SAR TEST REPORT

Equipment Under Test	Smart Phone
Model Name	V02S002
Company Name	DELL Inc.
Company Address	One Dell Way Round Rock Texas 78682 United States
Date of Receipt	2010.07.26
Date of Test(s)	2010.09.10-2010.12.31;2011.02.14
Date of Issue	2011.02.15

Standards:

FCC OET Bulletin 65 supplement C,
IEEE/ANSI C95.1, C95.3, IEEE 1528

In the configuration tested, the EUT complied with the standards specified above.

Remarks:

This report details the results of the testing carried out on one sample, the results contained in this test report do not relate to other samples of the same product. The manufacturer should ensure that all products in series production are in conformity with the product sample detailed in this report.

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Tested by : **Ricky Huang** **Date** : **2011.02.15**
Asst. Supervisor

Approved by : **Nick Hsu** **Date** : **2011.02.15**
Supervisor

Version

Version No.	Date	Description
1.0	Jan. 06, 2011	Initial issue of report
1.1	Feb. 15, 2011	1st modification

Contents

1. General Information

1.1 Testing Laboratory

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1.2 Details of Applicant

Company Name	DELL Inc.
Company Address	One Dell Way Round Rock Texas 78682 United States
Contact Person	Matthew Samonek
TEL	815-382-4275
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1.3 Description of EUT

EUT Name	Smart Phone
Model Name	V02S002
Brand Name	DELL
IMEI Code	012287000040377
FCC ID	E2KV02S002
Mode of Operation	GSM/GPRS/EGPRS/WCDMA/HSDPA/ HSUPA/WLAN802.11 b/g band

Definition	Production unit			
Duty Cycle	GSM	GPRS	WCDMA B4	WLAN 802.11 b/g
	1/8	1/2(Class B)	1	1
TX Frequency Range (MHz)	GSM 850	GSM1900	WCDMA B4	WLAN802.11 b/g
	824.2-848.8MHZ	1850.2-1909.8MHZ	1712.4-1752.6 MHZ	2412-2462 MHZ
Channel Number (ARFCN)	GSM 850	GSM1900	WCDMA B4	WLAN802.11 b/g
	128-251	512- 810	1312-1513	1-11
VOIP Function	No			
Battery Type	3.7 V Lithium-Ion			
Antenna Type	Internal Antenna			

Max. SAR Measured (1 g)	**GSM850**	
	Head	Body
	0.414 mW/g (At GSM 850 Left Head (Cheek Position)_Slider off_ 251 Channel	**1.12 mW/g** (At GSM 850 Body _ 128 channel)

Max. SAR Measured (1 g)	**GSM1900**	
	Head	Body
	0.274 mW/g (At GSM 1900 Right Head (Cheek Position)_Slider off_ 661 channel)	**0.644 mW/g** (At GSM 1900 Body _ 810 channel)

Max. SAR Measured (1 g)	**WCDMA B4**	
	Head	Body
	0.809 mW/g (At WCDMA B4 Right Head (Cheek Position)_Slider off_ 1513 channel_repeated with memory card)	**0.833 mW/g** (At WCDMA B4 Body _ 1312 channel)
Max. SAR Measured (1 g)	**WLAN802.11 b**	**WLAN802.11 g**
	Body	Body
	0.13 mW/g (At WLAN802.11b Body_ 1 channel)	**0.096 mW/g** (At WLAN802.11g Body_ 1 channel)

#. Conducted power table:

	GSM 850 (Average)			GSM 1900 (Average)		
Mode\ARFCN	128	190	251	512	661	810
GSM	32.2	32.2	32.2	28.9	29	29
EGPRS 12	22.5	22.6	22.5	25.3	25.4	25.5
GPRS 12	28.5	28.5	28.5	28.6	28.7	28.8

		WCDMA Band 4 Channel		
Mode	**Subtest**	**4132**	**4183**	**4233**
Rel99	R99	23.3	23.2	23.1
Rel6 HSDPA	1	23.59	23.46	23.37
	2	23.18	23.06	22.95
	3	23.11	23.01	22.84
	4	23.18	23.02	22.96
Rel6 HSUPA	1	23.22	23.18	23.04
	2	21.27	21.25	21.08
	3	22.28	22.2	22.12
	4	21.4	21.3	21.12
	5	23.11	23.04	22.95

EUT Mode	**Frequency (MHz)**	**CH**	**Average Power (dBm)**
WLAN802.11b	2412	1	13.74
	2437	6	14.04
	2462	11	14.92
EUT Mode	**Frequency (MHz)**	**CH**	**Average Power (dBm)**
WLAN802.11g	2412	1	9.54
	2437	6	9.93
	2462	11	10.53

1.4 Test Environment

Ambient Temperature : 22±2° C
Tissue Simulating Liquid: 22±2° C

1.5 Operation description

General:

1. The EUT is controlled by using a Radio Communication Tester (R&S CMU200), and the communication between the EUT and the tester is established by air link.
2. Measurements are performed respectively on the lowest, middle and highest channels of the operating band(s). The EUT is set to maximum power level during all tests, and at the beginning of each test the batt¯ery is fully charged.
3. During the SAR testing, the DASY4 system checks power drift by comparing the e-field strength of one specific location measured at the beginning with that measured at the end of the SAR testing.
4. Testing Head SAR at lowest, middle and highest channel for all bands with LET/LEC/RET/REC conditions.
5. Testing body-worn SAR by separating **1.5cm** between the back of the EUT and the flat phantom in GPRS mode.

SAR evaluation considerations for handsets with multiple transmitters:

6. Since the WLAN function of this device does NOT support VoIP function. Users will not use it close to head. SAR evaluation of head adjacent is unnecessary, only Body condition will be considered for WLAN stand-alone situation.
7. When the maximum transmitter and antenna output power are ≦ 60/f(GHz) (mW) SAR evaluation is typically not required for FCC or TCB approval
   (BT power= 3.62dBm)
8. WWAN to WLAN antenna distance is 11cm.

9. The highest 1-g SAR for WLAN is 0.13 W/kg and the highest 1-g SAR for WWAN is 1.12W/kg. The sum of 1-g for simultaneous transmitting WLAN and WWAN antenna pair is 0.13+1.12 = 1.25 W/kg < 1.6 W/kg. According to KDB648474/KDB447498 /KDB248227/KDB941225 Simultaneous SAR evaluation is not required.

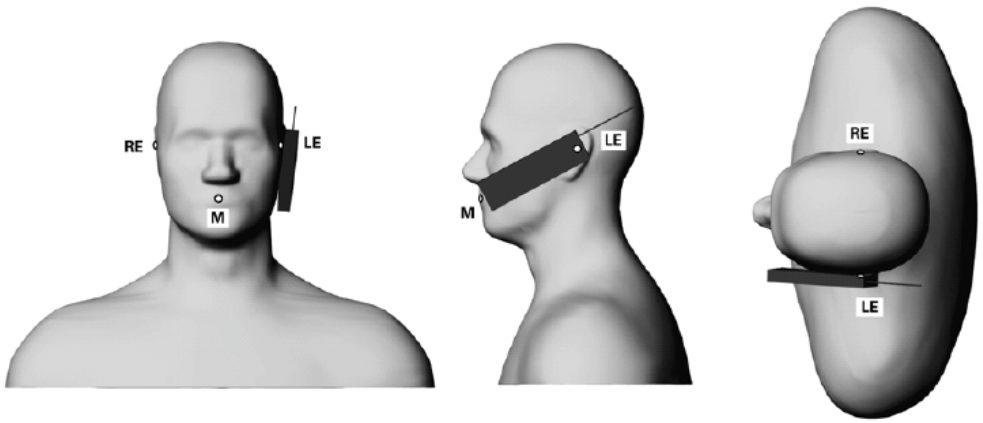
Additional configuration(Head):

10. For highest SAR configuration in this band repeated with external Memory card inside.

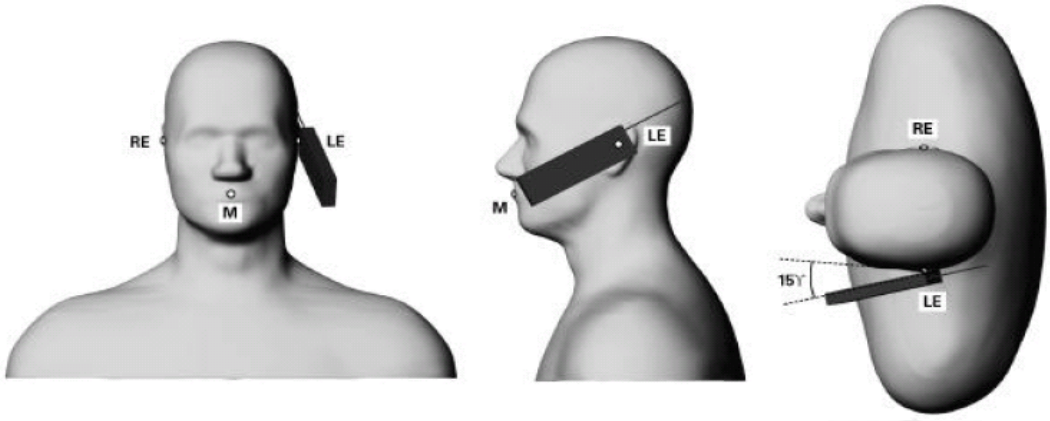
Additional configuration(Body):

11. For highest SAR configuration in this band repeated with external Memory card inside.
12. For highest SAR configuration in this band repeated with external Headset (Foster).
13. For highest SAR configuration in this band repeated with external Headset (PCH).

1.6 Positioning Procedure



Phone position 1, “cheek” or “touch” position. The reference points for the right ear (RE), left ear (LE) and mouth (M), which define the reference plane for phone positioning



Phone position 2, “tilted position.” The reference points for the right ear (RE), left ear (LE) and mouth (M), which define the reference plane for phone positioning

Cheek/Touch Position:

the handset was brought toward the mouth of the head phantom by pivoting against the ear reference point until any point of the mouthpiece or keypad touched the phantom.

Ear/Tilt Position:

With the phone aligned in the Cheek/Touch position, the handset was tilted away from the mouth with respect to the test device reference point by 15 degrees.

1.7 EVALUATION PROCEDURES

The entire evaluation of the spatial peak values is performed within the Post-processing engine (SEMCAD). The system always gives the maximum values for the 1 g and 10 g cubes. The algorithm to find the cube with highest averaged SAR is divided into the following stages:

1. The extraction of the measured data (grid and values) from the Zoom Scan.
2. The calculation of the SAR value at every measurement point based on all stored data (A/D values and measurement parameters)
3. The generation of a high-resolution mesh within the measured volume
4. The interpolation of all measured values from the measurement grid to the high-resolution grid
5. The extrapolation of the entire 3-D field distribution to the phantom surface over the distance from sensor to surface
6. The calculation of the averaged SAR within masses of 1g and 10g.

The probe is calibrated at the center of the dipole sensors that is located 1 to 2.7mm away from the probe tip. During measurements, the probe stops shortly above the phantom surface, depending on the probe and the surface detecting system. Both distances are included as parameters in the probe configuration file. The software always knows exactly how far away the measured point is from the surface. As the probe cannot directly measure at the surface, the values between the deepest measured point and the surface must be extrapolated. The angle between the probe axis and the surface normal line is less than 30 degree.

In the Area Scan, the gradient of the interpolation function is evaluated to find all the extreme of the SAR distribution. The uncertainty on the locations of the extreme is less than 1/20 of the grid size. Only local maximum within –2 dB of the global maximum are searched and passed for the Cube Scan measurement. In the Cube Scan, the interpolation function is used to extrapolate the Peak SAR from the lowest measurement points to the inner phantom surface (the extrapolation distance). The uncertainty increases with the extrapolation distance. To keep the uncertainty within 1% for the 1 g and 10 g cubes, the extrapolation distance should not be larger than 5mm.

The maximum search is automatically performed after each area scan measurement. It is based on splines in two or three dimensions. The procedure can find the maximum for most SAR distributions even with relatively large grid spacing. After the area scanning measurement, the probe is automatically moved to a position at the interpolated maximum. The following scan can directly use this position for reference, e.g., for a finer resolution grid or the cube evaluations. The 1g and 10g peak evaluations are only available for the predefined cube 7x7x7 scans.

The routines are verified and optimized for the grid dimensions used in these cube measurements. The measured volume of 30x30x30mm contains about 30g of tissue. The first procedure is an extrapolation (incl. Boundary correction) to get the points between the lowest measured plane and the surface. The next step uses 3D interpolation to get all points within the measured volume. In the last step, a 1g cube is placed numerically into the volume and its averaged SAR is calculated. This cube is the moved around until the highest averaged SAR is found.

If the highest SAR is found at the edge of the measured volume, the system will issue a warning: higher SAR values might be found outside of the measured volume. In that

case the cube measurement can be repeated, using the new interpolated maximum as the center.

1.8 The SAR Measurement System

A photograph of the SAR measurement System is given in Fig. a. This SAR Measurement System uses a Computer-controlled 3-D stepper motor system (SPEAG DASY 4 professional system). A Model ES3DV3 field probe is used to determine the internal electric fields. The SAR can be obtained from the equation SAR= $\sigma (|Ei|^2)/ \rho$ where σ and ρ are the conductivity and mass density of the tissue-simulant.

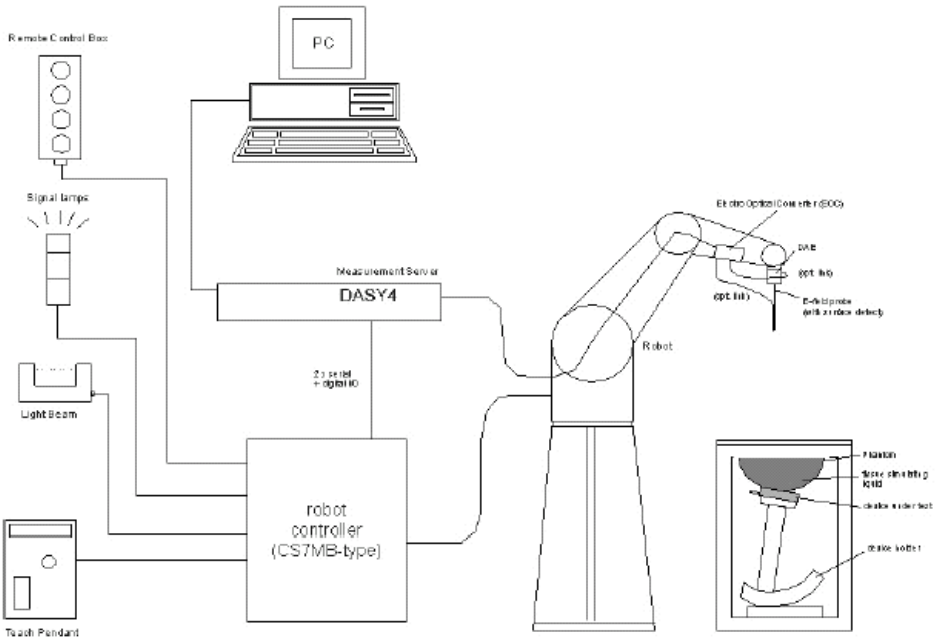


Fig.a The block diagram of SAR system

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

- A standard high precision 6-axis robot (Staubli RX family) with controller, teach pendant and software. An arm extension is for accommodating the data acquisition electronics (DAE).
- A dosimetric probe, i.e., an isotropic E-field probe optimized and calibrated for usage in tissue simulating liquid. The probe is equipped with an optical surface detector system.

- A data acquisition electronics (DAE) which performs the signal amplification, signal multiplexing, AD-conversion, offset measurements, mechanical surface detection, collision detection, etc. The unit is battery powered with standard or rechargeable batteries. The signal is optically transmitted to the EOC.
- The Electro-optical converter (EOC) performs the conversion between optical and electrical of the signals for the digital communication to the DAE and for the analog signal from the optical surface detection. The EOC is connected to the measurement server.
- The function of the measurement server is to perform the time critical tasks such as signal filtering, control of the robot operation and fast movement interrupts.
- A probe alignment unit which improves the (absolute) accuracy of the probe positioning.
  - A computer operating Windows 2000 or Windows XP.
  - DASY4 software.
- Remote control with teach pendant and additional circuitry for robot safety such as warning lamps, etc.
  - The SAM twin phantom enabling testing left-hand and right-hand usage.
  - The device holder for handheld mobile phones.
  - Tissue simulating liquid mixed according to the given recipes.
  - Validation dipole kits allowing to validate the proper functioning of the system.

1.9 System Components

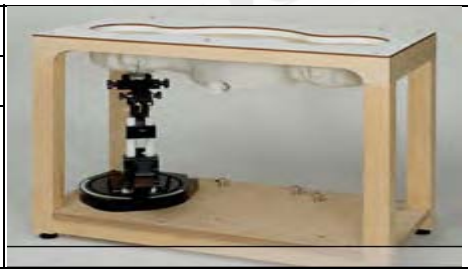
ES3DV3 E-Field Probe

Construction:	Symmetrical design with triangular core Built-in shielding against static charges PEEK enclosure material (resistant to organic solvents, e.g., DGBE)
Calibration:	Basic Broad Band Calibration in air Conversion Factors (CF) for HSL850/1750/1900/2450MHz Additional CF for other liquids and frequencies upon request
Frequency:	10 MHz to > 4 GHz; Linearity: ± 0.2 dB (30 MHz to 6 GHz)
Directivity:	± 0.3 dB in HSL (rotation around probe axis) ± 0.5 dB in tissue material (rotation normal to probe axis)
Dynamic Range:	10 µW/g to > 100 mW/g; Linearity: ± 0.2 dB (noise: typically < 1 µW/g)
Dimensions:	Overall length: 330 mm (Tip: 20 mm) Tip diameter: 2.5 mm (Body: 12 mm) Typical distance from probe tip to dipole centers: 1 mm
Application:	High precision dosimetric measurements in any exposure scenario (e.g., very strong gradient fields). Only probe which enables compliance testing for frequencies up to 6 GHz with precision of better 30%.

ES3DV3 E-Field Probe

SAM PHANTOM V4.0C

Construction:	The shell corresponds to the specifications of the Specific Anthropomorphic Mannequin (SAM) phantom defined in IEEE 1528-200X, CENELEC 50361 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. Reference markings on the phantom allow the complete setup of all predefined phantom positions and measurement grids by manually teaching three points with the robot.
Shell Thickness:	2 ± 0.2 mm
Filling Volume:	Approx. 25 liters
Dimensions:	Height: 251 mm; Length: 1000 mm; Width: 500 mm



DEVICE HOLDER

Construction	In combination with the Twin SAM Phantom V4.0/V4.0C or Twin SAM, the Mounting Device (made from POM) enables the rotation of the mounted transmitter in spherical coordinates, whereby the rotation point is the ear opening. The devices can be easily and accurately positioned according to IEC, IEEE, CENELEC, FCC or other specifications. The device holder can be locked at different phantom locations (left head, right head, flat phantom).

Device Holder

1.10 SAR System Verification

The microwave circuit arrangement for system verification is sketched in Fig. b. The daily system accuracy verification occurs within the flat section of the SAM phantom. A SAR measurement was performed to see if the measured SAR was within +/- 5% from the target SAR values.

These tests were done at 850/1750/1900/2450 MHz. The tests were conducted on the same days as the measurement of the DUT. The obtained results from the system accuracy verification are displayed in the table 1. During the tests, the ambient temperature of the laboratory was in the range 22.1°C, the relative humidity was in the range 62% and the liquid depth above the ear reference points was above 15 cm in all the cases. It is seen that the system is operating within its specification, as the results are within acceptable tolerance of the reference values.

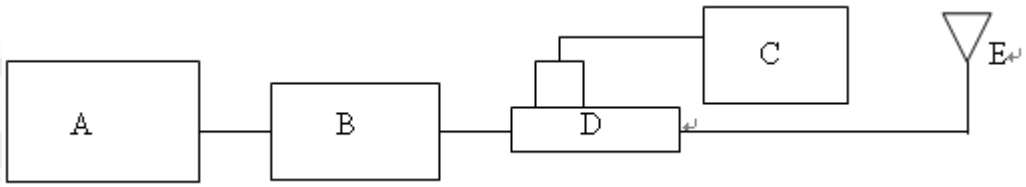


Fig.b The block diagram of system verification

A. Agilent Model 8648D Signal Generator
B. Mini circuits Model ZHL-42 Amplifier
C. Agilent Model U2001B Power Sensor
D. Agilent Model 778D/777D Dual directional coupling
E. Reference dipole antenna

Photograph of the dipole Antenna

Validation Kit	Frequency (MHz)	Target SAR (1g) (Pin=250mW)	Measured SAR (1g)	Measured Date
D835V2 S/N: 4d063	835 MHz (Head)	2.42 mW/g	2.36mW/g	2010-12-28
D835V2 S/N: 4d092	835 MHz (Body)	2.53 mW/g	2.64mW/g	2010-12-31
D1750V2 S/N: 1008	1750 MHz (Head)	8.84 mW/g	8.66mW/g	2010-12-30
D1750V2 S/N: 1008	1750 MHz (Body)	9.46 mW/g	9.90mW/g	2010-12-31
D1900V2 S/N: 5d027	1900 MHz (Head)	9.91 mW/g	9.95mW/g	2010-12-29
D1900V2 S/N: 5d027	1900 MHz (Body)	10.1 mW/g	10.2mW/g	2010-12-31
D2450V2 S/N: 727	2450 MHz (Body)	13.4 mW/g	13.9mW/g	2011-02-14

Table 1. System validation (follow manufacture target value)

1.11 Tissue Simulant Fluid for the Frequency Band

The dielectric properties for this Head-simulant fluid were measured by using the HP Model 85070D Dielectric Probe (rates frequency band 200 MHz to 20 GHz) in conjuncation with HP 8753D Network Analyzer (30 KHz-6000MHz) by using a procedure detailed in Section V.

All dielectric parameters of tissue simulates were measured within 24 hours of SAR measurements. The depth of the tissue simulant iin the flat section of the phantom was 15cm±5mm during all tests. (Appendix Fig .2)

Frequency (MHz)	Tissue type	Measurement date/ Limits	Dielectric Parameters		
			ρ	σ (S/m)	Simulated Tissue Temperature(° C)
850	Head	Measured, 2010-12-28	43	0.878	21.7
		Recommended Limits	39.62-43.79	0.86-0.96	20-24
850	Body	Measured, 2010-12-31	54.7	0.991	21.7
		Recommended Limits	51.49-56.91	0.93-1.03	20-24
1750	Head	Measured, 2010-12-30	39.8	1.37	21.7
		Recommended Limits	37.81-41.79	1.26-1.4	20-24
1750	Body	Measured, 2010-12-31	53.3	1.47	21.7
		Recommended Limits	51.4-56.81	1.36-1.50	20-24
1900	Head	Measured, 2010-12-29	39	1.43	21.7
		Recommended Limits	38.48-42.53	1.34-1.48	20-24
1900	Body	Measured, 2010-12-31	53.2	1.58	21.7
		Recommended Limits	52.06-57.54	1.45-1.61	20-24
2450	Body	Measured, 2011-02-14	52.1	1.99	21.7
		Recommended Limits	51.49-56.91	1.91-2.11	20-24

Table 2. Dielectric Parameters of Tissue Simulant Fluid

The composition of the brain tissue simulating liquid:

Ingredient	850MHz (Head)	850MHz (Body)	1750MHz (Head)	1750MHz (Body)	1900MHz (Head)	1900MHz (Body)	2450MHz (Body)
DGMBE	X	X	444.52 g	300.67 g	444.52 g	300.67g	301.7ml
Water	532.98 g	631.68 g	552.42 g	716.56 g	552.42 g	716.56 g	698.3ml
Salt	18.3 g	11.72 g	3.06 g	4.0 g	3.06 g	4.0 g	X
Preventol D-7	2.4 g	1.2 g	X	X	X	X	X
Cellulose	3.2 g	X	X	X	X	X	X
Sugar	766.0 g	600 g	X	X	X	X	X
Total amount	1 L (1.0kg)	1 L (1.0kg)	1 L (1.0kg)	1 L (1.0kg)	1 L (1.0kg)	1 L (1.0kg)	1 L (1.0kg)

Table 3. Recipes for tissue simulating liquid

1.12 Test Standards and Limits

According to FCC 47CFR §2.1093(d) The limits to be used for evaluation are based generally on criteria published by the American National Standards Institute (ANSI) for localized specific absorption rate (“SAR”) in Section 4.2 of “IEEE Standard for Safety Levels with Respect to Human Exposure to Radio Frequency Electromagnetic Fields, 3 kHz to 300 GHz,” ANSI/IEEE C95.1–1992, Copyright 1992 by the Institute of Electrical and Electronics Engineers, Inc., New York, New York 10017.

These criteria for SAR evaluation are similar to those recommended by the National Council on Radiation Protection and Measurements (NCRP) in “Biological Effects and Exposure Criteria for Radio frequency Electromagnetic Fields,” NCRP Report No. 86, Section 17.4.5. Copyright NCRP, 1986, Bethesda, Maryland 20814. SAR is a measure of the rate of energy absorption due to exposure to an RF transmitting source. SAR values have been related to threshold levels for potential biological hazards. The criteria to be used are specified in paragraphs (d)(1) and (d)(2) of this section and shall apply for portable devices transmitting in the frequency range from 100 kHz to 6 GHz. Portable devices that transmit at frequencies above 6 GHz are to be evaluated in terms of the MPE limits specified in § 1.1310 of this chapter.

Measurements and calculations to demonstrate compliance with MPE field strength or power density limits for devices operating above 6 GHz should be made at a minimum distance of 5 cm from the radiating source.

(1) Limits for Occupational/Controlled exposure: 0.4 W/kg as averaged over the whole-body and spatial peak SAR not exceeding 8 W/kg as averaged over any 1 gram of tissue (defined as a tissue volume in the shape of a cube). Exceptions are the hands, wrists, feet and ankles where the spatial peak SAR shall not exceed 20 W/kg, as averaged over an 10 grams of tissue (defined as a tissue volume in the shape of a cube). Occupational/Controlled limits apply when persons are exposed as a consequence of their employment provided these persons are fully aware of and exercise control over their exposure. Awareness of exposure can be accomplished by use of warning labels or by specific training or education through appropriate means, such as an RF safety program in a work environment.

(2) Limits for General Population/Uncontrolled exposure: 0.08 W/kg as averaged over

the whole-body and spatial peak SAR not exceeding 1.6 W/kg as averaged over any 1 gram of tissue (defined as a tissue volume in the shape of a cube).

Exceptions are the hands, wrists, feet and ankles where the spatial peak SAR shall not exceed 4 W/kg, as averaged over any 10 grams of tissue (defined as a tissue volume in the shape of a cube).

General Population/Uncontrolled limits apply when the general public may be exposed, or when persons that are exposed as a consequence of their employment may not be fully aware of the potential for exposure or do not exercise control over their exposure. Warning labels placed on consumer devices such as cellular telephones will not be sufficient reason to allow these devices to be evaluated subject to limits for occupational/controlled exposure in paragraph (d)(1) of this section.(Table .6)

Human Exposure	Uncontrolled Environment General Population	Controlled Environment Occupational
Spatial Peak SAR (Brain)	1.60 m W/g	8.00 m W/g
Spatial Average SAR (Whole Body)	0.08 m W/g	0.40 m W/g
Spatial Peak SAR (Hands/Feet/Ankle/Wrist)	4.00 m W/g	20.00 m W/g

Table 4. RF exposure limits

Notes:
1. Uncontrolled environments are defined as locations where there is potential exposure of individuals who have no knowledge or control of their potential exposure.
2. Controlled environments are defined as locations where there is potential exposure of individuals who have knowledge of their potential exposure and can exercise control over their exposure.

2. Summary of Results

GSM 850 MHZ

Right Head (Cheek Position)_Slider off						
Frequency	Channel	MHz	Conducted Output Power (Average)	Measured(W/kg) 1g	Amb. Temp[˚C]	Liquid Temp[˚C]
850 MHz	128	824.2	32.20 dBm	0.360	22.1	21.7
	190	836.6	32.20 dBm	0.344	22.1	21.7
	251	848.8	32.20 dBm	0.363	22.1	21.7
Left Head (Cheek Position) _Slider off						
Frequency	Channel	MHz	Conducted Output Power (Average)	Measured(W/kg) 1g	Amb. Temp[˚C]	Liquid Temp[˚C]
850 MHz	128	824.2	32.20 dBm	0.342	22.1	21.7
	190	836.6	32.20 dBm	0.378	22.1	21.7
	251	848.8	32.20 dBm	0.414	22.1	21.7
Right Head (15° Tilt Position) _Slider off						
Frequency	Channel	MHz	Conducted Output Power (Average)	Measured(W/kg) 1g	Amb. Temp[˚C]	Liquid Temp[˚C]
850 MHz	128	824.2	32.20 dBm	0.250	22.1	21.7
	190	836.6	32.20 dBm	0.257	22.1	21.7
	251	848.8	32.20 dBm	0.265	22.1	21.7
Left Head (15° Tilt Position) _Slider off						
Frequency	Channel	MHz	Conducted Output Power (Average)	Measured(W/kg) 1g	Amb. Temp[˚C]	Liquid Temp[˚C]
850 MHz	128	824.2	32.20 dBm	0.240	22.1	21.7
	190	836.6	32.20 dBm	0.241	22.1	21.7
	251	848.8	32.20 dBm	0.252	22.1	21.7

Right Head (Cheek Position)_Slider on						
Frequency	Channel	MHz	Conducted Output Power (Average)	Measured(W/kg) 1g	Amb. Temp[˚C]	Liquid Temp[˚C]
850 MHz	128	824.2	32.20 dBm	0.179	22.1	21.7
	190	836.6	32.20 dBm	0.173	22.1	21.7
	251	848.8	32.20 dBm	0.166	22.1	21.7
Left Head (Cheek Position) _Slider on						
Frequency	Channel	MHz	Conducted Output Power (Average)	Measured(W/kg) 1g	Amb. Temp[˚C]	Liquid Temp[˚C]
850 MHz	128	824.2	32.20 dBm	0.167	22.1	21.7
	190	836.6	32.20 dBm	0.169	22.1	21.7
	251	848.8	32.20 dBm	0.161	22.1	21.7
Right Head (15° Tilt Position) _Slider on						
Frequency	Channel	MHz	Conducted Output Power (Average)	Measured(W/kg) 1g	Amb. Temp[˚C]	Liquid Temp[˚C]
850 MHz	128	824.2	32.20 dBm	0.095	22.1	21.7
	190	836.6	32.20 dBm	0.090	22.1	21.7
	251	848.8	32.20 dBm	0.085	22.1	21.7
Left Head (15° Tilt Position) _Slider on						
Frequency	Channel	MHz	Conducted Output Power (Average)	Measured(W/kg) 1g	Amb. Temp[˚C]	Liquid Temp[˚C]
850 MHz	128	824.2	32.20 dBm	0.097	22.1	21.7
	190	836.6	32.20 dBm	0.094	22.1	21.7
	251	848.8	32.20 dBm	0.091	22.1	21.7
Body worn (testing in GPRS mode)						
Frequency	Channel	MHz	Conducted Output Power (Average)	Measured(W/kg) 1g	Amb. Temp[˚C]	Liquid Temp[˚C]
850 MHz	128	824.2	28.50 dBm	1.12	22.1	21.7
	190	836.6	28.50 dBm	1.1	22.1	21.7
	251	848.8	28.50 dBm	1.02	22.1	21.7

Body worn (testing in GPRS mode)_repeated for EUT front to phantom						
Frequency	Channel	MHz	Conducted Output Power (Average)	Measured(W/kg) 1g	Amb. Temp[˚C]	Liquid Temp[˚C]
850 MHz	128	824.2	28.50 dBm	0.745	22.1	21.7
Body worn (testing in GPRS mode)_repeated with Headset (PCH)						
Frequency	Channel	MHz	Conducted Output Power (Average)	Measured(W/kg) 1g	Amb. Temp[˚C]	Liquid Temp[˚C]
850 MHz	128	824.2	28.50 dBm	0.798	22.1	21.7
Body worn (testing in GPRS mode)_repeated with Headset (Foster)						
Frequency	Channel	MHz	Conducted Output Power (Average)	Measured(W/kg) 1g	Amb. Temp[˚C]	Liquid Temp[˚C]
850 MHz	128	824.2	28.50 dBm	0.709	22.1	21.7
Body worn (testing in GPRS mode)_repeated with Memory card						
Frequency	Channel	MHz	Conducted Output Power (Average)	Measured(W/kg) 1g	Amb. Temp[˚C]	Liquid Temp[˚C]
850 MHz	128	824.2	28.50 dBm	1.08	22.1	21.7
Body worn (testing in EGPRS mode)_repeated with EGPRS mode						
Frequency	Channel	MHz	Conducted Output Power (Average)	Measured(W/kg) 1g	Amb. Temp[˚C]	Liquid Temp[˚C]
850 MHz	128	824.2	28.50 dBm	0.303	22.1	21.7

PCS 1900 MHZ

Right Head (Cheek Position)_Slider off						
Frequency	Channel	MHz	Conducted Output Power (Average)	Measured(W/kg) 1g	Amb. Temp[˚C]	Liquid Temp[˚C]
1900 MHz	512	1850.2	28.90 dBm	0.241	22.1	21.7
	661	1880	29.00 dBm	0.274	22.1	21.7
	810	1909.8	29.00 dBm	0.258	22.1	21.7
Left Head (Cheek Position) _Slider off						
Frequency	Channel	MHz	Conducted Output Power (Average)	Measured(W/kg) 1g	Amb. Temp[˚C]	Liquid Temp[˚C]
1900 MHz	512	1850.2	28.90 dBm	0.155	22.1	21.7
	661	1880	29.00 dBm	0.183	22.1	21.7
	810	1909.8	29.00 dBm	0.191	22.1	21.7
Right Head (15° Tilt Position) _Slider off						
Frequency	Channel	MHz	Conducted Output Power (Average)	Measured(W/kg) 1g	Amb. Temp[˚C]	Liquid Temp[˚C]
1900 MHz	512	1850.2	28.90 dBm	0.104	22.1	21.7
	661	1880	29.00 dBm	0.134	22.1	21.7
	810	1909.8	29.00 dBm	0.130	22.1	21.7
Left Head (15° Tilt Position) _Slider off						
Frequency	Channel	MHz	Conducted Output Power (Average)	Measured(W/kg) 1g	Amb. Temp[˚C]	Liquid Temp[˚C]
1900 MHz	512	1850.2	28.90 dBm	0.141	22.1	21.7
	661	1880	29.00 dBm	0.162	22.1	21.7
	810	1909.8	29.00 dBm	0.147	22.1	21.7

Right Head (Cheek Position)_Slider on						
Frequency	Channel	MHz	Conducted Output Power (Average)	Measured(W/kg) 1g	Amb. Temp[˚C]	Liquid Temp[˚C]
1900 MHz	512	1850.2	28.90 dBm	0.104	22.1	21.7
	661	1880	29.00 dBm	0.107	22.1	21.7
	810	1909.8	29.00 dBm	0.126	22.1	21.7
Left Head (Cheek Position) _Slider on						
Frequency	Channel	MHz	Conducted Output Power (Average)	Measured(W/kg) 1g	Amb. Temp[˚C]	Liquid Temp[˚C]
1900 MHz	512	1850.2	28.90 dBm	0.068	22.1	21.7
	661	1880	29.00 dBm	0.079	22.1	21.7
	810	1909.8	29.00 dBm	0.099	22.1	21.7
Right Head (15° Tilt Position) _Slider on						
Frequency	Channel	MHz	Conducted Output Power (Average)	Measured(W/kg) 1g	Amb. Temp[˚C]	Liquid Temp[˚C]
1900 MHz	512	1850.2	28.90 dBm	0.049	22.1	21.7
	661	1880	29.00 dBm	0.051	22.1	21.7
	810	1909.8	29.00 dBm	0.072	22.1	21.7
Left Head (15° Tilt Position) _Slider on						
Frequency	Channel	MHz	Conducted Output Power (Average)	Measured(W/kg) 1g	Amb. Temp[˚C]	Liquid Temp[˚C]
1900 MHz	512	1850.2	28.90 dBm	0.051	22.1	21.7
	661	1880	29.00 dBm	0.058	22.1	21.7
	810	1909.8	29.00 dBm	0.067	22.1	21.7
Body worn (testing in GPRS mode)						
Frequency	Channel	MHz	Conducted Output Power (Average)	Measured(W/kg) 1g	Amb. Temp[˚C]	Liquid Temp[˚C]
1900 MHz	512	1850.2	28.60 dBm	0.382	22.1	21.7
	661	1880	28.70 dBm	0.517	22.1	21.7
	810	1909.8	28.80 dBm	0.644	22.1	21.7

WCDMA B4

Right Head (Cheek Position)_Slider off						
Frequency	Channel	MHz	Conducted Output Power (Average)	Measured(W/kg) 1g	Amb. Temp[˚C]	Liquid Temp[˚C]
1750 MHz	1312	1712.4	23.30 dBm	0.642	22.1	21.7
	1412	1732.4	23.20 dBm	0.631	22.1	21.7
	1513	1752.6	23.10 dBm	0.721	22.1	21.7
Left Head (Cheek Position) _Slider off						
Frequency	Channel	MHz	Conducted Output Power (Average)	Measured(W/kg) 1g	Amb. Temp[˚C]	Liquid Temp[˚C]
1750 MHz	1312	1712.4	23.30 dBm	0.482	22.1	21.7
	1412	1732.4	23.20 dBm	0.426	22.1	21.7
	1513	1752.6	23.10 dBm	0.515	22.1	21.7
Right Head (15° Tilt Position) _Slider off						
Frequency	Channel	MHz	Conducted Output Power (Average)	Measured(W/kg) 1g	Amb. Temp[˚C]	Liquid Temp[˚C]
1750 MHz	1312	1712.4	23.30 dBm	0.290	22.1	21.7
	1412	1732.4	23.20 dBm	0.329	22.1	21.7
	1513	1752.6	23.10 dBm	0.440	22.1	21.7
Left Head (15° Tilt Position) _Slider off						
Frequency	Channel	MHz	Conducted Output Power (Average)	Measured(W/kg) 1g	Amb. Temp[˚C]	Liquid Temp[˚C]
1750 MHz	1312	1712.4	23.30 dBm	0.445	22.1	21.7
	1412	1732.4	23.20 dBm	0.389	22.1	21.7
	1513	1752.6	23.10 dBm	0.329	22.1	21.7
Left Head (Cheek Position) _Slider off_repeated with Memory card						
Frequency	Channel	MHz	Conducted Output Power (Average)	Measured(W/kg) 1g	Amb. Temp[˚C]	Liquid Temp[˚C]
1750 MHz	1513	1752.6	23.10 dBm	0.809	22.1	21.7

Right Head (Cheek Position)_Slider on						
Frequency	Channel	MHz	Conducted Output Power (Average)	Measured(W/kg) 1g	Amb. Temp[˚C]	Liquid Temp[˚C]
1750 MHz	1312	1712.4	23.30 dBm	0.327	22.1	21.7
	1412	1732.4	23.20 dBm	0.359	22.1	21.7
	1513	1752.6	23.10 dBm	0.337	22.1	21.7
Left Head (Cheek Position) _Slider on						
Frequency	Channel	MHz	Conducted Output Power (Average)	Measured(W/kg) 1g	Amb. Temp[˚C]	Liquid Temp[˚C]
1750 MHz	1312	1712.4	23.30 dBm	0.229	22.1	21.7
	1412	1732.4	23.20 dBm	0.229	22.1	21.7
	1513	1752.6	23.10 dBm	0.205	22.1	21.7
Right Head (15° Tilt Position) _Slider on						
Frequency	Channel	MHz	Conducted Output Power (Average)	Measured(W/kg) 1g	Amb. Temp[˚C]	Liquid Temp[˚C]
1750 MHz	1312	1712.4	23.30 dBm	0.191	22.1	21.7
	1412	1732.4	23.20 dBm	0.193	22.1	21.7
	1513	1752.6	23.10 dBm	0.182	22.1	21.7
Left Head (15° Tilt Position) _Slider on						
Frequency	Channel	MHz	Conducted Output Power (Average)	Measured(W/kg) 1g	Amb. Temp[˚C]	Liquid Temp[˚C]
1750 MHz	1312	1712.4	23.30 dBm	0.216	22.1	21.7
	1412	1732.4	23.20 dBm	0.226	22.1	21.7
	1513	1752.6	23.10 dBm	0.227	22.1	21.7
Body worn (testing in R99 mode)						
Frequency	Channel	MHz	Conducted Output Power (Average)	Measured(W/kg) 1g	Amb. Temp[˚C]	Liquid Temp[˚C]
1750 MHz	1312	1712.4	23.30 dBm	0.833	22.1	21.7
	1412	1732.4	23.20 dBm	0.654	22.1	21.7
	1513	1752.6	23.10 dBm	0.752	22.1	21.7

WLAN802.11 b

Body worn						
Frequency	Channel	MHz	Conducted Output Power (Average)	Measured(W/kg) 1g	Amb. Temp[˚C]	Liquid Temp[˚C]
2450 MHz	1	2412	13.74 dBm	0.13	22.1	21.7
	6	2437	14.04 dBm	0.122	22.1	21.7
	11	2462	14.92 dBm	0.108	22.1	21.7
Body worn- repeated for EUT front to phantom						
Frequency	Channel	MHz	Conducted Output Power (Average)	Measured(W/kg) 1g	Amb. Temp[˚C]	Liquid Temp[˚C]
2450 MHz	1	2412	13.74 dBm	0.022	22.1	21.7
Body worn-repeated with Memory card						
Frequency	Channel	MHz	Conducted Output Power (Average)	Measured(W/kg) 1g	Amb. Temp[˚C]	Liquid Temp[˚C]
2450 MHz	1	2412	13.74 dBm	0.108	22.1	21.7
Body worn-repeated with Headset (Foster)						
Frequency	Channel	MHz	Conducted Output Power (Average)	Measured(W/kg) 1g	Amb. Temp[˚C]	Liquid Temp[˚C]
2450 MHz	1	2412	13.74 dBm	0.090	22.1	21.7
Body worn-repeated with Headset(PCH)						
Frequency	Channel	MHz	Conducted Output Power (Average)	Measured(W/kg) 1g	Amb. Temp[˚C]	Liquid Temp[˚C]
2450 MHz	1	2412	13.74 dBm	0.086	22.1	21.7

WLAN 802.11 g

Body worn						
Frequency	Channel	MHz	Conducted Output Power (Average)	Measured(W/kg) 1g	Amb. Temp[˚C]	Liquid Temp[˚C]
2450 MHz	1	2412	9.54 dBm	0.096	22.1	21.7
	6	2437	9.93 dBm	0.095	22.1	21.7
	11	2462	10.53 dBm	0.077	22.1	21.7

3. Instruments List

Manufacturer	Device	Type	Serial number	Date of last calibration
Schmid & Partner Engineering AG	Dosimetric E-Field Probe	ES3DV3	3712	May.21.2010
Schmid & Partner Engineering AG	850 /1750/1900 /2450 MHz System Validation Dipole	D835V2	4d063	May.21.2010
		D1750V2	1008	May.26.2010
		D1900V2	5d027	Apr.28.2010
		D2450V2	727	Apr.29.2010
Schmid & Partner Engineering AG	Data acquisition Electronics	DAE4	547	Aug.18.2010
Schmid & Partner Engineering AG	Software	DASY 4 V4.7 Build 80	N/A	Calibration not required
Schmid & Partner Engineering AG	Phantom	SAM	N/A	Calibration not required
HP	Network Analyzer	8753D	3410A05662	Mar.30.2010
HP	Dielectric Probe Kit	85070D	US01440168	Calibration not required
Agilent	Dual-directional coupler	778D	50313	Aug.25.2010
		777D	50114	Aug.25.2010
Agilent	RF Signal Generator	8648D	3847M00432	Jun.04.2010
Agilent	Power Sensor	U2001B	MY48100169	Apr.30.2010
R&S	Radio Communication Test	CMU200	113505	Mar.25.2010

4. Measurements

Date: 2010/12/28

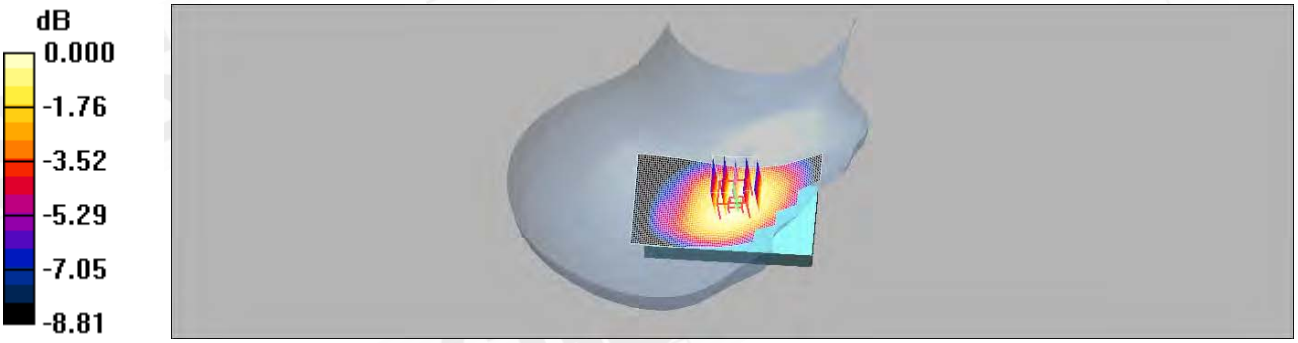
Re Cheek_CH128_Slider off

DUT: V02S002;

Communication System: GSM 850; Frequency: 824.2 MHz;Duty Cycle: 1:8.3
Medium: Head 900 MHz Medium parameters used (interpolated): f = 824.2 MHz; σ = 0.865 mho/m; ε_r = 43.2; ρ = 1000 kg/m^3
Phantom section: Right Section

- Probe: ES3DV3 - SN3172; ConvF(5.85, 5.85, 5.85); Calibrated: 2010/5/21
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn547; Calibrated: 2010/8/18
- Phantom: SAM1; Type: SAM 4.0; Serial: TP:1419
- Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 186

RE Cheek/Area Scan (51x91x1): Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (interpolated) = 0.356 mW/g
RE Cheek/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 9.18 V/m; Power Drift = -0.042 dB
Peak SAR (extrapolated) = 0.440 W/kg
SAR(1 g) = 0.360 mW/g; SAR(10 g) = 0.278 mW/g
Maximum value of SAR (measured) = 0.376 mW/g



0 dB = 0.376mW/g

Re Cheek_CH190_Slider off

DUT: V02S002;

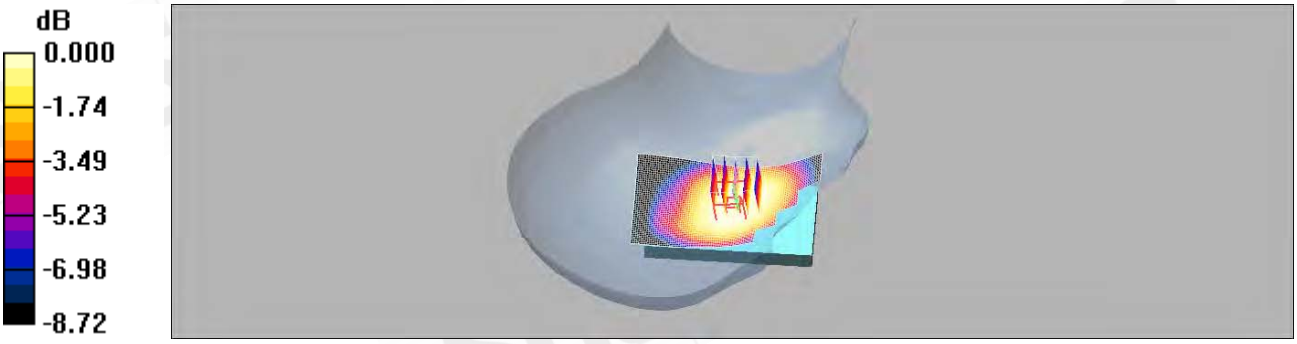
Communication System: GSM 850; Frequency: 836.6 MHz;Duty Cycle: 1:8.3
Medium: Head 900 MHz Medium parameters used: f = 837 MHz; σ = 0.88 mho/m; ε_r = 43.1; ρ = 1000 kg/m^3
Phantom section: Right Section

DASY4 Configuration:

- Probe: ES3DV3 - SN3172; ConvF(5.85, 5.85, 5.85); Calibrated: 2010/5/21
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn547; Calibrated: 2010/8/18
- Phantom: SAM1; Type: SAM 4.0; Serial: TP:1419
- Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 186

RE Cheek/Area Scan (51x91x1): Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (interpolated) = 0.394 mW/g

RE Cheek/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 9.12 V/m; Power Drift = 0.187 dB
Peak SAR (extrapolated) = 0.416 W/kg
SAR(1 g) = 0.344 mW/g; SAR(10 g) = 0.268 mW/g
Maximum value of SAR (measured) = 0.355 mW/g



0 dB = 0.355mW/g

Re Cheek_CH251_Slider off

DUT: V02S002;

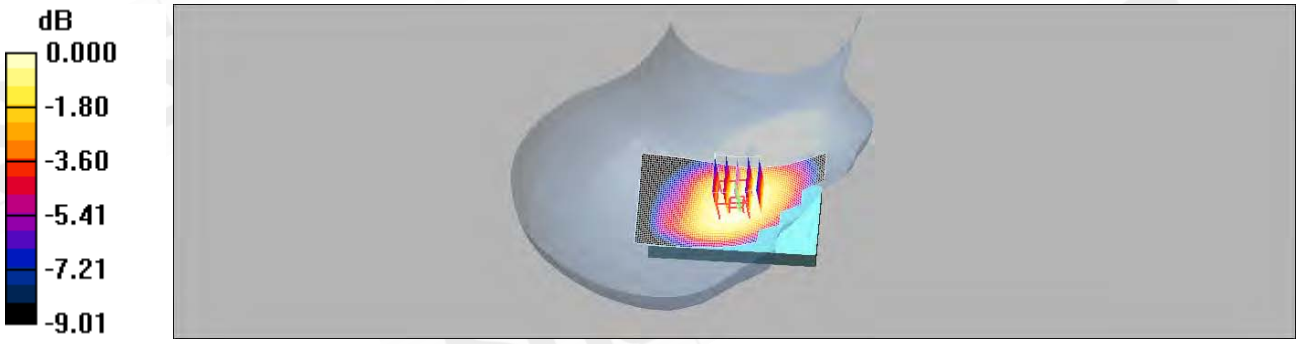
Communication System: GSM 850; Frequency: 848.8 MHz;Duty Cycle: 1:8.3
Medium: Head 900 MHz Medium parameters used: f = 849 MHz; σ = 0.891 mho/m; ε_r = 42.9; ρ = 1000 kg/m^3
Phantom section: Right Section

DASY4 Configuration:

- Probe: ES3DV3 - SN3172; ConvF(5.85, 5.85, 5.85); Calibrated: 2010/5/21
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn547; Calibrated: 2010/8/18
- Phantom: SAM1; Type: SAM 4.0; Serial: TP:1419
- Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 186

RE Cheek/Area Scan (51x91x1): Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (interpolated) = 0.378 mW/g

RE Cheek/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 9.48 V/m; Power Drift = 0.098 dB
Peak SAR (extrapolated) = 0.436 W/kg
SAR(1 g) = 0.363 mW/g; SAR(10 g) = 0.282 mW/g
Maximum value of SAR (measured) = 0.376 mW/g



0 dB = 0.376mW/g

Le Cheek_CH128_Slider off

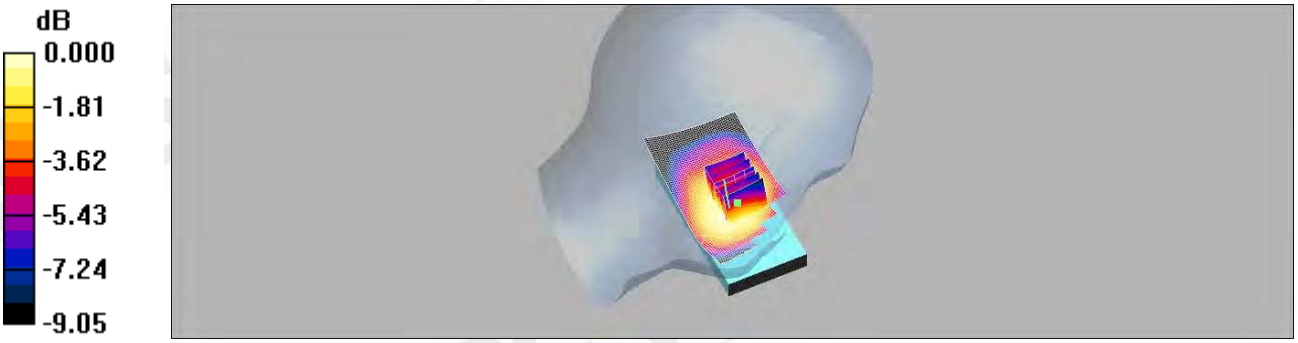
DUT: V02S002;

Communication System: GSM 850; Frequency: 824.2 MHz;Duty Cycle: 1:8.3
Medium: Head 900 MHz Medium parameters used (interpolated): f = 824.2 MHz; σ = 0.865 mho/m; ε_r = 43.2; ρ = 1000 kg/m^3
Phantom section: Left Section

DASY4 Configuration:

- Probe: ES3DV3 - SN3172; ConvF(5.85, 5.85, 5.85); Calibrated: 2010/5/21
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn547; Calibrated: 2010/8/18
- Phantom: SAM1; Type: SAM 4.0; Serial: TP:1419
- Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 186

LE Cheek/Area Scan (51x91x1): Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (interpolated) = 0.349 mW/g
LE Cheek/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 9.56 V/m; Power Drift = 0.018 dB
Peak SAR (extrapolated) = 0.424 W/kg
SAR(1 g) = 0.342 mW/g; SAR(10 g) = 0.260 mW/g
Maximum value of SAR (measured) = 0.359 mW/g



0 dB = 0.359mW/g

Le Cheek_CH190_Slider off

DUT: V02S002;

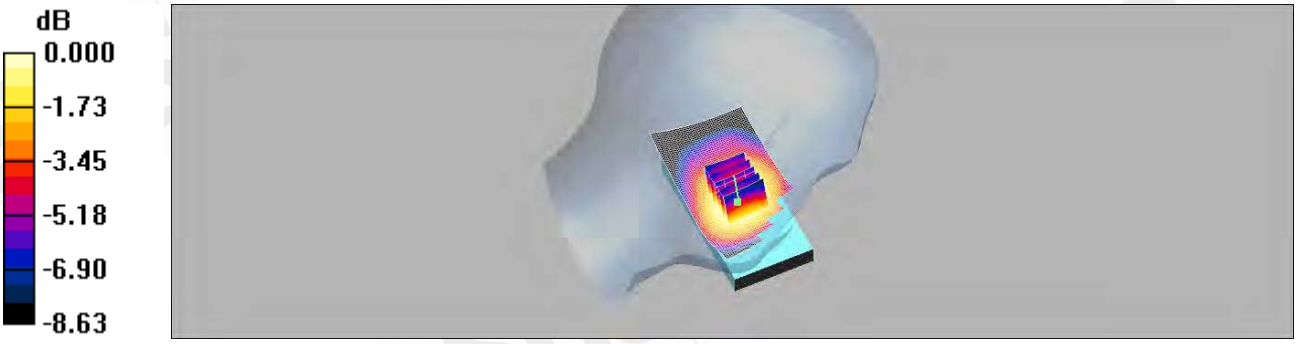
Communication System: GSM 850; Frequency: 836.6 MHz;Duty Cycle: 1:8.3
Medium: Head 900 MHz Medium parameters used: f = 837 MHz; σ = 0.88 mho/m; ε_r = 43.1; ρ = 1000 kg/m^3
Phantom section: Left Section

DASY4 Configuration:

- Probe: ES3DV3 - SN3172; ConvF(5.85, 5.85, 5.85); Calibrated: 2010/5/21
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn547; Calibrated: 2010/8/18
- Phantom: SAM1; Type: SAM 4.0; Serial: TP:1419
- Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 186

LE Cheek/Area Scan (51x91x1): Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (interpolated) = 0.388 mW/g

LE Cheek/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 9.56 V/m; Power Drift = -0.185 dB
Peak SAR (extrapolated) = 0.478 W/kg
SAR(1 g) = 0.378 mW/g; SAR(10 g) = 0.286 mW/g
Maximum value of SAR (measured) = 0.397 mW/g



0 dB = 0.397mW/g

Le Cheek_CH251_Slider off

DUT: V02S002;

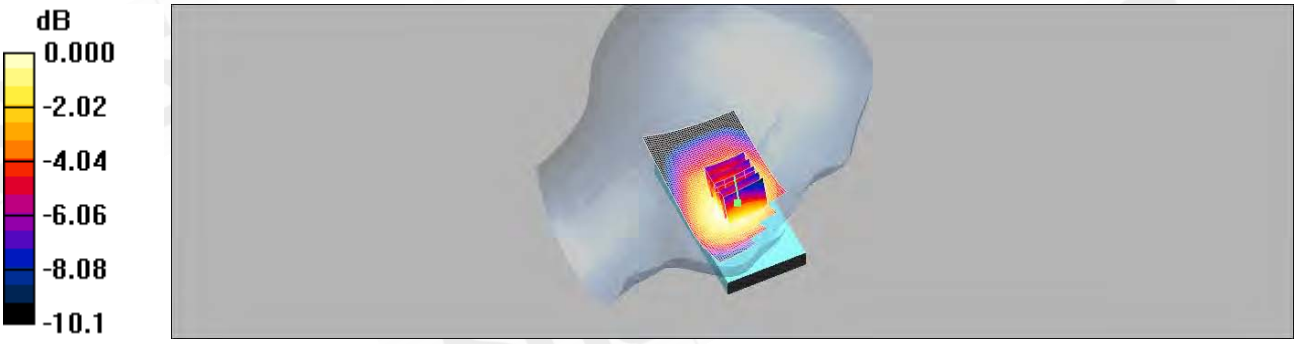
Communication System: GSM 850; Frequency: 848.8 MHz;Duty Cycle: 1:8.3
Medium: Head 900 MHz Medium parameters used: f = 849 MHz; σ = 0.891 mho/m; ε_r = 42.9; ρ = 1000 kg/m^3
Phantom section: Left Section

DASY4 Configuration:

- Probe: ES3DV3 - SN3172; ConvF(5.85, 5.85, 5.85); Calibrated: 2010/5/21
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn547; Calibrated: 2010/8/18
- Phantom: SAM1; Type: SAM 4.0; Serial: TP:1419
- Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 186

LE Cheek/Area Scan (51x91x1): Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (interpolated) = 0.436 mW/g

LE Cheek/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 9.71 V/m; Power Drift = 0.041 dB
Peak SAR (extrapolated) = 0.526 W/kg
SAR(1 g) = 0.414 mW/g; SAR(10 g) = 0.317 mW/g
Maximum value of SAR (measured) = 0.437 mW/g



0 dB = 0.437mW/g

Re Tilt_CH128_Slider off

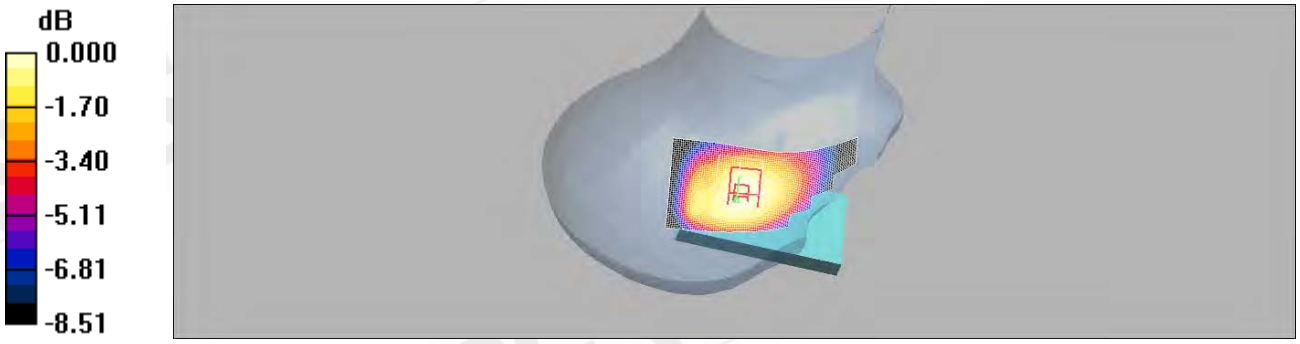
DUT: V02S002;

Communication System: GSM 850; Frequency: 824.2 MHz;Duty Cycle: 1:8.3
Medium: Head 900 MHz Medium parameters used (interpolated): f = 824.2 MHz; σ = 0.865 mho/m; ε_r = 43.2; ρ = 1000 kg/m^3
Phantom section: Right Section

DASY4 Configuration:

- Probe: ES3DV3 - SN3172; ConvF(5.85, 5.85, 5.85); Calibrated: 2010/5/21
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn547; Calibrated: 2010/8/18
- Phantom: SAM1; Type: SAM 4.0; Serial: TP:1419
- Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 186

RE Tilt/Area Scan (51x91x1): Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (interpolated) = 0.258 mW/g
RE Tilt/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 12.7 V/m; Power Drift = -0.024 dB
Peak SAR (extrapolated) = 0.315 W/kg
SAR(1 g) = 0.250 mW/g; SAR(10 g) = 0.192 mW/g
Maximum value of SAR (measured) = 0.260 mW/g



0 dB = 0.260mW/g

Re Tilt_CH190_Slider off

DUT: V02S002;

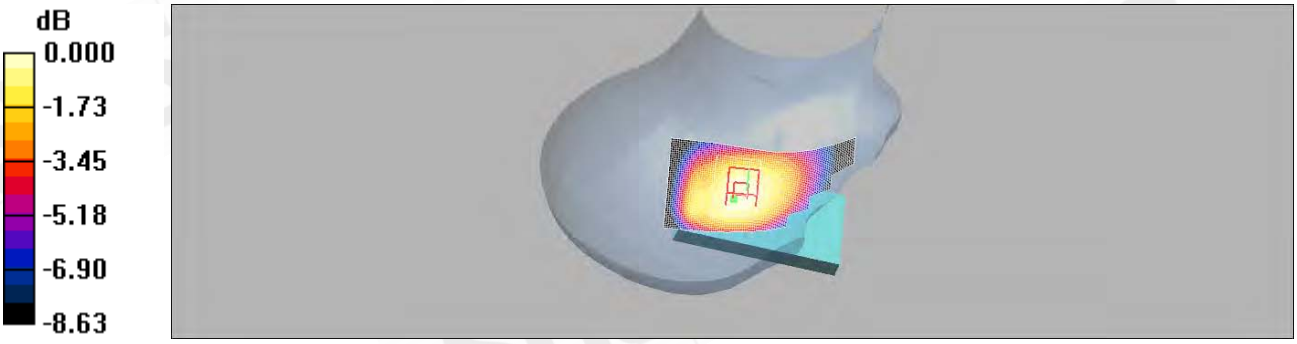
Communication System: GSM 850; Frequency: 836.6 MHz;Duty Cycle: 1:8.3
Medium: Head 900 MHz Medium parameters used: f = 837 MHz; σ = 0.88 mho/m; ε_r = 43.1; ρ = 1000 kg/m^3
Phantom section: Right Section

DASY4 Configuration:

- Probe: ES3DV3 - SN3172; ConvF(5.85, 5.85, 5.85); Calibrated: 2010/5/21
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn547; Calibrated: 2010/8/18
- Phantom: SAM1; Type: SAM 4.0; Serial: TP:1419
- Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 186

RE Tilt/Area Scan (51x91x1): Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (interpolated) = 0.265 mW/g

RE Tilt/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 12.5 V/m; Power Drift = -0.005 dB
Peak SAR (extrapolated) = 0.322 W/kg
SAR(1 g) = 0.257 mW/g; SAR(10 g) = 0.197 mW/g
Maximum value of SAR (measured) = 0.266 mW/g



0 dB = 0.266mW/g

Re Tilt_CH251_Slider off

DUT: V02S002;

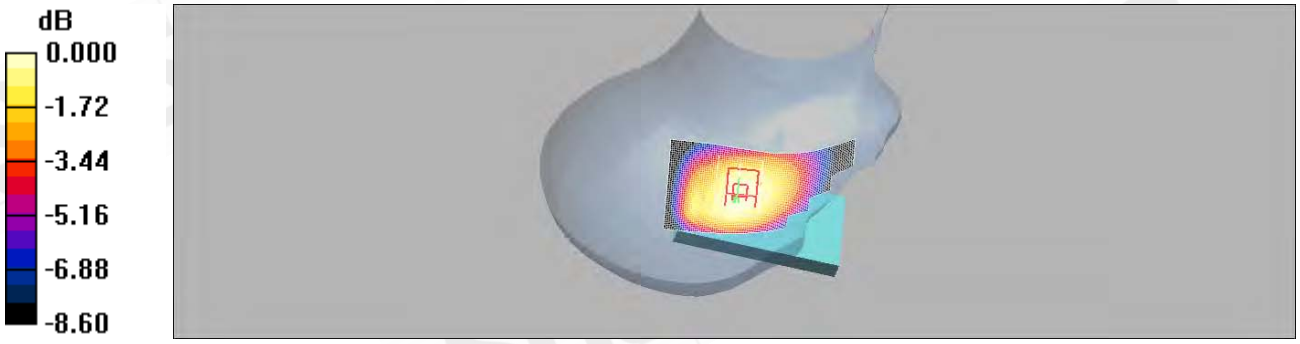
Communication System: GSM 850; Frequency: 848.8 MHz;Duty Cycle: 1:8.3
Medium: Head 900 MHz Medium parameters used: f = 849 MHz; σ = 0.891 mho/m; ε_r = 42.9; ρ = 1000 kg/m^3
Phantom section: Right Section

DASY4 Configuration:

- Probe: ES3DV3 - SN3172; ConvF(5.85, 5.85, 5.85); Calibrated: 2010/5/21
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn547; Calibrated: 2010/8/18
- Phantom: SAM1; Type: SAM 4.0; Serial: TP:1419
- Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 186

RE Tilt/Area Scan (51x91x1): Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (interpolated) = 0.272 mW/g

RE Tilt/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 12.4 V/m; Power Drift = 0.008 dB
Peak SAR (extrapolated) = 0.332 W/kg
SAR(1 g) = 0.265 mW/g; SAR(10 g) = 0.201 mW/g
Maximum value of SAR (measured) = 0.275 mW/g



0 dB = 0.275mW/g

Le Tilt_CH128_Slider off

DUT: V02S002;

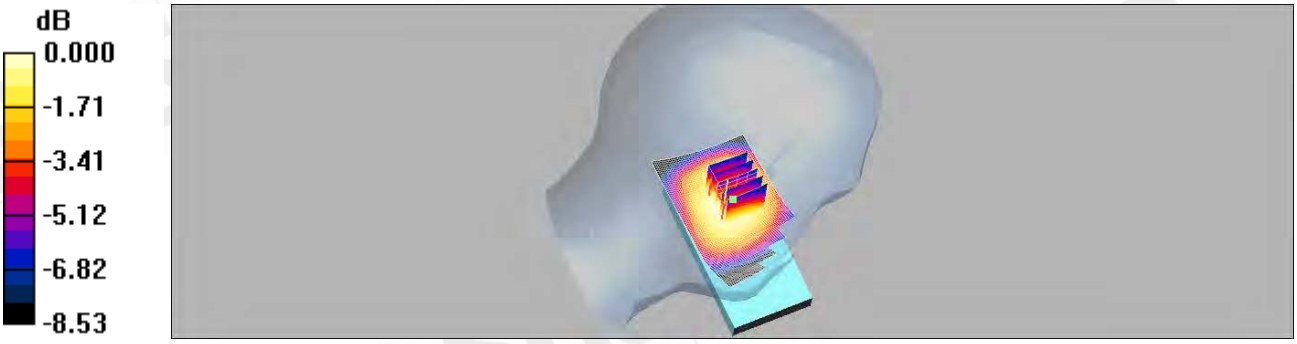
Communication System: GSM 850; Frequency: 824.2 MHz;Duty Cycle: 1:8.3
Medium: Head 900 MHz Medium parameters used (interpolated): f = 824.2 MHz; σ = 0.865 mho/m; ε_r = 43.2; ρ = 1000 kg/m^3
Phantom section: Left Section

DASY4 Configuration:

- Probe: ES3DV3 - SN3172; ConvF(5.85, 5.85, 5.85); Calibrated: 2010/5/21
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn547; Calibrated: 2010/8/18
- Phantom: SAM1; Type: SAM 4.0; Serial: TP:1419
- Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 186

Le Titl/Area Scan (51x91x1): Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (interpolated) = 0.251 mW/g

Le Titl/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 13.2 V/m; Power Drift = -0.020 dB
Peak SAR (extrapolated) = 0.311 W/kg
SAR(1 g) = 0.240 mW/g; SAR(10 g) = 0.181 mW/g
Maximum value of SAR (measured) = 0.250 mW/g



0 dB = 0.250mW/g

Le Tilt_CH190_Slider off

DUT: V02S002;

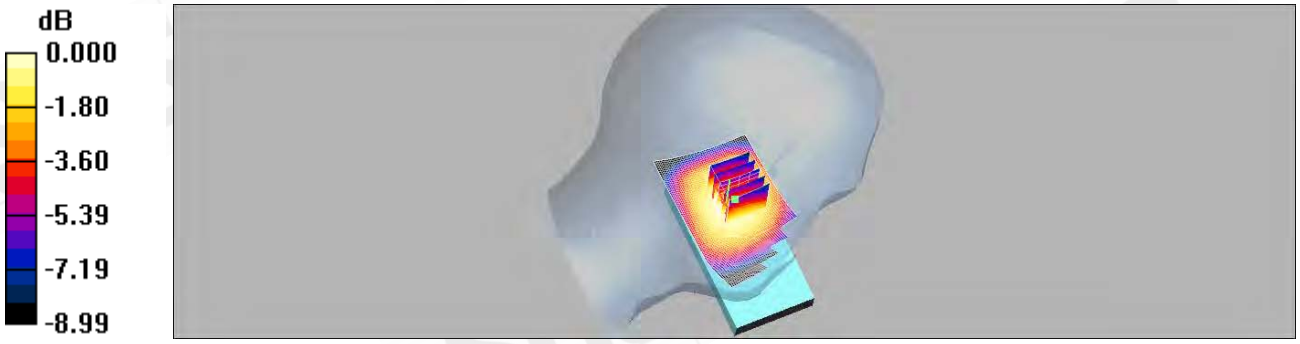
Communication System: GSM 850; Frequency: 836.6 MHz;Duty Cycle: 1:8.3
Medium: Head 900 MHz Medium parameters used: f = 837 MHz; σ = 0.88 mho/m; ε_r = 43.1; ρ = 1000 kg/m^3
Phantom section: Left Section

DASY4 Configuration:

- Probe: ES3DV3 - SN3172; ConvF(5.85, 5.85, 5.85); Calibrated: 2010/5/21
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn547; Calibrated: 2010/8/18
- Phantom: SAM1; Type: SAM 4.0; Serial: TP:1419
- Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 186

Le Titl/Area Scan (51x91x1): Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (interpolated) = 0.260 mW/g

Le Titl/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 13.1 V/m; Power Drift = -0.023 dB
Peak SAR (extrapolated) = 0.302 W/kg
SAR(1 g) = 0.241 mW/g; SAR(10 g) = 0.183 mW/g
Maximum value of SAR (measured) = 0.259 mW/g



0 dB = 0.259mW/g

Le Tilt_CH251_Slider off

DUT: V02S002;

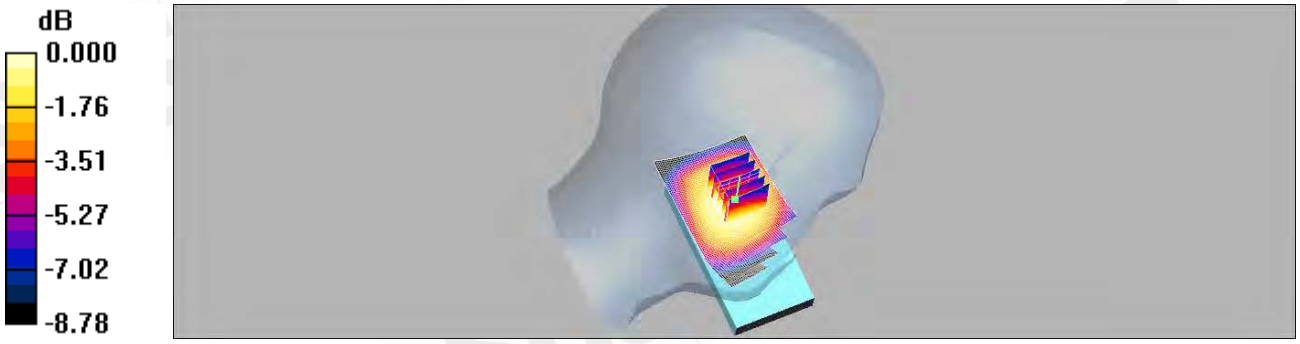
Communication System: GSM 850; Frequency: 848.8 MHz;Duty Cycle: 1:8.3
Medium: Head 900 MHz Medium parameters used: f = 849 MHz; σ = 0.891 mho/m; ε_r = 42.9; ρ = 1000 kg/m^3
Phantom section: Left Section

DASY4 Configuration:

- Probe: ES3DV3 - SN3172; ConvF(5.85, 5.85, 5.85); Calibrated: 2010/5/21
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn547; Calibrated: 2010/8/18
- Phantom: SAM1; Type: SAM 4.0; Serial: TP:1419
- Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 186

Le Titl/Area Scan (51x91x1): Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (interpolated) = 0.265 mW/g

Le Titl/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 12.9 V/m; Power Drift = 0.029 dB
Peak SAR (extrapolated) = 0.321 W/kg
SAR(1 g) = 0.252 mW/g; SAR(10 g) = 0.190 mW/g
Maximum value of SAR (measured) = 0.264 mW/g



0 dB = 0.264mW/g

Re Cheek_CH128_Slider on

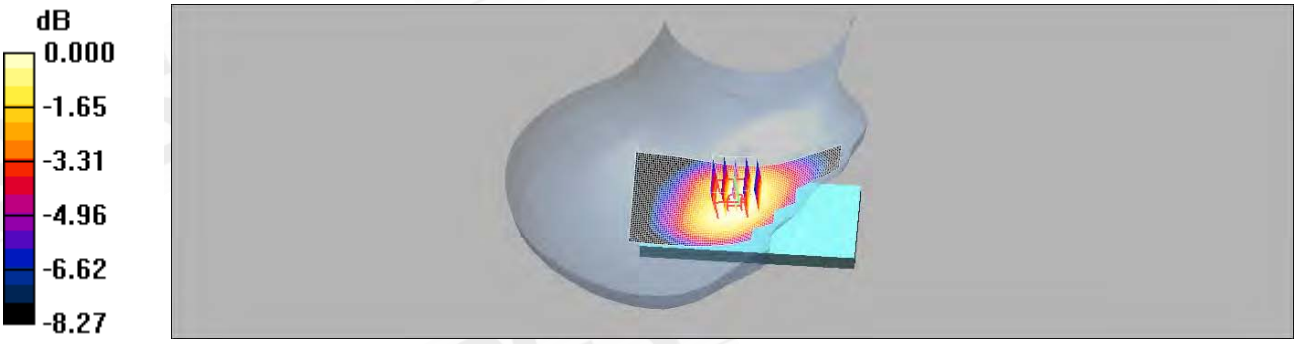
DUT: V02S002;

Communication System: GSM 850; Frequency: 824.2 MHz;Duty Cycle: 1:8.3
Medium: Head 900 MHz Medium parameters used (interpolated): f = 824.2 MHz; σ = 0.865 mho/m; ε_r = 43.2; ρ = 1000 kg/m^3
Phantom section: Right Section

DASY4 Configuration:

- Probe: ES3DV3 - SN3172; ConvF(5.85, 5.85, 5.85); Calibrated: 2010/5/21
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn547; Calibrated: 2010/8/18
- Phantom: SAM1; Type: SAM 4.0; Serial: TP:1419
- Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 186

RE Cheek/Area Scan (51x111x1): Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (interpolated) = 0.187 mW/g
RE Cheek/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 6.32 V/m; Power Drift = -0.021 dB
Peak SAR (extrapolated) = 0.213 W/kg
SAR(1 g) = 0.179 mW/g; SAR(10 g) = 0.139 mW/g
Maximum value of SAR (measured) = 0.186 mW/g



0 dB = 0.186mW/g

Re Cheek_CH190_Slider on

DUT: V02S002;

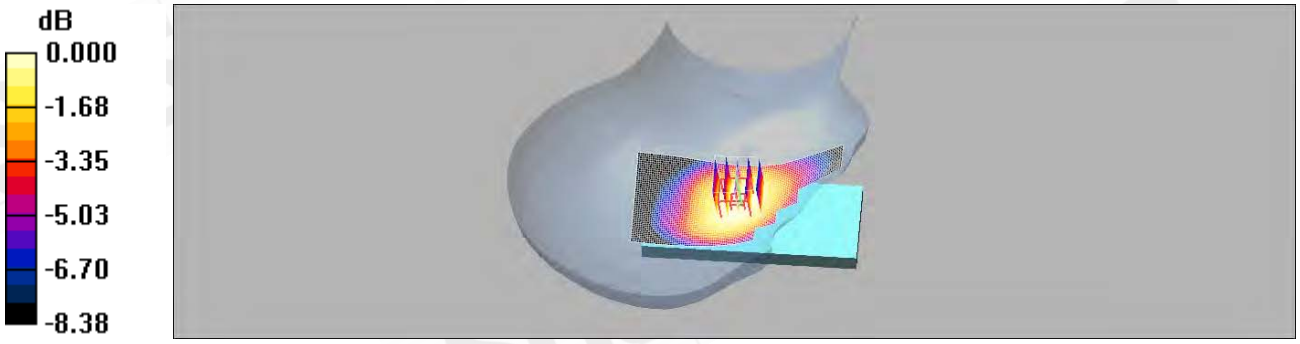
Communication System: GSM 850; Frequency: 836.6 MHz;Duty Cycle: 1:8.3
Medium: Head 900 MHz Medium parameters used: f = 837 MHz; σ = 0.88 mho/m; ε_r = 43.1; ρ = 1000 kg/m^3
Phantom section: Right Section

DASY4 Configuration:

- Probe: ES3DV3 - SN3172; ConvF(5.85, 5.85, 5.85); Calibrated: 2010/5/21
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn547; Calibrated: 2010/8/18
- Phantom: SAM1; Type: SAM 4.0; Serial: TP:1419
- Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 186

RE Cheek/Area Scan (51x111x1): Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (interpolated) = 0.179 mW/g

RE Cheek/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 6.10 V/m; Power Drift = 0.023 dB
Peak SAR (extrapolated) = 0.207 W/kg
SAR(1 g) = 0.173 mW/g; SAR(10 g) = 0.135 mW/g
Maximum value of SAR (measured) = 0.180 mW/g



0 dB = 0.180mW/g

Re Cheek_CH251_Slider on

DUT: V02S002;

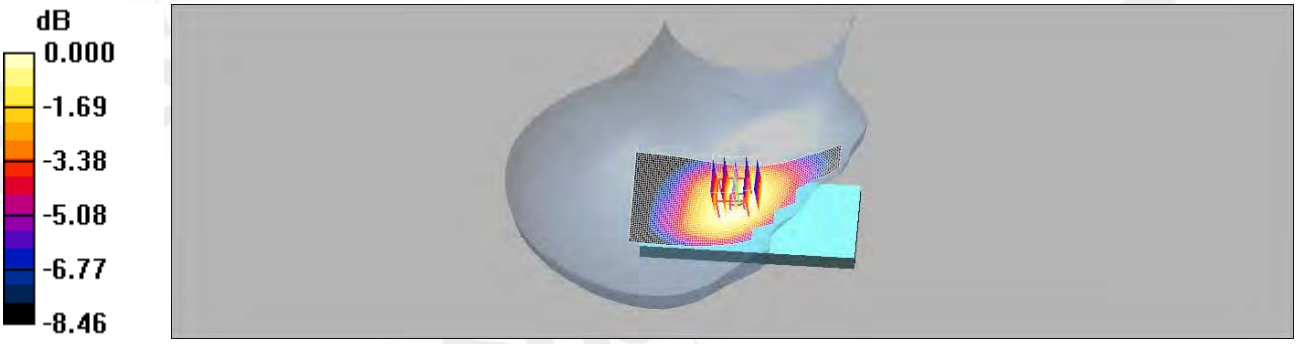
Communication System: GSM 850; Frequency: 848.8 MHz;Duty Cycle: 1:8.3
Medium: Head 900 MHz Medium parameters used: f = 849 MHz; σ = 0.891 mho/m; ε_r = 42.9; ρ = 1000 kg/m^3
Phantom section: Right Section

DASY4 Configuration:

- Probe: ES3DV3 - SN3172; ConvF(5.85, 5.85, 5.85); Calibrated: 2010/5/21
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn547; Calibrated: 2010/8/18
- Phantom: SAM1; Type: SAM 4.0; Serial: TP:1419
- Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 186

RE Cheek/Area Scan (51x111x1): Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (interpolated) = 0.173 mW/g

RE Cheek/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 5.90 V/m; Power Drift = 0.050 dB
Peak SAR (extrapolated) = 0.201 W/kg
SAR(1 g) = 0.166 mW/g; SAR(10 g) = 0.128 mW/g
Maximum value of SAR (measured) = 0.176 mW/g



0 dB = 0.176mW/g

Le Cheek_CH128_Slider on

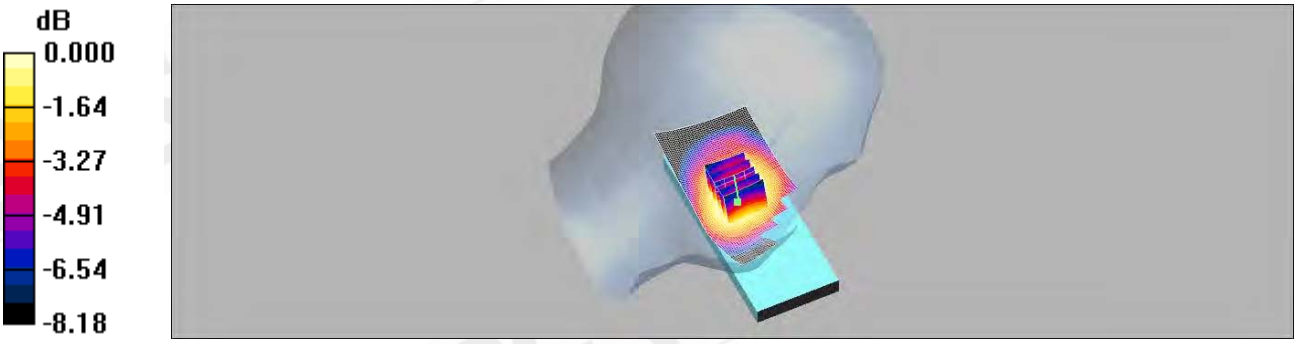
DUT: V02S002;

Communication System: GSM 850; Frequency: 824.2 MHz;Duty Cycle: 1:8.3
Medium: Head 900 MHz Medium parameters used (interpolated): f = 824.2 MHz; σ = 0.865 mho/m; ε_r = 43.2; ρ = 1000 kg/m^3
Phantom section: Left Section

DASY4 Configuration:

- Probe: ES3DV3 - SN3172; ConvF(5.85, 5.85, 5.85); Calibrated: 2010/5/21
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn547; Calibrated: 2010/8/18
- Phantom: SAM1; Type: SAM 4.0; Serial: TP:1419
- Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 186

LE Cheek/Area Scan (51x111x1): Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (interpolated) = 0.176 mW/g
LE Cheek/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 7.16 V/m; Power Drift = -0.003 dB
Peak SAR (extrapolated) = 0.200 W/kg
SAR(1 g) = 0.167 mW/g; SAR(10 g) = 0.129 mW/g
Maximum value of SAR (measured) = 0.176 mW/g



0 dB = 0.176mW/g

Le Cheek_CH190_Slider on

DUT: V02S002;

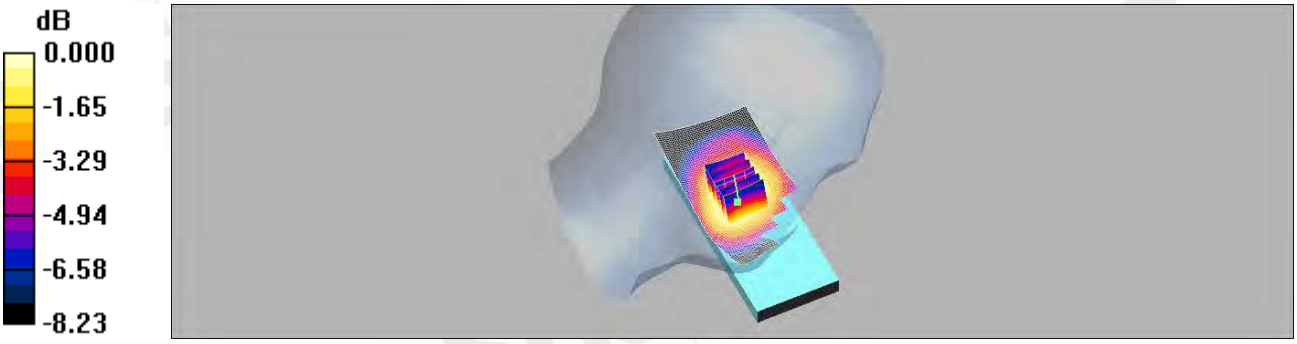
Communication System: GSM 850; Frequency: 836.6 MHz;Duty Cycle: 1:8.3
Medium: Head 900 MHz Medium parameters used: f = 837 MHz; σ = 0.88 mho/m; ε_r = 43.1; ρ = 1000 kg/m^3
Phantom section: Left Section

DASY4 Configuration:

- Probe: ES3DV3 - SN3172; ConvF(5.85, 5.85, 5.85); Calibrated: 2010/5/21
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn547; Calibrated: 2010/8/18
- Phantom: SAM1; Type: SAM 4.0; Serial: TP:1419
- Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 186

LE Cheek/Area Scan (51x111x1): Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (interpolated) = 0.177 mW/g

LE Cheek/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 7.12 V/m; Power Drift = 0.009 dB
Peak SAR (extrapolated) = 0.202 W/kg
SAR(1 g) = 0.169 mW/g; SAR(10 g) = 0.130 mW/g
Maximum value of SAR (measured) = 0.177 mW/g



0 dB = 0.177mW/g

Le Cheek_CH251_Slider on

DUT: V02S002;

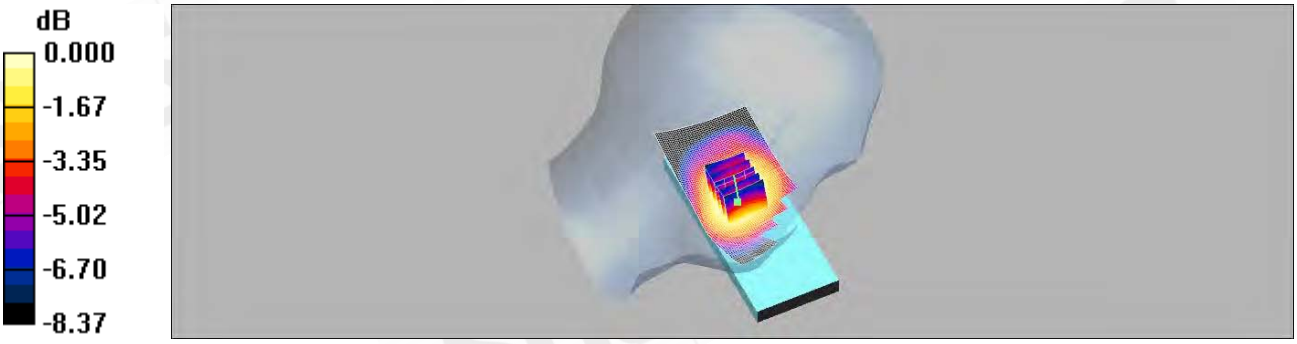
Communication System: GSM 850; Frequency: 848.8 MHz;Duty Cycle: 1:8.3
Medium: Head 900 MHz Medium parameters used: f = 849 MHz; σ = 0.891 mho/m; ε_r = 42.9; ρ = 1000 kg/m^3
Phantom section: Left Section

DASY4 Configuration:

- Probe: ES3DV3 - SN3172; ConvF(5.85, 5.85, 5.85); Calibrated: 2010/5/21
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn547; Calibrated: 2010/8/18
- Phantom: SAM1; Type: SAM 4.0; Serial: TP:1419
- Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 186

LE Cheek/Area Scan (51x111x1): Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (interpolated) = 0.167 mW/g

LE Cheek/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 6.76 V/m; Power Drift = 0.006 dB
Peak SAR (extrapolated) = 0.195 W/kg
SAR(1 g) = 0.161 mW/g; SAR(10 g) = 0.124 mW/g
Maximum value of SAR (measured) = 0.169 mW/g



0 dB = 0.169mW/g

Re Tilt_CH128_Slider on

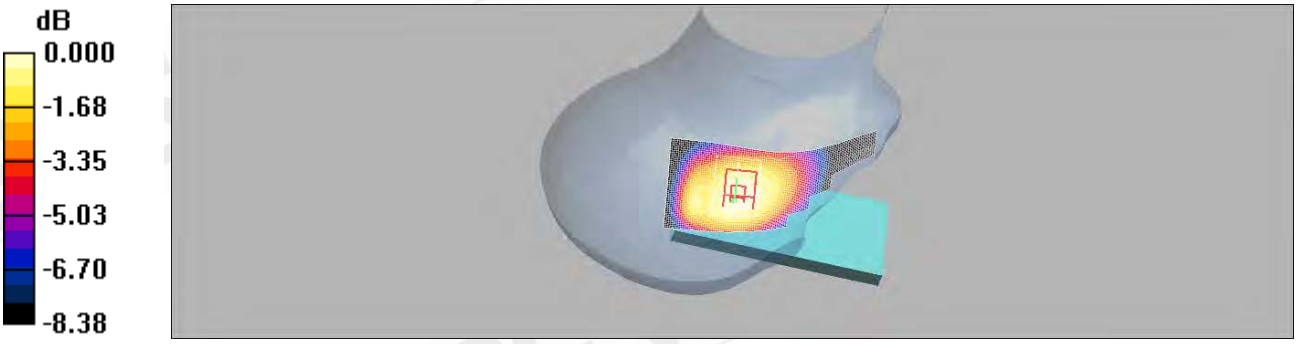
DUT: V02S002;

Communication System: GSM 850; Frequency: 824.2 MHz;Duty Cycle: 1:8.3
Medium: Head 900 MHz Medium parameters used (interpolated): f = 824.2 MHz; σ = 0.865 mho/m; ε_r = 43.2; ρ = 1000 kg/m^3
Phantom section: Right Section

DASY4 Configuration:

- Probe: ES3DV3 - SN3172; ConvF(5.85, 5.85, 5.85); Calibrated: 2010/5/21
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn547; Calibrated: 2010/8/18
- Phantom: SAM1; Type: SAM 4.0; Serial: TP:1419
- Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 186

RE Tilt/Area Scan (51x111x1): Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (interpolated) = 0.100 mW/g
RE Tilt/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 8.28 V/m; Power Drift = -0.082 dB
Peak SAR (extrapolated) = 0.116 W/kg
SAR(1 g) = 0.095 mW/g; SAR(10 g) = 0.074 mW/g
Maximum value of SAR (measured) = 0.099 mW/g



0 dB = 0.099mW/g

Re Tilt_CH190_Slider on

DUT: V02S002;

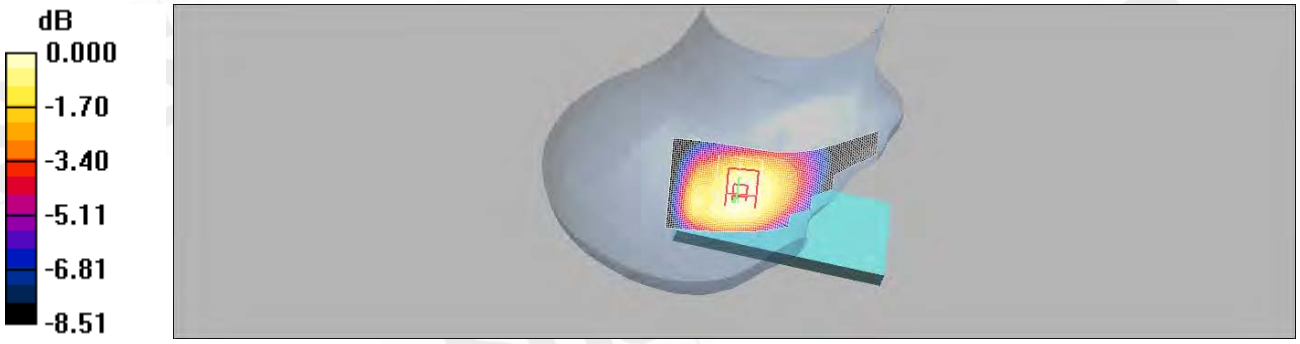
Communication System: GSM 850; Frequency: 836.6 MHz;Duty Cycle: 1:8.3
Medium: Head 900 MHz Medium parameters used: f = 837 MHz; σ = 0.88 mho/m; ε_r = 43.1; ρ = 1000 kg/m^3
Phantom section: Right Section

DASY4 Configuration:

- Probe: ES3DV3 - SN3172; ConvF(5.85, 5.85, 5.85); Calibrated: 2010/5/21
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn547; Calibrated: 2010/8/18
- Phantom: SAM1; Type: SAM 4.0; Serial: TP:1419
- Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 186

RE Tilt/Area Scan (51x111x1): Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (interpolated) = 0.093 mW/g

RE Tilt/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 7.90 V/m; Power Drift = 0.032 dB
Peak SAR (extrapolated) = 0.111 W/kg
SAR(1 g) = 0.090 mW/g; SAR(10 g) = 0.069 mW/g
Maximum value of SAR (measured) = 0.094 mW/g



0 dB = 0.094mW/g

Re Tilt_CH251_Slider on

DUT: V02S002;

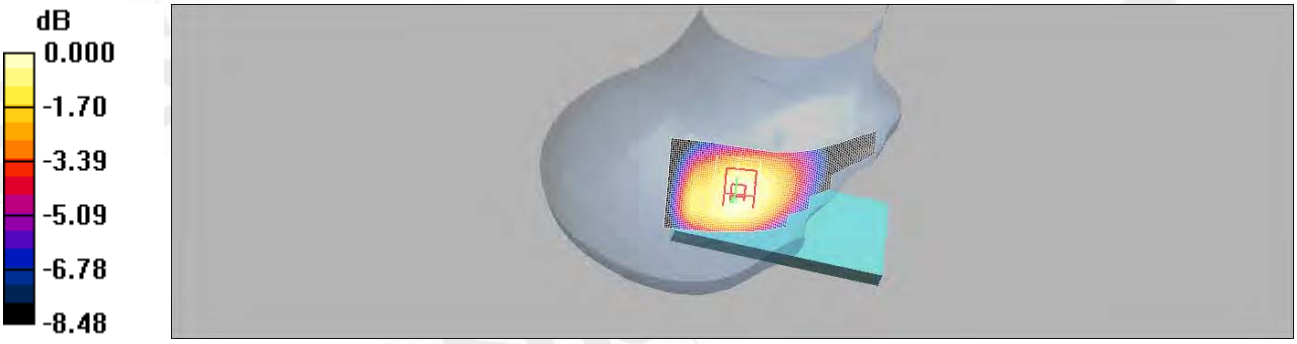
Communication System: GSM 850; Frequency: 848.8 MHz;Duty Cycle: 1:8.3
Medium: Head 900 MHz Medium parameters used: f = 849 MHz; σ = 0.891 mho/m; ε_r = 42.9; ρ = 1000 kg/m^3
Phantom section: Right Section

DASY4 Configuration:

- Probe: ES3DV3 - SN3172; ConvF(5.85, 5.85, 5.85); Calibrated: 2010/5/21
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn547; Calibrated: 2010/8/18
- Phantom: SAM1; Type: SAM 4.0; Serial: TP:1419
- Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 186

RE Tilt/Area Scan (51x111x1): Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (interpolated) = 0.087 mW/g

RE Tilt/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 7.56 V/m; Power Drift = 0.057 dB
Peak SAR (extrapolated) = 0.106 W/kg
SAR(1 g) = 0.085 mW/g; SAR(10 g) = 0.065 mW/g
Maximum value of SAR (measured) = 0.089 mW/g



0 dB = 0.089mW/g

Le Tilt_CH128_Slider on

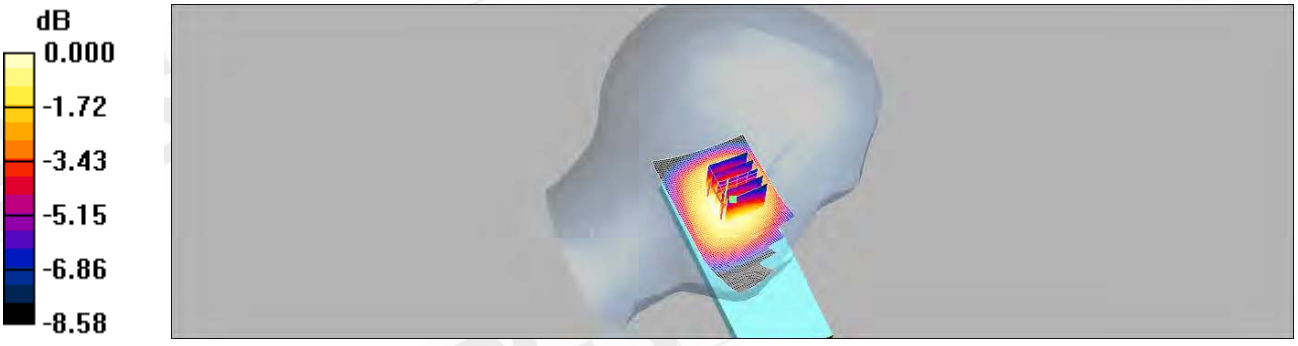
DUT: V02S002;

Communication System: GSM 850; Frequency: 824.2 MHz;Duty Cycle: 1:8.3
Medium: Head 900 MHz Medium parameters used (interpolated): f = 824.2 MHz; σ = 0.865 mho/m; ε_r = 43.2; ρ = 1000 kg/m^3
Phantom section: Left Section

DASY4 Configuration:

- Probe: ES3DV3 - SN3172; ConvF(5.85, 5.85, 5.85); Calibrated: 2010/5/21
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn547; Calibrated: 2010/8/18
- Phantom: SAM1; Type: SAM 4.0; Serial: TP:1419
- Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 186

LE Tilt/Area Scan (51x111x1): Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (interpolated) = 0.102 mW/g
LE Tilt/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 8.70 V/m; Power Drift = -0.027 dB
Peak SAR (extrapolated) = 0.121 W/kg
SAR(1 g) = 0.097 mW/g; SAR(10 g) = 0.075 mW/g
Maximum value of SAR (measured) = 0.102 mW/g



0 dB = 0.102mW/g

Le Tilt_CH190_Slider on

DUT: V02S002;

Communication System: GSM 850; Frequency: 836.6 MHz;Duty Cycle: 1:8.3
Medium: Head 900 MHz Medium parameters used: f = 837 MHz; σ = 0.88 mho/m; ε_r = 43.1; ρ = 1000 kg/m^3
Phantom section: Left Section

DASY4 Configuration:

- Probe: ES3DV3 - SN3172; ConvF(5.85, 5.85, 5.85); Calibrated: 2010/5/21
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn547; Calibrated: 2010/8/18
- Phantom: SAM1; Type: SAM 4.0; Serial: TP:1419
- Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 186

LE Tilt/Area Scan (51x111x1): Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (interpolated) = 0.098 mW/g
LE Tilt/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 8.61 V/m; Power Drift = -0.029 dB
Peak SAR (extrapolated) = 0.119 W/kg
SAR(1 g) = 0.094 mW/g; SAR(10 g) = 0.074 mW/g
Maximum value of SAR (measured) = 0.099 mW/g

0 dB = 0.099mW/g

Le Tilt_CH251_Slider on

DUT: V02S002;

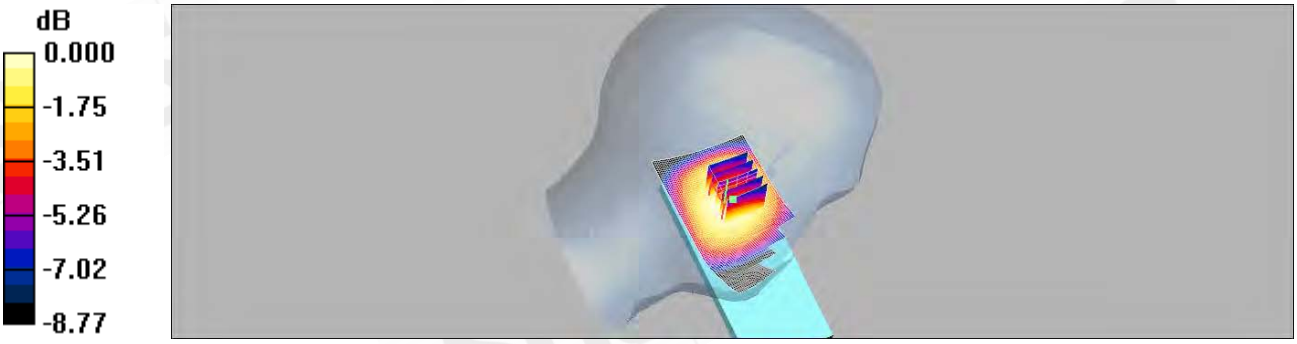
Communication System: GSM 850; Frequency: 848.8 MHz;Duty Cycle: 1:8.3
Medium: Head 900 MHz Medium parameters used: f = 849 MHz; σ = 0.891 mho/m; ε_r = 42.9; ρ = 1000 kg/m^3
Phantom section: Left Section

DASY4 Configuration:

- Probe: ES3DV3 - SN3172; ConvF(5.85, 5.85, 5.85); Calibrated: 2010/5/21
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn547; Calibrated: 2010/8/18
- Phantom: SAM1; Type: SAM 4.0; Serial: TP:1419
- Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 186

LE Tilt/Area Scan (51x111x1): Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (interpolated) = 0.094 mW/g

LE Tilt/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 8.20 V/m; Power Drift = -0.008 dB
Peak SAR (extrapolated) = 0.114 W/kg
SAR(1 g) = 0.091 mW/g; SAR(10 g) = 0.069 mW/g
Maximum value of SAR (measured) = 0.095 mW/g



0 dB = 0.095mW/g

BODY_CH128

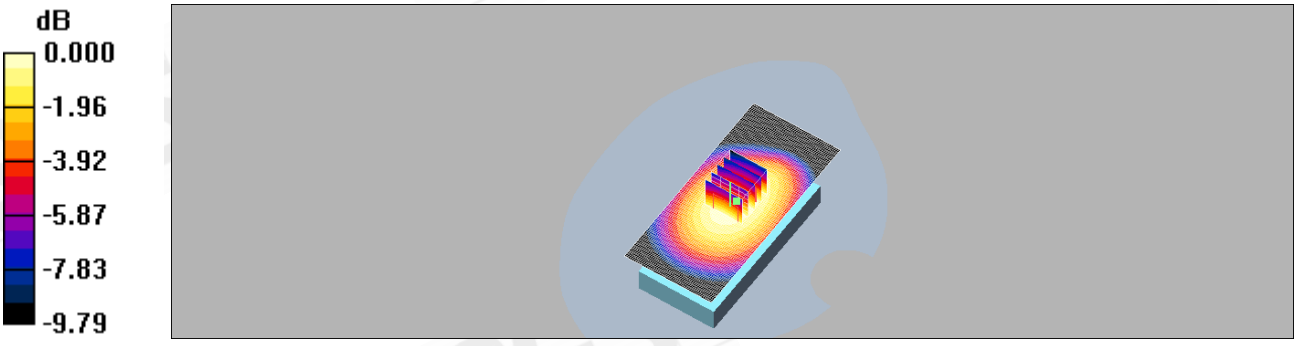
DUT: V02S002;

Communication System: GSM 850; Frequency: 824.2 MHz;Duty Cycle: 1:2
Medium: Muscle 900 MHz Medium parameters used (interpolated): f = 824.2 MHz; σ = 0.981 mho/m; ε_r = 54.7; ρ = 1000 kg/m^3
Phantom section: Flat Section

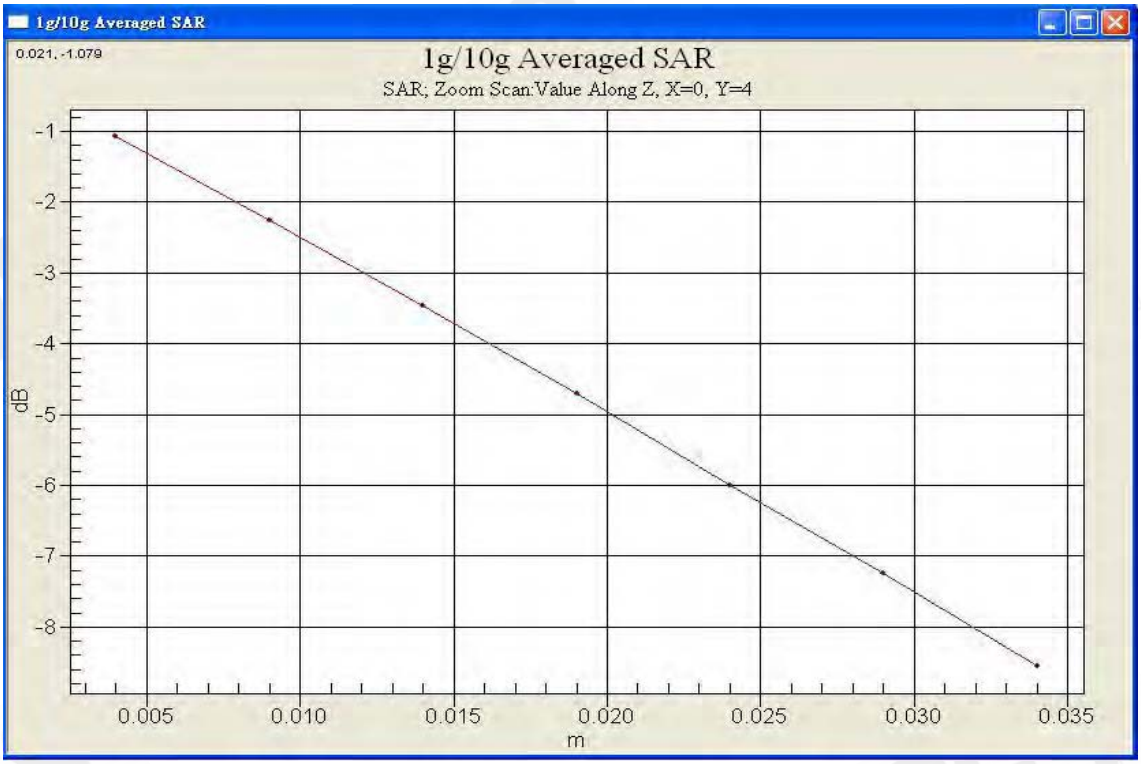
DASY4 Configuration:

- Probe: ES3DV3 - SN3172; ConvF(5.84, 5.84, 5.84); Calibrated: 2010/5/21
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn547; Calibrated: 2010/8/18
- Phantom: SAM1; Type: SAM 4.0; Serial: TP:1419
- Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 186

BODY/Area Scan (51x111x1): Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (interpolated) = 1.19 mW/g
BODY/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 35.3 V/m; Power Drift = -0.168 dB
Peak SAR (extrapolated) = 1.43 W/kg
SAR(1 g) = 1.12 mW/g; SAR(10 g) = 0.836 mW/g
Maximum value of SAR (measured) = 1.17 mW/g



0 dB = 1.17mW/g



BODY_CH190

DUT: V02S002;

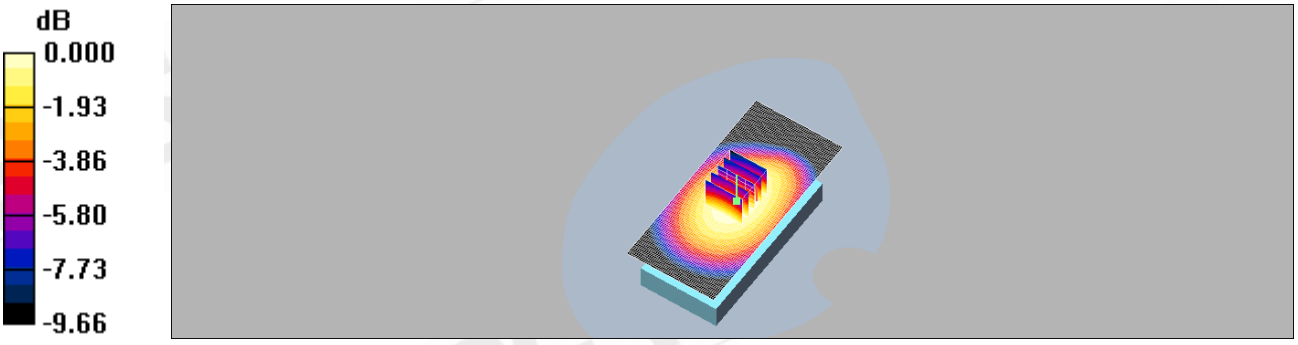
Communication System: GSM 850; Frequency: 836.6 MHz;Duty Cycle: 1:2
Medium: Muscle 900 MHz Medium parameters used: f = 837 MHz; σ = 0.993 mho/m; ε_r = 54.6; ρ = 1000 kg/m^3
Phantom section: Flat Section

DASY4 Configuration:

- Probe: ES3DV3 - SN3172; ConvF(5.84, 5.84, 5.84); Calibrated: 2010/5/21
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn547; Calibrated: 2010/8/18
- Phantom: SAM1; Type: SAM 4.0; Serial: TP:1419
- Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 186

BODY/Area Scan (51x111x1): Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (interpolated) = 1.16 mW/g

BODY/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 34.2 V/m; Power Drift = 0.014 dB
Peak SAR (extrapolated) = 1.39 W/kg
SAR(1 g) = 1.1 mW/g; SAR(10 g) = 0.818 mW/g
Maximum value of SAR (measured) = 1.15 mW/g



0 dB = 1.15mW/g

BODY_CH251

DUT: V02S002;

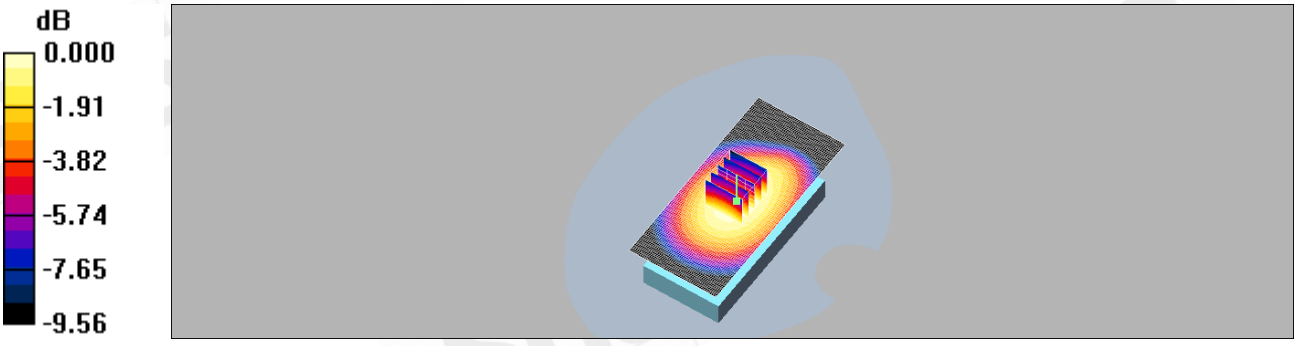
Communication System: GSM 850; Frequency: 848.8 MHz;Duty Cycle: 1:2
Medium: Muscle 900 MHz Medium parameters used: f = 849 MHz; σ = 1.01 mho/m; ε_r = 54.5; ρ = 1000 kg/m^3
Phantom section: Flat Section

DASY4 Configuration:

- Probe: ES3DV3 - SN3172; ConvF(5.84, 5.84, 5.84); Calibrated: 2010/5/21
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn547; Calibrated: 2010/8/18
- Phantom: SAM1; Type: SAM 4.0; Serial: TP:1419
- Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 186

BODY/Area Scan (51x111x1): Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (interpolated) = 1.08 mW/g

BODY/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 33.2 V/m; Power Drift = 0.002 dB
Peak SAR (extrapolated) = 1.31 W/kg
SAR(1 g) = 1.02 mW/g; SAR(10 g) = 0.763 mW/g
Maximum value of SAR (measured) = 1.08 mW/g



0 dB = 1.08mW/g

BODY_CH128_repeated for EUT front to phantom

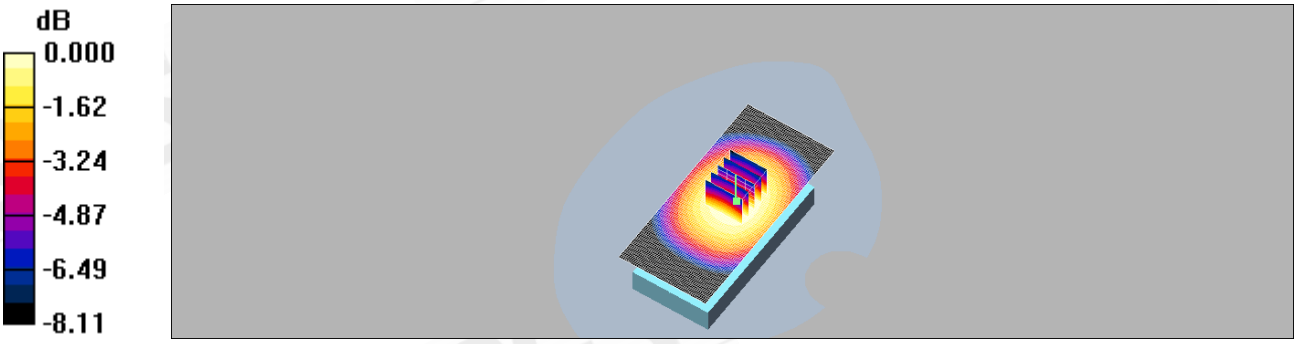
DUT: V02S002;

Communication System: GSM 850; Frequency: 824.2 MHz;Duty Cycle: 1:2
Medium: Muscle 900 MHz Medium parameters used (interpolated): f = 824.2 MHz; σ = 0.981 mho/m; ε_r = 54.7; ρ = 1000 kg/m^3
Phantom section: Flat Section

DASY4 Configuration:

- Probe: ES3DV3 - SN3172; ConvF(5.84, 5.84, 5.84); Calibrated: 2010/5/21
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn547; Calibrated: 2010/8/18
- Phantom: SAM1; Type: SAM 4.0; Serial: TP:1419
- Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 186

BODY/Area Scan (51x111x1): Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (interpolated) = 0.797 mW/g
BODY/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 28.2 V/m; Power Drift = -0.169 dB
Peak SAR (extrapolated) = 0.926 W/kg
SAR(1 g) = 0.745 mW/g; SAR(10 g) = 0.569 mW/g
Maximum value of SAR (measured) = 0.781 mW/g



0 dB = 0.781mW/g

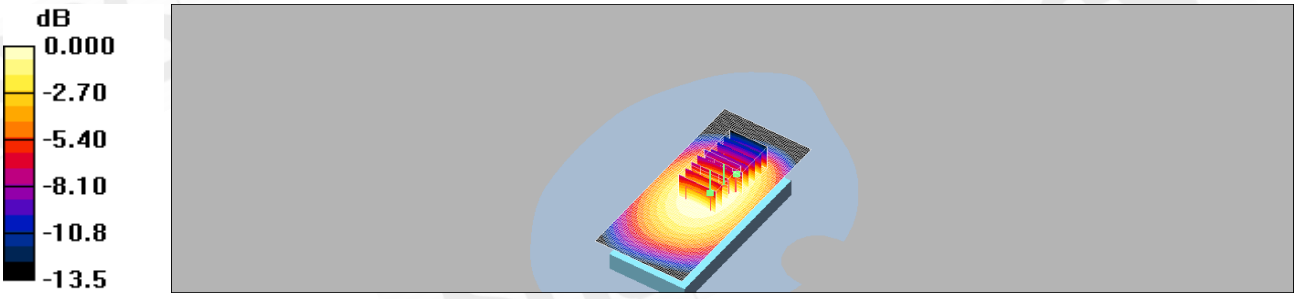
BODY_CH128_repeated with headset(PCH)

DUT: V02S002;

Communication System: GSM 850; Frequency: 824.2 MHz;Duty Cycle: 1:2
Medium: Muscle 900 MHz Medium parameters used (interpolated): f = 824.2 MHz; σ = 0.981 mho/m; ε_r = 54.7; ρ = 1000 kg/m^3

- Probe: ES3DV3 - SN3172; ConvF(5.84, 5.84, 5.84); Calibrated: 2010/5/21
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn547; Calibrated: 2010/8/18
- Phantom: SAM1; Type: SAM 4.0; Serial: TP:1419
- Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 186

BODY/Area Scan (51x111x1): Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (interpolated) = 0.845 mW/g
BODY/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 28.9 V/m; Power Drift = 0.075 dB
Peak SAR (extrapolated) = 1.04 W/kg
SAR(1 g) = 0.798 mW/g; SAR(10 g) = 0.588 mW/g
Maximum value of SAR (measured) = 0.842 mW/g
BODY/Zoom Scan (5x5x7)/Cube 1: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 28.9 V/m; Power Drift = 0.075 dB
Peak SAR (extrapolated) = 1.01 W/kg
SAR(1 g) = 0.717 mW/g; SAR(10 g) = 0.474 mW/g
Maximum value of SAR (measured) = 0.787 mW/g



0 dB = 0.787mW/g

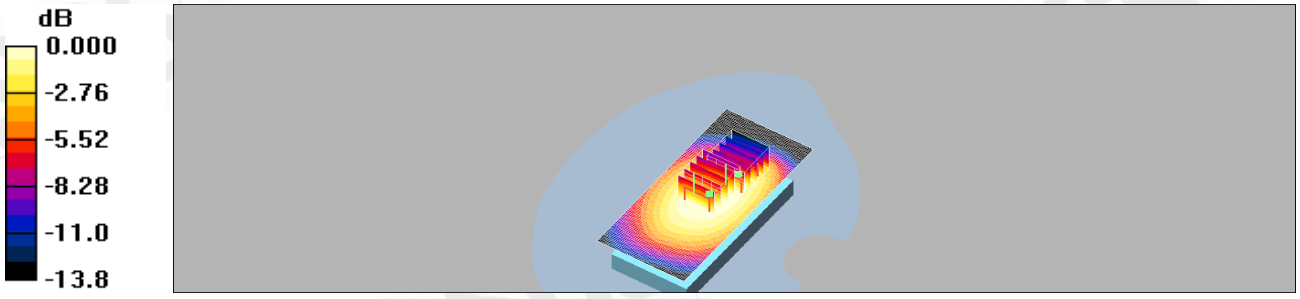
BODY_CH128_repeated with headset(Foster)

DUT: V02S002;

Communication System: GSM 850; Frequency: 824.2 MHz;Duty Cycle: 1:2
Medium: Muscle 900 MHz Medium parameters used (interpolated): f = 824.2 MHz; σ = 0.981 mho/m; ε_r = 54.7; ρ = 1000 kg/m^3

- Probe: ES3DV3 - SN3172; ConvF(5.84, 5.84, 5.84); Calibrated: 2010/5/21
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn547; Calibrated: 2010/8/18
- Phantom: SAM1; Type: SAM 4.0; Serial: TP:1419
- Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 186

BODY/Area Scan (51x111x1): Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (interpolated) = 0.848 mW/g
BODY/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 29.1 V/m; Power Drift = -0.166 dB
Peak SAR (extrapolated) = 0.906 W/kg
SAR(1 g) = 0.709 mW/g; SAR(10 g) = 0.529 mW/g
Maximum value of SAR (measured) = 0.750 mW/g
BODY/Zoom Scan (5x5x7)/Cube 1: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 29.1 V/m; Power Drift = -0.166 dB
Peak SAR (extrapolated) = 0.969 W/kg
SAR(1 g) = 0.684 mW/g; SAR(10 g) = 0.450 mW/g
Maximum value of SAR (measured) = 0.768 mW/g



0 dB = 0.768mW/g

BODY_CH128_repeated with Memory card

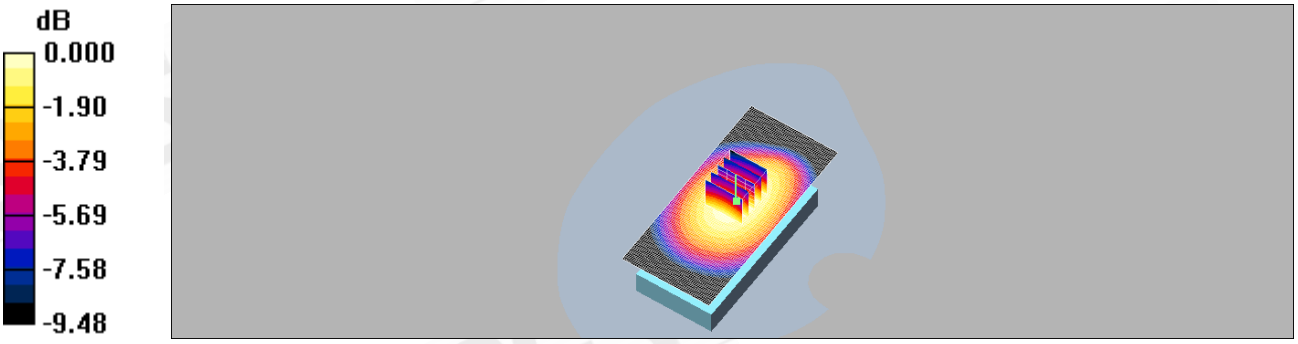
DUT: V02S002;

Communication System: GSM 850; Frequency: 824.2 MHz;Duty Cycle: 1:2
Medium: Muscle 900 MHz Medium parameters used (interpolated): f = 824.2 MHz; σ = 0.981 mho/m; ε_r = 54.7; ρ = 1000 kg/m^3
Phantom section: Flat Section

DASY4 Configuration:

- Probe: ES3DV3 - SN3172; ConvF(5.84, 5.84, 5.84); Calibrated: 2010/5/21
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn547; Calibrated: 2010/8/18
- Phantom: SAM1; Type: SAM 4.0; Serial: TP:1419
- Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 186

BODY/Area Scan (51x111x1): Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (interpolated) = 1.15 mW/g
BODY/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 33.6 V/m; Power Drift = -0.126 dB
Peak SAR (extrapolated) = 1.37 W/kg
SAR(1 g) = 1.08 mW/g; SAR(10 g) = 0.807 mW/g
Maximum value of SAR (measured) = 1.14 mW/g



0 dB = 1.14mW/g

BODY_CH128_repeated with EGPRS mode

DUT: V02S002;

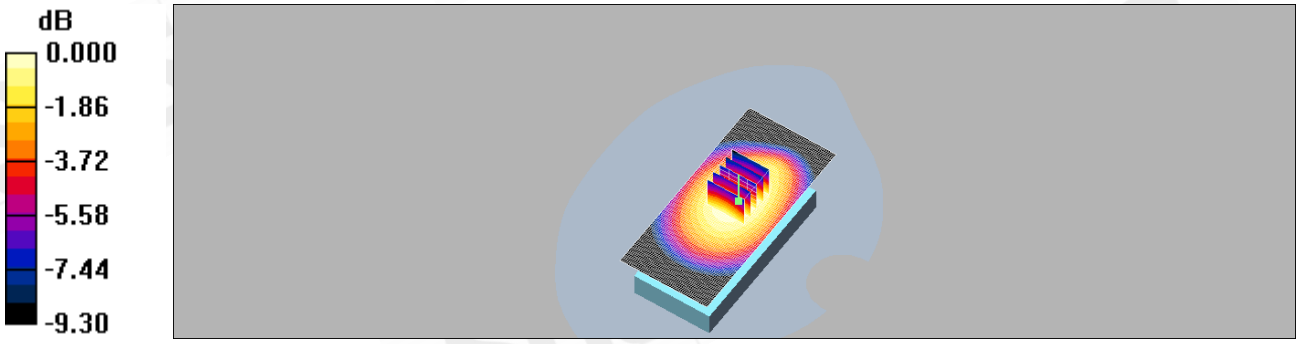
Communication System: GSM 850; Frequency: 824.2 MHz;Duty Cycle: 1:2
Medium: Muscle 900 MHz Medium parameters used (interpolated): f = 824.2 MHz; σ = 0.981 mho/m; ε_r = 54.7; ρ = 1000 kg/m^3
Phantom section: Flat Section

DASY4 Configuration:

- Probe: ES3DV3 - SN3172; ConvF(5.84, 5.84, 5.84); Calibrated: 2010/5/21
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn547; Calibrated: 2010/8/18
- Phantom: SAM1; Type: SAM 4.0; Serial: TP:1419
- Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 186

BODY/Area Scan (51x111x1): Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (interpolated) = 0.323 mW/g

BODY/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 17.7 V/m; Power Drift = -0.113 dB
Peak SAR (extrapolated) = 0.389 W/kg
SAR(1 g) = 0.303 mW/g; SAR(10 g) = 0.226 mW/g
Maximum value of SAR (measured) = 0.318 mW/g



0 dB = 0.318mW/g

Re Cheek_CH512_Slider off

DUT: V02S002;

Communication System: GSM1900; Frequency: 1850.2 MHz;Duty Cycle: 1:8.3
Medium: Head 1900 MHz Medium parameters used (interpolated): f = 1850.2 MHz; σ = 1.37 mho/m; ε_r = 39.2; ρ = 1000 kg/m^3
Phantom section: Right Section

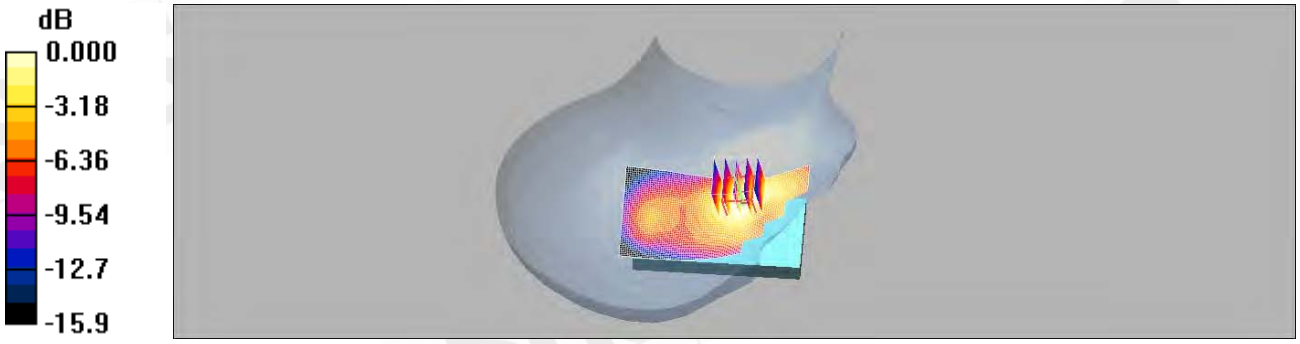
DASY4 Configuration:

- Probe: ES3DV3 - SN3172; ConvF(4.89, 4.89, 4.89); Calibrated: 2010/5/21
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn547; Calibrated: 2010/8/18
- Phantom: SAM1; Type: SAM 4.0; Serial: TP:1419
- Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 186

RE Cheek/Area Scan (51x91x1): Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (interpolated) = 0.274 mW/g

RE Cheek/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 7.45 V/m; Power Drift = 0.042 dB
Peak SAR (extrapolated) = 0.344 W/kg
SAR(1 g) = 0.241 mW/g; SAR(10 g) = 0.153 mW/g

Maximum value of SAR (measured) = 0.261 mW/g



0 dB = 0.261mW/g

Re Cheek_CH661_Slider off

DUT: V02S002;

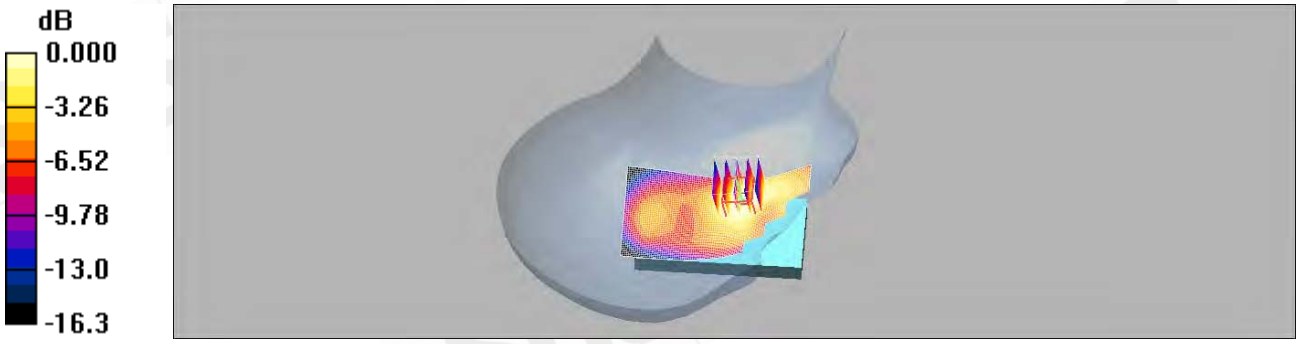
Communication System: GSM1900; Frequency: 1880 MHz;Duty Cycle: 1:8.3
Medium: Head 1900 MHz Medium parameters used: f = 1880 MHz; σ = 1.41 mho/m; ε_r = 39.1; ρ = 1000 kg/m^3
Phantom section: Right Section

DASY4 Configuration:

- Probe: ES3DV3 - SN3172; ConvF(4.89, 4.89, 4.89); Calibrated: 2010/5/21
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn547; Calibrated: 2010/8/18
- Phantom: SAM1; Type: SAM 4.0; Serial: TP:1419
- Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 186

RE Cheek/Area Scan (51x91x1): Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (interpolated) = 0.313 mW/g

RE Cheek/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 8.49 V/m; Power Drift = -0.044 dB
Peak SAR (extrapolated) = 0.396 W/kg
SAR(1 g) = 0.274 mW/g; SAR(10 g) = 0.173 mW/g
Maximum value of SAR (measured) = 0.295 mW/g



0 dB = 0.295mW/g

Re Cheek_CH810_Slider off

DUT: V02S002;

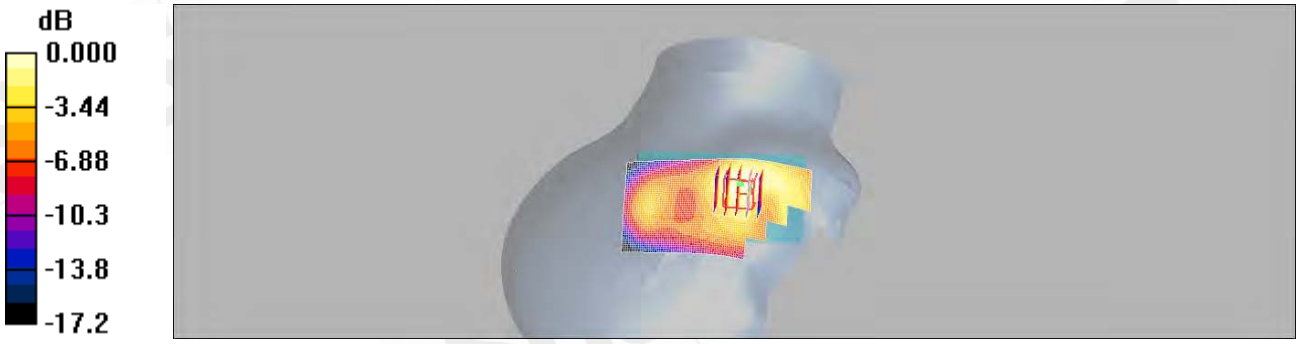
Communication System: GSM1900; Frequency: 1909.8 MHz;Duty Cycle: 1:8.3
Medium: Head 1900 MHz Medium parameters used: f = 1910 MHz; σ = 1.44 mho/m; ε_r = 39; ρ = 1000 kg/m^3
Phantom section: Right Section

DASY4 Configuration:

- Probe: ES3DV3 - SN3172; ConvF(4.89, 4.89, 4.89); Calibrated: 2010/5/21
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn547; Calibrated: 2010/8/18
- Phantom: SAM1; Type: SAM 4.0; Serial: TP:1419
- Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 186

RE Cheek/Area Scan (51x91x1): Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (interpolated) = 0.299 mW/g

RE Cheek/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 8.58 V/m; Power Drift = -0.057 dB
Peak SAR (extrapolated) = 0.378 W/kg
SAR(1 g) = 0.258 mW/g; SAR(10 g) = 0.163 mW/g
Maximum value of SAR (measured) = 0.275 mW/g



0 dB = 0.275mW/g

Le Cheek_CH512_Slider off

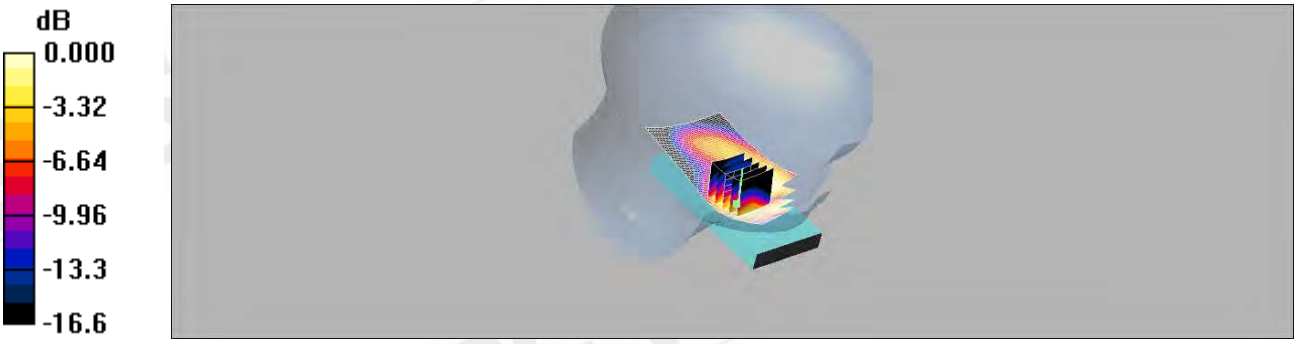
DUT: V02S002;

Communication System: GSM1900; Frequency: 1850.2 MHz;Duty Cycle: 1:8.3
Medium: Head 1900 MHz Medium parameters used (interpolated): f = 1850.2 MHz; σ = 1.37 mho/m; ε_r = 39.2; ρ = 1000 kg/m^3
Phantom section: Left Section

DASY4 Configuration:

- Probe: ES3DV3 - SN3172; ConvF(4.89, 4.89, 4.89); Calibrated: 2010/5/21
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn547; Calibrated: 2010/8/18
- Phantom: SAM1; Type: SAM 4.0; Serial: TP:1419
- Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 186

Le Cheek/Area Scan (51x91x1): Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (interpolated) = 0.168 mW/g
Le Cheek/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 6.83 V/m; Power Drift = -0.087 dB
Peak SAR (extrapolated) = 0.238 W/kg
SAR(1 g) = 0.155 mW/g; SAR(10 g) = 0.097 mW/g
Maximum value of SAR (measured) = 0.165 mW/g



0 dB = 0.165mW/g

Le Cheek_CH661_Slider off

DUT: V02S002;

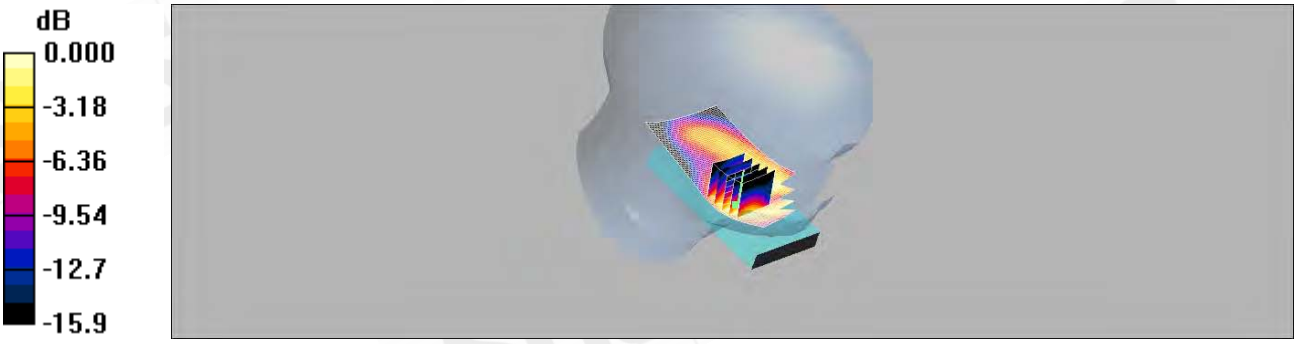
Communication System: GSM1900; Frequency: 1880 MHz;Duty Cycle: 1:8.3
Medium: Head 1900 MHz Medium parameters used: f = 1880 MHz; σ = 1.41 mho/m; ε_r = 39.1; ρ = 1000 kg/m^3
Phantom section: Left Section

DASY4 Configuration:

- Probe: ES3DV3 - SN3172; ConvF(4.89, 4.89, 4.89); Calibrated: 2010/5/21
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn547; Calibrated: 2010/8/18
- Phantom: SAM1; Type: SAM 4.0; Serial: TP:1419
- Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 186

Le Cheek/Area Scan (51x91x1): Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (interpolated) = 0.201 mW/g

Le Cheek/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 7.28 V/m; Power Drift = 0.164 dB
Peak SAR (extrapolated) = 0.287 W/kg
SAR(1 g) = 0.183 mW/g; SAR(10 g) = 0.113 mW/g
Maximum value of SAR (measured) = 0.197 mW/g



0 dB = 0.197mW/g

Le Cheek_CH810_Slider off

DUT: V02S002;

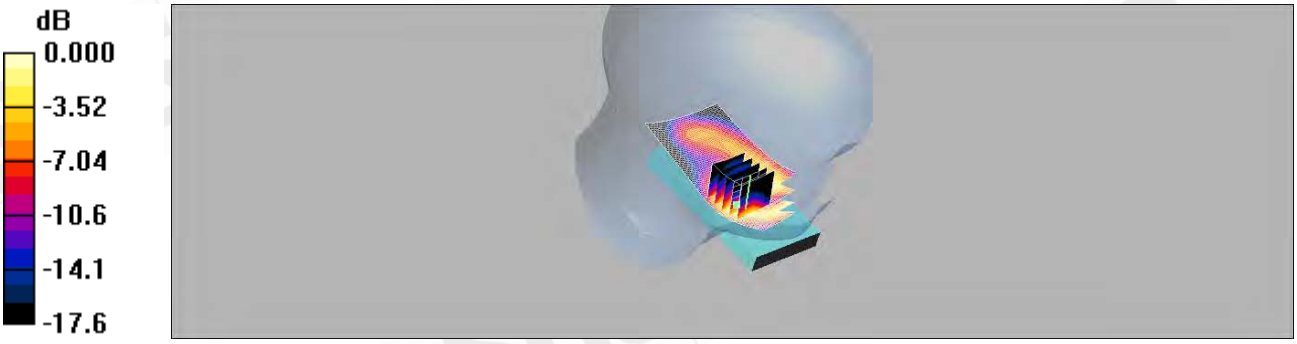
Communication System: GSM1900; Frequency: 1909.8 MHz;Duty Cycle: 1:8.3
Medium: Head 1900 MHz Medium parameters used: f = 1910 MHz; σ = 1.44 mho/m; ε_r = 39; ρ = 1000 kg/m^3
Phantom section: Left Section

DASY4 Configuration:

- Probe: ES3DV3 - SN3172; ConvF(4.89, 4.89, 4.89); Calibrated: 2010/5/21
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn547; Calibrated: 2010/8/18
- Phantom: SAM1; Type: SAM 4.0; Serial: TP:1419
- Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 186

Le Cheek/Area Scan (51x91x1): Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (interpolated) = 0.197 mW/g

Le Cheek/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 7.76 V/m; Power Drift = -0.058 dB
Peak SAR (extrapolated) = 0.301 W/kg
SAR(1 g) = 0.191 mW/g; SAR(10 g) = 0.116 mW/g
Maximum value of SAR (measured) = 0.205 mW/g



0 dB = 0.205mW/g

Re Tilt_CH512_Slider off

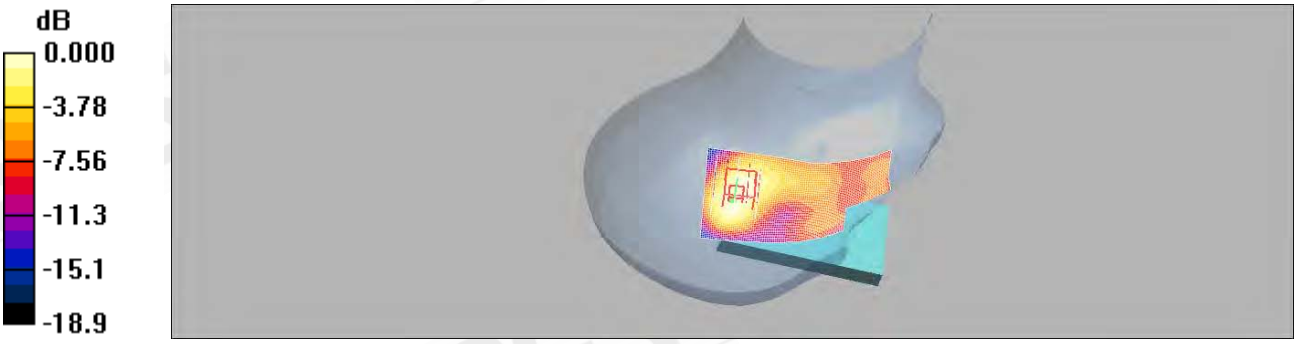
DUT: V02S002;

Communication System: GSM1900; Frequency: 1850.2 MHz;Duty Cycle: 1:8.3
Medium: Head 1900 MHz Medium parameters used (interpolated): f = 1850.2 MHz; σ = 1.37 mho/m; ε_r = 39.2; ρ = 1000 kg/m^3
Phantom section: Right Section

DASY4 Configuration:

- Probe: ES3DV3 - SN3172; ConvF(4.89, 4.89, 4.89); Calibrated: 2010/5/21
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn547; Calibrated: 2010/8/18
- Phantom: SAM1; Type: SAM 4.0; Serial: TP:1419
- Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 186

RE Tilt/Area Scan (51x91x1): Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (interpolated) = 0.119 mW/g
RE Tilt/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 9.21 V/m; Power Drift = -0.049 dB
Peak SAR (extrapolated) = 0.166 W/kg
SAR(1 g) = 0.104 mW/g; SAR(10 g) = 0.062 mW/g
Maximum value of SAR (measured) = 0.114 mW/g



0 dB = 0.114mW/g

Re Tilt_CH661_Slider off

DUT: V02S002;

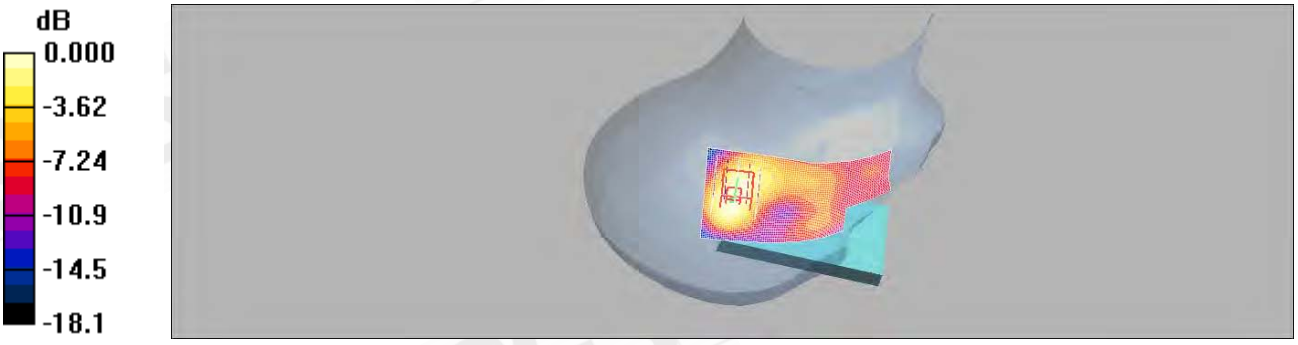
Communication System: GSM1900; Frequency: 1880 MHz;Duty Cycle: 1:8.3
Medium: Head 1900 MHz Medium parameters used: f = 1880 MHz; σ = 1.41 mho/m; ε_r = 39.1; ρ = 1000 kg/m^3
Phantom section: Right Section

DASY4 Configuration:

- Probe: ES3DV3 - SN3172; ConvF(4.89, 4.89, 4.89); Calibrated: 2010/5/21
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn547; Calibrated: 2010/8/18
- Phantom: SAM1; Type: SAM 4.0; Serial: TP:1419
- Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 186

RE Tilt/Area Scan (51x91x1): Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (interpolated) = 0.153 mW/g

RE Tilt/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 10.3 V/m; Power Drift = 0.096 dB
Peak SAR (extrapolated) = 0.219 W/kg
SAR(1 g) = 0.134 mW/g; SAR(10 g) = 0.078 mW/g
Maximum value of SAR (measured) = 0.149 mW/g



0 dB = 0.149mW/g

Re Tilt_CH810_Slider off

DUT: V02S002;

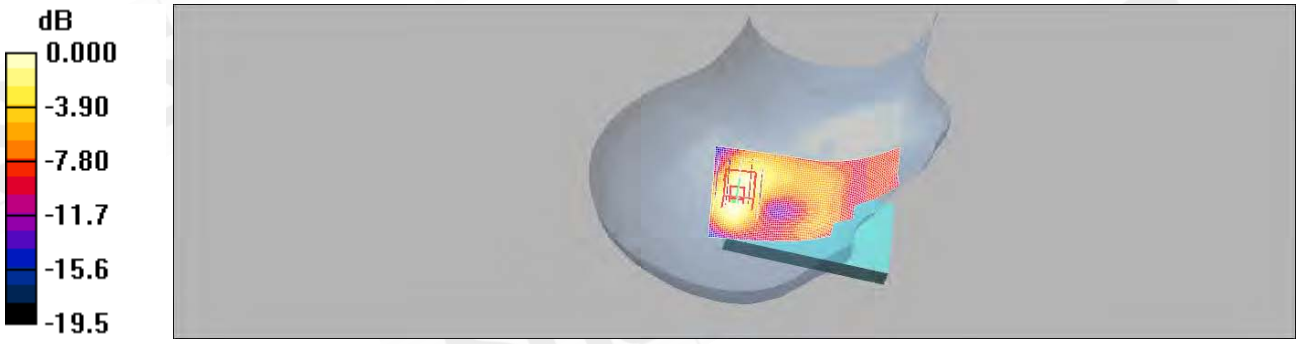
Communication System: GSM1900; Frequency: 1909.8 MHz;Duty Cycle: 1:8.3
Medium: Head 1900 MHz Medium parameters used: f = 1910 MHz; σ = 1.44 mho/m; ε_r = 39; ρ = 1000 kg/m^3
Phantom section: Right Section

DASY4 Configuration:

- Probe: ES3DV3 - SN3172; ConvF(4.89, 4.89, 4.89); Calibrated: 2010/5/21
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn547; Calibrated: 2010/8/18
- Phantom: SAM1; Type: SAM 4.0; Serial: TP:1419
- Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 186

RE Tilt/Area Scan (51x91x1): Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (interpolated) = 0.156 mW/g

RE Tilt/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 10.1 V/m; Power Drift = 0.118 dB
Peak SAR (extrapolated) = 0.215 W/kg
SAR(1 g) = 0.130 mW/g; SAR(10 g) = 0.074 mW/g
Maximum value of SAR (measured) = 0.143 mW/g



0 dB = 0.143mW/g

Le Tilt_CH512_Slider off

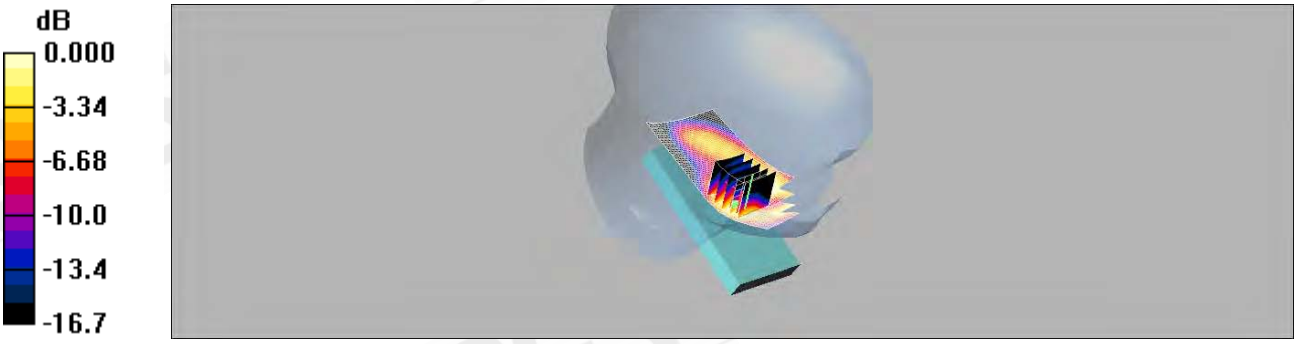
DUT: V02S002;

Communication System: GSM1900; Frequency: 1850.2 MHz;Duty Cycle: 1:8.3
Medium: Head 1900 MHz Medium parameters used (interpolated): f = 1850.2 MHz; σ = 1.37 mho/m; ε_r = 39.2; ρ = 1000 kg/m^3
Phantom section: Left Section

DASY4 Configuration:

- Probe: ES3DV3 - SN3172; ConvF(4.89, 4.89, 4.89); Calibrated: 2010/5/21
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn547; Calibrated: 2010/8/18
- Phantom: SAM1; Type: SAM 4.0; Serial: TP:1419
- Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 186

Le Tilt/Area Scan (51x91x1): Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (interpolated) = 0.154 mW/g
Le Tilt/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 7.19 V/m; Power Drift = 0.005 dB
Peak SAR (extrapolated) = 0.217 W/kg
SAR(1 g) = 0.141 mW/g; SAR(10 g) = 0.089 mW/g
Maximum value of SAR (measured) = 0.149 mW/g



0 dB = 0.149mW/g

Le Tilt_CH661_Slider off

DUT: V02S002;

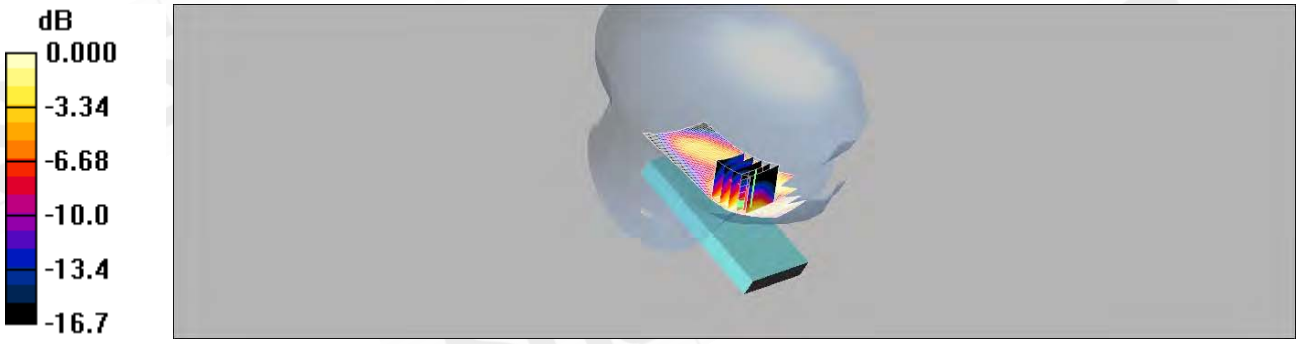
Communication System: GSM1900; Frequency: 1880 MHz;Duty Cycle: 1:8.3
Medium: Head 1900 MHz Medium parameters used: f = 1880 MHz; σ = 1.41 mho/m; ε_r = 39.1; ρ = 1000 kg/m^3
Phantom section: Left Section

DASY4 Configuration:

- Probe: ES3DV3 - SN3172; ConvF(4.89, 4.89, 4.89); Calibrated: 2010/5/21
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn547; Calibrated: 2010/8/18
- Phantom: SAM1; Type: SAM 4.0; Serial: TP:1419
- Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 186

Le Tilt/Area Scan (51x91x1): Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (interpolated) = 0.176 mW/g

Le Tilt/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 7.92 V/m; Power Drift = 0.036 dB
Peak SAR (extrapolated) = 0.256 W/kg
SAR(1 g) = 0.162 mW/g; SAR(10 g) = 0.099 mW/g
Maximum value of SAR (measured) = 0.172 mW/g



0 dB = 0.172mW/g

Le Tilt_CH810_Slider off

DUT: V02S002;

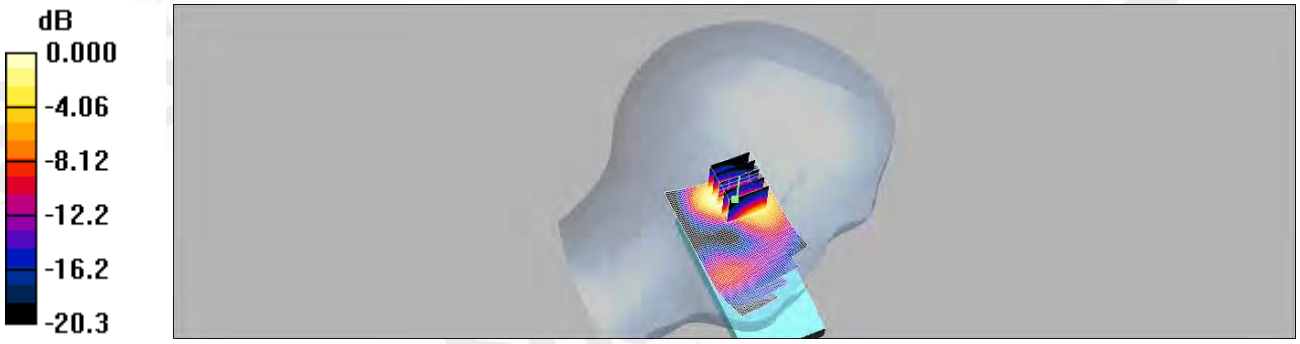
Communication System: GSM1900; Frequency: 1909.8 MHz;Duty Cycle: 1:8.3
Medium: Head 1900 MHz Medium parameters used: f = 1910 MHz; σ = 1.44 mho/m; ε_r = 39; ρ = 1000 kg/m^3
Phantom section: Left Section

DASY4 Configuration:

- Probe: ES3DV3 - SN3172; ConvF(4.89, 4.89, 4.89); Calibrated: 2010/5/21
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn547; Calibrated: 2010/8/18
- Phantom: SAM1; Type: SAM 4.0; Serial: TP:1419
- Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 186

Le Tilt/Area Scan (51x91x1): Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (interpolated) = 0.168 mW/g

Le Tilt/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 10.4 V/m; Power Drift = 0.050 dB
Peak SAR (extrapolated) = 0.240 W/kg
SAR(1 g) = 0.147 mW/g; SAR(10 g) = 0.085 mW/g
Maximum value of SAR (measured) = 0.155 mW/g



0 dB = 0.155mW/g

Re Cheek_CH512_Slider on

DUT: V02S002;

Communication System: GSM1900; Frequency: 1850.2 MHz;Duty Cycle: 1:8.3
Medium: Head 1900 MHz Medium parameters used (interpolated): f = 1850.2 MHz; σ = 1.37 mho/m; ε_r = 39.2; ρ = 1000 kg/m^3
Phantom section: Right Section

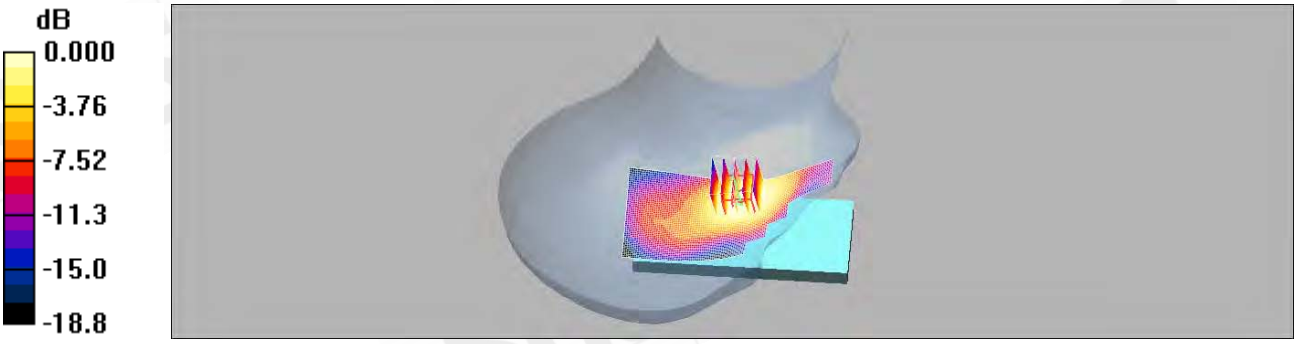
DASY4 Configuration:

- Probe: ES3DV3 - SN3172; ConvF(4.89, 4.89, 4.89); Calibrated: 2010/5/21
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn547; Calibrated: 2010/8/18
- Phantom: SAM1; Type: SAM 4.0; Serial: TP:1419
- Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 186

RE Cheek/Area Scan (51x111x1): Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (interpolated) = 0.118 mW/g

RE Cheek/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 3.52 V/m; Power Drift = 0.121 dB
Peak SAR (extrapolated) = 0.157 W/kg
SAR(1 g) = 0.104 mW/g; SAR(10 g) = 0.066 mW/g

Maximum value of SAR (measured) = 0.112 mW/g



0 dB = 0.112mW/g

Re Cheek_CH661_Slider on

DUT: V02S002;

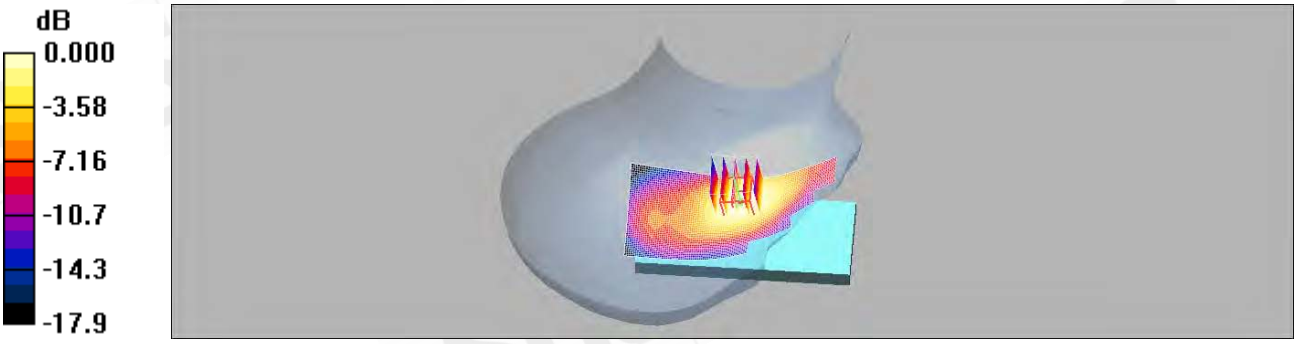
Communication System: GSM1900; Frequency: 1880 MHz;Duty Cycle: 1:8.3
Medium: Head 1900 MHz Medium parameters used: f = 1880 MHz; σ = 1.41 mho/m; ε_r = 39.1; ρ = 1000 kg/m^3
Phantom section: Right Section

DASY4 Configuration:

- Probe: ES3DV3 - SN3172; ConvF(4.89, 4.89, 4.89); Calibrated: 2010/5/21
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn547; Calibrated: 2010/8/18
- Phantom: SAM1; Type: SAM 4.0; Serial: TP:1419
- Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 186

RE Cheek/Area Scan (51x111x1): Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (interpolated) = 0.123 mW/g

RE Cheek/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 4.15 V/m; Power Drift = -0.107 dB
Peak SAR (extrapolated) = 0.158 W/kg
SAR(1 g) = 0.107 mW/g; SAR(10 g) = 0.067 mW/g
Maximum value of SAR (measured) = 0.116 mW/g



0 dB = 0.116mW/g

Re Cheek_CH810_Slider on

DUT: V02S002;

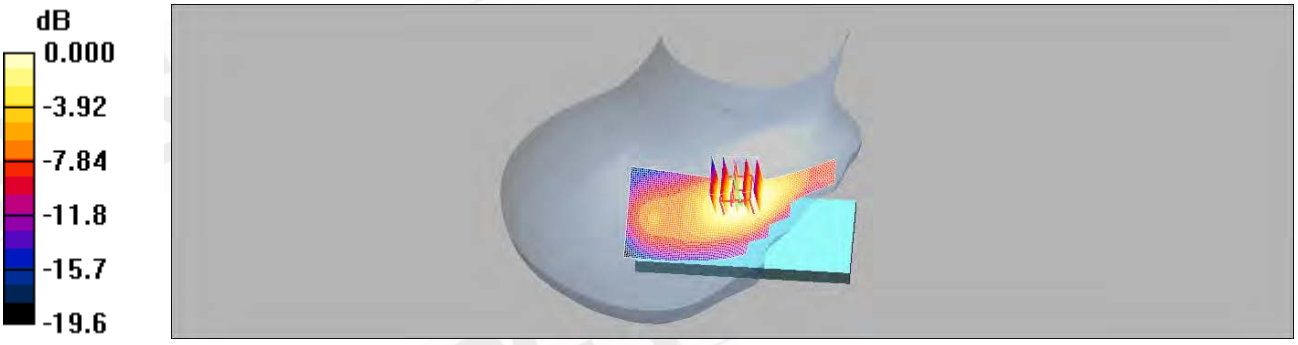
Communication System: GSM1900; Frequency: 1909.8 MHz;Duty Cycle: 1:8.3
Medium: Head 1900 MHz Medium parameters used: f = 1910 MHz; σ = 1.44 mho/m; ε_r = 39; ρ = 1000 kg/m^3
Phantom section: Right Section

DASY4 Configuration:

- Probe: ES3DV3 - SN3172; ConvF(4.89, 4.89, 4.89); Calibrated: 2010/5/21
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn547; Calibrated: 2010/8/18
- Phantom: SAM1; Type: SAM 4.0; Serial: TP:1419
- Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 186

RE Cheek/Area Scan (51x111x1): Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (interpolated) = 0.144 mW/g

RE Cheek/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 4.74 V/m; Power Drift = -0.094 dB
Peak SAR (extrapolated) = 0.193 W/kg
SAR(1 g) = 0.126 mW/g; SAR(10 g) = 0.079 mW/g
Maximum value of SAR (measured) = 0.136 mW/g



0 dB = 0.136mW/g

Le Cheek_CH512_Slider on

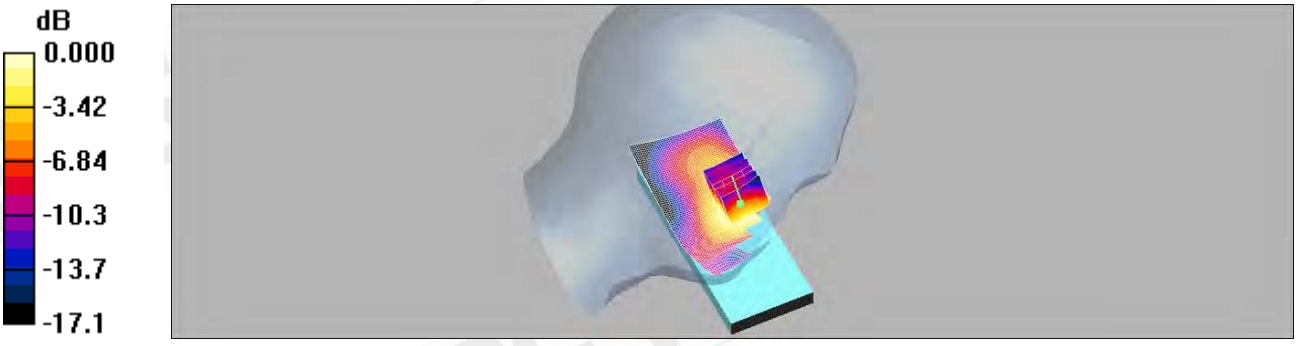
DUT: V02S002;

Communication System: GSM1900; Frequency: 1850.2 MHz;Duty Cycle: 1:8.3
Medium: Head 1900 MHz Medium parameters used (interpolated): f = 1850.2 MHz; σ = 1.37 mho/m; ε_r = 39.2; ρ = 1000 kg/m^3
Phantom section: Left Section

DASY4 Configuration:

- Probe: ES3DV3 - SN3172; ConvF(4.89, 4.89, 4.89); Calibrated: 2010/5/21
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn547; Calibrated: 2010/8/18
- Phantom: SAM1; Type: SAM 4.0; Serial: TP:1419
- Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 186

Le Cheek/Area Scan (51x111x1): Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (interpolated) = 0.074 mW/g
Le Cheek/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 2.51 V/m; Power Drift = 0.161 dB
Peak SAR (extrapolated) = 0.104 W/kg
SAR(1 g) = 0.068 mW/g; SAR(10 g) = 0.043 mW/g
Maximum value of SAR (measured) = 0.073 mW/g



0 dB = 0.073mW/g

Le Cheek_CH661_Slider on

DUT: V02S002;

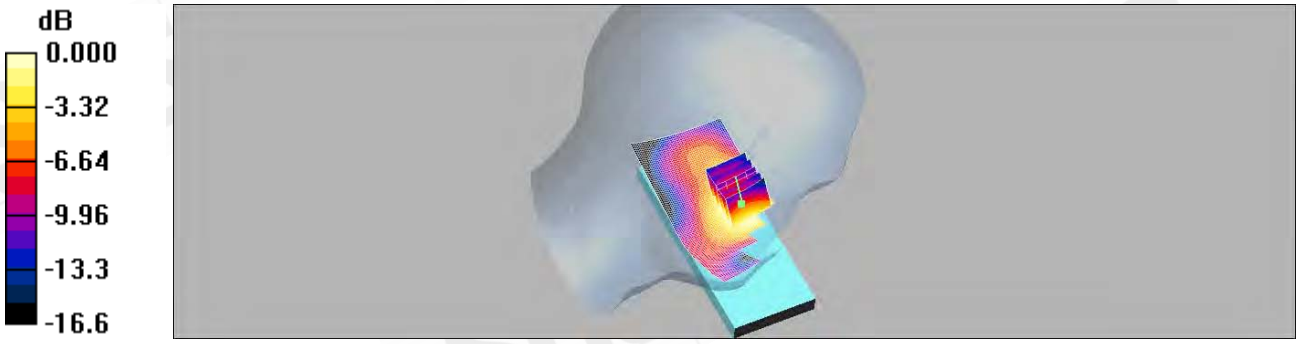
Communication System: GSM1900; Frequency: 1880 MHz;Duty Cycle: 1:8.3
Medium: Head 1900 MHz Medium parameters used: f = 1880 MHz; σ = 1.41 mho/m; ε_r = 39.1; ρ = 1000 kg/m^3
Phantom section: Left Section

DASY4 Configuration:

- Probe: ES3DV3 - SN3172; ConvF(4.89, 4.89, 4.89); Calibrated: 2010/5/21
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn547; Calibrated: 2010/8/18
- Phantom: SAM1; Type: SAM 4.0; Serial: TP:1419
- Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 186

Le Cheek/Area Scan (51x111x1): Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (interpolated) = 0.085 mW/g

Le Cheek/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 3.45 V/m; Power Drift = 0.169 dB
Peak SAR (extrapolated) = 0.120 W/kg
SAR(1 g) = 0.079 mW/g; SAR(10 g) = 0.049 mW/g
Maximum value of SAR (measured) = 0.085 mW/g



0 dB = 0.085mW/g

Le Cheek_CH810_Slider on

DUT: V02S002;

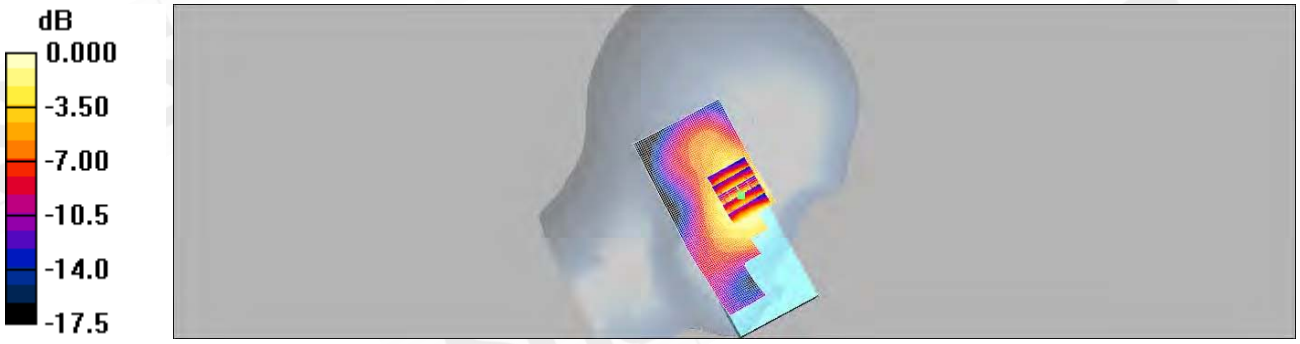
Communication System: GSM1900; Frequency: 1909.8 MHz;Duty Cycle: 1:8.3
Medium: Head 1900 MHz Medium parameters used: f = 1910 MHz; σ = 1.44 mho/m; ε_r = 39; ρ = 1000 kg/m^3
Phantom section: Left Section

DASY4 Configuration:

- Probe: ES3DV3 - SN3172; ConvF(4.89, 4.89, 4.89); Calibrated: 2010/5/21
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn547; Calibrated: 2010/8/18
- Phantom: SAM1; Type: SAM 4.0; Serial: TP:1419
- Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 186

Le Cheek/Area Scan (51x111x1): Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (interpolated) = 0.103 mW/g

Le Cheek/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 3.64 V/m; Power Drift = 0.032 dB
Peak SAR (extrapolated) = 0.152 W/kg
SAR(1 g) = 0.099 mW/g; SAR(10 g) = 0.061 mW/g
Maximum value of SAR (measured) = 0.108 mW/g



0 dB = 0.108mW/g

Re Tilt_CH512_Slider on

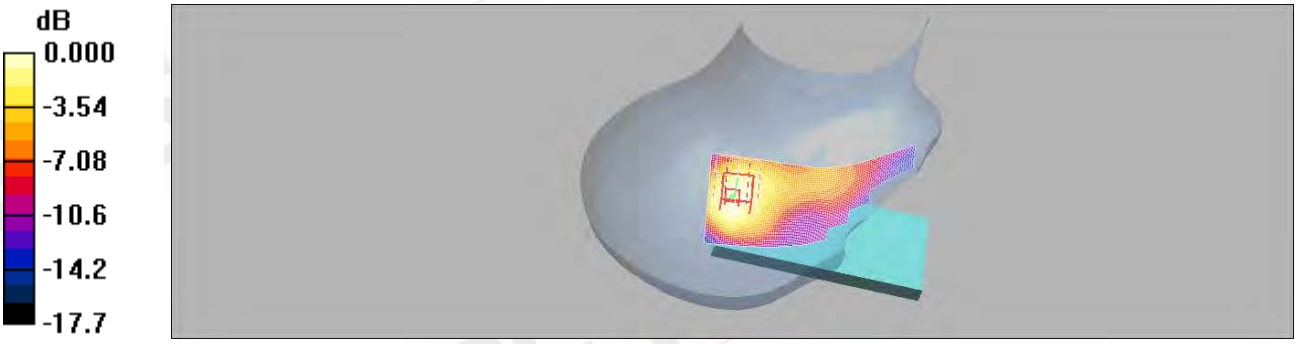
DUT: V02S002;

Communication System: GSM1900; Frequency: 1850.2 MHz;Duty Cycle: 1:8.3
Medium: Head 1900 MHz Medium parameters used (interpolated): f = 1850.2 MHz; σ = 1.37 mho/m; ε_r = 39.2; ρ = 1000 kg/m^3
Phantom section: Right Section

DASY4 Configuration:

- Probe: ES3DV3 - SN3172; ConvF(4.89, 4.89, 4.89); Calibrated: 2010/5/21
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn547; Calibrated: 2010/8/18
- Phantom: SAM1; Type: SAM 4.0; Serial: TP:1419
- Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 186

RE CTilt/Area Scan (51x111x1): Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (interpolated) = 0.055 mW/g
RE CTilt/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 6.28 V/m; Power Drift = -0.011 dB
Peak SAR (extrapolated) = 0.078 W/kg
SAR(1 g) = 0.049 mW/g; SAR(10 g) = 0.029 mW/g
Maximum value of SAR (measured) = 0.053 mW/g



0 dB = 0.053mW/g

Re Tilt_CH661_Slider on

DUT: V02S002;

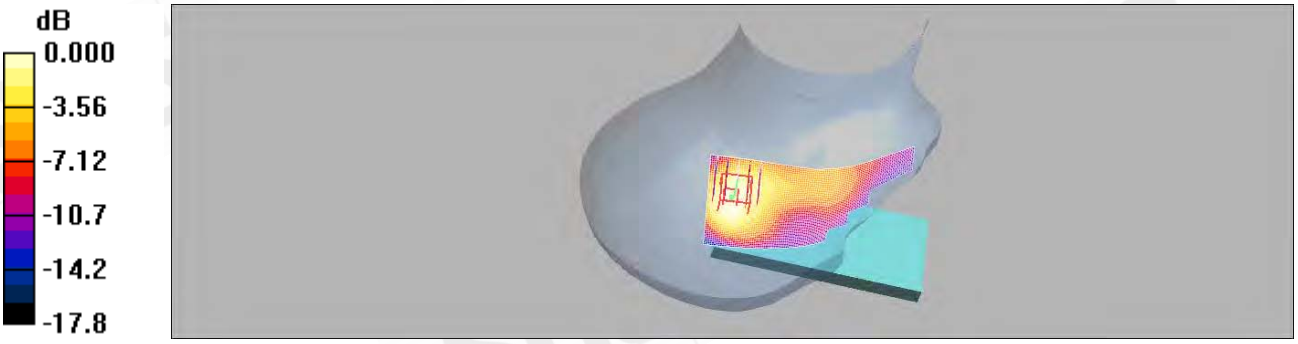
Communication System: GSM1900; Frequency: 1880 MHz;Duty Cycle: 1:8.3
Medium: Head 1900 MHz Medium parameters used: f = 1880 MHz; σ = 1.41 mho/m; ε_r = 39.1; ρ = 1000 kg/m^3
Phantom section: Right Section

DASY4 Configuration:

- Probe: ES3DV3 - SN3172; ConvF(4.89, 4.89, 4.89); Calibrated: 2010/5/21
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn547; Calibrated: 2010/8/18
- Phantom: SAM1; Type: SAM 4.0; Serial: TP:1419
- Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 186

RE CTilt/Area Scan (51x111x1): Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (interpolated) = 0.058 mW/g

RE CTilt/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 6.36 V/m; Power Drift = 0.024 dB
Peak SAR (extrapolated) = 0.083 W/kg
SAR(1 g) = 0.051 mW/g; SAR(10 g) = 0.031 mW/g
Maximum value of SAR (measured) = 0.055 mW/g



0 dB = 0.055mW/g

Re Tilt_CH810_Slider on

DUT: V02S002;

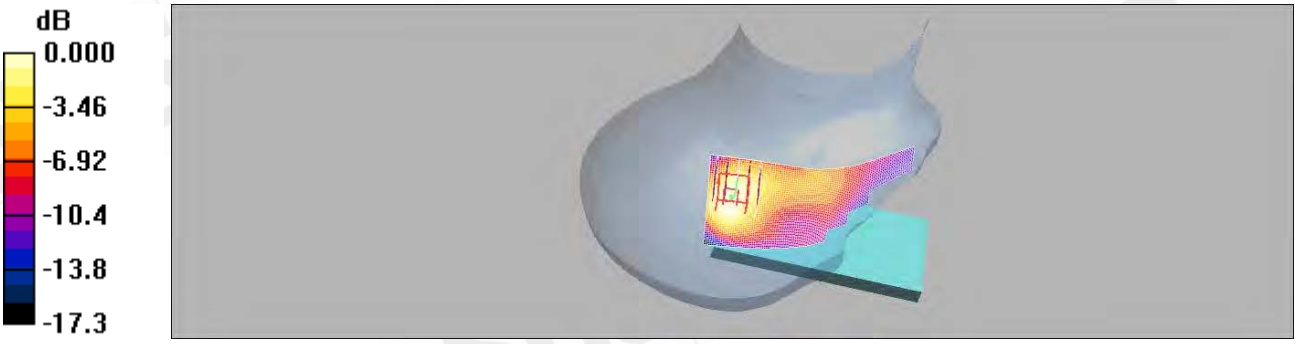
Communication System: GSM1900; Frequency: 1909.8 MHz;Duty Cycle: 1:8.3
Medium: Head 1900 MHz Medium parameters used: f = 1910 MHz; σ = 1.44 mho/m; ε_r = 39; ρ = 1000 kg/m^3
Phantom section: Right Section

DASY4 Configuration:

- Probe: ES3DV3 - SN3172; ConvF(4.89, 4.89, 4.89); Calibrated: 2010/5/21
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn547; Calibrated: 2010/8/18
- Phantom: SAM1; Type: SAM 4.0; Serial: TP:1419
- Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 186

RE CTilt/Area Scan (51x111x1): Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (interpolated) = 0.081 mW/g

RE CTilt/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 7.48 V/m; Power Drift = 0.007 dB
Peak SAR (extrapolated) = 0.118 W/kg
SAR(1 g) = 0.072 mW/g; SAR(10 g) = 0.042 mW/g
Maximum value of SAR (measured) = 0.077 mW/g



0 dB = 0.077mW/g

Le Tilt_CH512_Slider on

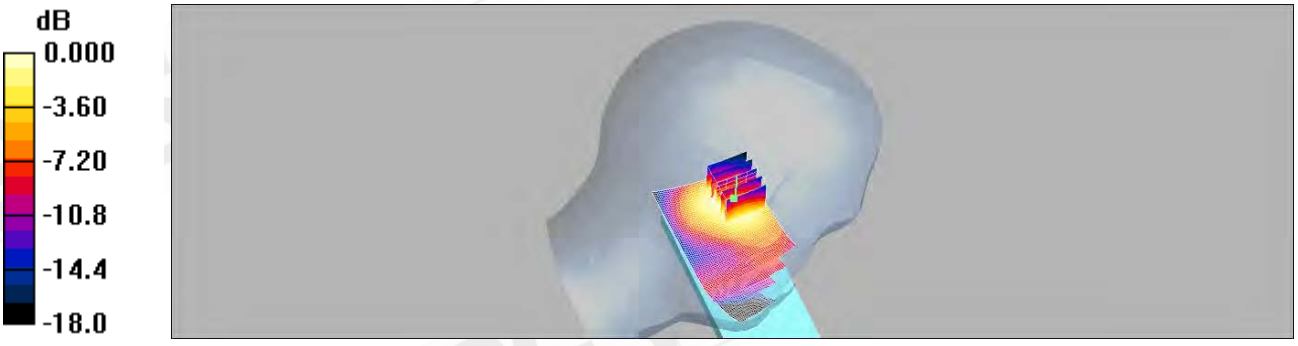
DUT: V02S002;

Communication System: GSM1900; Frequency: 1850.2 MHz;Duty Cycle: 1:8.3
Medium: Head 1900 MHz Medium parameters used (interpolated): f = 1850.2 MHz; σ = 1.37 mho/m; ε_r = 39.2; ρ = 1000 kg/m^3
Phantom section: Left Section

DASY4 Configuration:

- Probe: ES3DV3 - SN3172; ConvF(4.89, 4.89, 4.89); Calibrated: 2010/5/21
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn547; Calibrated: 2010/8/18
- Phantom: SAM1; Type: SAM 4.0; Serial: TP:1419
- Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 186

Le Cheek/Area Scan (51x111x1): Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (interpolated) = 0.058 mW/g
Le Cheek/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 5.36 V/m; Power Drift = -0.006 dB
Peak SAR (extrapolated) = 0.082 W/kg
SAR(1 g) = 0.051 mW/g; SAR(10 g) = 0.031 mW/g
Maximum value of SAR (measured) = 0.055 mW/g



0 dB = 0.055mW/g

Le Tilt_CH661_Slider on

DUT: V02S002;

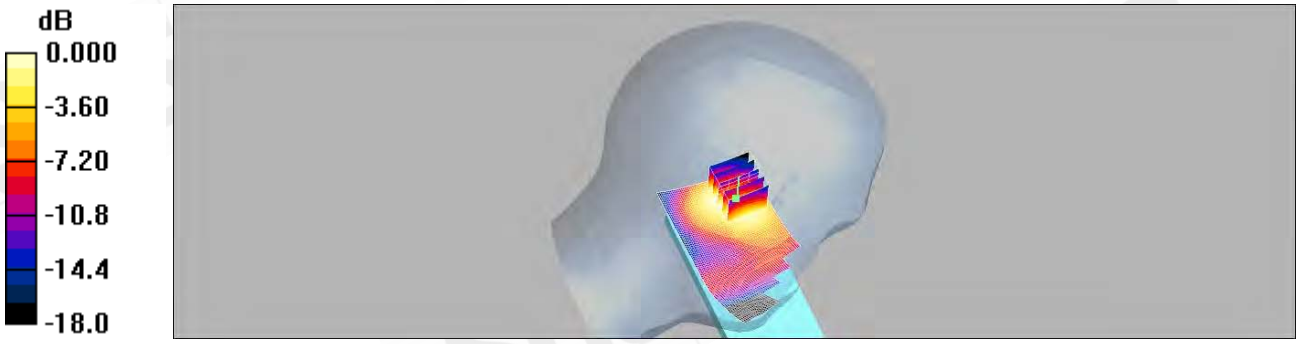
Communication System: GSM1900; Frequency: 1880 MHz;Duty Cycle: 1:8.3
Medium: Head 1900 MHz Medium parameters used: f = 1880 MHz; σ = 1.41 mho/m; ε_r = 39.1; ρ = 1000 kg/m^3
Phantom section: Left Section

DASY4 Configuration:

- Probe: ES3DV3 - SN3172; ConvF(4.89, 4.89, 4.89); Calibrated: 2010/5/21
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn547; Calibrated: 2010/8/18
- Phantom: SAM1; Type: SAM 4.0; Serial: TP:1419
- Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 186

Le Cheek/Area Scan (51x111x1): Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (interpolated) = 0.068 mW/g

Le Cheek/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 5.93 V/m; Power Drift = 0.013 dB
Peak SAR (extrapolated) = 0.093 W/kg
SAR(1 g) = 0.058 mW/g; SAR(10 g) = 0.035 mW/g
Maximum value of SAR (measured) = 0.063 mW/g



0 dB = 0.063mW/g

Le Tilt_CH810_Slider on

DUT: V02S002;

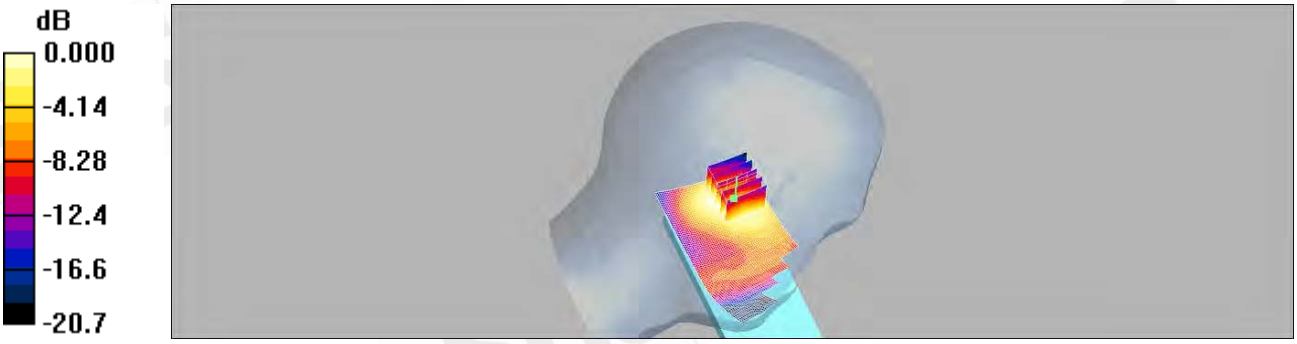
Communication System: GSM1900; Frequency: 1909.8 MHz;Duty Cycle: 1:8.3
Medium: Head 1900 MHz Medium parameters used: f = 1910 MHz; σ = 1.44 mho/m; ε_r = 39; ρ = 1000 kg/m^3
Phantom section: Left Section

DASY4 Configuration:

- Probe: ES3DV3 - SN3172; ConvF(4.89, 4.89, 4.89); Calibrated: 2010/5/21
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn547; Calibrated: 2010/8/18
- Phantom: SAM1; Type: SAM 4.0; Serial: TP:1419
- Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 186

Le Cheek/Area Scan (51x111x1): Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (interpolated) = 0.080 mW/g

Le Cheek/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 6.46 V/m; Power Drift = 0.012 dB
Peak SAR (extrapolated) = 0.112 W/kg
SAR(1 g) = 0.067 mW/g; SAR(10 g) = 0.041 mW/g
Maximum value of SAR (measured) = 0.072 mW/g



0 dB = 0.072mW/g

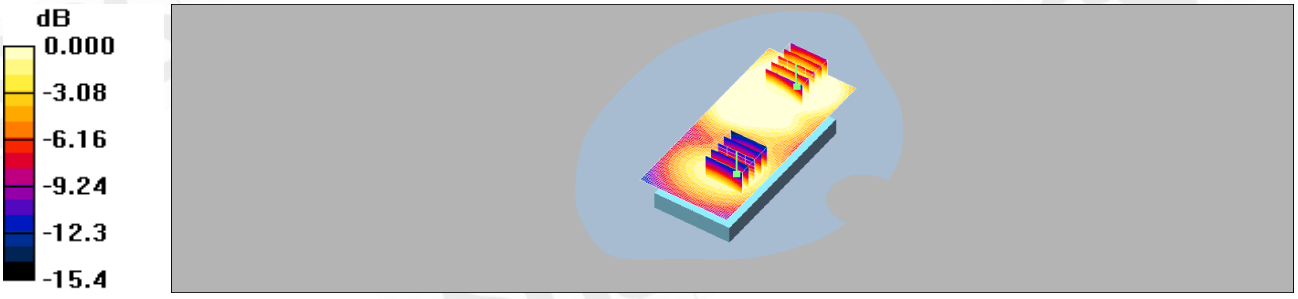
BODY_CH512

DUT: V02S002;

Communication System: GSM1900; Frequency: 1850.2 MHz;Duty Cycle: 1:2
Medium: M1800 & 1900 Medium parameters used (interpolated): f = 1850.2 MHz; σ = 1.57 mho/m; ε_r = 52.9; ρ = 1000 kg/m^3

- Probe: ES3DV3 - SN3172; ConvF(4.45, 4.45, 4.45); Calibrated: 2010/5/21
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn547; Calibrated: 2010/8/18
- Phantom: SAM1; Type: SAM 4.0; Serial: TP:1419
- Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 186

BODY/Area Scan (51x111x1): Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (interpolated) = 0.408 mW/g
BODY/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 4.78 V/m; Power Drift = 0.197 dB
Peak SAR (extrapolated) = 0.592 W/kg
SAR(1 g) = 0.382 mW/g; SAR(10 g) = 0.227 mW/g
Maximum value of SAR (measured) = 0.416 mW/g
BODY/Zoom Scan (5x5x7)/Cube 1: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 4.78 V/m; Power Drift = 0.197 dB
Peak SAR (extrapolated) = 0.174 W/kg
SAR(1 g) = 0.116 mW/g; SAR(10 g) = 0.073 mW/g
Maximum value of SAR (measured) = 0.125 mW/g



0 dB = 0.125mW/g

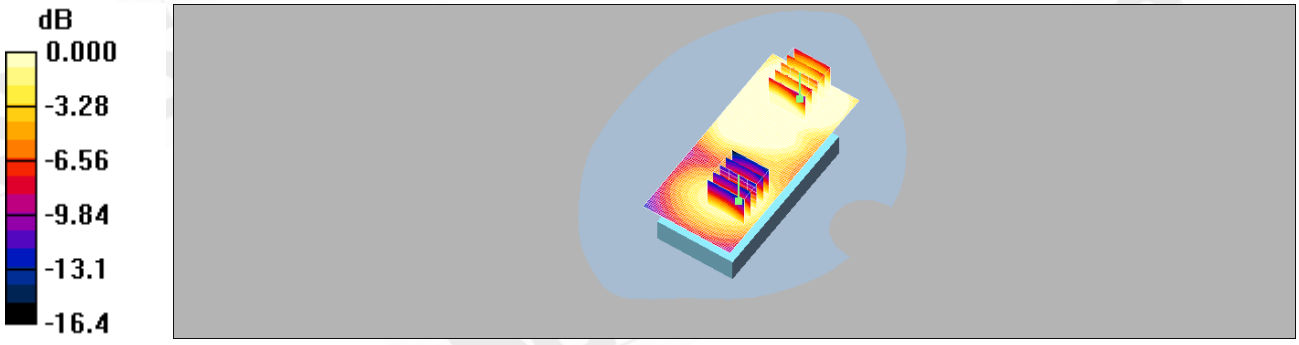
BODY_CH661

DUT: V02S002;

Communication System: GSM1900; Frequency: 1880 MHz;Duty Cycle: 1:2
Medium: M1800 & 1900 Medium parameters used: f = 1880 MHz; σ = 1.57 mho/m; ε_r = 52.9; ρ = 1000 kg/m^3

- Probe: ES3DV3 - SN3172; ConvF(4.45, 4.45, 4.45); Calibrated: 2010/5/21
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn547; Calibrated: 2010/8/18
- Phantom: SAM1; Type: SAM 4.0; Serial: TP:1419
- Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 186

BODY/Area Scan (51x111x1): Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (interpolated) = 0.560 mW/g
BODY/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 4.94 V/m; Power Drift = 0.069 dB
Peak SAR (extrapolated) = 0.820 W/kg
SAR(1 g) = 0.517 mW/g; SAR(10 g) = 0.301 mW/g
Maximum value of SAR (measured) = 0.558 mW/g
BODY/Zoom Scan (5x5x7)/Cube 1: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 4.94 V/m; Power Drift = 0.069 dB
Peak SAR (extrapolated) = 0.174 W/kg
SAR(1 g) = 0.115 mW/g; SAR(10 g) = 0.072 mW/g
Maximum value of SAR (measured) = 0.124 mW/g



0 dB = 0.124mW/g

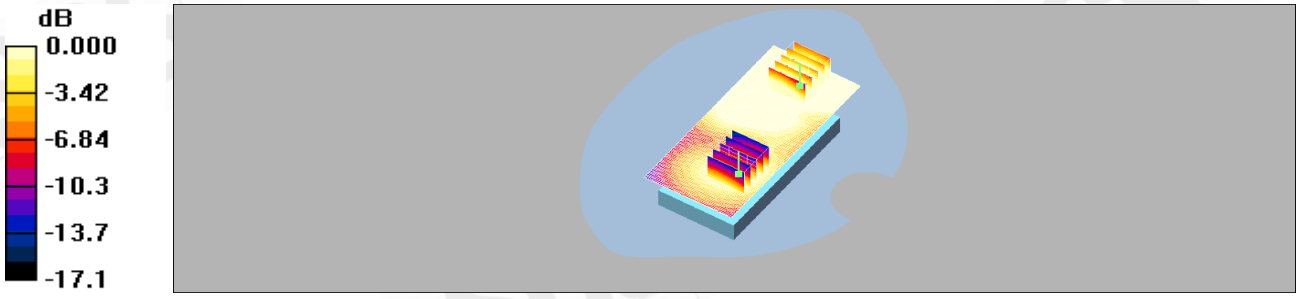
BODY_CH810

DUT: V02S002;

Communication System: GSM1900; Frequency: 1909.8 MHz;Duty Cycle: 1:2
Medium: M1800 & 1900 Medium parameters used: f = 1910 MHz; σ = 1.59 mho/m; ε_r = 53.3; ρ = 1000 kg/m^3

- Probe: ES3DV3 - SN3172; ConvF(4.45, 4.45, 4.45); Calibrated: 2010/5/21
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn547; Calibrated: 2010/8/18
- Phantom: SAM1; Type: SAM 4.0; Serial: TP:1419
- Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 186

BODY/Area Scan (51x111x1): Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (interpolated) = 0.718 mW/g
BODY/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 5.11 V/m; Power Drift = 0.191 dB
Peak SAR (extrapolated) = 1.03 W/kg
SAR(1 g) = 0.644 mW/g; SAR(10 g) = 0.371 mW/g
Maximum value of SAR (measured) = 0.699 mW/g
BODY/Zoom Scan (5x5x7)/Cube 1: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 5.11 V/m; Power Drift = 0.191 dB
Peak SAR (extrapolated) = 0.155 W/kg
SAR(1 g) = 0.102 mW/g; SAR(10 g) = 0.063 mW/g
Maximum value of SAR (measured) = 0.109 mW/g



0 dB = 0.109mW/g

Re Cheek_CH1312_Slider off

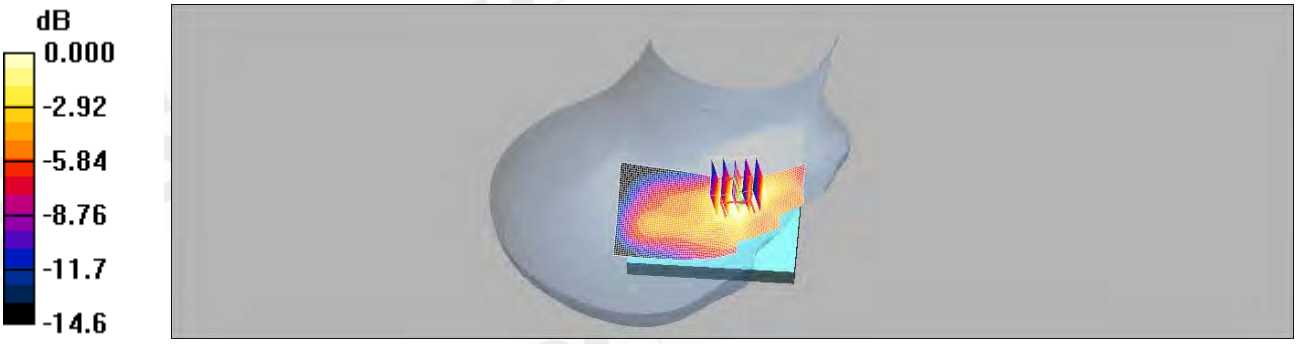
DUT: V02S002;

Communication System: WCDMA BAND4; Frequency: 1712.4 MHz;Duty Cycle: 1:1
Medium: Head 1800 MHz Medium parameters used (interpolated): f = 1712.4 MHz; σ = 1.32 mho/m; ε_r = 39.8; ρ = 1000 kg/m^3
Phantom section: Right Section

DASY4 Configuration:

- Probe: ES3DV3 - SN3172; ConvF(5.04, 5.04, 5.04); Calibrated: 2010/5/21
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn547; Calibrated: 2010/8/18
- Phantom: SAM1; Type: SAM 4.0; Serial: TP:1419
- Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 186

RE Cheek/Area Scan (51x91x1): Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (interpolated) = 0.724 mW/g
RE Cheek/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 10.7 V/m; Power Drift = 0.164 dB
Peak SAR (extrapolated) = 1.01 W/kg
SAR(1 g) = 0.642 mW/g; SAR(10 g) = 0.399 mW/g
Maximum value of SAR (measured) = 0.717 mW/g



0 dB = 0.717mW/g

Re Cheek_CH1412_Slider off

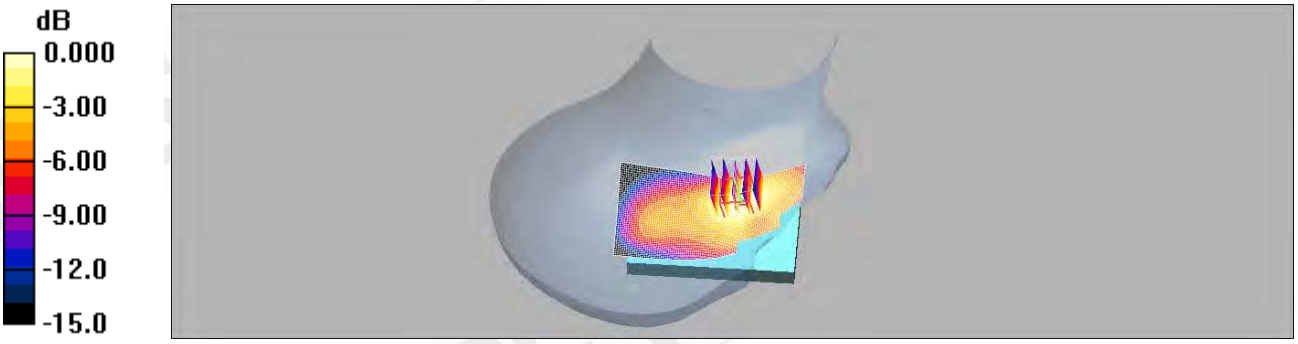
DUT: V02S002;

Communication System: WCDMA BAND4; Frequency: 1732.4 MHz;Duty Cycle: 1:1
Medium: Head 1800 MHz Medium parameters used (interpolated): f = 1732.4 MHz; σ = 1.35 mho/m; ε_r = 39.8; ρ = 1000 kg/m^3
Phantom section: Right Section

DASY4 Configuration:

- Probe: ES3DV3 - SN3172; ConvF(5.04, 5.04, 5.04); Calibrated: 2010/5/21
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn547; Calibrated: 2010/8/18
- Phantom: SAM1; Type: SAM 4.0; Serial: TP:1419
- Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 186

RE Cheek/Area Scan (51x91x1): Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (interpolated) = 0.698 mW/g
RE Cheek/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 11.1 V/m; Power Drift = 0.048 dB
Peak SAR (extrapolated) = 0.894 W/kg
SAR(1 g) = 0.631 mW/g; SAR(10 g) = 0.402 mW/g
Maximum value of SAR (measured) = 0.680 mW/g



0 dB = 0.680mW/g

Re Cheek_CH1513_Slider off

DUT: V02S002;

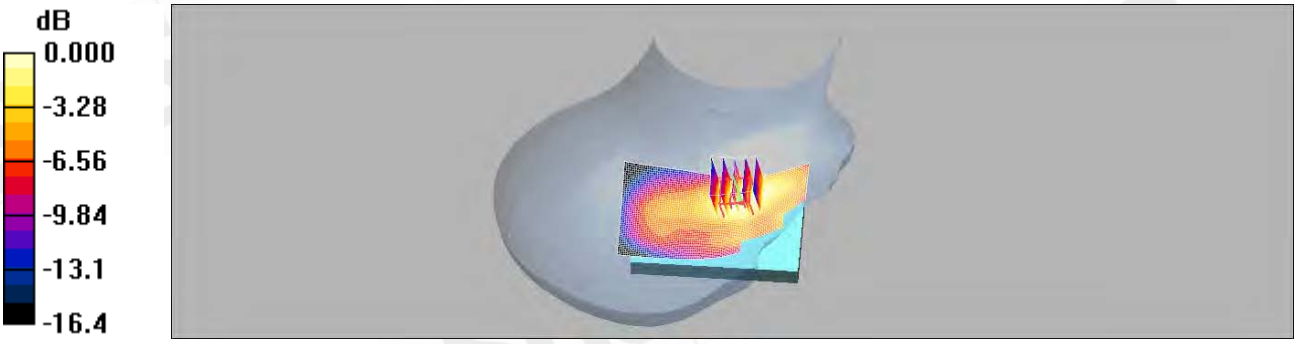
Communication System: WCDMA BAND4; Frequency: 1752.6 MHz;Duty Cycle: 1:1
Medium: Head 1800 MHz Medium parameters used: f = 1753 MHz; σ = 1.37 mho/m; ε_r = 39.8; ρ = 1000 kg/m^3
Phantom section: Right Section

DASY4 Configuration:

- Probe: ES3DV3 - SN3172; ConvF(5.04, 5.04, 5.04); Calibrated: 2010/5/21
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn547; Calibrated: 2010/8/18
- Phantom: SAM1; Type: SAM 4.0; Serial: TP:1419
- Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 186

RE Cheek/Area Scan (51x91x1): Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (interpolated) = 0.821 mW/g

RE Cheek/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 10.6 V/m; Power Drift = 0.09 dB
Peak SAR (extrapolated) = 1.19 W/kg
SAR(1 g) = 0.721 mW/g; SAR(10 g) = 0.457 mW/g
Maximum value of SAR (measured) = 0.810 mW/g



0 dB = 0.810mW/g

Le Cheek_CH1312_Slider off

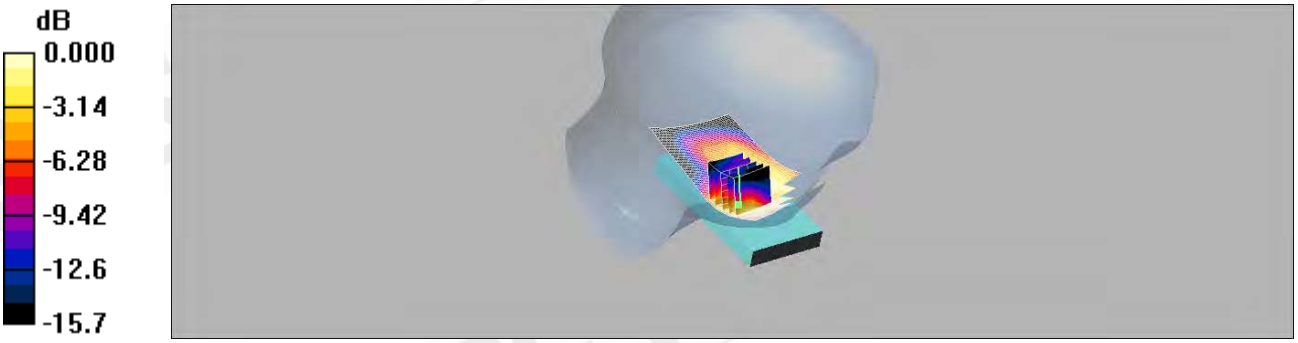
DUT: V02S002;

Communication System: WCDMA BAND4; Frequency: 1712.4 MHz;Duty Cycle: 1:1
Medium: Head 1800 MHz Medium parameters used (interpolated): f = 1712.4 MHz; σ = 1.32 mho/m; ε_r = 39.8; ρ = 1000 kg/m^3
Phantom section: Left Section

DASY4 Configuration:

- Probe: ES3DV3 - SN3172; ConvF(5.04, 5.04, 5.04); Calibrated: 2010/5/21
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn547; Calibrated: 2010/8/18
- Phantom: SAM1; Type: SAM 4.0; Serial: TP:1419
- Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 186

Le Cheek/Area Scan (51x91x1): Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (interpolated) = 0.551 mW/g
Le Cheek/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 9.16 V/m; Power Drift = -0.046 dB
Peak SAR (extrapolated) = 0.754 W/kg
SAR(1 g) = 0.482 mW/g; SAR(10 g) = 0.299 mW/g
Maximum value of SAR (measured) = 0.538 mW/g



0 dB = 0.538mW/g

Le Cheek_CH1412_Slider off

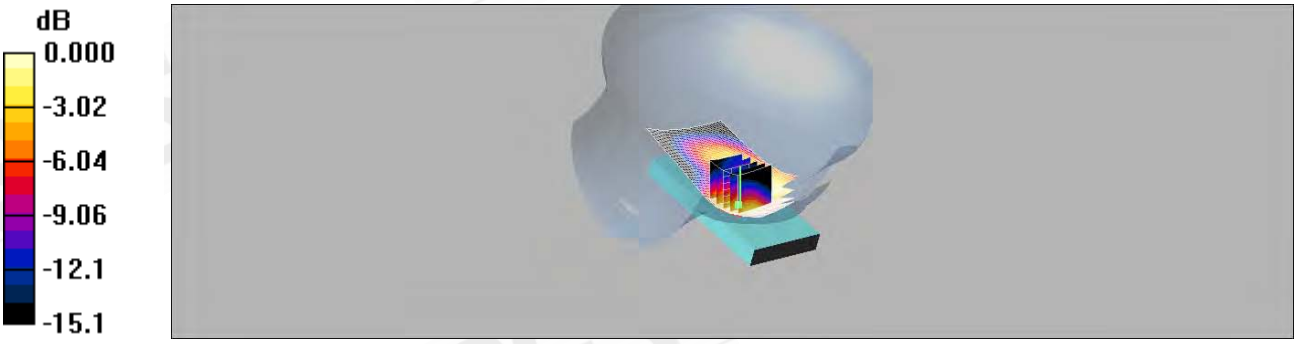
DUT: V02S002;

Communication System: WCDMA BAND4; Frequency: 1732.4 MHz;Duty Cycle: 1:1
Medium: Head 1800 MHz Medium parameters used (interpolated): f = 1732.4 MHz; σ = 1.35 mho/m; ε_r = 39.8; ρ = 1000 kg/m^3
Phantom section: Left Section

DASY4 Configuration:

- Probe: ES3DV3 - SN3172; ConvF(5.04, 5.04, 5.04); Calibrated: 2010/5/21
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn547; Calibrated: 2010/8/18
- Phantom: SAM1; Type: SAM 4.0; Serial: TP:1419
- Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 186

Le Cheek/Area Scan (51x91x1): Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (interpolated) = 0.468 mW/g
Le Cheek/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 8.49 V/m; Power Drift = -0.001 dB
Peak SAR (extrapolated) = 0.628 W/kg
SAR(1 g) = 0.426 mW/g; SAR(10 g) = 0.273 mW/g
Maximum value of SAR (measured) = 0.456 mW/g



0 dB = 0.456mW/g

Le Cheek_CH1513_Slider off

DUT: V02S002;

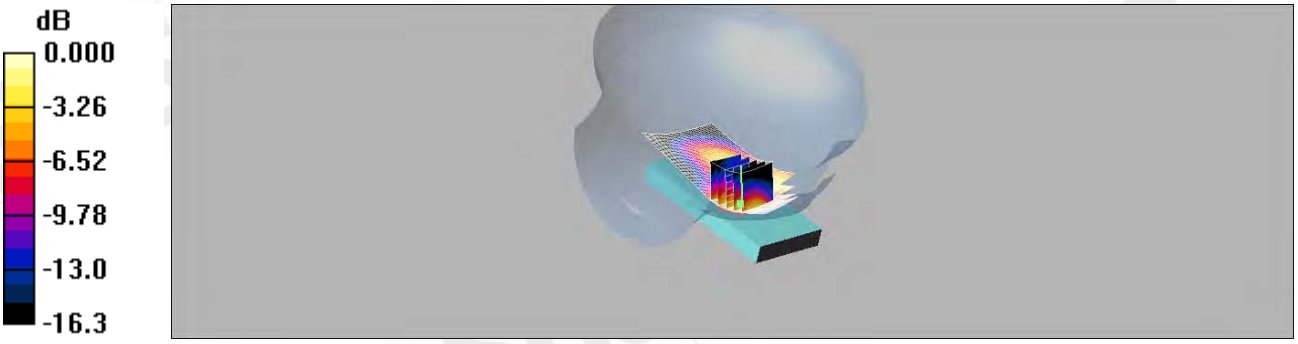
Communication System: WCDMA BAND4; Frequency: 1752.6 MHz;Duty Cycle: 1:1
Medium: Head 1800 MHz Medium parameters used: f = 1753 MHz; σ = 1.37 mho/m; ε_r = 39.8; ρ = 1000 kg/m^3
Phantom section: Left Section

DASY4 Configuration:

- Probe: ES3DV3 - SN3172; ConvF(5.04, 5.04, 5.04); Calibrated: 2010/5/21
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn547; Calibrated: 2010/8/18
- Phantom: SAM1; Type: SAM 4.0; Serial: TP:1419
- Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 186

Le Cheek/Area Scan (51x91x1): Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (interpolated) = 0.505 mW/g

Le Cheek/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 9.21 V/m; Power Drift = -0.090 dB
Peak SAR (extrapolated) = 0.778 W/kg
SAR(1 g) = 0.515 mW/g; SAR(10 g) = 0.328 mW/g
Maximum value of SAR (measured) = 0.562 mW/g



0 dB = 0.562mW/g

Re Tilt_CH1312_Slider off

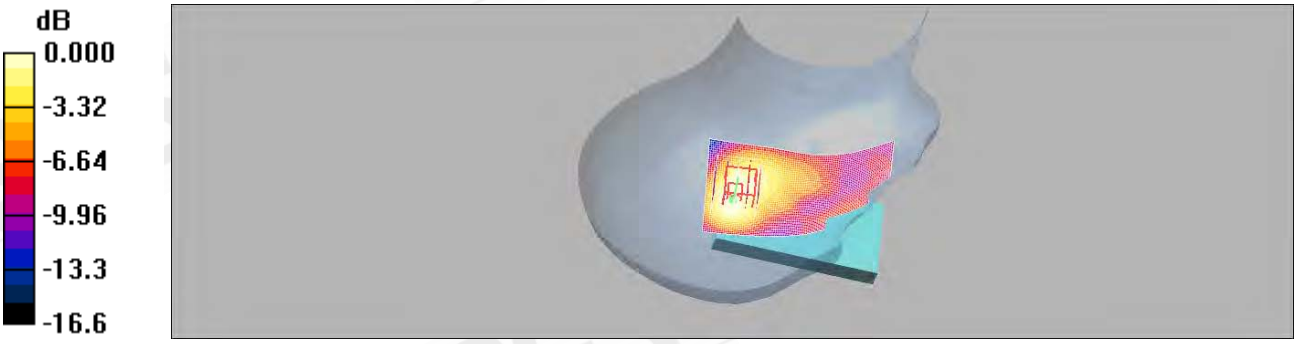
DUT: V02S002;

Communication System: WCDMA BAND4; Frequency: 1712.4 MHz;Duty Cycle: 1:1
Medium: Head 1800 MHz Medium parameters used (interpolated): f = 1712.4 MHz; σ = 1.32 mho/m; ε_r = 39.8; ρ = 1000 kg/m^3
Phantom section: Right Section

DASY4 Configuration:

- Probe: ES3DV3 - SN3172; ConvF(5.04, 5.04, 5.04); Calibrated: 2010/5/21
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn547; Calibrated: 2010/8/18
- Phantom: SAM1; Type: SAM 4.0; Serial: TP:1419
- Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 186

RE Cheek/Area Scan (51x91x1): Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (interpolated) = 0.343 mW/g
RE Cheek/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 17.0 V/m; Power Drift = -0.155 dB
Peak SAR (extrapolated) = 0.431 W/kg
SAR(1 g) = 0.290 mW/g; SAR(10 g) = 0.183 mW/g
Maximum value of SAR (measured) = 0.310 mW/g



0 dB = 0.310mW/g

Re Tilt_CH1412_Slider off

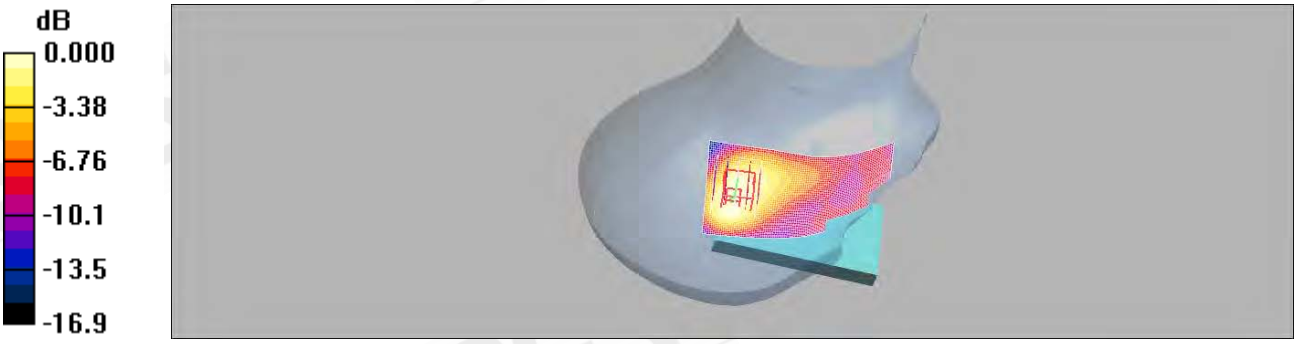
DUT: V02S002;

Communication System: WCDMA BAND4; Frequency: 1732.4 MHz;Duty Cycle: 1:1
Medium: Head 1800 MHz Medium parameters used (interpolated): f = 1732.4 MHz; σ = 1.35 mho/m; ε_r = 39.8; ρ = 1000 kg/m^3
Phantom section: Right Section

DASY4 Configuration:

- Probe: ES3DV3 - SN3172; ConvF(5.04, 5.04, 5.04); Calibrated: 2010/5/21
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn547; Calibrated: 2010/8/18
- Phantom: SAM1; Type: SAM 4.0; Serial: TP:1419
- Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 186

RE Cheek/Area Scan (51x91x1): Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (interpolated) = 0.387 mW/g
RE Cheek/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 16.3 V/m; Power Drift = -0.032 dB
Peak SAR (extrapolated) = 0.493 W/kg
SAR(1 g) = 0.329 mW/g; SAR(10 g) = 0.207 mW/g
Maximum value of SAR (measured) = 0.356 mW/g



0 dB = 0.356mW/g

Re Tilt_CH1513_Slider off

DUT: V02S002;

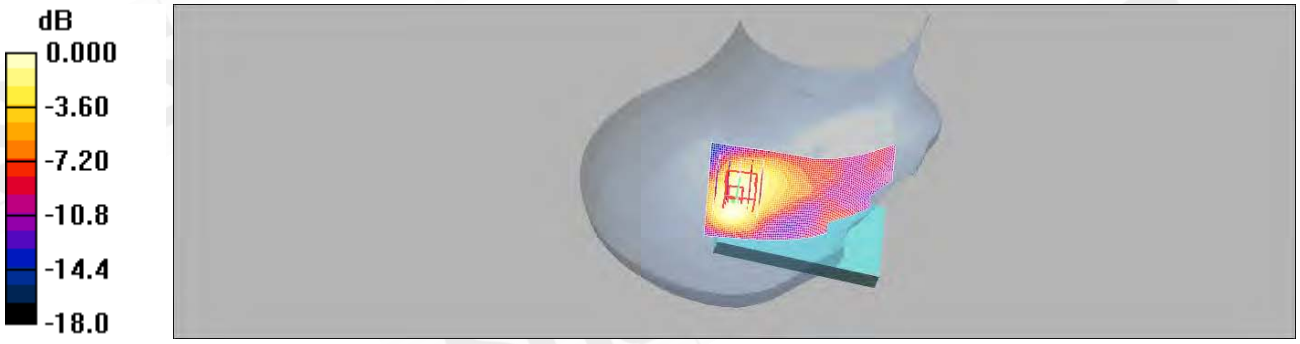
Communication System: WCDMA BAND4; Frequency: 1752.6 MHz;Duty Cycle: 1:1
Medium: Head 1800 MHz Medium parameters used: f = 1753 MHz; σ = 1.37 mho/m; ε_r = 39.8; ρ = 1000 kg/m^3
Phantom section: Right Section

DASY4 Configuration:

- Probe: ES3DV3 - SN3172; ConvF(5.04, 5.04, 5.04); Calibrated: 2010/5/21
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn547; Calibrated: 2010/8/18
- Phantom: SAM1; Type: SAM 4.0; Serial: TP:1419
- Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 186

RE Cheek/Area Scan (51x91x1): Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (interpolated) = 0.526 mW/g

RE Cheek/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 18.6 V/m; Power Drift = -0.191 dB
Peak SAR (extrapolated) = 0.902 W/kg
SAR(1 g) = 0.440 mW/g; SAR(10 g) = 0.249 mW/g
Maximum value of SAR (measured) = 0.468 mW/g



0 dB = 0.468mW/g

Le Tilt_CH1312_Slider off

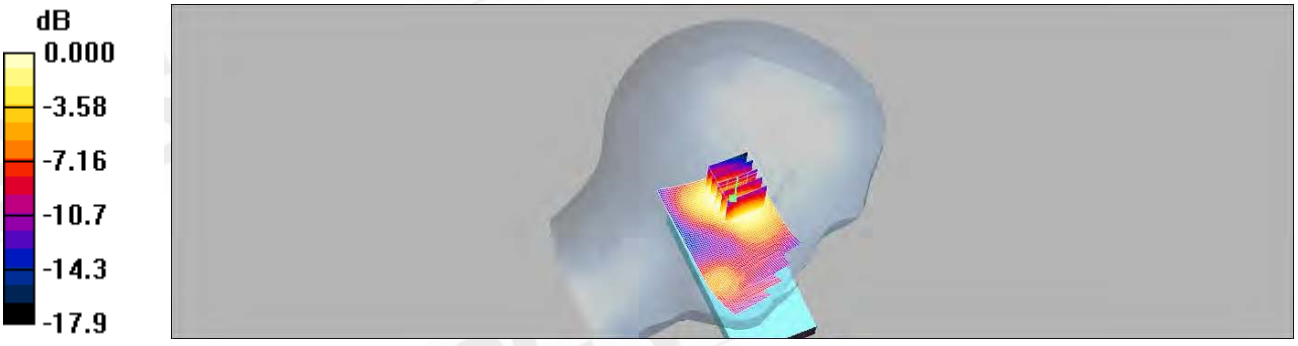
DUT: V02S002;

Communication System: WCDMA BAND4; Frequency: 1712.4 MHz;Duty Cycle: 1:1
Medium: Head 1800 MHz Medium parameters used (interpolated): f = 1712.4 MHz; σ = 1.32 mho/m; ε_r = 39.8; ρ = 1000 kg/m^3
Phantom section: Left Section

DASY4 Configuration:

- Probe: ES3DV3 - SN3172; ConvF(5.04, 5.04, 5.04); Calibrated: 2010/5/21
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn547; Calibrated: 2010/8/18
- Phantom: SAM1; Type: SAM 4.0; Serial: TP:1419
- Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 186

Le Tilt/Area Scan (51x91x1): Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (interpolated) = 0.516 mW/g
Le Tilt/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 16.8 V/m; Power Drift = 0.147 dB
Peak SAR (extrapolated) = 0.641 W/kg
SAR(1 g) = 0.445 mW/g; SAR(10 g) = 0.283 mW/g
Maximum value of SAR (measured) = 0.483 mW/g



0 dB = 0.483mW/g

Le Tilt_CH1412_Slider off

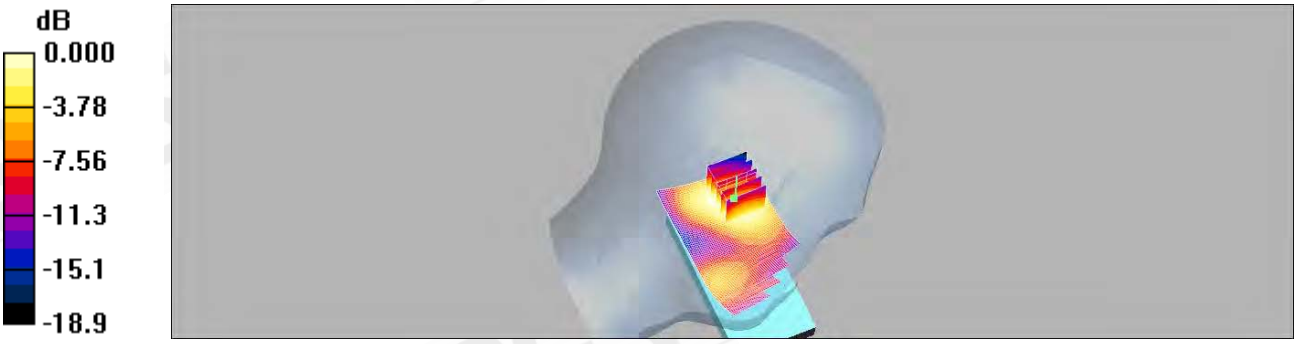
DUT: V02S002;

Communication System: WCDMA BAND4; Frequency: 1732.4 MHz;Duty Cycle: 1:1
Medium: Head 1800 MHz Medium parameters used (interpolated): f = 1732.4 MHz; σ = 1.35 mho/m; ε_r = 39.8; ρ = 1000 kg/m^3
Phantom section: Left Section

DASY4 Configuration:

- Probe: ES3DV3 - SN3172; ConvF(5.04, 5.04, 5.04); Calibrated: 2010/5/21
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn547; Calibrated: 2010/8/18
- Phantom: SAM1; Type: SAM 4.0; Serial: TP:1419
- Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 186

Le Tilt/Area Scan (51x91x1): Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (interpolated) = 0.445 mW/g
Le Tilt/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 15.8 V/m; Power Drift = -0.021 dB
Peak SAR (extrapolated) = 0.564 W/kg
SAR(1 g) = 0.389 mW/g; SAR(10 g) = 0.247 mW/g
Maximum value of SAR (measured) = 0.420 mW/g



0 dB = 0.420mW/g

Le Tilt_CH1513_Slider off

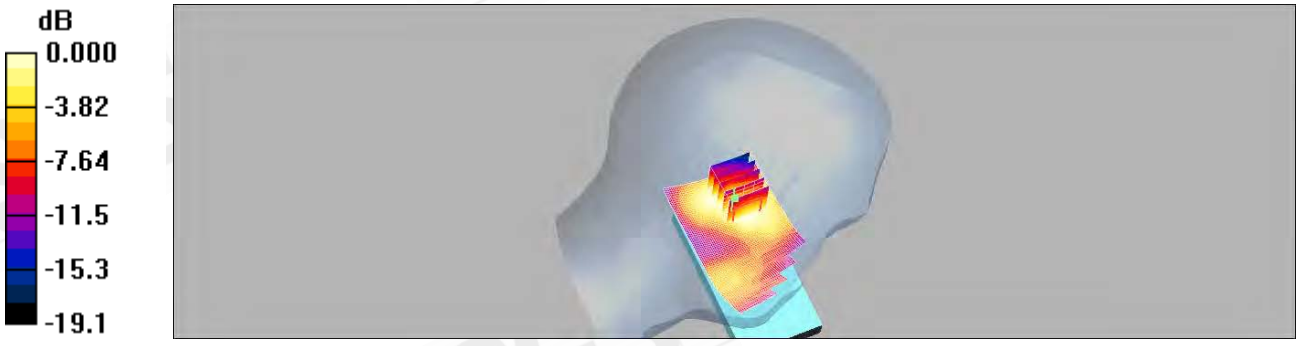
DUT: V02S002;

Communication System: WCDMA BAND4; Frequency: 1752.6 MHz;Duty Cycle: 1:1
Medium: Head 1800 MHz Medium parameters used: f = 1753 MHz; σ = 1.37 mho/m; ε_r = 39.8; ρ = 1000 kg/m^3
Phantom section: Left Section

DASY4 Configuration:

- Probe: ES3DV3 - SN3172; ConvF(5.04, 5.04, 5.04); Calibrated: 2010/5/21
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn547; Calibrated: 2010/8/18
- Phantom: SAM1; Type: SAM 4.0; Serial: TP:1419
- Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 186

Le Tilt/Area Scan (51x91x1): Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (interpolated) = 0.469 mW/g
Le Tilt/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 17.1 V/m; Power Drift = -0.04 dB
Peak SAR (extrapolated) = 0.498 W/kg
SAR(1 g) = 0.329 mW/g; SAR(10 g) = 0.214 mW/g
Maximum value of SAR (measured) = 0.356 mW/g



0 dB = 0.356mW/g

Re Cheek_CH1513_Slider off_repeated with Memory card

DUT: V02S002;

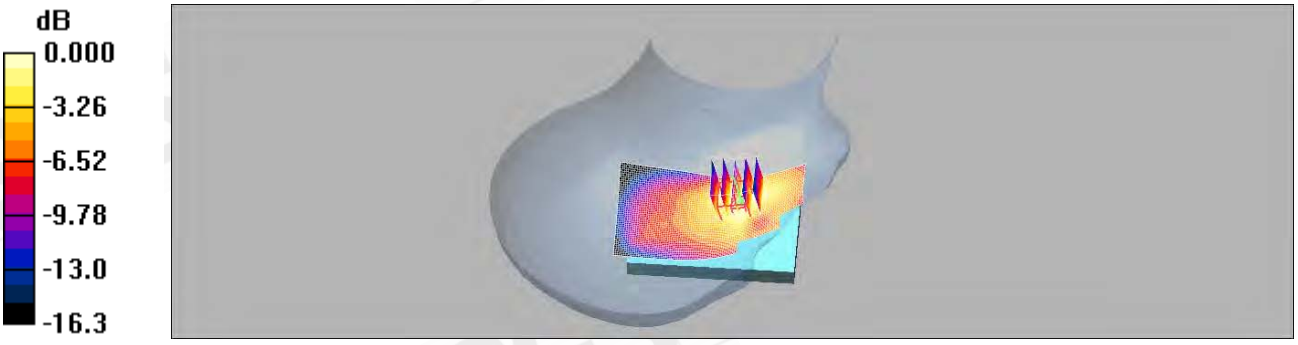
Communication System: WCDMA BAND4; Frequency: 1752.6 MHz;DutAy Cycle: 1:1
Medium: Head 1800 MHz Medium parameters used: f = 1753 MHz; σ = 1.37 mho/m; ε_r = 39.8; ρ = 1000 kg/m^3
Phantom section: Right Section

DASY4 Configuration:

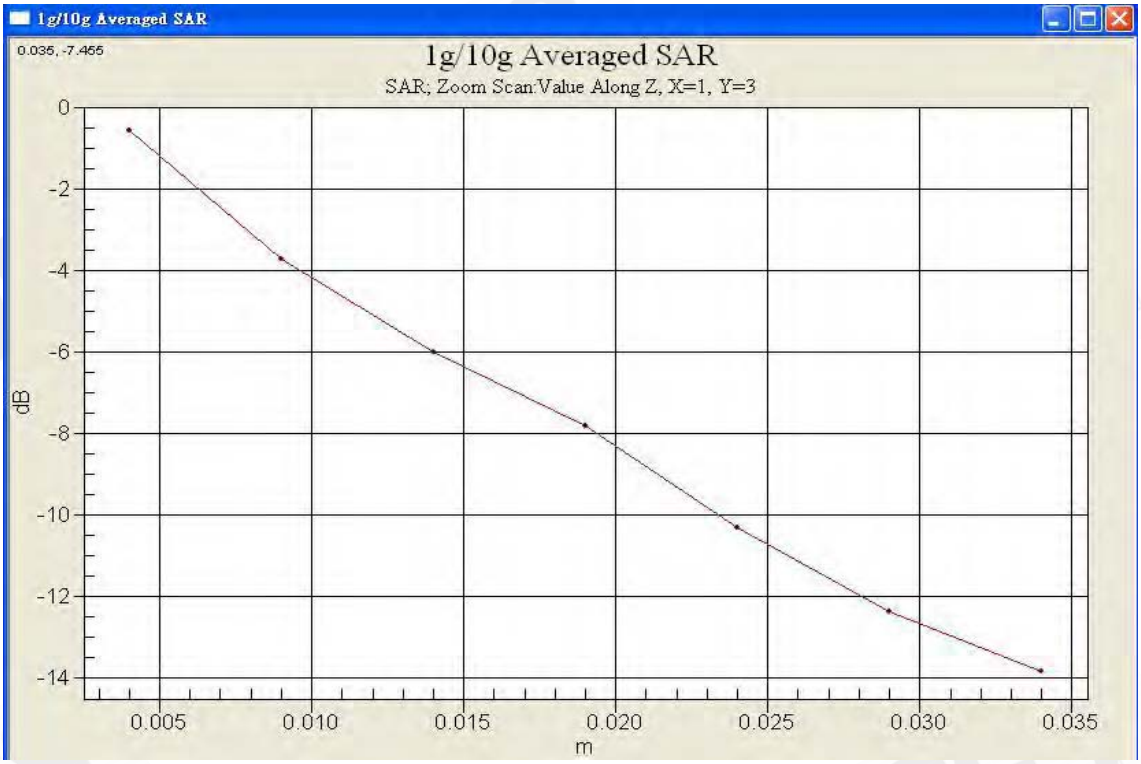
- Probe: ES3DV3 - SN3172; ConvF(5.04, 5.04, 5.04); Calibrated: 2010/5/21
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn547; Calibrated: 2010/8/18
- Phantom: SAM1; Type: SAM 4.0; Serial: TP:1419
- Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 186

RE Cheek/Area Scan (51x91x1): Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (interpolated) = 0.862 mW/g

RE Cheek/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 11.4 V/m; Power Drift = -0.120 dB
Peak SAR (extrapolated) = 1.48 W/kg
SAR(1 g) = 0.809 mW/g; SAR(10 g) = 0.473 mW/g
Maximum value of SAR (measured) = 0.866 mW/g



0 dB = 0.866mW/g



Re Cheek_CH1312_Slider on

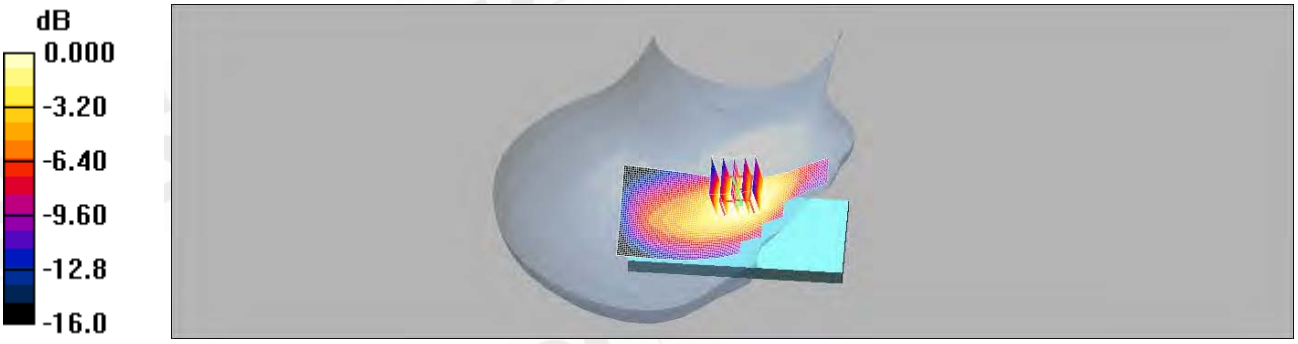
DUT: V02S002;

Communication System: WCDMA BAND4; Frequency: 1712.4 MHz;Duty Cycle: 1:1
Medium: Head 1800 MHz Medium parameters used (interpolated): f = 1712.4 MHz; σ = 1.32 mho/m; ε_r = 39.8; ρ = 1000 kg/m^3
Phantom section: Right Section

DASY4 Configuration:

- Probe: ES3DV3 - SN3172; ConvF(5.04, 5.04, 5.04); Calibrated: 2010/5/21
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn547; Calibrated: 2010/8/18
- Phantom: SAM1; Type: SAM 4.0; Serial: TP:1419
- Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 186

Re Cheek/Area Scan (51x111x1): Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (interpolated) = 0.388 mW/g
Re Cheek/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 6.87 V/m; Power Drift = 0.052 dB
Peak SAR (extrapolated) = 0.642 W/kg
SAR(1 g) = 0.327 mW/g; SAR(10 g) = 0.204 mW/g
Maximum value of SAR (measured) = 0.364 mW/g



0 dB = 0.364mW/g

Re Cheek_CH1412_Slider on

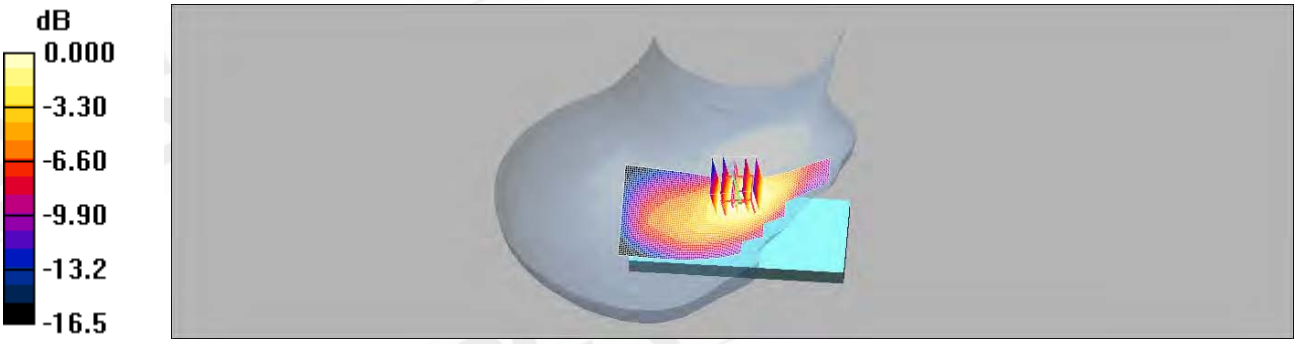
DUT: V02S002;

Communication System: WCDMA BAND4; Frequency: 1732.4 MHz;Duty Cycle: 1:1
Medium: Head 1800 MHz Medium parameters used (interpolated): f = 1732.4 MHz; σ = 1.35 mho/m; ε_r = 39.8; ρ = 1000 kg/m^3
Phantom section: Right Section

DASY4 Configuration:

- Probe: ES3DV3 - SN3172; ConvF(5.04, 5.04, 5.04); Calibrated: 2010/5/21
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn547; Calibrated: 2010/8/18
- Phantom: SAM1; Type: SAM 4.0; Serial: TP:1419
- Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 186

Re Cheek/Area Scan (51x111x1): Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (interpolated) = 0.377 mW/g
Re Cheek/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 7.22 V/m; Power Drift = -0.083 dB
Peak SAR (extrapolated) = 0.529 W/kg
SAR(1 g) = 0.359 mW/g; SAR(10 g) = 0.227 mW/g
Maximum value of SAR (measured) = 0.387 mW/g



0 dB = 0.387mW/g

Re Cheek_CH1513_Slider on

DUT: V02S002;

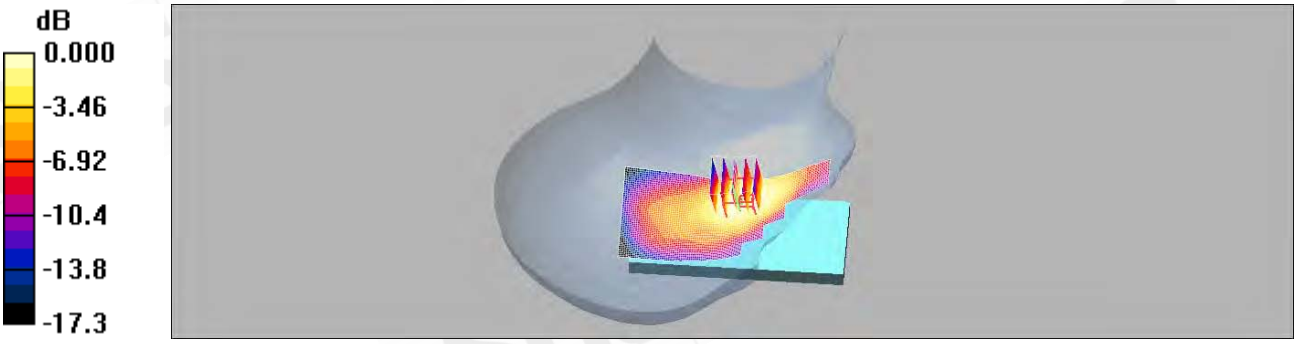
Communication System: WCDMA BAND4; Frequency: 1752.6 MHz;Duty Cycle: 1:1
Medium: Head 1800 MHz Medium parameters used: f = 1753 MHz; σ = 1.37 mho/m; ε_r = 39.8; ρ = 1000 kg/m^3
Phantom section: Right Section

DASY4 Configuration:

- Probe: ES3DV3 - SN3172; ConvF(5.04, 5.04, 5.04); Calibrated: 2010/5/21
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn547; Calibrated: 2010/8/18
- Phantom: SAM1; Type: SAM 4.0; Serial: TP:1419
- Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 186

Re Cheek/Area Scan (51x111x1): Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (interpolated) = 0.387 mW/g

Re Cheek/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 7.36 V/m; Power Drift = 0.135 dB
Peak SAR (extrapolated) = 0.659 W/kg
SAR(1 g) = 0.337 mW/g; SAR(10 g) = 0.197 mW/g
Maximum value of SAR (measured) = 0.371 mW/g



0 dB = 0.371mW/g

Le Cheek_CH1312_Slider on

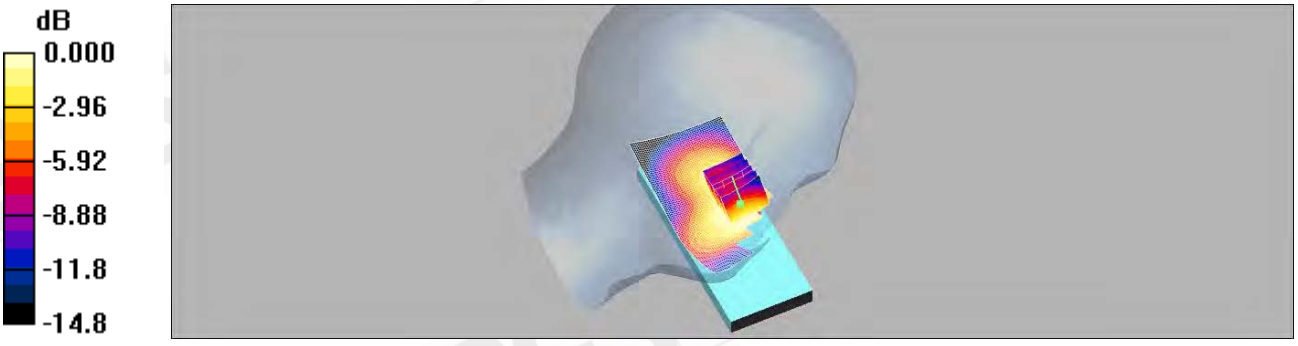
DUT: V02S002;

Communication System: WCDMA BAND4; Frequency: 1712.4 MHz;Duty Cycle: 1:1
Medium: Head 1800 MHz Medium parameters used (interpolated): f = 1712.4 MHz; σ = 1.32 mho/m; ε_r = 39.8; ρ = 1000 kg/m^3
Phantom section: Left Section

DASY4 Configuration:

- Probe: ES3DV3 - SN3172; ConvF(5.04, 5.04, 5.04); Calibrated: 2010/5/21
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn547; Calibrated: 2010/8/18
- Phantom: SAM1; Type: SAM 4.0; Serial: TP:1419
- Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 186

Le Cheek/Area Scan (51x111x1): Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (interpolated) = 0.245 mW/g
Le Cheek/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 5.81 V/m; Power Drift = 0.060 dB
Peak SAR (extrapolated) = 0.326 W/kg
SAR(1 g) = 0.229 mW/g; SAR(10 g) = 0.155 mW/g
Maximum value of SAR (measured) = 0.245 mW/g



0 dB = 0.245mW/g

Le Cheek_CH1412_Slider on

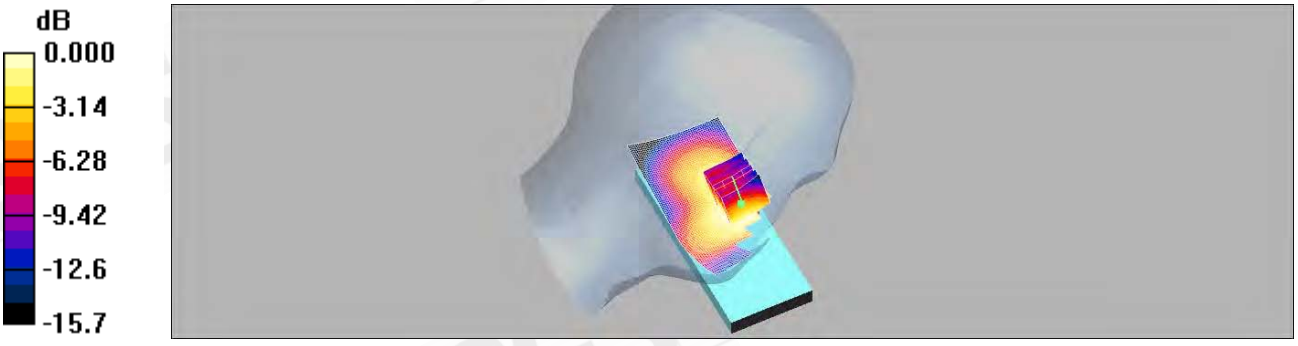
DUT: V02S002;

Communication System: WCDMA BAND4; Frequency: 1732.4 MHz;Duty Cycle: 1:1
Medium: Head 1800 MHz Medium parameters used (interpolated): f = 1732.4 MHz; σ = 1.35 mho/m; ε_r = 39.8; ρ = 1000 kg/m^3
Phantom section: Left Section

DASY4 Configuration:

- Probe: ES3DV3 - SN3172; ConvF(5.04, 5.04, 5.04); Calibrated: 2010/5/21
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn547; Calibrated: 2010/8/18
- Phantom: SAM1; Type: SAM 4.0; Serial: TP:1419
- Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 186

Le Cheek/Area Scan (51x111x1): Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (interpolated) = 0.246 mW/g
Le Cheek/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 5.81 V/m; Power Drift = 0.057 dB
Peak SAR (extrapolated) = 0.331 W/kg
SAR(1 g) = 0.229 mW/g; SAR(10 g) = 0.153 mW/g
Maximum value of SAR (measured) = 0.246 mW/g



0 dB = 0.246mW/g

Le Cheek_CH1513_Slider on

DUT: V02S002;

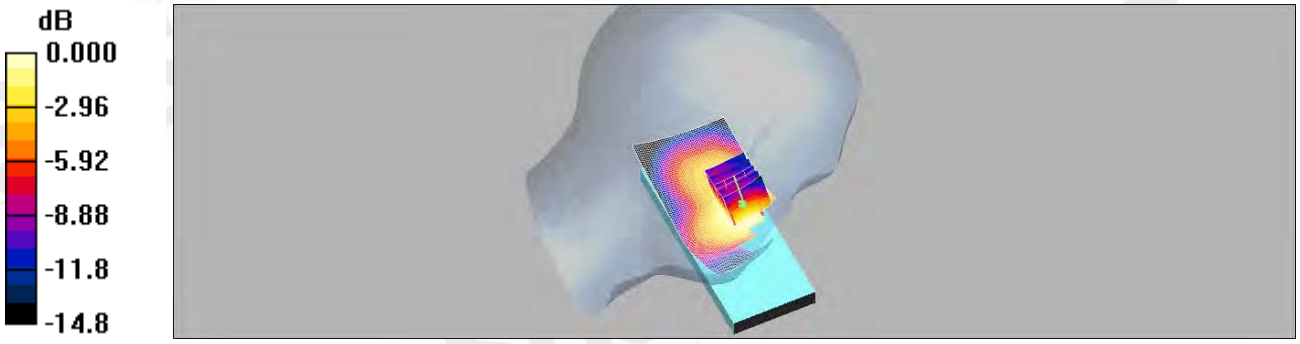
Communication System: WCDMA BAND4; Frequency: 1752.6 MHz;Duty Cycle: 1:1
Medium: Head 1800 MHz Medium parameters used: f = 1753 MHz; σ = 1.37 mho/m; ε_r = 39.8; ρ = 1000 kg/m^3
Phantom section: Left Section

DASY4 Configuration:

- Probe: ES3DV3 - SN3172; ConvF(5.04, 5.04, 5.04); Calibrated: 2010/5/21
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn547; Calibrated: 2010/8/18
- Phantom: SAM1; Type: SAM 4.0; Serial: TP:1419
- Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 186

Le Cheek/Area Scan (51x111x1): Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (interpolated) = 0.241 mW/g

Le Cheek/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 5.84 V/m; Power Drift = -0.173 dB
Peak SAR (extrapolated) = 0.321 W/kg
SAR(1 g) = 0.205 mW/g; SAR(10 g) = 0.134 mW/g
Maximum value of SAR (measured) = 0.245 mW/g



0 dB = 0.245mW/g

Re Tilt_CH1312_Slider on

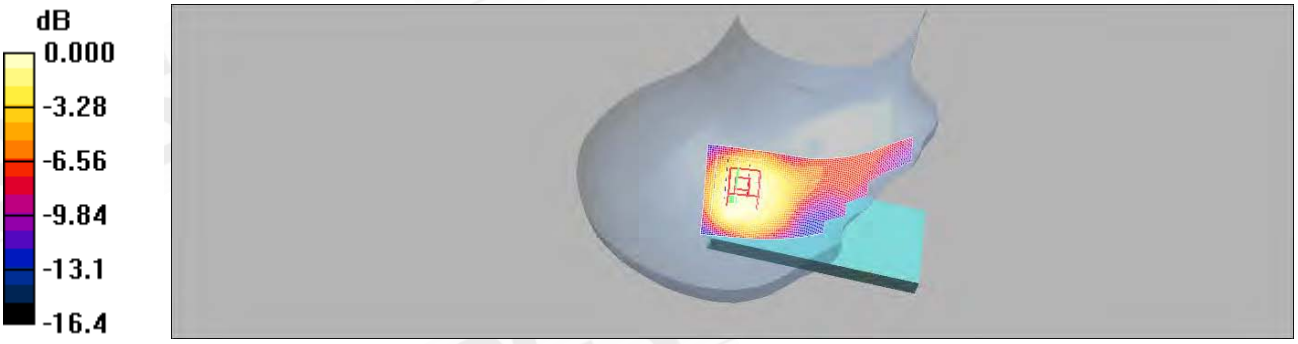
DUT: V02S002;

Communication System: WCDMA BAND4; Frequency: 1712.4 MHz;Duty Cycle: 1:1
Medium: Head 1800 MHz Medium parameters used (interpolated): f = 1712.4 MHz; σ = 1.32 mho/m; ε_r = 39.8; ρ = 1000 kg/m^3
Phantom section: Right Section

DASY4 Configuration:

- Probe: ES3DV3 - SN3172; ConvF(5.04, 5.04, 5.04); Calibrated: 2010/5/21
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn547; Calibrated: 2010/8/18
- Phantom: SAM1; Type: SAM 4.0; Serial: TP:1419
- Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 186

Re Cheek/Area Scan (51x111x1): Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (interpolated) = 0.227 mW/g
Re Cheek/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 10.8 V/m; Power Drift = 0.175 dB
Peak SAR (extrapolated) = 0.286 W/kg
SAR(1 g) = 0.191 mW/g; SAR(10 g) = 0.124 mW/g
Maximum value of SAR (measured) = 0.208 mW/g



0 dB = 0.208mW/g

Re Tilt_CH1412_Slider on

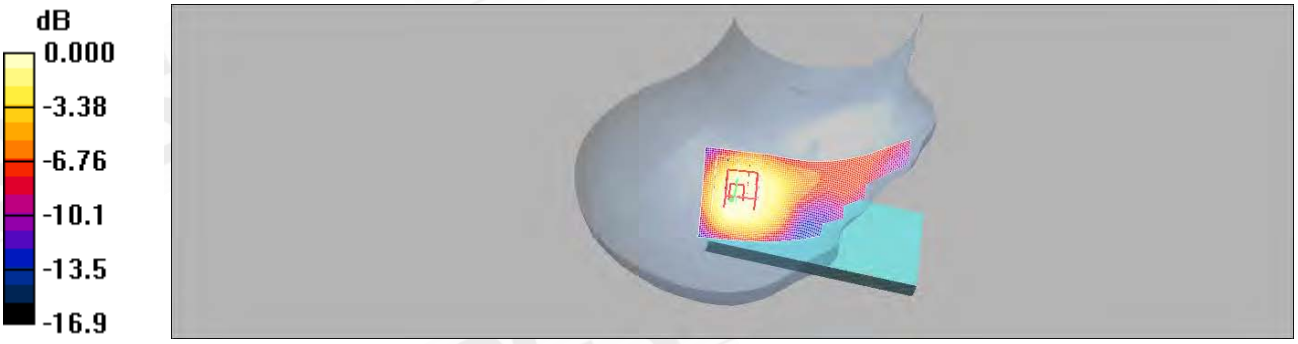
DUT: V02S002;

Communication System: WCDMA BAND4; Frequency: 1732.4 MHz;Duty Cycle: 1:1
Medium: Head 1800 MHz Medium parameters used (interpolated): f = 1732.4 MHz; σ = 1.35 mho/m; ε_r = 39.8; ρ = 1000 kg/m^3
Phantom section: Right Section

DASY4 Configuration:

- Probe: ES3DV3 - SN3172; ConvF(5.04, 5.04, 5.04); Calibrated: 2010/5/21
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn547; Calibrated: 2010/8/18
- Phantom: SAM1; Type: SAM 4.0; Serial: TP:1419
- Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 186

Re Cheek/Area Scan (51x111x1): Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (interpolated) = 0.219 mW/g
Re Cheek/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 11.6 V/m; Power Drift = 0.018 dB
Peak SAR (extrapolated) = 0.286 W/kg
SAR(1 g) = 0.193 mW/g; SAR(10 g) = 0.125 mW/g
Maximum value of SAR (measured) = 0.206 mW/g



0 dB = 0.206mW/g

Re Tilt_CH1513_Slider on

DUT: V02S002;

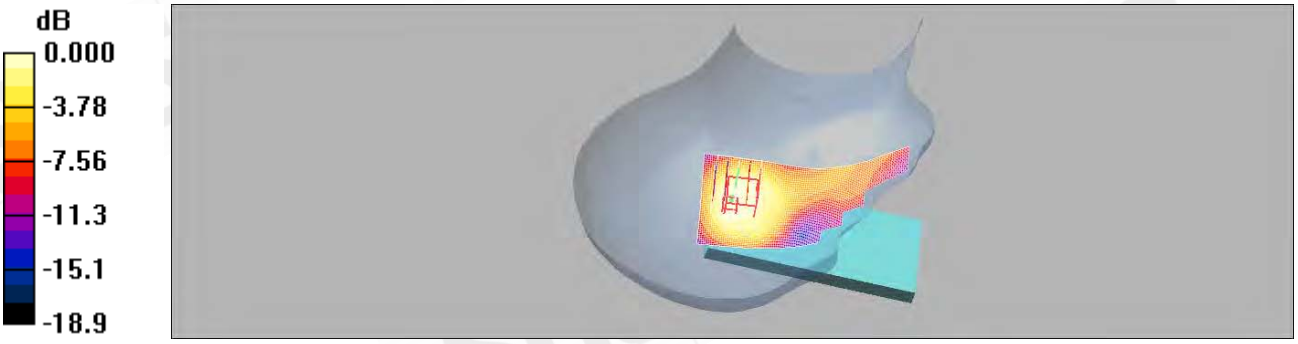
Communication System: WCDMA BAND4; Frequency: 1752.6 MHz;Duty Cycle: 1:1
Medium: Head 1800 MHz Medium parameters used: f = 1753 MHz; σ = 1.37 mho/m; ε_r = 39.8; ρ = 1000 kg/m^3
Phantom section: Right Section

DASY4 Configuration:

- Probe: ES3DV3 - SN3172; ConvF(5.04, 5.04, 5.04); Calibrated: 2010/5/21
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn547; Calibrated: 2010/8/18
- Phantom: SAM1; Type: SAM 4.0; Serial: TP:1419
- Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 186

Re Cheek/Area Scan (51x111x1): Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (interpolated) = 0.226 mW/g

Re Cheek/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 12.0 V/m; Power Drift = -0.175 dB
Peak SAR (extrapolated) = 0.321 W/kg
SAR(1 g) = 0.182 mW/g; SAR(10 g) = 0.121 mW/g
Maximum value of SAR (measured) = 0.195 mW/g



0 dB = 0.195mW/g

Le Tilt_CH1312_Slider on

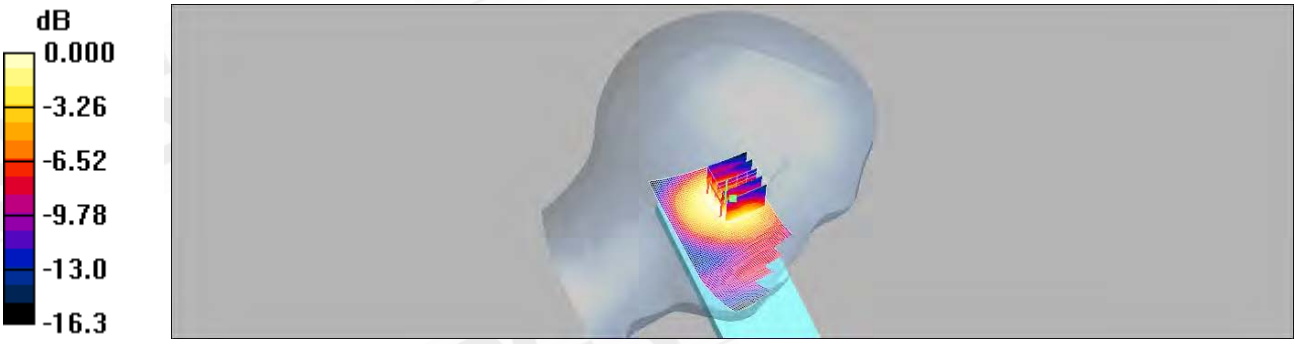
DUT: V02S002;

Communication System: WCDMA BAND4; Frequency: 1712.4 MHz;Duty Cycle: 1:1
Medium: Head 1800 MHz Medium parameters used (interpolated): f = 1712.4 MHz; σ = 1.32 mho/m; ε_r = 39.8; ρ = 1000 kg/m^3
Phantom section: Left Section

DASY4 Configuration:

- Probe: ES3DV3 - SN3172; ConvF(5.04, 5.04, 5.04); Calibrated: 2010/5/21
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn547; Calibrated: 2010/8/18
- Phantom: SAM1; Type: SAM 4.0; Serial: TP:1419
- Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 186

Le Cheek/Area Scan (51x111x1): Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (interpolated) = 0.261 mW/g
Le Cheek/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 10.4 V/m; Power Drift = -0.06 dB
Peak SAR (extrapolated) = 0.311 W/kg
SAR(1 g) = 0.216 mW/g; SAR(10 g) = 0.141 mW/g
Maximum value of SAR (measured) = 0.235 mW/g



0 dB = 0.235mW/g

Le Tilt_CH1412_Slider on

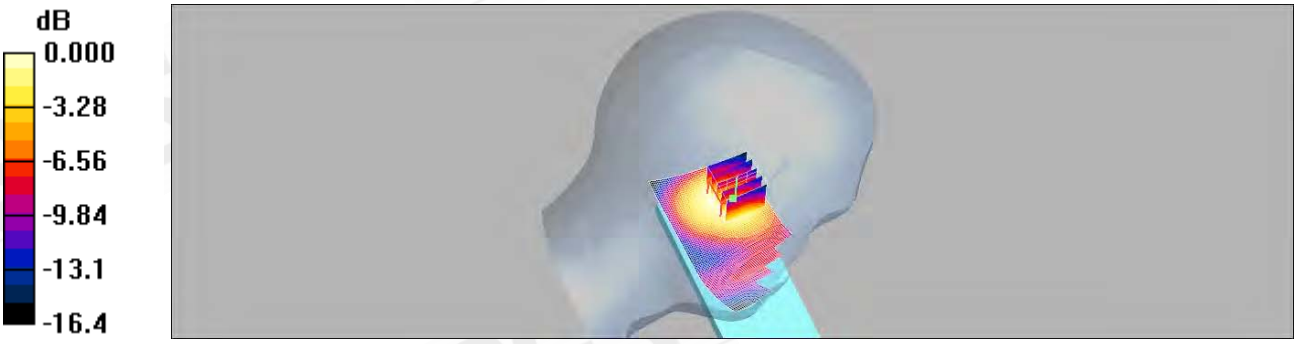
DUT: V02S002;

Communication System: WCDMA BAND4; Frequency: 1732.4 MHz;Duty Cycle: 1:1
Medium: Head 1800 MHz Medium parameters used (interpolated): f = 1732.4 MHz; σ = 1.35 mho/m; ε_r = 39.8; ρ = 1000 kg/m^3
Phantom section: Left Section

DASY4 Configuration:

- Probe: ES3DV3 - SN3172; ConvF(5.04, 5.04, 5.04); Calibrated: 2010/5/21
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn547; Calibrated: 2010/8/18
- Phantom: SAM1; Type: SAM 4.0; Serial: TP:1419
- Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 186

Le Cheek/Area Scan (51x111x1): Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (interpolated) = 0.254 mW/g
Le Cheek/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 10.7 V/m; Power Drift = -0.006 dB
Peak SAR (extrapolated) = 0.322 W/kg
SAR(1 g) = 0.226 mW/g; SAR(10 g) = 0.146 mW/g
Maximum value of SAR (measured) = 0.243 mW/g



0 dB = 0.243mW/g

Le Tilt_CH1513_Slider on

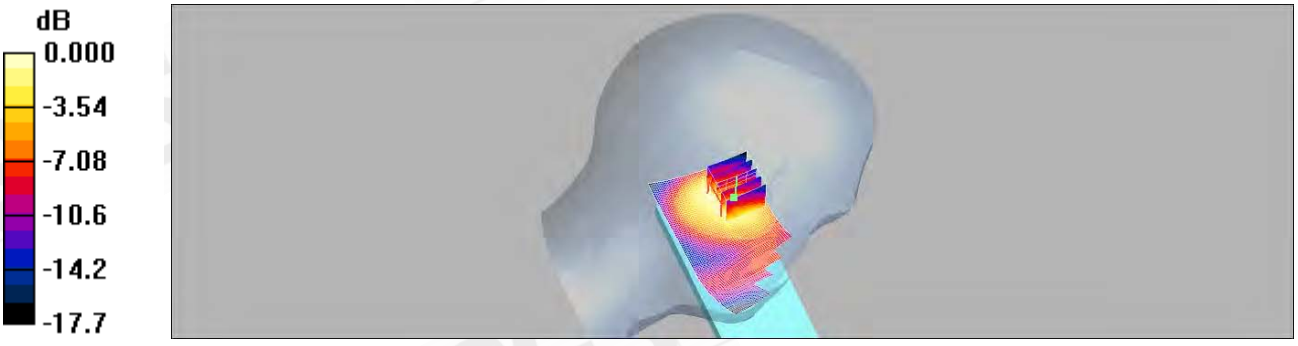
DUT: V02S002;

Communication System: WCDMA BAND4; Frequency: 1752.6 MHz;Duty Cycle: 1:1
Medium: Head 1800 MHz Medium parameters used: f = 1753 MHz; σ = 1.37 mho/m; ε_r = 39.8; ρ = 1000 kg/m^3
Phantom section: Left Section

DASY4 Configuration:

- Probe: ES3DV3 - SN3172; ConvF(5.04, 5.04, 5.04); Calibrated: 2010/5/21
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn547; Calibrated: 2010/8/18
- Phantom: SAM1; Type: SAM 4.0; Serial: TP:1419
- Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 186

Le Cheek/Area Scan (51x111x1): Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (interpolated) = 0.253 mW/g
Le Cheek/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 11.0 V/m; Power Drift = -0.156 dB
Peak SAR (extrapolated) = 0.346 W/kg
SAR(1 g) = 0.227 mW/g; SAR(10 g) = 0.137 mW/g
Maximum value of SAR (measured) = 0.247 mW/g



0 dB = 0.247mW/g

BODY_CH1312

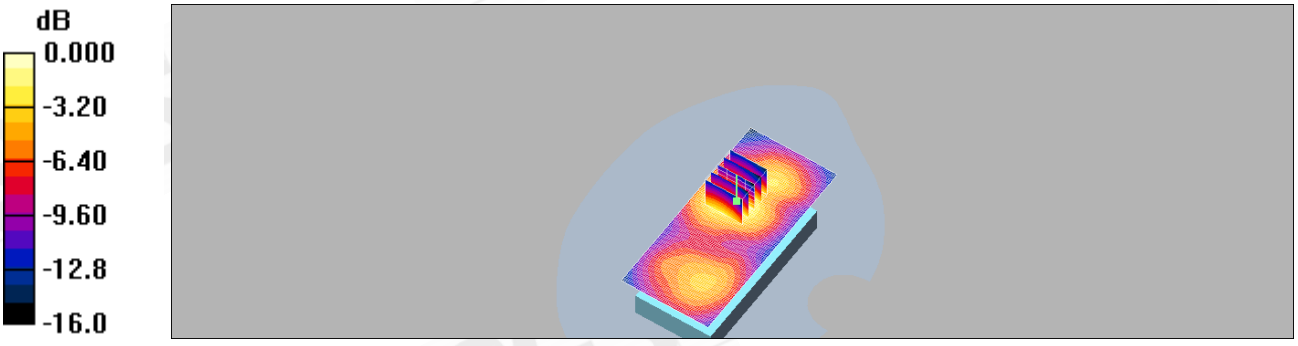
DUT: V02S002;

Communication System: WCDMA BAND4; Frequency: 1712.4 MHz;Duty Cycle: 1:1
Medium: M1800 & 1900 Medium parameters used (interpolated): f = 1712.4 MHz; σ = 1.44 mho/m; ε_r = 53.9; ρ = 1000 kg/m^3
Phantom section: Flat Section

DASY4 Configuration:

- Probe: ES3DV3 - SN3172; ConvF(4.63, 4.63, 4.63); Calibrated: 2010/5/21
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn547; Calibrated: 2010/8/18
- Phantom: SAM1; Type: SAM 4.0; Serial: TP:1419
- Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 186

BODY/Area Scan (51x111x1): Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (interpolated) = 0.848 mW/g
BODY/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 10.1 V/m; Power Drift = 0.138 dB
Peak SAR (extrapolated) = 1.34 W/kg
SAR(1 g) = 0.833 mW/g; SAR(10 g) = 0.501 mW/g
Maximum value of SAR (measured) = 0.902 mW/g



0 dB = 0.902mW/g

BODY_CH1412

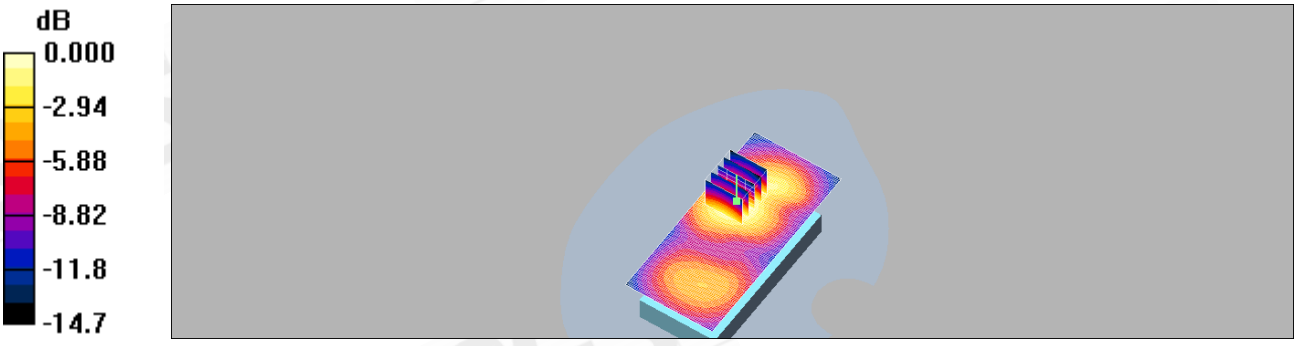
DUT: V02S002;

Communication System: WCDMA BAND4; Frequency: 1732.4 MHz;Duty Cycle: 1:1
Medium: M1800 & 1900 Medium parameters used (interpolated): f = 1732.4 MHz; σ = 1.45 mho/m; ε_r = 53.4; ρ = 1000 kg/m^3
Phantom section: Flat Section

DASY4 Configuration:

- Probe: ES3DV3 - SN3172; ConvF(4.63, 4.63, 4.63); Calibrated: 2010/5/21
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn547; Calibrated: 2010/8/18
- Phantom: SAM1; Type: SAM 4.0; Serial: TP:1419
- Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 186

BODY/Area Scan (51x111x1): Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (interpolated) = 0.724 mW/g
BODY/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 9.52 V/m; Power Drift = 0.029 dB
Peak SAR (extrapolated) = 1.04 W/kg
SAR(1 g) = 0.654 mW/g; SAR(10 g) = 0.395 mW/g
Maximum value of SAR (measured) = 0.706 mW/g



0 dB = 0.706mW/g

BODY_CH1513

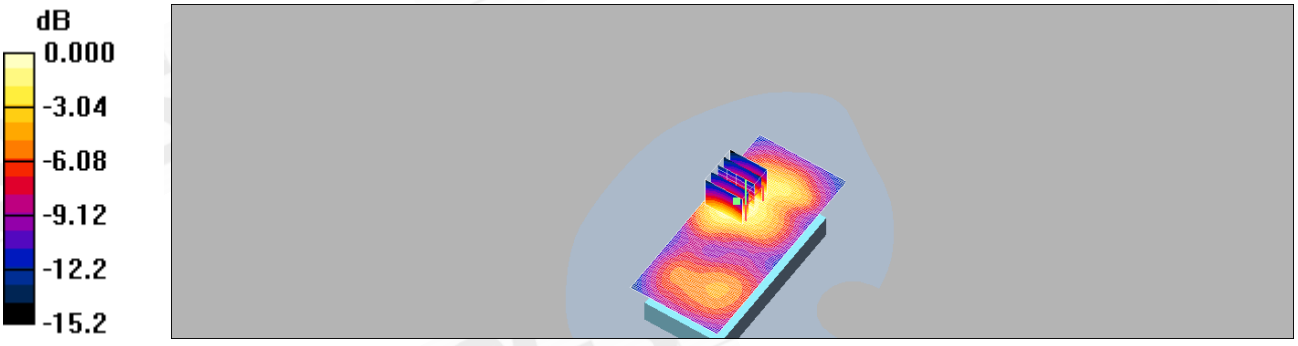
DUT: V02S002;

Communication System: WCDMA BAND4; Frequency: 1752.6 MHz;Duty Cycle: 1:1
Medium: M1800 & 1900 Medium parameters used: f = 1753 MHz; σ = 1.48 mho/m; ε_r = 53.3; ρ = 1000 kg/m^3
Phantom section: Flat Section

DASY4 Configuration:

- Probe: ES3DV3 - SN3172; ConvF(4.63, 4.63, 4.63); Calibrated: 2010/5/21
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn547; Calibrated: 2010/8/18
- Phantom: SAM1; Type: SAM 4.0; Serial: TP:1419
- Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 186

BODY/Area Scan (51x111x1): Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (interpolated) = 0.752 mW/g
BODY/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 10.2 V/m; Power Drift = 0.156 dB
Peak SAR (extrapolated) = 1.20 W/kg
SAR(1 g) = 0.752 mW/g; SAR(10 g) = 0.458 mW/g
Maximum value of SAR (measured) = 0.806 mW/g



0 dB = 0.806mW/g

BODY_WLAN802.11 b_CH1

DUT: V02S002;

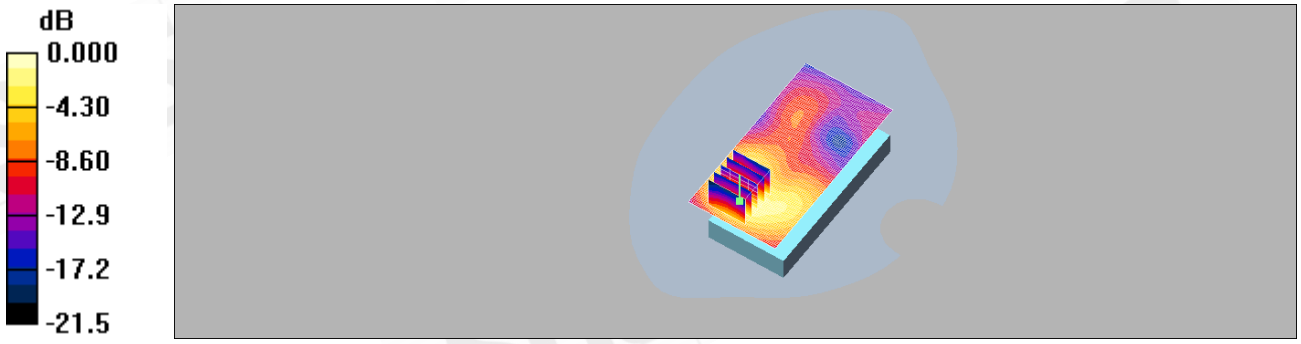
Communication System: Wireless LAN; Frequency: 2412 MHz;Duty Cycle: 1:1
Medium: Muscle 2450 Medium parameters used: f = 2412 MHz; σ = 1.94 mho/m; ε_r = 52.2; ρ = 1000 kg/m^3
Phantom section: Flat Section

DASY4 Configuration:

- Probe: ES3DV3 - SN3172; ConvF(4.11, 4.11, 4.11); Calibrated: 2010/5/21
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn547; Calibrated: 2010/8/18
- Phantom: SAM2; Type: SAM 4.0; Serial: TP:1270
- Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 186

BODY/Area Scan (51x101x1): Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (interpolated) = 0.132 mW/g

BODY/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 2.80 V/m; Power Drift = 0.071 dB
Peak SAR (extrapolated) = 0.251 W/kg
SAR(1 g) = 0.130 mW/g; SAR(10 g) = 0.069 mW/g
Maximum value of SAR (measured) = 0.142 mW/g



0 dB = 0.142mW/g

BODY_WLAN802.11 b_CH6

DUT: V02S002;

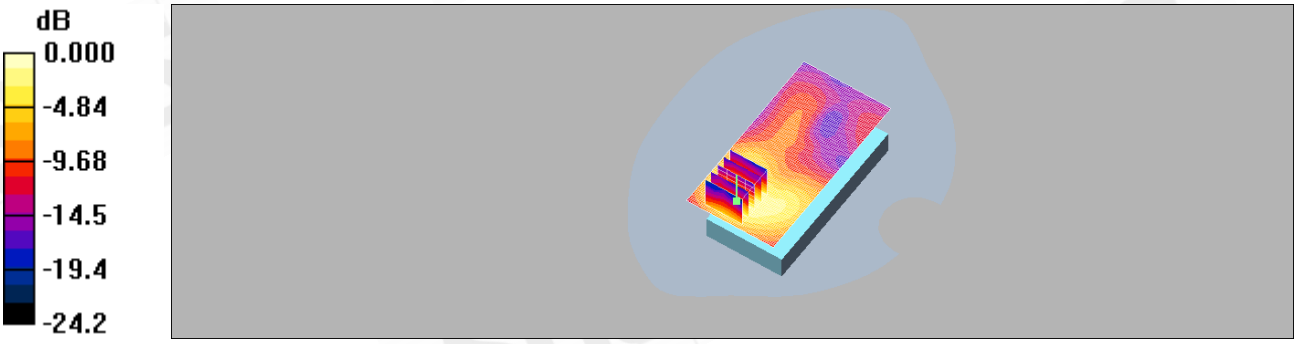
Communication System: Wireless LAN; Frequency: 2437 MHz;Duty Cycle: 1:1
Medium: Muscle 2450 Medium parameters used: f = 2437 MHz; σ = 1.98 mho/m; ε_r = 52.1; ρ = 1000 kg/m^3
Phantom section: Flat Section

DASY4 Configuration:

- Probe: ES3DV3 - SN3172; ConvF(4.11, 4.11, 4.11); Calibrated: 2010/5/21
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn547; Calibrated: 2010/8/18
- Phantom: SAM2; Type: SAM 4.0; Serial: TP:1270
- Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 186

BODY/Area Scan (51x101x1): Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (interpolated) = 0.124 mW/g

BODY/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 2.18 V/m; Power Drift = 1.11 dB
Peak SAR (extrapolated) = 0.241 W/kg
SAR(1 g) = 0.122 mW/g; SAR(10 g) = 0.063 mW/g
Maximum value of SAR (measured) = 0.134 mW/g



0 dB = 0.134mW/g

BODY_WLAN802.11 b_CH11

DUT: V02S002;

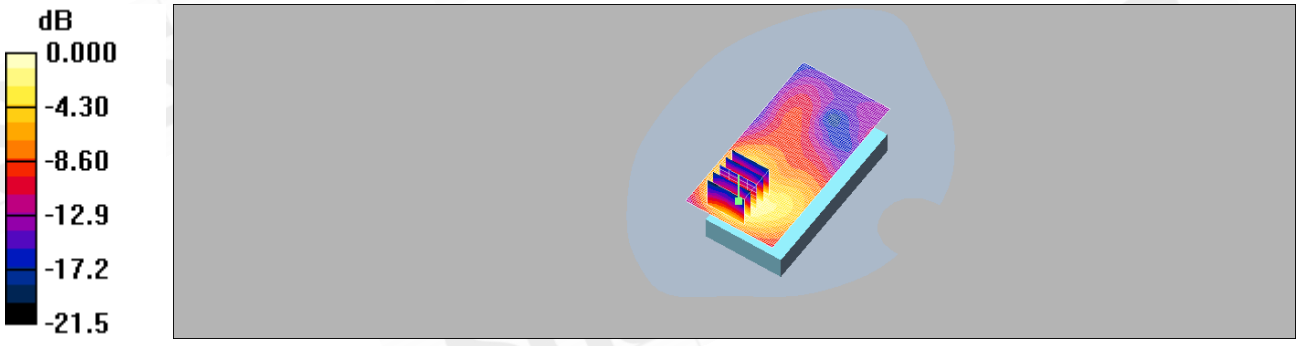
Communication System: Wireless LAN; Frequency: 2462 MHz;Duty Cycle: 1:1
Medium: Muscle 2450 Medium parameters used: f = 2462 MHz; σ = 2.01 mho/m; ε_r = 52; ρ = 1000 kg/m^3
Phantom section: Flat Section

DASY4 Configuration:

- Probe: ES3DV3 - SN3172; ConvF(4.11, 4.11, 4.11); Calibrated: 2010/5/21
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn547; Calibrated: 2010/8/18
- Phantom: SAM2; Type: SAM 4.0; Serial: TP:1270
- Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 186

BODY/Area Scan (51x101x1): Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (interpolated) = 0.115 mW/g

BODY/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 2.64 V/m; Power Drift = 0.164 dB
Peak SAR (extrapolated) = 0.215 W/kg
SAR(1 g) = 0.108 mW/g; SAR(10 g) = 0.056 mW/g
Maximum value of SAR (measured) = 0.120 mW/g



0 dB = 0.120mW/g

Date/Time: 2011/2/14

BODY_WLAN802.11 b_CH1_repeated for EUT front to phantom

DUT: V02S002;

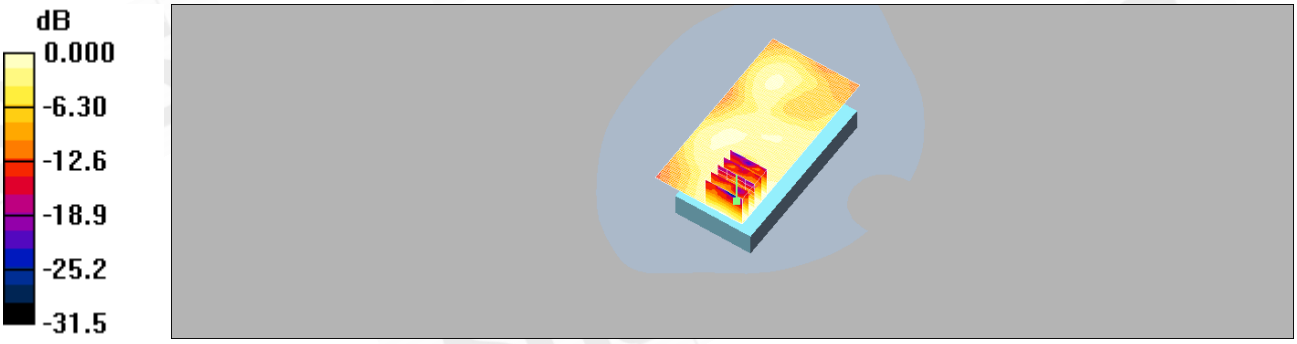
Communication System: Wireless LAN; Frequency: 2412 MHz;Duty Cycle: 1:1
Medium: Muscle 2450 Medium parameters used: f = 2412 MHz; σ = 1.94 mho/m; ε_r = 52.2; ρ = 1000 kg/m
Phantom section: Flat Section

DASY4 Configuration:

- Probe: ES3DV3 - SN3172; ConvF(4.11, 4.11, 4.11); Calibrated: 2010/5/21
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn547; Calibrated: 2010/8/18
- Phantom: SAM2; Type: SAM 4.0; Serial: TP:1270
- Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 186

BODY/Area Scan (51x101x1): Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (interpolated) = 0.023 mW/g

BODY/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 2.79 V/m; Power Drift = 0.420 dB
Peak SAR (extrapolated) = 0.039 W/kg
SAR(1 g) = 0.022 mW/g; SAR(10 g) = 0.012 mW/g
Maximum value of SAR (measured) = 0.023 mW/g



0 dB = 0.023mW/g

BODY_WLAN802.11 b_CH1_repeated with memory card

DUT: V02S002;

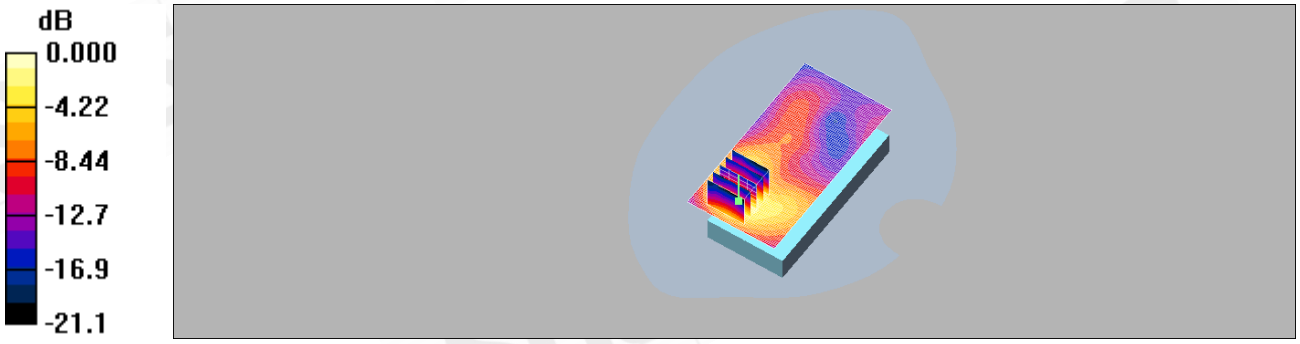
Communication System: Wireless LAN; Frequency: 2412 MHz;Duty Cycle: 1:1
Medium: Muscle 2450 Medium parameters used: f = 2412 MHz; σ = 1.94 mho/m; ε_r = 52.2; ρ = 1000 kg/m
Phantom section: Flat Section

DASY4 Configuration:

- Probe: ES3DV3 - SN3172; ConvF(4.11, 4.11, 4.11); Calibrated: 2010/5/21
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn547; Calibrated: 2010/8/18
- Phantom: SAM2; Type: SAM 4.0; Serial: TP:1270
- Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 186

BODY/Area Scan (51x101x1): Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (interpolated) = 0.108 mW/g

BODY/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 2.21 V/m; Power Drift = 0.735 dB
Peak SAR (extrapolated) = 0.217 W/kg
SAR(1 g) = 0.108 mW/g; SAR(10 g) = 0.055 mW/g
Maximum value of SAR (measured) = 0.119 mW/g



0 dB = 0.119mW/g

BODY_WLAN802.11 b_CH1_repeated with headset (Foster)

DUT: V02S002;

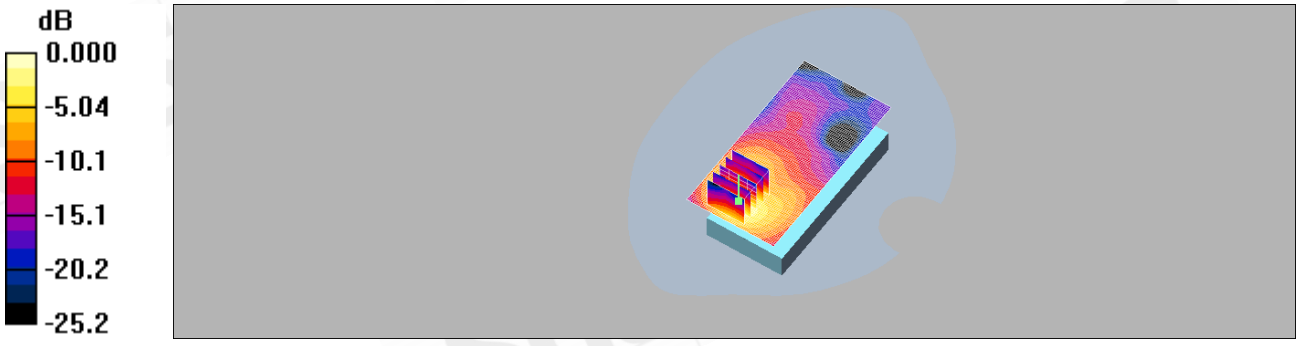
Communication System: Wireless LAN; Frequency: 2412 MHz;Duty Cycle: 1:1
Medium: Muscle 2450 Medium parameters used: f = 2412 MHz; σ = 1.94 mho/m; ε_r = 52.2; ρ = 1000 kg/m
Phantom section: Flat Section

DASY4 Configuration:

- Probe: ES3DV3 - SN3172; ConvF(4.11, 4.11, 4.11); Calibrated: 2010/5/21
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn547; Calibrated: 2010/8/18
- Phantom: SAM2; Type: SAM 4.0; Serial: TP:1270
- Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 186

BODY/Area Scan (51x101x1): Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (interpolated) = 0.094 mW/g

BODY/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 1.65 V/m; Power Drift = 1.67 dB
Peak SAR (extrapolated) = 0.181 W/kg
SAR(1 g) = 0.090 mW/g; SAR(10 g) = 0.044 mW/g
Maximum value of SAR (measured) = 0.103 mW/g



0 dB = 0.103mW/g

BODY_WLAN802.11 b_CH1_repeated wiht headset (PCH)

DUT: V02S002;

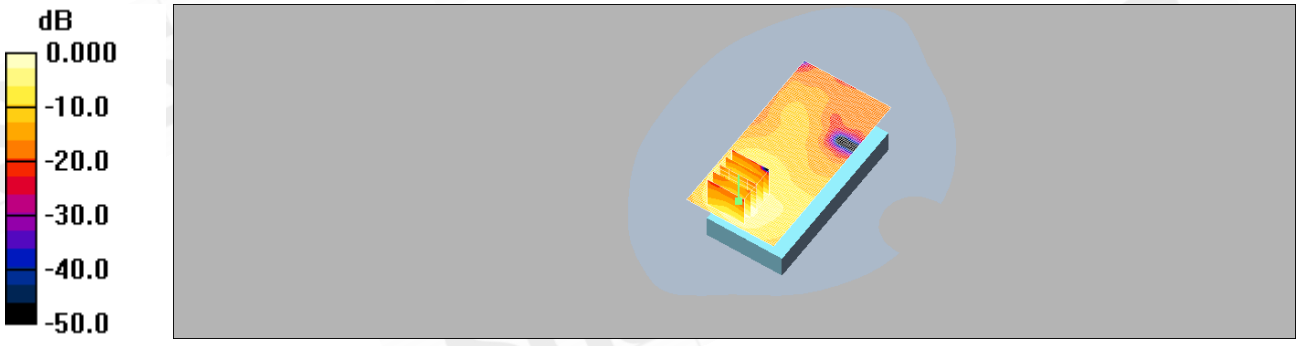
Communication System: Wireless LAN; Frequency: 2412 MHz;Duty Cycle: 1:1
Medium: Muscle 2450 Medium parameters used: f = 2412 MHz; σ = 1.94 mho/m; ε_r = 52.2; ρ = 1000 kg/m
Phantom section: Flat Section

DASY4 Configuration:

- Probe: ES3DV3 - SN3172; ConvF(4.11, 4.11, 4.11); Calibrated: 2010/5/21
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn547; Calibrated: 2010/8/18
- Phantom: SAM2; Type: SAM 4.0; Serial: TP:1270
- Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 186

BODY/Area Scan (51x101x1): Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (interpolated) = 0.091 mW/g

BODY/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 2.09 V/m; Power Drift = -1.35 dB
Peak SAR (extrapolated) = 0.178 W/kg
SAR(1 g) = 0.086 mW/g; SAR(10 g) = 0.041 mW/g
Maximum value of SAR (measured) = 0.098 mW/g



0 dB = 0.098mW/g

BODY_WLAN802.11 g_CH1

DUT: V02S002;

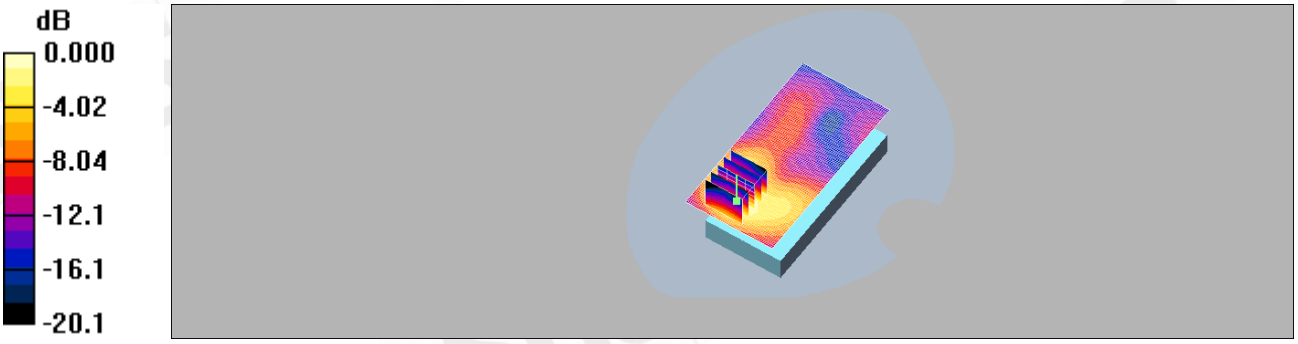
Communication System: Wireless LAN; Frequency: 2412 MHz;Duty Cycle: 1:1
Medium: Muscle 2450 Medium parameters used: f = 2412 MHz; σ = 1.94 mho/m; ε_r = 52.2; ρ = 1000 kg/m^3
Phantom section: Flat Section

DASY4 Configuration:

- Probe: ES3DV3 - SN3172; ConvF(4.11, 4.11, 4.11); Calibrated: 2010/5/21
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn547; Calibrated: 2010/8/18
- Phantom: SAM2; Type: SAM 4.0; Serial: TP:1270
- Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 186

BODY/Area Scan (51x101x1): Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (interpolated) = 0.101 mW/g

BODY/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 1.80 V/m; Power Drift = 1.18 dB
Peak SAR (extrapolated) = 0.188 W/kg
SAR(1 g) = 0.096 mW/g; SAR(10 g) = 0.050 mW/g
Maximum value of SAR (measured) = 0.106 mW/g



0 dB = 0.106mW/g

BODY_WLAN802.11 g_CH6

DUT: V02S002;

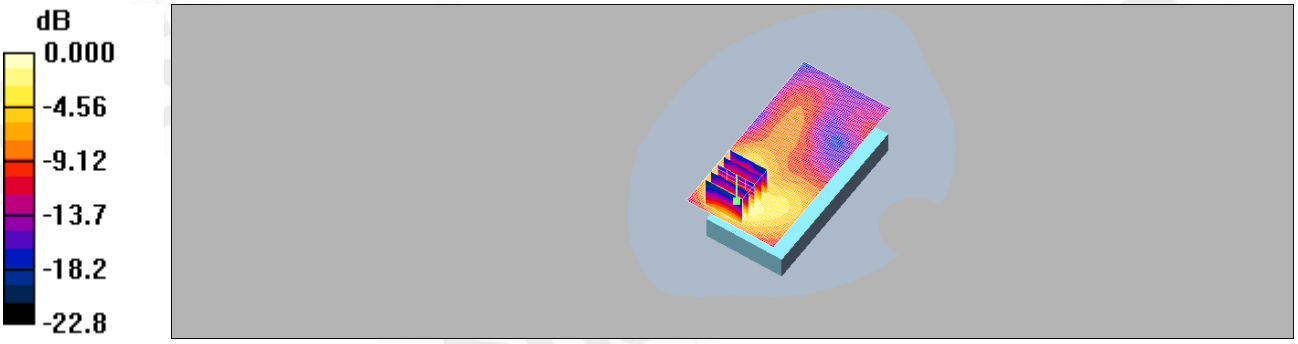
Communication System: Wireless LAN; Frequency: 2437 MHz;Duty Cycle: 1:1
Medium: Muscle 2450 Medium parameters used: f = 2437 MHz; σ = 1.98 mho/m; ε_r = 52.1; ρ = 1000 kg/m^3
Phantom section: Flat Section

DASY4 Configuration:

- Probe: ES3DV3 - SN3172; ConvF(4.11, 4.11, 4.11); Calibrated: 2010/5/21
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn547; Calibrated: 2010/8/18
- Phantom: SAM2; Type: SAM 4.0; Serial: TP:1270
- Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 186

BODY/Area Scan (51x101x1): Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (interpolated) = 0.101 mW/g

BODY/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 2.29 V/m; Power Drift = 0.250 dB
Peak SAR (extrapolated) = 0.192 W/kg
SAR(1 g) = 0.095 mW/g; SAR(10 g) = 0.049 mW/g
Maximum value of SAR (measured) = 0.105 mW/g



0 dB = 0.105mW/g

BODY_WLAN802.11 g_CH11

DUT: V02S002;

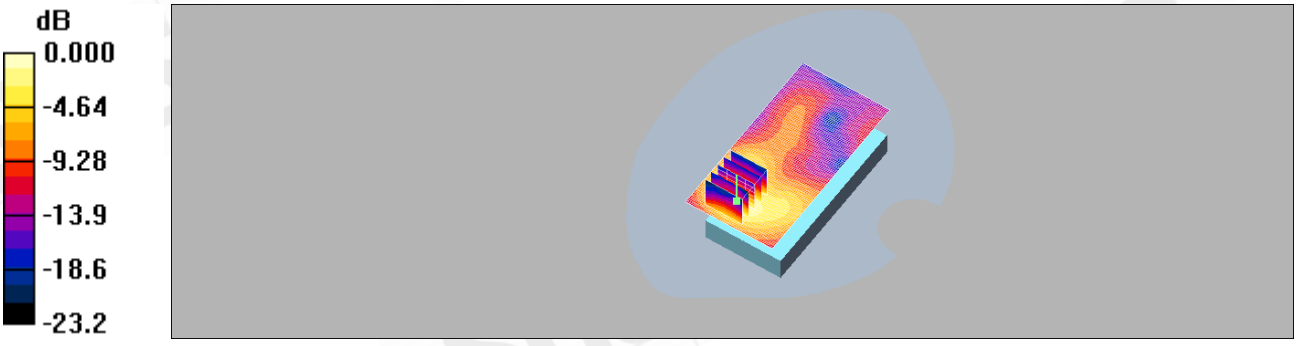
Communication System: Wireless LAN; Frequency: 2462 MHz;Duty Cycle: 1:1
Medium: Muscle 2450 Medium parameters used: f = 2462 MHz; σ = 2.01 mho/m; ε_r = 52; ρ = 1000 kg/m^3
Phantom section: Flat Section

DASY4 Configuration:

- Probe: ES3DV3 - SN3172; ConvF(4.11, 4.11, 4.11); Calibrated: 2010/5/21
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn547; Calibrated: 2010/8/18
- Phantom: SAM2; Type: SAM 4.0; Serial: TP:1270
- Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 186

BODY/Area Scan (51x101x1): Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (interpolated) = 0.082 mW/g

BODY/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 1.83 V/m; Power Drift = 0.118 dB
Peak SAR (extrapolated) = 0.152 W/kg
SAR(1 g) = 0.077 mW/g; SAR(10 g) = 0.039 mW/g
Maximum value of SAR (measured) = 0.086 mW/g



0 dB = 0.086mW/g

5. System Verification

Date: 2010/12/28

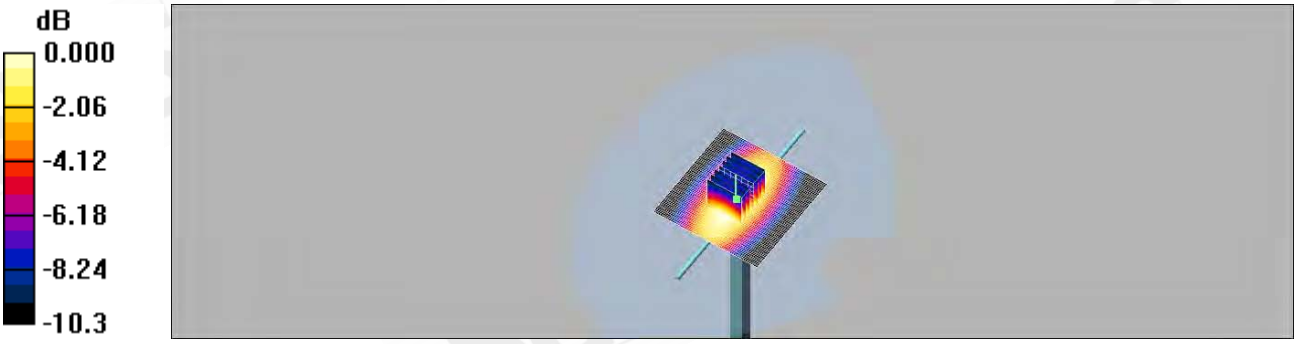
DUT: Dipole 835 MHz;

Communication System: CW; Frequency: 835 MHz;Duty Cycle: 1:1
Medium: Head 900 MHz Medium parameters used: f = 835 MHz; σ = 0.878 mho/m; ε_r = 43; ρ = 1000 kg/m^3
Phantom section: Flat Section

DASY4 Configuration:

- Probe: ES3DV3 - SN3172; ConvF(5.85, 5.85, 5.85); Calibrated: 2010/5/21
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn547; Calibrated: 2010/8/18
- Phantom: SAM1; Type: SAM 4.0; Serial: TP:1419
- Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 186

Pin=250mW/Area Scan (61x61x1): Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (interpolated) = 2.56 mW/g
Pin=250mW/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 54.4 V/m; Power Drift = 0.001 dB
Peak SAR (extrapolated) = 3.54 W/kg
SAR(1 g) = 2.36 mW/g; SAR(10 g) = 1.54 mW/g
Maximum value of SAR (measured) = 2.55 mW/g



0 dB = 2.55mW/g

DUT: Dipole 835 MHz;

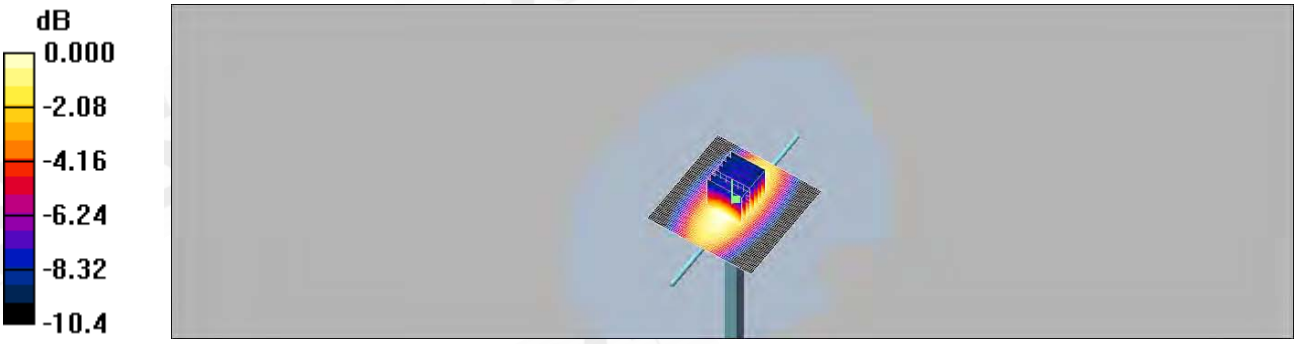
Communication System: CW; Frequency: 835 MHz;Duty Cycle: 1:1
Medium: Muscle 900 MHz Medium parameters used: f = 835 MHz; σ = 0.991 mho/m; ε_r = 54.7; ρ = 1000 kg/m^3
Phantom section: Flat Section

DASY4 Configuration:

- Probe: ES3DV3 - SN3172; ConvF(5.84, 5.84, 5.84); Calibrated: 2010/5/21
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn547; Calibrated: 2010/8/18
- Phantom: SAM1; Type: SAM 4.0; Serial: TP:1419
- Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 186

Pin=250mW/Area Scan (61x61x1): Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (interpolated) = 2.84 mW/g

Pin=250mW/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 54.1 V/m; Power Drift = -0.180 dB
Peak SAR (extrapolated) = 3.86 W/kg
SAR(1 g) = 2.64 mW/g; SAR(10 g) = 1.73 mW/g
Maximum value of SAR (measured) = 2.84 mW/g



0 dB = 2.84mW/g

DUT: Dipole 1750 MHz;

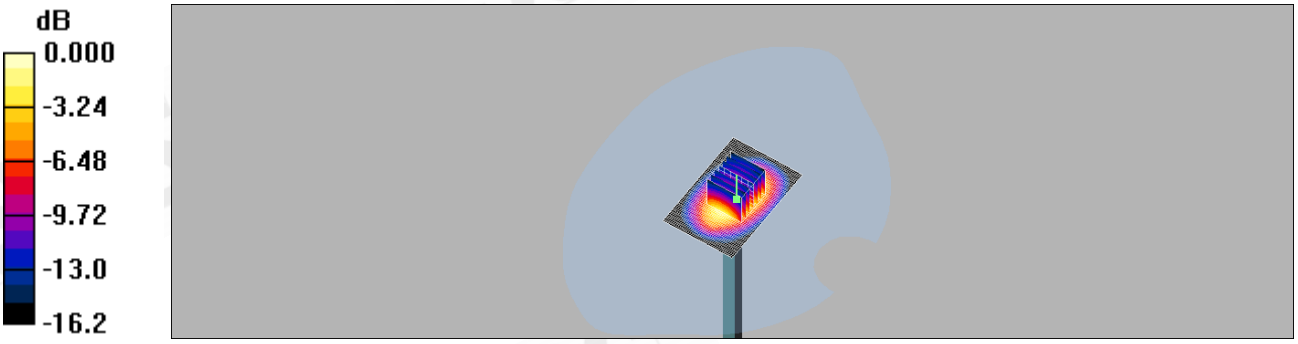
Communication System: CW; Frequency: 1750 MHz;Duty Cycle: 1:1
Medium: Head 1800 MHz Medium parameters used: f = 1750 MHz; σ = 1.37 mho/m; ε_r = 39.8; ρ = 1000 kg/m^3
Phantom section: Flat Section

DASY4 Configuration:

- Probe: ES3DV3 - SN3172; ConvF(5.04, 5.04, 5.04); Calibrated: 2010/5/21
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn547; Calibrated: 2010/8/18
- Phantom: SAM1; Type: SAM 4.0; Serial: TP:1419
- Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 186

Pin=250mW/Area Scan (41x61x1): Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (interpolated) = 9.92 mW/g

Pin=250mW/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 83.3 V/m; Power Drift = -0.028 dB
Peak SAR (extrapolated) = 15.7 W/kg
SAR(1 g) = 8.66 mW/g; SAR(10 g) = 4.62 mW/g
Maximum value of SAR (measured) = 9.64 mW/g



0 dB = 9.64mW/g

DUT: Dipole 1750 MHz;

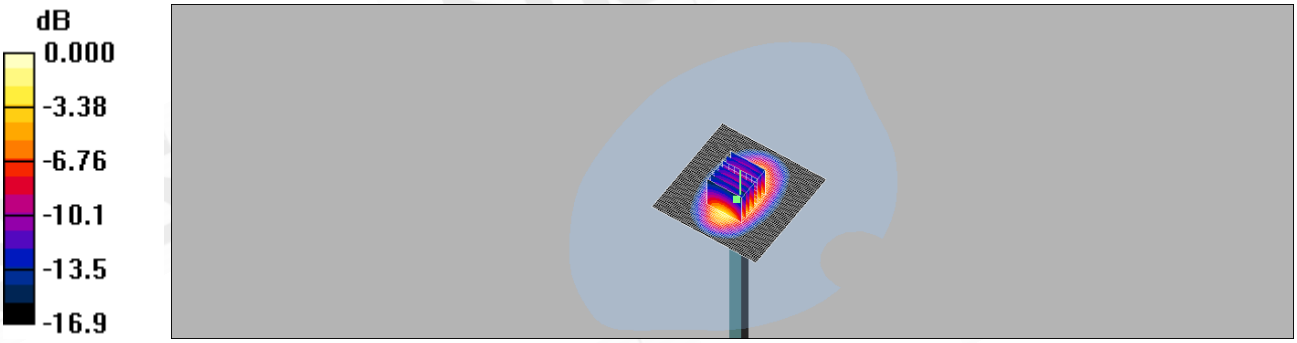
Communication System: CW; Frequency: 1750 MHz;Duty Cycle: 1:1
Medium: M1800 & 1900 Medium parameters used: f = 1750 MHz; σ = 1.47 mho/m; ε_r = 53.3; ρ = 1000 kg/m^3
Phantom section: Flat Section

DASY4 Configuration:

- Probe: ES3DV3 - SN3172; ConvF(4.63, 4.63, 4.63); Calibrated: 2010/5/21
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn547; Calibrated: 2010/8/18
- Phantom: SAM1; Type: SAM 4.0; Serial: TP:1419
- Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 186

Pin=250mW /Area Scan (61x61x1): Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (interpolated) = 11.9 mW/g

Pin=250mW /Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 87.0 V/m; Power Drift = -0.053 dB
Peak SAR (extrapolated) = 17.9 W/kg
SAR(1 g) = 9.90 mW/g; SAR(10 g) = 5.32 mW/g
Maximum value of SAR (measured) = 11.2 mW/g



0 dB = 11.2mW/g

DUT: Dipole 1900 MHz;

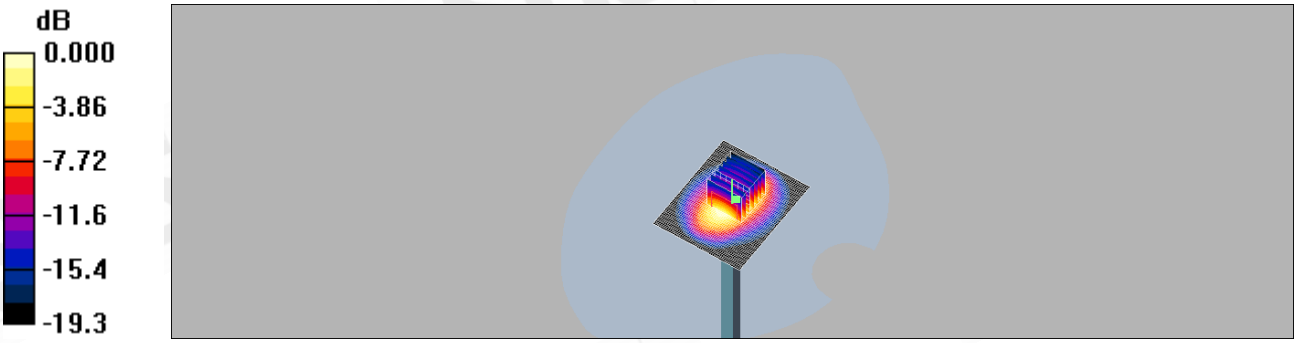
Communication System: CW; Frequency: 1900 MHz;Duty Cycle: 1:1
Medium: Head 1900MHz Medium parameters used: f = 1900 MHz; σ = 1.43 mho/m; ε_r = 39; ρ = 1000 kg/m^3
Phantom section: Flat Section

DASY4 Configuration:

- Probe: ES3DV3 - SN3172; ConvF(4.89, 4.89, 4.89); Calibrated: 2010/5/21
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn547; Calibrated: 2010/8/18
- Phantom: SAM1; Type: SAM 4.0; Serial: TP:1419
- Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 186

Pin=250mw/Area Scan (51x61x1): Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (interpolated) = 13.0 mW/g

Pin=250mw/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 88.1 V/m; Power Drift = 0.042 dB
Peak SAR (extrapolated) = 19.7 W/kg
SAR(1 g) = 9.95 mW/g; SAR(10 g) = 5.01 mW/g
Maximum value of SAR (measured) = 11.1 mW/g



0 dB = 11.1mW/g

DUT: Dipole 1900 MHz;

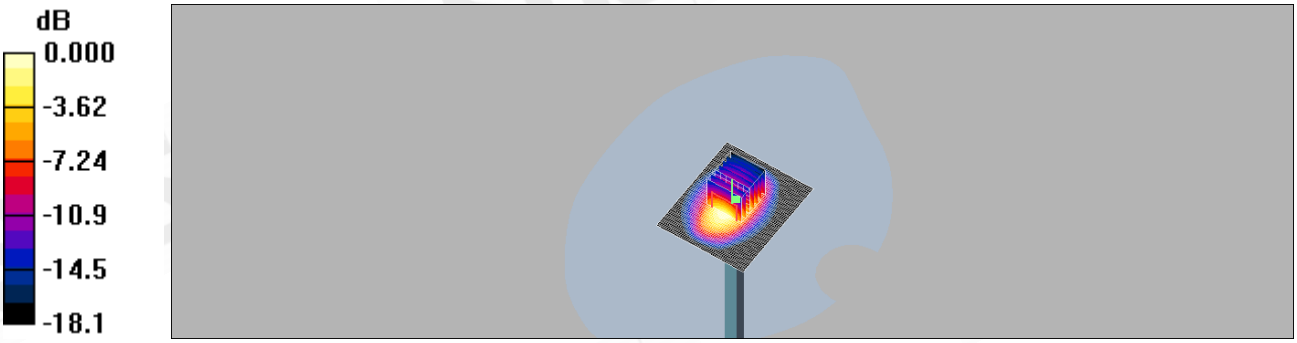
Communication System: CW; Frequency: 1900 MHz;Duty Cycle: 1:1
Medium: M1800 & 1900 Medium parameters used: f = 1900 MHz; σ = 1.58 mho/m; ε_r = 53.2; ρ = 1000 kg/m^3
Phantom section: Flat Section

DASY4 Configuration:

- Probe: ES3DV3 - SN3172; ConvF(4.45, 4.45, 4.45); Calibrated: 2010/5/21
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn547; Calibrated: 2010/8/18
- Phantom: SAM1; Type: SAM 4.0; Serial: TP:1419
- Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 186

Pin=250mW/Area Scan (51x61x1): Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (interpolated) = 12.7 mW/g

Pin=250mW/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 86.6 V/m; Power Drift = 0.063 dB
Peak SAR (extrapolated) = 17.7 W/kg
SAR(1 g) = 10.2 mW/g; SAR(10 g) = 5.34 mW/g
Maximum value of SAR (measured) = 11.6 mW/g



0 dB = 11.6mW/g

DUT: Dipole 2450 MHz;

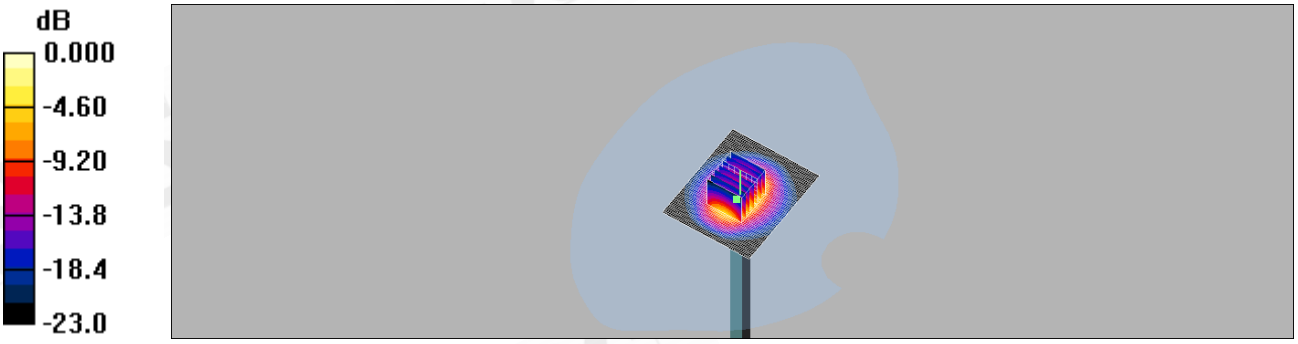
Communication System: CW; Frequency: 2450 MHz;Duty Cycle: 1:1
Medium: M 2450 Medium parameters used: f = 2450 MHz; σ = 1.99 mho/m; ε_r = 52.1; ρ = 1000 kg/m^3
Phantom section: Flat Section

DASY4 Configuration:

- Probe: ES3DV3 - SN3172; ConvF(4.11, 4.11, 4.11); Calibrated: 2010/5/21
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn547; Calibrated: 2010/8/18
- Phantom: SAM2; Type: SAM 4.0; Serial: TP:1270
- Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 186

Pin=250mW/Area Scan (51x61x1): Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (interpolated) = 19.3 mW/g

Pin=250mW/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 89.7 V/m; Power Drift = 0.022 dB
Peak SAR (extrapolated) = 29.9 W/kg
SAR(1 g) = 13.9 mW/g; SAR(10 g) = 6.32 mW/g
Maximum value of SAR (measured) = 15.9 mW/g



0 dB = 15.9mW/g

6. DAE & Probe Calibration certificate

Calibration Laboratory of
Schmid & Partner
Engineering AG
Zeughausstrasse 43, 8004 Zurich, Switzerland

S Schweizerischer Kalibrierdienst
C Service suisse d'étalonnage
S Servizio svizzero di taratura
S Swiss Calibration Service

Accredited by the Swiss Accreditation Service (SAS)
The Swiss Accreditation Service is one of the signatories to the EA Multilateral Agreement for the recognition of calibration certificates

Accreditation No.: **SCS 108**

Client **SGS-TW**

Certificate No: **DAE4-547_Aug10**

CALIBRATION CERTIFICATE

Object	DAE4 - SD 000 D04 BJ - SN: 547
Calibration procedure(s)	QA CAL-06.v22 Calibration procedure for the data acquisition electronics (DAE)
Calibration date:	August 18, 2010

This calibration certificate documents the traceability to national standards, which realize the physical units of measurements (SI).
The measurements and the uncertainties with confidence probability are given on the following pages and are part of the certificate.

All calibrations have been conducted in the closed laboratory facility: environment temperature (22 ± 3)°C and humidity < 70%.

Calibration Equipment used (M&TE critical for calibration)

Primary Standards	ID #	Cal Date (Certificate No.)	Scheduled Calibration
Keithley Multimeter Type 2001	SN: 0810278	1-Oct-09 (No: 9055)	Oct-10
Secondary Standards	**ID #**	**Check Date (in house)**	**Scheduled Check**
Calibrator Box V1.1	SE UMS 006 AB 1004	07-Jun-10 (in house check)	In house check: Jun-11

	Name	Function	Signature
Calibrated by:	Dominique Steffen	Technician	
Approved by:	Fin Bomholt	R&D Director	i.V.

Issued: August 18, 2010

This calibration certificate shall not be reproduced except in full without written approval of the laboratory.

Certificate No: DAE4-547_Aug10 Page 1 of 5

Calibration Laboratory of
Schmid & Partner
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Zeughausstrasse 43, 3004 Zurich, Switzerland

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Accreditation No.: SCS 108

Client SGS-TW (Auden)

Certificate No: ES3-3172_May10

CALIBRATION CERTIFICATE

Object ES3DV3 - SN:3172

Calibration procedure(s) QA CAL-01.v6, QA CAL-14.v3, QA CAL-23.v3 and QA CAL-25.v2
Calibration procedure for dosimetric E-field probes

Calibration date: May 21, 2010

This calibration certificate documents the traceability to national standards, which realize the physical units of measurements (SI).
The measurements and the uncertainties with confidence probability are given on the following pages and are part of the certificate.

All calibrations have been conducted in the closed laboratory facility: environment temperature (22 ± 3)°C and humidity < 70%.

Calibration Equipment used (M&TE critical for calibration)

Primary Standards	ID #	Cal Date (Certificate No.)	Scheduled Calibration
Power meter E4419B	GB41293874	1-Apr-10 (No. 217-01136)	Apr-11
Power sensor E4412A	MY41495277	1-Apr-10 (No. 217-01136)	Apr-11
Power sensor E4412A	MY41498087	1-Apr-10 (No. 217-01136)	Apr-11
Reference 3 dB Attenuator	SN: S5054 (3c)	30-Mar-10 (No. 217-01159)	Mar-11
Reference 20 dB Attenuator	SN: S5086 (20b)	30-Mar-10 (No. 217-01161)	Mar-11
Reference 30 dB Attenuator	SN: S5129 (30b)	30-Mar-10 (No. 217-01160)	Mar-11
Reference Probe ES3DV2	SN: 3013	30-Dec-09 (No. ES3-3013_Dec09)	Dec-10
DAE4	SN: 660	20-Apr-10 (No. DAE4-660_Apr10)	Apr-11

Secondary Standards	ID #	Check Date (in house)	Scheduled Check
RF generator HP 8648C	US3642U01700	4-Aug-99 (in house check Oct-09)	In house check: Oct-11
Network Analyzer HP 8753E	US37390585	18-Oct-01 (in house check Oct-09)	In house check: Oct10

	Name	Function	Signature
Calibrated by:	Katja Pokovic	Technical Manager	
Approved by:	Niels Kuster	Quality Manager	

Issued: May 22, 2010

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Certificate No: ES3-3172_May10 Page 1 of 11

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Accreditation No.: **SCS 108**

Glossary:

TSL	tissue simulating liquid
NORMx,y,z	sensitivity in free space
ConvF	sensitivity in TSL / NORMx,y,z
DCP	diode compression point
CF	crest factor (1/duty_cycle) of the RF signal
A, B, C	modulation dependent linearization parameters
Polarization φ	φ rotation around probe axis
Polarization ϑ	ϑ rotation around an axis that is in the plane normal to probe axis (at measurement center), i.e., ϑ = 0 is normal to probe axis

Calibration is Performed According to the Following Standards:

a) IEEE Std 1528-2003, "IEEE Recommended Practice for Determining the Peak Spatial-Averaged Specific Absorption Rate (SAR) in the Human Head from Wireless Communications Devices: Measurement Techniques", December 2003
b) IEC 62209-1, "Procedure to measure the Specific Absorption Rate (SAR) for hand-held devices used in close proximity to the ear (frequency range of 300 MHz to 3 GHz)", February 2005

Methods Applied and Interpretation of Parameters:

- *NORMx,y,z:* Assessed for E-field polarization ϑ = 0 (f ≤ 900 MHz in TEM-cell; f > 1800 MHz: R22 waveguide). NORMx,y,z are only intermediate values, i.e., the uncertainties of NORMx,y,z does not effect the E^2-field uncertainty inside TSL (see below *ConvF*).
- *NORM(f)x,y,z = NORMx,y,z * frequency_response* (see Frequency Response Chart). This linearization is implemented in DASY4 software versions later than 4.2. The uncertainty of the frequency response is included in the stated uncertainty of *ConvF*.
- *DCPx,y,z:* DCP are numerical linearization parameters assessed based on the data of power sweep with CW signal (no uncertainty required). DCP does not depend on frequency nor media.
- *Ax,y,z; Bx,y,z; Cx,y,z, VRx,y,z: A, B, C* are numerical linearization parameters assessed based on the data of power sweep for specific modulation signal. The parameters do not depend on frequency nor media. *VR* is the maximum calibration range expressed in RMS voltage across the diode.
- *ConvF and Boundary Effect Parameters:* Assessed in flat phantom using E-field (or Temperature Transfer Standard for f ≤ 800 MHz) and inside waveguide using analytical field distributions based on power measurements for f > 800 MHz. The same setups are used for assessment of the parameters applied for boundary compensation (alpha, depth) of which typical uncertainty values are given. These parameters are used in DASY4 software to improve probe accuracy close to the boundary. The sensitivity in TSL corresponds to *NORMx,y,z * ConvF* whereby the uncertainty corresponds to that given for *ConvF*. A frequency dependent *ConvF* is used in DASY version 4.4 and higher which allows extending the validity from ± 50 MHz to ± 100 MHz.
- *Spherical isotropy (3D deviation from isotropy)*: in a field of low gradients realized using a flat phantom exposed by a patch antenna.
- *Sensor Offset*: The sensor offset corresponds to the offset of virtual measurement center from the probe tip (on probe axis). No tolerance required.

Probe ES3DV3

SN:3172

Manufactured:	January 23, 2008
Last calibrated:	May 27, 2009
Recalibrated:	May 21, 2010

Calibrated for DASY/EASY Systems

(Note: non-compatible with DASY2 system!)

ES3DV3 SN:3172 May 21, 2010

DASY/EASY - Parameters of Probe: ES3DV3 SN:3172

Basic Calibration Parameters

	Sensor X	Sensor Y	Sensor Z	Unc (k=2)
Norm ($\mu V/(V/m)^2$)[A]	1.37	1.19	0.97	± 10.1%
DCP (mV)[B]	93.9	92.5	93.2	

Modulation Calibration Parameters

UID	Communication System Name	PAR		A dB	B dBuV	C	VR mV	Unc[E] (k=2)
10000	CW	0.00	X	0.00	0.00	1.00	300.0	± 1.5%
			Y	0.00	0.00	1.00	300.0	
			Z	0.00	0.00	1.00	300.0	

The reported uncertainty of measurement is stated as the standard uncertainty of measurement multiplied by the coverage factor k=2, which for a normal distribution corresponds to a coverage probability of approximately 95%.

[A] The uncertainties of NormX,Y,Z do not affect the E^2-field uncertainty inside TSL (see Pages 5 and 6).

[B] Numerical linearization parameter: uncertainty not required.

[E] Uncertainty is determined using the maximum deviation from linear response applying recatangular distribution and is expressed for the square of the field value.

ES3DV3 SN:3172 May 21, 2010

DASY/EASY - Parameters of Probe: ES3DV3 SN:3172

Calibration Parameter Determined in Head Tissue Simulating Media

f [MHz]	Validity [MHz][C]	Permittivity	Conductivity	ConvF X	ConvF Y	ConvF Z	Alpha	Depth Unc (k=2)
835	± 50 / ± 100	41.5 ± 5%	0.90 ± 5%	5.85	5.85	5.85	0.76	1.14 ± 11.0%
900	± 50 / ± 100	41.5 ± 5%	0.97 ± 5%	5.75	5.75	5.75	0.87	1.08 ± 11.0%
1750	± 50 / ± 100	40.1 ± 5%	1.37 ± 5%	5.04	5.04	5.04	0.31	1.82 ± 11.0%
1900	± 50 / ± 100	40.0 ± 5%	1.40 ± 5%	4.89	4.89	4.89	0.50	1.46 ± 11.0%
2000	± 50 / ± 100	40.0 ± 5%	1.40 ± 5%	4.73	4.73	4.73	0.49	1.44 ± 11.0%
2450	± 50 / ± 100	39.2 ± 5%	1.80 ± 5%	4.32	4.32	4.32	0.42	1.70 ± 11.0%

[C] The validity of ± 100 MHz only applies for DASY v4.4 and higher (see Page 2). The uncertainty is the RSS of the ConvF uncertainty at calibration frequency and the uncertainty for the indicated frequency band.

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DASY/EASY - Parameters of Probe: ES3DV3 SN:3172

Calibration Parameter Determined in Body Tissue Simulating Media

f [MHz]	Validity [MHz][C]	Permittivity	Conductivity	ConvF X	ConvF Y	ConvF Z	Alpha	Depth Unc (k=2)
835	± 50 / ± 100	55.2 ± 5%	0.97 ± 5%	5.84	5.84	5.84	0.81	1.19 ± 11.0%
900	± 50 / ± 100	55.0 ± 5%	1.05 ± 5%	5.75	5.75	5.75	0.73	1.24 ± 11.0%
1750	± 50 / ± 100	53.4 ± 5%	1.49 ± 5%	4.63	4.63	4.63	0.39	1.75 ± 11.0%
1900	± 50 / ± 100	53.3 ± 5%	1.52 ± 5%	4.45	4.45	4.45	0.32	2.36 ± 11.0%
2000	± 50 / ± 100	53.3 ± 5%	1.52 ± 5%	4.47	4.47	4.47	0.32	2.44 ± 11.0%
2450	± 50 / ± 100	52.7 ± 5%	1.95 ± 5%	4.11	4.11	4.11	0.82	1.17 ± 11.0%
2600	± 50 / ± 100	52.5 ± 5%	2.16 ± 5%	3.99	3.99	3.99	0.95	1.09 ± 11.0%
3500	± 50 / ± 100	51.3 ± 5%	3.31 ± 5%	3.28	3.28	3.28	1.00	1.28 ± 13.1%

[C] The validity of ± 100 MHz only applies for DASY v4.4 and higher (see Page 2). The uncertainty is the RSS of the ConvF uncertainty at calibration frequency and the uncertainty for the indicated frequency band.

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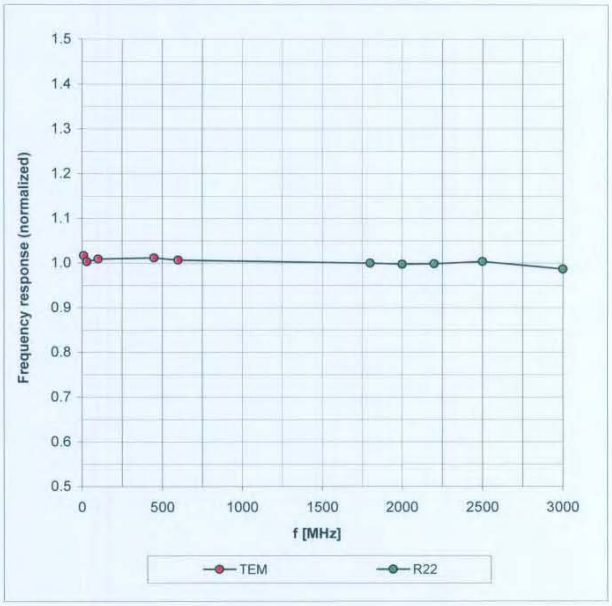
Frequency Response of E-Field

(TEM-Cell:ifi110 EXX, Waveguide: R22)



Uncertainty of Frequency Response of E-field: ± 6.3% (k=2)

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Member of SGS Group

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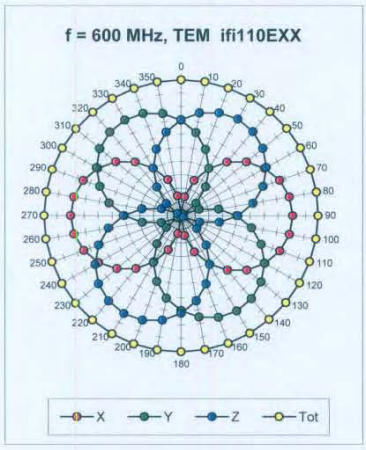
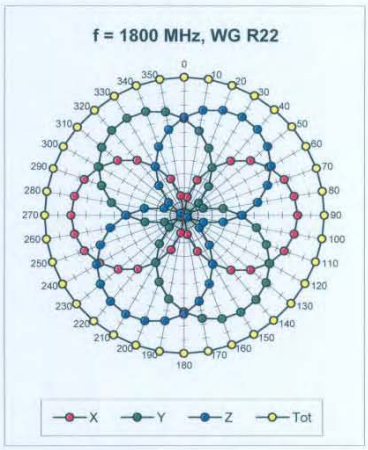
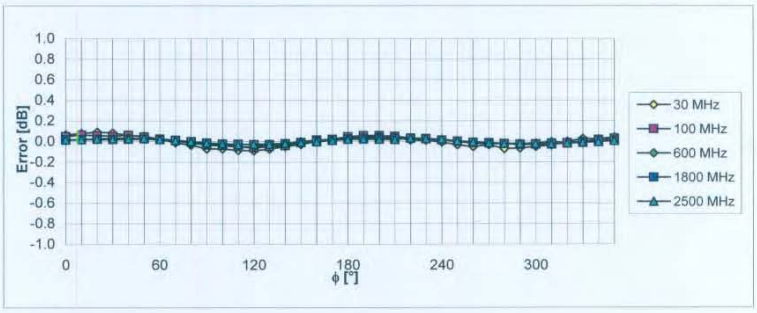
Receiving Pattern (ϕ), ϑ = 0°







Uncertainty of Axial Isotropy Assessment: ± 0.5% (k=2)

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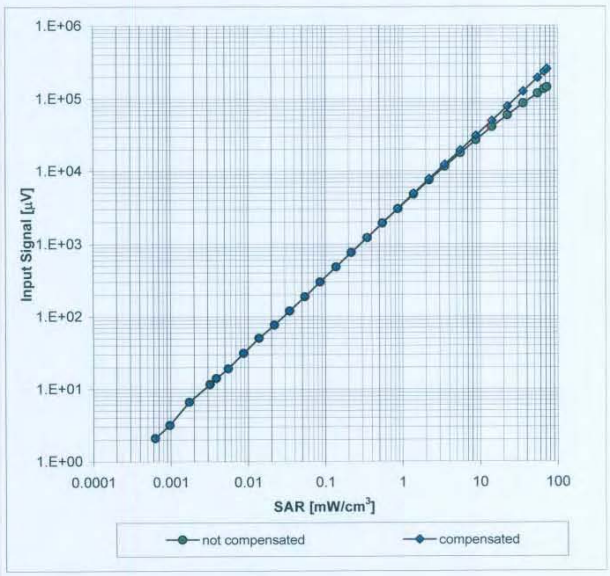
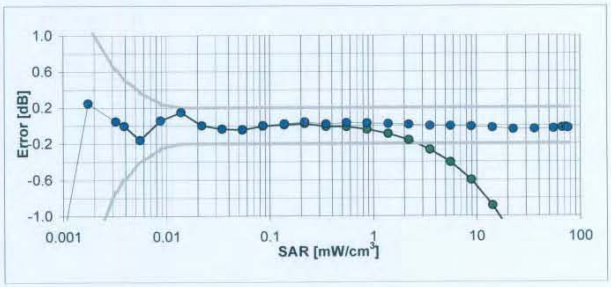
Dynamic Range f(SAR_{head})

(Waveguide R22, f = 1800 MHz)





Uncertainty of Linearity Assessment: ± 0.6% (k=2)

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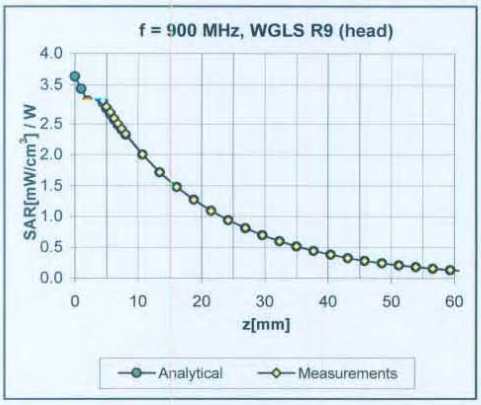
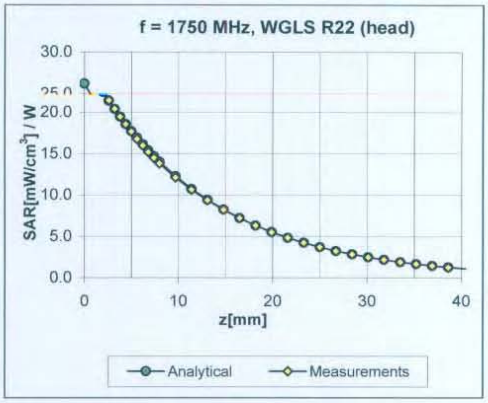
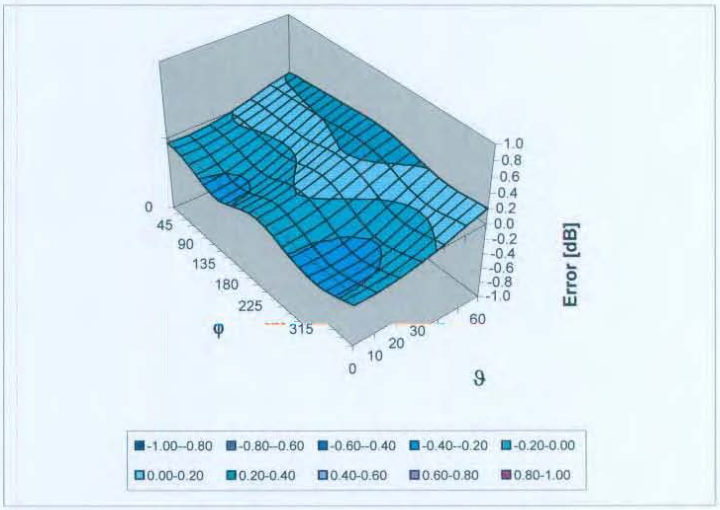
Conversion Factor Assessment





Deviation from Isotropy in HSL

Error (ϕ, ϑ), f = 900 MHz



Uncertainty of Spherical Isotropy Assessment: ± 2.6% (k=2)

Other Probe Parameters

Sensor Arrangement	Triangular
Connector Angle (°)	Not applicable
Mechanical Surface Detection Mode	enabled
Optical Surface Detection Mode	disabled
Probe Overall Length	337 mm
Probe Body Diameter	10 mm
Tip Length	10 mm
Tip Diameter	4.0 mm
Probe Tip to Sensor X Calibration Point	2 mm
Probe Tip to Sensor Y Calibration Point	2 mm
Probe Tip to Sensor Z Calibration Point	2 mm
Recommended Measurement Distance from Surface	3 mm

7. Uncertainty Budget

DASY4 Uncertainty Budget
According to IEEE P1528 [1]

Error Description	Uncertainty value	Prob. Dist.	Div.	(c_i) 1g	(c_i) 10g	Std. Unc. (1g)	Std. Unc. (10g)	(v_i) v_{eff}
Measurement System								
Probe Calibration	±4.8%	N	1	1	1	±4.8%	±4.8%	∞
Axial Isotropy	±4.7%	R	$\sqrt{3}$	0.7	0.7	±1.9%	±1.9%	∞
Hemispherical Isotropy	±9.6%	R	$\sqrt{3}$	0.7	0.7	±3.9%	±3.9%	∞
Boundary Effects	±1.0%	R	$\sqrt{3}$	1	1	±0.6%	±0.6%	∞
Linearity	±4.7%	R	$\sqrt{3}$	1	1	±2.7%	±2.7%	∞
System Detection Limits	±1.0%	R	$\sqrt{3}$	1	1	±0.6%	±0.6%	∞
Readout Electronics	±1.0%	N	1	1	1	±1.0%	±1.0%	∞
Response Time	±0.8%	R	$\sqrt{3}$	1	1	±0.5%	±0.5%	∞
Integration Time	±2.6%	R	$\sqrt{3}$	1	1	±1.5%	±1.5%	∞
RF Ambient Conditions	±3.0%	R	$\sqrt{3}$	1	1	±1.7%	±1.7%	∞
Probe Positioner	±0.4%	R	$\sqrt{3}$	1	1	±0.2%	±0.2%	∞
Probe Positioning	±2.9%	R	$\sqrt{3}$	1	1	±1.7%	±1.7%	∞
Max. SAR Eval.	±1.0%	R	$\sqrt{3}$	1	1	±0.6%	±0.6%	∞
Test Sample Related								
Device Positioning	±2.9%	N	1	1	1	±2.9%	±2.9%	875
Device Holder	±3.6%	N	1	1	1	±3.6%	±3.6%	5
Power Drift	±5.0%	R	$\sqrt{3}$	1	1	±2.9%	±2.9%	∞
Phantom and Setup								
Phantom Uncertainty	±4.0%	R	$\sqrt{3}$	1	1	±2.3%	±2.3%	∞
Liquid Conductivity (target)	±5.0%	R	$\sqrt{3}$	0.64	0.43	±1.8%	±1.2%	∞
Liquid Conductivity (meas.)	±2.5%	N	1	0.64	0.43	±1.6%	±1.1%	∞
Liquid Permittivity (target)	±5.0%	R	$\sqrt{3}$	0.6	0.49	±1.7%	±1.4%	∞
Liquid Permittivity (meas.)	±2.5%	N	1	0.6	0.49	±1.5%	±1.2%	∞
Combined Std. Uncertainty						±10.3%	±10.0%	331
Expanded STD Uncertainty						**±20.6%**	**±20.1%**	

8. Phantom description

Schmid & Partner Engineering AG

s p e a g

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Phone +41 1 245 9700, Fax +41 1 245 9779
info@speag.com, http://www.speag.com

Certificate of Conformity / First Article Inspection

Item	SAM Twin Phantom V4.0
Type No	QD 000 P40 C
Series No	TP-1150 and higher
Manufacturer	SPEAG Zeughausstrasse 43 CH-8004 Zürich Switzerland

Tests
The series production process used allows the limitation to test of first articles.
Complete tests were made on the pre-series Type No. QD 000 P40 AA, Serial No. TP-1001 and on the series first article Type No. QD 000 P40 BA, Serial No. TP-1006. Certain parameters have been retested using further series items (called samples) or are tested at each item.

Test	Requirement	Details	Units tested
Dimensions	Compliant with the geometry according to the CAD model.	IT'IS CAD File (*)	First article, Samples
Material thickness of shell	Compliant with the requirements according to the standards	2mm +/- 0.2mm in flat and specific areas of head section	First article, Samples, TP-1314 ff.
Material thickness at ERP	Compliant with the requirements according to the standards	6mm +/- 0.2mm at ERP	First article, All items
Material parameters	Dielectric parameters for required frequencies	300 MHz – 6 GHz: Relative permittivity < 5, Loss tangent < 0.05	Material samples
Material resistivity	The material has been tested to be compatible with the liquids defined in the standards if handled and cleaned according to the instructions. Observe technical Note for material compatibility.	DEGMBE based simulating liquids	Pre-series, First article, Material samples
Sagging	Compliant with the requirements according to the standards. Sagging of the flat section when filled with tissue simulating liquid.	< 1% typical < 0.8% if filled with 155mm of HSL900 and without DUT below	Prototypes, Sample testing

Standards
[1] CENELEC EN 50361
[2] IEEE Std 1528-2003
[3] IEC 62209 Part I
[4] FCC OET Bulletin 65, Supplement C, Edition 01-01
(*) The IT'IS CAD file is derived from [2] and is also within the tolerance requirements of the shapes of the other documents.

Conformity
Based on the sample tests above, we certify that this item is in compliance with the uncertainty requirements of SAR measurements specified in standards [1] to [4].

Date 07.07.2005

Signature / Stamp

s p e a g
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