

# SAR TEST REPORT

Equipment Under Test	Pocket Pc mobile Phone
Model Name	P30i
Company Name	Mobile XP Technology Co., LTD
Company Address	No.9 Shangdi East Road, Haidian District Beijing 100085 P.R.China
Date of Receipt	2007.07.27
Date of Test(s)	2007.08.10-2007.08.11
Date of Issue	2007.10.03

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 Electronics & Communication Laboratory Services or testing done by SGS Taiwan Electronics & Communication Laboratory Services in connection with distribution or use of the product described in this report must be approved by SGS Taiwan Electronics & Communication Laboratory Services in writing.

Tested by : LEO HSU



Date : 2007.08.23

Approved by : DIKIN YANG



Date : 2007.10.03

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# 1. General Information

## 1.1 Testing Laboratory

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Telephone	+886-2-2299-3279
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Internet	<a href="http://www.tw.sgs.com/">http://www.tw.sgs.com/</a>

## 1.2 Details of Applicant

Company Name	Mobile XP Technology Co., LTD
Company Address	No.9 Shangdi East Road, Haidian District Beijing 100085 P.R.China
Telephone	+861062981099
Fax	+861062981099-601
Contact Person	Sudan Yang
E-mail	<a href="mailto:Yangxudong@mbpchina.com">Yangxudong@mbpchina.com</a>

## 1.3 Description of EUT

EUT Name	Pocket Pc mobile Phone	
Model Name	P30i	
Brand Name	JAMA101	
IMEI Code	355313010110117	
Mode of Operation	GSM /GPRS	
Modulation mode	GMSK/QPSK	
Duty Cycle	GSM	GPRS/
	1/8	1/4
Maximum RF Conducted Power (Average)	30.42 dBm	

TX Frequency Range (MHz)	1850-1910	
Channel Number (ARFCN)	512-810	
Battery Type	3.7V Lithium-Ion	
Antenna Type	PIFA	
Antenna Gain (Average, dBi)	0.67	
H/W Version	BP01	
S/W Version	53287185	
Max. SAR Measured (1 g)	Head	Body
	0.289 W/kg (At GSM1900, Left-Tilt 810 Channel and repeated with Memory Card)	0.333 W/kg (At GSM1900, GPRS mode, 810 Channel)

#### 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 Wireless Communications Tester (Agilent 8960), and the communication between the EUT and the tester is established by air link. Measurements are performed respectively on the lowest, middle and highest channels of the operating band(s). The EUT is set to maximum power level during all tests, and at the beginning of each test the battery is fully charged.
2. Testing SAR with dominant transmitter ON and co-located Bluetooth transmitter OFF to find the highest head-position SAR measurement value.
3. For highest SAR configuration in this band repeated with SD-Card
4. Testing SAR with dominant transmitter and co-located Bluetooth transmitter both ON for head-position worst case configuration.
5. Testing body-worn SAR with Bluetooth transmitter OFF by separating 1.5cm between the back of the EUT and the flat phantom in GPRS mode.
6. For highest SAR configuration in this band repeated in EUT front to Phantom
7. For highest SAR configuration in this band repeated with SD-Card.
8. For highest SAR configuration in this band repeated with Headset.
9. Testing body-worn SAR with Bluetooth transmitter ON in GPRS mode at the body-worn worst case configuration.

10. 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 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 EX3DV4 3578-field probe is used to determine the internal electric fields. The SAR can be obtained from the equation  $SAR = \sigma (|E|^2) / \rho$  where  $\sigma$  and  $\rho$  are the conductivity and mass density of the tissue-simulant.

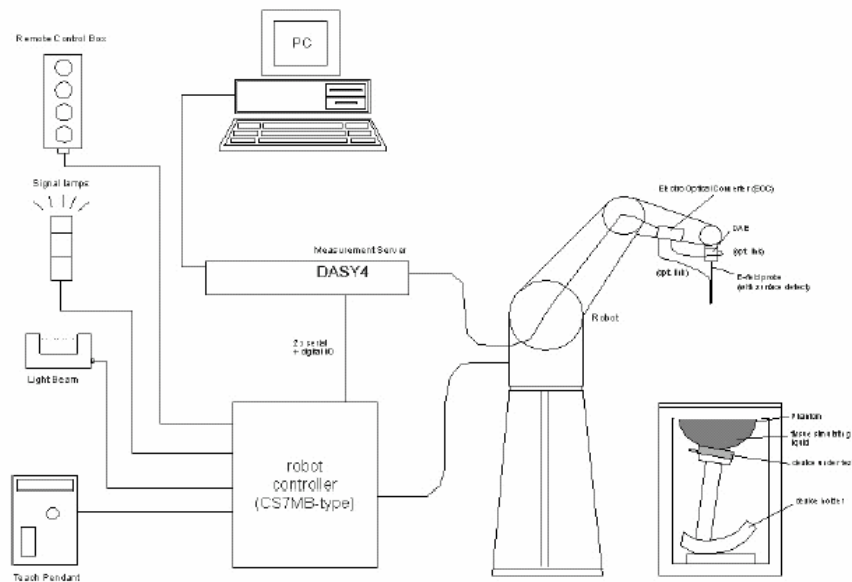


Fig.a The microwave circuit arrangement used for SAR system verification

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.

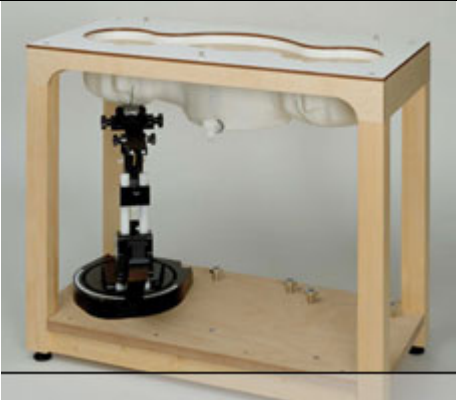
## 1.7 System Components

### EX3DV4 E-Field Probe


Construction:	Symmetrical design with triangular core Built-in shielding against static charges PEEK enclosure material (resistant to organic solvents, e.g., DGBE)	
Calibration:	Basic Broad Band Calibration in air Conversion Factors (CF) for HSL1900 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%.	

### SAM PHANTOM V4.0C

Construction:	The shell corresponds to the specifications of the Specific
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	<p>Anthropomorphic Mannequin (SAM) phantom defined in IEEE 1528-200X, CENELEC 50361 and IEC 62209.</p> <p>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.</p>	
Shell Thickness:	2 ± 0.2 mm	
Filling Volume:	Approx. 25 liters	
Dimensions:	<p>Height: 251 mm;</p> <p>Length: 1000 mm;</p> <p>Width: 500 mm</p>	

#### DEVICE HOLDER

Construction	<p>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).</p>	 <p>Device Holder</p>
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### 1.8 SAR System Verification

The microwave circuit arrangement for system verification is sketched in Fig. b. The daily system accuracy verification occurs within the flat section of the SAM phantom. A SAR measurement was performed to see if the measured SAR was within +/- 10% from the target SAR values. These tests were done at 1900 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 (SAR values are normalized to 1W forward power delivered to the dipole). 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.

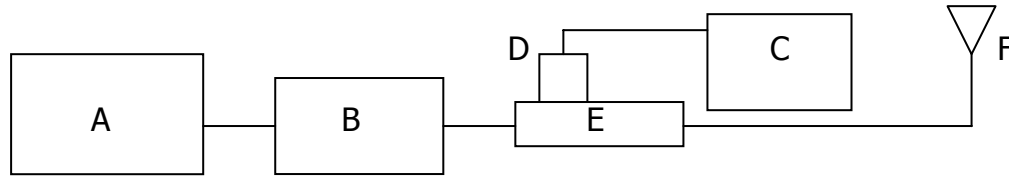
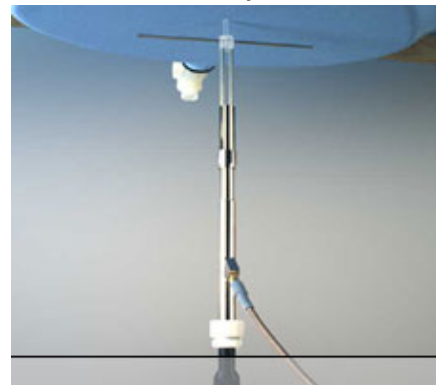


Fig.b The microwave circuit arrangement used for SAR system verification

- 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 Dual directional coupling
- F. Reference dipole antenna



Photograph of the dipole Antenna

Validation Kit	Frequency Hz	Target SAR (1g) (Pin=250mW)	Target SAR (10g) (Pin=250mW)	Measured SAR (1g)	Measured SAR (10g)	Measured Date
D1900V2 S/N: 5d027	1900 MHz (Head)	9.28 m W/g	4.9 m W/g	9.64 m W/g	4.92 m W/g	2007-8-10
D1900V2 S/N: 5d027	1900 MHz (Body)	9.67 m W/g	5.16 m W/g	9.82 m W/g	5.12 m W/g	2007-8-11

Table 1. Results system validation

### 1.9 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 15cm±5mm during all tests. (Fig .2)

Frequency (MHz)	Tissue type	Measurement date/ Limits	Dielectric Parameters		
			$\rho$	$\sigma$ (S/m)	Simulated Tissue Temperature(° C)
1900	Head	Measured, 2007.08.10	38.2	1.4	21.6
		Recommended Limits	38-42.1	1.29-1.47	20-24



1900	Body	Measured, 2007.08.11	52.4	1.58	21.7
		Recommended Limits	50.6-56	1.38-1.6	20-24

Table 2. Dielectric Parameters of Tissue Simulant Fluid

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

Ingredient	1900MHz(Head)	1900Mhz(Body)
DGMBE	444.52 g	300.67
Water	552.42 g	716.56 g
Salt	3.06 g	4.0 g
Preventol D-7	X	X
Cellulose	X	X
Sugar	X	X
Total amount	1 L (1.0kg)	1 L (1.0kg)

Table 3. Recipes for tissue simulating liquid

### 1.10 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 .4)

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

Table .4 RF exposure limits

Notes:

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

## 2.Summary of Results

### PCS 1900 MHZ

Right Head (Cheek Position)						
Frequency	Channel	MHz	Conducted Output Power (Average)	Measured(W/kg) 1g	Amb. Temp[°C]	Liquid Temp[°C]
1900 MHz	512	1850.2	29.73dbm	0.157	22	21.6
	661	1880	29.82dbm	0.236	22	21.6
	810	1909.8	30.42dbm	0.256	22	21.6
Left Head (Cheek Position)						
Frequency	Channel	MHz	Conducted Output Power (Average)	Measured(W/kg) 1g	Amb. Temp[°C]	Liquid Temp[°C]
1900 MHz	512	1850.2	29.73dbm	0.098	22	21.6
	661	1880	29.82dbm	0.150	22	21.6
	810	1909.8	30.42dbm	0.191	22	21.6
Right Head (15° Tilt Position)						
Frequency	Channel	MHz	Conducted Output Power (Average)	Measured(W/kg) 1g	Amb. Temp[°C]	Liquid Temp[°C]
1900 MHz	512	1850.2	29.73dbm	0.159	22	21.6
	661	1880	29.82dbm	0.249	22	21.6
	810	1909.8	30.42dbm	0.266	22	21.6
Left Head (15° Tilt Position)						
Frequency	Channel	MHz	Conducted Output Power (Average)	Measured(W/kg) 1g	Amb. Temp[°C]	Liquid Temp[°C]
1900 MHz	512	1850.2	29.73dbm	0.135	22	21.6
	661	1880	29.82dbm	0.205	22	21.6
	810	1909.8	30.42dbm	0.234	22	21.6
Right Head (15° Tilt Position)-repeated with Memory Card						
Frequency	Channel	MHz	Conducted Output Power (Average)	Measured(W/kg) 1g	Amb. Temp[°C]	Liquid Temp[°C]
1900 MHz	810	1909.8	30.42dbm	0.289	22.1	21.7
Right Head (15° Tilt Position)-repeated with Bluetooth active						
Frequency	Channel	MHz	Conducted Output Power (Average)	Measured(W/kg) 1g	Amb. Temp[°C]	Liquid Temp[°C]
1900 MHz	810	1909.8	30.42dbm	0.278	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	29.73dbm	0.167	22.1	21.7
	661	1880	29.82dbm	0.281	22.1	21.7
	810	1909.8	30.42dbm	0.333	22.1	21.7
<b>Body worn - repeated for EUT front to phantom (testing in GPRS mode)</b>						
Frequency	Channel	MHz	Conducted Output Power (Average)	Measured(W/kg) 1g	Amb. Temp[°C]	Liquid Temp[°C]
1900 MHz	810	1909.8	30.42dbm	0.133	22	21.6
<b>Body worn - repeated with Headset (testing in GPRS mode)</b>						
Frequency	Channel	MHz	Conducted Output Power (Average)	Measured(W/kg) 1g	Amb. Temp[°C]	Liquid Temp[°C]
1900 MHz	810	1909.8	30.42dbm	0.324	22	21.6
<b>Body worn - repeated with Memory Card (testing in GPRS mode)</b>						
Frequency	Channel	MHz	Conducted Output Power (Average)	Measured(W/kg) 1g	Amb. Temp[°C]	Liquid Temp[°C]
1900 MHz	810	1909.8	30.42dbm	0.301	22	21.6
<b>Body worn - repeated with Bluetooth active (testing in GPRS mode)</b>						
Frequency	Channel	MHz	Conducted Output Power (Average)	Measured(W/kg) 1g	Amb. Temp[°C]	Liquid Temp[°C]
1900 MHz	810	1909.8	30.42dbm	0.291	22	21.6

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-Field Probe	EX3DV4	3578	April.24.2007
Schmid & Partner Engineering AG	1900 MHz System Validation Dipole	D1900V2	5d027	Mar.20.2007
Schmid & Partner Engineering AG	Data acquisition Electronics	DAE4	547	Mar.21.2007
Schmid & Partner Engineering AG	Software	DASY 4 V4.7 Build 53	N/A	Calibration isn't necessary
Schmid & Partner Engineering AG	Phantom	SAM	N/A	Calibration isn't necessary
Agilent	Network Analyzer	8753D	3410A05547	Nov.16.2006
Agilent	Dielectric Probe Kit	85070D	US01440168	Calibration isn't necessary
Agilent	Dual-directional coupler	778D	50313	Aug.21.2007
Agilent	RF Signal Generator	8648D	3847M00432	May.22.2007
Agilent	Power Sensor	8481H	MY41091361	Jun.04.2007
Agilent	8960 Series 10 Wireless Communication Tester	8960	GB44051912	Nov.28.2006

## 4. Measurements

RE Cheek\_CH512

Date/Time: 2007/8/10 14:05:31

DUT: P30i; Type: GSM; IMEI: 355313010110117

Communication System: GSM1900; Frequency: 1850.2 MHz; Duty Cycle: 1:8.3

Medium: Head 1900 MHz Medium parameters used (interpolated):  $f = 1850.2$  MHz;  $\sigma = 1.37$  mho/m;

$\epsilon_r = 38.3$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Phantom section: Right Section

DASY4 Configuration:

- Probe: EX3DV4 - SN3578; ConvF(6.9, 6.9, 6.9); Calibrated: 2007/4/24
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn547; Calibrated: 2007/3/5
- Phantom: SAM2; Type: SAM 4.0; Serial: TP:1270
- Measurement SW: DASY4, V4.7 Build 53; Postprocessing SW: SEMCAD, V1.8 Build 172

RE\_Cheek/Area Scan (41x91x1): Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (interpolated) = 0.183 mW/g

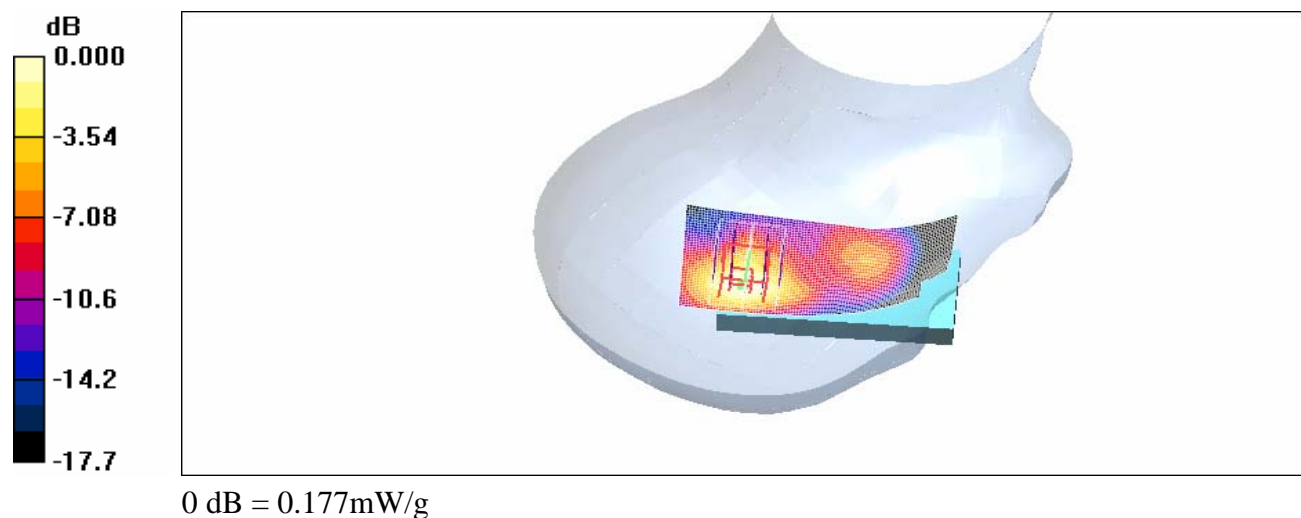
RE\_Cheek/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 8.21 V/m; Power Drift = 0.089 dB

Peak SAR (extrapolated) = 0.301 W/kg

SAR(1 g) = 0.157 mW/g; SAR(10 g) = 0.078 mW/g

Maximum value of SAR (measured) = 0.177 mW/g



## RE Cheek\_CH661

DUT: P30i; Type: GSM; IMEI: 355313010110117

Communication System: GSM1900; Frequency: 1880 MHz; Duty Cycle: 1:8.3

Medium: Head 1900 MHz Medium parameters used:  $f = 1880$  MHz;  $\sigma = 1.39$  mho/m;  $\epsilon_r = 38.2$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Phantom section: Right Section

DASY4 Configuration:

- Probe: EX3DV4 - SN3578; ConvF(6.9, 6.9, 6.9); Calibrated: 2007/4/24
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn547; Calibrated: 2007/3/5
- Phantom: SAM2; Type: SAM 4.0; Serial: TP:1270
- Measurement SW: DASY4, V4.7 Build 53; Postprocessing SW: SEMCAD, V1.8 Build 172

RE\_Cheek/Area Scan (41x91x1): Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (interpolated) = 0.281 mW/g

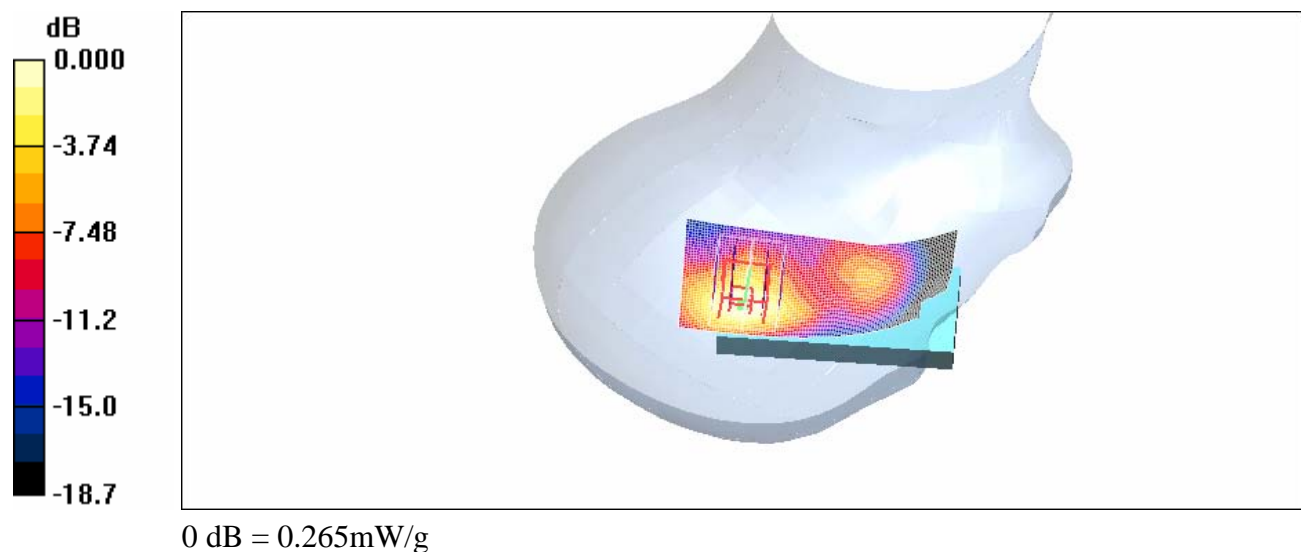
RE\_Cheek/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 10.1 V/m; Power Drift = 0.016 dB

Peak SAR (extrapolated) = 0.453 W/kg

SAR(1 g) = 0.236 mW/g; SAR(10 g) = 0.117 mW/g

Maximum value of SAR (measured) = 0.265 mW/g



## RE Cheek\_CH810

DUT: P30i; Type: GSM; IMEI: 355313010110117

Communication System: GSM1900; Frequency: 1909.8 MHz; Duty Cycle: 1:8.3

Medium: Head 1900 MHz Medium parameters used:  $f = 1910$  MHz;  $\sigma = 1.43$  mho/m;  $\epsilon_r = 38.2$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Phantom section: Right Section

DASY4 Configuration:

- Probe: EX3DV4 - SN3578; ConvF(6.9, 6.9, 6.9); Calibrated: 2007/4/24
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn547; Calibrated: 2007/3/5
- Phantom: SAM2; Type: SAM 4.0; Serial: TP:1270
- Measurement SW: DASY4, V4.7 Build 53; Postprocessing SW: SEMCAD, V1.8 Build 172

RE\_Cheek/Area Scan (41x91x1): Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (interpolated) = 0.304 mW/g

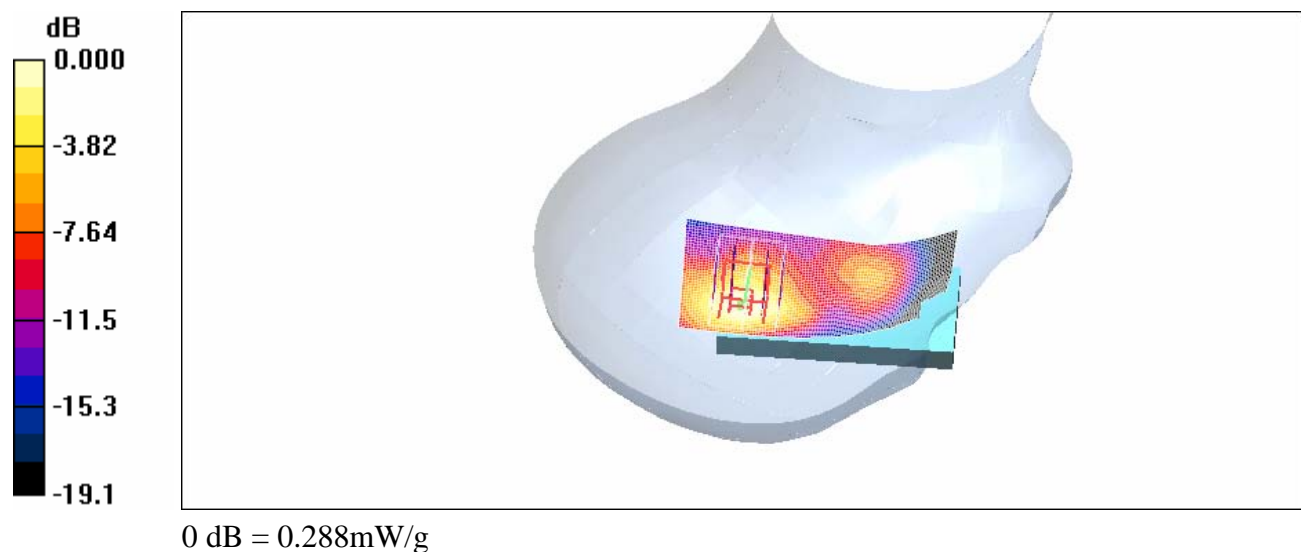
RE\_Cheek/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 10.4 V/m; Power Drift = -0.027 dB

Peak SAR (extrapolated) = 0.505 W/kg

SAR(1 g) = 0.256 mW/g; SAR(10 g) = 0.125 mW/g

Maximum value of SAR (measured) = 0.288 mW/g





## LE Cheek\_CH512

DUT: P30i; Type: GSM; IMEI: 355313010110117

Communication System: GSM1900; Frequency: 1850.2 MHz; Duty Cycle: 1:8.3

Medium: Head 1900 MHz Medium parameters used (interpolated):  $f = 1850.2$  MHz;  $\sigma = 1.37$  mho/m;

$\epsilon_r = 38.3$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Phantom section: Left Section

DASY4 Configuration:

- Probe: EX3DV4 - SN3578; ConvF(6.9, 6.9, 6.9); Calibrated: 2007/4/24
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn547; Calibrated: 2007/3/5
- Phantom: SAM2; Type: SAM 4.0; Serial: TP:1270
- Measurement SW: DASY4, V4.7 Build 53; Postprocessing SW: SEMCAD, V1.8 Build 172

LE\_Cheek/Area Scan (41x91x1): Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (interpolated) = 0.106 mW/g

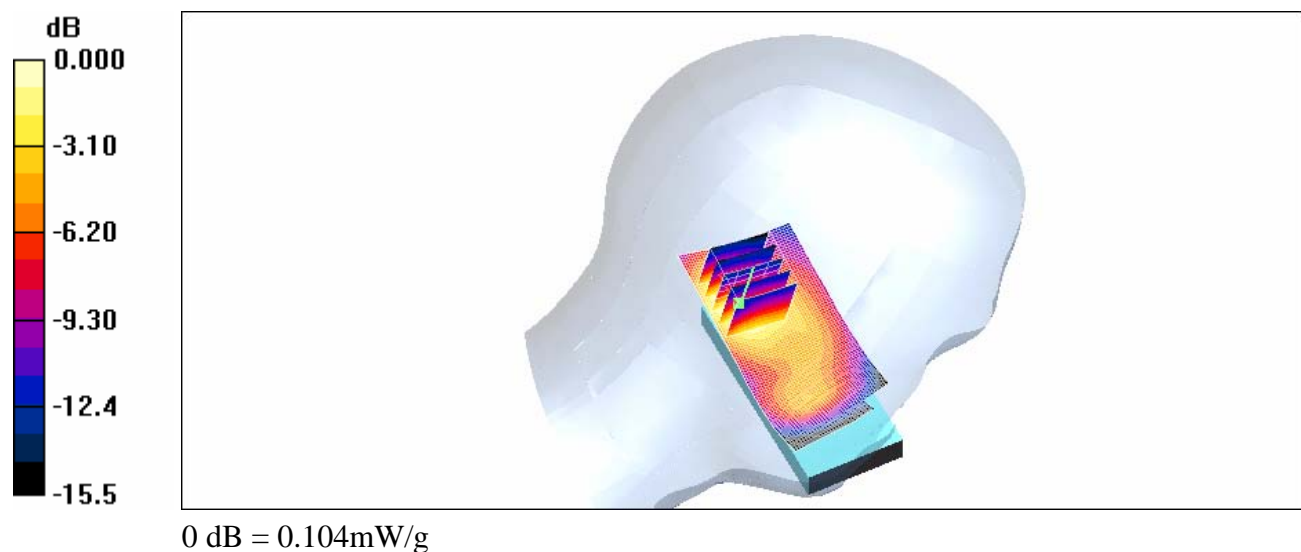
LE\_Cheek/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 7.62 V/m; Power Drift = -0.005 dB

Peak SAR (extrapolated) = 0.172 W/kg

SAR(1 g) = 0.098 mW/g; SAR(10 g) = 0.054 mW/g

Maximum value of SAR (measured) = 0.104 mW/g



## LE Cheek\_CH661

DUT: P30i; Type: GSM; IMEI: 355313010110117

Communication System: GSM1900; Frequency: 1880 MHz; Duty Cycle: 1:8.3

Medium: Head 1900 MHz Medium parameters used:  $f = 1880$  MHz;  $\sigma = 1.39$  mho/m;  $\epsilon_r = 38.2$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Phantom section: Left Section

DASY4 Configuration:

- Probe: EX3DV4 - SN3578; ConvF(6.9, 6.9, 6.9); Calibrated: 2007/4/24
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn547; Calibrated: 2007/3/5
- Phantom: SAM2; Type: SAM 4.0; Serial: TP:1270
- Measurement SW: DASY4, V4.7 Build 53; Postprocessing SW: SEMCAD, V1.8 Build 172

LE\_Cheek/Area Scan (41x91x1): Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (interpolated) = 0.163 mW/g

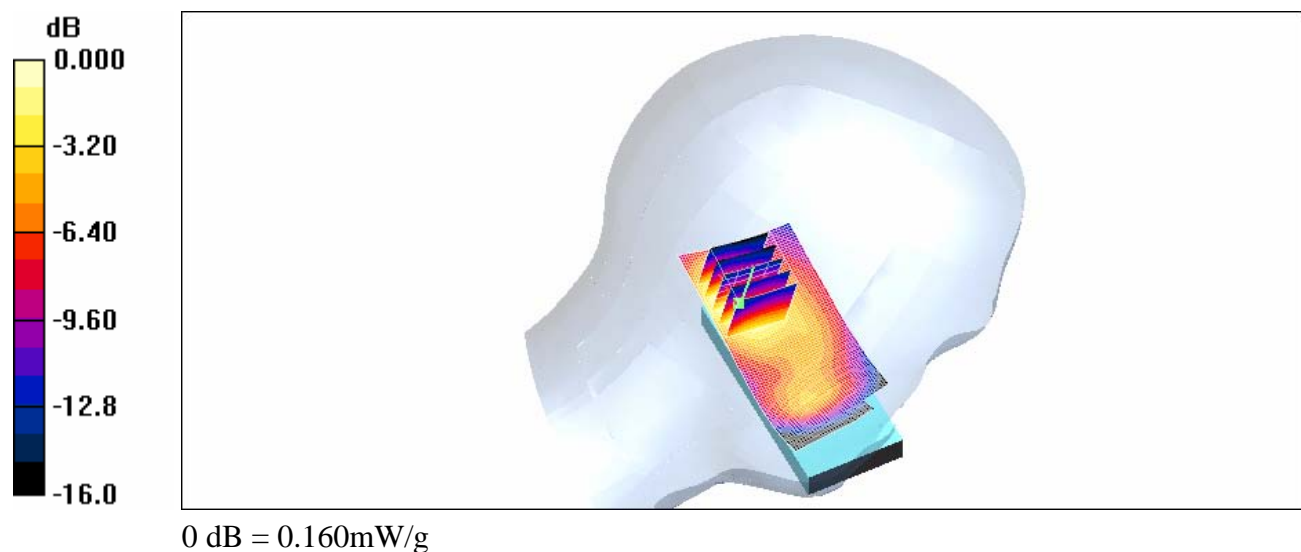
LE\_Cheek/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 9.43 V/m; Power Drift = -0.012 dB

Peak SAR (extrapolated) = 0.269 W/kg

SAR(1 g) = 0.150 mW/g; SAR(10 g) = 0.083 mW/g

Maximum value of SAR (measured) = 0.160 mW/g



## LE Cheek\_CH810

DUT: P30i; Type: GSM; IMEI: 355313010110117

Communication System: GSM1900; Frequency: 1909.8 MHz; Duty Cycle: 1:8.3

Medium: Head 1900 MHz Medium parameters used:  $f = 1910$  MHz;  $\sigma = 1.43$  mho/m;  $\epsilon_r = 38.2$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Phantom section: Left Section

DASY4 Configuration:

- Probe: EX3DV4 - SN3578; ConvF(6.9, 6.9, 6.9); Calibrated: 2007/4/24
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn547; Calibrated: 2007/3/5
- Phantom: SAM2; Type: SAM 4.0; Serial: TP:1270
- Measurement SW: DASY4, V4.7 Build 53; Postprocessing SW: SEMCAD, V1.8 Build 172

LE\_Cheek/Area Scan (41x91x1): Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (interpolated) = 0.207 mW/g

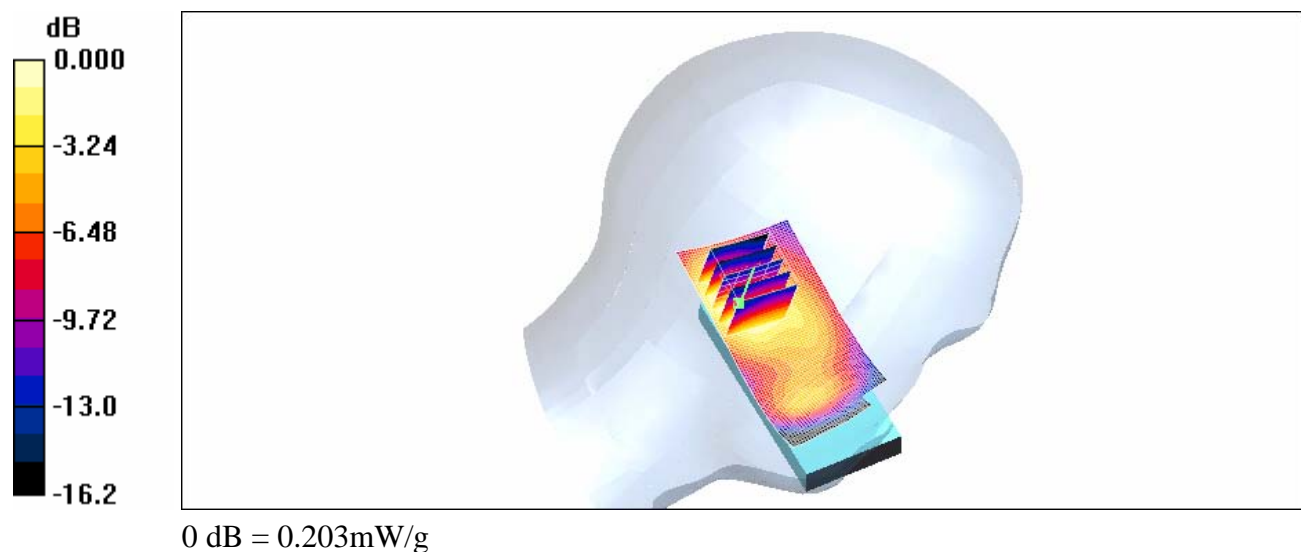
LE\_Cheek/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 10.5 V/m; Power Drift = -0.085 dB

Peak SAR (extrapolated) = 0.339 W/kg

SAR(1 g) = 0.191 mW/g; SAR(10 g) = 0.105 mW/g

Maximum value of SAR (measured) = 0.203 mW/g



## RE Tilt\_CH512

DUT: P30i; Type: GSM; IMEI: 355313010110117

Communication System: GSM1900; Frequency: 1850.2 MHz; Duty Cycle: 1:8.3

Medium: Head 1900 MHz Medium parameters used (interpolated):  $f = 1850.2$  MHz;  $\sigma = 1.37$  mho/m;

$\epsilon_r = 38.3$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Phantom section: Right Section

DASY4 Configuration:

- Probe: EX3DV4 - SN3578; ConvF(6.9, 6.9, 6.9); Calibrated: 2007/4/24
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn547; Calibrated: 2007/3/5
- Phantom: SAM2; Type: SAM 4.0; Serial: TP:1270
- Measurement SW: DASY4, V4.7 Build 53; Postprocessing SW: SEMCAD, V1.8 Build 172

RE\_Tilt/Area Scan (41x91x1): Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (interpolated) = 0.196 mW/g

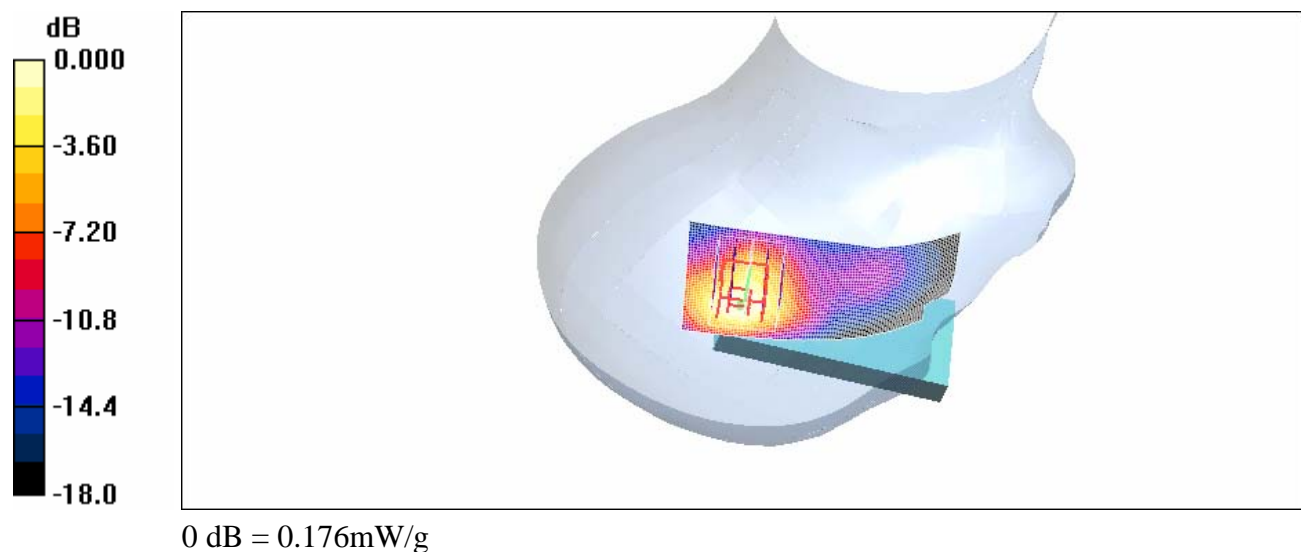
RE\_Tilt/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 9.35 V/m; Power Drift = -0.038 dB

Peak SAR (extrapolated) = 0.295 W/kg

SAR(1 g) = 0.159 mW/g; SAR(10 g) = 0.081 mW/g

Maximum value of SAR (measured) = 0.176 mW/g



## RE Tilt\_CH661

DUT: P30i; Type: GSM; IMEI: 355313010110117

Communication System: GSM1900; Frequency: 1880 MHz; Duty Cycle: 1:8.3

Medium: Head 1900 MHz Medium parameters used:  $f = 1880$  MHz;  $\sigma = 1.39$  mho/m;  $\epsilon_r = 38.2$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Phantom section: Right Section

DASY4 Configuration:

- Probe: EX3DV4 - SN3578; ConvF(6.9, 6.9, 6.9); Calibrated: 2007/4/24
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn547; Calibrated: 2007/3/5
- Phantom: SAM2; Type: SAM 4.0; Serial: TP:1270
- Measurement SW: DASY4, V4.7 Build 53; Postprocessing SW: SEMCAD, V1.8 Build 172

RE\_Tilt/Area Scan (41x91x1): Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (interpolated) = 0.306 mW/g

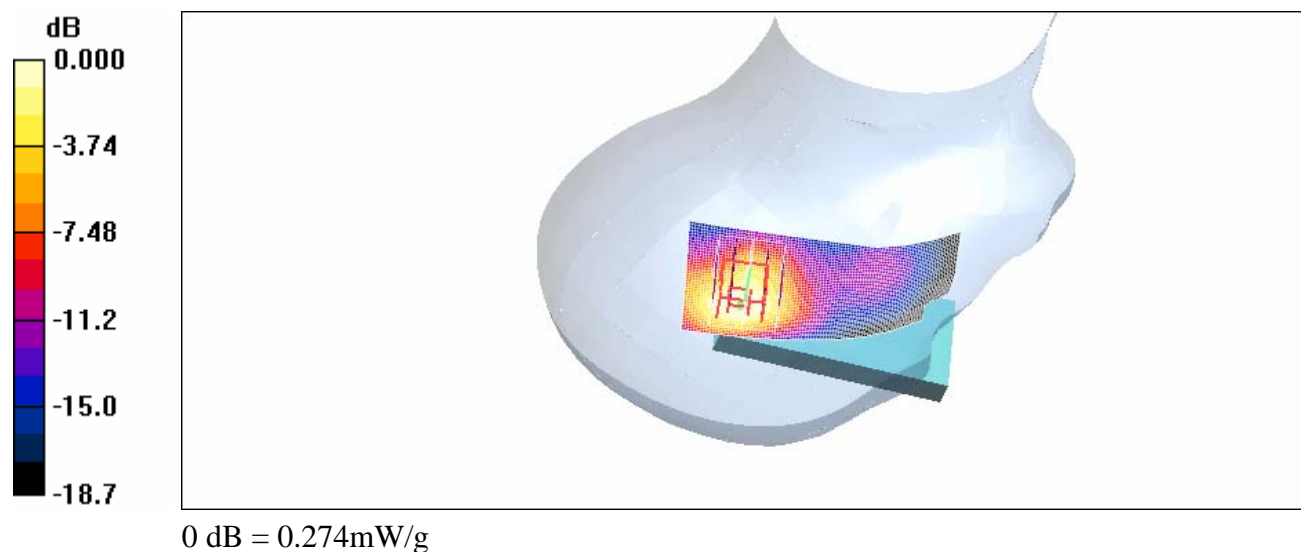
RE\_Tilt/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 11.6 V/m; Power Drift = -0.077 dB

Peak SAR (extrapolated) = 0.473 W/kg

SAR(1 g) = 0.249 mW/g; SAR(10 g) = 0.127 mW/g

Maximum value of SAR (measured) = 0.274 mW/g



## RE Tilt\_CH810

DUT: P30i; Type: GSM; IMEI: 355313010110117

Communication System: GSM1900; Frequency: 1909.8 MHz; Duty Cycle: 1:8.3

Medium: Head 1900 MHz Medium parameters used:  $f = 1910$  MHz;  $\sigma = 1.43$  mho/m;  $\epsilon_r = 38.2$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Phantom section: Right Section

DASY4 Configuration:

- Probe: EX3DV4 - SN3578; ConvF(6.9, 6.9, 6.9); Calibrated: 2007/4/24
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn547; Calibrated: 2007/3/5
- Phantom: SAM2; Type: SAM 4.0; Serial: TP:1270
- Measurement SW: DASY4, V4.7 Build 53; Postprocessing SW: SEMCAD, V1.8 Build 172

RE\_Tilt/Area Scan (41x91x1): Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (interpolated) = 0.329 mW/g

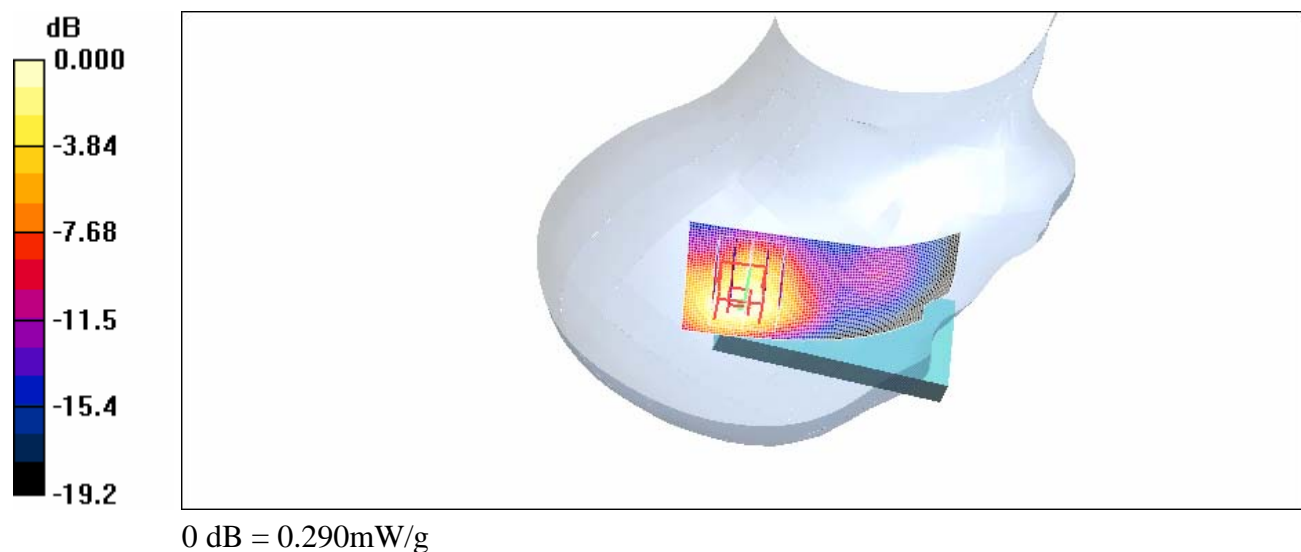
RE\_Tilt/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 11.9 V/m; Power Drift = -0.046 dB

Peak SAR (extrapolated) = 0.512 W/kg

SAR(1 g) = 0.266 mW/g; SAR(10 g) = 0.135 mW/g

Maximum value of SAR (measured) = 0.290 mW/g



## LE Tilt\_CH512

DUT: P30i; Type: GSM; IMEI: 355313010110117

Communication System: GSM1900; Frequency: 1850.2 MHz; Duty Cycle: 1:8.3

Medium: Head 1900 MHz Medium parameters used (interpolated):  $f = 1850.2$  MHz;  $\sigma = 1.37$  mho/m;

$\epsilon_r = 38.3$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Phantom section: Left Section

DASY4 Configuration:

- Probe: EX3DV4 - SN3578; ConvF(6.9, 6.9, 6.9); Calibrated: 2007/4/24
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn547; Calibrated: 2007/3/5
- Phantom: SAM2; Type: SAM 4.0; Serial: TP:1270
- Measurement SW: DASY4, V4.7 Build 53; Postprocessing SW: SEMCAD, V1.8 Build 172

LE\_Tilt/Area Scan (41x91x1): Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (interpolated) = 0.153 mW/g

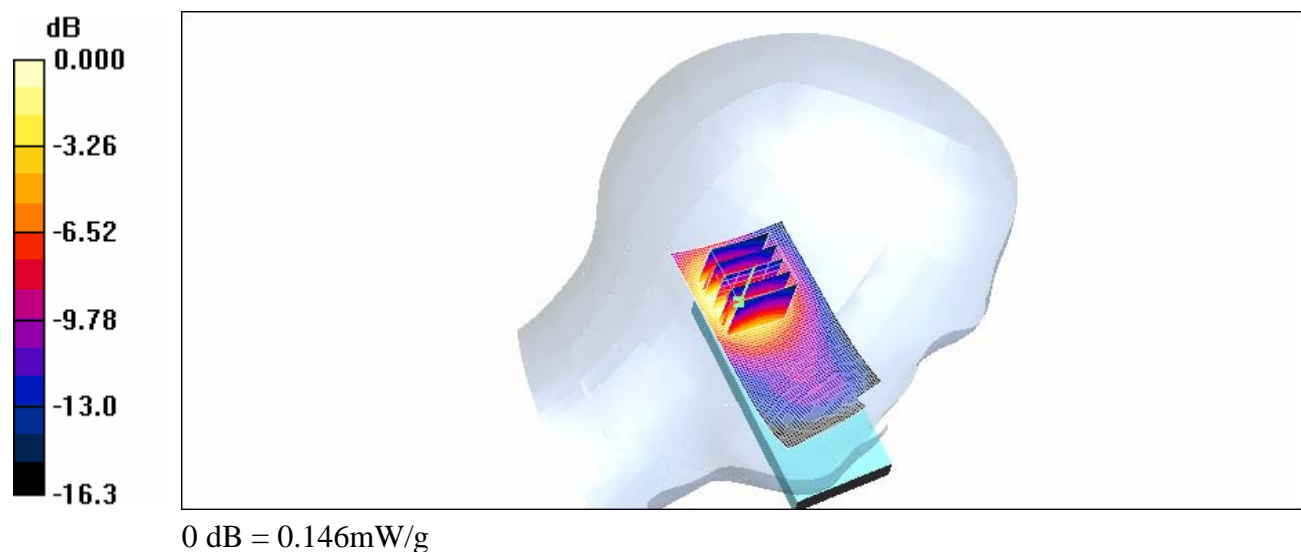
LE\_Tilt/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 9.39 V/m; Power Drift = 0.022 dB

Peak SAR (extrapolated) = 0.228 W/kg

SAR(1 g) = 0.135 mW/g; SAR(10 g) = 0.076 mW/g

Maximum value of SAR (measured) = 0.146 mW/g





## LE Tilt\_CH661

DUT: P30i; Type: GSM; IMEI: 355313010110117

Communication System: GSM1900; Frequency: 1880 MHz; Duty Cycle: 1:8.3

Medium: Head 1900 MHz Medium parameters used:  $f = 1880$  MHz;  $\sigma = 1.39$  mho/m;  $\epsilon_r = 38.2$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Phantom section: Left Section

DASY4 Configuration:

- Probe: EX3DV4 - SN3578; ConvF(6.9, 6.9, 6.9); Calibrated: 2007/4/24
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn547; Calibrated: 2007/3/5
- Phantom: SAM2; Type: SAM 4.0; Serial: TP:1270
- Measurement SW: DASY4, V4.7 Build 53; Postprocessing SW: SEMCAD, V1.8 Build 172

LE\_Tilt/Area Scan (41x91x1): Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (interpolated) = 0.231 mW/g

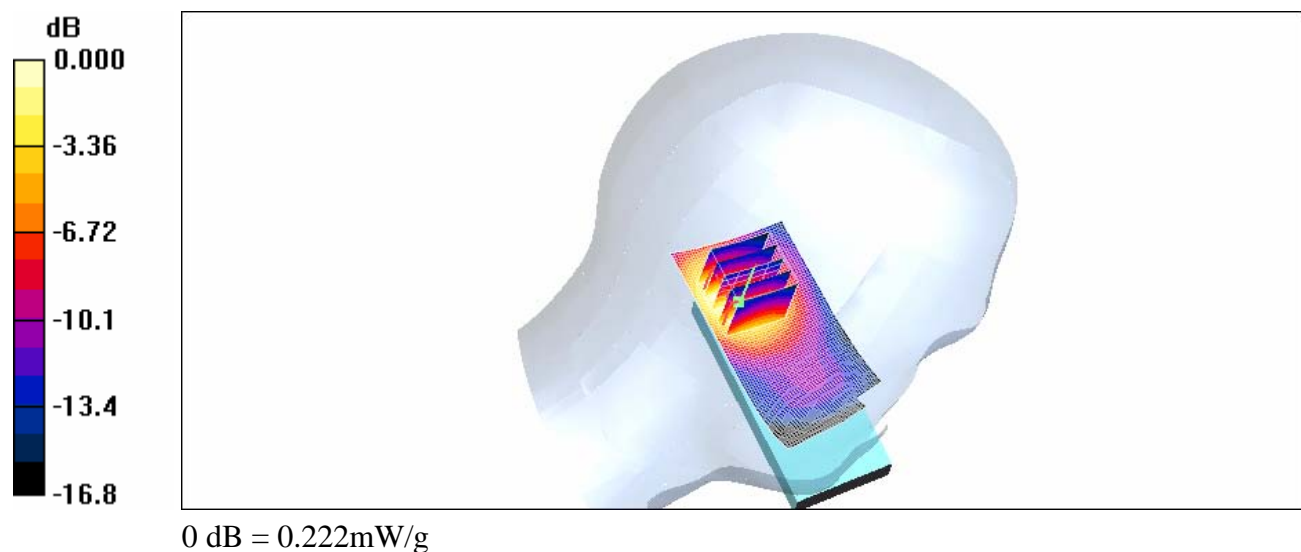
LE\_Tilt/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 11.4 V/m; Power Drift = 0.032 dB

Peak SAR (extrapolated) = 0.352 W/kg

SAR(1 g) = 0.205 mW/g; SAR(10 g) = 0.115 mW/g

Maximum value of SAR (measured) = 0.222 mW/g





## LE Tilt\_CH810

DUT: P30i; Type: GSM; IMEI: 355313010110117

Communication System: GSM1900; Frequency: 1909.8 MHz; Duty Cycle: 1:8.3

Medium: Head 1900 MHz Medium parameters used:  $f = 1910$  MHz;  $\sigma = 1.43$  mho/m;  $\epsilon_r = 38.2$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Phantom section: Left Section

DASY4 Configuration:

- Probe: EX3DV4 - SN3578; ConvF(6.9, 6.9, 6.9); Calibrated: 2007/4/24
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn547; Calibrated: 2007/3/5
- Phantom: SAM2; Type: SAM 4.0; Serial: TP:1270
- Measurement SW: DASY4, V4.7 Build 53; Postprocessing SW: SEMCAD, V1.8 Build 172

LE\_Tilt/Area Scan (41x91x1): Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (interpolated) = 0.264 mW/g

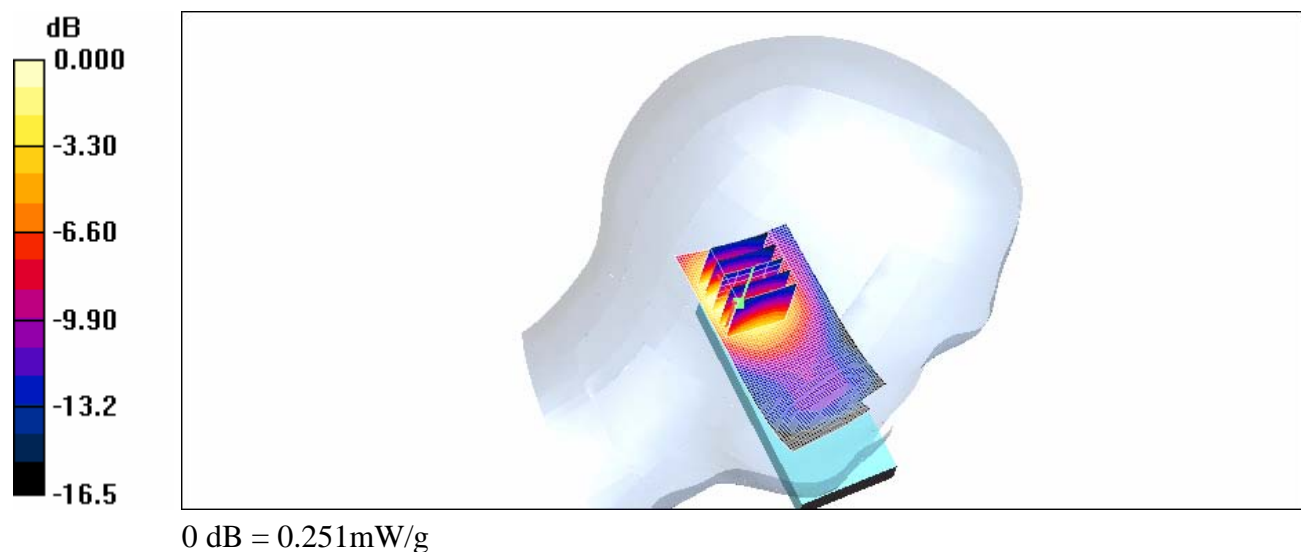
LE\_Tilt/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 12.2 V/m; Power Drift = -0.049 dB

Peak SAR (extrapolated) = 0.408 W/kg

SAR(1 g) = 0.234 mW/g; SAR(10 g) = 0.132 mW/g

Maximum value of SAR (measured) = 0.251 mW/g



## RE Tilt\_CH810\_repeated with Memory Card

DUT: P30i; Type: GSM; IMEI: 355313010110117

Communication System: GSM1900; Frequency: 1909.8 MHz; Duty Cycle: 1:8.3

Medium: Head 1900 MHz Medium parameters used:  $f = 1910$  MHz;  $\sigma = 1.43$  mho/m;  $\epsilon_r = 38.2$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Phantom section: Right Section

DASY4 Configuration:

- Probe: EX3DV4 - SN3578; ConvF(6.9, 6.9, 6.9); Calibrated: 2007/4/24
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn547; Calibrated: 2007/3/5
- Phantom: SAM2; Type: SAM 4.0; Serial: TP:1270
- Measurement SW: DASY4, V4.7 Build 53; Postprocessing SW: SEMCAD, V1.8 Build 172

RE\_Tilt/Area Scan (41x91x1): Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (interpolated) = 0.358 mW/g

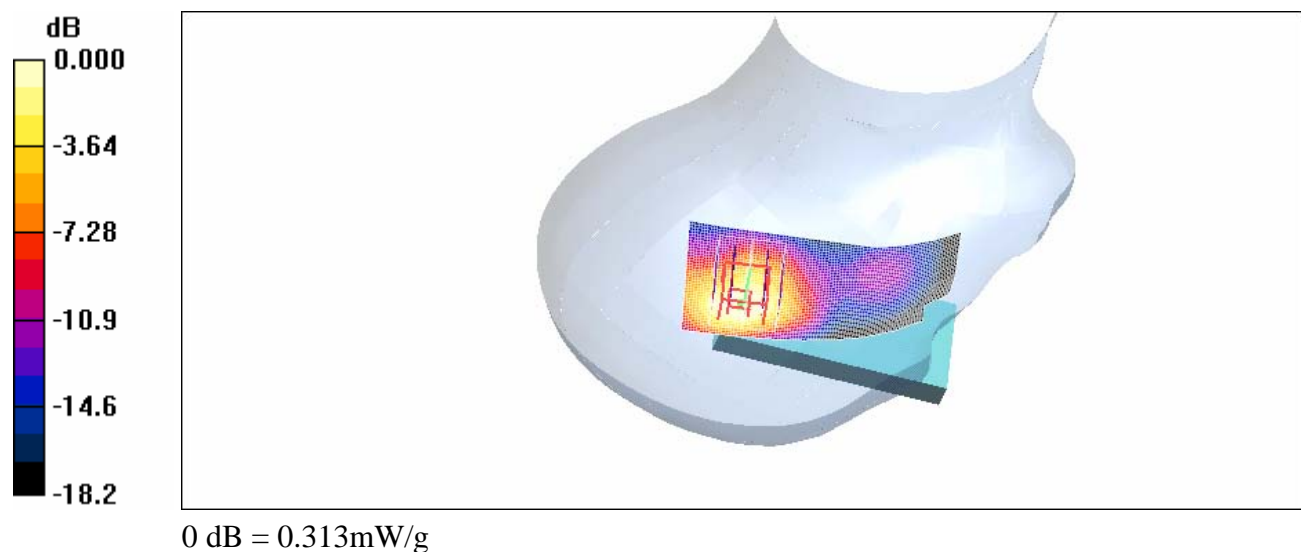
RE\_Tilt/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 12.3 V/m; Power Drift = -0.034 dB

Peak SAR (extrapolated) = 0.558 W/kg

SAR(1 g) = 0.289 mW/g; SAR(10 g) = 0.146 mW/g

Maximum value of SAR (measured) = 0.313 mW/g



## RE Tilt\_CH810\_repeated with Bluetooth active

DUT: P30i; Type: GSM; IMEI: 355313010110117

Communication System: GSM1900; Frequency: 1909.8 MHz; Duty Cycle: 1:8.3

Medium: Head 1900 MHz Medium parameters used:  $f = 1910$  MHz;  $\sigma = 1.43$  mho/m;  $\epsilon_r = 38.2$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Phantom section: Right Section

DASY4 Configuration:

- Probe: EX3DV4 - SN3578; ConvF(6.9, 6.9, 6.9); Calibrated: 2007/4/24
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn547; Calibrated: 2007/3/5
- Phantom: SAM2; Type: SAM 4.0; Serial: TP:1270
- Measurement SW: DASY4, V4.7 Build 53; Postprocessing SW: SEMCAD, V1.8 Build 172

RE\_Tilt/Area Scan (41x91x1): Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (interpolated) = 0.338 mW/g

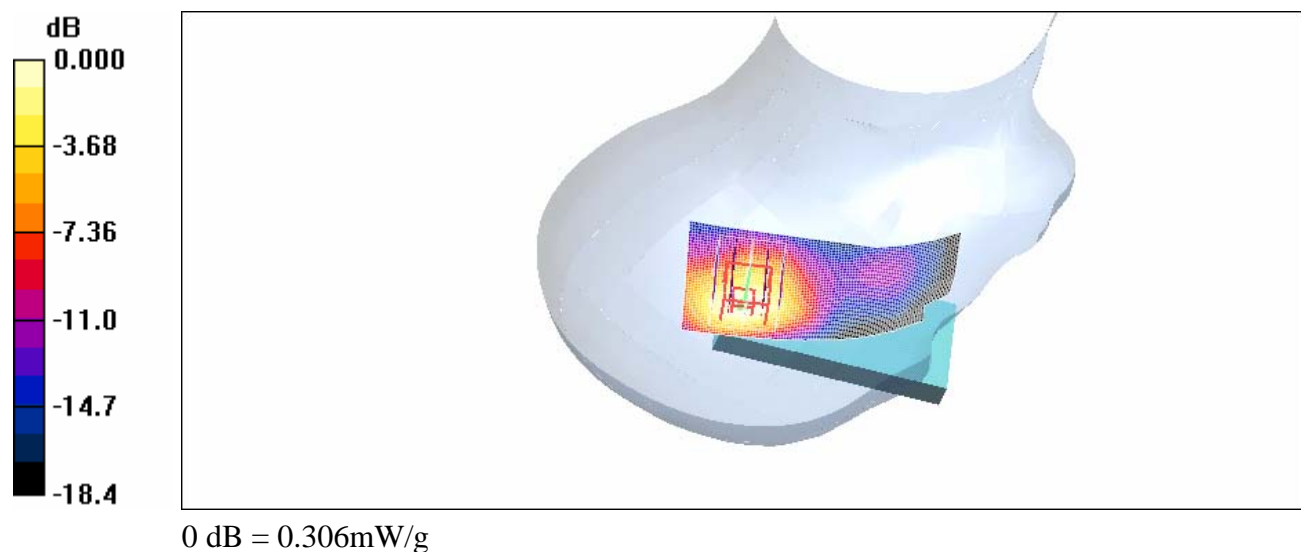
RE\_Tilt/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 12.1 V/m; Power Drift = -0.034 dB

Peak SAR (extrapolated) = 0.542 W/kg

SAR(1 g) = 0.278 mW/g; SAR(10 g) = 0.140 mW/g

Maximum value of SAR (measured) = 0.306 mW/g



## Body\_CH512

DUT: P30i; Type: GSM; IMEI: 355313010110117

Communication System: GSM1900; Frequency: 1850.2 MHz; Duty Cycle: 1:4

Medium: M1800 & 1900 Medium parameters used (interpolated):  $f = 1850.2$  MHz;  $\sigma = 1.53$  mho/m;  $\epsilon_r = 52.7$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Phantom section: Flat Section

DASY4 Configuration:

- Probe: EX3DV4 - SN3578; ConvF(6.97, 6.97, 6.97); Calibrated: 2007/4/24
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn547; Calibrated: 2007/3/5
- Phantom: SAM1; Type: SAM 4.0; Serial: TP:1419
- Measurement SW: DASY4, V4.7 Build 53; Postprocessing SW: SEMCAD, V1.8 Build 172

**Body/Area Scan (41x81x1):** Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (interpolated) = 0.185 mW/g

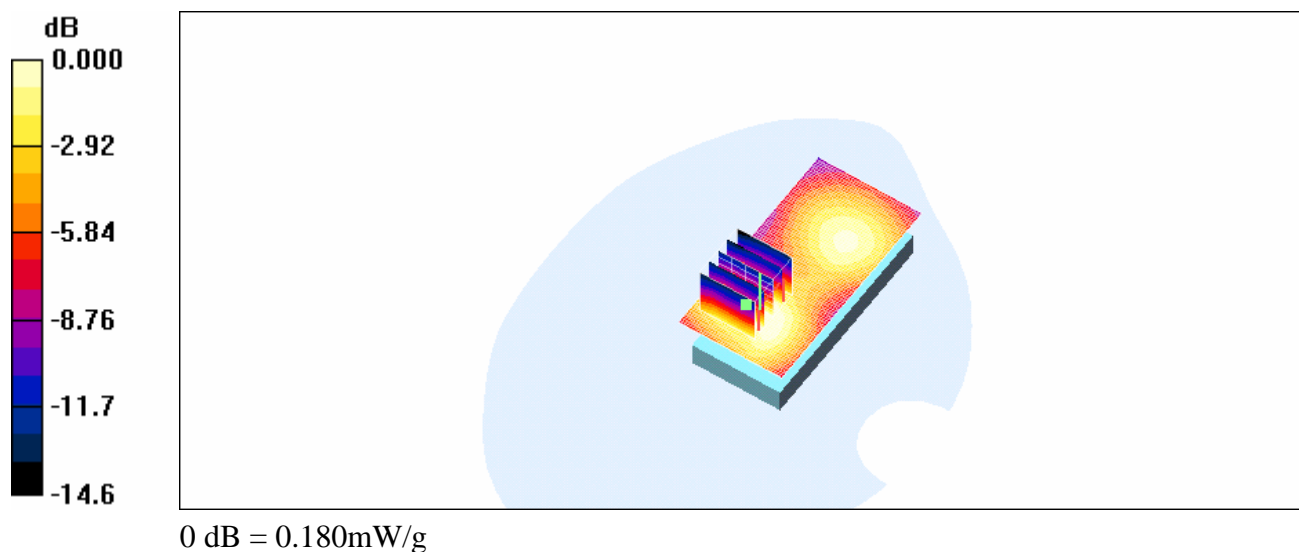
**Body/Zoom Scan (5x5x7)/Cube 0:** Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 7.76 V/m; Power Drift = 0.036 dB

Peak SAR (extrapolated) = 0.275 W/kg

SAR(1 g) = 0.167 mW/g; SAR(10 g) = 0.100 mW/g

Maximum value of SAR (measured) = 0.180 mW/g



## Body\_CH661

DUT: P30i; Type: GSM; IMEI: 355313010110117

Communication System: GSM1900; Frequency: 1880 MHz; Duty Cycle: 1:4

Medium: M1800 & 1900 Medium parameters used (interpolated):  $f = 1880$  MHz;  $\sigma = 1.56$  mho/m;  $\epsilon_r = 52.5$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Phantom section: Flat Section

DASY4 Configuration:

- Probe: EX3DV4 - SN3578; ConvF(6.97, 6.97, 6.97); Calibrated: 2007/4/24
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn547; Calibrated: 2007/3/5
- Phantom: SAM1; Type: SAM 4.0; Serial: TP:1419
- Measurement SW: DASY4, V4.7 Build 53; Postprocessing SW: SEMCAD, V1.8 Build 172

**Body/Area Scan (41x81x1):** Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (interpolated) = 0.315 mW/g

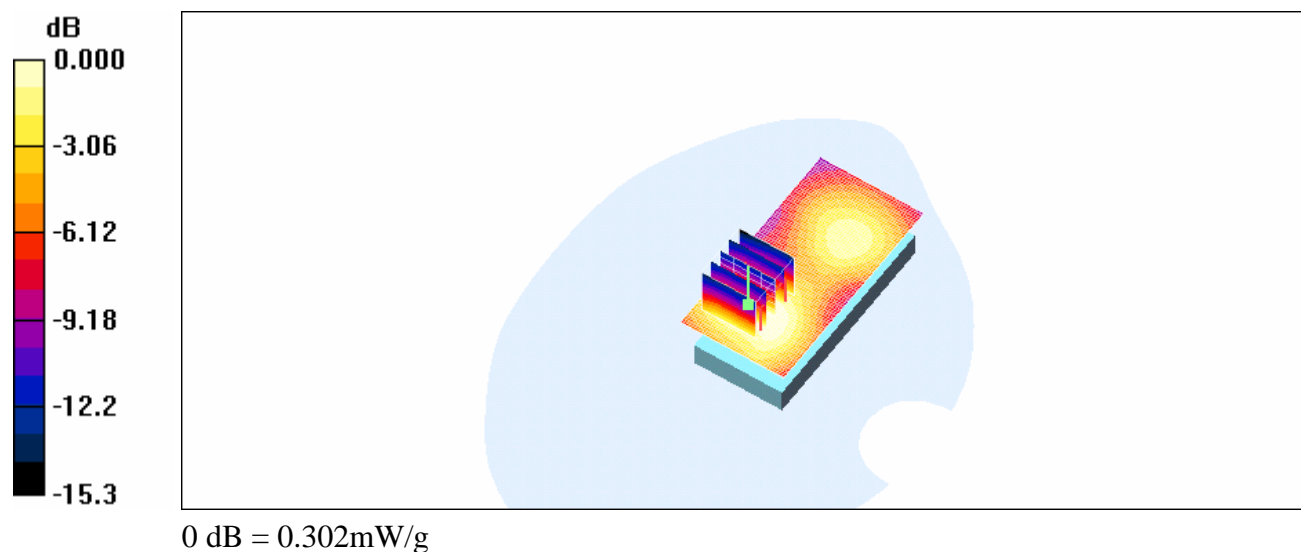
**Body/Zoom Scan (5x5x7)/Cube 0:** Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 10.4 V/m; Power Drift = 0.002 dB

Peak SAR (extrapolated) = 0.462 W/kg

**SAR(1 g) = 0.281 mW/g; SAR(10 g) = 0.170 mW/g**

Maximum value of SAR (measured) = 0.302 mW/g



## Body\_CH810

DUT: P30i; Type: GSM; IMEI: 355313010110117

Communication System: GSM1900; Frequency: 1909.8 MHz; Duty Cycle: 1:4

Medium: M1800 & 1900 Medium parameters used:  $f = 1910$  MHz;  $\sigma = 1.59$  mho/m;  $\epsilon_r = 52.3$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Phantom section: Flat Section

DASY4 Configuration:

- Probe: EX3DV4 - SN3578; ConvF(6.97, 6.97, 6.97); Calibrated: 2007/4/24
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn547; Calibrated: 2007/3/5
- Phantom: SAM1; Type: SAM 4.0; Serial: TP:1419
- Measurement SW: DASY4, V4.7 Build 53; Postprocessing SW: SEMCAD, V1.8 Build 172

**Body/Area Scan (41x81x1):** Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (interpolated) = 0.375 mW/g

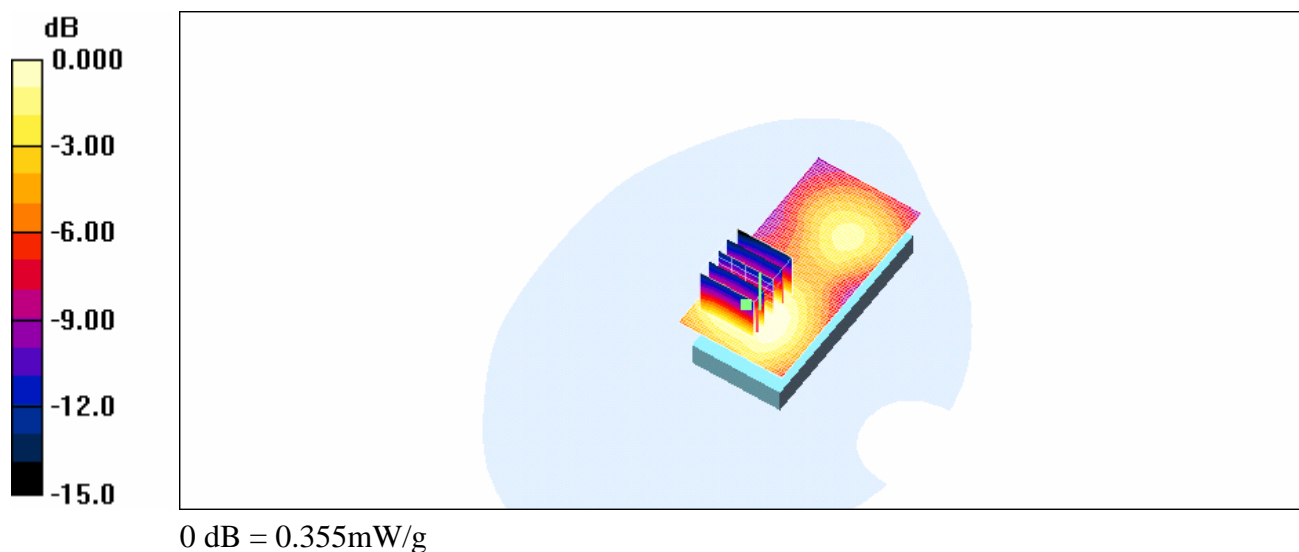
**Body/Zoom Scan (5x5x7)/Cube 0:** Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 11.8 V/m; Power Drift = -0.049 dB

Peak SAR (extrapolated) = 0.546 W/kg

SAR(1 g) = 0.333 mW/g; SAR(10 g) = 0.204 mW/g

Maximum value of SAR (measured) = 0.355 mW/g



## Body\_CH810 repeated for EUT front to Phantom

DUT: P30i; Type: GSM; IMEI: 355313010110117

Communication System: GSM1900; Frequency: 1909.8 MHz; Duty Cycle: 1:4

Medium: M1800 & 1900 Medium parameters used:  $f = 1910$  MHz;  $\sigma = 1.59$  mho/m;  $\epsilon_r = 52.3$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Phantom section: Flat Section

DASY4 Configuration:

- Probe: EX3DV4 - SN3578; ConvF(6.97, 6.97, 6.97); Calibrated: 2007/4/24
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn547; Calibrated: 2007/3/5
- Phantom: SAM1; Type: SAM 4.0; Serial: TP:1419
- Measurement SW: DASY4, V4.7 Build 53; Postprocessing SW: SEMCAD, V1.8 Build 172

**Body/Area Scan (41x81x1):** Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (interpolated) = 0.149 mW/g

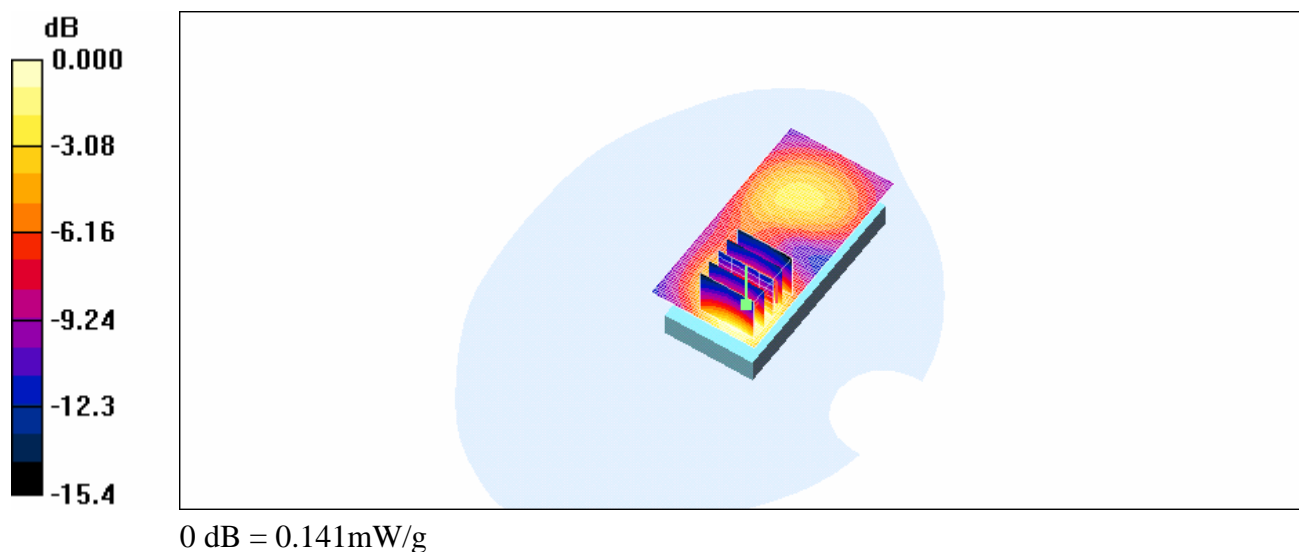
**Body/Zoom Scan (5x5x7)/Cube 0:** Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 6.27 V/m; Power Drift = 0.126 dB

Peak SAR (extrapolated) = 0.223 W/kg

**SAR(1 g) = 0.133 mW/g; SAR(10 g) = 0.078 mW/g**

Maximum value of SAR (measured) = 0.141 mW/g



## Body\_CH810 repeated with Headset

DUT: P30i; Type: GSM; IMEI: 355313010110117

Communication System: GSM1900; Frequency: 1909.8 MHz; Duty Cycle: 1:4

Medium: M1800 & 1900 Medium parameters used:  $f = 1910$  MHz;  $\sigma = 1.59$  mho/m;  $\epsilon_r = 52.3$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Phantom section: Flat Section

DASY4 Configuration:

- Probe: EX3DV4 - SN3578; ConvF(6.97, 6.97, 6.97); Calibrated: 2007/4/24
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn547; Calibrated: 2007/3/5
- Phantom: SAM1; Type: SAM 4.0; Serial: TP:1419
- Measurement SW: DASY4, V4.7 Build 53; Postprocessing SW: SEMCAD, V1.8 Build 172

**Body/Area Scan (41x81x1):** Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (interpolated) = 0.367 mW/g

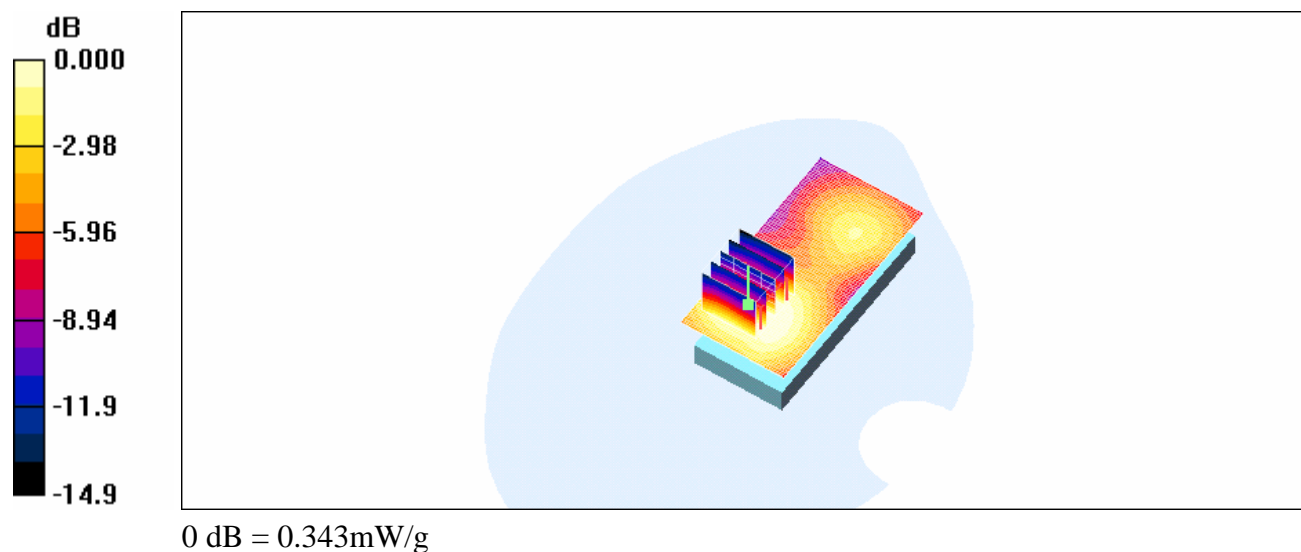
**Body/Zoom Scan (5x5x7)/Cube 0:** Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 11.8 V/m; Power Drift = -0.043 dB

Peak SAR (extrapolated) = 0.535 W/kg

SAR(1 g) = 0.324 mW/g; SAR(10 g) = 0.199 mW/g

Maximum value of SAR (measured) = 0.343 mW/g





## Body\_CH810 repeated with Memory Card

DUT: P30i; Type: GSM; IMEI: 355313010110117

Communication System: GSM1900; Frequency: 1909.8 MHz; Duty Cycle: 1:4

Medium: M1800 & 1900 Medium parameters used:  $f = 1910$  MHz;  $\sigma = 1.59$  mho/m;  $\epsilon_r = 52.3$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Phantom section: Flat Section

DASY4 Configuration:

- Probe: EX3DV4 - SN3578; ConvF(6.97, 6.97, 6.97); Calibrated: 2007/4/24
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn547; Calibrated: 2007/3/5
- Phantom: SAM1; Type: SAM 4.0; Serial: TP:1419
- Measurement SW: DASY4, V4.7 Build 53; Postprocessing SW: SEMCAD, V1.8 Build 172

**Body/Area Scan (41x81x1):** Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (interpolated) = 0.340 mW/g

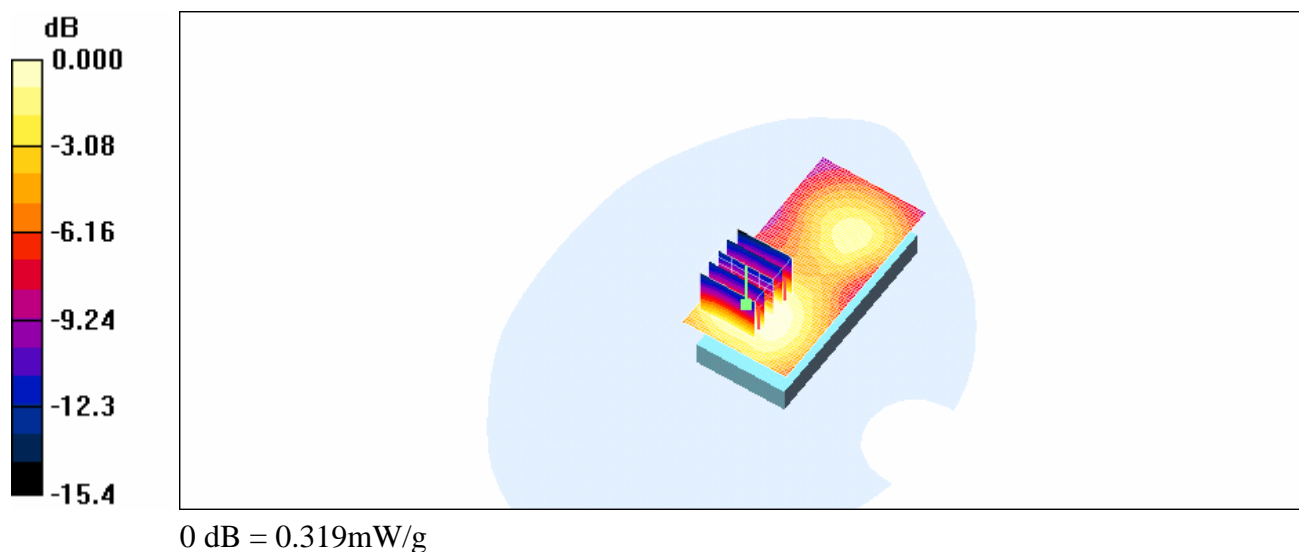
**Body/Zoom Scan (5x5x7)/Cube 0:** Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 11.2 V/m; Power Drift = -0.070 dB

Peak SAR (extrapolated) = 0.498 W/kg

**SAR(1 g) = 0.301 mW/g; SAR(10 g) = 0.184 mW/g**

Maximum value of SAR (measured) = 0.319 mW/g



## Body\_CH810 repeated with Bluetooth active

DUT: P30i; Type: GSM; IMEI: 355313010110117

Communication System: GSM1900; Frequency: 1909.8 MHz; Duty Cycle: 1:4

Medium: M1800 & 1900 Medium parameters used:  $f = 1910$  MHz;  $\sigma = 1.59$  mho/m;  $\epsilon_r = 52.3$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Phantom section: Flat Section

DASY4 Configuration:

- Probe: EX3DV4 - SN3578; ConvF(6.97, 6.97, 6.97); Calibrated: 2007/4/24
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn547; Calibrated: 2007/3/5
- Phantom: SAM1; Type: SAM 4.0; Serial: TP:1419
- Measurement SW: DASY4, V4.7 Build 53; Postprocessing SW: SEMCAD, V1.8 Build 172

**Body/Area Scan (41x81x1):** Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (interpolated) = 0.327 mW/g

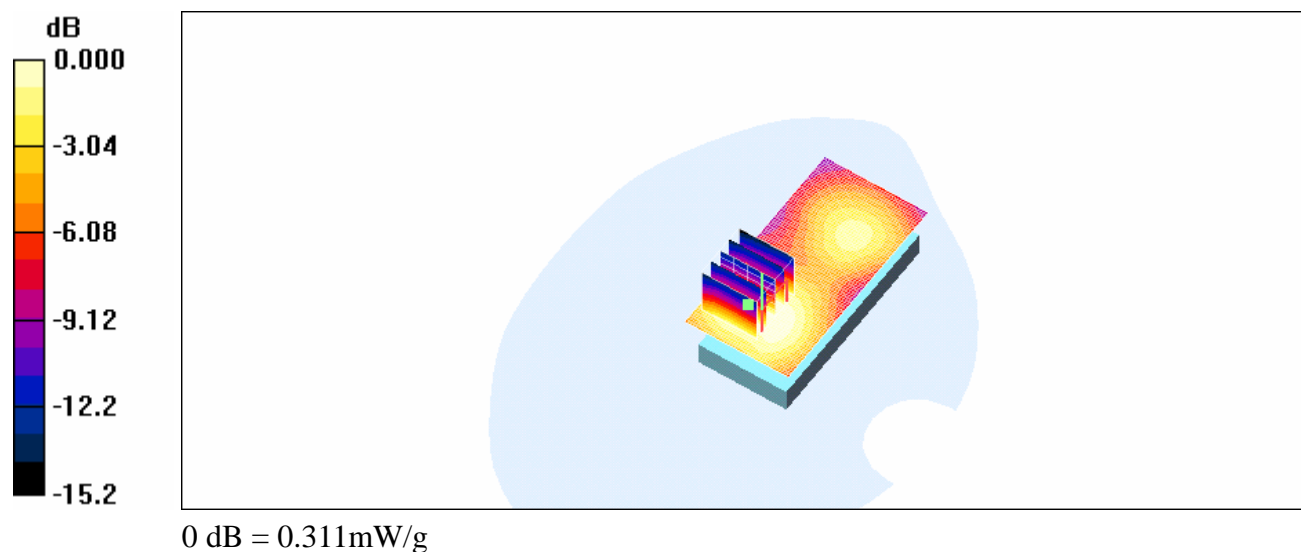
**Body/Zoom Scan (5x5x7)/Cube 0:** Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 11.1 V/m; Power Drift = -0.076 dB

Peak SAR (extrapolated) = 0.480 W/kg

**SAR(1 g) = 0.291 mW/g; SAR(10 g) = 0.178 mW/g**

Maximum value of SAR (measured) = 0.311 mW/g



## SAR System Verification

DUT: Dipole 1900 MHz; Type: D1900V2; Serial: 5d027

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

Medium: Head 1900MHz Medium parameters used:  $f = 1900$  MHz;  $\sigma = 1.4$  mho/m;  $\epsilon_r = 38.2$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Phantom section: Flat Section

DASY4 Configuration:

- Probe: EX3DV4 - SN3578; ConvF(6.9, 6.9, 6.9); Calibrated: 2007/4/24
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn547; Calibrated: 2007/3/5
- Phantom: SAM2; Type: SAM 4.0; Serial: TP:1270
- Measurement SW: DASY4, V4.7 Build 53; Postprocessing SW: SEMCAD, V1.8 Build 172

**Pin=250mw/Area Scan (51x61x1):** Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (interpolated) = 12.6 mW/g

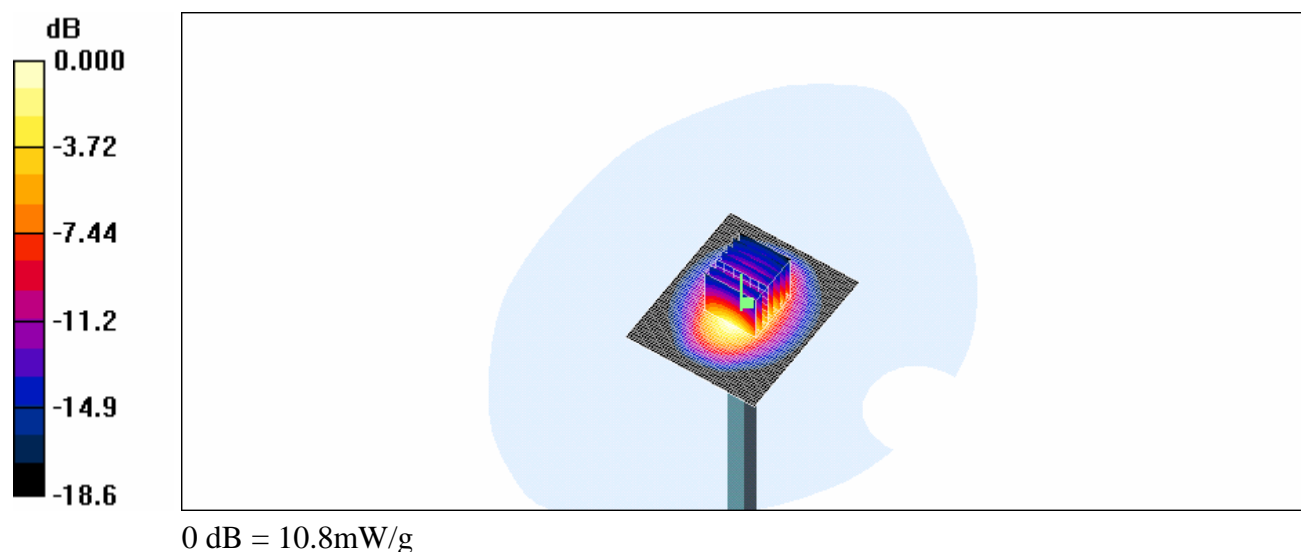
**Pin=250mw/Zoom Scan (7x7x7)/Cube 0:** Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 88.1 V/m; Power Drift = -0.015 dB

Peak SAR (extrapolated) = 18.2 W/kg

**SAR(1 g) = 9.64 mW/g; SAR(10 g) = 4.92 mW/g**

Maximum value of SAR (measured) = 10.8 mW/g



## SAR System Verification

DUT: Dipole 1900 MHz; Type: D1900V2; Serial: 5d027

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

Medium: M1800 & 1900 Medium parameters used (interpolated):  $f = 1900$  MHz;  $\sigma = 1.58$  mho/m;  $\epsilon_r = 52.4$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Phantom section: Flat Section

DASY4 Configuration:

- Probe: EX3DV4 - SN3578; ConvF(6.97, 6.97, 6.97); Calibrated: 2007/4/24
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn547; Calibrated: 2007/3/5
- Phantom: SAM1; Type: SAM 4.0; Serial: TP:1419
- Measurement SW: DASY4, V4.7 Build 53; Postprocessing SW: SEMCAD, V1.8 Build 172

Pin=250mW/Area Scan (51x61x1): Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (interpolated) = 13.4 mW/g

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

Reference Value = 84.1 V/m; Power Drift = -0.040 dB

Peak SAR (extrapolated) = 17.8 W/kg

SAR(1 g) = 9.82 mW/g; SAR(10 g) = 5.12 mW/g

Maximum value of SAR (measured) = 10.9 mW/g

