Medium parameters used: $f = 837$ MHz; $\sigma = 0.89$ mho/m; $\epsilon_r = 42.3$; $\rho = 1000$ kg/m³

Ambient Temperature: 22.3 °C Liquid Temperature: 21.5°C

Phantom section: Left Section

DASY4 Configuration:

Probe: EX3DV4 - SN3816; ConvF(9.22, 9.22, 9.22); Calibrated: 10/3/2011

Electronics: DAE4 Sn1317; Calibrated: 1/23/2012

Phantom: SAM 12; Type: SAM V4.0; Serial: TP-1246

Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 186

Tilt Middle/Area Scan (61x101x1): Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (interpolated) = 0.238 mW/g

Tilt Middle/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 9.79 V/m; Power Drift = 0.003 dB

Peak SAR (extrapolated) = 0.278 W/kg

SAR(1 g) = 0.226 mW/g; SAR(10 g) = 0.175 mW/g

Maximum value of SAR (measured) = 0.237 mW/g

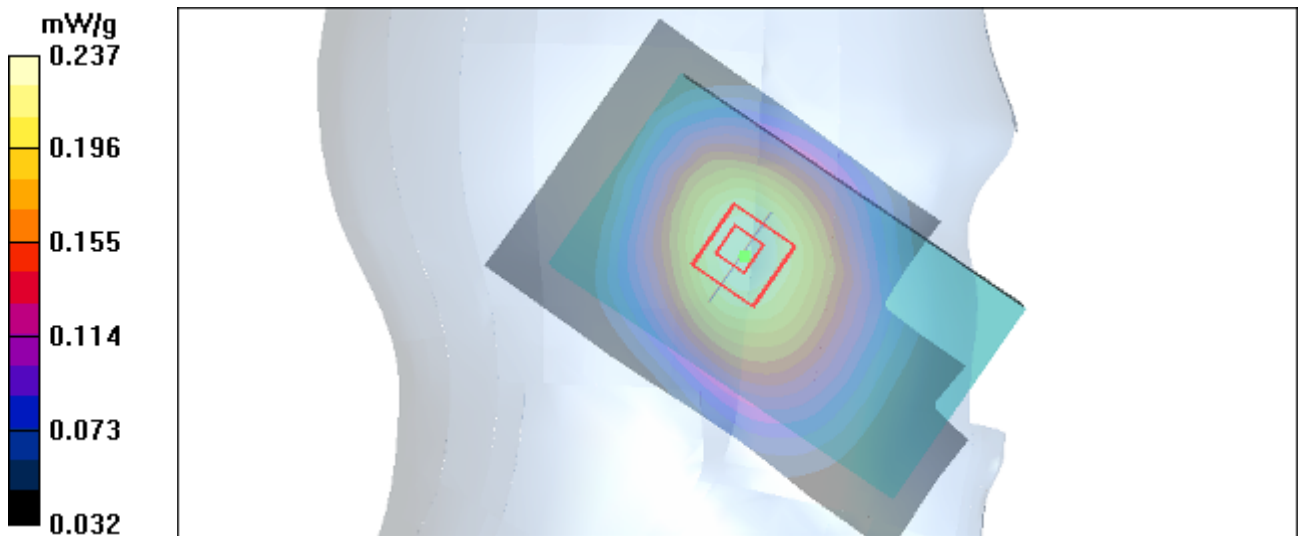


Figure 17 Left Hand Tilt 15° GSM 850 Channel 190

GSM 850 Left Tilt Low (Battery 1)

Date/Time: 4/24/2012 3:25:41 PM

Communication System: GSM850; Frequency: 824.2 MHz; Duty Cycle: 1:8.3

Medium parameters used (interpolated): $f = 824.2$ MHz; $\sigma = 0.878$ mho/m; $\epsilon_r = 42.4$; $\rho = 1000$ kg/m³

Ambient Temperature: 22.3 °C Liquid Temperature: 21.5°C

Phantom section: Left Section

DASY4 Configuration:

Probe: EX3DV4 - SN3816; ConvF(9.22, 9.22, 9.22); Calibrated: 10/3/2011

Electronics: DAE4 Sn1317; Calibrated: 1/23/2012

Phantom: SAM 12; Type: SAM V4.0; Serial: TP-1246

Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 186

Tilt Low/Area Scan (61x101x1): Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (interpolated) = 0.187 mW/g

Tilt Low/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 8.83 V/m; Power Drift = -0.016 dB

Peak SAR (extrapolated) = 0.215 W/kg

SAR(1 g) = 0.177 mW/g; SAR(10 g) = 0.138 mW/g

Maximum value of SAR (measured) = 0.184 mW/g

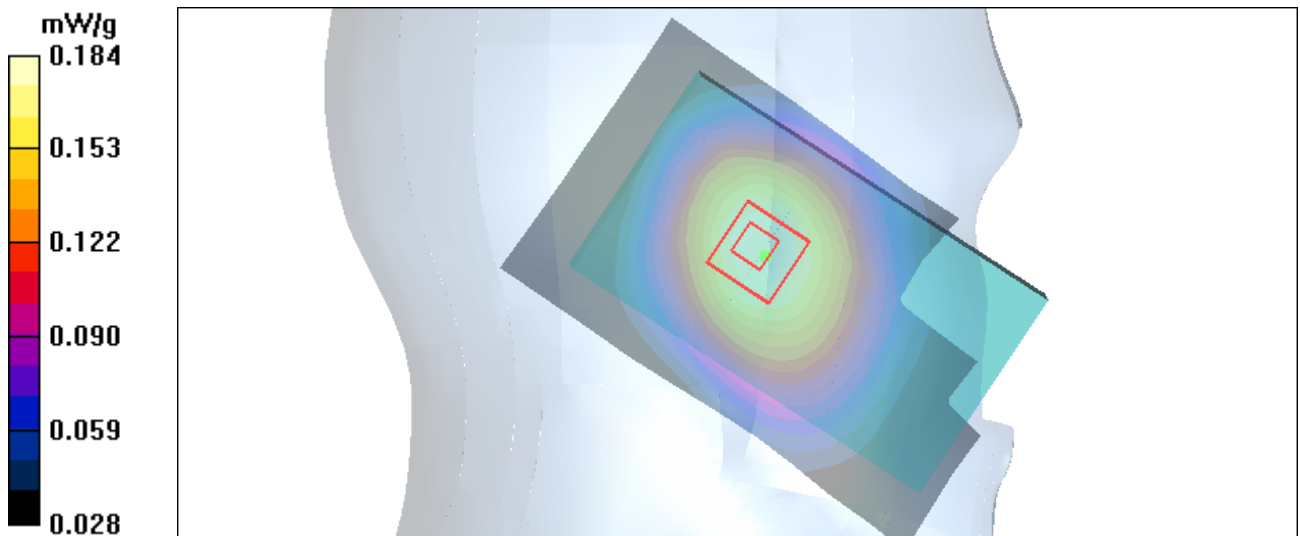


Figure 18 Left Hand Tilt 15° GSM 850 Channel 128

GSM 850 Right Cheek High (Battery 1)

Date/Time: 4/24/2012 4:21:03 PM

Communication System: GSM850; Frequency: 848.8 MHz; Duty Cycle: 1:8.3

Medium parameters used: $f = 849$ MHz; $\sigma = 0.901$ mho/m; $\epsilon_r = 42.1$; $\rho = 1000$ kg/m³

Ambient Temperature: 22.3 °C Liquid Temperature: 21.5°C

Phantom section: Right Section

DASY4 Configuration:

Probe: EX3DV4 - SN3816; ConvF(9.22, 9.22, 9.22); Calibrated: 10/3/2011

Electronics: DAE4 Sn1317; Calibrated: 1/23/2012

Phantom: SAM 12; Type: SAM V4.0; Serial: TP-1246

Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 186

Cheek High/Area Scan (61x101x1): Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (interpolated) = 0.372 mW/g

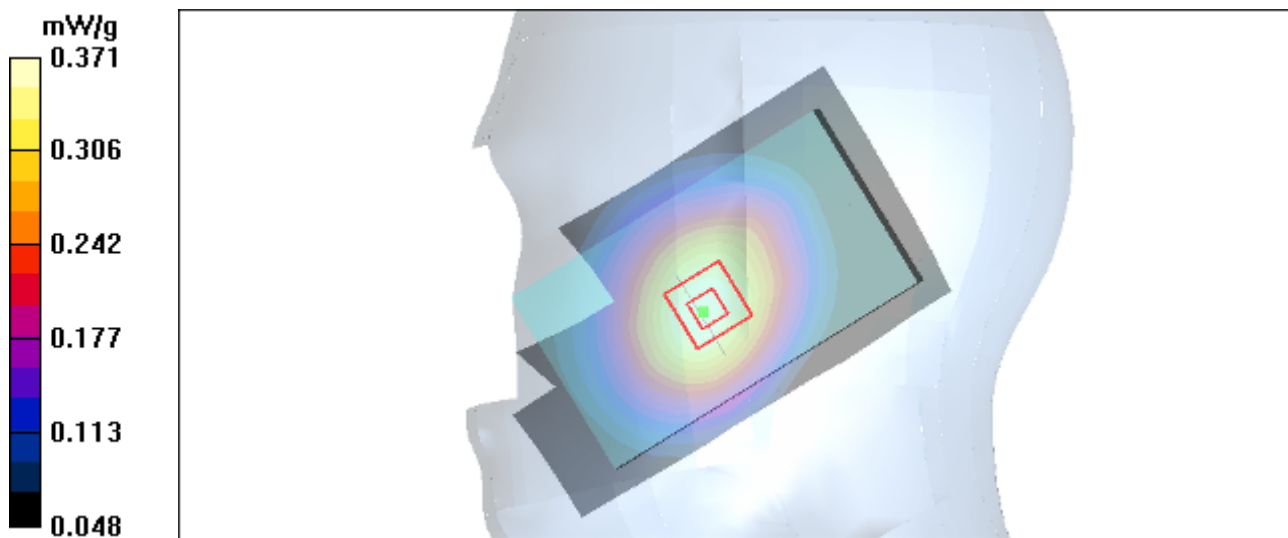
Cheek High/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 6.90 V/m; Power Drift = 0.025 dB

Peak SAR (extrapolated) = 0.431 W/kg

SAR(1 g) = 0.355 mW/g; SAR(10 g) = 0.276 mW/g

Maximum value of SAR (measured) = 0.371 mW/g



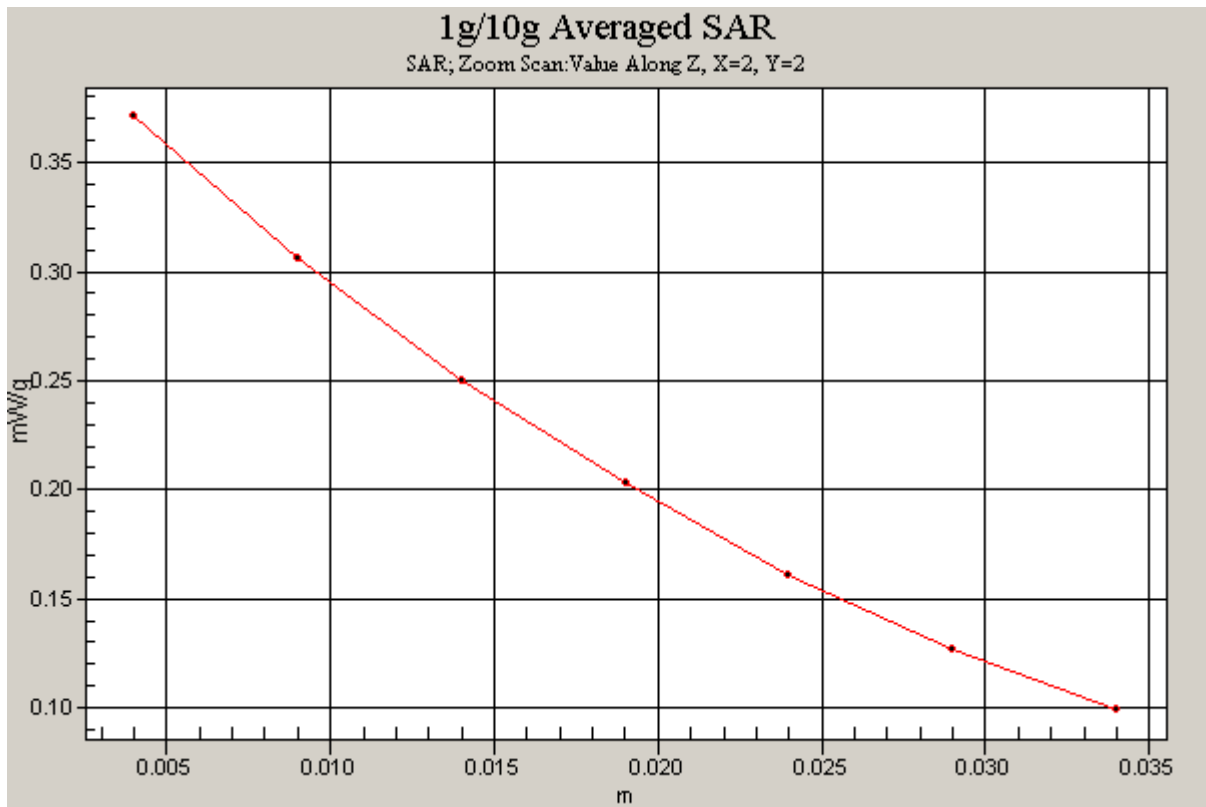


Figure 19 Right Hand Touch Cheek GSM 850 Channel 251

GSM 850 Right Cheek Middle (Battery 1)

Date/Time: 4/24/2012 4:06:35 PM

Communication System: GSM850; Frequency: 836.6 MHz; Duty Cycle: 1:8.3

Medium parameters used: $f = 837$ MHz; $\sigma = 0.89$ mho/m; $\epsilon_r = 42.3$; $\rho = 1000$ kg/m³

Ambient Temperature: 22.3 °C Liquid Temperature: 21.5°C

Phantom section: Right Section

DASY4 Configuration:

Probe: EX3DV4 - SN3816; ConvF(9.22, 9.22, 9.22); Calibrated: 10/3/2011

Electronics: DAE4 Sn1317; Calibrated: 1/23/2012

Phantom: SAM 12; Type: SAM V4.0; Serial: TP-1246

Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 186

Cheek Middle/Area Scan (61x101x1): Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (interpolated) = 0.310 mW/g

Cheek Middle/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 6.33 V/m; Power Drift = 0.000 dB

Peak SAR (extrapolated) = 0.367 W/kg

SAR(1 g) = 0.305 mW/g; SAR(10 g) = 0.237 mW/g

Maximum value of SAR (measured) = 0.316 mW/g

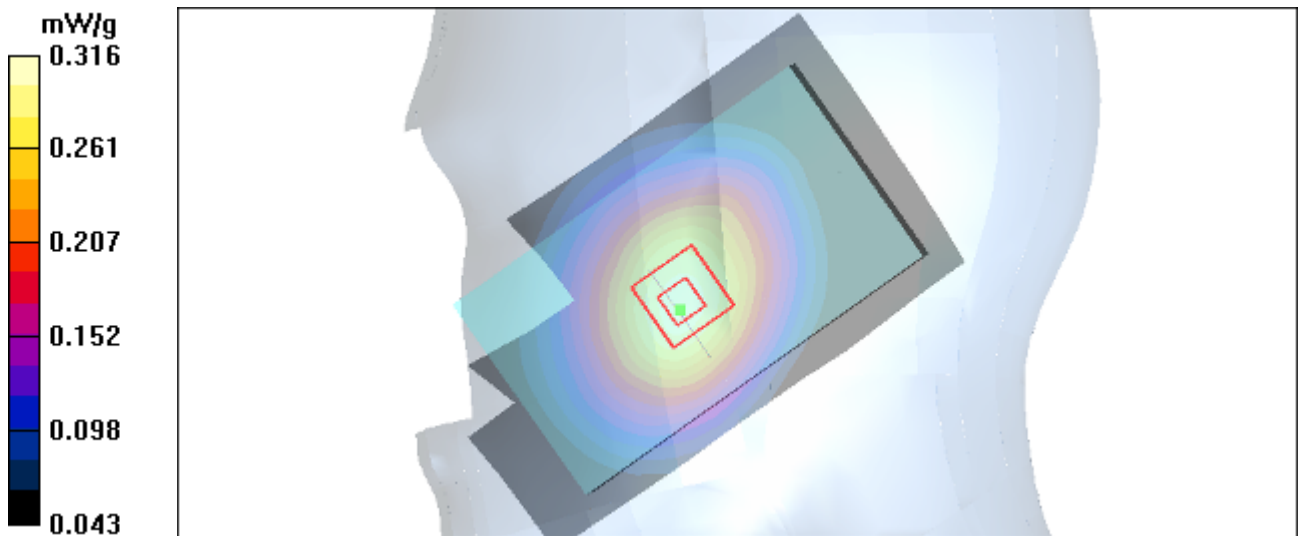


Figure 20 Right Hand Touch Cheek GSM 850 Channel 190

GSM 850 Right Cheek Low (Battery 1)

Date/Time: 4/24/2012 3:45:28 PM

Communication System: GSM850; Frequency: 824.2 MHz; Duty Cycle: 1:8.3

Medium parameters used (interpolated): $f = 824.2$ MHz; $\sigma = 0.878$ mho/m; $\epsilon_r = 42.4$; $\rho = 1000$ kg/m³

Ambient Temperature: 22.3 °C Liquid Temperature: 21.5°C

Phantom section: Right Section

DASY4 Configuration:

Probe: EX3DV4 - SN3816; ConvF(9.22, 9.22, 9.22); Calibrated: 10/3/2011

Electronics: DAE4 Sn1317; Calibrated: 1/23/2012

Phantom: SAM 12; Type: SAM V4.0; Serial: TP-1246

Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 186

Cheek Low/Area Scan (61x101x1): Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (interpolated) = 0.270 mW/g

Cheek Low/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 5.83 V/m; Power Drift = 0.024 dB

Peak SAR (extrapolated) = 0.305 W/kg

SAR(1 g) = 0.255 mW/g; SAR(10 g) = 0.199 mW/g

Maximum value of SAR (measured) = 0.266 mW/g

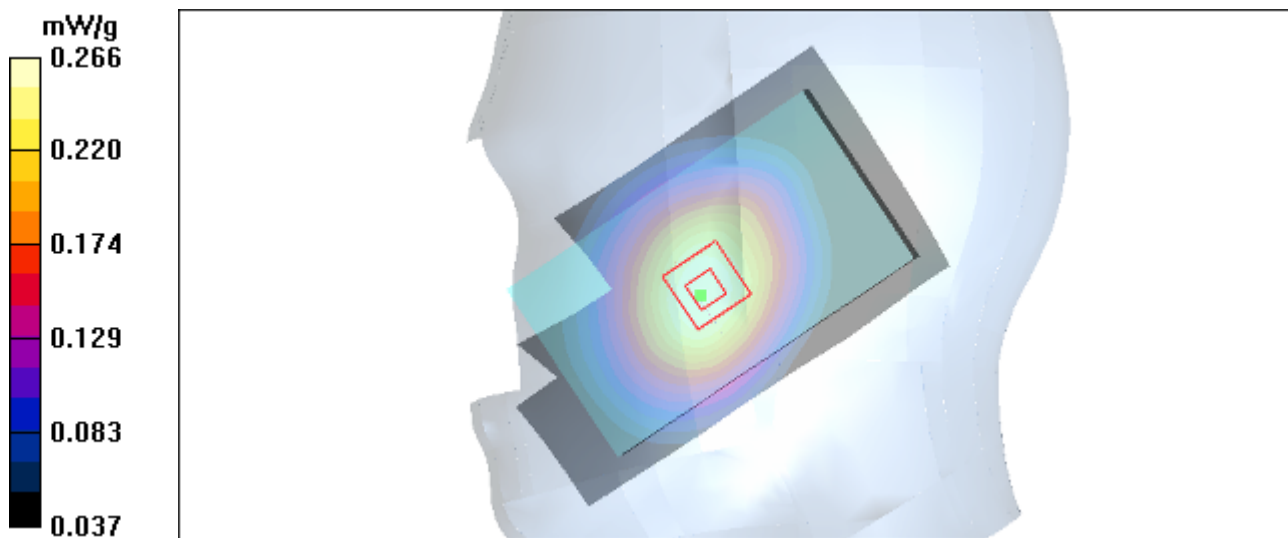


Figure 21 Right Hand Touch Cheek GSM 850 Channel 128

GSM 850 Right Tilt High (Battery 1)

Date/Time: 4/24/2012 5:04:46 PM

Communication System: GSM850; Frequency: 848.8 MHz; Duty Cycle: 1:8.3

Medium parameters used: $f = 849$ MHz; $\sigma = 0.901$ mho/m; $\epsilon_r = 42.1$; $\rho = 1000$ kg/m³

Ambient Temperature: 22.3 °C Liquid Temperature: 21.5°C

Phantom section: Right Section

DASY4 Configuration:

Probe: EX3DV4 - SN3816; ConvF(9.22, 9.22, 9.22); Calibrated: 10/3/2011

Electronics: DAE4 Sn1317; Calibrated: 1/23/2012

Phantom: SAM 12; Type: SAM V4.0; Serial: TP-1246

Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 186

Tilt High/Area Scan (61x101x1): Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (interpolated) = 0.260 mW/g

Tilt High/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 10.9 V/m; Power Drift = 0.003 dB

Peak SAR (extrapolated) = 0.310 W/kg

SAR(1 g) = 0.251 mW/g; SAR(10 g) = 0.193 mW/g

Maximum value of SAR (measured) = 0.262 mW/g

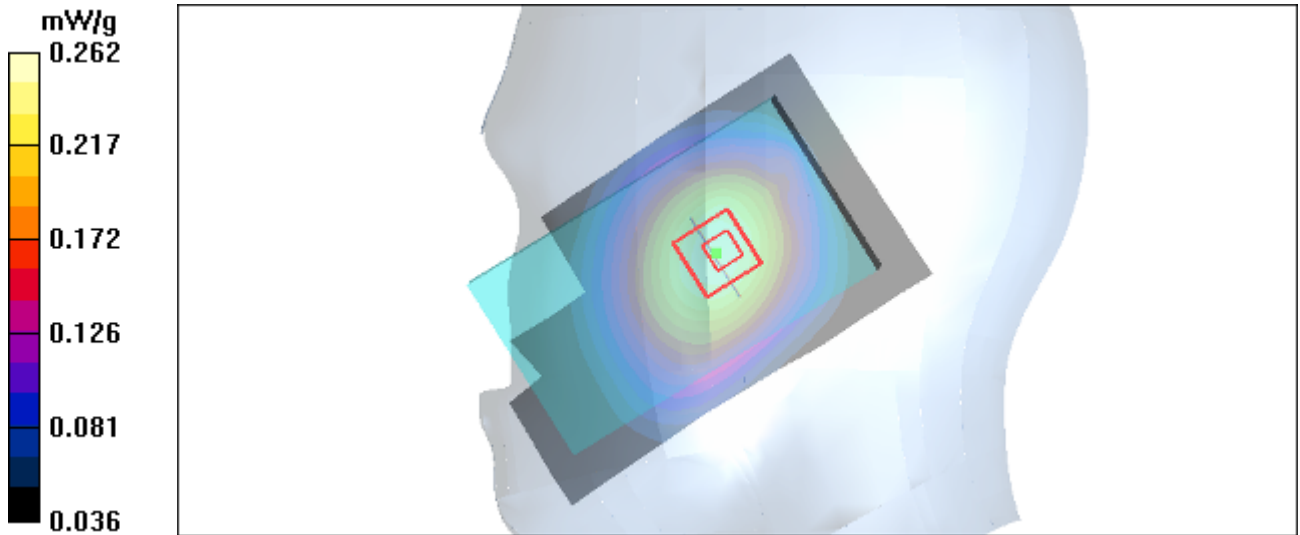


Figure 22 Right Hand Tilt 15° GSM 850 Channel 251

GSM 850 Right Tilt Middle (Battery 1)

Date/Time: 4/24/2012 4:36:00 PM

Communication System: GSM850; Frequency: 836.6 MHz; Duty Cycle: 1:8.3

Medium parameters used: $f = 837$ MHz; $\sigma = 0.89$ mho/m; $\epsilon_r = 42.3$; $\rho = 1000$ kg/m³

Ambient Temperature: 22.3 °C Liquid Temperature: 21.5°C

Phantom section: Right Section

DASY4 Configuration:

Probe: EX3DV4 - SN3816; ConvF(9.22, 9.22, 9.22); Calibrated: 10/3/2011

Electronics: DAE4 Sn1317; Calibrated: 1/23/2012

Phantom: SAM 12; Type: SAM V4.0; Serial: TP-1246

Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 186

Tilt Middle/Area Scan (61x101x1): Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (interpolated) = 0.222 mW/g

Tilt Middle/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 10.0 V/m; Power Drift = 0.025 dB

Peak SAR (extrapolated) = 0.261 W/kg

SAR(1 g) = 0.213 mW/g; SAR(10 g) = 0.165 mW/g

Maximum value of SAR (measured) = 0.221 mW/g

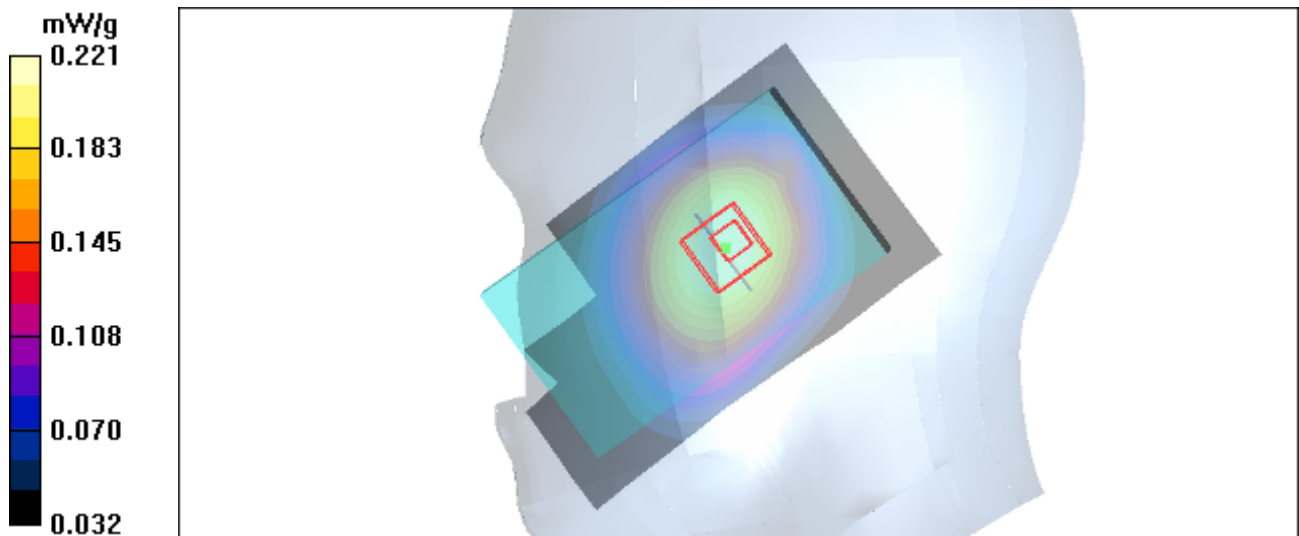


Figure 23 Right Hand Tilt 15° GSM 850 Channel 190

GSM 850 Right Tilt Low (Battery 1)

Date/Time: 4/24/2012 4:50:39 PM

Communication System: GSM850; Frequency: 824.2 MHz; Duty Cycle: 1:8.3

Medium parameters used (interpolated): $f = 824.2$ MHz; $\sigma = 0.878$ mho/m; $\epsilon_r = 42.4$; $\rho = 1000$ kg/m³

Ambient Temperature: 22.3 °C Liquid Temperature: 21.5°C

Phantom section: Right Section

DASY4 Configuration:

Probe: EX3DV4 - SN3816; ConvF(9.22, 9.22, 9.22); Calibrated: 10/3/2011

Electronics: DAE4 Sn1317; Calibrated: 1/23/2012

Phantom: SAM 12; Type: SAM V4.0; Serial: TP-1246

Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 186

Tilt Low/Area Scan (61x101x1): Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (interpolated) = 0.195 mW/g

Tilt Low/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 9.49 V/m; Power Drift = 0.013 dB

Peak SAR (extrapolated) = 0.229 W/kg

SAR(1 g) = 0.187 mW/g; SAR(10 g) = 0.145 mW/g

Maximum value of SAR (measured) = 0.194 mW/g

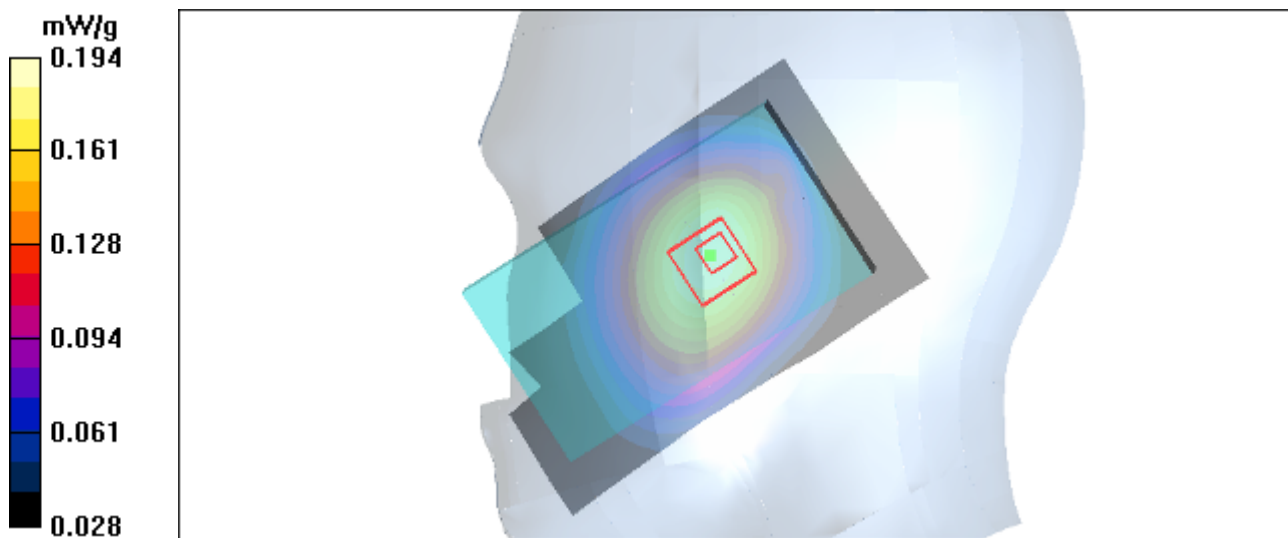


Figure 24 Right Hand Tilt 15° GSM 850 Channel 128

GSM 850 GPRS (2Txslots) Back Side High (Battery 1)

Date/Time: 4/25/2012 6:59:54 AM

Communication System: GSM850 + GPRS(2Up); Frequency: 848.8 MHz; Duty Cycle: 1:4.15

Medium parameters used: $f = 849$ MHz; $\sigma = 1.01$ mho/m; $\epsilon_r = 54.1$; $\rho = 1000$ kg/m³

Ambient Temperature: 22.3 °C Liquid Temperature: 21.5°C

Phantom section: Flat Section

DASY4 Configuration:

Probe: EX3DV4 - SN3816; ConvF(9.38, 9.38, 9.38); Calibrated: 10/3/2011

Electronics: DAE4 Sn1317; Calibrated: 1/23/2012

Phantom: SAM 12; Type: SAM V4.0; Serial: TP-1246

Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 186

Back Side High/Area Scan (61x91x1): Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (interpolated) = 0.906 mW/g

Back Side High/Zoom Scan (5x5x7)/Cube 1: Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 28.7 V/m; Power Drift = -0.153 dB

Peak SAR (extrapolated) = 1.11 W/kg

SAR(1 g) = 0.694 mW/g; SAR(10 g) = 0.447 mW/g

Maximum value of SAR (measured) = 0.754 mW/g

Back Side High/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 28.7 V/m; Power Drift = -0.153 dB

Peak SAR (extrapolated) = 1.10 W/kg

SAR(1 g) = 0.845 mW/g; SAR(10 g) = 0.636 mW/g

Maximum value of SAR (measured) = 0.908 mW/g

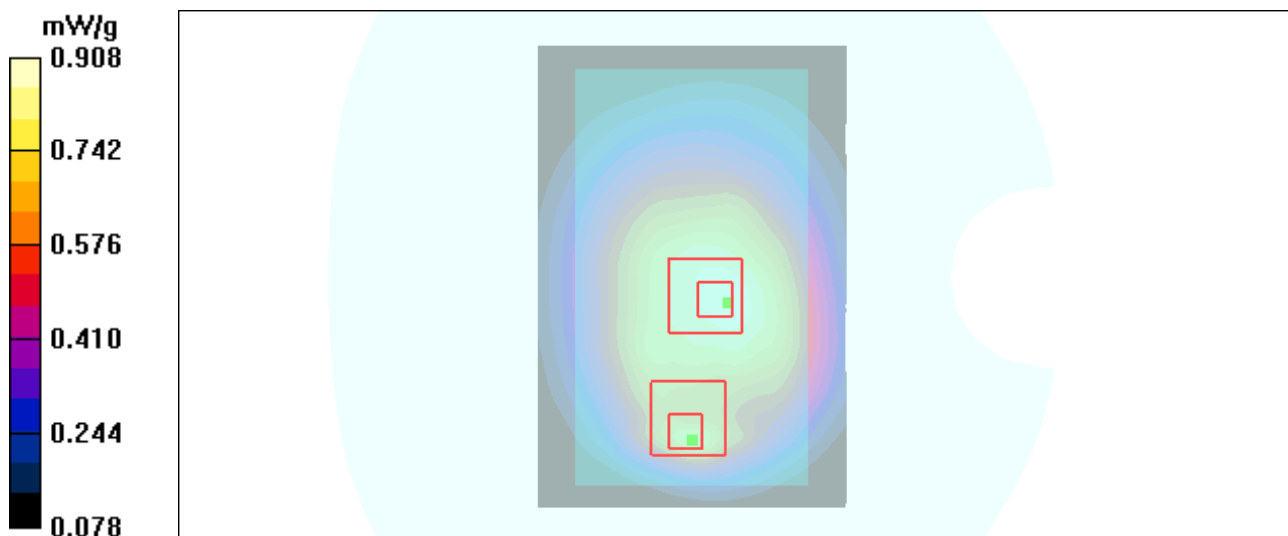


Figure 25 Body, Back Side, GSM 850 GPRS (2Txslots) Channel 251

GSM 850 GPRS (2Txslots) Back Side Middle (Battery 1)

Date/Time: 4/25/2012 7:19:10 AM

Communication System: GSM850 + GPRS(2Up); Frequency: 836.6 MHz; Duty Cycle: 1:4.15

Medium parameters used: $f = 837$ MHz; $\sigma = 0.988$ mho/m; $\epsilon_r = 54.2$; $\rho = 1000$ kg/m³

Ambient Temperature: 22.3 °C Liquid Temperature: 21.5°C

Phantom section: Flat Section

DASY4 Configuration:

Probe: EX3DV4 - SN3816; ConvF(9.38, 9.38, 9.38); Calibrated: 10/3/2011

Electronics: DAE4 Sn1317; Calibrated: 1/23/2012

Phantom: SAM 12; Type: SAM V4.0; Serial: TP-1246

Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 186

Back Side Middle/Area Scan (61x91x1): Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (interpolated) = 1.03 mW/g

Back Side Middle/Zoom Scan (5x5x7)/Cube 1: Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 30.4 V/m; Power Drift = 0.058 dB

Peak SAR (extrapolated) = 1.18 W/kg

SAR(1 g) = 0.756 mW/g; SAR(10 g) = 0.494 mW/g

Maximum value of SAR (measured) = 0.870 mW/g

Back Side Middle/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 30.4 V/m; Power Drift = 0.058 dB

Peak SAR (extrapolated) = 1.25 W/kg

SAR(1 g) = 0.946 mW/g; SAR(10 g) = 0.720 mW/g

Maximum value of SAR (measured) = 0.988 mW/g

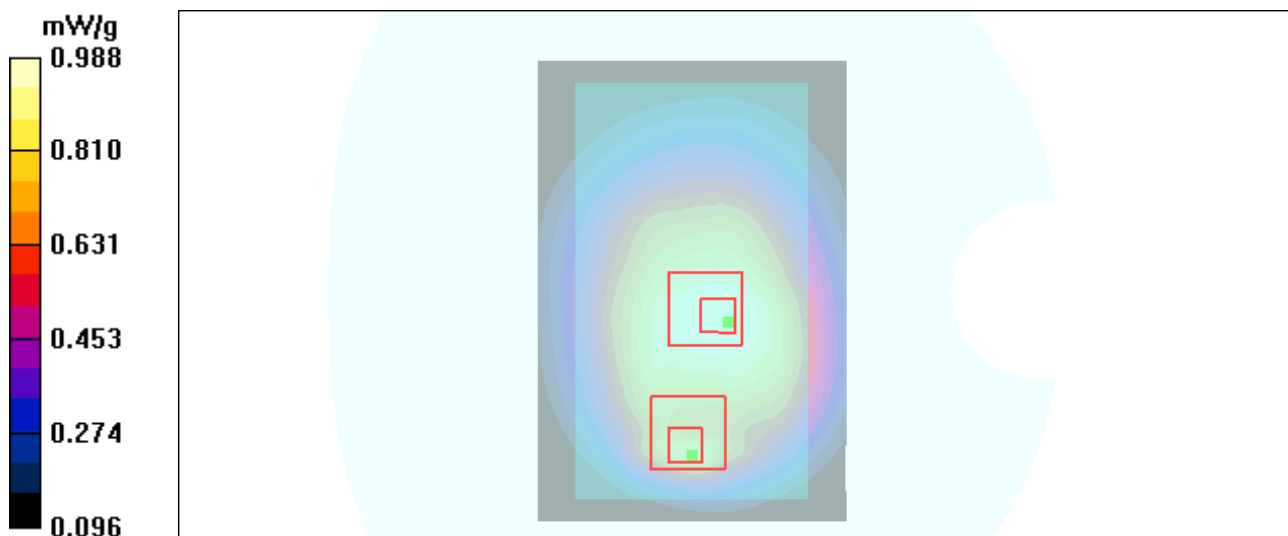


Figure 26 Body, Back Side, GSM 850 GPRS (2Txslots) Channel 190

GSM 850 GPRS (2Txslots) Back Side Low (Battery 1)

Date/Time: 4/25/2012 6:40:22 AM

Communication System: GSM850 + GPRS(2Up); Frequency: 824.2 MHz; Duty Cycle: 1:4.15

Medium parameters used (interpolated): $f = 824.2$ MHz; $\sigma = 0.972$ mho/m; $\epsilon_r = 54.4$; $\rho = 1000$ kg/m³

Ambient Temperature: 22.3 °C Liquid Temperature: 21.5°C

Phantom section: Flat Section

DASY4 Configuration:

Probe: EX3DV4 - SN3816; ConvF(9.38, 9.38, 9.38); Calibrated: 10/3/2011

Electronics: DAE4 Sn1317; Calibrated: 1/23/2012

Phantom: SAM 12; Type: SAM V4.0; Serial: TP-1246

Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 186

Back Side Low/Area Scan (61x91x1): Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (interpolated) = 1.14 mW/g

Back Side Low/Zoom Scan (5x5x7)/Cube 1: Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 32.5 V/m; Power Drift = 0.160 dB

Peak SAR (extrapolated) = 1.31 W/kg

SAR(1 g) = 0.815 mW/g; SAR(10 g) = 0.563 mW/g

Maximum value of SAR (measured) = 0.894 mW/g

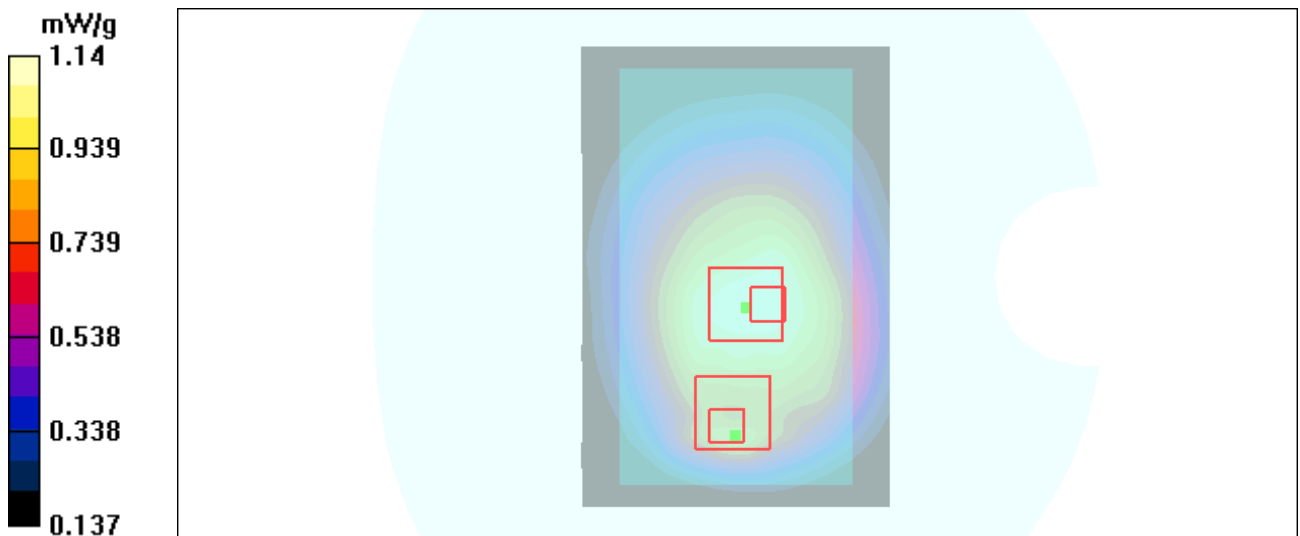
Back Side Low/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 32.5 V/m; Power Drift = 0.160 dB

Peak SAR (extrapolated) = 1.45 W/kg

SAR(1 g) = 1.06 mW/g; SAR(10 g) = 0.801 mW/g

Maximum value of SAR (measured) = 1.14 mW/g



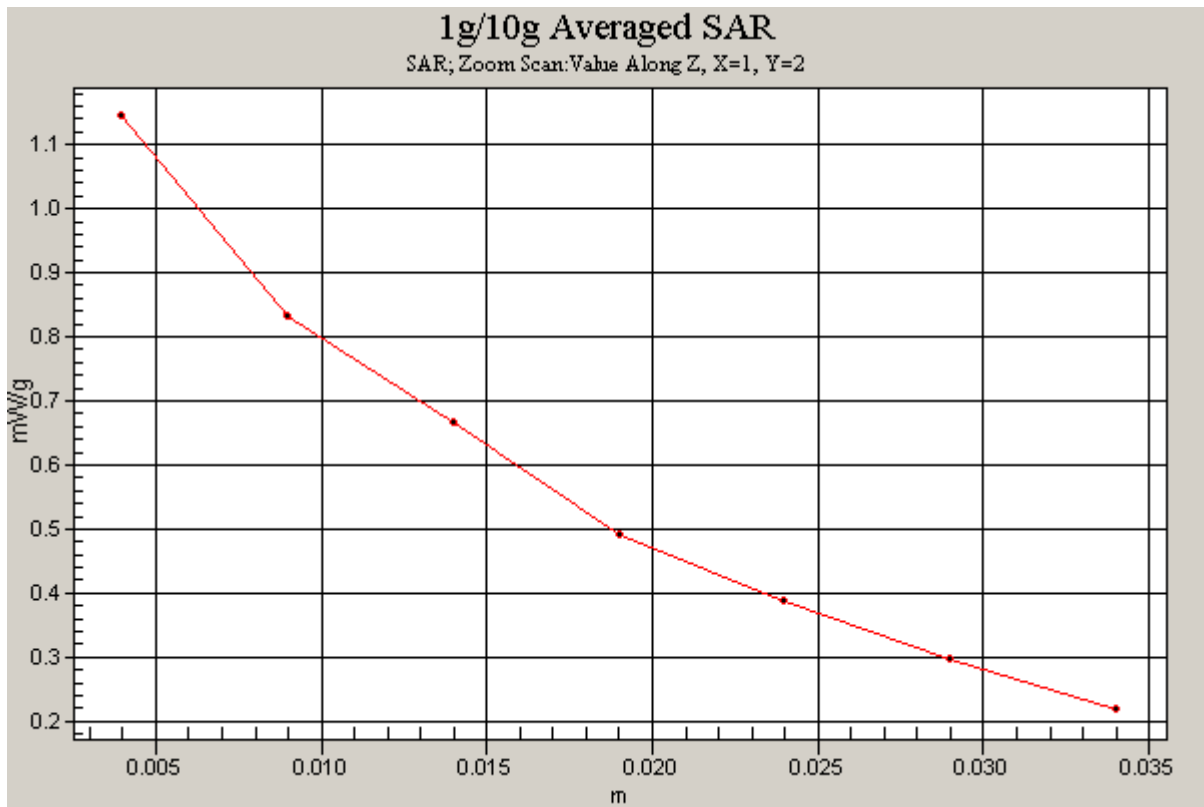


Figure 27 Body, Back Side, GSM 850 GPRS (2Txslots) Channel 128

GSM 850 GPRS (2Txslots) Front Side Low (Battery 1)

Date/Time: 4/25/2012 7:39:40 AM

Communication System: GSM850 + GPRS(2Up); Frequency: 824.2 MHz; Duty Cycle: 1:4.15

Medium parameters used (interpolated): $f = 824.2$ MHz; $\sigma = 0.972$ mho/m; $\epsilon_r = 54.4$; $\rho = 1000$ kg/m³

Ambient Temperature: 22.3 °C Liquid Temperature: 21.5°C

Phantom section: Flat Section

DASY4 Configuration:

Probe: EX3DV4 - SN3816; ConvF(9.38, 9.38, 9.38); Calibrated: 10/3/2011

Electronics: DAE4 Sn1317; Calibrated: 1/23/2012

Phantom: SAM 12; Type: SAM V4.0; Serial: TP-1246

Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 186

Front Side Low/Area Scan (61x91x1): Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (interpolated) = 0.610 mW/g

Front Side Low/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 24.4 V/m; Power Drift = 0.187 dB

Peak SAR (extrapolated) = 0.732 W/kg

SAR(1 g) = 0.575 mW/g; SAR(10 g) = 0.435 mW/g

Maximum value of SAR (measured) = 0.614 mW/g

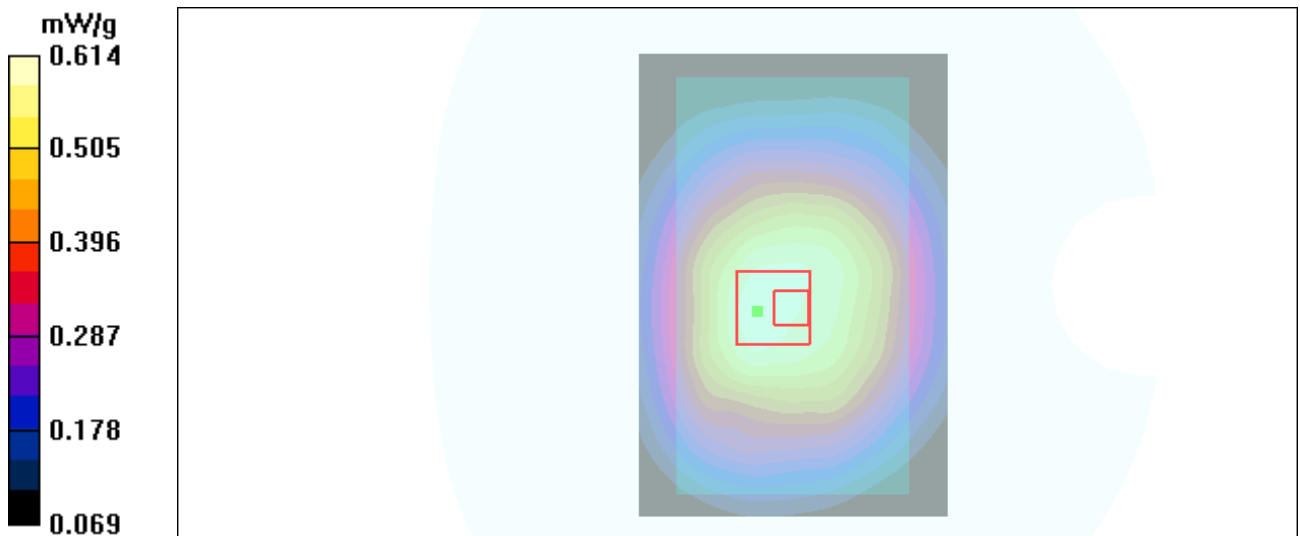


Figure 28 Body, Front Side, GSM 850 GPRS (2Txslots) Channel 128

GSM 850 GPRS (2Txslots) Left Edge Low (Battery 1)

Date/Time: 4/25/2012 7:59:00 AM

Communication System: GSM850 + GPRS(2Up); Frequency: 824.2 MHz; Duty Cycle: 1:4.15

Medium parameters used (interpolated): $f = 824.2$ MHz; $\sigma = 0.972$ mho/m; $\epsilon_r = 54.4$; $\rho = 1000$ kg/m³

Ambient Temperature: 22.3 °C Liquid Temperature: 21.5°C

Phantom section: Flat Section

DASY4 Configuration:

Probe: EX3DV4 - SN3816; ConvF(9.38, 9.38, 9.38); Calibrated: 10/3/2011

Electronics: DAE4 Sn1317; Calibrated: 1/23/2012

Phantom: SAM 12; Type: SAM V4.0; Serial: TP-1246

Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 186

Left Edge Low/Area Scan (31x91x1): Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (interpolated) = 0.425 mW/g

Left Edge Low/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 21.8 V/m; Power Drift = 0.013 dB

Peak SAR (extrapolated) = 0.649 W/kg

SAR(1 g) = 0.431 mW/g; SAR(10 g) = 0.293 mW/g

Maximum value of SAR (measured) = 0.458 mW/g

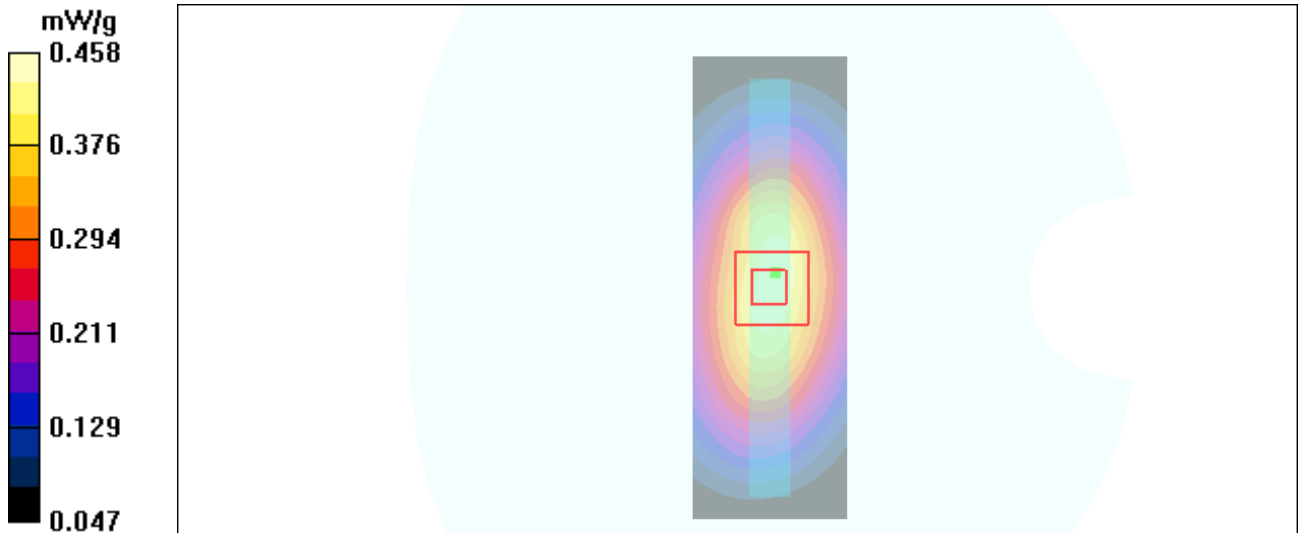


Figure 29 Body, Left Edge, GSM 850 GPRS (2Txslots) Channel 128

GSM 850 GPRS (2Txslots) Right Edge Low (Battery 1)

Date/Time: 4/25/2012 8:10:12 AM

Communication System: GSM850 + GPRS(2Up); Frequency: 824.2 MHz; Duty Cycle: 1:4.15

Medium parameters used (interpolated): $f = 824.2$ MHz; $\sigma = 0.972$ mho/m; $\epsilon_r = 54.4$; $\rho = 1000$ kg/m³

Ambient Temperature: 22.3 °C Liquid Temperature: 21.5°C

Phantom section: Flat Section

DASY4 Configuration:

Probe: EX3DV4 - SN3816; ConvF(9.38, 9.38, 9.38); Calibrated: 10/3/2011

Electronics: DAE4 Sn1317; Calibrated: 1/23/2012

Phantom: SAM 12; Type: SAM V4.0; Serial: TP-1246

Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 186

Right Edge Low/Area Scan (31x91x1): Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (interpolated) = 0.448 mW/g

Right Edge Low/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 21.0 V/m; Power Drift = 0.043 dB

Peak SAR (extrapolated) = 0.587 W/kg

SAR(1 g) = 0.421 mW/g; SAR(10 g) = 0.294 mW/g

Maximum value of SAR (measured) = 0.454 mW/g

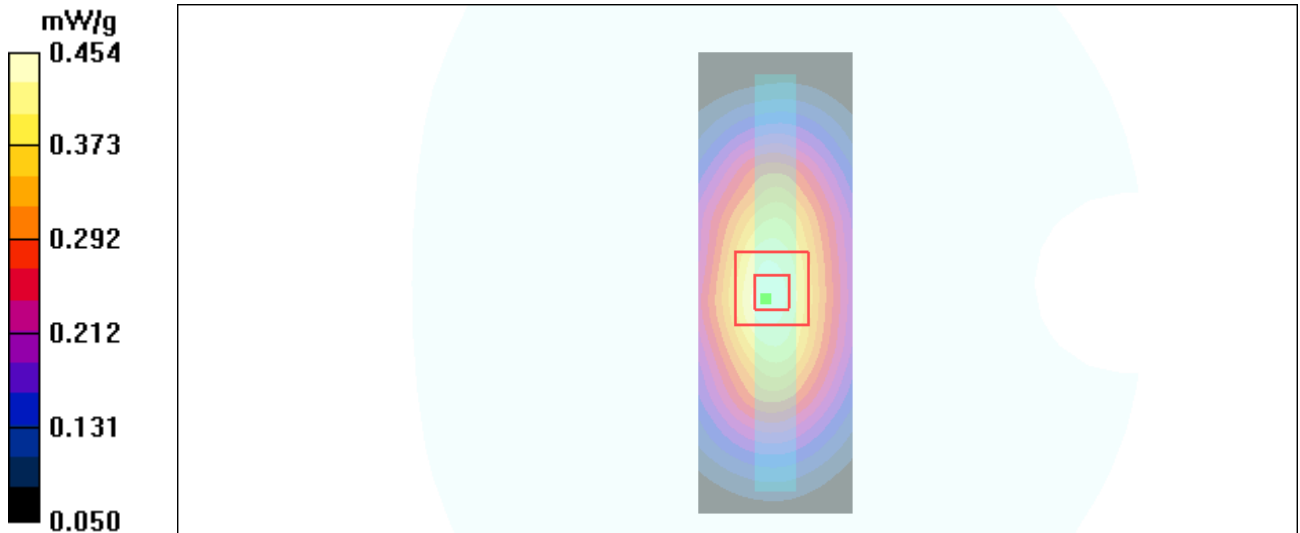


Figure 30 Body, Right Edge, GSM 850 GPRS (2Txslots) Channel 128

GSM 850 GPRS (2Txslots) Bottom Edge Low (Battery 1)

Date/Time: 4/25/2012 8:29:16 AM

Communication System: GSM850 + GPRS(2Up); Frequency: 824.2 MHz; Duty Cycle: 1:4.15

Medium parameters used (interpolated): $f = 824.2$ MHz; $\sigma = 0.972$ mho/m; $\epsilon_r = 54.4$; $\rho = 1000$ kg/m³

Ambient Temperature: 22.3 °C Liquid Temperature: 21.5°C

Phantom section: Flat Section

DASY4 Configuration:

Probe: EX3DV4 - SN3816; ConvF(9.38, 9.38, 9.38); Calibrated: 10/3/2011

Electronics: DAE4 Sn1317; Calibrated: 1/23/2012

Phantom: SAM 12; Type: SAM V4.0; Serial: TP-1246

Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 186

Bottom Edge Low/Area Scan (31x61x1): Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (interpolated) = 0.081 mW/g

Bottom Edge Low/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 8.58 V/m; Power Drift = 0.035 dB

Peak SAR (extrapolated) = 0.115 W/kg

SAR(1 g) = 0.071 mW/g; SAR(10 g) = 0.044 mW/g

Maximum value of SAR (measured) = 0.079 mW/g

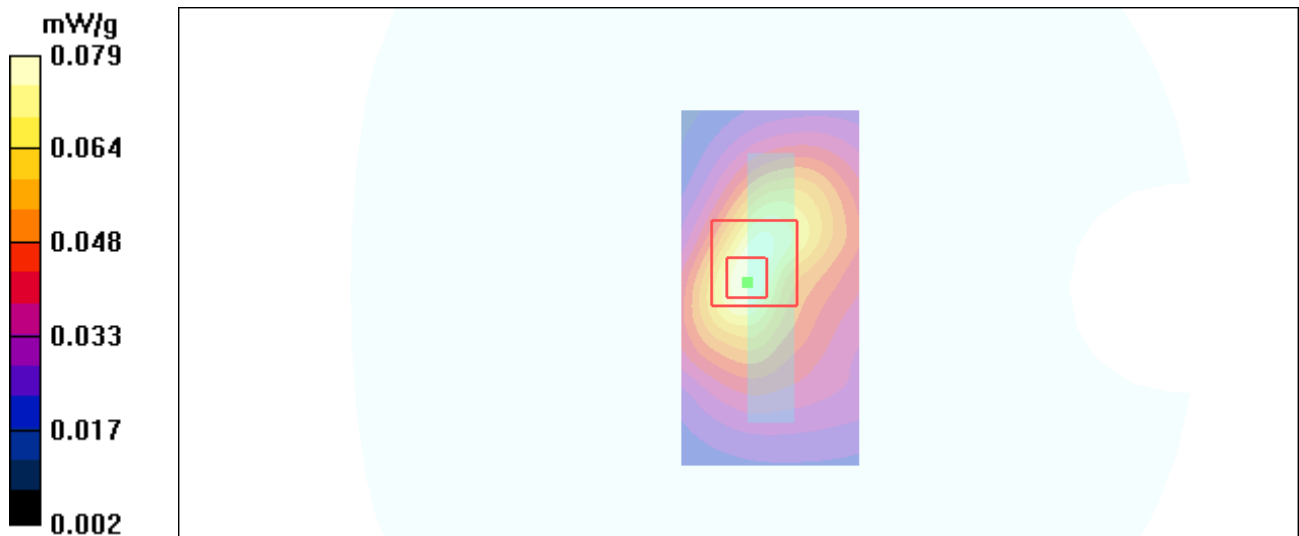


Figure 31 Body, Bottom Edge, GSM 850 GPRS (2Txslots) Channel 128

GSM 850 EGPRS (2Txslots) Back Side Low (Battery 1)

Date/Time: 4/25/2012 9:04:50 AM

Communication System: GSM850 + EGPRS(2Up); Frequency: 824.2 MHz; Duty Cycle: 1:4.15

Medium parameters used (interpolated): $f = 824.2$ MHz; $\sigma = 0.972$ mho/m; $\epsilon_r = 54.4$; $\rho = 1000$ kg/m³

Ambient Temperature: 22.3 °C Liquid Temperature: 21.5°C

Phantom section: Flat Section

DASY4 Configuration:

Probe: EX3DV4 - SN3816; ConvF(9.38, 9.38, 9.38); Calibrated: 10/3/2011

Electronics: DAE4 Sn1317; Calibrated: 1/23/2012

Phantom: SAM 12; Type: SAM V4.0; Serial: TP-1246

Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 186

Back Side Low/Area Scan (61x91x1): Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (interpolated) = 0.996 mW/g

Back Side Low/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 30.3 V/m; Power Drift = 0.004 dB

Peak SAR (extrapolated) = 1.25 W/kg

SAR(1 g) = 0.971 mW/g; SAR(10 g) = 0.730 mW/g

Maximum value of SAR (measured) = 1.02 mW/g

Back Side Low/Zoom Scan (5x5x7)/Cube 1: Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 30.3 V/m; Power Drift = 0.004 dB

Peak SAR (extrapolated) = 1.28 W/kg

SAR(1 g) = 0.746 mW/g; SAR(10 g) = 0.532 mW/g

Maximum value of SAR (measured) = 0.865 mW/g

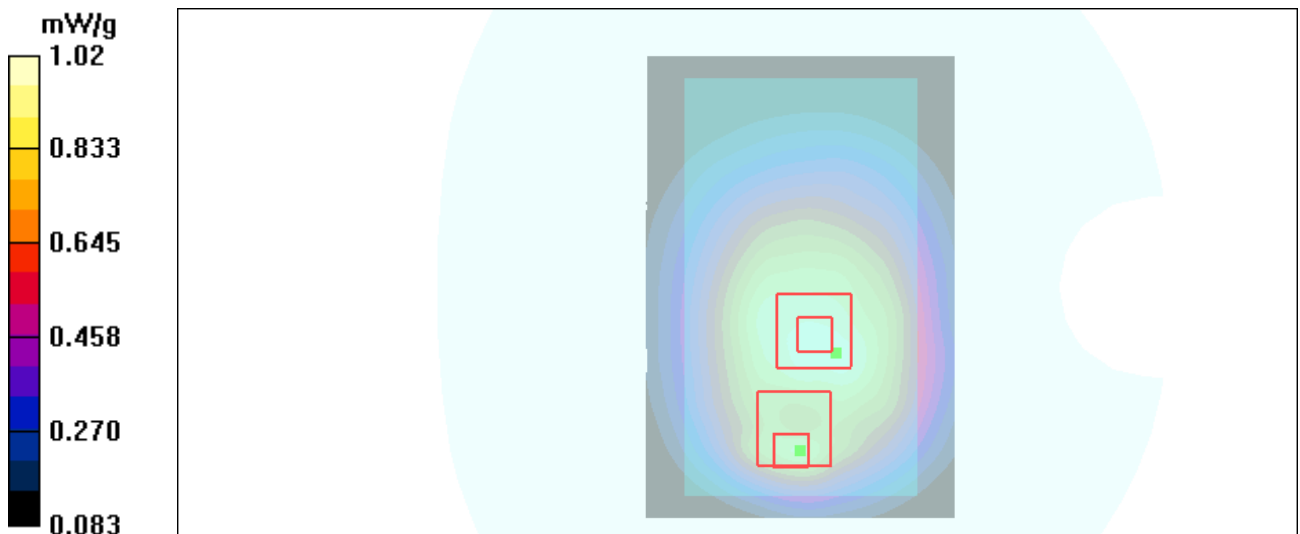


Figure 32 Body, Back Side, GSM 850 EGPRS (2Txslots) Channel 128

GSM 850 with Stereo Headset 1 Back Side Low (Battery 1)

Date/Time: 4/25/2012 9:32:45 AM

Communication System: GSM850; Frequency: 824.2 MHz; Duty Cycle: 1:8.3

Medium parameters used (interpolated): $f = 824.2$ MHz; $\sigma = 0.972$ mho/m; $\epsilon_r = 54.4$; $\rho = 1000$ kg/m³

Ambient Temperature: 22.3 °C Liquid Temperature: 21.5°C

Phantom section: Flat Section

DASY4 Configuration:

Probe: EX3DV4 - SN3816; ConvF(9.38, 9.38, 9.38); Calibrated: 10/3/2011

Electronics: DAE4 Sn1317; Calibrated: 1/23/2012

Phantom: SAM 12; Type: SAM V4.0; Serial: TP-1246

Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 186

Back Side Low/Area Scan (61x91x1): Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (interpolated) = 0.507 mW/g

Back Side Low/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 22.8 V/m; Power Drift = -0.002 dB

Peak SAR (extrapolated) = 0.618 W/kg

SAR(1 g) = 0.490 mW/g; SAR(10 g) = 0.375 mW/g

Maximum value of SAR (measured) = 0.512 mW/g

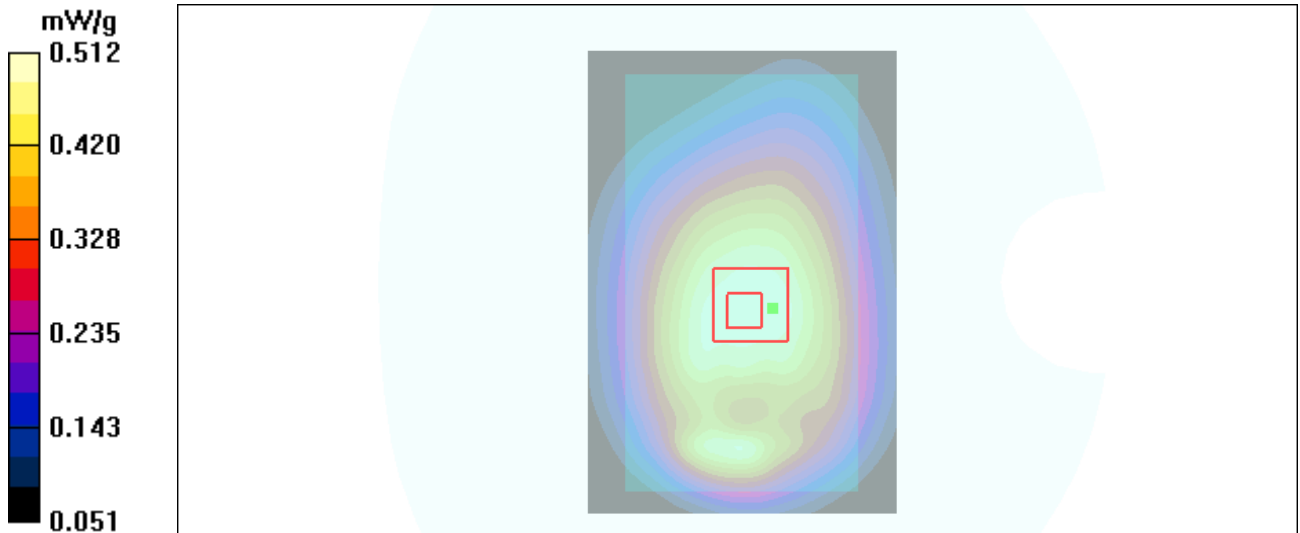


Figure 33 Body with Stereo Headset 1, Back Side, GSM 850 Channel 128

GSM 850 with Stereo Headset 2 Back Side Low (Battery 1)

Date/Time: 4/25/2012 9:47:02 AM

Communication System: GSM850; Frequency: 824.2 MHz; Duty Cycle: 1:8.3

Medium parameters used (interpolated): $f = 824.2$ MHz; $\sigma = 0.972$ mho/m; $\epsilon_r = 54.4$; $\rho = 1000$ kg/m³

Ambient Temperature: 22.3 °C Liquid Temperature: 21.5°C

Phantom section: Flat Section

DASY4 Configuration:

Probe: EX3DV4 - SN3816; ConvF(9.38, 9.38, 9.38); Calibrated: 10/3/2011

Electronics: DAE4 Sn1317; Calibrated: 1/23/2012

Phantom: SAM 12; Type: SAM V4.0; Serial: TP-1246

Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 186

Back Side Low/Area Scan (61x91x1): Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (interpolated) = 0.577 mW/g

Back Side Low/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 23.2 V/m; Power Drift = -0.005 dB

Peak SAR (extrapolated) = 0.730 W/kg

SAR(1 g) = 0.551 mW/g; SAR(10 g) = 0.416 mW/g

Maximum value of SAR (measured) = 0.575 mW/g

Back Side Low/Zoom Scan (5x5x7)/Cube 1: Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 23.2 V/m; Power Drift = -0.005 dB

Peak SAR (extrapolated) = 0.757 W/kg

SAR(1 g) = 0.462 mW/g; SAR(10 g) = 0.312 mW/g

Maximum value of SAR (measured) = 0.479 mW/g

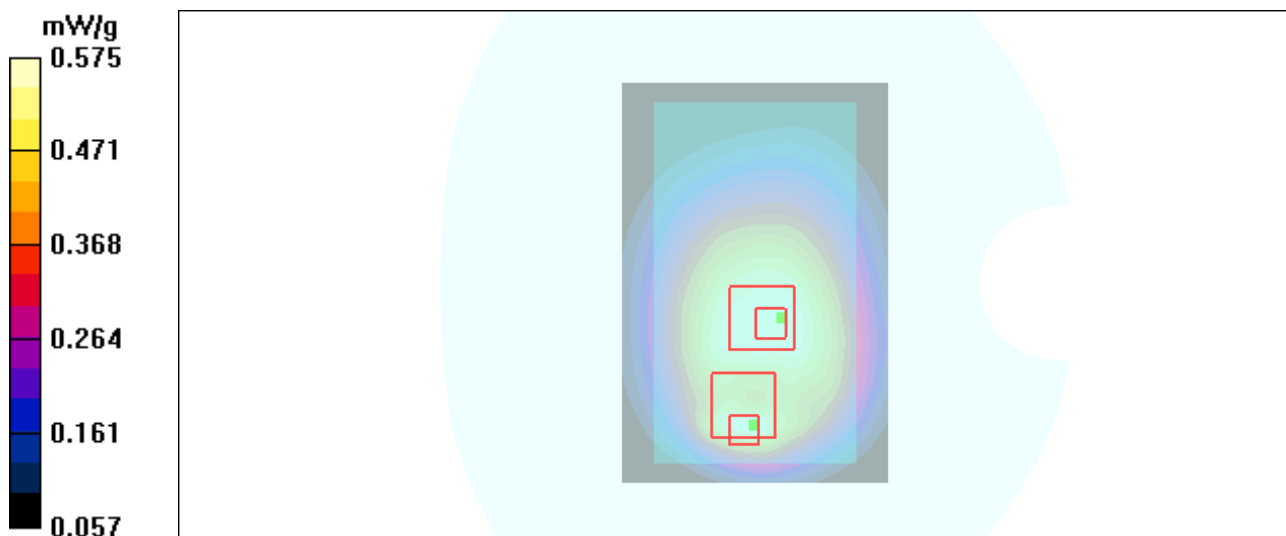


Figure 34 Body with Stereo Headset 2, Back Side, GSM 850 Channel 128

GSM 850 with Stereo Headset 3 Back Side Low (Battery 1)

Date/Time: 4/25/2012 10:06:25 AM

Communication System: GSM850; Frequency: 824.2 MHz; Duty Cycle: 1:8.3

Medium parameters used (interpolated): $f = 824.2$ MHz; $\sigma = 0.972$ mho/m; $\epsilon_r = 54.4$; $\rho = 1000$ kg/m³

Ambient Temperature: 22.3 °C Liquid Temperature: 21.5°C

Phantom section: Flat Section

DASY4 Configuration:

Probe: EX3DV4 - SN3816; ConvF(9.38, 9.38, 9.38); Calibrated: 10/3/2011

Electronics: DAE4 Sn1317; Calibrated: 1/23/2012

Phantom: SAM 12; Type: SAM V4.0; Serial: TP-1246

Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 186

Back Side Low/Area Scan (61x91x1): Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (interpolated) = 0.601 mW/g

Back Side Low/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 22.9 V/m; Power Drift = -0.031 dB

Peak SAR (extrapolated) = 0.739 W/kg

SAR(1 g) = 0.555 mW/g; SAR(10 g) = 0.418 mW/g

Maximum value of SAR (measured) = 0.582 mW/g

Back Side Low/Zoom Scan (5x5x7)/Cube 1: Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 22.9 V/m; Power Drift = -0.031 dB

Peak SAR (extrapolated) = 0.746 W/kg

SAR(1 g) = 0.469 mW/g; SAR(10 g) = 0.323 mW/g

Maximum value of SAR (measured) = 0.512 mW/g

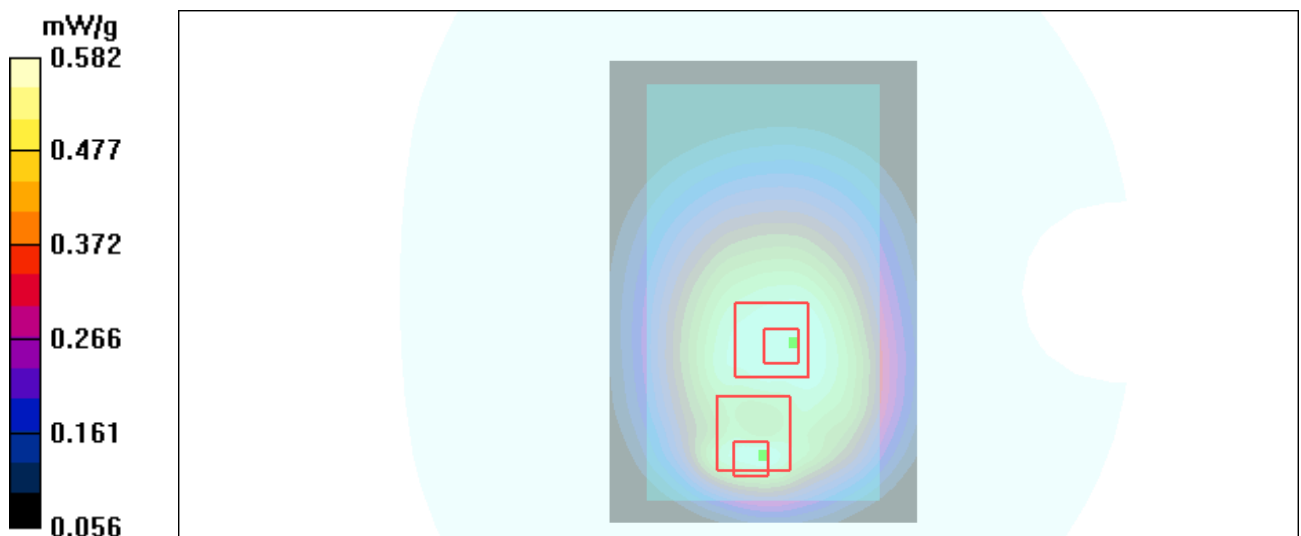


Figure 35 Body with Stereo Headset 3, Back Side, GSM 850 Channel 128

GSM 1900 Left Cheek High (Battery 1)

Date/Time: 4/25/2012 8:21:08 PM

Communication System: PCS 1900; Frequency: 1909.8 MHz; Duty Cycle: 1:8.3

Medium parameters used: $f = 1910 \text{ MHz}$; $\sigma = 1.4 \text{ mho/m}$; $\epsilon_r = 40.1$; $\rho = 1000 \text{ kg/m}^3$

Ambient Temperature: $22.3 \text{ }^\circ\text{C}$ Liquid Temperature: 21.5°C

Phantom section: Left Section

DASY4 Configuration:

Probe: EX3DV4 - SN3816; ConvF(7.9, 7.9, 7.9); Calibrated: 10/3/2011

Electronics: DAE4 Sn1317; Calibrated: 1/23/2012

Phantom: SAM000 T01; Type: SAM V4.0; Serial: TP-1246

Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 186

Cheek High/Area Scan (61x101x1): Measurement grid: $dx=15\text{mm}$, $dy=15\text{mm}$

Maximum value of SAR (interpolated) = 0.497 mW/g

Cheek High/Zoom Scan (5x5x7)/Cube 0: Measurement grid: $dx=8\text{mm}$, $dy=8\text{mm}$, $dz=5\text{mm}$

Reference Value = 9.35 V/m ; Power Drift = 0.033 dB

Peak SAR (extrapolated) = 0.699 W/kg

SAR(1 g) = 0.453 mW/g ; SAR(10 g) = 0.277 mW/g

Maximum value of SAR (measured) = 0.496 mW/g

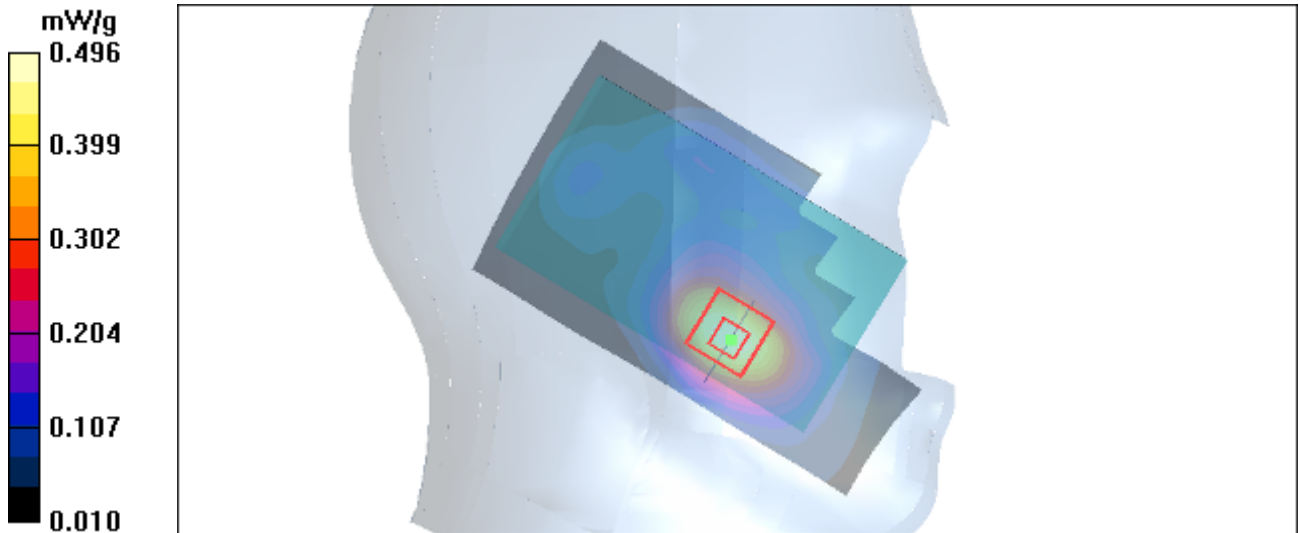


Figure 36 Left Hand Touch Cheek GSM 1900 Channel 810

GSM 1900 Left Cheek Middle (Battery 1)

Date/Time: 4/25/2012 7:51:08 PM

Communication System: PCS 1900; Frequency: 1880 MHz; Duty Cycle: 1:8.3

Medium parameters used: $f = 1880$ MHz; $\sigma = 1.38$ mho/m; $\epsilon_r = 40.2$; $\rho = 1000$ kg/m³

Ambient Temperature: 22.3 °C Liquid Temperature: 21.5°C

Phantom section: Left Section

DASY4 Configuration:

Probe: EX3DV4 - SN3816; ConvF(7.9, 7.9, 7.9); Calibrated: 10/3/2011

Electronics: DAE4 Sn1317; Calibrated: 1/23/2012

Phantom: SAM000 T01; Type: SAM V4.0; Serial: TP-1246

Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 186

Cheek Middle/Area Scan (61x101x1): Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (interpolated) = 0.512 mW/g

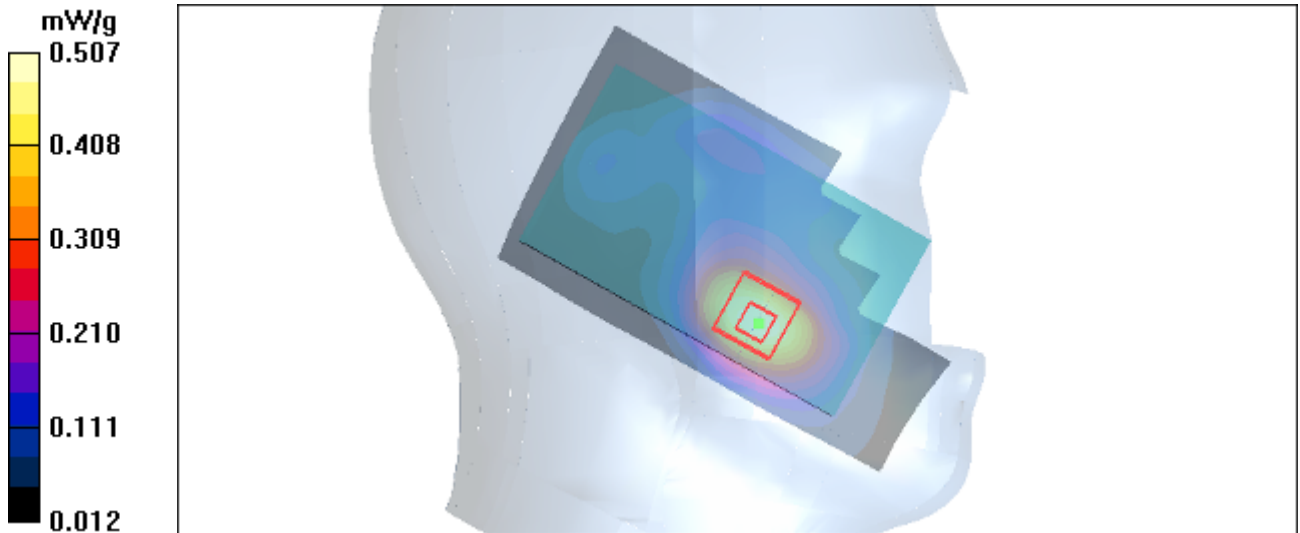
Cheek Middle/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 9.08 V/m; Power Drift = 0.077 dB

Peak SAR (extrapolated) = 0.708 W/kg

SAR(1 g) = 0.462 mW/g; SAR(10 g) = 0.285 mW/g

Maximum value of SAR (measured) = 0.507 mW/g



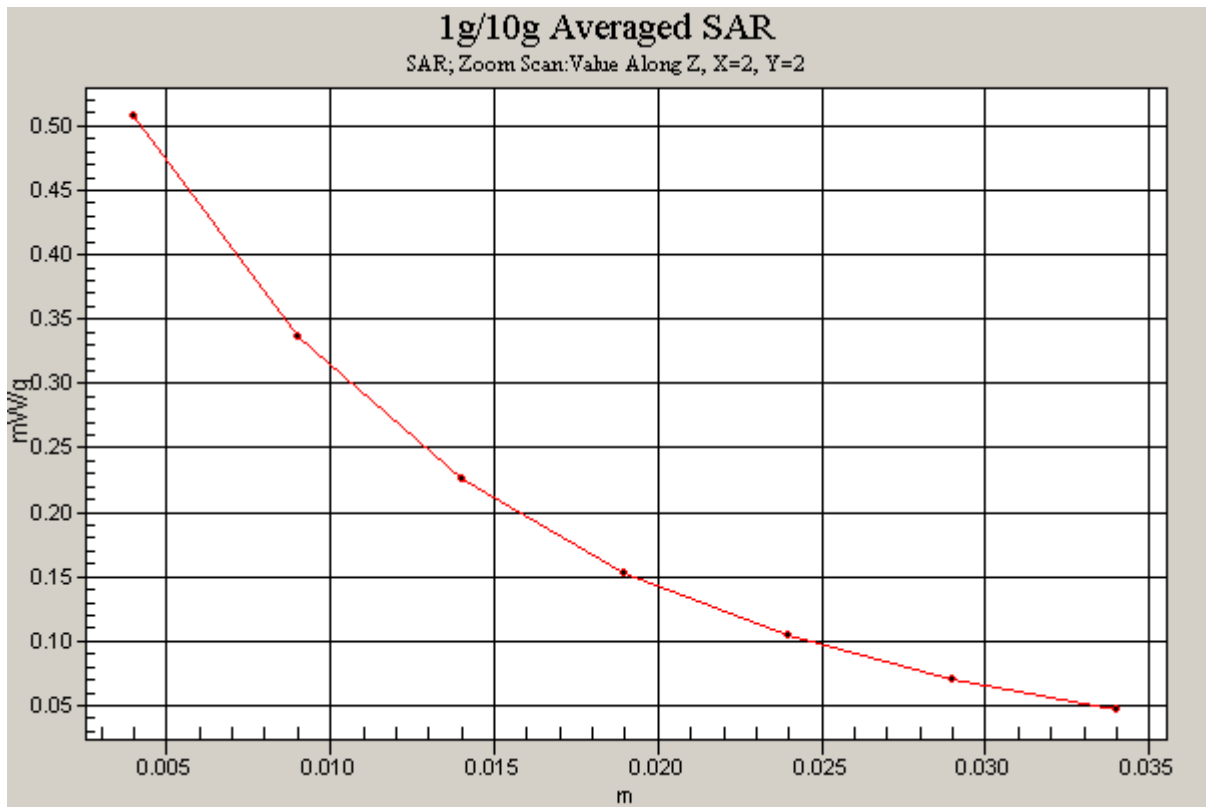


Figure 37 Left Hand Touch Cheek GSM 1900 Channel 661

GSM 1900 Left Cheek Low (Battery 1)

Date/Time: 4/25/2012 8:06:06 PM

Communication System: PCS 1900; Frequency: 1850.2 MHz; Duty Cycle: 1:8.3

Medium parameters used (interpolated): $f = 1850.2$ MHz; $\sigma = 1.35$ mho/m; $\epsilon_r = 40.3$; $\rho = 1000$ kg/m³

Ambient Temperature: 22.3 °C Liquid Temperature: 21.5 °C

Phantom section: Left Section

DASY4 Configuration:

Probe: EX3DV4 - SN3816; ConvF(7.9, 7.9, 7.9); Calibrated: 10/3/2011

Electronics: DAE4 Sn1317; Calibrated: 1/23/2012

Phantom: SAM000 T01; Type: SAM V4.0; Serial: TP-1246

Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 186

Cheek Low/Area Scan (61x101x1): Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (interpolated) = 0.496 mW/g

Cheek Low/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 8.80 V/m; Power Drift = 0.059 dB

Peak SAR (extrapolated) = 0.682 W/kg

SAR(1 g) = 0.450 mW/g; SAR(10 g) = 0.281 mW/g

Maximum value of SAR (measured) = 0.491 mW/g

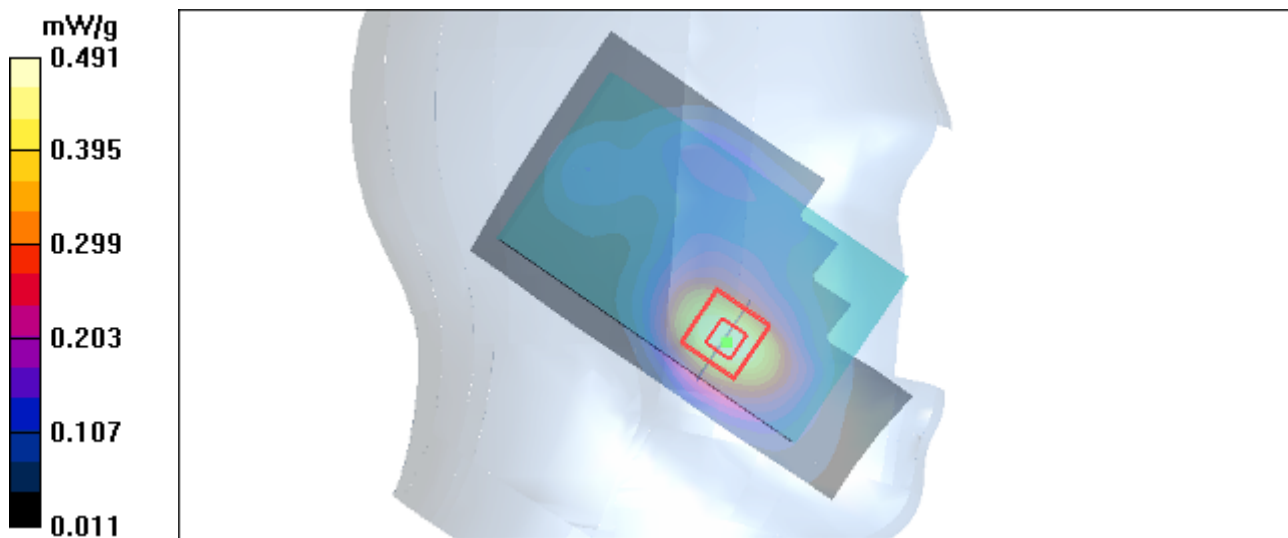


Figure 38 Left Hand Touch Cheek GSM 1900 Channel 512

GSM 1900 Left Tilt High (Battery 1)

Date/Time: 4/25/2012 8:36:19 PM

Communication System: PCS 1900; Frequency: 1909.8 MHz; Duty Cycle: 1:8.3

Medium parameters used: $f = 1910$ MHz; $\sigma = 1.4$ mho/m; $\epsilon_r = 40.1$; $\rho = 1000$ kg/m³

Ambient Temperature: 22.3 °C Liquid Temperature: 21.5 °C

Phantom section: Left Section

DASY4 Configuration:

Probe: EX3DV4 - SN3816; ConvF(7.9, 7.9, 7.9); Calibrated: 10/3/2011

Electronics: DAE4 Sn1317; Calibrated: 1/23/2012

Phantom: SAM000 T01; Type: SAM V4.0; Serial: TP-1246

Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 186

Tilt High/Area Scan (61x101x1): Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (interpolated) = 0.247 mW/g

Tilt High/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 13.3 V/m; Power Drift = 0.035 dB

Peak SAR (extrapolated) = 0.377 W/kg

SAR(1 g) = 0.220 mW/g; SAR(10 g) = 0.120 mW/g

Maximum value of SAR (measured) = 0.241 mW/g

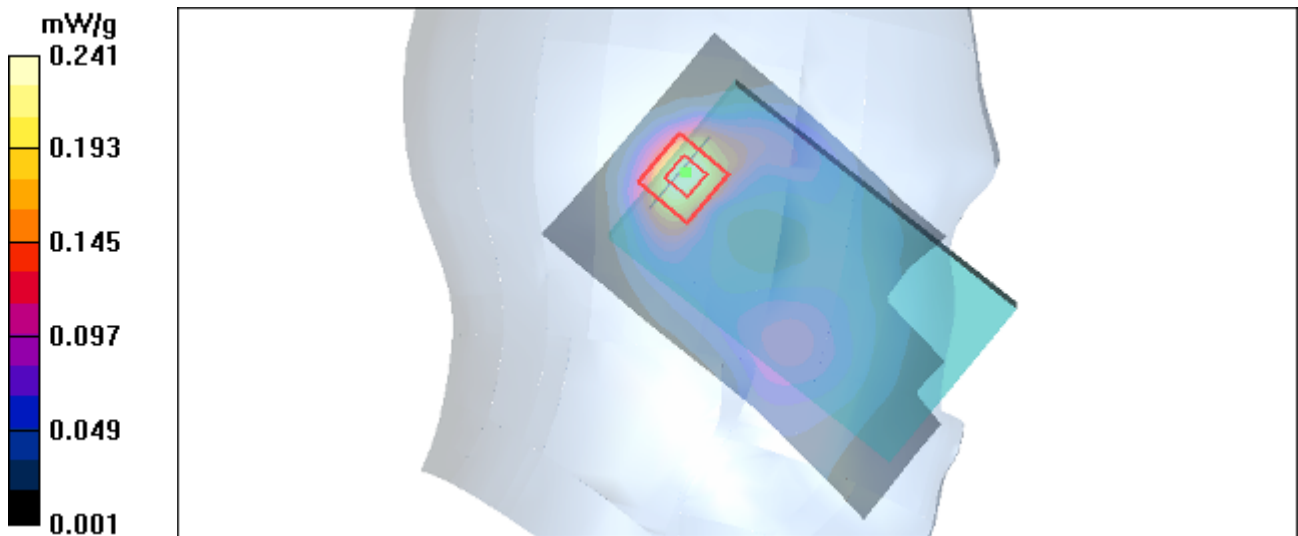


Figure 39 Left Hand Tilt 15° GSM 1900 Channel 810

GSM 1900 Left Tilt Middle (Battery 1)

Date/Time: 4/25/2012 9:06:32 PM

Communication System: PCS 1900; Frequency: 1880 MHz; Duty Cycle: 1:8.3

Medium parameters used: $f = 1880$ MHz; $\sigma = 1.38$ mho/m; $\epsilon_r = 40.2$; $\rho = 1000$ kg/m³

Ambient Temperature: 22.3 °C Liquid Temperature: 21.5 °C

Phantom section: Left Section

DASY4 Configuration:

Probe: EX3DV4 - SN3816; ConvF(7.9, 7.9, 7.9); Calibrated: 10/3/2011

Electronics: DAE4 Sn1317; Calibrated: 1/23/2012

Phantom: SAM000 T01; Type: SAM V4.0; Serial: TP-1246

Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 186

Tilt Middle/Area Scan (61x101x1): Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (interpolated) = 0.221 mW/g

Tilt Middle/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 12.7 V/m; Power Drift = -0.016 dB

Peak SAR (extrapolated) = 0.340 W/kg

SAR(1 g) = 0.201 mW/g; SAR(10 g) = 0.111 mW/g

Maximum value of SAR (measured) = 0.220 mW/g

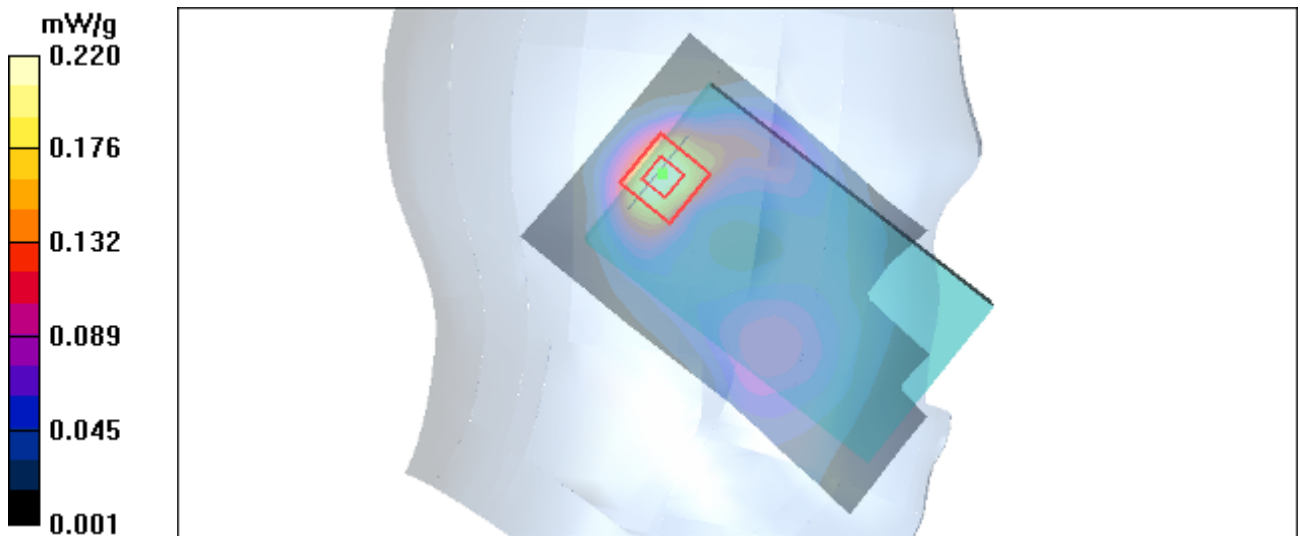


Figure 40 Left Hand Tilt 15° GSM 1900 Channel 661

GSM 1900 Left Tilt Low (Battery 1)

Date/Time: 4/25/2012 8:51:36 PM

Communication System: PCS 1900; Frequency: 1850.2 MHz; Duty Cycle: 1:8.3

Medium parameters used (interpolated): $f = 1850.2$ MHz; $\sigma = 1.35$ mho/m; $\epsilon_r = 40.3$; $\rho = 1000$ kg/m³

Ambient Temperature: 22.3 °C Liquid Temperature: 21.5 °C

Phantom section: Left Section

DASY4 Configuration:

Probe: EX3DV4 - SN3816; ConvF(7.9, 7.9, 7.9); Calibrated: 10/3/2011

Electronics: DAE4 Sn1317; Calibrated: 1/23/2012

Phantom: SAM000 T01; Type: SAM V4.0; Serial: TP-1246

Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 186

Tilt Low/Area Scan (61x101x1): Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (interpolated) = 0.220 mW/g

Tilt Low/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 13.0 V/m; Power Drift = 0.044 dB

Peak SAR (extrapolated) = 0.341 W/kg

SAR(1 g) = 0.206 mW/g; SAR(10 g) = 0.115 mW/g

Maximum value of SAR (measured) = 0.231 mW/g

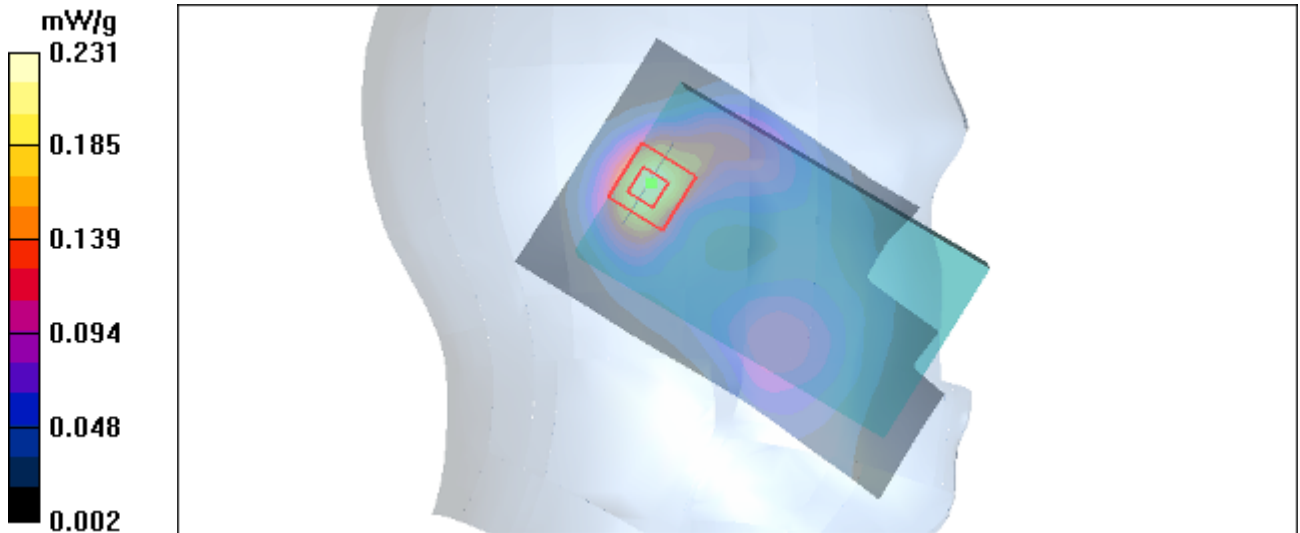


Figure 41 Left Hand Tilt 15° GSM 1900 Channel 512

GSM 1900 Right Cheek High (Battery 1)

Date/Time: 4/25/2012 6:47:50 PM

Communication System: PCS 1900; Frequency: 1909.8 MHz; Duty Cycle: 1:8.3

Medium parameters used: $f = 1910$ MHz; $\sigma = 1.4$ mho/m; $\epsilon_r = 40.1$; $\rho = 1000$ kg/m³

Ambient Temperature: 22.3 °C Liquid Temperature: 21.5°C

Phantom section: Right Section

DASY4 Configuration:

Probe: EX3DV4 - SN3816; ConvF(7.9, 7.9, 7.9); Calibrated: 10/3/2011

Electronics: DAE4 Sn1317; Calibrated: 1/23/2012

Phantom: SAM000 T01; Type: SAM V4.0; Serial: TP-1246

Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 186

Cheek High/Area Scan (61x101x1): Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (interpolated) = 0.292 mW/g

Cheek High/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 9.63 V/m; Power Drift = 0.008 dB

Peak SAR (extrapolated) = 0.404 W/kg

SAR(1 g) = 0.265 mW/g; SAR(10 g) = 0.171 mW/g

Maximum value of SAR (measured) = 0.289 mW/g

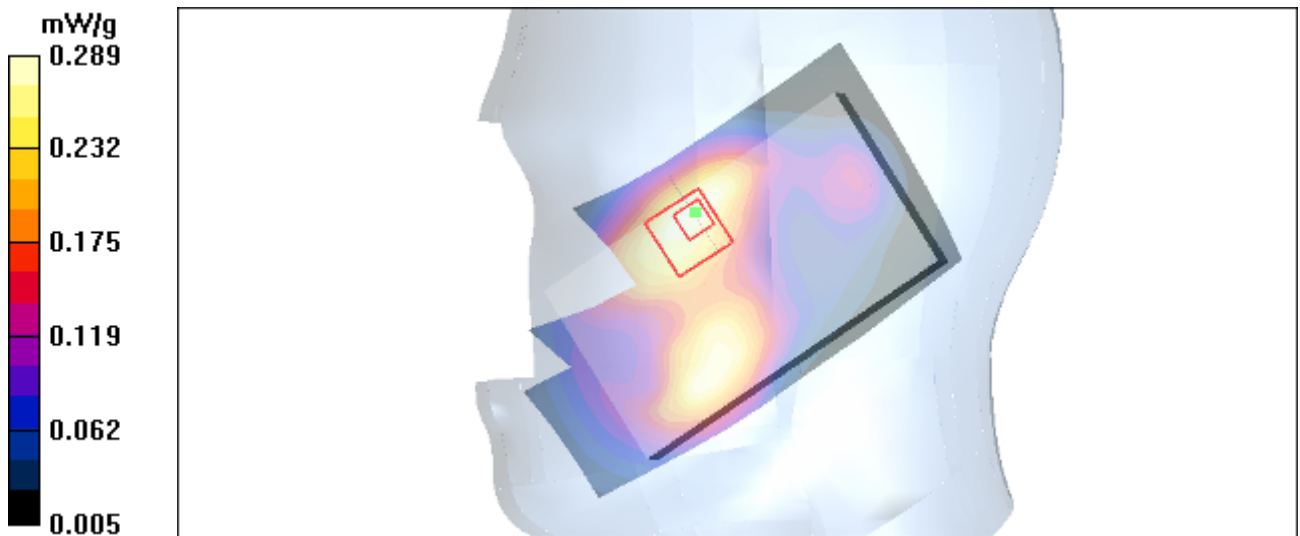


Figure 42 Right Hand Touch Cheek GSM 1900 Channel 810

GSM 1900 Right Cheek Middle (Battery 1)

Date/Time: 4/25/2012 6:33:00 PM

Communication System: PCS 1900; Frequency: 1880 MHz; Duty Cycle: 1:8.3

Medium parameters used: $f = 1880$ MHz; $\sigma = 1.38$ mho/m; $\epsilon_r = 40.2$; $\rho = 1000$ kg/m³

Ambient Temperature: 22.3 °C Liquid Temperature: 21.5°C

Phantom section: Right Section

DASY4 Configuration:

Probe: EX3DV4 - SN3816; ConvF(7.9, 7.9, 7.9); Calibrated: 10/3/2011

Electronics: DAE4 Sn1317; Calibrated: 1/23/2012

Phantom: SAM000 T01; Type: SAM V4.0; Serial: TP-1246

Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 186

Cheek Middle/Area Scan (61x101x1): Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (interpolated) = 0.293 mW/g

Cheek Middle/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 9.47 V/m; Power Drift = 0.036 dB

Peak SAR (extrapolated) = 0.454 W/kg

SAR(1 g) = 0.295 mW/g; SAR(10 g) = 0.180 mW/g

Maximum value of SAR (measured) = 0.324 mW/g

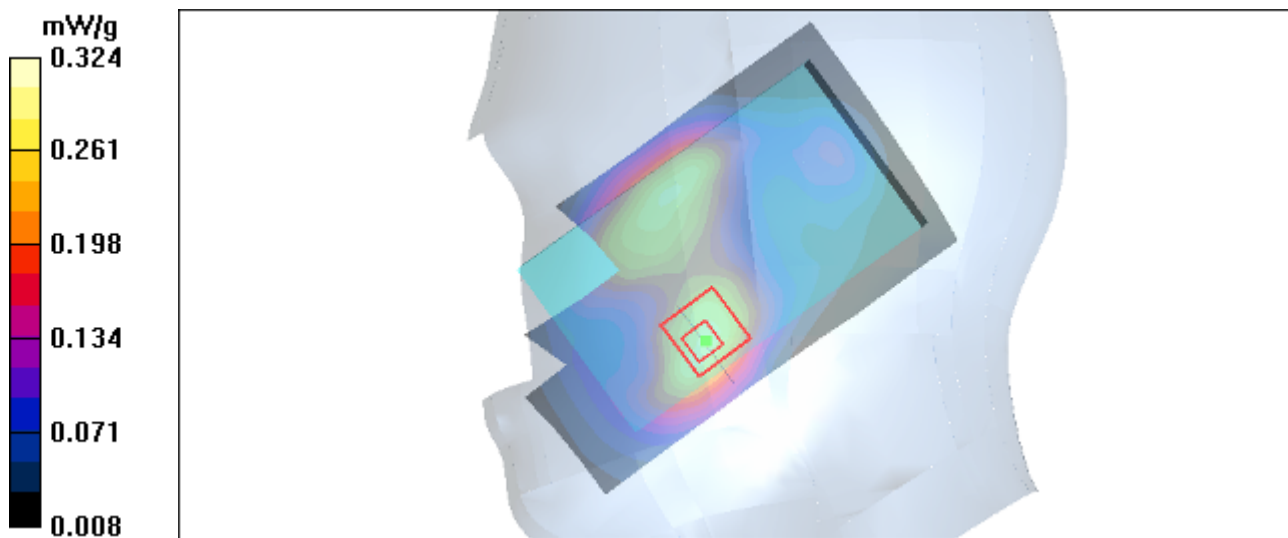


Figure 43 Right Hand Touch Cheek GSM 1900 Channel 661

GSM 1900 Right Cheek Low (Battery 1)

Date/Time: 4/25/2012 6:17:30 PM

Communication System: PCS 1900; Frequency: 1850.2 MHz; Duty Cycle: 1:8.3

Medium parameters used (interpolated): $f = 1850.2$ MHz; $\sigma = 1.35$ mho/m; $\epsilon_r = 40.3$; $\rho = 1000$ kg/m³

Ambient Temperature: 22.3 °C Liquid Temperature: 21.5 °C

Phantom section: Right Section

DASY4 Configuration:

Probe: EX3DV4 - SN3816; ConvF(7.9, 7.9, 7.9); Calibrated: 10/3/2011

Electronics: DAE4 Sn1317; Calibrated: 1/23/2012

Phantom: SAM000 T01; Type: SAM V4.0; Serial: TP-1246

Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 186

Cheek Low/Area Scan (61x101x1): Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (interpolated) = 0.305 mW/g

Cheek Low/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 9.36 V/m; Power Drift = 0.120 dB

Peak SAR (extrapolated) = 0.454 W/kg

SAR(1 g) = 0.304 mW/g; SAR(10 g) = 0.189 mW/g

Maximum value of SAR (measured) = 0.333 mW/g

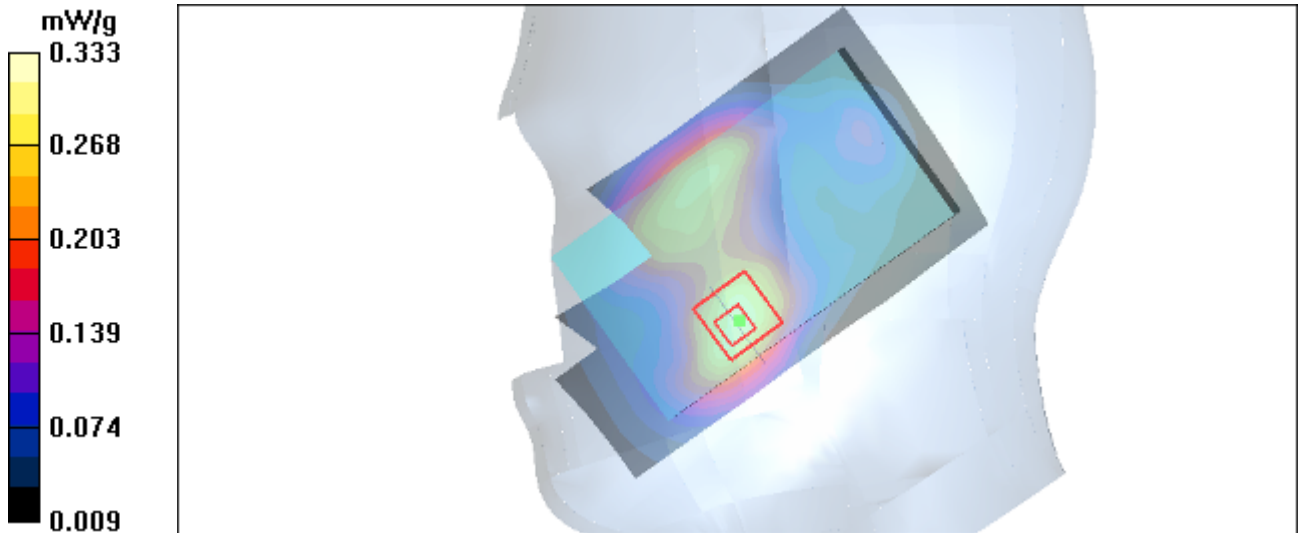


Figure 44 Right Hand Touch Cheek GSM 1900 Channel 512

GSM 1900 Right Tilt High (Battery 1)

Date/Time: 4/25/2012 7:02:58 PM

Communication System: PCS 1900; Frequency: 1909.8 MHz; Duty Cycle: 1:8.3

Medium parameters used: $f = 1910$ MHz; $\sigma = 1.4$ mho/m; $\epsilon_r = 40.1$; $\rho = 1000$ kg/m³

Ambient Temperature: 22.3 °C Liquid Temperature: 21.5°C

Phantom section: Right Section

DASY4 Configuration:

Probe: EX3DV4 - SN3816; ConvF(7.9, 7.9, 7.9); Calibrated: 10/3/2011

Electronics: DAE4 Sn1317; Calibrated: 1/23/2012

Phantom: SAM000 T01; Type: SAM V4.0; Serial: TP-1246

Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 186

Tilt High/Area Scan (61x101x1): Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (interpolated) = 0.261 mW/g

Tilt High/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 13.4 V/m; Power Drift = 0.029 dB

Peak SAR (extrapolated) = 0.383 W/kg

SAR(1 g) = 0.230 mW/g; SAR(10 g) = 0.126 mW/g

Maximum value of SAR (measured) = 0.258 mW/g

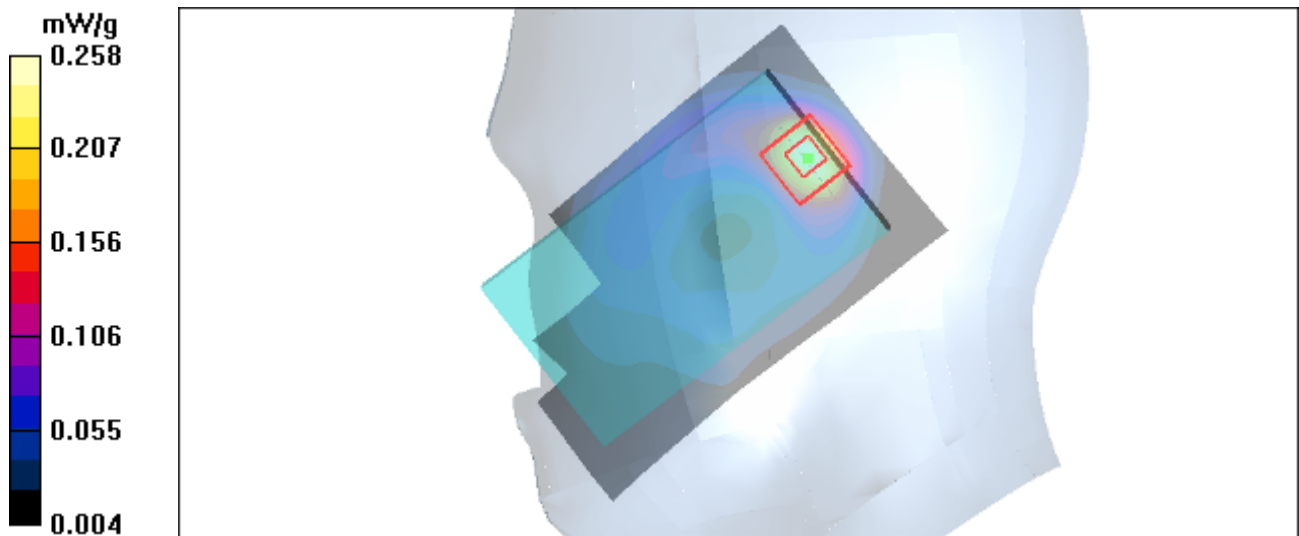


Figure 45 Right Hand Tilt 15° GSM 1900 Channel 810

GSM 1900 Right Tilt Middle (Battery 1)

Date/Time: 4/25/2012 7:31:42 PM

Communication System: PCS 1900; Frequency: 1880 MHz; Duty Cycle: 1:8.3

Medium parameters used: $f = 1880$ MHz; $\sigma = 1.38$ mho/m; $\epsilon_r = 40.2$; $\rho = 1000$ kg/m³

Ambient Temperature: 22.3 °C Liquid Temperature: 21.5°C

Phantom section: Right Section

DASY4 Configuration:

Probe: EX3DV4 - SN3816; ConvF(7.9, 7.9, 7.9); Calibrated: 10/3/2011

Electronics: DAE4 Sn1317; Calibrated: 1/23/2012

Phantom: SAM000 T01; Type: SAM V4.0; Serial: TP-1246

Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 186

Tilt Middle/Area Scan (61x101x1): Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (interpolated) = 0.259 mW/g

Tilt Middle/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 13.4 V/m; Power Drift = 0.031 dB

Peak SAR (extrapolated) = 0.376 W/kg

SAR(1 g) = 0.228 mW/g; SAR(10 g) = 0.127 mW/g

Maximum value of SAR (measured) = 0.257 mW/g

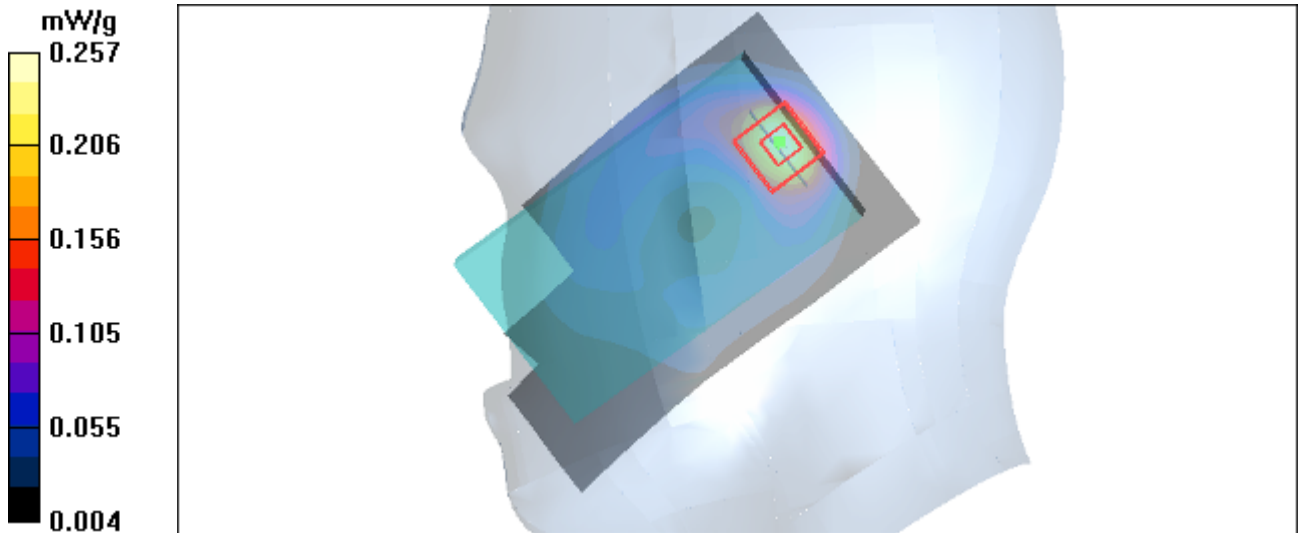


Figure 46 Right Hand Tilt 15° GSM 1900 Channel 661

GSM 1900 Right Tilt Low (Battery 1)

Date/Time: 4/25/2012 7:17:16 PM

Communication System: PCS 1900; Frequency: 1850.2 MHz; Duty Cycle: 1:8.3

Medium parameters used (interpolated): $f = 1850.2$ MHz; $\sigma = 1.35$ mho/m; $\epsilon_r = 40.3$; $\rho = 1000$ kg/m³

Ambient Temperature: 22.3 °C Liquid Temperature: 21.5°C

Phantom section: Right Section

DASY4 Configuration:

Probe: EX3DV4 - SN3816; ConvF(7.9, 7.9, 7.9); Calibrated: 10/3/2011

Electronics: DAE4 Sn1317; Calibrated: 1/23/2012

Phantom: SAM000 T01; Type: SAM V4.0; Serial: TP-1246

Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 186

Tilt Low/Area Scan (61x101x1): Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (interpolated) = 0.250 mW/g

Tilt Low/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 13.5 V/m; Power Drift = 0.013 dB

Peak SAR (extrapolated) = 0.374 W/kg

SAR(1 g) = 0.229 mW/g; SAR(10 g) = 0.129 mW/g

Maximum value of SAR (measured) = 0.257 mW/g

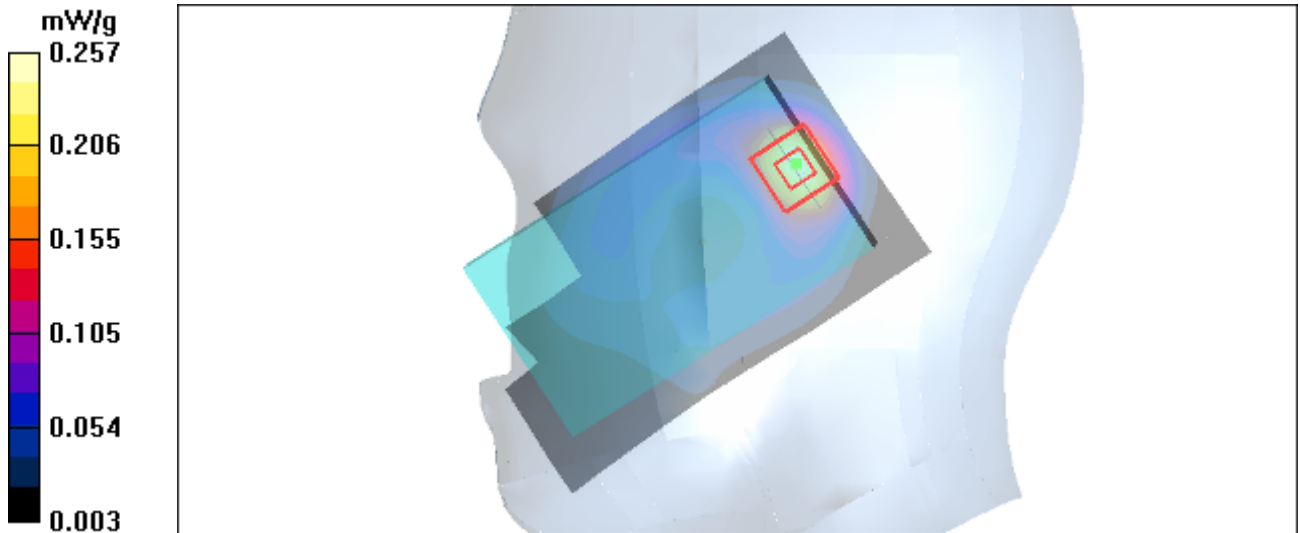


Figure 47 Right Hand Tilt 15° GSM 1900 Channel 512

GSM 1900 GPRS (4Txslots) Back Side High (Battery 1)

Date/Time: 4/25/2012 2:59:35 AM

Communication System: PCS 1900+GPRS(4Up); Frequency: 1909.8 MHz;Duty Cycle: 1:2.075

Medium parameters used: $f = 1910$ MHz; $\sigma = 1.56$ mho/m; $\epsilon_r = 52.1$; $\rho = 1000$ kg/m³

Ambient Temperature:22.3 °C Liquid Temperature: 21.5°C

Phantom section: Flat Section

DASY4 Configuration:

Probe: EX3DV4 - SN3816; ConvF(7.51, 7.51, 7.51); Calibrated: 10/3/2011

Electronics: DAE4 Sn1317; Calibrated: 1/23/2012

Phantom: SAM000 T01; Type: SAM V4.0; Serial: TP-1246

Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 186

Back Side High/Area Scan (61x91x1): Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (interpolated) = 1.14 mW/g

Back Side High/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 9.99 V/m; Power Drift = -0.020 dB

Peak SAR (extrapolated) = 1.69 W/kg

SAR(1 g) = 0.981 mW/g; SAR(10 g) = 0.575 mW/g

Maximum value of SAR (measured) = 1.04 mW/g

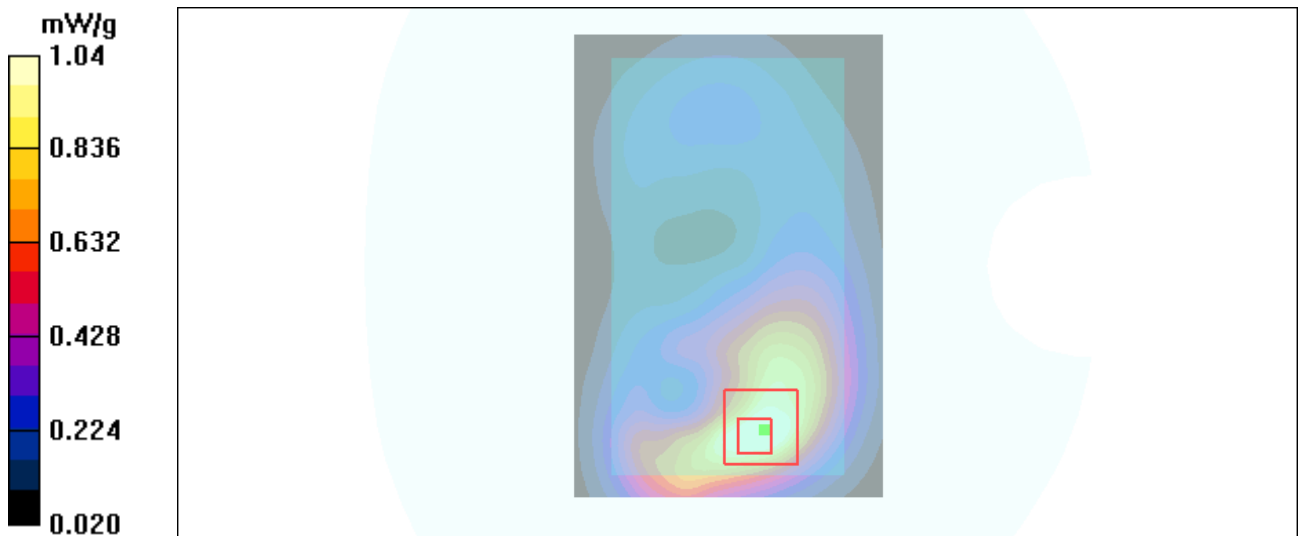


Figure 48 Body, Back Side, GSM 1900 GPRS (4Txslots) Channel 810

TA Technology (Shanghai) Co., Ltd. Test Report

Report No.: RXA1204-0067SAR01R1

Page 98 of 220

GSM 1900 GPRS (4Txslots) Back Side Middle (Battery 1)

Date/Time: 4/25/2012 3:23:24 AM

Communication System: PCS 1900+GPRS(4Up); Frequency: 1880 MHz; Duty Cycle: 1:2.075

Medium parameters used: $f = 1880$ MHz; $\sigma = 1.54$ mho/m; $\epsilon_r = 52.2$; $\rho = 1000$ kg/m³

Ambient Temperature: 22.3 °C Liquid Temperature: 21.5 °C

Phantom section: Flat Section

DASY4 Configuration:

Probe: EX3DV4 - SN3816; ConvF(7.51, 7.51, 7.51); Calibrated: 10/3/2011

Electronics: DAE4 Sn1317; Calibrated: 1/23/2012

Phantom: SAM000 T01; Type: SAM V4.0; Serial: TP-1246

Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 186

Back Side Middle/Area Scan (61x91x1): Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (interpolated) = 0.896 mW/g

Back Side Middle/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 9.51 V/m; Power Drift = 0.185 dB

Peak SAR (extrapolated) = 1.26 W/kg

SAR(1 g) = 0.802 mW/g; SAR(10 g) = 0.496 mW/g

Maximum value of SAR (measured) = 0.874 mW/g

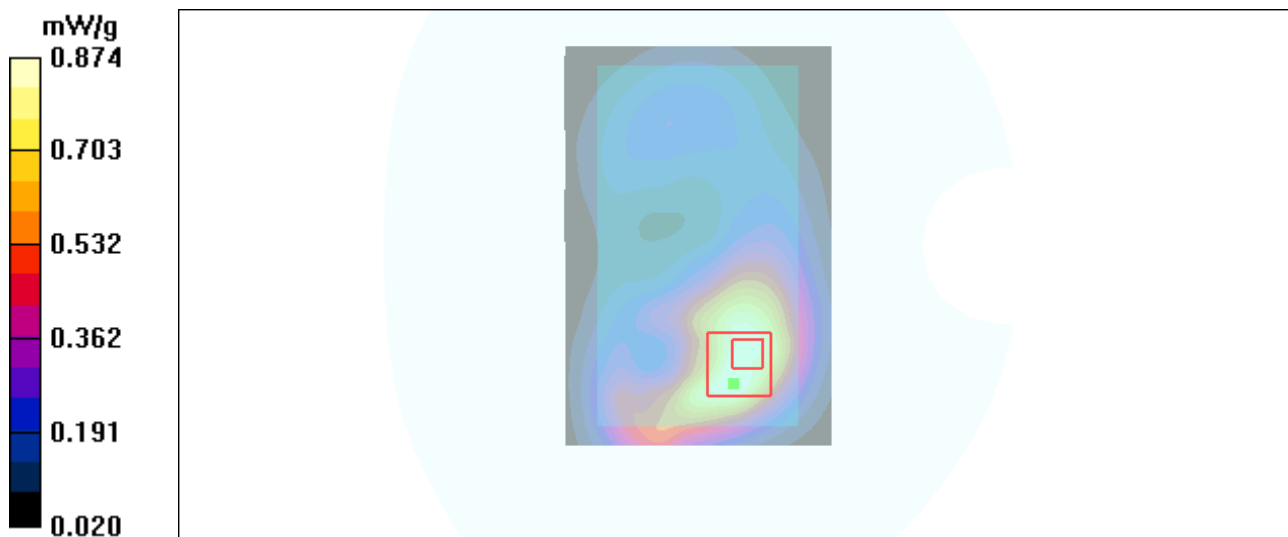


Figure 49 Body, Back Side, GSM 1900 GPRS (4Txslots) Channel 661

GSM 1900 GPRS (4Txslots) Back Side Low (Battery 1)

Date/Time: 4/25/2012 3:37:05 AM

Communication System: PCS 1900+GPRS(4Up); Frequency: 1850.2 MHz; Duty Cycle: 1:2.075

Medium parameters used (interpolated): $f = 1850.2$ MHz; $\sigma = 1.51$ mho/m; $\epsilon_r = 52.3$; $\rho = 1000$ kg/m³

Ambient Temperature: 22.3 °C Liquid Temperature: 21.5°C

Phantom section: Flat Section

DASY4 Configuration:

Probe: EX3DV4 - SN3816; ConvF(7.51, 7.51, 7.51); Calibrated: 10/3/2011

Electronics: DAE4 Sn1317; Calibrated: 1/23/2012

Phantom: SAM000 T01; Type: SAM V4.0; Serial: TP-1246

Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 186

Back Side Low/Area Scan (61x91x1): Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (interpolated) = 0.884 mW/g

Back Side Low/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 9.40 V/m; Power Drift = -0.196 dB

Peak SAR (extrapolated) = 1.29 W/kg

SAR(1 g) = 0.799 mW/g; SAR(10 g) = 0.499 mW/g

Maximum value of SAR (measured) = 0.841 mW/g

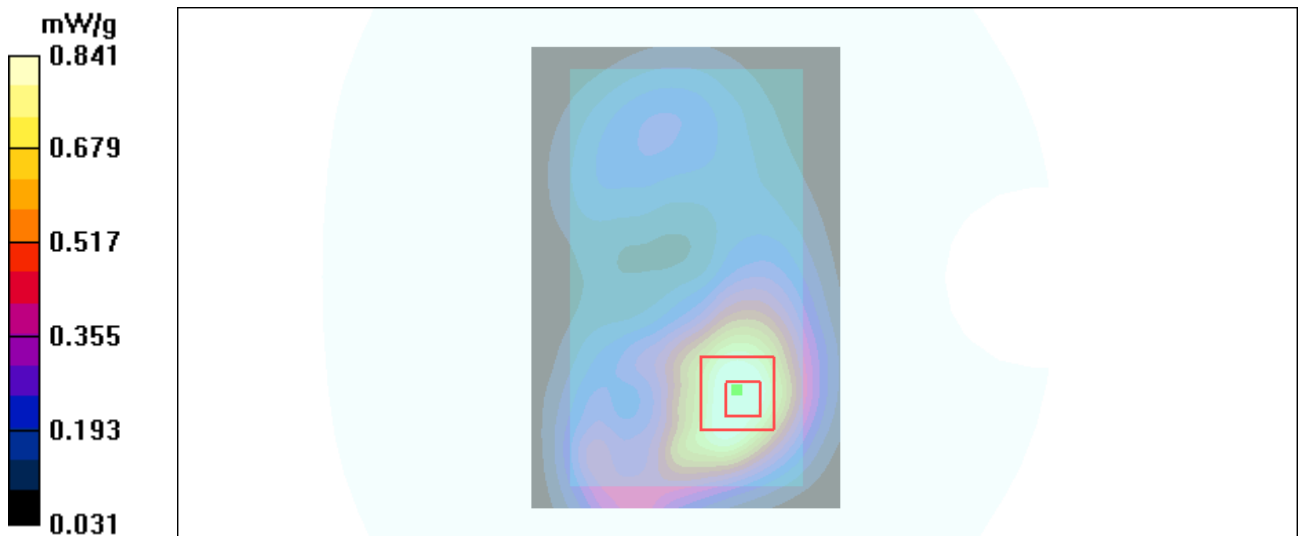


Figure 50 Body, Back Side, GSM 1900 GPRS (4Txslots) Channel 512

GSM 1900 GPRS (4Txslots) Front Side High (Battery 1)

Date/Time: 4/25/2012 3:51:32 AM

Communication System: PCS 1900+GPRS(4Up); Frequency: 1909.8 MHz;Duty Cycle: 1:2.075

Medium parameters used: $f = 1910$ MHz; $\sigma = 1.56$ mho/m; $\epsilon_r = 52.1$; $\rho = 1000$ kg/m³

Ambient Temperature:22.3 °C Liquid Temperature: 21.5°C

Phantom section: Flat Section

DASY4 Configuration:

Probe: EX3DV4 - SN3816; ConvF(7.51, 7.51, 7.51); Calibrated: 10/3/2011

Electronics: DAE4 Sn1317; Calibrated: 1/23/2012

Phantom: SAM000 T01; Type: SAM V4.0; Serial: TP-1246

Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 186

Front Side High/Area Scan (61x91x1): Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (interpolated) = 0.748 mW/g

Front Side High/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 9.13 V/m; Power Drift = 0.029 dB

Peak SAR (extrapolated) = 1.20 W/kg

SAR(1 g) = 0.725 mW/g; SAR(10 g) = 0.451 mW/g

Maximum value of SAR (measured) = 0.781 mW/g

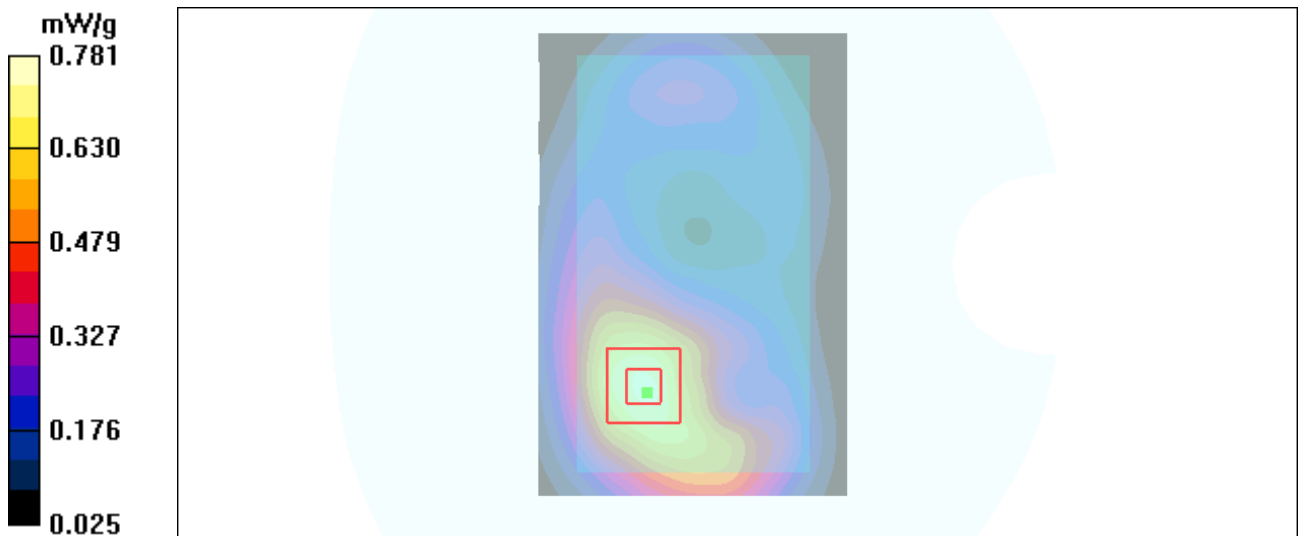


Figure 51 Body, Front Side, GSM 1900 GPRS (4Txslots) Channel 810

GSM 1900 GPRS (4Txslots) Left Edge High (Battery 1)

Date/Time: 4/25/2012 4:07:02 AM

Communication System: PCS 1900+GPRS(4Up); Frequency: 1909.8 MHz; Duty Cycle: 1:2.075

Medium parameters used: $f = 1910$ MHz; $\sigma = 1.56$ mho/m; $\epsilon_r = 52.1$; $\rho = 1000$ kg/m³

Ambient Temperature: 22.3 °C Liquid Temperature: 21.5°C

Phantom section: Flat Section

DASY4 Configuration:

Probe: EX3DV4 - SN3816; ConvF(7.51, 7.51, 7.51); Calibrated: 10/3/2011

Electronics: DAE4 Sn1317; Calibrated: 1/23/2012

Phantom: SAM000 T01; Type: SAM V4.0; Serial: TP-1246

Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 186

Left Edge High/Area Scan (31x91x1): Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (interpolated) = 0.285 mW/g

Left Edge High/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 12.4 V/m; Power Drift = 0.044 dB

Peak SAR (extrapolated) = 0.424 W/kg

SAR(1 g) = 0.260 mW/g; SAR(10 g) = 0.158 mW/g

Maximum value of SAR (measured) = 0.285 mW/g

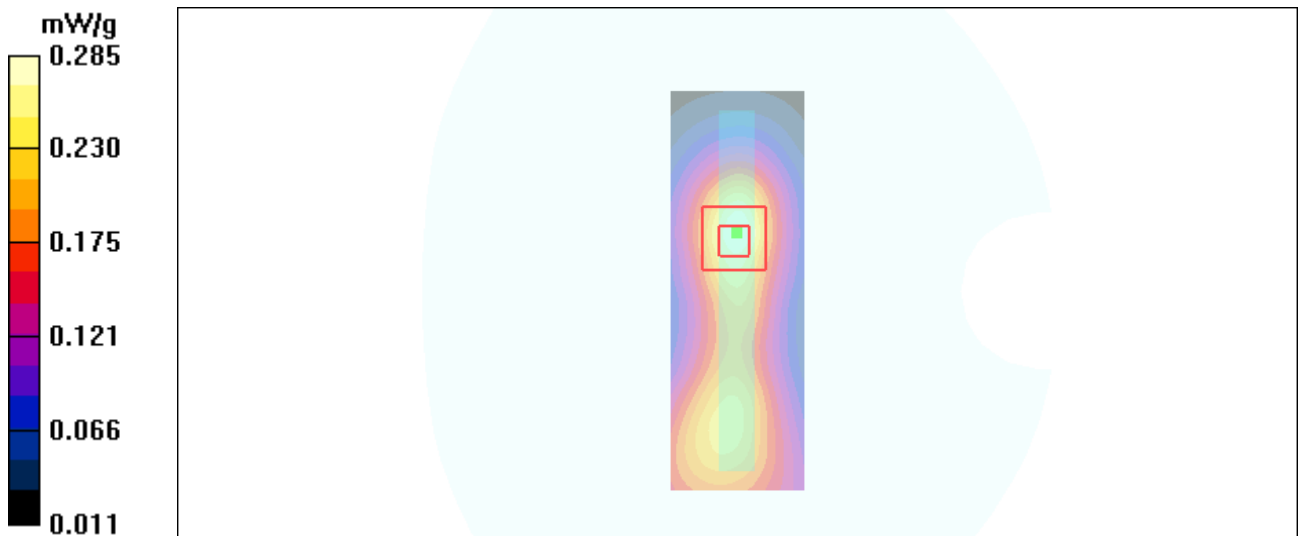


Figure 52 Body, Left Edge, GSM 1900 GPRS (4Txslots) Channel 810

GSM 1900 GPRS (4Txslots) Right Edge High (Battery 1)

Date/Time: 4/25/2012 4:18:23 AM

Communication System: PCS 1900+GPRS(4Up); Frequency: 1909.8 MHz; Duty Cycle: 1:2.075

Medium parameters used: $f = 1910$ MHz; $\sigma = 1.56$ mho/m; $\epsilon_r = 52.1$; $\rho = 1000$ kg/m³

Ambient Temperature: 22.3 °C Liquid Temperature: 21.5°C

Phantom section: Flat Section

DASY4 Configuration:

Probe: EX3DV4 - SN3816; ConvF(7.51, 7.51, 7.51); Calibrated: 10/3/2011

Electronics: DAE4 Sn1317; Calibrated: 1/23/2012

Phantom: SAM000 T01; Type: SAM V4.0; Serial: TP-1246

Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 186

Right Edge High/Area Scan (31x91x1): Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (interpolated) = 0.167 mW/g

Right Edge High/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 7.04 V/m; Power Drift = -0.006 dB

Peak SAR (extrapolated) = 0.258 W/kg

SAR(1 g) = 0.157 mW/g; SAR(10 g) = 0.095 mW/g

Maximum value of SAR (measured) = 0.170 mW/g

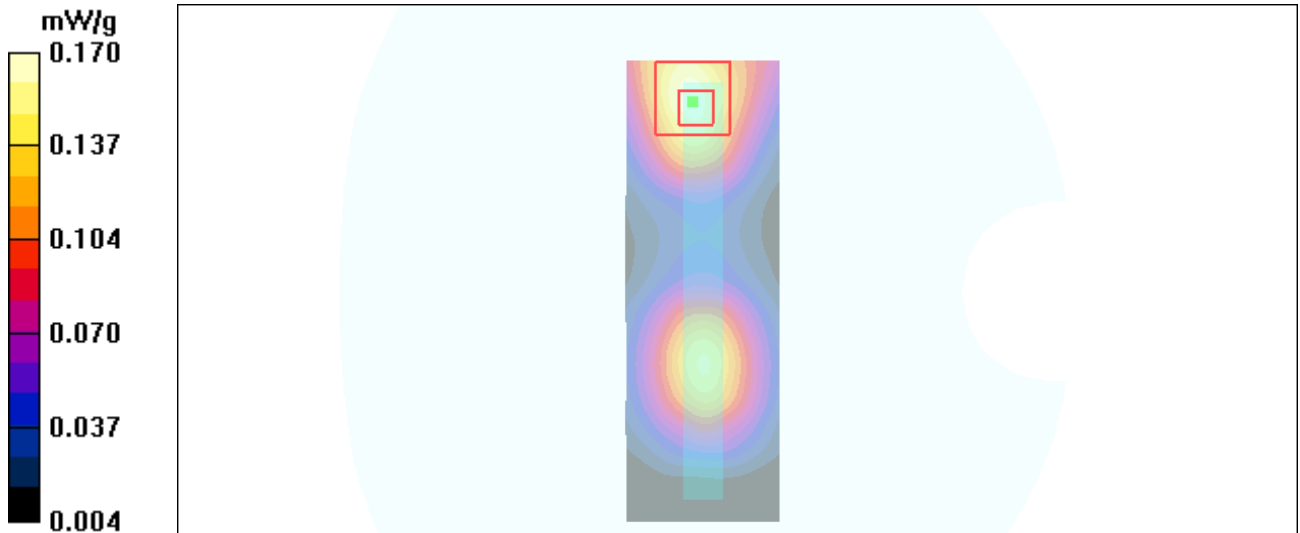


Figure 53 Body, Right Edge, GSM 1900 GPRS (4Txslots) Channel 810

GSM 1900 GPRS (4Txslots) Bottom Edge High (Battery 1)

Date/Time: 4/25/2012 4:32:03 AM

Communication System: PCS 1900+GPRS(4Up); Frequency: 1909.8 MHz; Duty Cycle: 1:2.075

Medium parameters used: $f = 1910$ MHz; $\sigma = 1.56$ mho/m; $\epsilon_r = 52.1$; $\rho = 1000$ kg/m³

Ambient Temperature: 22.3 °C Liquid Temperature: 21.5°C

Phantom section: Flat Section

DASY4 Configuration:

Probe: EX3DV4 - SN3816; ConvF(7.51, 7.51, 7.51); Calibrated: 10/3/2011

Electronics: DAE4 Sn1317; Calibrated: 1/23/2012

Phantom: SAM000 T01; Type: SAM V4.0; Serial: TP-1246

Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 186

Bottom Edge High/Area Scan (31x61x1): Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (interpolated) = 0.815 mW/g

Bottom Edge High/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 20.6 V/m; Power Drift = -0.028 dB

Peak SAR (extrapolated) = 1.19 W/kg

SAR(1 g) = 0.702 mW/g; SAR(10 g) = 0.369 mW/g

Maximum value of SAR (measured) = 0.782 mW/g

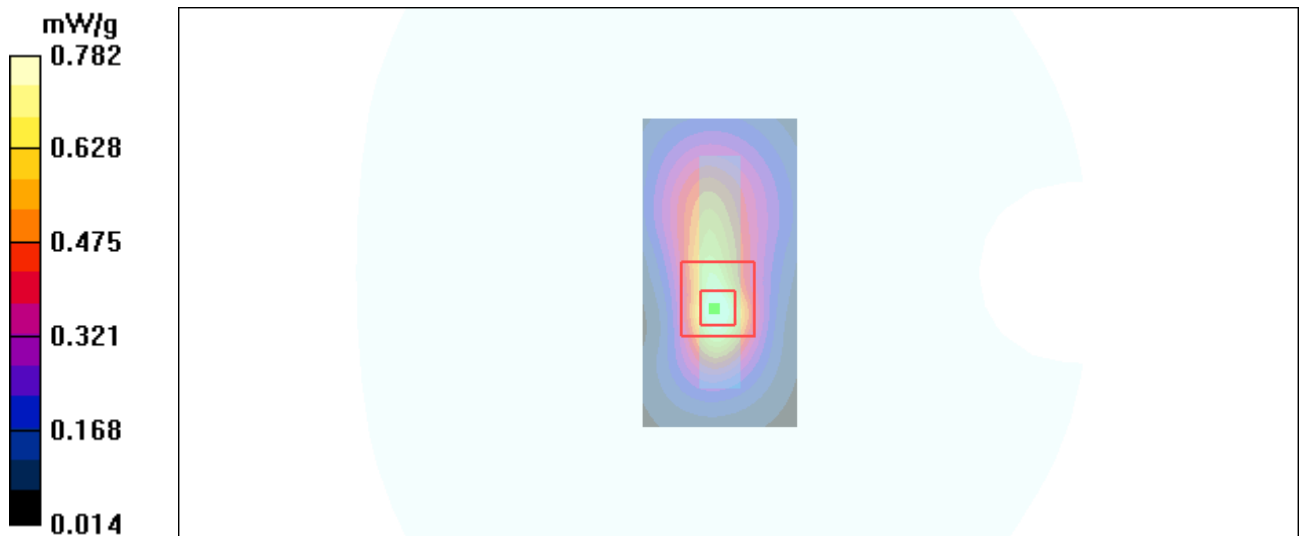


Figure 54 Body, Bottom Edge, GSM 1900 GPRS (4Txslots) Channel 810

GSM 1900 EGPRS (4Txslots) Back Side High (Battery 1)

Date/Time: 4/25/2012 4:43:49 AM

Communication System: PCS 1900+EGPRS(4Up); Frequency: 1909.8 MHz;Duty Cycle: 1:2.075

Medium parameters used: $f = 1910$ MHz; $\sigma = 1.56$ mho/m; $\epsilon_r = 52.1$; $\rho = 1000$ kg/m³

Ambient Temperature:22.3 °C Liquid Temperature: 21.5°C

Phantom section: Flat Section

DASY4 Configuration:

Probe: EX3DV4 - SN3816; ConvF(7.51, 7.51, 7.51); Calibrated: 10/3/2011

Electronics: DAE4 Sn1317; Calibrated: 1/23/2012

Phantom: SAM000 T01; Type: SAM V4.0; Serial: TP-1246

Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 186

Back Side High/Area Scan (61x91x1): Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (interpolated) = 1.16 mW/g

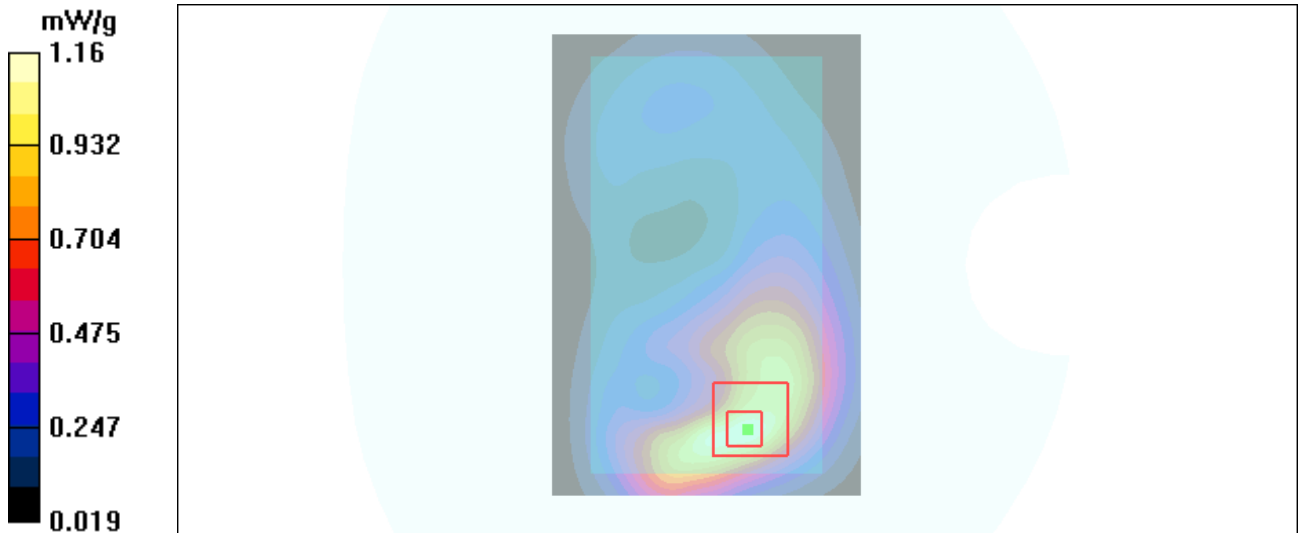
Back Side High/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 10.8 V/m; Power Drift = -0.007 dB

Peak SAR (extrapolated) = 1.69 W/kg

SAR(1 g) = 1.05 mW/g; SAR(10 g) = 0.619 mW/g

Maximum value of SAR (measured) = 1.16 mW/g



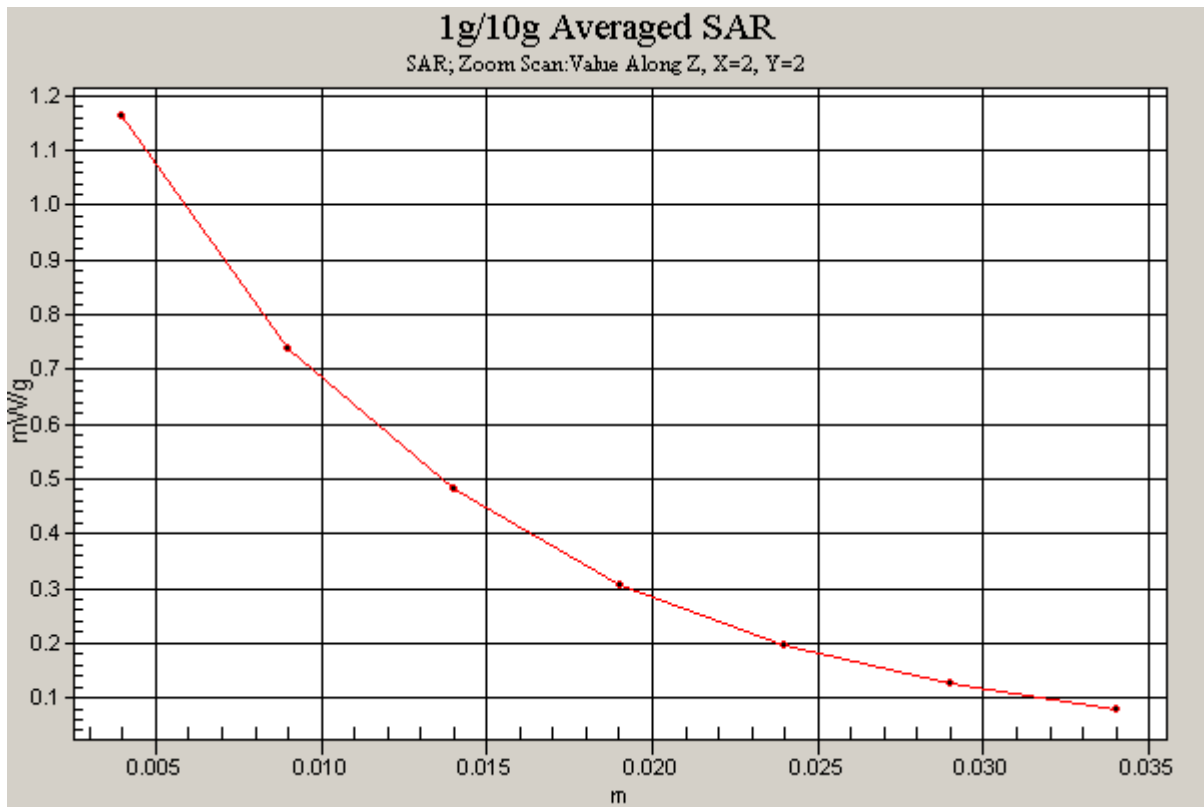


Figure 55 Body, Back Side, GSM 1900 EGPRS (4Txslots) Channel 810

GSM 1900 with Stereo Headset 1 Back Side High (Battery 1)

Date/Time: 4/25/2012 5:02:37 AM

Communication System: PCS 1900; Frequency: 1909.8 MHz; Duty Cycle: 1:2.075

Medium parameters used: $f = 1910$ MHz; $\sigma = 1.56$ mho/m; $\epsilon_r = 52.1$; $\rho = 1000$ kg/m³

Ambient Temperature: 22.3 °C Liquid Temperature: 21.5°C

Phantom section: Flat Section

DASY4 Configuration:

Probe: EX3DV4 - SN3816; ConvF(7.51, 7.51, 7.51); Calibrated: 10/3/2011

Electronics: DAE4 Sn1317; Calibrated: 1/23/2012

Phantom: SAM000 T01; Type: SAM V4.0; Serial: TP-1246

Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 186

Back Side High/Area Scan (61x91x1): Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (interpolated) = 0.647 mW/g

Back Side High/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 8.83 V/m; Power Drift = 0.023 dB

Peak SAR (extrapolated) = 0.940 W/kg

SAR(1 g) = 0.596 mW/g; SAR(10 g) = 0.356 mW/g

Maximum value of SAR (measured) = 0.666 mW/g

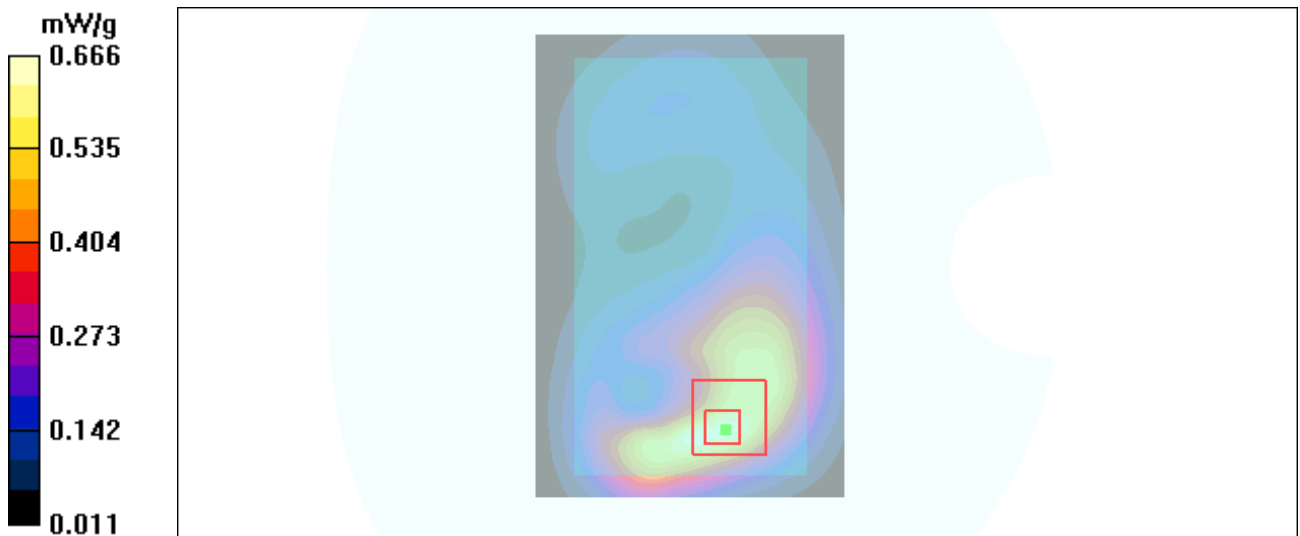


Figure 56 Body with Stereo Headset 1, Back Side, GSM 1900 Channel 810

GSM 1900 with Stereo Headset 2 Back Side High (Battery 1)

Date/Time: 4/25/2012 5:21:11 AM

Communication System: PCS 1900; Frequency: 1909.8 MHz; Duty Cycle: 1:2.075

Medium parameters used: $f = 1910$ MHz; $\sigma = 1.56$ mho/m; $\epsilon_r = 52.1$; $\rho = 1000$ kg/m³

Ambient Temperature: 22.3 °C Liquid Temperature: 21.5°C

Phantom section: Flat Section

DASY4 Configuration:

Probe: EX3DV4 - SN3816; ConvF(7.51, 7.51, 7.51); Calibrated: 10/3/2011

Electronics: DAE4 Sn1317; Calibrated: 1/23/2012

Phantom: SAM000 T01; Type: SAM V4.0; Serial: TP-1246

Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 186

Back Side High/Area Scan (61x91x1): Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (interpolated) = 0.624 mW/g

Back Side High/Zoom Scan (5x5x7)/Cube 1: Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 9.01 V/m; Power Drift = 0.017 dB

Peak SAR (extrapolated) = 0.897 W/kg

SAR(1 g) = 0.521 mW/g; SAR(10 g) = 0.319 mW/g

Maximum value of SAR (measured) = 0.630 mW/g

Back Side High/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 9.01 V/m; Power Drift = 0.017 dB

Peak SAR (extrapolated) = 0.912 W/kg

SAR(1 g) = 0.574 mW/g; SAR(10 g) = 0.334 mW/g

Maximum value of SAR (measured) = 0.629 mW/g

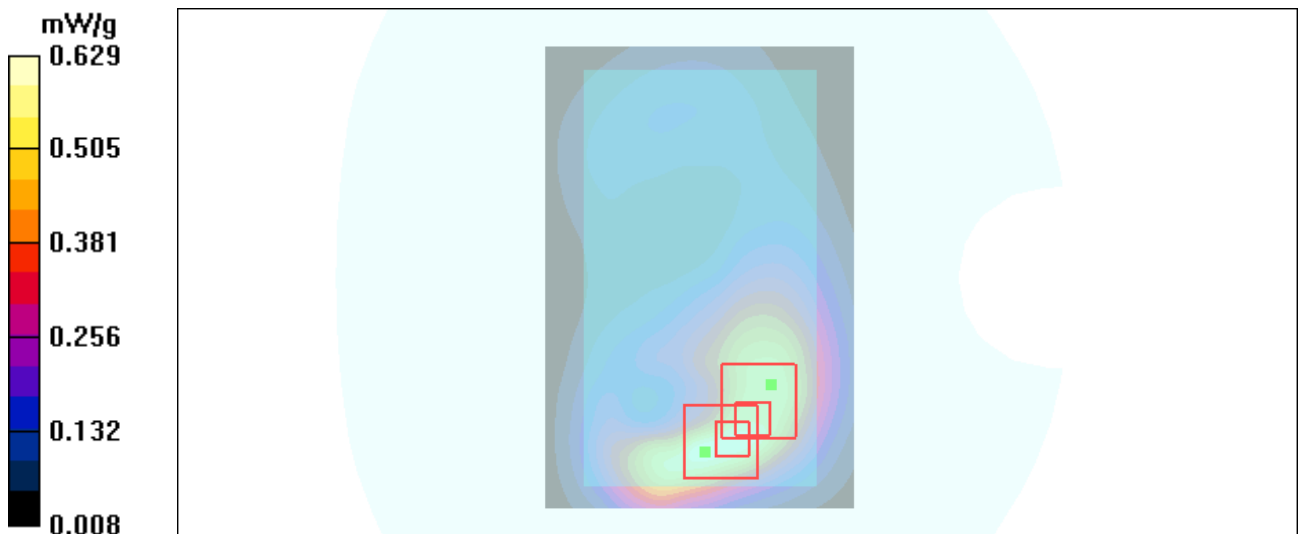


Figure 57 Body with Stereo Headset 2, Back Side, GSM 1900 Channel 810

GSM 1900 with Stereo Headset 3 Back Side High (Battery 1)

Date/Time: 4/25/2012 5:41:27 AM

Communication System: PCS 1900; Frequency: 1909.8 MHz; Duty Cycle: 1:2.075

Medium parameters used: $f = 1910$ MHz; $\sigma = 1.56$ mho/m; $\epsilon_r = 52.1$; $\rho = 1000$ kg/m³

Ambient Temperature: 22.3 °C Liquid Temperature: 21.5°C

Phantom section: Flat Section

DASY4 Configuration:

Probe: EX3DV4 - SN3816; ConvF(7.51, 7.51, 7.51); Calibrated: 10/3/2011

Electronics: DAE4 Sn1317; Calibrated: 1/23/2012

Phantom: SAM000 T01; Type: SAM V4.0; Serial: TP-1246

Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 186

Back Side High/Area Scan (61x91x1): Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (interpolated) = 0.654 mW/g

Back Side High/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 9.04 V/m; Power Drift = -0.010 dB

Peak SAR (extrapolated) = 0.927 W/kg

SAR(1 g) = 0.595 mW/g; SAR(10 g) = 0.355 mW/g

Maximum value of SAR (measured) = 0.659 mW/g

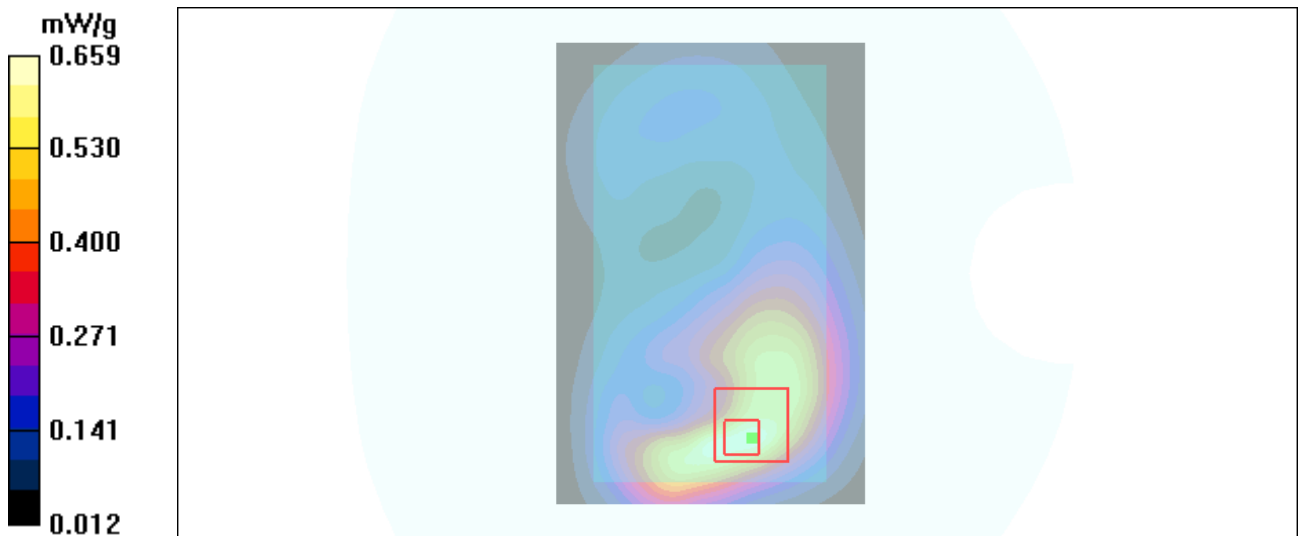


Figure 58 Body with Stereo Headset 3, Back Side, GSM 1900 Channel 810

WCDMA Band II Left Cheek High (Battery 1)

Date/Time: 4/25/2012 2:27:28 PM

Communication System: WCDMA Band II; Frequency: 1907.6 MHz; Duty Cycle: 1:1

Medium parameters used: $f = 1908$ MHz; $\sigma = 1.4$ mho/m; $\epsilon_r = 40.1$; $\rho = 1000$ kg/m³

Ambient Temperature: 22.3 °C Liquid Temperature: 21.5°C

Phantom section: Left Section

DASY4 Configuration:

Probe: EX3DV4 - SN3816; ConvF(7.9, 7.9, 7.9); Calibrated: 10/3/2011

Electronics: DAE4 Sn1317; Calibrated: 1/23/2012

Phantom: SAM000 T01; Type: SAM V4.0; Serial: TP-1246

Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 186

Cheek High/Area Scan (61x101x1): Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (interpolated) = 0.854 mW/g

Cheek High/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 11.9 V/m; Power Drift = 0.053 dB

Peak SAR (extrapolated) = 1.20 W/kg

SAR(1 g) = 0.780 mW/g; SAR(10 g) = 0.474 mW/g

Maximum value of SAR (measured) = 0.849 mW/g

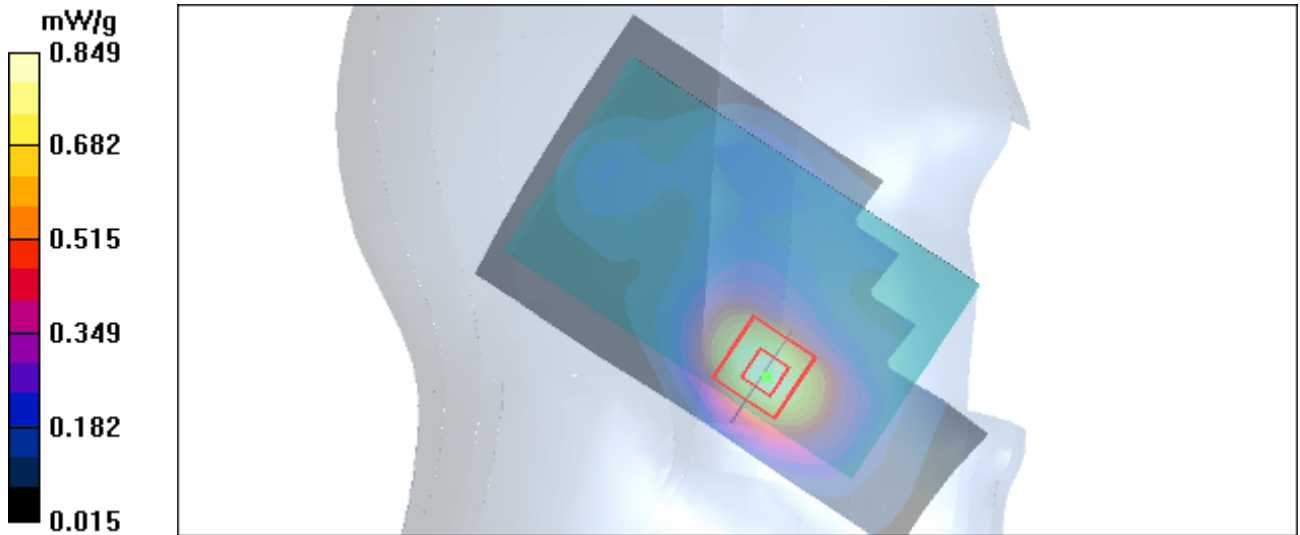


Figure 59 Left Hand Touch Cheek WCDMA Band II Channel 9538

WCDMA Band II Left Cheek Middle (Battery 1)

Date/Time: 4/25/2012 2:12:36 PM

Communication System: WCDMA Band II; Frequency: 1880 MHz; Duty Cycle: 1:1

Medium parameters used: $f = 1880$ MHz; $\sigma = 1.38$ mho/m; $\epsilon_r = 40.2$; $\rho = 1000$ kg/m³

Ambient Temperature: 22.3 °C Liquid Temperature: 21.5 °C

Phantom section: Left Section

DASY4 Configuration:

Probe: EX3DV4 - SN3816; ConvF(7.9, 7.9, 7.9); Calibrated: 10/3/2011

Electronics: DAE4 Sn1317; Calibrated: 1/23/2012

Phantom: SAM000 T01; Type: SAM V4.0; Serial: TP-1246

Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 186

Cheek Middle/Area Scan (61x101x1): Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (interpolated) = 0.934 mW/g

Cheek Middle/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 12.0 V/m; Power Drift = 0.043 dB

Peak SAR (extrapolated) = 1.31 W/kg

SAR(1 g) = 0.858 mW/g; SAR(10 g) = 0.524 mW/g

Maximum value of SAR (measured) = 0.944 mW/g

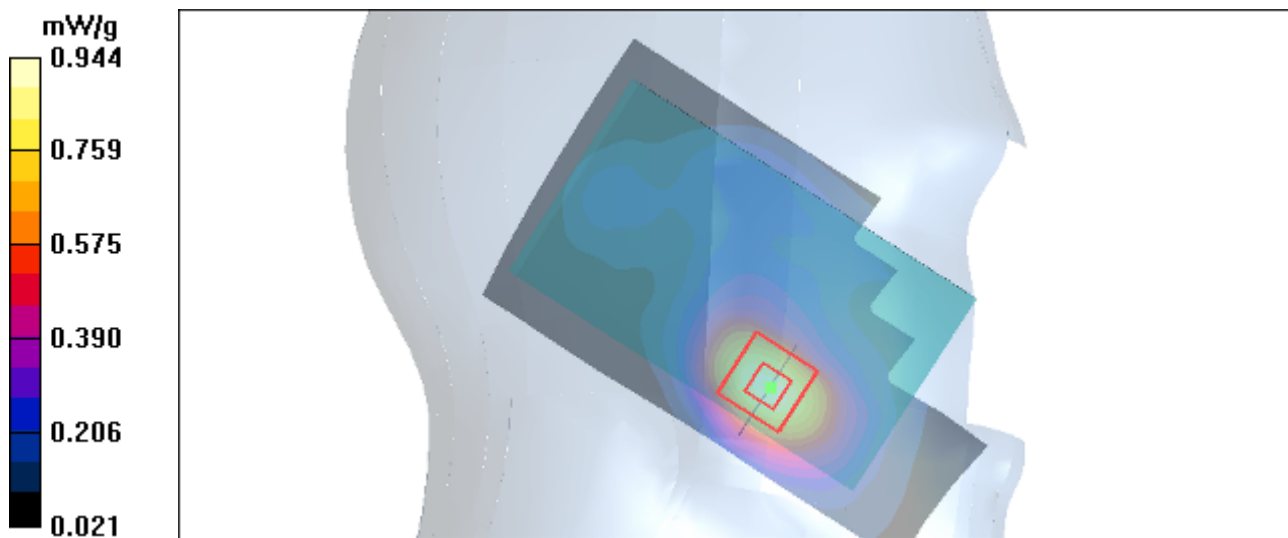


Figure 60 Left Hand Touch Cheek WCDMA Band II Channel 9400

WCDMA Band II Left Cheek Low (Battery 1)

Date/Time: 4/25/2012 3:06:09 PM

Communication System: WCDMA Band II; Frequency: 1852.4 MHz; Duty Cycle: 1:1

Medium parameters used (interpolated): $f = 1852.4$ MHz; $\sigma = 1.36$ mho/m; $\epsilon_r = 40.3$; $\rho = 1000$ kg/m³

Ambient Temperature: 22.3 °C Liquid Temperature: 21.5°C

Phantom section: Left Section

DASY4 Configuration:

Probe: EX3DV4 - SN3816; ConvF(7.9, 7.9, 7.9); Calibrated: 10/3/2011

Electronics: DAE4 Sn1317; Calibrated: 1/23/2012

Phantom: SAM000 T01; Type: SAM V4.0; Serial: TP-1246

Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 186

Cheek Low/Area Scan (61x101x1): Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (interpolated) = 1.03 mW/g

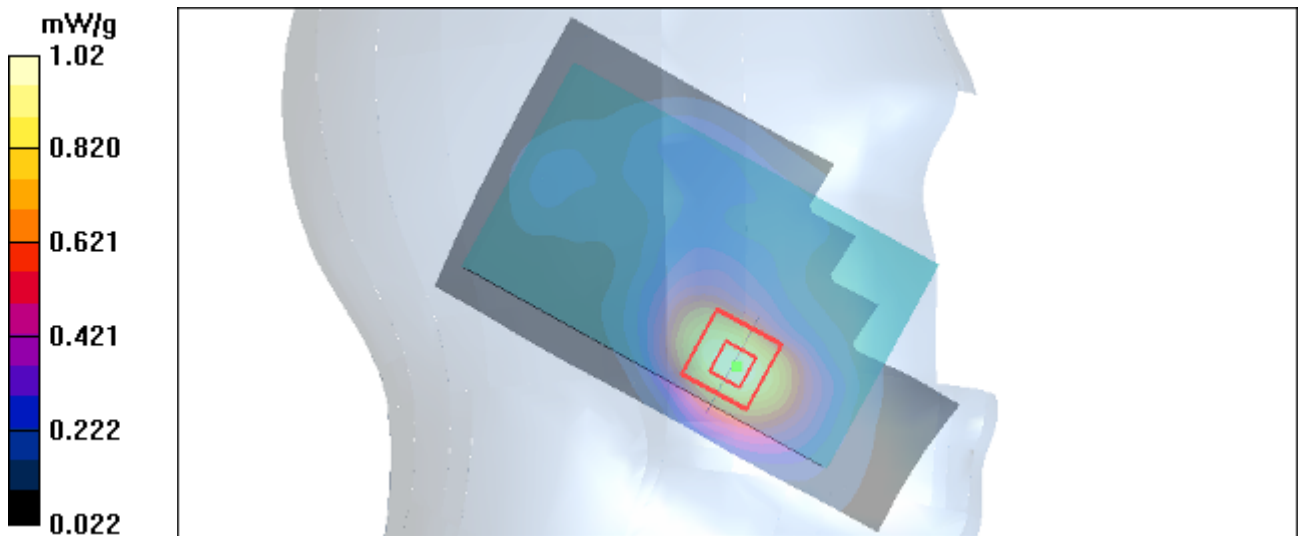
Cheek Low/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 12.4 V/m; Power Drift = 0.026 dB

Peak SAR (extrapolated) = 1.40 W/kg

SAR(1 g) = 0.932 mW/g; SAR(10 g) = 0.574 mW/g

Maximum value of SAR (measured) = 1.02 mW/g



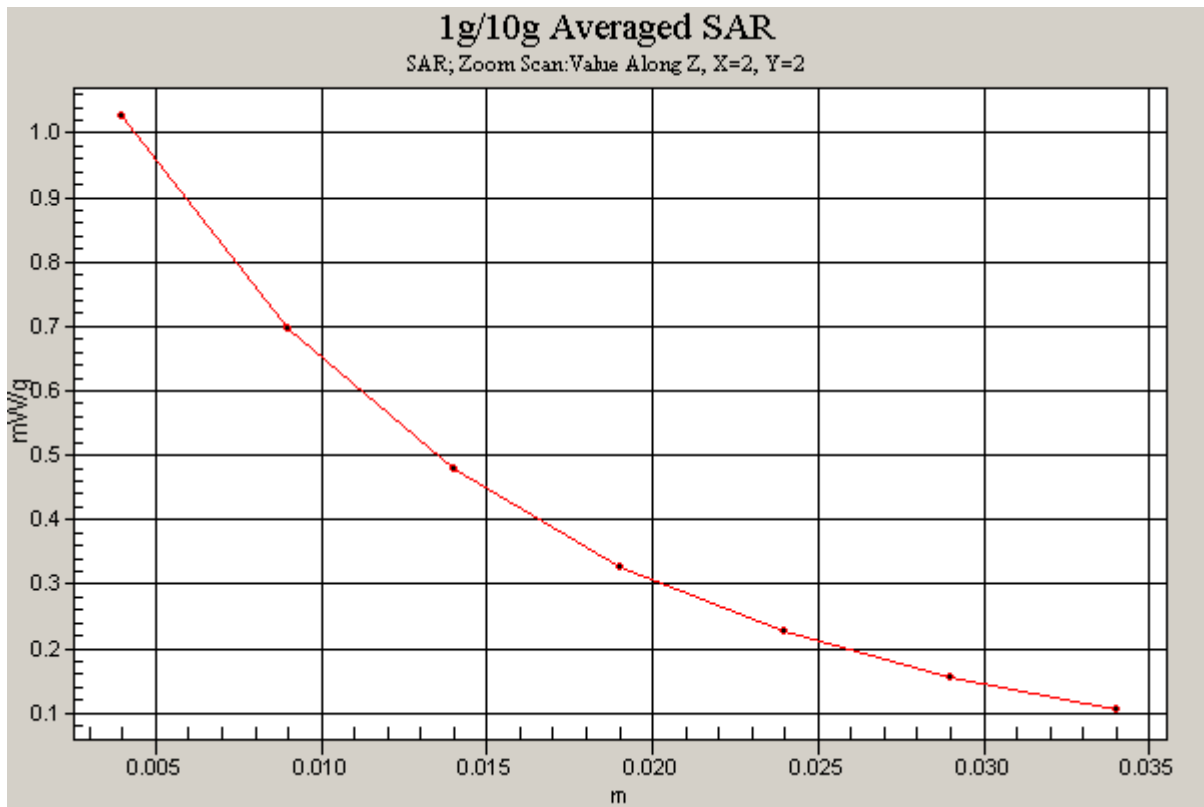


Figure 61 Left Hand Touch Cheek WCDMA Band II Channel 9262

WCDMA Band II Left Tilt High (Battery 1)

Date/Time: 4/25/2012 3:37:02 PM

Communication System: WCDMA Band II; Frequency: 1907.6 MHz; Duty Cycle: 1:1

Medium parameters used: $f = 1908$ MHz; $\sigma = 1.4$ mho/m; $\epsilon_r = 40.1$; $\rho = 1000$ kg/m³

Ambient Temperature: 22.3 °C Liquid Temperature: 21.5°C

Phantom section: Left Section

DASY4 Configuration:

Probe: EX3DV4 - SN3816; ConvF(7.9, 7.9, 7.9); Calibrated: 10/3/2011

Electronics: DAE4 Sn1317; Calibrated: 1/23/2012

Phantom: SAM000 T01; Type: SAM V4.0; Serial: TP-1246

Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 186

Tilt High/Area Scan (61x101x1): Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (interpolated) = 0.402 mW/g

Tilt High/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 17.1 V/m; Power Drift = 0.031 dB

Peak SAR (extrapolated) = 0.621 W/kg

SAR(1 g) = 0.364 mW/g; SAR(10 g) = 0.199 mW/g

Maximum value of SAR (measured) = 0.399 mW/g

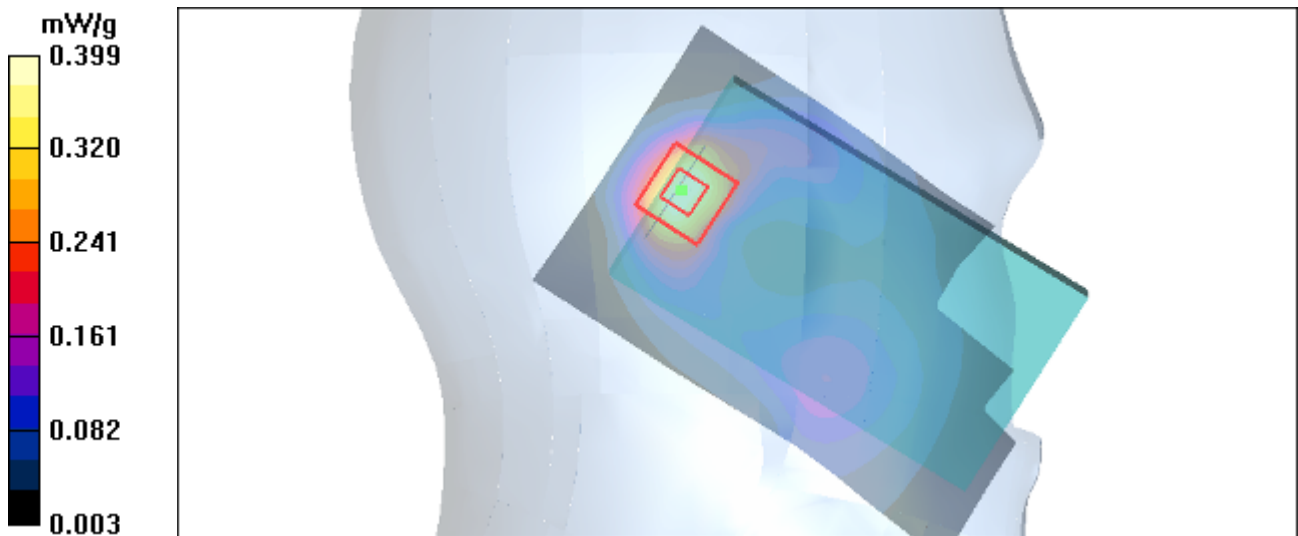


Figure 62 Left Hand Tilt 15° WCDMA Band II Channel 9538

WCDMA Band II Left Tilt Middle (Battery 1)

Date/Time: 4/25/2012 3:52:53 PM

Communication System: WCDMA Band II; Frequency: 1880 MHz; Duty Cycle: 1:1

Medium parameters used: $f = 1880$ MHz; $\sigma = 1.38$ mho/m; $\epsilon_r = 40.2$; $\rho = 1000$ kg/m³

Ambient Temperature: 22.3 °C Liquid Temperature: 21.5°C

Phantom section: Left Section

DASY4 Configuration:

Probe: EX3DV4 - SN3816; ConvF(7.9, 7.9, 7.9); Calibrated: 10/3/2011

Electronics: DAE4 Sn1317; Calibrated: 1/23/2012

Phantom: SAM000 T01; Type: SAM V4.0; Serial: TP-1246

Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 186

Tilt Middle/Area Scan (61x101x1): Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (interpolated) = 0.393 mW/g

Tilt Middle/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 17.4 V/m; Power Drift = 0.009 dB

Peak SAR (extrapolated) = 0.616 W/kg

SAR(1 g) = 0.367 mW/g; SAR(10 g) = 0.202 mW/g

Maximum value of SAR (measured) = 0.410 mW/g

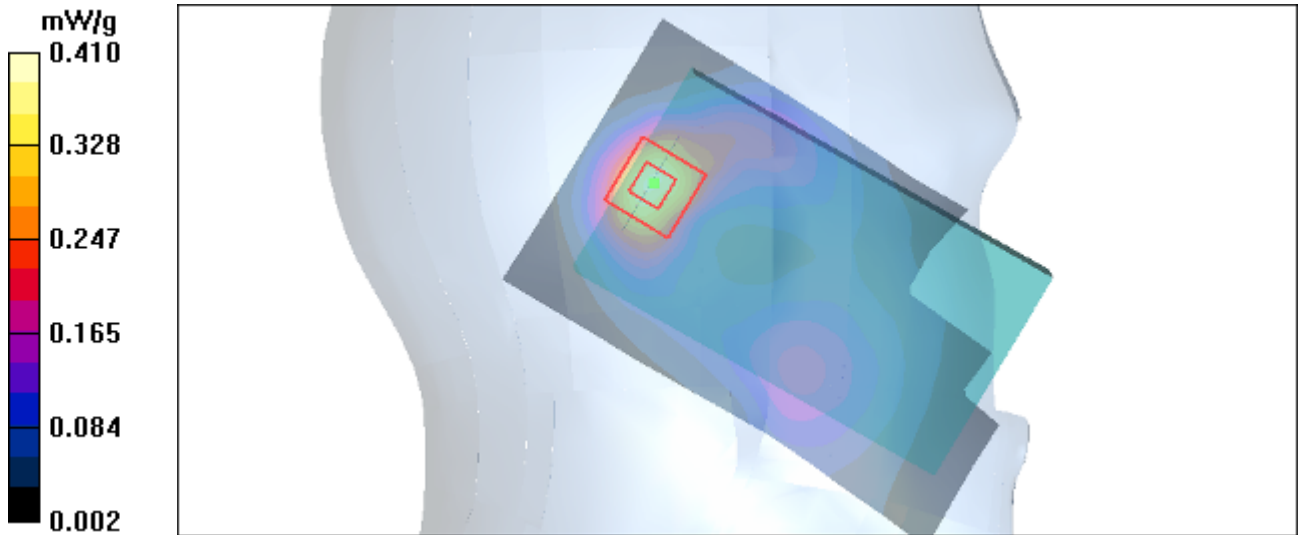


Figure 63 Left Hand Tilt 15° WCDMA Band II Channel 9400

WCDMA Band II Left Tilt Low (Battery 1)

Date/Time: 4/25/2012 3:21:57 PM

Communication System: WCDMA Band II; Frequency: 1852.4 MHz; Duty Cycle: 1:1

Medium parameters used (interpolated): $f = 1852.4$ MHz; $\sigma = 1.36$ mho/m; $\epsilon_r = 40.3$; $\rho = 1000$ kg/m³

Ambient Temperature: 22.3 °C Liquid Temperature: 21.5°C

Phantom section: Left Section

DASY4 Configuration:

Probe: EX3DV4 - SN3816; ConvF(7.9, 7.9, 7.9); Calibrated: 10/3/2011

Electronics: DAE4 Sn1317; Calibrated: 1/23/2012

Phantom: SAM000 T01; Type: SAM V4.0; Serial: TP-1246

Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 186

Tilt Low/Area Scan (61x101x1): Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (interpolated) = 0.419 mW/g

Tilt Low/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 17.8 V/m; Power Drift = 0.014 dB

Peak SAR (extrapolated) = 0.635 W/kg

SAR(1 g) = 0.384 mW/g; SAR(10 g) = 0.215 mW/g

Maximum value of SAR (measured) = 0.427 mW/g

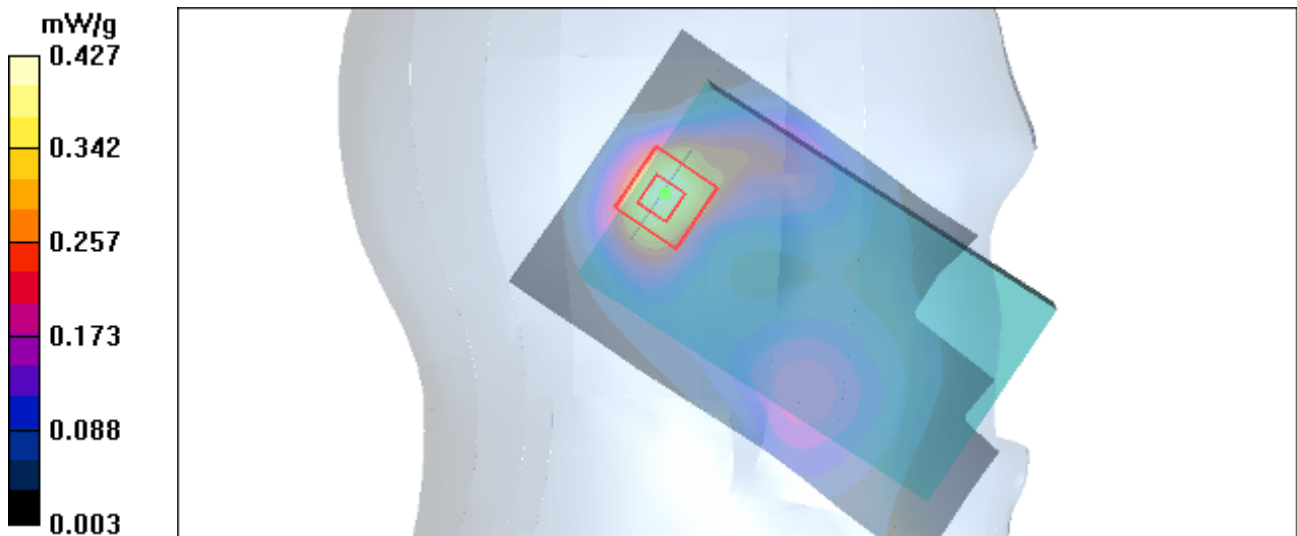


Figure 64 Left Hand Tilt 15° WCDMA Band II Channel 9262

WCDMA Band II Right Cheek High (Battery 1)

Date/Time: 4/25/2012 4:42:32 PM

Communication System: WCDMA Band II; Frequency: 1907.6 MHz; Duty Cycle: 1:1

Medium parameters used: $f = 1908$ MHz; $\sigma = 1.4$ mho/m; $\epsilon_r = 40.1$; $\rho = 1000$ kg/m³

Ambient Temperature: 22.3 °C Liquid Temperature: 21.5°C

Phantom section: Right Section

DASY4 Configuration:

Probe: EX3DV4 - SN3816; ConvF(7.9, 7.9, 7.9); Calibrated: 10/3/2011

Electronics: DAE4 Sn1317; Calibrated: 1/23/2012

Phantom: SAM000 T01; Type: SAM V4.0; Serial: TP-1246

Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 186

Cheek High/Area Scan (61x101x1): Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (interpolated) = 0.449 mW/g

Cheek High/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 12.2 V/m; Power Drift = 0.044 dB

Peak SAR (extrapolated) = 0.614 W/kg

SAR(1 g) = 0.407 mW/g; SAR(10 g) = 0.268 mW/g

Maximum value of SAR (measured) = 0.441 mW/g

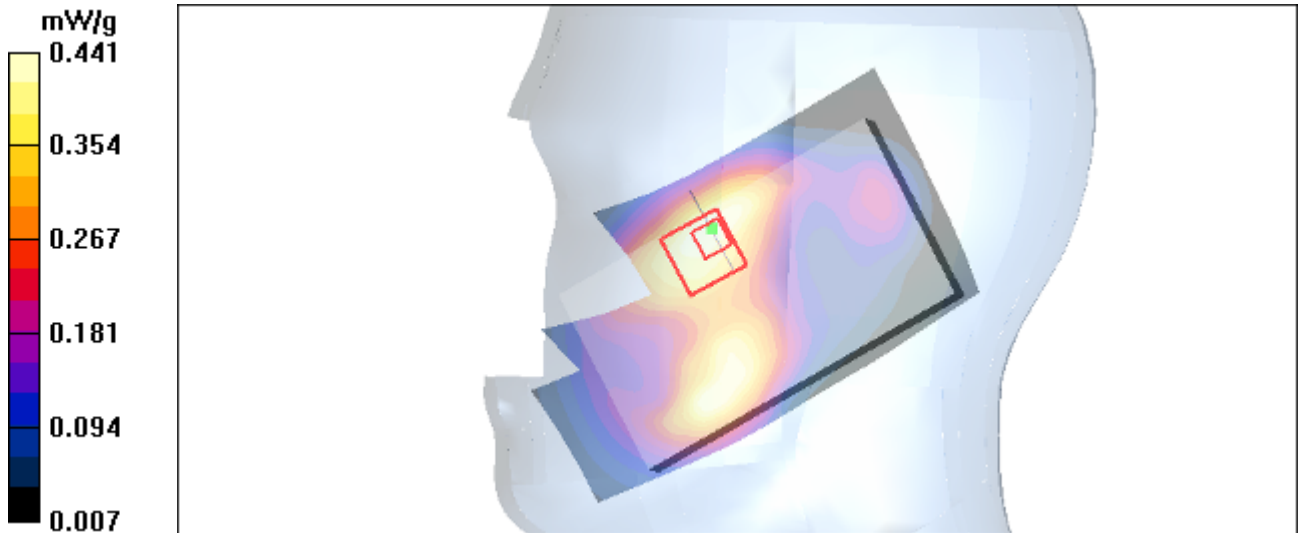


Figure 65 Right Hand Touch Cheek WCDMA Band II Channel 9538

WCDMA Band II Right Cheek Middle (Battery 1)

Date/Time: 4/25/2012 4:15:47 PM

Communication System: WCDMA Band II; Frequency: 1880 MHz; Duty Cycle: 1:1

Medium parameters used: $f = 1880$ MHz; $\sigma = 1.38$ mho/m; $\epsilon_r = 40.2$; $\rho = 1000$ kg/m³

Ambient Temperature: 22.3 °C Liquid Temperature: 21.5°C

Phantom section: Right Section

DASY4 Configuration:

Probe: EX3DV4 - SN3816; ConvF(7.9, 7.9, 7.9); Calibrated: 10/3/2011

Electronics: DAE4 Sn1317; Calibrated: 1/23/2012

Phantom: SAM000 T01; Type: SAM V4.0; Serial: TP-1246

Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 186

Cheek Middle/Area Scan (61x101x1): Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (interpolated) = 0.513 mW/g

Cheek Middle/Zoom Scan (5x5x7)/Cube 1: Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 12.5 V/m; Power Drift = 0.048 dB

Peak SAR (extrapolated) = 0.784 W/kg

SAR(1 g) = 0.509 mW/g; SAR(10 g) = 0.310 mW/g

Maximum value of SAR (measured) = 0.559 mW/g

Cheek Middle/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 12.5 V/m; Power Drift = 0.048 dB

Peak SAR (extrapolated) = 0.696 W/kg

SAR(1 g) = 0.459 mW/g; SAR(10 g) = 0.304 mW/g

Maximum value of SAR (measured) = 0.500 mW/g

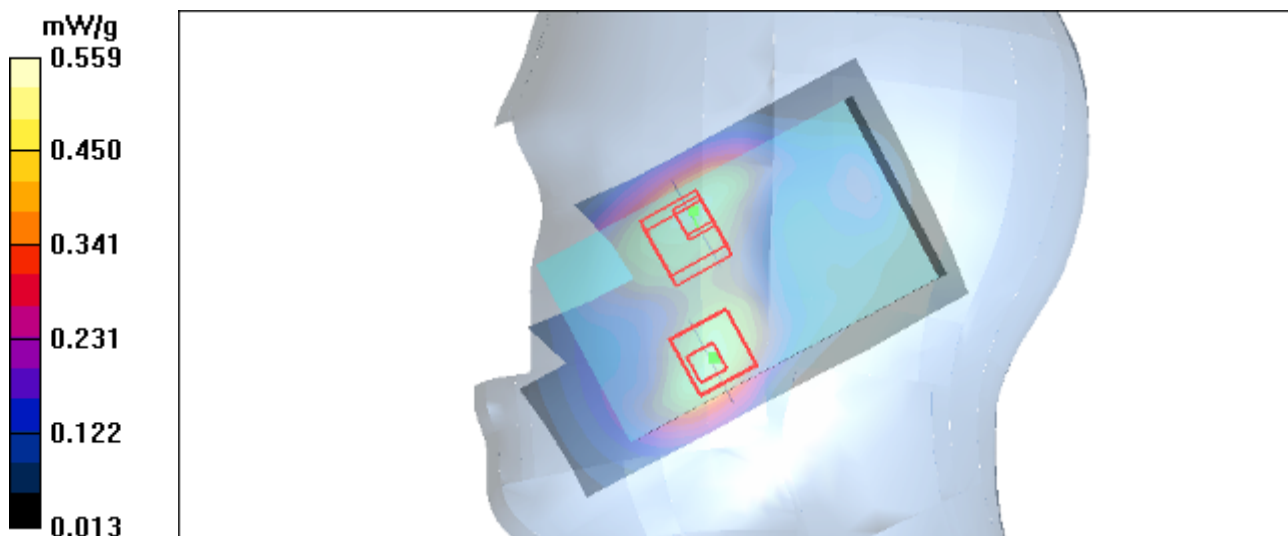


Figure 66 Right Hand Touch Cheek WCDMA Band II Channel 9400

WCDMA Band II Right Cheek Low (Battery 1)

Date/Time: 4/25/2012 4:57:44 PM

Communication System: WCDMA Band II; Frequency: 1852.4 MHz; Duty Cycle: 1:1

Medium parameters used (interpolated): $f = 1852.4$ MHz; $\sigma = 1.36$ mho/m; $\epsilon_r = 40.3$; $\rho = 1000$ kg/m³

Ambient Temperature: 22.3 °C Liquid Temperature: 21.5°C

Phantom section: Right Section

DASY4 Configuration:

Probe: EX3DV4 - SN3816; ConvF(7.9, 7.9, 7.9); Calibrated: 10/3/2011

Electronics: DAE4 Sn1317; Calibrated: 1/23/2012

Phantom: SAM000 T01; Type: SAM V4.0; Serial: TP-1246

Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 186

Cheek Low/Area Scan (61x101x1): Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (interpolated) = 0.545 mW/g

Cheek Low/Zoom Scan (5x5x7)/Cube 1: Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 13.1 V/m; Power Drift = 0.062 dB

Peak SAR (extrapolated) = 0.685 W/kg

SAR(1 g) = 0.464 mW/g; SAR(10 g) = 0.316 mW/g

Maximum value of SAR (measured) = 0.497 mW/g

Cheek Low/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 13.1 V/m; Power Drift = 0.062 dB

Peak SAR (extrapolated) = 0.830 W/kg

SAR(1 g) = 0.548 mW/g; SAR(10 g) = 0.340 mW/g

Maximum value of SAR (measured) = 0.601 mW/g

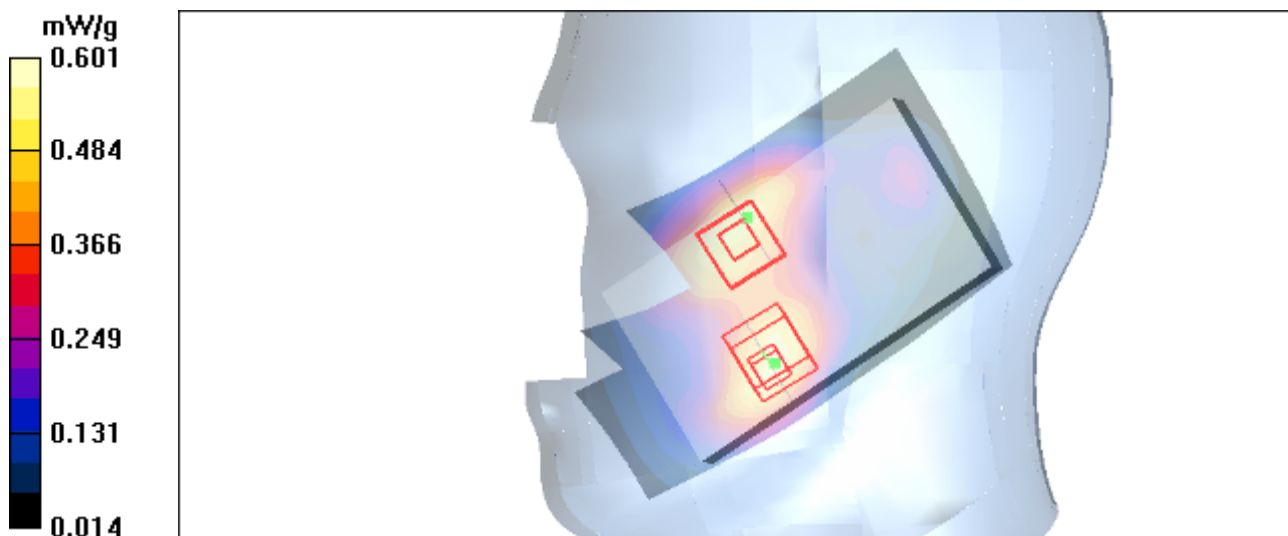


Figure 67 Right Hand Touch Cheek WCDMA Band II Channel 9262

WCDMA Band II Right Tilt High (Battery 1)

Date/Time: 4/25/2012 5:55:47 PM

Communication System: WCDMA Band II; Frequency: 1907.6 MHz; Duty Cycle: 1:1

Medium parameters used: $f = 1908$ MHz; $\sigma = 1.4$ mho/m; $\epsilon_r = 40.1$; $\rho = 1000$ kg/m³

Ambient Temperature: 22.3 °C Liquid Temperature: 21.5°C

Phantom section: Right Section

DASY4 Configuration:

Probe: EX3DV4 - SN3816; ConvF(7.9, 7.9, 7.9); Calibrated: 10/3/2011

Electronics: DAE4 Sn1317; Calibrated: 1/23/2012

Phantom: SAM000 T01; Type: SAM V4.0; Serial: TP-1246

Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 186

Tilt High/Area Scan (61x101x1): Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (interpolated) = 0.409 mW/g

Tilt High/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 16.8 V/m; Power Drift = 0.053 dB

Peak SAR (extrapolated) = 0.614 W/kg

SAR(1 g) = 0.365 mW/g; SAR(10 g) = 0.200 mW/g

Maximum value of SAR (measured) = 0.408 mW/g

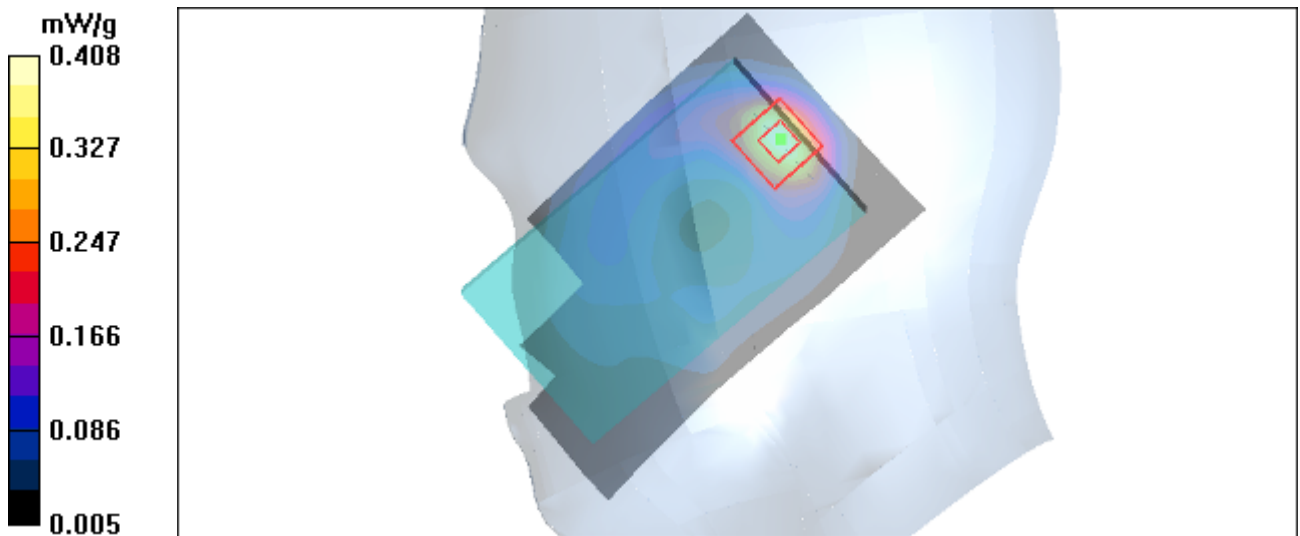


Figure 68 Right Hand Tilt 15° WCDMA Band II Channel 9538

WCDMA Band II Right Tilt Middle (Battery 1)

Date/Time: 4/25/2012 5:40:01 PM

Communication System: WCDMA Band II; Frequency: 1880 MHz; Duty Cycle: 1:1

Medium parameters used: $f = 1880$ MHz; $\sigma = 1.38$ mho/m; $\epsilon_r = 40.2$; $\rho = 1000$ kg/m³

Ambient Temperature: 22.3 °C Liquid Temperature: 21.5°C

Phantom section: Right Section

DASY4 Configuration:

Probe: EX3DV4 - SN3816; ConvF(7.9, 7.9, 7.9); Calibrated: 10/3/2011

Electronics: DAE4 Sn1317; Calibrated: 1/23/2012

Phantom: SAM000 T01; Type: SAM V4.0; Serial: TP-1246

Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 186

Tilt Middle/Area Scan (61x101x1): Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (interpolated) = 0.444 mW/g

Tilt Middle/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 17.6 V/m; Power Drift = 0.040 dB

Peak SAR (extrapolated) = 0.663 W/kg

SAR(1 g) = 0.399 mW/g; SAR(10 g) = 0.221 mW/g

Maximum value of SAR (measured) = 0.448 mW/g

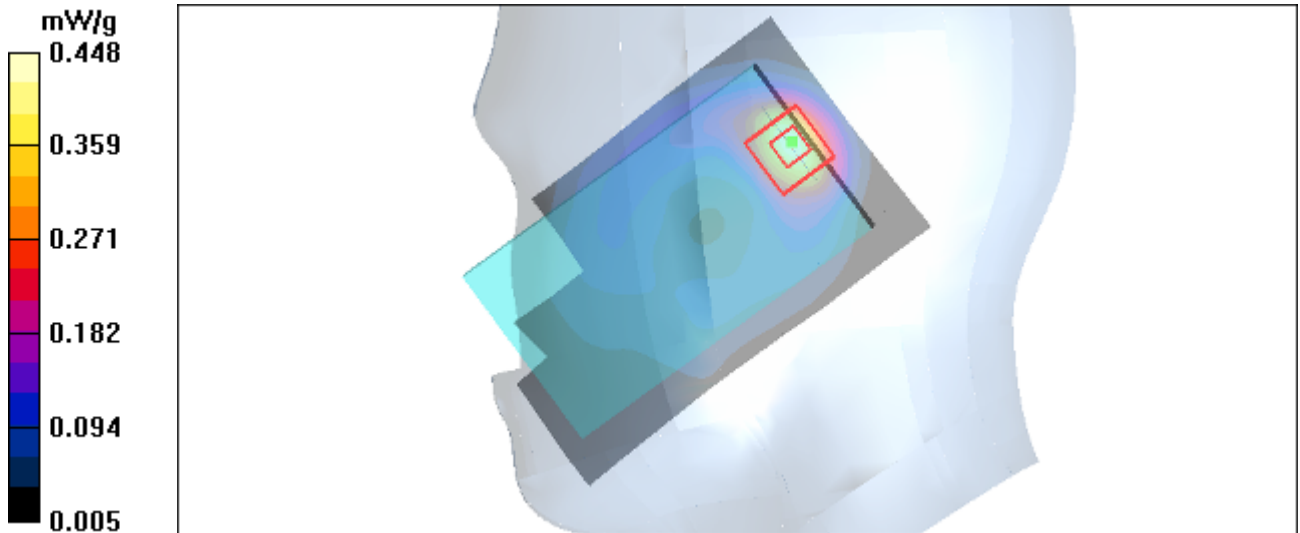


Figure 69 Right Hand Tilt 15° WCDMA Band II Channel 9400

WCDMA Band II Right Tilt Low (Battery 1)

Date/Time: 4/25/2012 5:20:37 PM

Communication System: WCDMA Band II; Frequency: 1852.4 MHz; Duty Cycle: 1:1

Medium parameters used (interpolated): $f = 1852.4$ MHz; $\sigma = 1.36$ mho/m; $\epsilon_r = 40.3$; $\rho = 1000$ kg/m³

Ambient Temperature: 22.3 °C Liquid Temperature: 21.5°C

Phantom section: Right Section

DASY4 Configuration:

Probe: EX3DV4 - SN3816; ConvF(7.9, 7.9, 7.9); Calibrated: 10/3/2011

Electronics: DAE4 Sn1317; Calibrated: 1/23/2012

Phantom: SAM000 T01; Type: SAM V4.0; Serial: TP-1246

Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 186

Tilt Low/Area Scan (61x101x1): Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (interpolated) = 0.463 mW/g

Tilt Low/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 18.2 V/m; Power Drift = 0.037 dB

Peak SAR (extrapolated) = 0.693 W/kg

SAR(1 g) = 0.421 mW/g; SAR(10 g) = 0.235 mW/g

Maximum value of SAR (measured) = 0.473 mW/g

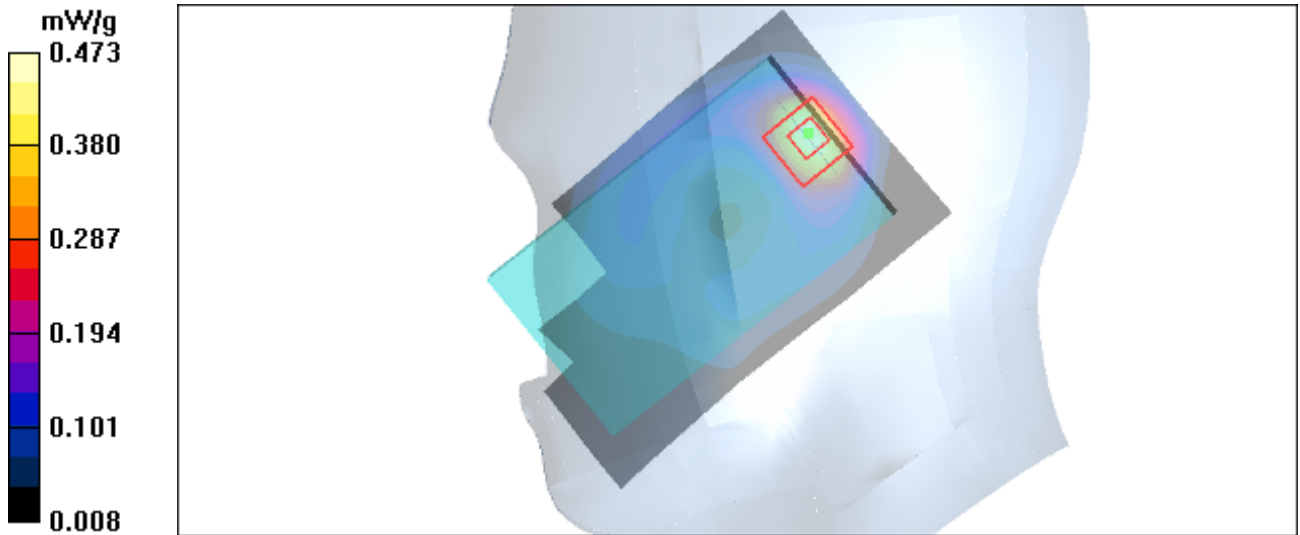


Figure 70 Right Hand Tilt 15° WCDMA Band II Channel 9262

WCDMA Band II Left Cheek Low (Battery 2)

Date/Time: 4/25/2012 9:41:44 PM

Communication System: WCDMA Band II; Frequency: 1852.4 MHz; Duty Cycle: 1:1

Medium parameters used (interpolated): $f = 1852.4$ MHz; $\sigma = 1.36$ mho/m; $\epsilon_r = 40.3$; $\rho = 1000$ kg/m³

Ambient Temperature: 22.3 °C Liquid Temperature: 21.5°C

Phantom section: Left Section

DASY4 Configuration:

Probe: EX3DV4 - SN3816; ConvF(7.9, 7.9, 7.9); Calibrated: 10/3/2011

Electronics: DAE4 Sn1317; Calibrated: 1/23/2012

Phantom: SAM000 T01; Type: SAM V4.0; Serial: TP-1246

Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 186

Cheek Low/Area Scan (61x101x1): Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (interpolated) = 0.942 mW/g

Cheek Low/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 11.8 V/m; Power Drift = 0.063 dB

Peak SAR (extrapolated) = 1.33 W/kg

SAR(1 g) = 0.868 mW/g; SAR(10 g) = 0.535 mW/g

Maximum value of SAR (measured) = 0.951 mW/g

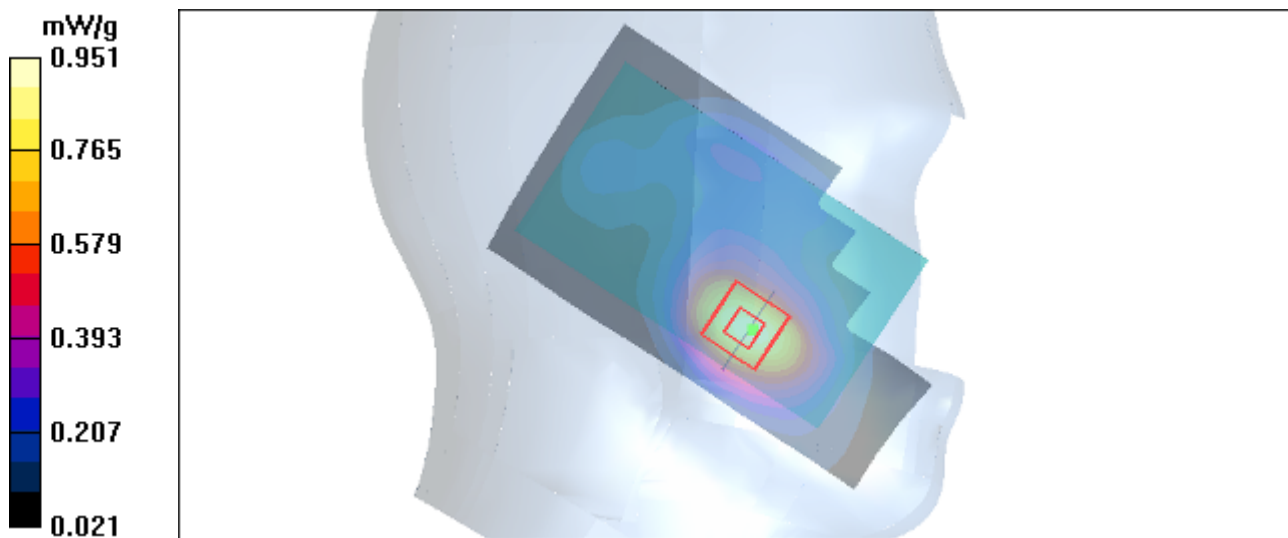


Figure 71 Left Hand Touch Cheek WCDMA Band II Channel 9262

WCDMA Band II Back Side High (Battery 1)

Date/Time: 4/25/2012 12:03:45 AM

Communication System: WCDMA Band II; Frequency: 1907.6 MHz; Duty Cycle: 1:1

Medium parameters used: $f = 1908$ MHz; $\sigma = 1.56$ mho/m; $\epsilon_r = 52.1$; $\rho = 1000$ kg/m³

Ambient Temperature: 22.3 °C Liquid Temperature: 21.5°C

Phantom section: Flat Section

DASY4 Configuration:

Probe: EX3DV4 - SN3816; ConvF(7.51, 7.51, 7.51); Calibrated: 10/3/2011

Electronics: DAE4 Sn1317; Calibrated: 1/23/2012

Phantom: SAM000 T01; Type: SAM V4.0; Serial: TP-1246

Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 186

Back Side High/Area Scan (61x101x1): Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (interpolated) = 0.988 mW/g

Back Side High/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 9.04 V/m; Power Drift = 0.030 dB

Peak SAR (extrapolated) = 1.50 W/kg

SAR(1 g) = 0.938 mW/g; SAR(10 g) = 0.567 mW/g

Maximum value of SAR (measured) = 1.04 mW/g

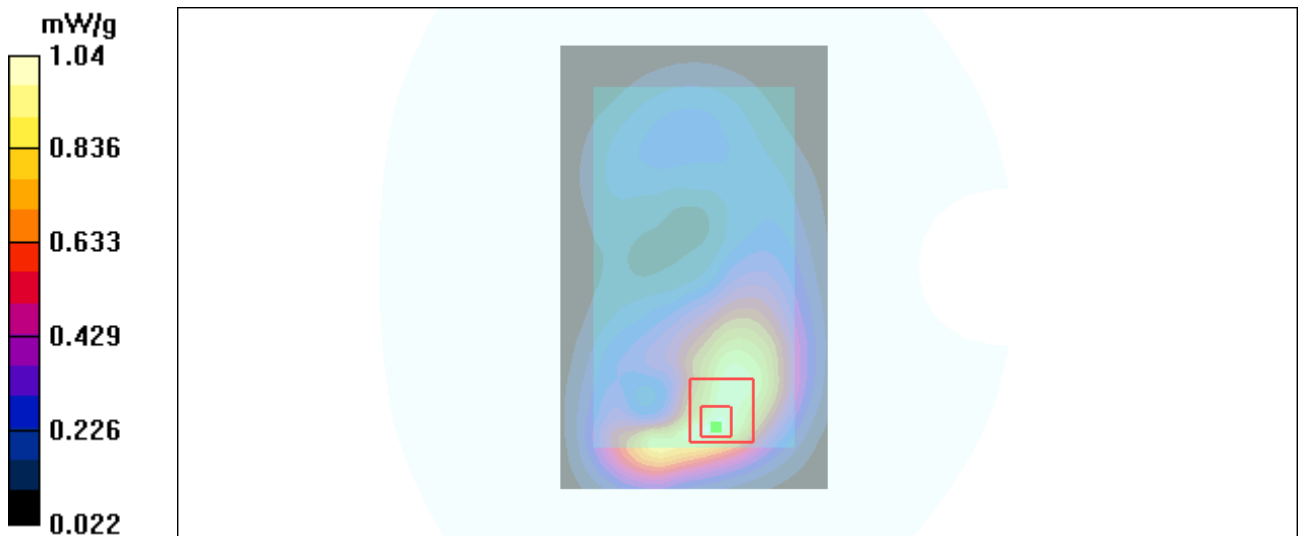


Figure 72 Body, Back Side, WCDMA Band II Channel 9538

WCDMA Band II Back Side Middle (Battery 1)

Date/Time: 4/25/2012 12:18:49 AM

Communication System: WCDMA Band II; Frequency: 1880 MHz; Duty Cycle: 1:1

Medium parameters used: $f = 1880$ MHz; $\sigma = 1.54$ mho/m; $\epsilon_r = 52.2$; $\rho = 1000$ kg/m³

Ambient Temperature: 22.3 °C Liquid Temperature: 21.5°C

Phantom section: Flat Section

DASY4 Configuration:

Probe: EX3DV4 - SN3816; ConvF(7.51, 7.51, 7.51); Calibrated: 10/3/2011

Electronics: DAE4 Sn1317; Calibrated: 1/23/2012

Phantom: SAM000 T01; Type: SAM V4.0; Serial: TP-1246

Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 186

Back Side Middle/Area Scan (61x101x1): Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (interpolated) = 1.08 mW/g

Back Side Middle/Zoom Scan (5x5x7)/Cube 1: Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 9.40 V/m; Power Drift = 0.008 dB

Peak SAR (extrapolated) = 1.31 W/kg

SAR(1 g) = 0.749 mW/g; SAR(10 g) = 0.419 mW/g

Maximum value of SAR (measured) = 0.904 mW/g

Back Side Middle/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 9.40 V/m; Power Drift = 0.008 dB

Peak SAR (extrapolated) = 1.53 W/kg

SAR(1 g) = 0.968 mW/g; SAR(10 g) = 0.602 mW/g

Maximum value of SAR (measured) = 1.03 mW/g

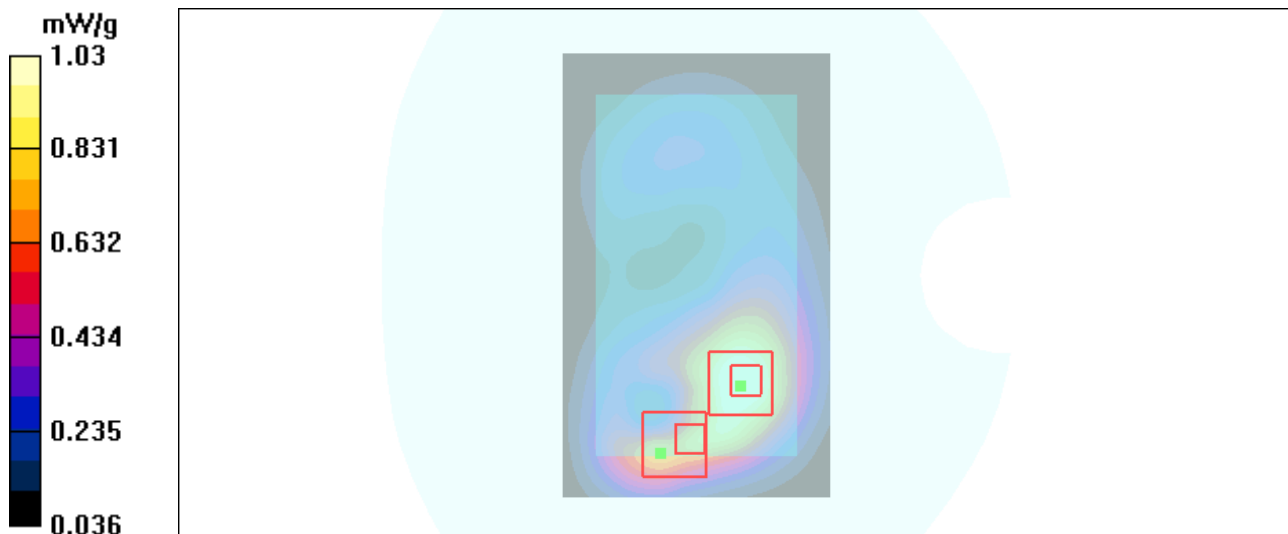


Figure 73 Body, Back Side, WCDMA Band II Channel 9400

WCDMA Band II Back Side Low (Battery 1)

Date/Time: 4/25/2012 12:39:18 AM

Communication System: WCDMA Band II; Frequency: 1852.4 MHz; Duty Cycle: 1:1

Medium parameters used (interpolated): $f = 1852.4$ MHz; $\sigma = 1.51$ mho/m; $\epsilon_r = 52.3$; $\rho = 1000$ kg/m³

Ambient Temperature: 22.3 °C Liquid Temperature: 21.5°C

Phantom section: Flat Section

DASY4 Configuration:

Probe: EX3DV4 - SN3816; ConvF(7.51, 7.51, 7.51); Calibrated: 10/3/2011

Electronics: DAE4 Sn1317; Calibrated: 1/23/2012

Phantom: SAM000 T01; Type: SAM V4.0; Serial: TP-1246

Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 186

Back Side Low/Area Scan (61x101x1): Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (interpolated) = 1.09 mW/g

Back Side Low/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 9.20 V/m; Power Drift = 0.007 dB

Peak SAR (extrapolated) = 1.53 W/kg

SAR(1 g) = 0.976 mW/g; SAR(10 g) = 0.602 mW/g

Maximum value of SAR (measured) = 1.05 mW/g

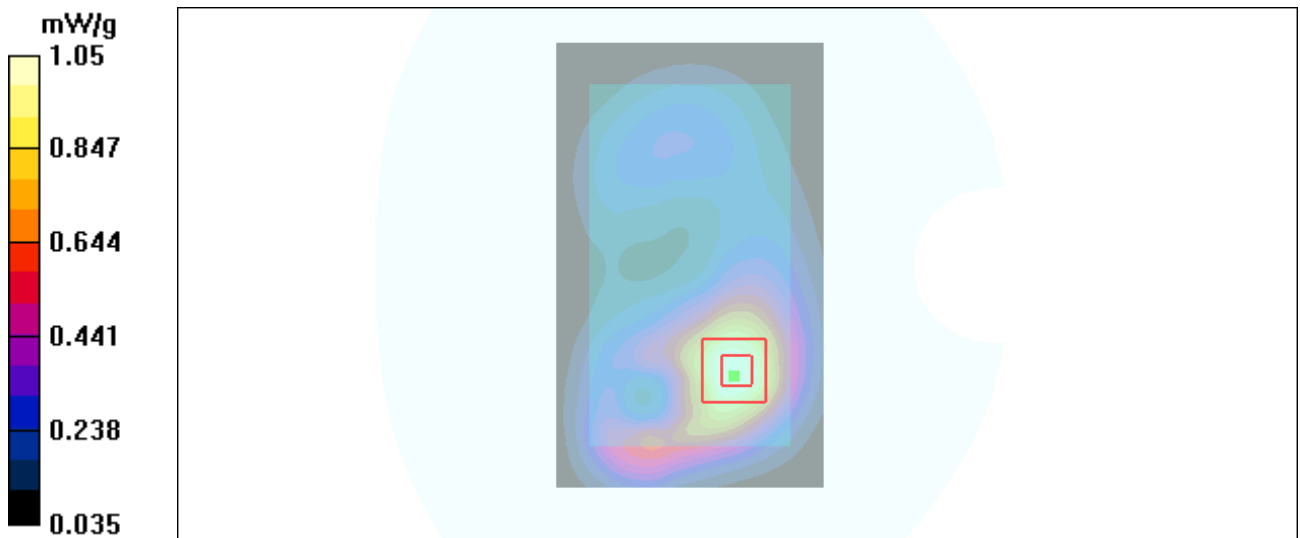


Figure 74 Body, Back Side, WCDMA Band II Channel 9262

WCDMA Band II Front Side High (Battery 1)

Date/Time: 4/25/2012 12:56:33 AM

Communication System: WCDMA Band II; Frequency: 1907.6 MHz; Duty Cycle: 1:1

Medium parameters used: $f = 1908$ MHz; $\sigma = 1.56$ mho/m; $\epsilon_r = 52.1$; $\rho = 1000$ kg/m³

Ambient Temperature: 22.3 °C Liquid Temperature: 21.5°C

Phantom section: Flat Section

DASY4 Configuration:

Probe: EX3DV4 - SN3816; ConvF(7.51, 7.51, 7.51); Calibrated: 10/3/2011

Electronics: DAE4 Sn1317; Calibrated: 1/23/2012

Phantom: SAM000 T01; Type: SAM V4.0; Serial: TP-1246

Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 186

Front Side High/Area Scan (61x91x1): Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (interpolated) = 0.813 mW/g

Front Side High/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 9.39 V/m; Power Drift = 0.084 dB

Peak SAR (extrapolated) = 1.18 W/kg

SAR(1 g) = 0.762 mW/g; SAR(10 g) = 0.476 mW/g

Maximum value of SAR (measured) = 0.818 mW/g

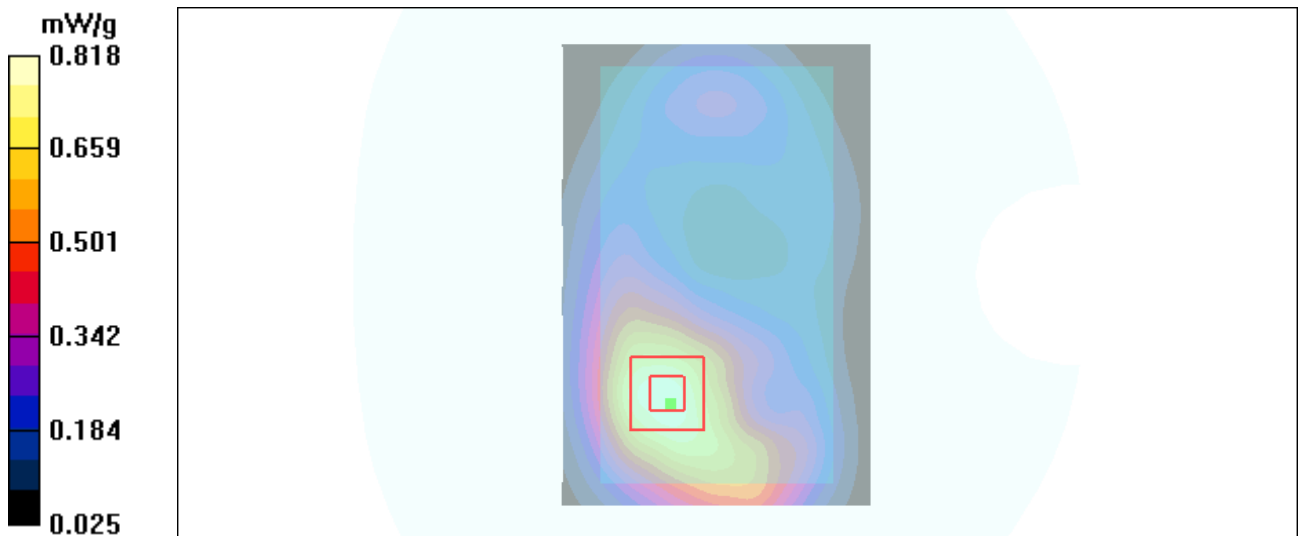


Figure 75 Body, Front Side, WCDMA Band II Channel 9538

WCDMA Band II Left Edge High (Battery 1)

Date/Time: 4/25/2012 1:12:55 AM

Communication System: WCDMA Band II; Frequency: 1907.6 MHz; Duty Cycle: 1:1

Medium parameters used: $f = 1908$ MHz; $\sigma = 1.56$ mho/m; $\epsilon_r = 52.1$; $\rho = 1000$ kg/m³

Ambient Temperature: 22.3 °C Liquid Temperature: 21.5°C

Phantom section: Flat Section

DASY4 Configuration:

Probe: EX3DV4 - SN3816; ConvF(7.51, 7.51, 7.51); Calibrated: 10/3/2011

Electronics: DAE4 Sn1317; Calibrated: 1/23/2012

Phantom: SAM000 T01; Type: SAM V4.0; Serial: TP-1246

Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 186

Left Edge High/Area Scan (41x101x1): Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (interpolated) = 0.292 mW/g

Left Edge High/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 12.3 V/m; Power Drift = -0.003 dB

Peak SAR (extrapolated) = 0.418 W/kg

SAR(1 g) = 0.264 mW/g; SAR(10 g) = 0.159 mW/g

Maximum value of SAR (measured) = 0.284 mW/g

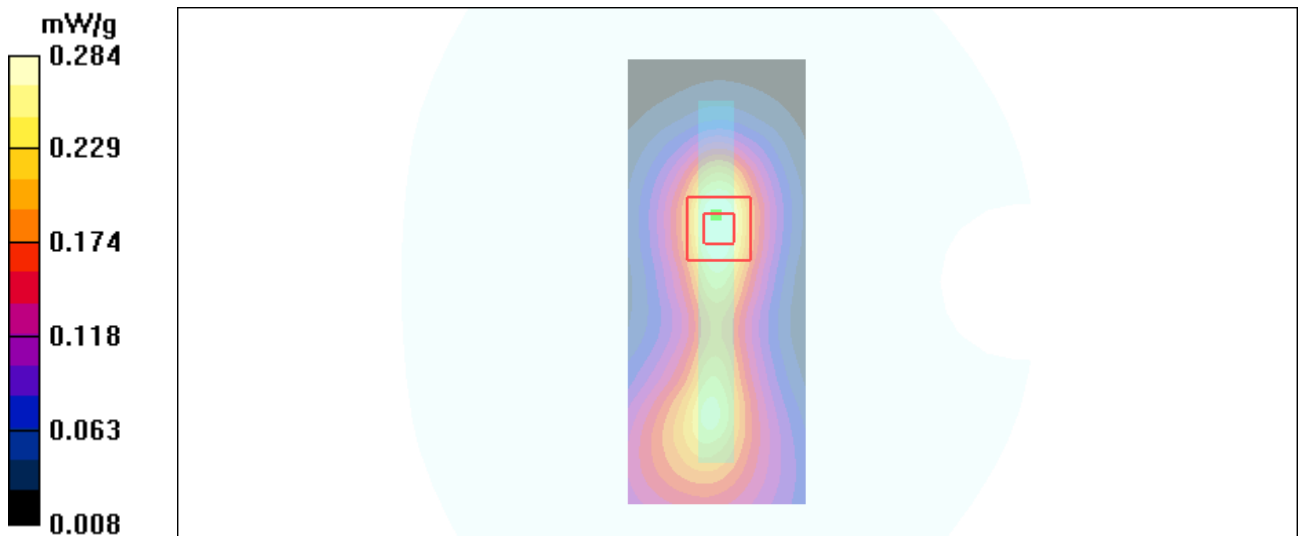


Figure 76 Body, Left Edge, WCDMA Band II Channel 9538

WCDMA Band II Right Edge High (Battery 1)

Date/Time: 4/25/2012 1:26:22 AM

Communication System: WCDMA Band II; Frequency: 1907.6 MHz; Duty Cycle: 1:1

Medium parameters used: $f = 1908$ MHz; $\sigma = 1.56$ mho/m; $\epsilon_r = 52.1$; $\rho = 1000$ kg/m³

Ambient Temperature: 22.3 °C Liquid Temperature: 21.5°C

Phantom section: Flat Section

DASY4 Configuration:

Probe: EX3DV4 - SN3816; ConvF(7.51, 7.51, 7.51); Calibrated: 10/3/2011

Electronics: DAE4 Sn1317; Calibrated: 1/23/2012

Phantom: SAM000 T01; Type: SAM V4.0; Serial: TP-1246

Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 186

Right Edge High/Area Scan (41x101x1): Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (interpolated) = 0.158 mW/g

Right Edge High/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 5.96 V/m; Power Drift = 0.000 dB

Peak SAR (extrapolated) = 0.228 W/kg

SAR(1 g) = 0.142 mW/g; SAR(10 g) = 0.084 mW/g

Maximum value of SAR (measured) = 0.156 mW/g

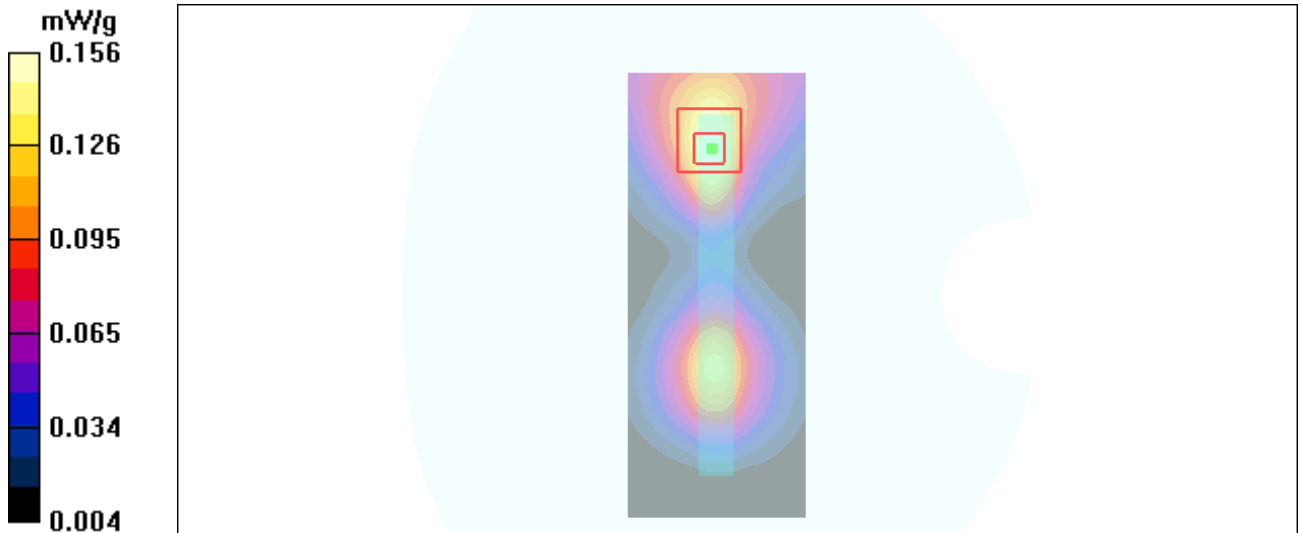


Figure 77 Body, Right Edge, WCDMA Band II Channel 9538

WCDMA Band II Bottom Edge High (Battery 1)

Date/Time: 4/25/2012 1:41:37 AM

Communication System: WCDMA Band II; Frequency: 1907.6 MHz; Duty Cycle: 1:1

Medium parameters used: $f = 1908$ MHz; $\sigma = 1.56$ mho/m; $\epsilon_r = 52.1$; $\rho = 1000$ kg/m³

Ambient Temperature: 22.3 °C Liquid Temperature: 21.5°C

Phantom section: Flat Section

DASY4 Configuration:

Probe: EX3DV4 - SN3816; ConvF(7.51, 7.51, 7.51); Calibrated: 10/3/2011

Electronics: DAE4 Sn1317; Calibrated: 1/23/2012

Phantom: SAM000 T01; Type: SAM V4.0; Serial: TP-1246

Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 186

Bottom Edge High/Area Scan (31x61x1): Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (interpolated) = 0.853 mW/g

Bottom Edge High/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 21.0 V/m; Power Drift = -0.001 dB

Peak SAR (extrapolated) = 1.27 W/kg

SAR(1 g) = 0.719 mW/g; SAR(10 g) = 0.379 mW/g

Maximum value of SAR (measured) = 0.818 mW/g

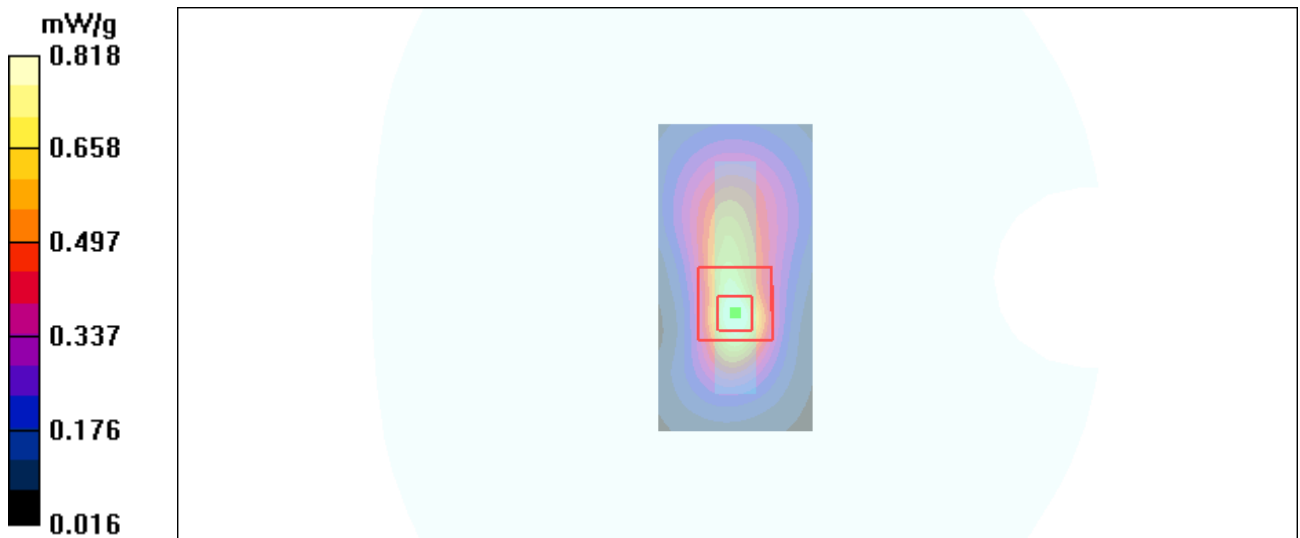


Figure 78 Body, Bottom Edge, WCDMA Band II Channel 9538

TA Technology (Shanghai) Co., Ltd.
Test Report

Report No.: RXA1204-0067SAR01R1

Page 130 of 220

WCDMA Band II with Stereo Headset 1 Back Side Low (Battery 1)

Date/Time: 4/25/2012 1:54:23 AM

Communication System: WCDMA Band II; Frequency: 1852.4 MHz; Duty Cycle: 1:1

Medium parameters used (interpolated): $f = 1852.4$ MHz; $\sigma = 1.51$ mho/m; $\epsilon_r = 52.3$; $\rho = 1000$ kg/m³

Ambient Temperature: 22.3 °C Liquid Temperature: 21.5°C

Phantom section: Flat Section

DASY4 Configuration:

Probe: EX3DV4 - SN3816; ConvF(7.51, 7.51, 7.51); Calibrated: 10/3/2011

Electronics: DAE4 Sn1317; Calibrated: 1/23/2012

Phantom: SAM000 T01; Type: SAM V4.0; Serial: TP-1246

Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 186

Back Side Low/Area Scan (61x91x1): Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (interpolated) = 1.15 mW/g

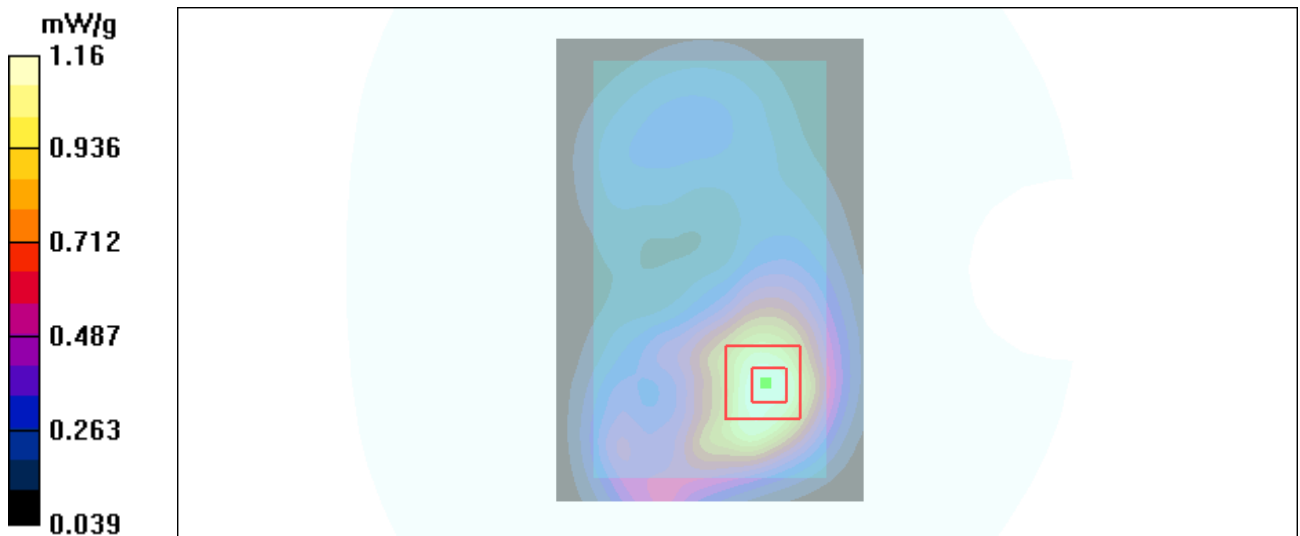
Back Side Low/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 10.9 V/m; Power Drift = 0.030 dB

Peak SAR (extrapolated) = 1.70 W/kg

SAR(1 g) = 1.08 mW/g; SAR(10 g) = 0.659 mW/g

Maximum value of SAR (measured) = 1.16 mW/g



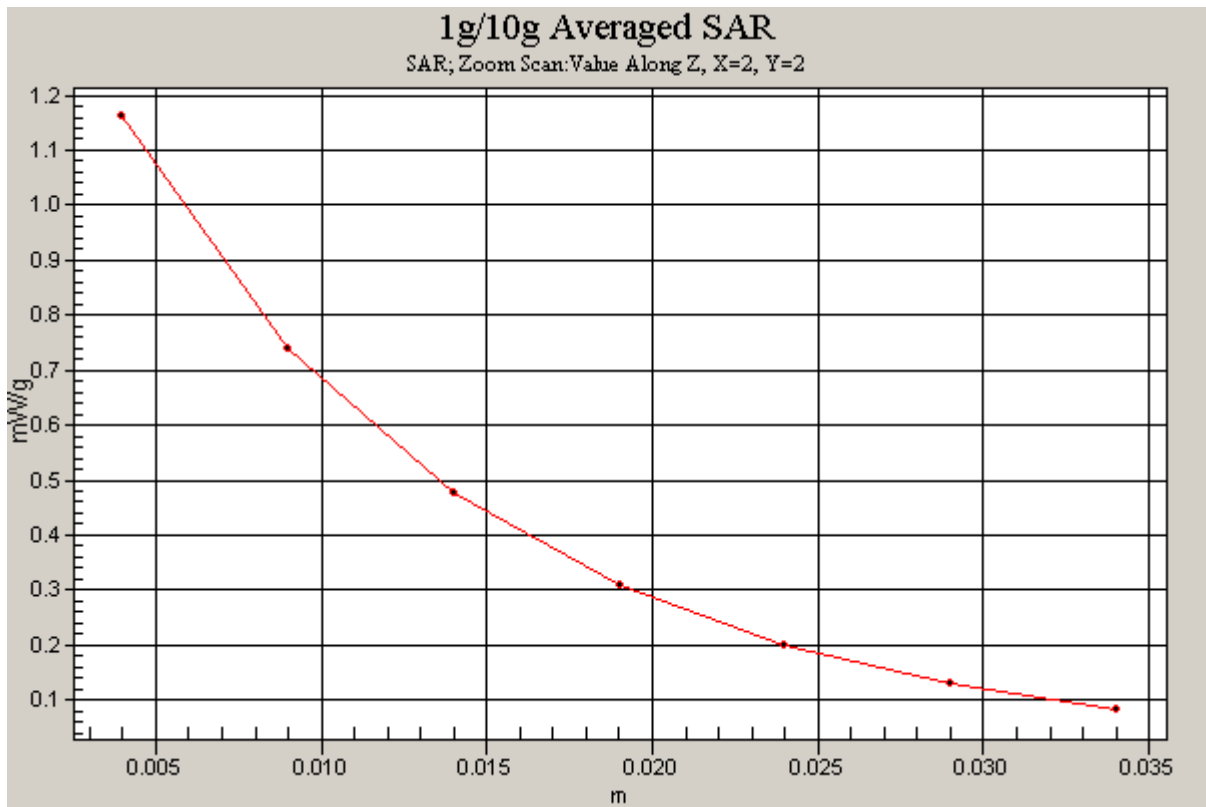


Figure 79 Body with Stereo Headset 1, Back Side, WCDMA Band II Channel 9262

WCDMA Band II with Stereo Headset 2 Back Side Low (Battery 1)

Date/Time: 4/25/2012 2:08:43 AM

Communication System: WCDMA Band II; Frequency: 1852.4 MHz; Duty Cycle: 1:1

Medium parameters used (interpolated): $f = 1852.4$ MHz; $\sigma = 1.51$ mho/m; $\epsilon_r = 52.3$; $\rho = 1000$ kg/m³

Ambient Temperature: 22.3 °C Liquid Temperature: 21.5°C

Phantom section: Flat Section

DASY4 Configuration:

Probe: EX3DV4 - SN3816; ConvF(7.51, 7.51, 7.51); Calibrated: 10/3/2011

Electronics: DAE4 Sn1317; Calibrated: 1/23/2012

Phantom: SAM000 T01; Type: SAM V4.0; Serial: TP-1246

Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 186

Back Side Low/Area Scan (61x91x1): Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (interpolated) = 1.10 mW/g

Back Side Low/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 11.5 V/m; Power Drift = 0.030 dB

Peak SAR (extrapolated) = 1.61 W/kg

SAR(1 g) = 1.02 mW/g; SAR(10 g) = 0.629 mW/g

Maximum value of SAR (measured) = 1.11 mW/g

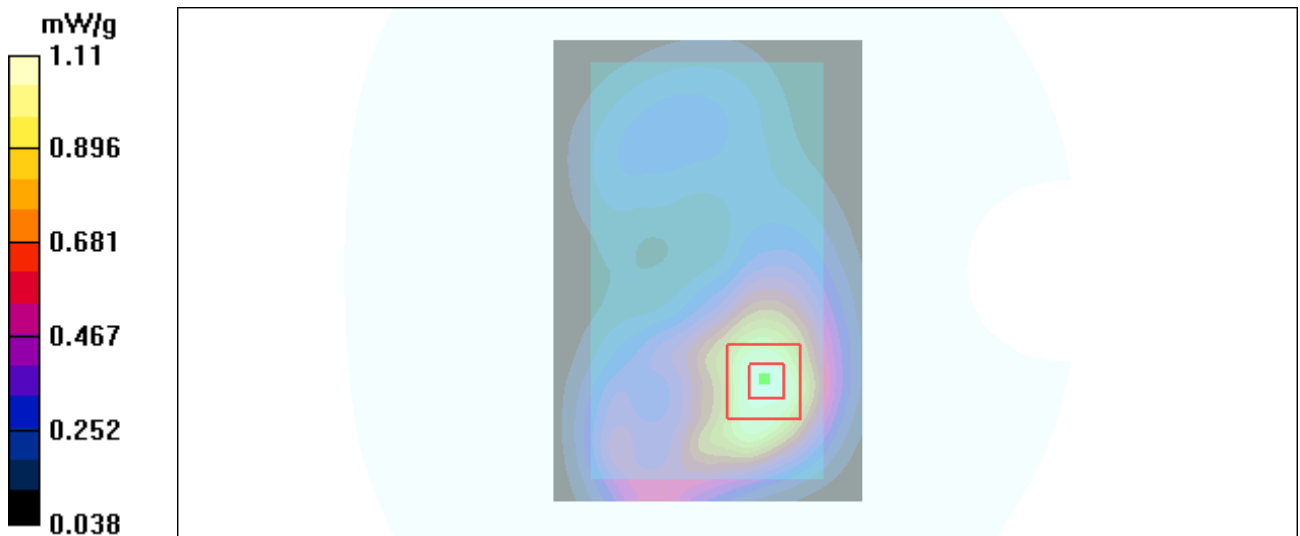


Figure 80 Body with Stereo Headset 2, Back Side, WCDMA Band II Channel 9262

WCDMA Band II with Stereo Headset 3 Back Side Low (Battery 1)

Date/Time: 4/25/2012 2:23:09 AM

Communication System: WCDMA Band II; Frequency: 1852.4 MHz; Duty Cycle: 1:1

Medium parameters used (interpolated): $f = 1852.4$ MHz; $\sigma = 1.51$ mho/m; $\epsilon_r = 52.3$; $\rho = 1000$ kg/m³

Ambient Temperature: 22.3 °C Liquid Temperature: 21.5°C

Phantom section: Flat Section

DASY4 Configuration:

Probe: EX3DV4 - SN3816; ConvF(7.51, 7.51, 7.51); Calibrated: 10/3/2011

Electronics: DAE4 Sn1317; Calibrated: 1/23/2012

Phantom: SAM000 T01; Type: SAM V4.0; Serial: TP-1246

Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 186

Back Side Low/Area Scan (61x91x1): Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (interpolated) = 1.11 mW/g

Back Side Low/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 10.6 V/m; Power Drift = 0.028 dB

Peak SAR (extrapolated) = 1.64 W/kg

SAR(1 g) = 1.04 mW/g; SAR(10 g) = 0.637 mW/g

Maximum value of SAR (measured) = 1.11 mW/g

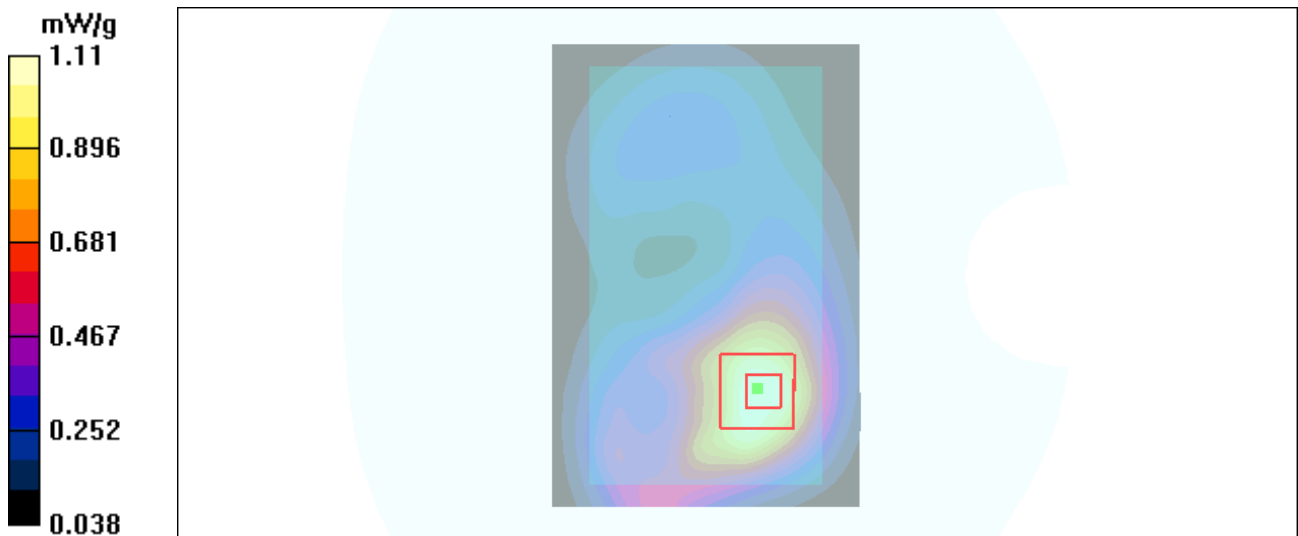


Figure 81 Body with Stereo Headset 3, Back Side, WCDMA Band II Channel 9262

WCDMA Band II with Stereo Headset 1 Back Side Low (Battery 2)

Date/Time: 4/25/2012 2:39:48 AM

Communication System: WCDMA Band II; Frequency: 1852.4 MHz; Duty Cycle: 1:1

Medium parameters used (interpolated): $f = 1852.4$ MHz; $\sigma = 1.51$ mho/m; $\epsilon_r = 52.3$; $\rho = 1000$ kg/m³

Ambient Temperature: 22.3 °C Liquid Temperature: 21.5°C

Phantom section: Flat Section

DASY4 Configuration:

Probe: EX3DV4 - SN3816; ConvF(7.51, 7.51, 7.51); Calibrated: 10/3/2011

Electronics: DAE4 Sn1317; Calibrated: 1/23/2012

Phantom: SAM000 T01; Type: SAM V4.0; Serial: TP-1246

Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 186

Back Side Low/Area Scan (61x91x1): Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (interpolated) = 1.14 mW/g

Back Side Low/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 11.2 V/m; Power Drift = 0.021 dB

Peak SAR (extrapolated) = 1.68 W/kg

SAR(1 g) = 1.06 mW/g; SAR(10 g) = 0.650 mW/g

Maximum value of SAR (measured) = 1.14 mW/g

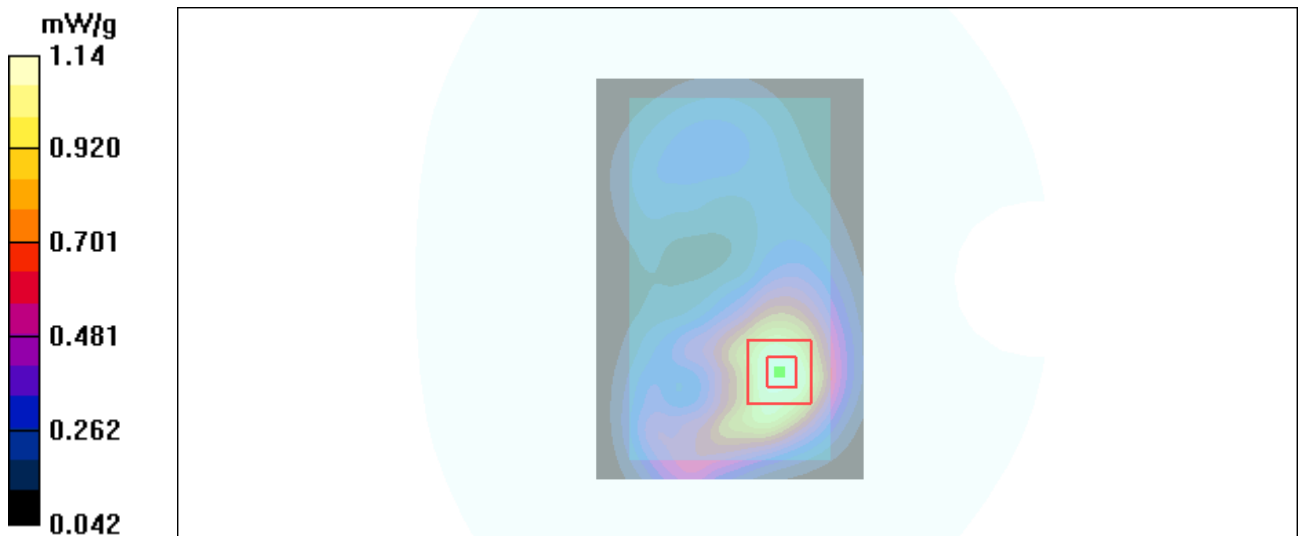


Figure 82 Body with Stereo Headset 1, Back Side, WCDMA Band II Channel 9262

WCDMA Band V Left Cheek High (Battery 1)

Date/Time: 4/24/2012 8:17:03 PM

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

Medium parameters used: $f = 847$ MHz; $\sigma = 0.899$ mho/m; $\epsilon_r = 42.1$; $\rho = 1000$ kg/m³

Ambient Temperature: 22.3 °C Liquid Temperature: 21.5°C

Phantom section: Left Section

DASY4 Configuration:

Probe: EX3DV4 - SN3816; ConvF(9.22, 9.22, 9.22); Calibrated: 10/3/2011

Electronics: DAE4 Sn1317; Calibrated: 1/23/2012

Phantom: SAM 12; Type: SAM V4.0; Serial: TP-1246

Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 186

Cheek High/Area Scan (61x101x1): Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (interpolated) = 0.345 mW/g

Cheek High/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 6.26 V/m; Power Drift = 0.098 dB

Peak SAR (extrapolated) = 0.408 W/kg

SAR(1 g) = 0.332 mW/g; SAR(10 g) = 0.257 mW/g

Maximum value of SAR (measured) = 0.348 mW/g

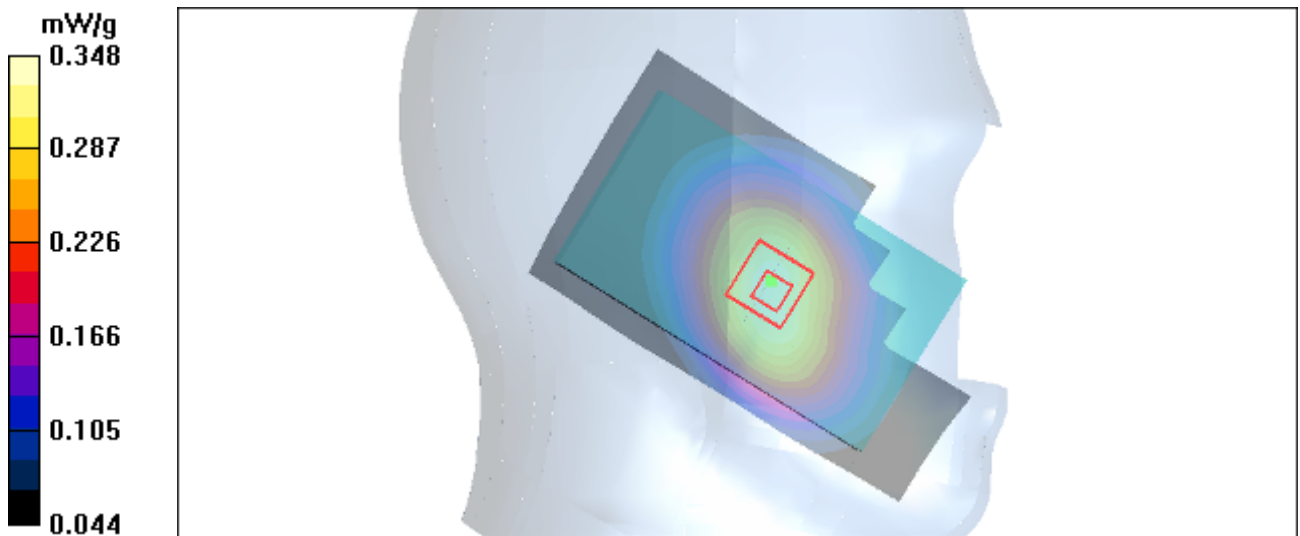


Figure 83 Left Hand Touch Cheek WCDMA Band V Channel 4233

WCDMA Band V Left Cheek Middle (Battery 1)

Date/Time: 4/24/2012 8:46:41 PM

Communication System: WCDMA Band V; Frequency: 836.6 MHz; Duty Cycle: 1:1

Medium parameters used: $f = 837$ MHz; $\sigma = 0.89$ mho/m; $\epsilon_r = 42.3$; $\rho = 1000$ kg/m³

Ambient Temperature: 22.3 °C Liquid Temperature: 21.5 °C

Phantom section: Left Section

DASY4 Configuration:

Probe: EX3DV4 - SN3816; ConvF(9.22, 9.22, 9.22); Calibrated: 10/3/2011

Electronics: DAE4 Sn1317; Calibrated: 1/23/2012

Phantom: SAM 12; Type: SAM V4.0; Serial: TP-1246

Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 186

Cheek Middle/Area Scan (61x101x1): Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (interpolated) = 0.229 mW/g

Cheek Middle/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 5.01 V/m; Power Drift = 0.053 dB

Peak SAR (extrapolated) = 0.268 W/kg

SAR(1 g) = 0.217 mW/g; SAR(10 g) = 0.168 mW/g

Maximum value of SAR (measured) = 0.227 mW/g

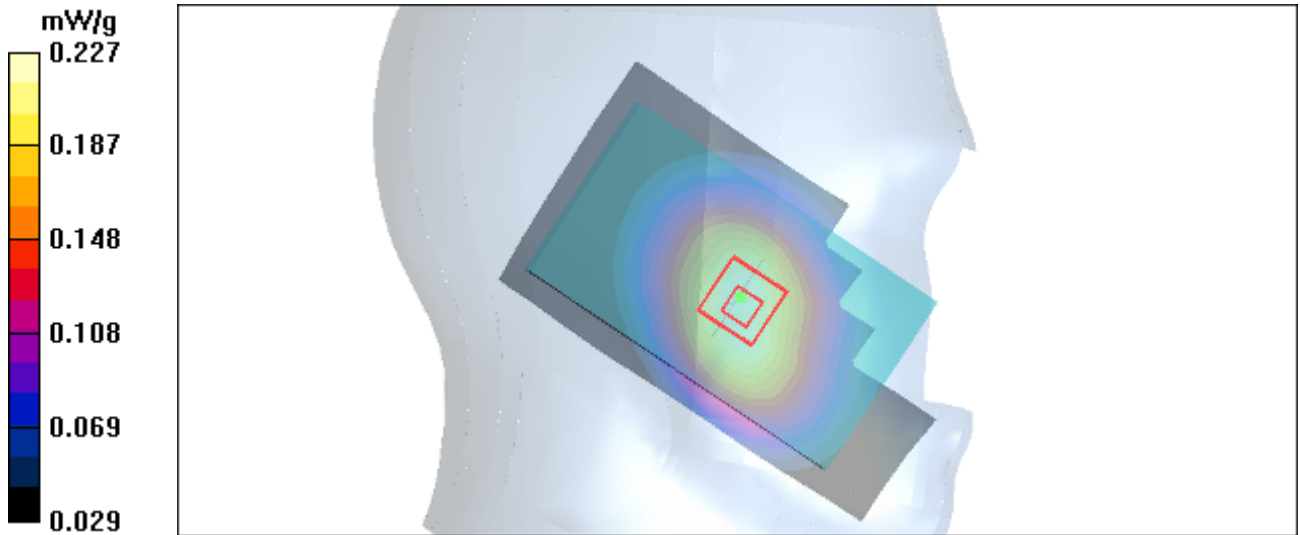


Figure 84 Left Hand Touch Cheek WCDMA Band V Channel 4183

WCDMA Band V Left Cheek Low (Battery 1)

Date/Time: 4/24/2012 8:31:59 PM

Communication System: WCDMA Band V; Frequency: 826.4 MHz; Duty Cycle: 1:1

Medium parameters used (interpolated): $f = 826.4$ MHz; $\sigma = 0.879$ mho/m; $\epsilon_r = 42.4$; $\rho = 1000$ kg/m³

Ambient Temperature: 22.3 °C Liquid Temperature: 21.5 °C

Phantom section: Left Section

DASY4 Configuration:

Probe: EX3DV4 - SN3816; ConvF(9.22, 9.22, 9.22); Calibrated: 10/3/2011

Electronics: DAE4 Sn1317; Calibrated: 1/23/2012

Phantom: SAM 12; Type: SAM V4.0; Serial: TP-1246

Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 186

Cheek Low/Area Scan (61x101x1): Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (interpolated) = 0.253 mW/g

Cheek Low/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 5.46 V/m; Power Drift = 0.092 dB

Peak SAR (extrapolated) = 0.300 W/kg

SAR(1 g) = 0.243 mW/g; SAR(10 g) = 0.188 mW/g

Maximum value of SAR (measured) = 0.253 mW/g

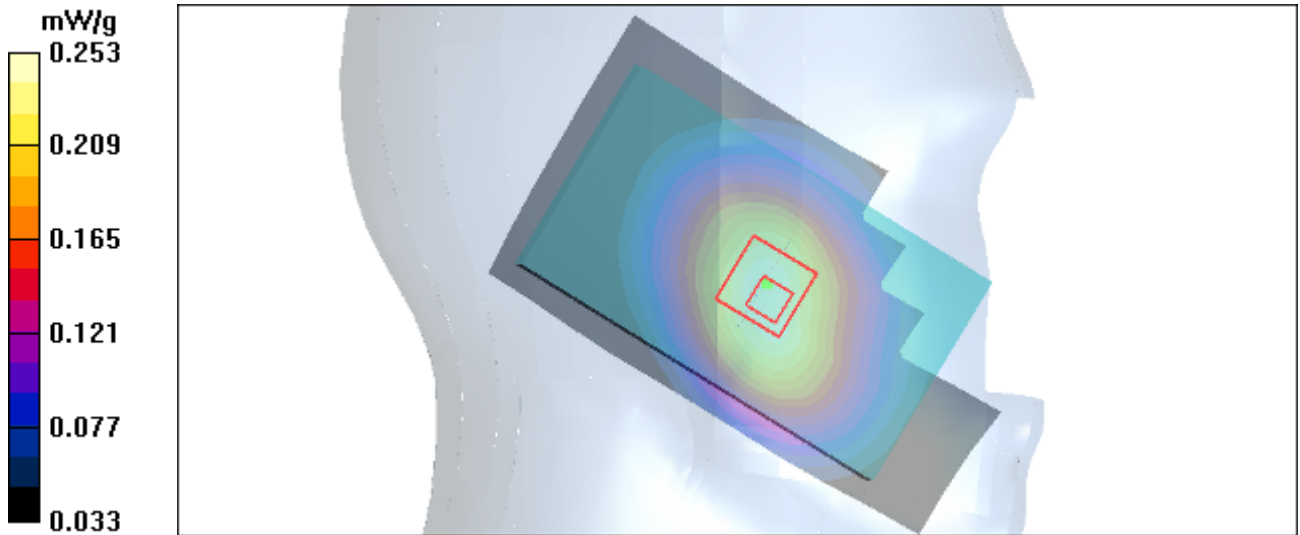


Figure 85 Left Hand Touch Cheek WCDMA Band V Channel 4132

WCDMA Band V Left Tilt High (Battery 1)

Date/Time: 4/24/2012 9:56:14 PM

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

Medium parameters used: $f = 847$ MHz; $\sigma = 0.899$ mho/m; $\epsilon_r = 42.1$; $\rho = 1000$ kg/m³

Ambient Temperature: 22.3 °C Liquid Temperature: 21.5°C

Phantom section: Left Section

DASY4 Configuration:

Probe: EX3DV4 - SN3816; ConvF(9.22, 9.22, 9.22); Calibrated: 10/3/2011

Electronics: DAE4 Sn1317; Calibrated: 1/23/2012

Phantom: SAM 12; Type: SAM V4.0; Serial: TP-1246

Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 186

Tilt High/Area Scan (61x101x1): Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (interpolated) = 0.214 mW/g

Tilt High/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 9.26 V/m; Power Drift = 0.054 dB

Peak SAR (extrapolated) = 0.246 W/kg

SAR(1 g) = 0.202 mW/g; SAR(10 g) = 0.156 mW/g

Maximum value of SAR (measured) = 0.212 mW/g

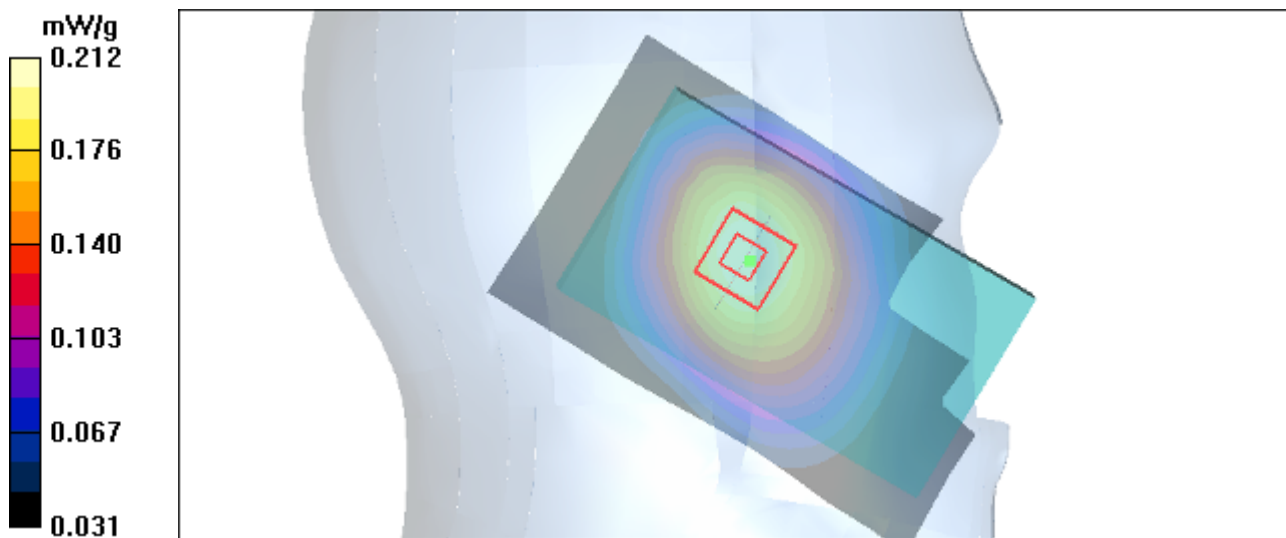


Figure 86 Left Hand Tilt 15° WCDMA Band V Channel 4233

WCDMA Band V Left Tilt Middle (Battery 1)

Date/Time: 4/24/2012 10:26:53 PM

Communication System: WCDMA Band V; Frequency: 836.6 MHz; Duty Cycle: 1:1

Medium parameters used: $f = 837$ MHz; $\sigma = 0.89$ mho/m; $\epsilon_r = 42.3$; $\rho = 1000$ kg/m³

Ambient Temperature: 22.3 °C Liquid Temperature: 21.5°C

Phantom section: Left Section

DASY4 Configuration:

Probe: EX3DV4 - SN3816; ConvF(9.22, 9.22, 9.22); Calibrated: 10/3/2011

Electronics: DAE4 Sn1317; Calibrated: 1/23/2012

Phantom: SAM 12; Type: SAM V4.0; Serial: TP-1246

Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 186

Tilt Middle/Area Scan (61x101x1): Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (interpolated) = 0.143 mW/g

Tilt Middle/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 7.65 V/m; Power Drift = 0.173 dB

Peak SAR (extrapolated) = 0.167 W/kg

SAR(1 g) = 0.137 mW/g; SAR(10 g) = 0.106 mW/g

Maximum value of SAR (measured) = 0.144 mW/g

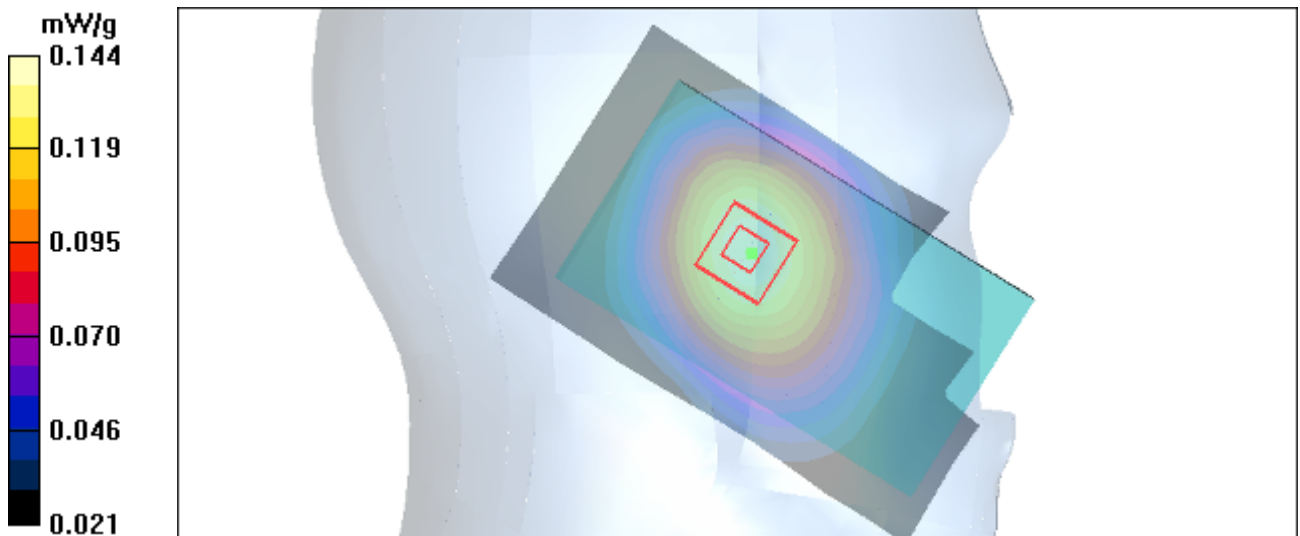


Figure 87 Left Hand Tilt 15° WCDMA Band V Channel 4183

WCDMA Band V Left Tilt Low (Battery 1)

Date/Time: 4/24/2012 10:11:54 PM

Communication System: WCDMA Band V; Frequency: 826.4 MHz; Duty Cycle: 1:1

Medium parameters used (interpolated): $f = 826.4$ MHz; $\sigma = 0.879$ mho/m; $\epsilon_r = 42.4$; $\rho = 1000$ kg/m³

Ambient Temperature: 22.3 °C Liquid Temperature: 21.5°C

Phantom section: Left Section

DASY4 Configuration:

Probe: EX3DV4 - SN3816; ConvF(9.22, 9.22, 9.22); Calibrated: 10/3/2011

Electronics: DAE4 Sn1317; Calibrated: 1/23/2012

Phantom: SAM 12; Type: SAM V4.0; Serial: TP-1246

Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 186

Tilt Low/Area Scan (61x101x1): Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (interpolated) = 0.152 mW/g

Tilt Low/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 7.97 V/m; Power Drift = 0.100 dB

Peak SAR (extrapolated) = 0.177 W/kg

SAR(1 g) = 0.146 mW/g; SAR(10 g) = 0.113 mW/g

Maximum value of SAR (measured) = 0.152 mW/g

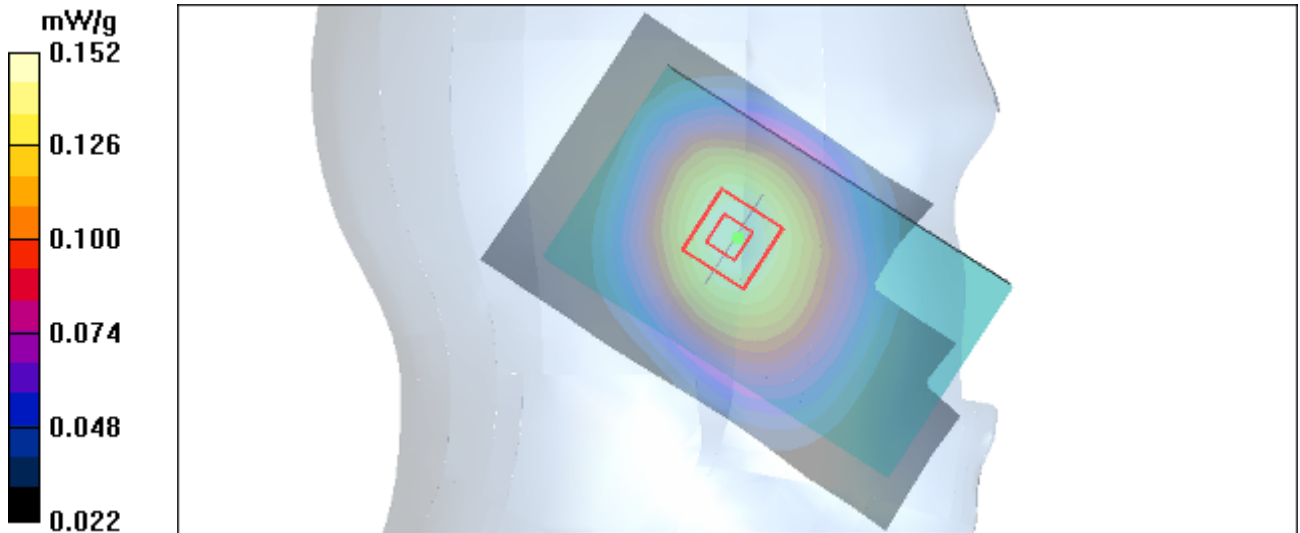


Figure 88 Left Hand Tilt 15° WCDMA Band V Channel 4132

WCDMA Band V Right Cheek High (Battery 1)

Date/Time: 4/24/2012 6:27:39 PM

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

Medium parameters used: $f = 847$ MHz; $\sigma = 0.899$ mho/m; $\epsilon_r = 42.1$; $\rho = 1000$ kg/m³

Ambient Temperature: 22.3 °C Liquid Temperature: 21.5°C

Phantom section: Right Section

DASY4 Configuration:

Probe: EX3DV4 - SN3816; ConvF(9.22, 9.22, 9.22); Calibrated: 10/3/2011

Electronics: DAE4 Sn1317; Calibrated: 1/23/2012

Phantom: SAM 12; Type: SAM V4.0; Serial: TP-1246

Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 186

Cheek High/Area Scan (61x101x1): Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (interpolated) = 0.362 mW/g

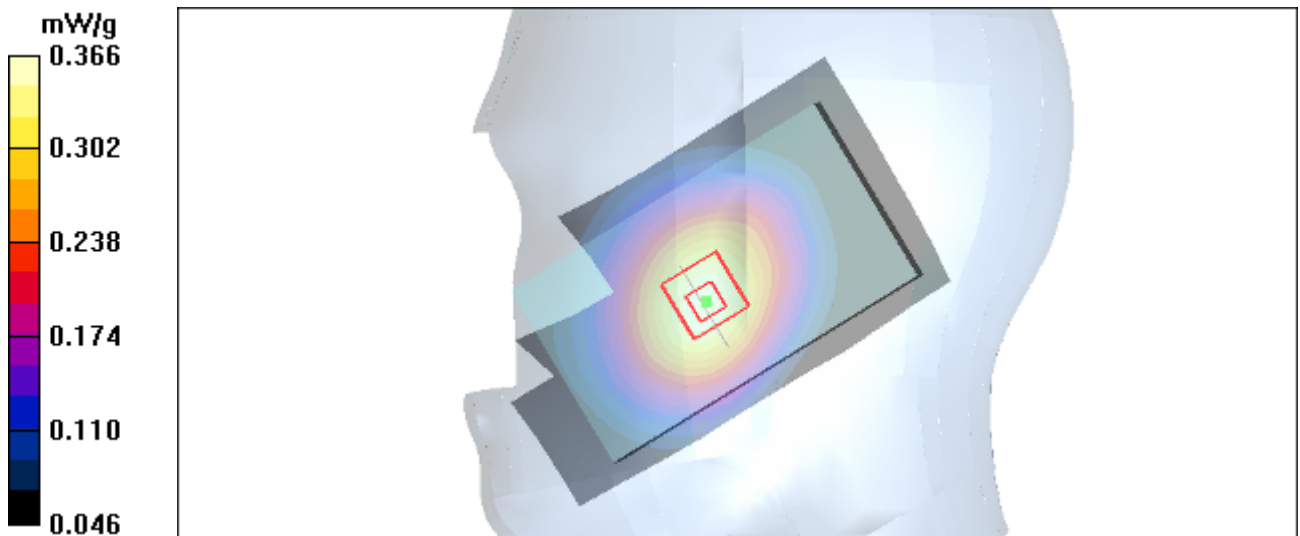
Cheek High/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 6.78 V/m; Power Drift = -0.101 dB

Peak SAR (extrapolated) = 0.428 W/kg

SAR(1 g) = 0.349 mW/g; SAR(10 g) = 0.270 mW/g

Maximum value of SAR (measured) = 0.366 mW/g



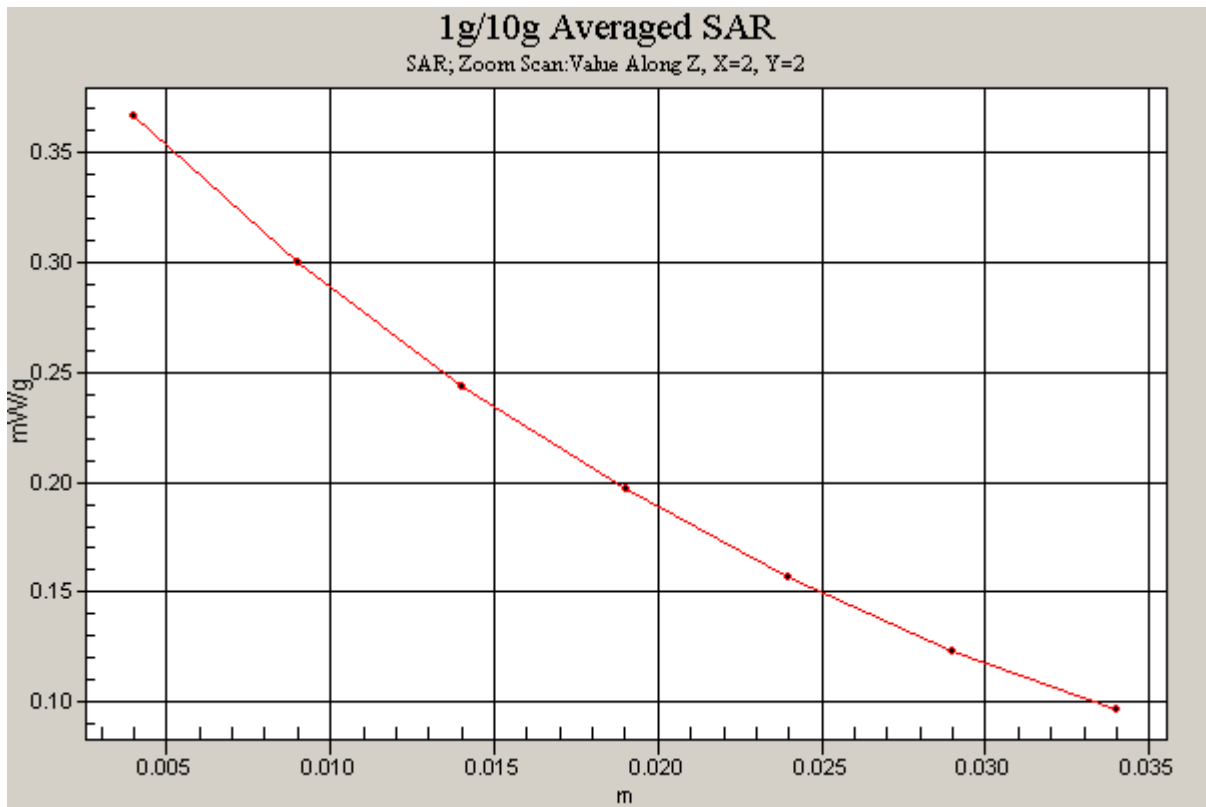


Figure 89 Right Hand Touch Cheek WCDMA Band V Channel 4233

WCDMA Band V Right Cheek Middle (Battery 1)

Date/Time: 4/24/2012 7:01:59 PM

Communication System: WCDMA Band V; Frequency: 836.6 MHz; Duty Cycle: 1:1

Medium parameters used: $f = 837$ MHz; $\sigma = 0.89$ mho/m; $\epsilon_r = 42.3$; $\rho = 1000$ kg/m³

Ambient Temperature: 22.3 °C Liquid Temperature: 21.5°C

Phantom section: Right Section

DASY4 Configuration:

Probe: EX3DV4 - SN3816; ConvF(9.22, 9.22, 9.22); Calibrated: 10/3/2011

Electronics: DAE4 Sn1317; Calibrated: 1/23/2012

Phantom: SAM 12; Type: SAM V4.0; Serial: TP-1246

Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 186

Cheek Middle/Area Scan (61x101x1): Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (interpolated) = 0.246 mW/g

Cheek Middle/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 5.57 V/m; Power Drift = 0.106 dB

Peak SAR (extrapolated) = 0.287 W/kg

SAR(1 g) = 0.237 mW/g; SAR(10 g) = 0.183 mW/g

Maximum value of SAR (measured) = 0.247 mW/g

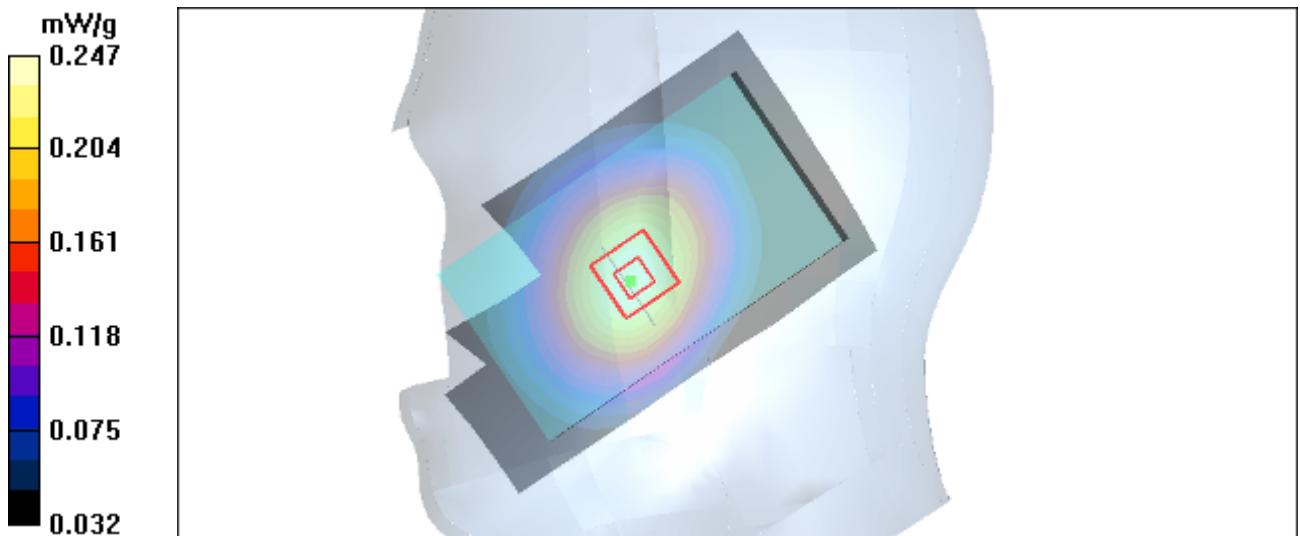


Figure 90 Right Hand Touch Cheek WCDMA Band V Channel 4183

WCDMA Band V Right Cheek Low (Battery 1)

Date/Time: 4/24/2012 7:16:27 PM

Communication System: WCDMA Band V; Frequency: 826.4 MHz; Duty Cycle: 1:1

Medium parameters used (interpolated): $f = 826.4$ MHz; $\sigma = 0.879$ mho/m; $\epsilon_r = 42.4$; $\rho = 1000$ kg/m³

Ambient Temperature: 22.3 °C Liquid Temperature: 21.5°C

Phantom section: Right Section

DASY4 Configuration:

Probe: EX3DV4 - SN3816; ConvF(9.22, 9.22, 9.22); Calibrated: 10/3/2011

Electronics: DAE4 Sn1317; Calibrated: 1/23/2012

Phantom: SAM 12; Type: SAM V4.0; Serial: TP-1246

Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 186

Cheek Low/Area Scan (61x101x1): Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (interpolated) = 0.279 mW/g

Cheek Low/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 5.86 V/m; Power Drift = 0.188 dB

Peak SAR (extrapolated) = 0.323 W/kg

SAR(1 g) = 0.267 mW/g; SAR(10 g) = 0.208 mW/g

Maximum value of SAR (measured) = 0.279 mW/g

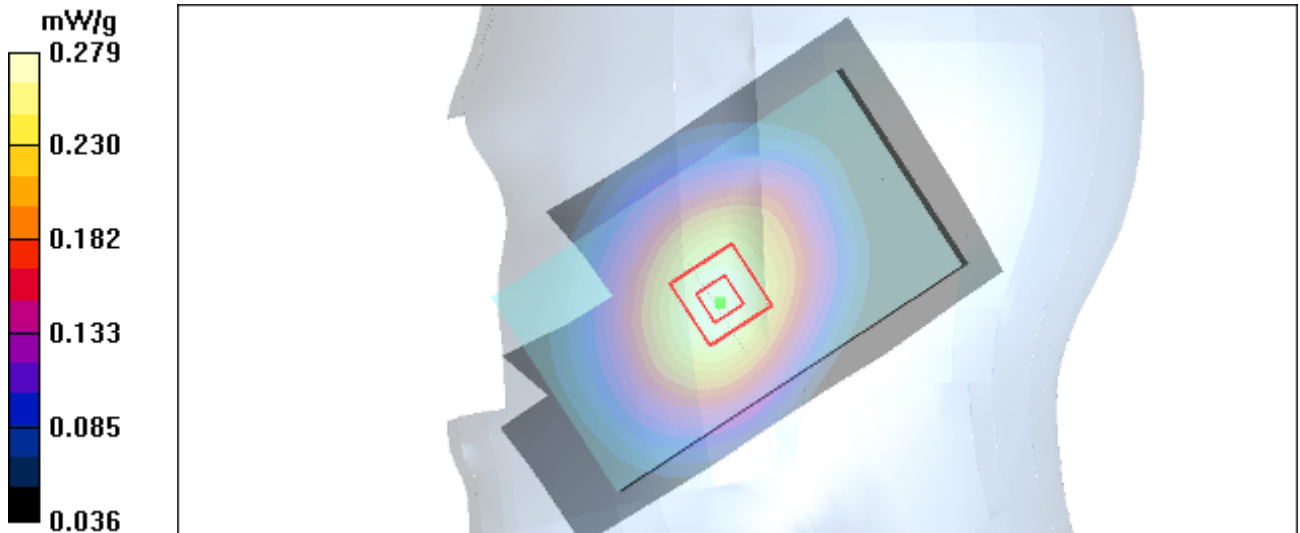


Figure 91 Right Hand Touch Cheek WCDMA Band V Channel 4132

WCDMA Band V Right Tilt High (Battery 1)

Date/Time: 4/24/2012 8:01:04 PM

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

Medium parameters used: $f = 847$ MHz; $\sigma = 0.899$ mho/m; $\epsilon_r = 42.1$; $\rho = 1000$ kg/m³

Ambient Temperature: 22.3 °C Liquid Temperature: 21.5°C

Phantom section: Right Section

DASY4 Configuration:

Probe: EX3DV4 - SN3816; ConvF(9.22, 9.22, 9.22); Calibrated: 10/3/2011

Electronics: DAE4 Sn1317; Calibrated: 1/23/2012

Phantom: SAM 12; Type: SAM V4.0; Serial: TP-1246

Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 186

Tilt High/Area Scan (61x101x1): Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (interpolated) = 0.239 mW/g

Tilt High/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 10.3 V/m; Power Drift = 0.053 dB

Peak SAR (extrapolated) = 0.284 W/kg

SAR(1 g) = 0.229 mW/g; SAR(10 g) = 0.176 mW/g

Maximum value of SAR (measured) = 0.239 mW/g

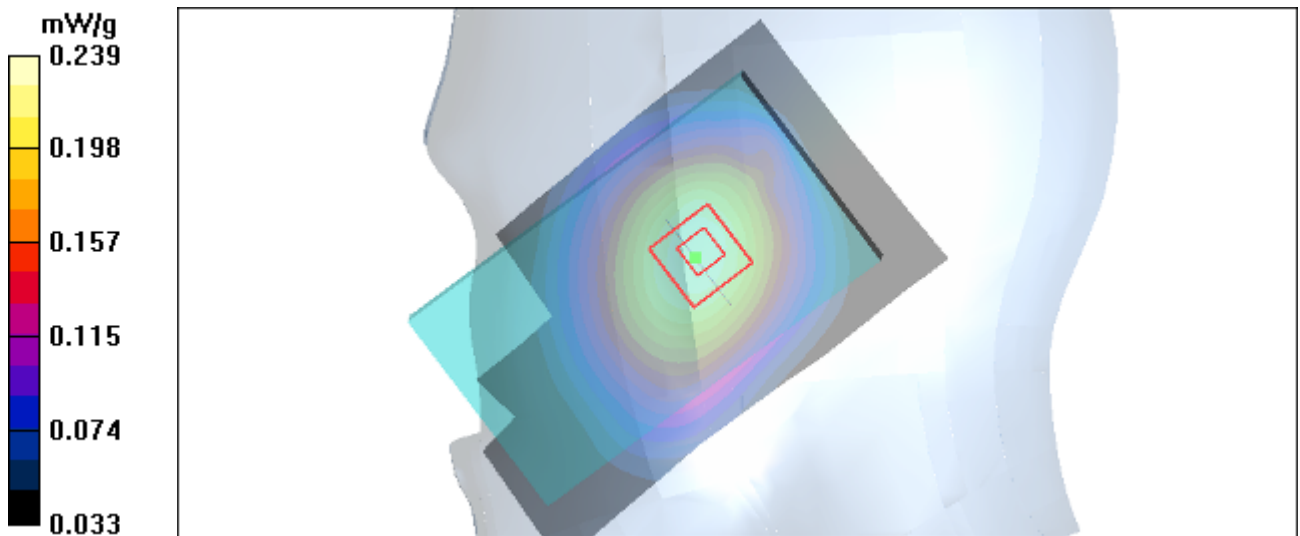


Figure 92 Right Hand Tilt 15° WCDMA Band V Channel 4233

WCDMA Band V Right Tilt Middle (Battery 1)

Date/Time: 4/24/2012 7:46:23 PM

Communication System: WCDMA Band V; Frequency: 836.6 MHz; Duty Cycle: 1:1

Medium parameters used: $f = 837$ MHz; $\sigma = 0.89$ mho/m; $\epsilon_r = 42.3$; $\rho = 1000$ kg/m³

Ambient Temperature: 22.3 °C Liquid Temperature: 21.5°C

Phantom section: Right Section

DASY4 Configuration:

Probe: EX3DV4 - SN3816; ConvF(9.22, 9.22, 9.22); Calibrated: 10/3/2011

Electronics: DAE4 Sn1317; Calibrated: 1/23/2012

Phantom: SAM 12; Type: SAM V4.0; Serial: TP-1246

Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 186

Tilt Middle/Area Scan (61x101x1): Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (interpolated) = 0.163 mW/g

Tilt Middle/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 8.56 V/m; Power Drift = 0.031 dB

Peak SAR (extrapolated) = 0.193 W/kg

SAR(1 g) = 0.158 mW/g; SAR(10 g) = 0.121 mW/g

Maximum value of SAR (measured) = 0.165 mW/g

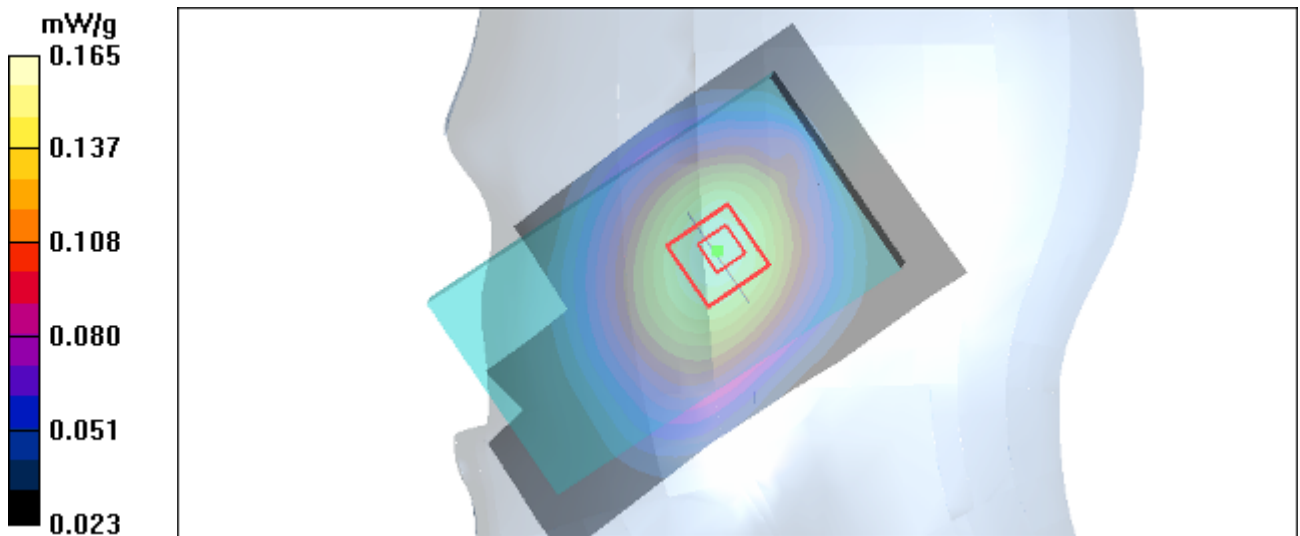


Figure 93 Right Hand Tilt 15° WCDMA Band V Channel 4183

WCDMA Band V Right Tilt Low (Battery 1)

Date/Time: 4/24/2012 7:31:43 PM

Communication System: WCDMA Band V; Frequency: 826.4 MHz; Duty Cycle: 1:1

Medium parameters used (interpolated): $f = 826.4$ MHz; $\sigma = 0.879$ mho/m; $\epsilon_r = 42.4$; $\rho = 1000$ kg/m³

Ambient Temperature: 22.3 °C Liquid Temperature: 21.5°C

Phantom section: Right Section

DASY4 Configuration:

Probe: EX3DV4 - SN3816; ConvF(9.22, 9.22, 9.22); Calibrated: 10/3/2011

Electronics: DAE4 Sn1317; Calibrated: 1/23/2012

Phantom: SAM 12; Type: SAM V4.0; Serial: TP-1246

Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 186

Tilt Low/Area Scan (61x101x1): Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (interpolated) = 0.183 mW/g

Tilt Low/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 9.16 V/m; Power Drift = 0.044 dB

Peak SAR (extrapolated) = 0.220 W/kg

SAR(1 g) = 0.179 mW/g; SAR(10 g) = 0.138 mW/g

Maximum value of SAR (measured) = 0.187 mW/g

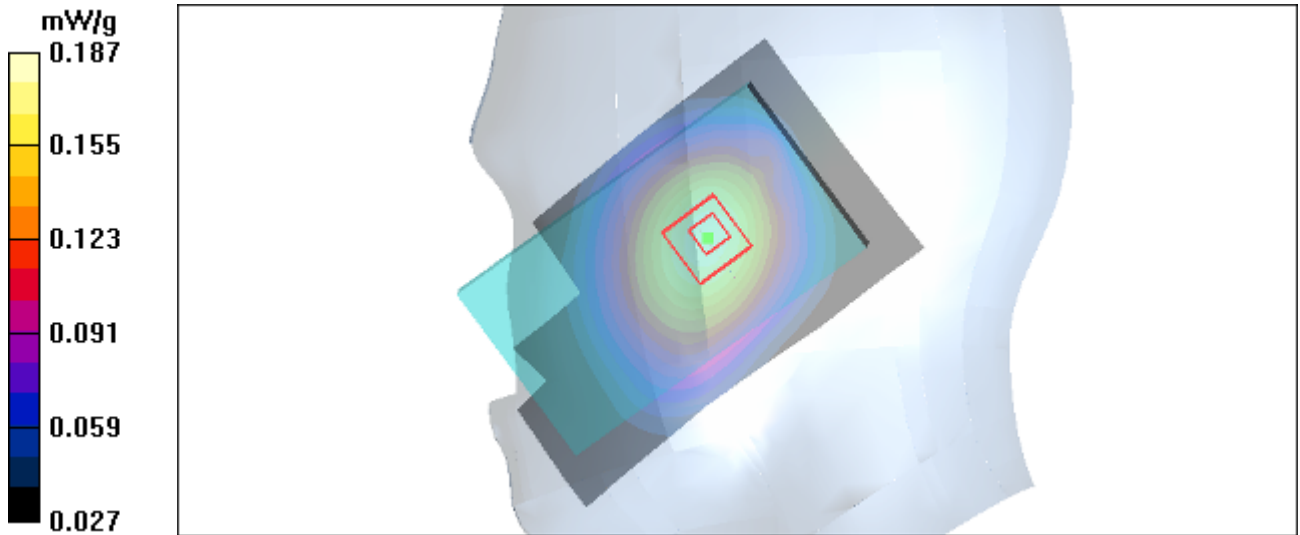


Figure 94 Right Hand Tilt 15° WCDMA Band V Channel 4132

WCDMA Band V Back Side High (Battery 1)

Date/Time: 4/25/2012 12:05:26 PM

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

Medium parameters used: $f = 847$ MHz; $\sigma = 1$ mho/m; $\epsilon_r = 54.1$; $\rho = 1000$ kg/m³

Ambient Temperature: 22.3 °C Liquid Temperature: 21.5 °C

Phantom section: Flat Section

DASY4 Configuration:

Probe: EX3DV4 - SN3816; ConvF(9.38, 9.38, 9.38); Calibrated: 10/3/2011

Electronics: DAE4 Sn1317; Calibrated: 1/23/2012

Phantom: SAM 12; Type: SAM V4.0; Serial: TP-1246

Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 186

Back Side High/Area Scan (61x91x1): Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (interpolated) = 0.681 mW/g

Back Side High/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 25.2 V/m; Power Drift = -0.007 dB

Peak SAR (extrapolated) = 0.843 W/kg

SAR(1 g) = 0.649 mW/g; SAR(10 g) = 0.489 mW/g

Maximum value of SAR (measured) = 0.677 mW/g

Back Side High/Zoom Scan (5x5x7)/Cube 1: Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 25.2 V/m; Power Drift = -0.007 dB

Peak SAR (extrapolated) = 0.778 W/kg

SAR(1 g) = 0.483 mW/g; SAR(10 g) = 0.333 mW/g

Maximum value of SAR (measured) = 0.527 mW/g

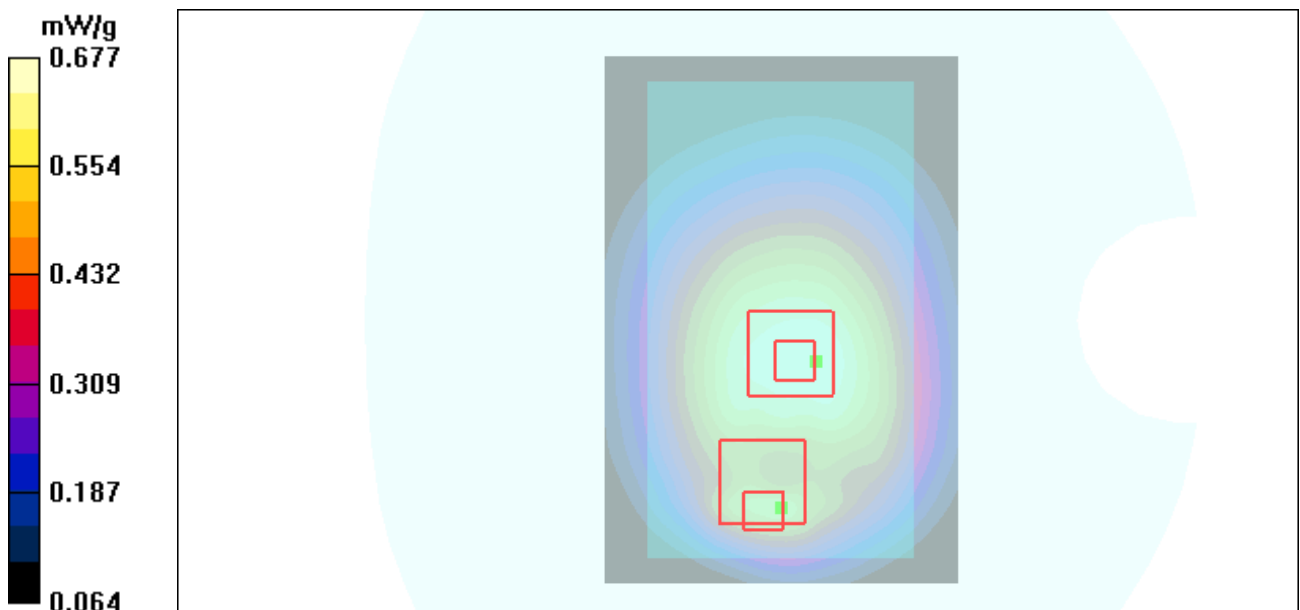


Figure 95 Body, Back Side, WCDMA Band V Channel 4233

WCDMA Band V Back Side Middle (Battery 1)

Date/Time: 4/25/2012 11:51:54 AM

Communication System: WCDMA Band V; Frequency: 836.6 MHz; Duty Cycle: 1:1

Medium parameters used: $f = 837$ MHz; $\sigma = 0.988$ mho/m; $\epsilon_r = 54.2$; $\rho = 1000$ kg/m³

Ambient Temperature: 22.3 °C Liquid Temperature: 21.5°C

Phantom section: Flat Section

DASY4 Configuration:

Probe: EX3DV4 - SN3816; ConvF(9.38, 9.38, 9.38); Calibrated: 10/3/2011

Electronics: DAE4 Sn1317; Calibrated: 1/23/2012

Phantom: SAM 12; Type: SAM V4.0; Serial: TP-1246

Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 186

Back Side Middle/Area Scan (61x91x1): Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (interpolated) = 0.501 mW/g

Back Side Middle/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 21.8 V/m; Power Drift = 0.001 dB

Peak SAR (extrapolated) = 0.624 W/kg

SAR(1 g) = 0.478 mW/g; SAR(10 g) = 0.360 mW/g

Maximum value of SAR (measured) = 0.502 mW/g

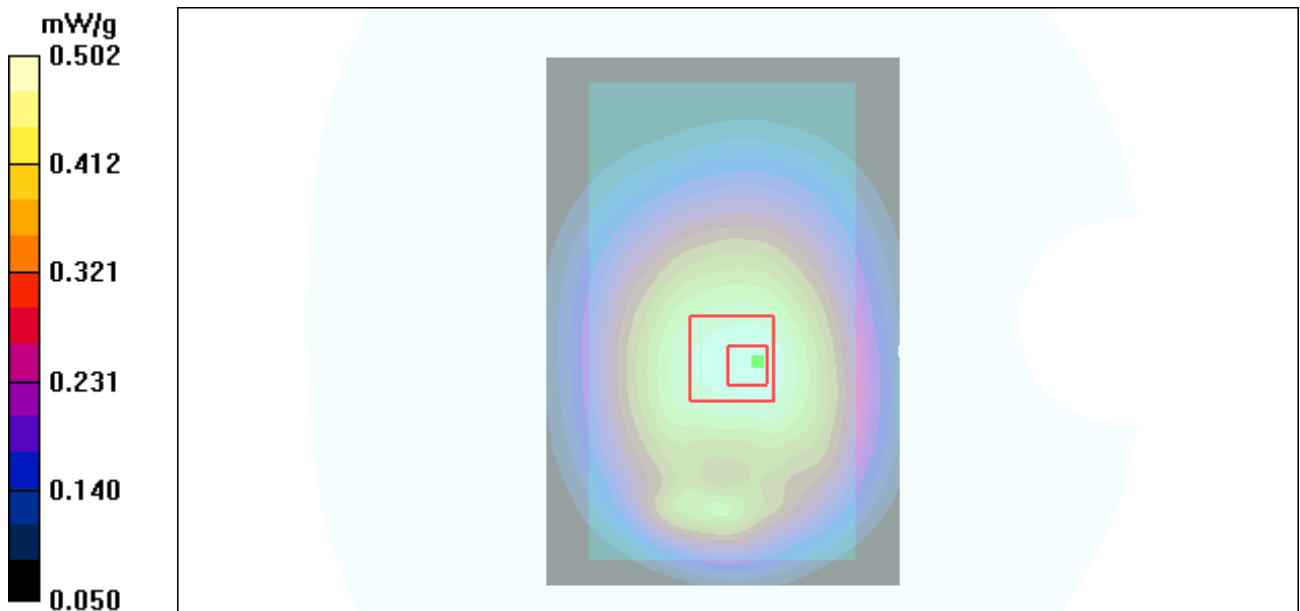


Figure 96 Body, Back Side, WCDMA Band V Channel 4183

WCDMA Band V Back Side Low (Battery 1)

Date/Time: 4/25/2012 10:31:52 AM

Communication System: WCDMA Band V; Frequency: 826.4 MHz; Duty Cycle: 1:1

Medium parameters used (interpolated): $f = 826.4$ MHz; $\sigma = 0.974$ mho/m; $\epsilon_r = 54.3$; $\rho = 1000$ kg/m³

Ambient Temperature: 22.3 °C Liquid Temperature: 21.5°C

Phantom section: Flat Section

DASY4 Configuration:

Probe: EX3DV4 - SN3816; ConvF(9.38, 9.38, 9.38); Calibrated: 10/3/2011

Electronics: DAE4 Sn1317; Calibrated: 1/23/2012

Phantom: SAM 12; Type: SAM V4.0; Serial: TP-1246

Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 186

Back Side Low/Area Scan (61x91x1): Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (interpolated) = 0.687 mW/g

Back Side Low/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 25.5 V/m; Power Drift = -0.004 dB

Peak SAR (extrapolated) = 0.876 W/kg

SAR(1 g) = 0.676 mW/g; SAR(10 g) = 0.506 mW/g

Maximum value of SAR (measured) = 0.710 mW/g

Back Side Low/Zoom Scan (5x5x7)/Cube 1: Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 25.5 V/m; Power Drift = -0.004 dB

Peak SAR (extrapolated) = 0.801 W/kg

SAR(1 g) = 0.490 mW/g; SAR(10 g) = 0.350 mW/g

Maximum value of SAR (measured) = 0.580 mW/g

