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## TEST REPORT

**Equipment Under Test**: Arima 2717

Model Number : 2717

FCC ID : PJO-KMP6J1CR

**Applicant**: ARIMA COMMUNICATIONS CORP.

Address of Applicant : No. 16, Lane 658, Ying Tao Road, Yingko Taipei

Hsien, Taiwan

Date of Receipt : 2006.05.05

Date of Test(s) : 2006.05.08-2006.06.30

**Date of Issue** : 2006.07.02

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

Tested by : Leo Hsu Date : 2006.07.02

Approved by: Robert Chang Date: 2006.07.02

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### 1. General Information

#### 1.1 Testing Laboratory

SGS Taiwan Ltd.

5F, No. 134, Wukung Road, Wuku industrial zone

Taipei county , Taiwan , R.O.C.
Telephone : +886-2-2299-3279
Fax : +886-2-2298-0488
Internet : http://www.tw.sgs.com

#### 1.2 Details of Applicant

Name : ARIMA COMMUNICATIONS CORP.

Address : No. 16, Lane 658, Ying Tao Road, Yingko Taipei

Hsien, Taiwan

Telephone : +886-2-82277755 ext,3358

Fax : +886-2-82275533

Contact Person : Gallon Lee

E-mail : gallonlee@arimacomm.com.tw Website : http://www.arimacomm.com.tw

#### 1.3 Description of EUT(s)

EUT Name	Arima 2717		
Model Number	2717		
Mode of Operation	Treble Band GS	M/GPRS Mobile	
	Pho	one	
FCC ID	PJO-KMP6J1CR		
IMEI	351578015770950		
Modulation Mode	GM	ISK	
Duty Cycle	GSM	GPRS	
	1 / 8.3	1/ 4	
GPRS Multislot Class	10 ( 4 downlink & 2 uplink)		
TX Frequency range	1850.2-1909.8MHz		

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Channel Number (AFRFCN)	512-810
Battery Type	3.7V Lithium-Ion
Antenna Type	Internal
Antenna Gain	1.93 ~ 3.53dbi
HW Version	P1G
SW Version	NAP1L
Exposure environment	Uncontrolled exposure
Max. SAR Measured	0.92 W/kg
(1 g)	At Body position 661 Channel
	(testing in GPRS mode)

#### 1.4 Test Environment

Ambient Temperature: 22.1° C

Tissue Simulating Liquid: 21.6° C

Relative Humidity: 58 %

#### 1.5 Testing Procedure

Since the EUT supports Bluetooth function, the Bluetooth transmitter has to always keep on and use Bluetooth headset to speak to each channel to measure SAR values in the worst case condition.

- 1. Testing SAR with dominant transmitter or co-located Bluetooth transmitter both ON for whole (Head or Body) position. (testing in GSM mode with handset)
- 2. Testing SAR with dominant transmitter ON, co-located Bluetooth transmitter OFF for Body position. (testing in GSM mode)
- 3. Testing SAR with dominant transmitter ON, co-located Bluetooth transmitter OFF for Body position. (testing in GPRS mode)
- 4. The EUT was controlled by using a Universal Radio Communication Tester (CMU 200), and the communication between the EUT and the tester was established by air link. Measurements were performed respectively on the lowest, middle and highest channels of the operating band. The phone was set to maximum power level during all tests, and at the beginning of each test the battery was fully charged. During the SAR testing, the DASY4 system checks power drift by comparing the e-field

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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 ET3DV6 1759 E-field probe is used to determine the internal electric fields. The SAR can be obtained from the equation SAR=  $\sigma$  (|Ei| $^2$ )/  $\rho$  where  $\sigma$  and  $\rho$  are the conductivity and mass density of the tissue-simulant. The DASY4 system for performing compliance tests consists of the following items:

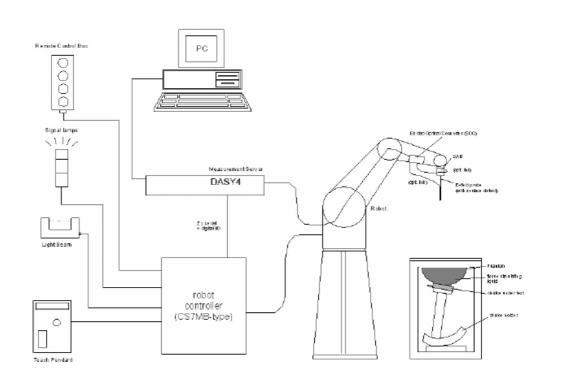


Fig. a The microwave circuit arrangement used for SAR system verification

- A standard high precision 6-axis robot (Stabile RX family) with controller, teach pendant and software. An arm extension 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

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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

#### **ET3DV6 E-Field Probe**

Construction: Symmetrical design with triangular core

Built-in shielding against static charges

PEEK enclosure material

(resistant to organic solvents, e.g. glycol)

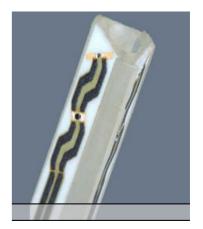
Calibration: In air from 10 MHz to 2.5 GHz

In brain simulating tissue at

frequencies of 1900 MHz (accuracy  $\pm$  8%)

Frequency: 10 MHz to >6 GHz; Linearity: ±0.2 dB

(30 MHz to 3 GHz)



ET3DV6 E-Field Probe

Directivity:  $\pm 0.2$  dB in brain tissue (rotation around probe axis)

 $\pm 0.4$  dB in brain tissue (rotation normal to probe axis)

Dynamic Range:  $5 \mu W/g$  to >100 mW/g; Linearity:  $\pm 0.2 \text{ dB}$ 

Surface. Detect: ±0.2 mm repeatability in air and clear liquids over

diffuse reflecting surfaces

Dimensions: Overall length: 330 mm

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Tip length: 16 mm; Body diameter: 12 mm; Tip diameter: 6.8 mm

Distance from probe tip to dipole centers: 2.7 mm

Application: General dosimetry up to 3 GHz

Compliance tests of mobile phone

#### **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:  $2 \pm 0.2 \text{ mm}$ 

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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#### 1.8 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 22.1°C, the relative humidity was in the range 58% 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.

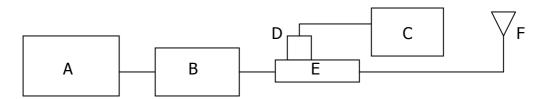
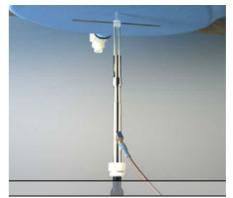


Fig.b The microwave circuit arrangement used for SAR system verification

- 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 and 777D Dual directional coupling
- F. Reference dipole antenna



Photograph of the dipole Antenna

Validation	Frequency	Target	Target	Measured	Measured	Measured
Kit	(Position)	SAR 1g	SAR 10g	SAR 1g	SAR 10g	date
		(250mW)	(250mW)			
D1900V2	1900 MHz	9.97 m W/g	5.25 m W/g	9.88 m W/g	5.21 m W/g	2006/05/09
S/N:5d027	(Head)					
	1900 MHz	10.3 m W/g	5.5 m W/g	10.3 m W/g	5.29 m W/g	2006/06/23
	(Body)					
	1900 MHz	10.3 m W/g	5.5 m W/g	10 m W/g	5.21 m W/g	2006/06/30
	(Body)					

Table 1. Results system validation

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#### 1.9 Tissue Simulant Fluid for the Frequency Band

F (Mhz)	Tissue type	Limits/ Measured	Dielectric Parameters			
			ρ σ (S/m)		Simulated Tissue	
					Temp(° C)	
	Head	Measured, 2006.05.09	38.5	1.38	21.7	
1900		Recommended Limits	38-42	1.305-1.595	20-24	
1300	Body	Measured, 2006.06.23	52.9	1.58	21.7	
	Dody	Measured, 2006.06.30	53.2	1.56	21.7	
		Recommended Limits	50.6-56	1.44-1.6	20-24	

Table 2. Dielectric Parameters of Tissue Simulant Fluid

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

All dielectric parameters of tissue simulates were measured within 24 hours of SAR measurements. The depth of the tissue simulant in the ear reference point of the phantom was 15cm±5mm during all tests. (Appendix page2 Fig .2.1 & Fig.2.2)

The composition of the brain tissue simulating liquid for 1900 MHz is:

Ingradiant	1000Mbz(Hood)	1900Mhz(Body)
Ingredient	1900MIIZ(Head)	1900M12(body)
DGMBE	444.52 g	300.67
Water	552.42 g	716.56
Salt	3.06 g	4.0
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

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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 Radiofrequency 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)

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

Table .4 RF exposure limits

#### Notes:

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

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## 2.Summary of Results

### **GSM 1900 MHZ**

Right Head (Cheek Position & testing in GSM mode with Headset)						
Frequency	Channel	MHz	Conducted Output	Measured(W/kg)	Amb.	Liquid
			Power(Average)	1g/10g	Temp[°C]	Temp[°C]
1900 MHz	512	1850.2	29.21dbm	0.456/0.257	22.1	21.6
	661	1880	29.16dbm	0.474/0.267	22.1	21.6
	810	1909.8	28.96dbm	0.452/0.255	22.1	21.6
Left Head (	(Cheek P	osition 8	& testing in GSM m	ode with Headse	et)	
Frequency	Channel	MHz	Conducted Output	Measured(W/kg)	Amb.	Liquid
			Power(Average)	1g/10g	Temp[°C]	Temp[°C]
1900 MHz	512	1850.2	29.21dbm	0.353/0.211	22.1	21.6
	661	1880	29.16dbm	0.382/0.228	22.1	21.6
	810	1909.8	28.96dbm	0.385/0.23	22.1	21.6
Right Head	l (15° Til	t Positio	n & testing in GSM	mode with Hea	dset)	
Frequency	Channel	MHz	Conducted Output	Measured(W/kg)	Amb.	Liquid
			Power(Average)	1g/10g	Temp[°C]	Temp[°C]
1900 MHz	512	1850.2	29.21dbm	0.5/0.267	22.1	21.6
	661	1880	29.16dbm	0.54/0.289	22.1	21.6
	810	1909.8	28.96dbm	0.504/0.267	22.1	21.6
Left Head	(15° Tilt	Position	& testing in GSM r	node with Head	set)	
Frequency	Channel	MHz	Conducted Output	Measured(W/kg)	Amb.	Liquid
			Power(Average)	1g/10g	$Temp[^{\circ}C]$	Temp[°C]
1900 MHz	512	1850.2	29.21dbm	0.397/0.225	22.1	21.6
	661	1880	29.16dbm	0.42/0.238	22.1	21.6
	810	1909.8	28.96dbm	0.401/0.226	22.1	21.6
<b>Body Posit</b>	ion(testi	ng in GS	M mode with Head	set)		
Frequency	Channel	MHz	Conducted Output	Measured(W/kg)	Amb.	Liquid
			Power(Average)	1g/10g	Temp[°C]	Temp[°C]
			20 21 41	0.413/0.245	22.1	21.6
1900 MHz	512	1850.2	29.21dbm	0.413/0.243	22.1	21.0
1900 MHz	512 661	1850.2 1880	29.21dbm 29.16dbm	0.463/0.272	22.1	21.6

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	1 uge : 11 01 37						
<b>Body Posit</b>	Body Position(testing in GSM mode- Bluetooth function OFF)						
Frequency	Channel	MHz	Conducted Output	Measured(W/kg)	Amb.	Liquid	
			Power(Average)	1g/10g	Temp[°C]	Temp[°C]	
1900 MHz	512	1850.2	29.21dbm	0.389/0.231	22.1	21.6	
	661	1880	29.16dbm	0.446/0.257	22.1	21.6	
	810	1909.8	28.96dbm	0.437/0.255	22.1	21.6	
<b>Body Posit</b>	ion(testi	ng in GP	RS mode )				
Frequency	Channel	MHz	Conducted Output	Measured(W/kg)	Amb.	Liquid	
			Power(Average)	1g/10g	Temp[°C]	Temp[°C]	
1900 MHz	512	1850.2	29.21dbm	0.803/0.474	22.1	21.6	
	661	1880	29.16dbm	0.92/0.538	22.1	21.6	
	810	1909.8	28.96dbm	0.877/0.507	22.1	21.6	

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

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## 3. Instruments List

		T		_
Manufacturer	Device	Туре	Serial number	Date of last calibration
Schmid & Partner				
Engineering AG	Dosimetric E-Field Probe	ET3DV6	1759	Aug.30.2005
Schmid & Partner	1900 MHz System			
Engineering AG	Validation Dipole	D1900V2	5d027	Mar.21.2006
Schmid & Partner				
Engineering AG	Data acquisition Electronics	DAE4	679	Mar.21.2006
Schmid & Partner		DASY 4 V4.6c		Calibration
Engineering AG	Software	Build 23	N/A	isn't
				necessary
Schmid & Partner				Calibration
Engineering AG	Phantom	SAM	N/A	isn't
			-	necessary
Agilent	Network Analyzer	8753D	3410A05547	Jun.02.2005
	,			Calibration
Agilent	Dielectric Probe Kit	85070D	US01440168	isn't
				necessary
Agilent	Dual-directional	777D	50114	Aug.12.2005
	coupler	778D	50313	Aug12.2005
Agilent	RF Signal Generator	8648D	3847M00432	May.04.2006
Agilent	Power Sensor	8481H	MY41091361	May.27.2005
Rohde & Schwarz	Universal Radio	CMU200	102189	Oct.24.2005
	Communication Tester			

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### 4. Measurements

**RE\_Cheek\_CH512** Date/Time: 2006/5/9 09:44:55

DUT: Arima-2717; Type: GSM1900; Serial: 351578015770950

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

Medium: Head 1900MHz Medium parameters used (interpolated): f = 1850.2 MHz;  $\sigma = 1.35$  mho/m;  $\varepsilon_r$ 

 $= 39.1; \rho = 1000 \text{ kg/m}^3$ 

Phantom section: Right Section

#### DASY4 Configuration:

• Probe: ET3DV6 - SN1759; ConvF(5.11, 5.11, 5.11); Calibrated: 2005/8/30

• Sensor-Surface: 4mm (Mechanical And Optical Surface Detection)

• Electronics: DAE4 Sn679; Calibrated: 2006/3/21

• Phantom: SAM 12; Type: SAM 4.0; Serial: TP:1150

Measurement SW: DASY4, V4.6 Build 23; Postprocessing SW: SEMCAD, V1.8 Build 160

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

Maximum value of SAR (interpolated) = 0.521 mW/g

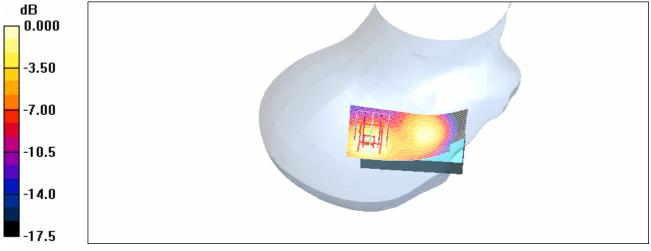
RE Cheek/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 16.9 V/m; Power Drift = -0.070 dB

Peak SAR (extrapolated) = 0.758 W/kg

#### SAR(1 g) = 0.456 mW/g; SAR(10 g) = 0.257 mW/g

Maximum value of SAR (measured) = 0.502 mW/g



0 dB = 0.502 mW/g

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#### RE Cheek CH661

DUT: Arima-2717; Type: GSM1900; Serial: 351578015770950

Communication System: GSM1900; Frequency: 1800 MHz; Duty Cycle: 1:8.3

Medium: Head 1900MHz Medium parameters used (extrapolated): f = 1800 MHz;  $\sigma = 1.33$  mho/m;  $\varepsilon_r =$ 

39.1;  $\rho = 1000 \text{ kg/m}^3$ 

Phantom section: Right Section

#### DASY4 Configuration:

• Probe: ET3DV6 - SN1759; ConvF(5.11, 5.11, 5.11); Calibrated: 2005/8/30

• Sensor-Surface: 4mm (Mechanical And Optical Surface Detection)

• Electronics: DAE4 Sn679; Calibrated: 2006/3/21

• Phantom: SAM 12; Type: SAM 4.0; Serial: TP:1150

• Measurement SW: DASY4, V4.6 Build 23; Postprocessing SW: SEMCAD, V1.8 Build 160

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

Maximum value of SAR (interpolated) = 0.541 mW/g

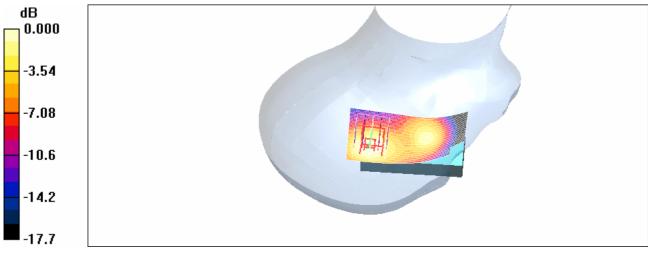
RE Cheek/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 17.3 V/m; Power Drift = -0.018 dB

Peak SAR (extrapolated) = 0.789 W/kg

#### SAR(1 g) = 0.474 mW/g; SAR(10 g) = 0.267 mW/g

Maximum value of SAR (measured) = 0.522 mW/g



0 dB = 0.522 mW/g

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#### RE Cheek CH810

DUT: Arima-2717; Type: GSM1900; Serial: 351578015770950

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

Medium: Head 1900MHz Medium parameters used: f = 1910 MHz;  $\sigma = 1.4$  mho/m;  $\varepsilon_r = 38.3$ ;  $\rho =$ 

 $1000 \text{ kg/m}^3$ 

Phantom section: Right Section

#### DASY4 Configuration:

• Probe: ET3DV6 - SN1759; ConvF(5.11, 5.11, 5.11); Calibrated: 2005/8/30

• Sensor-Surface: 4mm (Mechanical And Optical Surface Detection)

• Electronics: DAE4 Sn679; Calibrated: 2006/3/21

• Phantom: SAM 12; Type: SAM 4.0; Serial: TP:1150

• Measurement SW: DASY4, V4.6 Build 23; Postprocessing SW: SEMCAD, V1.8 Build 160

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

Maximum value of SAR (interpolated) = 0.513 mW/g

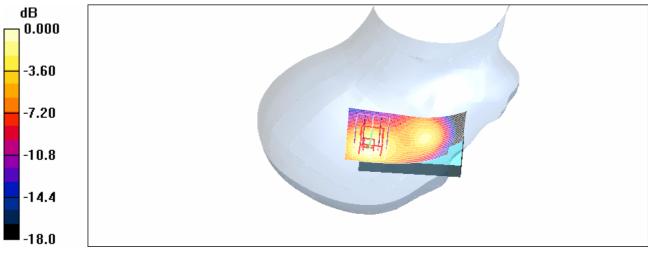
RE Cheek/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 16.3 V/m; Power Drift = 0.003 dB

Peak SAR (extrapolated) = 0.780 W/kg

#### SAR(1 g) = 0.452 mW/g; SAR(10 g) = 0.255 mW/g

Maximum value of SAR (measured) = 0.494 mW/g



0 dB = 0.494 mW/g

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#### LE\_Cheek\_CH512

DUT: Arima-2717; Type: GSM1900; Serial: 351578015770950

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

Medium: Head 1900MHz Medium parameters used (interpolated): f = 1850.2 MHz;  $\sigma = 1.35$  mho/m;  $\varepsilon_r$ 

= 39.1;  $\rho$  = 1000 kg/m<sup>3</sup> Phantom section: Left Section

#### DASY4 Configuration:

• Probe: ET3DV6 - SN1759; ConvF(5.11, 5.11, 5.11); Calibrated: 2005/8/30

• Sensor-Surface: 4mm (Mechanical And Optical Surface Detection)

• Electronics: DAE4 Sn679; Calibrated: 2006/3/21

• Phantom: SAM 12; Type: SAM 4.0; Serial: TP:1150

• Measurement SW: DASY4, V4.6 Build 23; Postprocessing SW: SEMCAD, V1.8 Build 160

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

Maximum value of SAR (interpolated) = 0.390 mW/g

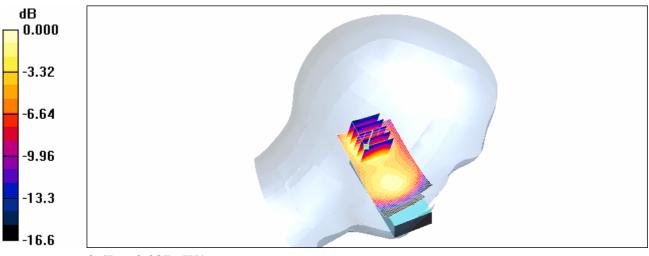
LE Cheek/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 16.6 V/m; Power Drift = 0.039 dB

Peak SAR (extrapolated) = 0.544 W/kg

#### SAR(1 g) = 0.353 mW/g; SAR(10 g) = 0.211 mW/g

Maximum value of SAR (measured) = 0.387 mW/g



0 dB = 0.387 mW/g

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#### LE\_Cheek\_CH661

DUT: Arima-2717; Type: GSM1900; Serial: 351578015770950

Communication System: GSM1900; Frequency: 1800 MHz; Duty Cycle: 1:8.3

Medium: Head 1900MHz Medium parameters used (extrapolated): f = 1800 MHz;  $\sigma = 1.33$  mho/m;  $\varepsilon_r =$ 

39.1;  $\rho = 1000 \text{ kg/m}^3$ 

Phantom section: Left Section

#### DASY4 Configuration:

- Probe: ET3DV6 SN1759; ConvF(5.11, 5.11, 5.11); Calibrated: 2005/8/30
- Sensor-Surface: 4mm (Mechanical And Optical Surface Detection)
- Electronics: DAE4 Sn679; Calibrated: 2006/3/21
- Phantom: SAM 12; Type: SAM 4.0; Serial: TP:1150
- Measurement SW: DASY4, V4.6 Build 23; Postprocessing SW: SEMCAD, V1.8 Build 160

#### LE Cheek/Area Scan (41x81x1): Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (interpolated) = 0.426 mW/g

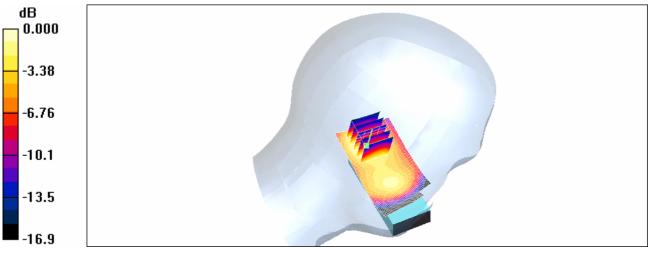
#### LE Cheek/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 17.4 V/m; Power Drift = -0.061 dB

Peak SAR (extrapolated) = 0.593 W/kg

#### SAR(1 g) = 0.382 mW/g; SAR(10 g) = 0.228 mW/g

Maximum value of SAR (measured) = 0.417 mW/g



0 dB = 0.417 mW/g

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#### LE\_Cheek\_CH810

DUT: Arima-2717; Type: GSM1900; Serial: 351578015770950

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

Medium: Head 1900MHz Medium parameters used: f = 1910 MHz;  $\sigma = 1.4$  mho/m;  $\varepsilon_r = 38.3$ ;  $\rho =$ 

 $1000 \text{ kg/m}^3$ 

Phantom section: Left Section

#### DASY4 Configuration:

• Probe: ET3DV6 - SN1759; ConvF(5.11, 5.11, 5.11); Calibrated: 2005/8/30

• Sensor-Surface: 4mm (Mechanical And Optical Surface Detection)

• Electronics: DAE4 Sn679; Calibrated: 2006/3/21

• Phantom: SAM 12; Type: SAM 4.0; Serial: TP:1150

Measurement SW: DASY4, V4.6 Build 23; Postprocessing SW: SEMCAD, V1.8 Build 160

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

Maximum value of SAR (interpolated) = 0.424 mW/g

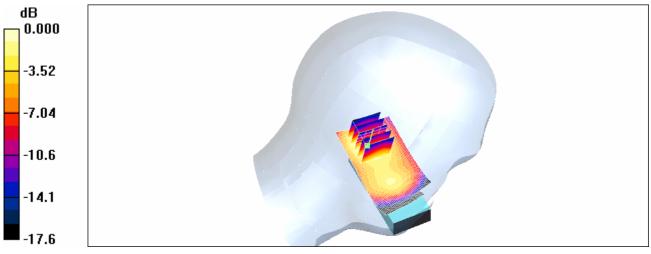
LE Cheek/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 17.0 V/m; Power Drift = -0.005 dB

Peak SAR (extrapolated) = 0.599 W/kg

#### SAR(1 g) = 0.385 mW/g; SAR(10 g) = 0.230 mW/g

Maximum value of SAR (measured) = 0.420 mW/g



0 dB = 0.420 mW/g

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#### RE\_Tilt\_CH512

DUT: Arima-2717; Type: GSM1900; Serial: 351578015770950

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

Medium: Head 1900MHz Medium parameters used (interpolated): f = 1850.2 MHz;  $\sigma = 1.35$  mho/m;  $\varepsilon_r$ 

 $= 39.1; \rho = 1000 \text{ kg/m}^3$ 

Phantom section: Right Section

#### DASY4 Configuration:

• Probe: ET3DV6 - SN1759; ConvF(5.11, 5.11, 5.11); Calibrated: 2005/8/30

• Sensor-Surface: 4mm (Mechanical And Optical Surface Detection)

• Electronics: DAE4 Sn679; Calibrated: 2006/3/21

• Phantom: SAM 12; Type: SAM 4.0; Serial: TP:1150

Measurement SW: DASY4, V4.6 Build 23; Postprocessing SW: SEMCAD, V1.8 Build 160

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

Maximum value of SAR (interpolated) = 0.565 mW/g

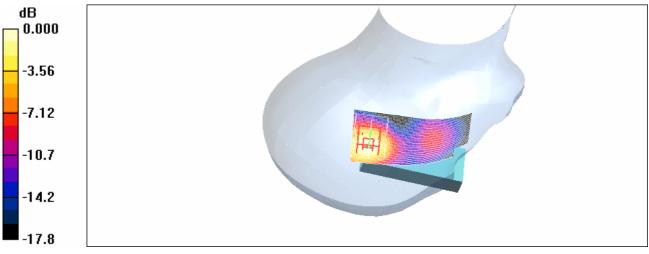
RE Tilt/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 18.6 V/m; Power Drift = -0.029 dB

Peak SAR (extrapolated) = 0.849 W/kg

#### SAR(1 g) = 0.500 mW/g; SAR(10 g) = 0.267 mW/g

Maximum value of SAR (measured) = 0.562 mW/g



0 dB = 0.562 mW/g

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#### RE\_Tilt\_CH661

DUT: Arima-2717; Type: GSM1900; Serial: 351578015770950

Communication System: GSM1900; Frequency: 1800 MHz; Duty Cycle: 1:8.3

Medium: Head 1900MHz Medium parameters used (extrapolated): f = 1800 MHz;  $\sigma = 1.33$  mho/m;  $\varepsilon_r =$ 

39.1;  $\rho = 1000 \text{ kg/m}^3$ 

Phantom section: Right Section

#### DASY4 Configuration:

• Probe: ET3DV6 - SN1759; ConvF(5.11, 5.11, 5.11); Calibrated: 2005/8/30

• Sensor-Surface: 4mm (Mechanical And Optical Surface Detection)

• Electronics: DAE4 Sn679; Calibrated: 2006/3/21

• Phantom: SAM 12; Type: SAM 4.0; Serial: TP:1150

• Measurement SW: DASY4, V4.6 Build 23; Postprocessing SW: SEMCAD, V1.8 Build 160

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

Maximum value of SAR (interpolated) = 0.616 mW/g

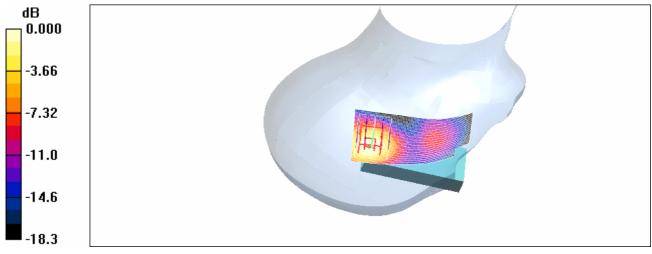
RE Tilt/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 19.8 V/m; Power Drift = -0.011 dB

Peak SAR (extrapolated) = 0.922 W/kg

#### SAR(1 g) = 0.540 mW/g; SAR(10 g) = 0.289 mW/g

Maximum value of SAR (measured) = 0.600 mW/g



0 dB = 0.600 mW/g

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#### RE\_Tilt\_CH810

DUT: Arima-2717; Type: GSM1900; Serial: 351578015770950

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

Medium: Head 1900MHz Medium parameters used: f = 1910 MHz;  $\sigma = 1.4$  mho/m;  $\varepsilon_r = 38.3$ ;  $\rho =$ 

 $1000 \text{ kg/m}^3$ 

Phantom section: Right Section

#### DASY4 Configuration:

• Probe: ET3DV6 - SN1759; ConvF(5.11, 5.11, 5.11); Calibrated: 2005/8/30

• Sensor-Surface: 4mm (Mechanical And Optical Surface Detection)

• Electronics: DAE4 Sn679; Calibrated: 2006/3/21

• Phantom: SAM 12; Type: SAM 4.0; Serial: TP:1150

• Measurement SW: DASY4, V4.6 Build 23; Postprocessing SW: SEMCAD, V1.8 Build 160

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

Maximum value of SAR (interpolated) = 0.569 mW/g

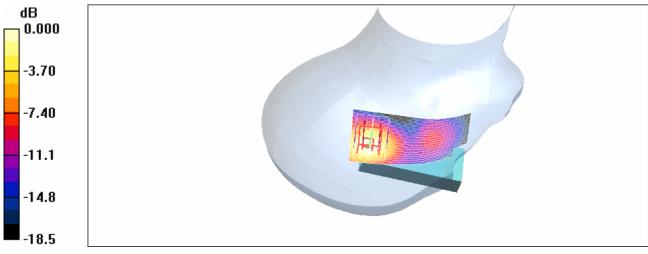
RE Tilt/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 18.4 V/m; Power Drift = -0.029 dB

Peak SAR (extrapolated) = 0.890 W/kg

#### SAR(1 g) = 0.504 mW/g; SAR(10 g) = 0.267 mW/g

Maximum value of SAR (measured) = 0.562 mW/g



0 dB = 0.562 mW/g

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#### LE\_Tilt\_CH512

DUT: Arima-2717; Type: GSM1900; Serial: 351578015770950

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

Medium: Head 1900MHz Medium parameters used (interpolated): f = 1850.2 MHz;  $\sigma = 1.35$  mho/m;  $\varepsilon_r$ 

= 39.1;  $\rho$  = 1000 kg/m<sup>3</sup> Phantom section: Left Section

#### DASY4 Configuration:

• Probe: ET3DV6 - SN1759; ConvF(5.11, 5.11, 5.11); Calibrated: 2005/8/30

• Sensor-Surface: 4mm (Mechanical And Optical Surface Detection)

• Electronics: DAE4 Sn679; Calibrated: 2006/3/21

• Phantom: SAM 12; Type: SAM 4.0; Serial: TP:1150

Measurement SW: DASY4, V4.6 Build 23; Postprocessing SW: SEMCAD, V1.8 Build 160

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

Maximum value of SAR (interpolated) = 0.453 mW/g

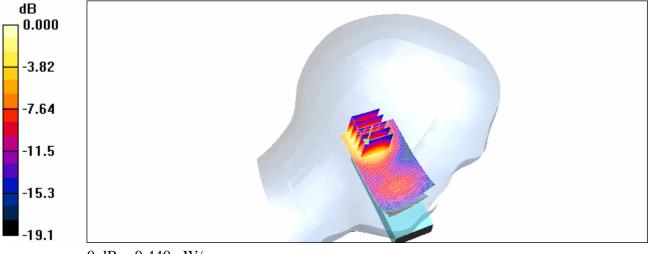
LE Tilt/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 17.6 V/m; Power Drift = 0.003 dB

Peak SAR (extrapolated) = 0.641 W/kg

#### SAR(1 g) = 0.397 mW/g; SAR(10 g) = 0.225 mW/g

Maximum value of SAR (measured) = 0.440 mW/g



0 dB = 0.440 mW/g

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#### LE\_Tilt\_CH661

DUT: Arima-2717; Type: GSM1900; Serial: 351578015770950

Communication System: GSM1900; Frequency: 1800 MHz; Duty Cycle: 1:8.3

Medium: Head 1900MHz Medium parameters used (extrapolated): f = 1800 MHz;  $\sigma = 1.33$  mho/m;  $\varepsilon_r =$ 

39.1;  $\rho = 1000 \text{ kg/m}^3$ 

Phantom section: Left Section

#### DASY4 Configuration:

• Probe: ET3DV6 - SN1759; ConvF(5.11, 5.11, 5.11); Calibrated: 2005/8/30

• Sensor-Surface: 4mm (Mechanical And Optical Surface Detection)

• Electronics: DAE4 Sn679; Calibrated: 2006/3/21

• Phantom: SAM 12; Type: SAM 4.0; Serial: TP:1150

Measurement SW: DASY4, V4.6 Build 23; Postprocessing SW: SEMCAD, V1.8 Build 160

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

Maximum value of SAR (interpolated) = 0.480 mW/g

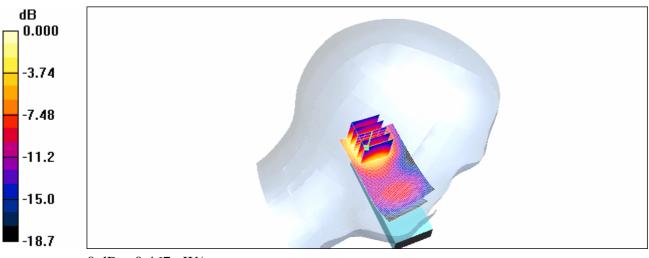
LE Tilt/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 18.5 V/m; Power Drift = 0.032 dB

Peak SAR (extrapolated) = 0.678 W/kg

#### SAR(1 g) = 0.420 mW/g; SAR(10 g) = 0.238 mW/g

Maximum value of SAR (measured) = 0.467 mW/g



0 dB = 0.467 mW/g

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#### LE\_Tilt\_CH810

DUT: Arima-2717; Type: GSM1900; Serial: 351578015770950

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

Medium: Head 1900MHz Medium parameters used: f = 1910 MHz;  $\sigma = 1.4$  mho/m;  $\varepsilon_r = 38.3$ ;  $\rho =$ 

 $1000 \text{ kg/m}^3$ 

Phantom section: Left Section

#### DASY4 Configuration:

• Probe: ET3DV6 - SN1759; ConvF(5.11, 5.11, 5.11); Calibrated: 2005/8/30

• Sensor-Surface: 4mm (Mechanical And Optical Surface Detection)

• Electronics: DAE4 Sn679; Calibrated: 2006/3/21

• Phantom: SAM 12; Type: SAM 4.0; Serial: TP:1150

Measurement SW: DASY4, V4.6 Build 23; Postprocessing SW: SEMCAD, V1.8 Build 160

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

Maximum value of SAR (interpolated) = 0.455 mW/g

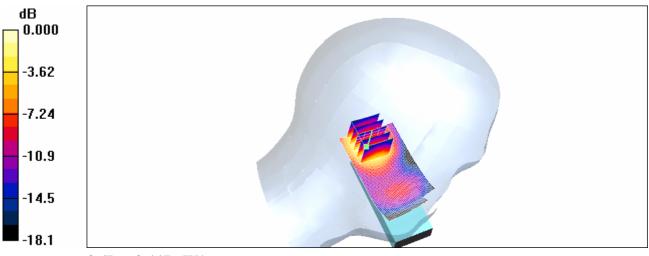
LE Tilt/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 17.7 V/m; Power Drift = 0.028 dB

Peak SAR (extrapolated) = 0.654 W/kg

#### SAR(1 g) = 0.401 mW/g; SAR(10 g) = 0.226 mW/g

Maximum value of SAR (measured) = 0.447 mW/g



0 dB = 0.447 mW/g

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#### Body\_CH512\_ (testing in GSM mode with handset)

DUT: Arima-2717; Type: GSM1900; Serial: 351578015770950

Communication System: GSM 1900; Frequency: 1850.2 MHz; Duty Cycle: 1:8.3

Medium: M1800 & 1900 Medium parameters used (interpolated): f = 1850.2 MHz;  $\sigma$  = 1.57 mho/m;  $\varepsilon_{\rm r}$ 

= 53.1;  $\rho$  = 1000 kg/m<sup>3</sup> Phantom section: Flat Section

#### DASY4 Configuration:

- Probe: ET3DV6 SN1759; ConvF(4.4, 4.4, 4.4); Calibrated: 2005/8/30
- Sensor-Surface: 4mm (Mechanical And Optical Surface Detection)
- Electronics: DAE3 Sn547; Calibrated: 2006/4/28
- Phantom: SAM 12; Type: SAM 4.0; Serial: TP:1150
- Measurement SW: DASY4, V4.6 Build 23; Postprocessing SW: SEMCAD, V1.8 Build 160

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

Maximum value of SAR (interpolated) = 0.481 mW/g

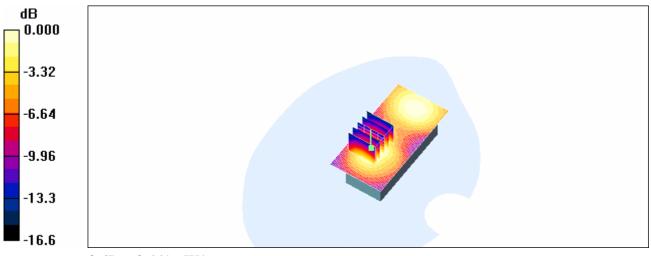
Body/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 13.1 V/m; Power Drift = -0.003 dB

Peak SAR (extrapolated) = 0.649 W/kg

#### SAR(1 g) = 0.413 mW/g; SAR(10 g) = 0.245 mW/g

Maximum value of SAR (measured) = 0.449 mW/g



0 dB = 0.449 mW/g

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#### Body\_CH661\_(testing in GSM mode with handset)

DUT: Arima-2717; Type: GSM1900; Serial: 351578015770950

Communication System: GSM 1900; Frequency: 1880 MHz; Duty Cycle: 1:8.3

Medium: M1800 & 1900 Medium parameters used: f = 1880 MHz;  $\sigma = 1.58$  mho/m;  $\varepsilon_r = 53$ ;  $\rho = 1000$ 

kg/m<sup>3</sup>

Phantom section: Flat Section

#### DASY4 Configuration:

• Probe: ET3DV6 - SN1759; ConvF(4.4, 4.4, 4.4); Calibrated: 2005/8/30

• Sensor-Surface: 4mm (Mechanical And Optical Surface Detection)

• Electronics: DAE3 Sn547; Calibrated: 2006/4/28

• Phantom: SAM 12; Type: SAM 4.0; Serial: TP:1150

Measurement SW: DASY4, V4.6 Build 23; Postprocessing SW: SEMCAD, V1.8 Build 160

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

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

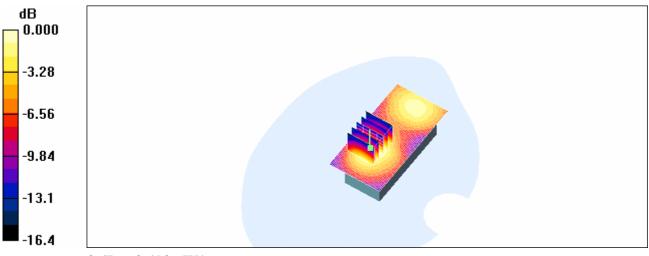
Body/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 13.3 V/m; Power Drift = 0.008 dB

Peak SAR (extrapolated) = 0.732 W/kg

#### SAR(1 g) = 0.463 mW/g; SAR(10 g) = 0.272 mW/g

Maximum value of SAR (measured) = 0.498 mW/g



0 dB = 0.498 mW/g

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#### Body\_CH810\_(testing in GSM mode with handset)

DUT: Arima-2717; Type: GSM1900; Serial: 351578015770950

Communication System: GSM 1900; Frequency: 1909.8 MHz; Duty Cycle: 1:8.3

Medium: M1800 & 1900 Medium parameters used: f = 1910 MHz;  $\sigma$  = 1.59 mho/m;  $\varepsilon$   $_{\rm r}$  = 52.8;  $\rho$  =

 $1000 \text{ kg/m}^3$ 

Phantom section: Flat Section

#### DASY4 Configuration:

• Probe: ET3DV6 - SN1759; ConvF(4.4, 4.4, 4.4); Calibrated: 2005/8/30

• Sensor-Surface: 4mm (Mechanical And Optical Surface Detection)

• Electronics: DAE3 Sn547; Calibrated: 2006/4/28

• Phantom: SAM 12; Type: SAM 4.0; Serial: TP:1150

• Measurement SW: DASY4, V4.6 Build 23; Postprocessing SW: SEMCAD, V1.8 Build 160

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

Maximum value of SAR (interpolated) = 0.535 mW/g

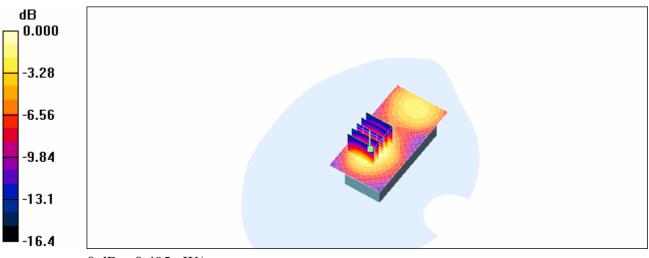
Body/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 12.8 V/m; Power Drift = 0.057 dB

Peak SAR (extrapolated) = 0.738 W/kg

#### SAR(1 g) = 0.457 mW/g; SAR(10 g) = 0.267 mW/g

Maximum value of SAR (measured) = 0.495 mW/g



0 dB = 0.495 mW/g

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#### Body\_CH512\_(testing in GSM mode and Bluetooth function OFF)

DUT: Arima-2717; Type: GSM1900; Serial: 351578015770950

Communication System: GSM 1900; Frequency: 1850.2 MHz; Duty Cycle: 1:8.3

Medium: M1800 & 1900 Medium parameters used (interpolated): f = 1850.2 MHz;  $\sigma$  = 1.57 mho/m;  $\varepsilon_{\rm r}$ 

= 53.1;  $\rho$  = 1000 kg/m<sup>3</sup> Phantom section: Flat Section

#### DASY4 Configuration:

- Probe: ET3DV6 SN1759; ConvF(4.4, 4.4, 4.4); Calibrated: 2005/8/30
- Sensor-Surface: 4mm (Mechanical And Optical Surface Detection)
- Electronics: DAE3 Sn547; Calibrated: 2006/4/28
- Phantom: SAM 12; Type: SAM 4.0; Serial: TP:1150
- Measurement SW: DASY4, V4.6 Build 23; Postprocessing SW: SEMCAD, V1.8 Build 160

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

Maximum value of SAR (interpolated) = 0.455 mW/g

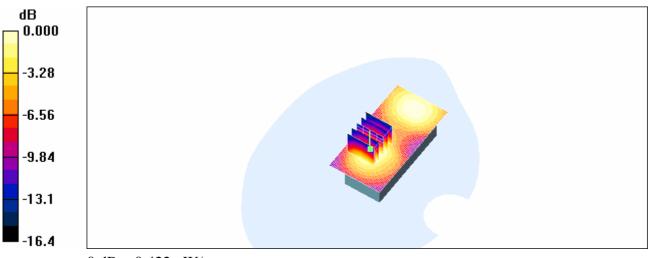
Body/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 12.8 V/m; Power Drift = 0.046 dB

Peak SAR (extrapolated) = 0.601 W/kg

#### SAR(1 g) = 0.389 mW/g; SAR(10 g) = 0.231 mW/g

Maximum value of SAR (measured) = 0.422 mW/g



0 dB = 0.422 mW/g

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#### Body\_CH661\_ (testing in GSM mode and Bluetooth function OFF)

DUT: Arima-2717; Type: GSM1900; Serial: 351578015770950

Communication System: GSM 1900; Frequency: 1909.8 MHz; Duty Cycle: 1:8.3

Medium: M1800 & 1900 Medium parameters used: f = 1910 MHz;  $\sigma$  = 1.59 mho/m;  $\varepsilon$   $_{\rm r}$  = 52.8;  $\rho$  =

 $1000 \text{ kg/m}^3$ 

Phantom section: Flat Section

#### DASY4 Configuration:

- Probe: ET3DV6 SN1759; ConvF(4.4, 4.4, 4.4); Calibrated: 2005/8/30
- Sensor-Surface: 4mm (Mechanical And Optical Surface Detection)
- Electronics: DAE3 Sn547; Calibrated: 2006/4/28
- Phantom: SAM 12; Type: SAM 4.0; Serial: TP:1150
- Measurement SW: DASY4, V4.6 Build 23; Postprocessing SW: SEMCAD, V1.8 Build 160

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

Maximum value of SAR (interpolated) = 0.507 mW/g

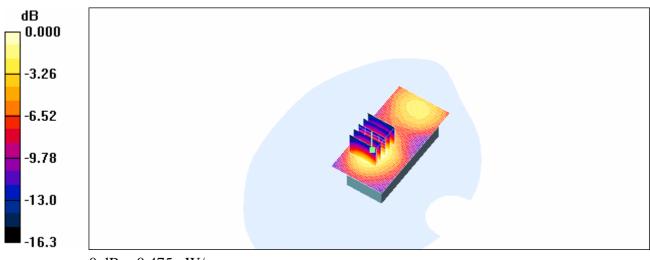
Body/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 12.8 V/m; Power Drift = 0.041 dB

Peak SAR (extrapolated) = 0.713 W/kg

#### SAR(1 g) = 0.446 mW/g; SAR(10 g) = 0.257 mW/g

Maximum value of SAR (measured) = 0.475 mW/g



0 dB = 0.475 mW/g

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#### Body\_CH810\_ (testing in GSM mode and Bluetooth function OFF)

DUT: Arima-2717; Type: GSM1900; Serial: 351578015770950

Communication System: GSM 1900; Frequency: 1909.8 MHz; Duty Cycle: 1:8.3

Medium: M1800 & 1900 Medium parameters used: f = 1910 MHz;  $\sigma$  = 1.59 mho/m;  $\varepsilon$  = 52.8;  $\rho$  =

 $1000 \text{ kg/m}^3$ 

Phantom section: Flat Section

#### DASY4 Configuration:

• Probe: ET3DV6 - SN1759; ConvF(4.4, 4.4, 4.4); Calibrated: 2005/8/30

• Sensor-Surface: 4mm (Mechanical And Optical Surface Detection)

• Electronics: DAE3 Sn547; Calibrated: 2006/4/28

• Phantom: SAM 12; Type: SAM 4.0; Serial: TP:1150

• Measurement SW: DASY4, V4.6 Build 23; Postprocessing SW: SEMCAD, V1.8 Build 160

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

Maximum value of SAR (interpolated) = 0.504 mW/g

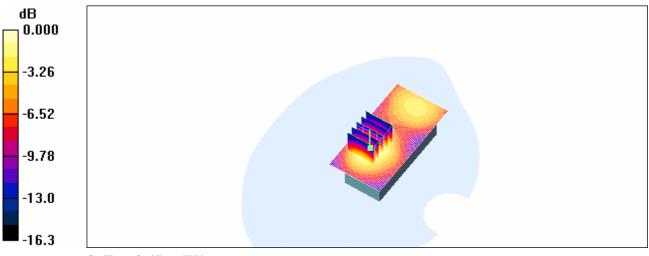
Body/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 12.6 V/m; Power Drift = 0.032 dB

Peak SAR (extrapolated) = 0.716 W/kg

#### SAR(1 g) = 0.437 mW/g; SAR(10 g) = 0.255 mW/g

Maximum value of SAR (measured) = 0.476 mW/g



0 dB = 0.476 mW/g

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#### Body CH512(Testing in GPRS mode multislot class=10)

DUT: Arima-2717; Type: GSM900.1800.1900; Serial: 351578015770950

Communication System: GSM 1900; Frequency: 1850.2 MHz; Duty Cycle: 1:4

Medium: M1800 & 1900 Medium parameters used (interpolated): f = 1850.2 MHz;  $\sigma = 1.52$  mho/m;  $\varepsilon_r$ 

= 52.6;  $\rho = 1000 \text{ kg/m}^3$ Phantom section: Flat Section

#### DASY4 Configuration:

- Probe: ET3DV6 SN1759; ConvF(4.4, 4.4, 4.4); Calibrated: 2005/8/30
- Sensor-Surface: 4mm (Mechanical And Optical Surface Detection)
- Electronics: DAE4 Sn679; Calibrated: 2006/3/21
- Phantom: SAM 12; Type: SAM 4.0; Serial: TP:1150
- Measurement SW: DASY4, V4.6 Build 23; Postprocessing SW: SEMCAD, V1.8 Build 160

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

Maximum value of SAR (interpolated) = 0.918 mW/g

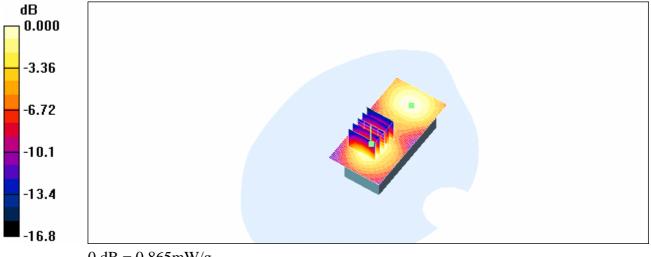
Body/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 20.4 V/m; Power Drift = -0.051 dB

Peak SAR (extrapolated) = 1.25 W/kg

#### SAR(1 g) = 0.803 mW/g; SAR(10 g) = 0.474 mW/g

Maximum value of SAR (measured) = 0.865 mW/g



0 dB = 0.865 mW/g

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#### Body CH661(Testing in GPRS mode multislot class=10)

DUT: Arima-2717; Type: GSM900.1800.1900; Serial: 351578015770950

Communication System: GSM 1900; Frequency: 1880 MHz; Duty Cycle: 1:4

Medium: M1800 & 1900 Medium parameters used: f = 1880 MHz;  $\sigma = 1.55$  mho/m;  $\varepsilon_r = 52.5$ ;  $\rho =$ 

 $1000 \text{ kg/m}^3$ 

Phantom section: Flat Section

#### DASY4 Configuration:

• Probe: ET3DV6 - SN1759; ConvF(4.4, 4.4, 4.4); Calibrated: 2005/8/30

• Sensor-Surface: 4mm (Mechanical And Optical Surface Detection)

• Electronics: DAE4 Sn679; Calibrated: 2006/3/21

• Phantom: SAM 12; Type: SAM 4.0; Serial: TP:1150

Measurement SW: DASY4, V4.6 Build 23; Postprocessing SW: SEMCAD, V1.8 Build 160

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

Maximum value of SAR (interpolated) = 1.06 mW/g

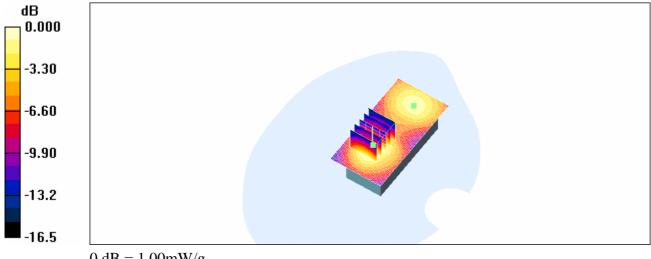
Body/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 21.0 V/m; Power Drift = -0.113 dB

Peak SAR (extrapolated) = 1.47 W/kg

#### SAR(1 g) = 0.920 mW/g; SAR(10 g) = 0.538 mW/g

Maximum value of SAR (measured) = 1.00 mW/g



0 dB = 1.00 mW/g

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#### Body CH810 (Testing in GPRS mode multislot class=10)

DUT: Arima-2717; Type: GSM900.1800.1900; Serial: 351578015770950

Communication System: GSM 1900; Frequency: 1909.8 MHz; Duty Cycle: 1:4

Medium: M1800 & 1900 Medium parameters used: f = 1910 MHz;  $\sigma = 1.58$  mho/m;  $\varepsilon_r = 52.4$ ;  $\rho =$ 

 $1000 \text{ kg/m}^3$ 

Phantom section: Flat Section

#### DASY4 Configuration:

• Probe: ET3DV6 - SN1759; ConvF(4.4, 4.4, 4.4); Calibrated: 2005/8/30

• Sensor-Surface: 4mm (Mechanical And Optical Surface Detection)

• Electronics: DAE4 Sn679; Calibrated: 2006/3/21

• Phantom: SAM 12; Type: SAM 4.0; Serial: TP:1150

Measurement SW: DASY4, V4.6 Build 23; Postprocessing SW: SEMCAD, V1.8 Build 160

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

Maximum value of SAR (interpolated) = 0.998 mW/g

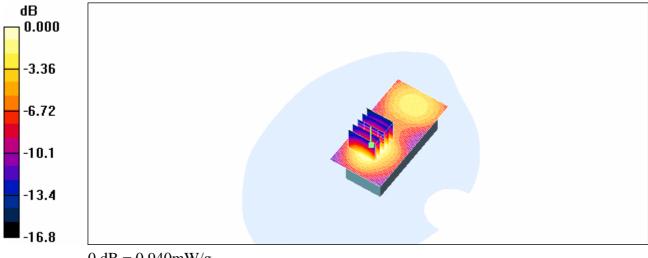
Body/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 19.9 V/m; Power Drift = 0.058 dB

Peak SAR (extrapolated) = 1.43 W/kg

#### SAR(1 g) = 0.877 mW/g; SAR(10 g) = 0.507 mW/g

Maximum value of SAR (measured) = 0.940 mW/g



0 dB = 0.940 mW/g

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## **SAR System Performance Verification**

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

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

Medium: Head 1900MHz Medium parameters used: f = 1900 MHz;  $\sigma = 1.38$  mho/m;  $\varepsilon_r = 38.5$ ;  $\rho =$ 

 $1000 \text{ kg/m}^3$ 

Phantom section: Flat Section

#### DASY4 Configuration:

- Probe: ET3DV6 SN1759; ConvF(5.11, 5.11, 5.11); Calibrated: 2005/8/30
- Sensor-Surface: 4mm (Mechanical And Optical Surface Detection)
- Electronics: DAE4 Sn679; Calibrated: 2006/3/21
- Phantom: SAM 12; Type: SAM 4.0; Serial: TP:1150
- Measurement SW: DASY4, V4.6 Build 23; Postprocessing SW: SEMCAD, V1.8 Build 160

Pin=250mw/Area Scan (41x61x1): Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (interpolated) = 11.3 mW/g

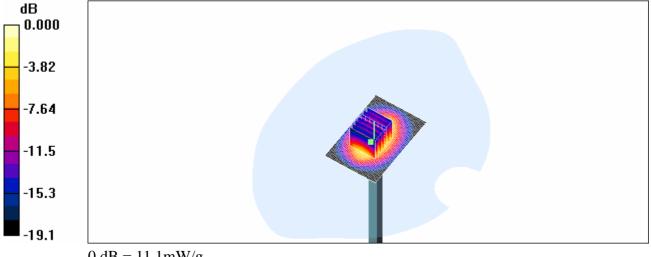
Pin=250mw/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 95.1 V/m; Power Drift = -0.136 dB

Peak SAR (extrapolated) = 17.1 W/kg

#### SAR(1 g) = 9.88 mW/g; SAR(10 g) = 5.21 mW/g

Maximum value of SAR (measured) = 11.1 mW/g



0 dB = 11.1 mW/g

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#### **SAR System Performance Verification**

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

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

Medium: M1800 & 1900 Medium parameters used: f = 1900 MHz;  $\sigma$  = 1.59 mho/m;  $\varepsilon$   $_{\rm r}$  = 52.3;  $\rho$  =

 $1000 \text{ kg/m}^3$ 

Phantom section: Flat Section

#### DASY4 Configuration:

• Probe: ET3DV6 - SN1759; ConvF(4.4, 4.4, 4.4); Calibrated: 2005/8/30

• Sensor-Surface: 4mm (Mechanical And Optical Surface Detection)

• Electronics: DAE3 Sn547; Calibrated: 2006/4/28

• Phantom: SAM 12; Type: SAM 4.0; Serial: TP:1150

• Measurement SW: DASY4, V4.6 Build 23; Postprocessing SW: SEMCAD, V1.8 Build 160

Pin=250mW/Area Scan (61x61x1): Measurement grid: dx=15mm, dy=15mm

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

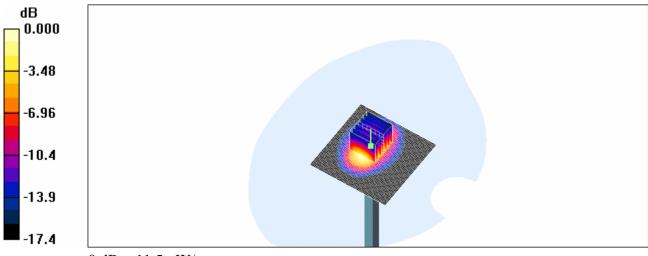
Pin=250mW/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 89.3 V/m; Power Drift = -0.098 dB

Peak SAR (extrapolated) = 17.9 W/kg

#### SAR(1 g) = 10.3 mW/g; SAR(10 g) = 5.29 mW/g

Maximum value of SAR (measured) = 11.5 mW/g



0 dB = 11.5 mW/g

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#### **SAR System Performance Verification**

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

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

Medium: M1800 & 1900 Medium parameters used: f = 1900 MHz;  $\sigma = 1.56$  mho/m;  $\varepsilon_r = 53.2$ ;  $\rho =$ 

 $1000 \text{ kg/m}^3$ 

Phantom section: Flat Section

#### DASY4 Configuration:

• Probe: ET3DV6 - SN1759; ConvF(4.4, 4.4, 4.4); Calibrated: 2005/8/30

• Sensor-Surface: 4mm (Mechanical And Optical Surface Detection)

• Electronics: DAE4 Sn679; Calibrated: 2006/3/21

• Phantom: SAM 12; Type: SAM 4.0; Serial: TP:1150

Measurement SW: DASY4, V4.6 Build 23; Postprocessing SW: SEMCAD, V1.8 Build 160

Pin=250mW/Area Scan (41x61x1): Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (interpolated) = 11.9 mW/g

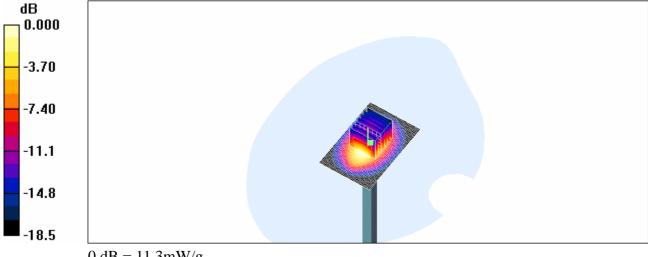
Pin=250mW/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 90.1 V/m; Power Drift = -0.028 dB

Peak SAR (extrapolated) = 17.8 W/kg

#### SAR(1 g) = 10 mW/g; SAR(10 g) = 5.21 mW/g

Maximum value of SAR (measured) = 11.3 mW/g



0 dB = 11.3 mW/g