

TEST REPORT

| | |
|----------------------|---|
| Equipment Under Test | : 850/1900 DUAL BAND GSM PHONES |
| Model No. | : TSM2 |
| FCC ID | : TKH-A109-TSM2 |
| Applicant | : VITELCOM MOBILE TECHNOLOGY, S.A. |
| Address of Applicant | : Parque Tecnológico de Andalucía Av. Juan López Peñalver 7, Malaga, Spain |
| Date of Receipt | : 2006.03.24 |
| Date of Test(s) | : 2006.03.29-2006.03.30 |
| Date of Issue | : 2006.06.15 |

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.

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Tested by : Leo Date : 2006.06.15

Approved by : Robert Date : 2006.06.15

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1. General Information

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1.3 Description of EUT(s)

| | | |
|----------------------------------|---|-----------|
| EUT Name | 850/1900 Dual Band GSM Phones | |
| Trade mark | MOVISTAR | |
| Model | TSM2 | |
| IMEI | 355409003878794 | |
| FCC ID | TKH-A109-TSM2 | |
| Mode of Operation | 850/1900 MHz dual band GSM mobile phone | |
| Duty Cycle | 1/8 | |
| Modulation Mode | GMSK | |
| Maximum RF Conducted Power(Peak) | GSM 850 | PCS 1900 |
| | 32.31 dBm | 28.54 dBm |

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| | | |
|----------------------------|--|------------------|
| TX Frequency range | GSM 850 | PCS 1900 |
| | 824.2-848.8 MHz | 1850.2-1909.8MHz |
| Channel Number (AFRFCN) | GSM 850 | PCS 1900 |
| | 128-251 | 512-810 |
| Battery Type | 3.6 V Lithium-Ion | |
| Antenna Type | Integral | |
| Antenna Gain (Peak) | GSM850 | PCS 1900 |
| | 0.5 dbi | |
| Exposure environment | Uncontrolled exposure | |
| HW Version | 3.1 | |
| SW Version | V3.1-Ec | |
| Max. SAR Measured (1 g) | 0.958W/kg (At GSM 850 Body 190 Channel) | |

1.4 Test Environment

Ambient temperature : 22.2° C

Tissue Simulating Liquid : 21.7° C

Relative Humidity : 62 %

1.5 Operation description

The device was controlled by using a Universal Radio Communication Tester (CMU 200). Communication between the device and the tester was established by air link.

Measurements were performed 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.

The DASY4 system measures power drift during SAR testing by comparing e-field in the same location at the beginning and at the end of measurement.

1.6 The SAR Measurement System

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

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.

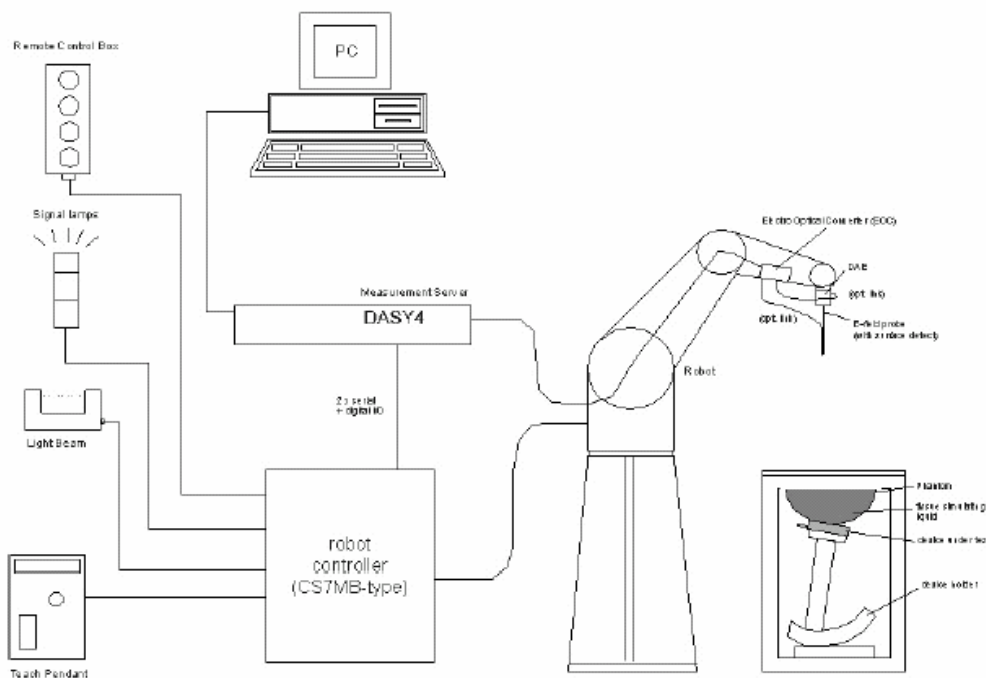


Fig. a The microwave circuit arrangement used for SAR system verification

- 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

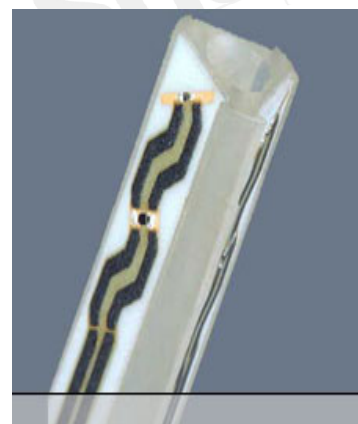
server.

- 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 850&1900 MHz
(accuracy $\pm 8\%$)
- Frequency:** 10 MHz to 6 GHz; Linearity: ± 0.2 dB
(30 MHz to 3 GHz)
- Directivity:** ± 0.2 dB in brain tissue (rotation around probe axis)
 ± 0.4 dB in brain tissue (rotation normal to probe axis)
- Dynamic Range:** 5 μ W/g to 100 mW/g; Linearity: ± 0.2 dB
- Surface. Detect:** ± 0.2 mm repeatability in air and clear liquids over diffuse reflecting surfaces
- Dimensions:** Overall length: 330 mm
Tip length: 16 mm
Body diameter: 12 mm
Tip diameter: 6.8 mm



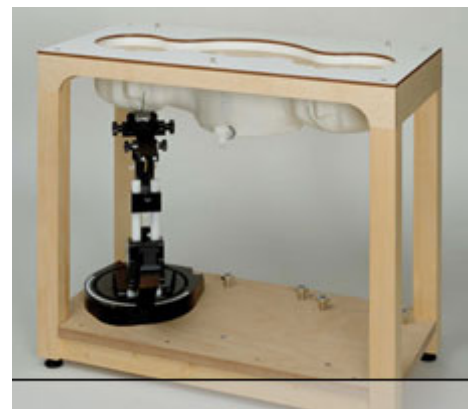
ET3DV6 E-Field Probe

Application: Distance from probe tip to dipole centers: 2.7 mm
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 ± 0.2 mm
Filling Volume: Approx. 25 liters
Dimensions: Height: 251 mm;
Length: 1000 mm;
Width: 500 mm



DEVICE HOLDER

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



Device Holder

1.8 SAR System Verification

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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 $\pm 10\%$ from the target SAR values. These tests were done at 850&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.

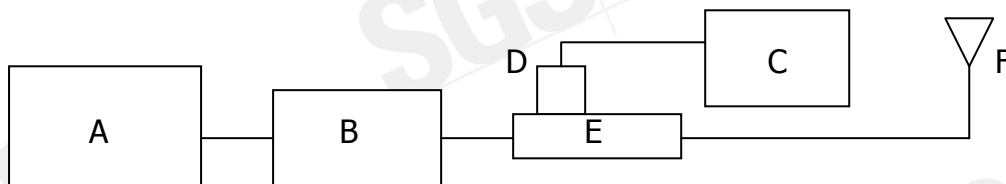
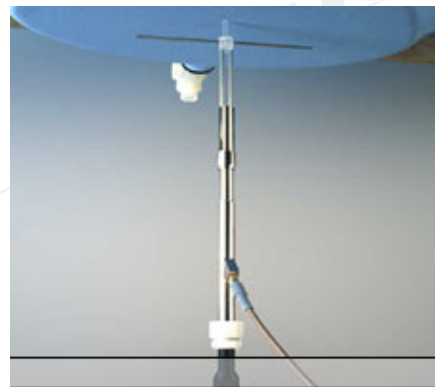


Fig.b The microwave circuit arrangement used for SAR system verification

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



Photograph of the dipole Antenna

| Validation Kit | Frequency | Target SAR 1g (250mW) | Target SAR 10g (250mW) | Measured SAR 1g | Measured SAR 10g | Measured date |
|---------------------|-----------------|-----------------------|------------------------|-----------------|------------------|---------------|
| DT3DV6 S/N :1759 | 900 MHz (Head) | 2.7 m W/g | 1.74 m W/g | 2.75m W/g | 1.77 m W/g | 2006/03/30 |
| | 900 MHz (Body) | 2.78 m W/g | 1.81 m W/g | 2.66 m W/g | 1.66 m W/g | 2006/03/29 |
| | 1900 MHz (Head) | 9.64 m W/g | 5.07 m W/g | 9.71 m W/g | 5.01 m W/g | 2006/03/30 |
| | 1900 MHz (Body) | 9.92 m W/g | 5.28 m W/g | 10.4 m W/g | 5.39 m W/g | 2006/03/30 |

Table 1. Results system validation

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1.9 Tissue Simulant Fluid for the Frequency Band

The dielectric properties for this body-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 - 6000 MHz) by using a procedure detailed in Section V.

All dielectric parameters of tissue simulates were measured within 24 hours of SAR measurement. The depth of the tissue simulant in the ear reference point of the phantom was 15cm±5mm during all tests. (Fig .2)

| F (MHz) | Tissue type | Limits/ Measured | Dielectric Parameters | | |
|---------|-------------|----------------------|-----------------------|----------------|----------------------------|
| | | | ρ | σ (S/m) | Simulated Tissue Temp(° C) |
| 850 | Head | Measured, 2006.03.30 | 40.3 | 0.925 | 21.7 |
| | | Recommended Limits | 39.4-43.6 | 0.86-1.02 | 20-24 |
| | Body | Measured, 2006.03.29 | 53.20 | 0.994 | 22.1 |
| | | Recommended Limits | 52.3-58 | 0.92-1.1 | 20-24 |
| 1900 | Head | Measured, 2006.03.30 | 39.5 | 1.44 | 21.8 |
| | | Recommended Limits | 38-42 | 1.305-1.595 | 20-24 |
| | Body | Measured, 2006.03.30 | 53.2 | 1.56 | 22.0 |
| | | Recommended Limits | 50.6-56 | 1.44-1.6 | 20-24 |

Table 2. Dielectric Parameters of Tissue Simulant Fluid

The composition of the brain tissue simulating liquid for 900 & 1900 MHz is:

| Ingredient | 900MHz(Head) | 900MHz(Body) | 1900MHz(Head) | 1900MHz(Body) |
|---------------|--------------|--------------|---------------|---------------|
| BDGMBE | X | X | 444.52 g | 300.67 |
| Water | 532.98 g | 632.68 | 552.42 g | 716.56 |
| Salt | 18.3 g | 11.72 | 3.06 g | 4.0 |
| Preventol D-7 | 2.4 g | 1.2 | X | X |
| Cellulose | 3.2 g | X | X | X |
| Sugar | 766.0 g | 600 g | X | X |
| Total amount | 1 L (1.0kg) | 1 L (1.0kg) | 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)

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

Table .4 RF exposure limits

Notes:

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

2.Summary of Results

GSM 850 MHZ

| Frequency | Channel | MHz | Conducted Output Power(Peak) | Measured(W/kg) 1g/10g | Amb. Temp[°C] | Liquid Temp[°C] |
|-----------|---------|-------|------------------------------|--------------------------|------------------|--------------------|
| 850 MHz | 128 | 824.2 | 32.31dbm | 0.735/0.511 | 22 | 21.7 |
| | 190 | 836.6 | 32.24dbm | 0.839/0.58 | 22 | 21.7 |
| | 251 | 848.8 | 32.16dbm | 0.952/0.657 | 22 | 21.7 |

Left Head (Cheek Position)

| Frequency | Channel | MHz | Conducted Output Power(Peak) | Measured(W/kg) 1g/10g | Amb. Temp[°C] | Liquid Temp[°C] |
|-----------|---------|-------|------------------------------|--------------------------|------------------|--------------------|
| 850 MHz | 128 | 824.2 | 32.31dbm | 0.633/0.434 | 22 | 21.7 |
| | 190 | 836.6 | 32.24dbm | 0.717/0.49 | 22 | 21.7 |
| | 251 | 848.8 | 32.16dbm | 0.795/0.541 | 22 | 21.7 |

Right Head (15° Tilt Position)

| Frequency | Channel | MHz | Conducted Output Power(Peak) | Measured(W/kg) 1g/10g | Amb. Temp[°C] | Liquid Temp[°C] |
|-----------|---------|-------|------------------------------|--------------------------|------------------|--------------------|
| 850 MHz | 128 | 824.2 | 32.31dbm | 0.418/0.292 | 22 | 21.7 |
| | 190 | 836.6 | 32.24dbm | 0.388/0.272 | 22 | 21.7 |
| | 251 | 848.8 | 32.16dbm | 0.428/0.298 | 22 | 21.7 |

Left Head (15° Tilt Position)

| Frequency | Channel | MHz | Conducted Output Power(Peak) | Measured(W/kg) 1g/10g | Amb. Temp[°C] | Liquid Temp[°C] |
|-----------|---------|-------|------------------------------|--------------------------|------------------|--------------------|
| 850 MHz | 128 | 824.2 | 32.31dbm | 0.424/0.286 | 22 | 21.7 |
| | 190 | 836.6 | 32.24dbm | 0.385/0.26 | 22 | 21.7 |
| | 251 | 848.8 | 32.16dbm | 0.413/0.28 | 22 | 21.7 |

Body Worn for Headset

| Frequency | Channel | MHz | Conducted Output Power(Peak) | Measured(W/kg) 1g/10g | Amb. Temp[°C] | Liquid Temp[°C] |
|-----------|---------|-------|------------------------------|--------------------------|------------------|--------------------|
| 850 MHz | 128 | 824.2 | 32.31dbm | 0.923/0.659 | 22 | 21.7 |
| | 190 | 836.6 | 32.24dbm | 0.958/0.681 | 22 | 21.7 |
| | 251 | 848.8 | 32.16dbm | 0.897/0.635 | 22 | 21.7 |

PCS 1900 MHZ

Right Head (Cheek Position)

| Frequency | Channel | MHz | Conducted Output Power(Peak) | Measured(W/kg) 1g/10g | Amb. Temp[°C] | Liquid Temp[°C] |
|-----------|---------|--------|------------------------------|--------------------------|------------------|--------------------|
| 1900 MHz | 512 | 1850.2 | 28.54dbm | 0.368/0.224 | 22 | 21.7 |
| | 661 | 1880 | 28.18dbm | 0.337/0.202 | 22 | 21.7 |
| | 810 | 1909.8 | 28.46dbm | 0.279/0.165 | 22 | 21.7 |

Left Head (Cheek Position)

| Frequency | Channel | MHz | Conducted Output Power(Peak) | Measured(W/kg) 1g/10g | Amb. Temp[°C] | Liquid Temp[°C] |
|-----------|---------|--------|------------------------------|--------------------------|------------------|--------------------|
| 1900 MHz | 512 | 1850.2 | 28.54dbm | 0.438/0.255 | 22 | 21.7 |
| | 661 | 1880 | 28.18dbm | 0.383/0.222 | 22 | 21.7 |
| | 810 | 1909.8 | 28.46dbm | 0.305/0.176 | 22 | 21.7 |

Right Head (15° Tilt Position)

| Frequency | Channel | MHz | Conducted Output Power(Peak) | Measured(W/kg) 1g/10g | Amb. Temp[°C] | Liquid Temp[°C] |
|-----------|---------|--------|------------------------------|--------------------------|------------------|--------------------|
| 1900 MHz | 512 | 1850.2 | 28.54dbm | 0.372/0.217 | 22 | 21.7 |
| | 661 | 1880 | 28.18dbm | 0.325/0.189 | 22 | 21.7 |
| | 810 | 1909.8 | 28.46dbm | 0.264/0.151 | 22 | 21.7 |

Left Head (15° Tilt Position)

| Frequency | Channel | MHz | Conducted Output Power(Peak) | Measured(W/kg) 1g/10g | Amb. Temp[°C] | Liquid Temp[°C] |
|-----------|---------|--------|------------------------------|--------------------------|------------------|--------------------|
| 1900 MHz | 512 | 1850.2 | 28.54dbm | 0.495/0.276 | 22 | 21.7 |
| | 661 | 1880 | 28.18dbm | 0.423/0.233 | 22 | 21.7 |
| | 810 | 1909.8 | 28.46dbm | 0.322/0.177 | 22 | 21.7 |

Body Worn for Headset

| Frequency | Channel | MHz | Conducted Output Power(Peak) | Measured(W/kg) 1g/10g | Amb. Temp[°C] | Liquid Temp[°C] |
|-----------|---------|--------|------------------------------|--------------------------|------------------|--------------------|
| 1900 MHz | 512 | 1850.2 | 28.54dbm | 0.399/0.229 | 22 | 21.7 |
| | 661 | 1880 | 28.18dbm | 0.304/0.176 | 22 | 21.7 |
| | 810 | 1909.8 | 28.46dbm | 0.244/0.141 | 22 | 21.7 |

Note:

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

3. Instruments List

| Manufacturer | Device | Type | Serial number | Date of last calibration |
|---------------------------------|---------------------------------------|-------------------------|----------------|-----------------------------|
| Schmid & Partner Engineering AG | Dosimetric E-Field Probe | ET3DV6 | 1759 | Aug.30.2005 |
| Schmid & Partner Engineering AG | 900/1900 MHz System Validation Dipole | D900V2 D1900V2 | 178 5d027 | Feb.07.2006 MAR.21.2006 |
| Schmid & Partner Engineering AG | Data acquisition Electronics | DAE3 | 547 | Feb.14.2006 |
| Schmid & Partner Engineering AG | Software | DASY 4 V4.6 Build 23 | N/A | Calibration isn't necessary |
| Schmid & Partner Engineering AG | Phantom | SAM | N/A | Calibration isn't necessary |
| Agilent | Network Analyzer | 8753D | 3410A05547 | Jun.02.2005 |
| Agilent | Dielectric Probe Kit | 85070D | US01440168 | Calibration isn't necessary |
| Agilent | Dual-directional coupler | 777D 778D | 50114 50313 | Aug.12.2005 Aug12.2005 |
| Agilent | RF Signal Generator | 8648D | 3847M00432 | Apr.15.2005 |
| Agilent | Power Sensor | 8481H | MY41091361 | May.27.2005 |
| Rohde & Schwarz | Universal Radio Communication Tester | CMU200 | 102189 | Oct.24.2005 |

4. Measurements

HEAD_RE_Cheek_CH128

Date/Time: 2006/3/30 14:31:37

DUT: CETECOM-TSM2; Type: GSM 850; Serial: 355409003878794

Communication System: GSM 850; Frequency: 824.2 MHz; Duty Cycle: 1:8.3

Medium: Head 850 MHz Medium parameters used (interpolated): $f = 824.2$ MHz; $\sigma = 0.87$ mho/m; $\epsilon_r = 40.7$; $\rho = 1000$ kg/m³

Phantom section: Right Section

DASY4 Configuration:

- Probe: ET3DV6 - SN1759; ConvF(6.15, 6.15, 6.15); Calibrated: 2005/8/30
- Sensor-Surface: 4mm (Mechanical And Optical Surface Detection)
- Electronics: DAE3 Sn547; Calibrated: 2006/2/14
- Phantom: SAM 12; Type: SAM 4.0; Serial: TP:1150
- Measurement SW: DASY4, V4.6 Build 23; Postprocessing SW: SEMCAD, V1.8 Build 160

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

Maximum value of SAR (interpolated) = 0.797 mW/g

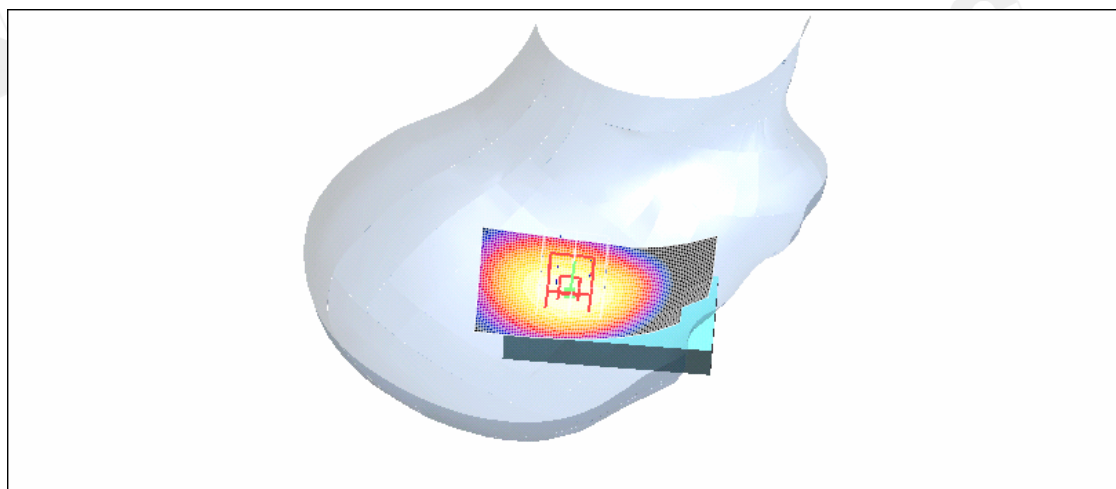
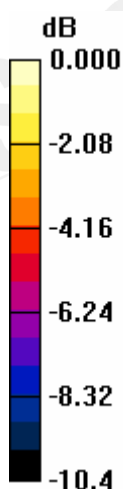
Right Cheek/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 25.5 V/m; Power Drift = 0.001 dB

Peak SAR (extrapolated) = 0.973 W/kg

SAR(1 g) = 0.735 mW/g; SAR(10 g) = 0.511 mW/g

Maximum value of SAR (measured) = 0.781 mW/g



0 dB = 0.781mW/g

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HEAD_RE_Cheek_CH190

DUT: CETECOM-TSM2; Type: GSM 850; Serial: 355409003878794

Communication System: GSM 850; Frequency: 836.6 MHz; Duty Cycle: 1:8.3

Medium: Head 850 MHz Medium parameters used (interpolated): $f = 836.6 \text{ MHz}$; $\sigma = 0.88 \text{ mho/m}$; $\epsilon_r = 40.7$; $\rho = 1000 \text{ kg/m}^3$

Phantom section: Right Section

DASY4 Configuration:

- Probe: ET3DV6 - SN1759; ConvF(6.15, 6.15, 6.15); Calibrated: 2005/8/30
- Sensor-Surface: 4mm (Mechanical And Optical Surface Detection)
- Electronics: DAE3 Sn547; Calibrated: 2006/2/14
- Phantom: SAM 12; Type: SAM 4.0; Serial: TP:1150
- Measurement SW: DASY4, V4.6 Build 23; Postprocessing SW: SEMCAD, V1.8 Build 160

Right Cheek/Area Scan (41x81x1): Measurement grid: $dx=15\text{mm}$, $dy=15\text{mm}$

Maximum value of SAR (interpolated) = 0.906 mW/g

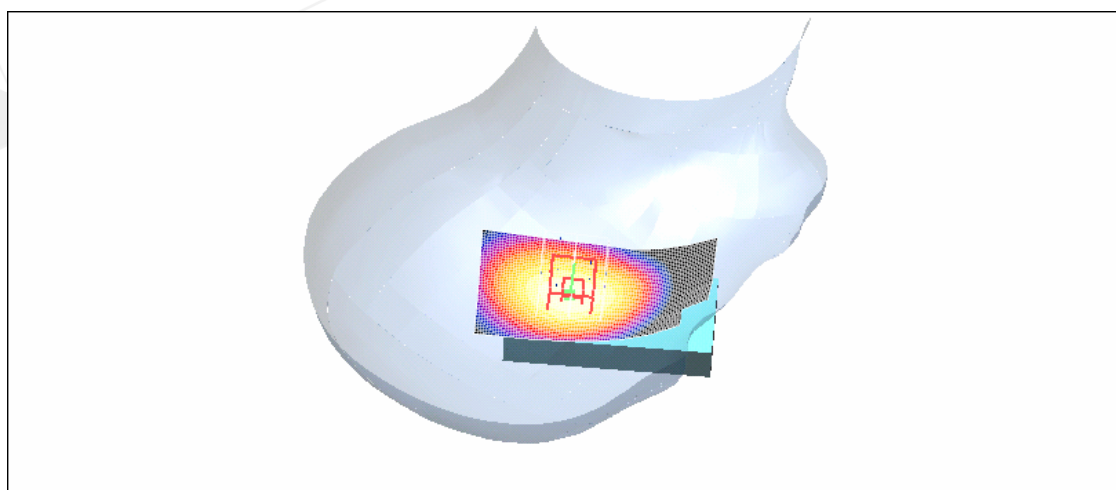
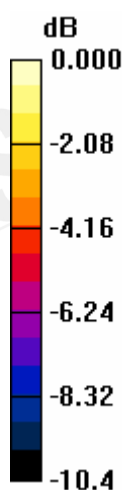
Right Cheek/Zoom Scan (5x5x7)/Cube 0: Measurement grid: $dx=8\text{mm}$, $dy=8\text{mm}$, $dz=5\text{mm}$

Reference Value = 26.7 V/m ; Power Drift = 0.031 dB

Peak SAR (extrapolated) = 1.12 W/kg

SAR(1 g) = 0.839 mW/g ; SAR(10 g) = 0.580 mW/g

Maximum value of SAR (measured) = 0.901 mW/g



0 dB = 0.901 mW/g

HEAD_RE_Cheek_CH251

DUT: CETECOM-TSM2; Type: GSM 850; Serial: 355409003878794

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

Medium: Head 850 MHz Medium parameters used (interpolated): $f = 848.8 \text{ MHz}$; $\sigma = 0.889 \text{ mho/m}$; $\epsilon_r = 40.5$; $\rho = 1000 \text{ kg/m}^3$

Phantom section: Right Section

DASY4 Configuration:

- Probe: ET3DV6 - SN1759; ConvF(6.15, 6.15, 6.15); Calibrated: 2005/8/30
- Sensor-Surface: 4mm (Mechanical And Optical Surface Detection)
- Electronics: DAE3 Sn547; Calibrated: 2006/2/14
- Phantom: SAM 12; Type: SAM 4.0; Serial: TP:1150
- Measurement SW: DASY4, V4.6 Build 23; Postprocessing SW: SEMCAD, V1.8 Build 160

Right Cheek/Area Scan (41x81x1): Measurement grid: $dx=15\text{mm}$, $dy=15\text{mm}$

Maximum value of SAR (interpolated) = 1.02 mW/g

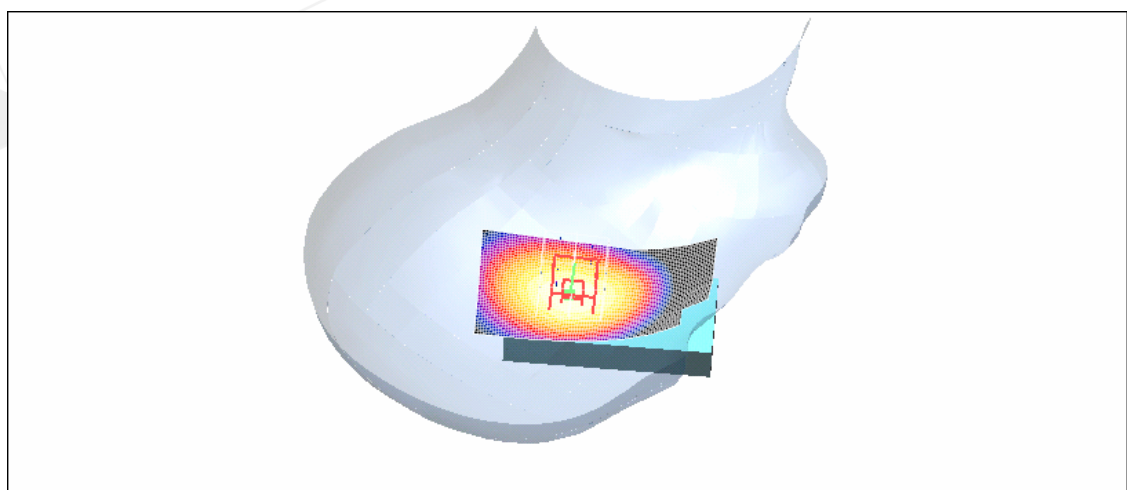
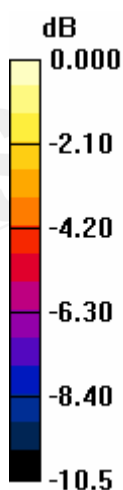
Right Cheek/Zoom Scan (5x5x7)/Cube 0: Measurement grid: $dx=8\text{mm}$, $dy=8\text{mm}$, $dz=5\text{mm}$

Reference Value = 27.9 V/m; Power Drift = -0.008 dB

Peak SAR (extrapolated) = 1.28 W/kg

SAR(1 g) = 0.952 mW/g; SAR(10 g) = 0.657 mW/g

Maximum value of SAR (measured) = 1.02 mW/g



0 dB = 1.02mW/g

HEAD_LE_Cheek_CH128

DUT: CETECOM-TSM2; Type: GSM 850; Serial: 355409003878794

Communication System: GSM 850; Frequency: 824.2 MHz; Duty Cycle: 1:8.3

Medium: Head 850 MHz Medium parameters used (interpolated): $f = 824.2 \text{ MHz}$; $\sigma = 0.87 \text{ mho/m}$; $\epsilon_r = 40.7$; $\rho = 1000 \text{ kg/m}^3$

Phantom section: Left Section

DASY4 Configuration:

- Probe: ET3DV6 - SN1759; ConvF(6.15, 6.15, 6.15); Calibrated: 2005/8/30
- Sensor-Surface: 4mm (Mechanical And Optical Surface Detection)
- Electronics: DAE3 Sn547; Calibrated: 2006/2/14
- Phantom: SAM 12; Type: SAM 4.0; Serial: TP:1150
- Measurement SW: DASY4, V4.6 Build 23; Postprocessing SW: SEMCAD, V1.8 Build 160

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

Maximum value of SAR (interpolated) = 0.678 mW/g

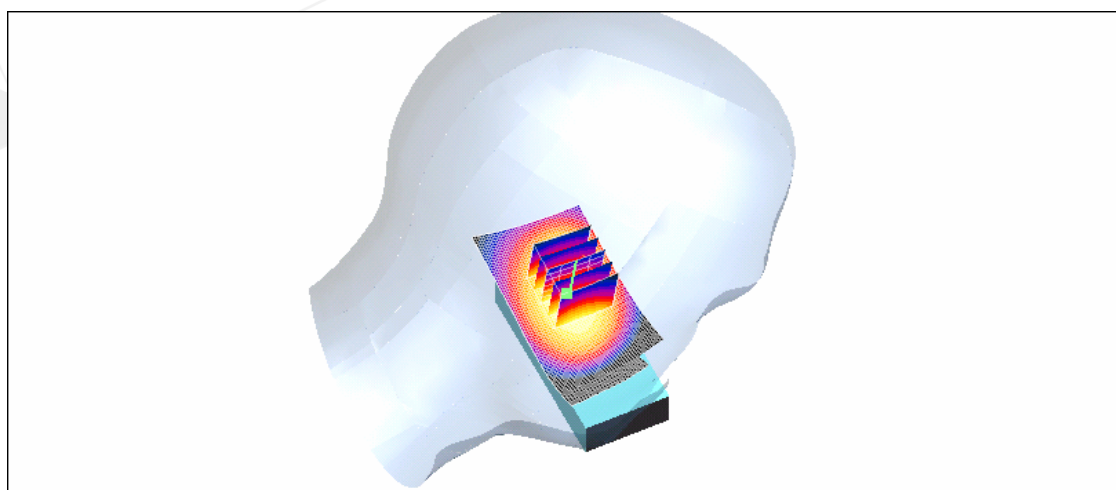
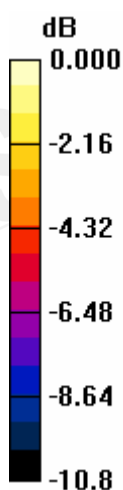
Left Cheek/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 22.6 V/m; Power Drift = 0.061 dB

Peak SAR (extrapolated) = 0.869 W/kg

SAR(1 g) = 0.633 mW/g; SAR(10 g) = 0.434 mW/g

Maximum value of SAR (measured) = 0.675 mW/g



0 dB = 0.675mW/g

HEAD_LE_Cheek_CH190

DUT: CETECOM-TSM2; Type: GSM 850; Serial: 355409003878794

Communication System: GSM 850; Frequency: 836.6 MHz; Duty Cycle: 1:8.3

Medium: Head 850 MHz Medium parameters used (interpolated): $f = 836.6 \text{ MHz}$; $\sigma = 0.88 \text{ mho/m}$; $\epsilon_r = 40.7$; $\rho = 1000 \text{ kg/m}^3$

Phantom section: Left Section

DASY4 Configuration:

- Probe: ET3DV6 - SN1759; ConvF(6.15, 6.15, 6.15); Calibrated: 2005/8/30
- Sensor-Surface: 4mm (Mechanical And Optical Surface Detection)
- Electronics: DAE3 Sn547; Calibrated: 2006/2/14
- Phantom: SAM 12; Type: SAM 4.0; Serial: TP:1150
- Measurement SW: DASY4, V4.6 Build 23; Postprocessing SW: SEMCAD, V1.8 Build 160

Left Cheek/Area Scan (41x81x1): Measurement grid: $dx=15\text{mm}$, $dy=15\text{mm}$

Maximum value of SAR (interpolated) = 0.767 mW/g

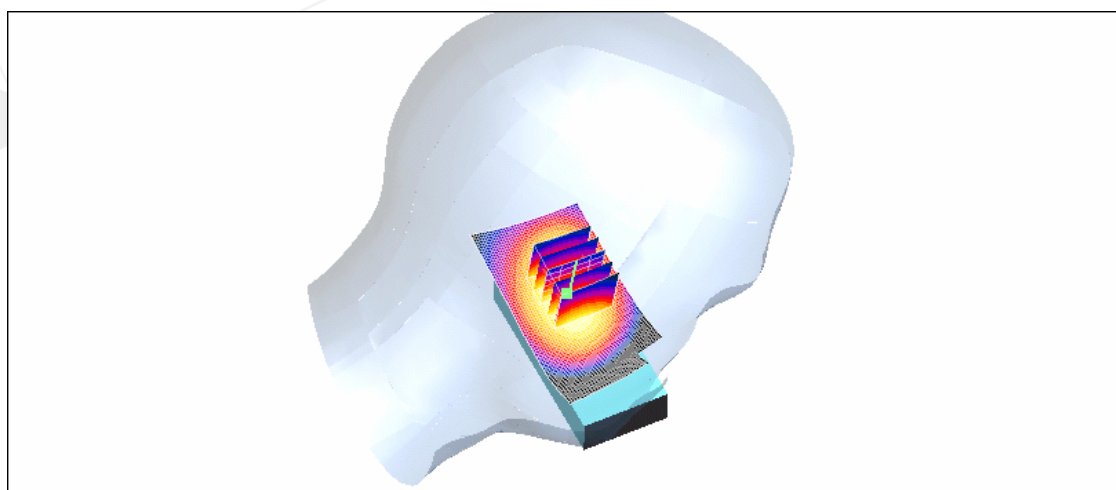
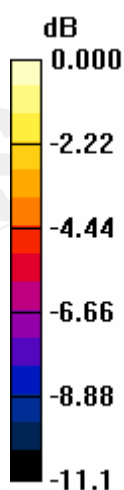
Left Cheek/Zoom Scan (5x5x7)/Cube 0: Measurement grid: $dx=8\text{mm}$, $dy=8\text{mm}$, $dz=5\text{mm}$

Reference Value = 23.7 V/m ; Power Drift = 0.002 dB

Peak SAR (extrapolated) = 0.985 W/kg

SAR(1 g) = 0.717 mW/g ; SAR(10 g) = 0.490 mW/g

Maximum value of SAR (measured) = 0.767 mW/g



0 dB = 0.767 mW/g

HEAD_LE_Cheek_CH251

DUT: CETECOM-TSM2; Type: GSM 850; Serial: 355409003878794

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

Medium: Head 850 MHz Medium parameters used (interpolated): $f = 848.8 \text{ MHz}$; $\sigma = 0.889 \text{ mho/m}$; $\epsilon_r = 40.5$; $\rho = 1000 \text{ kg/m}^3$

Phantom section: Left Section

DASY4 Configuration:

- Probe: ET3DV6 - SN1759; ConvF(6.15, 6.15, 6.15); Calibrated: 2005/8/30
- Sensor-Surface: 4mm (Mechanical And Optical Surface Detection)
- Electronics: DAE3 Sn547; Calibrated: 2006/2/14
- Phantom: SAM 12; Type: SAM 4.0; Serial: TP:1150
- Measurement SW: DASY4, V4.6 Build 23; Postprocessing SW: SEMCAD, V1.8 Build 160

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

Maximum value of SAR (interpolated) = 0.844 mW/g

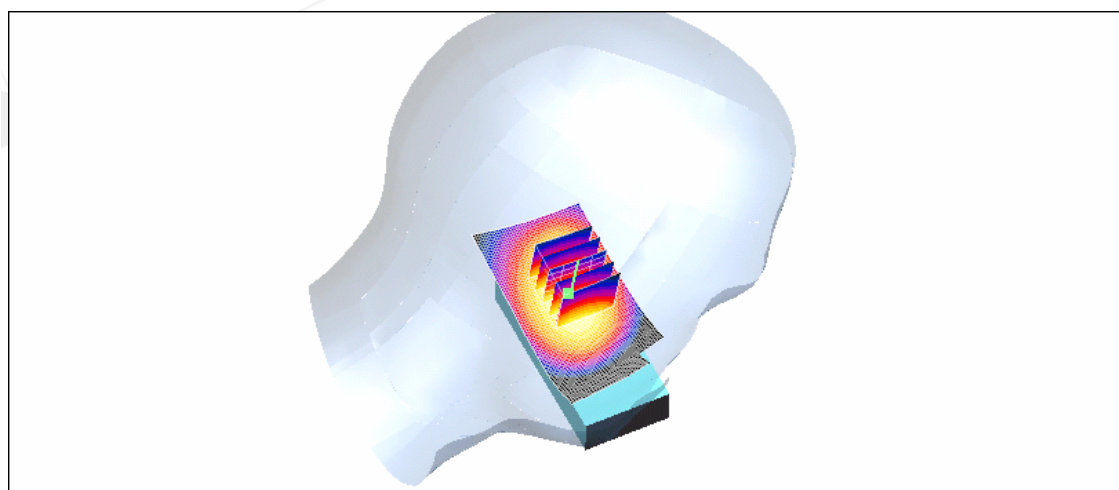
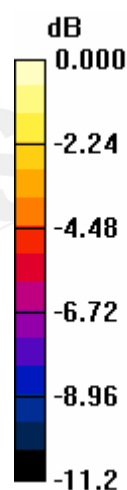
Left Cheek/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 24.3 V/m; Power Drift = 0.003 dB

Peak SAR (extrapolated) = 1.09 W/kg

SAR(1 g) = 0.795 mW/g; SAR(10 g) = 0.541 mW/g

Maximum value of SAR (measured) = 0.854 mW/g



0 dB = 0.854mW/g

HEAD_RE_Tilt_CH128

DUT: CETECOM-TSM2; Type: GSM 850; Serial: 355409003878794

Communication System: GSM 850; Frequency: 824.2 MHz; Duty Cycle: 1:8.3

Medium: Head 850 MHz Medium parameters used (interpolated): $f = 824.2 \text{ MHz}$; $\sigma = 0.87 \text{ mho/m}$; $\epsilon_r = 40.7$; $\rho = 1000 \text{ kg/m}^3$

Phantom section: Right Section

DASY4 Configuration:

- Probe: ET3DV6 - SN1759; ConvF(6.15, 6.15, 6.15); Calibrated: 2005/8/30
- Sensor-Surface: 4mm (Mechanical And Optical Surface Detection)
- Electronics: DAE3 Sn547; Calibrated: 2006/2/14
- Phantom: SAM 12; Type: SAM 4.0; Serial: TP:1150
- Measurement SW: DASY4, V4.6 Build 23; Postprocessing SW: SEMCAD, V1.8 Build 160

Right Tilt/Area Scan (41x81x1): Measurement grid: $dx=15\text{mm}$, $dy=15\text{mm}$

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

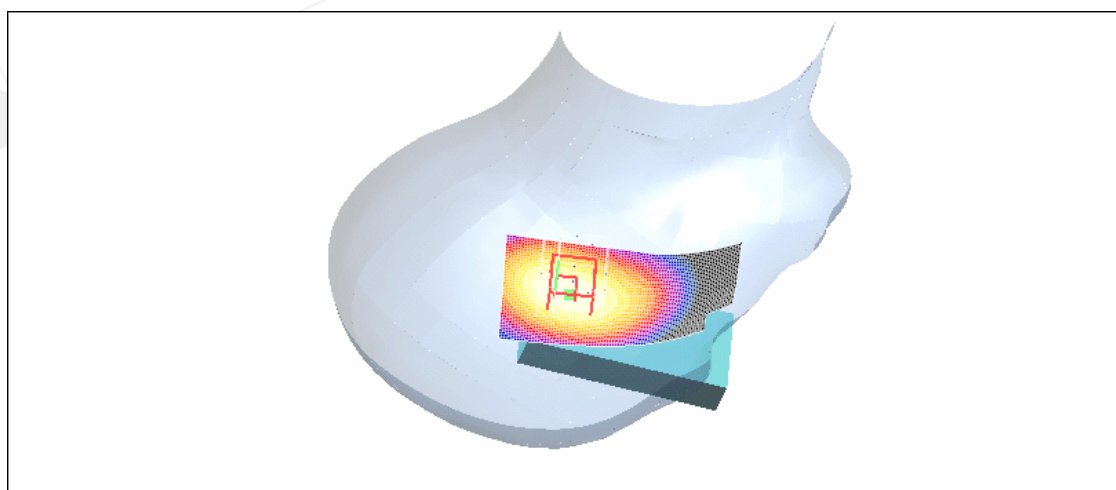
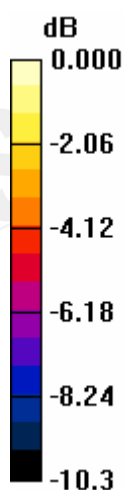
Right Tilt/Zoom Scan (5x5x7)/Cube 0: Measurement grid: $dx=8\text{mm}$, $dy=8\text{mm}$, $dz=5\text{mm}$

Reference Value = 22.1 V/m ; Power Drift = 0.022 dB

Peak SAR (extrapolated) = 0.552 W/kg

SAR(1 g) = 0.418 mW/g ; SAR(10 g) = 0.292 mW/g

Maximum value of SAR (measured) = 0.442 mW/g



0 dB = 0.442 mW/g

HEAD_RE_Tilt_CH190

DUT: CETECOM-TSM2; Type: GSM 850; Serial: 355409003878794

Communication System: GSM 850; Frequency: 836.6 MHz; Duty Cycle: 1:8.3

Medium: Head 850 MHz Medium parameters used (interpolated): $f = 836.6 \text{ MHz}$; $\sigma = 0.88 \text{ mho/m}$; $\epsilon_r = 40.7$; $\rho = 1000 \text{ kg/m}^3$

Phantom section: Right Section

DASY4 Configuration:

- Probe: ET3DV6 - SN1759; ConvF(6.15, 6.15, 6.15); Calibrated: 2005/8/30
- Sensor-Surface: 4mm (Mechanical And Optical Surface Detection)
- Electronics: DAE3 Sn547; Calibrated: 2006/2/14
- Phantom: SAM 12; Type: SAM 4.0; Serial: TP:1150
- Measurement SW: DASY4, V4.6 Build 23; Postprocessing SW: SEMCAD, V1.8 Build 160

Right Tilt/Area Scan (41x81x1): Measurement grid: $dx=15\text{mm}$, $dy=15\text{mm}$

Maximum value of SAR (interpolated) = 0.432 mW/g

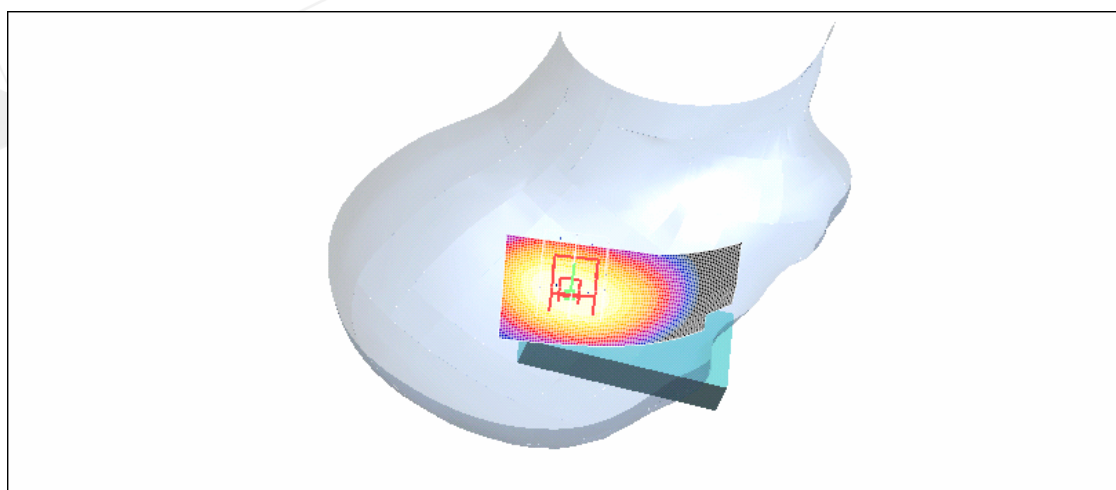
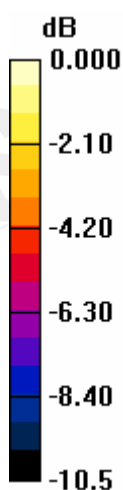
Right Tilt/Zoom Scan (5x5x7)/Cube 0: Measurement grid: $dx=8\text{mm}$, $dy=8\text{mm}$, $dz=5\text{mm}$

Reference Value = 21.6 V/m ; Power Drift = -0.225 dB

Peak SAR (extrapolated) = 0.511 W/kg

SAR(1 g) = 0.388 mW/g ; SAR(10 g) = 0.272 mW/g

Maximum value of SAR (measured) = 0.410 mW/g



0 dB = 0.410 mW/g

HEAD_RE_Tilt_CH251

DUT: CETECOM-TSM2; Type: GSM 850; Serial: 355409003878794

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

Medium: Head 850 MHz Medium parameters used (interpolated): $f = 848.8 \text{ MHz}$; $\sigma = 0.889 \text{ mho/m}$; $\epsilon_r = 40.5$; $\rho = 1000 \text{ kg/m}^3$

Phantom section: Right Section

DASY4 Configuration:

- Probe: ET3DV6 - SN1759; ConvF(6.15, 6.15, 6.15); Calibrated: 2005/8/30
- Sensor-Surface: 4mm (Mechanical And Optical Surface Detection)
- Electronics: DAE3 Sn547; Calibrated: 2006/2/14
- Phantom: SAM 12; Type: SAM 4.0; Serial: TP:1150
- Measurement SW: DASY4, V4.6 Build 23; Postprocessing SW: SEMCAD, V1.8 Build 160

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

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

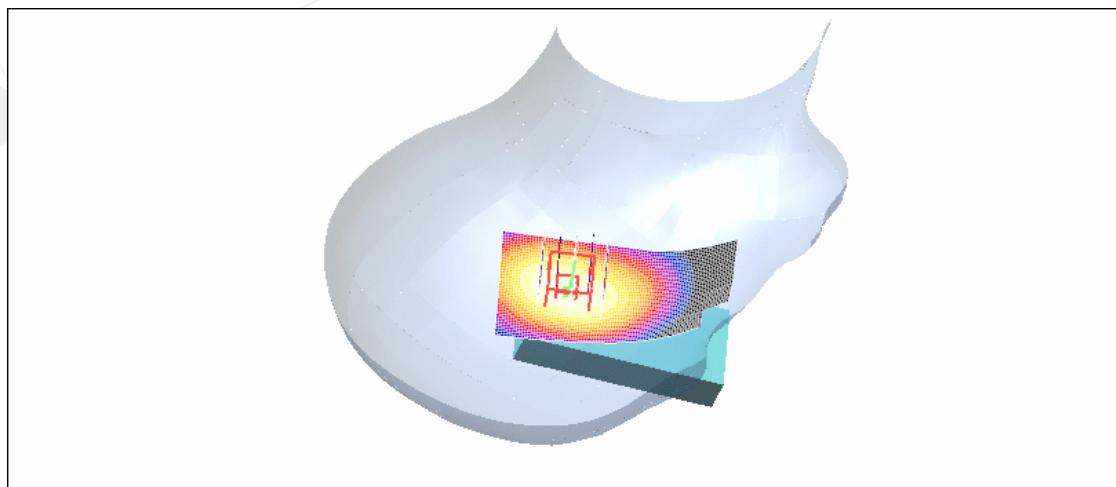
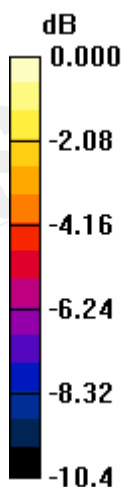
Right Tilt/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 22.2 V/m; Power Drift = -0.141 dB

Peak SAR (extrapolated) = 0.570 W/kg

SAR(1 g) = 0.428 mW/g; SAR(10 g) = 0.298 mW/g

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



0 dB = 0.455mW/g

HEAD_LE_Tilt_CH128

DUT: CETECOM-TSM2; Type: GSM 850; Serial: 355409003878794

Communication System: GSM 850; Frequency: 824.2 MHz; Duty Cycle: 1:8.3

Medium: Head 850 MHz Medium parameters used (interpolated): $f = 824.2$ MHz; $\sigma = 0.87$ mho/m; $\epsilon_r = 40.7$; $\rho = 1000$ kg/m³

Phantom section: Left Section

DASY4 Configuration:

- Probe: ET3DV6 - SN1759; ConvF(6.15, 6.15, 6.15); Calibrated: 2005/8/30
- Sensor-Surface: 4mm (Mechanical And Optical Surface Detection)
- Electronics: DAE3 Sn547; Calibrated: 2006/2/14
- Phantom: SAM 12; Type: SAM 4.0; Serial: TP:1150
- Measurement SW: DASY4, V4.6 Build 23; Postprocessing SW: SEMCAD, V1.8 Build 160

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

Maximum value of SAR (interpolated) = 0.465 mW/g

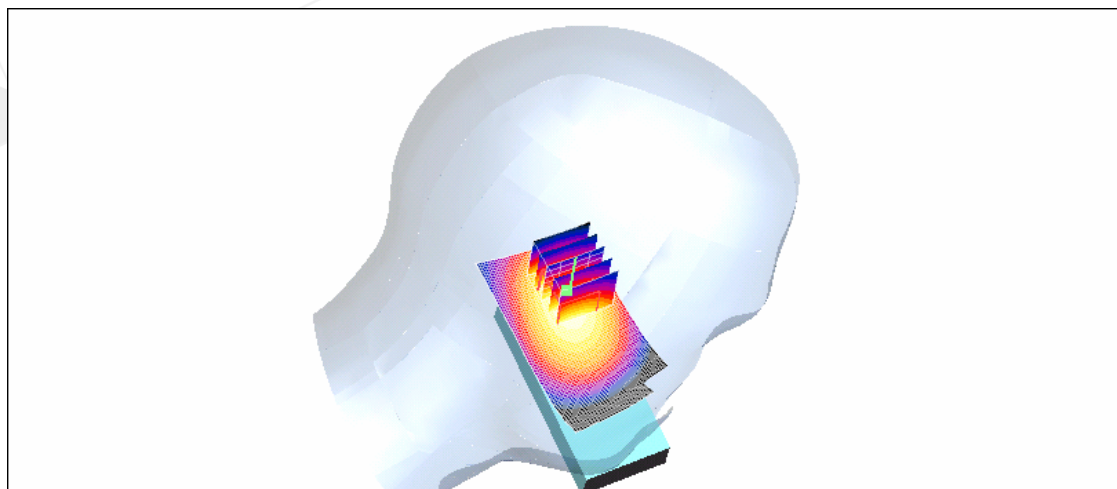
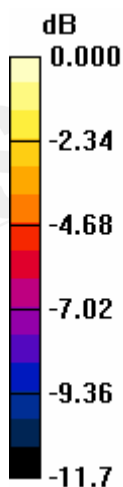
Left Tilt/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 21.3 V/m; Power Drift = 0.000 dB

Peak SAR (extrapolated) = 0.606 W/kg

SAR(1 g) = 0.424 mW/g; SAR(10 g) = 0.286 mW/g

Maximum value of SAR (measured) = 0.454 mW/g



0 dB = 0.454mW/g

HEAD_LE_Tilt_CH190

DUT: CETECOM-TSM2; Type: GSM 850; Serial: 355409003878794

Communication System: GSM 850; Frequency: 836.6 MHz; Duty Cycle: 1:8.3

Medium: Head 850 MHz Medium parameters used (interpolated): $f = 836.6 \text{ MHz}$; $\sigma = 0.88 \text{ mho/m}$; $\epsilon_r = 40.7$; $\rho = 1000 \text{ kg/m}^3$

Phantom section: Left Section

DASY4 Configuration:

- Probe: ET3DV6 - SN1759; ConvF(6.15, 6.15, 6.15); Calibrated: 2005/8/30
- Sensor-Surface: 4mm (Mechanical And Optical Surface Detection)
- Electronics: DAE3 Sn547; Calibrated: 2006/2/14
- Phantom: SAM 12; Type: SAM 4.0; Serial: TP:1150
- Measurement SW: DASY4, V4.6 Build 23; Postprocessing SW: SEMCAD, V1.8 Build 160

Left Tilt/Area Scan (41x81x1): Measurement grid: $dx=15\text{mm}$, $dy=15\text{mm}$

Maximum value of SAR (interpolated) = 0.429 mW/g

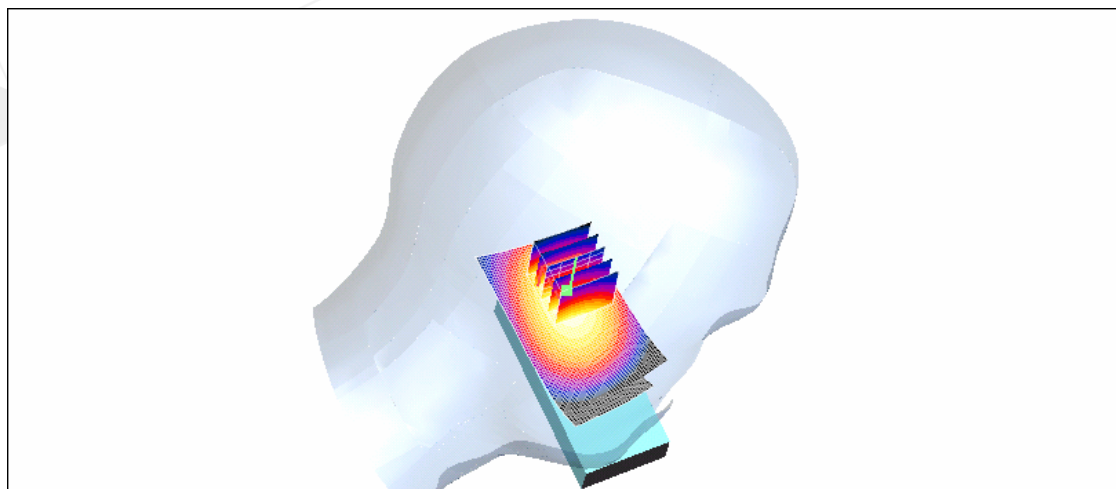
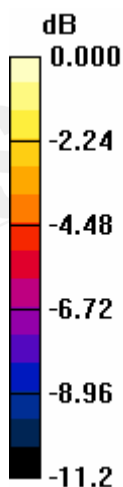
Left Tilt/Zoom Scan (5x5x7)/Cube 0: Measurement grid: $dx=8\text{mm}$, $dy=8\text{mm}$, $dz=5\text{mm}$

Reference Value = 20.5 V/m ; Power Drift = -0.243 dB

Peak SAR (extrapolated) = 0.544 W/kg

SAR(1 g) = 0.385 mW/g ; SAR(10 g) = 0.260 mW/g

Maximum value of SAR (measured) = 0.412 mW/g



0 dB = 0.412 mW/g

HEAD_LE_Tilt_CH251

DUT: CETECOM-TSM2; Type: GSM 850; Serial: 355409003878794

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

Medium: Head 850 MHz Medium parameters used (interpolated): $f = 848.8 \text{ MHz}$; $\sigma = 0.889 \text{ mho/m}$; $\epsilon_r = 40.5$; $\rho = 1000 \text{ kg/m}^3$

Phantom section: Left Section

DASY4 Configuration:

- Probe: ET3DV6 - SN1759; ConvF(6.15, 6.15, 6.15); Calibrated: 2005/8/30
- Sensor-Surface: 4mm (Mechanical And Optical Surface Detection)
- Electronics: DAE3 Sn547; Calibrated: 2006/2/14
- Phantom: SAM 12; Type: SAM 4.0; Serial: TP:1150
- Measurement SW: DASY4, V4.6 Build 23; Postprocessing SW: SEMCAD, V1.8 Build 160

Left Tilt/Area Scan (41x81x1): Measurement grid: $dx=15\text{mm}$, $dy=15\text{mm}$

Maximum value of SAR (interpolated) = 0.454 mW/g

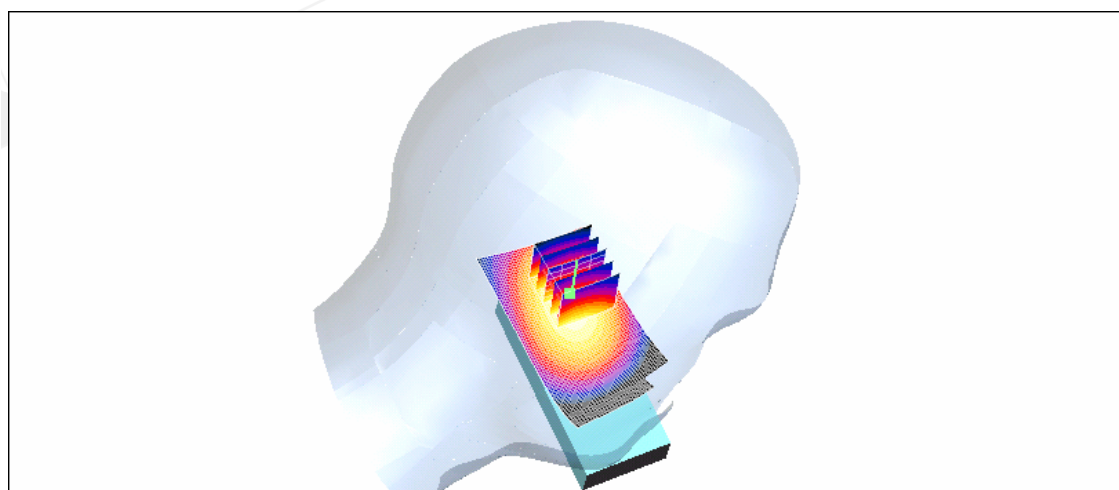
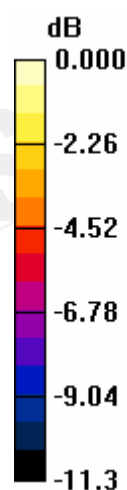
Left Tilt/Zoom Scan (5x5x7)/Cube 0: Measurement grid: $dx=8\text{mm}$, $dy=8\text{mm}$, $dz=5\text{mm}$

Reference Value = 20.9 V/m ; Power Drift = -0.186 dB

Peak SAR (extrapolated) = 0.581 W/kg

SAR(1 g) = 0.413 mW/g ; SAR(10 g) = 0.280 mW/g

Maximum value of SAR (measured) = 0.437 mW/g



0 dB = 0.437 mW/g

Body_CH128

DUT: CETECOM-TSM2; Type: GSM 850; Serial: 355409003878794

Communication System: GSM 850; Frequency: 824.2 MHz; Duty Cycle: 1:8.3

Medium: Muscle 900 MHz Medium parameters used (interpolated): $f = 824.2$ MHz; $\sigma = 0.946$ mho/m;

$\epsilon_r = 55$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

DASY4 Configuration:

- Probe: ET3DV6 - SN1759; ConvF(5.93, 5.93, 5.93); Calibrated: 2005/8/30
- Sensor-Surface: 4mm (Mechanical And Optical Surface Detection)
- Electronics: DAE3 Sn547; Calibrated: 2006/2/14
- 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) = 0.982 mW/g

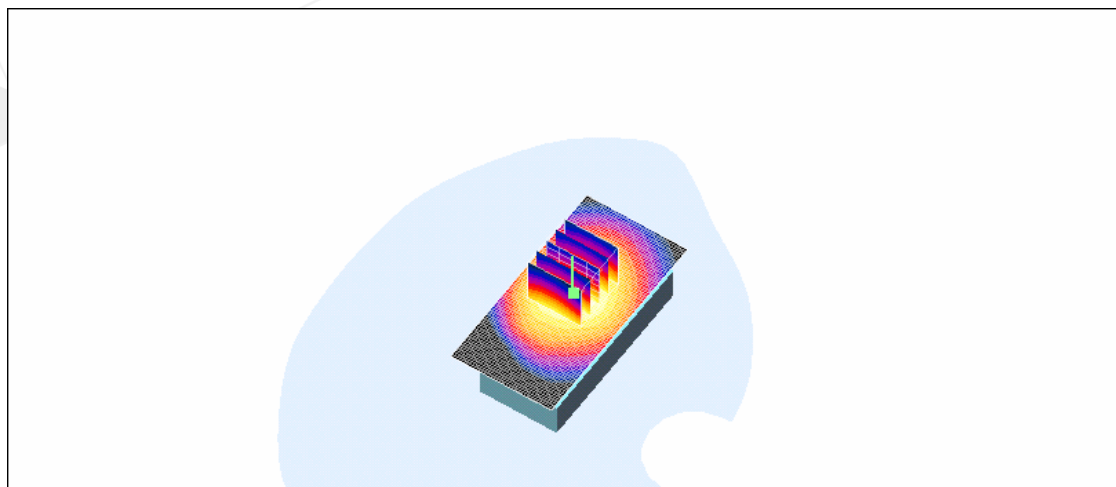
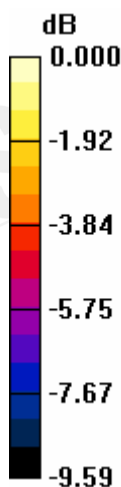
Body/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 15.7 V/m; Power Drift = 0.032 dB

Peak SAR (extrapolated) = 1.21 W/kg

SAR(1 g) = 0.923 mW/g; SAR(10 g) = 0.659 mW/g

Maximum value of SAR (measured) = 0.983 mW/g



0 dB = 0.983mW/g

Body_CH190

DUT: CETECOM-TSM2; Type: GSM 850; Serial: 355409003878794

Communication System: GSM 850; Frequency: 836.6 MHz; Duty Cycle: 1:8.3

Medium: Muscle 900 MHz Medium parameters used (interpolated): $f = 836.6$ MHz; $\sigma = 0.957$ mho/m;
 $\epsilon_r = 54.8$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

DASY4 Configuration:

- Probe: ET3DV6 - SN1759; ConvF(5.93, 5.93, 5.93); Calibrated: 2005/8/30
- Sensor-Surface: 4mm (Mechanical And Optical Surface Detection)
- Electronics: DAE3 Sn547; Calibrated: 2006/2/14
- 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) = 1.02 mW/g

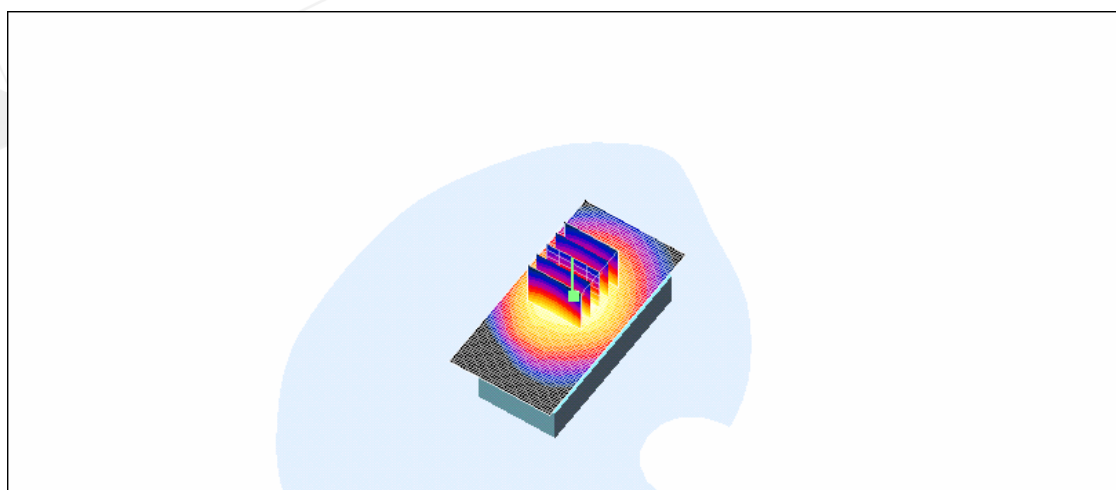
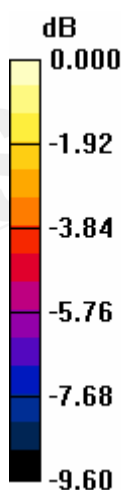
Body/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 15.7 V/m; Power Drift = 0.030 dB

Peak SAR (extrapolated) = 1.27 W/kg

SAR(1 g) = 0.958 mW/g; SAR(10 g) = 0.681 mW/g

Maximum value of SAR (measured) = 1.01 mW/g



0 dB = 1.01mW/g

Body_CH251

DUT: CETECOM-TSM2; Type: GSM 850; Serial: 355409003878794

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

Medium: Muscle 900 MHz Medium parameters used (interpolated): $f = 848.8$ MHz; $\sigma = 0.967$ mho/m;
 $\epsilon_r = 54.7$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

DASY4 Configuration:

- Probe: ET3DV6 - SN1759; ConvF(5.93, 5.93, 5.93); Calibrated: 2005/8/30
- Sensor-Surface: 4mm (Mechanical And Optical Surface Detection)
- Electronics: DAE3 Sn547; Calibrated: 2006/2/14
- 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) = 0.947 mW/g

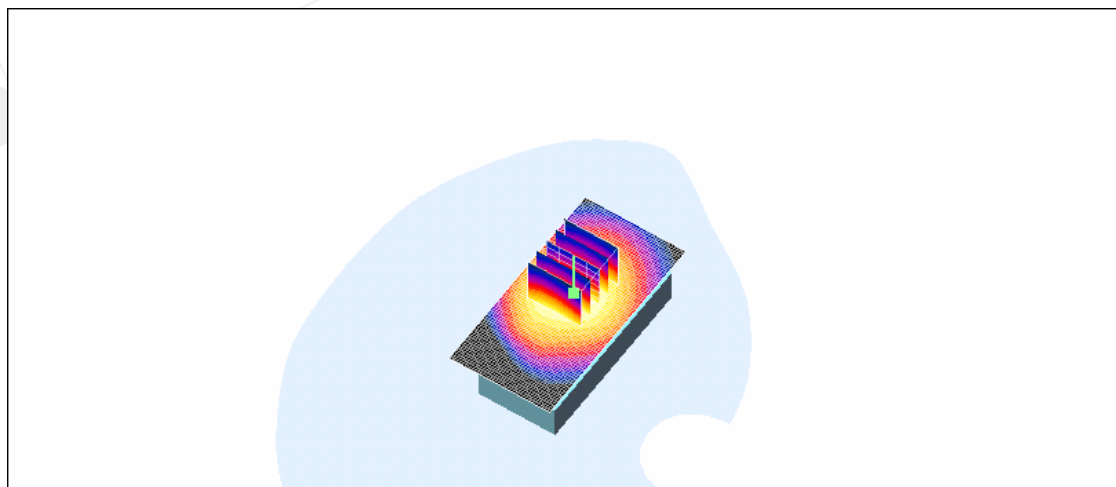
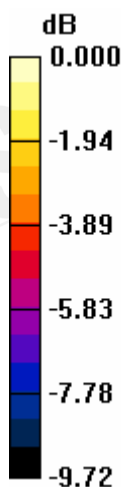
Body/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 15.1 V/m; Power Drift = 0.003 dB

Peak SAR (extrapolated) = 1.19 W/kg

SAR(1 g) = 0.897 mW/g; SAR(10 g) = 0.635 mW/g

Maximum value of SAR (measured) = 0.954 mW/g



0 dB = 0.954mW/g

HEAD_RE_Cheek_CH512

DUT: CETECOM-TSM2; Type: GSM 1900; Serial: 355409003878794

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

Medium: Head 1900MHz Medium parameters used: $f = 1851 \text{ MHz}$; $\sigma = 1.36 \text{ mho/m}$; $\epsilon_r = 39.2$; $\rho = 1000 \text{ kg/m}^3$

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: DAE3 Sn547; Calibrated: 2006/2/14
- Phantom: SAM 12; Type: SAM 4.0; Serial: TP:1150
- Measurement SW: DASY4, V4.6 Build 23; Postprocessing SW: SEMCAD, V1.8 Build 160

Right Cheek/Area Scan (41x81x1): Measurement grid: $dx=15\text{mm}$, $dy=15\text{mm}$

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

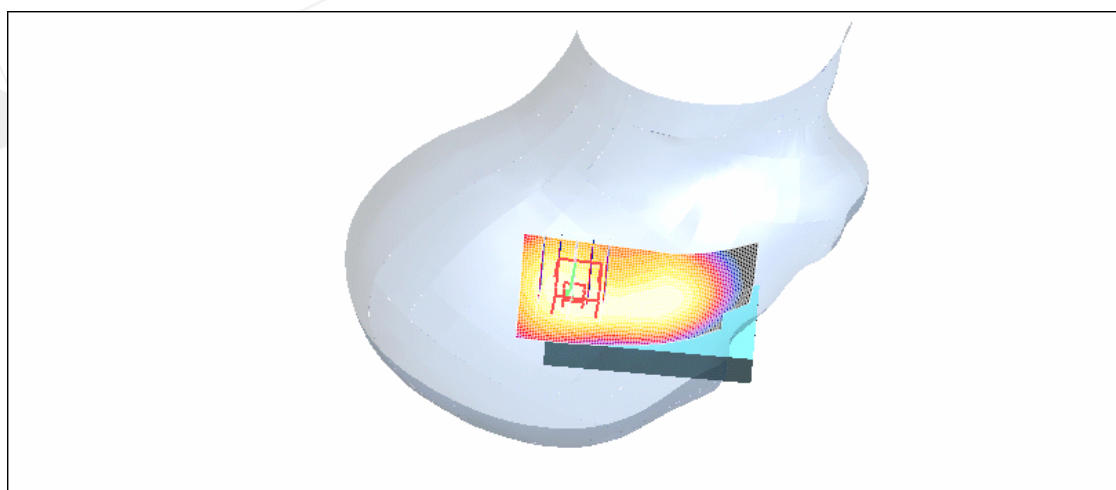
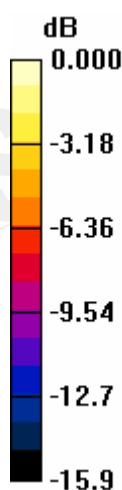
RightCheek/Zoom Scan (5x5x7)/Cube 0: Measurement grid: $dx=8\text{mm}$, $dy=8\text{mm}$, $dz=5\text{mm}$

Reference Value = 17.6 V/m; Power Drift = -0.011 dB

Peak SAR (extrapolated) = 0.534 W/kg

SAR(1 g) = 0.368 mW/g; SAR(10 g) = 0.224 mW/g

Maximum value of SAR (measured) = 0.391 mW/g



0 dB = 0.391mW/g

HEAD_RE_Cheek_CH661

DUT: CETECOM-TSM2; Type: GSM 1900; Serial: 355409003878794

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

Medium: Head 1900MHz Medium parameters used (interpolated): $f = 1880 \text{ MHz}$; $\sigma = 1.41 \text{ mho/m}$; $\epsilon_r = 39.3$; $\rho = 1000 \text{ kg/m}^3$

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: DAE3 Sn547; Calibrated: 2006/2/14
- Phantom: SAM 12; Type: SAM 4.0; Serial: TP:1150
- Measurement SW: DASY4, V4.6 Build 23; Postprocessing SW: SEMCAD, V1.8 Build 160

Right Cheek/Area Scan (41x81x1): Measurement grid: $dx=15\text{mm}$, $dy=15\text{mm}$

Maximum value of SAR (interpolated) = 0.360 mW/g

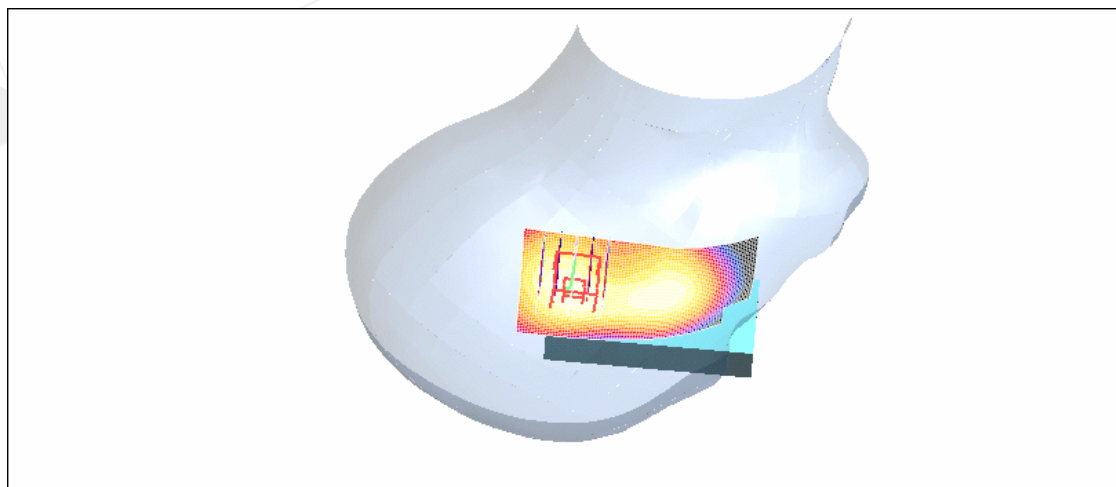
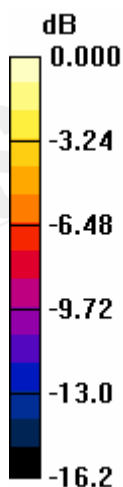
Right Cheek/Zoom Scan (5x5x7)/Cube 0: Measurement grid: $dx=8\text{mm}$, $dy=8\text{mm}$, $dz=5\text{mm}$

Reference Value = 16.6 V/m; Power Drift = 0.016 dB

Peak SAR (extrapolated) = 0.490 W/kg

SAR(1 g) = 0.337 mW/g; SAR(10 g) = 0.202 mW/g

Maximum value of SAR (measured) = 0.364 mW/g



0 dB = 0.364mW/g

HEAD_RE_Cheek_CH810

DUT: CETECOM-TSM2; Type: GSM 1900; Serial: 355409003878794

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

Medium: Head 1900MHz Medium parameters used (interpolated): $f = 1909.8 \text{ MHz}$; $\sigma = 1.45 \text{ mho/m}$; $\epsilon_r = 39.5$; $\rho = 1000 \text{ kg/m}^3$

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: DAE3 Sn547; Calibrated: 2006/2/14
- Phantom: SAM 12; Type: SAM 4.0; Serial: TP:1150
- Measurement SW: DASY4, V4.6 Build 23; Postprocessing SW: SEMCAD, V1.8 Build 160

Right Cheek/Area Scan (41x81x1): Measurement grid: $dx=15\text{mm}$, $dy=15\text{mm}$

Maximum value of SAR (interpolated) = 0.299 mW/g

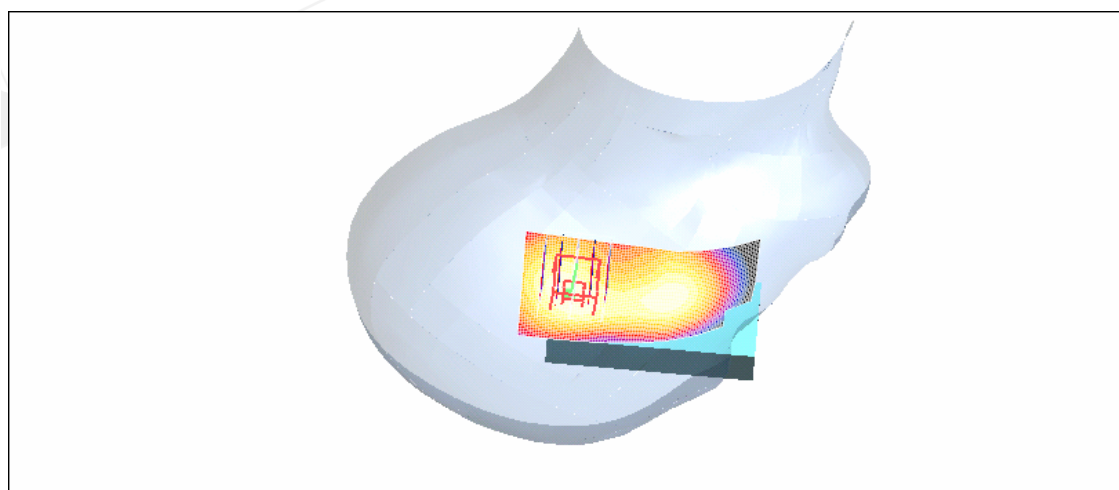
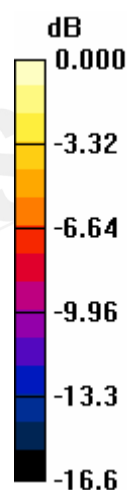
Right Cheek/Zoom Scan (5x5x7)/Cube 0: Measurement grid: $dx=8\text{mm}$, $dy=8\text{mm}$, $dz=5\text{mm}$

Reference Value = 14.8 V/m; Power Drift = -0.005 dB

Peak SAR (extrapolated) = 0.411 W/kg

SAR(1 g) = 0.279 mW/g; SAR(10 g) = 0.165 mW/g

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



0 dB = 0.302mW/g

HEAD_LE_Cheek_CH512

DUT: CETECOM-TSM2; Type: GSM 1900; Serial: 355409003878794

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

Medium: Head 1900MHz Medium parameters used: $f = 1851 \text{ MHz}$; $\sigma = 1.36 \text{ mho/m}$; $\epsilon_r = 39.2$; $\rho = 1000 \text{ kg/m}^3$

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: DAE3 Sn547; Calibrated: 2006/2/14
- Phantom: SAM 12; Type: SAM 4.0; Serial: TP:1150
- Measurement SW: DASY4, V4.6 Build 23; Postprocessing SW: SEMCAD, V1.8 Build 160

Left Cheek/Area Scan (41x81x1): Measurement grid: $dx=15\text{mm}$, $dy=15\text{mm}$

Maximum value of SAR (interpolated) = 0.492 mW/g

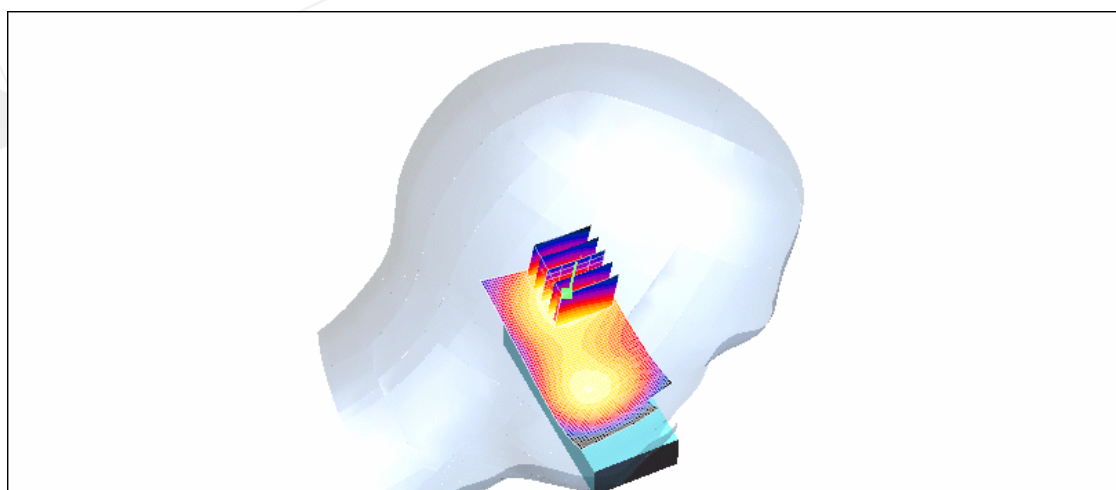
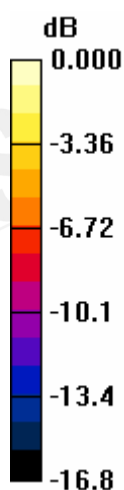
Left Cheek/Zoom Scan (5x5x7)/Cube 0: Measurement grid: $dx=8\text{mm}$, $dy=8\text{mm}$, $dz=5\text{mm}$

Reference Value = 18.6 V/m; Power Drift = 0.016 dB

Peak SAR (extrapolated) = 0.707 W/kg

SAR(1 g) = 0.438 mW/g; SAR(10 g) = 0.255 mW/g

Maximum value of SAR (measured) = 0.485 mW/g



0 dB = 0.485mW/g

HEAD_LE_Cheek_CH661

DUT: CETECOM-TSM2; Type: GSM 1900; Serial: 355409003878794

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

Medium: Head 1900MHz Medium parameters used (interpolated): $f = 1880 \text{ MHz}$; $\sigma = 1.41 \text{ mho/m}$; $\epsilon_r = 39.3$; $\rho = 1000 \text{ kg/m}^3$

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: DAE3 Sn547; Calibrated: 2006/2/14
- Phantom: SAM 12; Type: SAM 4.0; Serial: TP:1150
- Measurement SW: DASY4, V4.6 Build 23; Postprocessing SW: SEMCAD, V1.8 Build 160

Left Cheek/Area Scan (41x81x1): Measurement grid: $dx=15\text{mm}$, $dy=15\text{mm}$

Maximum value of SAR (interpolated) = 0.431 mW/g

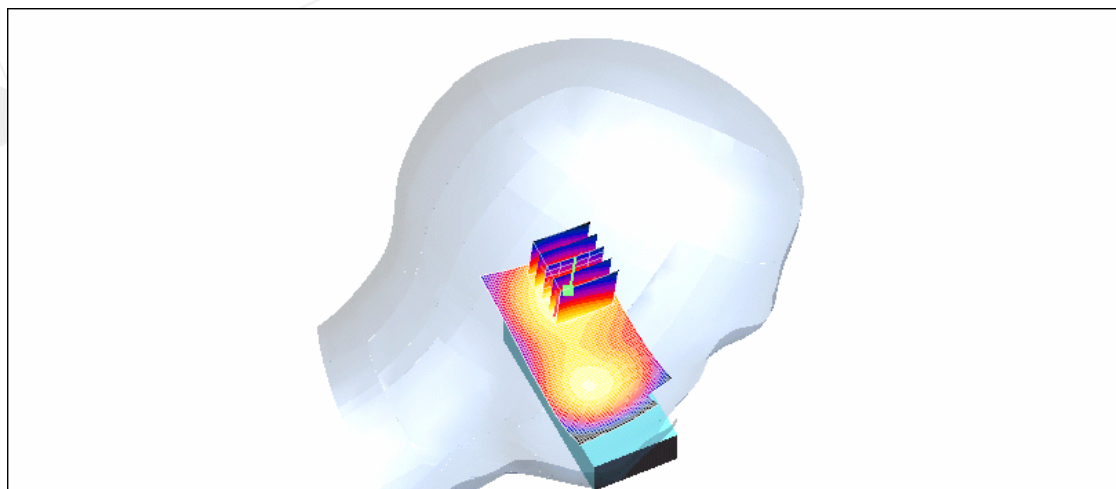
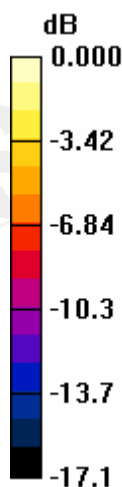
Left Cheek/Zoom Scan (5x5x7)/Cube 0: Measurement grid: $dx=8\text{mm}$, $dy=8\text{mm}$, $dz=5\text{mm}$

Reference Value = 16.9 V/m; Power Drift = 0.043 dB

Peak SAR (extrapolated) = 0.621 W/kg

SAR(1 g) = 0.383 mW/g; SAR(10 g) = 0.222 mW/g

Maximum value of SAR (measured) = 0.416 mW/g



0 dB = 0.416mW/g

HEAD_LE_Cheek_CH810

DUT: CETECOM-TSM2; Type: GSM 1900; Serial: 355409003878794

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

Medium: Head 1900MHz Medium parameters used (interpolated): $f = 1909.8 \text{ MHz}$; $\sigma = 1.45 \text{ mho/m}$; $\epsilon_r = 39.5$; $\rho = 1000 \text{ kg/m}^3$

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: DAE3 Sn547; Calibrated: 2006/2/14
- Phantom: SAM 12; Type: SAM 4.0; Serial: TP:1150
- Measurement SW: DASY4, V4.6 Build 23; Postprocessing SW: SEMCAD, V1.8 Build 160

LeftCheek/Area Scan (41x81x1): Measurement grid: $dx=15\text{mm}$, $dy=15\text{mm}$

Maximum value of SAR (interpolated) = 0.347 mW/g

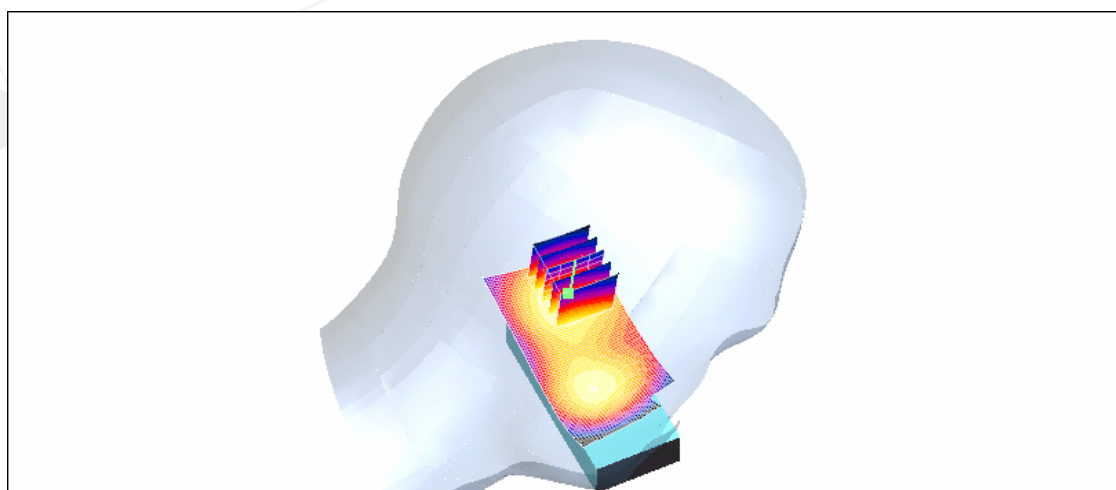
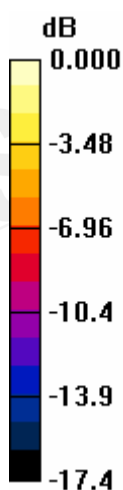
LeftCheek/Zoom Scan (5x5x7)/Cube 0: Measurement grid: $dx=8\text{mm}$, $dy=8\text{mm}$, $dz=5\text{mm}$

Reference Value = 15.1 V/m ; Power Drift = -0.020 dB

Peak SAR (extrapolated) = 0.495 W/kg

SAR(1 g) = 0.305 mW/g ; SAR(10 g) = 0.176 mW/g

Maximum value of SAR (measured) = 0.335 mW/g



0 dB = 0.335 mW/g

HEAD_RE_Tilt_CH512

DUT: CETECOM-TSM2; Type: GSM 1900; Serial: 355409003878794

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

Medium: Head 1900MHz Medium parameters used: $f = 1851 \text{ MHz}$; $\sigma = 1.36 \text{ mho/m}$; $\epsilon_r = 39.2$; $\rho = 1000 \text{ kg/m}^3$

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: DAE3 Sn547; Calibrated: 2006/2/14
- Phantom: SAM 12; Type: SAM 4.0; Serial: TP:1150
- Measurement SW: DASY4, V4.6 Build 23; Postprocessing SW: SEMCAD, V1.8 Build 160

Right Tilt/Area Scan (41x81x1): Measurement grid: $dx=15\text{mm}$, $dy=15\text{mm}$

Maximum value of SAR (interpolated) = 0.416 mW/g

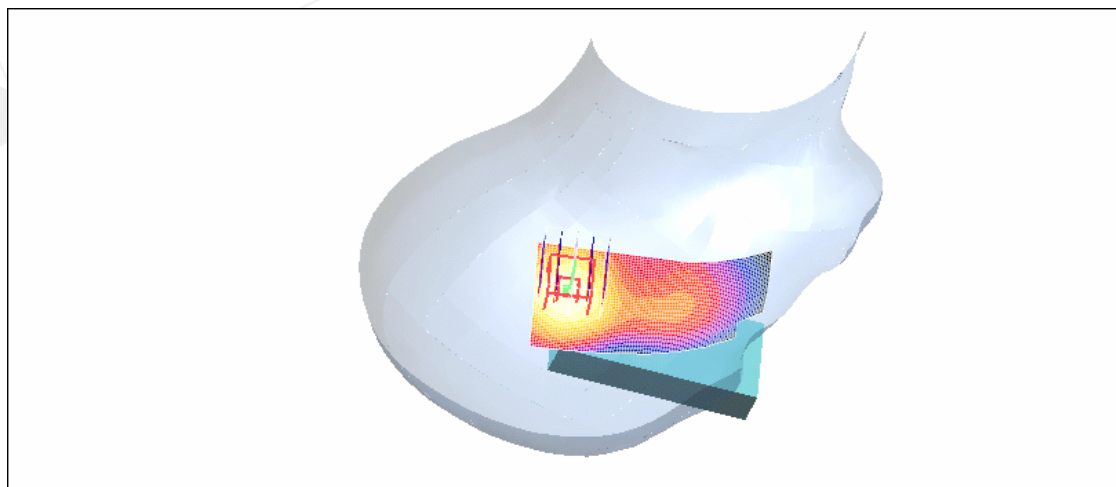
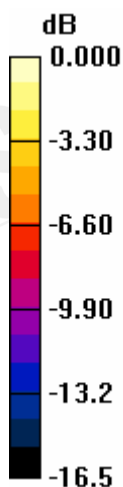
Right Tilt/Zoom Scan (5x5x7)/Cube 0: Measurement grid: $dx=8\text{mm}$, $dy=8\text{mm}$, $dz=5\text{mm}$

Reference Value = 17.7 V/m ; Power Drift = 0.023 dB

Peak SAR (extrapolated) = 0.592 W/kg

SAR(1 g) = 0.372 mW/g ; SAR(10 g) = 0.217 mW/g

Maximum value of SAR (measured) = 0.404 mW/g



0 dB = 0.404 mW/g

HEAD_RE_Tilt_CH661

DUT: CETECOM-TSM2; Type: GSM 1900; Serial: 355409003878794

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

Medium: Head 1900MHz Medium parameters used (interpolated): $f = 1880 \text{ MHz}$; $\sigma = 1.41 \text{ mho/m}$; $\epsilon_r = 39.3$; $\rho = 1000 \text{ kg/m}^3$

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: DAE3 Sn547; Calibrated: 2006/2/14
- Phantom: SAM 12; Type: SAM 4.0; Serial: TP:1150
- Measurement SW: DASY4, V4.6 Build 23; Postprocessing SW: SEMCAD, V1.8 Build 160

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

Maximum value of SAR (interpolated) = 0.360 mW/g

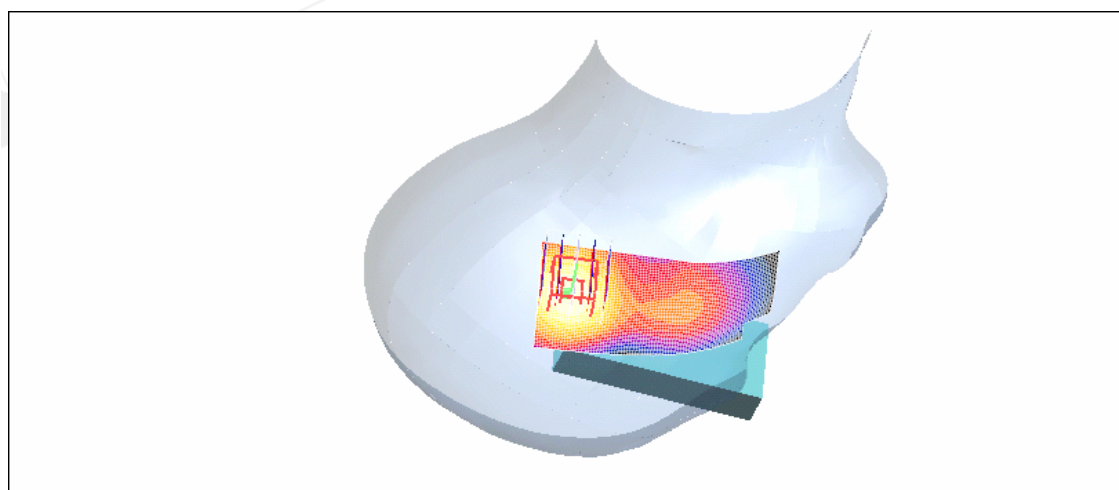
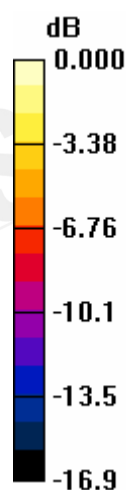
Right Tilt/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 16.3 V/m; Power Drift = 0.043 dB

Peak SAR (extrapolated) = 0.519 W/kg

SAR(1 g) = 0.325 mW/g; SAR(10 g) = 0.189 mW/g

Maximum value of SAR (measured) = 0.357 mW/g



0 dB = 0.357mW/g

HEAD_RE_Tilt_CH810

DUT: CETECOM-TSM2; Type: GSM 1900; Serial: 355409003878794

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

Medium: Head 1900MHz Medium parameters used (interpolated): $f = 1909.8 \text{ MHz}$; $\sigma = 1.45 \text{ mho/m}$; $\epsilon_r = 39.5$; $\rho = 1000 \text{ kg/m}^3$

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: DAE3 Sn547; Calibrated: 2006/2/14
- Phantom: SAM 12; Type: SAM 4.0; Serial: TP:1150
- Measurement SW: DASY4, V4.6 Build 23; Postprocessing SW: SEMCAD, V1.8 Build 160

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

Maximum value of SAR (interpolated) = 0.295 mW/g

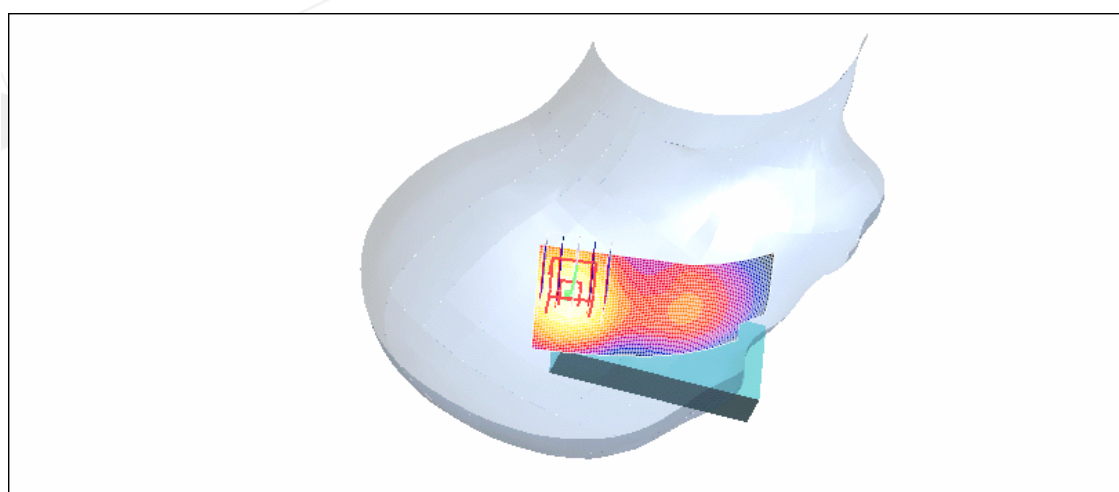
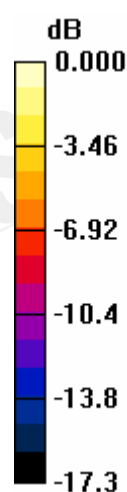
Right Tilt/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 14.4 V/m; Power Drift = 0.057 dB

Peak SAR (extrapolated) = 0.429 W/kg

SAR(1 g) = 0.264 mW/g; SAR(10 g) = 0.151 mW/g

Maximum value of SAR (measured) = 0.291 mW/g



0 dB = 0.291mW/g

HEAD_LE_Tilt_CH512

DUT: CETECOM-TSM2; Type: GSM 1900; Serial: 355409003878794

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

Medium: Head 1900MHz Medium parameters used: $f = 1851 \text{ MHz}$; $\sigma = 1.36 \text{ mho/m}$; $\epsilon_r = 39.2$; $\rho = 1000 \text{ kg/m}^3$

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: DAE3 Sn547; Calibrated: 2006/2/14
- Phantom: SAM 12; Type: SAM 4.0; Serial: TP:1150
- Measurement SW: DASY4, V4.6 Build 23; Postprocessing SW: SEMCAD, V1.8 Build 160

Left Tilt/Area Scan (41x81x1): Measurement grid: $dx=15\text{mm}$, $dy=15\text{mm}$

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

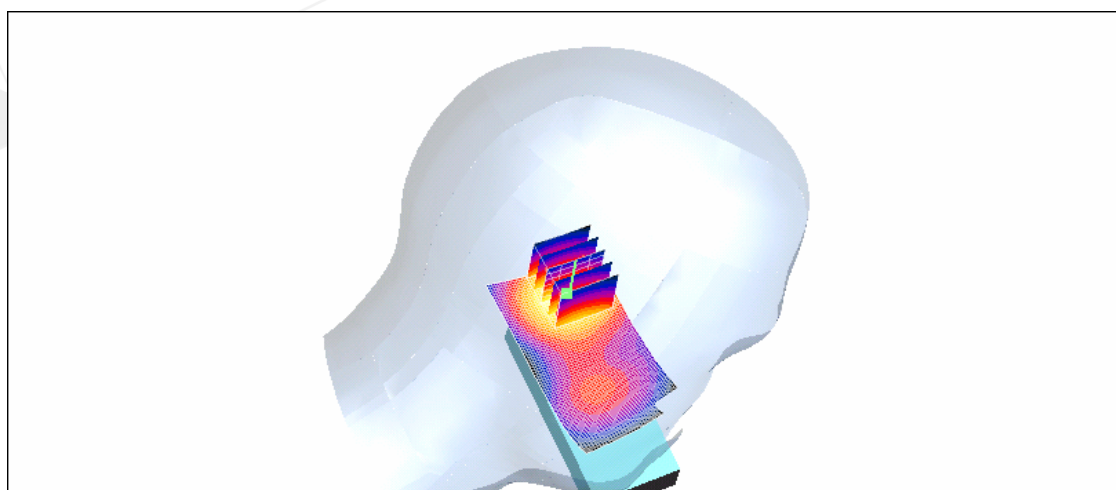
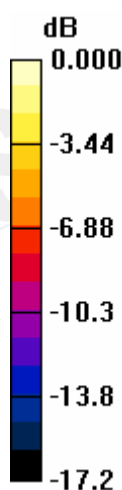
Left Tilt/Zoom Scan (5x5x7)/Cube 0: Measurement grid: $dx=8\text{mm}$, $dy=8\text{mm}$, $dz=5\text{mm}$

Reference Value = 19.2 V/m; Power Drift = 0.024 dB

Peak SAR (extrapolated) = 0.815 W/kg

SAR(1 g) = 0.495 mW/g; SAR(10 g) = 0.276 mW/g

Maximum value of SAR (measured) = 0.546 mW/g



0 dB = 0.546mW/g

HEAD_LE_Tilt_CH661

DUT: CETECOM-TSM2; Type: GSM 1900; Serial: 355409003878794

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

Medium: Head 1900MHz Medium parameters used (interpolated): $f = 1880 \text{ MHz}$; $\sigma = 1.41 \text{ mho/m}$; $\epsilon_r = 39.3$; $\rho = 1000 \text{ kg/m}^3$

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: DAE3 Sn547; Calibrated: 2006/2/14
- Phantom: SAM 12; Type: SAM 4.0; Serial: TP:1150
- Measurement SW: DASY4, V4.6 Build 23; Postprocessing SW: SEMCAD, V1.8 Build 160

Left Tilt/Area Scan (41x81x1): Measurement grid: $dx=15\text{mm}$, $dy=15\text{mm}$

Maximum value of SAR (interpolated) = 0.483 mW/g

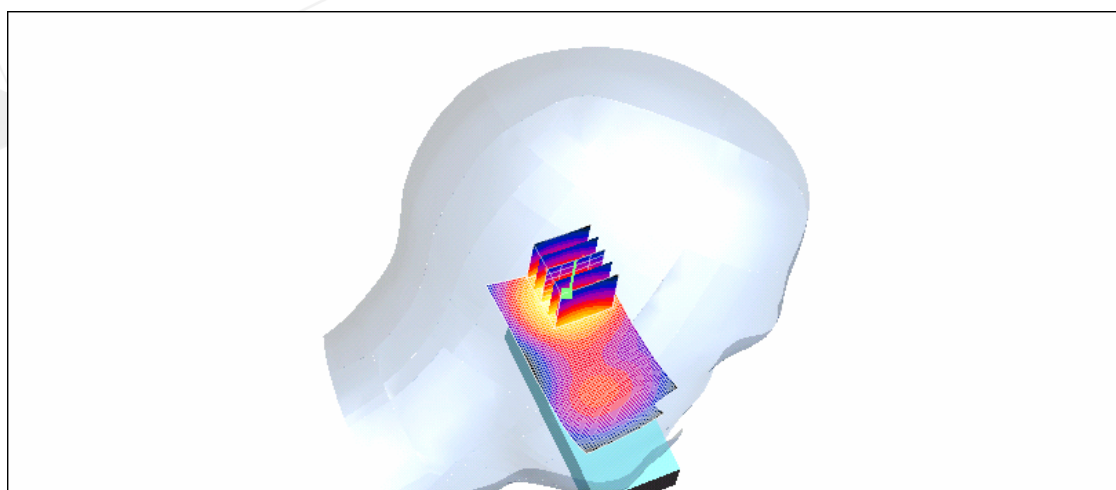
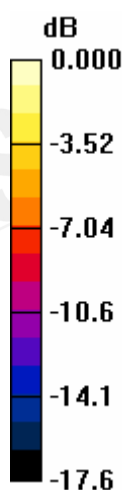
Left Tilt/Zoom Scan (5x5x7)/Cube 0: Measurement grid: $dx=8\text{mm}$, $dy=8\text{mm}$, $dz=5\text{mm}$

Reference Value = 17.5 V/m ; Power Drift = -0.073 dB

Peak SAR (extrapolated) = 0.707 W/kg

SAR(1 g) = 0.423 mW/g ; SAR(10 g) = 0.233 mW/g

Maximum value of SAR (measured) = 0.471 mW/g



0 dB = 0.471 mW/g

HEAD_LE_Tilt_CH810

DUT: CETECOM-TSM2; Type: GSM 1900; Serial: 355409003878794

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

Medium: Head 1900MHz Medium parameters used (interpolated): $f = 1909.8 \text{ MHz}$; $\sigma = 1.45 \text{ mho/m}$; $\epsilon_r = 39.5$; $\rho = 1000 \text{ kg/m}^3$

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: DAE3 Sn547; Calibrated: 2006/2/14
- Phantom: SAM 12; Type: SAM 4.0; Serial: TP:1150
- Measurement SW: DASY4, V4.6 Build 23; Postprocessing SW: SEMCAD, V1.8 Build 160

Left Tilt/Area Scan (41x81x1): Measurement grid: $dx=15\text{mm}$, $dy=15\text{mm}$

Maximum value of SAR (interpolated) = 0.368 mW/g

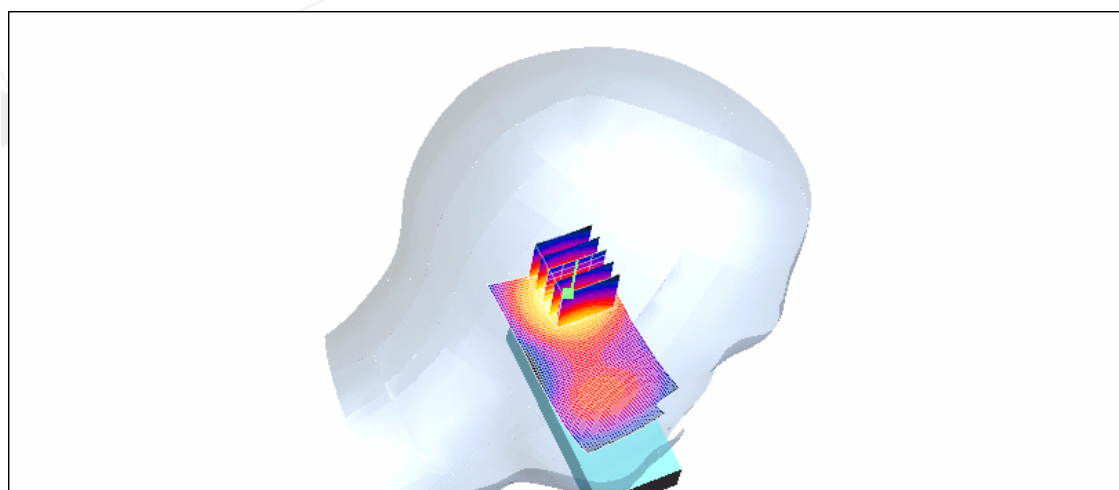
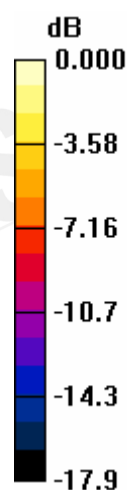
Left Tilt/Zoom Scan (5x5x7)/Cube 0: Measurement grid: $dx=8\text{mm}$, $dy=8\text{mm}$, $dz=5\text{mm}$

Reference Value = 15.2 V/m ; Power Drift = -0.068 dB

Peak SAR (extrapolated) = 0.541 W/kg

SAR(1 g) = 0.322 mW/g ; SAR(10 g) = 0.177 mW/g

Maximum value of SAR (measured) = 0.354 mW/g



0 dB = 0.354mW/g

Body_CH512

DUT: CETECOM-TSM2; Type: GSM 850; Serial: 355409003878794

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

Medium: Head 1900MHz Medium parameters used (extrapolated): $f = 1850.2 \text{ MHz}$; $\sigma = 1.6 \text{ mho/m}$; $\epsilon_r = 53.2$; $\rho = 1000 \text{ kg/m}^3$

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: DAE3 Sn547; Calibrated: 2006/2/14
- 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: $dx=15\text{mm}$, $dy=15\text{mm}$

Maximum value of SAR (interpolated) = 0.465 mW/g

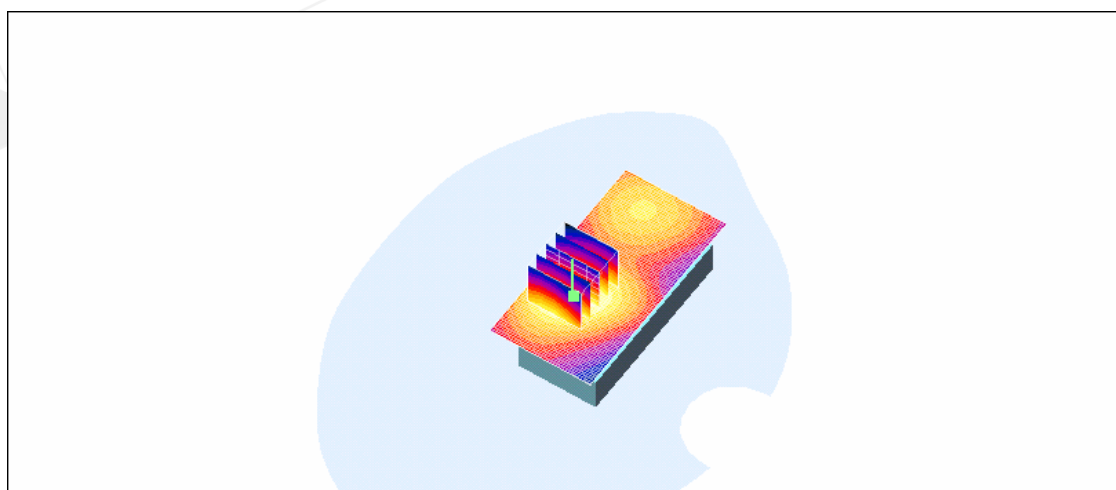
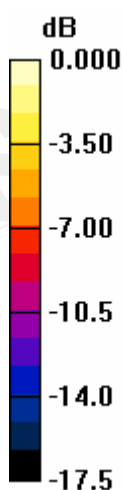
Body/Zoom Scan (5x5x7)/Cube 0: Measurement grid: $dx=8\text{mm}$, $dy=8\text{mm}$, $dz=5\text{mm}$

Reference Value = 10.3 V/m ; Power Drift = 0.021 dB

Peak SAR (extrapolated) = 0.667 W/kg

SAR(1 g) = 0.399 mW/g ; SAR(10 g) = 0.229 mW/g

Maximum value of SAR (measured) = 0.436 mW/g



0 dB = 0.436 mW/g

Body_CH661

DUT: CETECOM-TSM2; Type: GSM 850; Serial: 355409003878794

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

Medium: Head 1900MHz Medium parameters used (interpolated): $f = 1800 \text{ MHz}$; $\sigma = 1.55 \text{ mho/m}$; $\epsilon_r = 53.5$; $\rho = 1000 \text{ kg/m}^3$

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: DAE3 Sn547; Calibrated: 2006/2/14
- 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: $dx=15\text{mm}$, $dy=15\text{mm}$

Maximum value of SAR (interpolated) = 0.353 mW/g

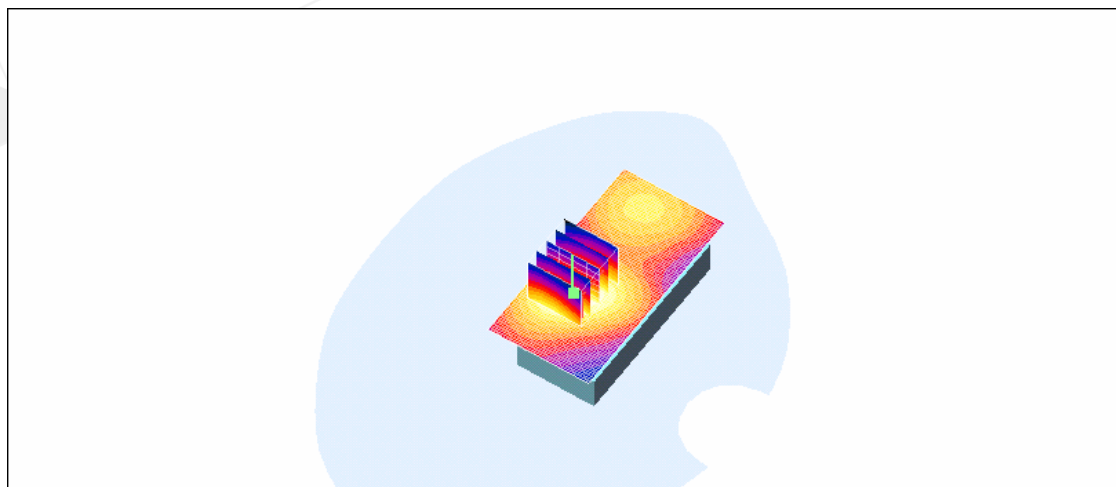
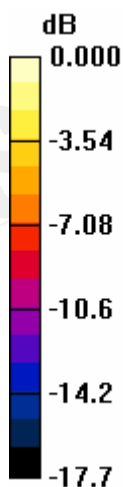
Body/Zoom Scan (5x5x7)/Cube 0: Measurement grid: $dx=8\text{mm}$, $dy=8\text{mm}$, $dz=5\text{mm}$

Reference Value = 8.82 V/m ; Power Drift = -0.008 dB

Peak SAR (extrapolated) = 0.509 W/kg

SAR(1 g) = 0.304 mW/g ; SAR(10 g) = 0.176 mW/g

Maximum value of SAR (measured) = 0.332 mW/g



0 dB = 0.332 mW/g

Body_CH810

DUT: CETECOM-TSM2; Type: GSM 850; Serial: 355409003878794

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

Medium: Head 1900MHz Medium parameters used: $f = 1910 \text{ MHz}$; $\sigma = 1.57 \text{ mho/m}$; $\epsilon_r = 53.1$; $\rho = 1000 \text{ kg/m}^3$

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: 2006/2/14
- 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: $dx=15\text{mm}$, $dy=15\text{mm}$

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

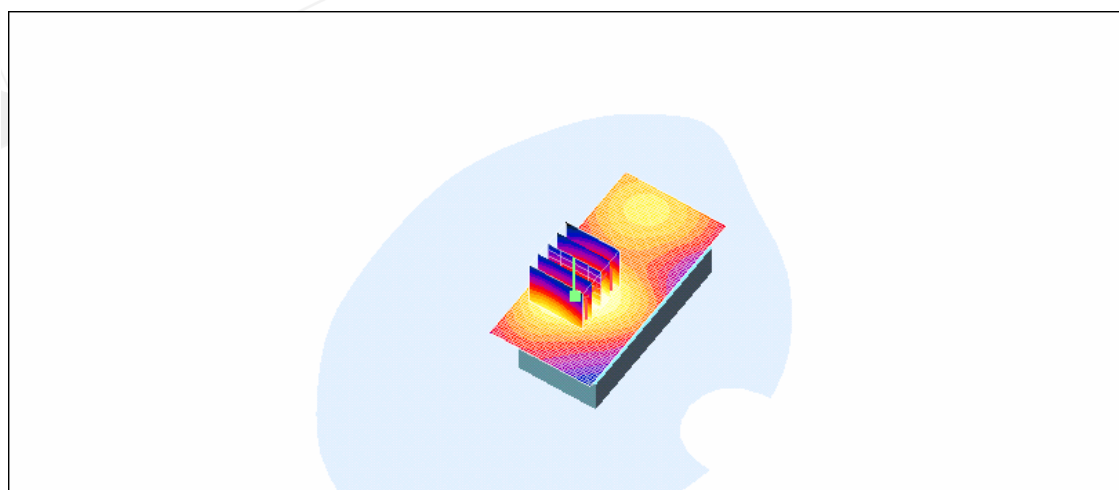
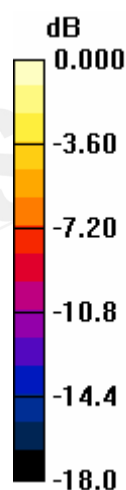
Body/Zoom Scan (5x5x7)/Cube 0: Measurement grid: $dx=8\text{mm}$, $dy=8\text{mm}$, $dz=5\text{mm}$

Reference Value = 7.63 V/m ; Power Drift = -0.003 dB

Peak SAR (extrapolated) = 0.413 W/kg

SAR(1 g) = 0.244 mW/g ; SAR(10 g) = 0.141 mW/g

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



0 dB = 0.264 mW/g

SAR System Performance Verification

DUT: Dipole 900 MHz; Type: D900V2; Serial: SN:178

Communication System: CW; Frequency: 900 MHz; Duty Cycle: 1:1

Medium: Head 900 MHz Medium parameters used (interpolated): $f = 900 \text{ MHz}$; $\sigma = 0.925 \text{ mho/m}$; $\epsilon_r = 40.3$; $\rho = 1000 \text{ kg/m}^3$

Phantom section: Flat Section

DASY4 Configuration:

- Probe: ET3DV6 - SN1759; ConvF(6.15, 6.15, 6.15); Calibrated: 2005/8/30
- Sensor-Surface: 4mm (Mechanical And Optical Surface Detection)
- Electronics: DAE3 Sn547; Calibrated: 2006/2/14
- 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) = 3.00 mW/g

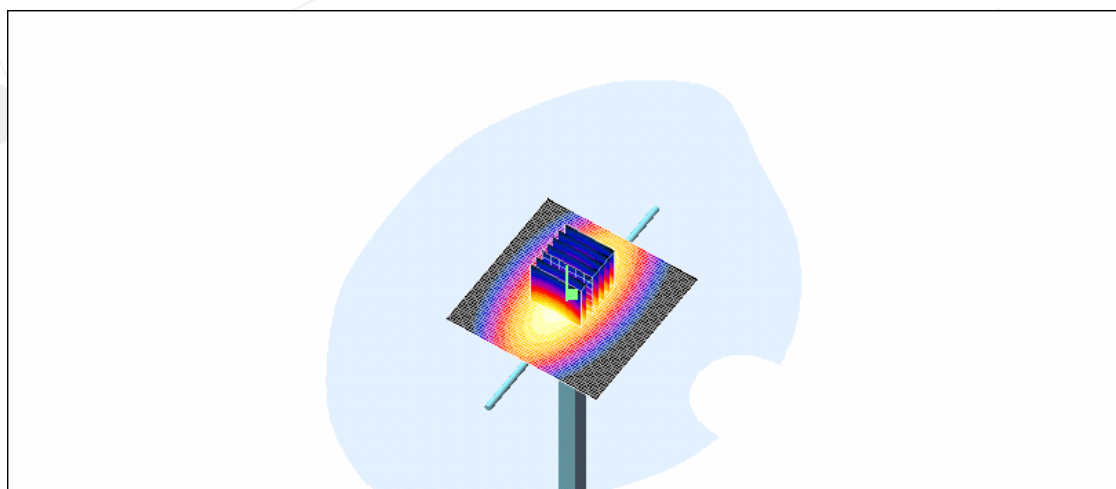
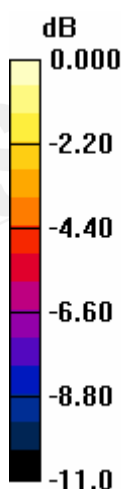
Pin=250mW/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 58.1 V/m; Power Drift = 0.001 dB

Peak SAR (extrapolated) = 4.15 W/kg

SAR(1 g) = 2.75 mW/g; SAR(10 g) = 1.77 mW/g

Maximum value of SAR (measured) = 2.97 mW/g



0 dB = 2.97mW/g

SAR System Performance Verification

DUT: Dipole 900 MHz; Type: D900V2; Serial: SN:178

Communication System: CW; Frequency: 900 MHz; Duty Cycle: 1:1

Medium: Muscle 900 MHz Medium parameters used (interpolated): $f = 900 \text{ MHz}$; $\sigma = 0.994 \text{ mho/m}$; $\epsilon_r = 53.2$; $\rho = 1000 \text{ kg/m}^3$

Phantom section: Flat Section

DASY4 Configuration:

- Probe: ET3DV6 - SN1759; ConvF(5.93, 5.93, 5.93); Calibrated: 2005/8/30
- Sensor-Surface: 4mm (Mechanical And Optical Surface Detection)
- Electronics: DAE3 Sn547; Calibrated: 2006/2/14
- 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) = 2.95 mW/g

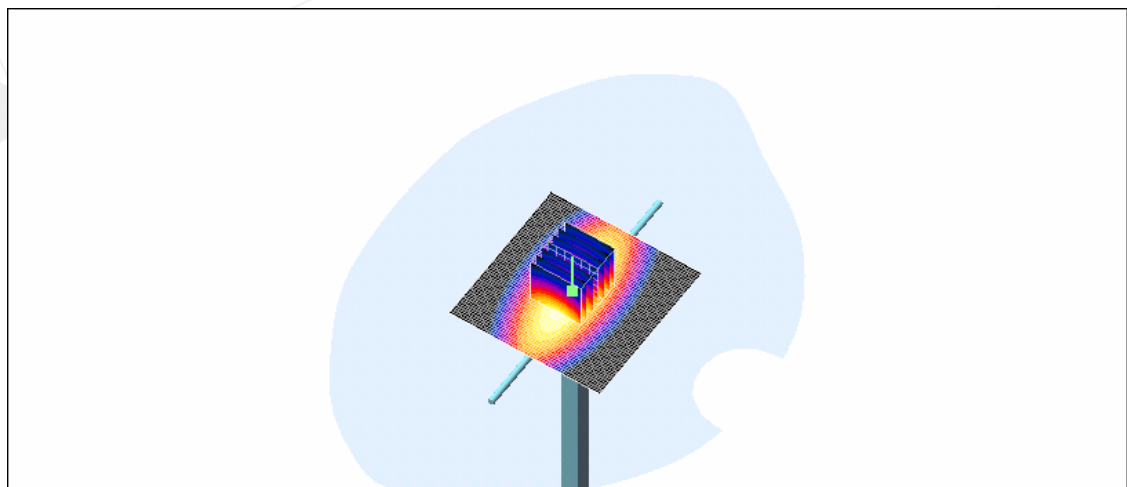
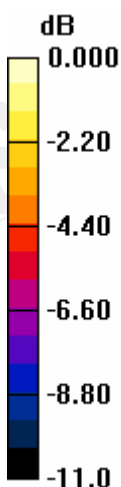
Pin=250mw/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 56.0 V/m; Power Drift = -0.010 dB

Peak SAR (extrapolated) = 4.15 W/kg

SAR(1 g) = 2.66 mW/g; SAR(10 g) = 1.66 mW/g

Maximum value of SAR (measured) = 2.91 mW/g



0 dB = 2.91mW/g

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: $f = 1900 \text{ MHz}$; $\sigma = 1.44 \text{ mho/m}$; $\epsilon_r = 39.5$; $\rho = 1000 \text{ kg/m}^3$

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: DAE3 Sn547; Calibrated: 2006/2/14
- 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) = 11.8 mW/g

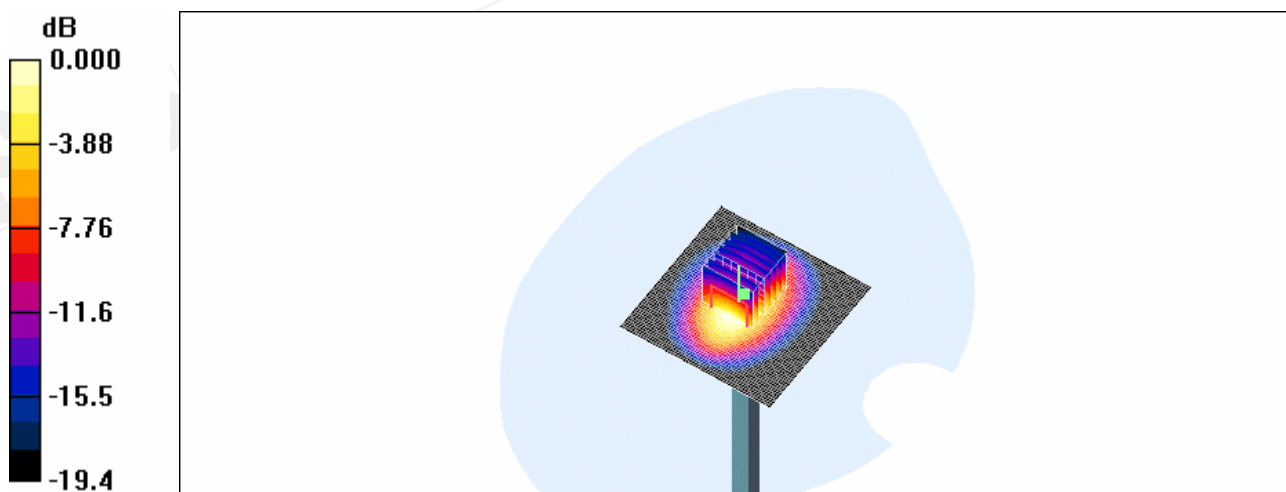
Pin=250mw/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 91.5 V/m; Power Drift = -0.153 dB

Peak SAR (extrapolated) = 17.3 W/kg

SAR(1 g) = 9.71 mW/g; SAR(10 g) = 5.01 mW/g

Maximum value of SAR (measured) = 11.0 mW/g



0 dB = 11.0mW/g

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 (interpolated): $f = 1900 \text{ MHz}$; $\sigma = 1.56 \text{ mho/m}$; $\epsilon_r = 53.2$; $\rho = 1000 \text{ kg/m}^3$

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: DAE3 Sn547; Calibrated: 2006/2/14
- 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) = 13.0 mW/g

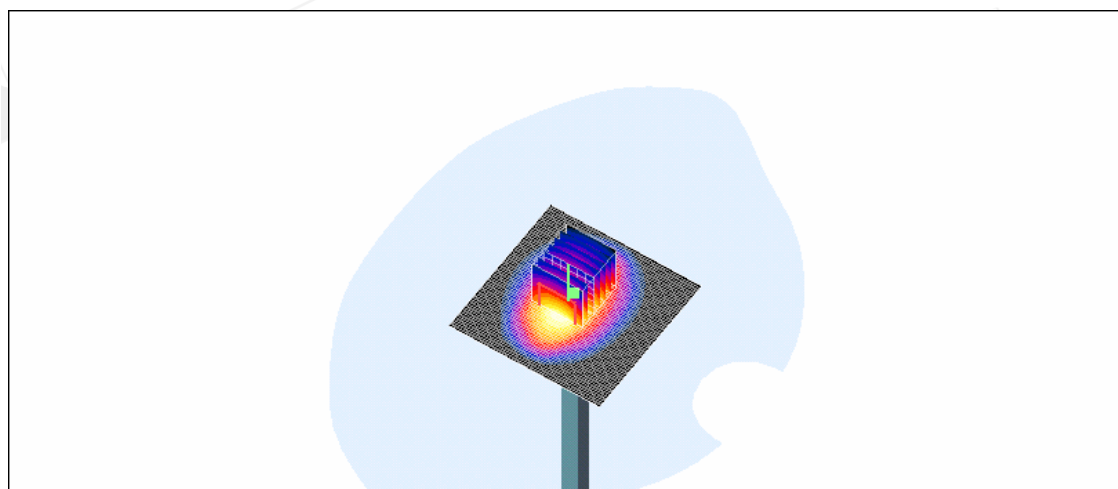
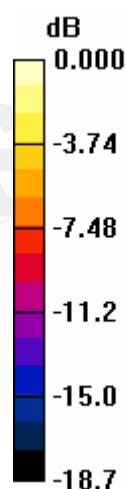
Pin=250mW/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 88.2 V/m; Power Drift = -0.021 dB

Peak SAR (extrapolated) = 18.7 W/kg

SAR(1 g) = 10.4 mW/g; SAR(10 g) = 5.39 mW/g

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



0 dB = 11.9mW/g