# SAR TEST REPORT

**REPORT NO.:** SA991230C03

**MODEL NO.:** C505

**FCC ID:** UZI-C505

**RECEIVED:** Dec. 28, 2010

**TESTED:** Jan. 12 ~ Mar. 02, 2011

**ISSUED:** Mar. 04, 2011

**APPLICANT:** BandRich Inc.

**ADDRESS:** 7F., No. 188, Baociao Rd., Sindian City, Taipei County 23146, Taiwan

**ISSUED BY:** Bureau Veritas Consumer Products Services (H.K.) Ltd., Taoyuan Branch

**LAB ADDRESS:** No. 47, 14th Ling, Chia Pau Tsuen, Lin Kou Hsiang, Taipei Hsien 244, Taiwan, R.O.C.

**TEST LOCATION:** No. 19, Hwa Ya 2nd Rd, Wen Hwa Tsuen, Kwei Shan Hsiang, Taoyuan Hsien 333, Taiwan, R.O.C.

# TABLE OF CONTENTS

# RELEASE CONTROL RECORD

| ISSUE NO. | REASON FOR CHANGE | DATE ISSUED |
|---|---|---|
| Original release | N/A | Mar. 04, 2011 |

# 1. CERTIFICATION

**PRODUCT:** LTE USB Modem
**MODEL NO.:** C505
**BRAND:** BandLuxe
**APPLICANT:** BandRich Inc.
**TESTED:** Jan. 12 ~ Mar. 02, 2011
**TEST SAMPLE:** ENGINEERING SAMPLE
**STANDARDS: FCC Part 2 (Section 2.1093)**
**FCC OET Bulletin 65, Supplement C (01-01)**
**RSS-102 Issue 4 (2010-03)**

The above equipment (model: C505) has been tested by **Bureau Veritas Consumer Products Services (H.K.) Ltd., Taoyuan Branch**, and found compliance with the requirement of the above standards. The test record, data evaluation & Equipment Under Test (EUT) configurations represented herein are true and accurate accounts of the measurements of the sample's EMC characteristics under the conditions specified in this report.

PREPARED BY : _____ , **DATE:** ___Mar. 04, 2011___
Andrea Hsia / Specialist

APPROVED BY : _____ , **DATE:** ___Mar. 04, 2011___
Gary Chang / Assistant Manager

## 2. GENERAL INFORMATION
### 2.1 GENERAL DESCRIPTION OF EUT

| PRODUCT | LTE USB Modem | |
|---|---|---|
| MODEL NO. | C505 | |
| FCC ID | UZI-C505 | |
| NOMINAL VOLTAGE | 5.0Vdc from host equipment | |
| MODULATION TYPE | GPRS, E-GPRS | GMSK, 8PSK |
| | WCDMA | BPSK |
| | LTE Band 17 | QPSK, 16QAM |
| | LTE Band 4 | QPSK, 16QAM |
| | WCDMA AWS Band | BPSK |
| FREQUENCY RANGE | GPRS, E-GPRS | 824.2MHz ~ 848.8MHz<br>1850.2MHz ~ 1909.8MHz |
| | WCDMA | 826.4MHz ~ 846.6MHz<br>1852.4MHz ~ 1907.6MHz |
| | LTE Band 17<br>Channel Bandwidth: 5MHz | 706.5MHz ~ 713.5MHz |
| | LTE Band 17<br>Channel Bandwidth: 10MHz | 709MHz ~ 711MHz |
| | LTE Band 4<br>Channel Bandwidth: 5MHz | 1712.5MHz ~1752.5MHz |
| | LTE Band 4<br>Channel Bandwidth: 10MHz | 1715.0MHz ~1750.0MHz |
| | WCDMA AWS Band | 1712.4MHz ~1752.6MHz |
| MAXIMUM SAR (1g) | LTE band 17 | 0.334W/kg |
| | GPRS/EGPRS/WCDMA 850 | 0.676W/kg |
| | LTE band 4 /<br>WCDMA AWS Band | 0.702W/kg |
| | GPRS/EGPRS/WCDMA 1900 | 0.694W/kg |
| CATEGORY | LTE: 3 | |
| RELEASE VERSION | WCDMA: Release 5 / 6 | |
| ANTENNA TYPE | Refer to Note | |
| DATA CABLE | 0.5m non-shielded USB cable without core | |
| I/O PORTS | Refer to user's manual | |
| ACCESSORY DEVICES | NA | |

**NOTE:**

1. The antennas used in this EUT are listed as below table:

| Frequency Band | Embedded Monopole Antenna | Chip Antenna | Printed Antenna |
|---|---|---|---|
| **LTE band 17** | TX/ RX (Gain: -3dBi) | Not support | RX only |
| **GPRS/EGPRS/WCDMA 850** | TX/ RX (Gain: -2dBi) | | Not support |
| **GPRS/EGPRS/WCDMA 1900** | TX/ RX (Gain: -3dBi) | | |
| **LTE band 4 / WCDMA AWS Band** | TX/ RX (Gain: -7dBi) | RX only | |

2. The EUT has no voice function.
3. Hardware version: V1.0.3
4. Software version: 1034 001 0310
5. IMEI Code: 35673404*******.
6. The above EUT information was declared by manufacturer and for more detailed features description, please refer to the manufacturer's specifications or User's Manual.

## 2.2 GENERAL DESCRIPTION OF APPLIED STANDARDS

According to the specifications of the manufacturer, this product must comply with the requirements of the following standards:

**FCC Part 2 (2.1093)**

**FCC OET Bulletin 65, Supplement C (01- 01)**

**RSS-102 Issue 4 (2010-03)**

**IEEE 1528-2003**

All test items have been performed and recorded as per the above standards.

## 2.3 GENERAL INOFRMATION OF THE SAR SYSTEM

DASY4 **(Software 4.7 Build 80)** consists of high precision robot, probe alignment sensor, phantom, robot controller, controlled measurement server and near-field probe. The robot includes six axes that can move to the precision position of the DASY4 software defined. The DASY4 software can define the area that is detected by the probe. The robot is connected to controlled box. Controlled measurement server is connected to the controlled robot box. The DAE includes amplifier, signal multiplexing, AD converter, offset measurement and surface detection. It is connected to the Electro-optical coupler (ECO). The ECO performs the conversion form the optical into digital electric signal of the DAE and transfers data to the PC.

### ES3DV3 ISOTROPIC E-FIELD PROBE

| | |
|---|---|
| **CONSTRUCTION** | Symmetrical design with triangular core <br> Interleaved sensors <br> Built-in shielding against static charges <br> PEEK enclosure material (resistant to organic solvents, e.g., DGBE) |
| **FREQUENCY** | 10 MHz to 4 GHz; <br> Linearity: ± 0.2 dB (30 MHz to 4 GHz) |
| **DIRECTIVITY** | ± 0.2 dB in HSL (rotation around probe axis) <br> ± 0.3 dB in tissue material (rotation normal to probe axis) |
| **DYNAMIC RANGE** | 5 µW/g to > 100 mW/g; <br> Linearity: ± 0.2 dB |
| **DIMENSIONS** | Overall length: 337 mm (Tip: 20 mm) <br> Tip diameter: 3.9 mm (Body: 12 mm) <br> Distance from probe tip to dipole centers: 2.0 mm |
| **APPLICATION** | General dosimetry up to 4 GHz <br> Dosimetry in strong gradient fields <br> Compliance tests of mobile phones |

**NOTE**

1. The Probe parameters have been calibrated by the SPEAG. Please reference "APPENDIX D" for the Calibration Certification Report.

## EX3DV4 ISOTROPIC E-FIELD PROBE

| | |
|---|---|
| **CONSTRUCTION** | Symmetrical design with triangular core<br>Built-in shielding against static charges<br>PEEK enclosure material (resistant to organic solvents, e.g., DGBE) |
| **FREQUENCY** | 10 MHz to > 6 GHz<br>Linearity: ± 0.2 dB (30 MHz to 6 GHz) |
| **DIRECTIVITY** | ± 0.3 dB in HSL (rotation around probe axis)<br>± 0.5 dB in tissue material (rotation normal to probe axis) |
| **DYNAMIC RANGE** | 10 $\mu$ W/g to > 100 mW/g<br>Linearity: ± 0.2 dB (noise: typically < 1 $\mu$ W/g) |
| **DIMENSIONS** | Overall length: 330 mm (Tip: 20 mm)<br>Tip diameter: 2.5 mm (Body: 12 mm)<br>Typical distance from probe tip to dipole centers: 1 mm |
| **APPLICATION** | High precision dosimetric measurements in any exposure scenario (e.g., very strong gradient fields). Only probe which enables compliance testing for frequencies up to 6 GHz with precision of better 30%. |

**NOTE**

1. The Probe parameters have been calibrated by the SPEAG. Please reference "APPENDIX D" for the Calibration Certification Report.
2. For frequencies above 800MHz, calibration in a rectangular wave-guide is used, because wave-guide size is manageable.
3. For frequencies below 800MHz, temperature transfer calibration is used because the wave-guide size becomes relatively large.

## TWIN SAM V4.0

| | |
|---|---|
| **CONSTRUCTION** | The shell corresponds to the specifications of the Specific Anthropomorphic Mannequin (SAM) phantom defined in IEEE 1528-2003, EN 62209-1 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 ± 0.2mm |
| **FILLING VOLUME** | Approx. 25liters |
| **DIMENSIONS** | Height: 810mm; Length: 1000mm; Width: 500mm |

## SYSTEM VALIDATION KITS:

**CONSTRUCTION**       Symmetrical dipole with l/4 balun enables measurement of feedpoint impedance with NWA matched for use near flat phantoms filled with brain simulating solutions.
Includes distance holder and tripod adaptor

**CALIBRATION**       Calibrated SAR value for specified position and input power at the flat phantom in brain simulating solutions

**FREQUENCY**       750, 835, 1700, 1900MHz

**RETURN LOSS**       > 20dB at specified validation position

**POWER CAPABILITY**       > 100W (f < 1GHz); > 40W (f > 1GHz)

**OPTIONS**       Dipoles for other frequencies or solutions and other calibration conditions upon request


## DEVICE HOLDER FOR SAM TWIN PHANTOM

**CONSTRUCTION**       The device holder for the mobile phone device is designed to cope with different positions given in the standard. It has two scales for the device rotation (with respect to the body axis) and the device inclination (with respect to the line between the ear reference points). The rotation centers for both scales is the ear reference point (ERP). Thus the device needs no repositioning when changing the angles. The holder has been made out of low-loss POM material having the following dielectric parameters: relative permittivity =3 and loss tangent =0.02. The amount of dielectric material has been reduced in the closest vicinity of the device, since measurements have suggested that the influence of the clamp on the test results could thus be lowered. The device holder for the portable device makes up of the polyethylene foam. The dielectric parameters of material close to the dielectric parameters of the air.

## DATA ACQUISITION ELECTRONICS

**CONSTRUCTION**    The data acquisition electronics (DAE3) consists of a highly sensitive electrometer grade preamplifier with auto-zeroing, a channel and gain-switching multiplex, a fast 16 bit AD converter and a command decoder and control logic unit. Transmission to the measurement server is accomplished through an optical downlink for data and status information as well as an optical uplink for commands and the clock. The mechanical probe is mounting device includes two different sensor systems for frontal and sideways probe contacts. They are used for mechanical surface detection and probe collision detection. The input impedance of the DAE3 box is 200MOhm; the inputs are symmetrical and floating. Common mode rejection is above 80 dB.

## 2.4 TEST EQUIPMENT

**FOR SAR MEASURENENT**

| ITEM | NAME | BRAND | TYPE | SERIES NO. | DATE OF CALIBRATION | DUE DATE OF CALIBRATION |
|------|------|-------|------|------------|---------------------|-------------------------|
| 1 | SAM Phantom | S & P | QD000 P40 CA | TP 1202 | NA | NA |
| 2 | Signal Generator | Agilent | E8257C | MY43321031 | Aug. 30, 2010 | Aug. 29, 2011 |
| 3 | E-Field Probe | S & P | EX3DV4 | 3578 | Jun. 22, 2010 | Jun. 21, 2011 |
| 4 | E-Field Probe | S & P | ES3DV3 | 3177 | Aug. 24, 2010 | Aug. 23, 2011 |
| 5 | E-Field Probe | S & P | EX3DV4 | 3753 | Dec.13, 2010 | Dec.12, 2011 |
| 6 | DAE | S & P | DAE 3 | 579 | Sep. 20, 2010 | Sep. 19, 2011 |
| 7 | Robot Positioner | Staubli Unimation | NA | NA | NA | NA |
| 8 | Validation Dipole | S & P | D750V. | 1013 | Jun. 11, 2010 | Jun. 10, 2011 |
| 9 | | | D835V2 | 4d021 | Apr. 29, 2010 | Apr. 28, 2011 |
| 10 | | | D1800V2 | 2d077 | Feb. 23, 2010 | Feb. 22, 2011 |
| 11 | | | D1900V2 | 5d036 | Feb. 23, 2010 | Feb. 22, 2011 |
| 12 | | | D1800V2 | 2d041 | Jan.26, 2011 | Jan.25, 2012 |
| 13 | | | D1750v2 | 1003 | Sep.29, 2010 | Sep.28, 2011 |

**NOTE:** Before starting, all test equipment shall be warmed up for 30min.

**FOR TISSUE PROPERTY**

| ITEM | NAME | BRAND | TYPE | SERIES NO. | DATE OF CALIBRATION | DUE DATE OF CALIBRATION |
|------|------|-------|------|------------|---------------------|-------------------------|
| 1 | Network Analyzer | Agilent | E5071C | MY46104190 | Apr. 06, 2010 | Apr. 05, 2011 |
| 2 | Dielectric Probe | Agilent | 85070D | US01440176 | NA | NA |

**NOTE:**

1. Before starting, all test equipment shall be warmed up for 30min.
2. The tolerance (k=1) specified by Agilent for general dielectric measurements, deriving from inaccuracies in the calibration data, analyzer drift, and random errors, are usually ±2.5% and ±5% for measured permittivity and conductivity, respectively. However, the tolerances for the conductivity is smaller for material with large loss tangents, i.e., less than ±2.5% (k=1). It can be substantially smaller if more accurate methods are applied

## 2.5 GENERAL DESCRIPTION OF THE SPATIAL PEAK SAR EVALUATION

The DASY4 post-processing software (SEMCAD) automatically executes the following procedures to calculate the field units from the micro-volt readings at the probe connector. The parameters used in the evaluation are stored in the configuration modules of the software:

| | | |
|---|---|---|
| Probe parameters: | - Sensitivity | $Norm_i$, $a_{i0}$, $a_{i1}$, $a_{i2}$ |
| | - Conversion factor | $ConvF_i$ |
| | - Diode compression point | $dcp_i$ |
| Device parameters: | - Frequency | F |
| | - Crest factor | Cf |
| Media parameters: | - Conductivity | |
| | - Density | |

The first step of the evaluation is a linearization of the filtered input signal to account for the compression characteristics of the detector diode. The compensation depends on the input signal, the diode type and the DC-transmission factor from the diode to the evaluation electronics. If the exciting field is pulsed, the crest factor of the signal must be known to correctly compensate for peak power. The formula for each channel can be given as:

$$V_i = U_i + U_i^2 \bullet \frac{cf}{dcp_i}$$

| | | |
|---|---|---|
| $V_i$ | =compensated signal of channel i | (i = x, y, z) |
| $U_i$ | =input signal of channel I | (i = x, y, z) |
| Cf | =crest factor of exciting field | (DASY parameter) |
| $dcp_i$ | =diode compression point | (DASY parameter) |

From the compensated input signals the primary field data for each channel can be evaluated:

$$\text{E-fieldprobes: } E_i = \sqrt{\frac{V_1}{Norm_i \cdot ConvF}}$$

$$\text{H-fieldprobes: } H_i = \sqrt{V_i} \cdot \frac{a_{i0} + a_{i1}f + a_{i2}f^2}{f}$$

$V_i$        =compensated signal of channel I      (i = x, y, z)

$Norm_i$    =sensor sensitivity of channel i µV/(V/m)2 for      (i = x, y, z) E-field Probes

ConvF      = sensitivity enhancement in solution

$a_{ij}$         = sensor sensitivity factors for H-field probes

F           = carrier frequency [GHz]

$E_i$          = electric field strength of channel i in V/m

$H_i$          = magnetic field strength of channel i in A/m

The RSS value of the field components gives the total field strength (Hermitian magnitude):

$$E_{tot} = \sqrt{E_x^2 + E_y^2 + E_z^2}$$

The primary field data are used to calculate the derived field units.

$$SAR = E_{tot}^2 \cdot \frac{\sigma}{\rho \cdot 1'000}$$

SAR       = local specific absorption rate in mW/g

$E_{tot}$      = total field strength in V/m

           = conductivity in [mho/m] or [Siemens/m]

           = equivalent tissue density in g/cm3

Note that the density is set to 1, to account for actual head tissue density rather than the density of the tissue simulating liquid. The entire evaluation of the spatial peak values is performed within the Post-processing engine (SEMCAD). The system always gives the maximum values for the 1g and 10g cubes. The algorithm to find the cube with highest averaged SAR is divided into the following stages:

1. The extraction of the measured data (grid and values) from the Zoom Scan

2. The calculation of the SAR value at every measurement point based on all stored data (A/D values and measurement parameters)

3. The generation of a high-resolution mesh within the measured volume

4. The interpolation of all measured values from the measurement grid to the high-resolution grid

5. The extrapolation of the entire 3-D field distribution to the phantom surface over the distance from sensor to surface

6. The calculation of the averaged SAR within masses of 1g and 10g.

The probe is calibrated at the center of the dipole sensors that is located 1 to 2.7mm away from the probe tip. During measurements, the probe stops shortly above the phantom surface, depending on the probe and the surface detecting system. Both distances are included as parameters in the probe configuration file. The software always knows exactly how far away the measured point is from the surface. As the probe cannot directly measure at the surface, the values between the deepest measured point and the surface must be extrapolated. The angle between the probe axis and the surface normal line is less than 30 degree.

The maximum search is automatically performed after each area scan measurement. It is based on splines in two or three dimensions. The procedure can find the maximum for most SAR distributions even with relatively large grid spacing. After the area scanning measurement, the probe is automatically moved to a position at the interpolated maximum. The following scan can directly use this position for reference, e.g., for a finer resolution grid or the cube evaluations. The 1g and 10g peak evaluations are only available for the predefined cube 7 x 7 x 7 scans. The routines are verified and optimized for the grid dimensions used in these cube measurements. The measured volume of 30 x 30 x 30mm contains about 30g of tissue. The first procedure is an extrapolation (incl. boundary correction) to get the points between the lowest measured plane and the surface. The next step uses 3D interpolation to get all points within the measured volume in a 1mm grid (42875 points). In the last step, a 1g cube is placed numerically into the volume and its averaged SAR is calculated. This cube is the moved around until the highest averaged SAR is found. If the highest SAR is found at the edge of the measured volume, the system will issue a warning: higher SAR values might be found outside of the measured volume. In that case the cube measurement can be repeated, using the new interpolated maximum as the center.

## 3.   DESCRIPTION OF SUPPORT UNITS

| NO. | PRODUCT | BRAND | MODEL NO. | SERIAL NO. |
|---|---|---|---|---|
| 1 | LTE | Anritsu | MT8820C | 6200910015 |
| 2 | Universal Radio Communication Tester | R&S | CMU200 | 104484 |

| NO. | SIGNAL CABLE DESCRIPTION OF THE ABOVE SUPPORT UNITS |
|---|---|
| 1 | NA |
| 2 | NA |

**NOTE:** All power cords of the above support units are non shielded (1.8m).

# 4. SAR TEST CONSIDERATIONS

## 4.1. SUMMARY INFORMATION OF LTE

| | |
|---|---|
| Operating frequency range of each LTE transmission band | Band 4 : 1710~1755MHz<br>Band 17: 704~716 MHz |
| Channel bandwidths | 5 and 10MHz is used for Band 4 /17 |
| High, middle and low (H, M, L) channel numbers and frequencies in each LTE frequency band | |

704~716MHz Band

| Channel bandwidth (MHz) | Channel | Channel No. | Frequency (MHz) |
|---|---|---|---|
| 5 | Low | 23755 | 706.5 |
| | Middle | 23790 | 710 |
| | High | 23825 | 713.5 |
| 10 | Low | 23780 | 709 |
| | Middle | 23790 | 710 |
| | High | 23800 | 711 |

1710~1755 MHz band

| Channel bandwidth (MHz) | Channel | Channel No. | Frequency (MHz) |
|---|---|---|---|
| 5 | Low | 19975 | 1712.5 |
| | Middle | 20175 | 1732.5 |
| | High | 20375 | 1752.5 |
| 10 | Low | 20000 | 1715 |
| | Middle | 20175 | 1732.5 |
| | High | 20350 | 1750 |

| | |
|---|---|
| UE category | 3 |
| Uplink modulations | QPSK , 16QAM |
| LTE transmitter and antenna implementation | 1Tx 2Rx, please see section 4.5 for detail |
| LTE antenna function | Only one monopole ant can transmit |
| Maximum Power Reduction (MPR) is optional or mandatory | MPR is Mandatory, please see section 4.4 |
| A-MPR (additional MPR) is disabled or not | A-MPR was Disabled, not available to the EUT. |
| Conducted output power for 1RB Upper, 1RB lower , 50% RB centered, 100 % RB | Average conducted power and RB configuration plots included in section 4.3 |
| Other U.S. wireless operating modes | Include GPRS/EGPRS/WCDMA please See section 4.2 and 4.3 for detail |
| Simultaneous transmission conditions | No, only 1Tx can on at a time. see section 4.11 |
| Power reduction for SAR | No |

## 4.2. OTHER U.S. WIRELESS OPERATING MODES

| Frequency band (MHz) | Operating mode |
|---|---|
| 704~716 | LTE: Category 3 |
| 824~849 | GPRS: Class 12<br>EGPRS: Class 12<br>WCDMA:HSPA/release5/6 |
| 1710~1755 | WCDMA:HSPA,release5/6<br>LTE: Category 3 |
| 1850~1910 | GPRS: Class 12<br>EGPRS: Class 12<br>WCDMA:HSPA/release5/6 |

## 4.3. CONDUCTED OUTPUT POWER AND RB CONFIGURATION

**LTE MODE**
Frequency band: 704~716MHz **(dBm)**

| BW (MHz) | Modulation | Channel | Frequency (MHz) | RB size | RB Offset | Conducted power (dBm) | Target power (dBm) | MPR target (dB) |
|---|---|---|---|---|---|---|---|---|
| 5 | QPSK | 23755 | 706.5 | 1 | 0 | 23.08 | 22.5 | 0 |
| | | | | 1 | 24 | 22.76 | 22.5 | 0 |
| | | | | 12 | 6 | 21.93 | 22.5 | 0.5 |
| | | | | 25 | 0 | 21.8 | 22.5 | 0.5 |
| | | 23790 | 710 | 1 | 0 | 23 | 22.5 | 0 |
| | | | | 1 | 24 | 22.72 | 22.5 | 0 |
| | | | | 12 | 6 | 22.15 | 22.5 | 0.5 |
| | | | | 25 | 0 | 21.73 | 22.5 | 0.5 |
| | | 23825 | 713.5 | 1 | 0 | 22.81 | 22.5 | 0 |
| | | | | 1 | 24 | 22.52 | 22.5 | 0 |
| | | | | 12 | 6 | 21.82 | 22.5 | 0.5 |
| | | | | 25 | 0 | 21.49 | 22.5 | 0.5 |

| BW (MHz) | Modulation | Channel | Frequency (MHz) | RB size | RB Offset | Conducted power (dBm) | Target power (dBm) | MPR target (dB) |
|---|---|---|---|---|---|---|---|---|
| 5 | 16QAM | 23755 | 706.5 | 1 | 0 | 22.51 | 22.5 | 0.5 |
| | | | | 1 | 24 | 22.11 | 22.5 | 0.5 |
| | | | | 12 | 6 | 21.78 | 22.5 | 1 |
| | | | | 25 | 0 | 21.45 | 22.5 | 1 |
| | | 23790 | 710 | 1 | 0 | 22.42 | 22.5 | 0.5 |
| | | | | 1 | 24 | 22.01 | 22.5 | 0.5 |
| | | | | 12 | 6 | 21.31 | 22.5 | 1 |
| | | | | 25 | 0 | 21.55 | 22.5 | 1 |
| | | 23825 | 713.5 | 1 | 0 | 22.24 | 22.5 | 0.5 |
| | | | | 1 | 24 | 21.83 | 22.5 | 0.5 |
| | | | | 12 | 6 | 21.38 | 22.5 | 1 |
| | | | | 25 | 0 | 21.22 | 22.5 | 1 |

Note:
1) The differences from expected MPR levels are a result of measurement uncertainty and product hardware characteristic. The maximum output power will be tuned individually for not exceed tested maximum as indicated in the SAR report.
2) SAR for 5MHz is not required since the test reduced condition is satisfied. Please check P35 for detail information.

| BW (MHz) | Modulation | Channel | Frequency (MHz) | RB size | RB Offset | Conducted power (dBm) | Target power (dBm) | MPR target (dB) | Max SAR value (W/kg) |
|---|---|---|---|---|---|---|---|---|---|
| 10 | QPSK | 23780 | 709 | 1 | 0 | 22.75 | 22.5 | 0 | Not test |
| | | | | 1 | 49 | 22.4 | 22.5 | 0 | |
| | | | | 25 | 13 | 21.91 | 22.5 | 0.5 | |
| | | | | 50 | 0 | 21.72 | 22.5 | 0.5 | |
| | | 23790 | 710 | 1 | 0 | 22.57 | 22.5 | 0 | 0.202 |
| | | | | 1 | 49 | 22.25 | 22.5 | 0 | 0.218 |
| | | | | 25 | 13 | 21.9 | 22.5 | 0.5 | 0.334 |
| | | | | 50 | 0 | 21.64 | 22.5 | 0.5 | |
| | | 23800 | 711 | 1 | 0 | 22.52 | 22.5 | 0 | Not test |
| | | | | 1 | 49 | 22.21 | 22.5 | 0 | |
| | | | | 25 | 13 | 21.69 | 22.5 | 0.5 | |
| | | | | 50 | 0 | 21.52 | 22.5 | 0.5 | |

| BW (MHz) | Modulation | Channel | Frequency (MHz) | RB size | RB Offset | Conducted power (dBm) | Target power (dBm) | MPR target (dB) | Max SAR value (W/kg) |
|---|---|---|---|---|---|---|---|---|---|
| 10 | 16QAM | 23780 | 709 | 1 | 0 | 21.89 | 22.5 | 0.5 | Not test |
| | | | | 1 | 49 | 21.53 | 22.5 | 0.5 | |
| | | | | 25 | 13 | 21.46 | 22.5 | 1 | |
| | | | | 50 | 0 | 21.23 | 22.5 | 1 | |
| | | 23790 | 710 | 1 | 0 | 21.79 | 22.5 | 0.5 | 0.254 |
| | | | | 1 | 49 | 21.46 | 22.5 | 0.5 | 0.221 |
| | | | | 25 | 13 | 21.37 | 22.5 | 1 | 0.267 |
| | | | | 50 | 0 | 21.01 | 22.5 | 1 | |
| | | 23800 | 711 | 1 | 0 | 21.53 | 22.5 | 0.5 | Not test |
| | | | | 1 | 49 | 22.3 | 22.5 | 0.5 | |
| | | | | 25 | 13 | 21.17 | 22.5 | 1 | |
| | | | | 50 | 0 | 21.05 | 22.5 | 1 | |

Note:
1) The differences from expected MPR levels are a result of measurement uncertainty and product hardware characteristic. The maximum output power will be tuned individually for not exceed tested maximum as indicated in the SAR report.
2) Not all channels and configurations are tested since the test reduced condition is satisfied. Please check P35 for detail information.

Frequency band: 1710~1755MHz **(dBm)**

| BW (MHz) | Modulation | Channel | Frequency (MHz) | RB size | RB Offset | Conducted power (dBm) | Target power (dBm) | MPR target (dB) |
|---|---|---|---|---|---|---|---|---|
| 5 | QPSK | 19975 | 1712.5 | 1 | 0 | 22.83 | 22.5 | 0 |
| | | | | 1 | 24 | 23.07 | 22.5 | 0 |
| | | | | 12 | 6 | 21.76 | 22.5 | 0.5 |
| | | | | 25 | 0 | 21.75 | 22.5 | 0.5 |
| | | 20175 | 1732.5 | 1 | 0 | 22.64 | 22.5 | 0 |
| | | | | 1 | 24 | 22.67 | 22.5 | 0 |
| | | | | 12 | 6 | 21.36 | 22.5 | 0.5 |
| | | | | 25 | 0 | 21.46 | 22.5 | 0.5 |
| | | 20375 | 1752.5 | 1 | 0 | 22.6 | 22.5 | 0 |
| | | | | 1 | 24 | 22.62 | 22.5 | 0 |
| | | | | 12 | 6 | 21.78 | 22.5 | 0.5 |
| | | | | 25 | 0 | 21.66 | 22.5 | 0.5 |

| BW (MHz) | Modulation | Channel | Frequency (MHz) | RB size | RB Offset | Conducted power (dBm) | Target power (dBm) | MPR target (dB) |
|---|---|---|---|---|---|---|---|---|
| 5 | 16QAM | 19975 | 1712.5 | 1 | 0 | 22.12 | 22.5 | 0.5 |
| | | | | 1 | 24 | 22.19 | 22.5 | 0.5 |
| | | | | 12 | 6 | 21.3 | 22.5 | 1 |
| | | | | 25 | 0 | 21.48 | 22.5 | 1 |
| | | 20175 | 1732.5 | 1 | 0 | 21.79 | 22.5 | 0.5 |
| | | | | 1 | 24 | 21.81 | 22.5 | 0.5 |
| | | | | 12 | 6 | 21.13 | 22.5 | 1 |
| | | | | 25 | 0 | 21.22 | 22.5 | 1 |
| | | 20375 | 1752.5 | 1 | 0 | 21.85 | 22.5 | 0.5 |
| | | | | 1 | 24 | 21.94 | 22.5 | 0.5 |
| | | | | 12 | 6 | 21.25 | 22.5 | 1 |
| | | | | 25 | 0 | 21.37 | 22.5 | 1 |

Note:
1) The differences from expected MPR levels are a result of measurement uncertainty and product hardware characteristic. The maximum output power will be tuned individually for not exceed tested maximum as indicated in the SAR report.
2) SAR for 5MHz is not required since the test reduced condition is satisfied. Please check P35 for detail information.

| BW (MHz) | Modulation | Channel | Frequency (MHz) | RB size | RB Offset | Conducted power (dBm) | Target power (dBm) | MPR target (dB) | Max SAR value (W/kg) |
|---|---|---|---|---|---|---|---|---|---|
| 10 | QPSK | 20000 | 1715 | 1 | 0 | 22.91 | 22.5 | 0 | Not test |
|  |  |  |  | 1 | 49 | 23.46 | 22.5 | 0 |  |
|  |  |  |  | 25 | 13 | 22.24 | 22.5 | 0.5 |  |
|  |  |  |  | 50 | 0 | 22.22 | 22.5 | 0.5 |  |
|  |  | 20175 | 1732.5 | 1 | 0 | 22.79 | 22.5 | 0 | 0.638 |
|  |  |  |  | 1 | 49 | 23.22 | 22.5 | 0 | 0.702 |
|  |  |  |  | 25 | 13 | 21.88 | 22.5 | 0.5 | 0.653 |
|  |  |  |  | 50 | 0 | 21.84 | 22.5 | 0.5 | Not test |
|  |  | 20350 | 1750 | 1 | 0 | 22.65 | 22.5 | 0 |  |
|  |  |  |  | 1 | 49 | 23.13 | 22.5 | 0 |  |
|  |  |  |  | 25 | 13 | 21.96 | 22.5 | 0.5 |  |
|  |  |  |  | 50 | 0 | 21.92 | 22.5 | 0.5 |  |

| BW (MHz) | Modulation | Channel | Frequency (MHz) | RB size | RB Offset | Conducted power (dBm) | Target power (dBm) | MPR target (dB) | Max SAR value (W/kg) |
|---|---|---|---|---|---|---|---|---|---|
| 10 | 16QAM | 20000 | 1715 | 1 | 0 | 22.45 | 22.5 | 0.5 | Not test |
|  |  |  |  | 1 | 49 | 23.06 | 22.5 | 0.5 |  |
|  |  |  |  | 25 | 13 | 21.7 | 22.5 | 1 |  |
|  |  |  |  | 50 | 0 | 21.68 | 22.5 | 1 |  |
|  |  | 20175 | 1732.5 | 1 | 0 | 22.1 | 22.5 | 0.5 | 0.546 |
|  |  |  |  | 1 | 49 | 22.74 | 22.5 | 0.5 | 0.639 |
|  |  |  |  | 25 | 13 | 21.32 | 22.5 | 1 | 0.498 |
|  |  |  |  | 50 | 0 | 21.25 | 22.5 | 1 | Not test |
|  |  | 20350 | 1750 | 1 | 0 | 22.21 | 22.5 | 0.5 |  |
|  |  |  |  | 1 | 49 | 22.83 | 22.5 | 0.5 |  |
|  |  |  |  | 25 | 13 | 21.45 | 22.5 | 1 |  |
|  |  |  |  | 50 | 0 | 21.28 | 22.5 | 1 |  |

Note:
1) The differences from expected MPR levels are a result of measurement uncertainty and product hardware characteristic. The maximum output power will be tuned individually for not exceed tested maximum as indicated in the SAR report.
2) Not all channels and configurations are tested since the test reduced condition is satisfied. Please check P35 for detail information.


**Below are different RB configuration plots (1 RB at low end, 1 RB at high end and 50% RB centered for demonstrating that the RB was configured correctly during the test**
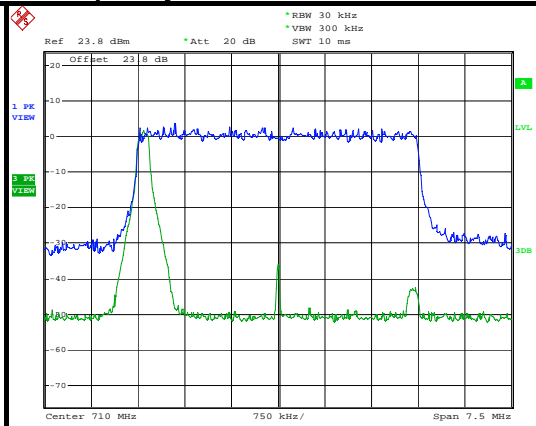
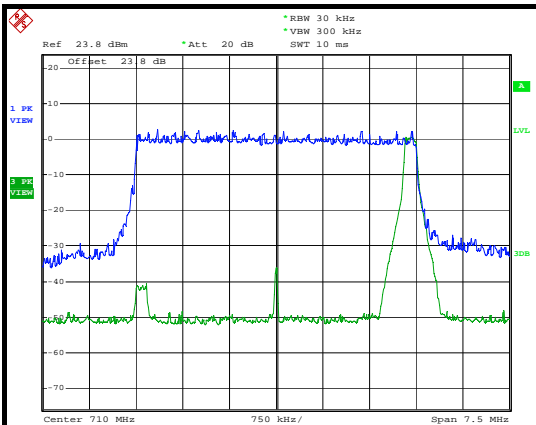## Test plot of middle channel for Frequency band: 704~716MHz
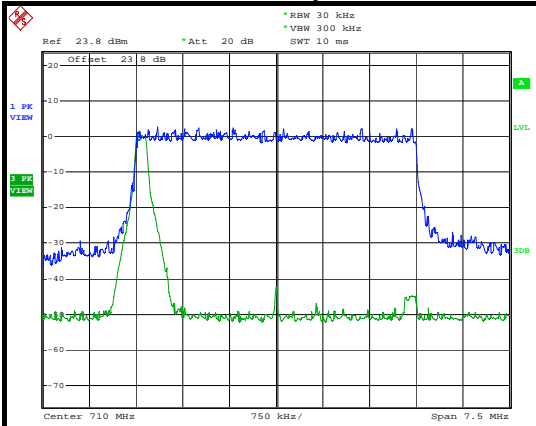


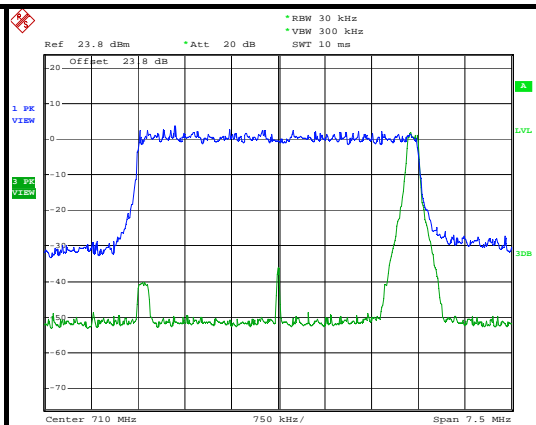Date: 2.MAR.2011 16:21:23

**5MHz / QPSK / 1RB LOWER**



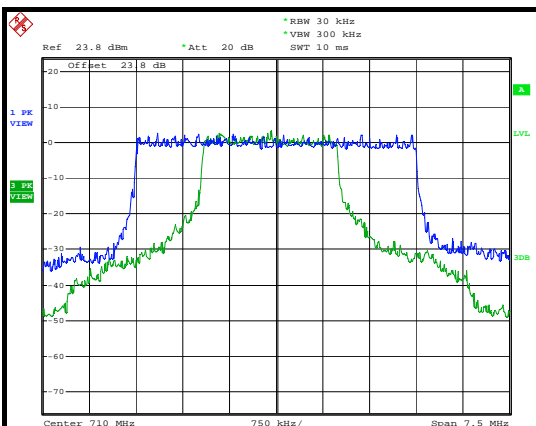Date: 2.MAR.2011 16:19:32

**5MHz / 16QAM / 1RB LOWER**



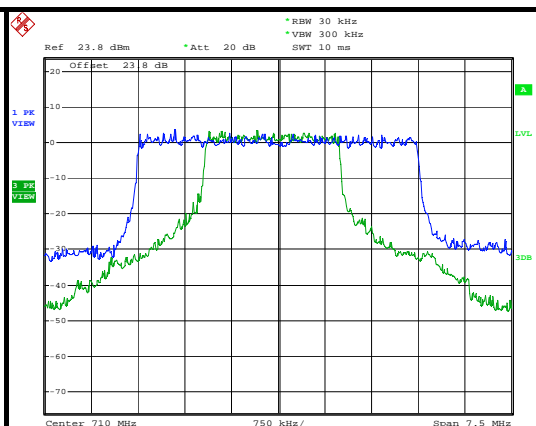Date: 2.MAR.2011 16:22:00

**5MHz / QPSK / 1RB UPPER**



Date: 2.MAR.2011 16:20:00

**5MHz / 16QAM / 1RB UPPER**



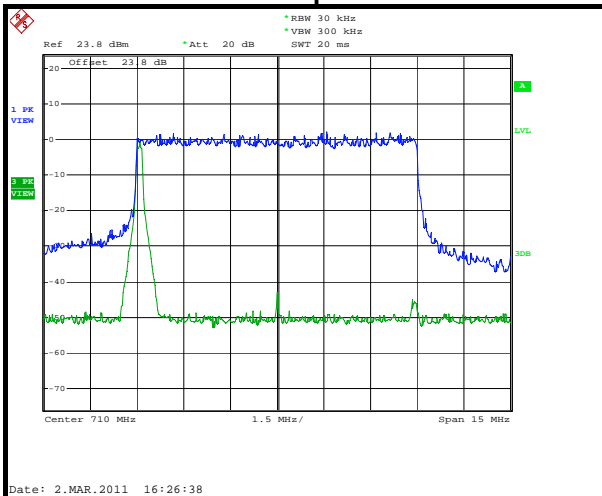Date: 2.MAR.2011 16:20:47

**5MHz / QPSK / 12 RB CENTERED**



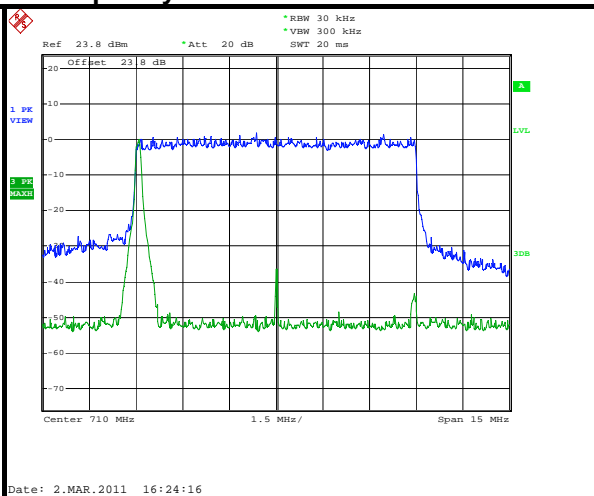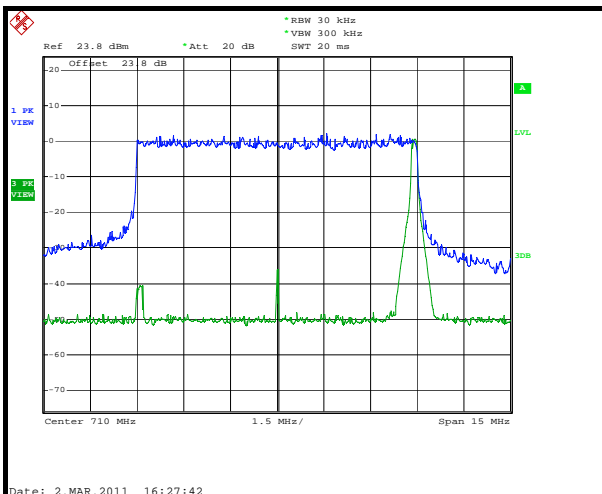Date: 2.MAR.2011 16:18:47

**5MHz / 16QAM / 12 RB CENTERED**

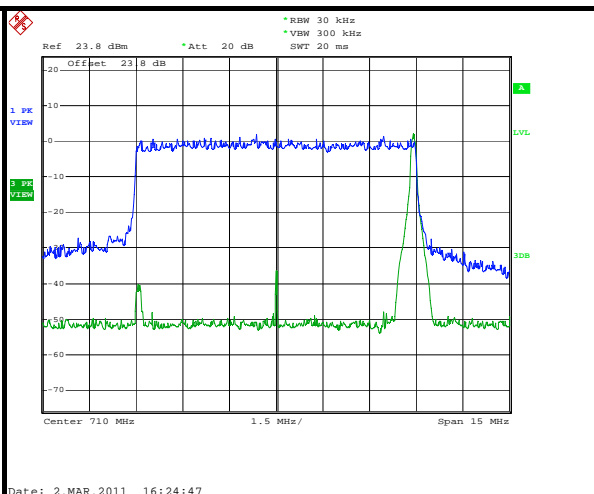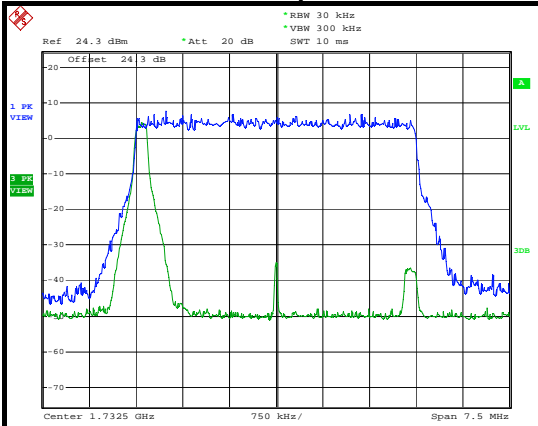# Test plot of middle channel for Frequency band: 704~716MHz



Date: 2.MAR.2011 16:26:38

**10MHz / QPSK / 1RB LOWER**



Date: 2.MAR.2011 16:24:16

**10MHz / 16QAM / 1RB LOWER**



Date: 2.MAR.2011 16:27:42

**10MHz / QPSK / 1RB UPPER**



Date: 2.MAR.2011 16:24:47

**10MHz / 16QAM / 1RB UPPER**



Date: 2.MAR.2011 16:25:46

**10MHz / QPSK / 25 RB CENTERED**



Date: 2.MAR.2011 16:23:35
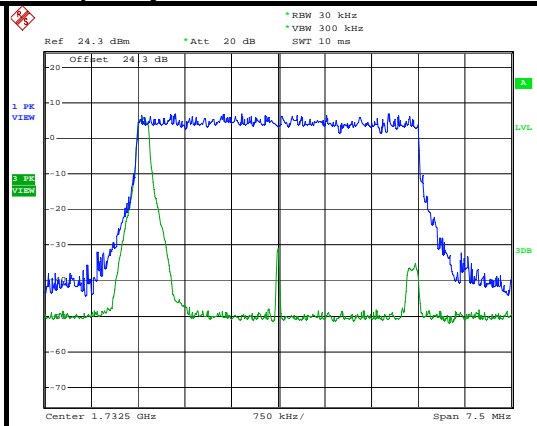
**10MHz / 16QAM / 25 RB CENTERED**

## Test plot of middle channel for Frequency band: 1710~1755MHz
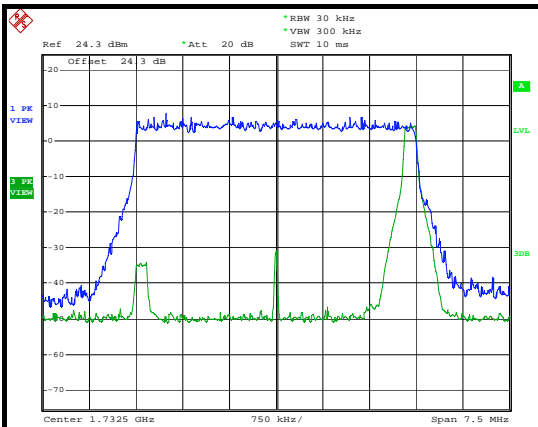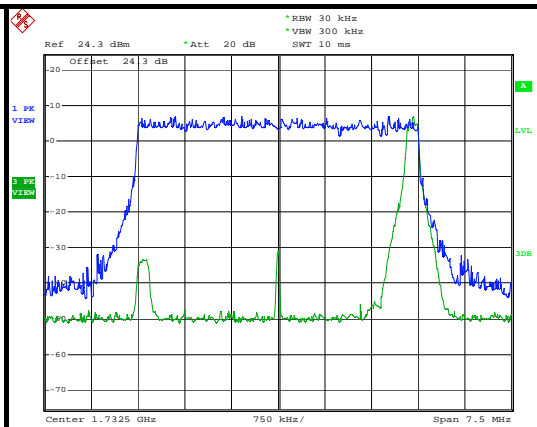


Date: 2.MAR.2011 16:13:20

**5MHz / QPSK / 1RB LOWER**



Date: 2.MAR.2011 16:15:39
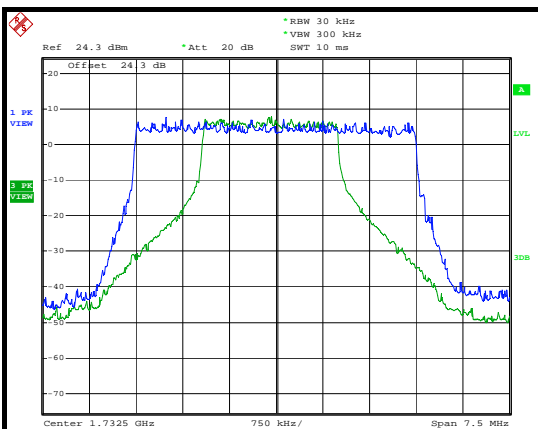
**5MHz / 16QAM / 1RB LOWER**
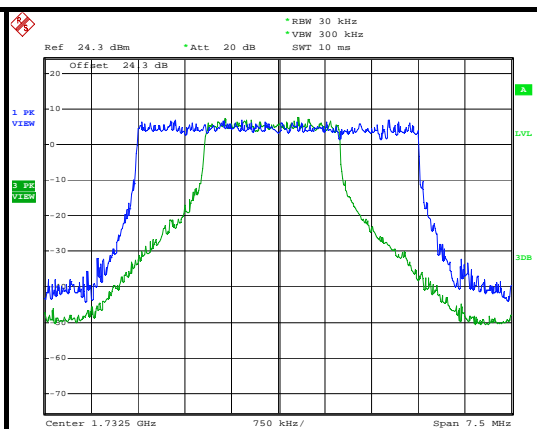


Date: 2.MAR.2011 16:14:11

**5MHz / QPSK / 1RB UPPER**



Date: 2.MAR.2011 16:16:24

**5MHz / 16QAM / 1RB UPPER**
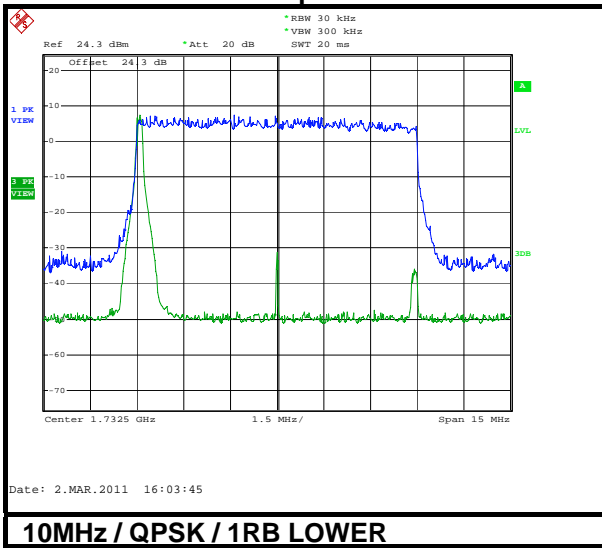


Date: 2.MAR.2011 16:10:27
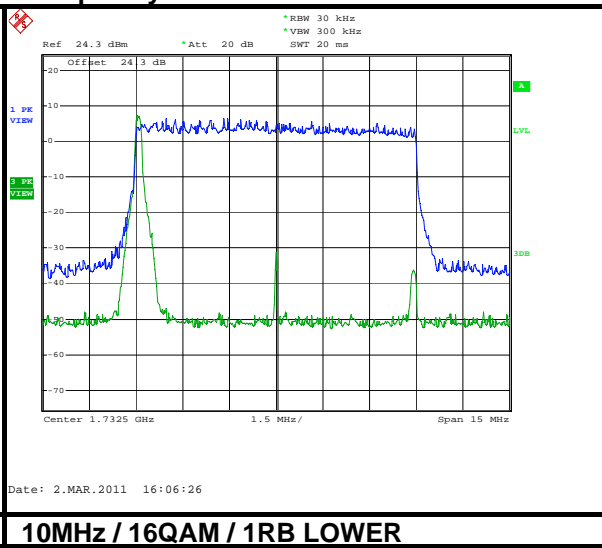
**5MHz / QPSK / 12 RB CENTERED**



Date: 2.MAR.2011 16:15:06
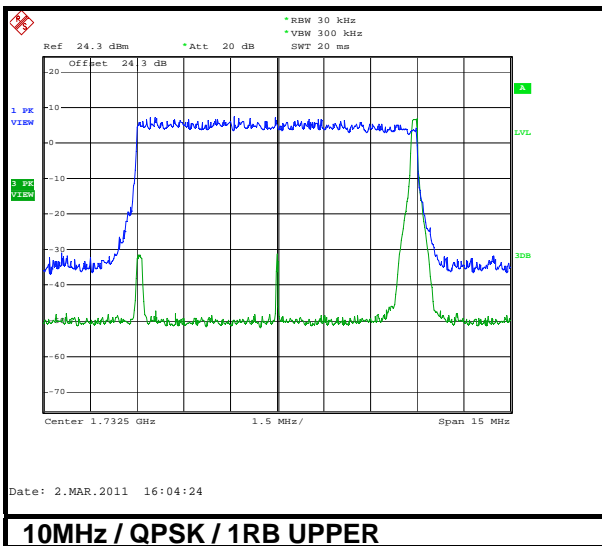
**5MHz / 16QAM / 12 RB CENTERED**

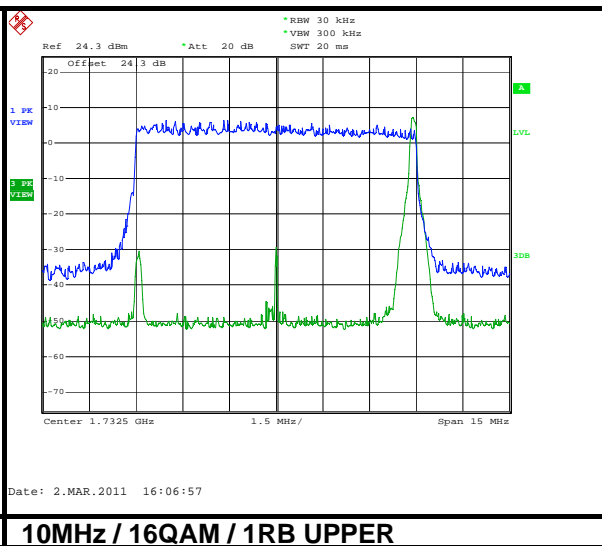# Test plot of middle channel for Frequency band: 1710~1755MHz
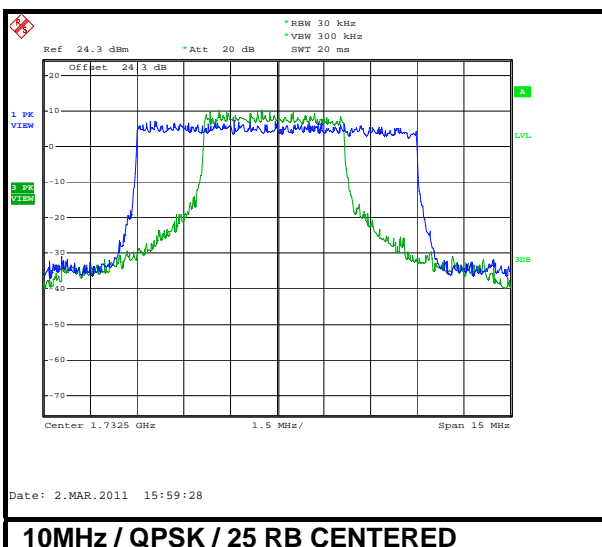


**10MHz / QPSK / 1RB LOWER**



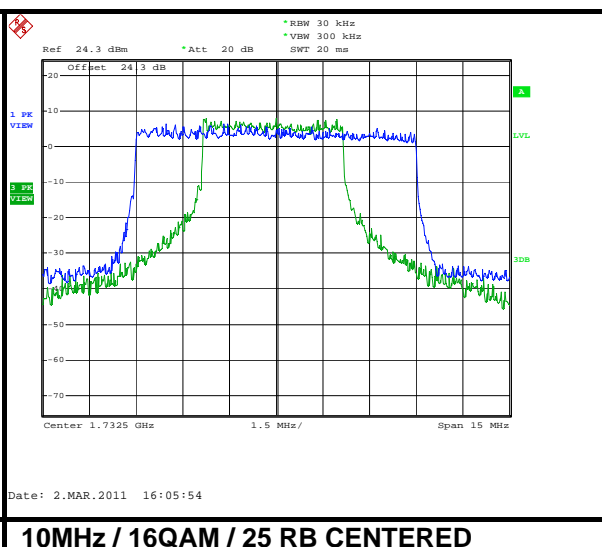**10MHz / 16QAM / 1RB LOWER**



**10MHz / QPSK / 1RB UPPER**



**10MHz / 16QAM / 1RB UPPER**



**10MHz / QPSK / 25 RB CENTERED**



**10MHz / 16QAM / 25 RB CENTERED**

**GPRS / EGPRS MODE conducted average power (dBm)**

| Band | Channel | Frequency (MHz) | GPRS mode | | | | EGPRS mode | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | | | TS1 | TS2 | TS3 | TS4 | TS1 | TS2 | TS3 | TS4 |
| 850 | 128 | 824.2 | 32.13 | 30.87 | 29.24 | 27.56 | 26.71 | 25.02 | 23.71 | 21.72 |
| | 190 | 836.6 | 32.23 | 31.08 | 29.32 | 27.70 | 26.85 | 25.23 | 23.95 | 21.90 |
| | 251 | 848.8 | 32.18 | 30.92 | 29.21 | 27.61 | 26.75 | 25.08 | 23.88 | 21.87 |
| 1900 | 512 | 1850.2 | 29.84 | 28.95 | 26.98 | 24.93 | 24.86 | 23.07 | 21.93 | 19.92 |
| | 661 | 1880 | 30.48 | 29.22 | 27.31 | 25.21 | 25.23 | 23.47 | 22.24 | 20.35 |
| | 128 | 824.2 | 30.24 | 29.08 | 27.20 | 25.10 | 25.08 | 23.11 | 22.07 | 20.02 |

Note: TS=Time slot

**WCDMA conducted average power (dBm)**

| Mode | Channel | Frequency (MHz) | Conducted power (dBm) |
|---|---|---|---|
| WCDMA 850 | 4132 | 826.4 | 23.08 |
| | 4182 | 836.4 | 23.37 |
| | 4233 | 846.6 | 23.12 |
| WCDMA1900 | 9262 | 1852.4 | 22.32 |
| | 9400 | 1880 | 22.89 |
| | 9538 | 1907.6 | 22.31 |
| WCDMA AWS | 1312 | 1712.4 | 23.32 |
| | 1412 | 1732.4 | 23.47 |
| | 1513 | 1752.6 | 23.26 |

**HSDPA conducted average power (dBm)**

| Mode | Channel | Frequency (MHz) | H-set 1 | | | |
|---|---|---|---|---|---|---|
| | | | SUBTEST 1 | SUBTEST 2 | SUBTEST 3 | SUBTEST4 |
| HSDPA 850 | 4132 | 826.4 | 22.41 | 22.23 | 21.23 | 21.05 |
| | 4182 | 836.4 | 22.68 | 22.63 | 21.34 | 21.33 |
| | 4233 | 846.6 | 22.59 | 22.54 | 21.16 | 21.25 |
| HSDPA 1900 | 9262 | 1852.4 | 21.91 | 22.03 | 20.81 | 21.01 |
| | 9400 | 1880 | 22.29 | 22.23 | 21.15 | 21.15 |
| | 9538 | 1907.6 | 21.93 | 22.15 | 21.01 | 20.93 |
| HSDPA AWS | 1312 | 1712.4 | 23.25 | 23.32 | 23.27 | 23.26 |
| | 1412 | 1732.4 | 23.45 | 23.44 | 23.42 | 23.48 |
| | 1513 | 1752.6 | 23.19 | 23.18 | 23.16 | 23.3 |

**HSUPA conducted average power (dBm)**

| Mode | Channel | Frequency (MHz) | H-set 1 | | | | |
|---|---|---|---|---|---|---|---|
| | | | SUBTEST 1 | SUBTEST 2 | SUBTEST 3 | SUBTEST 4 | SUBTEST 5 |
| HSUPA 850 | 4132 | 826.4 | 22.46 | 21.27 | 21.72 | 21.81 | 22.48 |
| | 4182 | 836.4 | 22.63 | 21.49 | 21.82 | 22.09 | 22.63 |
| | 4233 | 846.6 | 22.53 | 21.33 | 21.75 | 21.89 | 22.49 |
| HSUPA 1900 | 9262 | 1852.4 | 22.06 | 20.46 | 21.89 | 21.62 | 22.47 |
| | 9400 | 1880 | 22.42 | 20.84 | 21.93 | 21.95 | 22.88 |
| | 9538 | 1907.6 | 21.93 | 20.23 | 21.52 | 21.39 | 22.43 |
| HSUPA AWS | 1312 | 1712.4 | 22.59 | 21.13 | 22.31 | 22.94 | 22.04 |
| | 1412 | 1732.4 | 22.78 | 21.43 | 22.61 | 22.14 | 22.35 |
| | 1513 | 1752.6 | 22.62 | 21.18 | 22.35 | 21.98 | 22.10 |

## 4.4. MPR AND A-MPR IMPLEMENTATION INFO

| Modulation | Channel bandwidth / Transmission bandwidth configuration (RB) | MPR (dB) |
|---|---|---|
| | 5MHz | |
| QPSK | > 8 | 0 |
| 16QAM | <=8 | 0 |
| 16QAM | > 8 | 1 |

| Modulation | Channel bandwidth / Transmission bandwidth configuration (RB) | MPR (dB) |
|---|---|---|
| | 10MHz | |
| QPSK | > 12 | 0 |
| 16QAM | < 12 | 0 |
| 16QAM | > 12 | 1 |

MPR is according to the standard and implemented in the circuit (mandatory). A-MPR is disabled by hard-coded in the software and is not available to the device.

.

## 4.5. ANTENNA LOCATION AND FUNCTION

3 Antennas are used for the device. But only monopole antenna can transmit and receive signal for all 4 bands, chip and printed can only receive signal on LTE band 4 and LTE band 17 respectively.
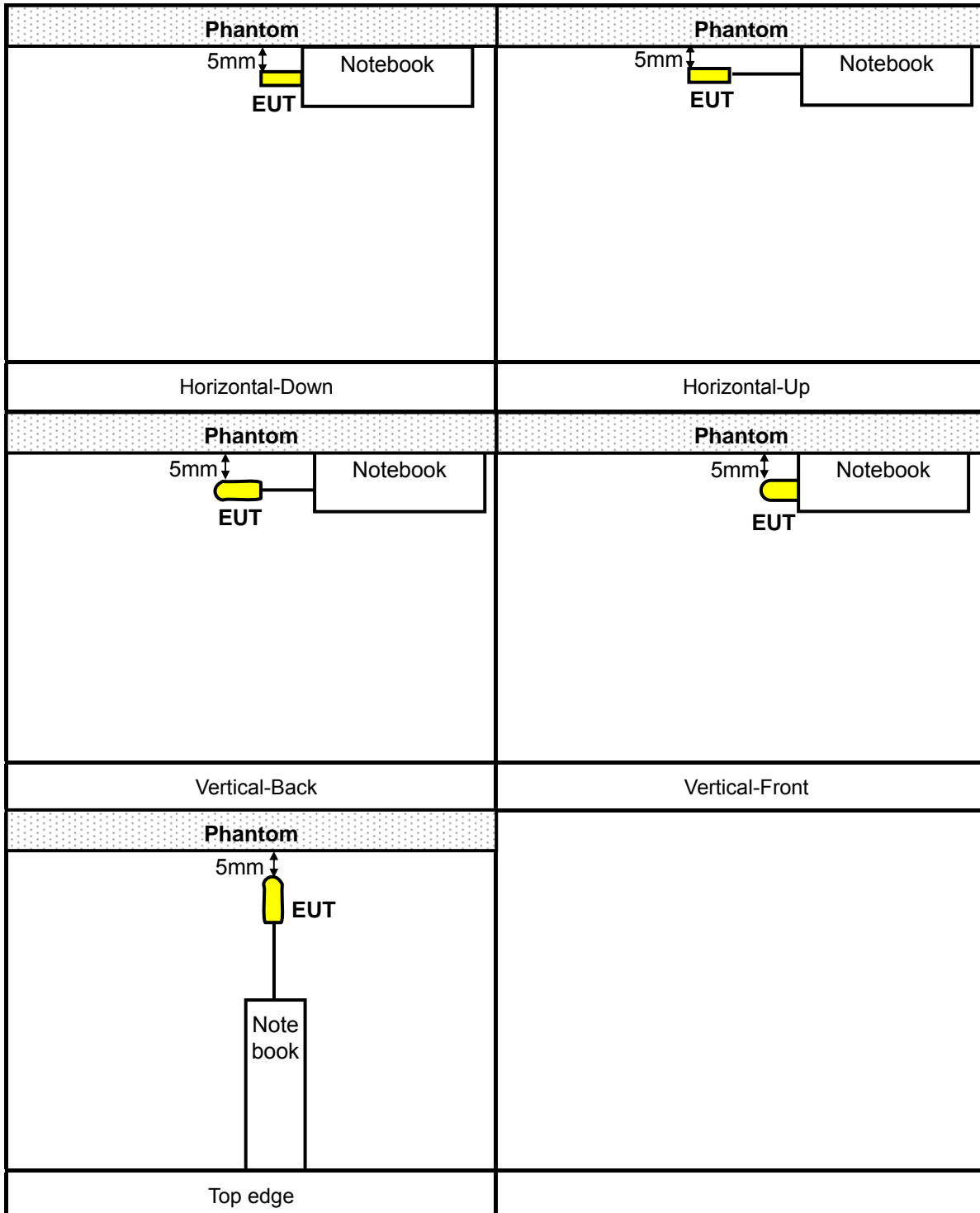
Antenna location
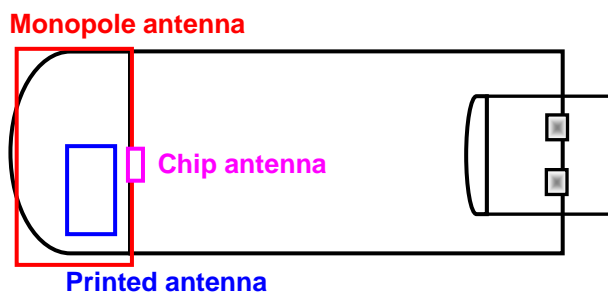


Antenna function and operating bands

| Frequency Band | Embedded Monopole Antenna | Chip Antenna | Printed Antenna |
|---|---|---|---|
| LTE band 17 | TX/ RX (Gain: -3dBi) | Not support | RX only |
| GPRS/EGPRS/WCDMA 850 | TX/ RX (Gain: -2dBi) | | Not support |
| GPRS/EGPRS/WCDMA 1900 | TX/ RX (Gain: -3dBi) | | |
| LTE band 4 / WCDMA AWS Band | TX/ RX (Gain: -7dBi) | RX only | |

## 4.6. TEST SETUP

EUT was connected to NB directly for Horizontal-Down and Vertical-Front test position
EUT was connected to NB via a short usb cable for Horizontal-Down, Vertical-Back and Top edge position.

| | |
|---|---|
| **Phantom** | **Phantom** |
| 5mm Notebook / EUT | 5mm Notebook / EUT |
| Horizontal-Down | Horizontal-Up |
| **Phantom** | **Phantom** |
| 5mm Notebook / EUT | 5mm Notebook / EUT |
| Vertical-Back | Vertical-Front |
| **Phantom** | |
| 5mm EUT / Note book | |
| Top edge | |

## 4.7.  TEST INSTRUMEN TS

Different simulator was used during the test for GRPS/EGPRS/WCDMA and LTE mode:

R&S CMU 200 is used for GRPS/EGPRS and WCDMA mode.

| Test mode | Instrument | | |
|---|---|---|---|
| | Brand | Model | SW version |
| GPRS/EGPRS/WCDMA | R&S | CMU 200 -1100.0008.02 | V5.04 |

Information of R&S CMU 200
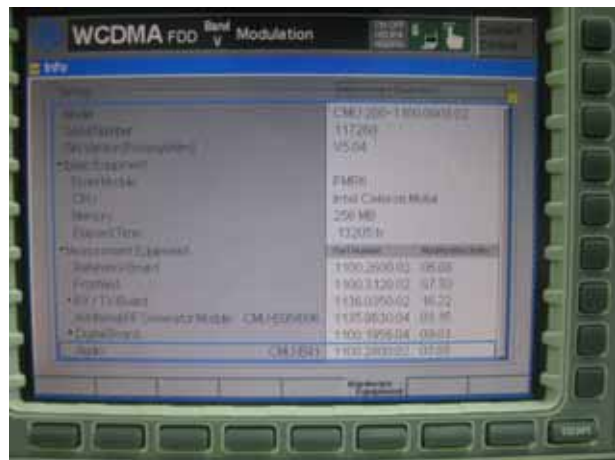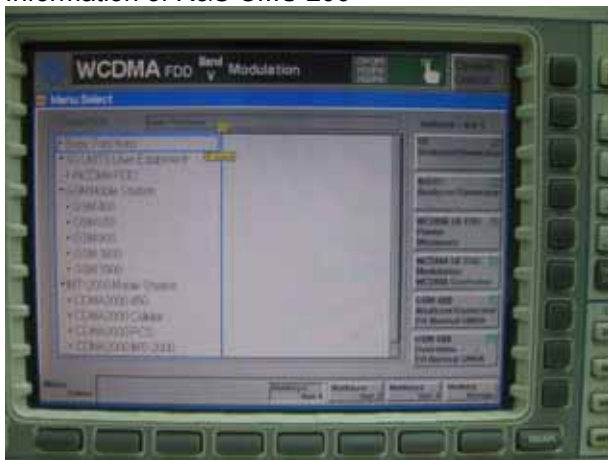


Anritsu MT8820C is used for LTE mode

| Test mode | Instrument | | |
|---|---|---|---|
| | Brand | Model | SW version |
| LTE | Anritsu | MT8820C | 21.03 #003 |

Information of Anritsu MT8820C

## 4.8. TEST SOFTWARE

EUT was plugged into laptop pc and a special test mode software which supplied by the manufacture was loaded into the host NB. The software configures the EUT for each intended test mode.

Software version:1.03.010 Build010
Firmware version:1034_001_0310



Test tool can control EUT operating mode only and the detail output parameters was controlled by the correspondent simulator as explained in the previous section.
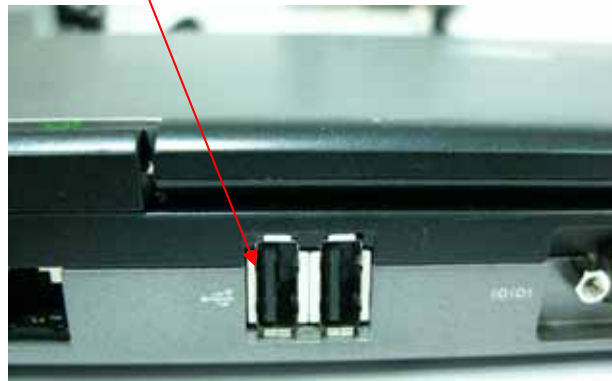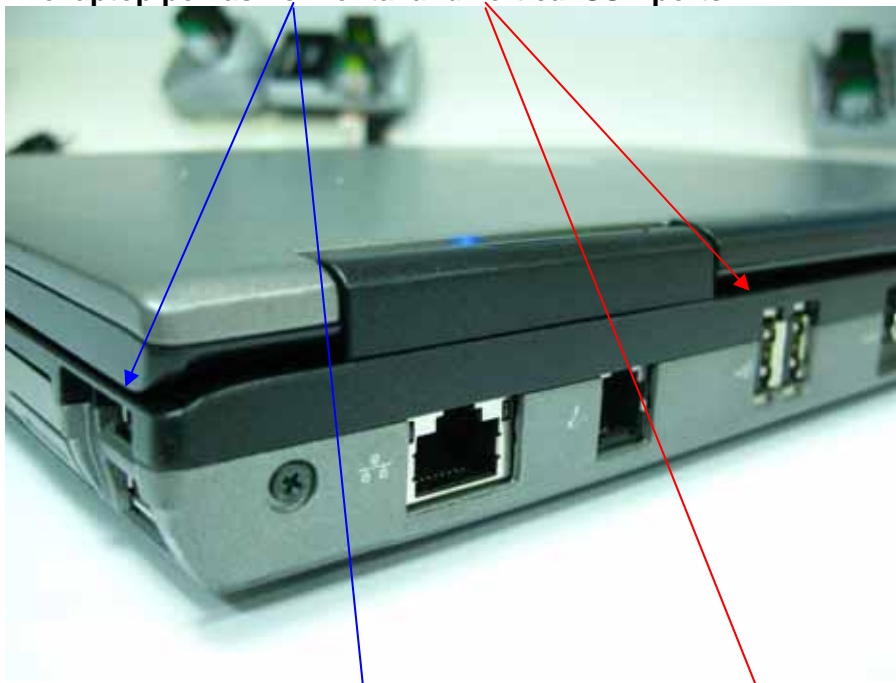Select setting item → network type to choose operating mode.

## 4.9.  TEST LAPTOP

Brand name: Dell
Model name: D820
**The laptop pc has horizontal and vertical USB ports**

## 4.10. TEST MODE AND TEST REDUCTION

Test mode and test reduction is according to the "KDB 941225 D05 SAR for LTE Devices v01" and "KDB 941225 D01-3 for GSM/GPRS/WCDMA 3G device". Also test plan had been accepted by FCC in Lab pre-TCB KDB tracking no. 765203. The device supports 3 air interface modes

**GPRS / EGPRS**
**WCDMA**
**LTE**

### *GRPS and EGPRS mode*

Middle channel will be tested first. Other channels will be reduced if SAR of middle channel is < 0.8 W/kg
Time slot 1/2/3/4 will be tested

### *WCDMA mode*

1. Middle channel will be tested first. Other channels will be reduced if SAR of middle channel is < 0.8 W/kg
2.
   1) Please check power table of p23 and 24, power of HSDPA and HSUPA mode is not higher 1/4dB than that measured without HSPA using 12.2kbps RMC
   2) Please check below SAR test result table, max SAR value of each mode is less than 0.75 % of SAR limit

| Mode | Channel | Frequency (MHz) | Horizontal-Down | Horizontal-Up | Vertical-Back | Vertical-Front | Tip |
|------|---------|-----------------|-----------------|---------------|---------------|----------------|-----|
| WCDMA 850 | 4182 | 836.4 | 0.500 | 0.380 | 0.280 | 0.279 | 0.033 |
| WCDMA 1900 | 9400 | 1800 | 0.694 | 0.586 | 0.489 | 0.528 | 0.051 |
| WCDMA 1700 | 1412 | 1732.4 | 0.362 | 0.423 | 0.204 | 0.396 | 0.071 |

Therefore, only WCDMA-RMC will be tested, HSDPA and HSUPA are not required.

## *LTE mode*

1. Middle channel will be tested first. Other channels will be reduced if SAR of middle channel is < 0.8 W/kg
2. 5 & 10MHz bandwidth is used for LTE mode. The highest BW (10MHz bandwidth) with QPSK modulation was tested at 3 different RB configurations first as required by the KDB 941225 D05. The SAR result tabulated in following tables:

LTE Band 17 (704~716MHz) / Bandwidth: 10MHz/ Modulation QPSK

| Channel | Frequency (MHz) | RB size and allocation | Horizontal-Down | Horizontal-Up | Vertical-Back | Vertical-Front | Tip |
|---------|-----------------|------------------------|-----------------|---------------|---------------|----------------|-----|
| 23790 | 710 | 50% centered | 0.334 | 0.215 | 0.108 | 0.169 | 0.023 |
| | | 1 RB , lower edge | 0.202 | 0.125 | 0.074 | 0.12 | 0.018 |
| | | 1 RB , upper edge | 0.218 | 0.137 | 0.075 | 0.113 | 0.017 |

LTE Band 4 (1710~1755MHz) / Bandwidth: 10MHz/ Modulation QPSK

| Channel | Frequency (MHz) | RB size and allocation | Horizontal-Down | Horizontal-Up | Vertical-Back | Vertical-Front | Tip |
|---------|-----------------|------------------------|-----------------|---------------|---------------|----------------|-----|
| 20175 | 1732.5 | 50% centered | 0.336 | 0.653 | 0.392 | 0.446 | 0.129 |
| | | 1 RB , lower edge | 0.340 | 0.638 | 0.358 | 0.449 | 0.127 |
| | | 1 RB , upper edge | 0.376 | 0.702 | 0.379 | 0.531 | 0.142 |

Per KDB 941225 D05

1) SAR of QPSK with 50% RB (10MHz) is < 1.45 W/kg → SAR for QPSK with 100 % is not required
2) Measured SAR in QPSK with 1 RB is < 1.45 W/kg→ Test 1RB configuration on other channels is not required.
3) Per  section 5)B), SAR for 5MHz is not required due to following 2 conditions
   (a) Max average conducted power of 5MHz BW is within +/- 1/2dB of 10MHz BW

| BANDWIDTH (MHz) | 704~716MHz | 1710~1755MHz |
|-----------------|------------|--------------|
| 5 | 23.08 | 23.07 |
| 10 | 22.75 | 23.46 |

   (b) SAR of QPSK with 50% RB (10MHz) is < 1.45 W/kg

According to above explanation, we conclude that only following configurations are required for this specific device:

| BANDWIDTH (MHz) | 10 |
|-----------------|-----|
| **MODULATION TYPE** | QPSK / 16QAM |
| **RB SIZE AND ALLOCATION** | 1RB lower edge<br>1RB upper edge<br>50 % RB centered |
| **TEST CHANNEL** | Middle channel |

## *Final test configuration*

Per pretest data and valid test reductions items as discussed in previous section, below are final test configurations for each air interface mode.

| GPRS / EGPRS | Time slot 1/2/3/4 | 4 configurations need to be tested |
|---|---|---|
| | LOW CHANNEL | Not TEST * |
| | MIDDLE CHANNEL | TEST* |
| | HIGH CHANNEL | Not TEST * |

*Please check SAR test result table of P49. SAR of middle channel is <0.8 W/kg, other channels are not required.

| WCDMA | WCDMA-RMC | TEST |
|---|---|---|
| | HSDPA | Not TEST |
| | HSUPA | Not TEST |
| | LOW CHANNEL | Not TEST * |
| | MIDDLE CHANNEL | TEST* |
| | HIGH CHANNEL | Not TEST * |

*Please check SAR test result table of P49. SAR of middle channel is <0.8 W/kg, other channels are not required.

| LTE | BANDWIDTH (MHZ) | 5 | Not test |
|---|---|---|---|
| | | 10 | TEST |
| | MODULATION TYPE | QPSK | TEST |
| | | 16QAM | TEST |
| | RB SIZE AND ALLOCATION | 1RB LOWER EDGE | TEST |
| | | 1RB UPPER EDGE | TEST |
| | | 50% CERTERED | TEST |
| | | 100 % RB | Not TEST |
| | TEST CHANNEL | LOW CHANNEL | Not TEST* |
| | | MIDDLE CHANNEL | TEST*/ |
| | | HIGH CHANNEL | Not TEST* |

*Please check SAR test result table of P50. SAR of middle channel is <0.8 W/kg, other channels are not required.

## 4.11. NO SIMULTANEOUS TRANSMISSION SAR JUSTIFICATION

GPRS / WCDMA / LTE mode can not work at the same time. Only one mode can work at a time. No Simultaneous transmission mode is provided for the device. Therefore, simultaneous transmission SAR is not required

## 4.12. LINEARITY CONSIDERATION

In order to estimate the measurement error due to PAR issues, the configuration with the highest SAR in each channel bandwidth and frequency band is measured at various power level. Test conditions are as below

| Test position | Horizontal Down for Band 17 (worst SAR configuration for this band)<br>Horizontal Up for Band 4 (worst SAR configuration for this band) |
|---|---|
| Test mode | LTE |
| Test frequency | 710MHz for Band 17<br>1732.5MHz for Band 4 |
| TX antenna | Main antenna |
| Bandwidth | 10MHz |
| Modulation | QPSK 16QAM |

By tuning different power on this EUT and measuring the relative SAR to verify the high PAR of LTE is as below:

QPSK / 1732.5 MHz / RB Size: 1 / RB offset: 49

| SAR (W/kg) | Power (mW) | 13.24 | 26.42 | 52.72 | 105.20 | 209.89 |
|---|---|---|---|---|---|---|
| | Point SAR | 0.071 | 0.145 | 0.294 | 0.59 | 1.21 |
| 5MHz | Linear line | 0.071 | 0.142 | 0.283 | 0.564 | 1.126 |
| | Deviation(%) | 0.00% | 2.11 | 3.89 | 4.61 | 7.46 |
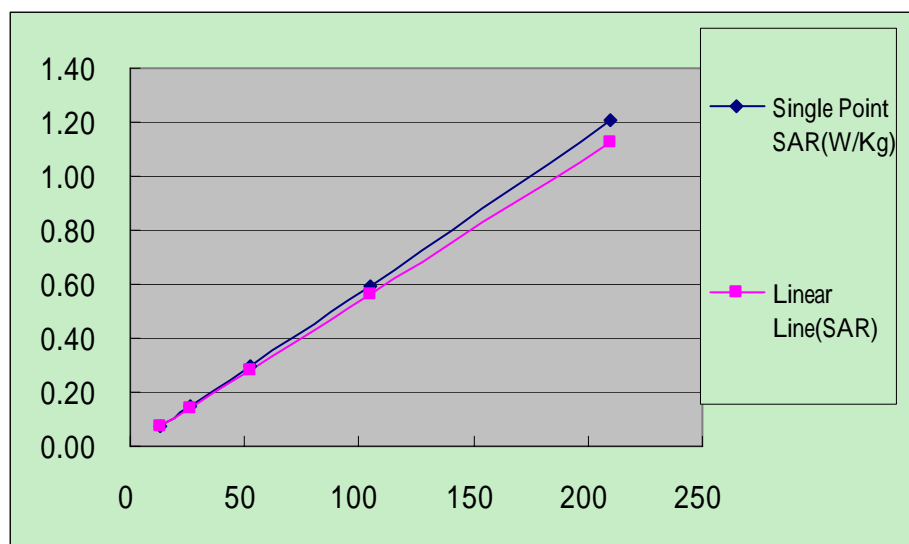
QPSK / 710 MHz / RB Size: 25 / RB offset: 13

| SAR (W/kg) | Power (mW) | 9.77 | 19.50 | 38.90 | 77.62 | 154.88 |
|---|---|---|---|---|---|---|
| 5MHz | Point SAR | 0.037 | 0.076 | 0.151 | 0.304 | 0.613 |
| | Linear line | 0.037 | 0.074 | 0.147 | 0.294 | 0.587 |
| | Deviation(%) | 0 | 2.70 | 2.72 | 3.40 | 4.43 |
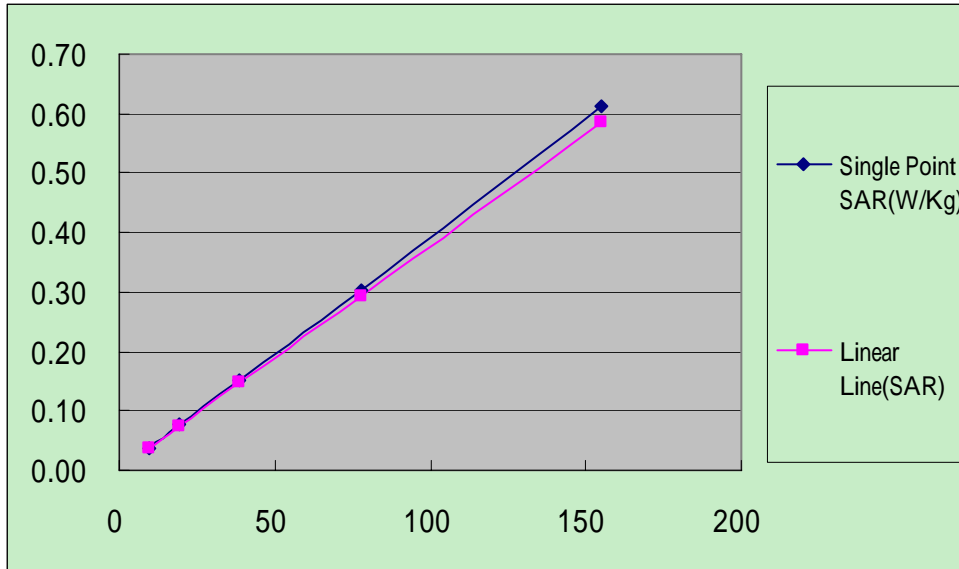


16QAM / 1732.5 MHz / RB Size: 1 / RB offset: 49

| SAR (W/kg) | Power (mW) | 11.86 | 23.66 | 47.20 | 94.19 | 187.93 |
|---|---|---|---|---|---|---|
| 5MHz | Point SAR | 0.068 | 0.141 | 0.283 | 0.571 | 1.172 |
| | Linear line | 0.068 | 0.136 | 0.271 | 0.54 | 1.078 |
| | Deviation(%) | 0 | 3.68 | 4.43 | 5.74 | 8.72 |
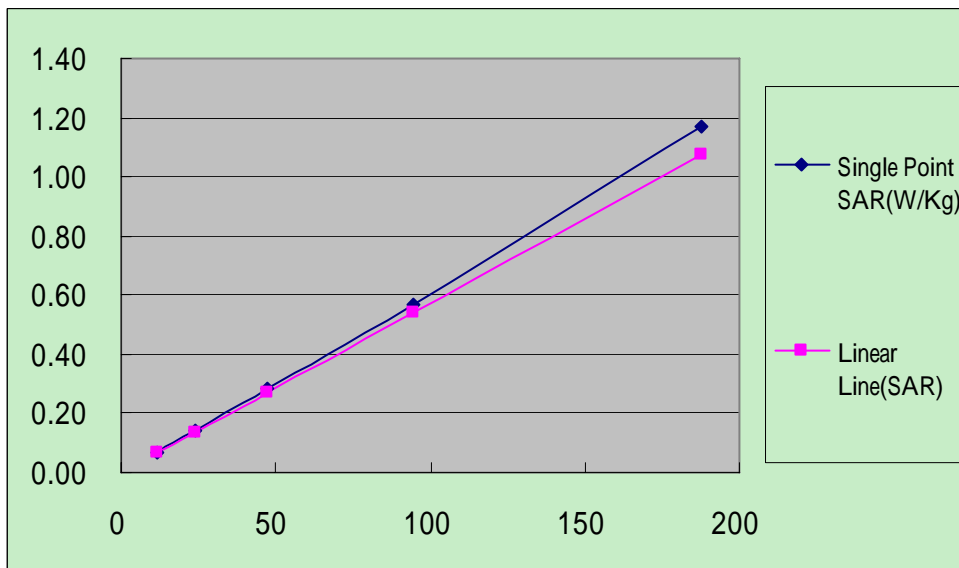
16QAM / 710 MHz / RB Size: 25 / RB offset: 13

| SAR (W/kg) | Power (mW) | 8.65 | 17.26 | 34.43 | 68.70 | 137.09 |
|---|---|---|---|---|---|---|
| | Point SAR | 0.029 | 0.06 | 0.117 | 0.241 | 0.474 |
| 5MHz | Linear line | 0.029 | 0.058 | 0.115 | 0.23 | 0.46 |
| | Deviation(%) | 0 | 3.45 | 1.74 | 4.78 | 3.04 |
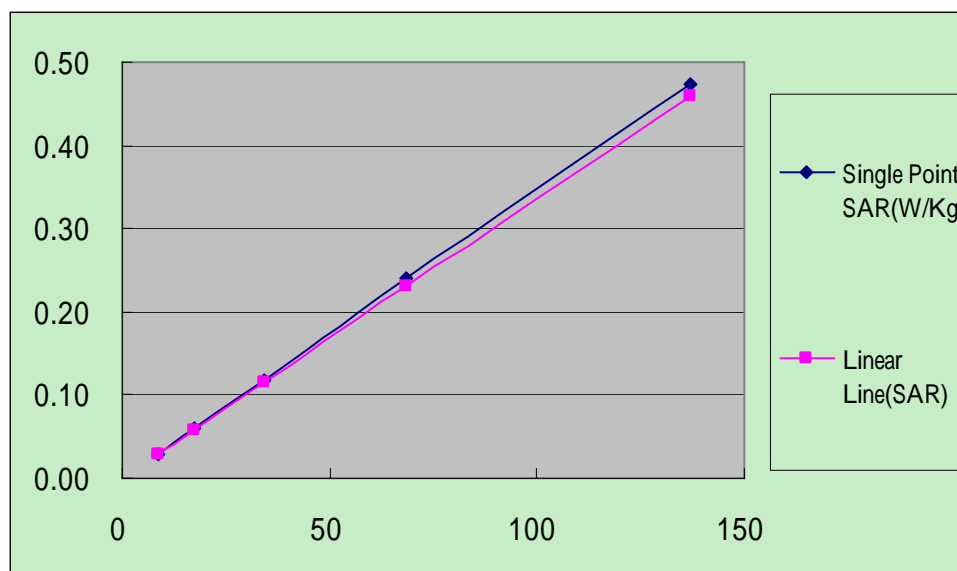
# 5. RECIPES FOR TISSUE SIMULATING LIQUIDS

For the measurement of the field distribution inside the SAM phantom, the phantom must be filled with 25 litters of tissue simulation liquid.

The following are some common ingredients

- **WATER-** Deionized water (pure H20), resistivity _16 M - as basis for the liquid
- **SUGAR-** Refined sugar in crystals, as available in food shops - to reduce relative permittivity
- **SALT-** Pure NaCl - to increase conductivity
- **CELLULOSE-** Hydroxyethyl-cellulose, medium viscosity (75-125mPa.s, 2% in water, 20_C),

  CAS # 54290 - to increase viscosity and to keep sugar in solution
- **PRESERVATIVE-** Preventol D-7 Bayer AG, D-51368 Leverkusen, CAS # 55965-84-9 - to prevent the spread of bacteria and molds
- **DGMBE-** Diethylenglycol-monobuthyl ether (DGMBE), Fluka Chemie GmbH, CAS # 112-34-5 - to reduce relative permittivity

### THE RECIPES FOR 700MHz SIMULATING LIQUID TABLE

| INGREDIENT | BODY SIMULATING LIQUID 700MHz (MSL-700) |
|---|---|
| Water | 49% |
| Sugar | 49.58% |
| Cellulose | 0.12% |
| Salt | 1.2% |
| Preventol | 0.1% |

**THE RECIPES FOR 835MHz SIMULATING LIQUID TABLE**

| INGREDIENT | MUSCLE SIMULATING LIQUID 835MHz (MSL-835) |
|---|---|
| Water | 50.07% |
| Cellulose | NA |
| Salt | 0.94% |
| Preventtol D-7 | 0.09% |
| Sugar | 48.2% |

**THE RECIPES FOR 1700MHz SIMULATING LIQUID TABLE**

| Ingredient | Muscle Simulating Liquid 1700MHz (MSL-1700) |
|---|---|
| Water | 70.53% |
| Sugar | 29.12% |
| Cellulose | 0.35% |

**THE RECIPES FOR 1900MHz SIMULATING LIQUID TABLE**

| INGREDIENT | MUSCLE SIMULATING LIQUID 1900MHz (MSL-1900) |
|---|---|
| Water | 70.16% |
| DGMBE | 29.44% |
| Salt | 00.39% |
| Dielectric Parameters at 22 | f= 1900MHz<br>$\varepsilon$= 53.3 ± 5%<br>$\sigma$= 1.52 ± 5% S/m |

Testing the liquids using the Agilent Network Analyzer E8358A and Agilent Dielectric Probe Kit 85070D.The testing procedure is following as

1. Turn Network Analyzer on and allow at least 30min. warm up.
2. Mount dielectric probe kit so that interconnecting cable to Network Analyzer will not be moved during measurements or calibration.
3. Pour de-ionized water and measure water temperature (±1°).
4. Set water temperature in Agilent-Software (Calibration Setup).
5. Perform calibration.
6. Validate calibration with dielectric material of known properties (e.g. polished ceramic slab with >8mm thickness ε'=10.0, ε''=0.0). If measured parameters do not fit within tolerance, repeat calibration (±0.2 for ε': ±0.1 for ε'').
7. Conductivity can be calculated from ε'' by $\sigma = \omega\, \varepsilon_0\, \varepsilon'' = \varepsilon''\, f\,[GHz]\,/\,18$.
8. Measure liquid shortly after calibration. Repeat calibration every hour.
9. Stir the liquid to be measured. Take a sample (~ 50ml) with a syringe from the center of the liquid container.
10. Pour the liquid into a small glass flask. Hold the syringe at the bottom of the flask to avoid air bubbles.
11. Put the dielectric probe in the glass flask. Check that there are no air bubbles in front of the opening in the dielectric probe kit.
12. Perform measurements.
13. Adjust medium parameters in DASY4 for the frequencies necessary for the measurements ('Setup Config', select medium (e.g. Brain 900MHz) and press 'Option'-button.
14. Select the current medium for the frequency of the validation (e.g. Setup Medium Brain 900MHz).

**FOR BAND SIMULATING LIQUID**

| LIQUID TYPE | MSL-750 | | | | |
|---|---|---|---|---|---|
| **SIMULATING LIQUID TEMP.** | 21.2 | | | | |
| **TEST DATE** | Jan. 24, 2011 | | | | |
| **TESTED BY** | Sam Onn | | | | |
| **FREQ. (MHz)** | **LIQUID PARAMETER** | **STANDARD VALUE** | **MEASUREMENT VALUE** | **ERROR PERCENTAGE (%)** | **LIMIT(%)** |
| 710 | Permitivity | 55.69 | 55.86 | 0.31 | |
| 750 | (   ) | 55.53 | 55.84 | 0.56 | ±5 |
| 710 | Conductivity | 0.96 | 0.95 | -1.04 | |
| 750 | (   ) S/m | 0.96 | 0.98 | 2.08 | |

| LIQUID TYPE | MSL-750 | | | | |
|---|---|---|---|---|---|
| **SIMULATING LIQUID TEMP.** | 21.6 | | | | |
| **TEST DATE** | Mar. 02, 2011 | | | | |
| **TESTED BY** | Sam Onn | | | | |
| **FREQ. (MHz)** | **LIQUID PARAMETER** | **STANDARD VALUE** | **MEASUREMENT VALUE** | **ERROR PERCENTAGE (%)** | **LIMIT(%)** |
| 710 | Permitivity | 55.69 | 56.11 | 0.75 | |
| 750 | (   ) | 55.53 | 56.06 | 0.95 | ±5 |
| 710 | Conductivity | 0.96 | 0.96 | 0.00 | |
| 750 | (   ) S/m | 0.96 | 0.99 | 3.13 | |

| LIQUID TYPE | MSL-835 | | | | |
|---|---|---|---|---|---|
| SIMULATING LIQUID TEMP. | 21.6 | | | | |
| TEST DATE | Jan. 12, 2011 | | | | |
| TESTED BY | Sam Onn | | | | |
| FREQ. (MHz) | LIQUID PARAMETER | STANDARD VALUE | MEASUREMENT VALUE | ERROR PERCENTAGE (%) | LIMIT( % ) |
| 835.0 | Permitivity ( ) | 55.20 | 55.86 | 1.20 | |
| 836.4 | | 55.20 | 55.84 | 1.16 | |
| 836.6 | | 55.20 | 55.84 | 1.16 | ±5 |
| 835.0 | Conductivity ( ) S/m | 0.97 | 0.98 | 1.03 | |
| 836.4 | | 0.97 | 0.98 | 1.03 | |
| 836.6 | | 0.97 | 0.98 | 1.03 | |

| LIQUID TYPE | MSL-1700 | | | | |
|---|---|---|---|---|---|
| SIMULATING LIQUID TEMP. | 21.3 | | | | |
| TEST DATE | Jan. 21, 2011 | | | | |
| TESTED BY | Sam Onn | | | | |
| FREQ. (MHz) | LIQUID PARAMETER | STANDARD VALUE | MEASUREMENT VALUE | ERROR PERCENTAGE (%) | LIMIT(%) |
| 1732.4 | Permitivity ( ) | 53.48 | 54.38 | 1.68 | |
| 1732.5 | | 53.48 | 54.38 | 1.68 | |
| 1750.0 | | 53.43 | 54.15 | 1.35 | |
| 1800.0 | | 53.30 | 53.85 | 1.03 | |
| 1732.4 | Conductivity ( ) S/m | 1.48 | 1.49 | 0.68 | ±5 |
| 1732.5 | | 1.48 | 1.49 | 0.68 | |
| 1750.0 | | 1.49 | 1.51 | 1.34 | |
| 1800.0 | | 1.52 | 1.54 | 1.32 | |

| LIQUID TYPE | MSL-1700 | | | | |
|---|---|---|---|---|---|
| SIMULATING LIQUID TEMP. | 21.2 | | | | |
| TEST DATE | Mar. 01, 2011 | | | | |
| TESTED BY | Sam Onn | | | | |
| FREQ. (MHz) | LIQUID PARAMETER | STANDARD VALUE | MEASUREMENT VALUE | ERROR PERCENTAGE (%) | LIMIT(%) |
| 1732.4 | Permitivity ( ) | 53.52 | 53.76 | 0.45 | ±5 |
| 1732.5 | | 53.48 | 53.65 | 0.32 | |
| 1750.0 | | 53.43 | 54.01 | 1.09 | |
| 1800.0 | | 53.30 | 54.21 | 1.71 | |
| 1732.4 | Conductivity ( ) S/m | 1.47 | 1.48 | 0.68 | |
| 1732.5 | | 1.48 | 1.5 | 1.35 | |
| 1750.0 | | 1.49 | 1.51 | 1.34 | |
| 1800.0 | | 1.52 | 1.55 | 1.97 | |

| LIQUID TYPE | MSL-1900 | | | | |
|---|---|---|---|---|---|
| SIMULATING LIQUID TEMP. | 21.6 | | | | |
| TEST DATE | Jan. 13, 2011 | | | | |
| TESTED BY | Sam Onn | | | | |
| FREQ. (MHz) | LIQUID PARAMETER | STANDARD VALUE | MEASUREMENT VALUE | ERROR PERCENTAGE (%) | LIMIT( % ) |
| 1880.00 | Permitivity ( ) | 53.30 | 54.64 | 2.51 | ±5 |
| 1900.00 | | 53.30 | 54.50 | 2.25 | |
| 1880.00 | Conductivity ( ) S/m | 1.52 | 1.54 | 1.32 | |
| 1900.00 | | 1.52 | 1.56 | 2.63 | |

# 5. SYSTEM VALIDATION

The system validation was performed in the flat phantom with equipment listed in the following table. Since the SAR value is calculated from the measured electric field, dielectric constant and conductivity of the body tissue and the SAR is proportional to the square of the electric field. So, the SAR value will be also proportional to the RF power input to the system validation dipole under the same test environment. In our system validation test, 250mW RF input power was used.

## 5.1 TEST PROCEDURE

Before the system performance check, we need only to tell the system which components (probe, medium, and device) are used for the system performance check; the system will take care of all parameters. The dipole must be placed beneath the flat section of the SAM Twin Phantom with the correct distance holder in place. The distance holder should touch the phantom surface with a light pressure at the reference marking (little cross) and be oriented parallel to the long side of the phantom. Accurate positioning is not necessary, since the system will search for the peak SAR location, except that the dipole arms should be parallel to the surface. The device holder for mobile phones can be left in place but should be rotated away from the dipole.

1. The "Power Reference Measurement" and "Power Drift Measurement" jobs are located at the beginning and end of the batch process. They measure the field drift at one single point in the liquid over the complete procedure. The indicated drift is mainly the variation of the amplifier output power. If it is too high (above ±0.1 dB), the system performance check should be repeated; some amplifiers have very high drift during warm-up. A stable amplifier gives drift results in the DASY system below ±0.02dB.

2. The "Surface Check" job tests the optical surface detection system of the DASY system by repeatedly detecting the surface with the optical and mechanical surface detector and comparing the results. The output gives the detecting heights of both systems, the difference between the two systems and the standard deviation of the detection repeatability. Air bubbles or refraction in the liquid due to separation of the sugar-water mixture gives poor repeatability (above ±0.1mm). In that case it is better to abort the system performance check and stir the liquid.

3. The "Area Scan" job measures the SAR above the dipole on a plane parallel to the surface. It is used to locate the approximate location of the peak SAR. The proposed scan uses large grid spacing for faster measurement; due to the symmetric field, the peak detection is reliable. If a finer graphic is desired, the grid spacing can be reduced. Grid spacing and orientation have no influence on the SAR result.

4. The "Zoom Scan" job measures the field in a volume around the peak SAR value assessed in the previous "Area Scan" job (for more information see the application note on SAR evaluation).

About the validation dipole positioning uncertainty, the constant and low loss dielectric spacer is used to establish the correct distance between the top surface of the dipole and the bottom surface of the phantom, the error component introduced by the uncertainty of the distance between the liquid (i.e., phantom shell) and the validation dipole in the DASY4 system is less than ±0.1mm.

$$SAR_{tolerance}[\%] = 100 \times (\frac{(a+d)^2}{a^2} - 1)$$

As the closest distance is 10mm, the resulting tolerance $SAR_{tolerance}[\%]$ is <2%.

## 5.2 VALIDATION RESULTS

| SYSTEM VALIDATION TEST OF SIMULATING LIQUID | | | | | |
|---|---|---|---|---|---|
| FREQUENCY (MHz) | REQUIRED SAR (mW/g) | MEASURED SAR (mW/g) | DEVIATION (%) | SEPARATION DISTANCE | TESTED DATE |
| MSL 750 | 2.23 (1g) | 2.09 | -6.28 | 10mm | Jan. 24, 2011 |
| MSL 750 | 2.23 (1g) | 2.06 | -7.62 | 10mm | Mar. 02, 2011 |
| MSL 835 | 2.52 (1g) | 2.45 | -2.78 | 15mm | Jan. 12, 2011 |
| MSL 1800 | 9.58 (1g) | 9.39 | -1.98 | 10mm | Jan. 21, 2011 |
| MSL 1800 | 9.70 (1g) | 9.60 | -1.03 | 10mm | Mar. 01, 201 |
| MSL 1900 | 10.3 (1g) | 9.69 | -5.92 | 10mm | Jan. 13, 2011 |
| TESTED BY | Sam Onn | | | | |

**NOTE:** Please see Appendix for the photo of system validation test.

## 5.3 SYSTEM VALIDATION UNCERTAINTIES

In the table below, the system validation uncertainty with respect to the analytically assessed SAR value of a dipole source as given in the IEEE 1528 standard is given. This uncertainty is smaller than the expected uncertainty for mobile phone measurements due to the simplified setup and the symmetric field distribution.

| Error Description | Tolerance (±%) | Probability Distribution | Divisor | $(C_i)$ (1g) | $(C_i)$ (10g) | Standard Uncertainty (±%) (1g) | Standard Uncertainty (±%) (10g) | $(v_i)$ |
|---|---|---|---|---|---|---|---|---|
| Measurement System | | | | | | | | |
| Probe Calibration | 5.50 | Normal | 1 | 1 | 1 | 5.50 | 5.50 | |
| Axial Isotropy | 0.25 | Rectangular | 3 | 0.7 | 0.7 | 0.10 | 0.10 | |
| Hemispherical Isotropy | 1.30 | Rectangular | 3 | 0.7 | 0.7 | 0.53 | 0.53 | |
| Boundary effects | 1.00 | Rectangular | 3 | 1 | 1 | 0.58 | 0.58 | |
| Linearity | 0.30 | Rectangular | 3 | 1 | 1 | 0.17 | 0.17 | |
| System Detection Limits | 1.00 | Rectangular | 3 | 1 | 1 | 0.58 | 0.58 | |
| Readout Electronics | 0.30 | Normal | 1 | 1 | 1 | 0.30 | 0.30 | |
| Response Time | 0.80 | Rectangular | 3 | 1 | 1 | 0.46 | 0.46 | |
| Integration Time | 2.60 | Rectangular | 3 | 1 | 1 | 1.50 | 1.50 | |
| RF Ambient Noise | 3.00 | Rectangular | 3 | 1 | 1 | 1.73 | 1.73 | 9 |
| RF Ambient Reflections | 3.00 | Rectangular | 3 | 1 | 1 | 1.73 | 1.73 | 9 |
| Probe Positioner | 0.40 | Rectangular | 3 | 1 | 1 | 0.23 | 0.23 | |
| Probe Positioning | 2.90 | Rectangular | 3 | 1 | 1 | 1.67 | 1.67 | |
| Max. SAR Eval. | 1.00 | Rectangular | 3 | 1 | 1 | 0.58 | 0.58 | |
| Test sample related | | | | | | | | |
| Sample positioning | 1.90 | Normal | 1 | 1 | 1 | 1.90 | 1.90 | 4 |
| Device holder uncertainty | 2.80 | Normal | 1 | 1 | 1 | 2.80 | 2.80 | 4 |
| Output power variation-SAR drift measrurement | 4.50 | Rectangular | 3 | 1 | 1 | 2.60 | 2.60 | 1 |
| Dipole Related | | | | | | | | |
| Dipole Axis to Liquid Distance | 1.60 | Rectangular | 3 | 1 | 1 | 0.92 | 0.92 | 4 |
| Input Power Drift | 1.93 | Rectangular | 3 | 1 | 1 | 1.11 | 1.11 | 1 |
| Phantom and Tissue parameters | | | | | | | | |
| Phantom Uncertainty | 4.00 | Rectangular | 3 | 1 | 1 | 2.31 | 2.31 | |
| Liquid Conductivity (target) | 5.00 | Rectangular | 3 | 0.64 | 0.43 | 1.85 | 1.24 | |
| Liquid Conductivity (measurement) | 2.63 | Normal | 1 | 0.64 | 0.43 | 1.68 | 1.13 | 9 |
| Liquid Permittivity (target) | 5.00 | Rectangular | 3 | 0.6 | 0.49 | 1.73 | 1.41 | |
| Liquid Permittivity (measurement) | 2.51 | Normal | 1 | 0.6 | 0.49 | 1.51 | 1.23 | 9 |
| Combined Standard Uncertainty | | | | | | 8.95 | 8.66 | |
| Coverage Factor for 95% | | | | | | Kp=2 | | |
| Expanded Uncertainty (K=2) | | | | | | 17.90 | 17.31 | |

**NOTE:** About the system validation uncertainty assessment, please reference the section 7.

# 6. TEST RESULTS

## 6.1 TEST PROCEDURES

The EUT makes a phone call to the communication simulator station. Establish the simulation communication configuration rather the actual communication. Then the EUT could continuous the transmission mode. Adjust the PCL of the base station could controlled the EUT to transmitted the maximum output power. The base station also could control the transmission channel. The SAR value was calculated via the 3D spline interpolation algorithm that has been implemented in the software of DASY4 SAR measurement system manufactured and calibrated by SPEAG. According to the IEEE 1528 / EN 62209-1, the recommended procedure for assessing the peak spatial-average SAR value consists of the following steps:

• Power reference measurement

• Verification of the power reference measurement

• Area scan

• Zoom scan

• Power reference measurement

The area scan was performed for the highest spatial SAR location. The zoom scan was performed for SAR value averaged over 1g and 10g spatial volumes.

In the zoom scan, the distance between the measurement point at the probe sensor location (geometric center behind the probe tip) and the phantom surface is 3mm and maintained at a constant distance of ±0.5mm during a zoom scan to determine peak SAR locations. The distance is 2mm between the first measurement point and the bottom surface of the phantom. The secondary measurement point to the bottom surface of the phantom is with 7mm separation distance. The cube size is 7 x 7 x 7 points consists of 343 points and the grid space is 5mm.

The measurement time is 0.5s at each point of the zoom scan. The probe boundary effect compensation shall be applied during the SAR test. Because of the tip of the probe to the Phantom surface separated distances are longer than half a tip probe diameter.

In the area scan, the separation distance is 2mm between the each measurement point and the phantom surface. The scan size shall be included the transmission portion of the EUT. The measurement time is the same as the zoom scan. At last the reference power drift shall be less than ±5%.

## 6.2 DESCRIPTION OF TEST CONDITION

| TEST DATE | TISSUE TYPE / FREQ. | TEMPERATURE (°C) | | HUMIDITY (%RH) | TESTED BY |
|---|---|---|---|---|---|
| | | AIMBENT | LIQUID | | |
| Jan. 24, 2011 | MSL 750 | 22.3 | 21.2 | 52 | Sam Onn |
| Mar. 02, 2011 | MSL 750 | 22.7 | 21.6 | 58 | Sam Onn |
| Jan. 12, 2011 | MSL 835 | 22.7 | 21.6 | 52 | Sam Onn |
| Jan. 12, 2011 | MSL 1700 | 22.1 | 21.3 | 54 | Sam Onn |
| Mar. 01, 2011 | MSL 1700 | 22.4 | 21.2 | 56 | Sam Onn |
| Jan. 13, 2011 | MSL 1900 | 22.5 | 21.6 | 54 | Sam Onn |

## 6.3 MEASURED SAR RESULT

GPRS 850

| Channel | Frequency (MHz) | Time slot | Horizontal-Down | Horizontal-Up | Vertical-Back | Vertical-Front | Tip |
|---|---|---|---|---|---|---|---|
| 190 | 836.6 | 1 | 0.505 | 0.435 | 0.275 | 0.255 | 0.02 |
| | | 2 | 0.624 | 0.519 | 0.346 | 0.327 | 0.025 |
| | | 3 | 0.586 | 0.493 | 0.326 | 0.315 | 0.024 |
| | | 4 | **0.676** | 0.534 | 0.352 | 0.344 | 0.026 |

EGPRS 850

| Channel | Frequency (MHz) | Time slot | Horizontal-Down | Horizontal-Up | Vertical-Back | Vertical-Front | Tip |
|---|---|---|---|---|---|---|---|
| 190 | 836.6 | 1 | 0.143 | 0.113 | 0.083 | 0.093 | 0.00753 |
| | | 2 | 0.249 | 0.198 | 0.148 | 0.165 | 0.012 |
| | | 3 | 0.321 | 0.257 | 0.194 | 0.216 | 0.015 |
| | | 4 | 0.435 | 0.301 | 0.23 | 0.259 | 0.018 |

Note: GMSK was tested for EGPRS.

GPRS 1900

| Channel | Frequency (MHz) | Time slot | Horizontal-Down | Horizontal-Up | Vertical-Back | Vertical-Front | Tip |
|---|---|---|---|---|---|---|---|
| 661 | 1880 | 1 | 0.514 | 0.266 | 0.222 | 0.183 | 0.045 |
| | | 2 | 0.610 | 0.526 | 0.233 | 0.213 | 0.049 |
| | | 3 | 0.543 | 0.392 | 0.233 | 0.210 | 0.052 |
| | | 4 | 0.365 | 0.365 | 0.173 | 0.161 | 0.038 |

EGPRS 1900

| Channel | Frequency (MHz) | Time slot | Horizontal-Down | Horizontal-Up | Vertical-Back | Vertical-Front | Tip |
|---|---|---|---|---|---|---|---|
| 661 | 1880 | 1 | 0.181 | 0.168 | 0.087 | 0.075 | 0.019 |
| | | 2 | 0.317 | 0.299 | 0.134 | 0.122 | 0.033 |
| | | 3 | 0.394 | 0.359 | 0.168 | 0.155 | 0.036 |
| | | 4 | 0.426 | 0.390 | 0.173 | 0.160 | 0.035 |

Note: GMSK was tested for EGPRS.

WCDMA 850 / 1900 / AWS

| Mode | Channel | Frequency (MHz) | Horizontal-Down | Horizontal-Up | Vertical-Back | Vertical-Front | Tip |
|---|---|---|---|---|---|---|---|
| WCDMA 850 | 4182 | 836.4 | 0.500 | 0.380 | 0.280 | 0.279 | 0.033 |
| WCDMA 1900 | 9400 | 1800 | **0.694** | 0.586 | 0.489 | 0.528 | 0.051 |
| WCDMA AWS | 1412 | 1732.4 | 0.362 | 0.423 | 0.204 | 0.396 | 0.071 |

LTE Band 17 (704~716MHz) / Bandwidth: 10MHz / Modulation: QPSK

| Channel | Freq (MHz) | C.P (dBm) | Target power (dBm) | MPR target (dB) | RB Size | RB Offset | SAR value of each test position ( W/ Kg ) | | | | |
|---------|-----------|-----------|--------------------|-----------------|---------|-----------|------|------|------|------|------|
| | | | | | | | H-D | H-U | V-B | V-F | Tip |
| 23790 | 710 | 21.9 | 22.5 | 0.5 | 25 | 13 | 0.334 | 0.215 | 0.108 | 0.169 | 0.023 |
| | | 22.57 | 22.5 | 0 | 1 | 0 | 0.202 | 0.125 | 0.074 | 0.12 | 0.018 |
| | | 22.25 | 22.5 | 0 | 1 | 49 | 0.218 | 0.137 | 0.075 | 0.113 | 0.017 |

LTE Band 17 (704~716MHz) / Bandwidth: 10MHz / Modulation: 16QAM

| Channel | Freq (MHz) | C.P (dBm) | Target power (dBm) | MPR target (dB) | RB Size | RB Offset | SAR value of each test position ( W/ Kg ) | | | | |
|---------|-----------|-----------|--------------------|-----------------|---------|-----------|------|------|------|------|------|
| | | | | | | | H-D | H-U | V-B | V-F | Tip |
| 23790 | 710 | 21.37 | 22.5 | 1 | 25 | 13 | 0.267 | 0.213 | 0.118 | 0.135 | 0.018 |
| | | 21.79 | 22.5 | 0.5 | 1 | 0 | 0.254 | 0.195 | 0.102 | 0.117 | 0.011 |
| | | 21.46 | 22.5 | 0.5 | 1 | 49 | 0.221 | 0.163 | 0.096 | 0.104 | 0.013 |

**NOTE:**

1. Please see the Appendix A for the data.
2. The variation of the EUT conducted power measured before and after SAR testing should not over 5%.
3. Distance between EUT and phantom is 5mm for test of body position.
4. Per DA-02-1438A1, when 1-g SAR for the middle channel is less than 0.8 W/kg, testing for the other channels is not required
5. C.P: Conducted power
   H-D: Horizontal Down
   H-U: horizontal Up
   V-B: Vertical Back
   V-F: Vertical Front

LTE Band 4 (1710~1755MHz) / Bandwidth: 10MHz / Modulation: QPSK

| Channel | Freq (MHz) | C.P (dBm) | Target power (dBm) | MPR target (dB) | RB Size | RB Offset | SAR value of each test position ( W/ Kg ) | | | | |
|---------|-----------|-----------|--------------------|-----------------|---------|-----------|-------|-------|-------|-------|-------|
| | | | | | | | H-D | H-U | V-B | V-F | Tip |
| 20175 | 1732.5 | 21.88 | 22.5 | 0.5 | 25 | 13 | 0.336 | 0.653 | 0.392 | 0.446 | 0.129 |
| | | 22.79 | 22.5 | 0 | 1 | 0 | 0.340 | 0.638 | 0.358 | 0.449 | 0.127 |
| | | 23.22 | 22.5 | 0 | 1 | 49 | 0.376 | 0.702 | 0.379 | 0.531 | 0.142 |

LTE Band 4 (1710~1755MHz) / Bandwidth: 10MHz / Modulation: 16QAM

| Channel | Freq (MHz) | C.P (dBm) | Target power (dBm) | MPR target (dB) | RB Size | RB Offset | SAR value of each test position ( W/ Kg ) | | | | |
|---------|-----------|-----------|--------------------|-----------------|---------|-----------|-------|-------|-------|-------|-------|
| | | | | | | | H-D | H-U | V-B | V-F | Tip |
| 20175 | 1732.5 | 21.32 | 22.5 | 1 | 25 | 13 | 0.306 | 0.498 | 0.198 | 0.397 | 0.112 |
| | | 22.1 | 22.5 | 0.5 | 1 | 0 | 0.342 | 0.546 | 0.26 | 0.469 | 0.128 |
| | | 22.74 | 22.5 | 0.5 | 1 | 49 | 0.369 | 0.639 | 0.272 | 0.517 | 0.130 |

**NOTE:**

1. Please see the Appendix A for the data.
2. The variation of the EUT conducted power measured before and after SAR testing should not over 5%.
3. Distance between EUT and phantom is 5mm for test of body position.
4. Per DA-02-1438A1, when 1-g SAR for the middle channel is less than 0.8 W/kg, testing for the other channels is not required
5. C.P: Conducted power
   H-D: Horizontal Down
   H-U: horizontal Up
   V-B: Vertical Back

   V-F: Vertical Front

## 6.4 POWER DRIFT TABLE
**850MHz Band**

| Test Mode | Test Position | Communication Mode | Test Channel | Test Frequency | Power (dBm) Begin | Power (dBm) After | Power Drift (%) |
|---|---|---|---|---|---|---|---|
| 1 | Horizontal-Down | GPRS850 TS1 | 190 | 836.6MHz | 32.23 | 32.17 | -1.37 |
| 2 | Horizontal-Down | GPRS850 TS2 | 190 | 836.6MHz | 31.08 | 31.01 | -1.60 |
| 3 | Horizontal-Down | GPRS850 TS3 | 190 | 836.6MHz | 29.32 | 29.23 | -2.05 |
| 4 | Horizontal-Down | GPRS850 TS4 | 190 | 836.6MHz | 27.70 | 27.59 | -2.50 |
| 5 | Vertical-Front | GPRS850 TS1 | 190 | 836.6MHz | 32.23 | 32.10 | -2.95 |
| 6 | Vertical-Front | GPRS850 TS2 | 190 | 836.6MHz | 31.08 | 31.05 | -0.69 |
| 7 | Vertical-Front | GPRS850 TS3 | 190 | 836.6MHz | 29.32 | 29.28 | -0.92 |
| 8 | Vertical-Front | GPRS850 TS4 | 190 | 836.6MHz | 27.70 | 27.65 | -1.14 |
| 9 | Horizontal-Up | GPRS850 TS1 | 190 | 836.6MHz | 32.23 | 32.17 | -1.37 |
| 10 | Horizontal-Up | GPRS850 TS2 | 190 | 836.6MHz | 31.08 | 31.01 | -1.60 |
| 11 | Horizontal-Up | GPRS850 TS3 | 190 | 836.6MHz | 29.32 | 29.24 | -1.83 |
| 12 | Horizontal-Up | GPRS850 TS4 | 190 | 836.6MHz | 27.70 | 27.60 | -2.28 |
| 13 | Vertical-Back | GPRS850 TS1 | 190 | 836.6MHz | 32.23 | 32.11 | -2.73 |
| 14 | Vertical-Back | GPRS850 TS2 | 190 | 836.6MHz | 31.08 | 30.95 | -2.95 |
| 15 | Vertical-Back | GPRS850 TS3 | 190 | 836.6MHz | 29.32 | 29.18 | -3.17 |
| 16 | Vertical-Back | GPRS850 TS4 | 190 | 836.6MHz | 27.70 | 27.55 | -3.39 |
| 17 | Tip | GPRS850 TS1 | 190 | 836.6MHz | 32.23 | 32.07 | -3.62 |
| 18 | Tip | GPRS850 TS2 | 190 | 836.6MHz | 31.08 | 30.91 | -3.84 |
| 19 | Tip | GPRS850 TS3 | 190 | 836.6MHz | 29.32 | 29.14 | -4.06 |
| 20 | Tip | GPRS850 TS4 | 190 | 836.6MHz | 27.70 | 27.50 | -4.50 |
| 21 | Horizontal-Down | E-GPRS850 TS1 | 190 | 836.6MHz | 26.85 | 26.83 | -0.46 |
| 22 | Horizontal-Down | E-GPRS850 TS2 | 190 | 836.6MHz | 25.23 | 25.20 | -0.69 |
| 23 | Horizontal-Down | E-GPRS850 TS3 | 190 | 836.6MHz | 23.95 | 23.91 | -0.92 |
| 24 | Horizontal-Down | E-GPRS850 TS4 | 190 | 836.6MHz | 21.90 | 21.85 | -1.14 |
| 25 | Vertical-Front | E-GPRS850 TS1 | 190 | 836.6MHz | 26.85 | 26.79 | -1.37 |
| 26 | Vertical-Front | E-GPRS850 TS2 | 190 | 836.6MHz | 25.23 | 25.16 | -1.60 |
| 27 | Vertical-Front | E-GPRS850 TS3 | 190 | 836.6MHz | 23.95 | 23.87 | -1.83 |
| 28 | Vertical-Front | E-GPRS850 TS4 | 190 | 836.6MHz | 21.90 | 21.80 | -2.28 |
| 29 | Horizontal-Up | E-GPRS850 TS1 | 190 | 836.6MHz | 26.85 | 26.74 | -2.50 |
| 30 | Horizontal-Up | E-GPRS850 TS2 | 190 | 836.6MHz | 25.23 | 25.11 | -2.73 |
| 31 | Horizontal-Up | E-GPRS850 TS3 | 190 | 836.6MHz | 23.95 | 23.81 | -3.17 |
| 32 | Horizontal-Up | E-GPRS850 TS4 | 190 | 836.6MHz | 21.90 | 21.74 | -3.62 |
| 33 | Vertical-Back | E-GPRS850 TS1 | 190 | 836.6MHz | 26.85 | 26.68 | -3.84 |
| 34 | Vertical-Back | E-GPRS850 TS2 | 190 | 836.6MHz | 25.23 | 25.05 | -4.06 |
| 35 | Vertical-Back | E-GPRS850 TS3 | 190 | 836.6MHz | 23.95 | 23.76 | -4.28 |
| 36 | Vertical-Back | E-GPRS850 TS4 | 190 | 836.6MHz | 21.90 | 21.70 | -4.50 |
| 37 | Tip | E-GPRS850 TS1 | 190 | 836.6MHz | 26.85 | 26.82 | -0.69 |
| 38 | Tip | E-GPRS850 TS2 | 190 | 836.6MHz | 25.23 | 25.19 | -0.92 |
| 39 | Tip | E-GPRS850 TS3 | 190 | 836.6MHz | 23.95 | 23.90 | -1.14 |
| 40 | Tip | E-GPRS850 TS4 | 190 | 836.6MHz | 21.90 | 21.84 | -1.37 |
| 41 | Horizontal-Down | WCDMA 850 | 4182 | 836.4MHz | 23.37 | 23.29 | -1.83 |
| 42 | Vertical- Front | WCDMA 850 | 4182 | 836.4MHz | 23.37 | 23.28 | -2.05 |
| 43 | Horizontal-Up | WCDMA 850 | 4182 | 836.4MHz | 23.37 | 23.25 | -2.73 |
| 44 | Vertical-Back | WCDMA 850 | 4182 | 836.4MHz | 23.37 | 23.23 | -3.17 |

| 45 | Tip | WCDMA 850 | 4182 | 836.4MHz | 23.37 | 23.21 | -3.62 |

**1900 MHz Band**

| Test Mode | Test Position | Communication Mode | Test Channel | Test Frequency | Power (dBm) Begin | After | Power Drift (%) |
|---|---|---|---|---|---|---|---|
| 46 | Horizontal-Down | GPRS1900 TS1 | 661 | 1800MHz | 30.48 | 30.46 | -0.46 |
| 47 | | GPRS1900 TS2 | 661 | 1800MHz | 29.22 | 29.19 | -0.69 |
| 48 | | GPRS1900 TS3 | 661 | 1800MHz | 27.31 | 27.26 | -1.14 |
| 49 | | GPRS1900 TS4 | 661 | 1800MHz | 25.21 | 25.15 | -1.37 |
| 50 | Vertical-Front | GPRS1900 TS1 | 661 | 1800MHz | 30.48 | 30.40 | -1.83 |
| 51 | | GPRS1900 TS2 | 661 | 1800MHz | 29.22 | 29.12 | -2.28 |
| 52 | | GPRS1900 TS3 | 661 | 1800MHz | 27.31 | 27.20 | -2.50 |
| 53 | | GPRS1900 TS4 | 661 | 1800MHz | 25.21 | 25.09 | -2.73 |
| 54 | Horizontal-Up | GPRS1900 TS1 | 661 | 1800MHz | 30.48 | 30.35 | -2.95 |
| 55 | | GPRS1900 TS2 | 661 | 1800MHz | 29.22 | 29.08 | -3.17 |
| 56 | | GPRS1900 TS3 | 661 | 1800MHz | 27.31 | 27.16 | -3.39 |
| 57 | | GPRS1900 TS4 | 661 | 1800MHz | 25.21 | 25.05 | -3.62 |
| 58 | Vertical-Back | GPRS1900 TS1 | 661 | 1800MHz | 30.48 | 30.31 | -3.84 |
| 59 | | GPRS1900 TS2 | 661 | 1800MHz | 29.22 | 29.04 | -4.06 |
| 60 | | GPRS1900 TS3 | 661 | 1800MHz | 27.31 | 27.12 | -4.28 |
| 61 | | GPRS1900 TS4 | 661 | 1800MHz | 25.21 | 25.01 | -4.50 |
| 62 | Tip | GPRS1900 TS1 | 661 | 1800MHz | 30.48 | 30.45 | -0.69 |
| 63 | | GPRS1900 TS2 | 661 | 1800MHz | 29.22 | 29.18 | -0.92 |
| 64 | | GPRS1900 TS3 | 661 | 1800MHz | 27.31 | 27.25 | -1.37 |
| 65 | | GPRS1900 TS4 | 661 | 1800MHz | 25.21 | 25.14 | -1.60 |
| 66 | Horizontal-Down | E-GPRS1900 TS1 | 661 | 1800MHz | 25.23 | 25.15 | -1.83 |
| 67 | | E-GPRS1900 TS2 | 661 | 1800MHz | 23.47 | 23.38 | -2.05 |
| 68 | | E-GPRS1900 TS3 | 661 | 1800MHz | 22.24 | 22.14 | -2.28 |
| 69 | | E-GPRS1900 TS4 | 661 | 1800MHz | 20.35 | 20.24 | -2.50 |
| 70 | Vertical-Front | E-GPRS1900 TS1 | 661 | 1800MHz | 25.23 | 25.10 | -2.95 |
| 71 | | E-GPRS1900 TS2 | 661 | 1800MHz | 23.47 | 23.32 | -3.39 |
| 72 | | E-GPRS1900 TS3 | 661 | 1800MHz | 22.24 | 22.08 | -3.62 |
| 73 | | E-GPRS1900 TS4 | 661 | 1800MHz | 20.35 | 20.18 | -3.84 |
| 74 | Horizontal-Up | E-GPRS1900 TS1 | 661 | 1800MHz | 25.23 | 25.21 | -0.46 |
| 75 | | E-GPRS1900 TS2 | 661 | 1800MHz | 23.47 | 23.44 | -0.69 |
| 76 | | E-GPRS1900 TS3 | 661 | 1800MHz | 22.24 | 22.20 | -0.92 |
| 77 | | E-GPRS1900 TS4 | 661 | 1800MHz | 20.35 | 20.30 | -1.14 |
| 78 | Vertical-Back | E-GPRS1900 TS1 | 661 | 1800MHz | 25.23 | 25.17 | -1.37 |
| 79 | | E-GPRS1900 TS2 | 661 | 1800MHz | 23.47 | 23.40 | -1.60 |
| 80 | | E-GPRS1900 TS3 | 661 | 1800MHz | 22.24 | 22.16 | -1.83 |
| 81 | | E-GPRS1900 TS4 | 661 | 1800MHz | 20.35 | 20.26 | -2.05 |
| 82 | Tip | E-GPRS1900 TS1 | 661 | 1800MHz | 25.23 | 25.13 | -2.28 |
| 83 | | E-GPRS1900 TS2 | 661 | 1800MHz | 23.47 | 23.35 | -2.73 |
| 84 | | E-GPRS1900 TS3 | 661 | 1800MHz | 22.24 | 22.11 | -2.95 |
| 85 | | E-GPRS1900 TS4 | 661 | 1800MHz | 20.35 | 20.21 | -3.17 |
| 86 | Horizontal-Down | WCDMA1900 | 9400 | 1800MHz | 22.89 | 22.74 | -3.39 |
| 87 | Vertical- Front | WCDMA1900 | 9400 | 1800MHz | 22.89 | 22.73 | -3.62 |
| 88 | Horizontal-Up | WCDMA1900 | 9400 | 1800MHz | 22.89 | 22.72 | -3.84 |
| 89 | Vertical-Back | WCDMA1900 | 9400 | 1800MHz | 22.89 | 22.71 | -4.06 |
| 90 | Tip | WCDMA1900 | 9400 | 1800MHz | 22.89 | 22.69 | -4.50 |

**LTE Band 4 and Band 17 / QPSK modulation**

| Test Mode | Test Position | RB Size | RB offset | Test Channel | Test Frequency | Power (dBm) Begin | Power (dBm) After | Power Drift (%) |
|---|---|---|---|---|---|---|---|---|
| 1 | Horizontal-Down | 25 | 13 | 23790 | 710MHz | 21.90 | 21.84 | -1.37 |
| 2 | | 1 | 0 | 23790 | 710MHz | 22.57 | 22.50 | -1.60 |
| 3 | | 1 | 49 | 23790 | 710MHz | 22.25 | 22.17 | -1.83 |
| 4 | Vertical-Front | 25 | 13 | 23790 | 710MHz | 21.90 | 21.81 | -2.05 |
| 5 | | 1 | 0 | 23790 | 710MHz | 22.57 | 22.47 | -2.28 |
| 6 | | 1 | 49 | 23790 | 710MHz | 22.25 | 22.14 | -2.50 |
| 7 | Horizontal-Up | 25 | 13 | 23790 | 710MHz | 21.90 | 21.78 | -2.73 |
| 8 | | 1 | 0 | 23790 | 710MHz | 22.57 | 22.44 | -2.95 |
| 9 | | 1 | 49 | 23790 | 710MHz | 22.25 | 22.11 | -3.17 |
| 10 | Vertical-Back | 25 | 13 | 23790 | 710MHz | 21.90 | 21.75 | -3.39 |
| 11 | | 1 | 0 | 23790 | 710MHz | 22.57 | 22.41 | -3.62 |
| 12 | | 1 | 49 | 23790 | 710MHz | 22.25 | 22.08 | -3.84 |
| 13 | Tip | 25 | 13 | 23790 | 710MHz | 21.90 | 21.72 | -4.06 |
| 14 | | 1 | 0 | 23790 | 710MHz | 22.57 | 22.38 | -4.28 |
| 15 | | 1 | 49 | 23790 | 710MHz | 22.25 | 22.05 | -4.50 |
| 16 | Horizontal-Down | 25 | 13 | 20175 | 1732.5MHz | 21.88 | 21.85 | -0.69 |
| 17 | | 1 | 0 | 20175 | 1732.5MHz | 22.79 | 22.75 | -0.92 |
| 18 | | 1 | 49 | 20175 | 1732.5MHz | 23.22 | 23.17 | -1.14 |
| 19 | Vertical-Front | 25 | 13 | 20175 | 1732.5MHz | 21.88 | 21.82 | -1.37 |
| 20 | | 1 | 0 | 20175 | 1732.5MHz | 22.79 | 22.72 | -1.60 |
| 21 | | 1 | 49 | 20175 | 1732.5MHz | 23.22 | 23.14 | -1.83 |
| 22 | Horizontal-Up | 25 | 13 | 20175 | 1732.5MHz | 21.88 | 21.79 | -2.05 |
| 23 | | 1 | 0 | 20175 | 1732.5MHz | 22.79 | 22.69 | -2.28 |
| 24 | | 1 | 49 | 20175 | 1732.5MHz | 23.22 | 23.11 | -2.50 |
| 25 | Vertical-Back | 25 | 13 | 20175 | 1732.5MHz | 21.88 | 21.76 | -2.73 |
| 26 | | 1 | 0 | 20175 | 1732.5MHz | 22.79 | 22.66 | -2.95 |
| 27 | | 1 | 49 | 20175 | 1732.5MHz | 23.22 | 23.08 | -3.17 |
| 28 | Tip | 25 | 13 | 20175 | 1732.5MHz | 21.88 | 21.73 | -3.39 |
| 29 | | 1 | 0 | 20175 | 1732.5MHz | 22.79 | 22.63 | -3.62 |
| 30 | | 1 | 49 | 20175 | 1732.5MHz | 23.22 | 23.05 | -3.84 |

**WCDMA AWS Band**

| Test Mode | Test Position | Communication Mode | Test Channel | Test Frequency | Power (dBm) Begin | Power (dBm) After | Power Drift (%) |
|---|---|---|---|---|---|---|---|
| 31 | Horizontal-Down | WCDMA AWS | 1412 | 1732.4MHz | 23.47 | 23.35 | -2.73 |
| 32 | Vertical- Front | WCDMA AWS | 1412 | 1732.4MHz | 23.47 | 23.34 | -2.95 |
| 33 | Horizontal-Up | WCDMA AWS | 1412 | 1732.4MHz | 23.47 | 23.33 | -3.17 |
| 34 | Vertical-Back | WCDMA AWS | 1412 | 1732.4MHz | 23.47 | 23.32 | -3.39 |
| 35 | Tip | WCDMA AWS | 1412 | 1732.4MHz | 23.47 | 23.31 | -3.62 |

**LTE Band 4 and Band 17 / 16QAM modulation**

| Test Mode | Test Position | RB Size | RB offset | Test Channel | Test Frequency | Power (dBm) Begin | Power (dBm) After | Power Drift (%) |
|---|---|---|---|---|---|---|---|---|
| 36 | Horizontal-Down | 25 | 13 | 23790 | 710MHz | 21.37 | 21.31 | -1.37 |
| 37 | | 1 | 0 | 23790 | 710MHz | 21.79 | 21.72 | -1.60 |
| 38 | | 1 | 49 | 23790 | 710MHz | 21.46 | 21.38 | -1.83 |
| 39 | Vertical-Front | 25 | 13 | 23790 | 710MHz | 21.37 | 21.28 | -2.05 |
| 40 | | 1 | 0 | 23790 | 710MHz | 21.79 | 21.69 | -2.28 |
| 41 | | 1 | 49 | 23790 | 710MHz | 21.46 | 21.35 | -2.50 |
| 42 | Horizontal-Up | 25 | 13 | 23790 | 710MHz | 21.37 | 21.25 | -2.73 |
| 43 | | 1 | 0 | 23790 | 710MHz | 21.79 | 21.66 | -2.95 |
| 44 | | 1 | 49 | 23790 | 710MHz | 21.46 | 21.32 | -3.17 |
| 45 | Vertical-Back | 25 | 13 | 23790 | 710MHz | 21.37 | 21.22 | -3.39 |
| 46 | | 1 | 0 | 23790 | 710MHz | 21.79 | 21.63 | -3.62 |
| 47 | | 1 | 49 | 23790 | 710MHz | 21.46 | 21.29 | -3.84 |
| 48 | Tip | 25 | 13 | 23790 | 710MHz | 21.37 | 21.19 | -4.06 |
| 49 | | 1 | 0 | 23790 | 710MHz | 21.79 | 21.60 | -4.28 |
| 50 | | 1 | 49 | 23790 | 710MHz | 21.46 | 21.26 | -4.50 |
| 51 | Horizontal-Down | 25 | 13 | 20175 | 1732.5MHz | 21.32 | 21.29 | -0.69 |
| 52 | | 1 | 0 | 20175 | 1732.5MHz | 22.10 | 22.06 | -0.92 |
| 53 | | 1 | 49 | 20175 | 1732.5MHz | 22.74 | 22.69 | -1.14 |
| 54 | Vertical-Front | 25 | 13 | 20175 | 1732.5MHz | 21.32 | 21.26 | -1.37 |
| 55 | | 1 | 0 | 20175 | 1732.5MHz | 22.10 | 22.03 | -1.60 |
| 56 | | 1 | 49 | 20175 | 1732.5MHz | 22.74 | 22.66 | -1.83 |
| 57 | Horizontal-Up | 25 | 13 | 20175 | 1732.5MHz | 21.32 | 21.23 | -2.05 |
| 58 | | 1 | 0 | 20175 | 1732.5MHz | 22.10 | 22.00 | -2.28 |
| 59 | | 1 | 49 | 20175 | 1732.5MHz | 22.74 | 22.63 | -2.50 |
| 60 | Vertical-Back | 25 | 13 | 20175 | 1732.5MHz | 21.32 | 21.20 | -2.73 |
| 61 | | 1 | 0 | 20175 | 1732.5MHz | 22.10 | 21.97 | -2.95 |
| 62 | | 1 | 49 | 20175 | 1732.5MHz | 22.74 | 22.60 | -3.17 |
| 63 | Tip | 25 | 13 | 20175 | 1732.5MHz | 21.32 | 21.17 | -3.39 |
| 64 | | 1 | 0 | 20175 | 1732.5MHz | 22.10 | 21.94 | -3.62 |
| 65 | | 1 | 49 | 20175 | 1732.5MHz | 22.74 | 22.57 | -3.84 |

## 6.5　SAR LIMITS

| HUMAN EXPOSURE | SAR (W/kg) | |
|---|---|---|
| | (GENERAL POPULATION / UNCONTROLLED EXPOSURE ENVIRONMENT) | (OCCUPATIONAL / CONTROLLED EXPOSURE ENVIRONMENT) |
| Spatial Peak (averaged over 1 g) | **1.6** | 8.0 |

**NOTE:** This limits accord to 47 CFR 2.1093 – Safety Limit.

# 7. INFORMATION ON THE TESTING LABORATORIES

We, Bureau Veritas Consumer Products Services (H.K.) Ltd., Taoyuan Branch, were founded in 1988 to provide our best service in EMC, Radio, Telecom and Safety consultation.  Our laboratories are accredited and approved according to ISO/IEC 17025.

Copies of accreditation certificates of our laboratories obtained from approval agencies can be downloaded from our web site: www.adt.com.tw/index.5.phtml. If you have any comments, please feel free to contact us at the following:

**Linko EMC/RF Lab**:
Tel: 886-2-26052180
Fax: 886-2-26051924

**Hsin Chu EMC/RF Lab**:
Tel: 886-3-5935343
Fax: 886-3-5935342

**Hwa Ya EMC/RF/Safety/Telecom Lab**:
Tel: 886-3-3183232
Fax: 886-3-3185050
**Web Site**: www.adt.com.tw

The address and road map of all our labs can be found in our web site also.

**---END---**

# APPENDIX A: TEST DATA

**Product Name: LTE USB Modem ; Model Name: C505**

## Liquid Level Photo

**Tissue 835MHz D=150mm**



**Tissue 1900MHz D=150mm**

## M01-GPRS850 TS1-Ch190

Communication System: GPRS850 ; Frequency: 836.6 MHz ; Duty Cycle: 1:8.3 ; Modulation Type: GMSK / UL 1 time slot

Medium: MSL835 Medium parameters used: f = 836.6 MHz; σ = 0.98 mho/m; εr = 55.84; ρ = 1000 kg/m$^3$

Phantom section: Flat Section ; Separation distance : 5 mm (The Horizontal-Down side of the EUT to the Phantom)

DASY4 Configuration:

- Probe: EX3DV4 - SN3578; ConvF(8.55, 8.55, 8.55); Calibrated: 2010/6/22
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn579; Calibrated: 2010/9/20
- Phantom: SAM 12; Type: SAM V4.0;   Serial: TP 1202
- Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 186

**Body Position - Mid/Area Scan (7x15x1):** Measurement grid: dx=8mm, dy=8mm
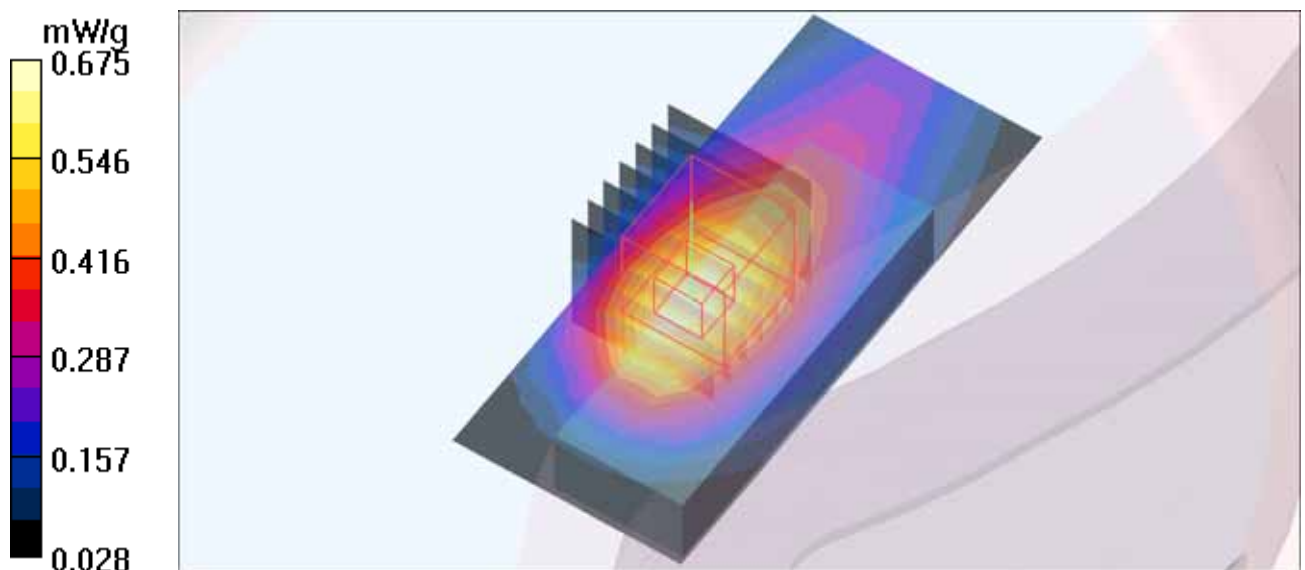Maximum value of SAR (measured) = 0.653 mW/g

**Body Position - Mid/Zoom Scan (7x7x7)/Cube 0:** Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 9.66 V/m; Power Drift = -0.133 dB
Peak SAR (extrapolated) = 0.757 W/kg
**SAR(1 g) = 0.505 mW/g; SAR(10 g) = 0.325 mW/g**
Maximum value of SAR (measured) = 0.638 mW/g

## M02-GPRS850 TS2-Ch190

Communication System: GPRS850 ; Frequency: 836.6 MHz ; Duty Cycle: 1:4 ; Modulation Type: GMSK / UL 2 time slots
Medium: MSL835 Medium parameters used: f = 836.6 MHz; σ = 0.98 mho/m; εr = 55.84; ρ = 1000 kg/m$^3$
Phantom section: Flat Section ; Separation distance : 5 mm (The Horizontal-Down side of the EUT to the Phantom)

DASY4 Configuration:

- Probe: EX3DV4 - SN3578; ConvF(8.55, 8.55, 8.55); Calibrated: 2010/6/22
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn579; Calibrated: 2010/9/20
- Phantom: SAM 12; Type: SAM V4.0;   Serial: TP 1202
- Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 186

**Body Position - Mid/Area Scan (7x15x1):** Measurement grid: dx=8mm, dy=8mm
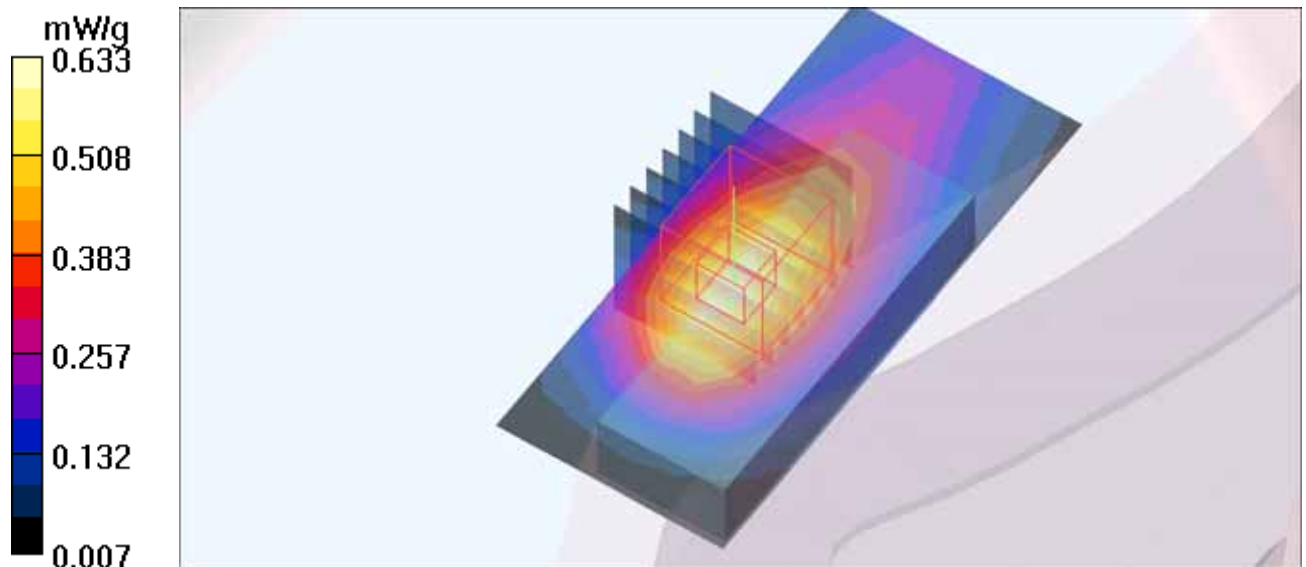Maximum value of SAR (measured) = 0.819 mW/g

**Body Position - Mid/Zoom Scan (7x7x7)/Cube 0:** Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 11.0 V/m; Power Drift = -0.172 dB
Peak SAR (extrapolated) = 0.944 W/kg
**SAR(1 g) = 0.624 mW/g; SAR(10 g) = 0.399 mW/g**
Maximum value of SAR (measured) = 0.801 mW/g
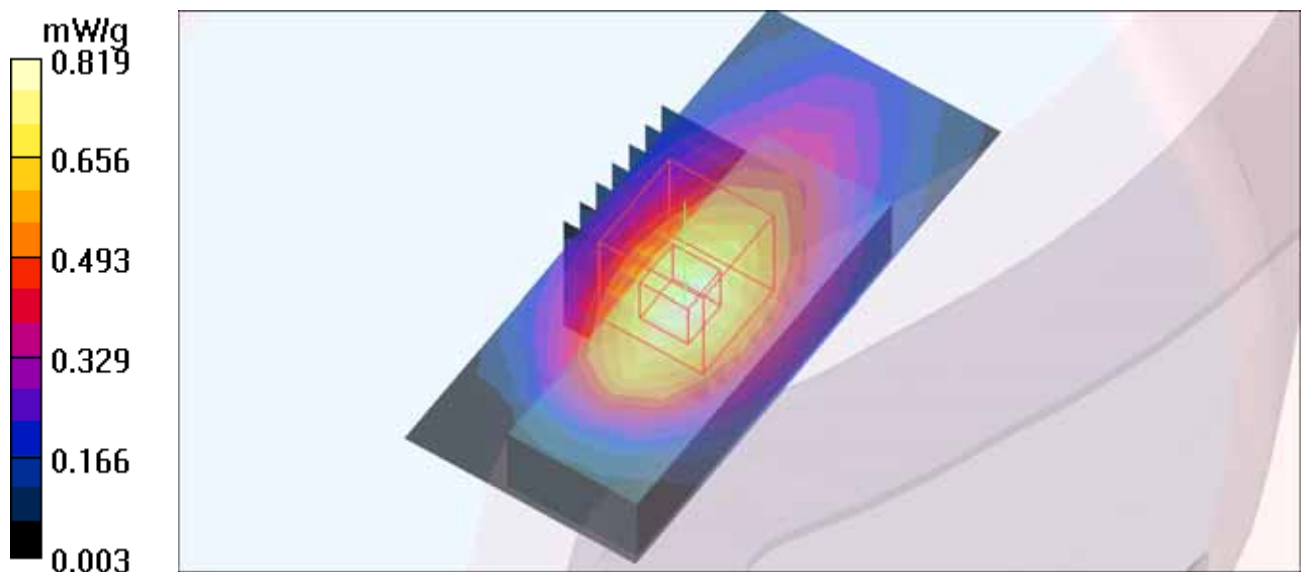
## M03-GPRS850 TS3-Ch190-Ch190

Communication System: GPRS850 ; Frequency: 836.6 MHz ; Duty Cycle: 1:2.67 ; Modulation Type: GMSK / UL 3 time slots
Medium: MSL835 Medium parameters used: f = 836.6 MHz; σ = 0.98 mho/m; εr = 55.84; ρ = 1000 kg/m$^3$
Phantom section: Flat Section ; Separation distance : 5 mm (The Horizontal-Down side of the EUT to the Phantom)

DASY4 Configuration:

- Probe: EX3DV4 - SN3578; ConvF(8.55, 8.55, 8.55); Calibrated: 2010/6/22
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn579; Calibrated: 2010/9/20
- Phantom: SAM 12; Type: SAM V4.0;   Serial: TP 1202
- Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 186

**Body Position - Mid/Area Scan (7x15x1):** Measurement grid: dx=8mm, dy=8mm
Maximum value of SAR (measured) = 0.766 mW/g

**Body Position - Mid/Zoom Scan (7x7x7)/Cube 0:** Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 10.6 V/m; Power Drift = -0.195 dB
Peak SAR (extrapolated) = 0.879 W/kg
**SAR(1 g) = 0.586 mW/g; SAR(10 g) = 0.375 mW/g**
Maximum value of SAR (measured) = 0.745 mW/g

## M04-GPRS850 TS4-Ch190

Communication System: GPRS850 ; Frequency: 836.6 MHz ; Duty Cycle: 1:2 ; Modulation
Type: GMSK / UL 4 time slots
Medium: MSL835 Medium parameters used: f = 836.6 MHz; σ = 0.98 mho/m; εr = 55.84; ρ = 1000
kg/m$^3$
Phantom section: Flat Section ; Separation distance : 5 mm (The Horizontal-Down side of the EUT to
the Phantom)

DASY4 Configuration:

- Probe: EX3DV4 - SN3578; ConvF(8.55, 8.55, 8.55); Calibrated: 2010/6/22
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn579; Calibrated: 2010/9/20
- Phantom: SAM 12; Type: SAM V4.0;  Serial: TP 1202
- Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 186

**Body Position - Mid/Area Scan (7x15x1):** Measurement grid: dx=8mm, dy=8mm
Maximum value of SAR (measured) = 0.886 mW/g
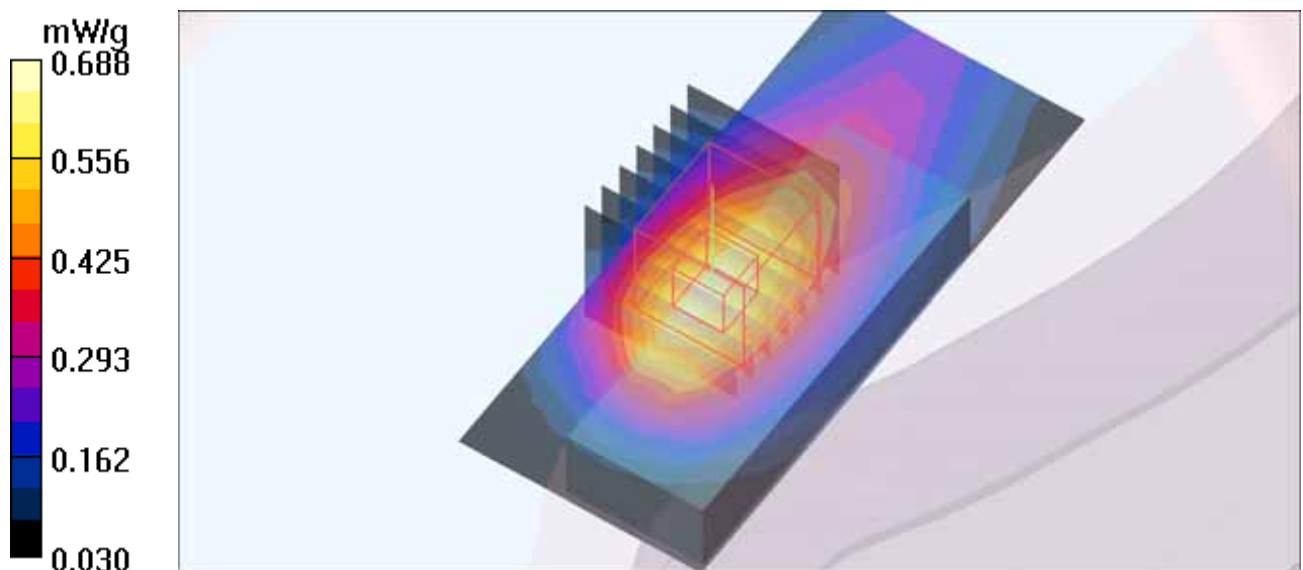
**Body Position - Mid/Zoom Scan (7x7x7)/Cube 0:** Measurement grid: dx=5mm, dy=5mm,
dz=5mm
Reference Value = 11.1 V/m; Power Drift = -0.118 dB
Peak SAR (extrapolated) = 1.03 W/kg
**SAR(1 g) = 0.676 mW/g; SAR(10 g) = 0.432 mW/g**
Maximum value of SAR (measured) = 0.869 mW/g

## M05-GPRS850 TS1-Ch190

Communication System: GPRS850 ; Frequency: 836.6 MHz ; Duty Cycle: 1:8.3 ; Modulation Type: GMSK / UL 1 time slot
Medium: MSL835 Medium parameters used: f = 836.6 MHz; σ = 0.98 mho/m; εr = 55.84; ρ = 1000 kg/m$^3$
Phantom section: Flat Section ; Separation distance : 5 mm (The Vertical-Front side of the EUT to the Phantom)

DASY4 Configuration:

- Probe: EX3DV4 - SN3578; ConvF(8.55, 8.55, 8.55); Calibrated: 2010/6/22
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn579; Calibrated: 2010/9/20
- Phantom: SAM 12; Type: SAM V4.0;   Serial: TP 1202
- Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 186

**Body Position - Mid/Area Scan (7x15x1):** Measurement grid: dx=8mm, dy=8mm
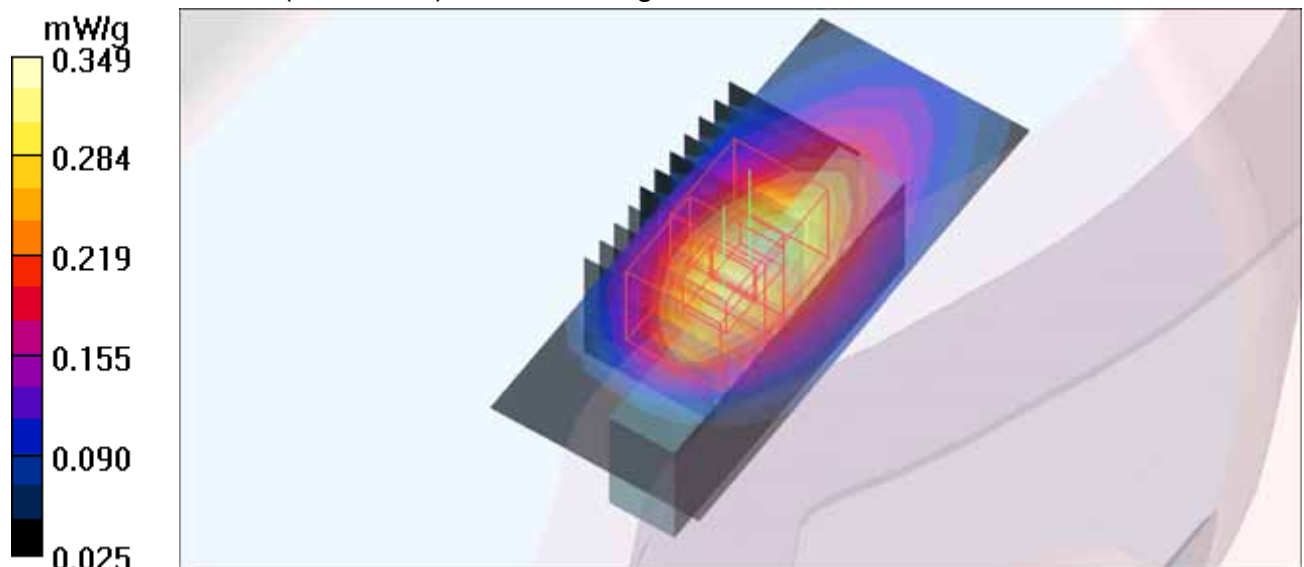Maximum value of SAR (measured) = 0.315 mW/g

**Body Position - Mid/Zoom Scan (7x7x7)/Cube 0:** Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 8.68 V/m; Power Drift = 0.106 dB
Peak SAR (extrapolated) = 0.417 W/kg
**SAR(1 g) = 0.255 mW/g; SAR(10 g) = 0.156 mW/g**
Maximum value of SAR (measured) = 0.338 mW/g

## M06-GPRS850 TS2-Ch190

Communication System: GPRS850 ; Frequency: 836.6 MHz ; Duty Cycle: 1:4 ; Modulation Type: GMSK / UL 2 time slots
Medium: MSL835 Medium parameters used: f = 836.6 MHz; σ = 0.98 mho/m; εr = 55.84; ρ = 1000 kg/m$^3$
Phantom section: Flat Section ; Separation distance : 5 mm (The Vertical-Front side of the EUT to the Phantom)

DASY4 Configuration:

- Probe: EX3DV4 - SN3578; ConvF(8.55, 8.55, 8.55); Calibrated: 2010/6/22
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn579; Calibrated: 2010/9/20
- Phantom: SAM 12; Type: SAM V4.0;   Serial: TP 1202
- Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 186

**Body Position - Mid/Area Scan (7x15x1):** Measurement grid: dx=8mm, dy=8mm
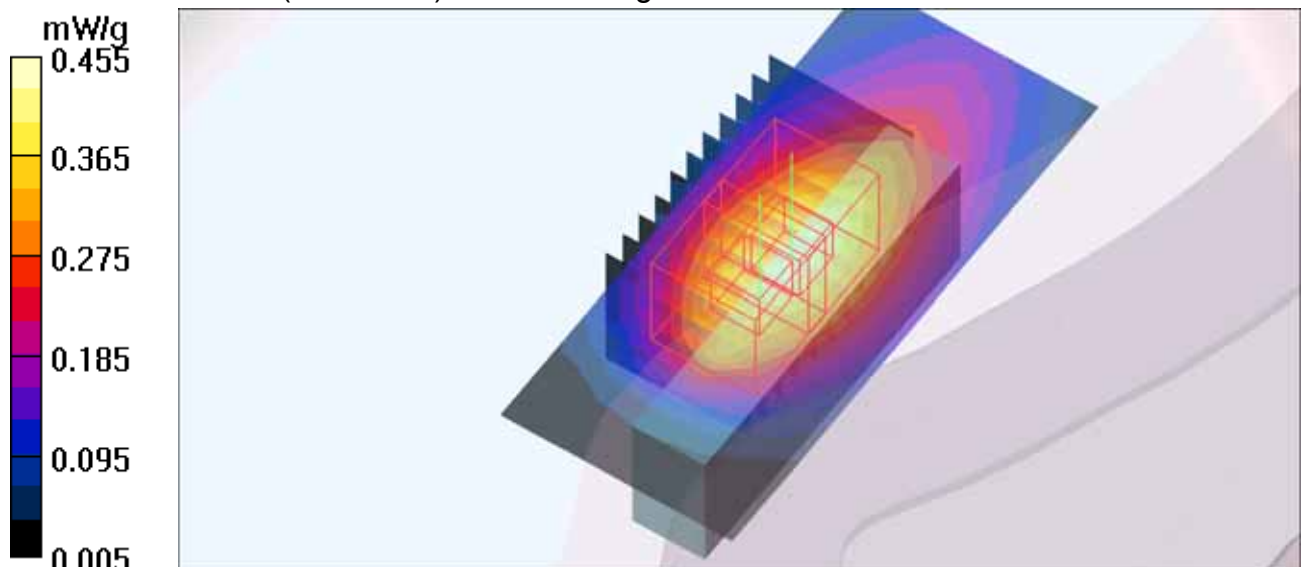Maximum value of SAR (measured) = 0.433 mW/g

**Body Position - Mid/Zoom Scan (7x7x7)/Cube 0:** Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 10.7 V/m; Power Drift = -0.160 dB
Peak SAR (extrapolated) = 0.532 W/kg
**SAR(1 g) = 0.327 mW/g; SAR(10 g) = 0.201 mW/g**
Maximum value of SAR (measured) = 0.434 mW/g

## M07-GPRS850 TS3-Ch190

Communication System: GPRS850 ; Frequency: 836.6 MHz ; Duty Cycle: 1:2.67 ; Modulation Type: GMSK / UL 3 time slots
Medium: MSL835 Medium parameters used: f = 836.6 MHz; σ = 0.98 mho/m; εr = 55.84; ρ = 1000 kg/m$^3$
Phantom section: Flat Section ; Separation distance : 5 mm (The Vertical-Front side of the EUT to the Phantom)

DASY4 Configuration:

- Probe: EX3DV4 - SN3578; ConvF(8.55, 8.55, 8.55); Calibrated: 2010/6/22
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn579; Calibrated: 2010/9/20
- Phantom: SAM 12; Type: SAM V4.0;   Serial: TP 1202
- Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 186

**Body Position - Mid/Area Scan (7x15x1):** Measurement grid: dx=8mm, dy=8mm
Maximum value of SAR (measured) = 0.419 mW/g

**Body Position - Mid/Zoom Scan (7x7x7)/Cube 0:** Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 10.4 V/m; Power Drift = -0.109 dB
Peak SAR (extrapolated) = 0.507 W/kg
**SAR(1 g) = 0.315 mW/g; SAR(10 g) = 0.193 mW/g**
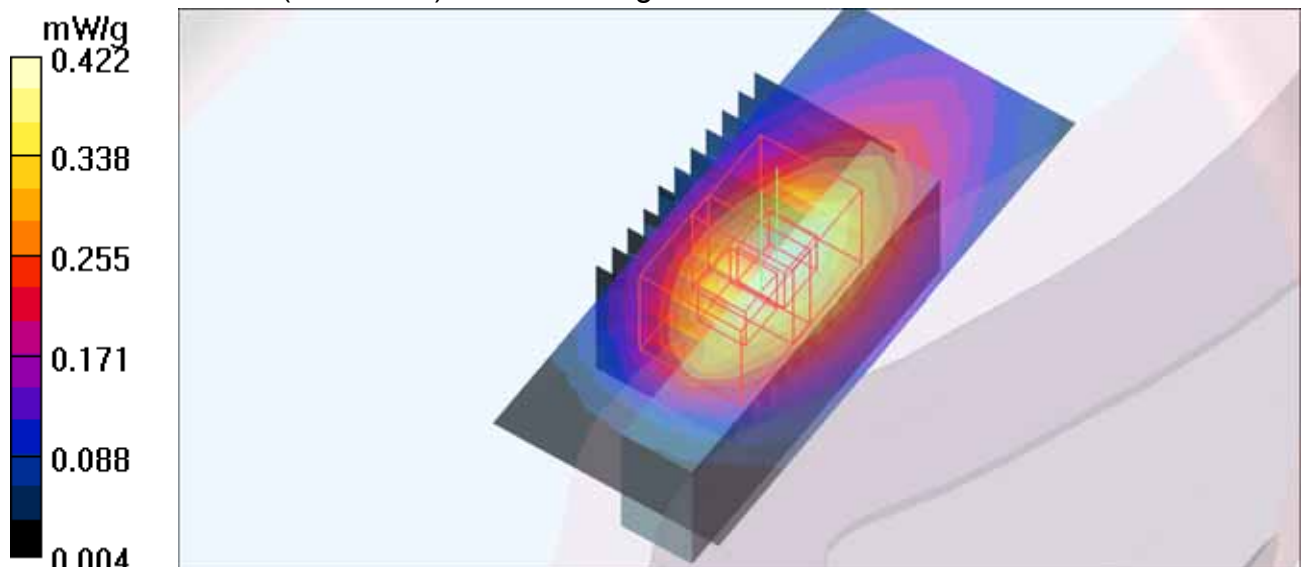Maximum value of SAR (measured) = 0.414 mW/g

## M08-GPRS850 TS4-Ch190

Communication System: GPRS850 ; Frequency: 836.6 MHz ; Duty Cycle: 1:2 ; Modulation Type: GMSK / UL 4 time slots

Medium: MSL835 Medium parameters used: f = 836.6 MHz; σ = 0.98 mho/m; εr = 55.84; ρ = 1000 kg/m$^3$

Phantom section: Flat Section ; Separation distance : 5 mm (The Vertical-Front side of the EUT to the Phantom)

DASY4 Configuration:

- Probe: EX3DV4 - SN3578; ConvF(8.55, 8.55, 8.55); Calibrated: 2010/6/22
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn579; Calibrated: 2010/9/20
- Phantom: SAM 12; Type: SAM V4.0;   Serial: TP 1202
- Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 186

**Body Position - Mid/Area Scan (7x15x1):** Measurement grid: dx=8mm, dy=8mm
Maximum value of SAR (measured) = 0.443 mW/g

**Body Position - Mid/Zoom Scan (7x7x7)/Cube 0:** Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 10.5 V/m; Power Drift = 0.025 dB
Peak SAR (extrapolated) = 0.558 W/kg
**SAR(1 g) = 0.344 mW/g; SAR(10 g) = 0.211 mW/g**
Maximum value of SAR (measured) = 0.455 mW/g

## M09-GPRS850 TS1-Ch190

Communication System: GPRS850 ; Frequency: 836.6 MHz ; Duty Cycle: 1:8.3 ; Modulation Type: GMSK / UL 1 time slot
Medium: MSL835 Medium parameters used: f = 836.6 MHz; σ = 0.98 mho/m; εr = 55.84; ρ = 1000 kg/m$^3$
Phantom section: Flat Section ; Separation distance : 5 mm (The Horizontal-Up side of the EUT to the Phantom)

DASY4 Configuration:

- Probe: EX3DV4 - SN3578; ConvF(8.55, 8.55, 8.55); Calibrated: 2010/6/22
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn579; Calibrated: 2010/9/20
- Phantom: SAM 12; Type: SAM V4.0;   Serial: TP 1202
- Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 186

**Body Position - Mid/Area Scan (7x15x1):** Measurement grid: dx=8mm, dy=8mm
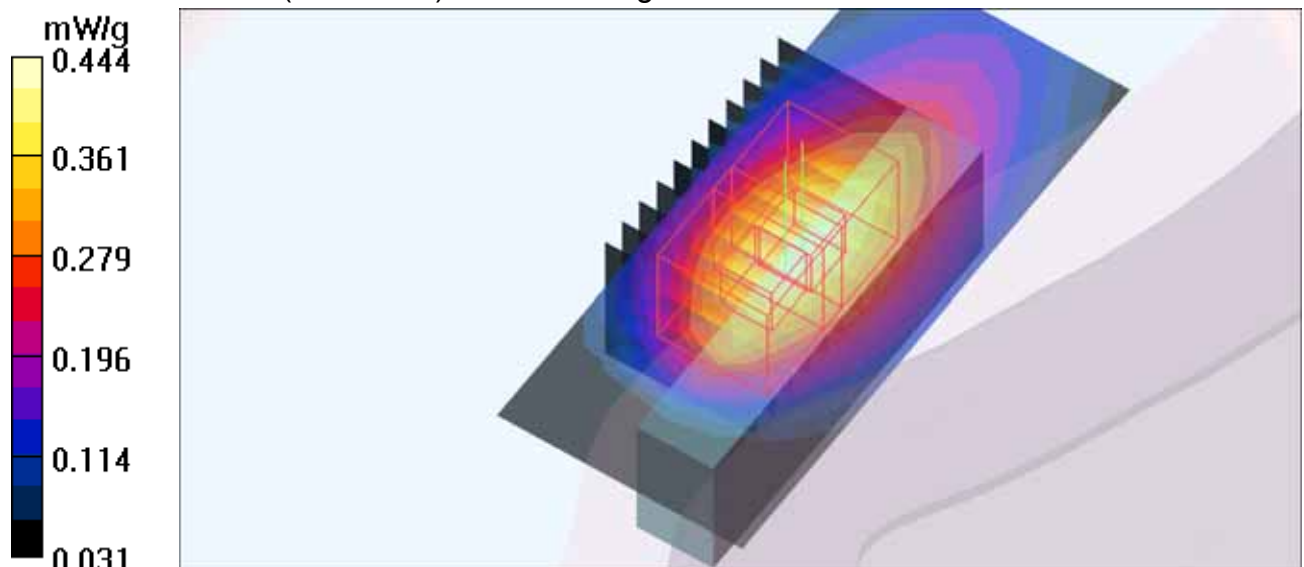Maximum value of SAR (measured) = 0.551 mW/g

**Body Position - Mid/Zoom Scan (7x7x7)/Cube 0:** Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 10.5 V/m; Power Drift = 0.181 dB
Peak SAR (extrapolated) = 0.683 W/kg
**SAR(1 g) = 0.435 mW/g; SAR(10 g) = 0.278 mW/g**
Maximum value of SAR (measured) = 0.561 mW/g

Date/Time: 2011/1/12 06:13:53

## M10-GPRS850 TS2-Ch190

Communication System: GPRS850 ; Frequency: 836.6 MHz ; Duty Cycle: 1:4 ; Modulation Type: GMSK / UL 2 time slots

Medium: MSL835 Medium parameters used: f = 836.6 MHz; σ = 0.98 mho/m; εr = 55.84; ρ = 1000 kg/m$^3$

Phantom section: Flat Section ; Separation distance : 5 mm (The Horizontal-Up side of the EUT to the Phantom)

DASY4 Configuration:

- Probe: EX3DV4 - SN3578; ConvF(8.55, 8.55, 8.55); Calibrated: 2010/6/22
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn579; Calibrated: 2010/9/20
- Phantom: SAM 12; Type: SAM V4.0;   Serial: TP 1202
- Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 186

**Body Position - Mid/Area Scan (7x15x1):** Measurement grid: dx=8mm, dy=8mm
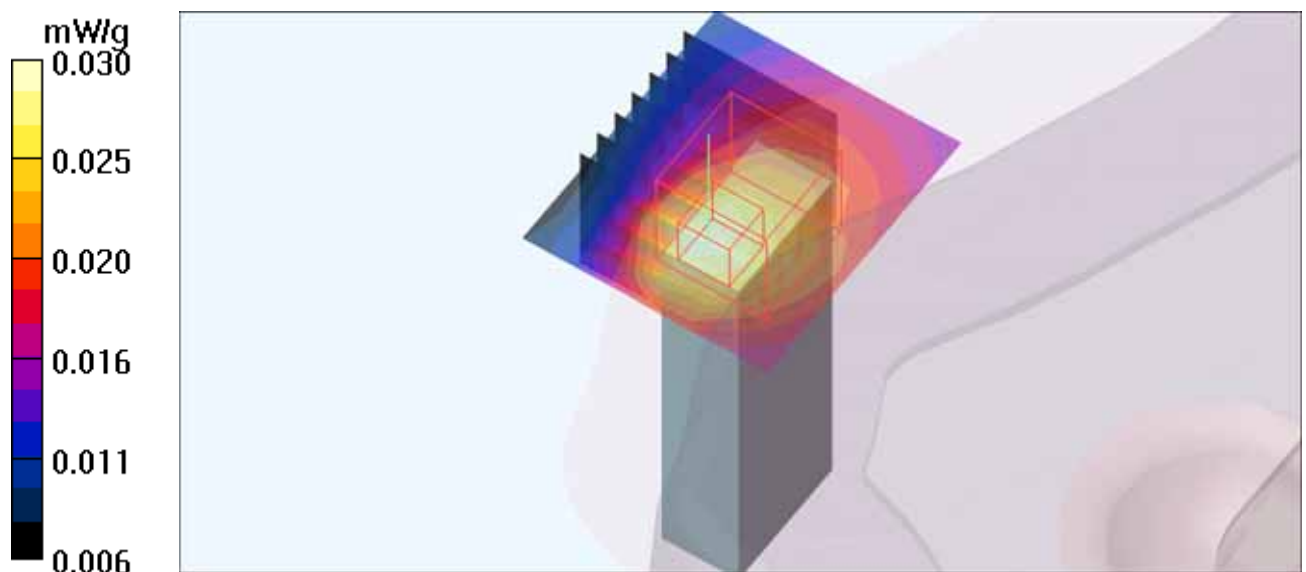Maximum value of SAR (measured) = 0.685 mW/g

**Body Position - Mid/Zoom Scan (7x7x7)/Cube 0:** Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 12.7 V/m; Power Drift = -0.114 dB
Peak SAR (extrapolated) = 0.811 W/kg
**SAR(1 g) = 0.519 mW/g; SAR(10 g) = 0.331 mW/g**
Maximum value of SAR (measured) = 0.675 mW/g



11

## M11-GPRS850 TS3-Ch190

Communication System: GPRS850 ; Frequency: 836.6 MHz ; Duty Cycle: 1:2.67 ; Modulation Type: GMSK / UL 3 time slots
Medium: MSL835 Medium parameters used: f = 836.6 MHz; σ = 0.98 mho/m; εr = 55.84; ρ = 1000 kg/m$^3$
Phantom section: Flat Section ; Separation distance : 5 mm (The Horizontal-Up side of the EUT to the Phantom)

DASY4 Configuration:

- Probe: EX3DV4 - SN3578; ConvF(8.55, 8.55, 8.55); Calibrated: 2010/6/22
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn579; Calibrated: 2010/9/20
- Phantom: SAM 12; Type: SAM V4.0;   Serial: TP 1202
- Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 186

**Body Position - Mid/Area Scan (7x15x1):** Measurement grid: dx=8mm, dy=8mm
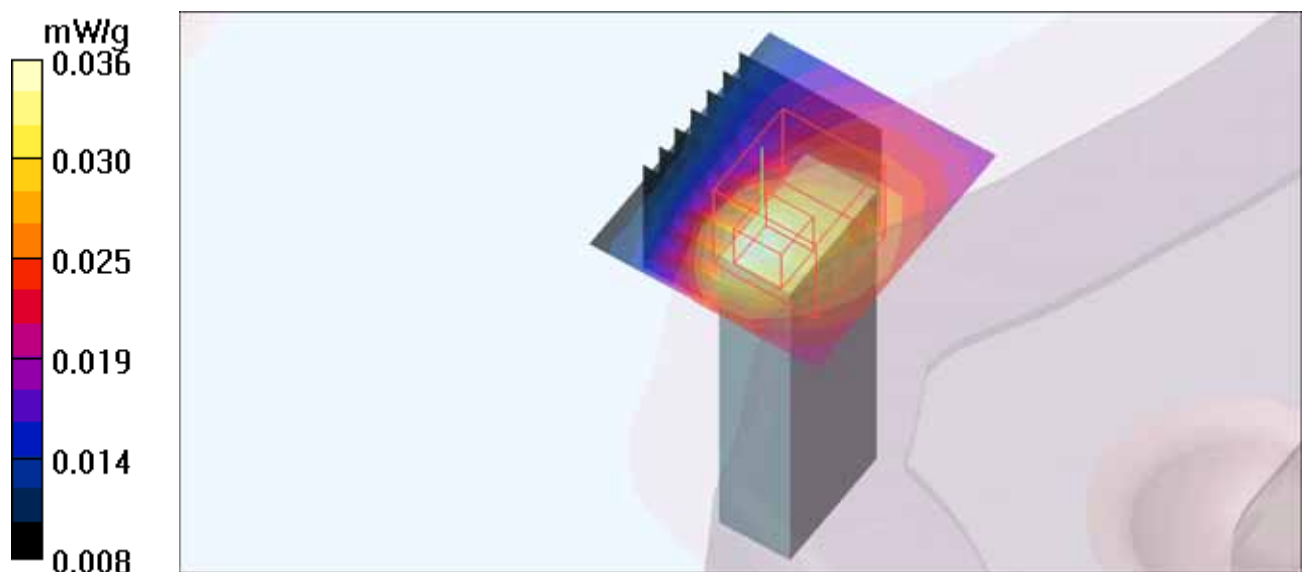Maximum value of SAR (measured) = 0.644 mW/g

**Body Position - Mid/Zoom Scan (7x7x7)/Cube 0:** Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 12.1 V/m; Power Drift = -0.136 dB
Peak SAR (extrapolated) = 0.770 W/kg
**SAR(1 g) = 0.493 mW/g; SAR(10 g) = 0.315 mW/g**
Maximum value of SAR (measured) = 0.633 mW/g

# M12-GPRS850 TS4-Ch190

Communication System: GPRS850 ; Frequency: 836.6 MHz ; Duty Cycle: 1:2 ; Modulation Type: GMSK / UL 4 time slots
Medium: MSL835 Medium parameters used: f = 836.6 MHz; σ = 0.98 mho/m; εr = 55.84; ρ = 1000 kg/m$^3$
Phantom section: Flat Section ; Separation distance : 5 mm (The Horizontal-Up side of the EUT to the Phantom)

DASY4 Configuration:

- Probe: EX3DV4 - SN3578; ConvF(8.55, 8.55, 8.55); Calibrated: 2010/6/22
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn579; Calibrated: 2010/9/20
- Phantom: SAM 12; Type: SAM V4.0;   Serial: TP 1202
- Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 186

**Body Position - Mid/Area Scan (7x15x1):** Measurement grid: dx=8mm, dy=8mm
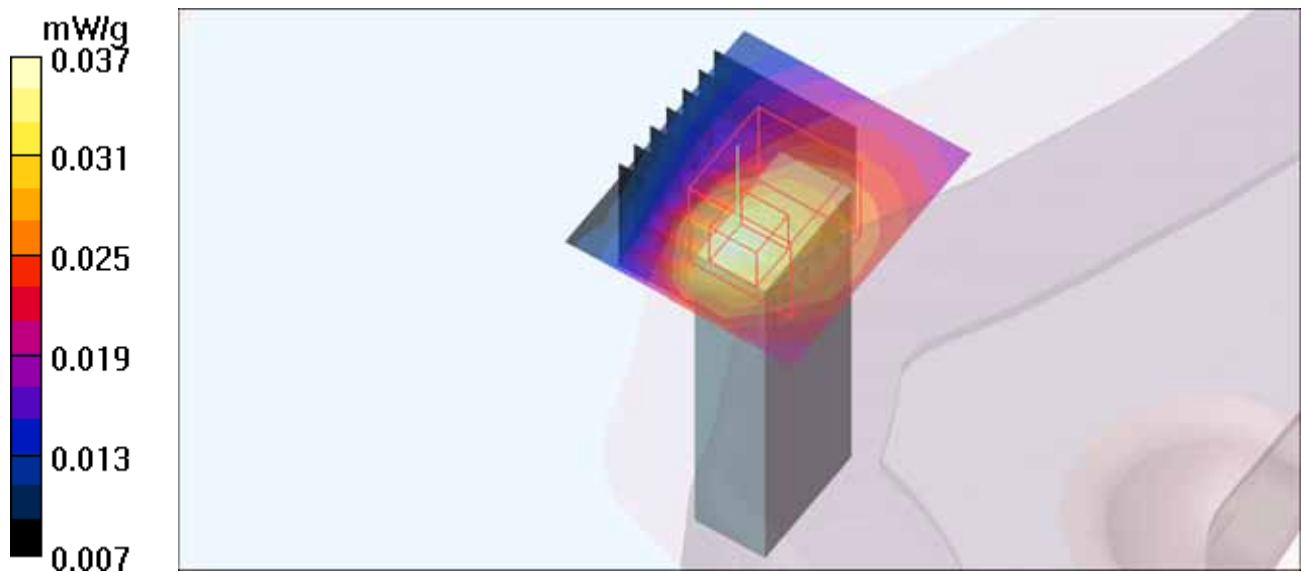Maximum value of SAR (measured) = 0.683 mW/g

**Body Position - Mid/Zoom Scan (7x7x7)/Cube 0:** Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 12.2 V/m; Power Drift = 0.062 dB
Peak SAR (extrapolated) = 0.827 W/kg
**SAR(1 g) = 0.534 mW/g; SAR(10 g) = 0.340 mW/g**
Maximum value of SAR (measured) = 0.688 mW/g

## M13-GPRS850 TS1-Ch190

Communication System: GPRS850 ; Frequency: 836.6 MHz ; Duty Cycle: 1:8.3 ; Modulation Type: GMSK / UL 1 time slot
Medium: MSL835 Medium parameters used: f = 836.6 MHz; σ = 0.98 mho/m; εr = 55.84; ρ = 1000 kg/m$^3$
Phantom section: Flat Section ; Separation distance : 5 mm (The Vertical-Back side of the EUT to the Phantom)
DASY4 Configuration:

- Probe: EX3DV4 - SN3578; ConvF(8.55, 8.55, 8.55); Calibrated: 2010/6/22
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn579; Calibrated: 2010/9/20
- Phantom: SAM 12; Type: SAM V4.0;   Serial: TP 1202
- Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 186

**Body Position - Mid/Area Scan (7x15x1):** Measurement grid: dx=8mm, dy=8mm
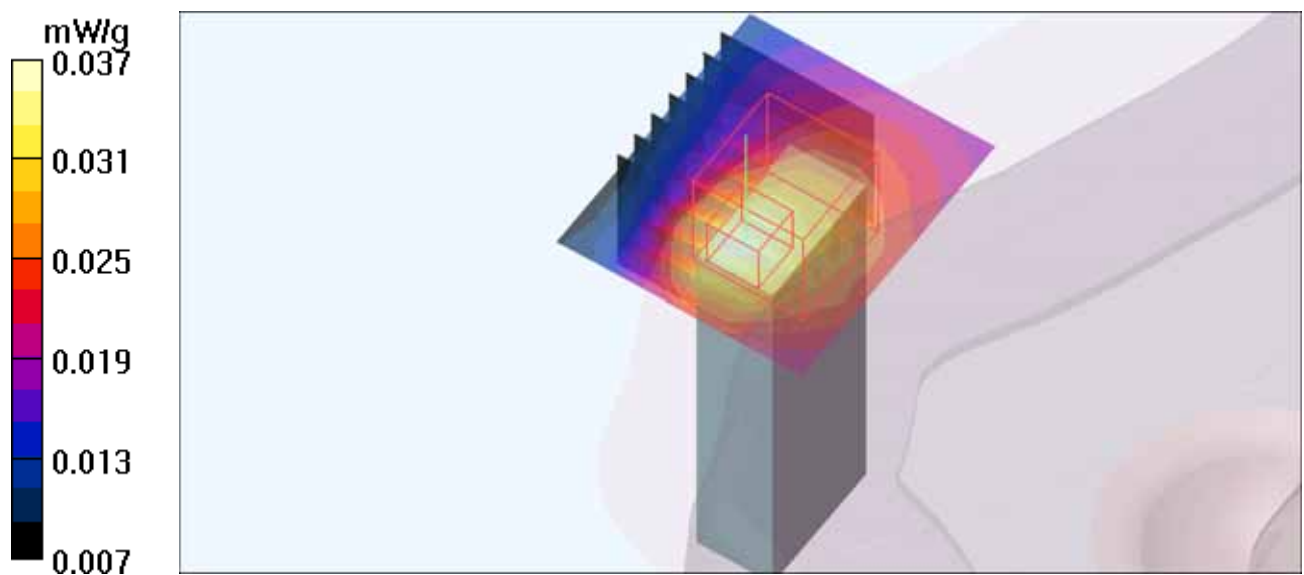Maximum value of SAR (measured) = 0.335 mW/g
**Body Position - Mid/Zoom Scan (7x7x7)/Cube 0:** Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 7.03 V/m; Power Drift = 0.156 dB
Peak SAR (extrapolated) = 0.415 W/kg
**SAR(1 g) = 0.275 mW/g; SAR(10 g) = 0.180 mW/g**
Maximum value of SAR (measured) = 0.349 mW/g
**Body Position - Mid/Zoom Scan (7x7x7)/Cube 1:** Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 7.03 V/m; Power Drift = 0.156 dB
Peak SAR (extrapolated) = 0.407 W/kg
**SAR(1 g) = 0.262 mW/g; SAR(10 g) = 0.151 mW/g**
Maximum value of SAR (measured) = 0.346 mW/g

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Bureau Veritas Consumer Products Services (H.K.) Ltd., Taoyuan Branch

## M14-GPRS850 TS2-Ch190

Communication System: GPRS850 ; Frequency: 836.6 MHz ; Duty Cycle: 1:4 ; Modulation Type: GMSK / UL 2 time slots

Medium: MSL835 Medium parameters used: f = 836.6 MHz; σ = 0.98 mho/m; εr = 55.84; ρ = 1000 kg/m$^3$

Phantom section: Flat Section ; Separation distance : 5 mm (The Vertical-Back side of the EUT to the Phantom)

DASY4 Configuration:

- Probe: EX3DV4 - SN3578; ConvF(8.55, 8.55, 8.55); Calibrated: 2010/6/22
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn579; Calibrated: 2010/9/20
- Phantom: SAM 12; Type: SAM V4.0;   Serial: TP 1202
- Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 186

**Body Position - Mid/Area Scan (7x15x1):** Measurement grid: dx=8mm, dy=8mm
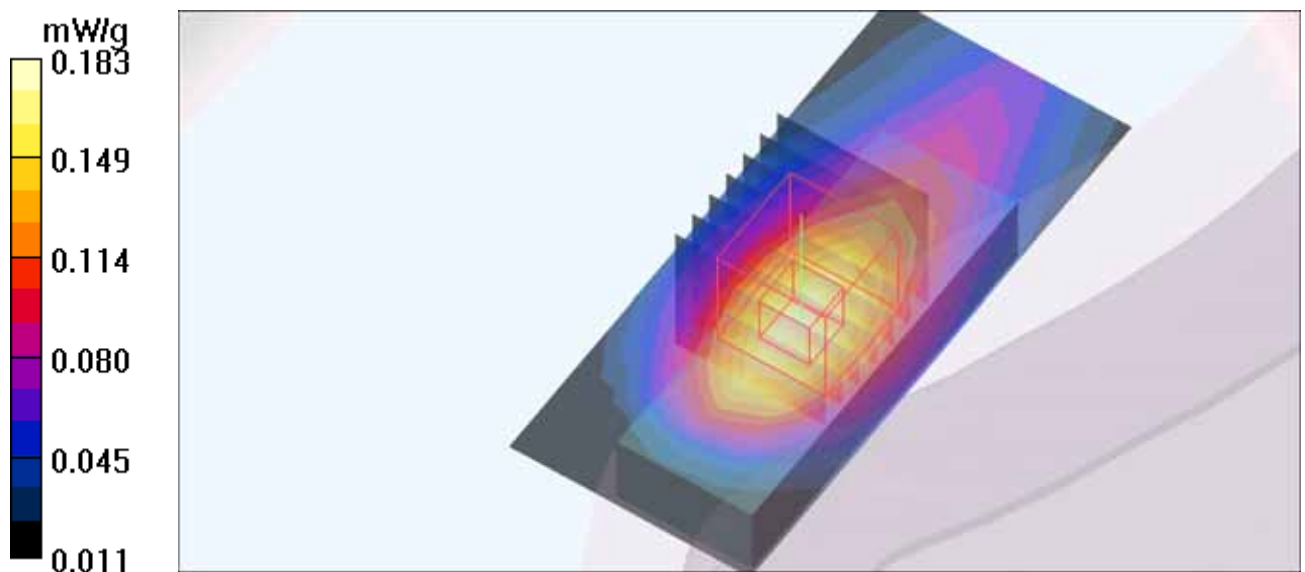Maximum value of SAR (measured) = 0.455 mW/g
**Body Position - Mid/Zoom Scan (7x7x7)/Cube 0:** Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 8.88 V/m; Power Drift = -0.181 dB
Peak SAR (extrapolated) = 0.519 W/kg
**SAR(1 g) = 0.346 mW/g; SAR(10 g) = 0.226 mW/g**
Maximum value of SAR (measured) = 0.437 mW/g
**Body Position - Mid/Zoom Scan (7x7x7)/Cube 1:** Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 8.88 V/m; Power Drift = -0.181 dB
Peak SAR (extrapolated) = 0.506 W/kg
**SAR(1 g) = 0.318 mW/g; SAR(10 g) = 0.186 mW/g**
Maximum value of SAR (measured) = 0.425 mW/g

Date/Time: 2011/1/12 09:08:16

## M15-GPRS850 TS3-Ch190

Communication System: GPRS850 ; Frequency: 836.6 MHz ; Duty Cycle: 1:2.67 ; Modulation Type: GMSK / UL 3 time slots

Medium: MSL835 Medium parameters used: f = 836.6 MHz; σ = 0.98 mho/m; εr = 55.84; ρ = 1000 kg/m$^3$

Phantom section: Flat Section ; Separation distance : 5 mm (The Vertical-Back side of the EUT to the Phantom)

DASY4 Configuration:

- Probe: EX3DV4 - SN3578; ConvF(8.55, 8.55, 8.55); Calibrated: 2010/6/22
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn579; Calibrated: 2010/9/20
- Phantom: SAM 12; Type: SAM V4.0;  Serial: TP 1202
- Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 186

**Body Position - Mid/Area Scan (7x15x1):** Measurement grid: dx=8mm, dy=8mm
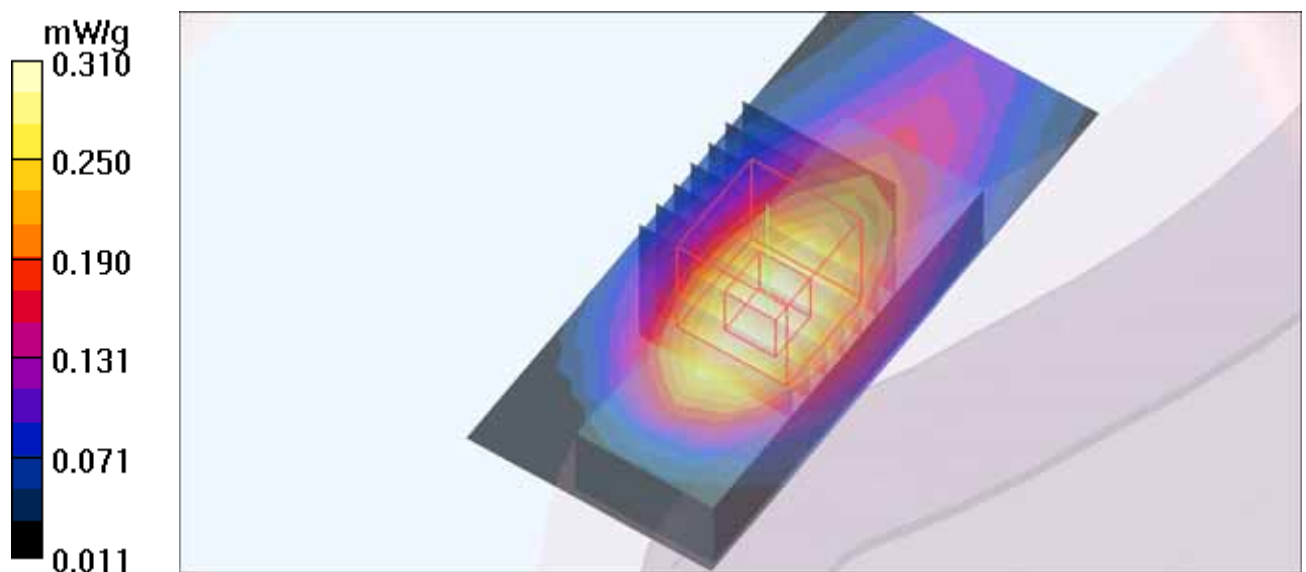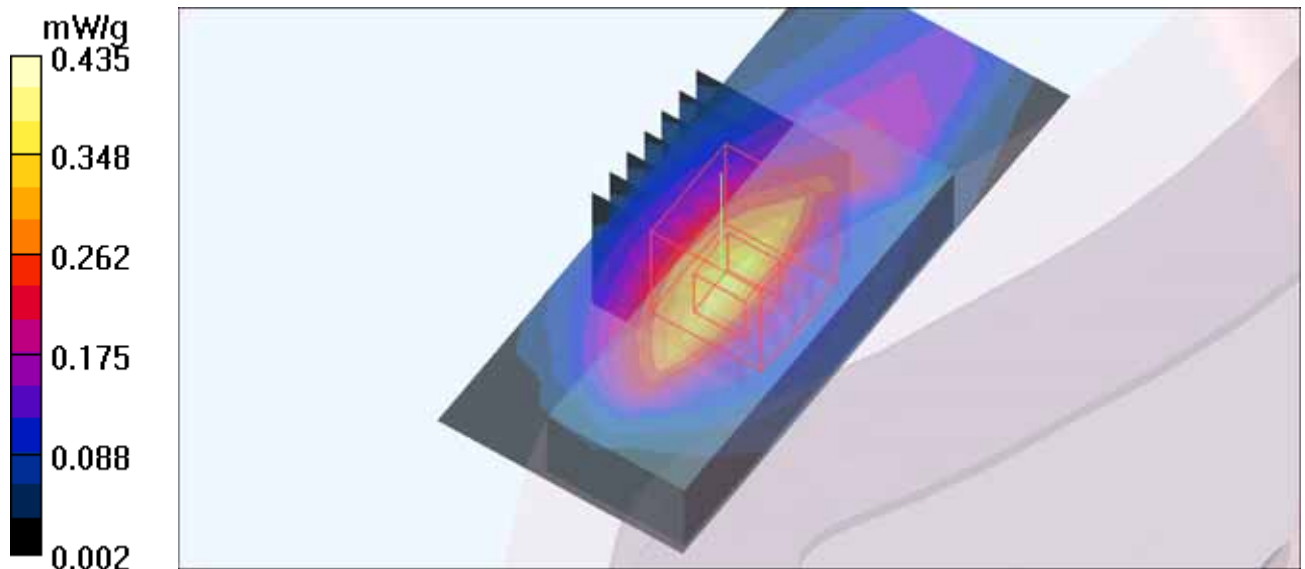Maximum value of SAR (measured) = 0.422 mW/g
**Body Position - Mid/Zoom Scan (7x7x7)/Cube 0:** Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 8.45 V/m; Power Drift = -0.131 dB
Peak SAR (extrapolated) = 0.488 W/kg
**SAR(1 g) = 0.326 mW/g; SAR(10 g) = 0.214 mW/g**
Maximum value of SAR (measured) = 0.411 mW/g
**Body Position - Mid/Zoom Scan (7x7x7)/Cube 1:** Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 8.45 V/m; Power Drift = -0.131 dB
Peak SAR (extrapolated) = 0.485 W/kg
**SAR(1 g) = 0.303 mW/g; SAR(10 g) = 0.178 mW/g**
Maximum value of SAR (measured) = 0.407 mW/g

## M16-GPRS850 TS4-Ch190

Communication System: GPRS850 ; Frequency: 836.6 MHz ; Duty Cycle: 1:2 ; Modulation Type: GMSK / UL 4 time slots

Medium: MSL835 Medium parameters used: f = 836.6 MHz; σ = 0.98 mho/m; εr = 55.84; ρ = 1000 kg/m$^3$

Phantom section: Flat Section ; Separation distance : 5 mm (The Vertical-Back side of the EUT to the Phantom)

DASY4 Configuration:

- Probe: EX3DV4 - SN3578; ConvF(8.55, 8.55, 8.55); Calibrated: 2010/6/22
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn579; Calibrated: 2010/9/20
- Phantom: SAM 12; Type: SAM V4.0;   Serial: TP 1202
- Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 186

**Body Position - Mid/Area Scan (7x15x1):** Measurement grid: dx=8mm, dy=8mm
Maximum value of SAR (measured) = 0.441 mW/g
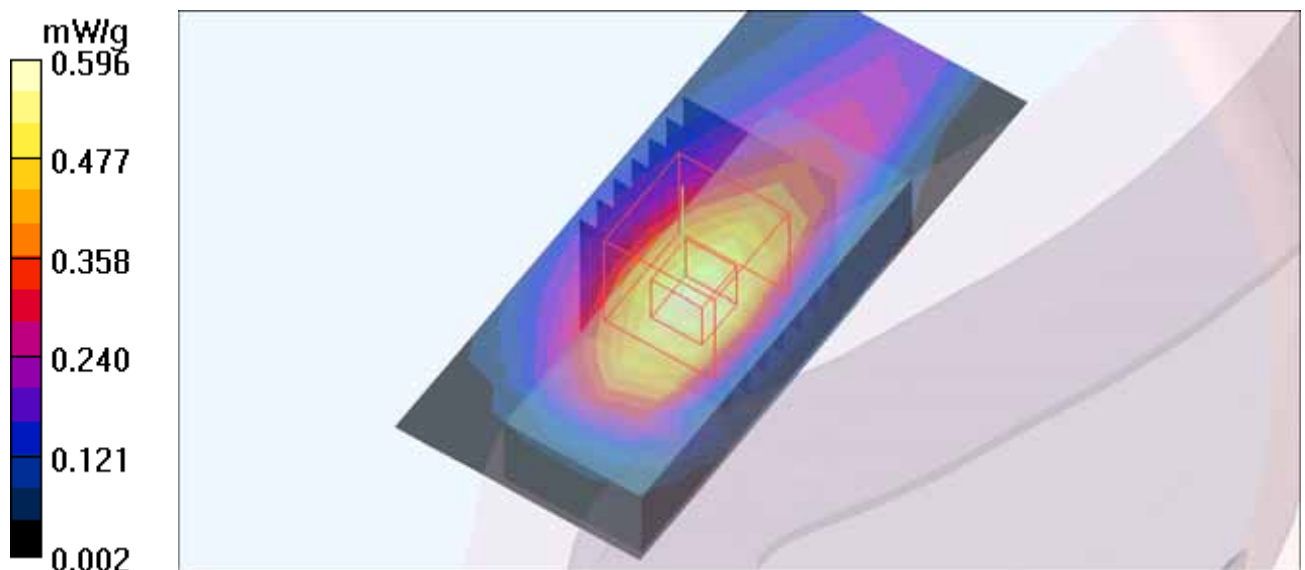**Body Position - Mid/Zoom Scan (7x7x7)/Cube 0:** Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 8.46 V/m; Power Drift = -0.054 dB
Peak SAR (extrapolated) = 0.528 W/kg
**SAR(1 g) = 0.352 mW/g; SAR(10 g) = 0.229 mW/g**
Maximum value of SAR (measured) = 0.444 mW/g
**Body Position - Mid/Zoom Scan (7x7x7)/Cube 1:** Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 8.46 V/m; Power Drift = -0.054 dB
Peak SAR (extrapolated) = 0.511 W/kg
**SAR(1 g) = 0.326 mW/g; SAR(10 g) = 0.192 mW/g**
Maximum value of SAR (measured) = 0.431 mW/g

Date/Time: 2011/1/12 09:49:49

## M17-GPRS850 TS1-Ch190

Communication System: GPRS850 ; Frequency: 836.6 MHz ; Duty Cycle: 1:8.3 ; Modulation Type: GMSK / UL 1 time slot

Medium: MSL835 Medium parameters used: f = 836.6 MHz; σ = 0.98 mho/m; εr = 55.84; ρ = 1000 kg/m$^3$

Phantom section: Flat Section ; Separation distance : 5 mm (The top side of the EUT to the Phantom)

DASY4 Configuration:

- Probe: EX3DV4 - SN3578; ConvF(8.55, 8.55, 8.55); Calibrated: 2010/6/22
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn579; Calibrated: 2010/9/20
- Phantom: SAM 12; Type: SAM V4.0;  Serial: TP 1202
- Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 186

**Body Position - Mid/Area Scan (7x8x1):** Measurement grid: dx=8mm, dy=8mm
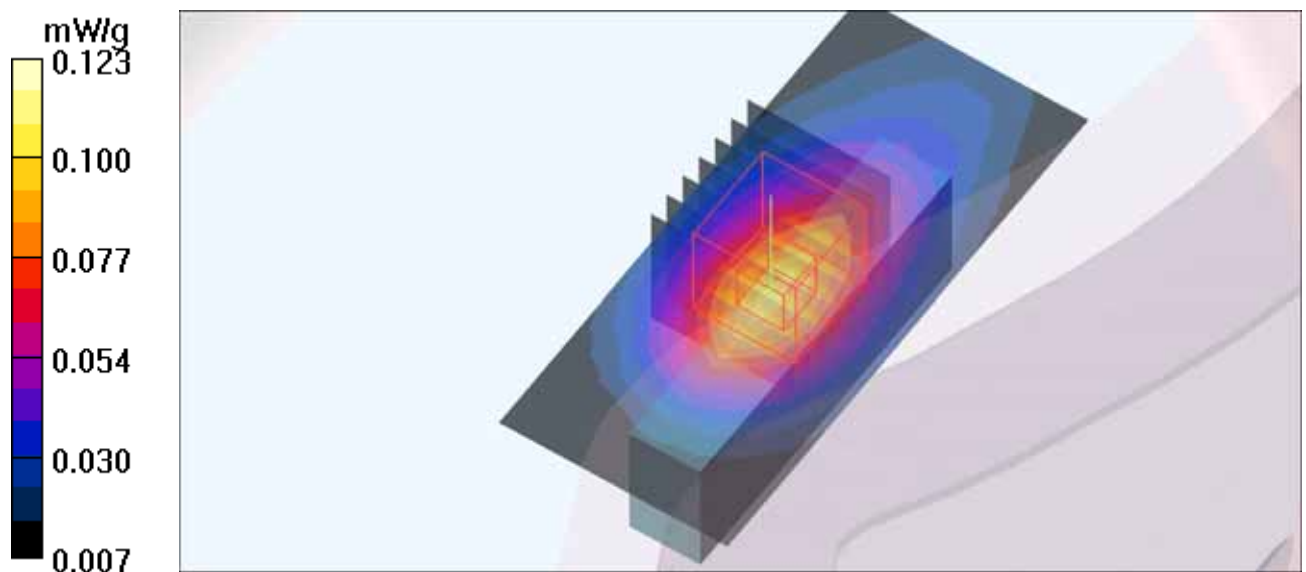Maximum value of SAR (measured) = 0.030 mW/g

**Body Position - Mid/Zoom Scan (7x7x7)/Cube 0:** Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 5.75 V/m; Power Drift = -0.139 dB
Peak SAR (extrapolated) = 0.036 W/kg
**SAR(1 g) = 0.020 mW/g; SAR(10 g) = 0.013 mW/g**
Maximum value of SAR (measured) = 0.027 mW/g

## M18-GPRS850 TS2-Ch190

Communication System: GPRS850 ; Frequency: 836.6 MHz ; Duty Cycle: 1:4 ; Modulation Type: GMSK / UL 2 time slots
Medium: MSL835 Medium parameters used: f = 836.6 MHz; σ = 0.98 mho/m; εr = 55.84; ρ = 1000 kg/m$^3$
Phantom section: Flat Section ; Separation distance : 5 mm (The top side of the EUT to the Phantom)

DASY4 Configuration:

- Probe: EX3DV4 - SN3578; ConvF(8.55, 8.55, 8.55); Calibrated: 2010/6/22
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn579; Calibrated: 2010/9/20
- Phantom: SAM 12; Type: SAM V4.0;   Serial: TP 1202
- Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 186

**Body Position - Mid/Area Scan (7x8x1):** Measurement grid: dx=8mm, dy=8mm
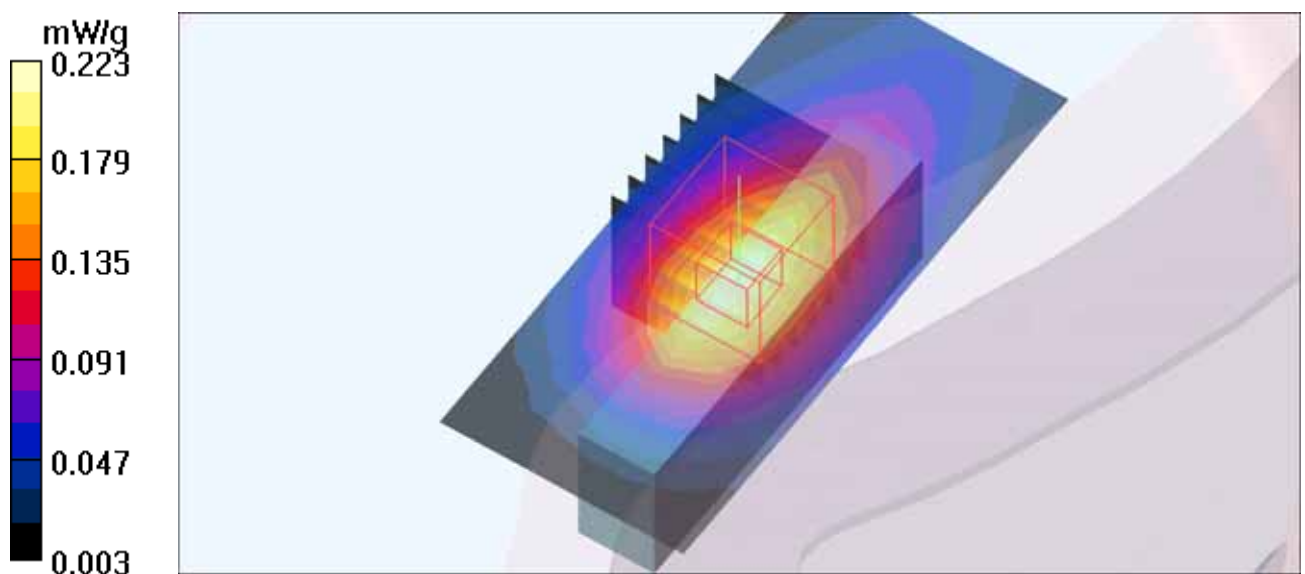Maximum value of SAR (measured) = 0.036 mW/g

**Body Position - Mid/Zoom Scan (7x7x7)/Cube 0:** Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 6.46 V/m; Power Drift = -0.135 dB
Peak SAR (extrapolated) = 0.046 W/kg
**SAR(1 g) = 0.025 mW/g; SAR(10 g) = 0.016 mW/g**
Maximum value of SAR (measured) = 0.035 mW/g

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## M19-GPRS850 TS3-Ch190

Communication System: GPRS850 ; Frequency: 836.6 MHz ; Duty Cycle: 1:2.67 ; Modulation Type: GMSK / UL 3 time slots
Medium: MSL835 Medium parameters used: f = 836.6 MHz; σ = 0.98 mho/m; εr = 55.84; ρ = 1000 kg/m$^3$
Phantom section: Flat Section ; Separation distance : 5 mm (The top side of the EUT to the Phantom)

DASY4 Configuration:

- Probe: EX3DV4 - SN3578; ConvF(8.55, 8.55, 8.55); Calibrated: 2010/6/22
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn579; Calibrated: 2010/9/20
- Phantom: SAM 12; Type: SAM V4.0;   Serial: TP 1202
- Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 186

**Body Position - Mid/Area Scan (7x8x1):** Measurement grid: dx=8mm, dy=8mm
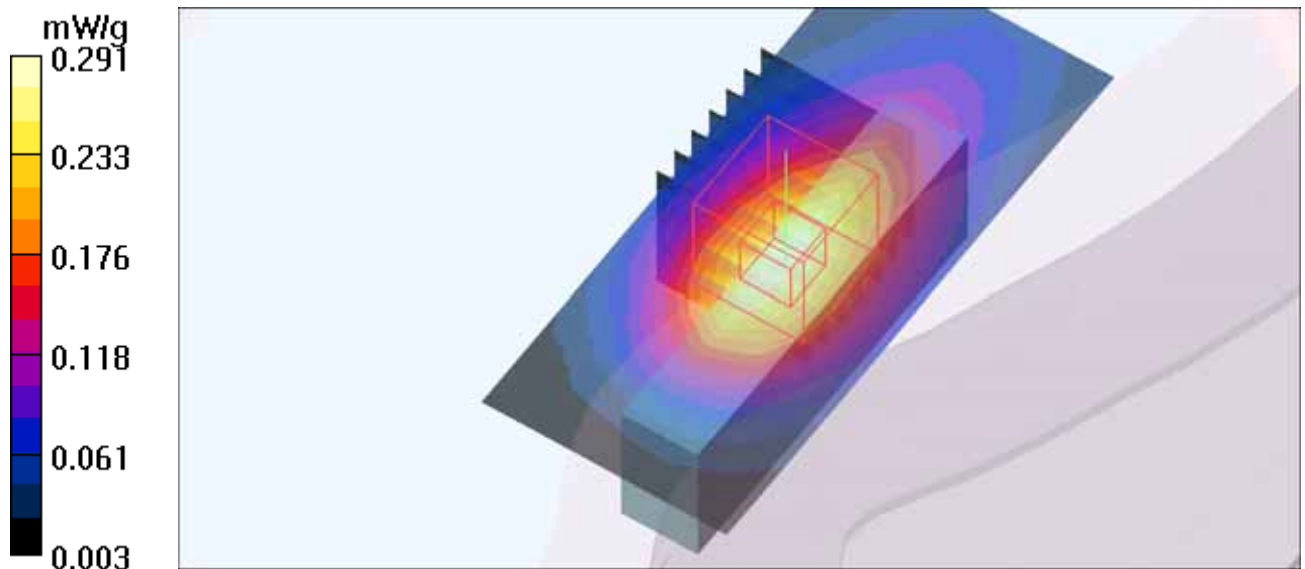Maximum value of SAR (measured) = 0.037 mW/g

**Body Position - Mid/Zoom Scan (7x7x7)/Cube 0:** Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 6.39 V/m; Power Drift = -0.121 dB
Peak SAR (extrapolated) = 0.044 W/kg
**SAR(1 g) = 0.024 mW/g; SAR(10 g) = 0.015 mW/g**
Maximum value of SAR (measured) = 0.033 mW/g

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## M20-GPRS850 TS4-Ch190

Communication System: GPRS850 ; Frequency: 836.6 MHz ; Duty Cycle: 1:2 ; Modulation Type: GMSK / UL 4 time slots
Medium: MSL835 Medium parameters used: f = 836.6 MHz; σ = 0.98 mho/m; εr = 55.84; ρ = 1000 kg/m$^3$
Phantom section: Flat Section ; Separation distance : 5 mm (The top side of the EUT to the Phantom)

DASY4 Configuration:

- Probe: EX3DV4 - SN3578; ConvF(8.55, 8.55, 8.55); Calibrated: 2010/6/22
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn579; Calibrated: 2010/9/20
- Phantom: SAM 12; Type: SAM V4.0;   Serial: TP 1202
- Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 186

**Body Position - Mid/Area Scan (7x8x1):** Measurement grid: dx=8mm, dy=8mm
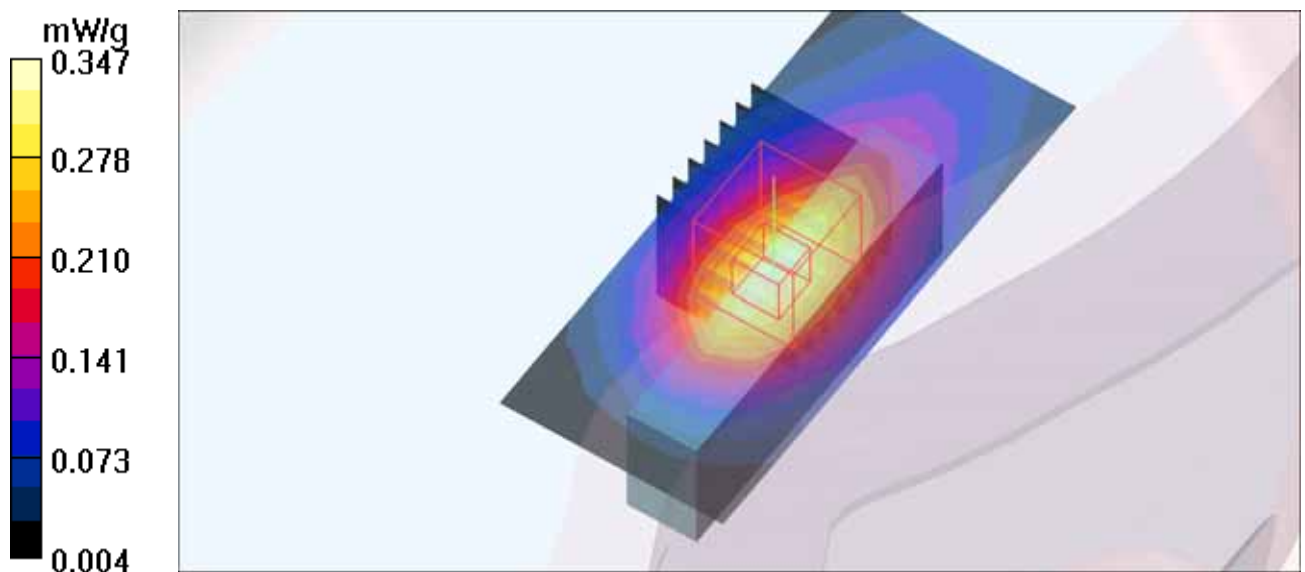Maximum value of SAR (measured) = 0.037 mW/g

**Body Position - Mid/Zoom Scan (7x7x7)/Cube 0:** Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 6.45 V/m; Power Drift = -0.149 dB
Peak SAR (extrapolated) = 0.050 W/kg
**SAR(1 g) = 0.026 mW/g; SAR(10 g) = 0.017 mW/g**
Maximum value of SAR (measured) = 0.036 mW/g

## M21-E-GPRS850 TS1-Ch190

Communication System: E-GPRS850 ; Frequency: 836.6 MHz ; Duty Cycle: 1:8.3 ; Modulation Type: 8PSK / UL 1 time slot
Medium: MSL835 Medium parameters used: f = 836.6 MHz; σ = 0.98 mho/m; εr = 55.84; ρ = 1000 kg/m$^3$
Phantom section: Flat Section ; Separation distance : 5 mm (The Horizontal-Down side of the EUT to the Phantom)

DASY4 Configuration:

- Probe: EX3DV4 - SN3578; ConvF(8.55, 8.55, 8.55); Calibrated: 2010/6/22
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn579; Calibrated: 2010/9/20
- Phantom: SAM 12; Type: SAM V4.0;   Serial: TP 1202
- Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 186

**Body Position - Mid/Area Scan (7x15x1):** Measurement grid: dx=8mm, dy=8mm
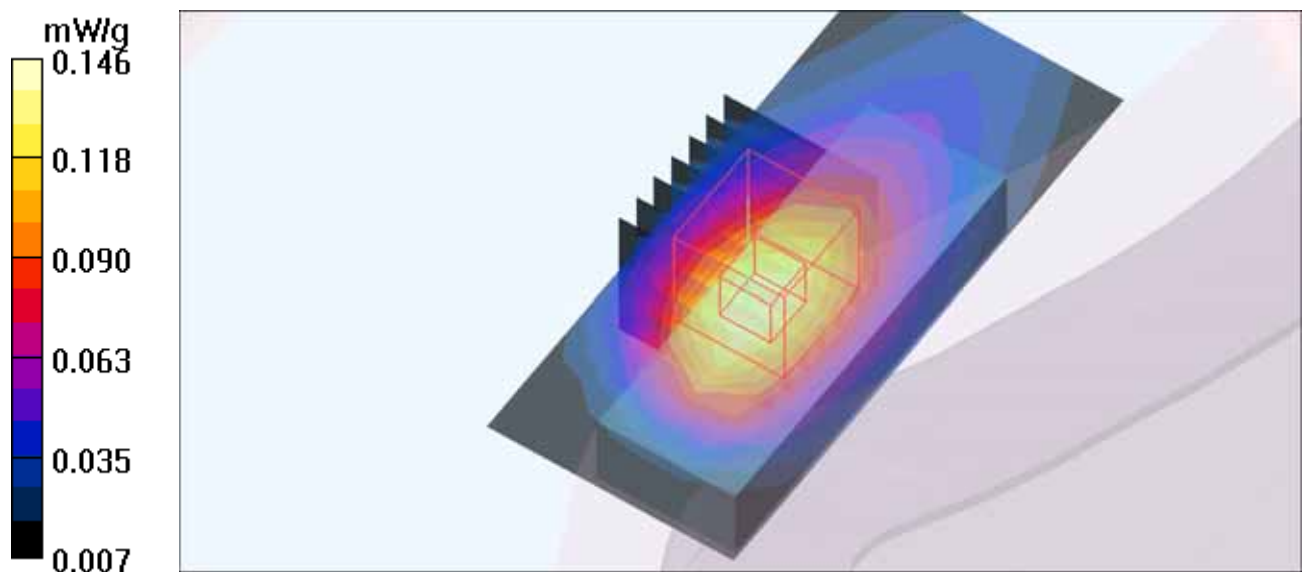Maximum value of SAR (measured) = 0.181 mW/g

**Body Position - Mid/Zoom Scan (7x7x7)/Cube 0:** Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 6.98 V/m; Power Drift = -0.171 dB
Peak SAR (extrapolated) = 0.217 W/kg
**SAR(1 g) = 0.143 mW/g; SAR(10 g) = 0.092 mW/g**
Maximum value of SAR (measured) = 0.183 mW/g

## M22-E-GPRS850 TS2-Ch190

Communication System: E-GPRS850 ; Frequency: 836.6 MHz ; Duty Cycle: 1:4 ; Modulation Type: 8PSK / UL 2 time slots
Medium: MSL835 Medium parameters used: f = 836.6 MHz; σ = 0.98 mho/m; εr = 55.84; ρ = 1000 kg/m$^3$
Phantom section: Flat Section ; Separation distance : 5 mm (The Horizontal-Down side of the EUT to the Phantom)

DASY4 Configuration:

- Probe: EX3DV4 - SN3578; ConvF(8.55, 8.55, 8.55); Calibrated: 2010/6/22
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn579; Calibrated: 2010/9/20
- Phantom: SAM 12; Type: SAM V4.0;  Serial: TP 1202
- Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 186

**Body Position - Mid/Area Scan (7x15x1):** Measurement grid: dx=8mm, dy=8mm
Maximum value of SAR (measured) = 0.320 mW/g

**Body Position - Mid/Zoom Scan (7x7x7)/Cube 0:** Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 7.00 V/m; Power Drift = -0.155 dB
Peak SAR (extrapolated) = 0.370 W/kg
**SAR(1 g) = 0.249 mW/g; SAR(10 g) = 0.160 mW/g**
Maximum value of SAR (measured) = 0.310 mW/g

## M23-E-GPRS850 TS3-Ch190

Communication System: E-GPRS850 ; Frequency: 836.6 MHz ; Duty Cycle: 1:2.67 ; Modulation Type: 8PSK / UL 3 time slots
Medium: MSL835 Medium parameters used: f = 836.6 MHz; σ = 0.98 mho/m; εr = 55.84; ρ = 1000 kg/m$^3$
Phantom section: Flat Section ; Separation distance : 5 mm (The Horizontal-Down side of the EUT to the Phantom)

DASY4 Configuration:

- Probe: EX3DV4 - SN3578; ConvF(8.55, 8.55, 8.55); Calibrated: 2010/6/22
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn579; Calibrated: 2010/9/20
- Phantom: SAM 12; Type: SAM V4.0;   Serial: TP 1202
- Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 186

**Body Position - Mid/Area Scan (7x15x1):** Measurement grid: dx=8mm, dy=8mm
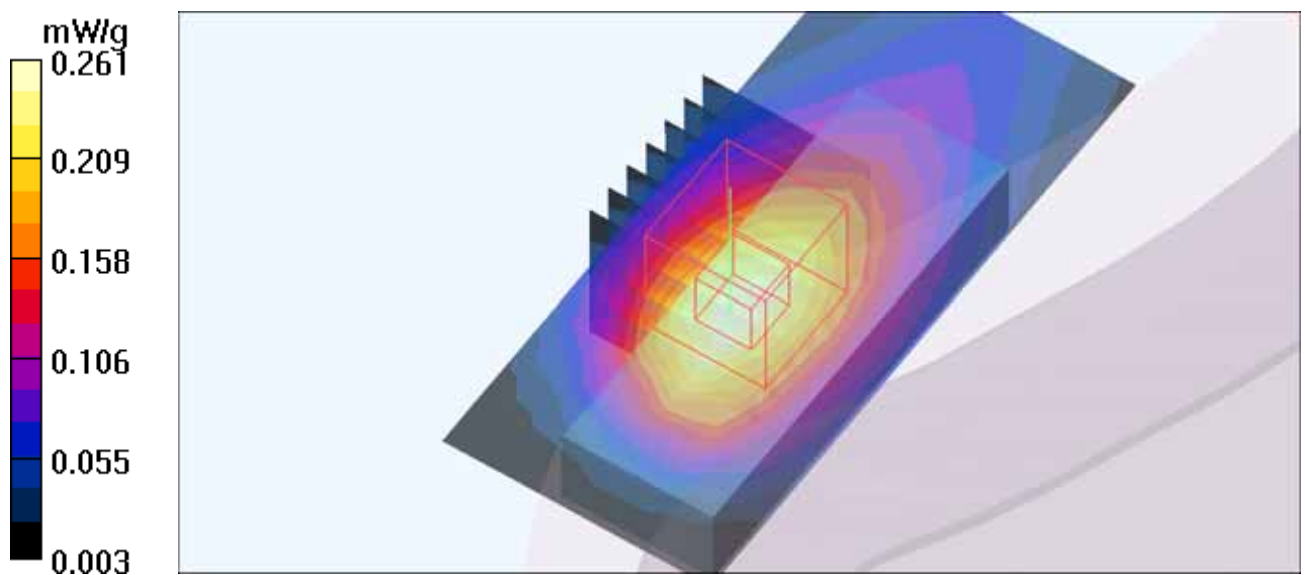Maximum value of SAR (measured) = 0.435 mW/g

**Body Position - Mid/Zoom Scan (7x7x7)/Cube 0:** Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 7.50 V/m; Power Drift = -0.117 dB
Peak SAR (extrapolated) = 0.486 W/kg
**SAR(1 g) = 0.321 mW/g; SAR(10 g) = 0.205 mW/g**
Maximum value of SAR (measured) = 0.406 mW/g

## M24-E-GPRS850 TS4-Ch190

Communication System: E-GPRS850 ; Frequency: 836.6 MHz ; Duty Cycle: 1:2 ; Modulation Type: 8PSK / UL 4 time slots
Medium: MSL835 Medium parameters used: f = 836.6 MHz; σ = 0.98 mho/m; εr = 55.84; ρ = 1000 kg/m$^3$
Phantom section: Flat Section ; Separation distance : 5 mm (The Horizontal-Down side of the EUT to the Phantom)

DASY4 Configuration:

- Probe: EX3DV4 - SN3578; ConvF(8.55, 8.55, 8.55); Calibrated: 2010/6/22
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn579; Calibrated: 2010/9/20
- Phantom: SAM 12; Type: SAM V4.0;   Serial: TP 1202
- Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 186

**Body Position - Mid/Area Scan (7x15x1):** Measurement grid: dx=8mm, dy=8mm
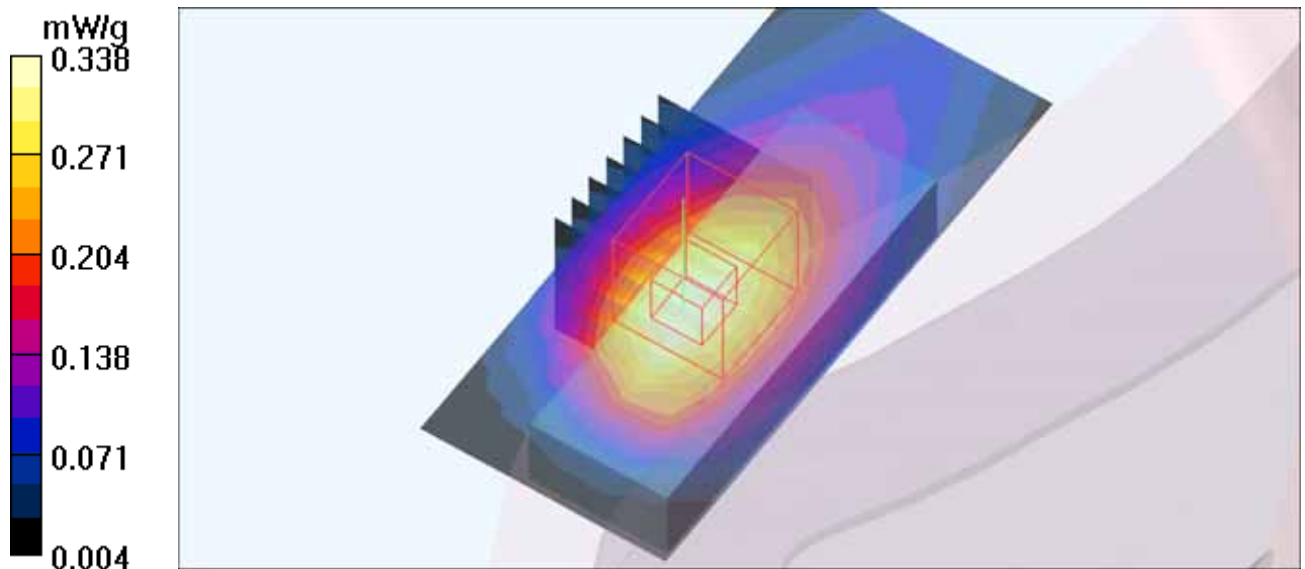Maximum value of SAR (measured) = 0.596 mW/g

**Body Position - Mid/Zoom Scan (7x7x7)/Cube 0:** Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 6.40 V/m; Power Drift = 0.119 dB
Peak SAR (extrapolated) = 0.660 W/kg
**SAR(1 g) = 0.435 mW/g; SAR(10 g) = 0.280 mW/g**
Maximum value of SAR (measured) = 0.549 mW/g

## M25-E-GPRS850 TS1-Ch190

Communication System: E-GPRS850 ; Frequency: 836.6 MHz ; Duty Cycle: 1:8.3 ; Modulation Type: 8PSK / UL 1 time slot
Medium: MSL835 Medium parameters used: f = 836.6 MHz; σ = 0.98 mho/m; εr = 55.84; ρ = 1000 kg/m$^3$
Phantom section: Flat Section ; Separation distance : 5 mm (The Vertical-Front side of the EUT to the Phantom)

DASY4 Configuration:

- Probe: EX3DV4 - SN3578; ConvF(8.55, 8.55, 8.55); Calibrated: 2010/6/22
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn579; Calibrated: 2010/9/20
- Phantom: SAM 12; Type: SAM V4.0;   Serial: TP 1202
- Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 186

**Body Position - Mid/Area Scan (7x15x1):** Measurement grid: dx=8mm, dy=8mm
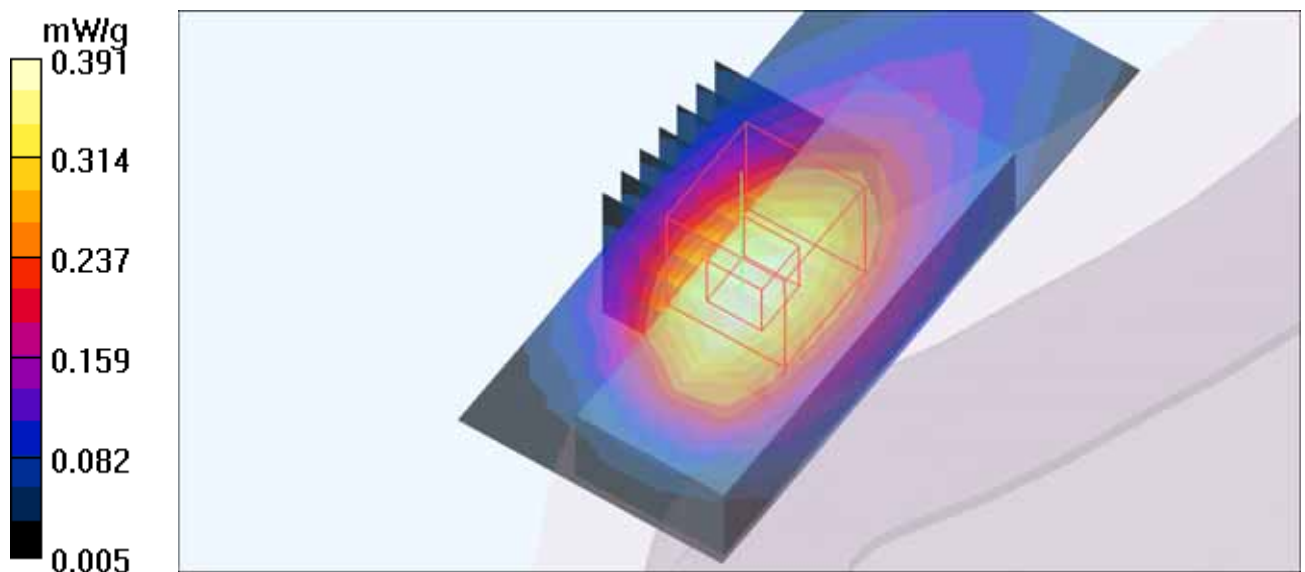Maximum value of SAR (measured) = 0.106 mW/g

**Body Position - Mid/Zoom Scan (7x7x7)/Cube 0:** Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 4.28 V/m; Power Drift = -0.165 dB
Peak SAR (extrapolated) = 0.152 W/kg
**SAR(1 g) = 0.093 mW/g; SAR(10 g) = 0.057 mW/g**
Maximum value of SAR (measured) = 0.123 mW/g

## M26-E-GPRS850 TS2-Ch190

Communication System: E-GPRS850 ; Frequency: 836.6 MHz ; Duty Cycle: 1:4 ; Modulation Type: 8PSK / UL 2 time slots
Medium: MSL835 Medium parameters used: f = 836.6 MHz; σ = 0.98 mho/m; εr = 55.84; ρ = 1000 kg/m$^3$
Phantom section: Flat Section ; Separation distance : 5 mm (The Vertical-Front side of the EUT to the Phantom)

DASY4 Configuration:

- Probe: EX3DV4 - SN3578; ConvF(8.55, 8.55, 8.55); Calibrated: 2010/6/22
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn579; Calibrated: 2010/9/20
- Phantom: SAM 12; Type: SAM V4.0;   Serial: TP 1202
- Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 186

**Body Position - Mid/Area Scan (7x15x1):** Measurement grid: dx=8mm, dy=8mm
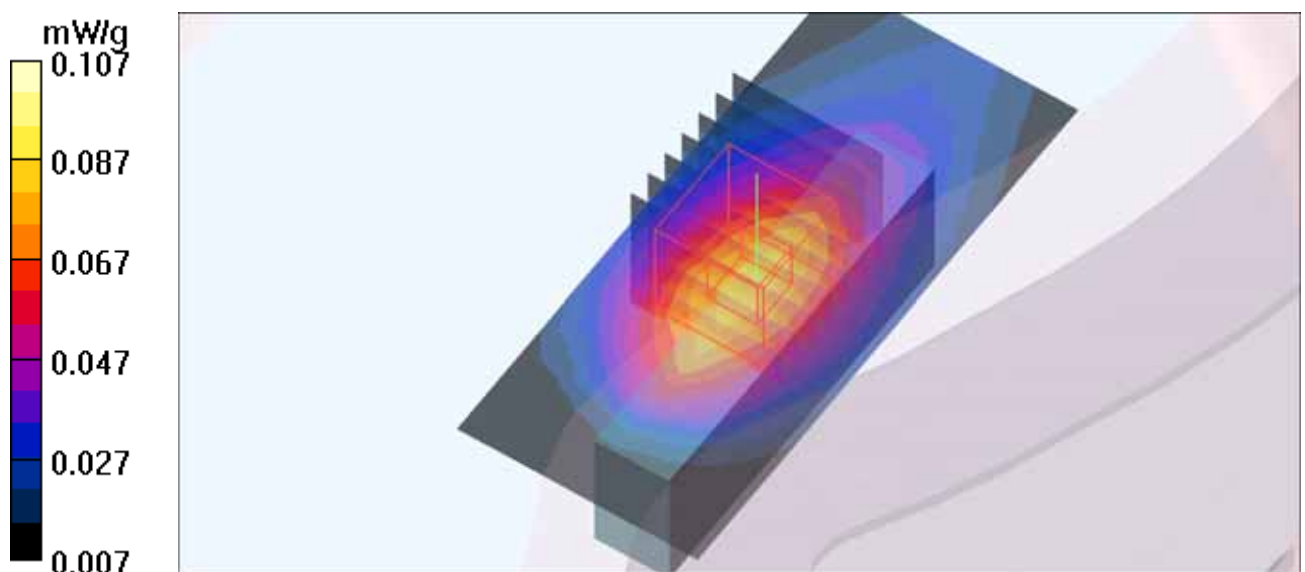Maximum value of SAR (measured) = 0.223 mW/g

**Body Position - Mid/Zoom Scan (7x7x7)/Cube 0:** Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 7.04 V/m; Power Drift = -0.134 dB
Peak SAR (extrapolated) = 0.267 W/kg
**SAR(1 g) = 0.165 mW/g; SAR(10 g) = 0.102 mW/g**
Maximum value of SAR (measured) = 0.218 mW/g

## M27-E-GPRS850 TS3-Ch190

Communication System: E-GPRS850 ; Frequency: 836.6 MHz ; Duty Cycle: 1:2.67 ; Modulation Type: 8PSK / UL 3 time slots
Medium: MSL835 Medium parameters used: f = 836.6 MHz; σ = 0.98 mho/m; εr = 55.84; ρ = 1000 kg/m$^3$
Phantom section: Flat Section ; Separation distance : 5 mm (The Vertical-Front side of the EUT to the Phantom)

DASY4 Configuration:

- Probe: EX3DV4 - SN3578; ConvF(8.55, 8.55, 8.55); Calibrated: 2010/6/22
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn579; Calibrated: 2010/9/20
- Phantom: SAM 12; Type: SAM V4.0;   Serial: TP 1202
- Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 186

**Body Position - Mid/Area Scan (7x15x1):** Measurement grid: dx=8mm, dy=8mm
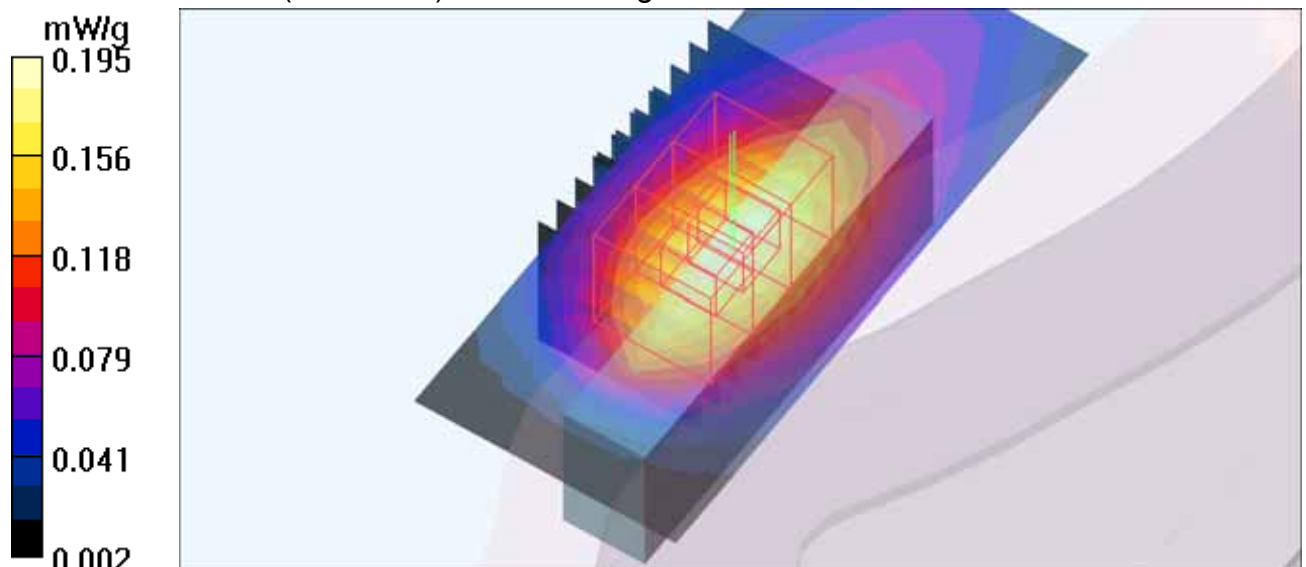Maximum value of SAR (measured) = 0.291 mW/g

**Body Position - Mid/Zoom Scan (7x7x7)/Cube 0:** Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 8.22 V/m; Power Drift = -0.145 dB
Peak SAR (extrapolated) = 0.349 W/kg
**SAR(1 g) = 0.216 mW/g; SAR(10 g) = 0.133 mW/g**
Maximum value of SAR (measured) = 0.285 mW/g

## M28-E-GPRS850 TS4-Ch190

Communication System: E-GPRS850 ; Frequency: 836.6 MHz ; Duty Cycle: 1:2 ; Modulation Type: 8PSK / UL 4 time slots
Medium: MSL835 Medium parameters used: f = 836.6 MHz; σ = 0.98 mho/m; εr = 55.84; ρ = 1000 kg/m$^3$
Phantom section: Flat Section ; Separation distance : 5 mm (The Vertical-Front side of the EUT to the Phantom)

DASY4 Configuration:

- Probe: EX3DV4 - SN3578; ConvF(8.55, 8.55, 8.55); Calibrated: 2010/6/22
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn579; Calibrated: 2010/9/20
- Phantom: SAM 12; Type: SAM V4.0;   Serial: TP 1202
- Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 186

**Body Position - Mid/Area Scan (7x15x1):** Measurement grid: dx=8mm, dy=8mm
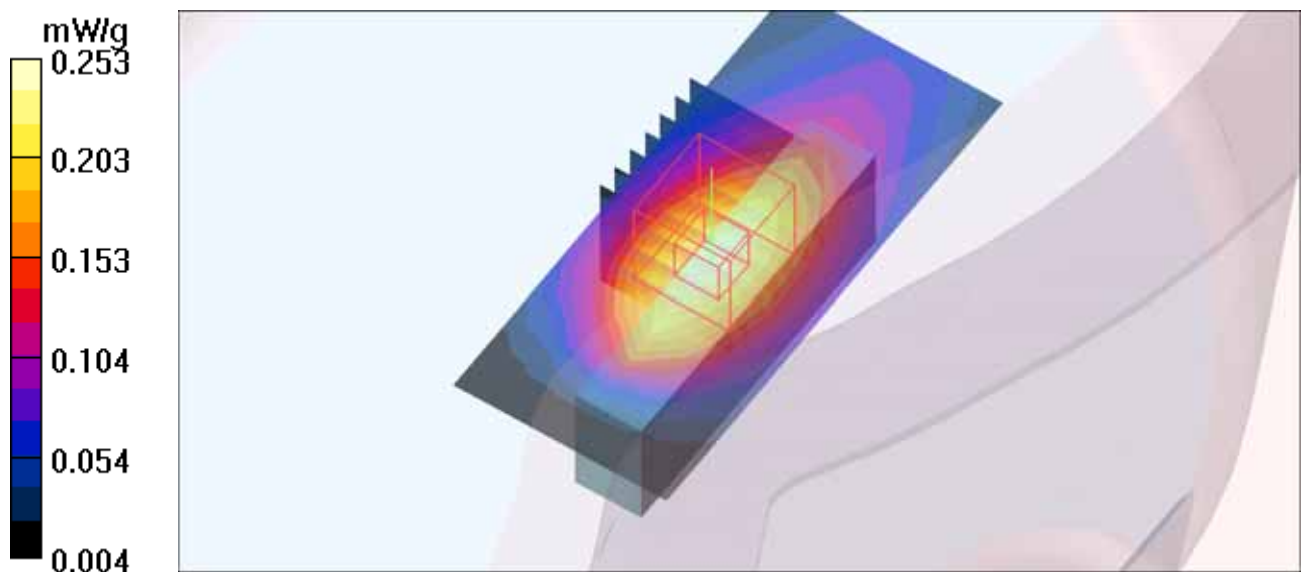Maximum value of SAR (measured) = 0.347 mW/g

**Body Position - Mid/Zoom Scan (7x7x7)/Cube 0:** Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 8.86 V/m; Power Drift = -0.178 dB
Peak SAR (extrapolated) = 0.420 W/kg
**SAR(1 g) = 0.259 mW/g; SAR(10 g) = 0.159 mW/g**
Maximum value of SAR (measured) = 0.341 mW/g

## M29-E-GPRS850 TS1-Ch190

Communication System: E-GPRS850 ; Frequency: 836.6 MHz ; Duty Cycle: 1:8.3 ; Modulation Type: 8PSK / UL 1 time slot
Medium: MSL835 Medium parameters used: f = 836.6 MHz; σ = 0.98 mho/m; εr = 55.84; ρ = 1000 kg/m$^3$
Phantom section: Flat Section ; Separation distance : 5 mm (The Horizontal-Up side of the EUT to the Phantom)

DASY4 Configuration:

- Probe: EX3DV4 - SN3578; ConvF(8.55, 8.55, 8.55); Calibrated: 2010/6/22
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn579; Calibrated: 2010/9/20
- Phantom: SAM 12; Type: SAM V4.0;   Serial: TP 1202
- Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 186

**Body Position - Mid/Area Scan (7x15x1):** Measurement grid: dx=8mm, dy=8mm
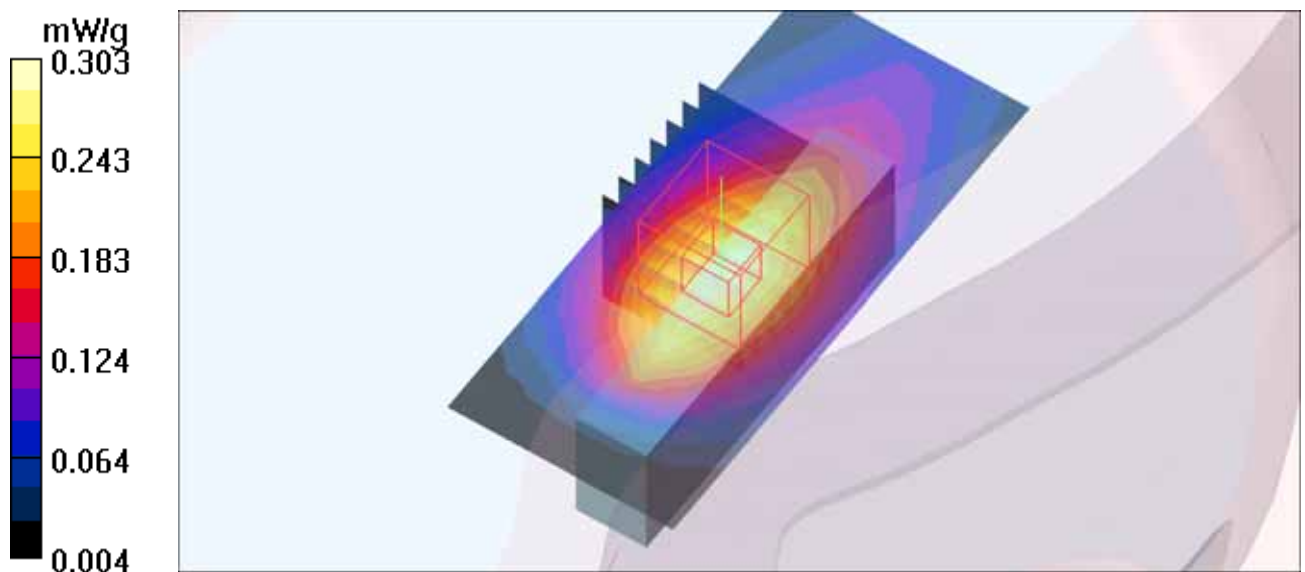Maximum value of SAR (measured) = 0.138 mW/g

**Body Position - Mid/Zoom Scan (7x7x7)/Cube 0:** Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 6.39 V/m; Power Drift = 0.182 dB
Peak SAR (extrapolated) = 0.178 W/kg
**SAR(1 g) = 0.113 mW/g; SAR(10 g) = 0.071 mW/g**
Maximum value of SAR (measured) = 0.146 mW/g

# M30-E-GPRS850 TS2-Ch190

Communication System: E-GPRS850 ; Frequency: 836.6 MHz ; Duty Cycle: 1:4 ; Modulation Type: 8PSK / UL 2 time slots
Medium: MSL835 Medium parameters used: f = 836.6 MHz; σ = 0.98 mho/m; εr = 55.84; ρ = 1000 kg/m$^3$
Phantom section: Flat Section ; Separation distance : 5 mm (The Horizontal-Up side of the EUT to the Phantom)

DASY4 Configuration:

- Probe: EX3DV4 - SN3578; ConvF(8.55, 8.55, 8.55); Calibrated: 2010/6/22
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn579; Calibrated: 2010/9/20
- Phantom: SAM 12; Type: SAM V4.0;   Serial: TP 1202
- Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 186

**Body Position - Mid/Area Scan (7x15x1):** Measurement grid: dx=8mm, dy=8mm
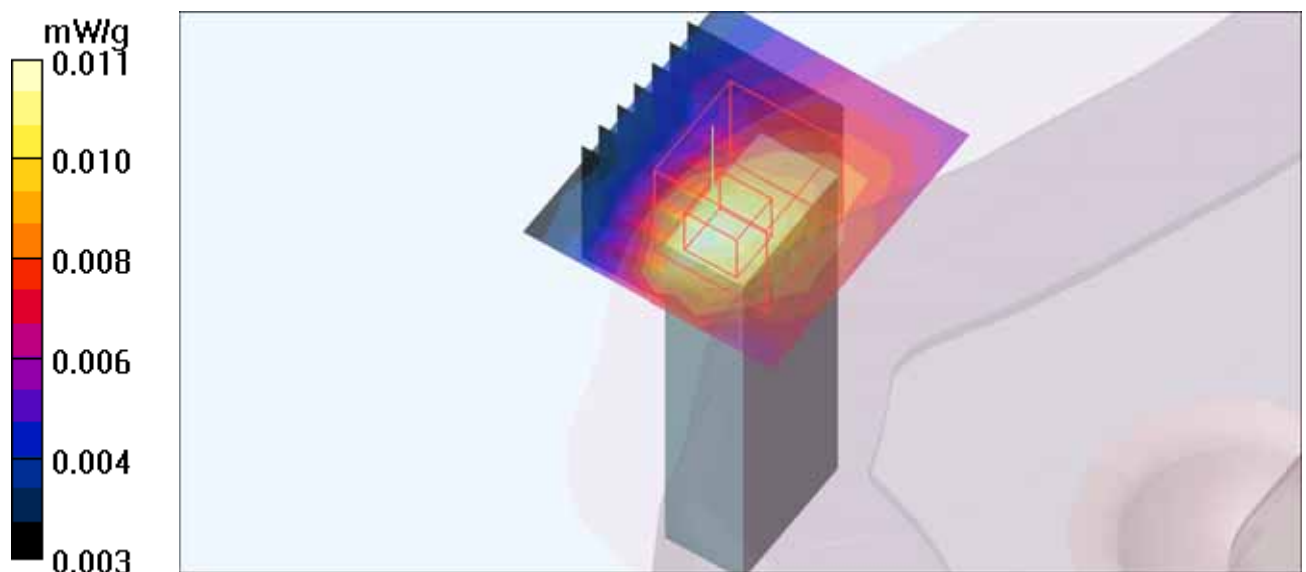Maximum value of SAR (measured) = 0.261 mW/g

**Body Position - Mid/Zoom Scan (7x7x7)/Cube 0:** Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 9.39 V/m; Power Drift = -0.107 dB
Peak SAR (extrapolated) = 0.310 W/kg
**SAR(1 g) = 0.198 mW/g; SAR(10 g) = 0.125 mW/g**
Maximum value of SAR (measured) = 0.257 mW/g

## M31-E-GPRS850 TS3-Ch190

Communication System: E-GPRS850 ; Frequency: 836.6 MHz ; Duty Cycle: 1:2.67 ; Modulation Type: 8PSK / UL 3 time slots
Medium: MSL835 Medium parameters used: f = 836.6 MHz; σ = 0.98 mho/m; εr = 55.84; ρ = 1000 kg/m$^3$
Phantom section: Flat Section ; Separation distance : 5 mm (The Horizontal-Up side of the EUT to the Phantom)

DASY4 Configuration:

- Probe: EX3DV4 - SN3578; ConvF(8.55, 8.55, 8.55); Calibrated: 2010/6/22
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn579; Calibrated: 2010/9/20
- Phantom: SAM 12; Type: SAM V4.0;   Serial: TP 1202
- Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 186

**Body Position - Mid/Area Scan (7x15x1):** Measurement grid: dx=8mm, dy=8mm
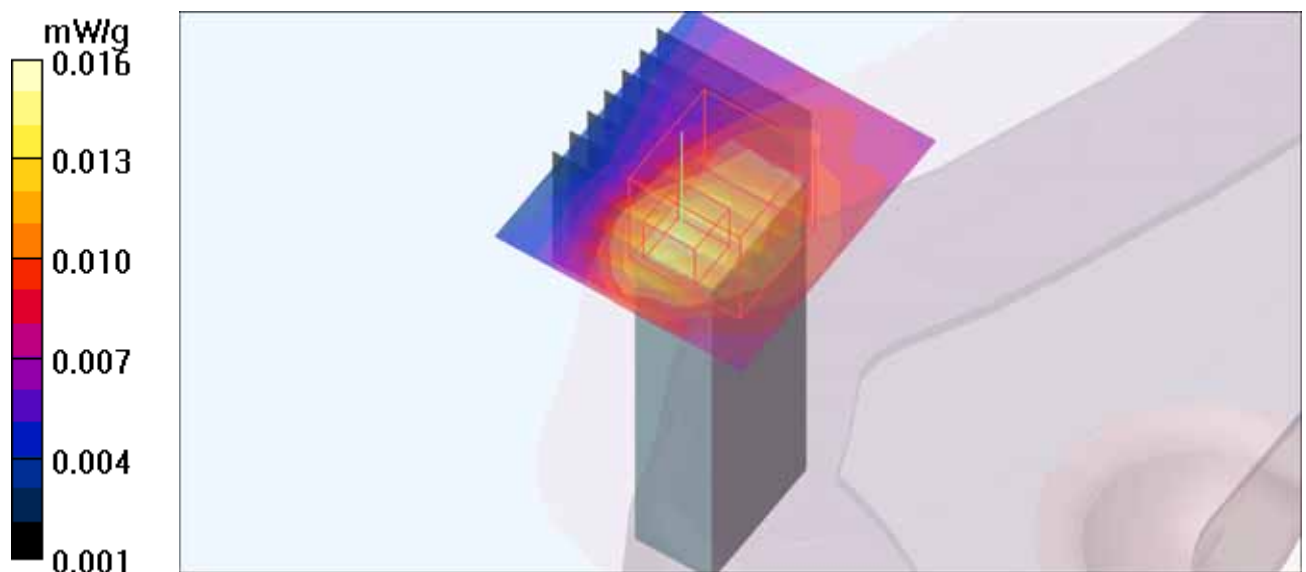Maximum value of SAR (measured) = 0.338 mW/g

**Body Position - Mid/Zoom Scan (7x7x7)/Cube 0:** Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 10.8 V/m; Power Drift = -0.106 dB
Peak SAR (extrapolated) = 0.400 W/kg
**SAR(1 g) = 0.257 mW/g; SAR(10 g) = 0.162 mW/g**
Maximum value of SAR (measured) = 0.332 mW/g

## M32-E-GPRS850 TS4-Ch190

Communication System: E-GPRS850 ; Frequency: 836.6 MHz ; Duty Cycle: 1:2 ; Modulation Type: 8PSK / UL 4 time slots
Medium: MSL835 Medium parameters used: f = 836.6 MHz; σ = 0.98 mho/m; εr = 55.84; ρ = 1000 kg/m$^3$
Phantom section: Flat Section ; Separation distance : 5 mm (The Horizontal-Up side of the EUT to the Phantom)

DASY4 Configuration:

- Probe: EX3DV4 - SN3578; ConvF(8.55, 8.55, 8.55); Calibrated: 2010/6/22
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn579; Calibrated: 2010/9/20
- Phantom: SAM 12; Type: SAM V4.0;   Serial: TP 1202
- Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 186

**Body Position - Mid/Area Scan (7x15x1):** Measurement grid: dx=8mm, dy=8mm
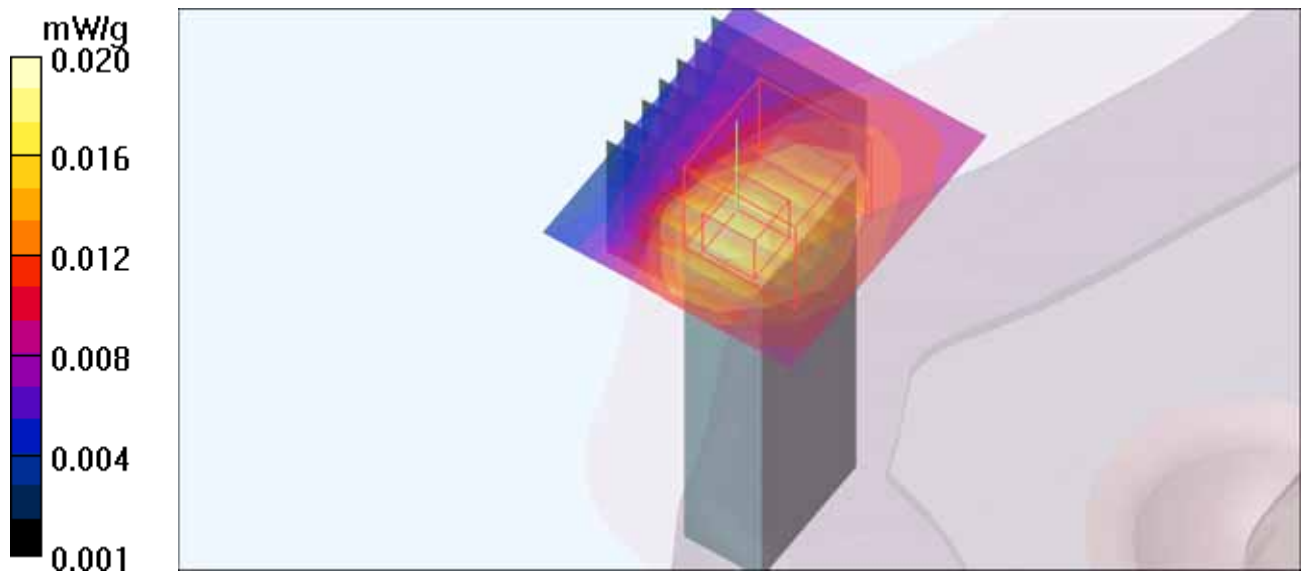Maximum value of SAR (measured) = 0.391 mW/g

**Body Position - Mid/Zoom Scan (7x7x7)/Cube 0:** Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 11.4 V/m; Power Drift = -0.183 dB
Peak SAR (extrapolated) = 0.468 W/kg
**SAR(1 g) = 0.301 mW/g; SAR(10 g) = 0.190 mW/g**
Maximum value of SAR (measured) = 0.389 mW/g

## M33-E-GPRS850 TS1-Ch190

Communication System: E-GPRS850 ; Frequency: 836.6 MHz ; Duty Cycle: 1:8.3 ; Modulation Type: 8PSK / UL 1 time slot
Medium: MSL835 Medium parameters used: f = 836.6 MHz; σ = 0.98 mho/m; εr = 55.84; ρ = 1000 kg/m$^3$
Phantom section: Flat Section ; Separation distance : 5 mm (The Vertical-Back side of the EUT to the Phantom)

DASY4 Configuration:

- Probe: EX3DV4 - SN3578; ConvF(8.55, 8.55, 8.55); Calibrated: 2010/6/22
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn579; Calibrated: 2010/9/20
- Phantom: SAM 12; Type: SAM V4.0;   Serial: TP 1202
- Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 186

**Body Position - Mid/Area Scan (7x15x1):** Measurement grid: dx=8mm, dy=8mm
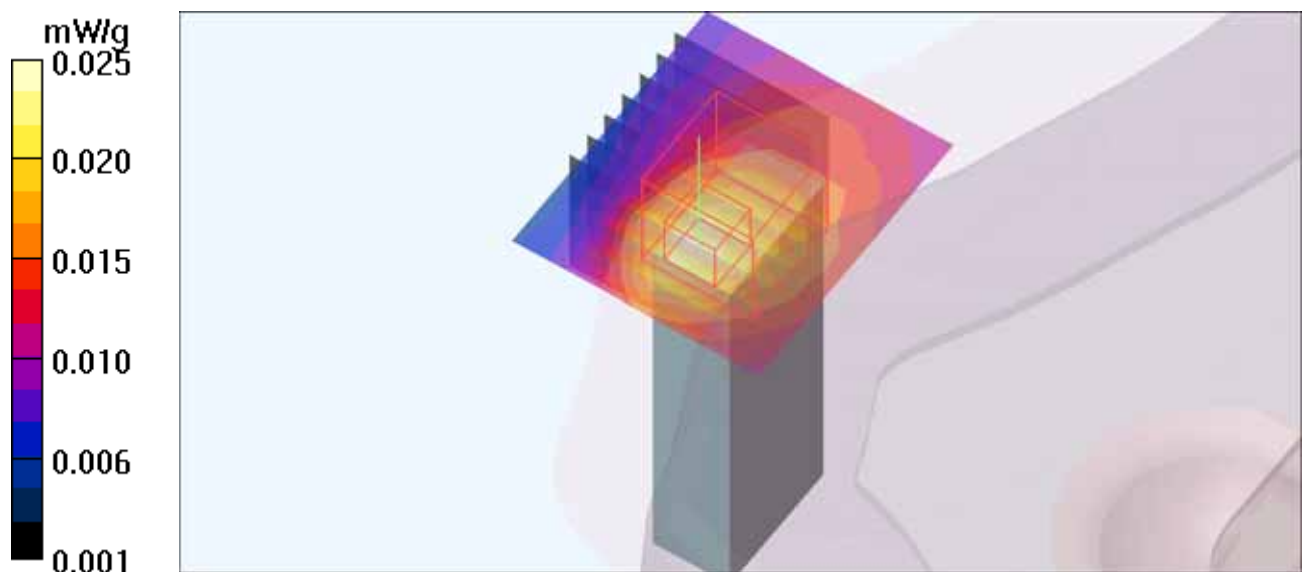Maximum value of SAR (measured) = 0.087 mW/g

**Body Position - Mid/Zoom Scan (7x7x7)/Cube 0:** Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 4.42 V/m; Power Drift = -0.164 dB
Peak SAR (extrapolated) = 0.127 W/kg
**SAR(1 g) = 0.083 mW/g; SAR(10 g) = 0.054 mW/g**
Maximum value of SAR (measured) = 0.107 mW/g

## M34-E-GPRS850 TS2-Ch190

Communication System: E-GPRS850 ; Frequency: 836.6 MHz ; Duty Cycle: 1:4 ; Modulation Type: 8PSK / UL 2 time slots

Medium: MSL835 Medium parameters used: f = 836.6 MHz; σ = 0.98 mho/m; εr = 55.84; ρ = 1000 kg/m$^3$

Phantom section: Flat Section ; Separation distance : 5 mm (The Vertical-Back side of the EUT to the Phantom)

DASY4 Configuration:

- Probe: EX3DV4 - SN3578; ConvF(8.55, 8.55, 8.55); Calibrated: 2010/6/22
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn579; Calibrated: 2010/9/20
- Phantom: SAM 12; Type: SAM V4.0;   Serial: TP 1202
- Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 186

**Body Position - Mid/Area Scan (7x15x1):** Measurement grid: dx=8mm, dy=8mm
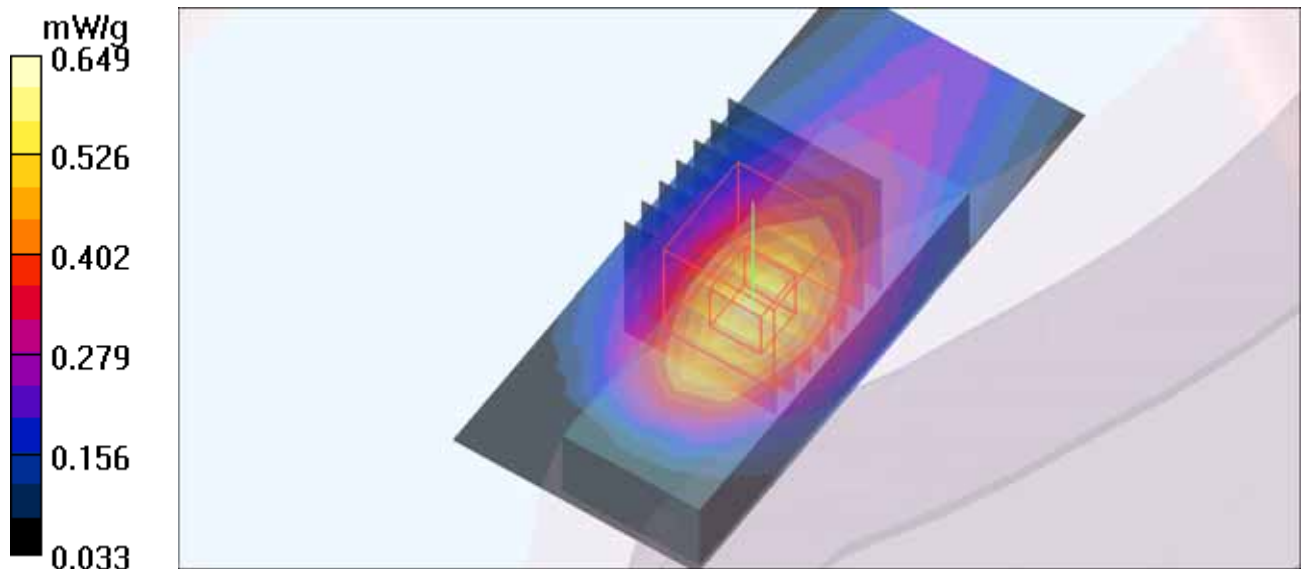Maximum value of SAR (measured) = 0.195 mW/g
**Body Position - Mid/Zoom Scan (7x7x7)/Cube 0:** Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 7.25 V/m; Power Drift = -0.135 dB
Peak SAR (extrapolated) = 0.226 W/kg
**SAR(1 g) = 0.148 mW/g; SAR(10 g) = 0.096 mW/g**
Maximum value of SAR (measured) = 0.188 mW/g
**Body Position - Mid/Zoom Scan (7x7x7)/Cube 1:** Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 7.25 V/m; Power Drift = -0.135 dB
Peak SAR (extrapolated) = 0.223 W/kg
**SAR(1 g) = 0.143 mW/g; SAR(10 g) = 0.086 mW/g**
Maximum value of SAR (measured) = 0.187 mW/g

Date/Time: 2011/1/12 17:36:01

## M35-E-GPRS850 TS3-Ch190

Communication System: E-GPRS850 ; Frequency: 836.6 MHz ; Duty Cycle: 1:2.67 ; Modulation Type: 8PSK / UL 3 time slots
Medium: MSL835 Medium parameters used: f = 836.6 MHz; σ = 0.98 mho/m; εr = 55.84; ρ = 1000 kg/m$^3$
Phantom section: Flat Section ; Separation distance : 5 mm (The Vertical-Back side of the EUT to the Phantom)

DASY4 Configuration:

- Probe: EX3DV4 - SN3578; ConvF(8.55, 8.55, 8.55); Calibrated: 2010/6/22
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn579; Calibrated: 2010/9/20
- Phantom: SAM 12; Type: SAM V4.0;   Serial: TP 1202
- Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 186

**Body Position - Mid/Area Scan (7x15x1):** Measurement grid: dx=8mm, dy=8mm
Maximum value of SAR (measured) = 0.253 mW/g

**Body Position - Mid/Zoom Scan (7x7x7)/Cube 0:** Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 8.44 V/m; Power Drift = -0.167 dB
Peak SAR (extrapolated) = 0.296 W/kg
**SAR(1 g) = 0.194 mW/g; SAR(10 g) = 0.125 mW/g**
Maximum value of SAR (measured) = 0.247 mW/g

## M36-E-GPRS850 TS4-Ch190

Communication System: E-GPRS850 ; Frequency: 836.6 MHz ; Duty Cycle: 1:2 ; Modulation Type: 8PSK / UL 4 time slots
Medium: MSL835 Medium parameters used: f = 836.6 MHz; σ = 0.98 mho/m; εr = 55.84; ρ = 1000 kg/m$^3$
Phantom section: Flat Section ; Separation distance : 5 mm (The Vertical-Back side of the EUT to the Phantom)

DASY4 Configuration:

- Probe: EX3DV4 - SN3578; ConvF(8.55, 8.55, 8.55); Calibrated: 2010/6/22
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn579; Calibrated: 2010/9/20
- Phantom: SAM 12; Type: SAM V4.0;   Serial: TP 1202
- Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 186

**Body Position - Mid/Area Scan (7x15x1):** Measurement grid: dx=8mm, dy=8mm
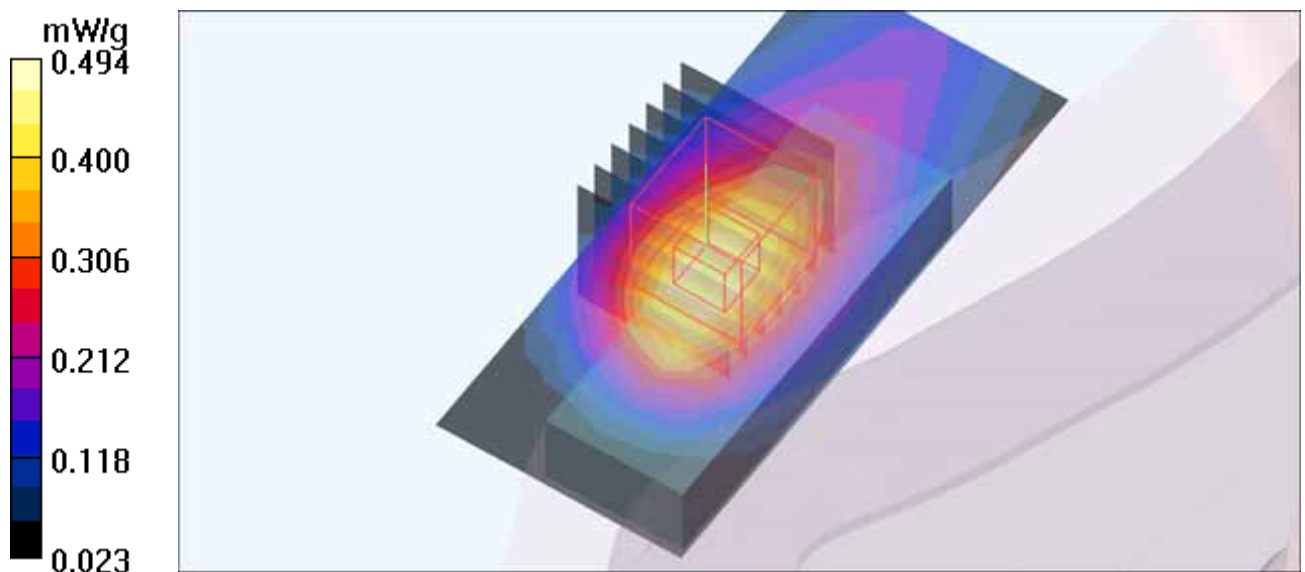Maximum value of SAR (measured) = 0.303 mW/g

**Body Position - Mid/Zoom Scan (7x7x7)/Cube 0:** Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 9.19 V/m; Power Drift = -0.123 dB
Peak SAR (extrapolated) = 0.352 W/kg
**SAR(1 g) = 0.230 mW/g; SAR(10 g) = 0.149 mW/g**
Maximum value of SAR (measured) = 0.293 mW/g

Date/Time: 2011/1/12 18:31:32

## M37-E-GPRS850 TS1-Ch190

Communication System: E-GPRS850 ; Frequency: 836.6 MHz ; Duty Cycle: 1:8.3 ; Modulation Type: 8PSK / UL 1 time slot
Medium: MSL835 Medium parameters used: f = 836.6 MHz; σ = 0.98 mho/m; εr = 55.84; ρ = 1000 kg/m$^3$
Phantom section: Flat Section ; Separation distance : 5 mm (The top side of the EUT to the Phantom)

DASY4 Configuration:

- Probe: EX3DV4 - SN3578; ConvF(8.55, 8.55, 8.55); Calibrated: 2010/6/22
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn579; Calibrated: 2010/9/20
- Phantom: SAM 12; Type: SAM V4.0;   Serial: TP 1202
- Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 186

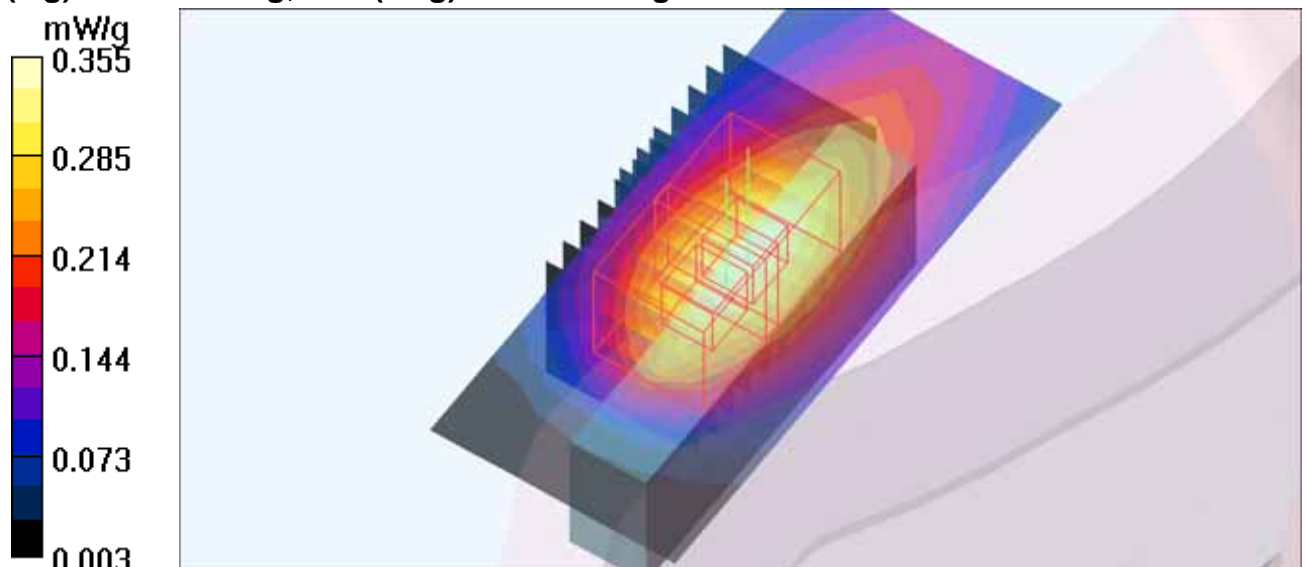**Body Position - Mid/Area Scan (7x8x1):** Measurement grid: dx=8mm, dy=8mm
Maximum value of SAR (measured) = 0.011 mW/g

**Body Position - Mid/Zoom Scan (7x7x7)/Cube 0:** Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 3.58 V/m; Power Drift = -0.133 dB
Peak SAR (extrapolated) = 0.013 W/kg
**SAR(1 g) = 0.00753 mW/g; SAR(10 g) = 0.00502 mW/g**
Maximum value of SAR (measured) = 0.010 mW/g

## M38-E-GPRS850 TS2-Ch190

Communication System: E-GPRS850 ; Frequency: 836.6 MHz ; Duty Cycle: 1:4 ; Modulation Type: 8PSK / UL 2 time slots
Medium: MSL835 Medium parameters used: f = 836.6 MHz; σ = 0.98 mho/m; εr = 55.84; ρ = 1000 kg/m$^3$
Phantom section: Flat Section ; Separation distance : 5 mm (The top side of the EUT to the Phantom)

DASY4 Configuration:

- Probe: EX3DV4 - SN3578; ConvF(8.55, 8.55, 8.55); Calibrated: 2010/6/22
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn579; Calibrated: 2010/9/20
- Phantom: SAM 12; Type: SAM V4.0;   Serial: TP 1202
- Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 186

**Body Position - Mid/Area Scan (7x8x1):** Measurement grid: dx=8mm, dy=8mm
Maximum value of SAR (measured) = 0.014 mW/g

**Body Position - Mid/Zoom Scan (7x7x7)/Cube 0:** Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 3.82 V/m; Power Drift = 0.188 dB
Peak SAR (extrapolated) = 0.022 W/kg
**SAR(1 g) = 0.012 mW/g; SAR(10 g) = 0.00749 mW/g**
Maximum value of SAR (measured) = 0.016 mW/g

## M39-E-GPRS850 TS3-Ch190

Communication System: E-GPRS850 ; Frequency: 836.6 MHz ; Duty Cycle: 1:2.67 ; Modulation Type: 8PSK / UL 3 time slots
Medium: MSL835 Medium parameters used: f = 836.6 MHz; σ = 0.98 mho/m; εr = 55.84; ρ = 1000 kg/m$^3$
Phantom section: Flat Section ; Separation distance : 5 mm (The top side of the EUT to the Phantom)

DASY4 Configuration:

- Probe: EX3DV4 - SN3578; ConvF(8.55, 8.55, 8.55); Calibrated: 2010/6/22
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn579; Calibrated: 2010/9/20
- Phantom: SAM 12; Type: SAM V4.0;   Serial: TP 1202
- Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 186

**Body Position - Mid/Area Scan (7x8x1):** Measurement grid: dx=8mm, dy=8mm
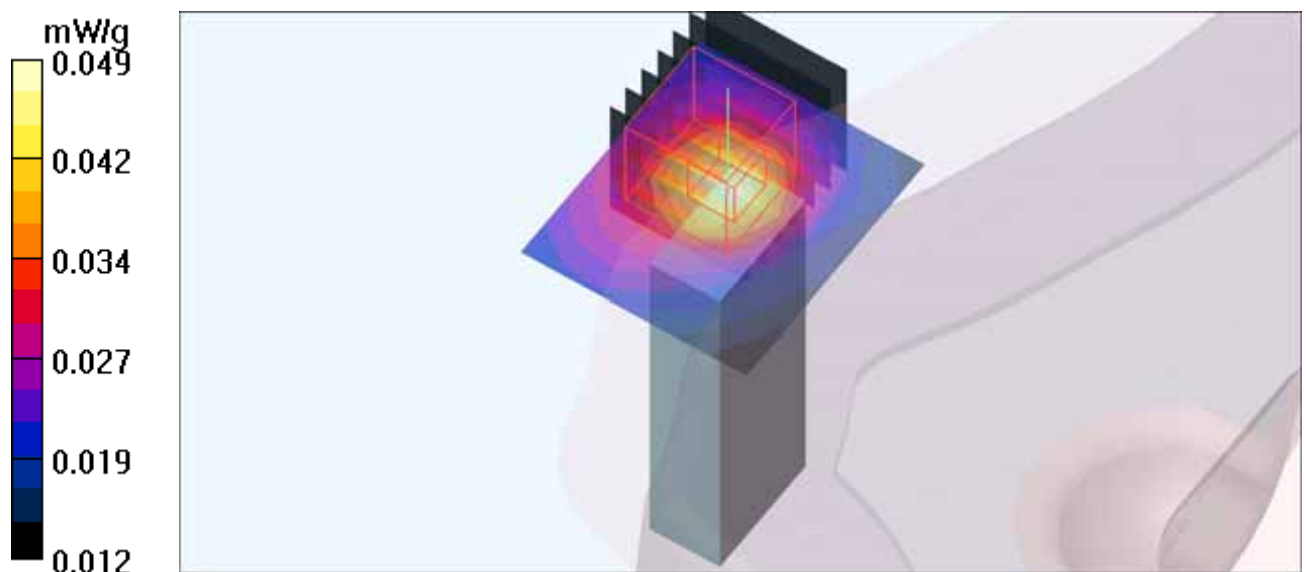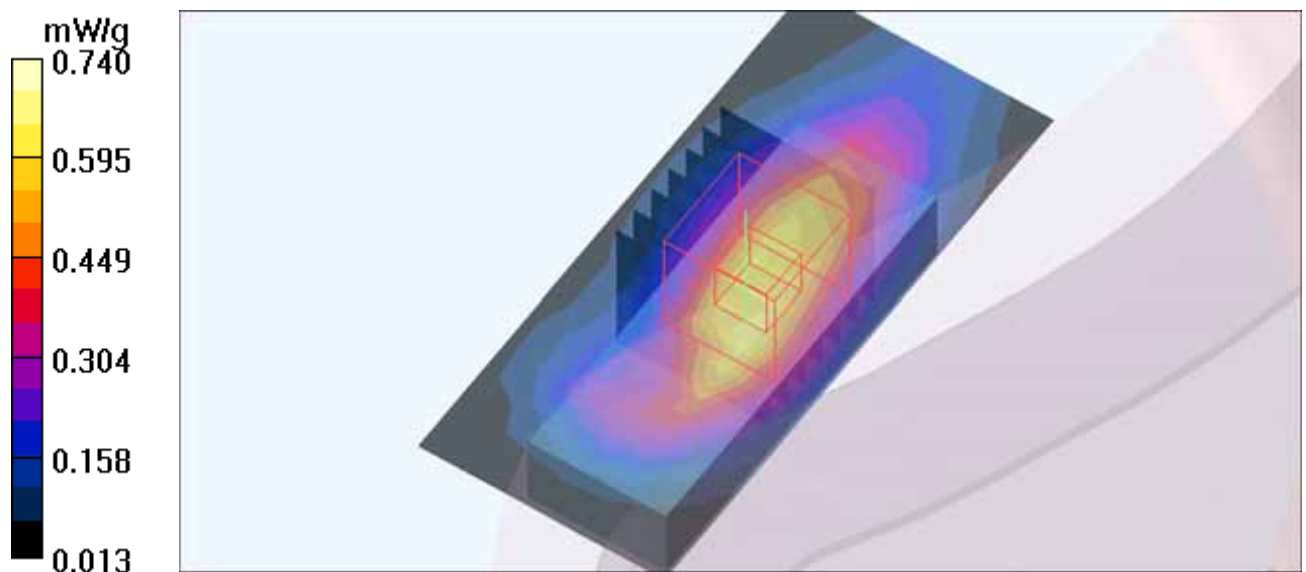Maximum value of SAR (measured) = 0.018 mW/g

**Body Position - Mid/Zoom Scan (7x7x7)/Cube 0:** Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 4.34 V/m; Power Drift = 0.174 dB
Peak SAR (extrapolated) = 0.027 W/kg
**SAR(1 g) = 0.015 mW/g; SAR(10 g) = 0.00932 mW/g**
Maximum value of SAR (measured) = 0.020 mW/g

## M40-E-GPRS850 TS4-Ch190

Communication System: E-GPRS850 ; Frequency: 836.6 MHz ; Duty Cycle: 1:2 ; Modulation Type: 8PSK / UL 4 time slots
Medium: MSL835 Medium parameters used: f = 836.6 MHz; σ = 0.98 mho/m; εr = 55.84; ρ = 1000 kg/m$^3$
Phantom section: Flat Section ; Separation distance : 5 mm (The top side of the EUT to the Phantom)

DASY4 Configuration:

- Probe: EX3DV4 - SN3578; ConvF(8.55, 8.55, 8.55); Calibrated: 2010/6/22
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn579; Calibrated: 2010/9/20
- Phantom: SAM 12; Type: SAM V4.0;   Serial: TP 1202
- Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 186

**Body Position - Mid/Area Scan (7x8x1):** Measurement grid: dx=8mm, dy=8mm
Maximum value of SAR (measured) = 0.023 mW/g

**Body Position - Mid/Zoom Scan (7x7x7)/Cube 0:** Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 4.93 V/m; Power Drift = 0.185 dB
Peak SAR (extrapolated) = 0.034 W/kg
**SAR(1 g) = 0.018 mW/g; SAR(10 g) = 0.011 mW/g**
Maximum value of SAR (measured) = 0.025 mW/g

## M41-WCDMA850-Ch4182

Communication System: WCDMA850 ; Frequency: 836.4 MHz ; Duty Cycle: 1:1 ; Modulation Type: BPSK

Medium: MSL835 Medium parameters used: f = 836.4 MHz; σ = 0.98 mho/m; εr = 55.84; ρ = 1000 kg/m$^3$

Phantom section: Flat Section ; Separation distance : 5 mm (The Horizontal-Down side of the EUT to the Phantom)

DASY4 Configuration:

- Probe: EX3DV4 - SN3578; ConvF(8.55, 8.55, 8.55); Calibrated: 2010/6/22
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn579; Calibrated: 2010/9/20
- Phantom: SAM 12; Type: SAM V4.0;   Serial: TP 1202
- Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 186

**Body Position - Mid/Area Scan (7x15x1):** Measurement grid: dx=8mm, dy=8mm
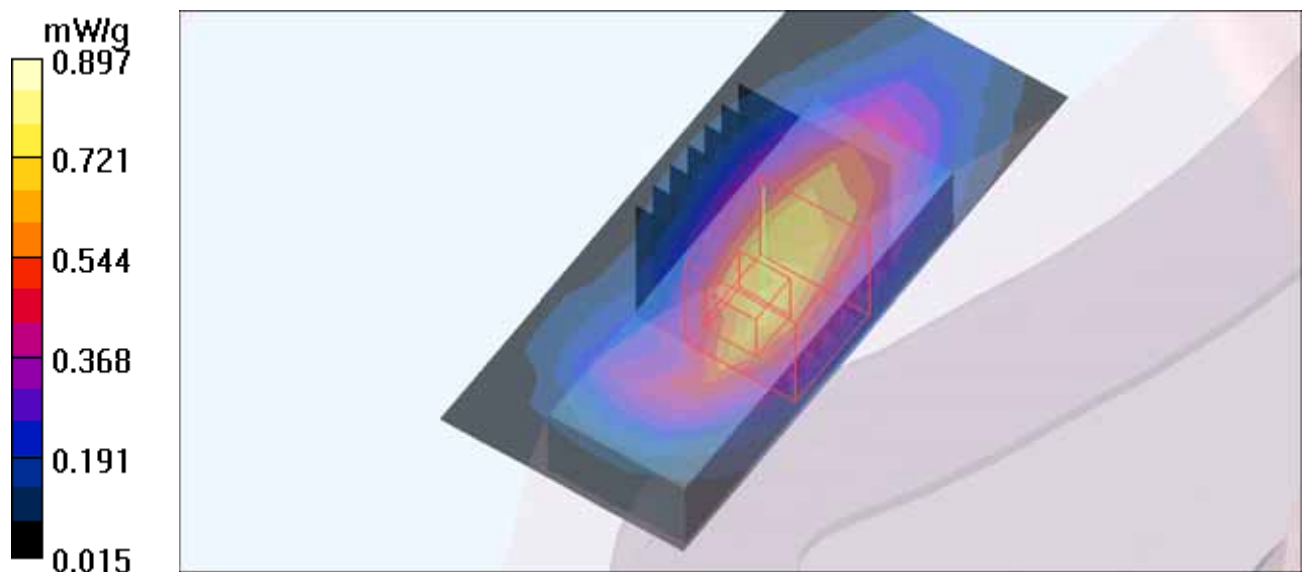Maximum value of SAR (measured) = 0.620 mW/g

**Body Position - Mid/Zoom Scan (7x7x7)/Cube 0:** Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 10.2 V/m; Power Drift = 0.140 dB
Peak SAR (extrapolated) = 0.771 W/kg
**SAR(1 g) = 0.500 mW/g; SAR(10 g) = 0.315 mW/g**
Maximum value of SAR (measured) = 0.649 mW/g

## M42-WCDMA850-Ch4182

Communication System: WCDMA850 ; Frequency: 836.4 MHz ; Duty Cycle: 1:1 ; Modulation Type: BPSK

Medium: MSL835 Medium parameters used: f = 836.4 MHz; σ = 0.98 mho/m; εr = 55.84; ρ = 1000 kg/m$^3$

Phantom section: Flat Section ; Separation distance : 5 mm (The Vertical-Front side of the EUT to the Phantom)

DASY4 Configuration:

- Probe: EX3DV4 - SN3578; ConvF(8.55, 8.55, 8.55); Calibrated: 2010/6/22
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn579; Calibrated: 2010/9/20
- Phantom: SAM 12; Type: SAM V4.0;   Serial: TP 1202
- Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 186

**Body Position - Mid/Area Scan (7x15x1):** Measurement grid: dx=8mm, dy=8mm
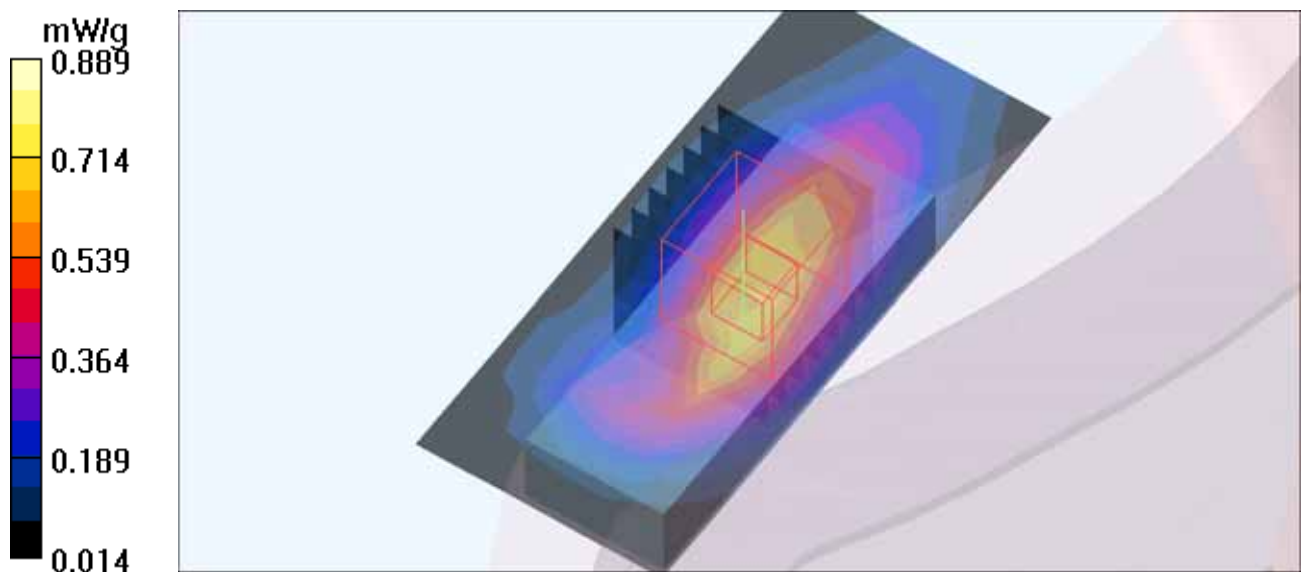Maximum value of SAR (measured) = 0.369 mW/g

**Body Position - Mid/Zoom Scan (7x7x7)/Cube 0:** Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 9.43 V/m; Power Drift = 0.173 dB
Peak SAR (extrapolated) = 0.456 W/kg
**SAR(1 g) = 0.279 mW/g; SAR(10 g) = 0.169 mW/g**
Maximum value of SAR (measured) = 0.371 mW/g

Date/Time: 2011/1/12 20:17:16
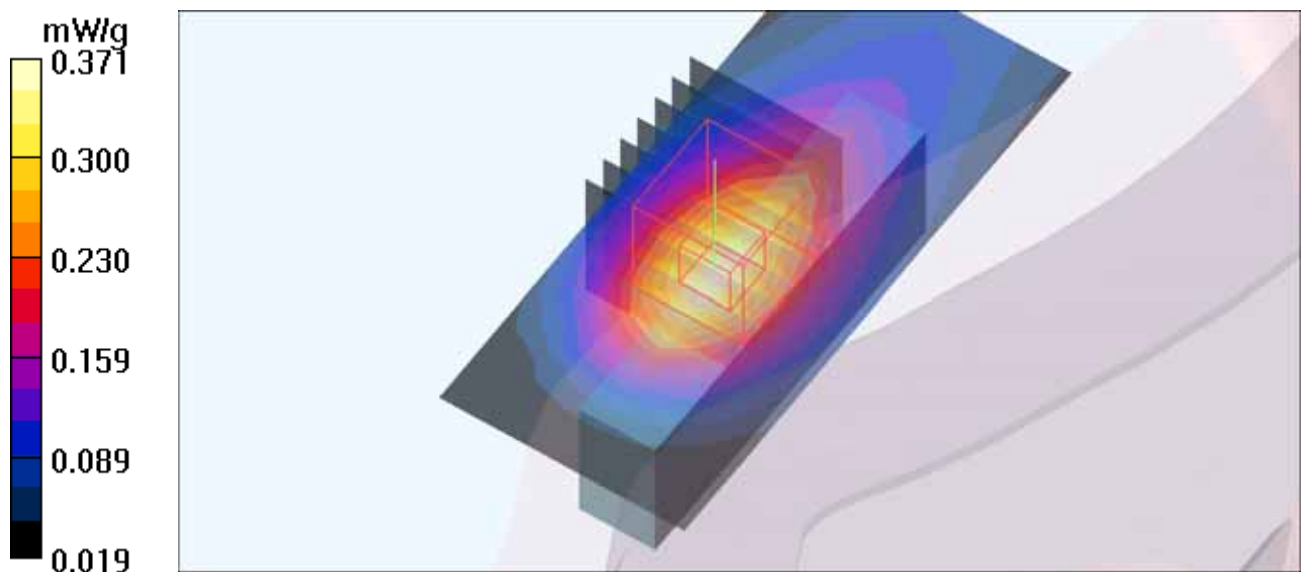
## M43-WCDMA850-Ch4182

Communication System: WCDMA850 ; Frequency: 836.4 MHz ; Duty Cycle: 1:1 ; Modulation Type: BPSK

Medium: MSL835 Medium parameters used: f = 836.4MHz; $\sigma$ = 0.98 mho/m; $\varepsilon r$ = 55.84; $\rho$ = 1000 kg/m$^3$

Phantom section: Flat Section ; Separation distance : 5 mm (The Horizontal-Up side of the EUT to the Phantom)

DASY4 Configuration:

- Probe: EX3DV4 - SN3578; ConvF(8.55, 8.55, 8.55); Calibrated: 2010/6/22
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn579; Calibrated: 2010/9/20
- Phantom: SAM 12; Type: SAM V4.0;   Serial: TP 1202
- Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 186

**Body Position - Mid/Area Scan (7x15x1):** Measurement grid: dx=8mm, dy=8mm
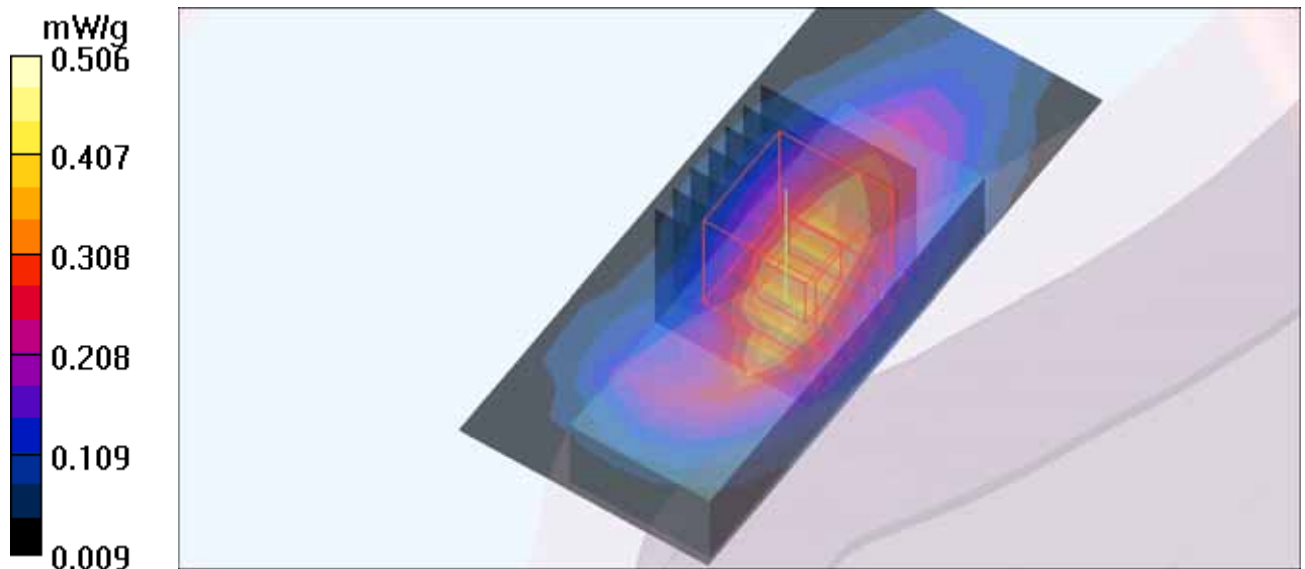Maximum value of SAR (measured) = 0.464 mW/g

**Body Position - Mid/Zoom Scan (7x7x7)/Cube 0:** Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 8.50 V/m; Power Drift = 0.105 dB
Peak SAR (extrapolated) = 0.600 W/kg
**SAR(1 g) = 0.380 mW/g; SAR(10 g) = 0.238 mW/g**
Maximum value of SAR (measured) = 0.494 mW/g



44

## M44-WCDMA850-Ch4182

Communication System: WCDMA850 ; Frequency: 836.4 MHz ; Duty Cycle: 1:1 ; Modulation Type: BPSK

Medium: MSL835 Medium parameters used: f = 836.4 MHz; σ = 0.98 mho/m; εr = 55.84; ρ = 1000 kg/m$^3$

Phantom section: Flat Section ; Separation distance : 5 mm (The Vertical-Back side of the EUT to the Phantom)

DASY4 Configuration:

- Probe: EX3DV4 - SN3578; ConvF(8.55, 8.55, 8.55); Calibrated: 2010/6/22
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn579; Calibrated: 2010/9/20
- Phantom: SAM 12; Type: SAM V4.0;   Serial: TP 1202
- Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 186

**Body Position - Mid/Area Scan (7x15x1):** Measurement grid: dx=8mm, dy=8mm
Maximum value of SAR (measured) = 0.355 mW/g
**Body Position - Mid/Zoom Scan (7x7x7)/Cube 0:** Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 7.32 V/m; Power Drift = -0.014 dB
Peak SAR (extrapolated) = 0.418 W/kg
**SAR(1 g) = 0.280 mW/g; SAR(10 g) = 0.184 mW/g**
Maximum value of SAR (measured) = 0.353 mW/g
**Body Position - Mid/Zoom Scan (7x7x7)/Cube 1:** Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 7.32 V/m; Power Drift = -0.014 dB
Peak SAR (extrapolated) = 0.422 W/kg
**SAR(1 g) = 0.262 mW/g; SAR(10 g) = 0.153 mW/g**

## M45-WCDMA850-Ch4182

Communication System: WCDMA850 ; Frequency: 836.4 MHz ; Duty Cycle: 1:1 ; Modulation Type: BPSK

Medium: MSL835 Medium parameters used: f = 836.4 MHz; σ = 0.98 mho/m; εr = 55.84; ρ = 1000 kg/m$^3$

Phantom section: Flat Section ; Separation distance : 5 mm (The top side of the EUT to the Phantom)

DASY4 Configuration:

- Probe: EX3DV4 - SN3578; ConvF(8.55, 8.55, 8.55); Calibrated: 2010/6/22
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn579; Calibrated: 2010/9/20
- Phantom: SAM 12; Type: SAM V4.0;  Serial: TP 1202
- Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 186

**Body Position - Mid/Area Scan (7x8x1):** Measurement grid: dx=8mm, dy=8mm
Maximum value of SAR (measured) = 0.049 mW/g

**Body Position - Mid/Zoom Scan (7x7x7)/Cube 0:** Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 5.37 V/m; Power Drift = 0.135 dB
Peak SAR (extrapolated) = 0.066 W/kg
**SAR(1 g) = 0.033 mW/g; SAR(10 g) = 0.020 mW/g**
Maximum value of SAR (measured) = 0.048 mW/g

## M46-GPRS1900 TS1-Ch661

Communication System: GPRS1900 ; Frequency: 1880 MHz ; Duty Cycle: 1:8.3 ; Modulation Type: GMSK / UL 1 time slot
Medium: MSL1900 Medium parameters used: f = 1880 MHz; $\sigma$ = 1.54 mho/m; $\varepsilon r$ = 54.64; $\rho$ = 1000 kg/m$^3$
Phantom section: Flat Section ; Separation Distance : 5 mm (The Horizontal-Down side of the EUT to the Phantom)

DASY4 Configuration:

- Probe: EX3DV4 - SN3578; ConvF(6.7, 6.7, 6.7); Calibrated: 2010/6/22
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn579; Calibrated: 2010/9/20
- Phantom: SAM 12; Type: SAM V4.0;   Serial: TP 1202
- Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 186

**Body Position - Mid/Area Scan (7x15x1):** Measurement grid: dx=8mm, dy=8mm
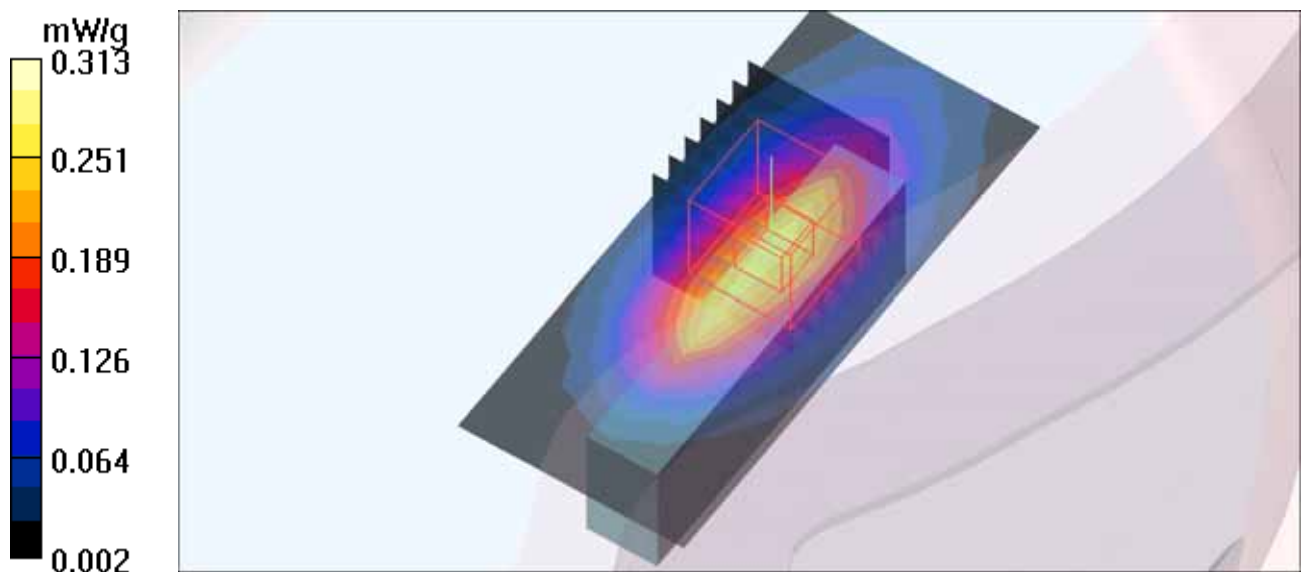Maximum value of SAR (measured) = 0.740 mW/g

**Body Position - Mid/Zoom Scan (7x7x7)/Cube 0:** Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 12.3 V/m; Power Drift = -0.146 dB
Peak SAR (extrapolated) = 0.926 W/kg
**SAR(1 g) = 0.514 mW/g; SAR(10 g) = 0.283 mW/g**
Maximum value of SAR (measured) = 0.708 mW/g

## M47-GPRS1900 TS2-Ch661

Communication System: GPRS1900 ; Frequency: 1880 MHz ; Duty Cycle: 1:4 ; Modulation Type: GMSK / UL 2 time slots
Medium: MSL1900 Medium parameters used: f = 1880 MHz; σ = 1.54 mho/m; εr = 54.64; ρ = 1000 kg/m$^3$
Phantom section: Flat Section ; Separation Distance : 5 mm (The Horizontal-Down side of the EUT to the Phantom)

DASY4 Configuration:

- Probe: EX3DV4 - SN3578; ConvF(6.7, 6.7, 6.7); Calibrated: 2010/6/22
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn579; Calibrated: 2010/9/20
- Phantom: SAM 12; Type: SAM V4.0;   Serial: TP 1202
- Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 186

**Body Position - Mid/Area Scan (7x15x1):** Measurement grid: dx=8mm, dy=8mm
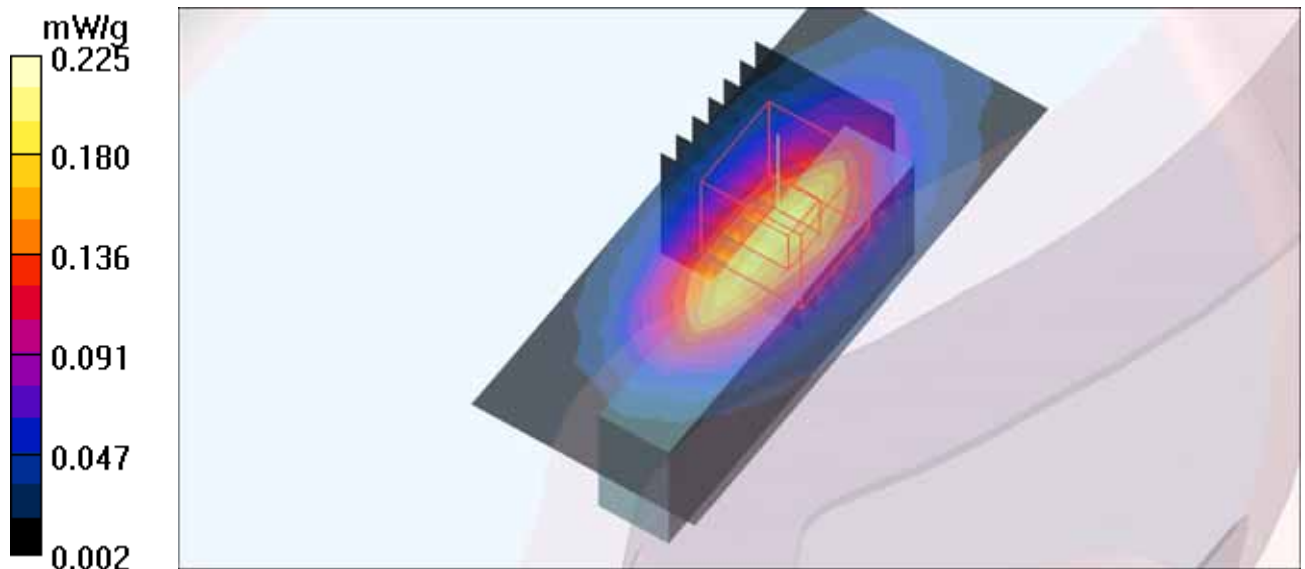Maximum value of SAR (measured) = 0.897 mW/g

**Body Position - Mid/Zoom Scan (7x7x7)/Cube 0:** Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 14.6 V/m; Power Drift = -0.103 dB
Peak SAR (extrapolated) = 1.65 W/kg
**SAR(1 g) = 0.610 mW/g; SAR(10 g) = 0.248 mW/g.**
Maximum value of SAR (measured) = 0.759 mW/g

## M48-GPRS1900 TS3-Ch661

Communication System: GPRS1900 ; Frequency: 1880 MHz ; Duty Cycle: 1:2.67 ; Modulation Type: GMSK / UL 3 time slots
Medium: MSL1900 Medium parameters used: f = 1880 MHz; σ = 1.54 mho/m; εr = 54.64; ρ = 1000 kg/m$^3$
Phantom section: Flat Section ; Separation Distance : 5 mm (The Horizontal-Down side of the EUT to the Phantom)

DASY4 Configuration:

- Probe: EX3DV4 - SN3578; ConvF(6.7, 6.7, 6.7); Calibrated: 2010/6/22
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn579; Calibrated: 2010/9/20
- Phantom: SAM 12; Type: SAM V4.0;   Serial: TP 1202
- Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 186

**Body Position - Mid/Area Scan (7x15x1):** Measurement grid: dx=8mm, dy=8mm
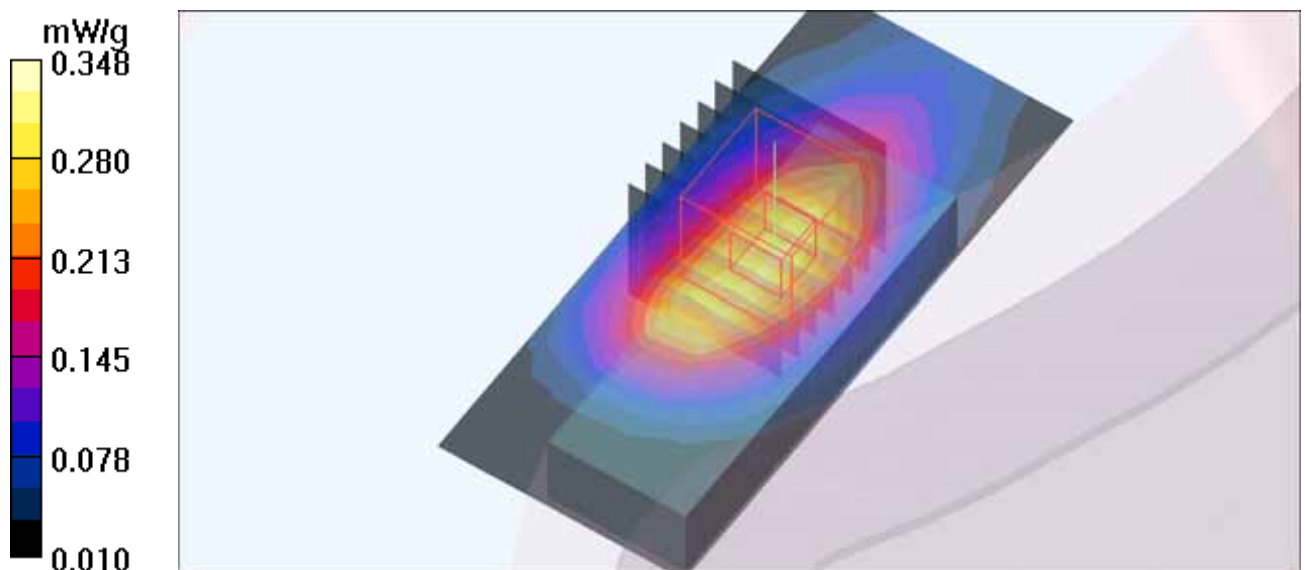Maximum value of SAR (measured) = 0.889 mW/g

**Body Position - Mid/Zoom Scan (7x7x7)/Cube 0:** Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 14.6 V/m; Power Drift = -0.174 dB
Peak SAR (extrapolated) = 0.994 W/kg
**SAR(1 g) = 0.543 mW/g; SAR(10 g) = 0.299 mW/g**
Maximum value of SAR (measured) = 0.759 mW/g

## M49-GPRS1900 TS4-Ch661

Communication System: GPRS1900 ; Frequency: 1880 MHz ; Duty Cycle: 1:2 ; Modulation Type: GMSK / UL 4 time slots
Medium: MSL1900 Medium parameters used: f = 1880 MHz; σ = 1.54 mho/m; εr = 54.64; ρ = 1000 kg/m$^3$
Phantom section: Flat Section ; Separation Distance : 5 mm (The Horizontal-Down side of the EUT to the Phantom)

DASY4 Configuration:

- Probe: EX3DV4 - SN3578; ConvF(6.7, 6.7, 6.7); Calibrated: 2010/6/22
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn579; Calibrated: 2010/9/20
- Phantom: SAM 12; Type: SAM V4.0;   Serial: TP 1202
- Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 186

**Body Position - Mid/Area Scan (7x15x1):** Measurement grid: dx=8mm, dy=8mm
Maximum value of SAR (measured) = 0.492 mW/g
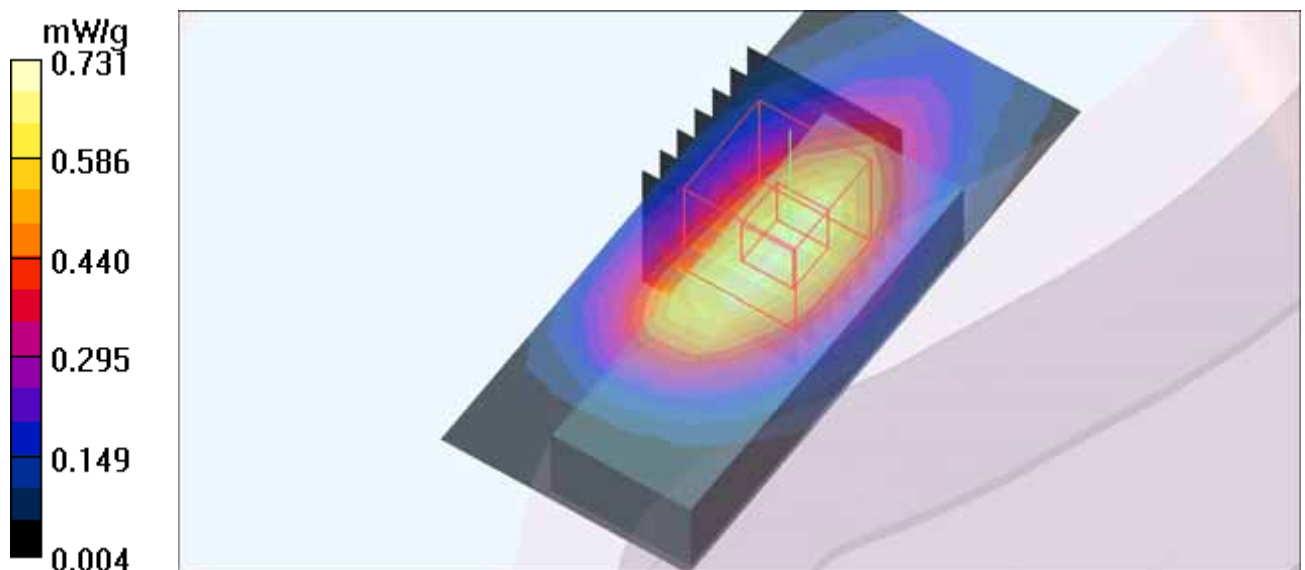
**Body Position - Mid/Zoom Scan (7x7x7)/Cube 0:** Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 9.97 V/m; Power Drift = 0.033 dB
Peak SAR (extrapolated) = 0.668 W/kg
**SAR(1 g) = 0.365 mW/g; SAR(10 g) = 0.201 mW/g**
Maximum value of SAR (measured) = 0.506 mW/g

## M50-GPRS1900 TS1-Ch661

Communication System: GPRS1900 ; Frequency: 1880 MHz ; Duty Cycle: 1:8.3 ; Modulation Type: GMSK / UL 1 time slot

Medium: MSL1900 Medium parameters used: f = 1880 MHz; σ = 1.54 mho/m; εr = 54.64; ρ = 1000 kg/m$^3$

Phantom section: Flat Section ; Separation Distance : 5 mm (The Vertical-Front side of the EUT to the Phantom)

DASY4 Configuration:

- Probe: EX3DV4 - SN3578; ConvF(6.7, 6.7, 6.7); Calibrated: 2010/6/22
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn579; Calibrated: 2010/9/20
- Phantom: SAM 12; Type: SAM V4.0;   Serial: TP 1202
- Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 186

**Body Position - Mid/Area Scan (7x15x1):** Measurement grid: dx=8mm, dy=8mm
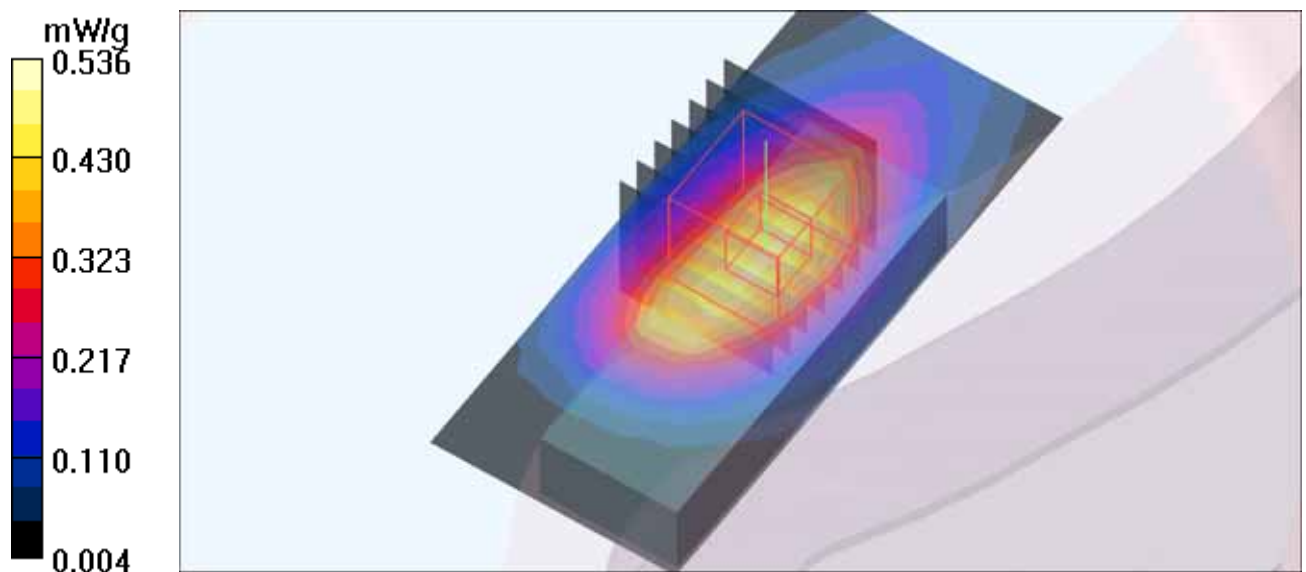Maximum value of SAR (measured) = 0.226 mW/g

**Body Position - Mid/Zoom Scan (7x7x7)/Cube 0:** Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 3.62 V/m; Power Drift = 0.145 dB
Peak SAR (extrapolated) = 0.317 W/kg
**SAR(1 g) = 0.183 mW/g; SAR(10 g) = 0.101 mW/g**
Maximum value of SAR (measured) = 0.250 mW/g
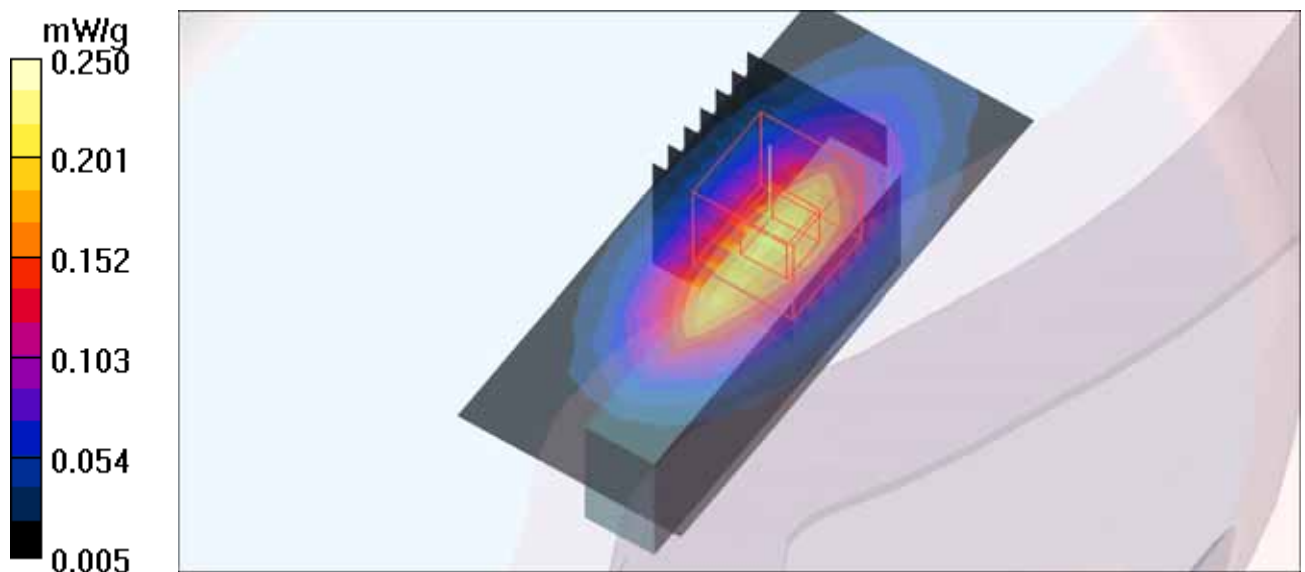
## M51-GPRS1900 TS2-Ch190-Ch661

Communication System: GPRS1900 ; Frequency: 1880 MHz ; Duty Cycle: 1:4 ; Modulation Type: GMSK / UL 2 time slots
Medium: MSL1900 Medium parameters used: f = 1880 MHz; σ = 1.54 mho/m; εr = 54.64; ρ = 1000 kg/m$^3$
Phantom section: Flat Section ; Separation Distance : 5 mm (The Vertical-Front side of the EUT to the Phantom)

DASY4 Configuration:

- Probe: EX3DV4 - SN3578; ConvF(6.7, 6.7, 6.7); Calibrated: 2010/6/22
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn579; Calibrated: 2010/9/20
- Phantom: SAM 12; Type: SAM V4.0;   Serial: TP 1202
- Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 186

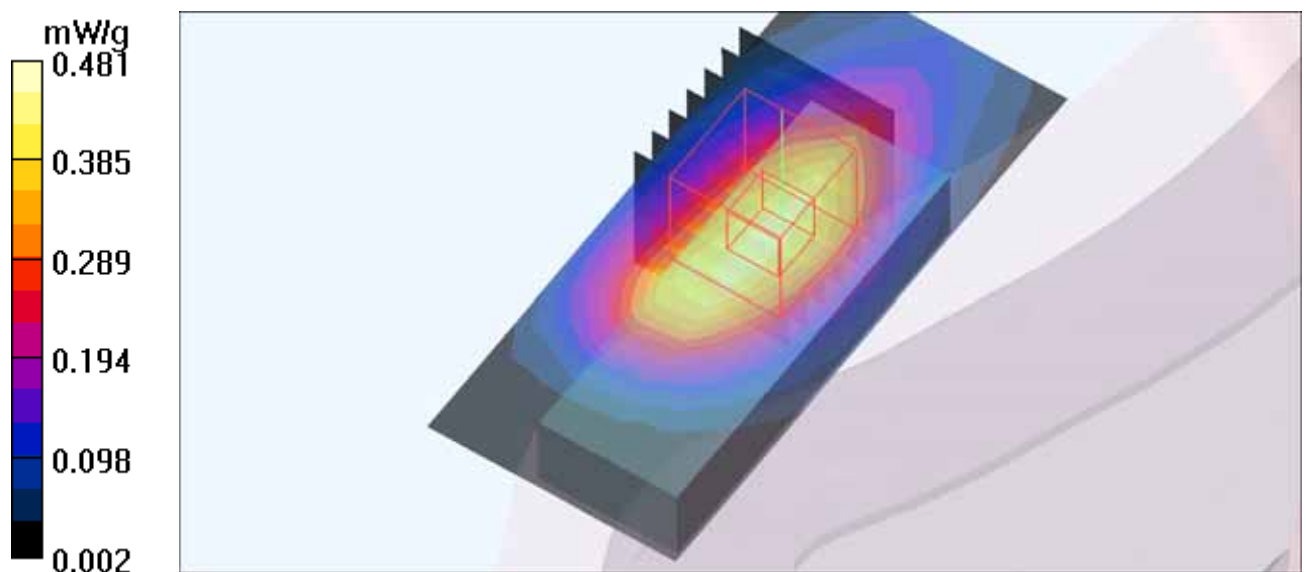**Body Position - Mid/Area Scan (7x15x1):** Measurement grid: dx=8mm, dy=8mm
Maximum value of SAR (measured) = 0.309 mW/g

**Body Position - Mid/Zoom Scan (7x7x7)/Cube 0:** Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 4.99 V/m; Power Drift = -0.144 dB
Peak SAR (extrapolated) = 0.368 W/kg
**SAR(1 g) = 0.213 mW/g; SAR(10 g) = 0.119 mW/g**
Maximum value of SAR (measured) = 0.293 mW/g

Date/Time: 2011/1/13 04:57:00
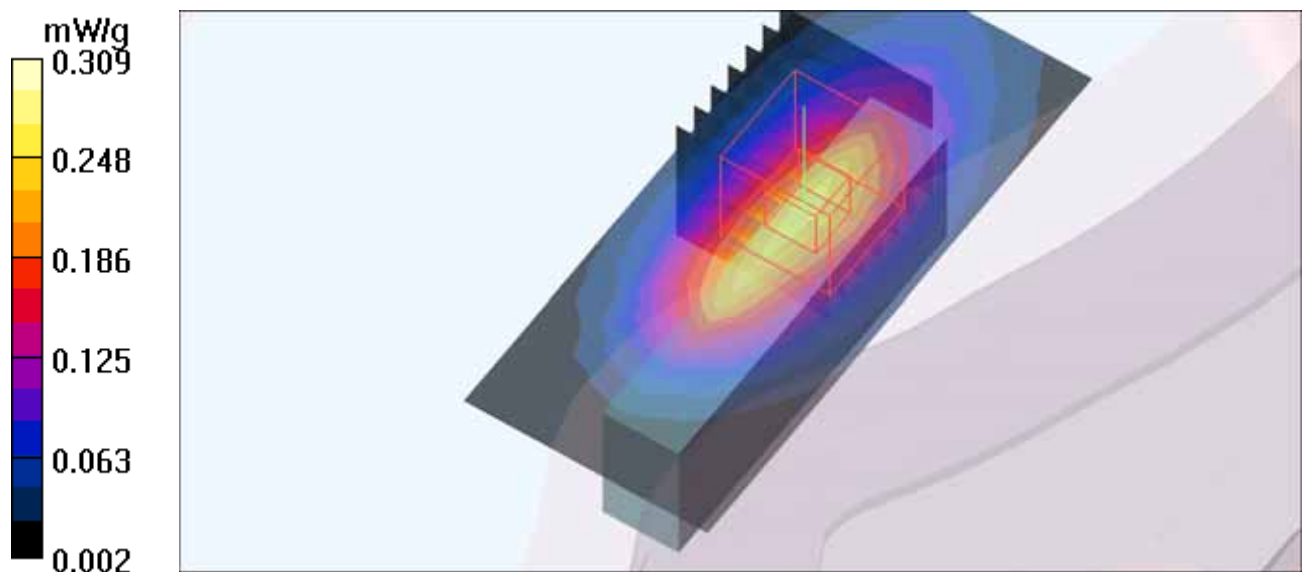
## M52-GPRS1900 TS3-Ch190-Ch661

Communication System: GPRS1900 ; Frequency: 1880 MHz ; Duty Cycle: 1:2.67 ; Modulation Type: GMSK / UL 3 time slots
Medium: MSL1900 Medium parameters used: f = 1880 MHz; σ = 1.54 mho/m; εr = 54.64; ρ = 1000 kg/m$^3$
Phantom section: Flat Section ; Separation distance : 5 mm (The Vertical-Front side of the EUT to the Phantom)

DASY4 Configuration:

- Probe: EX3DV4 - SN3578; ConvF(6.7, 6.7, 6.7); Calibrated: 2010/6/22
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn579; Calibrated: 2010/9/20
- Phantom: SAM 12; Type: SAM V4.0;   Serial: TP 1202
- Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 186

**Body Position - Mid/Area Scan (7x15x1):** Measurement grid: dx=8mm, dy=8mm
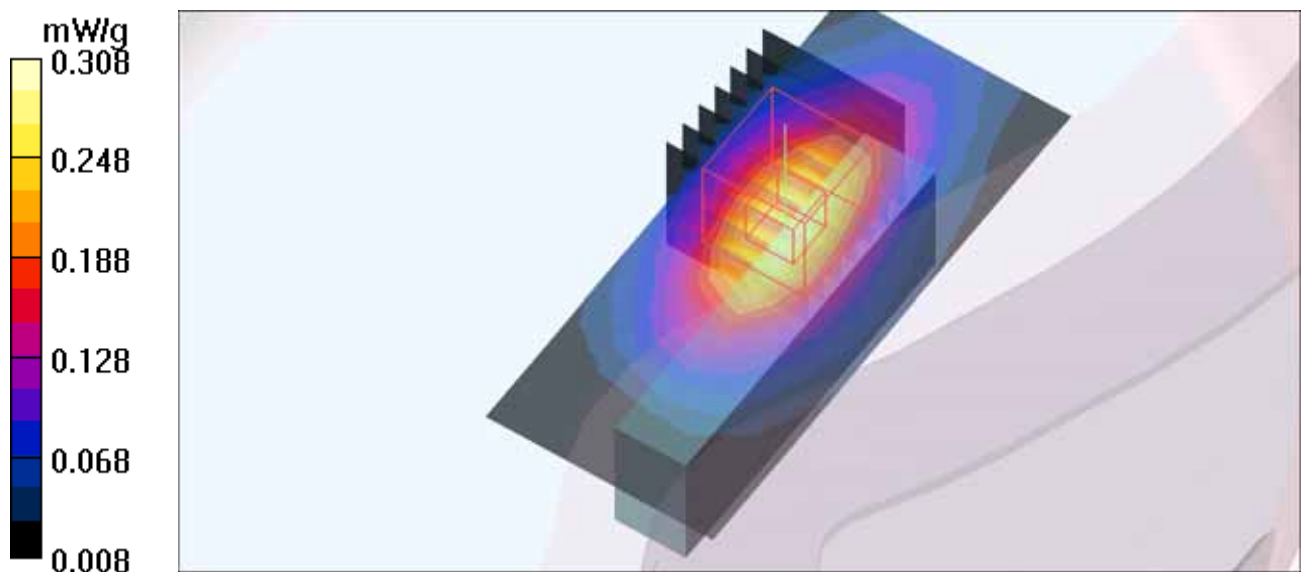Maximum value of SAR (measured) = 0.313 mW/g

**Body Position - Mid/Zoom Scan (7x7x7)/Cube 0:** Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 5.19 V/m; Power Drift = -0.190 dB
Peak SAR (extrapolated) = 0.364 W/kg
**SAR(1 g) = 0.210 mW/g; SAR(10 g) = 0.117 mW/g**
Maximum value of SAR (measured) = 0.291 mW/g

## M53-GPRS1900 TS4-Ch661

Communication System: GPRS1900 ; Frequency: 1880 MHz ; Duty Cycle: 1:2 ; Modulation Type: GMSK / UL 4 time slots

Medium: MSL1900 Medium parameters used: f = 1880 MHz; σ = 1.54 mho/m; εr = 54.64; ρ = 1000 kg/m$^3$

Phantom section: Flat Section ; Separation distance : 5 mm (The Vertical-Front side of the EUT to the Phantom)

DASY4 Configuration:

- Probe: EX3DV4 - SN3578; ConvF(6.7, 6.7, 6.7); Calibrated: 2010/6/22
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn579; Calibrated: 2010/9/20
- Phantom: SAM 12; Type: SAM V4.0;   Serial: TP 1202
- Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 186

**Body Position - Mid/Area Scan (7x15x1):** Measurement grid: dx=8mm, dy=8mm
Maximum value of SAR (measured) = 0.225 mW/g
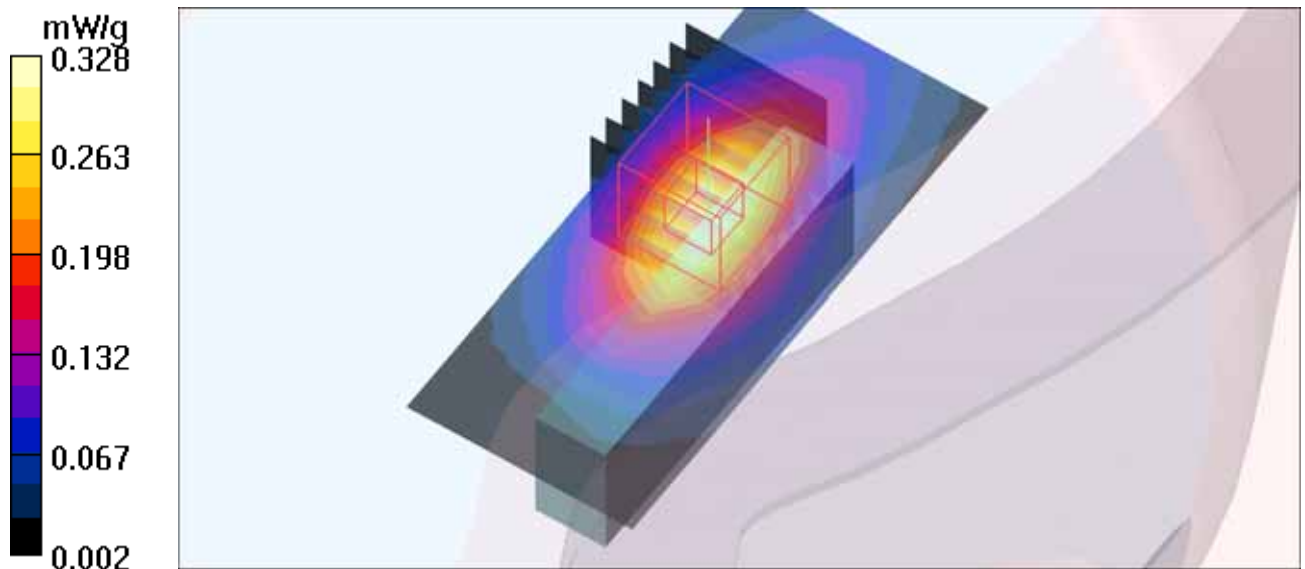
**Body Position - Mid/Zoom Scan (7x7x7)/Cube 0:** Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 4.21 V/m; Power Drift = -0.193 dB
Peak SAR (extrapolated) = 0.280 W/kg
**SAR(1 g) = 0.161 mW/g; SAR(10 g) = 0.090 mW/g**
Maximum value of SAR (measured) = 0.223 mW/g

## M54-GPRS1900 TS1-Ch661

Communication System: GPRS1900 ; Frequency: 1880 MHz ; Duty Cycle: 1:8.3 ; Modulation Type: GMSK / UL 1 time slot
Medium: MSL1900 Medium parameters used: f = 1880 MHz; σ = 1.54 mho/m; εr = 54.64; ρ = 1000 kg/m$^3$
Phantom section: Flat Section ; Separation Distance : 5 mm (The Horizontal-Up side of the EUT to the Phantom)

DASY4 Configuration:

- Probe: EX3DV4 - SN3578; ConvF(6.7, 6.7, 6.7); Calibrated: 2010/6/22
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn579; Calibrated: 2010/9/20
- Phantom: SAM 12; Type: SAM V4.0;   Serial: TP 1202
- Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 186

**Body Position - Mid/Area Scan (7x15x1):** Measurement grid: dx=8mm, dy=8mm
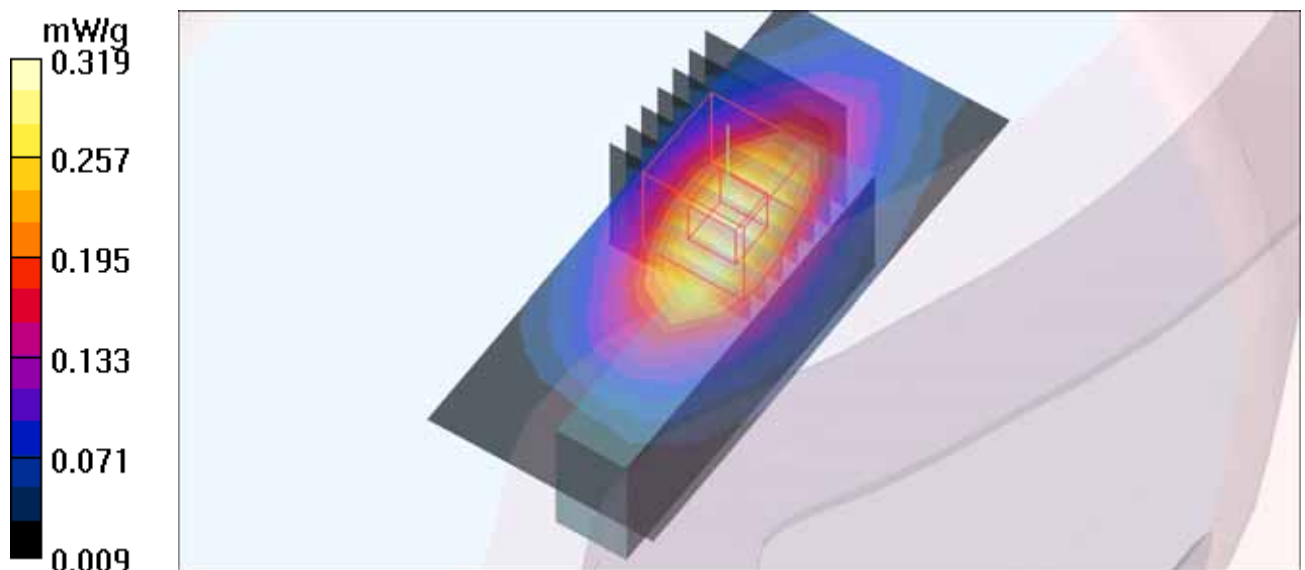Maximum value of SAR (measured) = 0.331 mW/g

**Body Position - Mid/Zoom Scan (7x7x7)/Cube 0:** Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 3.07 V/m; Power Drift = 0.170 dB
Peak SAR (extrapolated) = 0.427 W/kg
**SAR(1 g) = 0.266 mW/g; SAR(10 g) = 0.157 mW/g.**
Maximum value of SAR (measured) = 0.348 mW/g

## M55-GPRS1900 TS2-Ch661

Communication System: GPRS1900 ; Frequency: 1880 MHz ; Duty Cycle: 1:4 ; Modulation Type: GMSK / UL 2 time slots

Medium: MSL1900 Medium parameters used: f = 1880 MHz; σ = 1.54 mho/m; εr = 54.64; ρ = 1000 kg/m$^3$

Phantom section: Flat Section ; Separation Distance : 5 mm (The Horizontal-Up side of the EUT to the Phantom)

DASY4 Configuration:

- Probe: EX3DV4 - SN3578; ConvF(6.7, 6.7, 6.7); Calibrated: 2010/6/22
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn579; Calibrated: 2010/9/20
- Phantom: SAM 12; Type: SAM V4.0;   Serial: TP 1202
- Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 186

**Body Position - Mid/Area Scan (7x15x1):** Measurement grid: dx=8mm, dy=8mm
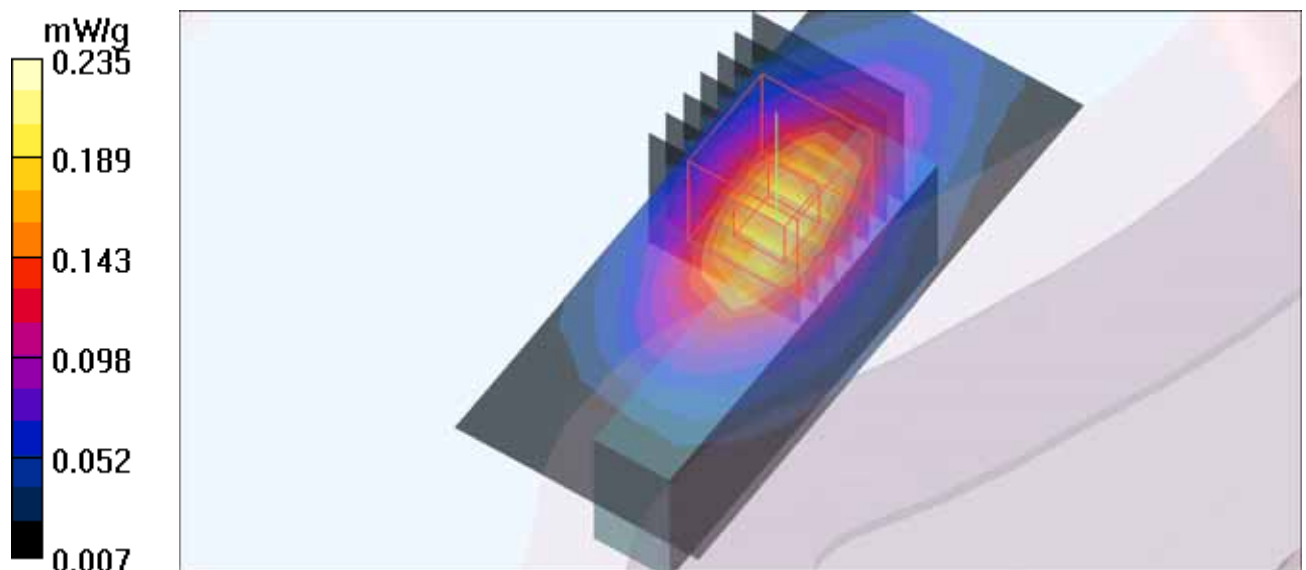Maximum value of SAR (measured) = 0.731 mW/g

**Body Position - Mid/Zoom Scan (7x7x7)/Cube 0:** Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 4.00 V/m; Power Drift = -0.171 dB
Peak SAR (extrapolated) = 0.846 W/kg
**SAR(1 g) = 0.526 mW/g; SAR(10 g) = 0.310 mW/g**
Maximum value of SAR (measured) = 0.687 mW/g

## M56-GPRS1900 TS3-Ch661

Communication System: GPRS1900 ; Frequency: 1880 MHz ; Duty Cycle: 1:2.67 ; Modulation
Type: GMSK / UL 3 time slots
Medium: MSL1900 Medium parameters used: f = 1880 MHz; σ = 1.54 mho/m; εr = 54.64; ρ = 1000
kg/m$^3$
Phantom section: Flat Section ; Separation Distance : 5 mm (The Horizontal-Up side of the EUT to the
Phantom)

DASY4 Configuration:

- Probe: EX3DV4 - SN3578; ConvF(6.7, 6.7, 6.7); Calibrated: 2010/6/22
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn579; Calibrated: 2010/9/20
- Phantom: SAM 12; Type: SAM V4.0;   Serial: TP 1202
- Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 186

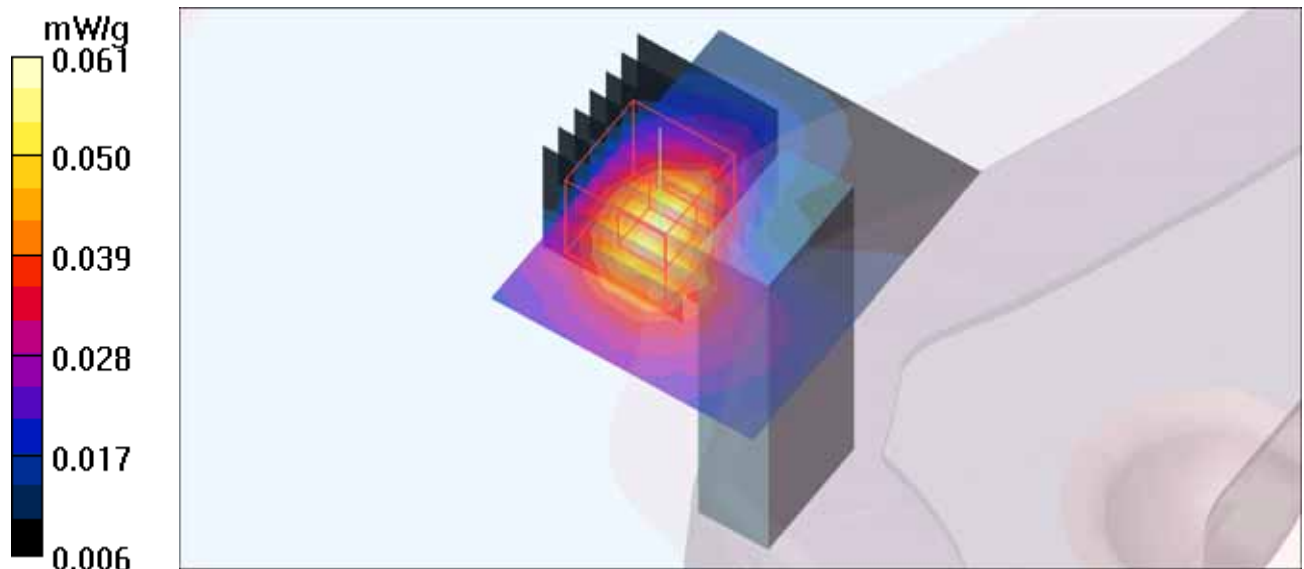**Body Position - Mid/Area Scan (7x15x1):** Measurement grid: dx=8mm, dy=8mm
Maximum value of SAR (measured) = 0.536 mW/g

**Body Position - Mid/Zoom Scan (7x7x7)/Cube 0:** Measurement grid: dx=5mm, dy=5mm,
dz=5mm
Reference Value = 4.02 V/m; Power Drift = -0.191 dB
Peak SAR (extrapolated) = 0.634 W/kg
**SAR(1 g) = 0.392 mW/g; SAR(10 g) = 0.230 mW/g**
Maximum value of SAR (measured) = 0.512 mW/g

## M57-GPRS1900 TS4-Ch661

Communication System: GPRS1900 ; Frequency: 1880 MHz ; Duty Cycle: 1:2 ; Modulation Type: GMSK / UL 4 time slots

Medium: MSL1900 Medium parameters used: f = 1880 MHz; σ = 1.54 mho/m; εr = 54.64; ρ = 1000 kg/m$^3$

Phantom section: Flat Section ; Separation Distance : 5 mm (The Horizontal-Up side of the EUT to the Phantom)

DASY4 Configuration:

- Probe: EX3DV4 - SN3578; ConvF(6.7, 6.7, 6.7); Calibrated: 2010/6/22
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn579; Calibrated: 2010/9/20
- Phantom: SAM 12; Type: SAM V4.0;   Serial: TP 1202
- Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 186

**Body Position - Mid/Area Scan (7x15x1):** Measurement grid: dx=8mm, dy=8mm
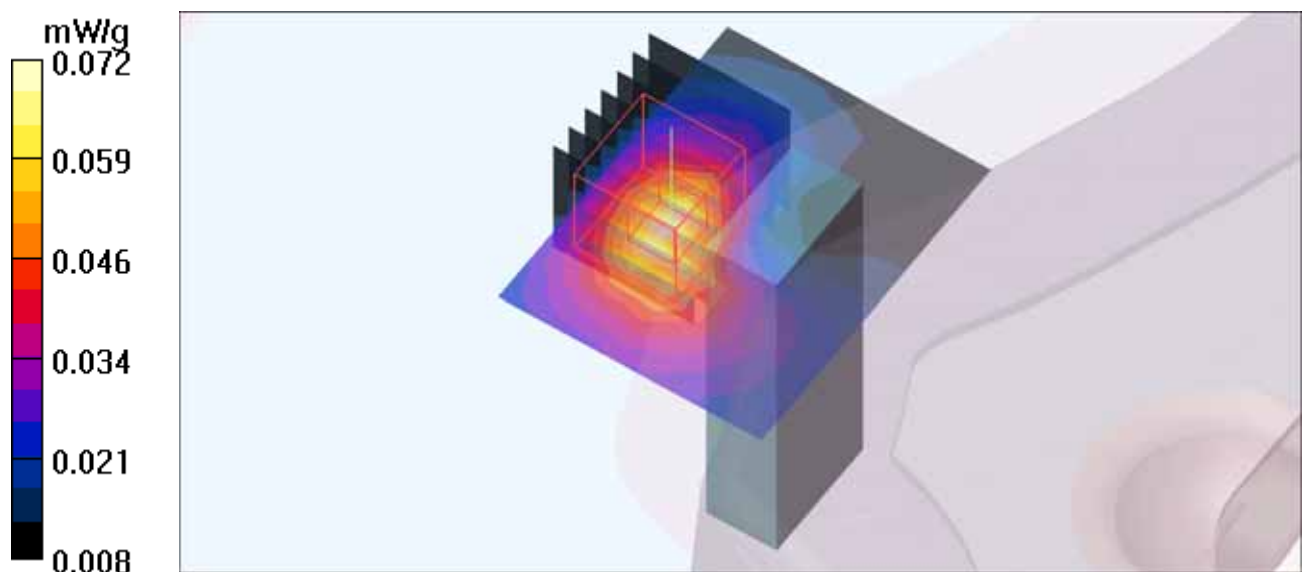Maximum value of SAR (measured) = 0.481 mW/g

**Body Position - Mid/Zoom Scan (7x7x7)/Cube 0:** Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 3.38 V/m; Power Drift = -0.164 dB
Peak SAR (extrapolated) = 0.588 W/kg
**SAR(1 g) = 0.365 mW/g; SAR(10 g) = 0.214 mW/g**

## M58-GPRS1900 TS1-Ch661

Communication System: GPRS1900 ; Frequency: 1880 MHz ; Duty Cycle: 1:8.3 ; Modulation Type: GMSK / UL 1 time slot
Medium: MSL1900 Medium parameters used: f = 1880 MHz; σ = 1.54 mho/m; εr = 54.64; ρ = 1000 kg/m$^3$
Phantom section: Flat Section ; Separation distance : 5 mm (The Vertical-Back side of the EUT to the Phantom)

DASY4 Configuration:

- Probe: EX3DV4 - SN3578; ConvF(6.7, 6.7, 6.7); Calibrated: 2010/6/22
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn579; Calibrated: 2010/9/20
- Phantom: SAM 12; Type: SAM V4.0;   Serial: TP 1202
- Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 186

**Body Position - Mid/Area Scan (7x15x1):** Measurement grid: dx=8mm, dy=8mm
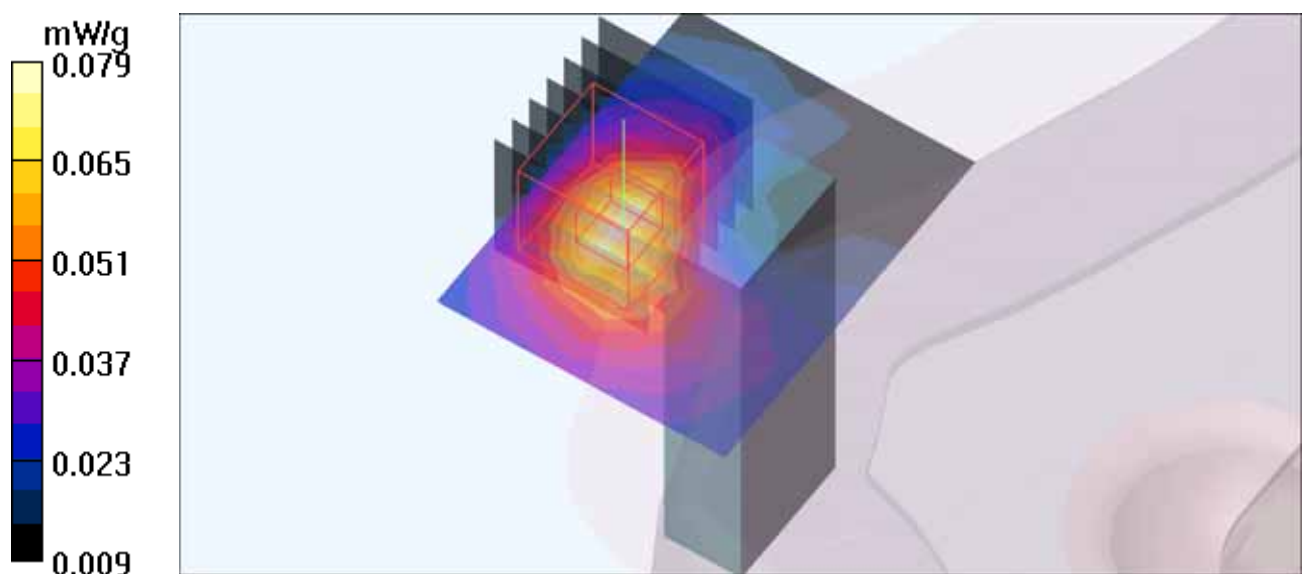Maximum value of SAR (measured) = 0.284 mW/g

**Body Position - Mid/Zoom Scan (7x7x7)/Cube 0:** Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 3.93 V/m; Power Drift = 0.123 dB
Peak SAR (extrapolated) = 0.384 W/kg
**SAR(1 g) = 0.222 mW/g; SAR(10 g) = 0.125 mW/g**
Maximum value of SAR (measured) = 0.308 mW/g

## M59-GPRS1900 TS2-Ch661

Communication System: GPRS1900 ; Frequency: 1880 MHz ; Duty Cycle: 1:4 ; Modulation Type: GMSK / UL 2 time slots

Medium: MSL1900 Medium parameters used: f = 1880 MHz; σ = 1.54 mho/m; εr = 54.64; ρ = 1000 kg/m$^3$

Phantom section: Flat Section ; Separation distance : 5 mm (The Vertical-Back side of the EUT to the Phantom)

DASY4 Configuration:

- Probe: EX3DV4 - SN3578; ConvF(6.7, 6.7, 6.7); Calibrated: 2010/6/22
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn579; Calibrated: 2010/9/20
- Phantom: SAM 12; Type: SAM V4.0;   Serial: TP 1202
- Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 186

**Body Position - Mid/Area Scan (7x15x1):** Measurement grid: dx=8mm, dy=8mm
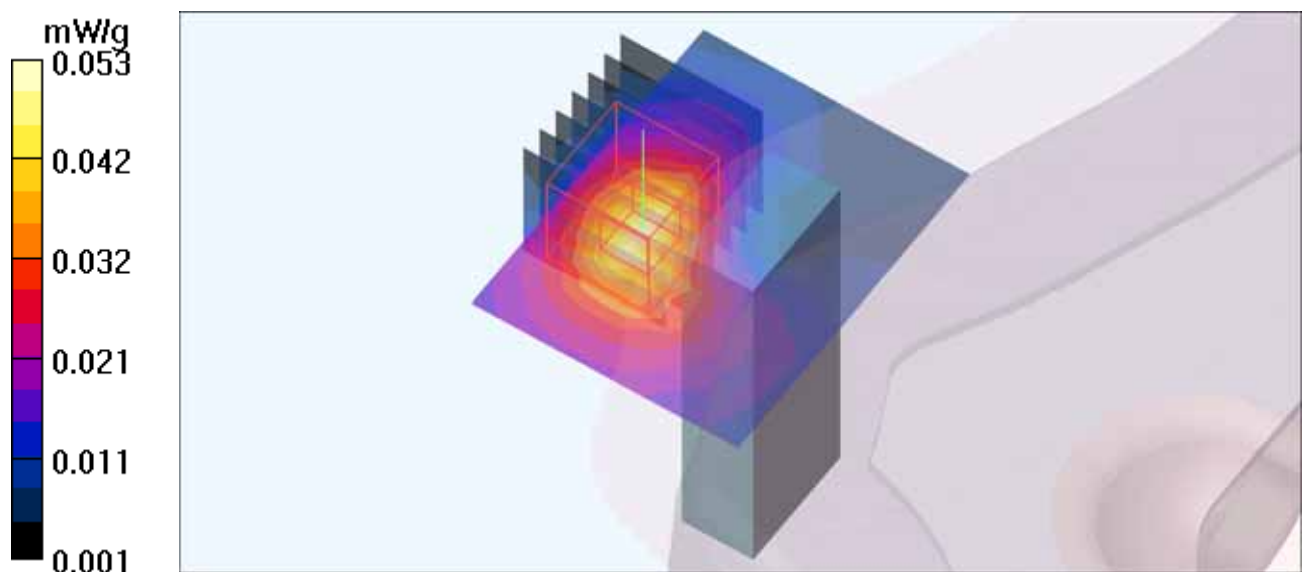Maximum value of SAR (measured) = 0.328 mW/g

**Body Position - Mid/Zoom Scan (7x7x7)/Cube 0:** Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 4.77 V/m; Power Drift = -0.122 dB
Peak SAR (extrapolated) = 0.402 W/kg
**SAR(1 g) = 0.233 mW/g; SAR(10 g) = 0.132 mW/g**
Maximum value of SAR (measured) = 0.322 mW/g

## M60-GPRS1900 TS3-Ch661

Communication System: GPRS1900 ; Frequency: 1880 MHz ; Duty Cycle: 1:2.67 ; Modulation Type: GMSK / UL 3 time slots
Medium: MSL1900 Medium parameters used: f = 1880 MHz; σ = 1.54 mho/m; εr = 54.64; ρ = 1000 kg/m$^3$
Phantom section: Flat Section ; Separation distance : 5 mm (The Vertical-Back side of the EUT to the Phantom)

DASY4 Configuration:

- Probe: EX3DV4 - SN3578; ConvF(6.7, 6.7, 6.7); Calibrated: 2010/6/22
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn579; Calibrated: 2010/9/20
- Phantom: SAM 12; Type: SAM V4.0;   Serial: TP 1202
- Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 186

**Body Position - Mid/Area Scan (7x15x1):** Measurement grid: dx=8mm, dy=8mm
Maximum value of SAR (measured) = 0.313 mW/g

**Body Position - Mid/Zoom Scan (7x7x7)/Cube 0:** Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 4.43 V/m; Power Drift = -0.145 dB
Peak SAR (extrapolated) = 0.398 W/kg
**SAR(1 g) = 0.233 mW/g; SAR(10 g) = 0.131 mW/g**
Maximum value of SAR (measured) = 0.319 mW/g

## M61-GPRS1900 TS4-Ch661

Communication System: GPRS1900 ; Frequency: 1880 MHz ; Duty Cycle: 1:2 ; Modulation Type: GMSK / UL 4 time slots
Medium: MSL1900 Medium parameters used: f = 1880 MHz; σ = 1.54 mho/m; εr = 54.64; ρ = 1000 kg/m$^3$
Phantom section: Flat Section ; Separation distance : 5 mm (The Vertical-Back side of the EUT to the Phantom)

DASY4 Configuration:

- Probe: EX3DV4 - SN3578; ConvF(6.7, 6.7, 6.7); Calibrated: 2010/6/22
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn579; Calibrated: 2010/9/20
- Phantom: SAM 12; Type: SAM V4.0;   Serial: TP 1202
- Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 186

**Body Position - Mid/Area Scan (7x15x1):** Measurement grid: dx=8mm, dy=8mm
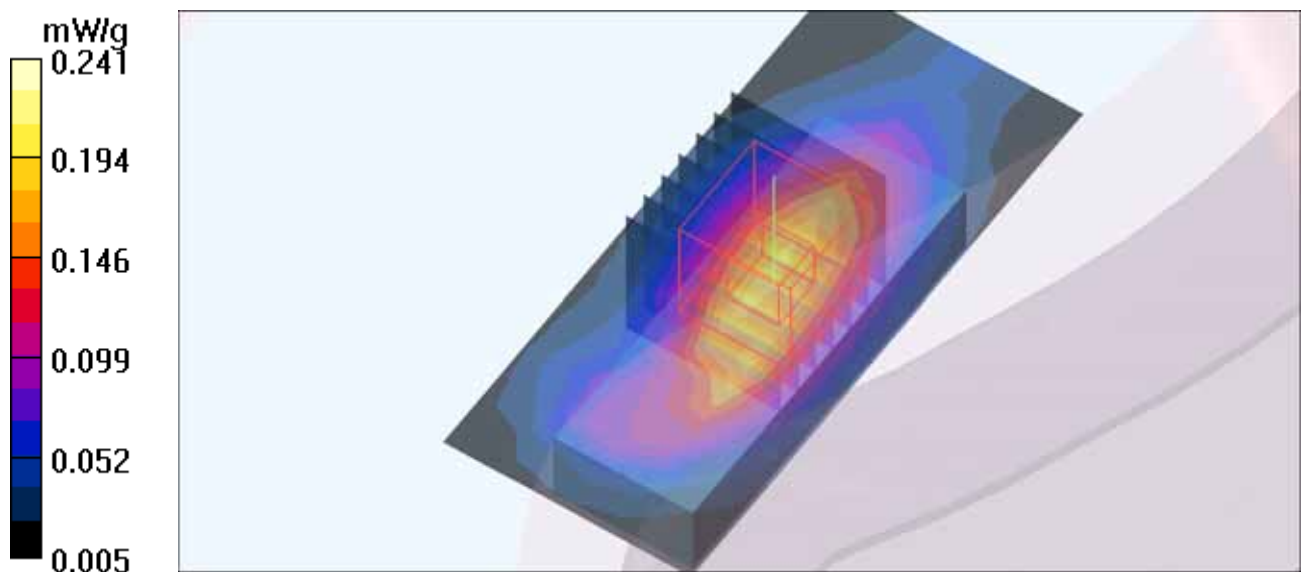Maximum value of SAR (measured) = 0.224 mW/g

**Body Position - Mid/Zoom Scan (7x7x7)/Cube 0:** Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 3.70 V/m; Power Drift = -0.195 dB
Peak SAR (extrapolated) = 0.293 W/kg
**SAR(1 g) = 0.173 mW/g; SAR(10 g) = 0.098 mW/g**
Maximum value of SAR (measured) = 0.235 mW/g

## M62-GPRS1900 TS1-Ch661

Communication System: GPRS1900 ; Frequency: 1880 MHz ; Duty Cycle: 1:8.3 ; Modulation Type: GMSK / UL 1 time slot

Medium: MSL1900 Medium parameters used: f = 1880 MHz; σ = 1.54 mho/m; εr = 54.64; ρ = 1000 kg/m$^3$

Phantom section: Flat Section ; Separation distance : 5 mm (The top side of the EUT to the Phantom)

DASY4 Configuration:

- Probe: EX3DV4 - SN3578; ConvF(6.7, 6.7, 6.7); Calibrated: 2010/6/22
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn579; Calibrated: 2010/9/20
- Phantom: SAM 12; Type: SAM V4.0;   Serial: TP 1202
- Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 186

**Body Position - Mid/Area Scan (8x10x1):** Measurement grid: dx=8mm, dy=8mm
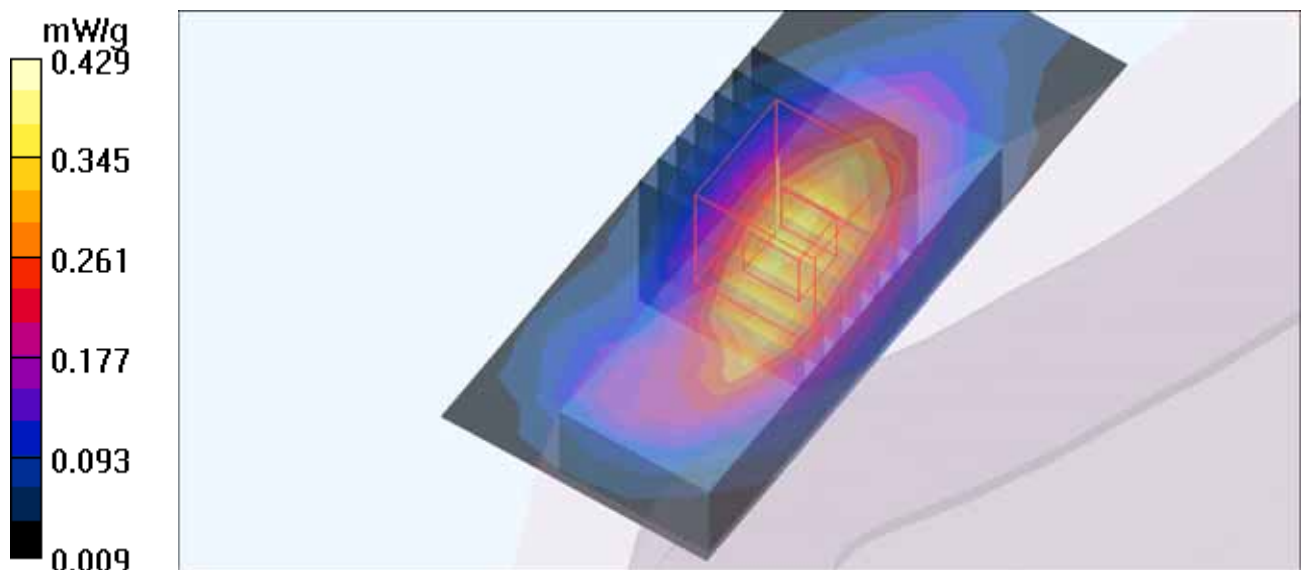Maximum value of SAR (measured) = 0.061 mW/g

**Body Position - Mid/Zoom Scan (7x7x7)/Cube 0:** Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 4.23 V/m; Power Drift = -0.041 dB
Peak SAR (extrapolated) = 0.075 W/kg
**SAR(1 g) = 0.045 mW/g; SAR(10 g) = 0.025 mW/g**

Date/Time: 2011/1/13 08:56:47

## M63-GPRS1900 TS2-Ch661

Communication System: GPRS1900 ; Frequency: 1880 MHz ; Duty Cycle: 1:4 ; Modulation Type: GMSK / UL 2 time slots
Medium: MSL1900 Medium parameters used: f = 1880 MHz; σ = 1.54 mho/m; εr = 54.64; ρ = 1000 kg/m³
Phantom section: Flat Section ; Separation Distance : 5 mm ( The top side of the EUT to the Phantom)

DASY4 Configuration:

- Probe: EX3DV4 - SN3578; ConvF(6.7, 6.7, 6.7); Calibrated: 2010/6/22
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn579; Calibrated: 2010/9/20
- Phantom: SAM 12; Type: SAM V4.0;   Serial: TP 1202
- Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 186

**Body Position - Mid/Area Scan (8x10x1):** Measurement grid: dx=8mm, dy=8mm
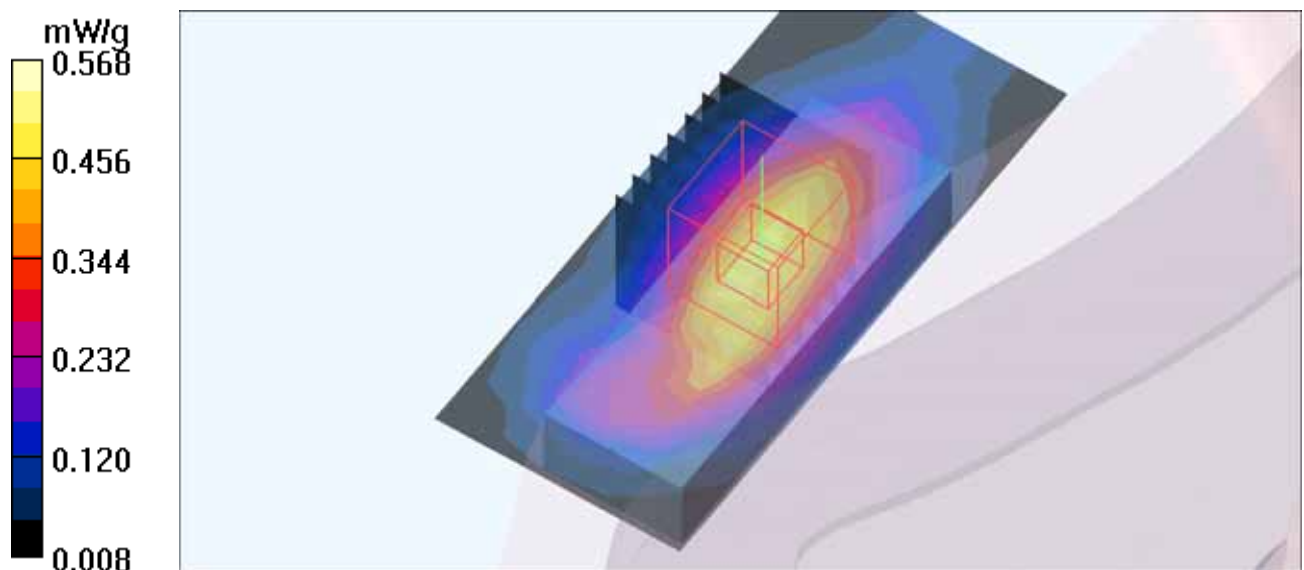Maximum value of SAR (measured) = 0.072 mW/g

**Body Position - Mid/Zoom Scan (7x7x7)/Cube 0:** Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 4.82 V/m; Power Drift = -0.185 dB
Peak SAR (extrapolated) = 0.085 W/kg
**SAR(1 g) = 0.049 mW/g; SAR(10 g) = 0.027 mW/g**
Maximum value of SAR (measured) = 0.068 mW/g

Date/Time: 2011/1/13 09:15:32

## M64-GPRS1900 TS3-Ch661

Communication System: GPRS1900 ; Frequency: 1880 MHz ; Duty Cycle: 1:2.67 ; Modulation Type: GMSK / UL 3 time slots
Medium: MSL1900 Medium parameters used: f = 1880 MHz; σ = 1.54 mho/m; εr = 54.64; ρ = 1000 kg/m$^3$
Phantom section: Flat Section ; Separation Distance : 5 mm ( The top side of the EUT to the Phantom)


DASY4 Configuration:

- Probe: EX3DV4 - SN3578; ConvF(6.7, 6.7, 6.7); Calibrated: 2010/6/22
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn579; Calibrated: 2010/9/20
- Phantom: SAM 12; Type: SAM V4.0;   Serial: TP 1202
- Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 186


**Body Position - Mid/Area Scan (8x10x1):** Measurement grid: dx=8mm, dy=8mm
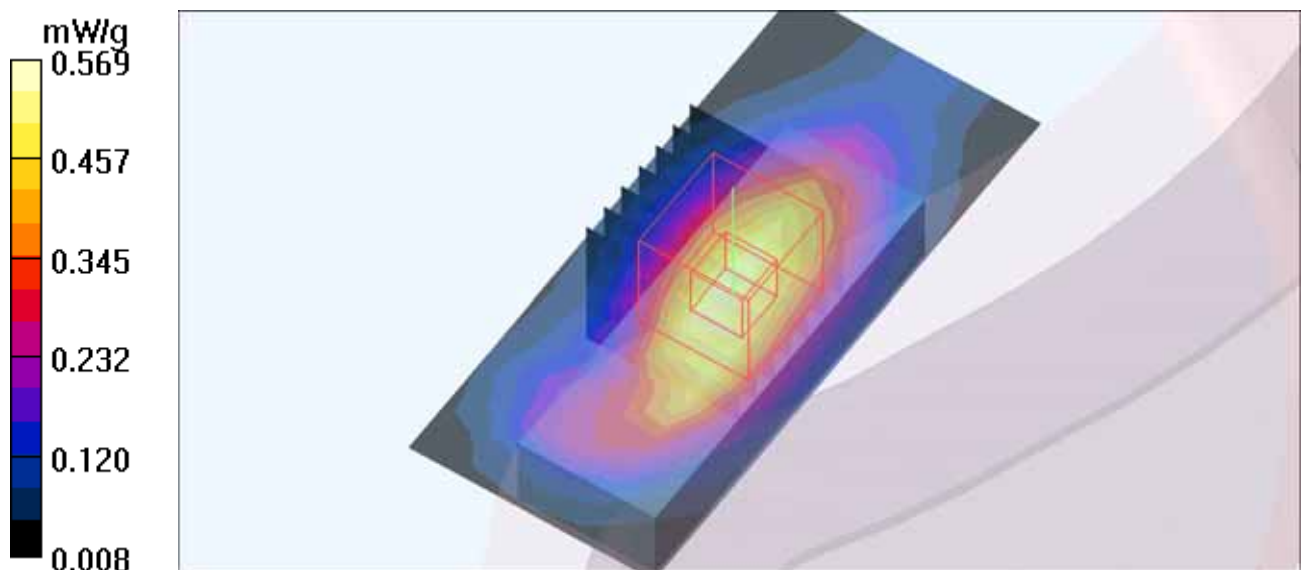Maximum value of SAR (measured) = 0.079 mW/g

**Body Position - Mid/Zoom Scan (7x7x7)/Cube 0:** Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 5.35 V/m; Power Drift = -0.154 dB
Peak SAR (extrapolated) = 0.090 W/kg
**SAR(1 g) = 0.052 mW/g; SAR(10 g) = 0.029 mW/g**
Maximum value of SAR (measured) = 0.072 mW/g

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## M65-GPRS1900 TS4-Ch661

Communication System: GPRS1900 ; Frequency: 1880 MHz ; Duty Cycle: 1:2 ; Modulation Type: GMSK / UL 4 time slots
Medium: MSL1900 Medium parameters used: f = 1880 MHz; σ = 1.54 mho/m; εr = 54.64; ρ = 1000 kg/m$^3$
Phantom section: Flat Section ; Separation Distance : 5 mm ( The top side of the EUT to the Phantom)

DASY4 Configuration:

- Probe: EX3DV4 - SN3578; ConvF(6.7, 6.7, 6.7); Calibrated: 2010/6/22
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn579; Calibrated: 2010/9/20
- Phantom: SAM 12; Type: SAM V4.0;   Serial: TP 1202
- Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 186

**Body Position - Mid/Area Scan (8x10x1):** Measurement grid: dx=8mm, dy=8mm
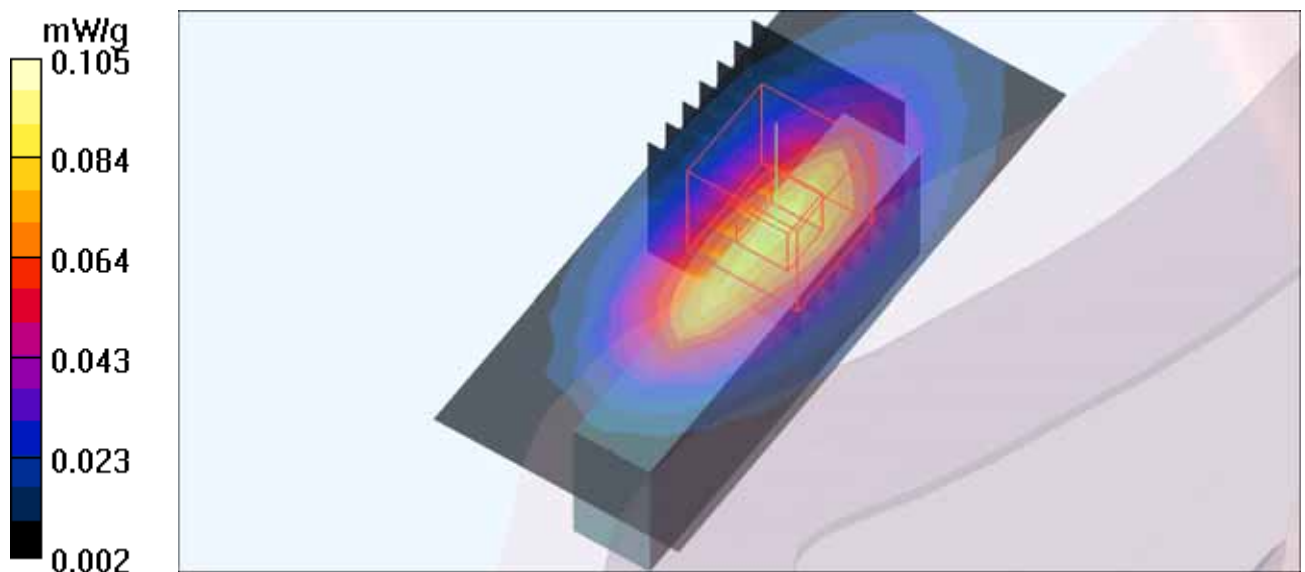Maximum value of SAR (measured) = 0.051 mW/g

**Body Position - Mid/Zoom Scan (7x7x7)/Cube 0:** Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 3.74 V/m; Power Drift = 0.127 dB
Peak SAR (extrapolated) = 0.065 W/kg
**SAR(1 g) = 0.038 mW/g; SAR(10 g) = 0.021 mW/g**
Maximum value of SAR (measured) = 0.053 mW/g

## M66-E-GPRS1900 TS1-Ch661

Communication System: E-GPRS1900 ; Frequency: 1880 MHz ; Duty Cycle: 1:8.3 ; Modulation Type: 8PSK / UL 1 time slot
Medium: MSL1900 Medium parameters used: f = 1880 MHz; σ = 1.54 mho/m; εr = 54.64; ρ = 1000 kg/m$^3$
Phantom section: Flat Section ; Separation Distance : 5 mm (The Horizontal-Down side of the EUT to the Phantom)

DASY4 Configuration:

- Probe: EX3DV4 - SN3578; ConvF(6.7, 6.7, 6.7); Calibrated: 2010/6/22
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn579; Calibrated: 2010/9/20
- Phantom: SAM 12; Type: SAM V4.0;   Serial: TP 1202
- Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 186

**Body Position - Mid/Area Scan (7x15x1):** Measurement grid: dx=8mm, dy=8mm
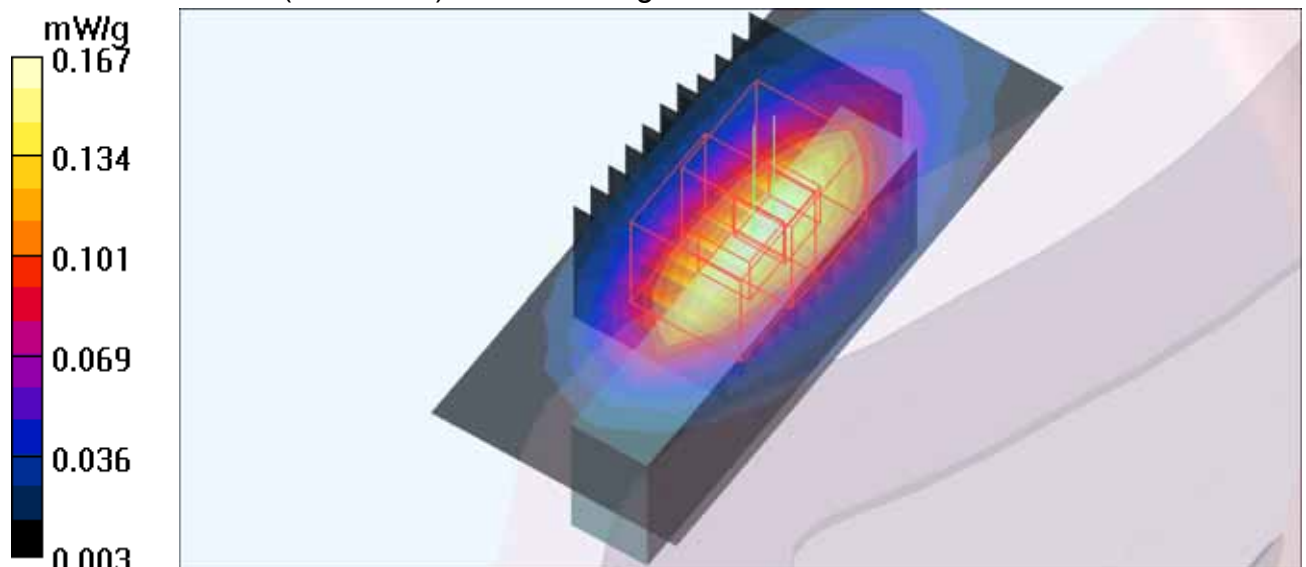Maximum value of SAR (measured) = 0.237 mW/g

**Body Position - Mid/Zoom Scan (7x7x7)/Cube 0:** Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 8.65 V/m; Power Drift = 0.073 dB
Peak SAR (extrapolated) = 0.304 W/kg
**SAR(1 g) = 0.181 mW/g; SAR(10 g) = 0.104 mW/g**
Maximum value of SAR (measured) = 0.241 mW/g

## M67-E-GPRS1900 TS2-Ch661

Communication System: E-GPRS1900 ; Frequency: 1880 MHz ; Duty Cycle: 1:4 ; Modulation Type: 8PSK / UL 2 time slots
Medium: MSL1900 Medium parameters used: f = 1880 MHz; σ = 1.54 mho/m; εr = 54.64; ρ = 1000 kg/m$^3$
Phantom section: Flat Section ; Separation Distance : 5 mm (The Horizontal-Down side of the EUT to the Phantom)

DASY4 Configuration:

- Probe: EX3DV4 - SN3578; ConvF(6.7, 6.7, 6.7); Calibrated: 2010/6/22
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn579; Calibrated: 2010/9/20
- Phantom: SAM 12; Type: SAM V4.0;   Serial: TP 1202
- Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 186

**Body Position - Mid/Area Scan (7x15x1):** Measurement grid: dx=8mm, dy=8mm
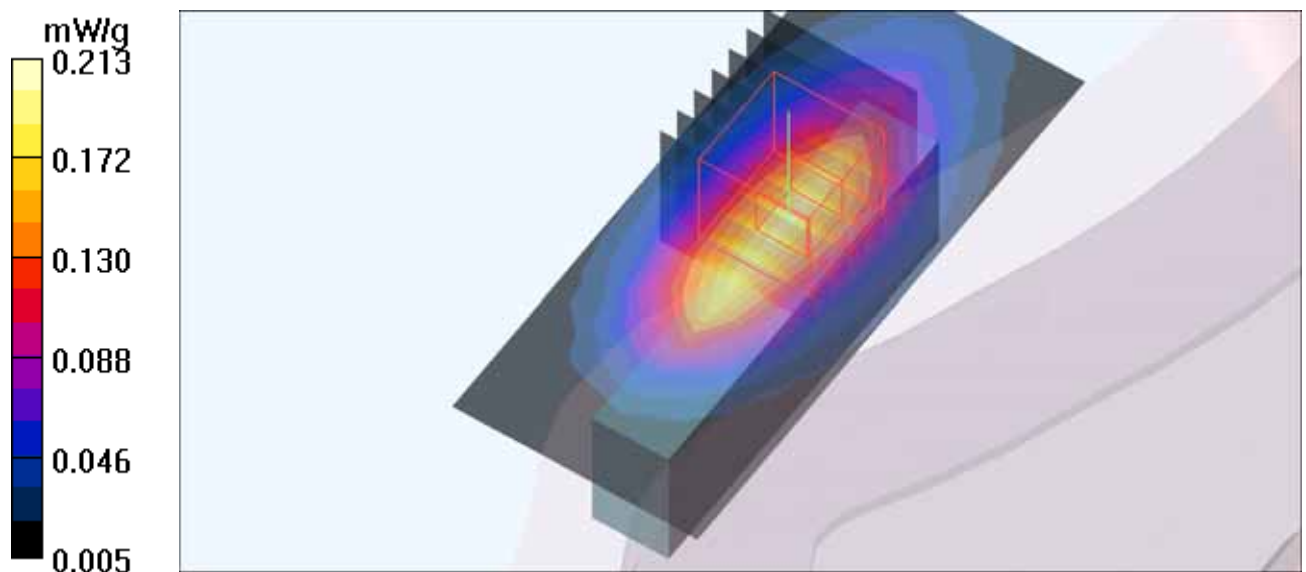Maximum value of SAR (measured) = 0.416 mW/g

**Body Position - Mid/Zoom Scan (7x7x7)/Cube 0:** Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 12.4 V/m; Power Drift = -0.127 dB
Peak SAR (extrapolated) = 0.540 W/kg
**SAR(1 g) = 0.317 mW/g; SAR(10 g) = 0.182 mW/g**
Maximum value of SAR (measured) = 0.429 mW/g

## M68-E-GPRS1900 TS3-Ch661

Communication System: E-GPRS1900 ; Frequency: 1880 MHz ; Duty Cycle: 1:2.67 ; Modulation Type: 8PSK / UL 3 time slots
Medium: MSL1900 Medium parameters used: f = 1880 MHz; σ = 1.54 mho/m; εr = 54.64; ρ = 1000 kg/m$^3$
Phantom section: Flat Section ; Separation Distance : 5 mm (The Horizontal-Down side of the EUT to the Phantom)

DASY4 Configuration:

- Probe: EX3DV4 - SN3578; ConvF(6.7, 6.7, 6.7); Calibrated: 2010/6/22
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn579; Calibrated: 2010/9/20
- Phantom: SAM 12; Type: SAM V4.0;   Serial: TP 1202
- Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 186

**Body Position - Mid/Area Scan (7x15x1):** Measurement grid: dx=8mm, dy=8mm
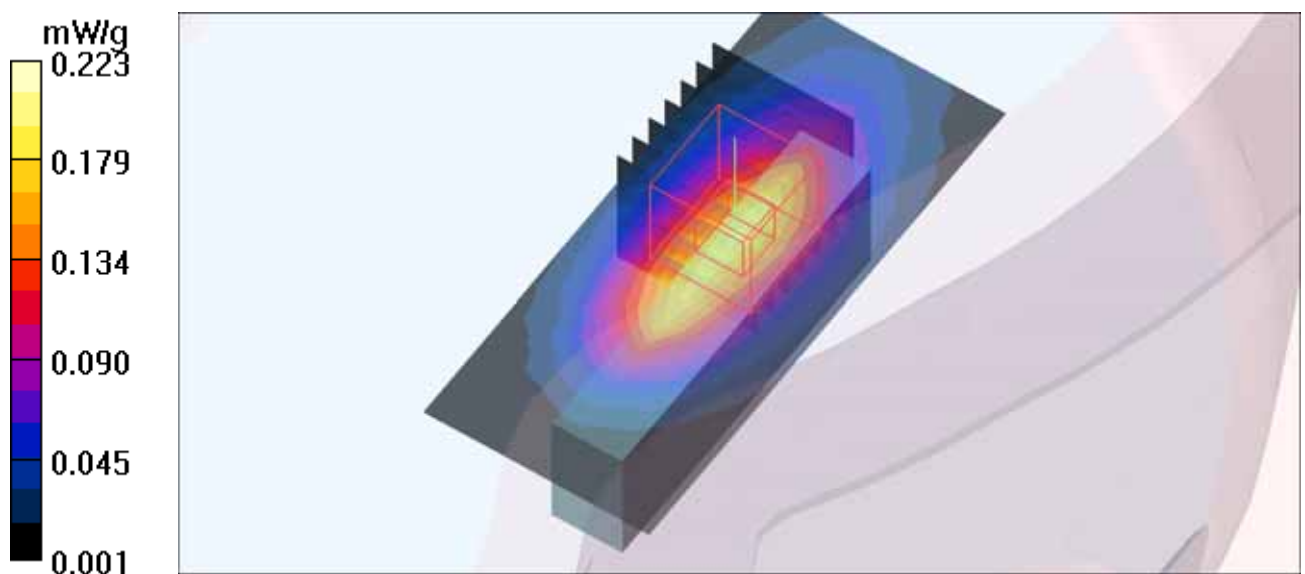Maximum value of SAR (measured) = 0.568 mW/g

**Body Position - Mid/Zoom Scan (7x7x7)/Cube 0:** Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 13.5 V/m; Power Drift = -0.118 dB
Peak SAR (extrapolated) = 0.673 W/kg
**SAR(1 g) = 0.394 mW/g; SAR(10 g) = 0.225 mW/g**
Maximum value of SAR (measured) = 0.526 mW/g

## M69-E-GPRS1900 TS4-Ch661

Communication System: E-GPRS1900 ; Frequency: 1880 MHz ; Duty Cycle: 1:2 ; Modulation Type: 8PSK / UL 4 time slots
Medium: MSL1900 Medium parameters used: f = 1880 MHz; σ = 1.54 mho/m; εr = 54.64; ρ = 1000 kg/m$^3$
Phantom section: Flat Section ; Separation Distance : 5 mm (The Horizontal-Down side of the EUT to the Phantom)

DASY4 Configuration:

- Probe: EX3DV4 - SN3578; ConvF(6.7, 6.7, 6.7); Calibrated: 2010/6/22
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn579; Calibrated: 2010/9/20
- Phantom: SAM 12; Type: SAM V4.0;   Serial: TP 1202
- Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 186

**Body Position - Mid/Area Scan (7x15x1):** Measurement grid: dx=8mm, dy=8mm
Maximum value of SAR (measured) = 0.569 mW/g

**Body Position - Mid/Zoom Scan (7x7x7)/Cube 0:** Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 12.7 V/m; Power Drift = -0.183 dB
Peak SAR (extrapolated) = 0.730 W/kg
**SAR(1 g) = 0.426 mW/g; SAR(10 g) = 0.244 mW/g**
Maximum value of SAR (measured) = 0.566 mW/g

## M70-E-GPRS1900 TS1-Ch661

Communication System: E-GPRS1900 ; Frequency: 1880 MHz ; Duty Cycle: 1:8.3 ; Modulation Type: 8PSK / UL 1 time slot
Medium: MSL1900 Medium parameters used: f = 1880 MHz; σ = 1.54 mho/m; εr = 54.64; ρ = 1000 kg/m$^3$
Phantom section: Flat Section ; Separation Distance : 5 mm (The Vertical-Front side of the EUT to the Phantom)

DASY4 Configuration:

- Probe: EX3DV4 - SN3578; ConvF(6.7, 6.7, 6.7); Calibrated: 2010/6/22
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn579; Calibrated: 2010/9/20
- Phantom: SAM 12; Type: SAM V4.0;   Serial: TP 1202
- Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 186

**Body Position - Mid/Area Scan (7x15x1):** Measurement grid: dx=8mm, dy=8mm
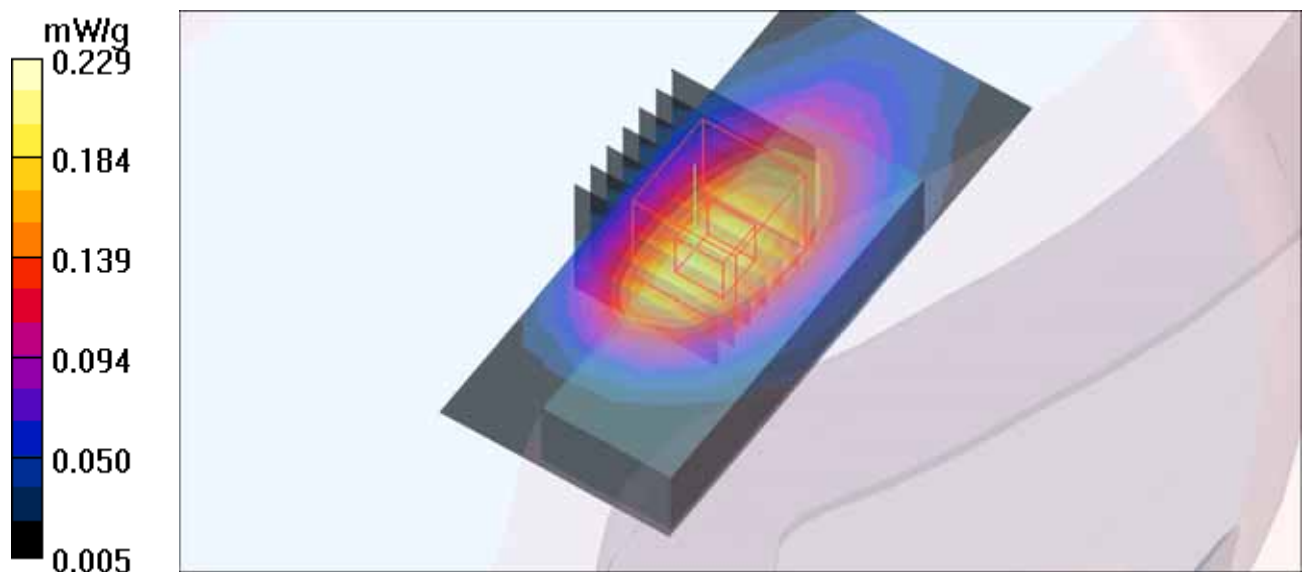Maximum value of SAR (measured) = 0.105 mW/g

**Body Position - Mid/Zoom Scan (7x7x7)/Cube 0:** Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 2.63 V/m; Power Drift = 0.118 dB
Peak SAR (extrapolated) = 0.130 W/kg
**SAR(1 g) = 0.075 mW/g; SAR(10 g) = 0.042 mW/g**
Maximum value of SAR (measured) = 0.104 mW/g

## M71-E-GPRS1900 TS2-Ch661

Communication System: E-GPRS1900 ; Frequency: 1880 MHz ; Duty Cycle: 1:4 ; Modulation Type: 8PSK / UL 2 time slots

Medium: MSL1900 Medium parameters used: f = 1880 MHz; σ = 1.54 mho/m; εr = 54.64; ρ = 1000 kg/m³

Phantom section: Flat Section ; Separation distance : 5 mm (The Vertical-Front side of the EUT to the Phantom)

DASY4 Configuration:

- Probe: EX3DV4 - SN3578; ConvF(6.7, 6.7, 6.7); Calibrated: 2010/6/22
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn579; Calibrated: 2010/9/20
- Phantom: SAM 12; Type: SAM V4.0;  Serial: TP 1202
- Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 186

**Body Position - Mid/Area Scan (7x15x1):** Measurement grid: dx=8mm, dy=8mm
Maximum value of SAR (measured) = 0.164 mW/g
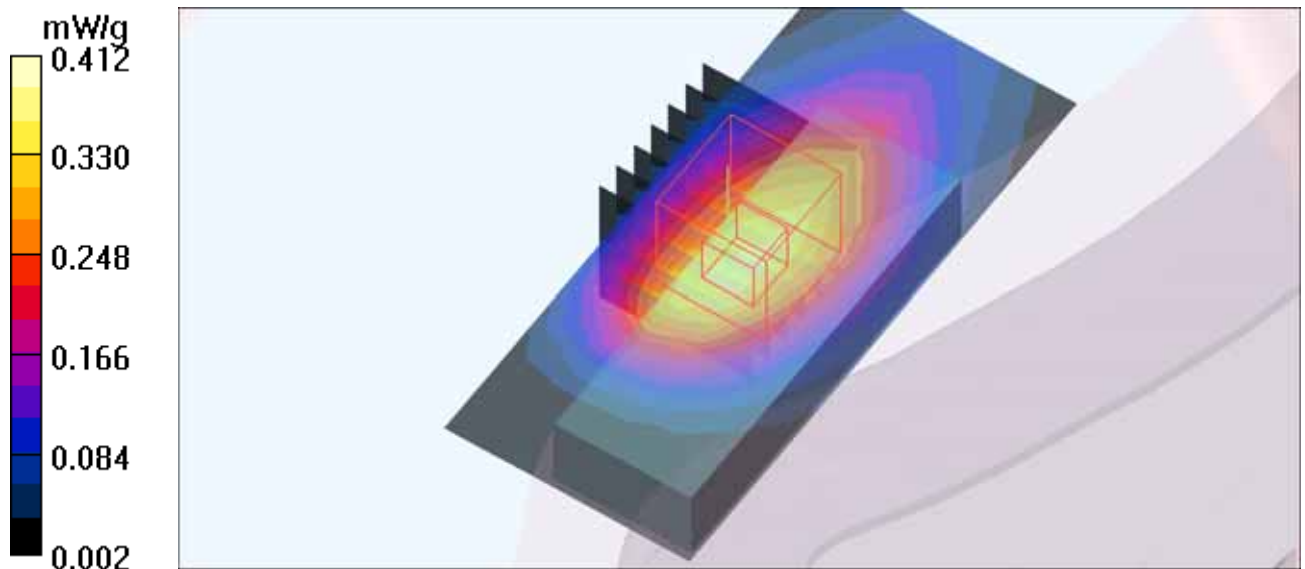**Body Position - Mid/Zoom Scan (7x7x7)/Cube 0:** Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 3.52 V/m; Power Drift = 0.151 dB
Peak SAR (extrapolated) = 0.209 W/kg
**SAR(1 g) = 0.122 mW/g; SAR(10 g) = 0.068 mW/g**
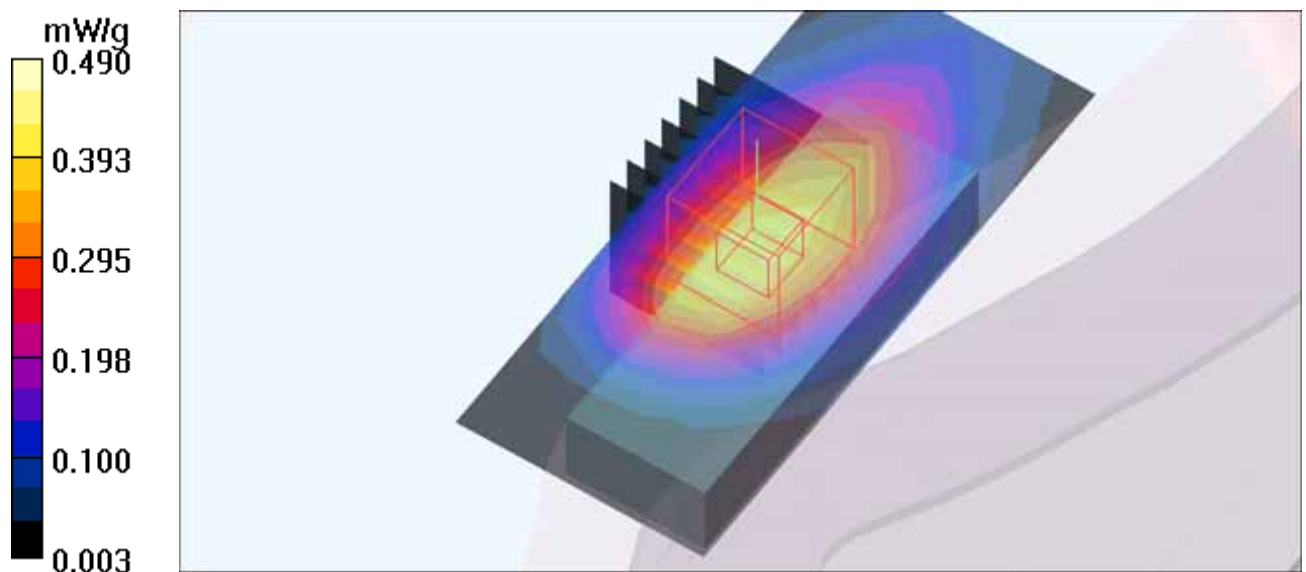Maximum value of SAR (measured) = 0.167 mW/g
**Body Position - Mid/Zoom Scan (7x7x7)/Cube 1:** Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 3.52 V/m; Power Drift = 0.151 dB
Peak SAR (extrapolated) = 0.207 W/kg
**SAR(1 g) = 0.117 mW/g; SAR(10 g) = 0.061 mW/g**
Maximum value of SAR (measured) = 0.165 mW/g

## M72-E-GPRS1900 TS3-Ch661

Communication System: E-GPRS1900 ; Frequency: 1880 MHz ; Duty Cycle: 1:2.67 ; Modulation Type: 8PSK / UL 3 time slots
Medium: MSL1900 Medium parameters used: f = 1880 MHz; σ = 1.54 mho/m; εr = 54.64; ρ = 1000 kg/m$^3$
Phantom section: Flat Section ; Separation distance : 5 mm (The Vertical-Front side of the EUT to the Phantom)

DASY4 Configuration:

- Probe: EX3DV4 - SN3578; ConvF(6.7, 6.7, 6.7); Calibrated: 2010/6/22
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn579; Calibrated: 2010/9/20
- Phantom: SAM 12; Type: SAM V4.0;   Serial: TP 1202
- Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 186

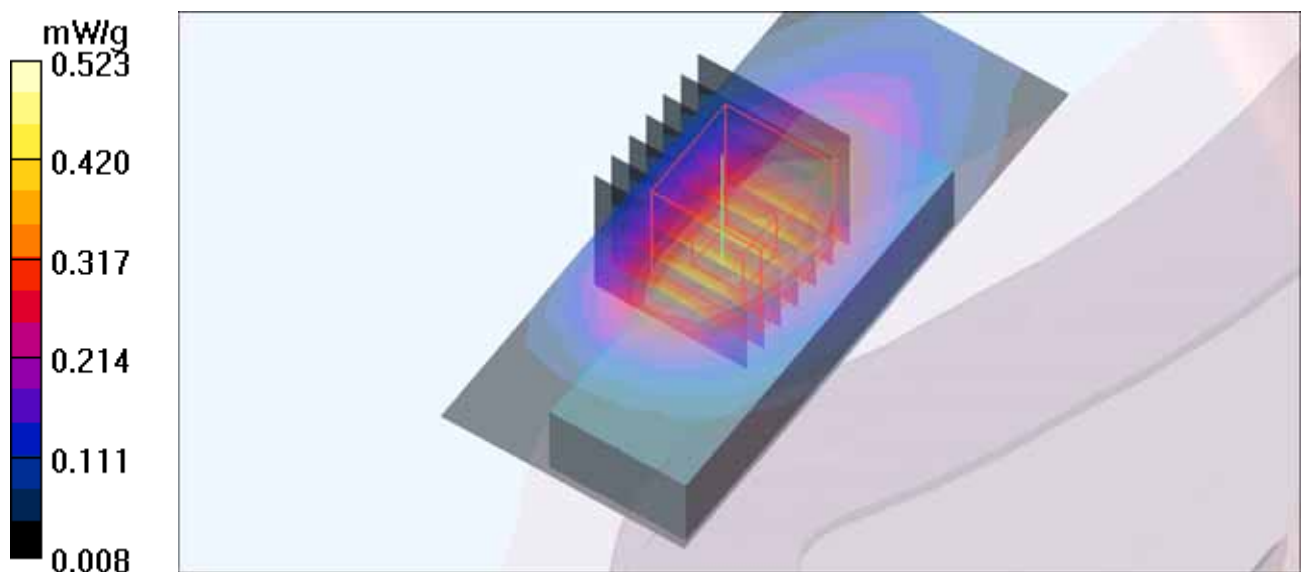**Body Position - Mid/Area Scan (7x15x1):** Measurement grid: dx=8mm, dy=8mm
Maximum value of SAR (measured) = 0.211 mW/g

**Body Position – Mid/Zoom Scan (7x7x7)/Cube 0:** Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 3.93 V/m; Power Drift = 0.145 dB
Peak SAR (extrapolated) = 0.268 W/kg
**SAR(1 g) = 0.155 mW/g; SAR(10 g) = 0.086 mW/g**
Maximum value of SAR (measured) = 0.213 mW/g

## M73-E-GPRS1900 TS4-Ch661

Communication System: E-GPRS1900 ; Frequency: 1880 MHz ; Duty Cycle: 1:2 ; Modulation Type: 8PSK / UL 4 time slots
Medium: MSL1900 Medium parameters used: f = 1880 MHz; σ = 1.54 mho/m; εr = 54.64; ρ = 1000 kg/m$^3$
Phantom section: Flat Section ; Separation distance : 5 mm (The Vertical-Front side of the EUT to the Phantom)

DASY4 Configuration:

- Probe: EX3DV4 - SN3578; ConvF(6.7, 6.7, 6.7); Calibrated: 2010/6/22
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn579; Calibrated: 2010/9/20
- Phantom: SAM 12; Type: SAM V4.0;   Serial: TP 1202
- Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 186

**Body Position - Mid/Area Scan (7x15x1):** Measurement grid: dx=8mm, dy=8mm
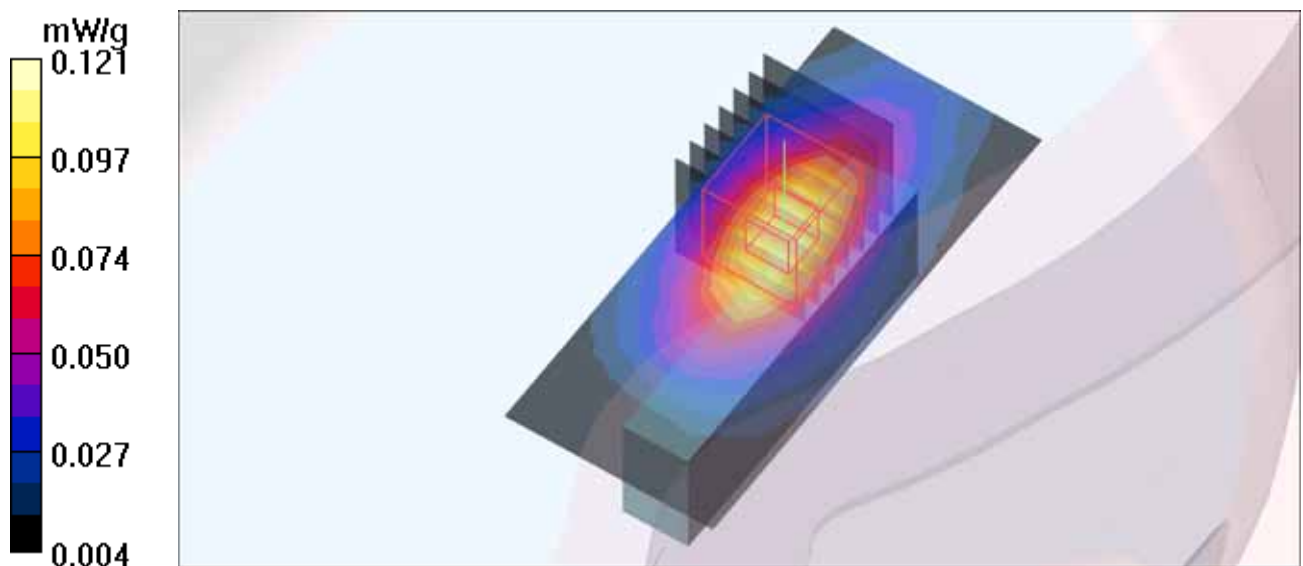Maximum value of SAR (measured) = 0.223 mW/g

**Body Position - Mid/Zoom Scan (7x7x7)/Cube 0:** Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 4.19 V/m; Power Drift = -0.134 dB
Peak SAR (extrapolated) = 0.277 W/kg
**SAR(1 g) = 0.160 mW/g; SAR(10 g) = 0.089 mW/g**
Maximum value of SAR (measured) = 0.221 mW/g

## M74-E-GPRS1900 TS1-Ch661

Communication System: E-GPRS1900 ; Frequency: 1880 MHz ; Duty Cycle: 1:8.3 ; Modulation Type: 8PSK / UL 1 time slot
Medium: MSL1900 Medium parameters used: f = 1880 MHz; σ = 1.54 mho/m; εr = 54.64; ρ = 1000 kg/m$^3$
Phantom section: Flat Section ; Separation Distance : 5 mm (The Horizontal-Up side of the EUT to the Phantom)

DASY4 Configuration:

- Probe: EX3DV4 - SN3578; ConvF(6.7, 6.7, 6.7); Calibrated: 2010/6/22
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn579; Calibrated: 2010/9/20
- Phantom: SAM 12; Type: SAM V4.0;   Serial: TP 1202
- Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 186

**Body Position - Mid/Area Scan (7x15x1):** Measurement grid: dx=8mm, dy=8mm
Maximum value of SAR (measured) = 0.201 mW/g

**Body Position - Mid/Zoom Scan (7x7x7)/Cube 0:** Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 2.29 V/m; Power Drift = 0.133 dB
Peak SAR (extrapolated) = 0.287 W/kg
**SAR(1 g) = 0.168 mW/g; SAR(10 g) = 0.100 mW/g**
Maximum value of SAR (measured) = 0.229 mW/g

## M75-E-GPRS1900 TS2-Ch661

Communication System: E-GPRS1900 ; Frequency: 1880 MHz ; Duty Cycle: 1:4 ; Modulation Type: 8PSK / UL 2 time slots
Medium: MSL1900 Medium parameters used: f = 1880 MHz; σ = 1.54 mho/m; εr = 54.64; ρ = 1000 kg/m$^3$
Phantom section: Flat Section ; Separation Distance : 5 mm (The Horizontal-Up side of the EUT to the Phantom)

DASY4 Configuration:

- Probe: EX3DV4 - SN3578; ConvF(6.7, 6.7, 6.7); Calibrated: 2010/6/22
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn579; Calibrated: 2010/9/20
- Phantom: SAM 12; Type: SAM V4.0;   Serial: TP 1202
- Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 186

**Body Position - Mid/Area Scan (7x15x1):** Measurement grid: dx=8mm, dy=8mm
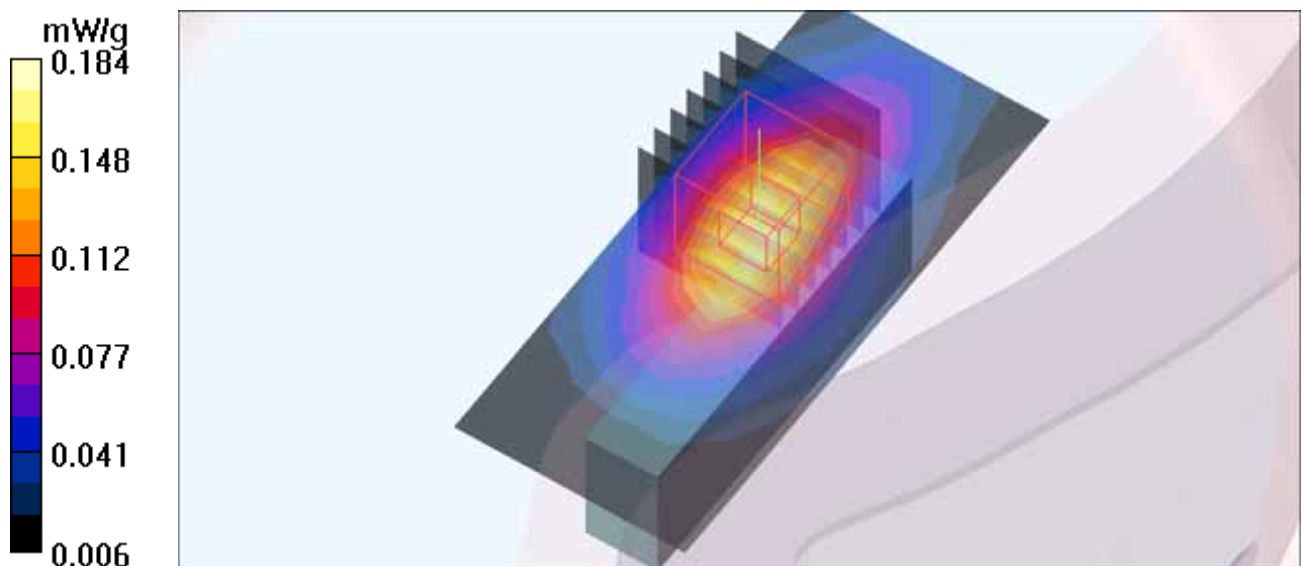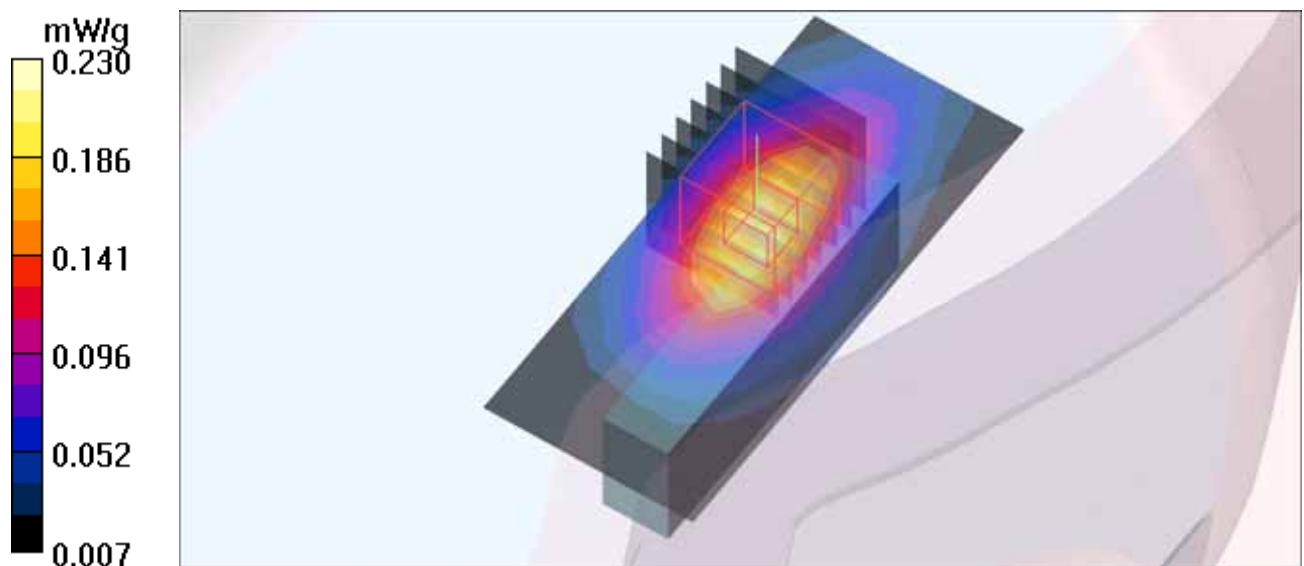Maximum value of SAR (measured) = 0.412 mW/g

**Body Position - Mid/Zoom Scan (7x7x7)/Cube 0:** Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 3.71 V/m; Power Drift = -0.097 dB
Peak SAR (extrapolated) = 0.503 W/kg
**SAR(1 g) = 0.299 mW/g; SAR(10 g) = 0.178 mW/g**.
Maximum value of SAR (measured) = 0.401 mW/g

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## M76-E-GPRS1900 TS3-Ch661

Communication System: E-GPRS1900 ; Frequency: 1880 MHz ; Duty Cycle: 1:2.67 ; Modulation Type: 8PSK / UL 3 time slots
Medium: MSL1900 Medium parameters used: f = 1880 MHz; σ = 1.54 mho/m; εr = 54.64; ρ = 1000 kg/m$^3$
Phantom section: Flat Section ; Separation Distance : 5 mm (The Horizontal-Up side of the EUT to the Phantom)

DASY4 Configuration:

- Probe: EX3DV4 - SN3578; ConvF(6.7, 6.7, 6.7); Calibrated: 2010/6/22
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn579; Calibrated: 2010/9/20
- Phantom: SAM 12; Type: SAM V4.0;   Serial: TP 1202
- Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 186

**Body Position - Mid/Area Scan (7x15x1):** Measurement grid: dx=8mm, dy=8mm
Maximum value of SAR (measured) = 0.490 mW/g

**Body Position - Mid/Zoom Scan (7x7x7)/Cube 0:** Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 4.12 V/m; Power Drift = -0.135 dB
Peak SAR (extrapolated) = 0.600 W/kg
**SAR(1 g) = 0.359 mW/g; SAR(10 g) = 0.213 mW/g**
Maximum value of SAR (measured) = 0.478 mW/g

## M77-E-GPRS1900 TS4-Ch661

Communication System: E-GPRS1900 ; Frequency: 1880 MHz ; Duty Cycle: 1:2 ; Modulation Type: 8PSK / UL 4 time slots
Medium: MSL1900 Medium parameters used: f = 1880 MHz; σ = 1.54 mho/m; εr = 54.64; ρ = 1000 kg/m$^3$
Phantom section: Flat Section ; Separation Distance : 5 mm (The Horizontal-Up side of the EUT to the Phantom)

DASY4 Configuration:

- Probe: EX3DV4 - SN3578; ConvF(6.7, 6.7, 6.7); Calibrated: 2010/6/22
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn579; Calibrated: 2010/9/20
- Phantom: SAM 12; Type: SAM V4.0;   Serial: TP 1202
- Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 186

**Body Position - Mid/Area Scan (7x15x1):** Measurement grid: dx=8mm, dy=8mm
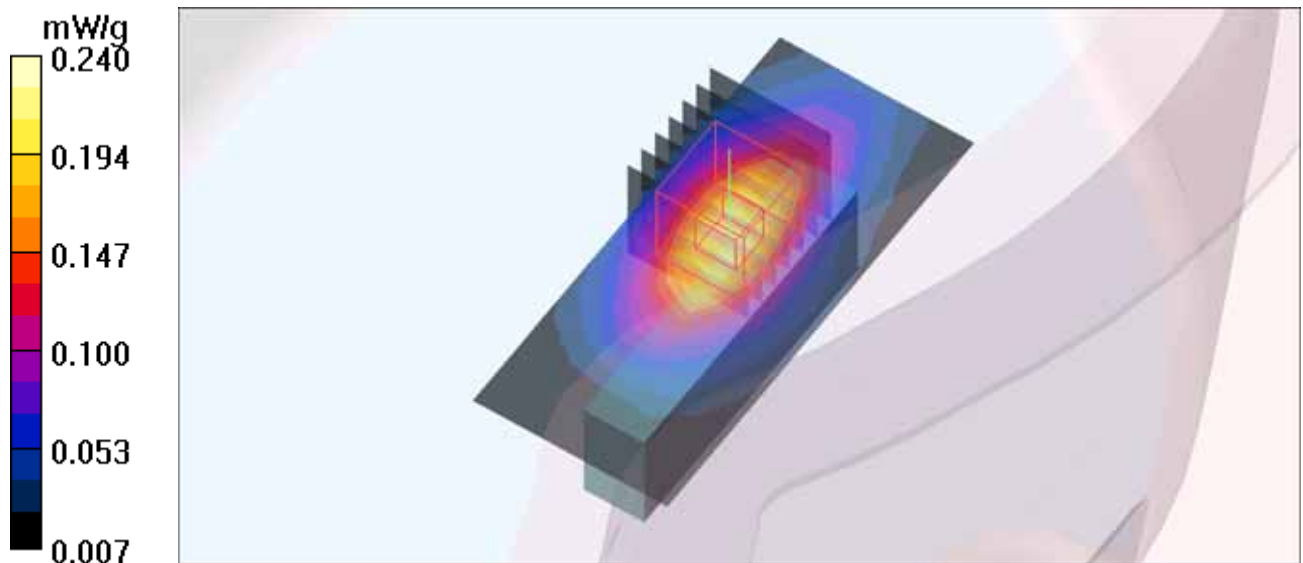Maximum value of SAR (measured) = 0.523 mW/g

**Body Position - Mid/Zoom Scan (7x7x7)/Cube 0:** Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 3.96 V/m; Power Drift = -0.136 dB
Peak SAR (extrapolated) = 0.661 W/kg
**SAR(1 g) = 0.39 mW/g; SAR(10 g) = 0.232 mW/g**

## M78-E-GPRS1900 TS1-Ch661

Communication System: E-GPRS1900 ; Frequency: 1880 MHz ; Duty Cycle: 1:8.3 ; Modulation Type: 8PSK / UL 1 time slot
Medium: MSL1900 Medium parameters used: f = 1880 MHz; σ = 1.54 mho/m; εr = 54.64; ρ = 1000 kg/m$^3$
Phantom section: Flat Section ; Separation distance : 5 mm (The Vertical-Back side of the EUT to the Phantom)

DASY4 Configuration:

- Probe: EX3DV4 - SN3578; ConvF(6.7, 6.7, 6.7); Calibrated: 2010/6/22
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn579; Calibrated: 2010/9/20
- Phantom: SAM 12; Type: SAM V4.0;   Serial: TP 1202
- Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 186

**Body Position - Mid/Area Scan (7x15x1):** Measurement grid: dx=8mm, dy=8mm
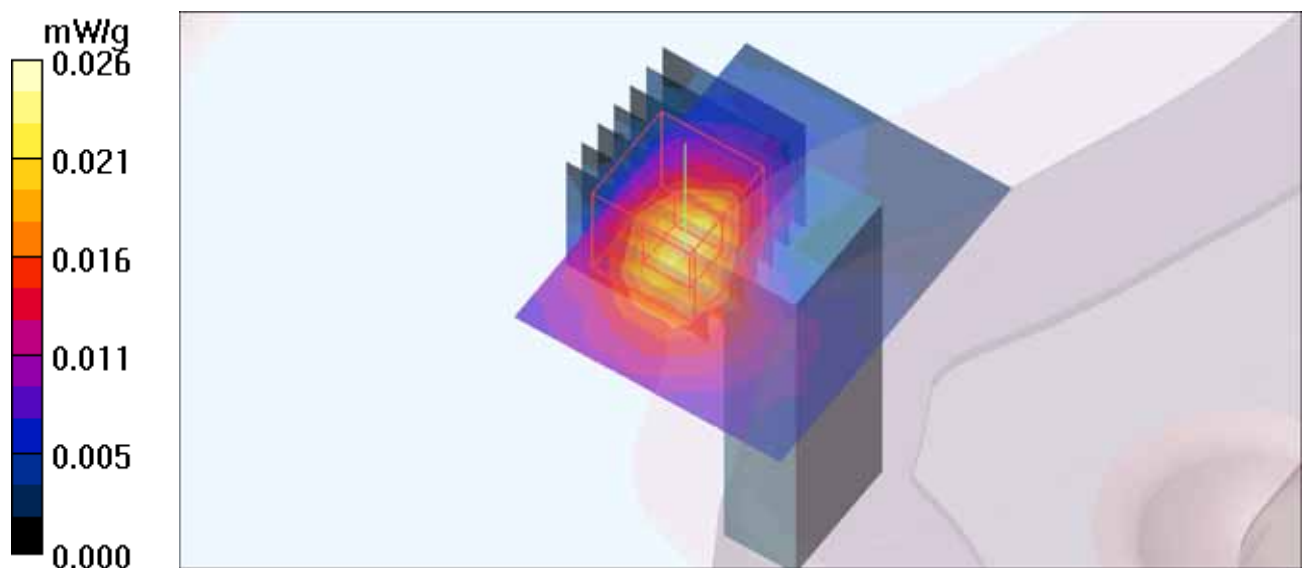Maximum value of SAR (measured) = 0.111 mW/g

**Body Position - Mid/Zoom Scan (7x7x7)/Cube 0:** Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 2.76 V/m; Power Drift = -0.141 dB
Peak SAR (extrapolated) = 0.152 W/kg
**SAR(1 g) = 0.087 mW/g; SAR(10 g) = 0.049 mW/g**
Maximum value of SAR (measured) = 0.121 mW/g

## M79-E-GPRS1900 TS2-Ch661

Communication System: E-GPRS1900 ; Frequency: 1880 MHz ; Duty Cycle: 1:4 ; Modulation Type: 8PSK / UL 2 time slots
Medium: MSL1900 Medium parameters used: f = 1880 MHz; σ = 1.54 mho/m; εr = 54.64; ρ = 1000 kg/m$^3$
Phantom section: Flat Section ; Separation distance : 5 mm (The Vertical-Back side of the EUT to the Phantom)

DASY4 Configuration:

- Probe: EX3DV4 - SN3578; ConvF(6.7, 6.7, 6.7); Calibrated: 2010/6/22
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn579; Calibrated: 2010/9/20
- Phantom: SAM 12; Type: SAM V4.0;   Serial: TP 1202
- Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 186

**Body Position - Mid/Area Scan (7x15x1):** Measurement grid: dx=8mm, dy=8mm
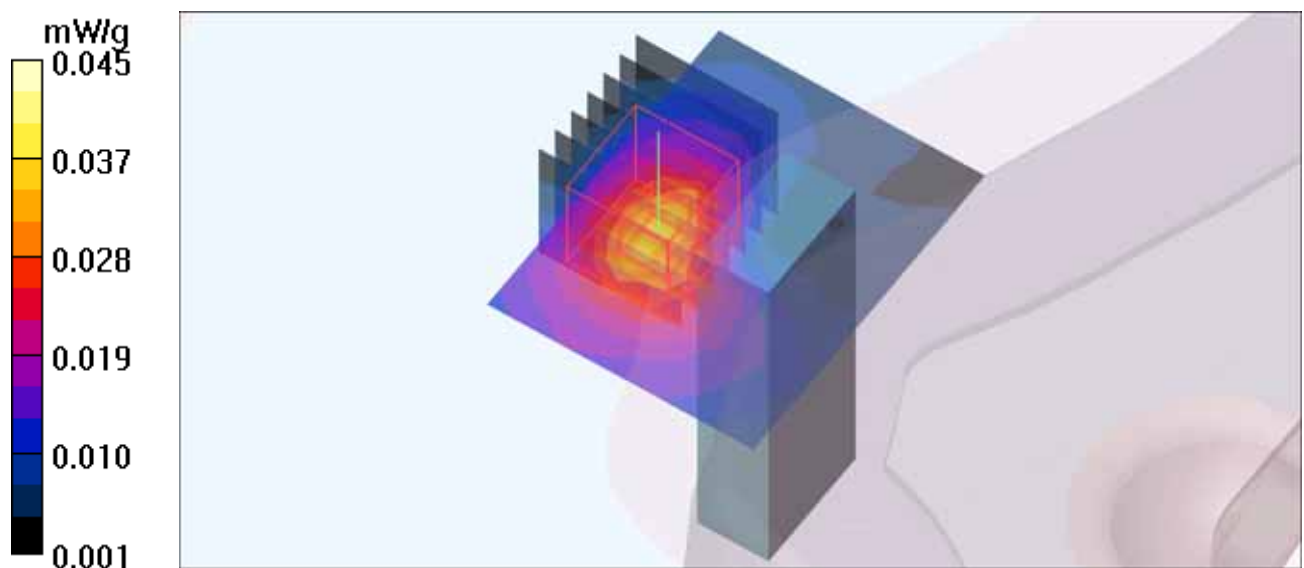Maximum value of SAR (measured) = 0.168 mW/g

**Body Position - Mid/Zoom Scan (7x7x7)/Cube 0:** Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 3.04 V/m; Power Drift = 0.121 dB
Peak SAR (extrapolated) = 0.231 W/kg
**SAR(1 g) = 0.134 mW/g; SAR(10 g) = 0.076 mW/g**
Maximum value of SAR (measured) = 0.184 mW/g

## M80-E-GPRS1900 TS3-Ch661

Communication System: E-GPRS1900 ; Frequency: 1880 MHz ; Duty Cycle: 1:2.67 ; Modulation Type: 8PSK / UL 3 time slots
Medium: MSL1900 Medium parameters used: f = 1880 MHz; σ = 1.54 mho/m; εr = 54.64; ρ = 1000 kg/m$^3$
Phantom section: Flat Section ; Separation distance : 5 mm (The Vertical-Back side of the EUT to the Phantom)

DASY4 Configuration:

- Probe: EX3DV4 - SN3578; ConvF(6.7, 6.7, 6.7); Calibrated: 2010/6/22
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn579; Calibrated: 2010/9/20
- Phantom: SAM 12; Type: SAM V4.0;   Serial: TP 1202
- Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 186

**Body Position - Mid/Area Scan (7x15x1):** Measurement grid: dx=8mm, dy=8mm
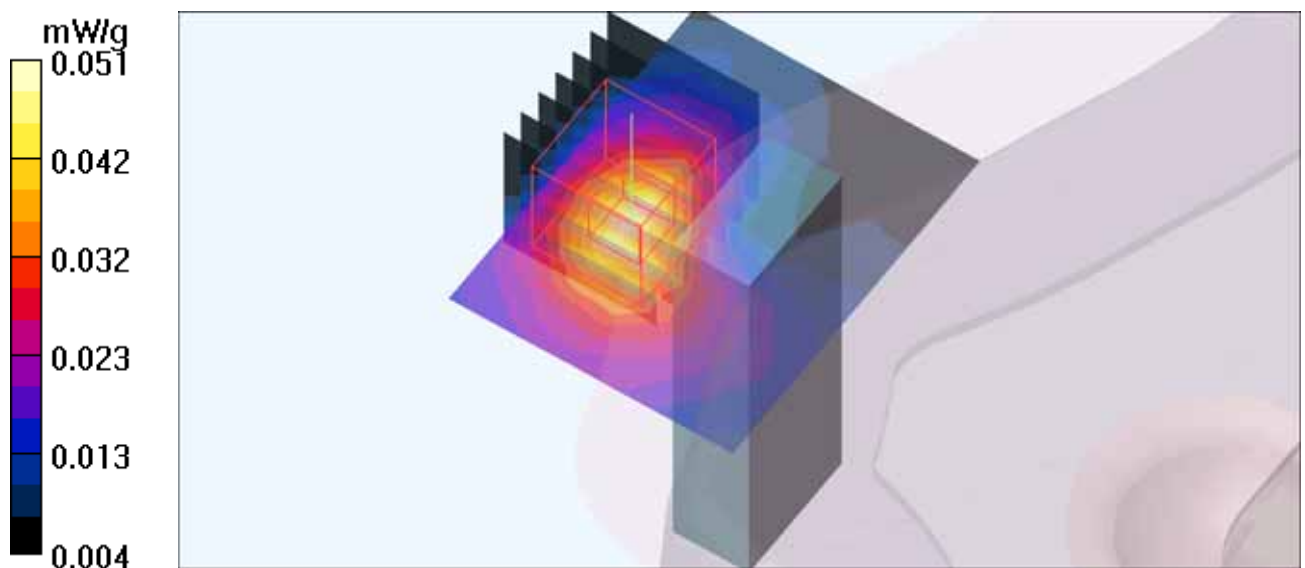Maximum value of SAR (measured) = 0.212 mW/g

**Body Position - Mid/Zoom Scan (7x7x7)/Cube 0:** Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 3.48 V/m; Power Drift = -0.047 dB
Peak SAR (extrapolated) = 0.288 W/kg
**SAR(1 g) = 0.168 mW/g; SAR(10 g) = 0.095 mW/g**
Maximum value of SAR (measured) = 0.230 mW/g

## M81-E-GPRS1900 TS4-Ch661

Communication System: E-GPRS1900 ; Frequency: 1880 MHz ; Duty Cycle: 1:2 ; Modulation Type: 8PSK / UL 4 time slots
Medium: MSL1900 Medium parameters used: f = 1880 MHz; σ = 1.54 mho/m; εr = 54.64; ρ = 1000 kg/m$^3$
Phantom section: Flat Section ; Separation distance : 5 mm (The Vertical-Back side of the EUT to the Phantom)

DASY4 Configuration:

- Probe: EX3DV4 - SN3578; ConvF(6.7, 6.7, 6.7); Calibrated: 2010/6/22
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn579; Calibrated: 2010/9/20
- Phantom: SAM 12; Type: SAM V4.0;   Serial: TP 1202
- Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 186

**Body Position - Mid/Area Scan (7x15x1):** Measurement grid: dx=8mm, dy=8mm
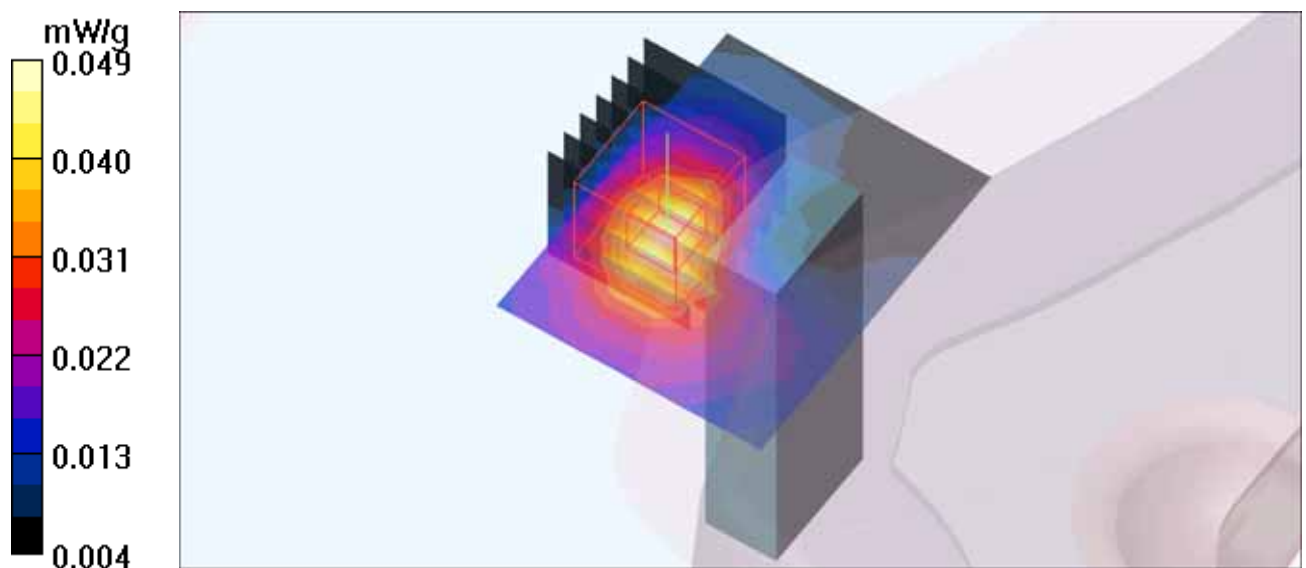Maximum value of SAR (measured) = 0.221 mW/g

**Body Position - Mid/Zoom Scan (7x7x7)/Cube 0:** Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 3.60 V/m; Power Drift = -0.072 dB
Peak SAR (extrapolated) = 0.301 W/kg
**SAR(1 g) = 0.173 mW/g; SAR(10 g) = 0.097 mW/g**
Maximum value of SAR (measured) = 0.240 mW/g

## M82-E-GPRS1900 TS1-Ch661

Communication System: E-GPRS1900 ; Frequency: 1880 MHz ; Duty Cycle: 1:8.3 ; Modulation Type: 8PSK / UL 1 time slot
Medium: MSL1900 Medium parameters used: f = 1880 MHz; $\sigma$ = 1.54 mho/m; $\varepsilon r$ = 54.64; $\rho$ = 1000 kg/m$^3$
Phantom section: Flat Section ; Separation distance : 5 mm (The top side of the EUT to the Phantom)

DASY4 Configuration:

- Probe: EX3DV4 - SN3578; ConvF(6.7, 6.7, 6.7); Calibrated: 2010/6/22
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn579; Calibrated: 2010/9/20
- Phantom: SAM 12; Type: SAM V4.0;   Serial: TP 1202
- Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 186

**Body Position - Mid/Area Scan (8x10x1):** Measurement grid: dx=8mm, dy=8mm
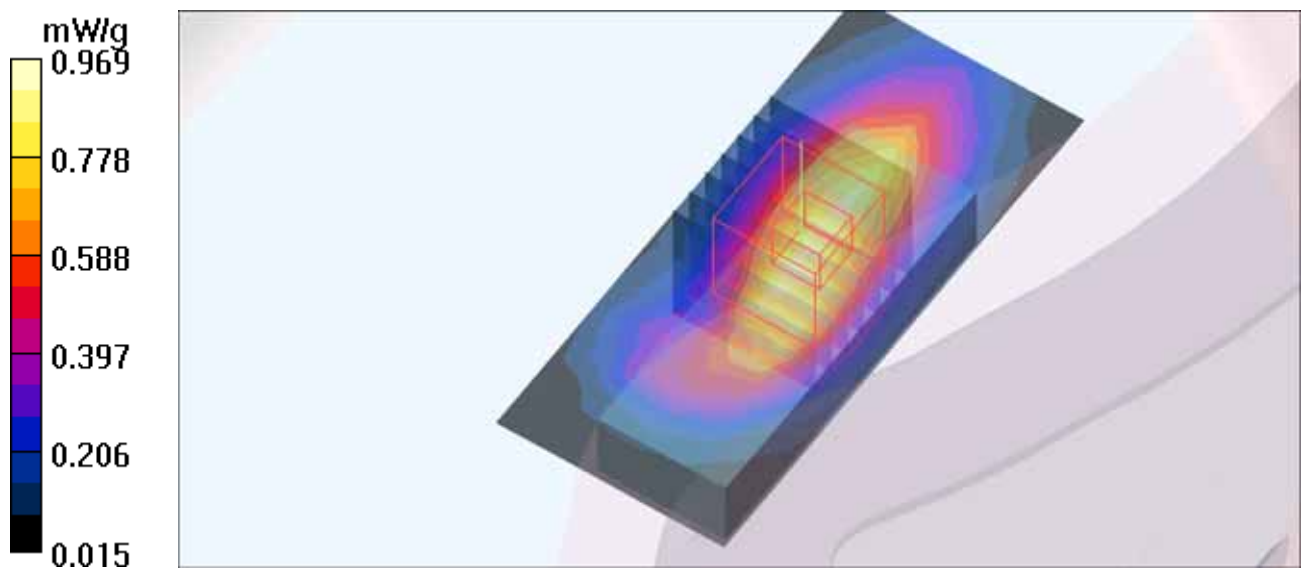Maximum value of SAR (measured) = 0.024 mW/g

**Body Position - Mid/Zoom Scan (7x7x7)/Cube 0:** Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 2.51 V/m; Power Drift = 0.118 dB
Peak SAR (extrapolated) = 0.032 W/kg
**SAR(1 g) = 0.019 mW/g; SAR(10 g) = 0.011 mW/g**
Maximum value of SAR (measured) = 0.026 mW/g

## M83-E-GPRS1900 TS2-Ch661

Communication System: E-GPRS1900 ; Frequency: 1880 MHz ; Duty Cycle: 1:4 ; Modulation Type: 8PSK / UL 2 time slots
Medium: MSL1900 Medium parameters used: f = 1880 MHz; σ = 1.54 mho/m; εr = 54.64; ρ = 1000 kg/m$^3$
Phantom section: Flat Section ; Separation Distance : 5 mm ( The top side of the EUT to the Phantom)

DASY4 Configuration:

- Probe: EX3DV4 - SN3578; ConvF(6.7, 6.7, 6.7); Calibrated: 2010/6/22
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn579; Calibrated: 2010/9/20
- Phantom: SAM 12; Type: SAM V4.0;   Serial: TP 1202
- Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 186

**Body Position - Mid/Area Scan (8x10x1):** Measurement grid: dx=8mm, dy=8mm
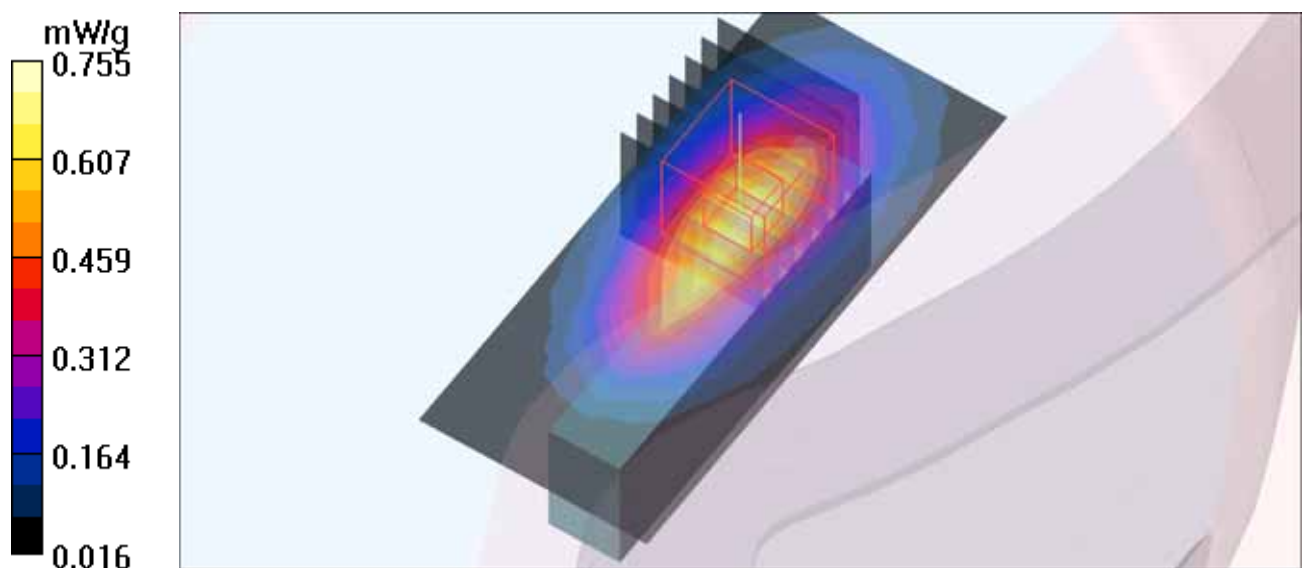Maximum value of SAR (measured) = 0.037 mW/g

**Body Position - Mid/Zoom Scan (7x7x7)/Cube 0:** Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 2.89 V/m; Power Drift = 0.178 dB
Peak SAR (extrapolated) = 0.056 W/kg
**SAR(1 g) = 0.033 mW/g; SAR(10 g) = 0.018 mW/g**
Maximum value of SAR (measured) = 0.045 mW/g

## M84-E-GPRS1900 TS3-Ch661

Communication System: E-GPRS1900 ; Frequency: 1880 MHz ; Duty Cycle: 1:2.67 ; Modulation Type: 8PSK / UL 3 time slots
Medium: MSL1900 Medium parameters used: f = 1880 MHz; σ = 1.54 mho/m; εr = 54.64; ρ = 1000 kg/m$^3$
Phantom section: Flat Section ; Separation Distance : 5 mm ( The top side of the EUT to the Phantom)


DASY4 Configuration:

- Probe: EX3DV4 - SN3578; ConvF(6.7, 6.7, 6.7); Calibrated: 2010/6/22
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn579; Calibrated: 2010/9/20
- Phantom: SAM 12; Type: SAM V4.0;   Serial: TP 1202
- Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 186


**Body Position - Mid/Area Scan (8x10x1):** Measurement grid: dx=8mm, dy=8mm
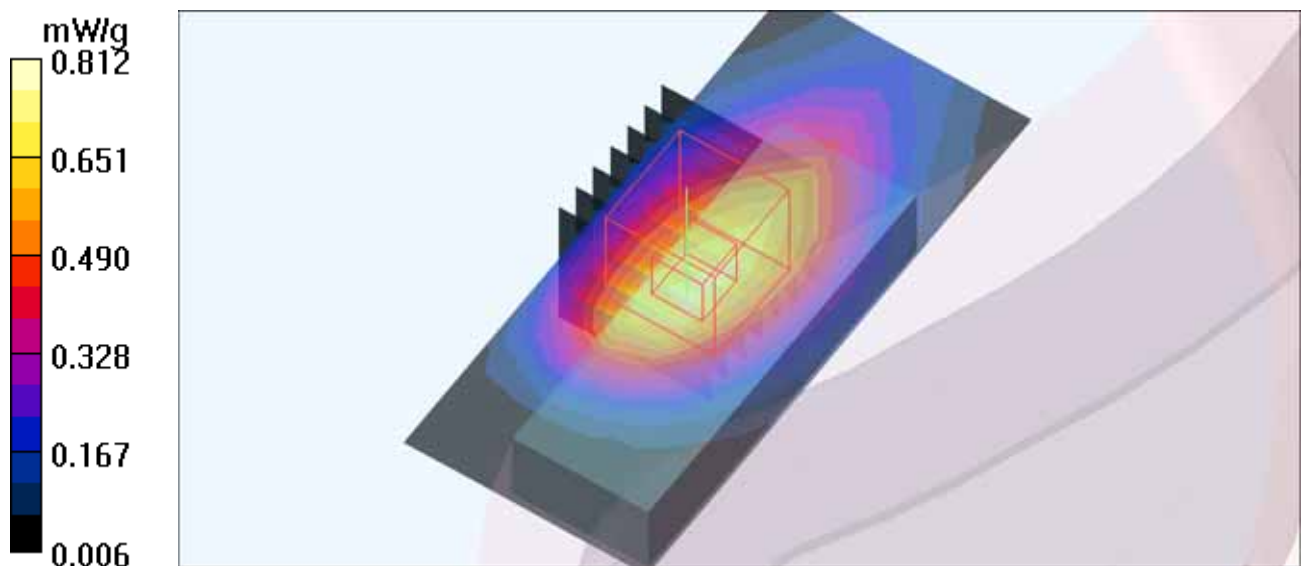Maximum value of SAR (measured) = 0.051 mW/g

**Body Position - Mid/Zoom Scan (7x7x7)/Cube 0:** Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 3.92 V/m; Power Drift = -0.170 dB
Peak SAR (extrapolated) = 0.063 W/kg
**SAR(1 g) = 0.036 mW/g; SAR(10 g) = 0.020 mW/g**
Maximum value of SAR (measured) = 0.050 mW/g

Date/Time: 2011/1/13 17:16:22

## M85-E-GPRS1900 TS4-Ch661

Communication System: E-GPRS1900 ; Frequency: 1880 MHz ; Duty Cycle: 1:2 ; Modulation Type: 8PSK / UL 4 time slots
Medium: MSL1900 Medium parameters used: f = 1880 MHz; σ = 1.54 mho/m; εr = 54.64; ρ = 1000 kg/m$^3$
Phantom section: Flat Section ; Separation Distance : 5 mm ( The top side of the EUT to the Phantom)

DASY4 Configuration:

- Probe: EX3DV4 - SN3578; ConvF(6.7, 6.7, 6.7); Calibrated: 2010/6/22
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn579; Calibrated: 2010/9/20
- Phantom: SAM 12; Type: SAM V4.0;   Serial: TP 1202
- Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 186

**Body Position - Mid/Area Scan (8x10x1):** Measurement grid: dx=8mm, dy=8mm
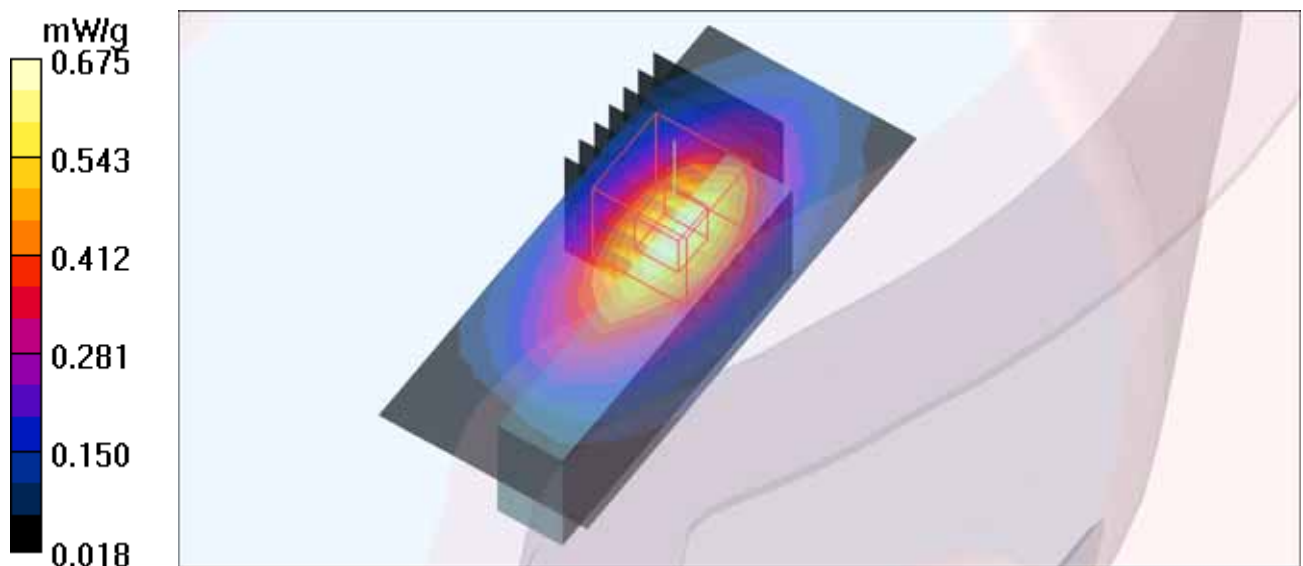Maximum value of SAR (measured) = 0.049 mW/g

**Body Position - Mid/Zoom Scan (7x7x7)/Cube 0:** Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 3.80 V/m; Power Drift = -0.045 dB
Peak SAR (extrapolated) = 0.059 W/kg
**SAR(1 g) = 0.035 mW/g; SAR(10 g) = 0.020 mW/g**
Maximum value of SAR (measured) = 0.048 mW/g

## M86-WCDMA1900-Ch9400

Communication System: WCDMA1900 ; Frequency: 1880 MHz ; Duty Cycle: 1:1 ; Modulation Type: BPSK

Medium: MSL1900 Medium parameters used: f = 1880 MHz; σ = 1.54 mho/m; εr = 54.64; ρ = 1000 kg/m$^3$

Phantom section: Flat Section ; Separation Distance : 5 mm (The Horizontal-Down side of the EUT to the Phantom)

DASY4 Configuration:

- Probe: EX3DV4 - SN3578; ConvF(6.7, 6.7, 6.7); Calibrated: 2010/6/22
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn579; Calibrated: 2010/9/20
- Phantom: SAM 12; Type: SAM V4.0;   Serial: TP 1202
- Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 186

**Body Position - Mid/Area Scan (7x15x1):** Measurement grid: dx=8mm, dy=8mm
Maximum value of SAR (measured) = 0.926 mW/g

**Body Position - Mid/Zoom Scan (7x7x7)/Cube 0:** Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 10.3 V/m; Power Drift = 0.123 dB
Peak SAR (extrapolated) = 1.27 W/kg
**SAR(1 g) = 0.694 mW/g; SAR(10 g) = 0.378 mW/g**
Maximum value of SAR (measured) = 0.969 mW/g

## M87-WCDMA1900-Ch9400

Communication System: WCDMA1900 ; Frequency: 1880 MHz ; Duty Cycle: 1:1 ; Modulation Type: BPSK

Medium: MSL1900 Medium parameters used: f = 1880 MHz; $\sigma$ = 1.54 mho/m; $\varepsilon_r$ = 54.64; $\rho$ = 1000 kg/m$^3$

Phantom section: Flat Section ; Separation Distance : 5 mm (The Vertical-Front side of the EUT to the Phantom)

DASY4 Configuration:

- Probe: EX3DV4 - SN3578; ConvF(6.7, 6.7, 6.7); Calibrated: 2010/6/22
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn579; Calibrated: 2010/9/20
- Phantom: SAM 12; Type: SAM V4.0;   Serial: TP 1202
- Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 186

**Body Position - Mid/Area Scan (7x15x1):** Measurement grid: dx=8mm, dy=8mm
Maximum value of SAR (measured) = 0.689 mW/g

**Body Position - Mid/Zoom Scan (7x7x7)/Cube 0:** Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 6.36 V/m; Power Drift = 0.182 dB
Peak SAR (extrapolated) = 0.967 W/kg
**SAR(1 g) = <mark>0.528</mark> mW/g; SAR(10 g) = 0.279 mW/g**
Maximum value of SAR (measured) = 0.755 mW/g

## M88-WCDMA1900-Ch9400

Communication System: WCDMA1900 ; Frequency: 1880 MHz ; Duty Cycle: 1:1 ; Modulation Type: BPSK
Medium: MSL1900 Medium parameters used: f = 1880 MHz; σ = 1.54 mho/m; εr = 54.64; ρ = 1000 kg/m$^3$
Phantom section: Flat Section ; Separation Distance : 5 mm (The Horizontal-Up side of the EUT to the Phantom)

DASY4 Configuration:

- Probe: EX3DV4 - SN3578; ConvF(6.7, 6.7, 6.7); Calibrated: 2010/6/22
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn579; Calibrated: 2010/9/20
- Phantom: SAM 12; Type: SAM V4.0;   Serial: TP 1202
- Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 186

**Body Position - Mid/Area Scan (7x15x1):** Measurement grid: dx=8mm, dy=8mm
Maximum value of SAR (measured) = 0.812 mW/g

**Body Position - Mid/Zoom Scan (7x7x7)/Cube 0:** Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 4.90 V/m; Power Drift = 0.039 dB
Peak SAR (extrapolated) = 0.995 W/kg
**SAR(1 g) = 0.586 mW/g; SAR(10 g) = 0.346 mW/g**
Maximum value of SAR (measured) = 0.778 mW/g

Date/Time: 2011/1/13 20:02:36

## M89-WCDMA1900-Ch9400

Communication System: WCDMA1900 ; Frequency: 1880 MHz ; Duty Cycle: 1:1 ; Modulation Type: BPSK

Medium: MSL1900 Medium parameters used: f = 1880 MHz; σ = 1.54 mho/m; εr = 54.64; ρ = 1000 kg/m$^3$

Phantom section: Flat Section ; Separation Distance : 5 mm ( The Vertical-Back side of the EUT to the Phantom)

DASY4 Configuration:

- Probe: EX3DV4 - SN3578; ConvF(6.7, 6.7, 6.7); Calibrated: 2010/6/22
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn579; Calibrated: 2010/9/20
- Phantom: SAM 12; Type: SAM V4.0;   Serial: TP 1202
- Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 186

**Body Position - Mid/Area Scan (7x15x1):** Measurement grid: dx=8mm, dy=8mm
Maximum value of SAR (measured) = 0.673 mW/g

**Body Position - Mid/Zoom Scan (7x7x7)/Cube 0:** Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 7.14 V/m; Power Drift = -0.122 dB
Peak SAR (extrapolated) = 0.848 W/kg
**SAR(1 g) = 0.489 mW/g; SAR(10 g) = 0.275 mW/g**
Maximum value of SAR (measured) = 0.675 mW/g

Date/Time: 2011/1/13 20:26:54

## M90-WCDMA1900-Ch9400

Communication System: WCDMA1900 ; Frequency: 1880 MHz ; Duty Cycle: 1:1 ; Modulation Type: BPSK
Medium: MSL1900 Medium parameters used: f = 1880 MHz; σ = 1.54 mho/m; εr = 54.64; ρ = 1000 kg/m$^3$
Phantom section: Flat Section ; Separation Distance : 5 mm ( The top side of the EUT to the Phantom)

DASY4 Configuration:

- Probe: EX3DV4 - SN3578; ConvF(6.7, 6.7, 6.7); Calibrated: 2010/6/22
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn579; Calibrated: 2010/9/20
- Phantom: SAM 12; Type: SAM V4.0;   Serial: TP 1202
- Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 186

**Body Position - Mid/Area Scan (8x10x1):** Measurement grid: dx=8mm, dy=8mm
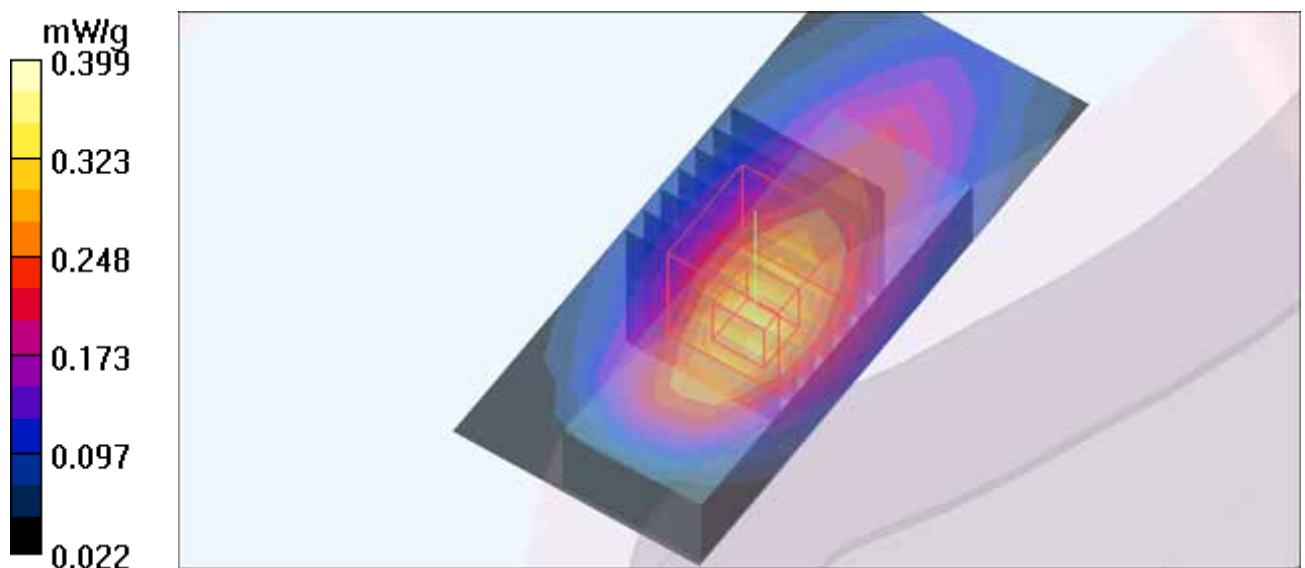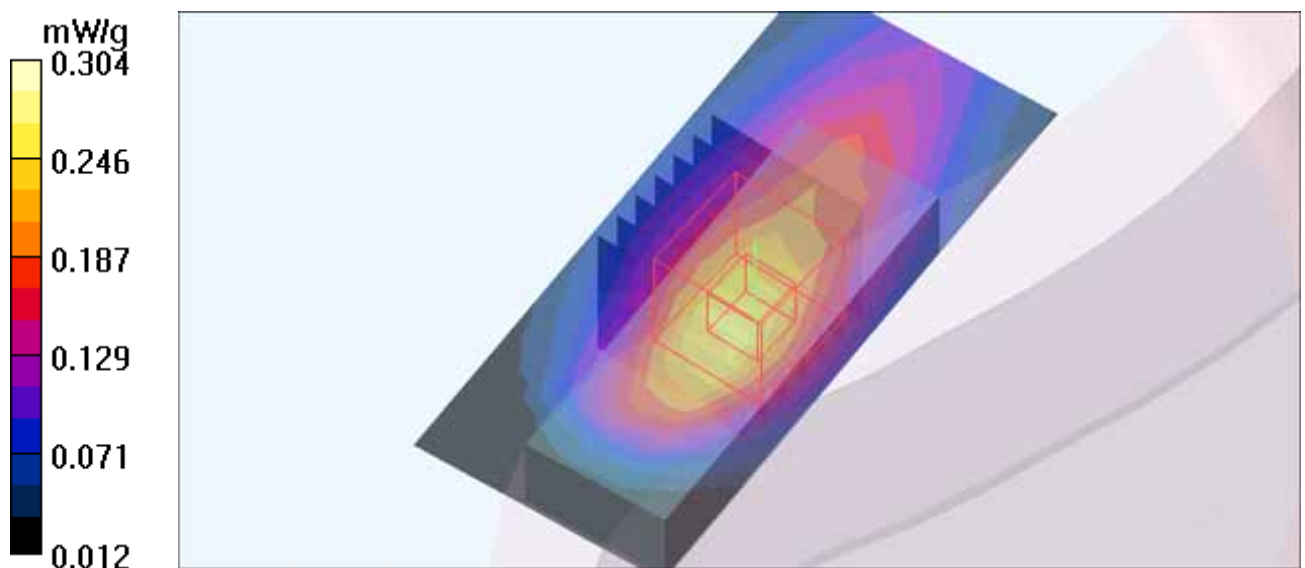Maximum value of SAR (measured) = 0.069 mW/g

**Body Position - Mid/Zoom Scan (7x7x7)/Cube 0:** Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 6.09 V/m; Power Drift = 0.041 dB
Peak SAR (extrapolated) = 0.091 W/kg
**SAR(1 g) = 0.051 mW/g; SAR(10 g) = 0.027 mW/g**
Maximum value of SAR (measured) = 0.072 mW/g

Date/Time: 2011/1/12 00:29:14
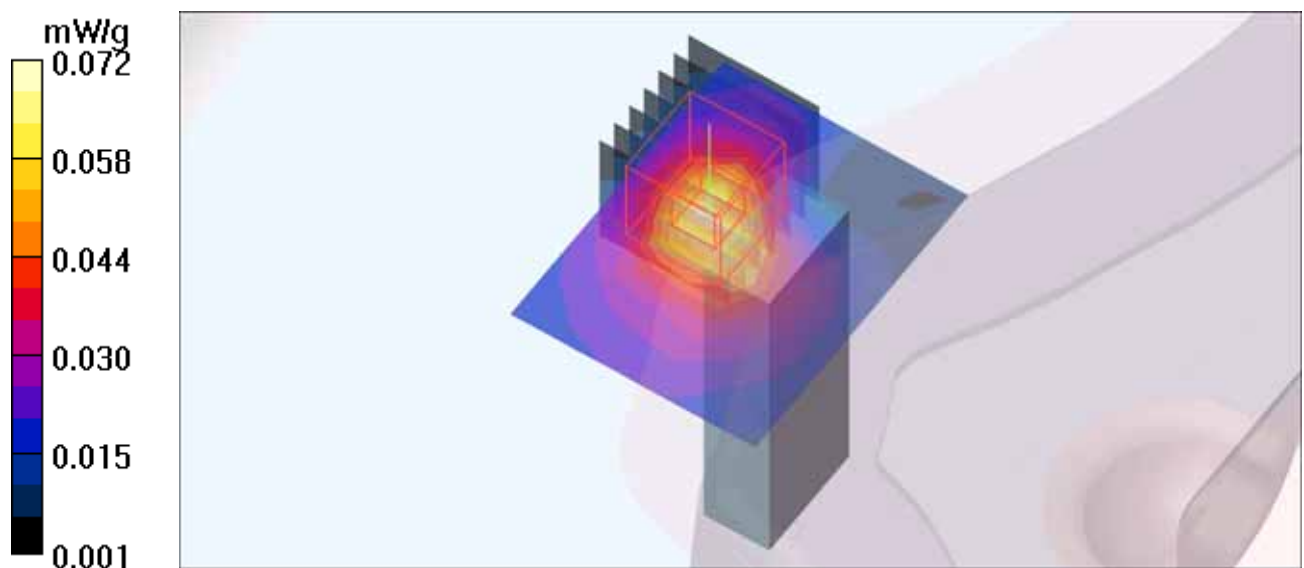
## SystemPerformanceCheck-D835V2-MSL835 MHz

**DUT: Dipole 835 MHz ; Type: D835V2 ; Serial: D835V2 - SN:4d021 ; Test Frequency: 835 MHz**

Communication System: CW ; Frequency: 835 MHz; Duty Cycle: 1:1; Modulation Type: CW
Medium: MSL835;Medium parameters used: f = 835 MHz; σ = 0.98 mho/m; $\varepsilon_r$ = 55.86; ρ = 1000 kg/m$^3$ ; Liquid level : 150 mm
Phantom section: Flat Section ; Separation Distance : 15 mm (The feet point of the dipole to the Phantom)Air temp. : 22.7 degrees ; Liquid temp. : 21.6 degrees

DASY4 Configuration:

- Probe: EX3DV4 - SN3578; ConvF(8.55, 8.55, 8.55); Calibrated: 2010/6/22
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn579; Calibrated: 2010/9/20
- Phantom: SAM 12; Type: SAM V4.0;   Serial: TP 1202
- Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 186

**d=15mm, Pin=250mW/Area Scan (7x9x1):** Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (measured) = 3.12 mW/g

**d=15mm, Pin=250mW/Zoom Scan (7x7x7)/Cube 0:** Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 55.2 V/m; Power Drift = -0.083 dB
Peak SAR (extrapolated) = 3.72 W/kg
**SAR(1 g) = 2.45 mW/g; SAR(10 g) = 1.59 mW/g**
Maximum value of SAR (measured) = 3.17 mW/g
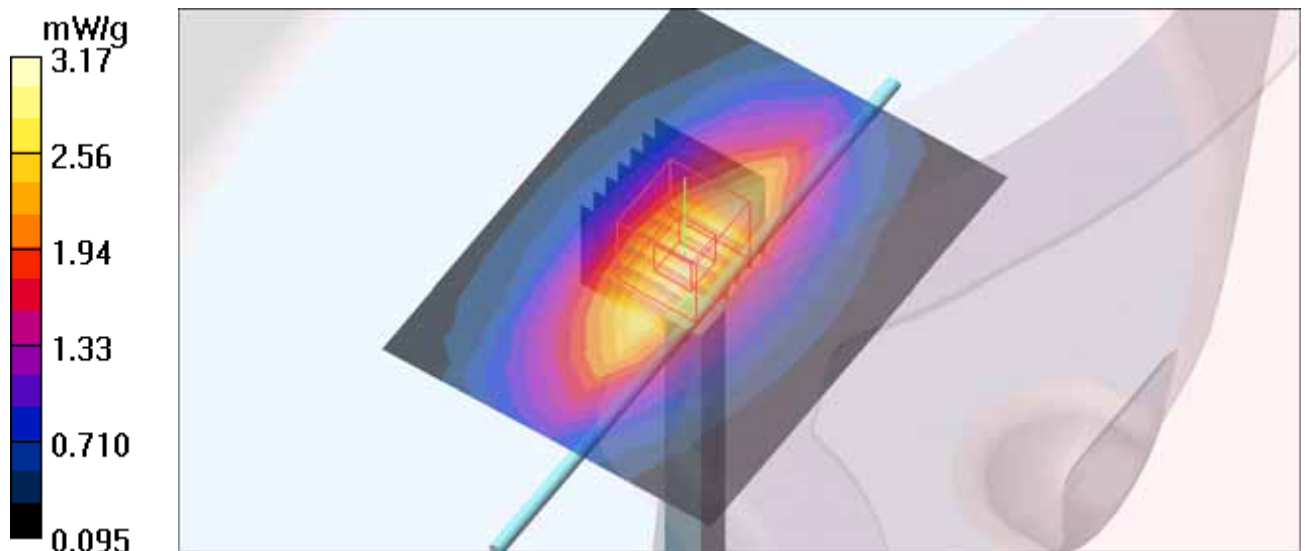
## SystemPerformanceCheck-D1900V2-MSL1900 MHz

**DUT: Dipole 1900 MHz ; Type: D1900V2 ; Serial: D1900V2 - SN:5d036 ; Test Frequency: 1900 MHz**

Communication System: CW ; Frequency: 1900 MHz; Duty Cycle: 1:1; Modulation Type: CW
Medium: MSL1900;Medium parameters used: f = 1900 MHz; $\sigma$ = 1.56 mho/m; $\varepsilon_r$ = 54.5; $\rho$ = 1000 kg/m$^3$ ; Liquid level : 150 mm
Phantom section: Flat Section ; Separation distance : 10 mm (The feet point of the dipole to the Phantom)Air temp. : 22.5 degrees ; Liquid temp. : 21.6 degrees

DASY4 Configuration:

- Probe: EX3DV4 - SN3578; ConvF(6.7, 6.7, 6.7); Calibrated: 2010/6/22
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn579; Calibrated: 2010/9/20
- Phantom: SAM 12; Type: SAM V4.0;  Serial: TP 1202
- Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 186

**d=10mm, Pin=250mW/Area Scan (7x7x1):** Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (measured) = 14.1 mW/g

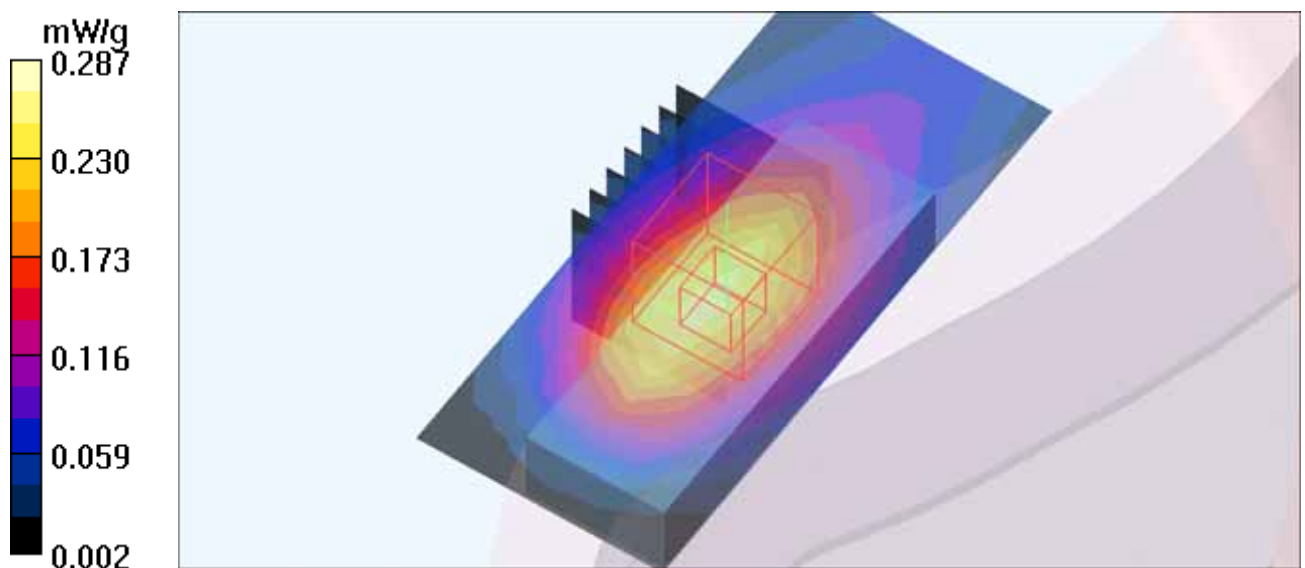**d=10mm, Pin=250mW/Zoom Scan (7x7x7)/Cube 0:** Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 95.4 V/m; Power Drift = 0.021 dB
Peak SAR (extrapolated) = 18.5 W/kg
**SAR(1 g) = 9.69 mW/g; SAR(10 g) = 5.05 mW/g**
Maximum value of SAR (measured) = 14.3 mW/g
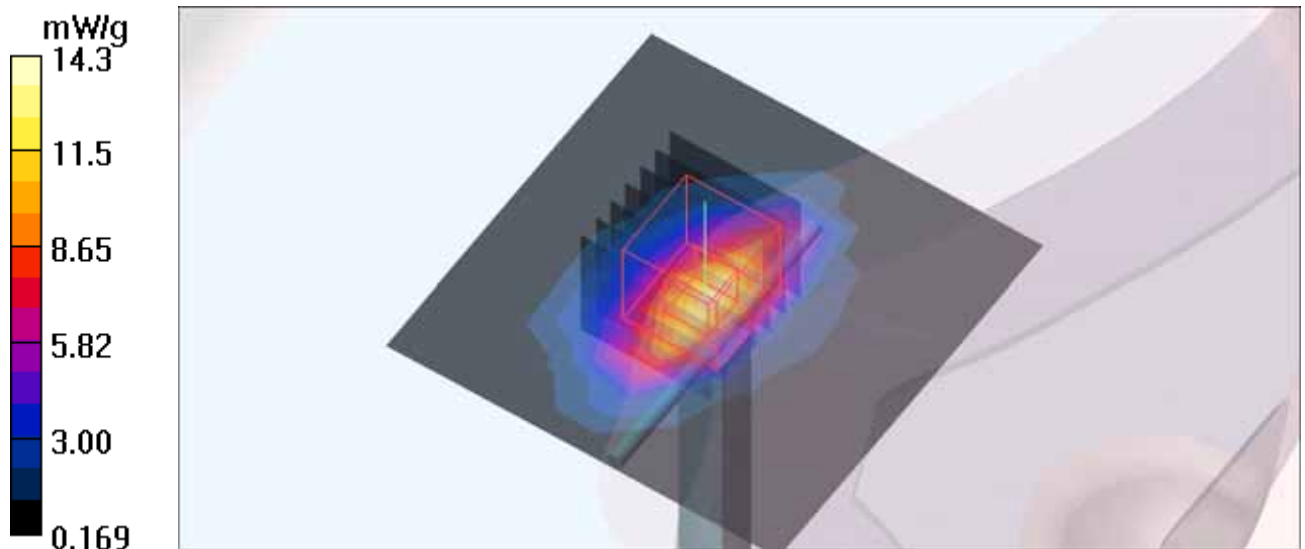
# APPENDIX A: TEST DATA

**Product Name: LTE USB Modem; Model Name: C505**

## Liquid Level Photo

**Tissue 750 MHz D=150mm**



**Tissue 1700MHz D=150mm**

Date/Time: 2011/1/24 02:04:25

## M01-LTE BAND 17-Ch23790 (50% RB centered)

Communication System: LTE band17 (700) ; Frequency: 710 MHz ; Duty Cycle: 1:1 ; Modulation type: QPSK
Medium: MSL750 Medium parameters used: f = 710 MHz; σ = 0.95 mho/m; εr = 55.86; ρ = 1000 kg/m³
Phantom section: Flat Section ; Separation distance : 5 mm (The Horizontal-Down side of the EUT to the Phantom)

DASY4 Configuration:

- Probe: ES3DV3 - SN3177; ConvF(6.18, 6.18, 6.18); Calibrated: 2010/8/24
- Sensor-Surface: 3mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn579; Calibrated: 2010/9/20
- Phantom: SAM Twin Phantom V4.0; Type: QD 000 P40 CA; Serial: TP-1202
- Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 186

**Body Position - Mid/Area Scan (7x15x1):** Measurement grid: dx=8mm, dy=8mm
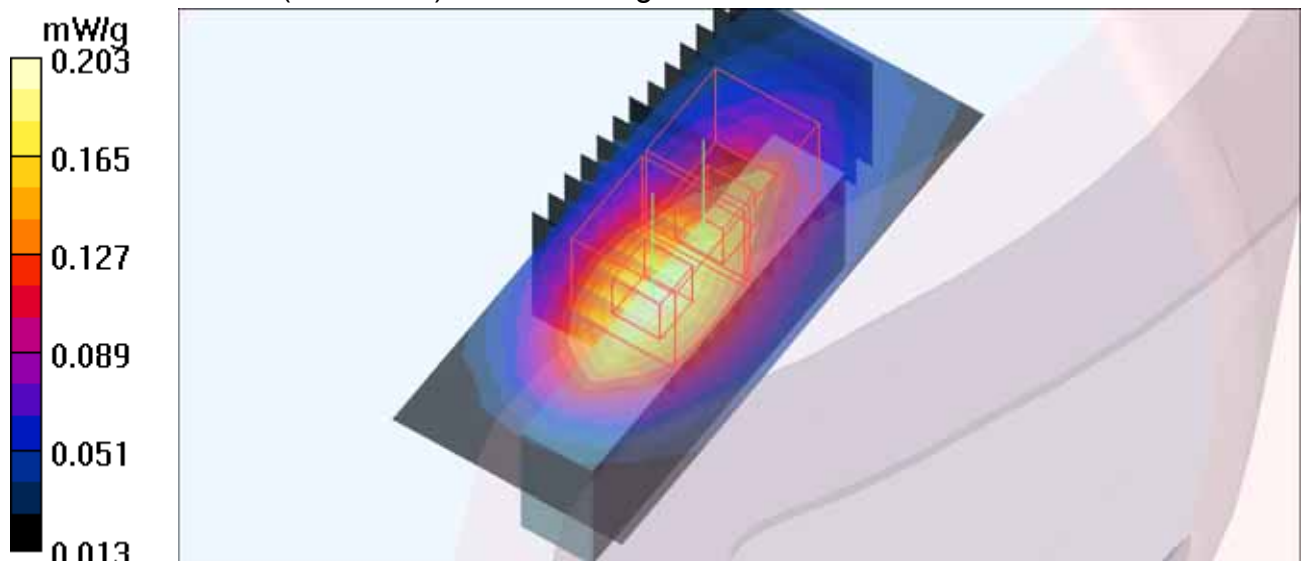Maximum value of SAR (measured) = 0.378 mW/g

**Body Position - Mid/Zoom Scan (7x7x7)/Cube 0:** Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 19.9 V/m; Power Drift = 0.071 dB
Peak SAR (extrapolated) = 0.517 W/kg
**SAR(1 g) = 0.334 mW/g; SAR(10 g) = 0.212 mW/g**
Maximum value of SAR (measured) = 0.399 mW/g

## M02-LTE BAND 17-Ch23790 (1RB, Lower edge)

Communication System: LTE band17 (700) ; Frequency: 710 MHz ; Duty Cycle: 1:1 ; Modulation type: QPSK
Medium: MSL750 Medium parameters used: f = 710 MHz; σ = 0.95 mho/m; εr = 55.86; ρ = 1000 kg/m$^3$
Phantom section: Flat Section ; Separation distance : 5 mm (The Horizontal-Down side of the EUT to the Phantom)

DASY4 Configuration:

- Probe: ES3DV3 - SN3177; ConvF(6.18, 6.18, 6.18); Calibrated: 2010/8/24
- Sensor-Surface: 3mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn579; Calibrated: 2010/9/20
- Phantom: SAM Twin Phantom V4.0; Type: QD 000 P40 CA; Serial: TP-1202
- Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 186

**Body Position - Mid/Area Scan (7x15x1):** Measurement grid: dx=8mm, dy=8mm
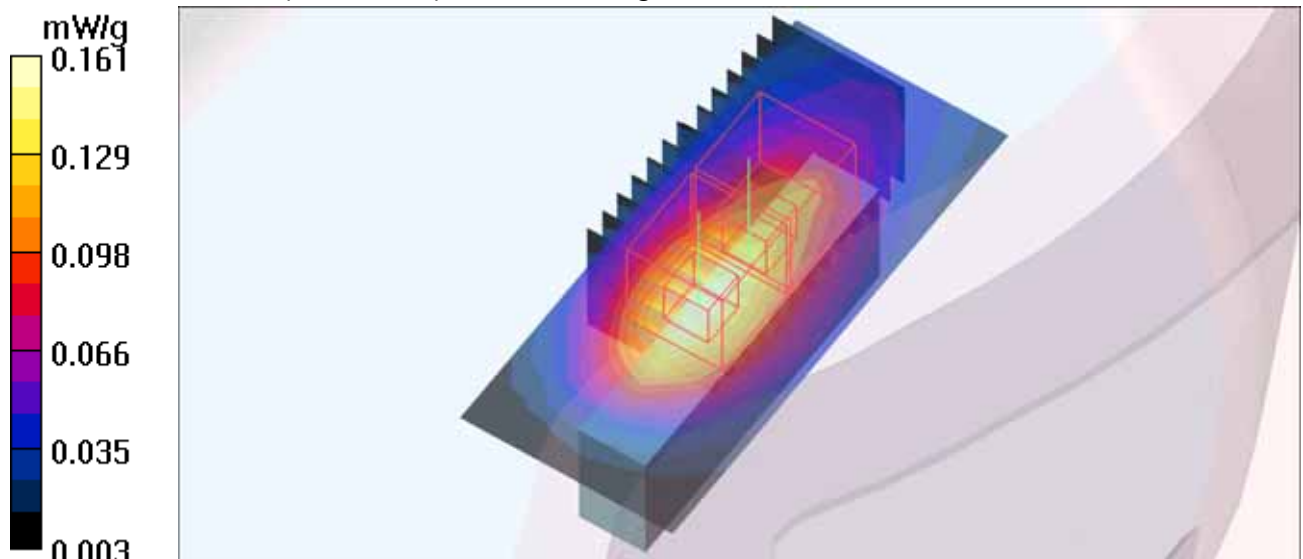Maximum value of SAR (measured) = 0.256 mW/g

**Body Position - Mid/Zoom Scan (7x7x7)/Cube 0:** Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 12.7 V/m; Power Drift = -0.184 dB
Peak SAR (extrapolated) = 0.542 W/kg
**SAR(1 g) = 0.202 mW/g; SAR(10 g) = 0.123 mW/g**
Maximum value of SAR (measured) = 0.304 mW/g

Date/Time: 2011/1/24 05:14:56

## M03-LTE BAND 17-Ch23790 (1RB, Upper edge)

Communication System: LTE band17 (700) ; Frequency: 710 MHz ; Duty Cycle: 1:1 ; Modulation type: QPSK
Medium: MSL750 Medium parameters used: f = 710 MHz; σ = 0.95 mho/m; εr = 55.86; ρ = 1000 kg/m$^3$
Phantom section: Flat Section ; Separation distance : 5 mm (The Horizontal-Down side of the EUT to the Phantom)

DASY4 Configuration:

- Probe: ES3DV3 - SN3177; ConvF(6.18, 6.18, 6.18); Calibrated: 2010/8/24
- Sensor-Surface: 3mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn579; Calibrated: 2010/9/20
- Phantom: SAM Twin Phantom V4.0; Type: QD 000 P40 CA; Serial: TP-1202
- Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 186

**Body Position - Mid/Area Scan (7x15x1):** Measurement grid: dx=8mm, dy=8mm
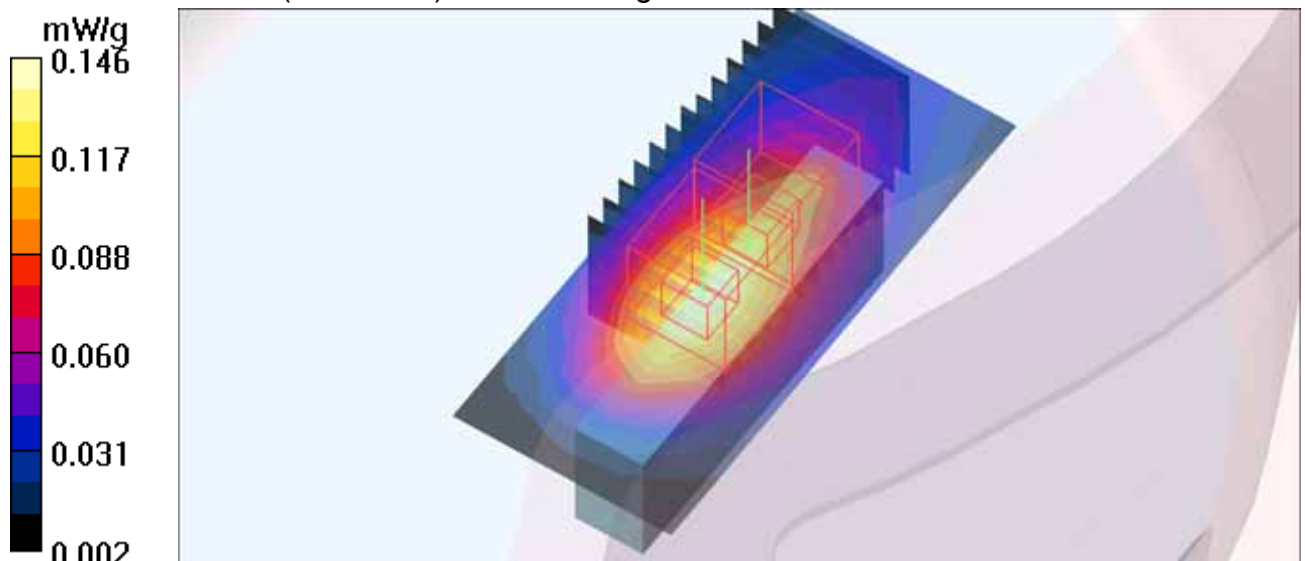Maximum value of SAR (measured) = 0.287 mW/g

**Body Position - Mid/Zoom Scan (7x7x7)/Cube 0:** Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 14.3 V/m; Power Drift = -0.157 dB
Peak SAR (extrapolated) = 0.334 W/kg
**SAR(1 g) = 0.218 mW/g; SAR(10 g) = 0.139 mW/g**
Maximum value of SAR (measured) = 0.258 mW/g



4

## M04-LTE BAND 17-Ch23790 (50% RB centered)

Communication System: LTE band17 (700) ; Frequency: 710 MHz ; Duty Cycle: 1:1 ; Modulation Type: QPSK
Medium: MSL750 Medium parameters used: f = 710 MHz; σ = 0.95 mho/m; εr = 55.86; ρ = 1000 kg/m³
Phantom section: Flat Section ; Separation Distance : 5 mm (The Vertical-Front side of the EUT to the Phantom)

DASY4 Configuration:

- Probe: ES3DV3 - SN3177; ConvF(6.18, 6.18, 6.18); Calibrated: 2010/8/24
- Sensor-Surface: 3mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn579; Calibrated: 2010/9/20
- Phantom: SAM Twin Phantom V4.0; Type: QD 000 P40 CA; Serial: TP-1202
- Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 186

**Body Position - Mid/Area Scan (7x15x1):** Measurement grid: dx=8mm, dy=8mm
Maximum value of SAR (measured) = 0.199 mW/g
**Body Position - Mid/Zoom Scan (7x7x7)/Cube 0:** Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 11.4 V/m; Power Drift = 0.004 dB
Peak SAR (extrapolated) = 0.268 W/kg
**SAR(1 g) = 0.169 mW/g; SAR(10 g) = 0.105 mW/g**
Maximum value of SAR (measured) = 0.203 mW/g
**Body Position - Mid/Zoom Scan (7x7x7)/Cube 1:** Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 11.4 V/m; Power Drift = 0.004 dB
Peak SAR (extrapolated) = 0.226 W/kg
**SAR(1 g) = 0.134 mW/g; SAR(10 g) = 0.082 mW/g**
Maximum value of SAR (measured) = 0.170 mW/g

## M05-LTE BAND 17-Ch23790 (1RB, Lower edge)

Communication System: LTE band17 (700) ; Frequency: 710 MHz ; Duty Cycle: 1:1 ; Modulation Type: QPSK
Medium: MSL750 Medium parameters used: f = 710 MHz; σ = 0.95 mho/m; εr = 55.86; ρ = 1000 kg/m$^3$
Phantom section: Flat Section ; Separation Distance : 5 mm (The Vertical-Front side of the EUT to the Phantom)

DASY4 Configuration:

- Probe: ES3DV3 - SN3177; ConvF(6.18, 6.18, 6.18); Calibrated: 2010/8/24
- Sensor-Surface: 3mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn579; Calibrated: 2010/9/20
- Phantom: SAM Twin Phantom V4.0; Type: QD 000 P40 CA; Serial: TP-1202
- Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 186

**Body Position - Mid/Area Scan (7x15x1):** Measurement grid: dx=8mm, dy=8mm
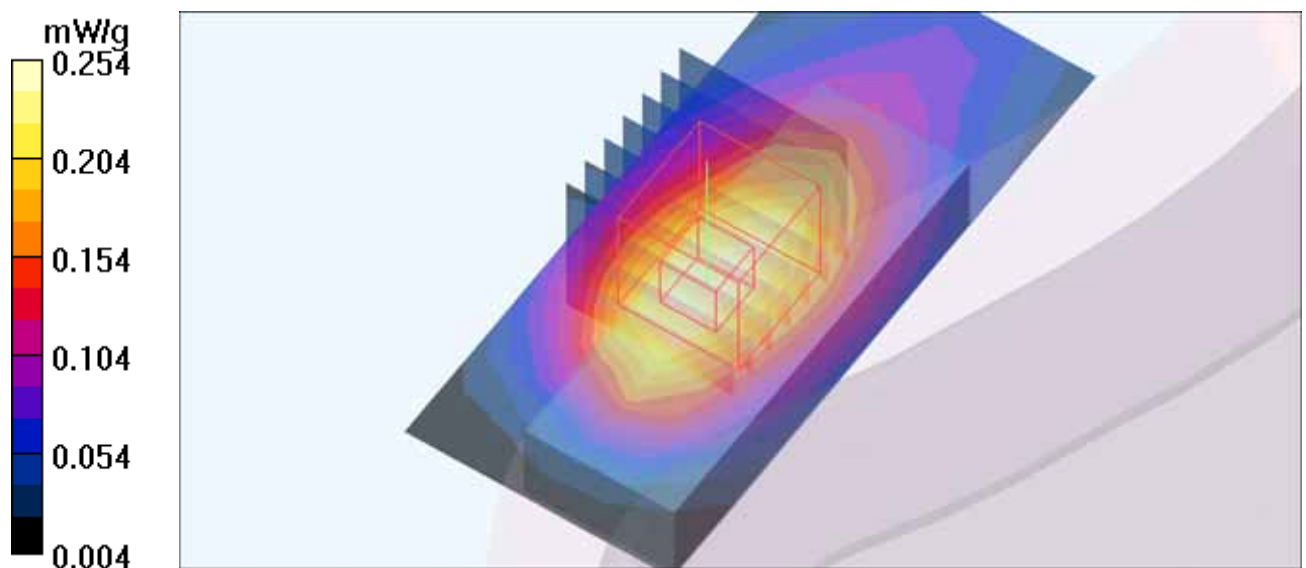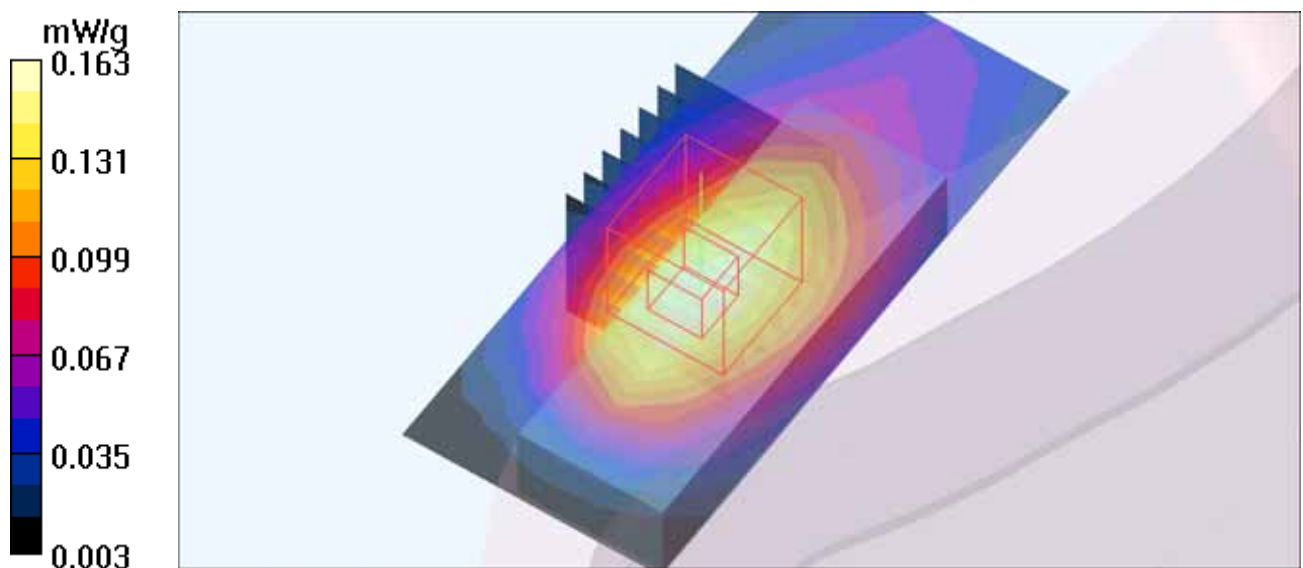Maximum value of SAR (measured) = 0.161 mW/g
**Body Position - Mid/Zoom Scan (7x7x7)/Cube 0:** Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 10.1 V/m; Power Drift = -0.161 dB
Peak SAR (extrapolated) = 0.189 W/kg
**SAR(1 g) = 0.120 mW/g; SAR(10 g) = 0.075 mW/g**
Maximum value of SAR (measured) = 0.144 mW/g
**Body Position - Mid/Zoom Scan (7x7x7)/Cube 1:** Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 10.1 V/m; Power Drift = -0.161 dB
Peak SAR (extrapolated) = 0.160 W/kg
**SAR(1 g) = 0.096 mW/g; SAR(10 g) = 0.059 mW/g**
Maximum value of SAR (measured) = 0.122 mW/g

## M06-LTE BAND 17-Ch23790 (1RB, Upper edge)

Communication System: LTE band17 (700) ; Frequency: 710 MHz ; Duty Cycle: 1:1 ; Modulation Type: QPSK
Medium: MSL750 Medium parameters used: f = 710 MHz; σ = 0.95 mho/m; εr = 55.86; ρ = 1000 kg/m$^3$
Phantom section: Flat Section ; Separation Distance : 5 mm (The Vertical-Front side of the EUT to the Phantom)

DASY4 Configuration:

- Probe: ES3DV3 - SN3177; ConvF(6.18, 6.18, 6.18); Calibrated: 2010/8/24
- Sensor-Surface: 3mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn579; Calibrated: 2010/9/20
- Phantom: SAM Twin Phantom V4.0; Type: QD 000 P40 CA; Serial: TP-1202
- Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 186

**Body Position - Mid/Area Scan (7x15x1):** Measurement grid: dx=8mm, dy=8mm
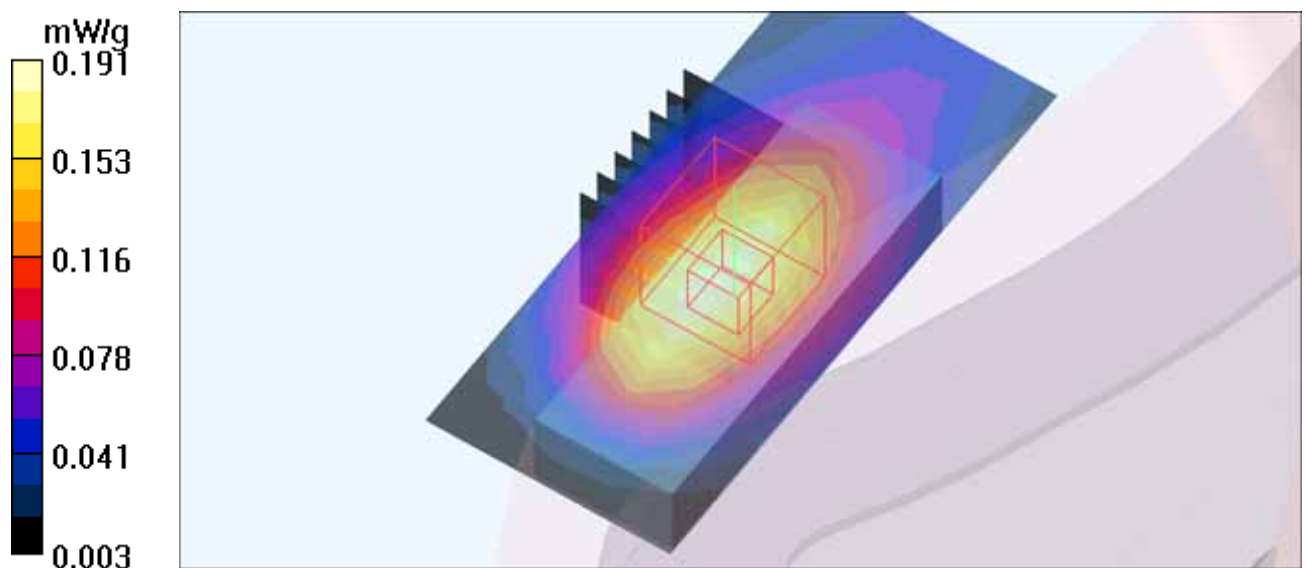Maximum value of SAR (measured) = 0.146 mW/g
**Body Position - Mid/Zoom Scan (7x7x7)/Cube 0:** Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 10.2 V/m; Power Drift = -0.125 dB
Peak SAR (extrapolated) = 0.179 W/kg
**SAR(1 g) = 0.113 mW/g; SAR(10 g) = 0.071 mW/g**
Maximum value of SAR (measured) = 0.136 mW/g
**Body Position - Mid/Zoom Scan (7x7x7)/Cube 1:** Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 10.2 V/m; Power Drift = -0.125 dB
Peak SAR (extrapolated) = 0.149 W/kg
**SAR(1 g) = 0.088 mW/g; SAR(10 g) = 0.054 mW/g**
Maximum value of SAR (measured) = 0.113 mW/g

## M07-LTE BAND 17-Ch23790 (50% RB centered)

Communication System: LTE band17 (700) ; Frequency: 710 MHz ; Duty Cycle: 1:1; Modulation Type: QPSK
Medium: MSL750 Medium parameters used: f = 710 MHz; σ = 0.95 mho/m; εr = 55.86; ρ = 1000 kg/m$^3$
Phantom section: Flat Section ; Separation Distance : 5 mm (The Horizontal-Up side of the EUT to the Phantom)

DASY4 Configuration:

- Probe: ES3DV3 - SN3177; ConvF(6.18, 6.18, 6.18); Calibrated: 2010/8/24
- Sensor-Surface: 3mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn579; Calibrated: 2010/9/20
- Phantom: SAM Twin Phantom V4.0; Type: QD 000 P40 CA; Serial: TP-1202
- Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 186

**Body Position - Mid/Area Scan (7x15x1):** Measurement grid: dx=8mm, dy=8mm
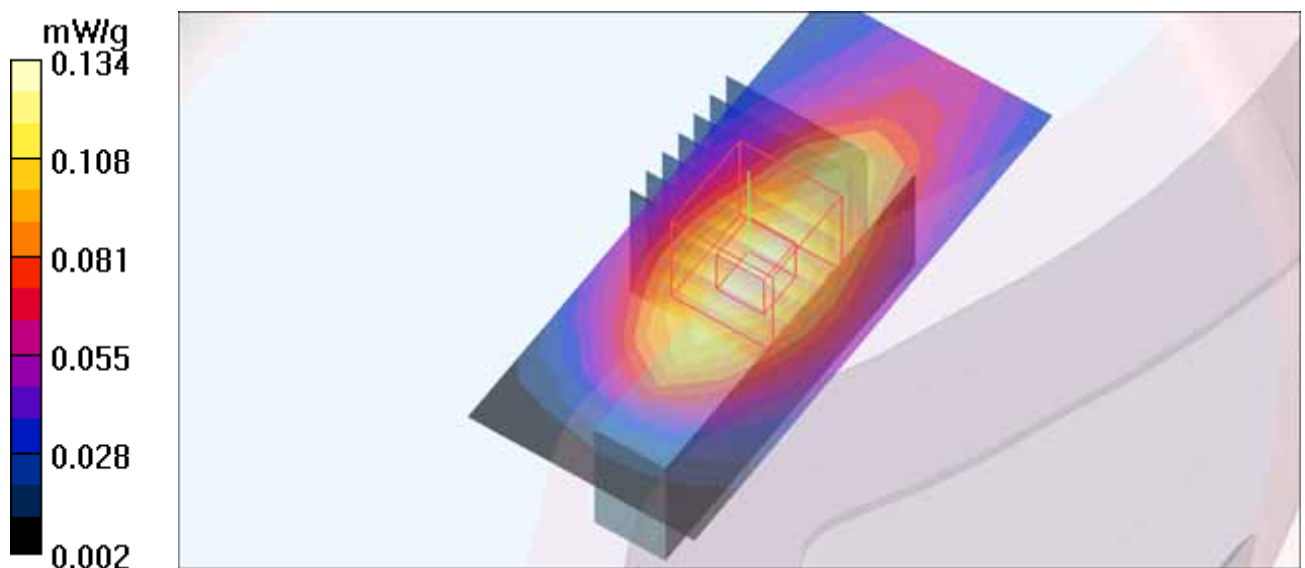Maximum value of SAR (measured) = 0.254 mW/g

**Body Position - Mid/Zoom Scan (7x7x7)/Cube 0:** Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 13.7 V/m; Power Drift = -0.023 dB
Peak SAR (extrapolated) = 0.319 W/kg
**SAR(1 g) = 0.215 mW/g; SAR(10 g) = 0.140 mW/g**
Maximum value of SAR (measured) = 0.251 mW/g

Date/Time: 2011/1/24 03:56:54

## M08-LTE BAND 17-Ch23790 (1RB, Lower edge)

Communication System: LTE band17 (700) ; Frequency: 710 MHz ; Duty Cycle: 1:1 ; Modulation Type: QPSK

Medium: MSL750 Medium parameters used: f = 710 MHz; σ = 0.95 mho/m; εr = 55.86; ρ = 1000 kg/m$^3$

Phantom section: Flat Section ; Separation Distance : 5 mm (The Horizontal-Up side of the EUT to the Phantom)

DASY4 Configuration:

- Probe: ES3DV3 - SN3177; ConvF(6.18, 6.18, 6.18); Calibrated: 2010/8/24
- Sensor-Surface: 3mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn579; Calibrated: 2010/9/20
- Phantom: SAM Twin Phantom V4.0; Type: QD 000 P40 CA; Serial: TP-1202
- Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 186

**Body Position - Mid/Area Scan (7x15x1):** Measurement grid: dx=8mm, dy=8mm
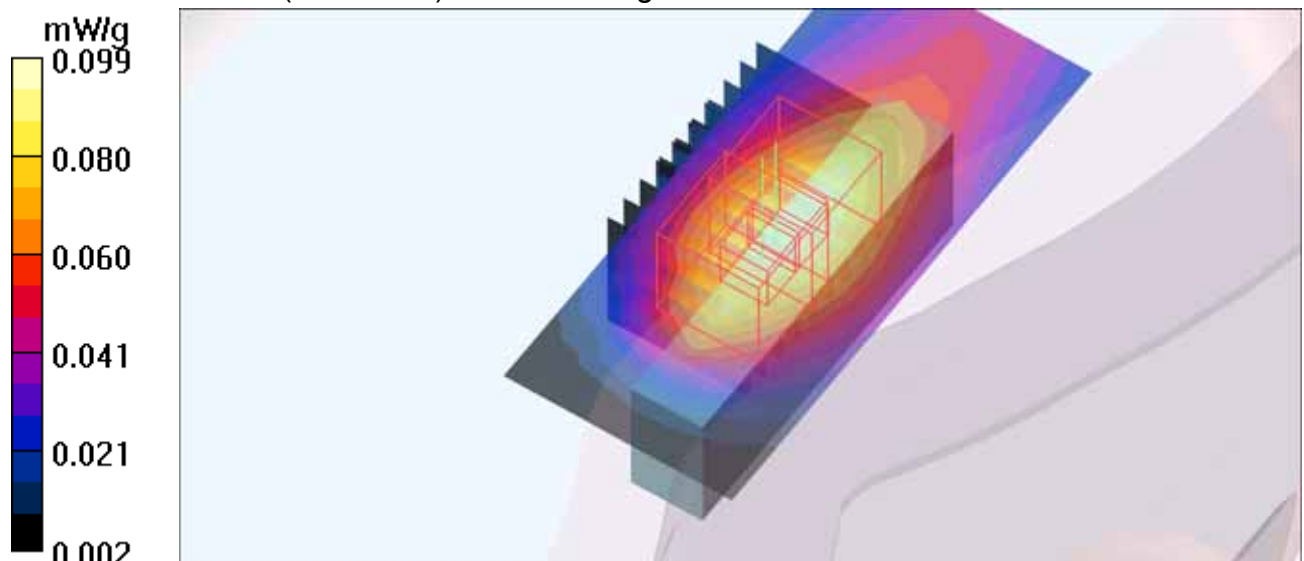Maximum value of SAR (measured) = 0.163 mW/g

**Body Position - Mid/Zoom Scan (7x7x7)/Cube 0:** Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 12.3 V/m; Power Drift = -0.144 dB
Peak SAR (extrapolated) = 0.183 W/kg
**SAR(1 g) = 0.125 mW/g; SAR(10 g) = 0.081 mW/g**
Maximum value of SAR (measured) = 0.145 mW/g



9

Date/Time: 2011/1/24 04:38:32

## M09-LTE BAND 17-Ch23790 (1RB, Upper edge)

Communication System: LTE band17 (700) ; Frequency: 710 MHz ; Duty Cycle: 1:1 ; Modulation Type: QPSK
Medium: MSL750 Medium parameters used: f = 710 MHz; σ = 0.95 mho/m; εr = 55.86; ρ = 1000 kg/m³
Phantom section: Flat Section ; Separation Distance : 5 mm (The Horizontal-Up side of the EUT to the Phantom)

DASY4 Configuration:

- Probe: ES3DV3 - SN3177; ConvF(6.18, 6.18, 6.18); Calibrated: 2010/8/24
- Sensor-Surface: 3mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn579; Calibrated: 2010/9/20
- Phantom: SAM Twin Phantom V4.0; Type: QD 000 P40 CA; Serial: TP-1202
- Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 186

**Body Position - Mid/Area Scan (7x15x1):** Measurement grid: dx=8mm, dy=8mm
Maximum value of SAR (measured) = 0.191 mW/g

**Body Position - Mid/Zoom Scan (7x7x7)/Cube 0:** Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 12.6 V/m; Power Drift = -0.158 dB
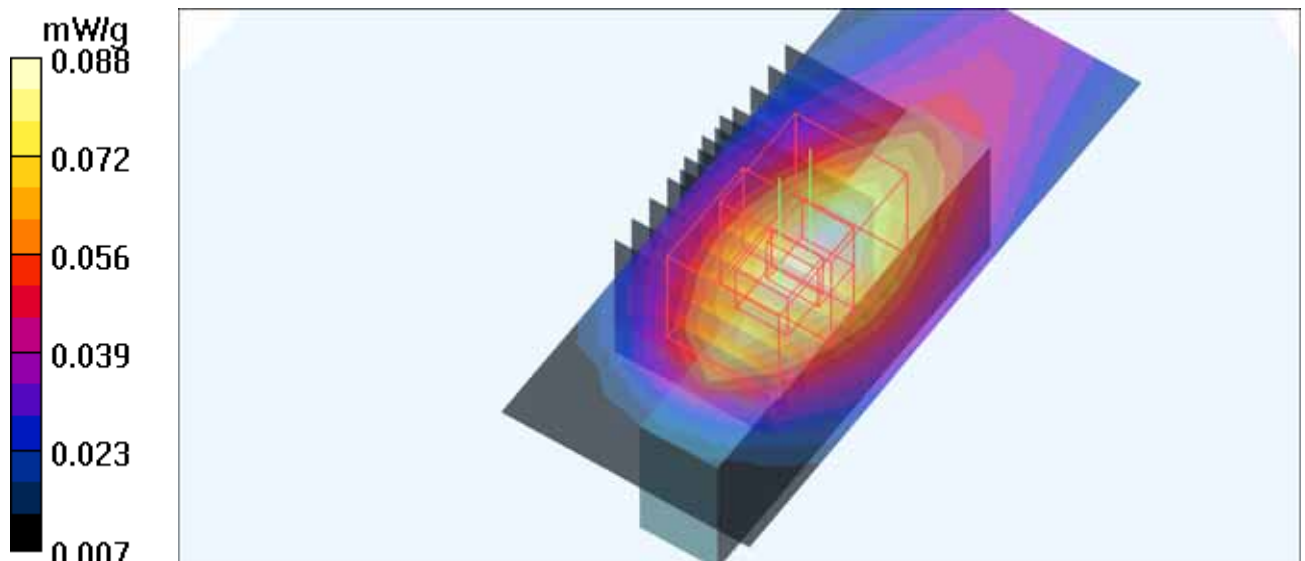Peak SAR (extrapolated) = 0.198 W/kg
**SAR(1 g) = 0.137 mW/g; SAR(10 g) = 0.091 mW/g**
Maximum value of SAR (measured) = 0.156 mW/g

Date/Time: 2011/1/24 08:29:17

## M10-LTE BAND 17-Ch23790 (50% RB centered)

Communication System: LTE band17 (700) ; Frequency: 710 MHz ; Duty Cycle: 1:1 ; Modulation Type: QPSK
Medium: MSL750 Medium parameters used: f = 710 MHz; σ = 0.95 mho/m; εr = 55.86; ρ = 1000 kg/m³
Phantom section: Flat Section ; Separation Distance : 5 mm (The Vertical-Back side of the EUT to the Phantom)

DASY4 Configuration:

- Probe: ES3DV3 - SN3177; ConvF(6.18, 6.18, 6.18); Calibrated: 2010/8/24
- Sensor-Surface: 3mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn579; Calibrated: 2010/9/20
- Phantom: SAM Twin Phantom V4.0; Type: QD 000 P40 CA; Serial: TP-1202
- Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 186

**Body Position - Mid/Area Scan (7x15x1):** Measurement grid: dx=8mm, dy=8mm
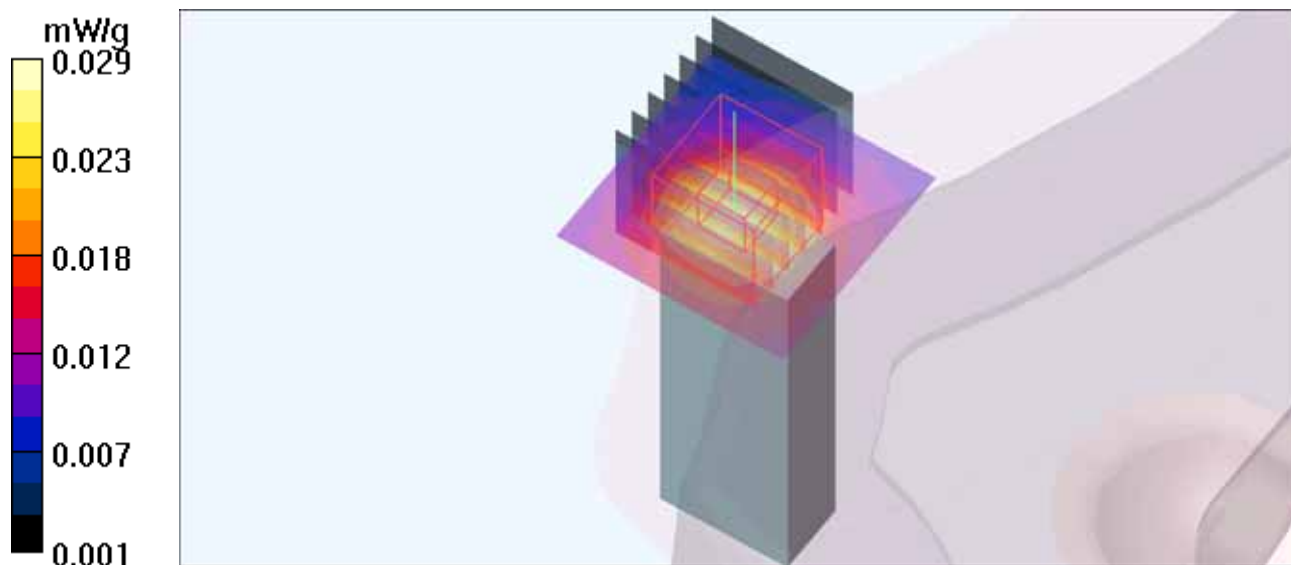Maximum value of SAR (measured) = 0.134 mW/g

**Body Position - Mid/Zoom Scan (7x7x7)/Cube 0:** Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 9.18 V/m; Power Drift = 0.108 dB
Peak SAR (extrapolated) = 0.167 W/kg
**SAR(1 g) = 0.108 mW/g; SAR(10 g) = 0.071 mW/g**
Maximum value of SAR (measured) = 0.127 mW/g

## M11-LTE BAND 17-Ch23790 (1RB, Lower edge)

Communication System: LTE band17 (700) ; Frequency: 710 MHz ; Duty Cycle: 1:1 ; Modulation Type: QPSK
Medium: MSL750 Medium parameters used: f = 710 MHz; σ = 0.95 mho/m; εr = 55.86; ρ = 1000 kg/m³
Phantom section: Flat Section ; Separation Distance : 5 mm (The Vertical-Back side of the EUT to the Phantom)

DASY4 Configuration:

- Probe: ES3DV3 - SN3177; ConvF(6.18, 6.18, 6.18); Calibrated: 2010/8/24
- Sensor-Surface: 3mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn579; Calibrated: 2010/9/20
- Phantom: SAM Twin Phantom V4.0; Type: QD 000 P40 CA; Serial: TP-1202
- Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 186

**Body Position - Mid/Area Scan (7x15x1):** Measurement grid: dx=8mm, dy=8mm
Maximum value of SAR (measured) = 0.099 mW/g
**Body Position - Mid/Zoom Scan (7x7x7)/Cube 0:** Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 8.07 V/m; Power Drift = -0.185 dB
Peak SAR (extrapolated) = 0.114 W/kg
**SAR(1 g) = 0.074 mW/g; SAR(10 g) = 0.048 mW/g**
Maximum value of SAR (measured) = 0.087 mW/g
**Body Position - Mid/Zoom Scan (7x7x7)/Cube 1:** Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 8.07 V/m; Power Drift = -0.185 dB
Peak SAR (extrapolated) = 0.113 W/kg
**SAR(1 g) = 0.069 mW/g; SAR(10 g) = 0.042 mW/g**
Maximum value of SAR (measured) = 0.086 mW/g

## M12-LTE BAND 17-Ch23790 (1RB, Upper edge)

Communication System: LTE band17 (700) ; Frequency: 710 MHz ; Duty Cycle: 1:1 ; Modulation Type: QPSK
Medium: MSL750 Medium parameters used: f = 710 MHz; σ = 0.95 mho/m; εr = 55.86; ρ = 1000 kg/m$^3$
Phantom section: Flat Section ; Separation Distance : 5 mm (The Vertical-Back side of the EUT to the Phantom)

DASY4 Configuration:

- Probe: ES3DV3 - SN3177; ConvF(6.18, 6.18, 6.18); Calibrated: 2010/8/24
- Sensor-Surface: 3mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn579; Calibrated: 2010/9/20
- Phantom: SAM Twin Phantom V4.0; Type: QD 000 P40 CA; Serial: TP-1202
- Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 186

**Body Position - Mid/Area Scan (7x15x1):** Measurement grid: dx=8mm, dy=8mm
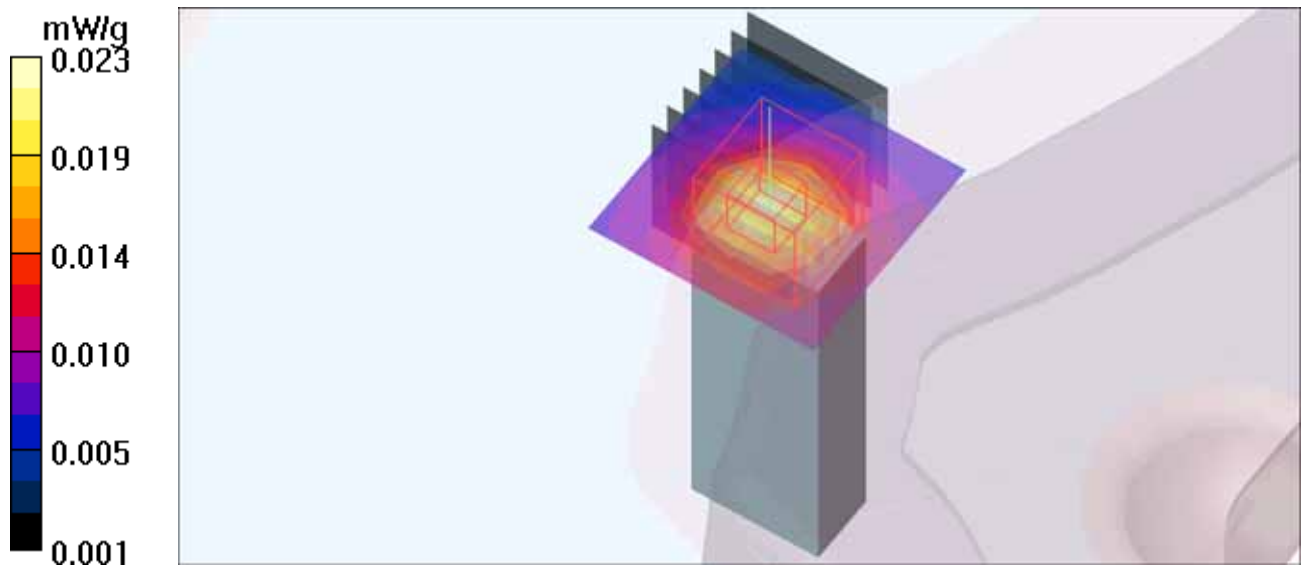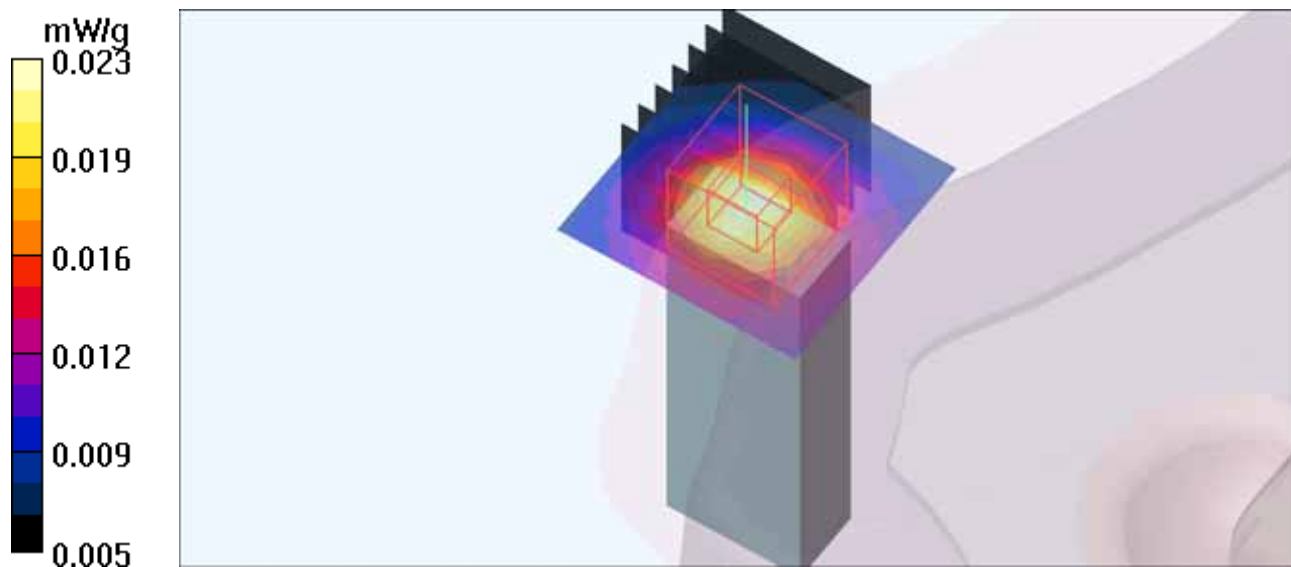Maximum value of SAR (measured) = 0.088 mW/g
**Body Position - Mid/Zoom Scan (7x7x7)/Cube 0:** Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 8.11 V/m; Power Drift = -0.116 dB
Peak SAR (extrapolated) = 0.116 W/kg
**SAR(1 g) = 0.075 mW/g; SAR(10 g) = 0.049 mW/g**
**Body Position - Mid/Zoom Scan (7x7x7)/Cube 1:** Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 8.11 V/m; Power Drift = -0.116 dB
Peak SAR (extrapolated) = 0.115 W/kg
**SAR(1 g) = 0.071 mW/g; SAR(10 g) = 0.044 mW/g**

## M13-LTE BAND 17-Ch23790 (50% RB centered)

Communication System: LTE band17 (700) ; Frequency: 710 MHz ; Duty Cycle: 1:1 ; Modulation Type: QPSK
Medium: MSL750 Medium parameters used: f = 710 MHz; σ = 0.95 mho/m; εr = 55.86; ρ = 1000 kg/m$^3$
Phantom section: Flat Section ; Separation Distance : 5 mm ( The top side of the EUT to the Phantom)


DASY4 Configuration:

- Probe: ES3DV3 - SN3177; ConvF(6.18, 6.18, 6.18); Calibrated: 2010/8/24
- Sensor-Surface: 3mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn579; Calibrated: 2010/9/20
- Phantom: SAM Twin Phantom V4.0; Type: QD 000 P40 CA; Serial: TP-1202
- Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 186


**Body Position - Mid/Area Scan (7x7x1):** Measurement grid: dx=8mm, dy=8mm
Maximum value of SAR (measured) = 0.028 mW/g

**Body Position - Mid/Zoom Scan (7x7x7)/Cube 0:** Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 9.01 V/m; Power Drift = 0.115 dB
Peak SAR (extrapolated) = 0.051 W/kg
**SAR(1 g) = 0.023 mW/g; SAR(10 g) = 0.013 mW/g**
Maximum value of SAR (measured) = 0.029 mW/g

Date/Time: 2011/1/24 10:25:09

## M14-LTE BAND 17-Ch23790 (1RB, Lower edge)

Communication System: LTE band17 (700) ; Frequency: 710 MHz ; Duty Cycle: 1:1; Modulation Type: QPSK
Medium: MSL750 Medium parameters used: f = 710 MHz; σ = 0.95 mho/m; εr = 55.86; ρ = 1000 kg/m³
Phantom section: Flat Section ; Separation Distance : 5 mm ( The top side of the EUT to the Phantom)

DASY4 Configuration:

- Probe: ES3DV3 - SN3177; ConvF(6.18, 6.18, 6.18); Calibrated: 2010/8/24
- Sensor-Surface: 3mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn579; Calibrated: 2010/9/20
- Phantom: SAM Twin Phantom V4.0; Type: QD 000 P40 CA; Serial: TP-1202
- Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 186

**Body Position - Mid/Area Scan (7x7x1):** Measurement grid: dx=8mm, dy=8mm
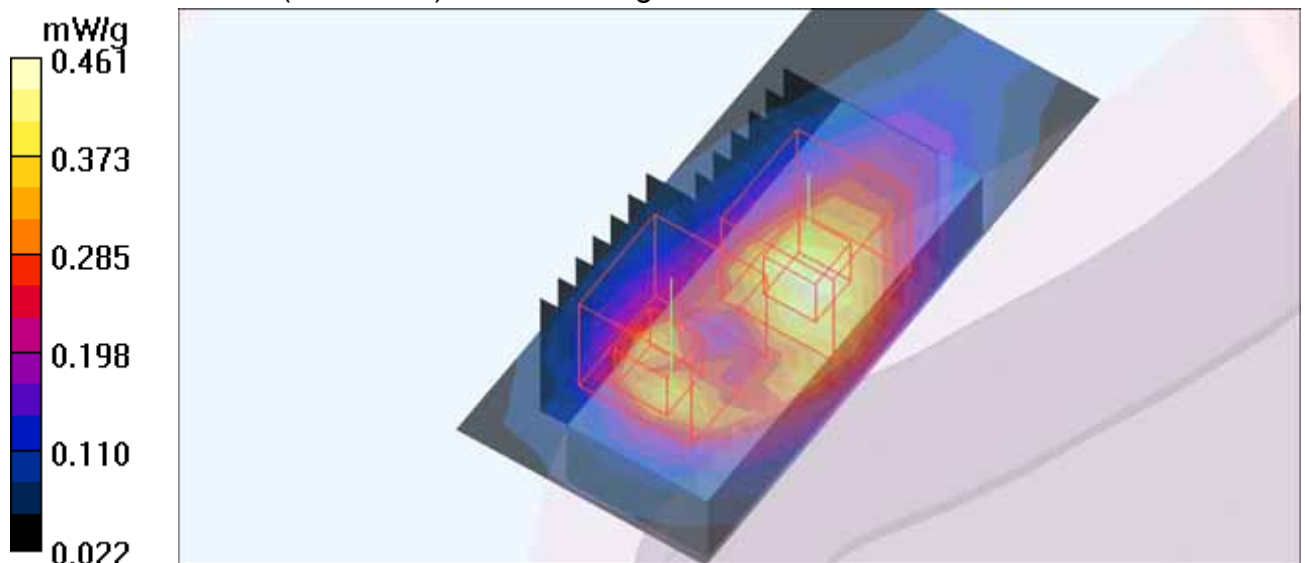Maximum value of SAR (measured) = 0.022 mW/g

**Body Position - Mid/Zoom Scan (7x7x7)/Cube 0:** Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 7.80 V/m; Power Drift = -0.157 dB
Peak SAR (extrapolated) = 0.042 W/kg
**SAR(1 g) = 0.018 mW/g; SAR(10 g) = 0.00997 mW/g**
Maximum value of SAR (measured) = 0.023 mW/g

Date/Time: 2011/1/24 10:43:22

## M15-LTE BAND 17-Ch23790 (1RB, Upper edge)

Communication System: LTE band17 (700) ; Frequency: 710 MHz ; Duty Cycle: 1:1; Modulation Type: QPSK
Medium: MSL750 Medium parameters used: f = 710 MHz; σ = 0.95 mho/m; εr = 55.86; ρ = 1000 kg/m$^3$
Phantom section: Flat Section ; Separation Distance : 5 mm ( The top side of the EUT to the Phantom)

DASY4 Configuration:

- Probe: ES3DV3 - SN3177; ConvF(6.18, 6.18, 6.18); Calibrated: 2010/8/24
- Sensor-Surface: 3mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn579; Calibrated: 2010/9/20
- Phantom: SAM Twin Phantom V4.0; Type: QD 000 P40 CA; Serial: TP-1202
- Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 186

**Body Position - Mid/Area Scan (7x7x1):** Measurement grid: dx=8mm, dy=8mm
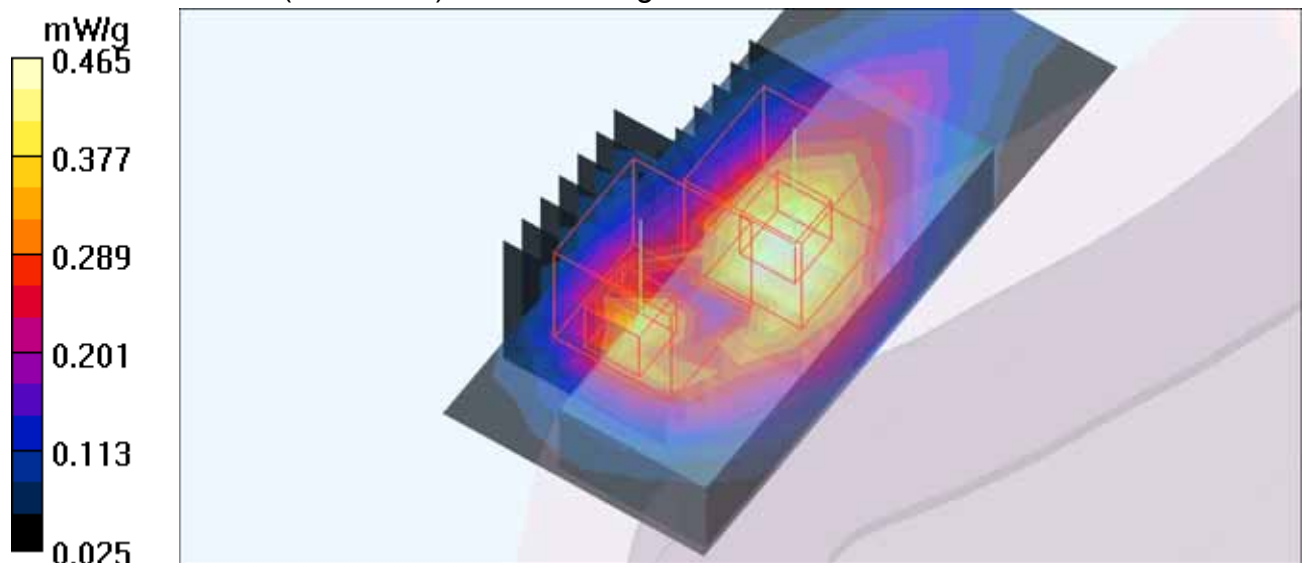Maximum value of SAR (measured) = 0.023 mW/g

**Body Position - Mid/Zoom Scan (7x7x7)/Cube 0:** Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 8.14 V/m; Power Drift = -0.190 dB
Peak SAR (extrapolated) = 0.039 W/kg
**SAR(1 g) = 0.017 mW/g; SAR(10 g) = 0.00977 mW/g**
Maximum value of SAR (measured) = 0.022 mW/g



16

## M16-LTE BAND 4-Ch20175 (50% RB centered)

Communication System: LTE band4 (1700) ; Frequency: 1732.5 MHz ; Duty Cycle: 1:1; Modulation Type: QPSK

Medium: MSL1700 Medium parameters used: f = 1732.5 MHz; σ = 1.49 mho/m; εr = 54.38; ρ = 1000 kg/m$^3$

Phantom section: Flat Section ; Separation Distance : 5 mm (The Horizontal-Down side of the EUT to the Phantom)

DASY4 Configuration:

- Probe: EX3DV4 - SN3578; ConvF(6.81, 6.81, 6.81); Calibrated: 2010/6/22
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn579; Calibrated: 2010/9/20
- Phantom: SAM Twin Phantom V4.0; Type: QD 000 P40 CA; Serial: TP-1202
- Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 186

**Body Position - Mid/Area Scan (7x15x1):** Measurement grid: dx=8mm, dy=8mm
Maximum value of SAR (measured) = 0.461 mW/g
**Body Position - Mid/Zoom Scan (7x7x7)/Cube 0:** Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 11.2 V/m; Power Drift = 0.186 dB
Peak SAR (extrapolated) = 0.580 W/kg
**SAR(1 g) = 0.336 mW/g; SAR(10 g) = 0.194 mW/g**
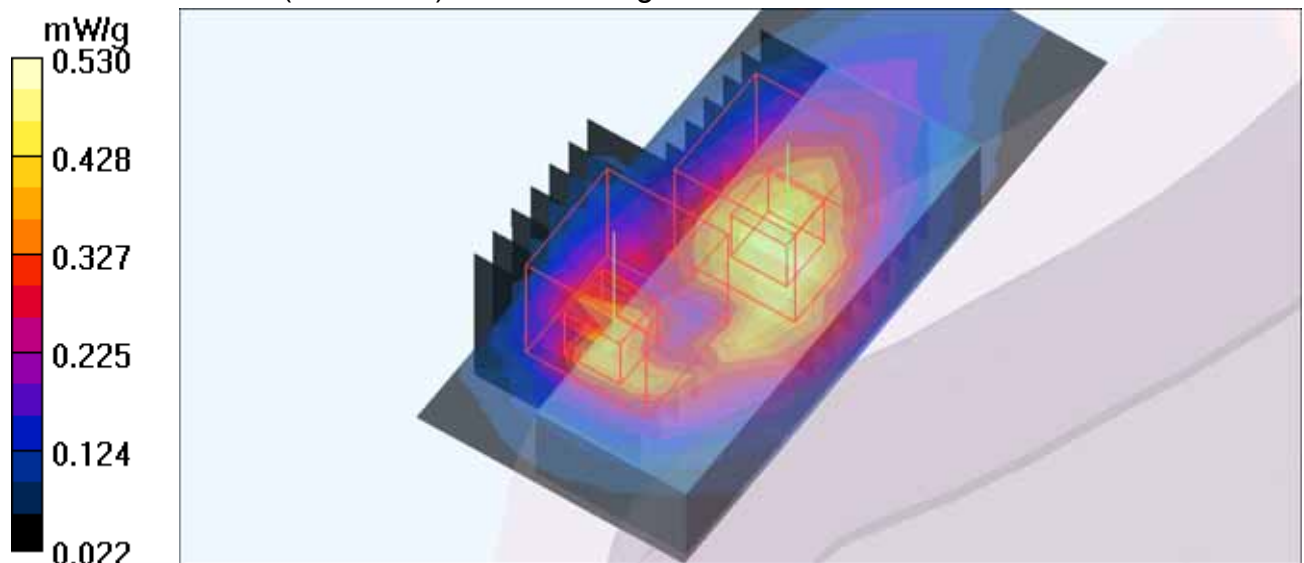Maximum value of SAR (measured) = 0.459 mW/g
**Body Position - Mid/Zoom Scan (7x7x7)/Cube 1:** Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 11.2 V/m; Power Drift = 0.186 dB
Peak SAR (extrapolated) = 0.521 W/kg
**SAR(1 g) = 0.282 mW/g; SAR(10 g) = 0.151 mW/g**
Maximum value of SAR (measured) = 0.396 mW/g

Date/Time: 2011/1/21 04:48:54

## M17-LTE BAND 4-Ch20175 (1RB, Lower edge)

Communication System: LTE band4 (1700) ; Frequency: 1732.5 MHz ; Duty Cycle: 1:1; Modulation Type: QPSK

Medium: MSL1700 Medium parameters used: f = 1732.5 MHz; σ = 1.49 mho/m; εr = 54.38; ρ = 1000 kg/m³

Phantom section: Flat Section ; Separation Distance : 5 mm (The Horizontal-Down side of the EUT to the Phantom)

DASY4 Configuration:

- Probe: EX3DV4 - SN3578; ConvF(6.81, 6.81, 6.81); Calibrated: 2010/6/22
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn579; Calibrated: 2010/9/20
- Phantom: SAM Twin Phantom V4.0; Type: QD 000 P40 CA; Serial: TP-1202
- Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 186

**Body Position - Mid/Area Scan (7x15x1):** Measurement grid: dx=8mm, dy=8mm
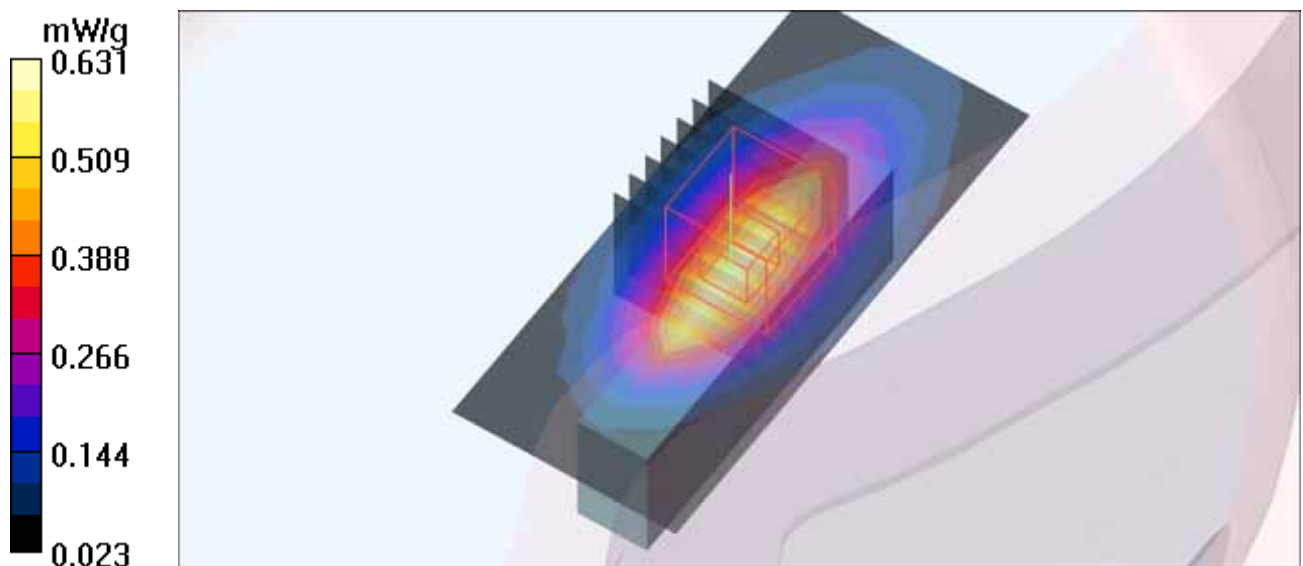Maximum value of SAR (measured) = 0.465 mW/g
**Body Position - Mid/Zoom Scan (7x7x7)/Cube 0:** Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 10.4 V/m; Power Drift = 0.107 dB
Peak SAR (extrapolated) = 0.582 W/kg
**SAR(1 g) = 0.340 mW/g; SAR(10 g) = 0.197 mW/g**
Maximum value of SAR (measured) = 0.459 mW/g
**Body Position - Mid/Zoom Scan (7x7x7)/Cube 1:** Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 10.4 V/m; Power Drift = 0.107 dB
Peak SAR (extrapolated) = 0.537 W/kg
**SAR(1 g) = 0.282 mW/g; SAR(10 g) = 0.153 mW/g**
Maximum value of SAR (measured) = 0.399 mW/g

## M18-LTE BAND 4-Ch20175 (1RB, Upper edge)

Communication System: LTE band4 (1700) ; Frequency: 1732.5 MHz ; Duty Cycle: 1:1 ; Modulation Type: QPSK

Medium: MSL1700 Medium parameters used: f = 1732.5 MHz; σ = 1.49 mho/m; εr = 54.38; ρ = 1000 kg/m³

Phantom section: Flat Section ; Separation Distance : 5 mm (The Horizontal-Down side of the EUT to the Phantom)

DASY4 Configuration:

- Probe: EX3DV4 - SN3578; ConvF(6.81, 6.81, 6.81); Calibrated: 2010/6/22
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn579; Calibrated: 2010/9/20
- Phantom: SAM Twin Phantom V4.0; Type: QD 000 P40 CA; Serial: TP-1202
- Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 186

**Body Position - Mid/Area Scan (7x15x1):** Measurement grid: dx=8mm, dy=8mm
Maximum value of SAR (measured) = 0.483 mW/g
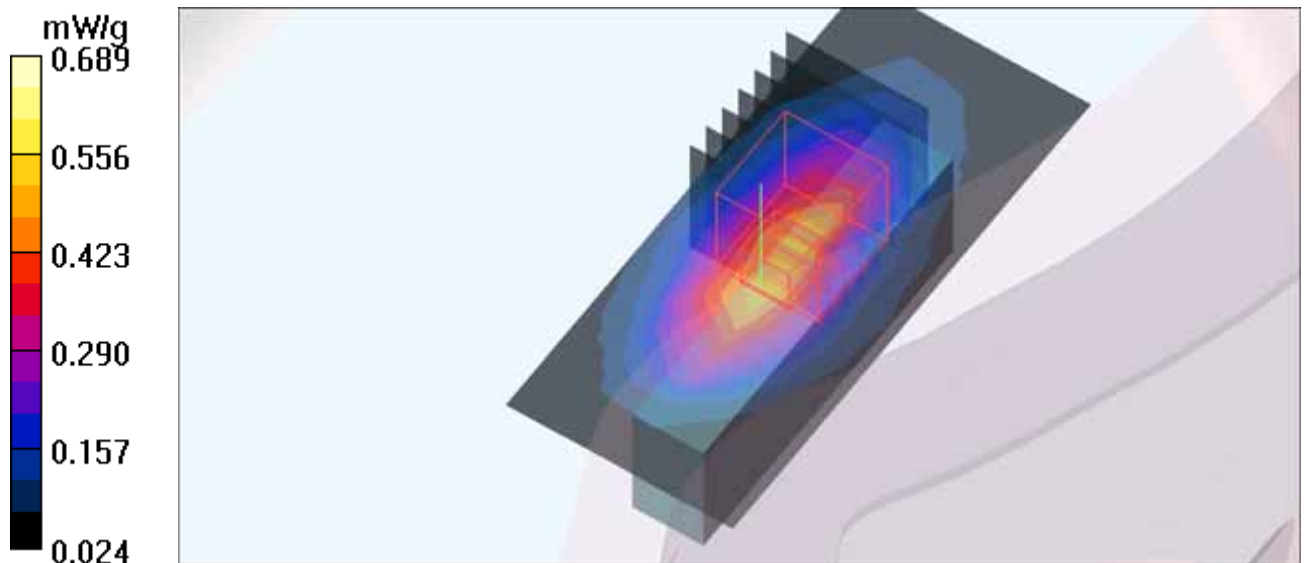**Body Position - Mid/Zoom Scan (7x7x7)/Cube 0:** Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 11.0 V/m; Power Drift = 0.159 dB
Peak SAR (extrapolated) = 0.682 W/kg
**SAR(1 g) = 0.376 mW/g; SAR(10 g) = 0.216 mW/g**
Maximum value of SAR (measured) = 0.530 mW/g
**Body Position - Mid/Zoom Scan (7x7x7)/Cube 1:** Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 11.0 V/m; Power Drift = 0.159 dB
Peak SAR (extrapolated) = 0.669 W/kg
**SAR(1 g) = 0.320 mW/g; SAR(10 g) = 0.169 mW/g**
Maximum value of SAR (measured) = 0.444 mW/g

## M19-LTE BAND 4-Ch20175 (50% RB centered)

Communication System: LTE band4 (1700) ; Frequency: 1732.5 MHz ; Duty Cycle: 1:1 ; Modulation Type: QPSK

Medium: MSL1700 Medium parameters used: f = 1732.5 MHz; σ = 1.49 mho/m; εr = 54.38; ρ = 1000 kg/m$^3$

Phantom section: Flat Section ; Separation Distance : 5 mm (The Vertical-Front side of the EUT to the Phantom)

DASY4 Configuration:

- Probe: EX3DV4 - SN3578; ConvF(6.81, 6.81, 6.81); Calibrated: 2010/6/22
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn579; Calibrated: 2010/9/20
- Phantom: SAM Twin Phantom V4.0; Type: QD 000 P40 CA; Serial: TP-1202
- Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 186

**Body Position - Mid/Area Scan (7x15x1):** Measurement grid: dx=8mm, dy=8mm
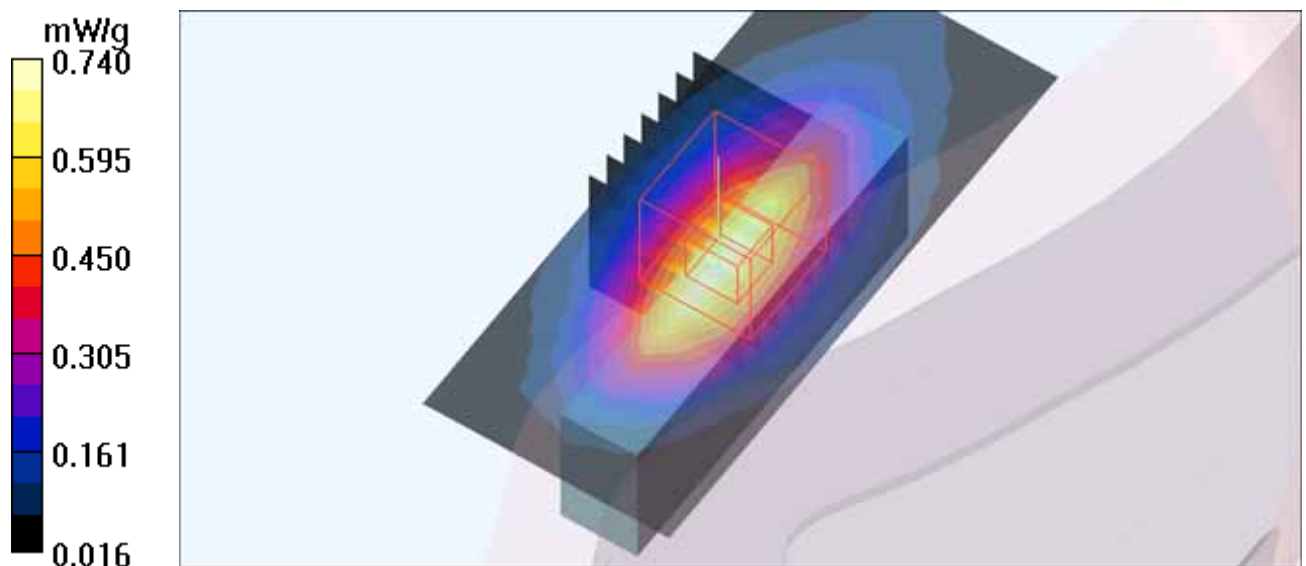Maximum value of SAR (measured) = 0.601 mW/g

**Body Position - Mid/Zoom Scan (7x7x7)/Cube 0:** Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 7.82 V/m; Power Drift = 0.124 dB
Peak SAR (extrapolated) = 0.793 W/kg
**SAR(1 g) = 0.446 mW/g; SAR(10 g) = 0.252 mW/g**
Maximum value of SAR (measured) = 0.631 mW/g

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## M20-LTE BAND 4-Ch20175 (1RB, Lower edge)

Communication System: LTE band4 (1700) ; Frequency: 1732.5 MHz ; Duty Cycle: 1:1 ; Modulation Type: QPSK
Medium: MSL1700 Medium parameters used: f = 1732.5 MHz; σ = 1.49 mho/m; εr = 54.38; ρ = 1000 kg/m$^3$
Phantom section: Flat Section ; Separation Distance : 5 mm (The Vertical-Front side of the EUT to the Phantom)

DASY4 Configuration:

- Probe: EX3DV4 - SN3578; ConvF(6.81, 6.81, 6.81); Calibrated: 2010/6/22
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn579; Calibrated: 2010/9/20
- Phantom: SAM Twin Phantom V4.0; Type: QD 000 P40 CA; Serial: TP-1202
- Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 186

**Body Position - Mid/Area Scan (7x15x1):** Measurement grid: dx=8mm, dy=8mm
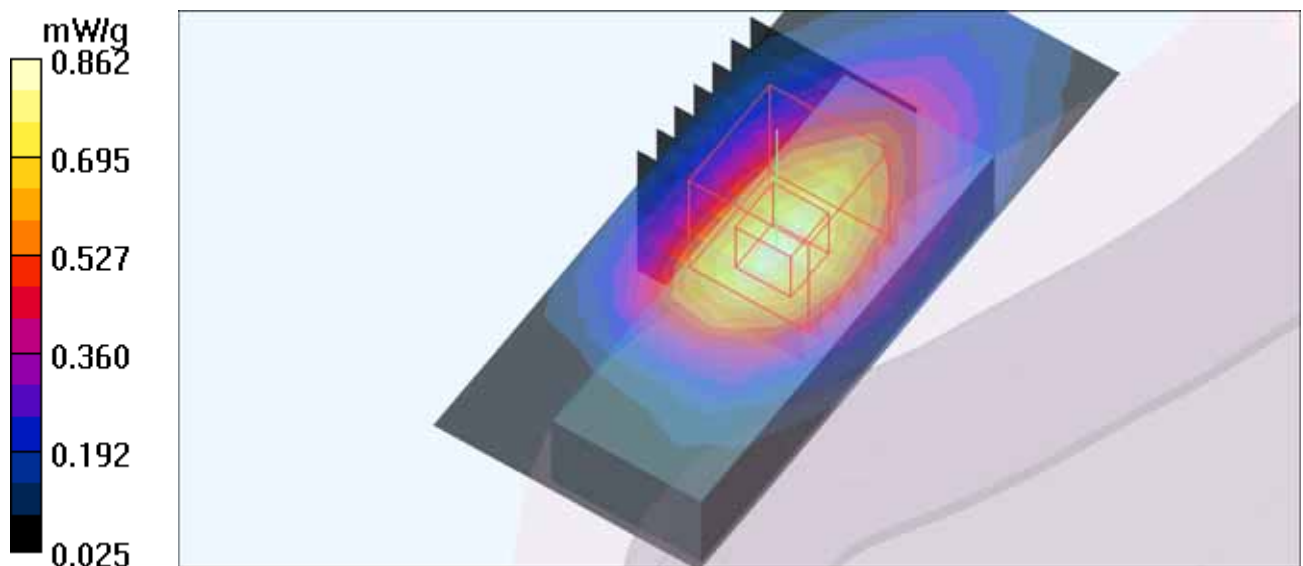Maximum value of SAR (measured) = 0.569 mW/g

**Body Position - Mid/Zoom Scan (7x7x7)/Cube 0:** Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 9.18 V/m; Power Drift = 0.142 dB
Peak SAR (extrapolated) = 0.851 W/kg
**SAR(1 g) = 0.449 mW/g; SAR(10 g) = 0.251 mW/g**
Maximum value of SAR (measured) = 0.689 mW/g

## M21-LTE BAND 4-Ch20175 (1RB, Upper edge)

Communication System: LTE band4 (1700) ; Frequency: 1732.5 MHz ; Duty Cycle: 1:1 ; Modulation Type: QPSK

Medium: MSL1700 Medium parameters used: f = 1732.5 MHz; σ = 1.49 mho/m; εr = 54.38; ρ = 1000 kg/m$^3$

Phantom section: Flat Section ; Separation Distance : 5 mm (The Vertical-Front side of the EUT to the Phantom)

DASY4 Configuration:

- Probe: EX3DV4 - SN3578; ConvF(6.81, 6.81, 6.81); Calibrated: 2010/6/22
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn579; Calibrated: 2010/9/20
- Phantom: SAM Twin Phantom V4.0; Type: QD 000 P40 CA; Serial: TP-1202
- Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 186

**Body Position - Mid/Area Scan (7x15x1):** Measurement grid: dx=8mm, dy=8mm
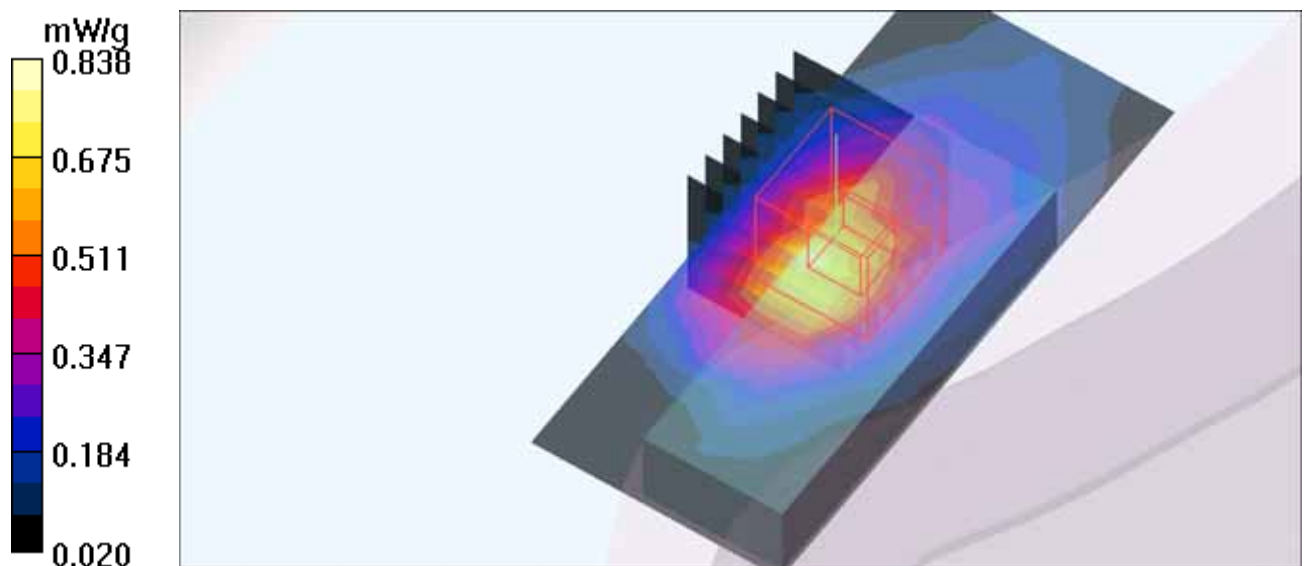Maximum value of SAR (measured) = 0.740 mW/g

**Body Position - Mid/Zoom Scan (7x7x7)/Cube 0:** Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 11.0 V/m; Power Drift = -0.005 dB
Peak SAR (extrapolated) = 0.926 W/kg
**SAR(1 g) = 0.531 mW/g; SAR(10 g) = 0.294 mW/g**
Maximum value of SAR (measured) = 0.736 mW/g

## M22-LTE BAND 4-Ch20175 (50% RB centered)

Communication System: LTE band4 (1700) ; Frequency: 1732.5 MHz ; Duty Cycle: 1:1 ; Modulation Type: QPSK
Medium: MSL1700 Medium parameters used: f = 1732.5 MHz; σ = 1.49 mho/m; εr = 54.38; ρ = 1000 kg/m$^3$
Phantom section: Flat Section ; Separation Distance : 5 mm (The Horizontal-Up side of the EUT to the Phantom)

DASY4 Configuration:

- Probe: EX3DV4 - SN3578; ConvF(6.81, 6.81, 6.81); Calibrated: 2010/6/22
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn579; Calibrated: 2010/9/20
- Phantom: SAM Twin Phantom V4.0; Type: QD 000 P40 CA; Serial: TP-1202
- Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 186

**Body Position - Mid/Area Scan (7x15x1):** Measurement grid: dx=8mm, dy=8mm
Maximum value of SAR (measured) = 0.862 mW/g
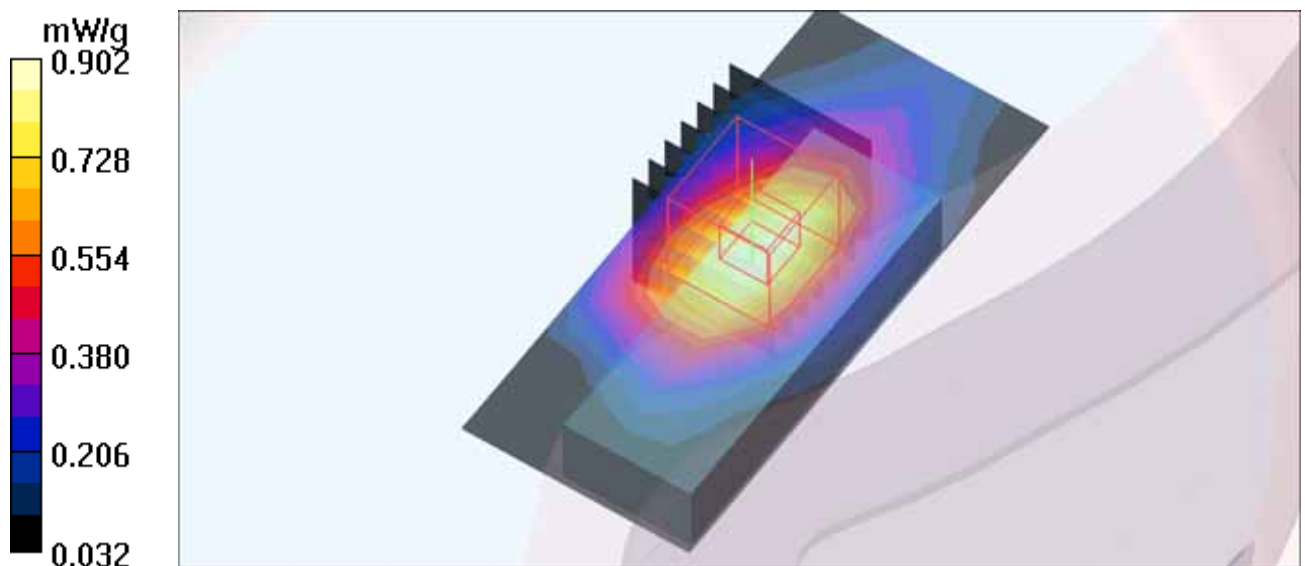
**Body Position - Mid/Zoom Scan (7x7x7)/Cube 0:** Measurement grid: dx=5mm, dy=5mm, dz=5mm
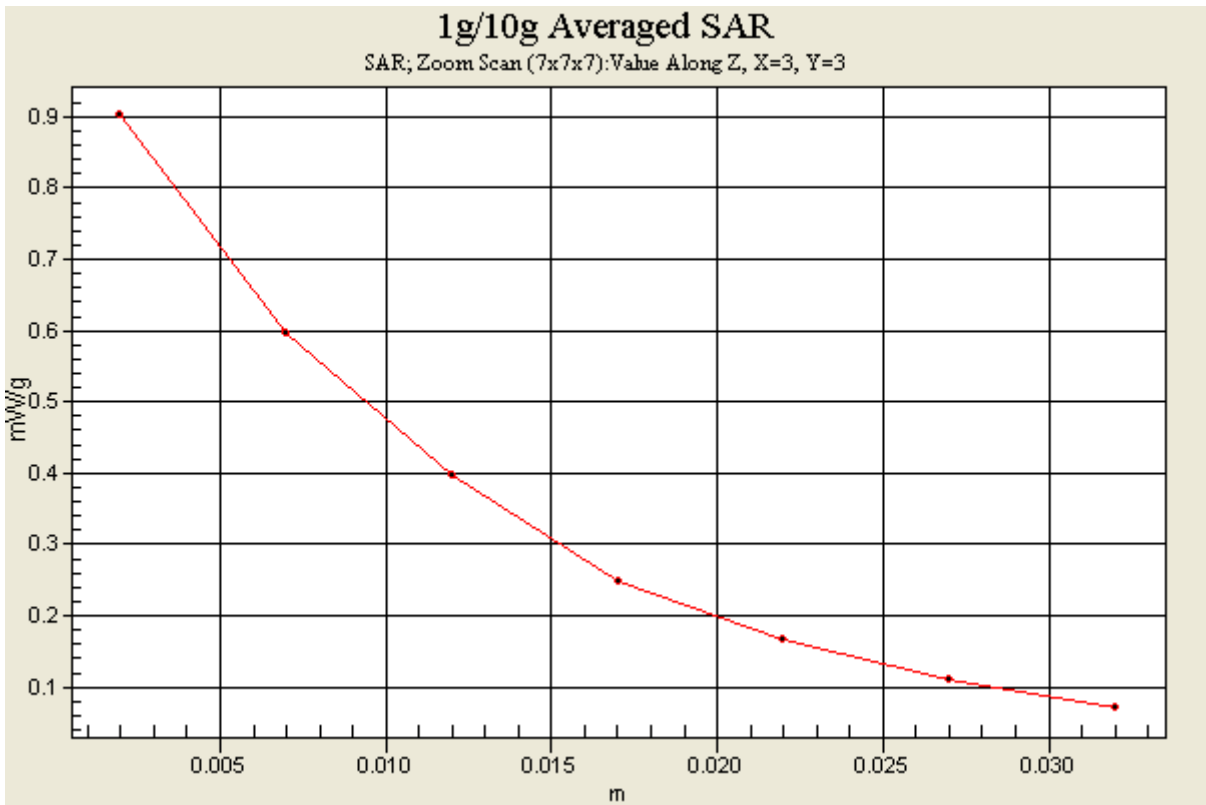Reference Value = 5.69 V/m; Power Drift = 0.015 dB
Peak SAR (extrapolated) = 1.05 W/kg
**SAR(1 g) = 0.653 mW/g; SAR(10 g) = 0.383 mW/g**
Maximum value of SAR (measured) = 0.869 mW/g

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## M23-LTE BAND 4-Ch20175 (1RB, Lower edge)

Communication System: LTE band4 (1700) ; Frequency: 1732.5 MHz ; Duty Cycle: 1:1 ; Modulation Type: QPSK
Medium: MSL1700 Medium parameters used: f = 1732.5 MHz; σ = 1.49 mho/m; εr = 54.38; ρ = 1000 kg/m$^3$
Phantom section: Flat Section ; Separation Distance : 5 mm (The Horizontal-Up side of the EUT to the Phantom)

DASY4 Configuration:

- Probe: EX3DV4 - SN3578; ConvF(6.81, 6.81, 6.81); Calibrated: 2010/6/22
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn579; Calibrated: 2010/9/20
- Phantom: SAM Twin Phantom V4.0; Type: QD 000 P40 CA; Serial: TP-1202
- Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 186

**Body Position - Mid/Area Scan (7x15x1):** Measurement grid: dx=8mm, dy=8mm
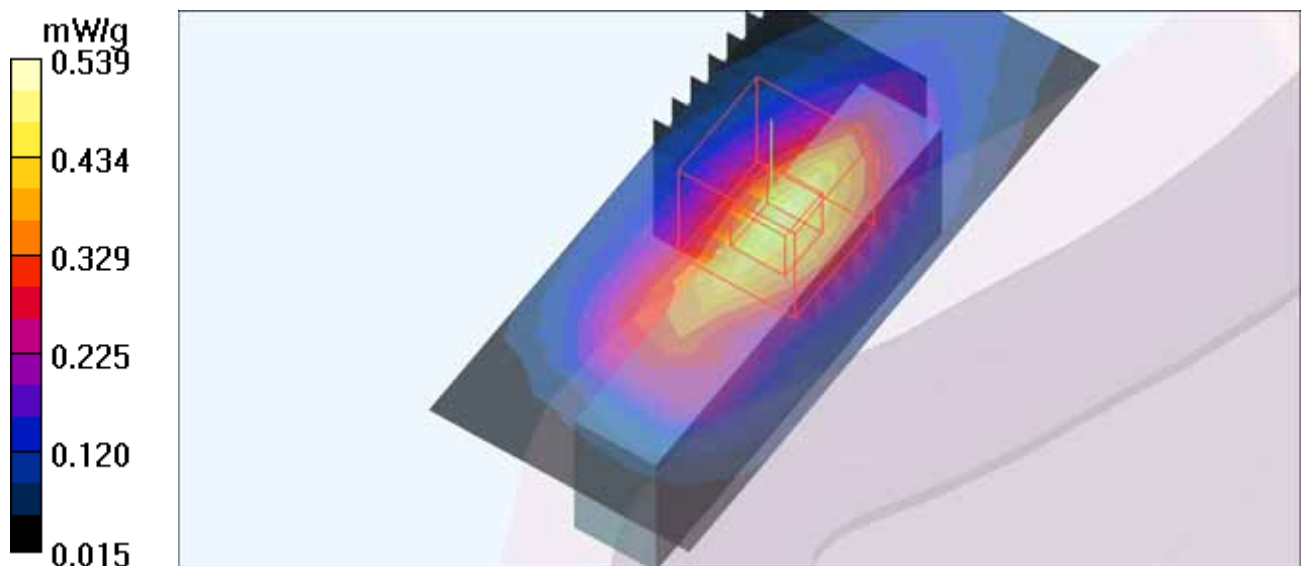Maximum value of SAR (measured) = 0.838 mW/g

**Body Position - Mid/Zoom Scan (7x7x7)/Cube 0:** Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 7.35 V/m; Power Drift = 0.169 dB
Peak SAR (extrapolated) = 0.993 W/kg
**SAR(1 g) = 0.638 mW/g; SAR(10 g) = 0.383 mW/g**
Maximum value of SAR (measured) = 0.818 mW/g

## M24-LTE BAND 4-Ch20175 (1RB, Upper edge)

Communication System: LTE band4 (1700) ; Frequency: 1732.5 MHz ; Duty Cycle: 1:1 ; Modulation Type: QPSK

Medium: MSL1700 Medium parameters used: f = 1732.5 MHz; σ = 1.49 mho/m; εr = 54.38; ρ = 1000 kg/m$^3$

Phantom section: Flat Section ; Separation Distance : 5 mm (The Horizontal-Up side of the EUT to the Phantom)

DASY4 Configuration:

- Probe: EX3DV4 - SN3578; ConvF(6.81, 6.81, 6.81); Calibrated: 2010/6/22
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn579; Calibrated: 2010/9/20
- Phantom: SAM Twin Phantom V4.0; Type: QD 000 P40 CA; Serial: TP-1202
- Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 186

**Body Position - Mid/Area Scan (7x15x1):** Measurement grid: dx=8mm, dy=8mm
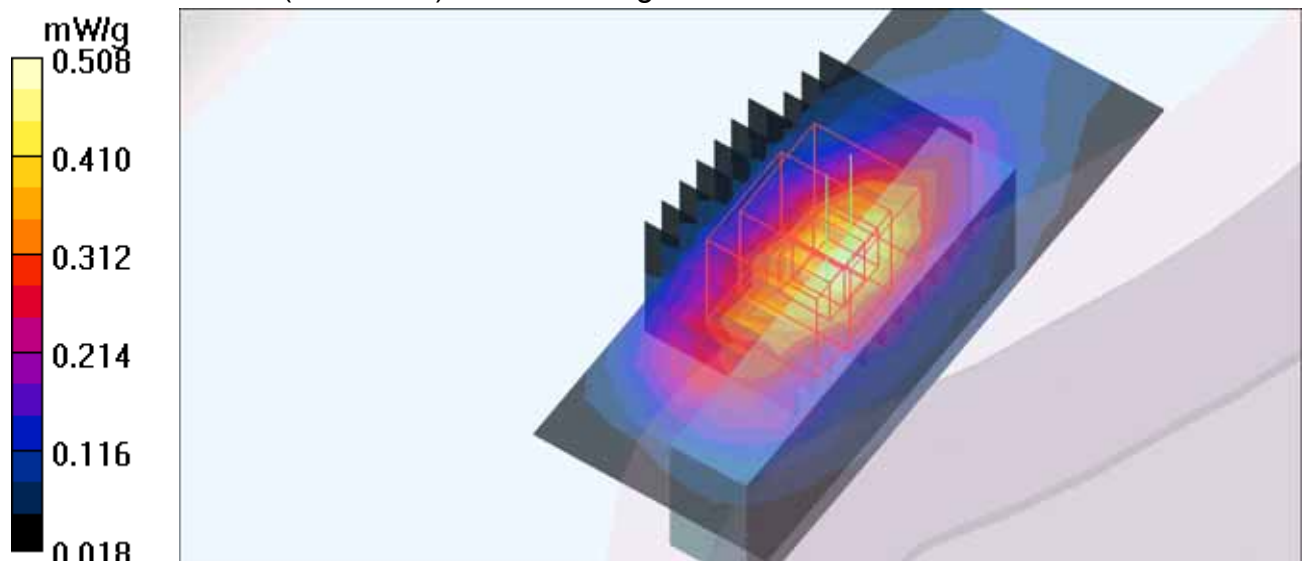Maximum value of SAR (measured) = 0.881 mW/g

**Body Position - Mid/Zoom Scan (7x7x7)/Cube 0:** Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 7.88 V/m; Power Drift = 0.152 dB
Peak SAR (extrapolated) = 1.08 W/kg
**SAR(1 g) = 0.702 mW/g; SAR(10 g) = 0.422 mW/g**
Maximum value of SAR (measured) = 0.902 mW/g

1g/10g Averaged SAR
SAR; Zoom Scan (7x7x7):Value Along Z, X=3, Y=3

## M25-LTE BAND 4-Ch20175 (50% RB centered)

Communication System: LTE band4 (1700) ; Frequency: 1732.5 MHz ; Duty Cycle: 1:1; Modulation Type: QPSK

Medium: MSL1700 Medium parameters used: f = 1732.5 MHz; σ = 1.49 mho/m; εr = 54.38; ρ = 1000 kg/m$^3$

Phantom section: Flat Section ; Separation Distance : 5 mm (The Vertical-Back side of the EUT to the Phantom)

DASY4 Configuration:

- Probe: EX3DV4 - SN3578; ConvF(6.81, 6.81, 6.81); Calibrated: 2010/6/22
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn579; Calibrated: 2010/9/20
- Phantom: SAM Twin Phantom V4.0; Type: QD 000 P40 CA; Serial: TP-1202
- Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 186

**Body Position - Mid/Area Scan (7x15x1):** Measurement grid: dx=8mm, dy=8mm
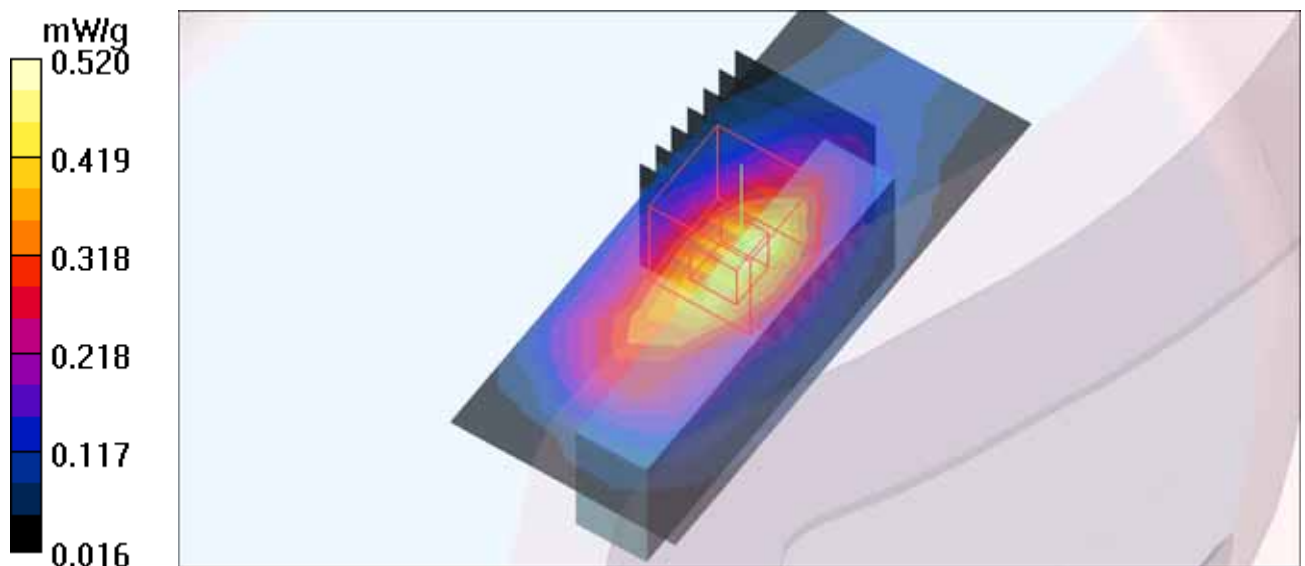Maximum value of SAR (measured) = 0.539 mW/g

**Body Position - Mid/Zoom Scan (7x7x7) /Cube 0:** Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 9.01 V/m; Power Drift = 0.092 dB
Peak SAR (extrapolated) = 0.665 W/kg
**SAR(1 g) = 0.392 mW/g; SAR(10 g) = 0.227 mW/g**
Maximum value of SAR (measured) = 0.529 mW/g

## M26-LTE BAND 4-Ch20175 (1RB, Lower edge)

 Communication System: LTE band4 (1700) ; Frequency: 1732.5 MHz ; Duty Cycle: 1:1 ; Modulation Type: QPSK

Medium: MSL1700 Medium parameters used: f = 1732.5 MHz; σ = 1.49 mho/m; εr = 54.38; ρ = 1000 kg/m³

Phantom section: Flat Section ; Separation Distance : 5 mm (The Vertical-Back side of the EUT to the Phantom)

DASY4 Configuration:

- Probe: EX3DV4 - SN3578; ConvF(6.81, 6.81, 6.81); Calibrated: 2010/6/22
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn579; Calibrated: 2010/9/20
- Phantom: SAM Twin Phantom V4.0; Type: QD 000 P40 CA; Serial: TP-1202
- Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 186

**Body Position - Mid/Area Scan (7x15x1):** Measurement grid: dx=8mm, dy=8mm

Maximum value of SAR (measured) = 0.508 mW/g
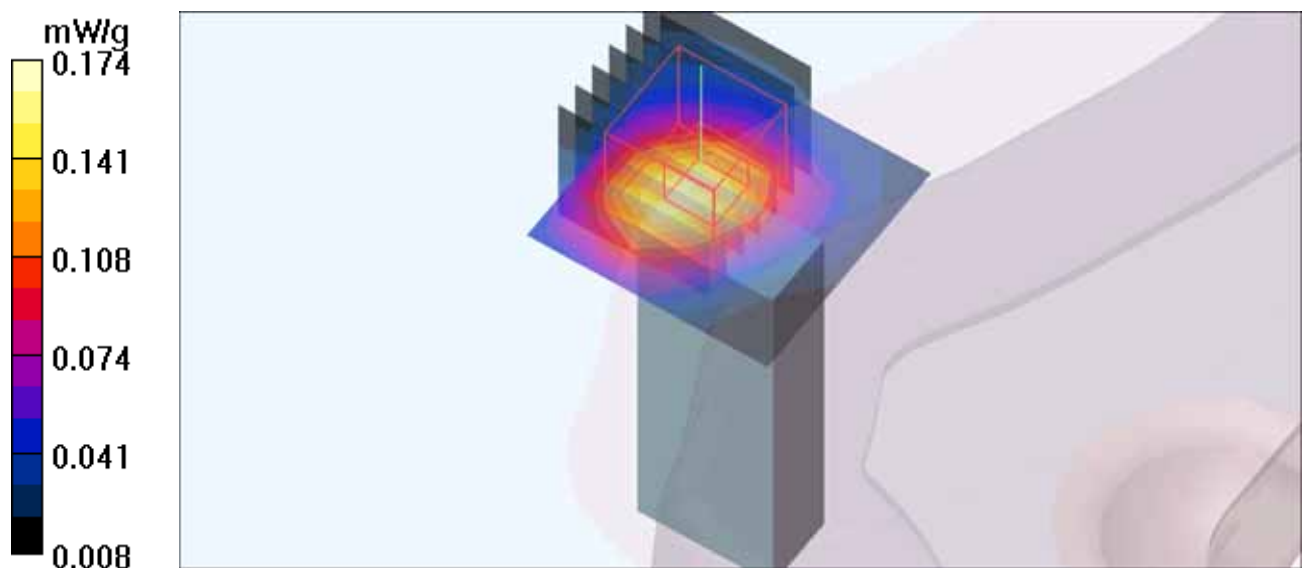
**Body Position - Mid/Zoom Scan (7x7x7)/Cube 0:** Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 10.3 V/m; Power Drift = -0.031 dB

Peak SAR (extrapolated) = 0.596 W/kg

**SAR(1 g) = 0.358 mW/g; SAR(10 g) = 0.215 mW/g**

Maximum value of SAR (measured) = 0.469 mW/g

**Body Position - Mid/Zoom Scan (7x7x7)/Cube 1:** Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 10.3 V/m; Power Drift = -0.031 dB

Peak SAR (extrapolated) = 0.587 W/kg

**SAR(1 g) = 0.349 mW/g; SAR(10 g) = 0.199 mW/g**

Maximum value of SAR (measured) = 0.470 mW/g

## M27-LTE BAND 4-Ch20175 (1RB, Upper edge)

Communication System: LTE band4 (1700) ; Frequency: 1732.5 MHz ; Duty Cycle: 1:1 ; Modulation Type: QPSK
Medium: MSL1700 Medium parameters used: f = 1732.5 MHz; σ = 1.49 mho/m; εr = 54.38; ρ = 1000 kg/m$^3$
Phantom section: Flat Section ; Separation Distance : 5 mm (The Vertical-Back side of the EUT to the Phantom)

DASY4 Configuration:

- Probe: EX3DV4 - SN3578; ConvF(6.81, 6.81, 6.81); Calibrated: 2010/6/22
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn579; Calibrated: 2010/9/20
- Phantom: SAM Twin Phantom V4.0; Type: QD 000 P40 CA; Serial: TP-1202
- Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 186

**Body Position - Mid/Area Scan (7x15x1):** Measurement grid: dx=8mm, dy=8mm
Maximum value of SAR (measured) = 0.520 mW/g

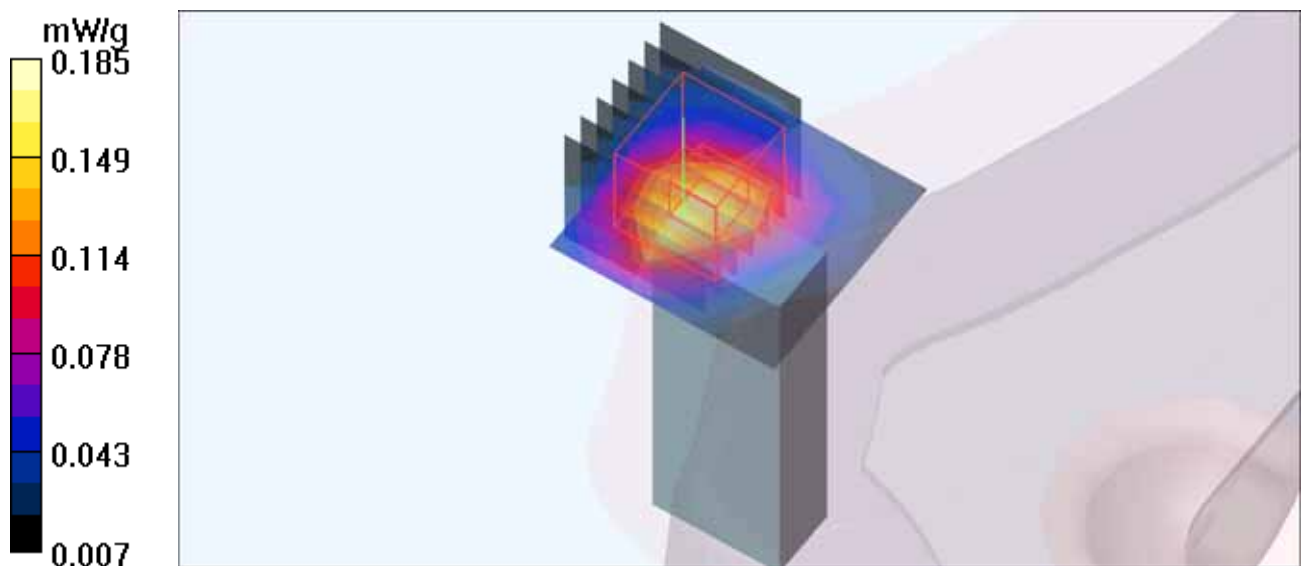**Body Position - Mid/Zoom Scan (7x7x7)/Cube 0:** Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 10.8 V/m; Power Drift = 0.036 dB
Peak SAR (extrapolated) = 0.624 W/kg
**SAR(1 g) = 0.379 mW/g; SAR(10 g) = 0.224 mW/g**
Maximum value of SAR (measured) = 0.501 mW/g

## M28-LTE BAND 4-Ch20175 (50% RB centered)

Communication System: LTE band4 (1700) ; Frequency: 1732.5 MHz ; Duty Cycle: 1:1 ; Modulation Type: QPSK

Medium: MSL1700 Medium parameters used: f = 1732.5 MHz; σ = 1.49 mho/m; εr = 54.38; ρ = 1000 kg/m$^3$

Phantom section: Flat Section ; Separation Distance : 5 mm ( The top side of the EUT to the Phantom)

DASY4 Configuration:

- Probe: EX3DV4 - SN3578; ConvF(6.81, 6.81, 6.81); Calibrated: 2010/6/22
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn579; Calibrated: 2010/9/20
- Phantom: SAM Twin Phantom V4.0; Type: QD 000 P40 CA; Serial: TP-1202
- Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 186

**Body Position - Mid/Area Scan (7x7x1):** Measurement grid: dx=8mm, dy=8mm
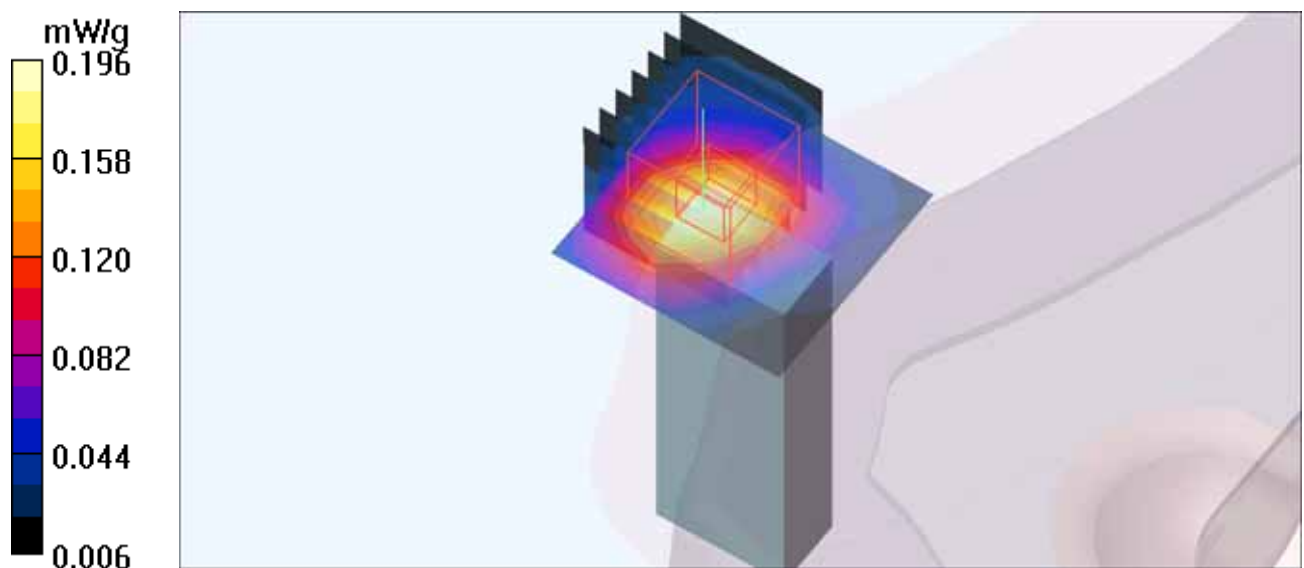Maximum value of SAR (measured) = 0.166 mW/g

**Body Position - Mid/Zoom Scan (7x7x7)/Cube 0:** Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 8.94 V/m; Power Drift = 0.155 dB
Peak SAR (extrapolated) = 0.218 W/kg
**SAR(1 g) = 0.129 mW/g; SAR(10 g) = 0.073 mW/g**
Maximum value of SAR (measured) = 0.174 mW/g

Date/Time: 2011/1/21 03:06:52

## M29-LTE BAND 4-Ch20175 (1RB, Lower edge)

Communication System: LTE band4 (1700) ; Frequency: 1732.5 MHz ; Duty Cycle: 1:1 ; Modulation Type: QPSK
Medium: MSL1700 Medium parameters used: f = 1732.5 MHz; σ = 1.49 mho/m; εr = 54.38; ρ = 1000 kg/m$^3$
Phantom section: Flat Section ; Separation Distance : 5 mm ( The top side of the EUT to the Phantom)

DASY4 Configuration:

- Probe: EX3DV4 - SN3578; ConvF(6.81, 6.81, 6.81); Calibrated: 2010/6/22
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn579; Calibrated: 2010/9/20
- Phantom: SAM Twin Phantom V4.0; Type: QD 000 P40 CA; Serial: TP-1202
- Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 186

**Body Position - Mid channel Low End/Area Scan (7x7x1):** Measurement grid: dx=8mm, dy=8mm
Maximum value of SAR (measured) = 0.162 mW/g

**Body Position - Mid channel Low End/Zoom Scan (7x7x7)/Cube 0:** Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 8.72 V/m; Power Drift = 0.18 dB
Peak SAR (extrapolated) = 0.252 W/kg
**SAR(1 g) = 0.127 mW/g; SAR(10 g) = 0.072 mW/g**
Maximum value of SAR (measured) = 0.185 mW/g

## M30-LTE BAND 4-Ch20175 (1RB, Upper edge)

Communication System: LTE band4 (1700) ; Frequency: 1732.5 MHz ; Duty Cycle: 1:1 ; Modulation Type: QPSK
Medium: MSL1700 Medium parameters used: f = 1732.5 MHz; σ = 1.49 mho/m; εr = 54.38; ρ = 1000 kg/m³
Phantom section: Flat Section ; Separation Distance : 5 mm ( The top side of the EUT to the Phantom)


DASY4 Configuration:

- Probe: EX3DV4 - SN3578; ConvF(6.81, 6.81, 6.81); Calibrated: 2010/6/22
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn579; Calibrated: 2010/9/20
- Phantom: SAM Twin Phantom V4.0; Type: QD 000 P40 CA; Serial: TP-1202
- Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 186


**Body Position - Mid/Area Scan (7x7x1):** Measurement grid: dx=8mm, dy=8mm
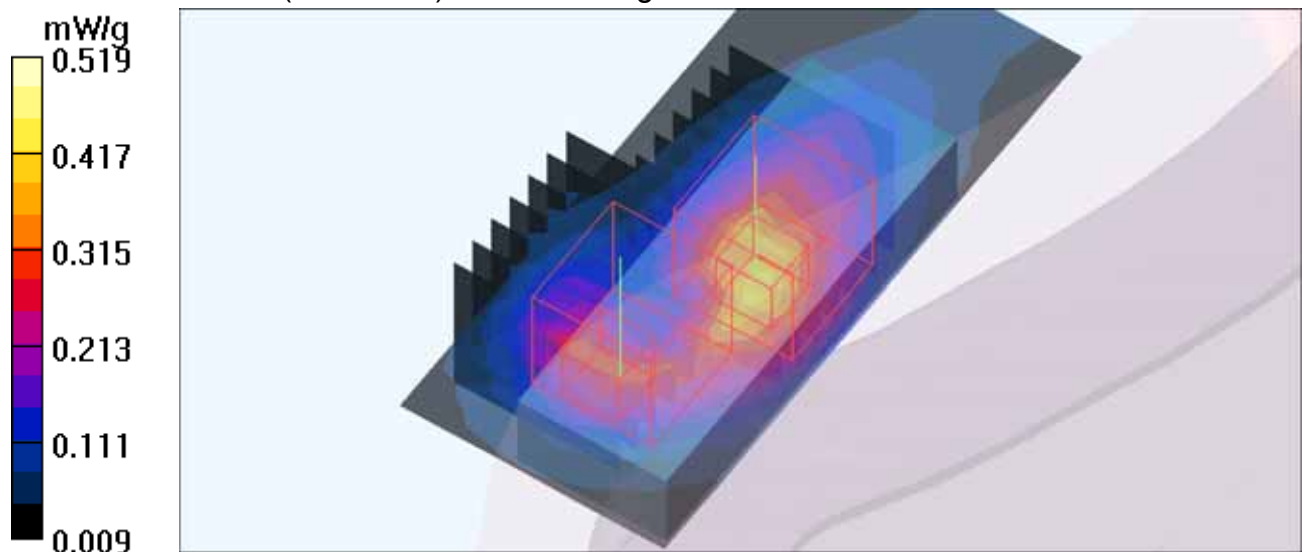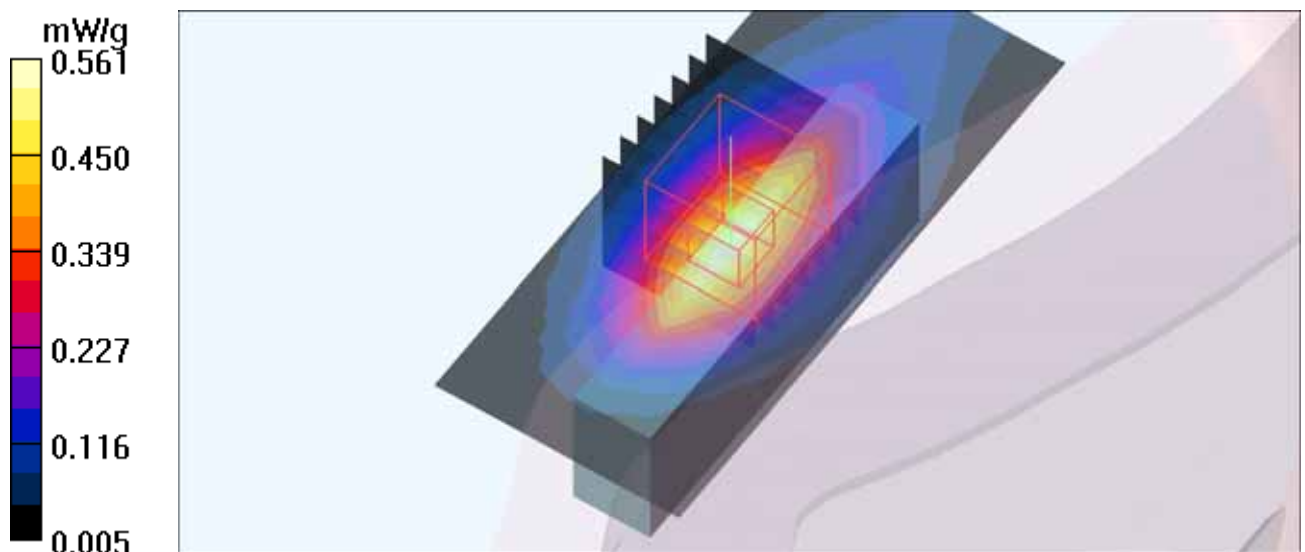Maximum value of SAR (measured) = 0.196 mW/g

**Body Position - Mid/Zoom Scan (7x7x7)/Cube 0:** Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 9.64 V/m; Power Drift = 0.012 dB
Peak SAR (extrapolated) = 0.240 W/kg
**SAR(1 g) = 0.142 mW/g; SAR(10 g) = 0.080 mW/g**
Maximum value of SAR (measured) = 0.189 mW/g

## M31-WCDMA AWS BAND-Ch1412

Communication System: WCDMA AWS BAND ; Frequency: 1732.4 MHz ; Duty Cycle: 1:1 ; Modulation type: BPSK

Medium: MSL1700 Medium parameters used : f = 1732.4 MHz; σ = 1.49 mho/m; εr = 54.38; ρ = 1000 kg/m$^3$

Phantom section: Flat Section ; Separation distance : 5 mm (The Horizontal-Down side of the EUT to the Phantom)

DASY4 Configuration:

- Probe: EX3DV4 - SN3578; ConvF(6.81, 6.81, 6.81); Calibrated: 2010/6/22
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn579; Calibrated: 2010/9/20
- Phantom: SAM Twin Phantom V4.0; Type: QD 000 P40 CA; Serial: TP-1202
- Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 186

**Body Position - Mid/Area Scan (7x15x1):** Measurement grid: dx=8mm, dy=8mm
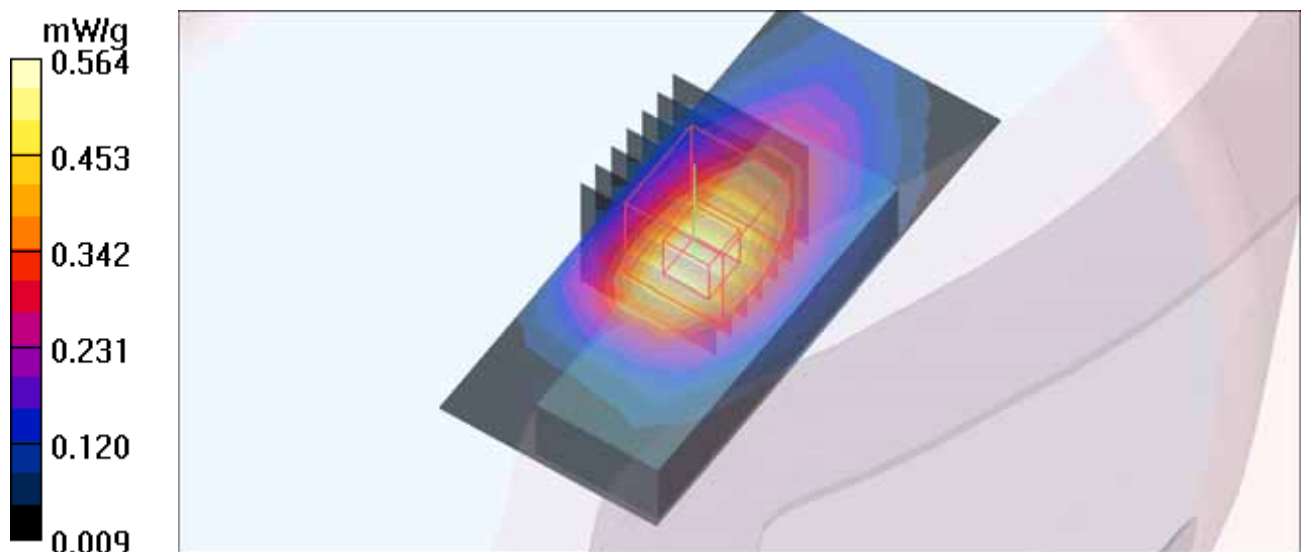Maximum value of SAR (measured) = 0.420 mW/g
**Body Position - Mid/Zoom Scan (7x7x7)/Cube 0:** Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 11.5 V/m; Power Drift = 0.136 dB
Peak SAR (extrapolated) = 0.700 W/kg
**SAR(1 g) = 0.362 mW/g; SAR(10 g) = 0.187 mW/g**
Maximum value of SAR (measured) = 0.519 mW/g
**Body Position - Mid/Zoom Scan (7x7x7)/Cube 1:** Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 11.5 V/m; Power Drift = 0.136 dB
Peak SAR (extrapolated) = 0.618 W/kg
**SAR(1 g) = 0.218 mW/g; SAR(10 g) = 0.119 mW/g**
Maximum value of SAR (measured) = 0.454 mW/g

# M32-WCDMA AWS BAND-Ch1412

Communication System: WCDMA AWS BAND ; Frequency: 1732.4 MHz ; Duty Cycle: 1:1 ; Modulation type: BPSK

Medium: MSL1700 Medium parameters used : f = 1732.4 MHz; σ = 1.49 mho/m; εr = 54.38; ρ = 1000 kg/m$^3$

Phantom section: Flat Section ; Separation distance : 5 mm (The Vertical-Front side of the EUT to the Phantom)

DASY4 Configuration:

- Probe: EX3DV4 - SN3578; ConvF(6.81, 6.81, 6.81); Calibrated: 2010/6/22
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn579; Calibrated: 2010/9/20
- Phantom: SAM Twin Phantom V4.0; Type: QD 000 P40 CA; Serial: TP-1202
- Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 186

**Body Position - Mid/Area Scan (7x15x1):** Measurement grid: dx=8mm, dy=8mm
Maximum value of SAR (measured) = 0.561 mW/g

**Body Position - Mid/Zoom Scan (7x7x7)/Cube 0:** Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 7.68 V/m; Power Drift = 0.074 dB
Peak SAR (extrapolated) = 0.699 W/kg
**SAR(1 g) = 0.396 mW/g; SAR(10 g) = 0.214 mW/g**
Maximum value of SAR (measured) = 0.556 mW/g

Date/Time: 2011/1/21 13:06:24

## M33-WCDMA AWS BAND-Ch1412

Communication System: WCDMA AWS BAND ; Frequency: 1732.4 MHz ; Duty Cycle: 1:1 ;
Modulation type: BPSK
Medium: MSL1700 Medium parameters used : f = 1732.4 MHz; σ = 1.49 mho/m; εr = 54.38; ρ = 1000 kg/m$^3$
Phantom section: Flat Section ; Separation distance : 5 mm (The Horizontal-Up side of the EUT to the Phantom)

DASY4 Configuration:

- Probe: EX3DV4 - SN3578; ConvF(6.81, 6.81, 6.81); Calibrated: 2010/6/22
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn579; Calibrated: 2010/9/20
- Phantom: SAM Twin Phantom V4.0; Type: QD 000 P40 CA; Serial: TP-1202
- Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 186

**Body Position - Mid/Area Scan (7x15x1):** Measurement grid: dx=8mm, dy=8mm
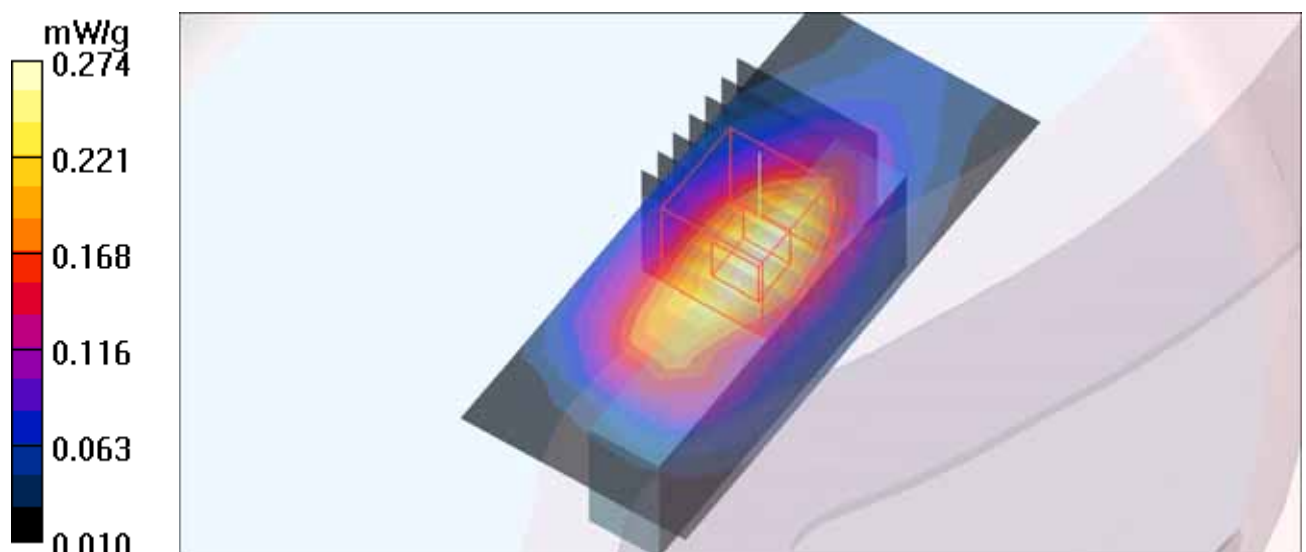Maximum value of SAR (measured) = 0.554 mW/g

**Body Position - Mid/Zoom Scan (7x7x7)/Cube 0:** Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 4.60 V/m; Power Drift = -0.156 dB
Peak SAR (extrapolated) = 0.686 W/kg
**SAR(1 g) = 0.423 mW/g; SAR(10 g) = 0.247 mW/g**
Maximum value of SAR (measured) = 0.564 mW/g

## M34-WCDMA AWS BAND-Ch1412

Communication System: WCDMA AWS BAND ; Frequency: 1732.4 MHz ; Duty Cycle: 1:1 ;
Modulation type: BPSK
Medium: MSL1700 Medium parameters used : f = 1732.4 MHz; σ = 1.49 mho/m; εr = 54.38; ρ = 1000 kg/m$^3$
Phantom section: Flat Section ; Separation distance : 5 mm (The Vertical-Back side of the EUT to the Phantom)

DASY4 Configuration:

- Probe: EX3DV4 - SN3578; ConvF(6.81, 6.81, 6.81); Calibrated: 2010/6/22
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn579; Calibrated: 2010/9/20
- Phantom: SAM Twin Phantom V4.0; Type: QD 000 P40 CA; Serial: TP-1202
- Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 186

**Body Position - Mid/Area Scan (7x15x1):** Measurement grid: dx=8mm, dy=8mm
Maximum value of SAR (measured) = 0.273 mW/g

**Body Position - Mid/Zoom Scan (7x7x7)/Cube 0:** Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 6.28 V/m; Power Drift = 0.152 dB
Peak SAR (extrapolated) = 0.336 W/kg
**SAR(1 g) = 0.204 mW/g; SAR(10 g) = 0.120 mW/g**
Maximum value of SAR (measured) = 0.274 mW/g

Date/Time: 2011/1/21 13:54:17

## M35-WCDMA AWS BAND-Ch1412

Communication System: WCDMA AWS BAND ; Frequency: 1732.4 MHz ; Duty Cycle: 1:1 ;
Modulation type: BPSK
Medium: MSL1700 Medium parameters used : f = 1732.4 MHz; σ = 1.49 mho/m; εr = 54.38; ρ = 1000 kg/m$^3$
Phantom section: Flat Section ; Separation distance : 5 mm (The top side of the EUT to the Phantom)

DASY4 Configuration:

- Probe: EX3DV4 - SN3578; ConvF(6.81, 6.81, 6.81); Calibrated: 2010/6/22
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn579; Calibrated: 2010/9/20
- Phantom: SAM Twin Phantom V4.0; Type: QD 000 P40 CA; Serial: TP-1202
- Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 186

**Body Position - Mid/Area Scan (8x10x1):** Measurement grid: dx=8mm, dy=8mm
Maximum value of SAR (measured) = 0.093 mW/g

**Body Position - Mid/Zoom Scan (7x7x7)/Cube 0:** Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 6.55 V/m; Power Drift = 0.057 dB
Peak SAR (extrapolated) = 0.120 W/kg
**SAR(1 g) = 0.071 mW/g; SAR(10 g) = 0.040 mW/g**
Maximum value of SAR (measured) = 0.098 mW/g
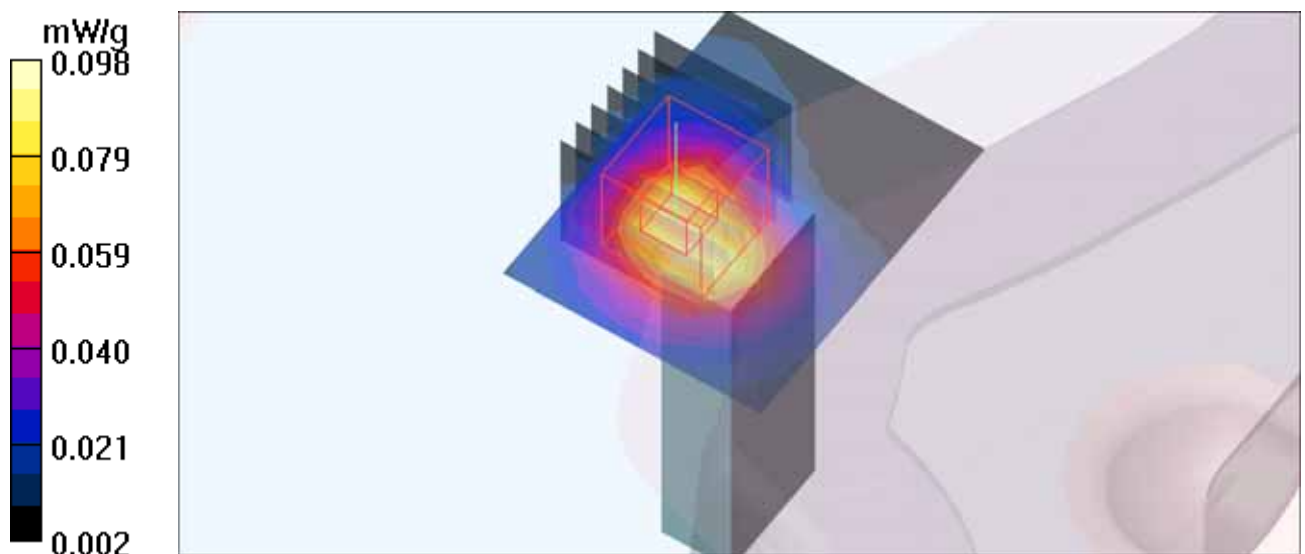
## System Validation Check-MSL 750MHz
**DUT: Dipole 750 MHz ; Type: D750V3 ; Serial: 1013 ; Test Frequency: 750 MHz**

Communication System: CW ; Frequency: 750 MHz; Duty Cycle: 1:1; Modulation type: CW
Medium: MSL750;Medium parameters used: f = 750 MHz; σ = 0.98 mho/m; $\varepsilon_r$ = 55.84; ρ = 1000 kg/m$^3$ ; Liquid level : 150 mm
Phantom section: Flat Section ; Separation distance : 15 mm (The feet point of the dipole to the Phantom)Air temp. : 22.3 degrees ; Liquid temp. : 22.1 degrees

DASY4 Configuration:

- Probe: ES3DV3 - SN3177; ConvF(6.18, 6.18, 6.18); Calibrated: 2010/8/24
- Sensor-Surface: 3mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn579; Calibrated: 2010/9/20
- Phantom: SAM Twin Phantom V4.0; Type: QD 000 P40 CA; Serial: TP-1202
- Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 186

**d=15mm, Pin=250mW/Area Scan (7x9x1):** Measurement grid: dx=15mm, dy=15mm
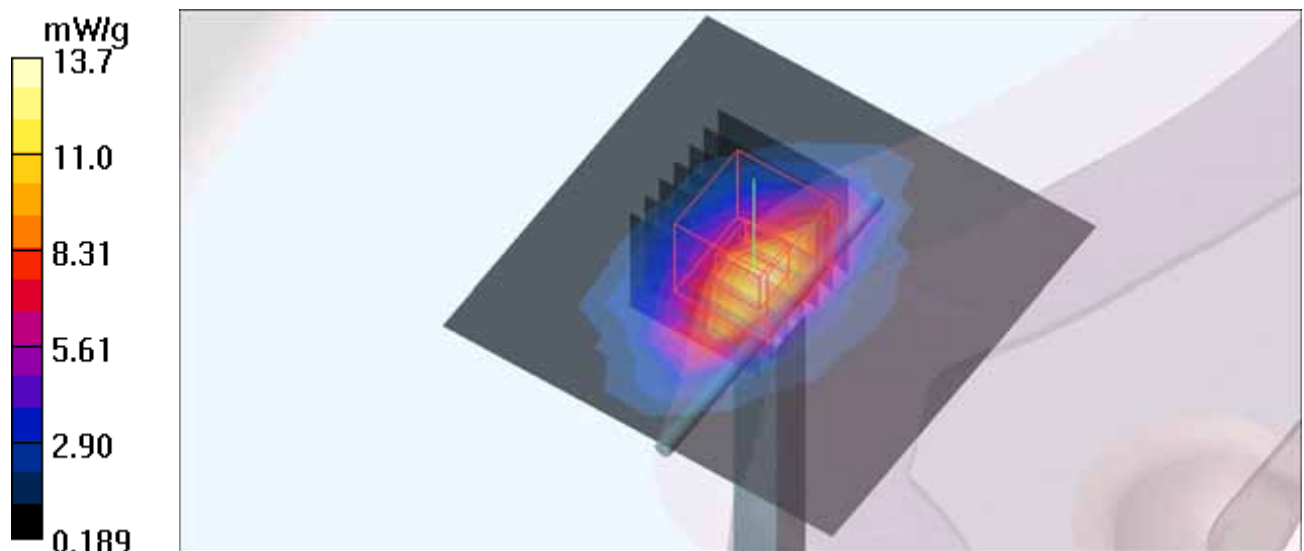Maximum value of SAR (measured) = 2.10 mW/g

**d=15mm, Pin=250mW/Zoom Scan (7x7x7)/Cube 0:** Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 52.5 V/m; Power Drift = -0.023 dB
Peak SAR (extrapolated) = 3.10 W/kg
**SAR(1 g) = 2.09 mW/g; SAR(10 g) = 1.38 mW/g**
Maximum value of SAR (measured) = 2.41 mW/g
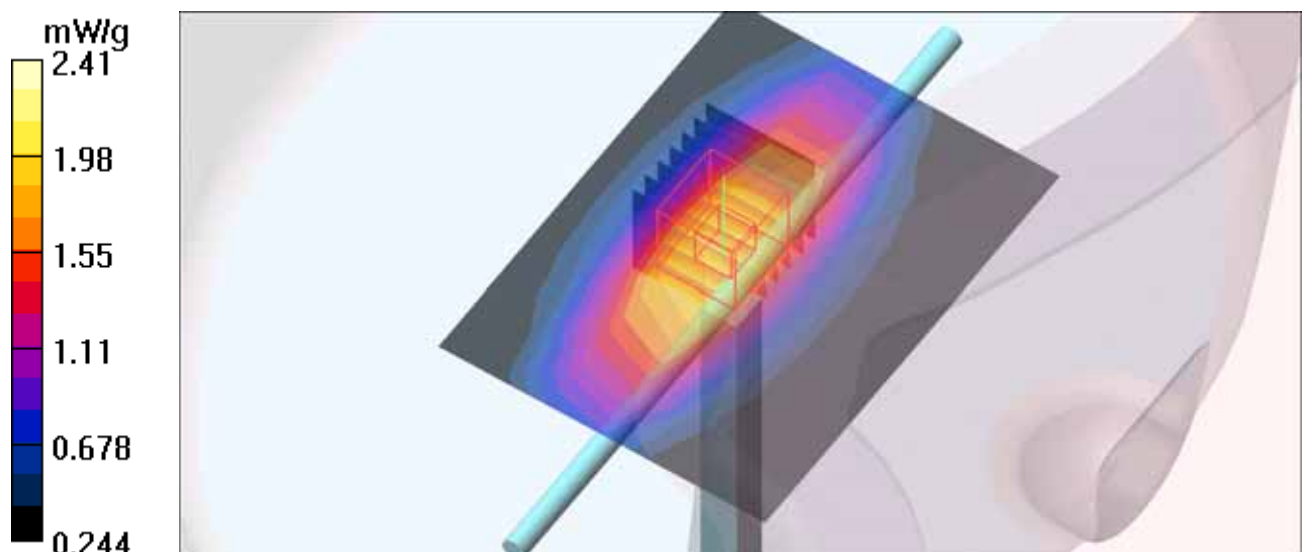
Date/Time: 2011/1/21 00:25:34

## SystemPerformanceCheck-D1750-MSL1750 MHz
**DUT: Dipole 1750 MHz ; Type: D1750V2 ; Serial: D1750V2 - SN:1003 ; Test Frequency: 1750 MHz**

Communication System: CW ; Frequency: 1750 MHz; Duty Cycle: 1:1; Modulation type: CW
Medium: MSL1700;Medium parameters used: f = 1750 MHz; $\sigma$ = 1.51 mho/m; $\varepsilon_r$ = 54.15; $\rho$ = 1000 kg/m$^3$ ; Liquid level : 150 mm
Phantom section: Flat Section ; Separation distance : 10 mm (The feet point of the dipole to the Phantom)Air temp. : 22.1 degrees ; Liquid temp. : 21.3 degrees

DASY4 Configuration:

- Probe: EX3DV4 - SN3578; ConvF(6.81, 6.81, 6.81); Calibrated: 2010/6/22
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn579; Calibrated: 2010/9/20
- Phantom: SAM Twin Phantom V4.0; Type: QD 000 P40 CA; Serial: TP-1202
- Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 186

**d=10mm, Pin=250mW/Area Scan (7x7x1):** Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (measured) = 13.1 mW/g

**d=10mm, Pin=250mW/Zoom Scan (7x7x7)/Cube 0:** Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 96.4 V/m; Power Drift = 0.050 dB
Peak SAR (extrapolated) = 17.9 W/kg
**SAR(1 g) = 9.39 mW/g; SAR(10 g) = 4.97 mW/g**
Maximum value of SAR (measured) = 13.7 mW/g
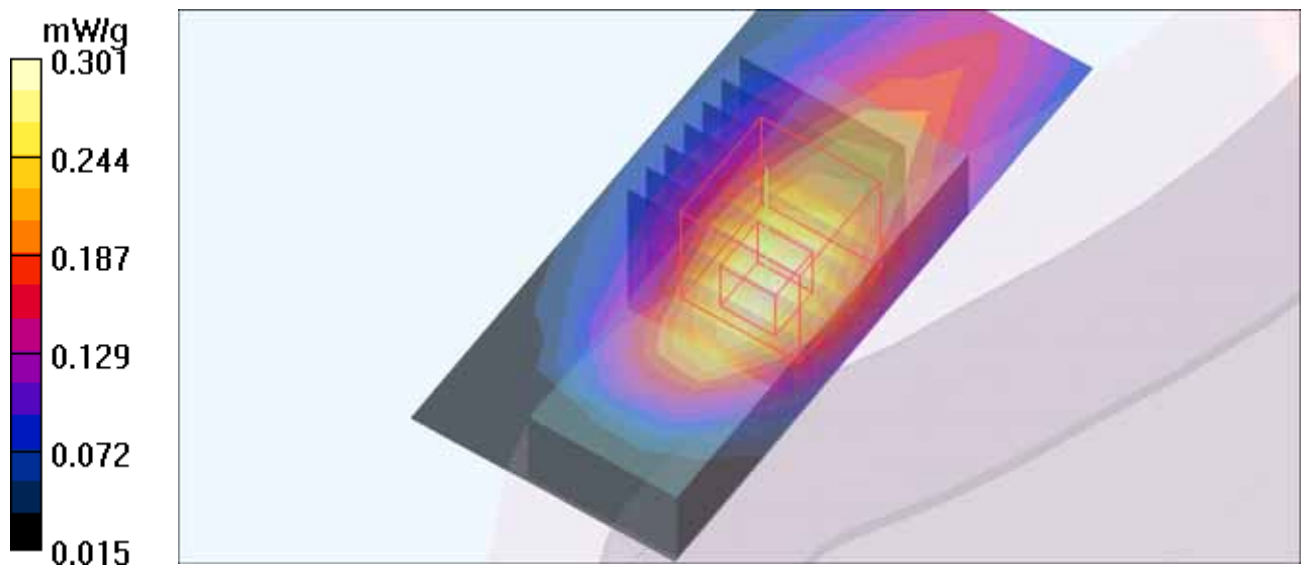
## M36-LTE BAND17-Ch23790 (50% RB centered)

Communication System: LTE band17 (700) ; Frequency: 710 MHz ; Duty Cycle: 1:1
Medium: MSL750 Medium parameters used: f = 710 MHz; σ = 0.96 mho/m; εr = 56.11; ρ = 1000 kg/m$^3$
Phantom section: Flat Section ; DUT test position : Body ; Modulation Type: 16QAM
Separation Distance : 5 mm ( The horizontal-down side of the EUT to the Phantom)

DASY4 Configuration:

- Probe: ES3DV3 - SN3177; ConvF(6.18, 6.18, 6.18); Calibrated: 2010/8/24
- Sensor-Surface: 3mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn579; Calibrated: 2010/9/20
- Phantom: SAM Twin Phantom V4.0; Type: QD 000 P40 CA; Serial: TP-1202
- Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 186

**Body Position - Low/Area Scan (7x15x1):** Measurement grid: dx=8mm, dy=8mm
Maximum value of SAR (measured) = 0.314 mW/g

**Body Position - Low/Zoom Scan (7x7x7)/Cube 0:** Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 6.78 V/m; Power Drift = 0.027 dB
Peak SAR (extrapolated) = 0.413 W/kg
**SAR(1 g) = 0.267 mW/g; SAR(10 g) = 0.168 mW/g**
Maximum value of SAR (measured) = 0.317 mW/g
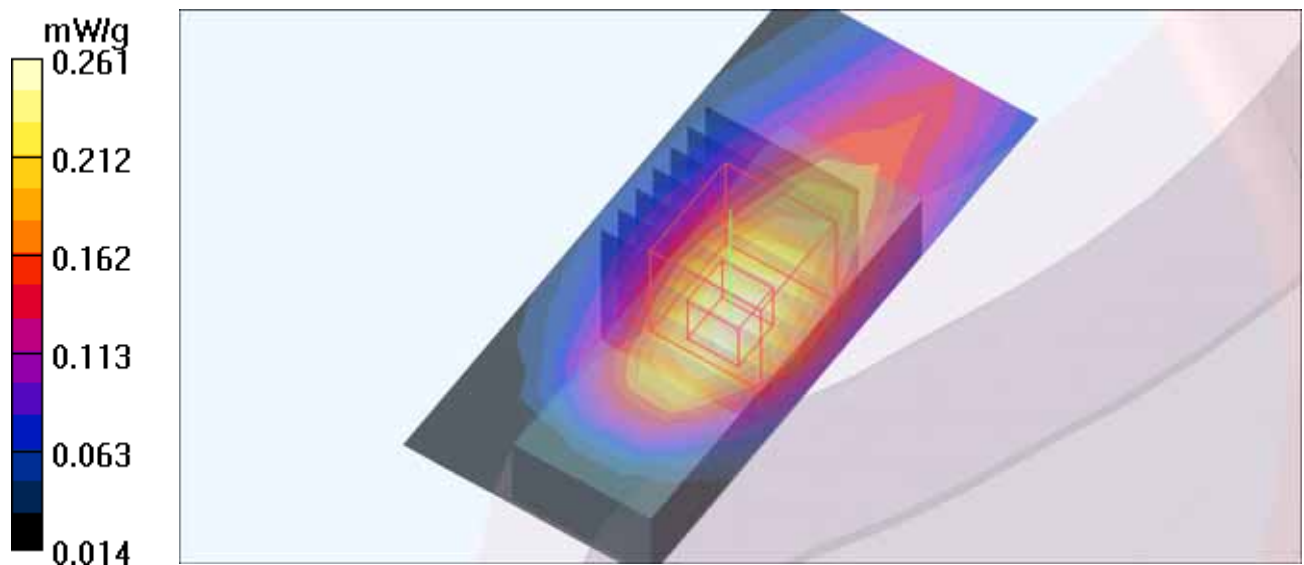
## M37-LTE BAND17-Ch23790 (1RB, Lower edge)

Communication System: LTE band17 (700) ; Frequency: 710 MHz ; Duty Cycle: 1:1
Medium: MSL750 Medium parameters used: f = 710 MHz; σ = 0.96 mho/m; εr = 56.11; ρ = 1000 kg/m$^3$
Phantom section: Flat Section ; DUT test position : Body ; Modulation Type: 16QAM
Separation Distance : 5 mm ( The horizontal-down side of the EUT to the Phantom)

DASY4 Configuration:

- Probe: ES3DV3 - SN3177; ConvF(6.18, 6.18, 6.18); Calibrated: 2010/8/24
- Sensor-Surface: 3mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn579; Calibrated: 2010/9/20
- Phantom: SAM Twin Phantom V4.0; Type: QD 000 P40 CA; Serial: TP-1202
- Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 186

**Body Position - Low channel/Area Scan (7x15x1):** Measurement grid: dx=8mm, dy=8mm
Maximum value of SAR (measured) = 0.296 mW/g

**Body Position - Low channel/Zoom Scan (7x7x7)/Cube 0:** Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 6.69 V/m; Power Drift = -0.046 dB
Peak SAR (extrapolated) = 0.397 W/kg
**SAR(1 g) = 0.254 mW/g; SAR(10 g) = 0.160 mW/g**
Maximum value of SAR (measured) = 0.301 mW/g
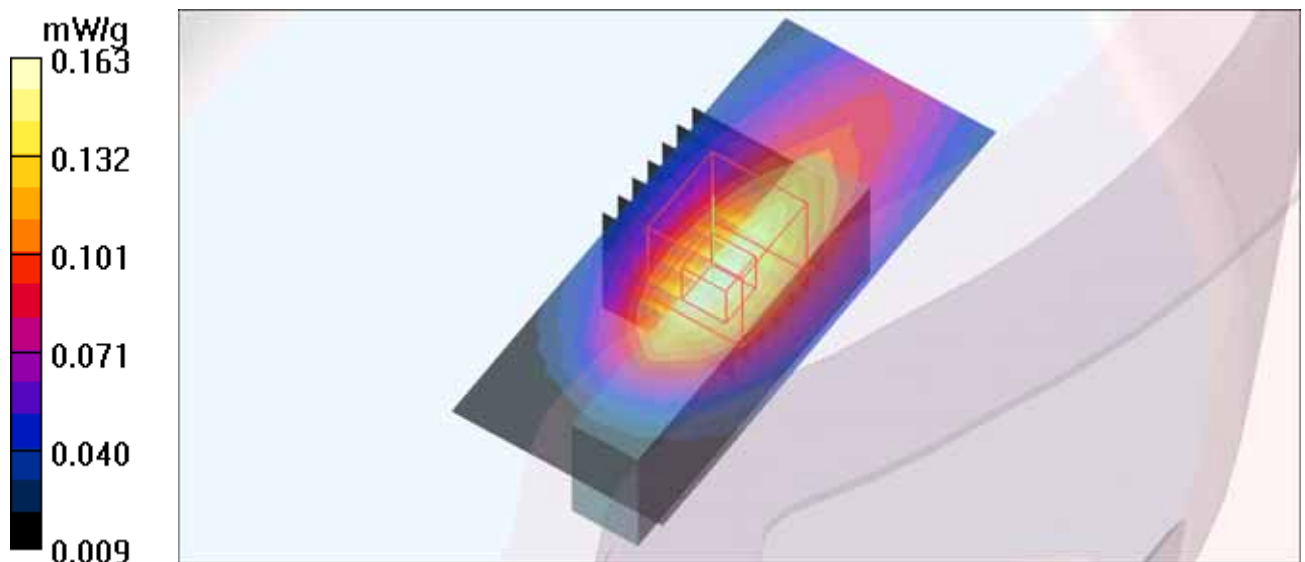
## M38-LTE BAND17-Ch23790 (1RB, Upper edge)

Communication System: LTE band17 (700) ; Frequency: 710 MHz ; Duty Cycle: 1:1
Medium: MSL750 Medium parameters used: f = 710 MHz; σ = 0.96 mho/m; εr = 56.11; ρ = 1000 kg/m$^3$
Phantom section: Flat Section ; DUT test position : Body ; Modulation Type: 16QAM
Separation Distance : 5 mm ( The horizontal-down side of the EUT to the Phantom)

DASY4 Configuration:

- Probe: ES3DV3 - SN3177; ConvF(6.18, 6.18, 6.18); Calibrated: 2010/8/24
- Sensor-Surface: 3mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn579; Calibrated: 2010/9/20
- Phantom: SAM Twin Phantom V4.0; Type: QD 000 P40 CA; Serial: TP-1202
- Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 186

**Body Position - Low channel/Area Scan (7x15x1):** Measurement grid: dx=8mm, dy=8mm
Maximum value of SAR (measured) = 0.260 mW/g

**Body Position - Low channel/Zoom Scan (7x7x7)/Cube 0:** Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 6.37 V/m; Power Drift = -0.027 dB
Peak SAR (extrapolated) = 0.336 W/kg
**SAR(1 g) = 0.221 mW/g; SAR(10 g) = 0.140 mW/g**
Maximum value of SAR (measured) = 0.261 mW/g
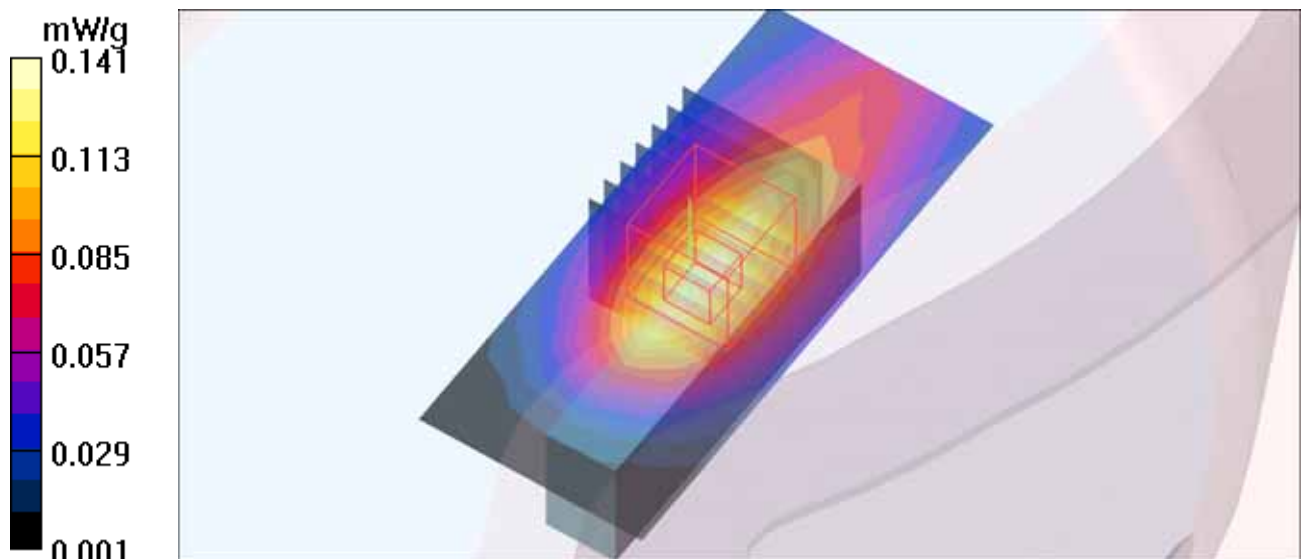
## M39-LTE BAND17-Ch23790 (50% RB centered)

Communication System: LTE band17 (700) ; Frequency: 710 MHz ; Duty Cycle: 1:1
Medium: MSL750 Medium parameters used: f = 710 MHz; σ = 0.96 mho/m; εr = 56.11; ρ = 1000 kg/m$^3$
Phantom section: Flat Section ; DUT test position : Body ; Modulation Type: 16QAM
Separation Distance : 5 mm ( The vertical-front side of the EUT to the Phantom)

DASY4 Configuration:

- Probe: ES3DV3 - SN3177; ConvF(6.18, 6.18, 6.18); Calibrated: 2010/8/24
- Sensor-Surface: 3mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn579; Calibrated: 2010/9/20
- Phantom: SAM Twin Phantom V4.0; Type: QD 000 P40 CA; Serial: TP-1202
- Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 186

**Body Position - Low/Area Scan (7x15x1):** Measurement grid: dx=8mm, dy=8mm
Maximum value of SAR (measured) = 0.163 mW/g

**Body Position - Low/Zoom Scan (7x7x7)/Cube 0:** Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 5.29 V/m; Power Drift = 0.188 dB
Peak SAR (extrapolated) = 0.216 W/kg
**SAR(1 g) = 0.135 mW/g; SAR(10 g) = 0.085 mW/g**

## M40-LTE BAND17-Ch23790 (1RB, Lower edge)
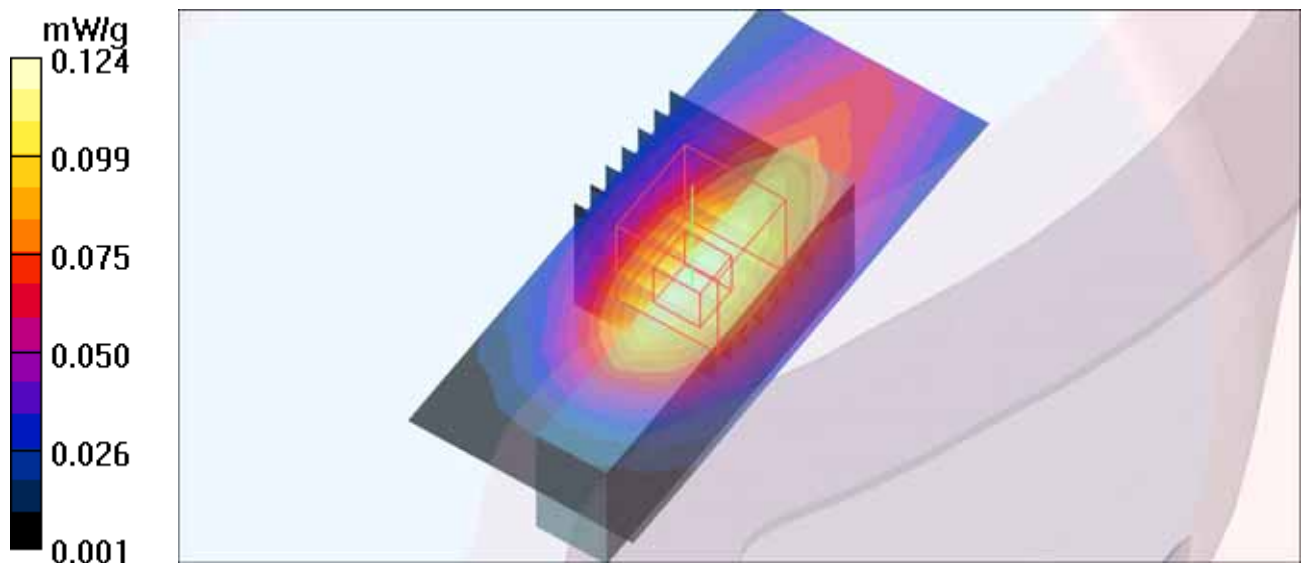
Communication System: LTE band17 (700) ; Frequency: 710 MHz ; Duty Cycle: 1:1
Medium: MSL750 Medium parameters used: f = 710 MHz; σ = 0.96 mho/m; εr = 56.11; ρ = 1000 kg/m$^3$
Phantom section: Flat Section ; DUT test position : Body ; Modulation Type: 16QAM
Separation Distance : 5 mm ( The vertical-front side of the EUT to the Phantom)

DASY4 Configuration:

- Probe: ES3DV3 - SN3177; ConvF(6.18, 6.18, 6.18); Calibrated: 2010/8/24
- Sensor-Surface: 3mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn579; Calibrated: 2010/9/20
- Phantom: SAM Twin Phantom V4.0; Type: QD 000 P40 CA; Serial: TP-1202
- Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 186

**Body Position - Low channel/Area Scan (7x15x1):** Measurement grid: dx=8mm, dy=8mm
Maximum value of SAR (measured) = 0.141 mW/g

**Body Position - Low channel/Zoom Scan (7x7x7)/Cube 0:** Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 5.02 V/m; Power Drift = -0.008 dB
Peak SAR (extrapolated) = 0.187 W/kg
**SAR(1 g) = 0.117 mW/g; SAR(10 g) = 0.074 mW/g**

Date/Time: 2011/3/2 06:44:52

## M41-LTE BAND17-Ch23790 (1RB, Upper edge)

Communication System: LTE band17 (700) ; Frequency: 710 MHz ; Duty Cycle: 1:1
Medium: MSL750 Medium parameters used: f = 710 MHz; σ = 0.96 mho/m; εr = 56.11; ρ = 1000 kg/m$^3$
Phantom section: Flat Section ; DUT test position : Body ; Modulation Type: 16QAM
Separation Distance : 5 mm ( The vertical-front side of the EUT to the Phantom)

DASY4 Configuration:

- Probe: ES3DV3 - SN3177; ConvF(6.18, 6.18, 6.18); Calibrated: 2010/8/24
- Sensor-Surface: 3mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn579; Calibrated: 2010/9/20
- Phantom: SAM Twin Phantom V4.0; Type: QD 000 P40 CA; Serial: TP-1202
- Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 186

**Body Position - Low channel/Area Scan (7x15x1):** Measurement grid: dx=8mm, dy=8mm
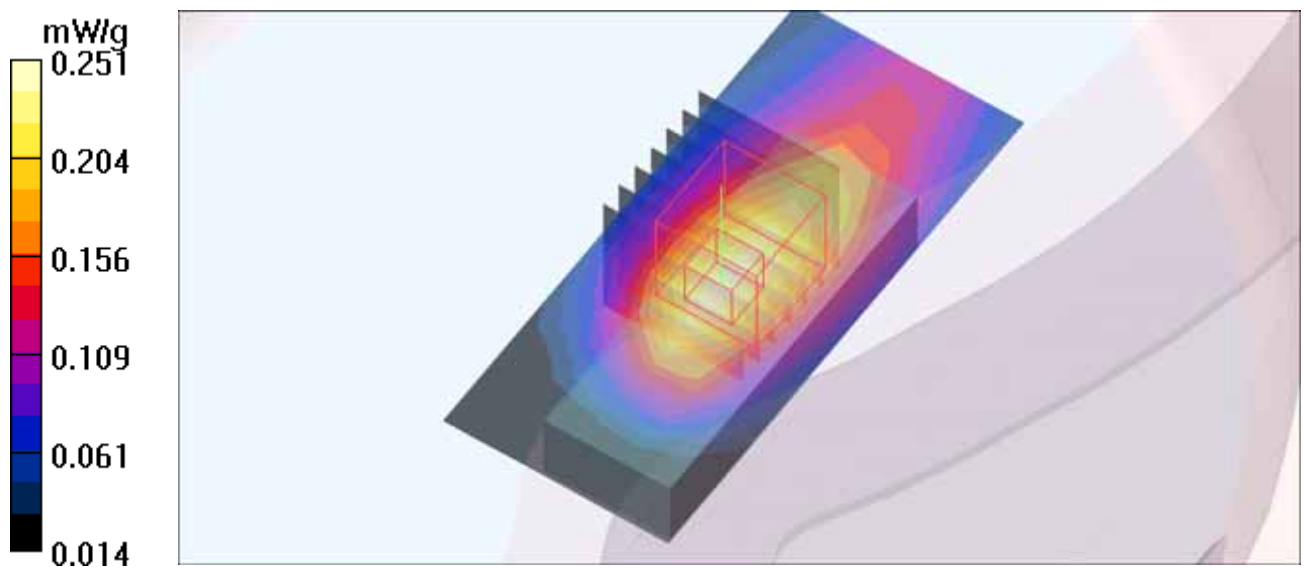Maximum value of SAR (measured) = 0.124 mW/g

**Body Position - Low channel/Zoom Scan (7x7x7)/Cube 0:** Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 4.79 V/m; Power Drift = 0.046 dB
Peak SAR (extrapolated) = 0.166 W/kg
**SAR(1 g) = 0.104 mW/g; SAR(10 g) = 0.065 mW/g**

Date/Time: 2011/3/2 07:08:13

## M42-LTE BAND17-Ch23790 (50% RB centered)

Communication System: LTE band17 (700) ; Frequency: 710 MHz ; Duty Cycle: 1:1 ; Modulation type: 16QAM
Medium: MSL750 Medium parameters used: f = 710 MHz; σ = 0.96 mho/m; εr = 56.11; ρ = 1000 kg/m$^3$
Phantom section: Flat Section ; Separation distance : 5 mm (The horizontal-up side of the EUT to the Phantom)

DASY4 Configuration:

- Probe: ES3DV3 - SN3177; ConvF(6.18, 6.18, 6.18); Calibrated: 2010/8/24
- Sensor-Surface: 3mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn579; Calibrated: 2010/9/20
- Phantom: SAM Twin Phantom V4.0; Type: QD 000 P40 CA; Serial: TP-1202
- Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 186

**Body Position - Low/Area Scan (7x15x1):** Measurement grid: dx=8mm, dy=8mm
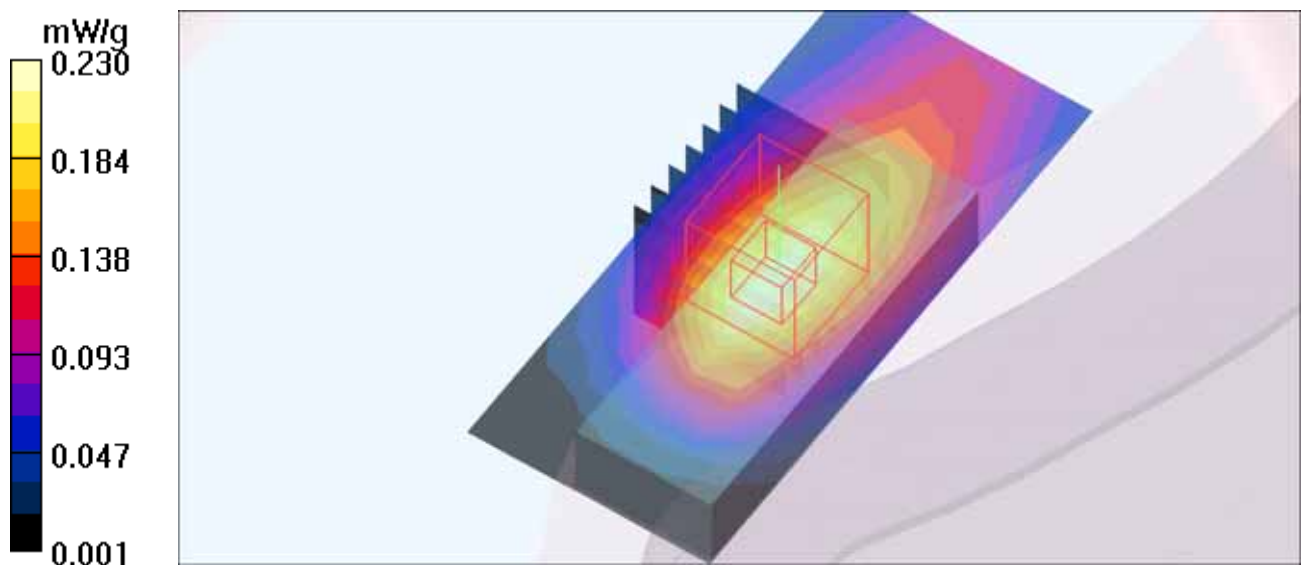Maximum value of SAR (measured) = 0.249 mW/g

**Body Position - Low/Zoom Scan (7x7x7)/Cube 0:** Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 6.10 V/m; Power Drift = 0.186 dB
Peak SAR (extrapolated) = 0.327 W/kg
**SAR(1 g) = 0.213 mW/g; SAR(10 g) = 0.137 mW/g**
Maximum value of SAR (measured) = 0.251 mW/g

## M43- LTE BAND17-Ch23790 (1RB, Lower edge)

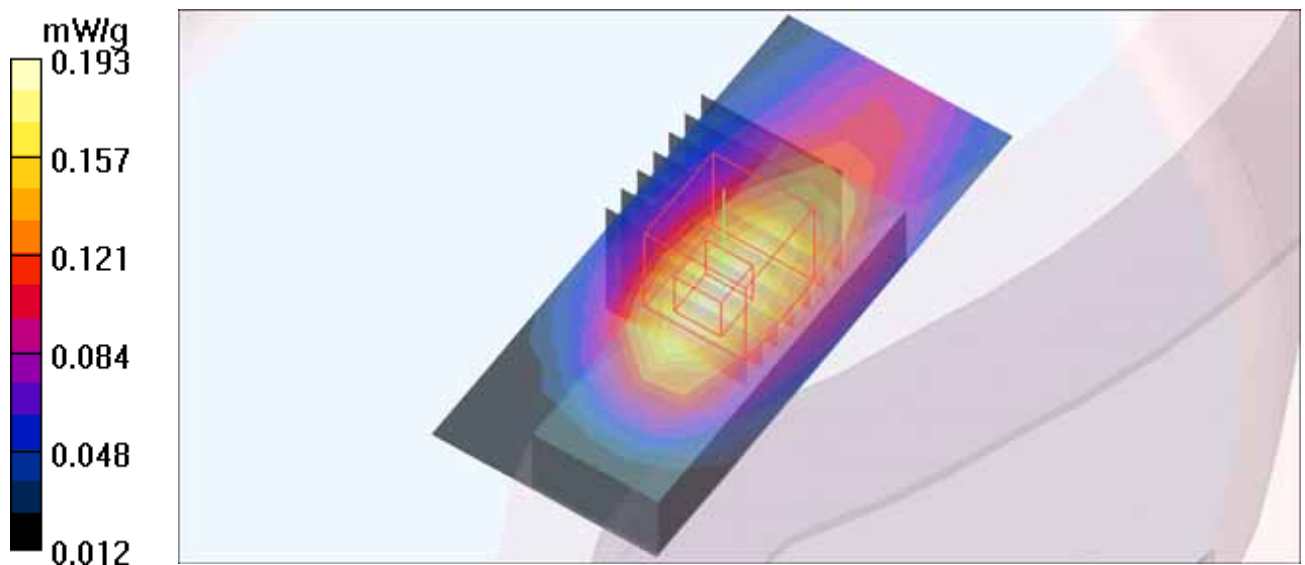Communication System: LTE band17 (700) ; Frequency: 710 MHz ; Duty Cycle: 1:1 ; Modulation type: 16QAM
Medium: MSL750 Medium parameters used: f = 710 MHz; σ = 0.96 mho/m; εr = 56.11; ρ = 1000 kg/m$^3$
Phantom section: Flat Section ; Separation distance : 5 mm (The horizontal-up side of the EUT to the Phantom)

DASY4 Configuration:

- Probe: ES3DV3 - SN3177; ConvF(6.18, 6.18, 6.18); Calibrated: 2010/8/24
- Sensor-Surface: 3mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn579; Calibrated: 2010/9/20
- Phantom: SAM Twin Phantom V4.0; Type: QD 000 P40 CA; Serial: TP-1202
- Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 186

**Body Position - Low channel/Area Scan (7x15x1):** Measurement grid: dx=8mm, dy=8mm
Maximum value of SAR (measured) = 0.230 mW/g

**Body Position - Low channel/Zoom Scan (7x7x7)/Cube 0:** Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 5.91 V/m; Power Drift = 0.023 dB
Peak SAR (extrapolated) = 0.296 W/kg
**SAR(1 g) = 0.195 mW/g; SAR(10 g) = 0.125 mW/g**
Maximum value of SAR (measured) = 0.228 mW/g

## M44- LTE BAND17-Ch23790 (1RB, Upper edge)

Communication System: LTE band17 (700) ; Frequency: 710 MHz ; Duty Cycle: 1:1 ; Modulation type: 16QAM

Medium: MSL750 Medium parameters used: f = 710 MHz; σ = 0.96 mho/m; εr = 56.11; ρ = 1000 kg/m$^3$

Phantom section: Flat Section ; Separation distance : 5 mm (The horizontal-up side of the EUT to the Phantom)

DASY4 Configuration:

- Probe: ES3DV3 - SN3177; ConvF(6.18, 6.18, 6.18); Calibrated: 2010/8/24
- Sensor-Surface: 3mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn579; Calibrated: 2010/9/20
- Phantom: SAM Twin Phantom V4.0; Type: QD 000 P40 CA; Serial: TP-1202
- Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 186

**Body Position - Low channel/Area Scan (7x15x1):** Measurement grid: dx=8mm, dy=8mm
Maximum value of SAR (measured) = 0.192 mW/g

**Body Position - Low channel/Zoom Scan (7x7x7)/Cube 0:** Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 5.54 V/m; Power Drift = -0.068 dB
Peak SAR (extrapolated) = 0.248 W/kg
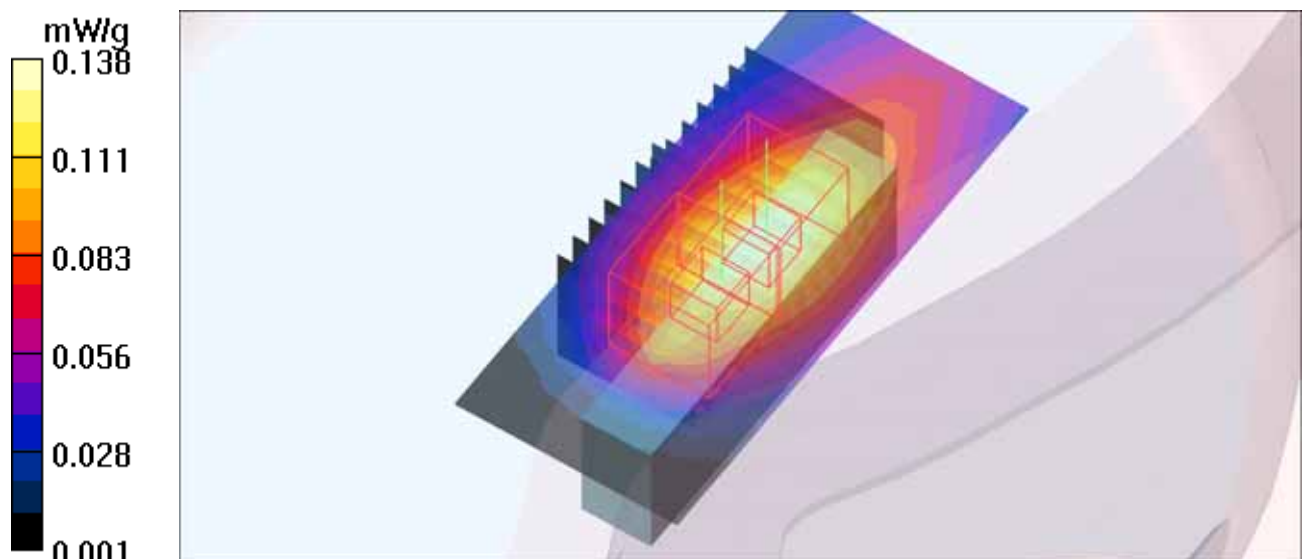**SAR(1 g) = 0.163 mW/g; SAR(10 g) = 0.105 mW/g**
Maximum value of SAR (measured) = 0.193 mW/g

## M45- LTE BAND17-Ch23790 (50% RB centered)

Communication System: LTE band17 (700) ; Frequency: 710 MHz ; Duty Cycle: 1:1 ; Modulation type: 16QAM
Medium: MSL750 Medium parameters used: f = 710 MHz; σ = 0.96 mho/m; εr = 56.11; ρ = 1000 kg/m³
Phantom section: Flat Section ; Separation distance : 5 mm (The vertical-back side of the EUT to the Phantom)
 DASY4 Configuration:

- Probe: ES3DV3 - SN3177; ConvF(6.18, 6.18, 6.18); Calibrated: 2010/8/24
- Sensor-Surface: 3mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn579; Calibrated: 2010/9/20
- Phantom: SAM Twin Phantom V4.0; Type: QD 000 P40 CA; Serial: TP-1202
- Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 186

**Body Position - Low/Area Scan (7x15x1):** Measurement grid: dx=8mm, dy=8mm
Maximum value of SAR (measured) = 0.138 mW/g
**Body Position - Low/Zoom Scan (7x7x7)/Cube 0:** Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 5.06 V/m; Power Drift = 0.198 dB
Peak SAR (extrapolated) = 0.180 W/kg
**SAR(1 g) = 0.118 mW/g; SAR(10 g) = 0.077 mW/g**
**Body Position - Low/Zoom Scan (7x7x7)/Cube 1:** Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 5.06 V/m; Power Drift = 0.198 dB
Peak SAR (extrapolated) = 0.168 W/kg
**SAR(1 g) = 0.102 mW/g; SAR(10 g) = 0.061 mW/g**
Maximum value of SAR (measured) = 0.128 mW/g

## M46- LTE BAND17-Ch23790 (1RB, Lower edge)

Communication System: LTE band17 (700) ; Frequency: 710 MHz ; Duty Cycle: 1:1 ; Modulation type: 16QAM
Medium: MSL750 Medium parameters used: f = 710 MHz; σ = 0.96 mho/m; εr = 56.11; ρ = 1000 kg/m$^3$
Phantom section: Flat Section ; Separation distance : 5 mm (The vertical-back side of the EUT to the Phantom)
 DASY4 Configuration:

- Probe: ES3DV3 - SN3177; ConvF(6.18, 6.18, 6.18); Calibrated: 2010/8/24
- Sensor-Surface: 3mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn579; Calibrated: 2010/9/20
- Phantom: SAM Twin Phantom V4.0; Type: QD 000 P40 CA; Serial: TP-1202
- Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 186

**Body Position - Low channel/Area Scan (7x15x1):** Measurement grid: dx=8mm, dy=8mm
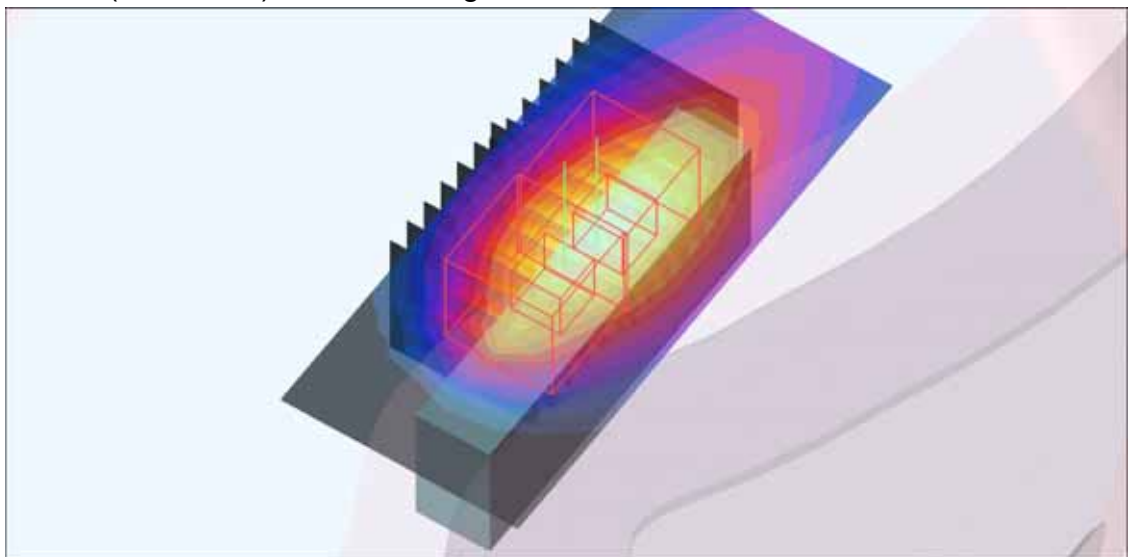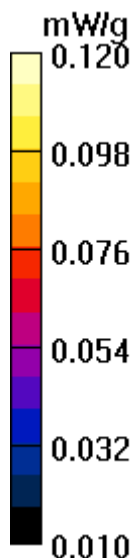Maximum value of SAR (measured) = 0.118 mW/g
**Body Position - Low channel/Zoom Scan (7x7x7)/Cube 0:** Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 4.91 V/m; Power Drift = 0.136 dB
Peak SAR (extrapolated) = 0.156 W/kg
**SAR(1 g) = 0.102 mW/g; SAR(10 g) = 0.067 mW/g**
Maximum value of SAR (measured) = 0.120 mW/g
**Body Position - Low channel/Zoom Scan (7x7x7)/Cube 1:** Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 4.91 V/m; Power Drift = 0.136 dB
Peak SAR (extrapolated) = 0.144 W/kg
**SAR(1 g) = 0.088 mW/g; SAR(10 g) = 0.052 mW/g**
Maximum value of SAR (measured) = 0.111 mW/g

## M47- LTE BAND17-Ch23790 (1RB, Upper edge)

Communication System: LTE band17 (700) ; Frequency: 710 MHz ; Duty Cycle: 1:1 ; Modulation type: 16QAM

Medium: MSL750 Medium parameters used: f = 710 MHz; σ = 0.96 mho/m; εr = 56.11; ρ = 1000 kg/m$^3$

Phantom section: Flat Section ; Separation distance : 5 mm (The vertical-back side of the EUT to the Phantom)

DASY4 Configuration:

- Probe: ES3DV3 - SN3177; ConvF(6.18, 6.18, 6.18); Calibrated: 2010/8/24
- Sensor-Surface: 3mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn579; Calibrated: 2010/9/20
- Phantom: SAM Twin Phantom V4.0; Type: QD 000 P40 CA; Serial: TP-1202
- Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 186

**Body Position - Low channel/Area Scan (7x15x1):** Measurement grid: dx=8mm, dy=8mm

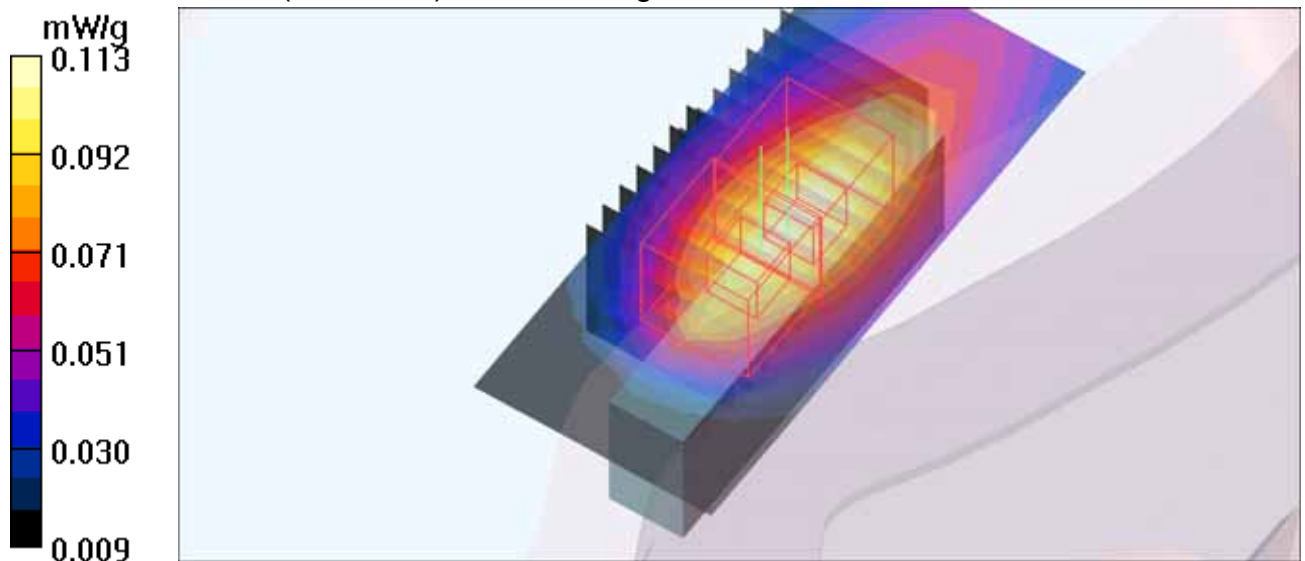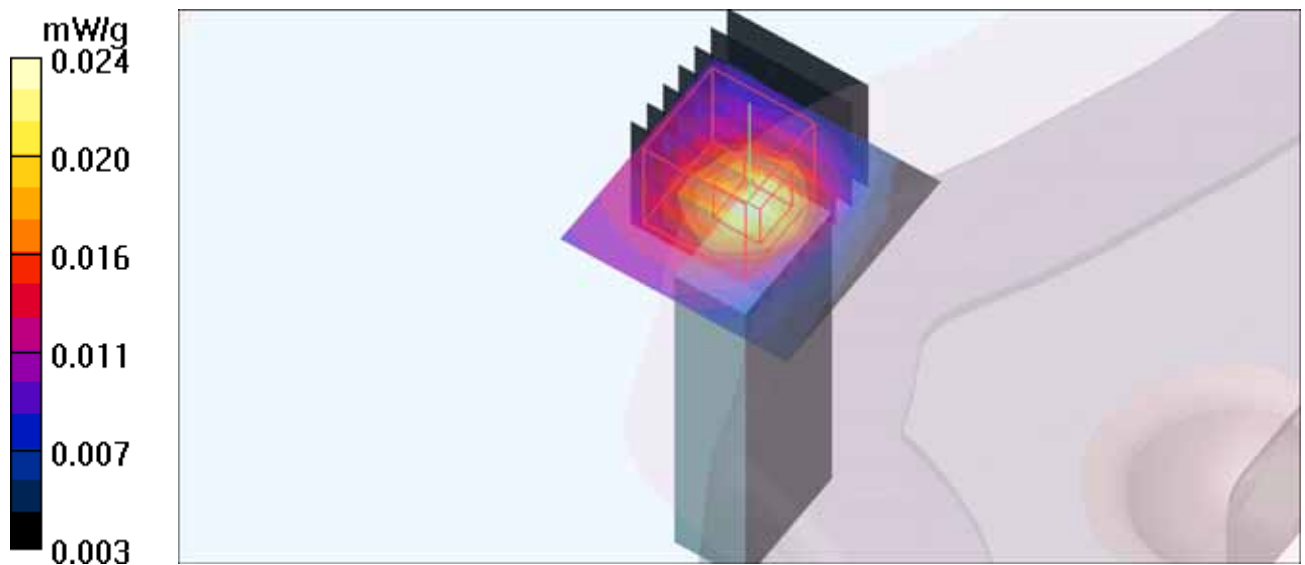Maximum value of SAR (measured) = 0.111 mW/g

**Body Position - Low channel/Zoom Scan (7x7x7)/Cube 0:** Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 4.76 V/m; Power Drift = -0.136 dB

Peak SAR (extrapolated) = 0.148 W/kg

**SAR(1 g) = 0.096 mW/g; SAR(10 g) = 0.063 mW/g**

Maximum value of SAR (measured) = 0.113 mW/g

**Body Position - Low channel/Zoom Scan (7x7x7)/Cube 1:** Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 4.76 V/m; Power Drift = -0.136 dB

Peak SAR (extrapolated) = 0.143 W/kg

**SAR(1 g) = 0.085 mW/g; SAR(10 g) = 0.051 mW/g**

Maximum value of SAR (measured) = 0.110 mW/g

## M48-LTE BAND17-Ch23790 (50% RB centered)

Communication System: LTE band17 (700) ; Frequency: 710 MHz ; Duty Cycle: 1:1 ; Modulation type: 16QAM

Medium: MSL750 Medium parameters used: f = 710 MHz; σ = 0.96 mho/m; εr = 56.11; ρ = 1000 kg/m$^3$

Phantom section: Flat Section ; Separation distance : 5 mm (The top side of the EUT to the Phantom)

DASY4 Configuration:

- Probe: ES3DV3 - SN3177; ConvF(6.18, 6.18, 6.18); Calibrated: 2010/8/24
- Sensor-Surface: 3mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn579; Calibrated: 2010/9/20
- Phantom: SAM Twin Phantom V4.0; Type: QD 000 P40 CA; Serial: TP-1202
- Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 186

**Body Position - Low/Area Scan (7x7x1):** Measurement grid: dx=8mm, dy=8mm
Maximum value of SAR (measured) = 0.024 mW/g

**Body Position - Low/Zoom Scan (7x7x7)/Cube 0:** Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 5.78 V/m; Power Drift = -0.104 dB
Peak SAR (extrapolated) = 0.042 W/kg
**SAR(1 g) = 0.018 mW/g; SAR(10 g) = 0.00998 mW/g**

Date/Time: 2011/3/2 11:10:56

## M49-LTE BAND17-Ch23790 (1RB, Lower edge)

Communication System: LTE band17 (700) ; Frequency: 710 MHz ; Duty Cycle: 1:1 ; Modulation type: 16QAM

Medium: MSL750 Medium parameters used: f = 710 MHz; σ = 0.96 mho/m; εr = 56.11; ρ = 1000 kg/m$^3$

Phantom section: Flat Section ; Separation distance : 5 mm (The top side of the EUT to the Phantom)

DASY4 Configuration:

- Probe: ES3DV3 - SN3177; ConvF(6.18, 6.18, 6.18); Calibrated: 2010/8/24
- Sensor-Surface: 3mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn579; Calibrated: 2010/9/20
- Phantom: SAM Twin Phantom V4.0; Type: QD 000 P40 CA; Serial: TP-1202
- Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 186

**Body Position - Low channel/Area Scan (7x7x1):** Measurement grid: dx=8mm, dy=8mm
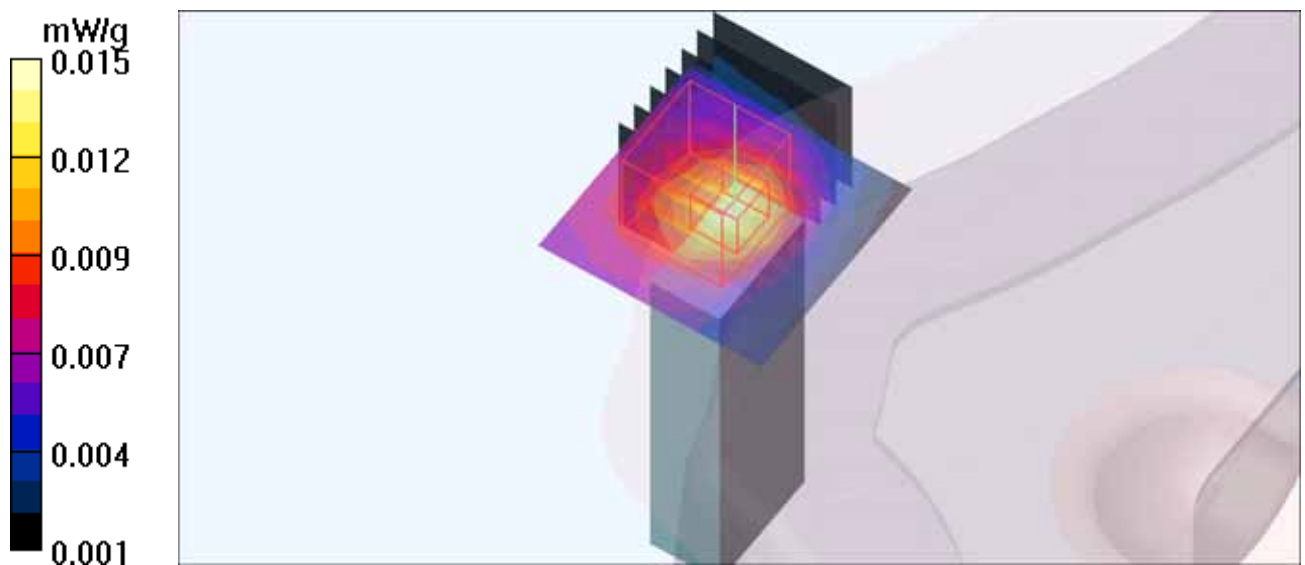Maximum value of SAR (measured) = 0.015 mW/g

**Body Position - Low channel/Zoom Scan (7x7x7)/Cube 0:** Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 4.13 V/m; Power Drift = -0.181 dB
Peak SAR (extrapolated) = 0.027 W/kg
**SAR(1 g) = 0.011 mW/g; SAR(10 g) = 0.00609 mW/g**
Maximum value of SAR (measured) = 0.014 mW/g

## M50-LTE BAND17-Ch23790 (1RB, Upper edge)

Communication System: LTE band17 (700) ; Frequency: 710 MHz ; Duty Cycle: 1:1 ; Modulation type: 16QAM

Medium: MSL750 Medium parameters used: f = 710 MHz; σ = 0.96 mho/m; εr = 56.11; ρ = 1000 kg/m$^3$

Phantom section: Flat Section ; Separation distance : 5 mm (The top side of the EUT to the Phantom)

DASY4 Configuration:

- Probe: ES3DV3 - SN3177; ConvF(6.18, 6.18, 6.18); Calibrated: 2010/8/24
- Sensor-Surface: 3mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn579; Calibrated: 2010/9/20
- Phantom: SAM Twin Phantom V4.0; Type: QD 000 P40 CA; Serial: TP-1202
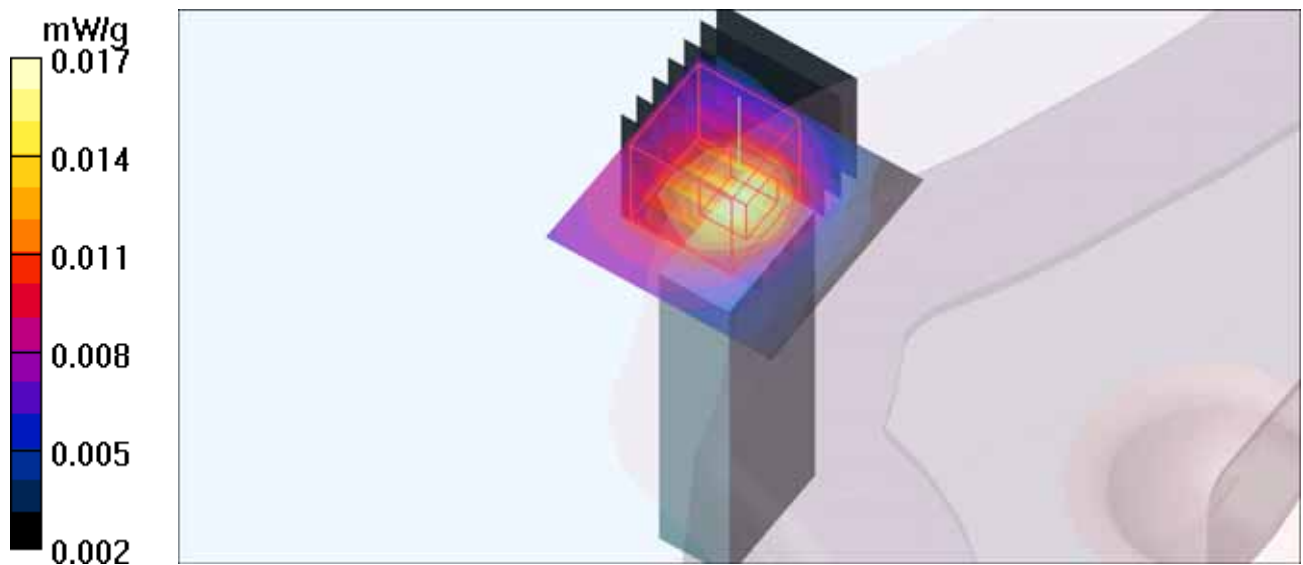- Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 186

**Body Position - Low channel/Area Scan (7x7x1):** Measurement grid: dx=8mm, dy=8mm
Maximum value of SAR (measured) = 0.017 mW/g

**Body Position - Low channel/Zoom Scan (7x7x7)/Cube 0:** Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 4.28 V/m; Power Drift = 0.119 dB
Peak SAR (extrapolated) = 0.031 W/kg
**SAR(1 g) = 0.013 mW/g; SAR(10 g) = 0.0071 mW/g**

## M51-LTE BAND4-Ch20175 (50% RB centered)

Communication System: LTE band4 (1700) ; Frequency: 1732.5 MHz ; Duty Cycle: 1:1
Medium: MSL 1700 Medium parameters used: f = 1732.5 MHz; σ = 1.5 mho/m; εr = 53.65; ρ = 1000 kg/m³
Phantom section: Flat Section ; DUT test position : Body ; Modulation Type: 16QAM
Separation Distance : 5 mm ( The horizontal-down side of the EUT to the Phantom)
DASY4 Configuration:

- Probe: EX3DV4 - SN3753; ConvF(7.48, 7.48, 7.48); Calibrated: 2010/12/13
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn579; Calibrated: 2010/9/20
- Phantom: SAM Twin Phantom V4.0; Type: QD 000 P40 CA; Serial: TP-1202
- Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 186

**Body Position - Low/Area Scan (7x15x1):** Measurement grid: dx=8mm, dy=8mm
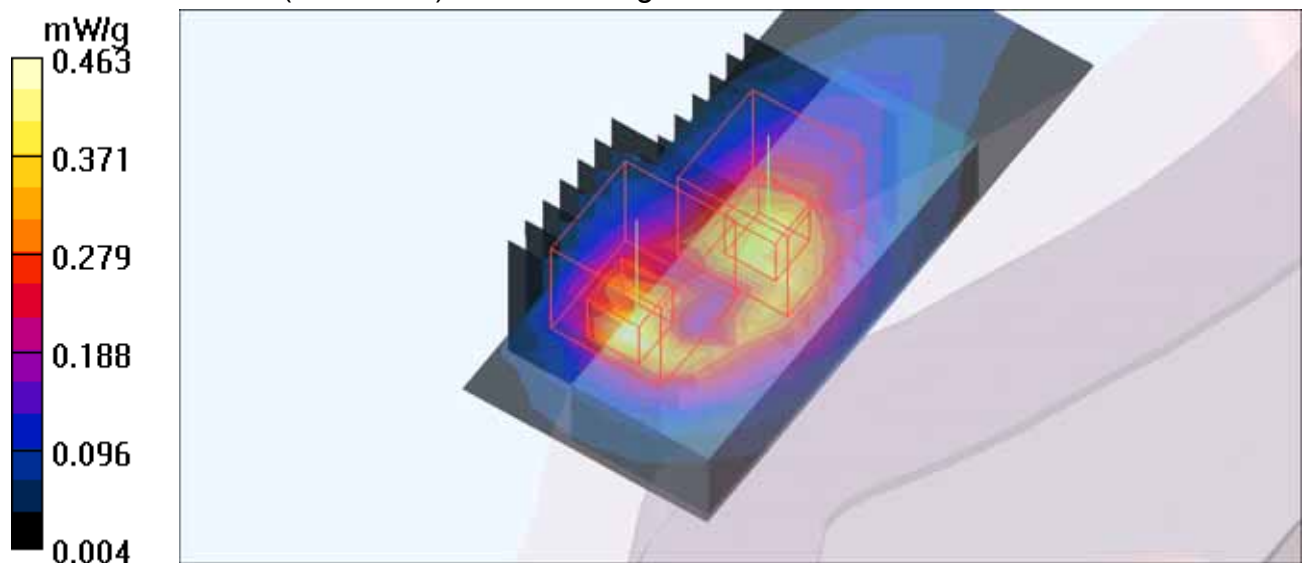Maximum value of SAR (measured) = 0.450 mW/g
**Body Position - Low/Zoom Scan (7x7x7)/Cube 0:** Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 11.2 V/m; Power Drift = 0.086 dB
Peak SAR (extrapolated) = 0.598 W/kg
**SAR(1 g) = 0.306 mW/g; SAR(10 g) = 0.146 mW/g**
Maximum value of SAR (measured) = 0.463 mW/g
**Body Position - Low/Zoom Scan (7x7x7)/Cube 1:** Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 11.2 V/m; Power Drift = 0.086 dB
Peak SAR (extrapolated) = 0.526 W/kg
**SAR(1 g) = 0.299 mW/g; SAR(10 g) = 0.163 mW/g**
Maximum value of SAR (measured) = 0.414 mW/g

## M52-LTE BAND4-Ch20175 (1RB, Lower edge)

Communication System: LTE band4 (1700) ; Frequency: 1732.5 MHz ; Duty Cycle: 1:1
Medium: MSL 1700 Medium parameters used: f = 1732.5 MHz; σ = 1.5 mho/m; εr = 53.65; ρ = 1000 kg/m$^3$
Phantom section: Flat Section ; DUT test position : Body ; Modulation Type: 16QAM
Separation Distance : 5 mm ( The horizontal-down side of the EUT to the Phantom)
 DASY4 Configuration:

- Probe: EX3DV4 - SN3753; ConvF(7.48, 7.48, 7.48); Calibrated: 2010/12/13
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn579; Calibrated: 2010/9/20
- Phantom: SAM Twin Phantom V4.0; Type: QD 000 P40 CA; Serial: TP-1202
- Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 186

**Body Position - Low channel/Area Scan (7x15x1):** Measurement grid: dx=8mm, dy=8mm
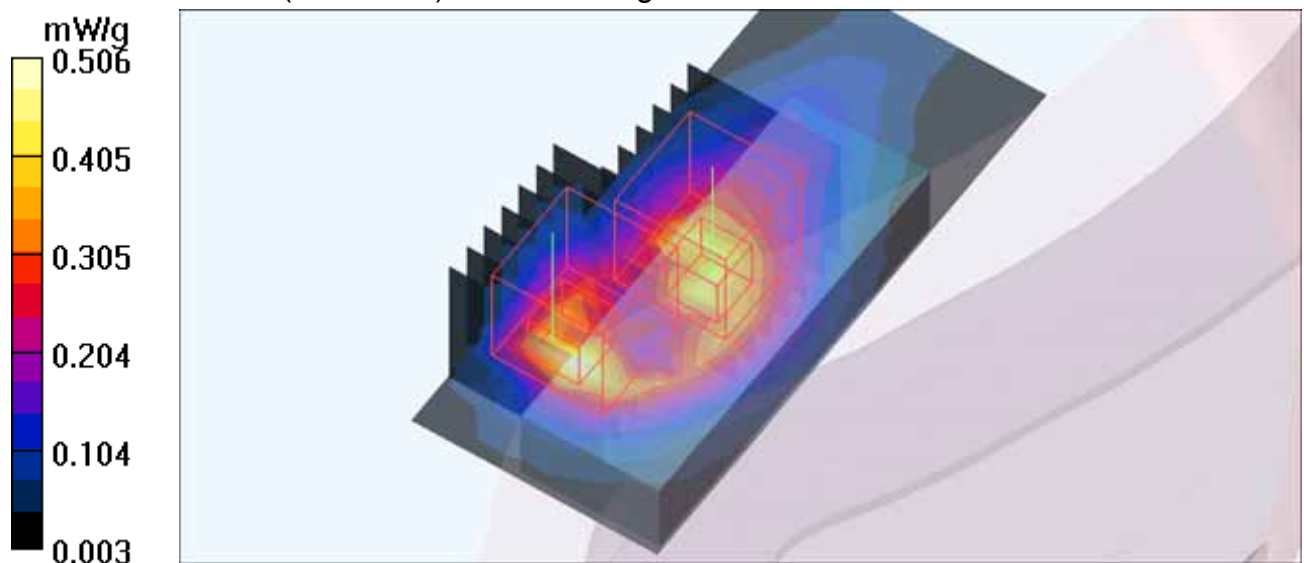Maximum value of SAR (measured) = 0.538 mW/g
**Body Position - Low channel/Zoom Scan (7x7x7)/Cube 0:** Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 10.7 V/m; Power Drift = 0.12 dB
Peak SAR (extrapolated) = 0.689 W/kg
**SAR(1 g) = 0.332 mW/g; SAR(10 g) = 0.161 mW/g**
Maximum value of SAR (measured) = 0.506 mW/g
**Body Position - Low channel/Zoom Scan (7x7x7)/Cube 1:** Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 10.7 V/m; Power Drift = 0.12 dB
Peak SAR (extrapolated) = 0.682 W/kg
**SAR(1 g) = 0.342 mW/g; SAR(10 g) = 0.188 mW/g**
Maximum value of SAR (measured) = 0.499 mW/g

## M53-LTE BAND4-Ch20175 (1RB, Upper edge)

Communication System: LTE band4 (1700) ; Frequency: 1732.5 MHz ; Duty Cycle: 1:1
Medium: MSL 1700 Medium parameters used: f = 1732.5 MHz; σ = 1.5 mho/m; εr = 53.65; ρ = 1000 kg/m$^3$
Phantom section: Flat Section ; DUT test position : Body ; Modulation Type: 16QAM
Separation Distance : 5 mm ( The horizontal-down side of the EUT to the Phantom)

DASY4 Configuration:

- Probe: EX3DV4 - SN3753; ConvF(7.48, 7.48, 7.48); Calibrated: 2010/12/13
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn579; Calibrated: 2010/9/20
- Phantom: SAM Twin Phantom V4.0; Type: QD 000 P40 CA; Serial: TP-1202
- Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 186

**Body Position - Low channel/Area Scan (7x15x1):** Measurement grid: dx=8mm, dy=8mm
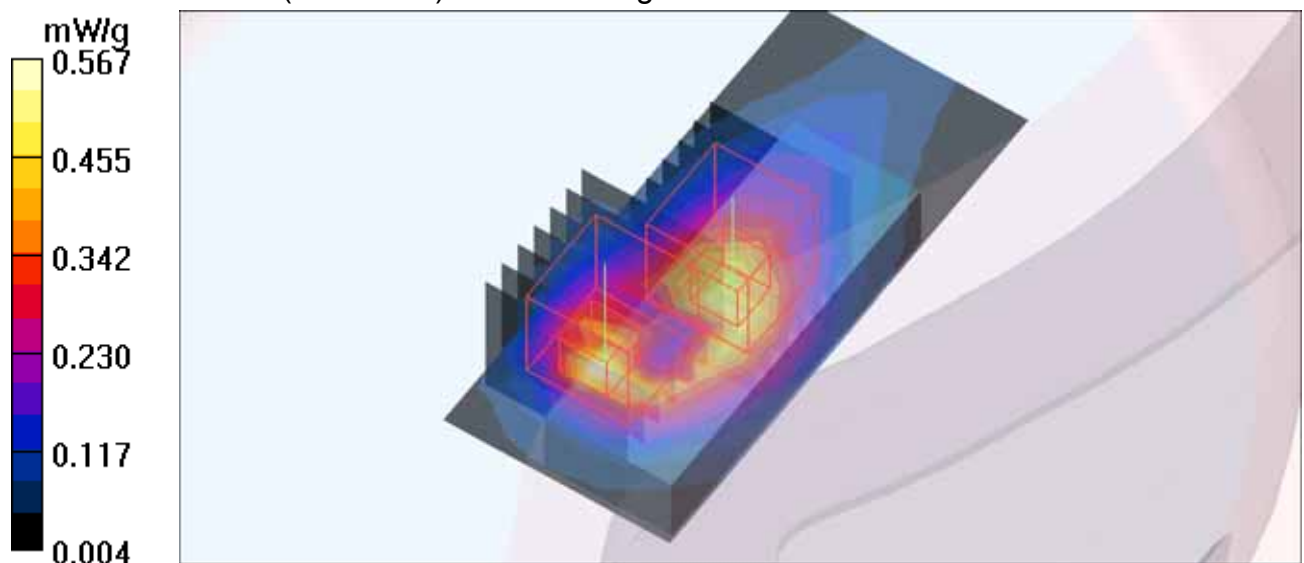Maximum value of SAR (measured) = 0.543 mW/g
**Body Position - Low channel/Zoom Scan (7x7x7)/Cube 0:** Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 12.4 V/m; Power Drift = 0.032 dB
Peak SAR (extrapolated) = 0.724 W/kg
**SAR(1 g) = 0.369 mW/g; SAR(10 g) = 0.175 mW/g**
Maximum value of SAR (measured) = 0.567 mW/g
**Body Position - Low channel/Zoom Scan (7x7x7)/Cube 1:** Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 12.4 V/m; Power Drift = 0.032 dB
Peak SAR (extrapolated) = 0.656 W/kg
**SAR(1 g) = 0.362 mW/g; SAR(10 g) = 0.197 mW/g**
Maximum value of SAR (measured) = 0.510 mW/g

Date/Time: 2011/3/1 15:27:52

## M54-LTE BAND4-Ch20175 (50% RB centered)

Communication System: LTE band4 (1700) ; Frequency: 1732.5 MHz ; Duty Cycle: 1:1
Medium: MSL 1700 Medium parameters used: f = 1732.5 MHz; σ = 1.5 mho/m; εr = 53.65; ρ = 1000 kg/m$^3$
Phantom section: Flat Section ; DUT test position : Body ; Modulation Type: 16QAM
Separation Distance : 5 mm ( The vertical-front side of the EUT to the Phantom)


DASY4 Configuration:

- Probe: EX3DV4 - SN3753; ConvF(7.48, 7.48, 7.48); Calibrated: 2010/12/13
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn579; Calibrated: 2010/9/20
- Phantom: SAM Twin Phantom V4.0; Type: QD 000 P40 CA; Serial: TP-1202
- Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 186


**Body Position - Low/Area Scan (7x15x1):** Measurement grid: dx=8mm, dy=8mm
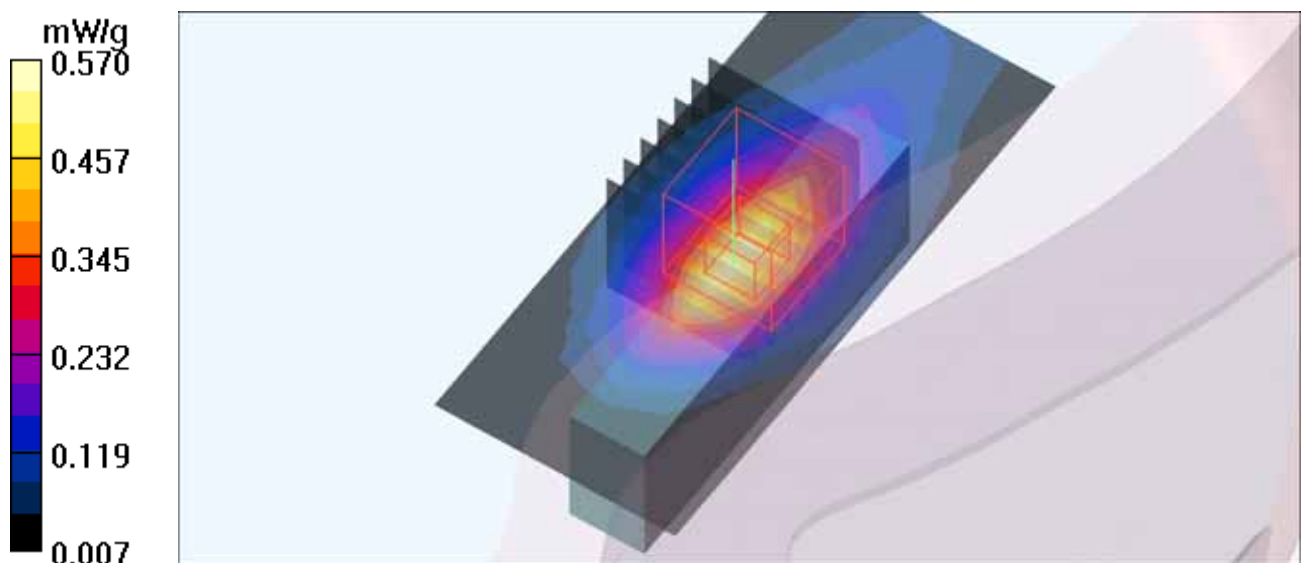Maximum value of SAR (measured) = 0.524 mW/g

**Body Position - Low/Zoom Scan (7x7x7)/Cube 0:** Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 5.60 V/m; Power Drift = 0.108 dB
Peak SAR (extrapolated) = 0.723 W/kg
**SAR(1 g) = 0.397 mW/g; SAR(10 g) = 0.209 mW/g**
Maximum value of SAR (measured) = 0.570 mW/g

Date/Time: 2011/3/1 15:50:32

## M55-LTE BAND4-Ch20175 (1RB, Lower edge)

Communication System: LTE band4 (1700) ; Frequency: 1732.5 MHz ; Duty Cycle: 1:1
Medium: MSL 1700 Medium parameters used: f = 1732.5 MHz; σ = 1.5 mho/m; εr = 53.65; ρ = 1000 kg/m³
Phantom section: Flat Section ; DUT test position : Body ; Modulation Type: 16QAM
Separation Distance : 5 mm ( The vertical-front side of the EUT to the Phantom)
 DASY4 Configuration:

- Probe: EX3DV4 - SN3753; ConvF(7.48, 7.48, 7.48); Calibrated: 2010/12/13
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn579; Calibrated: 2010/9/20
- Phantom: SAM Twin Phantom V4.0; Type: QD 000 P40 CA; Serial: TP-1202
- Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 186

**Body Position - Low channel/Area Scan (7x15x1):** Measurement grid: dx=8mm, dy=8mm
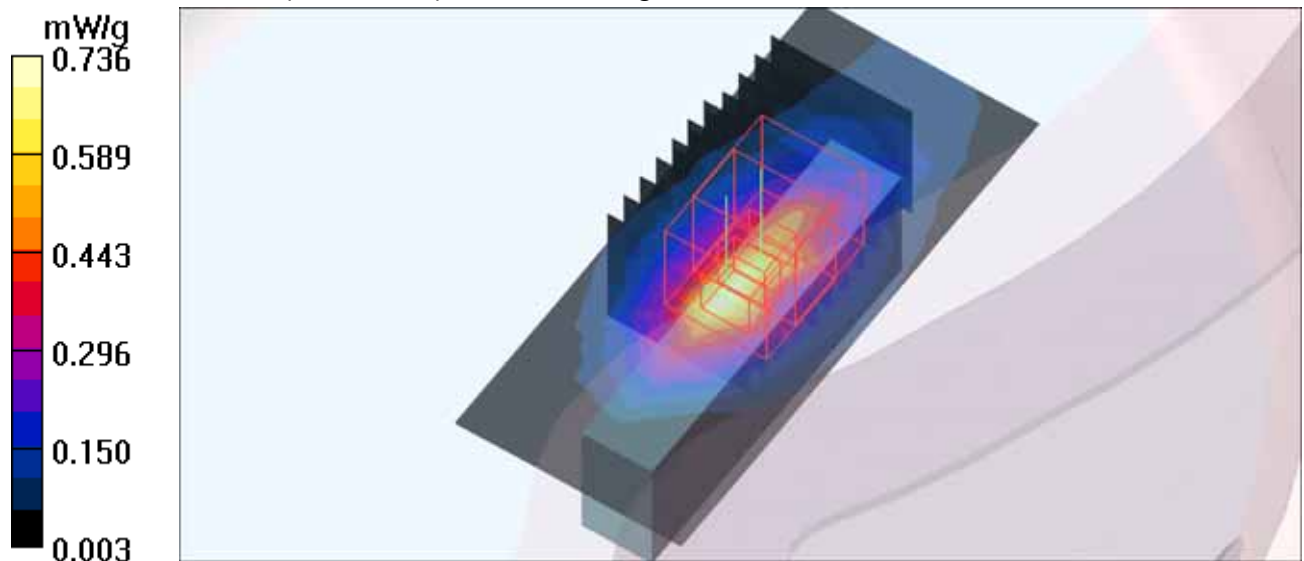Maximum value of SAR (measured) = 0.736 mW/g
**Body Position - Low channel/Zoom Scan (7x7x7)/Cube 0:** Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 5.57 V/m; Power Drift = 0.173 dB
Peak SAR (extrapolated) = 0.923 W/kg
**SAR(1 g) = 0.469 mW/g; SAR(10 g) = 0.231 mW/g**
Maximum value of SAR (measured) = 0.713 mW/g
**Body Position - Low channel/Zoom Scan (7x7x7)/Cube 1:** Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 5.57 V/m; Power Drift = 0.173 dB
Peak SAR (extrapolated) = 0.876 W/kg
**SAR(1 g) = 0.427 mW/g; SAR(10 g) = 0.217 mW/g**
Maximum value of SAR (measured) = 0.661 mW/g

## M56-LTE BAND4-Ch20175 (1RB, Upper edge)

Communication System: LTE band4 (1700) ; Frequency: 1732.5 MHz ; Duty Cycle: 1:1
Medium: MSL 1700 Medium parameters used: f = 1732.5 MHz; σ = 1.5 mho/m; εr = 53.65; ρ = 1000 kg/m³
Phantom section: Flat Section ; DUT test position : Body ; Modulation Type: 16QAM
Separation Distance : 5 mm ( The vertical-front side of the EUT to the Phantom)

DASY4 Configuration:

- Probe: EX3DV4 - SN3753; ConvF(7.48, 7.48, 7.48); Calibrated: 2010/12/13
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn579; Calibrated: 2010/9/20
- Phantom: SAM Twin Phantom V4.0; Type: QD 000 P40 CA; Serial: TP-1202
- Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 186

**Body Position - Low channel/Area Scan (7x15x1):** Measurement grid: dx=8mm, dy=8mm
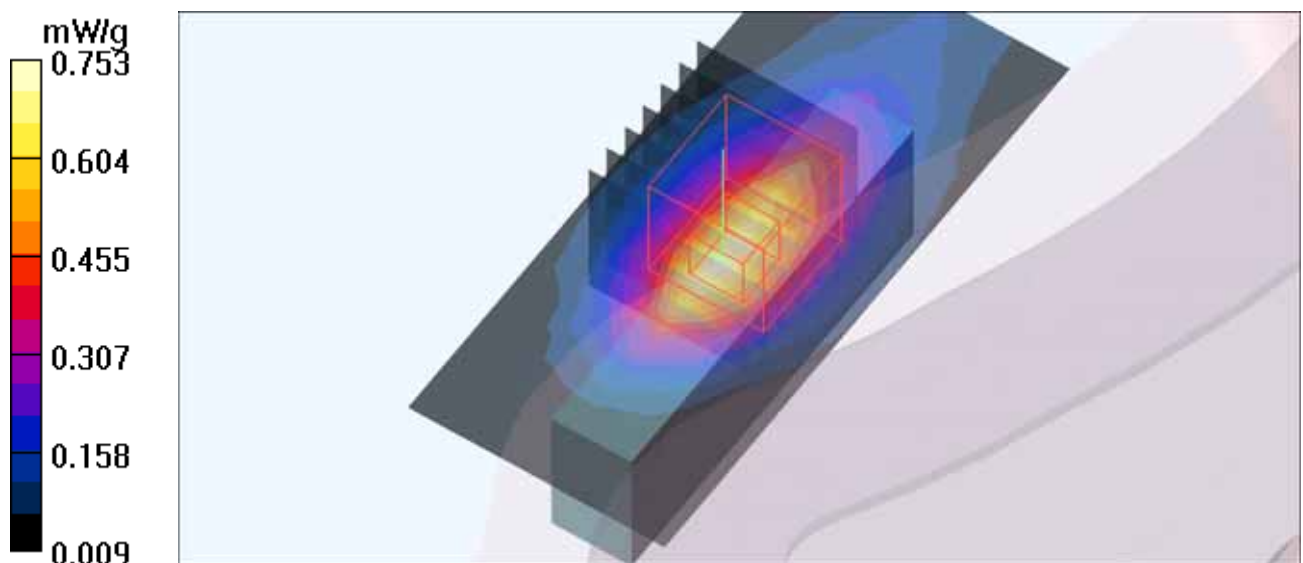Maximum value of SAR (measured) = 0.733 mW/g

**Body Position - Low channel/Zoom Scan (7x7x7)/Cube 0:** Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 6.45 V/m; Power Drift = 0.156 dB
Peak SAR (extrapolated) = 0.961 W/kg
**SAR(1 g) = 0.517 mW/g; SAR(10 g) = 0.271 mW/g**
Maximum value of SAR (measured) = 0.753 mW/g

Date/Time: 2011/3/1 10:49:06

## M57-LTE BAND4-Ch20175 (50% RB centered)

Communication System: LTE band4 (1700) ; Frequency: 1732.5 MHz ; Duty Cycle: 1:1
Medium: MSL 1700 Medium parameters used: f = 1732.5 MHz; σ = 1.5 mho/m; εr = 53.65; ρ = 1000 kg/m³
Phantom section: Flat Section ; DUT test position : Body ; Modulation Type: 16QAM
Separation Distance : 5 mm ( The horizontal-up side of the EUT to the Phantom)

DASY4 Configuration:

- Probe: EX3DV4 - SN3753; ConvF(7.48, 7.48, 7.48); Calibrated: 2010/12/13
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn579; Calibrated: 2010/9/20
- Phantom: SAM Twin Phantom V4.0; Type: QD 000 P40 CA; Serial: TP-1202
- Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 186

**Body Position - Low/Area Scan (7x15x1):** Measurement grid: dx=8mm, dy=8mm
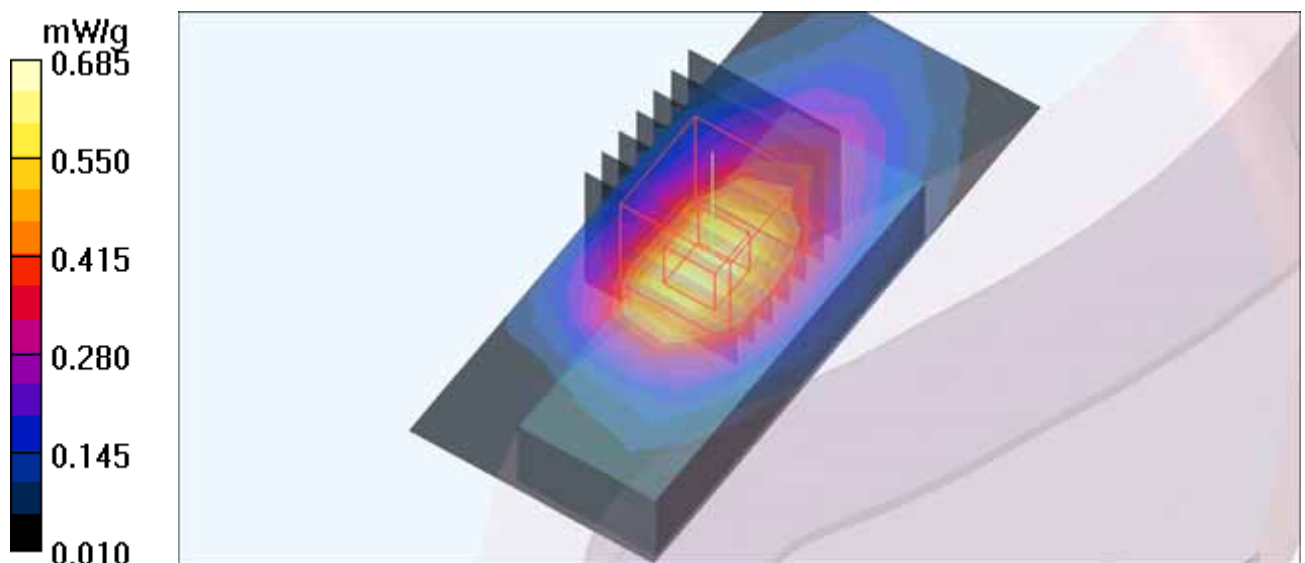Maximum value of SAR (measured) = 0.643 mW/g

**Body Position - Low/Zoom Scan (7x7x7)/Cube 0:** Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 4.73 V/m; Power Drift = -0.066 dB
Peak SAR (extrapolated) = 0.805 W/kg
**SAR(1 g) = 0.498 mW/g; SAR(10 g) = 0.287 mW/g**
Maximum value of SAR (measured) = 0.685 mW/g

## M58-LTE BAND4-Ch20175 (1RB, Lower edge)

Communication System: LTE band4 (1700) ; Frequency: 1732.5 MHz ; Duty Cycle: 1:1
Medium: MSL 1700 Medium parameters used: f = 1732.5 MHz; σ = 1.5 mho/m; εr = 53.65; ρ = 1000 kg/m$^3$
Phantom section: Flat Section ; DUT test position : Body ; Modulation Type: 16QAM
Separation Distance : 5 mm ( The horizontal-up side of the EUT to the Phantom)

DASY4 Configuration:

- Probe: EX3DV4 - SN3753; ConvF(7.48, 7.48, 7.48); Calibrated: 2010/12/13
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn579; Calibrated: 2010/9/20
- Phantom: SAM Twin Phantom V4.0; Type: QD 000 P40 CA; Serial: TP-1202
- Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 186

**Body Position - Low channel/Area Scan (7x15x1):** Measurement grid: dx=8mm, dy=8mm
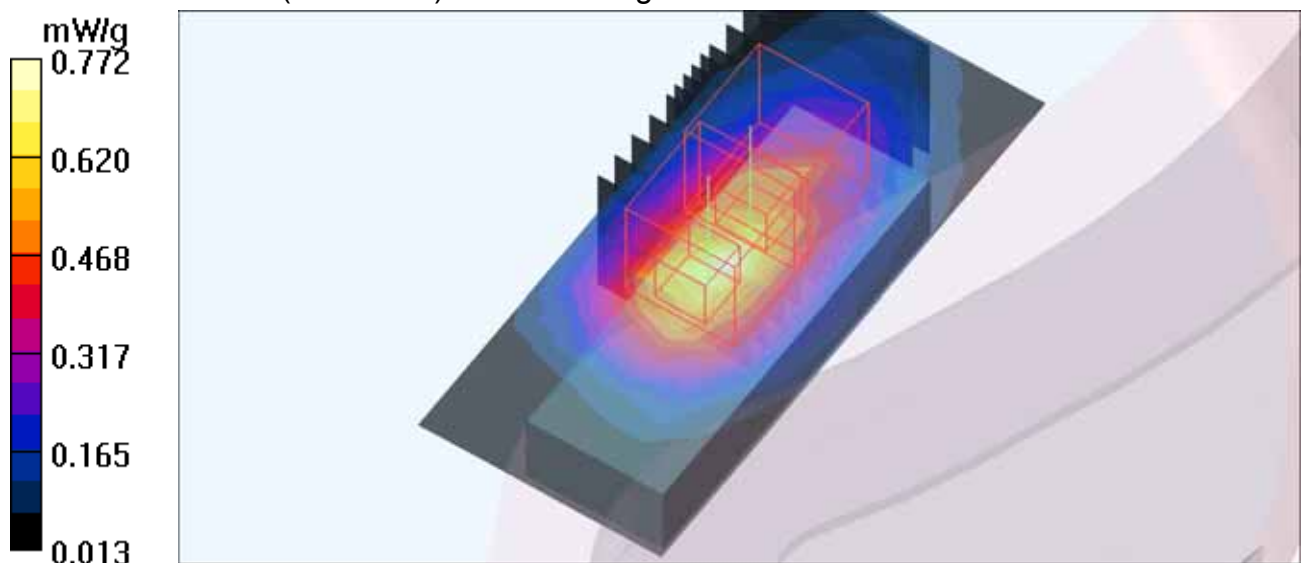Maximum value of SAR (measured) = 0.769 mW/g
**Body Position - Low channel/Zoom Scan (7x7x7)/Cube 0:** Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 5.73 V/m; Power Drift = -0.157 dB
Peak SAR (extrapolated) = 0.973 W/kg
**SAR(1 g) = 0.546 mW/g; SAR(10 g) = 0.303 mW/g**
Maximum value of SAR (measured) = 0.772 mW/g
**Body Position - Low channel/Zoom Scan (7x7x7)/Cube 1:** Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 5.73 V/m; Power Drift = -0.157 dB
Peak SAR (extrapolated) = 0.799 W/kg
**SAR(1 g) = 0.433 mW/g; SAR(10 g) = 0.234 mW/g**
Maximum value of SAR (measured) = 0.706 mW/g

Date/Time: 2011/3/1 11:42:54

## M59-LTE BAND4-Ch20175 (1RB, Upper edge)

Communication System: LTE band4 (1700) ; Frequency: 1732.5 MHz ; Duty Cycle: 1:1
Medium: MSL 1700 Medium parameters used: f = 1732.5 MHz; σ = 1.5 mho/m; εr = 53.65; ρ = 1000 kg/m$^3$
Phantom section: Flat Section ; DUT test position : Body ; Modulation Type: 16QAM
Separation Distance : 5 mm ( The horizontal-up side of the EUT to the Phantom)

DASY4 Configuration:

- Probe: EX3DV4 - SN3753; ConvF(7.48, 7.48, 7.48); Calibrated: 2010/12/13
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn579; Calibrated: 2010/9/20
- Phantom: SAM Twin Phantom V4.0; Type: QD 000 P40 CA; Serial: TP-1202
- Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 186

**Body Position - Low channel/Area Scan (7x15x1):** Measurement grid: dx=8mm, dy=8mm
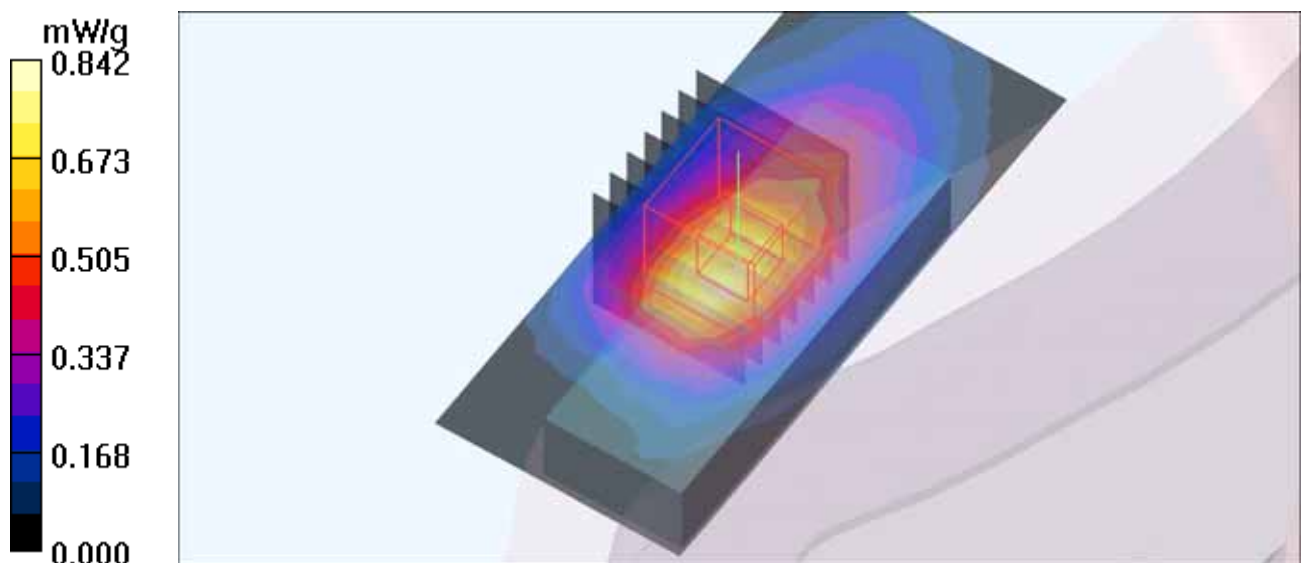Maximum value of SAR (measured) = 0.830 mW/g

**Body Position - Low channel/Zoom Scan (7x7x7)/Cube 0:** Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 5.01 V/m; Power Drift = -0.112 dB
Peak SAR (extrapolated) = 1.07 W/kg
**SAR(1 g) = 0.639 mW/g; SAR(10 g) = 0.330 mW/g**
Maximum value of SAR (measured) = 0.842 mW/g

## M60-LTE BAND4-Ch20175 (50% RB centered)

Communication System: LTE band4 (1700) ; Frequency: 1732.5 MHz ; Duty Cycle: 1:1
Medium: MSL 1700 Medium parameters used: f = 1732.5 MHz; σ = 1.5 mho/m; εr = 53.65; ρ = 1000 kg/m³
Phantom section: Flat Section ; DUT test position : Body ; Modulation Type: 16QAM
Separation Distance : 5 mm ( The vertical-back side of the EUT to the Phantom)
DASY4 Configuration:

- Probe: EX3DV4 - SN3753; ConvF(7.48, 7.48, 7.48); Calibrated: 2010/12/13
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn579; Calibrated: 2010/9/20
- Phantom: SAM Twin Phantom V4.0; Type: QD 000 P40 CA; Serial: TP-1202
- Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 186

**Body Position - Low/Area Scan (7x15x1):** Measurement grid: dx=8mm, dy=8mm
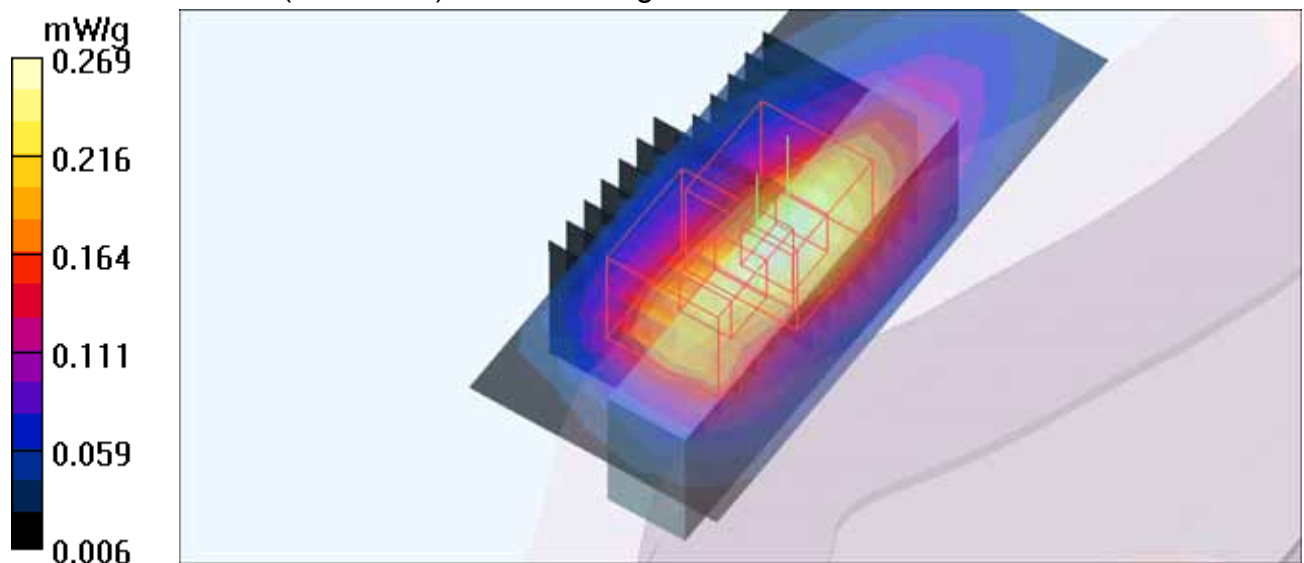Maximum value of SAR (measured) = 0.269 mW/g
**Body Position - Low/Zoom Scan (7x7x7)/Cube 0:** Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 9.26 V/m; Power Drift = 0.073 dB
Peak SAR (extrapolated) = 0.316 W/kg
**SAR(1 g) = 0.198 mW/g; SAR(10 g) = 0.116 mW/g**
Maximum value of SAR (measured) = 0.262 mW/g
**Body Position - Low/Zoom Scan (7x7x7)/Cube 1:** Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 9.26 V/m; Power Drift = 0.073 dB
Peak SAR (extrapolated) = 0.304 W/kg
**SAR(1 g) = 0.185 mW/g; SAR(10 g) = 0.106 mW/g**
Maximum value of SAR (measured) = 0.253 mW/g

## M61-LTE BAND4-Ch20175 (1RB, Lower edge)

Communication System: LTE band4 (1700) ; Frequency: 1732.5 MHz ; Duty Cycle: 1:1
Medium: MSL 1700 Medium parameters used: f = 1732.5 MHz; σ = 1.5 mho/m; εr = 53.65; ρ = 1000 kg/m$^3$
Phantom section: Flat Section ; DUT test position : Body ; Modulation Type: 16QAM
Separation Distance : 5 mm ( The vertical-back side of the EUT to the Phantom)

DASY4 Configuration:

- Probe: EX3DV4 - SN3753; ConvF(7.48, 7.48, 7.48); Calibrated: 2010/12/13
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn579; Calibrated: 2010/9/20
- Phantom: SAM Twin Phantom V4.0; Type: QD 000 P40 CA; Serial: TP-1202
- Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 186

**Body Position - Low channel/Area Scan (7x15x1):** Measurement grid: dx=8mm, dy=8mm
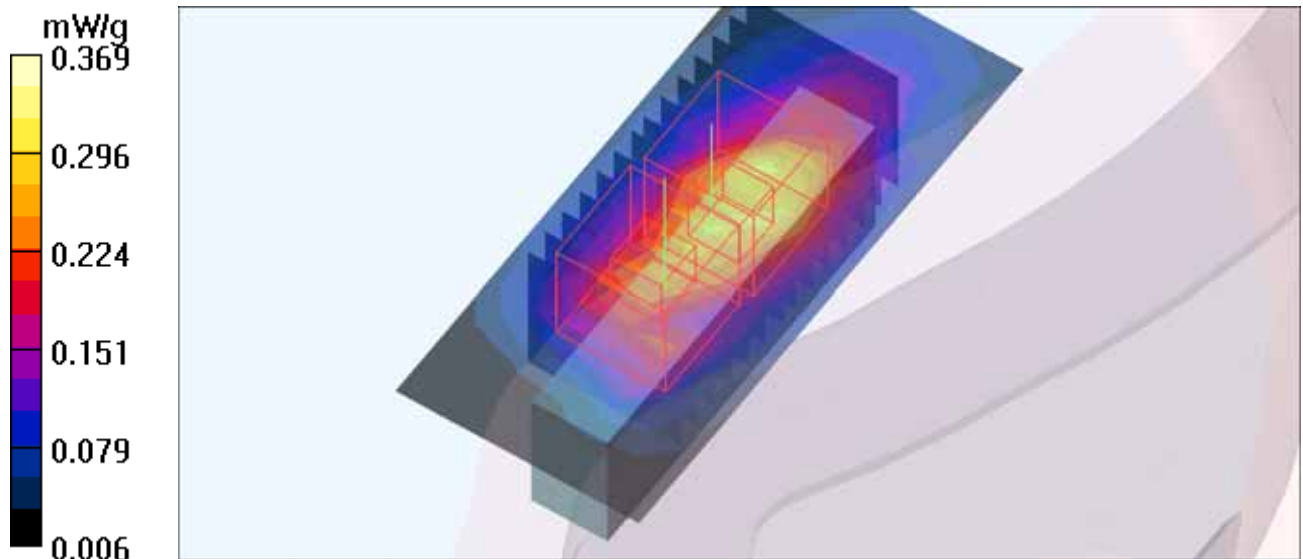Maximum value of SAR (measured) = 0.306 mW/g
**Body Position - Low channel/Zoom Scan (7x7x7)/Cube 0:** Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 4.74 V/m; Power Drift = 0.161 dB
Peak SAR (extrapolated) = 0.531 W/kg
**SAR(1 g) = 0.260 mW/g; SAR(10 g) = 0.147 mW/g**
Maximum value of SAR (measured) = 0.369 mW/g
**Body Position - Low channel/Zoom Scan (7x7x7)/Cube 1:** Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 4.74 V/m; Power Drift = 0.161 dB
Peak SAR (extrapolated) = 0.415 W/kg
**SAR(1 g) = 0.214 mW/g; SAR(10 g) = 0.109 mW/g**
Maximum value of SAR (measured) = 0.313 mW/g

## M62-LTE BAND4-Ch20175 (1RB, Upper edge)

Communication System: LTE band4 (1700) ; Frequency: 1732.5 MHz ; Duty Cycle: 1:1
Medium: MSL 1700 Medium parameters used: f = 1732.5 MHz; σ = 1.5 mho/m; εr = 53.65; ρ = 1000 kg/m$^3$
Phantom section: Flat Section ; DUT test position : Body ; Modulation Type: 16QAM
Separation Distance : 5 mm ( The vertical-back side of the EUT to the Phantom)

DASY4 Configuration:

- Probe: EX3DV4 - SN3753; ConvF(7.48, 7.48, 7.48); Calibrated: 2010/12/13
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn579; Calibrated: 2010/9/20
- Phantom: SAM Twin Phantom V4.0; Type: QD 000 P40 CA; Serial: TP-1202
- Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 186

**Body Position - Low channel/Area Scan (7x15x1):** Measurement grid: dx=8mm, dy=8mm
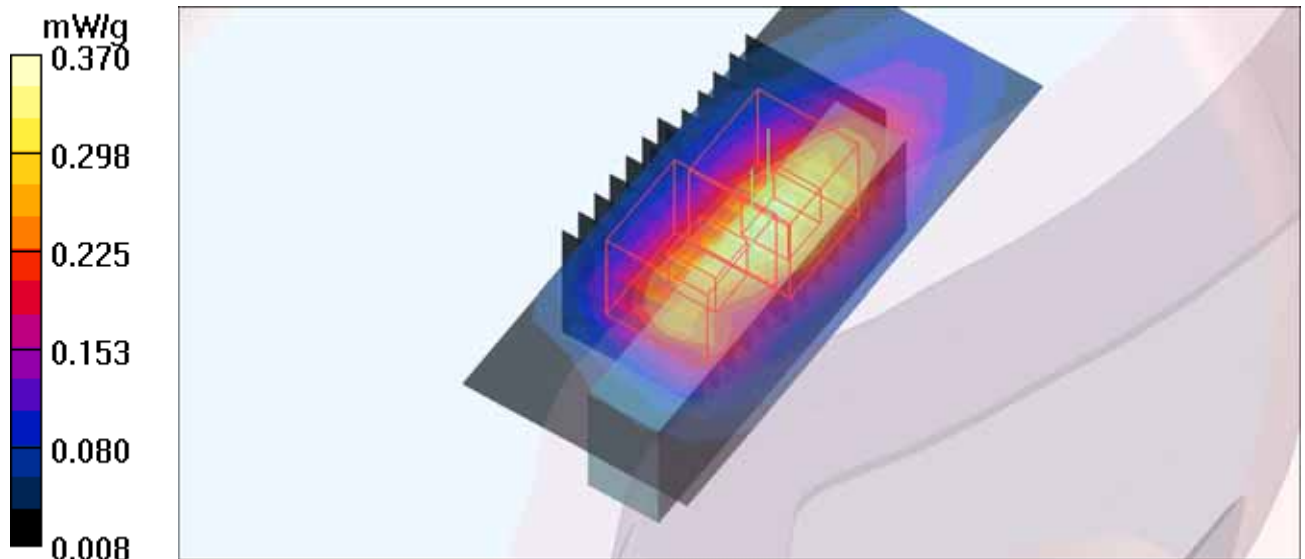Maximum value of SAR (measured) = 0.348 mW/g
**Body Position - Low channel/Zoom Scan (7x7x7)/Cube 0:** Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 6.37 V/m; Power Drift = 0.075 dB
Peak SAR (extrapolated) = 0.458 W/kg
**SAR(1 g) = 0.272 mW/g; SAR(10 g) = 0.157 mW/g**
Maximum value of SAR (measured) = 0.370 mW/g
**Body Position - Low channel/Zoom Scan (7x7x7)/Cube 1:** Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 6.37 V/m; Power Drift = 0.075 dB
Peak SAR (extrapolated) = 0.395 W/kg
**SAR(1 g) = 0.230 mW/g; SAR(10 g) = 0.128 mW/g**
Maximum value of SAR (measured) = 0.317 mW/g

## M63-LTE BAND4-Ch20175 (50% RB centered)

Communication System: LTE band4 (1700) ; Frequency: 1732.5 MHz ; Duty Cycle: 1:1
Medium: MSL 1700 Medium parameters used: f = 1732.5 MHz; σ = 1.5 mho/m; εr = 53.65; ρ = 1000 kg/m$^3$
Phantom section: Flat Section ; DUT test position : Body ; Modulation Type: 16QAM
Separation Distance : 5 mm ( The top edge side of the EUT to the Phantom)

DASY4 Configuration:

- Probe: EX3DV4 - SN3753; ConvF(7.48, 7.48, 7.48); Calibrated: 2010/12/13
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn579; Calibrated: 2010/9/20
- Phantom: SAM Twin Phantom V4.0; Type: QD 000 P40 CA; Serial: TP-1202
- Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 186

**Body Position - Low/Area Scan (7x7x1):** Measurement grid: dx=8mm, dy=8mm
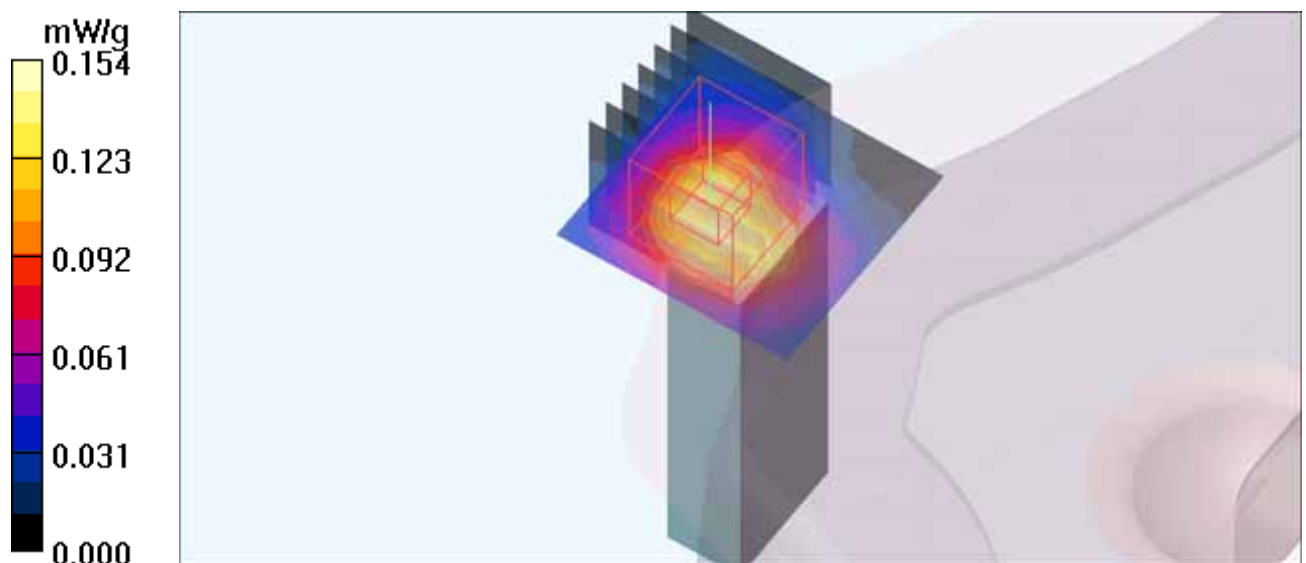Maximum value of SAR (measured) = 0.142 mW/g

**Body Position - Low/Zoom Scan (7x7x7)/Cube 0:** Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 9.36 V/m; Power Drift = 0.181 dB
Peak SAR (extrapolated) = 0.189 W/kg
**SAR(1 g) = 0.112 mW/g; SAR(10 g) = 0.062 mW/g**
Maximum value of SAR (measured) = 0.154 mW/g

## M64-LTE BAND4-Ch20175 (1RB, Lower edge)

Communication System: LTE band4 (1700) ; Frequency: 1732.5 MHz ; Duty Cycle: 1:1
Medium: MSL 1700 Medium parameters used: f = 1732.5 MHz; σ = 1.5 mho/m; εr = 53.65; ρ = 1000 kg/m³
Phantom section: Flat Section ; DUT test position : Body ; Modulation Type: 16QAM
Separation Distance : 5 mm ( The top edge side of the EUT to the Phantom)

DASY4 Configuration:

- Probe: EX3DV4 - SN3753; ConvF(7.48, 7.48, 7.48); Calibrated: 2010/12/13
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn579; Calibrated: 2010/9/20
- Phantom: SAM Twin Phantom V4.0; Type: QD 000 P40 CA; Serial: TP-1202
- Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 186

**Body Position - Low channel/Area Scan (7x7x1):** Measurement grid: dx=8mm, dy=8mm
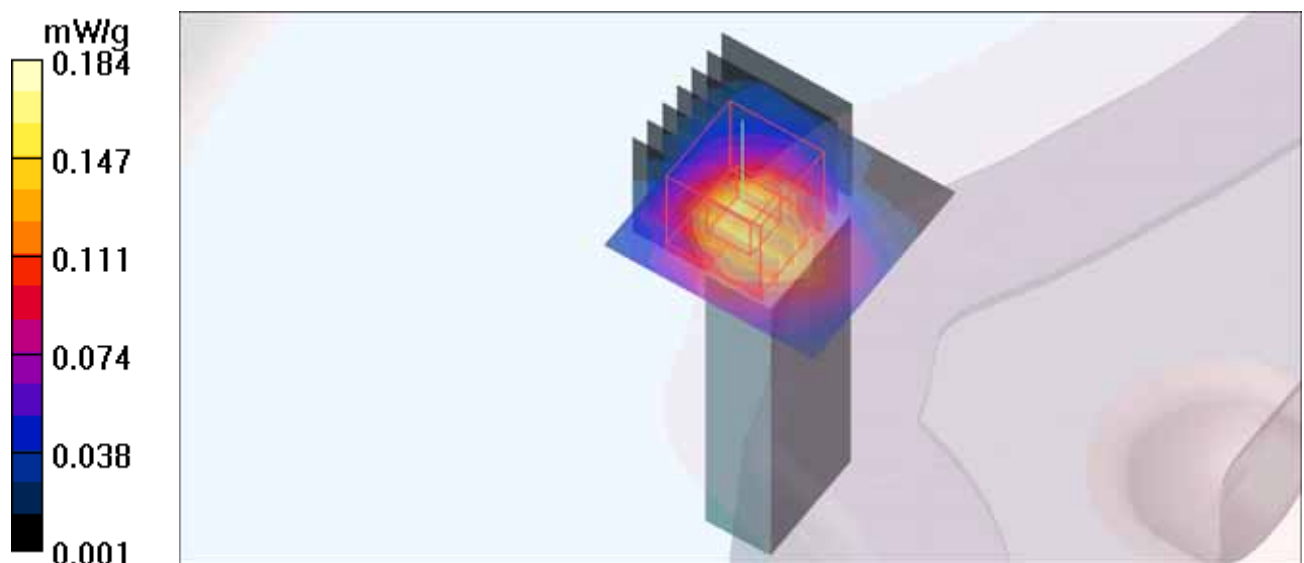Maximum value of SAR (measured) = 0.169 mW/g

**Body Position - Low channel/Zoom Scan (7x7x7)/Cube 0:** Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 9.88 V/m; Power Drift = 0.043 dB
Peak SAR (extrapolated) = 0.229 W/kg
**SAR(1 g) = 0.128 mW/g; SAR(10 g) = 0.069 mW/g**
Maximum value of SAR (measured) = 0.184 mW/g

Date/Time: 2011/3/1 14:45:06

## M65-LTE BAND4-Ch20175 (1RB, Upper edge)

Communication System: LTE band4 (1700) ; Frequency: 1732.5 MHz ; Duty Cycle: 1:1
Medium: MSL 1700 Medium parameters used: f = 1732.5 MHz; σ = 1.5 mho/m; εr = 53.65; ρ = 1000 kg/m$^3$
Phantom section: Flat Section ; DUT test position : Body ; Modulation Type: 16QAM
Separation Distance : 5 mm ( The top edge side of the EUT to the Phantom)

DASY4 Configuration:

- Probe: EX3DV4 - SN3753; ConvF(7.48, 7.48, 7.48); Calibrated: 2010/12/13
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn579; Calibrated: 2010/9/20
- Phantom: SAM Twin Phantom V4.0; Type: QD 000 P40 CA; Serial: TP-1202
- Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 186

**Body Position - Low channel/Area Scan (7x7x1):** Measurement grid: dx=8mm, dy=8mm
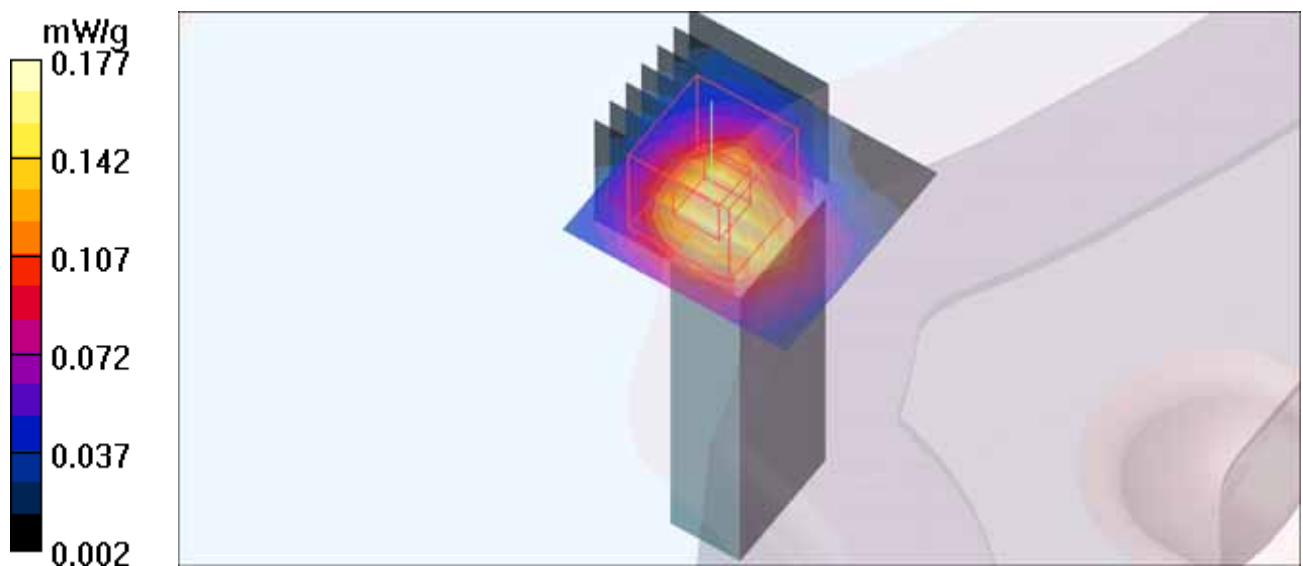Maximum value of SAR (measured) = 0.164 mW/g

**Body Position - Low channel/Zoom Scan (7x7x7)/Cube 0:** Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 9.87 V/m; Power Drift = 0.141 dB
Peak SAR (extrapolated) = 0.216 W/kg
**SAR(1 g) = 0.130 mW/g; SAR(10 g) = 0.071 mW/g**
Maximum value of SAR (measured) = 0.177 mW/g

Date/Time: 2011/3/2 01:19:02

## System Validation Check-MSL 750MHz

**DUT: Dipole 750 MHz ; Type: D750V3 ; Serial: 1013 ; Test Frequency: 750 MHz**

Communication System: CW ; Frequency: 750 MHz; Duty Cycle: 1:1; Modulation type: CW
Medium: MSL750;Medium parameters used: f = 750 MHz; σ = 0.99 mho/m; $\varepsilon_r$ = 56.06; ρ = 1000 kg/m$^3$ ; Liquid level : 150 mm
Phantom section: Flat Section ; Separation distance : 15 mm (The feet point of the dipole to the Phantom)Air temp. : 22.7 degrees ; Liquid temp. : 21.6 degrees

DASY4 Configuration:

- Probe: ES3DV3 - SN3177; ConvF(6.18, 6.18, 6.18); Calibrated: 2010/8/24
- Sensor-Surface: 3mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn579; Calibrated: 2010/9/20
- Phantom: SAM Twin Phantom V4.0; Type: QD 000 P40 CA; Serial: TP-1202
- Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 186

**d=15mm, Pin=250mW/Area Scan (7x9x1):** Measurement grid: dx=15mm, dy=15mm
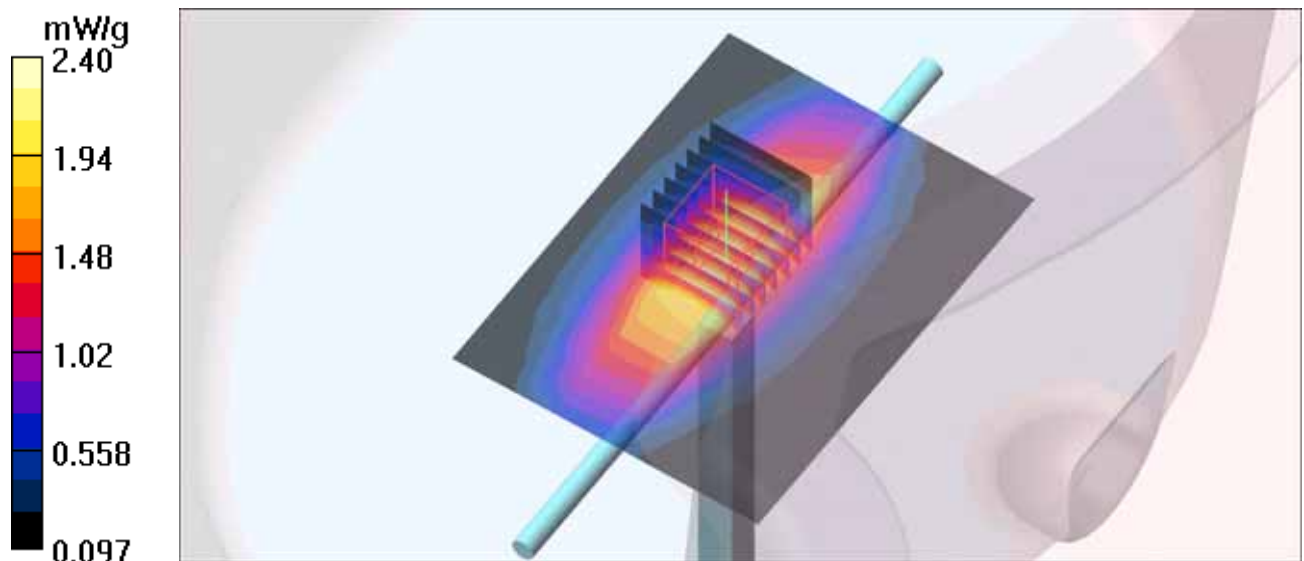Maximum value of SAR (measured) = 2.11 mW/g

**d=15mm, Pin=250mW/Zoom Scan (7x7x7)/Cube 0:** Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 52.1 V/m; Power Drift = 0.009 dB
Peak SAR (extrapolated) = 3.02 W/kg
**SAR(1 g) = 2.06 mW/g; SAR(10 g) = 1.37 mW/g**
Maximum value of SAR (measured) = 2.40 mW/g

Date/Time: 2011/3/1 08:11:09

## SystemPerformanceCheck-D1750-MSL1750 MHz
**DUT: Dipole 1750 MHz ; Type: D1750V2 ; Serial: D1750V2 - SN:1003 ; Test Frequency: 1750 MHz**

Communication System: CW ; Frequency: 1750 MHz; Duty Cycle: 1:1; Modulation type: CW
Medium: MSL1700;Medium parameters used : f = 1750 MHz; σ = 1.51 mho/m; $\varepsilon_r$ = 54.01; ρ = 1000 kg/m$^3$ ; Liquid level : 150 mm
Phantom section: Flat Section ; Separation distance : 10 mm (The feet point of the dipole to the Phantom)Air temp. : 22.4 degrees ; Liquid temp. : 21.2 degrees

DASY4 Configuration:

- Probe: EX3DV4 - SN3753; ConvF(7.48, 7.48, 7.48); Calibrated: 2010/12/13
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn579; Calibrated: 2010/9/20
- Phantom: SAM Twin Phantom V4.0; Type: QD 000 P40 CA; Serial: TP-1202
- Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 186

**d=10mm, Pin=250mW/Area Scan (7x7x1):** Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (measured) = 13.7 mW/g

**d=10mm, Pin=250mW/Zoom Scan (7x7x7)/Cube 0:** Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 100.0 V/m; Power Drift = 0.014 dB
Peak SAR (extrapolated) = 17.8 W/kg
**SAR(1 g) = 9.6 mW/g; SAR(10 g) = 5.07 mW/g**
Maximum value of SAR (measured) = 13.6 mW/g