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Regulatory Compliance Group
IT R&D Center

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Gyeonggi-do, Korea 443-742

TEST REPORT ON SAR

Model Tested:	**GT-N7100**
FCC ID (Requested):	**A3LGTN7100**
Job No:	**FJ-213**
Report No:	**FJ-213-S1**

- Abstract -

This document reports on SAR Tests carried out in accordance with FCC/OET Bulletin 65, Supplement C(June 2001).

Prepared By

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1. GENERAL INFORMATION

Test Dates :	Aug.08, 2012 ~ Aug.27, 2012
Manufacturer :	SAMSUNG ELECTRONICS Co., Ltd.
Address :	416 Maetan3-Dong, Suwon City, Korea
Test Standard :	§2.1093; FCC/OET Bulletin 65, Supplement C(June 2001) Licensed Portable Transmitter Held to Ear (PCE)
FCC Classification :	Digital Transmitter System (DTS) Unlicensed National Information Infrastructure Tx (UNII)
Tested for :	FCC/TCB Certification

2. DESCRIPTION OF DEVICE

Test Sample :	850/1900 GSM/GPRS/EDGE/WCDMA/HSPA Mobile Phone with WLAN, Bluetooth and NFC
Model Number :	GT-N7100
Serial Number :	Identical prototype (S/N : # FJ-213-E)
Tx Freq.Range :	824.2 ~ 848.8 MHz (GSM850), 1850.20 ~ 1909.80 MHz (GSM1900) 826.4 ~ 846.6 MHz (WCDMA850), 1852.4 ~ 1907.6 MHz (WCDMA1900) 2412 ~ 2462 MHz (2.4GHz WLAN) 5180 ~5240 MHz (5.2 GHz WLAN), 5260 ~ 5320 MHz (5.3 GHz WLAN) 5500 ~5700 MHz (5.5 GHz WLAN), 5745 ~5825 MHz (5.8 GHz WLAN) 2402 ~ 2480 MHz (Bluetooth) 13.56 MHz (NFC)
Antenna Manufacturer :	PARTRON Model No.: J90-OY5480
Antenna Dimensions :	60.67 X 19.55 X 5.0 (mm)
Separation distance between Main and Bluetooth antenna :	102mm

3. DESCRIPTION OF TEST EQUIPMENT

3.1 SAR Measurement Setup

Robotic System

Measurements are performed using the DASY4 (or DASY5) automated dosimetric assessment system. Which is made by Schmid & Partner Engineering AG (SPEAG) in Zurich, Switzerland and consists of high precision robotics system (Stäubli), robot controller, measurement server, Samsung computer, near-field probe, probe alignment sensor, and the SAM twin phantom containing the brain equivalent material. The robot is a six-axis industrial robot performing precise movements to position the probe to the location (points) of maximum electromagnetic field (EMF) (see Fig. 3.1).

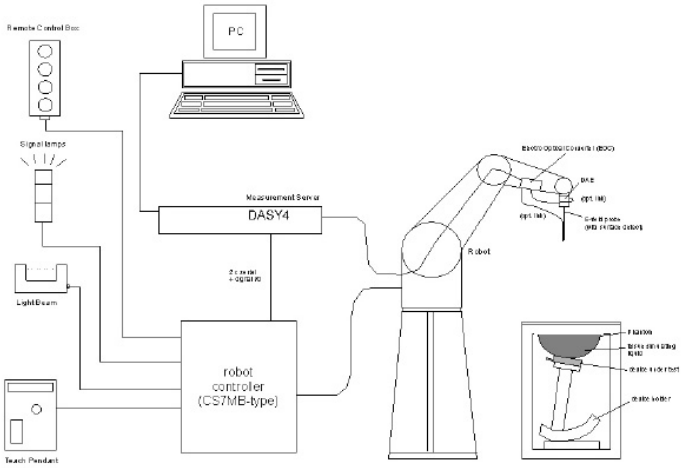


Figure 3.1 SAR Measurement System Setup

System Hardware

A cell controller system contains the power supply, robot controller, teach pendant (Joystick), and a remote control is used to drive the robot motors. The PC consists of the Samsung computer with Windows XP system and SAR Measurement Software DASY4 (or DASY5), LCD monitor, mouse and keyboard. The Stäubli Robot is connected to the cell controller to allow software manipulation of the robot. A data acquisition electronic (DAE) circuit that performs the signal amplification, signal multiplexing, AD-conversion, offset measurements, mechanical surface detection, collision detection, etc. is connected to the Electro-optical coupler (EOC). The EOC performs the conversion from the optical into digital electric signal of the DAE and transfers data to the measurement server.

System Electronics

The DAE4(or DAE3) consists of a highly sensitive electrometer-grade preamplifier with auto-zeroing, a channel and gain-switching multiplexer, a fast 16-bit AD-converter and a command decoder and control logic unit. Transmission to the measurement server is accomplished through an optical downlink for data and status information and an optical uplink for commands and clock lines. The mechanical probe mounting device includes two different sensor systems for frontal and sidewise probe contacts. They are also used for mechanical surface detection and probe

collision detection. The robot uses its own controller with a built in VME-bus computer.

3.2 E-field Probe

Figure 3.2 DAE System

The SAR measurement were conducted with the dosimetric probe ES3DV2, ES3DV3, EX3DV4 and ET3DV6, designed in the classical triangular configuration (see Fig.3.3) and optimized for dosimetric evaluation. The probe is constructed using the thick film technique; with printed resistive lines on ceramic substrates. If the probe is flatly touching the surface, the coupling is zero. The distance of the coupling maximum to the surface is independent of the surface reflectivity and largely independent of the surface to probe angle. The DASY4 software reads the reflection during a software approach and looks for the maximum using a 2nd order fitting (see Fig.3.2). The approach is stopped at reaching the maximum.

Probe Specifications

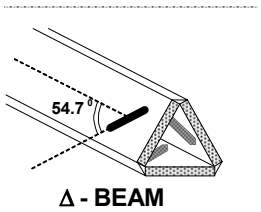


Figure 3.3 Triangular Probe Configuration

Construction: Symmetrical design with triangular core
Interleaved sensors
Built-in shielding against static charges
PEEK enclosure material (resistant to organic solvents, e.g., DGBE)

Calibration: Basic Broad Band Calibration in air: 10-3000 MHz
Conversion Factors (CF) for HSL 900 and HSL 1800

Additional CF for other liquids and frequencies upon request

Frequency: 10 MHz to > 6 GHz; Linearity: ± 0.2 dB (30 MHz to 3 GHz)

Directivity: **[ES3DV3], [ET3DV6]**
± 0.2 dB in HSL (rotation around probe axis)
± 0.3 dB in tissue material (rotation normal to probe axis)

[EX3DV4]
± 0.3 dB in HSL (rotation around probe axis)
± 0.5 dB in tissue material (rotation normal to probe axis)

Dynamic Range: **[ES3DV3], [ET3DV6]**
5μW/g to > 100mW/g; Linearity: ± 0.2dB

[EX3DV4]

10 µW/g to > 100 mW/g; Linearity: ± 0.2 dB

Dimensions

[ES3DV3], [ES3DV2]

Overall length: 330 mm (Tip: 20 mm)

Tip diameter: 3.9 mm (Body: 12 mm)

Distance from probe tip to dipole centers: 2.1 mm

[EX3DV4]

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

[ES3DV3] ,[ES3DV2]

[ET3DV6]

Overall length: 330mm

Tip length: 16mm

Body diameter: 12mm

Tip diameter: 6.8mm

Distance from probe tip to dipole centers: 2.7mm

[EX3DV4]

Application

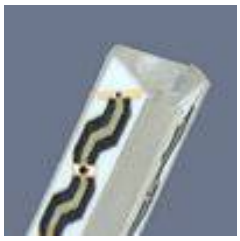
[ES3DV3], [ES3DV2]

General dosimetry up to 5 GHz Dosimetry in strong gradient fields Compliance tests of mobile phones

[EX3DV4]

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 %.



[ET3DV6]

[ET3DV6]

General dosimetry up to 3 GHz

Compliance tests of mobile phones

Fast automatic scanning in arbitrary phantoms

Optical Surface Detection

[ET3DV6]

± 0.2 mm repeatability in air and clear liquids over diffuse reflecting surfaces

3.3 Phantom

SAM Twin Phantom

The SAM Twin Phantom V4.0 is constructed of a fiberglass shell integrated in a wooden table. 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. (See Figure 3.5)

Figure3.5 SAM Twin Phantom

SAM Twin Phantom Specification

Construction	The shell corresponds to the specifications of the Specific Anthropomorphic Mannequin (SAM) phantom defined in IEEE 1528-2003, EN 50361:2001 and IEC 62209. 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 evaporation of the liquid.
Shell Thickness	2 ± 0.2 mm
Filling Volume	Approx. 25 liters
Dimensions	Height: 810 mm; Length: 1000 mm; Width: 500 mm

Modular Flat Phantom

The Modular Flat Phantom V5.1 is constructed of a fiberglass shell integrated in a wooden table. Also It consists of three identical flat phantoms (modules) which can be installed and removed separately without emptying the liquid, as well as a wooden support.. It enables the dosimetric evaluation of 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. (See Figure 3.6)

Figure 3.6 Modular Flat

Modular Flat Phantom Specification

Construction	The shell corresponds to the specifications of IEEE 1528-2003. It enables the dosimetric evaluation of body mounted usage above 800 MHz at the flat phantom region. A cover prevents evaporation of the liquid
Shell Thickness	2 ± 0.2 mm
Filling Volume	Approx. 10 liters
Dimension	Wooden support - Height: 810 mm; Length: 830 mm; Width: 500 mm Each Module - Height:190 mm; Length: 200 mm; width: 300 mm

3.4 Brain Simulating Mixture Characterization

The brain mixtures consist of a viscous gel using hydroxethylcellullose (HEC) gelling agent and saline solution (see Table 3.1). Preservation with a bactericide is added and visual inspection is made to make sure air bubbles are not trapped during the mixing process. The mixture is calibrated to obtain proper dielectric constant (permittivity) and conductivity of the desired tissue.

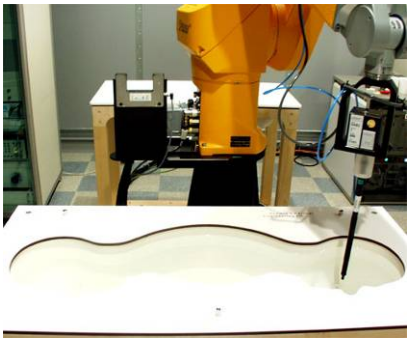


Figure 3.7 Simulated Tissue

Table 3.1 Composition of the Tissue Equivalent Matter

INGREDIENTS	835MHz Brain	835MHz Muscle	1900MHz Brain	1900MHz Muscle	2450MHz Brain	2450MHz Muscle
WATER	40.29%	50.75%	55.24%	70.23%	62.7%	73.2%
SUGAR	57.90%	48.21%	-	-	-	-
SALT	1.38%	0.94%	0.24%	0.21%	-	0.04%
TWEEN20	-	-	44.52%	29.56%	37.3%	26.76%
BACTERIACIDE	0.18%	0.10%	-	-	-	-
HEC	0.25%	-	-	-	-	-
Dielectric Constant Target	41.50	55.20	40.00	53.30	39.2	52.7
Conductivity Target (S/m)	0.900	0.970	1.400	1.520	1.80	1.95

Table 3.2 Simulating Liquids for 5GHz, Manufactured by SPEAG

INGREDIENTS	Brain	Muscle
WATER	50 - 65%	60 - 80%
Mineral oil	10 - 30%	-
Emulsifiers	8 - 25%	-
Esters, Emulsfiers, Inhibitors	-	20 - 40 %
Sodium salt	0 - 1.5%	0 - 1.5%

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3.5 Device Holder for Transmitters

In combination with the Twin SAM Phantom V4.0, the Mounting Device (see Fig. 3.7) enables the rotation of the mounted transmitter in spherical coordinates whereby the rotation points is the ear opening. The devices can be easily, accurately and repeatedly be positioned according to the EN 50360:2001 and FCC specifications. The device holder can be locked at different phantom locations (left head, right head, flat phantom).

Figure 3.8 Device Holder

*Note: A simulating human hand is not used due to the complex anatomical and geometrical structure of the hand that may produced infinite number of configuration. To produce worst-case condition (the hand absorbs antenna output power), the hand is omitted during the tests.

3.6 Validation Dipole

The reference dipole should have a return loss better than –20 dB (measured in the setup) at the resonant frequency to reduce the uncertainty in the power measurement.

Frequency	835, 1900, 2450, 5000 MHz
Return Loss	< -20 dB at specified validation position
Dimensions	D835V2: dipole length: 161 mm; overall height: 330 mm D1900V2: dipole length: 68 mm; overall height: 300 mm D2450V2: dipole length: 51.8 mm; overall height: 300 mm D5000V2: dipole length: 20.6mm; overall height: 300 mm

Note:

Usage of SAR dipoles calibrated less than 2 years ago but more than 1 year ago were confirmed in maintaining return loss (< -20dB, within 20% of prior calibration) and impedance (within 5 ohm from prior calibration) requirements per extended calibration in KDB 450824

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3.7 Equipment Calibration

Table 3.3 Test Equipment Calibration

Type	Calibration Date	Calibration Due Date	Serial No.
SPEAG E-Field Probe EX3DV4	Feb.21, 2012	Feb.21, 2013	3520
SPEAG DAE4	Sep.21, 2011	Sep.21, 2012	533
SPEAG Validation Dipole D835V2	Nov.18, 2011	Nov.18, 2013	4d111
SPEAG Validation Dipole D1900V2	Jan.26, 2012	Jan.26, 2014	5d023
SPEAG Validation Dipole D2450V2	Feb.23, 2012	Feb.23, 2014	807
SPEAG Validation Dipole D5GHzV2	Jul.02, 2012	Jul.02, 2014	1132
Stäubli Robot RX90BL	Not Required	Not Required	F05/51G6A1/A/01
SPEAG SAM Twin Phantom V4.0	Not Required	Not Required	TP-1248
SPEAG SAM Twin Phantom V4.0	Not Required	Not Required	TP-1247
Modular Phantom	Not Required	Not Required	MP-1007
E4421B Signal Generator	Oct.12, 2011	Oct.12, 2012	MY41000654
BBS3Q7ELU Power Amp	Oct.12, 2011	Oct.12, 2012	1007D/C0035
E4419B Power meter	Oct.12, 2011	Oct.12, 2012	GB41293847
HP-8753ES Network Analyzer	Apr.16, 2012	Apr.16, 2013	US39173712
HP85070C Dielectric Probe Kit	Not Required	Not Required	US99360087
Digital thermo-hygrometer	Feb.09, 2012	Feb.09, 2013	1367
Digital thermo-hygrometer	Feb.09, 2012	Feb.09, 2013	SK-L200TH
E4419B Power meter	Feb.25, 2012	Feb.25, 2013	MY45103291
E9300B Power sensor	Mar.04, 2012	Mar.04, 2013	MY41496209
E9300B Power sensor	Mar.04, 2012	Mar.04, 2013	MY41496085
DASY4 S/W (ver 4.7)	Not Required	Not Required	-
8560E Spectrum Analyzer	Sep.16, 2011	Sep.16, 2012	3635A02452
778D Dual Directional Coupler	Dec.02, 2011	Dec.02, 2012	50189
777D Dual Directional Coupler	Feb.23, 2012	Feb.23, 2013	07523
772D Dual Directional Coupler	Mar.04, 2012	Mar.04, 2013	ZA200100954
Pre-Amplifier 84498B	Dec.09, 2011	Dec.09, 2012	3008A00691
Base Station Simulator	Dec.19, 2011	Dec.19, 2012	GB46490112
Communication tester(E5515C)	Nov.27, 2011	Nov.27, 2012	GB42230535

NOTE:
The E-field probe was calibrated by SPEAG, by temperature measurement procedure. Dipole Validation measurement is performed by Samsung Lab. before each test. (see § 7.2) The brain/body simulating material is calibrated by Samsung using the dielectric probe system and network analyzer to determine the conductivity and permittivity (dielectric constant) of the brain/body-equivalent material. (see § 7.1)

4. SAR MEASUREMENT PROCEDURE

The evaluation was performed using the following procedure.

STEP 1

The SAR measurement was taken at a selected spatial reference point to monitor power variations during testing. This fixed location point was measured and used as a reference value.

STEP 2

The SAR distribution at the exposed side of the head was measured at a distance of 3.9mm from the inner surface of the shell. The area covered the entire dimension of the head and the horizontal grid spacing was 20mm x 20mm. Based on the area scan data, the area of the maximum absorption was determined by spline interpolation.

STEP 3

Around this point, a volume of 32mm x 32mm x 30mm (fine resolution volume scan, zoom scan) was assessed by measuring 5 x 5 x 7 points. On this basis of this data set, the spatial peak SAR value was evaluated with the following procedure:

The data at the surface was extrapolated, since the center of the dipoles is 2.7mm away from the tip of the probe and the distance between the surface and the lowest measuring point is 1.2mm. The extrapolation was based on a least square algorithm. A polynomial of the fourth order was calculated through the points in z-axes. This polynomial was then used to evaluated the points between the surface and the probe tip. The maximum interpolated value was searched with a straight-forward algorithm. Around this maximum the SAR values averaged over the spatial volumes (1g or 10g) were computed using the 3D-Spline interpolation algorithm. The 3D-spline is composed of three one-dimensional splines with the “Not a knot” condition (in x, y, and z directions). The volume was integrated with the trapezoidal algorithm. One thousand points (10 x 10 x 10) were interpolated to calculate the average. All neighboring volumes were evaluated until no neighboring volume with a higher average value was found.

STEP 4

The SAR value at the same location as in step 1 was again measured.

(If the value changed by more than 5%, the evaluation is repeated.)

STEP 5

For 5GHz testing finer resolution zoom scans were performed as specified by FCC SAR Measurement Requirements for 3 -6 GHz, KDB pub 865664. The 5GHz zoom scan requires a minimum volume of 24mm x 24mm x 20mm and 7 x 7 x 11 points.

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5. DESCRIPTION OF TEST POSITION

5.1 SAM Phantom Shape

Figure 5.1 shows the front, back and side views of SAM. The point “M” is the reference point for the center of mouth, “LE” is the left ear reference point (ERP), and “RE” is the right ERP. The ERPs are 15 mm posterior to the entrance to ear canal (EEC) along the B-M line (Back-Mouth), as shown in Figure 5.2.

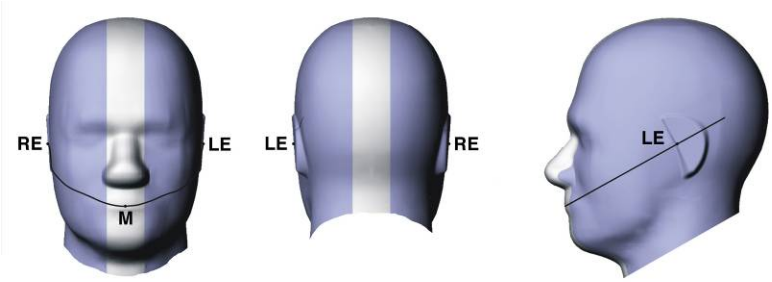

Figure 5.1 Front, back and side view of SAM

The plane passing through the two ear canals and M is defined as the Reference Plane. The line N-F (Neck-Front) perpendicular to the reference plane and passing through the RE (or LE) is called the Reference Pivoting Line (see Figure 5.3). Line B-M is perpendicular to the N-F line. Both N-F and B-M lines should be marked on the external phantom shell to facilitate handset positioning. Posterior to the N-F line, the thickness of the phantom shell with the shape of an ear is a flat surface 6 mm thick at the ERPs.

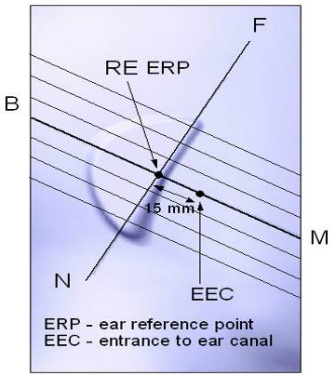

Figure 5.2 Close up side view

5.2 “cheek” Position

Two imaginary lines on the handset were established: the vertical centerline and the horizontal line. The test device was placed in a normal operating position with the “test device reference point” located along the “vertical centerline” on the front of the device aligned to the “ear reference point” (see Fig. 5.4). The “test device reference point” was than located at the same level as the center of the eat reference point. The test device was positioned so that the “vertical centerline” was bisecting the front surface of the handset at it’s tip and bottom edges, positioning the “ear reference point” on the outer surface of the both the left and right head phantoms on the ear reference point

Step 1

The test device was positioned with the handset close to the surface of the phantom such that point A is on the (virtual) extension of the line passing through points RE and LE on the phantom (see Figure 5.5), such that the

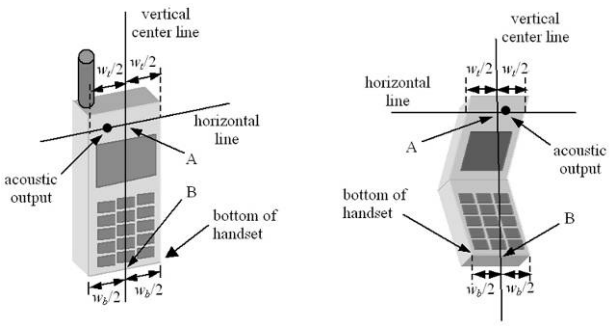

Figure 5.4 Handset vertical and horizontal reference lines

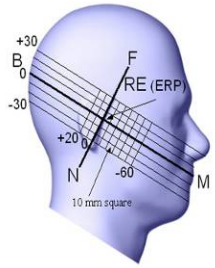

Figure 5.3 Side view of the phantom showing relevant markings

plane defined by the vertical center line and the horizontal line of the phone is approximately parallel to the sagittal plane of the phantom

.

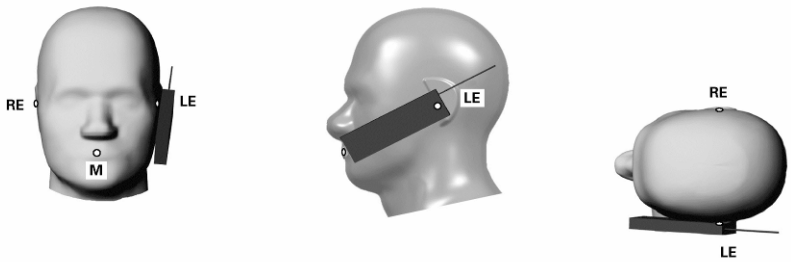

Figure 5.5 Front, Side and Top View of Cheek/Touch Position

Step 2

The handset was translated towards the phantom along the line passing through RE & LE until the handset touches the ear.

Step 3

While maintaining the handset in this plane, the handset was rotated around the LE-RE line until the vertical centerline was in the plane normal to MB-NF including the line MB (reference plane).

Step 4

Rotate the handset around the vertical centerline until the phone (horizontal line) was symmetrical was respect to the line NF.

Step 5

While maintaining the vertical centerline in the reference plane, keeping point A on the line passing through RE and LE, and maintaining the phone contact with the ear, the handset was rotated about the line NF until any point on the handset made contact with a phantom point below the ear (cheek). See Figure 5.2.

5.3 “tilted” Position

With the test device aligned in the “cheek” position :

Step 1

Repeat steps 1 to 5 of 5.2 to place the device in the “Cheek/Touch Position”

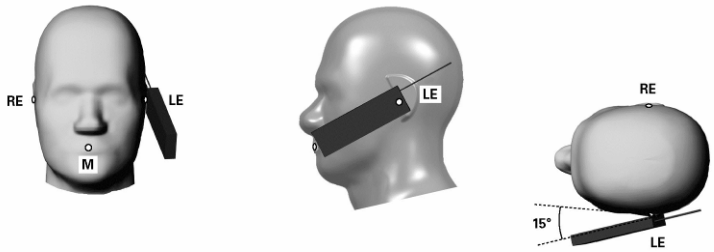

Figure 5.6 Front, side and Top View of Ear/Tilt 15° Position

Step 2

While maintaining the orientation of the phone, the phone was retracted parallel to the reference plane far enough to enable a rotation of the phone by 15 degree.

Step 3

The phone was then rotated around the horizontal line by 15 degree.

Step 4

While maintaining the orientation of the phone, the phone was moved parallel to the reference plane until any part of the phone touches the head. (In this position, point A was located on the line RE-LE). The tilted position is obtained when the contact is on the pinna. If the contact was at any location other than the pinna, the angle of the phone would then be reduced. The tilted position was obtained when any part of the phone was in contact of the ear as well as a second part of the phone was in contact with the head.

5.4 Body Holster/Belt Clip Configurations

Body-worn operating configurations are tested with the belt-clips and holsters attached to the device and positioned against a flat phantom in a normal use configuration (see Figure 5.7). A device with a headset output is tested with a headset connected to the device. Body dielectric parameters are used.

Accessories for Body-worn operation configurations are divided into two categories: those that do not contain metallic components and those that contain metallic components. When multiple accessories that do not contain metallic components are supplied with the device, the device is tested with only the accessory that dictates the closest spacing to the body. Then multiple accessories that contain metallic components are supplied with the device, the device is tested with each accessory that contains unique metallic component. If multiple accessory share an identical metallic component (i.e. the same metallic belt-clip used with different holsters with no other metallic components) only the accessory that dictates the closest spacing to the body is tested.
Body-worn accessories may not always be supplied or available as options for some Devices intended to be authorized for body-worn use. In this case, a test configuration where a separation distance between the back of the device and the flat phantom is used.

Transmitters that are designed to operate in front of a person's face, as in push-to-talk configurations, are tested for SAR compliance with the front of the device positioned to face the flat phantom. For devices that are carried next to the body such as a shoulder, waist or chest-worn transmitters, SAR compliance is tested with the accessory(ies), Including headsets and microphones, attached to the device and positioned against a flat phantom in a normal use configuration.

In all cases SAR measurements are performed to investigate the worst-case positioning. Worst-case positioning is then documented and used to perform Body SAR testing.
In order for users to be aware of the body-worn operating requirements for meeting RF exposure compliance, operating instructions and cautions statements must be included in the user's manual.

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5.5 FCC Personal Wireless Router Configurations

5.5.1 Personal Wireless Router

Some battery-operated handsets have the capability to transmit and receive internet connectivity through simultaneous transmission of WIFI in conjunction with a separate licensed transmitter. The FCC has provided guidance in KDB Publication 941225 D06 for handsets greater than 9cm x 5cm where SAR test considerations are based on a composite test separation distance of 10mm from the edges, front and back of the device with antennas 2.5cm or closer to the edge of the device, determined from general mixed use conditions for this type of devices. Since the hotspot SAR results may overlap with the body-worn accessory SAR requirements, the more conservative configurations can be considered, thus excluding some body-worn accessory SAR test.

5.5.2 SAR test Setup for Personal Wireless Router Features

When the user enables the personal wireless router functions for the handset, actual operations include simultaneous transmission of both the WIFI transmitter and another licensed transmitter. Both transmitters often do not transmit at the same transmitting frequency and thus connot be evaluated for SAR under actual use conditions. Therefore, SAR must be evaluated for each frequency transmission and mode separately and summed with the WIFI transmitter according to KDB 648474 publication procedures. The “Portable Hotspot: feature on the handset was NOT activated, to ensure the SAR measurements were evaluated for a single transmission frequency RF signal.

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Table 5-1 Mobile Hotspot Sides for SAR testing

Mode	Back	Front	Top	Bottom	Left	Right
GPRS850	Yes	Yes	No	Yes	Yes	No
GPRS1900	Yes	Yes	No	Yes	Yes	No
WCDMA850	Yes	Yes	No	Yes	Yes	No
WCDMA1900	Yes	Yes	No	Yes	Yes	No
WLAN	Yes	Yes	Yes	No	No	Yes

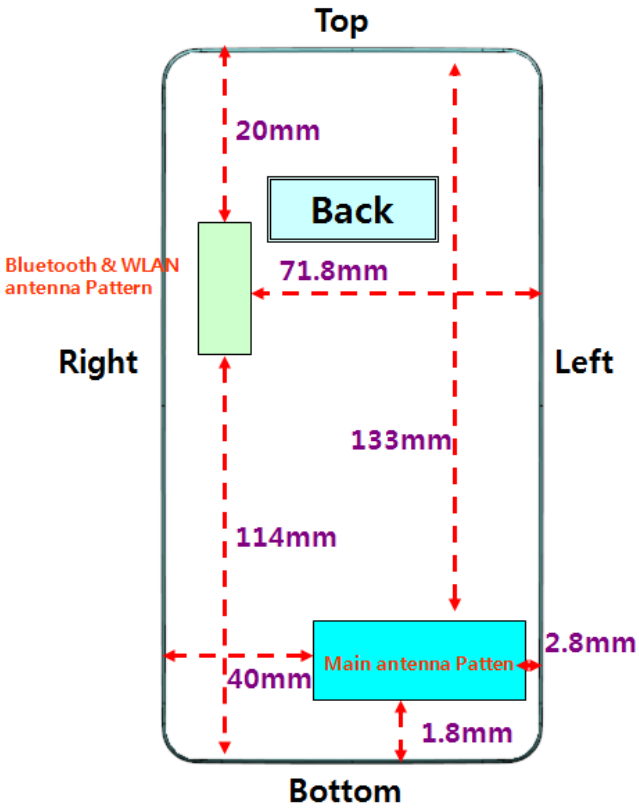

Figure 5.7 Identification of Sides for SAR testing

Note : Particular DUT edges were not necessary to be evaluated for Wireless Router SAR if the edges were greater than 2.5cm from the transmitting antenna according to FCC KDB Publication 941225 D06 guidance, page2. The antenna document shows the distances between the transmit antennas and the edges of the device. When the wireless router mode is enabled, all 5 GHz bands are disabled. Therefore 5GHz WIFI is not considered in this section.

5.6 Near Fiel Communications (NFC) Antenna

This DUT has NFC operations. The NFC antenna is integrated into the standard battery cover and will be the only battery available from the manufacturer for this model. Therefore all SAR tests were performed with the standard battery and battery cover with the NFC antenna. The device restricts the battery used to the battery model. Please refer to NFC operational descrition.

- End of page -

6. MEASUREMENT UNCERTAINTY

Table 6.1 Uncertainty Budget at 835MHz

Error Description	Uncertainty Value (±%)	Probability Distribution	Divisor	c_i	Standard uncertainty (±%)	v_i^2 or v_{eff}
Measurement System						
Probe Calibration	11.00	normal	2.000	1	5.50	∞
Axial Isotropy	4.70	rectangular	1.732	0.7	1.90	∞
Hemispherical Isotropy	9.60	rectangular	1.732	0.7	3.88	∞
Linearity	4.70	rectangular	1.732	1	2.71	∞
System Detection Limits	0.25	rectangular	1.732	1	0.14	∞
Boundary effects	1.00	rectangular	1.732	1	0.58	∞
Readout electronics	0.30	normal	1.000	1	0.30	∞
Response time	0.80	rectangular	1.732	1	0.46	∞
RF ambient conditions	3.00	rectangular	1.732	1	1.73	∞
Integration time	1.73	rectangular	1.732	1	1.00	∞
Mechanical constrains of robot	1.50	rectangular	1.732	1	0.87	∞
Probe positioning	2.90	rectangular	1.732	1	1.67	∞
Extrapolation and integration	1.00	rectangular	1.732	1	0.58	∞
Test Sample Related						
Test Sample positioning	1.12	normal	1.000	1	1.12	14
Device holded uncertainty	3.44	normal	1.000	1	3.44	∞
Power Drift	5.00	rectangular	1.732	1	2.89	∞
Phantom and Setup						
Modular Phantom uncertainty	5.62	normal	1.000	1	5.62	2
Phantom uncertainty	4.00	rectangular	1.732	1	2.31	∞
Liquid conductivity (deviation from target)	5.00	rectangular	1.732	0.64	1.85	∞
Liquid conductivity (measurement error)	0.38	normal	1.000	0.64	0.24	∞
Liquid permittivity (deviation from target)	5.00	rectangular	1.732	0.6	1.73	∞
Liquid permittivity (measurement error)	5.44	normal	1.000	0.6	3.26	∞
Combined Standard Uncertainty		Normal	-	-	**11.84**	**172776**
Extended Standard Uncertainty(K=2.00)					**23.69**	**172776**

Table 6.2 Uncertainty Budget at 1900MHz

Error Description	Uncertainty Value (±%)	Probability Distribution	Divisor	c_i	Standard uncertainty (±%)	v_i^2 or v_{eff}
Measurement System						
Probe Calibration	12.00	normal	2.000	1	6.00	∞
Axial Isotropy	4.70	rectangular	1.732	0.7	1.90	∞
Hemispherical Isotropy	9.60	rectangular	1.732	0.7	3.88	∞
Linearity	4.70	rectangular	1.732	1	2.71	∞
System Detection Limits	0.25	rectangular	1.732	1	0.14	∞
Boundary effects	1.00	rectangular	1.732	1	0.58	∞
Readout electronics	0.30	normal	1.000	1	0.30	∞
Response time	0.80	rectangular	1.732	1	0.46	∞
RF ambient conditions	3.00	rectangular	1.732	1	1.73	∞
Integration time	0.00	rectangular	1.732	1	0.00	∞
Mechanical constrains of robot	1.50	rectangular	1.732	1	0.87	∞
Probe positioning	2.90	rectangular	1.732	1	1.67	∞
Extrapolation and integration	1.00	rectangular	1.732	1	0.58	∞
Test Sample Related						
Test Sample positioning	1.50	normal	1.000	1	1.50	14
Device holded uncertainty	3.44	normal	1.000	1	3.44	∞
Power Drift	5.00	rectangular	1.732	1	2.89	∞
Phantom and Setup						
Modular Phantom uncertainty	6.02	normal	1.000	1	6.02	2
Phantom uncertainty	4.00	rectangular	1.732	1	2.31	∞
Liquid conductivity (deviation from target)	5.00	rectangular	1.732	0.64	1.85	∞
Liquid conductivity (measurement error)	1.84	normal	1.000	0.64	1.18	∞
Liquid permittivity (deviation from target)	5.00	rectangular	1.732	0.6	1.73	∞
Liquid permittivity (measurement error)	4.54	normal	1.000	0.6	2.73	∞
Combined Standard Uncertainty		Normal	-	-	**12.24**	**62037**
Extended Standard Uncertainty(K=2.00)					**24.48**	**62037**

Table 6.3 Uncertainty Budget at 2450MHz

Error Description	Uncertainty Value (±%)	Probability Distribution	Divisor	c_i	Standard uncertainty (±%)	v_i^2 or v_{eff}
Measurement System						
Probe Calibration	12.00	normal	2.000	1	6.00	∞
Axial Isotropy	4.70	rectangular	1.732	0.7	1.90	∞
Hemispherical Isotropy	9.60	rectangular	1.732	0.7	3.88	∞
Linearity	4.70	rectangular	1.732	1	2.71	∞
System Detection Limits	0.25	rectangular	1.732	1	0.14	∞
Boundary effects	1.00	rectangular	1.732	1	0.58	∞
Readout electronics	0.30	normal	1.000	1	0.30	∞
Response time	0.80	rectangular	1.732	1	0.46	∞
RF ambient conditions	3.00	rectangular	1.732	1	1.73	∞
Integration time	0.00	rectangular	1.732	1	0.00	∞
Mechanical constrains of robot	1.50	rectangular	1.732	1	0.87	∞
Probe positioning	2.90	rectangular	1.732	1	1.67	∞
Extrapolation and integration	1.00	rectangular	1.732	1	0.58	∞
Test Sample Related						
Test Sample positioning	4.22	normal	1.000	1	4.22	14
Device holded uncertainty	3.44	normal	1.000	1	3.44	∞
Power Drift	5.00	rectangular	1.732	1	2.89	∞
Phantom and Setup						
Modular Phantom uncertainty	2.32	Normal	1.0001	1	2.32	2
Phantom uncertainty	4.00	rectangular	1.732	1	2.31	∞
Liquid conductivity (deviation from target)	5.00	rectangular	1.732	0.64	1.85	∞
Liquid conductivity (measurement error)	2.04	normal	1.000	0.64	1.30	∞
Liquid permittivity (deviation from target)	5.00	rectangular	1.732	0.6	1.73	∞
Liquid permittivity (measurement error)	4.27	normal	1.000	0.6	2.56	∞
Combined Standard Uncertainty		Normal	-	-	**11.57**	**792**
Extended Standard Uncertainty(K=2.00)					**23.15**	**792**

Table 6.4 Uncertainty Budget at 5GHz

Error Description	Uncertainty Value (±%)	Probability Distribution	Divisor	c_i	Standard uncertainty (±%)	v_i^2 or v_{eff}
Measurement System						
Probe Calibration	13.1	normal	2.000	1	6.55	∞
Axial Isotropy	4.70	rectangular	1.732	0.7	1.90	∞
Hemispherical Isotropy	9.60	rectangular	1.732	0.7	3.88	∞
Linearity	4.70	rectangular	1.732	1	2.71	∞
System Detection Limits	0.25	rectangular	1.732	1	0.14	∞
Boundary effects	1.00	rectangular	1.732	1	0.58	∞
Readout electronics	0.30	normal	1.000	1	0.30	∞
Response time	0.80	rectangular	1.732	1	0.46	∞
RF ambient conditions	3.00	rectangular	1.732	1	1.73	∞
Integration time	0.00	rectangular	1.732	1	0.00	∞
Mechanical constrains of robot	1.50	rectangular	1.732	1	0.87	∞
Probe positioning	2.90	rectangular	1.732	1	1.67	∞
Extrapolation and integration	1.00	rectangular	1.732	1	0.58	∞
Test Sample Related						
Test Sample positioning	4.22	normal	1.000	1	4.22	14
Device holded uncertainty	3.44	normal	1.000	1	3.44	∞
Power Drift	5.00	rectangular	1.732	1	2.89	∞
Phantom and Setup						
Modular Phantom uncertainty	2.32	Normal	1.0001	1	2.32	2
Phantom uncertainty	4.00	rectangular	1.732	1	2.31	∞
Liquid conductivity (deviation from target)	5.00	rectangular	1.732	0.64	1.85	∞
Liquid conductivity (measurement error)	1.12	normal	1.000	0.64	1.30	∞
Liquid permittivity (deviation from target)	5.00	rectangular	1.732	0.6	1.73	∞
Liquid permittivity (measurement error)	3.06	normal	1.000	0.6	2.56	∞
Combined Standard Uncertainty		Normal	-	-	**11.68**	**822**
Extended Standard Uncertainty(K=2.00)					**23.36**	**822**

7. SYSTEM VERIFICATION

7.1 Tissue Verification

Table 7.1 MEASURED TISSUE PARAMETERS

	835MHz Head		835MHz Body		1900MHz Head		1900MHz Body		2450MHz Head		2450MHz Body	
	Target	Measured	Target	Measured	Target	Measured	Target	Measured	Target	Measured	Target	Measured
Date	Aug.08, 2012		Aug.08, 2012		Aug.14, 2012		Aug.14, 2012		Aug.10, 2012		Aug.10, 2012	
Liquid Temperature(°C)	22.1		22.2		22.3		22.2		22.2		22.2	
Dielectric Constant: å'	41.5	40.6	55.2	54.3	40	39.4	53.3	53.2	39.2	39	52.7	51.5
Conductivity:	0.9	0.89	0.97	0.97	1.4	1.4	1.52	1.49	1.8	1.81	1.95	1.95
Tissue Batch Number	835DF2001M		835B2001N		1900F2002W		1900B1001W		2450MF4001K		2450B1001X	

	5200MHz Head		5200MHz Body		5500MHz Head		5500MHz Body		5800MHz Head		5800MHz Body	
	Target	Measured	Target	Measured	Target	Measured	Target	Measured	Target	Measured	Target	Measured
Date	Aug.24, 2012		Aug.27, 2012		Aug.24, 2012		Aug.27, 2012		Aug.24, 2012		Aug.27, 2012	
Liquid Temperature(°C)	22.2		22.1		22.2		22.4		22.2		22.0	
Dielectric Constant: å'	35.99	34.7	49.02	47.9	35.65	34.9	48.61	47.2	35.4	34.5	48.2	46.1
Conductivity:	4.65	4.85	5.29	5.41	4.96	5.2	5.64	5.91	5.27	5.47	6	6.17
Tissue Batch Number	5000MF1001A		5000B1001A		5000MF1001A		5000B1001A		5000MF1001A		5000B1001A	

The measured value must be within ±5% of the target value.

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7.2 Test System Validation

Prior to assessment, the system is verified to the ±10% of the specification at 835MHz, 1900MHz, 2450MHz and 5GHz by using the system validation kit(s). (see Appendix D, Graphic Plot Attached)

Table 7.2 System Validation Results

System Validation Kit	Tissue	Targeted SAR_{1g} (mW/g)	Normalized SAR_{1g} (mW/g)	Measured SAR_{1g} (mW/g)	Deviation (%)	Date	Liquid Temperature(°C)	Ambient Temperature(°C)	Input Power (mW)
4d111	835MHz Brain	9.43	9.12	2.28	-3.29	Aug.08, 2012	22.1	22.4	250
4d111	835MHz Body	9.54	9.32	2.33	-2.31	Aug.08, 2012	22.0	22.3	250
5d023	1900MHz Brain	39.0	40.6	4.06	4.10	Aug.14, 2012	22.4	22.6	100
5d023	1900MHz Body	38.8	38.3	3.83	-1.29	Aug.14, 2012	22.2	22.4	100
807	2450MHz Brain	53.5	54.4	5.44	1.68	Aug.10, 2012	22.1	22.3	100
807	2450MHz Body	50.3	50.1	5.01	-0.40	Aug.10, 2012	22.2	22.3	100
1132	5200MHz Brain	81.5	82.8	8.28	1.60	Aug.24, 2012	22.4	22.5	100
1132	5200MHz Body	75.3	72.9	7.29	-3.19	Aug.27, 2012	22.3	22.5	100
1132	5500MHz Brain	85.2	82.8	8.28	-2.82	Aug.24, 2012	22.4	22.5	100
1132	5500MHz Body	78.9	81.1	8.11	2.79	Aug.27, 2012	22.3	22.5	100
1132	5800MHz Brain	80.2	87.4	8.74	8.98	Aug.24, 2012	22.4	22.5	100
1132	5800MHz Body	74.5	76.4	7.64	2.55	Aug.27, 2012	22.3	22.5	100

*Validation was normalized to 1W.

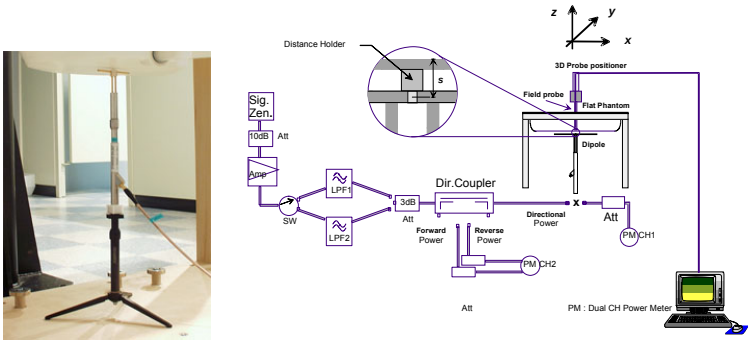

Figure 7.1 Dipole Validation Test Setup

8. SAR MEASUREMENT RESULTS

Procedures Used To Establish Test Signal

The handset was placed into simulated call mode using base station simulator. Such test signals offer a consistent means for testing SAR and are recommended for evaluating SAR. When test modes are not available or inappropriate for testing a handset, the actual transmission is activated through a base station simulator or similar equipment. See data pages for actual procedure used in measurement.

SAR Measurement Conditions for WCDMA

These procedures were followed according to FCC "SAR Measurement Procedures for 3G Devices"v02, October 2007.

Output Power Verification

Maximum output power is verified on the High, Middle and Low channels according to the general descriptions in section 5.2 of 3GPP TS 34.121, using the appropriate RMC or AMR with TPC (transmit power control) set to all "1s". Results for all applicable physical channel configurations (DPCCH, DPDCHn and spreading codes) should be tabulated in the test report. All configurations that are not supported by the DUT or cannot be measured due to technical or equipment limitations should be clearly identified.

Head SAR Measurements

SAR for head exposure configurations is measured using the 12.2 kbps RMC with TPC bits configured to all "1s". SAR in AMR configurations is not required when the maximum average output of each RF channel for 12.2 kbps AMR is less than ¼ dB higher than that measured in 12.2kbps RMC. Otherwise, SAR is measured on the maximum output channel in 12.2 AMR with a 3.4kbps SRB (signaling radio bearer) using the exposure configuration that results in the highest SAR for that RF channel in 12.2 RMC.

Body SAR Measurements

SAR for body exposure configurations is measured using the 12.2 kbps RMC with the TPC bits configured to all "1s". SAR for other spreading codes and multiple DPDCHn, when supported by the DUT, are not required when the maximum average outputs of each RF channel, for each spreading code and DPDCHn configuration, are less than ¼ dB higher than those measured in 12.2 RMC. Otherwise, SAR is measured on the maximum output channel with an applicable RMC configuration for the corresponding spreading code or DPDCHn using the exposure configuration that results in the highest SAR with 12.2 RMC. When more than 2 DPDCHn are supported by the DUT, it may be necessary to configure

the additional DPDCHn for the DUT using FTM(Factory Test Mode) with parameters similar to those used in 384 kbps and 768 kbps RMC.

Table 8.1 Max. Power Output Table for GT-N7100

Operating Band	Channel	HSPA Inactive		HSPA Active
		12.2 kbps RMC	12.2 kbps AMR	12.2 kbps RMC
WCDMA 850 (dBm)	4132	23.11	23.07	23.10
	4183	22.83	22.78	22.83
	4233	22.78	22.73	22.77
WCDMA 1900 (dBm)	9262	22.04	21.96	22.08
	9400	22.18	22.13	22.20
	9538	22.12	22.15	22.16

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Table 8.2 HSPA Max. Power Output Table for GT-N7100

	HSDPA	4132	4183	4233	MPR
WCDMA 850 (dBm)	Subtest1	23.10	22.83	22.77	0.0
	Subtest2	22.36	22.08	22.02	0.0
	Subtest3	22.11	21.82	21.77	0.5
	Subtest4	21.85	21.57	21.51	0.5
	HSUPA	**4132**	**4183**	**4233**	**MPR**
	Subtest1	22.31	22.04	22.00	0
	Subtest2	20.24	20.00	20.01	1
	Subtest3	21.08	20.82	20.77	2
	Subtest4	20.45	20.20	20.18	1
	Subtest5	22.34	22.33	22.27	0
WCDMA 1900 (dBm)	**HSDPA**	**9262**	**9400**	**9538**	**MPR**
	Subtest1	22.08	22.20	22.16	0.0
	Subtest2	21.85	21.98	21.97	0.0
	Subtest3	21.68	21.79	21.82	0.5
	Subtest4	21.45	21.57	21.55	0.5
	HSUPA	**9262**	**9400**	**9538**	**MPR**
	Subtest1	21.30	21.24	21.48	0
	Subtest2	20.07	20.21	20.21	1
	Subtest3	20.93	21.02	21.00	2
	Subtest4	20.32	20.39	20.42	1
	Subtest5	21.31	21.46	21.51	0

- End of page –

Device Test Conditions

The handset is battery operated. Each SAR measurement was taken with a fully charged battery. In order to verify that the device was tested at full power, conducted output power measurements were performed before and after each SAR measurement to confirm the output power. If a conducted power deviation of more than 5% occurred, the test was repeated. And all Tx conducted power were also investigated for Body SAR Measurement.

Table 8.3 Conducted Power Table for GT-N7100

Band	Channel	Voice	GPRS/EDGE (GMSK)				EDGE (8-PSK)			
		GSM(dBm) CS(1 Tx)	1Tx (dBm)	2Tx (dBm)	3Tx (dBm)	4Tx (dBm)	1Tx (dBm)	2Tx (dBm)	3Tx (dBm)	4Tx (dBm)
850	128	32.89	32.91	32.91	32.87	30.05	26.57	26.54	26.52	23.58
	190	32.80	32.80	32.81	32.79	29.98	26.55	26.53	26.51	23.49
	251	32.74	32.75	32.74	32.72	29.88	26.46	26.43	26.43	23.47
1900	512	29.26	29.23	29.25	29.23	26.25	25.29	25.28	25.26	22.45
	661	29.37	29.36	29.36	29.35	26.37	25.38	25.37	25.37	22.56
	810	29.58	29.57	29.56	29.56	26.61	25.59	25.59	25.57	22.80

Table 8.4 Calculated Frame-Averaged Output Power Table for GT-N7100

Band	Channel	Voice	GPRS/EDGE (GMSK)				EDGE (8-PSK)			
		GSM(dBm) CS(1 Tx)	1Tx (dBm)	2Tx (dBm)	3Tx (dBm)	4Tx (dBm)	1Tx (dBm)	2Tx (dBm)	3Tx (dBm)	4Tx (dBm)
850	128	23.86	23.88	26.89	28.61	27.04	17.54	20.52	22.26	20.57
	190	23.77	23.77	26.79	28.53	26.97	17.52	20.51	22.25	20.48
	251	23.71	23.72	26.72	28.46	26.87	17.43	20.41	22.17	20.46
1900	512	20.23	20.20	23.23	24.97	23.24	16.26	19.26	21.00	19.44
	661	20.34	20.33	23.34	25.09	23.36	16.35	19.35	21.11	19.55
	810	20.55	20.54	23.54	25.30	23.60	16.56	19.57	21.31	19.79

Note:

1. Both burst-averaged and calculated frame-averaged powers are included. Frame-averaged power was calculated from the measured burst-averaged power by converting the slot powers into linear units and calculating the energy over 8 timeslots.
2. CS1 coding scheme was used in GPRS output power measurements and SAR Testing, as a condition where GMSK modulation was ensured. It was investigated that CS1 - CS4 settings do not have any impact on the output levels in the GPRS modes.
3. MCS7 coding scheme was used to measure the output power measurements and SAR Testing, as a condition where GMSK modulation was ensured. Investigation has shown that CS1- CS4 settings do not have any impact on the output levels in the GPRS modes.
4. The conducted powers are reported and measured by base station simulator E5515C when the equipment was calibrated.

GSM Class : B

GPRS Multislot Class : 33 (max 4 Tx Uplink slots)

EDGE Multislot Class : 33 (max 4 Tx Uplink slots)

DTM Multislot Class : N/A

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Table 8.5 802.11b Average RF Power

802.11b Mode		Rated	Average Power (dBm)
Frequncy[MHz]	Channel No.	[Mbps]	(dBm)
2412	1	1	15.64
		2	15.59
		5.5	15.56
		11	15.30
2437	6	1	14.90
		2	14.87
		5.5	14.88
		11	14.63
2462	11	1	**15.65**
		2	15.55
		5.5	15.49
		11	15.22

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Table 8.6 802.11g Average RF Power

802.11g Mode		Rated	Average Power (dBm)
Frequncy[MHz]	Channel No.	[Mbps]	(dBm)
2412	1	6	12.46
		9	12.30
		12	12.09
		18	11.90
		24	11.71
		36	11.33
		48	10.97
		54	10.82
2437	6	6	12.25
		9	12.19
		12	12.02
		18	11.85
		24	11.64
		36	11.28
		48	10.88
		54	10.81
2462	11	6	12.49
		9	12.20
		12	12.17
		18	11.83
		24	11.64
		36	11.28
		48	10.98
		54	10.86

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Table 8.7 802.11n Average RF Power

802.11n_HT20 Mode		Rated	Average Power (dBm)
Frequncy[MHz]	Channel No.	[Mbps]	(dBm)
2412	1	MCS0	12.30
		MCS1	11.98
		MCS2	11.76
		MCS3	11.52
		MCS4	11.23
		MCS5	10.85
		MCS6	10.77
		MCS7	10.65
2437	6	MCS0	12.15
		MCS1	11.91
		MCS2	11.72
		MCS3	11.51
		MCS4	11.18
		MCS5	10.85
		MCS6	10.77
		MCS7	10.60
2462	11	MCS0	12.09
		MCS1	11.94
		MCS2	11.69
		MCS3	11.55
		MCS4	11.21
		MCS5	10.89
		MCS6	10.71
		MCS7	10.59

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Table 8.8 802.11a Average RF Power

802.11a Mode Frequncy[MHz]	Rated [Mbps]	Average Power (dBm) (dBm)	802.11a Mode Frequncy[MHz]	Rated [Mbps]	Average Power (dBm) (dBm)	802.11a Mode Frequncy[MHz]	Rated [Mbps]	Average Power (dBm) (dBm)
5180	6	**12.89**	5520	6	12.09	5700	6	**12.27**
	9	12.79		9	12.05		9	12.11
	12	12.71		12	12.03		12	12.10
	18	12.54		18	11.95		18	12.03
	24	12.34		24	11.85		24	11.95
	36	11.97		36	11.73		36	11.93
	48	11.69		48	11.65		48	11.85
	54	11.58		54	11.35		54	11.74
5200	6	12.68	5540	6	12.14	5745	6	12.54
	9	12.55		9	12.11		9	12.43
	12	12.53		12	12.09		12	12.33
	18	12.43		18	12.05		18	12.22
	24	12.15		24	11.93		24	12.10
	36	12.36		36	11.97		36	11.93
	48	12.25		48	11.85		48	11.88
	54	11.99		54	11.82		54	11.75
5220	6	12.71	5560	6	11.97	5765	6	12.26
	9	12.65		9	11.85		9	12.11
	12	12.63		12	11.74		12	12.03
	18	12.55		18	11.63		18	11.93
	24	12.25		24	11.54		24	11.85
	36	12.13		36	11.36		36	11.74
	48	12.03		48	11.10		48	11.65
	54	11.95		54	11.03		54	11.61
5240	6	12.86	5580	6	12.06	5785	6	12.44
	9	12.77		9	12.03		9	12.31
	12	12.75		12	11.93		12	12.22
	18	12.63		18	11.98		18	12.11
	24	12.55		24	11.95		24	12.03
	36	12.41		36	11.85		36	11.93
	48	12.35		48	11.73		48	11.84
	54	12.20		54	11.65		54	11.77
5260	6	**12.58**	5600	6	N/A	5805	6	**12.66**
	9	12.43		9	N/A		9	12.52
	12	12.44		12	N/A		12	12.43
	18	12.35		18	N/A		18	12.30
	24	12.25		24	N/A		24	12.15
	36	12.10		36	N/A		36	11.98
	48	12.00		48	N/A		48	11.90
	54	11.95		54	N/A		54	11.85
5280	6	12.43	5620	6	N/A	5825	6	12.62
	9	12.36		9	N/A		9	12.53
	12	12.33		12	N/A		12	12.43
	18	12.10		18	N/A		18	12.30
	24	12.03		24	N/A		24	12.00
	36	11.93		36	N/A		36	11.95
	48	11.95		48	N/A		48	11.83
	54	11.85		54	N/A		54	11.77
5300	6	12.46	5640	6	N/A			
	9	12.33		9	N/A			
	12	12.32		12	N/A			
	18	12.15		18	N/A			
	24	12.10		24	N/A			
	36	12.00		36	N/A			
	48	11.93		48	N/A			
	54	11.85		54	N/A			
5320	6	12.54	5660	6	12.10			
	9	12.43		9	12.05			
	12	12.40		12	12.03			
	18	12.35		18	11.93			
	24	12.25		24	11.83			
	36	12.11		36	11.77			
	48	12.03		48	11.43			
	54	11.85		54	11.35			
5500	6	11.95	5680	6	12.14			
	9	11.92		9	12.05			
	12	11.83		12	11.93			
	18	11.75		18	11.83			
	24	11.63		24	11.77			
	36	11.52		36	11.65			
	48	11.43		48	11.35			
	54	11.33		54	11.25			

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Table 8.9 802.11n_HT20 Average RF Power

802.11n_HT20 Mode	Rated	Average Power (dBm)	802.11n_HT20 Mode	Rated	Average Power (dBm)	802.11n_HT20 Mode	Rated	Average Power (dBm)
Frequncy[MHz]	[Mbps]	(dBm)	Frequncy[MHz]	[Mbps]	(dBm)	Frequncy[MHz]	[Mbps]	(dBm)
5180	MCS0	12.88	5520	MCS0	12.00	5700	MCS0	12.07
	MCS1	12.77		MCS1	11.98		MCS1	12.03
	MCS2	12.65		MCS2	11.74		MCS2	11.93
	MCS3	12.55		MCS3	11.63		MCS3	11.85
	MCS4	12.43		MCS4	11.53		MCS4	11.74
	MCS5	12.20		MCS5	11.40		MCS5	11.63
	MCS6	12.15		MCS6	11.25		MCS6	11.55
	MCS7	12.10		MCS7	11.03		MCS7	11.40
5200	MCS0	12.62	5540	MCS0	12.12	5745	MCS0	12.33
	MCS1	12.35		MCS1	12.03		MCS1	12.20
	MCS2	12.22		MCS2	11.83		MCS2	12.10
	MCS3	12.10		MCS3	11.74		MCS3	12.00
	MCS4	12.00		MCS4	11.63		MCS4	11.83
	MCS5	11.93		MCS5	11.43		MCS5	11.77
	MCS6	11.85		MCS6	11.32		MCS6	11.65
	MCS7	11.74		MCS7	11.20		MCS7	11.54
5220	MCS0	12.79	5560	MCS0	11.87	5765	MCS0	12.04
	MCS1	12.66		MCS1	11.77		MCS1	12.00
	MCS2	12.52		MCS2	11.63		MCS2	11.95
	MCS3	12.43		MCS3	11.60		MCS3	11.83
	MCS4	12.33		MCS4	11.52		MCS4	11.74
	MCS5	12.10		MCS5	11.43		MCS5	11.63
	MCS6	11.95		MCS6	11.22		MCS6	11.55
	MCS7	11.85		MCS7	11.10		MCS7	11.38
5240	MCS0	12.80	5580	MCS0	11.88	5785	MCS0	12.26
	MCS1	12.74		MCS1	11.77		MCS1	12.15
	MCS2	12.46		MCS2	11.65		MCS2	12.00
	MCS3	12.33		MCS3	11.43		MCS3	12.95
	MCS4	12.10		MCS4	11.25		MCS4	11.83
	MCS5	11.95		MCS5	11.11		MCS5	11.63
	MCS6	11.85		MCS6	11.10		MCS6	11.50
	MCS7	11.74		MCS7	10.89		MCS7	11.43
5260	MCS0	12.60	5600	MCS0	N/A	5805	MCS0	12.32
	MCS1	12.52		MCS1	N/A		MCS1	12.20
	MCS2	12.43		MCS2	N/A		MCS2	12.05
	MCS3	12.33		MCS3	N/A		MCS3	12.03
	MCS4	12.11		MCS4	N/A		MCS4	11.83
	MCS5	12.03		MCS5	N/A		MCS5	11.80
	MCS6	11.95		MCS6	N/A		MCS6	11.70
	MCS7	11.83		MCS7	N/A		MCS7	11.63
5280	MCS0	12.39	5620	MCS0	N/A	5825	MCS0	12.44
	MCS1	12.21		MCS1	N/A		MCS1	12.35
	MCS2	12.10		MCS2	N/A		MCS2	12.22
	MCS3	12.00		MCS3	N/A		MCS3	12.10
	MCS4	11.59		MCS4	N/A		MCS4	11.93
	MCS5	11.48		MCS5	N/A		MCS5	11.88
	MCS6	11.38		MCS6	N/A		MCS6	11.74
	MCS7	11.25		MCS7	N/A		MCS7	11.70
5300	MCS0	12.46	5640	MCS0	N/A			
	MCS1	12.33		MCS1	N/A			
	MCS2	12.31		MCS2	N/A			
	MCS3	12.15		MCS3	N/A			
	MCS4	12.10		MCS4	N/A			
	MCS5	12.03		MCS5	N/A			
	MCS6	11.95		MCS6	N/A			
	MCS7	11.85		MCS7	N/A			
5320	MCS0	12.54	5660	MCS0	11.93			
	MCS1	12.43		MCS1	11.88			
	MCS2	12.33		MCS2	11.74			
	MCS3	12.25		MCS3	11.63			
	MCS4	12.10		MCS4	11.50			
	MCS5	11.96		MCS5	11.43			
	MCS6	11.85		MCS6	11.32			
	MCS7	11.74		MCS7	11.25			
5500	MCS0	11.89	5680	MCS0	12.04			
	MCS1	11.74		MCS1	12.00			
	MCS2	11.61		MCS2	11.95			
	MCS3	11.55		MCS3	11.84			
	MCS4	11.40		MCS4	11.73			
	MCS5	11.32		MCS5	11.60			
	MCS6	11.22		MCS6	11.54			
	MCS7	11.03		MCS7	11.38			

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Table 8.10 802.11n_HT40 Average RF Power

802.11n_HT40 Mode Frequncy[MHz]	Rated [Mbps]	Average Power (dBm) (dBm)	802.11n_HT40 Mode Frequncy[MHz]	Rated [Mbps]	Average Power (dBm) (dBm)	802.11n_HT40 Mode Frequncy[MHz]	Rated [Mbps]	Average Power (dBm) (dBm)
5190	MCS0	11.50	5510	MCS0	10.86	5670	MCS0	11.41
	MCS1	11.38		MCS1	10.77		MCS1	11.33
	MCS2	11.25		MCS2	10.63		MCS2	11.25
	MCS3	11.20		MCS3	10.42		MCS3	11.10
	MCS4	11.03		MCS4	10.22		MCS4	10.93
	MCS5	10.95		MCS5	10.15		MCS5	10.88
	MCS6	10.88		MCS6	10.10		MCS6	10.74
	MCS7	10.74		MCS7	10.02		MCS7	10.65
5230	MCS0	11.64	5550	MCS0	10.93	5755	MCS0	**12.91**
	MCS1	11.55		MCS1	10.85		MCS1	12.88
	MCS2	11.43		MCS2	10.77		MCS2	12.70
	MCS3	11.35		MCS3	10.60		MCS3	12.61
	MCS4	11.22		MCS4	10.45		MCS4	12.43
	MCS5	11.10		MCS5	10.33		MCS5	12.33
	MCS6	10.93		MCS6	10.21		MCS6	12.25
	MCS7	10.88		MCS7	10.22		MCS7	12.13
5270	MCS0	11.15	5590	MCS0	N/A	5795	MCS0	12.90
	MCS1	11.10		MCS1	N/A		MCS1	12.88
	MCS2	11.03		MCS2	N/A		MCS2	12.74
	MCS3	11.00		MCS3	N/A		MCS3	12.65
	MCS4	10.93		MCS4	N/A		MCS4	12.43
	MCS5	10.83		MCS5	N/A		MCS5	12.22
	MCS6	10.80		MCS6	N/A		MCS6	12.11
	MCS7	10.75		MCS7	N/A		MCS7	12.03
5310	MCS0	11.13	5630	MCS0	N/A			
	MCS1	11.10		MCS1	N/A			
	MCS2	10.99		MCS2	N/A			
	MCS3	10.85		MCS3	N/A			
	MCS4	10.74		MCS4	N/A			
	MCS5	10.63		MCS5	N/A			
	MCS6	10.55		MCS6	N/A			
	MCS7	10.41		MCS7	N/A			

Per FCC KDB Publication 443999, transmission on channels which overlap the 5600-5650 MHz is prohibited as a client. This device does not transmit any beacons or initiate any transmissions in 5.3 and 5.5 GHz Bands. (*) – indicates default channels per KDB Publication 248227. When the adjacent channels are higher in power then the default channels, these “required channels” are considered instead of the default channels for SAR testing.

The bolded channels and data rates above were tested for SAR

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8.1 SAR DATA Summay

Table 8.11 GSM850 Head SAR Results

Frequency		Mode	Conducted		Side	Test Position	Antenna Type	Battery	Drift (dB)	SAR Level (W/kg)
MHz	Ch		Start	End						
836.6	190	GSM850	32.81	32.80	Right	Cheek/Touch	Intenna	Standard	-0.014	0.159
836.6	190	GSM850	32.79	32.81	Right	Ear/Tilt 15°	Intenna	Standard	0.051	0.037
836.6	190	GSM850	32.82	32.80	Left	Cheek/Touch	Intenna	Standard	-0.137	**0.171**
836.6	190	GSM850	32.80	32.82	Left	Ear/Tilt 15°	Intenna	Standard	-0.002	0.039
ANSI / IEEE C95.1 1992 – SAFETY LIMIT Spatial Peak Uncontrolled Exposure / General Population						**1.6W/kg (mW/g)** averaged over 1 gram				

Table 8.12 GSM850 Body SAR Results

Frequency		Mode	Conducted		Separation Distance	Test Position	Antenna Type	Battery	Tx Slots	Drift (dB)	SAR Level (W/kg)
MHz	Ch		Start	End							
836.6	190	GSM850	32.80	32.83	1.0 cm	Back	Intenna	Standard	1	-0.016	0.305
836.6	190	GPRS850	32.80	32.82	1.0 cm	Back	Intenna	Standard	1	0.057	0.292
836.6	190	GPRS850	32.82	32.81	1.0 cm	Back	Intenna	Standard	2	-0.034	0.581
836.6	190	GPRS850	32.78	32.79	1.0 cm	Back	Intenna	Standard	3	-0.027	**0.783**
836.6	190	GPRS850	29.97	29.98	1.0 cm	Back	Intenna	Standard	4	-0.113	0.556
836.6	190	GPRS850	32.79	32.78	1.0 cm	Front	Intenna	Standard	3	-0.022	0.377
836.6	190	GPRS850	32.79	32.77	1.0 cm	Left	Intenna	Standard	3	0.028	0.366
836.6	190	GPRS850	32.79	32.79	1.0 cm	Bottom	Intenna	Standard	3	0.011	0.655
ANSI / IEEE C95.1 1992 – SAFETY LIMIT Spatial Peak Uncontrolled Exposure / General Population						**1.6W/kg (mW/g)** averaged over 1 gram					

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Table 8.13 GSM1900 Head SAR Results

Frequency		Mode	Conducted		Side	Test Position	Antenna Type	Battery	Drift (dB)	SAR Level (W/kg)
MHz	Ch		Start	End						
1880	661	GSM1900	29.35	29.37	Right	Cheek/Touch	Intenna	Standard	0.051	0.094
1880	661	GSM1900	29.37	29.36	Right	Ear/Tilt 15°	Intenna	Standard	0.048	0.029
1880	661	GSM1900	29.37	29.35	Left	Cheek/Touch	Intenna	Standard	-0.016	**0.098**
1880	661	GSM1900	29.37	29.37	Left	Ear/Tilt 15°	Intenna	Standard	0.094	0.041
ANSI / IEEE C95.1 1992 – SAFETY LIMIT Spatial Peak Uncontrolled Exposure / General Population						**1.6W/kg (mW/g)** averaged over 1 gram				

Table 8.14 GSM1900 Body SAR Results

Frequency		Mode	Conducted		Separation Distance	Test Position	Antenna Type	Battery	Tx Slots	Drift (dB)	SAR Level (W/kg)
MHz	Ch		Start	End							
1880	661	GSM1900	29.37	29.35	1.0 cm	Back	Intenna	Standard	1	0.183	0.316
1880	661	GPRS1900	29.36	29.37	1.0 cm	Back	Intenna	Standard	1	-0.124	0.292
1880	661	GPRS1900	29.35	29.36	1.0 cm	Back	Intenna	Standard	2	-0.126	0.575
1850.2	512	GPRS1900	29.25	29.23	1.0 cm	Back	Intenna	Standard	3	-0.125	0.804
1880	661	GPRS1900	29.35	29.34	1.0 cm	Back	Intenna	Standard	3	-0.132	0.859
1909.8	810	GPRS1900	29.56	29.55	1.0 cm	Back	Intenna	Standard	3	0.010	**0.935**
1880	661	GPRS1900	26.37	26.39	1.0 cm	Back	Intenna	Standard	4	0.123	0.619
1880	661	GPRS1900	29.35	29.34	1.0 cm	Front	Intenna	Standard	3	0.164	0.500
1880	661	GPRS1900	29.35	29.32	1.0 cm	Bottom	Intenna	Standard	3	-0.042	0.491
1880	661	GPRS1900	29.35	29.34	1.0 cm	Left	Intenna	Standard	3	-0.022	0.355
ANSI / IEEE C95.1 1992 – SAFETY LIMIT Spatial Peak Uncontrolled Exposure / General Population						**1.6W/kg (mW/g)** averaged over 1 gram					

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Table 8.15 WCDMA850 Head SAR Results

Frequency		Mode	Conducted		Side	Test Position	Antenna Type	Battery	Drift (dB)	SAR Level (W/kg)
MHz	Ch		Start	End						
836.6	4183	WCDMA850	22.85	22.83	Right	Cheek/Touch	Intenna	Standard	-0.002	0.154
836.6	4183	WCDMA850	22.84	22.83	Right	Ear/Tilt 15°	Intenna	Standard	-0.140	0.036
836.6	4183	WCDMA850	22.83	22.85	Left	Cheek/Touch	Intenna	Standard	0.010	**0.163**
836.6	4183	WCDMA850	22.83	22.84	Left	Ear/Tilt 15°	Intenna	Standard	-0.004	0.040
ANSI / IEEE C95.1 1992 – SAFETY LIMIT Spatial Peak Uncontrolled Exposure / General Population						**1.6W/kg (mW/g)** averaged over 1 gram				

Table 8.16 WCDMA850 Body SAR Results

Frequency		Mode	Conducted		Separation Distance	Test Position	Antenna Type	Battery	Drift (dB)	SAR Level (W/kg)
MHz	Ch		Start	End						
836.6	4183	WCDMA850	22.84	22.83	1.0 cm	Back	Intenna	Standard	-0.005	**0.314**
836.6	4183	WCDMA850	22.84	22.83	1.0 cm	Front	Intenna	Standard	-0.021	0.194
836.6	4183	WCDMA850	22.85	22.86	1.0 cm	Left	Intenna	Standard	-0.014	0.136
836.6	4183	WCDMA850	22.83	22.82	1.0 cm	Bottom	Intenna	Standard	-0.015	0.237
ANSI / IEEE C95.1 1992 – SAFETY LIMIT Spatial Peak Uncontrolled Exposure / General Population						**1.6W/kg (mW/g)** averaged over 1 gram				

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Table 8.17 WCDMA1900 Head SAR Results

Frequency		Mode	Conducted		Side	Test Position	Antenna Type	Battery	Drift (dB)	SAR Level (W/kg)
MHz	Ch		Start	End						
1880	9400	WCDMA1900	22.19	22.18	Right	Cheek/Touch	Intenna	Standard	0.144	0.127
1880	9400	WCDMA1900	22.18	22.17	Right	Ear/Tilt 15°	Intenna	Standard	-0.141	0.063
1880	9400	WCDMA1900	22.18	22.17	Left	Cheek/Touch	Intenna	Standard	0.020	**0.147**
1880	9400	WCDMA1900	22.18	22.18	Left	Ear/Tilt 15°	Intenna	Standard	0.036	0.073
ANSI / IEEE C95.1 1992 – SAFETY LIMIT Spatial Peak Uncontrolled Exposure / General Population						**1.6W/kg (mW/g)** averaged over 1 gram				

Table 8.18 WCDMA1900 Body SAR Results

Frequency		Mode	Conducted		Separation Distance	Test Position	Antenna Type	Battery	Drift (dB)	SAR Level (W/kg)
MHz	Ch		Start	End						
1880	9400	WCDMA1900	22.16	22.18	1.0 cm	Back	Intenna	Standard	0.024	**0.397**
1880	9400	WCDMA1900	22.17	22.18	1.0 cm	Front	Intenna	Standard	0.027	0.327
1880	9400	WCDMA1900	22.18	22.19	1.0 cm	Bottom	Intenna	Standard	-0.093	0.369
1880	9400	WCDMA1900	22.17	22.18	1.0 cm	Left	Intenna	Standard	0.110	0.193
ANSI / IEEE C95.1 1992 – SAFETY LIMIT Spatial Peak Uncontrolled Exposure / General Population						**1.6W/kg (mW/g)** averaged over 1 gram				

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Table 8.19 2.4GHz 802.11b Head SAR Results

Frequency		Mode	Conducted		Side	Test Position	Antenna Type	Battery	Data Rate (Mbps)	Drift (dB)	SAR Level (W/kg)
MHz	Ch		Start	End							
2462	11	IEEE 802.11b	15.62	15.65	Right	Cheek/Touch	Intenna	Standard	1	0.058	0.007
2462	11	IEEE 802.11b	15.65	15.62	Right	Ear/Tilt 15°	Intenna	Standard	1	0.054	0.005
2462	11	IEEE 802.11b	15.65	15.63	Left	Cheek/Touch	Intenna	Standard	1	-0.190	**0.022**
2462	11	IEEE 802.11b	15.64	15.65	Left	Ear/Tilt 15°	Intenna	Standard	1	0.063	0.016
ANSI / IEEE C95.1 1992 – SAFETY LIMIT Spatial Peak Uncontrolled Exposure / General Population						**1.6W/kg (mW/g)** averaged over 1 gram					

Table 8.20 2.4GHz 802.11b Body SAR Results

Frequency		Mode	Conducted		Separation Distance	Test Position	Antenna Type	Battery	Data Rate (Mbps)	Drift (dB)	SAR Level (W/kg)
MHz	Ch		Start	End							
2462	11	IEEE 802.11b	15.64	15.65	1.0 cm	Back	Intenna	Standard	1	-0.154	**0.019**
2462	11	IEEE 802.11b	15.65	15.63	1.0 cm	Front	Intenna	Standard	1	-0.035	0.003
2462	11	IEEE 802.11b	15.67	15.65	1.0 cm	Right	Intenna	Standard	1	-0.172	0.014
2462	11	IEEE 802.11b	15.65	15.63	1.0 cm	Top	Intenna	Standard	1	-0.136	0.003
ANSI / IEEE C95.1 1992 – SAFETY LIMIT Spatial Peak Uncontrolled Exposure / General Population						**1.6W/kg (mW/g)** averaged over 1 gram					

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Table 8.21 5GHz WLAN Head SAR Results

Frequency		Mode	Conducted		Side	Test Position	Antenna Type	Battery	Data Rate (Mbps)	Drift (dB)	SAR Level (W/kg)
MHz	Ch		Start	End							
5180	36	802.11a	12.87	12.89	Right	Cheek/Touch	Intenna	Standard	6	-0.124	0.034
5180	36	802.11a	12.89	12.86	Right	Ear/Tilt 15°	Intenna	Standard	6	0.040	0.032
5180	36	802.11a	12.89	12.87	Left	Cheek/Touch	Intenna	Standard	6	0.040	0.047
5180	36	802.11a	12.89	12.88	Left	Ear/Tilt 15°	Intenna	Standard	6	-0.017	0.066
5260	52	802.11a	12.58	12.57	Right	Cheek/Touch	Intenna	Standard	6	0.152	0.022
5260	52	802.11a	12.58	12.56	Right	Ear/Tilt 15°	Intenna	Standard	6	-0.193	0.023
5260	52	802.11a	12.58	12.55	Left	Cheek/Touch	Intenna	Standard	6	0.012	0.042
5260	52	802.11a	12.58	12.55	Left	Ear/Tilt 15°	Intenna	Standard	6	0.143	0.045
5700	140	802.11a	12.27	12.26	Right	Cheek/Touch	Intenna	Standard	6	-0.122	0.033
5700	140	802.11a	12.27	12.24	Right	Ear/Tilt 15°	Intenna	Standard	6	0.057	0.028
5700	140	802.11a	12.26	12.25	Left	Cheek/Touch	Intenna	Standard	6	0.065	0.022
5700	140	802.11a	12.27	12.27	Left	Ear/Tilt 15°	Intenna	Standard	6	-0.144	0.029
5755	151	802.11n(HT40)	12.92	12.91	Right	Cheek/Touch	Intenna	Standard	MCS0	0.102	0.033
5755	151	802.11n(HT40)	12.91	12.93	Right	Ear/Tilt 15°	Intenna	Standard	MCS0	0.060	0.034
5755	151	802.11n(HT40)	12.92	12.91	Left	Cheek/Touch	Intenna	Standard	MCS0	-0.025	0.058
5755	151	802.11n(HT40)	12.91	12.94	Left	Ear/Tilt 15°	Intenna	Standard	MCS0	0.050	**0.068**
5805	161	802.11a	12.66	12.65	Right	Cheek/Touch	Intenna	Standard	6	0.100	0.013
5805	161	802.11a	12.63	12.64	Right	Ear/Tilt 15°	Intenna	Standard	6	-0.060	0.018
5805	161	802.11a	12.65	12.67	Left	Cheek/Touch	Intenna	Standard	6	-0.042	0.044
5805	161	802.11a	12.63	12.65	Left	Ear/Tilt 15°	Intenna	Standard	6	-0.077	0.057
ANSI / IEEE C95.1 1992 – SAFETY LIMIT Spatial Peak Uncontrolled Exposure / General Population						**1.6W/kg (mW/g)** averaged over 1 gram					

Table 8.22 5GHz WLAN Body SAR Results

Frequency		Mode	Conducted		Separation Distance	Test Position	Antenna Type	Battery	Data Rate (Mbps)	Drift (dB)	SAR Level (W/kg)
MHz	Ch		Start	End							
5180	36	802.11a	12.90	12.89	1.0cm	Back	Intenna	Standard	6	-0.061	0.404
5260	52	802.11a	12.58	12.56	1.0cm	Back	Intenna	Standard	6	-0.062	0.217
5700	140	802.11a	12.27	12.25	1.0cm	Back	Intenna	Standard	6	-0.013	0.029
5755	151	802.11n(HT40)	12.91	12.93	1.0cm	Back	Intenna	Standard	MCS0	0.155	0.040
5805	161	802.11a	12.66	12.64	1.0cm	Back	Intenna	Standard	6	0.014	0.020
ANSI / IEEE C95.1 1992 – SAFETY LIMIT Spatial Peak Uncontrolled Exposure / General Population						**1.6W/kg (mW/g)** averaged over 1 gram					

8.2 SAR Note

General Note :

1. The test data reported are the worst-case SAR value with the position set in a typical configuration. Test procedures used are according to FCC/OET Bulletin 65, Supp.C [June 2001].
2. Tissue parameters and temperatures are listed on the SAR plot.
3. Liquid tissue depth is 15.2 ± 0.2cm
4. Battery is fully charged for all readings. The Standard battery was used.
5. Test Configuration ☐ With Holster ☒ Without Holster
6. Justification for reduced test configurations: Per FCC/OET Bulletin 65 Supplement C (June, 2001), if the SAR measured at the middle channel for each test configuration (left, right, cheek/touch, tilt/ear, extended and retracted) is least 3.0 dB lower than the SAR limit, testing at the high and low channels is optional for such test configuration(s).
7. Device was tested using a fixed spacing for body-worn accessory tesing. A separation distance of 10mm was tested because the manufacturer has determined that there will be body-worn accessories available in the marketplace for usere to support this separation distance.
8. The standard battery contains a near field communications (NFC) antenna, and is the only battery that comes with the device. All tests were performed using the standard NFC battery. The technical description contains detailed informations about the near field communications antenna. As described in Operational Description, the device does not allow other battery than model.

GSM Notes

1. Body-Worn Accessory testing is typically associated with voice operations. Therefore, GSM voice was evaluated for body-worn SAR using headphone.
2. Per FCC guidance, GPRS Data Mode is additionally required for body-worn configuration. When the same wireless modes and device transmission configurations are required for body-worn accderssory SAR for the same device orientation. Therefore, the hotspot data for the back and front side configuration additionally shows body-worn compliance at the same distance.
3. Justification for reduced thest configurations per KDB Publication 941225 D03: The source-based time-averaged output power was evaluated for all multi-slot operations. In addition to the worst-case reported, all source-based time-averaged powers within 10% of the worst-case were additionally included in the evaluation for data modes.
4. Per FCC guidance, when the measured Hotspot SAR is less than <1.2W/Kg for the same device orientation and device transmission configurations, separate body-worn accessory data taken with a headset cable is not required. Therefore, hotspot back side SAR data was considered to determine body-worn SAR compliance

WCDMA Notes

1. WCDMA mode in Body SAR was tested under RMC 12.2 kbps with HSPA Inactive per KDB Publication 941225 D01. HSPA SAR was not required since the average output power of the HSPA subtests was not more than 0.25 dB higher than the RMC level and SAR was less than 1.2W/Kg.
2. Per FCC KDB Publication 941225 D06, when the same wireless modes and device transmission configurations are required for body-worn accessory SAR for the same device orientation. Therefore, the hotspot data for the back side configuration additionally shows body-worn complicane at the same distance.

3. Per FCC guidance, when the measured Hotspot SAR is less than <1.2W/Kg for the same device orientation and device transmission configurations, separate body-worn accessory data taken with a headset cable is not required. Therefore, hotspot back side SAR data was considered to determine body-worn SAR compliance

WLAN Notes

1. Justification for reduced test configurations for WIFI channels per KDB Publication 248227 and April 2010 FCC/TCB Meeting Notes for 2.4GHz WIFI : Highest average RF output power channel for the lowest data rate was selected for SAR evaluation in 802.11b. Other IEEE 802.11 modes (including 802.11g/n) were not investigated since the average output powers over all channels and data rates were not more than 0.25dB higher than the tested channel in the lowest data rate of IEEE 802.11b mode.
2. Justification for reduced test configurations for WIFI channels per KDB Publication 248227 and April 2010 FCC/TCB Meeting Notes for 5GHz WIFI : Highest average RF output power channel for the lowest data rate was selected for SAR evaluation in 802.11a. Other IEEE 802.11 mode (802.11n 40MHz Bandwidth, Channel 151) were investigated since the average output power was more than 0.25dB higher than the tested channel in the lowest data rate of IEEE 802.11a mode.
3. When Hotspot is enabled, all 5GHz bands are disabled.
4. WLAN transmission was verified using an uncalibrated spectrum analyzer.
5. When the maximum extrapolated peak SAR of the zoom scan for the maximum output channel is <1.6 W/Kg and the 1g averaged SAR is <0.8 W/Kg, SAR testing on other channels is not required. The other default(or corresponding required) test channels were additionally tested using the lowest data rate since the maximum extrapolated peak SAR of the zoom scan for the maximum output channel is greater than 1.6W/Kg.
6. Per FCC KDB Publication 941225 D06, when the same wireless modes and device transmission configurations are required for body-worn accessories and hotspot mode(2.4GHz WLAN), it is not necessary to additionally test body-worn accessory SAR for the same device orientation. Therefore, the hotspot data for the back side configuration additionally shows body-worn compliance at the same distance.
7. Per FCC guidance, when the measured Hotspot SAR is less than <1.2W/Kg for the same device orientation and device transmission configurations, separate body-worn accessory data taken with a headset cable is not required. Therefore, hotspot back side SAR data was considered to determine body-worn SAR compliance

Hotspot Notes

1. Top and Right Edge for the licensed transmitter was not tested since the antenna distance from the edge was greater than 2.5cm per FCC KDB Publication 941225 D06 guidance.
2. Bottom and Left Edges for the WLAN transmitter were not tested since the antenna distance from the edge was greater than 2.5cm per FCC KDB Publication 941225 D06 guidance.
3. During SAR testing for the wireless Router conditions per KDB 941225 D06, the actural Portable Hotspot operation (with actual simultaneous transmission of a transmitter with WIFI) was not activated.

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8.3 Simultaneous Transmission

Refer to the FCC OET document, 'SAR Evaluation Considerations for Handsets with Multiple Transmitters and Antennas' (Feb 2008)

Table 8.23 Output Power Thresholds for Unlicensed Transmitters

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

Table 8.24 Summary of SAR Evaluation Requirements for Cell phones with Multiple Transmitters

	Individual Transmitter	**Simultaneous Transmission**
Licensed Transmitters	**<u>Routine evaluation required</u>**	**SAR not required:** **<u>Unlicensed only</u>** o when stand-alone 1-g SAR is not required and antenna is > 5 cm from other antennas **<u>Licensed & Unlicensed</u>** o when the sum of the 1-g SAR is <1.6 W/kg for all simultaneous transmitting antennas o when SAR to antenna separation ratio of simultaneous transmitting antenna pair is < 0.3 **SAR required:** **<u>Licensed & Unlicensed</u>** antenna pairs with SAR to antenna separation ratio ≥ 0.3; test is only required for the configuration that results in the highest SAR in standalone configuration for each wireless mode and exposure condition Note: simultaneous transmission exposure conditions for head and body can be different for different style phones; therefore, different test requirements may apply
Unlicensed Transmitters	**When there is no simultaneous transmission –** o output < 60/f: SAR not required o output ≥ 60/f: stand-alone SAR required **When there is simultaneous transmission –** **<u>Stand-alone SAR not required when</u>** O output ≤ 2.P_{Ref} and antenna is > 5.0 cm from other antennas O output ≤ PRef and antenna is ≥ 2.5 cm from other antennas O output ≤ PRef and antenna is < 2.5 cm from other antennas, each with either output power ≤ PRef or 1-g SAR < 1.2 W/kg **<u>Otherwise stand-alone SAR is required</u>** **When stand-alone SAR is required** o test SAR on highest output channel for each wireless mode and exposure condition o if SAR for highest output channel is > 50% of SAR limit, evaluate all channels according to normal procedures	

Table 8.25 Simultaneous Transmission Summation for Held to Ear Voice Call (2.4GHz WLAN)

Simult Tx	Configuration	GSM850 SAR(W/Kg)	2.4GHz WIFI SAR (W/Kg)	Σ SAR (W/Kg)	Simult Tx	Configuration	GSM1900 SAR(W/Kg)	2.4GHz WIFI SAR (W/Kg)	Σ SAR (W/Kg)
Head SAR	Right Cheek	0.159	0.007	0.166	Head SAR	Right Cheek	0.094	0.007	0.101
	Right Tilt	0.037	0.005	0.042		Right Tilt	0.029	0.005	0.034
	Left Cheek	0.171	0.022	0.193		Left Cheek	0.098	0.022	0.12
	Left Tilt	0.039	0.016	0.055		Left Tilt	0.041	0.016	0.057
Simult Tx	**Configuration**	**WCDMA850 SAR(W/Kg)**	**2.4GHz WIFI SAR (W/Kg)**	**Σ SAR (W/Kg)**	**Simult Tx**	**Configuration**	**WCDMA1900 SAR(W/Kg)**	**2.4GHz WIFI SAR (W/Kg)**	**Σ SAR (W/Kg)**
Head SAR	Right Cheek	0.154	0.007	0.161	Head SAR	Right Cheek	0.127	0.007	0.134
	Right Tilt	0.036	0.005	0.041		Right Tilt	0.063	0.005	0.068
	Left Cheek	0.163	0.022	0.185		Left Cheek	0.147	0.022	0.169
	Left Tilt	0.04	0.016	0.056		Left Tilt	0.073	0.016	0.089

The above tables represent a held to ear voice call with 2.4GHz WLAN.

Table 8.26 Simultaneous Transmission Summation for Held to Ear Voice Call (5.2GHz WLAN)

Simult Tx	Configuration	GSM850 SAR(W/Kg)	5.2GHz WIFI SAR (W/Kg)	Σ SAR (W/Kg)	Simult Tx	Configuration	GSM1900 SAR(W/Kg)	5.2GHz WIFI SAR (W/Kg)	Σ SAR (W/Kg)
Head SAR	Right Cheek	0.159	0.034	0.193	Head SAR	Right Cheek	0.094	0.034	0.128
	Right Tilt	0.037	0.032	0.069		Right Tilt	0.029	0.032	0.061
	Left Cheek	0.171	0.047	0.218		Left Cheek	0.098	0.047	0.145
	Left Tilt	0.039	0.066	0.105		Left Tilt	0.041	0.066	0.107
Simult Tx	**Configuration**	**WCDMA850 SAR(W/Kg)**	**5.2GHz WIFI SAR (W/Kg)**	**Σ SAR (W/Kg)**	**Simult Tx**	**Configuration**	**WCDMA1900 SAR(W/Kg)**	**5.2GHz WIFI SAR (W/Kg)**	**Σ SAR (W/Kg)**
Head SAR	Right Cheek	0.154	0.034	0.188	Head SAR	Right Cheek	0.127	0.034	0.161
	Right Tilt	0.036	0.032	0.068		Right Tilt	0.063	0.032	0.095
	Left Cheek	0.163	0.047	0.21		Left Cheek	0.147	0.047	0.194
	Left Tilt	0.04	0.066	0.106		Left Tilt	0.073	0.066	0.139

The above tables represent a held to ear voice call with 5.2GHz WLAN.

Table 8.27 Simultaneous Transmission Summation for Held to Ear Voice Call (5.3GHz WLAN)

Simult Tx	Configuration	GSM850 SAR(W/Kg)	5.3GHz WIFI SAR (W/Kg)	Σ SAR (W/Kg)	Simult Tx	Configuration	GSM1900 SAR(W/Kg)	5.3GHz WIFI SAR (W/Kg)	Σ SAR (W/Kg)
Head SAR	Right Cheek	0.159	0.022	0.181	Head SAR	Right Cheek	0.094	0.022	0.116
	Right Tilt	0.037	0.023	0.06		Right Tilt	0.029	0.023	0.052
	Left Cheek	0.171	0.042	0.213		Left Cheek	0.098	0.042	0.14
	Left Tilt	0.039	0.045	0.084		Left Tilt	0.041	0.045	0.086
Simult Tx	**Configuration**	**WCDMA850 SAR(W/Kg)**	**5.3GHz WIFI SAR (W/Kg)**	**Σ SAR (W/Kg)**	**Simult Tx**	**Configuration**	**WCDMA1900 SAR(W/Kg)**	**5.3GHz WIFI SAR (W/Kg)**	**Σ SAR (W/Kg)**
Head SAR	Right Cheek	0.154	0.022	0.176	Head SAR	Right Cheek	0.127	0.022	0.149
	Right Tilt	0.036	0.023	0.059		Right Tilt	0.063	0.023	0.086
	Left Cheek	0.163	0.042	0.205		Left Cheek	0.147	0.042	0.189
	Left Tilt	0.04	0.045	0.085		Left Tilt	0.073	0.045	0.118

The above tables represent a held to ear voice call with 5.3GHz WLAN.

Table 8.28 Simultaneous Transmission Summation for Held to Ear Voice Call (5.5GHz WLAN)

Simult Tx	Configuration	GSM850 SAR(W/Kg)	5.5GHz WIFI SAR (W/Kg)	Σ SAR (W/Kg)	Simult Tx	Configuration	GSM1900 SAR(W/Kg)	5.5GHz WIFI SAR (W/Kg)	Σ SAR (W/Kg)
Head SAR	Right Cheek	0.159	0.033	0.192	Head SAR	Right Cheek	0.094	0.033	0.127
	Right Tilt	0.037	0.028	0.065		Right Tilt	0.029	0.028	0.057
	Left Cheek	0.171	0.022	0.193		Left Cheek	0.098	0.022	0.12
	Left Tilt	0.039	0.029	0.068		Left Tilt	0.041	0.029	0.07
Simult Tx	**Configuration**	**WCDMA850 SAR(W/Kg)**	**5.5GHz WIFI SAR (W/Kg)**	**Σ SAR (W/Kg)**	**Simult Tx**	**Configuration**	**WCDMA1900 SAR(W/Kg)**	**5.5GHz WIFI SAR (W/Kg)**	**Σ SAR (W/Kg)**
Head SAR	Right Cheek	0.154	0.033	0.187	Head SAR	Right Cheek	0.127	0.033	0.16
	Right Tilt	0.036	0.028	0.064		Right Tilt	0.063	0.028	0.091
	Left Cheek	0.163	0.022	0.185		Left Cheek	0.147	0.022	0.169
	Left Tilt	0.04	0.029	0.069		Left Tilt	0.073	0.029	0.102

The above tables represent a held to ear voice call with 5.5GHz WLAN.

Table 8.29 Simultaneous Transmission Summation for Held to Ear Voice Call (5.8GHz WLAN)

Simult Tx	Configuration	GSM850 SAR(W/Kg)	5.8GHz WIFI SAR (W/Kg)	Σ SAR (W/Kg)	Simult Tx	Configuration	GSM1900 SAR(W/Kg)	5.8GHz WIFI SAR (W/Kg)	Σ SAR (W/Kg)
Head SAR	Right Cheek	0.159	0.033	0.192	Head SAR	Right Cheek	0.094	0.033	0.127
	Right Tilt	0.037	0.034	0.071		Right Tilt	0.029	0.034	0.063
	Left Cheek	0.171	0.058	0.229		Left Cheek	0.098	0.058	0.156
	Left Tilt	0.039	0.068	0.107		Left Tilt	0.041	0.068	0.109
Simult Tx	**Configuration**	**WCDMA850 SAR(W/Kg)**	**5.8GHz WIFI SAR (W/Kg)**	**Σ SAR (W/Kg)**	**Simult Tx**	**Configuration**	**WCDMA1900 SAR(W/Kg)**	**5.8GHz WIFI SAR (W/Kg)**	**Σ SAR (W/Kg)**
Head SAR	Right Cheek	0.154	0.033	0.187	Head SAR	Right Cheek	0.127	0.033	0.16
	Right Tilt	0.036	0.034	0.07		Right Tilt	0.063	0.034	0.097
	Left Cheek	0.163	0.058	0.221		Left Cheek	0.147	0.058	0.205
	Left Tilt	0.04	0.068	0.108		Left Tilt	0.073	0.068	0.141

The above tables represent a held to ear voice call with 5.8GHz WLAN.

Table 8.30 Simultaneous Transmission Summation for 2G&3G voice and 2.4GHz WLAN(Body-Worn)

Configuration	Mode	2G&3G SAR (W/Kg)	WIFI SAR	Σ SAR
Back	GSM850	0.305	0.019	0.324
Back	GSM1900	0.316	0.019	0.335
Back	WCDMA850	0.314	0.019	0.333
Back	WCDMA1900	0.397	0.019	0.416

The above tables represent a body worn voice call with 2.4GHz WLAN.

Table 8.31 Simultaneous Transmission Summation for 2G&3G voice and 5GHz WLAN(Body-Worn)

Configuration	Mode	2G&3G SAR (W/Kg)	5.2GHz WIFI SAR (W/Kg)	Σ SAR (W/Kg)	Configuration	Mode	2G&3G SAR (W/Kg)	5.3GHz WIFI SAR (W/Kg)	Σ SAR (W/Kg)
Back	GSM850	0.305	0.404	0.709	Back	GSM850	0.305	0.217	0.522
Back	GSM1900	0.316	0.404	0.72	Back	GSM1900	0.316	0.217	0.533
Back	WCDMA850	0.314	0.404	0.718	Back	WCDMA850	0.314	0.217	0.531
Back	WCDMA190	0.397	0.404	0.801	Back	WCDMA190	0.397	0.217	0.614
Configuration	Mode	2G&3G SAR (W/Kg)	5.5GHz WIFI SAR (W/Kg)	Σ SAR (W/Kg)	Configuration	Mode	2G&3G SAR (W/Kg)	5.8GHz WIFI SAR (W/Kg)	Σ SAR (W/Kg)
Back	GSM850	0.305	0.029	0.334	Back	GSM850	0.305	0.04	0.345
Back	GSM1900	0.316	0.029	0.345	Back	GSM1900	0.316	0.04	0.356
Back	WCDMA850	0.314	0.029	0.343	Back	WCDMA850	0.314	0.04	0.354
Back	WCDMA190	0.397	0.029	0.426	Back	WCDMA190	0.397	0.04	0.437

The above tables represent a body worn voice call with 5GHz WLAN.

Table 8.32 Simultaneous Transmission Summation for 2G&3G Data and 2.4GHz WLAN(Hotspot)

Simult Tx	Configuration	GPRS850 SAR(W/Kg)	2.4GHz WIFI SAR (W/Kg)	Σ SAR (W/Kg)	Simult Tx	Configuration	GPRS1900 SAR(W/Kg)	2.4GHz WIFI SAR (W/Kg)	Σ SAR (W/Kg)
Body SAR	Back	0.783	0.019	0.802	Body SAR	Back	0.935	0.019	0.954
	Front	0.377	0.003	0.38		Front	0.5	0.003	0.503
	Left	0.366	-	0.366		Left	0.355	-	0.355
	Right	-	0.014	0.014		Right	-	0.014	0.014
	Top	-	0.003	0.003		Top	-	0.003	0.003
	Bottom	0.655	-	0.655		Bottom	0.491	-	0.491
Simult Tx	Configuration	WCDMA850 SAR(W/Kg)	2.4GHz WIFI SAR (W/Kg)	Σ SAR (W/Kg)	Simult Tx	Configuration	WCDMA1900 SAR(W/Kg)	2.4GHz WIFI SAR (W/Kg)	Σ SAR (W/Kg)
Body SAR	Back	0.314	0.019	0.333	Body SAR	Back	0.397	0.019	0.416
	Front	0.194	0.003	0.197		Front	0.327	0.003	0.33
	Left	0.136	-	0.136		Left	0.193	-	0.193
	Right	-	0.014	0.014		Right	-	0.014	0.014
	Top	-	0.003	0.003		Top	-	0.003	0.003
	Bottom	0.237	-	0.237		Bottom	0.369	-	0.369

Note :

1. Per FCC KDB Publication941225 D06, the edges with antennas more than 2.5cm are not required to be evaluated for SAR(”-“). The above tables represent a portable hotspot condition.
2. When Hotspot is enabled all 5GHz WLAN bands are disabled.

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Multiple Antenna/Transmission Information for GT-N7100

The separation between the main antenna and the Bluetooth and WLAN antennas is 102mm.

RF Conducted Power of Bluetooth Tx is 7.98dBm. RF Conducted Power of 2.4GHz WLAN is 15.65dBm. Maximum RF conducted power of 5GHz WLAN is 12.91 Bm

2.4 GHz and 5 GHz WIFI and Bluetooth share the same antenna path and cannot transmit simultaneously.

Per KDB Publication 648474, Bluetooth SAR was not required based on the maximum conducted power, the Bluetooth/WLAN to main antenna separation distance and Body-SAR of the main antenna.

Simultaneous Transmission Conclusion

The above numerical summed SAR was below the SAR limit. Therefore, the above analysis is sufficient to determine that simultaneous transmission cases will not exceed the SAR limit. Therefore, no volumetric SAR summation is required since the numerical sums are below the limit

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9. CONCLUSION

The SAR measurement indicates that the EUT complies with the RF radiation exposure limits of the FCC. These measurements are taken to simulate the RF effects exposure under worst-case conditions. Precise laboratory measures were taken to assure repeatability of the tests. The test results and statements relate only to the item(s) tested.

Please note that the absorption and distribution of electromagnetic energy in the body are very complex phenomena that depend on the mass, shape, and size of the body, the orientation of the body with respect to the field vectors, and the electrical properties of both the body and the environment. Other variables that may play a substantial role in possible biological effects are those that characterize the environment (e.g. ambient temperature, air velocity, relative humidity, and body insulation) and those that characterize the individual (e.g. age, gender, activity level, debilitation, or disease). Because innumerable factors may interact to determine the specific biological outcome of an exposure to electromagnetic fields, any protection guide shall consider maximal amplification of biological effects as a result of field-body interactions, environmental conditions, and physiological variables.

The highest reported SAR values are as follows:
GSM850: Head: 0.171W/Kg : Body-worn: 0.305W/Kg : Hotspot: 0.783 W/Kg
GSM1900: Head: 0.09W/Kg : Body-worn: 0.316W/Kg : Hotspot: 0.935 W/Kg
WCDMA850: Head: 0.163W/Kg : Body-worn: 0.314W/Kg : Hotspot: 0.314W/Kg
WCDMA1900: Head: 0.147W/Kg : Body-worn: 0.397W/Kg : Hotspot: 0.397W/Kg
2.4GHz WLAN: Head: 0.022W/Kg : Body-worn: 0.019W/Kg : Hotspot: 0.019W/Kg
5.2GHz WLAN: Head: 0.066W/Kg : Body-worn: 0.404W/Kg
5.3GHz WLAN: Head: 0.045W/Kg : Body-worn: 0.217W/Kg
5.5GHz WLAN: Head: 0.033W/Kg : Body-worn: 0.029W/Kg
5.8GHz WLAN: Head: 0.068W/Kg : Body-worn: 0.04W/Kg
Highest Simulataneous SAR : Head : 0.229 W/Kg : Body : 0.954 W/Kg

10. REFERENCES

[1] Federal Communications Commission, ET Docket 93-62, Guidelines for Evaluating the Environmental Effects of Radiofrequency Radiation, Aug. 1996.

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APPENDIX A

SAR Definition

Specific Absorption Rate (SAR) is defined as the time derivative (rate) of the incremental energy (dU) absorbed by (dissipated in) an incremental mass (dm) contained in a volume element (dV) of a given density (p). It is also defined as the rate of RF energy absorption pet unit mass at a point in an absorbing body (see Fig. A.1) .

$$SAR = \frac{d}{dt}\left(\frac{dU}{dm}\right) = \frac{d}{dt}\left(\frac{dU}{pdv}\right)$$

Figure A.1 SAR Mathematical Equation

SAR is expressed in units of Watts per Kilogram (W/kg).

$$\text{SAR} = \sigma E^2 / p$$

Where :

σ = conductivity of the tissue-simulant material (S/m)
p = mass density of the tissue-simulant material (kg/m^3)
E = Total RMS electric field strength (V/m)

Note: The primary factors that control rate or energy absorption were found to be the wavelength of the incident field in relations to the dimensions and geometry of the irradiated organism, the orientation of the organism in relation to the polarity of field vectors, the presence of reflecting surfaces, and whether conductive contact is made by the organism with a ground plane.

- End of page -

APPENDIX B

Probe Calibration Process

Dosimetric Assessment Procedure

Each probe is calibrated according to a dosimetric assessment procedure described in **K. Pokovic, T.Schmid, N. Kuster, *Robust setup for precise calibration of E-field probes in tissue simulating liquids at mobile communications frequencies*, ICECOM97, Oct. 1997, pp. 120-124** with an accuracy better than +/-10%. The spherical isotropy was evaluated with the procedure described in **K. Pokovic, T.Schmid, N. Kuster, *E-field Probe with improved isotropy in brain simulating liquids*, Proceedings of the ELMAR, Zadar, June 23-25, 1996, pp. 172-175** 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 is tested.

Free Space Assessment

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 (see Fig. B.1), and in a waveguide 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.

Temperature Assessment

E-field temperature correlation calibration is performed in a flat phantom 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 (see Fig. B.2).

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

where:

Δt = exposure time (30 seconds)

C = heat capacity of tissue (brain or muscle).

ΔT = temperature increase due to RF exposure.

SAR is proportional to ΔT/ Δt, the initial rate of tissue heating, before thermal diffusion takes place. Now it's possible to quantify the electric field in the simulated tissue by equating the thermally derived SAR to the E-field;

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

where:

σ = simulated tissue conductivity

p = Tissue density (1.25 g/cm^3 for brain tissue)

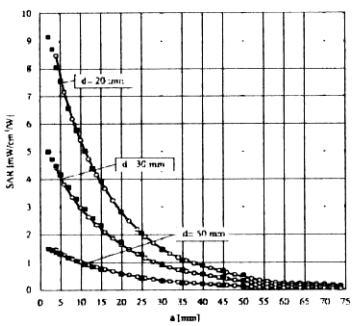


Figure B.1. E-Field and Temperature measurements at 900MHz

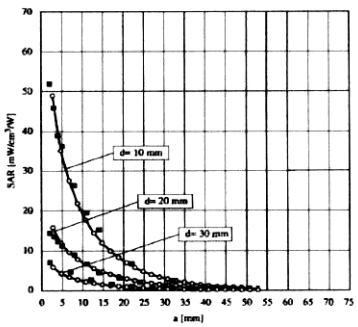


Figure B.2. E-Field and temperature measurements at 1.9GHz

APPENDIX C

ANSI/IEEE C95.1 – 1992 RF EXPOSURE LIMITS

Uncontrolled Environment

UNCONTROLLED ENVIRONMENTS are defined as locations where there is the exposure of individuals who have no knowledge or control of their exposure. The general population/uncontrolled exposure limits are applicable to situations in which the general public may be exposed or in which persons who are exposed as a consequence of their employment may not be made fully aware of the potential for exposure or cannot exercise control over their exposure. Members of the general public would come under this category when exposure is not employment-related; for example, in the case of a wireless transmitter that exposes persons in its vicinity.

Controlled Environment

CONTROLLED ENVIRONMENTS are defined as locations where there is the exposure that may be incurred by persons who are aware of the potential for exposure,(i.e. as a result of employment or occupation). In general, occupational/controlled exposure limits are applicable to situations in which persons are exposed as a consequence of their employment, who have been made fully aware of the potential for exposure and can exercise control over their exposure. This exposure category is also applicable when the exposure is of a transient nature due to incidental passage through a location where the exposure levels may be higher than the general population/uncontrolled limits, but the exposed person is fully aware of the potential for exposure and can exercise control over his or her exposure by leaving the area or by some other appropriate means.

Table C.1 Safety Limits for Partial Body Exposure

	UNCONTROLLED ENVIRONMENT General Population (W/kg) or (mW/g)	CONTROLLED ENVIRONMENT General Population (W/kg) or (mW/g)
SPATIAL PEAK SAR[1] Brain	1.60	8.00
SPATIAL PEAK SAR[2] Whole Body	0.08	0.40
SPATIAL PEAK SAR[3] Hands,Feet,Ankles, Wrists	4.00	20.00

[1] The Spatial Peak value of the SAR averaged over any 1 gram of tissue (defined as tissue volume in the shape of a cube) and over the appropriate averaging time.
[2] The Spatial Average value of the SAR averaged over the whole body.
[3] The Spatial Peak value of the SAR averaged over any 10 grams of tissue (defined as a tissue volume in the shape of a cube) and over the appropriate averaging time.

APPENDIX D

The Validation Measurements

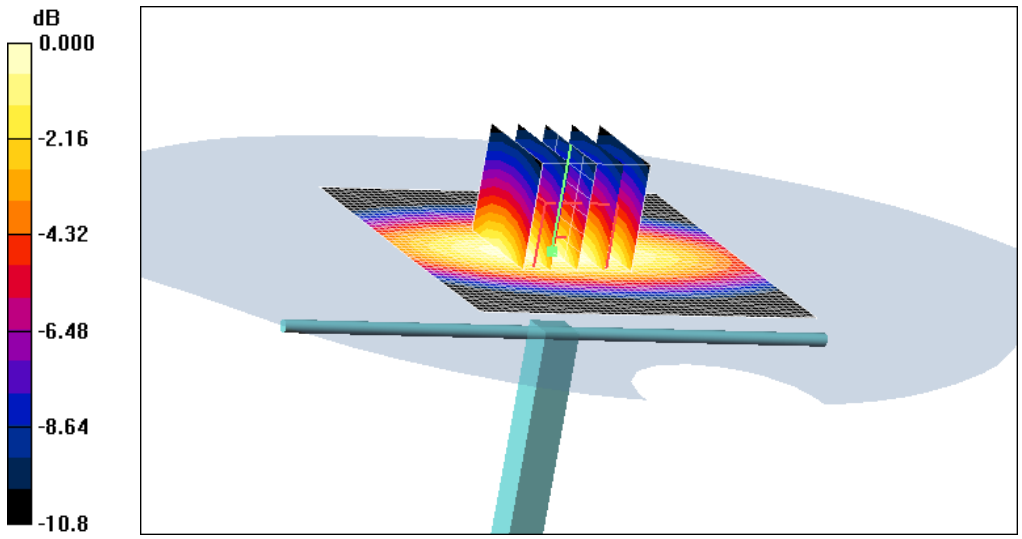
DUT: Dipole 835 MHz; Serial: 4d111
Program Name: 835MHz Dipole Validation 2012.08.08
Procedure Name: 835MHz @ 250mW
Meas. Ambient Temp(celsius)-22.4,Tissue Temp(celsius)-22.1;Test Date-08/Aug/2012

Communication System: CW; Frequency: 835 MHz;Duty Cycle: 1:1
Medium parameters used: f = 835 MHz; σ = 0.89 mho/m; ε_r = 40.6; ρ = 1000 kg/m^3
Phantom section: Flat Section

DASY5 Configuration:
- Probe: EX3DV4 - SN3520; ConvF(9.62, 9.62, 9.62); Calibrated: 2012-02-21
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn533; Calibrated: 2011-09-21
- Phantom: SAM PHANTOM #1; Type: SAM; Serial: TP-1248
- Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 184

835MHz @ 250mW/Area Scan (51x51x1): Measurement grid: dx=20mm, dy=20mm
Maximum value of SAR (interpolated) = 2.43 mW/g

835MHz @ 250mW/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 52.5 V/m; Power Drift = -0.036 dB
Peak SAR (extrapolated) = 3.41 W/kg
SAR(1 g) = 2.28 mW/g; SAR(10 g) = 1.48 mW/g
Maximum value of SAR (measured) = 2.47 mW/g



0 dB = 2.47mW/g

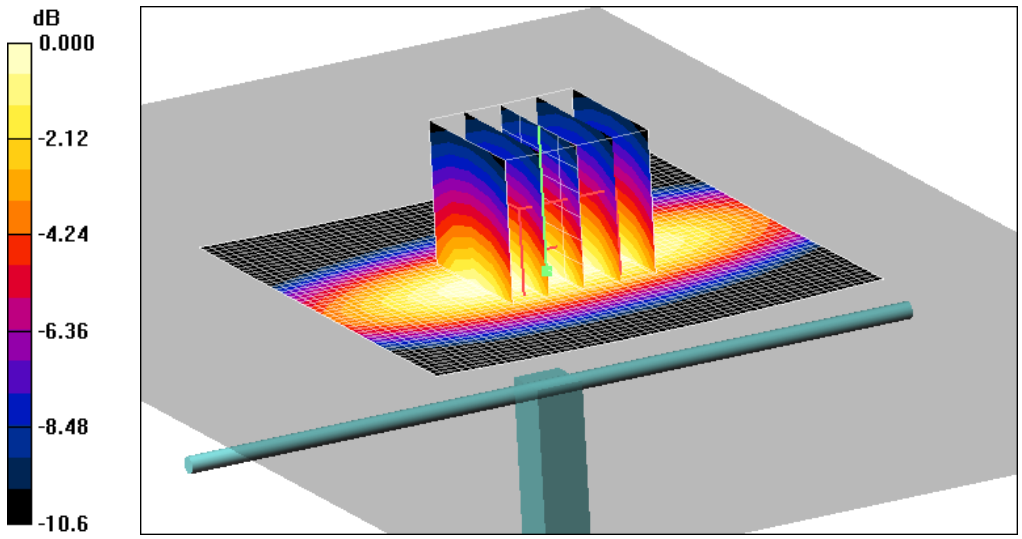
DUT: Dipole 835 MHz; Serial: 4d111
Program Name: 835MHz Dipole Validation 2012.08.08
Procedure Name: 835MHz @ 250mW
Meas. Ambient Temp(celsius)-22.3,Tissue Temp(celsius)-22.0;Test Date-08/Aug/2012

Communication System: CW; Frequency: 835 MHz;Duty Cycle: 1:1
Medium parameters used: f = 835 MHz; σ = 0.97 mho/m; ε_r = 54.3; ρ = 1000 kg/m^3
Phantom section: Right Section

DASY5 Configuration:
- Probe: EX3DV4 - SN3520; ConvF(9.72, 9.72, 9.72); Calibrated: 2012-02-21
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn533; Calibrated: 2011-09-21
- Phantom: Triple Flat Phantom 5.1; Type: Triple Flat Phantom 5.1; Serial: 1003
- Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 184

835MHz @ 250mW/Area Scan (51x51x1): Measurement grid: dx=20mm, dy=20mm
Maximum value of SAR (interpolated) = 2.61 mW/g

835MHz @ 250mW/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 50.8 V/m; Power Drift = 0.003 dB
Peak SAR (extrapolated) = 3.46 W/kg
SAR(1 g) = 2.33 mW/g; SAR(10 g) = 1.52 mW/g
Maximum value of SAR (measured) = 2.52 mW/g



0 dB = 2.52mW/g

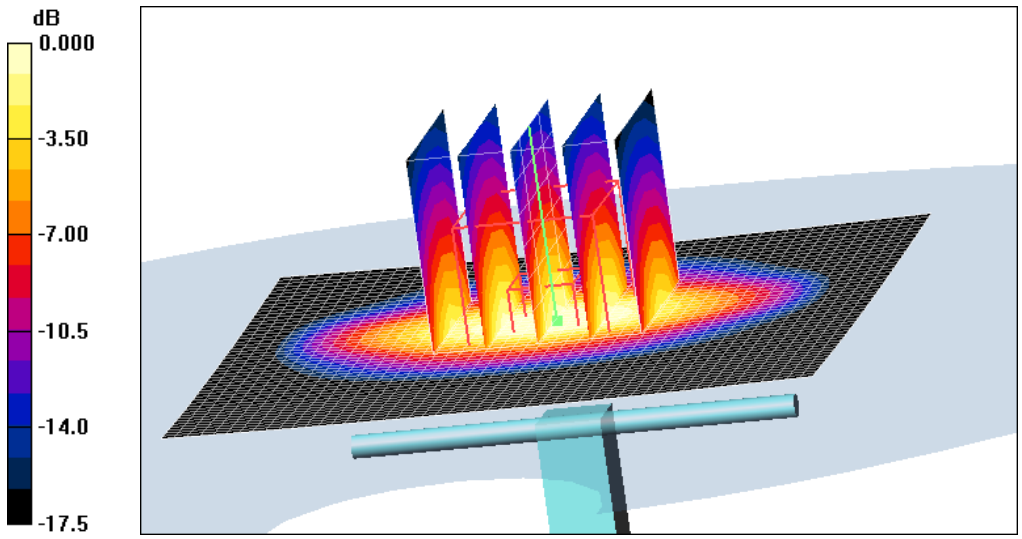
DUT: Dipole 1900 MHz; Serial: 5d023
Program Name: 1900MHz Dipole Validation 2012.08.14
Procedure Name: 1900MHz @ 100mW
Meas. Ambient Temp(celsius)-22.6,Tissue Temp(celsius)-22.4;Test Date-14/Aug/2012

Communication System: CW; Frequency: 1900 MHz;Duty Cycle: 1:1
Medium parameters used: f = 1900 MHz; σ = 1.4 mho/m; ε_r = 39.4; ρ = 1000 kg/m^3
Phantom section: Flat Section

DASY5 Configuration:
- Probe: EX3DV4 - SN3520; ConvF(8.54, 8.54, 8.54); Calibrated: 2012-02-21
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn533; Calibrated: 2011-09-21
- Phantom: SAM PHANTOM #2; Type: SAM; Serial: TP-1247
- Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 184

1900MHz @ 100mW/Area Scan (51x51x1): Measurement grid: dx=20mm, dy=20mm
Maximum value of SAR (interpolated) = 5.30 mW/g

1900MHz @ 100mW/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 45.4 V/m; Power Drift = -0.026 dB
Peak SAR (extrapolated) = 7.41 W/kg
SAR(1 g) = 4.06 mW/g; SAR(10 g) = 2.13 mW/g
Maximum value of SAR (measured) = 4.55 mW/g



0 dB = 4.55mW/g

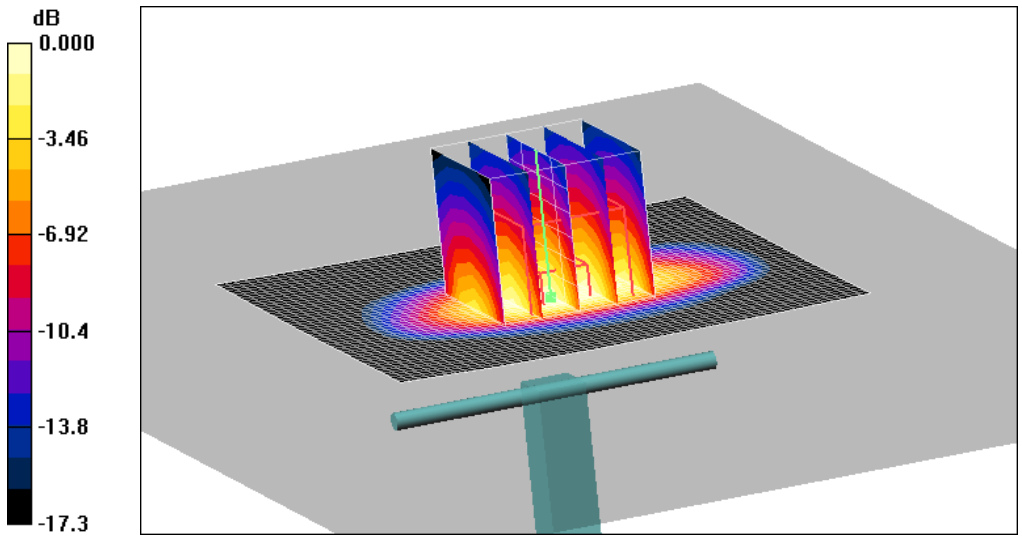
DUT: Dipole 1900 MHz; Serial: 5d023
Program Name: 1900MHz Dipole Validation 2012.08.14
Procedure Name: 1900MHz @ 100mW
Meas. Ambient Temp(celsius)-22.4,Tissue Temp(celsius)-22.2;Test Date-14/Aug/2012

Communication System: CW; Frequency: 1900 MHz;Duty Cycle: 1:1
Medium parameters used: f = 1900 MHz; σ = 1.49 mho/m; ε_r = 53.2; ρ = 1000 kg/m^3
Phantom section: Left Section

DASY5 Configuration:
- Probe: EX3DV4 - SN3520; ConvF(8.19, 8.19, 8.19); Calibrated: 2012-02-21
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn533; Calibrated: 2011-09-21
- Phantom: Triple Flat Phantom 5.1; Type: Triple Flat Phantom 5.1; Serial: 1003
- Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 184

1900MHz @ 100mW/Area Scan (51x51x1): Measurement grid: dx=20mm, dy=20mm
Maximum value of SAR (interpolated) = 5.42 mW/g

1900MHz @ 100mW/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 52.8 V/m; Power Drift = -0.191 dB
Peak SAR (extrapolated) = 6.76 W/kg
SAR(1 g) = 3.83 mW/g; SAR(10 g) = 2.02 mW/g
Maximum value of SAR (measured) = 4.27 mW/g



0 dB = 4.27mW/g

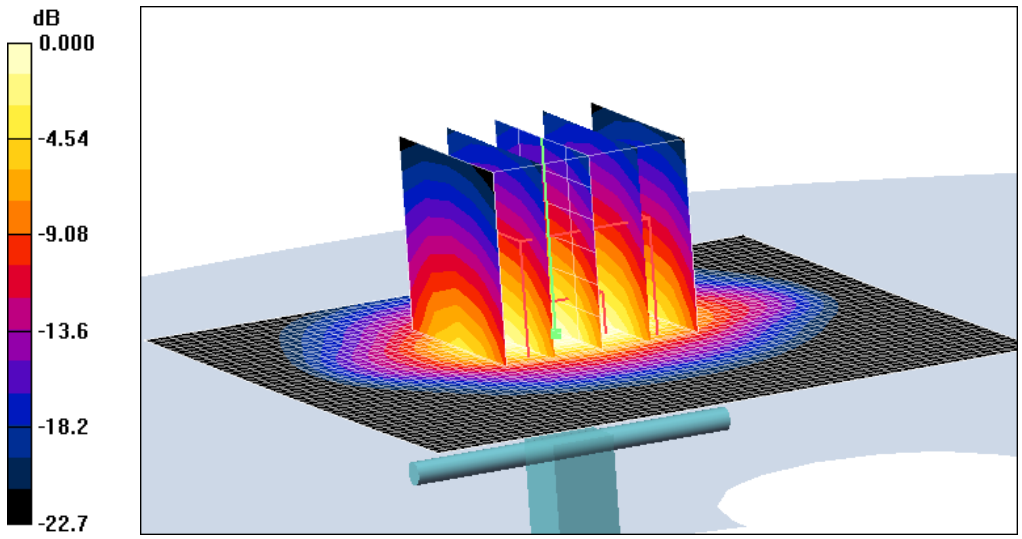
DUT: Dipole 2450 MHz; Serial: 807
Program Name: 2450MHz Dipole Validation 2012.08.10
Procedure Name: 2450MHz @ 100mW
Meas. Ambient Temp(celsius)-22.3,Tissue Temp(celsius)-22.1;Test Date-10/Aug/2012

Communication System: CW; Frequency: 2450 MHz;Duty Cycle: 1:1
Medium parameters used: f = 2450 MHz; σ = 1.81 mho/m; ε_r = 39; ρ = 1000 kg/m^3
Phantom section: Flat Section

DASY5 Configuration:
- Probe: EX3DV4 - SN3520; ConvF(7.43, 7.43, 7.43); Calibrated: 2012-02-21
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn533; Calibrated: 2011-09-21
- Phantom: SAM PHANTOM #2; Type: SAM; Serial: TP-1247
- Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 184

2450MHz @ 100mW/Area Scan (51x51x1): Measurement grid: dx=20mm, dy=20mm
Maximum value of SAR (interpolated) = 7.08 mW/g

2450MHz @ 100mW/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 35.8 V/m; Power Drift = 0.058 dB
Peak SAR (extrapolated) = 11.6 W/kg
SAR(1 g) = 5.44 mW/g; SAR(10 g) = 2.5 mW/g
Maximum value of SAR (measured) = 6.18 mW/g



0 dB = 6.18mW/g

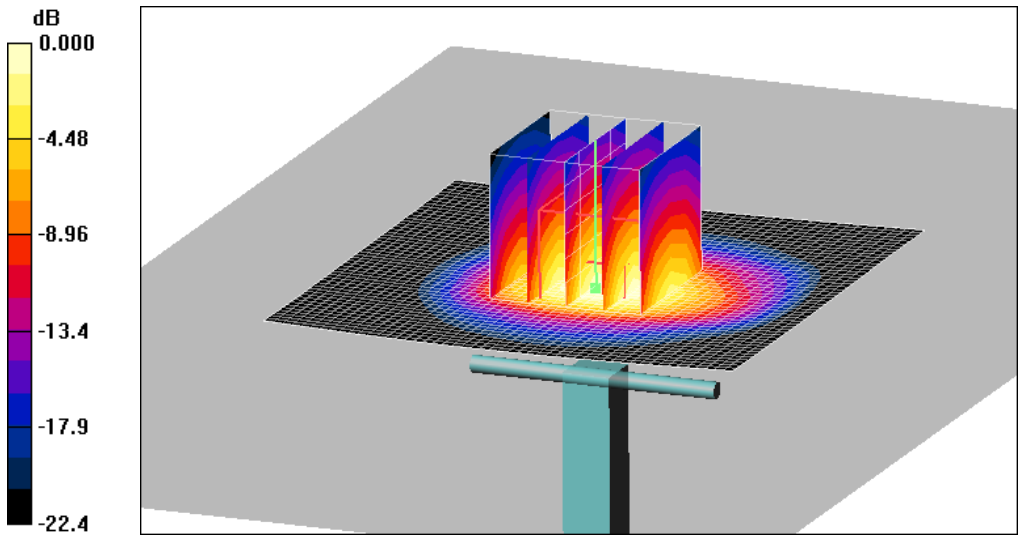
DUT: Dipole 2450 MHz; Serial: D2450V2 - SN:807
Program Name: 2450MHz Dipole Validation 2012.08.10
Procedure Name: 2450MHz @ 100mW
Meas. Ambient Temp(celsius)-22.3,Tissue Temp(celsius)-22.2;Test Date-10/Aug/2012

Communication System: CW; Frequency: 2450 MHz;Duty Cycle: 1:1
Medium parameters used: f = 2450 MHz; σ = 1.95 mho/m; ε_r = 51.5; ρ = 1000 kg/m^3
Phantom section: Right Section

DASY5 Configuration:
- Probe: EX3DV4 - SN3520; ConvF(7.45, 7.45, 7.45); Calibrated: 2012-02-21
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn533; Calibrated: 2011-09-21
- Phantom: Triple Flat Phantom 5.1; Type: Triple Flat Phantom 5.1; Serial: 1003
- Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 184

2450MHz @ 100mW/Area Scan (51x51x1): Measurement grid: dx=20mm, dy=20mm
Maximum value of SAR (interpolated) = 6.16 mW/g

2450MHz @ 100mW/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 50.3 V/m; Power Drift = -0.013 dB
Peak SAR (extrapolated) = 9.95 W/kg
SAR(1 g) = 5.01 mW/g; SAR(10 g) = 2.35 mW/g
Maximum value of SAR (measured) = 5.58 mW/g



0 dB = 5.58mW/g

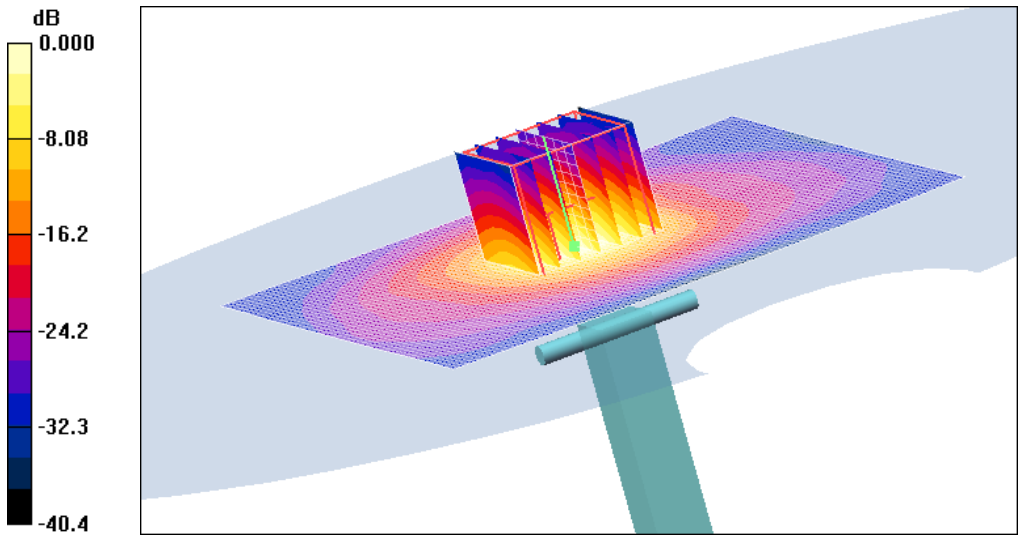
DUT: Dipole 5000 MHz; Serial: D5GHzV2 - SN:1132
Program Name: 5200MHz Dipole Validation 2012.08.24
Procedure Name: 5200MHz @ 100mW
Meas. Ambient Temp(celsius)-22.5,Tissue Temp(celsius)-22.4;Test Date-24/Aug/2012

Communication System: CW; Frequency: 5200 MHz;Duty Cycle: 1:1
Medium parameters used: f = 5200 MHz; σ = 4.85 mho/m; ε_r = 34.7; ρ = 1000 kg/m^3
Phantom section: Flat Section

DASY5 Configuration:
- Probe: EX3DV4 - SN3520; ConvF(4.91, 4.91, 4.91); Calibrated: 2012-02-21
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn533; Calibrated: 2011-09-21
- Phantom: SAM PHANTOM #2; Type: SAM; Serial: TP-1247
- Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 184

5200MHz @ 100mW/Area Scan (101x101x1): Measurement grid: dx=10mm, dy=10mm
Maximum value of SAR (interpolated) = 16.6 mW/g

5200MHz @ 100mW/Zoom Scan (7x7x11)/Cube 0: Measurement grid: dx=4mm, dy=4mm, dz=2mm
Reference Value = 56.5 V/m; Power Drift = 0.170 dB
Peak SAR (extrapolated) = 35.2 W/kg
SAR(1 g) = 8.28 mW/g; SAR(10 g) = 2.33 mW/g
Maximum value of SAR (measured) = 17.5 mW/g



0 dB = 17.5mW/g

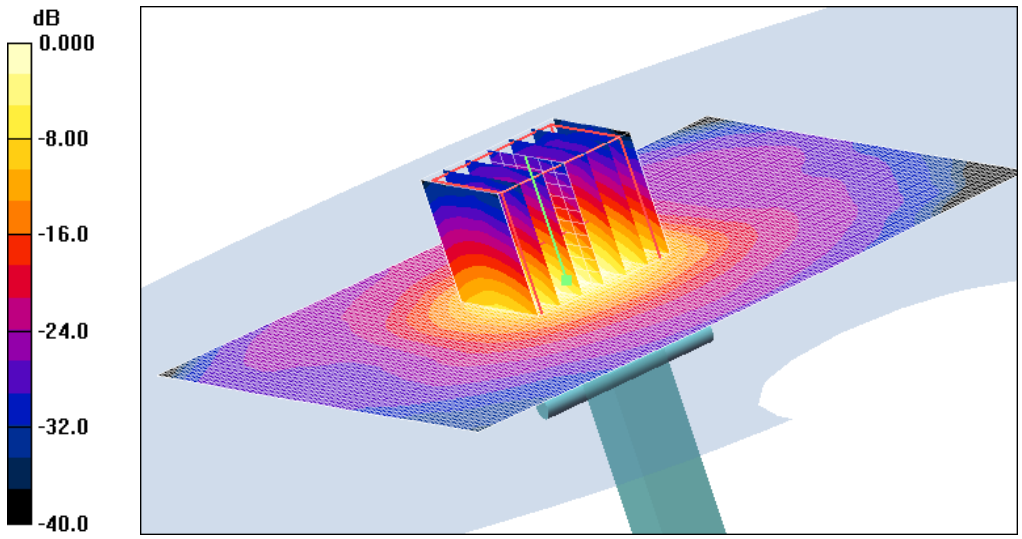
DUT: Dipole 5000 MHz; Serial: D5GHzV2 - SN:1132
Program Name: 5200MHz Dipole Validation 2012.08.24
Procedure Name: 5500MHz @ 100mW
Meas. Ambient Temp(celsius)-22.5,Tissue Temp(celsius)-22.4;Test Date-24/Aug/2012

Communication System: CW; Frequency: 5500 MHz;Duty Cycle: 1:1
Medium parameters used: f = 5500 MHz; σ = 5.2 mho/m; ε_r = 34.9; ρ = 1000 kg/m^3
Phantom section: Flat Section

DASY5 Configuration:
- Probe: EX3DV4 - SN3520; ConvF(4.52, 4.52, 4.52); Calibrated: 2012-02-21
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn533; Calibrated: 2011-09-21
- Phantom: SAM PHANTOM #2; Type: SAM; Serial: TP-1247
- Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 184

5500MHz @ 100mW/Area Scan (101x101x1): Measurement grid: dx=10mm, dy=10mm
Maximum value of SAR (interpolated) = 17.1 mW/g

5500MHz @ 100mW/Zoom Scan (7x7x11)/Cube 0: Measurement grid: dx=4mm, dy=4mm, dz=2mm
Reference Value = 53.9 V/m; Power Drift = -0.119 dB
Peak SAR (extrapolated) = 36.1 W/kg
SAR(1 g) = 8.28 mW/g; SAR(10 g) = 2.35 mW/g
Maximum value of SAR (measured) = 17.4 mW/g



0 dB = 17.4mW/g

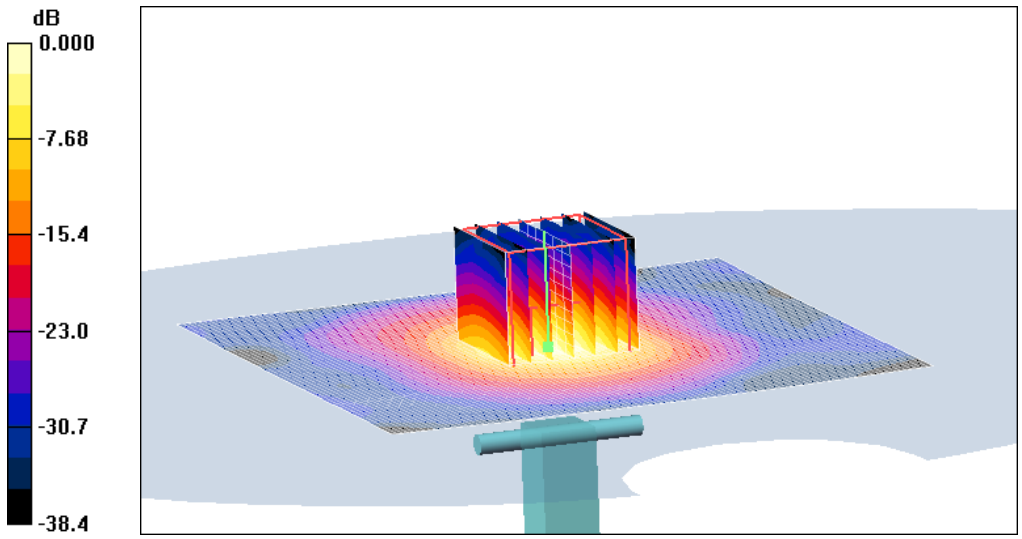
DUT: Dipole 5000 MHz; Serial: D5GHzV2 - SN:1132
Program Name: 5800MHz Dipole Validation 2012.08.24
Procedure Name: 5800MHz @ 100mW
Meas. Ambient Temp(celsius)-22.5,Tissue Temp(celsius)-22.4;Test Date-24/Aug/2012

Communication System: CW; Frequency: 5800 MHz;Duty Cycle: 1:1
Medium parameters used: f = 5800 MHz; σ = 5.47 mho/m; ε_r = 34.5; ρ = 1000 kg/m^3
Phantom section: Flat Section

DASY5 Configuration:
- Probe: EX3DV4 - SN3520; ConvF(4.28, 4.28, 4.28); Calibrated: 2012-02-21
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn533; Calibrated: 2011-09-21
- Phantom: SAM PHANTOM #2; Type: SAM; Serial: TP-1247
- Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 184

5800MHz @ 100mW/Area Scan (101x101x1): Measurement grid: dx=10mm, dy=10mm
Maximum value of SAR (interpolated) = 17.9 mW/g

5800MHz @ 100mW/Zoom Scan (7x7x11)/Cube 0: Measurement grid: dx=4mm, dy=4mm, dz=2mm
Reference Value = 58.5 V/m; Power Drift = 0.124 dB
Peak SAR (extrapolated) = 40.3 W/kg
SAR(1 g) = 8.74 mW/g; SAR(10 g) = 2.49 mW/g
Maximum value of SAR (measured) = 18.2 mW/g



0 dB = 18.2mW/g

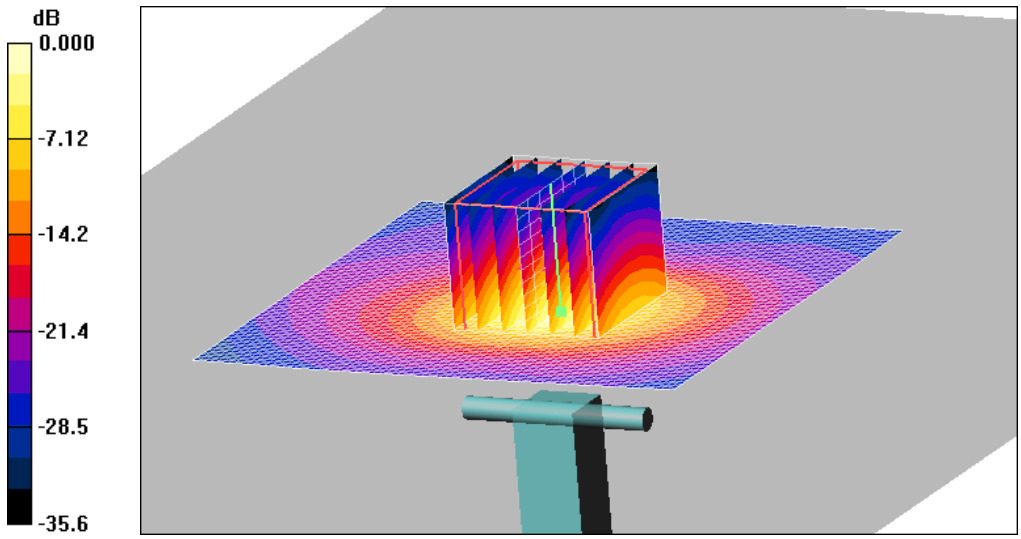
DUT: Dipole 5000 MHz; Serial: D5GHzV2 - SN:1132
Program Name: 5200MHz Dipole Validation 2012.08.27
Procedure Name: 5200MHz @ 100mW
Meas. Ambient Temp(celsius)-22.5,Tissue Temp(celsius)-22.3;Test Date-27/Aug/2012

Communication System: CW; Frequency: 5200 MHz;Duty Cycle: 1:1
Medium parameters used: f = 5200 MHz; σ = 5.41 mho/m; ε_r = 47.9; ρ = 1000 kg/m^3
Phantom section: Right Section

DASY5 Configuration:
- Probe: EX3DV4 - SN3520; ConvF(3.9, 3.9, 3.9); Calibrated: 2012-02-21
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn533; Calibrated: 2011-09-21
- Phantom: Triple Flat Phantom 5.1; Type: Triple Flat Phantom 5.1; Serial: 1003
- Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 184

5200MHz @ 100mW/Area Scan (81x81x1): Measurement grid: dx=10mm, dy=10mm
Maximum value of SAR (interpolated) = 15.2 mW/g

5200MHz @ 100mW/Zoom Scan (7x7x11)/Cube 0: Measurement grid: dx=4mm, dy=4mm, dz=2mm
Reference Value = 41.5 V/m; Power Drift = 0.012 dB
Peak SAR (extrapolated) = 29.0 W/kg
SAR(1 g) = 7.29 mW/g; SAR(10 g) = 2.06 mW/g
Maximum value of SAR (measured) = 15.4 mW/g



0 dB = 15.4mW/g

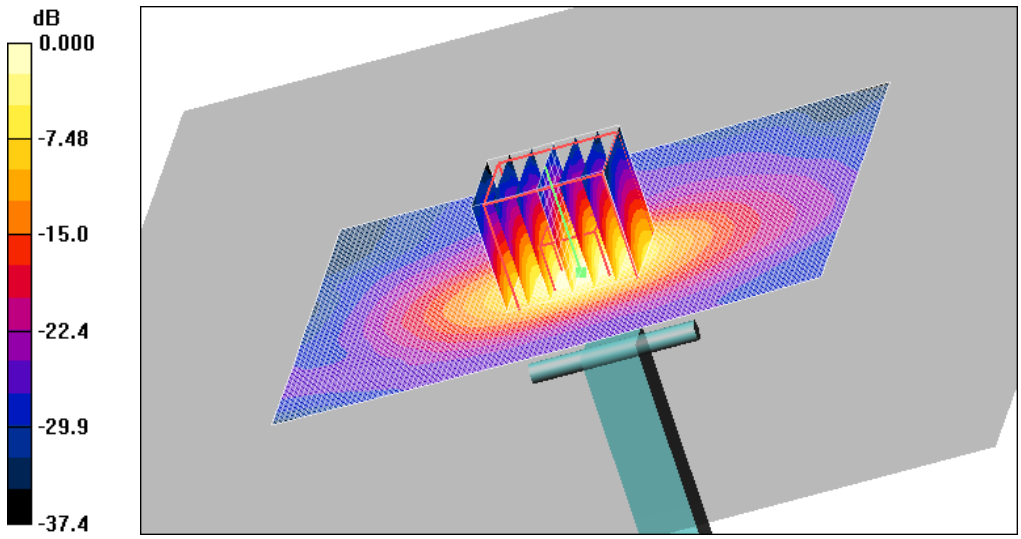
DUT: Dipole 5000 MHz; Serial: D5GHzV2 - SN:1132
Program Name: 5500MHz Dipole Validation 2012.08.27
Procedure Name: 5500MHz @ 100mW
Meas. Ambient Temp(celsius)-22.5,Tissue Temp(celsius)-22.3;Test Date-27/Aug/2012

Communication System: CW; Frequency: 5500 MHz;Duty Cycle: 1:1
Medium parameters used: f = 5500 MHz; σ = 5.91 mho/m; ε_r = 47.2; ρ = 1000 kg/m^3
Phantom section: Right Section

DASY5 Configuration:
- Probe: EX3DV4 - SN3520; ConvF(3.38, 3.38, 3.38); Calibrated: 2012-02-21
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn533; Calibrated: 2011-09-21
- Phantom: Triple Flat Phantom 5.1; Type: Triple Flat Phantom 5.1; Serial: 1003
- Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 184

5500MHz @ 100mW/Area Scan (101x101x1): Measurement grid: dx=10mm, dy=10mm
Maximum value of SAR (interpolated) = 19.0 mW/g

5500MHz @ 100mW/Zoom Scan (7x7x11)/Cube 0: Measurement grid: dx=4mm, dy=4mm, dz=2mm
Reference Value = 38.9 V/m; Power Drift = -0.078 dB
Peak SAR (extrapolated) = 33.6 W/kg
SAR(1 g) = 8.11 mW/g; SAR(10 g) = 2.27 mW/g
Maximum value of SAR (measured) = 17.0 mW/g



0 dB = 17.0mW/g

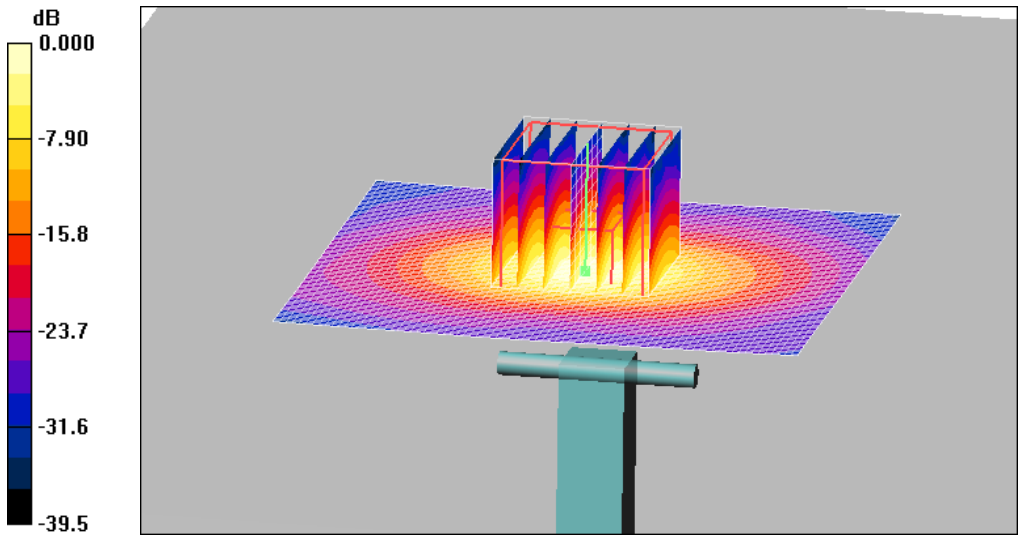
DUT: Dipole 5000 MHz; Serial: D5GHzV2 - SN:1132
Program Name: 5800MHz Dipole Validation 2012.08.27
Procedure Name: 5800MHz @ 100mW
Meas. Ambient Temp(celsius)-22.5,Tissue Temp(celsius)-22.3;Test Date-27/Aug/2012

Communication System: CW; Frequency: 5800 MHz;Duty Cycle: 1:1
Medium parameters used: f = 5800 MHz; σ = 6.17 mho/m; ε_r = 46.1; ρ = 1000 kg/m^3
Phantom section: Right Section

DASY5 Configuration:
- Probe: EX3DV4 - SN3520; ConvF(3.5, 3.5, 3.5); Calibrated: 2012-02-21
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn533; Calibrated: 2011-09-21
- Phantom: Triple Flat Phantom 5.1; Type: Triple Flat Phantom 5.1; Serial: 1003
- Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 184

5800MHz @ 100mW/Area Scan (81x81x1): Measurement grid: dx=10mm, dy=10mm
Maximum value of SAR (interpolated) = 16.5 mW/g

5800MHz @ 100mW/Zoom Scan (7x7x11)/Cube 0: Measurement grid: dx=4mm, dy=4mm, dz=2mm
Reference Value = 30.3 V/m; Power Drift = 0.190 dB
Peak SAR (extrapolated) = 32.5 W/kg
SAR(1 g) = 7.64 mW/g; SAR(10 g) = 2.13 mW/g
Maximum value of SAR (measured) = 16.6 mW/g



0 dB = 16.6mW/g

APPENDIX E

Plots of The SAR Measurements

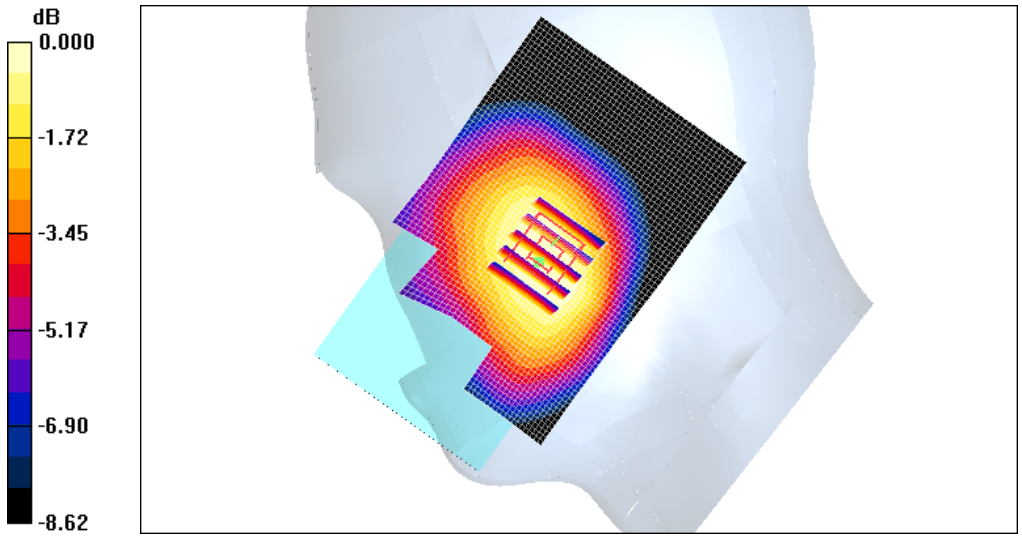
DUT: GT-N7100; Serial: FJ-213-E
Program Name: GT-N7100 GSM850 Right (Job No. : FJ-213)
Procedure Name: Cheek/Touch, Ch.190, Ant.Intenna, Bat.Standard
Meas. Ambient Temp(celsius)-22.4,Tissue Temp(celsius)-22.1;Test Date-08/Aug/2012

Communication System: GSM 850; Frequency: 836.6 MHz;Duty Cycle: 1:8.3
Medium parameters used: f = 836.6 MHz; σ = 0.89 mho/m; ε_r = 40.6; ρ = 1000 kg/m^3
Phantom section: Right Section

DASY5 Configuration:
- Probe: EX3DV4 - SN3520; ConvF(9.62, 9.62, 9.62); Calibrated: 2012-02-21
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn533; Calibrated: 2011-09-21
- Phantom: SAM PHANTOM #1; Type: SAM; Serial: TP-1248
- Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 184

Cheek/Touch, Ch.190, Ant.Intenna, Bat.Standard/Area Scan (51x71x1): Measurement grid: dx=20mm, dy=20mm
Maximum value of SAR (interpolated) = 0.181 mW/g

Cheek/Touch, Ch.190, Ant.Intenna, Bat.Standard/Zoom Scan (5x5x7)/Cube 0:
Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 13.8 V/m; Power Drift = -0.014 dB
Peak SAR (extrapolated) = 0.198 W/kg
SAR(1 g) = 0.159 mW/g; SAR(10 g) = 0.122 mW/g
Maximum value of SAR (measured) = 0.181 mW/g



0 dB = 0.181mW/g

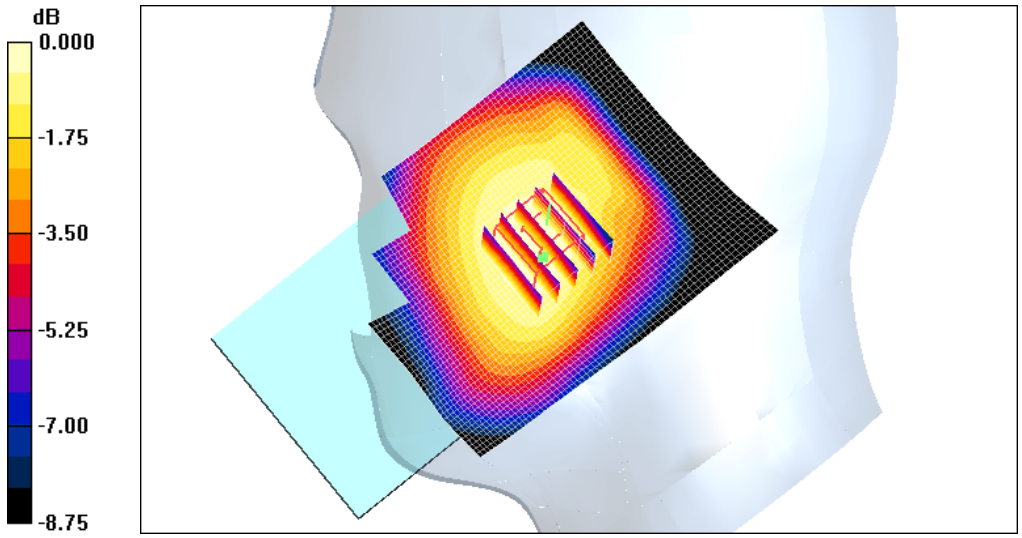
DUT: GT-N7100; Serial: FJ-213-E
Program Name: GT-N7100 GSM850 Right (Job No. : FJ-213)
Procedure Name: Ear/Tilt, Ch.190, Ant.Intenna, Bat.Standard
Meas. Ambient Temp(celsius)-22.4,Tissue Temp(celsius)-22.1;Test Date-08/Aug/2012

Communication System: GSM 850; Frequency: 836.6 MHz;Duty Cycle: 1:8.3
Medium parameters used: f = 836.6 MHz; σ = 0.89 mho/m; ε_r = 40.6; ρ = 1000 kg/m^3
Phantom section: Right Section

DASY5 Configuration:
- Probe: EX3DV4 - SN3520; ConvF(9.62, 9.62, 9.62); Calibrated: 2012-02-21
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn533; Calibrated: 2011-09-21
- Phantom: SAM PHANTOM #1; Type: SAM; Serial: TP-1248
- Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 184

Ear/Tilt, Ch.190, Ant.Intenna, Bat.Standard/Area Scan (51x71x1): Measurement grid: dx=20mm, dy=20mm
Maximum value of SAR (interpolated) = 0.042 mW/g

Ear/Tilt, Ch.190, Ant.Intenna, Bat.Standard/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 4.30 V/m; Power Drift = 0.051 dB
Peak SAR (extrapolated) = 0.046 W/kg
SAR(1 g) = 0.037 mW/g; SAR(10 g) = 0.030 mW/g
Maximum value of SAR (measured) = 0.042 mW/g



0 dB = 0.042mW/g

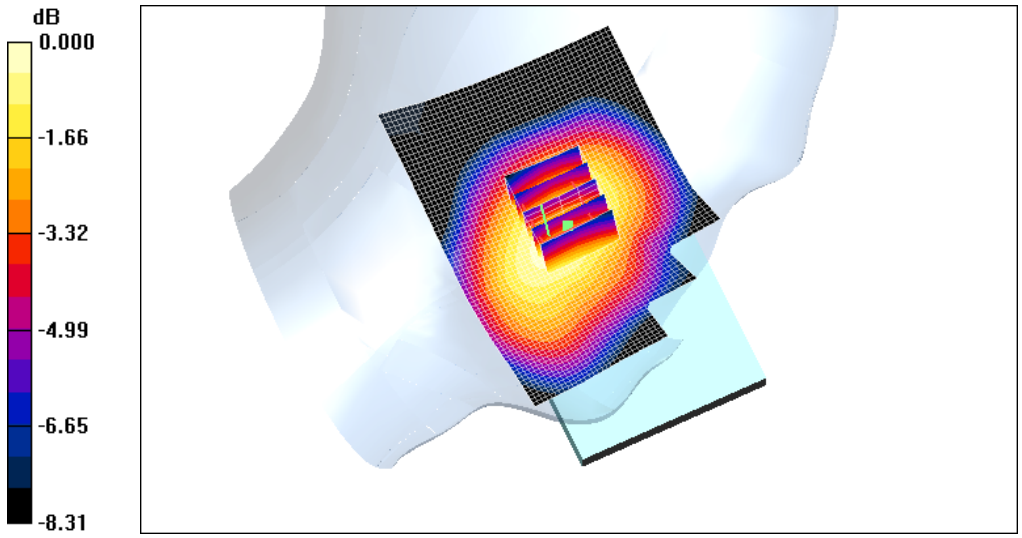
DUT: GT-N7100; Serial: FJ-213-E
Program Name: GT-N7100 GSM850 Left (Job No. : FJ-213)
Procedure Name: Cheek/Touch, Ch.190, Ant.Intenna, Bat.Standard 2
Meas. Ambient Temp(celsius)-22.4,Tissue Temp(celsius)-22.1;Test Date-08/Aug/2012

Communication System: GSM 850; Frequency: 836.6 MHz;Duty Cycle: 1:8.3
Medium parameters used: f = 836.6 MHz; σ = 0.89 mho/m; ε_r = 40.6; ρ = 1000 kg/m^3
Phantom section: Left Section

DASY5 Configuration:
- Probe: EX3DV4 - SN3520; ConvF(9.62, 9.62, 9.62); Calibrated: 2012-02-21
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn533; Calibrated: 2011-09-21
- Phantom: SAM PHANTOM #1; Type: SAM; Serial: TP-1248
- Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 184

Cheek/Touch, Ch.190, Ant.Intenna, Bat.Standard 2/Area Scan (51x81x1): Measurement grid: dx=20mm, dy=20mm
Maximum value of SAR (interpolated) = 0.192 mW/g

Cheek/Touch, Ch.190, Ant.Intenna, Bat.Standard 2/Zoom Scan (5x5x7)/Cube 0:
Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 14.3 V/m; Power Drift = -0.137 dB
Peak SAR (extrapolated) = 0.215 W/kg
SAR(1 g) = 0.171 mW/g; SAR(10 g) = 0.132 mW/g
Maximum value of SAR (measured) = 0.197 mW/g



0 dB = 0.197mW/g

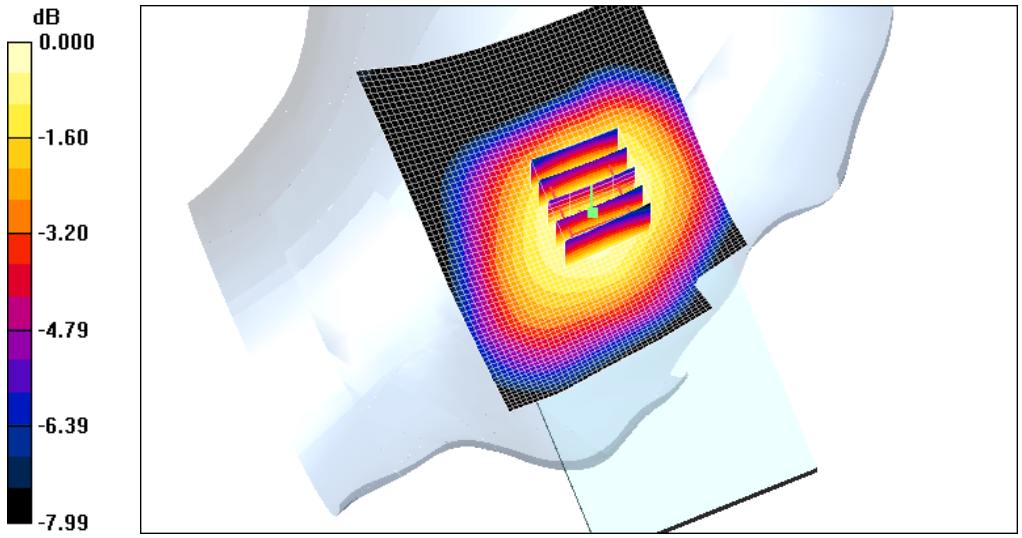
DUT: GT-N7100; Serial: FJ-213-E
Program Name: GT-N7100 GSM850 Left (Job No. : FJ-213)
Procedure Name: Ear/Tilt, Ch.190, Ant.Intenna, Bat.Standard
Meas. Ambient Temp(celsius)-22.4,Tissue Temp(celsius)-22.1;Test Date-08/Aug/2012

Communication System: GSM 850; Frequency: 836.6 MHz;Duty Cycle: 1:8.3
Medium parameters used: f = 836.6 MHz; σ = 0.89 mho/m; ε_r = 40.6; ρ = 1000 kg/m^3
Phantom section: Left Section

DASY5 Configuration:
- Probe: EX3DV4 - SN3520; ConvF(9.62, 9.62, 9.62); Calibrated: 2012-02-21
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn533; Calibrated: 2011-09-21
- Phantom: SAM PHANTOM #1; Type: SAM; Serial: TP-1248
- Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 184

Ear/Tilt, Ch.190, Ant.Intenna, Bat.Standard/Area Scan (51x71x1): Measurement grid: dx=20mm, dy=20mm
Maximum value of SAR (interpolated) = 0.041 mW/g

Ear/Tilt, Ch.190, Ant.Intenna, Bat.Standard/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 5.90 V/m; Power Drift = -0.002 dB
Peak SAR (extrapolated) = 0.047 W/kg
SAR(1 g) = 0.039 mW/g; SAR(10 g) = 0.031 mW/g
Maximum value of SAR (measured) = 0.041 mW/g



0 dB = 0.041mW/g

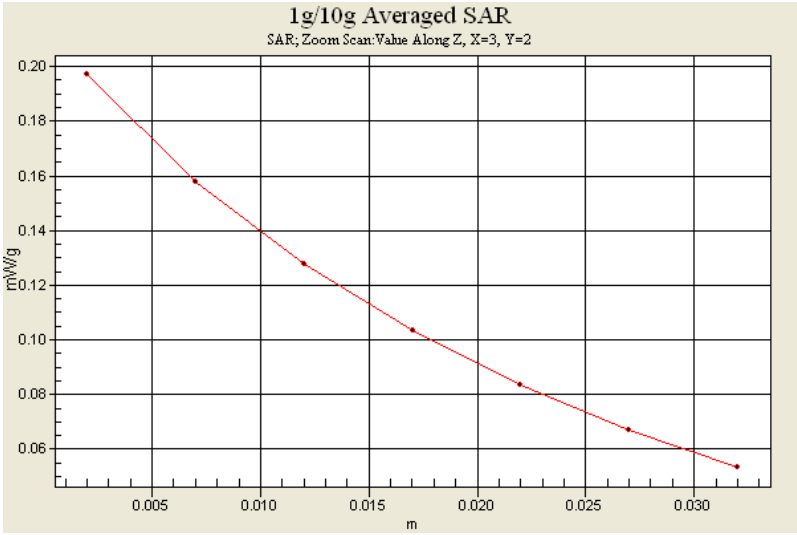
DUT: GT-N7100; Serial: FJ-213-E
Program Name: GT-N7100 GSM850 Left (Job No. : FJ-213)
Procedure Name: Cheek/Touch, Ch.190, Ant.Intenna, Bat.Standard 2
Meas. Ambient Temp(celsius)-22.4,Tissue Temp(celsius)-22.1;Test Date-08/Aug/2012

Communication System: GSM 850; Frequency: 836.6 MHz;Duty Cycle: 1:8.3
Medium parameters used: f = 836.6 MHz; σ = 0.89 mho/m; ε_r = 40.6; ρ = 1000 kg/m^3
Phantom section: Left Section

DASY5 Configuration:
- Probe: EX3DV4 - SN3520; ConvF(9.62, 9.62, 9.62); Calibrated: 2012-02-21
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn533; Calibrated: 2011-09-21
- Phantom: SAM PHANTOM #1; Type: SAM; Serial: TP-1248
- Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 184

Cheek/Touch, Ch.190, Ant.Intenna, Bat.Standard 2/Area Scan (51x81x1): Measurement grid: dx=20mm, dy=20mm
Maximum value of SAR (interpolated) = 0.192 mW/g

Cheek/Touch, Ch.190, Ant.Intenna, Bat.Standard 2/Zoom Scan (5x5x7)/Cube 0:
Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 14.3 V/m; Power Drift = -0.137 dB
Peak SAR (extrapolated) = 0.215 W/kg
SAR(1 g) = 0.171 mW/g; SAR(10 g) = 0.132 mW/g
Maximum value of SAR (measured) = 0.197 mW/g



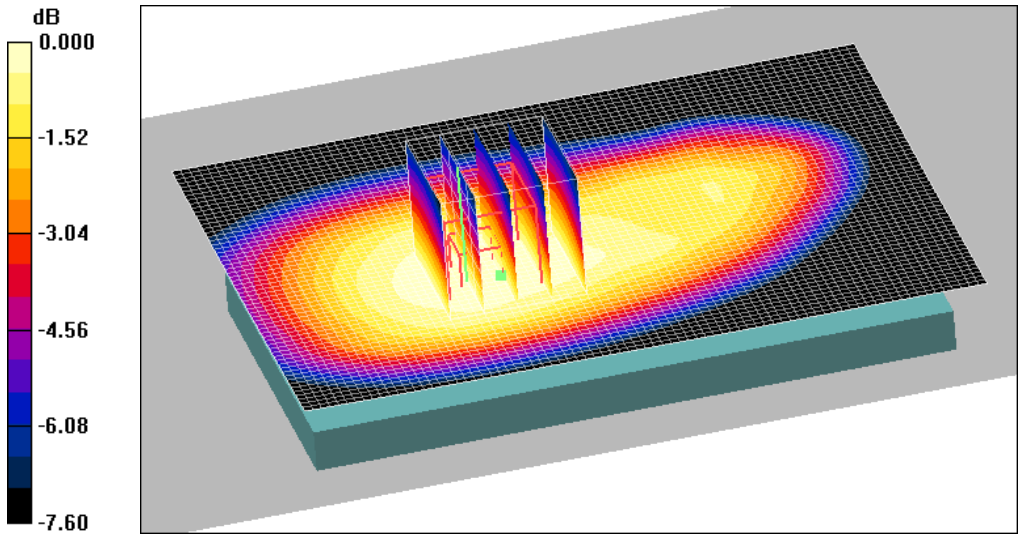
DUT: GT-N7100; Serial: FJ-213-E
Program Name: GT-N7100 GSM850 Body (Job No. : FJ-213)
Procedure Name: Body, Ch. 190, Ant. Intenna, Bat. Standard, Back, 1Tx, 10mm, voice call
Meas. Ambient Temp(celsius)-22.3,Tissue Temp(celsius)-22.0;Test Date-08/Aug/2012

Communication System: GPRS 850; Frequency: 836.6 MHz;Duty Cycle: 1:8.3
Medium parameters used: f = 836.6 MHz; σ = 0.97 mho/m; ε_r = 54.3; ρ = 1000 kg/m^3
Phantom section: Right Section

DASY5 Configuration:
- Probe: EX3DV4 - SN3520; ConvF(9.72, 9.72, 9.72); Calibrated: 2012-02-21
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn533; Calibrated: 2011-09-21
- Phantom: Triple Flat Phantom 5.1; Type: Triple Flat Phantom 5.1; Serial: 1003
- Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 184

Body, Ch. 190, Ant. Intenna, Bat. Standard, Back, 1Tx, 10mm, voice/Area Scan (61x81x1): Measurement grid: dx=20mm, dy=20mm
Maximum value of SAR (interpolated) = 0.354 mW/g

Body, Ch. 190, Ant. Intenna, Bat. Standard, Back, 1Tx, 10mm, voice/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 18.0 V/m; Power Drift = -0.016 dB
Peak SAR (extrapolated) = 0.386 W/kg
SAR(1 g) = 0.305 mW/g; SAR(10 g) = 0.236 mW/g
Maximum value of SAR (measured) = 0.351 mW/g



0 dB = 0.351mW/g

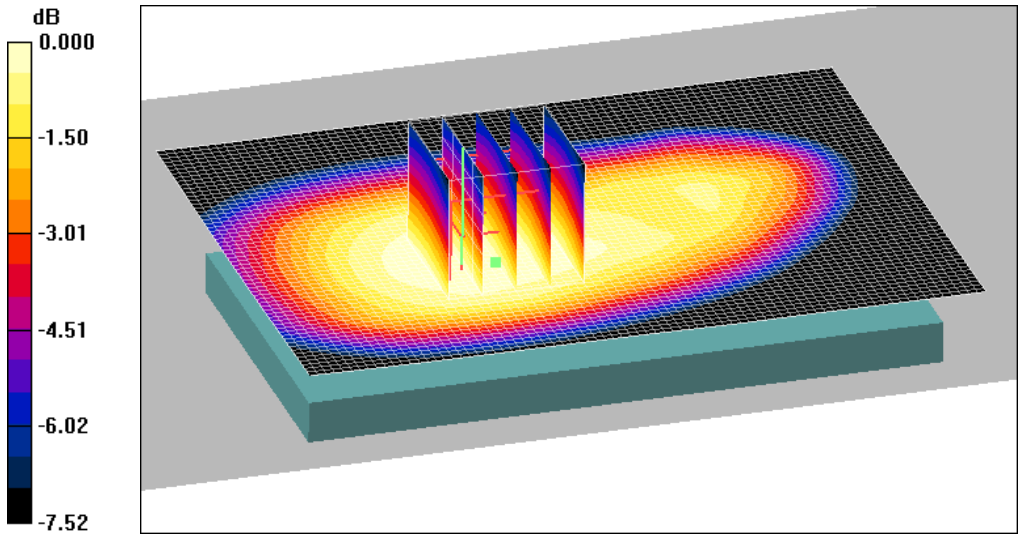
DUT: GT-N7100; Serial: FJ-213-E
Program Name: GT-N7100 GPRS850 Body (Job No. : FJ-213)
Procedure Name: Body, Ch. 190, Ant. Intenna, Bat. Standard, Back, 1Tx, 10mm
Meas. Ambient Temp(celsius)-22.3,Tissue Temp(celsius)-22.0;Test Date-08/Aug/2012

Communication System: GPRS 850; Frequency: 836.6 MHz;Duty Cycle: 1:8.3
Medium parameters used: f = 836.6 MHz; σ = 0.97 mho/m; ε_r = 54.3; ρ = 1000 kg/m^3
Phantom section: Right Section

DASY5 Configuration:
- Probe: EX3DV4 - SN3520; ConvF(9.72, 9.72, 9.72); Calibrated: 2012-02-21
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn533; Calibrated: 2011-09-21
- Phantom: Triple Flat Phantom 5.1; Type: Triple Flat Phantom 5.1; Serial: 1003
- Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 184

Body, Ch. 190, Ant. Intenna, Bat. Standard, Back, 1Tx, 10mm/Area Scan (61x81x1):
Measurement grid: dx=20mm, dy=20mm
Maximum value of SAR (interpolated) = 0.338 mW/g

Body, Ch. 190, Ant. Intenna, Bat. Standard, Back, 1Tx, 10mm/Zoom Scan (5x5x7)/Cube 0:
Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 17.5 V/m; Power Drift = 0.057 dB
Peak SAR (extrapolated) = 0.366 W/kg
SAR(1 g) = 0.292 mW/g; SAR(10 g) = 0.227 mW/g
Maximum value of SAR (measured) = 0.333 mW/g



0 dB = 0.333mW/g

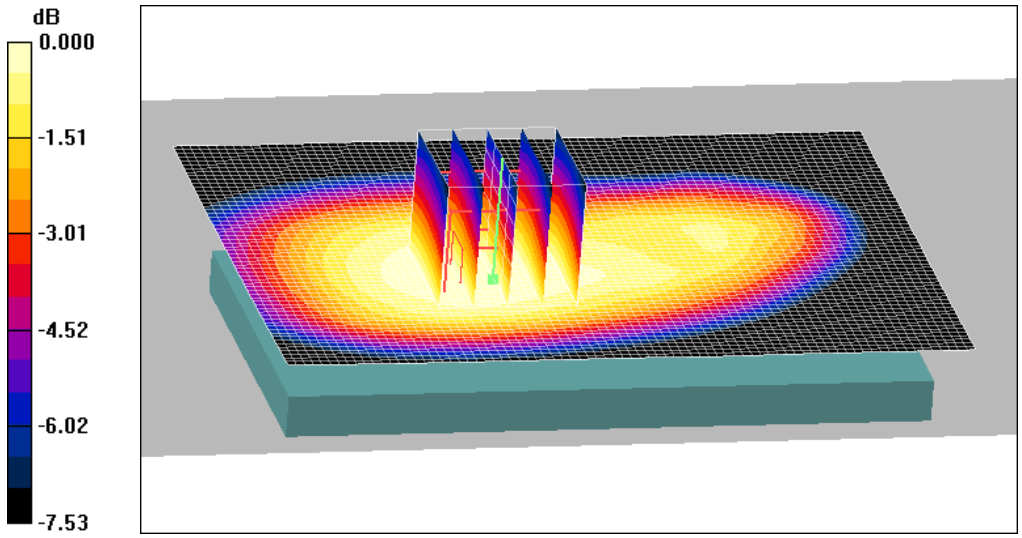
DUT: GT-N7100; Serial: FJ-213-E
Program Name: GT-N7100 GPRS850 Body (Job No. : FJ-213)
Procedure Name: Body, Ch. 190, Ant. Intenna, Bat. Standard, Back, 2Tx, 10mm
Meas. Ambient Temp(celsius)-22.3,Tissue Temp(celsius)-22.0;Test Date-08/Aug/2012

Communication System: GPRS 850; Frequency: 836.6 MHz;Duty Cycle: 1:4.15
Medium parameters used: f = 836.6 MHz; σ = 0.97 mho/m; ε_r = 54.3; ρ = 1000 kg/m^3
Phantom section: Right Section

DASY5 Configuration:
- Probe: EX3DV4 - SN3520; ConvF(9.72, 9.72, 9.72); Calibrated: 2012-02-21
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn533; Calibrated: 2011-09-21
- Phantom: Triple Flat Phantom 5.1; Type: Triple Flat Phantom 5.1; Serial: 1003
- Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 184

Body, Ch. 190, Ant. Intenna, Bat. Standard, Back, 2Tx, 10mm/Area Scan (61x81x1):
Measurement grid: dx=20mm, dy=20mm
Maximum value of SAR (interpolated) = 0.681 mW/g

Body, Ch. 190, Ant. Intenna, Bat. Standard, Back, 2Tx, 10mm/Zoom Scan (5x5x7)/Cube 0:
Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 24.9 V/m; Power Drift = -0.034 dB
Peak SAR (extrapolated) = 0.732 W/kg
SAR(1 g) = 0.581 mW/g; SAR(10 g) = 0.451 mW/g
Maximum value of SAR (measured) = 0.663 mW/g



0 dB = 0.663mW/g

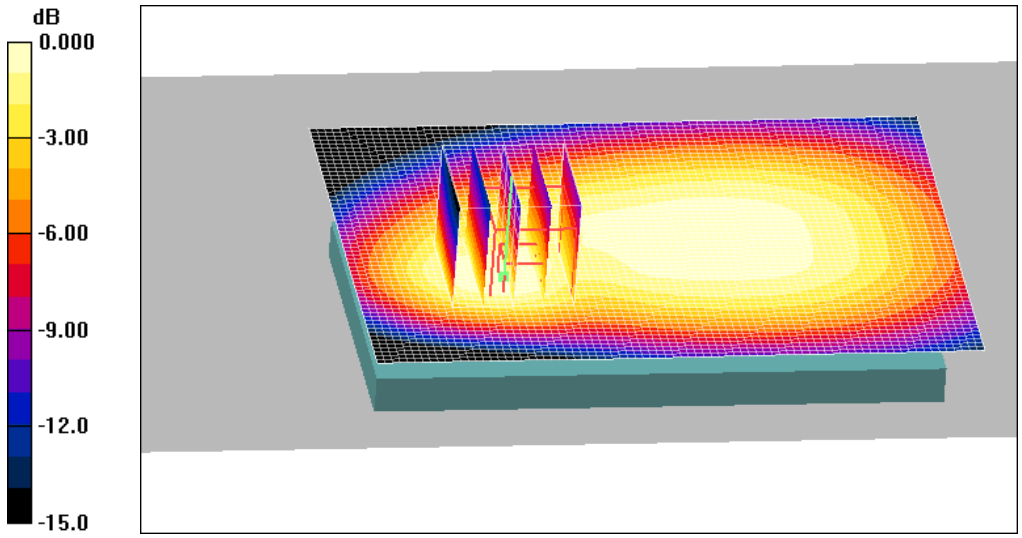
DUT: GT-N7100; Serial: FJ-213-E
Program Name: GT-N7100 GPRS850 Body (Job No. : FJ-213)
Procedure Name: Body, Ch. 190, Ant. Intenna, Bat. Standard, Back, 3Tx, 10mm
Meas. Ambient Temp(celsius)-22.3,Tissue Temp(celsius)-22.0;Test Date-08/Aug/2012

Communication System: GPRS 850; Frequency: 836.6 MHz;Duty Cycle: 1:2.767
Medium parameters used: f = 836.6 MHz; σ = 0.97 mho/m; ε_r = 54.3; ρ = 1000 kg/m^3
Phantom section: Right Section

DASY5 Configuration:
- Probe: EX3DV4 - SN3520; ConvF(9.72, 9.72, 9.72); Calibrated: 2012-02-21
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn533; Calibrated: 2011-09-21
- Phantom: Triple Flat Phantom 5.1; Type: Triple Flat Phantom 5.1; Serial: 1003
- Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 184

Body, Ch. 190, Ant. Intenna, Bat. Standard, Back, 3Tx, 10mm/Area Scan (61x81x1):
Measurement grid: dx=20mm, dy=20mm
Maximum value of SAR (interpolated) = 1.11 mW/g

Body, Ch. 190, Ant. Intenna, Bat. Standard, Back, 3Tx, 10mm/Zoom Scan (5x5x7)/Cube 0:
Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 31.6 V/m; Power Drift = -0.027 dB
Peak SAR (extrapolated) = 1.28 W/kg
SAR(1 g) = 0.783 mW/g; SAR(10 g) = 0.490 mW/g
Maximum value of SAR (measured) = 1.03 mW/g



0 dB = 1.03mW/g

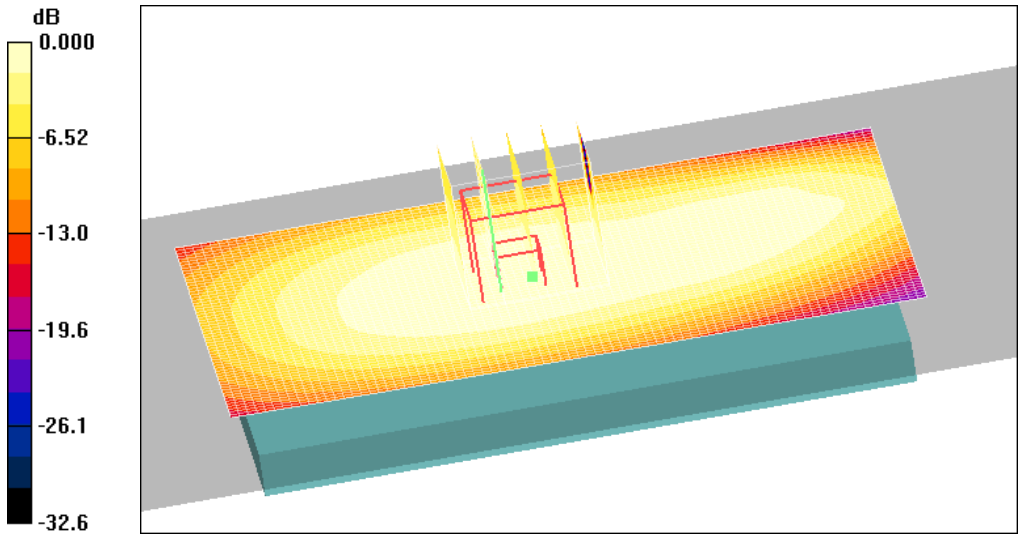
DUT: GT-N7100; Serial: FJ-213-E
Program Name: GT-N7100 GPRS850 Body (Job No. : FJ-213)
Procedure Name: Body, Ch. 190, Ant. Intenna, Bat. Standard, Back, 4Tx, 10mm
Meas. Ambient Temp(celsius)-22.3,Tissue Temp(celsius)-22.0;Test Date-08/Aug/2012

Communication System: GPRS 850; Frequency: 836.6 MHz;Duty Cycle: 1:2.075
Medium parameters used: f = 836.6 MHz; σ = 0.97 mho/m; ε_r = 54.3; ρ = 1000 kg/m^3
Phantom section: Right Section

DASY5 Configuration:
- Probe: EX3DV4 - SN3520; ConvF(9.72, 9.72, 9.72); Calibrated: 2012-02-21
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn533; Calibrated: 2011-09-21
- Phantom: Triple Flat Phantom 5.1; Type: Triple Flat Phantom 5.1; Serial: 1003
- Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 184

Body, Ch. 190, Ant. Intenna, Bat. Standard, Back, 4Tx, 10mm/Area Scan (61x81x1):
Measurement grid: dx=20mm, dy=20mm
Maximum value of SAR (interpolated) = 0.637 mW/g

Body, Ch. 190, Ant. Intenna, Bat. Standard, Back, 4Tx, 10mm/Zoom Scan (5x5x7)/Cube 0:
Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 26.0 V/m; Power Drift = -0.113 dB
Peak SAR (extrapolated) = 0.700 W/kg
SAR(1 g) = 0.556 mW/g; SAR(10 g) = 0.433 mW/g
Maximum value of SAR (measured) = 0.633 mW/g



0 dB = 0.633mW/g

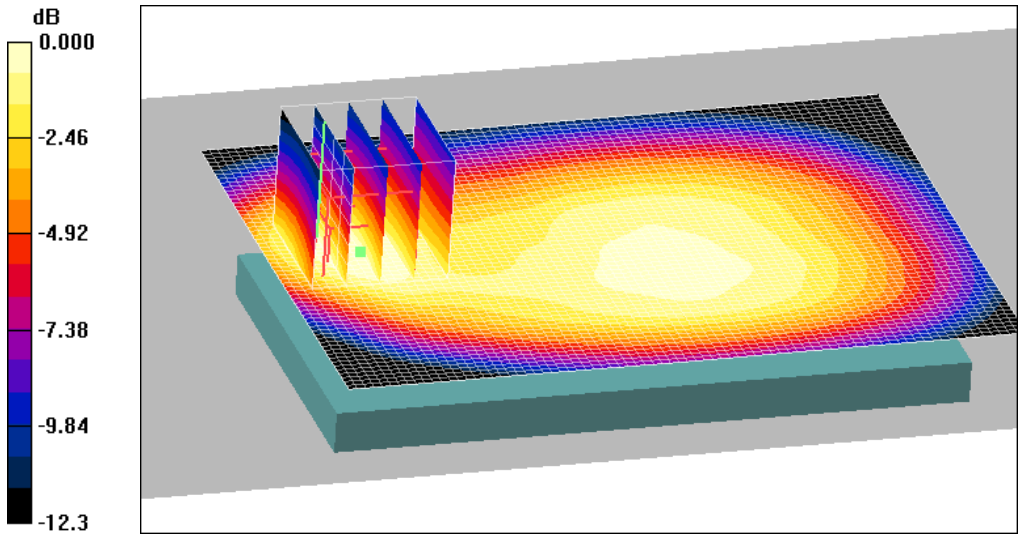
DUT: GT-N7100; Serial: FJ-213-E
Program Name: GT-N7100 GPRS850 Body (Job No. : FJ-213)
Procedure Name: Body, Ch. 190, Ant. Intenna, Bat. Standard, Front, 3Tx, 10mm
Meas. Ambient Temp(celsius)-22.3,Tissue Temp(celsius)-22.0;Test Date-08/Aug/2012

Communication System: GPRS 850; Frequency: 836.6 MHz;Duty Cycle: 1:2.767
Medium parameters used: f = 836.6 MHz; σ = 0.97 mho/m; ε_r = 54.3; ρ = 1000 kg/m^3
Phantom section: Right Section

DASY5 Configuration:
- Probe: EX3DV4 - SN3520; ConvF(9.72, 9.72, 9.72); Calibrated: 2012-02-21
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn533; Calibrated: 2011-09-21
- Phantom: Triple Flat Phantom 5.1; Type: Triple Flat Phantom 5.1; Serial: 1003
- Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 184

Body, Ch. 190, Ant. Intenna, Bat. Standard, Front, 3Tx, 10mm/Area Scan (61x81x1):
Measurement grid: dx=20mm, dy=20mm
Maximum value of SAR (interpolated) = 0.516 mW/g

Body, Ch. 190, Ant. Intenna, Bat. Standard, Front, 3Tx, 10mm/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 20.6 V/m; Power Drift = -0.022 dB
Peak SAR (extrapolated) = 0.602 W/kg
SAR(1 g) = 0.377 mW/g; SAR(10 g) = 0.238 mW/g
Maximum value of SAR (measured) = 0.476 mW/g



0 dB = 0.476mW/g

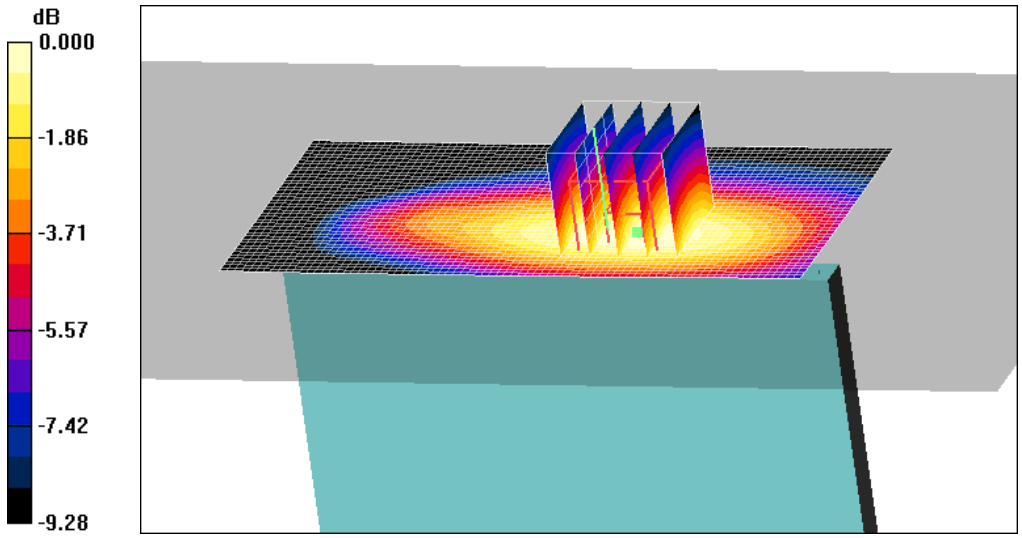
DUT: GT-N7100; Serial: FJ-213-E
Program Name: GT-N7100 GPRS850 Body (Job No. : FJ-213)
Procedure Name: Body, Ch. 190, Ant. Intenna, Bat. Standard, Left, 3Tx, 10mm
Meas. Ambient Temp(celsius)-22.3,Tissue Temp(celsius)-22.0;Test Date-08/Aug/2012

Communication System: GPRS 850; Frequency: 836.6 MHz;Duty Cycle: 1:2.767
Medium parameters used: f = 836.6 MHz; σ = 0.97 mho/m; ε_r = 54.3; ρ = 1000 kg/m^3
Phantom section: Right Section

DASY5 Configuration:
- Probe: EX3DV4 - SN3520; ConvF(9.72, 9.72, 9.72); Calibrated: 2012-02-21
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn533; Calibrated: 2011-09-21
- Phantom: Triple Flat Phantom 5.1; Type: Triple Flat Phantom 5.1; Serial: 1003
- Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 184

Body, Ch. 190, Ant. Intenna, Bat. Standard, Left, 3Tx, 10mm/Area Scan (41x81x1):
Measurement grid: dx=20mm, dy=20mm
Maximum value of SAR (interpolated) = 0.438 mW/g

Body, Ch. 190, Ant. Intenna, Bat. Standard, Left, 3Tx, 10mm/Zoom Scan (5x5x7)/Cube 0:
Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 17.5 V/m; Power Drift = 0.028 dB
Peak SAR (extrapolated) = 0.510 W/kg
SAR(1 g) = 0.366 mW/g; SAR(10 g) = 0.256 mW/g
Maximum value of SAR (measured) = 0.443 mW/g



0 dB = 0.443mW/g

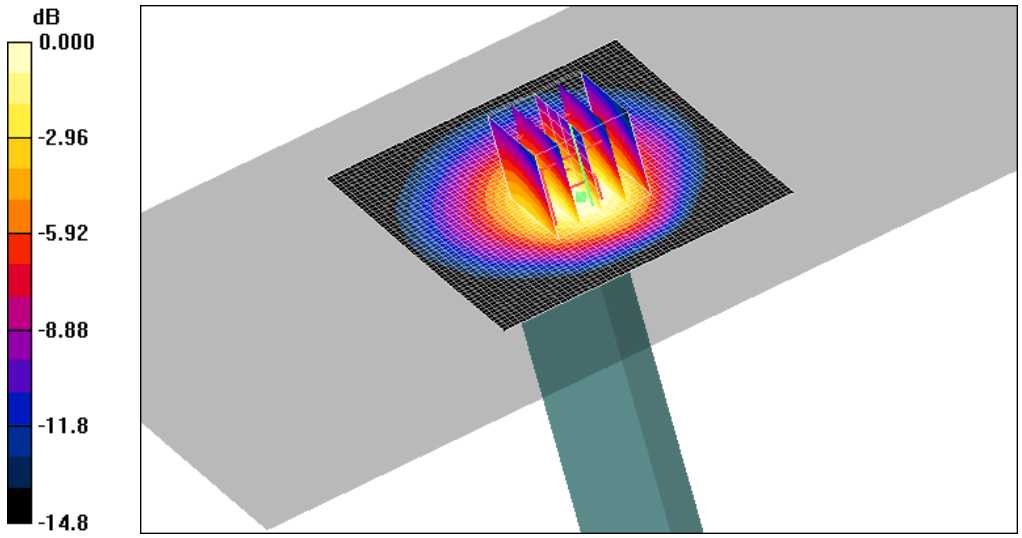
DUT: GT-N7100; Serial: FJ-213-E
Program Name: GT-N7100 GPRS850 Body (Job No. : FJ-213)
Procedure Name: Body, Ch. 190, Ant. Intenna, Bat. Standard, Bottom, 3Tx, 10mm
Meas. Ambient Temp(celsius)-22.3,Tissue Temp(celsius)-22.0;Test Date-08/Aug/2012

Communication System: GPRS 850; Frequency: 836.6 MHz;Duty Cycle: 1:2.767
Medium parameters used: f = 836.6 MHz; σ = 0.97 mho/m; ε_r = 54.3; ρ = 1000 kg/m^3
Phantom section: Right Section

DASY5 Configuration:
- Probe: EX3DV4 - SN3520; ConvF(9.72, 9.72, 9.72); Calibrated: 2012-02-21
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn533; Calibrated: 2011-09-21
- Phantom: Triple Flat Phantom 5.1; Type: Triple Flat Phantom 5.1; Serial: 1003
- Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 184

Body, Ch. 190, Ant. Intenna, Bat. Standard, Bottom, 3Tx, 10mm/Area Scan (61x51x1):
Measurement grid: dx=20mm, dy=20mm
Maximum value of SAR (interpolated) = 0.951 mW/g

Body, Ch. 190, Ant. Intenna, Bat. Standard, Bottom, 3Tx, 10mm/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 28.0 V/m; Power Drift = 0.011 dB
Peak SAR (extrapolated) = 1.06 W/kg
SAR(1 g) = 0.655 mW/g; SAR(10 g) = 0.408 mW/g
Maximum value of SAR (measured) = 0.845 mW/g



0 dB = 0.845mW/g

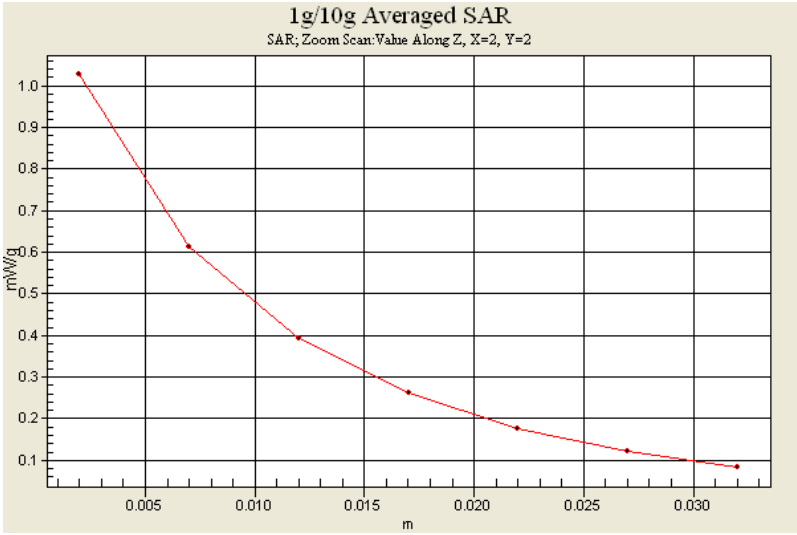
DUT: GT-N7100; Serial: FJ-213-E
Program Name: GT-N7100 GPRS850 Body (Job No. : FJ-213)
Procedure Name: Body, Ch. 190, Ant. Intenna, Bat. Standard, Back, 3Tx, 10mm
Meas. Ambient Temp(celsius)-22.3,Tissue Temp(celsius)-22.0;Test Date-08/Aug/2012

Communication System: GPRS 850; Frequency: 836.6 MHz;Duty Cycle: 1:2.767
Medium parameters used: f = 836.6 MHz; σ = 0.97 mho/m; ε_r = 54.3; ρ = 1000 kg/m^3
Phantom section: Right Section

DASY5 Configuration:
- Probe: EX3DV4 - SN3520; ConvF(9.72, 9.72, 9.72); Calibrated: 2012-02-21
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn533; Calibrated: 2011-09-21
- Phantom: Triple Flat Phantom 5.1; Type: Triple Flat Phantom 5.1; Serial: 1003
- Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 184

Body, Ch. 190, Ant. Intenna, Bat. Standard, Back, 3Tx, 10mm/Area Scan (61x81x1):
Measurement grid: dx=20mm, dy=20mm
Maximum value of SAR (interpolated) = 1.11 mW/g

Body, Ch. 190, Ant. Intenna, Bat. Standard, Back, 3Tx, 10mm/Zoom Scan (5x5x7)/Cube 0:
Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 31.6 V/m; Power Drift = -0.027 dB
Peak SAR (extrapolated) = 1.28 W/kg
SAR(1 g) = 0.783 mW/g; SAR(10 g) = 0.490 mW/g
Maximum value of SAR (measured) = 1.03 mW/g



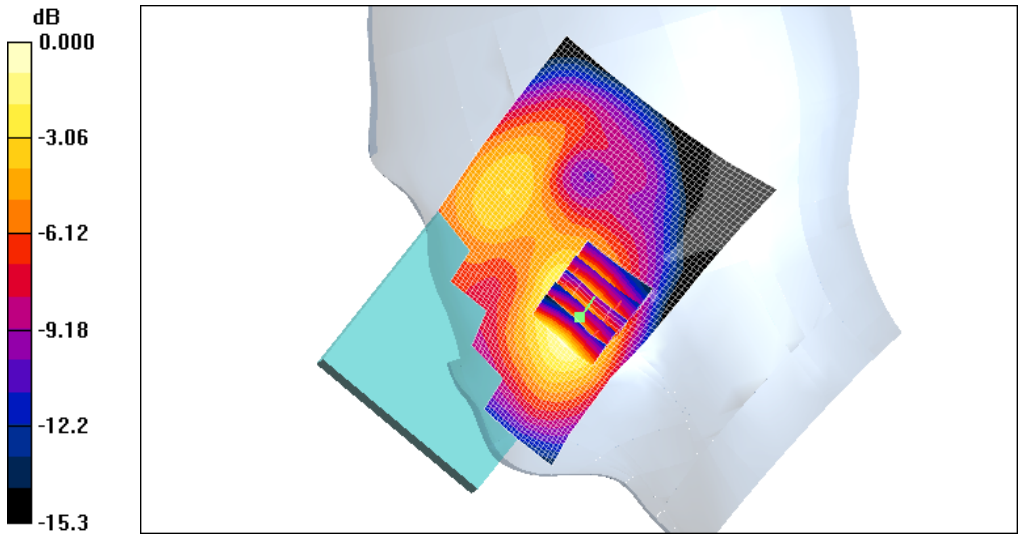
DUT: GT-N7100; Serial: FJ-213-E
Program Name: GT-N7100 GSM1900 Right (Job No. : FJ-213)
Procedure Name: Cheek, Ch.661, Ant.Intenna, Bat.Standard
Meas. Ambient Temp(celsius)-22.6,Tissue Temp(celsius)-22.4;Test Date-14/Aug/2012

Communication System: GSM 1900; Frequency: 1880 MHz;Duty Cycle: 1:8.3
Medium parameters used: f = 1880 MHz; σ = 1.4 mho/m; ε_r = 39.4; ρ = 1000 kg/m^3
Phantom section: Right Section

DASY5 Configuration:
- Probe: EX3DV4 - SN3520; ConvF(8.54, 8.54, 8.54); Calibrated: 2012-02-21
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn533; Calibrated: 2011-09-21
- Phantom: SAM PHANTOM #2; Type: SAM; Serial: TP-1247
- Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 184

Cheek, Ch.661, Ant.Intenna, Bat.Standard/Area Scan (51x81x1): Measurement grid: dx=20mm, dy=20mm
Maximum value of SAR (interpolated) = 0.137 mW/g

Cheek, Ch.661, Ant.Intenna, Bat.Standard/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 5.27 V/m; Power Drift = 0.051 dB
Peak SAR (extrapolated) = 0.157 W/kg
SAR(1 g) = 0.094 mW/g; SAR(10 g) = 0.057 mW/g
Maximum value of SAR (measured) = 0.128 mW/g



0 dB = 0.128mW/g

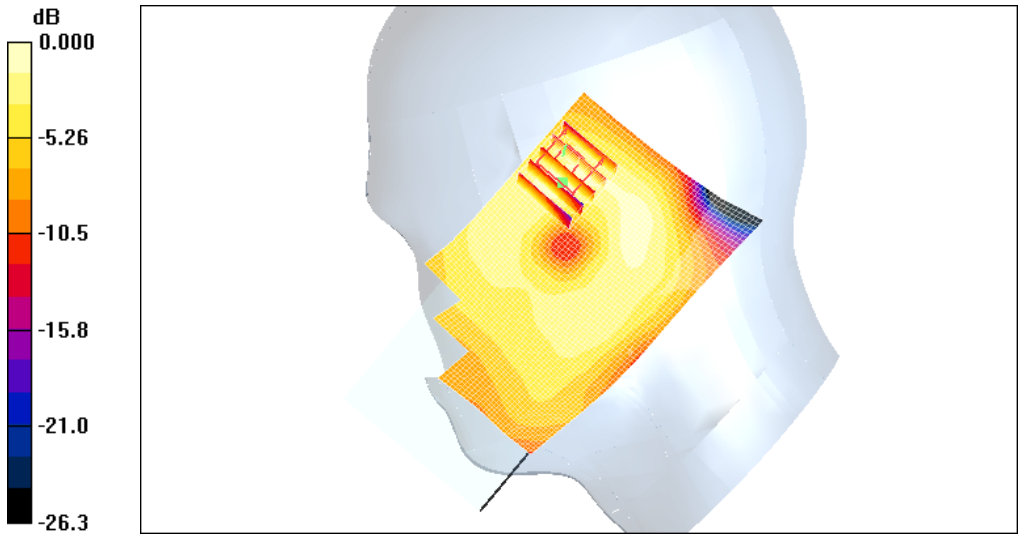
DUT: GT-N7100; Serial: FJ-213-E
Program Name: GT-N7100 GSM1900 Right (Job No. : FJ-213)
Procedure Name: Tilt, Ch.661, Ant.Intenna, Bat.Standard
Meas. Ambient Temp(celsius)-22.6,Tissue Temp(celsius)-22.4;Test Date-14/Aug/2012

Communication System: GSM 1900; Frequency: 1880 MHz;Duty Cycle: 1:8.3
Medium parameters used: f = 1880 MHz; σ = 1.4 mho/m; ε_r = 39.4; ρ = 1000 kg/m^3
Phantom section: Right Section

DASY5 Configuration:
- Probe: EX3DV4 - SN3520; ConvF(8.54, 8.54, 8.54); Calibrated: 2012-02-21
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn533; Calibrated: 2011-09-21
- Phantom: SAM PHANTOM #2; Type: SAM; Serial: TP-1247
- Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 184

Tilt, Ch.661, Ant.Intenna, Bat.Standard/Area Scan (51x81x1): Measurement grid: dx=20mm, dy=20mm
Maximum value of SAR (interpolated) = 0.031 mW/g

Tilt, Ch.661, Ant.Intenna, Bat.Standard/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 4.83 V/m; Power Drift = 0.048 dB
Peak SAR (extrapolated) = 0.047 W/kg
SAR(1 g) = 0.029 mW/g; SAR(10 g) = 0.017 mW/g
Maximum value of SAR (measured) = 0.038 mW/g



0 dB = 0.038mW/g

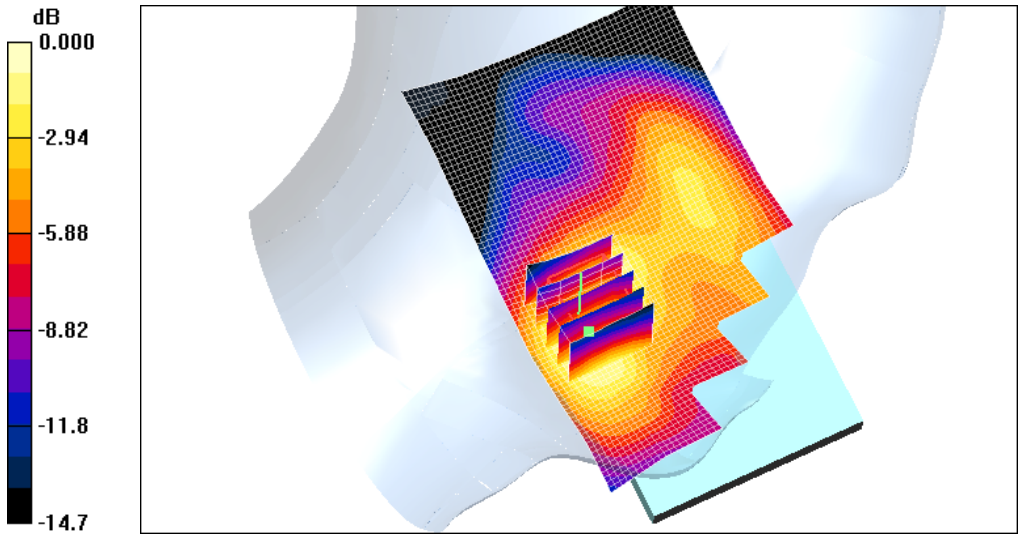
DUT: GT-N7100; Serial: FJ-213-E
Program Name: GT-N7100 GSM1900 Left (Job No. : FJ-213)
Procedure Name: Cheek, Ch.661, Ant.Intenna, Bat.Standard
Meas. Ambient Temp(celsius)-22.6,Tissue Temp(celsius)-22.4;Test Date-14/Aug/2012

Communication System: GSM 1900; Frequency: 1880 MHz;Duty Cycle: 1:8.3
Medium parameters used: f = 1880 MHz; σ = 1.4 mho/m; ε_r = 39.4; ρ = 1000 kg/m^3
Phantom section: Left Section

DASY5 Configuration:
- Probe: EX3DV4 - SN3520; ConvF(8.54, 8.54, 8.54); Calibrated: 2012-02-21
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn533; Calibrated: 2011-09-21
- Phantom: SAM PHANTOM #2; Type: SAM; Serial: TP-1247
- Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 184

Cheek, Ch.661, Ant.Intenna, Bat.Standard/Area Scan (51x81x1): Measurement grid: dx=20mm, dy=20mm
Maximum value of SAR (interpolated) = 0.123 mW/g

Cheek, Ch.661, Ant.Intenna, Bat.Standard/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 6.13 V/m; Power Drift = -0.016 dB
Peak SAR (extrapolated) = 0.150 W/kg
SAR(1 g) = 0.098 mW/g; SAR(10 g) = 0.063 mW/g
Maximum value of SAR (measured) = 0.124 mW/g



0 dB = 0.124mW/g

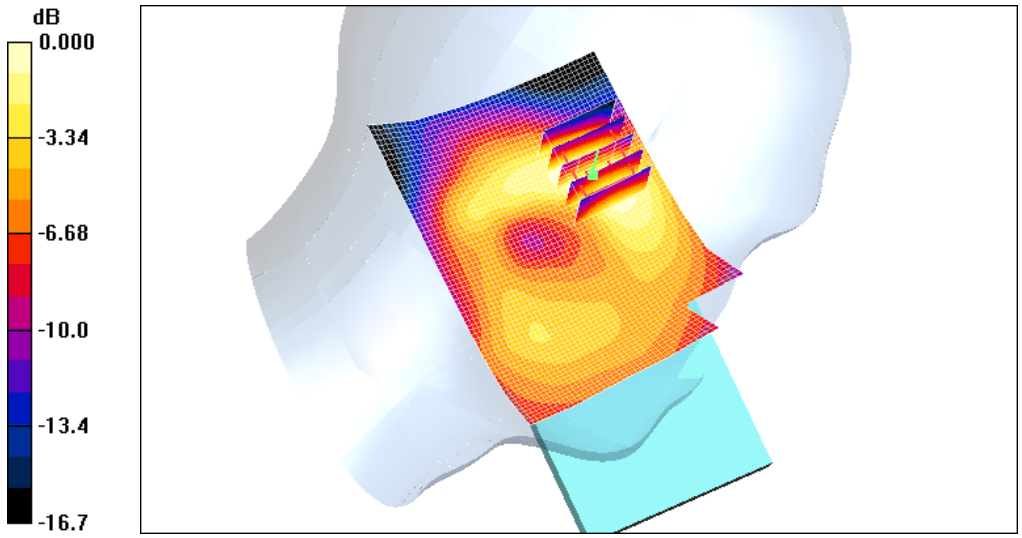
DUT: GT-N7100; Serial: FJ-213-E
Program Name: GT-N7100 GSM1900 Left (Job No. : FJ-213)
Procedure Name: Tilt, Ch.661, Ant.Intenna, Bat.Standard
Meas. Ambient Temp(celsius)-22.6,Tissue Temp(celsius)-22.4;Test Date-14/Aug/2012

Communication System: GSM 1900; Frequency: 1880 MHz;Duty Cycle: 1:8.3
Medium parameters used: f = 1880 MHz; σ = 1.4 mho/m; ε_r = 39.4; ρ = 1000 kg/m^3
Phantom section: Left Section

DASY5 Configuration:
- Probe: EX3DV4 - SN3520; ConvF(8.54, 8.54, 8.54); Calibrated: 2012-02-21
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn533; Calibrated: 2011-09-21
- Phantom: SAM PHANTOM #2; Type: SAM; Serial: TP-1247
- Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 184

Tilt, Ch.661, Ant.Intenna, Bat.Standard/Area Scan (51x71x1): Measurement grid: dx=20mm, dy=20mm
Maximum value of SAR (interpolated) = 0.062 mW/g

Tilt, Ch.661, Ant.Intenna, Bat.Standard/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 5.12 V/m; Power Drift = 0.094 dB
Peak SAR (extrapolated) = 0.060 W/kg
SAR(1 g) = 0.041 mW/g; SAR(10 g) = 0.026 mW/g
Maximum value of SAR (measured) = 0.051 mW/g



0 dB = 0.051mW/g

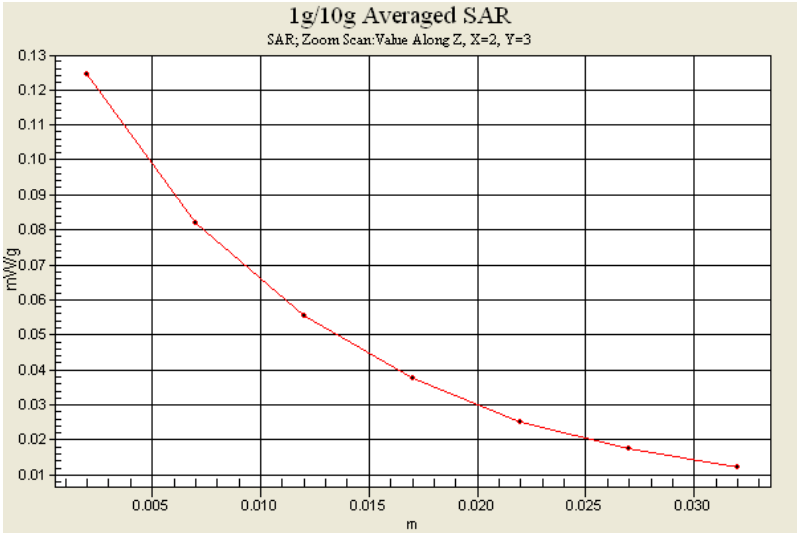
DUT: GT-N7100; Serial: FJ-213-E
Program Name: GT-N7100 GSM1900 Left (Job No. : FJ-213)
Procedure Name: Cheek, Ch.661, Ant.Intenna, Bat.Standard
Meas. Ambient Temp(celsius)-22.6,Tissue Temp(celsius)-22.4;Test Date-14/Aug/2012

Communication System: GSM 1900; Frequency: 1880 MHz;Duty Cycle: 1:8.3
Medium parameters used: f = 1880 MHz; σ = 1.4 mho/m; ε_r = 39.4; ρ = 1000 kg/m^3
Phantom section: Left Section

DASY5 Configuration:
- Probe: EX3DV4 - SN3520; ConvF(8.54, 8.54, 8.54); Calibrated: 2012-02-21
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn533; Calibrated: 2011-09-21
- Phantom: SAM PHANTOM #2; Type: SAM; Serial: TP-1247
- Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 184

Cheek, Ch.661, Ant.Intenna, Bat.Standard/Area Scan (51x81x1): Measurement grid: dx=20mm, dy=20mm
Maximum value of SAR (interpolated) = 0.123 mW/g

Cheek, Ch.661, Ant.Intenna, Bat.Standard/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 6.13 V/m; Power Drift = -0.016 dB
Peak SAR (extrapolated) = 0.150 W/kg
SAR(1 g) = 0.098 mW/g; SAR(10 g) = 0.063 mW/g
Maximum value of SAR (measured) = 0.124 mW/g



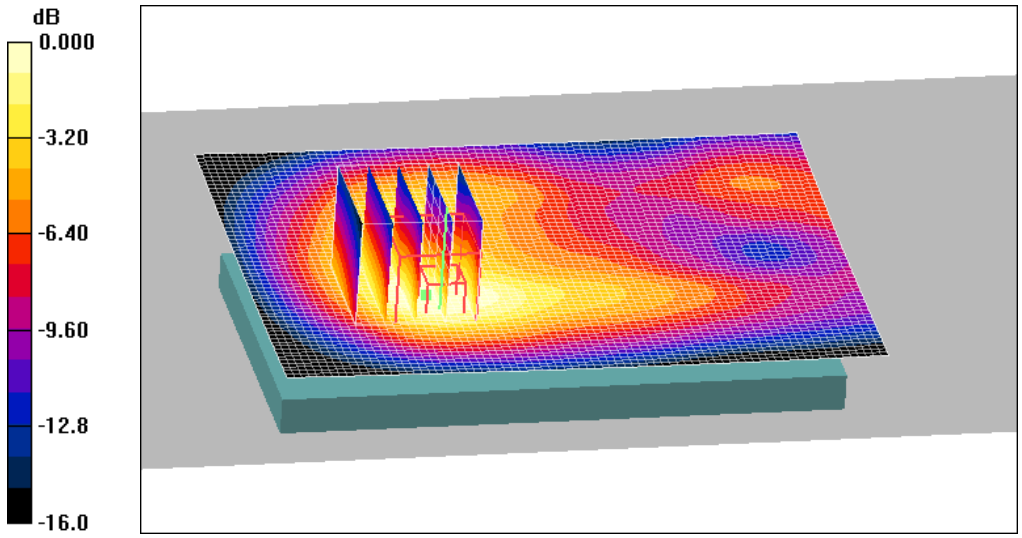
DUT: GT-N7100; Serial: FJ-213-E
Program Name: GT-N7100 GSM1900 Body (Job No. : FJ-213)
Procedure Name: Body, Ch.661, Ant.Intenna, Bat.Standard, Back, 1Tx, 10mm, voice call
Meas. Ambient Temp(celsius)-22.4,Tissue Temp(celsius)-22.2;Test Date-14/Aug/2012

Communication System: Body GPRS ; Frequency: 1880 MHz;Duty Cycle: 1:8.3
Medium parameters used: f = 1880 MHz; σ = 1.49 mho/m; ε_r = 53.2; ρ = 1000 kg/m^3
Phantom section: Left Section

DASY5 Configuration:
- Probe: EX3DV4 - SN3520; ConvF(8.19, 8.19, 8.19); Calibrated: 2012-02-21
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn533; Calibrated: 2011-09-21
- Phantom: Triple Flat Phantom 5.1; Type: Triple Flat Phantom 5.1; Serial: 1003
- Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 184

Body, Ch.661, Ant.Intenna, Bat.Standard, Back, 1Tx, 10mm, voice/Area Scan (61x81x1):
Measurement grid: dx=20mm, dy=20mm
Maximum value of SAR (interpolated) = 0.459 mW/g

Body, Ch.661, Ant.Intenna, Bat.Standard, Back, 1Tx, 10mm, voice/Zoom Scan 2 (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 8.95 V/m; Power Drift = 0.183 dB
Peak SAR (extrapolated) = 0.503 W/kg
SAR(1 g) = 0.316 mW/g; SAR(10 g) = 0.181 mW/g
Maximum value of SAR (measured) = 0.399 mW/g



0 dB = 0.399mW/g

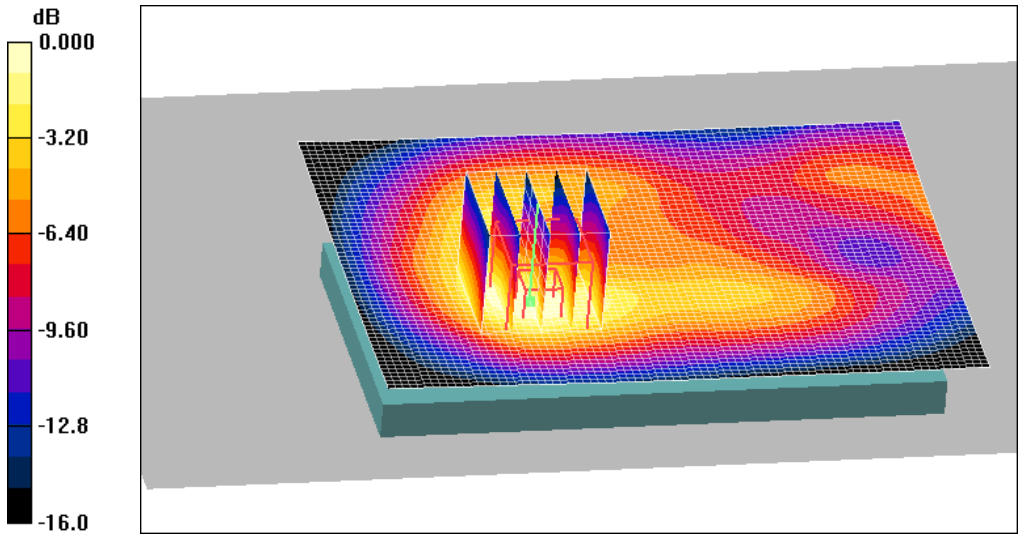
DUT: GT-N7100; Serial: FJ-213-E
Program Name: GT-N7100 GPRS1900 Body (Job No. : FJ-213)
Procedure Name: Body, Ch.661, Ant.Intenna, Bat.Standard, Back, 1Tx, 10mm
Meas. Ambient Temp(celsius)-22.4,Tissue Temp(celsius)-22.2;Test Date-14/Aug/2012

Communication System: Body GPRS ; Frequency: 1880 MHz;Duty Cycle: 1:8.3
Medium parameters used: f = 1880 MHz; σ = 1.49 mho/m; ε_r = 53.2; ρ = 1000 kg/m^3
Phantom section: Left Section

DASY5 Configuration:
- Probe: EX3DV4 - SN3520; ConvF(8.19, 8.19, 8.19); Calibrated: 2012-02-21
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn533; Calibrated: 2011-09-21
- Phantom: Triple Flat Phantom 5.1; Type: Triple Flat Phantom 5.1; Serial: 1003
- Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 184

Body, Ch.661, Ant.Intenna, Bat.Standard, Back, 1Tx, 10mm/Area Scan (61x81x1):
Measurement grid: dx=20mm, dy=20mm
Maximum value of SAR (interpolated) = 0.409 mW/g

Body, Ch.661, Ant.Intenna, Bat.Standard, Back, 1Tx, 10mm/Zoom Scan (5x5x7)/Cube 0:
Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 8.66 V/m; Power Drift = -0.124 dB
Peak SAR (extrapolated) = 0.468 W/kg
SAR(1 g) = 0.292 mW/g; SAR(10 g) = 0.168 mW/g
Maximum value of SAR (measured) = 0.381 mW/g



0 dB = 0.381mW/g

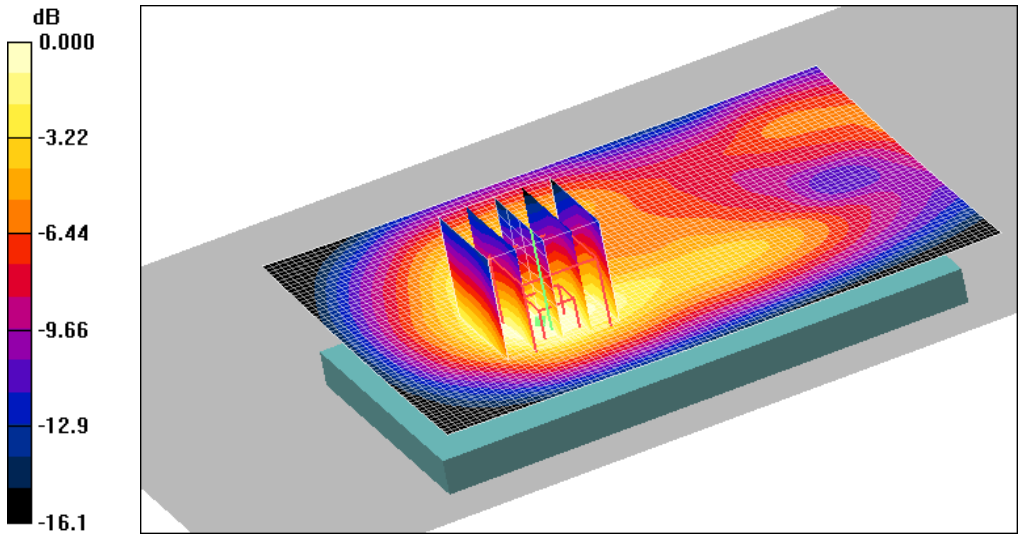
DUT: GT-N7100; Serial: FJ-213-E
Program Name: GT-N7100 GPRS1900 Body (Job No. : FJ-213)
Procedure Name: Body, Ch.661, Ant.Intenna, Bat.Standard, Back, 2Tx, 10mm
Meas. Ambient Temp(celsius)-22.4,Tissue Temp(celsius)-22.2;Test Date-14/Aug/2012

Communication System: Body GPRS ; Frequency: 1880 MHz;Duty Cycle: 1:4.15
Medium parameters used: f = 1880 MHz; σ = 1.49 mho/m; ε_r = 53.2; ρ = 1000 kg/m^3
Phantom section: Left Section

DASY5 Configuration:
- Probe: EX3DV4 - SN3520; ConvF(8.19, 8.19, 8.19); Calibrated: 2012-02-21
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn533; Calibrated: 2011-09-21
- Phantom: Triple Flat Phantom 5.1; Type: Triple Flat Phantom 5.1; Serial: 1003
- Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 184

Body, Ch.661, Ant.Intenna, Bat.Standard, Back, 2Tx, 10mm/Area Scan (61x81x1):
Measurement grid: dx=20mm, dy=20mm
Maximum value of SAR (interpolated) = 0.802 mW/g

Body, Ch.661, Ant.Intenna, Bat.Standard, Back, 2Tx, 10mm/Zoom Scan (5x5x7)/Cube 0:
Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 12.2 V/m; Power Drift = -0.126 dB
Peak SAR (extrapolated) = 0.918 W/kg
SAR(1 g) = 0.575 mW/g; SAR(10 g) = 0.332 mW/g
Maximum value of SAR (measured) = 0.735 mW/g



0 dB = 0.735mW/g

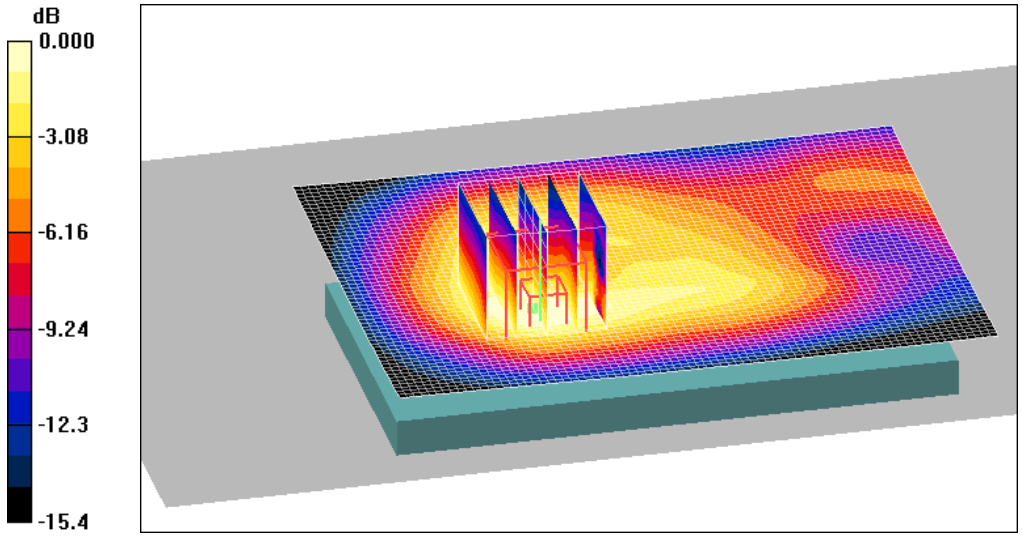
DUT: GT-N7100; Serial: FJ-213-E
Program Name: GT-N7100 GPRS1900 Body (Job No. : FJ-213)
Procedure Name: Body, Ch.512, Ant.Intenna, Bat.Standard, Back, 3Tx, 10mm
Meas. Ambient Temp(celsius)-22.4,Tissue Temp(celsius)-22.2;Test Date-14/Aug/2012

Communication System: Body GPRS ; Frequency: 1850.2 MHz;Duty Cycle: 1:2.767
Medium parameters used (extrapolated): f = 1850.2 MHz; σ = 1.49 mho/m; ε_r = 53.2; ρ = 1000 kg/m^3
Phantom section: Left Section

DASY5 Configuration:
- Probe: EX3DV4 - SN3520; ConvF(8.19, 8.19, 8.19); Calibrated: 2012-02-21
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn533; Calibrated: 2011-09-21
- Phantom: Triple Flat Phantom 5.1; Type: Triple Flat Phantom 5.1; Serial: 1003
- Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 184

Body, Ch.512, Ant.Intenna, Bat.Standard, Back, 3Tx, 10mm/Area Scan (61x81x1):
Measurement grid: dx=20mm, dy=20mm
Maximum value of SAR (interpolated) = 1.11 mW/g

Body, Ch.512, Ant.Intenna, Bat.Standard, Back, 3Tx, 10mm/Zoom Scan (5x5x7)/Cube 0:
Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 18.7 V/m; Power Drift = -0.125 dB
Peak SAR (extrapolated) = 1.30 W/kg
SAR(1 g) = 0.804 mW/g; SAR(10 g) = 0.451 mW/g
Maximum value of SAR (measured) = 0.985 mW/g



0 dB = 0.985mW/g

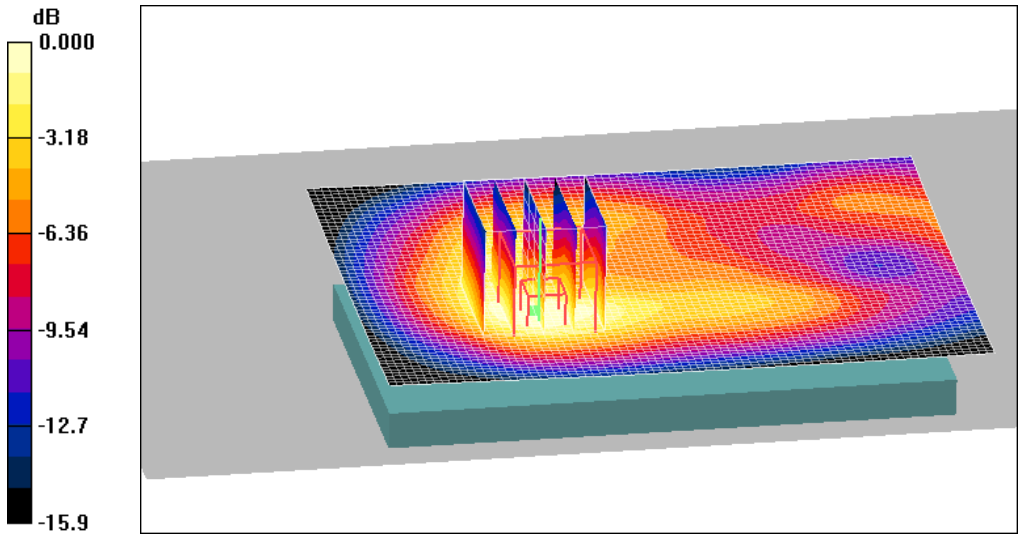
DUT: GT-N7100; Serial: FJ-213-E
Program Name: GT-N7100 GPRS1900 Body (Job No. : FJ-213)
Procedure Name: Body, Ch.661, Ant.Intenna, Bat.Standard, Back, 3Tx, 10mm
Meas. Ambient Temp(celsius)-22.4,Tissue Temp(celsius)-22.2;Test Date-14/Aug/2012

Communication System: Body GPRS ; Frequency: 1880 MHz;Duty Cycle: 1:2.767
Medium parameters used: f = 1880 MHz; σ = 1.49 mho/m; ε_r = 53.2; ρ = 1000 kg/m^3
Phantom section: Left Section

DASY5 Configuration:
- Probe: EX3DV4 - SN3520; ConvF(8.19, 8.19, 8.19); Calibrated: 2012-02-21
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn533; Calibrated: 2011-09-21
- Phantom: Triple Flat Phantom 5.1; Type: Triple Flat Phantom 5.1; Serial: 1003
- Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 184

Body, Ch.661, Ant.Intenna, Bat.Standard, Back, 3Tx, 10mm/Area Scan (61x81x1):
Measurement grid: dx=20mm, dy=20mm
Maximum value of SAR (interpolated) = 1.22 mW/g

Body, Ch.661, Ant.Intenna, Bat.Standard, Back, 3Tx, 10mm/Zoom Scan (5x5x7)/Cube 0:
Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 14.8 V/m; Power Drift = -0.132 dB
Peak SAR (extrapolated) = 1.37 W/kg
SAR(1 g) = 0.859 mW/g; SAR(10 g) = 0.498 mW/g
Maximum value of SAR (measured) = 1.08 mW/g



0 dB = 1.08mW/g

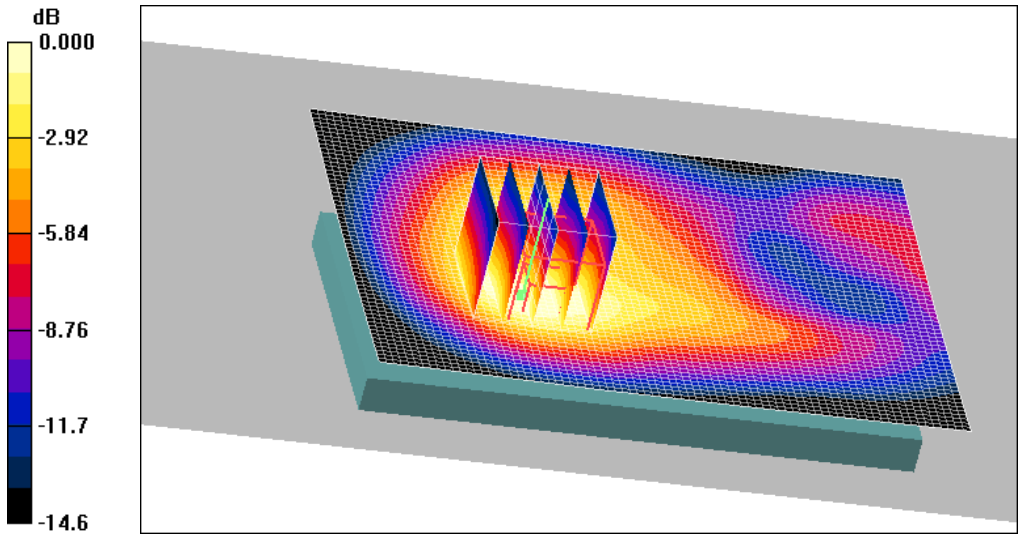
DUT: GT-N7100; Serial: FJ-213-E
Program Name: GT-N7100 GPRS1900 Body (Job No. : FJ-213)
Procedure Name: Body, Ch.810, Ant.Intenna, Bat.Standard, Back, 3Tx, 10mm
Meas. Ambient Temp(celsius)-22.4,Tissue Temp(celsius)-22.2;Test Date-14/Aug/2012

Communication System: Body GPRS ; Frequency: 1909.8 MHz;Duty Cycle: 1:2.767
Medium parameters used (extrapolated): f = 1909.8 MHz; σ = 1.49 mho/m; ε_r = 53.2; ρ = 1000 kg/m^3
Phantom section: Left Section

DASY5 Configuration:
- Probe: EX3DV4 - SN3520; ConvF(8.19, 8.19, 8.19); Calibrated: 2012-02-21
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn533; Calibrated: 2011-09-21
- Phantom: Triple Flat Phantom 5.1; Type: Triple Flat Phantom 5.1; Serial: 1003
- Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 184

Body, Ch.810, Ant.Intenna, Bat.Standard, Back, 3Tx, 10mm/Area Scan (61x81x1):
Measurement grid: dx=20mm, dy=20mm
Maximum value of SAR (interpolated) = 1.36 mW/g

Body, Ch.810, Ant.Intenna, Bat.Standard, Back, 3Tx, 10mm/Zoom Scan (5x5x7)/Cube 0:
Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 19.3 V/m; Power Drift = 0.010 dB
Peak SAR (extrapolated) = 1.50 W/kg
SAR(1 g) = 0.935 mW/g; SAR(10 g) = 0.551 mW/g
Maximum value of SAR (measured) = 1.17 mW/g



0 dB = 1.17mW/g

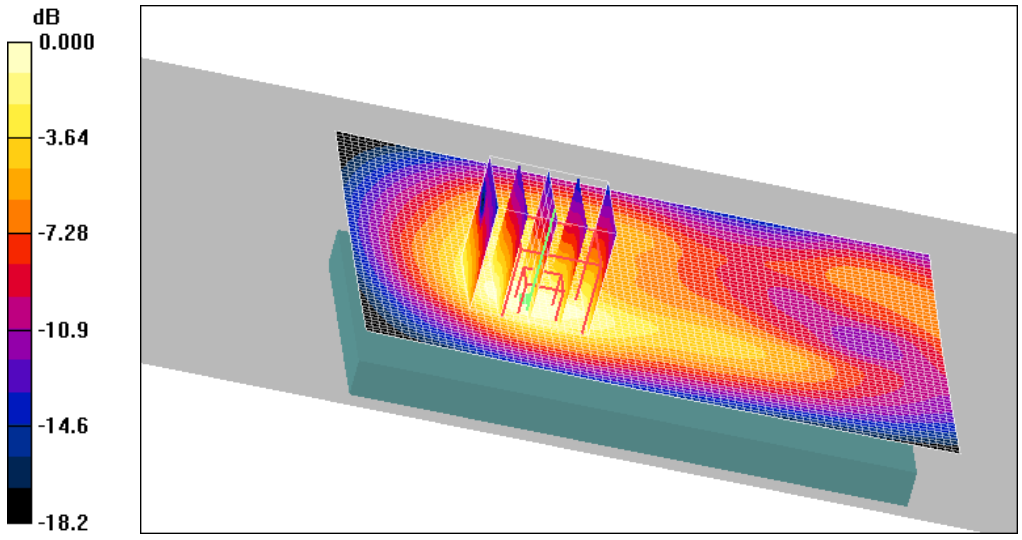
DUT: GT-N7100; Serial: FJ-213-E
Program Name: GT-N7100 GPRS1900 Body (Job No. : FJ-213)
Procedure Name: Body, Ch.661, Ant.Intenna, Bat.Standard, Back, 4Tx, 10mm
Meas. Ambient Temp(celsius)-22.4,Tissue Temp(celsius)-22.2;Test Date-14/Aug/2012

Communication System: Body GPRS ; Frequency: 1880 MHz;Duty Cycle: 1:2.075
Medium parameters used: f = 1880 MHz; σ = 1.49 mho/m; ε_r = 53.2; ρ = 1000 kg/m^3
Phantom section: Left Section

DASY5 Configuration:
- Probe: EX3DV4 - SN3520; ConvF(8.19, 8.19, 8.19); Calibrated: 2012-02-21
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn533; Calibrated: 2011-09-21
- Phantom: Triple Flat Phantom 5.1; Type: Triple Flat Phantom 5.1; Serial: 1003
- Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 184

Body, Ch.661, Ant.Intenna, Bat.Standard, Back, 4Tx, 10mm/Area Scan (61x81x1):
Measurement grid: dx=20mm, dy=20mm
Maximum value of SAR (interpolated) = 0.844 mW/g

Body, Ch.661, Ant.Intenna, Bat.Standard, Back, 4Tx, 10mm/Zoom Scan 2 2 (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 11.9 V/m; Power Drift = 0.123 dB
Peak SAR (extrapolated) = 0.995 W/kg
SAR(1 g) = 0.619 mW/g; SAR(10 g) = 0.362 mW/g
Maximum value of SAR (measured) = 0.776 mW/g



0 dB = 0.776mW/g

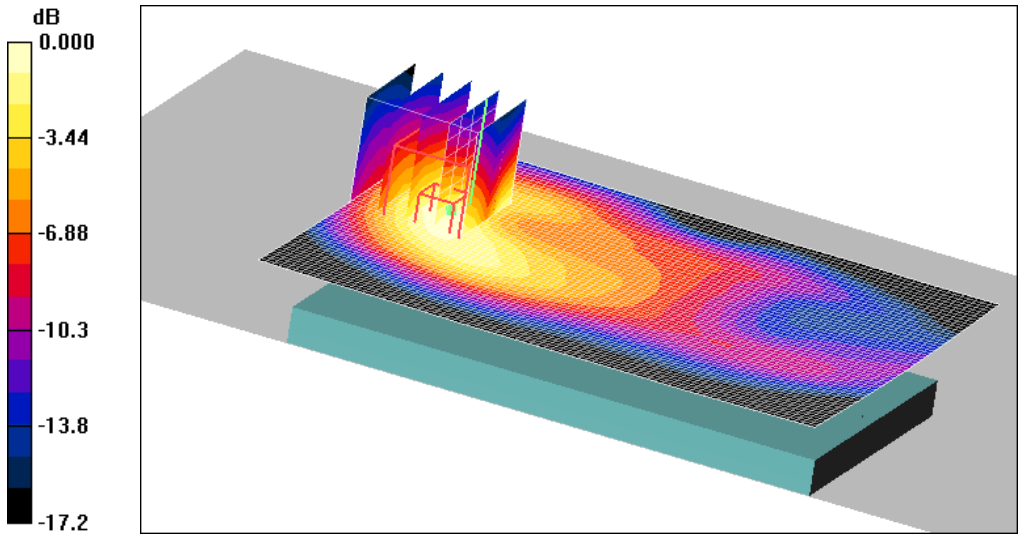
DUT: GT-N7100; Serial: FJ-213-E
Program Name: GT-N7100 GPRS1900 Body (Job No. : FJ-213)
Procedure Name: Body, Ch.661, Ant.Intenna, Bat.Standard, Front, 3Tx, 10mm
Meas. Ambient Temp(celsius)-22.4,Tissue Temp(celsius)-22.2;Test Date-14/Aug/2012

Communication System: Body GPRS ; Frequency: 1880 MHz;Duty Cycle: 1:2.767
Medium parameters used: f = 1880 MHz; σ = 1.49 mho/m; ε_r = 53.2; ρ = 1000 kg/m^3
Phantom section: Left Section

DASY5 Configuration:
- Probe: EX3DV4 - SN3520; ConvF(8.19, 8.19, 8.19); Calibrated: 2012-02-21
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn533; Calibrated: 2011-09-21
- Phantom: Triple Flat Phantom 5.1; Type: Triple Flat Phantom 5.1; Serial: 1003
- Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 184

Body, Ch.661, Ant.Intenna, Bat.Standard, Front, 3Tx, 10mm/Area Scan (61x81x1):
Measurement grid: dx=20mm, dy=20mm
Maximum value of SAR (interpolated) = 0.690 mW/g

Body, Ch.661, Ant.Intenna, Bat.Standard, Front, 3Tx, 10mm/Zoom Scan 2 (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 11.1 V/m; Power Drift = 0.164 dB
Peak SAR (extrapolated) = 0.873 W/kg
SAR(1 g) = 0.500 mW/g; SAR(10 g) = 0.279 mW/g
Maximum value of SAR (measured) = 0.695 mW/g



0 dB = 0.695mW/g

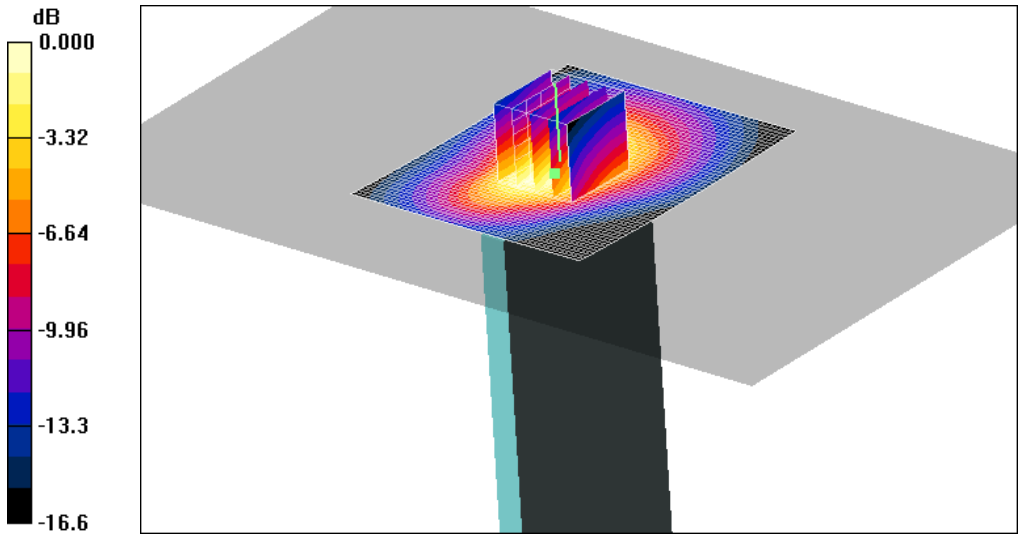
DUT: GT-N7100; Serial: FJ-213-E
Program Name: GT-N7100 GPRS1900 Body (Job No. : FJ-213)
Procedure Name: Body, Ch.661, Ant.Intenna, Bat.Standard, Bottom, 3Tx, 10mm
Meas. Ambient Temp(celsius)-22.4,Tissue Temp(celsius)-22.2;Test Date-14/Aug/2012

Communication System: Body GPRS ; Frequency: 1880 MHz;Duty Cycle: 1:2.767
Medium parameters used: f = 1880 MHz; σ = 1.49 mho/m; ε_r = 53.2; ρ = 1000 kg/m^3
Phantom section: Left Section

DASY5 Configuration:
- Probe: EX3DV4 - SN3520; ConvF(8.19, 8.19, 8.19); Calibrated: 2012-02-21
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn533; Calibrated: 2011-09-21
- Phantom: Triple Flat Phantom 5.1; Type: Triple Flat Phantom 5.1; Serial: 1003
- Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 184

Body, Ch.661, Ant.Intenna, Bat.Standard, Bottom, 3Tx, 10mm/Area Scan (61x51x1):
Measurement grid: dx=20mm, dy=20mm
Maximum value of SAR (interpolated) = 0.627 mW/g

Body, Ch.661, Ant.Intenna, Bat.Standard, Bottom, 3Tx, 10mm/Zoom Scan 2 (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 20.5 V/m; Power Drift = -0.042 dB
Peak SAR (extrapolated) = 0.763 W/kg
SAR(1 g) = 0.491 mW/g; SAR(10 g) = 0.295 mW/g
Maximum value of SAR (measured) = 0.609 mW/g



0 dB = 0.609mW/g

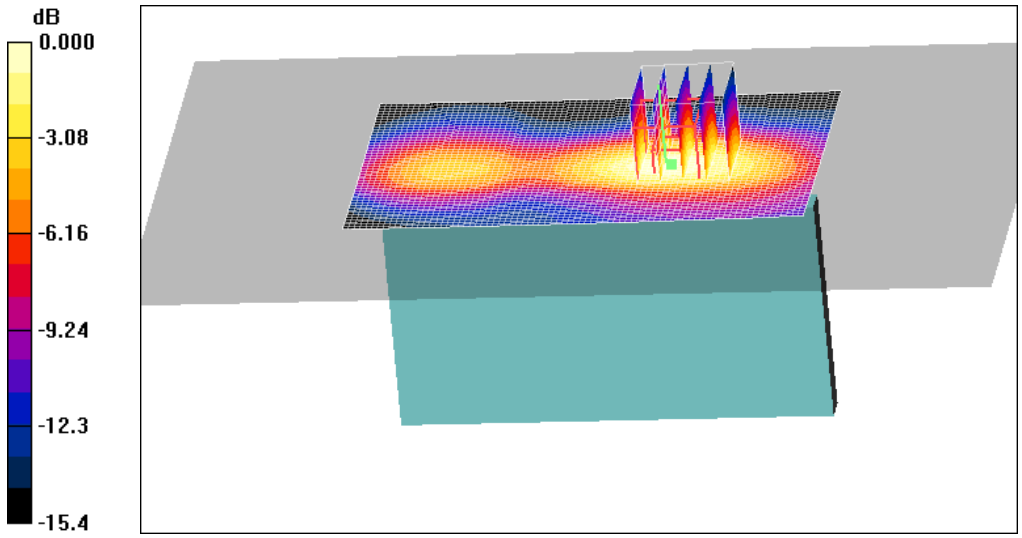
DUT: GT-N7100; Serial: FJ-213-E
Program Name: GT-N7100 GPRS1900 Body (Job No. : FJ-213)
Procedure Name: Body, Ch.661, Ant.Intenna, Bat.Standard, Left, 3Tx, 10mm
Meas. Ambient Temp(celsius)-22.4,Tissue Temp(celsius)-22.2;Test Date-14/Aug/2012

Communication System: Body GPRS ; Frequency: 1880 MHz;Duty Cycle: 1:2.767
Medium parameters used: f = 1880 MHz; σ = 1.49 mho/m; ε_r = 53.2; ρ = 1000 kg/m^3
Phantom section: Left Section

DASY5 Configuration:
- Probe: EX3DV4 - SN3520; ConvF(8.19, 8.19, 8.19); Calibrated: 2012-02-21
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn533; Calibrated: 2011-09-21
- Phantom: Triple Flat Phantom 5.1; Type: Triple Flat Phantom 5.1; Serial: 1003
- Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 184

Body, Ch.661, Ant.Intenna, Bat.Standard, Left, 3Tx, 10mm/Area Scan (51x81x1):
Measurement grid: dx=20mm, dy=20mm
Maximum value of SAR (interpolated) = 0.478 mW/g

Body, Ch.661, Ant.Intenna, Bat.Standard, Left, 3Tx, 10mm/Zoom Scan 2 (5x5x7)/Cube 0:
Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 13.1 V/m; Power Drift = -0.022 dB
Peak SAR (extrapolated) = 0.551 W/kg
SAR(1 g) = 0.355 mW/g; SAR(10 g) = 0.214 mW/g
Maximum value of SAR (measured) = 0.463 mW/g



0 dB = 0.463mW/g

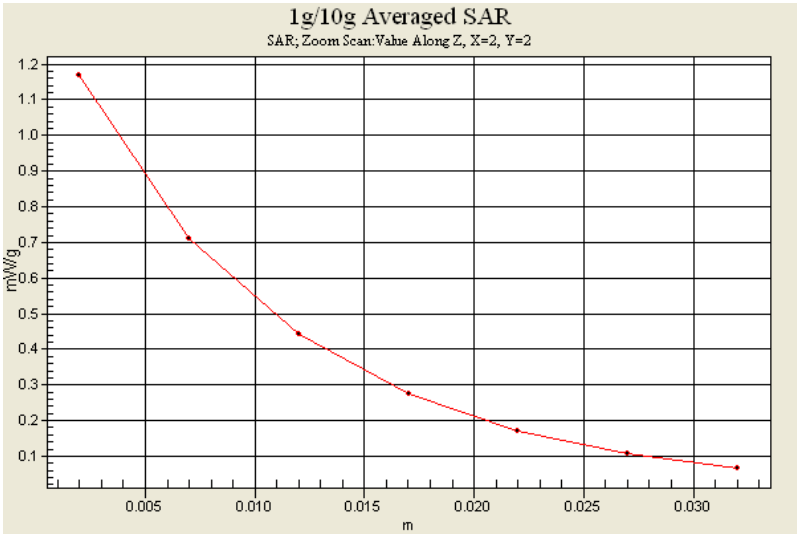
DUT: GT-N7100; Serial: FJ-213-E
Program Name: GT-N7100 GPRS1900 Body (Job No. : FJ-213)
Procedure Name: Body, Ch.810, Ant.Intenna, Bat.Standard, Back, 3Tx, 10mm
Meas. Ambient Temp(celsius)-22.4,Tissue Temp(celsius)-22.2;Test Date-14/Aug/2012

Communication System: Body GPRS ; Frequency: 1909.8 MHz;Duty Cycle: 1:2.767
Medium parameters used (extrapolated): f = 1909.8 MHz; σ = 1.49 mho/m; ε_r = 53.2; ρ = 1000 kg/m^3
Phantom section: Left Section

DASY5 Configuration:
- Probe: EX3DV4 - SN3520; ConvF(8.19, 8.19, 8.19); Calibrated: 2012-02-21
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn533; Calibrated: 2011-09-21
- Phantom: Triple Flat Phantom 5.1; Type: Triple Flat Phantom 5.1; Serial: 1003
- Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 184

Body, Ch.810, Ant.Intenna, Bat.Standard, Back, 3Tx, 10mm/Area Scan (61x81x1):
Measurement grid: dx=20mm, dy=20mm
Maximum value of SAR (interpolated) = 1.36 mW/g

Body, Ch.810, Ant.Intenna, Bat.Standard, Back, 3Tx, 10mm/Zoom Scan (5x5x7)/Cube 0:
Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 19.3 V/m; Power Drift = 0.010 dB
Peak SAR (extrapolated) = 1.50 W/kg
SAR(1 g) = 0.935 mW/g; SAR(10 g) = 0.551 mW/g
Maximum value of SAR (measured) = 1.17 mW/g



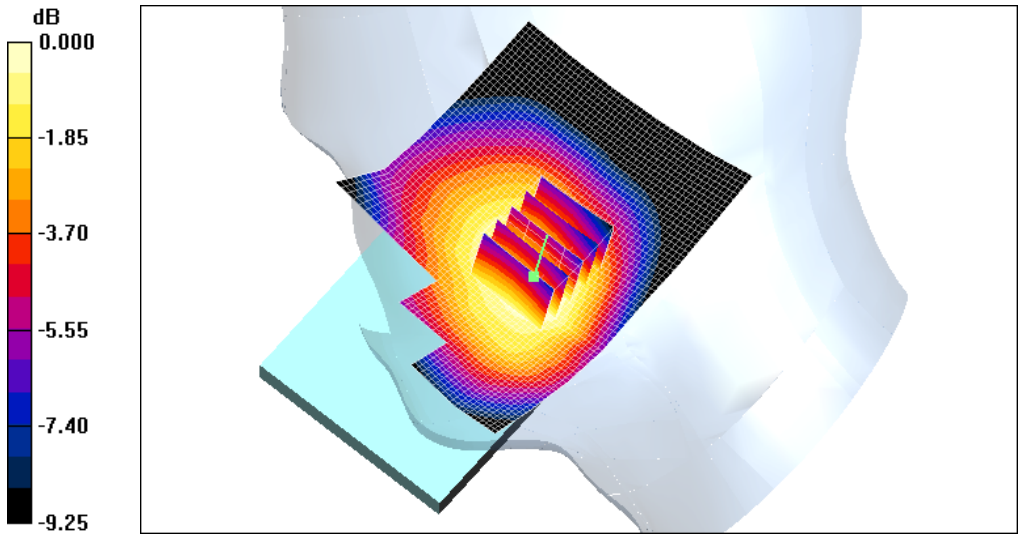
DUT: GT-N7100; Serial: FJ-213-E
Program Name: GT-N7100 WCDMA850 Right (Job No. : FJ-213)
Procedure Name: Cheek, Ch.4183, Ant.Intenna, Bat.Standard
Meas. Ambient Temp(celsius)-22.4,Tissue Temp(celsius)-22.1;Test Date-08/Aug/2012

Communication System: WCDMA850; Frequency: 836.6 MHz;Duty Cycle: 1:1
Medium parameters used: f = 836.6 MHz; σ = 0.89 mho/m; ε_r = 40.6; ρ = 1000 kg/m^3
Phantom section: Right Section

DASY5 Configuration:
- Probe: EX3DV4 - SN3520; ConvF(9.62, 9.62, 9.62); Calibrated: 2012-02-21
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn533; Calibrated: 2011-09-21
- Phantom: SAM PHANTOM #1; Type: SAM; Serial: TP-1248
- Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 184

Cheek, Ch.4183, Ant.Intenna, Bat.Standard/Area Scan (51x81x1): Measurement grid: dx=20mm, dy=20mm
Maximum value of SAR (interpolated) = 0.179 mW/g

Cheek, Ch.4183, Ant.Intenna, Bat.Standard/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 13.7 V/m; Power Drift = -0.002 dB
Peak SAR (extrapolated) = 0.192 W/kg
SAR(1 g) = 0.154 mW/g; SAR(10 g) = 0.119 mW/g
Maximum value of SAR (measured) = 0.173 mW/g



0 dB = 0.173mW/g

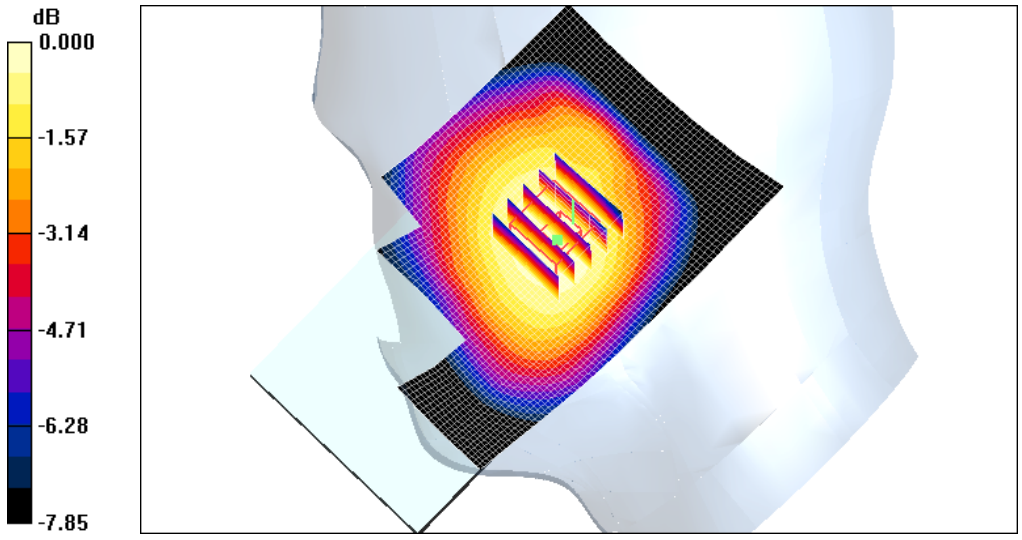
DUT: GT-N7100; Serial: FJ-213-E
Program Name: GT-N7100 WCDMA850 Right (Job No. : FJ-213)
Procedure Name: Tilt, Ch.4183, Ant.Intenna, Bat.Standard
Meas. Ambient Temp(celsius)-22.4,Tissue Temp(celsius)-22.1;Test Date-08/Aug/2012

Communication System: WCDMA850; Frequency: 836.6 MHz;Duty Cycle: 1:1
Medium parameters used: f = 836.6 MHz; σ = 0.89 mho/m; ε_r = 40.6; ρ = 1000 kg/m^3
Phantom section: Right Section

DASY5 Configuration:
- Probe: EX3DV4 - SN3520; ConvF(9.62, 9.62, 9.62); Calibrated: 2012-02-21
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn533; Calibrated: 2011-09-21
- Phantom: SAM PHANTOM #1; Type: SAM; Serial: TP-1248
- Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 184

Tilt, Ch.4183, Ant.Intenna, Bat.Standard/Area Scan (51x81x1): Measurement grid: dx=20mm, dy=20mm
Maximum value of SAR (interpolated) = 0.041 mW/g

Tilt, Ch.4183, Ant.Intenna, Bat.Standard/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 3.82 V/m; Power Drift = -0.140 dB
Peak SAR (extrapolated) = 0.043 W/kg
SAR(1 g) = 0.036 mW/g; SAR(10 g) = 0.028 mW/g
Maximum value of SAR (measured) = 0.040 mW/g



0 dB = 0.040mW/g

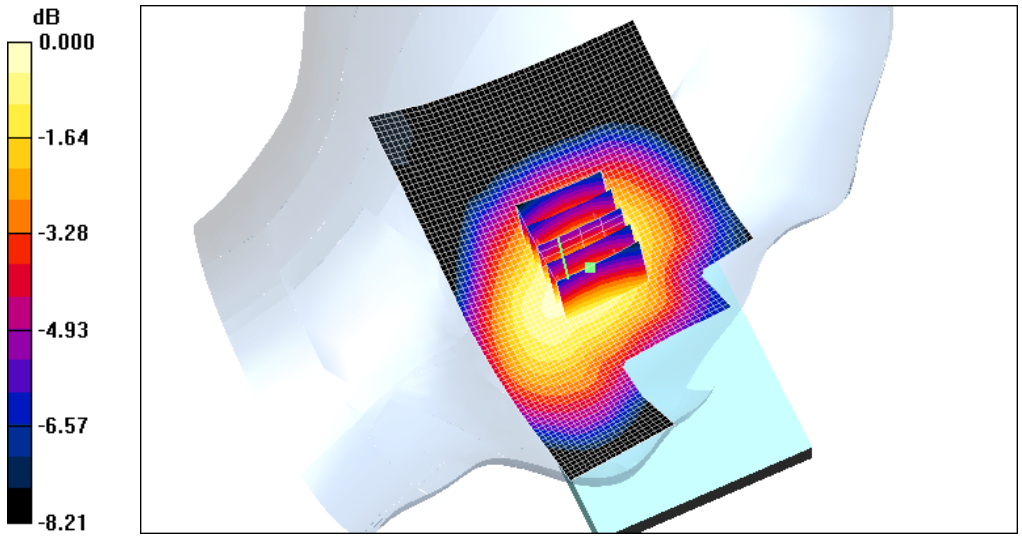
DUT: GT-N7100; Serial: FJ-213-E
Program Name: GT-N7100 WCDMA850 Left (Job No. : FJ-213)
Procedure Name: Cheek, Ch.4183, Ant.Intenna, Bat.Standard
Meas. Ambient Temp(celsius)-22.4,Tissue Temp(celsius)-22.1;Test Date-08/Aug/2012

Communication System: WCDMA850; Frequency: 836.6 MHz;Duty Cycle: 1:1
Medium parameters used: f = 836.6 MHz; σ = 0.89 mho/m; ε_r = 40.6; ρ = 1000 kg/m^3
Phantom section: Left Section

DASY5 Configuration:
- Probe: EX3DV4 - SN3520; ConvF(9.62, 9.62, 9.62); Calibrated: 2012-02-21
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn533; Calibrated: 2011-09-21
- Phantom: SAM PHANTOM #1; Type: SAM; Serial: TP-1248
- Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 184

Cheek, Ch.4183, Ant.Intenna, Bat.Standard/Area Scan (51x81x1): Measurement grid: dx=20mm, dy=20mm
Maximum value of SAR (interpolated) = 0.187 mW/g

Cheek, Ch.4183, Ant.Intenna, Bat.Standard/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 13.8 V/m; Power Drift = 0.010 dB
Peak SAR (extrapolated) = 0.204 W/kg
SAR(1 g) = 0.163 mW/g; SAR(10 g) = 0.127 mW/g
Maximum value of SAR (measured) = 0.187 mW/g



0 dB = 0.187mW/g

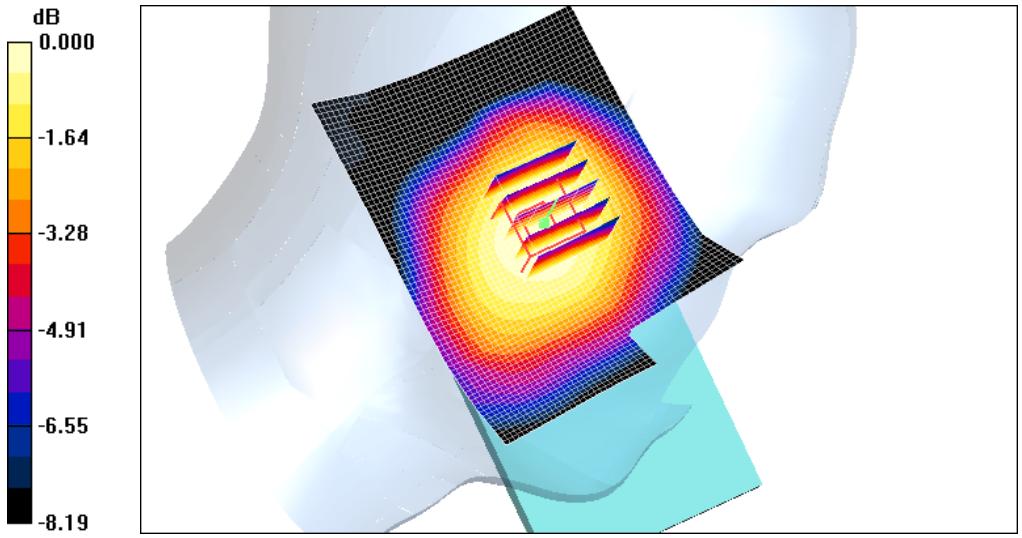
DUT: GT-N7100; Serial: FJ-213-E
Program Name: GT-N7100 WCDMA850 Left (Job No. : FJ-213)
Procedure Name: Tilt, Ch.4183, Ant.Intenna, Bat.Standard
Meas. Ambient Temp(celsius)-22.4,Tissue Temp(celsius)-22.1;Test Date-08/Aug/2012

Communication System: WCDMA850; Frequency: 836.6 MHz;Duty Cycle: 1:1
Medium parameters used: f = 836.6 MHz; σ = 0.89 mho/m; ε_r = 40.6; ρ = 1000 kg/m^3
Phantom section: Left Section

DASY5 Configuration:
- Probe: EX3DV4 - SN3520; ConvF(9.62, 9.62, 9.62); Calibrated: 2012-02-21
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn533; Calibrated: 2011-09-21
- Phantom: SAM PHANTOM #1; Type: SAM; Serial: TP-1248
- Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 184

Tilt, Ch.4183, Ant.Intenna, Bat.Standard/Area Scan (51x71x1): Measurement grid: dx=20mm, dy=20mm
Maximum value of SAR (interpolated) = 0.046 mW/g

Tilt, Ch.4183, Ant.Intenna, Bat.Standard/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 4.60 V/m; Power Drift = -0.004 dB
Peak SAR (extrapolated) = 0.048 W/kg
SAR(1 g) = 0.040 mW/g; SAR(10 g) = 0.031 mW/g
Maximum value of SAR (measured) = 0.044 mW/g



0 dB = 0.044mW/g

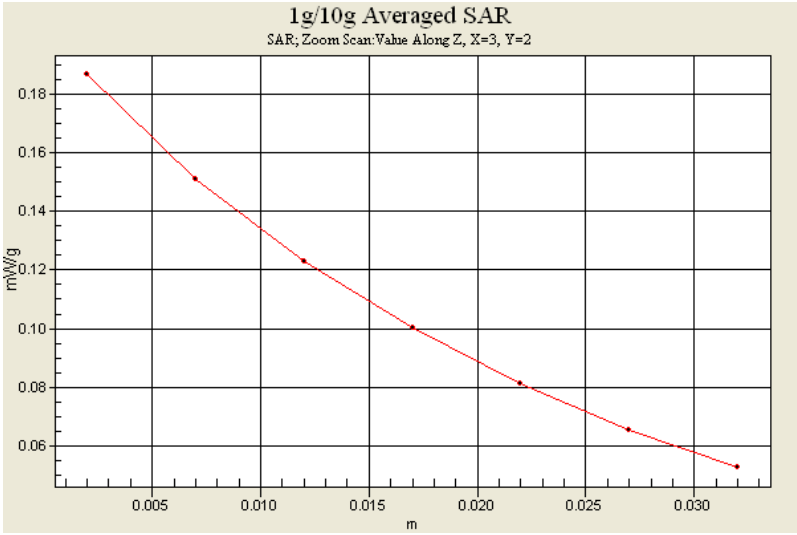
DUT: GT-N7100; Serial: FJ-213-E
Program Name: GT-N7100 WCDMA850 Left (Job No. : FJ-213)
Procedure Name: Cheek, Ch.4183, Ant.Intenna, Bat.Standard
Meas. Ambient Temp(celsius)-22.4,Tissue Temp(celsius)-22.1;Test Date-08/Aug/2012

Communication System: WCDMA850; Frequency: 836.6 MHz;Duty Cycle: 1:1
Medium parameters used: f = 836.6 MHz; σ = 0.89 mho/m; ε_r = 40.6; ρ = 1000 kg/m^3
Phantom section: Left Section

DASY5 Configuration:
- Probe: EX3DV4 - SN3520; ConvF(9.62, 9.62, 9.62); Calibrated: 2012-02-21
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn533; Calibrated: 2011-09-21
- Phantom: SAM PHANTOM #1; Type: SAM; Serial: TP-1248
- Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 184

Cheek, Ch.4183, Ant.Intenna, Bat.Standard/Area Scan (51x81x1): Measurement grid: dx=20mm, dy=20mm
Maximum value of SAR (interpolated) = 0.187 mW/g

Cheek, Ch.4183, Ant.Intenna, Bat.Standard/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 13.8 V/m; Power Drift = 0.010 dB
Peak SAR (extrapolated) = 0.204 W/kg
SAR(1 g) = 0.163 mW/g; SAR(10 g) = 0.127 mW/g
Maximum value of SAR (measured) = 0.187 mW/g



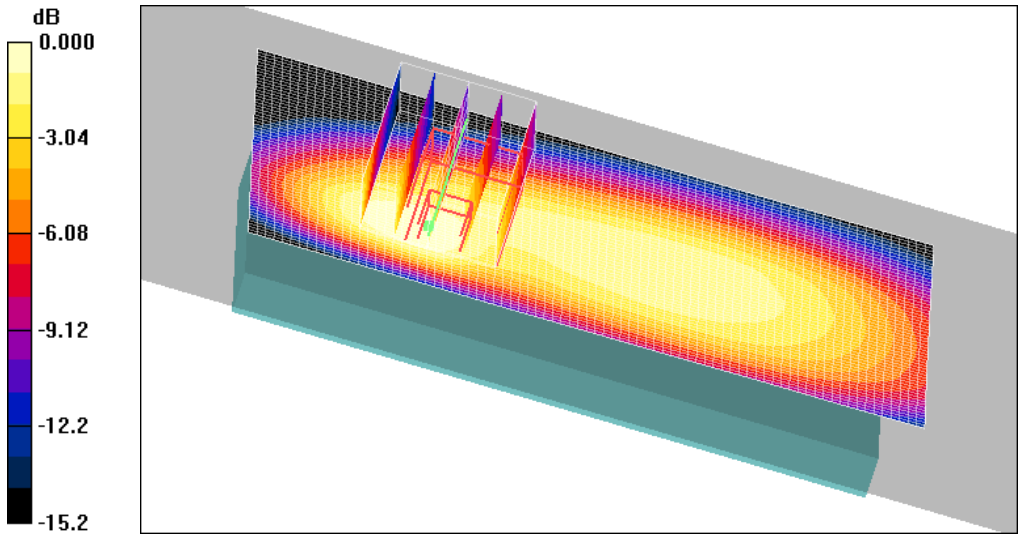
DUT: GT-N7100; Serial: FJ-213-E
Program Name: GT-N7100 WCDMA850 Body (Job No. : FJ-213)
Procedure Name: Body, Ch. 4183, Ant. Intenna, Bat. Standard, Back, 10mm
Meas. Ambient Temp(celsius)-22.3,Tissue Temp(celsius)-22.0;Test Date-08/Aug/2012

Communication System: WCDMA850; Frequency: 836.6 MHz;Duty Cycle: 1:1
Medium parameters used: f = 836.6 MHz; σ = 0.97 mho/m; ε_r = 54.3; ρ = 1000 kg/m^3
Phantom section: Right Section

DASY5 Configuration:
- Probe: EX3DV4 - SN3520; ConvF(9.72, 9.72, 9.72); Calibrated: 2012-02-21
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn533; Calibrated: 2011-09-21
- Phantom: Triple Flat Phantom 5.1; Type: Triple Flat Phantom 5.1; Serial: 1003
- Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 184

Body, Ch. 4183, Ant. Intenna, Bat. Standard, Back, 10mm/Area Scan (61x81x1):
Measurement grid: dx=20mm, dy=20mm
Maximum value of SAR (interpolated) = 0.417 mW/g

Body, Ch. 4183, Ant. Intenna, Bat. Standard, Back, 10mm/Zoom Scan (5x5x7)/Cube 0:
Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 18.5 V/m; Power Drift = -0.005 dB
Peak SAR (extrapolated) = 0.523 W/kg
SAR(1 g) = 0.314 mW/g; SAR(10 g) = 0.193 mW/g
Maximum value of SAR (measured) = 0.426 mW/g



0 dB = 0.426mW/g

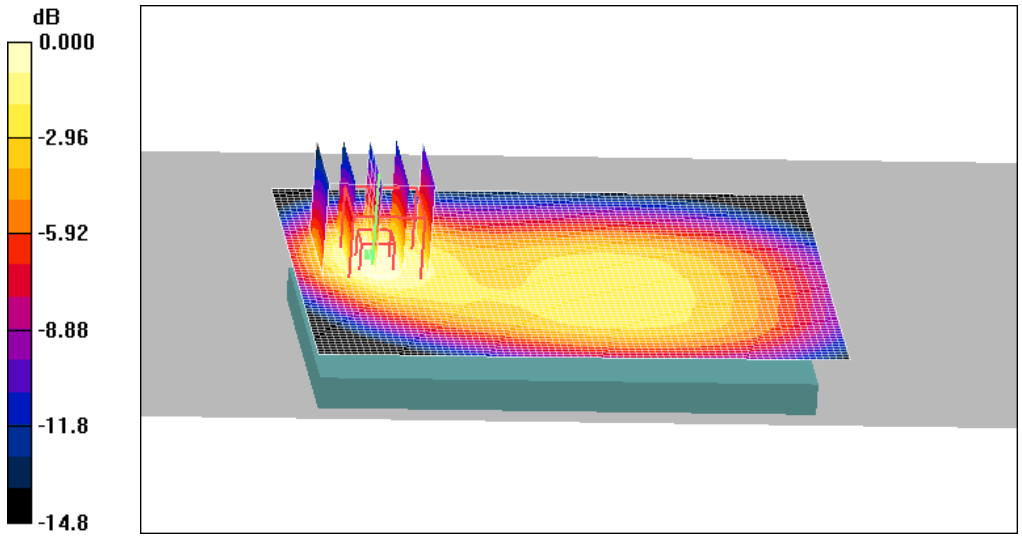
DUT: GT-N7100; Serial: FJ-213-E
Program Name: GT-N7100 WCDMA850 Body (Job No. : FJ-213)
Procedure Name: Body, Ch. 4183, Ant. Intenna, Bat. Standard, Front, 10mm
Meas. Ambient Temp(celsius)-22.3,Tissue Temp(celsius)-22.0;Test Date-08/Aug/2012

Communication System: WCDMA850; Frequency: 836.6 MHz;Duty Cycle: 1:1
Medium parameters used: f = 836.6 MHz; σ = 0.97 mho/m; ε_r = 54.3; ρ = 1000 kg/m^3
Phantom section: Right Section

DASY5 Configuration:
- Probe: EX3DV4 - SN3520; ConvF(9.72, 9.72, 9.72); Calibrated: 2012-02-21
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn533; Calibrated: 2011-09-21
- Phantom: Triple Flat Phantom 5.1; Type: Triple Flat Phantom 5.1; Serial: 1003
- Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 184

Body, Ch. 4183, Ant. Intenna, Bat. Standard, Front, 10mm/Area Scan (61x81x1):
Measurement grid: dx=20mm, dy=20mm
Maximum value of SAR (interpolated) = 0.278 mW/g

Body, Ch. 4183, Ant. Intenna, Bat. Standard, Front, 10mm/Zoom Scan (5x5x7)/Cube 0:
Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 12.3 V/m; Power Drift = -0.021 dB
Peak SAR (extrapolated) = 0.320 W/kg
SAR(1 g) = 0.194 mW/g; SAR(10 g) = 0.120 mW/g
Maximum value of SAR (measured) = 0.254 mW/g



0 dB = 0.254mW/g

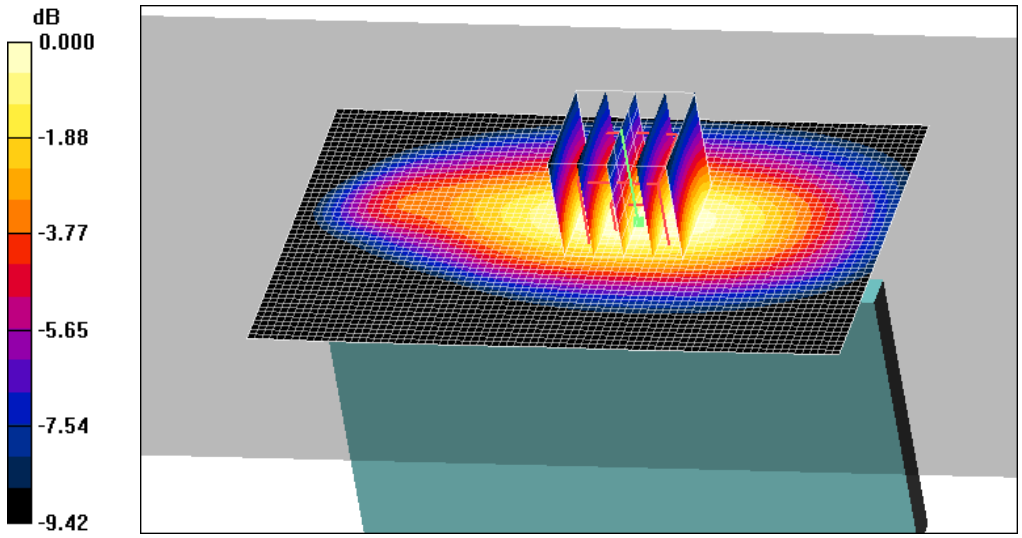
DUT: GT-N7100; Serial: FJ-213-E
Program Name: GT-N7100 WCDMA850 Body (Job No. : FJ-213)
Procedure Name: Body, Ch. 4183, Ant. Intenna, Bat. Standard, Left, 10mm
Meas. Ambient Temp(celsius)-22.3,Tissue Temp(celsius)-22.0;Test Date-08/Aug/2012

Communication System: WCDMA850; Frequency: 836.6 MHz;Duty Cycle: 1:1
Medium parameters used: f = 836.6 MHz; σ = 0.97 mho/m; ε_r = 54.3; ρ = 1000 kg/m^3
Phantom section: Right Section

DASY5 Configuration:
- Probe: EX3DV4 - SN3520; ConvF(9.72, 9.72, 9.72); Calibrated: 2012-02-21
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn533; Calibrated: 2011-09-21
- Phantom: Triple Flat Phantom 5.1; Type: Triple Flat Phantom 5.1; Serial: 1003
- Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 184

Body, Ch. 4183, Ant. Intenna, Bat. Standard, Left, 10mm/Area Scan (51x81x1):
Measurement grid: dx=20mm, dy=20mm
Maximum value of SAR (interpolated) = 0.169 mW/g

Body, Ch. 4183, Ant. Intenna, Bat. Standard, Left, 10mm/Zoom Scan (5x5x7)/Cube 0:
Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 12.5 V/m; Power Drift = -0.014 dB
Peak SAR (extrapolated) = 0.191 W/kg
SAR(1 g) = 0.136 mW/g; SAR(10 g) = 0.095 mW/g
Maximum value of SAR (measured) = 0.167 mW/g



0 dB = 0.167mW/g

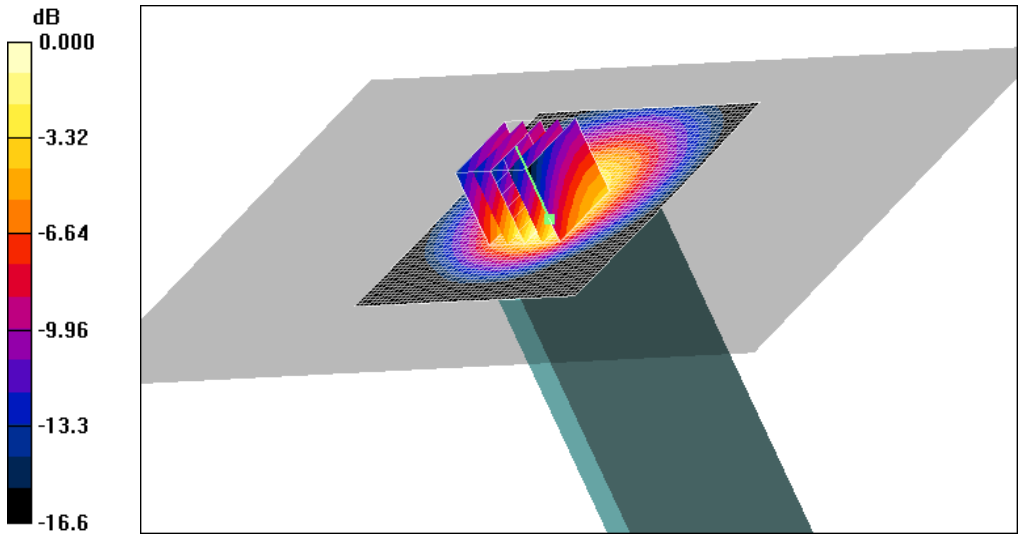
DUT: GT-N7100; Serial: FJ-213-E
Program Name: GT-N7100 WCDMA850 Body (Job No. : FJ-213)
Procedure Name: Body, Ch. 4183, Ant. Intenna, Bat. Standard, Bottom, 10mm
Meas. Ambient Temp(celsius)-22.3,Tissue Temp(celsius)-22.0;Test Date-08/Aug/2012

Communication System: WCDMA850; Frequency: 836.6 MHz;Duty Cycle: 1:1
Medium parameters used: f = 836.6 MHz; σ = 0.97 mho/m; ε_r = 54.3; ρ = 1000 kg/m^3
Phantom section: Right Section

DASY5 Configuration:
- Probe: EX3DV4 - SN3520; ConvF(9.72, 9.72, 9.72); Calibrated: 2012-02-21
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn533; Calibrated: 2011-09-21
- Phantom: Triple Flat Phantom 5.1; Type: Triple Flat Phantom 5.1; Serial: 1003
- Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 184

Body, Ch. 4183, Ant. Intenna, Bat. Standard, Bottom, 10mm/Area Scan (61x51x1):
Measurement grid: dx=20mm, dy=20mm
Maximum value of SAR (interpolated) = 0.328 mW/g

Body, Ch. 4183, Ant. Intenna, Bat. Standard, Bottom, 10mm/Zoom Scan (5x5x7)/Cube 0:
Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 17.9 V/m; Power Drift = -0.015 dB
Peak SAR (extrapolated) = 0.382 W/kg
SAR(1 g) = 0.237 mW/g; SAR(10 g) = 0.146 mW/g
Maximum value of SAR (measured) = 0.311 mW/g



0 dB = 0.311mW/g

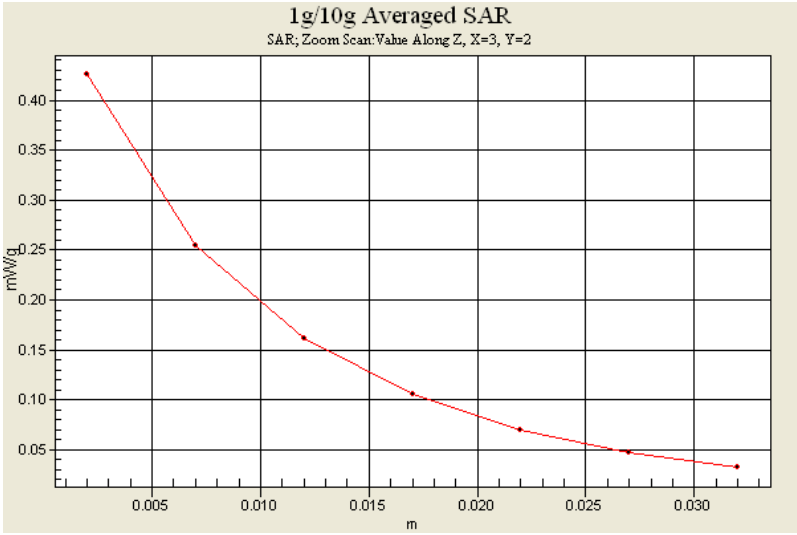
DUT: GT-N7100; Serial: FJ-213-E
Program Name: GT-N7100 WCDMA850 Body (Job No. : FJ-213)
Procedure Name: Body, Ch. 4183, Ant. Intenna, Bat. Standard, Back, 10mm
Meas. Ambient Temp(celsius)-22.3,Tissue Temp(celsius)-22.0;Test Date-08/Aug/2012

Communication System: WCDMA850; Frequency: 836.6 MHz;Duty Cycle: 1:1
Medium parameters used: f = 836.6 MHz; σ = 0.97 mho/m; ε_r = 54.3; ρ = 1000 kg/m^3
Phantom section: Right Section

DASY5 Configuration:
- Probe: EX3DV4 - SN3520; ConvF(9.72, 9.72, 9.72); Calibrated: 2012-02-21
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn533; Calibrated: 2011-09-21
- Phantom: Triple Flat Phantom 5.1; Type: Triple Flat Phantom 5.1; Serial: 1003
- Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 184

Body, Ch. 4183, Ant. Intenna, Bat. Standard, Back, 10mm/Area Scan (61x81x1):
Measurement grid: dx=20mm, dy=20mm
Maximum value of SAR (interpolated) = 0.417 mW/g

Body, Ch. 4183, Ant. Intenna, Bat. Standard, Back, 10mm/Zoom Scan (5x5x7)/Cube 0:
Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 18.5 V/m; Power Drift = -0.005 dB
Peak SAR (extrapolated) = 0.523 W/kg
SAR(1 g) = 0.314 mW/g; SAR(10 g) = 0.193 mW/g
Maximum value of SAR (measured) = 0.426 mW/g



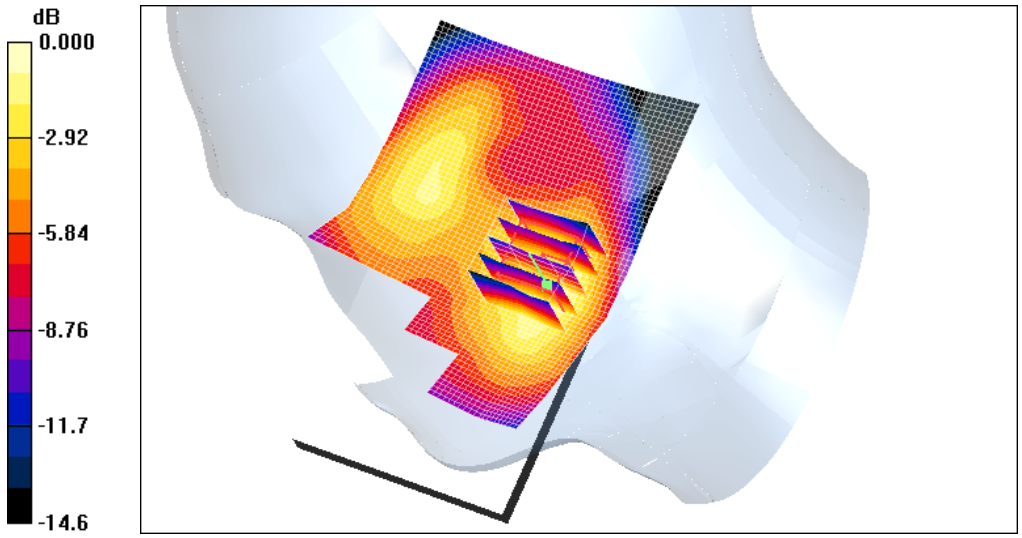
DUT: GT-N7100; Serial: FJ-213-E
Program Name: GT-N7100 WCDMA1900 Right (Job No. : FJ-213)
Procedure Name: Cheek, Ch.9400, Ant.Intenna, Bat.Standard
Meas. Ambient Temp(celsius)-22.6,Tissue Temp(celsius)-22.4;Test Date-14/Aug/2012

Communication System: WCDMA1900; Frequency: 1880 MHz;Duty Cycle: 1:1
Medium parameters used: f = 1880 MHz; σ = 1.4 mho/m; ε_r = 39.4; ρ = 1000 kg/m^3
Phantom section: Right Section

DASY5 Configuration:
- Probe: EX3DV4 - SN3520; ConvF(8.54, 8.54, 8.54); Calibrated: 2012-02-21
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn533; Calibrated: 2011-09-21
- Phantom: SAM PHANTOM #2; Type: SAM; Serial: TP-1247
- Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 184

Cheek, Ch.9400, Ant.Intenna, Bat.Standard/Area Scan (51x81x1): Measurement grid: dx=20mm, dy=20mm
Maximum value of SAR (interpolated) = 0.156 mW/g

Cheek, Ch.9400, Ant.Intenna, Bat.Standard/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 7.02 V/m; Power Drift = 0.144 dB
Peak SAR (extrapolated) = 0.205 W/kg
SAR(1 g) = 0.127 mW/g; SAR(10 g) = 0.080 mW/g
Maximum value of SAR (measured) = 0.165 mW/g



0 dB = 0.165mW/g

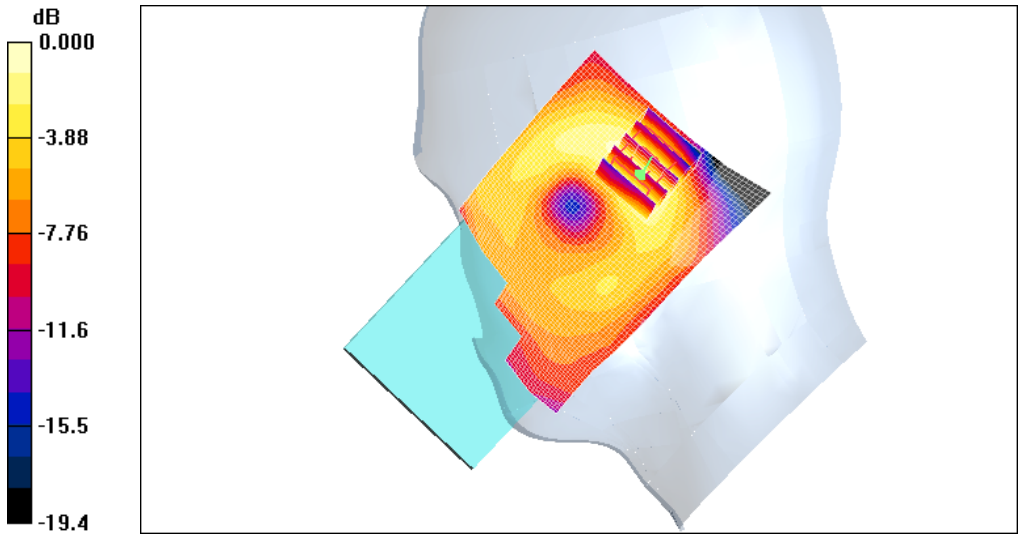
DUT: GT-N7100; Serial: FJ-213-E
Program Name: GT-N7100 WCDMA1900 Right (Job No. : FJ-213)
Procedure Name: Tilt, Ch.9400, Ant.Intenna, Bat.Standard
Meas. Ambient Temp(celsius)-22.6,Tissue Temp(celsius)-22.4;Test Date-14/Aug/2012

Communication System: WCDMA1900; Frequency: 1880 MHz;Duty Cycle: 1:1
Medium parameters used: f = 1880 MHz; σ = 1.4 mho/m; ε_r = 39.4; ρ = 1000 kg/m^3
Phantom section: Right Section

DASY5 Configuration:
- Probe: EX3DV4 - SN3520; ConvF(8.54, 8.54, 8.54); Calibrated: 2012-02-21
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn533; Calibrated: 2011-09-21
- Phantom: SAM PHANTOM #2; Type: SAM; Serial: TP-1247
- Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 184

Tilt, Ch.9400, Ant.Intenna, Bat.Standard/Area Scan (51x81x1): Measurement grid: dx=20mm, dy=20mm
Maximum value of SAR (interpolated) = 0.083 mW/g

Tilt, Ch.9400, Ant.Intenna, Bat.Standard/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 7.74 V/m; Power Drift = -0.141 dB
Peak SAR (extrapolated) = 0.103 W/kg
SAR(1 g) = 0.063 mW/g; SAR(10 g) = 0.037 mW/g
Maximum value of SAR (measured) = 0.082 mW/g



0 dB = 0.082mW/g

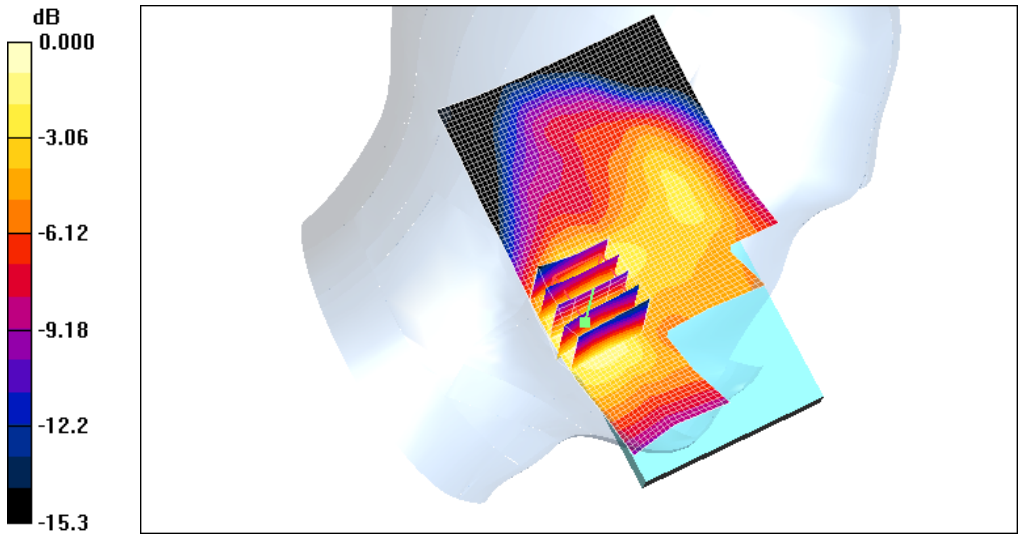
DUT: GT-N7100; Serial: FJ-213-E
Program Name: GT-N7100 WCDMA1900 Left (Job No. : FJ-213)
Procedure Name: Cheek, Ch.9400, Ant.Intenna, Bat.Standard
Meas. Ambient Temp(celsius)-22.6,Tissue Temp(celsius)-22.4;Test Date-14/Aug/2012

Communication System: WCDMA1900; Frequency: 1880 MHz;Duty Cycle: 1:1
Medium parameters used: f = 1880 MHz; σ = 1.4 mho/m; ε_r = 39.4; ρ = 1000 kg/m^3
Phantom section: Left Section

DASY5 Configuration:
- Probe: EX3DV4 - SN3520; ConvF(8.54, 8.54, 8.54); Calibrated: 2012-02-21
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn533; Calibrated: 2011-09-21
- Phantom: SAM PHANTOM #2; Type: SAM; Serial: TP-1247
- Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 184

Cheek, Ch.9400, Ant.Intenna, Bat.Standard/Area Scan (51x81x1): Measurement grid: dx=20mm, dy=20mm
Maximum value of SAR (interpolated) = 0.185 mW/g

Cheek, Ch.9400, Ant.Intenna, Bat.Standard/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 7.61 V/m; Power Drift = 0.020 dB
Peak SAR (extrapolated) = 0.225 W/kg
SAR(1 g) = 0.147 mW/g; SAR(10 g) = 0.094 mW/g
Maximum value of SAR (measured) = 0.185 mW/g



0 dB = 0.185mW/g

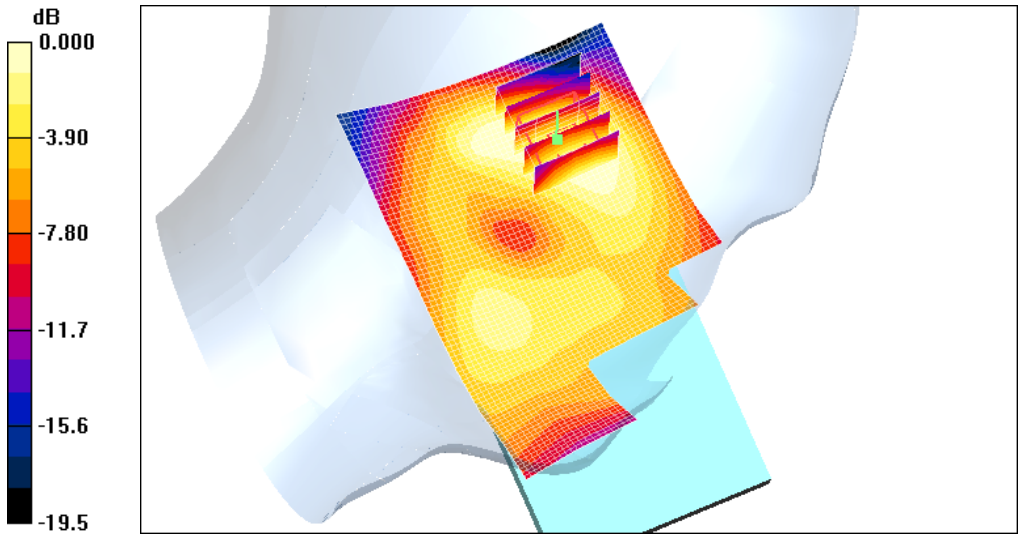
DUT: GT-N7100; Serial: FJ-213-E
Program Name: GT-N7100 WCDMA1900 Left (Job No. : FJ-213)
Procedure Name: Tilt, Ch.9400, Ant.Intenna, Bat.Standard 2
Meas. Ambient Temp(celsius)-22.6,Tissue Temp(celsius)-22.4;Test Date-14/Aug/2012

Communication System: WCDMA1900; Frequency: 1880 MHz;Duty Cycle: 1:1
Medium parameters used: f = 1880 MHz; σ = 1.4 mho/m; ε_r = 39.4; ρ = 1000 kg/m^3
Phantom section: Left Section

DASY5 Configuration:
- Probe: EX3DV4 - SN3520; ConvF(8.54, 8.54, 8.54); Calibrated: 2012-02-21
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn533; Calibrated: 2011-09-21
- Phantom: SAM PHANTOM #2; Type: SAM; Serial: TP-1247
- Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 184

Tilt, Ch.9400, Ant.Intenna, Bat.Standard 2/Area Scan (51x81x1): Measurement grid: dx=20mm, dy=20mm
Maximum value of SAR (interpolated) = 0.108 mW/g

Tilt, Ch.9400, Ant.Intenna, Bat.Standard 2/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 7.64 V/m; Power Drift = 0.036 dB
Peak SAR (extrapolated) = 0.112 W/kg
SAR(1 g) = 0.073 mW/g; SAR(10 g) = 0.047 mW/g
Maximum value of SAR (measured) = 0.090 mW/g



0 dB = 0.090mW/g

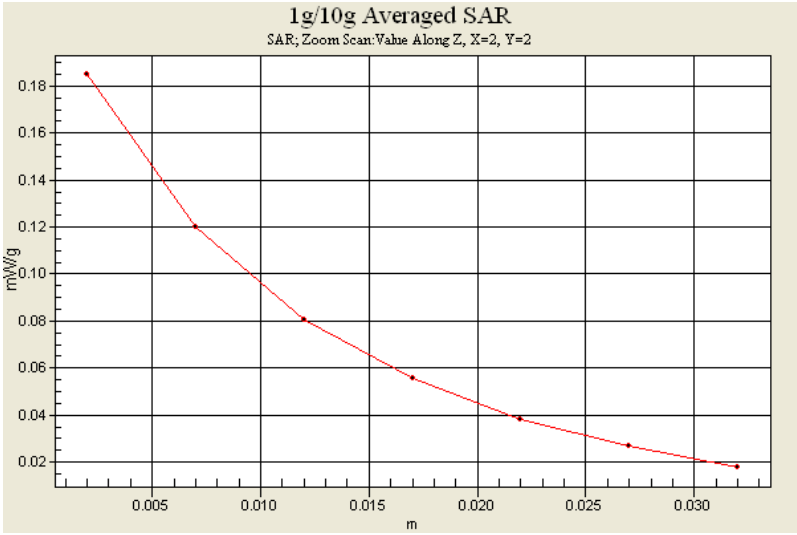
DUT: GT-N7100; Serial: FJ-213-E
Program Name: GT-N7100 WCDMA1900 Left (Job No. : FJ-213)
Procedure Name: Cheek, Ch.9400, Ant.Intenna, Bat.Standard
Meas. Ambient Temp(celsius)-22.6,Tissue Temp(celsius)-22.4;Test Date-14/Aug/2012

Communication System: WCDMA1900; Frequency: 1880 MHz;Duty Cycle: 1:1
Medium parameters used: f = 1880 MHz; σ = 1.4 mho/m; ε_r = 39.4; ρ = 1000 kg/m^3
Phantom section: Left Section

DASY5 Configuration:
- Probe: EX3DV4 - SN3520; ConvF(8.54, 8.54, 8.54); Calibrated: 2012-02-21
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn533; Calibrated: 2011-09-21
- Phantom: SAM PHANTOM #2; Type: SAM; Serial: TP-1247
- Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 184

Cheek, Ch.9400, Ant.Intenna, Bat.Standard/Area Scan (51x81x1): Measurement grid: dx=20mm, dy=20mm
Maximum value of SAR (interpolated) = 0.185 mW/g

Cheek, Ch.9400, Ant.Intenna, Bat.Standard/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 7.61 V/m; Power Drift = 0.020 dB
Peak SAR (extrapolated) = 0.225 W/kg
SAR(1 g) = 0.147 mW/g; SAR(10 g) = 0.094 mW/g
Maximum value of SAR (measured) = 0.185 mW/g



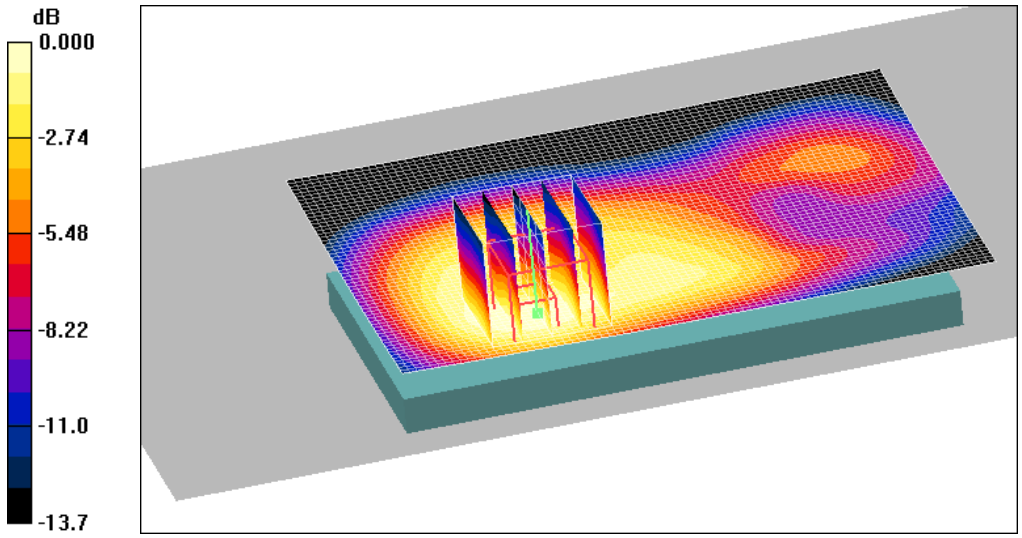
DUT: GT-N7100; Serial: FJ-213-E
Program Name: GT-N7100 WCDMA1900 Body (Job No. : FJ-213)
Procedure Name: Body, Ch. 9400, Ant.Intenna, Bat.Standard, Back, 10mm
Meas. Ambient Temp(celsius)-22.4,Tissue Temp(celsius)-22.2;Test Date-14/Aug/2012

Communication System: WCDMA1900; Frequency: 1880 MHz;Duty Cycle: 1:1
Medium parameters used: f = 1880 MHz; σ = 1.49 mho/m; ε_r = 53.2; ρ = 1000 kg/m^3
Phantom section: Left Section

DASY5 Configuration:
- Probe: EX3DV4 - SN3520; ConvF(8.19, 8.19, 8.19); Calibrated: 2012-02-21
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn533; Calibrated: 2011-09-21
- Phantom: Triple Flat Phantom 5.1; Type: Triple Flat Phantom 5.1; Serial: 1003
- Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 184

Body, Ch. 9400, Ant.Intenna, Bat.Standard, Back, 10mm/Area Scan (61x81x1):
Measurement grid: dx=20mm, dy=20mm
Maximum value of SAR (interpolated) = 0.527 mW/g

Body, Ch. 9400, Ant.Intenna, Bat.Standard, Back, 10mm/Zoom Scan (5x5x7)/Cube 0:
Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 13.1 V/m; Power Drift = 0.024 dB
Peak SAR (extrapolated) = 0.630 W/kg
SAR(1 g) = 0.397 mW/g; SAR(10 g) = 0.238 mW/g
Maximum value of SAR (measured) = 0.496 mW/g



0 dB = 0.496mW/g

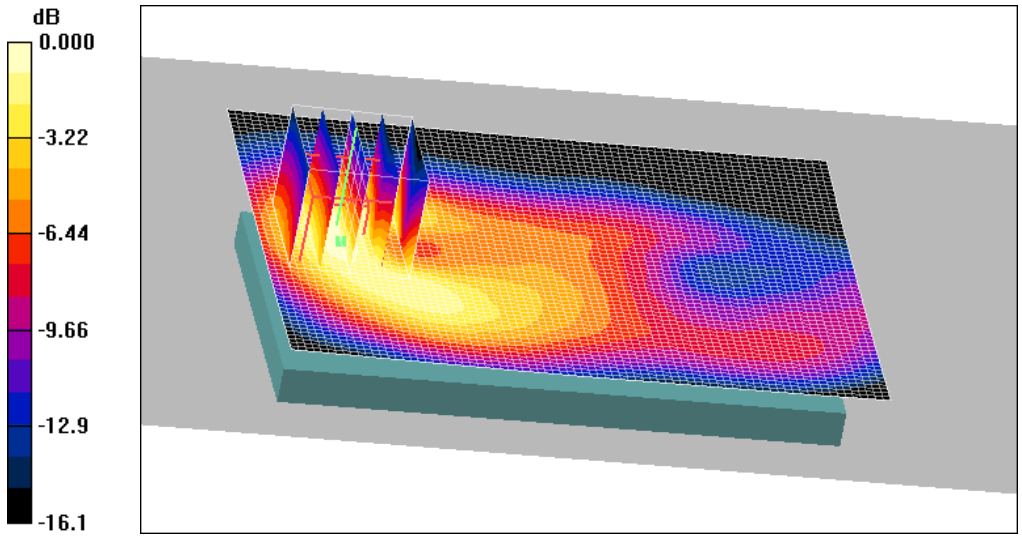
DUT: GT-N7100; Serial: FJ-213-E
Program Name: GT-N7100 WCDMA1900 Body (Job No. : FJ-213)
Procedure Name: Body, Ch. 9400, Ant.Intenna, Bat.Standard, Front, 10mm
Meas. Ambient Temp(celsius)-22.4,Tissue Temp(celsius)-22.2;Test Date-14/Aug/2012

Communication System: WCDMA1900; Frequency: 1880 MHz;Duty Cycle: 1:1
Medium parameters used: f = 1880 MHz; σ = 1.49 mho/m; ε_r = 53.2; ρ = 1000 kg/m^3
Phantom section: Left Section

DASY5 Configuration:
- Probe: EX3DV4 - SN3520; ConvF(8.19, 8.19, 8.19); Calibrated: 2012-02-21
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn533; Calibrated: 2011-09-21
- Phantom: Triple Flat Phantom 5.1; Type: Triple Flat Phantom 5.1; Serial: 1003
- Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 184

Body, Ch. 9400, Ant.Intenna, Bat.Standard, Front, 10mm/Area Scan (61x81x1):
Measurement grid: dx=20mm, dy=20mm
Maximum value of SAR (interpolated) = 0.418 mW/g

Body, Ch. 9400, Ant.Intenna, Bat.Standard, Front, 10mm/Zoom Scan (5x5x7)/Cube 0:
Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 9.31 V/m; Power Drift = 0.027 dB
Peak SAR (extrapolated) = 0.581 W/kg
SAR(1 g) = 0.327 mW/g; SAR(10 g) = 0.184 mW/g
Maximum value of SAR (measured) = 0.458 mW/g



0 dB = 0.458mW/g

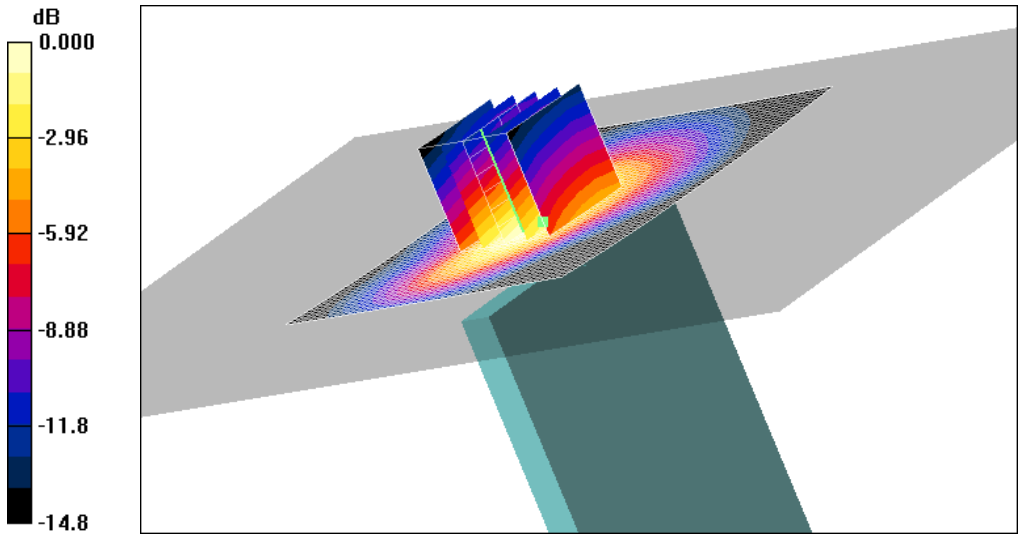
DUT: GT-N7100; Serial: FJ-213-E
Program Name: GT-N7100 WCDMA1900 Body (Job No. : FJ-213)
Procedure Name: Body, Ch. 9400, Ant.Intenna, Bat.Standard, Bottom, 10mm
Meas. Ambient Temp(celsius)-22.4,Tissue Temp(celsius)-22.2;Test Date-14/Aug/2012

Communication System: WCDMA1900; Frequency: 1880 MHz;Duty Cycle: 1:1
Medium parameters used: f = 1880 MHz; σ = 1.49 mho/m; ε_r = 53.2; ρ = 1000 kg/m^3
Phantom section: Left Section

DASY5 Configuration:
- Probe: EX3DV4 - SN3520; ConvF(8.19, 8.19, 8.19); Calibrated: 2012-02-21
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn533; Calibrated: 2011-09-21
- Phantom: Triple Flat Phantom 5.1; Type: Triple Flat Phantom 5.1; Serial: 1003
- Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 184

Body, Ch. 9400, Ant.Intenna, Bat.Standard, Bottom, 10mm/Area Scan (61x51x1):
Measurement grid: dx=20mm, dy=20mm
Maximum value of SAR (interpolated) = 0.494 mW/g

Body, Ch. 9400, Ant.Intenna, Bat.Standard, Bottom, 10mm/Zoom Scan (5x5x7)/Cube 0:
Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 17.7 V/m; Power Drift = -0.093 dB
Peak SAR (extrapolated) = 0.573 W/kg
SAR(1 g) = 0.369 mW/g; SAR(10 g) = 0.225 mW/g
Maximum value of SAR (measured) = 0.479 mW/g



0 dB = 0.479mW/g

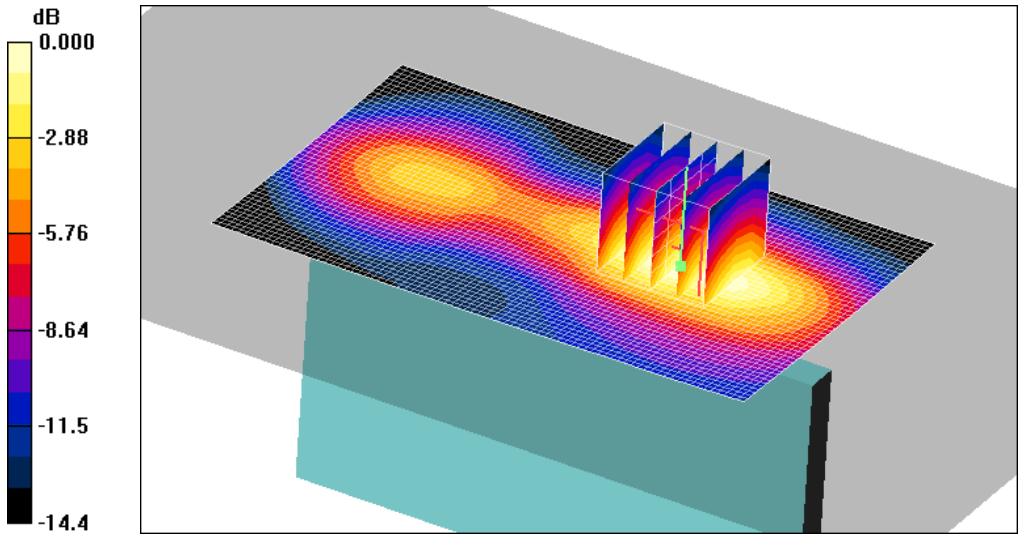
DUT: GT-N7100; Serial: FJ-213-E
Program Name: GT-N7100 WCDMA1900 Body (Job No. : FJ-213)
Procedure Name: Body, Ch. 9400, Ant.Intenna, Bat.Standard, Left, 10mm
Meas. Ambient Temp(celsius)-22.4,Tissue Temp(celsius)-22.2;Test Date-14/Aug/2012

Communication System: WCDMA1900; Frequency: 1880 MHz;Duty Cycle: 1:1
Medium parameters used: f = 1880 MHz; σ = 1.49 mho/m; ε_r = 53.2; ρ = 1000 kg/m^3
Phantom section: Left Section

DASY5 Configuration:
- Probe: EX3DV4 - SN3520; ConvF(8.19, 8.19, 8.19); Calibrated: 2012-02-21
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn533; Calibrated: 2011-09-21
- Phantom: Triple Flat Phantom 5.1; Type: Triple Flat Phantom 5.1; Serial: 1003
- Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 184

Body, Ch. 9400, Ant.Intenna, Bat.Standard, Left, 10mm/Area Scan (51x81x1):
Measurement grid: dx=20mm, dy=20mm
Maximum value of SAR (interpolated) = 0.268 mW/g

Body, Ch. 9400, Ant.Intenna, Bat.Standard, Left, 10mm/Zoom Scan (5x5x7)/Cube 0:
Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 8.84 V/m; Power Drift = 0.110 dB
Peak SAR (extrapolated) = 0.300 W/kg
SAR(1 g) = 0.193 mW/g; SAR(10 g) = 0.117 mW/g
Maximum value of SAR (measured) = 0.253 mW/g



0 dB = 0.253mW/g

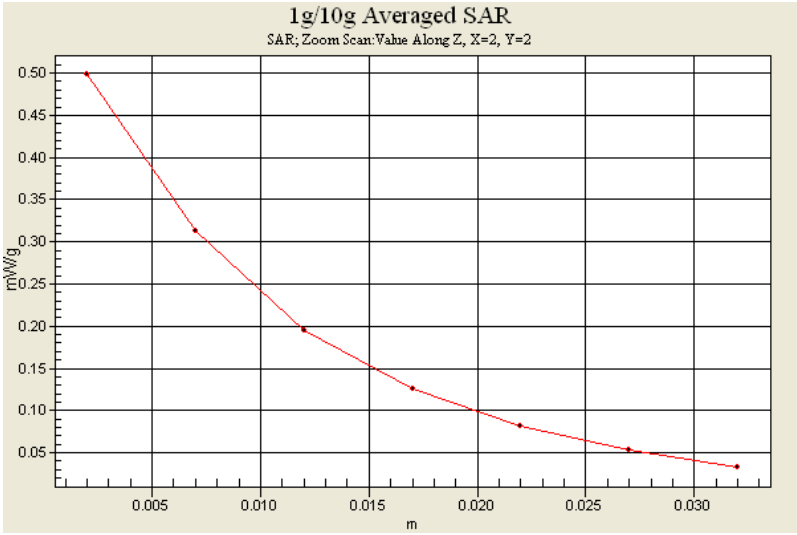
DUT: GT-N7100; Serial: FJ-213-E
Program Name: GT-N7100 WCDMA1900 Body (Job No. : FJ-213)
Procedure Name: Body, Ch. 9400, Ant.Intenna, Bat.Standard, Back, 10mm
Meas. Ambient Temp(celsius)-22.4,Tissue Temp(celsius)-22.2;Test Date-14/Aug/2012

Communication System: WCDMA1900; Frequency: 1880 MHz;Duty Cycle: 1:1
Medium parameters used: f = 1880 MHz; σ = 1.49 mho/m; ε_r = 53.2; ρ = 1000 kg/m^3
Phantom section: Left Section

DASY5 Configuration:
- Probe: EX3DV4 - SN3520; ConvF(8.19, 8.19, 8.19); Calibrated: 2012-02-21
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn533; Calibrated: 2011-09-21
- Phantom: Triple Flat Phantom 5.1; Type: Triple Flat Phantom 5.1; Serial: 1003
- Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 184

Body, Ch. 9400, Ant.Intenna, Bat.Standard, Back, 10mm/Area Scan (61x81x1):
Measurement grid: dx=20mm, dy=20mm
Maximum value of SAR (interpolated) = 0.527 mW/g

Body, Ch. 9400, Ant.Intenna, Bat.Standard, Back, 10mm/Zoom Scan (5x5x7)/Cube 0:
Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 13.1 V/m; Power Drift = 0.024 dB
Peak SAR (extrapolated) = 0.630 W/kg
SAR(1 g) = 0.397 mW/g; SAR(10 g) = 0.238 mW/g
Maximum value of SAR (measured) = 0.496 mW/g



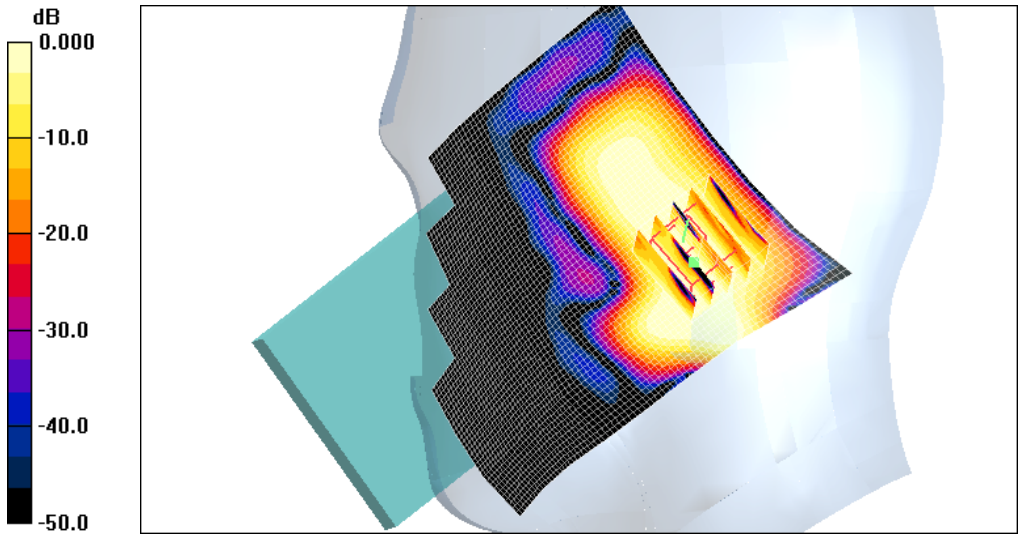
DUT: GT-N7100; Serial: FJ-213-E
Program Name: GT-N7100 WLAN Right (Job No. : FJ-213)
Procedure Name: Cheek, Ch.11, Ant.Intenna, Bat.Standard, 1Mbps
Meas. Ambient Temp(celsius)-22.3,Tissue Temp(celsius)-22.1;Test Date-10/Aug/2012

Communication System: WLAN; Frequency: 2462 MHz;Duty Cycle: 1:1
Medium parameters used: f = 2462 MHz; σ = 1.81 mho/m; ε_r = 39; ρ = 1000 kg/m^3
Phantom section: Right Section

DASY5 Configuration:
- Probe: EX3DV4 - SN3520; ConvF(7.43, 7.43, 7.43); Calibrated: 2012-02-21
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn533; Calibrated: 2011-09-21
- Phantom: SAM PHANTOM #2; Type: SAM; Serial: TP-1247
- Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 184

Cheek, Ch.11, Ant.Intenna, Bat.Standard, 1Mbps/Area Scan (61x91x1): Measurement grid: dx=20mm, dy=20mm
Maximum value of SAR (interpolated) = 0.016 mW/g

Cheek, Ch.11, Ant.Intenna, Bat.Standard, 1Mbps/Zoom Scan (5x5x7)/Cube 0:
Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 3.56 V/m; Power Drift = 0.058 dB
Peak SAR (extrapolated) = 0.014 W/kg
SAR(1 g) = 0.00667 mW/g; SAR(10 g) = 0.00302 mW/g
Maximum value of SAR (measured) = 0.010 mW/g



0 dB = 0.010mW/g

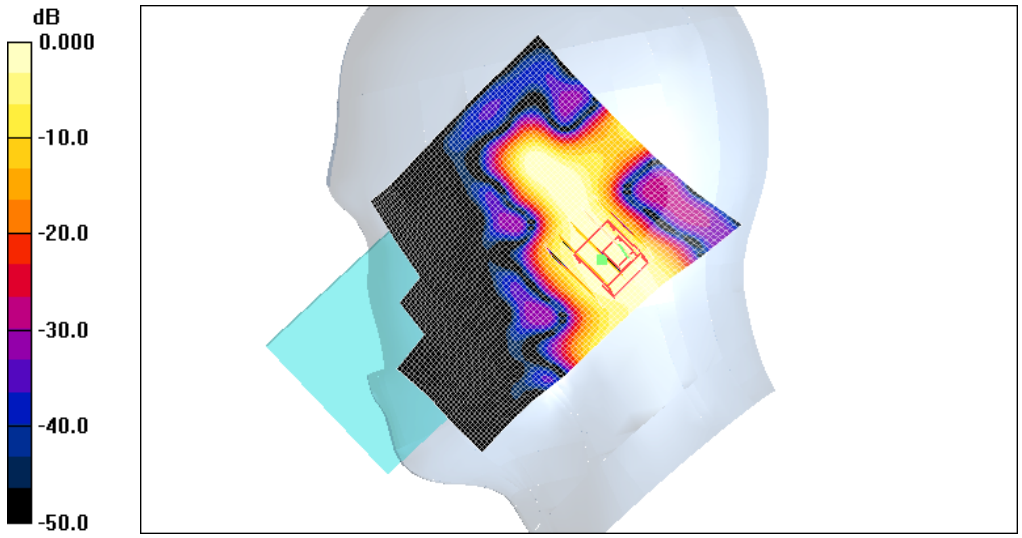
DUT: GT-N7100; Serial: FJ-213-E
Program Name: GT-N7100 WLAN Right (Job No. : FJ-213)
Procedure Name: Tilt, Ch.11, Ant.Intenna, Bat.Standard, 1Mbps
Meas. Ambient Temp(celsius)-22.3,Tissue Temp(celsius)-22.1;Test Date-10/Aug/2012

Communication System: WLAN; Frequency: 2462 MHz;Duty Cycle: 1:1
Medium parameters used: f = 2462 MHz; σ = 1.81 mho/m; ε_r = 39; ρ = 1000 kg/m^3
Phantom section: Right Section

DASY5 Configuration:
- Probe: EX3DV4 - SN3520; ConvF(7.43, 7.43, 7.43); Calibrated: 2012-02-21
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn533; Calibrated: 2011-09-21
- Phantom: SAM PHANTOM #2; Type: SAM; Serial: TP-1247
- Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 184

Tilt, Ch.11, Ant.Intenna, Bat.Standard, 1Mbps/Area Scan (61x81x1): Measurement grid: dx=20mm, dy=20mm
Maximum value of SAR (interpolated) = 0.015 mW/g

Tilt, Ch.11, Ant.Intenna, Bat.Standard, 1Mbps/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 3.05 V/m; Power Drift = 0.054 dB
Peak SAR (extrapolated) = 0.011 W/kg
SAR(1 g) = 0.00511 mW/g; SAR(10 g) = 0.00244 mW/g
Maximum value of SAR (measured) = 0.008 mW/g



0 dB = 0.008mW/g

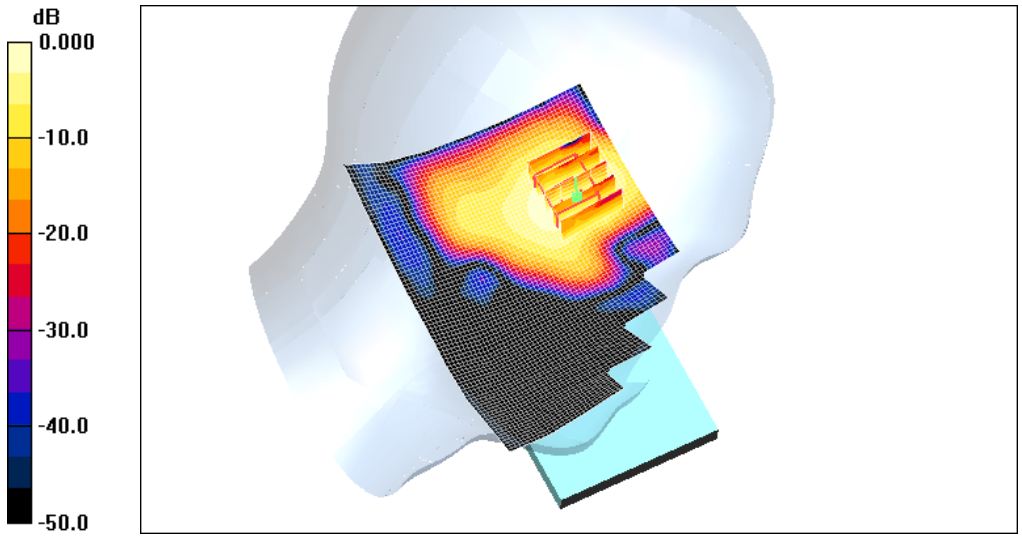
DUT: GT-N7100; Serial: FJ-213-E
Program Name: GT-N7100 WLAN Left (Job No. : FJ-213)
Procedure Name: Cheek, Ch.11, Ant.Intenna, Bat.Standard, 1Mbps
Meas. Ambient Temp(celsius)-22.3,Tissue Temp(celsius)-22.1;Test Date-10/Aug/2012

Communication System: WLAN; Frequency: 2462 MHz;Duty Cycle: 1:1
Medium parameters used: f = 2462 MHz; σ = 1.81 mho/m; ε_r = 39; ρ = 1000 kg/m^3
Phantom section: Left Section

DASY5 Configuration:
- Probe: EX3DV4 - SN3520; ConvF(7.43, 7.43, 7.43); Calibrated: 2012-02-21
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn533; Calibrated: 2011-09-21
- Phantom: SAM PHANTOM #2; Type: SAM; Serial: TP-1247
- Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 184

Cheek, Ch.11, Ant.Intenna, Bat.Standard, 1Mbps/Area Scan (61x81x1): Measurement grid: dx=20mm, dy=20mm
Maximum value of SAR (interpolated) = 0.045 mW/g

Cheek, Ch.11, Ant.Intenna, Bat.Standard, 1Mbps/Zoom Scan (5x5x7)/Cube 0:
Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 3.15 V/m; Power Drift = -0.190 dB
Peak SAR (extrapolated) = 0.046 W/kg
SAR(1 g) = 0.022 mW/g; SAR(10 g) = 0.011 mW/g
Maximum value of SAR (measured) = 0.033 mW/g



0 dB = 0.033mW/g

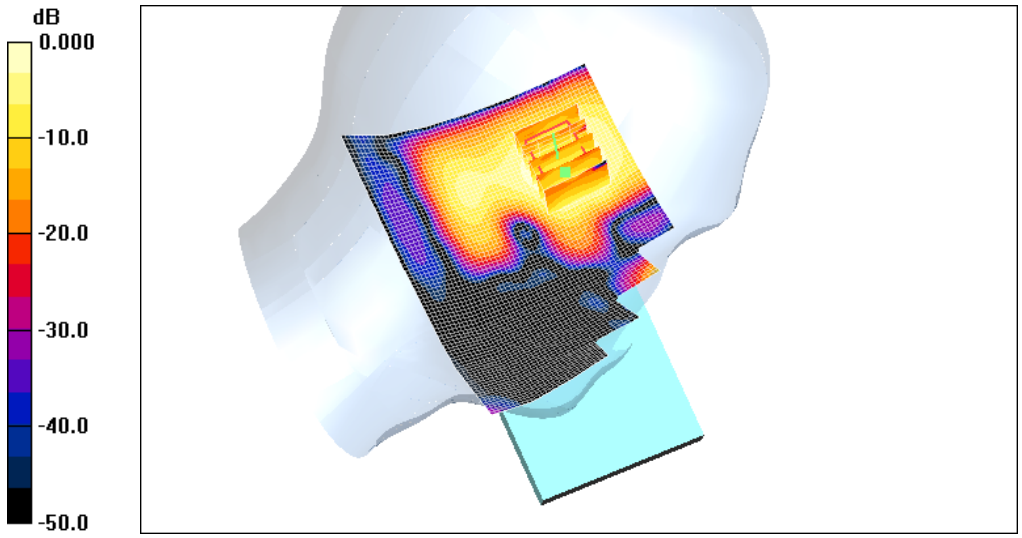
DUT: GT-N7100; Serial: FJ-213-E
Program Name: GT-N7100 WLAN Left (Job No. : FJ-213)
Procedure Name: Tilt, Ch.11, Ant.Intenna, Bat.Standard, 1Mbps
Meas. Ambient Temp(celsius)-22.3,Tissue Temp(celsius)-22.1;Test Date-10/Aug/2012

Communication System: WLAN; Frequency: 2462 MHz;Duty Cycle: 1:1
Medium parameters used: f = 2462 MHz; σ = 1.81 mho/m; ε_r = 39; ρ = 1000 kg/m^3
Phantom section: Left Section

DASY5 Configuration:
- Probe: EX3DV4 - SN3520; ConvF(7.43, 7.43, 7.43); Calibrated: 2012-02-21
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn533; Calibrated: 2011-09-21
- Phantom: SAM PHANTOM #2; Type: SAM; Serial: TP-1247
- Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 184

Tilt, Ch.11, Ant.Intenna, Bat.Standard, 1Mbps/Area Scan (61x81x1): Measurement grid: dx=20mm, dy=20mm
Maximum value of SAR (interpolated) = 0.025 mW/g

Tilt, Ch.11, Ant.Intenna, Bat.Standard, 1Mbps/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 2.79 V/m; Power Drift = 0.063 dB
Peak SAR (extrapolated) = 0.033 W/kg
SAR(1 g) = 0.016 mW/g; SAR(10 g) = 0.00799 mW/g
Maximum value of SAR (measured) = 0.023 mW/g



0 dB = 0.023mW/g

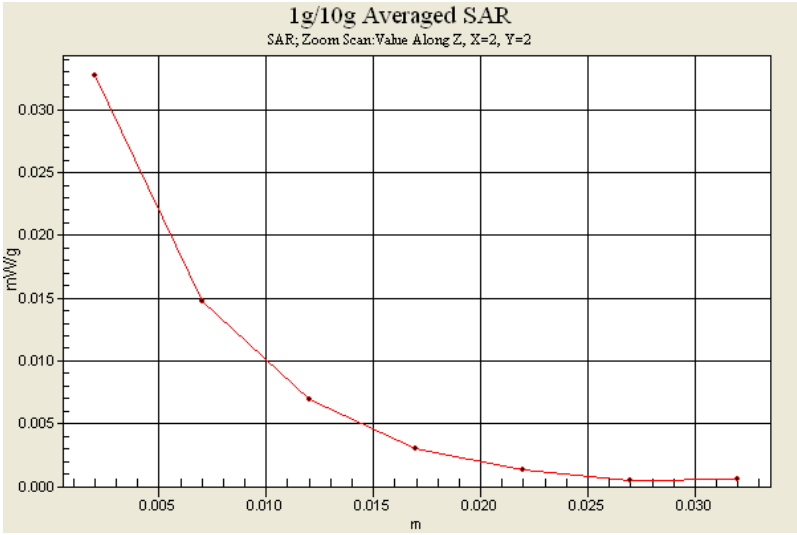
DUT: GT-N7100; Serial: FJ-213-E
Program Name: GT-N7100 WLAN Left (Job No. : FJ-213)
Procedure Name: Cheek, Ch.11, Ant.Intenna, Bat.Standard, 1Mbps
Meas. Ambient Temp(celsius)-22.3,Tissue Temp(celsius)-22.1;Test Date-10/Aug/2012

Communication System: WLAN; Frequency: 2462 MHz;Duty Cycle: 1:1
Medium parameters used: f = 2462 MHz; σ = 1.81 mho/m; ε_r = 39; ρ = 1000 kg/m^3
Phantom section: Left Section

DASY5 Configuration:
- Probe: EX3DV4 - SN3520; ConvF(7.43, 7.43, 7.43); Calibrated: 2012-02-21
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn533; Calibrated: 2011-09-21
- Phantom: SAM PHANTOM #2; Type: SAM; Serial: TP-1247
- Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 184

Cheek, Ch.11, Ant.Intenna, Bat.Standard, 1Mbps/Area Scan (61x81x1): Measurement grid: dx=20mm, dy=20mm
Maximum value of SAR (interpolated) = 0.045 mW/g

Cheek, Ch.11, Ant.Intenna, Bat.Standard, 1Mbps/Zoom Scan (5x5x7)/Cube 0:
Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 3.15 V/m; Power Drift = -0.190 dB
Peak SAR (extrapolated) = 0.046 W/kg
SAR(1 g) = 0.022 mW/g; SAR(10 g) = 0.011 mW/g
Maximum value of SAR (measured) = 0.033 mW/g



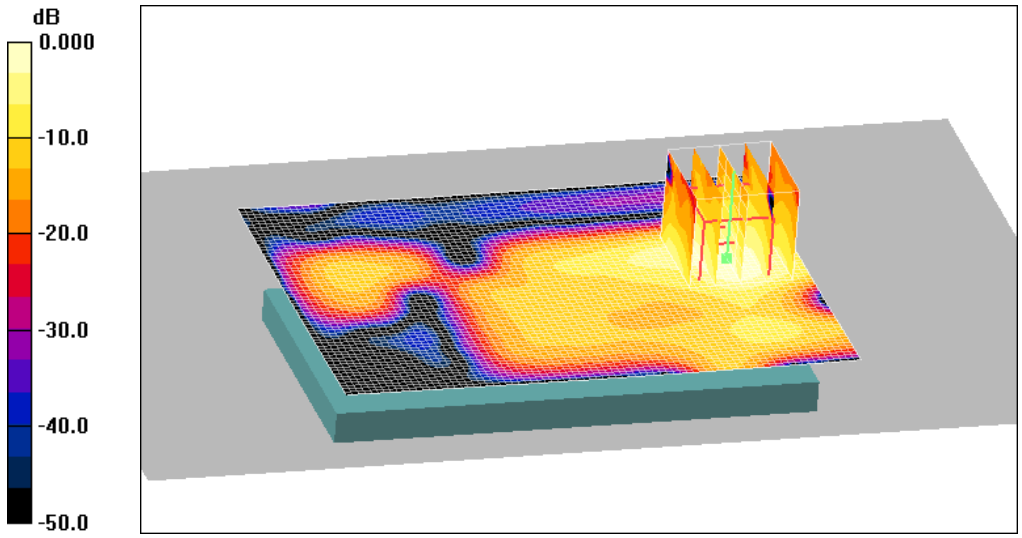
DUT: GT-N7100; Serial: FJ-213-E
Program Name: GT-N7100 WLAN Body (Job No. : FJ-213)
Procedure Name: Body, Ch.11, Ant.Intenna, Bat.Standard, Back, 1Mbps, 10mm
Meas. Ambient Temp(celsius)-22.3,Tissue Temp(celsius)-22.2;Test Date-10/Aug/2012

Communication System: WLAN; Frequency: 2462 MHz;Duty Cycle: 1:1
Medium parameters used: f = 2462 MHz; σ = 1.95 mho/m; ε_r = 51.5; ρ = 1000 kg/m^3
Phantom section: Right Section

DASY5 Configuration:
- Probe: EX3DV4 - SN3520; ConvF(7.45, 7.45, 7.45); Calibrated: 2012-02-21
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn533; Calibrated: 2011-09-21
- Phantom: Triple Flat Phantom 5.1; Type: Triple Flat Phantom 5.1; Serial: MP-1003
- Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 184

Body, Ch.11, Ant.Intenna, Bat.Standard, Back, 1Mbps, 10mm/Area Scan (61x81x1):
Measurement grid: dx=20mm, dy=20mm
Maximum value of SAR (interpolated) = 0.029 mW/g

Body, Ch.11, Ant.Intenna, Bat.Standard, Back, 1Mbps, 10mm/Zoom Scan (5x5x7)/Cube 0:
Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 2.05 V/m; Power Drift = -0.154 dB
Peak SAR (extrapolated) = 0.038 W/kg
SAR(1 g) = 0.019 mW/g; SAR(10 g) = 0.00903 mW/g
Maximum value of SAR (measured) = 0.028 mW/g



0 dB = 0.028mW/g

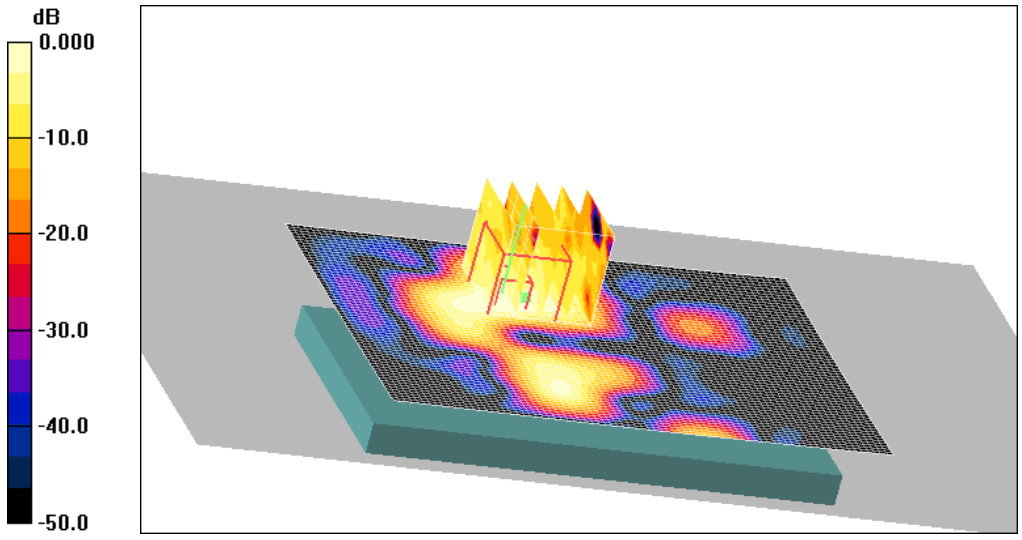
DUT: GT-N7100; Serial: FJ-213-E
Program Name: GT-N7100 WLAN Body (Job No. : FJ-213)
Procedure Name: Body, Ch.11, Ant.Intenna, Bat.Standard, Front, 1Mbps, 10mm
Meas. Ambient Temp(celsius)-22.3,Tissue Temp(celsius)-22.2;Test Date-10/Aug/2012

Communication System: WLAN; Frequency: 2462 MHz;Duty Cycle: 1:1
Medium parameters used: f = 2462 MHz; σ = 1.95 mho/m; ε_r = 51.5; ρ = 1000 kg/m^3
Phantom section: Right Section

DASY5 Configuration:
- Probe: EX3DV4 - SN3520; ConvF(7.45, 7.45, 7.45); Calibrated: 2012-02-21
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn533; Calibrated: 2011-09-21
- Phantom: Triple Flat Phantom 5.1; Type: Triple Flat Phantom 5.1; Serial: MP-1003
- Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 184

Body, Ch.11, Ant.Intenna, Bat.Standard, Front, 1Mbps, 10mm/Area Scan (61x81x1):
Measurement grid: dx=20mm, dy=20mm
Maximum value of SAR (interpolated) = 0.010 mW/g

Body, Ch.11, Ant.Intenna, Bat.Standard, Front, 1Mbps, 10mm/Zoom Scan (5x5x7)/Cube 0:
Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 2.34 V/m; Power Drift = -0.035 dB
Peak SAR (extrapolated) = 0.006 W/kg
SAR(1 g) = 0.00336 mW/g; SAR(10 g) = 0.00161 mW/g
Maximum value of SAR (measured) = 0.006 mW/g



0 dB = 0.006mW/g

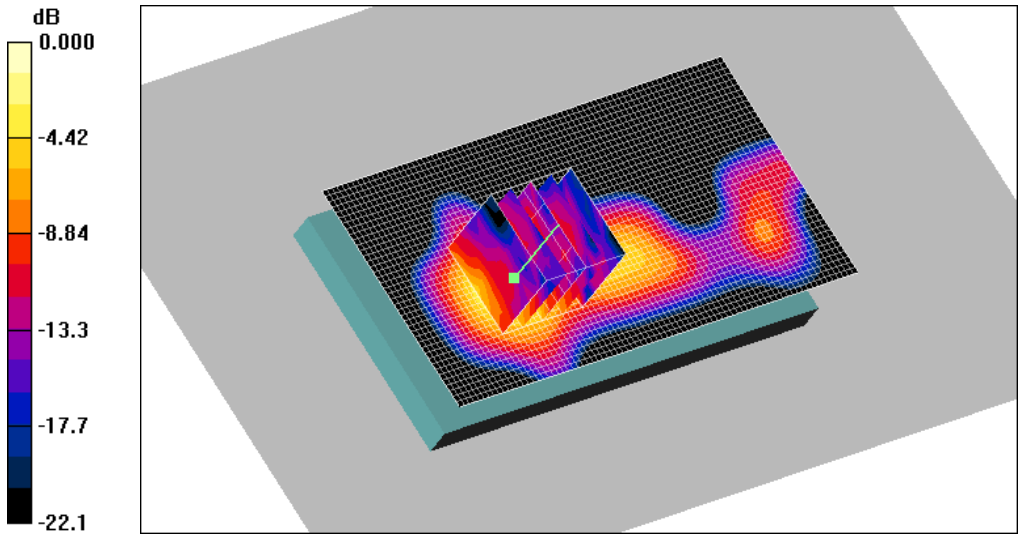
DUT: GT-N7100; Serial: FJ-213-E
Program Name: GT-N7100 WLAN Body (Job No. : FJ-213)
Procedure Name: Body, Ch.11, Ant.Intenna, Bat.Standard, Right, 1Mbps, 10mm
Meas. Ambient Temp(celsius)-22.3,Tissue Temp(celsius)-22.2;Test Date-10/Aug/2012

Communication System: WLAN; Frequency: 2462 MHz;Duty Cycle: 1:1
Medium parameters used: f = 2462 MHz; σ = 1.95 mho/m; ε_r = 51.5; ρ = 1000 kg/m^3
Phantom section: Right Section

DASY5 Configuration:
- Probe: EX3DV4 - SN3520; ConvF(7.45, 7.45, 7.45); Calibrated: 2012-02-21
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn533; Calibrated: 2011-09-21
- Phantom: Triple Flat Phantom 5.1; Type: Triple Flat Phantom 5.1; Serial: MP-1003
- Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 184

Body, Ch.11, Ant.Intenna, Bat.Standard, Right, 1Mbps, 10mm/Area Scan (41x81x1):
Measurement grid: dx=20mm, dy=20mm
Maximum value of SAR (interpolated) = 0.022 mW/g

Body, Ch.11, Ant.Intenna, Bat.Standard, Right, 1Mbps, 10mm/Zoom Scan (5x5x7)/Cube 0:
Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 2.03 V/m; Power Drift = -0.172 dB
Peak SAR (extrapolated) = 0.029 W/kg
SAR(1 g) = 0.014 mW/g; SAR(10 g) = 0.0062 mW/g
Maximum value of SAR (measured) = 0.021 mW/g



0 dB = 0.021mW/g

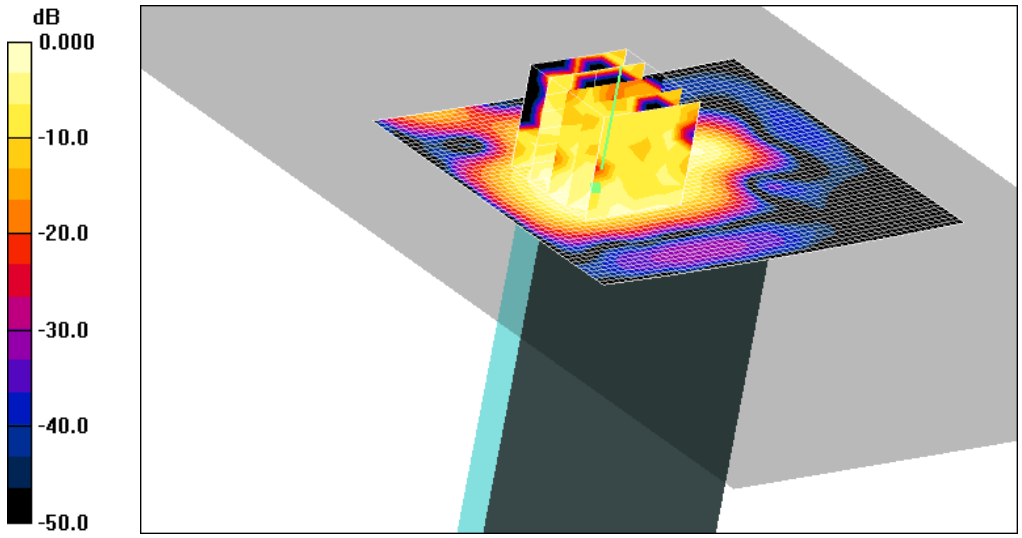
DUT: GT-N7100; Serial: FJ-213-E
Program Name: GT-N7100 WLAN Body (Job No. : FJ-213)
Procedure Name: Body, Ch.11, Ant.Intenna, Bat.Standard, Top, 1Mbps, 10mm
Meas. Ambient Temp(celsius)-22.3,Tissue Temp(celsius)-22.2;Test Date-10/Aug/2012

Communication System: WLAN; Frequency: 2462 MHz;Duty Cycle: 1:1
Medium parameters used: f = 2462 MHz; σ = 1.95 mho/m; ε_r = 51.5; ρ = 1000 kg/m^3
Phantom section: Right Section

DASY5 Configuration:
- Probe: EX3DV4 - SN3520; ConvF(7.45, 7.45, 7.45); Calibrated: 2012-02-21
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn533; Calibrated: 2011-09-21
- Phantom: Triple Flat Phantom 5.1; Type: Triple Flat Phantom 5.1; Serial: MP-1003
- Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 184

Body, Ch.11, Ant.Intenna, Bat.Standard, Top, 1Mbps, 10mm/Area Scan (61x51x1):
Measurement grid: dx=20mm, dy=20mm
Maximum value of SAR (interpolated) = 0.007 mW/g

Body, Ch.11, Ant.Intenna, Bat.Standard, Top, 1Mbps, 10mm/Zoom Scan (5x5x7)/Cube 0:
Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 2.30 V/m; Power Drift = -0.136 dB
Peak SAR (extrapolated) = 0.006 W/kg
SAR(1 g) = 0.00309 mW/g; SAR(10 g) = 0.00131 mW/g
Maximum value of SAR (measured) = 0.004 mW/g



0 dB = 0.004mW/g

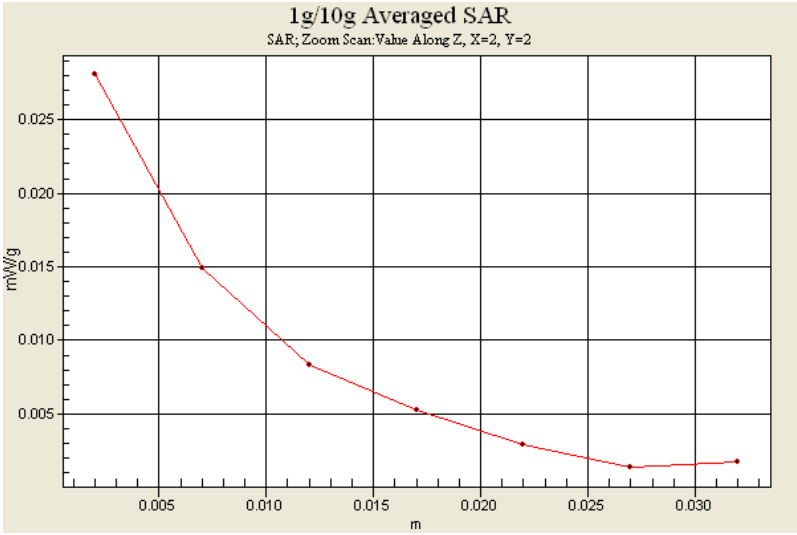
DUT: GT-N7100; Serial: FJ-213-E
Program Name: GT-N7100 WLAN Body (Job No. : FJ-213)
Procedure Name: Body, Ch.11, Ant.Intenna, Bat.Standard, Back, 1Mbps, 10mm
Meas. Ambient Temp(celsius)-22.3,Tissue Temp(celsius)-22.2;Test Date-10/Aug/2012

Communication System: WLAN; Frequency: 2462 MHz;Duty Cycle: 1:1
Medium parameters used: f = 2462 MHz; σ = 1.95 mho/m; ε_r = 51.5; ρ = 1000 kg/m^3
Phantom section: Right Section

DASY5 Configuration:
- Probe: EX3DV4 - SN3520; ConvF(7.45, 7.45, 7.45); Calibrated: 2012-02-21
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn533; Calibrated: 2011-09-21
- Phantom: Triple Flat Phantom 5.1; Type: Triple Flat Phantom 5.1; Serial: MP-1003
- Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 184

Body, Ch.11, Ant.Intenna, Bat.Standard, Back, 1Mbps, 10mm/Area Scan (61x81x1):
Measurement grid: dx=20mm, dy=20mm
Maximum value of SAR (interpolated) = 0.029 mW/g

Body, Ch.11, Ant.Intenna, Bat.Standard, Back, 1Mbps, 10mm/Zoom Scan (5x5x7)/Cube 0:
Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 2.05 V/m; Power Drift = -0.154 dB
Peak SAR (extrapolated) = 0.038 W/kg
SAR(1 g) = 0.019 mW/g; SAR(10 g) = 0.00903 mW/g
Maximum value of SAR (measured) = 0.028 mW/g



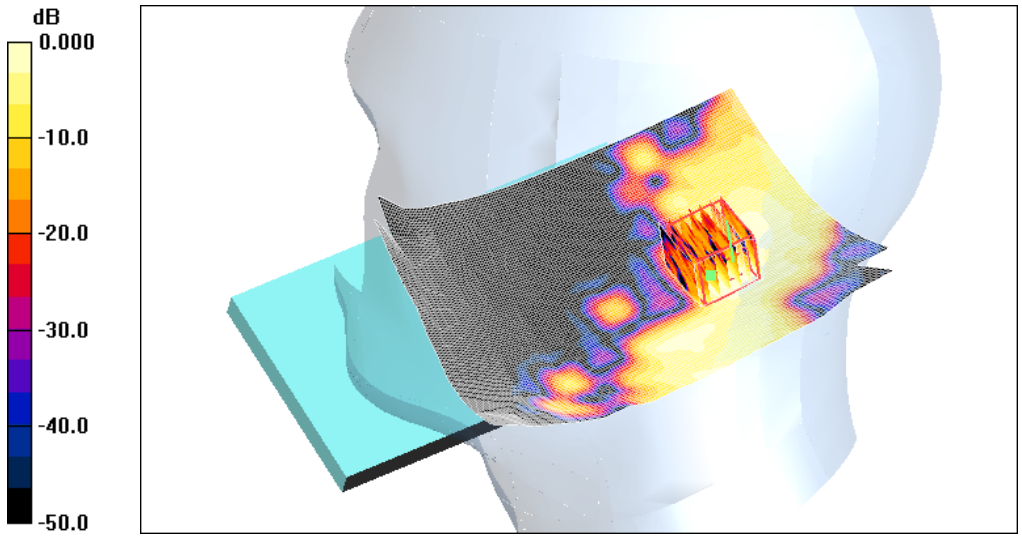
DUT: GT-N7100; Serial: FJ-213-E
Program Name: GT-N7100 WLAN 5GHz Right (Job No. : FJ-213)
Procedure Name: Cheek, Ch.36, Ant.Intenna, Bat.Standard, 802.11a, 6Mbps
Meas. Ambient Temp(celsius)-22.5,Tissue Temp(celsius)-22.4;Test Date-24/Aug/2012

Communication System: 5GHz; Frequency: 5180 MHz;Duty Cycle: 1:1
Medium parameters used: f = 5180 MHz; σ = 4.82 mho/m; ε_r = 34.7; ρ = 1000 kg/m^3
Phantom section: Right Section

DASY5 Configuration:
- Probe: EX3DV4 - SN3520; ConvF(4.91, 4.91, 4.91); Calibrated: 2012-02-21
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn533; Calibrated: 2011-09-21
- Phantom: SAM PHANTOM #2; Type: SAM; Serial: TP-1247
- Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 184

Cheek, Ch.36, Ant.Intenna, Bat.Standard, 802.11a, 6Mbps/Area Scan (101x161x1):
Measurement grid: dx=10mm, dy=10mm
Maximum value of SAR (interpolated) = 0.073 mW/g

Cheek, Ch.36, Ant.Intenna, Bat.Standard, 802.11a, 6Mbps/Zoom Scan 3 2 (7x7x11)/Cube 0: Measurement grid: dx=4mm, dy=4mm, dz=2mm
Reference Value = 4.23 V/m; Power Drift = -0.124 dB
Peak SAR (extrapolated) = 0.117 W/kg
SAR(1 g) = 0.034 mW/g; SAR(10 g) = 0.0094 mW/g
Maximum value of SAR (measured) = 0.065 mW/g



0 dB = 0.065mW/g

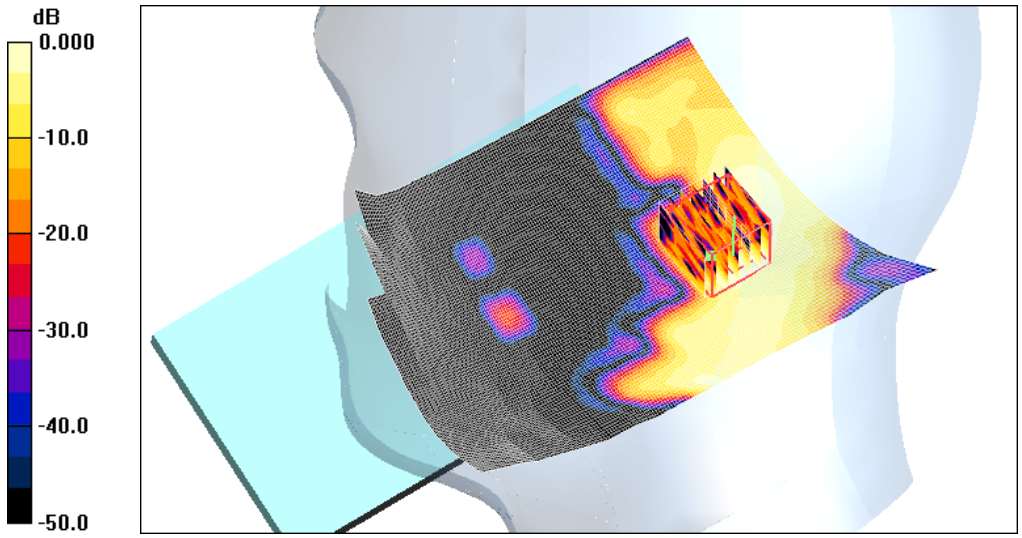
DUT: GT-N7100; Serial: FJ-213-E
Program Name: GT-N7100 WLAN 5GHz Right (Job No. : FJ-213)
Procedure Name: Tilt, Ch.36, Ant.Intenna, Bat.Standard, 802.11a, 6Mbps
Meas. Ambient Temp(celsius)-22.5,Tissue Temp(celsius)-22.4;Test Date-24/Aug/2012

Communication System: 5GHz; Frequency: 5180 MHz;Duty Cycle: 1:1
Medium parameters used: f = 5180 MHz; σ = 4.82 mho/m; ε_r = 34.7; ρ = 1000 kg/m^3
Phantom section: Right Section

DASY5 Configuration:
- Probe: EX3DV4 - SN3520; ConvF(4.91, 4.91, 4.91); Calibrated: 2012-02-21
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn533; Calibrated: 2011-09-21
- Phantom: SAM PHANTOM #2; Type: SAM; Serial: TP-1247
- Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 184

Tilt, Ch.36, Ant.Intenna, Bat.Standard, 802.11a, 6Mbps/Area Scan (101x161x1):
Measurement grid: dx=10mm, dy=10mm
Maximum value of SAR (interpolated) = 0.070 mW/g

Tilt, Ch.36, Ant.Intenna, Bat.Standard, 802.11a, 6Mbps/Zoom Scan (7x7x11)/Cube 0:
Measurement grid: dx=4mm, dy=4mm, dz=2mm
Reference Value = 3.47 V/m; Power Drift = 0.040 dB
Peak SAR (extrapolated) = 0.109 W/kg
SAR(1 g) = 0.032 mW/g; SAR(10 g) = 0.00943 mW/g
Maximum value of SAR (measured) = 0.062 mW/g



0 dB = 0.062mW/g

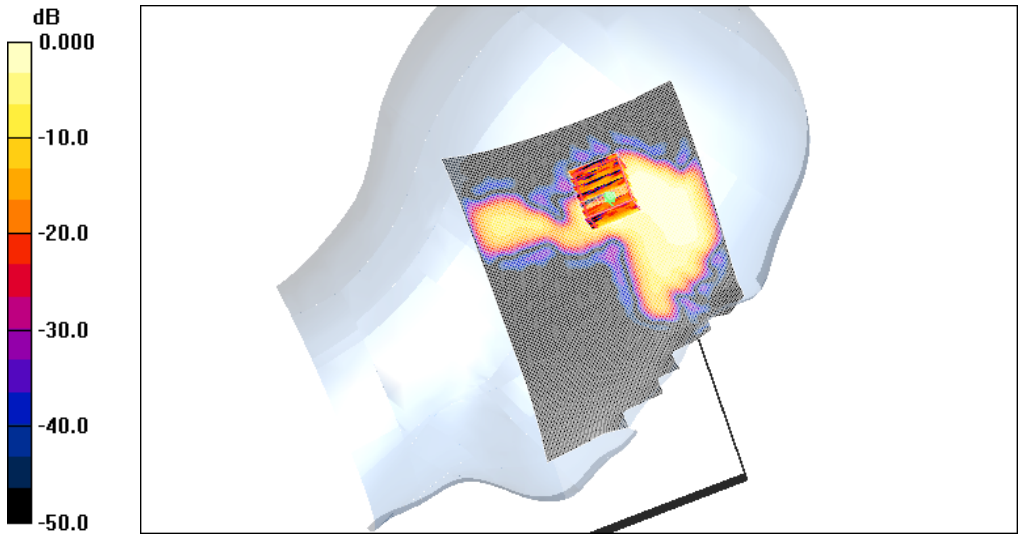
DUT: GT-N7100; Serial: FJ-213-E
Program Name: GT-N7100 WLAN 5GHz Left (Job No. : FJ-213)
Procedure Name: Cheek, Ch.36, Ant.Intenna, Bat.Standard, 802.11a, 6Mbps
Meas. Ambient Temp(celsius)-22.5,Tissue Temp(celsius)-22.4;Test Date-24/Aug/2012

Communication System: 5GHz; Frequency: 5180 MHz;Duty Cycle: 1:1
Medium parameters used: f = 5180 MHz; σ = 4.82 mho/m; ε_r = 34.7; ρ = 1000 kg/m^3
Phantom section: Left Section

DASY5 Configuration:
- Probe: EX3DV4 - SN3520; ConvF(4.91, 4.91, 4.91); Calibrated: 2012-02-21
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn533; Calibrated: 2011-09-21
- Phantom: SAM PHANTOM #2; Type: SAM; Serial: TP-1247
- Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 184

Cheek, Ch.36, Ant.Intenna, Bat.Standard, 802.11a, 6Mbps/Area Scan (111x161x1):
Measurement grid: dx=10mm, dy=10mm
Maximum value of SAR (interpolated) = 0.117 mW/g

Cheek, Ch.36, Ant.Intenna, Bat.Standard, 802.11a, 6Mbps/Zoom Scan (7x7x11)/Cube 0:
Measurement grid: dx=4mm, dy=4mm, dz=2mm
Reference Value = 3.52 V/m; Power Drift = 0.040 dB
Peak SAR (extrapolated) = 0.164 W/kg
SAR(1 g) = 0.047 mW/g; SAR(10 g) = 0.015 mW/g
Maximum value of SAR (measured) = 0.090 mW/g



0 dB = 0.090mW/g

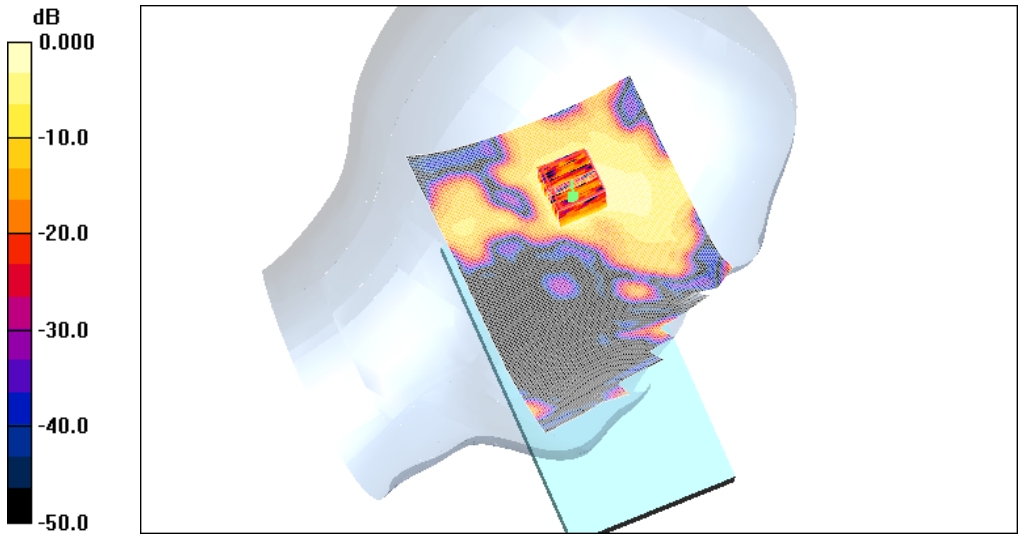
DUT: GT-N7100; Serial: FJ-213-E
Program Name: GT-N7100 WLAN 5GHz Left (Job No. : FJ-213)
Procedure Name: Tilt, Ch.36, Ant.Intenna, Bat.Standard, 802.11a, 6Mbps
Meas. Ambient Temp(celsius)-22.5,Tissue Temp(celsius)-22.4;Test Date-24/Aug/2012

Communication System: 5GHz; Frequency: 5180 MHz;Duty Cycle: 1:1
Medium parameters used: f = 5180 MHz; σ = 4.82 mho/m; ε_r = 34.7; ρ = 1000 kg/m^3
Phantom section: Left Section

DASY5 Configuration:
- Probe: EX3DV4 - SN3520; ConvF(4.91, 4.91, 4.91); Calibrated: 2012-02-21
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn533; Calibrated: 2011-09-21
- Phantom: SAM PHANTOM #2; Type: SAM; Serial: TP-1247
- Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 184

Tilt, Ch.36, Ant.Intenna, Bat.Standard, 802.11a, 6Mbps/Area Scan (111x161x1):
Measurement grid: dx=10mm, dy=10mm
Maximum value of SAR (interpolated) = 0.118 mW/g

Tilt, Ch.36, Ant.Intenna, Bat.Standard, 802.11a, 6Mbps/Zoom Scan (7x7x11)/Cube 0:
Measurement grid: dx=4mm, dy=4mm, dz=2mm
Reference Value = 4.49 V/m; Power Drift = -0.017 dB
Peak SAR (extrapolated) = 0.381 W/kg
SAR(1 g) = 0.066 mW/g; SAR(10 g) = 0.021 mW/g
Maximum value of SAR (measured) = 0.126 mW/g



0 dB = 0.126mW/g

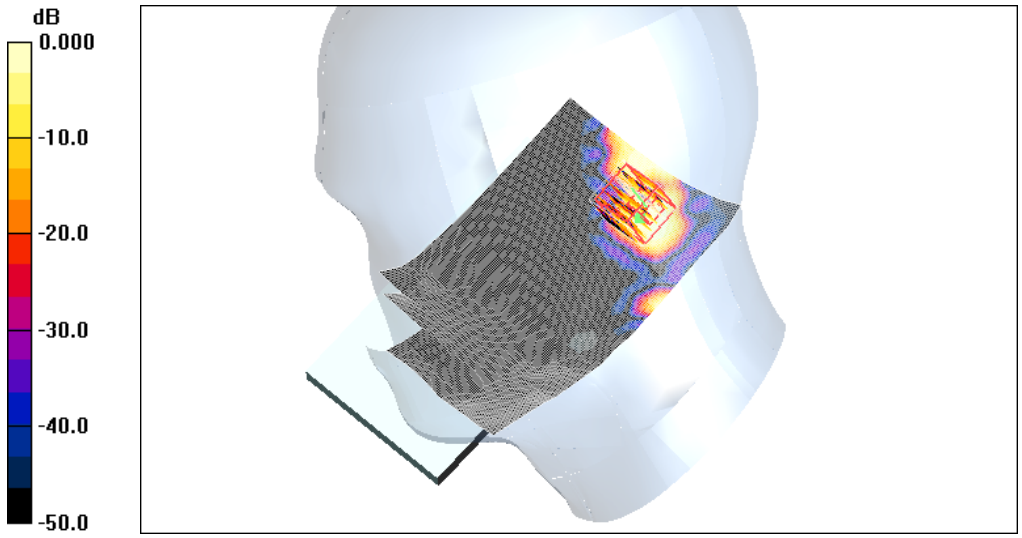
DUT: GT-N7100; Serial: FJ-213-E
Program Name: GT-N7100 WLAN 5GHz Right (Job No. : FJ-213)
Procedure Name: Cheek, Ch.52, Ant.Intenna, Bat.Standard, 802.11a, 6Mbps
Meas. Ambient Temp(celsius)-22.5,Tissue Temp(celsius)-22.4;Test Date-24/Aug/2012

Communication System: 5GHz; Frequency: 5260 MHz;Duty Cycle: 1:1
Medium parameters used: f = 5260 MHz; σ = 4.92 mho/m; ε_r = 34.5; ρ = 1000 kg/m^3
Phantom section: Right Section

DASY5 Configuration:
- Probe: EX3DV4 - SN3520; ConvF(4.72, 4.72, 4.72); Calibrated: 2012-02-21
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn533; Calibrated: 2011-09-21
- Phantom: SAM PHANTOM #2; Type: SAM; Serial: TP-1247
- Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 184

Cheek, Ch.52, Ant.Intenna, Bat.Standard, 802.11a, 6Mbps/Area Scan (101x161x1):
Measurement grid: dx=10mm, dy=10mm
Maximum value of SAR (interpolated) = 0.084 mW/g

Cheek, Ch.52, Ant.Intenna, Bat.Standard, 802.11a, 6Mbps/Zoom Scan 2 (7x7x11)/Cube 0:
Measurement grid: dx=4mm, dy=4mm, dz=2mm
Reference Value = 3.17 V/m; Power Drift = 0.152 dB
Peak SAR (extrapolated) = 0.085 W/kg
SAR(1 g) = 0.022 mW/g; SAR(10 g) = 0.00603 mW/g
Maximum value of SAR (measured) = 0.046 mW/g



0 dB = 0.046mW/g

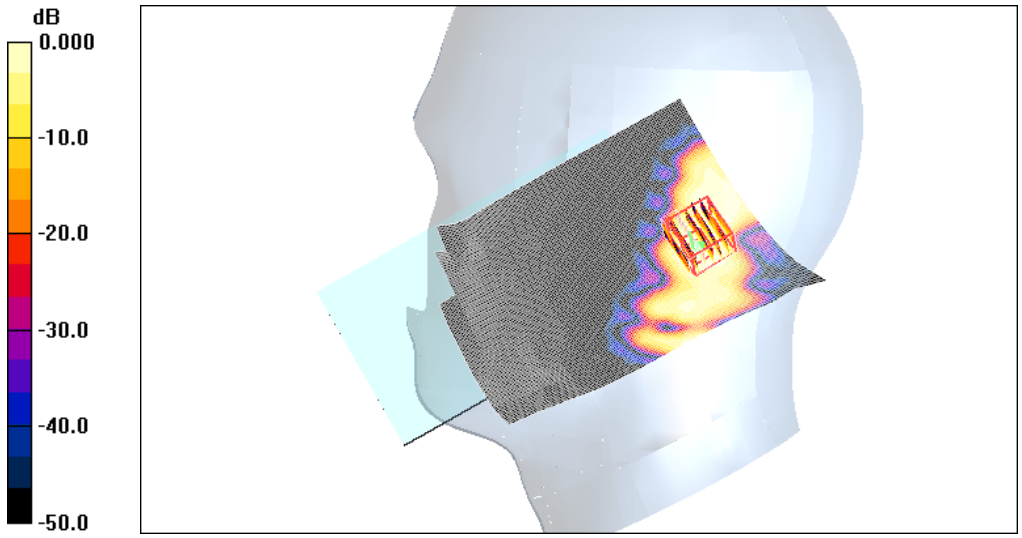
DUT: GT-N7100; Serial: FJ-213-E
Program Name: GT-N7100 WLAN 5GHz Right (Job No. : FJ-213)
Procedure Name: Tilt, Ch.52, Ant.Intenna, Bat.Standard, 802.11a, 6Mbps
Meas. Ambient Temp(celsius)-22.5,Tissue Temp(celsius)-22.4;Test Date-24/Aug/2012

Communication System: 5GHz; Frequency: 5260 MHz;Duty Cycle: 1:1
Medium parameters used: f = 5260 MHz; σ = 4.92 mho/m; ε_r = 34.5; ρ = 1000 kg/m^3
Phantom section: Right Section

DASY5 Configuration:
- Probe: EX3DV4 - SN3520; ConvF(4.72, 4.72, 4.72); Calibrated: 2012-02-21
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn533; Calibrated: 2011-09-21
- Phantom: SAM PHANTOM #2; Type: SAM; Serial: TP-1247
- Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 184

Tilt, Ch.52, Ant.Intenna, Bat.Standard, 802.11a, 6Mbps/Area Scan (101x161x1):
Measurement grid: dx=10mm, dy=10mm
Maximum value of SAR (interpolated) = 0.059 mW/g

Tilt, Ch.52, Ant.Intenna, Bat.Standard, 802.11a, 6Mbps/Zoom Scan (7x7x11)/Cube 0:
Measurement grid: dx=4mm, dy=4mm, dz=2mm
Reference Value = 3.19 V/m; Power Drift = -0.193 dB
Peak SAR (extrapolated) = 0.121 W/kg
SAR(1 g) = 0.023 mW/g; SAR(10 g) = 0.00712 mW/g
Maximum value of SAR (measured) = 0.048 mW/g



0 dB = 0.048mW/g

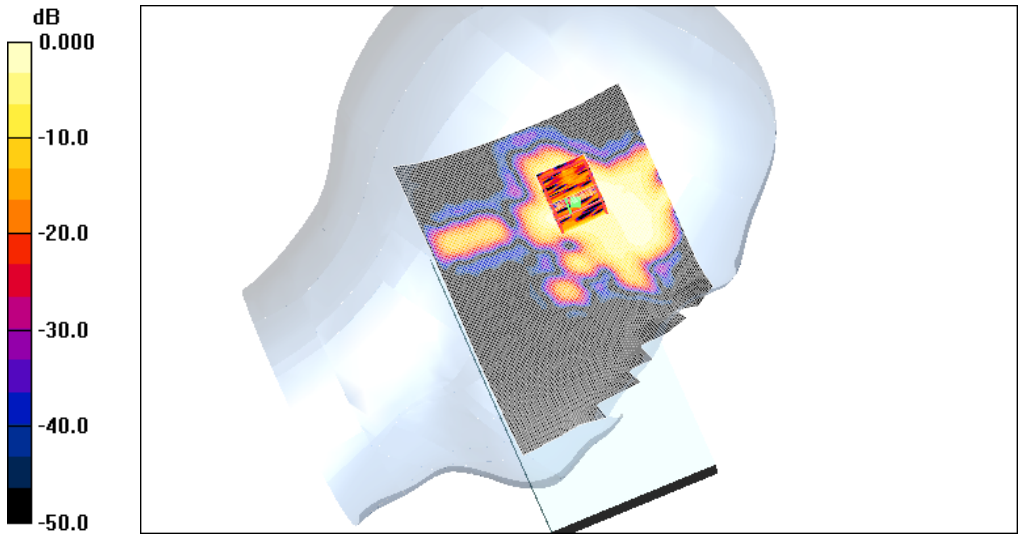
DUT: GT-N7100; Serial: FJ-213-E
Program Name: GT-N7100 WLAN 5GHz Left (Job No. : FJ-213)
Procedure Name: Cheek, Ch.52, Ant.Intenna, Bat.Standard, 802.11a, 6Mbps
Meas. Ambient Temp(celsius)-22.5,Tissue Temp(celsius)-22.4;Test Date-24/Aug/2012

Communication System: 5GHz; Frequency: 5260 MHz;Duty Cycle: 1:1
Medium parameters used: f = 5260 MHz; σ = 4.92 mho/m; ε_r = 34.5; ρ = 1000 kg/m^3
Phantom section: Left Section

DASY5 Configuration:
- Probe: EX3DV4 - SN3520; ConvF(4.72, 4.72, 4.72); Calibrated: 2012-02-21
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn533; Calibrated: 2011-09-21
- Phantom: SAM PHANTOM #2; Type: SAM; Serial: TP-1247
- Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 184

Cheek, Ch.52, Ant.Intenna, Bat.Standard, 802.11a, 6Mbps/Area Scan (111x161x1):
Measurement grid: dx=10mm, dy=10mm
Maximum value of SAR (interpolated) = 0.074 mW/g

Cheek, Ch.52, Ant.Intenna, Bat.Standard, 802.11a, 6Mbps/Zoom Scan (7x7x11)/Cube 0:
Measurement grid: dx=4mm, dy=4mm, dz=2mm
Reference Value = 5.19 V/m; Power Drift = 0.012 dB
Peak SAR (extrapolated) = 0.173 W/kg
SAR(1 g) = 0.042 mW/g; SAR(10 g) = 0.013 mW/g
Maximum value of SAR (measured) = 0.080 mW/g



0 dB = 0.080mW/g

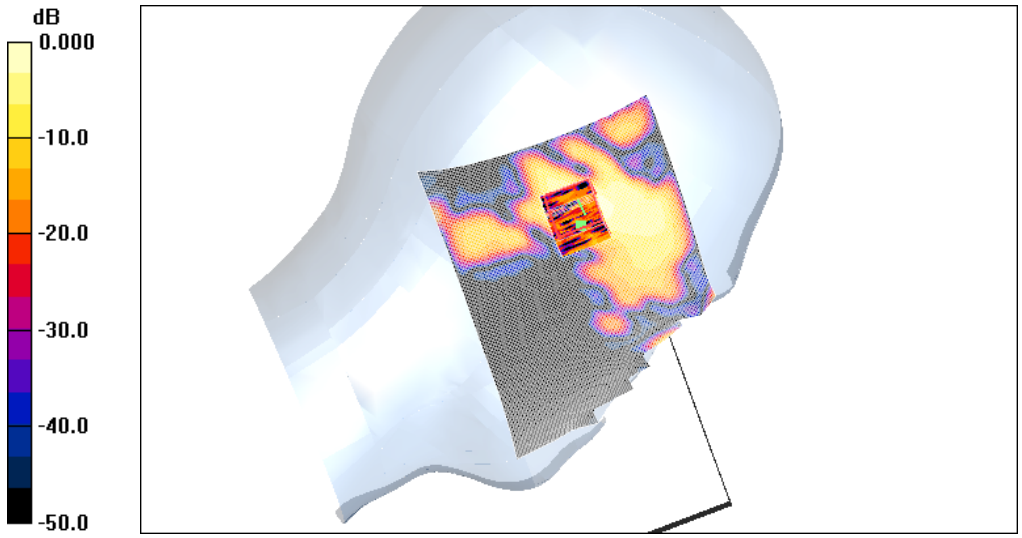
DUT: GT-N7100; Serial: FJ-213-E
Program Name: GT-N7100 WLAN 5GHz Left (Job No. : FJ-213)
Procedure Name: Tilt, Ch.52, Ant.Intenna, Bat.Standard, 802.11a, 6Mbps
Meas. Ambient Temp(celsius)-22.5,Tissue Temp(celsius)-22.4;Test Date-24/Aug/2012

Communication System: 5GHz; Frequency: 5260 MHz;Duty Cycle: 1:1
Medium parameters used: f = 5260 MHz; σ = 4.92 mho/m; ε_r = 34.5; ρ = 1000 kg/m^3
Phantom section: Left Section

DASY5 Configuration:
- Probe: EX3DV4 - SN3520; ConvF(4.72, 4.72, 4.72); Calibrated: 2012-02-21
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn533; Calibrated: 2011-09-21
- Phantom: SAM PHANTOM #2; Type: SAM; Serial: TP-1247
- Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 184

Tilt, Ch.52, Ant.Intenna, Bat.Standard, 802.11a, 6Mbps/Area Scan (111x161x1):
Measurement grid: dx=10mm, dy=10mm
Maximum value of SAR (interpolated) = 0.090 mW/g

Tilt, Ch.52, Ant.Intenna, Bat.Standard, 802.11a, 6Mbps/Zoom Scan (7x7x11)/Cube 0:
Measurement grid: dx=4mm, dy=4mm, dz=2mm
Reference Value = 3.57 V/m; Power Drift = 0.143 dB
Peak SAR (extrapolated) = 0.169 W/kg
SAR(1 g) = 0.045 mW/g; SAR(10 g) = 0.012 mW/g
Maximum value of SAR (measured) = 0.090 mW/g



0 dB = 0.090mW/g

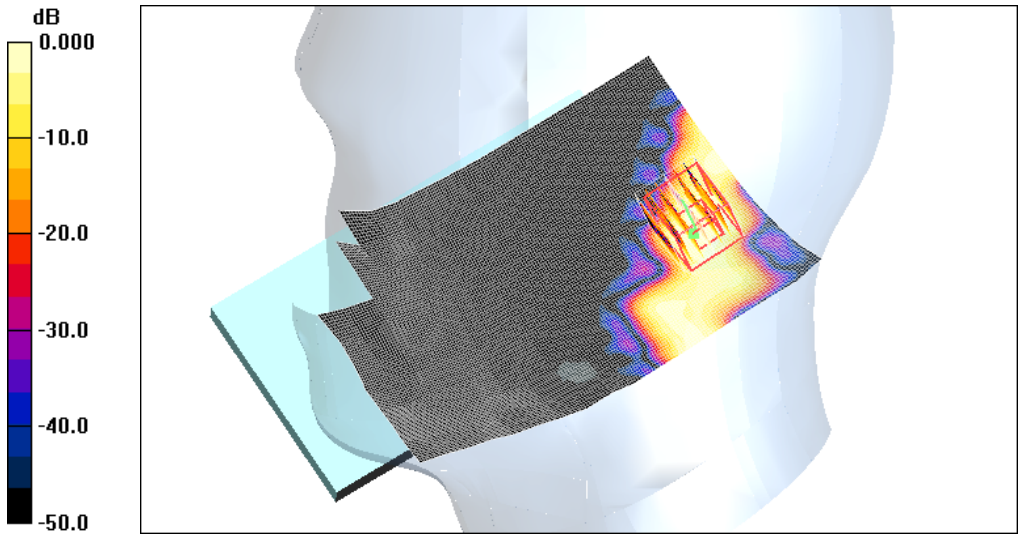
DUT: GT-N7100; Serial: FJ-213-E
Program Name: GT-N7100 WLAN 5GHz Right (Job No. : FJ-213)
Procedure Name: Cheek, Ch.140, Ant.Intenna, Bat.Standard, 802.11a, 6Mbps
Meas. Ambient Temp(celsius)-22.5,Tissue Temp(celsius)-22.4;Test Date-24/Aug/2012

Communication System: 5GHz; Frequency: 5700 MHz;Duty Cycle: 1:1
Medium parameters used: f = 5700 MHz; σ = 5.35 mho/m; ε_r = 34.7; ρ = 1000 kg/m^3
Phantom section: Right Section

DASY5 Configuration:
- Probe: EX3DV4 - SN3520; ConvF(4.28, 4.28, 4.28); Calibrated: 2012-02-21
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn533; Calibrated: 2011-09-21
- Phantom: SAM PHANTOM #2; Type: SAM; Serial: TP-1247
- Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 184

Cheek, Ch.140, Ant.Intenna, Bat.Standard, 802.11a, 6Mbps/Area Scan (101x161x1):
Measurement grid: dx=10mm, dy=10mm
Maximum value of SAR (interpolated) = 0.092 mW/g

Cheek, Ch.140, Ant.Intenna, Bat.Standard, 802.11a, 6Mbps/Zoom Scan 2 (7x7x11)/Cube 0: Measurement grid: dx=4mm, dy=4mm, dz=2mm
Reference Value = 4.44 V/m; Power Drift = -0.122 dB
Peak SAR (extrapolated) = 0.112 W/kg
SAR(1 g) = 0.033 mW/g; SAR(10 g) = 0.0097 mW/g
Maximum value of SAR (measured) = 0.066 mW/g



0 dB = 0.066mW/g

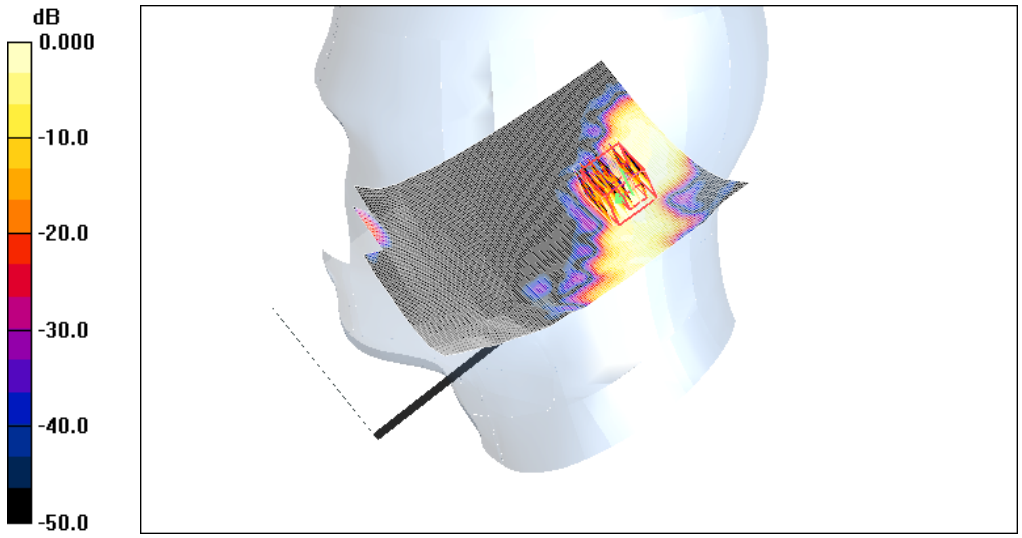
DUT: GT-N7100; Serial: FJ-213-E
Program Name: GT-N7100 WLAN 5GHz Right (Job No. : FJ-213)
Procedure Name: Tilt, Ch.140, Ant.Intenna, Bat.Standard, 802.11a, 6Mbps
Meas. Ambient Temp(celsius)-22.5,Tissue Temp(celsius)-22.4;Test Date-24/Aug/2012

Communication System: 5GHz; Frequency: 5700 MHz;Duty Cycle: 1:1
Medium parameters used: f = 5700 MHz; σ = 5.35 mho/m; ε_r = 34.7; ρ = 1000 kg/m^3
Phantom section: Right Section

DASY5 Configuration:
- Probe: EX3DV4 - SN3520; ConvF(4.28, 4.28, 4.28); Calibrated: 2012-02-21
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn533; Calibrated: 2011-09-21
- Phantom: SAM PHANTOM #2; Type: SAM; Serial: TP-1247
- Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 184

Tilt, Ch.140, Ant.Intenna, Bat.Standard, 802.11a, 6Mbps/Area Scan (101x161x1):
Measurement grid: dx=10mm, dy=10mm
Maximum value of SAR (interpolated) = 0.100 mW/g

Tilt, Ch.140, Ant.Intenna, Bat.Standard, 802.11a, 6Mbps/Zoom Scan (7x7x11)/Cube 0:
Measurement grid: dx=4mm, dy=4mm, dz=2mm
Reference Value = 3.70 V/m; Power Drift = 0.057 dB
Peak SAR (extrapolated) = 0.105 W/kg
SAR(1 g) = 0.028 mW/g; SAR(10 g) = 0.00813 mW/g
Maximum value of SAR (measured) = 0.060 mW/g



0 dB = 0.060mW/g

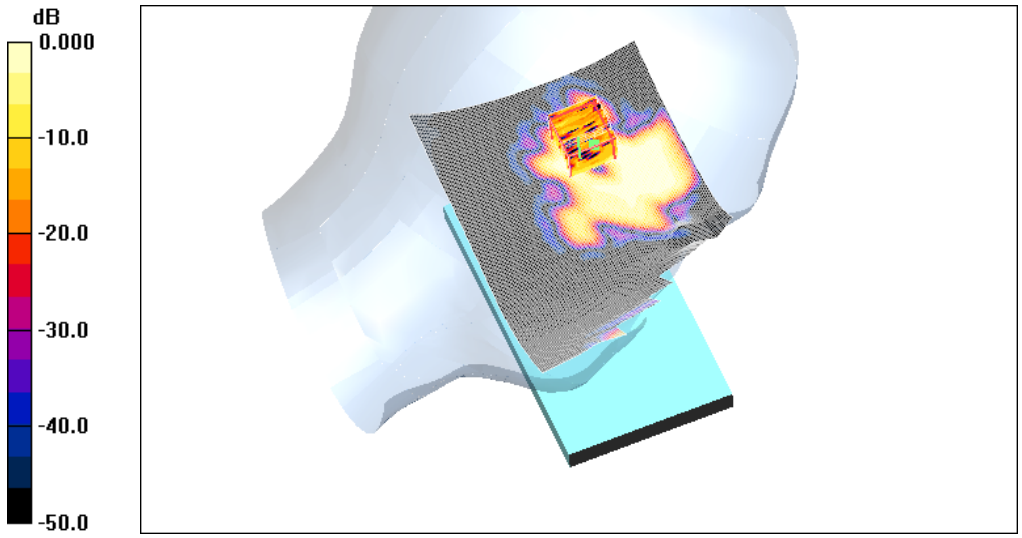
DUT: GT-N7100; Serial: FJ-213-E
Program Name: GT-N7100 WLAN 5GHz Left (Job No. : FJ-213)
Procedure Name: Cheek, Ch.140, Ant.Intenna, Bat.Standard, 802.11a, 6Mbps
Meas. Ambient Temp(celsius)-22.5,Tissue Temp(celsius)-22.4;Test Date-24/Aug/2012

Communication System: 5GHz; Frequency: 5700 MHz;Duty Cycle: 1:1
Medium parameters used: f = 5700 MHz; σ = 5.35 mho/m; ε_r = 34.7; ρ = 1000 kg/m^3
Phantom section: Left Section

DASY5 Configuration:
- Probe: EX3DV4 - SN3520; ConvF(4.28, 4.28, 4.28); Calibrated: 2012-02-21
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn533; Calibrated: 2011-09-21
- Phantom: SAM PHANTOM #2; Type: SAM; Serial: TP-1247
- Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 184

Cheek, Ch.140, Ant.Intenna, Bat.Standard, 802.11a, 6Mbps/Area Scan (111x161x1):
Measurement grid: dx=10mm, dy=10mm
Maximum value of SAR (interpolated) = 0.069 mW/g

Cheek, Ch.140, Ant.Intenna, Bat.Standard, 802.11a, 6Mbps/Zoom Scan 2 (7x7x11)/Cube 0: Measurement grid: dx=4mm, dy=4mm, dz=2mm
Reference Value = 3.06 V/m; Power Drift = 0.065 dB
Peak SAR (extrapolated) = 0.080 W/kg
SAR(1 g) = 0.022 mW/g; SAR(10 g) = 0.00678 mW/g
Maximum value of SAR (measured) = 0.044 mW/g



0 dB = 0.044mW/g

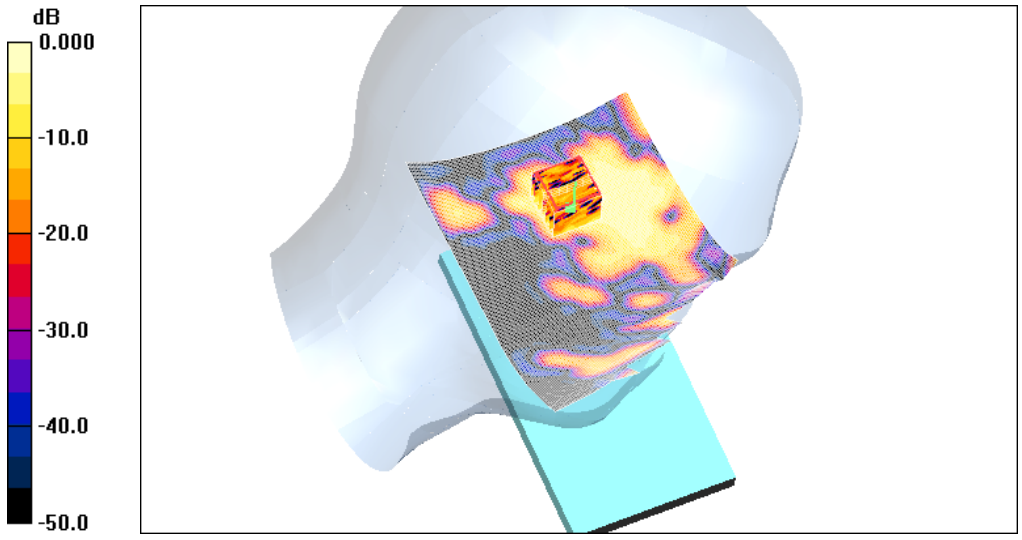
DUT: GT-N7100; Serial: FJ-213-E
Program Name: GT-N7100 WLAN 5GHz Left (Job No. : FJ-213)
Procedure Name: Tilt, Ch.140, Ant.Intenna, Bat.Standard, 802.11a, 6Mbps
Meas. Ambient Temp(celsius)-22.5,Tissue Temp(celsius)-22.4;Test Date-24/Aug/2012

Communication System: 5GHz; Frequency: 5700 MHz;Duty Cycle: 1:1
Medium parameters used: f = 5700 MHz; σ = 5.35 mho/m; ε_r = 34.7; ρ = 1000 kg/m^3
Phantom section: Left Section

DASY5 Configuration:
- Probe: EX3DV4 - SN3520; ConvF(4.28, 4.28, 4.28); Calibrated: 2012-02-21
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn533; Calibrated: 2011-09-21
- Phantom: SAM PHANTOM #2; Type: SAM; Serial: TP-1247
- Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 184

Tilt, Ch.140, Ant.Intenna, Bat.Standard, 802.11a, 6Mbps/Area Scan (111x161x1):
Measurement grid: dx=10mm, dy=10mm
Maximum value of SAR (interpolated) = 0.051 mW/g

Tilt, Ch.140, Ant.Intenna, Bat.Standard, 802.11a, 6Mbps/Zoom Scan (7x7x11)/Cube 0:
Measurement grid: dx=4mm, dy=4mm, dz=2mm
Reference Value = 3.21 V/m; Power Drift = -0.144 dB
Peak SAR (extrapolated) = 0.101 W/kg
SAR(1 g) = 0.029 mW/g; SAR(10 g) = 0.00964 mW/g
Maximum value of SAR (measured) = 0.055 mW/g



0 dB = 0.055mW/g

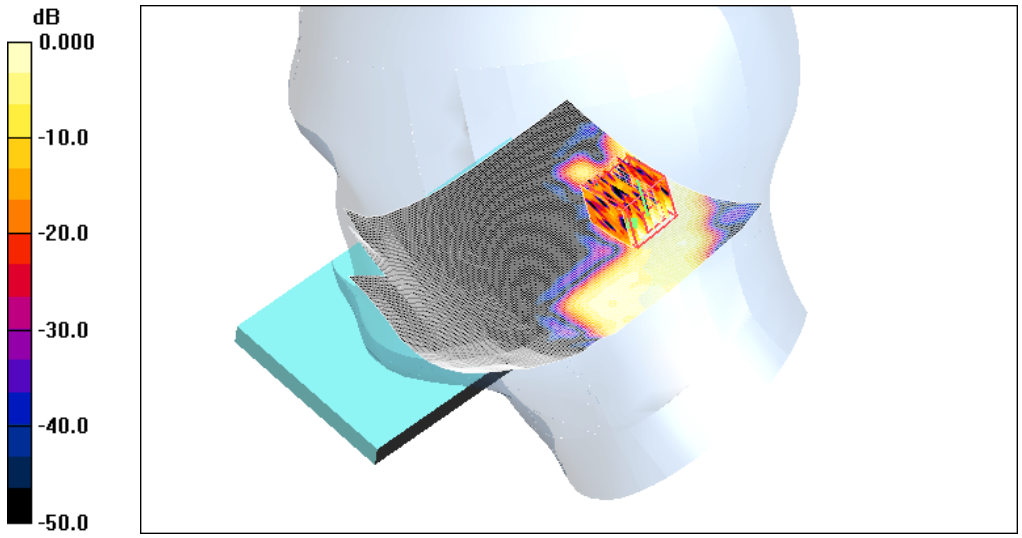
DUT: GT-N7100; Serial: FJ-213-E
Program Name: GT-N7100 WLAN 5GHz Right (Job No. : FJ-213)
Procedure Name: Cheek, Ch.151, Ant.Intenna, Bat.Standard, 802.11n, MCS0, HT40
Meas. Ambient Temp(celsius)-22.5,Tissue Temp(celsius)-22.4;Test Date-24/Aug/2012

Communication System: 5GHz; Frequency: 5755 MHz;Duty Cycle: 1:1
Medium parameters used: f = 5755 MHz; σ = 5.41 mho/m; ε_r = 34.6; ρ = 1000 kg/m^3
Phantom section: Right Section

DASY5 Configuration:
- Probe: EX3DV4 - SN3520; ConvF(4.28, 4.28, 4.28); Calibrated: 2012-02-21
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn533; Calibrated: 2011-09-21
- Phantom: SAM PHANTOM #2; Type: SAM; Serial: TP-1247
- Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 184

Cheek, Ch.151, Ant.Intenna, Bat.Standard, 802.11n, MCS0, HT40/Area Scan (101x161x1): Measurement grid: dx=10mm, dy=10mm
Maximum value of SAR (interpolated) = 0.111 mW/g

Cheek, Ch.151, Ant.Intenna, Bat.Standard, 802.11n, MCS0, HT40/Zoom Scan 2 (7x7x11)/Cube 0: Measurement grid: dx=4mm, dy=4mm, dz=2mm
Reference Value = 3.23 V/m; Power Drift = 0.102 dB
Peak SAR (extrapolated) = 0.108 W/kg
SAR(1 g) = 0.033 mW/g; SAR(10 g) = 0.00941 mW/g
Maximum value of SAR (measured) = 0.065 mW/g



0 dB = 0.065mW/g

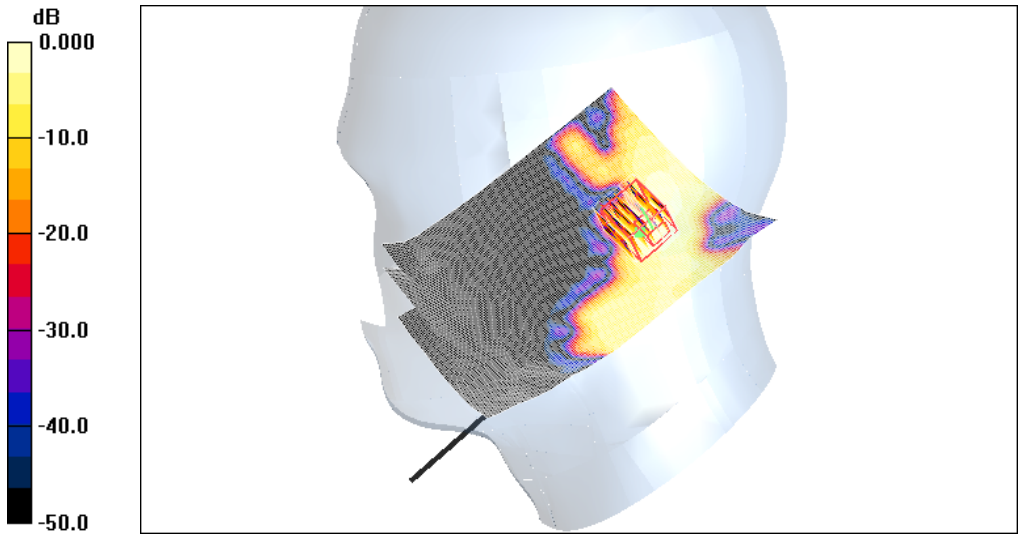
DUT: GT-N7100; Serial: FJ-213-E
Program Name: GT-N7100 WLAN 5GHz Right (Job No. : FJ-213)
Procedure Name: Tilt, Ch.151, Ant.Intenna, Bat.Standard, 802.11n, MCS0, HT40
Meas. Ambient Temp(celsius)-22.5,Tissue Temp(celsius)-22.4;Test Date-24/Aug/2012

Communication System: 5GHz; Frequency: 5755 MHz;Duty Cycle: 1:1
Medium parameters used: f = 5755 MHz; σ = 5.41 mho/m; ε_r = 34.6; ρ = 1000 kg/m^3
Phantom section: Right Section

DASY5 Configuration:
- Probe: EX3DV4 - SN3520; ConvF(4.28, 4.28, 4.28); Calibrated: 2012-02-21
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn533; Calibrated: 2011-09-21
- Phantom: SAM PHANTOM #2; Type: SAM; Serial: TP-1247
- Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 184

Tilt, Ch.151, Ant.Intenna, Bat.Standard, 802.11n, MCS0, HT40/Area Scan (101x161x1):
Measurement grid: dx=10mm, dy=10mm
Maximum value of SAR (interpolated) = 0.079 mW/g

Tilt, Ch.151, Ant.Intenna, Bat.Standard, 802.11n, MCS0, HT40/Zoom Scan (7x7x11)/Cube 0: Measurement grid: dx=4mm, dy=4mm, dz=2mm
Reference Value = 4.45 V/m; Power Drift = 0.060 dB
Peak SAR (extrapolated) = 0.120 W/kg
SAR(1 g) = 0.034 mW/g; SAR(10 g) = 0.00961 mW/g
Maximum value of SAR (measured) = 0.068 mW/g



0 dB = 0.068mW/g

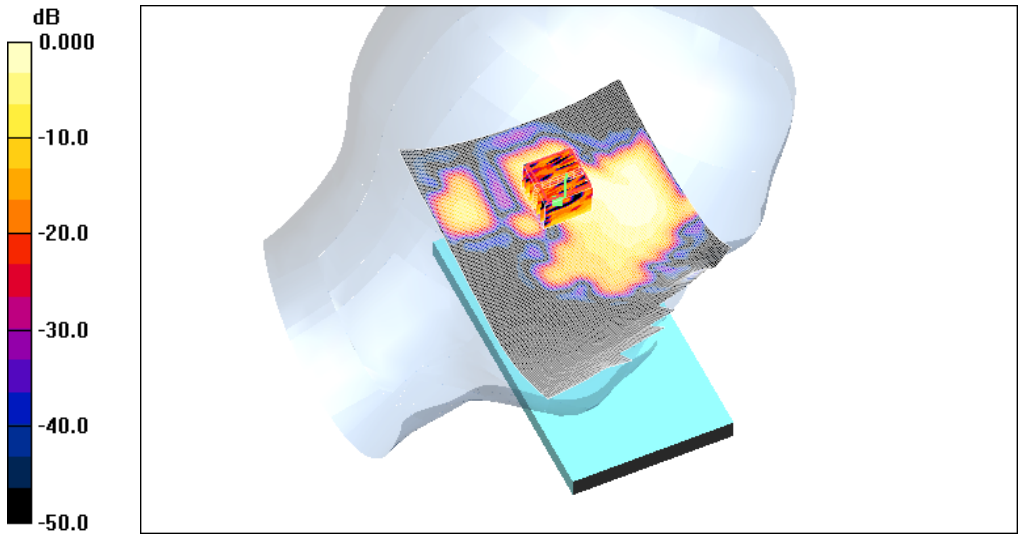
DUT: GT-N7100; Serial: FJ-213-E
Program Name: GT-N7100 WLAN 5GHz Left (Job No. : FJ-213)
Procedure Name: Cheek, Ch.151, Ant.Intenna, Bat.Standard, 802.11n, MCS0, HT40
Meas. Ambient Temp(celsius)-22.5,Tissue Temp(celsius)-22.4;Test Date-24/Aug/2012

Communication System: 5GHz; Frequency: 5755 MHz;Duty Cycle: 1:1
Medium parameters used: f = 5755 MHz; σ = 5.41 mho/m; ε_r = 34.6; ρ = 1000 kg/m^3
Phantom section: Left Section

DASY5 Configuration:
- Probe: EX3DV4 - SN3520; ConvF(4.28, 4.28, 4.28); Calibrated: 2012-02-21
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn533; Calibrated: 2011-09-21
- Phantom: SAM PHANTOM #2; Type: SAM; Serial: TP-1247
- Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 184

Cheek, Ch.151, Ant.Intenna, Bat.Standard, 802.11n, MCS0, HT40/Area Scan (111x161x1):
Measurement grid: dx=10mm, dy=10mm
Maximum value of SAR (interpolated) = 0.110 mW/g

Cheek, Ch.151, Ant.Intenna, Bat.Standard, 802.11n, MCS0, HT40/Zoom Scan (7x7x11)/Cube 0: Measurement grid: dx=4mm, dy=4mm, dz=2mm
Reference Value = 4.78 V/m; Power Drift = -0.025 dB
Peak SAR (extrapolated) = 0.194 W/kg
SAR(1 g) = 0.058 mW/g; SAR(10 g) = 0.018 mW/g
Maximum value of SAR (measured) = 0.112 mW/g



0 dB = 0.112mW/g

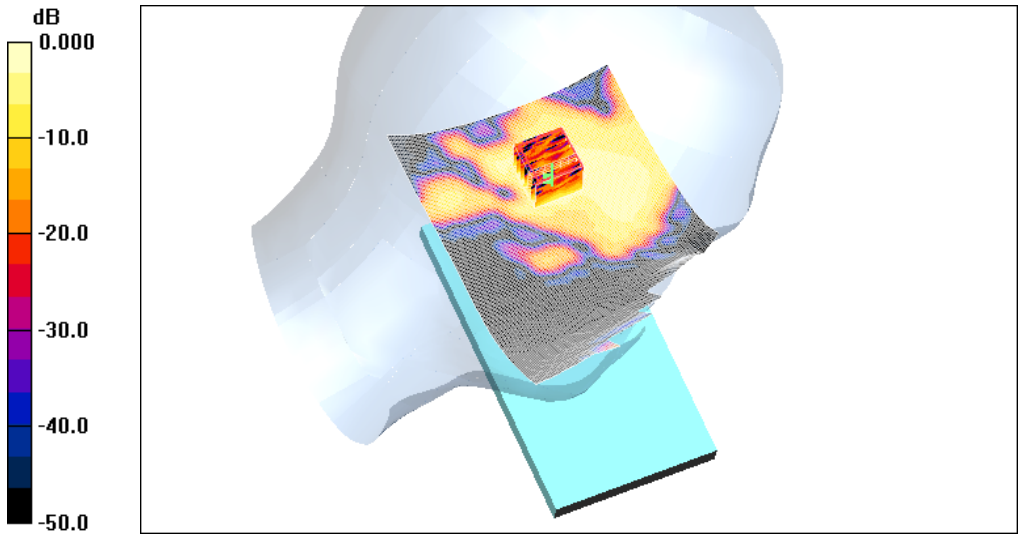
DUT: GT-N7100; Serial: FJ-213-E
Program Name: GT-N7100 WLAN 5GHz Left (Job No. : FJ-213)
Procedure Name: Tilt, Ch.151, Ant.Intenna, Bat.Standard, 802.11n, MCS0, HT40
Meas. Ambient Temp(celsius)-22.5,Tissue Temp(celsius)-22.4;Test Date-24/Aug/2012

Communication System: 5GHz; Frequency: 5755 MHz;Duty Cycle: 1:1
Medium parameters used: f = 5755 MHz; σ = 5.41 mho/m; ε_r = 34.6; ρ = 1000 kg/m^3
Phantom section: Left Section

DASY5 Configuration:
- Probe: EX3DV4 - SN3520; ConvF(4.28, 4.28, 4.28); Calibrated: 2012-02-21
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn533; Calibrated: 2011-09-21
- Phantom: SAM PHANTOM #2; Type: SAM; Serial: TP-1247
- Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 184

Tilt, Ch.151, Ant.Intenna, Bat.Standard, 802.11n, MCS0, HT40/Area Scan (111x161x1):
Measurement grid: dx=10mm, dy=10mm
Maximum value of SAR (interpolated) = 0.127 mW/g

Tilt, Ch.151, Ant.Intenna, Bat.Standard, 802.11n, MCS0, HT40/Zoom Scan (7x7x11)/Cube 0: Measurement grid: dx=4mm, dy=4mm, dz=2mm
Reference Value = 3.13 V/m; Power Drift = 0.050 dB
Peak SAR (extrapolated) = 0.245 W/kg
SAR(1 g) = 0.068 mW/g; SAR(10 g) = 0.022 mW/g
Maximum value of SAR (measured) = 0.127 mW/g



0 dB = 0.127mW/g

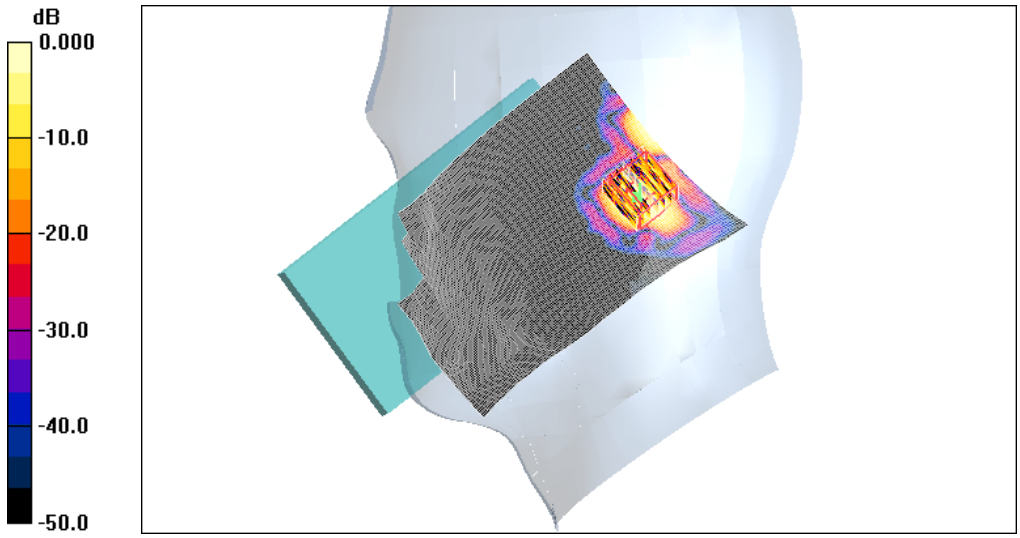
DUT: GT-N7100; Serial: FJ-213-E
Program Name: GT-N7100 WLAN 5GHz Right (Job No. : FJ-213)
Procedure Name: Cheek, Ch.161, Ant.Intenna, Bat.Standard, 802.11a, 6Mbps
Meas. Ambient Temp(celsius)-22.5,Tissue Temp(celsius)-22.4;Test Date-24/Aug/2012

Communication System: 5GHz; Frequency: 5805 MHz;Duty Cycle: 1:1
Medium parameters used: f = 5805 MHz; σ = 5.48 mho/m; ε_r = 34.5; ρ = 1000 kg/m^3
Phantom section: Right Section

DASY5 Configuration:
- Probe: EX3DV4 - SN3520; ConvF(4.28, 4.28, 4.28); Calibrated: 2012-02-21
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn533; Calibrated: 2011-09-21
- Phantom: SAM PHANTOM #2; Type: SAM; Serial: TP-1247
- Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 184

Cheek, Ch.161, Ant.Intenna, Bat.Standard, 802.11a, 6Mbps/Area Scan (101x161x1):
Measurement grid: dx=10mm, dy=10mm
Maximum value of SAR (interpolated) = 0.027 mW/g

Cheek, Ch.161, Ant.Intenna, Bat.Standard, 802.11a, 6Mbps/Zoom Scan 2 (7x7x11)/Cube 0: Measurement grid: dx=4mm, dy=4mm, dz=2mm
Reference Value = 3.72 V/m; Power Drift = 0.100 dB
Peak SAR (extrapolated) = 0.098 W/kg
SAR(1 g) = 0.013 mW/g; SAR(10 g) = 0.00376 mW/g
Maximum value of SAR (measured) = 0.030 mW/g



0 dB = 0.030mW/g

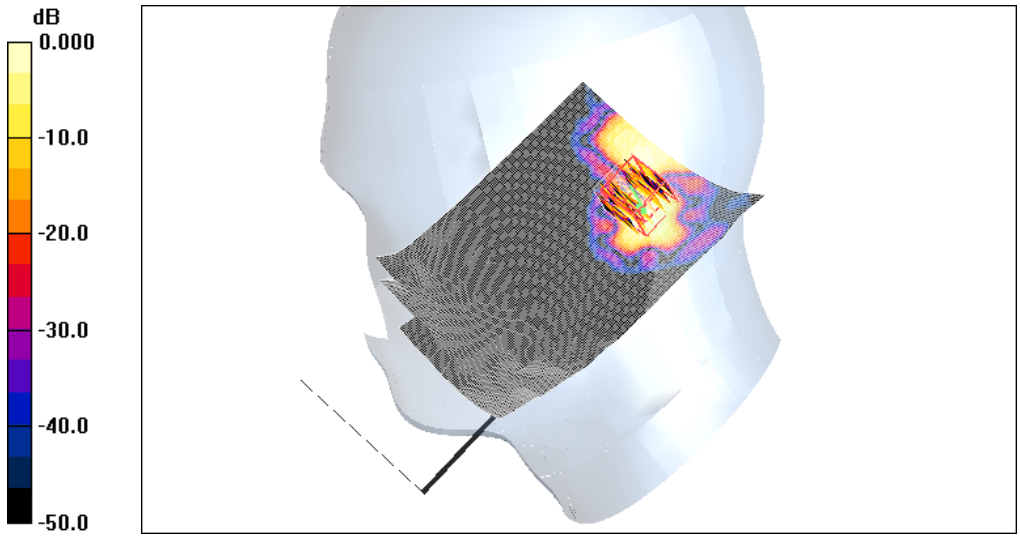
DUT: GT-N7100; Serial: FJ-213-E
Program Name: GT-N7100 WLAN 5GHz Right (Job No. : FJ-213)
Procedure Name: Tilt, Ch.161, Ant.Intenna, Bat.Standard, 802.11a, 6Mbps
Meas. Ambient Temp(celsius)-22.5,Tissue Temp(celsius)-22.4;Test Date-24/Aug/2012

Communication System: 5GHz; Frequency: 5805 MHz;Duty Cycle: 1:1
Medium parameters used: f = 5805 MHz; σ = 5.48 mho/m; ε_r = 34.5; ρ = 1000 kg/m^3
Phantom section: Right Section

DASY5 Configuration:
- Probe: EX3DV4 - SN3520; ConvF(4.28, 4.28, 4.28); Calibrated: 2012-02-21
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn533; Calibrated: 2011-09-21
- Phantom: SAM PHANTOM #2; Type: SAM; Serial: TP-1247
- Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 184

Tilt, Ch.161, Ant.Intenna, Bat.Standard, 802.11a, 6Mbps/Area Scan (101x161x1):
Measurement grid: dx=10mm, dy=10mm
Maximum value of SAR (interpolated) = 0.042 mW/g

Tilt, Ch.161, Ant.Intenna, Bat.Standard, 802.11a, 6Mbps/Zoom Scan (7x7x11)/Cube 0:
Measurement grid: dx=4mm, dy=4mm, dz=2mm
Reference Value = 3.78 V/m; Power Drift = -0.060 dB
Peak SAR (extrapolated) = 0.132 W/kg
SAR(1 g) = 0.018 mW/g; SAR(10 g) = 0.00517 mW/g
Maximum value of SAR (measured) = 0.042 mW/g



0 dB = 0.042mW/g

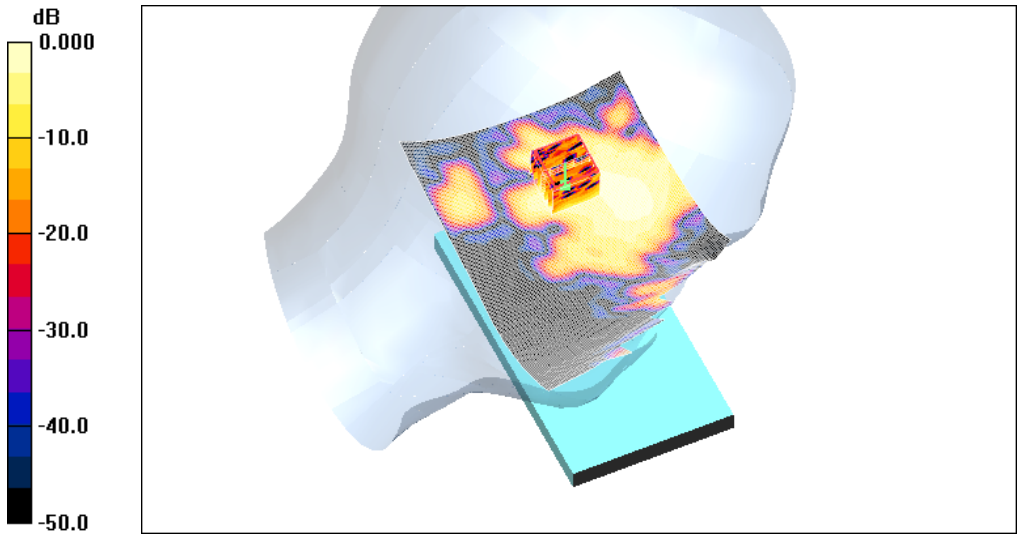
DUT: GT-N7100; Serial: FJ-213-E
Program Name: GT-N7100 WLAN 5GHz Left (Job No. : FJ-213)
Procedure Name: Cheek, Ch.161, Ant.Intenna, Bat.Standard, 802.11a, 6Mbps
Meas. Ambient Temp(celsius)-22.5,Tissue Temp(celsius)-22.4;Test Date-24/Aug/2012

Communication System: 5GHz; Frequency: 5805 MHz;Duty Cycle: 1:1
Medium parameters used: f = 5805 MHz; σ = 5.48 mho/m; ε_r = 34.5; ρ = 1000 kg/m^3
Phantom section: Left Section

DASY5 Configuration:
- Probe: EX3DV4 - SN3520; ConvF(4.28, 4.28, 4.28); Calibrated: 2012-02-21
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn533; Calibrated: 2011-09-21
- Phantom: SAM PHANTOM #2; Type: SAM; Serial: TP-1247
- Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 184

Cheek, Ch.161, Ant.Intenna, Bat.Standard, 802.11a, 6Mbps/Area Scan (111x161x1):
Measurement grid: dx=10mm, dy=10mm
Maximum value of SAR (interpolated) = 0.103 mW/g

Cheek, Ch.161, Ant.Intenna, Bat.Standard, 802.11a, 6Mbps/Zoom Scan (7x7x11)/Cube 0:
Measurement grid: dx=4mm, dy=4mm, dz=2mm
Reference Value = 3.71 V/m; Power Drift = -0.042 dB
Peak SAR (extrapolated) = 0.157 W/kg
SAR(1 g) = 0.044 mW/g; SAR(10 g) = 0.015 mW/g
Maximum value of SAR (measured) = 0.089 mW/g



0 dB = 0.089mW/g

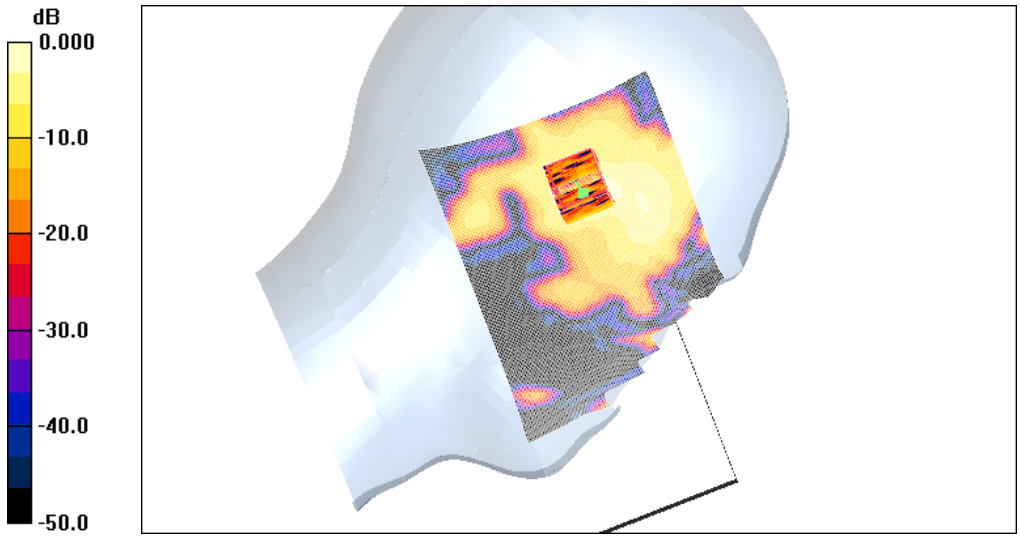
DUT: GT-N7100; Serial: FJ-213-E
Program Name: GT-N7100 WLAN 5GHz Left (Job No. : FJ-213)
Procedure Name: Tilt, Ch.161, Ant.Intenna, Bat.Standard, 802.11a, 6Mbps
Meas. Ambient Temp(celsius)-22.5,Tissue Temp(celsius)-22.4;Test Date-24/Aug/2012

Communication System: 5GHz; Frequency: 5825 MHz;Duty Cycle: 1:1
Medium parameters used: f = 5825 MHz; σ = 5.5 mho/m; ε_r = 34.5; ρ = 1000 kg/m^3
Phantom section: Left Section

DASY5 Configuration:
- Probe: EX3DV4 - SN3520; ConvF(4.28, 4.28, 4.28); Calibrated: 2012-02-21
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn533; Calibrated: 2011-09-21
- Phantom: SAM PHANTOM #2; Type: SAM; Serial: TP-1247
- Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 184

Tilt, Ch.161, Ant.Intenna, Bat.Standard, 802.11a, 6Mbps/Area Scan (111x161x1):
Measurement grid: dx=10mm, dy=10mm
Maximum value of SAR (interpolated) = 0.102 mW/g

Tilt, Ch.161, Ant.Intenna, Bat.Standard, 802.11a, 6Mbps/Zoom Scan (7x7x11)/Cube 0:
Measurement grid: dx=4mm, dy=4mm, dz=2mm
Reference Value = 4.82 V/m; Power Drift = -0.077 dB
Peak SAR (extrapolated) = 0.191 W/kg
SAR(1 g) = 0.057 mW/g; SAR(10 g) = 0.019 mW/g
Maximum value of SAR (measured) = 0.108 mW/g



0 dB = 0.108mW/g

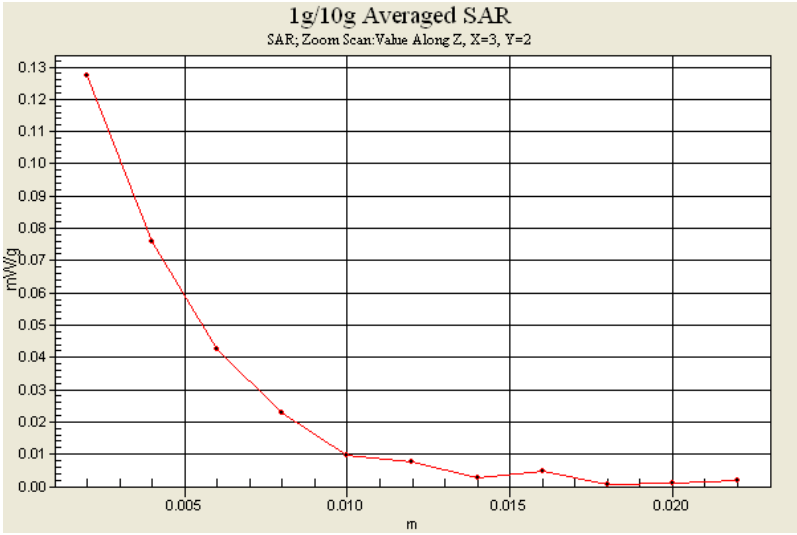
DUT: GT-N7100; Serial: FJ-213-E
Program Name: GT-N7100 WLAN 5GHz Left (Job No. : FJ-213)
Procedure Name: Tilt, Ch.151, Ant.Intenna, Bat.Standard, 802.11n, MCS0, HT40
Meas. Ambient Temp(celsius)-22.5,Tissue Temp(celsius)-22.4;Test Date-24/Aug/2012

Communication System: 5GHz; Frequency: 5755 MHz;Duty Cycle: 1:1
Medium parameters used: f = 5755 MHz; σ = 5.41 mho/m; ε_r = 34.6; ρ = 1000 kg/m^3
Phantom section: Left Section

DASY5 Configuration:
- Probe: EX3DV4 - SN3520; ConvF(4.28, 4.28, 4.28); Calibrated: 2012-02-21
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn533; Calibrated: 2011-09-21
- Phantom: SAM PHANTOM #2; Type: SAM; Serial: TP-1247
- Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 184

Tilt, Ch.151, Ant.Intenna, Bat.Standard, 802.11n, MCS0, HT40/Area Scan (111x161x1):
Measurement grid: dx=10mm, dy=10mm
Maximum value of SAR (interpolated) = 0.127 mW/g

Tilt, Ch.151, Ant.Intenna, Bat.Standard, 802.11n, MCS0, HT40/Zoom Scan (7x7x11)/Cube 0: Measurement grid: dx=4mm, dy=4mm, dz=2mm
Reference Value = 3.13 V/m; Power Drift = 0.050 dB
Peak SAR (extrapolated) = 0.245 W/kg
SAR(1 g) = 0.068 mW/g; SAR(10 g) = 0.022 mW/g
Maximum value of SAR (measured) = 0.127 mW/g



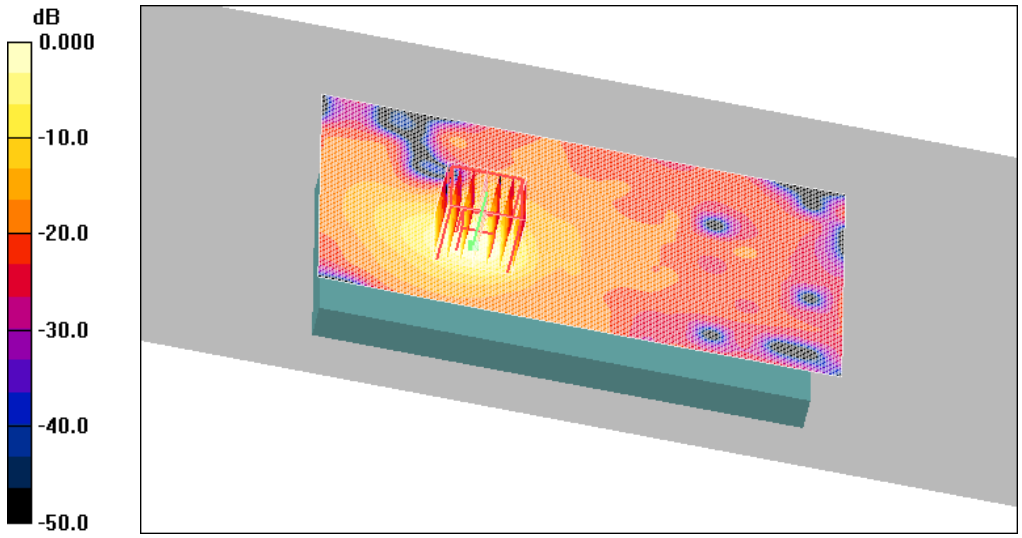
DUT: GT-N7100; Serial: FJ-213-E
Program Name: GT-N7100 5GHz WLAN Body (Job No. : FI-213)
Procedure Name: Back, Ch.36, Ant.Intenna, Bat.Standard, 802.11a, 6Mbps, 10mm
Meas. Ambient Temp(celsius)-22.5,Tissue Temp(celsius)-22.3;Test Date-27/Aug/2012

Communication System: 5GHz; Frequency: 5180 MHz;Duty Cycle: 1:1
Medium parameters used: f = 5180 MHz; σ = 5.39 mho/m; ε_r = 47.9; ρ = 1000 kg/m^3
Phantom section: Right Section

DASY5 Configuration:
- Probe: EX3DV4 - SN3520; ConvF(3.9, 3.9, 3.9); Calibrated: 2012-02-21
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn533; Calibrated: 2011-09-21
- Phantom: Triple Flat Phantom 5.1; Type: Triple Flat Phantom 5.1; Serial: 1003
- Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 184

Back, Ch.36, Ant.Intenna, Bat.Standard, 802.11a, 6Mbps, 10mm/Area Scan (101x161x1):
Measurement grid: dx=10mm, dy=10mm
Maximum value of SAR (interpolated) = 0.774 mW/g

Back, Ch.36, Ant.Intenna, Bat.Standard, 802.11a, 6Mbps, 10mm/Zoom Scan (7x7x11)/Cube 0: Measurement grid: dx=4mm, dy=4mm, dz=2mm
Reference Value = 16.6 V/m; Power Drift = -0.061 dB
Peak SAR (extrapolated) = 1.49 W/kg
SAR(1 g) = 0.404 mW/g; SAR(10 g) = 0.121 mW/g
Maximum value of SAR (measured) = 0.807 mW/g



0 dB = 0.807mW/g

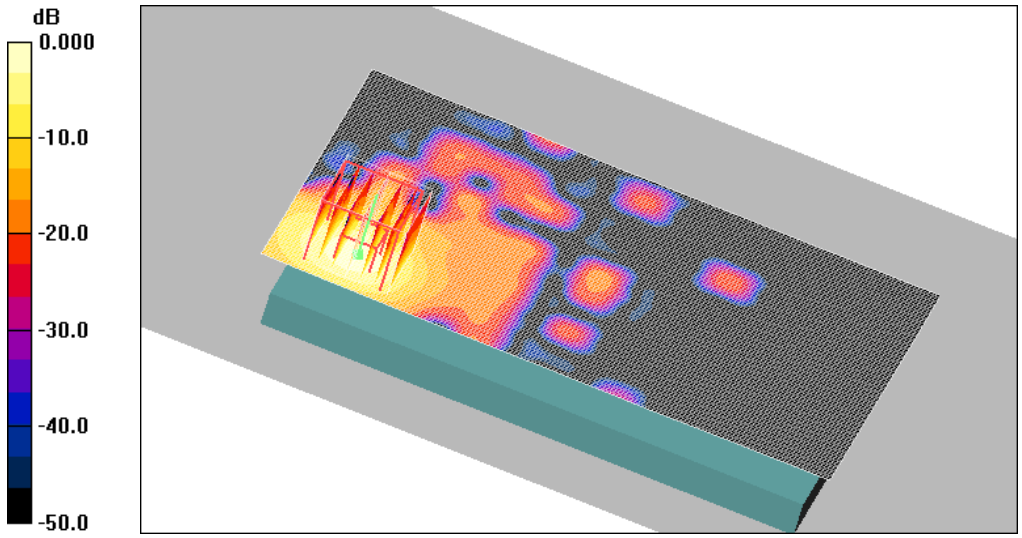
DUT: GT-N7100; Serial: FJ-213-E
Program Name: GT-N7100 5GHz WLAN Body (Job No. : FI-213)
Procedure Name: Back, Ch.52, Ant.Intenna, Bat.Standard, 802.11a, 6Mbps, 10mm
Meas. Ambient Temp(celsius)-22.5,Tissue Temp(celsius)-22.3;Test Date-27/Aug/2012

Communication System: 5GHz; Frequency: 5260 MHz;Duty Cycle: 1:1
Medium parameters used: f = 5260 MHz; σ = 5.48 mho/m; ε_r = 47.6; ρ = 1000 kg/m^3
Phantom section: Right Section

DASY5 Configuration:
- Probe: EX3DV4 - SN3520; ConvF(3.64, 3.64, 3.64); Calibrated: 2012-02-21
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn533; Calibrated: 2011-09-21
- Phantom: Triple Flat Phantom 5.1; Type: Triple Flat Phantom 5.1; Serial: 1003
- Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 184

Back, Ch.52, Ant.Intenna, Bat.Standard, 802.11a, 6Mbps, 10mm/Area Scan (101x161x1):
Measurement grid: dx=10mm, dy=10mm
Maximum value of SAR (interpolated) = 0.412 mW/g

Back, Ch.52, Ant.Intenna, Bat.Standard, 802.11a, 6Mbps, 10mm/Zoom Scan (7x7x11)/Cube 0: Measurement grid: dx=4mm, dy=4mm, dz=2mm
Reference Value = 11.2 V/m; Power Drift = -0.062 dB
Peak SAR (extrapolated) = 0.781 W/kg
SAR(1 g) = 0.217 mW/g; SAR(10 g) = 0.064 mW/g
Maximum value of SAR (measured) = 0.440 mW/g



0 dB = 0.440mW/g

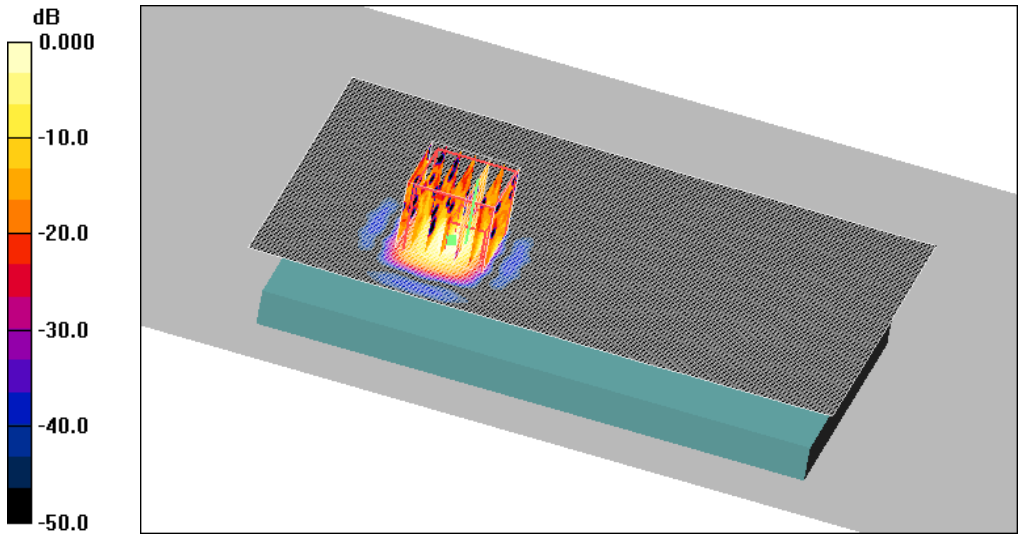
DUT: GT-N7100; Serial: FJ-213-E
Program Name: GT-N7100 5GHz WLAN Body (Job No. : FI-213)
Procedure Name: Back, Ch.140, Ant.Intenna, Bat.Standard, 802.11a, 6Mbps, 10mm
Meas. Ambient Temp(celsius)-22.5,Tissue Temp(celsius)-22.3;Test Date-27/Aug/2012

Communication System: 5GHz; Frequency: 5700 MHz;Duty Cycle: 1:1
Medium parameters used: f = 5700 MHz; σ = 6.04 mho/m; ε_r = 47.4; ρ = 1000 kg/m^3
Phantom section: Right Section

DASY5 Configuration:
- Probe: EX3DV4 - SN3520; ConvF(3.27, 3.27, 3.27); Calibrated: 2012-02-21
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn533; Calibrated: 2011-09-21
- Phantom: Triple Flat Phantom 5.1; Type: Triple Flat Phantom 5.1; Serial: 1003
- Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 184

Back, Ch.140, Ant.Intenna, Bat.Standard, 802.11a, 6Mbps, 10mm/Area Scan (101x161x1):
Measurement grid: dx=10mm, dy=10mm
Maximum value of SAR (interpolated) = 0.101 mW/g

Back, Ch.140, Ant.Intenna, Bat.Standard, 802.11a, 6Mbps, 10mm/Zoom Scan (7x7x11)/Cube 0: Measurement grid: dx=4mm, dy=4mm, dz=2mm
Reference Value = 3.91 V/m; Power Drift = -0.013 dB
Peak SAR (extrapolated) = 0.167 W/kg
SAR(1 g) = 0.029 mW/g; SAR(10 g) = 0.00605 mW/g
Maximum value of SAR (measured) = 0.101 mW/g



0 dB = 0.101mW/g

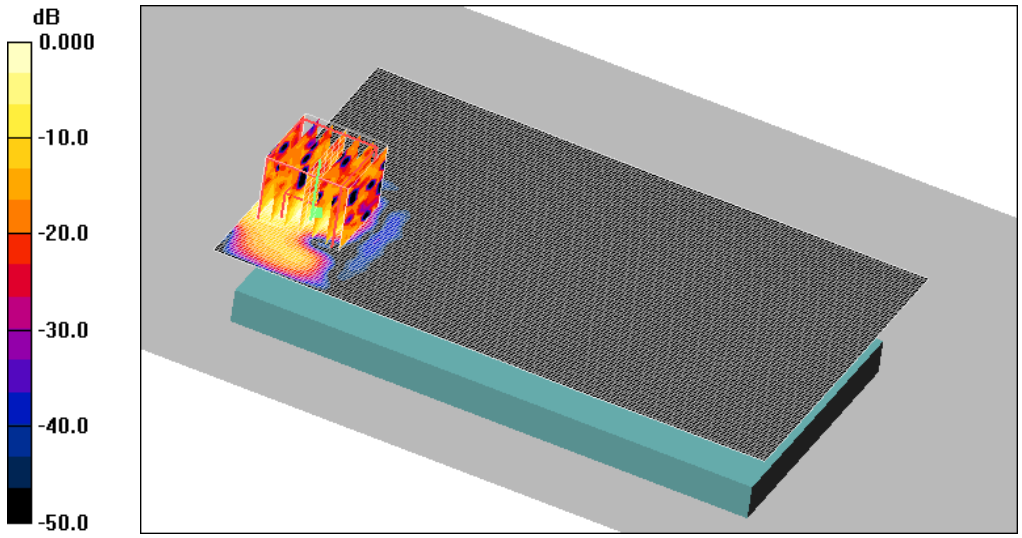
DUT: GT-N7100; Serial: FJ-213-E
Program Name: GT-N7100 5GHz WLAN Body (Job No. : FI-213)
Procedure Name: Back, Ch.151, Ant.Intenna, Bat.Standard, 802.11n, MCS0, 10mm, HT40
Meas. Ambient Temp(celsius)-22.5,Tissue Temp(celsius)-22.3;Test Date-27/Aug/2012

Communication System: 5GHz; Frequency: 5755 MHz;Duty Cycle: 1:1
Medium parameters used: f = 5755 MHz; σ = 6.11 mho/m; ε_r = 47.3; ρ = 1000 kg/m^3
Phantom section: Right Section

DASY5 Configuration:
- Probe: EX3DV4 - SN3520; ConvF(3.5, 3.5, 3.5); Calibrated: 2012-02-21
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn533; Calibrated: 2011-09-21
- Phantom: Triple Flat Phantom 5.1; Type: Triple Flat Phantom 5.1; Serial: 1003
- Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 184

Back, Ch.151, Ant.Intenna, Bat.Standard, 802.11n, MCS0, 10mm, HT40/Area Scan (101x161x1): Measurement grid: dx=10mm, dy=10mm
Maximum value of SAR (interpolated) = 0.117 mW/g

Back, Ch.151, Ant.Intenna, Bat.Standard, 802.11n, MCS0, 10mm, HT40/Zoom Scan (7x7x11)/Cube 0: Measurement grid: dx=4mm, dy=4mm, dz=2mm
Reference Value = 4.64 V/m; Power Drift = 0.155 dB
Peak SAR (extrapolated) = 0.245 W/kg
SAR(1 g) = 0.040 mW/g; SAR(10 g) = 0.00821 mW/g
Maximum value of SAR (measured) = 0.131 mW/g



0 dB = 0.131mW/g

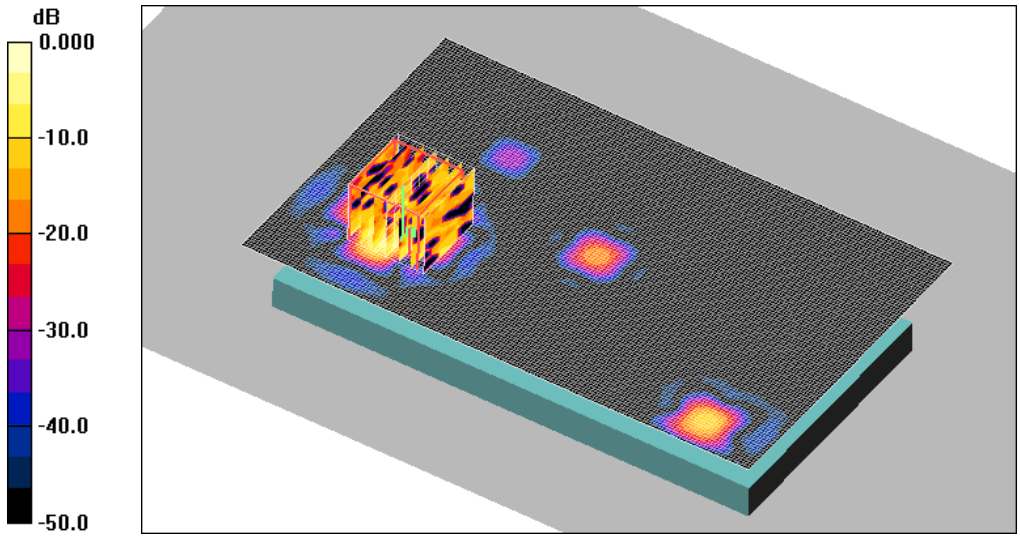
DUT: GT-N7100; Serial: FJ-213-E
Program Name: GT-N7100 5GHz WLAN Body (Job No. : FI-213)
Procedure Name: Back, Ch.161, Ant.Intenna, Bat.Standard, 802.11a, 6Mbps, 10mm
Meas. Ambient Temp(celsius)-22.5,Tissue Temp(celsius)-22.3;Test Date-27/Aug/2012

Communication System: 5GHz; Frequency: 5805 MHz;Duty Cycle: 1:1
Medium parameters used: f = 5805 MHz; σ = 6.18 mho/m; ε_r = 46.1; ρ = 1000 kg/m^3
Phantom section: Right Section

DASY5 Configuration:
- Probe: EX3DV4 - SN3520; ConvF(3.5, 3.5, 3.5); Calibrated: 2012-02-21
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn533; Calibrated: 2011-09-21
- Phantom: Triple Flat Phantom 5.1; Type: Triple Flat Phantom 5.1; Serial: 1003
- Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 184

Back, Ch.161, Ant.Intenna, Bat.Standard, 802.11a, 6Mbps, 10mm/Area Scan (101x161x1):
Measurement grid: dx=10mm, dy=10mm
Maximum value of SAR (interpolated) = 0.060 mW/g

Back, Ch.161, Ant.Intenna, Bat.Standard, 802.11a, 6Mbps, 10mm/Zoom Scan (7x7x11)/Cube 0: Measurement grid: dx=4mm, dy=4mm, dz=2mm
Reference Value = 3.92 V/m; Power Drift = 0.014 dB
Peak SAR (extrapolated) = 0.143 W/kg
SAR(1 g) = 0.020 mW/g; SAR(10 g) = 0.00472 mW/g
Maximum value of SAR (measured) = 0.051 mW/g

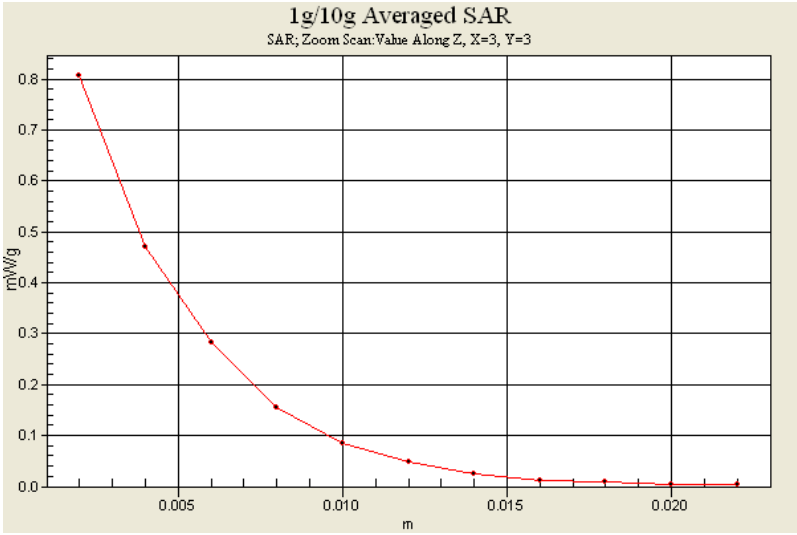


0 dB = 0.051mW/g

DUT: GT-N7100; Serial: FJ-213-E
Program Name: GT-N7100 5GHz WLAN Body (Job No. : FI-213)
Procedure Name: Back, Ch.36, Ant.Intenna, Bat.Standard, 802.11a, 6Mbps, 10mm
Meas. Ambient Temp(celsius)-22.5,Tissue Temp(celsius)-22.3;Test Date-27/Aug/2012

Communication System: 5GHz; Frequency: 5180 MHz;Duty Cycle: 1:1
Medium parameters used: f = 5180 MHz; σ = 5.39 mho/m; ε_r = 47.9; ρ = 1000 kg/m^3
Phantom section: Right Section

DASY5 Configuration:
- Probe: EX3DV4 - SN3520; ConvF(3.9, 3.9, 3.9); Calibrated: 2012-02-21
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn533; Calibrated: 2011-09-21
- Phantom: Triple Flat Phantom 5.1; Type: Triple Flat Phantom 5.1; Serial: 1003
- Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 184

Back, Ch.36, Ant.Intenna, Bat.Standard, 802.11a, 6Mbps, 10mm/Area Scan (101x161x1):
Measurement grid: dx=10mm, dy=10mm
Maximum value of SAR (interpolated) = 0.774 mW/g

Back, Ch.36, Ant.Intenna, Bat.Standard, 802.11a, 6Mbps, 10mm/Zoom Scan (7x7x11)/Cube 0: Measurement grid: dx=4mm, dy=4mm, dz=2mm
Reference Value = 16.6 V/m; Power Drift = -0.061 dB
Peak SAR (extrapolated) = 1.49 W/kg
SAR(1 g) = 0.404 mW/g; SAR(10 g) = 0.121 mW/g
Maximum value of SAR (measured) = 0.807 mW/g