OET 65

TEST REPORT

Product Name	HUAWEI IDEOS SERIES; cdma2000 Digital Mobile Phone ; IDEOS
FCC ID	QISC8150
Model	C8150
Client	Huawei Technologies Co., Ltd.

TA Technology (Shanghai) Co., Ltd.

GENERAL SUMMARY

Product Name	HUAWEI IDEOS SERIES; cdma2000 Digital Mobile Phone ; IDEOS	**Model**	C8150
FCC ID	QISC8150	**Report No.**	RZA2010 -1144
Client	Huawei Technologies Co., Ltd.		
Manufacturer	Huawei Technologies Co., Ltd.		
Standard(s)	**IEEE Std C95.1, 1999:** IEEE Standard for Safety Levels with Respect to Human Exposure to Radio Frequency Electromagnetic Fields, 3 kHz to 300 GHz. **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. **SUPPLEMENT C Edition 01-01 to OET BULLETIN 65 Edition 97-01 June 2001 including DA 02-1438 June 19, 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.		
Conclusion	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. General Judgment: **Pass** (Stamp) **Date of issue: August 4th, 2010**		
Comment	The test result only responds to the measured sample.		

Approved by _Yang Weizhong_   **Revised by** _Ling Minbao_   **Performed by** _Xue Chaofeng_

Yang Weizhong   Ling Minbao   Xue Chaofeng

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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.

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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.

1.2. Testing Laboratory

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1.4. Manufacturer Information

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City: Shenzhen

Postal Code: 518129

Country: P.R. China

Telephone: 0755-28780808

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1.5. Information of EUT

General Information

Device Type:	Portable Device
Exposure Category:	Uncontrolled Environment / General Population
Product Name:	HUAWEI IDEOS SERIES; cdma2000 Digital Mobile Phone ; IDEOS
SN:	1M2AA11070700020
Device Operating Configurations:	
Supporting Mode(s):	CDMA Cellular; (tested) CDMA PCS; (tested) CDMA AWS; (tested) Bluetooth; WIFI; (tested)
Test Modulation:	QPSK

Operating Frequency Range(s):	Band	Tx (MHz)	Rx (MHz)
	CDMA Cellular	824.7 ~ 848.31	869.7 ~ 893.31
	CDMA PCS	1851.25 ~ 1908.75	1931.25 ~ 1988.75
	CDMA AWS	1711.25 ~ 1752.5	2111.25 ~ 2152.5

Test Channel: (Low - Middle - High)	1013 - 384 - 777 (CDMA Cellular) (tested) 25 - 600 - 1175 (CDMA PCS) (tested) 25 - 450 - 875 (CDMA AWS) (tested)
Power Class:	CDMA Cellular: Tested with Power Control All up bits
	CDMA PCS: Tested with Power Control All up bits
	CDMA AWS: Tested with Power Control All up bits
Hardware Version:	HC1C815M
Software Version:	C8150V100R001C126B811
Antenna Type:	Internal Antenna

Auxiliary Equipment Details

AE1:Battery

Model: HB4J1H

Manufacturer: Huawei Technologies Co., Ltd.

SN: UNHA325VI1300022

AE2:Travel Adapter

Model: HW-050100U1W

Manufacturer: Huawei Technologies Co., Ltd.

SN: HKAA52653737

Equipment Under Test (EUT) is a model of HUAWEI IDEOS SERIES; cdma2000 Digital Mobile Phone ; IDEOS with internal antenna. The detail about Mobile phone, Lithium Battery and AC/DC Adapter is in chapter 1.5 in this report. SAR is tested for CDMA Cellular, CDMA PCS and CDMA AWS.

The sample under test was selected by the Client.

Components list please refer to documents of the manufacturer.

1.6. The Maximum SAR$_{1g}$ Vaules and Conducted Power of each tested band

Band	SAR$_{1g}$ (W/kg)		Maximum Conducted Power(dBm)
	Head	Body	
CDMA Cellular	0.677	0.861	24.53
CDMA PCS	0.885	0.817	24.54
CDMA AWS	0.426	0.837	24.43
802. 11b	0.089	0.027	15.76

1.7. Test Date

The test is performed from July 28, 2010 to August 2, 2010.

2. Operational Conditions during Test

2.1. 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 Radio Frequency Channel Number (ARFCN) is allocated to 1013, 384 and 777 respectively in the case of CDMA Cellular, to 25, 600 and 1175 respectively in the case of CDMA PCS, to 25, 450 and 875 respectively in the case of CDMA AWS. 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. Using the E5515C Power control is set "All Up Bits" in SAR of CDMA. 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.

2.2. Information for the Measurement of CDMA 1x Devices

2.2.1. Output Power Verification

Test Parameter setup for maximum RF output power according to section 4.4.5 of 3GPP2

Parameter	Units	Value
I or	dBm/1.23MHz	-104
PilotE c /I or	dB	-7
TrafficE c /I or	dB	-7.4

For SAR test, the maximum power output is very important and essential; it is identical under the measurement uncertainty. It is proper to use typical Test Mode 3 (FW RC3, RVS RC3, SO55) as the worst case for SAR test.

2.2.2. Head SAR Measurement

SAR is measured in RC3 with the DUT configured to transmit at full rate using Loopback Service Option SO55.SAR for RC1 is not required because the maximum average output of each channel is less than 0.25 dB higher than that measured in RC3.Otherwise, SAR is measured on the maximum output channel in RC1 using the exposure configuration that results in the highest SAR for that channel in RC3.

2.2.3. Body SAR Measurement

SAR is measured in RC3 with the EUT configured to transmit at full rate using TDSO/SO32, transmit at full rate on FCH with all other code channels disabled. SAR for multiple code channels (FCH+SCHn) is not required when the maximum average output of each RF channel is less than 0.25dB higher than measured with FCH only.

Body SAR in RC1 is not required because the maximum average output of each channel is less than 0.25 dB higher than that measured in RC3. Otherwise, SAR is measured on the maximum output channel in RC1; with Loopback Service Option SO55, at full rate using the body exposure configuration that results in the highest SAR for that channel in RC3.

Test communication setup meet as followings:

Communication standard between mobile station and base station simulator	3GPP2 C.S0011-B
Radio configuration	RC3（Supporting CDMA 1X）
Spreading Rate	SR1
Data Rate	9600bps
Service Options	SO55 （loop back mode）
Service Options	SO32 （test data service mode）
Multiplex Options	The mobile station does not support this service.

2.3. Handsets with Ev-Do

For handsets with Ev-Do capabilities, when the maximum average output of each channel in Rev. 0 is less than ¼ dB higher than that measured in RC3 (1x RTT), body SAR for Ev-Do is not required. Otherwise, SAR for Rev. 0 is measured on the maximum output channel, at 153.6 kbps using the body exposure configuration that results in the highest SAR for that channel in RC3. SAR for Rev. A is not required when the maximum average output of each channel is less than that measured in Rev. 0 or less than ¼ dB higher than that measured in RC3.   Otherwise, SAR is measured on the maximum output channel for Rev. A using a Reverse Data Channel payload size of 4096 bits and a Termination Target of 16 slots defined for Subtype 2 Physical Layer configurations.   A Forward Traffic Channel data rate corresponding to the 2-slot version of 307.2 kbps with the ACK Channel transmitting in all slots should be configured in the downlink for both Rev. 0 and Rev. A.

2.4. WIFI Test Configuration

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. Each channel should be tested at the lowest data rate.

802.11b/g operating modes are tested independently according to the service requirements in each frequency band.802.11b/g modes are tested on channels1,6,11;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 1.

And according to the "3 dB rule" FCC Public Notice, DA 02-1948, June 19.2002 **"If the SAR measured at the middle channel for each test configuration is at least 3.0 dB lower than the SAR limit, testing at the high and low channels is optional for such test configuration(s)"**. Then The Absolute Radio Frequency Channel Number (ARFCN) is firstly allocated to 2437 respectively in the case of 802.11b/g.

Table 1: "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 11to 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"

3. SAR Measurements System Configuration

3.1. 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.
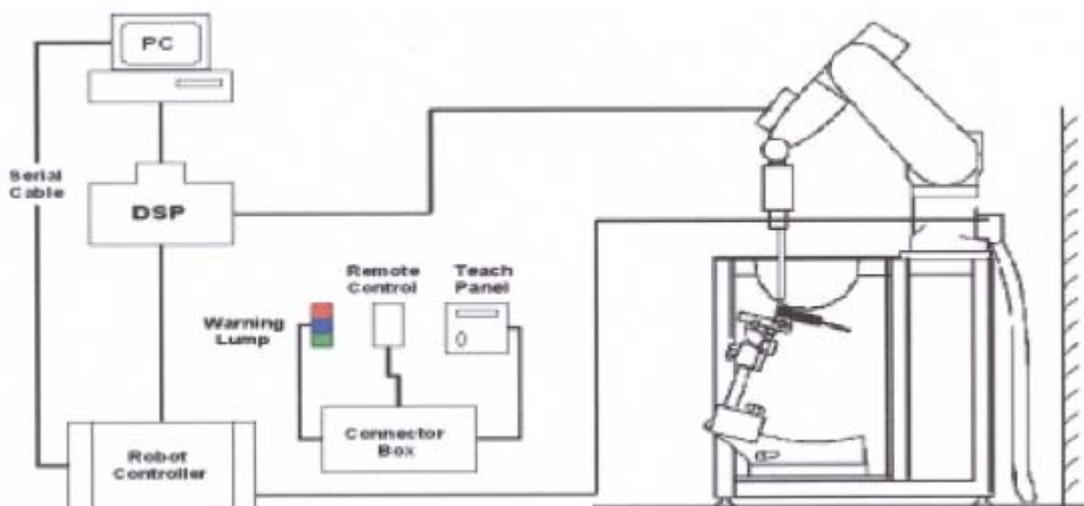- System validation dipoles allowing to validate the proper functioning of the system.

Figure 1. SAR Lab Test Measurement Set-up

3.2. 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.

3.2.1. 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)

Figure 2.EX3DV4 E-field Probe

Directivity   ± 0.3 dB in HSL (rotation around probe axis) ± 0.5 dB in tissue material (rotation normal to probe axis)

Dynamic Range   10 µW/g to > 100 mW/g Linearity: ± 0.2dB (noise: typically < 1 µW/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 3. EX3DV4 E-field probe

3.2.2. E-field Probe Calibration

Each probe is calibrated according to a dosimetric assessment procedure with accuracy better than ± 10%. The spherical isotropy was evaluated and found to be better than ± 0.25dB. 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 bellow 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.

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

Where: Δt = Exposure time (30 seconds),

C = Heat capacity of tissue (brain or muscle),

ΔT = Temperature increase due to RF exposure.

Or

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

Where:

σ = Simulated tissue conductivity,

ρ = Tissue density (kg/m3).

3.3. Other Test Equipment

3.3.1. Device Holder for Transmitters

The DASY device holder is designed to cope with the die rent 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

Figure 4.Device Holder

inference of the clamp on the test results could thus be lowered.

3.3.2. 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 l000 x 500 mm (H x L x W)
Aailable   Special

Figure 5.Generic Twin Phantom

3.4. 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

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 7x7x7 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 7x7x7 measurement points with 5mm resolution amounting to 343 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 7x7x7 scan. The probe is moved away in z-direction from the bottom of the SAM phantom in 5mm steps.

3.5. Data Storage and Evaluation

3.5.1. 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.

3.5.2. 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.

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.

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

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

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

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

   ▪ = equivalent tissue density in g/cm^3

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.

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

with P_{pwe} = equivalent power density of a plane wave in mW/cm^2

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

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

3.6. System Check

The manufacturer calibrates the probes annually. Dielectric parameters of the tissue simulants were measured every day using the dielectric probe kit and the network analyser. A system check measurement was made following the determination of the dielectric parameters of the simulant, 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 8 and table 9.

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

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

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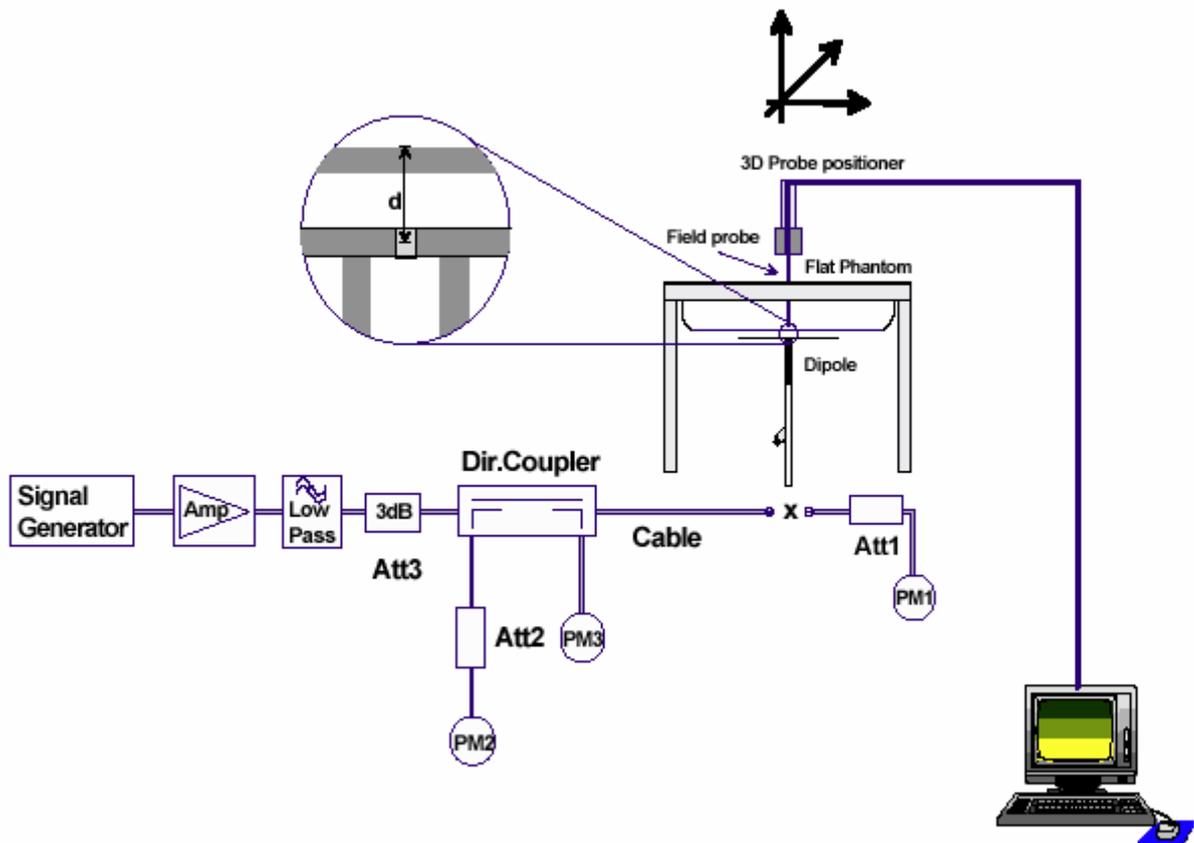
Figure 6. **System Check Set-up**

3.7. Equivalent Tissues

The liquid is consisted of water, sugar, salt, Preventol,Glycol 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 ε=41.5 σ=0.9

MIXTURE%	FREQUENCY(Brain) 1750MHz
Water	55.24
Glycol	44.45
Salt	0.31
Dielectric Parameters Target Value	f=1750MHz ε=40.1 σ=1.37

MIXTURE%	FREQUENCY(Brain) 1900MHz
Water	55.242
Glycol monobutyl	44.452
Salt	0.306
Dielectric Parameters Target Value	f=1900MHz ε=40.0 σ=1.40

MIXTURE%	FREQUENCY(Brain) 2450MHz
Water	62.7
Glycol	36.8
Salt	0.5
Dielectric Parameters Target Value	f=2450MHz ε=39.20 σ=1.80

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 ε=55.2 σ=0.97

MIXTURE%	FREQUENCY(Body) 1750MHz
Water	69.91
Glycol	29.97
Salt	0.12
Dielectric Parameters Target Value	f=1750MHz ε=53.4 σ=1.49

MIXTURE%	FREQUENCY(Body) 1900MHz
Water	69.91
Glycol	29.96
Salt	0.13
Dielectric Parameters Target Value	f=1900MHz ε=53.3 σ=1.52

MIXTURE%	FREQUENCY(Body) 2450MHz
Water	73.2
Glycol	26.7
Salt	0.1
Dielectric Parameters Target Value	f=2450MHz ε=52.70 σ=1.95

4. Laboratory Environment

Table 4: The Ambient Conditions during Test

Temperature	Min. = 20°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.	

5. Characteristics of the Test

5.1. Applicable Limit Regulations

IEEE Std C95.1, 1999: IEEE Standard for Safety Levels with Respect to Human Exposure to Radio Frequency Electromagnetic Fields, 3 KHz to 300 GHz.

5.2. Applicable Measurement Standards

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.

SUPPLEMENT C Edition 01-01 to OET BULLETIN 65 Edition 97-01 June 2001 including DA 02-1438 June 19, 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.

6. Conducted Output Power Measurement

6.1. Summary

The DUT is tested using an E5515C communications tester as controller unit to set test channels and maximum output power to the DUT, as well as for measuring the conducted power. Conducted output power was measured using an integrated RF connector and attached RF cable. This result contains conducted output power for the EUT.

6.2. Conducted Power Results

Table 5: Conducted Power Measurement Results

CDMA Cellular (RC3)	Conducted Power(dBm)		
	Channel 1013	Channel 384	Channel 777
Before test	24.49	24.28	24.15
After test	24.48	24.27	24.12
CDMA Cellular (RC1)	Conducted Power(dBm)		
	Channel 1013	Channel 384	Channel 777
Before test	24.51	24.32	24.21
After test	24.53	24.33	24.23
CDMA Cellular EVDO (Rev.0)	Conducted Power(dBm)		
	Channel 1013	Channel 384	Channel 777
Before test	23.91	23.92	23.74
After test	23.90	23.95	23.72
CDMA Cellular EVDO (Rev.A)	Conducted Power(dBm)		
	Channel 1013	Channel 384	Channel 777
Before test	23.91	23.90	23.73
After test	23.89	23.93	23.72
CDMA PCS (RC3)	Conducted Power(dBm)		
	Channel 25	Channel 600	Channel 1175
Before test	24.52	24.53	24.42
After test	24.53	24.52	24.43
CDMA PCS (RC1)	Conducted Power(dBm)		
	Channel 25	Channel 600	Channel 1175
Before test	24.51	24.52	24.41
After test	24.54	24.54	24.42

CDMA PCS EVDO (Rev.0)	Conducted Power(dBm)		
	Channel 25	Channel 600	Channel 1175
Before test	24.50	24.51	24.36
After test	24.52	24.54	24.35
CDMA PCS EVDO (Rev.A)	Conducted Power(dBm)		
	Channel 25	Channel 600	Channel 1175
Before test	24.53	24.50	24.35
After test	24.52	24.52	24.33
CDMA AWS (RC3)	Conducted Power(dBm)		
	Channel 25	Channel 450	Channel 875
Before test	24.10	24.41	24.01
After test	24.12	24.43	24.00
CDMA AWS (RC1)	Conducted Power(dBm)		
	Channel 25	Channel 450	Channel 875
Before test	24.08	24.42	24.03
After test	24.11	24.40	24.05
CDMA AWS EVDO (Rev.0)	Conducted Power(dBm)		
	Channel 25	Channel 450	Channel 875
Before test	24.03	24.20	23.80
After test	24.01	24.18	23.81
CDMA AWS EVDO (Rev.A)	Conducted Power(dBm)		
	Channel 25	Channel 450	Channel 875
Before test	24.01	24.16	23.75
After test	24.03	24.18	23.78

Note: For handsets with Ev-Do capabilities, when the maximum average output of each channel in Rev. 0 is less than ¼ dB higher than that measured in RC3 (1x RTT), body SAR for Ev-Do is not required.

7. Test Results

7.1. Dielectric Performance

Table 6: Dielectric Performance of Head Tissue Simulating Liquid

Frequency	Description	Dielectric Parameters		Temp ℃
		ε_r	σ(s/m)	
835MHz (head)	Target value ±5% window	41.5 39.43 — 43.58	0.90 0.86 — 0.95	/
	Measurement value 2010-7-28	42.82	0.91	22.5
1750MHz (head)	Target value ±5% window	40.1 38.10 — 42.11	1.37 1.30 — 1.44	/
	Measurement value 2010-7-29	39.98	1.37	21.9
1900MHz (head)	Target value ±5% window	40.00 38.00 — 42.00	1.40 1.33 — 1.47	/
	Measurement value 2010-7-29	39.80	1.42	21.8
2450MHz (head)	Target value ±5% window	39.20 37.24 — 41.16	1.80 1.71 — 1.89	/
	Measurement value 2010-7-30	38.81	1.79	21.9

Table 7: Dielectric Performance of Body Tissue Simulating Liquid

Frequency	Description	Dielectric Parameters		Temp ℃
		ε_r	σ(s/m)	
835MHz (body)	Target value ±5% window	55.20 52.44 — 57.96	0.97 0.92 — 1.02	/
	Measurement value 2010-7-28	55.16	1.00	22.5
1750MHz (body)	Target value ±5% window	53.4 50.73 — 56.07	1.49 1.42 — 1.56	/
	Measurement value 2010-7-28	53.11	1.51	21.8
1900MHz (body)	Target value ±5% window	53.3 50.64 — 55.97	1.52 1.44 — 1.60	/
	Measurement value 2010-7-28	51.95	1.56	21.8
2450MHz (body)	Target value ±5% window	52.70 50.07 — 55.34	1.95 1.85 — 2.05	/
	Measurement value 2010-8-2	51.83	1.92	21.9

7.2. System Check

Table 8: System Checking for Head Tissue Simulating Liquid

Frequency	Description	SAR(W/kg)		Dielectric Parameters		Temp
		10g	1g	ε_r	σ(s/m)	℃
835MHz	Recommended value ±10% window	1.56 1.40 — 1.72	2.39 2.15 — 2.63	41.2	0.89	/
	Measurement value 2010-7-28	1.50	2.30	42.82	0.91	22.5
1800 MHz	Recommended value ±10% window	4.99 4.49 - 5.49	9.47 8.52 - 10.42	39.4	1.37	/
	Measurement value 2010-7-29	5.01	9.68	39.85	1.43	21.9
1900 MHz	Recommended value ±10% window	5.22 4.70 – 5.74	10.00 9.00 - 11.00	39.5	1.44	/
	Measurement value 2010-7-29	5.46	10.60	39.80	1.42	21.8
2450 MHz	Recommended result ±10% window	6.24 5.62 — 6.86	13.3 11.97—14.63	38.7	1.77	/
	Measurement value 2010-7-30	6.50	14.05	38.81	1.79	21.9

Note: 1. The graph results see ANNEX B.

   2. Recommended Values used derive from the calibration certificate and 250 mW is used as feeding power to the calibrated dipole.

Table 9: System Check for Body Tissue Simulating Liquid

Frequency	Description	SAR(W/kg)		Dielectric Parameters		Temp
		10g	1g	ε_r	σ(s/m)	℃
835MHz	Recommended value ±10% window	1.63 1.47 — 1.79	2.49 2.24 — 2.74	54.6	0.98	/
	Measurement value 2010-7-28	1.58	2.40	55.16	1.00	22.5
1800 MHz	Recommended value ±10% window	5.04 4.54 — 5.54	9.49 8.54 — 10.44	52.7	1.49	/
	Measurement value 2010-7-28	5.25	10.1	52.98	1.56	21.8
1900 MHz	Recommended value ±10% window	5.52 4.97 — 6.57	10.30 9.27 — 11.33	53.5	1.54	/
	Measurement value 2010-7-28	5.17	9.73	51.95	1.56	21.8
2450 MHz	Recommended result ±10% window	5.97 5.37 — 6.57	13 11.7 — 14.3	51.8	2.01	/
	Measurement value 2010-8-2	6.46	14.00	51.83	1.92	21.9

Note: 1. The graph results see ANNEX B.

2. Recommended Values used derive from the calibration certificate and 250 mW is used as feeding power to the calibrated dipole.

7.3. Summary of Measurement Results

7.3.1. CDMA Cellular (CDMA/EVDO)

Table 10: SAR Values [CDMA Cellular (CDMA/EVDO)]

Limit of SAR		10 g Average	1 g Average	Power Drift	Graph Results
		2.0 W/kg	1.6 W/kg	$\pm$ 0.21 dB	
Different Test Position	Channel	Measurement Result(W/kg)		Power Drift (dB)	
		10 g Average	1 g Average		
Test Position of Head					
Left hand, Touch cheek	Middle	0.421	0.587	-0.114	Figure 15
Left hand, Tilt 15 Degree	Middle	0.321	0.467	0.045	Figure 16
Right hand, Touch cheek	High	0.454	0.662	-0.004	Figure 17
	Middle	0.454	0.660	-0.194	Figure 18
	Low	0.465	0.677	-0.054	Figure 19
Right hand, Tilt 15 Degree	Middle	0.363	0.540	0.071	Figure 20
Test Position of Body (Distance 15mm)					
Towards Ground	High	0.496	0.683	-0.109	Figure 21
	Middle	0.624	0.857	-0.161	Figure 22
	Low	0.626	0.861	-0.069	Figure 23
Towards Phantom	Middle	0.229	0.318	-0.094	Figure 24
Worst Case Position of Body with Earphone (Distance 15mm)					
Towards Ground	Low	0.479	0.667	-0.013	Figure 25

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

2. Upper and lower frequencies were measured at the worst position.

3. The SAR test shall be performed at the high, middle and low frequency channels of each operating mode. If the SAR measured at mid-band channel for each test configuration is at least 3.0 dB lower than the SAR_{1g} limit (< 0.8W/kg), testing at the high and low channels is optional.

Table 11: Extrapolated SAR Values of highest measured SAR [CDMA Cellular (CDMA/EVDO)]

Limit of SAR		Conducted Power	1g Average	Tune-up procedures Power(dBm)	1g Average
			1.6 W/kg		1.6
Test Case		Measurement Result (dBm)			Extrapolated Result (W/kg)
Different Test Position	Channel				
Towards Ground	Low	24.49	0.861	26.00	0.914

7.3.2. CDMA PCS (CDMA/EVDO)

Table 12: SAR Values [CDMA PCS (CDMA/EVDO)]

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					
Left hand, Touch cheek	Middle	0.317(max.cube)	0.537(max.cube)	-0.016	Figure 26
Left hand, Tilt 15 Degree	Middle	0.308	0.535	-0.067	Figure 27
Right hand, Touch cheek	High	0.462	0.846	-0.030	Figure 28
	Middle	0.481	0.885	-0.188	Figure 29
	Low	0.462	0.854	-0.125	Figure 30
Right hand, Tilt 15 Degree	Middle	0.401	0.734	-0.004	Figure 31
Test Position of Body (Distance 15mm)					
Towards Ground	High	0.391(max.cube)	0.665(max.cube)	-0.022	Figure 32
	Middle	0.450(max.cube)	0.790(max.cube)	-0.036	Figure 33
	Low	0.463(max.cube)	0.817(max.cube)	-0.096	Figure 34
Towards Phantom	Middle	0.119	0.198	-0.049	Figure 35
Worst Case Position of Body with Earphone (Distance 15mm)					
Towards Ground	Low	0.440	0.773	0.061	Figure 36

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

2. Upper and lower frequencies were measured at the worst position.

3. The SAR test shall be performed at the high, middle and low frequency channels of each operating mode. If the SAR measured at mid-band channel for each test configuration is at least 3.0 dB lower than the SAR_{1g} limit (< 0.8W/kg), testing at the high and low channels is optional.

4. 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.

Table 13: Extrapolated SAR Values of highest measured SAR [CDMA PCS (CDMA/EVDO)]

Limit of SAR		Conducted Power	1g Average	Tune-up procedures Power(dBm)	1g Average
			1.6 W/kg		1.6
Test Case		Measurement Result (dBm)			Extrapolated Result (W/kg)
Different Test Position	Channel				
Right hand, Touch cheek	Middle	24.53	0.885	26.00	0.938

7.3.3. CDMA AWS (CDMA/EVDO)

Table 14: SAR Values [CDMA AWS (CDMA/EVDO)]

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					
Left hand, Touch cheek	Middle	0.128	0.216	-0.076	Figure 37
Left hand, Tilt 15 Degree	Middle	0.135	0.234	-0.046	Figure 38
Right hand, Touch cheek	High	0.232	0.426	-0.067	Figure 39
	Middle	0.192	0.348	-0.161	Figure 40
	Low	0.157	0.280	-0.078	Figure 41
Right hand, Tilt 15 Degree	Middle	0.182	0.329	-0.187	Figure 42
Test Position of Body (Distance 15mm)					
Towards Ground	High	0.456	0.837	-0.007	Figure 43
	Middle	0.434	0.794	0.016	Figure 44
	Low	0.392	0.717	0.064	Figure 45
Towards Phantom	Middle	0.045	0.074	0.089	Figure 46
Worst Case Position of Body with Earphone (Distance 15mm)					
Towards Ground	High	0.422	0.764	0.050	Figure 47

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

2. Upper and lower frequencies were measured at the worst position.

3. The SAR test shall be performed at the high, middle and low frequency channels of each operating mode. If the SAR measured at mid-band channel for each test configuration is at least 3.0 dB lower than the SAR_{1g} limit (< 0.8W/kg), testing at the high and low channels is optional.

Table 15: Extrapolated SAR Values of highest measured SAR [CDMA AWS (CDMA/EVDO)]

Limit of SAR		Conducted Power	1g Average	Tune-up procedures Power(dBm)	1g Average
			1.6 W/kg		1.6
Test Case		Measurement Result (dBm)			Extrapolated Result (W/kg)
Different Test Position	Channel				
Towards Ground	High	24.01	0.837	26.00	0.906

7.3.4. Bluetooth/WIFI Function

The distance between BT/WIFI antenna and main antenna is >5 cm. The location of the antennas inside mobile phone is shown ANNEX L.
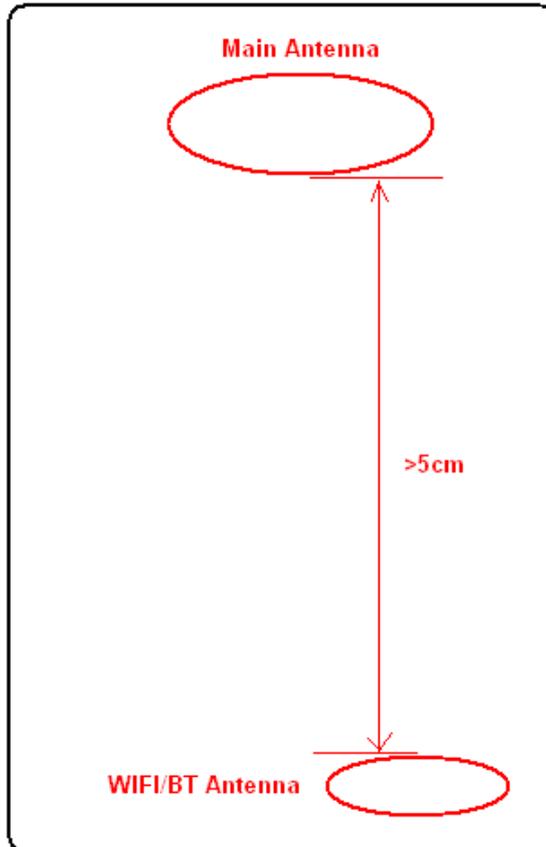
The output power of BT antenna is as following:

Channel	Ch 0 2402 MHz	Ch 39 2441 Mhz	Ch 78 2480 MHz
Peak Conducted Output Power(dBm)	7.65	7.77	8.23

The output power of WIFI antenna is as following:

Channel		Channel 1 (2412MHz)	Channel 6 (2437MHz)	Channel 11 (2462MHz)
802.11b Peak Conducted Output Power (dBm)	Before Test	15.28	15.46	15.76
	After Test	15.26	15.49	15.72
802.11g Peak Conducted Output Power (dBm)	Before Test	9.18	9.16	9.22
	After Test	9.21	9.17	9.19
802.11n Peak Conducted Output Power (dBm)	Before Test	9.20	8.57	8.71
	After Test	9.21	8.55	8.74

Stand-alone SAR

According to the output power measurement result and the distance between BT antenna and main antenna we can draw the conclusion that: stand-alone SAR are not required for BT, because the output power of BT transmitter is $< 2P_{Ref}$ and its antenna is >5cm from other antenna, stand-alone SAR are required for WIFI, because the output power of WIFI transmitter is $>2P_{Ref}$ and its antenna is >5cm from other antenna.

Table 16: SAR Values (802.11b)

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	1g Average		
Test Position of Head (802.11b)					
Left Hand, Touch Cheek	High	0.047	0.089	-0.112	Figure 48
	Middle	0.035	0.068	-0.051	Figure 49
	Low	0.030	0.057	-0.067	Figure 50
Left Hand, Tilt 15 Degree	Middle	0.006	0.014	-0.023	Figure 51
Right Hand, Touch Cheek	Middle	0.026	0.048	-0.020	Figure 52
Right Hand, Tilt 15 Degree	Middle	0.006	0.019	-0.030	Figure 53
Test Position of Body (802.11b Distance 15mm)					
Towards Ground	Middle	0.001	0.007	0.100	Figure 54
Towards Phantom	High	0.008	0.020	0.029	Figure 55
	Middle	0.005	0.012	0.030	Figure 56
	Low	0.007	0.020	0.039	Figure 57
Worst Case Position of Body with Earphone (802.11b Distance 15mm)					
Towards Phantom	High	0.011	0.027	0.058	Figure 58

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

2. Upper and lower frequencies were measured at the worst position.

3. The SAR test shall be performed at the high, middle and low frequency channels of each operating mode. If the SAR measured at mid-band channel for each test configuration is at least 3.0 dB lower than the SAR limit (< 0.8W/kg), testing at the high and low channels is optional.

4. SAR is not required for 802.11g/n channels when the maximum average output power is less than 0.25dB higher than that measured on the corresponding 802.11b channels.

Simultaneous SAR

About BT, because stand-alone SAR is not required for BT, so Simultaneous SAR are not required for BT.

About WIFI, because the output power of WIFI antenna is >5cm from other antenna. (main antenna SAR_{MAX})0.938+ (wifi antenna SAR_{MAX})0.089 = 1.027<1.6, so Simultaneous SAR are not required for wifi.

8. Measurement Uncertainty

No.	source	Type	Uncertainty Value (%)	Probability Distribution	k	c_i	Standard ncertainty $u_i^{'}$ (%)	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	5.9	N	1	1	5.9	∞
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	5
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	∞
21	-liquid conductivity (deviation from target)	B	5.0	R	$\sqrt{3}$	0.64	1.8	∞
22	-liquid conductivity (measurement uncertainty)	B	5.0	N	1	0.64	3.2	∞
23	-liquid permittivity (deviation from target)	B	5.0	R	$\sqrt{3}$	0.6	1.7	∞
24	-liquid permittivity (measurement uncertainty)	B	5.0	N	1	0.6	3.0	∞
Combined standard uncertainty	$u_c^{'} = \sqrt{\sum_{i=1}^{21} c_i^2 u_i^2}$						12.0	
Expanded uncertainty (confidence interval of 95 %)	$u_e = 2u_c$		N		k=2		24.0	

9. Main Test Instruments

Table 17: List of Main Instruments

No.	Name	Type	Serial Number	Calibration Date	Valid Period
01	Network analyzer	Agilent 8753E	US37390326	September 13, 2009	One year
02	Dielectric Probe Kit	Agilent 85070E	US44020115	No Calibration Requested	
03	Power meter	Agilent E4417A	GB41291714	March 13, 2010	One year
04	Power sensor	Agilent 8481H	MY41091316	March 26, 2010	One year
05	Signal Generator	HP 8341B	2730A00804	September 13, 2009	One year
06	Amplifier	IXA-020	0401	No Calibration Requested	
07	BTS	E5515C	MY48360988	December 4, 2009	One year
08	E-field Probe	EX3DV4	3677	September 23, 2009	One year
09	E-field Probe	EX3DV4	3661	December 30, 2009	One year
10	DAE	DAE4	871	November 11, 2009	One year
11	Validation Kit 835MHz	D835V2	4d092	January 14, 2010	One year
12	Validation Kit 1800MHz	D1800V2	2d146	February 23, 2010	One year
13	Validation Kit 1900MHz	D1900V2	5d018	June 15, 2010	One year
14	Validation Kit 2450MHz	D2450V2	712	February 19, 2010	One year

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

ANNEX A: Test Layout

Picture 1: Specific Absorption Rate Test Layout
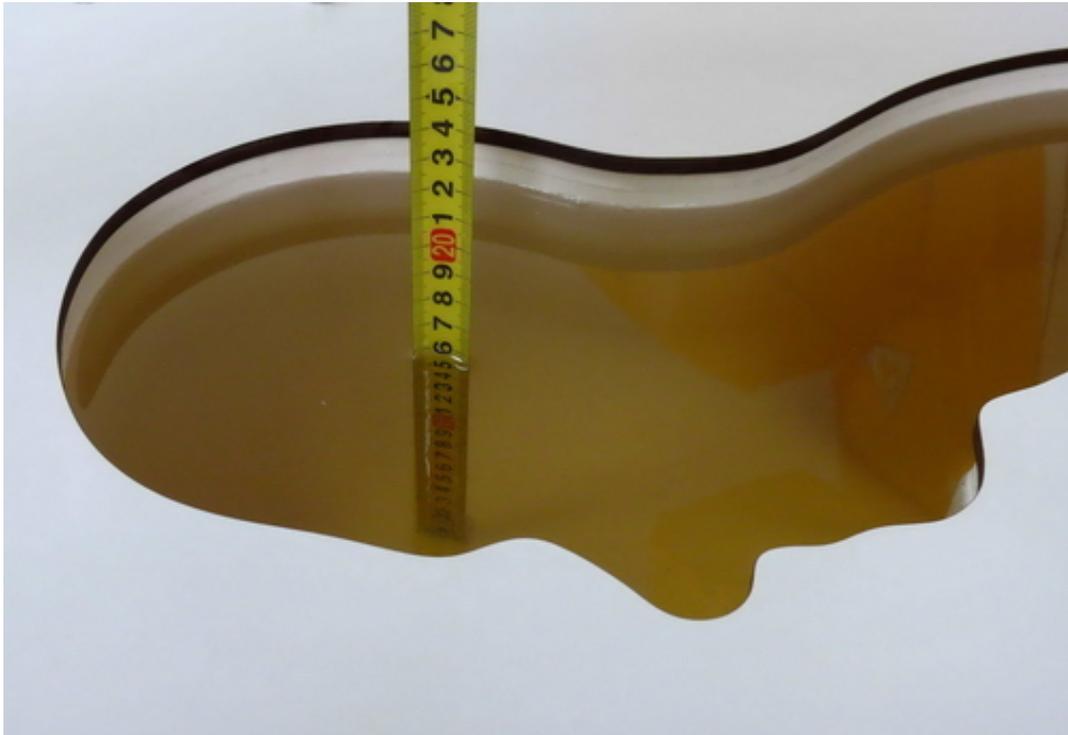
Picture 2: Liquid depth in the head Phantom (835MHz, 15.3cm depth)

Picture 3: Liquid depth in the Flat Phantom (835 MHz, 15.4cm depth)

Picture 4: liquid depth in the head Phantom (1750 MHz, 15.1cm depth)
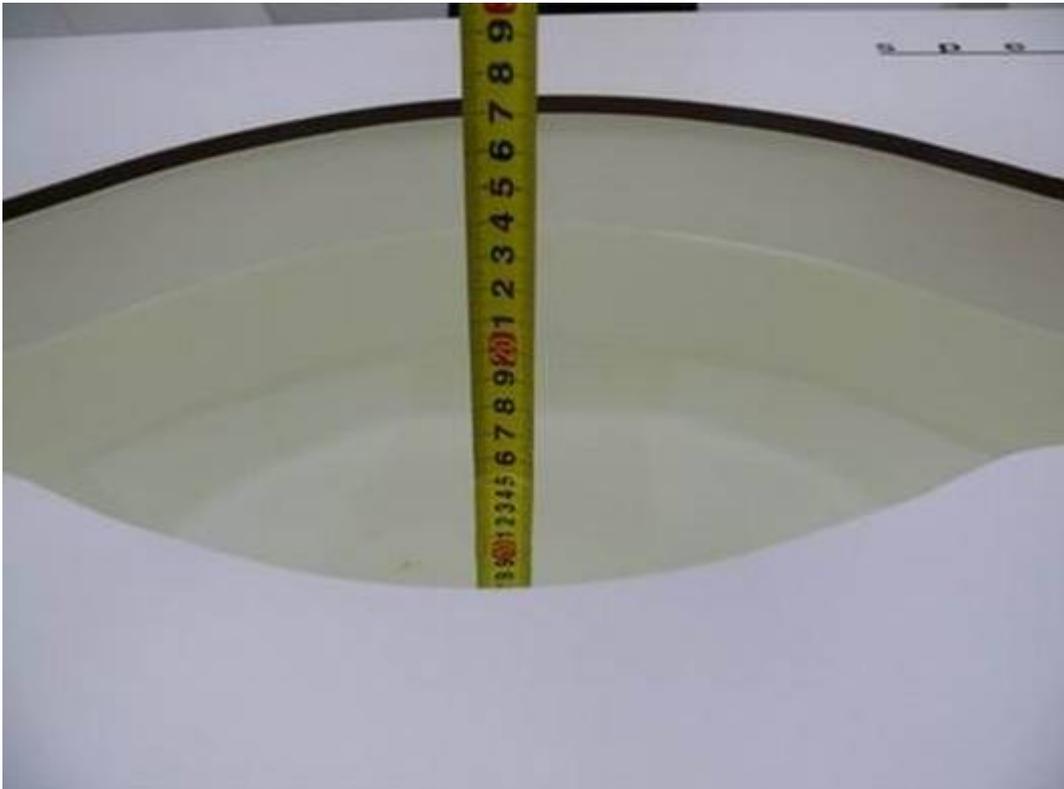
Picture 5: Liquid depth in the Flat Phantom (1750 MHz, 15.2cm depth)

Picture 6: liquid depth in the head Phantom (1900 MHz, 15.2cm depth)
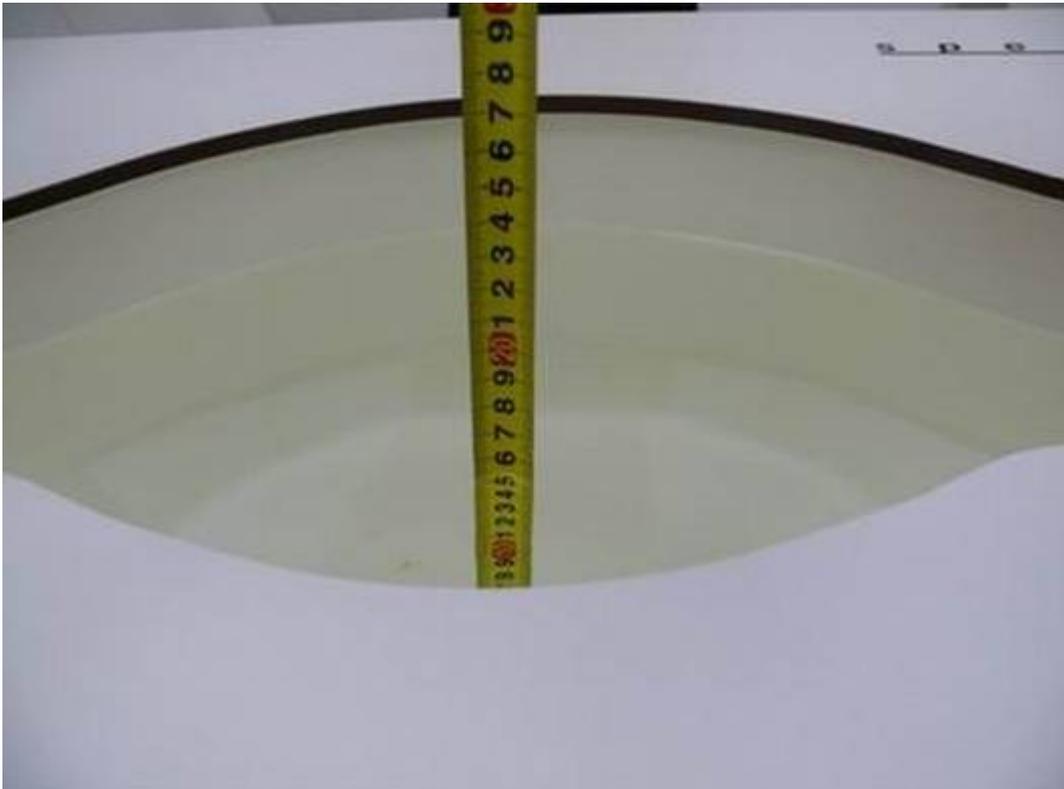
Picture 7: Liquid depth in the Flat Phantom (1900 MHz, 15.3cm depth)

Picture 8: liquid depth in the head Phantom (2450 MHz, 15.3cm depth)
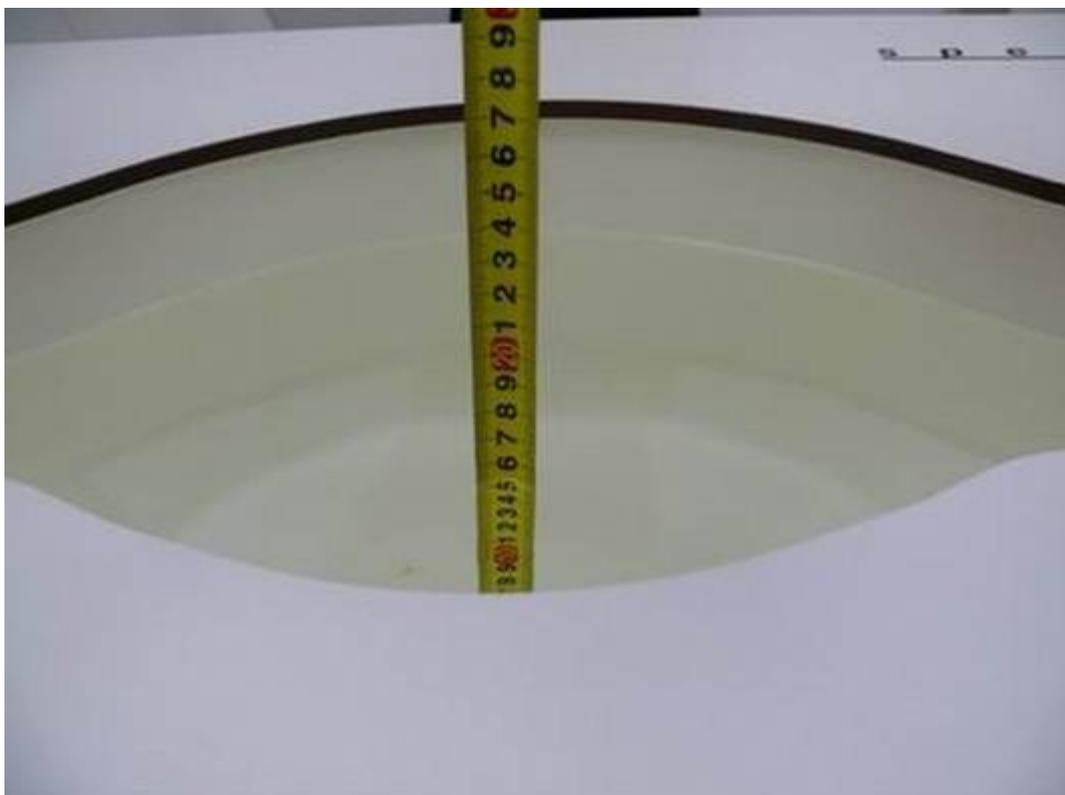
Picture 9: Liquid depth in the Flat Phantom (2450 MHz, 15.4cm depth)

ANNEX B: System Check Results

System Performance Check at 835 MHz Head TSL
DUT: Dipole 835 MHz; Type: D835V2; Serial: D835V2 - SN: 4d092

Date/Time: 7/28/2010 10:28 PM

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

Medium parameters used: f = 835 MHz; σ = 0.91 mho/m; ε_r = 42.82; ρ = 1000 kg/m^3

Ambient Temperature:22.3℃   Liqiud Temperature: 21.5℃

DASY4 Configuration:

Probe: EX3DV4 - SN3677; ConvF(9.2, 9.2, 9.2); Calibrated: 9/23/2009

Electronics: DAE4 Sn871; Calibrated: 11/11/2009

Phantom: SAM1; Type: SAM;

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

d=15mm, Pin=250mW/Area Scan (101x121x1): Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (interpolated) = 2.81 mW/g

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

Reference Value = 55.8 V/m; Power Drift = -0.060 dB

Peak SAR (extrapolated) = 3.50 W/kg

SAR(1 g) = 2.3 mW/g; SAR(10 g) = 1.5 mW/g

Maximum value of SAR (measured) = 2.83 mW/g
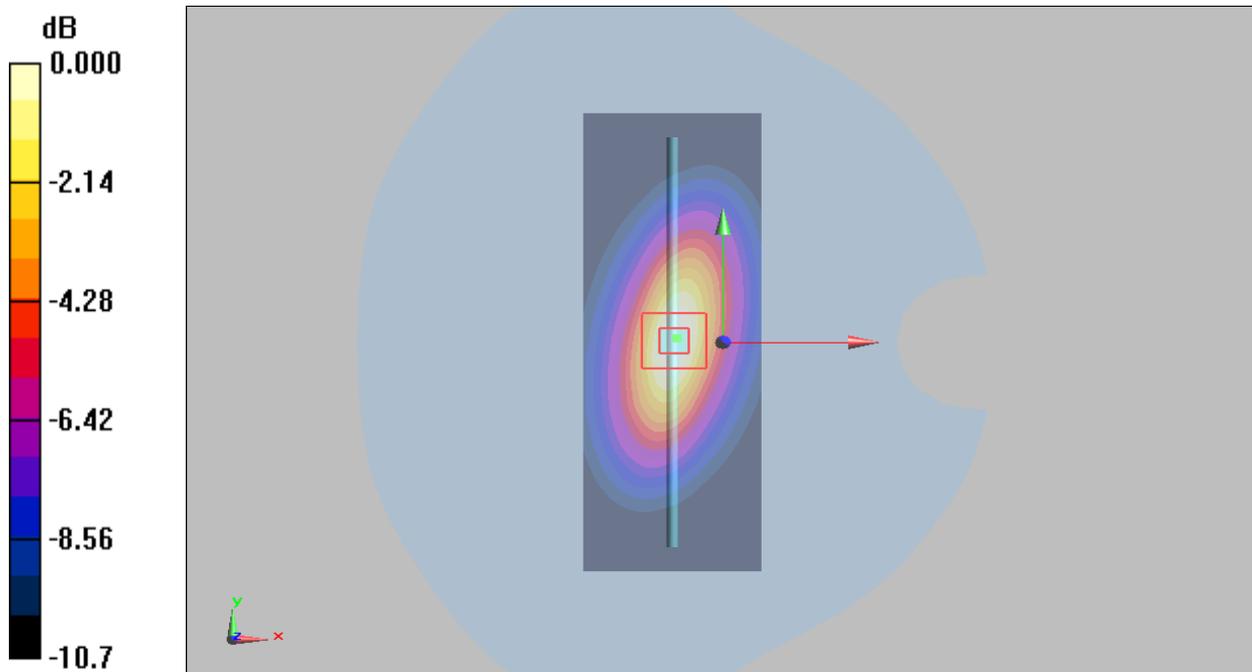
Figure 7 System Performance Check 835MHz 250mW

System Performance Check at 835 MHz Body TSL

DUT: Dipole 835 MHz; Type: D835V2; Serial: D835V2 - SN: 4d092

Date/Time: 7/28/2010 2:45:49 PM

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

Medium parameters used: f = 835 MHz; σ = 1.00 mho/m; $ε_r$ = 55.16; ρ = 1000 kg/m^3

Ambient Temperature:22.3℃   Liqiud Temperature: 21.5℃

DASY4 Configuration:

Probe: EX3DV4 - SN3677; ConvF(9.11, 9.11, 9.11); Calibrated: 9/23/2009

Electronics: DAE4 Sn871; Calibrated: 11/11/2009

Phantom: SAM1; Type: SAM;

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

d=15mm, Pin=250mW/Area Scan (101x121x1): Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (interpolated) = 2.93 mW/g

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

Reference Value = 55.7 V/m; Power Drift = -0.017 dB

Peak SAR (extrapolated) = 3.59 W/kg

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

Maximum value of SAR (measured) = 2.92 mW/g
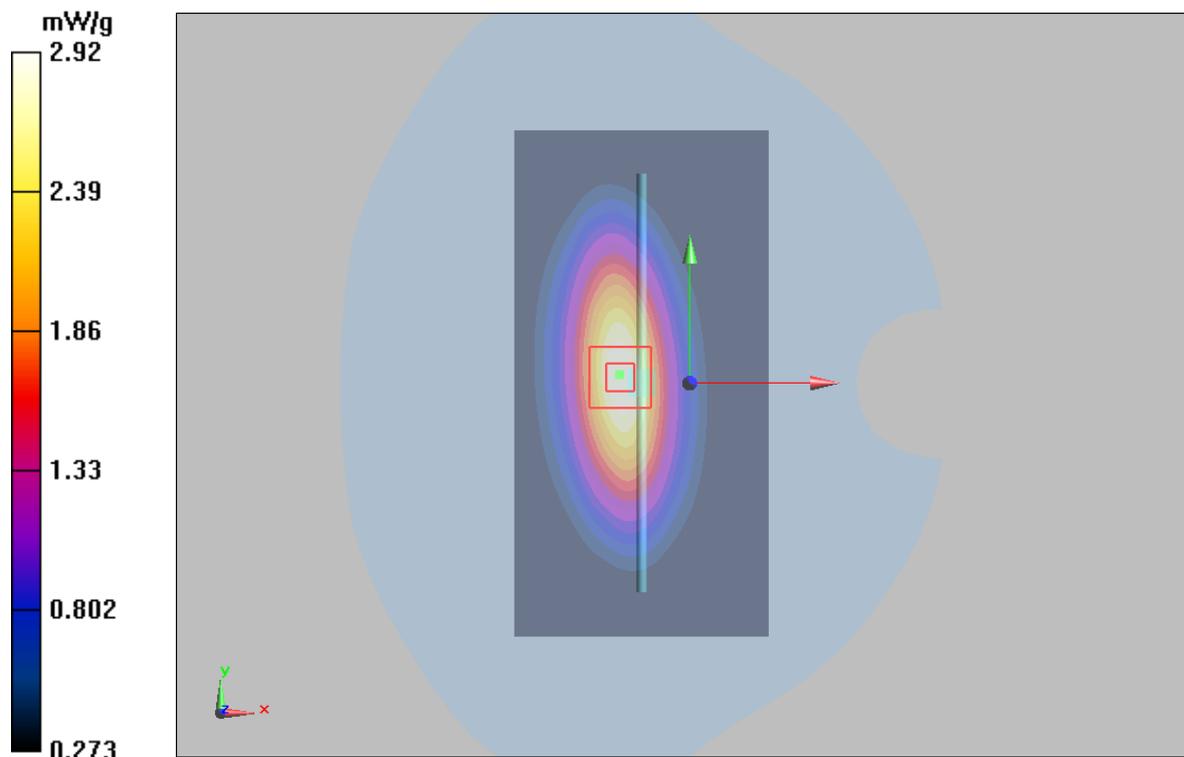
Figure 8 System Performance Check 835MHz 250mW

System Performance Check at 1800 MHz Head TSL
DUT: Dipole 1800 MHz; Type: D1800V2; Serial: D1800V2 - SN: 2d146
Date/Time: 7/29/2010 10:10:05 AM
Communication System: CW; Frequency: 1800 MHz;Duty Cycle: 1:1
Medium parameters used: f = 1800 MHz; σ = 1.43 mho/m; ε_r = 39.85; ρ = 1000 kg/m^3
Ambient Temperature:22.3 ℃   Liqiud Temperature: 21.5℃
DASY4 Configuration:
Probe: EX3DV4 - SN3677; ConvF(8.04, 8.04, 8.04); Calibrated: 9/23/2009
Electronics: DAE4 Sn871; Calibrated: 11/11/2009
Phantom: SAM2; Type: SAM;
Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 186

d=10mm, Pin=250mW/Area Scan (51x81x1): 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 = 85.3 V/m; Power Drift = 0.080 dB
Peak SAR (extrapolated) = 18.2 W/kg
SAR(1 g) = 9.68 mW/g; SAR(10 g) = 5.01 mW/g
Maximum value of SAR (measured) = 10.8 mW/g
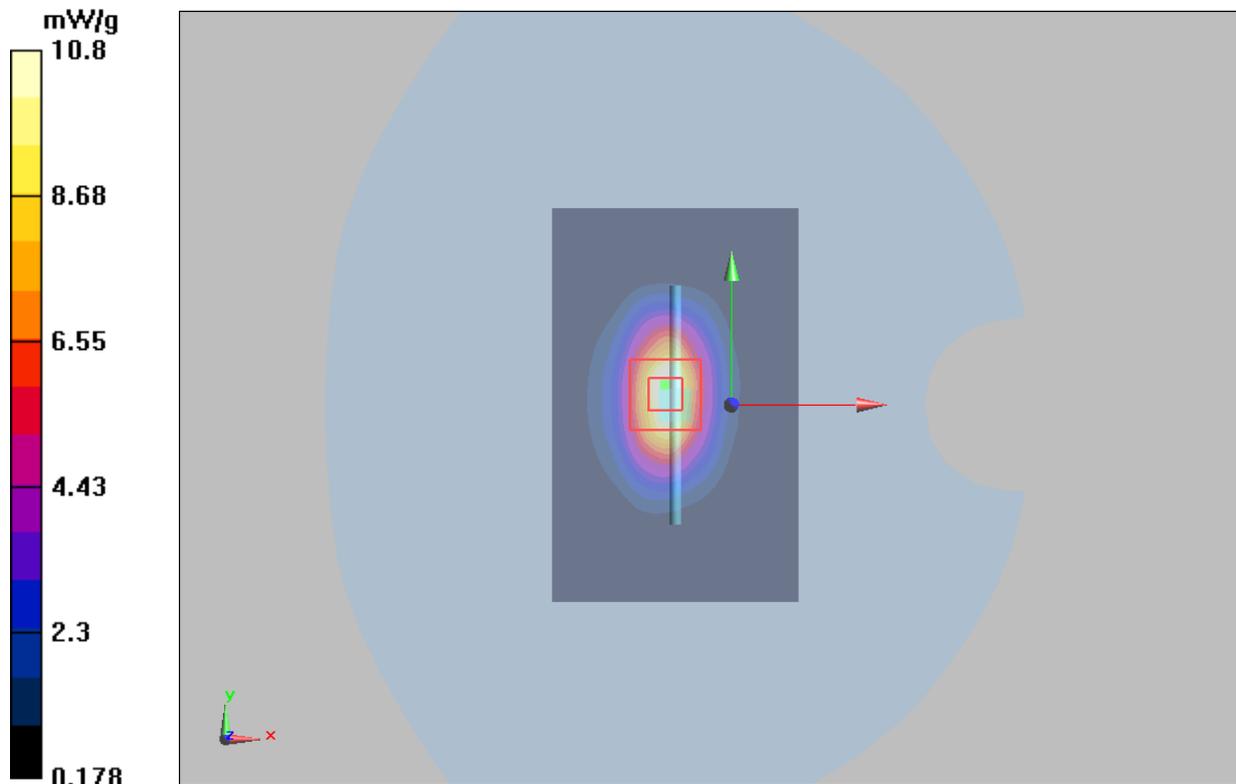
Figure 9 System Performance Check 1800MHz 250mW

System Performance Check at 1800 MHz Body TSL

DUT: Dipole 1800 MHz; Type: D1800V2; Serial: D1800V2 - SN: 2d146

Date/Time: 7/28/2010 8:32:55 AM

Communication System: CW; Frequency: 1800 MHz;Duty Cycle: 1:1

Medium parameters used: f = 1800 MHz; σ = 1.56 mho/m; $ε_r$ = 52.98; ρ = 1000 kg/m^3

Ambient Temperature:22.3 ℃   Liqiud Temperature: 21.5℃

DASY4 Configuration:

Probe: EX3DV4 - SN3677; ConvF(7.7, 7.7, 7.7); Calibrated: 9/23/2009

Electronics: DAE4 Sn871; Calibrated: 11/11/2009

Phantom: SAM2; Type: SAM;

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) = 12.2 mW/g

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

Reference Value = 83.2 V/m; Power Drift = 0.050 dB

Peak SAR (extrapolated) = 18.5 W/kg

SAR(1 g) = 10.1 mW/g; SAR(10 g) = 5.25 mW/g

Maximum value of SAR (measured) = 11.4 mW/g
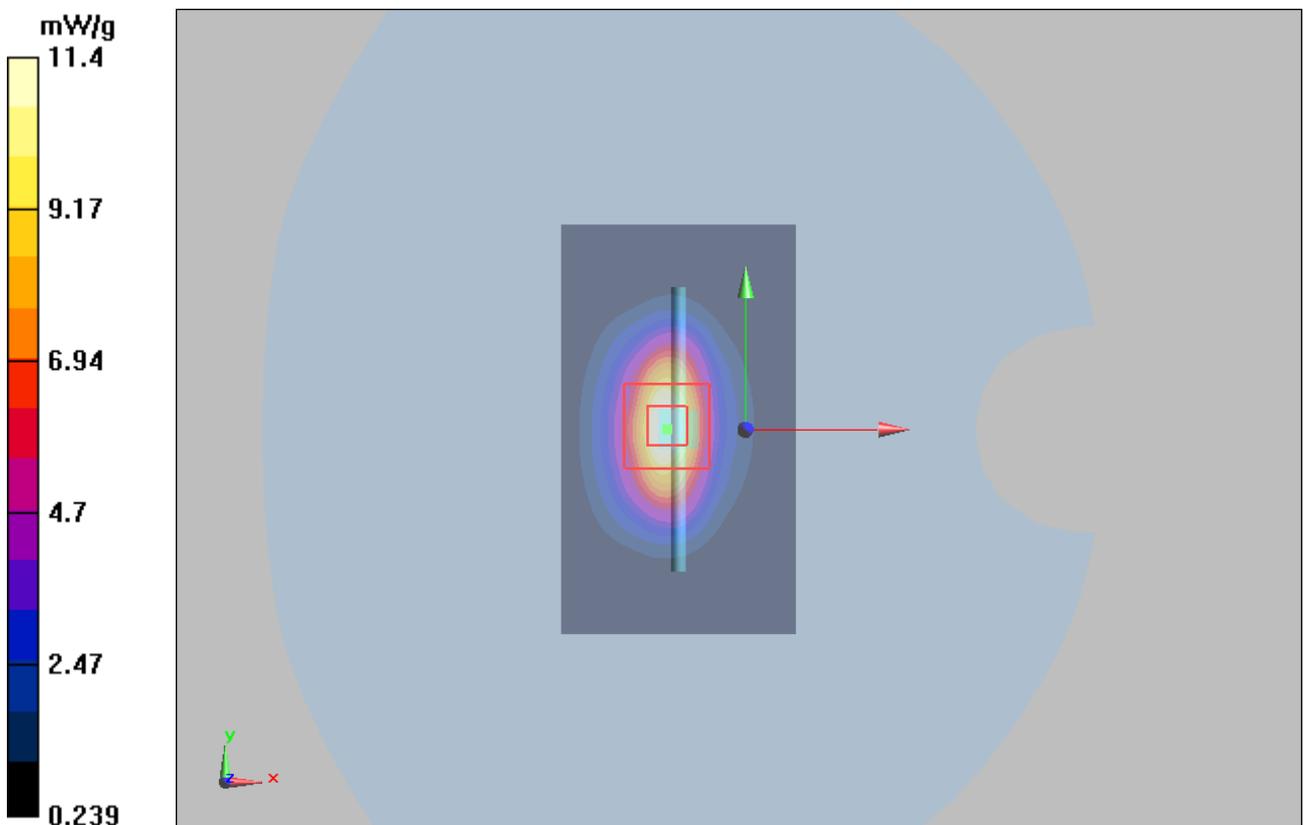
Figure 10 System Performance Check 1800MHz 250mW

System Performance Check at 1900 MHz Head TSL

DUT: Dipole 1900 MHz; Type: D1900V2; Serial: D1900V2 - SN: 5d018

Date/Time: 7/29/2010 12:40:04 PM

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

Medium parameters used: f = 1900 MHz; σ = 1.42 mho/m; ε_r = 39.8; ρ = 1000 kg/m^3

Ambient Temperature:22.3 ℃   Liqiud Temperature: 21.5℃

DASY4 Configuration:

Probe: EX3DV4 - SN3677; ConvF(7.53, 7.53, 7.53); Calibrated: 9/23/2009

Electronics: DAE4 Sn871; Calibrated: 11/11/2009

Phantom: SAM2; Type: SAM;

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) = 12.9 mW/g

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

Reference Value = 87.8 V/m; Power Drift = 0.040 dB

Peak SAR (extrapolated) = 20.1 W/kg

SAR(1 g) = 10.6 mW/g; SAR(10 g) = 5.46 mW/g

Maximum value of SAR (measured) = 11.9 mW/g
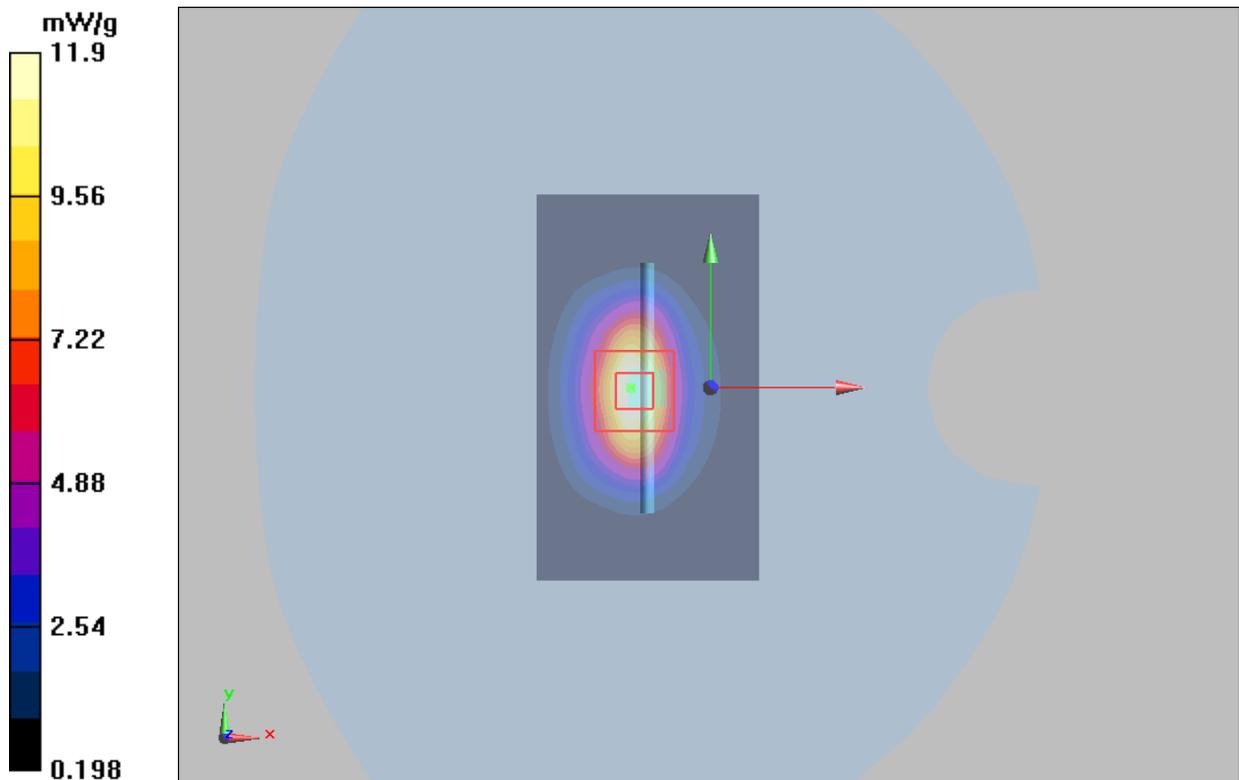
Figure 11 System Performance Check 1900MHz 250mW

System Performance Check at 1900 MHz Body TSL

DUT: Dipole 1900 MHz; Type: D1900V2; Serial: D1900V2 - SN: 5d018

Date/Time: 7/28/2010 6:10:19 PM

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

Medium parameters used: f = 1900 MHz; σ = 1.56 mho/m; ε_r = 51.95; ρ = 1000 kg/m^3

Ambient Temperature:22.3 ℃   Liqiud Temperature: 21.5℃

DASY4 Configuration:

Probe: EX3DV4 - SN3677; ConvF(7.62, 7.62, 7.62); Calibrated: 9/23/2009

Electronics: DAE4 Sn871; Calibrated: 11/11/2009

Phantom: SAM2; Type: SAM;

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) = 12.5 mW/g

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

Reference Value = 75.9 V/m; Power Drift = 0.051 dB

Peak SAR (extrapolated) = 16.8 W/kg

SAR(1 g) = 9.73 mW/g; SAR(10 g) = 5.17 mW/g

Maximum value of SAR (measured) = 11 mW/g
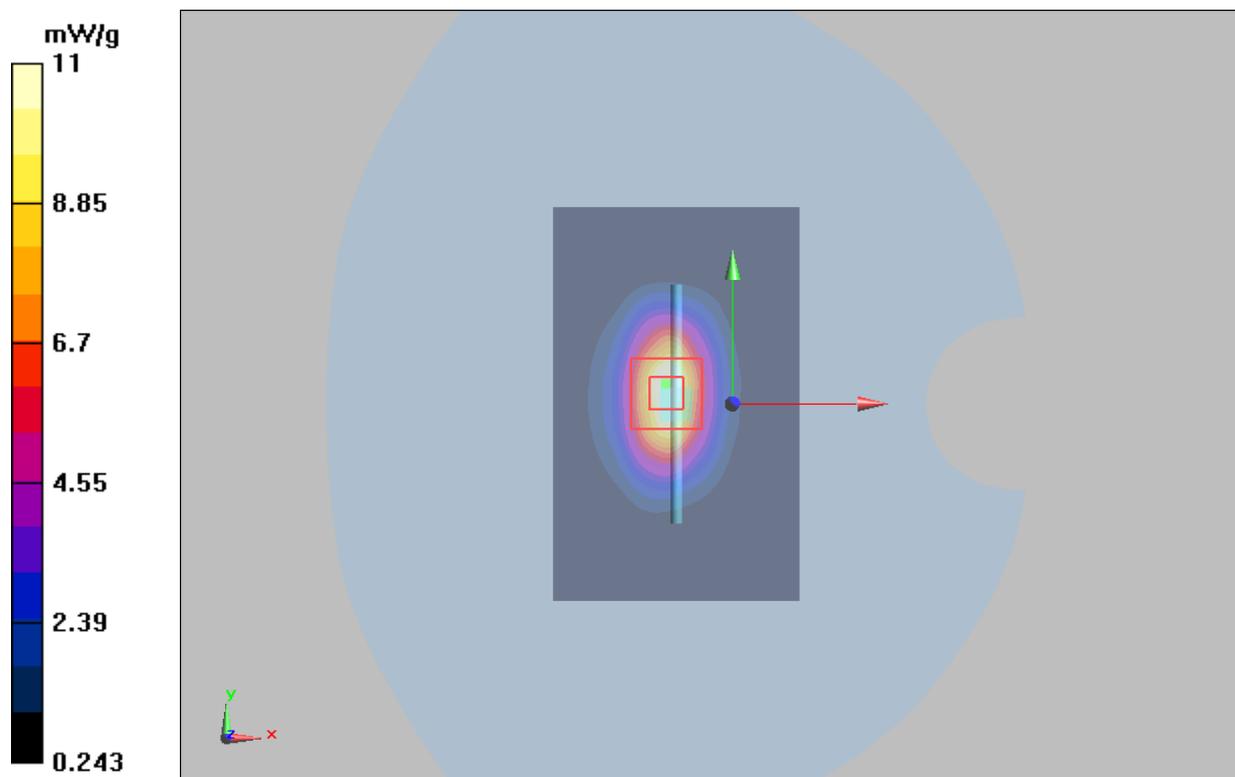
Figure 12 System Performance Check 1900MHz 250mW

System Performance Check at 2450 MHz Head TSL

DUT: Dipole 2450 MHz; Type: D2450V2; Serial: D2450V2 - SN: 712

Date/Time: 7/30/2010 1:01:36 PM

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

Medium parameters used: f = 2450 MHz; σ = 1.79 mho/m; ε_r = 38.81; ρ = 1000 kg/m^3

Ambient Temperature:22.3 ℃   Liqiud Temperature: 21.5℃

Phantom section: Flat Section

DASY4 Configuration:

Probe: EX3DV4 - SN3661; ConvF(7.22, 7.22, 7.22); Calibrated: 12/30/2009

Electronics: DAE4 Sn871; Calibrated: 11/11/2009

Phantom: SAM2; Type: SAM;

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

d=10mm, Pin=250mW/Area Scan (61x101x1): Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (interpolated) = 21.4 mW/g

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

Reference Value = 67.0 V/m; Power Drift = 0.010 dB

Peak SAR (extrapolated) = 28.0 W/kg

SAR(1 g) = 14.05 mW/g; SAR(10 g) = 6.5 mW/g

Maximum value of SAR (measured) = 15.7 mW/g
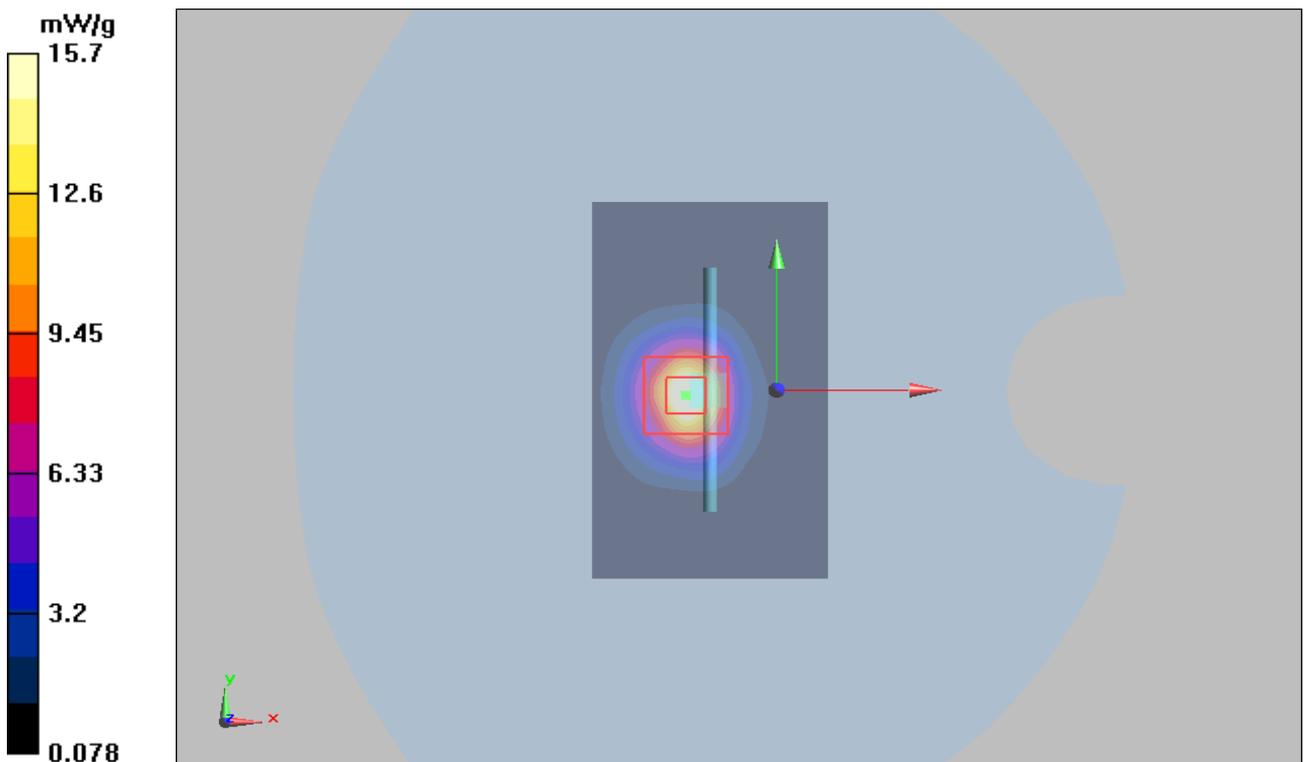
Figure 13 System Performance Check 2450MHz 250mW

System Performance Check at 2450 MHz Body TSL

DUT: Dipole 2450 MHz; Type: D2450V2; Serial: D2450V2 - SN: 712

Date/Time: 8/2/2010 4:07:36 PM

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

Medium parameters used: f = 2450 MHz; σ = 1.92 mho/m; ε_r = 51.83; ρ = 1000 kg/m^3

Ambient Temperature:22.3 ℃   Liqiud Temperature: 21.5℃

Phantom section: Flat Section

DASY4 Configuration:

Probe: EX3DV4 - SN3661; ConvF(7.34, 7.34, 7.34); Calibrated: 12/30/2009

Electronics: DAE4 Sn871; Calibrated: 11/11/2009

Phantom: SAM2; Type: SAM;

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

d=10mm, Pin=250mW/Area Scan (61x101x1): Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (interpolated) = 21.5 mW/g

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

Reference Value = 71.0 V/m; Power Drift = 0.011 dB

Peak SAR (extrapolated) = 28.2 W/kg

SAR(1 g) = 14.0 mW/g; SAR(10 g) = 6.46 mW/g

Maximum value of SAR (measured) = 19.8 mW/g
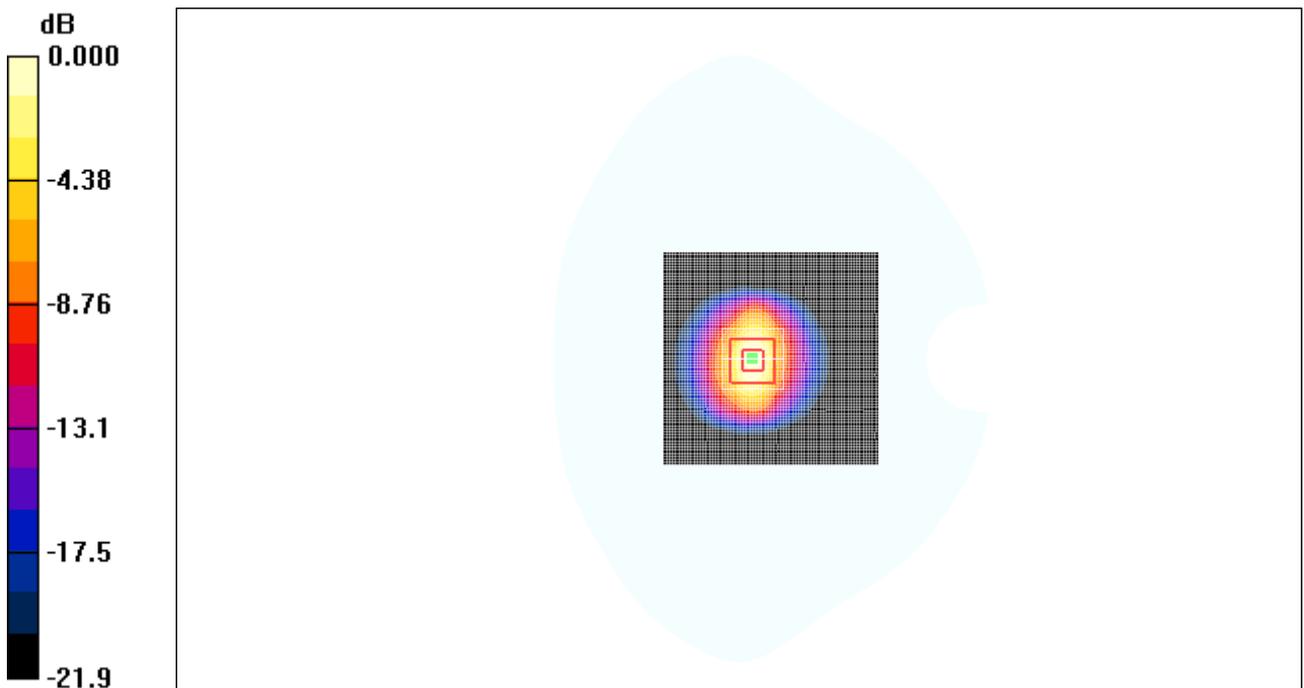
0 dB = 19.8mW/g

Figure 14 System Performance Check 2450MHz 250mW

ANNEX C: Graph Results

CDMA Cellular Left Cheek Middle

Date/Time: 7/29/2010 9:32:27 AM

Communication System: CDMA Cellular; Frequency: 836.52 MHz;Duty Cycle: 1:1

Medium parameters used: f = 837 MHz; σ = 0.91 mho/m; ε_r = 42.8; ρ = 1000 kg/m^3

Ambient Temperature:22.3 ℃   Liqiud Temperature: 21.5℃

DASY4 Configuration:

Probe: EX3DV4 - SN3677; ConvF(9.2, 9.2, 9.2); Calibrated: 9/23/2009

Electronics: DAE4 Sn871; Calibrated: 11/11/2009

Phantom: SAM1; Type: SAM;

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

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

Maximum value of SAR (interpolated) = 0.641 mW/g

Cheek Middle/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 23 V/m; Power Drift = -0.114 dB

Peak SAR (extrapolated) = 0.769 W/kg

SAR(1 g) = 0.587 mW/g; SAR(10 g) = 0.421 mW/g

Maximum value of SAR (measured) = 0.621 mW/g
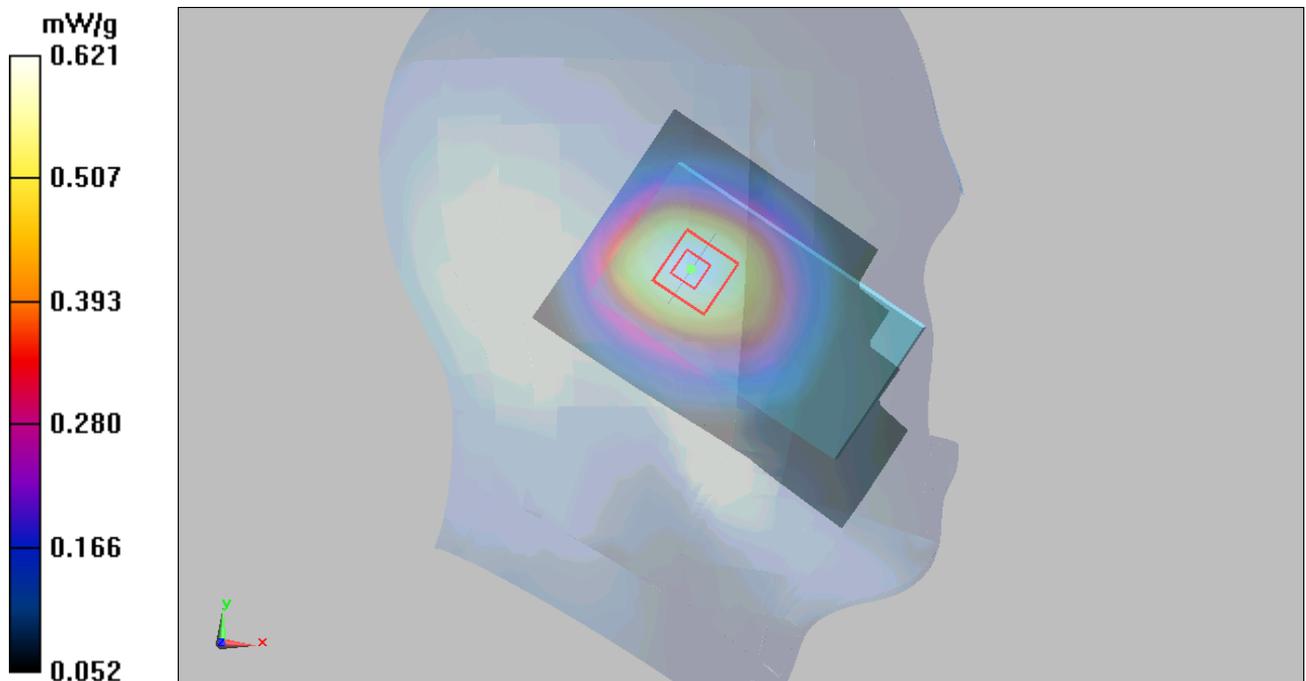
Figure 15 CDMA Cellular Left Hand Touch Cheek Channel 384

CDMA Cellular Left Tilt Middle

Date/Time: 7/29/2010 9:54:39 AM

Communication System: CDMA Cellular; Frequency: 836.52 MHz;Duty Cycle: 1:1

Medium parameters used: f = 837 MHz; σ = 0.91 mho/m; $ε_r$ = 42.8; ρ = 1000 kg/m^3

Ambient Temperature:22.3 ℃   Liqiud Temperature: 21.5℃

DASY4 Configuration:

Probe: EX3DV4 - SN3677; ConvF(9.2, 9.2, 9.2); Calibrated: 9/23/2009

Electronics: DAE4 Sn871; Calibrated: 11/11/2009

Phantom: SAM1; Type: SAM;

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

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

Maximum value of SAR (interpolated) = 0.502 mW/g

Tilt Middle/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 21.6 V/m; Power Drift = 0.045 dB

Peak SAR (extrapolated) = 0.653 W/kg

SAR(1 g) = 0.467 mW/g; SAR(10 g) = 0.321 mW/g

Maximum value of SAR (measured) = 0.498 mW/g
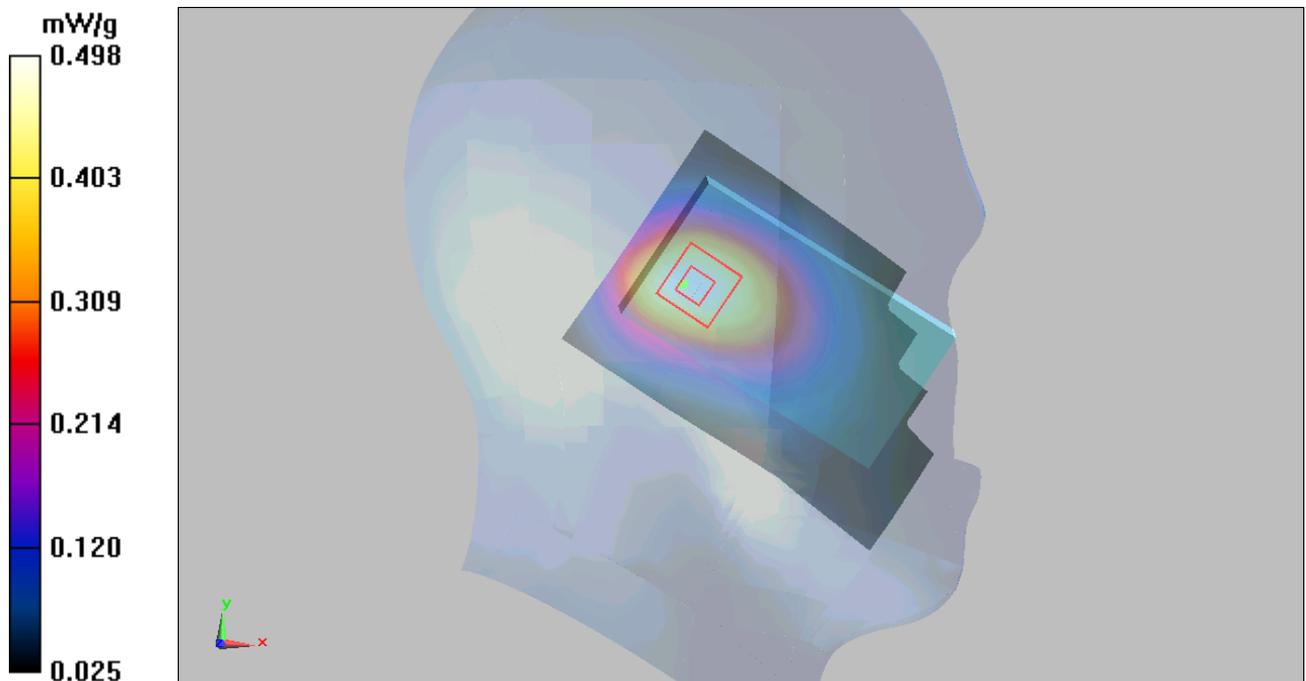
Figure 16 CDMA Cellular Left Hand Tilt 15° Channel 384

CDMA Cellular Right Cheek High

Date/Time: 7/29/2010 10:40:38 AM

Communication System: CDMA Cellular; Frequency: 848.31 MHz;Duty Cycle: 1:1

Medium parameters used (interpolated): f = 848.31 MHz; σ = 0.92 mho/m; $ε_r$ = 42.6; ρ = 1000 kg/m^3

Ambient Temperature:22.3 ℃   Liqiud Temperature: 21.5℃

DASY4 Configuration:

Probe: EX3DV4 - SN3677; ConvF(9.2, 9.2, 9.2); Calibrated: 9/23/2009

Electronics: DAE4 Sn871; Calibrated: 11/11/2009

Phantom: SAM1; Type: SAM;

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

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

Maximum value of SAR (interpolated) = 0.712 mW/g

Cheek High/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 21.6 V/m; Power Drift = -0.004 dB

Peak SAR (extrapolated) = 0.970 W/kg

SAR(1 g) = 0.662 mW/g; SAR(10 g) = 0.454 mW/g

Maximum value of SAR (measured) = 0.708 mW/g
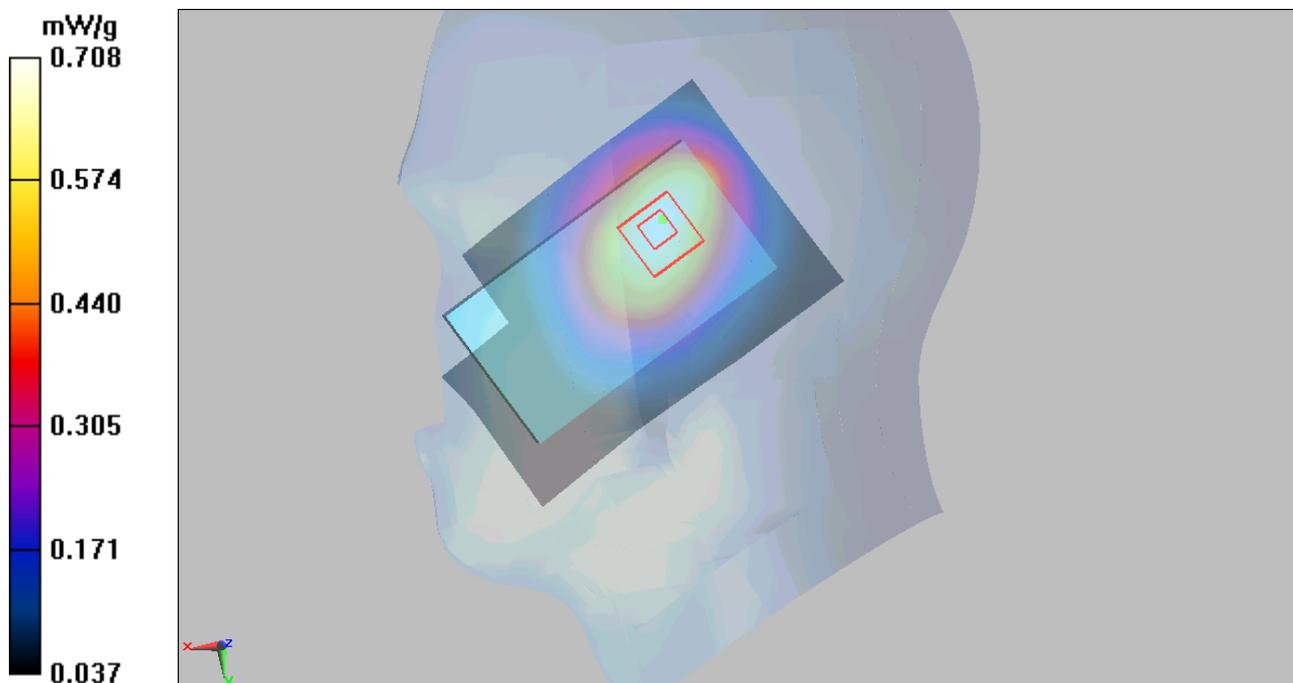
Figure 17 CDMA Cellular Right Hand Touch Cheek Channel 777

CDMA Cellular Right Cheek Middle

Date/Time: 7/28/2010 11:36:13 PM

Communication System: CDMA Cellular; Frequency: 836.52 MHz;Duty Cycle: 1:1

Medium parameters used: f = 837 MHz; σ = 0.91 mho/m; ε_r = 42.8; ρ = 1000 kg/m^3

Ambient Temperature:22.3 ℃   Liqiud Temperature: 21.5℃

DASY4 Configuration:

Probe: EX3DV4 - SN3677; ConvF(9.2, 9.2, 9.2); Calibrated: 9/23/2009

Electronics: DAE4 Sn871; Calibrated: 11/11/2009

Phantom: SAM1; Type: SAM;

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

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

Maximum value of SAR (interpolated) = 0.740 mW/g

Cheek Middle/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 22.8 V/m; Power Drift = -0.194 dB

Peak SAR (extrapolated) = 0.974 W/kg

SAR(1 g) = 0.660 mW/g; SAR(10 g) = 0.454 mW/g

Maximum value of SAR (measured) = 0.704 mW/g
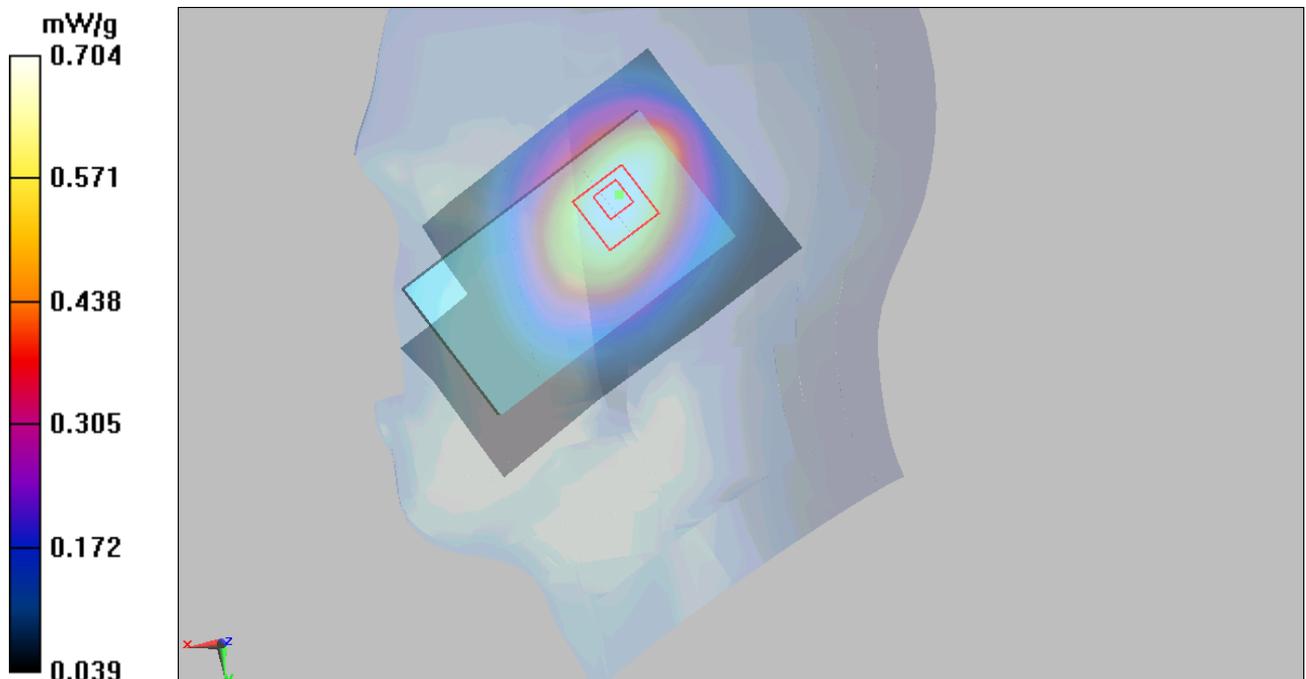
Figure 18 CDMA Cellular Right Hand Touch Cheek Channel 384

CDMA Cellular Right Cheek Low

Date/Time: 7/29/2010 10:18:55 AM

Communication System: CDMA Cellular; Frequency: 824.7 MHz;Duty Cycle: 1:1

Medium parameters used: f = 825 MHz; σ = 0.898 mho/m; ε_r = 42.9; ρ = 1000 kg/m^3

Ambient Temperature:22.3 ℃　　　　Liqiud Temperature: 21.5℃

DASY4 Configuration:

Probe: EX3DV4 - SN3677; ConvF(9.2, 9.2, 9.2); Calibrated: 9/23/2009

Electronics: DAE4 Sn871; Calibrated: 11/11/2009

Phantom: SAM1; Type: SAM;

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

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

Maximum value of SAR (interpolated) = 0.737 mW/g

Cheek Low/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 23.3 V/m; Power Drift = -0.054 dB

Peak SAR (extrapolated) = 0.984 W/kg

SAR(1 g) = 0.677 mW/g; SAR(10 g) = 0.465 mW/g

Maximum value of SAR (measured) = 0.724 mW/g
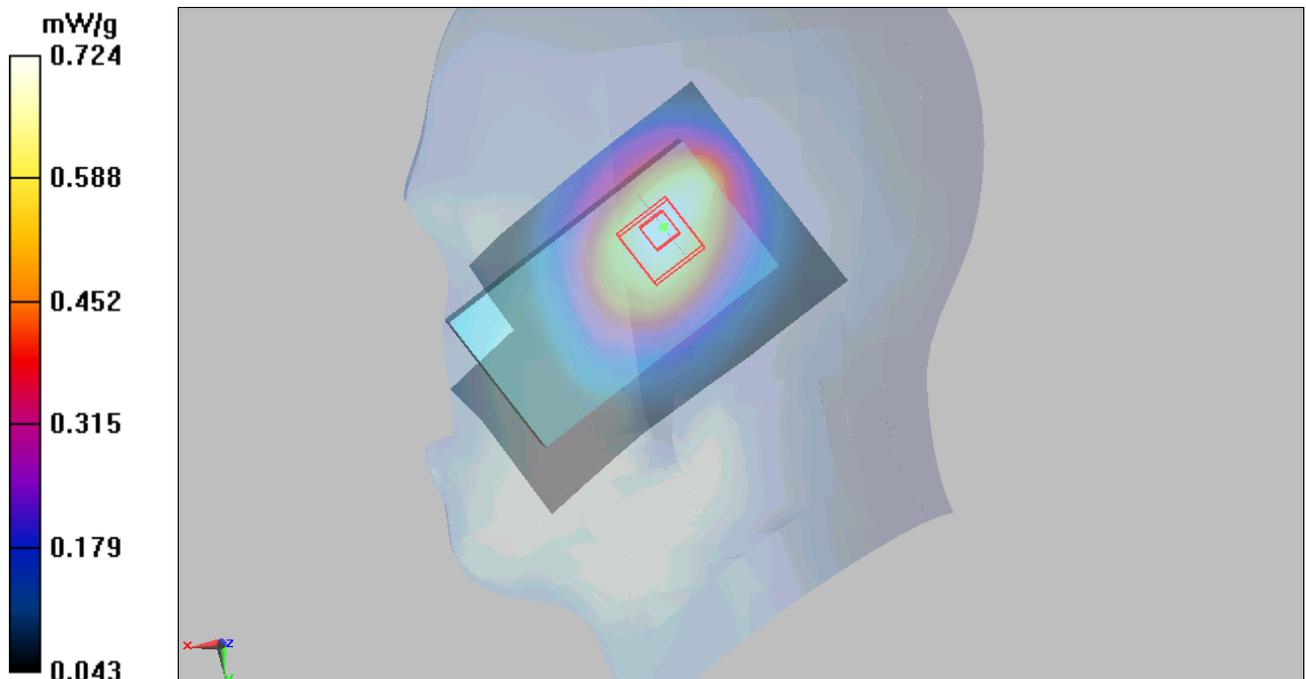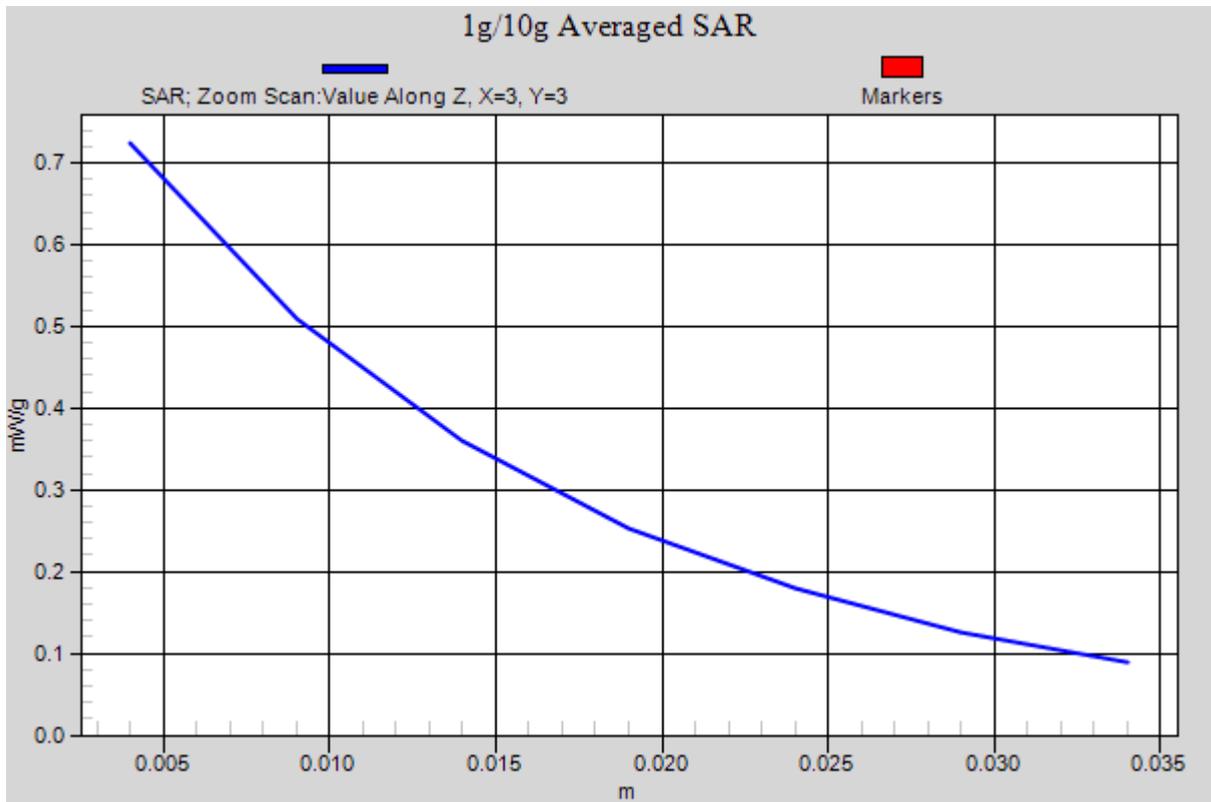
Figure 19 CDMA Cellular Right Hand Touch Cheek Channel 1013

CDMA Cellular Right Tilt Middle

Date/Time: 7/28/2010 11:58:28 PM

Communication System: CDMA Cellular; Frequency: 836.52 MHz;Duty Cycle: 1:1

Medium parameters used: f = 837 MHz; σ = 0.91 mho/m; $ε_r$ = 42.8; ρ = 1000 kg/m^3

Ambient Temperature:22.3 ℃   Liqiud Temperature: 21.5℃

DASY4 Configuration:

Probe: EX3DV4 - SN3677; ConvF(9.2, 9.2, 9.2); Calibrated: 9/23/2009

Electronics: DAE4 Sn871; Calibrated: 11/11/2009

Phantom: SAM1; Type: SAM;

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

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

Maximum value of SAR (interpolated) = 0.594 mW/g

Tilt Middle/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 21.3 V/m; Power Drift = 0.071 dB

Peak SAR (extrapolated) = 0.854 W/kg

SAR(1 g) = 0.540 mW/g; SAR(10 g) = 0.363 mW/g

Maximum value of SAR (measured) = 0.576 mW/g
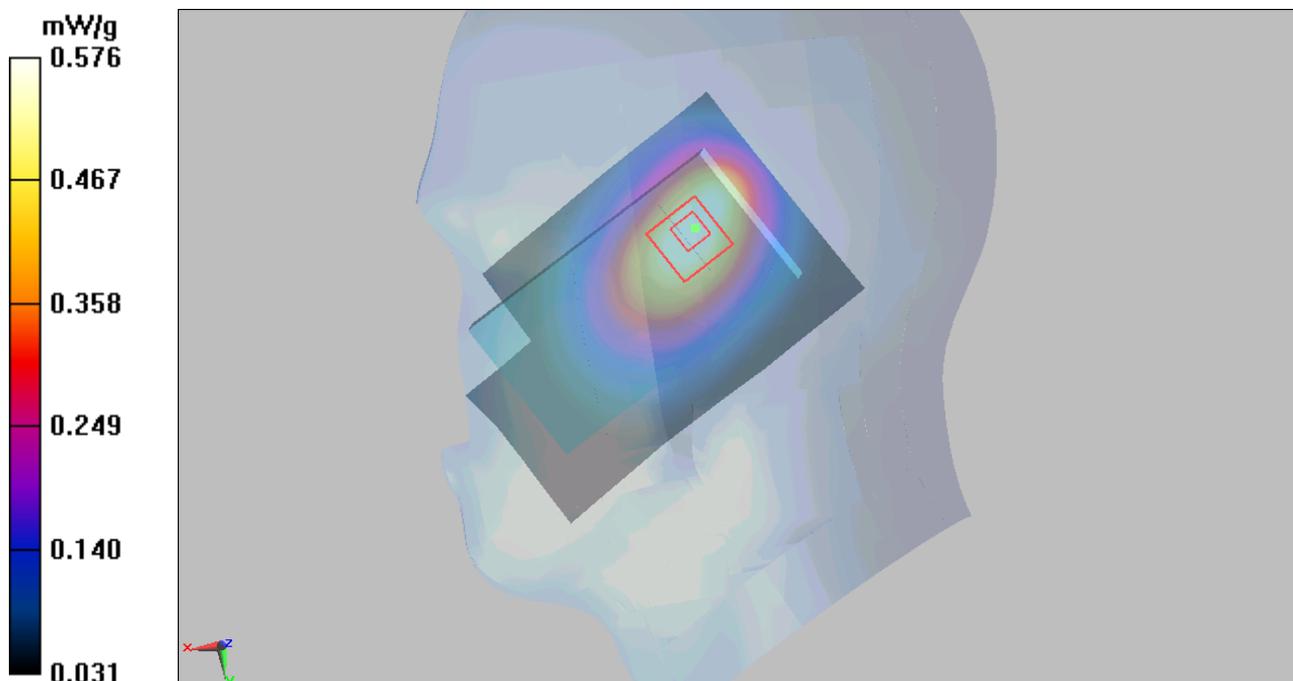
Figure 20 CDMA Cellular Right Hand Tilt 15° Channel 384

CDMA Cellular Towards Ground High

Date/Time: 7/28/2010 5:44:04 PM

Communication System: CDMA Cellular; Frequency: 848.31 MHz;Duty Cycle: 1:1

Medium parameters used (interpolated): f = 848.31 MHz; σ = 1.02 mho/m; $ε_r$ = 55; ρ = 1000 kg/m^3

Ambient Temperature:22.3 ℃   Liqiud Temperature: 21.5℃

DASY4 Configuration:

Probe: EX3DV4 - SN3677; ConvF(9.11, 9.11, 9.11); Calibrated: 9/23/2009

Electronics: DAE4 Sn871; Calibrated: 11/11/2009

Phantom: SAM1; Type: SAM;

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

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

Maximum value of SAR (interpolated) = 0.745 mW/g

Towrads Ground High/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 19.2 V/m; Power Drift = -0.109 dB

Peak SAR (extrapolated) = 0.897 W/kg

SAR(1 g) = 0.683 mW/g; SAR(10 g) = 0.496 mW/g

Maximum value of SAR (measured) = 0.727 mW/g
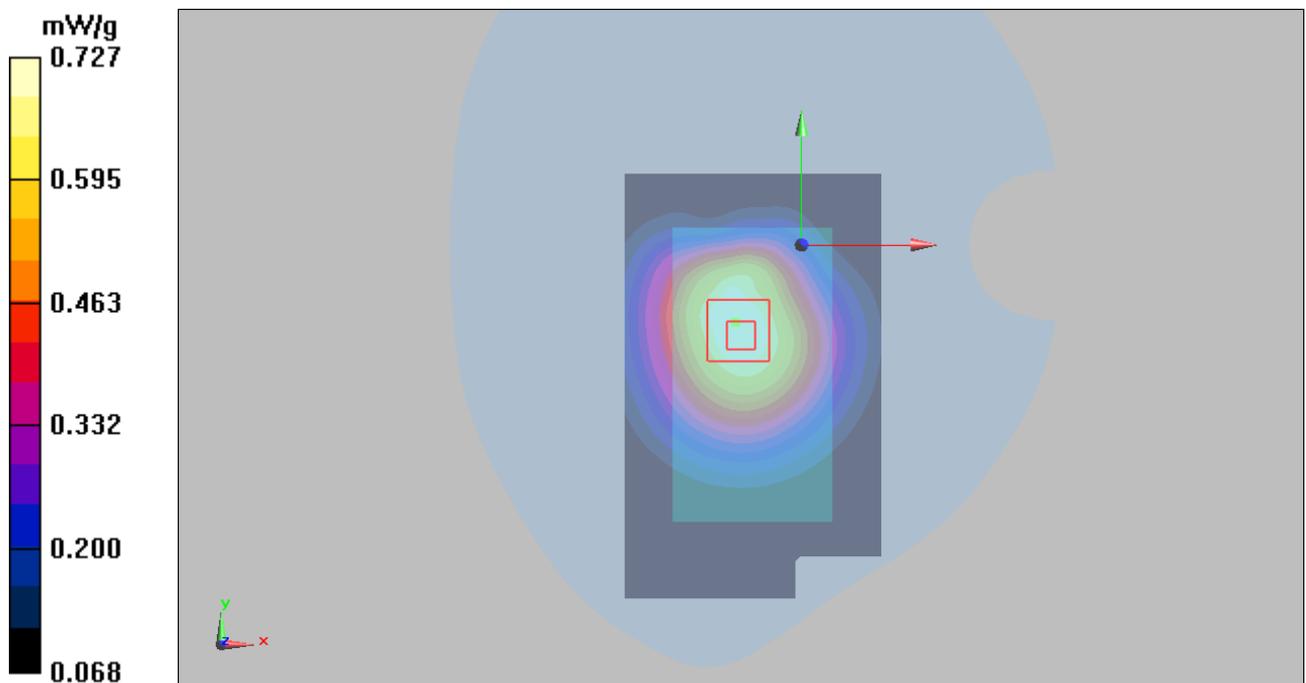
Figure 21 Body, CDMA Cellular Towards Ground Channel 777

CDMA Cellular Towards Ground Middle

Date/Time: 7/28/2010 4:23:15 PM

Communication System: CDMA Cellular; Frequency: 836.52 MHz;Duty Cycle: 1:1

Medium parameters used: f = 837 MHz; σ = 1 mho/m; $ε_r$ = 55.1; ρ = 1000 kg/m^3

Ambient Temperature:22.3 ℃   Liqiud Temperature: 21.5℃

DASY4 Configuration:

Probe: EX3DV4 - SN3677; ConvF(9.11, 9.11, 9.11); Calibrated: 9/23/2009

Electronics: DAE4 Sn871; Calibrated: 11/11/2009

Phantom: SAM1; Type: SAM;

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

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

Maximum value of SAR (interpolated) = 0.929 mW/g

Towrads Ground Middle/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 21 V/m; Power Drift = -0.161 dB

Peak SAR (extrapolated) = 1.12 W/kg

SAR(1 g) = 0.857 mW/g; SAR(10 g) = 0.624 mW/g

Maximum value of SAR (measured) = 0.903 mW/g
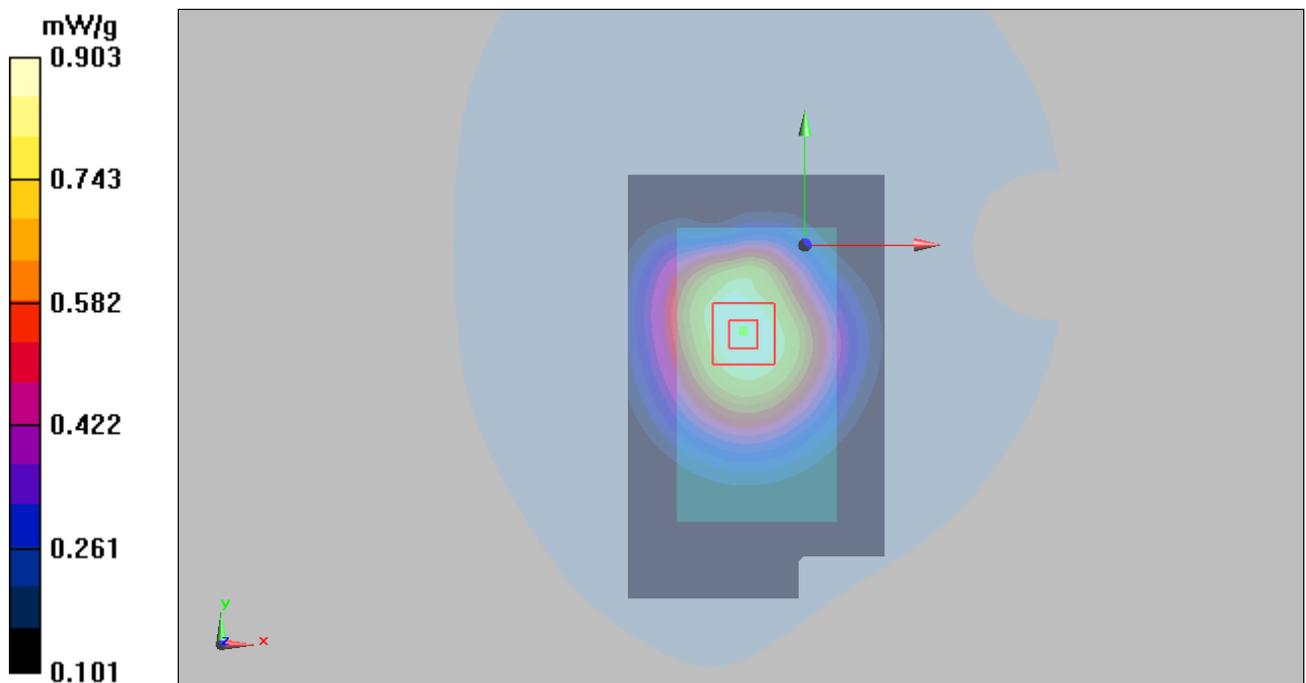
Figure 22 Body, CDMA Cellular Towards Ground Channel 384

CDMA Cellular Towards Ground Low

Date/Time: 7/28/2010 4:49:40 PM

Communication System: CDMA Cellular; Frequency: 824.7 MHz;Duty Cycle: 1:1

Medium parameters used: f = 825 MHz; σ = 0.996 mho/m; ε_r = 55.3; ρ = 1000 kg/m^3

Ambient Temperature:22.3 ℃   Liqiud Temperature: 21.5℃

DASY4 Configuration:

Probe: EX3DV4 - SN3677; ConvF(9.11, 9.11, 9.11); Calibrated: 9/23/2009

Electronics: DAE4 Sn871; Calibrated: 11/11/2009

Phantom: SAM1; Type: SAM;

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

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

Maximum value of SAR (interpolated) = 0.950 mW/g

Towrads Ground Low/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 17.8 V/m; Power Drift = -0.069 dB

Peak SAR (extrapolated) = 1.14 W/kg

SAR(1 g) = 0.861 mW/g; SAR(10 g) = 0.626 mW/g

Maximum value of SAR (measured) = 0.915 mW/g
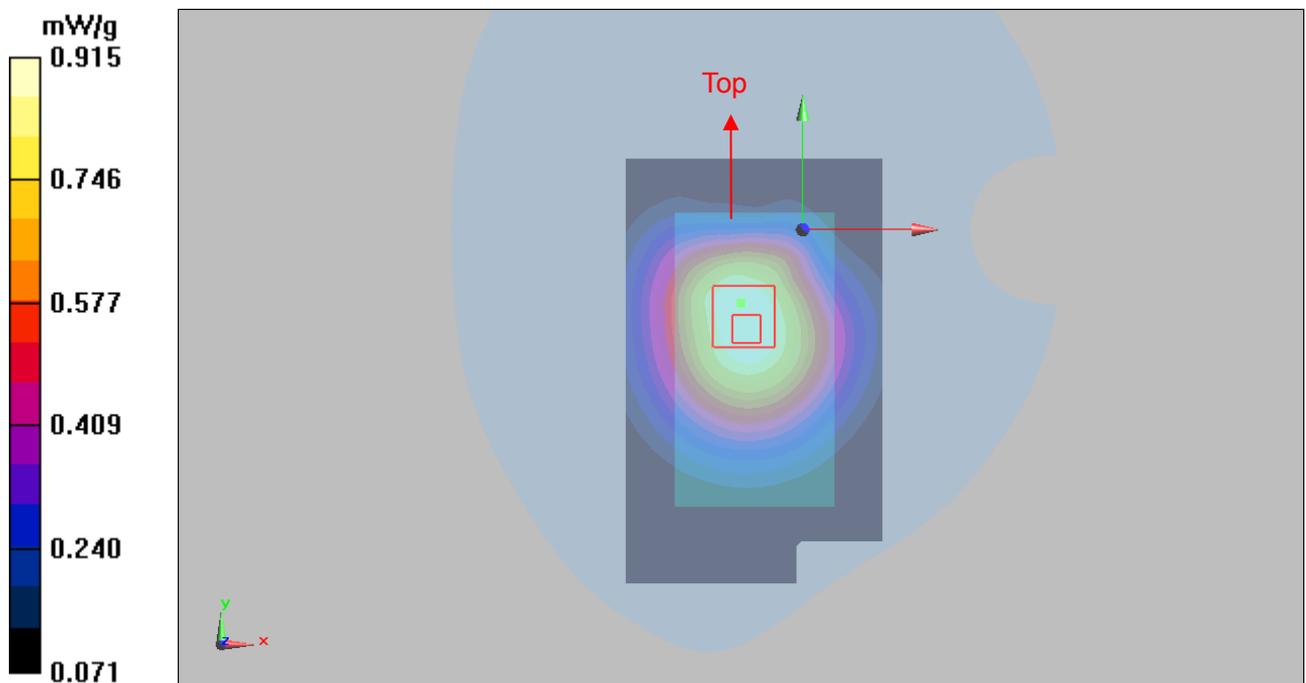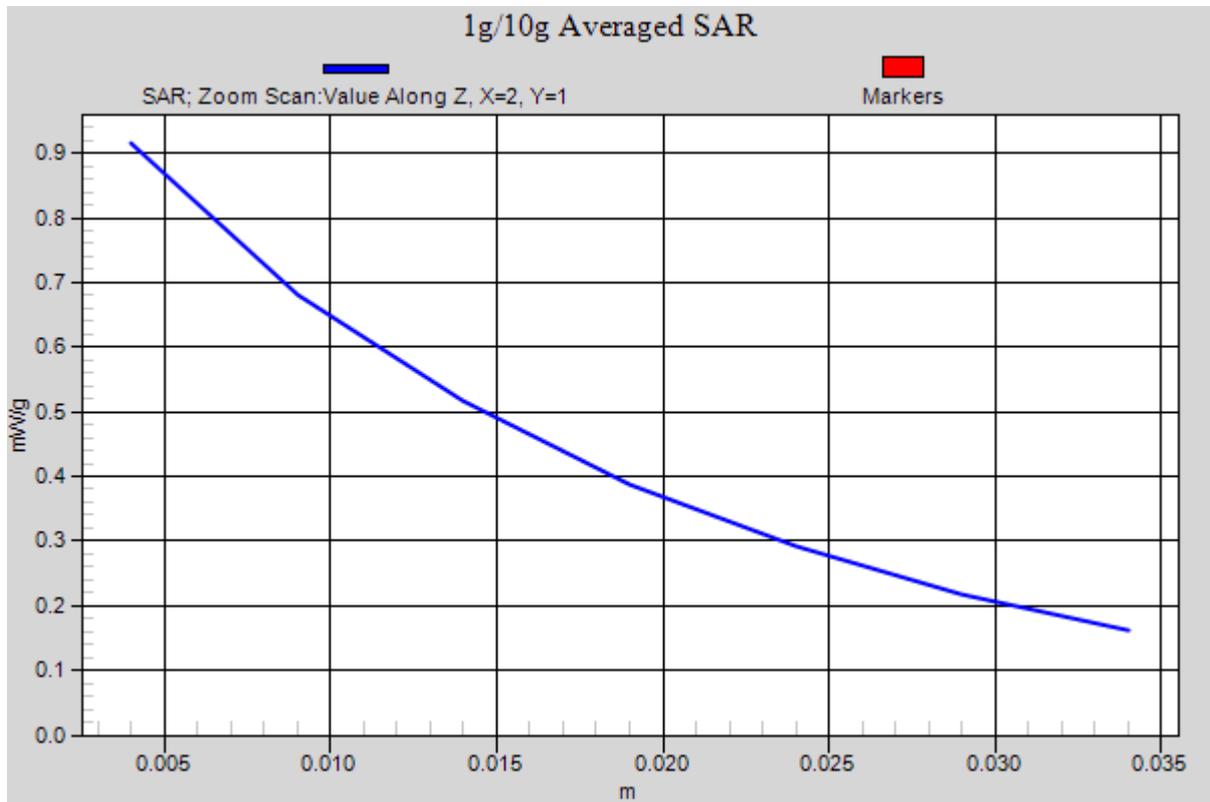
Figure 23 Body, CDMA Cellular Towards Ground Channel 1013

CDMA Cellular Towards Phantom Middle

Date/Time: 7/28/2010 3:59:14 PM

Communication System: CDMA Cellular; Frequency: 836.52 MHz;Duty Cycle: 1:1

Medium parameters used: f = 837 MHz; σ = 1 mho/m; ε_r = 55.1; ρ = 1000 kg/m^3

Ambient Temperature:22.3 ℃   Liqiud Temperature: 21.5℃

DASY4 Configuration:

Probe: EX3DV4 - SN3677; ConvF(9.11, 9.11, 9.11); Calibrated: 9/23/2009

Electronics: DAE4 Sn871; Calibrated: 11/11/2009

Phantom: SAM1; Type: SAM;

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

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

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

Towrads Phantom Middle/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 13.2 V/m; Power Drift = -0.094 dB

Peak SAR (extrapolated) = 0.422 W/kg

SAR(1 g) = 0.318 mW/g; SAR(10 g) = 0.229 mW/g

Maximum value of SAR (measured) = 0.336 mW/g
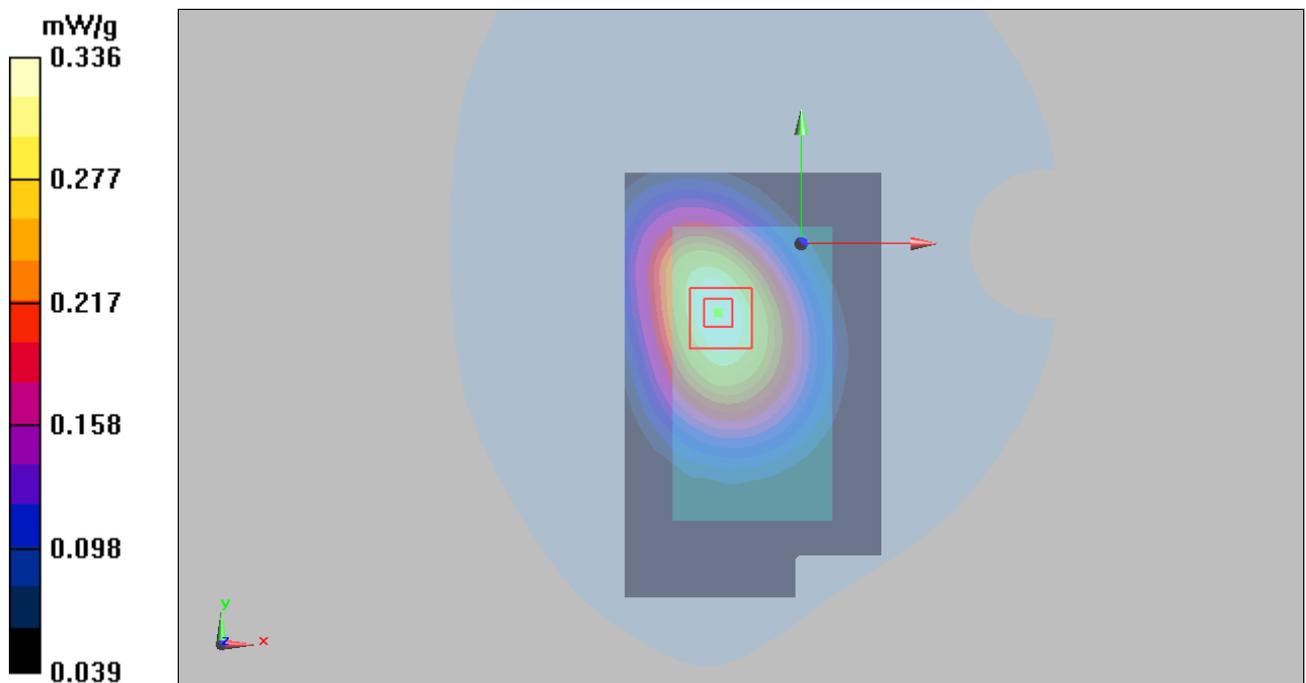
Figure 24 Body, CDMA Cellular Towards Phantom Channel 384

CDMA Cellular with Earphone Towards Ground Low

Date/Time: 7/28/2010 8:11:02 PM

Communication System: CDMA Cellular; Frequency: 824.7 MHz;Duty Cycle: 1:1

Medium parameters used: f = 825 MHz; σ = 0.996 mho/m; ε_r = 55.3; ρ = 1000 kg/m^3

Ambient Temperature:22.3 ℃   Liqiud Temperature: 21.5℃

DASY4 Configuration:

Probe: EX3DV4 - SN3677; ConvF(9.11, 9.11, 9.11); Calibrated: 9/23/2009

Electronics: DAE4 Sn871; Calibrated: 11/11/2009

Phantom: SAM1; Type: SAM;

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

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

Maximum value of SAR (interpolated) = 0.713 mW/g

Towrads Ground Low/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 12.7 V/m; Power Drift = -0.013 dB

Peak SAR (extrapolated) = 0.878 W/kg

SAR(1 g) = 0.667 mW/g; SAR(10 g) = 0.479 mW/g

Maximum value of SAR (measured) = 0.705 mW/g
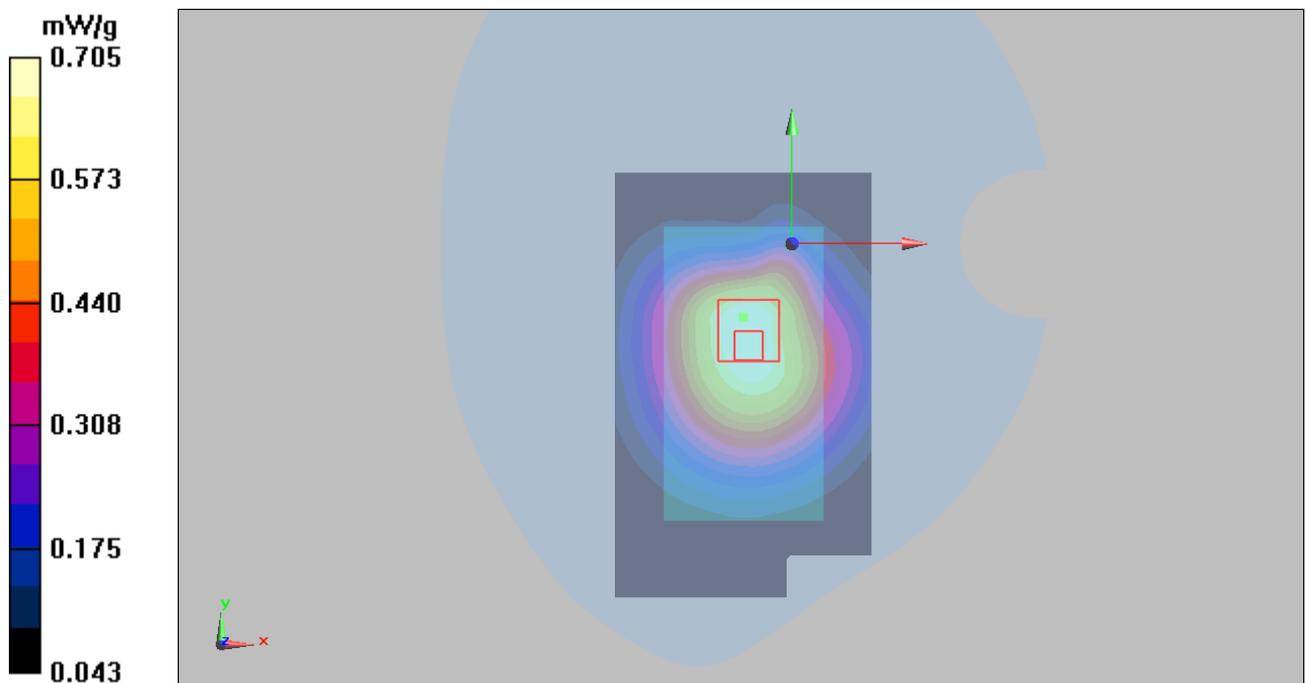
Figure 25 Body, CDMA Cellular with Earphone Towards Ground Channel 1013

CDMA PCS Left Cheek Middle

Date/Time: 7/29/2010 11:29:25 AM

Communication System: CDMA PCS; Frequency: 1880 MHz;Duty Cycle: 1:1

Medium parameters used: f = 1880 MHz; σ = 1.4 mho/m; ε_r = 39.9; ρ = 1000 kg/m^3

Ambient Temperature:22.3 ℃   Liqiud Temperature: 21.5℃

DASY4 Configuration:

Probe: EX3DV4 - SN3677; ConvF(7.53, 7.53, 7.53); Calibrated: 9/23/2009

Electronics: DAE4 Sn871; Calibrated: 11/11/2009

Phantom: SAM2; Type: SAM;

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

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

Maximum value of SAR (interpolated) = 0.620 mW/g

Cheek Middle/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 16.4 V/m; Power Drift = -0.016 dB

Peak SAR (extrapolated) = 0.834 W/kg

SAR(1 g) = 0.537 mW/g; SAR(10 g) = 0.317 mW/g

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

Cheek Middle/Zoom Scan (7x7x7)/Cube 1: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 16.4 V/m; Power Drift = -0.016 dB

Peak SAR (extrapolated) = 0.658 W/kg

SAR(1 g) = 0.455 mW/g; SAR(10 g) = 0.262 mW/g

Maximum value of SAR (measured) = 0.516 mW/g
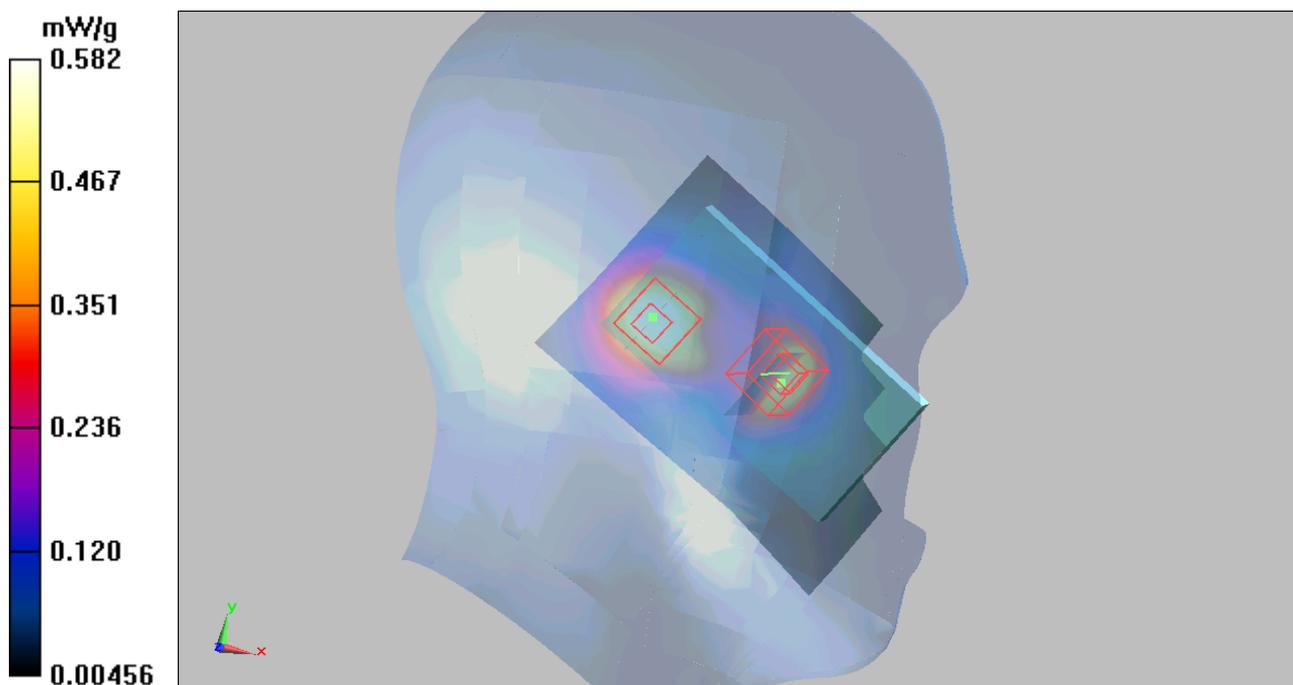
Figure 26 CDMA PCS Left Hand Touch Cheek Channel 600

CDMA PCS Left Tilt Middle

Date/Time: 7/29/2010 11:54:32 AM

Communication System: CDMA PCS; Frequency: 1880 MHz;Duty Cycle: 1:1

Medium parameters used: f = 1880 MHz; σ = 1.4 mho/m; ε_r = 39.9; ρ = 1000 kg/m^3

Ambient Temperature:22.3 ℃　　　　Liqiud Temperature: 21.5℃

DASY4 Configuration:

Probe: EX3DV4 - SN3677; ConvF(7.53, 7.53, 7.53); Calibrated: 9/23/2009

Electronics: DAE4 Sn871; Calibrated: 11/11/2009

Phantom: SAM2; Type: SAM;

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

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

Maximum value of SAR (interpolated) = 0.608 mW/g

Tilt Middle/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 17.8 V/m; Power Drift = -0.067 dB

Peak SAR (extrapolated) = 0.873 W/kg

SAR(1 g) = 0.535 mW/g; SAR(10 g) = 0.308 mW/g

Maximum value of SAR (measured) = 0.586 mW/g
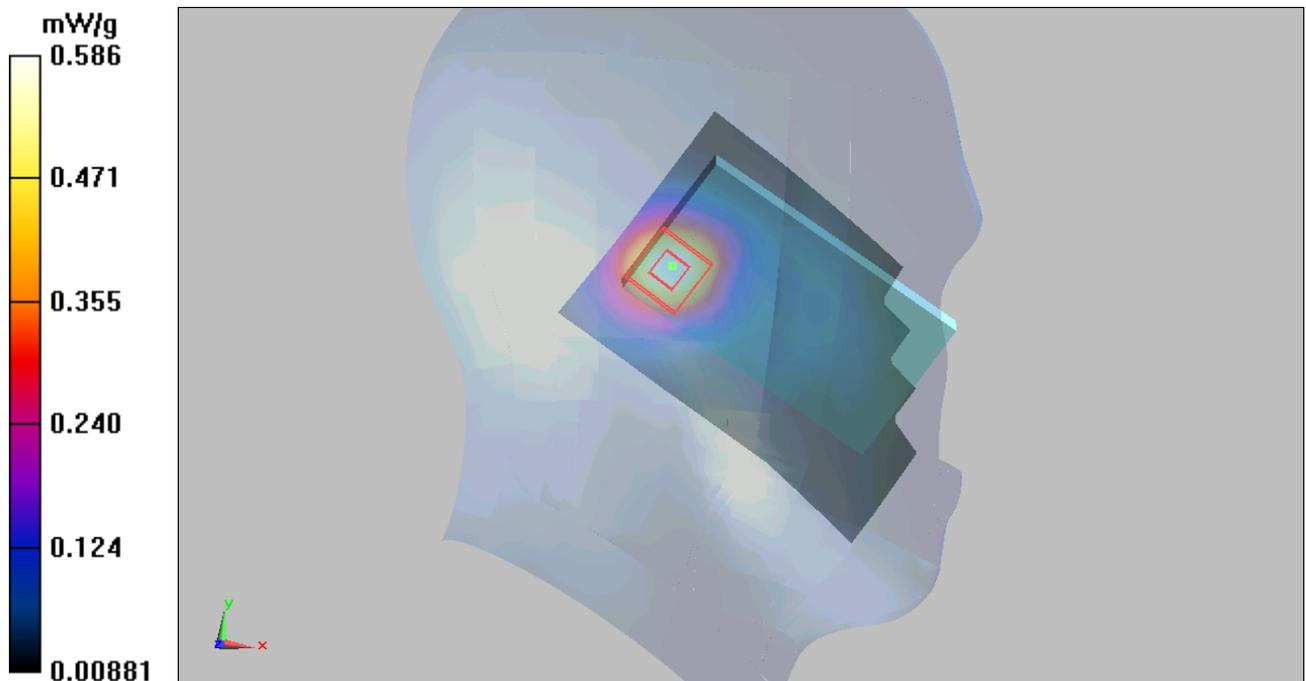
Figure 27 CDMA PCS Left Hand Tilt 15° Channel 600

CDMA PCS Right Cheek High

Date/Time: 7/29/2010 1:02:03 PM

Communication System: CDMA PCS; Frequency: 1908.75 MHz;Duty Cycle: 1:1

Medium parameters used: f = 1909 MHz; σ = 1.43 mho/m; $ε_r$ = 39.8; ρ = 1000 kg/m^3

Ambient Temperature:22.3 ℃   Liqiud Temperature: 21.5℃

DASY4 Configuration:

Probe: EX3DV4 - SN3677; ConvF(7.53, 7.53, 7.53); Calibrated: 9/23/2009

Electronics: DAE4 Sn871; Calibrated: 11/11/2009

Phantom: SAM2; Type: SAM;

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

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

Maximum value of SAR (interpolated) = 0.915 mW/g

Cheek High/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 16.7 V/m; Power Drift = -0.030 dB

Peak SAR (extrapolated) = 1.43 W/kg

SAR(1 g) = 0.846 mW/g; SAR(10 g) = 0.462 mW/g

Maximum value of SAR (measured) = 0.929 mW/g
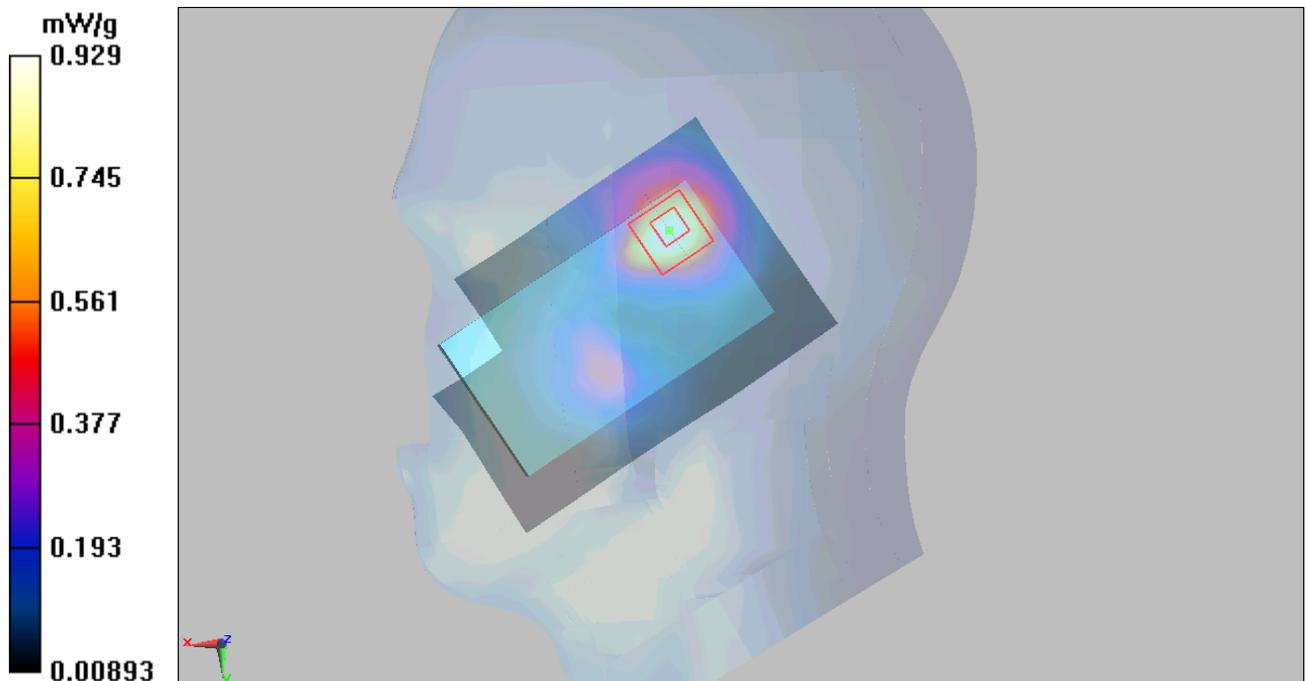

Figure 28 CDMA PCS Right Hand Touch Cheek Channel 1175

CDMA PCS Right Cheek Middle

Date/Time: 7/29/2010 12:18:24 PM

Communication System: CDMA PCS; Frequency: 1880 MHz;Duty Cycle: 1:1

Medium parameters used: f = 1880 MHz; σ = 1.4 mho/m; ε_r = 39.9; ρ = 1000 kg/m^3

Ambient Temperature:22.3 ℃   Liqiud Temperature: 21.5℃

DASY4 Configuration:

Probe: EX3DV4 - SN3677; ConvF(7.53, 7.53, 7.53); Calibrated: 9/23/2009

Electronics: DAE4 Sn871; Calibrated: 11/11/2009

Phantom: SAM2; Type: SAM;

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

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

Maximum value of SAR (interpolated) = 0.968 mW/g

Cheek Middle/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 17.4 V/m; Power Drift = -0.188 dB

Peak SAR (extrapolated) = 1.49 W/kg

SAR(1 g) = 0.885 mW/g; SAR(10 g) = 0.481 mW/g

Maximum value of SAR (measured) = 0.987 mW/g
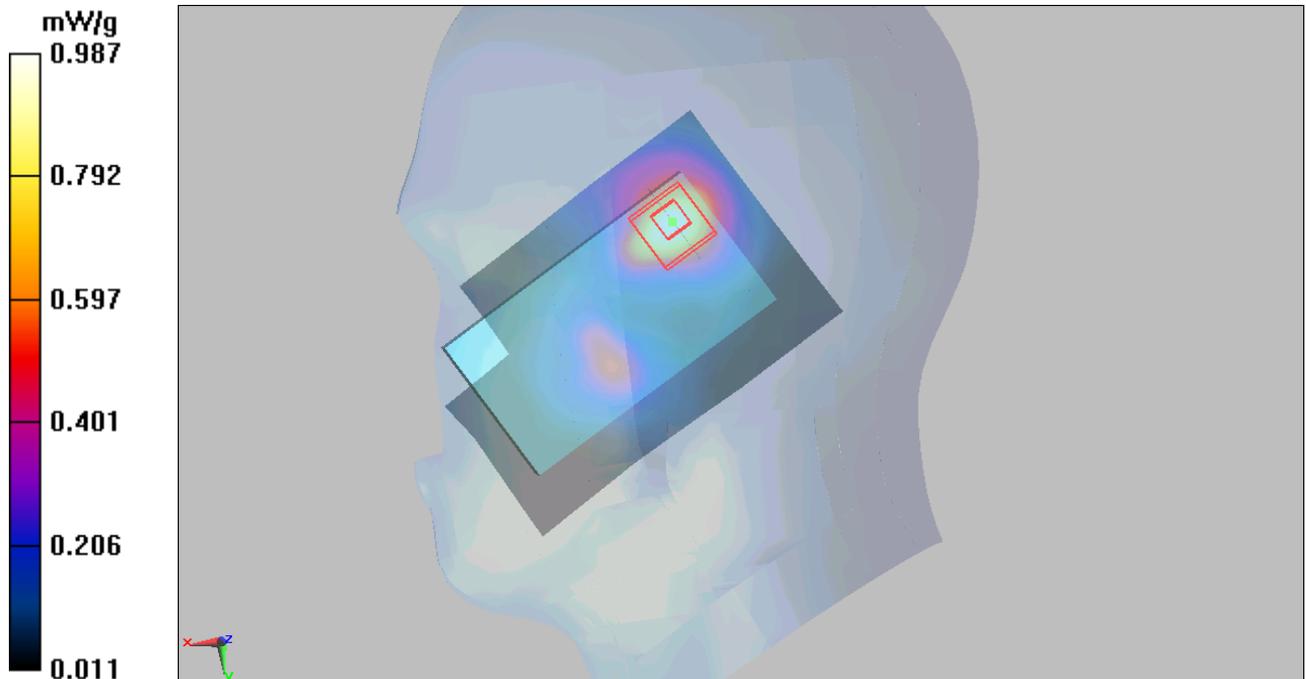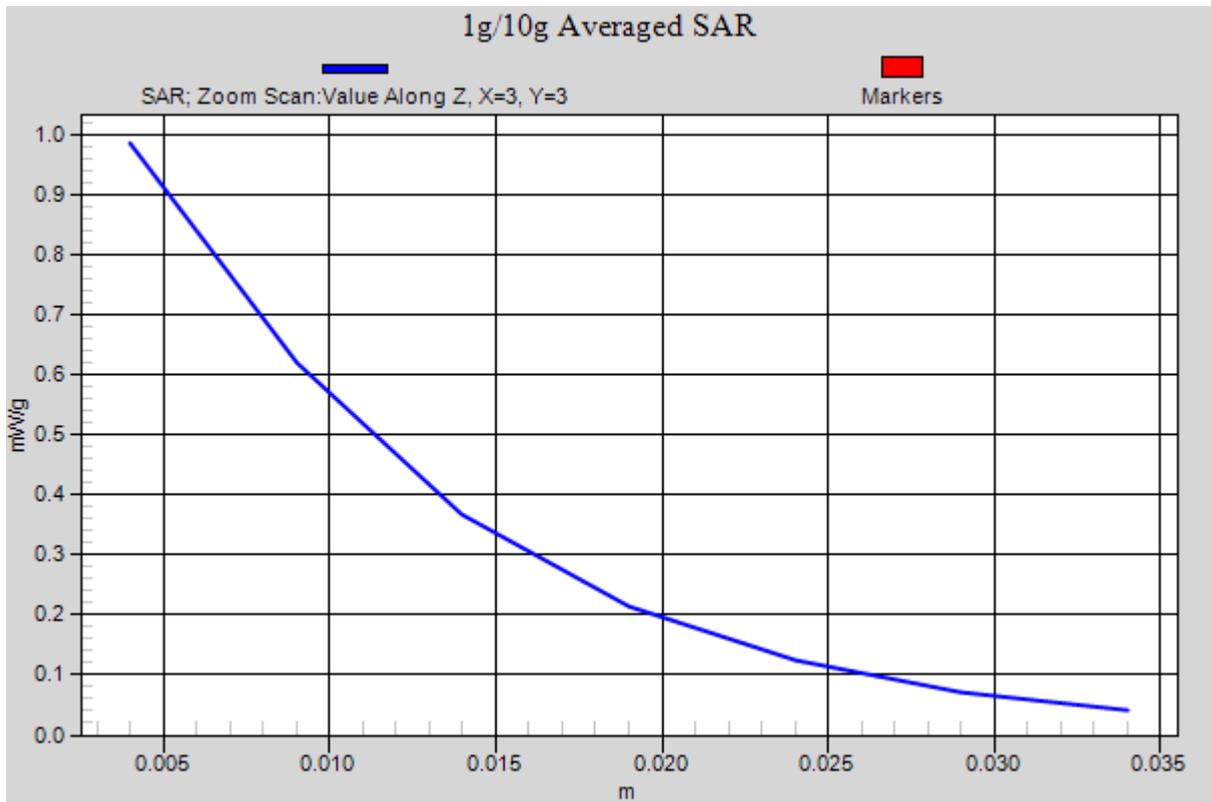
Figure 29 CDMA PCS Right Hand Touch Cheek Channel 600

CDMA PCS Right Cheek Low

Date/Time: 7/29/2010 12:40:01 PM

Communication System: CDMA PCS; Frequency: 1851.25 MHz;Duty Cycle: 1:1

Medium parameters used (interpolated): f = 1851.25 MHz; σ = 1.37 mho/m; $ε_r$ = 40; ρ = 1000 kg/m^3

Ambient Temperature:22.3 ℃   Liqiud Temperature: 21.5℃

DASY4 Configuration:

Probe: EX3DV4 - SN3677; ConvF(7.53, 7.53, 7.53); Calibrated: 9/23/2009

Electronics: DAE4 Sn871; Calibrated: 11/11/2009

Phantom: SAM2; Type: SAM;

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

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

Maximum value of SAR (interpolated) = 0.948 mW/g

Cheek Low/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 16.8 V/m; Power Drift = -0.125 dB

Peak SAR (extrapolated) = 1.43 W/kg

SAR(1 g) = 0.854 mW/g; SAR(10 g) = 0.462 mW/g

Maximum value of SAR (measured) = 0.950 mW/g
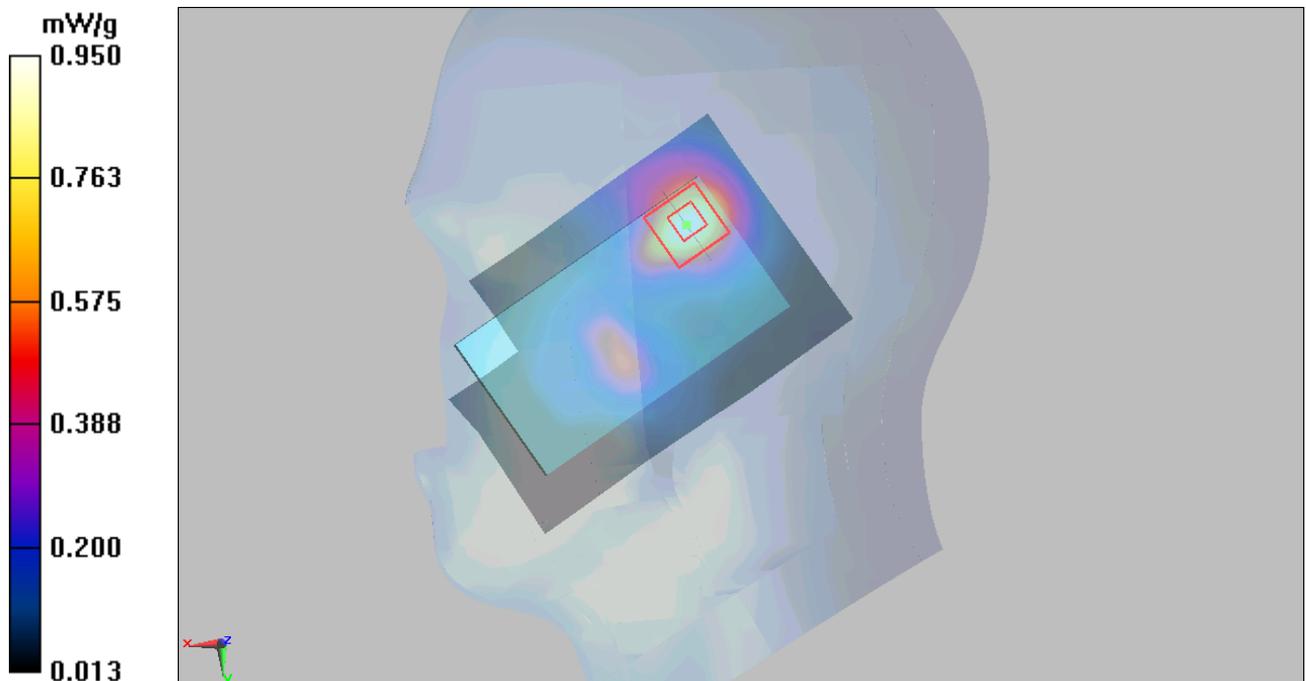
Figure 30 CDMA PCS Right Hand Touch Cheek Channel 25

CDMA PCS Right Tilt Middle

Date/Time: 7/29/2010 1:26:04 PM

Communication System: CDMA PCS; Frequency: 1880 MHz;Duty Cycle: 1:1

Medium parameters used: f = 1880 MHz; σ = 1.4 mho/m; ε_r = 39.9; ρ = 1000 kg/m^3

Ambient Temperature:22.3 ℃   Liqiud Temperature: 21.5℃

DASY4 Configuration:

Probe: EX3DV4 - SN3677; ConvF(7.53, 7.53, 7.53); Calibrated: 9/23/2009

Electronics: DAE4 Sn871; Calibrated: 11/11/2009

Phantom: SAM2; Type: SAM;

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

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

Maximum value of SAR (interpolated) = 0.866 mW/g

Tilt Middle/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 19.9 V/m; Power Drift = -0.004 dB

Peak SAR (extrapolated) = 1.25 W/kg

SAR(1 g) = 0.734 mW/g; SAR(10 g) = 0.401 mW/g

Maximum value of SAR (measured) = 0.817 mW/g
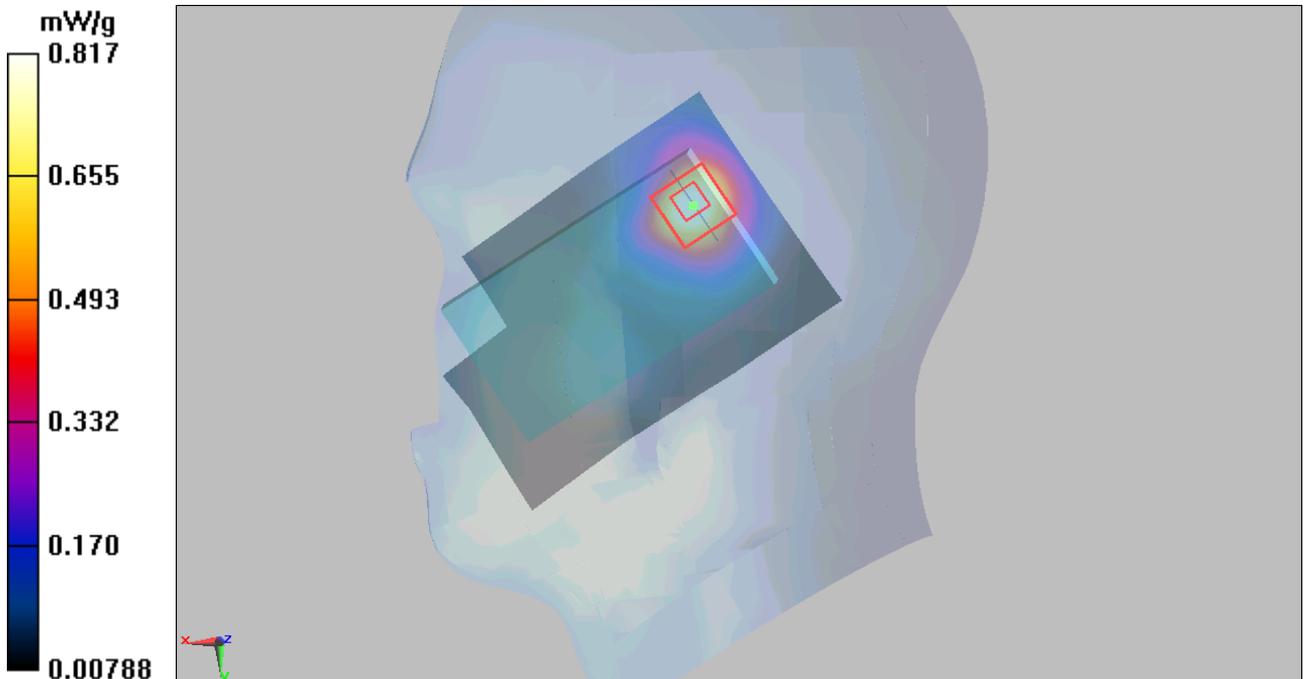
Figure 31 Right Hand Tilt 15° CDMA PCS Channel 600

CDMA PCS Towards Ground High

Date/Time: 7/28/2010 1:27:46 PM

Communication System: CDMA PCS; Frequency: 1908.75 MHz;Duty Cycle: 1:1

Medium parameters used (interpolated): f = 1908.75 MHz; σ = 1.57 mho/m; ε_r = 51.9; ρ = 1000 kg/m^3

Ambient Temperature:22.3 ℃   Liqiud Temperature: 21.5℃

DASY4 Configuration:

Probe: EX3DV4 - SN3677; ConvF(7.62, 7.62, 7.62); Calibrated: 9/23/2009

Electronics: DAE4 Sn871; Calibrated: 11/11/2009

Phantom: SAM2; Type: SAM;

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

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

Maximum value of SAR (interpolated) = 0.771 mW/g

Towrads Ground High/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 19.5 V/m; Power Drift = -0.022 dB

Peak SAR (extrapolated) = 1.09 W/kg

SAR(1 g) = 0.665 mW/g; SAR(10 g) = 0.391 mW/g

Maximum value of SAR (measured) = 0.722 mW/g

Towrads Ground High/Zoom Scan (7x7x7)/Cube 1: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 19.5 V/m; Power Drift = -0.022 dB

Peak SAR (extrapolated) = 0.810 W/kg

SAR(1 g) = 0.543 mW/g; SAR(10 g) = 0.351 mW/g

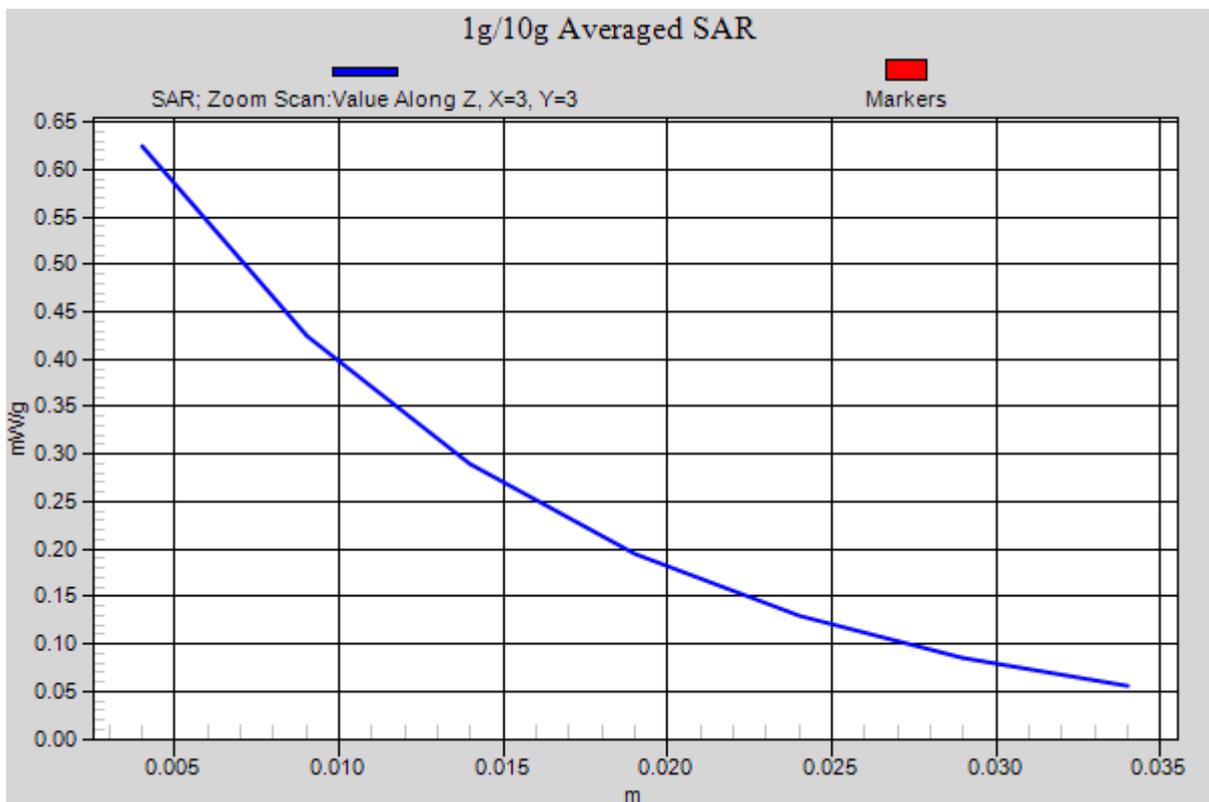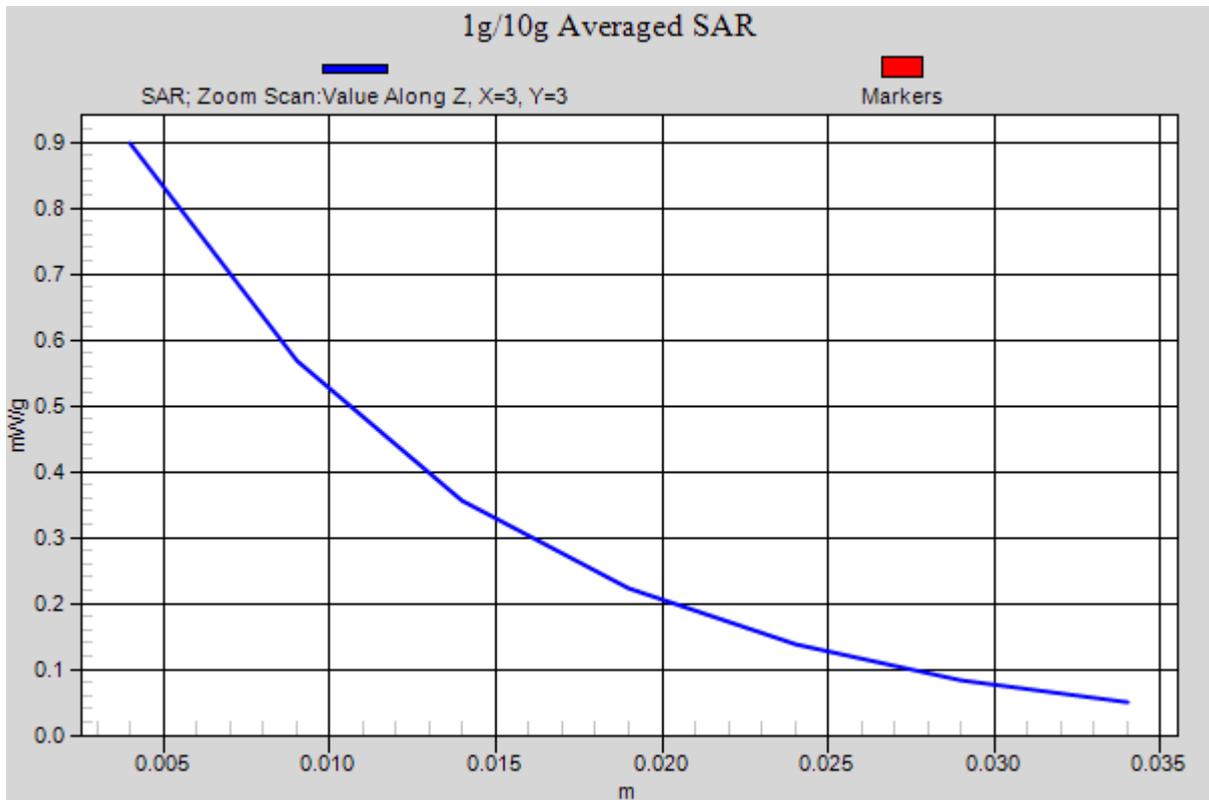Maximum value of SAR (measured) = 0.584 mW/g
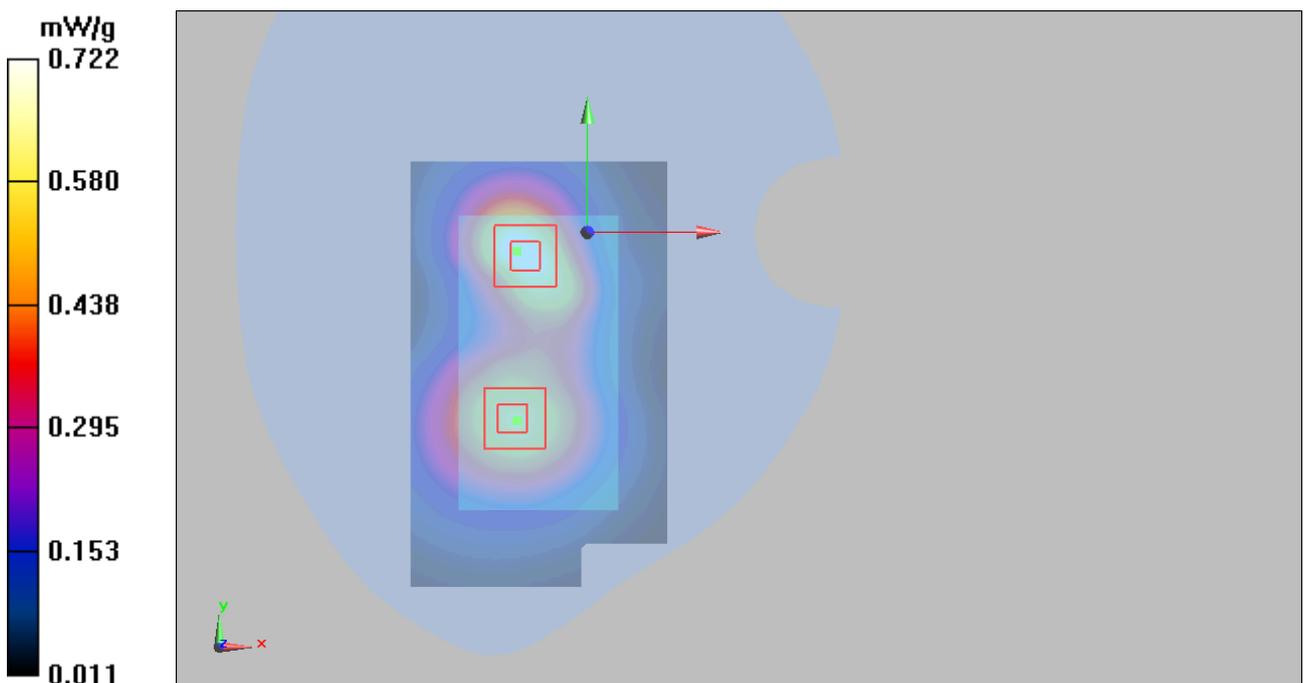
Figure 32 Body, CDMA PCS Towards Ground Channel 1175

CDMA PCS Towards Ground Middle

Date/Time: 7/28/2010 11:33:10 AM

Communication System: CDMA PCS; Frequency: 1880 MHz;Duty Cycle: 1:1

Medium parameters used: f = 1880 MHz; σ = 1.54 mho/m; ε_r = 52; ρ = 1000 kg/m^3

Ambient Temperature:22.3 ℃   Liqiud Temperature: 21.5℃

DASY4 Configuration:

Probe: EX3DV4 - SN3677; ConvF(7.62 7.62, 7.62); Calibrated: 9/23/2009

Electronics: DAE4 Sn871; Calibrated: 11/11/2009

Phantom: SAM2; Type: SAM;

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

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

Maximum value of SAR (interpolated) = 0.925 mW/g

Towrads Ground Middle/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 15.5 V/m; Power Drift = -0.036 dB

Peak SAR (extrapolated) = 1.3 W/kg

SAR(1 g) = 0.790 mW/g; SAR(10 g) = 0.450 mW/g

Maximum value of SAR (measured) = 0.863 mW/g

Towrads Ground Middle/Zoom Scan (7x7x7)/Cube 1: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 15.5 V/m; Power Drift = -0.036 dB

Peak SAR (extrapolated) = 0.904 W/kg

SAR(1 g) = 0.613 mW/g; SAR(10 g) = 0.400 mW/g
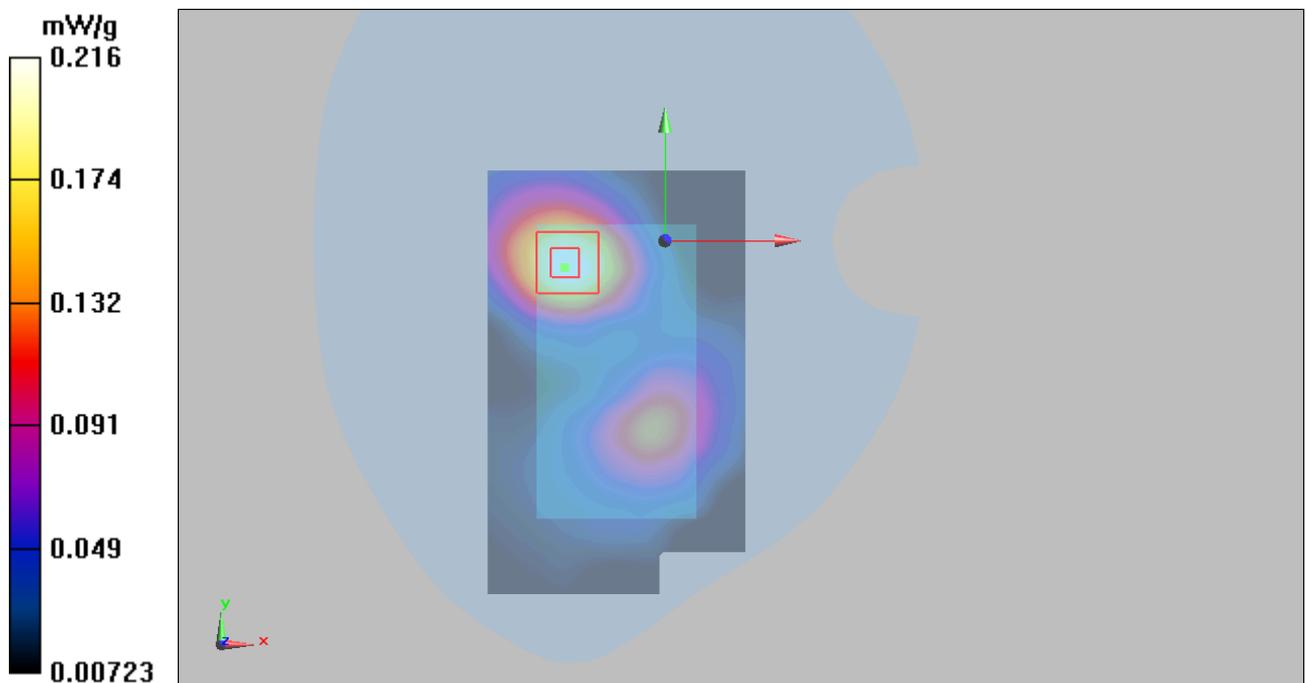
Maximum value of SAR (measured) = 0.662 mW/g
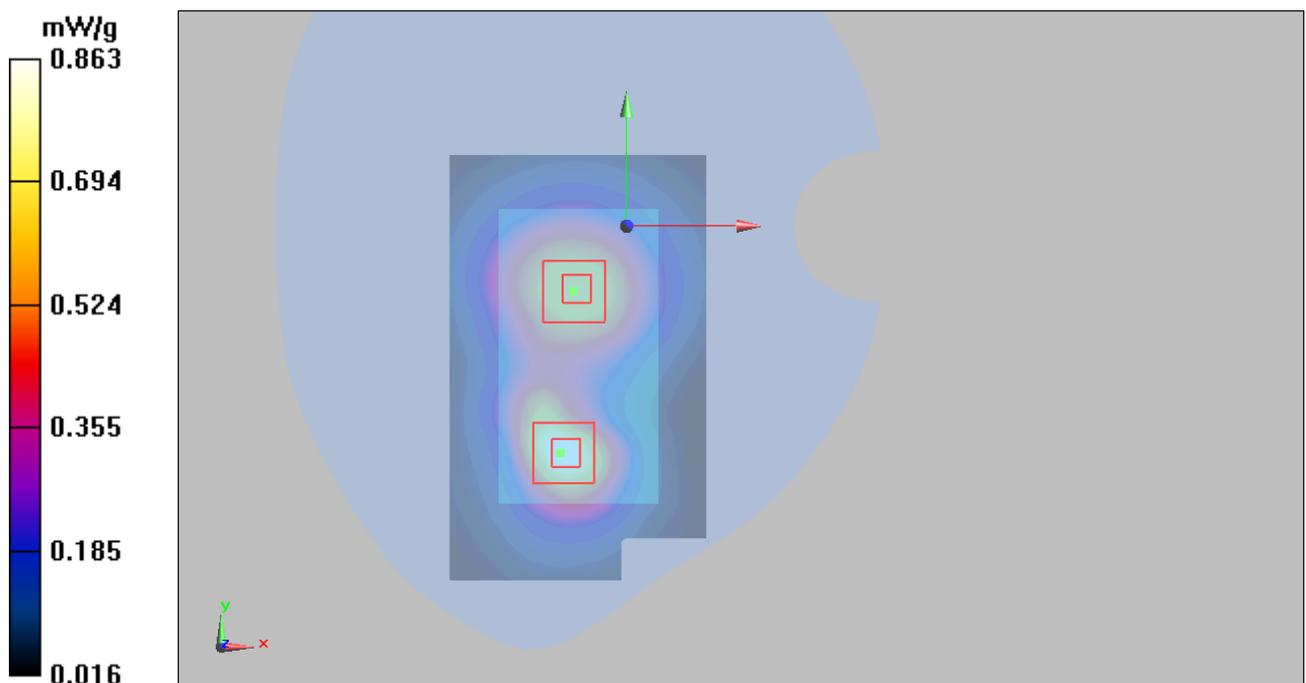
Figure 33 Body, CDMA PCS Towards Ground Channel 600

CDMA PCS Towards Ground Low

Date/Time: 7/28/2010 12:10:04 PM

Communication System: CDMA PCS; Frequency: 1851.25 MHz;Duty Cycle: 1:1

Medium parameters used: f = 1852 MHz; σ = 1.51 mho/m; $ε_r$ = 52.1; ρ = 1000 kg/m^3

Ambient Temperature:22.3 ℃   Liqiud Temperature: 21.5℃

DASY4 Configuration:

Probe: EX3DV4 - SN3677; ConvF(7.62, 7.62, 7.62); Calibrated: 9/23/2009

Electronics: DAE4 Sn871; Calibrated: 11/11/2009

Phantom: SAM2; Type: SAM;

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

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

Maximum value of SAR (interpolated) = 0.944 mW/g

Towrads Ground Low/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 14.5 V/m; Power Drift = -0.096 dB

Peak SAR (extrapolated) = 1.34 W/kg

SAR(1 g) = 0.817 mW/g; SAR(10 g) = 0.463 mW/g

Maximum value of SAR (measured) = 0.898 mW/g

Towrads Ground Low/Zoom Scan (7x7x7)/Cube 1: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 14.5 V/m; Power Drift = -0.096 dB

Peak SAR (extrapolated) = 0.845 W/kg

SAR(1 g) = 0.582 mW/g; SAR(10 g) = 0.382 mW/g

Maximum value of SAR (measured) = 0.624 mW/g
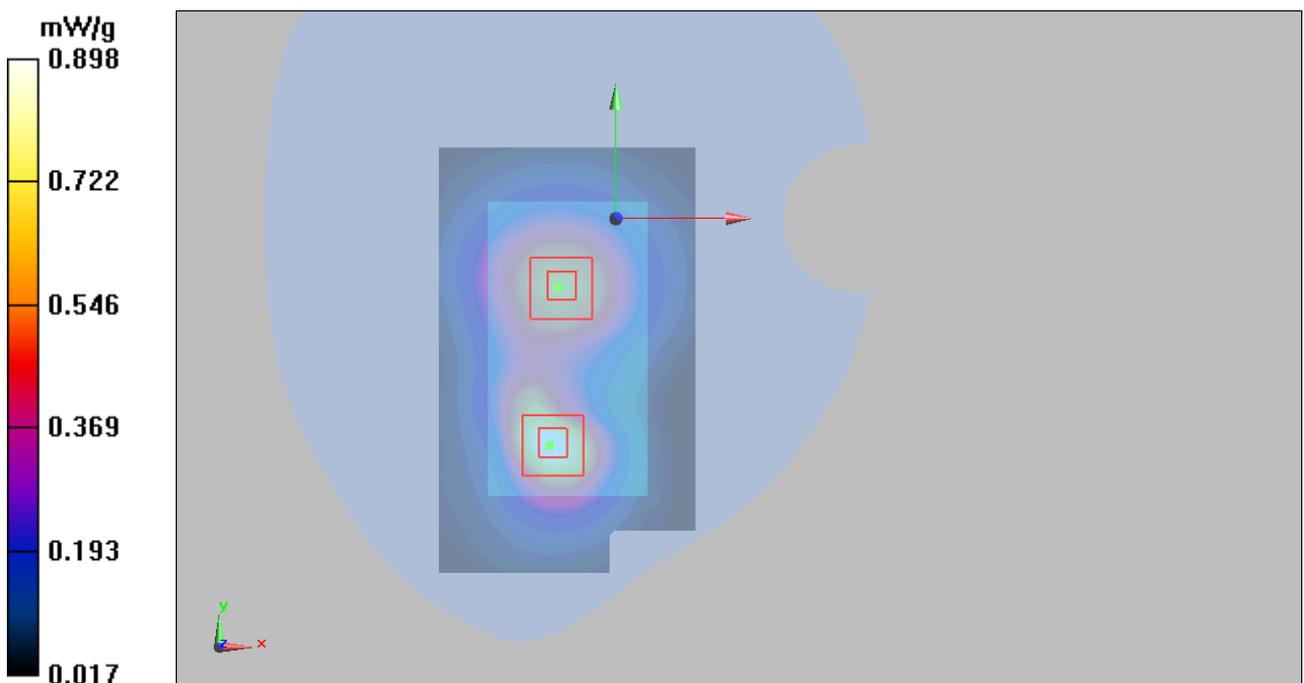
Figure 34 Body, CDMA PCS Towards Ground Channel 25

CDMA PCS Towards Phantom Middle

Date/Time: 7/28/2010 9:47:18 AM

Communication System: CDMA PCS; Frequency: 1880 MHz;Duty Cycle: 1:1

Medium parameters used: f = 1880 MHz; σ = 1.54 mho/m; $ε_r$ = 52; ρ = 1000 kg/m^3

Ambient Temperature:22.3 ℃   Liqiud Temperature: 21.5℃

DASY4 Configuration:

Probe: EX3DV4 - SN3677; ConvF(7.62, 7.62, 7.62); Calibrated: 9/23/2009

Electronics: DAE4 Sn871; Calibrated: 11/11/2009

Phantom: SAM2; Type: SAM;

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

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

Maximum value of SAR (interpolated) = 0.225 mW/g

Towrads Phantom Middle/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 8.78 V/m; Power Drift = -0.049 dB

Peak SAR (extrapolated) = 0.308 W/kg

SAR(1 g) = 0.198 mW/g; SAR(10 g) = 0.119 mW/g

Maximum value of SAR (measured) = 0.216 mW/g

Figure 35 Body, CDMA PCS Towards Phantom Channel 600

CDMA PCS with Earphone Towards Ground Low

Date/Time: 7/28/2010 1:51:46 PM

Communication System: CDMA PCS; Frequency: 1851.25 MHz;Duty Cycle: 1:1

Medium parameters used: f = 1852 MHz; σ = 1.51 mho/m; ε_r = 52.1; ρ = 1000 kg/m^3

Ambient Temperature:22.3 ℃   Liqiud Temperature: 21.5℃

DASY4 Configuration:

Probe: EX3DV4 - SN3677; ConvF(7.62, 7.62, 7.62); Calibrated: 9/23/2009

Electronics: DAE4 Sn871; Calibrated: 11/11/2009

Phantom: SAM2; Type: SAM;

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

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

Maximum value of SAR (interpolated) = 0.858 mW/g

Towrads Ground Low/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 20.4 V/m; Power Drift = 0.061 dB

Peak SAR (extrapolated) = 1.3 W/kg

SAR(1 g) = 0.773 mW/g; SAR(10 g) = 0.440 mW/g

Maximum value of SAR (measured) = 0.845 mW/g
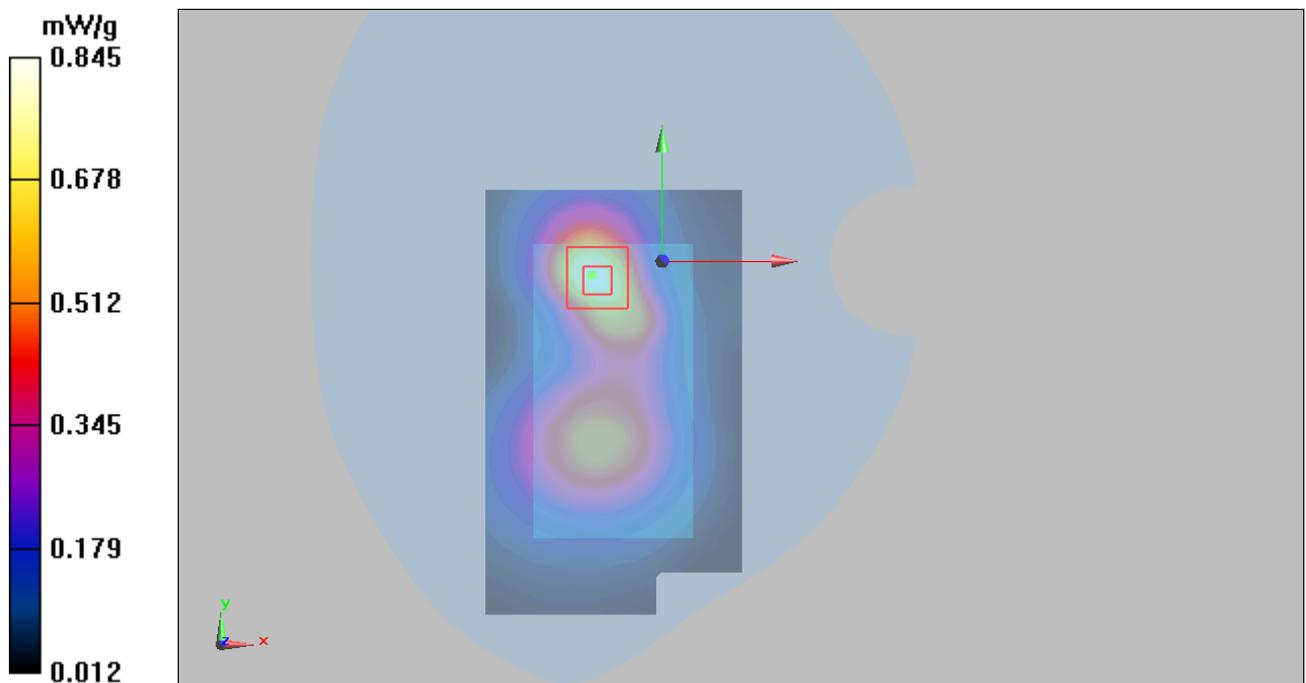
Figure 36 Body, CDMA PCS with Earphone Towards Ground Channel 25

CDMA AWS Left Cheek Middle

Date/Time: 7/29/2010 2:08:03 PM

Communication System: CDMA AWS; Frequency: 1732.5 MHz;Duty Cycle: 1:1

Medium parameters used (interpolated): f = 1732.5 MHz; σ = 1.35 mho/m; ε_r = 40.1; ρ = 1000 kg/m^3

Ambient Temperature:22.3 ℃   Liqiud Temperature: 21.5℃

DASY4 Configuration:

Probe: EX3DV4 - SN3677; ConvF(8.04, 8.04, 8.04); Calibrated: 9/23/2009

Electronics: DAE4 Sn871; Calibrated: 11/11/2009

Phantom: SAM2; Type: SAM;

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

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

Maximum value of SAR (interpolated) = 0.253 mW/g

**Cheek Middle/Zoom Scan (7x7x7)/Cube 0:** Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 10.3 V/m; Power Drift = -0.076 dB

Peak SAR (extrapolated) = 0.346 W/kg

SAR(1 g) = 0.216 mW/g; SAR(10 g) = 0.128 mW/g

Maximum value of SAR (measured) = 0.233 mW/g
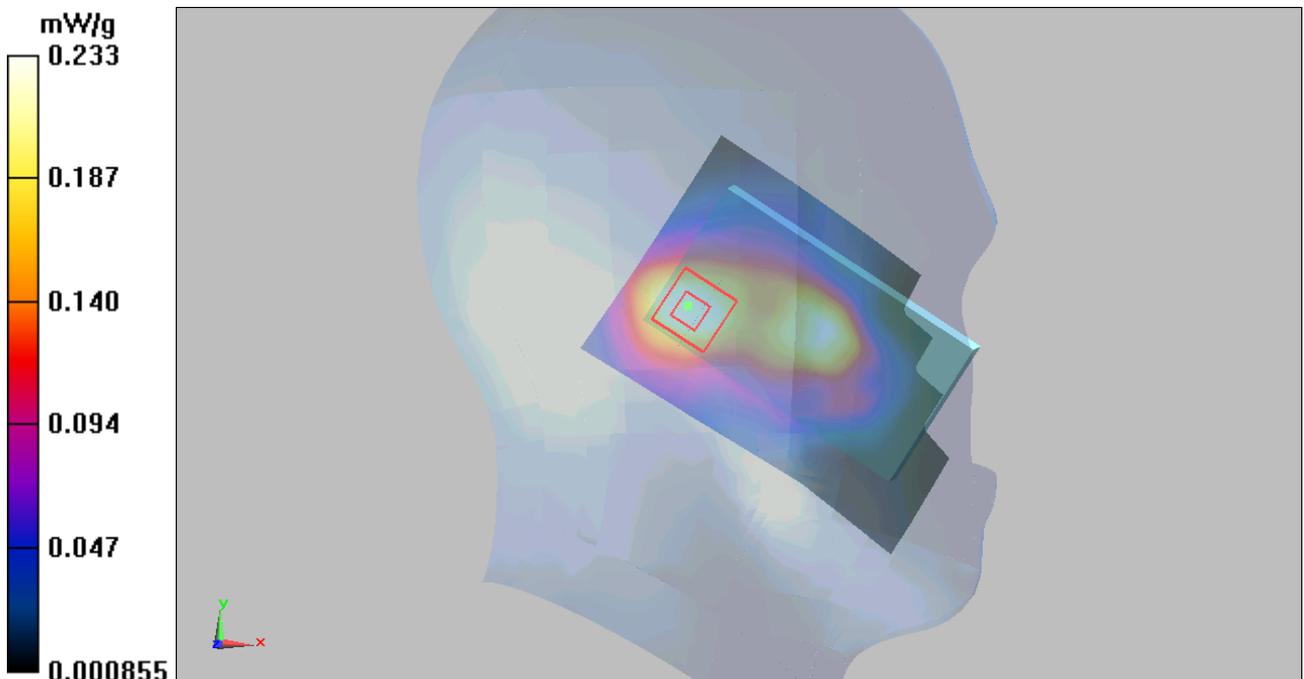
Figure 37 CDMA AWS Left Hand Touch Cheek Channel 450

CDMA AWS Left Tilt Middle

Date/Time: 7/29/2010 2:31:43 PM

Communication System: CDMA AWS; Frequency: 1732.5 MHz;Duty Cycle: 1:1

Medium parameters used (interpolated): f = 1732.5 MHz; σ = 1.35 mho/m; ε_r = 40.1; ρ = 1000 kg/m^3

Ambient Temperature:22.3 ℃   Liqiud Temperature: 21.5℃

DASY4 Configuration:

Probe: EX3DV4 - SN3677; ConvF(8.04, 8.04, 8.04); Calibrated: 9/23/2009

Electronics: DAE4 Sn871; Calibrated: 11/11/2009

Phantom: SAM2; Type: SAM;

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

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

Maximum value of SAR (interpolated) = 0.271 mW/g

Tilt Middle/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 12.1 V/m; Power Drift = -0.046 dB

Peak SAR (extrapolated) = 0.381 W/kg

SAR(1 g) = 0.234 mW/g; SAR(10 g) = 0.135 mW/g

Maximum value of SAR (measured) = 0.256 mW/g
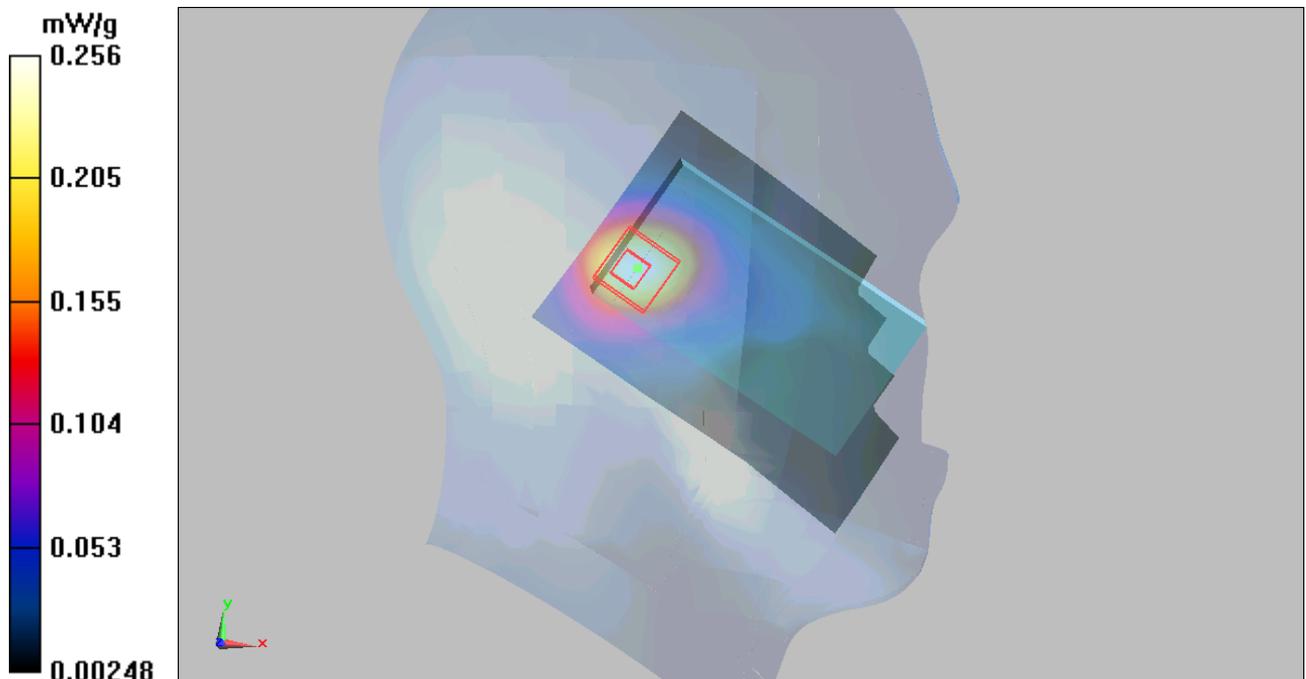
Figure 38 CDMA AWS Left Hand Tilt 15° Channel 450

CDMA AWS Right Cheek High

Date/Time: 7/29/2010 3:41:30 PM

Communication System: CDMA AWS; Frequency: 1753.75 MHz;Duty Cycle: 1:1

Medium parameters used: f = 1754 MHz; σ = 1.37 mho/m; ε_r = 40; ρ = 1000 kg/m^3

Ambient Temperature:22.3 ℃   Liqiud Temperature: 21.5℃

DASY4 Configuration:

Probe: EX3DV4 - SN3677; ConvF(8.04, 8.04, 8.04); Calibrated: 9/23/2009

Electronics: DAE4 Sn871; Calibrated: 11/11/2009

Phantom: SAM2; Type: SAM;

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

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

Maximum value of SAR (interpolated) = 0.460 mW/g

Cheek High/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 11.3 V/m; Power Drift = -0.067 dB

Peak SAR (extrapolated) = 0.733 W/kg

SAR(1 g) = 0.426 mW/g; SAR(10 g) = 0.232 mW/g

Maximum value of SAR (measured) = 0.472 mW/g
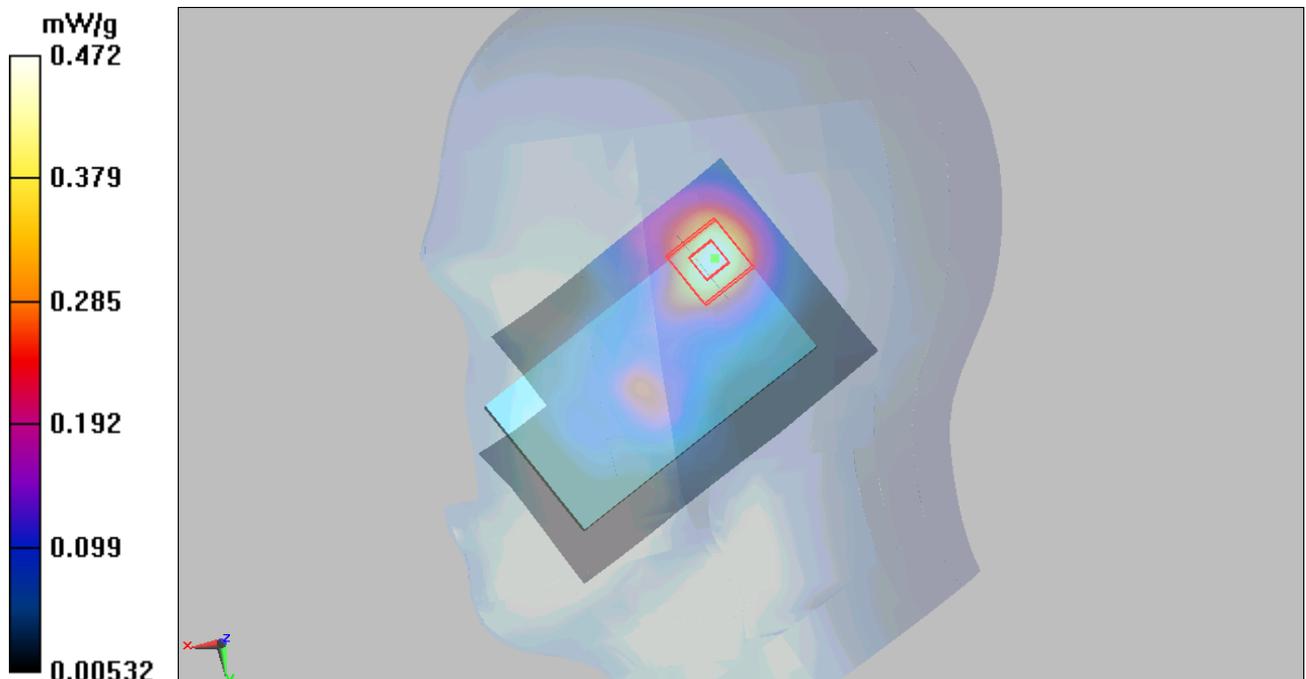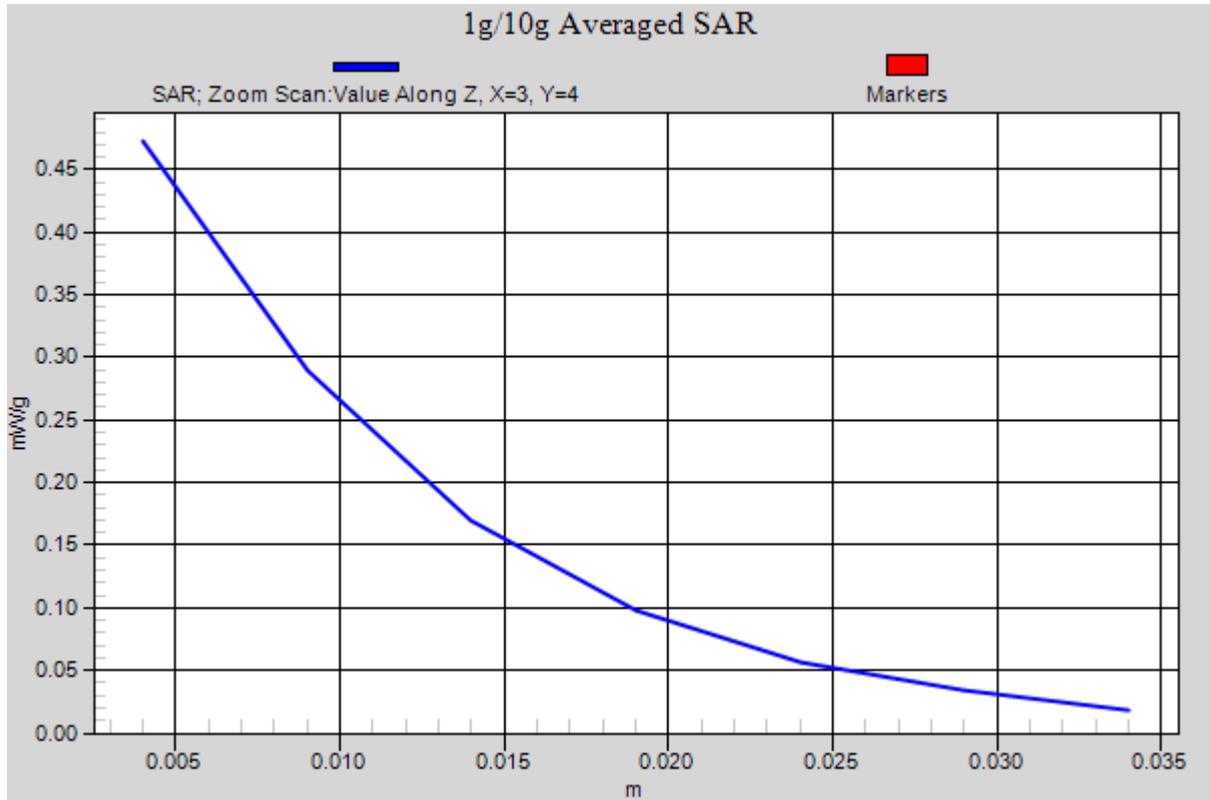
Figure 39 CDMA AWS Right Hand Touch Cheek Channel 875

CDMA AWS Right Cheek Middle

Date/Time: 7/29/2010 2:55:04 PM

Communication System: CDMA AWS; Frequency: 1732.5 MHz;Duty Cycle: 1:1

Medium parameters used (interpolated): f = 1732.5 MHz; σ = 1.35 mho/m; ε_r = 40.1; ρ = 1000 kg/m^3

Ambient Temperature:22.3 ℃   Liqiud Temperature: 21.5℃

DASY4 Configuration:

Probe: EX3DV4 - SN3677; ConvF(8.04, 8.04, 8.04); Calibrated: 9/23/2009

Electronics: DAE4 Sn871; Calibrated: 11/11/2009

Phantom: SAM2; Type: SAM;

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

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

Maximum value of SAR (interpolated) = 0.380 mW/g

Cheek Middle/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 10.2 V/m; Power Drift = -0.161 dB

Peak SAR (extrapolated) = 0.595 W/kg

SAR(1 g) = 0.348 mW/g; SAR(10 g) = 0.192 mW/g

Maximum value of SAR (measured) = 0.387 mW/g
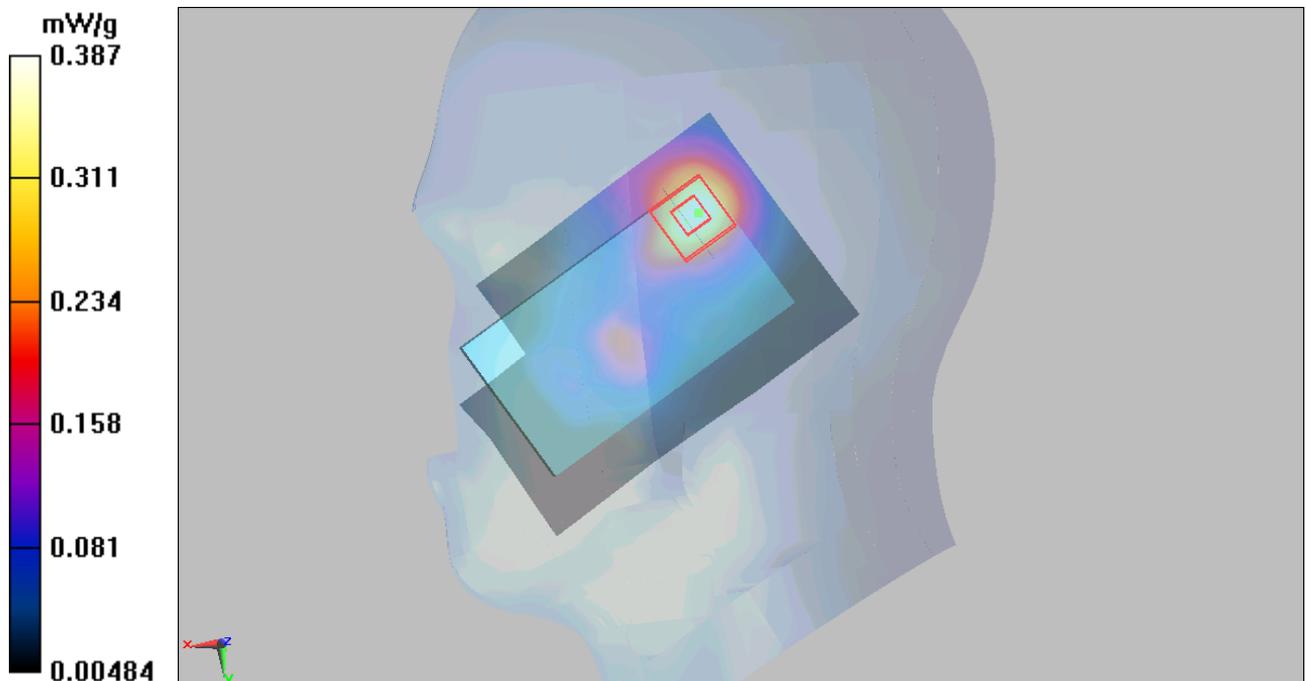
Figure 40 CDMA AWS Right Hand Touch Cheek Channel 450

CDMA AWS Right Cheek Low

Date/Time: 7/29/2010 3:16:47 PM

Communication System: CDMA AWS; Frequency: 1711.25 MHz;Duty Cycle: 1:1

Medium parameters used (interpolated): f = 1711.25 MHz; σ = 1.34 mho/m; ε_r = 40.2; ρ = 1000 kg/m^3

Ambient Temperature:22.3 ℃　　　Liqiud Temperature: 21.5℃

DASY4 Configuration:

Probe: EX3DV4 - SN3677; ConvF(8.04, 8.04, 8.04); Calibrated: 9/23/2009

Electronics: DAE4 Sn871; Calibrated: 11/11/2009

Phantom: SAM2; Type: SAM;

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

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

Maximum value of SAR (interpolated) = 0.308 mW/g

Cheek Low/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 9.08 V/m; Power Drift = -0.078 dB

Peak SAR (extrapolated) = 0.486 W/kg

SAR(1 g) = 0.280 mW/g; SAR(10 g) = 0.157 mW/g

Maximum value of SAR (measured) = 0.312 mW/g
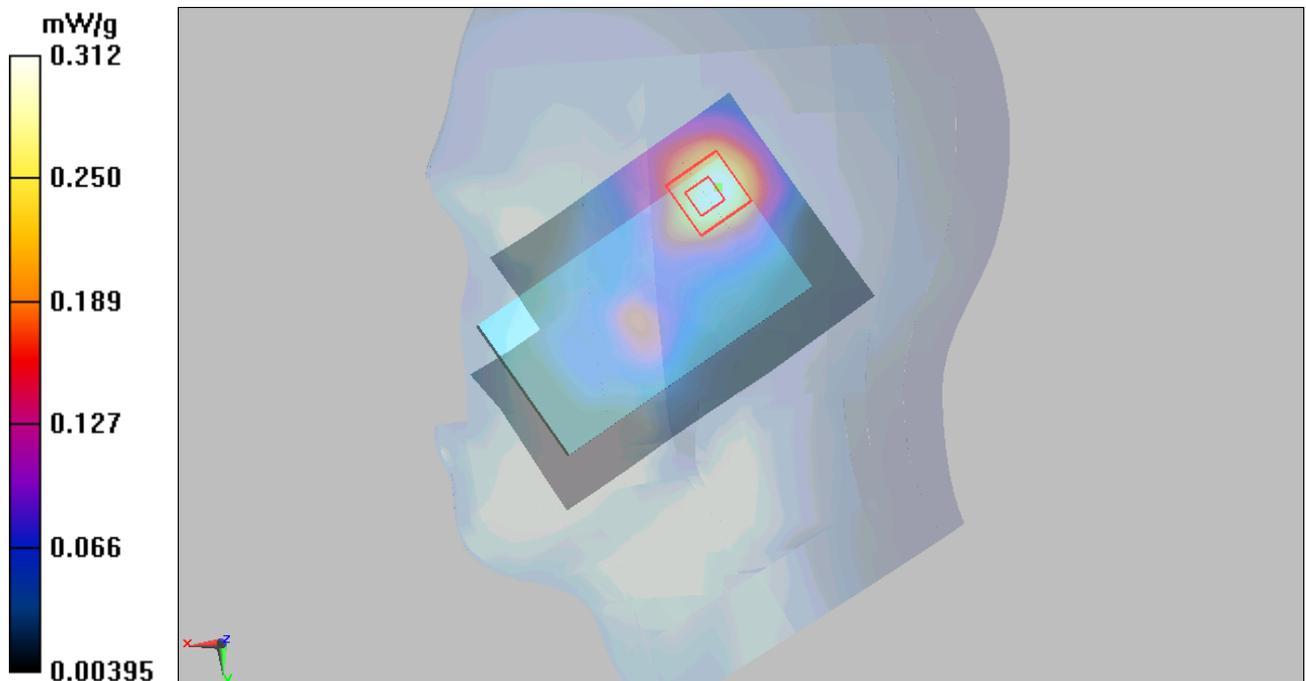
Figure 41 CDMA AWS Right Hand Touch Cheek Channel 25

CDMA AWS Right Tilt Middle

Date/Time: 7/29/2010 4:03:32 PM

Communication System: CDMA AWS; Frequency: 1732.5 MHz;Duty Cycle: 1:1

Medium parameters used (interpolated): f = 1732.5 MHz; σ = 1.35 mho/m; ε_r = 40.1; ρ = 1000 kg/m^3

Ambient Temperature:22.3 ℃   Liqiud Temperature: 21.5℃

DASY4 Configuration:

Probe: EX3DV4 - SN3677; ConvF(8.04, 8.04, 8.04); Calibrated: 9/23/2009

Electronics: DAE4 Sn871; Calibrated: 11/11/2009

Phantom: SAM2; Type: SAM;

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

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

Maximum value of SAR (interpolated) = 0.381 mW/g

Tilt Middle/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 13.1 V/m; Power Drift = -0.187 dB

Peak SAR (extrapolated) = 0.568 W/kg

SAR(1 g) = 0.329 mW/g; SAR(10 g) = 0.182 mW/g

Maximum value of SAR (measured) = 0.364 mW/g
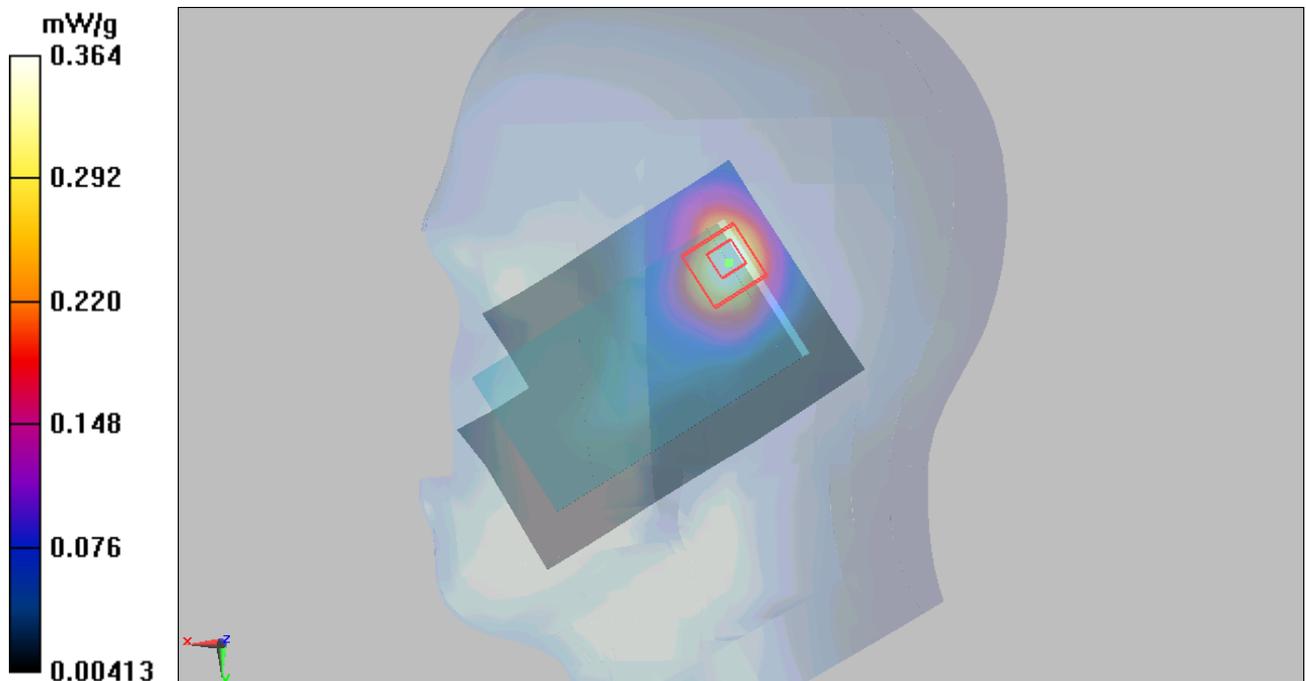
Figure 42 CDMA AWS Right Hand Tilt 15° Channel 450

CDMA AWS Towards Ground High

Date/Time: 7/28/2010 7:25:52 PM

Communication System: CDMA AWS; Frequency: 1753.75 MHz;Duty Cycle: 1:1

Medium parameters used: f = 1754 MHz; σ = 1.51 mho/m; $ε_r$ = 53.1; ρ = 1000 kg/m^3

Ambient Temperature:22.3 ℃   Liqiud Temperature: 21.5℃

DASY4 Configuration:

Probe: EX3DV4 - SN3677; ConvF(7.7, 7.7, 7.7); Calibrated: 9/23/2009

Electronics: DAE4 Sn871; Calibrated: 11/11/2009

Phantom: SAM2; Type: SAM;

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

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

Maximum value of SAR (interpolated) = 0.902 mW/g

Towrads Ground High/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 18.9 V/m; Power Drift = -0.007 dB

Peak SAR (extrapolated) = 1.41 W/kg

SAR(1 g) = 0.837 mW/g; SAR(10 g) = 0.456 mW/g

Maximum value of SAR (measured) = 0.928 mW/g
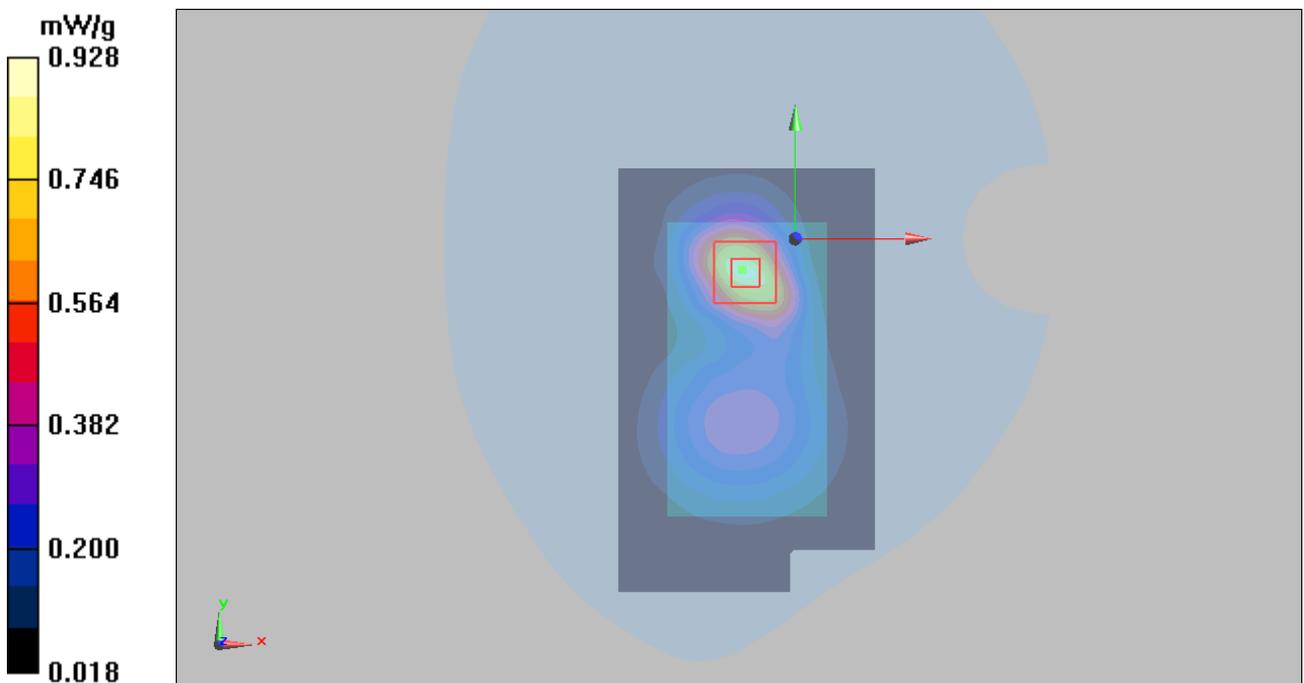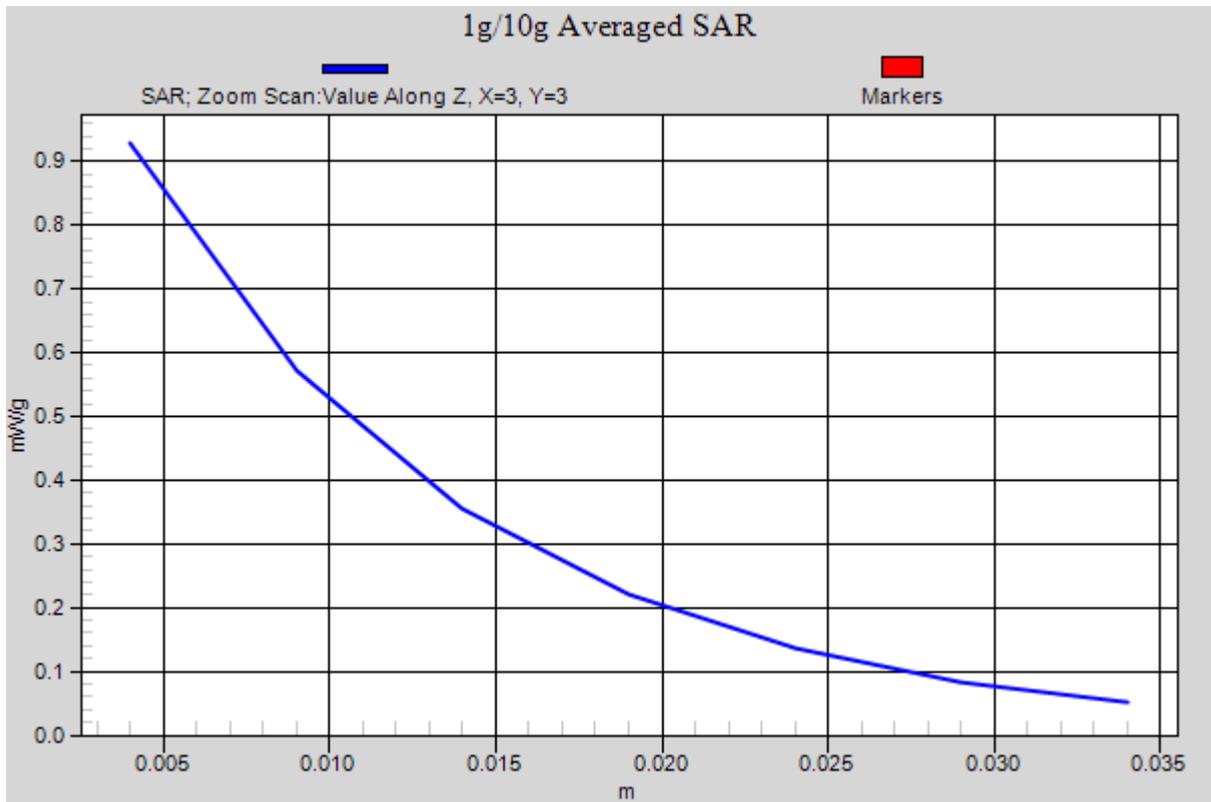
Figure 43 Body, CDMA AWS Towards Ground Channel 875

CDMA AWS Towards Ground Middle

Date/Time: 7/28/2010 9:43:27 PM

Communication System: CDMA AWS; Frequency: 1732.5 MHz;Duty Cycle: 1:1

Medium parameters used (interpolated): f = 1732.5 MHz; σ = 1.49 mho/m; $ε_r$ = 53.2; ρ = 1000 kg/m^3

Ambient Temperature:22.3 ℃   Liqiud Temperature: 21.5℃

DASY4 Configuration:

Probe: EX3DV4 - SN3677; ConvF(7.7, 7.7, 7.7); Calibrated: 9/23/2009

Electronics: DAE4 Sn871; Calibrated: 11/11/2009

Phantom: SAM2; Type: SAM;

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

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

Maximum value of SAR (interpolated) = 0.893 mW/g

Towrads Ground Middle/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 18.3 V/m; Power Drift = 0.016 dB

Peak SAR (extrapolated) = 1.34 W/kg

SAR(1 g) = 0.794 mW/g; SAR(10 g) = 0.434 mW/g

Maximum value of SAR (measured) = 0.889 mW/g
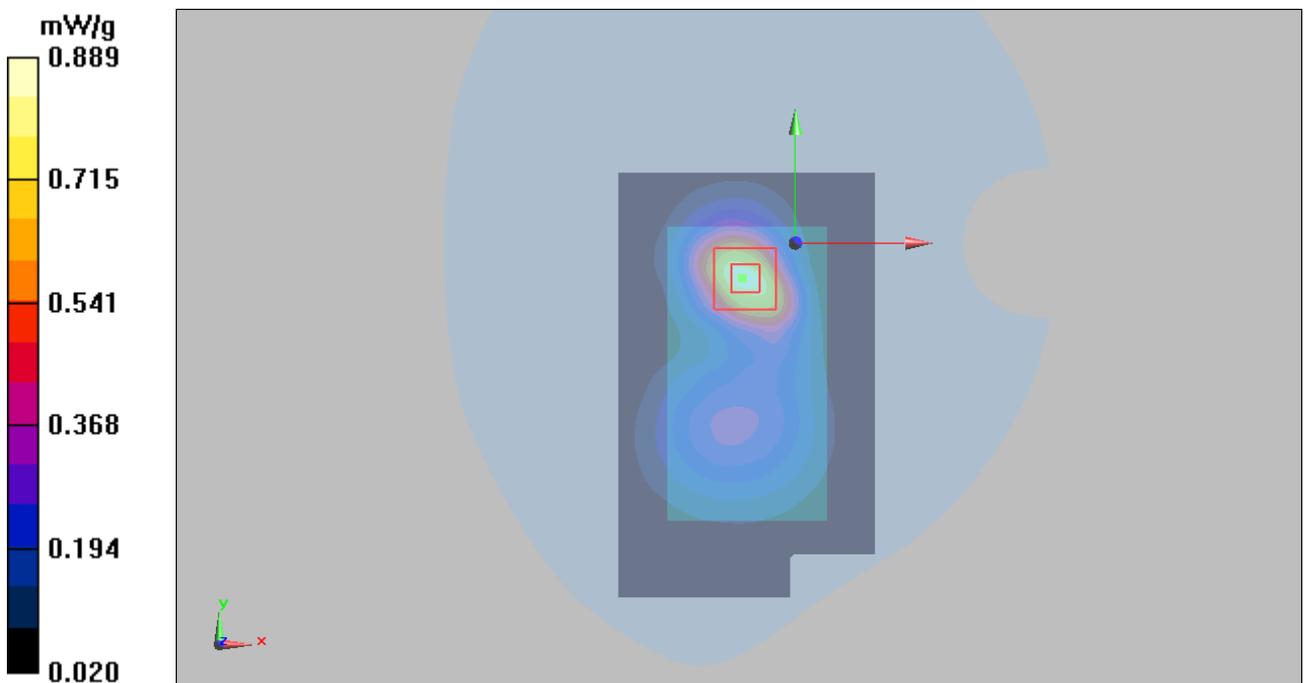
Figure 44 Body, CDMA AWS Towards Ground Channel 450

CDMA AWS Towards Ground Low

Date/Time: 7/28/2010 10:06:06 PM

Communication System: CDMA AWS; Frequency: 1711.25 MHz;Duty Cycle: 1:1

Medium parameters used: f = 1712 MHz; σ = 1.47 mho/m; ε_r = 53.2; ρ = 1000 kg/m^3

Ambient Temperature:22.3 ℃   Liqiud Temperature: 21.5℃

DASY4 Configuration:

Probe: EX3DV4 - SN3677; ConvF(7.7, 7.7, 7.7); Calibrated: 9/23/2009

Electronics: DAE4 Sn871; Calibrated: 11/11/2009

Phantom: SAM2; Type: SAM;

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

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

Maximum value of SAR (interpolated) = 0.781 mW/g

Towrads Ground Low/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 17.3 V/m; Power Drift = 0.064 dB

Peak SAR (extrapolated) = 1.19 W/kg

SAR(1 g) = 0.717 mW/g; SAR(10 g) = 0.392 mW/g

Maximum value of SAR (measured) = 0.803 mW/g
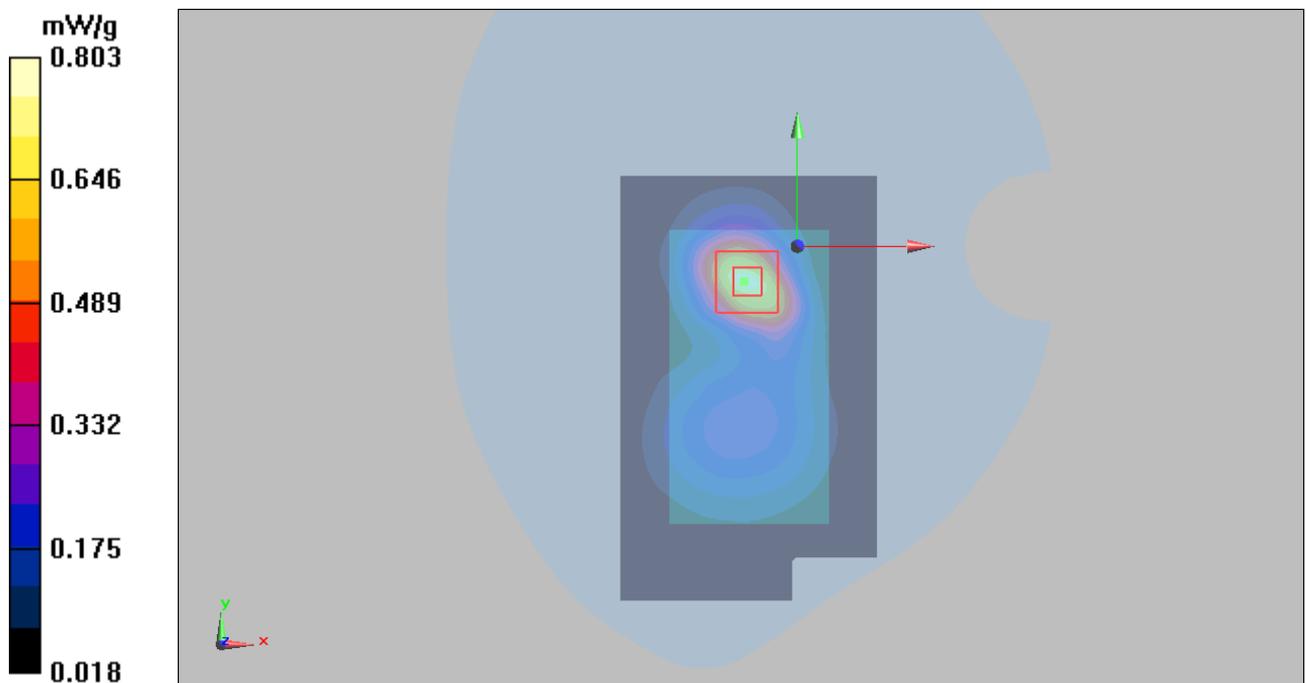
Figure 45 Body, CDMA AWS Towards Ground Channel 25

CDMA AWS Towards Phantom Middle

Date/Time: 7/28/2010 9:16:55 PM

Communication System: CDMA AWS; Frequency: 1732.5 MHz;Duty Cycle: 1:1

Medium parameters used (interpolated): f = 1732.5 MHz; σ = 1.49 mho/m; ε_r = 53.2; ρ = 1000 kg/m^3

Ambient Temperature:22.3 ℃   Liqiud Temperature: 21.5℃

DASY4 Configuration:

Probe: EX3DV4 - SN3677; ConvF(7.7, 7.7, 7.7); Calibrated: 9/23/2009

Electronics: DAE4 Sn871; Calibrated: 11/11/2009

Phantom: SAM2; Type: SAM;

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

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

Maximum value of SAR (interpolated) = 0.088 mW/g

Towrads Phantom Middle/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 4.99 V/m; Power Drift = 0.089 dB

Peak SAR (extrapolated) = 0.116 W/kg

SAR(1 g) = 0.074 mW/g; SAR(10 g) = 0.045 mW/g

Maximum value of SAR (measured) = 0.081 mW/g
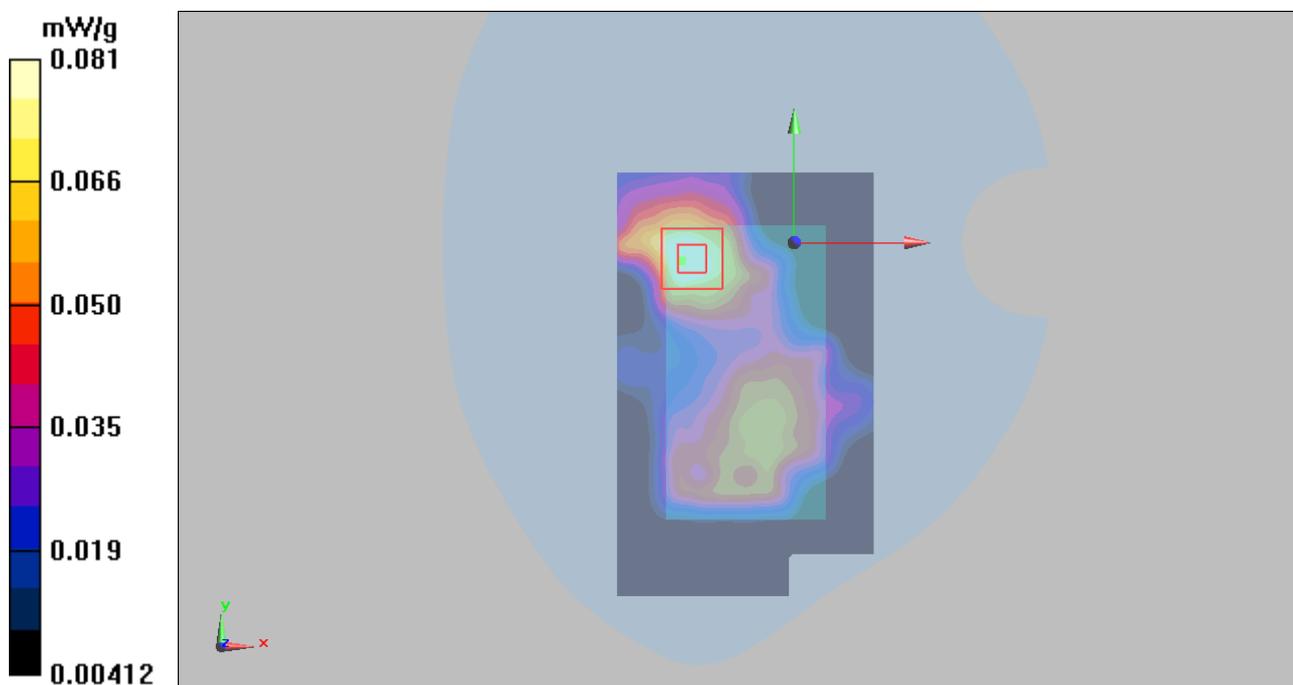
Figure 46 Body, CDMA AWS Towards Phantom Channel 450

CDMA AWS with Earphone Towards Ground High

Date/Time: 7/28/2010 7:49:50 PM

Communication System: CDMA AWS; Frequency: 1753.75 MHz;Duty Cycle: 1:1

Medium parameters used: f = 1754 MHz; σ = 1.51 mho/m; ε_r = 53.1; ρ = 1000 kg/m^3

Ambient Temperature:22.3 ℃   Liqiud Temperature: 21.5℃

DASY4 Configuration:

Probe: EX3DV4 - SN3677; ConvF(7.7, 7.7, 7.7); Calibrated: 9/23/2009

Electronics: DAE4 Sn871; Calibrated: 11/11/2009

Phantom: SAM2; Type: SAM;

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

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

Maximum value of SAR (interpolated) = 0.844 mW/g

Towrads Ground High/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 18.9 V/m; Power Drift = 0.050 dB

Peak SAR (extrapolated) = 1.27 W/kg

SAR(1 g) = 0.764 mW/g; SAR(10 g) = 0.422 mW/g

Maximum value of SAR (measured) = 0.850 mW/g
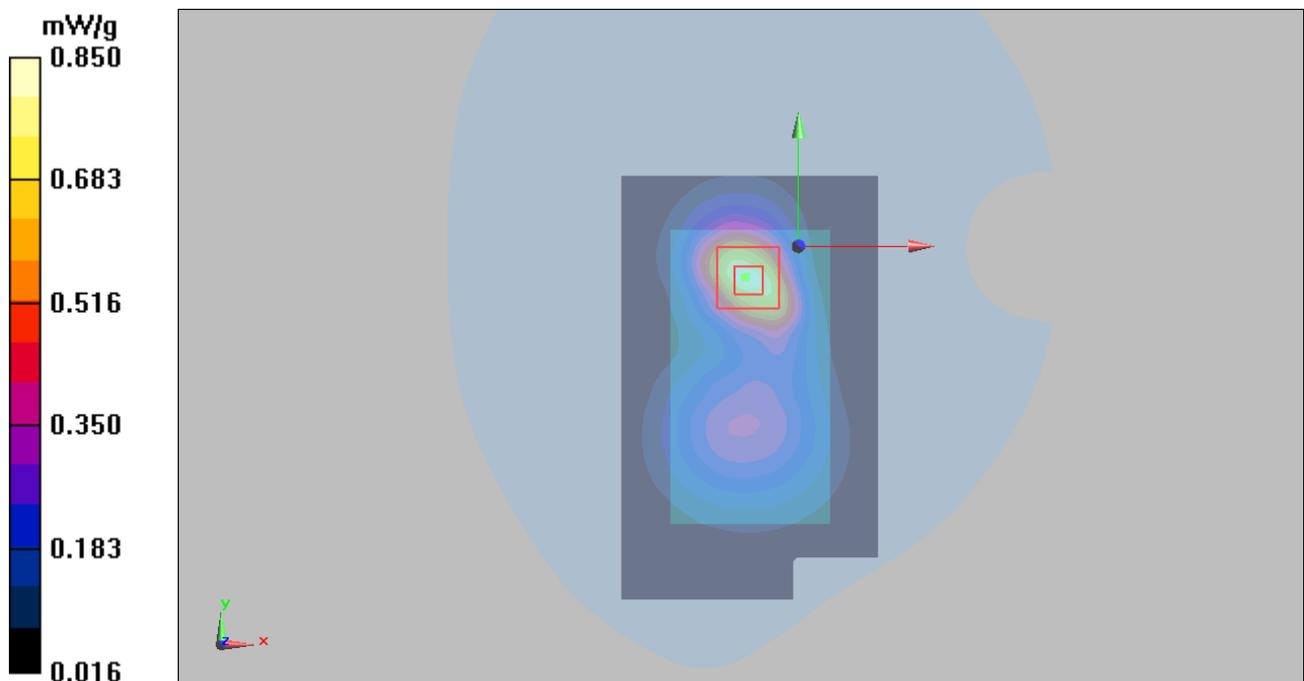
Figure 47 Body, CDMA AWS with Earphone Towards Ground Channel 875

802.11b Left Cheek High

Date/Time: 7/30/2010 4:12:46 PM

Communication System: 802.11b; Frequency: 2462 MHz;Duty Cycle: 1:1

Medium parameters used: f = 2462 MHz; σ = 1.8 mho/m; ε_r = 38.8; ρ = 1000 kg/m^3

Ambient Temperature:22.3 ℃   Liqiud Temperature: 21.5℃

DASY4 Configuration:

Probe: EX3DV4 - SN3661; ConvF(7.22, 7.22, 7.22); Calibrated: 12/30/2009

Electronics: DAE4 Sn871; Calibrated: 11/11/2009

Phantom: SAM2; Type: SAM;

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

Cheek High/Area Scan (51x91x1): Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (interpolated) = 0.107 mW/g

Cheek High/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 2.55 V/m; Power Drift = -0.112 dB

Peak SAR (extrapolated) = 0.196 W/kg

SAR(1 g) = 0.089 mW/g; SAR(10 g) = 0.047 mW/g
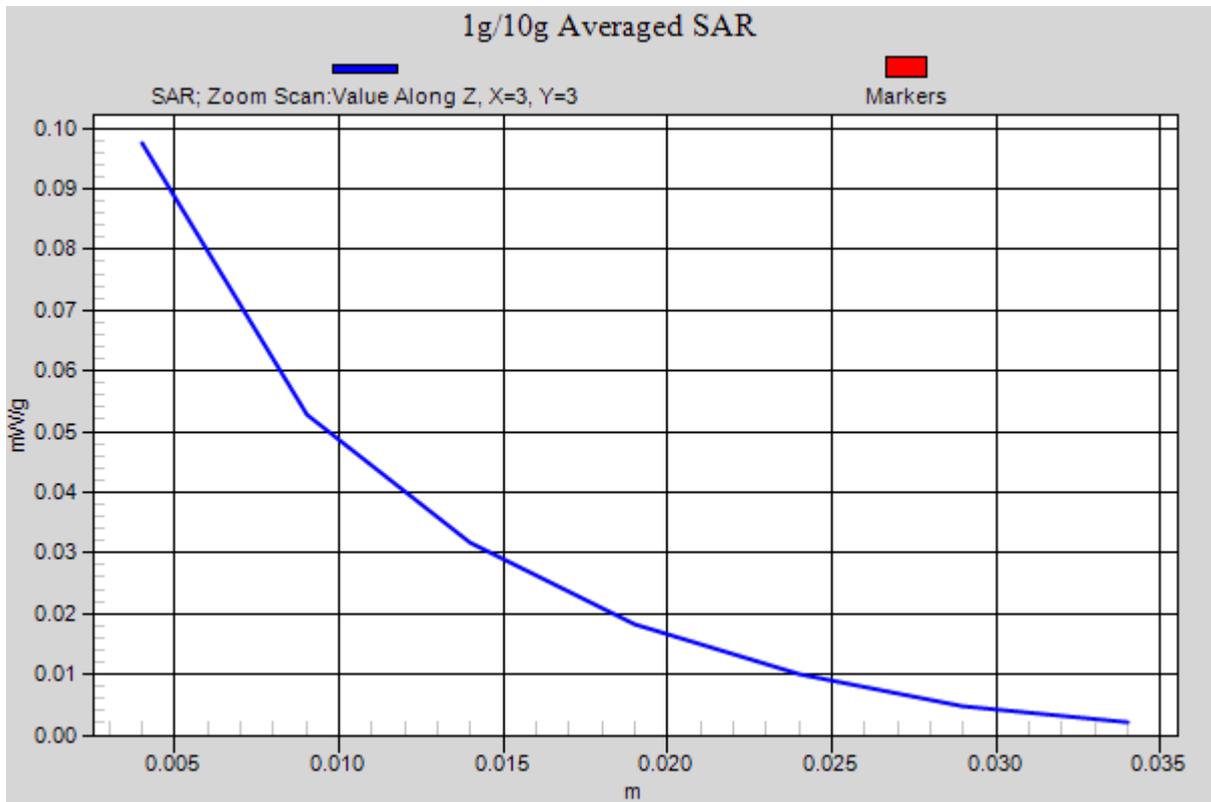
Maximum value of SAR (measured) = 0.097 mW/g
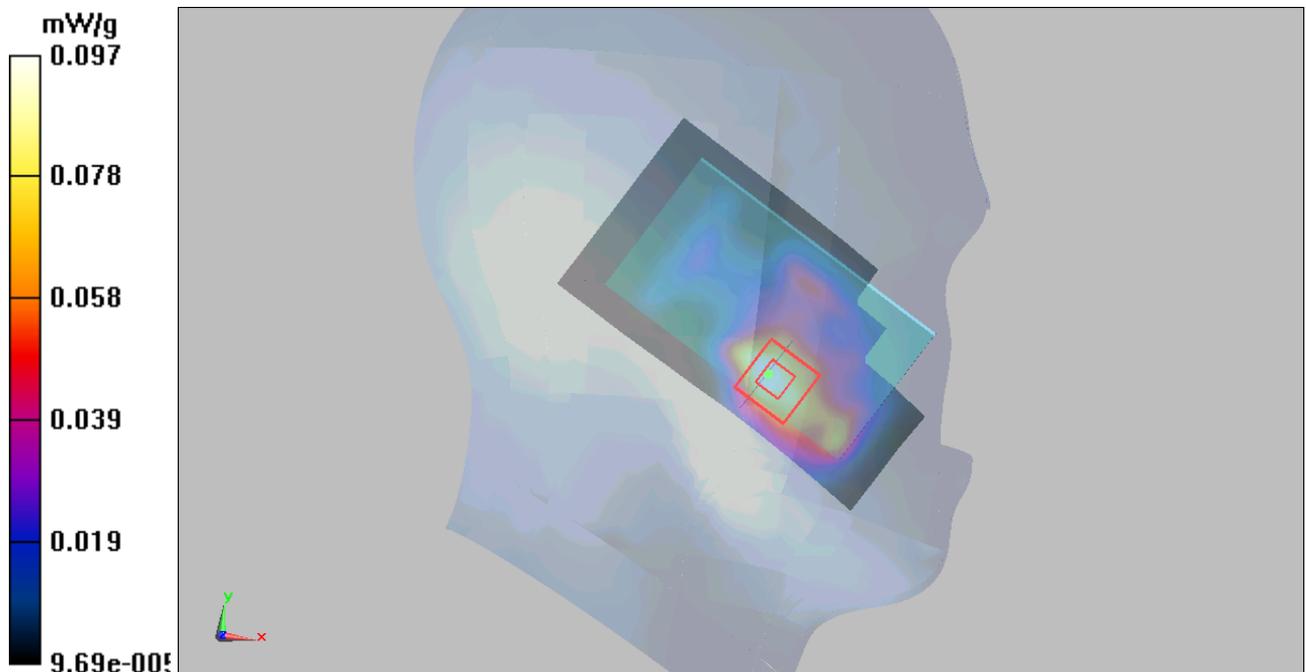
Figure 48 802.11b Left Hand Touch Cheek Channel 11

802.11b Left Cheek Middle

Date/Time: 7/30/2010 3:04:12 PM

Communication System: 802.11b; Frequency: 2437 MHz;Duty Cycle: 1:1

Medium parameters used: f = 2437 MHz; σ = 1.77 mho/m; ε_r = 38.9; ρ = 1000 kg/m^3

Ambient Temperature:22.3 ℃   Liqiud Temperature: 21.5℃

DASY4 Configuration:

Probe: EX3DV4 - SN3661; ConvF(7.22, 7.22, 7.22); Calibrated: 12/30/2009

Electronics: DAE4 Sn871; Calibrated: 11/11/2009

Phantom: SAM2; Type: SAM;

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

Cheek Middle/Area Scan (51x91x1): Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (interpolated) = 0.110 mW/g

Cheek Middle/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 2.41 V/m; Power Drift = -0.051 dB

Peak SAR (extrapolated) = 0.286 W/kg

SAR(1 g) = 0.068 mW/g; SAR(10 g) = 0.035 mW/g
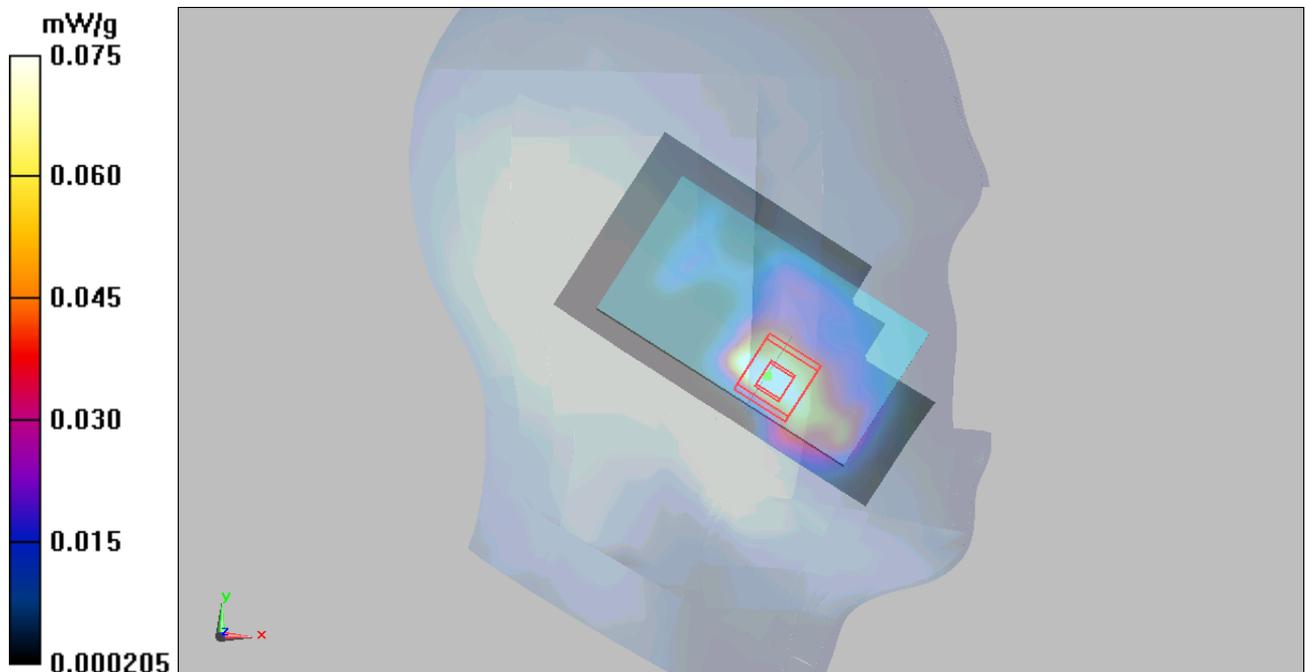
Maximum value of SAR (measured) = 0.075 mW/g

Figure 49 802.11b Left Hand Touch Cheek Channel 6

802.11b Left Cheek Low

Date/Time: 7/30/2010 3:50:33 PM

Communication System: 802.11b; Frequency: 2412 MHz;Duty Cycle: 1:1

Medium parameters used: f = 2412 MHz; σ = 1.74 mho/m; ε_r = 38.9; ρ = 1000 kg/m^3

Ambient Temperature:22.3 ℃   Liqiud Temperature: 21.5℃

DASY4 Configuration:

Probe: EX3DV4 - SN3661; ConvF(7.22, 7.22, 7.22); Calibrated: 12/30/2009

Electronics: DAE4 Sn871; Calibrated: 11/11/2009

Phantom: SAM2; Type: SAM;

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

Cheek Low/Area Scan (51x91x1): Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (interpolated) = 0.090 mW/g

Cheek Low/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 2.36 V/m; Power Drift = -0.067 dB

Peak SAR (extrapolated) = 0.145 W/kg

SAR(1 g) = 0.057 mW/g; SAR(10 g) = 0.030 mW/g

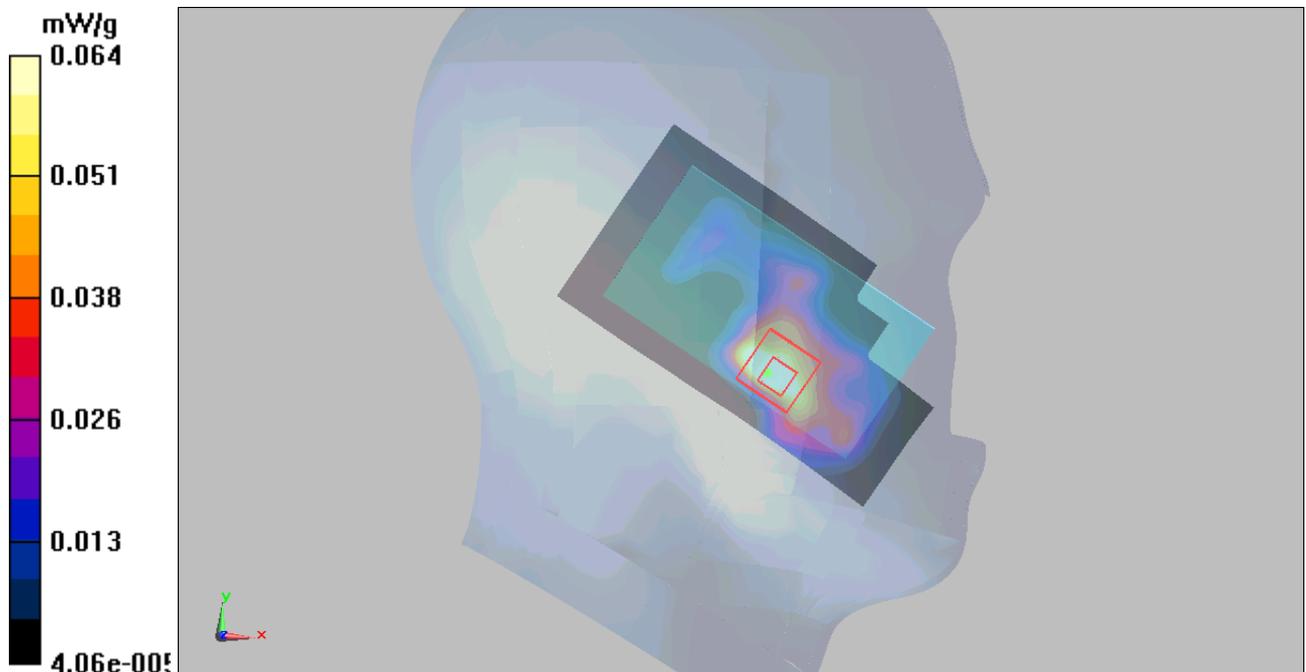Maximum value of SAR (measured) = 0.064 mW/g

Figure 50 802.11b Left Hand Touch Cheek Channel 1

802.11b Left Tilt Middle

Date/Time: 7/30/2010 3:25:24 PM

Communication System: 802.11b; Frequency: 2437 MHz;Duty Cycle: 1:1

Medium parameters used: f = 2437 MHz; σ = 1.77 mho/m; $ε_r$ = 38.9; ρ = 1000 kg/m^3

Ambient Temperature:22.3 ℃   Liqiud Temperature: 21.5℃

DASY4 Configuration:

Probe: EX3DV4 - SN3661; ConvF(7.22, 7.22, 7.22); Calibrated: 12/30/2009

Electronics: DAE4 Sn871; Calibrated: 11/11/2009

Phantom: SAM2; Type: SAM;

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

Tilt Middle/Area Scan (51x91x1): Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (interpolated) = 0.017 mW/g

Tilt Middle/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 2.68 V/m; Power Drift = -0.023 dB

Peak SAR (extrapolated) = 0.059 W/kg

SAR(1 g) = 0.014 mW/g; SAR(10 g) = 0.006 mW/g

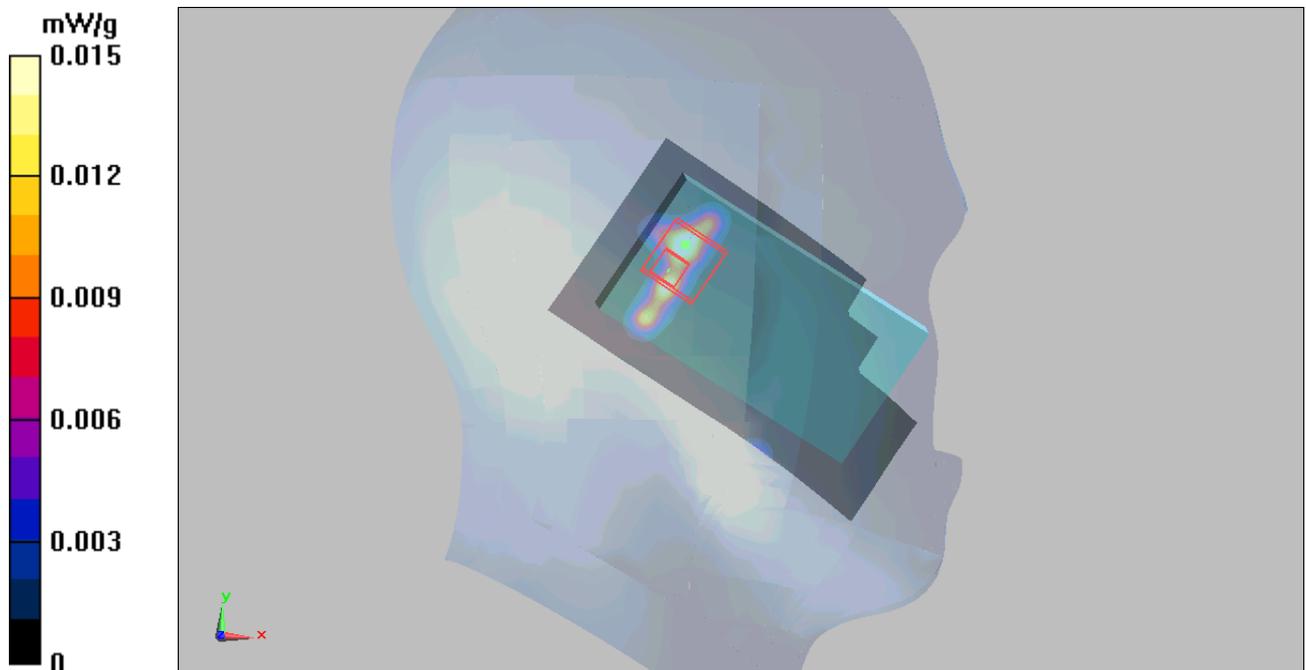Maximum value of SAR (measured) = 0.015 mW/g

Figure 51 802.11b Left Hand Tilt 15° Channel 6

802.11b Right Cheek Middle

Date/Time: 7/30/2010 2:18:36 PM

Communication System: 802.11b; Frequency: 2437 MHz;Duty Cycle: 1:1

Medium parameters used: f = 2437 MHz; σ = 1.77 mho/m; ε_r = 38.9; ρ = 1000 kg/m³

Ambient Temperature:22.3 ℃   Liqiud Temperature: 21.5℃

DASY4 Configuration:

Probe: EX3DV4 - SN3661; ConvF(7.22, 7.22, 7.22); Calibrated: 12/30/2009

Electronics: DAE4 Sn871; Calibrated: 11/11/2009

Phantom: SAM2; Type: SAM;

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

Cheek Middle/Area Scan (51x91x1): Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (interpolated) = 0.075 mW/g

Cheek Middle/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 2 V/m; Power Drift = -0.020 dB

Peak SAR (extrapolated) = 0.143 W/kg

SAR(1 g) = 0.048 mW/g; SAR(10 g) = 0.026 mW/g

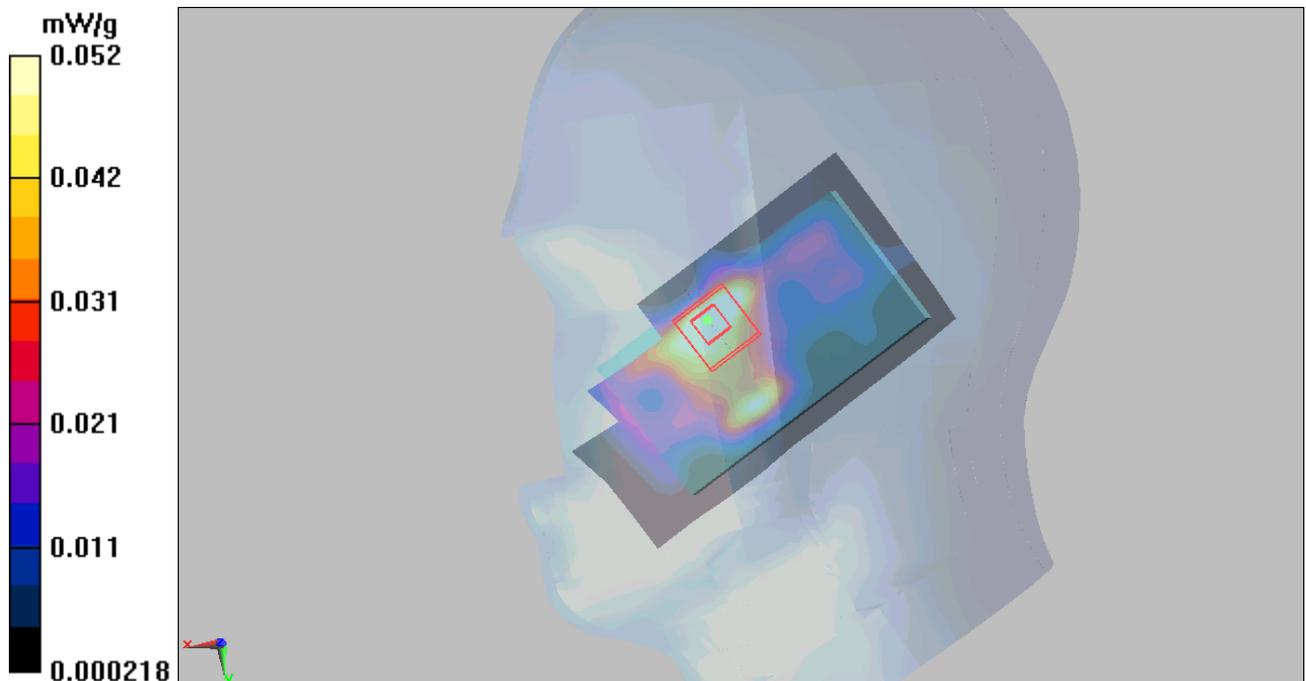Maximum value of SAR (measured) = 0.052 mW/g

Figure 52 802.11b Right Hand Touch Cheek Channel 6

802.11b Right Tilt Middle

Date/Time: 7/30/2010 2:39:14 PM

Communication System: 802.11b; Frequency: 2437 MHz;Duty Cycle: 1:1

Medium parameters used: f = 2437 MHz; σ = 1.77 mho/m; $ε_r$ = 38.9; ρ = 1000 kg/m^3

Ambient Temperature:22.3 ℃   Liqiud Temperature: 21.5℃

DASY4 Configuration:

Probe: EX3DV4 - SN3661; ConvF(7.22, 7.22, 7.22); Calibrated: 12/30/2009

Electronics: DAE4 Sn871; Calibrated: 11/11/2009

Phantom: SAM2; Type: SAM;

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

Tilt Middle/Area Scan (51x91x1): Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (interpolated) = 0.053 mW/g

Tilt Middle/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 3.04 V/m; Power Drift = -0.030 dB

Peak SAR (extrapolated) = 0.043 W/kg

SAR(1 g) = 0.019 mW/g; SAR(10 g) = 0.006 mW/g

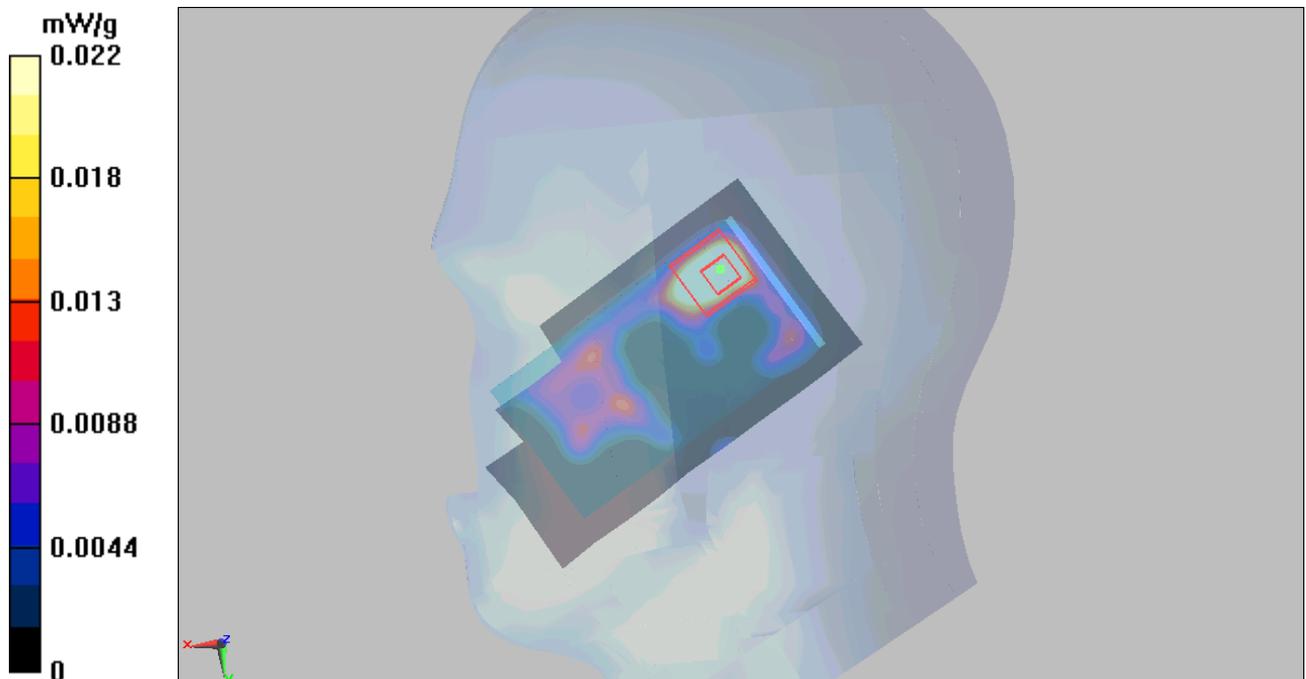Maximum value of SAR (measured) = 0.022 mW/g

Figure 53 802.11b Right Hand Tilt 15° Channel 6

802.11b Towards Ground Middle

Date/Time: 8/2/2010 6:33:47 PM

Communication System: 802.11b; Frequency: 2437 MHz;Duty Cycle: 1:1

Medium parameters used (interpolated): f = 2437 MHz; σ = 1.91 mho/m; ε_r = 51.9; ρ = 1000 kg/m^3

Ambient Temperature:22.3 ℃   Liqiud Temperature: 21.5℃

Phantom section: Flat Section

DASY4 Configuration:

Probe: EX3DV4 - SN3661; ConvF(7.34, 7.34, 7.34); Calibrated: 12/30/2009

Electronics: DAE4 Sn871; Calibrated: 11/11/2009

Phantom: SAM2; Type: SAM;

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

Towards Ground Middle 2/Area Scan (51x91x1): Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (interpolated) = 0.00653 mW/g

Towards Ground Middle 2/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 0.802 V/m; Power Drift = 0.100 dB

Peak SAR (extrapolated) = 0.040 W/kg

SAR(1 g) = 0.007 mW/g; SAR(10 g) = 0.001 mW/g

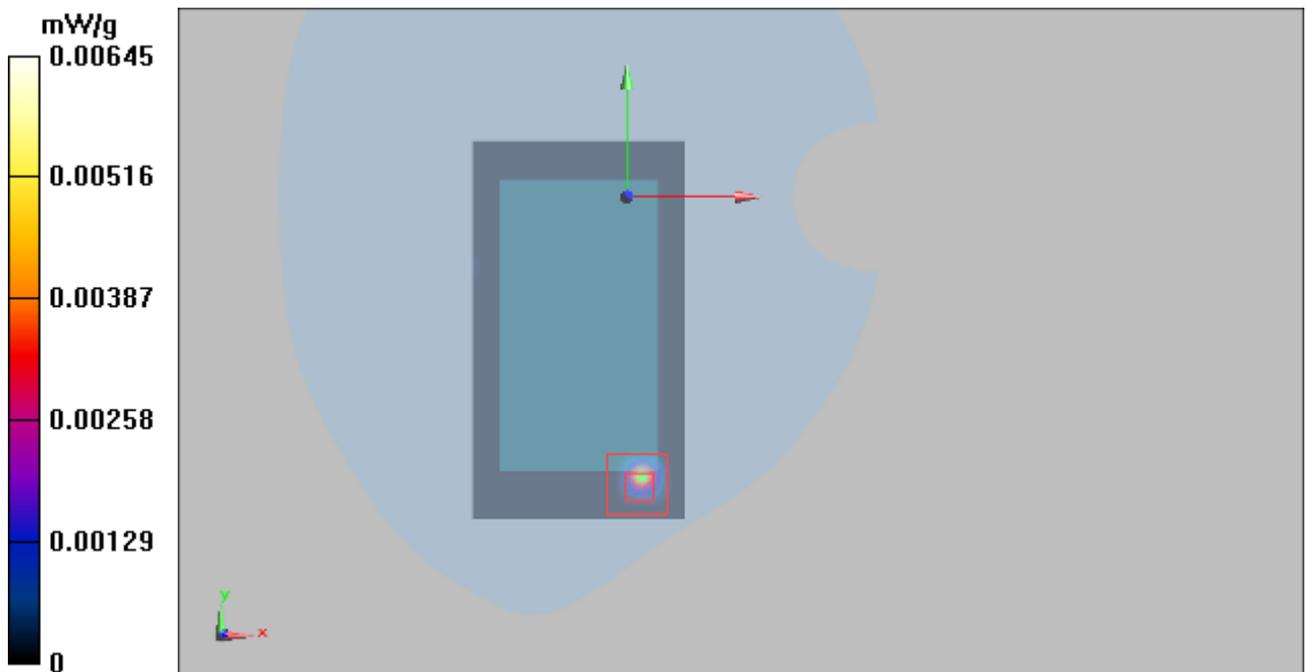Maximum value of SAR (measured) = 0.00645 mW/g

Figure 54 Body, Towards Ground, 802.11b Channel 6

802.11b Towards Phantom High

Date/Time: 8/2/2010 5:39:30 PM

Communication System: 802.11b; Frequency: 2462 MHz;Duty Cycle: 1:1

Medium parameters used: f = 2462 MHz; σ = 1.94 mho/m; ε_r = 51.8; ρ = 1000 kg/m^3

Ambient Temperature:22.3 ℃   Liqiud Temperature: 21.5℃

Phantom section: Flat Section

DASY4 Configuration:

Probe: EX3DV4 - SN3661; ConvF(7.34, 7.34, 7.34); Calibrated: 12/30/2009

Electronics: DAE4 Sn871; Calibrated: 11/11/2009

Phantom: SAM2; Type: SAM;

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

Towards Phantom High/Area Scan (51x91x1): Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (interpolated) = 0.035 mW/g

Towards Phantom High/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 2.02 V/m; Power Drift = 0.029 dB

Peak SAR (extrapolated) = 0.107 W/kg

SAR(1 g) = 0.020 mW/g; SAR(10 g) = 0.008 mW/g
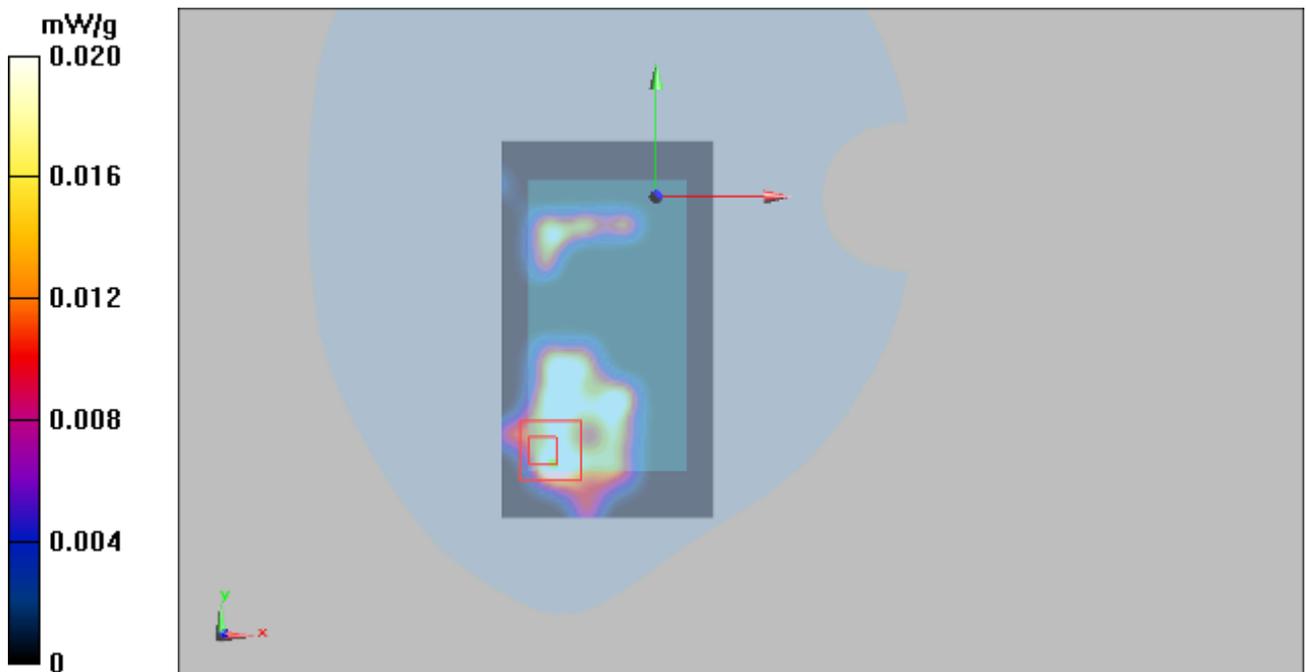
Maximum value of SAR (measured) = 0.020 mW/g

Figure 55 Body, Towards Phantom, 802.11b Channel 11

802.11b Towards Phantom Middle

Date/Time: 8/2/2010 5:54:33 PM

Communication System: 802.11b; Frequency: 2437 MHz;Duty Cycle: 1:1

Medium parameters used (interpolated): f = 2437 MHz; σ = 1.91 mho/m; ε_r = 51.9; ρ = 1000 kg/m^3

Ambient Temperature:22.3 ℃   Liqiud Temperature: 21.5℃

Phantom section: Flat Section

DASY4 Configuration:

Probe: EX3DV4 - SN3661; ConvF(7.34, 7.34, 7.34); Calibrated: 12/30/2009

Electronics: DAE4 Sn871; Calibrated: 11/11/2009

Phantom: SAM2; Type: SAM;

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

Towards Phantom Middle/Area Scan (51x91x1): Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (interpolated) = 0.026 mW/g

Towards Phantom Middle/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 2.22 V/m; Power Drift = 0.030 dB

Peak SAR (extrapolated) = 0.056 W/kg

SAR(1 g) = 0.012 mW/g; SAR(10 g) = 0.005 mW/g

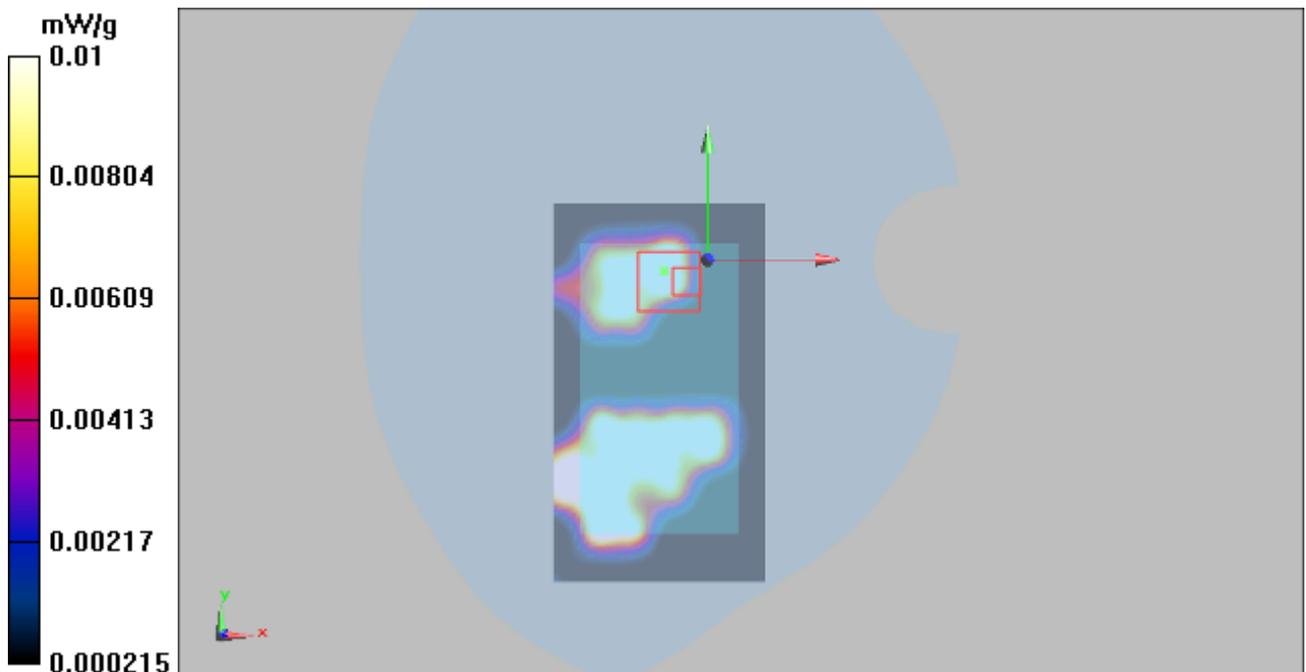Maximum value of SAR (measured) = 0.010 mW/g

Figure 56 Body, Towards Phantom, 802.11b Channel 6

802.11b Towards Phantom Low

Date/Time: 8/2/2010 5:07:25 PM

Communication System: 802.11b; Frequency: 2412 MHz;Duty Cycle: 1:1

Medium parameters used: f = 2412 MHz; σ = 1.88 mho/m; $ε_r$ = 51.9; ρ = 1000 kg/m^3

Ambient Temperature:22.3 ℃   Liqiud Temperature: 21.5℃

Phantom section: Flat Section

DASY4 Configuration:

Probe: EX3DV4 - SN3661; ConvF(7.34, 7.34, 7.34); Calibrated: 12/30/2009

Electronics: DAE4 Sn871; Calibrated: 11/11/2009

Phantom: SAM2; Type: SAM;

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

Towards Phantom Low/Area Scan (51x91x1): Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (interpolated) = 0.023 mW/g

Towards Phantom Low/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 1.49 V/m; Power Drift = 0.039 dB

Peak SAR (extrapolated) = 0.094 W/kg

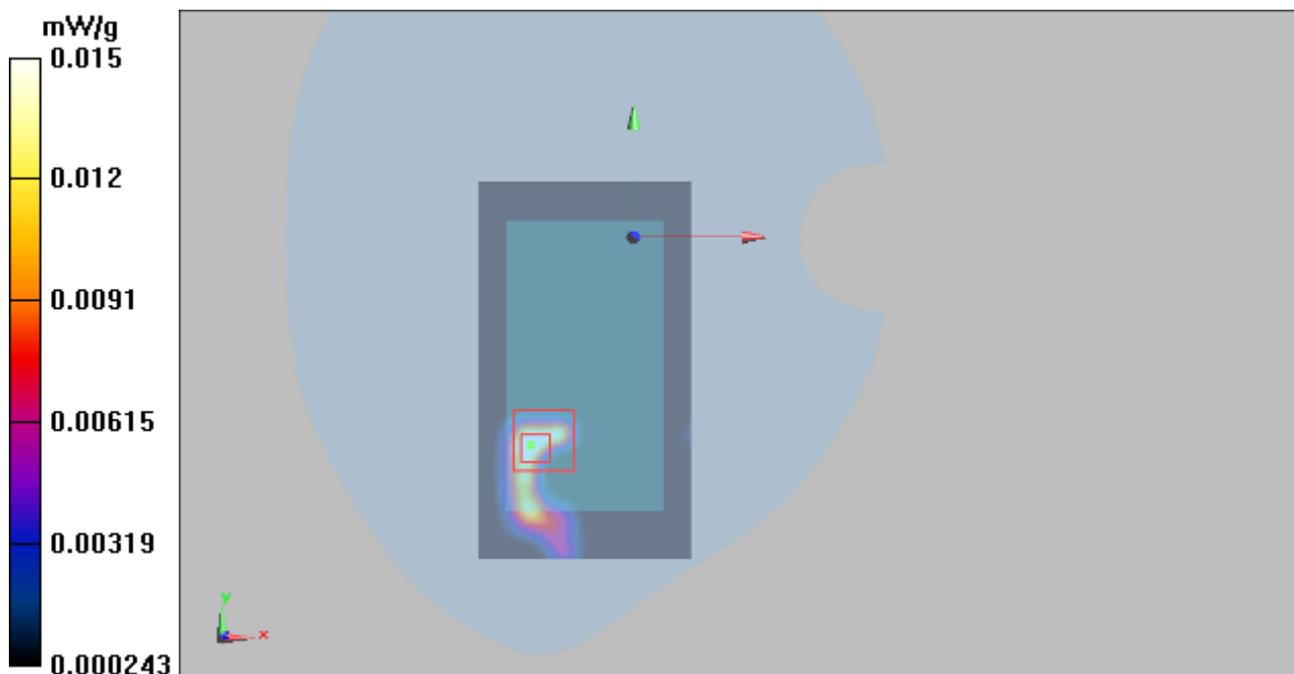**SAR(1 g) = 0.020 mW/g; SAR(10 g) = 0.007 mW/g**

Maximum value of SAR (measured) = 0.015 mW/g

Figure 57 Body, Towards Phantom, 802.11b Channel 1