

# SAR TEST REPORT

<b>Equipment Under Test</b>	PDA phone
<b>Model Name</b>	KAIS140
<b>Company Name</b>	High Tech Computer Corp.
<b>Company Address</b>	23 Xinghua Rd., Taoyuan 330, Taiwan, R.O.C.
<b>Date of Receipt</b>	2008.02.01
<b>Date of Test(s)</b>	2008.02.04-2008.02.26
<b>Date of Issue</b>	2008.02.29

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.

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Date : 2008.02.29

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## **2. Summary of Results**

## **3. Instruments List**

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**Mode Number: KAIS140.....**

**Orignal solution measurement result.....**

**GSM 850MHz**

**GSM 1900MHz**

**WLAN 802.11 b**

**WLAN 802.11 g**

**Second solution measurement result (LCM & Camera changed)..... 113**

**GSM 850MHz**

**GSM 1900MHz**

**WLAN 802.11 b**

**WLAN 802.11 g**

**Third solution measurement result (PA changed)..... 117**

**GSM 850MHz**

**GSM 1900MHz**

**WLAN 802.11 b**

**WLAN 802.11 g**

**Mode Number: KAIS130.....**

**203**

**GSM 850MHz**

**GSM 1900MHz**

**WLAN 802.11 b**

**WLAN 802.11 g**

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## 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		
Model number	KAIS140		
Brand Name	hTC		
FCC ID	NM8KSJ		
Mode of Operation	GSM/GPRS/EDGE, Band 850/1900/WALN 802.11 b/g		
Duty Cycle	GSM	GPRS	WLAN 802.11 b/g
	1/8	1/4	1
Modulation Mode	GSM/ GPRS	EDGE	WLAN 802.11 b/g
	GMSK	8PSK	B:QPSK G:OFDM

Maximum RF Conducted Power(Average)	EGSM 850 33.3 dBm	DCS 1900 30.65 dBm	WLAN 802.11 b/g 16.23 dBm
TX Frequency range (MHz)	EGSM 850 824.2-848.8	DCS 1900 1850-1910	WLAN 802.11 b/g 2412-2472
Channel Number (ARFCN)	EGSM 850 128-251	DCS 1900 512-810	WLAN 802.11 b/g 1-13
Antenna Gain	EGSM 850 1.5dBi	DCS 1900	WLAN 802.11 b/g
Antenna Type			PIFA
Battery Type		1. DynaPack, Model number: KAIS160 3.7V 1350mAh Lithium-Ion 2. Samsung, Model number: KAIS160 3.7V 1350mAh Lithium-Ion	
Definition			Production unit
IMEI		Original solution:35972801001016601 Second solution:35972801001008301 Third solution:35972801000000101	
Hardware Version			XA02
Software Version			25.64.40.01H
KAIS140_Max. SAR Measurement value (1 g)		For Head part 0.629 W/kg (At GSM 1900, Left Tilt and Slider-off, channel 512_ <b>Third solution</b> )	For Body Part 1.54 W/kg (At GSM 850 in GPRS mode, Channel 251_ <b>Third solution</b> )
Declaration		<b>Original solution</b>  According to KAIS130 with report number ES/2007/90005, our client kept GSM850/1900 and removed WCDMA B2 & WCDMA B5, they changed the model name to KAIS140, basically, we used spot-check method to check head and body conditions, for the head check result, GSM850/1800 was within 20% deviation but over 20% in WLAN 802.11b/g, therefore we retest the WLAN bands. In addition, the body check result were all over 20% in GSM850/1900/WLAN 802.11b/g bands, so we retested all of the body conditions.	<b>Second solution(change LCM &amp; Camera)</b>  This model KAIS140 changed anotherLCM & Camera component. In order to find SAR value whether the same between first and second solution, we used spot-check method to check it. Finally, the check result, GSM850/1900 /WALN

	802.11 b/g was within 20% deviation.
	<p style="text-align: center;"><b>Third solution(change PA)</b></p> <p>This model KAIS140 changed PA component. In order to find SAR value whether the same between first and third solution, we used spot-check method to check it. Finally, we found SAR value was over 20% deviation in GSM1900 &amp; WLAN 802.11b bands, so we decide to retest GSM1900 &amp; WLAN 802.11b bands.</p>

Note:

1. EGPRS mode was not measured because maximum averaged output power is more than 3 dB lower in EGPRS mode than in GPRS mode.  
(In EDGE mode, its power class level is E2 and output power less than 24dBm)

## 1.4 Test Environment

Ambient Temperature: 22.2° C

Tissue Simulating Liquid: 21.7° C

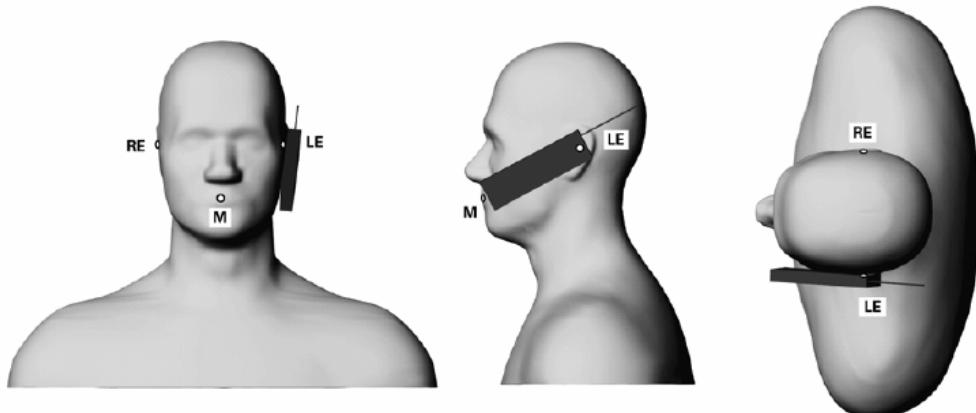
Relative Humidity: 62 %

## 1.5 Operation description

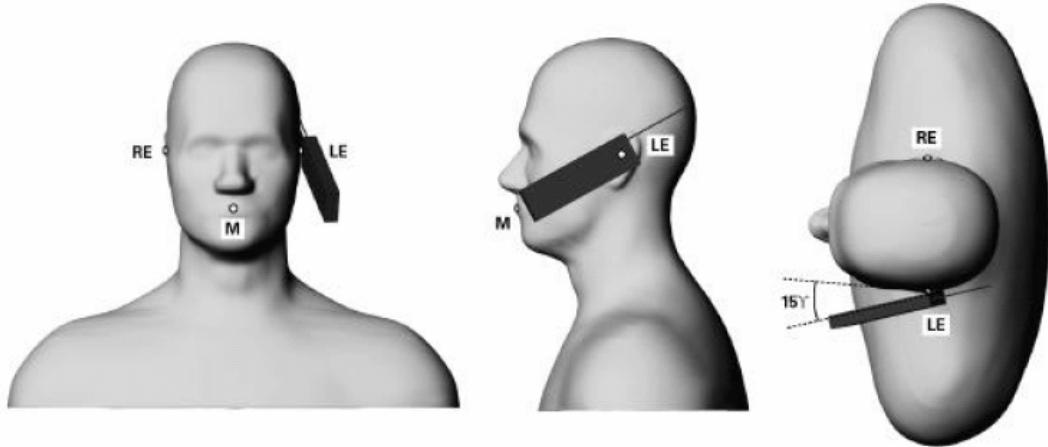
1. The EUT is controlled by using a Radio Communication Tester (R&S CMU200), and the communication between the EUT and the tester is established by air link. Measurements are performed respectively on the lowest, middle and highest channels of the operating band(s). The EUT is set to maximum power level during all tests, and at the beginning of each test the battery is fully charged.
2. Testing SAR with dominant transmitter ON and co-located Bluetooth transmitter OFF to find the highest head-position SAR measurement value.
3. Testing SAR with dominant transmitter and co-located Bluetooth transmitter both ON for head-position worst case configuration.
4. For highest SAR configuration in this band repeated with Memory card.
5. For highest SAR configuration in this band repeated with other model battery.
6. For highest SAR configuration in this band repeated with WLAN802.11 b active.
7. For highest SAR configuration in this band repeated with WLAN802.11 g active.
8. For highest SAR configuration in this band repeated with WLAN802.11 & Bluetooth active.
9. Testing body-worn SAR with Headset with Bluetooth transmitter OFF by separating 1.5cm between the back of the EUT and the flat phantom in GPRS mode.

10. Testing body-worn SAR with Headset and with Bluetooth transmitter OFF by separating 1.5cm between the front of the EUT and the flat phantom in GPRS mode.
11. Testing body-worn SAR with Headset and with Bluetooth transmitter ON in GPRS mode at the body-worn worst case configuration.
12. For highest SAR configuration in this band repeated with external Memory card.
13. For highest SAR configuration in this band repeated with other two Headsets.
14. For highest SAR configuration in this band repeated with other model battery.
15. For highest SAR configuration in this band repeated with WLAN802.11 b active.
16. For highest SAR configuration in this band repeated with WLAN802.11 g active.
17. For highest SAR configuration in this band repeated with WLAN802.11 & Bluetooth active.
18. During the SAR testing, the DASY4 system checks power drift by comparing the e-field strength of one specific location measured at the beginning with that measured at the end of the SAR testing

## **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 moved around until the highest averaged SAR is found. If the highest SAR is found at the edge of the measured volume, the system will issue a warning: higher SAR values might be found outside of the measured volume. In that case the cube measurement can be repeated, using the new interpolated maximum as the center.

## **1.8 The SAR Measurement System**

A photograph of the SAR measurement System is given in Fig. a. This SAR Measurement

System uses a Computer-controlled 3-D stepper motor system (SPEAG DASY 4 professional system ). A Model EX3DV3 3526-field probe is used to determine the internal electric fields. The SAR can be obtained from the equation  $SAR = \sigma (|E_i|^2) / \rho$  where  $\sigma$  and  $\rho$  are the conductivity and mass density of the tissue-simulant.

A photograph of the SAR measurement System is given in Fig. a. This SAR Measurement System uses a Computer-controlled 3-D stepper motor system (SPEAG DASY 4 professional system ). A Model EX3DV3 3526-field probe is used to determine the internal electric fields. The SAR can be obtained from the equation  $SAR = \sigma (|E_i|^2) / \rho$  where  $\sigma$  and  $\rho$  are the conductivity and mass density of the tissue-simulant.

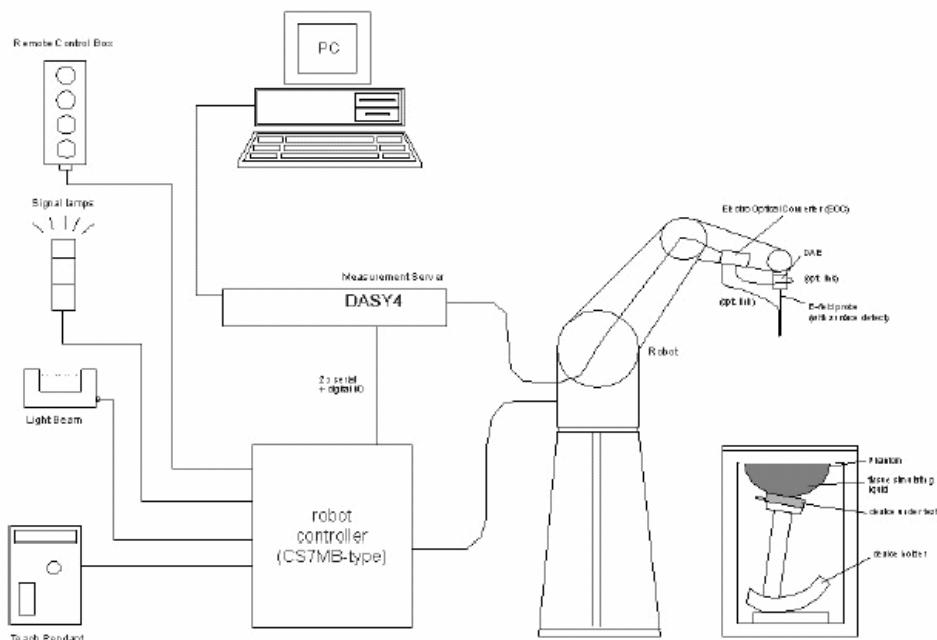


Fig.a The microwave circuit arrangement used for SAR system verification

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

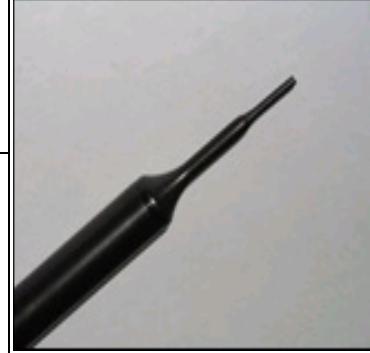
- A standard high precision 6-axis robot (Stabile RX family) with controller, teach pendant and software. An arm extension is for accommodating the data acquisition electronics (DAE).
- A dosimetric probe, i.e., an isotropic E-field probe optimized and calibrated for usage in tissue simulating liquid. The probe is equipped with an optical surface detector system.
- A data acquisition electronics (DAE) which performs the signal amplification, signal multiplexing, AD-conversion, offset measurements, mechanical surface detection, collision detection, etc. The unit is battery powered with standard or rechargeable

batteries. The signal is optically transmitted to the EOC.

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

## 1.9 System Components

### EX3DV3 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)	 EX3DV3 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 > 6 GHz; Linearity: $\pm 0.2$ dB (30 MHz to 6 GHz)	
Directivity:	$\pm 0.3$ dB in HSL (rotation around probe axis) $\pm 0.5$ dB in tissue material (rotation normal to probe axis)	
Dynamic Range:	10 $\mu$ W/g to > 100 mW/g; Linearity: $\pm 0.2$ dB (noise: typically < 1 $\mu$ W/g)	
Dimensions:	Overall length: 330 mm (Tip: 20 mm) Tip diameter: 2.5 mm (Body: 12 mm) Typical distance from probe tip to dipole centers: 1 mm	
Application:	High precision dosimetric measurements in any exposure scenario	

	(e.g., very strong gradient fields). Only probe which enables compliance testing for frequencies up to 6 GHz with precision of better 30%.
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### SAM PHANTOM V4.0C

Construction:	The shell corresponds to the specifications of the Specific Anthropomorphic Mannequin (SAM) phantom defined in IEEE 1528-200X, CENELEC 50361 and IEC 62209. It enables the dosimetric evaluation of left and right hand phone usage as well as body mounted usage at the flat phantom region. A cover prevents evaporation of the liquid. Reference markings on the phantom allow the complete setup of all predefined phantom positions and measurement grids by manually teaching three points with the robot.
Shell Thickness:	2 ± 0.2 mm
Filling Volume:	Approx. 25 liters
Dimensions:	Height: 251 mm; Length: 1000 mm; Width: 500 mm



### DEVICE HOLDER

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

The microwave circuit arrangement for system verification is sketched in Fig. b. The daily system accuracy verification occurs within the flat section of the SAM phantom. A SAR measurement was performed to see if the measured SAR was within +/- 5% from the target SAR values. These tests were done at 900/1900/2450 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 22.2°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.

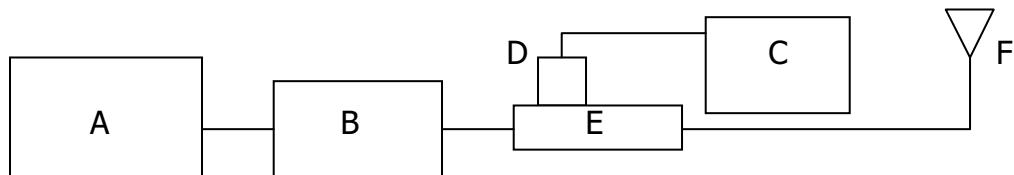
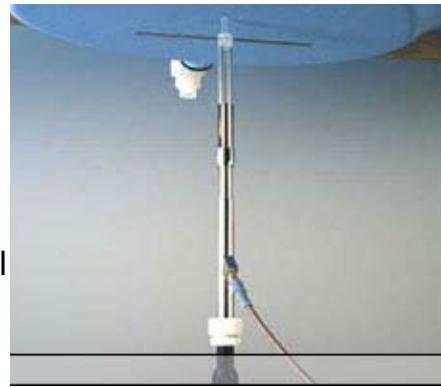


Fig.b The microwave circuit arrangement used for SAR system verification

- 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

<b>KAIS140</b>					
Validation Kit	Frequency (MHz)	Target SAR (1g) (Pin=250mW)	Measured SAR (1g)	Variation	Measured Date
D900V2 S/N: 168	900 MHz (Head)	2.59 m W/g	2.56m W/g	1.1%	2008/2/4
D900V2 S/N: 168	900 MHz (Body)	2.58 m W/g	2.7m W/g	4.6%	2008/2/4
D900V2 S/N: 168	900 MHz (Body)	2.58 m W/g	2.69m W/g	4.2%	2008/2/14
D1900V2 S/N: 5d027	1900 MHz (Head)	9.28 m W/g	9.44m W/g	1.72%	2008/2/4
D1900V2 S/N: 5d027	1900 MHz (Head)	9.28 m W/g	9.43m W/g	1.61%	2008/2/22
D1900V2 S/N: 5d027	1900 MHz (Body)	9.67 m W/g	9.86m W/g	1.96%	2008/2/4

D1900V2 S/N: 5d027	1900 MHz (Body)	9.67 m W/g	9.57m W/g	1%	2008/2/14
D2450V2 S/N: 727	2450 MHz (Head)	13.8 m W/g	13.2m W/g	4.3%	2008/2/5
D2450V2 S/N: 727	2450 MHz (Head)	13.8 m W/g	13.3m W/g	3.6%	2008/2/6
D2450V2 S/N: 727	2450 MHz (Head)	13.8 m W/g	13.2m W/g	4.3%	2008/2/26
D2450V2 S/N: 727	2450 MHz (Body)	14.0 m W/g	14.3m W/g	2.1%	2008/2/13
D2450V2 S/N: 727	2450 MHz (Body)	14.0 m W/g	13.7m W/g	2.1%	2008/2/27
<b>KAIS130</b>					
Validation Kit	Frequency (MHz)	Target SAR (1g) (Pin=250mW)	Measured SAR (1g)	Variation	Measured Date
D900V2 S/N: 178	900 MHz (Head)	2.66 m W/g	2.7 m W/g	1.50%	2007/9/16
D900V2 S/N: 178	900 MHz (Body)	2.69 m W/g	2.64 m W/g	1.86%	2007/9/19
D1900V2 S/N: 5d027	1900 MHz (Head)	9.28 m W/g	9.53 m W/g	2.69%	2007/9/18
D1900V2 S/N: 5d027	1900 MHz (Body)	9.67 m W/g	9.89 m W/g	2.28%	2007/9/13
D2450V2 S/N: 727	2450 MHz (Head)	13.8 m W/g	13.2 m W/g	4.35%	2007/9/15
D2450V2 S/N: 727	2450 MHz (Body)	14.0 m W/g	13.5 m W/g	3.57%	2007/9/14

Table 1. System validation (follow manufacture target value)

### 1.11 Tissue Simulant Fluid for the Frequency Band

The dielectric properties for this Head-simulant fluid were measured by using the HP Model 85070D Dielectric Probe (rates frequency band 200 MHz to 20 GHz) in conjunction 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  $15\text{cm}\pm5\text{mm}$  during all tests. (Appendix Fig .2)

<b>KAIS140</b>					
Frequency (MHz)	Tissue type	Measurement date/ Limits	Dielectric Parameters		
			$\rho$	$\sigma$ (S/m)	Simulated Tissue Temperature( $^{\circ}$ C)
900	Head	Measured, 2008.02.04	42.2	0.956	21.7
		Recommended Limits	39.4-43.6	0.86-1.03	20-24
900	Body	Measured, 2008.02.04	54.3	1.07	21.7
		Recommended Limits	52.3-57.8	0.92-1.1	20-24
		Measured, 2008.02.14	54.4	1.06	21.7
		Recommended Limits	52.3-57.8	0.92-1.1	20-24
1900	Head	Measured, 2008.02.04	40.8	1.37	21.7
		Recommended Limits	38-42	1.29-1.47	20-24
		Measured, 2008.02.22	40.7	1.37	21.7
		Recommended Limits	38-42	1.29-1.47	20-24
1900	Body	Measured, 2008.02.04	55	1.6	21.7
		Recommended Limits	50.6-56	1.38-1.6	20-24
		Measured, 2008.02.14	54.9	1.58	21.7
		Recommended Limits	50.6-56	1.38-1.6	20-24
2450	Head	Measured, 2008.02.05	40.1	1.85	21.7
		Recommended Limits	37.2-41.2	1.71-1.93	20-24
		Measured, 2008.02.06	40	1.84	21.7
		Recommended Limits	37.2-41.2	1.71-1.93	20-24
		Measured, 2008.02.26	40.2	1.85	21.7
		Recommended Limits	37.2-41.2	1.71-1.93	20-24
2450	Body	Measured, 2008.02.13	50.9	1.99	21.7
		Recommended Limits	50.1-55.3	1.85-2.12	20-24
		Measured, 2008.02.27	50.9	1.98	21.7
		Recommended Limits	50.1-55.3	1.85-2.12	20-24
<b>KAIS130</b>					
Frequency (MHz)	Tissue type	Measurement date/ Limits	Dielectric Parameters		
			$\rho$	$\sigma$ (S/m)	Simulated Tissue Temperature( $^{\circ}$ C)
900	Head	Measured, 2007.09.16	41.9	0.974	21.7
		Recommended Limits	39.4-43.6	0.86-1.03	20-24
900	Body	Measured, 2007.09.19	55.5	1.02	21.7
		Recommended Limits	52.3-58	0.92-1.1	20-24

1900	Head	Measured, 2007.09.18	38.6	1.44	21.6
		Recommended Limits	38-42	1.29-1.47	20-24
1900	Body	Measured, 2007.09.13	50.8	1.6	21.7
		Recommended Limits	50.6-56	1.38-1.6	20-24
2450	Head	Measured, 2007.09.15	37.5	1.9	21.7
		Recommended Limits	37.1-41.2	1.71-1.93	20-24
2450	Body	Measured, 2007.09.14	50.8	2.09	21.7
		Recommended Limits	50.0-55.3	1.85-2.12	20-24

Table 3. Dielectric Parameters of Tissue Simulant Fluid

Band 850 Frequency (MHz)	Channel	Target	Permittivity Measurement Data	Variation	Target	Conductivity Measurement Data	Variation	
For Head Part								
High(848.8)	251	41	42.8	4.3%	0.89	0.911	2.35%	
For Body Part								
Low(824.2)	128	55.2	55.1	0.1%	0.97	0.995	2.5%	
Mid(836.6)	190		55	0.36%		0.998	2.8%	
High(848.8)	251		54.9	0.54%		0.999	2.9%	
			54.9	0.54%		1.01	4.1%	

Table 4. Dielectric Parameters of Tissue Simulant Fluid (follow P1528 target value)

The composition of the brain tissue simulating liquid for 900 & 1900 & 2450 band:

Ingredient	900MHz (Head)	900MHz (Body)	1900MHz (Head)	1900MHz (Body)	2450Mhz (Head)	2450Mhz (Body)
DGMBE	X	X	444.52 g	300.67g	450.0 g	301.7 ml
Water	532.98 g	632.68 g	552.42 g	716.56 g	550.0 g	698.3 ml
Salt	18.3 g	11.72 g	3.06 g	4.0 g	X	X
Preventol D-7	2.4 g	1.2 g	X	X	X	X
Cellulose	3.2 g	X	X	X	X	X
Sugar	766.0 g	600 g	X	X	X	X
Total amount	1 L (1.0kg)					

Table 5. 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 .6 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

### Mode Number:KAIS140

#### Orignal solution measurement result

#### GSM 850 MHZ

<b>Left Head Hold up(Cheek Position)</b>						
Frequency	Channel	MHz	Conducted Output Power (Average)	Measured(W/kg) 1g	Amb. Temp[°C]	Liquid Temp[°C]
850 MHz	251	848.8	33.21dbm	0.321	22.1	21.7
<b>Body worn (testing in GPRS mode)</b>						
Frequency	Channel	MHz	Conducted Output Power (Average)	Measured(W/kg) 1g	Amb. Temp[°C]	Liquid Temp[°C]
850 MHz	128	824.2	33.03dbm	1.51	22.1	21.7
	190	836.6	33.15dbm	1.51	22.1	21.7
	251	848.8	33.21dbm	1.53	22.1	21.7
<b>Body worn- repeated for EUT front to phantom</b>						
Frequency	Channel	MHz	Conducted Output Power (Average)	Measured(W/kg) 1g	Amb. Temp[°C]	Liquid Temp[°C]
850 MHz	251	848.8	33.21dbm	0.348	22.1	21.7
<b>Body worn-repeated with Memory card</b>						
Frequency	Channel	MHz	Conducted Output Power (Average)	Measured(W/kg) 1g	Amb. Temp[°C]	Liquid Temp[°C]
850 MHz	251	848.8	33.21dbm	1.41	22.1	21.7
<b>Body worn-repeated with Bluetooth active</b>						
Frequency	Channel	MHz	Conducted Output Power (Average)	Measured(W/kg) 1g	Amb. Temp[°C]	Liquid Temp[°C]
850 MHz	251	848.8	33.21dbm	1.45	22.1	21.7
<b>Body worn-repeated with WLAN 802.11 b active</b>						
Frequency	Channel	MHz	Conducted Output Power (Average)	Measured(W/kg) 1g	Amb. Temp[°C]	Liquid Temp[°C]
850 MHz	251	848.8	dbm	1.05	22.1	21.7
<b>Body worn-repeated with WLAN 802.11 g active</b>						
Frequency	Channel	MHz	Conducted Output Power (Average)	Measured(W/kg) 1g	Amb. Temp[°C]	Liquid Temp[°C]
850 MHz	251	848.8	33.21dbm	0.965	22.1	21.7

<b>Body worn-repeated with WLAN 802.11 b &amp; Bluetooth active</b>						
Frequency	Channel	MHz	Conducted Output Power (Average)	Measured(W/kg) 1g	Amb. Temp[°C]	Liquid Temp[°C]
850 MHz	251	848.8	33.21dbm	1.15	22.1	21.7
<b>Body worn-repeated with Headset 1</b>						
Frequency	Channel	MHz	Conducted Output Power (Average)	Measured(W/kg) 1g	Amb. Temp[°C]	Liquid Temp[°C]
850 MHz	251	848.8	33.21dbm	1.2	22.1	21.7
<b>Body worn-repeated with Headset 2</b>						
Frequency	Channel	MHz	Conducted Output Power (Average)	Measured(W/kg) 1g	Amb. Temp[°C]	Liquid Temp[°C]
850 MHz	251	848.8	33.21dbm	1.04	22.1	21.7
<b>Body worn-repeated with Battery model: Samsung</b>						
Frequency	Channel	MHz	Conducted Output Power (Average)	Measured(W/kg) 1g	Amb. Temp[°C]	Liquid Temp[°C]
850 MHz	251	848.8	33.21dbm	1.27	22.1	21.7

## PCS 1900 MHZ

<b>Left Head Hold up(Cheek Position)</b>						
Frequency	Channel	MHz	Conducted Output Power (Average)	Measured(W/kg) 1g	Amb. Temp[°C]	Liquid Temp[°C]
1900 MHz	810	1909.8	30.62dbm	0.437	22.1	21.7
<b>Body worn (testing in GPRS mode)</b>						
Frequency	Channel	MHz	Conducted Output Power (Average)	Measured(W/kg) 1g	Amb. Temp[°C]	Liquid Temp[°C]
1900 MHz	512	1850.2	30.58dbm	0.945	22.1	21.7
	661	1880	30.55dbm	1.04	22.1	21.7
	810	1909.8	30.62dbm	1.02	22.1	21.7

## WLAN 802.11 b

<b>Right Head Slider-off(Cheek Position)</b>						
Frequency	Channel	MHz	Conducted Output Power (Average)	Measured(W/kg) 1g	Amb. Temp[°C]	Liquid Temp[°C]
WLAN 802.11 b	1	2412	16.1dbm	0.186	22.1	21.7
	6	2437	16.19dbm	0.192	22.1	21.7
	11	2462	16.01dbm	0.182	22.1	21.7

**Left Head Slider-off (Cheek Position)**

Frequency	Channel	MHz	Conducted Output Power (Average)	Measured(W/kg) 1g	Amb. Temp[°C]	Liquid Temp[°C]
WLAN 802.11 b	1	2412	16.1dbm	0.299	22.1	21.7
	6	2437	16.19dbm	0.339	22.1	21.7
	11	2462	16.01dbm	0.310	22.1	21.7

**Right Head Slider-off(15° Tilt Position)**

Frequency	Channel	MHz	Conducted Output Power (Average)	Measured(W/kg) 1g	Amb. Temp[°C]	Liquid Temp[°C]
WLAN 802.11 b	1	2412	16.1dbm	0.086	22.1	21.7
	6	2437	16.19dbm	0.103	22.1	21.7
	11	2462	16.01dbm	0.099	22.1	21.7

**Left Head Slider-off(15° Tilt Position)**

Frequency	Channel	MHz	Conducted Output Power (Average)	Measured(W/kg) 1g	Amb. Temp[°C]	Liquid Temp[°C]
WLAN 802.11 b	1	2412	16.1dbm	0.097	22.1	21.7
	6	2437	16.19dbm	0.121	22.1	21.7
	11	2462	16.01dbm	0.121	22.1	21.7

**Right Head Slider-on(Cheek Position)**

Frequency	Channel	MHz	Conducted Output Power (Average)	Measured(W/kg) 1g	Amb. Temp[°C]	Liquid Temp[°C]
WLAN 802.11 b	1	2412	16.1dbm	0.292	22.1	21.7
	6	2437	16.19dbm	0.295	22.1	21.7
	11	2462	16.01dbm	0.218	22.1	21.7

**Left Head Slider- on (Cheek Position)**

Frequency	Channel	MHz	Conducted Output Power (Average)	Measured(W/kg) 1g	Amb. Temp[°C]	Liquid Temp[°C]
WLAN 802.11 b	1	2412	16.1dbm	0.412	22.1	21.7
	6	2437	16.19dbm	0.438	22.1	21.7
	11	2462	16.01dbm	0.365	22.1	21.7

**Right Head Slider- on (15° Tilt Position)**

Frequency	Channel	MHz	Conducted Output Power (Average)	Measured(W/kg) 1g	Amb. Temp[°C]	Liquid Temp[°C]
WLAN 802.11 b	1	2412	16.1dbm	0.229	22.1	21.7
	6	2437	16.19dbm	0.244	22.1	21.7
	11	2462	16.01dbm	0.208	22.1	21.7

<b>Left Head Slider- on (15° Tilt Position)</b>						
Frequency	Channel	MHz	Conducted Output Power (Average)	Measured(W/kg) 1g	Amb. Temp[°C]	Liquid Temp[°C]
WLAN 802.11 b	1	2412	16.1dbm	0.2	22.1	21.7
	6	2437	16.19dbm	0.194	22.1	21.7
	11	2462	16.01dbm	0.157	22.1	21.7
<b>Right Head Hold up(Cheek Position)</b>						
Frequency	Channel	MHz	Conducted Output Power (Average)	Measured(W/kg) 1g	Amb. Temp[°C]	Liquid Temp[°C]
WLAN 802.11 b	11	2462	16.01dbm	0.204	22.1	21.7
<b>Left Head Hold up(Cheek Position)</b>						
Frequency	Channel	MHz	Conducted Output Power (Average)	Measured(W/kg) 1g	Amb. Temp[°C]	Liquid Temp[°C]
WLAN 802.11 b	11	2462	16.01dbm	0.299	22.1	21.7
<b>Left Head Slider- on (Cheek Position) _ repeated with Memory Card</b>						
Frequency	Channel	MHz	Conducted Output Power (Average)	Measured(W/kg) 1g	Amb. Temp[°C]	Liquid Temp[°C]
WLAN 802.11 b	6	2437	16.19dbm	0.475	22.1	21.7
<b>Left Head Slider- on (Cheek Position) _ repeated with Bluetooth active</b>						
Frequency	Channel	MHz	Conducted Output Power (Average)	Measured(W/kg) 1g	Amb. Temp[°C]	Liquid Temp[°C]
WLAN 802.11 b	6	2437	16.19dbm	0.432	22.1	21.7
<b>Left Head Slider- on (Cheek Position) _ repeated with Samsung Battery</b>						
Frequency	Channel	MHz	Conducted Output Power (Average)	Measured(W/kg) 1g	Amb. Temp[°C]	Liquid Temp[°C]
WLAN 802.11 b	6	2437	16.19dbm	0.436	22.1	21.7
<b>Body worn (testing in GPRS mode)</b>						
Frequency	Channel	MHz	Conducted Output Power (Average)	Measured(W/kg) 1g	Amb. Temp[°C]	Liquid Temp[°C]
WLAN 802.11 b	1	2412	16.1dbm	0.568	22.1	21.7
	6	2437	16.19dbm	0.615	22.1	21.7
	11	2462	16.01dbm	0.532	22.1	21.7
<b>Body worn- repeated for EUT front to phantom</b>						
Frequency	Channel	MHz	Conducted Output Power (Average)	Measured(W/kg) 1g	Amb. Temp[°C]	Liquid Temp[°C]

WLAN 802.11 b	6	2437	16.19dbm	0.218	22.1	21.7
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**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	16.19dbm	0.504	22.1	21.7

**Body worn-repeated with Bluetooth active**

Frequency	Channel	MHz	Conducted Output Power (Average)	Measured(W/kg) 1g	Amb. Temp[°C]	Liquid Temp[°C]
WLAN 802.11 b	6	2437	16.19dbm	0.501	22.1	21.7

**Body worn-repeated with Samsung Battery**

Frequency	Channel	MHz	Conducted Output Power (Average)	Measured(W/kg) 1g	Amb. Temp[°C]	Liquid Temp[°C]
WLAN 802.11 b	6	2437	16.19dbm	0.537	22.1	21.7

## **WLAN 802.11 g**

**Right Head Slider-off(Cheek Position)**

Frequency	Channel	MHz	Conducted Output Power (Average)	Measured(W/kg) 1g	Amb. Temp[°C]	Liquid Temp[°C]
WLAN 802.11 g	1	2412	14.23dbm	0.057	22.1	21.7
	6	2437	14.43dbm	0.064	22.1	21.7
	11	2462	13.94dbm	0.059	22.1	21.7

**Left Head Slider-off (Cheek Position)**

Frequency	Channel	MHz	Conducted Output Power (Average)	Measured(W/kg) 1g	Amb. Temp[°C]	Liquid Temp[°C]
WLAN 802.11 g	1	2412	14.23dbm	0.099	22.1	21.7
	6	2437	14.43dbm	0.114	22.1	21.7
	11	2462	13.94dbm	0.108	22.1	21.7

**Right Head Slider-off(15° Tilt Position)**

Frequency	Channel	MHz	Conducted Output Power (Average)	Measured(W/kg) 1g	Amb. Temp[°C]	Liquid Temp[°C]
WLAN 802.11 g	1	2412	14.23dbm	0.029	22.1	21.7
	6	2437	14.43dbm	0.038	22.1	21.7
	11	2462	13.94dbm	0.026	22.1	21.7

**Left Head Slider-off(15° Tilt Position)**

Frequency	Channel	MHz	Conducted Output Power (Average)	Measured(W/kg) 1g	Amb. Temp[°C]	Liquid Temp[°C]
WLAN 802.11 g	1	2412	14.23dbm	0.033	22.1	21.7
	6	2437	14.43dbm	0.042	22.1	21.7
	11	2462	13.94dbm	0.040	22.1	21.7

#### **Right Head Slider-on(Cheek Position)**

Frequency	Channel	MHz	Conducted Output Power (Average)	Measured(W/kg) 1g	Amb. Temp[°C]	Liquid Temp[°C]
WLAN 802.11 g	1	2412	14.23dbm	0.070	22.1	21.7
	6	2437	14.43dbm	0.073	22.1	21.7
	11	2462	13.94dbm	0.057	22.1	21.7

#### **Left Head Slider- on (Cheek Position)**

Frequency	Channel	MHz	Conducted Output Power (Average)	Measured(W/kg) 1g	Amb. Temp[°C]	Liquid Temp[°C]
WLAN 802.11 g	1	2412	14.23dbm	0.122	22.1	21.7
	6	2437	14.43dbm	0.134	22.1	21.7
	11	2462	13.94dbm	0.107	22.1	21.7

#### **Right Head Slider- on (15° Tilt Position)**

Frequency	Channel	MHz	Conducted Output Power (Average)	Measured(W/kg) 1g	Amb. Temp[°C]	Liquid Temp[°C]
WLAN 802.11 g	1	2412	14.23dbm	0.054	22.1	21.7
	6	2437	14.43dbm	0.065	22.1	21.7
	11	2462	13.94dbm	0.048	22.1	21.7

#### **Left Head Slider- on (15° Tilt Position)**

Frequency	Channel	MHz	Conducted Output Power (Average)	Measured(W/kg) 1g	Amb. Temp[°C]	Liquid Temp[°C]
WLAN 802.11 g	1	2412	14.23dbm	0.045	22.1	21.7
	6	2437	14.43dbm	0.049	22.1	21.7
	11	2462	13.94dbm	0.030	22.1	21.7

#### **Right Head Hold up(Cheek Position)**

Frequency	Channel	MHz	Conducted Output Power (Average)	Measured(W/kg) 1g	Amb. Temp[°C]	Liquid Temp[°C]
WLAN 802.11 g	11	2462	13.94dbm	0.034	22.1	21.7

#### **Left Head Hold up(Cheek Position)**

Frequency	Channel	MHz	Conducted Output Power (Average)	Measured(W/kg) 1g	Amb. Temp[°C]	Liquid Temp[°C]

WLAN 802.11 g	11	2462	13.94dbm	0.091	22.1	21.7
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**Body worn (testing in GPRS mode)**

Frequency	Channel	MHz	Conducted Output Power (Average)	Measured(W/kg) 1g	Amb. Temp[°C]	Liquid Temp[°C]
WLAN 802.11 g	1	2412	14.23dbm	0.153	22.1	21.7
	6	2437	14.43dbm	0.166	22.1	21.7
	11	2462	13.94dbm	0.158	22.1	21.7

Note: SAR measurement results for the Mobile Phone at maximum output power.

**Second solution measurement result (LCM & Camera changed)**

**GSM 850 MHZ**

<b>Body worn (testing in GPRS mode)</b>						
Frequency	Channel	MHz	Conducted Output Power (Average)	Measured(W/kg) 1g	Amb. Temp[°C]	Liquid Temp[°C]
850 MHz	251	848.8	33.12dbm	1.5	22.1	21.7

**PCS 1900 MHZ**

<b>Body worn (testing in GPRS mode)</b>						
Frequency	Channel	MHz	Conducted Output Power (Average)	Measured(W/kg) 1g	Amb. Temp[°C]	Liquid Temp[°C]
1900 MHz	661	1880	30.41dbm	0.985	22.1	21.7

**WLAN 802.11 b**

<b>Body worn (testing in GPRS mode)</b>						
Frequency	Channel	MHz	Conducted Output Power (Average)	Measured(W/kg) 1g	Amb. Temp[°C]	Liquid Temp[°C]
WLAN 802.11 b	6	2437	16.1dbm	0.655	22.1	21.7

## **WLAN 802.11 g**

<b>Body worn (testing in GPRS mode)</b>						
Frequency	Channel	MHz	Conducted Output Power (Average)	Measured(W/kg) 1g	Amb. Temp[°C]	Liquid Temp[°C]
WLAN 802.11 g	6	2437	14.41dbm	0.199	22.1	21.7

Note: SAR measurement results for the Mobile Phone at maximum output power.

## **Third solution measurement result (PA changed)**

### **GSM 850 MHZ**

<b>Body worn (testing in GPRS mode)</b>						
Frequency	Channel	MHz	Conducted Output Power (Average)	Measured(W/kg) 1g	Amb. Temp[°C]	Liquid Temp[°C]
850 MHz	251	848.8	33.2dbm	1.54	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]
850 MHz	251	848.8	33.2dbm	0.462	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]
850 MHz	251	848.8	33.2dbm	1.51	22.1	21.7

### **Body worn-repeated with Bluetooth active**

Frequency	Channel	MHz	Conducted Output Power (Average)	Measured(W/kg) 1g	Amb. Temp[°C]	Liquid Temp[°C]
850 MHz	251	848.8	33.2dbm	1.53	22.1	21.7

### **Body worn-repeated with WLAN 802.11 b active**

Frequency	Channel	MHz	Conducted Output Power (Average)	Measured(W/kg) 1g	Amb. Temp[°C]	Liquid Temp[°C]
850 MHz	251	848.8	33.2dbm	0.867	22.1	21.7

### **Body worn-repeated with WLAN 802.11 g active**

Frequency	Channel	MHz	Conducted Output Power (Average)	Measured(W/kg) 1g	Amb. Temp[°C]	Liquid Temp[°C]
850 MHz	251	848.8	33.2dbm	0.847	22.1	21.7

### **Body worn-repeated with WLAN 802.11 b & Bluetooth active**

Frequency	Channel	MHz	Conducted Output Power (Average)	Measured(W/kg) 1g	Amb. Temp[°C]	Liquid Temp[°C]
850 MHz	251	848.8	33.2dbm	0.847	22.1	21.7

850 MHz	251	848.8	33.2dbm	0.936	22.1	21.7
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**Body worn-repeated with Headset 1**

Frequency	Channel	MHz	Conducted Output Power (Average)	Measured(W/kg) 1g	Amb. Temp[°C]	Liquid Temp[°C]
850 MHz	251	848.8	33.2dbm	1.31	22.1	21.7

**Body worn-repeated with Headset 2**

Frequency	Channel	MHz	Conducted Output Power (Average)	Measured(W/kg) 1g	Amb. Temp[°C]	Liquid Temp[°C]
850 MHz	251	848.8	33.2dbm	1.29	22.1	21.7

**Body worn-repeated with Samsung Battery**

Frequency	Channel	MHz	Conducted Output Power (Average)	Measured(W/kg) 1g	Amb. Temp[°C]	Liquid Temp[°C]
850 MHz	251	848.8	33.2dbm	1.53	22.1	21.7

## PCS 1900 MHZ

**Right Head Slider-off(Cheek Position)**

Frequency	Channel	MHz	Conducted Output Power (Average)	Measured(W/kg) 1g	Amb. Temp[°C]	Liquid Temp[°C]
1900 MHz	512	1850.2	29.3dbm	0.376	22.1	21.7
	661	1880	29.1dbm	0.292	22.1	21.7
	810	1909.8	29.07dbm	0.201	22.1	21.7

**Left Head Slider-off (Cheek Position)**

Frequency	Channel	MHz	Conducted Output Power (Average)	Measured(W/kg) 1g	Amb. Temp[°C]	Liquid Temp[°C]
1900 MHz	512	1850.2	29.3dbm	0.419	22.1	21.7
	661	1880	29.1dbm	0.364	22.1	21.7
	810	1909.8	29.07dbm	0.245	22.1	21.7

**Right Head Slider-off(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	29.3dbm	0.615	22.1	21.7
	661	1880	29.1dbm	0.484	22.1	21.7
	810	1909.8	29.07dbm	0.306	22.1	21.7

**Left Head Slider-off(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	29.3dbm	0.629	22.1	21.7

	661	1880	29.1dbm	0.496	22.1	21.7
	810	1909.8	29.07dbm	0.334	22.1	21.7

**Right Head Slider-on(Cheek Position)**

Frequency	Channel	MHz	Conducted Output Power (Average)	Measured(W/kg) 1g	Amb. Temp[°C]	Liquid Temp[°C]
1900 MHz	512	1850.2	29.3dbm	0.253	22.1	21.7
	661	1880	29.1dbm	0.193	22.1	21.7
	810	1909.8	29.07dbm	0.132	22.1	21.7

**Left Head Slider- on (Cheek Position)**

Frequency	Channel	MHz	Conducted Output Power (Average)	Measured(W/kg) 1g	Amb. Temp[°C]	Liquid Temp[°C]
1900 MHz	512	1850.2	29.3dbm	0.352	22.1	21.7
	661	1880	29.1dbm	0.291	22.1	21.7
	810	1909.8	29.07dbm	0.220	22.1	21.7

**Right Head Slider- on (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	29.3dbm	0.404	22.1	21.7
	661	1880	29.1dbm	0.338	22.1	21.7
	810	1909.8	29.07dbm	0.243	22.1	21.7

**Left Head Slider- on (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	29.3dbm	0.489	22.1	21.7
	661	1880	29.1dbm	0.403	22.1	21.7
	810	1909.8	29.07dbm	0.267	22.1	21.7

**Right Head Hold up(Cheek Position)**

Frequency	Channel	MHz	Conducted Output Power (Average)	Measured(W/kg) 1g	Amb. Temp[°C]	Liquid Temp[°C]
1900 MHz	810	1909.8	29.07dbm	0.166	22.1	21.7

**Left Head Hold up(Cheek Position)**

Frequency	Channel	MHz	Conducted Output Power (Average)	Measured(W/kg) 1g	Amb. Temp[°C]	Liquid Temp[°C]
1900 MHz	810	1909.8	29.07dbm	0.352	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	29.3dbm	0.792	22.1	21.7
	661	1880	29.1dbm	0.644	22.1	21.7
	810	1909.8	29.07dbm	0.663	22.1	21.7

## WLAN 802.11 b

### Right Head Slider-off(Cheek Position)

Frequency	Channel	MHz	Conducted Output Power (Average)	Measured(W/kg) 1g	Amb. Temp[°C]	Liquid Temp[°C]
WLAN 802.11 b	1	2412	16.16dbm	0.119	22.1	21.7
	6	2437	16.23dbm	0.171	22.1	21.7
	11	2462	15.44dbm	0.188	22.1	21.7

### Left Head Slider-off (Cheek Position)

Frequency	Channel	MHz	Conducted Output Power (Average)	Measured(W/kg) 1g	Amb. Temp[°C]	Liquid Temp[°C]
WLAN 802.11 b	1	2412	16.16dbm	0.236	22.1	21.7
	6	2437	16.23dbm	0.281	22.1	21.7
	11	2462	15.44dbm	0.323	22.1	21.7

### Right Head Slider-off(15° Tilt Position)

Frequency	Channel	MHz	Conducted Output Power (Average)	Measured(W/kg) 1g	Amb. Temp[°C]	Liquid Temp[°C]
WLAN 802.11 b	1	2412	16.16dbm	0.076	22.1	21.7
	6	2437	16.23dbm	0.103	22.1	21.7
	11	2462	15.44dbm	0.121	22.1	21.7

### Left Head Slider-off(15° Tilt Position)

Frequency	Channel	MHz	Conducted Output Power (Average)	Measured(W/kg) 1g	Amb. Temp[°C]	Liquid Temp[°C]
WLAN 802.11 b	1	2412	16.16dbm	0.076	22.1	21.7
	6	2437	16.23dbm	0.113	22.1	21.7
	11	2462	15.44dbm	0.149	22.1	21.7

### Right Head Slider-on(Cheek Position)

Frequency	Channel	MHz	Conducted Output Power (Average)	Measured(W/kg) 1g	Amb. Temp[°C]	Liquid Temp[°C]
WLAN 802.11 b	1	2412	16.16dbm	0.206	22.1	21.7
	6	2437	16.23dbm	0.261	22.1	21.7
	11	2462	15.44dbm	0.203	22.1	21.7

**Left Head Slider- on (Cheek Position)**

Frequency	Channel	MHz	Conducted Output Power (Average)	Measured(W/kg) 1g	Amb. Temp[°C]	Liquid Temp[°C]
WLAN 802.11 b	1	2412	16.16dbm	0.393	22.1	21.7
	6	2437	16.23dbm	0.494	22.1	21.7
	11	2462	15.44dbm	0.487	22.1	21.7

**Right Head Slider- on (15° Tilt Position)**

Frequency	Channel	MHz	Conducted Output Power (Average)	Measured(W/kg) 1g	Amb. Temp[°C]	Liquid Temp[°C]
WLAN 802.11 b	1	2412	16.16dbm	0.134	22.1	21.7
	6	2437	16.23dbm	0.185	22.1	21.7
	11	2462	15.44dbm	0.145	22.1	21.7

**Left Head Slider- on (15° Tilt Position)**

Frequency	Channel	MHz	Conducted Output Power (Average)	Measured(W/kg) 1g	Amb. Temp[°C]	Liquid Temp[°C]
WLAN 802.11 b	1	2412	16.16dbm	0.122	22.1	21.7
	6	2437	16.23dbm	0.148	22.1	21.7
	11	2462	15.44dbm	0.134	22.1	21.7

**Right Head Hold up(Cheek Position)**

Frequency	Channel	MHz	Conducted Output Power (Average)	Measured(W/kg) 1g	Amb. Temp[°C]	Liquid Temp[°C]
WLAN 802.11 b	11	2462	15.44dbm	0.103	22.1	21.7

**Left Head Hold up(Cheek Position)**

Frequency	Channel	MHz	Conducted Output Power (Average)	Measured(W/kg) 1g	Amb. Temp[°C]	Liquid Temp[°C]
WLAN 802.11 b	11	2462	15.44dbm	0.256	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]
WLAN 802.11 b	1	2412	16.16dbm	0.316	22.1	21.7
	6	2437	16.23dbm	0.421	22.1	21.7
	11	2462	15.44dbm	0.513	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	16.23dbm	0.109	22.1	21.7

<b>Body worn-repeated with Memory card</b>						
Frequency	Channel	MHz	Conducted Output Power (Average)	Measured(W/kg) 1g	Amb. Temp[°C]	Liquid Temp[°C]
WLAN 802.11 b	6	2437	16.23dbm	0.569	22.1	21.7
<b>Body worn-repeated with Bluetooth active</b>						
Frequency	Channel	MHz	Conducted Output Power (Average)	Measured(W/kg) 1g	Amb. Temp[°C]	Liquid Temp[°C]
WLAN 802.11 b	6	2437	16.23dbm	0.427	22.1	21.7
<b>Body worn-repeated with Samsung Battery</b>						
Frequency	Channel	MHz	Conducted Output Power (Average)	Measured(W/kg) 1g	Amb. Temp[°C]	Liquid Temp[°C]
WLAN 802.11 b	6	2437	16.23dbm	0.455	22.1	21.7

## **WLAN 802.11 g**

<b>Body worn (testing in GPRS mode)</b>						
Frequency	Channel	MHz	Conducted Output Power (Average)	Measured(W/kg) 1g	Amb. Temp[°C]	Liquid Temp[°C]
WLAN 802.11 g	6	2437	14.51dbm	0.155	22.1	21.7

Note: SAR measurement results for the Mobile Phone at maximum output power.

# **Mode Number:KAIS130**

# **GSM 850 MHZ**

Right Head Slider-off(Cheek Position)						
Frequency	Channel	MHz	Conducted Output Power (Average)	Measured(W/kg) 1g	Amb. Temp[°C]	Liquid Temp[°C]
850 MHz	128	824.2	32.1dbm	0.125	22.1	21.7
	190	836.6	32.7dbm	0.123	22.1	21.7
	251	848.8	32.5dbm	0.152	22.1	21.7

## **Left Head Slider-off (Cheek Position)**

Frequency	Channel	MHz	Conducted Output Power (Average)	Measured(W/kg) 1g	Amb. Temp[°C]	Liquid Temp[°C]
850 MHz	128	824.2	32.1dbm	0.128	22.1	21.7
	190	836.6	32.7dbm	0.121	22.1	21.7
	251	848.8	32.5dbm	0.146	22.1	21.7

## **Right Head Slider-off(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	32.1dbm	0.126	22.1	21.7
	190	836.6	32.7dbm	0.128	22.1	21.7
	251	848.8	32.5dbm	0.163	22.1	21.7

### **Left Head Slider-off(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	32.1dbm	0.145	22.1	21.7
	190	836.6	32.7dbm	0.141	22.1	21.7
	251	848.8	32.5dbm	0.176	22.1	21.7

## **Right Head Slider-on(Cheek Position)**

Frequency	Channel	MHz	Conducted Output Power (Average)	Measured(W/kg) 1g	Amb. Temp[°C]	Liquid Temp[°C]
850 MHz	128	824.2	32.1dbm	0.085	22.1	21.7
	190	836.6	32.7dbm	0.080	22.1	21.7
	251	848.8	32.5dbm	0.096	22.1	21.7

## **Left Head Slider- on (Cheek Position)**

Frequency	Channel	MHz	Conducted Output Power (Average)	Measured(W/kg) 1g	Amb. Temp[°C]	Liquid Temp[°C]
850 MHz	128	824.2	32.1dbm	0.122	22.1	21.7
	190	836.6	32.7dbm	0.122	22.1	21.7
	251	848.8	32.5dbm	0.150	22.1	21.7

#### **Right Head Slider- on (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	32.1dbm	0.101	22.1	21.7
	190	836.6	32.7dbm	0.103	22.1	21.7
	251	848.8	32.5dbm	0.131	22.1	21.7

#### **Left Head Slider- on (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	32.1dbm	0.167	22.1	21.7
	190	836.6	32.7dbm	0.168	22.1	21.7
	251	848.8	32.5dbm	0.216	22.1	21.7

#### **Right Head Hold up(Cheek Position)**

Frequency	Channel	MHz	Conducted Output Power (Average)	Measured(W/kg) 1g	Amb. Temp[°C]	Liquid Temp[°C]
850 MHz	251	848.8	32.5dbm	0.120	22.1	21.7

#### **Left Head Hold up(Cheek Position)**

Frequency	Channel	MHz	Conducted Output Power (Average)	Measured(W/kg) 1g	Amb. Temp[°C]	Liquid Temp[°C]
850 MHz	251	848.8	32.5dbm	0.280	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	32.1dbm	0.836	22.1	21.7
	190	836.6	32.7dbm	0.915	22.1	21.7
	251	848.8	32.5dbm	1.08	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]
850 MHz	251	848.8	32.5dbm	0.531	22.1	21.7

#### **Body worn-repeated with Headset 1**

Frequency	Channel	MHz	Conducted Output Power (Average)	Measured(W/kg) 1g	Amb. Temp[°C]	Liquid Temp[°C]
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850 MHz	251	848.8	32.5dbm	1.08	22.1	21.7
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**Body worn-repeated with Headset 2**

Frequency	Channel	MHz	Conducted Output Power (Average)	Measured(W/kg) 1g	Amb. Temp[°C]	Liquid Temp[°C]
850 MHz	251	848.8	32.5dbm	0.732	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]
850 MHz	251	848.8	32.5dbm	1.11	22.1	21.7

**Body worn-repeated with Bluetooth active**

Frequency	Channel	MHz	Conducted Output Power (Average)	Measured(W/kg) 1g	Amb. Temp[°C]	Liquid Temp[°C]
850 MHz	251	848.8	32.5dbm	0.911	22.1	21.7

**Body worn- repeated with Samsung Battery**

Frequency	Channel	MHz	Conducted Output Power (Average)	Measured(W/kg) 1g	Amb. Temp[°C]	Liquid Temp[°C]
850 MHz	251	848.8	32.5dbm	0.960	22.1	21.7

**Body worn-repeated with WLAN802.11 b active**

Frequency	Channel	MHz	Conducted Output Power (Average)	Measured(W/kg) 1g	Amb. Temp[°C]	Liquid Temp[°C]
850 MHz	251	848.8	32.5dbm	0.494	22.1	21.7

**Body worn-repeated with WLAN802.11 g active**

Frequency	Channel	MHz	Conducted Output Power (Average)	Measured(W/kg) 1g	Amb. Temp[°C]	Liquid Temp[°C]
850 MHz	251	848.8	32.5dbm	0.482	22.1	21.7

**Body worn-repeated with EGPRS mode**

Frequency	Channel	MHz	Conducted Output Power (Average)	Measured(W/kg) 1g	Amb. Temp[°C]	Liquid Temp[°C]
850 MHz	251	848.8	32.5dbm	0.253	22.1	21.7

## PCS 1900 MHZ

**Right Head Slider-off(Cheek Position)**

Frequency	Channel	MHz	Conducted Output Power (Average)	Measured(W/kg) 1g	Amb. Temp[°C]	Liquid Temp[°C]
1900 MHz	512	1850.2	29.8dbm	0.221	22.1	21.7
	661	1880	29.5dbm	0.233	22.1	21.7
	810	1909.8	29.1dbm	0.225	22.1	21.7

**Left Head Slider-off (Cheek Position)**

Frequency	Channel	MHz	Conducted Output Power (Average)	Measured(W/kg) 1g	Amb. Temp[°C]	Liquid Temp[°C]
1900 MHz	512	1850.2	29.8dbm	0.233	22.1	21.7
	661	1880	29.5dbm	0.257	22.1	21.7
	810	1909.8	29.1dbm	0.242	22.1	21.7

**Right Head Slider-off(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	29.8dbm	0.382	22.1	21.7
	661	1880	29.5dbm	0.394	22.1	21.7
	810	1909.8	29.1dbm	0.343	22.1	21.7

**Left Head Slider-off(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	29.8dbm	0.307	22.1	21.7
	661	1880	29.5dbm	0.345	22.1	21.7
	810	1909.8	29.1dbm	0.326	22.1	21.7

**Right Head Slider-on(Cheek Position)**

Frequency	Channel	MHz	Conducted Output Power (Average)	Measured(W/kg) 1g	Amb. Temp[°C]	Liquid Temp[°C]
1900 MHz	512	1850.2	29.8dbm	0.127	22.1	21.7
	661	1880	29.5dbm	0.123	22.1	21.7
	810	1909.8	29.1dbm	0.115	22.1	21.7

**Left Head Slider- on (Cheek Position)**

Frequency	Channel	MHz	Conducted Output Power (Average)	Measured(W/kg) 1g	Amb. Temp[°C]	Liquid Temp[°C]
1900 MHz	512	1850.2	29.8dbm	0.178	22.1	21.7
	661	1880	29.5dbm	0.184	22.1	21.7
	810	1909.8	29.1dbm	0.186	22.1	21.7

**Right Head Slider- on (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	29.8dbm	0.225	22.1	21.7
	661	1880	29.5dbm	0.241	22.1	21.7
	810	1909.8	29.1dbm	0.241	22.1	21.7

**Left Head Slider- on (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	29.8dbm	0.242	22.1	21.7
	661	1880	29.5dbm	0.256	22.1	21.7
	810	1909.8	29.1dbm	0.237	22.1	21.7

#### **Right Head Hold up(Cheek Position)**

Frequency	Channel	MHz	Conducted Output Power (Average)	Measured(W/kg) 1g	Amb. Temp[°C]	Liquid Temp[°C]
1900 MHz	810	1909.8	29.1dbm	0.273	22.1	21.7

#### **Left Head Hold up(Cheek Position)**

Frequency	Channel	MHz	Conducted Output Power (Average)	Measured(W/kg) 1g	Amb. Temp[°C]	Liquid Temp[°C]
1900 MHz	810	1909.8	29.1dbm	0.426	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	0.635	22.1	21.7
	661	1880	29.5dbm	0.709	22.1	21.7
	810	1909.8	29.1dbm	0.677	22.1	21.7

## **WLAN802.11 b**

#### **Right Head Slider-off(Cheek Position)**

Frequency	Channel	MHz	Conducted Output Power (Average)	Measured(W/kg) 1g	Amb. Temp[°C]	Liquid Temp[°C]
WLAN802.11 b	1	2412	17.02dbm	0.047	22.1	21.7
	6	2437	16.91 dbm	0.057	22.1	21.7
	11	2462	17.04 dbm	0.051	22.1	21.7

#### **Left Head Slider-off (Cheek Position)**

Frequency	Channel	MHz	Conducted Output Power (Average)	Measured(W/kg) 1g	Amb. Temp[°C]	Liquid Temp[°C]
WLAN802.11 b	1	2412	17.02dbm	0.081	22.1	21.7
	6	2437	16.91 dbm	0.093	22.1	21.7
	11	2462	17.04 dbm	0.082	22.1	21.7

#### **Right Head Slider-off(15° Tilt Position)**

Frequency	Channel	MHz	Conducted Output Power (Average)	Measured(W/kg) 1g	Amb. Temp[°C]	Liquid Temp[°C]
WLAN802.11	1	2412	17.02dbm	0.017	22.1	21.7

b	6	2437	16.91 dbm	0.019	22.1	21.7
	11	2462	17.04 dbm	0.017	22.1	21.7

**Left Head Slider-off(15° Tilt Position)**

Frequency	Channel	MHz	Conducted Output Power (Average)	Measured(W/kg) 1g	Amb. Temp[°C]	Liquid Temp[°C]
WLAN802.11 b	1	2412	17.02dbm	0.027	22.1	21.7
	6	2437	16.91 dbm	0.035	22.1	21.7
	11	2462	17.04 dbm	0.032	22.1	21.7

**Right Head Slider-on(Cheek Position)**

Frequency	Channel	MHz	Conducted Output Power (Average)	Measured(W/kg) 1g	Amb. Temp[°C]	Liquid Temp[°C]
WLAN802.11 b	1	2412	17.02dbm	0.043	22.1	21.7
	6	2437	16.91 dbm	0.053	22.1	21.7
	11	2462	17.04 dbm	0.044	22.1	21.7

**Left Head Slider- on (Cheek Position)**

Frequency	Channel	MHz	Conducted Output Power (Average)	Measured(W/kg) 1g	Amb. Temp[°C]	Liquid Temp[°C]
WLAN802.11 b	1	2412	17.02dbm	0.087	22.1	21.7
	6	2437	16.91 dbm	0.102	22.1	21.7
	11	2462	17.04 dbm	0.086	22.1	21.7

**Right Head Slider- on (15° Tilt Position)**

Frequency	Channel	MHz	Conducted Output Power (Average)	Measured(W/kg) 1g	Amb. Temp[°C]	Liquid Temp[°C]
WLAN802.11 b	1	2412	17.02dbm	0.034	22.1	21.7
	6	2437	16.91 dbm	0.038	22.1	21.7
	11	2462	17.04 dbm	0.035	22.1	21.7

**Left Head Slider- on (15° Tilt Position)**

Frequency	Channel	MHz	Conducted Output Power (Average)	Measured(W/kg) 1g	Amb. Temp[°C]	Liquid Temp[°C]
WLAN802.11 b	1	2412	17.02dbm	0.027	22.1	21.7
	6	2437	16.91 dbm	0.034	22.1	21.7
	11	2462	17.04 dbm	0.029	22.1	21.7

**Left Head Slider- on (Cheek Position) \_ repeated with Memory Card**

Frequency	Channel	MHz	Conducted Output Power (Average)	Measured(W/kg) 1g	Amb. Temp[°C]	Liquid Temp[°C]
WLAN802.11 b	6	2437	16.91 dbm	0.110	22.1	21.7

<b>Left Head Slider- on (Cheek Position) _ repeated with Bluetooth active</b>						
Frequency	Channel	MHz	Conducted Output Power (Average)	Measured(W/kg) 1g	Amb. Temp[°C]	Liquid Temp[°C]
WLAN802.11 b	6	2437	16.91 dbm	0.119	22.1	21.7
<b>Left Head Slider- on (Cheek Position) _ repeated with Samsung Battery</b>						
Frequency	Channel	MHz	Conducted Output Power (Average)	Measured(W/kg) 1g	Amb. Temp[°C]	Liquid Temp[°C]
WLAN802.11 b	6	2437	16.91 dbm	0.109	22.1	21.7
<b>Right Head Hold up(Cheek Position)</b>						
Frequency	Channel	MHz	Conducted Output Power (Average)	Measured(W/kg) 1g	Amb. Temp[°C]	Liquid Temp[°C]
WLAN802.11 b	11	2462	17.04 dbm	0.018	22.1	21.7
<b>Left Head Hold up(Cheek Position)</b>						
Frequency	Channel	MHz	Conducted Output Power (Average)	Measured(W/kg) 1g	Amb. Temp[°C]	Liquid Temp[°C]
WLAN802.11 b	11	2462	17.04 dbm	0.038	22.1	21.7
<b>Body worn</b>						
Frequency	Channel	MHz	Conducted Output Power (Average)	Measured(W/kg) 1g	Amb. Temp[°C]	Liquid Temp[°C]
WLAN802.11 b	1	2412	17.02dbm	0.038	22.1	21.7
	6	2437	16.91 dbm	0.046	22.1	21.7
	11	2462	17.04 dbm	0.040	22.1	21.7
<b>Body worn- repeated for EUT front to phantom</b>						
Frequency	Channel	MHz	Conducted Output Power (Average)	Measured(W/kg) 1g	Amb. Temp[°C]	Liquid Temp[°C]
WLAN802.11 b	6	2437	16.91 dbm	0.028	22.1	21.7
<b>Body worn-repeated with Memory card</b>						
Frequency	Channel	MHz	Conducted Output Power (Average)	Measured(W/kg) 1g	Amb. Temp[°C]	Liquid Temp[°C]
WLAN802.11 b	6	2437	16.91 dbm	0.046	22.1	21.7
<b>Body worn-repeated with Bluetooth active</b>						
Frequency	Channel	MHz	Conducted Output Power (Average)	Measured(W/kg) 1g	Amb. Temp[°C]	Liquid Temp[°C]
WLAN802.11 b	6	2437	16.91 dbm	0.048	22.1	21.7

**Body worn-repeated with Samsung Battery**

Frequency	Channel	MHz	Conducted Output Power (Average)	Measured(W/kg) 1g	Amb. Temp[°C]	Liquid Temp[°C]
WLAN802.11 b	6	2437	16.91 dbm	0.052	22.1	21.7

## **WLAN802.11 g**

**Right Head Slider-off(Cheek Position)**

Frequency	Channel	MHz	Conducted Output Power (Average)	Measured(W/kg) 1g	Amb. Temp[°C]	Liquid Temp[°C]
WLAN802.11 g	1	2412	17.02dbm	0.021	22.1	21.7
	6	2437	16.91 dbm	0.025	22.1	21.7
	11	2462	17.04 dbm	0.024	22.1	21.7

**Left Head Slider-off (Cheek Position)**

Frequency	Channel	MHz	Conducted Output Power (Average)	Measured(W/kg) 1g	Amb. Temp[°C]	Liquid Temp[°C]
WLAN802.11 g	1	2412	17.02dbm	0.037	22.1	21.7
	6	2437	16.91 dbm	0.045	22.1	21.7
	11	2462	17.04 dbm	0.039	22.1	21.7

**Right Head Slider-off(15° Tilt Position)**

Frequency	Channel	MHz	Conducted Output Power (Average)	Measured(W/kg) 1g	Amb. Temp[°C]	Liquid Temp[°C]
WLAN802.11 g	1	2412	17.02dbm	0.00951	22.1	21.7
	6	2437	16.91 dbm	0.013	22.1	21.7
	11	2462	17.04 dbm	0.012	22.1	21.7

**Left Head Slider-off(15° Tilt Position)**

Frequency	Channel	MHz	Conducted Output Power (Average)	Measured(W/kg) 1g	Amb. Temp[°C]	Liquid Temp[°C]
WLAN802.11 g	1	2412	17.02dbm	0.012	22.1	21.7
	6	2437	16.91 dbm	0.015	22.1	21.7
	11	2462	17.04 dbm	0.015	22.1	21.7

**Right Head Slider-on(Cheek Position)**

Frequency	Channel	MHz	Conducted Output Power (Average)	Measured(W/kg) 1g	Amb. Temp[°C]	Liquid Temp[°C]
WLAN802.11 g	1	2412	17.02dbm	0.023	22.1	21.7
	6	2437	16.91 dbm	0.029	22.1	21.7

	11	2462	17.04 dbm	0.024	22.1	21.7
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**Left Head Slider- on (Cheek Position)**

Frequency	Channel	MHz	Conducted Output Power (Average)	Measured(W/kg) 1g	Amb. Temp[°C]	Liquid Temp[°C]
WLAN802.11 g	1	2412	17.02dbm	0.046	22.1	21.7
	6	2437	16.91 dbm	0.053	22.1	21.7
	11	2462	17.04 dbm	0.048	22.1	21.7

**Right Head Slider- on (15° Tilt Position)**

Frequency	Channel	MHz	Conducted Output Power (Average)	Measured(W/kg) 1g	Amb. Temp[°C]	Liquid Temp[°C]
WLAN802.11 g	1	2412	17.02dbm	0.018	22.1	21.7
	6	2437	16.91 dbm	0.019	22.1	21.7
	11	2462	17.04 dbm	0.018	22.1	21.7

**Left Head Slider- on (15° Tilt Position)**

Frequency	Channel	MHz	Conducted Output Power (Average)	Measured(W/kg) 1g	Amb. Temp[°C]	Liquid Temp[°C]
WLAN802.11 g	1	2412	17.02dbm	0.013	22.1	21.7
	6	2437	16.91 dbm	0.020	22.1	21.7
	11	2462	17.04 dbm	0.017	22.1	21.7

**Right Head Hold up(Cheek Position)**

Frequency	Channel	MHz	Conducted Output Power (Average)	Measured(W/kg) 1g	Amb. Temp[°C]	Liquid Temp[°C]
WLAN802.11 g	11	2462	17.04 dbm	0.013	22.1	21.7

**Left Head Hold up(Cheek Position)**

Frequency	Channel	MHz	Conducted Output Power (Average)	Measured(W/kg) 1g	Amb. Temp[°C]	Liquid Temp[°C]
WLAN802.11 g	11	2462	17.04 dbm	0.023	22.1	21.7

**Body worn**

Frequency	Channel	MHz	Conducted Output Power (Average)	Measured(W/kg) 1g	Amb. Temp[°C]	Liquid Temp[°C]
WLAN802.11 g	1	2412	17.02dbm	0.020	22.1	21.7
	6	2437	16.91 dbm	0.025	22.1	21.7
	11	2462	17.04 dbm	0.022	22.1	21.7

Note: SAR measurement results for the Mobile Phone at maximum output power.

### 3. Instruments List

Manufacturer	Device	Type	Serial number	Date of last calibration
Schmid & Partner Engineering AG	Dosimetric E-FieldProbe	EX3DV3	3526	Aug.29.2007
Schmid & Partner Engineering AG	900/1900/2450 MHz System Validation Dipole	D900V2 D1900V2 D2450V2 D900V2	168 5d027 727 178	Apr.17.2007 Mar.20.2007 Mar.13.2007 Feb.19.2007
Schmid & Partner Engineering AG	Data acquisition Electronics	DAE4 DAE4	547 679	Oct.01.2007 Apr.20.2007
Schmid & Partner Engineering AG	Software	DASY 4 V4.7 Build 55	N/A	Calibration isn't necessary
Schmid & Partner Engineering AG	Phantom	SAM	N/A	Calibration isn't necessary
Agilent	Network Analyzer	8753D	3410A05547	Nov.14.2007
Agilent	Dielectric Probe Kit	85070D	US01440168	Calibration isn't necessary
Agilent	Dual-directional coupler	777D 778D	50114 50313	Sep.21.2007 Aug.21.2007
Agilent	RF Signal Generator	E4438c	MY45093613	May.22.2007
Agilent	Power Sensor	8481H	MY41091361	Jun.04.2007
R&S	Radio Communication Test	CMU200	113508	Aug.24.2007

## 4.Measurements

**LE\_Cheek\_CH251\_hold up**

Date/Time: 2008/2/4 04:21:19

**DUT: Kais140; Type:GSM;IMEI: 35972801001016601**

Communication System: GSM 850; Frequency: 848.8 MHz; Duty Cycle: 1:8.3

Medium: Head 850 MHz Medium parameters used:  $f = 849 \text{ MHz}$ ;  $\sigma = 0.911 \text{ mho/m}$ ;  $\epsilon_r = 42.8$ ;  $\rho = 1000 \text{ kg/m}^3$

Phantom section: Left Section

DASY4 Configuration:

- Probe: EX3DV3 - SN3526; Calibrated: 2007/8/29
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn547; Calibrated: 2007/10/1
- Phantom: SAM2; Type: SAM 4.0; Serial: TP:1270
- Measurement SW: DASY4, V4.7 Build 55; Postprocessing SW: SEMCAD, V1.8 Build 176

**LE\_Cheek/Area Scan (81x91x1):** Measurement grid:  $dx=15\text{mm}$ ,  $dy=15\text{mm}$

Maximum value of SAR (interpolated) = 0.362 mW/g

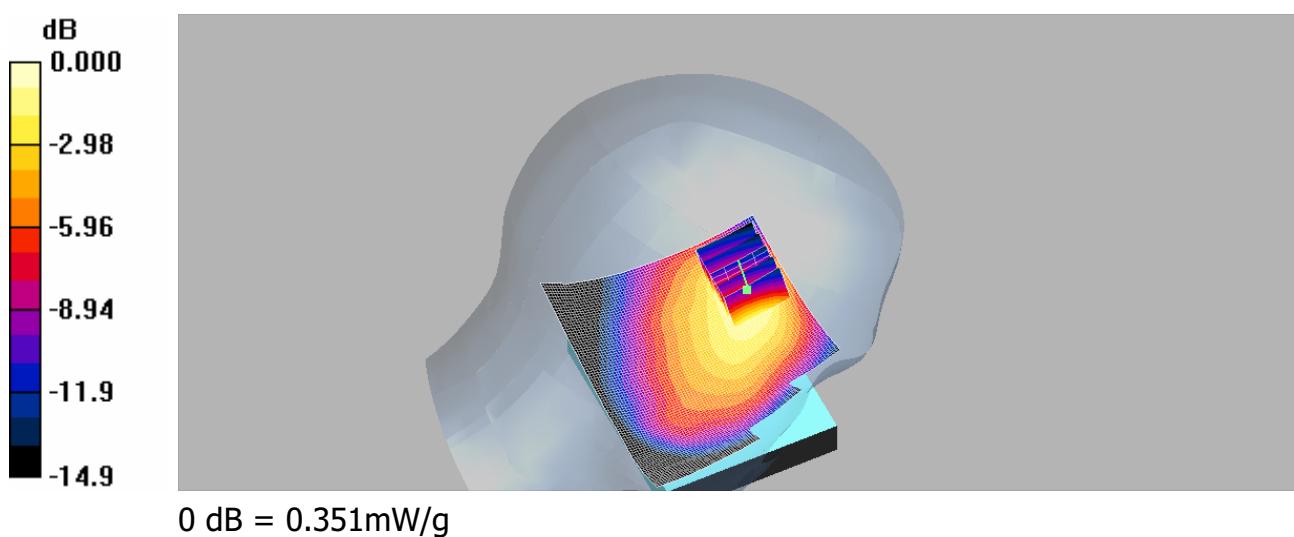
**LE\_Cheek/Zoom Scan (5x5x7)/Cube 0:** Measurement grid:  $dx=8\text{mm}$ ,  $dy=8\text{mm}$ ,  $dz=5\text{mm}$

Reference Value = 9.46 V/m; Power Drift = -0.195 dB

Peak SAR (extrapolated) = 0.576 W/kg

**SAR(1 g) = 0.321 mW/g; SAR(10 g) = 0.189 mW/g**

Maximum value of SAR (measured) = 0.351 mW/g



## BODY\_CH128

**DUT: Kais140; Type:GSM;IMEI: 35972801001016601**

Communication System: GSM 850; Frequency: 824.2 MHz; Duty Cycle: 1:4  
Medium: Muscle 850 MHz Medium parameters used (interpolated):  $f = 824.2 \text{ MHz}$ ;  $\sigma = 0.995 \text{ mho/m}$ ;  $\epsilon_r = 55.1$ ;  $\rho = 1000 \text{ kg/m}^3$   
Phantom section: Flat Section

DASY4 Configuration:

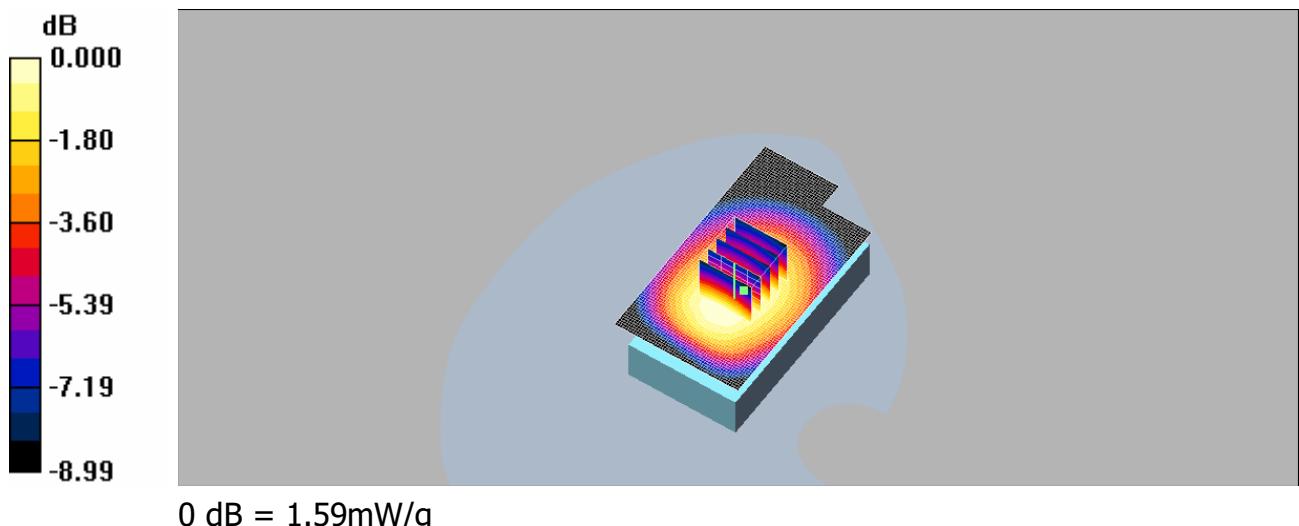
- Probe: EX3DV3 - SN3526; Calibrated: 2007/8/29
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn547; Calibrated: 2007/10/1
- Phantom: SAM2; Type: SAM 4.0; Serial: TP:1270
- Measurement SW: DASY4, V4.7 Build 55; Postprocessing SW: SEMCAD, V1.8 Build 176

**BODY/Area Scan (51x91x1):** Measurement grid:  $dx=15\text{mm}$ ,  $dy=15\text{mm}$   
Maximum value of SAR (interpolated) = 1.58 mW/g

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

Reference Value = 17.5 V/m; Power Drift = -0.035 dB  
Peak SAR (extrapolated) = 1.96 W/kg

**SAR(1 g) = 1.51 mW/g; SAR(10 g) = 1.1 mW/g**  
Maximum value of SAR (measured) = 1.59 mW/g



## BODY\_CH190

**DUT: Kais140; Type:GSM;IMEI: 35972801001016601**

Communication System: GSM 850; Frequency: 836.6 MHz; Duty Cycle: 1:4  
Medium: Muscle 850 MHz Medium parameters used:  $f = 837$  MHz;  $\sigma = 0.998$  mho/m;  $\epsilon_r = 55$ ;  $\rho = 1000$  kg/m<sup>3</sup>  
Phantom section: Flat Section

DASY4 Configuration:

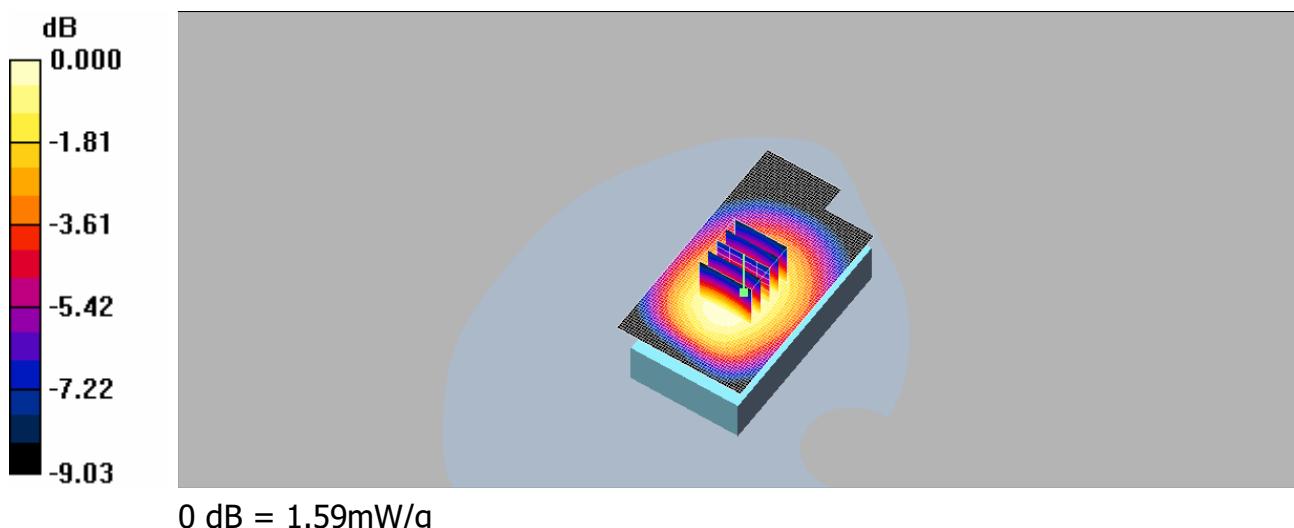
- Probe: EX3DV3 - SN3526; Calibrated: 2007/8/29
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn547; Calibrated: 2007/10/1
- Phantom: SAM2; Type: SAM 4.0; Serial: TP:1270
- Measurement SW: DASY4, V4.7 Build 55; Postprocessing SW: SEMCAD, V1.8 Build 176

**BODY/Area Scan (51x91x1):** Measurement grid: dx=15mm, dy=15mm  
Maximum value of SAR (interpolated) = 1.58 mW/g

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

Reference Value = 16.8 V/m; Power Drift = 0.024 dB  
Peak SAR (extrapolated) = 1.95 W/kg

**SAR(1 g) = 1.51 mW/g; SAR(10 g) = 1.1 mW/g**  
Maximum value of SAR (measured) = 1.59 mW/g



## BODY\_CH251

**DUT: Kais140; Type:GSM;IMEI: 35972801001016601**

Communication System: GSM 850; Frequency: 848.8 MHz; Duty Cycle: 1:4  
Medium: Muscle 850 MHz Medium parameters used:  $f = 849$  MHz;  $\sigma = 0.999$  mho/m;  $\epsilon_r = 54.9$ ;  $\rho = 1000$  kg/m<sup>3</sup>  
Phantom section: Flat Section

DASY4 Configuration:

- Probe: EX3DV3 - SN3526; Calibrated: 2007/8/29
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn547; Calibrated: 2007/10/1
- Phantom: SAM2; Type: SAM 4.0; Serial: TP:1270
- Measurement SW: DASY4, V4.7 Build 55; Postprocessing SW: SEMCAD, V1.8 Build 176

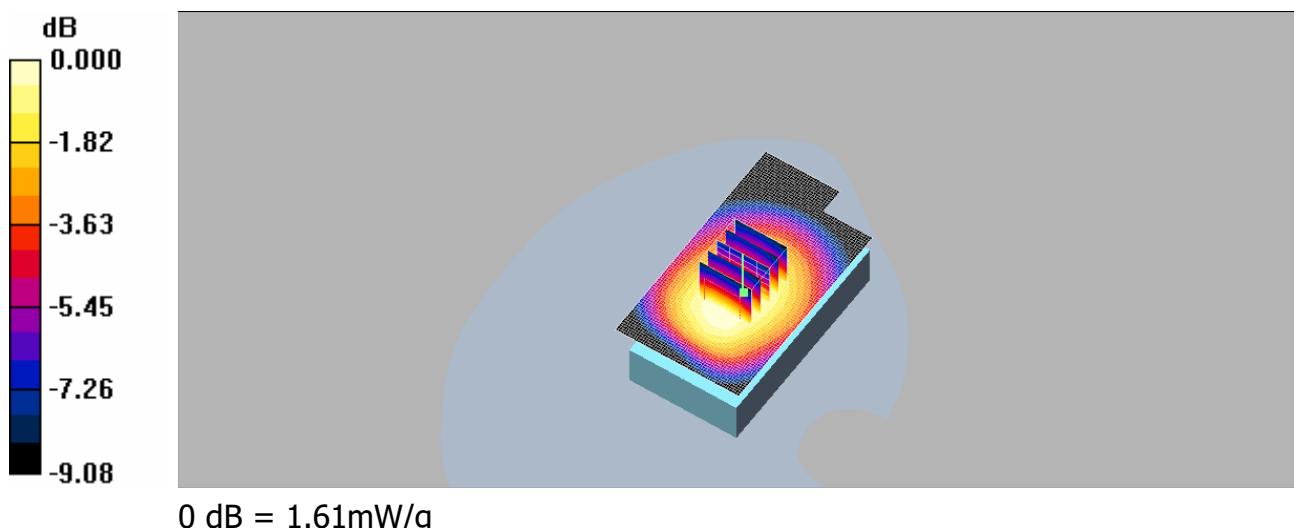
**BODY/Area Scan (51x91x1):** Measurement grid: dx=15mm, dy=15mm  
Maximum value of SAR (interpolated) = 1.61 mW/g

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

Reference Value = 16.7 V/m; Power Drift = 0.145 dB  
Peak SAR (extrapolated) = 2.02 W/kg

**SAR(1 g) = 1.53 mW/g; SAR(10 g) = 1.11 mW/g**

Maximum value of SAR (measured) = 1.61 mW/g



## **BODY\_CH251\_ repeated for EUT front to phantom**

**DUT: Kais140; Type:GSM;IMEI: 35972801001016601**

Communication System: GSM 850; Frequency: 848.8 MHz; Duty Cycle: 1:4  
Medium: Muscle 850 MHz Medium parameters used:  $f = 849$  MHz;  $\sigma = 0.999$  mho/m;  $\epsilon_r = 54.9$ ;  $\rho = 1000$  kg/m<sup>3</sup>  
Phantom section: Flat Section

DASY4 Configuration:

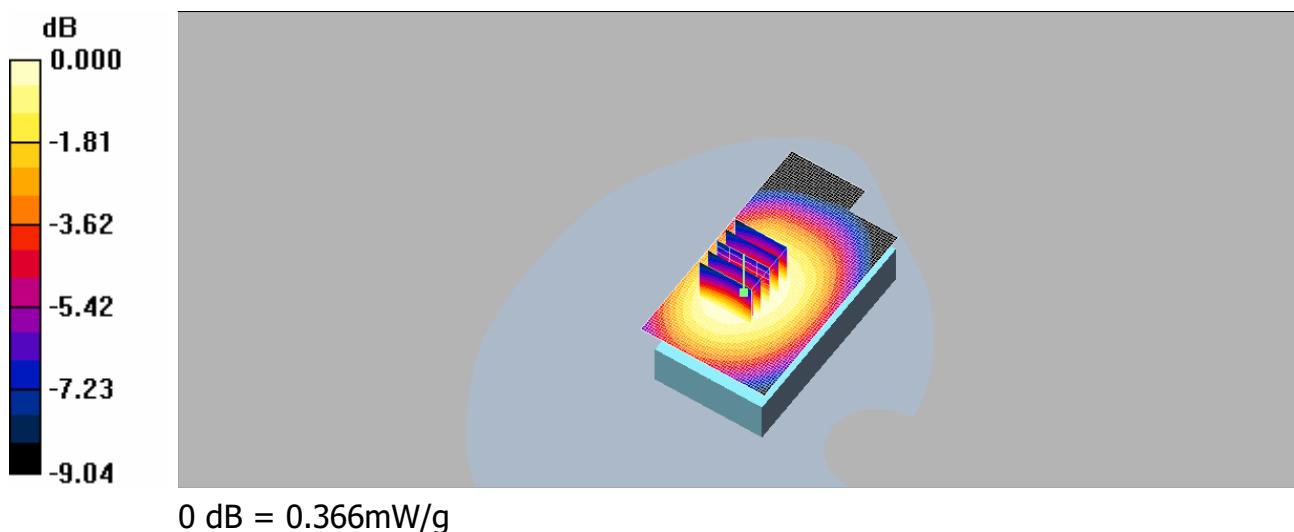
- Probe: EX3DV3 - SN3526; Calibrated: 2007/8/29
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn547; Calibrated: 2007/10/1
- Phantom: SAM2; Type: SAM 4.0; Serial: TP:1270
- Measurement SW: DASY4, V4.7 Build 55; Postprocessing SW: SEMCAD, V1.8 Build 176

**BODY/Area Scan (51x91x1):** Measurement grid: dx=15mm, dy=15mm  
Maximum value of SAR (interpolated) = 0.372 mW/g

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

Reference Value = 13.8 V/m; Power Drift = -0.143 dB  
Peak SAR (extrapolated) = 0.452 W/kg

**SAR(1 g) = 0.348 mW/g; SAR(10 g) = 0.260 mW/g**  
Maximum value of SAR (measured) = 0.366 mW/g



## BODY\_CH251\_ repeated with Memory card

**DUT: Kais140; Type:GSM;IMEI: 35972801001016601**

Communication System: GSM 850; Frequency: 848.8 MHz; Duty Cycle: 1:4  
Medium: Muscle 850 MHz Medium parameters used:  $f = 849$  MHz;  $\sigma = 0.999$  mho/m;  $\epsilon_r = 54.9$ ;  $\rho = 1000$  kg/m<sup>3</sup>  
Phantom section: Flat Section

DASY4 Configuration:

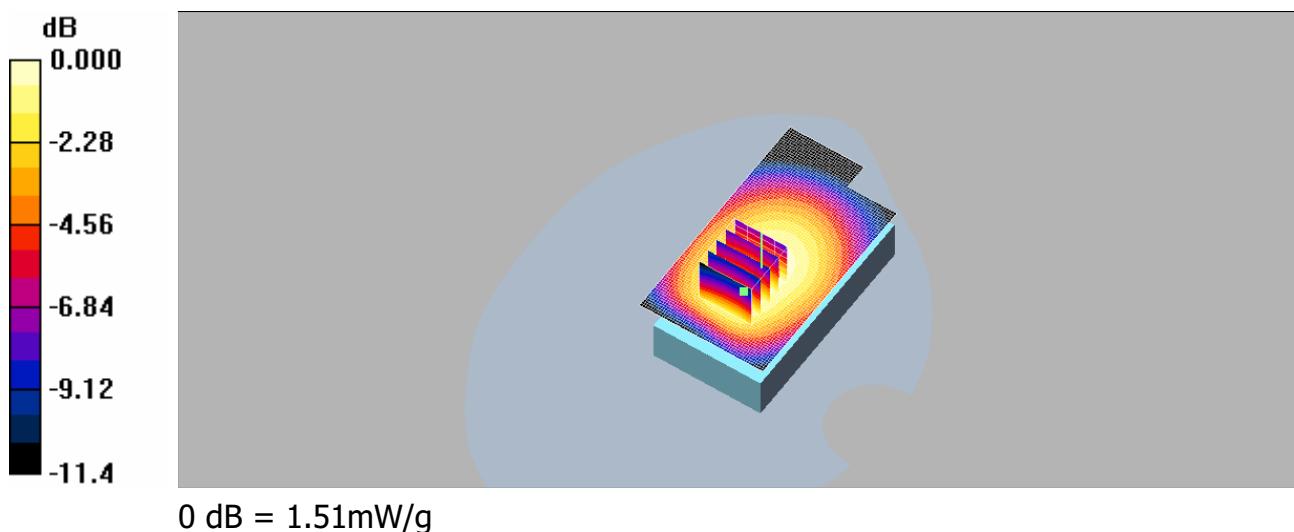
- Probe: EX3DV3 - SN3526; Calibrated: 2007/8/29
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn547; Calibrated: 2007/10/1
- Phantom: SAM2; Type: SAM 4.0; Serial: TP:1270
- Measurement SW: DASY4, V4.7 Build 55; Postprocessing SW: SEMCAD, V1.8 Build 176

**BODY/Area Scan (51x91x1):** Measurement grid: dx=15mm, dy=15mm  
Maximum value of SAR (interpolated) = 1.52 mW/g

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

Reference Value = 17.4 V/m; Power Drift = 0.032 dB  
Peak SAR (extrapolated) = 1.78 W/kg

**SAR(1 g) = 1.41 mW/g; SAR(10 g) = 1.03 mW/g**  
Maximum value of SAR (measured) = 1.51 mW/g



## **BODY\_CH251\_\_ repeated with Bluetooth active**

**DUT: Kais140; Type:GSM;IMEI: 35972801001016601**

Communication System: GSM 850; Frequency: 848.8 MHz; Duty Cycle: 1:4  
Medium: Muscle 850 MHz Medium parameters used:  $f = 849$  MHz;  $\sigma = 0.999$  mho/m;  $\epsilon_r = 54.9$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Phantom section: Flat Section

DASY4 Configuration:

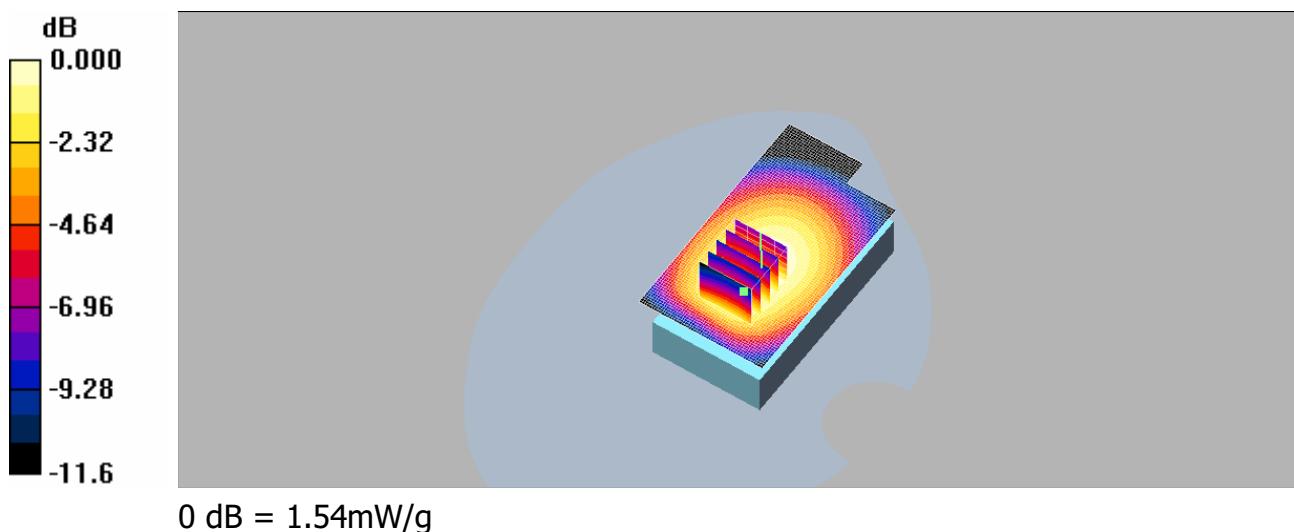
- Probe: EX3DV3 - SN3526; Calibrated: 2007/8/29
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn547; Calibrated: 2007/10/1
- Phantom: SAM2; Type: SAM 4.0; Serial: TP:1270
- Measurement SW: DASY4, V4.7 Build 55; Postprocessing SW: SEMCAD, V1.8 Build 176

**BODY/Area Scan (51x91x1):** Measurement grid: dx=15mm, dy=15mm  
Maximum value of SAR (interpolated) = 1.58 mW/g

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

Reference Value = 17.7 V/m; Power Drift = -0.048 dB  
Peak SAR (extrapolated) = 1.89 W/kg

**SAR(1 g) = 1.45 mW/g; SAR(10 g) = 1.05 mW/g**  
Maximum value of SAR (measured) = 1.54 mW/g



## **BODY\_CH251\_\_ repeated with WLAN 802.11 b active**

**DUT: Kais140; Type:GSM;IMEI: 35972801001016601**

Communication System: GSM 850; Frequency: 848.8 MHz; Duty Cycle: 1:4  
Medium: Muscle 850 MHz Medium parameters used:  $f = 849$  MHz;  $\sigma = 0.999$  mho/m;  $\epsilon_r = 54.9$ ;  $\rho = 1000$  kg/m<sup>3</sup>

- Probe: EX3DV3 - SN3526; Calibrated: 2007/8/29
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn547; Calibrated: 2007/10/1
- Phantom: SAM2; Type: SAM 4.0; Serial: TP:1270
- Measurement SW: DASY4, V4.7 Build 55; Postprocessing SW: SEMCAD, V1.8 Build 176

**BODY/Area Scan (51x91x1):** Measurement grid: dx=15mm, dy=15mm  
Maximum value of SAR (interpolated) = 1.18 mW/g

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

Reference Value = 16.6 V/m; Power Drift = -0.139 dB

Peak SAR (extrapolated) = 1.58 W/kg

**SAR(1 g) = 1.05 mW/g; SAR(10 g) = 0.712 mW/g**

Maximum value of SAR (measured) = 1.11 mW/g

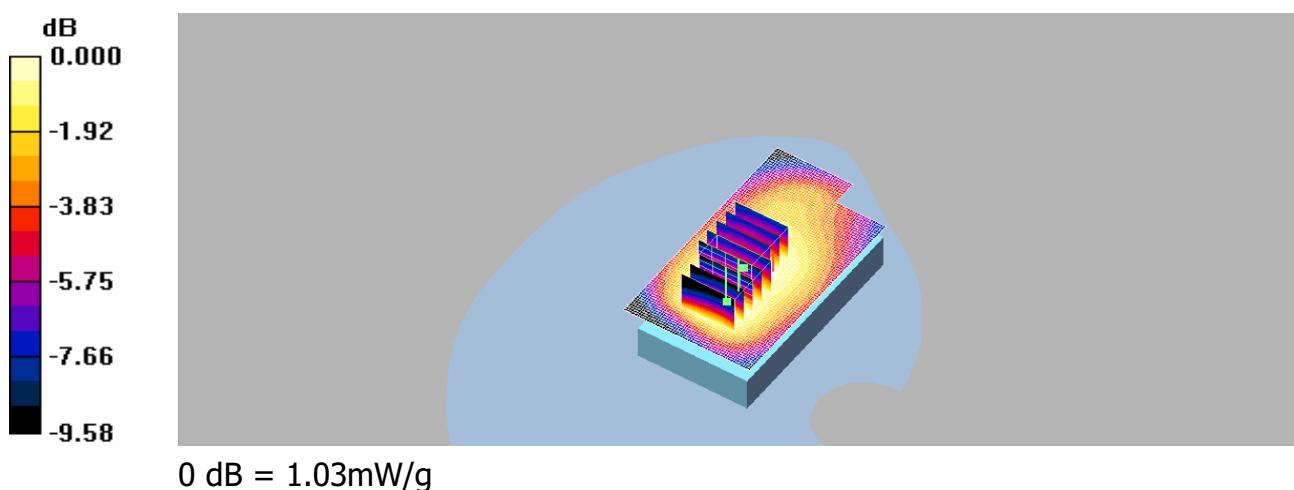
**BODY/Zoom Scan (5x5x7)/Cube 1:** Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 16.6 V/m; Power Drift = -0.139 dB

Peak SAR (extrapolated) = 1.32 W/kg

**SAR(1 g) = 0.972 mW/g; SAR(10 g) = 0.708 mW/g**

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



## **BODY\_CH251\_\_ repeated with WLAN 802.11 g active**

**DUT: Kais140; Type:GSM;IMEI: 35972801001016601**

Communication System: GSM 850; Frequency: 848.8 MHz; Duty Cycle: 1:4  
Medium: Muscle 850 MHz Medium parameters used:  $f = 849$  MHz;  $\sigma = 0.999$  mho/m;  $\epsilon_r = 54.9$ ;  $\rho = 1000$  kg/m<sup>3</sup>

- Probe: EX3DV3 - SN3526; Calibrated: 2007/8/29
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn547; Calibrated: 2007/10/1
- Phantom: SAM2; Type: SAM 4.0; Serial: TP:1270
- Measurement SW: DASY4, V4.7 Build 55; Postprocessing SW: SEMCAD, V1.8 Build 176

**BODY/Area Scan (51x91x1):** Measurement grid: dx=15mm, dy=15mm  
Maximum value of SAR (interpolated) = 1.09 mW/g

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

Reference Value = 15.8 V/m; Power Drift = -0.104 dB

Peak SAR (extrapolated) = 1.43 W/kg

**SAR(1 g) = 0.965 mW/g; SAR(10 g) = 0.665 mW/g**

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

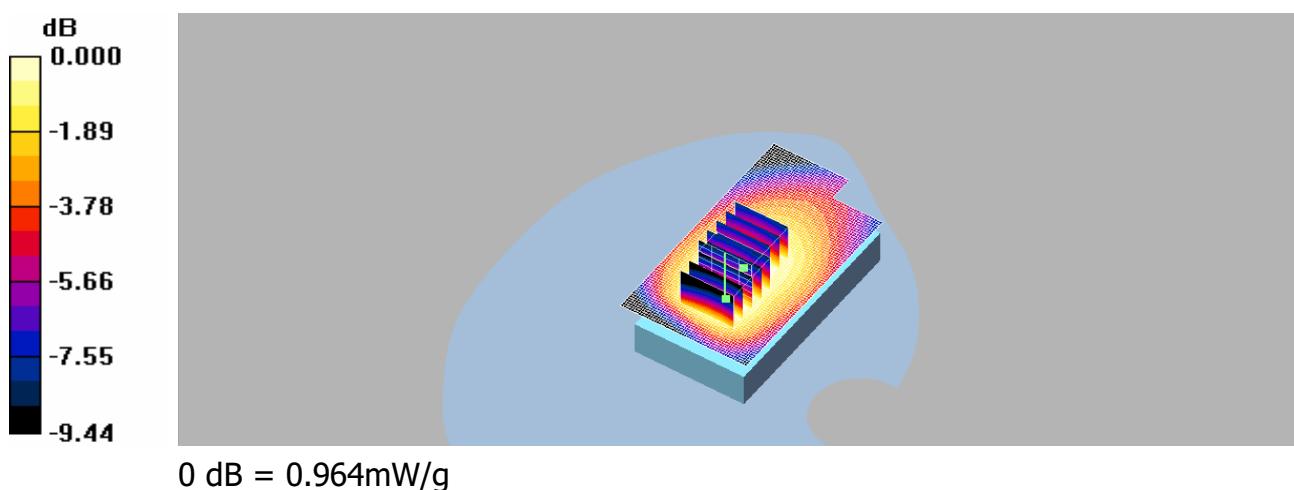
**BODY/Zoom Scan (5x5x7)/Cube 1:** Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 15.8 V/m; Power Drift = -0.104 dB

Peak SAR (extrapolated) = 1.24 W/kg

**SAR(1 g) = 0.904 mW/g; SAR(10 g) = 0.655 mW/g**

Maximum value of SAR (measured) = 0.964 mW/g



## **BODY\_CH251\_\_ repeated with WLAN 802.11 b & Bluetooth active**

**DUT: Kais140; Type:GSM;IMEI: 35972801001016601**

Communication System: GSM 850; Frequency: 848.8 MHz; Duty Cycle: 1:4  
Medium: Muscle 850 MHz Medium parameters used:  $f = 849$  MHz;  $\sigma = 0.999$  mho/m;  $\epsilon_r = 54.9$ ;  $\rho = 1000$  kg/m<sup>3</sup>

- Probe: EX3DV3 - SN3526; Calibrated: 2007/8/29
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn547; Calibrated: 2007/10/1
- Phantom: SAM2; Type: SAM 4.0; Serial: TP:1270
- Measurement SW: DASY4, V4.7 Build 55; Postprocessing SW: SEMCAD, V1.8 Build 176

**BODY/Area Scan (51x91x1):** Measurement grid: dx=15mm, dy=15mm  
Maximum value of SAR (interpolated) = 1.29 mW/g

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

Reference Value = 17.4 V/m; Power Drift = -0.146 dB

Peak SAR (extrapolated) = 1.73 W/kg

**SAR(1 g) = 1.15 mW/g; SAR(10 g) = 0.778 mW/g**

Maximum value of SAR (measured) = 1.22 mW/g

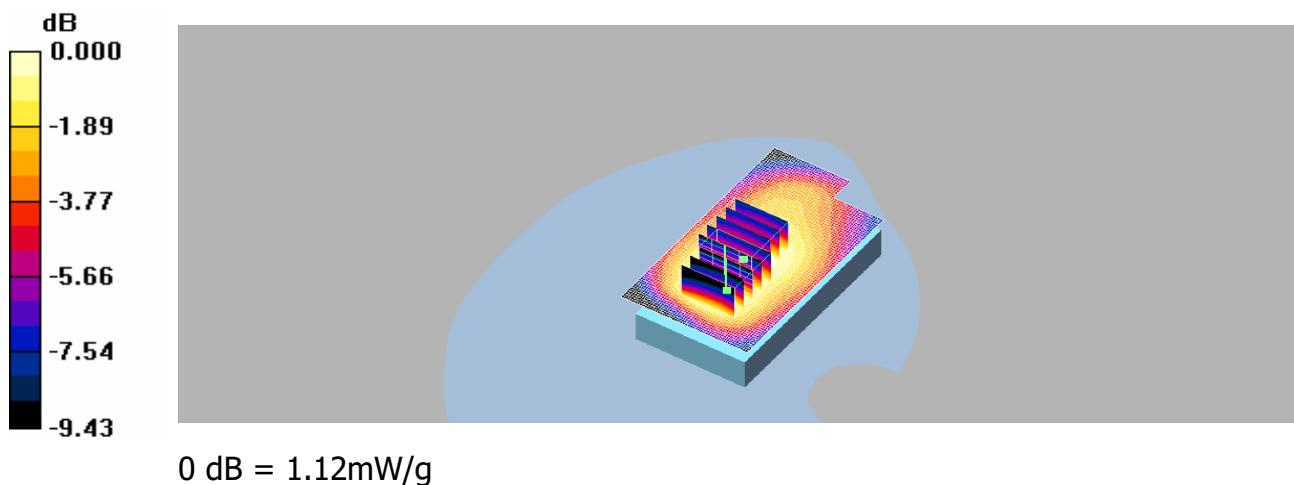
**BODY/Zoom Scan (5x5x7)/Cube 1:** Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 17.4 V/m; Power Drift = -0.146 dB

Peak SAR (extrapolated) = 1.42 W/kg

**SAR(1 g) = 1.06 mW/g; SAR(10 g) = 0.772 mW/g**

Maximum value of SAR (measured) = 1.12 mW/g



## **BODY\_CH251\_\_ repeated with headset\_1**

**DUT: Kais140; Type:GSM;IMEI: 35972801001016601**

Communication System: GSM 850; Frequency: 848.8 MHz; Duty Cycle: 1:4  
Medium: Muscle 850 MHz Medium parameters used:  $f = 849$  MHz;  $\sigma = 0.999$  mho/m;  $\epsilon_r = 54.9$ ;  $\rho = 1000$  kg/m<sup>3</sup>  
Phantom section: Flat Section

DASY4 Configuration:

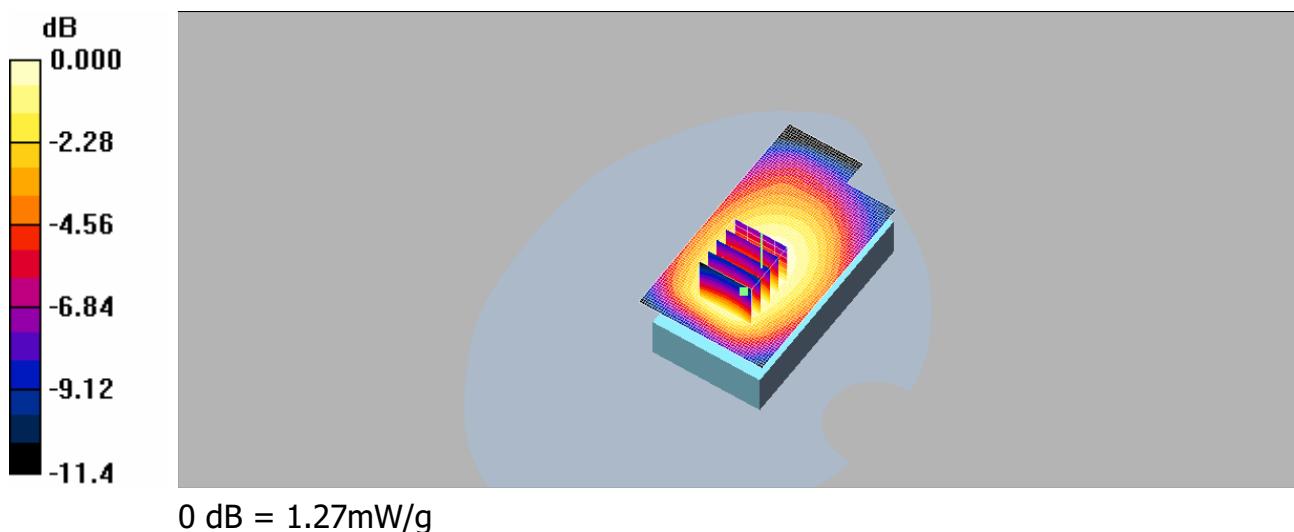
- Probe: EX3DV3 - SN3526; Calibrated: 2007/8/29
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn547; Calibrated: 2007/10/1
- Phantom: SAM2; Type: SAM 4.0; Serial: TP:1270
- Measurement SW: DASY4, V4.7 Build 55; Postprocessing SW: SEMCAD, V1.8 Build 176

**BODY/Area Scan (51x91x1):** Measurement grid: dx=15mm, dy=15mm  
Maximum value of SAR (interpolated) = 1.32 mW/g

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

Reference Value = 18.5 V/m; Power Drift = -0.085 dB  
Peak SAR (extrapolated) = 1.65 W/kg

**SAR(1 g) = 1.2 mW/g; SAR(10 g) = 0.859 mW/g**  
Maximum value of SAR (measured) = 1.27 mW/g



## **BODY\_CH251\_\_ repeated with headset\_2**

**DUT: Kais140; Type:GSM;IMEI: 35972801001016601**

Communication System: GSM 850; Frequency: 848.8 MHz; Duty Cycle: 1:4  
Medium: Muscle 850 MHz Medium parameters used:  $f = 849$  MHz;  $\sigma = 0.999$  mho/m;  $\epsilon_r = 54.9$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Phantom section: Flat Section

DASY4 Configuration:

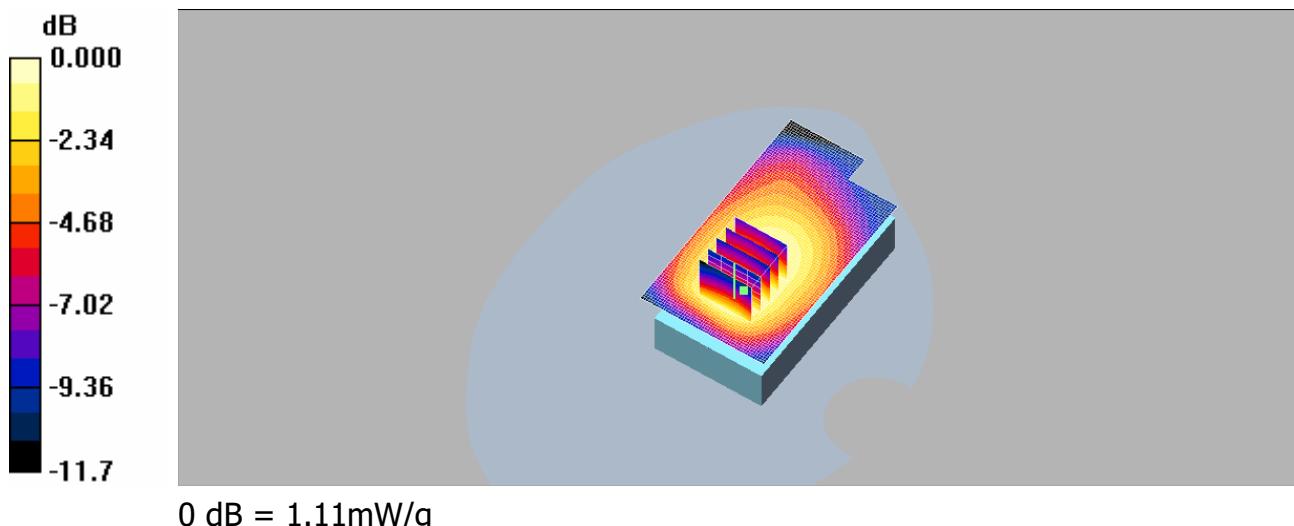
- Probe: EX3DV3 - SN3526; Calibrated: 2007/8/29
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn547; Calibrated: 2007/10/1
- Phantom: SAM2; Type: SAM 4.0; Serial: TP:1270
- Measurement SW: DASY4, V4.7 Build 55; Postprocessing SW: SEMCAD, V1.8 Build 176

**BODY/Area Scan (51x91x1):** Measurement grid: dx=15mm, dy=15mm  
Maximum value of SAR (interpolated) = 1.12 mW/g

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

Reference Value = 17.4 V/m; Power Drift = 0.071 dB  
Peak SAR (extrapolated) = 1.58 W/kg

**SAR(1 g) = 1.04 mW/g; SAR(10 g) = 0.719 mW/g**  
Maximum value of SAR (measured) = 1.11 mW/g



## **BODY\_CH251\_\_ repeated with Samsung Battery**

**DUT: Kais140; Type:GSM;IMEI: 35972801001016601**

Communication System: GSM 850; Frequency: 848.8 MHz; Duty Cycle: 1:4  
Medium: Muscle 850 MHz Medium parameters used:  $f = 849$  MHz;  $\sigma = 0.999$  mho/m;  $\epsilon_r = 54.9$ ;  $\rho = 1000$  kg/m<sup>3</sup>  
Phantom section: Flat Section

DASY4 Configuration:

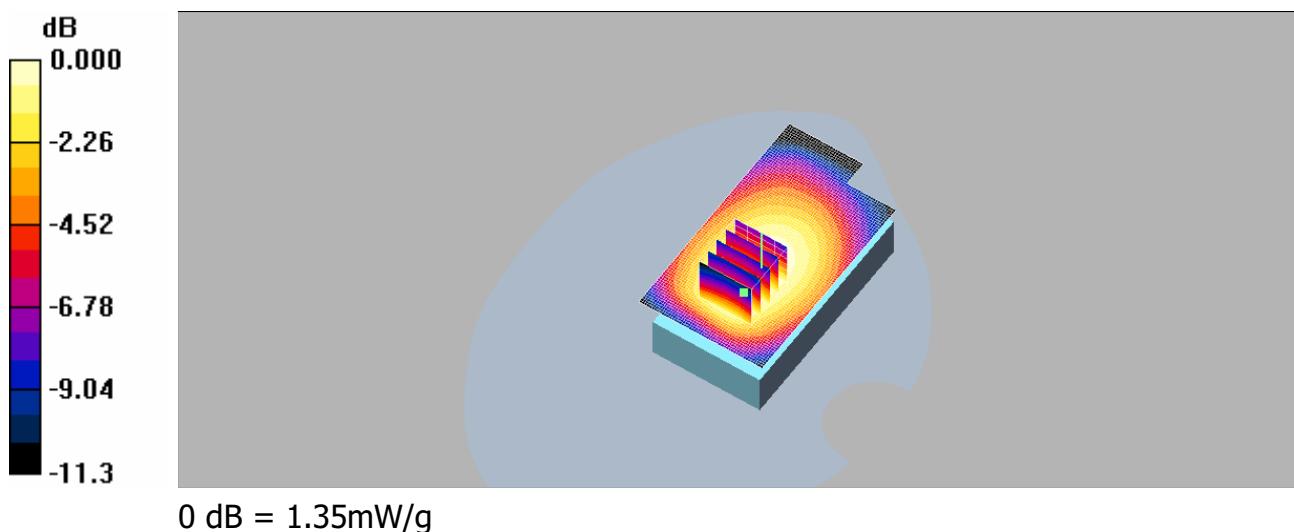
- Probe: EX3DV3 - SN3526; Calibrated: 2007/8/29
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn547; Calibrated: 2007/10/1
- Phantom: SAM2; Type: SAM 4.0; Serial: TP:1270
- Measurement SW: DASY4, V4.7 Build 55; Postprocessing SW: SEMCAD, V1.8 Build 176

**BODY/Area Scan (51x91x1):** Measurement grid: dx=15mm, dy=15mm  
Maximum value of SAR (interpolated) = 1.37 mW/g

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

Reference Value = 18.8 V/m; Power Drift = -0.005 dB  
Peak SAR (extrapolated) = 1.72 W/kg

**SAR(1 g) = 1.27 mW/g; SAR(10 g) = 0.915 mW/g**  
Maximum value of SAR (measured) = 1.35 mW/g



## LE\_Cheek\_CH810\_hold up

**DUT: Kais140; Type:GSM;IMEI: 35972801001016601**

Communication System: GSM1900; Frequency: 1909.8 MHz; Duty Cycle: 1:8.3  
Medium: Head 1900 MHz Medium parameters used:  $f = 1910$  MHz;  $\sigma = 1.39$  mho/m;  $\epsilon_r = 40.8$ ;  $\rho = 1000$  kg/m<sup>3</sup>  
Phantom section: Left Section

DASY4 Configuration:

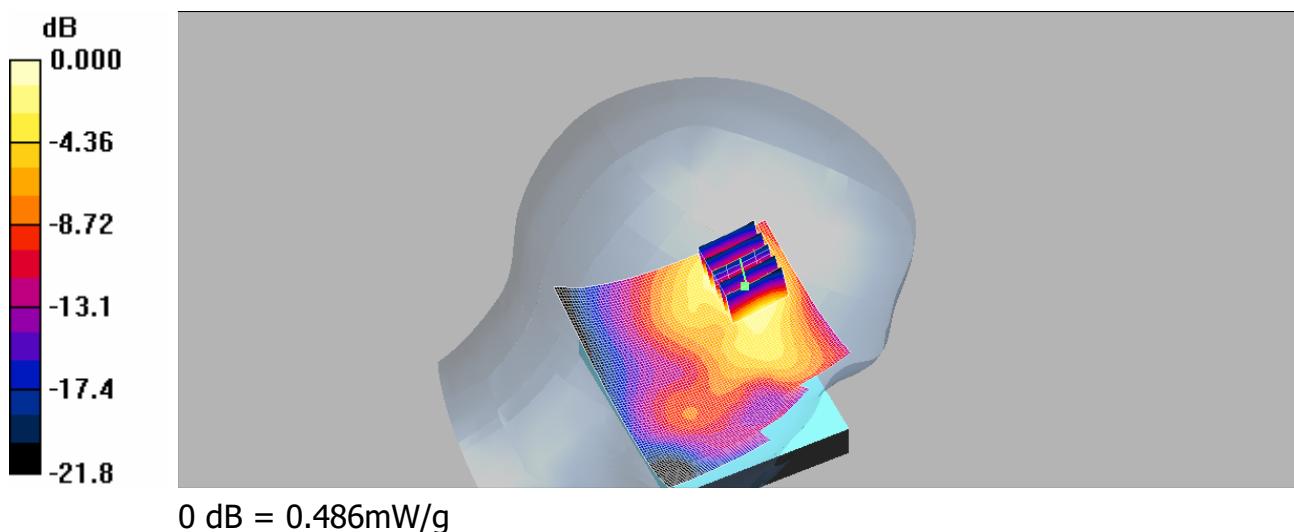
- Probe: EX3DV3 - SN3526; Calibrated: 2007/8/29
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn547; Calibrated: 2007/10/1
- Phantom: SAM2; Type: SAM 4.0; Serial: TP:1270
- Measurement SW: DASY4, V4.7 Build 55; Postprocessing SW: SEMCAD, V1.8 Build 176

**LE\_Cheek/Area Scan (81x91x1):** Measurement grid: dx=15mm, dy=15mm  
Maximum value of SAR (interpolated) = 0.460 mW/g

**LE\_Cheek/Zoom Scan (5x5x7)/Cube 0:** Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 8.20 V/m; Power Drift = -0.005 dB  
Peak SAR (extrapolated) = 0.881 W/kg

**SAR(1 g) = 0.437 mW/g; SAR(10 g) = 0.219 mW/g**  
Maximum value of SAR (measured) = 0.486 mW/g



## BODY\_CH512

**DUT: Kais140; Type:GSM;IMEI: 35972801001016601**

Communication System: GSM1900; Frequency: 1850.2 MHz; Duty Cycle: 1:4  
Medium: M1800 & 1900 Medium parameters used (interpolated):  $f = 1850.2$  MHz;  $\sigma = 1.52$  mho/m;  $\epsilon_r = 55.2$ ;  $\rho = 1000$  kg/m<sup>3</sup>  
Phantom section: Flat Section

DASY4 Configuration:

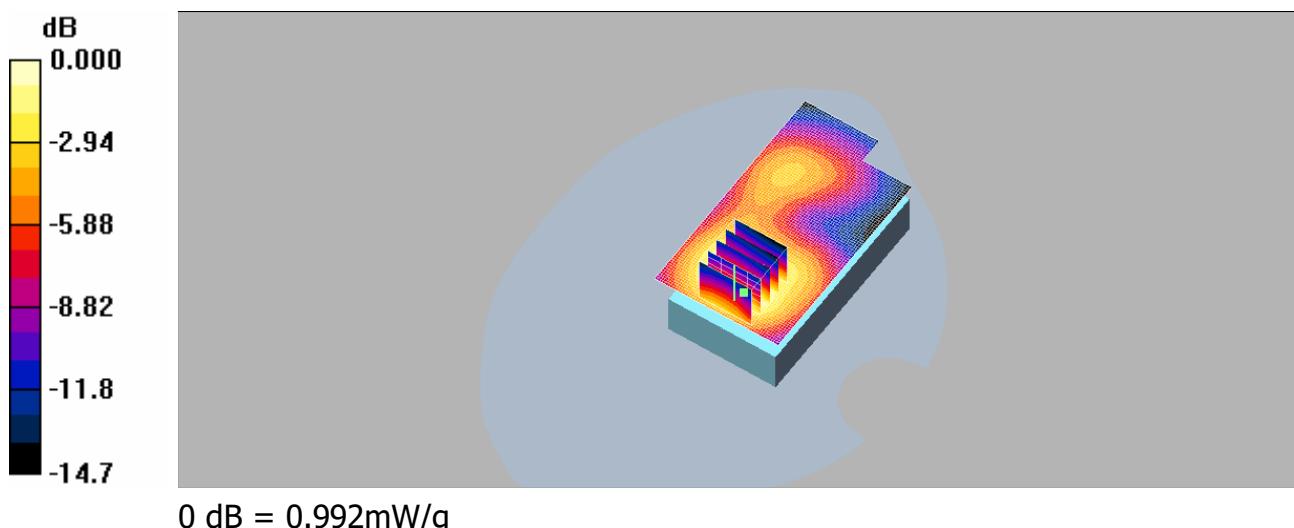
- Probe: EX3DV3 - SN3526; Calibrated: 2007/8/29
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn547; Calibrated: 2007/10/1
- Phantom: SAM2; Type: SAM 4.0; Serial: TP:1270
- Measurement SW: DASY4, V4.7 Build 55; Postprocessing SW: SEMCAD, V1.8 Build 176

**BODY/Area Scan (51x91x1):** Measurement grid: dx=15mm, dy=15mm  
Maximum value of SAR (interpolated) = 1.12 mW/g

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

Reference Value = 21.3 V/m; Power Drift = -0.051 dB  
Peak SAR (extrapolated) = 1.52 W/kg

**SAR(1 g) = 0.945 mW/g; SAR(10 g) = 0.552 mW/g**  
Maximum value of SAR (measured) = 0.992 mW/g



## BODY\_CH661

**DUT: Kais140; Type:GSM;IMEI: 35972801001016601**

Communication System: GSM1900; Frequency: 1880 MHz; Duty Cycle: 1:4  
Medium: M1800 & 1900 Medium parameters used:  $f = 1880$  MHz;  $\sigma = 1.55$  mho/m;  $\epsilon_r = 55.1$ ;  $\rho = 1000$  kg/m<sup>3</sup>  
Phantom section: Flat Section

DASY4 Configuration:

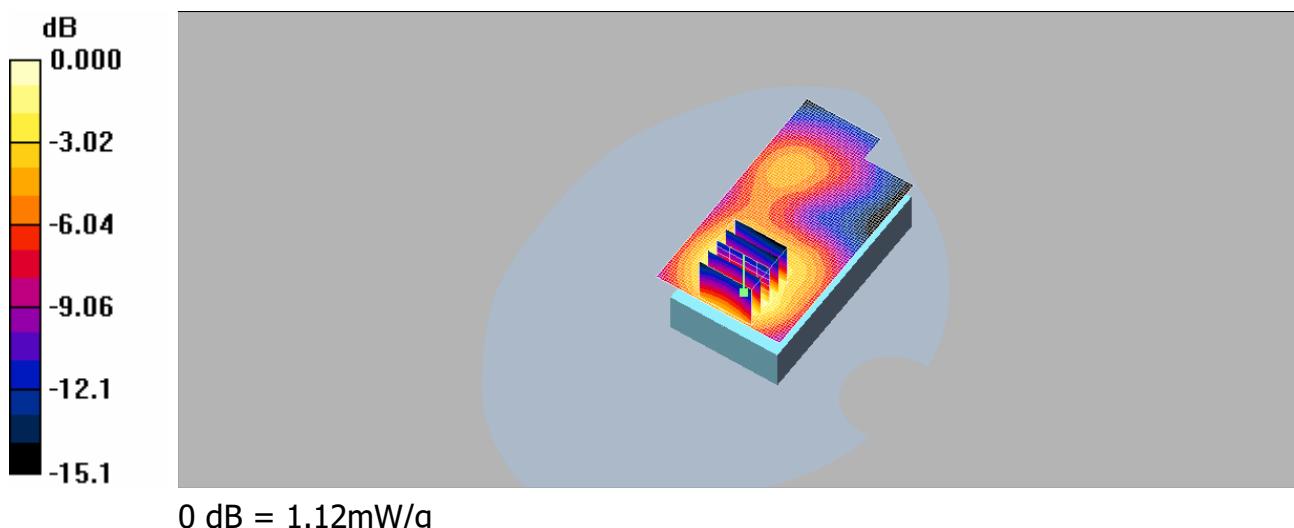
- Probe: EX3DV3 - SN3526; Calibrated: 2007/8/29
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn547; Calibrated: 2007/10/1
- Phantom: SAM2; Type: SAM 4.0; Serial: TP:1270
- Measurement SW: DASY4, V4.7 Build 55; Postprocessing SW: SEMCAD, V1.8 Build 176

**BODY/Area Scan (51x91x1):** Measurement grid: dx=15mm, dy=15mm  
Maximum value of SAR (interpolated) = 1.20 mW/g

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

Reference Value = 22.2 V/m; Power Drift = 0.067 dB  
Peak SAR (extrapolated) = 1.68 W/kg

**SAR(1 g) = 1.04 mW/g; SAR(10 g) = 0.590 mW/g**  
Maximum value of SAR (measured) = 1.12 mW/g



## BODY\_CH810

**DUT: Kais140; Type:GSM;IMEI: 35972801001016601**

Communication System: GSM1900; Frequency: 1909.8 MHz; Duty Cycle: 1:4  
Medium: M1800 & 1900 Medium parameters used:  $f = 1910$  MHz;  $\sigma = 1.58$  mho/m;  $\epsilon_r = 55.1$ ;  $\rho = 1000$  kg/m<sup>3</sup>  
Phantom section: Flat Section

DASY4 Configuration:

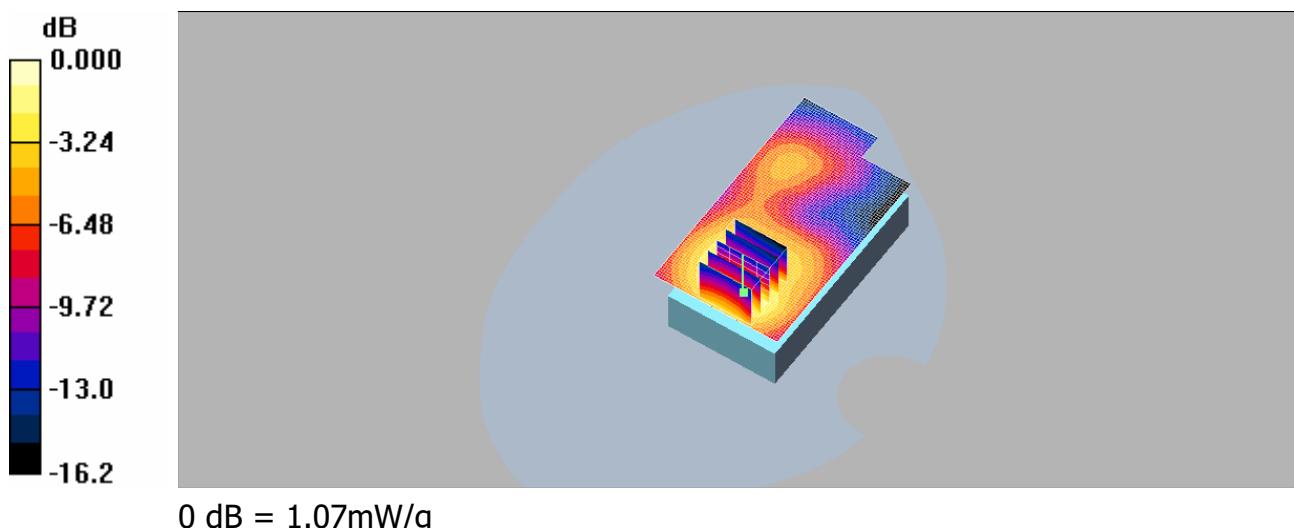
- Probe: EX3DV3 - SN3526; Calibrated: 2007/8/29
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn547; Calibrated: 2007/10/1
- Phantom: SAM2; Type: SAM 4.0; Serial: TP:1270
- Measurement SW: DASY4, V4.7 Build 55; Postprocessing SW: SEMCAD, V1.8 Build 176

**BODY/Area Scan (51x91x1):** Measurement grid: dx=15mm, dy=15mm  
Maximum value of SAR (interpolated) = 1.15 mW/g

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

Reference Value = 22.4 V/m; Power Drift = -0.050 dB  
Peak SAR (extrapolated) = 1.71 W/kg

**SAR(1 g) = 1.02 mW/g; SAR(10 g) = 0.563 mW/g**  
Maximum value of SAR (measured) = 1.07 mW/g



## **RE\_Cheek\_WLAN 802.11 b\_CH1\_Slider off**

**DUT: Kais140; Type WLAN 802.11; IMEI: 35972801001016601**

Communication System: Wireless LAN; Frequency: 2412 MHz; Duty Cycle: 1:1  
Medium: HEAD 2450 Medium parameters used:  $f = 2412 \text{ MHz}$ ;  $\sigma = 1.79 \text{ mho/m}$ ;  $\epsilon_r = 40.7$ ;  $\rho = 1000 \text{ kg/m}^3$

Phantom section: Right Section

DASY4 Configuration:

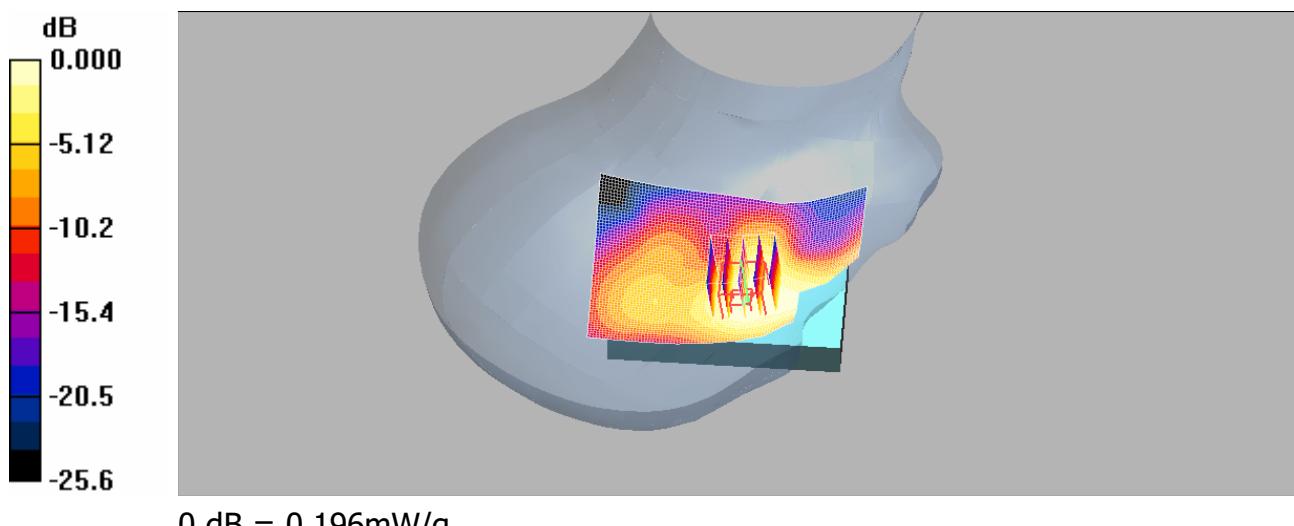
- Probe: EX3DV3 - SN3526; Calibrated: 2007/8/29
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn547; Calibrated: 2007/10/1
- Phantom: SAM2; Type: SAM 4.0; Serial: TP:1270
- Measurement SW: DASY4, V4.7 Build 55; Postprocessing SW: SEMCAD, V1.8 Build 176

**RE\_Cheek/Area Scan (61x91x1):** Measurement grid:  $dx=15\text{mm}$ ,  $dy=15\text{mm}$   
Maximum value of SAR (interpolated) = 0.204 mW/g

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

Reference Value = 4.82 V/m; Power Drift = 0.042 dB  
Peak SAR (extrapolated) = 0.371 W/kg

**SAR(1 g) = 0.186 mW/g; SAR(10 g) = 0.099 mW/g**  
Maximum value of SAR (measured) = 0.196 mW/g



## **RE\_Cheek\_WLAN 802.11 b\_CH6\_Slider off**

**DUT: Kais140; Type WLAN 802.11; IMEI: 35972801001016601**

Communication System: Wireless LAN; Frequency: 2437 MHz; Duty Cycle: 1:1  
Medium: HEAD 2450 Medium parameters used:  $f = 2437$  MHz;  $\sigma = 1.82$  mho/m;  $\epsilon_r = 40.3$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Phantom section: Right Section

DASY4 Configuration:

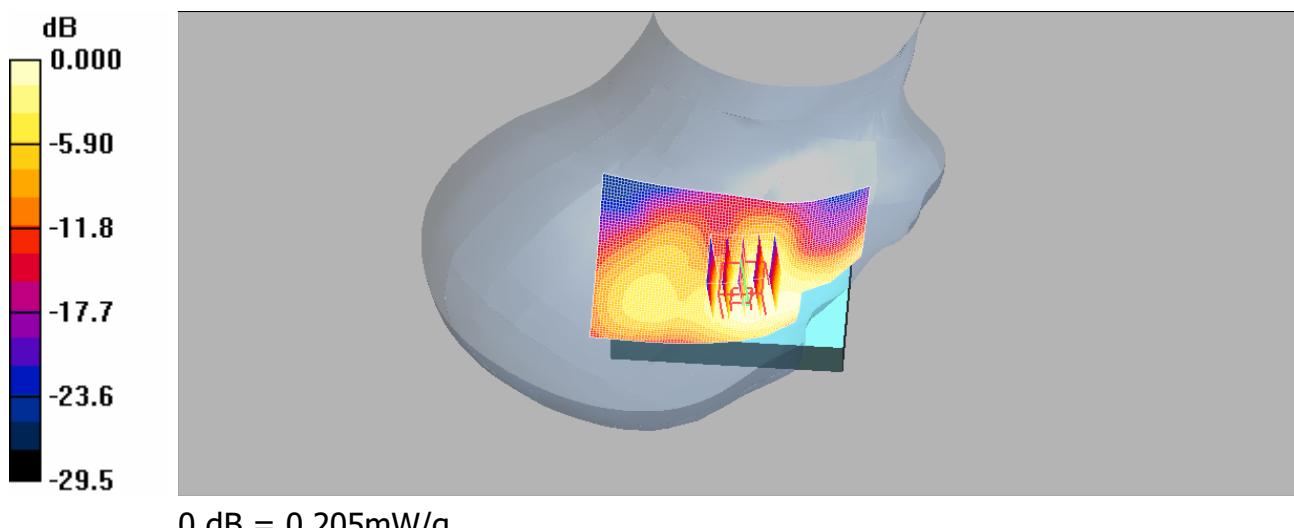
- Probe: EX3DV3 - SN3526; Calibrated: 2007/8/29
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn547; Calibrated: 2007/10/1
- Phantom: SAM2; Type: SAM 4.0; Serial: TP:1270
- Measurement SW: DASY4, V4.7 Build 55; Postprocessing SW: SEMCAD, V1.8 Build 176

**RE\_Cheek/Area Scan (61x91x1):** Measurement grid: dx=15mm, dy=15mm  
Maximum value of SAR (interpolated) = 0.212 mW/g

**RE\_Cheek/Zoom Scan (5x5x7)/Cube 0:** Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 5.56 V/m; Power Drift = -0.163 dB  
Peak SAR (extrapolated) = 0.381 W/kg

**SAR(1 g) = 0.192 mW/g; SAR(10 g) = 0.102 mW/g**  
Maximum value of SAR (measured) = 0.205 mW/g



## **RE\_Cheek\_WLAN 802.11 b\_CH11\_Slider off**

**DUT: Kais140; TypeWLAN 802.11;IMEI: 35972801001016601**

Communication System: Wireless LAN; Frequency: 2462 MHz; Duty Cycle: 1:1  
Medium: HEAD 2450 Medium parameters used:  $f = 2462$  MHz;  $\sigma = 1.87$  mho/m;  $\epsilon_r = 40.1$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Phantom section: Right Section

DASY4 Configuration:

- Probe: EX3DV3 - SN3526; Calibrated: 2007/8/29
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn547; Calibrated: 2007/10/1
- Phantom: SAM2; Type: SAM 4.0; Serial: TP:1270
- Measurement SW: DASY4, V4.7 Build 55; Postprocessing SW: SEMCAD, V1.8 Build 176

**RE\_Cheek/Area Scan (61x91x1):** Measurement grid: dx=15mm, dy=15mm  
Maximum value of SAR (interpolated) = 0.195 mW/g

**RE\_Cheek/Zoom Scan (5x5x7)/Cube 0:** Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 5.24 V/m; Power Drift = -0.150 dB  
Peak SAR (extrapolated) = 0.366 W/kg

**SAR(1 g) = 0.182 mW/g; SAR(10 g) = 0.095 mW/g**  
Maximum value of SAR (measured) = 0.190 mW/g



## **LE\_Cheek\_WLAN 802.11 b\_CH1\_Slider off**

**DUT: Kais140; Type WLAN 802.11; IMEI: 35972801001016601**

Communication System: Wireless LAN; Frequency: 2412 MHz; Duty Cycle: 1:1  
Medium: HEAD 2450 Medium parameters used:  $f = 2412 \text{ MHz}$ ;  $\sigma = 1.79 \text{ mho/m}$ ;  $\epsilon_r = 40.7$ ;  $\rho = 1000 \text{ kg/m}^3$

Phantom section: Left Section

DASY4 Configuration:

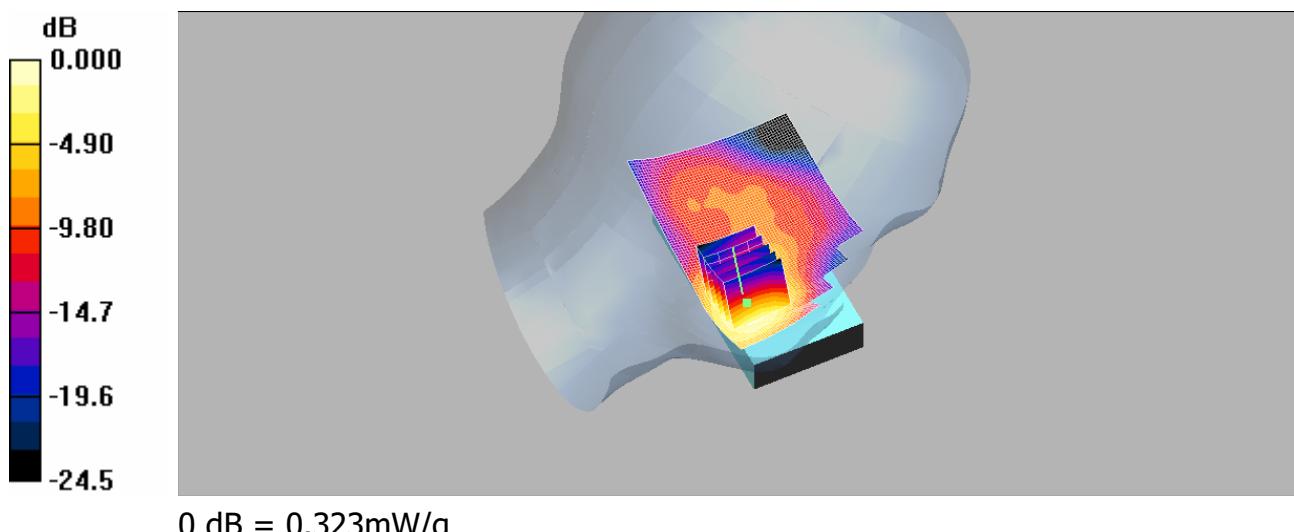
- Probe: EX3DV3 - SN3526; Calibrated: 2007/8/29
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn547; Calibrated: 2007/10/1
- Phantom: SAM2; Type: SAM 4.0; Serial: TP:1270
- Measurement SW: DASY4, V4.7 Build 55; Postprocessing SW: SEMCAD, V1.8 Build 176

**LE\_Cheek/Area Scan (61x91x1):** Measurement grid:  $dx=15\text{mm}$ ,  $dy=15\text{mm}$   
Maximum value of SAR (interpolated) = 0.361 mW/g

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

Reference Value = 4.88 V/m; Power Drift = -0.090 dB  
Peak SAR (extrapolated) = 0.644 W/kg

**SAR(1 g) = 0.299 mW/g; SAR(10 g) = 0.159 mW/g**  
Maximum value of SAR (measured) = 0.323 mW/g



## **LE\_Cheek\_WLAN 802.11 b\_CH6\_Slider off**

**DUT: Kais140; Type WLAN 802.11; IMEI: 35972801001016601**

Communication System: Wireless LAN; Frequency: 2437 MHz; Duty Cycle: 1:1  
Medium: HEAD 2450 Medium parameters used:  $f = 2437$  MHz;  $\sigma = 1.82$  mho/m;  $\epsilon_r = 40.3$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Phantom section: Left Section

DASY4 Configuration:

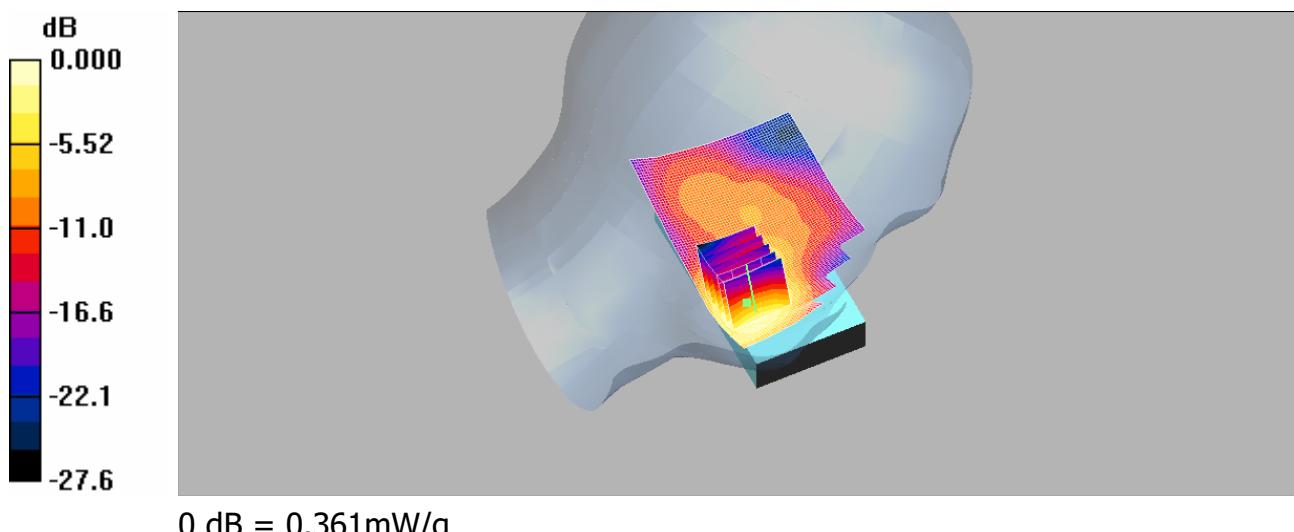
- Probe: EX3DV3 - SN3526; Calibrated: 2007/8/29
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn547; Calibrated: 2007/10/1
- Phantom: SAM2; Type: SAM 4.0; Serial: TP:1270
- Measurement SW: DASY4, V4.7 Build 55; Postprocessing SW: SEMCAD, V1.8 Build 176

**LE\_Cheek/Area Scan (61x91x1):** Measurement grid: dx=15mm, dy=15mm  
Maximum value of SAR (interpolated) = 0.398 mW/g

**LE\_Cheek/Zoom Scan (5x5x7)/Cube 0:** Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 4.79 V/m; Power Drift = -0.125 dB  
Peak SAR (extrapolated) = 0.750 W/kg

**SAR(1 g) = 0.339 mW/g; SAR(10 g) = 0.175 mW/g**  
Maximum value of SAR (measured) = 0.361 mW/g



## **LE\_Cheek\_WLAN 802.11 b\_CH11\_Slider off**

**DUT: Kais140; TypeWLAN 802.11;IMEI: 35972801001016601**

Communication System: Wireless LAN; Frequency: 2462 MHz; Duty Cycle: 1:1  
Medium: HEAD 2450 Medium parameters used:  $f = 2462$  MHz;  $\sigma = 1.87$  mho/m;  $\epsilon_r = 40.1$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Phantom section: Left Section

DASY4 Configuration:

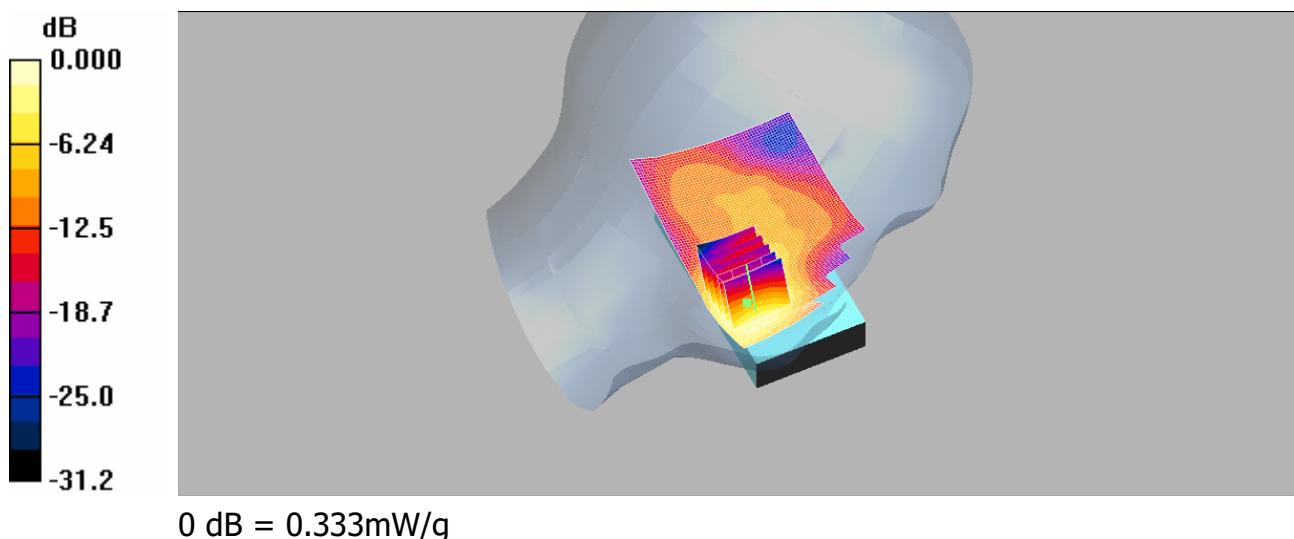
- Probe: EX3DV3 - SN3526; Calibrated: 2007/8/29
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn547; Calibrated: 2007/10/1
- Phantom: SAM2; Type: SAM 4.0; Serial: TP:1270
- Measurement SW: DASY4, V4.7 Build 55; Postprocessing SW: SEMCAD, V1.8 Build 176

**LE\_Cheek/Area Scan (61x91x1):** Measurement grid: dx=15mm, dy=15mm  
Maximum value of SAR (interpolated) = 0.364 mW/g

**LE\_Cheek/Zoom Scan (5x5x7)/Cube 0:** Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 4.30 V/m; Power Drift = -0.033 dB  
Peak SAR (extrapolated) = 0.694 W/kg

**SAR(1 g) = 0.310 mW/g; SAR(10 g) = 0.157 mW/g**  
Maximum value of SAR (measured) = 0.333 mW/g



## RE Tilt\_WLAN 802.11 b\_CH1\_Slider off

DUT: Kais140; Type WLAN 802.11; IMEI: 35972801001016601

Communication System: Wireless LAN; Frequency: 2412 MHz; Duty Cycle: 1:1  
Medium: HEAD 2450 Medium parameters used:  $f = 2412 \text{ MHz}$ ;  $\sigma = 1.79 \text{ mho/m}$ ;  $\epsilon_r = 40.7$ ;  $\rho = 1000 \text{ kg/m}^3$

Phantom section: Right Section

DASY4 Configuration:

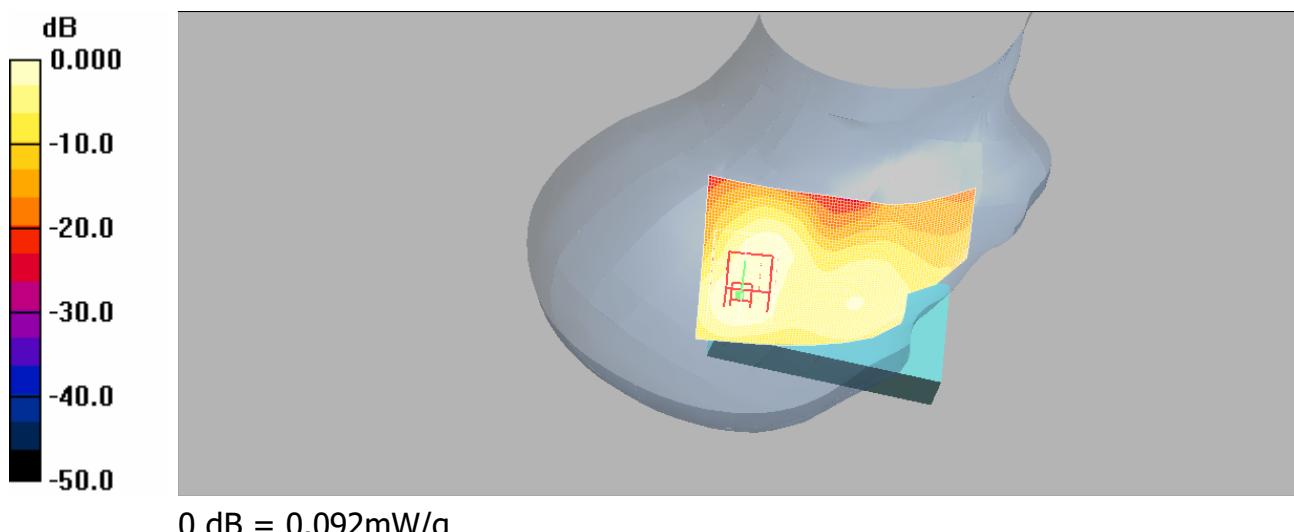
- Probe: EX3DV3 - SN3526; Calibrated: 2007/8/29
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn547; Calibrated: 2007/10/1
- Phantom: SAM2; Type: SAM 4.0; Serial: TP:1270
- Measurement SW: DASY4, V4.7 Build 55; Postprocessing SW: SEMCAD, V1.8 Build 176

**RE\_Tilt/Area Scan (61x91x1):** Measurement grid:  $dx=15\text{mm}$ ,  $dy=15\text{mm}$   
Maximum value of SAR (interpolated) = 0.095 mW/g

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

Reference Value = 6.91 V/m; Power Drift = -0.106 dB  
Peak SAR (extrapolated) = 0.195 W/kg

**SAR(1 g) = 0.086 mW/g; SAR(10 g) = 0.044 mW/g**  
Maximum value of SAR (measured) = 0.092 mW/g



## RE Tilt\_WLAN 802.11 b\_CH6\_Slider off

DUT: Kais140; Type WLAN 802.11; IMEI: 35972801001016601

Communication System: Wireless LAN; Frequency: 2437 MHz; Duty Cycle: 1:1  
Medium: HEAD 2450 Medium parameters used:  $f = 2437$  MHz;  $\sigma = 1.82$  mho/m;  $\epsilon_r = 40.3$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Phantom section: Right Section

DASY4 Configuration:

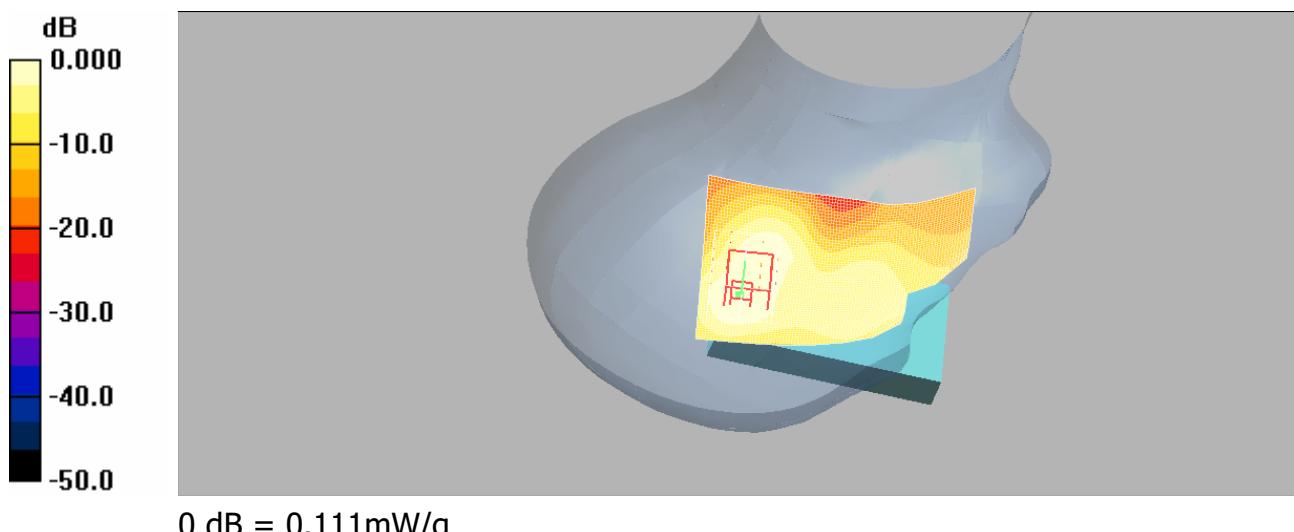
- Probe: EX3DV3 - SN3526; Calibrated: 2007/8/29
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn547; Calibrated: 2007/10/1
- Phantom: SAM2; Type: SAM 4.0; Serial: TP:1270
- Measurement SW: DASY4, V4.7 Build 55; Postprocessing SW: SEMCAD, V1.8 Build 176

**RE\_Tilt/Area Scan (61x91x1):** Measurement grid: dx=15mm, dy=15mm  
Maximum value of SAR (interpolated) = 0.113 mW/g

**RE\_Tilt/Zoom Scan (5x5x7)/Cube 0:** Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 7.40 V/m; Power Drift = -0.148 dB  
Peak SAR (extrapolated) = 0.235 W/kg

**SAR(1 g) = 0.103 mW/g; SAR(10 g) = 0.052 mW/g**  
Maximum value of SAR (measured) = 0.111 mW/g



## RE Tilt\_WLAN 802.11 b\_CH11\_Slider off

DUT: Kais140; Type WLAN 802.11; IMEI: 35972801001016601

Communication System: Wireless LAN; Frequency: 2462 MHz; Duty Cycle: 1:1  
Medium: HEAD 2450 Medium parameters used:  $f = 2462$  MHz;  $\sigma = 1.87$  mho/m;  $\epsilon_r = 40.1$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Phantom section: Right Section

DASY4 Configuration:

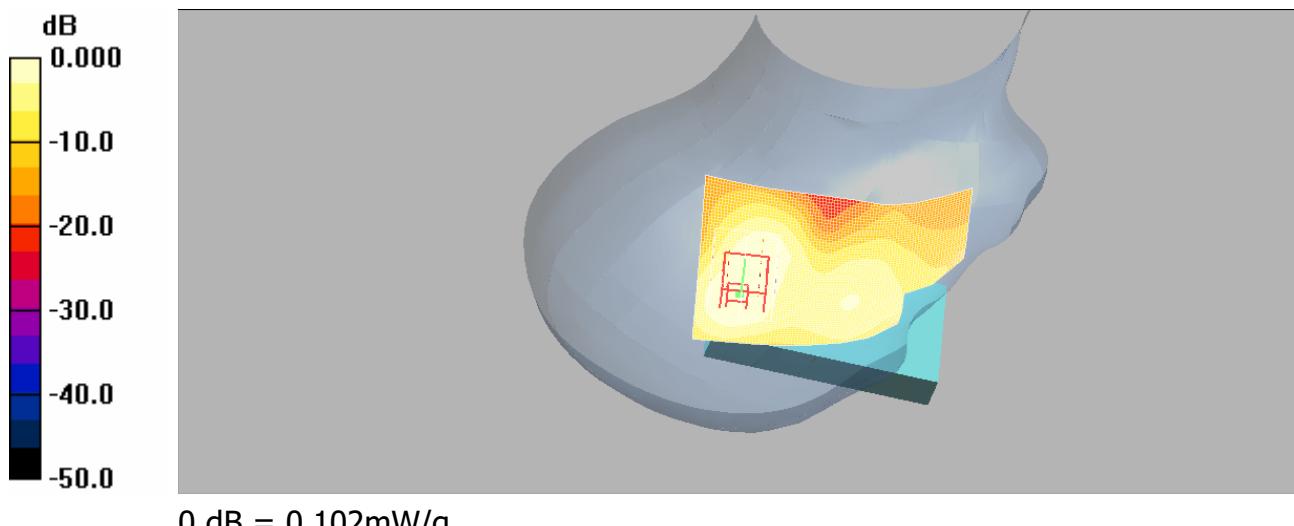
- Probe: EX3DV3 - SN3526; Calibrated: 2007/8/29
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn547; Calibrated: 2007/10/1
- Phantom: SAM2; Type: SAM 4.0; Serial: TP:1270
- Measurement SW: DASY4, V4.7 Build 55; Postprocessing SW: SEMCAD, V1.8 Build 176

**RE\_Tilt/Area Scan (61x91x1):** Measurement grid: dx=15mm, dy=15mm  
Maximum value of SAR (interpolated) = 0.111 mW/g

**RE\_Tilt/Zoom Scan (5x5x7)/Cube 0:** Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 7.22 V/m; Power Drift = -0.168 dB  
Peak SAR (extrapolated) = 0.234 W/kg

**SAR(1 g) = 0.099 mW/g; SAR(10 g) = 0.050 mW/g**  
Maximum value of SAR (measured) = 0.102 mW/g



## LE\_Tilt\_WLAN 802.11 b\_CH1\_Slider off

DUT: Kais140; Type WLAN 802.11; IMEI: 35972801001016601

Communication System: Wireless LAN; Frequency: 2412 MHz; Duty Cycle: 1:1  
Medium: HEAD 2450 Medium parameters used:  $f = 2412 \text{ MHz}$ ;  $\sigma = 1.79 \text{ mho/m}$ ;  $\epsilon_r = 40.7$ ;  $\rho = 1000 \text{ kg/m}^3$

Phantom section: Left Section

DASY4 Configuration:

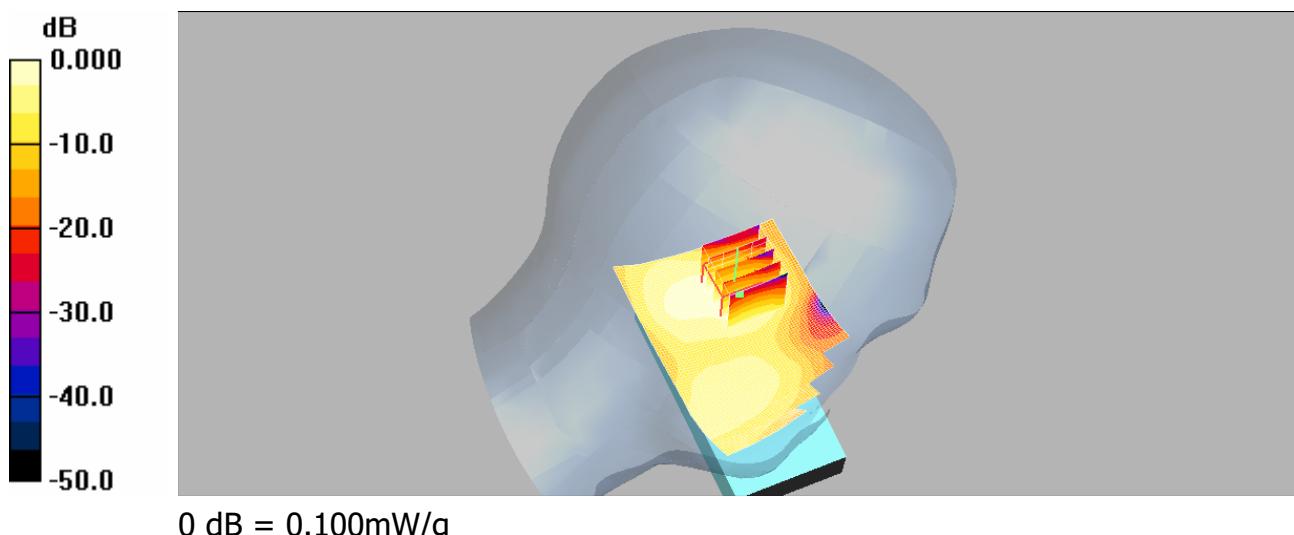
- Probe: EX3DV3 - SN3526; Calibrated: 2007/8/29
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn547; Calibrated: 2007/10/1
- Phantom: SAM2; Type: SAM 4.0; Serial: TP:1270
- Measurement SW: DASY4, V4.7 Build 55; Postprocessing SW: SEMCAD, V1.8 Build 176

**LE\_Tilt/Area Scan (61x91x1):** Measurement grid:  $dx=15\text{mm}$ ,  $dy=15\text{mm}$   
Maximum value of SAR (interpolated) = 0.111 mW/g

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

Reference Value = 6.74 V/m; Power Drift = -0.056 dB  
Peak SAR (extrapolated) = 0.212 W/kg

**SAR(1 g) = 0.097 mW/g; SAR(10 g) = 0.049 mW/g**  
Maximum value of SAR (measured) = 0.100 mW/g



## LE\_Tilt\_WLAN 802.11 b\_CH6\_Slider off

DUT: Kais140; Type WLAN 802.11; IMEI: 35972801001016601

Communication System: Wireless LAN; Frequency: 2437 MHz; Duty Cycle: 1:1  
Medium: HEAD 2450 Medium parameters used:  $f = 2437$  MHz;  $\sigma = 1.82$  mho/m;  $\epsilon_r = 40.3$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Phantom section: Left Section

DASY4 Configuration:

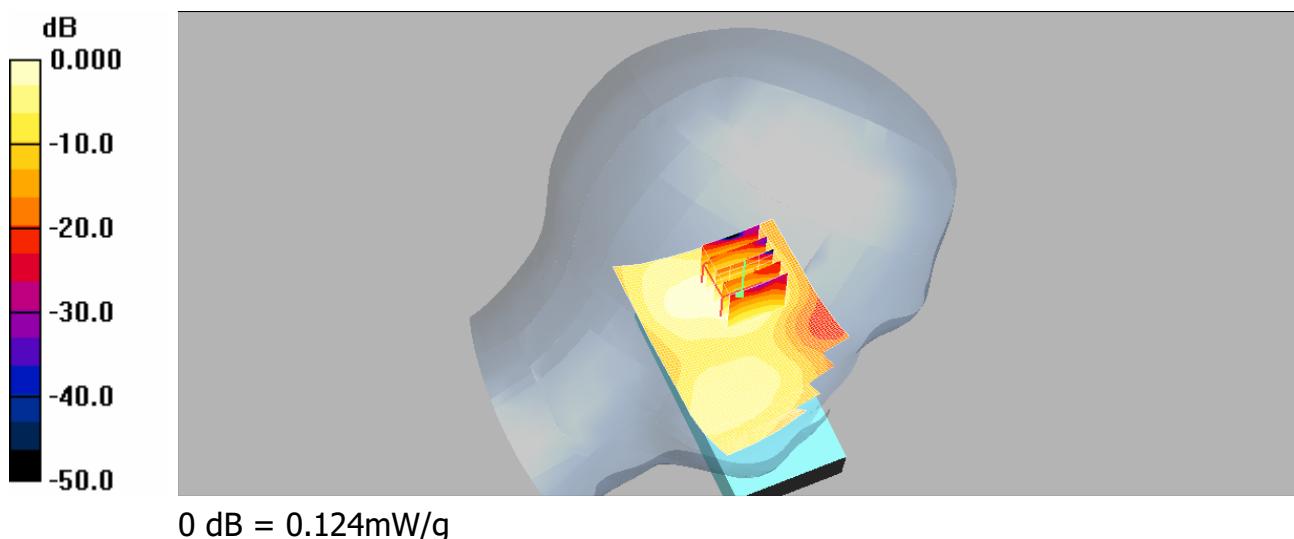
- Probe: EX3DV3 - SN3526; Calibrated: 2007/8/29
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn547; Calibrated: 2007/10/1
- Phantom: SAM2; Type: SAM 4.0; Serial: TP:1270
- Measurement SW: DASY4, V4.7 Build 55; Postprocessing SW: SEMCAD, V1.8 Build 176

**LE\_Tilt/Area Scan (61x91x1):** Measurement grid: dx=15mm, dy=15mm  
Maximum value of SAR (interpolated) = 0.141 mW/g

**LE\_Tilt/Zoom Scan (5x5x7)/Cube 0:** Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 7.23 V/m; Power Drift = -0.070 dB  
Peak SAR (extrapolated) = 0.263 W/kg

**SAR(1 g) = 0.121 mW/g; SAR(10 g) = 0.060 mW/g**  
Maximum value of SAR (measured) = 0.124 mW/g



## LE\_Tilt\_WLAN 802.11 b\_CH11\_Slider off

DUT: Kais140; Type WLAN 802.11; IMEI: 35972801001016601

Communication System: Wireless LAN; Frequency: 2462 MHz; Duty Cycle: 1:1  
Medium: HEAD 2450 Medium parameters used:  $f = 2462$  MHz;  $\sigma = 1.87$  mho/m;  $\epsilon_r = 40.1$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Phantom section: Left Section

DASY4 Configuration:

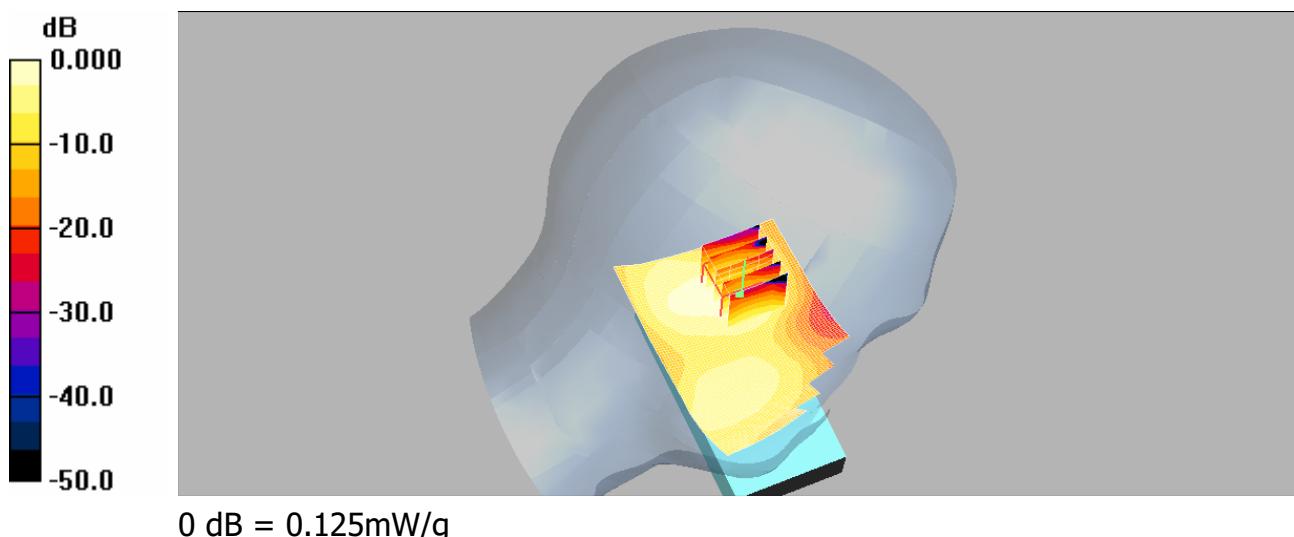
- Probe: EX3DV3 - SN3526; Calibrated: 2007/8/29
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn547; Calibrated: 2007/10/1
- Phantom: SAM2; Type: SAM 4.0; Serial: TP:1270
- Measurement SW: DASY4, V4.7 Build 55; Postprocessing SW: SEMCAD, V1.8 Build 176

**LE\_Tilt/Area Scan (61x91x1):** Measurement grid: dx=15mm, dy=15mm  
Maximum value of SAR (interpolated) = 0.142 mW/g

**LE\_Tilt/Zoom Scan (5x5x7)/Cube 0:** Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 7.04 V/m; Power Drift = -0.044 dB  
Peak SAR (extrapolated) = 0.268 W/kg

**SAR(1 g) = 0.121 mW/g; SAR(10 g) = 0.059 mW/g**  
Maximum value of SAR (measured) = 0.125 mW/g



## **Re\_Cheek\_WLAN 802.11 b\_CH1\_Slider on**

**DUT: Kais140; TypeWLAN 802.11;IMEI: 35972801001016601**

Communication System: Wireless LAN; Frequency: 2412 MHz; Duty Cycle: 1:1  
Medium: HEAD 2450 Medium parameters used:  $f = 2412 \text{ MHz}$ ;  $\sigma = 1.79 \text{ mho/m}$ ;  $\epsilon_r = 40.7$ ;  $\rho = 1000 \text{ kg/m}^3$

Phantom section: Right Section

DASY4 Configuration:

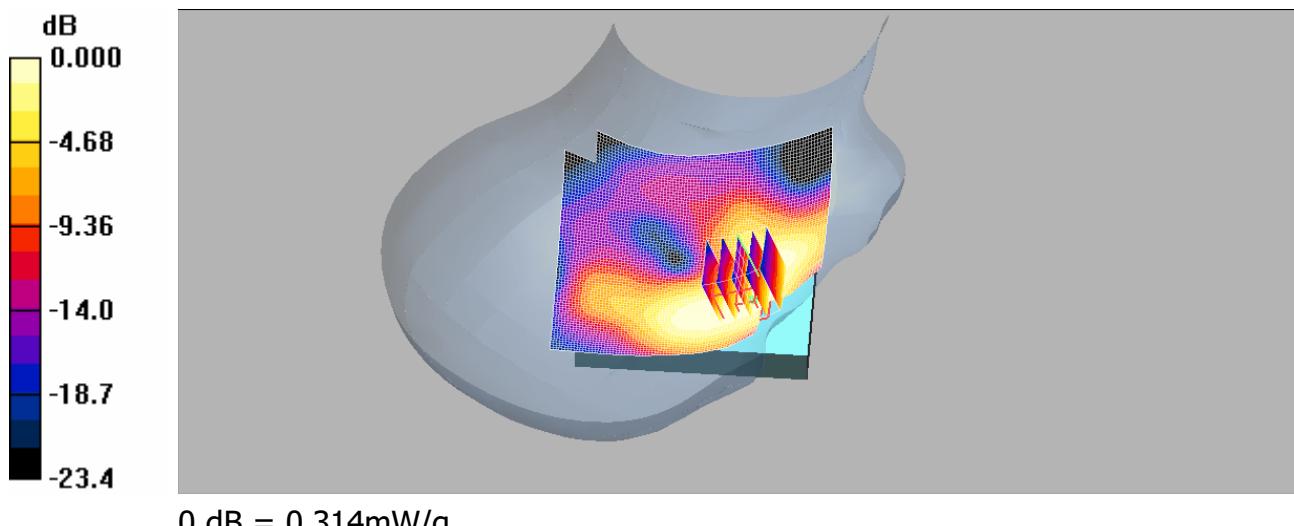
- Probe: EX3DV3 - SN3526; Calibrated: 2007/8/29
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn547; Calibrated: 2007/10/1
- Phantom: SAM2; Type: SAM 4.0; Serial: TP:1270
- Measurement SW: DASY4, V4.7 Build 55; Postprocessing SW: SEMCAD, V1.8 Build 176

**Re\_Cheek/Area Scan (81x91x1):** Measurement grid:  $dx=15\text{mm}$ ,  $dy=15\text{mm}$   
Maximum value of SAR (interpolated) = 0.313 mW/g

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

Reference Value = 6.31 V/m; Power Drift = -0.081 dB  
Peak SAR (extrapolated) = 0.605 W/kg

**SAR(1 g) = 0.292 mW/g; SAR(10 g) = 0.164 mW/g**  
Maximum value of SAR (measured) = 0.314 mW/g



## **Re\_Cheek\_WLAN 802.11 b\_CH6\_Slider on**

**DUT: Kais140; Type WLAN 802.11; IMEI: 35972801001016601**

Communication System: Wireless LAN; Frequency: 2437 MHz; Duty Cycle: 1:1  
Medium: HEAD 2450 Medium parameters used:  $f = 2437$  MHz;  $\sigma = 1.82$  mho/m;  $\epsilon_r = 40.3$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Phantom section: Right Section

DASY4 Configuration:

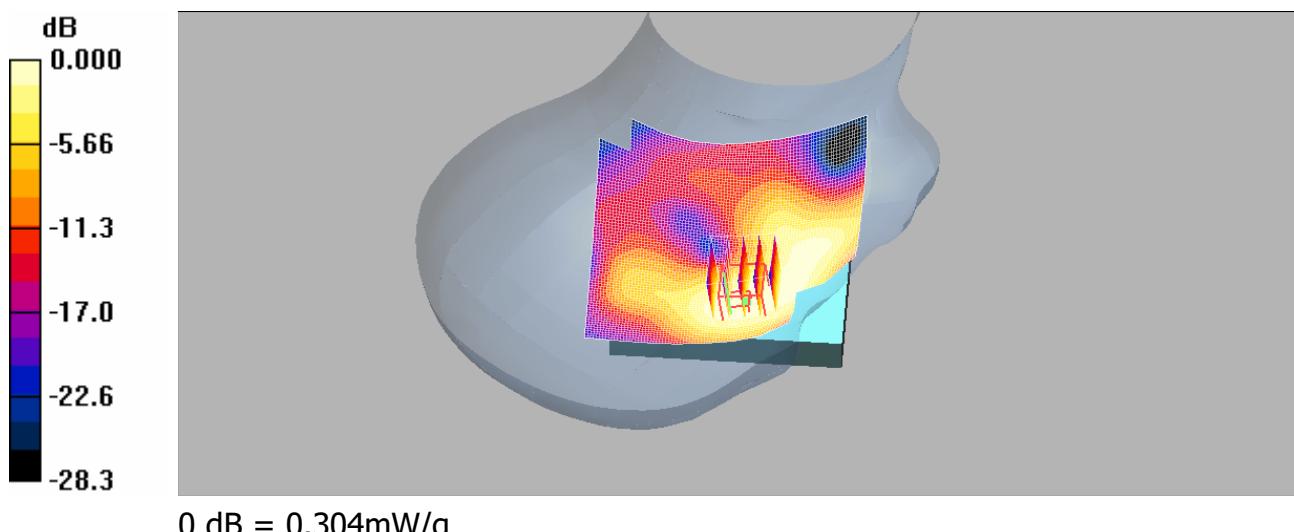
- Probe: EX3DV3 - SN3526; Calibrated: 2007/8/29
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn547; Calibrated: 2007/10/1
- Phantom: SAM2; Type: SAM 4.0; Serial: TP:1270
- Measurement SW: DASY4, V4.7 Build 55; Postprocessing SW: SEMCAD, V1.8 Build 176

**Re\_Cheek/Area Scan (81x91x1):** Measurement grid: dx=15mm, dy=15mm  
Maximum value of SAR (interpolated) = 0.299 mW/g

**Re\_Cheek/Zoom Scan (5x5x7)/Cube 0:** Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 6.51 V/m; Power Drift = -0.050 dB  
Peak SAR (extrapolated) = 0.624 W/kg

**SAR(1 g) = 0.295 mW/g; SAR(10 g) = 0.155 mW/g**  
Maximum value of SAR (measured) = 0.304 mW/g



## **Re\_Cheek\_WLAN 802.11 b\_CH11\_Slider on**

**DUT: Kais140; TypeWLAN 802.11;IMEI: 35972801001016601**

Communication System: Wireless LAN; Frequency: 2462 MHz; Duty Cycle: 1:1  
Medium: HEAD 2450 Medium parameters used:  $f = 2462$  MHz;  $\sigma = 1.87$  mho/m;  $\epsilon_r = 40.1$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Phantom section: Right Section

DASY4 Configuration:

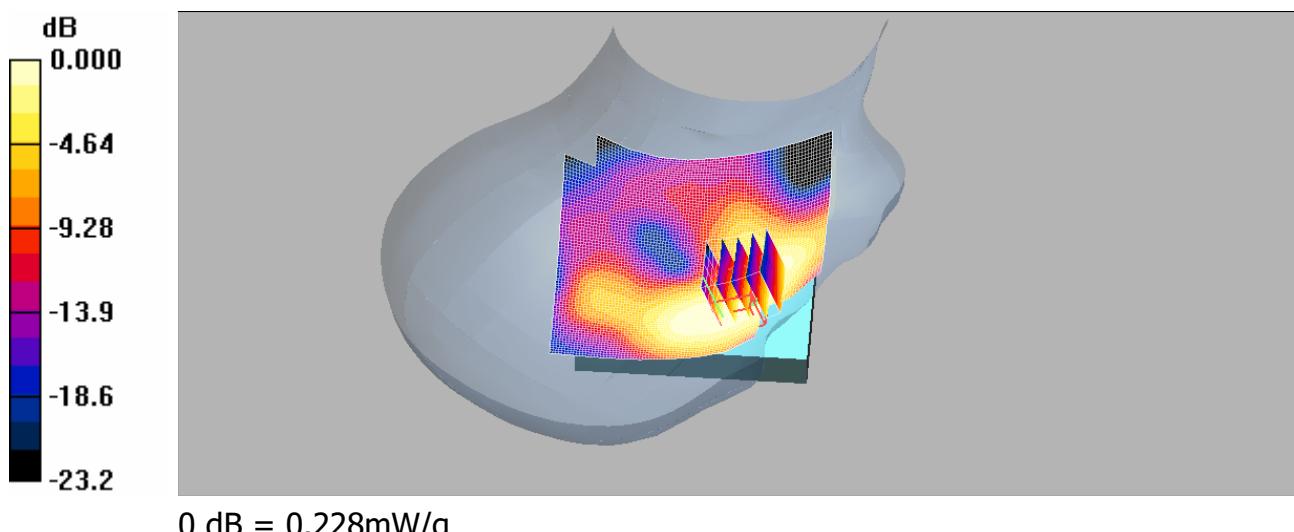
- Probe: EX3DV3 - SN3526; Calibrated: 2007/8/29
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn547; Calibrated: 2007/10/1
- Phantom: SAM2; Type: SAM 4.0; Serial: TP:1270
- Measurement SW: DASY4, V4.7 Build 55; Postprocessing SW: SEMCAD, V1.8 Build 176

**Re\_Cheek/Area Scan (81x91x1):** Measurement grid: dx=15mm, dy=15mm  
Maximum value of SAR (interpolated) = 0.222 mW/g

**Re\_Cheek/Zoom Scan (5x5x7)/Cube 0:** Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 5.95 V/m; Power Drift = -0.034 dB  
Peak SAR (extrapolated) = 0.461 W/kg

**SAR(1 g) = 0.218 mW/g; SAR(10 g) = 0.120 mW/g**  
Maximum value of SAR (measured) = 0.228 mW/g



## Le\_Cheek\_WLAN 802.11 b\_CH1\_Slider on

DUT: Kais140; Type WLAN 802.11; IMEI: 35972801001016601

Communication System: Wireless LAN; Frequency: 2412 MHz; Duty Cycle: 1:1  
Medium: HEAD 2450 Medium parameters used:  $f = 2412 \text{ MHz}$ ;  $\sigma = 1.79 \text{ mho/m}$ ;  $\epsilon_r = 40.7$ ;  $\rho = 1000 \text{ kg/m}^3$

Phantom section: Left Section

DASY4 Configuration:

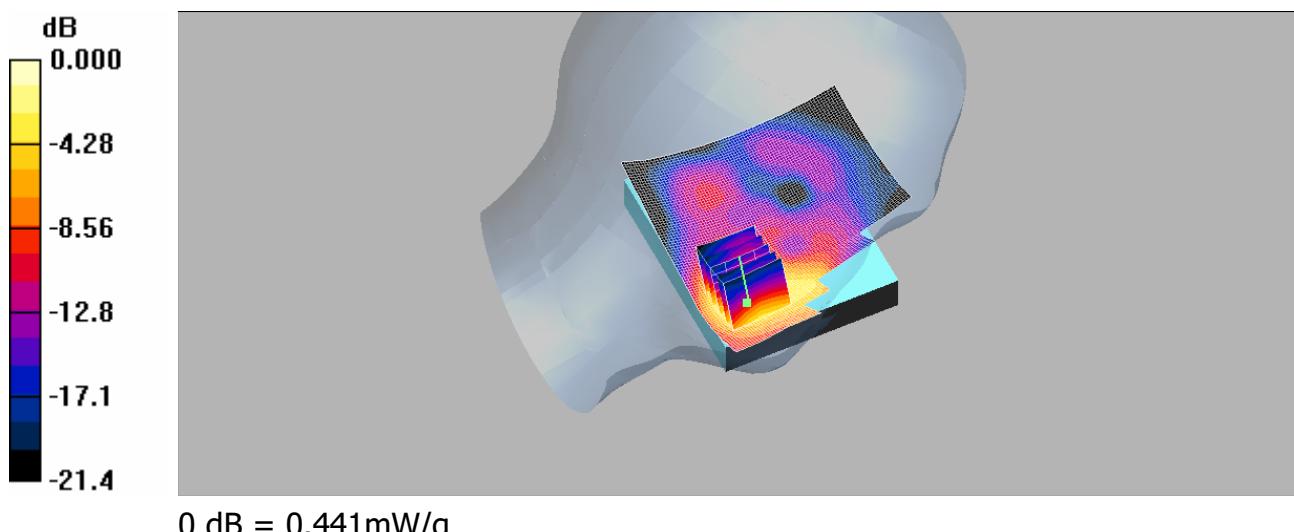
- Probe: EX3DV3 - SN3526; Calibrated: 2007/8/29
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn547; Calibrated: 2007/10/1
- Phantom: SAM2; Type: SAM 4.0; Serial: TP:1270
- Measurement SW: DASY4, V4.7 Build 55; Postprocessing SW: SEMCAD, V1.8 Build 176

**Le\_Cheek/Area Scan (81x91x1):** Measurement grid:  $dx=15\text{mm}$ ,  $dy=15\text{mm}$   
Maximum value of SAR (interpolated) = 0.473 mW/g

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

Reference Value = 4.63 V/m; Power Drift = -0.086 dB  
Peak SAR (extrapolated) = 0.811 W/kg

**SAR(1 g) = 0.412 mW/g; SAR(10 g) = 0.220 mW/g**  
Maximum value of SAR (measured) = 0.441 mW/g



## Le\_Cheek\_WLAN 802.11 b\_CH6\_Slider on

DUT: Kais140; Type WLAN 802.11; IMEI: 35972801001016601

Communication System: Wireless LAN; Frequency: 2437 MHz; Duty Cycle: 1:1  
Medium: HEAD 2450 Medium parameters used:  $f = 2437$  MHz;  $\sigma = 1.82$  mho/m;  $\epsilon_r = 40.3$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Phantom section: Left Section

DASY4 Configuration:

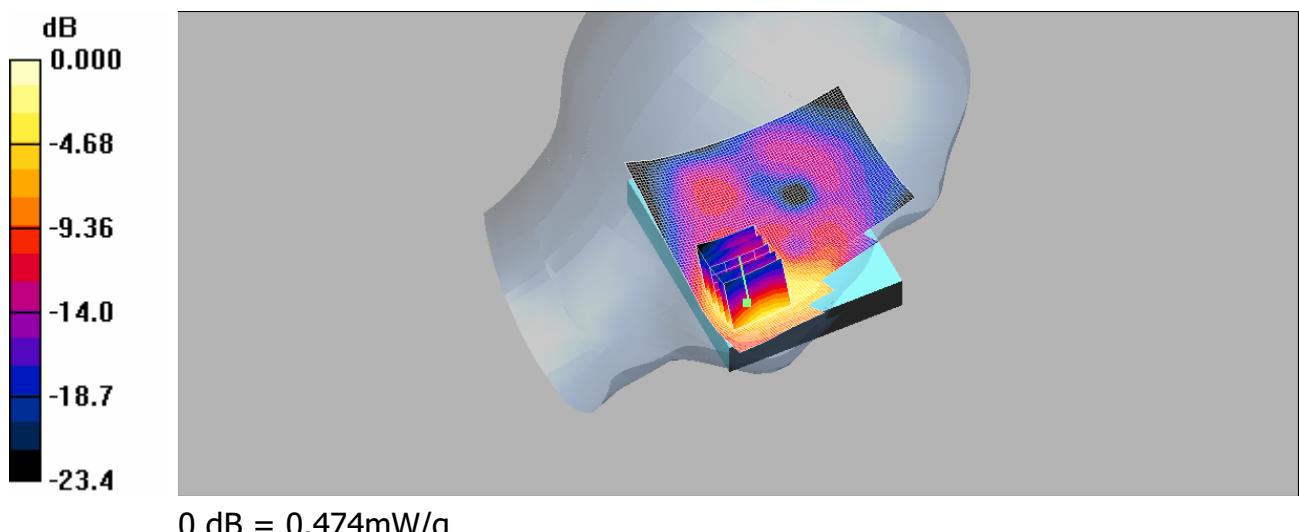
- Probe: EX3DV3 - SN3526; Calibrated: 2007/8/29
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn547; Calibrated: 2007/10/1
- Phantom: SAM2; Type: SAM 4.0; Serial: TP:1270
- Measurement SW: DASY4, V4.7 Build 55; Postprocessing SW: SEMCAD, V1.8 Build 176

**Le\_Cheek/Area Scan (81x91x1):** Measurement grid: dx=15mm, dy=15mm  
Maximum value of SAR (interpolated) = 0.503 mW/g

**Le\_Cheek/Zoom Scan (5x5x7)/Cube 0:** Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 4.60 V/m; Power Drift = -0.075 dB  
Peak SAR (extrapolated) = 0.893 W/kg

**SAR(1 g) = 0.438 mW/g; SAR(10 g) = 0.226 mW/g**  
Maximum value of SAR (measured) = 0.474 mW/g



## **Le\_Cheek\_WLAN 802.11 b\_CH11\_Slider on**

**DUT: Kais140; TypeWLAN 802.11;IMEI: 35972801001016601**

Communication System: Wireless LAN; Frequency: 2462 MHz; Duty Cycle: 1:1  
Medium: HEAD 2450 Medium parameters used:  $f = 2462$  MHz;  $\sigma = 1.87$  mho/m;  $\epsilon_r = 40.1$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Phantom section: Left Section

DASY4 Configuration:

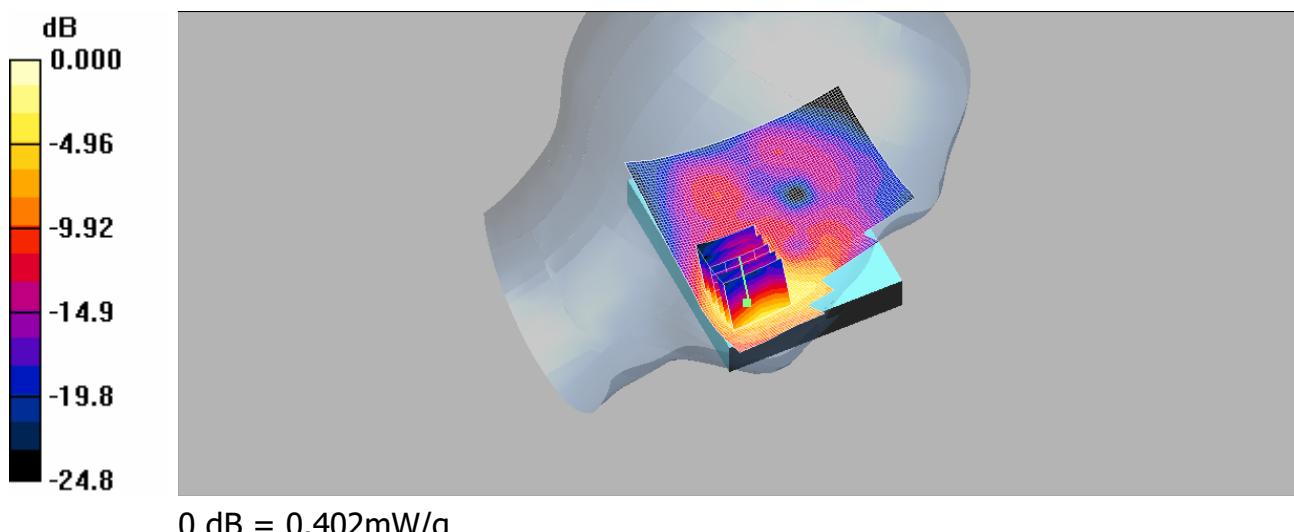
- Probe: EX3DV3 - SN3526; Calibrated: 2007/8/29
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn547; Calibrated: 2007/10/1
- Phantom: SAM2; Type: SAM 4.0; Serial: TP:1270
- Measurement SW: DASY4, V4.7 Build 55; Postprocessing SW: SEMCAD, V1.8 Build 176

**Le\_Cheek/Area Scan (81x91x1):** Measurement grid: dx=15mm, dy=15mm  
Maximum value of SAR (interpolated) = 0.416 mW/g

**Le\_Cheek/Zoom Scan (5x5x7)/Cube 0:** Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 4.09 V/m; Power Drift = -0.156 dB  
Peak SAR (extrapolated) = 0.748 W/kg

**SAR(1 g) = 0.365 mW/g; SAR(10 g) = 0.184 mW/g**  
Maximum value of SAR (measured) = 0.402 mW/g



0 dB = 0.402mW/g

## Re\_Tilt\_WLAN 802.11 b\_CH1\_Slider on

DUT: Kais140; Type WLAN 802.11; IMEI: 35972801001016601

Communication System: Wireless LAN; Frequency: 2412 MHz; Duty Cycle: 1:1  
Medium: HEAD 2450 Medium parameters used:  $f = 2412 \text{ MHz}$ ;  $\sigma = 1.79 \text{ mho/m}$ ;  $\epsilon_r = 40.7$ ;  $\rho = 1000 \text{ kg/m}^3$

Phantom section: Right Section

DASY4 Configuration:

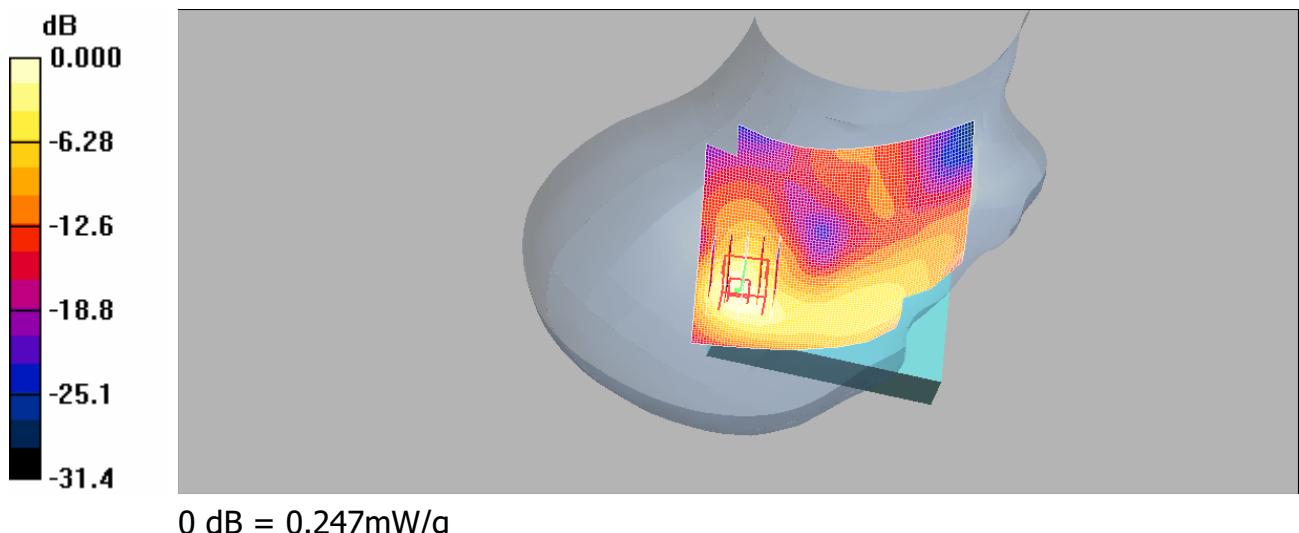
- Probe: EX3DV3 - SN3526; Calibrated: 2007/8/29
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn547; Calibrated: 2007/10/1
- Phantom: SAM2; Type: SAM 4.0; Serial: TP:1270
- Measurement SW: DASY4, V4.7 Build 55; Postprocessing SW: SEMCAD, V1.8 Build 176

**Re\_Tilt/Area Scan (81x91x1):** Measurement grid:  $dx=15\text{mm}$ ,  $dy=15\text{mm}$   
Maximum value of SAR (interpolated) = 0.270 mW/g

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

Reference Value = 11.4 V/m; Power Drift = -0.071 dB  
Peak SAR (extrapolated) = 0.518 W/kg

**SAR(1 g) = 0.229 mW/g; SAR(10 g) = 0.107 mW/g**  
Maximum value of SAR (measured) = 0.247 mW/g



## Re\_Tilt\_WLAN 802.11 b\_CH6\_Slider on

DUT: Kais140; Type WLAN 802.11; IMEI: 35972801001016601

Communication System: Wireless LAN; Frequency: 2437 MHz; Duty Cycle: 1:1  
Medium: HEAD 2450 Medium parameters used:  $f = 2437$  MHz;  $\sigma = 1.82$  mho/m;  $\epsilon_r = 40.3$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Phantom section: Right Section

DASY4 Configuration:

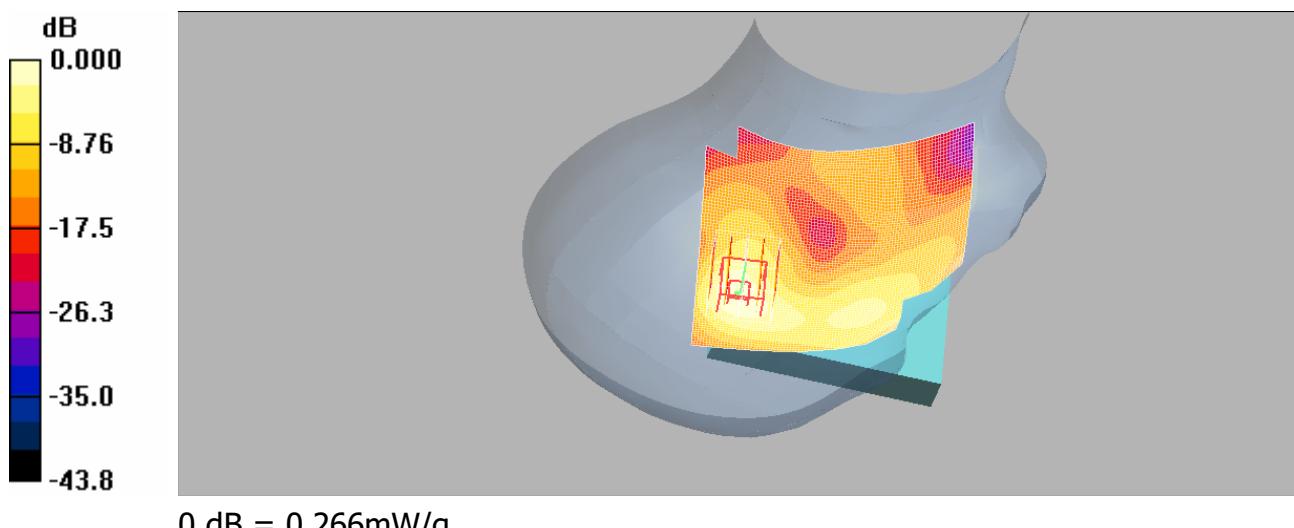
- Probe: EX3DV3 - SN3526; Calibrated: 2007/8/29
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn547; Calibrated: 2007/10/1
- Phantom: SAM2; Type: SAM 4.0; Serial: TP:1270
- Measurement SW: DASY4, V4.7 Build 55; Postprocessing SW: SEMCAD, V1.8 Build 176

**Re\_Tilt/Area Scan (81x91x1):** Measurement grid: dx=15mm, dy=15mm  
Maximum value of SAR (interpolated) = 0.279 mW/g

**Re\_Tilt/Zoom Scan (5x5x7)/Cube 0:** Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 11.5 V/m; Power Drift = 0.026 dB  
Peak SAR (extrapolated) = 0.555 W/kg

**SAR(1 g) = 0.244 mW/g; SAR(10 g) = 0.112 mW/g**  
Maximum value of SAR (measured) = 0.266 mW/g



## Re\_Tilt\_WLAN 802.11 b\_CH11\_Slider on

DUT: Kais140; Type WLAN 802.11; IMEI: 35972801001016601

Communication System: Wireless LAN; Frequency: 2462 MHz; Duty Cycle: 1:1  
Medium: HEAD 2450 Medium parameters used:  $f = 2462$  MHz;  $\sigma = 1.87$  mho/m;  $\epsilon_r = 40.1$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Phantom section: Right Section

DASY4 Configuration:

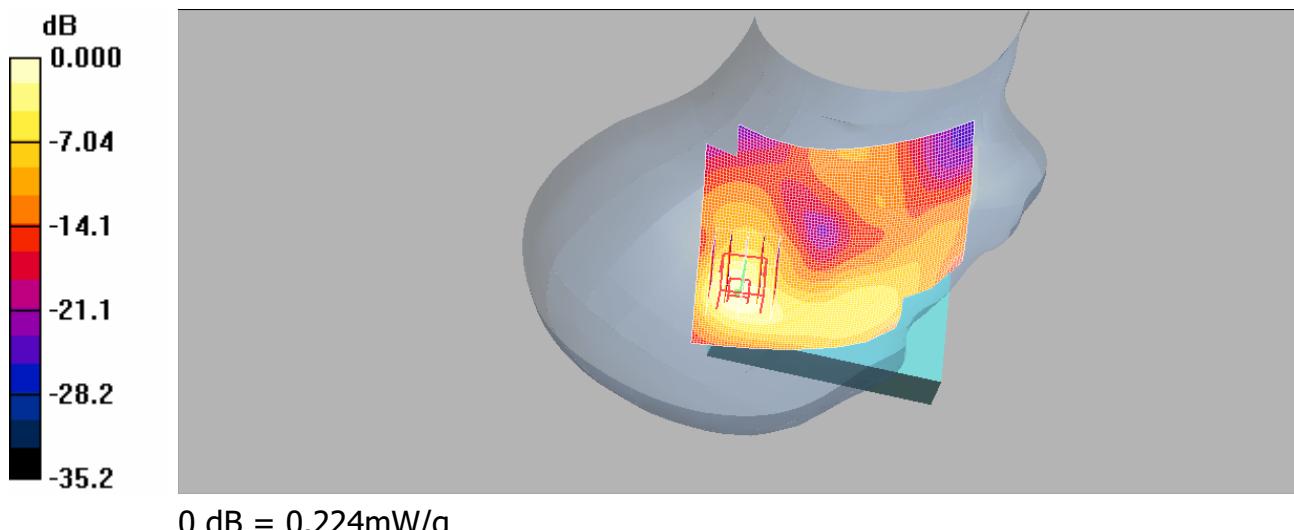
- Probe: EX3DV3 - SN3526; Calibrated: 2007/8/29
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn547; Calibrated: 2007/10/1
- Phantom: SAM2; Type: SAM 4.0; Serial: TP:1270
- Measurement SW: DASY4, V4.7 Build 55; Postprocessing SW: SEMCAD, V1.8 Build 176

**Re\_Tilt/Area Scan (81x91x1):** Measurement grid: dx=15mm, dy=15mm  
Maximum value of SAR (interpolated) = 0.244 mW/g

**Re\_Tilt/Zoom Scan (5x5x7)/Cube 0:** Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 10.7 V/m; Power Drift = 0.018 dB  
Peak SAR (extrapolated) = 0.476 W/kg

**SAR(1 g) = 0.208 mW/g; SAR(10 g) = 0.096 mW/g**  
Maximum value of SAR (measured) = 0.224 mW/g



## Le\_Tilt\_WLAN 802.11 b\_CH1\_Slider on

DUT: Kais140; Type WLAN 802.11; IMEI: 35972801001016601

Communication System: Wireless LAN; Frequency: 2412 MHz; Duty Cycle: 1:1  
Medium: HEAD 2450 Medium parameters used:  $f = 2412 \text{ MHz}$ ;  $\sigma = 1.79 \text{ mho/m}$ ;  $\epsilon_r = 40.7$ ;  $\rho = 1000 \text{ kg/m}^3$

Phantom section: Left Section

DASY4 Configuration:

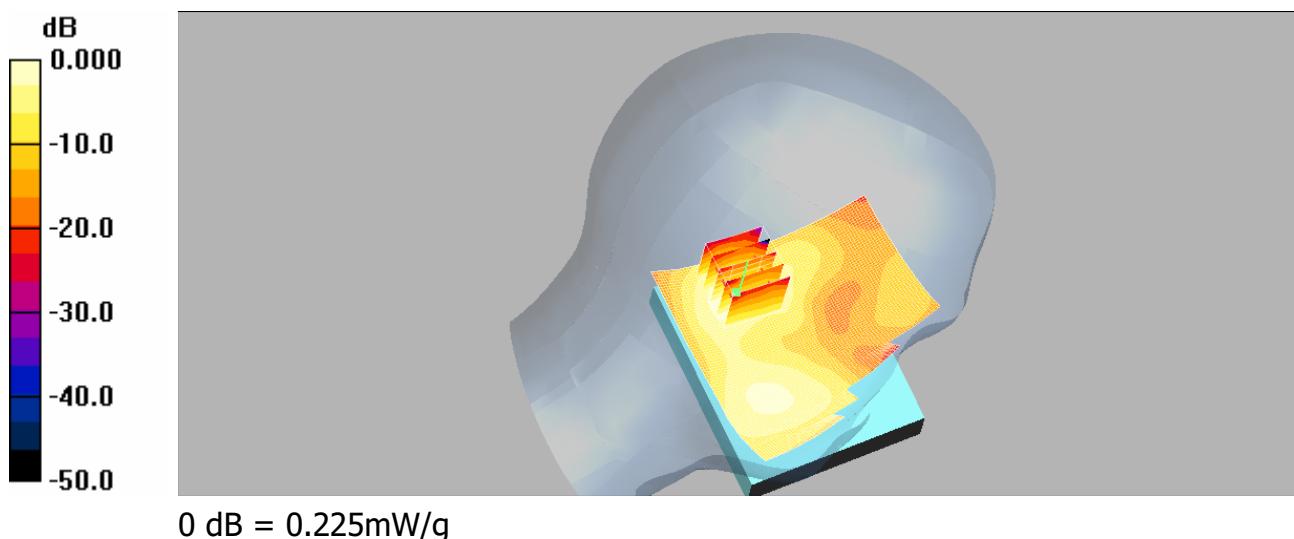
- Probe: EX3DV3 - SN3526; Calibrated: 2007/8/29
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn547; Calibrated: 2007/10/1
- Phantom: SAM2; Type: SAM 4.0; Serial: TP:1270
- Measurement SW: DASY4, V4.7 Build 55; Postprocessing SW: SEMCAD, V1.8 Build 176

**Le\_Tilt/Area Scan (81x91x1):** Measurement grid:  $dx=15\text{mm}$ ,  $dy=15\text{mm}$   
Maximum value of SAR (interpolated) = 0.207 mW/g

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

Reference Value = 11.3 V/m; Power Drift = -0.048 dB  
Peak SAR (extrapolated) = 0.446 W/kg

**SAR(1 g) = 0.200 mW/g; SAR(10 g) = 0.093 mW/g**  
Maximum value of SAR (measured) = 0.225 mW/g



## Le\_Tilt\_WLAN 802.11 b\_CH6\_Slider on

DUT: Kais140; Type WLAN 802.11; IMEI: 35972801001016601

Communication System: Wireless LAN; Frequency: 2437 MHz; Duty Cycle: 1:1  
Medium: HEAD 2450 Medium parameters used:  $f = 2437$  MHz;  $\sigma = 1.82$  mho/m;  $\epsilon_r = 40.3$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Phantom section: Left Section

DASY4 Configuration:

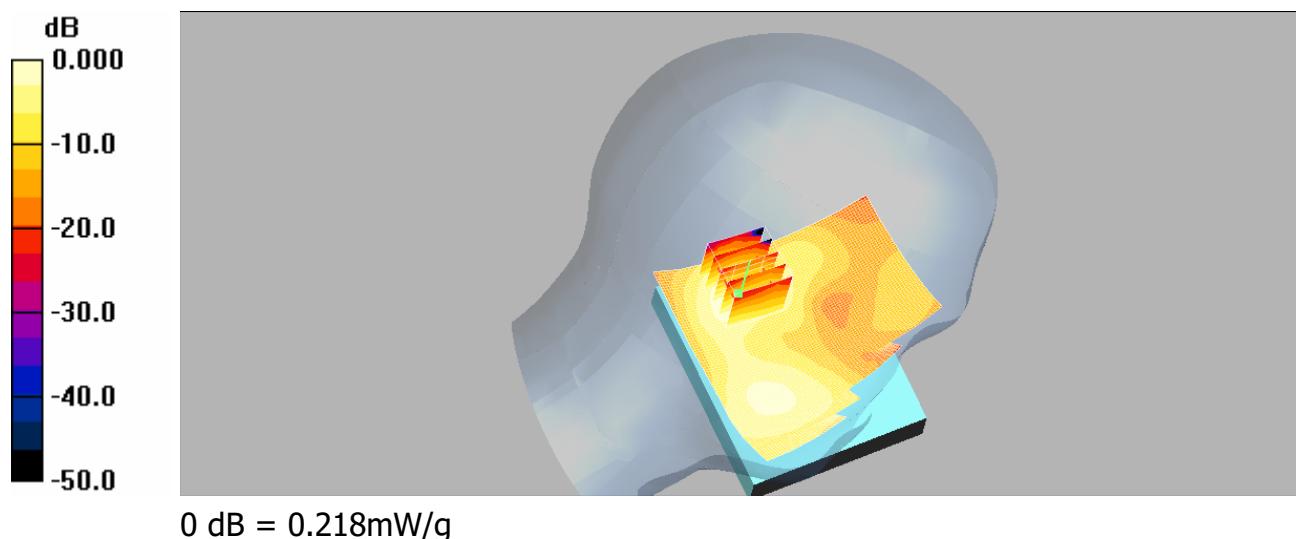
- Probe: EX3DV3 - SN3526; Calibrated: 2007/8/29
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn547; Calibrated: 2007/10/1
- Phantom: SAM2; Type: SAM 4.0; Serial: TP:1270
- Measurement SW: DASY4, V4.7 Build 55; Postprocessing SW: SEMCAD, V1.8 Build 176

**Le\_Tilt/Area Scan (81x91x1):** Measurement grid: dx=15mm, dy=15mm  
Maximum value of SAR (interpolated) = 0.207 mW/g

**Le\_Tilt/Zoom Scan (5x5x7)/Cube 0:** Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 10.8 V/m; Power Drift = -0.005 dB  
Peak SAR (extrapolated) = 0.440 W/kg

**SAR(1 g) = 0.194 mW/g; SAR(10 g) = 0.089 mW/g**  
Maximum value of SAR (measured) = 0.218 mW/g



## **Le\_Tilt\_WLAN 802.11 b\_CH11\_Slider on**

**DUT: Kais140; Type WLAN 802.11; IMEI: 35972801001016601**

Communication System: Wireless LAN; Frequency: 2462 MHz; Duty Cycle: 1:1  
Medium: HEAD 2450 Medium parameters used:  $f = 2462$  MHz;  $\sigma = 1.87$  mho/m;  $\epsilon_r = 40.1$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Phantom section: Left Section

DASY4 Configuration:

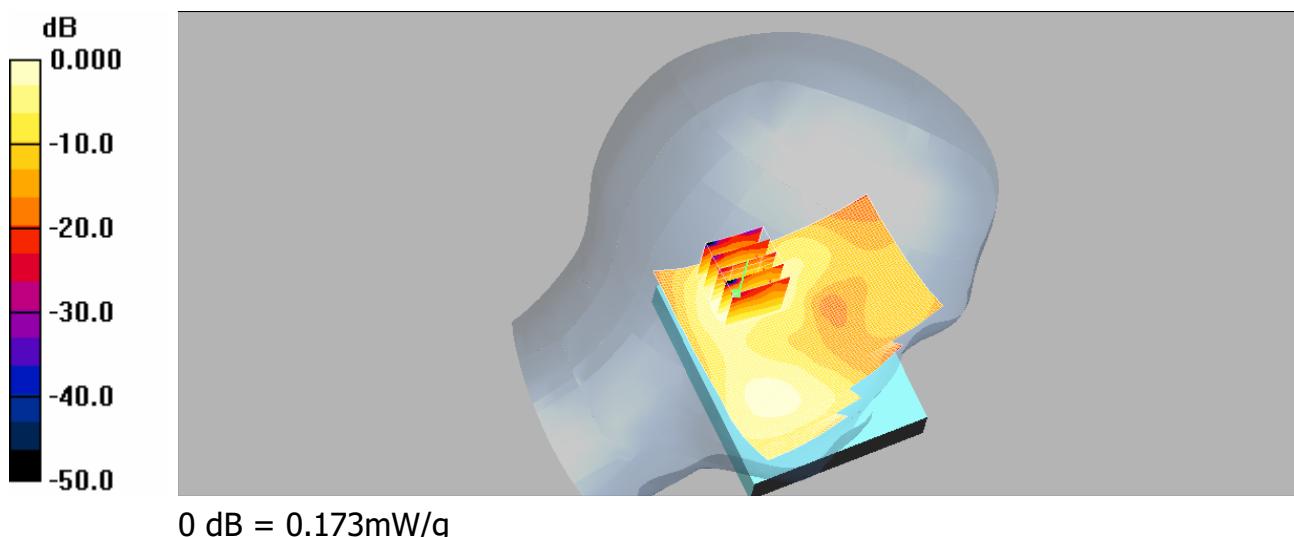
- Probe: EX3DV3 - SN3526; Calibrated: 2007/8/29
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn547; Calibrated: 2007/10/1
- Phantom: SAM2; Type: SAM 4.0; Serial: TP:1270
- Measurement SW: DASY4, V4.7 Build 55; Postprocessing SW: SEMCAD, V1.8 Build 176

**Le\_Tilt/Area Scan (81x91x1):** Measurement grid: dx=15mm, dy=15mm  
Maximum value of SAR (interpolated) = 0.168 mW/g

**Le\_Tilt/Zoom Scan (5x5x7)/Cube 0:** Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 9.75 V/m; Power Drift = -0.087 dB  
Peak SAR (extrapolated) = 0.357 W/kg

**SAR(1 g) = 0.157 mW/g; SAR(10 g) = 0.072 mW/g**  
Maximum value of SAR (measured) = 0.173 mW/g



## **Re\_Cheek\_WLAN 802.11 b\_CH11\_Hold up**

**DUT: Kais140; Type WLAN 802.11; IMEI: 35972801001016601**

Communication System: Wireless LAN; Frequency: 2462 MHz; Duty Cycle: 1:1  
Medium: HEAD 2450 Medium parameters used:  $f = 2462$  MHz;  $\sigma = 1.87$  mho/m;  $\epsilon_r = 40.1$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Phantom section: Right Section

DASY4 Configuration:

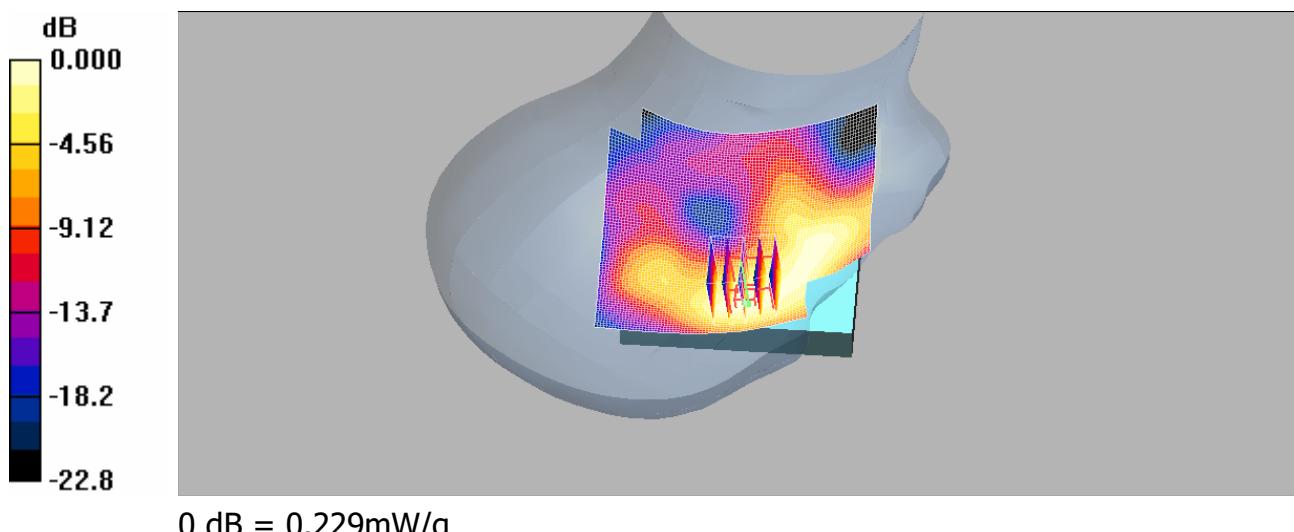
- Probe: EX3DV3 - SN3526; Calibrated: 2007/8/29
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn547; Calibrated: 2007/10/1
- Phantom: SAM2; Type: SAM 4.0; Serial: TP:1270
- Measurement SW: DASY4, V4.7 Build 55; Postprocessing SW: SEMCAD, V1.8 Build 176

**Re\_Cheek/Area Scan (81x91x1):** Measurement grid: dx=15mm, dy=15mm  
Maximum value of SAR (interpolated) = 0.205 mW/g

**Re\_Cheek/Zoom Scan (5x5x7)/Cube 0:** Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 5.91 V/m; Power Drift = -0.124 dB  
Peak SAR (extrapolated) = 0.398 W/kg

**SAR(1 g) = 0.204 mW/g; SAR(10 g) = 0.109 mW/g**  
Maximum value of SAR (measured) = 0.229 mW/g



## Le\_Cheek\_WLAN 802.11 b\_CH11\_Hlod up

**DUT: Kais140; Type WLAN 802.11; IMEI: 35972801001016601**

Communication System: Wireless LAN; Frequency: 2462 MHz; Duty Cycle: 1:1  
Medium: HEAD 2450 Medium parameters used:  $f = 2462$  MHz;  $\sigma = 1.87$  mho/m;  $\epsilon_r = 40.1$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Phantom section: Left Section

DASY4 Configuration:

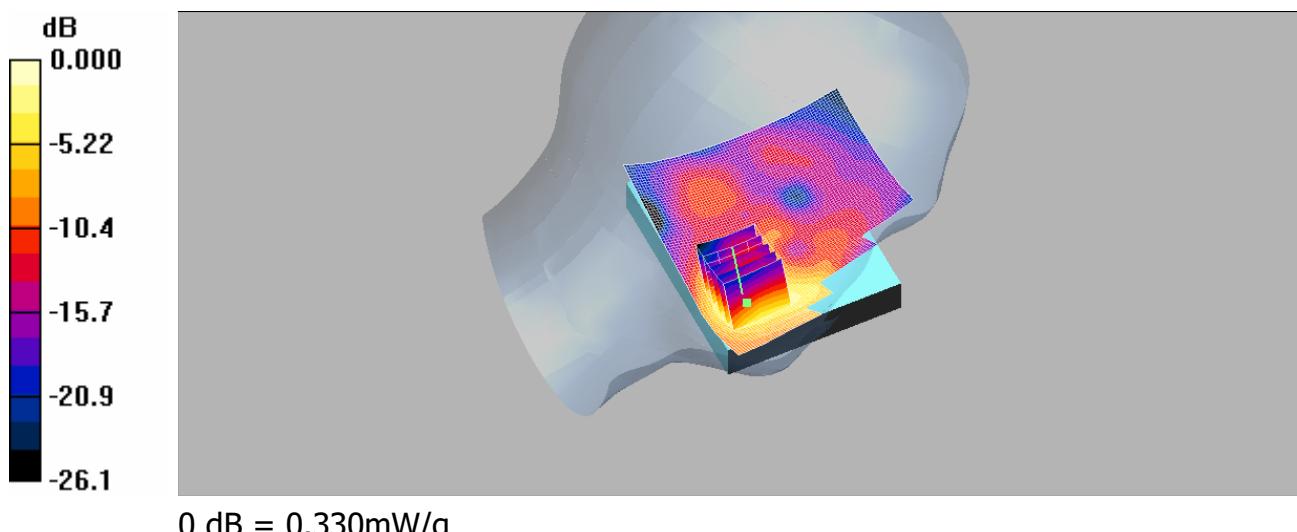
- Probe: EX3DV3 - SN3526; Calibrated: 2007/8/29
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn547; Calibrated: 2007/10/1
- Phantom: SAM2; Type: SAM 4.0; Serial: TP:1270
- Measurement SW: DASY4, V4.7 Build 55; Postprocessing SW: SEMCAD, V1.8 Build 176

**Le\_Cheek/Area Scan (81x91x1):** Measurement grid: dx=15mm, dy=15mm  
Maximum value of SAR (interpolated) = 0.336 mW/g

**Le\_Cheek/Zoom Scan (5x5x7)/Cube 0:** Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 3.95 V/m; Power Drift = 0.108 dB  
Peak SAR (extrapolated) = 0.573 W/kg

**SAR(1 g) = 0.299 mW/g; SAR(10 g) = 0.155 mW/g**  
Maximum value of SAR (measured) = 0.330 mW/g



## **Le\_Cheek\_WLAN 802.11 b\_CH6\_Slider on\_\_ repeated with Memory card**

**DUT: Kais140; TypeWLAN 802.11; IMEI: 35972801001016601**

Communication System: Wireless LAN; Frequency: 2437 MHz; Duty Cycle: 1:1  
Medium: HEAD 2450 Medium parameters used:  $f = 2437 \text{ MHz}$ ;  $\sigma = 1.82 \text{ mho/m}$ ;  $\epsilon_r = 40.3$ ;  $\rho = 1000 \text{ kg/m}^3$

Phantom section: Left Section

DASY4 Configuration:

- Probe: EX3DV3 - SN3526; Calibrated: 2007/8/29
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn547; Calibrated: 2007/10/1
- Phantom: SAM2; Type: SAM 4.0; Serial: TP:1270
- Measurement SW: DASY4, V4.7 Build 55; Postprocessing SW: SEMCAD, V1.8 Build 176

**Le\_Cheek/Area Scan (81x91x1):** Measurement grid:  $dx=15\text{mm}$ ,  $dy=15\text{mm}$

Maximum value of SAR (interpolated) = 0.488 mW/g

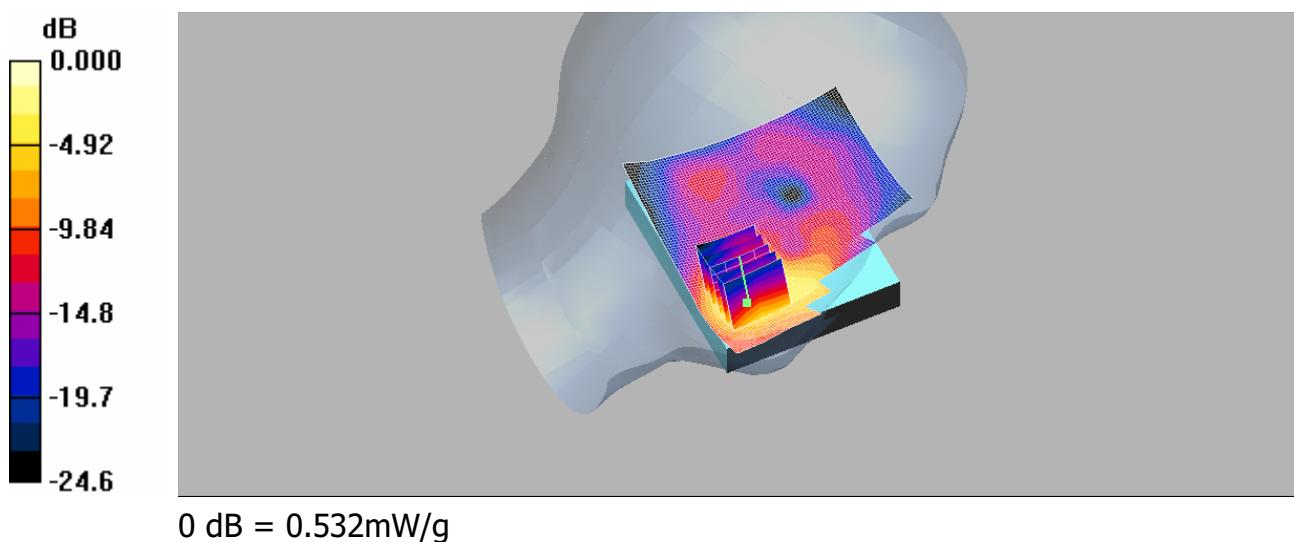
**Le\_Cheek/Zoom Scan (5x5x7)/Cube 0:** Measurement grid:  $dx=8\text{mm}$ ,  $dy=8\text{mm}$ ,  $dz=5\text{mm}$

Reference Value = 4.62 V/m; Power Drift = -0.193 dB

Peak SAR (extrapolated) = 0.998 W/kg

**SAR(1 g) = 0.475 mW/g; SAR(10 g) = 0.232 mW/g**

Maximum value of SAR (measured) = 0.532 mW/g



## **Le\_Cheek\_WLAN 802.11 b\_CH6\_Slider on\_\_ repeated with Bluetooth active**

**DUT: Kais140; TypeWLAN 802.11; IMEI: 35972801001016601**

Communication System: Wireless LAN; Frequency: 2437 MHz; Duty Cycle: 1:1  
Medium: HEAD 2450 Medium parameters used:  $f = 2437 \text{ MHz}$ ;  $\sigma = 1.82 \text{ mho/m}$ ;  $\epsilon_r = 40.3$ ;  $\rho = 1000 \text{ kg/m}^3$

Phantom section: Left Section

DASY4 Configuration:

- Probe: EX3DV3 - SN3526; Calibrated: 2007/8/29
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn547; Calibrated: 2007/10/1
- Phantom: SAM2; Type: SAM 4.0; Serial: TP:1270
- Measurement SW: DASY4, V4.7 Build 55; Postprocessing SW: SEMCAD, V1.8 Build 176

**Le\_Cheek/Area Scan (81x91x1):** Measurement grid:  $dx=15\text{mm}$ ,  $dy=15\text{mm}$

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

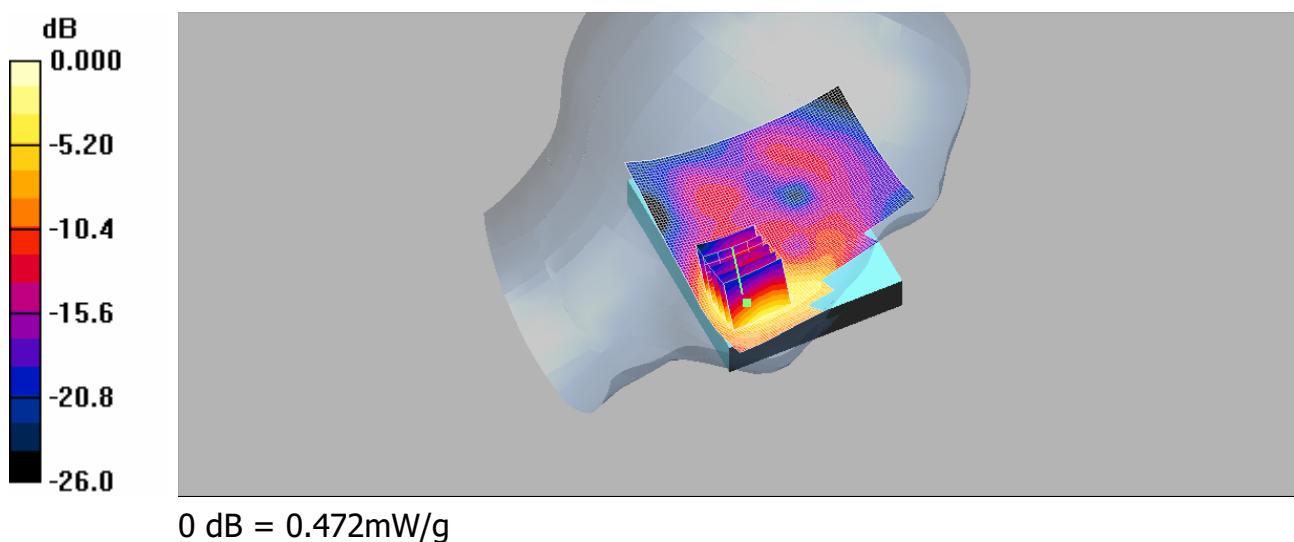
**Le\_Cheek/Zoom Scan (5x5x7)/Cube 0:** Measurement grid:  $dx=8\text{mm}$ ,  $dy=8\text{mm}$ ,  $dz=5\text{mm}$

Reference Value = 3.53 V/m; Power Drift = -0.023 dB

Peak SAR (extrapolated) = 0.869 W/kg

**SAR(1 g) = 0.432 mW/g; SAR(10 g) = 0.220 mW/g**

Maximum value of SAR (measured) = 0.472 mW/g



## **Le\_Cheek\_WLAN 802.11 b\_CH6\_Slider on\_\_ repeated with Samsung Battery**

**DUT: Kais140; TypeWLAN 802.11; IMEI: 35972801001016601**

Communication System: Wireless LAN; Frequency: 2437 MHz; Duty Cycle: 1:1  
Medium: HEAD 2450 Medium parameters used:  $f = 2437 \text{ MHz}$ ;  $\sigma = 1.82 \text{ mho/m}$ ;  $\epsilon_r = 40.3$ ;  $\rho = 1000 \text{ kg/m}^3$

Phantom section: Left Section

DASY4 Configuration:

- Probe: EX3DV3 - SN3526; Calibrated: 2007/8/29
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn547; Calibrated: 2007/10/1
- Phantom: SAM2; Type: SAM 4.0; Serial: TP:1270
- Measurement SW: DASY4, V4.7 Build 55; Postprocessing SW: SEMCAD, V1.8 Build 176

**Le\_Cheek/Area Scan (81x91x1):** Measurement grid:  $dx=15\text{mm}$ ,  $dy=15\text{mm}$

Maximum value of SAR (interpolated) = 0.490 mW/g

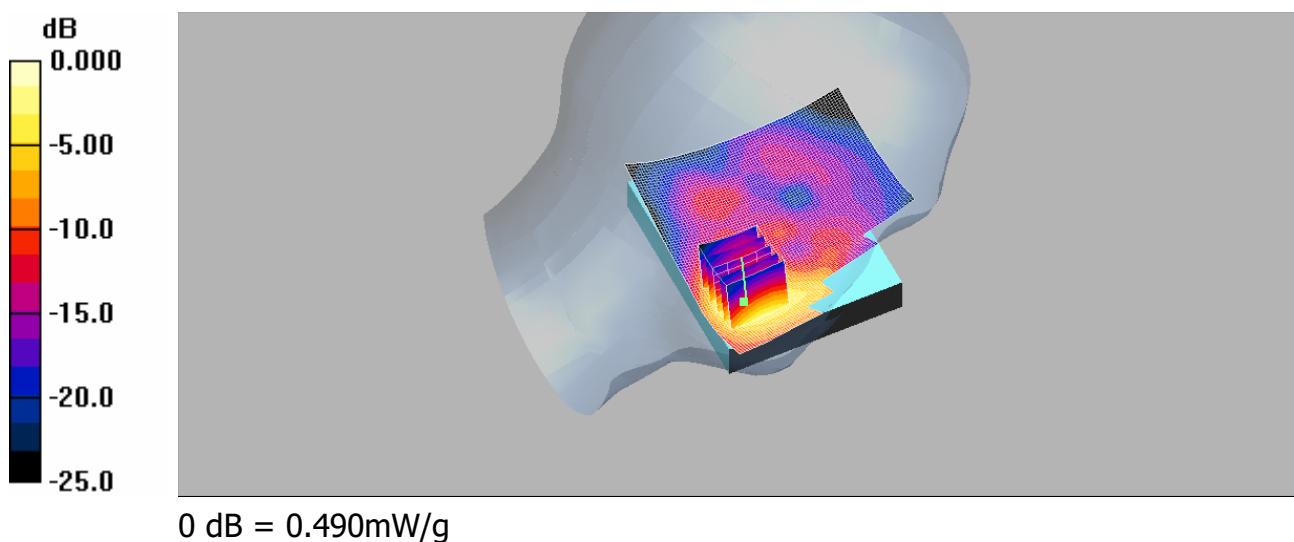
**Le\_Cheek/Zoom Scan (5x5x7)/Cube 0:** Measurement grid:  $dx=8\text{mm}$ ,  $dy=8\text{mm}$ ,  $dz=5\text{mm}$

Reference Value = 3.43 V/m; Power Drift = 0.067 dB

Peak SAR (extrapolated) = 0.881 W/kg

**SAR(1 g) = 0.436 mW/g; SAR(10 g) = 0.215 mW/g**

Maximum value of SAR (measured) = 0.490 mW/g



## BODY\_WLAN 802.11 b\_CH1

**DUT: Kais140; Type WLAN 802.11; IMEI: 35972801001016601**

Communication System: Wireless LAN; Frequency: 2412 MHz; Duty Cycle: 1:1  
Medium: Muscle 2450 Medium parameters used:  $f = 2412 \text{ MHz}$ ;  $\sigma = 1.93 \text{ mho/m}$ ;  $\epsilon_r = 51.1$ ;  $\rho = 1000 \text{ kg/m}^3$   
Phantom section: Flat Section

DASY4 Configuration:

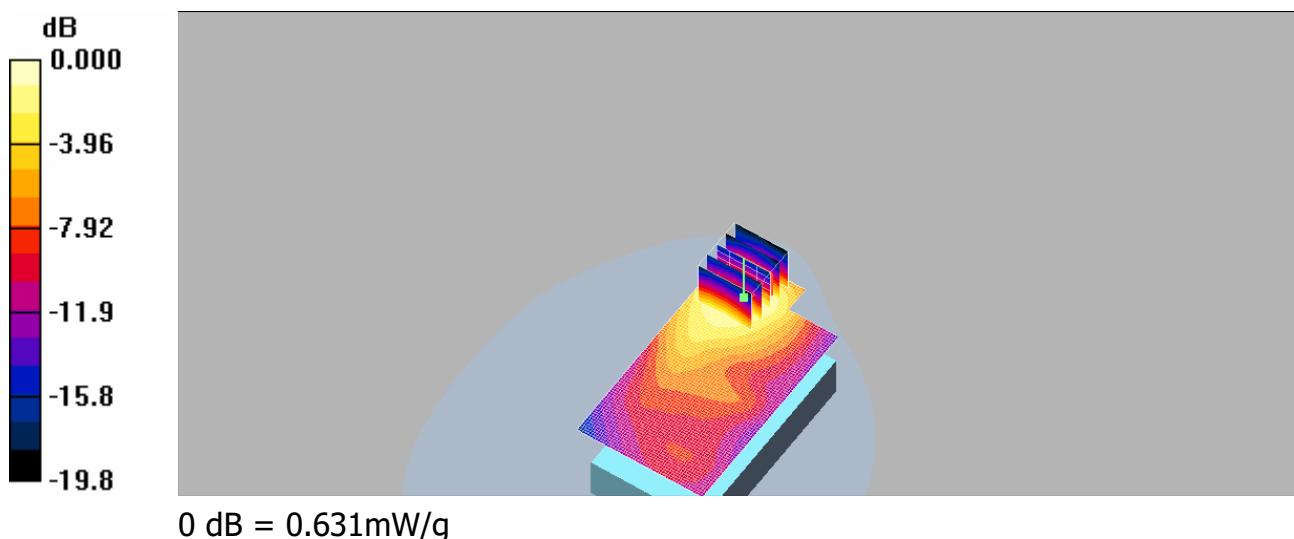
- Probe: EX3DV3 - SN3526; Calibrated: 2007/8/29
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn547; Calibrated: 2007/10/1
- Phantom: SAM2; Type: SAM 4.0; Serial: TP:1270
- Measurement SW: DASY4, V4.7 Build 55; Postprocessing SW: SEMCAD, V1.8 Build 176

**BODY/Area Scan (51x91x1):** Measurement grid:  $dx=15\text{mm}$ ,  $dy=15\text{mm}$   
Maximum value of SAR (interpolated) = 0.608 mW/g

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

Reference Value = 5.61 V/m; Power Drift = -0.148 dB  
Peak SAR (extrapolated) = 1.06 W/kg

**SAR(1 g) = 0.568 mW/g; SAR(10 g) = 0.301 mW/g**  
Maximum value of SAR (measured) = 0.631 mW/g



## BODY\_WLAN 802.11 b\_CH6

**DUT: Kais140; Type WLAN 802.11; IMEI: 35972801001016601**

Communication System: Wireless LAN; Frequency: 2437 MHz; Duty Cycle: 1:1  
Medium: Muscle 2450 Medium parameters used:  $f = 2437$  MHz;  $\sigma = 1.96$  mho/m;  $\epsilon_r = 51$ ;  $\rho = 1000$  kg/m<sup>3</sup>  
Phantom section: Flat Section

DASY4 Configuration:

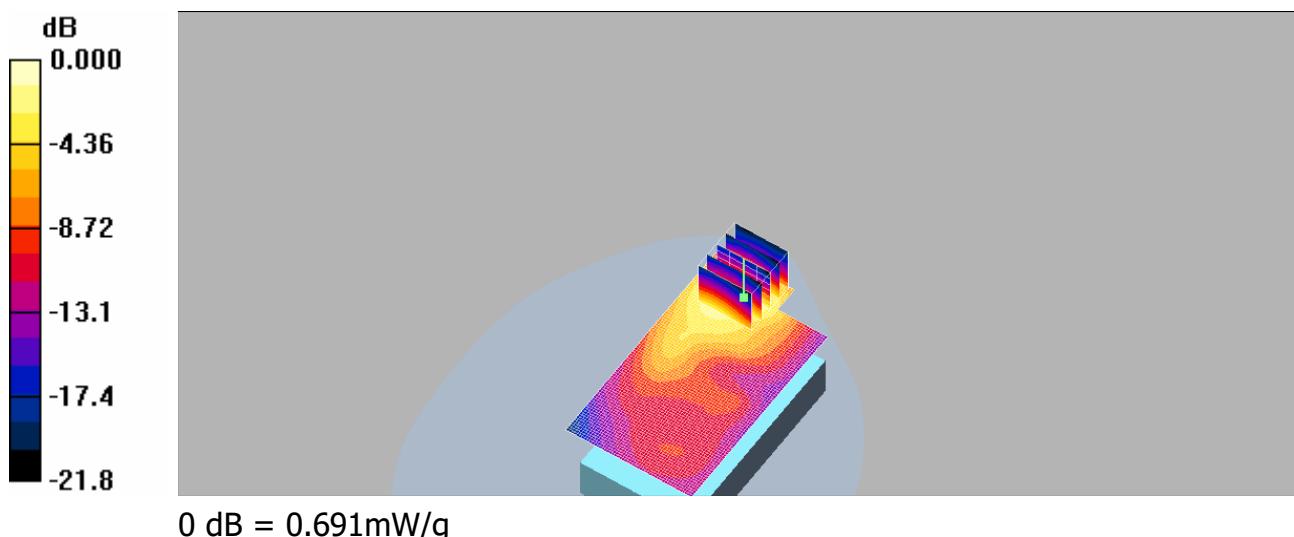
- Probe: EX3DV3 - SN3526; Calibrated: 2007/8/29
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn547; Calibrated: 2007/10/1
- Phantom: SAM2; Type: SAM 4.0; Serial: TP:1270
- Measurement SW: DASY4, V4.7 Build 55; Postprocessing SW: SEMCAD, V1.8 Build 176

**BODY/Area Scan (51x91x1):** Measurement grid: dx=15mm, dy=15mm  
Maximum value of SAR (interpolated) = 0.686 mW/g

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

Reference Value = 5.03 V/m; Power Drift = -0.143 dB  
Peak SAR (extrapolated) = 1.22 W/kg

**SAR(1 g) = 0.615 mW/g; SAR(10 g) = 0.305 mW/g**  
Maximum value of SAR (measured) = 0.691 mW/g



## BODY\_WLAN 802.11 b\_CH11

**DUT: Kais140; Type WLAN 802.11; IMEI: 35972801001016601**

Communication System: Wireless LAN; Frequency: 2462 MHz; Duty Cycle: 1:1  
Medium: Muscle 2450 Medium parameters used:  $f = 2462$  MHz;  $\sigma = 2.01$  mho/m;  $\epsilon_r = 50.8$ ;  $\rho = 1000$  kg/m<sup>3</sup>  
Phantom section: Flat Section

DASY4 Configuration:

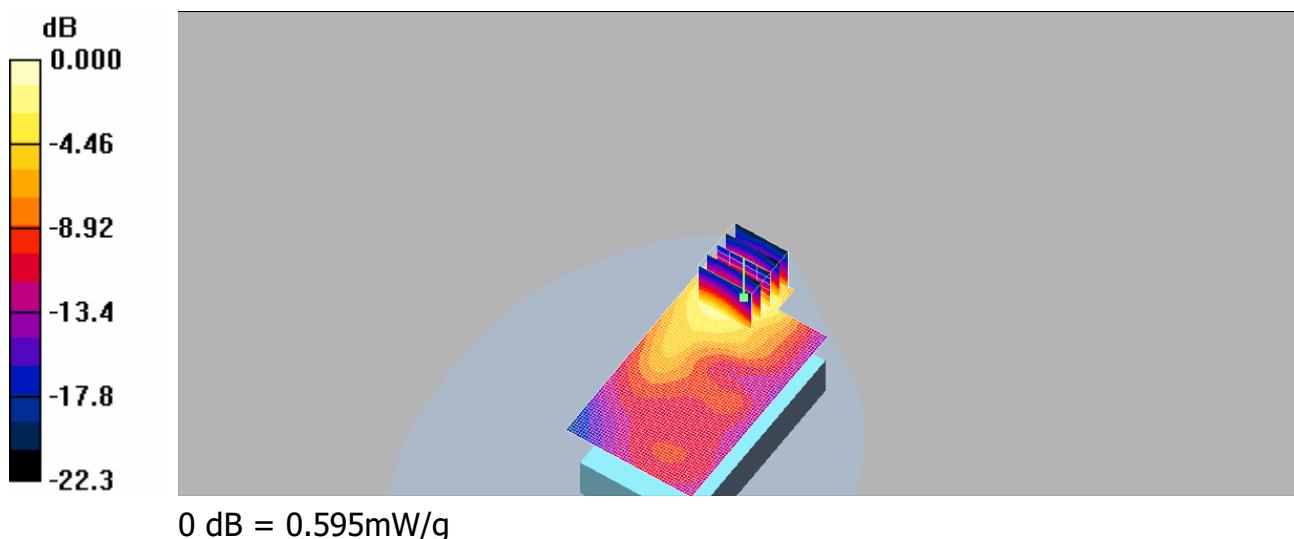
- Probe: EX3DV3 - SN3526; Calibrated: 2007/8/29
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn547; Calibrated: 2007/10/1
- Phantom: SAM2; Type: SAM 4.0; Serial: TP:1270
- Measurement SW: DASY4, V4.7 Build 55; Postprocessing SW: SEMCAD, V1.8 Build 176

**BODY/Area Scan (51x91x1):** Measurement grid: dx=15mm, dy=15mm  
Maximum value of SAR (interpolated) = 0.597 mW/g

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

Reference Value = 4.69 V/m; Power Drift = -0.148 dB  
Peak SAR (extrapolated) = 1.06 W/kg

**SAR(1 g) = 0.532 mW/g; SAR(10 g) = 0.263 mW/g**  
Maximum value of SAR (measured) = 0.595 mW/g



## **BODY\_WLAN 802.11 b\_CH6\_\_ repeated for EUT front to phantom**

**DUT: Kais140; TypeWLAN 802.11;IMEI: 35972801001016601**

Communication System: Wireless LAN; Frequency: 2437 MHz; Duty Cycle: 1:1  
Medium: Muscle 2450 Medium parameters used:  $f = 2437$  MHz;  $\sigma = 1.96$  mho/m;  $\epsilon_r = 51$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Phantom section: Flat Section

DASY4 Configuration:

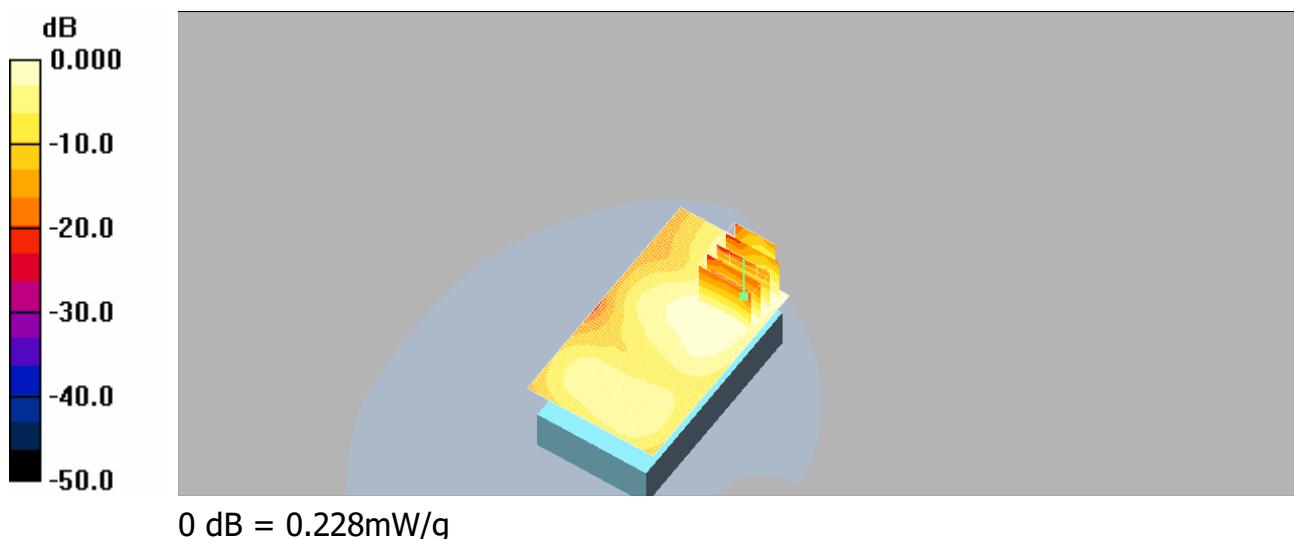
- Probe: EX3DV3 - SN3526; Calibrated: 2007/8/29
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn547; Calibrated: 2007/10/1
- Phantom: SAM2; Type: SAM 4.0; Serial: TP:1270
- Measurement SW: DASY4, V4.7 Build 55; Postprocessing SW: SEMCAD, V1.8 Build 176

**BODY/Area Scan (51x91x1):** Measurement grid: dx=15mm, dy=15mm  
Maximum value of SAR (interpolated) = 0.223 mW/g

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

Reference Value = 4.77 V/m; Power Drift = -0.023 dB  
Peak SAR (extrapolated) = 0.495 W/kg

**SAR(1 g) = 0.218 mW/g; SAR(10 g) = 0.111 mW/g**  
Maximum value of SAR (measured) = 0.228 mW/g



## **BODY\_WLAN 802.11 b\_CH6\_repeated with Memory card**

**DUT: Kais140; Type WLAN 802.11; IMEI: 35972801001016601**

Communication System: Wireless LAN; Frequency: 2437 MHz; Duty Cycle: 1:1  
Medium: Muscle 2450 Medium parameters used:  $f = 2437 \text{ MHz}$ ;  $\sigma = 1.96 \text{ mho/m}$ ;  $\epsilon_r = 51$ ;  $\rho = 1000 \text{ kg/m}^3$

Phantom section: Flat Section

DASY4 Configuration:

- Probe: EX3DV3 - SN3526; Calibrated: 2007/8/29
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn547; Calibrated: 2007/10/1
- Phantom: SAM2; Type: SAM 4.0; Serial: TP:1270
- Measurement SW: DASY4, V4.7 Build 55; Postprocessing SW: SEMCAD, V1.8 Build 176

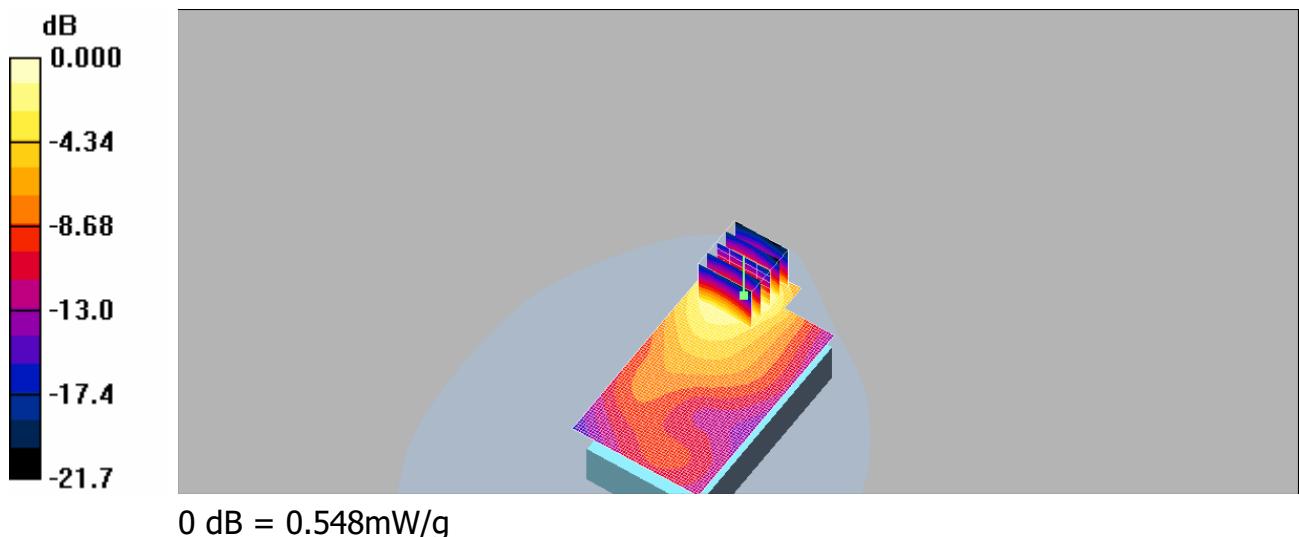
**BODY/Area Scan (51x91x1):** Measurement grid:  $dx=15\text{mm}$ ,  $dy=15\text{mm}$   
Maximum value of SAR (interpolated) = 0.548 mW/g

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

Reference Value = 5.49 V/m; Power Drift = 0.052 dB  
Peak SAR (extrapolated) = 1.04 W/kg

**SAR(1 g) = 0.504 mW/g; SAR(10 g) = 0.264 mW/g**

Maximum value of SAR (measured) = 0.548 mW/g



## **BODY\_WLAN 802.11 b\_CH6\_\_repeated with Bluetooth active**

**DUT: Kais140; TypeWLAN 802.11;IMEI: 35972801001016601**

Communication System: Wireless LAN; Frequency: 2437 MHz; Duty Cycle: 1:1  
Medium: Muscle 2450 Medium parameters used:  $f = 2437 \text{ MHz}$ ;  $\sigma = 1.96 \text{ mho/m}$ ;  $\epsilon_r = 51$ ;  $\rho = 1000 \text{ kg/m}^3$

Phantom section: Flat Section

DASY4 Configuration:

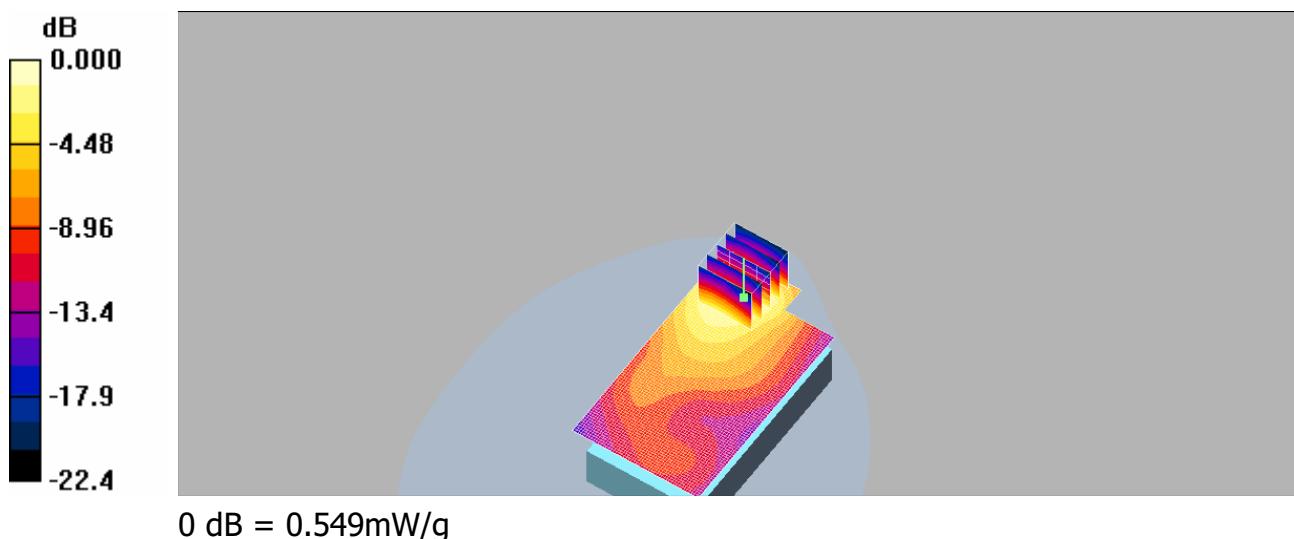
- Probe: EX3DV3 - SN3526; Calibrated: 2007/8/29
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn547; Calibrated: 2007/10/1
- Phantom: SAM2; Type: SAM 4.0; Serial: TP:1270
- Measurement SW: DASY4, V4.7 Build 55; Postprocessing SW: SEMCAD, V1.8 Build 176

**BODY/Area Scan (51x91x1):** Measurement grid:  $dx=15\text{mm}$ ,  $dy=15\text{mm}$   
Maximum value of SAR (interpolated) = 0.547 mW/g

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

Reference Value = 5.54 V/m; Power Drift = -0.031 dB  
Peak SAR (extrapolated) = 1.02 W/kg

**SAR(1 g) = 0.501 mW/g; SAR(10 g) = 0.261 mW/g**  
Maximum value of SAR (measured) = 0.549 mW/g



## **BODY\_WLAN 802.11 b\_CH6\_\_repeated with Samsung Battery**

**DUT: Kais140; TypeWLAN 802.11;IMEI: 35972801001016601**

Communication System: Wireless LAN; Frequency: 2437 MHz; Duty Cycle: 1:1  
Medium: Muscle 2450 Medium parameters used:  $f = 2437$  MHz;  $\sigma = 1.96$  mho/m;  $\epsilon_r = 51$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Phantom section: Flat Section

DASY4 Configuration:

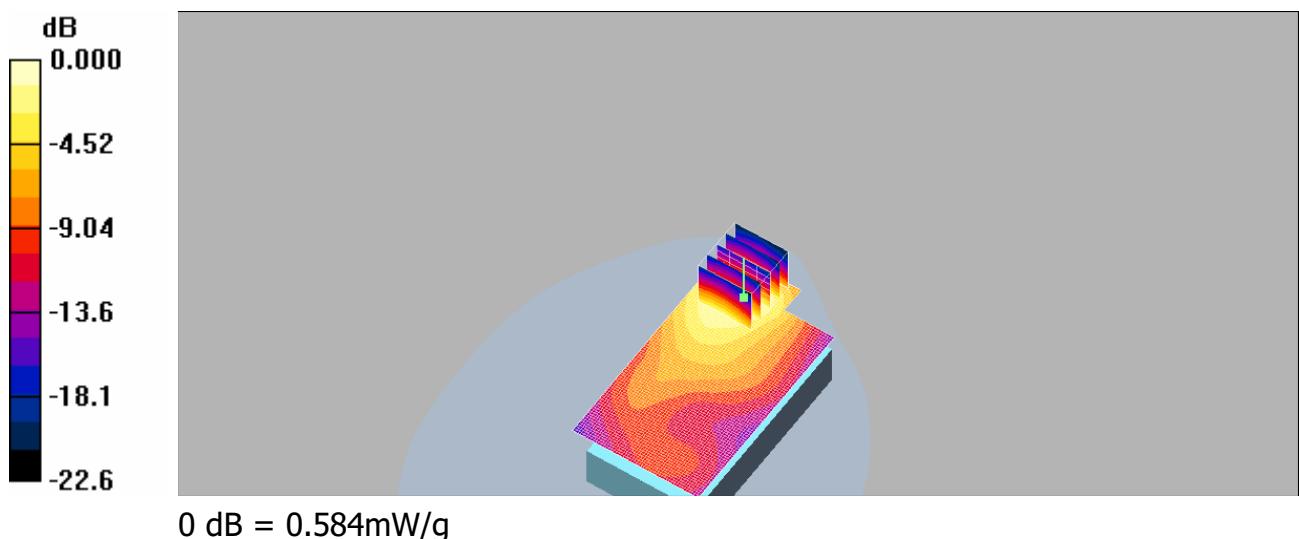
- Probe: EX3DV3 - SN3526; Calibrated: 2007/8/29
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn547; Calibrated: 2007/10/1
- Phantom: SAM2; Type: SAM 4.0; Serial: TP:1270
- Measurement SW: DASY4, V4.7 Build 55; Postprocessing SW: SEMCAD, V1.8 Build 176

**BODY/Area Scan (51x91x1):** Measurement grid: dx=15mm, dy=15mm  
Maximum value of SAR (interpolated) = 0.590 mW/g

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

Reference Value = 5.70 V/m; Power Drift = 0.030 dB  
Peak SAR (extrapolated) = 1.10 W/kg

**SAR(1 g) = 0.537 mW/g; SAR(10 g) = 0.278 mW/g**  
Maximum value of SAR (measured) = 0.584 mW/g



## **RE\_Cheek\_WLAN 802.11 g\_CH1\_Slider off**

**DUT: Kais140; TypeWLAN 802.11;IMEI: 35972801001016601**

Communication System: Wireless LAN; Frequency: 2412 MHz; Duty Cycle: 1:1  
Medium: HEAD 2450 Medium parameters used:  $f = 2412 \text{ MHz}$ ;  $\sigma = 1.79 \text{ mho/m}$ ;  $\epsilon_r = 40.7$ ;  $\rho = 1000 \text{ kg/m}^3$

Phantom section: Right Section

DASY4 Configuration:

- Probe: EX3DV3 - SN3526; Calibrated: 2007/8/29
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn547; Calibrated: 2007/10/1
- Phantom: SAM2; Type: SAM 4.0; Serial: TP:1270
- Measurement SW: DASY4, V4.7 Build 55; Postprocessing SW: SEMCAD, V1.8 Build 176

**RE\_Cheek/Area Scan (61x91x1):** Measurement grid:  $dx=15\text{mm}$ ,  $dy=15\text{mm}$   
Maximum value of SAR (interpolated) = 0.065 mW/g

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

Reference Value = 2.09 V/m; Power Drift = 0.161 dB  
Peak SAR (extrapolated) = 0.105 W/kg

**SAR(1 g) = 0.057 mW/g; SAR(10 g) = 0.031 mW/g**  
Maximum value of SAR (measured) = 0.062 mW/g

