SAR TEST REPORT

Equipment Under Test	PDA phone
Model Name	SAPP500
Company Name	HTC Corporation
Company Address	No.23, Xinghua Rd., Taoyuan City, Taoyuan County 330, Taiwan, R.O.C.
Date of Receipt	2009.03.04
Date of Test(s)	2009.04.15~2009.04.17 -2009.04.21
Date of Issue	2009.06.10

Standards:

FCC OET Bulletin 65 supplement C,
ANSI / IEEE 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.

This report may only be reproduced and distributed in full. If the product in this report is used in any configuration other than that detailed in the report, the manufacturer must ensure the new system complies with all relevant standards. Any mention of SGS Taiwan Electronic & Communication Laboratory or testing done by SGS Taiwan Electronic & Communication Laboratory in connection with distribution or use of the product described in this report must be approved by SGS Taiwan Electronic & Communication Laboratory in writing.

Tested by : **Antony Wu** **Date** : **2009.06.01**
Engineer

Approved by : **Robert Chang** **Date** : **2009.06.10**
Tech Manager

Contents

1. General Information

1.1 Testing Laboratory

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1.2 Details of Applicant

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1.3 Description of EUT

EUT Name	PDA phone
FCC ID	NM8SPRR
Model Name	SAPP500
Brand Name	HTC
IMEI Code	Orignal solution : 352949030010799 Second solution : 352949030011680 Third solution : 352949030010351 Forth solution : 352949030010898

Mode of Operation	GSM /GPRS/EDGE/WCDMA/HSDPA/HSUPA band			
Definition	Production unit			
Modulation Mode	GSM/GMSK/8PSK/QPSK/16QAM			
GPRS Multislot info	Multi Class 10 (2 slot up)			
Duty Cycle	GSM	GPRS	WCDMA B2	WCDMA B5
	1/8	1/4	1	1
Maximum RF Conducted Power (Average)	GSM 850	GSM1900	WCDMA B2	WCDMA B5
	33.9dbm	30.4dbm	22.91dbm	22.69dbm
TX Frequency Range (MHz)	GSM 850	GSM1900	WCDMA B2	WCDMA B5
	824.2-848.8	1850.2-1909.8	1712.4-1752.6	826.4-846.6
Channel Number (ARFCN)	GSM 850	GSM1900	WCDMA B2	WCDMA B5
	128-251	512-810	9262-9888	4132-4233
Battery Type	3.7 V Lithium-Ion			
Antenna Type	Internal Antenna			
Declaration	**Second solution(change LCD and camera)**			
	Besides the original configuration, this model SAPP500 also changed another LCD module and camera as second solution. In order to find SAR value whether the same between original and second solution, we used spot-check method to check it. The result of GSM850/ 1900/WCDMA B2/WCDMA B5/WALN 802.11 b/g are within 20% deviation.			
	Third solution(change Button & Housing painting)			
	Besides the original configuration, this SAPP500 also changed another metal plated Button component and black color housing as the third solution. In order to find SAR value whether the same between original and third solution, we used spot-check method to check it. The			

<table>
<tr><td></td><td>result of GSM850/ 1900/WCDMA B2/WCDMA B5/WALN 802.11 b/g are within 20% deviation.</td></tr>
<tr><td rowspan="2">Declaration</td><td>Fourth solution(change Button & Housing painting& LCD and camera)</td></tr>
<tr><td>Besides the original configuration, this SAPP500 also changed another metal plated Button component, black color housing, LCD module and camera as the forth solution. In order to find SAR value whether the same between original and fourth solution, we used spot-check method to check it. The result of GSM850/ 1900/WCDMA B2/WCDMA B5/WALN 802.11 b/g are within 20% deviation.</td></tr>
<tr><td rowspan="8">Max. SAR Measured (1 g)</td><td>Orignal solution</td></tr>
<tr><td>Head | Body</td></tr>
<tr><td>1.57 mW/g
(At WCDMA B2 Left Head (Cheek Position)_ 9400 channel_repeated with Memory card
1.22 mW/g
(At GSM 850 Body _ 251 channel_repeated with headset)</td></tr>
<tr><td>Second solution</td></tr>
<tr><td>Head | Body</td></tr>
<tr><td>1.52 mW/g
(At WCDMA B2 Left Head (Cheek Position)_ 9400 channel_repeated with Memory card
1.2 mW/g
(At GSM 850 Body _ 251 channel_repeated with headset)</td></tr>
<tr><td>Third solution</td></tr>
<tr><td>Head | Body</td></tr>
<tr><td>1.4 mW/g
(At WCDMA B2 Left Head (Cheek Position)_ 9400 channel_repeated with Memory card
1.17 mW/g
(At GSM 850 Body _ 251 channel_repeated with headset)</td></tr>
</table>

	Fourth solution	
	Head	Body
	1.57 mW/g (At WCDMA B2 Left Head (Cheek Position)_ 9400 channel_repeated with Memory card	**1.18 mW/g** (At GSM 850 Body _ 251 channel_repeated with headset)

Note:

1. EGPRS mode was not measured because maximum averaged output power is 3 dB lower in EGPRS than in GPRS mode.
2. WCDMA B2 & B5 HSDPA & HSUPA conducted power:

R99			**9262**	**9400**	**9538**
			22.62	**22.23**	**21.70**
Mode	Sub-test	Band	**WCDMA B2**		
		Channel	9262	9400	9538
HSDPA	1	β_c/β_d (2/15)	22.91	22.49	21.97
	2	β_c/β_d(12/15)	22.5	22.09	21.55
	3	β_c/β_d(15/8)	22.43	22.04	21.44
	4	β_c/β_d(15/4)	22.5	22.05	21.56

Mode	Sub-test	Band	**WCDMA B2**		
		Channel	9262	9400	9538
HSUPA	1	β_c/β_d(11/15)	22.54	22.21	21.64
	2	β_c/β_d(6/15)	20.59	20.28	19.82
	3	β_c/β_d(15/9)	21.6	21.23	20.67
	4	β_c/β_d(2/15)	20.72	20.33	19.72
	5	β_c/β_d(15/15)	22.43	22.07	21.55

R99			4132	4183	4233
			22.43	22.40	22.35
Mode	Sub-test	Band	WCDMA B5		
		Channel	4132	4183	4233
HSDPA	1	β_c/β_d (2/15)	22.65	22.69	22.54
	2	β_c/β_d(12/15)	22.36	22.29	22.22
	3	β_c/β_d(15/8)	22.19	22.21	22.05
	4	β_c/β_d(15/4)	22.24	22.25	22.11

Mode	Sub-test	Band	WCDMA B5		
		Channel	4132	4183	4233
HSUPA	1	β_c/β_d(11/15)	22.39	22.33	22.27
	2	β_c/β_d(6/15)	20.45	20.41	20.31
	3	β_c/β_d(15/9)	21.43	21.39	21.35
	4	β_c/β_d(2/15)	20.50	20.47	20.39
	5	β_c/β_d(15/15)	22.25	22.16	22.18

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 (Agilent 8960), and the communication between the EUT and the tester is established by air link. 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 battery is fully charged.

The WLAN transmitter is controlled by chip-specific software installed in this PDA phone , to make the EUT transmit at max power.

2. During the SAR testing, the DASY5 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.
3. Testing Head SAR at lowest, middle and highest channel for all bands with LET/LEC/RET/REC conditions.
4. Testing body-worn SAR by separating **1.5cm** between the back of the EUT and the flat phantom in GPRS mode.

Additional configuration(Head):

5. For highest SAR configuration in this band repeated with external Memory card inside.
6. For highest SAR configuration in this band repeated with WELLDONE Battery.

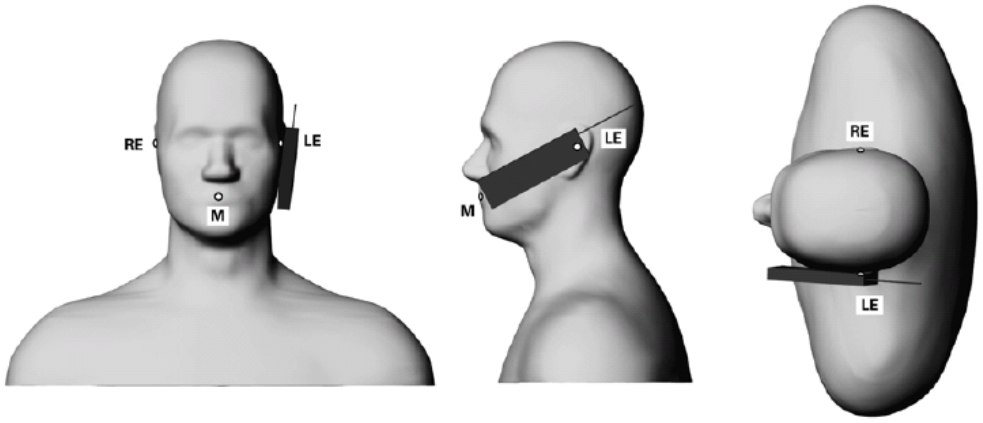
Additional configuration(Body):

7. Testing body-worn SAR with Handset and with Bluetooth transmitter OFF by separating **1.5cm** between the front of the EUT and the flat phantom in GPRS mode.
8. For highest SAR configuration in this band repeated with external Memory card inside.
9. For highest SAR configuration in this band repeated with headset.
10. For highest SAR configuration in this band repeated with WELLDONE Battery.

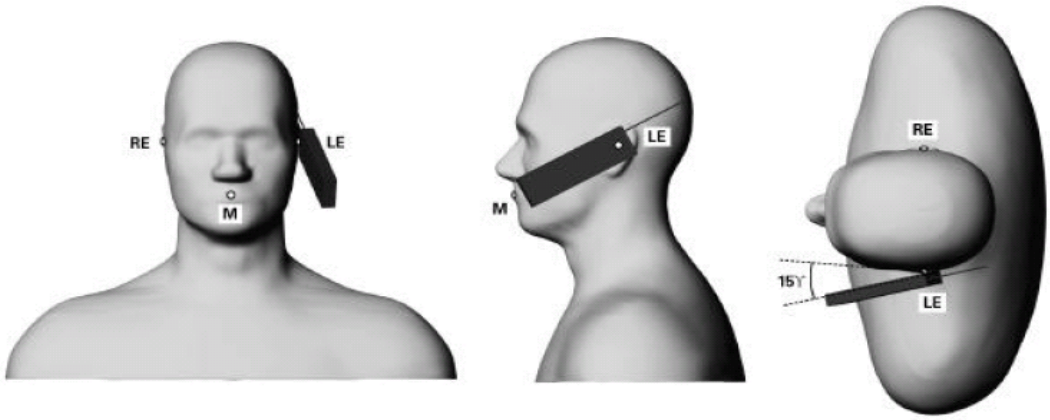
SAR evaluation considerations for handsets with multiple transmitters:

11. 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.
12. The maximum SAR value for licensed transmitter happens on WCDMA B2 band, Head Leftt side(Cheek Position) , channel 9400 with Memory card. the value is **1.57W/kg(1g)**. And the max SAR value for un-licensed transmitter WLAN 802.11b happens on Body worn, channel 6 with WELLDONE Battery The SAR value is **0.21W/kg (1g)** . **To evaluation if simultaneous transmission needed , according to FCC KDB648474**, The summation of the 1g SAR is 1.57+0.21 = **1.78 W/kg, which higher than the limit 1.6W/kg.**
13. By the way , the peak distance(hotspot to hotspot) for WWAN and WLAN antenna is 8.5 cm , we calculate the peak location separation ratio of simultaneous transmitting antenna pair , the value is **0.21** with less than 0.3. **NO simultaneous transmission SAR evaluation is necessary.**

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 5 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.

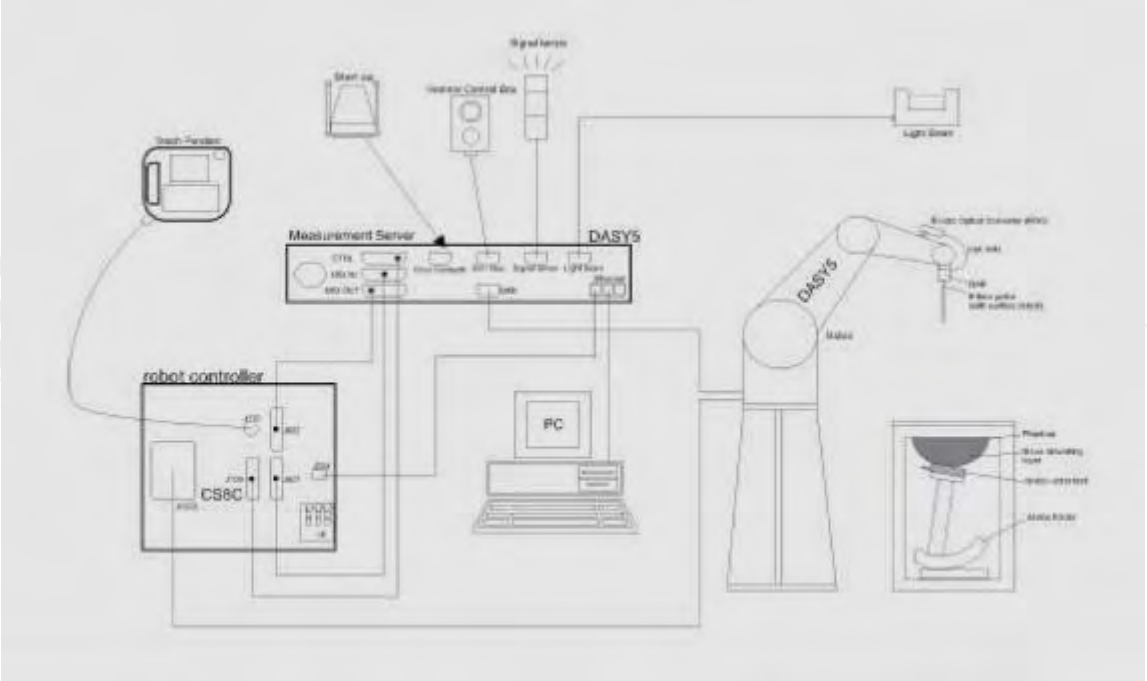


Fig.a The block diagram of SAR system

The DASY5 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.
- DASY5 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)	 ES3DV3 E-Field Probe
Calibration:	Basic Broad Band Calibration in air Conversion Factors (CF) for HSL850/1900/2450 Additional CF for other liquids and frequencies upon request	
Frequency:	10 MHz to > 3 GHz; Linearity: ± 0.6 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: ± 0.6 dB (noise: typically < 1 µW/g)	
Dimensions:	Overall length: 3370 mm (Tip: 10 mm) Tip diameter: 4 mm (Body: 10 mm) Typical distance from probe tip to dipole centers: 2 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%.	

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: 850 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 +/- 10% from the

target SAR values. These tests were done at 850/1900/2450 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.

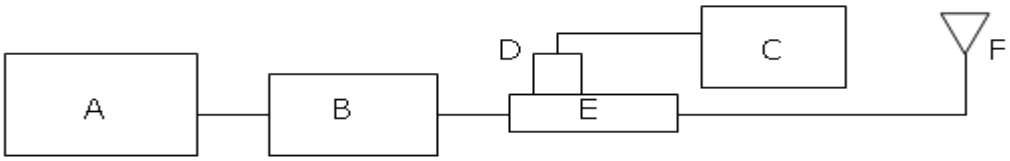
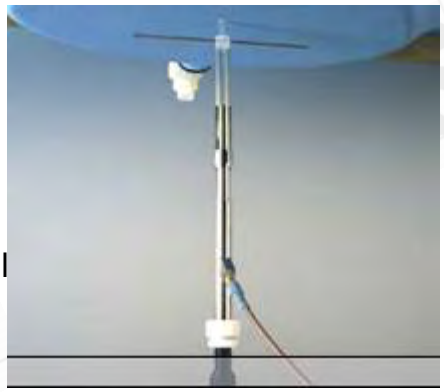


Fig.b The block diagram of SAR system verification

A. Agilent Model 8648D Signal Generator
B. Mini circuits Model ZHL-42 Amplifier
C. Agilent Model E4416A Power Meter
D. Agilent Model 8481H Power Sensor
E. Agilent Model 778D & 777D Dual directional coupling
F. 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)	2.29 mW/g	2.31 mW/g	2009/04/15
D835V2 S/N: 4d063	835 MHz (Body)	2.44 mW/g	2.44 mW/g	2009/04/16
D1900V2 S/N: 5d027	1900 MHz (Head)	10.3 mW/g	9.94 mW/g	2009/04/15
D1900V2 S/N: 5d027	1900 MHz (Body)	9.64 mW/g	10.1 mW/g	2009/04/16

D2450V2 S/N: 727	2450 MHz (Body)	13.2 mW/g	12.6 mW/g	2009/04/16
D835V2 S/N: 4d063	835 MHz (Head)	2.29 mW/g	2.3 mW/g	2009/04/17
D835V2 S/N: 4d063	835 MHz (Body)	2.44 mW/g	2.42 mW/g	2009/04/17
D1900V2 S/N: 5d027	1900 MHz (Head)	10.3 mW/g	10 mW/g	2009/04/17
D1900V2 S/N: 5d027	1900 MHz (Body)	9.64 mW/g	9.95 mW/g	2009/04/17
D2450V2 S/N: 727	2450 MHz (Body)	13.2 mW/g	12.8 mW/g	2009/04/21

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 in the ear reference point 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, 2009.04.15	42.3	0.89	21.7
		Recommended Limits	38.38-42.42	0.84-0.92	20-24
850	Body	Measured, 2009.04.16	55.3	0.955	21.7
		Recommended Limits	50.73-56.07	0.94-1.04	20-24
1900	Head	Measured, 2009.04.15	40.3	1.47	21.7
		Recommended Limits	37.43-41.37	1.39-1.53	20-24
1900	Body	Measured, 2009.04.16	53.7	1.57	21.7
		Recommended Limits	49.4-54.6	1.46-1.62	20-24

2450	Body	Measured, 2009.04.16	53.9	1.98	21.7
		Recommended Limits	50.07-55.34	1.85-2.05	20-24
850	Head	Measured, 2009.04.17	42.2	0.896	21.7
		Recommended Limits	38.38-42.42	0.84-0.92	20-24
850	Body	Measured, 2009.04.17	55.4	0.964	21.7
		Recommended Limits	50.73-56.07	0.94-1.04	20-24
1900	Head	Measured, 2009.04.17	40.5	1.49	21.7
		Recommended Limits	37.43-41.37	1.39-1.53	20-24
1900	Body	Measured, 2009.04.17	53.6	1.59	21.7
		Recommended Limits	49.4-54.6	1.46-1.62	20-24
2450	Body	Measured, 2009.04.21	54	1.99	21.7
		Recommended Limits	50.07-55.34	1.85-2.05	20-24

Table 2. Dielectric Parameters of Tissue Simulant Fluid

The composition of the brain tissue simulating liquid for 850 & 1900 & 2450 band:

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

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

Orignal solution measurement result

GSM 850 MHZ

Right Head (Cheek Position)						
Frequency	Channel	MHz	Conducted Output Power (Average)	Measured(W/kg) 1g	Amb. Temp[°C]	Liquid Temp[°C]
850 MHz	128	824.2	33.9dbm	0.637	22.1	21.7
	190	836.6	33.8dbm	0.91	22.1	21.7
	251	848.8	33.7dbm	1.18	22.1	21.7
Left Head (Cheek Position)						
Frequency	Channel	MHz	Conducted Output Power (Average)	Measured(W/kg) 1g	Amb. Temp[°C]	Liquid Temp[°C]
850 MHz	128	824.2	33.9dbm	0.547	22.1	21.7
	190	836.6	33.8dbm	0.826	22.1	21.7
	251	848.8	33.7dbm	1.04	22.1	21.7
Right Head (15° Tilt Position)						
Frequency	Channel	MHz	Conducted Output Power (Average)	Measured(W/kg) 1g	Amb. Temp[°C]	Liquid Temp[°C]
850 MHz	128	824.2	33.9dbm	0.389	22.1	21.7
	190	836.6	33.8dbm	0.536	22.1	21.7
	251	848.8	33.7dbm	0.657	22.1	21.7
Left Head (15° Tilt Position)						
Frequency	Channel	MHz	Conducted Output Power (Average)	Measured(W/kg) 1g	Amb. Temp[°C]	Liquid Temp[°C]
850 MHz	128	824.2	33.9dbm	0.377	22.1	21.7
	190	836.6	33.8dbm	0.524	22.1	21.7
	251	848.8	33.7dbm	0.633	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	33.3dbm	0.684	22.1	21.7
	190	836.6	33.3dbm	0.979	22.1	21.7
	251	848.8	33.1dbm	1.14	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	251	848.8	33.1dbm	0.401	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	251	848.8	33.1dbm	1.09	22.1	21.7
Body worn (testing in GPRS mode)_repeated with headset						
Frequency	Channel	MHz	Conducted Output Power (Average)	Measured(W/kg) 1g	Amb. Temp[°C]	Liquid Temp[°C]
850 MHz	251	848.8	33.1dbm	1.22	22.1	21.7
Body worn (testing in GPRS mode)_repeated with WELLDONE Battery						
Frequency	Channel	MHz	Conducted Output Power (Average)	Measured(W/kg) 1g	Amb. Temp[°C]	Liquid Temp[°C]
850 MHz	251	848.8	33.1dbm	1.04	22.1	21.7
Body worn (testing in EGPRS mode)						
Frequency	Channel	MHz	Conducted Output Power (Average)	Measured(W/kg) 1g	Amb. Temp[°C]	Liquid Temp[°C]
850 MHz	128	824.2	27dbm	0.291	22.1	21.7
	190	836.6	26.9dbm	0.366	22.1	21.7
	251	848.8	26.8dbm	0.384	22.1	21.7

PCS 1900 MHZ

Right Head (Cheek Position)						
Frequency	Channel	MHz	Conducted Output Power (Average)	Measured(W/kg) 1g	Amb. Temp[°C]	Liquid Temp[°C]
1900 MHz	512	1850.2	30.4dbm	0.968	22.1	21.7
	661	1880	30.3dbm	1.1	22.1	21.7
	810	1909.8	30.2dbm	1.03	22.1	21.7

Left Head (Cheek Position)

Frequency	Channel	MHz	Conducted Output Power (Average)	Measured(W/kg) 1g	Amb. Temp[°C]	Liquid Temp[°C]
1900 MHz	512	1850.2	30.4dbm	1.35	22.1	21.7
	661	1880	30.3dbm	1.47	22.1	21.7
	810	1909.8	30.2dbm	1.17	22.1	21.7

Right Head (15° Tilt Position)

Frequency	Channel	MHz	Conducted Output Power (Average)	Measured(W/kg) 1g	Amb. Temp[°C]	Liquid Temp[°C]
1900 MHz	512	1850.2	30.4dbm	0.545	22.1	21.7
	661	1880	30.3dbm	0.581	22.1	21.7
	810	1909.8	30.2dbm	0.519	22.1	21.7

Left Head (15° Tilt Position)

Frequency	Channel	MHz	Conducted Output Power (Average)	Measured(W/kg) 1g	Amb. Temp[°C]	Liquid Temp[°C]
1900 MHz	512	1850.2	30.4dbm	0.609	22.1	21.7
	661	1880	30.3dbm	0.635	22.1	21.7
	810	1909.8	30.2dbm	0.562	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	29.7dbm	1.03	22.1	21.7
	661	1880	29.6dbm	0.962	22.1	21.7
	810	1909.8	29.4dbm	0.746	22.1	21.7

Body worn (testing in EGPRS mode)

Frequency	Channel	MHz	Conducted Output Power (Average)	Measured(W/kg) 1g	Amb. Temp[°C]	Liquid Temp[°C]
1900 MHz	512	1850.2	24.2dbm	0.34	22.1	21.7
	661	1880	24.4dbm	0.34	22.1	21.7
	810	1909.8	24.3dbm	0.325	22.1	21.7

WCDMA BAND 2

Right Head (Cheek Position)						
Frequency	Channel	MHz	Conducted Output Power (Average)	Measured(W/kg) 1g	Amb. Temp[°C]	Liquid Temp[°C]
WCDMA B2	9262	1852.4	22.62dbm	1.03	22.1	21.7
	9400	1880	22.23dbm	1.19	22.1	21.7
	9538	1907.6	21.70dbm	1.28	22.1	21.7
Left Head (Cheek Position)						
Frequency	Channel	MHz	Conducted Output Power (Average)	Measured(W/kg) 1g	Amb. Temp[°C]	Liquid Temp[°C]
WCDMA B2	9262	1852.4	22.62dbm	1.41	22.1	21.7
	9400	1880	22.23dbm	1.56	22.1	21.7
	9538	1907.6	21.70dbm	1.5	22.1	21.7
Left Head (Cheek Position) _repeated with Memory card						
Frequency	Channel	MHz	Conducted Output Power (Average)	Measured(W/kg) 1g	Amb. Temp[°C]	Liquid Temp[°C]
WCDMA B2	9400	1880	22.23dbm	1.57	22.1	21.7
Left Head (Cheek Position)_repeated with WELLDONE Battery						
Frequency	Channel	MHz	Conducted Output Power (Average)	Measured(W/kg) 1g	Amb. Temp[°C]	Liquid Temp[°C]
WCDMA B2	9400	1880	22.23dbm	1.51	22.1	21.7
Right Head (15° Tilt Position)						
Frequency	Channel	MHz	Conducted Output Power (Average)	Measured(W/kg) 1g	Amb. Temp[°C]	Liquid Temp[°C]
WCDMA B2	9262	1852.4	22.62dbm	0.579	22.1	21.7
	9400	1880	22.23dbm	0.675	22.1	21.7
	9538	1907.6	21.70dbm	0.673	22.1	21.7
Left Head (15° Tilt Position)						
Frequency	Channel	MHz	Conducted Output Power (Average)	Measured(W/kg) 1g	Amb. Temp[°C]	Liquid Temp[°C]
WCDMA B2	9262	1852.4	22.62dbm	0.614	22.1	21.7
	9400	1880	22.23dbm	0.671	22.1	21.7
	9538	1907.6	21.70dbm	0.68	22.1	21.7

Body worn						
Frequency	Channel	MHz	Conducted Output Power (Average)	Measured(W/kg) 1g	Amb. Temp[°C]	Liquid Temp[°C]
WCDMA B2	9262	1852.4	22.62dbm	0.575	22.1	21.7
	9400	1880	22.23dbm	0.751	22.1	21.7
	9538	1907.6	21.70dbm	0.722	22.1	21.7

WCDMA BAND 2 HSDPA mode, subtest 1

Body worn						
Frequency	Channel	MHz	Conducted Output Power (Average)	Measured(W/kg) 1g	Amb. Temp[°C]	Liquid Temp[°C]
WCDMA B2	9262	1852.4	22.91dbm	0.559	22.1	21.7
	9400	1880	22.49dbm	0.655	22.1	21.7
	9538	1907.6	21.97dbm	0.641	22.1	21.7

WCDMA BAND 2 HSUPA mode, subtest 1

Body worn						
Frequency	Channel	MHz	Conducted Output Power (Average)	Measured(W/kg) 1g	Amb. Temp[°C]	Liquid Temp[°C]
WCDMA B2	9262	1852.4	22.54dbm	0.554	22.1	21.7
	9400	1880	22.21dbm	0.615	22.1	21.7
	9538	1907.6	21.64dbm	0.595	22.1	21.7

WCDMA BAND 5

Right Head (Cheek Position)						
Frequency	Channel	MHz	Conducted Output Power (Average)	Measured(W/kg) 1g	Amb. Temp[°C]	Liquid Temp[°C]
WCDMA B5	4132	826.4	22.43dbm	0.622	22.1	21.7
	4183	836.6	22.40dbm	0.633	22.1	21.7
	4233	846.6	22.35dbm	0.722	22.1	21.7

Left Head (Cheek Position)						
Frequency	Channel	MHz	Conducted Output Power (Average)	Measured(W/kg) 1g	Amb. Temp[°C]	Liquid Temp[°C]
WCDMA B5	4132	826.4	22.43dbm	0.572	22.1	21.7
	4183	836.6	22.40dbm	0.587	22.1	21.7
	4233	846.6	22.35dbm	0.638	22.1	21.7
Right Head (15° Tilt Position)						
Frequency	Channel	MHz	Conducted Output Power (Average)	Measured(W/kg) 1g	Amb. Temp[°C]	Liquid Temp[°C]
WCDMA B5	4132	826.4	22.43dbm	0.376	22.1	21.7
	4183	836.6	22.40dbm	0.383	22.1	21.7
	4233	846.6	22.35dbm	0.424	22.1	21.7
Left Head (15° Tilt Position)						
Frequency	Channel	MHz	Conducted Output Power (Average)	Measured(W/kg) 1g	Amb. Temp[°C]	Liquid Temp[°C]
WCDMA B5	4132	826.4	22.43dbm	0.38	22.1	21.7
	4183	836.6	22.40dbm	0.39	22.1	21.7
	4233	846.6	22.35dbm	0.414	22.1	21.7
Body worn						
Frequency	Channel	MHz	Conducted Output Power (Average)	Measured(W/kg) 1g	Amb. Temp[°C]	Liquid Temp[°C]
WCDMA B5	4132	826.4	22.43dbm	0.443	22.1	21.7
	4183	836.6	22.40dbm	0.473	22.1	21.7
	4233	846.6	22.35dbm	0.476	22.1	21.7

WCDMA BAND 5 HSDPA mode, subtest 1

Body worn						
Frequency	Channel	MHz	Conducted Output Power (Average)	Measured(W/kg) 1g	Amb. Temp[°C]	Liquid Temp[°C]
WCDMA B5	4132	826.4	22.65dbm	0.427	22.1	21.7
	4183	836.6	22.69dbm	0.447	22.1	21.7
	4233	846.6	22.54dbm	0.451	22.1	21.7

WCDMA BAND 5 HSUPA mode, subtest 1

Body worn						
Frequency	Channel	MHz	Conducted Output Power (Average)	Measured(W/kg) 1g	Amb. Temp[°C]	Liquid Temp[°C]
WCDMA B5	4132	826.4	22.39dbm	0.382	22.1	21.7
	4183	836.6	22.33dbm	0.433	22.1	21.7
	4233	846.6	22.27dbm	0.403	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]
WLAN 802.11 b	1	2412	16.66dbm	0.159	22.1	21.7
	6	2437	16.81dbm	0.165	22.1	21.7
	11	2462	16.75dbm	0.144	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]
WLAN 802.11 b	6	2437	16.81dbm	0.07	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]
WLAN 802.11 b	6	2437	16.81dbm	0.162	22.1	21.7
Body worn- repeated with WELLDONE Battery						
Frequency	Channel	MHz	Conducted Output Power (Average)	Measured(W/kg) 1g	Amb. Temp[°C]	Liquid Temp[°C]
WLAN 802.11 b	6	2437	16.81dbm	0.184	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]
WLAN 802.11 g	1	2412	8.55dbm	0.089	22.1	21.7
	6	2437	8.58dbm	0.089	22.1	21.7
	11	2462	8.56dbm	0.08	22.1	21.7

Second solution measurement result

GSM 850 MHZ

Right Head (Cheek Position)						
Frequency	Channel	MHz	Conducted Output Power (Average)	Measured(W/kg) 1g	Amb. Temp[°C]	Liquid Temp[°C]
850 MHz	251	848.8	33.6dbm	0.982	22.1	21.7
Body worn (testing in GPRS mode)_repeated with headset						
Frequency	Channel	MHz	Conducted Output Power (Average)	Measured(W/kg) 1g	Amb. Temp[°C]	Liquid Temp[°C]
850 MHz	251	848.8	33.1dbm	1.2	22.1	21.7

PCS 1900 MHZ

Left Head (Cheek Position)						
Frequency	Channel	MHz	Conducted Output Power (Average)	Measured(W/kg) 1g	Amb. Temp[°C]	Liquid Temp[°C]
1900 MHz	661	1880	30.3dbm	1.29	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	29.8dbm	0.839	22.1	21.7

WCDMA BAND 2

Right Head (Cheek Position)_repeated with Memory card						
Frequency	Channel	MHz	Conducted Output Power (Average)	Measured(W/kg) 1g	Amb. Temp[°C]	Liquid Temp[°C]
WCDMA B2	9400	1880	22.23dbm	1.52	22.1	21.7
Body worn						
Frequency	Channel	MHz	Conducted Output Power (Average)	Measured(W/kg) 1g	Amb. Temp[°C]	Liquid Temp[°C]
WCDMA B2	9400	1880	22.23dbm	0.76	22.1	21.7

WCDMA BAND 2 HSDPA mode, subtest 1

Body worn						
Frequency	Channel	MHz	Conducted Output Power (Average)	Measured(W/kg) 1g	Amb. Temp[°C]	Liquid Temp[°C]
WCDMA B2	9400	1880	22.49dbm	0.745	22.1	21.7

WCDMA BAND 2 HSUPA mode, subtest 1

Body worn						
Frequency	Channel	MHz	Conducted Output Power (Average)	Measured(W/kg) 1g	Amb. Temp[°C]	Liquid Temp[°C]
WCDMA B2	9400	1880	22.21dbm	0.692	22.1	21.7

WCDMA BAND 5

Right Head (Cheek Position)						
Frequency	Channel	MHz	Conducted Output Power (Average)	Measured(W/kg) 1g	Amb. Temp[°C]	Liquid Temp[°C]
WCDMA B5	4233	846.6	22.35dbm	0.62	22.1	21.7
Body worn						
Frequency	Channel	MHz	Conducted Output Power (Average)	Measured(W/kg) 1g	Amb. Temp[°C]	Liquid Temp[°C]
WCDMA B5	4233	846.6	22.35dbm	0.422	22.1	21.7

WCDMA BAND 5 HSDPA mode, subtest 1

Body worn						
Frequency	Channel	MHz	Conducted Output Power (Average)	Measured(W/kg) 1g	Amb. Temp[°C]	Liquid Temp[°C]
WCDMA B5	4233	846.6	22.54dbm	0.383	22.1	21.7

WCDMA BAND 5 HSUPA mode, subtest 1

Body worn						
Frequency	Channel	MHz	Conducted Output Power (Average)	Measured(W/kg) 1g	Amb. Temp[°C]	Liquid Temp[°C]
WCDMA B5	4183	836.6	22.33dbm	0.403	22.1	21.7

WLAN802.11 b

Body worn_repeated with WELLDONE Battery						
Frequency	Channel	MHz	Conducted Output Power (Average)	Measured(W/kg) 1g	Amb. Temp[°C]	Liquid Temp[°C]
WLAN 802.11 b	6	2437	16.76dbm	0.161	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]
WLAN 802.11 g	6	2437	8.54dbm	0.084	22.1	21.7

Third solution measurement result

GSM 850 MHZ

Right Head (Cheek Position)						
Frequency	Channel	MHz	Conducted Output Power (Average)	Measured(W/kg) 1g	Amb. Temp[°C]	Liquid Temp[°C]
850 MHz	251	848.8	33.7dbm	1.05	22.1	21.7

Body worn (testing in GPRS mode)_repeated with headset						
Frequency	Channel	MHz	Conducted Output Power (Average)	Measured(W/kg) 1g	Amb. Temp[°C]	Liquid Temp[°C]
850 MHz	251	848.8	33dbm	1.17	22.1	21.7

PCS 1900 MHZ

Left Head (Cheek Position)						
Frequency	Channel	MHz	Conducted Output Power (Average)	Measured(W/kg) 1g	Amb. Temp[°C]	Liquid Temp[°C]
1900 MHz	661	1880	30.1dbm	1.31	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	29.8dbm	1.04	22.1	21.7

WCDMA BAND 2

Right Head (Cheek Position)_repeated with Memory card						
Frequency	Channel	MHz	Conducted Output Power (Average)	Measured(W/kg) 1g	Amb. Temp[°C]	Liquid Temp[°C]
WCDMA B2	9400	1880	22.23dbm	1.4	22.1	21.7

Body worn						
Frequency	Channel	MHz	Conducted Output Power (Average)	Measured(W/kg) 1g	Amb. Temp[°C]	Liquid Temp[°C]
WCDMA B2	9400	1880	22.23dbm	0.69	22.1	21.7

WCDMA BAND 2 HSDPA mode, subtest 1

Body worn						
Frequency	Channel	MHz	Conducted Output Power (Average)	Measured(W/kg) 1g	Amb. Temp[°C]	Liquid Temp[°C]
WCDMA B2	9400	1880	22.49dbm	0.642	22.1	21.7

WCDMA BAND 2 HSUPA mode, subtest 1

Body worn						
Frequency	Channel	MHz	Conducted Output Power (Average)	Measured(W/kg) 1g	Amb. Temp[°C]	Liquid Temp[°C]
WCDMA B2	9400	1880	22.21dbm	0.587	22.1	21.7

WCDMA BAND 5

Right Head (Cheek Position)						
Frequency	Channel	MHz	Conducted Output Power (Average)	Measured(W/kg) 1g	Amb. Temp[°C]	Liquid Temp[°C]
WCDMA B5	4233	846.6	22.35dbm	0.714	22.1	21.7
Body worn						
Frequency	Channel	MHz	Conducted Output Power (Average)	Measured(W/kg) 1g	Amb. Temp[°C]	Liquid Temp[°C]
WCDMA B5	4233	846.6	22.35dbm	0.458	22.1	21.7

WCDMA BAND 5 HSDPA mode, subtest 1

Body worn						
Frequency	Channel	MHz	Conducted Output Power (Average)	Measured(W/kg) 1g	Amb. Temp[°C]	Liquid Temp[°C]
WCDMA B5	4233	846.6	22.54dbm	0.435	22.1	21.7

WCDMA BAND 5 HSUPA mode, subtest 1

Body worn						
Frequency	Channel	MHz	Conducted Output Power (Average)	Measured(W/kg) 1g	Amb. Temp[°C]	Liquid Temp[°C]
WCDMA B5	4183	836.6	22.33dbm	0.414	22.1	21.7

WLAN802.11 b

Body worn_repeated with WELLDONE Battery						
Frequency	Channel	MHz	Conducted Output Power (Average)	Measured(W/kg) 1g	Amb. Temp[°C]	Liquid Temp[°C]
WLAN 802.11 b	6	2437	16.83dbm	0.21	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]
WLAN 802.11 g	6	2437	8.55dbm	0.103	22.1	21.7

Fourth solution measurement result

GSM 850 MHZ

Right Head (Cheek Position)						
Frequency	Channel	MHz	Conducted Output Power (Average)	Measured(W/kg) 1g	Amb. Temp[°C]	Liquid Temp[°C]
850 MHz	251	848.8	33.6dbm	1.05	22.1	21.7
Body worn (testing in GPRS mode)_repeated with headset						
Frequency	Channel	MHz	Conducted Output Power (Average)	Measured(W/kg) 1g	Amb. Temp[°C]	Liquid Temp[°C]
850 MHz	251	848.8	33.1dbm	1.18	22.1	21.7

PCS 1900 MHZ

Left Head (Cheek Position)						
Frequency	Channel	MHz	Conducted Output Power (Average)	Measured(W/kg) 1g	Amb. Temp[°C]	Liquid Temp[°C]
1900 MHz	661	1880	30.2dbm	1.34	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	29.8dbm	1.06	22.1	21.7

WCDMA BAND 2

Right Head (Cheek Position)_repeated with Memory card						
Frequency	Channel	MHz	Conducted Output Power (Average)	Measured(W/kg) 1g	Amb. Temp[°C]	Liquid Temp[°C]
WCDMA B2	9400	1880	22.23dbm	1.57	22.1	21.7

Body worn						
Frequency	Channel	MHz	Conducted Output Power (Average)	Measured(W/kg) 1g	Amb. Temp[°C]	Liquid Temp[°C]
WCDMA B2	9400	1880	22.23dbm	0.724	22.1	21.7

WCDMA BAND 2 HSDPA mode, subtest 1

Body worn						
Frequency	Channel	MHz	Conducted Output Power (Average)	Measured(W/kg) 1g	Amb. Temp[°C]	Liquid Temp[°C]
WCDMA B2	9400	1880	22.49dbm	0.633	22.1	21.7

WCDMA BAND 2 HSUPA mode, subtest 1

Body worn						
Frequency	Channel	MHz	Conducted Output Power (Average)	Measured(W/kg) 1g	Amb. Temp[°C]	Liquid Temp[°C]
WCDMA B2	9400	1880	22.21dbm	0.585	22.1	21.7

WCDMA BAND 5

Right Head (Cheek Position)						
Frequency	Channel	MHz	Conducted Output Power (Average)	Measured(W/kg) 1g	Amb. Temp[°C]	Liquid Temp[°C]
WCDMA B5	4233	846.6	22.35dbm	0.698	22.1	21.7
Body worn						
Frequency	Channel	MHz	Conducted Output Power (Average)	Measured(W/kg) 1g	Amb. Temp[°C]	Liquid Temp[°C]
WCDMA B5	4233	846.6	22.35dbm	0.542	22.1	21.7

WCDMA BAND 5 HSDPA mode, subtest 1

Body worn						
Frequency	Channel	MHz	Conducted Output Power (Average)	Measured(W/kg) 1g	Amb. Temp[°C]	Liquid Temp[°C]
WCDMA B5	4233	846.6	22.54dbm	0.481	22.1	21.7

WCDMA BAND 5 HSUPA mode, subtest 1

Body worn						
Frequency	Channel	MHz	Conducted Output Power (Average)	Measured(W/kg) 1g	Amb. Temp[°C]	Liquid Temp[°C]
WCDMA B5	4183	836.6	22.33dbm	0.395	22.1	21.7

WLAN802.11 b

Body worn_repeated with WELLDONE Battery						
Frequency	Channel	MHz	Conducted Output Power (Average)	Measured(W/kg) 1g	Amb. Temp[°C]	Liquid Temp[°C]
WLAN 802.11 b	6	2437	16.81dbm	0.193	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]
WLAN 802.11 g	6	2437	8.51dbm	0.096	22.1	21.7

3. Instruments List

Manufacturer	Device	Type	Serial number	Date of last calibration
Schmid & Partner Engineering AG	Dosimetric E-FieldProbe	ES3DV3	3172	Jun.23.2008
Schmid & Partner Engineering AG	850/1900/2450MHz System Validation Dipole	D835V2 D1900V2 D2450V2	4d063 5d018 735	Jun.06.2008 May.22.2008 May.22.2008
Schmid & Partner Engineering AG	Data acquisition Electronics	DAE4	856	May.07.2008
Schmid & Partner Engineering AG	Software	DASY 5 V5.0 Build125	N/A	Calibration not required
Schmid & Partner Engineering AG	Phantom	SAM	N/A	Calibration not required
Agilent	Network Analyzer	8753D	3410A05547	Mar.31.2009
Agilent	Dielectric Probe Kit	85070D	US01440168	Calibration not required
Agilent	Dual-directional coupler	778D	50313	Aug.26.2008
		777D	50014	Aug.26.2008
Agilent	RF Signal Generator	8648D	3847M00432	May.21.2008
Agilent	Power Sensor	8481H	MY41091361	May.20.2008
Agilent	Radio Communication Test	E5515c	GB44051912	Nov.05 .2008

4. Measurements

Date/Time: 04/15/2009 01:11:32

RE_Cheek_CH128

DUT: SAPP500;

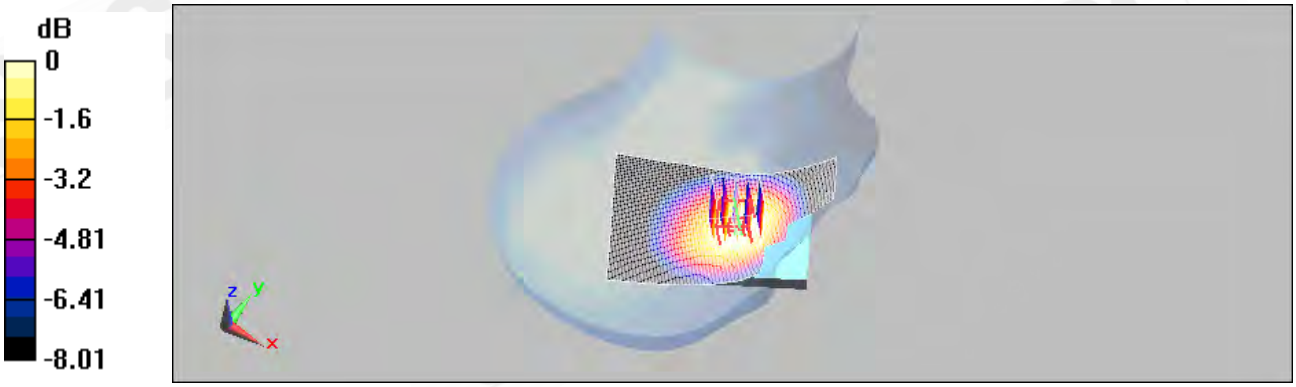
Communication System: GSM 850; Frequency: 824.2 MHz;Duty Cycle: 1:8.3
Medium: Head 900 Medium parameters used (extrapolated): f = 824.2 MHz; σ = 0.894 mho/m; ε_r = 42.4; ρ = 1000 kg/m^3
Phantom section: Right Section

- Probe: ES3DV3 - SN3172; ConvF(5.66, 5.66, 5.66); Calibrated: 6/23/2008
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn856; Calibrated: 5/7/2008
- Phantom: SAM1; Type: SAM;
- Measurement SW: DASY5, V5.0 Build 125; SEMCAD X Version 13.4 Build 125

RE Cheek/Area Scan (61x101x1): Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (interpolated) = 0.679 mW/g

RE Cheek/Zoom Scan (7x7x7) (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 12.9 V/m; Power Drift = -0.196 dB
Peak SAR (extrapolated) = 0.769 W/kg

SAR(1 g) = 0.637 mW/g; SAR(10 g) = 0.482 mW/g
Maximum value of SAR (measured) = 0.675 mW/g



0 dB = 0.675mW/g

Date/Time: 04/15/2009 01:36:41

RE_Cheek_CH190

DUT: SAPP500;

Communication System: GSM 850; Frequency: 836.6 MHz;Duty Cycle: 1:8.3
Medium: Head 900 Medium parameters used (extrapolated): f = 836.6 MHz; σ = 0.907 mho/m; ε_r = 42.2; ρ = 1000 kg/m^3
Phantom section: Right Section

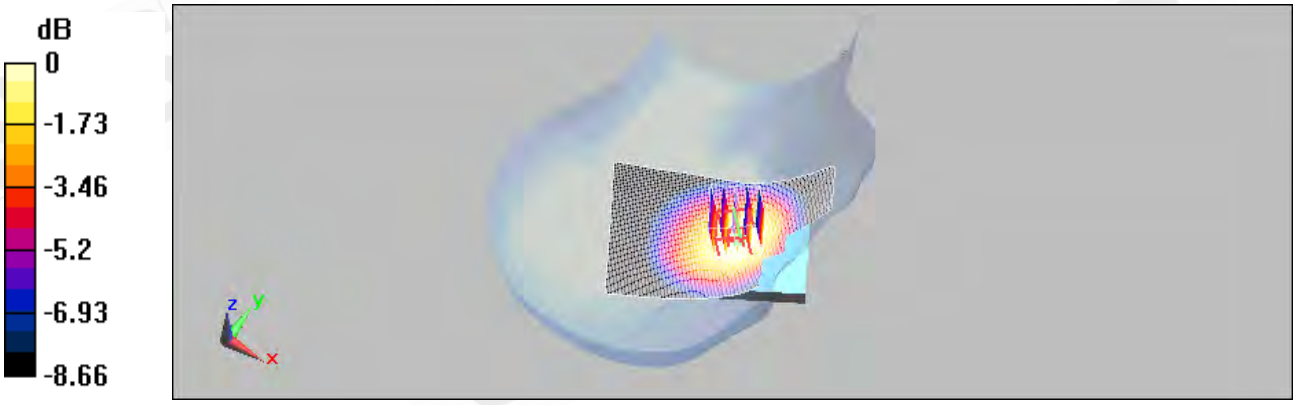
DASY5 Configuration:

- Probe: ES3DV3 - SN3172; ConvF(5.66, 5.66, 5.66); Calibrated: 6/23/2008
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn856; Calibrated: 5/7/2008
- Phantom: SAM1; Type: SAM;
- Measurement SW: DASY5, V5.0 Build 125; SEMCAD X Version 13.4 Build 125

RE Cheek/Area Scan (61x101x1): Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (interpolated) = 0.963 mW/g

RE Cheek/Zoom Scan (7x7x7) (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 14.1 V/m; Power Drift = -0.054 dB
Peak SAR (extrapolated) = 1.12 W/kg

SAR(1 g) = 0.910 mW/g; SAR(10 g) = 0.680 mW/g
Maximum value of SAR (measured) = 0.954 mW/g



0 dB = 0.954mW/g

Date/Time: 04/15/2009 02:04:55

RE_Cheek_CH251

DUT: SAPP500;

Communication System: GSM 850; Frequency: 848.8 MHz;Duty Cycle: 1:8.3
Medium: Head 900 Medium parameters used (extrapolated): f = 848.8 MHz; σ = 0.919 mho/m; ε_r = 42.1; ρ = 1000 kg/m^3
Phantom section: Right Section

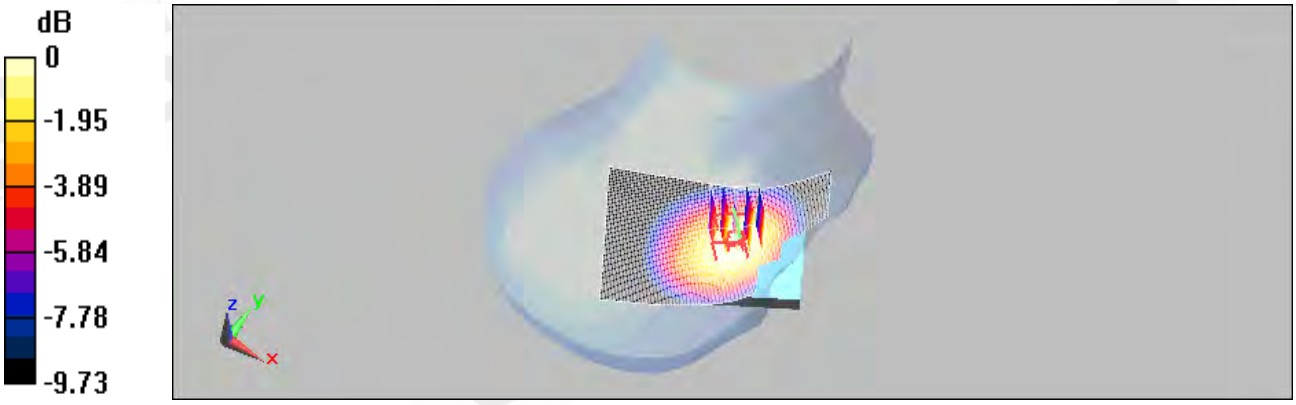
DASY5 Configuration:

- Probe: ES3DV3 - SN3172; ConvF(5.66, 5.66, 5.66); Calibrated: 6/23/2008
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn856; Calibrated: 5/7/2008
- Phantom: SAM1; Type: SAM;
- Measurement SW: DASY5, V5.0 Build 125; SEMCAD X Version 13.4 Build 125

RE Cheek/Area Scan (61x101x1): Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (interpolated) = 1.27 mW/g

RE Cheek/Zoom Scan (7x7x7) (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 14 V/m; Power Drift = -0.205 dB
Peak SAR (extrapolated) = 1.51 W/kg

SAR(1 g) = 1.18 mW/g; SAR(10 g) = 0.872 mW/g
Maximum value of SAR (measured) = 1.24 mW/g



0 dB = 1.24mW/g

Date/Time: 04/15/2009 03:49:22

LE_Cheek_CH128

DUT: SAPP500;

Communication System: GSM 850; Frequency: 824.2 MHz;Duty Cycle: 1:8.3
Medium: Head 900 Medium parameters used (extrapolated): f = 824.2 MHz; σ = 0.894 mho/m; ε_r = 42.4; ρ = 1000 kg/m^3
Phantom section: Left Section

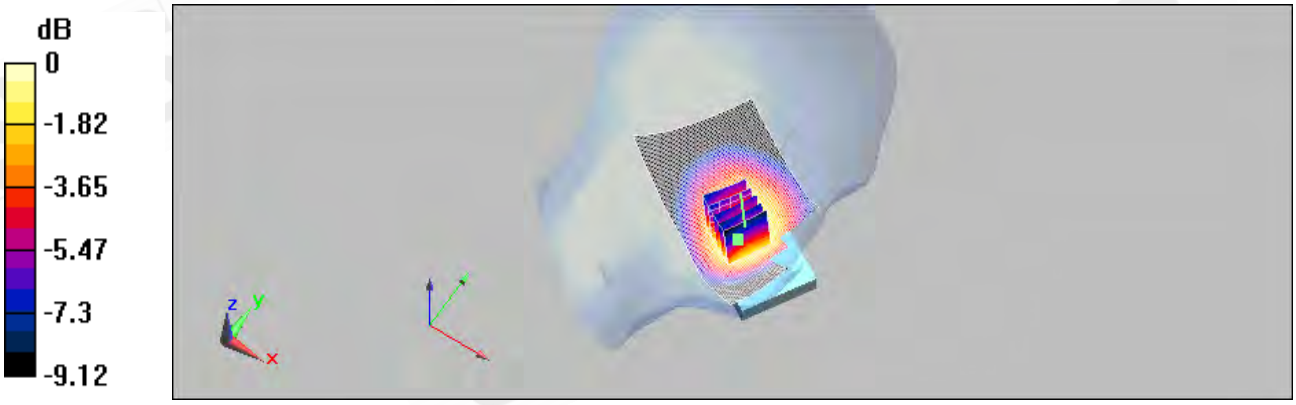
DASY5 Configuration:

- Probe: ES3DV3 - SN3172; ConvF(5.66, 5.66, 5.66); Calibrated: 6/23/2008
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn856; Calibrated: 5/7/2008
- Phantom: SAM1; Type: SAM;
- Measurement SW: DASY5, V5.0 Build 125; SEMCAD X Version 13.4 Build 125

LE Cheek/Area Scan (61x101x1): Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (interpolated) = 0.567 mW/g

LE Cheek/Zoom Scan (7x7x7) (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 11.7 V/m; Power Drift = 0.063 dB
Peak SAR (extrapolated) = 0.673 W/kg

SAR(1 g) = 0.547 mW/g; SAR(10 g) = 0.405 mW/g
Maximum value of SAR (measured) = 0.568 mW/g



0 dB = 0.568mW/g

Date/Time: 04/15/2009 04:16:59

LE_Cheek_CH190

DUT: SAPP500;

Communication System: GSM 850; Frequency: 836.6 MHz;Duty Cycle: 1:8.3
Medium: Head 900 Medium parameters used (extrapolated): f = 836.6 MHz; σ = 0.907 mho/m; ε_r = 42.2; ρ = 1000 kg/m^3
Phantom section: Left Section

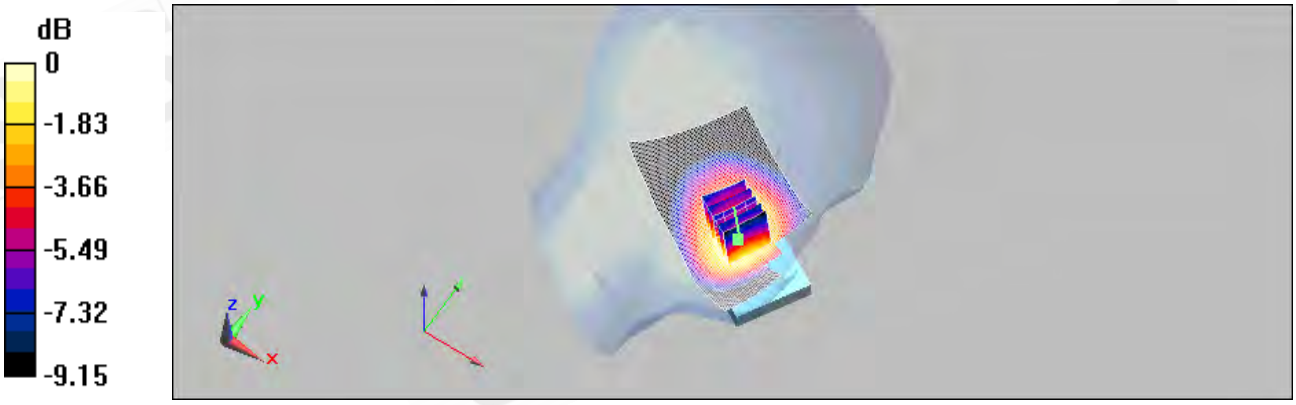
DASY5 Configuration:

- Probe: ES3DV3 - SN3172; ConvF(5.66, 5.66, 5.66); Calibrated: 6/23/2008
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn856; Calibrated: 5/7/2008
- Phantom: SAM1; Type: SAM;
- Measurement SW: DASY5, V5.0 Build 125; SEMCAD X Version 13.4 Build 125

LE Cheek/Area Scan (61x101x1): Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (interpolated) = 0.860 mW/g

LE Cheek/Zoom Scan (7x7x7) (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 14 V/m; Power Drift = 0.037 dB
Peak SAR (extrapolated) = 1.02 W/kg

SAR(1 g) = 0.826 mW/g; SAR(10 g) = 0.607 mW/g
Maximum value of SAR (measured) = 0.872 mW/g



0 dB = 0.872mW/g

Date/Time: 04/15/2009 04:41:27

LE_Cheek_CH251

DUT: SAPP500;

Communication System: GSM 850; Frequency: 848.8 MHz;Duty Cycle: 1:8.3
Medium: Head 900 Medium parameters used (extrapolated): f = 848.8 MHz; σ = 0.919 mho/m; ε_r = 42.1; ρ = 1000 kg/m^3
Phantom section: Left Section

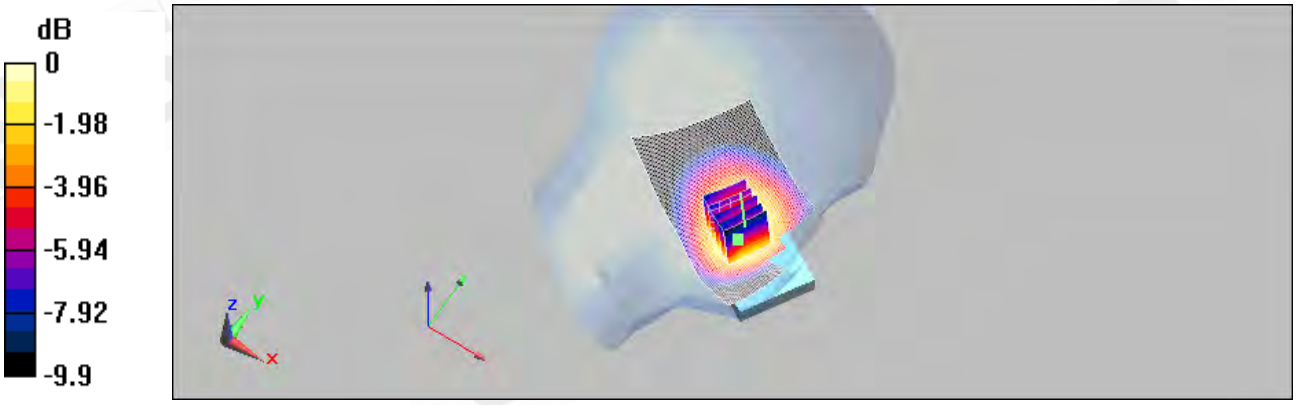
DASY5 Configuration:

- Probe: ES3DV3 - SN3172; ConvF(5.66, 5.66, 5.66); Calibrated: 6/23/2008
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn856; Calibrated: 5/7/2008
- Phantom: SAM1; Type: SAM;
- Measurement SW: DASY5, V5.0 Build 125; SEMCAD X Version 13.4 Build 125

LE Cheek/Area Scan (61x101x1): Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (interpolated) = 1.09 mW/g

LE Cheek/Zoom Scan (7x7x7) (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 15.7 V/m; Power Drift = -0.106 dB
Peak SAR (extrapolated) = 1.3 W/kg

SAR(1 g) = 1.04 mW/g; SAR(10 g) = 0.764 mW/g
Maximum value of SAR (measured) = 1.09 mW/g



0 dB = 1.09mW/g

Date/Time: 04/15/2009 02:31:07

RE_Tilt_CH128

DUT: SAPP500;

Communication System: GSM 850; Frequency: 824.2 MHz;Duty Cycle: 1:8.3
Medium: Head 900 Medium parameters used (extrapolated): f = 824.2 MHz; σ = 0.894 mho/m; ε_r = 42.4; ρ = 1000 kg/m^3
Phantom section: Right Section

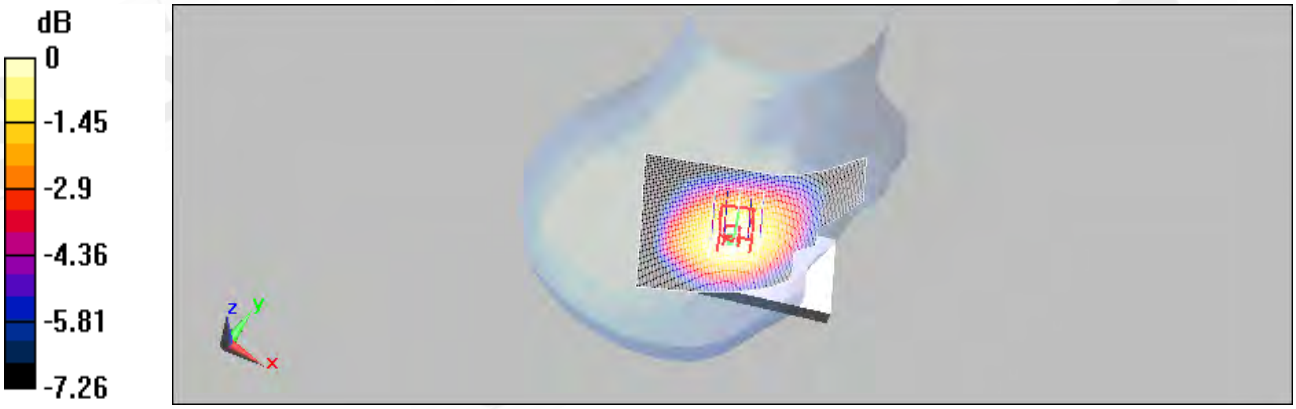
DASY5 Configuration:

- Probe: ES3DV3 - SN3172; ConvF(5.66, 5.66, 5.66); Calibrated: 6/23/2008
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn856; Calibrated: 5/7/2008
- Phantom: SAM1; Type: SAM;
- Measurement SW: DASY5, V5.0 Build 125; SEMCAD X Version 13.4 Build 125

RE Tilt/Area Scan (61x101x1): Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (interpolated) = 0.413 mW/g

RE Tilt/Zoom Scan (7x7x7) (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 16.5 V/m; Power Drift = 0.057 dB
Peak SAR (extrapolated) = 0.470 W/kg

SAR(1 g) = 0.389 mW/g; SAR(10 g) = 0.298 mW/g
Maximum value of SAR (measured) = 0.409 mW/g



0 dB = 0.409mW/g

Date/Time: 04/15/2009 02:57:49

RE_Tilt_CH190

DUT: SAPP500;

Communication System: GSM 850; Frequency: 836.6 MHz;Duty Cycle: 1:8.3
Medium: Head 900 Medium parameters used (extrapolated): f = 836.6 MHz; σ = 0.907 mho/m; ε_r = 42.2; ρ = 1000 kg/m^3
Phantom section: Right Section

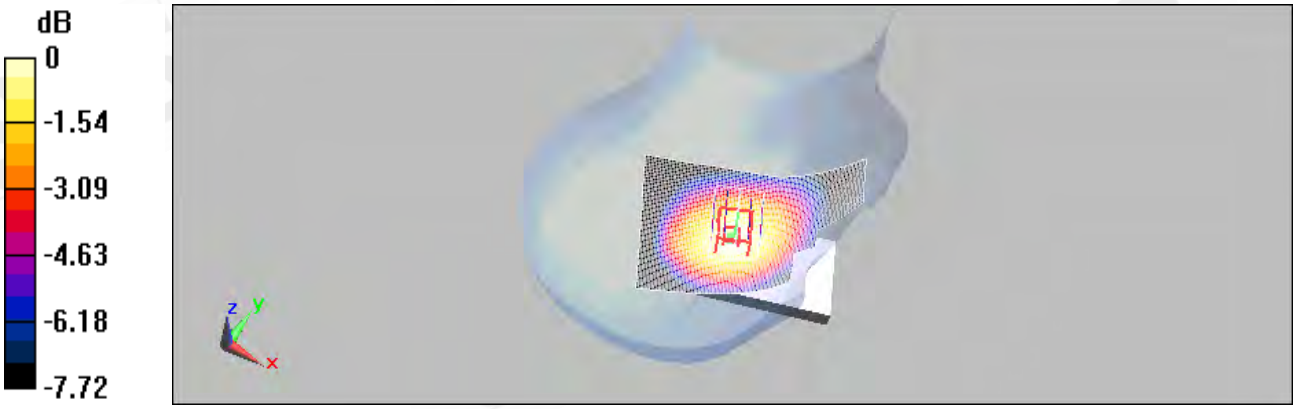
DASY5 Configuration:

- Probe: ES3DV3 - SN3172; ConvF(5.66, 5.66, 5.66); Calibrated: 6/23/2008
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn856; Calibrated: 5/7/2008
- Phantom: SAM1; Type: SAM;
- Measurement SW: DASY5, V5.0 Build 125; SEMCAD X Version 13.4 Build 125

RE Tilt/Area Scan (61x101x1): Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (interpolated) = 0.570 mW/g

RE Tilt/Zoom Scan (7x7x7) (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 19 V/m; Power Drift = -0.037 dB
Peak SAR (extrapolated) = 0.652 W/kg

SAR(1 g) = 0.536 mW/g; SAR(10 g) = 0.407 mW/g
Maximum value of SAR (measured) = 0.563 mW/g



0 dB = 0.563mW/g

Date/Time: 04/15/2009 03:25:27

RE_Tilt_CH251

DUT: SAPP500;

Communication System: GSM 850; Frequency: 848.8 MHz;Duty Cycle: 1:8.3
Medium: Head 900 Medium parameters used (extrapolated): f = 848.8 MHz; σ = 0.919 mho/m; ε_r = 42.1; ρ = 1000 kg/m^3
Phantom section: Right Section

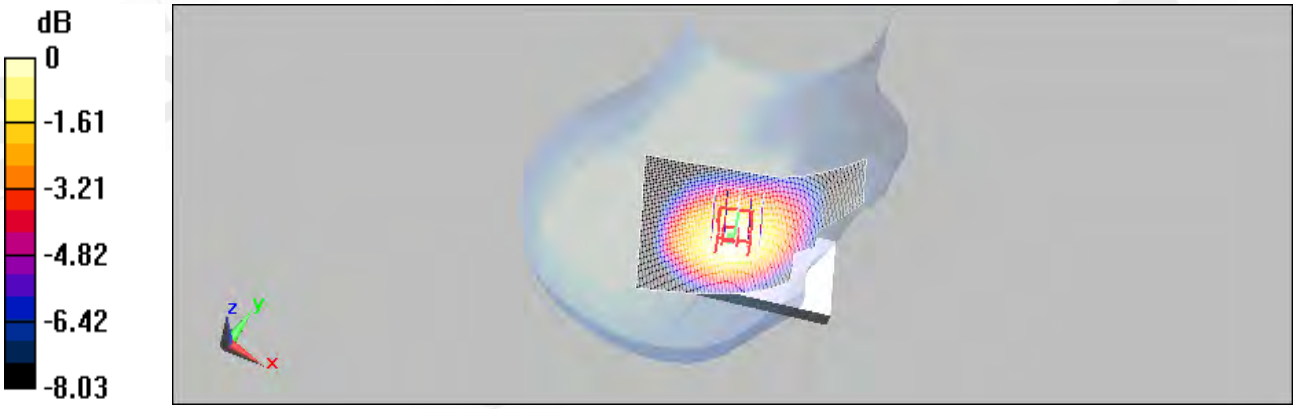
DASY5 Configuration:

- Probe: ES3DV3 - SN3172; ConvF(5.66, 5.66, 5.66); Calibrated: 6/23/2008
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn856; Calibrated: 5/7/2008
- Phantom: SAM1; Type: SAM;
- Measurement SW: DASY5, V5.0 Build 125; SEMCAD X Version 13.4 Build 125

RE Tilt/Area Scan (61x101x1): Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (interpolated) = 0.698 mW/g

RE Tilt/Zoom Scan (7x7x7) (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 20.7 V/m; Power Drift = 0.051 dB
Peak SAR (extrapolated) = 0.815 W/kg

SAR(1 g) = 0.657 mW/g; SAR(10 g) = 0.495 mW/g
Maximum value of SAR (measured) = 0.690 mW/g



0 dB = 0.690mW/g

Date/Time: 04/15/2009 05:07:15

LE_Tilt_CH128

DUT: SAPP500;

Communication System: GSM 850; Frequency: 824.2 MHz;Duty Cycle: 1:8.3
Medium: Head 900 Medium parameters used (extrapolated): f = 824.2 MHz; σ = 0.894 mho/m; ε_r = 42.4; ρ = 1000 kg/m^3
Phantom section: Left Section

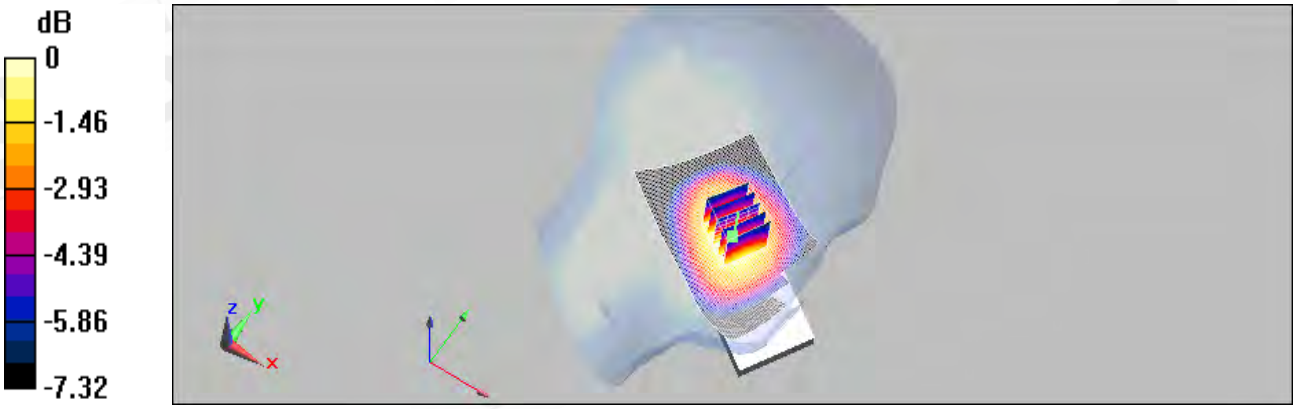
DASY5 Configuration:

- Probe: ES3DV3 - SN3172; ConvF(5.66, 5.66, 5.66); Calibrated: 6/23/2008
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn856; Calibrated: 5/7/2008
- Phantom: SAM1; Type: SAM;
- Measurement SW: DASY5, V5.0 Build 125; SEMCAD X Version 13.4 Build 125

LE Tilt/Area Scan (61x101x1): Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (interpolated) = 0.400 mW/g

LE Tilt/Zoom Scan (7x7x7) (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 16.8 V/m; Power Drift = -0.027 dB
Peak SAR (extrapolated) = 0.464 W/kg

SAR(1 g) = 0.377 mW/g; SAR(10 g) = 0.288 mW/g
Maximum value of SAR (measured) = 0.397 mW/g



0 dB = 0.397mW/g

Date/Time: 04/15/2009 05:31:59

LE_Tilt_CH190

DUT: SAPP500;

Communication System: GSM 850; Frequency: 836.6 MHz;Duty Cycle: 1:8.3
Medium: Head 900 Medium parameters used (extrapolated): f = 836.6 MHz; σ = 0.907 mho/m; ε_r = 42.2; ρ = 1000 kg/m^3
Phantom section: Left Section

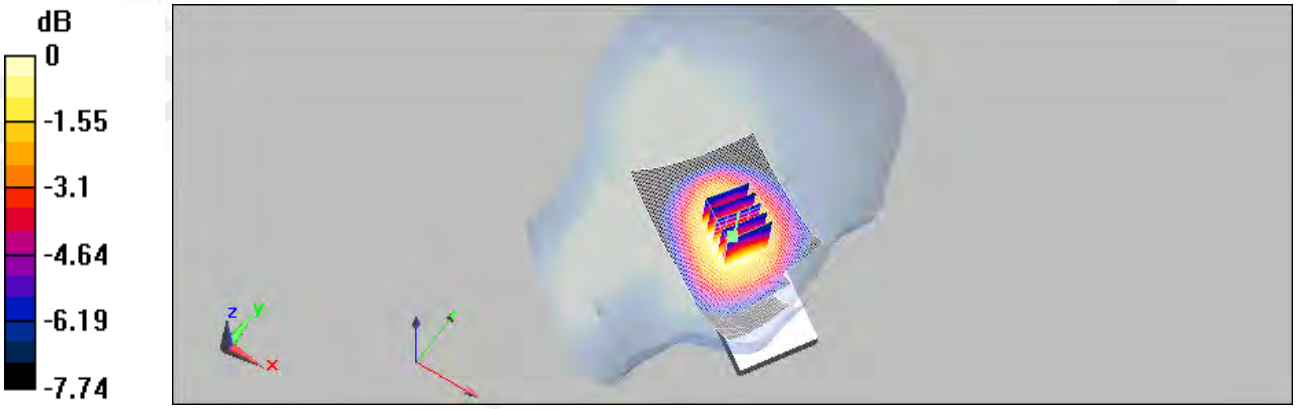
DASY5 Configuration:

- Probe: ES3DV3 - SN3172; ConvF(5.66, 5.66, 5.66); Calibrated: 6/23/2008
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn856; Calibrated: 5/7/2008
- Phantom: SAM1; Type: SAM;
- Measurement SW: DASY5, V5.0 Build 125; SEMCAD X Version 13.4 Build 125

LE Tilt/Area Scan (61x101x1): Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (interpolated) = 0.555 mW/g

LE Tilt/Zoom Scan (7x7x7) (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 19.6 V/m; Power Drift = -0.027 dB
Peak SAR (extrapolated) = 0.642 W/kg

SAR(1 g) = 0.524 mW/g; SAR(10 g) = 0.396 mW/g
Maximum value of SAR (measured) = 0.552 mW/g



0 dB = 0.552mW/g

Date/Time: 04/15/2009 05:38:37

LE_Tilt_CH251

DUT: SAPP500;

Communication System: GSM 850; Frequency: 848.8 MHz;Duty Cycle: 1:8.3
Medium: Head 900 Medium parameters used (extrapolated): f = 848.8 MHz; σ = 0.919 mho/m; ε_r = 42.1; ρ = 1000 kg/m^3
Phantom section: Left Section

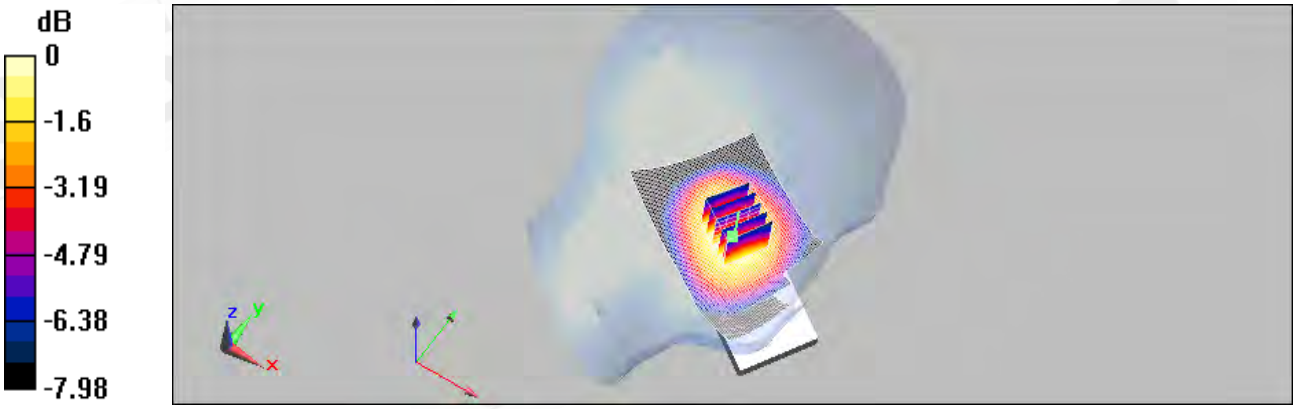
DASY5 Configuration:

- Probe: ES3DV3 - SN3172; ConvF(5.66, 5.66, 5.66); Calibrated: 6/23/2008
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn856; Calibrated: 5/7/2008
- Phantom: SAM1; Type: SAM;
- Measurement SW: DASY5, V5.0 Build 125; SEMCAD X Version 13.4 Build 125

LE Tilt/Area Scan (61x101x1): Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (interpolated) = 0.661 mW/g

LE Tilt/Zoom Scan (7x7x7) (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 21.1 V/m; Power Drift = 0.060 dB
Peak SAR (extrapolated) = 0.796 W/kg

SAR(1 g) = 0.633 mW/g; SAR(10 g) = 0.475 mW/g
Maximum value of SAR (measured) = 0.665 mW/g



0 dB = 0.665mW/g

Date/Time: 04/16/2009 01:26:23

BODY_CH128

DUT: SAPP500;

Communication System: GSM 850; Frequency: 824.2 MHz;Duty Cycle: 1:4
Medium: Body 900 Medium parameters used (extrapolated): f = 824.2 MHz; σ = 0.948 mho/m; ε_r = 55.2; ρ = 1000 kg/m^3
Phantom section: Flat Section

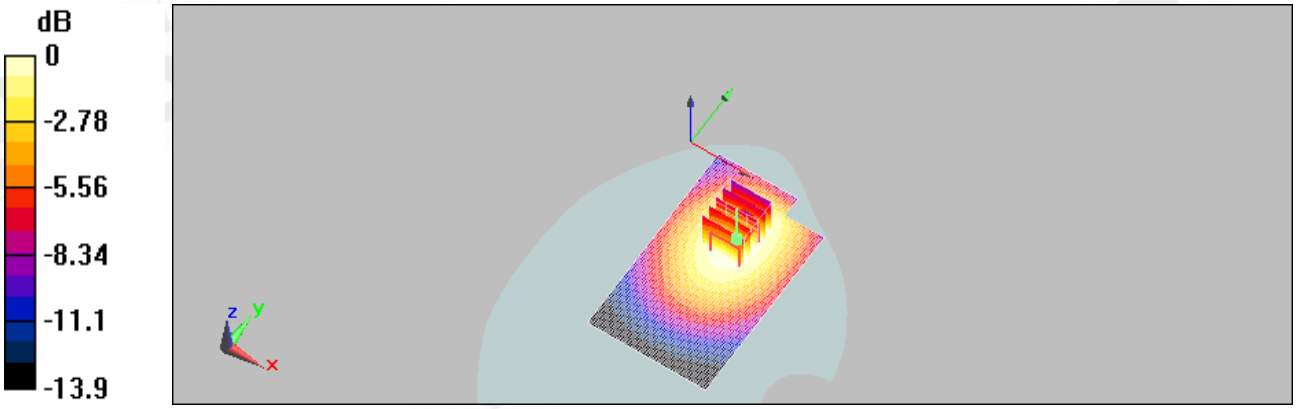
DASY5 Configuration:

- Probe: ES3DV3 - SN3172; ConvF(5.61, 5.61, 5.61); Calibrated: 6/23/2008
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn856; Calibrated: 5/7/2008
- Phantom: SAM1; Type: SAM;
- Measurement SW: DASY5, V5.0 Build 125; SEMCAD X Version 13.4 Build 125

Body/Area Scan (61x101x1): Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (interpolated) = 0.721 mW/g

Body/Zoom Scan (7x7x7) (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 8.86 V/m; Power Drift = 0.041 dB
Peak SAR (extrapolated) = 0.863 W/kg

SAR(1 g) = 0.684 mW/g; SAR(10 g) = 0.505 mW/g
Maximum value of SAR (measured) = 0.718 mW/g



0 dB = 0.718mW/g

Date/Time: 04/16/2009 01:53:21

BODY_CH190

DUT: SAPP500;

Communication System: GSM 850; Frequency: 836.6 MHz;Duty Cycle: 1:4
Medium: Body 900 Medium parameters used (extrapolated): f = 836.6 MHz; σ = 0.952 mho/m; ε_r = 55.1; ρ = 1000 kg/m^3
Phantom section: Flat Section

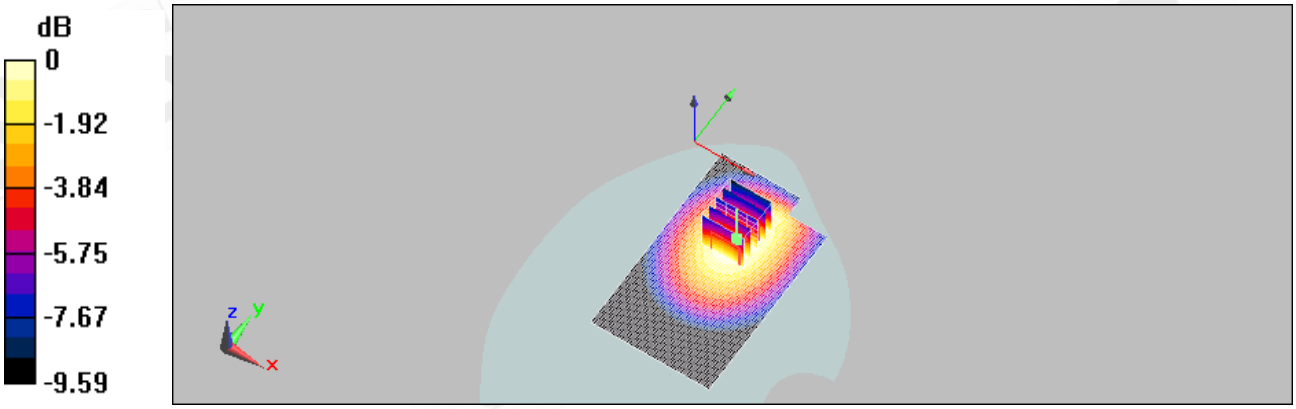
DASY5 Configuration:

- Probe: ES3DV3 - SN3172; ConvF(5.61, 5.61, 5.61); Calibrated: 6/23/2008
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn856; Calibrated: 5/7/2008
- Phantom: SAM1; Type: SAM;
- Measurement SW: DASY5, V5.0 Build 125; SEMCAD X Version 13.4 Build 125

Body/Area Scan (61x101x1): Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (interpolated) = 1.03 mW/g

Body/Zoom Scan (7x7x7) (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 10 V/m; Power Drift = -0.116 dB
Peak SAR (extrapolated) = 1.24 W/kg

SAR(1 g) = 0.979 mW/g; SAR(10 g) = 0.721 mW/g
Maximum value of SAR (measured) = 1.03 mW/g



0 dB = 1.03mW/g

Date/Time: 04/16/2009 02:17:52

BODY_CH251

DUT: SAPP500;

Communication System: GSM 850; Frequency: 848.8 MHz;Duty Cycle: 1:4
Medium: BODY 900 Medium parameters used (extrapolated): f = 848.8 MHz; σ = 0.966 mho/m; ε_r = 55.1; ρ = 1000 kg/m^3
Phantom section: Flat Section

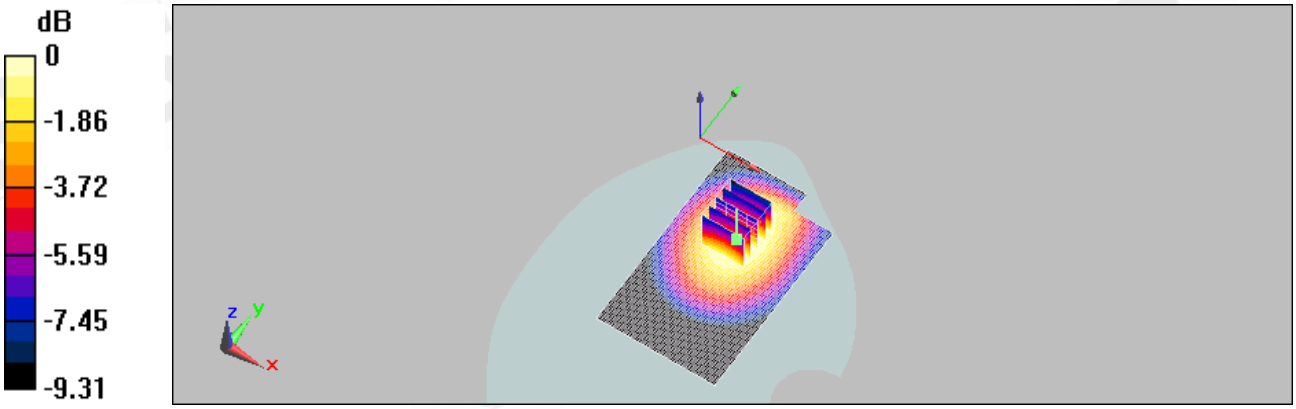
DASY5 Configuration:

- Probe: ES3DV3 - SN3172; ConvF(5.61, 5.61, 5.61); Calibrated: 6/23/2008
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn856; Calibrated: 5/7/2008
- Phantom: SAM1; Type: SAM;
- Measurement SW: DASY5, V5.0 Build 125; SEMCAD X Version 13.4 Build 125

Body/Area Scan (61x101x1): Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (interpolated) = 1.19 mW/g

Body/Zoom Scan (7x7x7) (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 10.7 V/m; Power Drift = 0.096 dB
Peak SAR (extrapolated) = 1.47 W/kg

SAR(1 g) = 1.14 mW/g; SAR(10 g) = 0.834 mW/g
Maximum value of SAR (measured) = 1.21 mW/g



0 dB = 1.21mW/g

Date/Time: 04/16/2009 16:15:07

BODY_CH251_ repeated for EUT front to phantom

DUT: SAPP500;

Communication System: GSM 850; Frequency: 848.8 MHz;Duty Cycle: 1:4
Medium: Body 900 Medium parameters used (extrapolated): f = 848.8 MHz; σ = 0.966 mho/m; ε_r = 55.1; ρ = 1000 kg/m^3
Phantom section: Flat Section

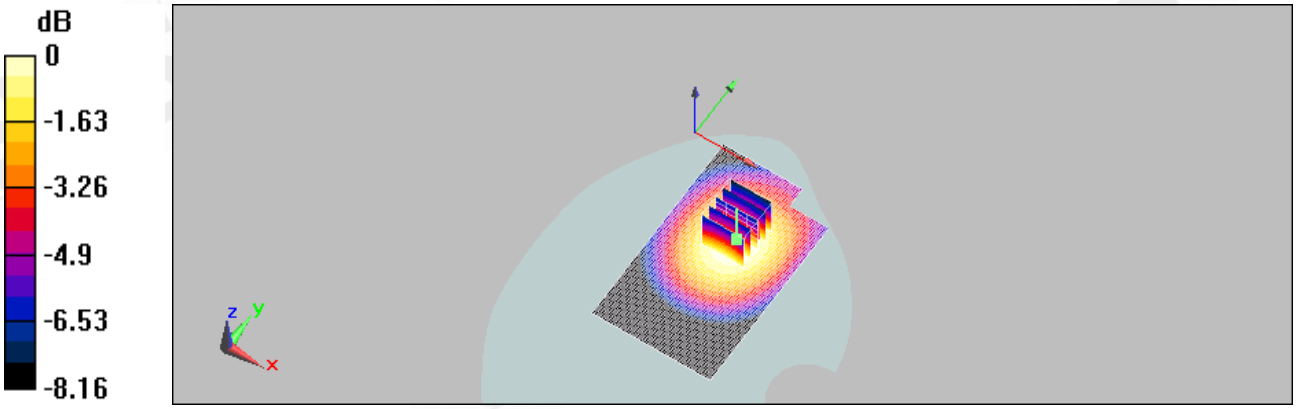
DASY5 Configuration:

- Probe: ES3DV3 - SN3172; ConvF(5.61, 5.61, 5.61); Calibrated: 6/23/2008
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn856; Calibrated: 5/7/2008
- Phantom: SAM1; Type: SAM;
- Measurement SW: DASY5, V5.0 Build 125; SEMCAD X Version 13.4 Build 125

Body/Area Scan (61x101x1): Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (interpolated) = 0.426 mW/g

Body/Zoom Scan (7x7x7) (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 7.36 V/m; Power Drift = -0.067 dB
Peak SAR (extrapolated) = 0.503 W/kg

SAR(1 g) = 0.401 mW/g; SAR(10 g) = 0.301 mW/g
Maximum value of SAR (measured) = 0.420 mW/g



0 dB = 0.420mW/g

Date/Time: 04/16/2009 16:44:22

BODY_CH251_ repeated with Memory card

DUT: SAPP500;

Communication System: GSM 850; Frequency: 848.8 MHz;Duty Cycle: 1:4
Medium: Body 900 Medium parameters used (extrapolated): f = 848.8 MHz; σ = 0.966 mho/m; ε_r = 55.1; ρ = 1000 kg/m^3
Phantom section: Flat Section

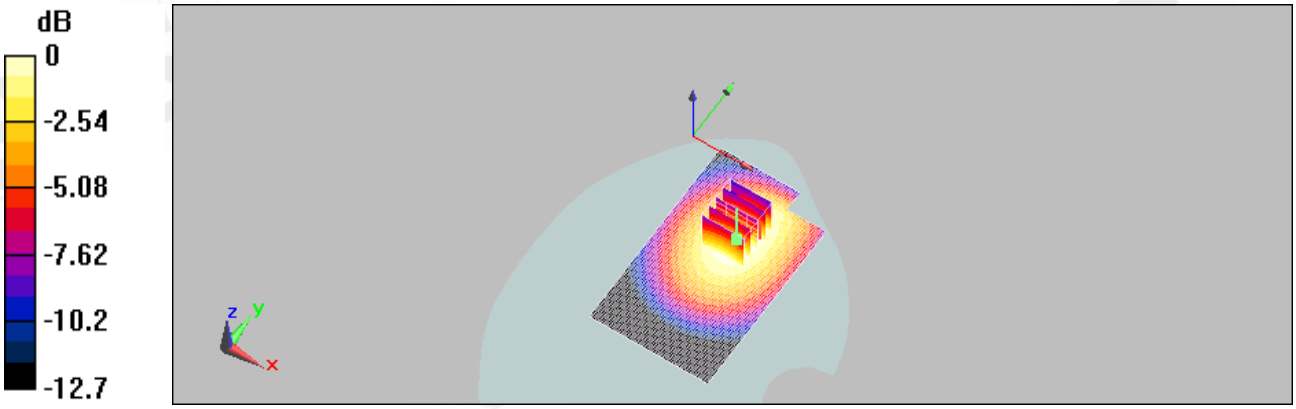
DASY5 Configuration:

- Probe: ES3DV3 - SN3172; ConvF(5.61, 5.61, 5.61); Calibrated: 6/23/2008
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn856; Calibrated: 5/7/2008
- Phantom: SAM1; Type: SAM;
- Measurement SW: DASY5, V5.0 Build 125; SEMCAD X Version 13.4 Build 125

Body/Area Scan (61x101x1): Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (interpolated) = 1.14 mW/g

Body/Zoom Scan (7x7x7) (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 9.97 V/m; Power Drift = 0.030 dB
Peak SAR (extrapolated) = 1.41 W/kg

SAR(1 g) = 1.09 mW/g; SAR(10 g) = 0.796 mW/g
Maximum value of SAR (measured) = 1.16 mW/g



0 dB = 1.16mW/g

Date/Time: 04/16/2009 17:10:45

BODY_CH251_ repeated with headset

DUT: SAPP500;

Communication System: GSM 850; Frequency: 848.8 MHz;Duty Cycle: 1:4
Medium: Body 900 Medium parameters used (extrapolated): f = 848.8 MHz; σ = 0.966 mho/m; ε_r = 55.1; ρ = 1000 kg/m^3
Phantom section: Flat Section

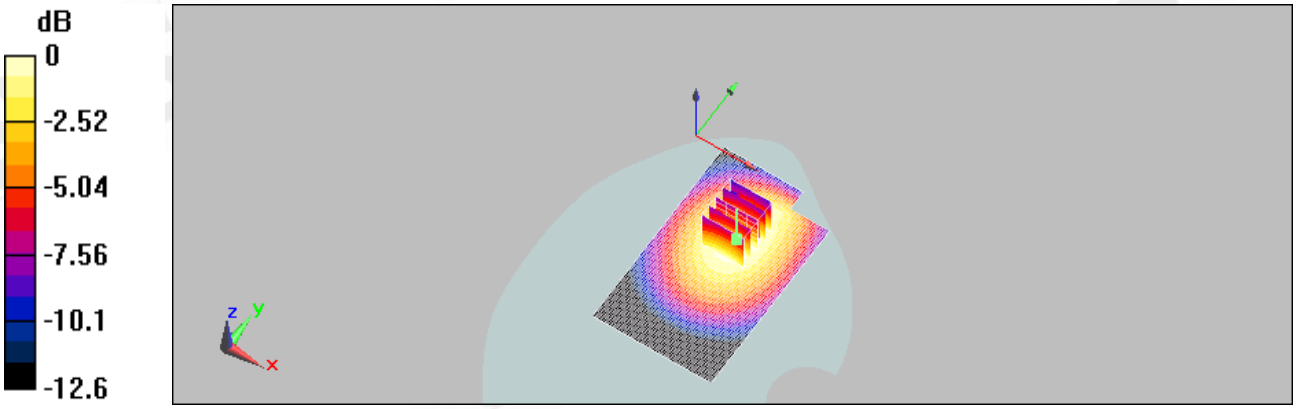
DASY5 Configuration:

- Probe: ES3DV3 - SN3172; ConvF(5.61, 5.61, 5.61); Calibrated: 6/23/2008
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn856; Calibrated: 5/7/2008
- Phantom: SAM1; Type: SAM;
- Measurement SW: DASY5, V5.0 Build 125; SEMCAD X Version 13.4 Build 125

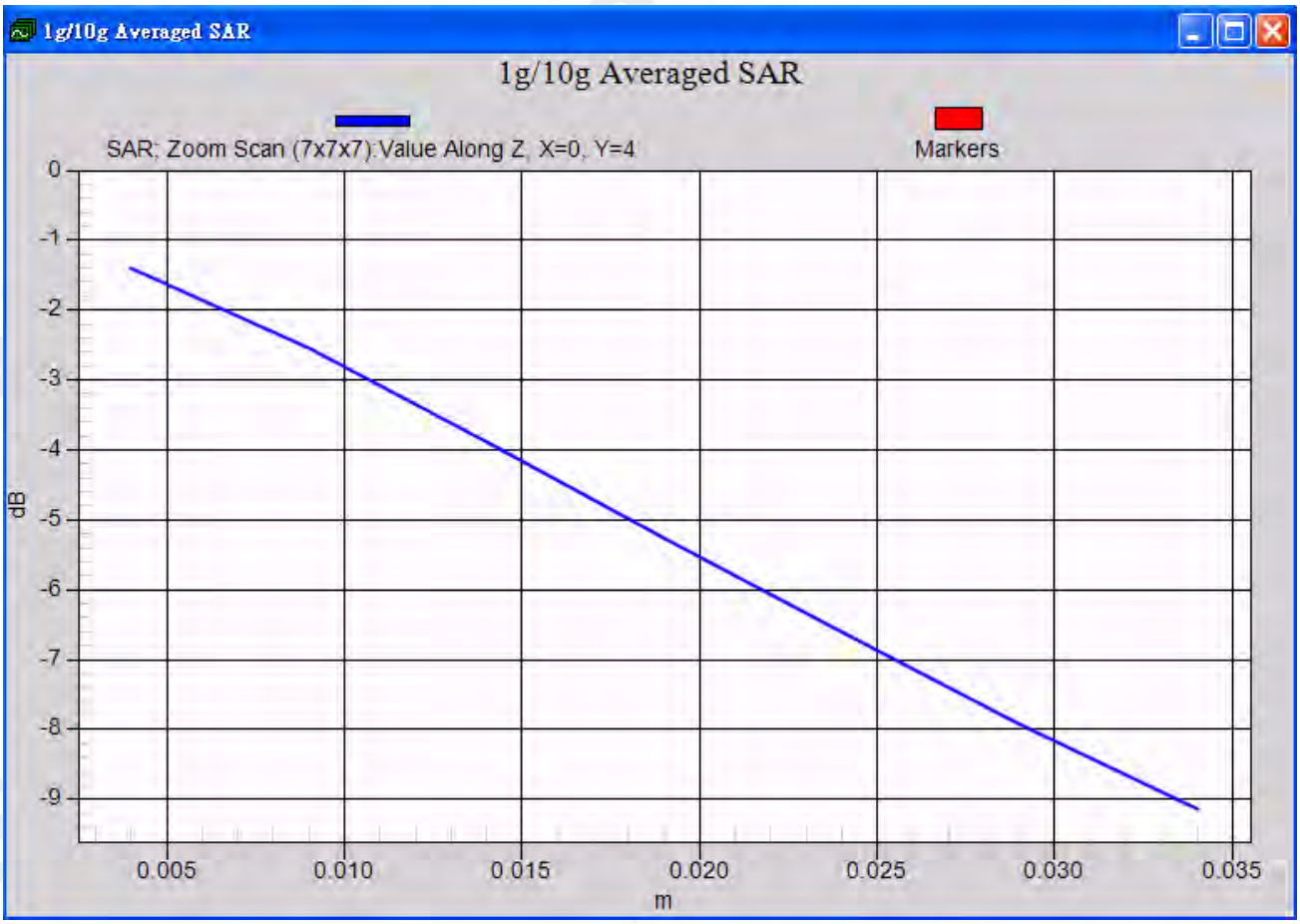
Body/Area Scan (61x101x1): Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (interpolated) = 1.28 mW/g

Body/Zoom Scan (7x7x7) (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 11 V/m; Power Drift = 0.030 dB
Peak SAR (extrapolated) = 1.57 W/kg

SAR(1 g) = 1.22 mW/g; SAR(10 g) = 0.890 mW/g
Maximum value of SAR (measured) = 1.3 mW/g



0 dB = 1.3mW/g



Date/Time: 04/16/2009 17:38:14

BODY_CH251_ repeated with WELLDONE Battery

DUT: SAPP500;

Communication System: GSM 850; Frequency: 848.8 MHz;Duty Cycle: 1:4
Medium: Body 900 Medium parameters used (extrapolated): f = 848.8 MHz; σ = 0.966 mho/m; ε_r = 55.1; ρ = 1000 kg/m^3
Phantom section: Flat Section

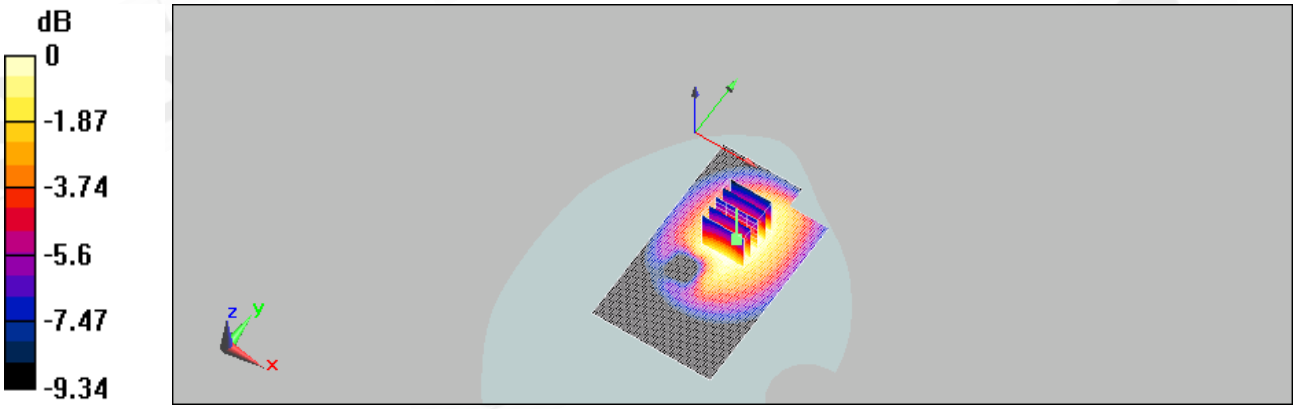
DASY5 Configuration:

- Probe: ES3DV3 - SN3172; ConvF(5.61, 5.61, 5.61); Calibrated: 6/23/2008
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn856; Calibrated: 5/7/2008
- Phantom: SAM1; Type: SAM;
- Measurement SW: DASY5, V5.0 Build 125; SEMCAD X Version 13.4 Build 125

Body/Area Scan (61x101x1): Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (interpolated) = 1.1 mW/g

Body/Zoom Scan (7x7x7) (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 10.2 V/m; Power Drift = -0.093 dB
Peak SAR (extrapolated) = 1.33 W/kg

SAR(1 g) = 1.04 mW/g; SAR(10 g) = 0.763 mW/g
Maximum value of SAR (measured) = 1.1 mW/g



0 dB = 1.1mW/g

Date/Time: 04/16/2009 02:42:06

BODY_CH128 test in EGPRS mode

DUT: SAPP500;

Communication System: GSM 850; Frequency: 824.2 MHz;Duty Cycle: 1:4
Medium: Body 900 Medium parameters used (extrapolated): f = 824.2 MHz; σ = 0.948 mho/m; ε_r = 55.2; ρ = 1000 kg/m^3
Phantom section: Flat Section

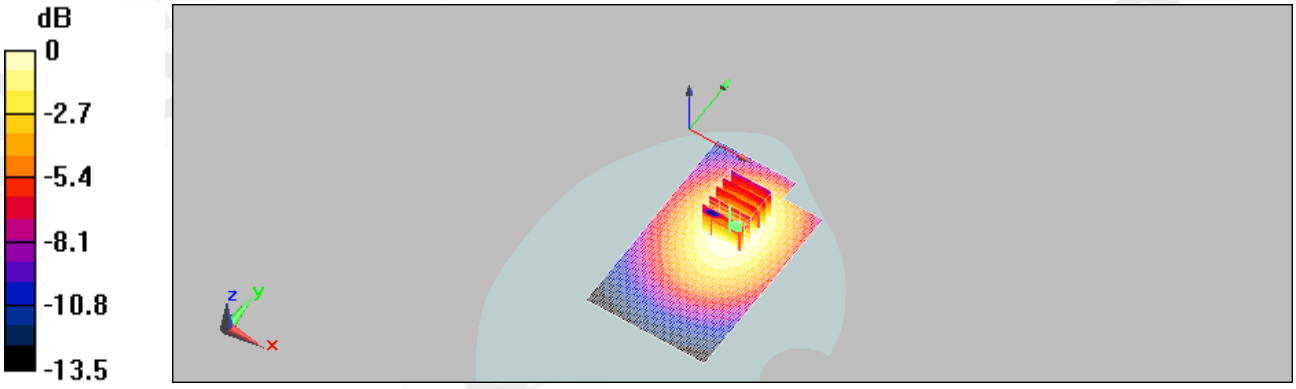
DASY5 Configuration:

- Probe: ES3DV3 - SN3172; ConvF(5.61, 5.61, 5.61); Calibrated: 6/23/2008
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn856; Calibrated: 5/7/2008
- Phantom: SAM1; Type: SAM;
- Measurement SW: DASY5, V5.0 Build 125; SEMCAD X Version 13.4 Build 125

Body/Area Scan (61x101x1): Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (interpolated) = 0.307 mW/g

Body/Zoom Scan (7x7x7) (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 6.58 V/m; Power Drift = -0.094 dB
Peak SAR (extrapolated) = 0.360 W/kg

SAR(1 g) = 0.291 mW/g; SAR(10 g) = 0.219 mW/g
Maximum value of SAR (measured) = 0.303 mW/g



0 dB = 0.303mW/g

Date/Time: 04/16/2009 03:09:52

BODY_CH190 test in EGPRS mode

DUT: SAPP500;

Communication System: GSM 850; Frequency: 836.6 MHz;Duty Cycle: 1:4
Medium: Body 900 Medium parameters used (extrapolated): f = 836.6 MHz; σ = 0.952 mho/m; ε_r = 55.1; ρ = 1000 kg/m^3
Phantom section: Flat Section

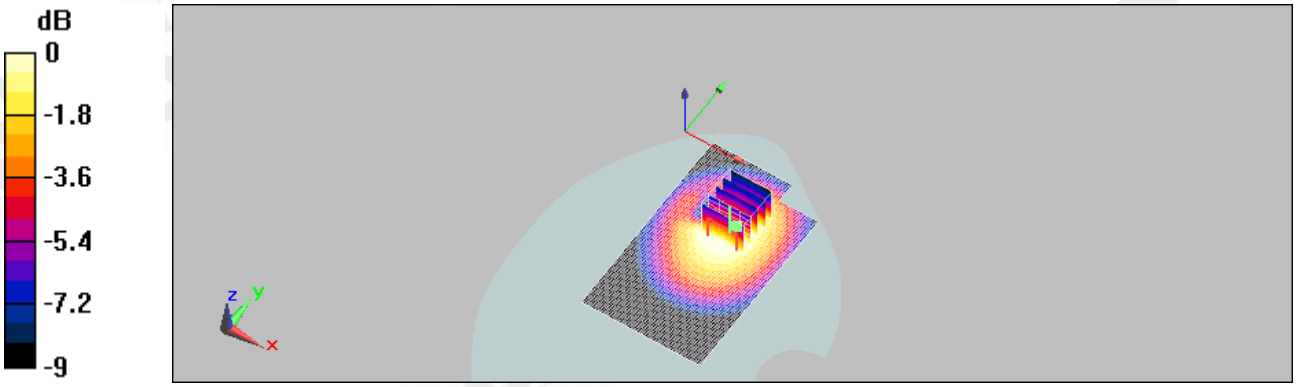
DASY5 Configuration:

- Probe: ES3DV3 - SN3172; ConvF(5.61, 5.61, 5.61); Calibrated: 6/23/2008
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn856; Calibrated: 5/7/2008
- Phantom: SAM1; Type: SAM;
- Measurement SW: DASY5, V5.0 Build 125; SEMCAD X Version 13.4 Build 125

Body/Area Scan (61x101x1): Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (interpolated) = 0.477 mW/g

Body/Zoom Scan (7x7x7) (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 7.18 V/m; Power Drift = -0.028 dB
Peak SAR (extrapolated) = 0.432 W/kg

SAR(1 g) = 0.366 mW/g; SAR(10 g) = 0.269 mW/g
Maximum value of SAR (measured) = 0.400 mW/g



0 dB = 0.400mW/g

Date/Time: 04/16/2009 03:34:04

BODY_CH251 test in EGPRS mode

DUT: SAPP500;

Communication System: GSM 850; Frequency: 848.8 MHz;Duty Cycle: 1:4
Medium: Body 900 Medium parameters used (extrapolated): f = 848.8 MHz; σ = 0.966 mho/m; ε_r = 55.1; ρ = 1000 kg/m^3
Phantom section: Flat Section

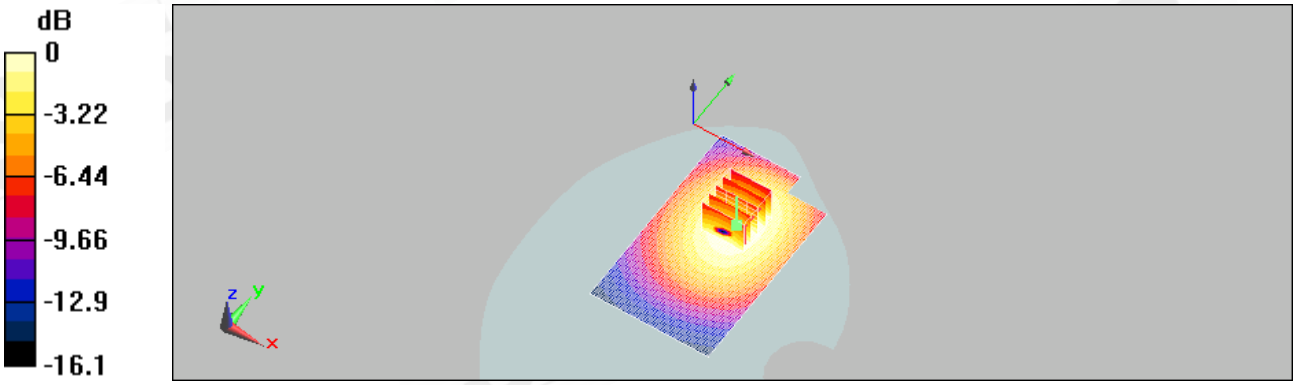
DASY5 Configuration:

- Probe: ES3DV3 - SN3172; ConvF(5.61, 5.61, 5.61); Calibrated: 6/23/2008
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn856; Calibrated: 5/7/2008
- Phantom: SAM1; Type: SAM;
- Measurement SW: DASY5, V5.0 Build 125; SEMCAD X Version 13.4 Build 125

Body/Area Scan (61x101x1): Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (interpolated) = 0.406 mW/g

Body/Zoom Scan (7x7x7) (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 7.3 V/m; Power Drift = -0.134 dB
Peak SAR (extrapolated) = 0.489 W/kg

SAR(1 g) = 0.384 mW/g; SAR(10 g) = 0.286 mW/g
Maximum value of SAR (measured) = 0.410 mW/g



0 dB = 0.410mW/g

Date/Time: 04/15/2009 07:50:18

RE_Cheek_CH512

DUT: SAPP500;

Communication System: GSM 1900; Frequency: 1850.2 MHz;Duty Cycle: 1:8.3
Medium: Head 1900 Medium parameters used (interpolated): f = 1850.2 MHz; σ = 1.43 mho/m; ε_r = 40.5; ρ = 1000 kg/m^3
Phantom section: Right Section

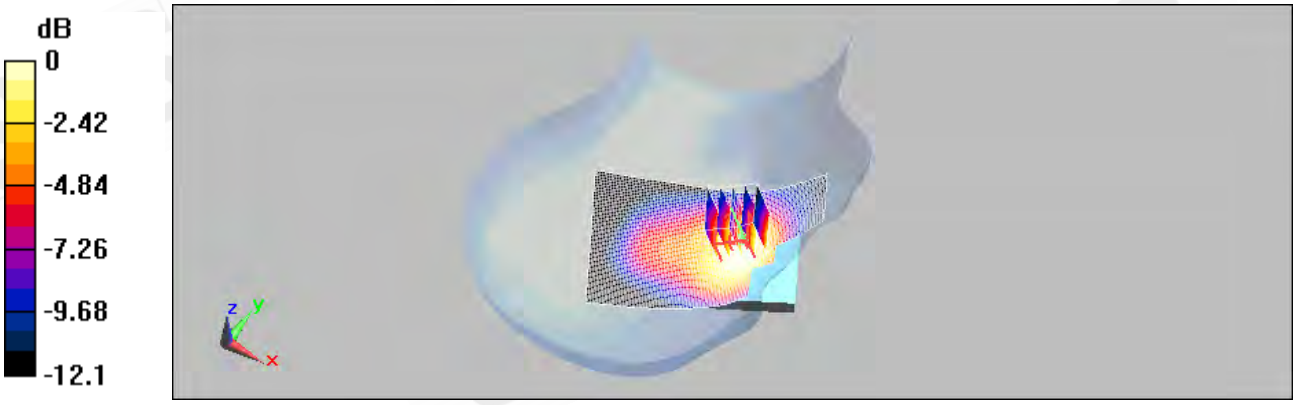
DASY5 Configuration:

- Probe: ES3DV3 - SN3172; ConvF(4.97, 4.97, 4.97); Calibrated: 6/23/2008
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn856; Calibrated: 5/7/2008
- Phantom: SAM1; Type: SAM;
- Measurement SW: DASY5, V5.0 Build 125; SEMCAD X Version 13.4 Build 125

RE Cheek/Area Scan (61x101x1): Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (interpolated) = 1.12 mW/g

RE Cheek/Zoom Scan (7x7x7) (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 12 V/m; Power Drift = -0.125 dB
Peak SAR (extrapolated) = 1.35 W/kg

SAR(1 g) = 0.968 mW/g; SAR(10 g) = 0.647 mW/g
Maximum value of SAR (measured) = 1.02 mW/g



0 dB = 1.02mW/g

Date/Time: 04/15/2009 08:17:38

RE_Cheek_CH661

DUT: SAPP500;

Communication System: GSM 1900; Frequency: 1880 MHz;Duty Cycle: 1:8.3
Medium: Head 1900 Medium parameters used: f = 1880 MHz; σ = 1.45 mho/m; ε_r = 40.4; ρ = 1000 kg/m^3
Phantom section: Right Section

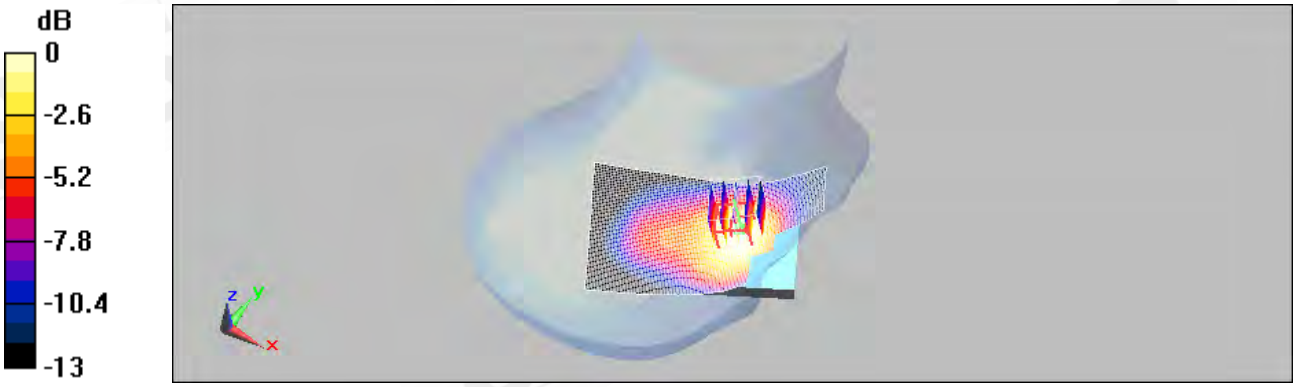
DASY5 Configuration:

- Probe: ES3DV3 - SN3172; ConvF(4.97, 4.97, 4.97); Calibrated: 6/23/2008
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn856; Calibrated: 5/7/2008
- Phantom: SAM1; Type: SAM;
- Measurement SW: DASY5, V5.0 Build 125; SEMCAD X Version 13.4 Build 125

RE Cheek/Area Scan (61x101x1): Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (interpolated) = 1.29 mW/g

RE Cheek/Zoom Scan (7x7x7) (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 12.2 V/m; Power Drift = -0.087 dB
Peak SAR (extrapolated) = 1.59 W/kg

SAR(1 g) = 1.1 mW/g; SAR(10 g) = 0.720 mW/g
Maximum value of SAR (measured) = 1.19 mW/g



0 dB = 1.19mW/g

Date/Time: 04/15/2009 08:42:27

RE_Cheek_CH810

DUT: SAPP500;

Communication System: GSM 1900; Frequency: 1909.8 MHz;Duty Cycle: 1:8.3
Medium: Head 1900 Medium parameters used: f = 1910 MHz; σ = 1.48 mho/m; ε_r = 40.3; ρ = 1000 kg/m^3
Phantom section: Right Section

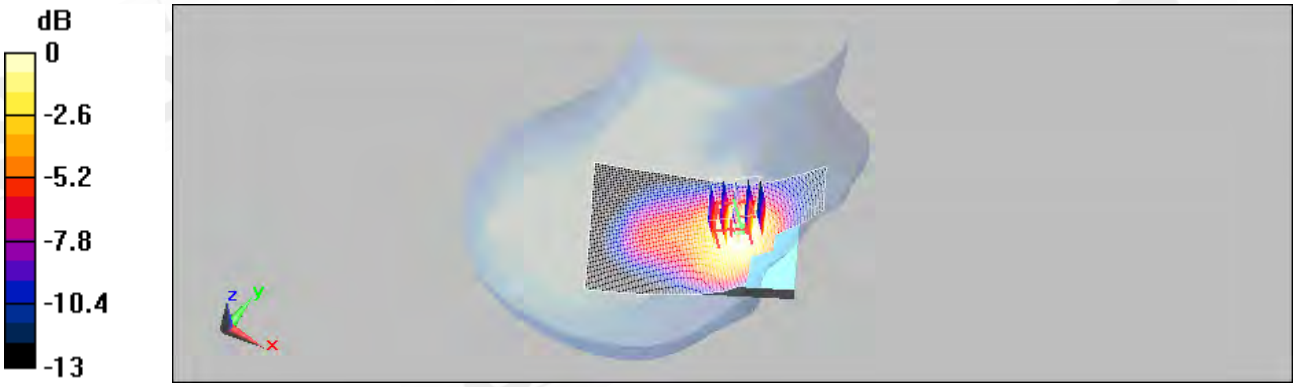
DASY5 Configuration:

- Probe: ES3DV3 - SN3172; ConvF(4.97, 4.97, 4.97); Calibrated: 6/23/2008
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn856; Calibrated: 5/7/2008
- Phantom: SAM1; Type: SAM;
- Measurement SW: DASY5, V5.0 Build 125; SEMCAD X Version 13.4 Build 125

RE Cheek/Area Scan (61x101x1): Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (interpolated) = 1.2 mW/g

RE Cheek/Zoom Scan (7x7x7) (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 11.7 V/m; Power Drift = -0.066 dB
Peak SAR (extrapolated) = 1.5 W/kg

SAR(1 g) = 1.03 mW/g; SAR(10 g) = 0.661 mW/g
Maximum value of SAR (measured) = 1.11 mW/g



0 dB = 1.11mW/g

Date/Time: 04/15/2009 10:29:31

LE_Cheek_CH512

DUT: SAPP500;

Communication System: GSM 1900; Frequency: 1850.2 MHz;Duty Cycle: 1:8.3
Medium: Head 1900 Medium parameters used (interpolated): f = 1850.2 MHz; σ = 1.43 mho/m; ε_r = 40.5; ρ = 1000 kg/m^3
Phantom section: Left Section

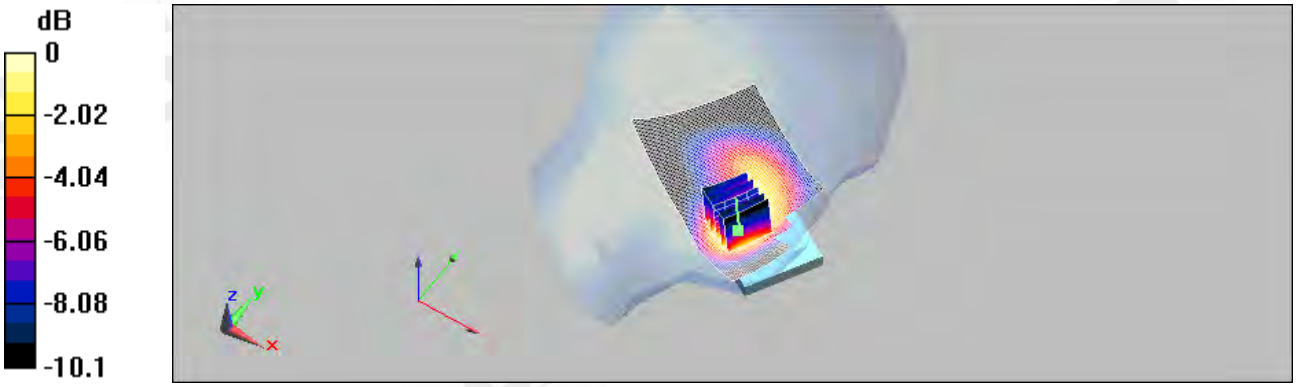
DASY5 Configuration:

- Probe: ES3DV3 - SN3172; ConvF(4.97, 4.97, 4.97); Calibrated: 6/23/2008
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn856; Calibrated: 5/7/2008
- Phantom: SAM1; Type: SAM;
- Measurement SW: DASY5, V5.0 Build 125; SEMCAD X Version 13.4 Build 125

LE Cheek/Area Scan (61x101x1): Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (interpolated) = 1.56 mW/g

LE Cheek/Zoom Scan (7x7x7) (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 14 V/m; Power Drift = -0.115 dB
Peak SAR (extrapolated) = 2.05 W/kg

SAR(1 g) = 1.35 mW/g; SAR(10 g) = 0.872 mW/g
Maximum value of SAR (measured) = 1.45 mW/g



0 dB = 1.45mW/g

Date/Time: 04/15/2009 10:53:00

LE_Cheek_CH661

DUT: SAPP500;

Communication System: GSM 1900; Frequency: 1880 MHz;Duty Cycle: 1:8.3
Medium: Head 1900 Medium parameters used: f = 1880 MHz; σ = 1.45 mho/m; ε_r = 40.4; ρ = 1000 kg/m^3
Phantom section: Left Section

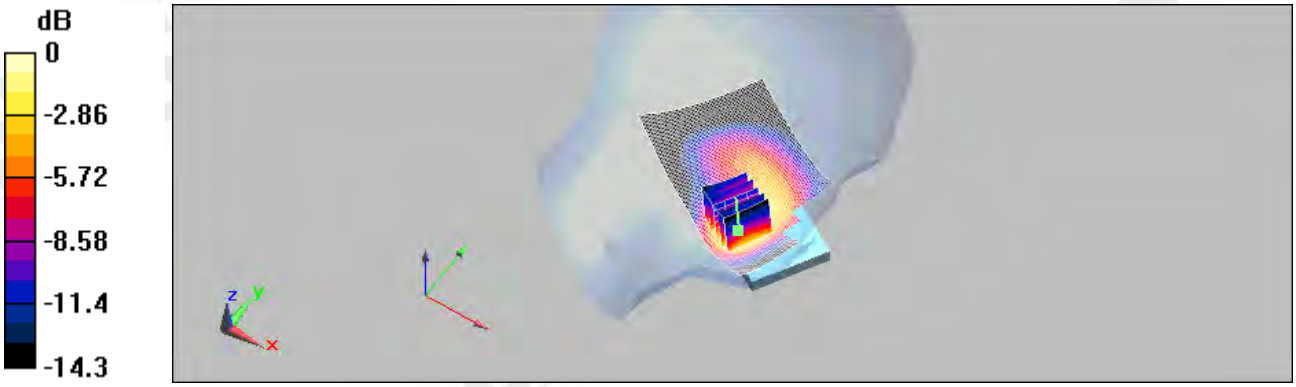
DASY5 Configuration:

- Probe: ES3DV3 - SN3172; ConvF(4.97, 4.97, 4.97); Calibrated: 6/23/2008
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn856; Calibrated: 5/7/2008
- Phantom: SAM1; Type: SAM;
- Measurement SW: DASY5, V5.0 Build 125; SEMCAD X Version 13.4 Build 125

LE Cheek/Area Scan (61x101x1): Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (interpolated) = 1.7 mW/g

LE Cheek/Zoom Scan (7x7x7) (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 10.6 V/m; Power Drift = -0.044 dB
Peak SAR (extrapolated) = 2.32 W/kg

SAR(1 g) = 1.47 mW/g; SAR(10 g) = 0.890 mW/g
Maximum value of SAR (measured) = 1.62 mW/g



0 dB = 1.62mW/g

Date/Time: 04/15/2009 11:19:05

LE_Cheek_CH810

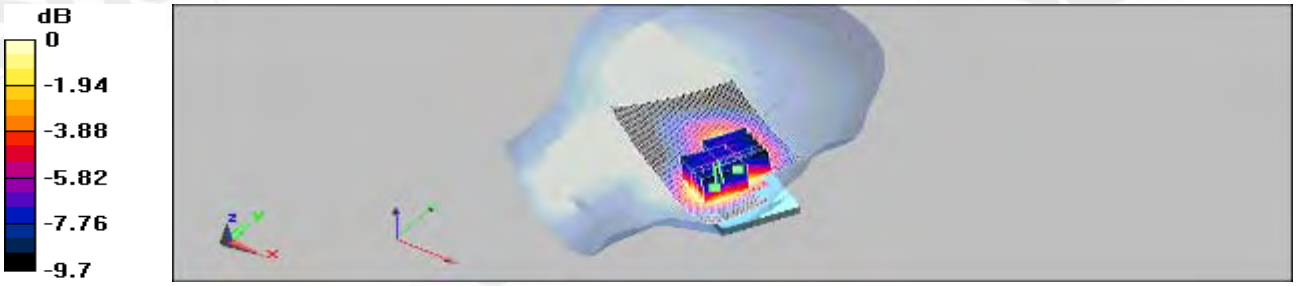
DUT: SAPP500;
Communication System: GSM 1900; Frequency: 1909.8 MHz;Duty Cycle: 1:8.3
Medium: Head 1900 Medium parameters used: f = 1910 MHz; σ = 1.48 mho/m; ε_r = 40.3; ρ = 1000 kg/m^3
Phantom section: Left Section

- Probe: ES3DV3 - SN3172; ConvF(4.97, 4.97, 4.97); Calibrated: 6/23/2008
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn856; Calibrated: 5/7/2008
- Phantom: SAM1; Type: SAM;
- Measurement SW: DASY5, V5.0 Build 125; SEMCAD X Version 13.4 Build 125

LE Cheek/Area Scan (61x101x1): Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (interpolated) = 1.34 mW/g

LE Cheek/Zoom Scan (7x7x7) (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 12.9 V/m; Power Drift = -0.156 dB
Peak SAR (extrapolated) = 1.78 W/kg
SAR(1 g) = 1.17 mW/g; SAR(10 g) = 0.752 mW/g
Maximum value of SAR (measured) = 1.24 mW/g

LE Cheek/Zoom Scan (7x7x7) (5x5x7)/Cube 1: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 12.9 V/m; Power Drift = -0.156 dB
Peak SAR (extrapolated) = 1.42 W/kg
SAR(1 g) = 0.964 mW/g; SAR(10 g) = 0.656 mW/g
Maximum value of SAR (measured) = 1.13 mW/g



0 dB = 1.13mW/g

Date/Time: 04/15/2009 09:08:05

RE_Tilt_CH512

DUT: SAPP500;

Communication System: GSM 1900; Frequency: 1850.2 MHz;Duty Cycle: 1:8.3
Medium: Head 1900 Medium parameters used (interpolated): f = 1850.2 MHz; σ = 1.43 mho/m; ε_r = 40.5; ρ = 1000 kg/m^3
Phantom section: Right Section

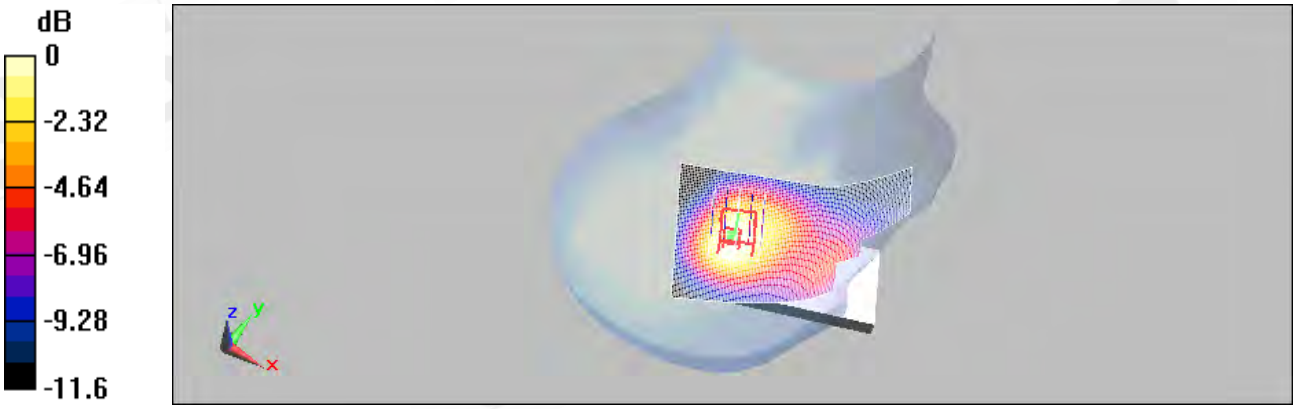
DASY5 Configuration:

- Probe: ES3DV3 - SN3172; ConvF(4.97, 4.97, 4.97); Calibrated: 6/23/2008
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn856; Calibrated: 5/7/2008
- Phantom: SAM1; Type: SAM;
- Measurement SW: DASY5, V5.0 Build 125; SEMCAD X Version 13.4 Build 125

RE Tilt/Area Scan (61x101x1): Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (interpolated) = 0.652 mW/g

RE Tilt/Zoom Scan (7x7x7) (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 18.6 V/m; Power Drift = -0.031 dB
Peak SAR (extrapolated) = 0.787 W/kg

SAR(1 g) = 0.545 mW/g; SAR(10 g) = 0.354 mW/g
Maximum value of SAR (measured) = 0.574 mW/g



0 dB = 0.574mW/g

Date/Time: 04/15/2009 09:36:07

RE_Tilt_CH661

DUT: SAPP500;

Communication System: GSM 1900; Frequency: 1880 MHz;Duty Cycle: 1:8.3
Medium: Head 1900 Medium parameters used: f = 1880 MHz; σ = 1.45 mho/m; ε_r = 40.4; ρ = 1000 kg/m^3
Phantom section: Right Section

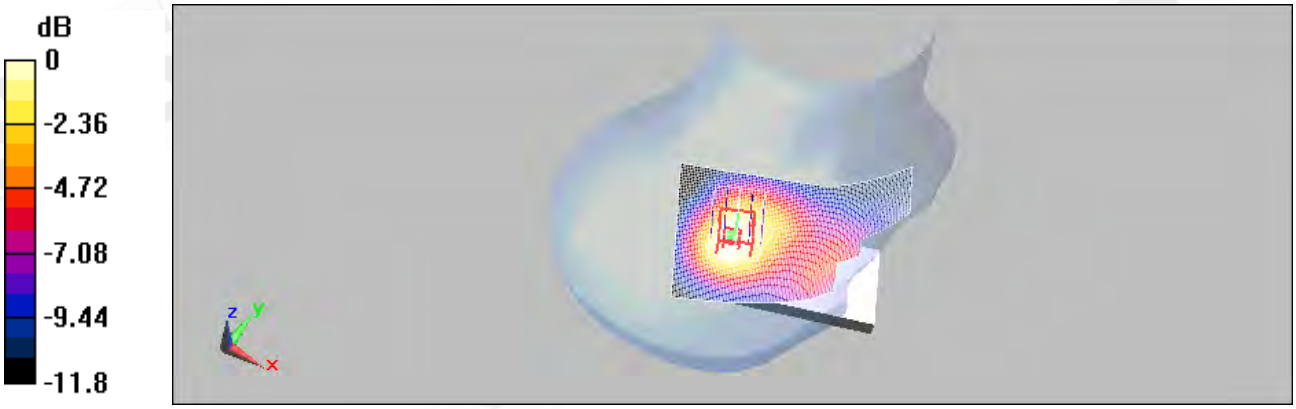
DASY5 Configuration:

- Probe: ES3DV3 - SN3172; ConvF(4.97, 4.97, 4.97); Calibrated: 6/23/2008
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn856; Calibrated: 5/7/2008
- Phantom: SAM1; Type: SAM;
- Measurement SW: DASY5, V5.0 Build 125; SEMCAD X Version 13.4 Build 125

RE Tilt/Area Scan (61x101x1): Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (interpolated) = 0.720 mW/g

RE Tilt/Zoom Scan (7x7x7) (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 19.9 V/m; Power Drift = -0.124 dB
Peak SAR (extrapolated) = 0.855 W/kg

SAR(1 g) = 0.581 mW/g; SAR(10 g) = 0.374 mW/g
Maximum value of SAR (measured) = 0.613 mW/g



0 dB = 0.613mW/g

Date/Time: 04/15/2009 10:03:16

RE_Tilt_CH810

DUT: SAPP500;

Communication System: GSM 1900; Frequency: 1909.8 MHz;Duty Cycle: 1:8.3
Medium: Head 1900 Medium parameters used: f = 1910 MHz; σ = 1.48 mho/m; ε_r = 40.3; ρ = 1000 kg/m^3
Phantom section: Right Section

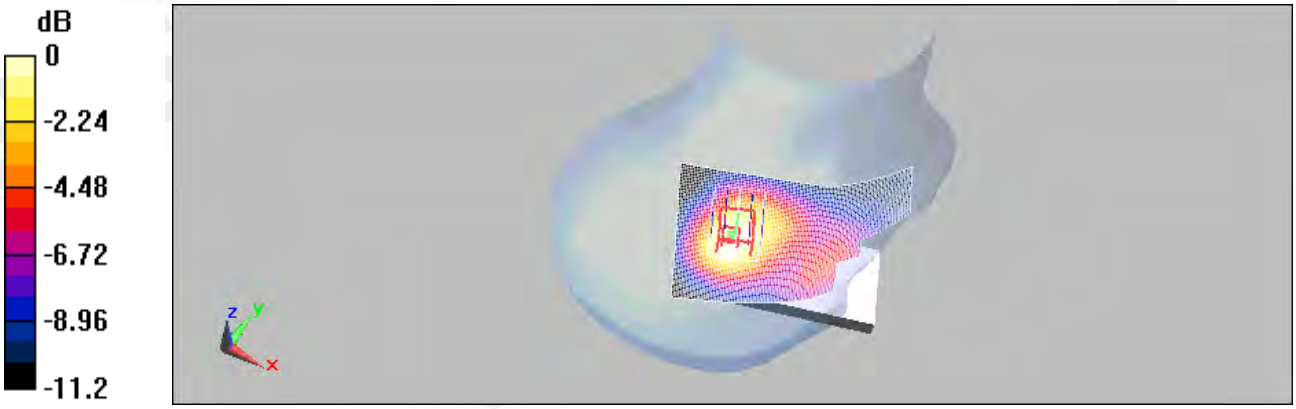
DASY5 Configuration:

- Probe: ES3DV3 - SN3172; ConvF(4.97, 4.97, 4.97); Calibrated: 6/23/2008
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn856; Calibrated: 5/7/2008
- Phantom: SAM1; Type: SAM;
- Measurement SW: DASY5, V5.0 Build 125; SEMCAD X Version 13.4 Build 125

RE Tilt/Area Scan (61x101x1): Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (interpolated) = 0.603 mW/g

RE Tilt/Zoom Scan (7x7x7) (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 18.2 V/m; Power Drift = 0.134 dB
Peak SAR (extrapolated) = 0.775 W/kg

SAR(1 g) = 0.519 mW/g; SAR(10 g) = 0.331 mW/g
Maximum value of SAR (measured) = 0.549 mW/g



0 dB = 0.549mW/g

Date/Time: 04/15/2009 11:45:52

LE_Tilt_CH512

DUT: SAPP500;

Communication System: GSM 1900; Frequency: 1850.2 MHz;Duty Cycle: 1:8.3
Medium: Head 1900 Medium parameters used (interpolated): f = 1850.2 MHz; σ = 1.43 mho/m; ε_r = 40.5; ρ = 1000 kg/m^3
Phantom section: Left Section

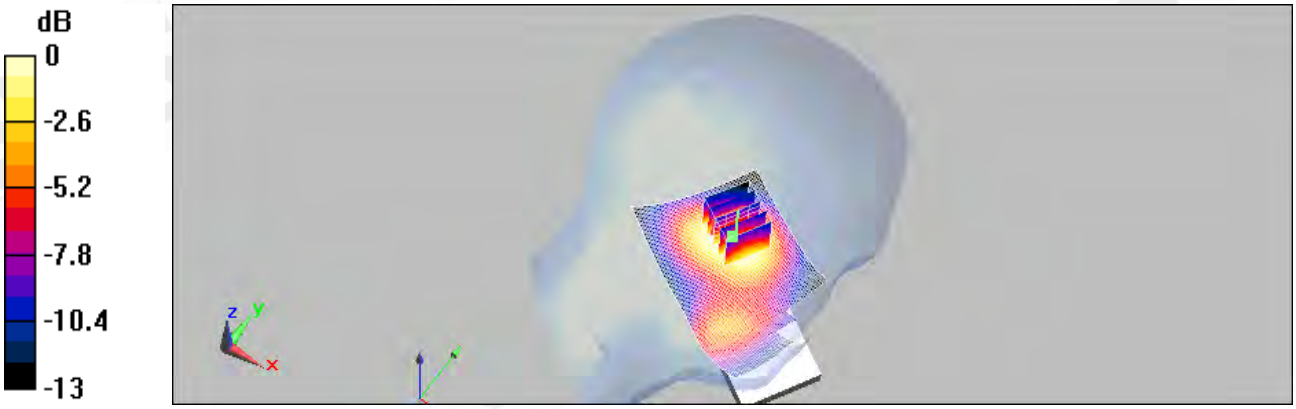
DASY5 Configuration:

- Probe: ES3DV3 - SN3172; ConvF(4.97, 4.97, 4.97); Calibrated: 6/23/2008
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn856; Calibrated: 5/7/2008
- Phantom: SAM1; Type: SAM;
- Measurement SW: DASY5, V5.0 Build 125; SEMCAD X Version 13.4 Build 125

LE Tilt/Area Scan (61x101x1): Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (interpolated) = 0.741 mW/g

LE Tilt/Zoom Scan (7x7x7) (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 19.5 V/m; Power Drift = -0.140 dB
Peak SAR (extrapolated) = 0.890 W/kg

SAR(1 g) = 0.609 mW/g; SAR(10 g) = 0.393 mW/g
Maximum value of SAR (measured) = 0.651 mW/g



0 dB = 0.651mW/g

Date/Time: 04/15/2009 12:12:30

LE_Tilt_CH661

DUT: SAPP500;

Communication System: GSM 1900; Frequency: 1880 MHz;Duty Cycle: 1:8.3
Medium: Head 1900 Medium parameters used: f = 1880 MHz; σ = 1.45 mho/m; ε_r = 40.4; ρ = 1000 kg/m^3
Phantom section: Left Section

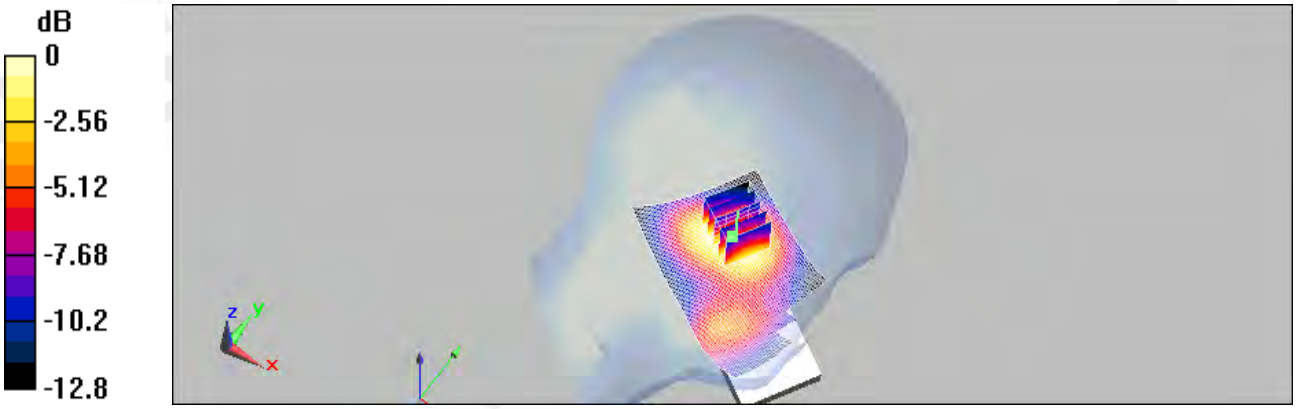
DASY5 Configuration:

- Probe: ES3DV3 - SN3172; ConvF(4.97, 4.97, 4.97); Calibrated: 6/23/2008
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn856; Calibrated: 5/7/2008
- Phantom: SAM1; Type: SAM;
- Measurement SW: DASY5, V5.0 Build 125; SEMCAD X Version 13.4 Build 125

LE Tilt/Area Scan (61x101x1): Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (interpolated) = 0.776 mW/g

LE Tilt/Zoom Scan (7x7x7) (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 19.7 V/m; Power Drift = 0.031 dB
Peak SAR (extrapolated) = 0.930 W/kg

SAR(1 g) = 0.635 mW/g; SAR(10 g) = 0.407 mW/g
Maximum value of SAR (measured) = 0.684 mW/g



0 dB = 0.684mW/g

Date/Time: 04/15/2009 12:37:35

LE_Tilt_CH810

DUT: SAPP500;

Communication System: GSM 1900; Frequency: 1909.8 MHz;Duty Cycle: 1:8.3
Medium: Head 1900 Medium parameters used: f = 1910 MHz; σ = 1.48 mho/m; ε_r = 40.3; ρ = 1000 kg/m^3
Phantom section: Left Section

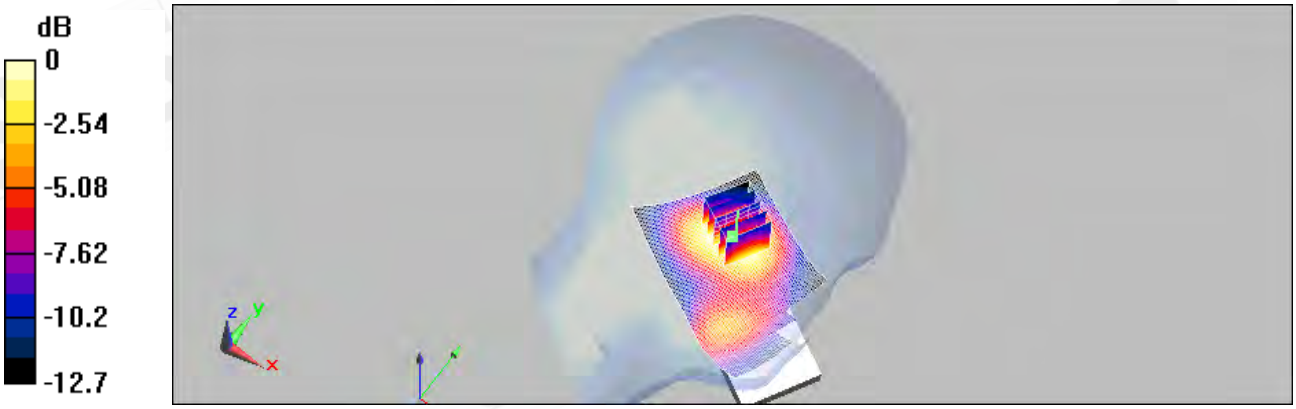
DASY5 Configuration:

- Probe: ES3DV3 - SN3172; ConvF(4.97, 4.97, 4.97); Calibrated: 6/23/2008
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn856; Calibrated: 5/7/2008
- Phantom: SAM1; Type: SAM;
- Measurement SW: DASY5, V5.0 Build 125; SEMCAD X Version 13.4 Build 125

LE Tilt/Area Scan (61x101x1): Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (interpolated) = 0.687 mW/g

LE Tilt/Zoom Scan (7x7x7) (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 18.3 V/m; Power Drift = 0.058 dB
Peak SAR (extrapolated) = 0.824 W/kg

SAR(1 g) = 0.562 mW/g; SAR(10 g) = 0.359 mW/g
Maximum value of SAR (measured) = 0.605 mW/g



0 dB = 0.605mW/g

Date/Time: 04/16/2009 05:18:08

BODY_CH512

DUT: SAPP500;

Communication System: GSM 1900; Frequency: 1850.2 MHz;Duty Cycle: 1:4
Medium: BODY 1900 Medium parameters used (interpolated): f = 1850.2 MHz; σ = 1.51 mho/m; ε_r = 53.9; ρ = 1000 kg/m^3
Phantom section: Flat Section

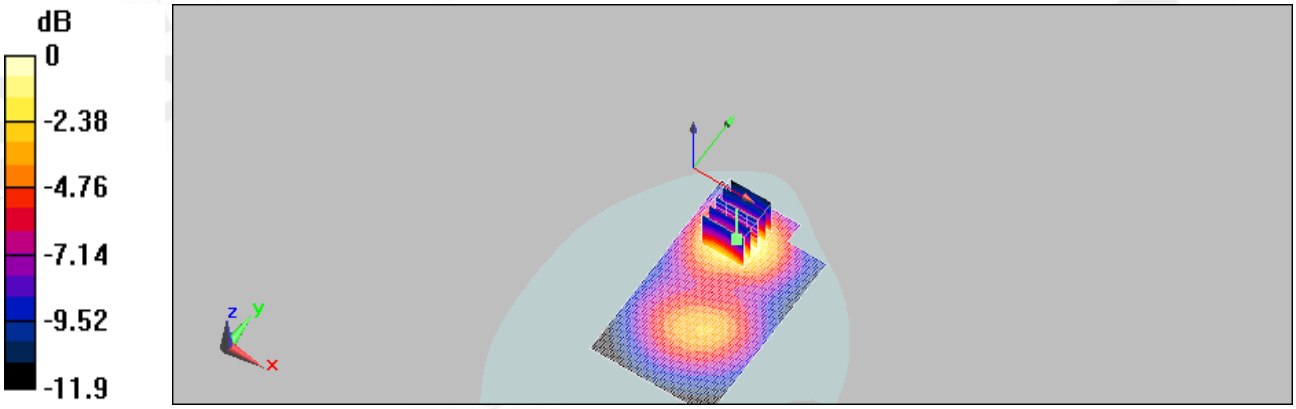
DASY5 Configuration:

- Probe: ES3DV3 - SN3172; ConvF(4.73, 4.73, 4.73); Calibrated: 6/23/2008
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn856; Calibrated: 5/7/2008
- Phantom: SAM1; Type: SAM;
- Measurement SW: DASY5, V5.0 Build 125; SEMCAD X Version 13.4 Build 125

BODY/Area Scan (61x101x1): Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (interpolated) = 1.15 mW/g

BODY/Zoom Scan (7x7x7) (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 13.9 V/m; Power Drift = -0.101 dB
Peak SAR (extrapolated) = 1.63 W/kg

SAR(1 g) = 1.03 mW/g; SAR(10 g) = 0.639 mW/g
Maximum value of SAR (measured) = 1.12 mW/g



0 dB = 1.12mW/g

Date/Time: 04/16/2009 05:43:10

BODY_CH661

DUT: SAPP500;

Communication System: GSM 1900; Frequency: 1880 MHz;Duty Cycle: 1:4
Medium: Body 1900 Medium parameters used: f = 1880 MHz; σ = 1.55 mho/m; ε_r = 53.8; ρ = 1000 kg/m^3
Phantom section: Flat Section

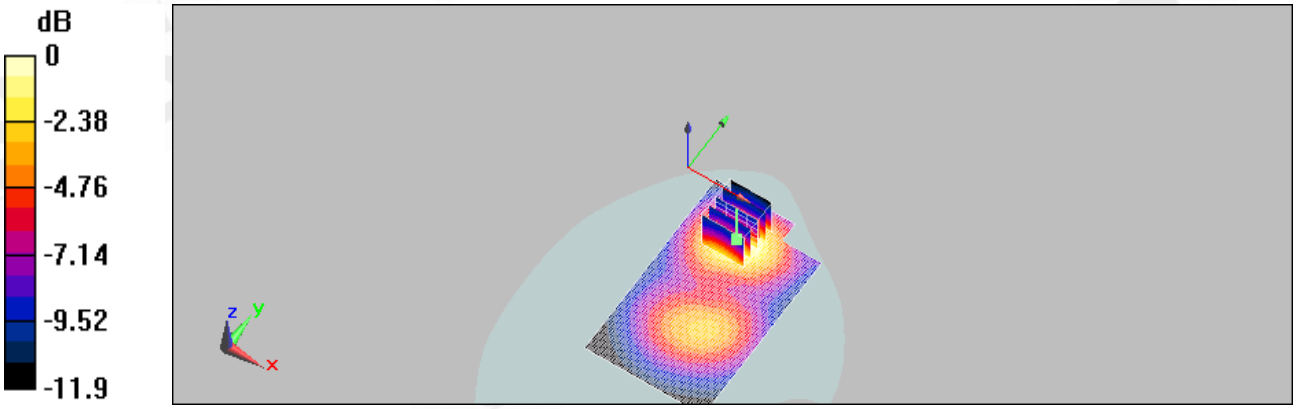
DASY5 Configuration:

- Probe: ES3DV3 - SN3172; ConvF(4.73, 4.73, 4.73); Calibrated: 6/23/2008
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn856; Calibrated: 5/7/2008
- Phantom: SAM1; Type: SAM;
- Measurement SW: DASY5, V5.0 Build 125; SEMCAD X Version 13.4 Build 125

Body/Area Scan (61x101x1): Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (interpolated) = 1.09 mW/g

Body/Zoom Scan (7x7x7) (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 12.9 V/m; Power Drift = -0.164 dB
Peak SAR (extrapolated) = 1.54 W/kg

SAR(1 g) = 0.962 mW/g; SAR(10 g) = 0.591 mW/g
Maximum value of SAR (measured) = 1.04 mW/g



0 dB = 1.04mW/g

Date/Time: 04/16/2009 06:10:00

BODY_CH810

DUT: SAPP500;

Communication System: GSM 1900; Frequency: 1909.8 MHz;Duty Cycle: 1:4
Medium: Body 1900 Medium parameters used: f = 1910 MHz; σ = 1.58 mho/m; ε_r = 53.6; ρ = 1000 kg/m^3
Phantom section: Flat Section

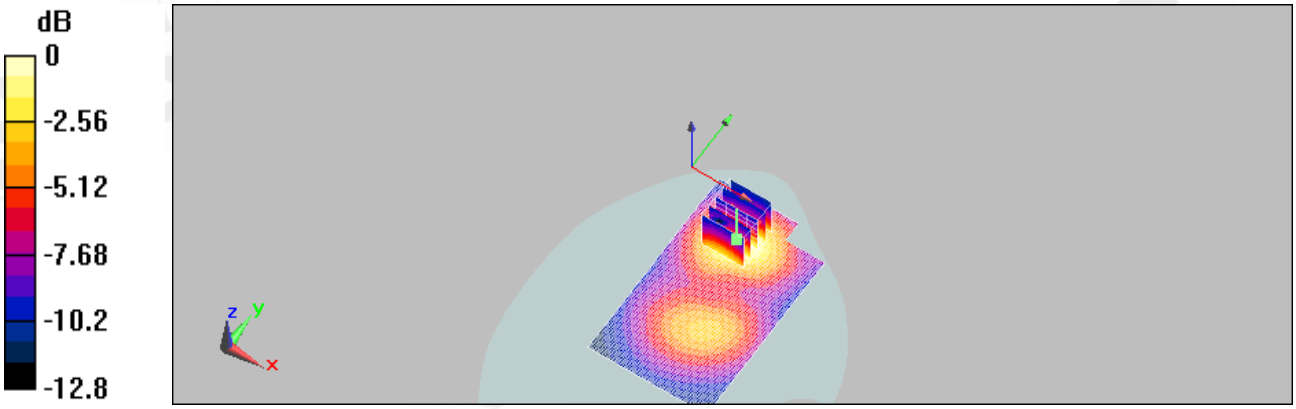
DASY5 Configuration:

- Probe: ES3DV3 - SN3172; ConvF(4.73, 4.73, 4.73); Calibrated: 6/23/2008
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn856; Calibrated: 5/7/2008
- Phantom: SAM1; Type: SAM;
- Measurement SW: DASY5, V5.0 Build 125; SEMCAD X Version 13.4 Build 125

Body/Area Scan (61x101x1): Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (interpolated) = 0.845 mW/g

Body/Zoom Scan (7x7x7) (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 11.5 V/m; Power Drift = -0.075 dB
Peak SAR (extrapolated) = 1.2 W/kg

SAR(1 g) = 0.746 mW/g; SAR(10 g) = 0.459 mW/g
Maximum value of SAR (measured) = 0.807 mW/g



0 dB = 0.807mW/g

Date/Time: 04/16/2009 06:36:23

BODY_CH512 test in EGPRS mode

DUT: SAPP500;

Communication System: GSM 1900; Frequency: 1850.2 MHz;Duty Cycle: 1:4
Medium: Body 1900 Medium parameters used (interpolated): f = 1850.2 MHz; σ = 1.51 mho/m; ε_r = 53.9; ρ = 1000 kg/m^3
Phantom section: Flat Section

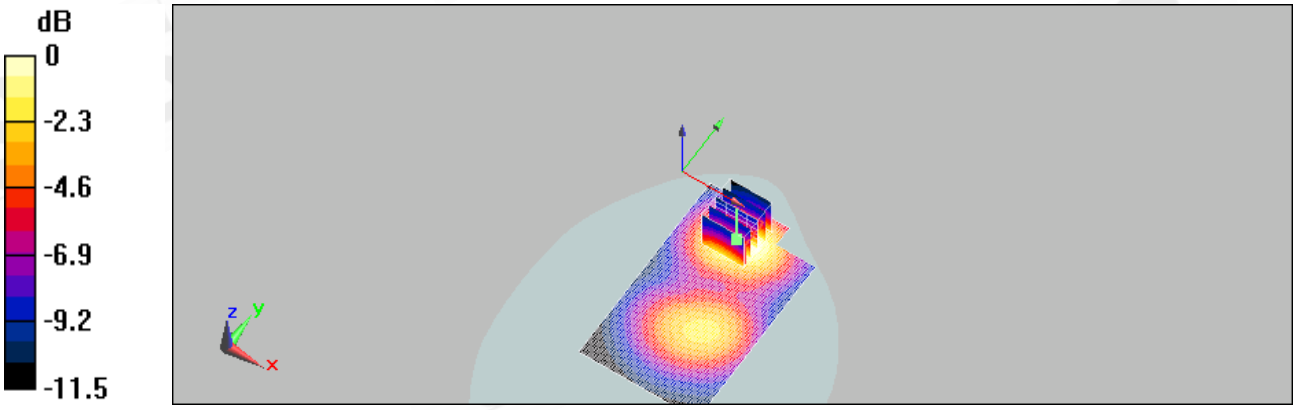
DASY5 Configuration:

- Probe: ES3DV3 - SN3172; ConvF(4.73, 4.73, 4.73); Calibrated: 6/23/2008
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn856; Calibrated: 5/7/2008
- Phantom: SAM1; Type: SAM;
- Measurement SW: DASY5, V5.0 Build 125; SEMCAD X Version 13.4 Build 125

Body/Area Scan (61x101x1): Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (interpolated) = 0.380 mW/g

Body/Zoom Scan (7x7x7) (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 7.79 V/m; Power Drift = -0.028 dB
Peak SAR (extrapolated) = 0.539 W/kg

SAR(1 g) = 0.340 mW/g; SAR(10 g) = 0.213 mW/g
Maximum value of SAR (measured) = 0.363 mW/g



0 dB = 0.363mW/g

Date/Time: 04/16/2009 07:04:13

BODY_CH661 test in EGPRS mode

DUT: SAPP500;

Communication System: GSM 1900; Frequency: 1880 MHz;Duty Cycle: 1:4
Medium: Body 1900 Medium parameters used: f = 1880 MHz; σ = 1.55 mho/m; ε_r = 53.8; ρ = 1000 kg/m^3
Phantom section: Flat Section

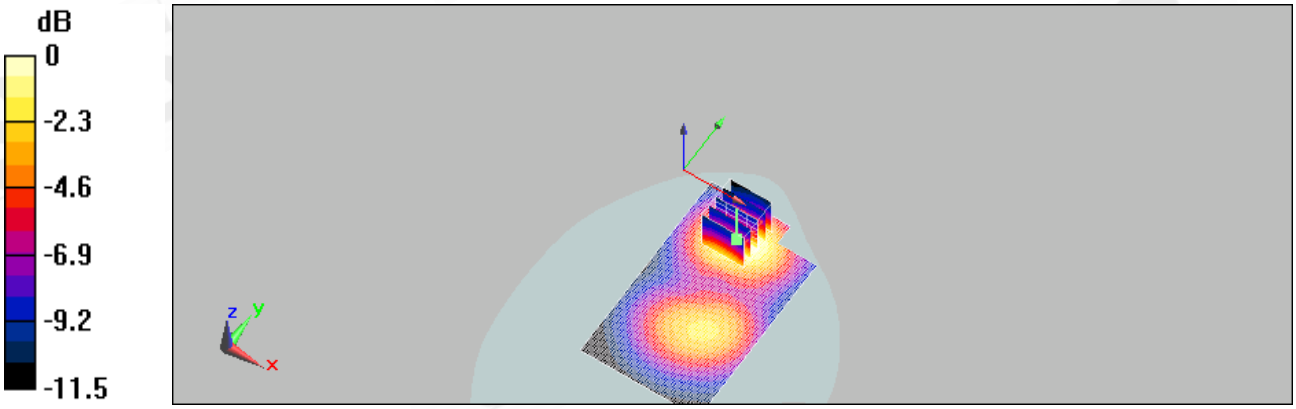
DASY5 Configuration:

- Probe: ES3DV3 - SN3172; ConvF(4.73, 4.73, 4.73); Calibrated: 6/23/2008
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn856; Calibrated: 5/7/2008
- Phantom: SAM1; Type: SAM;
- Measurement SW: DASY5, V5.0 Build 125; SEMCAD X Version 13.4 Build 125

Body/Area Scan (61x101x1): Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (interpolated) = 0.383 mW/g

Body/Zoom Scan (7x7x7) (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 7.77 V/m; Power Drift = -0.012 dB
Peak SAR (extrapolated) = 0.547 W/kg

SAR(1 g) = 0.340 mW/g; SAR(10 g) = 0.212 mW/g
Maximum value of SAR (measured) = 0.367 mW/g



0 dB = 0.367mW/g

Date/Time: 04/16/2009 07:31:25

BODY_CH810 test in EGPRS mode

DUT: SAPP500;

Communication System: GSM 1900; Frequency: 1909.8 MHz;Duty Cycle: 1:4
Medium: Body 1900 Medium parameters used: f = 1910 MHz; σ = 1.58 mho/m; ε_r = 53.6; ρ = 1000 kg/m^3
Phantom section: Flat Section

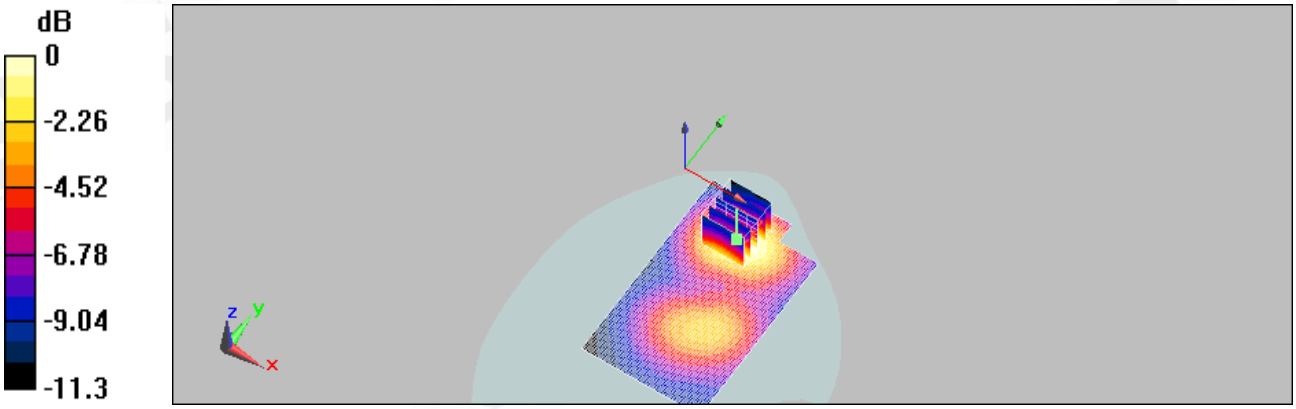
DASY5 Configuration:

- Probe: ES3DV3 - SN3172; ConvF(4.73, 4.73, 4.73); Calibrated: 6/23/2008
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn856; Calibrated: 5/7/2008
- Phantom: SAM1; Type: SAM;
- Measurement SW: DASY5, V5.0 Build 125; SEMCAD X Version 13.4 Build 125

Body/Area Scan (61x101x1): Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (interpolated) = 0.374 mW/g

Body/Zoom Scan (7x7x7) (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 7.92 V/m; Power Drift = -0.171 dB
Peak SAR (extrapolated) = 0.529 W/kg

SAR(1 g) = 0.325 mW/g; SAR(10 g) = 0.203 mW/g
Maximum value of SAR (measured) = 0.350 mW/g



0 dB = 0.350mW/g

Date/Time: 04/15/2009 13:09:56

RE_Cheek_CH9262

DUT: SAPP500;

Communication System: WCDMA B2; Frequency: 1852.4 MHz;Duty Cycle: 1:1
Medium: Head 1900 Medium parameters used (interpolated): f = 1852.4 MHz; σ = 1.42 mho/m; ε_r = 40.4; ρ = 1000 kg/m^3
Phantom section: Right Section

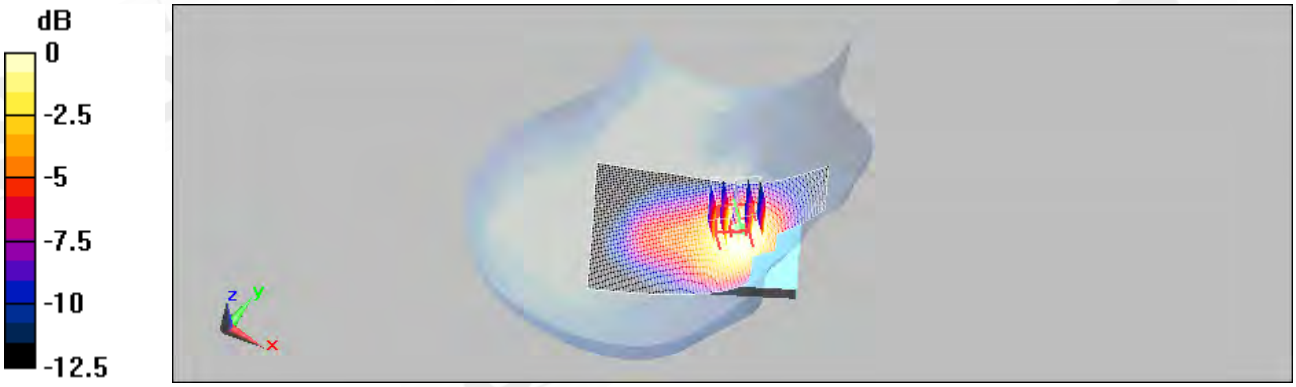
DASY5 Configuration:

- Probe: ES3DV3 - SN3172; ConvF(4.97, 4.97, 4.97); Calibrated: 6/23/2008
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn856; Calibrated: 5/7/2008
- Phantom: SAM1; Type: SAM;
- Measurement SW: DASY5, V5.0 Build 125; SEMCAD X Version 13.4 Build 125

RE Cheek/Area Scan (61x101x1): Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (interpolated) = 1.19 mW/g

RE Cheek/Zoom Scan (7x7x7) (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 12.1 V/m; Power Drift = -0.073 dB
Peak SAR (extrapolated) = 1.45 W/kg

SAR(1 g) = 1.03 mW/g; SAR(10 g) = 0.688 mW/g
Maximum value of SAR (measured) = 1.11 mW/g



0 dB = 1.11mW/g

Date/Time: 04/15/2009 13:35:07

RE_Cheek_CH9400

DUT: SAPP500;

Communication System: WCDMA B2; Frequency: 1880 MHz;Duty Cycle: 1:1
Medium: Head 1900 Medium parameters used: f = 1880 MHz; σ = 1.45 mho/m; ε_r = 40.4; ρ = 1000 kg/m^3
Phantom section: Right Section

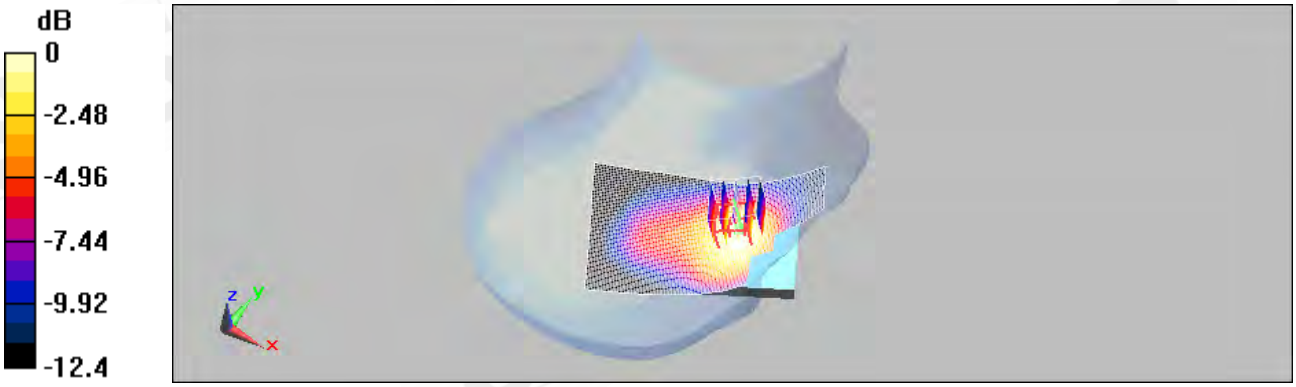
DASY5 Configuration:

- Probe: ES3DV3 - SN3172; ConvF(4.97, 4.97, 4.97); Calibrated: 6/23/2008
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn856; Calibrated: 5/7/2008
- Phantom: SAM1; Type: SAM;
- Measurement SW: DASY5, V5.0 Build 125; SEMCAD X Version 13.4 Build 125

RE Cheek/Area Scan (61x101x1): Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (interpolated) = 1.35 mW/g

RE Cheek/Zoom Scan (7x7x7) (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 13 V/m; Power Drift = 0.064 dB
Peak SAR (extrapolated) = 1.69 W/kg

SAR(1 g) = 1.19 mW/g; SAR(10 g) = 0.783 mW/g
Maximum value of SAR (measured) = 1.27 mW/g



0 dB = 1.27mW/g

Date/Time: 04/15/2009 13:59:53

RE_Cheek_CH9538

DUT: SAPP500;

Communication System: WCDMA B2; Frequency: 1907.6 MHz;Duty Cycle: 1:1
Medium: Head 1900 Medium parameters used: f = 1908 MHz; σ = 1.48 mho/m; ε_r = 40.2; ρ = 1000 kg/m^3
Phantom section: Right Section

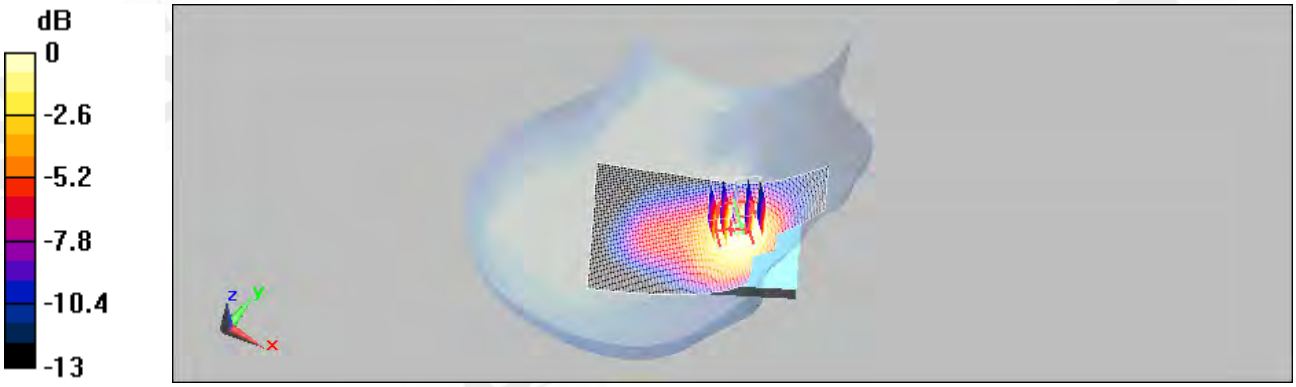
DASY5 Configuration:

- Probe: ES3DV3 - SN3172; ConvF(4.97, 4.97, 4.97); Calibrated: 6/23/2008
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn856; Calibrated: 5/7/2008
- Phantom: SAM1; Type: SAM;
- Measurement SW: DASY5, V5.0 Build 125; SEMCAD X Version 13.4 Build 125

RE Cheek/Area Scan (61x101x1): Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (interpolated) = 1.5 mW/g

RE Cheek/Zoom Scan (7x7x7) (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 13.1 V/m; Power Drift = 0.00129 dB
Peak SAR (extrapolated) = 1.86 W/kg

SAR(1 g) = 1.28 mW/g; SAR(10 g) = 0.825 mW/g
Maximum value of SAR (measured) = 1.39 mW/g



0 dB = 1.39mW/g

Date/Time: 04/15/2009 15:44:10

LE_Cheek_CH9262

DUT: SAPP500;

Communication System: WCDMA B2; Frequency: 1852.4 MHz;Duty Cycle: 1:1
Medium: Head 1900 Medium parameters used (interpolated): f = 1852.4 MHz; σ = 1.42 mho/m; ε_r = 40.4; ρ = 1000 kg/m^3
Phantom section: Left Section

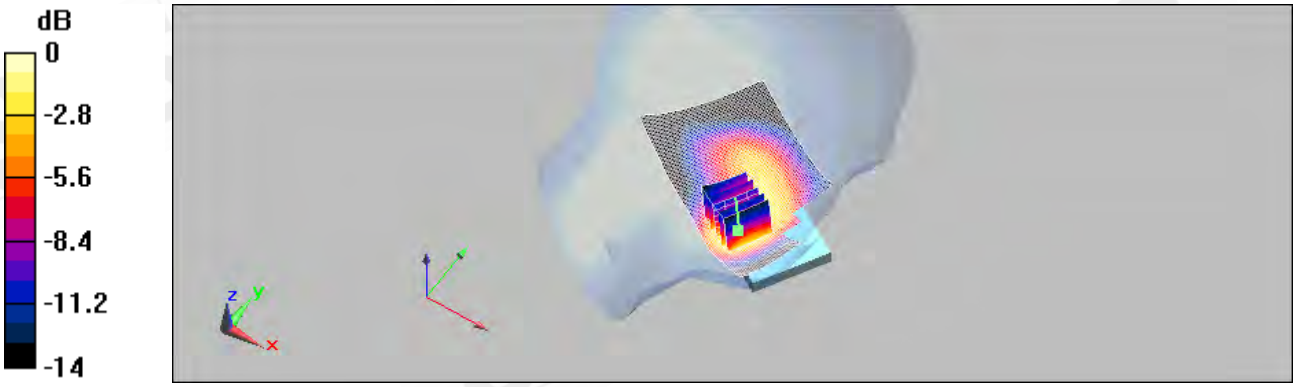
DASY5 Configuration:

- Probe: ES3DV3 - SN3172; ConvF(4.97, 4.97, 4.97); Calibrated: 6/23/2008
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn856; Calibrated: 5/7/2008
- Phantom: SAM1; Type: SAM;
- Measurement SW: DASY5, V5.0 Build 125; SEMCAD X Version 13.4 Build 125

LE Cheek/Area Scan (61x101x1): Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (interpolated) = 1.56 mW/g

LE Cheek/Zoom Scan (7x7x7) (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 12.6 V/m; Power Drift = -0.173 dB
Peak SAR (extrapolated) = 2.16 W/kg

SAR(1 g) = 1.41 mW/g; SAR(10 g) = 0.873 mW/g
Maximum value of SAR (measured) = 1.54 mW/g



0 dB = 1.54mW/g

Date/Time: 04/15/2009 1:19:23

LE_Cheek_CH9400

DUT: SAPP500;
Communication System: WCDMA B2; Frequency: 1880 MHz;Duty Cycle: 1:1
Medium: Head 1900 Medium parameters used: f = 1880 MHz; σ = 1.45 mho/m; ε_r = 40.4; ρ = 1000 kg/m^3
Phantom section: Left Section

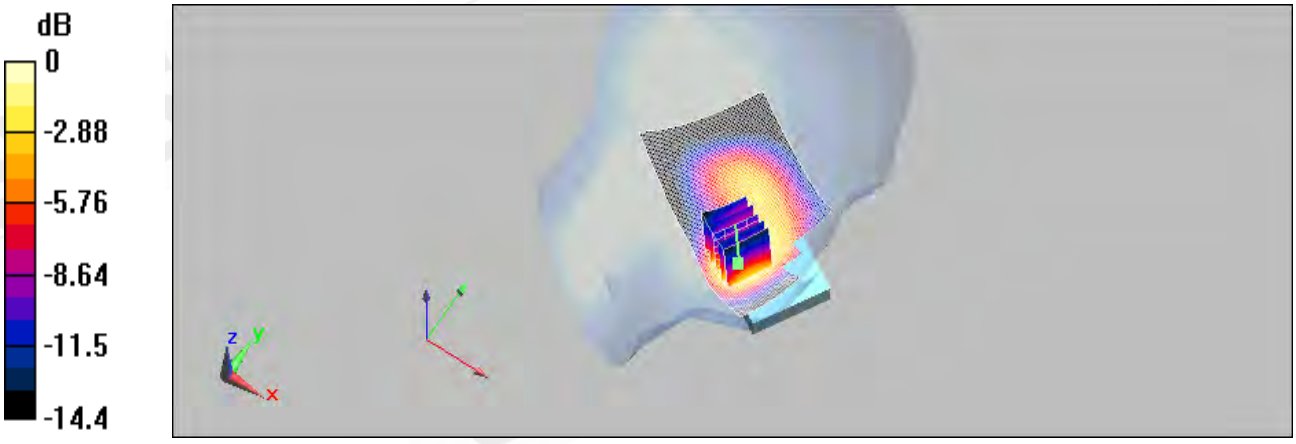
DASY5 Configuration:

- Probe: ES3DV3 - SN3172; ConvF(4.97, 4.97, 4.97); Calibrated: 6/23/2008
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn856; Calibrated: 5/7/2008
- Phantom: SAM1; Type: SAM;
- Measurement SW: DASY5, V5.0 Build 125; SEMCAD X Version 13.4 Build 125

LE Cheek/Area Scan (61x101x1): Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (interpolated) = 1.77 mW/g

LE Cheek/Zoom Scan (7x7x7) (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 13.5 V/m; Power Drift = 0.035 dB
Peak SAR (extrapolated) = 2.41 W/kg

SAR(1 g) = 1.56 mW/g; SAR(10 g) = 0.957 mW/g
Maximum value of SAR (measured) = 1.72 mW/g



0 dB = 1.72mW/g

Date/Time: 04/15/2009 16:37:05

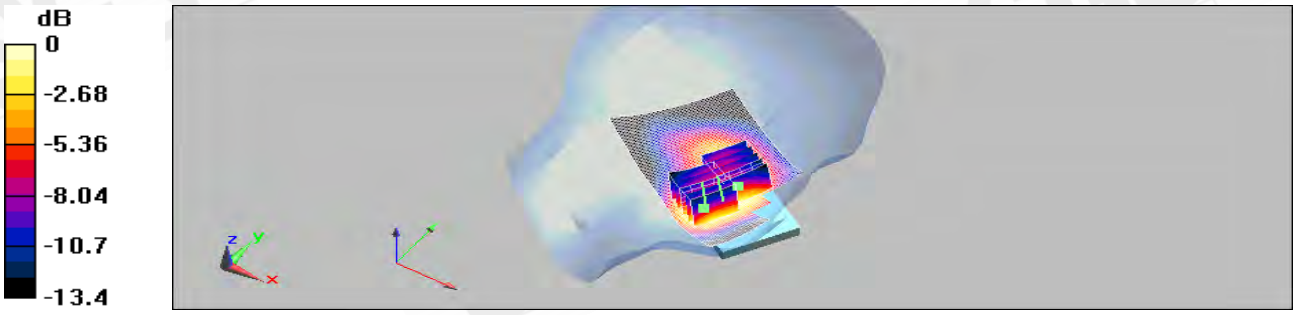
LE_Cheek_CH9538

DUT: SAPP500;
Communication System: WCDMA B2; Frequency: 1907.6 MHz;Duty Cycle: 1:1
Medium: Head 1900 Medium parameters used: f = 1908 MHz; σ = 1.48 mho/m; ε_r = 40.2; ρ = 1000 kg/m^3
Phantom section: Left Section

- Probe: ES3DV3 - SN3172; ConvF(4.97, 4.97, 4.97); Calibrated: 6/23/2008
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn856; Calibrated: 5/7/2008
- Phantom: SAM1; Type: SAM;
- Measurement SW: DASY5, V5.0 Build 125; SEMCAD X Version 13.4 Build 125

LE Cheek/Area Scan (61x101x1): Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (interpolated) = 1.69 mW/g
LE Cheek/Zoom Scan (7x7x7) (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 13.4 V/m; Power Drift = -0.142 dB
Peak SAR (extrapolated) = 2.34 W/kg
SAR(1 g) = 1.5 mW/g; SAR(10 g) = 0.944 mW/g
Maximum value of SAR (measured) = 1.62 mW/g

LE Cheek/Zoom Scan (7x7x7) (5x5x7)/Cube 1: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 13.4 V/m; Power Drift = -0.142 dB
Peak SAR (extrapolated) = 1.78 W/kg
SAR(1 g) = 1.22 mW/g; SAR(10 g) = 0.806 mW/g
Maximum value of SAR (measured) = 1.39 mW/g



0 dB = 1.39mW/g

Date/Time: 04/15/2009 23:27:12

LE_Cheek_CH9400_ repeated with Memory card

DUT: SAPP500;

Communication System: WCDMA B2; Frequency: 1880 MHz;Duty Cycle: 1:1
Medium: Head 1900 Medium parameters used: f = 1880 MHz; σ = 1.45 mho/m; ε_r = 40.4; ρ = 1000 kg/m^3
Phantom section: Left Section

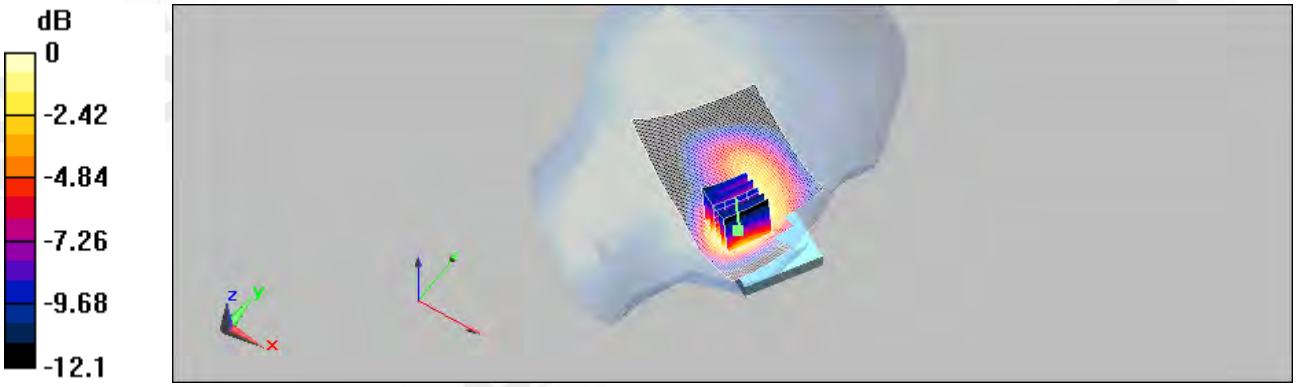
DASY5 Configuration:

- Probe: ES3DV3 - SN3172; ConvF(4.97, 4.97, 4.97); Calibrated: 6/23/2008
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn856; Calibrated: 5/7/2008
- Phantom: SAM1; Type: SAM;
- Measurement SW: DASY5, V5.0 Build 125; SEMCAD X Version 13.4 Build 125

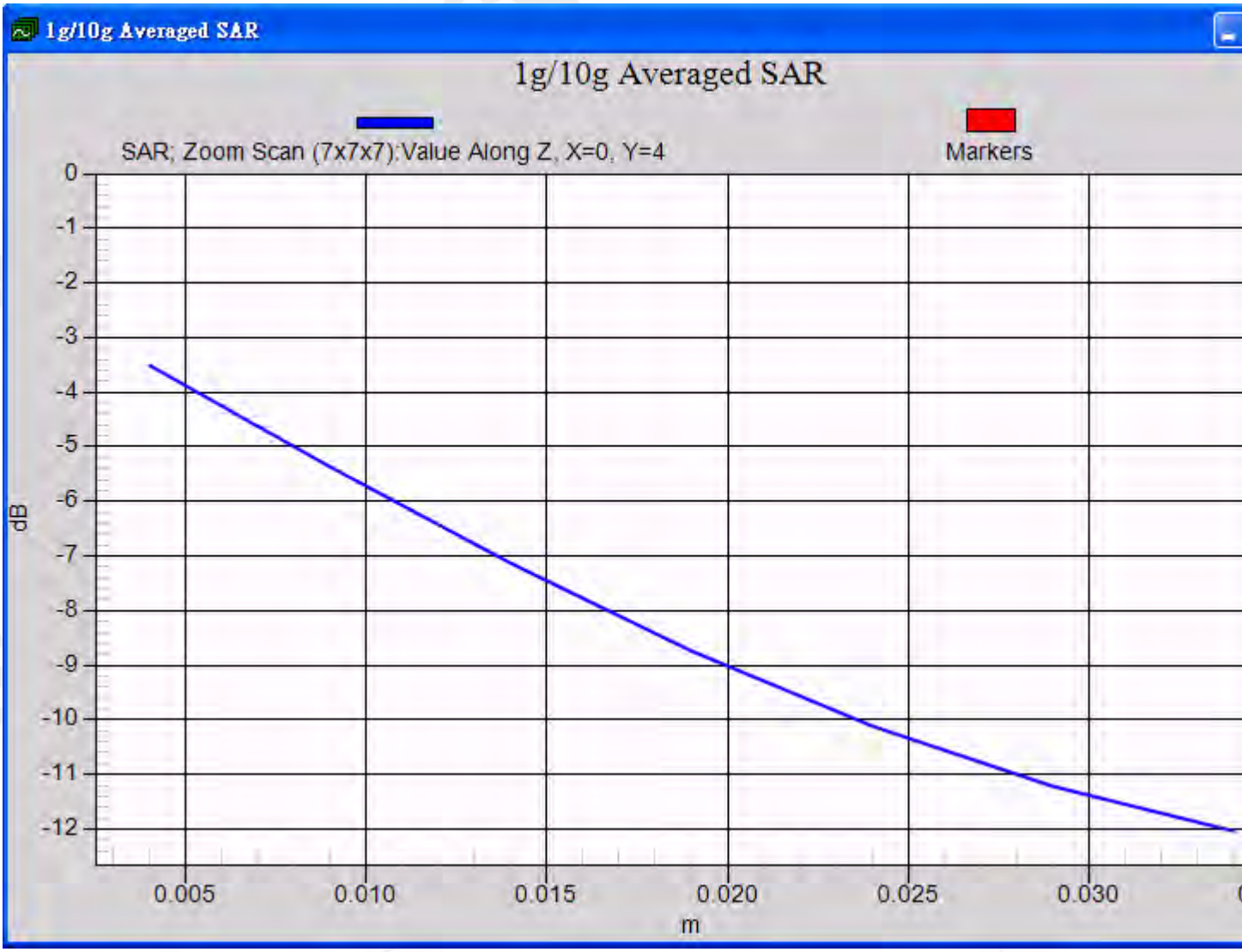
LE Cheek/Area Scan (61x101x1): Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (interpolated) = 1.82 mW/g

LE Cheek/Zoom Scan (7x7x7) (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 13.6 V/m; Power Drift = -0.097 dB
Peak SAR (extrapolated) = 2.46 W/kg

SAR(1 g) = 1.57 mW/g; SAR(10 g) = 0.994 mW/g
Maximum value of SAR (measured) = 1.69 mW/g



0 dB = 1.69mW/g



Date/Time: 04/15/2009 23:54:33

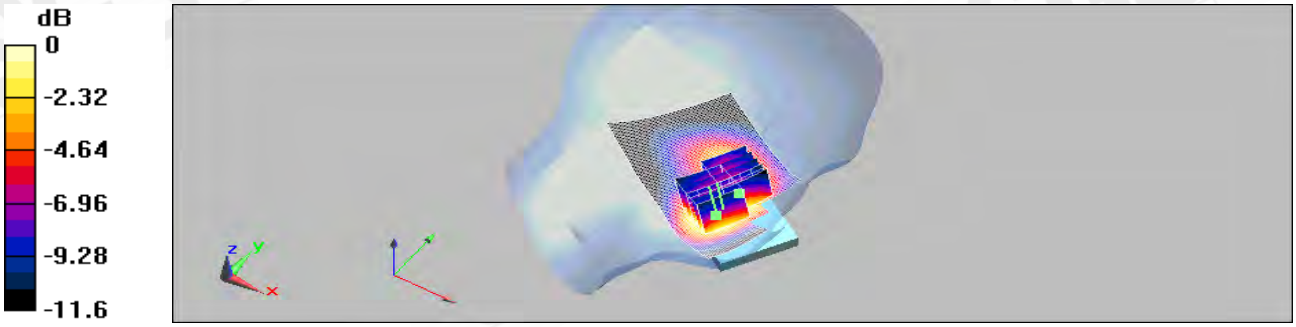
LE_Cheek_CH9400_ repeated with WELLDONE Battery

DUT: SAPP500;
Communication System: WCDMA B2; Frequency: 1880 MHz;Duty Cycle: 1:1
Medium: Head 1900 Medium parameters used: f = 1880 MHz; σ = 1.45 mho/m; ε_r = 40.4; ρ = 1000 kg/m^3
Phantom section: Left Section

- Probe: ES3DV3 - SN3172; ConvF(4.97, 4.97, 4.97); Calibrated: 6/23/2008
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn856; Calibrated: 5/7/2008
- Phantom: SAM1; Type: SAM;
- Measurement SW: DASY5, V5.0 Build 125; SEMCAD X Version 13.4 Build 125

LE Cheek/Area Scan (61x101x1): Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (interpolated) = 1.74 mW/g
LE Cheek/Zoom Scan (7x7x7) (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 13.3 V/m; Power Drift = 0.019 dB
Peak SAR (extrapolated) = 2.32 W/kg
SAR(1 g) = 1.51 mW/g; SAR(10 g) = 0.958 mW/g
Maximum value of SAR (measured) = 1.6 mW/g

LE Cheek/Zoom Scan (7x7x7) (5x5x7)/Cube 1: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 13.3 V/m; Power Drift = 0.019 dB
Peak SAR (extrapolated) = 1.79 W/kg
SAR(1 g) = 1.23 mW/g; SAR(10 g) = 0.833 mW/g
Maximum value of SAR (measured) = 1.42 mW/g



0 dB = 1.42mW/g

Date/Time: 04/15/2009 14:26:30

RE_Tilt_CH9262

DUT: SAPP500;

Communication System: WCDMA B2; Frequency: 1852.4 MHz;Duty Cycle: 1:1
Medium: Head 1900 Medium parameters used (interpolated): f = 1852.4 MHz; σ = 1.42 mho/m; ε_r = 40.4; ρ = 1000 kg/m^3
Phantom section: Right Section

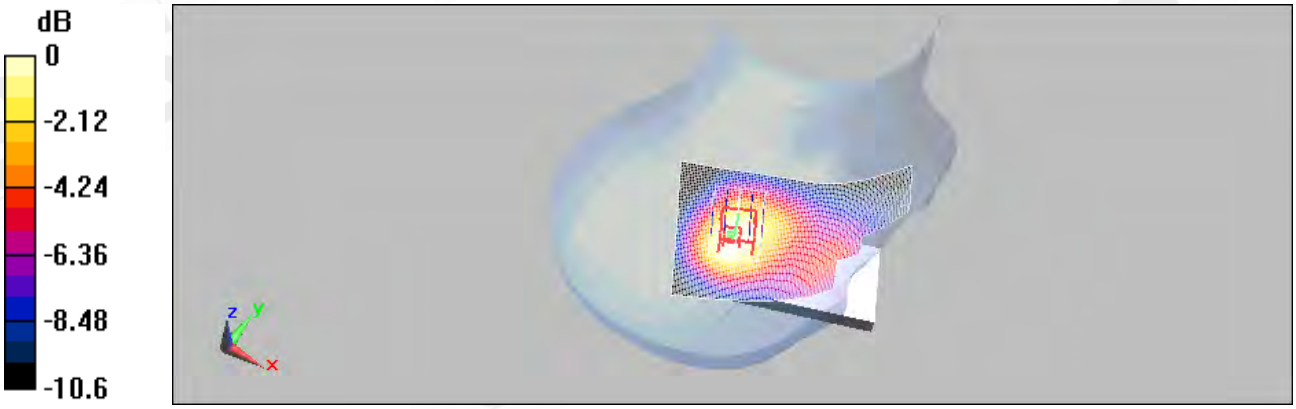
DASY5 Configuration:

- Probe: ES3DV3 - SN3172; ConvF(4.97, 4.97, 4.97); Calibrated: 6/23/2008
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn856; Calibrated: 5/7/2008
- Phantom: SAM1; Type: SAM;
- Measurement SW: DASY5, V5.0 Build 125; SEMCAD X Version 13.4 Build 125

RE Tilt/Area Scan (61x101x1): Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (interpolated) = 0.686 mW/g

RE Tilt/Zoom Scan (7x7x7) (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 19.6 V/m; Power Drift = -0.068 dB
Peak SAR (extrapolated) = 0.822 W/kg

SAR(1 g) = 0.579 mW/g; SAR(10 g) = 0.382 mW/g
Maximum value of SAR (measured) = 0.614 mW/g



0 dB = 0.614mW/g

Date/Time: 04/15/2009 14:49:47

RE_Tilt_CH9400

DUT: SAPP500;

Communication System: WCDMA B2; Frequency: 1880 MHz;Duty Cycle: 1:1
Medium: Head 1900 Medium parameters used: f = 1880 MHz; σ = 1.45 mho/m; ε_r = 40.4; ρ = 1000 kg/m^3
Phantom section: Right Section

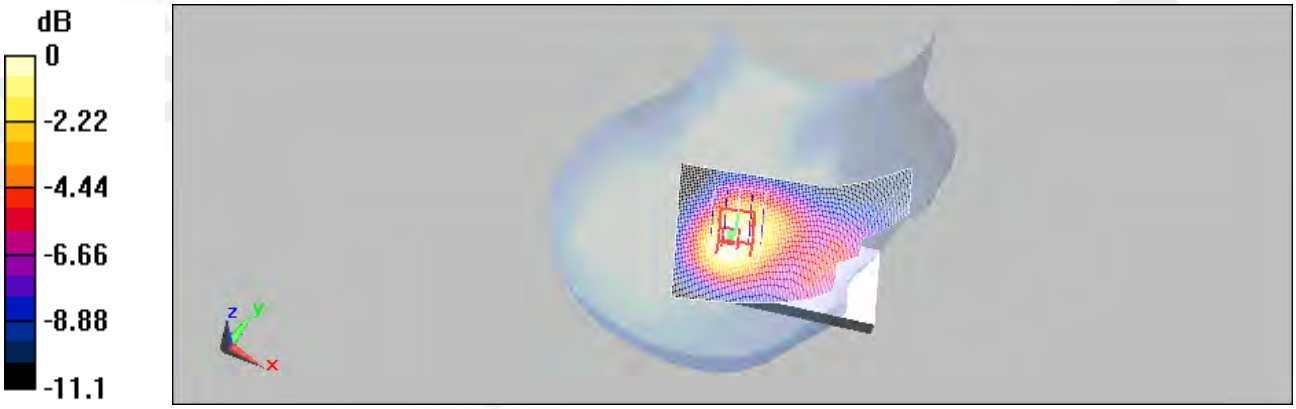
DASY5 Configuration:

- Probe: ES3DV3 - SN3172; ConvF(4.97, 4.97, 4.97); Calibrated: 6/23/2008
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn856; Calibrated: 5/7/2008
- Phantom: SAM1; Type: SAM;
- Measurement SW: DASY5, V5.0 Build 125; SEMCAD X Version 13.4 Build 125

RE Tilt/Area Scan (61x101x1): Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (interpolated) = 0.786 mW/g

RE Tilt/Zoom Scan (7x7x7) (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 20.8 V/m; Power Drift = 0.109 dB
Peak SAR (extrapolated) = 0.981 W/kg

SAR(1 g) = 0.675 mW/g; SAR(10 g) = 0.437 mW/g
Maximum value of SAR (measured) = 0.708 mW/g



0 dB = 0.708mW/g

Date/Time: 04/15/2009 15:16:03

RE_Tilt_CH9538

DUT: SAPP500;

Communication System: WCDMA B2; Frequency: 1907.6 MHz;Duty Cycle: 1:1
Medium: Head 1900 Medium parameters used: f = 1908 MHz; σ = 1.48 mho/m; ε_r = 40.2; ρ = 1000 kg/m^3
Phantom section: Right Section

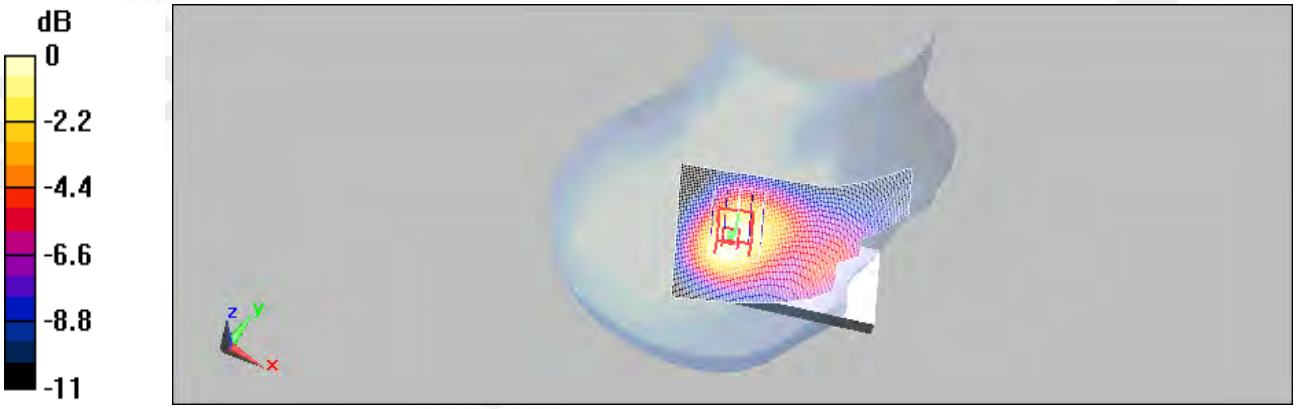
DASY5 Configuration:

- Probe: ES3DV3 - SN3172; ConvF(4.97, 4.97, 4.97); Calibrated: 6/23/2008
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn856; Calibrated: 5/7/2008
- Phantom: SAM1; Type: SAM;
- Measurement SW: DASY5, V5.0 Build 125; SEMCAD X Version 13.4 Build 125

RE Tilt/Area Scan (61x101x1): Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (interpolated) = 0.782 mW/g

RE Tilt/Zoom Scan (7x7x7) (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 21 V/m; Power Drift = 0.029 dB
Peak SAR (extrapolated) = 0.985 W/kg

SAR(1 g) = 0.673 mW/g; SAR(10 g) = 0.434 mW/g
Maximum value of SAR (measured) = 0.704 mW/g



0 dB = 0.704mW/g

Date/Time: 04/15/2009 17:04:16

LE_Tilt_CH9262

DUT: SAPP500;

Communication System: WCDMA B2; Frequency: 1852.4 MHz;Duty Cycle: 1:1
Medium: Head 1900 Medium parameters used (interpolated): f = 1852.4 MHz; σ = 1.42 mho/m; ε_r = 40.4; ρ = 1000 kg/m^3
Phantom section: Left Section

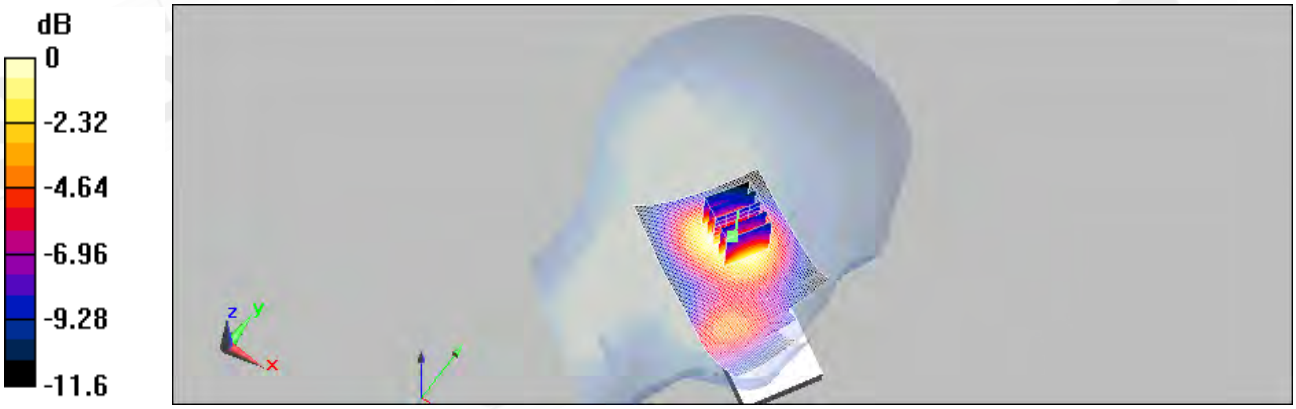
DASY5 Configuration:

- Probe: ES3DV3 - SN3172; ConvF(4.97, 4.97, 4.97); Calibrated: 6/23/2008
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn856; Calibrated: 5/7/2008
- Phantom: SAM1; Type: SAM;
- Measurement SW: DASY5, V5.0 Build 125; SEMCAD X Version 13.4 Build 125

LE Tilt/Area Scan (61x101x1): Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (interpolated) = 0.746 mW/g

LE Tilt/Zoom Scan (7x7x7) (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 19.5 V/m; Power Drift = 0.020 dB
Peak SAR (extrapolated) = 0.874 W/kg

SAR(1 g) = 0.614 mW/g; SAR(10 g) = 0.403 mW/g
Maximum value of SAR (measured) = 0.659 mW/g



0 dB = 0.659mW/g

Date/Time: 04/15/2009 17:29:29

LE_Tilt_CH9400

DUT: SAPP500;

Communication System: WCDMA B2; Frequency: 1880 MHz;Duty Cycle: 1:1
Medium: Head 1900 Medium parameters used: f = 1880 MHz; σ = 1.45 mho/m; ε_r = 40.4; ρ = 1000 kg/m^3
Phantom section: Left Section

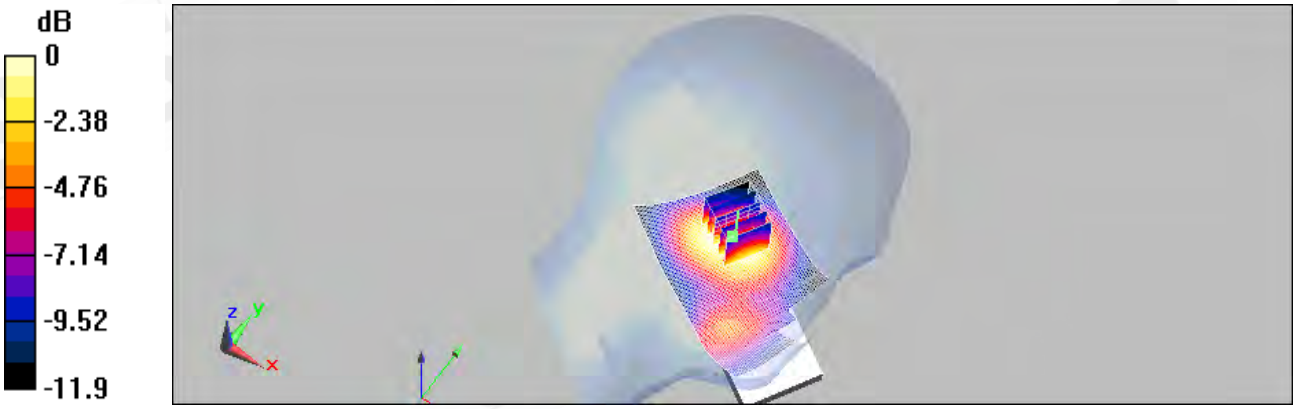
DASY5 Configuration:

- Probe: ES3DV3 - SN3172; ConvF(4.97, 4.97, 4.97); Calibrated: 6/23/2008
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn856; Calibrated: 5/7/2008
- Phantom: SAM1; Type: SAM;
- Measurement SW: DASY5, V5.0 Build 125; SEMCAD X Version 13.4 Build 125

LE Tilt/Area Scan (61x101x1): Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (interpolated) = 0.829 mW/g

LE Tilt/Zoom Scan (7x7x7) (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 20.5 V/m; Power Drift = -0.027 dB
Peak SAR (extrapolated) = 0.959 W/kg

SAR(1 g) = 0.671 mW/g; SAR(10 g) = 0.438 mW/g
Maximum value of SAR (measured) = 0.718 mW/g



0 dB = 0.718mW/g

Date/Time: 04/15/2009 17:57:12

LE_Tilt_CH9538

DUT: SAPP500;

Communication System: WCDMA B2; Frequency: 1907.6 MHz;Duty Cycle: 1:1
Medium: Head 1900 Medium parameters used: f = 1908 MHz; σ = 1.48 mho/m; ε_r = 40.2; ρ = 1000 kg/m^3
Phantom section: Left Section

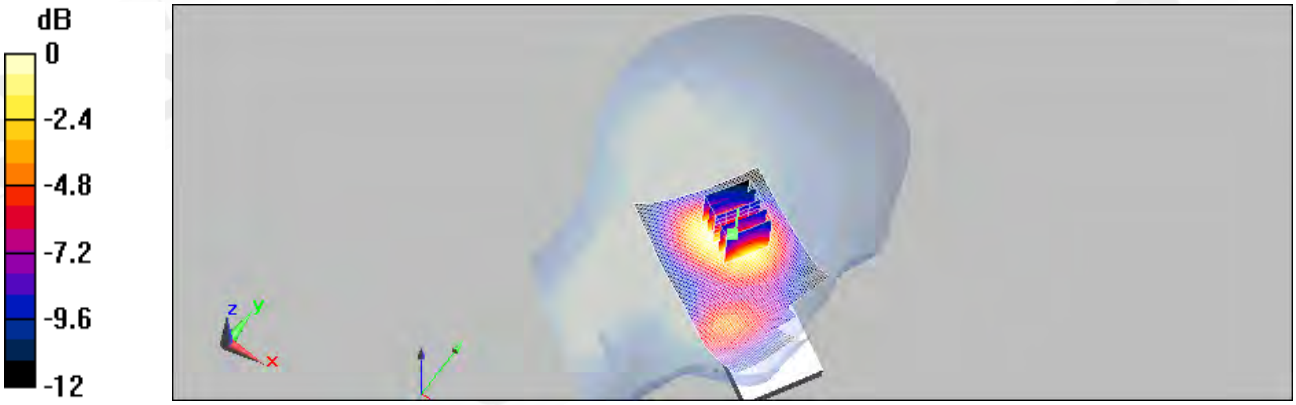
DASY5 Configuration:

- Probe: ES3DV3 - SN3172; ConvF(4.97, 4.97, 4.97); Calibrated: 6/23/2008
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn856; Calibrated: 5/7/2008
- Phantom: SAM1; Type: SAM;
- Measurement SW: DASY5, V5.0 Build 125; SEMCAD X Version 13.4 Build 125

LE Tilt/Area Scan (61x101x1): Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (interpolated) = 0.830 mW/g

LE Tilt/Zoom Scan (7x7x7) (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 20.5 V/m; Power Drift = 0.040 dB
Peak SAR (extrapolated) = 0.980 W/kg

SAR(1 g) = 0.680 mW/g; SAR(10 g) = 0.441 mW/g
Maximum value of SAR (measured) = 0.729 mW/g



0 dB = 0.729mW/g

Date/Time: 04/16/2009 08:09:18

BODY_CH9262

DUT: SAPP500;

Communication System: WCDMA B2; Frequency: 1852.4 MHz;Duty Cycle: 1:1
Medium: Body 1900 Medium parameters used (interpolated): f = 1852.4 MHz; σ = 1.5 mho/m; ε_r = 53.8; ρ = 1000 kg/m^3
Phantom section: Flat Section

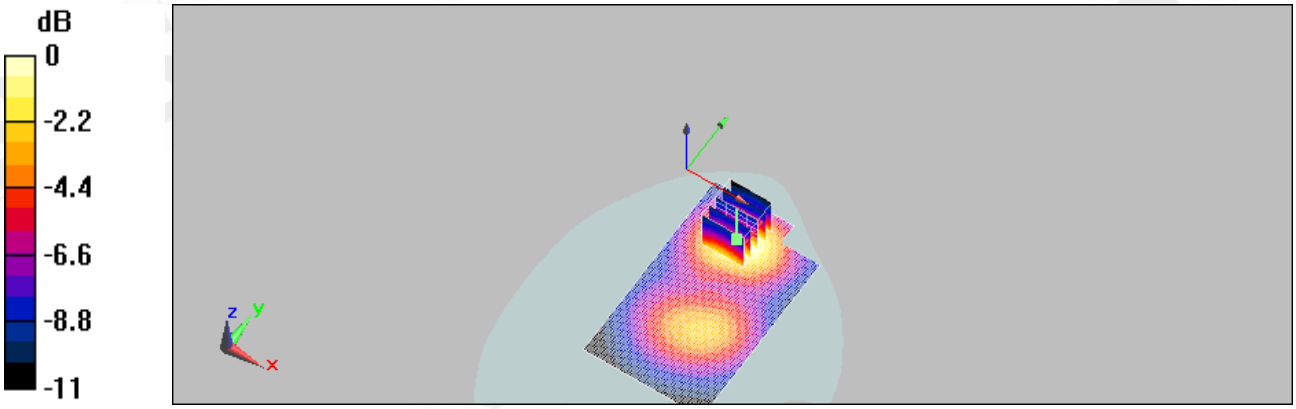
DASY5 Configuration:

- Probe: ES3DV3 - SN3172; ConvF(4.73, 4.73, 4.73); Calibrated: 6/23/2008
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn856; Calibrated: 5/7/2008
- Phantom: SAM1; Type: SAM;
- Measurement SW: DASY5, V5.0 Build 125; SEMCAD X Version 13.4 Build 125

Body/Area Scan (61x101x1): Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (interpolated) = 0.645 mW/g

Body/Zoom Scan (7x7x7) (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 10.2 V/m; Power Drift = -0.015 dB
Peak SAR (extrapolated) = 0.916 W/kg

SAR(1 g) = 0.575 mW/g; SAR(10 g) = 0.357 mW/g
Maximum value of SAR (measured) = 0.617 mW/g



0 dB = 0.617mW/g

Date/Time: 04/16/2009 08:35:38

BODY_CH9400

DUT: SAPP500;

Communication System: WCDMA B2; Frequency: 1880 MHz;Duty Cycle: 1:1
Medium: Body 1900 Medium parameters used: f = 1880 MHz; σ = 1.55 mho/m; ε_r = 53.8; ρ = 1000 kg/m^3
Phantom section: Flat Section

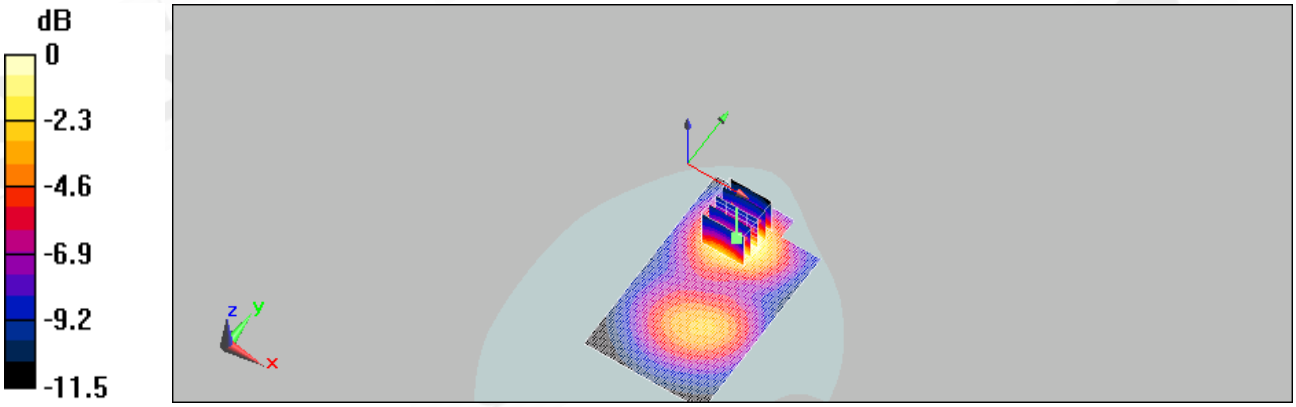
DASY5 Configuration:

- Probe: ES3DV3 - SN3172; ConvF(4.73, 4.73, 4.73); Calibrated: 6/23/2008
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn856; Calibrated: 5/7/2008
- Phantom: SAM1; Type: SAM;
- Measurement SW: DASY5, V5.0 Build 125; SEMCAD X Version 13.4 Build 125

Body/Area Scan (61x101x1): Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (interpolated) = 0.835 mW/g

Body/Zoom Scan (7x7x7) (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 12.06 V/m; Power Drift = 0.018 dB
Peak SAR (extrapolated) = 1.18 W/kg

SAR(1 g) = 0.751 mW/g; SAR(10 g) = 0.47 mW/g
Maximum value of SAR (measured) = 0.797 mW/g



0 dB = 0.797mW/g

Date/Time: 04/16/2009 08:59:03

BODY_CH9538

DUT: SAPP500;

Communication System: WCDMA B2; Frequency: 1907.6 MHz;Duty Cycle: 1:1
Medium: Body 1900 Medium parameters used: f = 1908 MHz; σ = 1.56 mho/m; ε_r = 53.7; ρ = 1000 kg/m^3
Phantom section: Flat Section

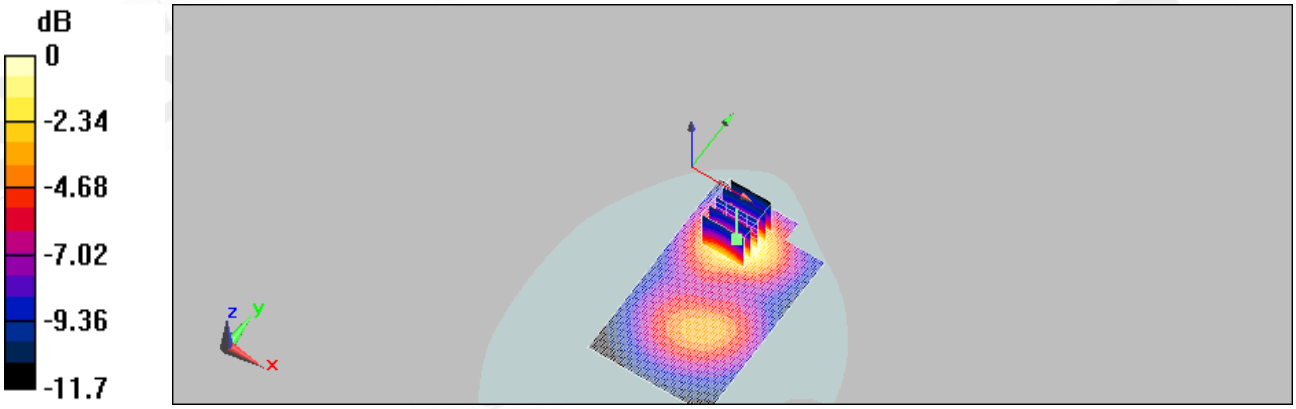
DASY5 Configuration:

- Probe: ES3DV3 - SN3172; ConvF(4.73, 4.73, 4.73); Calibrated: 6/23/2008
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn856; Calibrated: 5/7/2008
- Phantom: SAM1; Type: SAM;
- Measurement SW: DASY5, V5.0 Build 125; SEMCAD X Version 13.4 Build 125

Body/Area Scan (61x101x1): Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (interpolated) = 0.816 mW/g

Body/Zoom Scan (7x7x7) (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 11.2 V/m; Power Drift = -0.00746 dB
Peak SAR (extrapolated) = 1.17 W/kg

SAR(1 g) = 0.722 mW/g; SAR(10 g) = 0.441 mW/g
Maximum value of SAR (measured) = 0.782 mW/g



0 dB = 0.782mW/g

Date/Time: 04/16/2009 09:28:03

BODY_CH9262_ repeated with HSDPA mode

DUT: SAPP500;

Communication System: WCDMA B2; Frequency: 1852.4 MHz;Duty Cycle: 1:1
Medium: Body 1900 Medium parameters used (interpolated): f = 1852.4 MHz; σ = 1.5 mho/m; ε_r = 53.8; ρ = 1000 kg/m^3
Phantom section: Flat Section

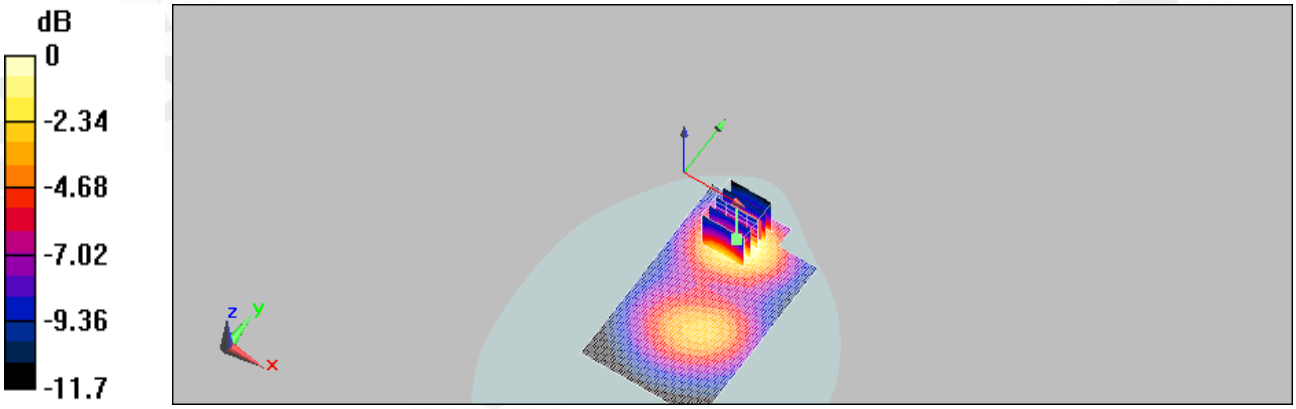
DASY5 Configuration:

- Probe: ES3DV3 - SN3172; ConvF(4.73, 4.73, 4.73); Calibrated: 6/23/2008
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn856; Calibrated: 5/7/2008
- Phantom: SAM1; Type: SAM;
- Measurement SW: DASY5, V5.0 Build 125; SEMCAD X Version 13.4 Build 125

Body/Area Scan (61x101x1): Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (interpolated) = 0.614 mW/g

Body/Zoom Scan (7x7x7) (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 9.32 V/m; Power Drift = 0.172 dB
Peak SAR (extrapolated) = 0.888 W/kg

SAR(1 g) = 0.559 mW/g; SAR(10 g) = 0.345 mW/g
Maximum value of SAR (measured) = 0.604 mW/g



0 dB = 0.604mW/g

Date/Time: 04/16/2009 09:53:25

BODY_CH9400_ repeated with HSDPA mode

DUT: SAPP500;

Communication System: WCDMA B2; Frequency: 1880 MHz;Duty Cycle: 1:1
Medium: Body 2000 Medium parameters used (extrapolated): f = 1880 MHz; σ = 1.55 mho/m; ε_r = 53.8; ρ = 1000 kg/m^3
Phantom section: Flat Section

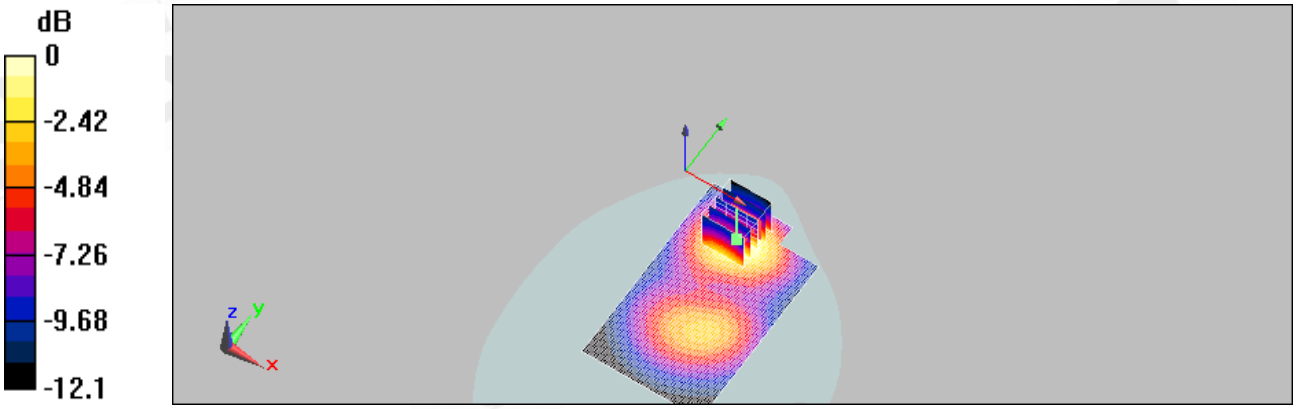
DASY5 Configuration:

- Probe: ES3DV3 - SN3172; ConvF(4.73, 4.73, 4.73); Calibrated: 6/23/2008
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn856; Calibrated: 5/7/2008
- Phantom: SAM1; Type: SAM;
- Measurement SW: DASY5, V5.0 Build 125; SEMCAD X Version 13.4 Build 125

Body/Area Scan (61x101x1): Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (interpolated) = 0.727mW/g

Body/Zoom Scan (7x7x7) (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 10.12 V/m; Power Drift = -0.016 dB
Peak SAR (extrapolated) = 1.01 W/kg

SAR(1 g) = 0.655 mW/g; SAR(10 g) = 0.402 mW/g
Maximum value of SAR (measured) = 0.686 mW/g



0 dB = 0.686mW/g

Date/Time: 04/16/2009 10:19:55

BODY_CH9538_ repeated with HSDPA mode

DUT: SAPP500;

Communication System: WCDMA B2; Frequency: 1907.6 MHz;Duty Cycle: 1:1
Medium: Body 1900 Medium parameters used: f = 1908 MHz; σ = 1.56 mho/m; ε_r = 53.7; ρ = 1000 kg/m^3
Phantom section: Flat Section

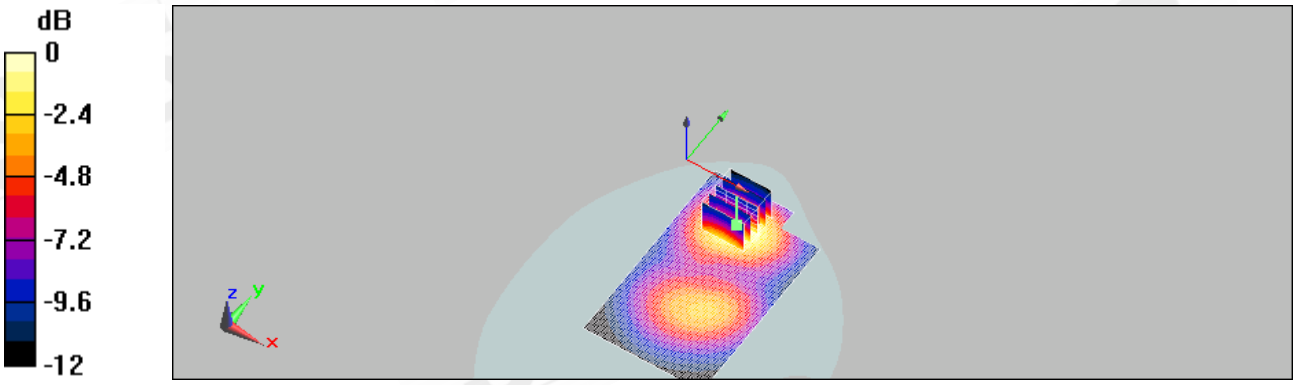
DASY5 Configuration:

- Probe: ES3DV3 - SN3172; ConvF(4.73, 4.73, 4.73); Calibrated: 6/23/2008
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn856; Calibrated: 5/7/2008
- Phantom: SAM1; Type: SAM;
- Measurement SW: DASY5, V5.0 Build 125; SEMCAD X Version 13.4 Build 125

Body/Area Scan (61x101x1): Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (interpolated) = 0.722 mW/g

Body/Zoom Scan (7x7x7) (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 10.1 V/m; Power Drift = -0.028 dB
Peak SAR (extrapolated) = 1.02 W/kg

SAR(1 g) = 0.641 mW/g; SAR(10 g) = 0.394 mW/g
Maximum value of SAR (measured) = 0.696 mW/g



0 dB = 0.696mW/g

Date/Time: 04/16/2009 10:47:19

BODY_CH9262_ repeated with HSUPA mode

DUT: SAPP500;

Communication System: WCDMA B2; Frequency: 1852.4 MHz;Duty Cycle: 1:1
Medium: Body 1900 Medium parameters used (interpolated): f = 1852.4 MHz; σ = 1.5 mho/m; ε_r = 53.8; ρ = 1000 kg/m^3
Phantom section: Flat Section

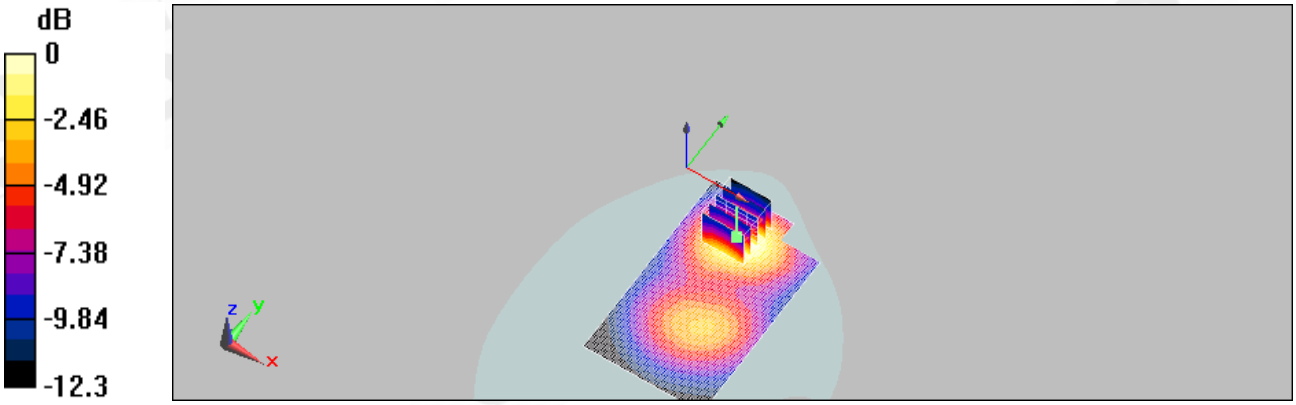
DASY5 Configuration:

- Probe: ES3DV3 - SN3172; ConvF(4.73, 4.73, 4.73); Calibrated: 6/23/2008
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn856; Calibrated: 5/7/2008
- Phantom: SAM1; Type: SAM;
- Measurement SW: DASY5, V5.0 Build 125; SEMCAD X Version 13.4 Build 125

Body/Area Scan (61x101x1): Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (interpolated) = 0.621 mW/g

Body/Zoom Scan (7x7x7) (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 9.37 V/m; Power Drift = 0.025 dB
Peak SAR (extrapolated) = 0.885 W/kg

SAR(1 g) = 0.554 mW/g; SAR(10 g) = 0.341 mW/g
Maximum value of SAR (measured) = 0.596 mW/g



0 dB = 0.596mW/g

Date/Time: 04/16/2009 11:12:53

BODY_CH9400_ repeated with HSUPA mode

DUT: SAPP500;

Communication System: WCDMA B2; Frequency: 1880 MHz;Duty Cycle: 1:1
Medium: Body 1900 Medium parameters used: f = 1880 MHz; σ = 1.55 mho/m; ε_r = 53.8; ρ = 1000 kg/m^3
Phantom section: Flat Section

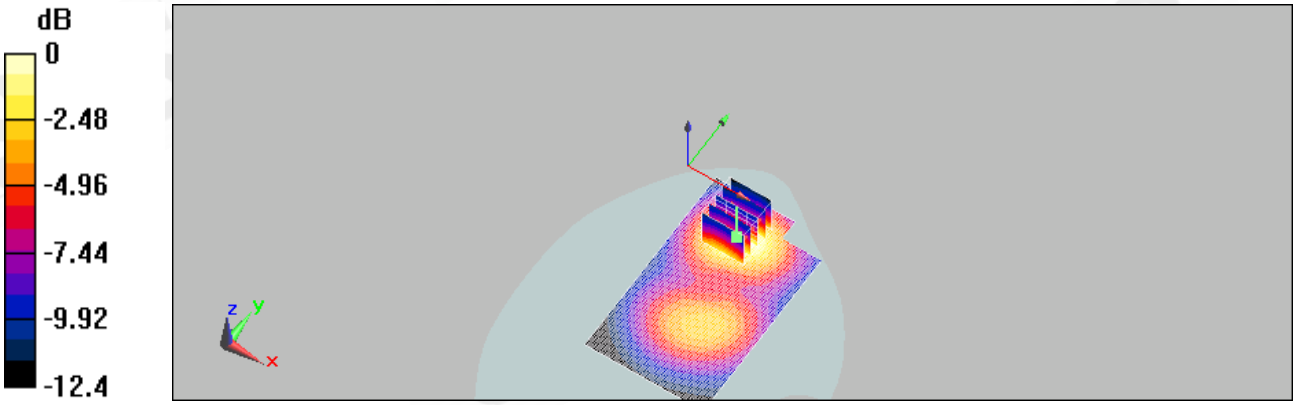
DASY5 Configuration:

- Probe: ES3DV3 - SN3172; ConvF(4.73, 4.73, 4.73); Calibrated: 6/23/2008
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn856; Calibrated: 5/7/2008
- Phantom: SAM1; Type: SAM;
- Measurement SW: DASY5, V5.0 Build 125; SEMCAD X Version 13.4 Build 125

Body/Area Scan (61x101x1): Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (interpolated) = 0.690 mW/g

Body/Zoom Scan (7x7x7) (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 10.2 V/m; Power Drift = -0.054 dB
Peak SAR (extrapolated) = 0.984 W/kg

SAR(1 g) = 0.615 mW/g; SAR(10 g) = 0.378 mW/g
Maximum value of SAR (measured) = 0.664 mW/g



0 dB = 0.664mW/g

Date/Time: 04/16/2009 11:39:46

BODY_CH9538_ repeated with HSUPA mode

DUT: SAPP500;

Communication System: WCDMA B2; Frequency: 1907.6 MHz;Duty Cycle: 1:1
Medium: Body 1900 Medium parameters used: f = 1908 MHz; σ = 1.56 mho/m; ε_r = 53.7; ρ = 1000 kg/m^3
Phantom section: Flat Section

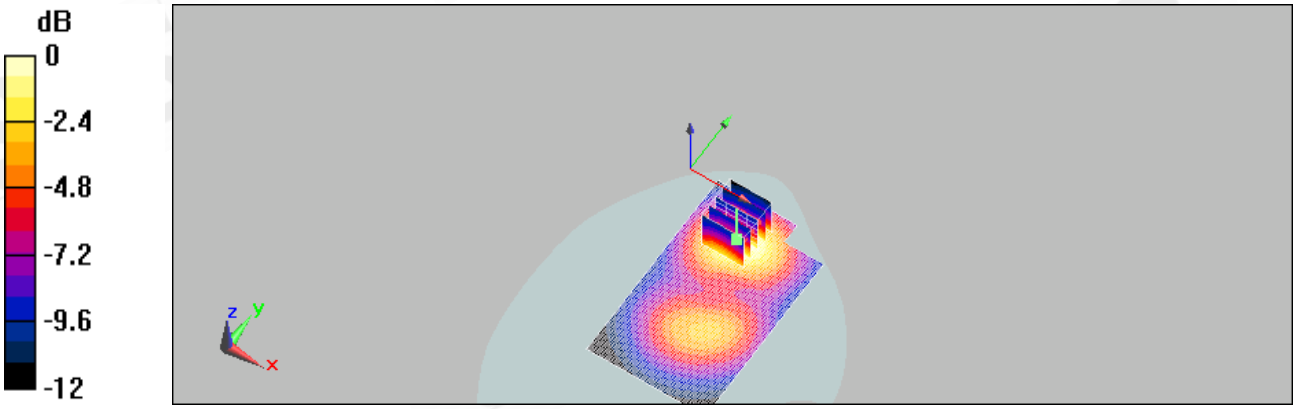
DASY5 Configuration:

- Probe: ES3DV3 - SN3172; ConvF(4.73, 4.73, 4.73); Calibrated: 6/23/2008
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn856; Calibrated: 5/7/2008
- Phantom: SAM1; Type: SAM;
- Measurement SW: DASY5, V5.0 Build 125; SEMCAD X Version 13.4 Build 125

Body/Area Scan (61x101x1): Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (interpolated) = 0.668 mW/g

Body/Zoom Scan (7x7x7) (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 10.1 V/m; Power Drift = -0.00281 dB
Peak SAR (extrapolated) = 0.952 W/kg

SAR(1 g) = 0.595 mW/g; SAR(10 g) = 0.368 mW/g
Maximum value of SAR (measured) = 0.642 mW/g



0 dB = 0.642mW/g

Date/Time: 04/15/2009 18:21:49

RE_Cheek_CH4132

DUT: SAPP500;

Communication System: WCDMA B5; Frequency: 826.4 MHz;Duty Cycle: 1:1
Medium: Head 900 Medium parameters used (extrapolated): f = 826.4 MHz; σ = 0.896 mho/m; ε_r = 42.3; ρ = 1000 kg/m^3
Phantom section: Right Section

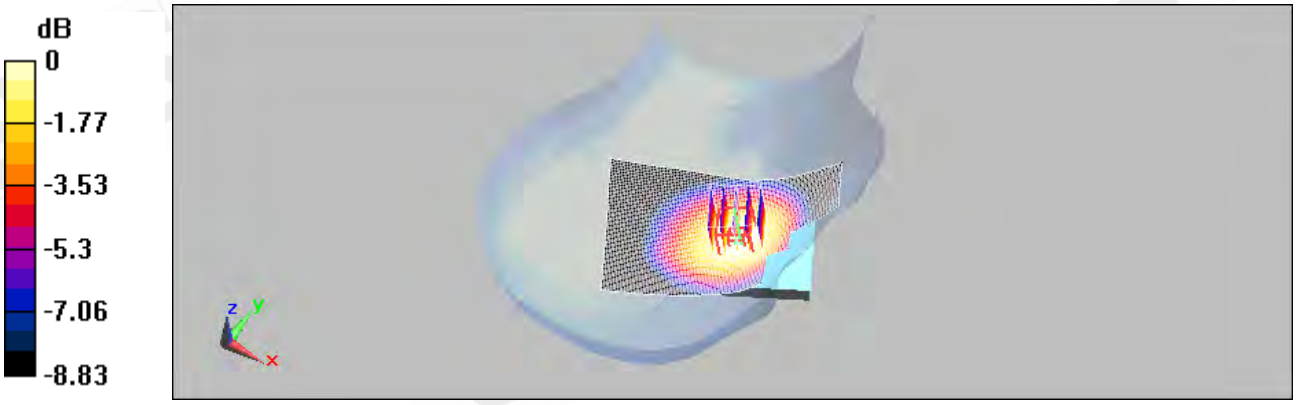
DASY5 Configuration:

- Probe: ES3DV3 - SN3172; ConvF(5.66, 5.66, 5.66); Calibrated: 6/23/2008
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn856; Calibrated: 5/7/2008
- Phantom: SAM1; Type: SAM;
- Measurement SW: DASY5, V5.0 Build 125; SEMCAD X Version 13.4 Build 125

RE Cheek/Area Scan (61x101x1): Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (interpolated) = 0.651 mW/g

RE Cheek/Zoom Scan (7x7x7) (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 11.7 V/m; Power Drift = 0.045 dB
Peak SAR (extrapolated) = 0.753 W/kg

SAR(1 g) = 0.622 mW/g; SAR(10 g) = 0.469 mW/g
Maximum value of SAR (measured) = 0.656 mW/g



0 dB = 0.656mW/g

Date/Time: 04/15/2009 18:47:27

RE_Cheek_CH4183

DUT: SAPP500;

Communication System: WCDMA B5; Frequency: 836.6 MHz;Duty Cycle: 1:1
Medium: Head 900 Medium parameters used (extrapolated): f = 836.6 MHz; σ = 0.907 mho/m; ε_r = 42.2; ρ = 1000 kg/m^3
Phantom section: Right Section

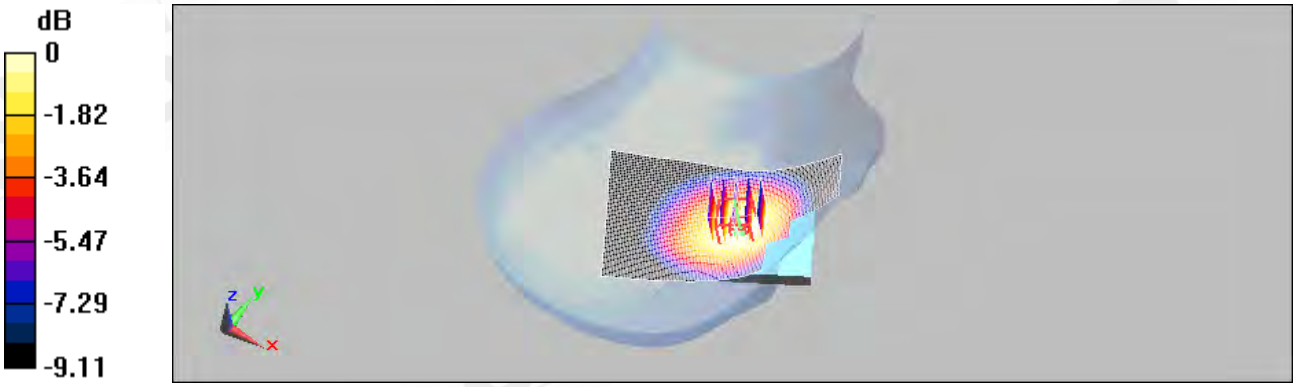
DASY5 Configuration:

- Probe: ES3DV3 - SN3172; ConvF(5.66, 5.66, 5.66); Calibrated: 6/23/2008
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn856; Calibrated: 5/7/2008
- Phantom: SAM1; Type: SAM;
- Measurement SW: DASY5, V5.0 Build 125; SEMCAD X Version 13.4 Build 125

RE Cheek/Area Scan (61x101x1): Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (interpolated) = 0.662 mW/g

RE Cheek/Zoom Scan (7x7x7) (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 11.1 V/m; Power Drift = -0.018 dB
Peak SAR (extrapolated) = 0.769 W/kg

SAR(1 g) = 0.633 mW/g; SAR(10 g) = 0.473 mW/g
Maximum value of SAR (measured) = 0.677 mW/g



0 dB = 0.677mW/g

Date/Time: 04/15/2009 19:11:43

RE_Cheek_CH4233

DUT: SAPP500;

Communication System: WCDMA B5; Frequency: 846.6 MHz;Duty Cycle: 1:1
Medium: Head 900 Medium parameters used (extrapolated): f = 846.6 MHz; σ = 0.917 mho/m; ε_r = 42.1; ρ = 1000 kg/m^3
Phantom section: Right Section

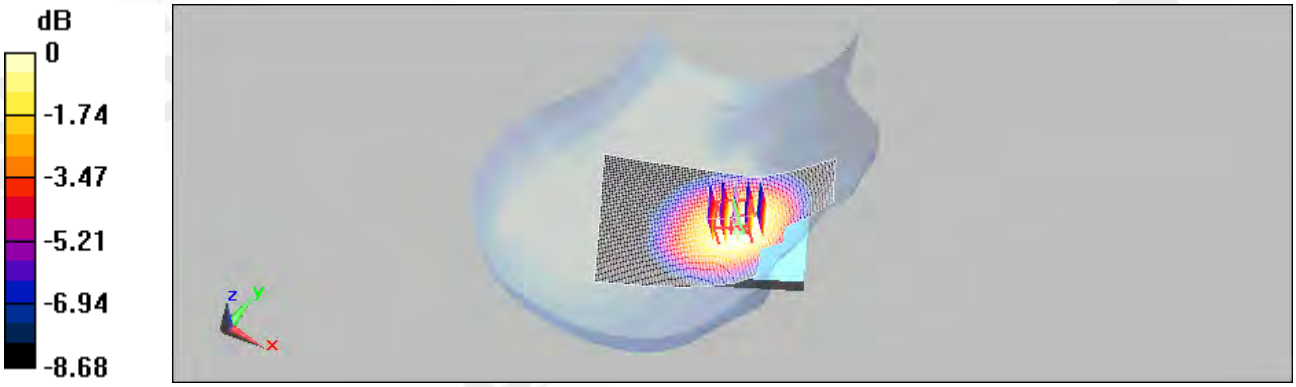
DASY5 Configuration:

- Probe: ES3DV3 - SN3172; ConvF(5.66, 5.66, 5.66); Calibrated: 6/23/2008
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn856; Calibrated: 5/7/2008
- Phantom: SAM1; Type: SAM;
- Measurement SW: DASY5, V5.0 Build 125; SEMCAD X Version 13.4 Build 125

RE Cheek/Area Scan (61x101x1): Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (interpolated) = 0.767 mW/g

RE Cheek/Zoom Scan (7x7x7) (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 10.5 V/m; Power Drift = 0.150 dB
Peak SAR (extrapolated) = 0.884 W/kg

SAR(1 g) = 0.722 mW/g; SAR(10 g) = 0.543 mW/g
Maximum value of SAR (measured) = 0.764 mW/g



0 dB = 0.764mW/g

Date/Time: 04/15/2009 20:57:46

LE_Cheek_CH4132

DUT: SAPP500;

Communication System: WCDMA B5; Frequency: 826.4 MHz;Duty Cycle: 1:1
Medium: Head 900 Medium parameters used (extrapolated): f = 826.4 MHz; σ = 0.896 mho/m; ε_r = 42.3; ρ = 1000 kg/m^3
Phantom section: Left Section

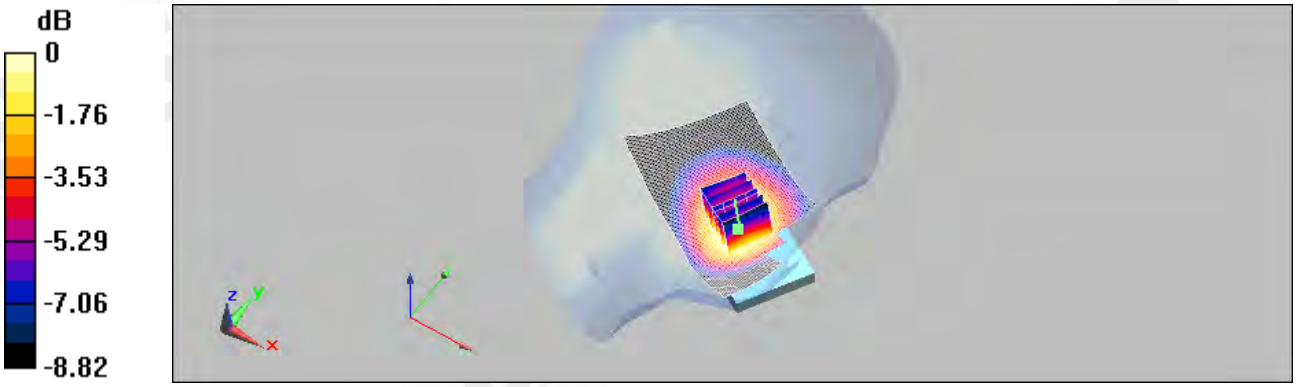
DASY5 Configuration:

- Probe: ES3DV3 - SN3172; ConvF(5.66, 5.66, 5.66); Calibrated: 6/23/2008
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn856; Calibrated: 5/7/2008
- Phantom: SAM1; Type: SAM;
- Measurement SW: DASY5, V5.0 Build 125; SEMCAD X Version 13.4 Build 125

LE Cheek/Area Scan (61x101x1): Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (interpolated) = 0.596 mW/g

LE Cheek/Zoom Scan (7x7x7) (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 11.9 V/m; Power Drift = 0.041 dB
Peak SAR (extrapolated) = 0.711 W/kg

SAR(1 g) = 0.572 mW/g; SAR(10 g) = 0.423 mW/g
Maximum value of SAR (measured) = 0.605 mW/g



0 dB = 0.605mW/g

Date/Time: 04/15/2009 21:23:17

LE_Cheek_CH4183

DUT: SAPP500;

Communication System: WCDMA B5; Frequency: 836.6 MHz;Duty Cycle: 1:1
Medium: Head 900 Medium parameters used (extrapolated): f = 836.6 MHz; σ = 0.907 mho/m; ε_r = 42.2; ρ = 1000 kg/m^3
Phantom section: Left Section

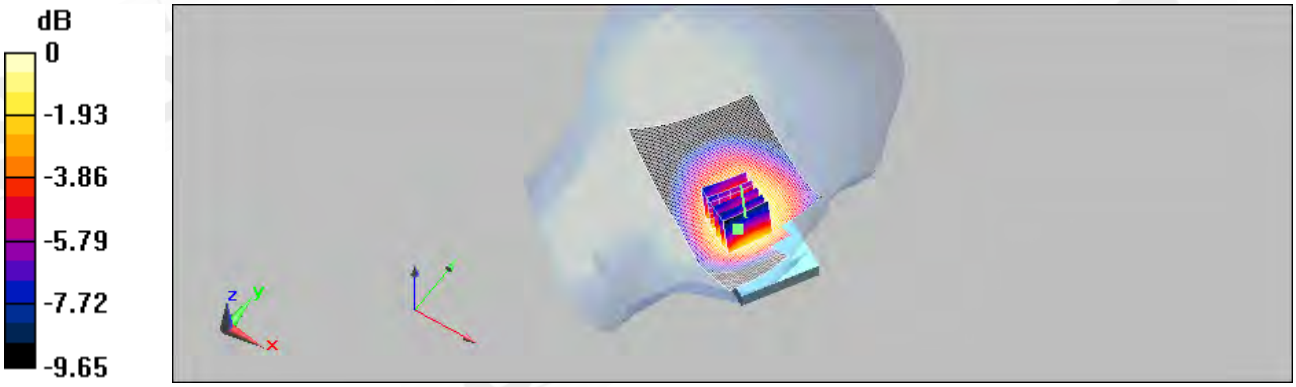
DASY5 Configuration:

- Probe: ES3DV3 - SN3172; ConvF(5.66, 5.66, 5.66); Calibrated: 6/23/2008
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn856; Calibrated: 5/7/2008
- Phantom: SAM1; Type: SAM;
- Measurement SW: DASY5, V5.0 Build 125; SEMCAD X Version 13.4 Build 125

LE Cheek/Area Scan (61x101x1): Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (interpolated) = 0.615 mW/g

LE Cheek/Zoom Scan (7x7x7) (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 11.9 V/m; Power Drift = 0.033 dB
Peak SAR (extrapolated) = 0.733 W/kg

SAR(1 g) = 0.587 mW/g; SAR(10 g) = 0.434 mW/g
Maximum value of SAR (measured) = 0.614 mW/g



0 dB = 0.614mW/g

Date/Time: 04/15/2009 21:47:32

LE_Cheek_CH4233

DUT: SAPP500;

Communication System: WCDMA B5; Frequency: 846.6 MHz;Duty Cycle: 1:1
Medium: Head 900 Medium parameters used (extrapolated): f = 846.6 MHz; σ = 0.917 mho/m; ε_r = 42.1; ρ = 1000 kg/m^3
Phantom section: Left Section

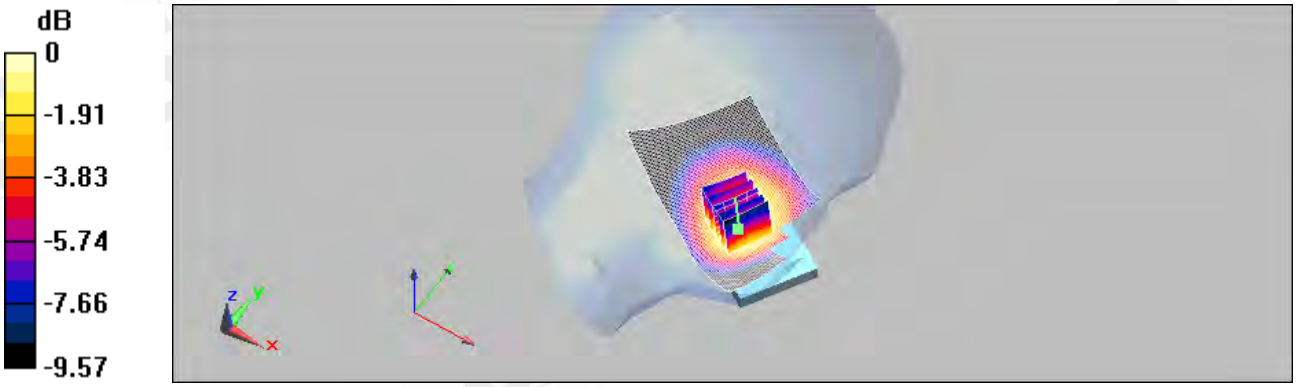
DASY5 Configuration:

- Probe: ES3DV3 - SN3172; ConvF(5.66, 5.66, 5.66); Calibrated: 6/23/2008
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn856; Calibrated: 5/7/2008
- Phantom: SAM1; Type: SAM;
- Measurement SW: DASY5, V5.0 Build 125; SEMCAD X Version 13.4 Build 125

LE Cheek/Area Scan (61x101x1): Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (interpolated) = 0.677 mW/g

LE Cheek/Zoom Scan (7x7x7) (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 12.3 V/m; Power Drift = 0.088 dB
Peak SAR (extrapolated) = 0.802 W/kg

SAR(1 g) = 0.638 mW/g; SAR(10 g) = 0.471 mW/g
Maximum value of SAR (measured) = 0.671 mW/g



0 dB = 0.671mW/g

Date/Time: 04/15/2009 19:37:56

RE_Tilt_CH4132

DUT: SAPP500;

Communication System: WCDMA B5; Frequency: 826.4 MHz;Duty Cycle: 1:1
Medium: Head 900 Medium parameters used (extrapolated): f = 826.4 MHz; σ = 0.896 mho/m; ε_r = 42.3; ρ = 1000 kg/m^3
Phantom section: Right Section

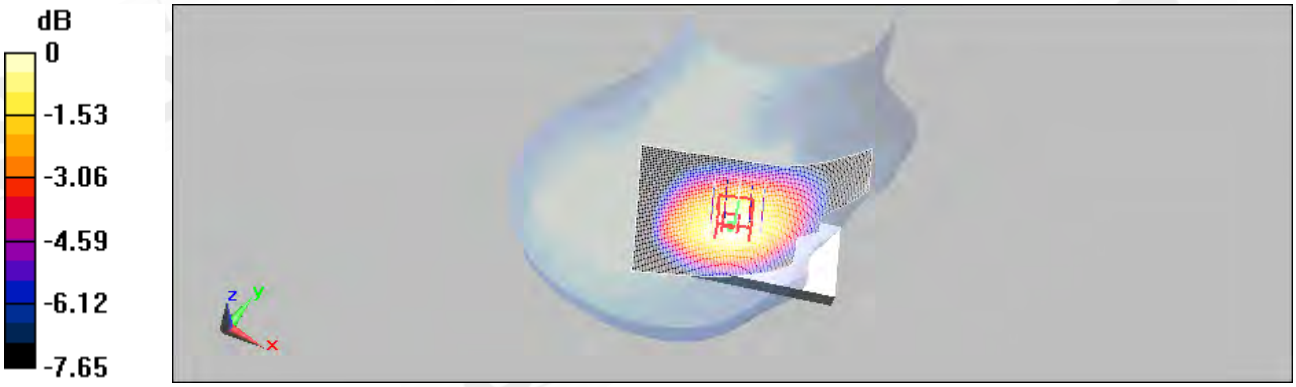
DASY5 Configuration:

- Probe: ES3DV3 - SN3172; ConvF(5.66, 5.66, 5.66); Calibrated: 6/23/2008
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn856; Calibrated: 5/7/2008
- Phantom: SAM1; Type: SAM;
- Measurement SW: DASY5, V5.0 Build 125; SEMCAD X Version 13.4 Build 125

RE Tilt/Area Scan (61x101x1): Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (interpolated) = 0.395 mW/g

RE Tilt/Zoom Scan (7x7x7) (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 16.1 V/m; Power Drift = 0.188 dB
Peak SAR (extrapolated) = 0.461 W/kg

SAR(1 g) = 0.376 mW/g; SAR(10 g) = 0.286 mW/g
Maximum value of SAR (measured) = 0.396 mW/g



0 dB = 0.396mW/g

Date/Time: 04/15/2009 20:04:21

RE_Tilt_CH4183

DUT: SAPP500;

Communication System: WCDMA B5; Frequency: 836.6 MHz;Duty Cycle: 1:1
Medium: Head 900 Medium parameters used (extrapolated): f = 836.6 MHz; σ = 0.907 mho/m; ε_r = 42.2; ρ = 1000 kg/m^3
Phantom section: Right Section

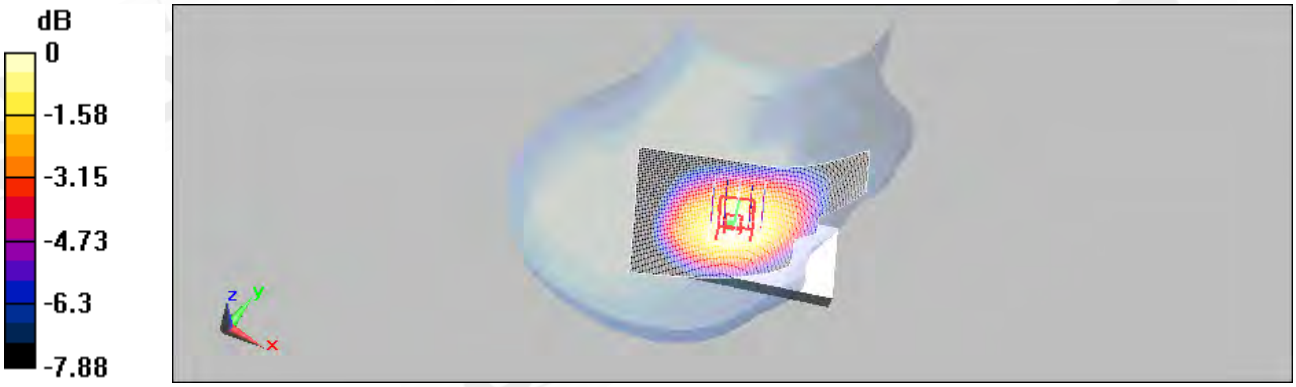
DASY5 Configuration:

- Probe: ES3DV3 - SN3172; ConvF(5.66, 5.66, 5.66); Calibrated: 6/23/2008
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn856; Calibrated: 5/7/2008
- Phantom: SAM1; Type: SAM;
- Measurement SW: DASY5, V5.0 Build 125; SEMCAD X Version 13.4 Build 125

RE Tilt/Area Scan (61x101x1): Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (interpolated) = 0.405 mW/g

RE Tilt/Zoom Scan (7x7x7) (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 15.4 V/m; Power Drift = 0.055 dB
Peak SAR (extrapolated) = 0.461 W/kg

SAR(1 g) = 0.383 mW/g; SAR(10 g) = 0.292 mW/g
Maximum value of SAR (measured) = 0.403 mW/g



0 dB = 0.403mW/g

Date/Time: 04/15/2009 20:29:21

RE_Tilt_CH4233

DUT: SAPP500;

Communication System: WCDMA B5; Frequency: 846.6 MHz;Duty Cycle: 1:1
Medium: Head 900 Medium parameters used (extrapolated): f = 846.6 MHz; σ = 0.917 mho/m; ε_r = 42.1; ρ = 1000 kg/m^3
Phantom section: Right Section

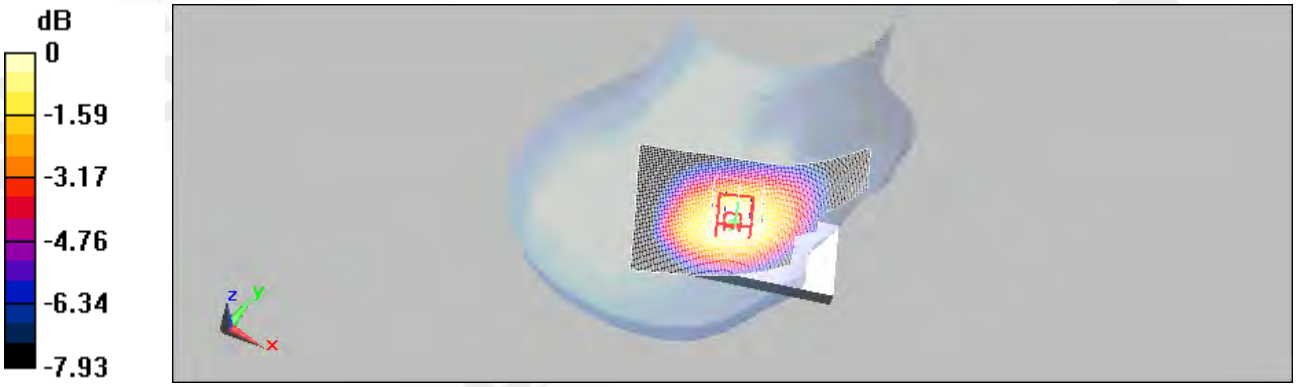
DASY5 Configuration:

- Probe: ES3DV3 - SN3172; ConvF(5.66, 5.66, 5.66); Calibrated: 6/23/2008
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn856; Calibrated: 5/7/2008
- Phantom: SAM1; Type: SAM;
- Measurement SW: DASY5, V5.0 Build 125; SEMCAD X Version 13.4 Build 125

RE Tilt/Area Scan (61x101x1): Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (interpolated) = 0.451 mW/g

RE Tilt/Zoom Scan (7x7x7) (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 16.5 V/m; Power Drift = 0.058 dB
Peak SAR (extrapolated) = 0.516 W/kg

SAR(1 g) = 0.424 mW/g; SAR(10 g) = 0.322 mW/g
Maximum value of SAR (measured) = 0.445 mW/g



0 dB = 0.445mW/g

Date/Time: 04/15/2009 22:13:25

LE_Tilt_CH4132

DUT: SAPP500;

Communication System: WCDMA B5; Frequency: 826.4 MHz;Duty Cycle: 1:1
Medium: Head 900 Medium parameters used (extrapolated): f = 826.4 MHz; σ = 0.896 mho/m; ε_r = 42.3; ρ = 1000 kg/m^3
Phantom section: Left Section

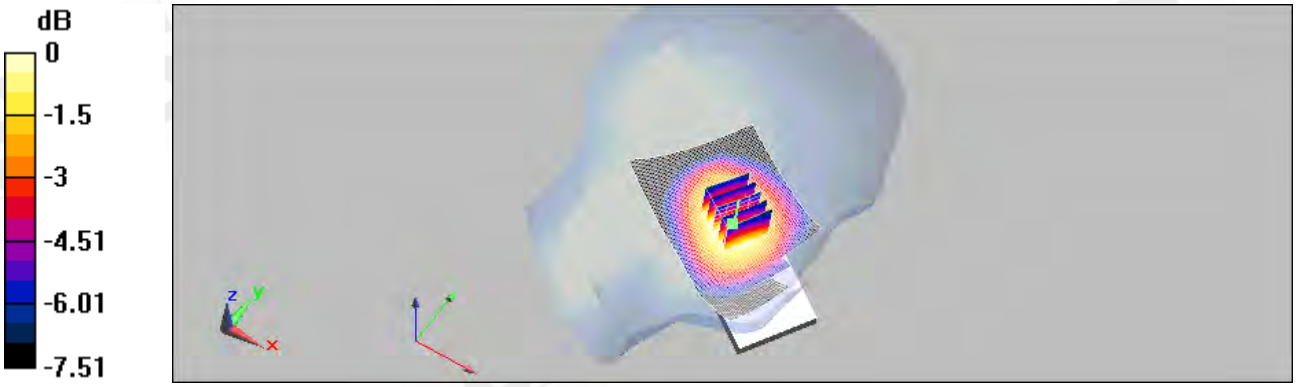
DASY5 Configuration:

- Probe: ES3DV3 - SN3172; ConvF(5.66, 5.66, 5.66); Calibrated: 6/23/2008
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn856; Calibrated: 5/7/2008
- Phantom: SAM1; Type: SAM;
- Measurement SW: DASY5, V5.0 Build 125; SEMCAD X Version 13.4 Build 125

LE Tilt/Area Scan (61x101x1): Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (interpolated) = 0.403 mW/g

LE Tilt/Zoom Scan (7x7x7) (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 16.5 V/m; Power Drift = 0.058 dB
Peak SAR (extrapolated) = 0.462 W/kg

SAR(1 g) = 0.380 mW/g; SAR(10 g) = 0.290 mW/g
Maximum value of SAR (measured) = 0.399 mW/g



0 dB = 0.399mW/g

Date/Time: 04/15/2009 22:38:35

LE_Tilt_CH4183

DUT: SAPP500;

Communication System: WCDMA B5; Frequency: 836.6 MHz;Duty Cycle: 1:1
Medium: Head 900 Medium parameters used (extrapolated): f = 836.6 MHz; σ = 0.907 mho/m; ε_r = 42.2; ρ = 1000 kg/m^3
Phantom section: Left Section

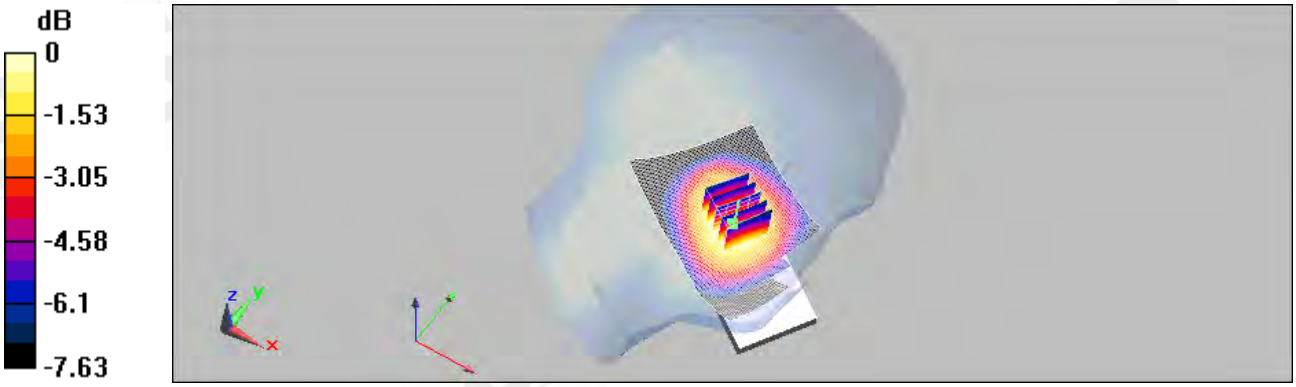
DASY5 Configuration:

- Probe: ES3DV3 - SN3172; ConvF(5.66, 5.66, 5.66); Calibrated: 6/23/2008
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn856; Calibrated: 5/7/2008
- Phantom: SAM1; Type: SAM;
- Measurement SW: DASY5, V5.0 Build 125; SEMCAD X Version 13.4 Build 125

LE Tilt/Area Scan (61x101x1): Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (interpolated) = 0.413 mW/g

LE Tilt/Zoom Scan (7x7x7) (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 16.5 V/m; Power Drift = 0.104 dB
Peak SAR (extrapolated) = 0.476 W/kg

SAR(1 g) = 0.390 mW/g; SAR(10 g) = 0.296 mW/g
Maximum value of SAR (measured) = 0.409 mW/g



0 dB = 0.409mW/g

Date/Time: 04/15/2009 23:02:42

LE_Tilt_CH4233

DUT: SAPP500;

Communication System: WCDMA B5; Frequency: 846.6 MHz;Duty Cycle: 1:1
Medium: Head 900 Medium parameters used (extrapolated): f = 846.6 MHz; σ = 0.917 mho/m; ε_r = 42.1; ρ = 1000 kg/m^3
Phantom section: Left Section

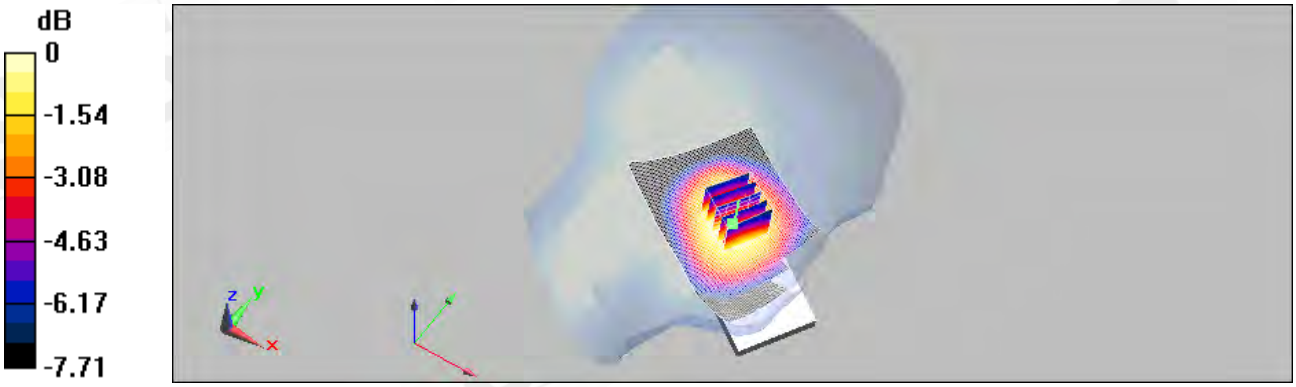
DASY5 Configuration:

- Probe: ES3DV3 - SN3172; ConvF(5.66, 5.66, 5.66); Calibrated: 6/23/2008
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn856; Calibrated: 5/7/2008
- Phantom: SAM1; Type: SAM;
- Measurement SW: DASY5, V5.0 Build 125; SEMCAD X Version 13.4 Build 125

LE Tilt/Area Scan (61x101x1): Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (interpolated) = 0.433 mW/g

LE Tilt/Zoom Scan (7x7x7) (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 17 V/m; Power Drift = 0.034 dB
Peak SAR (extrapolated) = 0.508 W/kg

SAR(1 g) = 0.414 mW/g; SAR(10 g) = 0.313 mW/g
Maximum value of SAR (measured) = 0.436 mW/g



0 dB = 0.436mW/g

Date/Time: 04/16/2009 12:09:12

Body_CH4132

DUT: SAPP500;

Communication System: WCDMA B5; Frequency: 826.4 MHz;Duty Cycle: 1:1
Medium: Body 900 Medium parameters used (extrapolated): f = 826.4 MHz; σ = 0.941 mho/m; ε_r = 55.2; ρ = 1000 kg/m^3
Phantom section: Flat Section

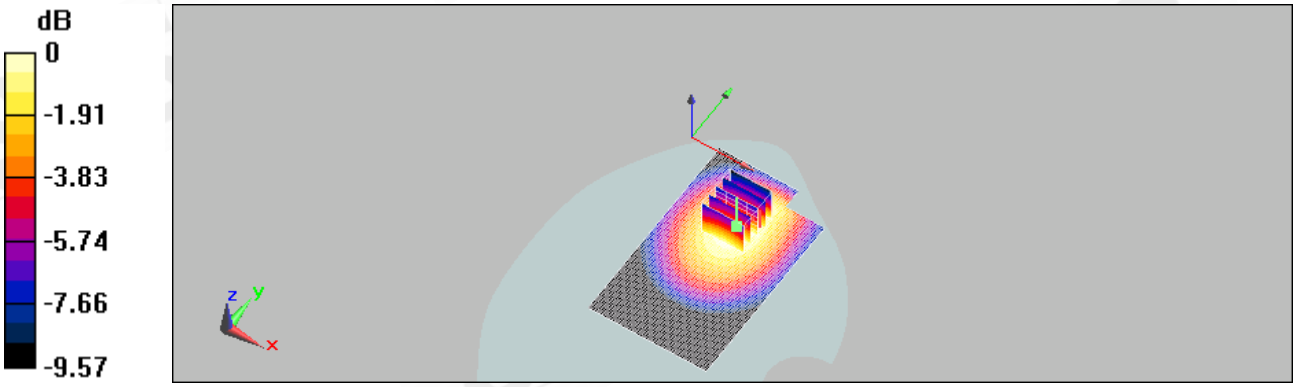
DASY5 Configuration:

- Probe: ES3DV3 - SN3172; ConvF(5.61, 5.61, 5.61); Calibrated: 6/23/2008
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn856; Calibrated: 5/7/2008
- Phantom: SAM1; Type: SAM;
- Measurement SW: DASY5, V5.0 Build 125; SEMCAD X Version 13.4 Build 125

Body/Area Scan (61x101x1): Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (interpolated) = 0.466 mW/g

Body/Zoom Scan (7x7x7) (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 6.34 V/m; Power Drift = -0.00994 dB
Peak SAR (extrapolated) = 0.561 W/kg

SAR(1 g) = 0.443 mW/g; SAR(10 g) = 0.327 mW/g
Maximum value of SAR (measured) = 0.467 mW/g



0 dB = 0.467mW/g

Date/Time: 04/16/2009 12:35:20

Body_CH4183

DUT: SAPP500;

Communication System: WCDMA B5; Frequency: 836.6 MHz;Duty Cycle: 1:1
Medium: Body 900 Medium parameters used (extrapolated): f = 836.6 MHz; σ = 0.952 mho/m; ε_r = 55.1; ρ = 1000 kg/m^3
Phantom section: Flat Section

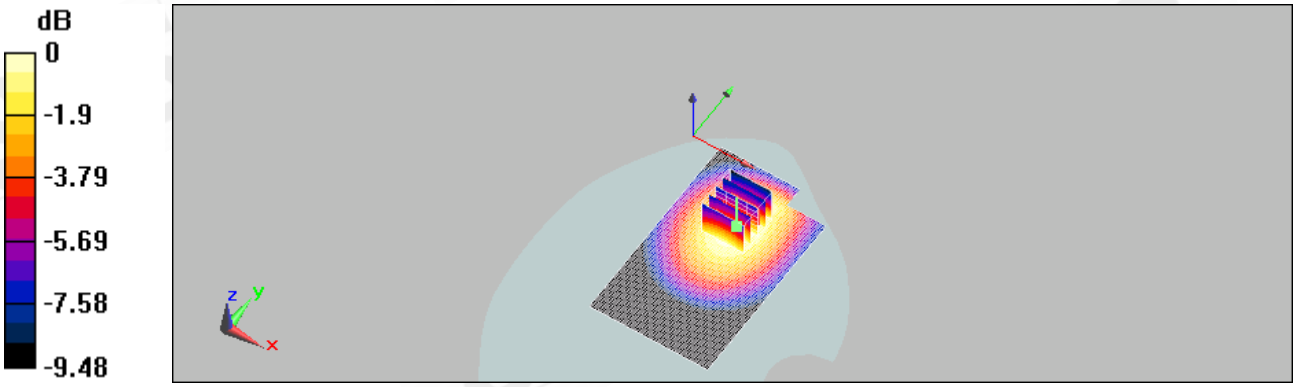
DASY5 Configuration:

- Probe: ES3DV3 - SN3172; ConvF(5.61, 5.61, 5.61); Calibrated: 6/23/2008
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn856; Calibrated: 5/7/2008
- Phantom: SAM1; Type: SAM;
- Measurement SW: DASY5, V5.0 Build 125; SEMCAD X Version 13.4 Build 125

Body/Area Scan (61x101x1): Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (interpolated) = 0.499 mW/g

Body/Zoom Scan (7x7x7) (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 6.29 V/m; Power Drift = 0.037 dB
Peak SAR (extrapolated) = 0.601 W/kg

SAR(1 g) = 0.473 mW/g; SAR(10 g) = 0.349 mW/g
Maximum value of SAR (measured) = 0.501 mW/g



0 dB = 0.501mW/g

Date/Time: 04/16/2009 13:03:58

Body_CH4233

DUT: SAPP500;

Communication System: WCDMA B5; Frequency: 846.6 MHz;Duty Cycle: 1:1
Medium: BODY 900 Medium parameters used (extrapolated): f = 846.6 MHz; σ = 0.964 mho/m; ε_r = 55.1; ρ = 1000 kg/m^3
Phantom section: Flat Section

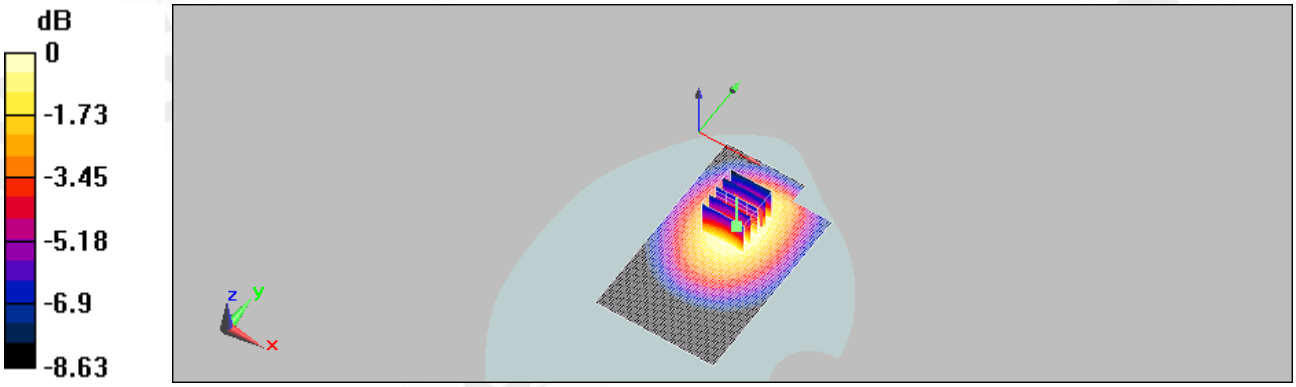
DASY5 Configuration:

- Probe: ES3DV3 - SN3172; ConvF(5.61, 5.61, 5.61); Calibrated: 6/23/2008
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn856; Calibrated: 5/7/2008
- Phantom: SAM1; Type: SAM;
- Measurement SW: DASY5, V5.0 Build 125; SEMCAD X Version 13.4 Build 125

BODY/Area Scan (61x101x1): Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (interpolated) = 0.493 mW/g

BODY/Zoom Scan (7x7x7) (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 7.96 V/m; Power Drift = 0.069 dB
Peak SAR (extrapolated) = 0.599 W/kg

SAR(1 g) = 0.476 mW/g; SAR(10 g) = 0.353 mW/g
Maximum value of SAR (measured) = 0.502 mW/g



0 dB = 0.502mW/g

Date/Time: 04/16/2009 13:30:24

Body_CH4132_repeated with HSDPA mode

DUT: SAPP500;

Communication System: WCDMA B5; Frequency: 826.4 MHz;Duty Cycle: 1:1
Medium: Body 900 Medium parameters used (extrapolated): f = 826.4 MHz; σ = 0.941 mho/m; ε_r = 55.2; ρ = 1000 kg/m^3
Phantom section: Flat Section

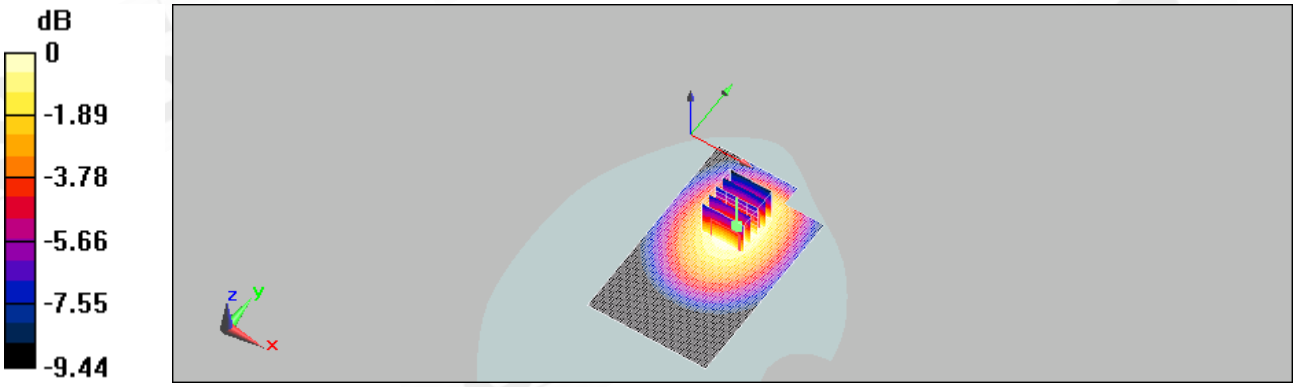
DASY5 Configuration:

- Probe: ES3DV3 - SN3172; ConvF(5.61, 5.61, 5.61); Calibrated: 6/23/2008
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn856; Calibrated: 5/7/2008
- Phantom: SAM1; Type: SAM;
- Measurement SW: DASY5, V5.0 Build 125; SEMCAD X Version 13.4 Build 125

Body/Area Scan (61x101x1): Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (interpolated) = 0.453 mW/g

Body/Zoom Scan (7x7x7) (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 6.65 V/m; Power Drift = 0.077 dB
Peak SAR (extrapolated) = 0.539 W/kg

SAR(1 g) = 0.427 mW/g; SAR(10 g) = 0.316 mW/g
Maximum value of SAR (measured) = 0.449 mW/g



0 dB = 0.449mW/g

Date/Time: 04/16/2009 13:59:43

Body_CH4183_ repeated with HSDPA mode

DUT: SAPP500;

Communication System: WCDMA B5; Frequency: 836.6 MHz;Duty Cycle: 1:1
Medium: Body 900 Medium parameters used (extrapolated): f = 836.6 MHz; σ = 0.952 mho/m; ε_r = 55.1; ρ = 1000 kg/m^3
Phantom section: Flat Section

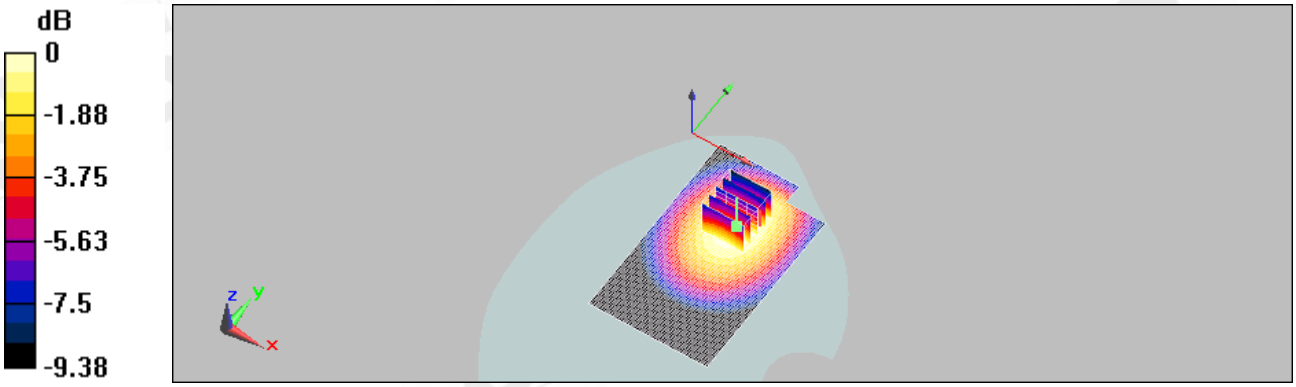
DASY5 Configuration:

- Probe: ES3DV3 - SN3172; ConvF(5.61, 5.61, 5.61); Calibrated: 6/23/2008
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn856; Calibrated: 5/7/2008
- Phantom: SAM1; Type: SAM;
- Measurement SW: DASY5, V5.0 Build 125; SEMCAD X Version 13.4 Build 125

Body/Area Scan (61x101x1): Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (interpolated) = 0.469 mW/g

Body/Zoom Scan (7x7x7) (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 6.85 V/m; Power Drift = 0.081 dB
Peak SAR (extrapolated) = 0.564 W/kg

SAR(1 g) = 0.447 mW/g; SAR(10 g) = 0.330 mW/g
Maximum value of SAR (measured) = 0.471 mW/g



0 dB = 0.471mW/g

Date/Time: 04/16/2009 14:25:37

Body_CH4233_ repeated with HSDPA mode

DUT: SAPP500;

Communication System: WCDMA B5; Frequency: 846.6 MHz;Duty Cycle: 1:1
Medium: Body 900 Medium parameters used (extrapolated): f = 846.6 MHz; σ = 0.964 mho/m; ε_r = 55.1; ρ = 1000 kg/m^3
Phantom section: Flat Section

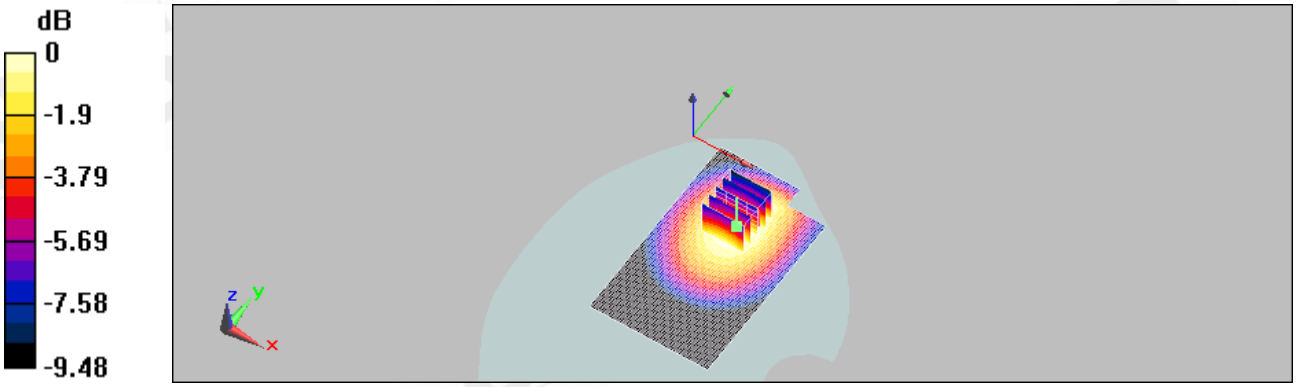
DASY5 Configuration:

- Probe: ES3DV3 - SN3172; ConvF(5.61, 5.61, 5.61); Calibrated: 6/23/2008
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn856; Calibrated: 5/7/2008
- Phantom: SAM1; Type: SAM;
- Measurement SW: DASY5, V5.0 Build 125; SEMCAD X Version 13.4 Build 125

Body/Area Scan (61x101x1): Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (interpolated) = 0.477 mW/g

Body/Zoom Scan (7x7x7) (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 6.05 V/m; Power Drift = 0.075 dB
Peak SAR (extrapolated) = 0.573 W/kg

SAR(1 g) = 0.451 mW/g; SAR(10 g) = 0.331 mW/g
Maximum value of SAR (measured) = 0.475 mW/g



0 dB = 0.475mW/g

Date/Time: 04/16/2009 14:49:56

Body_CH4132_ repeated with HSUPA mode

DUT: SAPP500;

Communication System: WCDMA B5; Frequency: 826.4 MHz;Duty Cycle: 1:1
Medium: Body 900 Medium parameters used (extrapolated): f = 826.4 MHz; σ = 0.941 mho/m; ε_r = 55.2; ρ = 1000 kg/m^3
Phantom section: Flat Section

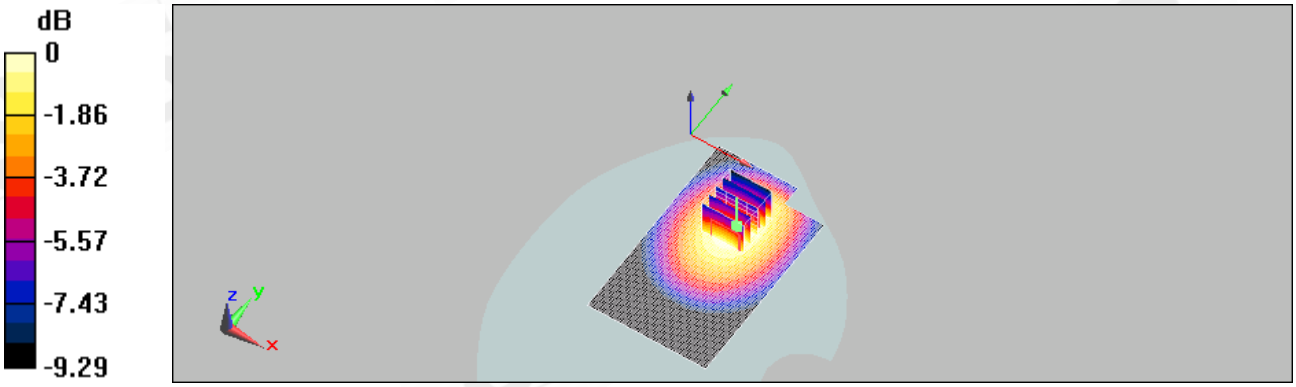
DASY5 Configuration:

- Probe: ES3DV3 - SN3172; ConvF(5.61, 5.61, 5.61); Calibrated: 6/23/2008
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn856; Calibrated: 5/7/2008
- Phantom: SAM1; Type: SAM;
- Measurement SW: DASY5, V5.0 Build 125; SEMCAD X Version 13.4 Build 125

Body/Area Scan (61x101x1): Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (interpolated) = 0.401 mW/g

Body/Zoom Scan (7x7x7) (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 6.31 V/m; Power Drift = 0.125 dB
Peak SAR (extrapolated) = 0.481 W/kg

SAR(1 g) = 0.382 mW/g; SAR(10 g) = 0.283 mW/g
Maximum value of SAR (measured) = 0.401 mW/g



0 dB = 0.401mW/g

Date/Time: 04/16/2009 15:17:44

Body_CH4183_ repeated with HSUPA mode

DUT: SAPP500;

Communication System: WCDMA B5; Frequency: 836.6 MHz;Duty Cycle: 1:1
Medium: Body 900 Medium parameters used (extrapolated): f = 836.6 MHz; σ = 0.952 mho/m; ε_r = 55.1; ρ = 1000 kg/m^3
Phantom section: Flat Section

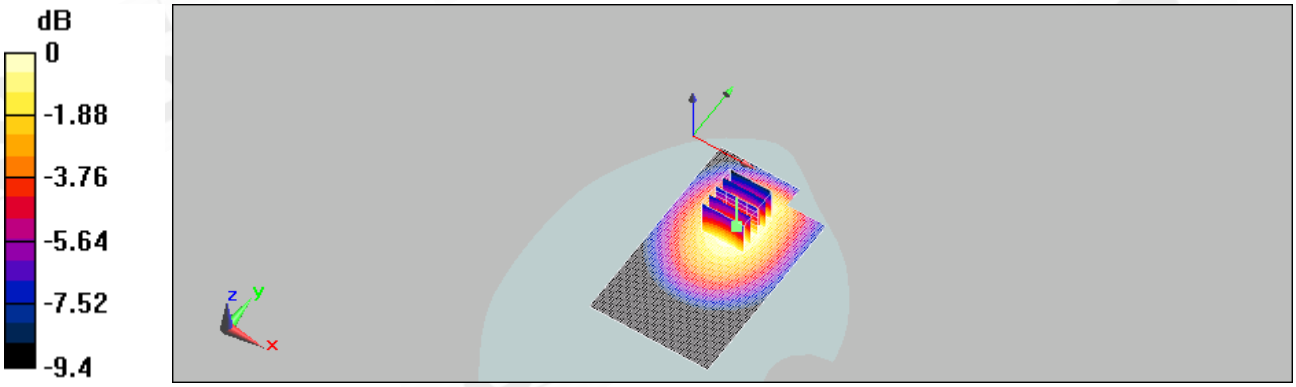
DASY5 Configuration:

- Probe: ES3DV3 - SN3172; ConvF(5.61, 5.61, 5.61); Calibrated: 6/23/2008
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn856; Calibrated: 5/7/2008
- Phantom: SAM1; Type: SAM;
- Measurement SW: DASY5, V5.0 Build 125; SEMCAD X Version 13.4 Build 125

Body/Area Scan (61x101x1): Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (interpolated) = 0.456 mW/g

Body/Zoom Scan (7x7x7) (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz= 5mm
Reference Value = 6.09 V/m; Power Drift = 0.073 dB
Peak SAR (extrapolated) = 0.549 W/kg

SAR(1 g) = 0.433 mW/g; SAR(10 g) = 0.319 mW/g
Maximum value of SAR (measured) = 0.457 mW/g



0 dB = 0.457mW/g

Date/Time: 04/16/2009 15:43:27

Body_CH4233_ repeated with HSUPA mode

DUT: SAPP500;

Communication System: WCDMA B5; Frequency: 846.6 MHz;Duty Cycle: 1:1
Medium: Body 900 Medium parameters used (extrapolated): f = 846.6 MHz; σ = 0.964 mho/m; ε_r = 55.1; ρ = 1000 kg/m^3
Phantom section: Flat Section

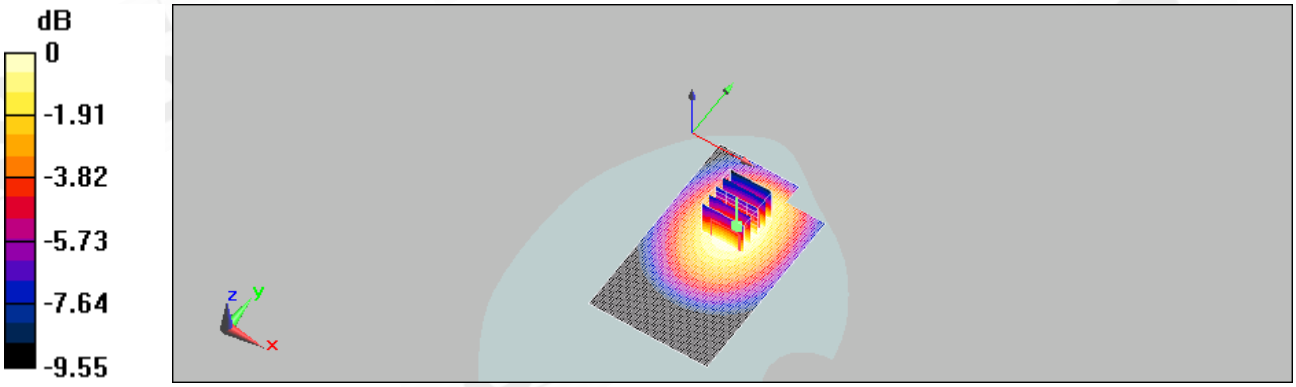
DASY5 Configuration:

- Probe: ES3DV3 - SN3172; ConvF(5.61, 5.61, 5.61); Calibrated: 6/23/2008
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn856; Calibrated: 5/7/2008
- Phantom: SAM1; Type: SAM;
- Measurement SW: DASY5, V5.0 Build 125; SEMCAD X Version 13.4 Build 125

Body/Area Scan (61x101x1): Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (interpolated) = 0.428 mW/g

Body/Zoom Scan (7x7x7) (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 6.69 V/m; Power Drift = -0.073 dB
Peak SAR (extrapolated) = 0.510 W/kg

SAR(1 g) = 0.403 mW/g; SAR(10 g) = 0.297 mW/g
Maximum value of SAR (measured) = 0.423 mW/g



0 dB = 0.423mW/g

Date/Time: 04/16/2009 19:20:27

Body_CH1_WLAN802.11 b

DUT: SAPP500;

Communication System: Wireless LAN; Frequency: 2412 MHz;Duty Cycle: 1:1
Medium: Body 2450 Medium parameters used: f = 2412 MHz; σ = 1.88 mho/m; ε_r = 51.8; ρ = 1000 kg/m^3
Phantom section: Flat Section

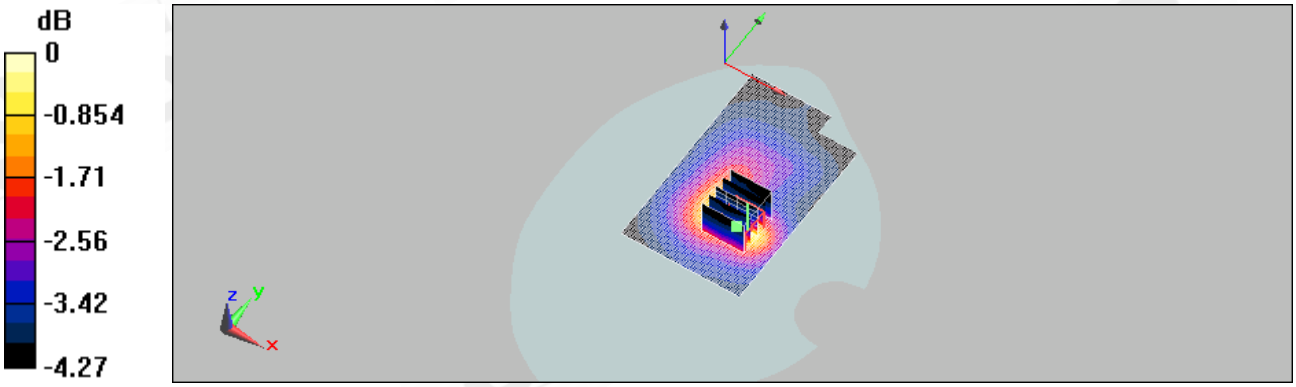
DASY5 Configuration:

- Probe: ES3DV3 - SN3172; ConvF(3.92, 3.92, 3.92); Calibrated: 6/23/2008
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn856; Calibrated: 5/7/2008
- Phantom: SAM1; Type: SAM;
- Measurement SW: DASY5, V5.0 Build 125; SEMCAD X Version 13.4 Build 125

Body/Area Scan (61x101x1): Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (interpolated) = 0.167 mW/g

Body/Zoom Scan (7x7x7) (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 7.46 V/m; Power Drift = -0.076 dB
Peak SAR (extrapolated) = 0.252 W/kg

SAR(1 g) = 0.159 mW/g; SAR(10 g) = 0.111 mW/g
Maximum value of SAR (measured) = 0.168 mW/g



0 dB = 0.168mW/g

Date/Time: 04/16/2009 19:48:15

Body_CH6_WLAN802.11 b

DUT: SAPP500;

Communication System: Wireless LAN; Frequency: 2437 MHz;Duty Cycle: 1:1
Medium: Body 2450 Medium parameters used: f = 2437 MHz; σ = 1.89 mho/m; ε_r = 51.7; ρ = 1000 kg/m^3
Phantom section: Flat Section

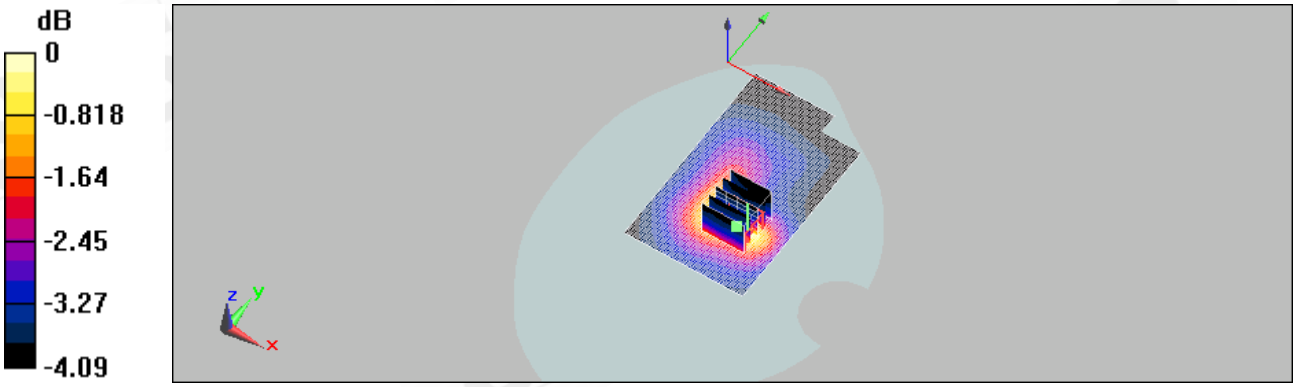
DASY5 Configuration:

- Probe: ES3DV3 - SN3172; ConvF(3.92, 3.92, 3.92); Calibrated: 6/23/2008
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn856; Calibrated: 5/7/2008
- Phantom: SAM1; Type: SAM;
- Measurement SW: DASY5, V5.0 Build 125; SEMCAD X Version 13.4 Build 125

Body/Area Scan (61x101x1): Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (interpolated) = 0.168 mW/g

Body/Zoom Scan (7x7x7) (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 8.1 V/m; Power Drift = -0.0016 dB
Peak SAR (extrapolated) = 0.264 W/kg

SAR(1 g) = 0.165 mW/g; SAR(10 g) = 0.118 mW/g
Maximum value of SAR (measured) = 0.175 mW/g



0 dB = 0.175mW/g

Date/Time: 04/16/2009 20:14:45

Body_CH11_WLAN802.11 b

DUT: SAPP500;

Communication System: Wireless LAN; Frequency: 2462 MHz;Duty Cycle: 1:1
Medium: Body 2450 Medium parameters used: f = 2462 MHz; σ = 1.93 mho/m; ε_r = 51.6; ρ = 1000 kg/m^3
Phantom section: Flat Section

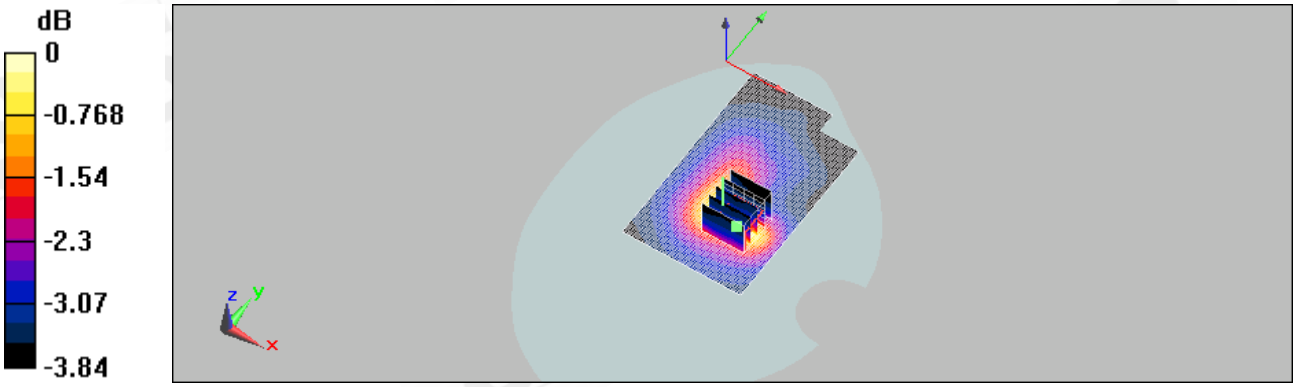
DASY5 Configuration:

- Probe: ES3DV3 - SN3172; ConvF(3.92, 3.92, 3.92); Calibrated: 6/23/2008
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn856; Calibrated: 5/7/2008
- Phantom: SAM1; Type: SAM;
- Measurement SW: DASY5, V5.0 Build 125; SEMCAD X Version 13.4 Build 125

Body/Area Scan (61x101x1): Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (interpolated) = 0.152 mW/g

Body/Zoom Scan (7x7x7) (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 7.33 V/m; Power Drift = -0.029 dB
Peak SAR (extrapolated) = 0.223 W/kg

SAR(1 g) = 0.144 mW/g; SAR(10 g) = 0.105 mW/g
Maximum value of SAR (measured) = 0.154 mW/g



0 dB = 0.154mW/g

Date/Time: 04/16/2009 22:04:22

Body_CH6_WLAN802.11 b_repeated for EUT front to phantom

DUT: SAPP500;

Communication System: Wireless LAN; Frequency: 2437 MHz;Duty Cycle: 1:1
Medium: Body 2450 Medium parameters used: f = 2437 MHz; σ = 1.89 mho/m; ε_r = 51.7; ρ = 1000 kg/m^3
Phantom section: Flat Section

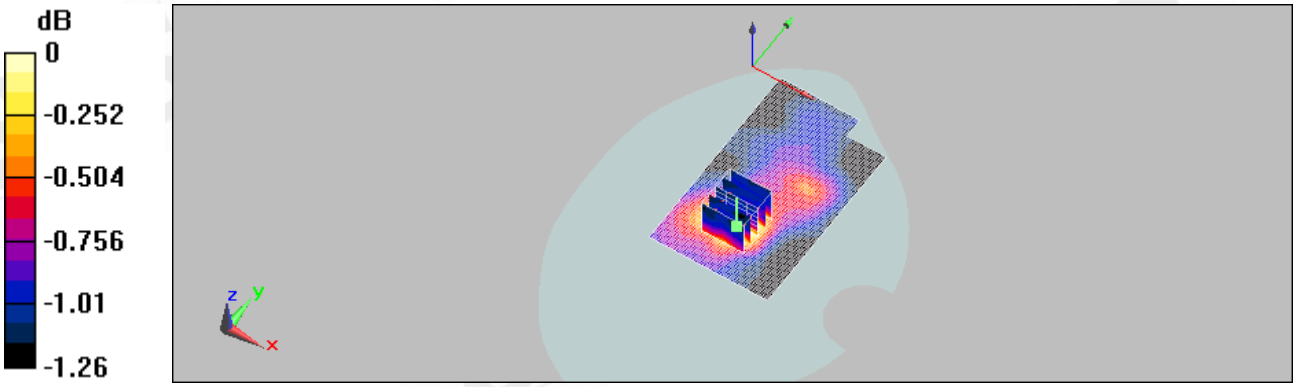
DASY5 Configuration:

- Probe: ES3DV3 - SN3172; ConvF(3.92, 3.92, 3.92); Calibrated: 6/23/2008
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn856; Calibrated: 5/7/2008
- Phantom: SAM1; Type: SAM;
- Measurement SW: DASY5, V5.0 Build 125; SEMCAD X Version 13.4 Build 125

Body/Area Scan (61x101x1): Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (interpolated) = 0.074 mW/g

Body/Zoom Scan (7x7x7) (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 6.04 V/m; Power Drift = 0.054 dB
Peak SAR (extrapolated) = 0.083 W/kg

SAR(1 g) = 0.070 mW/g; SAR(10 g) = 0.064 mW/g
Maximum value of SAR (measured) = 0.071 mW/g



0 dB = 0.071mW/g

Date/Time: 04/16/2009 22:31:43

Body_CH6_WLAN802.11 b_repeated with Memory card

DUT: SAPP500;

Communication System: Wireless LAN; Frequency: 2437 MHz;Duty Cycle: 1:1
Medium: Body 2450 Medium parameters used: f = 2437 MHz; σ = 1.89 mho/m; ε_r = 51.7; ρ = 1000 kg/m^3
Phantom section: Flat Section

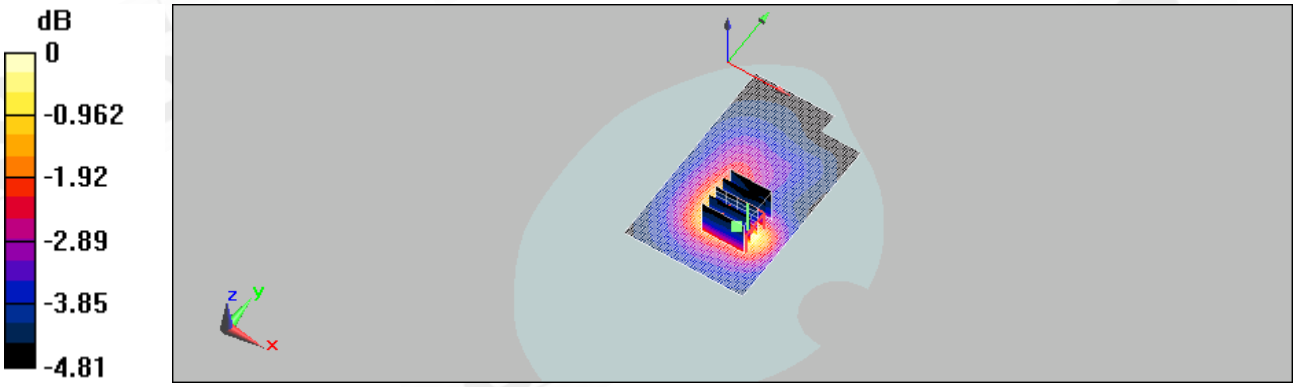
DASY5 Configuration:

- Probe: ES3DV3 - SN3172; ConvF(3.92, 3.92, 3.92); Calibrated: 6/23/2008
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn856; Calibrated: 5/7/2008
- Phantom: SAM1; Type: SAM;
- Measurement SW: DASY5, V5.0 Build 125; SEMCAD X Version 13.4 Build 125

Body/Area Scan (61x101x1): Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (interpolated) = 0.164 mW/g

Body/Zoom Scan (7x7x7) (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 7.57 V/m; Power Drift = -0.026 dB
Peak SAR (extrapolated) = 0.266 W/kg

SAR(1 g) = 0.162 mW/g; SAR(10 g) = 0.109 mW/g
Maximum value of SAR (measured) = 0.169 mW/g



0 dB = 0.169mW/g

Date/Time: 04/16/2009 22:59:30

Body_CH6_WLAN802.11 b_repeated with WELLDONE Battery

DUT: SAPP500;

Communication System: Wireless LAN; Frequency: 2437 MHz;Duty Cycle: 1:1
Medium: Body 2450 Medium parameters used: f = 2437 MHz; σ = 1.89 mho/m; ε_r = 51.7; ρ = 1000 kg/m^3
Phantom section: Flat Section

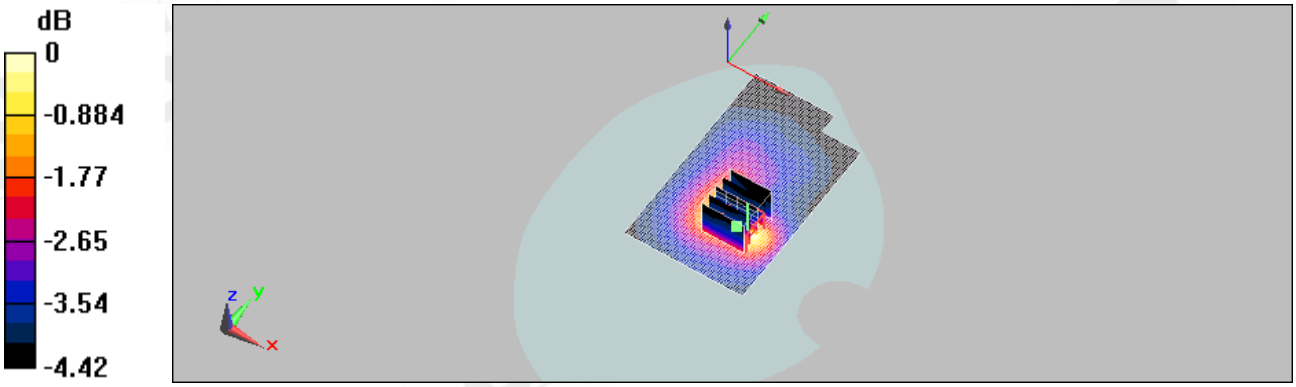
DASY5 Configuration:

- Probe: ES3DV3 - SN3172; ConvF(3.92, 3.92, 3.92); Calibrated: 6/23/2008
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn856; Calibrated: 5/7/2008
- Phantom: SAM1; Type: SAM;
- Measurement SW: DASY5, V5.0 Build 125; SEMCAD X Version 13.4 Build 125

Body/Area Scan (61x101x1): Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (interpolated) = 0.189 mW/g

Body/Zoom Scan (7x7x7) (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 8.17 V/m; Power Drift = -0.082 dB
Peak SAR (extrapolated) = 0.298 W/kg

SAR(1 g) = 0.184 mW/g; SAR(10 g) = 0.127 mW/g
Maximum value of SAR (measured) = 0.195 mW/g



0 dB = 0.195mW/g

Date/Time: 04/16/2009 20:41:18

Body_CH1_WLAN802.11 g

DUT: SAPP500;

Communication System: Wireless LAN; Frequency: 2412 MHz;Duty Cycle: 1:1
Medium: Body 2450 Medium parameters used: f = 2412 MHz; σ = 1.88 mho/m; ε_r = 51.8; ρ = 1000 kg/m^3
Phantom section: Flat Section

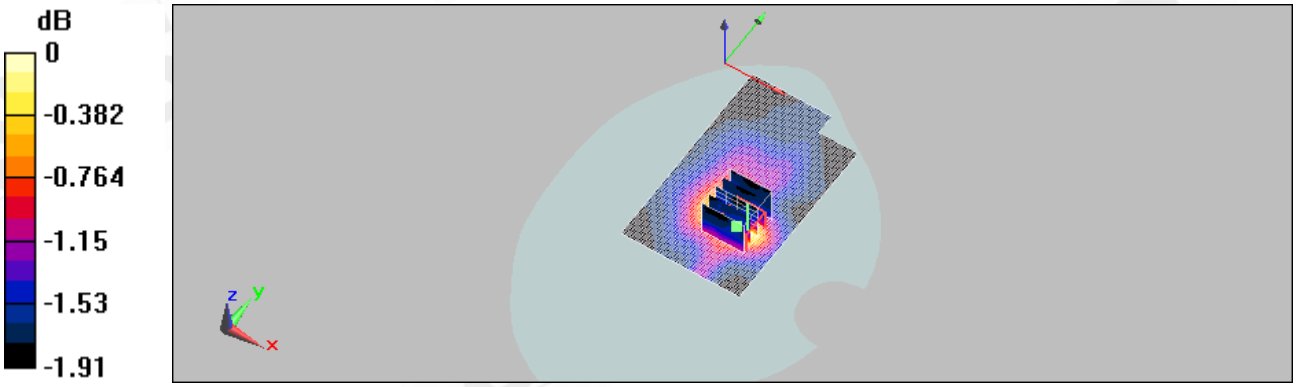
DASY5 Configuration:

- Probe: ES3DV3 - SN3172; ConvF(3.92, 3.92, 3.92); Calibrated: 6/23/2008
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn856; Calibrated: 5/7/2008
- Phantom: SAM1; Type: SAM;
- Measurement SW: DASY5, V5.0 Build 125; SEMCAD X Version 13.4 Build 125

Body/Area Scan (61x101x1): Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (interpolated) = 0.096 mW/g

Body/Zoom Scan (7x7x7) (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 6.22 V/m; Power Drift = -0.00953 dB
Peak SAR (extrapolated) = 0.114 W/kg

SAR(1 g) = 0.089 mW/g; SAR(10 g) = 0.075 mW/g
Maximum value of SAR (measured) = 0.092 mW/g



0 dB = 0.092mW/g

Date/Time: 04/16/2009 21:10:45

Body_CH6_WLAN802.11 g

DUT: SAPP500;

Communication System: Wireless LAN; Frequency: 2437 MHz;Duty Cycle: 1:1
Medium: Body 2450 Medium parameters used: f = 2437 MHz; σ = 1.89 mho/m; ε_r = 51.7; ρ = 1000 kg/m^3
Phantom section: Flat Section

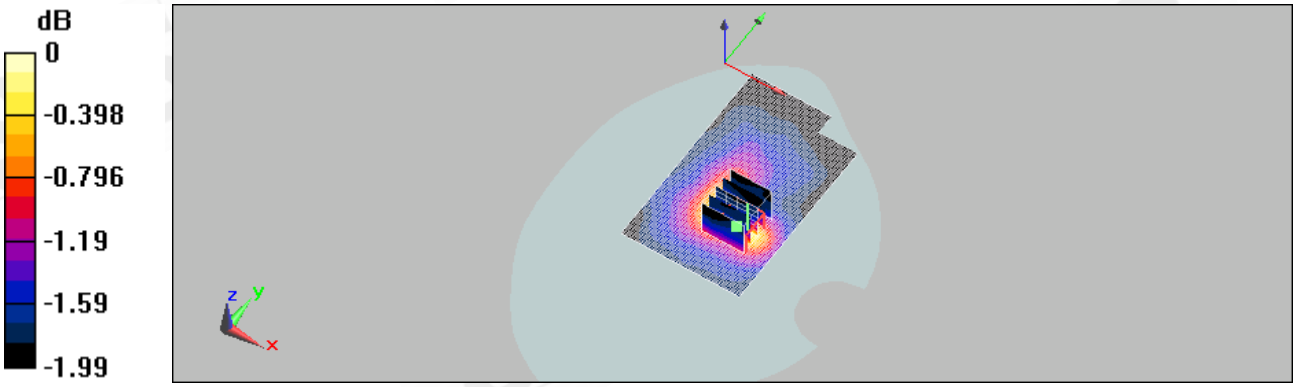
DASY5 Configuration:

- Probe: ES3DV3 - SN3172; ConvF(3.92, 3.92, 3.92); Calibrated: 6/23/2008
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn856; Calibrated: 5/7/2008
- Phantom: SAM1; Type: SAM;
- Measurement SW: DASY5, V5.0 Build 125; SEMCAD X Version 13.4 Build 125

Body/Area Scan (61x101x1): Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (interpolated) = 0.093 mW/g

Body/Zoom Scan (7x7x7) (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 6.23 V/m; Power Drift = -0.054 dB
Peak SAR (extrapolated) = 0.121 W/kg

SAR(1 g) = 0.089 mW/g; SAR(10 g) = 0.074 mW/g
Maximum value of SAR (measured) = 0.092 mW/g



0 dB = 0.092mW/g

Date/Time: 04/16/2009 21:36:45

Body_CH11_WLAN802.11 g

DUT: SAPP500;

Communication System: Wireless LAN; Frequency: 2462 MHz;Duty Cycle: 1:1
Medium: Body 2450 Medium parameters used: f = 2462 MHz; σ = 1.93 mho/m; ε_r = 51.6; ρ = 1000 kg/m^3
Phantom section: Flat Section

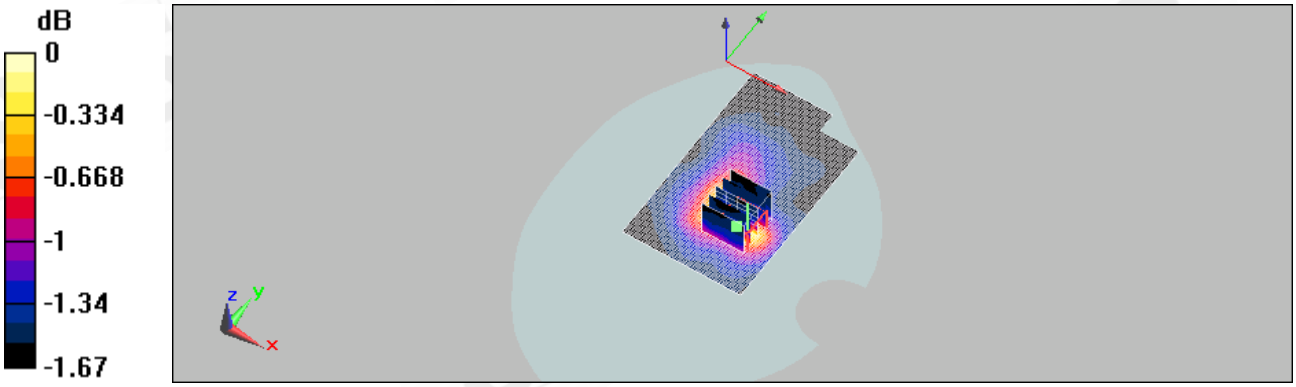
DASY5 Configuration:

- Probe: ES3DV3 - SN3172; ConvF(3.92, 3.92, 3.92); Calibrated: 6/23/2008
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn856; Calibrated: 5/7/2008
- Phantom: SAM1; Type: SAM;
- Measurement SW: DASY5, V5.0 Build 125; SEMCAD X Version 13.4 Build 125

Body/Area Scan (61x101x1): Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (interpolated) = 0.084 mW/g

Body/Zoom Scan (7x7x7) (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 5.97 V/m; Power Drift = 0.090 dB
Peak SAR (extrapolated) = 0.100 W/kg

SAR(1 g) = 0.080 mW/g; SAR(10 g) = 0.069 mW/g
Maximum value of SAR (measured) = 0.084 mW/g



0 dB = 0.084mW/g

Date/Time: 04/17/2009 01:38:43

RE_Cheek_CH251

DUT: SAPP500;

Communication System: GSM 850; Frequency: 848.8 MHz;Duty Cycle: 1:8.3
Medium: Head 900 Medium parameters used (extrapolated): f = 848.8 MHz; σ = 0.917 mho/m; ε_r = 42.1; ρ = 1000 kg/m^3
Phantom section: Right Section

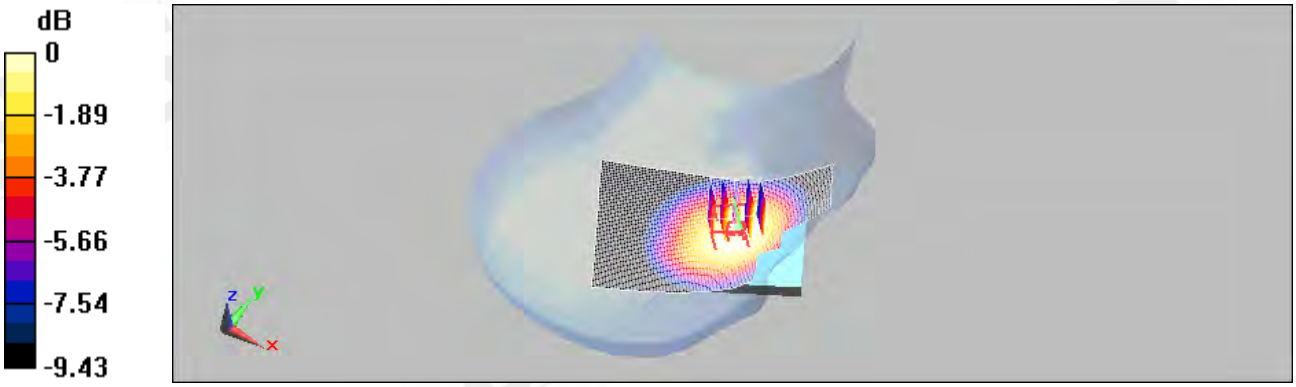
DASY5 Configuration:

- Probe: ES3DV3 - SN3172; ConvF(5.66, 5.66, 5.66); Calibrated: 6/23/2008
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn856; Calibrated: 5/7/2008
- Phantom: SAM1; Type: SAM;
- Measurement SW: DASY5, V5.0 Build 125; SEMCAD X Version 13.4 Build 125

RE Cheek/Area Scan (61x101x1): Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (interpolated) = 1.05 mW/g

RE Cheek/Zoom Scan (7x7x7) (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 11.2 V/m; Power Drift = -0.020 dB
Peak SAR (extrapolated) = 1.23 W/kg

SAR(1 g) = 0.982 mW/g; SAR(10 g) = 0.735 mW/g
Maximum value of SAR (measured) = 1.03 mW/g



0 dB = 1.03mW/g

Date/Time: 04/17/2009 10:21:38

BODY_CH251_ repeated with headset

DUT: SAPP500;

Communication System: GSM 850; Frequency: 848.8 MHz;Duty Cycle: 1:4
Medium: Body 900 Medium parameters used: f = 849 MHz; σ = 0.975 mho/m; ε_r = 55.8; ρ = 1000 kg/m^3
Phantom section: Flat Section

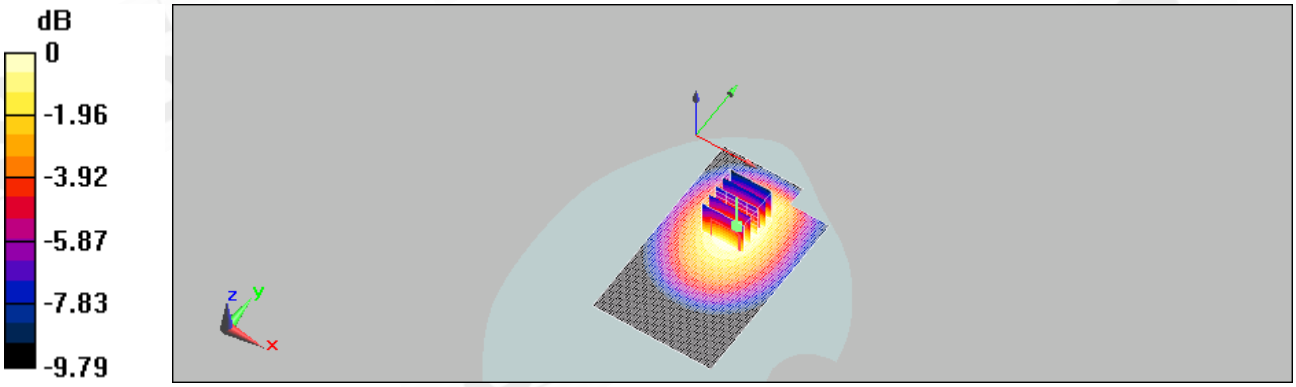
DASY5 Configuration:

- Probe: ES3DV3 - SN3172; ConvF(5.61, 5.61, 5.61); Calibrated: 6/23/2008
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn856; Calibrated: 5/7/2008
- Phantom: SAM1; Type: SAM;
- Measurement SW: DASY5, V5.0 Build 125; SEMCAD X Version 13.4 Build 125

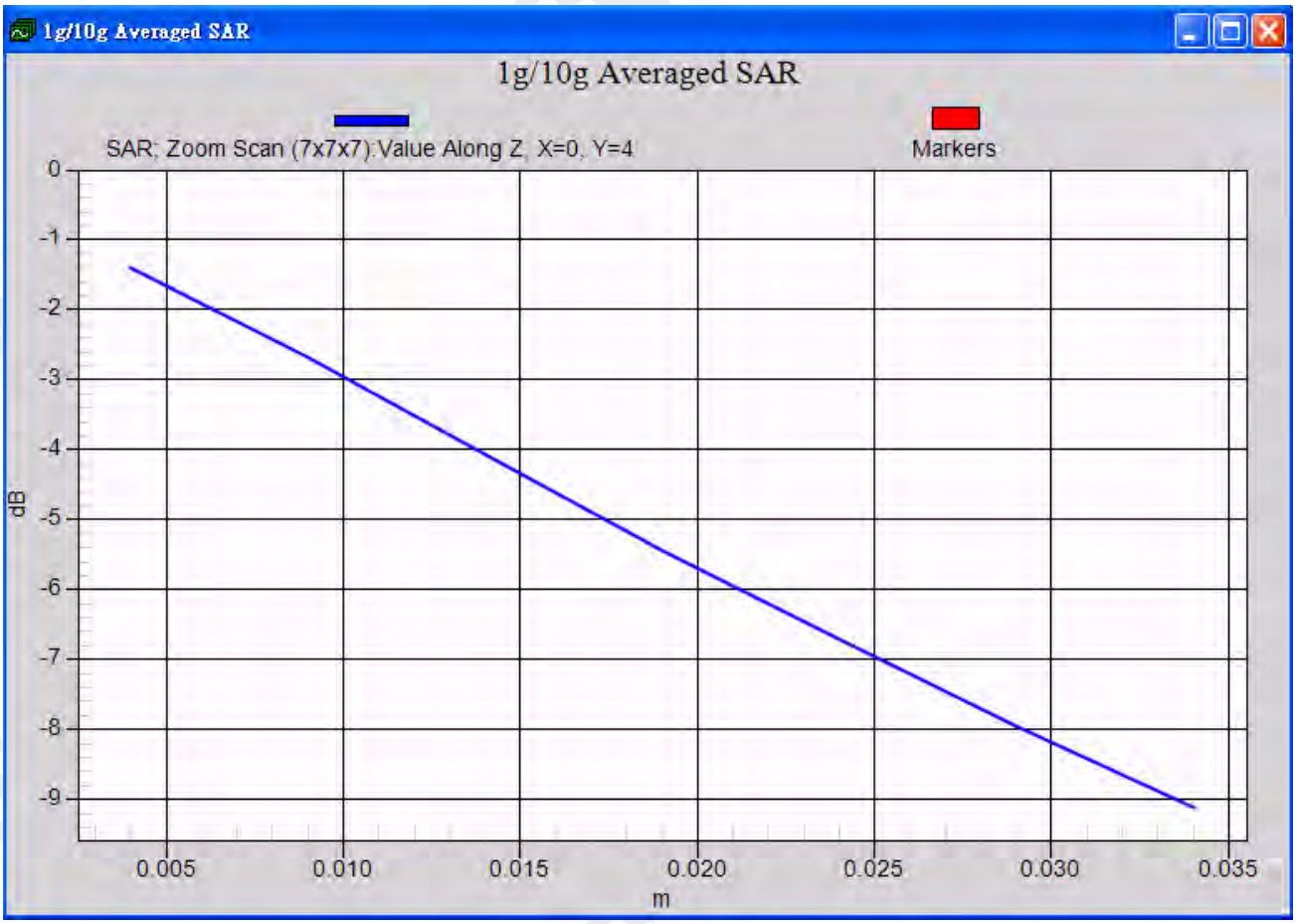
Body/Area Scan (61x101x1): Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (interpolated) = 1.26 mW/g

Body/Zoom Scan (7x7x7) (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz= 5mm
Reference Value = 10.7 V/m; Power Drift = -0.106 dB
Peak SAR (extrapolated) = 1.52 W/kg

SAR(1 g) = 1.2 mW/g; SAR(10 g) = 0.884 mW/g
Maximum value of SAR (measured) = 1.26 mW/g



0 dB = 1.26mW/g



Date/Time: 04/17/2009 05:58:39

LE_Cheek_CH661

DUT: SAPP500;

Communication System: GSM 1900; Frequency: 1880 MHz;Duty Cycle: 1:8.3
Medium: Head 1900 Medium parameters used: f = 1880 MHz; σ = 1.46 mho/m; ε_r = 40.4; ρ = 1000 kg/m^3
Phantom section: Left Section

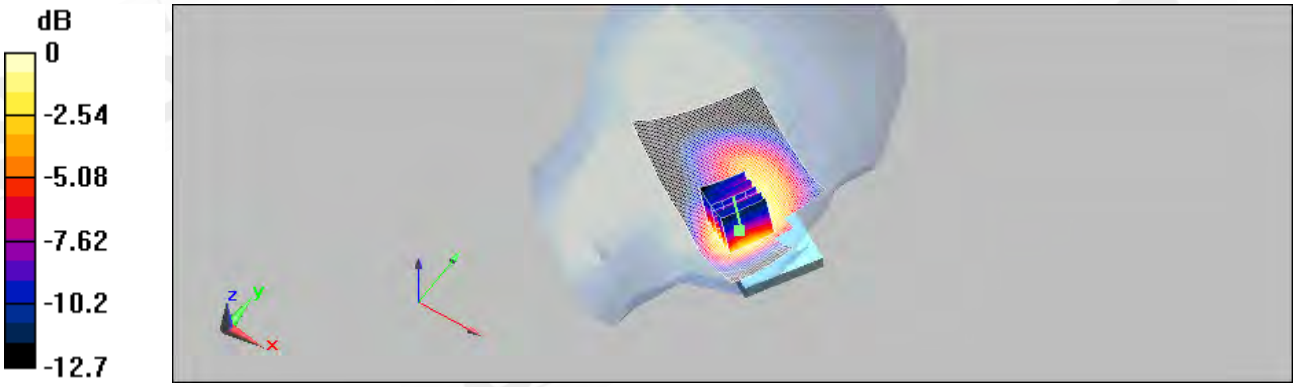
DASY5 Configuration:

- Probe: ES3DV3 - SN3172; ConvF(4.97, 4.97, 4.97); Calibrated: 6/23/2008
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn856; Calibrated: 5/7/2008
- Phantom: SAM1; Type: SAM;
- Measurement SW: DASY5, V5.0 Build 125; SEMCAD X Version 13.4 Build 125

LE Cheek/Area Scan (61x101x1): Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (interpolated) = 1.51 mW/g

LE Cheek/Zoom Scan (7x7x7) (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 11.2 V/m; Power Drift = -0.162 dB
Peak SAR (extrapolated) = 2.02 W/kg

SAR(1 g) = 1.29 mW/g; SAR(10 g) = 0.802 mW/g
Maximum value of SAR (measured) = 1.37 mW/g



0 dB = 1.37mW/g

Date/Time: 04/17/2009 17:33:45

BODY_CH512

DUT: SAPP500;

Communication System: GSM 1900; Frequency: 1850.2 MHz;Duty Cycle: 1:4
Medium: Body 1900 Medium parameters used (interpolated): f = 1850.2 MHz; σ = 1.48 mho/m; ε_r = 53.8; ρ = 1000 kg/m^3
Phantom section: Flat Section

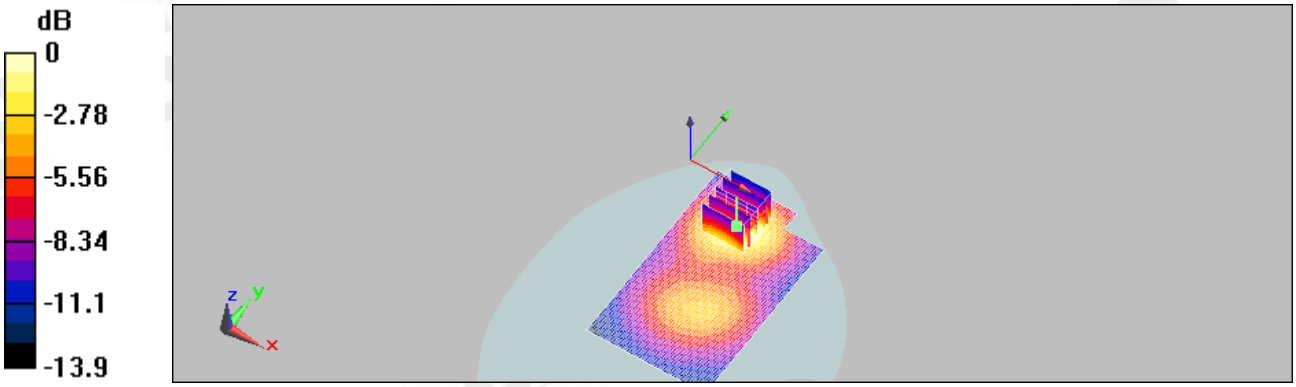
DASY5 Configuration:

- Probe: ES3DV3 - SN3172; ConvF(4.73, 4.73, 4.73); Calibrated: 6/23/2008
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn856; Calibrated: 5/7/2008
- Phantom: SAM1; Type: SAM;
- Measurement SW: DASY5, V5.0 Build 125; SEMCAD X Version 13.4 Build 125

Body/Area Scan (61x101x1): Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (interpolated) = 0.970 mW/g

Body/Zoom Scan (7x7x7) (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 12 V/m; Power Drift = 0.024 dB
Peak SAR (extrapolated) = 1.37 W/kg

SAR(1 g) = 0.839 mW/g; SAR(10 g) = 0.488 mW/g
Maximum value of SAR (measured) = 0.940 mW/g



0 dB = 0.940mW/g

Date/Time: 04/17/2009 07:27:09

LE_Cheek_CH9400_ repeated with Memory card

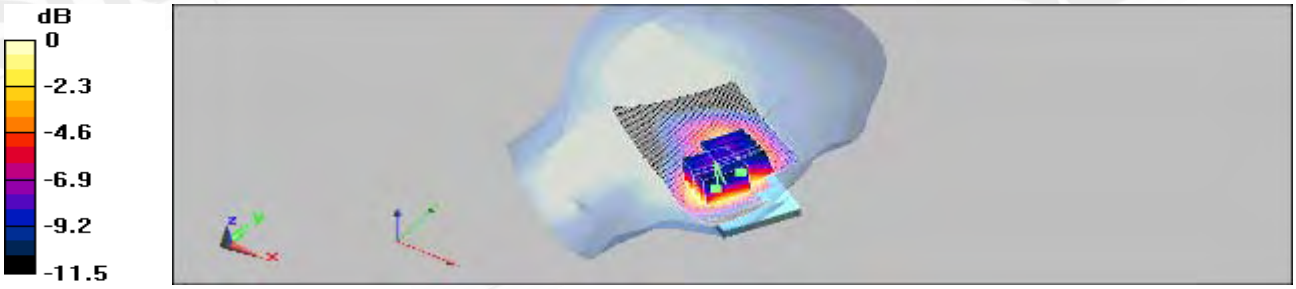
DUT: SAPP500;

Communication System: WCDMA B2; Frequency: 1880 MHz;Duty Cycle: 1:1
Medium: Head 1900 Medium parameters used: f = 1880 MHz; σ = 1.46 mho/m; ε_r = 40.4; ρ = 1000 kg/m^3
Phantom section: Left Section

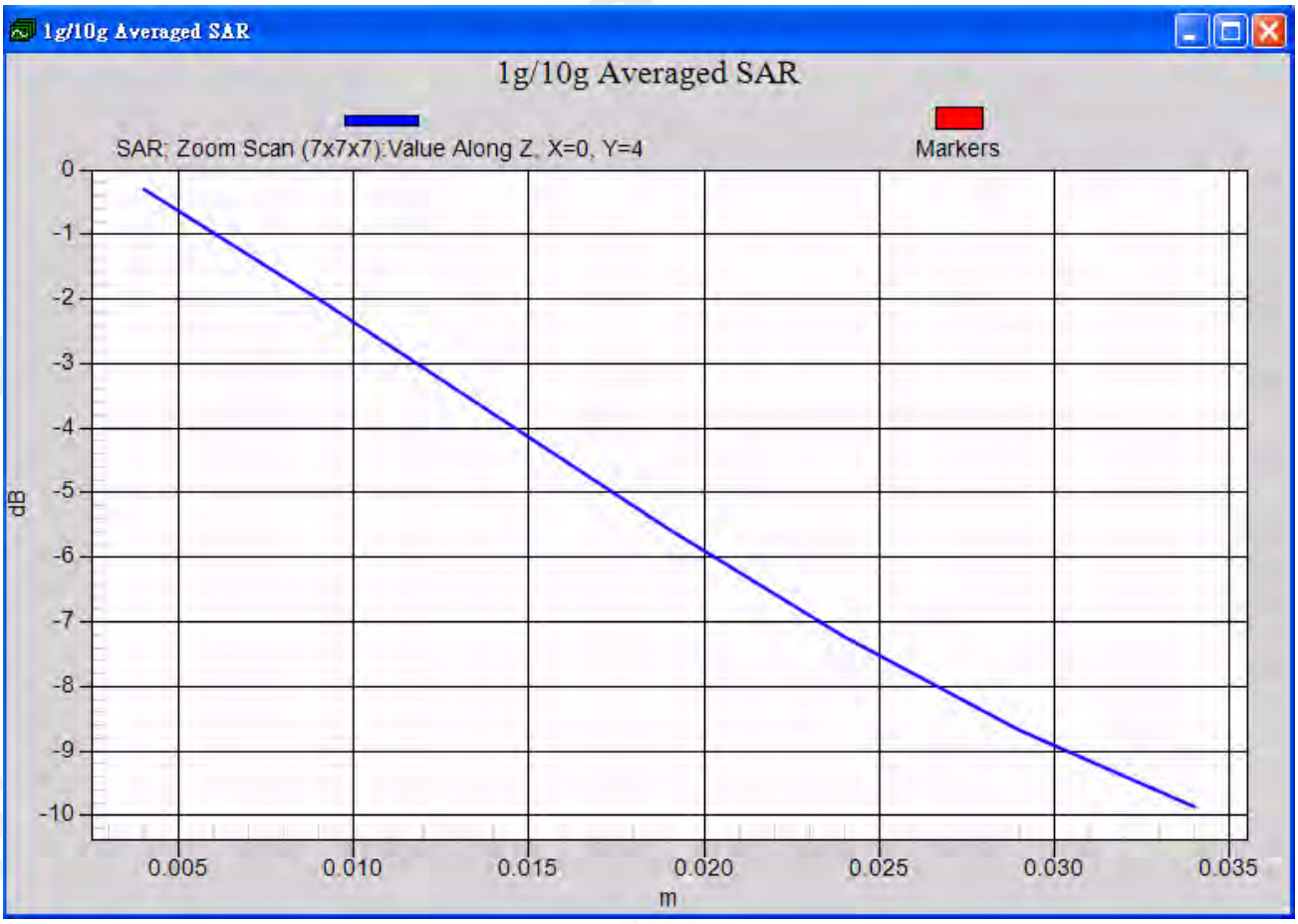
- Probe: ES3DV3 - SN3172; ConvF(4.97, 4.97, 4.97); Calibrated: 6/23/2008
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn856; Calibrated: 5/7/2008
- Phantom: SAM1; Type: SAM;
- Measurement SW: DASY5, V5.0 Build 125; SEMCAD X Version 13.4 Build 125

LE Cheek/Area Scan (61x101x1): Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (interpolated) = 1.66 mW/g
LE Cheek/Zoom Scan (7x7x7) (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 13.9 V/m; Power Drift = -0.114 dB
Peak SAR (extrapolated) = 2.31 W/kg
SAR(1 g) = 1.52 mW/g; SAR(10 g) = 0.957 mW/g
Maximum value of SAR (measured) = 1.64 mW/g

LE Cheek/Zoom Scan (7x7x7) (5x5x7)/Cube 1: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 13.9 V/m; Power Drift = -0.114 dB
Peak SAR (extrapolated) = 1.89 W/kg
SAR(1 g) = 1.25 mW/g; SAR(10 g) = 0.825 mW/g
Maximum value of SAR (measured) = 1.48 mW/g



0 dB = 1.48mW/g



Date/Time: 04/17/2009 18:58:37

BODY_CH9400

DUT: SAPP500;

Communication System: WCDMA B2; Frequency: 1880 MHz;Duty Cycle: 1:1
Medium: BODY 1900 Medium parameters used: f = 1880 MHz; σ = 1.49 mho/m; ε_r = 53.5; ρ = 1000 kg/m^3
Phantom section: Flat Section

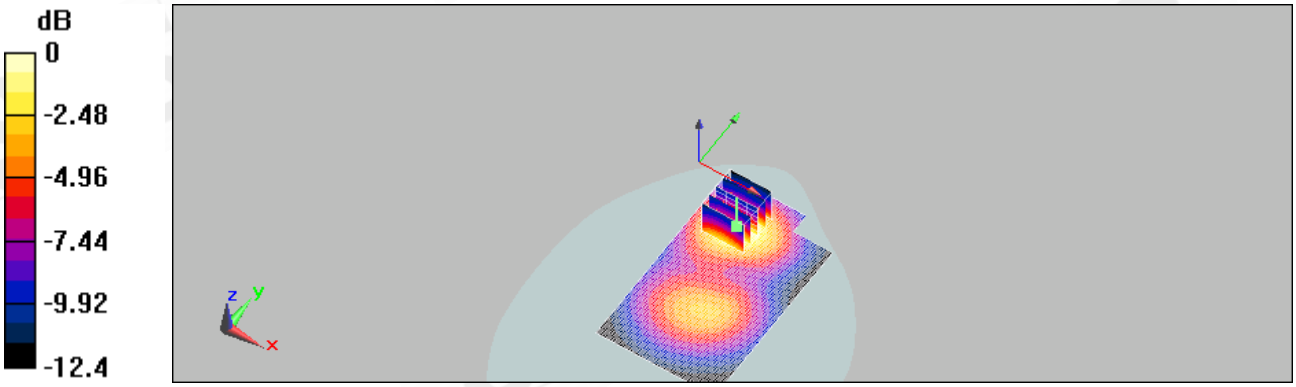
DASY5 Configuration:

- Probe: ES3DV3 - SN3172; ConvF(4.73, 4.73, 4.73); Calibrated: 6/23/2008
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn856; Calibrated: 5/7/2008
- Phantom: SAM1; Type: SAM;
- Measurement SW: DASY5, V5.0 Build 125; SEMCAD X Version 13.4 Build 125

BODY/Area Scan (61x101x1): Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (interpolated) = 0.828 mW/g

BODY/Zoom Scan (7x7x7) (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 11.4 V/m; Power Drift = 0.078 dB
Peak SAR (extrapolated) = 1.22 W/kg

SAR(1 g) = 0.760 mW/g; SAR(10 g) = 0.464 mW/g
Maximum value of SAR (measured) = 0.828 mW/g



0 dB = 0.828mW/g

Date/Time: 04/17/2009 19:25:07

BODY_CH9400_ repeated with HSDPA mode

DUT: SAPP500;

Communication System: WCDMA B2; Frequency: 1880 MHz;Duty Cycle: 1:1
Medium: BODY 1900 Medium parameters used: f = 1880 MHz; σ = 1.49 mho/m; ε_r = 53.5; ρ = 1000 kg/m^3
Phantom section: Flat Section

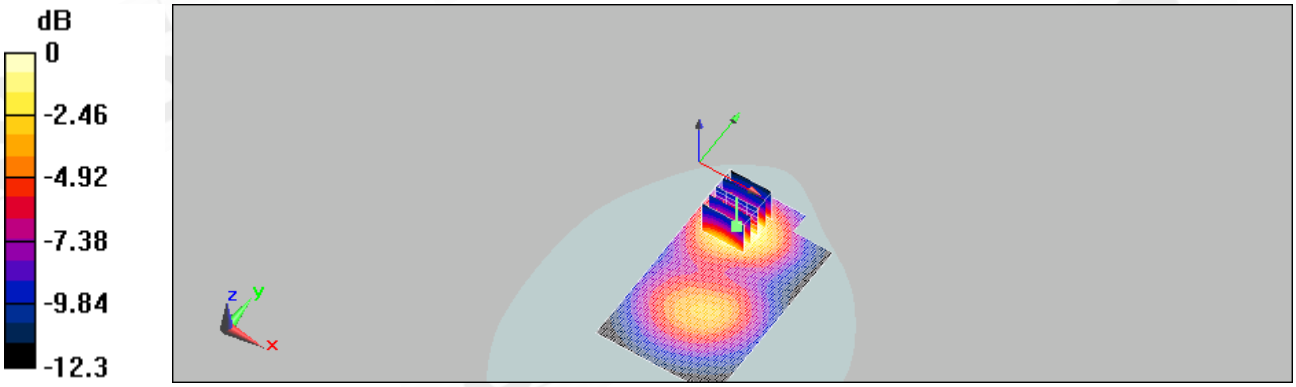
DASY5 Configuration:

- Probe: ES3DV3 - SN3172; ConvF(4.73, 4.73, 4.73); Calibrated: 6/23/2008
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn856; Calibrated: 5/7/2008
- Phantom: SAM1; Type: SAM;
- Measurement SW: DASY5, V5.0 Build 125; SEMCAD X Version 13.4 Build 125

BODY/Area Scan (61x101x1): Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (interpolated) = 0.803 mW/g

BODY/Zoom Scan (7x7x7) (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 11.5 V/m; Power Drift = -0.061 dB
Peak SAR (extrapolated) = 1.19 W/kg

SAR(1 g) = 0.745 mW/g; SAR(10 g) = 0.455 mW/g
Maximum value of SAR (measured) = 0.810 mW/g



0 dB = 0.810mW/g

Date/Time: 04/17/2009 19:54:44

BODY_CH9400_ repeated with HSUPA mode

DUT: SAPP500;

Communication System: WCDMA B2; Frequency: 1880 MHz;Duty Cycle: 1:1
Medium: BODY 1900 Medium parameters used: f = 1880 MHz; σ = 1.49 mho/m; ε_r = 53.5; ρ = 1000 kg/m^3
Phantom section: Flat Section

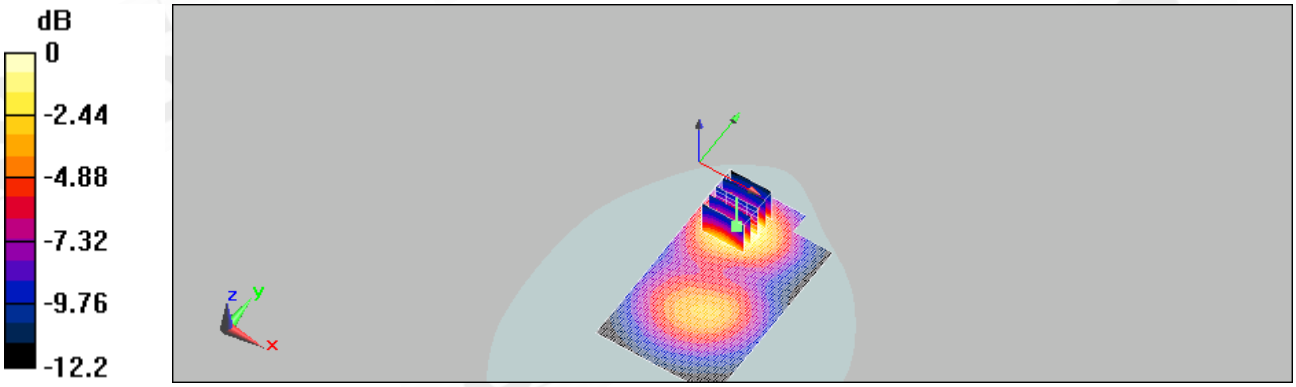
DASY5 Configuration:

- Probe: ES3DV3 - SN3172; ConvF(4.73, 4.73, 4.73); Calibrated: 6/23/2008
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn856; Calibrated: 5/7/2008
- Phantom: SAM1; Type: SAM;
- Measurement SW: DASY5, V5.0 Build 125; SEMCAD X Version 13.4 Build 125

BODY/Area Scan (61x101x1): Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (interpolated) = 0.755 mW/g

BODY/Zoom Scan (7x7x7) (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 11 V/m; Power Drift = 0.030 dB
Peak SAR (extrapolated) = 1.1 W/kg

SAR(1 g) = 0.692 mW/g; SAR(10 g) = 0.424 mW/g
Maximum value of SAR (measured) = 0.755 mW/g



0 dB = 0.755mW/g

Date/Time: 04/17/2009 03:09:34

RE_Cheek_CH4233

DUT: SAPP500;

Communication System: WCDMA B5; Frequency: 846.6 MHz;Duty Cycle: 1:1
Medium: Head 900 Medium parameters used (extrapolated): f = 846.6 MHz; σ = 0.915 mho/m; ε_r = 42.1; ρ = 1000 kg/m^3
Phantom section: Right Section

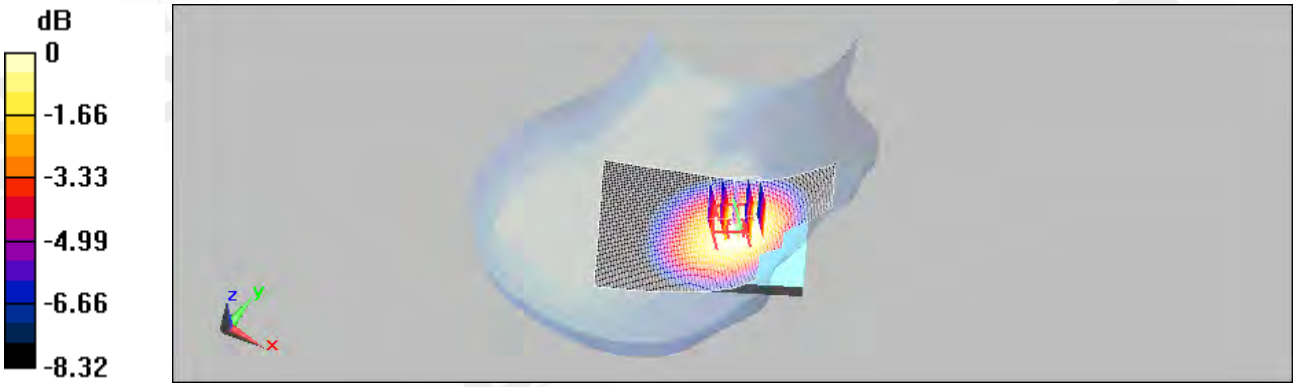
DASY5 Configuration:

- Probe: ES3DV3 - SN3172; ConvF(5.66, 5.66, 5.66); Calibrated: 6/23/2008
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn856; Calibrated: 5/7/2008
- Phantom: SAM1; Type: SAM;
- Measurement SW: DASY5, V5.0 Build 125; SEMCAD X Version 13.4 Build 125

RE Cheek/Area Scan (61x101x1): Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (interpolated) = 0.659 mW/g

RE Cheek/Zoom Scan (7x7x7) (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 10.5 V/m; Power Drift = -0.024 dB
Peak SAR (extrapolated) = 0.776 W/kg

SAR(1 g) = 0.620 mW/g; SAR(10 g) = 0.468 mW/g
Maximum value of SAR (measured) = 0.652 mW/g



0 dB = 0.652mW/g

Date/Time: 04/17/2009 11:50:58

BODY_CH4233

DUT: SAPP500;

Communication System: WCDMA B5; Frequency: 846.6 MHz;Duty Cycle: 1:1
Medium: BODY 900 Medium parameters used: f = 847 MHz; σ = 0.974 mho/m; ε_r = 55.9; ρ = 1000 kg/m^3
Phantom section: Flat Section

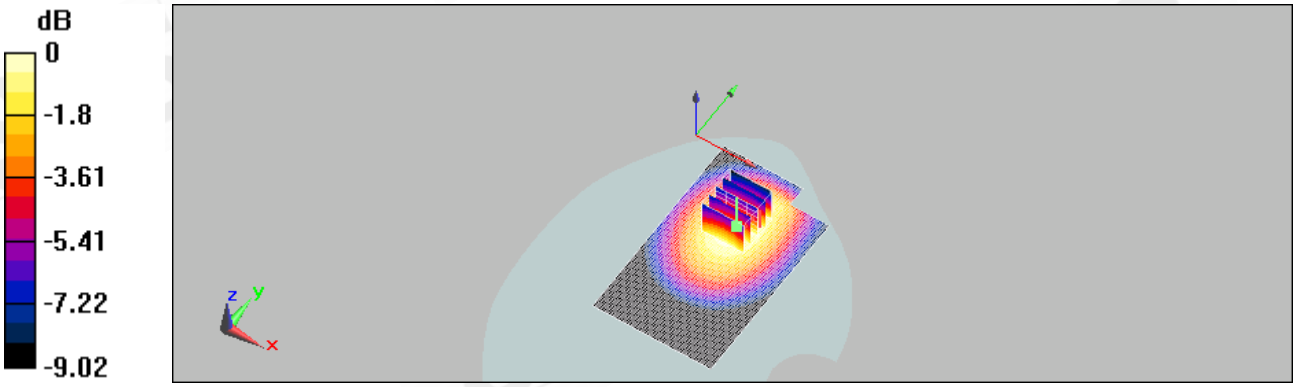
DASY5 Configuration:

- Probe: ES3DV3 - SN3172; ConvF(5.61, 5.61, 5.61); Calibrated: 6/23/2008
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn856; Calibrated: 5/7/2008
- Phantom: SAM1; Type: SAM;
- Measurement SW: DASY5, V5.0 Build 125; SEMCAD X Version 13.4 Build 125

BODY/Area Scan (61x101x1): Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (interpolated) = 0.438 mW/g

BODY/Zoom Scan (7x7x7) (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 6.43 V/m; Power Drift = 0.011 dB
Peak SAR (extrapolated) = 0.530 W/kg

SAR(1 g) = 0.422 mW/g; SAR(10 g) = 0.314 mW/g
Maximum value of SAR (measured) = 0.445 mW/g



0 dB = 0.445mW/g

Date/Time: 04/17/2009 12:18:21

BODY_CH4233_ repeated with HSDPA mode

DUT: SAPP500;

Communication System: WCDMA B5; Frequency: 846.6 MHz;Duty Cycle: 1:1
Medium: BODY 900 Medium parameters used: f = 847 MHz; σ = 0.974 mho/m; ε_r = 55.9; ρ = 1000 kg/m^3
Phantom section: Flat Section

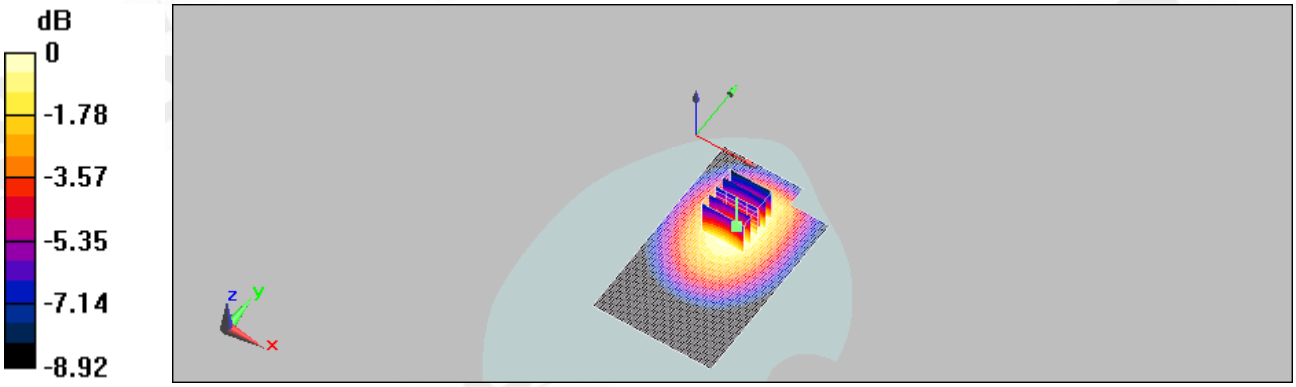
DASY5 Configuration:

- Probe: ES3DV3 - SN3172; ConvF(5.61, 5.61, 5.61); Calibrated: 6/23/2008
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn856; Calibrated: 5/7/2008
- Phantom: SAM1; Type: SAM;
- Measurement SW: DASY5, V5.0 Build 125; SEMCAD X Version 13.4 Build 125

BODY/Area Scan (61x101x1): Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (interpolated) = 0.397 mW/g

BODY/Zoom Scan (7x7x7) (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 6.22 V/m; Power Drift = 0.072 dB
Peak SAR (extrapolated) = 0.484 W/kg

SAR(1 g) = 0.383 mW/g; SAR(10 g) = 0.284 mW/g
Maximum value of SAR (measured) = 0.406 mW/g



0 dB = 0.406mW/g

Date/Time: 04/17/2009 12:47:10

BODY_CH4183_ repeated with HSUPA mode

DUT: SAPP500;

Communication System: WCDMA B5; Frequency: 836.6 MHz;Duty Cycle: 1:1
Medium: BODY 900 Medium parameters used: f = 837 MHz; σ = 0.969 mho/m; ε_r = 56; ρ = 1000 kg/m^3
Phantom section: Flat Section

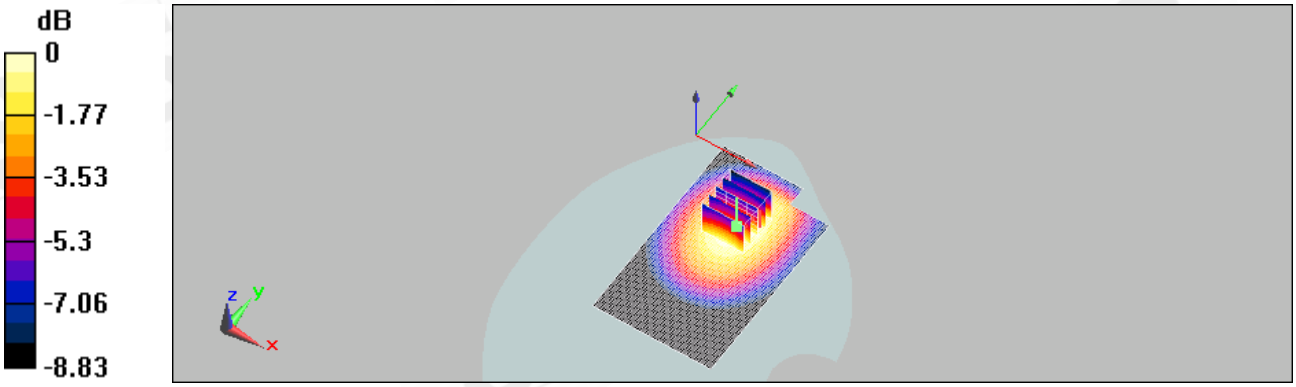
DASY5 Configuration:

- Probe: ES3DV3 - SN3172; ConvF(5.61, 5.61, 5.61); Calibrated: 6/23/2008
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn856; Calibrated: 5/7/2008
- Phantom: SAM1; Type: SAM;
- Measurement SW: DASY5, V5.0 Build 125; SEMCAD X Version 13.4 Build 125

BODY/Area Scan (61x101x1): Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (interpolated) = 0.422 mW/g

BODY/Zoom Scan (7x7x7) (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 6.37 V/m; Power Drift = 0.031 dB
Peak SAR (extrapolated) = 0.505 W/kg

SAR(1 g) = 0.403 mW/g; SAR(10 g) = 0.301 mW/g
Maximum value of SAR (measured) = 0.425 mW/g



0 dB = 0.425mW/g

Date/Time: 04/21/2009 01:31:09

BODY_CH6_WLAN 802.11b _ repeated with WELLDONE Battery

DUT: SAPP500;

Communication System: Wireless LAN; Frequency: 2437 MHz;Duty Cycle: 1:1
Medium: Body 2450 Medium parameters used: f = 2437 MHz; σ = 1.96 mho/m; ε_r = 52.3; ρ = 1000 kg/m^3
Phantom section: Flat Section

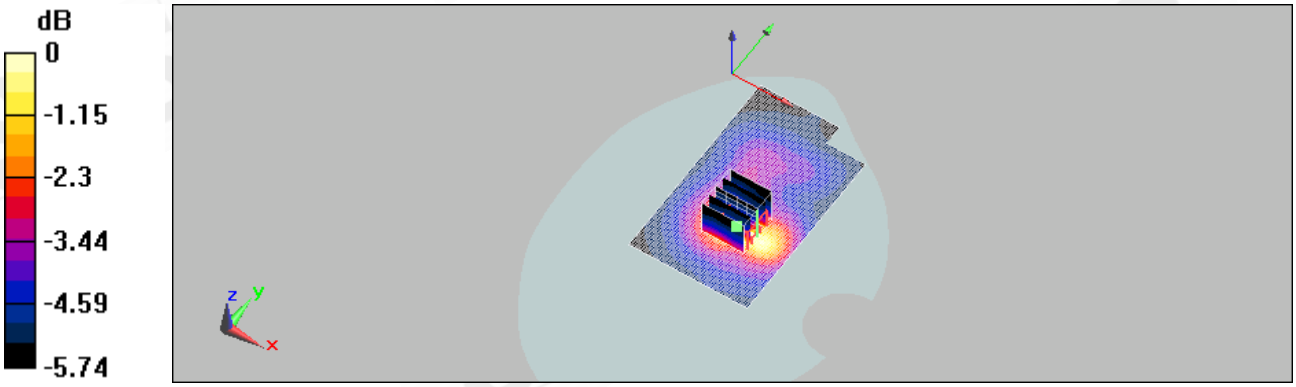
DASY5 Configuration:

- Probe: ES3DV3 - SN3172; ConvF(3.92, 3.92, 3.92); Calibrated: 6/23/2008
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn856; Calibrated: 5/7/2008
- Phantom: SAM1; Type: SAM;
- Measurement SW: DASY5, V5.0 Build 125; SEMCAD X Version 13.4 Build 125

Body/Area Scan (61x101x1): Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (interpolated) = 0.179 mW/g

Body/Zoom Scan (7x7x7) (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 6.96 V/m; Power Drift = -0.085 dB
Peak SAR (extrapolated) = 0.309 W/kg

SAR(1 g) = 0.161 mW/g; SAR(10 g) = 0.111 mW/g
Maximum value of SAR (measured) = 0.189 mW/g



0 dB = 0.189mW/g

Date/Time: 04/21/2009 01:59:25

BODY_CH6_WLAN 802.11g

DUT: SAPP500;

Communication System: Wireless LAN; Frequency: 2437 MHz;Duty Cycle: 1:1
Medium: Body 2450 Medium parameters used: f = 2437 MHz; σ = 1.96 mho/m; ε_r = 52.3; ρ = 1000 kg/m^3
Phantom section: Flat Section

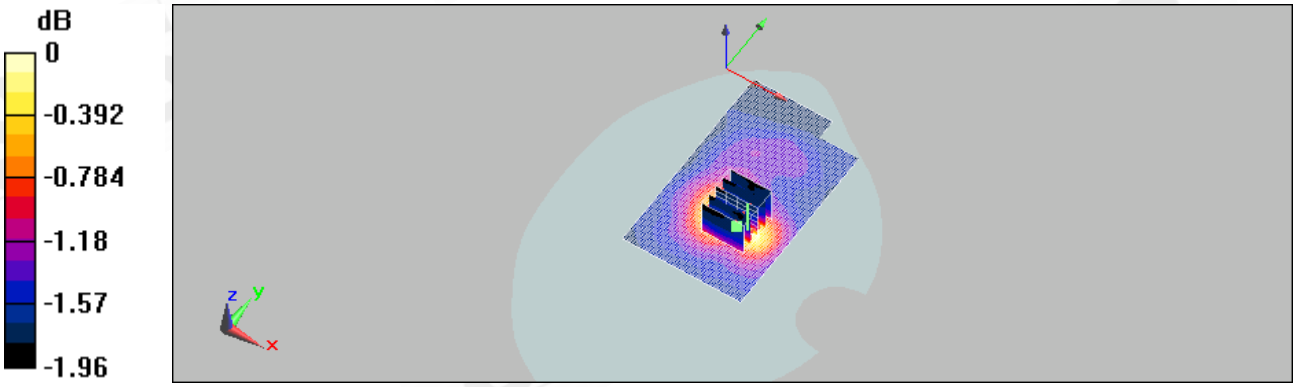
DASY5 Configuration:

- Probe: ES3DV3 - SN3172; ConvF(3.92, 3.92, 3.92); Calibrated: 6/23/2008
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn856; Calibrated: 5/7/2008
- Phantom: SAM1; Type: SAM;
- Measurement SW: DASY5, V5.0 Build 125; SEMCAD X Version 13.4 Build 125

Body/Area Scan (61x101x1): Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (interpolated) = 0.088 mW/g

Body/Zoom Scan (7x7x7) (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 6.06 V/m; Power Drift = -0.103 dB
Peak SAR (extrapolated) = 0.108 W/kg

SAR(1 g) = 0.084 mW/g; SAR(10 g) = 0.071 mW/g
Maximum value of SAR (measured) = 0.088 mW/g



0 dB = 0.088mW/g

Date/Time: 04/17/2009 02:07:25

RE_Cheek_CH251

DUT: SAPP500;

Communication System: GSM 850; Frequency: 848.8 MHz;Duty Cycle: 1:8.3
Medium: Head 900 Medium parameters used (extrapolated): f = 848.8 MHz; σ = 0.917 mho/m; ε_r = 42.1; ρ = 1000 kg/m^3
Phantom section: Right Section

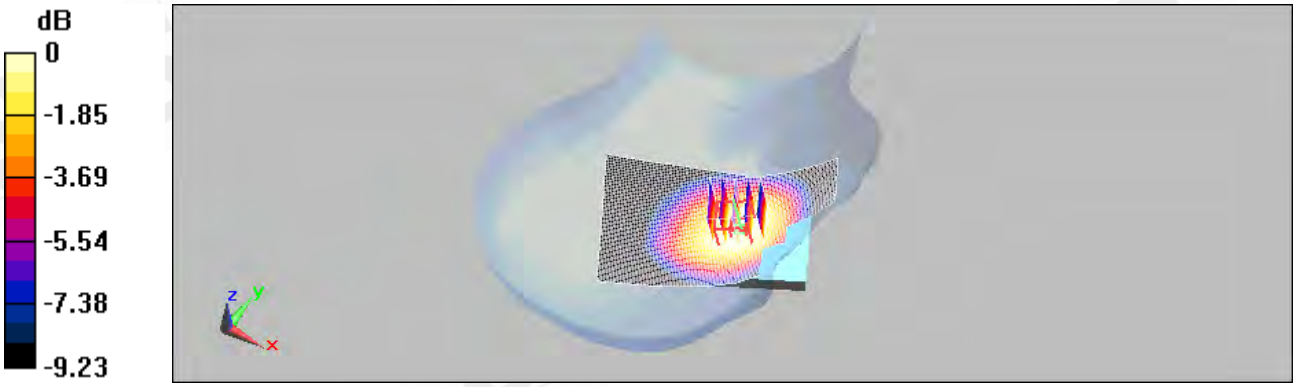
DASY5 Configuration:

- Probe: ES3DV3 - SN3172; ConvF(5.66, 5.66, 5.66); Calibrated: 6/23/2008
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn856; Calibrated: 5/7/2008
- Phantom: SAM1; Type: SAM;
- Measurement SW: DASY5, V5.0 Build 125; SEMCAD X Version 13.4 Build 125

RE Cheek/Area Scan (61x101x1): Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (interpolated) = 1.12 mW/g

RE Cheek/Zoom Scan (7x7x7) (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 12.7 V/m; Power Drift = -0.103 dB
Peak SAR (extrapolated) = 1.29 W/kg

SAR(1 g) = 1.05 mW/g; SAR(10 g) = 0.783 mW/g
Maximum value of SAR (measured) = 1.11 mW/g



0 dB = 1.11mW/g

Date/Time: 04/17/2009 10:50:55

BODY_CH251_ repeated with headset

DUT: SAPP500;

Communication System: GSM 850; Frequency: 848.8 MHz;Duty Cycle: 1:4
Medium: Body 900 Medium parameters used: f = 849 MHz; σ = 0.975 mho/m; ε_r = 55.8; ρ = 1000 kg/m^3
Phantom section: Flat Section

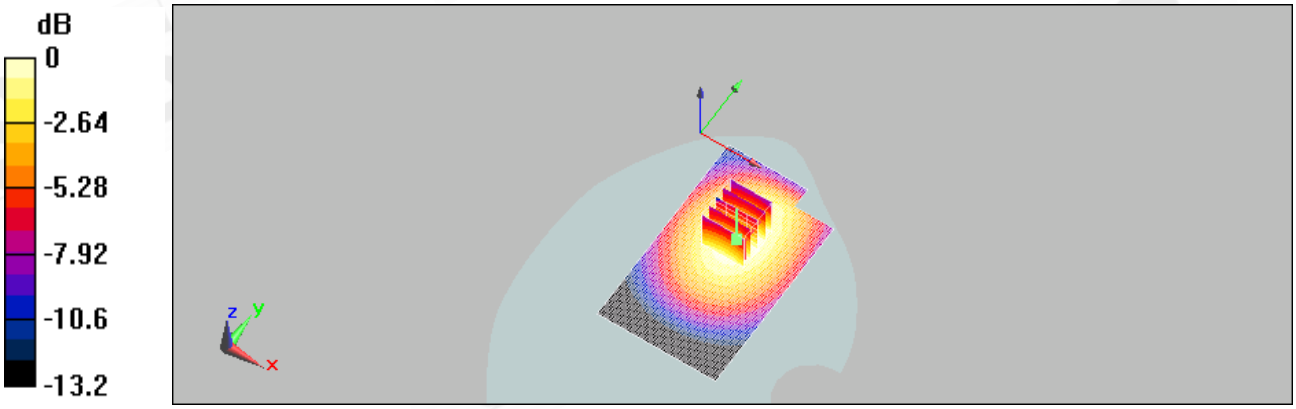
DASY5 Configuration:

- Probe: ES3DV3 - SN3172; ConvF(5.61, 5.61, 5.61); Calibrated: 6/23/2008
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn856; Calibrated: 5/7/2008
- Phantom: SAM1; Type: SAM;
- Measurement SW: DASY5, V5.0 Build 125; SEMCAD X Version 13.4 Build 125

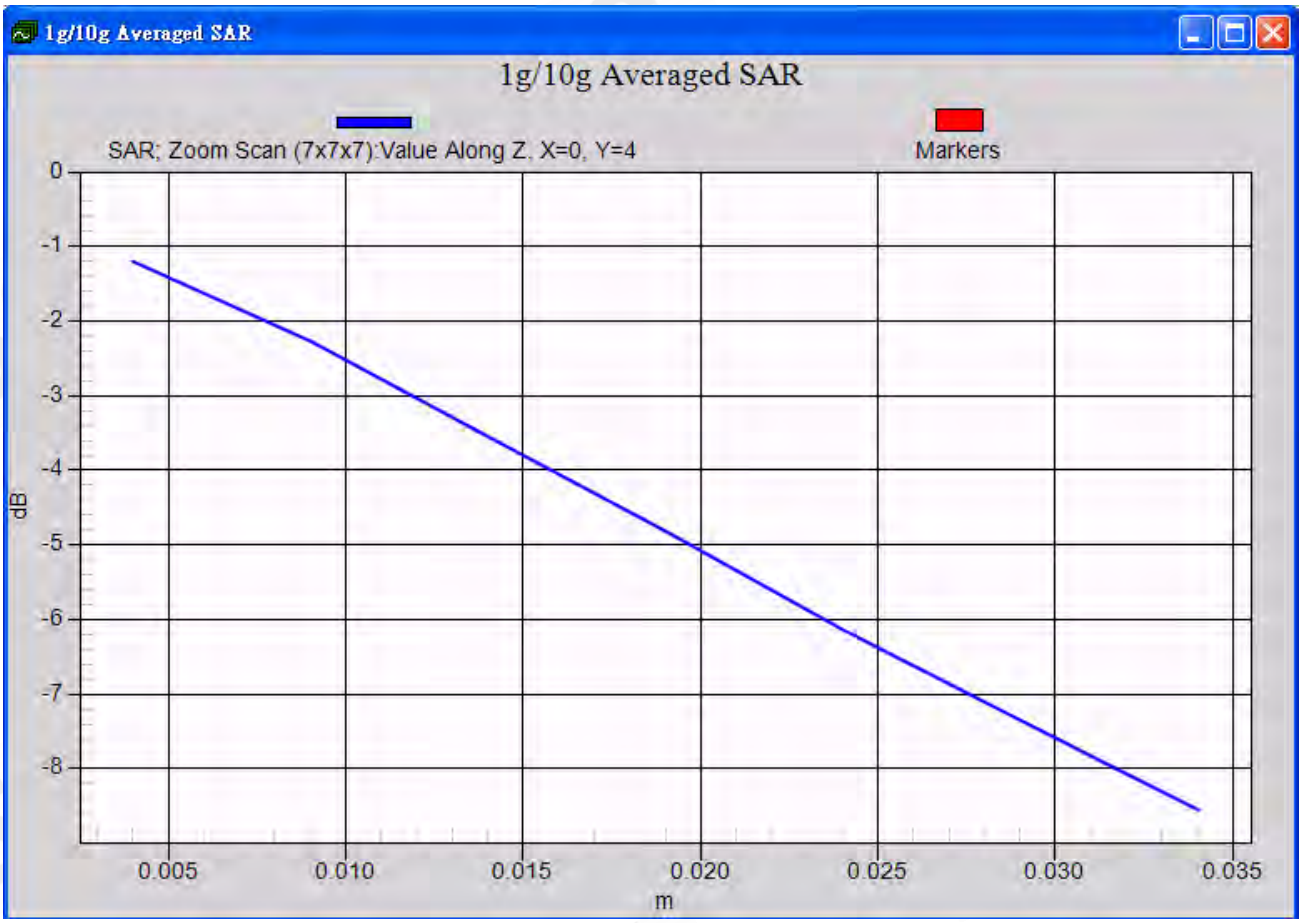
Body/Area Scan (61x101x1): Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (interpolated) = 1.25 mW/g

Body/Zoom Scan (7x7x7) (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 11.7 V/m; Power Drift = -0.111 dB
Peak SAR (extrapolated) = 1.51 W/kg

SAR(1 g) = 1.17 mW/g; SAR(10 g) = 0.860 mW/g
Maximum value of SAR (measured) = 1.23 mW/g



0 dB = 1.23mW/g



Date/Time: 04/17/2009 06:25:57

LE_Cheek_CH661

DUT: SAPP500;

Communication System: GSM 1900; Frequency: 1880 MHz;Duty Cycle: 1:8.3
Medium: Head 1900 Medium parameters used: f = 1880 MHz; σ = 1.46 mho/m; ε_r = 40.4; ρ = 1000 kg/m^3
Phantom section: Left Section

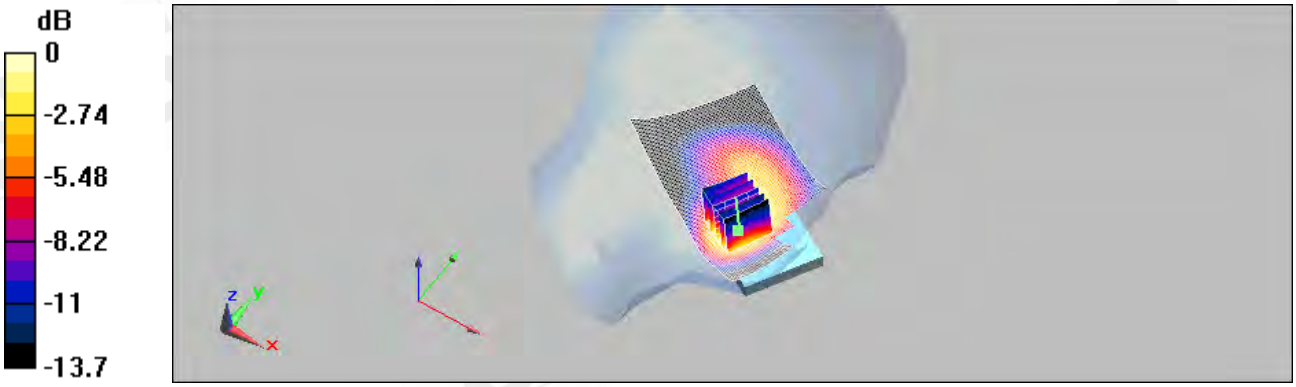
DASY5 Configuration:

- Probe: ES3DV3 - SN3172; ConvF(4.97, 4.97, 4.97); Calibrated: 6/23/2008
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn856; Calibrated: 5/7/2008
- Phantom: SAM1; Type: SAM;
- Measurement SW: DASY5, V5.0 Build 125; SEMCAD X Version 13.4 Build 125

LE Cheek/Area Scan (61x101x1): Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (interpolated) = 1.52 mW/g

LE Cheek/Zoom Scan (7x7x7) (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 11 V/m; Power Drift = -0.116 dB
Peak SAR (extrapolated) = 2.06 W/kg

SAR(1 g) = 1.31 mW/g; SAR(10 g) = 0.795 mW/g
Maximum value of SAR (measured) = 1.39 mW/g



0 dB = 1.39mW/g

Date/Time: 04/17/2009 18:02:30

BODY_CH512

DUT: SAPP500;

Communication System: GSM 1900; Frequency: 1850.2 MHz;Duty Cycle: 1:4
Medium: Body 1900 Medium parameters used (interpolated): f = 1850.2 MHz; σ = 1.48 mho/m; ε_r = 53.8; ρ = 1000 kg/m^3
Phantom section: Flat Section

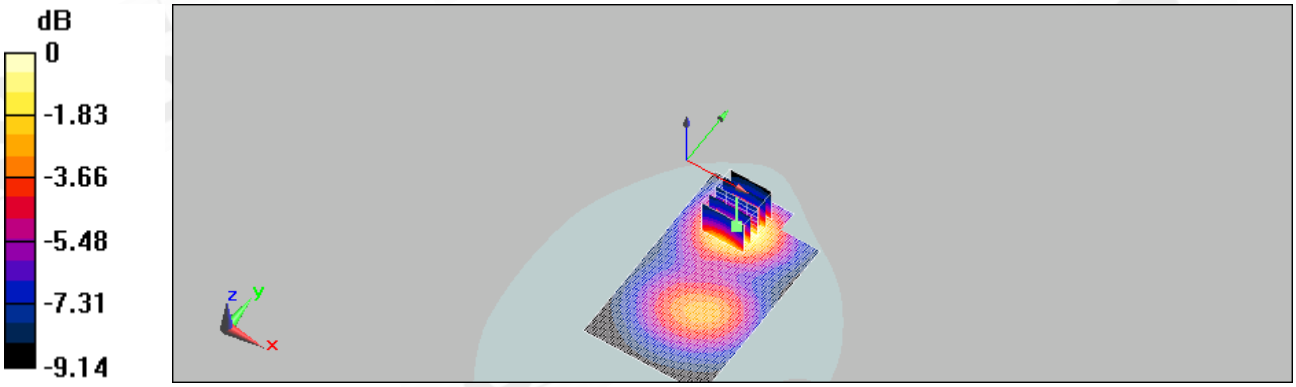
DASY5 Configuration:

- Probe: ES3DV3 - SN3172; ConvF(4.73, 4.73, 4.73); Calibrated: 6/23/2008
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn856; Calibrated: 5/7/2008
- Phantom: SAM1; Type: SAM;
- Measurement SW: DASY5, V5.0 Build 125; SEMCAD X Version 13.4 Build 125

Body/Area Scan (61x101x1): Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (interpolated) = 1.17 mW/g

Body/Zoom Scan (7x7x7) (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 14.9 V/m; Power Drift = -0.086 dB
Peak SAR (extrapolated) = 1.63 W/kg

SAR(1 g) = 1.04 mW/g; SAR(10 g) = 0.669 mW/g
Maximum value of SAR (measured) = 1.13 mW/g



0 dB = 1.13mW/g

Date/Time: 04/17/2009 07:58:29

LE_Cheek_CH9400_ repeated with Memory card

DUT: SAPP500;

Communication System: WCDMA B2; Frequency: 1880 MHz;Duty Cycle: 1:1
Medium: Head 1900 Medium parameters used: f = 1880 MHz; σ = 1.46 mho/m; ε_r = 40.4; ρ = 1000 kg/m^3
Phantom section: Left Section

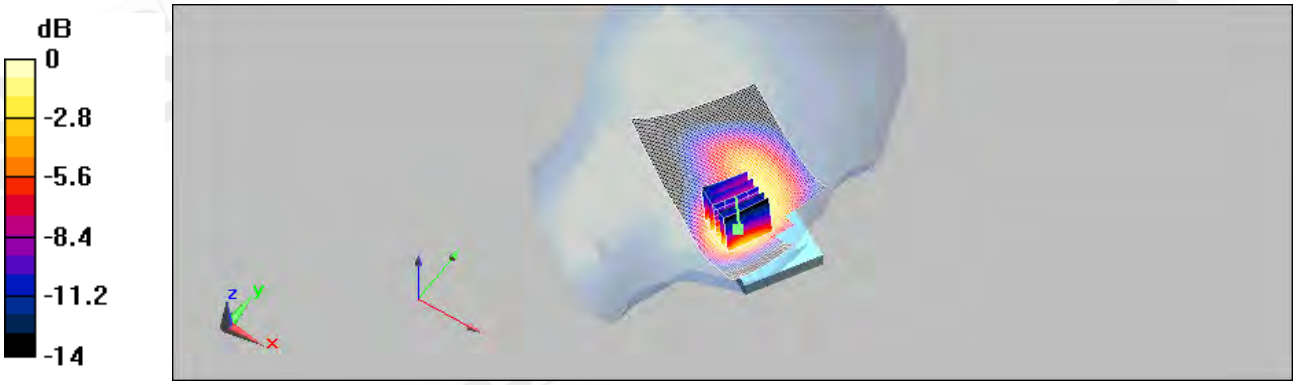
DASY5 Configuration:

- Probe: ES3DV3 - SN3172; ConvF(4.97, 4.97, 4.97); Calibrated: 6/23/2008
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn856; Calibrated: 5/7/2008
- Phantom: SAM1; Type: SAM;
- Measurement SW: DASY5, V5.0 Build 125; SEMCAD X Version 13.4 Build 125

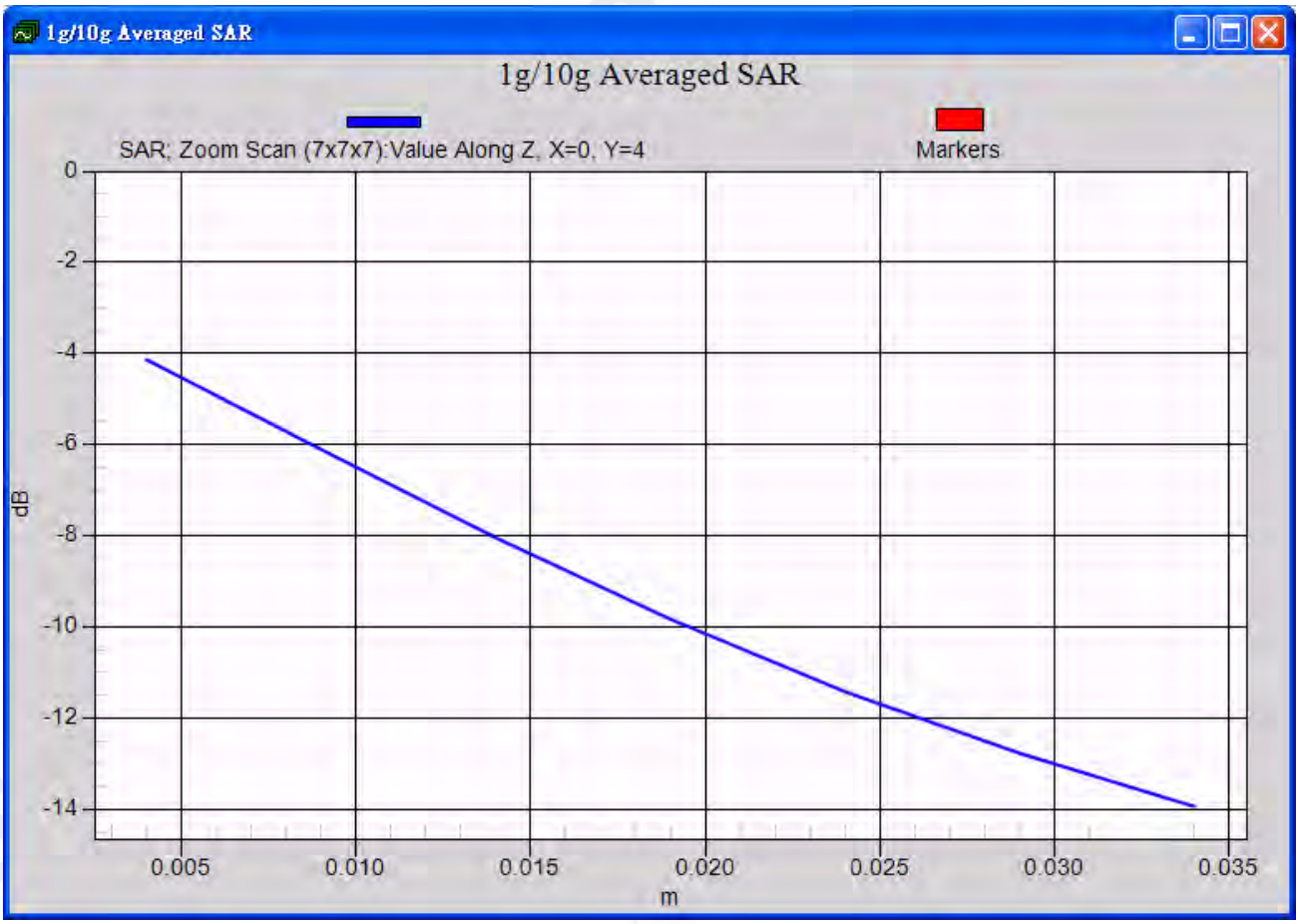
LE Cheek/Area Scan (61x101x1): Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (interpolated) = 1.59 mW/g

LE Cheek/Zoom Scan (7x7x7) (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 11.7 V/m; Power Drift = 0.106 dB
Peak SAR (extrapolated) = 2.17 W/kg

SAR(1 g) = 1.4 mW/g; SAR(10 g) = 0.858 mW/g
Maximum value of SAR (measured) = 1.49 mW/g



0 dB = 1.49mW/g



Date/Time: 04/17/2009 20:26:49

BODY_CH9400

DUT: SAPP500;

Communication System: WCDMA B2; Frequency: 1880 MHz;Duty Cycle: 1:1
Medium: Body 1900 Medium parameters used: f = 1880 MHz; σ = 1.49 mho/m; ε_r = 53.5; ρ = 1000 kg/m^3
Phantom section: Flat Section

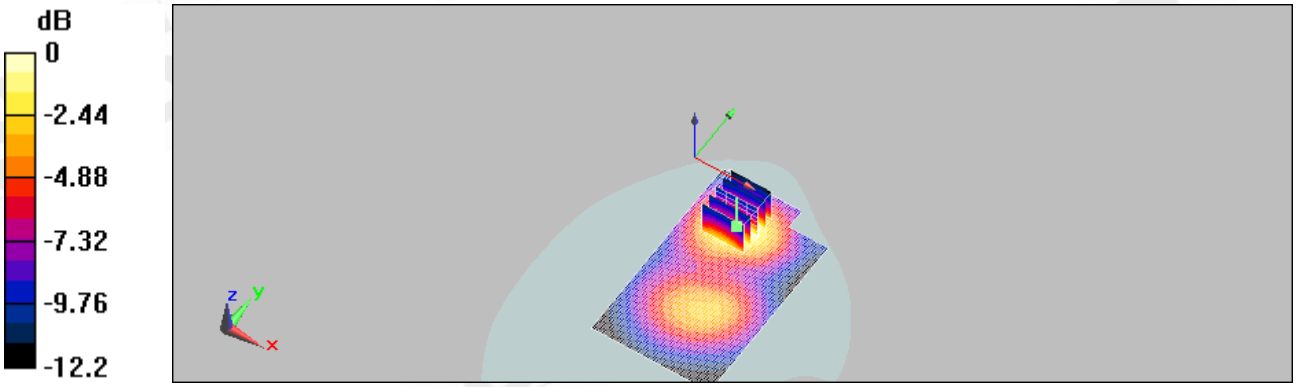
DASY5 Configuration:

- Probe: ES3DV3 - SN3172; ConvF(4.73, 4.73, 4.73); Calibrated: 6/23/2008
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn856; Calibrated: 5/7/2008
- Phantom: SAM1; Type: SAM;
- Measurement SW: DASY5, V5.0 Build 125; SEMCAD X Version 13.4 Build 125

Body/Area Scan (61x101x1): Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (interpolated) = 0.774 mW/g

Body/Zoom Scan (7x7x7) (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 11.4 V/m; Power Drift = 0.096 dB
Peak SAR (extrapolated) = 1.11 W/kg

SAR(1 g) = 0.690 mW/g; SAR(10 g) = 0.422 mW/g
Maximum value of SAR (measured) = 0.748 mW/g



0 dB = 0.748mW/g

Date/Time: 04/17/2009 20:54:07

BODY_CH9400_ repeated with HSDPA mode

DUT: SAPP500;

Communication System: WCDMA B2; Frequency: 1880 MHz;Duty Cycle: 1:1
Medium: Body 1900 Medium parameters used: f = 1880 MHz; σ = 1.49 mho/m; ε_r = 53.5; ρ = 1000 kg/m^3
Phantom section: Flat Section

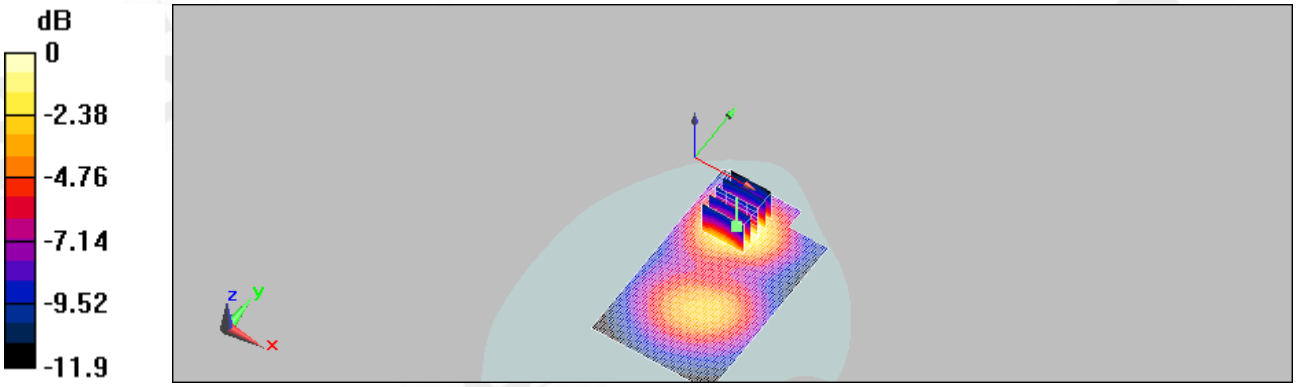
DASY5 Configuration:

- Probe: ES3DV3 - SN3172; ConvF(4.73, 4.73, 4.73); Calibrated: 6/23/2008
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn856; Calibrated: 5/7/2008
- Phantom: SAM1; Type: SAM;
- Measurement SW: DASY5, V5.0 Build 125; SEMCAD X Version 13.4 Build 125

Body/Area Scan (61x101x1): Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (interpolated) = 0.721 mW/g

Body/Zoom Scan (7x7x7) (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 11.5 V/m; Power Drift = -0.069 dB
Peak SAR (extrapolated) = 1.03 W/kg

SAR(1 g) = 0.642 mW/g; SAR(10 g) = 0.395 mW/g
Maximum value of SAR (measured) = 0.696 mW/g



0 dB = 0.696mW/g

Date/Time: 04/17/2009 21:21:47

BODY_CH9400_ repeated with HSUPA mode

DUT: SAPP500;

Communication System: WCDMA B2; Frequency: 1880 MHz;Duty Cycle: 1:1
Medium: Body 1900 Medium parameters used: f = 1880 MHz; σ = 1.49 mho/m; ε_r = 53.5; ρ = 1000 kg/m^3
Phantom section: Flat Section

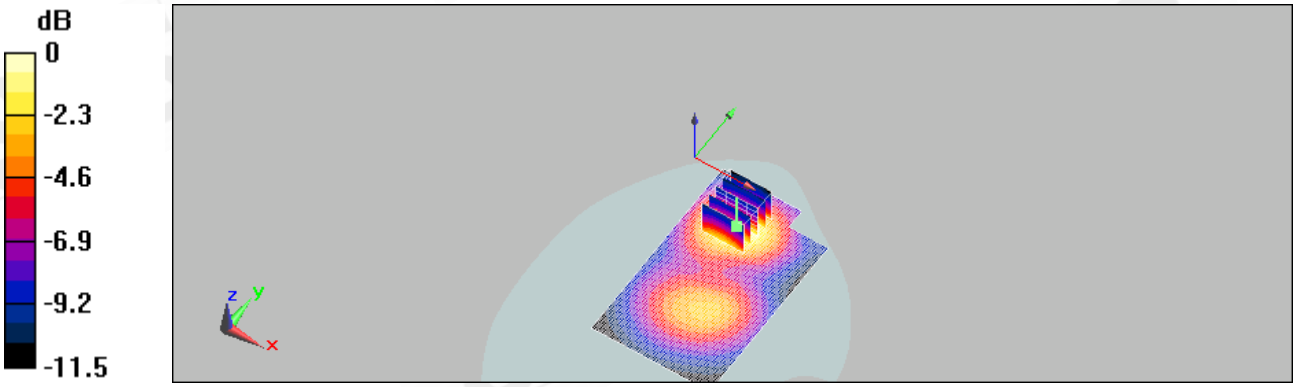
DASY5 Configuration:

- Probe: ES3DV3 - SN3172; ConvF(4.73, 4.73, 4.73); Calibrated: 6/23/2008
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn856; Calibrated: 5/7/2008
- Phantom: SAM1; Type: SAM;
- Measurement SW: DASY5, V5.0 Build 125; SEMCAD X Version 13.4 Build 125

Body/Area Scan (61x101x1): Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (interpolated) = 0.646 mW/g

Body/Zoom Scan (7x7x7) (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 11 V/m; Power Drift = 0.119 dB
Peak SAR (extrapolated) = 0.928 W/kg

SAR(1 g) = 0.587 mW/g; SAR(10 g) = 0.364 mW/g
Maximum value of SAR (measured) = 0.634 mW/g



0 dB = 0.634mW/g

Date/Time: 04/17/2009 03:36:10

RE_Cheek_CH4233

DUT: SAPP500;

Communication System: WCDMA B5; Frequency: 846.6 MHz;Duty Cycle: 1:1
Medium: Head 900 Medium parameters used (extrapolated): f = 846.6 MHz; σ = 0.915 mho/m; ε_r = 42.1; ρ = 1000 kg/m^3
Phantom section: Right Section

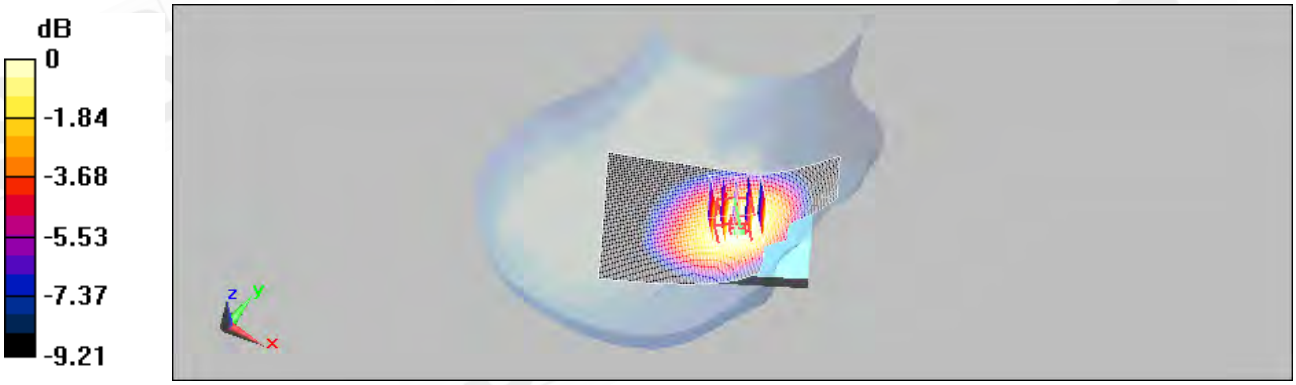
DASY5 Configuration:

- Probe: ES3DV3 - SN3172; ConvF(5.66, 5.66, 5.66); Calibrated: 6/23/2008
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn856; Calibrated: 5/7/2008
- Phantom: SAM1; Type: SAM;
- Measurement SW: DASY5, V5.0 Build 125; SEMCAD X Version 13.4 Build 125

RE Cheek/Area Scan (61x101x1): Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (interpolated) = 0.757 mW/g

RE Cheek/Zoom Scan (7x7x7) (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 11.6 V/m; Power Drift = 0.087 dB
Peak SAR (extrapolated) = 0.873 W/kg

SAR(1 g) = 0.714 mW/g; SAR(10 g) = 0.534 mW/g
Maximum value of SAR (measured) = 0.760 mW/g



0 dB = 0.760mW/g

Date/Time: 04/17/2009 13:18:52

BODY_CH4233

DUT: SAPP500;

Communication System: WCDMA B5; Frequency: 846.6 MHz;Duty Cycle: 1:1
Medium: BODY 900 Medium parameters used: f = 847 MHz; σ = 0.974 mho/m; ε_r = 55.9; ρ = 1000 kg/m^3
Phantom section: Flat Section

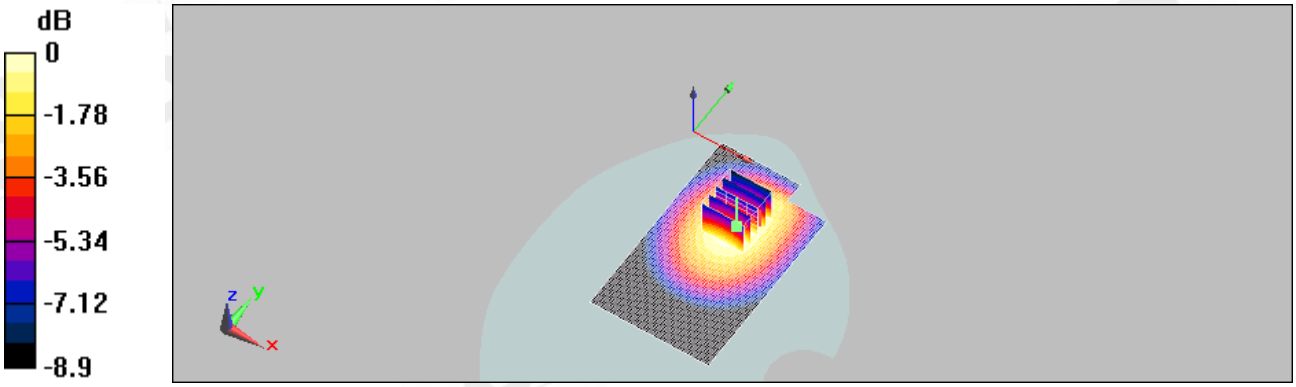
DASY5 Configuration:

- Probe: ES3DV3 - SN3172; ConvF(5.61, 5.61, 5.61); Calibrated: 6/23/2008
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn856; Calibrated: 5/7/2008
- Phantom: SAM1; Type: SAM;
- Measurement SW: DASY5, V5.0 Build 125; SEMCAD X Version 13.4 Build 125

BODY/Area Scan (61x101x1): Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (interpolated) = 0.473 mW/g

BODY/Zoom Scan (7x7x7) (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 7.17 V/m; Power Drift = 0.179 dB
Peak SAR (extrapolated) = 0.578 W/kg

SAR(1 g) = 0.458 mW/g; SAR(10 g) = 0.338 mW/g
Maximum value of SAR (measured) = 0.482 mW/g



0 dB = 0.482mW/g

Date/Time: 04/17/2009 13:46:36

BODY_CH4233_ repeated with HSDPA mode

DUT: SAPP500;

Communication System: WCDMA B5; Frequency: 846.6 MHz;Duty Cycle: 1:1
Medium: BODY 900 Medium parameters used: f = 847 MHz; σ = 0.974 mho/m; ε_r = 55.9; ρ = 1000 kg/m^3
Phantom section: Flat Section

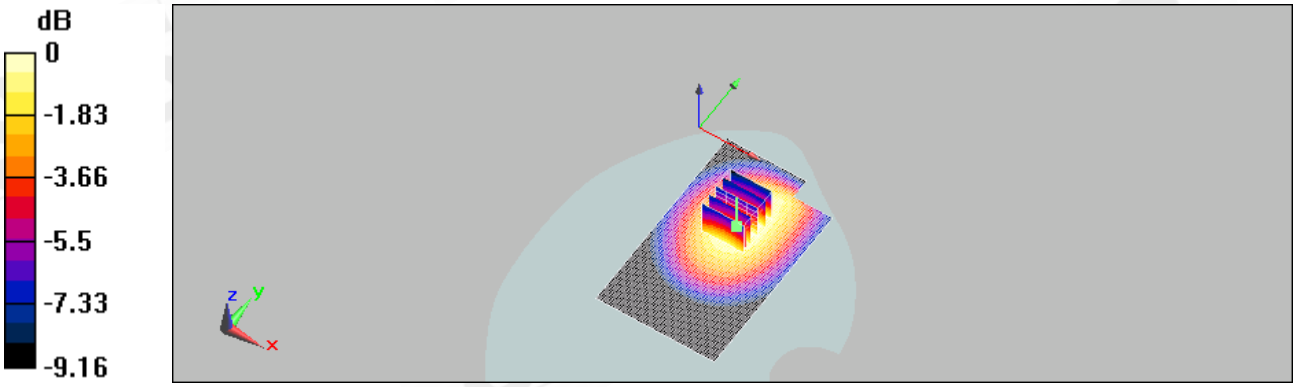
DASY5 Configuration:

- Probe: ES3DV3 - SN3172; ConvF(5.61, 5.61, 5.61); Calibrated: 6/23/2008
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn856; Calibrated: 5/7/2008
- Phantom: SAM1; Type: SAM;
- Measurement SW: DASY5, V5.0 Build 125; SEMCAD X Version 13.4 Build 125

BODY/Area Scan (61x101x1): Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (interpolated) = 0.453 mW/g

BODY/Zoom Scan (7x7x7) (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 6.72 V/m; Power Drift = -0.045 dB
Peak SAR (extrapolated) = 0.551 W/kg

SAR(1 g) = 0.435 mW/g; SAR(10 g) = 0.320 mW/g
Maximum value of SAR (measured) = 0.460 mW/g



0 dB = 0.460mW/g

Date/Time: 04/17/2009 14:13:25

BODY_CH4183_ repeated with HSUPA mode

DUT: SAPP500;

Communication System: WCDMA B5; Frequency: 836.6 MHz;Duty Cycle: 1:1
Medium: BODY 900 Medium parameters used: f = 837 MHz; σ = 0.969 mho/m; ε_r = 56; ρ = 1000 kg/m^3
Phantom section: Flat Section

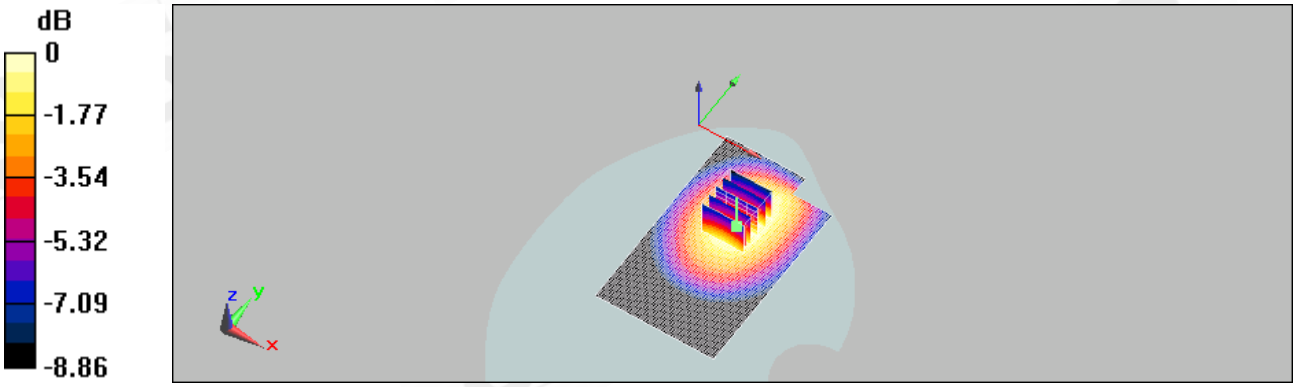
DASY5 Configuration:

- Probe: ES3DV3 - SN3172; ConvF(5.61, 5.61, 5.61); Calibrated: 6/23/2008
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn856; Calibrated: 5/7/2008
- Phantom: SAM1; Type: SAM;
- Measurement SW: DASY5, V5.0 Build 125; SEMCAD X Version 13.4 Build 125

BODY/Area Scan (61x101x1): Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (interpolated) = 0.436 mW/g

BODY/Zoom Scan (7x7x7) (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 6.63 V/m; Power Drift = 0.075 dB
Peak SAR (extrapolated) = 0.522 W/kg

SAR(1 g) = 0.414 mW/g; SAR(10 g) = 0.305 mW/g
Maximum value of SAR (measured) = 0.436 mW/g



0 dB = 0.436mW/g

Date/Time: 04/21/2009 02:27:02

BODY_CH6_ WLAN802.11 b_ repeated with WELLDONE Battery

DUT: SAPP500;

Communication System: Wireless LAN; Frequency: 2437 MHz;Duty Cycle: 1:1
Medium: Body 2450 Medium parameters used: f = 2437 MHz; σ = 1.96 mho/m; ε_r = 52.3; ρ = 1000 kg/m^3
Phantom section: Flat Section

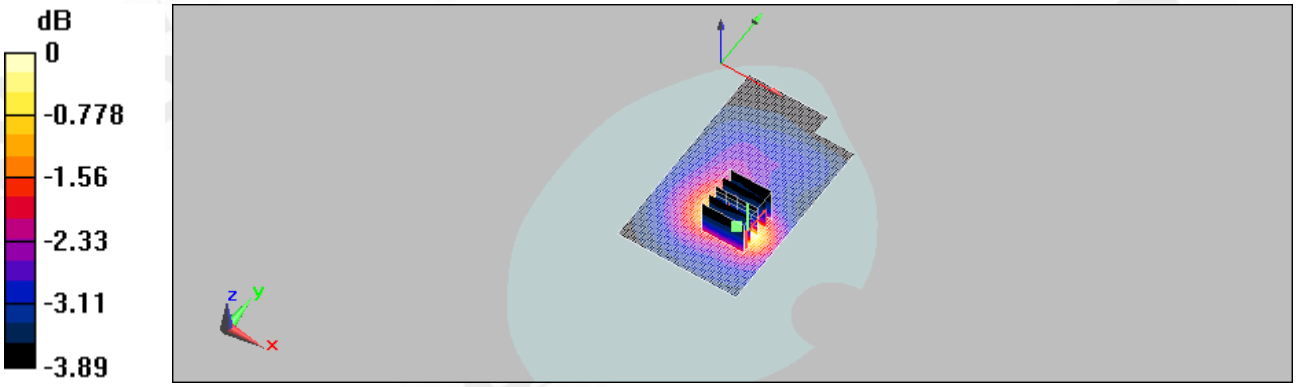
DASY5 Configuration:

- Probe: ES3DV3 - SN3172; ConvF(3.92, 3.92, 3.92); Calibrated: 6/23/2008
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn856; Calibrated: 5/7/2008
- Phantom: SAM1; Type: SAM;
- Measurement SW: DASY5, V5.0 Build 125; SEMCAD X Version 13.4 Build 125

Body/Area Scan (61x101x1): Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (interpolated) = 0.219 mW/g

Body/Zoom Scan (7x7x7) (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 8.43 V/m; Power Drift = -0.051 dB
Peak SAR (extrapolated) = 0.323 W/kg

SAR(1 g) = 0.210 mW/g; SAR(10 g) = 0.152 mW/g
Maximum value of SAR (measured) = 0.221 mW/g



0 dB = 0.221mW/g

Date/Time: 04/21/2009 02:53:00

BODY_CH6 WLAN802.11 g

DUT: SAPP500;

Communication System: Wireless LAN; Frequency: 2437 MHz;Duty Cycle: 1:1
Medium: Body 2450 Medium parameters used: f = 2437 MHz; σ = 1.96 mho/m; ε_r = 52.3; ρ = 1000 kg/m^3
Phantom section: Flat Section

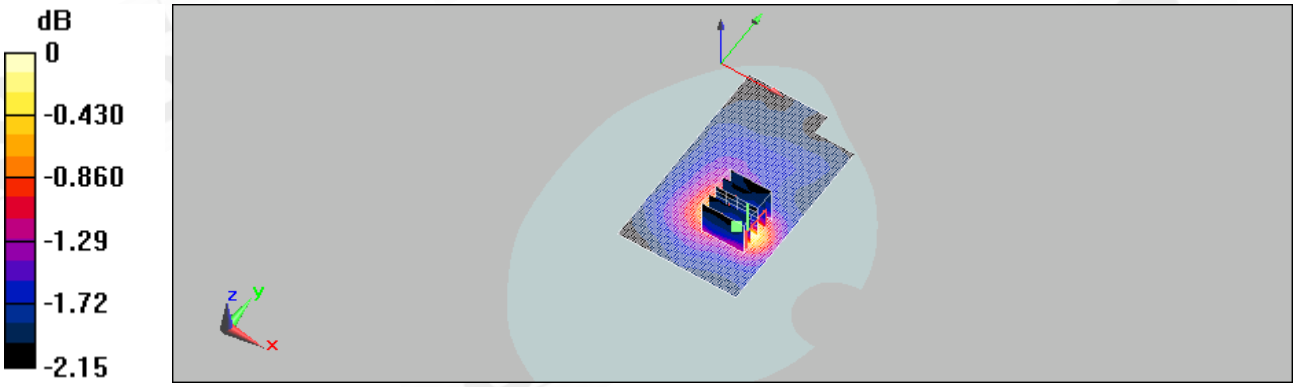
DASY5 Configuration:

- Probe: ES3DV3 - SN3172; ConvF(3.92, 3.92, 3.92); Calibrated: 6/23/2008
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn856; Calibrated: 5/7/2008
- Phantom: SAM1; Type: SAM;
- Measurement SW: DASY5, V5.0 Build 125; SEMCAD X Version 13.4 Build 125

Body/Area Scan (61x101x1): Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (interpolated) = 0.106 mW/g

Body/Zoom Scan (7x7x7) (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 6.46 V/m; Power Drift = -0.048 dB
Peak SAR (extrapolated) = 0.136 W/kg

SAR(1 g) = 0.103 mW/g; SAR(10 g) = 0.086 mW/g
Maximum value of SAR (measured) = 0.107 mW/g



0 dB = 0.107mW/g

Date/Time: 04/17/2009 02:35:43

RE_Cheek_CH251

DUT: SAPP500;

Communication System: GSM 850; Frequency: 848.8 MHz;Duty Cycle: 1:8.3
Medium: Head 900 Medium parameters used (extrapolated): f = 848.8 MHz; σ = 0.917 mho/m; ε_r = 42.1; ρ = 1000 kg/m^3
Phantom section: Right Section

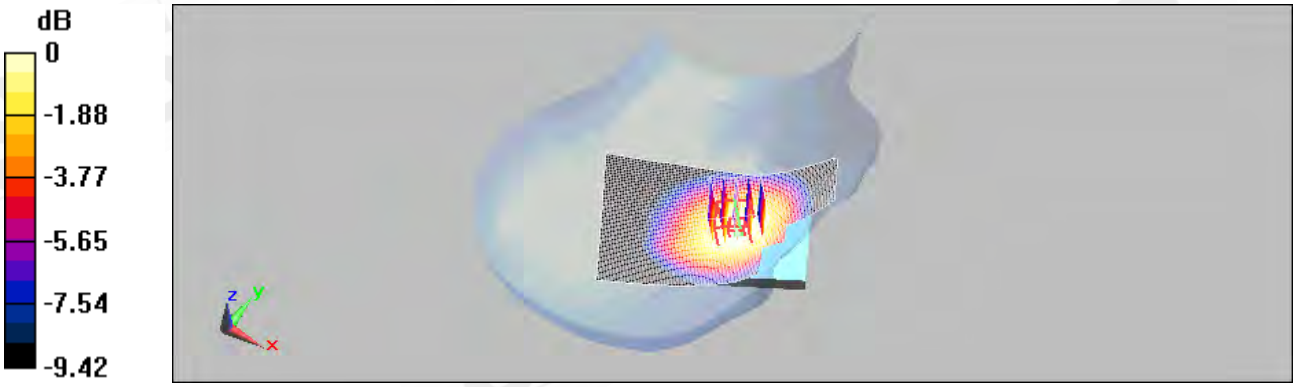
DASY5 Configuration:

- Probe: ES3DV3 - SN3172; ConvF(5.66, 5.66, 5.66); Calibrated: 6/23/2008
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn856; Calibrated: 5/7/2008
- Phantom: SAM1; Type: SAM;
- Measurement SW: DASY5, V5.0 Build 125; SEMCAD X Version 13.4 Build 125

RE Cheek/Area Scan (61x101x1): Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (interpolated) = 1.12 mW/g

RE Cheek/Zoom Scan (7x7x7) (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 12.5 V/m; Power Drift = -0.125 dB
Peak SAR (extrapolated) = 1.27 W/kg

SAR(1 g) = 1.05 mW/g; SAR(10 g) = 0.781 mW/g
Maximum value of SAR (measured) = 1.11 mW/g



0 dB = 1.11mW/g

Date/Time: 04/17/2009 11:17:54

BODY_CH251_repeated with headset

DUT: SAPP500;

Communication System: GSM 850; Frequency: 848.8 MHz;Duty Cycle: 1:4
Medium: Body 900 Medium parameters used: f = 849 MHz; σ = 0.975 mho/m; ε_r = 55.8; ρ = 1000 kg/m^3
Phantom section: Flat Section

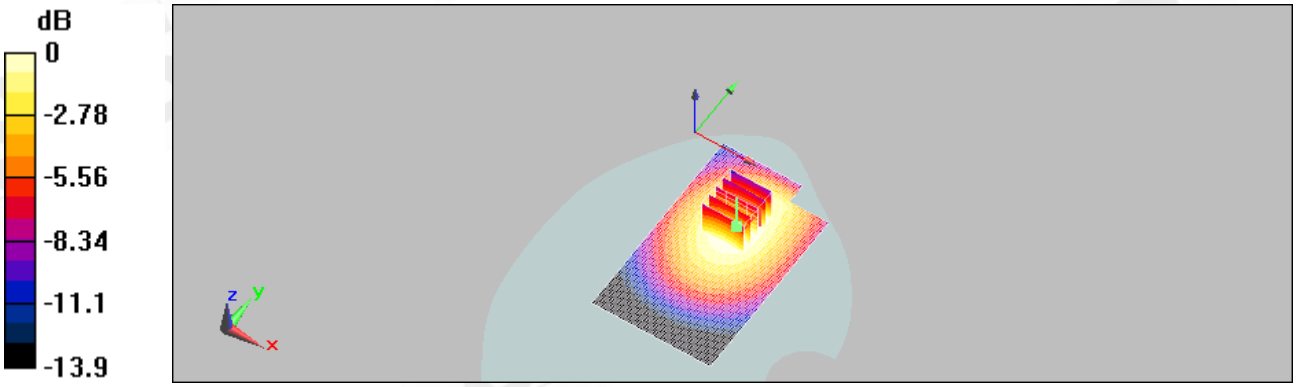
DASY5 Configuration:

- Probe: ES3DV3 - SN3172; ConvF(5.61, 5.61, 5.61); Calibrated: 6/23/2008
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn856; Calibrated: 5/7/2008
- Phantom: SAM1; Type: SAM;
- Measurement SW: DASY5, V5.0 Build 125; SEMCAD X Version 13.4 Build 125

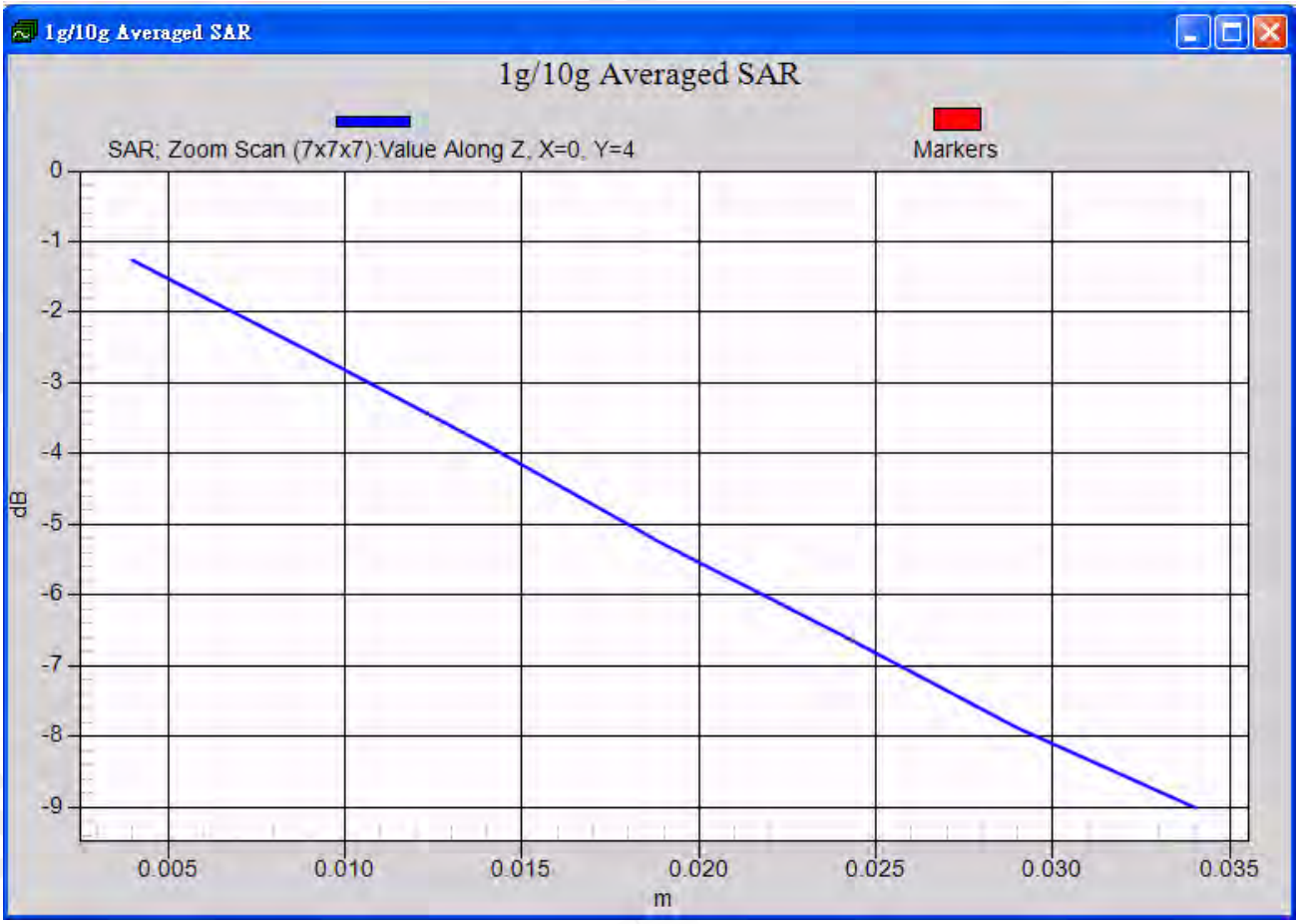
Body/Area Scan (61x101x1): Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (interpolated) = 1.26 mW/g

Body/Zoom Scan (7x7x7) (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 10.8 V/m; Power Drift = -0.117 dB
Peak SAR (extrapolated) = 1.51 W/kg

SAR(1 g) = 1.18 mW/g; SAR(10 g) = 0.863 mW/g
Maximum value of SAR (measured) = 1.24 mW/g



0 dB = 1.24mW/g



Date/Time: 04/17/2009 06:54:43

LE_Cheek_CH661

DUT: SAPP500;

Communication System: GSM 1900; Frequency: 1880 MHz;Duty Cycle: 1:8.3
Medium: Head 1900 Medium parameters used: f = 1880 MHz; σ = 1.46 mho/m; ε_r = 40.4; ρ = 1000 kg/m^3
Phantom section: Left Section

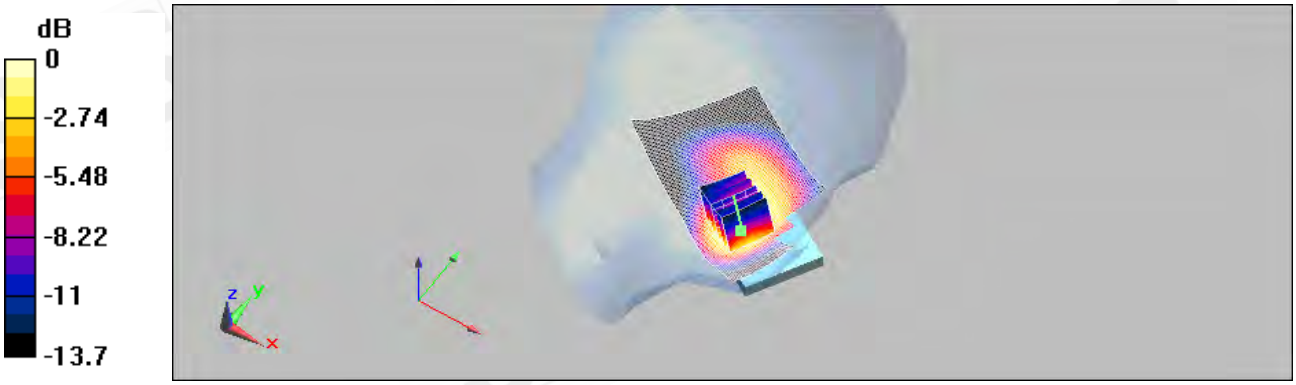
DASY5 Configuration:

- Probe: ES3DV3 - SN3172; ConvF(4.97, 4.97, 4.97); Calibrated: 6/23/2008
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn856; Calibrated: 5/7/2008
- Phantom: SAM1; Type: SAM;
- Measurement SW: DASY5, V5.0 Build 125; SEMCAD X Version 13.4 Build 125

LE Cheek/Area Scan (61x101x1): Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (interpolated) = 1.57 mW/g

LE Cheek/Zoom Scan (7x7x7) (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 11.7 V/m; Power Drift = -0.197 dB
Peak SAR (extrapolated) = 2.11 W/kg

SAR(1 g) = 1.34 mW/g; SAR(10 g) = 0.822 mW/g
Maximum value of SAR (measured) = 1.41 mW/g



0 dB = 1.41mW/g

Date/Time: 04/17/2009 18:31:50

BODY_CH512

DUT: SAPP500;

Communication System: GSM 1900; Frequency: 1850.2 MHz;Duty Cycle: 1:4
Medium: Body 1900 Medium parameters used (interpolated): f = 1850.2 MHz; σ = 1.48 mho/m; ε_r = 53.8; ρ = 1000 kg/m^3
Phantom section: Flat Section

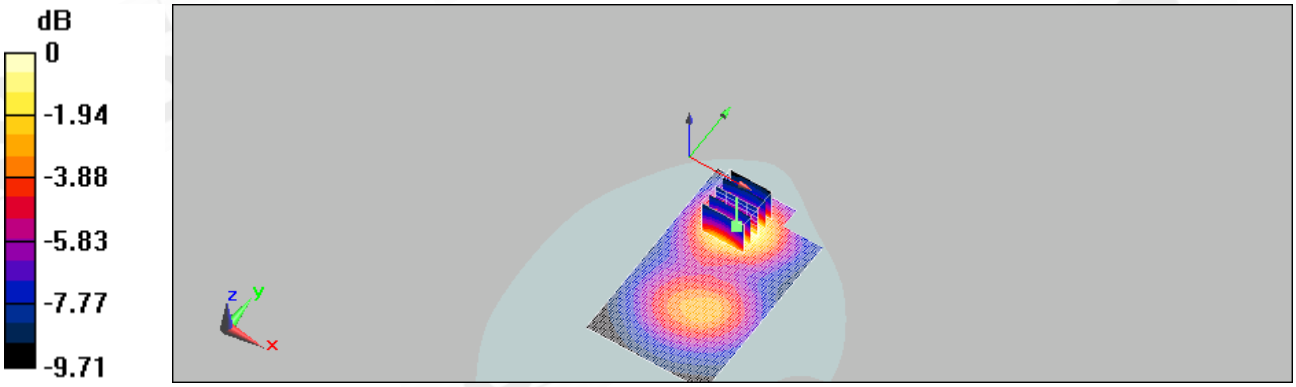
DASY5 Configuration:

- Probe: ES3DV3 - SN3172; ConvF(4.73, 4.73, 4.73); Calibrated: 6/23/2008
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn856; Calibrated: 5/7/2008
- Phantom: SAM1; Type: SAM;
- Measurement SW: DASY5, V5.0 Build 125; SEMCAD X Version 13.4 Build 125

Body/Area Scan (61x101x1): Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (interpolated) = 1.22 mW/g

Body/Zoom Scan (7x7x7) (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 15.2 V/m; Power Drift = -0.175 dB
Peak SAR (extrapolated) = 1.64 W/kg

SAR(1 g) = 1.06 mW/g; SAR(10 g) = 0.675 mW/g
Maximum value of SAR (measured) = 1.14 mW/g



0 dB = 1.14mW/g

Date/Time: 04/17/2009 08:26:42

LE_Cheek_CH9400_ rapeated with Memory card

DUT: SAPP500;

Communication System: WCDMA B2; Frequency: 1880 MHz;Duty Cycle: 1:1
Medium: Head 1900 Medium parameters used: f = 1880 MHz; σ = 1.46 mho/m; ε_r = 40.4; ρ = 1000 kg/m^3
Phantom section: Left Section

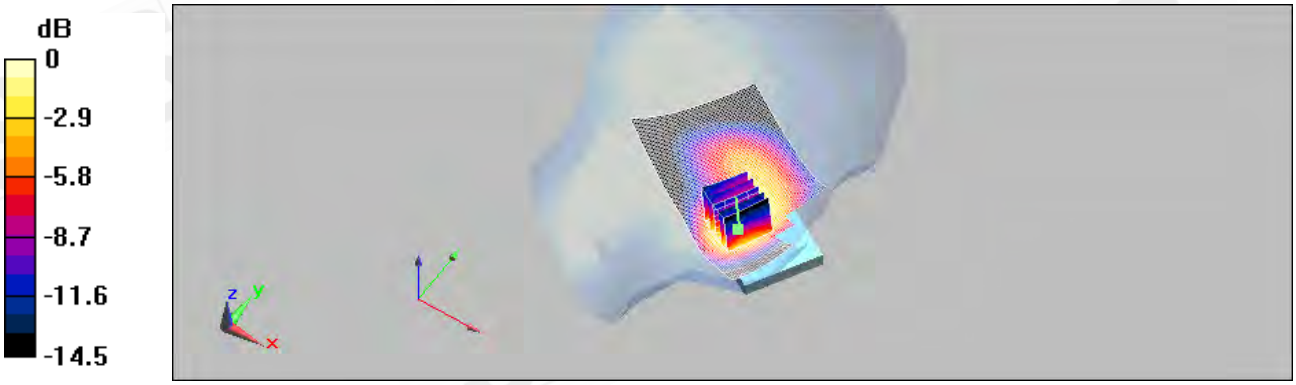
DASY5 Configuration:

- Probe: ES3DV3 - SN3172; ConvF(4.97, 4.97, 4.97); Calibrated: 6/23/2008
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn856; Calibrated: 5/7/2008
- Phantom: SAM1; Type: SAM;
- Measurement SW: DASY5, V5.0 Build 125; SEMCAD X Version 13.4 Build 125

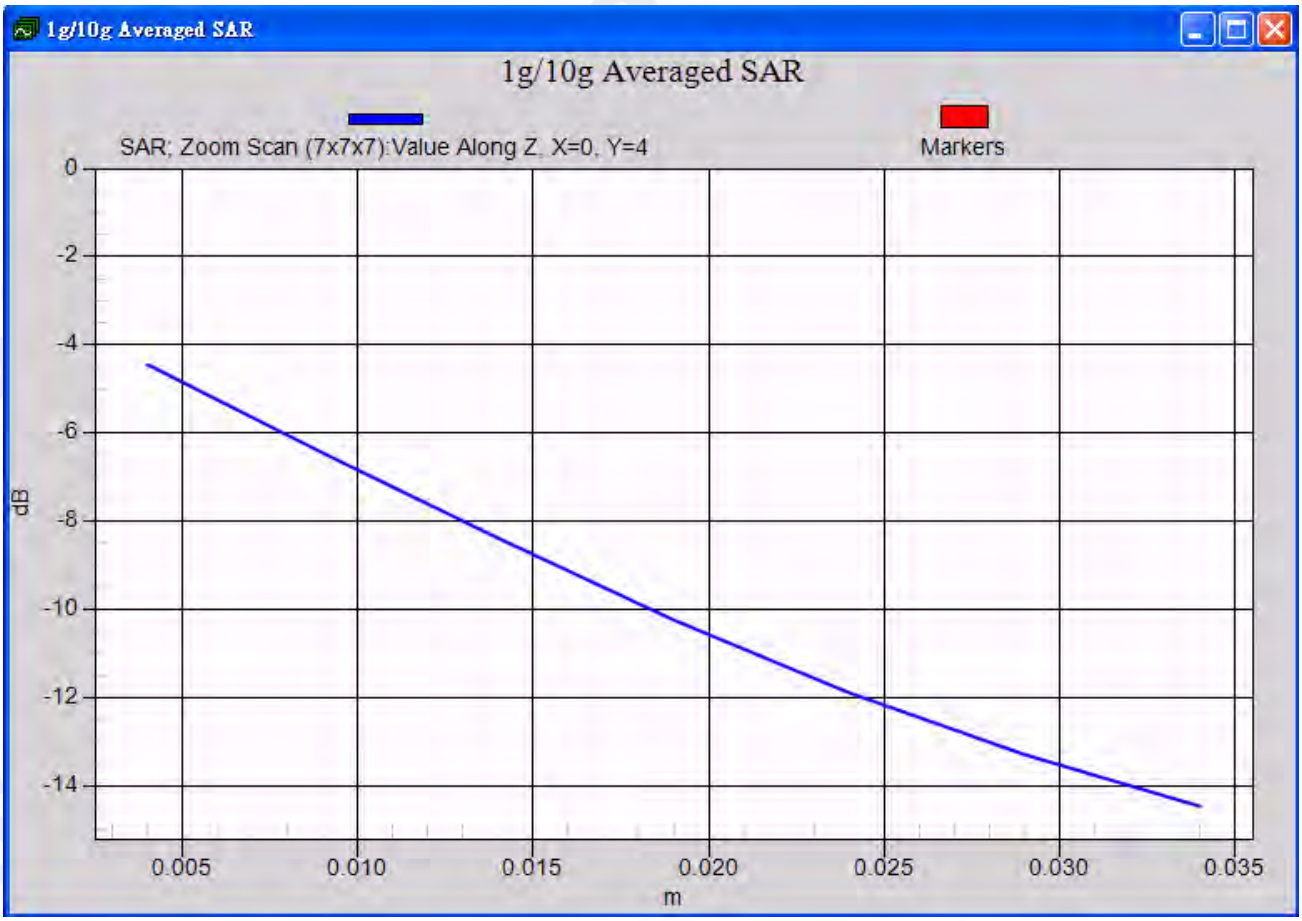
LE Cheek/Area Scan (61x101x1): Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (interpolated) = 1.79 mW/g

LE Cheek/Zoom Scan (7x7x7) (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 12 V/m; Power Drift = 0.099 dB
Peak SAR (extrapolated) = 2.48 W/kg

SAR(1 g) = 1.57 mW/g; SAR(10 g) = 0.955 mW/g
Maximum value of SAR (measured) = 1.69 mW/g



0 dB = 1.69mW/g



Date/Time: 04/17/2009 21:51:41

BODY_CH9400

DUT: SAPP500;

Communication System: WCDMA B2; Frequency: 1880 MHz;Duty Cycle: 1:1
Medium: Body 1900 Medium parameters used: f = 1880 MHz; σ = 1.49 mho/m; ε_r = 53.5; ρ = 1000 kg/m^3
Phantom section: Flat Section

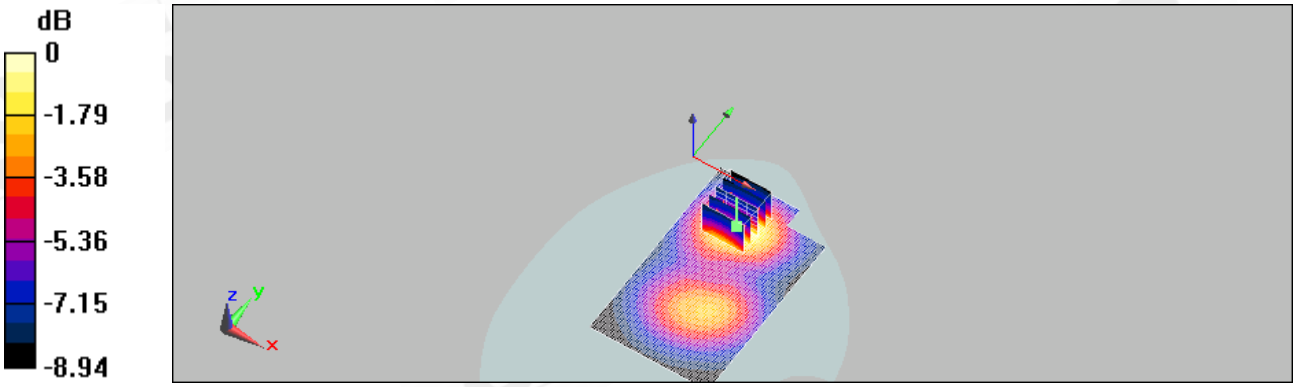
DASY5 Configuration:

- Probe: ES3DV3 - SN3172; ConvF(4.73, 4.73, 4.73); Calibrated: 6/23/2008
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn856; Calibrated: 5/7/2008
- Phantom: SAM1; Type: SAM;
- Measurement SW: DASY5, V5.0 Build 125; SEMCAD X Version 13.4 Build 125

Body/Area Scan (61x101x1): Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (interpolated) = 0.820 mW/g

Body/Zoom Scan (7x7x7) (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 13.2 V/m; Power Drift = -0.011 dB
Peak SAR (extrapolated) = 1.12 W/kg

SAR(1 g) = 0.724 mW/g; SAR(10 g) = 0.467 mW/g
Maximum value of SAR (measured) = 0.778 mW/g



0 dB = 0.778mW/g

Date/Time: 04/17/2009 22:19:21

BODY_CH9400_ repeated with HSDPA mode

DUT: SAPP500;

Communication System: WCDMA B2; Frequency: 1880 MHz;Duty Cycle: 1:1
Medium: Body 1900 Medium parameters used: f = 1880 MHz; σ = 1.49 mho/m; ε_r = 53.5; ρ = 1000 kg/m^3
Phantom section: Flat Section

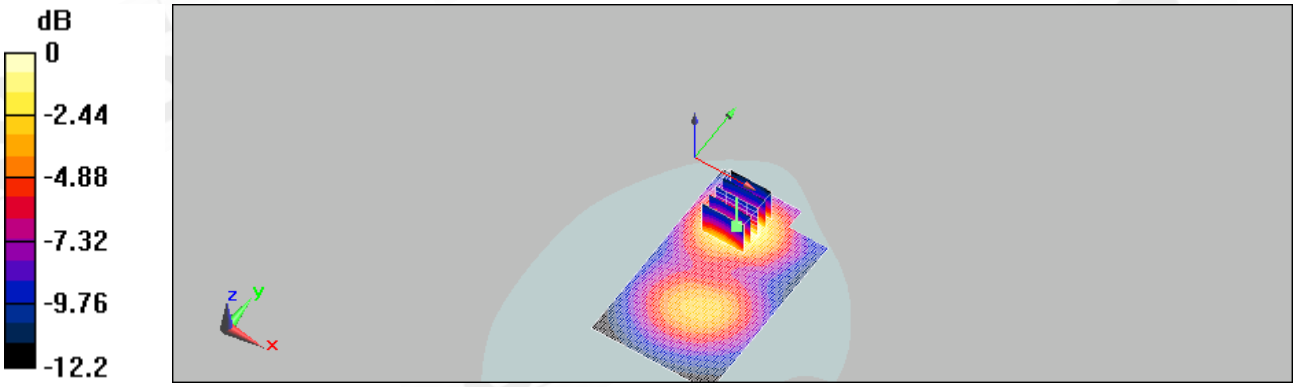
DASY5 Configuration:

- Probe: ES3DV3 - SN3172; ConvF(4.73, 4.73, 4.73); Calibrated: 6/23/2008
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn856; Calibrated: 5/7/2008
- Phantom: SAM1; Type: SAM;
- Measurement SW: DASY5, V5.0 Build 125; SEMCAD X Version 13.4 Build 125

Body/Area Scan (61x101x1): Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (interpolated) = 0.699 mW/g

Body/Zoom Scan (7x7x7) (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 11.1 V/m; Power Drift = -0.00524 dB
Peak SAR (extrapolated) = 1.01 W/kg

SAR(1 g) = 0.633 mW/g; SAR(10 g) = 0.388 mW/g
Maximum value of SAR (measured) = 0.684 mW/g



0 dB = 0.684mW/g

Date/Time: 04/17/2009 22:45:37

BODY_CH9400_ repeated with HSUPA mode

DUT: SAPP500;

Communication System: WCDMA B2; Frequency: 1880 MHz;Duty Cycle: 1:1
Medium: Body 1900 Medium parameters used: f = 1880 MHz; σ = 1.49 mho/m; ε_r = 53.5; ρ = 1000 kg/m^3
Phantom section: Flat Section

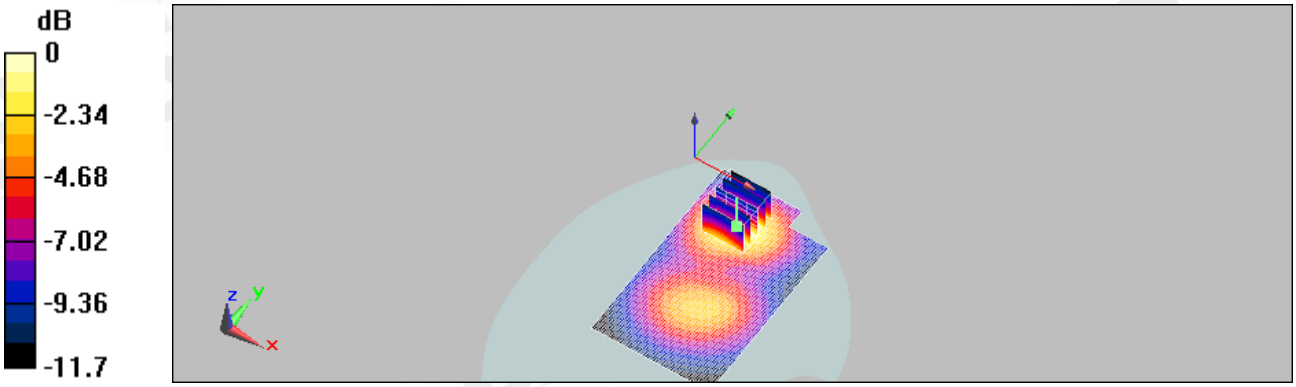
DASY5 Configuration:

- Probe: ES3DV3 - SN3172; ConvF(4.73, 4.73, 4.73); Calibrated: 6/23/2008
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn856; Calibrated: 5/7/2008
- Phantom: SAM1; Type: SAM;
- Measurement SW: DASY5, V5.0 Build 125; SEMCAD X Version 13.4 Build 125

Body/Area Scan (61x101x1): Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (interpolated) = 0.644 mW/g

Body/Zoom Scan (7x7x7) (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 10.6 V/m; Power Drift = 0.155 dB
Peak SAR (extrapolated) = 0.935 W/kg

SAR(1 g) = 0.585 mW/g; SAR(10 g) = 0.359 mW/g
Maximum value of SAR (measured) = 0.631 mW/g



0 dB = 0.631mW/g

Date/Time: 04/17/2009 04:04:49

RE_Cheek_CH4233

DUT: SAPP500;

Communication System: WCDMA B5; Frequency: 846.6 MHz;Duty Cycle: 1:1
Medium: Head 900 Medium parameters used (extrapolated): f = 846.6 MHz; σ = 0.915 mho/m; ε_r = 42.1; ρ = 1000 kg/m^3
Phantom section: Right Section

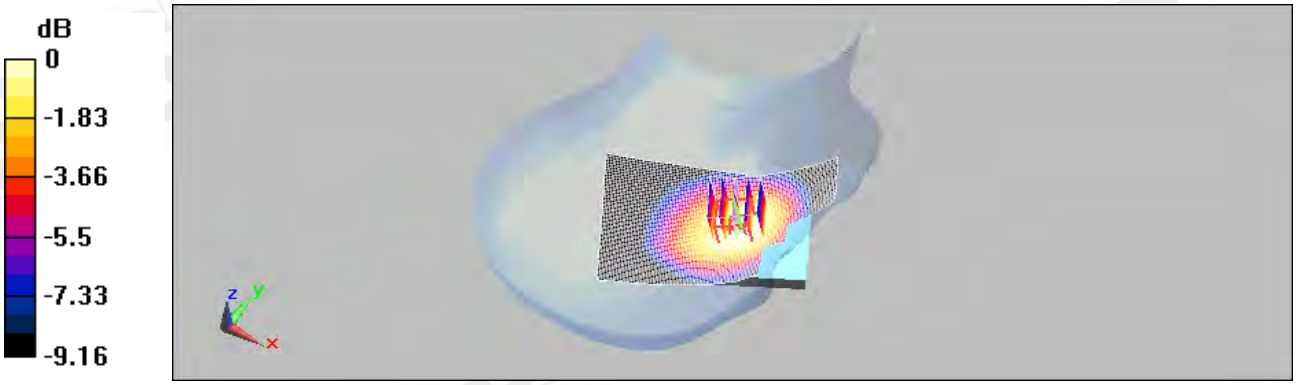
DASY5 Configuration:

- Probe: ES3DV3 - SN3172; ConvF(5.66, 5.66, 5.66); Calibrated: 6/23/2008
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn856; Calibrated: 5/7/2008
- Phantom: SAM1; Type: SAM;
- Measurement SW: DASY5, V5.0 Build 125; SEMCAD X Version 13.4 Build 125

RE Cheek/Area Scan (61x101x1): Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (interpolated) = 0.722 mW/g

RE Cheek/Zoom Scan (7x7x7) (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 10.7 V/m; Power Drift = 0.154 dB
Peak SAR (extrapolated) = 0.858 W/kg

SAR(1 g) = 0.698 mW/g; SAR(10 g) = 0.523 mW/g
Maximum value of SAR (measured) = 0.738 mW/g



0 dB = 0.738mW/g

Date/Time: 04/17/2009 14:45:55

BODY_CH4233

DUT: SAPP500;

Communication System: WCDMA B5; Frequency: 846.6 MHz;Duty Cycle: 1:1
Medium: BODY 900 Medium parameters used: f = 847 MHz; σ = 0.974 mho/m; ε_r = 55.9; ρ = 1000 kg/m^3
Phantom section: Flat Section

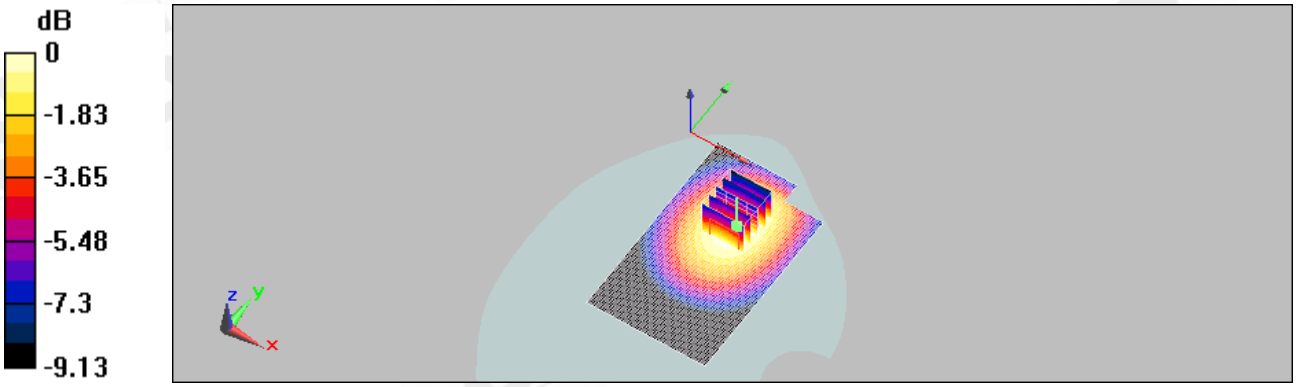
DASY5 Configuration:

- Probe: ES3DV3 - SN3172; ConvF(5.61, 5.61, 5.61); Calibrated: 6/23/2008
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn856; Calibrated: 5/7/2008
- Phantom: SAM1; Type: SAM;
- Measurement SW: DASY5, V5.0 Build 125; SEMCAD X Version 13.4 Build 125

BODY/Area Scan (61x101x1): Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (interpolated) = 0.565 mW/g

BODY/Zoom Scan (7x7x7) (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 7.68 V/m; Power Drift = -0.041 dB
Peak SAR (extrapolated) = 0.684 W/kg

SAR(1 g) = 0.542 mW/g; SAR(10 g) = 0.400 mW/g
Maximum value of SAR (measured) = 0.569 mW/g



0 dB = 0.569mW/g

Date/Time: 04/17/2009 15:13:24

BODY_CH4233_ repeated with HSDPA mode

DUT: SAPP500;

Communication System: WCDMA B5; Frequency: 846.6 MHz;Duty Cycle: 1:1
Medium: BODY 900 Medium parameters used: f = 847 MHz; σ = 0.974 mho/m; ε_r = 55.9; ρ = 1000 kg/m^3
Phantom section: Flat Section

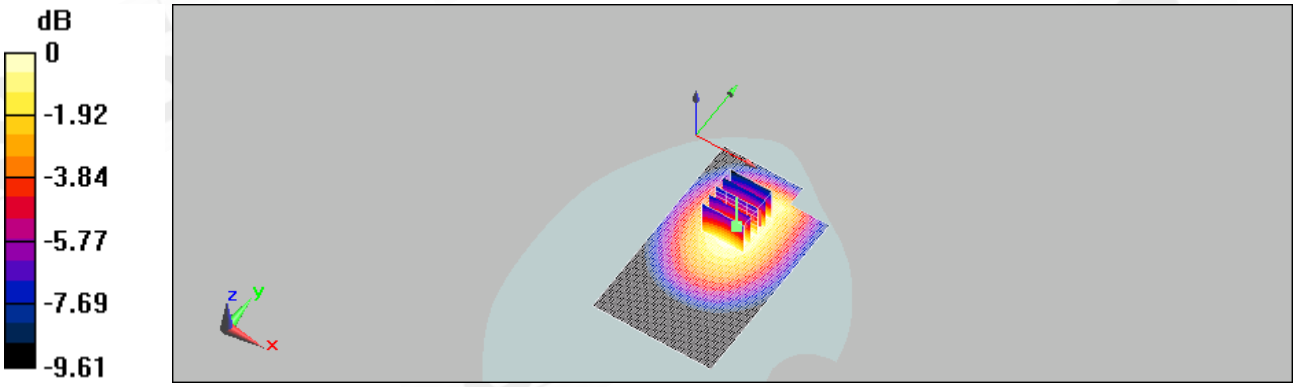
DASY5 Configuration:

- Probe: ES3DV3 - SN3172; ConvF(5.61, 5.61, 5.61); Calibrated: 6/23/2008
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn856; Calibrated: 5/7/2008
- Phantom: SAM1; Type: SAM;
- Measurement SW: DASY5, V5.0 Build 125; SEMCAD X Version 13.4 Build 125

BODY/Area Scan (61x101x1): Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (interpolated) = 0.501 mW/g

BODY/Zoom Scan (7x7x7) (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 6.66 V/m; Power Drift = 0.051 dB
Peak SAR (extrapolated) = 0.620 W/kg

SAR(1 g) = 0.481 mW/g; SAR(10 g) = 0.353 mW/g
Maximum value of SAR (measured) = 0.507 mW/g



0 dB = 0.507mW/g

Date/Time: 04/17/2009 15:42:39

BODY_CH4183_ repeated with HSUPA mode

DUT: SAPP500;

Communication System: WCDMA B5; Frequency: 836.6 MHz;Duty Cycle: 1:1
Medium: BODY 900 Medium parameters used: f = 837 MHz; σ = 0.969 mho/m; ε_r = 56; ρ = 1000 kg/m^3
Phantom section: Flat Section

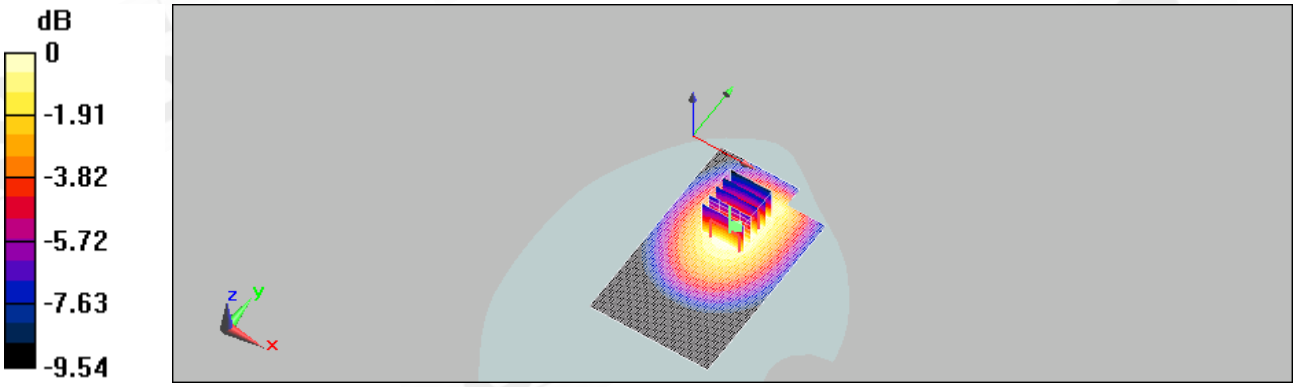
DASY5 Configuration:

- Probe: ES3DV3 - SN3172; ConvF(5.61, 5.61, 5.61); Calibrated: 6/23/2008
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn856; Calibrated: 5/7/2008
- Phantom: SAM1; Type: SAM;
- Measurement SW: DASY5, V5.0 Build 125; SEMCAD X Version 13.4 Build 125

BODY/Area Scan (61x101x1): Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (interpolated) = 0.412 mW/g

BODY/Zoom Scan (7x7x7) (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 6.19 V/m; Power Drift = -0.088 dB
Peak SAR (extrapolated) = 0.514 W/kg

SAR(1 g) = 0.395 mW/g; SAR(10 g) = 0.291 mW/g
Maximum value of SAR (measured) = 0.414 mW/g



0 dB = 0.414mW/g

Date/Time: 04/21/2009 03:21:25

BODY_CH6_WLAN 802.11b_ repeated with WELLDONE Battery

DUT: SAPP500;

Communication System: Wireless LAN; Frequency: 2437 MHz;Duty Cycle: 1:1
Medium: Body 2450 Medium parameters used: f = 2437 MHz; σ = 1.96 mho/m; ε_r = 52.3; ρ = 1000 kg/m^3
Phantom section: Flat Section

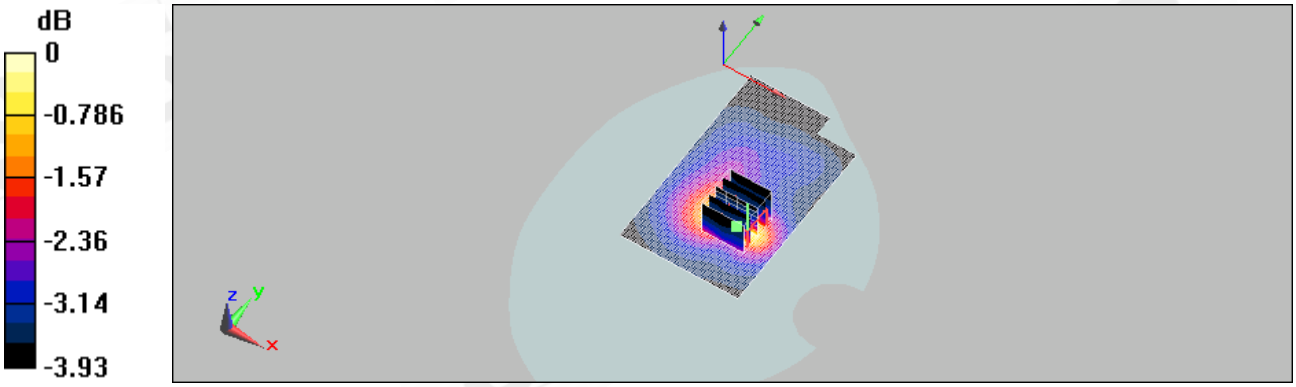
DASY5 Configuration:

- Probe: ES3DV3 - SN3172; ConvF(3.92, 3.92, 3.92); Calibrated: 6/23/2008
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn856; Calibrated: 5/7/2008
- Phantom: SAM1; Type: SAM;
- Measurement SW: DASY5, V5.0 Build 125; SEMCAD X Version 13.4 Build 125

Body/Area Scan (61x101x1): Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (interpolated) = 0.206 mW/g

Body/Zoom Scan (7x7x7) (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 7.94 V/m; Power Drift = -0.057 dB
Peak SAR (extrapolated) = 0.299 W/kg

SAR(1 g) = 0.193 mW/g; SAR(10 g) = 0.139 mW/g
Maximum value of SAR (measured) = 0.207 mW/g



0 dB = 0.207mW/g

Date/Time: 04/21/2009 03:50:45

BODY_CH6_WLAN 802.11g

DUT: SAPP500;

Communication System: Wireless LAN; Frequency: 2437 MHz;Duty Cycle: 1:1
Medium: Body 2450 Medium parameters used: f = 2437 MHz; σ = 1.96 mho/m; ε_r = 52.3; ρ = 1000 kg/m^3
Phantom section: Flat Section

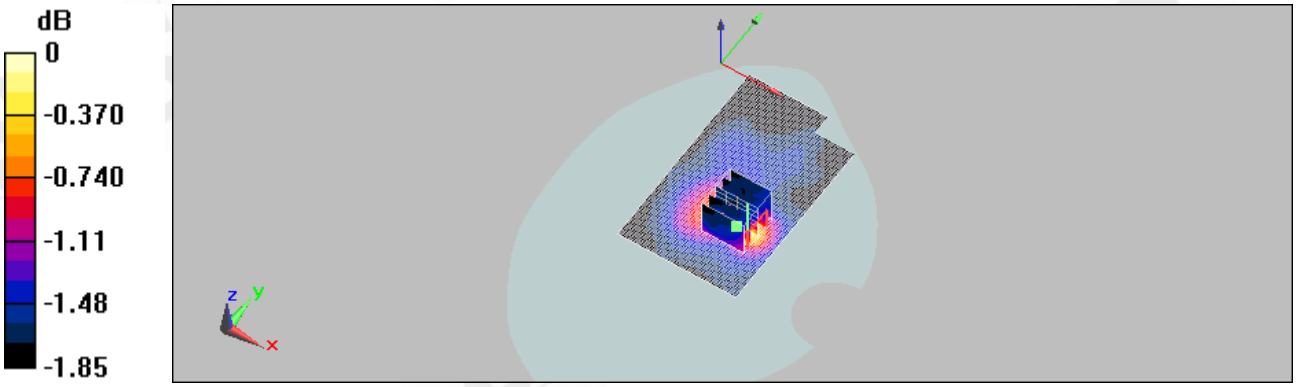
DASY5 Configuration:

- Probe: ES3DV3 - SN3172; ConvF(3.92, 3.92, 3.92); Calibrated: 6/23/2008
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn856; Calibrated: 5/7/2008
- Phantom: SAM1; Type: SAM;
- Measurement SW: DASY5, V5.0 Build 125; SEMCAD X Version 13.4 Build 125

Body/Area Scan (61x101x1): Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (interpolated) = 0.098 mW/g

Body/Zoom Scan (7x7x7) (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 6.35 V/m; Power Drift = -0.165 dB
Peak SAR (extrapolated) = 0.116 W/kg

SAR(1 g) = 0.096 mW/g; SAR(10 g) = 0.082 mW/g
Maximum value of SAR (measured) = 0.101 mW/g



0 dB = 0.101mW/g

5. System Verification

Date/Time: 04/15/2009 00:18:22

DUT: Dipole 835 MHz;

Communication System: CW; Frequency: 835 MHz;Duty Cycle: 1:1
Medium: HSL900 Medium parameters used: f = 835 MHz; σ = 0.89 mho/m; ε_r = 42.3; ρ = 1000 kg/m^3
Phantom section: Flat Section

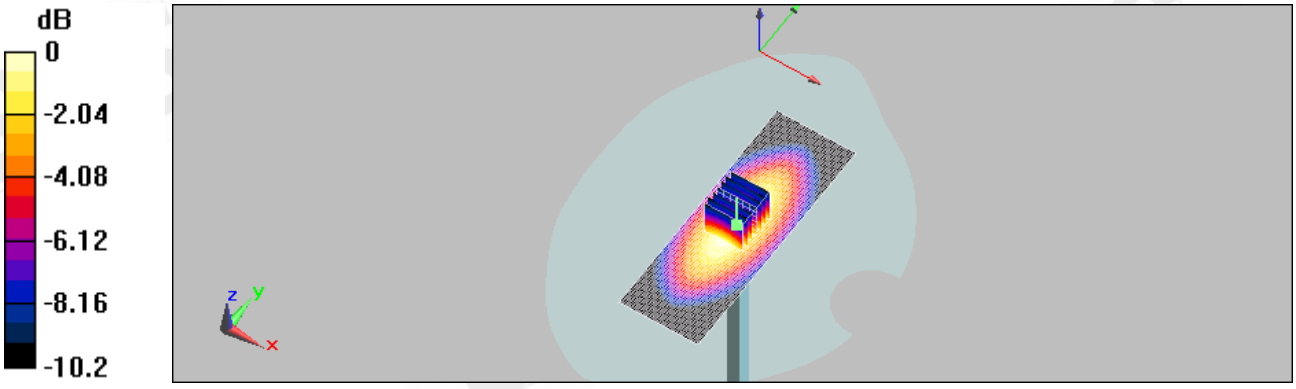
DASY5 Configuration:

- Probe: ES3DV3 - SN3172; ConvF(5.66, 5.66, 5.66); Calibrated: 6/23/2008
- Sensor-Surface: 3.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn856; Calibrated: 5/7/2008
- Phantom: SAM1; Type: SAM;
- Measurement SW: DASY5, V5.0 Build 125; SEMCAD X Version 13.4 Build 125

d=15mm, Pin=250mW, dist=3.4mm : Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (interpolated) = 2.61 mW/g

d=15mm, Pin=250mW, dist=3.4mm : Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 55.6 V/m; Power Drift = 0.00816 dB
Peak SAR (extrapolated) = 3.37 W/kg

SAR(1 g) = 2.31 mW/g; SAR(10 g) = 1.52 mW/g
Maximum value of SAR (measured) = 2.61 mW/g



0 dB = 2.61mW/g

Date/Time: 04/16/2009 00:30:00

DUT: Dipole 835 MHz;

Communication System: CW; Frequency: 835 MHz;Duty Cycle: 1:1
Medium: HSL900 Medium parameters used: f = 835 MHz; σ = 0.955 mho/m; ε_r = 55.3; ρ = 1000 kg/m^3
Phantom section: Flat Section

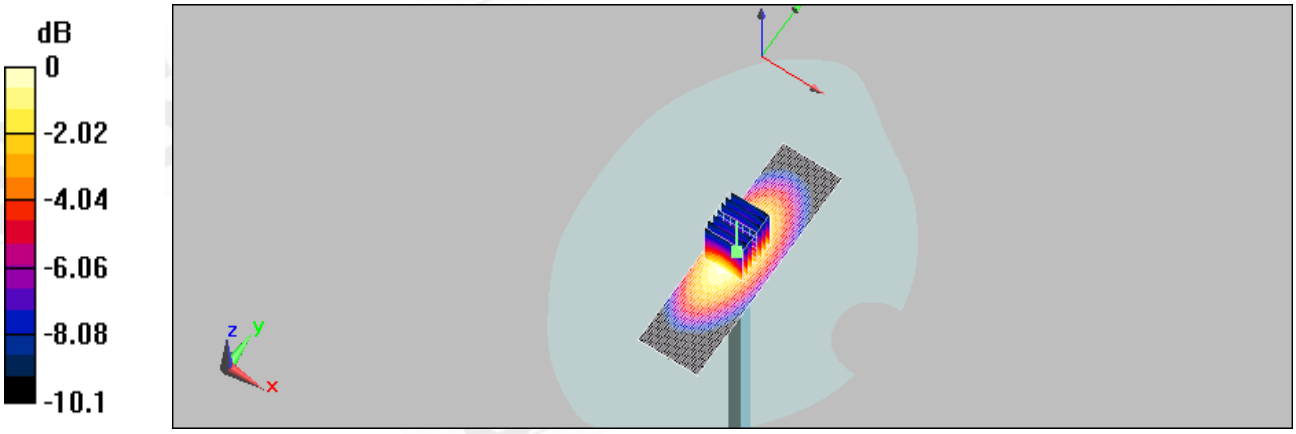
DASY5 Configuration:

- Probe: ES3DV3 - SN3172; ConvF(5.61, 5.61, 5.61); Calibrated: 6/23/2008
- Sensor-Surface: 3.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn856; Calibrated: 5/7/2008
- Phantom: SAM1; Type: SAM;
- Measurement SW: DASY5, V5.0 Build 125; SEMCAD X Version 13.4 Build 125

d=15mm, Pin=250mW, dist=3.4mm : Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (interpolated) = 2.74 mW/g

d=15mm, Pin=250mW, dist=3.4mm : Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 54.8 V/m; Power Drift = 0.00291 dB
Peak SAR (extrapolated) = 3.52 W/kg

SAR(1 g) = 2.44 mW/g; SAR(10 g) = 1.61 mW/g
Maximum value of SAR (measured) = 2.76 mW/g



0 dB = 2.76mW/g

Date/Time: 04/15/2009 06:54:48

DUT: Dipole 1900 MHz;

Communication System: CW; Frequency: 1900 MHz;Duty Cycle: 1:1
Medium: HSL1900 Medium parameters used: f = 1900 MHz; σ = 1.47 mho/m; ε_r = 40.3; ρ = 1000 kg/m^3
Phantom section: Flat Section

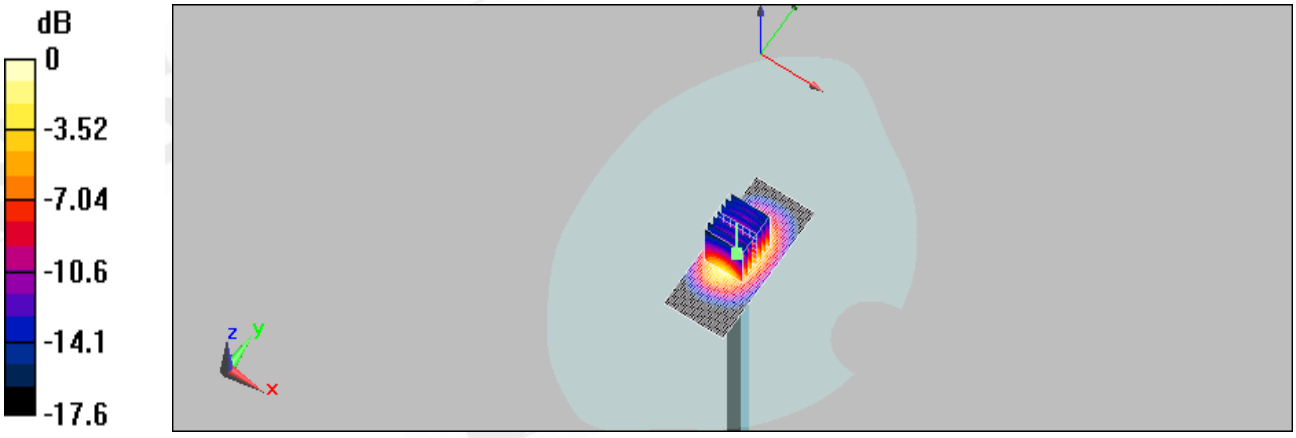
DASY5 Configuration:

- Probe: ES3DV3 - SN3172; ConvF(4.97, 4.97, 4.97); Calibrated: 6/23/2008
- Sensor-Surface: 3.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn856; Calibrated: 5/7/2008
- Phantom: SAM1; Type: SAM;
- Measurement SW: DASY5, V5.0 Build 125; SEMCAD X Version 13.4 Build 125

d=15mm, Pin=250mW, dist=3.4mm : Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (interpolated) = 13 mW/g

d=15mm, Pin=250mW, dist=3.4mm: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 94.2 V/m; Power Drift = -0.133 dB
Peak SAR (extrapolated) = 18.3 W/kg

SAR(1 g) = 9.94 mW/g; SAR(10 g) = 5.13 mW/g
Maximum value of SAR (measured) = 12.1 mW/g



0 dB = 12.1mW/g

Date/Time: 04/16/2009 04:26:55

DUT: Dipole 1900 MHz;

Communication System: CW; Frequency: 1900 MHz;Duty Cycle: 1:1
Medium: BODY1900 Medium parameters used: f = 1900 MHz; σ = 1.57 mho/m; ε_r = 53.7; ρ = 1000 kg/m^3
Phantom section: Flat Section

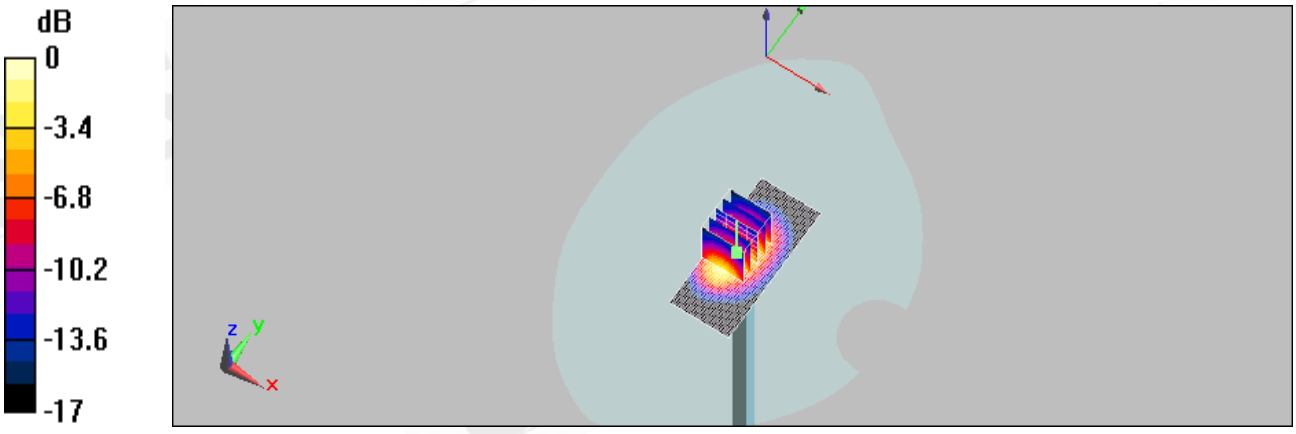
DASY5 Configuration:

- Probe: ES3DV3 - SN3172; ConvF(4.73, 4.73, 4.73); Calibrated: 6/23/2008
- Sensor-Surface: 3.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn856; Calibrated: 5/7/2008
- Phantom: SAM1; Type: SAM;
- Measurement SW: DASY5, V5.0 Build 125; SEMCAD X Version 13.4 Build 125

d=15mm, Pin=250mW, dist=3.4mm : Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (interpolated) = 13.2 mW/g

d=15mm, Pin=250mW, dist=3.4mm : Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 86.7 V/m; Power Drift = 0.050 dB
Peak SAR (extrapolated) = 17.9 W/kg

SAR(1 g) = 10.1 mW/g; SAR(10 g) = 5.25 mW/g
Maximum value of SAR (measured) = 12 mW/g



0 dB = 12mW/g

Date/Time: 04/16/2009 18:25:12

DUT: Dipole 2450 MHz;

Communication System: CW; Frequency: 2450 MHz;Duty Cycle: 1:1
Medium: HSL900 Medium parameters used: f = 2450 MHz; σ = 1.98 mho/m; ε_r = 53.9; ρ = 1000 kg/m^3
Phantom section: Flat Section

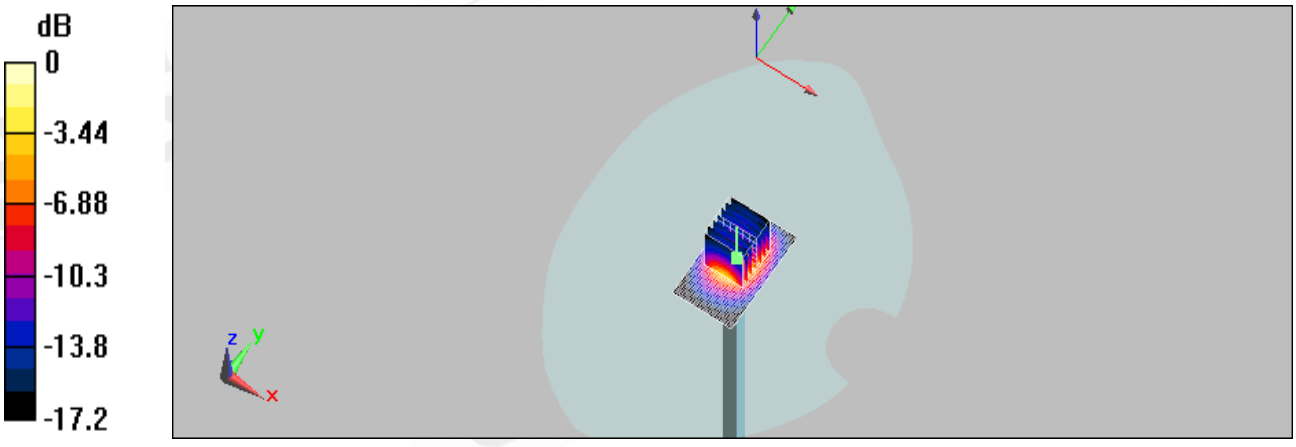
DASY5 Configuration:

- Probe: ES3DV3 - SN3172; ConvF(3.92, 3.92, 3.92); Calibrated: 6/23/2008
- Sensor-Surface: 3.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn856; Calibrated: 5/7/2008
- Phantom: SAM1; Type: SAM;
- Measurement SW: DASY5, V5.0 Build 119; SEMCAD X Version 13.4 Build 125

d=15mm, Pin=250mW, dist=3.4mm : Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (interpolated) = 17.7 mW/g

d=15mm, Pin=250mW, dist=3.4mm : Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 89.7 V/m; Power Drift = -0.024 dB
Peak SAR (extrapolated) = 25.6 W/kg

SAR(1 g) = 12.6 mW/g; SAR(10 g) = 5.9 mW/g
Maximum value of SAR (measured) = 15.6 mW/g



0 dB = 15.6mW/g

Date/Time: 04/17/2009 00:42:02

DUT: Dipole 835 MHz;

Communication System: CW; Frequency: 835 MHz;Duty Cycle: 1:1
Medium: HSL900 Medium parameters used: f = 835 MHz; σ = 0.896 mho/m; ε_r = 42.2; ρ = 1000 kg/m^3
Phantom section: Flat Section

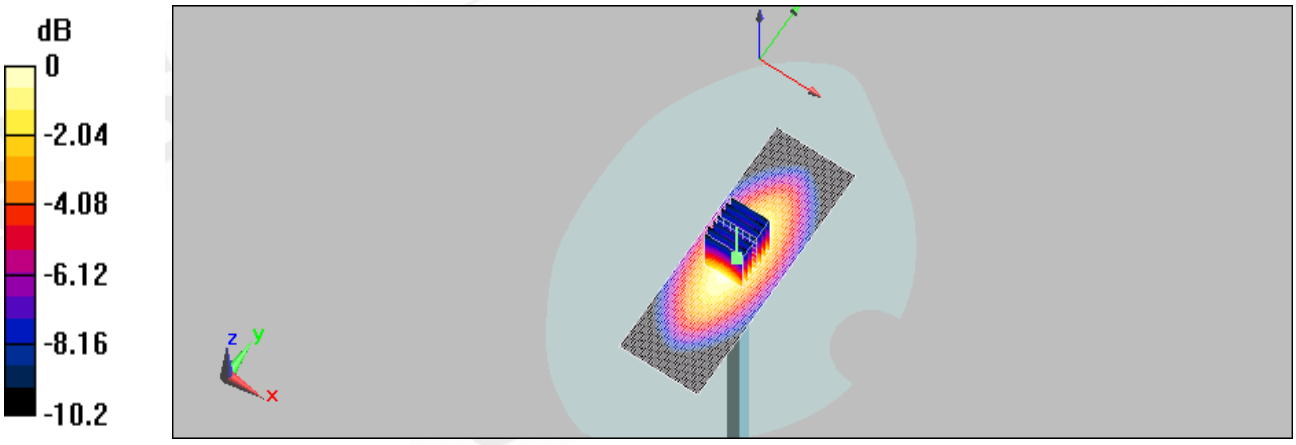
DASY5 Configuration:

- Probe: ES3DV3 - SN3172; ConvF(5.66, 5.66, 5.66); Calibrated: 6/23/2008
- Sensor-Surface: 3.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn856; Calibrated: 5/7/2008
- Phantom: SAM1; Type: SAM;
- Measurement SW: DASY5, V5.0 Build 125; SEMCAD X Version 13.4 Build 125

d=15mm, Pin=250mW, dist=3.4mm : Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (interpolated) = 2.61 mW/g

d=15mm, Pin=250mW, dist=3.4mm : Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 55.5 V/m; Power Drift = 0.00494 dB
Peak SAR (extrapolated) = 3.37 W/kg

SAR(1 g) = 2.3 mW/g; SAR(10 g) = 1.52 mW/g
Maximum value of SAR (measured) = 2.62 mW/g



0 dB = 2.62mW/g

Date/Time: 04/17/2009 09:23:50

DUT: Dipole 835 MHz;

Communication System: CW; Frequency: 835 MHz;Duty Cycle: 1:1
Medium: HSL900 Medium parameters used: f = 835 MHz; σ = 0.964 mho/m; ε_r = 55.4; ρ = 1000 kg/m^3
Phantom section: Flat Section

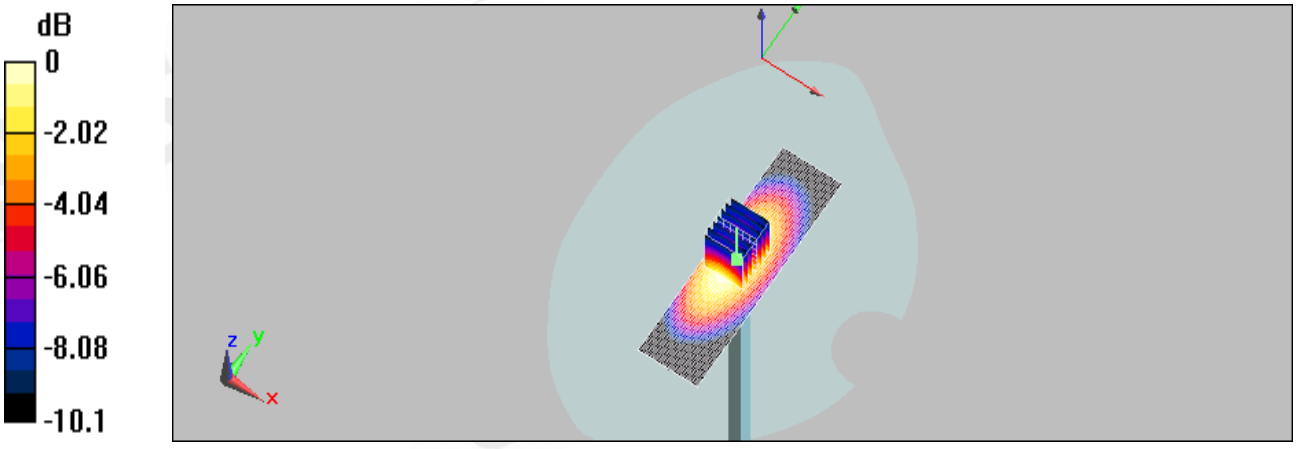
DASY5 Configuration:

- Probe: ES3DV3 - SN3172; ConvF(5.61, 5.61, 5.61); Calibrated: 6/23/2008
- Sensor-Surface: 3.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn856; Calibrated: 5/7/2008
- Phantom: SAM1; Type: SAM; Measurement SW: DASY5, V5.0 Build 125; SEMCAD X Version 13.4 Build 125

d=15mm, Pin=250mW, dist=3.4mm : Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (interpolated) = 2.74 mW/g

d=15mm, Pin=250mW, dist=3.4mm : Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 54.8 V/m; Power Drift = -0.000105 dB
Peak SAR (extrapolated) = 3.52 W/kg

SAR(1 g) = 2.42 mW/g; SAR(10 g) = 1.61 mW/g
Maximum value of SAR (measured) = 2.75 mW/g



0 dB = 2.75mW/g

Date/Time: 04/17/2009 05:01:15

DUT: Dipole 1900 MHz;

Communication System: CW; Frequency: 1900 MHz;Duty Cycle: 1:1
Medium: HSL1900 Medium parameters used: f = 1900 MHz; σ = 1.49 mho/m; ε_r = 40.5; ρ = 1000 kg/m^3
Phantom section: Flat Section

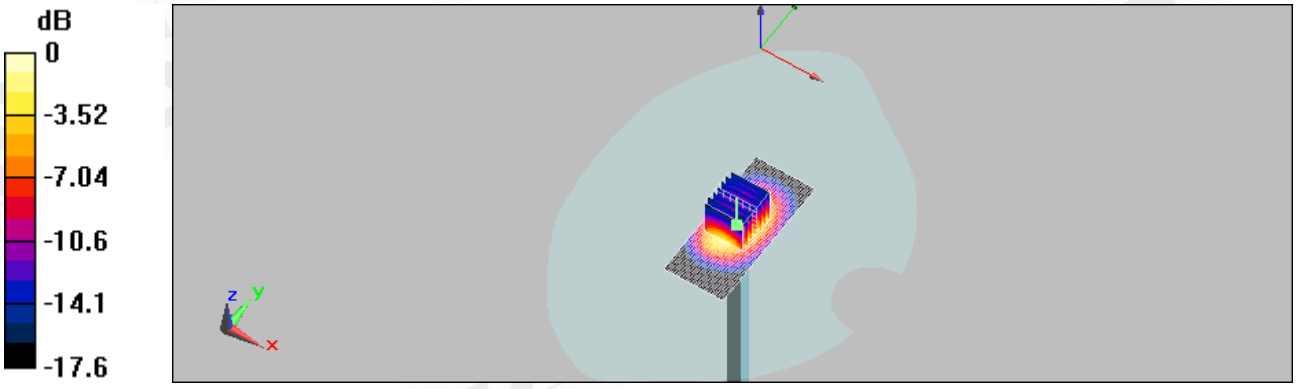
DASY5 Configuration:

- Probe: ES3DV3 - SN3172; ConvF(4.97, 4.97, 4.97); Calibrated: 6/23/2008
- Sensor-Surface: 3.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn856; Calibrated: 5/7/2008
- Phantom: SAM1; Type: SAM;
- Measurement SW: DASY5, V5.0 Build 125; SEMCAD X Version 13.4 Build 125

d=15mm, Pin=250mW, dist=3.4mm : Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (interpolated) = 13.1 mW/g

d=15mm, Pin=250mW, dist=3.4mm : Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 94.8 V/m; Power Drift = -0.031 dB
Peak SAR (extrapolated) = 18.4 W/kg

SAR(1 g) = 10 mW/g; SAR(10 g) = 5.18 mW/g
Maximum value of SAR (measured) = 12.2 mW/g



0 dB = 12.2mW/g

Date/Time: 04/17/2009 16:38:28

DUT: Dipole 1900 MHz;

Communication System: CW; Frequency: 1900 MHz;Duty Cycle: 1:1
Medium: BODY1900 Medium parameters used: f = 1900 MHz; σ = 1.59 mho/m; ε_r = 53.6; ρ = 1000 kg/m^3
Phantom section: Flat Section

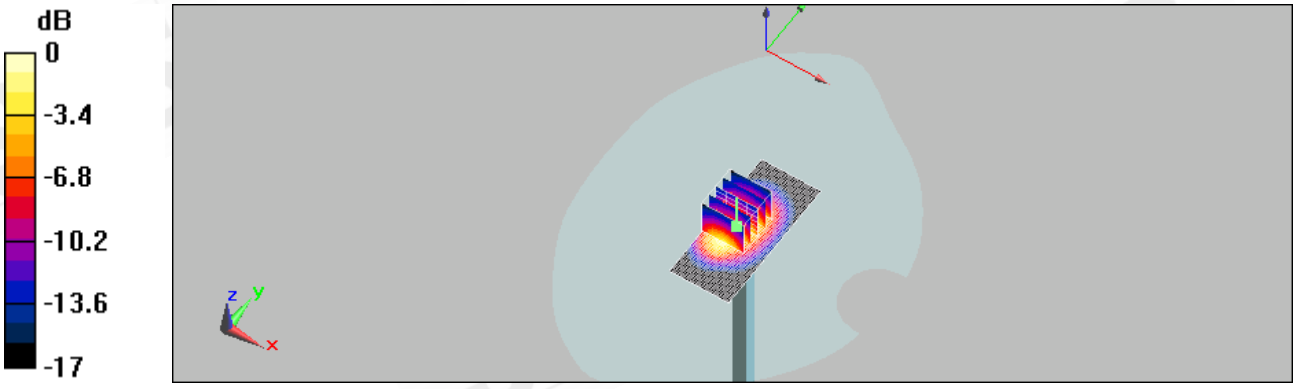
DASY5 Configuration:

- Probe: ES3DV3 - SN3172; ConvF(4.73, 4.73, 4.73); Calibrated: 6/23/2008
- Sensor-Surface: 3.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn856; Calibrated: 5/7/2008
- Phantom: SAM1; Type: SAM;
- Measurement SW: DASY5, V5.0 Build 125; SEMCAD X Version 13.4 Build 125

d=15mm, Pin=250mW, dist=3.4mm : Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (interpolated) = 13.3 mW/g

d=15mm, Pin=250mW, dist=3.4mm : Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 87.1 V/m; Power Drift = -0.027 dB
Peak SAR (extrapolated) = 17.7 W/kg

SAR(1 g) = 9.95 mW/g; SAR(10 g) = 5.21 mW/g
Maximum value of SAR (measured) = 11.9 mW/g



0 dB = 11.9mW/g

Date/Time: 04/21/2009 00:35:16

DUT: Dipole 2450 MHz;

Communication System: CW; Frequency: 2450 MHz;Duty Cycle: 1:1
Medium: BODY2450 Medium parameters used: f = 2450 MHz; σ = 1.99 mho/m; ε_r = 54; ρ = 1000 kg/m^3
Phantom section: Flat Section

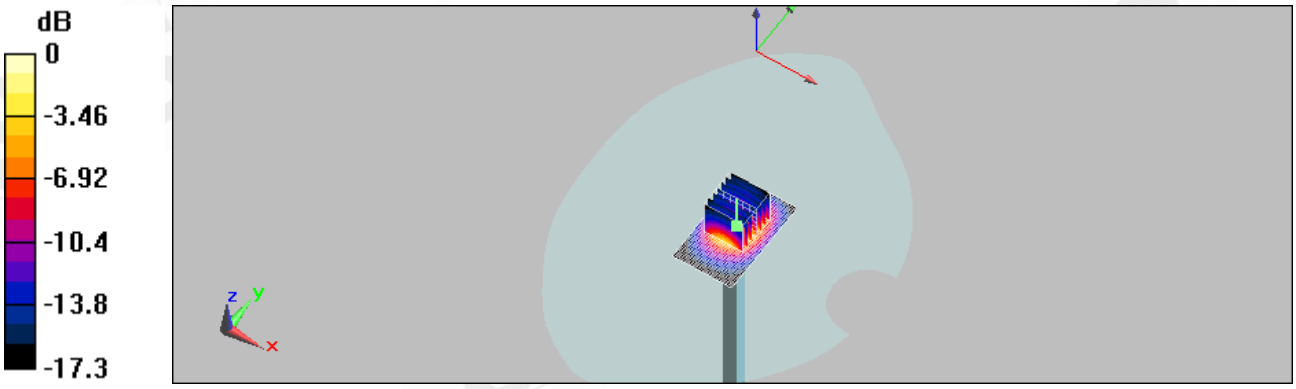
DASY5 Configuration:

- Probe: ES3DV3 - SN3172; ConvF(3.92, 3.92, 3.92); Calibrated: 6/23/2008
- Sensor-Surface: 3.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn856; Calibrated: 5/7/2008
- Phantom: SAM1; Type: SAM;
- Measurement SW: DASY5, V5.0 Build 119; SEMCAD X Version 13.4 Build 125

d=15mm, Pin=250mW, dist=3.4mm : Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (interpolated) = 17.6 mW/g

d=15mm, Pin=250mW, dist=3.4mm : Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 89.5 V/m; Power Drift = -0.018 dB
Peak SAR (extrapolated) = 25.5 W/kg

SAR(1 g) = 12.8 mW/g; SAR(10 g) = 5.88 mW/g
Maximum value of SAR (measured) = 15.5 mW/g



0 dB = 15.5mW/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 (Auden)

Certificate No: DAE4-856_May08

CALIBRATION CERTIFICATE

Object	DAE4 - SD 000 D04 BG - SN: 856
Calibration procedure(s)	QA CAL-06.v12 Calibration procedure for the data acquisition electronics (DAE)
Calibration date:	May 7, 2008
Condition of the calibrated item	In Tolerance

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
Fluke Process Calibrator Type 702	SN: 6295803	04-Oct-07 (No: 6467)	Oct-08
Keithley Multimeter Type 2001	SN: 0810278	03-Oct-07 (No: 6465)	Oct-08
Secondary Standards	**ID #**	**Check Date (in house)**	**Scheduled Check**
Calibrator Box V1.1	SE UMS 006 AB 1004	25-Jun-07 (in house check)	In house check: Jun-08

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

Issued: May 7, 2008

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

Certificate No: DAE4-856_May08 Page 1 of 5

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Accreditation No.: SCS 108

Client SGS (Auden)

Certificate No: ES3-3172_Jun08

CALIBRATION CERTIFICATE

Object ES3DV3 - SN:3172

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

Calibration date: June 23, 2008

Condition of the calibrated item In Tolerance

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-08 (No. 217-00788)	Apr-09
Power sensor E4412A	MY41495277	1-Apr-08 (No. 217-00788)	Apr-09
Power sensor E4412A	MY41498087	1-Apr-08 (No. 217-00788)	Apr-09
Reference 3 dB Attenuator	SN: S5054 (3c)	8-Aug-07 (No. 217-00719)	Aug-08
Reference 20 dB Attenuator	SN: S5086 (20b)	31-Mar-08 (No. 217-00787)	Apr-09
Reference 30 dB Attenuator	SN: S5129 (30b)	8-Aug-07 (No. 217-00720)	Aug-08
Reference Probe ES3DV2	SN: 3013	2-Jan-08 (No. ES3-3013_Jan08)	Jan-09
DAE4	SN: 660	3-Sep-07 (No. DAE4-660_Sep07)	Sep-08

Secondary Standards	ID #	Check Date (in house)	Scheduled Check
RF generator HP 8648C	US3642U01700	4-Aug-99 (in house check Oct-07)	In house check: Oct-09
Network Analyzer HP 8753E	US37390585	18-Oct-01 (in house check Oct-07)	In house check: Oct-08

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

Issued: June 24, 2008

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Certificate No: ES3-3172_Jun08 Page 1 of 9

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Accreditation No.: SCS 108

Accredited by the Swiss Accreditation Service (SAS)
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Glossary:

TSL	tissue simulating liquid
NORMx,y,z	sensitivity in free space
ConvF	sensitivity in TSL / NORMx,y,z
DCP	diode compression point
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 (no uncertainty required). DCP does not depend on frequency nor media.
- *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
Calibrated: June 23, 2008

Calibrated for DASY Systems
(Note: non-compatible with DASY2 system!)

ES3DV3 SN:3172 June 23, 2008

DASY - Parameters of Probe: ES3DV3 SN:3172

Sensitivity in Free Space[A]

NormX	1.38 ± 10.1%	$\mu V/(V/m)^2$	DCP X	93 mV
NormY	1.15 ± 10.1%	$\mu V/(V/m)^2$	DCP Y	93 mV
NormZ	0.94 ± 10.1%	$\mu V/(V/m)^2$	DCP Z	89 mV

Sensitivity in Tissue Simulating Liquid (Conversion Factors)

Please see Page 8.

Boundary Effect

TSL 900 MHz Typical SAR gradient: 5 % per mm

Sensor Center to Phantom Surface Distance		3.0 mm	4.0 mm
SAR_{be} [%]	Without Correction Algorithm	11.8	6.1
SAR_{be} [%]	With Correction Algorithm	0.6	0.2

TSL 1810 MHz Typical SAR gradient: 10 % per mm

Sensor Center to Phantom Surface Distance		3.0 mm	4.0 mm
SAR_{be} [%]	Without Correction Algorithm	10.2	6.5
SAR_{be} [%]	With Correction Algorithm	0.4	0.4

Sensor Offset

Probe Tip to Sensor Center	2.0 mm

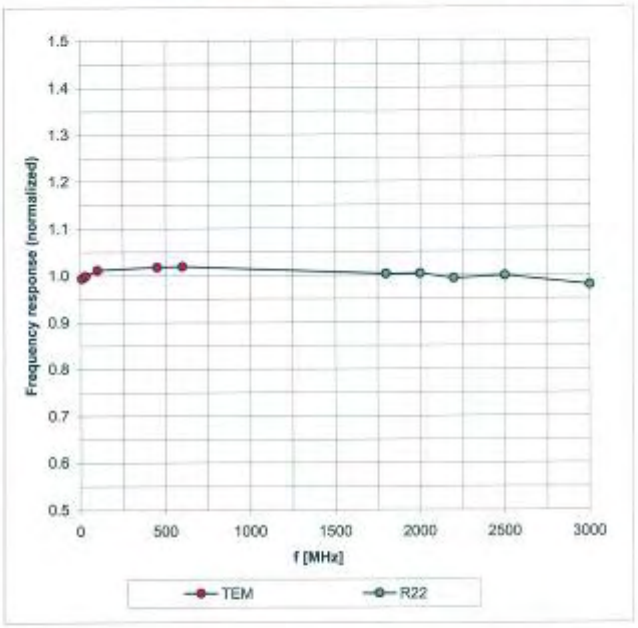
The reported uncertainty of measurement is stated as the standard uncertainty of measurement multiplied by the coverage factor k=2, which for a normal distribution corresponds to a coverage probability of approximately 95%.

[A] The uncertainties of NormX,Y,Z do not affect the E^2-field uncertainty inside TSL (see Page 8).
[B] Numerical linearization parameter: uncertainty not required.

ES3DV3 SN:3172 June 23, 2008

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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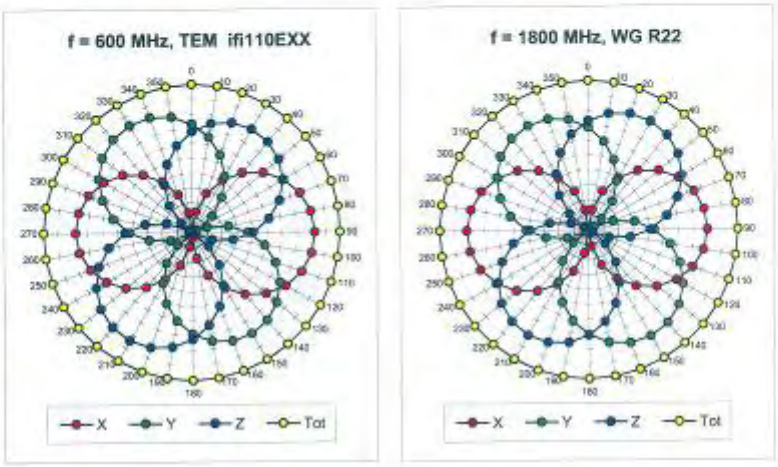
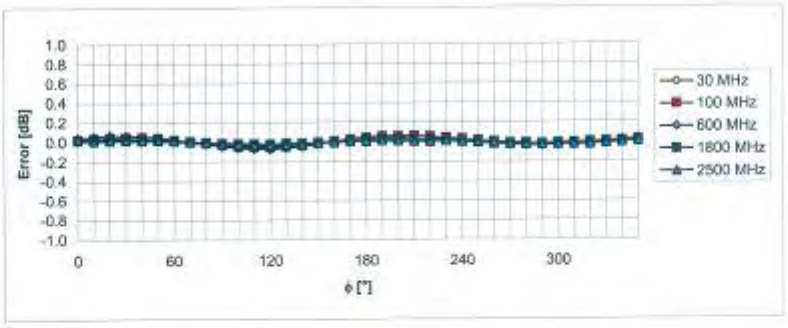
Member of SGS Group

ES3DV3 SN:3172 June 23, 2008

Receiving Pattern (ϕ), ϑ = 0°



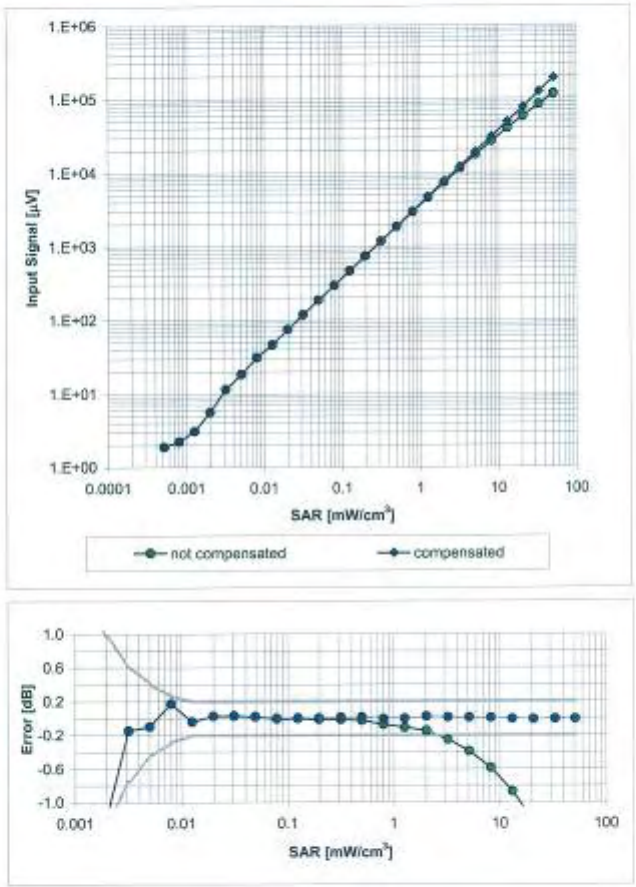


Uncertainty of Axial Isotropy Assessment: ± 0.5% (k=2)

ES3DV3 SN:3172 June 23, 2008

Dynamic Range f(SAR_{head})

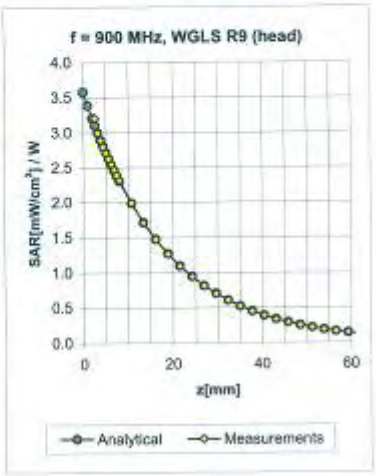
(Waveguide R22, f = 1800 MHz)

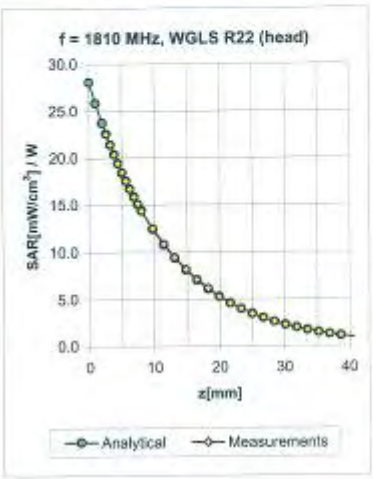


Uncertainty of Linearity Assessment: ± 0.6% (k=2)

ES3DV3 SN:3172 June 23, 2008

Conversion Factor Assessment





f [MHz]	Validity [MHz][C]	TSL	Permittivity	Conductivity	Alpha	Depth	ConvF Uncertainty
900	± 50 / ± 100	Head	41.5 ± 5%	0.97 ± 5%	0.23	2.36	5.66 ± 11.0% (k=2)
1810	± 50 / ± 100	Head	40.0 ± 5%	1.40 ± 5%	0.32	2.07	4.97 ± 11.0% (k=2)
1950	± 50 / ± 100	Head	40.0 ± 5%	1.40 ± 5%	0.65	1.40	4.80 ± 11.0% (k=2)
2450	± 50 / ± 100	Head	39.2 ± 5%	1.80 ± 5%	0.72	1.34	4.38 ± 11.0% (k=2)
900	± 50 / ± 100	Body	55.0 ± 5%	1.05 ± 5%	0.35	1.83	5.61 ± 11.0% (k=2)
1810	± 50 / ± 100	Body	53.3 ± 5%	1.52 ± 5%	0.55	1.50	4.73 ± 11.0% (k=2)
1950	± 50 / ± 100	Body	53.3 ± 5%	1.52 ± 5%	0.80	1.35	4.57 ± 11.0% (k=2)
2450	± 50 / ± 100	Body	52.7 ± 5%	1.95 ± 5%	0.75	1.25	3.92 ± 11.0% (k=2)

[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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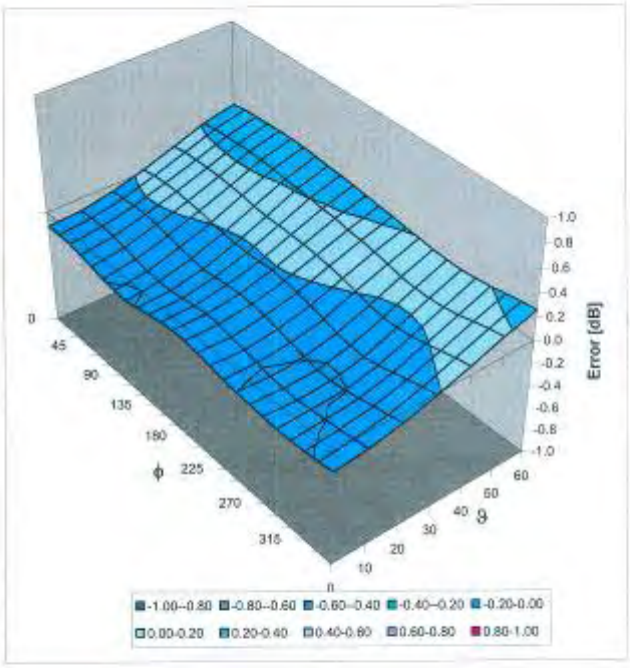
ES3DV3 SN:3172 June 23, 2008

Deviation from Isotropy in HSL

Error (ϕ, ϑ), f = 900 MHz



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

7. Uncertainty Analysis

DASY5 Uncertainty Budget
According to IEEE 1528 [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	±5.9%	N	1	1	1	±5.9%	±5.9%	∞
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	±0.3%	N	1	1	1	±0.3%	±0.3%	∞
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 Noise	±3.0%	R	$\sqrt{3}$	1	1	±1.7%	±1.7%	∞
RF Ambient Reflections	±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%	145
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						±10.9%	±10.7%	387
Expanded STD Uncertainty						±21.9%	±21.4%	

Table 19.6: Worst-Case uncertainty budget for DASY5 assessed according to IEEE 1528 [1]. The budget is valid for the frequency range 300 MHz - 3 GHz and represents a worst-case analysis. For specific tests and configurations, the uncertainty could be considerable smaller.

8. Phantom description

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Zeughausstrasse 43, 8004 Zurich, Switzerland
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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Zeughausstrasse 43, 8004 Zurich, Switzerland
Phone +41 1 245 9700, Fax +41 1 245 9779
info@speag.com, http://www.speag.com

9. System Validation from Original equipment supplier

Calibration Laboratory of
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Engineering AG
Zeughausstrasse 43, 8004 Zurich, Switzerland

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Accreditation No.: SCS 108

Client: SGS (Auden)

Certificate No: D835V2-4d063_Jun08

CALIBRATION CERTIFICATE

Object	D835V2 - SN: 4d063
Calibration procedure(s)	QA CAL-05.v7 Calibration procedure for dipole validation kits
Calibration date:	June 06, 2008
Condition of the calibrated item	In Tolerance

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 (Calibrated by, Certificate No.)	Scheduled Calibration
Power meter EPM-442A	GB37480704	04-Oct-07 (METAS, No. 217-00736)	Oct-08
Power sensor HP 8481A	US37292783	04-Oct-07 (METAS, No. 217-00736)	Oct-08
Reference 20 dB Attenuator	SN: 5086 (20g)	07-Aug-07 (METAS, No 217-00718)	Aug-08
Type-N mismatch combination	SN: 5047.2 / 06327	08-Aug-07 (No. 217-00721)	Aug-08
Reference Probe ES3DV2	SN: 3025	28-Apr-08 (No. ES3-3025_Apr08)	Apr-09
DAE4	SN: 601	14-Mar-08 (No. DAE4-601_Mar08)	Mar-09

Secondary Standards	ID #	Check Date (in house)	Scheduled Check
Power sensor HP 8481A	MY41092317	18-Oct-02 (SPEAG, in house check Oct-07)	In house check: Oct-09
RF generator R&S SMT-06	100005	04-Aug-99 (SPEAG, in house check Oct-07)	In house check: Oct-09
Network Analyzer HP 8753E	US37390585 S4206	18-Oct-01 (SPEAG, in house check Oct-07)	In house check: Oct-08

	Name	Function	Signature
Calibrated by:	Jeton Kastrati	Laboratory Technician	
Approved by:	Katja Pokovic	Technical Manager	

Issued: June 13, 2008

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Certificate No: D835V2-4d063_Jun08 Page 1 of 9

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Accreditation No.: SCS 108

Glossary:

TSL	tissue simulating liquid
ConvF	sensitivity in TSL / NORM x,y,z
N/A	not applicable or not measured

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
c) Federal Communications Commission Office of Engineering & Technology (FCC OET), "Evaluating Compliance with FCC Guidelines for Human Exposure to Radiofrequency Electromagnetic Fields; Additional Information for Evaluating Compliance of Mobile and Portable Devices with FCC Limits for Human Exposure to Radiofrequency Emissions", Supplement C (Edition 01-01) to Bulletin 65

Additional Documentation:

d) DASY4/5 System Handbook

Methods Applied and Interpretation of Parameters:

- *Measurement Conditions:* Further details are available from the Validation Report at the end of the certificate. All figures stated in the certificate are valid at the frequency indicated.
- *Antenna Parameters with TSL:* The dipole is mounted with the spacer to position its feed point exactly below the center marking of the flat phantom section, with the arms oriented parallel to the body axis.
- *Feed Point Impedance and Return Loss:* These parameters are measured with the dipole positioned under the liquid filled phantom. The impedance stated is transformed from the measurement at the SMA connector to the feed point. The Return Loss ensures low reflected power. No uncertainty required.
- *Electrical Delay:* One-way delay between the SMA connector and the antenna feed point. No uncertainty required.
- *SAR measured:* SAR measured at the stated antenna input power.
- *SAR normalized:* SAR as measured, normalized to an input power of 1 W at the antenna connector.
- *SAR for nominal TSL parameters:* The measured TSL parameters are used to calculate the nominal SAR result..

Measurement Conditions

DASY system configuration, as far as not given on page 1.

DASY Version	DASY4	V4.7
Extrapolation	Advanced Extrapolation	
Phantom	Modular Flat Phantom V4.9	
Distance Dipole Center - TSL	15 mm	with Spacer
Zoom Scan Resolution	dx, dy, dz = 5 mm	
Frequency	835 MHz ± 1 MHz	

Head TSL parameters

The following parameters and calculations were applied.

	Temperature	**Permittivity**	**Conductivity**
Nominal Head TSL parameters	22.0 °C	41.5	0.90 mho/m
Measured Head TSL parameters	(22.0 ± 0.2) °C	40.4 ± 6 %	0.88 mho/m ± 6 %
Head TSL temperature during test	(21.6 ± 0.2) °C	----	----

SAR result with Head TSL

SAR averaged over 1 cm³ (1 g) of Head TSL	Condition	
SAR measured	250 mW input power	2.29 mW / g
SAR normalized	normalized to 1W	9.16 mW / g
SAR for nominal Head TSL parameters [1]	normalized to 1W	**9.14 mW / g ± 17.0 % (k=2)**

SAR averaged over 10 cm³ (10 g) of Head TSL	condition	
SAR measured	250 mW input power	1.52 mW / g
SAR normalized	normalized to 1W	6.08 mW / g
SAR for nominal Head TSL parameters [1]	normalized to 1W	**6.05 mW / g ± 16.5 % (k=2)**

[1] Correction to nominal TSL parameters according to d), chapter "SAR Sensitivities"

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Body TSL parameters

The following parameters and calculations were applied.

	Temperature	Permittivity	Conductivity
Nominal Body TSL parameters	22.0 °C	55.2	0.97 mho/m
Measured Body TSL parameters	(22.0 ± 0.2) °C	53.4 ± 6 %	0.99 mho/m ± 6 %
Body TSL temperature during test	(21.5 ± 0.2) °C	----	----

SAR result with Body TSL

SAR averaged over 1 cm³ (1 g) of Body TSL	Condition	
SAR measured	250 mW input power	2.44 mW / g
SAR normalized	normalized to 1W	9.76 mW / g
SAR for nominal Body TSL parameters [2]	normalized to 1W	**9.43 mW / g ± 17.0 % (k=2)**

SAR averaged over 10 cm³ (10 g) of Body TSL	condition	
SAR measured	250 mW input power	1.61 mW / g
SAR normalized	normalized to 1W	6.44 mW / g
SAR for nominal Body TSL parameters [2]	normalized to 1W	**6.28 mW / g ± 16.5 % (k=2)**

[2] Correction to nominal TSL parameters according to d), chapter "SAR Sensitivities"

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Appendix

Antenna Parameters with Head TSL

Impedance, transformed to feed point	53.0 Ω - 2.4 jΩ
Return Loss	-28.6 dB

Antenna Parameters with Body TSL

Impedance, transformed to feed point	48.2 Ω - 4.2 jΩ
Return Loss	- 26.7 dB

General Antenna Parameters and Design

Electrical Delay (one direction)	1.391 ns

After long term use with 100W radiated power, only a slight warming of the dipole near the feedpoint can be measured.

The dipole is made of standard semirigid coaxial cable. The center conductor of the feeding line is directly connected to the second arm of the dipole. The antenna is therefore short-circuited for DC-signals.
No excessive force must be applied to the dipole arms, because they might bend or the soldered connections near the feedpoint may be damaged.

Additional EUT Data

Manufactured by	SPEAG
Manufactured on	November 27, 2006

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DASY4 Validation Report for Head TSL

Date/Time: 05.06.2008 14:11:53

Test Laboratory: SPEAG, Zurich, Switzerland

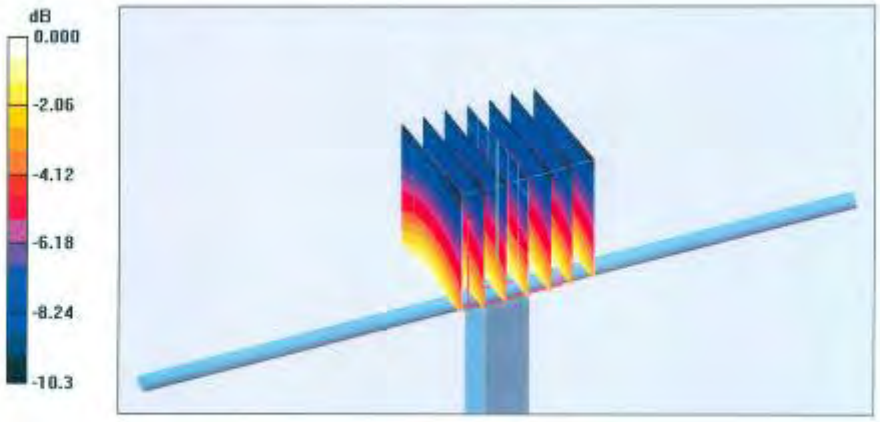
DUT: Dipole 835 MHz; Type: D835V2; Serial: D835V2 - SN:4d063

Communication System: CW-835; Frequency: 835 MHz;Duty Cycle: 1:1
Medium: HSL 900 MHz;
Medium parameters used: f = 835 MHz; σ = 0.879 mho/m; ε_r = 40.3; ρ = 1000 kg/m^3
Phantom section: Flat Section
Measurement Standard: DASY4 (High Precision Assessment)

DASY4 Configuration:

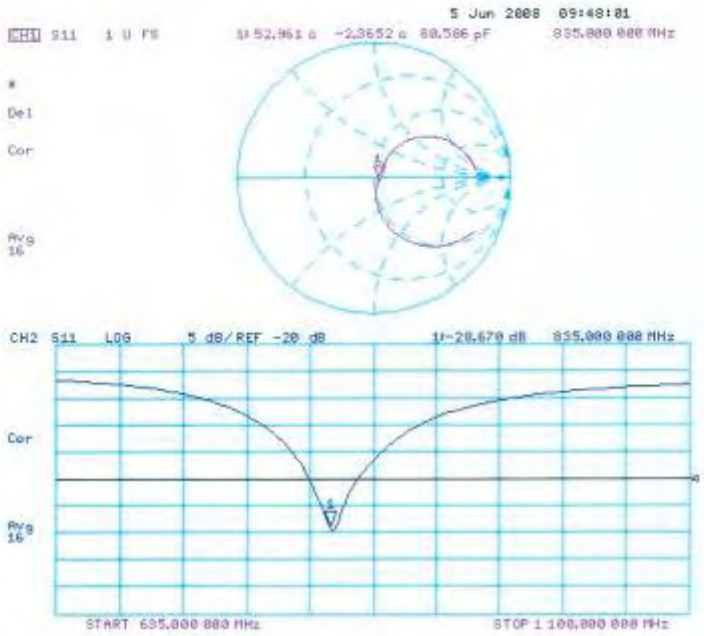
- Probe: ES3DV2 - SN3025; ConvF(5.97, 5.97, 5.97); Calibrated: 28.04.2008
- Sensor-Surface: 3.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn601; Calibrated: 14.03.2008
- Phantom: Flat Phantom 4.9L; Type: QD000P49AA; ;
- Measurement SW: DASY4, V4.7 Build 71; Postprocessing SW: SEMCAD, V1.8 Build 184

Pin=250mW; dip=15mm; dist=3.4mm/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 55.3 V/m; Power Drift = -0.021 dB
Peak SAR (extrapolated) = 3.36 W/kg
SAR(1 g) = 2.29 mW/g; SAR(10 g) = 1.52 mW/g
Maximum value of SAR (measured) = 2.58 mW/g



0 dB = 2.58mW/g

Impedance Measurement Plot for Head TSL



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DASY4 Validation Report for Body TSL

Date/Time: 06.06.2008 14:01:1

Test Laboratory: SPEAG, Zurich, Switzerland

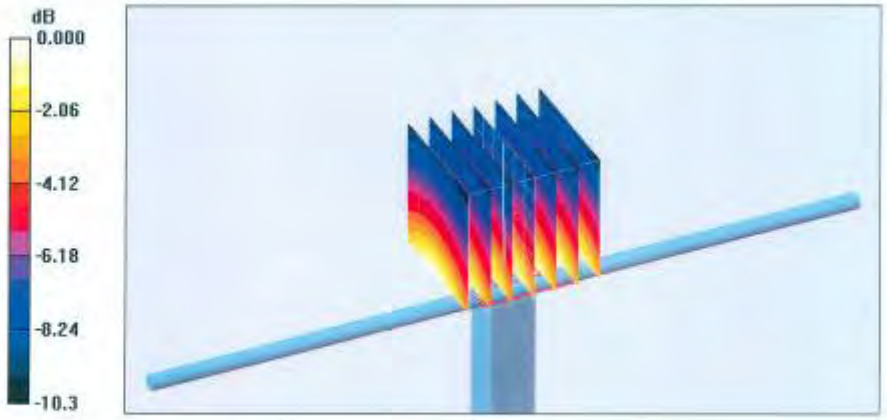
DUT: Dipole 835 MHz; Type: D835V2; Serial: D835V2 - SN:4d063

Communication System: CW; Frequency: 835 MHz;Duty Cycle: 1:1
Medium: MSL900;
Medium parameters used: f = 835 MHz; σ = 0.99 mho/m; ε_r = 53.4; ρ = 1000 kg/m^3
Phantom section: Flat Section
Measurement Standard: DASY4 (High Precision Assessment)

DASY4 Configuration:

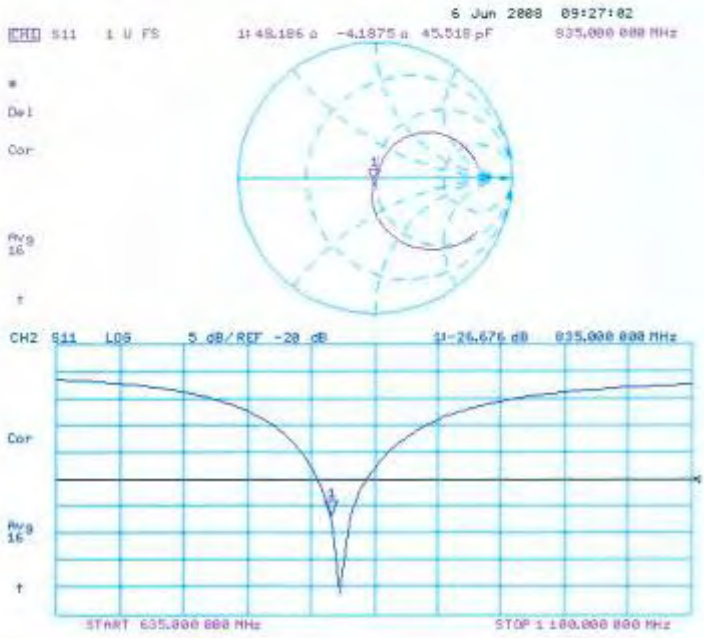
- Probe: ES3DV2 - SN3025; ConvF(5.9, 5.9, 5.9); Calibrated: 28.04.2008
- Sensor-Surface: 3.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn601; Calibrated: 14.03.2008
- Phantom: Flat Phantom 4.9L; Type: QD000P49AA; ;
- Measurement SW: DASY4, V4.7 Build 71; Postprocessing SW: SEMCAD, V1.8 Build 184

Pin = 250mW, d = 15mm/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 53.6 V/m; Power Drift = 0.010 dB
Peak SAR (extrapolated) = 3.53 W/kg
SAR(1 g) = 2.44 mW/g; SAR(10 g) = 1.61 mW/g
Maximum value of SAR (measured) = 2.73 mW/g



0 dB = 2.73mW/g

Impedance Measurement Plot for Body TSL



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Accreditation No.: SCS 108

Client Auden

Certificate No: D1900V2-5d018_May08

CALIBRATION CERTIFICATE

Object	D1900V2 - SN: 5d018
Calibration procedure(s)	QA CAL-05.v7 Calibration procedure for dipole validation kits
Calibration date:	May 22, 2008
Condition of the calibrated item	In Tolerance

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 (Calibrated by, Certificate No.)	Scheduled Calibration
Power meter EPM-442A	GB37480704	04-Oct-07 (No. 217-00736)	Oct-08
Power sensor HP 8481A	US37292783	04-Oct-07 (No. 217-00736)	Oct-08
Reference 20 dB Attenuator	SN: 5086 (20g)	07-Aug-07 (No. 217-00718)	Aug-08
Type-N mismatch combination	SN: 5047.2 / 06327	08-Aug-07 (No. 217-00721)	Aug-08
Reference Probe ES3DV2	SN: 3025	28-Apr-08 (No. ES3-3025_Apr08)	Apr-09
DAE4	SN: 601	14-Mar-08 (No. DAE4-601_Mar08)	Mar-09

Secondary Standards	ID #	Check Date (in house)	Scheduled Check
Power sensor HP 8481A	MY41092317	18-Oct-02 (in house check Oct-07)	In house check: Oct-08
RF generator R&S SMT-06	100005	4-Aug-99 (in house check Oct-07)	In house check: Oct-09
Network Analyzer HP 8753E	US37390585 S4206	18-Oct-01 (in house check Oct-07)	In house check: Oct-08

	Name	Function	Signature
Calibrated by:	Mike Meili	Laboratory Technician	
Approved by:	Katja Pokovic	Technical Manager	

Issued: May 22, 2008

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Accreditation No.: SCS 108

Glossary:

TSL	tissue simulating liquid
ConvF	sensitivity in TSL / NORM x,y,z
N/A	not applicable or not measured

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) CENELEC EN 50361, "Basic standard for the measurement of Specific Absorption Rate related to human exposure to electromagnetic fields from mobile phones (300 MHz - 3 GHz), July 2001
c) Federal Communications Commission Office of Engineering & Technology (FCC OET), "Evaluating Compliance with FCC Guidelines for Human Exposure to Radiofrequency Electromagnetic Fields; Additional Information for Evaluating Compliance of Mobile and Portable Devices with FCC Limits for Human Exposure to Radiofrequency Emissions", Supplement C (Edition 01-01) to Bulletin 65

Additional Documentation:

d) DASY4/5 System Handbook

Methods Applied and Interpretation of Parameters:

- *Measurement Conditions:* Further details are available from the Validation Report at the end of the certificate. All figures stated in the certificate are valid at the frequency indicated.
- *Antenna Parameters with TSL:* The dipole is mounted with the spacer to position its feed point exactly below the center marking of the flat phantom section, with the arms oriented parallel to the body axis.
- *Feed Point Impedance and Return Loss:* These parameters are measured with the dipole positioned under the liquid filled phantom. The impedance stated is transformed from the measurement at the SMA connector to the feed point. The Return Loss ensures low reflected power. No uncertainty required.
- *Electrical Delay:* One-way delay between the SMA connector and the antenna feed point. No uncertainty required.
- *SAR measured:* SAR measured at the stated antenna input power.
- *SAR normalized:* SAR as measured, normalized to an input power of 1 W at the antenna connector.
- SAR for nominal TSL parameters: The measured TSL parameters are used to calculate the nominal SAR result.

Measurement Conditions

DASY system configuration, as far as not given on page 1.

DASY Version	DASY4	V4.7
Extrapolation	Advanced Extrapolation	
Phantom	Modular Flat Phantom V5.0	
Distance Dipole Center - TSL	10 mm	with Spacer
Zoom Scan Resolution	dx, dy, dz = 5 mm	
Frequency	1900 MHz ± 1 MHz	

Head TSL parameters

The following parameters and calculations were applied.

	Temperature	**Permittivity**	**Conductivity**
Nominal Head TSL parameters	22.0 °C	40.0	1.40 mho/m
Measured Head TSL parameters	(22.0 ± 0.2) °C	39.4 ± 6 %	1.46 mho/m ± 6 %
Head TSL temperature during test	(21.4 ± 0.2) °C	----	----

.

SAR result with Head TSL

SAR averaged over 1 cm^3 (1 g) of Head TSL	condition	
SAR measured	250 mW input power	9.85 mW / g
SAR normalized	normalized to 1W	39.4 mW / g
SAR for nominal Head TSL parameters [1]	normalized to 1W	**38.3 mW / g ± 17.0 % (k=2)**

SAR averaged over 10 cm^3 (10 g) of Head TSL	Condition	
SAR measured	250 mW input power	5.07 mW / g
SAR normalized	normalized to 1W	20.3 mW / g
SAR for nominal Head TSL parameters [1]	normalized to 1W	**20.0 mW / g ± 16.5 % (k=2)**

[1] Correction to nominal TSL parameters according to d), chapter "SAR Sensitivities"

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Body TSL parameters

The following parameters and calculations were applied.

	Temperature	Permittivity	Conductivity
Nominal Body TSL parameters	22.0 °C	53.3	1.52 mho/m
Measured Body TSL parameters	(22.0 ± 0.2) °C	52.0 ± 6 %	1.54 mho/m ± 6 %
Body TSL temperature during test	(22.2 ± 0.2) °C	----	----

SAR result with Body TSL

SAR averaged over 1 cm^3 (1 g) of Body TSL	Condition	
SAR measured	250 mW input power	9.60 mW / g
SAR normalized	normalized to 1W	38.4 mW / g
SAR for nominal Body TSL parameters [2]	normalized to 1W	**37.6 mW / g ± 17.0 % (k=2)**

SAR averaged over 10 cm^3 (10 g) of Body TSL	condition	
SAR measured	250 mW input power	5.04 mW / g
SAR normalized	normalized to 1W	20.2 mW / g
SAR for nominal Body TSL parameters [2]	normalized to 1W	**19.9 mW / g ± 16.5 % (k=2)**

[2] Correction to nominal TSL parameters according to d), chapter "SAR Sensitivities"

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Appendix

Antenna Parameters with Head TSL

Impedance, transformed to feed point	52.9 Ω + 2.2 jΩ
Return Loss	- 29.0 dB

Antenna Parameters with Body TSL

Impedance, transformed to feed point	48.9 Ω + 2.3 jΩ
Return Loss	- 31.8 dB

General Antenna Parameters and Design

Electrical Delay (one direction)	1.194ns

After long term use with 100W radiated power, only a slight warming of the dipole near the feedpoint can be measured.

The dipole is made of standard semirigid coaxial cable. The center conductor of the feeding line is directly connected to the second arm of the dipole. The antenna is therefore short-circuited for DC-signals.
No excessive force must be applied to the dipole arms, because they might bend or the soldered connections near the feedpoint may be damaged.

Additional EUT Data

Manufactured by	SPEAG
Manufactured on	June 4, 2002

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DASY4 Validation Report for Head TSL

Date/Time: 20.05.2008 15:51:44

Test Laboratory: SPEAG, Zurich, Switzerland

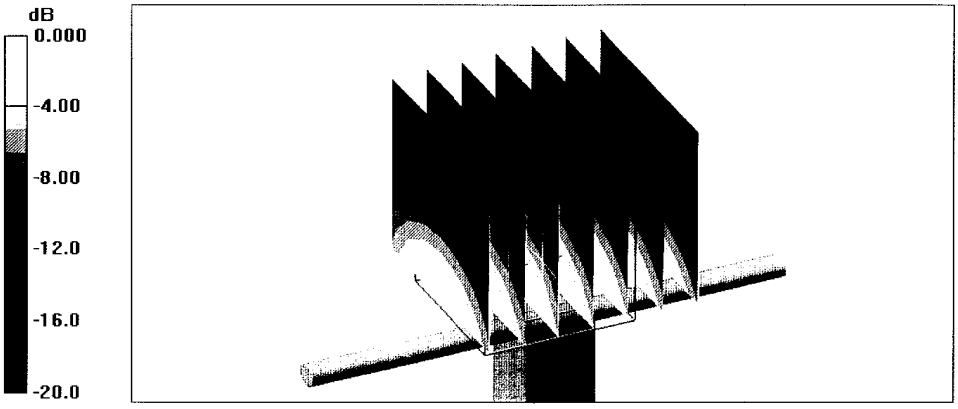
DUT: Dipole 1900 MHz; Type: D1900V2; Serial: D1900V2 - SN:5d018

Communication System: CW; Frequency: 1900 MHz; Duty Cycle: 1:1
Medium: HSL U10 BB;
Medium parameters used: f = 1900 MHz; σ = 1.46 mho/m; ε_r = 39.4; ρ = 1000 kg/m^3
Phantom section: Flat Section
Measurement Standard: DASY4 (High Precision Assessment)

DASY4 Configuration:

- Probe: ES3DV2 - SN3025; ConvF(4.9, 4.9, 4.9); Calibrated: 28.04.2008
- Sensor-Surface: 3.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn601; Calibrated: 14.03.2008
- Phantom: Flat Phantom 5.0 (front); Type: QD000P50AA
- Measurement SW: DASY4, V4.7 Build 71; Postprocessing SW: SEMCAD, V1.8 Build 184

Pin = 250 mW; dip = 10 mm, scan at 3.4mm/Zoom Scan (dist=3.4mm, probe 0deg) (7x7x7)/Cube 0:
Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 92.1 V/m; Power Drift = 0.011 dB
Peak SAR (extrapolated) = 18.3 W/kg
SAR(1 g) = 9.85 mW/g; SAR(10 g) = 5.07 mW/g
Maximum value of SAR (measured) = 11.9 mW/g



0 dB = 11.9mW/g

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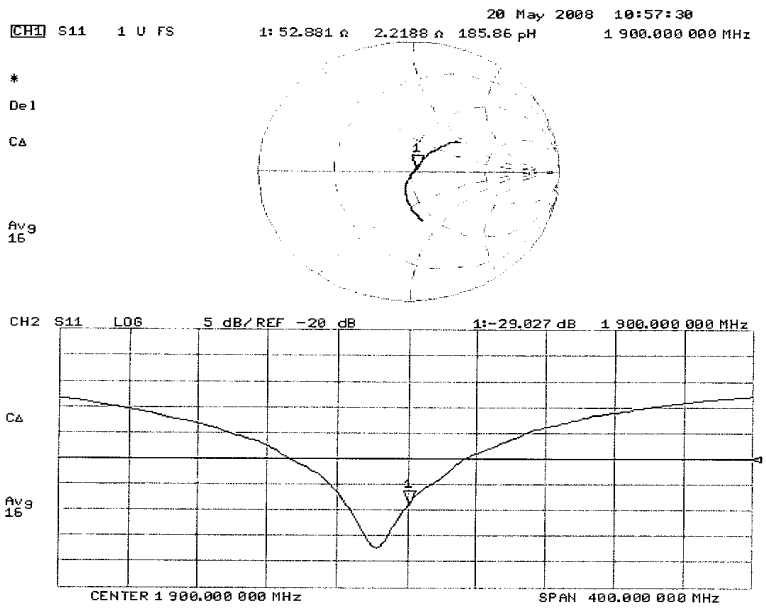
Impedance Measurement Plot for Head TSL



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DASY4 Validation Report for Body TSL

Date/Time: 22.05.2008 12:29:54

Test Laboratory: SPEAG, Zurich, Switzerland

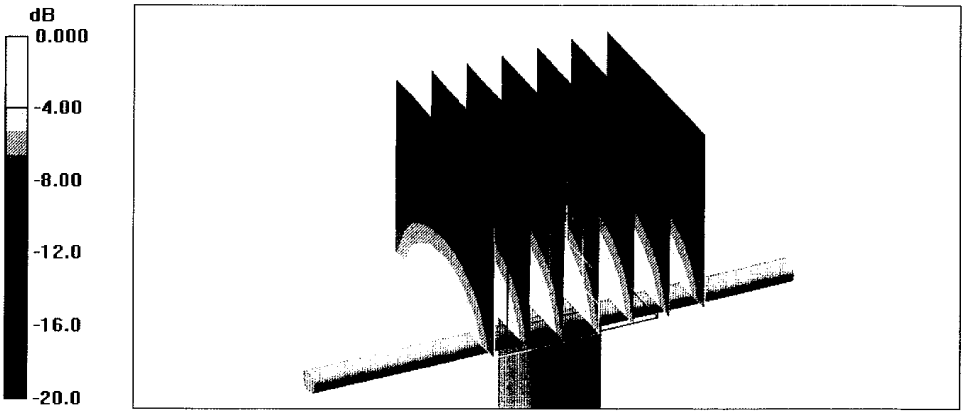
DUT: Dipole 1900 MHz; Type: D1900V2; Serial: D1900V2 - SN:5d018

Communication System: CW; Frequency: 1900 MHz; Duty Cycle: 1:1
Medium: MSL U10 BB;
Medium parameters used: f = 1900 MHz; σ = 1.54 mho/m; ε_r = 52; ρ = 1000 kg/m^3
Phantom section: Flat Section
Measurement Standard: DASY4 (High Precision Assessment)

DASY4 Configuration:

- Probe: ES3DV2 - SN3025; ConvF(4.5, 4.5, 4.5); Calibrated: 28.04.2008
- Sensor-Surface: 3.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn601; Calibrated: 14.03.2008
- Phantom: Flat Phantom 5.0 (back); Type: QD000P50AA
- Measurement SW: DASY4, V4.7 Build 71; Postprocessing SW: SEMCAD, V1.8 Build 184

Pin = 250 mW; d = 10 mm/Zoom Scan (7x7x7)/Cube 0:
Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 90.1 V/m; Power Drift = -0.011 dB
Peak SAR (extrapolated) = 16.8 W/kg
SAR(1 g) = 9.6 mW/g; SAR(10 g) = 5.04 mW/g
Maximum value of SAR (measured) = 11.7 mW/g



0 dB = 11.7mW/g

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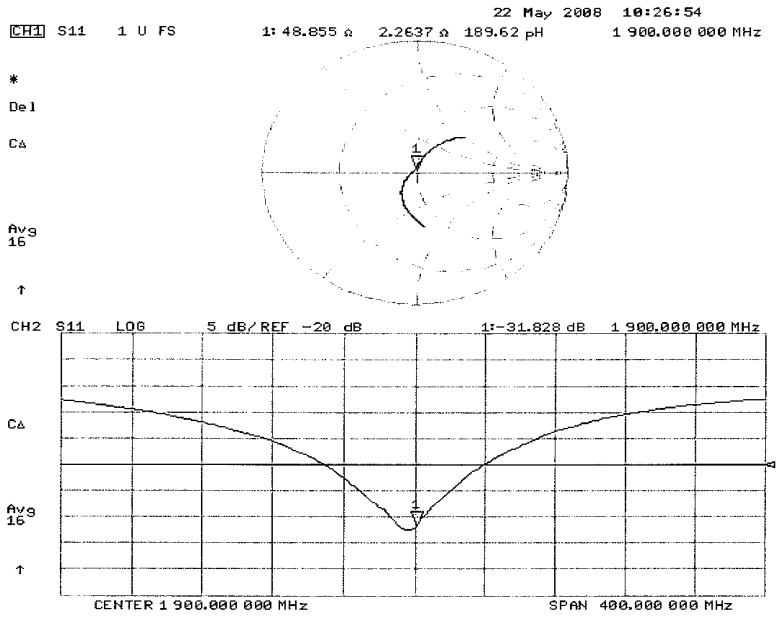
Impedance Measurement Plot for Body TSL



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Engineering AG
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S Schweizerischer Kalibrierdienst
C Service suisse d'étalonnage
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Accreditation No.: SCS 108

Client **Auden** **Certificate No: D2450V2_735_May08**

CALIBRATION CERTIFICATE

Object	D2450V2 - SN: 735
Calibration procedure(s)	QA CAL-05.v7 Calibration procedure for dipole validation kits
Calibration date:	May 22, 2008
Condition of the calibrated item	In Tolerance

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 EPM-442A	GB37480704	04-Oct-07 (No. 217-00736)	Oct-08
Power sensor HP 8481A	US37292783	04-Oct-07 (No. 217-00736)	Oct-08
Reference 20 dB Attenuator	SN: 5086 (20g)	07-Aug-07 (No. 217-00718)	Aug-08
Type-N mismatch combination	SN: 5047.2 / 06327	08-Aug-07 (No. 217-00721)	Aug-08
Reference Probe ES3DV2	SN: 3025	28-Apr-08 (No. ES3-3025_Apr08)	Apr-09
DAE4	SN: 601	14-Mar-08 (No. DAE4-601_Mar08)	Mar-09

Secondary Standards	ID #	Check Date (in house)	Scheduled Check
Power sensor HP 8481A	MY41092317	18-Oct-02 (in house check Oct-07)	In house check: Oct-09
RF generator R&S SMT-06	100005	4-Aug-99 (in house check Oct-07)	In house check: Oct-09
Network Analyzer HP 8753E	US37390585 S4206	18-Oct-01 (in house check Oct-07)	In house check: Oct-08

	Name	Function	Signature
Calibrated by:	Mike Meili	Laboratory Technician	
Approved by:	Katja Pokovic	Technical Manager	

Issued: May 22, 2008

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

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Accreditation No.: SCS 108

Glossary:

TSL	tissue simulating liquid
ConvF	sensitivity in TSL / NORM x,y,z
N/A	not applicable or not measured

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
c) Federal Communications Commission Office of Engineering & Technology (FCC OET), "Evaluating Compliance with FCC Guidelines for Human Exposure to Radiofrequency Electromagnetic Fields; Additional Information for Evaluating Compliance of Mobile and Portable Devices with FCC Limits for Human Exposure to Radiofrequency Emissions", Supplement C (Edition 01-01) to Bulletin 65

Additional Documentation:

d) DASY4/5 System Handbook

Methods Applied and Interpretation of Parameters:

- *Measurement Conditions:* Further details are available from the Validation Report at the end of the certificate. All figures stated in the certificate are valid at the frequency indicated.
- *Antenna Parameters with TSL:* The dipole is mounted with the spacer to position its feed point exactly below the center marking of the flat phantom section, with the arms oriented parallel to the body axis.
- *Feed Point Impedance and Return Loss:* These parameters are measured with the dipole positioned under the liquid filled phantom. The impedance stated is transformed from the measurement at the SMA connector to the feed point. The Return Loss ensures low reflected power. No uncertainty required.
- *Electrical Delay:* One-way delay between the SMA connector and the antenna feed point. No uncertainty required.
- *SAR measured:* SAR measured at the stated antenna input power.
- *SAR normalized:* SAR as measured, normalized to an input power of 1 W at the antenna connector.
- *SAR for nominal TSL parameters:* The measured TSL parameters are used to calculate the nominal SAR result.

Measurement Conditions

DASY system configuration, as far as not given on page 1.

DASY Version	DASY4	V4.7
Extrapolation	Advanced Extrapolation	
Phantom	Modular Flat Phantom V5.0	
Distance Dipole Center - TSL	10 mm	with Spacer
Zoom Scan Resolution	dx, dy, dz = 5 mm	
Frequency	2450 MHz ± 1 MHz	

Head TSL parameters

The following parameters and calculations were applied.

	Temperature	**Permittivity**	**Conductivity**
Nominal Head TSL parameters	22.0 °C	39.2	1.80 mho/m
Measured Head TSL parameters	(22.0 ± 0.2) °C	38.8 ± 6 %	1.81 mho/m ± 6 %
Head TSL temperature during test	(21.7 ± 0.2) °C	----	----

SAR result with Head TSL

SAR averaged over 1 cm^3 (1 g) of Head TSL	Condition	
SAR measured	250 mW input power	13.5 mW / g
SAR normalized	normalized to 1W	54.0 mW / g
SAR for nominal Head TSL parameters [1]	normalized to 1W	**53.6 mW /g ± 17.0 % (k=2)**

SAR averaged over 10 cm^3 (10 g) of Head TSL	condition	
SAR measured	250 mW input power	6.26 mW / g
SAR normalized	normalized to 1W	25.0 mW / g
SAR for nominal Head TSL parameters [1]	normalized to 1W	**24.9 mW /g ± 16.5 % (k=2)**

[1] Correction to nominal TSL parameters according to d), chapter "SAR Sensitivities"

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Body TSL parameters

The following parameters and calculations were applied.

	Temperature	Permittivity	Conductivity
Nominal Body TSL parameters	22.0 °C	52.7	1.95 mho/m
Measured Body TSL parameters	(22.0 ± 0.2) °C	51.5 ± 6 %	1.95 mho/m ± 6 %
Body TSL temperature during test	(22.1 ± 0.2) °C	----	----

SAR result with Body TSL

SAR averaged over 1 cm^3 (1 g) of Body TSL	Condition	
SAR measured	250 mW input power	12.7 mW / g
SAR normalized	normalized to 1W	50.8 mW / g
SAR for nominal Body TSL parameters [2]	normalized to 1W	**50.2 mW / g ± 17.0 % (k=2)**

SAR averaged over 10 cm^3 (10 g) of Body TSL	condition	
SAR measured	250 mW input power	5.92 mW / g
SAR normalized	normalized to 1W	23.7 mW / g
SAR for nominal Body TSL parameters [2]	normalized to 1W	**23.5 mW / g ± 16.5 % (k=2)**

[2] Correction to nominal TSL parameters according to d), chapter "SAR Sensitivities"

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Appendix

Antenna Parameters with Head TSL

Impedance, transformed to feed point	54.0 Ω + 3.8 jΩ	
Return Loss	- 25.4 dB	

Antenna Parameters with Body TSL

Impedance, transformed to feed point	49.0 Ω + 5.1 jΩ
Return Loss	- 25.6 dB

General Antenna Parameters and Design

Electrical Delay (one direction)	1.153 ns

After long term use with 100W radiated power, only a slight warming of the dipole near the feedpoint can be measured.

The dipole is made of standard semirigid coaxial cable. The center conductor of the feeding line is directly connected to the second arm of the dipole. The antenna is therefore short-circuited for DC-signals.
No excessive force must be applied to the dipole arms, because they might bend or the soldered connections near the feedpoint may be damaged.

Additional EUT Data

Manufactured by	SPEAG
Manufactured on	May 7, 2003

DASY4 Validation Report for Head TSL

Date/Time: 22.05.2008 14:52:26

Test Laboratory: SPEAG, Zurich, Switzerland

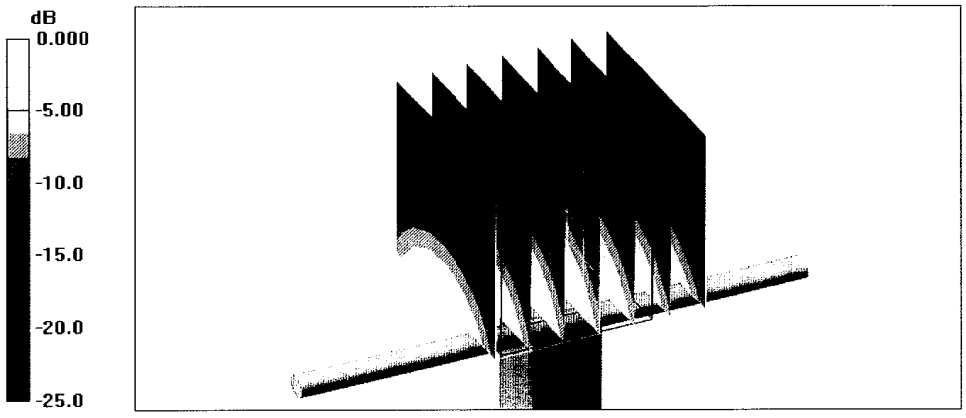
DUT: Dipole 2450 MHz; Type: D2450V2; Serial: D2450V2 - SN735

Communication System: CW; Frequency: 2450 MHz; Duty Cycle: 1:1
Medium: HSL U10 BB;
Medium parameters used: f = 2450 MHz; σ = 1.81 mho/m; ε_r = 38.8; ρ = 1000 kg/m^3
Phantom section: Flat Section
Measurement Standard: DASY4 (High Precision Assessment)

DASY4 Configuration:

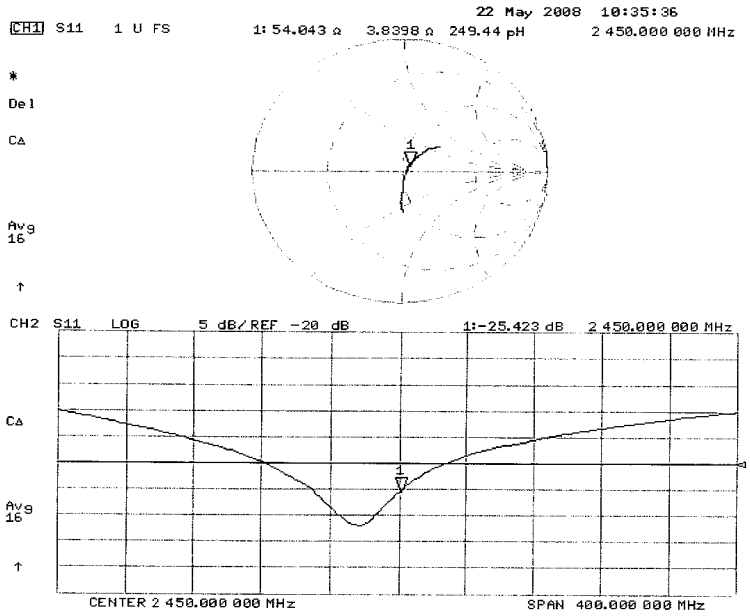
- Probe: ES3DV2 - SN3025; ConvF(4.4, 4.4, 4.4); Calibrated: 28.04.2008
- Sensor-Surface: 3.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn601; Calibrated: 14.03.2008
- Phantom: Flat Phantom 5.0 (front); Type: QD000P50AA
- Measurement SW: DASY4, V4.7 Build 71; Postprocessing SW: SEMCAD, V1.8 Build 184

Pin = 250 mW; d = 10 mm/Zoom Scan (7x7x7)/Cube 0:
Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 98.5 V/m; Power Drift = 0.054 dB
Peak SAR (extrapolated) = 28.1 W/kg
SAR(1 g) = 13.5 mW/g; SAR(10 g) = 6.26 mW/g
Maximum value of SAR (measured) = 16.6 mW/g



0 dB = 16.6mW/g

Impedance Measurement Plot for Head TSL



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DASY4 Validation Report for Body TSL

Date/Time: 22.05.2008 13:03:17

Test Laboratory: SPEAG, Zurich, Switzerland

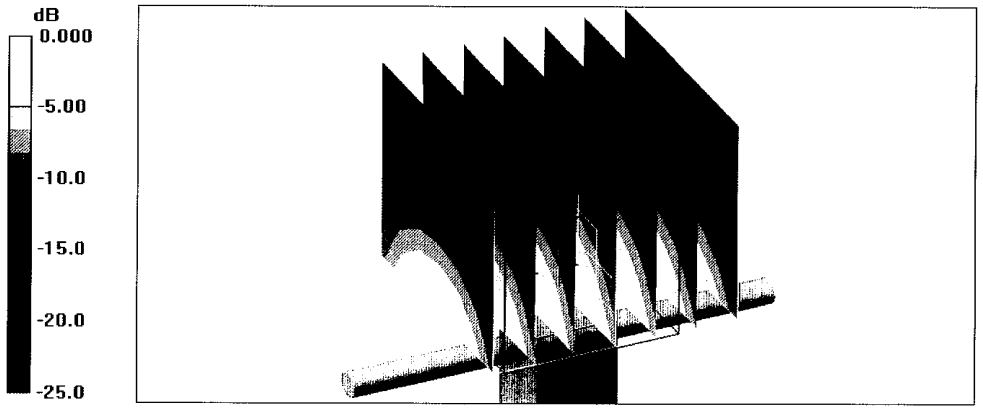
DUT: Dipole 2450 MHz; Type: D2450V2; Serial: D2450V2 - SN:735

Communication System: CW; Frequency: 2450 MHz; Duty Cycle: 1:1
Medium: MSL U10 BB;
Medium parameters used: f = 2450 MHz; σ = 1.95 mho/m; ε_r = 51.5; ρ = 1000 kg/m^3
Phantom section: Flat Section
Measurement Standard: DASY4 (High Precision Assessment)

DASY4 Configuration:

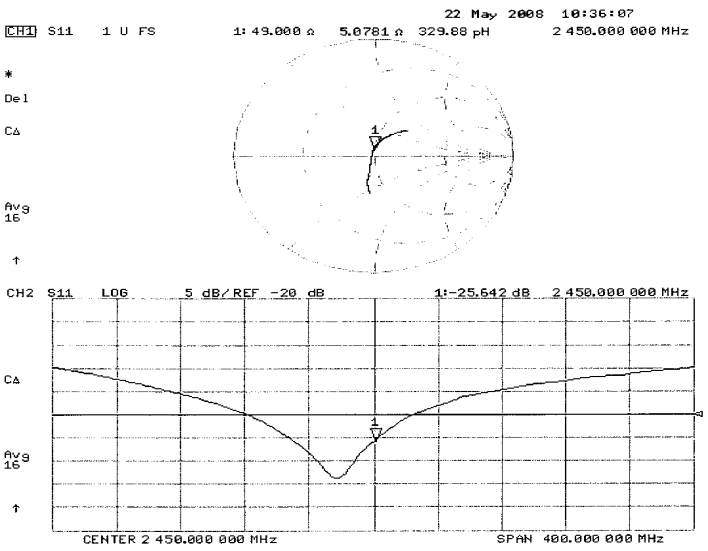
- Probe: ES3DV2 - SN3025; ConvF(4.07, 4.07, 4.07); Calibrated: 28.04.2008
- Sensor-Surface: 3.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn601; Calibrated: 14.03.2008
- Phantom: Flat Phantom 5.0 (back); Type: QD000P50AA
- Measurement SW: DASY4, V4.7 Build 71; Postprocessing SW: SEMCAD, V1.8 Build 184

Pin = 250 mW; d = 10 mm/Zoom Scan (7x7x7)/Cube 0:
Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 92.5 V/m; Power Drift = 0.012 dB
Peak SAR (extrapolated) = 26.1 W/kg
SAR(1 g) = 12.7 mW/g; SAR(10 g) = 5.92 mW/g
Maximum value of SAR (measured) = 15.7 mW/g



0 dB = 15.7mW/g

Impedance Measurement Plot for Body TSL



End of 1st part of report