SAR TEST REPORT

No. 121111-R1

for

AZUMI S.A

Mobile phone

Model Name: L2

FCC ID: QRP-AZUMIL2

Issued Date: 2012-12-11

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GENERAL SUMMARY

Product Name	Mobile phone
Model Name	L2
Applicant	AZUMI S.A
Manufacturer	AZUMI(HK) Limited
Test laboratory	GCCT, Guangdong Telecommunications Terminal Products Quality Supervision and Testing Center
Reference Standards	**OET Bulletin 65 (Edition 97-01) and Supplement C (Edition 01-01):** Additional Information for Evaluating Compliance of Mobile and Portable Devices with FCC Limits **IEEE Std C95.1, 1999:** IEEE Standard for Safety Levels with Respect to Human Exposure to Radio Frequency Electromagnetic Fields, 3 kHz to 300 GHz **IEEE 1528–2003:** Recommended Practice for Determining the Peak Spatial-Average Specific Absorption Rate (SAR) in the Human Body Due to Wireless Communications Devices: Experimental Techniques **FCC KDB 648474 D01 v01r05:** SAR Evaluation Considerations for Handsets with Multiple Transmitters and Antennas, September 2008 **IEC 62209-1: 2006:** Human exposure to radio frequency fields from hand-held and body-mounted wireless communication devices – Human models, instrumentation, and procedures, Part 1: Procedure to determine the specific absorption rate (SAR) for hand-held devices used in close proximity to the ear (frequency range of 300 MHz to 3 GHz) **IEC 62209-2: 2010:** Human exposure to radio frequency fields from handheld and body-mounted wireless communication devices - Human models, instrumentation, and procedures, Part 2: Procedure to determine the specific absorption rate (SAR) for mobile wireless communication devices used in close proximity to the human body (frequency range of 30 MHz to 6 GHz)
Test Conclusion	This portable wireless equipment has been measured in all cases requested by the relevant standards. Test results in Chapter 7 of this test report are below limits specified in the relevant standards. General Judgment: **Pass** **Date of issue:2012.12.11**
Comment:	The test results in this report apply only to the tested sample of the stated device/equipment.

Approved by:	*Reviewed by:*	*Tested by:*
Luo Jian	Dong Xiaobo	Li Linqiang
Deputy Manager	Deputy Manager	Test Engineer

1. General Information

1.1 Testing Laboratory

Company	GCCT, Guangdong Telecommunications Terminal Products Quality Supervision and Testing Center
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1.2 Application Information

Company Name:	AZUMI S.A
Address:	Avenida Aquilino de la Guardia con Calle 47, PH Ocean Plaza, Piso 16 of. 16-01, Marbella, Ciudad de Panama city, Panama
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1.3 Manufacturer Information

Company Name:	AZUMI S.A
Address:	Avenida Aquilino de la Guardia con Calle 47, PH Ocean Plaza, Piso 16 of. 16-01, Marbella, Ciudad de Panama city, Panama
Contact:	Kevin zou
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Fax:	0755-26966662

1.4 EUT Information

Product Name	Mobile phone
Exposure Category	Uncontrolled Environment / General Population
Model Number	L2
Device Type	Portable Device
Hardware version	V1.0
Software version	AZUMI-TECEL-L2-V01-021112
Supporting modes	GSM850/GPRS850 (tested) PCS1900/GPRS1900(tested) Bluetooth
Modulation Technique	GSM/GPRS: GMSK Bluetooth:GFSK/π/4-DQPSK/8DPSK
GPRS Level	GPRS: Class 12
Max. SAR (1g):	GSM850: Head: 1.27W/kg Body: 1.14W/kg PCS1900 Head: 0.99W/kg Body: 0.555W/kg
Antenna Specification	Internal Antenna
Accessories	Li-Ion Battery: Model: L2, Voltage:3.7V, Capacity:500mAh Charger: Model: L2, input: 100-240v, 0.1A output: 5v, 0.4A Earphone
Comment	The above EUT's information was declared by manufacture.

2. EUT Operational Conditions During Test

2.1 General Description of Test Procedures

A communication link is set up with a System Simulator (SS) by air link, and a call is established. The Absolute Radio Frequency Channel Number (ARFCN) is allocated to 128, 190 and 251 in the case of GSM850/GPRS850, allocated to 512, 661 and 810 in the case of PCS1900/GPRS1900. The EUT is commanded to operate at maximum transmitting power by MT8820C.

When we test, the EUT battery must be fully charged and checked periodically during the test to ascertain uniform power output. The antenna connected to the output of the base station simulator shall be placed at least 50 cm away from the EUT. The signal transmitted by the simulator to the antenna feeding point shall be lower than the output power level of the EUT by at least 30 dB.

2.2 GSM Test Configuration

For the SAR tests for GSM850 and PCS1900, a communication link is set up with a System Simulator (SS) by air link. Using MT8820C the power lever is set to “5” of GSM850, set to “0” of PCS1900. The EUT is commanded to operate at maximum transmitting power. The GPRS class is 12 for this EUT. It has at most 4 timeslots in uplink and at most 4 timeslots in downlink, the maximum total timeslots is 5.

3. SAR Measurements System Configuration

These measurements were performed with the automated near-field scanning system DASY5 from SPEAG. The system is based on a high precision robot, which positions the probes with a positional repeatability of better than ± 0.02 mm. Special E-field probes have been developed for measurements close to material discontinuity, the sensors of which are directly loaded with a Schottky diode and connected via highly resistive lines to the data acquisition unit. The SAR measurements were conducted with the dosimetric probe manufactured by SPEAG, designed in the classical triangular configuration and optimized for dosimetric evaluation. The probe has been calibrated according to the procedure described in with accuracy of better than ±10%. The spherical isotropy was evaluated and found to be better than ±0.3 dB. The phantom used was the SAM Twin Phantom and ELI4 Phantom as described in IEC 62209-1, FCC OET 065 supplement C, IEEE1528 and EN 62209-1.

3.1 Measurement System Diagram

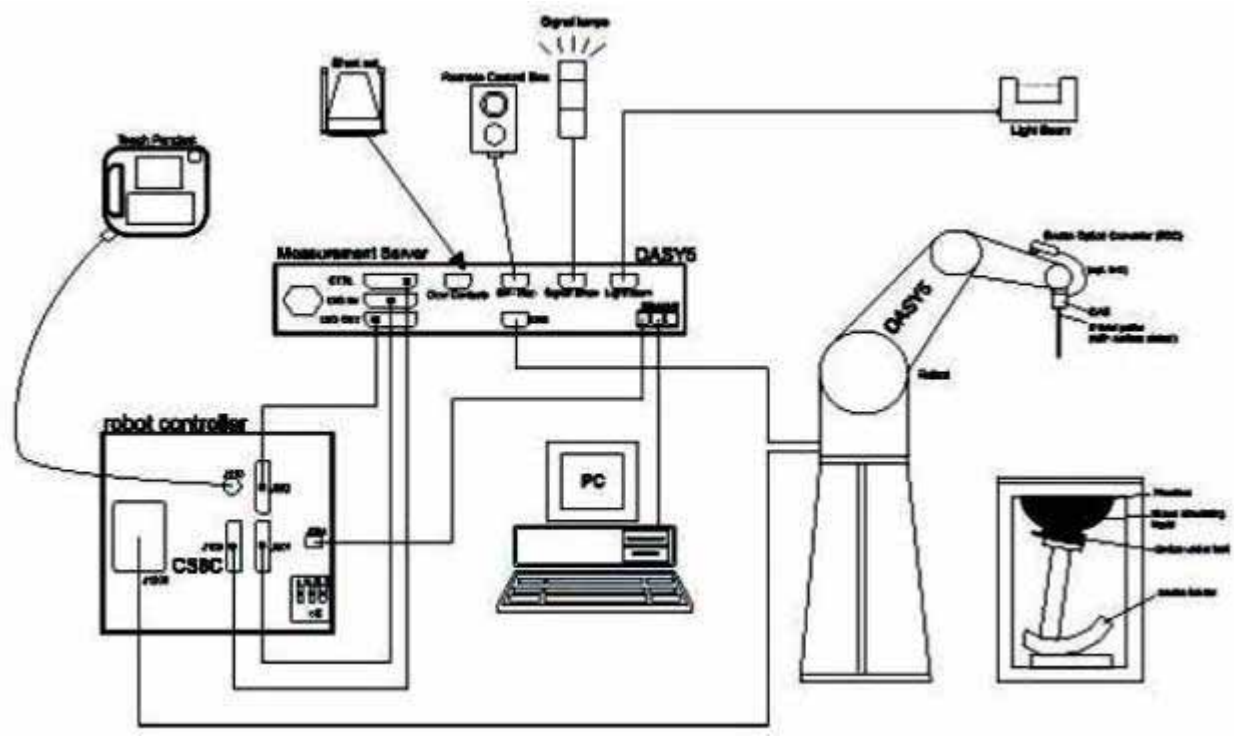


Figure1 system diagram

The DASY5 system for performing compliance tests consists of the following items:

1. A standard high precision 6-axis robot (TX90XL) with St¨aubli CS8c robot controllers.
2. DASY5 Measurement Server.
3. Data Acquisition Electronics.
4. A dosimetric probe, i.e., an isotropic E-field probe optimized and calibrated for usage in tissue simulating liquid. The probe is equipped with an optical surface detector system.

5. Light Beam Unit.
6. The SAM phantom enabling testing left-hand right-hand and the ELI4 phantom for body usage.
7. The Position device for handheld EUT.
8. Tissue simulating liquid mixed according to the given recipes
9. System validation dipoles to validate the proper functioning of the system.
10. A computer operating Windows xp.

3.2 System Components

The mobile phone under test operating at the maximum power level is placed in the phone holder, under the phantom, which is filled with head simulating liquid. The E-Field probe measures the electric field inside the phantom. The DASY5 software computes the results to give a SAR value in a 1g or 10 g mass.

3.2.1 TX90XL

The TX90XL robot has six axes. The six axes are controlled by the St¨aubli CS8c robot controllers. It offers the features important for our application:

- High precision (repeatability 0.02mm)
- High reliability (industrial design)
- Low maintenance costs (virtually maintenance free due to direct drive gears; no belt drives)
- Jerk-free straight movements (brushless synchrony motors; no stepper motors)
- Low ELF

3.2.2 DASY5 Measurement Server

The DASY5 measurement server is based on a PC/104 CPU board with a 400MHz Intel ULV Celeron, 128MB chip disk and 128MB RAM. The necessary circuits for communication with either the DAE4 electronics box as well as the 16 bit AD converter system for optical detection and digital I/O interface are contained on the DASY5 I/O board, which is directly connected to the PC/104 bus of the CPU board.

Figure 2 TX90XL

Figure 3 Measurement Server

3.2.3 Probe

For the measurements the Specific Dosimetric E-Field Probe ES3DV3 and EX3DV4 with following specifications is used.

Frequency：10 MHz to 3 GHz; Linearity: ± 0.2 dB

Directivity： ± 0.3 dB in HSL (rotation around probe axis)

± 0.5 dB in tissue material (rotation normal to probe axis)

Dynamic Range：10 μW/g to > 100 mW/g; Linearity: ± 0.2 dB

Tip Diameter: 5 mm; Distance between probe tip and sensor center: 2.5 mm

Probe linearity: ±0.3 dB

Calibration range: 835 to 2500 MHz for head & body simulating liquid

3.2.4 Device holder

The DASY device holder is designed to cope with the different positions given in the standard.

It has two scales for device rotation (with respect to the body axis) and device inclination (with respect to the line between the ear reference points). The rotation centers for both scales are the ear reference point (ERP). Thus the device needs no repositioning when changing the angles. The DASY device holder is constructed 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.

Figure 4 probe

Figure 5 device holder

3.2.5 Phantom

The SAM Twin Phantom and the ELI4 Phantom are constructed of a fiberglass shell integrated in a wooden table. The shape of the shell is in compliance with the specification set in IEEE P1528 and CENELEC EN62209-1. The SAM Twin phantom enables the dosimetric evaluation of left and right hand phone usage and the ELI4 phantom enables the dosimetric evaluation of body mounted usage. A cover prevents the 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 in the robot.

Shell thickness: 2 mm +/-0.2 mm

Filling Volume: Approx. 25 liters

Dimensions (H x L x W): 850 x 1000 x 500 mm

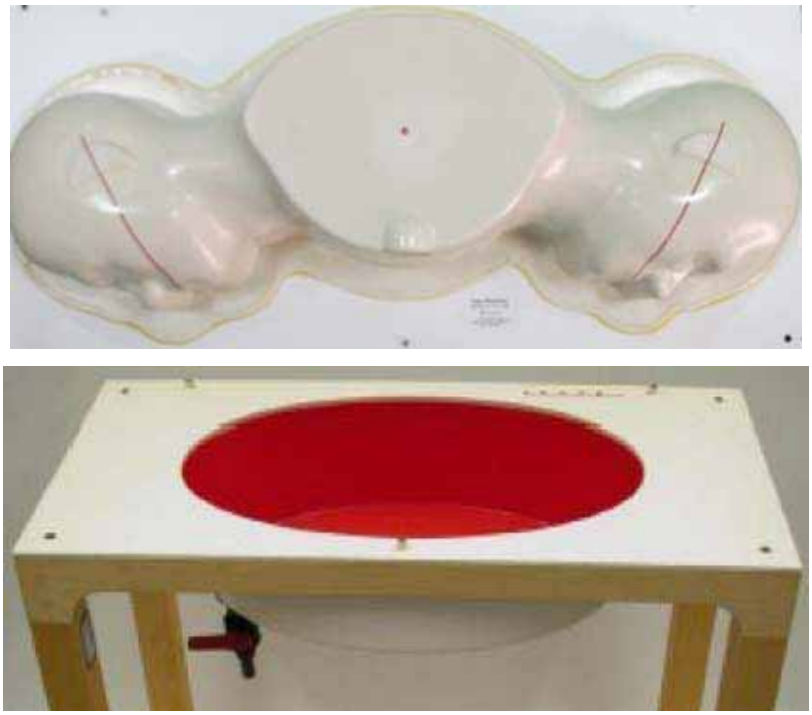


Figure 6 SAM Twin phantom and ELI phantom

3.2.6 Data Acquisition Electronics

DAE4 consist of a highly sensitive electrometer-grade preamplifier with auto-zeroing, a channel and gain-switching multiplexer, a fast 16 bit AD-converter and a command decoder with a 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 mounting device includes two different sensor systems for frontal and sideways probe contacts. They are used for mechanical surface detection and probe collision detection.

Input impedance: 200MOhm, symmetrical and floating.

Common mode rejection: > 80 dB.

3.2.7 Validation dipoles

Frequencies:

SPEAG has a full range of dipoles corresponding to the frequencies defines by the standards: 835, 900, 1800, 1900, 2000, 2450MHz

Maximum input Power: 100W

Connectors: SMA

Dimensions: (depends on the dipole frequency)

Figure 7 DAE4

Figure 8 Validation dipoles

3.3 Equivalent Tissues

The relative permittivity and conductivity of the tissue material should be within ±5% of the values given in the table below recommended by the FCC OET 65 supplement C.

Target Frequency	Head		Body	
(MHz)	εr	σ (S/m)	εr	σ (S/m)
150	52.3	0.76	61.9	0.80
300	45.3	0.87	58.2	0.92
450	43.5	0.87	56.7	0.94

835	41.5	0.90	55.2	0.97
900	41.5	0.97	55.0	1.05
915	41.5	0.98	55.0	1.06
1450	40.5	1.20	54.0	1.30
1610	40.3	1.29	53.8	1.40
1800—2000	40.0	1.40	53.3	1.52
2450	39.2	1.80	52.7	1.95
3000	38.5	2.40	52.0	2.73
5800	35.3	5.27	48.2	6.00

(ε_r = relative permittivity, σ = conductivity and ρ = 1000 kg/m^3)

4. Evaluation Procedures

4.1 Data Evaluation

The DASY5 software automatically executes the following procedures to calculate the field units from the microvolt readings at the probe connector. The parameters used in the evaluation are stored in the configuration modules of the software:

Probe parameters: - Sensitivity *Normi, ai0, ai1, ai2*

-Conversion factor *ConvFi*

- Diode compression point *dcpi* Device parameters: -

Frequency *f*

- Crest factor *cf*

Media parameters: - Conductivity σ

-Density ρ

These parameters must be set correctly in the software. They can be found in the component documents or be imported into the software from the configuration files issued for the DASY5 components. In the scan visualization and export modes, the parameters stored in the corresponding document files are used.

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:

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

with *Vi* = Compensated signal of channel i (i = x, y, z)

Ui = Input signal of channel i (i = x, y, z)

cf = Crest factor of exciting field (DASY5 parameter)

dcpi = Diode compression point (DASY5 parameter)

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

E-field probes: $E_i = \sqrt{\frac{V_i}{Norm_i \cdot ConvF}}$

H-field probes: $H_i = (V_i)^{1/2} \cdot (a_{i0} + a_{i1} f + a_{i2} f^2) / f$

With *Vi* = Compensated signal of channel i (i = x, y, z)

Normi = Sensor sensitivity of channel i (i = x, y, z)

$\mu V/(V/m)^2$ for E0field Probes

ConvF= Sensitivity enhancement in solution

aij = Sensor sensitivity factors for H-field probes

f = Carrier frequency (GHz)

Ei = Electric field strength of channel i in V/m

Hi = Magnetic field strength of channel i in A/m The RSS value of the field components give the total field strength (Hermitian magnitude):

$$E_{\text{tot}}=\sqrt{E_{\text{x}}^2+E_{\text{y}}^2+E_{\text{z}}^2}$$

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

$$SAR=E_{\text{tot}}^2\cdot\frac{\sigma}{\rho\cdot 1000}$$

With *SAR* = local specific absorption rate in mW/g

Etot = total field strength in V/m

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

ρ= equivalent tissue density in g/cm^3

Note that the density is normally set to 1 (or 1.06), to account for actual brain density rather than the density of the simulation liquid. The power flow density is calculated assuming the excitation field as a free space field.

$$P_{\text{pwe}}=\frac{E_{\text{tot}}^2}{3770}\quad\text{Or}\quad P_{\text{pwe}}=\text{H}_{\text{tot}}^2\cdot 37.7$$

With Ppwe = Equivalent power density of a plane wave in mW/cm^2

Etot = total electric field strength in V/m

Htot = total magnetic field strength in A/m

4.2 SAR Evaluation Procedures

The procedure for assessing the peak spatial-average SAR value consists of the following steps:

• **Power Reference Measurement**

The reference and drift jobs are useful jobs for monitoring the power drift of the device under test in the batch process. Both jobs measure the field at a specified reference position, at a selectable distance from the phantom surface. The reference position can be either the selected section's grid reference point or a user point in this section. The reference job projects the selected point onto the phantom surface, orients the probe perpendicularly to the surface, and approaches the surface using the selected detection method.

• **Area Scan**

The area scan is used as a fast scan in two dimensions to find the area of high field

values, before doing a finer measurement around the hot spot. The sophisticated interpolation routines implemented in DASY5 software can find the maximum locations even in relatively coarse grids. The scan area is defined by an editable grid. This grid is anchored at the grid reference point of the selected section in the phantom. When the area scan's property sheet is brought-up, grid was at to 15 mm by 15 mm and can be edited by a user.

• **Zoom Scan**

Zoom scans are used to assess the peak spatial SAR values within a cubic averaging volume containing 1 g and 10 g of simulated tissue. The default zoom scan measures 7 x 7 x 7 points within a cube whose base faces are centered around the maximum found in a preceding area scan job within the same procedure. If the preceding Area Scan job indicates more then one maximum, the number of Zoom Scans has to be enlarged accordingly (The default number inserted is 1).

• **Power Drift measurement**

The drift job measures the field at the same location as the most recent reference job within the same procedure, and with the same settings. The drift measurement gives the field difference in dB from the reading conducted within the last reference measurement. Several drift measurements are possible for one reference measurement. This allows a user to monitor the power drift of the device under test within a batch process. In the properties of the Drift job, the user can specify a limit for the drift and have DASY5 software stop the measurements if this limit is exceeded.

4.3 Spatial Peak SAR Evaluation

The procedure for spatial peak SAR evaluation has been implemented according to the IEC62209-1 standard. It can be conducted for 1 g and 10 g. The DASY5 system allows evaluations that combine measured data and robot positions, such as:

maximum search
extrapolation
boundary correction
Peak search for averaged SAR

During a maximum search, global and local maximum searches are automatically performed in 2-D after each Area Scan measurement with at least 6 measurement points. It is based on the evaluation of the local SAR gradient calculated by the Quadratic Shepard's method. The algorithm will find the global maximum and all local maxima within -2 dB of the global maxima for all SAR distributions.

Extrapolation

Extrapolation routines are used to obtain SAR values between the lowest measurement points and the inner phantom surface. The extrapolation distance is determined by the surface detection distance and the probe sensor offset. Several measurements at different distances are necessary for the extrapolation.

Extrapolation routines require at least 10 measurement points in 3-D space. They are used in the Cube Scan to obtain SAR values between the lowest measurement points and the inner phantom surface. The routine uses the modified Quadratic Shepard's method for extrapolation. For a grid using 7x7x7 measurement points with 5mm resolution amounting to 343 measurement points, the uncertainty of the extrapolation routines is less than 1% for 1 g and 10 g cubes.

Boundary effect

For measurements in the immediate vicinity of a phantom surface, the field coupling effects between the probe and the boundary influence the probe characteristics. Boundary effect errors of different dosimetric probe types have been analyzed by measurements and using a numerical probe model. As expected, both methods showed an enhanced sensitivity in the immediate vicinity of the boundary. The effect strongly depends on the probe dimensions and disappears with increasing distance from the boundary. The sensitivity can be approximately given as:

$$S \approx S_o + S_b exp(-\frac{z}{a}) cos(\pi \frac{z}{\lambda})$$

Since the decay of the boundary effect dominates for small probes (a<<λ), the cos-term can be omitted. Factors *Sb* (parameter Alpha in the DASY5 software) and *a* (parameter Delta in the DASY5 software) are assessed during probe calibration and used for numerical compensation of the boundary effect. Several simulations and measurements have confirmed that the compensation is valid for different field and boundary configurations. This simple compensation procedure can largely reduce the probe uncertainty near boundaries. It works well as long as:

the boundary curvature is small

the probe axis is angled less than 30_ to the boundary normal

the distance between probe and boundary is larger than 25% of the probe diameter

the probe is symmetric (all sensors have the same offset from the probe tip)

Since all of these requirements are fulfilled in a DASY5 system, the correction of the probe boundary effect in the vicinity of the phantom surface is performed in a fully automated manner via the measurement data extraction during post processing.

5. Test Laboratory Environment

Temperature	Min. = 20°C, Max. = 25 °C
Relative humidity	Min. = 30%, Max. = 70%
Ground system resistance	< 0.5 Ω
Ambient noise is checked and found very low and in compliance with requirement of standards. Reflection of surrounding objects is minimized and in compliance with requirement of standards.	

6. Conducted Output Power Measurement

The following procedures had been used to prepare the EUT for the SAR test. To setup the desire channel frequency and the maximum output power. A Radio Communication Tester MT8820C was used to program the EUT.

GSM850/ PCS1900

GSM850	Peak power（dBm）	PCS1900	Peak power（dBm）
Ch 128	32.43	**Ch 512**	29.62
Ch 190	32.52	**Ch 661**	29.91
Ch 251	32.50	**Ch 810**	30.01

GPRS 850

Time slot	Peak power（dBm）				Average power(dBm)		
	Ch 128	**Ch 190**	**Ch 251**		**Ch 128**	**Ch 190**	**Ch 251**
1TX- slot	30.38	29.65	29.41	-9.03dB	21.35	2.062	20.38
2TX- slots	28.91	28.81	28.61	-6.02dB	22.89	22.79	22.59
3TX- slots	26.83	26.70	26.49	-4.26dB	22.57	22.44	22.23
4TX- slots	26.81	26.31	26.08	-3.01dB	**23.80**	**23.30**	**23.07**

GPRS1900

Time slot	Peak power（dBm）				Average power(dBm)		
	Ch 512	**Ch 661**	**Ch 810**		**Ch 512**	**Ch 661**	**Ch 810**
1TX- slot	29.57	29.85	29.97	-9.03dB	20.54	20.82	20.94
2TX- slots	28.78	29.07	29.1	-6.02dB	22.76	23.05	23.08
3TX- slots	27.32	27.64	27.76	-4.26dB	23.06	23.38	23.50
4TX- slots	26.51	26.78	26.85	-3.01dB	**23.50**	**23.77**	**23.84**

Note:

1) Division Factors

To average the power, the division factor is as follows:

1TX-slot = 1 transmit time slot out of 8 time slots

=>Conducted power divided by (8/1) => -9.03 dB

2 TX-slots = 2 transmit time slots out of 8 time slots

=> Conducted power divided by (8/2) => -6.02 dB

3TX-slots = 3 transmit time slots out of 8 time slots

=> Conducted power divided by (8/3) => -4.26 dB

4 TX-slots = 4 transmit time slots out of 8 time slots

=> Conducted power divided by (8/4) => -3.01 dB

2) Average power numbers

The maximum power numbers are marks in bold. According to the conducted power as above, the body measurements are performed with 4Txslots for GPRS.

7. SAR Measurement Results

7.1 Liquid Measurement Results

The simulating liquids should be checked at the beginning of a series of SAR measurements to determine of the dielectric parameters are within the tolerances of the specified target values.

Date: Dec 3, 2012 **Ambient condition:** Temperature: 21.8°C; Relative humidity: 56%

Head Simulation Liquid			Parameters	Target	Measured	Deviation [%]	Limited [%]
Frequency	Temp.[°C]	Depth [cm]					
835MHz	21.5	＞15cm	Permittivity:	41.5	40.43	-2.58	±5
			Conductivity:	0.90	0.86	-4.44	±5

Date: Dec 3, 2012 **Ambient condition:** Temperature: 21.8°C; Relative humidity: 56%

Head Simulation Liquid			Parameters	Target	Measured	Deviation [%]	Limited [%]
Frequency	Temp.[°C]	Depth [cm]					
1900MHz	21.5	＞15cm	Permittivity:	40	39.75	-0.63	±5
			Conductivity:	1.40	1.45	3.57	±5

Date: Dec 4, 2012 **Ambient condition:** Temperature: 21.8°C; Relative humidity: 56%

Body Simulation Liquid			Parameters	Target	Measured	Deviation [%]	Limited [%]
Frequency	Temp.[°C]	Depth [cm]					
835MHz	21.5	＞15cm	Permittivity:	55.2	53.74	-2.64	±5
			Conductivity:	0.97	0.94	-3.09	±5

Date: Dec 4, 2012 **Ambient condition:** Temperature: 21.8°C; Relative humidity: 56%

Body Simulation Liquid			Parameters	Target	Measured	Deviation [%]	Limited [%]
Frequency	Temp.[°C]	Depth [cm]					
1900MHz	21.5	＞15cm	Permittivity:	53.3	50.72	-4.84	±5
			Conductivity:	1.52	1.58	3.95	±5

7.2 System Performance Check

System Performance Check Measurement conditions

- The measurements were performed in the flat section of the SAM twin phantom filled with head and body simulating liquid of the following parameters.
- The DASY5 system with an E-field probe was used for the measurements.
- The dipole was mounted on the small tripod so that the dipole feed point was positioned below the center marking of the flat phantom section and the dipole was oriented parallel to the body axis (the long side of the phantom). The standard measuring distance was 15 mm (below 1 GHz) and 10 mm (above 1 GHz) from dipole center to the simulating liquid surface.
- The coarse grid with a grid spacing of 10mm was aligned with the dipole.
- Special 5x5x7 fine cube was chosen for cube integration (dx= 8 mm, dy= 8 mm, dz= 5 mm).
- Distance between probe sensors and phantom surface was set to 2.5 mm.

The depth of Liquid must above 15cm

System Performance Check Results:

Dipole: D900V2 SN: 1d073

Date: Dec 3, 2012 **Ambient condition:** Temperature: 21.8°C; Relative humidity: 56%

Head Simulation Liquid			Parameters	Target	Measured	Deviation [%]	Limited [%]
Frequency	Temp.[°C]	Depth [cm]					
900MHz	21.5	15cm	Permittivity:	41.5	39.63	-4.51	±5
			Conductivity:	0.97	0.93	-4.12	±5
			1g SAR (250mW)	2.68	2.7	0.75	±10

Note: The signal power to dipole input port is 125mW.

Dipole: D900V2 SN: 1d073

Date: Dec 4, 2012 **Ambient condition:** Temperature: 21.8°C; Relative humidity: 56%

Body Simulation Liquid			Parameters	Target	Measured	Deviation [%]	Limited [%]
Frequency	Temp.[°C]	Depth [cm]					
900MHz	21.5	15cm	Permittivity:	55.0	53.12	-3.42	±5
			Conductivity:	1.05	1.002	-4.58	±5
			1g SAR (250mW)	2.81	2.68	-4.63	±10

Note: The signal power to dipole input port is 125mW.

Dipole: D1900V2 SN: 5d070

Date: Dec 3, 2012 **Ambient condition:** Temperature: 21.8°C; Relative humidity: 56%

Head Simulation Liquid			Parameters	Target	Measured	Deviation [%]	Limited [%]
Frequency	Temp.[°C]	Depth [cm]					
1900MHz	21.5	15cm	Permittivity:	40	39.75	-0.63	±5
			Conductivity:	1.4	1.45	3.57	±5
			1g SAR (250mW)	9.89	9.4	-4.95	±10

Note: The signal power to dipole input port is 62.5mW.

Dipole: D1900V2 SN: 5d070

Date: Dec 4, 2012 **Ambient condition:** Temperature: 21.8°C; Relative humidity: 56%

Body Simulation Liquid			Parameters	Target	Measured	Deviation [%]	Limited [%]
Frequency	Temp.[°C]	Depth [cm]					
1900MHz	21.5	15cm	Permittivity:	53.3	50.72	-4.84	±5
			Conductivity:	1.52	1.58	3.95	±5
			1g SAR (250mW)	10.3	10.52	2.14	±10

Note: The signal power to dipole input port is 62.5mW.

7.3 Measurement Results

Test mode: GSM 850, Duty Cycle: 12.5%, Depth of liquid: ＞15.0 cm Date: Dec 3, 2012						
EUT Position	Channel	Frequency (MHz)	Liquid Temp.°C	SAR (1g) (W/kg)	Power Drift (dB)	SAR Limit (W/kg)
Left Cheek	251	848.8	21.5	1.2	-0.06	1.6
Left Cheek	190	836.6	21.5	1.26	-0.07	
Left Cheek	128	824.2	21.5	1.14	-0.08	
Left Tilted	251	848.8	/	/	/	
Left Tilted	190	836.6	21.5	0.786	-0.06	
Left Tilted	128	824.2	/	/	/	
Right Cheek	251	848.8	21.5	1.14	-0.17	
Right Cheek	190	836.6	21.5	**1.27**	0.04	
Right Cheek	128	824.2	21.5	1.12	-0.06	
Right Tilted	251	848.8	/	/	/	
Right Tilted	190	836.6	21.5	0.692	-0.02	
Right Tilted	128	824.2	/	/	/	
Notes: Please refer to attachment for the result presentation in plot format.						

Test mode:PCS1900, Duty Cycle: 12.5%, Depth of liquid: ＞15.0 cm Date: Dec 3, 2012						
EUT Position	Channel	Frequency (MHz)	Liquid Temp.°C	SAR (1g) (W/kg)	Power Drift (dB)	Limit (W/kg)
Left Cheek	810	1909.8	21.5	0.776	0.08	1.6
Left Cheek	661	1880	21.5	0.891	-0.16	
Left Cheek	512	1850.2	21.5	**0.99**	0.14	
Left Tilted	810	1909.8	/	/	/	
Left Tilted	661	1880	21.5	0.633	0.06	
Left Tilted	512	1850.2	/	/	/	
Right Cheek	810	1909.8	/	/	/	
Right Cheek	661	1880	21.5	0.646	0.17	
Right Cheek	512	1850.2	/	/	/	
Right Tilted	810	1909.8	/	/	/	
Right Tilted	661	1880	21.5	0.463	-0.05	
Right Tilted	512	1850.2	/	/	/	
Notes: Please refer to attachment for the result presentation in plot format.						

Test mode: GPRS 850, Duty Cycle: 50%, Depth of liquid: ＞15.0 cm , Date: Dec 4, 2012						
Distance between EUT and phantom:15mm						
EUT Position	Channel	Frequency (MHz)	Liquid Temp.°C	SAR (1g) (W/kg)	Power Drift (dB)	Limit (W/kg)
Toward ground	251	848.8	21.5	1.13	0.07	1.6
Toward ground	190	836.6	21.5	**1.14**	0.13	
Toward ground	128	824.2	21.5	1	0.14	
Toward phantom	251	848.8	/	/	/	
Toward phantom	190	836.6	21.5	0.74	-0.17	
Toward phantom	128	824.2	/	/	/	
Toward ground with headset	190	836.6	21.5	0.992	0.15	
Toward phantom with headset	190	836.6	21.5	0.592	-0.08	
Notes: Please refer to attachment for the result presentation in plot format.						

Test mode: GPRS 1900, Duty Cycle: 50%, Depth of liquid: ＞15.0 cm, Date: Dec 4, 2012						
Distance between EUT and phantom:15mm						
EUT Position	Channel	Frequency (MHz)	Liquid Temp.°C	SAR (1g) (W/kg)	Power Drift (dB)	Limit (W/kg)
Toward ground	810	1909.8	21.5	0.356	0.11	1.6
Toward ground	661	1880	21.5	0.435	-0.03	
Toward ground	512	1850.2	21.5	**0.555**	0.11	
Toward phantom	810	1909.8	/	/	/	
Toward phantom	661	1880	21.5	0.249	-0.15	
Toward phantom	512	1850.2	/	/	/	
Toward ground with headset	512	1850.2	21.5	0.528	-0.04	
Toward phantom with headset	512	1850.2	21.5	0.217	-0.13	
Notes: Please refer to attachment for the result presentation in plot format.						

Multi antennas consideration:

The layout of antennas is as follow:

The output power of Bluetooth is as follow:

Mode Frequency	GFSK （dBm）	Pi/4-DQPSK （dBm）	8-DPSK （dBm）
2402MHz	2.67	2.00	1.94
2441MHz	3.20	2.52	2.49
2480MHz	3.99	3.29	3.22

Because the Bluetooth output power is ＜ P_{Ref}, the standalone SAR of Bluetooth antenna and the simultaneous SAR of Bluetooth and cellular antennas are not required.

8. Measurement Uncertainty

Uncertainty Component	Sec.	Tol (+-%)	Prob. Dist.	Div.	Ci (1g)	Ci (10g)	1g Ui (+-%)	10g Ui (+-%)	Vi
Measurement System									
Probe calibration	E.2.1	6.55	N	1.0	1.0	1.0	6.55	6.55	∞
Axial Isotropy	E.2.2	0.5	R	$\sqrt{3}$	1.0	1.0	0.29	0.29	∞
Hemispherical Isotropy	E.2.2	2.6	R	$\sqrt{3}$	1.0	1.0	1.5	1.5	∞
Boundary effect	E.2.3	0.8	R	$\sqrt{3}$	1.0	1.0	0.46	0.46	∞
Linearity	E.2.4	0.6	R	$\sqrt{3}$	1.0	1.0	0.35	0.35	∞
System detection limits	E.2.5	0.25	R	$\sqrt{3}$	1.0	1.0	0.14	0.14	∞
Readout Electronics	E.2.6	0.35	N	1	1.0	1.0	0.35	0.35	∞
Reponse Time	E.2.7	0	R	$\sqrt{3}$	1.0	1.0	0	0	∞
Integration Time	E.2.8	2.6	R	$\sqrt{3}$	1.0	1.0	1.5	1.5	∞
RF ambient Conditions-Noise	E.6.1	0	R	$\sqrt{3}$	1.0	1.0	0	0	∞
RF ambient Conditions-Reflections	E.6.1	3.0	R	$\sqrt{3}$	1.0	1.0	1.7	1.7	∞
Probe positioner Mechanical Tolerance	E.6.2	1.5	R	$\sqrt{3}$	1.0	1.0	0.87	0.87	∞
Probe positioning with respect to Phantom Shell	E.6.3	2.9	R	$\sqrt{3}$	1.0	1.0	1.67	1.67	∞
Extrapolation, interpolation and integration Algoritms for Max. SAR	E.5	1.0	R	$\sqrt{3}$	1.0	1.0	0.58	0.58	∞
Test sample Related									
Test Sample Positioning	E.4.2	4.6	N	1.0	1.0	1.0	4.6	4.6	N-1
Device Holder Uncertainty	E.4.1	5.2	N	1.0	1.0	1.0	5.2	5.2	N-1
Output Power Variation - SAR drift measurement	6.6.2	5	R	$\sqrt{3}$	1.0	1.0	2.89	2.89	∞
Phantom and Tissue Parameters									
Phantom Uncertainty (Shape and thickness tolerances)	E.3.1	4.0	R	$\sqrt{3}$	1.0	1.0	2.31	2.31	∞
Liquid conductivity - deviation from target value	E.3.2	5.0	R	$\sqrt{3}$	0.64	0.43	1.85	1.24	∞
Liquid conductivity - measurement uncertainty	E.3.3	2.5	N	1.0	0.64	0.43	1.60	1.08	M
Liquid permitivity - deviation from target value	E.3.2	5.0	R	$\sqrt{3}$	0.6	0.49	1.73	1.42	∞
Liquid permitivity - measurement uncertainty	E.3.3	2.5	N	1.0	0.6	0.49	1.5	1.23	M
Combined Standard Uncertainty			RSS				11.3	11.0	
Expanded Uncertainty (95% Confidence interval)			K				23	22	

9. EUT Photo

Mobile Phone

Mobile Phone

Mobile Phone

Mobile Phone

10. Equipment List & Calibration Status

Name of Equipment	Manufacturer	Type/Model	Serial Number	Calibration Due
P C	HP	d7900eC	CZC9312JJ4	N/A
E-field PROBE	SPEAG	ES3DV3	SN 3221	2013-9-27
DAE	SPEAG	DAE4-SD 000 D04 BJ	SN 893	2013-7-27
DEVICE HOLDER	Stäubli	N/A	N/A	N/A
SAM PHANTOM	SPEAG	SAM Twin Phantom	TP-1545/TP-1548	N/A
6 AXIS ROBOT	Stäubli	Robot TX90XL	F09/5B9UA1/A/01	N/A
DIPOLE 900MHz	SPEAG	D900V2	1d073	2013-9-28
DIPOLE 1900MHz	SPEAG	D1900V2	5d070	2013-10-01
Wireless Communication Test Set	Anritsu	MT8820C	6201060976	2013-8-27
Signal Generator	Agilent	5183A	MY49060563	2013-8-27
Power Meter	Agilent	E4419B	MY45104719	2013-8-27
Power Sensor	Agilent	N8481H	MY48100148	2013-8-27
Directional couplers	Agilent	778D	MY48220223	N/A
Power amplifier	mini-circuits	ZHL-42W	QA0940002	N/A
Power supply	Topward	3303d	796708	2013-8-27
Network Analyzer	Agilent	E5071C	MY46108263	2013-8-27
LIQUID CALIBRATION KIT	Agilent	85070E	N/A	N/A

11. References

[1] DASY5 System Handbook

[2] FCC KDB 447498 D01 v04, “Mobile and Portable Device RF Exposure Procedures and Equipment Authorization Policies”, November 2009

[3] FCC KDB 648474 D01 v01r05, “SAR Evaluation Considerations for Handsets with Multiple Transmitters and Antennas”, September 2008

[4] FCC KDB 941225 D03 v01, “Recommended SAR Test Reduction Procedures for GSM / GPRS / EDGE”, December 2008

[5] FCC KDB 941225 D04 v01, “Evaluating SAR for GSM/(E)GPRS Dual Transfer Mode”, January 27 2010

12. Attachments

Exhibit	Content
1	System Performance Check Plots
2	SAR Test Plots
3	EUT Test Positions
4	Probe calibration report ES3DV3 -SN3221
5	Dipole calibration report
6	DAE calibration report

ANNEXE 1 System Performance Check Plots

System 900 MHz dipole（Head）

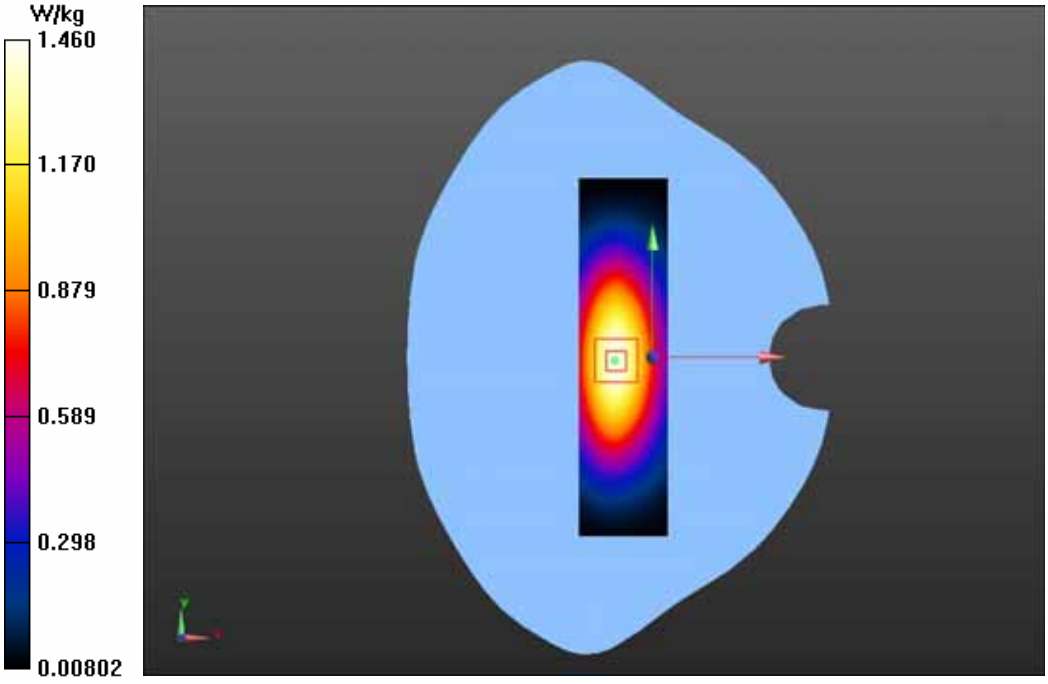
DUT: Dipole 900 MHz D900V2; Type: D900V2; Serial: D900V2

Communication System: CW; Communication System Band: D900 (900.0 MHz); Frequency: 900 MHz; Communication System PAR: 0 dB
Medium parameters used: f = 900 MHz; σ = 0.931 mho/m; ε_r = 39.626; ρ = 1000 kg/m^3
Phantom section: Flat Section
Measurement Standard: DASY5 (IEEE/IEC/ANSI C63.19-2007)

DASY5 Configuration:

- Probe: ES3DV3 - SN3221; ConvF(6.17, 6.17, 6.17); Calibrated: 9/27/2012;
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn893; Calibrated: 9/27/2012
- Phantom: SAM_1 with CRP v4.0; Type: QD000P40CC; Serial: TP:1586
- Measurement SW: DASY52, Version 52.8 (2); SEMCAD X Version 14.6.6 (6824)

System 900 Head/system/Area Scan (31x121x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm
Reference Value = 40.973 V/m; Power Drift = -0.11 dB
Maximum value of SAR (interpolated) = 1.46 W/kg
System 900 Head/system/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 40.973 V/m; Power Drift = -0.11 dB
Peak SAR (extrapolated) = 2.003 mW/g
SAR(1 g) = 1.35 mW/g; SAR(10 g) = 0.879 mW/g
Maximum value of SAR (measured) = 1.46 W/kg



System 900 MHz dipole（Body）

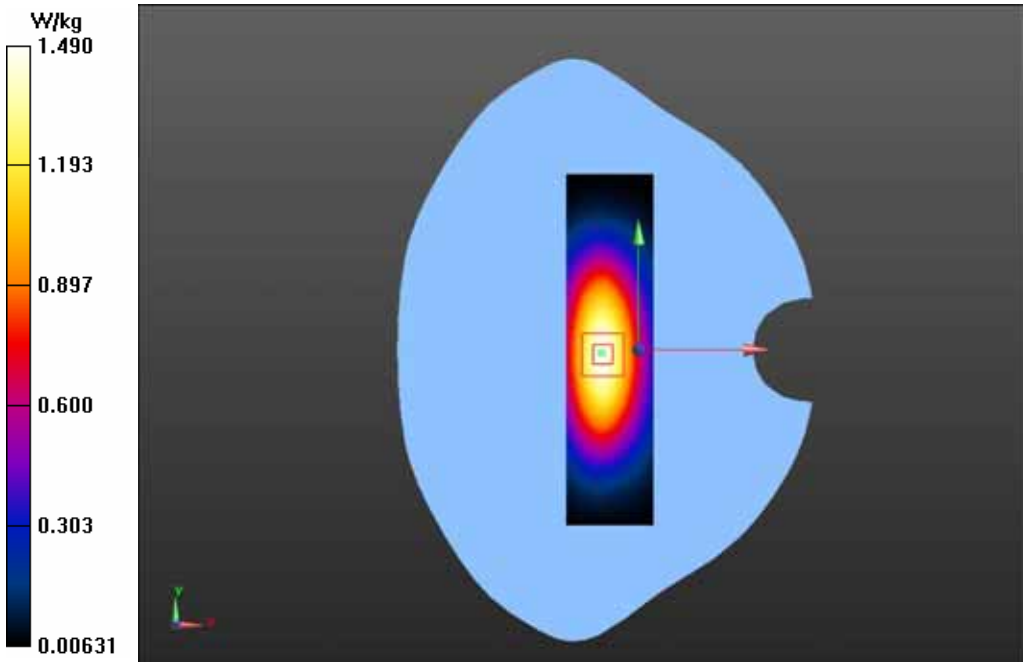
DUT: Dipole 900 MHz D900V2; Type: D900V2

Communication System: CW; Communication System Band: D900 (900.0 MHz); Frequency: 900 MHz; Communication System PAR: 0 dB
Medium parameters used: f = 900 MHz; σ = 1.002 mho/m; ε_r = 53.123; ρ = 1000 kg/m^3
Phantom section: Flat Section
Measurement Standard: DASY5 (IEEE/IEC/ANSI C63.19-2007)

DASY5 Configuration:

- Probe: ES3DV3 - SN3221; ConvF(6.17, 6.17, 6.17); Calibrated: 9/27/2012;
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn893; Calibrated: 9/27/2012
- Phantom: SAM_1 with CRP v4.0; Type: QD000P40CC; Serial: TP:1586
- Measurement SW: DASY52, Version 52.8 (2); SEMCAD X Version 14.6.6 (6824)

System 900Body/system/Area Scan (31x121x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm
Reference Value = 40.545 V/m; Power Drift = -0.15 dB
Maximum value of SAR (interpolated) = 1.49 W/kg
System 900Body/system/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 40.545 V/m; Power Drift = -0.15 dB
Peak SAR (extrapolated) = 1.987 mW/g
SAR(1 g) = 1.34 mW/g; SAR(10 g) = 0.871 mW/g
Maximum value of SAR (measured) = 1.45 W/kg



System 1900 MHz dipole（Head）

DUT: Dipole 1900 MHz D1900V2; Type: D1900V2

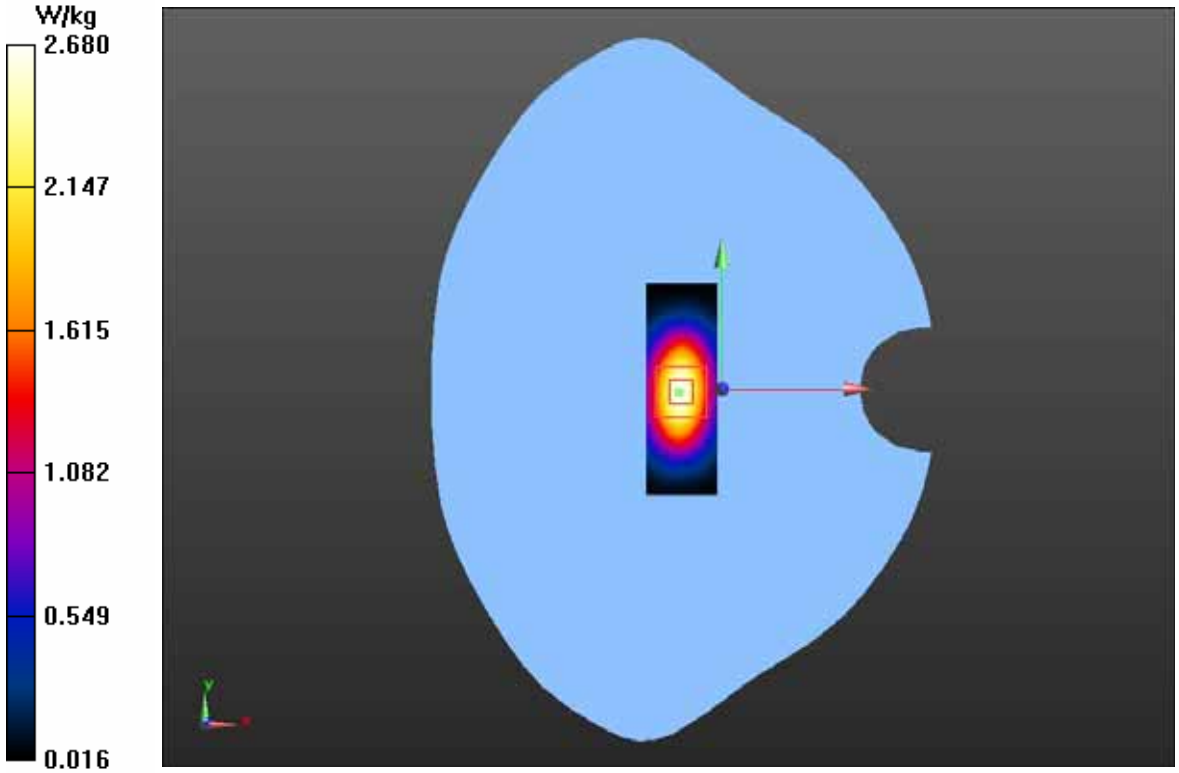
Communication System: CW; Communication System Band: D1900 (1900.0 MHz);
Frequency: 1900 MHz; Communication System PAR: 0 dB
Medium parameters used: f = 1900 MHz; σ = 1.45 mho/m; ε_r = 39.75; ρ = 1000 kg/m^3
Phantom section: Flat Section
Measurement Standard: DASY5 (IEEE/IEC/ANSI C63.19-2007)

DASY5 Configuration:

- Probe: ES3DV3 - SN3221; ConvF(5.39, 5.39, 5.39); Calibrated: 9/27/2012;
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn893; Calibrated: 9/27/2012
- Phantom: SAM_1 with CRP v4.0; Type: QD000P40CC; Serial: TP:1586
- Measurement SW: DASY52, Version 52.8 (2); SEMCAD X Version 14.6.6 (6824)

1900 head system performance check/system check/Area Scan (31x91x1): Interpolated grid: dx=1.000 mm, dy=1.000 mm
Reference Value = 43.241 V/m; Power Drift = -0.16 dB
Maximum value of SAR (interpolated) = 2.68 W/kg

1900 head system performance check/system check/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 43.241 V/m; Power Drift = -0.16 dB
Peak SAR (extrapolated) = 4.359 mW/g
SAR(1 g) = 2.35 mW/g; SAR(10 g) = 1.22 mW/g
Maximum value of SAR (measured) = 2.65 W/kg



System 1900 MHz dipole（Body）

DUT: Dipole 1900 MHz D1900V2; Type: D1900V2

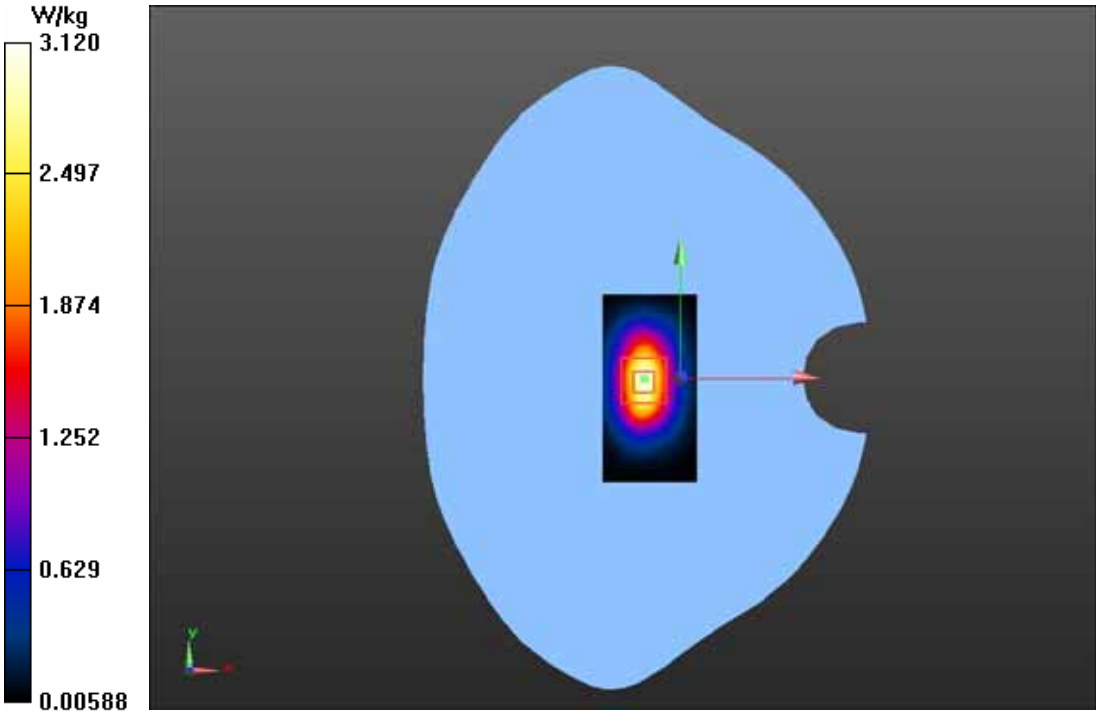
Communication System: CW; Communication System Band: D1900 (1900.0 MHz); Frequency: 1900 MHz; Communication System PAR: 0 dB
Medium parameters used: f = 1900 MHz; σ = 1.578 mho/m; ε_r = 50.718; ρ = 1000 kg/m^3
Phantom section: Flat Section
Measurement Standard: DASY5 (IEEE/IEC/ANSI C63.19-2007)

DASY5 Configuration:

- Probe: ES3DV3 - SN3221; ConvF(4.87, 4.87, 4.87); Calibrated: 9/27/2012;
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn893; Calibrated: 9/27/2012
- Phantom: SAM_2with CRP v4.0; Type: QD000P40CC; Serial: TP:1548
- Measurement SW: DASY52, Version 52.8 (2); SEMCAD X Version 14.6.6 (6824)

System 1900 Body/system (62.5mv)/Area Scan (31x61x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm
Reference Value = 44.616 V/m; Power Drift = -0.04 dB
Maximum value of SAR (interpolated) = 3.12 W/kg

System 1900 Body/system (62.5mv)/Zoom Scan (5x5x7)/Cube 0:
Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 44.616 V/m; Power Drift = -0.04 dB
Peak SAR (extrapolated) = 4.728 mW/g
SAR(1 g) = 2.63 mW/g; SAR(10 g) = 1.37 mW/g
Maximum value of SAR (measured) = 2.97 W/kg



ANNEXE 2 SAR Test Plots

GSM850 LEFT-CHEEK-HIGH

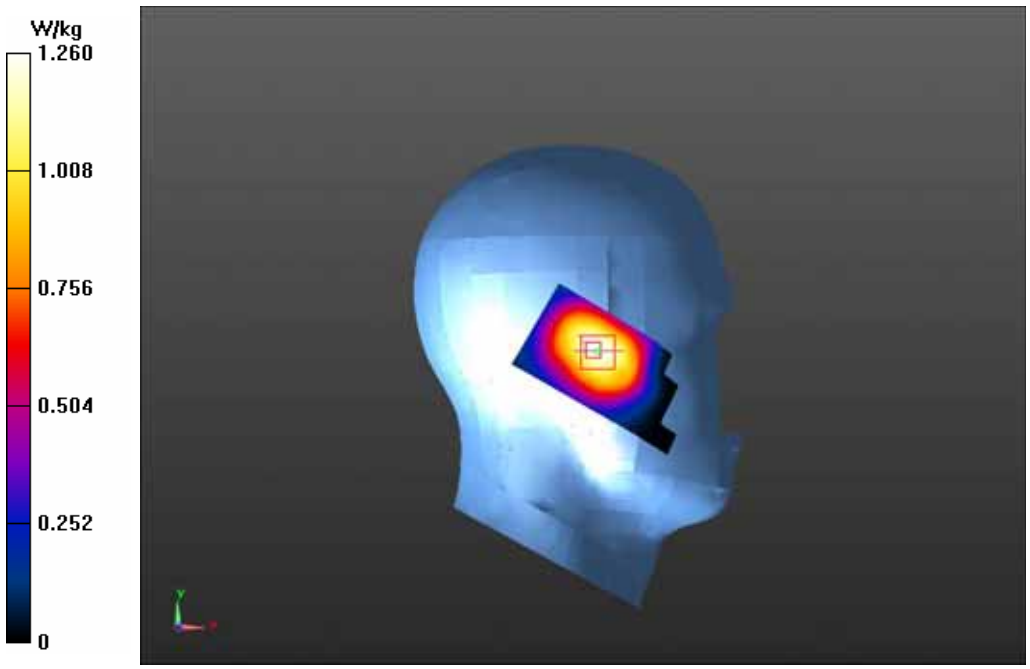
DUT: Azumi; Type: L2

Communication System: Generic GSM; Communication System Band: GSM 850 (824.0 - 849.0 MHz); Frequency: 848.8 MHz; Communication System PAR: 9.191 dB
Medium parameters used (interpolated): f = 848.8 MHz; σ = 0.872 mho/m; ε_r = 40.245; ρ = 1000 kg/m^3
Phantom section: Left Section
Measurement Standard: DASY5 (IEEE/IEC/ANSI C63.19-2007)

DASY5 Configuration:

- Probe: ES3DV3 - SN3221; ConvF(6.2, 6.2, 6.2); Calibrated: 9/27/2012;
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn893; Calibrated: 9/27/2012
- Phantom: SAM_1 with CRP v4.0; Type: QD000P40CC; Serial: TP:1586
- Measurement SW: DASY52, Version 52.8 (2); SEMCAD X Version 14.6.6 (6824)

GSM850 LEFT/CHEEK-HIGH/Area Scan (41x81x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm
Reference Value = 28.713 V/m; Power Drift = -0.06 dB
Maximum value of SAR (interpolated) = 1.26 W/kg
GSM850 LEFT/CHEEK-HIGH/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 28.713 V/m; Power Drift = -0.06 dB
Peak SAR (extrapolated) = 1.684 mW/g
SAR(1 g) = 1.2 mW/g; SAR(10 g) = 0.820 mW/g
Maximum value of SAR (measured) = 1.28 W/kg



GSM850 LEFT-CHEEK-MID

DUT: Azumi; Type: L2

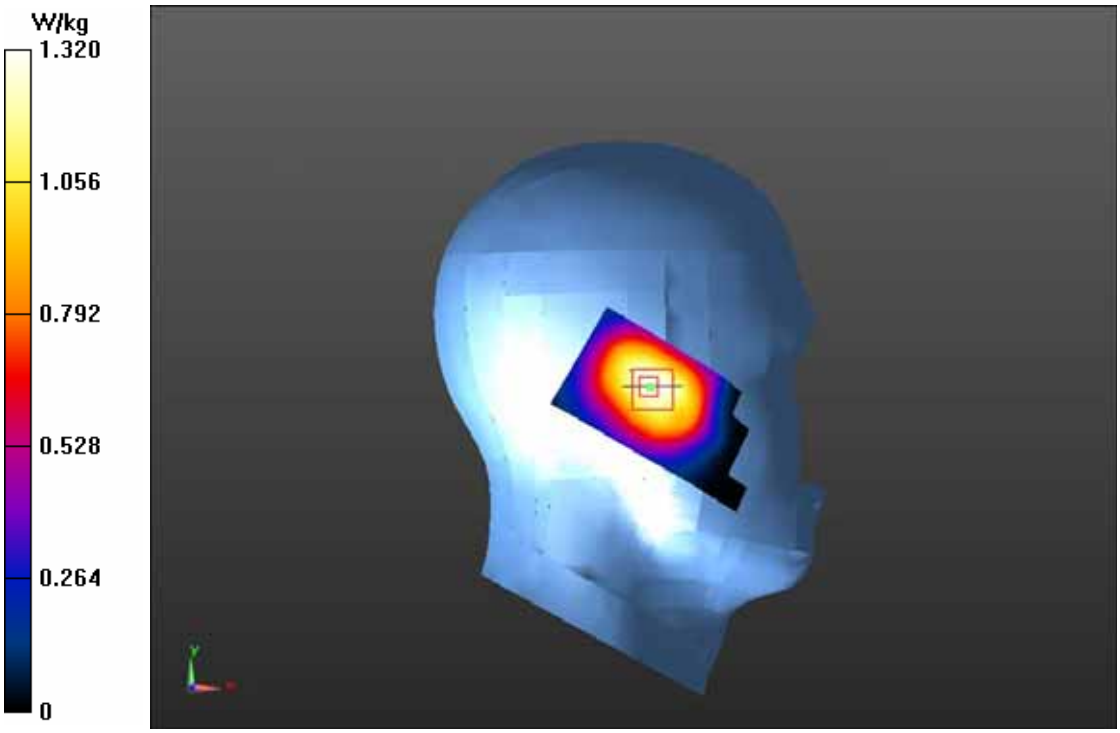
Communication System: Generic GSM; Communication System Band: GSM 850 (824.0 - 849.0 MHz); Frequency: 836.6 MHz; Communication System PAR: 9.191 dB
Medium parameters used (interpolated): f = 836.6 MHz; σ = 0.861 mho/m; ε_r = 40.411; ρ = 1000 kg/m^3
Phantom section: Left Section
Measurement Standard: DASY5 (IEEE/IEC/ANSI C63.19-2007)

DASY5 Configuration:

- Probe: ES3DV3 - SN3221; ConvF(6.2, 6.2, 6.2); Calibrated: 9/27/2012;
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn893; Calibrated: 9/27/2012
- Phantom: SAM_1 with CRP v4.0; Type: QD000P40CC; Serial: TP:1586
- Measurement SW: DASY52, Version 52.8 (2); SEMCAD X Version 14.6.6 (6824)

GSM850 LEFT/CHEEK-MID/Area Scan (41x81x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm
Reference Value = 30.039 V/m; Power Drift = -0.07 dB
Maximum value of SAR (interpolated) = 1.32 W/kg

GSM850 LEFT/CHEEK-MID/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 30.039 V/m; Power Drift = -0.07 dB
Peak SAR (extrapolated) = 1.715 mW/g
SAR(1 g) = 1.26 mW/g; SAR(10 g) = 0.863 mW/g
Maximum value of SAR (measured) = 1.35 W/kg



GSM850 LEFT-CHEEK-LOW

DUT: Azumi; Type: L2

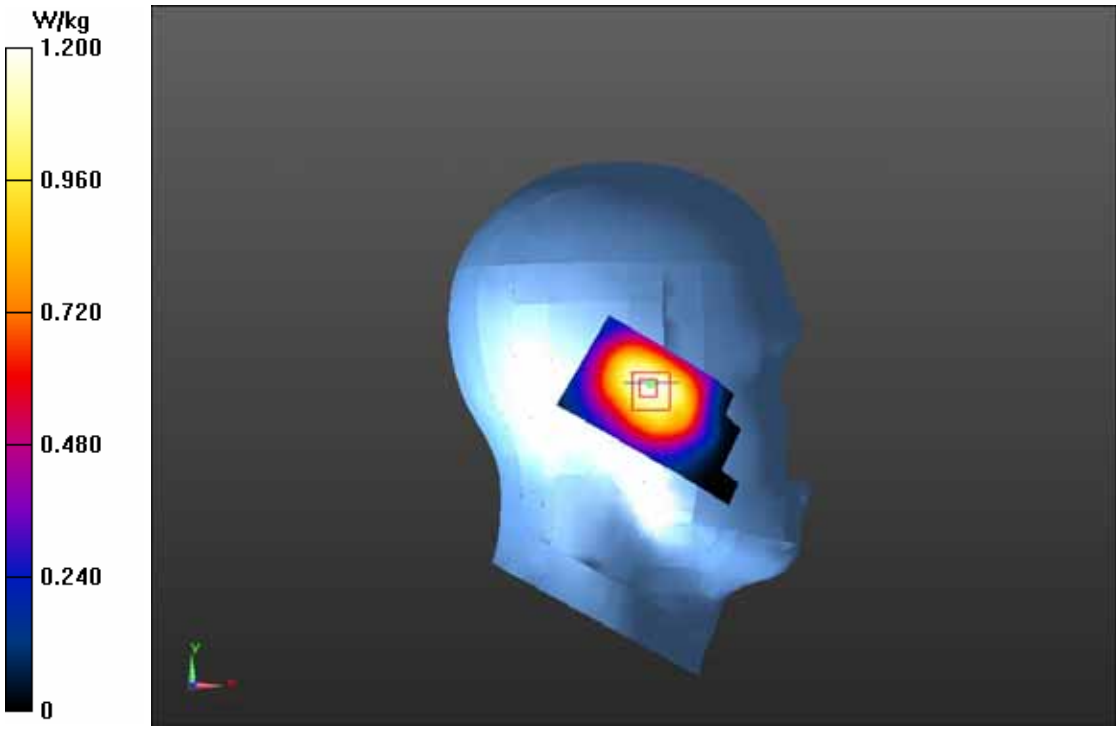
Communication System: Generic GSM; Communication System Band: GSM 850 (824.0 - 849.0 MHz); Frequency: 824.2 MHz; Communication System PAR: 9.191 dB
Medium parameters used (interpolated): f = 824.2 MHz; σ = 0.849 mho/m; ε_r = 40.573; ρ = 1000 kg/m^3
Phantom section: Left Section
Measurement Standard: DASY5 (IEEE/IEC/ANSI C63.19-2007)

DASY5 Configuration:

- Probe: ES3DV3 - SN3221; ConvF(6.2, 6.2, 6.2); Calibrated: 9/27/2012;
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn893; Calibrated: 9/27/2012
- Phantom: SAM_1 with CRP v4.0; Type: QD000P40CC; Serial: TP:1586
- Measurement SW: DASY52, Version 52.8 (2); SEMCAD X Version 14.6.6 (6824)

GSM850 LEFT/CHEEK-LOW/Area Scan (41x81x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm
Reference Value = 29.043 V/m; Power Drift = -0.08 dB
Maximum value of SAR (interpolated) = 1.20 W/kg

GSM850 LEFT/CHEEK-LOW/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 29.043 V/m; Power Drift = -0.08 dB
Peak SAR (extrapolated) = 1.585 mW/g
SAR(1 g) = 1.14 mW/g; SAR(10 g) = 0.785 mW/g
Maximum value of SAR (measured) = 1.22 W/kg



GSM850 LEFT-TILT-MID

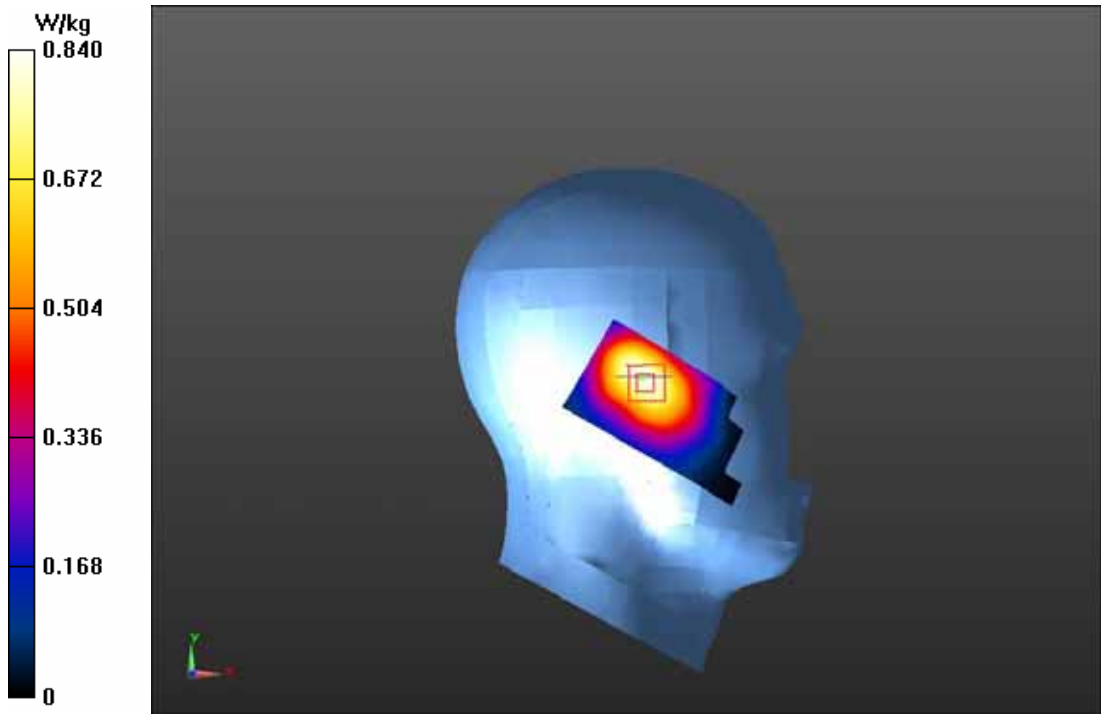
DUT: Azumi; Type: L2

Communication System: Generic GSM; Communication System Band: GSM 850 (824.0 - 849.0 MHz); Frequency: 836.6 MHz; Communication System PAR: 9.191 dB
Medium parameters used (interpolated): f = 836.6 MHz; σ = 0.861 mho/m; ε_r = 40.411; ρ = 1000 kg/m^3
Phantom section: Left Section
Measurement Standard: DASY5 (IEEE/IEC/ANSI C63.19-2007)

DASY5 Configuration:

- Probe: ES3DV3 - SN3221; ConvF(6.2, 6.2, 6.2); Calibrated: 9/27/2012;
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn893; Calibrated: 9/27/2012
- Phantom: SAM_1 with CRP v4.0; Type: QD000P40CC; Serial: TP:1586
- Measurement SW: DASY52, Version 52.8 (2); SEMCAD X Version 14.6.6 (6824)

GSM850 LEFT/TILT-MID/Area Scan (41x81x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm
Reference Value = 26.730 V/m; Power Drift = -0.06 dB
Maximum value of SAR (interpolated) = 0.840 W/kg
GSM850 LEFT/TILT-MID/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 26.730 V/m; Power Drift = -0.06 dB
Peak SAR (extrapolated) = 1.104 mW/g
SAR(1 g) = 0.786 mW/g; SAR(10 g) = 0.533 mW/g
Maximum value of SAR (measured) = 0.838 W/kg



GSM850 RIGHT-CHEEK-HIGH

DUT: Azumi; Type: L2

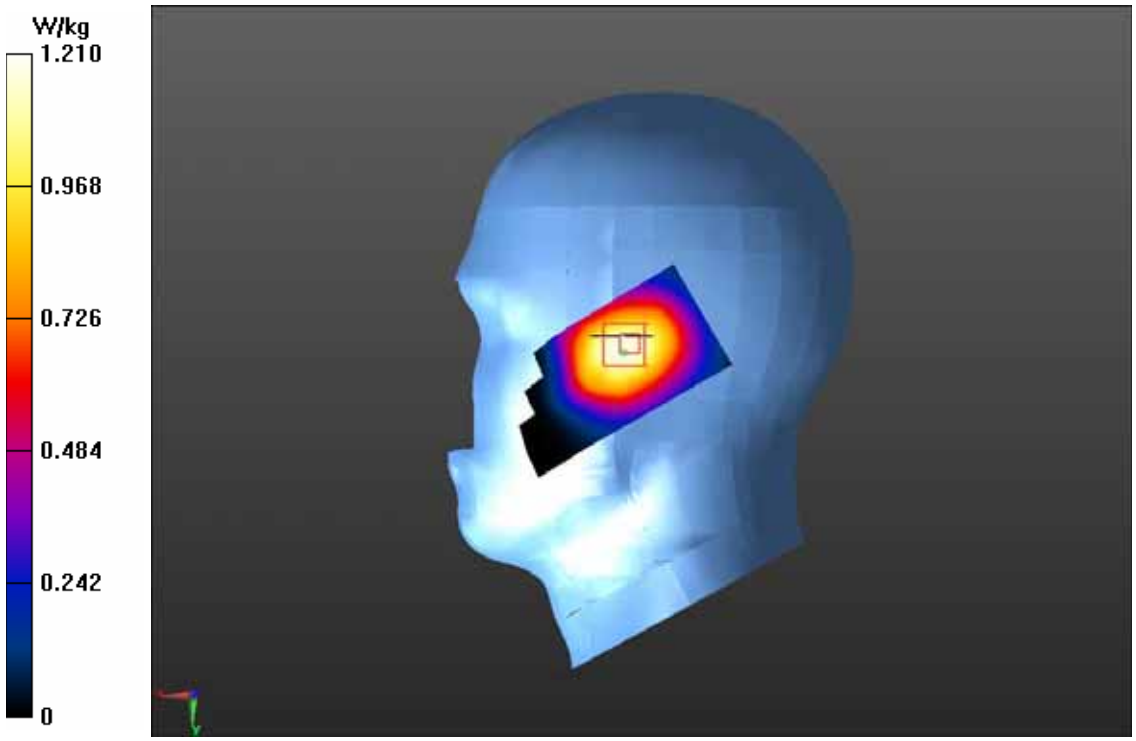
Communication System: Generic GSM; Communication System Band: GSM 850 (824.0 - 849.0 MHz); Frequency: 848.8 MHz; Communication System PAR: 9.191 dB
Medium parameters used (interpolated): f = 848.8 MHz; σ = 0.872 mho/m; ε_r = 40.245; ρ = 1000 kg/m^3
Phantom section: Right Section
Measurement Standard: DASY5 (IEEE/IEC/ANSI C63.19-2007)

DASY5 Configuration:

- Probe: ES3DV3 - SN3221; ConvF(6.2, 6.2, 6.2); Calibrated: 9/27/2012;
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn893; Calibrated: 9/27/2012
- Phantom: SAM_1 with CRP v4.0; Type: QD000P40CC; Serial: TP:1586
- Measurement SW: DASY52, Version 52.8 (2); SEMCAD X Version 14.6.6 (6824)

GSM850 RIGHT/CHEEK-HIGH/Area Scan (41x81x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm
Reference Value = 28.680 V/m; Power Drift = -0.17 dB
Maximum value of SAR (interpolated) = 1.21 W/kg

GSM850 RIGHT/CHEEK-HIGH/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 28.680 V/m; Power Drift = -0.17 dB
Peak SAR (extrapolated) = 1.537 mW/g
SAR(1 g) = 1.14 mW/g; SAR(10 g) = 0.785 mW/g
Maximum value of SAR (measured) = 1.19 W/kg



GSM850 RIGHT-CHEEK-MID

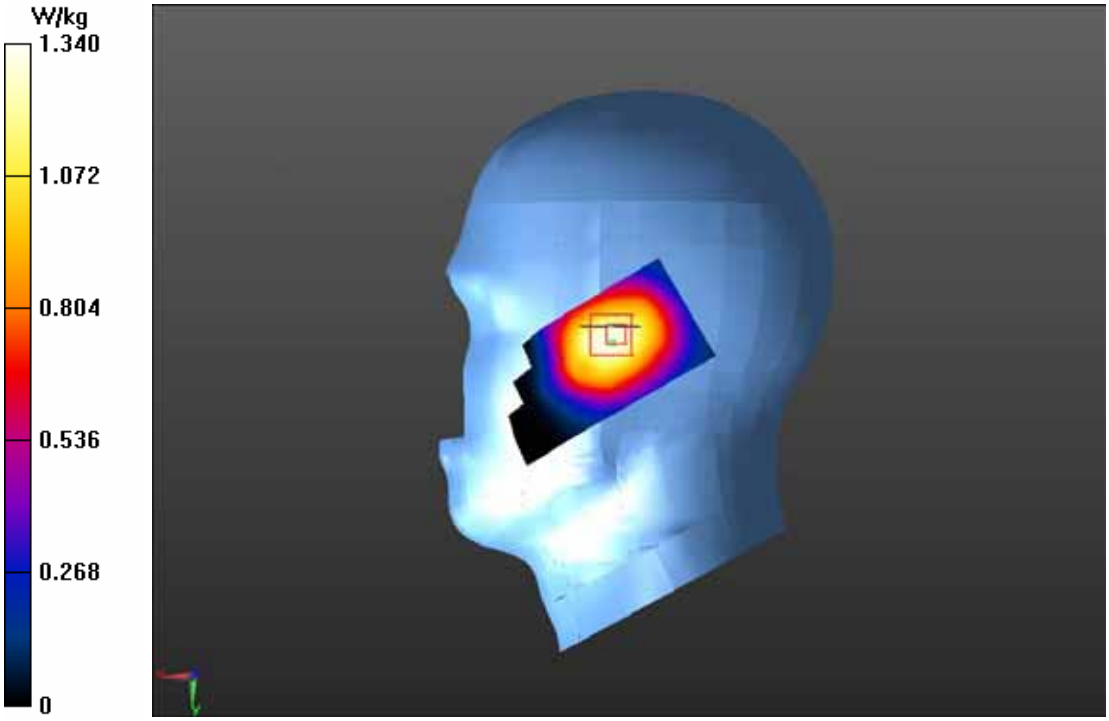
DUT: Azumi; Type: L2

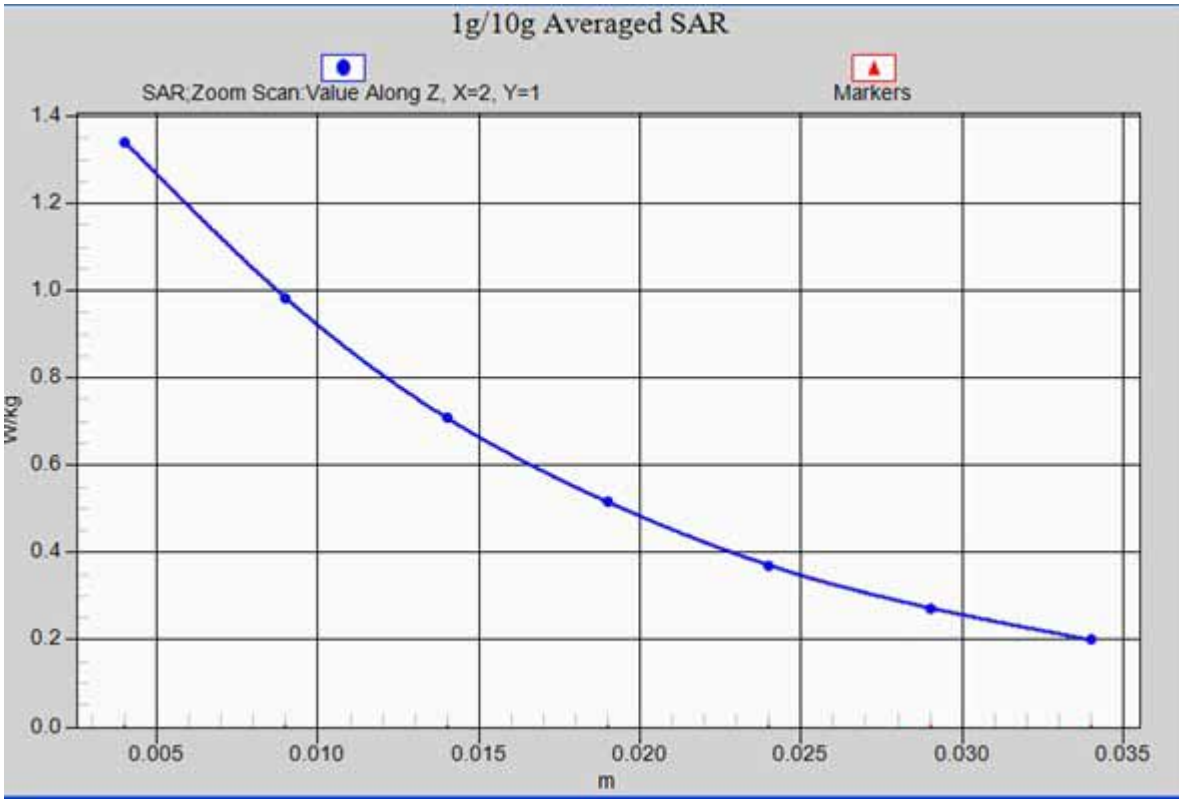
Communication System: Generic GSM; Communication System Band: GSM 850 (824.0 - 849.0 MHz); Frequency: 836.6 MHz; Communication System PAR: 9.191 dB
Medium parameters used (interpolated): f = 836.6 MHz; σ = 0.861 mho/m; ε_r = 40.411; ρ = 1000 kg/m^3
Phantom section: Right Section
Measurement Standard: DASY5 (IEEE/IEC/ANSI C63.19-2007)

DASY5 Configuration:

- Probe: ES3DV3 - SN3221; ConvF(6.2, 6.2, 6.2); Calibrated: 9/27/2012;
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn893; Calibrated: 9/27/2012
- Phantom: SAM_1 with CRP v4.0; Type: QD000P40CC; Serial: TP:1586
- Measurement SW: DASY52, Version 52.8 (2); SEMCAD X Version 14.6.6 (6824)

GSM850 RIGHT/CHEEK-MID/Area Scan (41x81x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm
Reference Value = 30.691 V/m; Power Drift = 0.04 dB
Maximum value of SAR (interpolated) = 1.34 W/kg
GSM850 RIGHT/CHEEK-MID/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 30.691 V/m; Power Drift = 0.04 dB
Peak SAR (extrapolated) = 1.704 mW/g
SAR(1 g) = 1.27 mW/g; SAR(10 g) = 0.884 mW/g
Maximum value of SAR (measured) = 1.34 W/kg





GSM850 RIGHT-CHEEK-MID_ z-axis scan

GSM850 RIGHT-CHEEK-LOW

DUT: Azumi; Type: L2

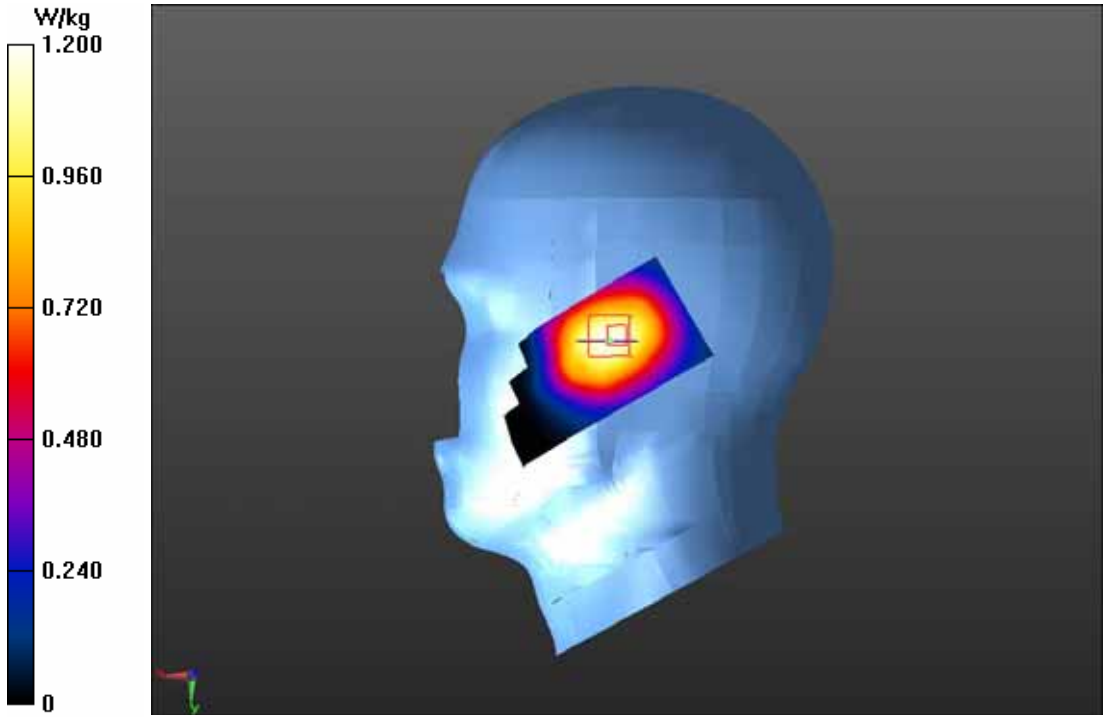
Communication System: Generic GSM; Communication System Band: GSM 850 (824.0 - 849.0 MHz); Frequency: 824.2 MHz; Communication System PAR: 9.191 dB
Medium parameters used (interpolated): f = 824.2 MHz; σ = 0.849 mho/m; ε_r = 40.573; ρ = 1000 kg/m^3
Phantom section: Right Section
Measurement Standard: DASY5 (IEEE/IEC/ANSI C63.19-2007)

DASY5 Configuration:

- Probe: ES3DV3 - SN3221; ConvF(6.2, 6.2, 6.2); Calibrated: 9/27/2012;
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn893; Calibrated: 9/27/2012
- Phantom: SAM_1 with CRP v4.0; Type: QD000P40CC; Serial: TP:1586
- Measurement SW: DASY52, Version 52.8 (2); SEMCAD X Version 14.6.6 (6824)

GSM850 RIGHT/CHEEK-LOW/Area Scan (41x81x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm
Reference Value = 29.940 V/m; Power Drift = -0.06 dB
Maximum value of SAR (interpolated) = 1.20 W/kg

GSM850 RIGHT/CHEEK-LOW/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 29.940 V/m; Power Drift = -0.06 dB
Peak SAR (extrapolated) = 1.524 mW/g
SAR(1 g) = 1.12 mW/g; SAR(10 g) = 0.778 mW/g
Maximum value of SAR (measured) = 1.17 W/kg



GSM850 RIGHT-TILT-MID

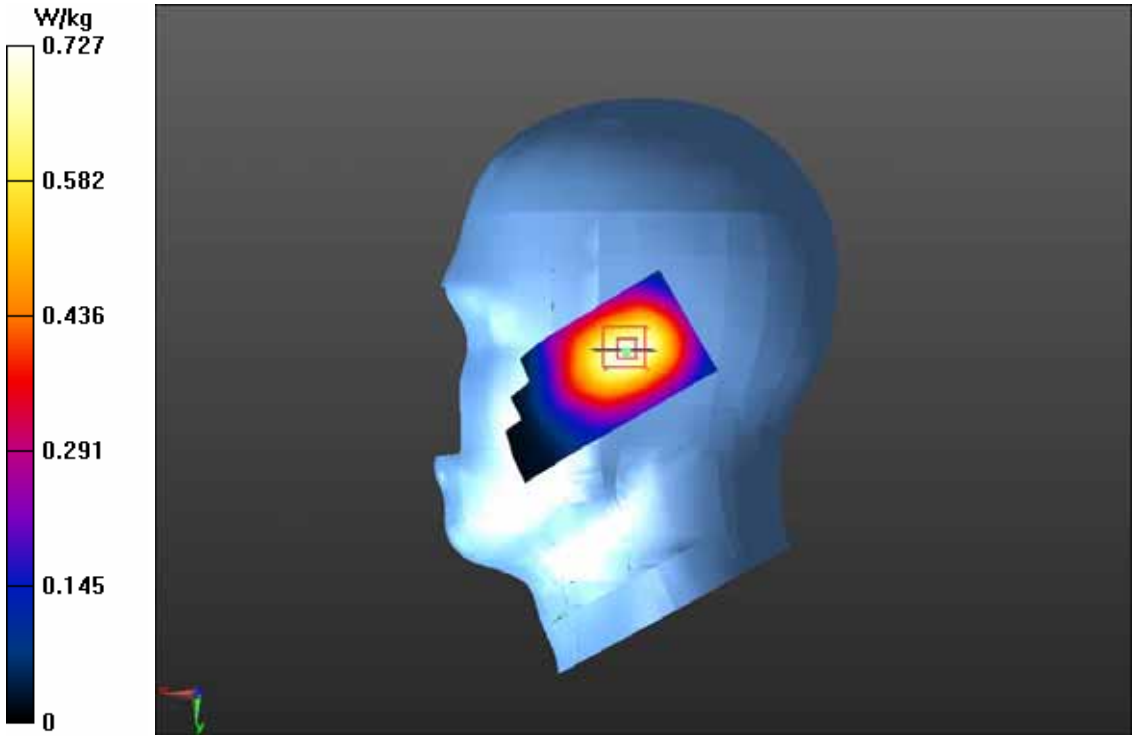
DUT: Azumi; Type: L2

Communication System: Generic GSM; Communication System Band: GSM 850 (824.0 - 849.0 MHz); Frequency: 836.6 MHz; Communication System PAR: 9.191 dB
Medium parameters used (interpolated): f = 836.6 MHz; σ = 0.861 mho/m; ε_r = 40.411; ρ = 1000 kg/m^3
Phantom section: Right Section
Measurement Standard: DASY5 (IEEE/IEC/ANSI C63.19-2007)

DASY5 Configuration:

- Probe: ES3DV3 - SN3221; ConvF(6.2, 6.2, 6.2); Calibrated: 9/27/2012;
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn893; Calibrated: 9/27/2012
- Phantom: SAM_1 with CRP v4.0; Type: QD000P40CC; Serial: TP:1586
- Measurement SW: DASY52, Version 52.8 (2); SEMCAD X Version 14.6.6 (6824)

GSM850 RIGHT/TILT-MID/Area Scan (41x81x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm
Reference Value = 26.029 V/m; Power Drift = -0.02 dB
Maximum value of SAR (interpolated) = 0.727 W/kg
GSM850 RIGHT/TILT-MID/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 26.029 V/m; Power Drift = -0.02 dB
Peak SAR (extrapolated) = 0.939 mW/g
SAR(1 g) = 0.692 mW/g; SAR(10 g) = 0.478 mW/g
Maximum value of SAR (measured) = 0.738 W/kg



PCS1900 LEFT-CHEEK-HIGH

DUT: Azumi; Type: L2

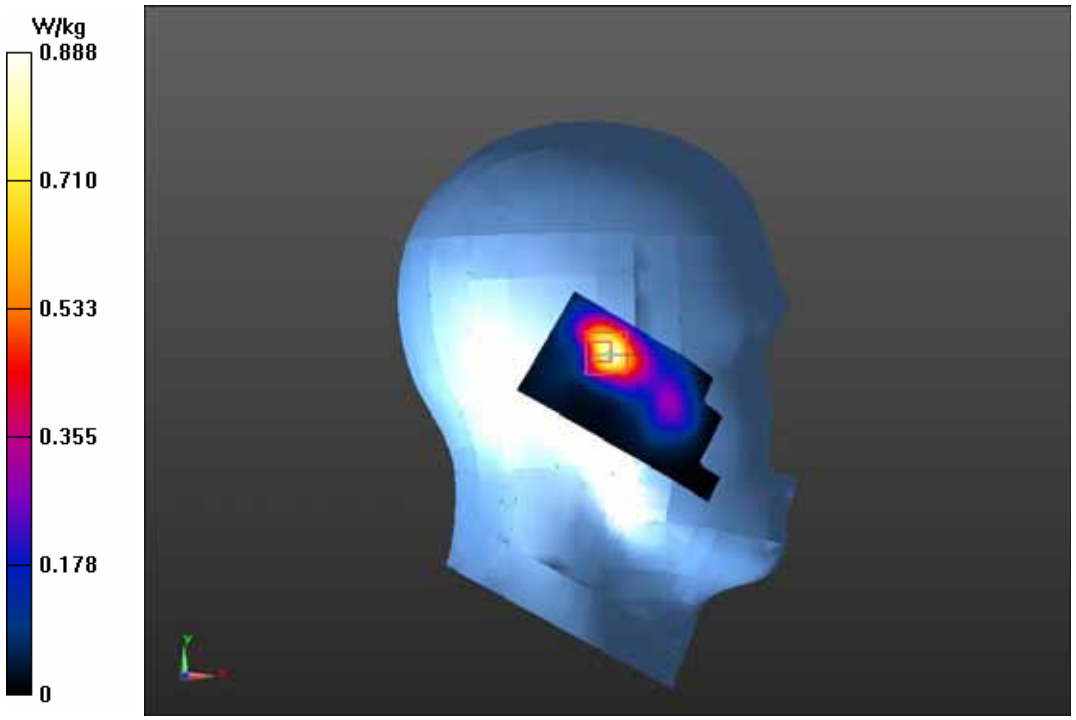
Communication System: Generic GSM; Communication System Band: PCS 1900 (1850.0 - 1910.0 MHz); Frequency: 1909.8 MHz; Communication System PAR: 9.191 dB. Medium parameters used: f = 1909.8 MHz; σ = 1.48 mho/m; ε_r = 39.6; ρ = 1000 kg/m^3
Phantom section: Left Section
Measurement Standard: DASY5 (IEEE/IEC/ANSI C63.19-2007)

DASY5 Configuration:

- Probe: ES3DV3 - SN3221; ConvF(5.39, 5.39, 5.39); Calibrated: 9/27/2012;
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn893; Calibrated: 9/27/2012
- Phantom: SAM_2with CRP v4.0; Type: QD000P40CC; Serial: TP:1548
- Measurement SW: DASY52, Version 52.8 (2); SEMCAD X Version 14.6.6 (6824)

PCS1900 LEFT/CHEEK-HIGH/Area Scan (41x81x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm
Reference Value = 9.506 V/m; Power Drift = 0.08 dB
Maximum value of SAR (interpolated) = 0.888 W/kg

PCS1900 LEFT/CHEEK-HIGH/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 9.506 V/m; Power Drift = 0.08 dB
Peak SAR (extrapolated) = 1.471 mW/g
SAR(1 g) = 0.776 mW/g; SAR(10 g) = 0.387 mW/g
Maximum value of SAR (measured) = 0.815 W/kg



PCS1900 LEFT-CHEEK-MID

DUT: Azumi; Type: L2

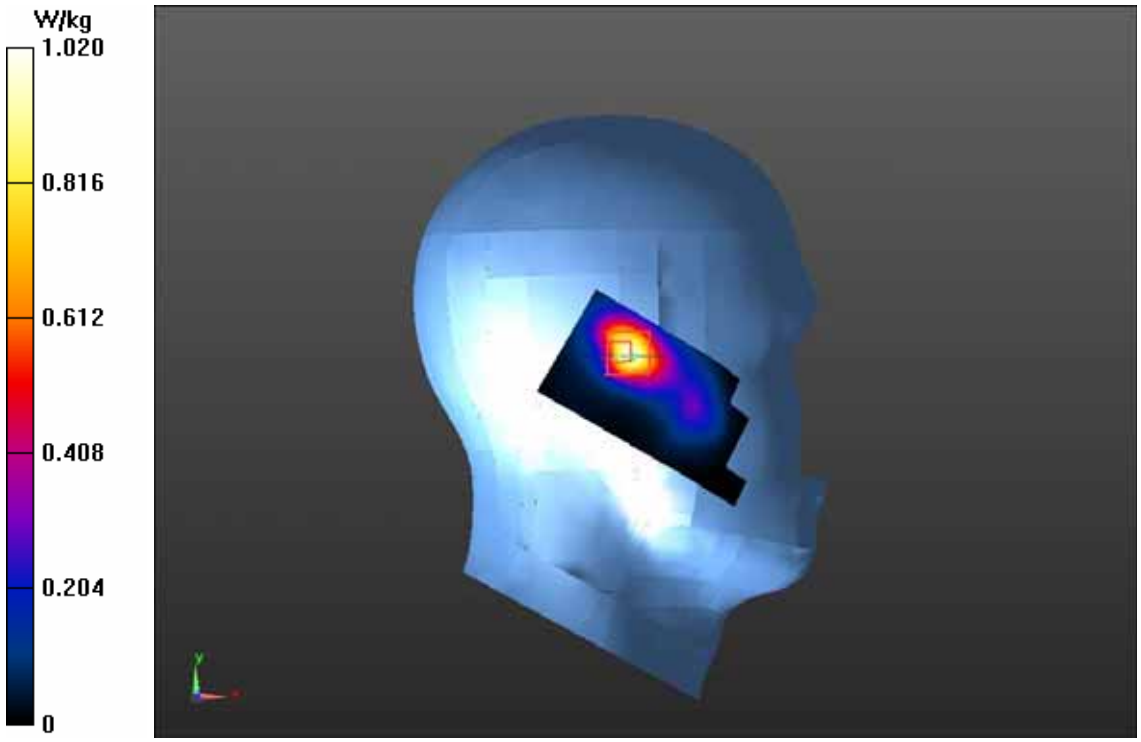
Communication System: Generic GSM; Communication System Band: PCS 1900 (1850.0 - 1910.0 MHz); Frequency: 1880 MHz; Communication System PAR: 9.191 dB. Medium parameters used: f = 1880 MHz; σ = 1.45 mho/m; ε_r = 39.74; ρ = 1000 kg/m^3
Phantom section: Left Section
Measurement Standard: DASY5 (IEEE/IEC/ANSI C63.19-2007)

DASY5 Configuration:

- Probe: ES3DV3 - SN3221; ConvF(5.39, 5.39, 5.39); Calibrated: 9/27/2012;
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn893; Calibrated: 9/27/2012
- Phantom: SAM_2with CRP v4.0; Type: QD000P40CC; Serial: TP:1548
- Measurement SW: DASY52, Version 52.8 (2); SEMCAD X Version 14.6.6 (6824)

PCS1900 LEFT/CHEEK-MID/Area Scan (41x81x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm
Reference Value = 13.727 V/m; Power Drift = -0.16 dB
Maximum value of SAR (interpolated) = 1.02 W/kg

PCS1900 LEFT/CHEEK-MID/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 13.727 V/m; Power Drift = -0.16 dB
Peak SAR (extrapolated) = 1.721 mW/g
SAR(1 g) = 0.891 mW/g; SAR(10 g) = 0.436 mW/g
Maximum value of SAR (measured) = 0.924 W/kg



PCS1900 LEFT-CHEEK-LOW

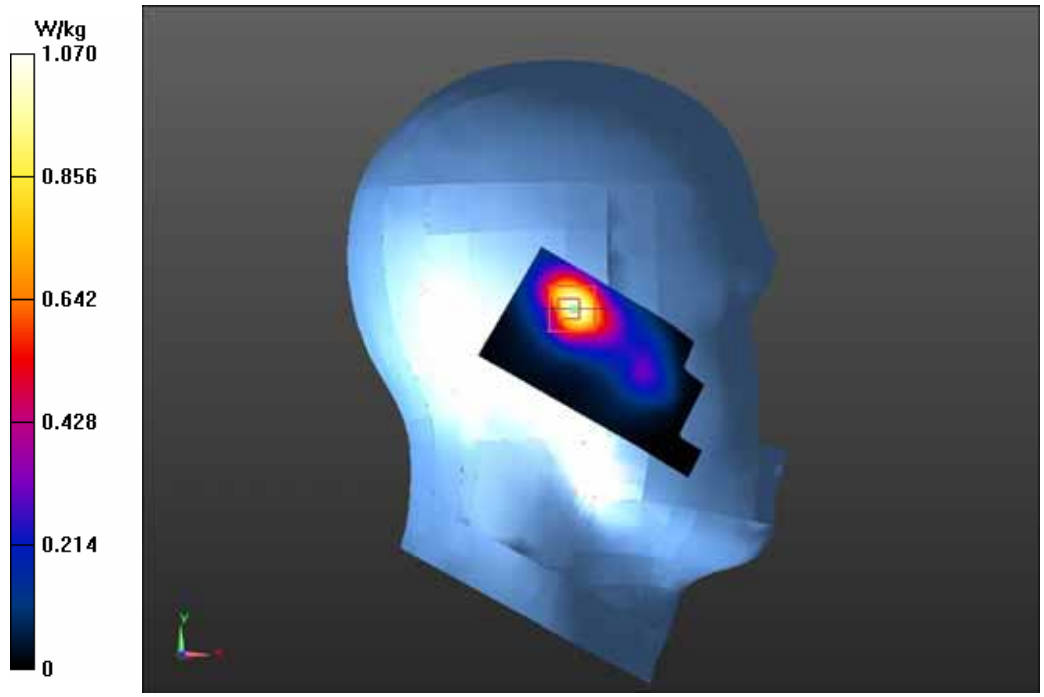
DUT: Azumi; Type: L2

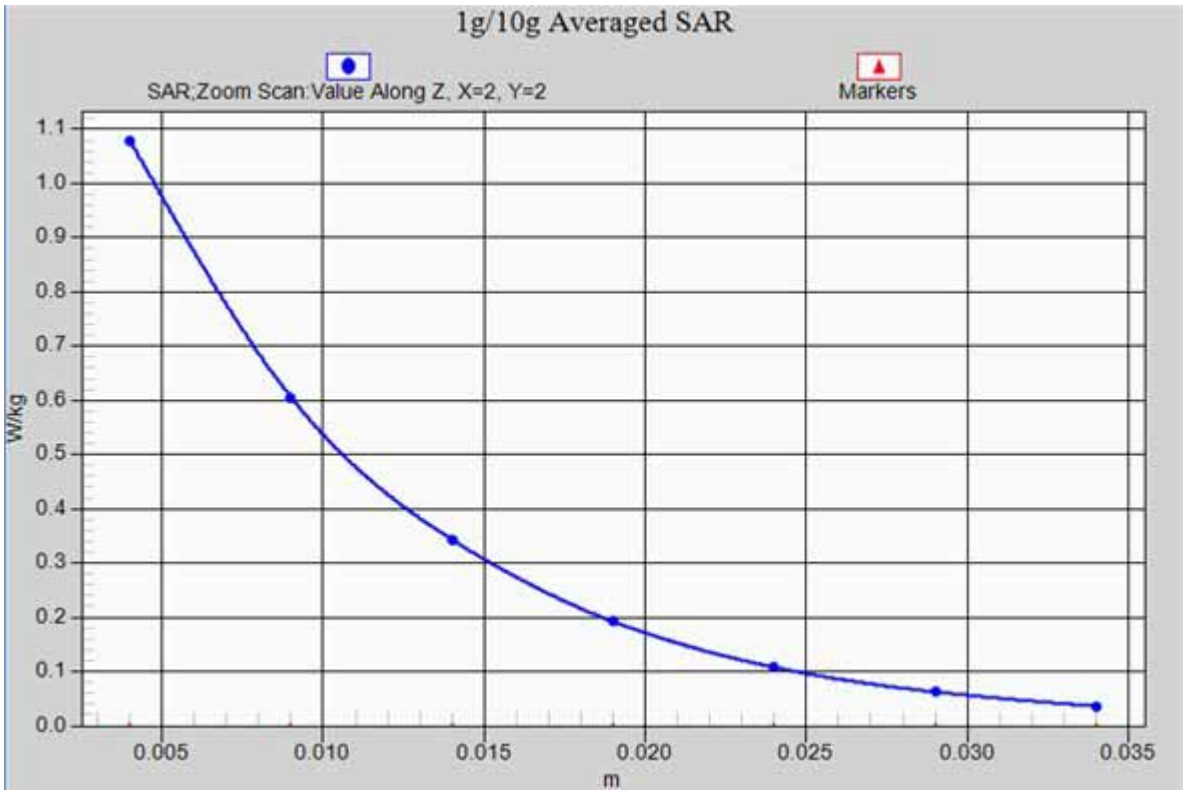
Communication System: Generic GSM; Communication System Band: PCS 1900 (1850.0 - 1910.0 MHz); Frequency: 1850.2 MHz; Communication System PAR: 9.191 dB. Medium parameters used: f = 1850.2 MHz; σ = 1.42 mho/m; ε_r = 39.87; ρ = 1000 kg/m^3
Phantom section: Left Section
Measurement Standard: DASY5 (IEEE/IEC/ANSI C63.19-2007)

DASY5 Configuration:

- Probe: ES3DV3 - SN3221; ConvF(5.39, 5.39, 5.39); Calibrated: 9/27/2012;
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn893; Calibrated: 9/27/2012
- Phantom: SAM_2with CRP v4.0; Type: QD000P40CC; Serial: TP:1548
- Measurement SW: DASY52, Version 52.8 (2); SEMCAD X Version 14.6.6 (6824)

PCS1900 LEFT/CHEEK-LOW/Area Scan (41x81x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm
Reference Value = 13.449 V/m; Power Drift = 0.14 dB
Maximum value of SAR (interpolated) = 1.07 W/kg
PCS1900 LEFT/CHEEK-LOW/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 13.449 V/m; Power Drift = 0.14 dB
Peak SAR (extrapolated) = 1.961 mW/g
SAR(1 g) = 0.990 mW/g; SAR(10 g) = 0.479 mW/g
Maximum value of SAR (measured) = 1.08 W/kg





PCS1900 LEFT-CHEEK-LOW _z-axis scan

PCS1900 LEFT-TILT-MID

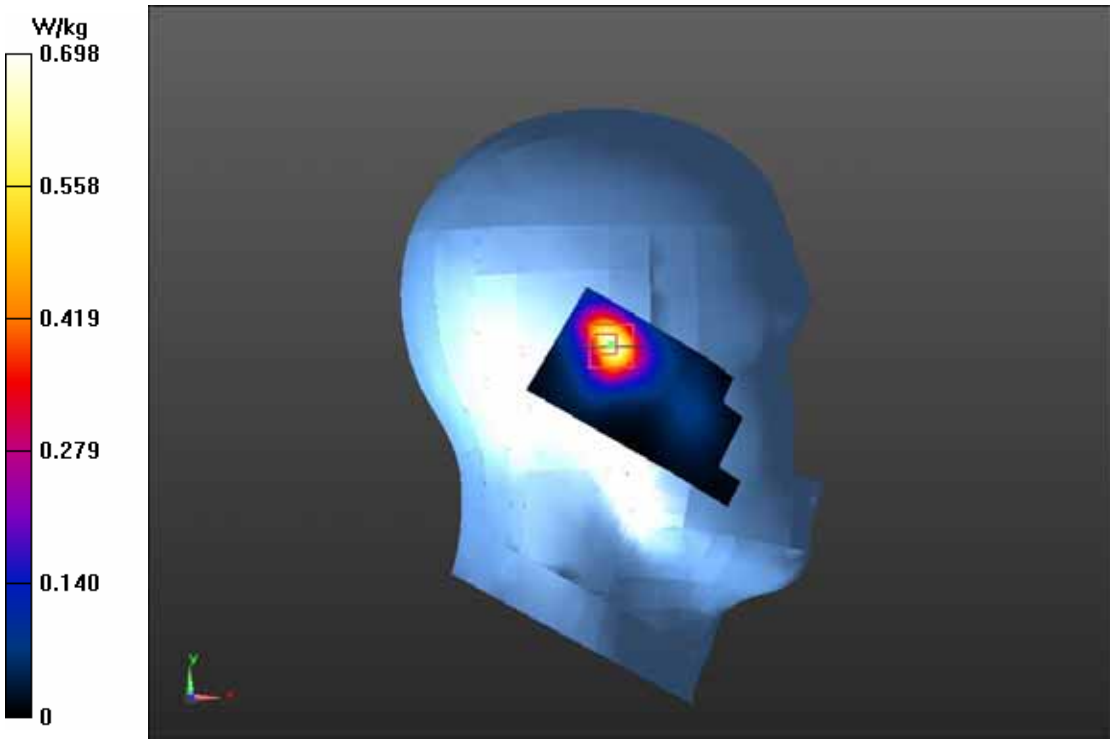
DUT: Azumi; Type: L2

Communication System: Generic GSM; Communication System Band: PCS 1900 (1850.0 - 1910.0 MHz); Frequency: 1880 MHz; Communication System PAR: 9.191 dB. Medium parameters used: f = 1880 MHz; σ = 1.45 mho/m; ε_r = 39.74; ρ = 1000 kg/m^3
Phantom section: Left Section
Measurement Standard: DASY5 (IEEE/IEC/ANSI C63.19-2007)

DASY5 Configuration:

- Probe: ES3DV3 - SN3221; ConvF(5.39, 5.39, 5.39); Calibrated: 9/27/2012;
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn893; Calibrated: 9/27/2012
- Phantom: SAM_2with CRP v4.0; Type: QD000P40CC; Serial: TP:1548
- Measurement SW: DASY52, Version 52.8 (2); SEMCAD X Version 14.6.6 (6824)

PCS1900 LEFT/TILT-MID/Area Scan (41x81x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm
Reference Value = 12.656 V/m; Power Drift = 0.06 dB
Maximum value of SAR (interpolated) = 0.698 W/kg
PCS1900 LEFT/TILT-MID/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 12.656 V/m; Power Drift = 0.06 dB
Peak SAR (extrapolated) = 1.221 mW/g
SAR(1 g) = 0.633 mW/g; SAR(10 g) = 0.309 mW/g
Maximum value of SAR (measured) = 0.697 W/kg



PCS1900 RIGHT-CHEEK-MID

DUT: Azumi; Type: L2

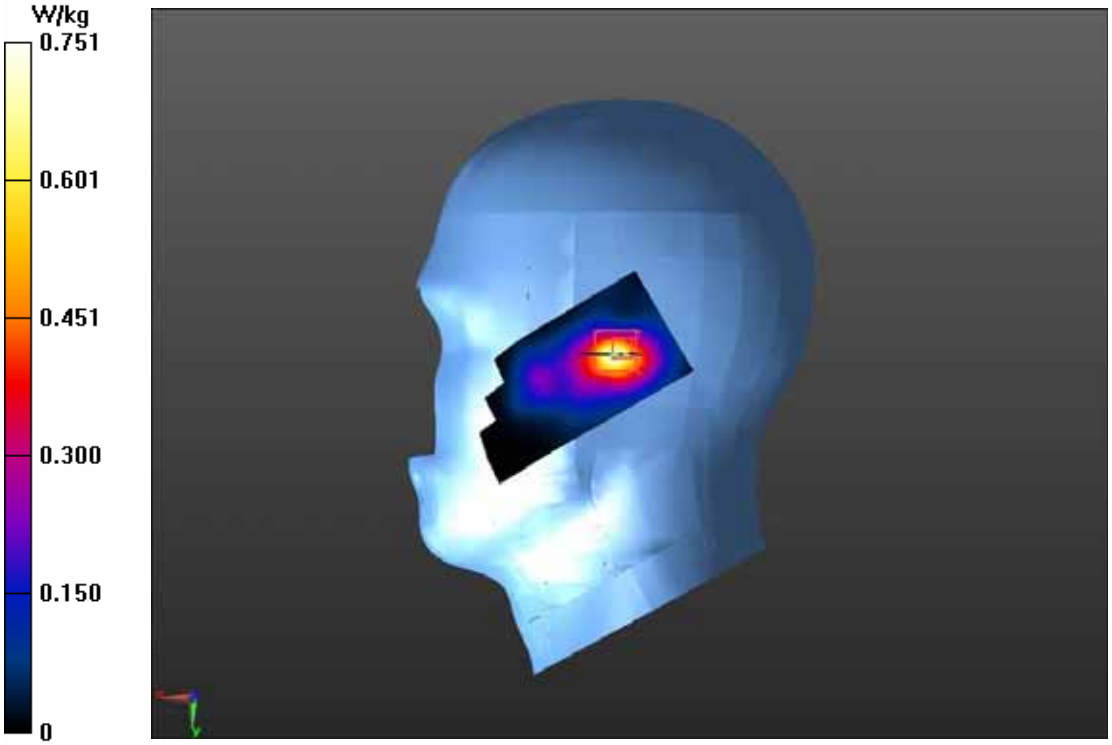
Communication System: Generic GSM; Communication System Band: PCS 1900 (1850.0 - 1910.0 MHz); Frequency: 1880 MHz; Communication System PAR: 9.191 dB. Medium parameters used: f = 1880 MHz; σ = 1.45 mho/m; ε_r = 39.74; ρ = 1000 kg/m^3
Phantom section: Right Section
Measurement Standard: DASY5 (IEEE/IEC/ANSI C63.19-2007)

DASY5 Configuration:

- Probe: ES3DV3 - SN3221; ConvF(5.39, 5.39, 5.39); Calibrated: 9/27/2012;
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn893; Calibrated: 9/27/2012
- Phantom: SAM_2with CRP v4.0; Type: QD000P40CC; Serial: TP:1548
- Measurement SW: DASY52, Version 52.8 (2); SEMCAD X Version 14.6.6 (6824)

PCS1900 RIGHT/CHEEK-MID/Area Scan (41x81x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm
Reference Value = 15.477 V/m; Power Drift = 0.17 dB
Maximum value of SAR (interpolated) = 0.751 W/kg

PCS1900 RIGHT/CHEEK-MID/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 15.477 V/m; Power Drift = 0.17 dB
Peak SAR (extrapolated) = 1.188 mW/g
SAR(1 g) = 0.646 mW/g; SAR(10 g) = 0.330 mW/g
Maximum value of SAR (measured) = 0.657 W/kg



PCS1900 RIGHT-TILT-MID

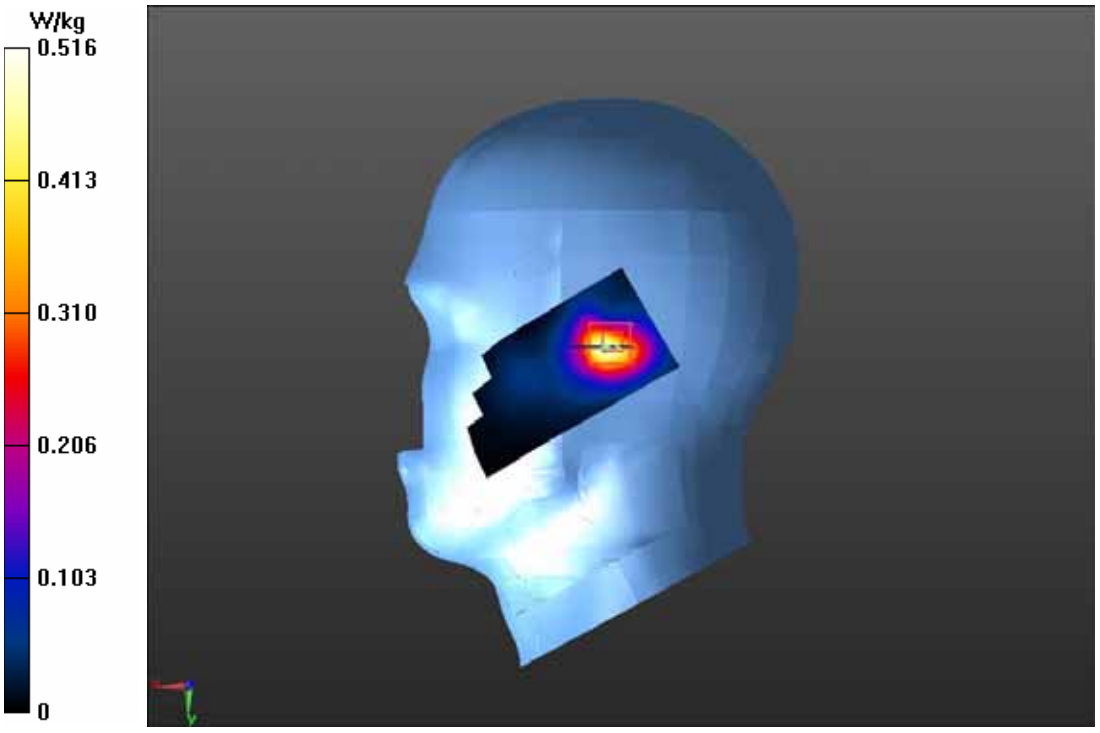
DUT: Azumi; Type: L2

Communication System: Generic GSM; Communication System Band: PCS 1900 (1850.0 - 1910.0 MHz); Frequency: 1880 MHz; Communication System PAR: 9.191 dB. Medium parameters used: f = 1880 MHz; σ = 1.45 mho/m; ε_r = 39.74; ρ = 1000 kg/m^3
Phantom section: Right Section
Measurement Standard: DASY5 (IEEE/IEC/ANSI C63.19-2007)

DASY5 Configuration:

- Probe: ES3DV3 - SN3221; ConvF(5.39, 5.39, 5.39); Calibrated: 9/27/2012;
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn893; Calibrated: 9/27/2012
- Phantom: SAM_2with CRP v4.0; Type: QD000P40CC; Serial: TP:1548
- Measurement SW: DASY52, Version 52.8 (2); SEMCAD X Version 14.6.6 (6824)

PCS1900 RIGHT/TILT-MID/Area Scan (41x81x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm
Reference Value = 15.044 V/m; Power Drift = -0.05 dB
Maximum value of SAR (interpolated) = 0.516 W/kg
PCS1900 RIGHT/TILT-MID/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 15.044 V/m; Power Drift = -0.05 dB
Peak SAR (extrapolated) = 0.850 mW/g
SAR(1 g) = 0.463 mW/g; SAR(10 g) = 0.234 mW/g
Maximum value of SAR (measured) = 0.476 W/kg



GPRS 850-Towards to phantom-MID

DUT: Azumi; Type: L2

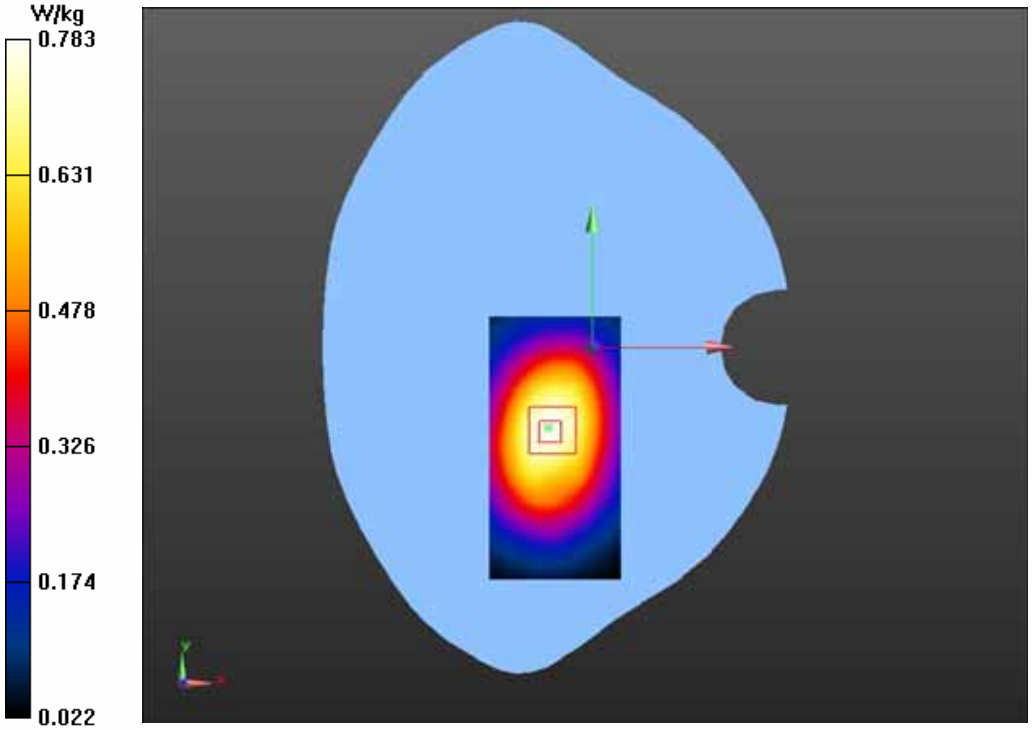
Communication System: GPRS(4slots); Communication System Band: GSM850; Frequency: 836.6 MHz; Communication System PAR: 3.181 dB
Medium parameters used (interpolated): f = 836.6 MHz; σ = 0.939 mho/m; ε_r = 53.719; ρ = 1000 kg/m^3
Phantom section: Flat Section
Measurement Standard: DASY5 (IEEE/IEC/ANSI C63.19-2007)

DASY5 Configuration:

- Probe: ES3DV3 - SN3221; ConvF(6.23, 6.23, 6.23); Calibrated: 9/27/2012;
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn893; Calibrated: 9/27/2012
- Phantom: SAM_1 with CRP v4.0; Type: QD000P40CC; Serial: TP:1586
- Measurement SW: DASY52, Version 52.8 (2); SEMCAD X Version 14.6.6 (6824)

GPRS 850/Towards to phantom-MID /Area Scan (41x81x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm
Reference Value = 19.696 V/m; Power Drift = -0.17 dB
Maximum value of SAR (interpolated) = 0.783 W/kg

GPRS 850/Towards to phantom-MID /Zoom Scan (5x5x7)/Cube 0:
Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 19.696 V/m; Power Drift = -0.17 dB
Peak SAR (extrapolated) = 0.974 mW/g
SAR(1 g) = 0.740 mW/g; SAR(10 g) = 0.529 mW/g
Maximum value of SAR (measured) = 0.789 W/kg



GPRS 850-Towards to ground-HIGH

DUT: Azumi; Type: L2

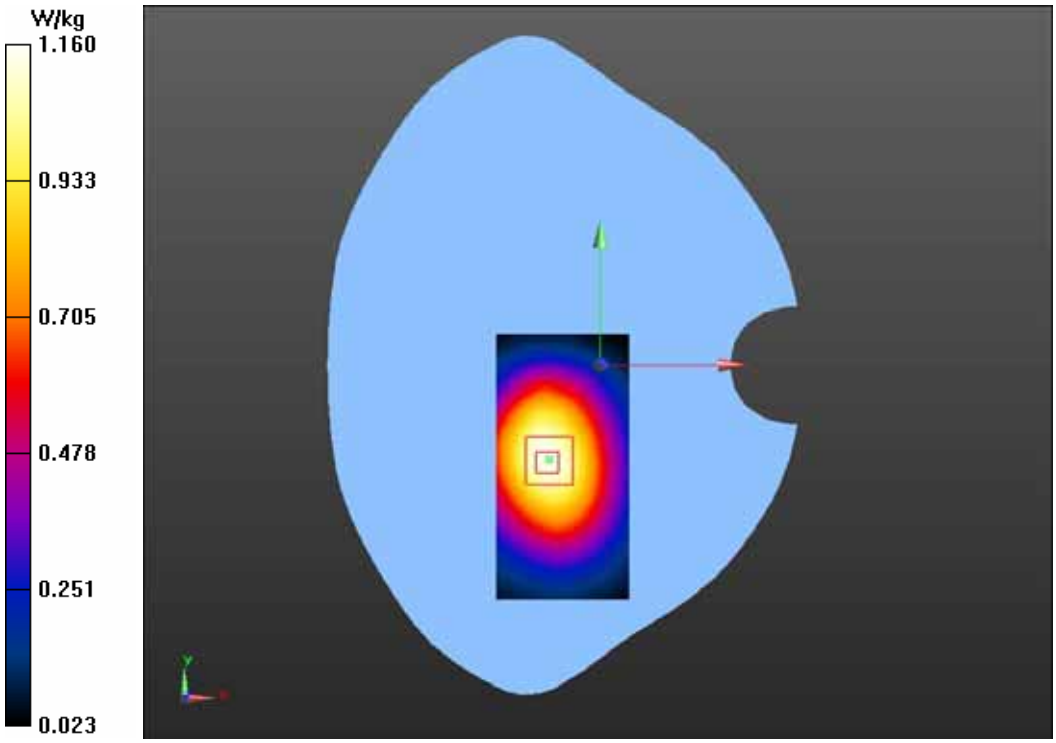
Communication System: GPRS(4slots); Communication System Band: GSM850; Frequency: 848.8 MHz; Communication System PAR: 3.181 dB
Medium parameters used (interpolated): f = 848.8 MHz; σ = 0.951 mho/m; ε_r = 53.603; ρ = 1000 kg/m^3
Phantom section: Flat Section
Measurement Standard: DASY5 (IEEE/IEC/ANSI C63.19-2007)

DASY5 Configuration:

- Probe: ES3DV3 - SN3221; ConvF(6.23, 6.23, 6.23); Calibrated: 9/27/2012;
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn893; Calibrated: 9/27/2012
- Phantom: SAM_1 with CRP v4.0; Type: QD000P40CC; Serial: TP:1586
- Measurement SW: DASY52, Version 52.8 (2); SEMCAD X Version 14.6.6 (6824)

GPRS 850/Towards to ground-HIGH /Area Scan (41x81x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm
Reference Value = 19.208 V/m; Power Drift = 0.07 dB
Maximum value of SAR (interpolated) = 1.16 W/kg

GPRS 850/Towards to ground-HIGH /Zoom Scan (5x5x7)/Cube 0:
Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 19.208 V/m; Power Drift = 0.07 dB
Peak SAR (extrapolated) = 1.499 mW/g
SAR(1 g) = 1.13 mW/g; SAR(10 g) = 0.801 mW/g
Maximum value of SAR (measured) = 1.22 W/kg



GPRS 850-Towards to ground-MID

DUT: Azumi; Type: L2

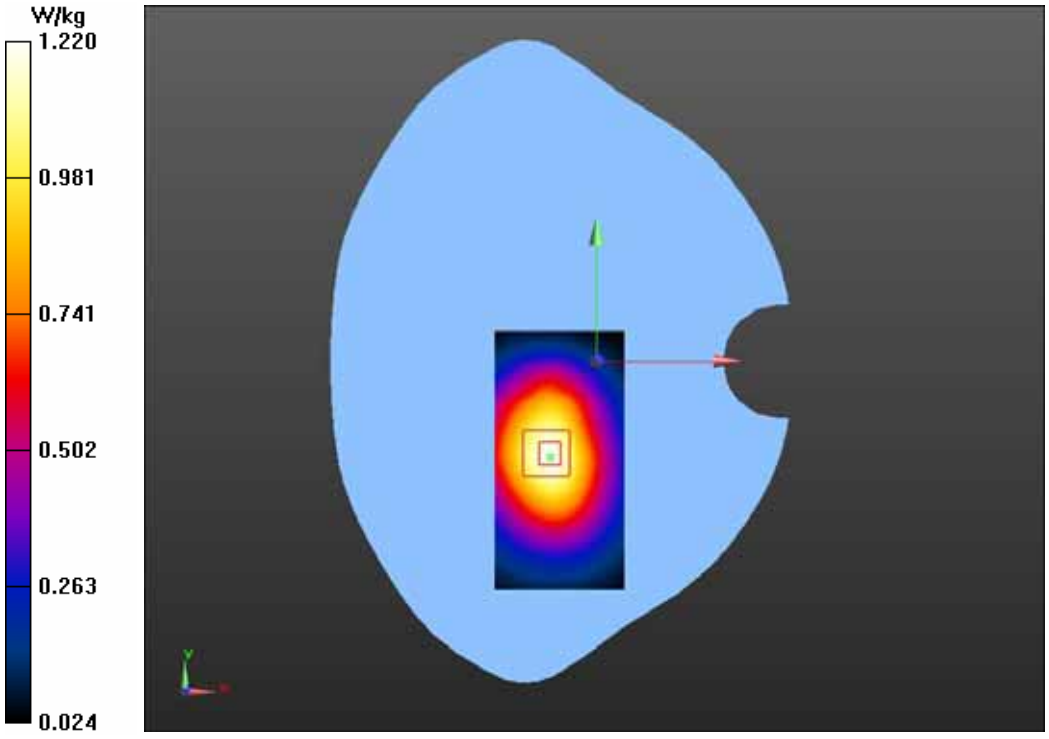
Communication System: GPRS(4slots); Communication System Band: GSM850; Frequency: 836.6 MHz; Communication System PAR: 3.181 dB
Medium parameters used (interpolated): f = 836.6 MHz; σ = 0.939 mho/m; ε_r = 53.719; ρ = 1000 kg/m^3
Phantom section: Flat Section
Measurement Standard: DASY5 (IEEE/IEC/ANSI C63.19-2007)

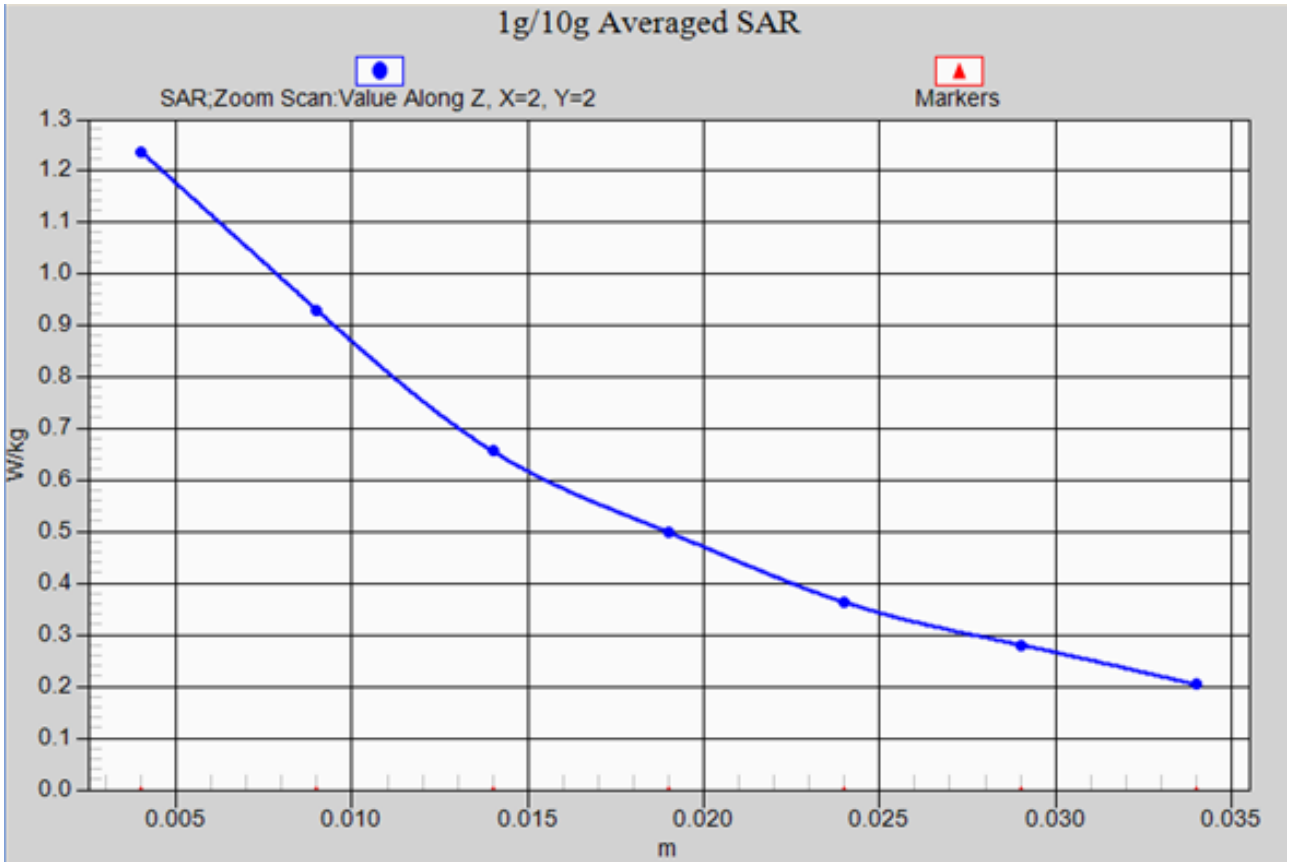
DASY5 Configuration:

- Probe: ES3DV3 - SN3221; ConvF(6.23, 6.23, 6.23); Calibrated: 9/27/2012;
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn893; Calibrated: 9/27/2012
- Phantom: SAM_1 with CRP v4.0; Type: QD000P40CC; Serial: TP:1586
- Measurement SW: DASY52, Version 52.8 (2); SEMCAD X Version 14.6.6 (6824)

GPRS 850/Towards to ground-MID /Area Scan (41x81x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm
Reference Value = 18.654 V/m; Power Drift = 0.13dB
Maximum value of SAR (interpolated) = 1.22 W/kg

GPRS 850/Towards to ground-MID /Zoom Scan (5x5x7)/Cube 0:
Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 18.654 V/m; Power Drift = 0.13 dB
Peak SAR (extrapolated) = 1.438 mW/g
SAR(1 g) = 1.14 mW/g; SAR(10 g) = 0.812 mW/g
Maximum value of SAR (measured) = 1.24 W/kg





GPRS 850-Towards to ground-MID _z-axis scan

GPRS 850-Towards to ground-LOW

DUT: Azumi; Type: L2

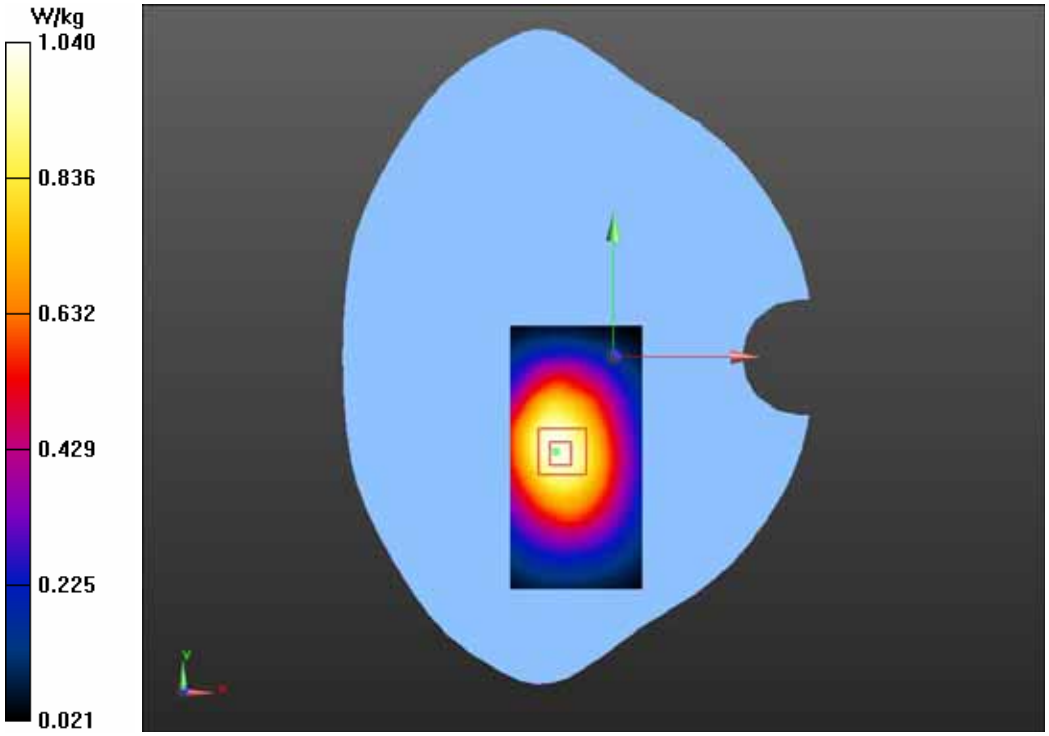
Communication System: GPRS(4slots); Communication System Band: GSM850; Frequency: 824.2 MHz; Communication System PAR: 3.181 dB
Medium parameters used (interpolated): f = 824.2 MHz; σ = 0.927 mho/m; ε_r = 53.832; ρ = 1000 kg/m^3
Phantom section: Flat Section
Measurement Standard: DASY5 (IEEE/IEC/ANSI C63.19-2007)

DASY5 Configuration:

- Probe: ES3DV3 - SN3221; ConvF(6.23, 6.23, 6.23); Calibrated: 9/27/2012;
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn893; Calibrated: 9/27/2012
- Phantom: SAM_1 with CRP v4.0; Type: QD000P40CC; Serial: TP:1586
- Measurement SW: DASY52, Version 52.8 (2); SEMCAD X Version 14.6.6 (6824)

GPRS 850/Towards to ground-LOW /Area Scan (41x81x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm
Reference Value = 17.509 V/m; Power Drift = 0.14 dB
Maximum value of SAR (interpolated) = 1.04 W/kg

GPRS 850/Towards to ground-LOW /Zoom Scan (5x5x7)/Cube 0:
Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 17.509 V/m; Power Drift = 0.14 dB
Peak SAR (extrapolated) = 1.327 mW/g
SAR(1 g) = 1 mW/g; SAR(10 g) = 0.702 mW/g
Maximum value of SAR (measured) = 1.06 W/kg



GPRS 850-Towards to ground-MID with headset

DUT: Azumi; Type: L2

Communication System: GPRS(4slots); Communication System Band: GSM850; Frequency: 836.6 MHz; Communication System PAR: 3.181 dB
Medium parameters used (interpolated): f = 836.6 MHz; σ = 0.939 mho/m; ε_r = 53.719; ρ = 1000 kg/m^3
Phantom section: Flat Section
Measurement Standard: DASY5 (IEEE/IEC/ANSI C63.19-2007)

DASY5 Configuration:

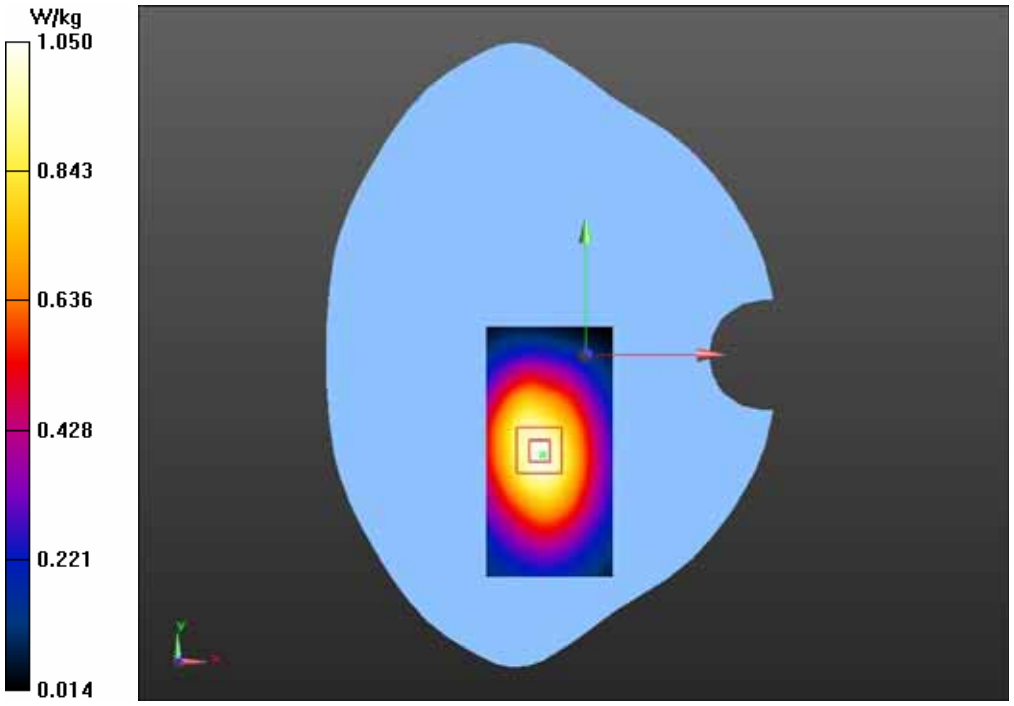
- Probe: ES3DV3 - SN3221; ConvF(6.23, 6.23, 6.23); Calibrated: 9/27/2012;
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn893; Calibrated: 9/27/2012
- Phantom: SAM_1 with CRP v4.0; Type: QD000P40CC; Serial: TP:1586
- Measurement SW: DASY52, Version 52.8 (2); SEMCAD X Version 14.6.6 (6824)

GPRS 850/Towards to ground-MID with headset/Area Scan (41x81x1):

Interpolated grid: dx=1.500 mm, dy=1.500 mm
Reference Value = 16.635 V/m; Power Drift = 0.15 dB
Maximum value of SAR (interpolated) = 1.05 W/kg

GPRS 850/Towards to ground-MID with headset/Zoom Scan (5x5x7)/Cube 0:

Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 16.635 V/m; Power Drift = 0.15 dB
Peak SAR (extrapolated) = 1.280 mW/g
SAR(1 g) = 0.992 mW/g; SAR(10 g) = 0.707 mW/g
Maximum value of SAR (measured) = 1.06 W/kg



GPRS 850-Towards to phantom -MID with headset

DUT: Azumi; Type: L2

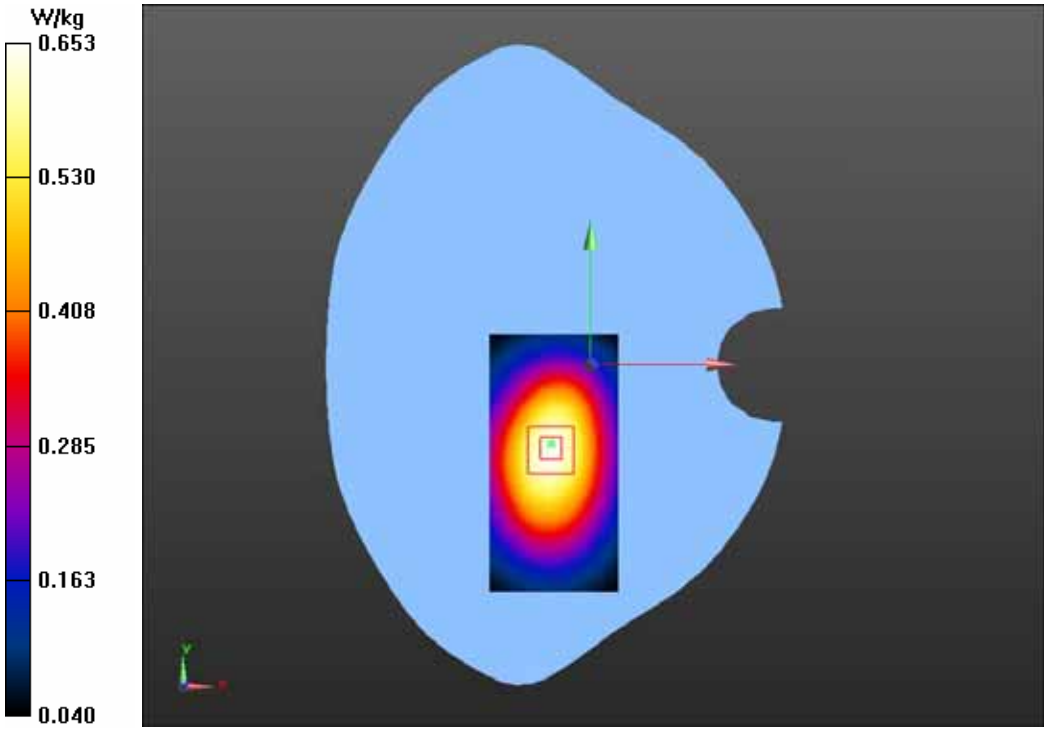
Communication System: GPRS(4slots); Communication System Band: GSM850; Frequency: 836.6 MHz; Communication System PAR: 3.181 dB
Medium parameters used (interpolated): f = 836.6 MHz; σ = 0.939 mho/m; ε_r = 53.719; ρ = 1000 kg/m^3
Phantom section: Flat Section
Measurement Standard: DASY5 (IEEE/IEC/ANSI C63.19-2007)

DASY5 Configuration:

- Probe: ES3DV3 - SN3221; ConvF(6.23, 6.23, 6.23); Calibrated: 9/27/2012;
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn893; Calibrated: 9/27/2012
- Phantom: SAM_1 with CRP v4.0; Type: QD000P40CC; Serial: TP:1586
- Measurement SW: DASY52, Version 52.8 (2); SEMCAD X Version 14.6.6 (6824)

GPRS 850/Towards to phantom -MID with headset/Area Scan (41x81x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm
Reference Value = 16.569 V/m; Power Drift = -0.08 dB
Maximum value of SAR (interpolated) = 0.653 W/kg

GPRS 850/Towards to phantom -MID with headset/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 16.569 V/m; Power Drift = -0.08 dB
Peak SAR (extrapolated) = 0.770 mW/g
SAR(1 g) = 0.592 mW/g; SAR(10 g) = 0.421 mW/g
Maximum value of SAR (measured) = 0.641 W/kg



GPRS 1900-Towards to phantom-MID

DUT: Azumi; Type: L2

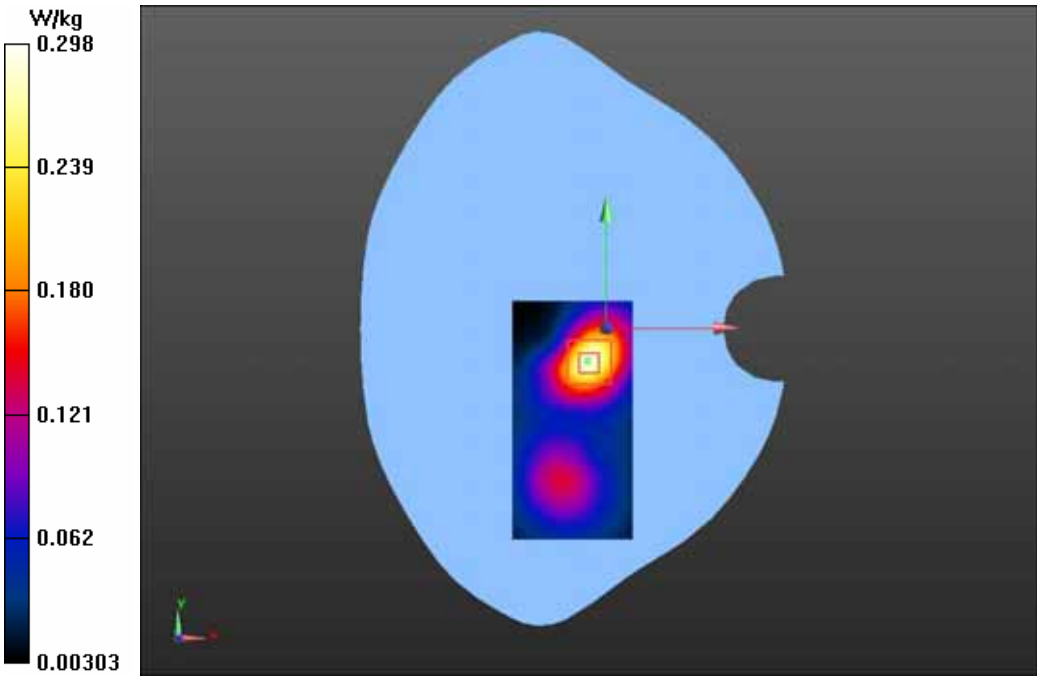
Communication System: GPRS(4slots); Communication System Band: PCS1900; Frequency: 1880 MHz; Communication System PAR: 3.181 dB
Medium parameters used: f = 1880 MHz; σ = 1.557 mho/m; ε_r = 50.765; ρ = 1000 kg/m^3
Phantom section: Flat Section
Measurement Standard: DASY5 (IEEE/IEC/ANSI C63.19-2007)

DASY5 Configuration:

- Probe: ES3DV3 - SN3221; ConvF(4.87, 4.87, 4.87); Calibrated: 9/27/2012;
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn893; Calibrated: 9/27/2012
- Phantom: SAM_2with CRP v4.0; Type: QD000P40CC; Serial: TP:1548
- Measurement SW: DASY52, Version 52.8 (2); SEMCAD X Version 14.6.6 (6824)

GPRS 1900/Towards to phantom-MID /Area Scan (41x81x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm
Reference Value = 7.943 V/m; Power Drift = -0.15 dB
Maximum value of SAR (interpolated) = 0.298 W/kg

GPRS 1900/Towards to phantom-MID /Zoom Scan (5x5x7)/Cube 0:
Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 7.943 V/m; Power Drift = -0.15 dB
Peak SAR (extrapolated) = 0.401 mW/g
SAR(1 g) = 0.249 mW/g; SAR(10 g) = 0.143 mW/g
Maximum value of SAR (measured) = 0.274 W/kg



GPRS 1900-Towards to ground-HIGH

DUT: Azumi; Type: L2

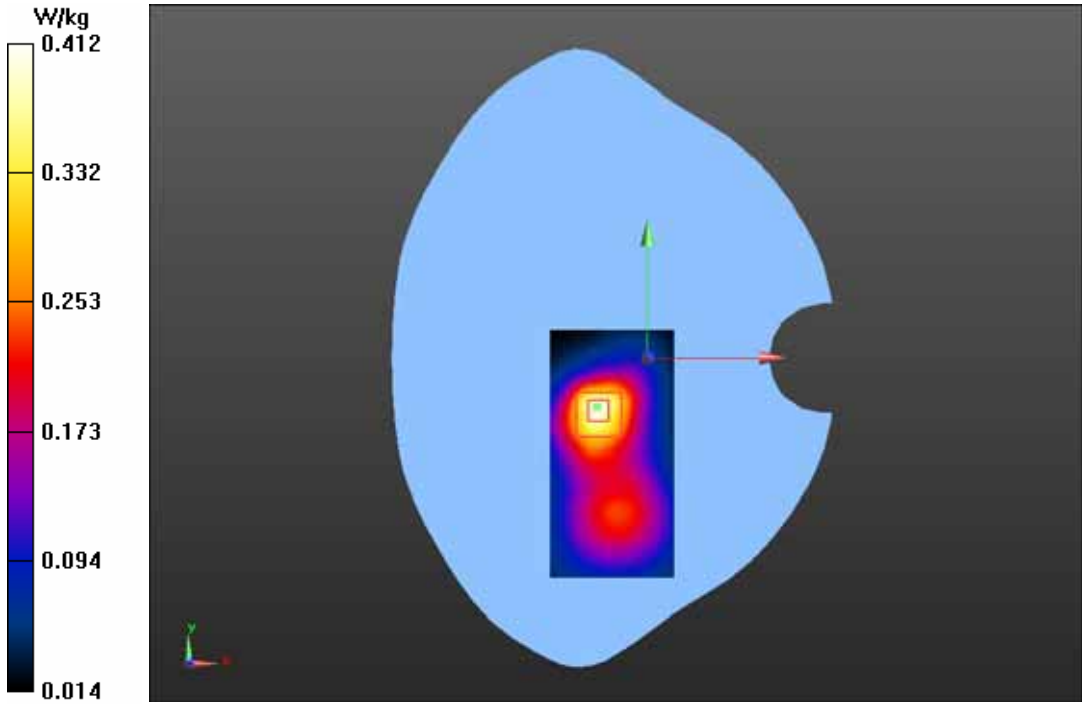
Communication System: GPRS(4slots); Communication System Band: PCS1900; Frequency: 1909.8 MHz; Communication System PAR: 3.181 dB
Medium parameters used: f = 1910 MHz; σ = 1.588 mho/m; ε_r = 50.69; ρ = 1000 kg/m^3
Phantom section: Flat Section
Measurement Standard: DASY5 (IEEE/IEC/ANSI C63.19-2007)

DASY5 Configuration:

- Probe: ES3DV3 - SN3221; ConvF(4.87, 4.87, 4.87); Calibrated: 9/27/2012;
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn893; Calibrated: 9/27/2012
- Phantom: SAM_2with CRP v4.0; Type: QD000P40CC; Serial: TP:1548
- Measurement SW: DASY52, Version 52.8 (2); SEMCAD X Version 14.6.6 (6824)

GPRS 1900/Towards to ground-HIGH /Area Scan (41x81x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm
Reference Value = 7.427 V/m; Power Drift = 0.11 dB
Maximum value of SAR (interpolated) = 0.412 W/kg

GPRS 1900/Towards to ground-HIGH /Zoom Scan (5x5x7)/Cube 0:
Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 7.427 V/m; Power Drift = 0.11 dB
Peak SAR (extrapolated) = 0.580 mW/g
SAR(1 g) = 0.356 mW/g; SAR(10 g) = 0.206 mW/g
Maximum value of SAR (measured) = 0.390 W/kg



GPRS 1900-Towards to ground-MID

DUT: Azumi; Type: L2

Communication System: GPRS(4slots); Communication System Band: PCS1900; Frequency: 1880 MHz; Communication System PAR: 3.181 dB
Medium parameters used: f = 1880 MHz; σ = 1.557 mho/m; ε_r = 50.765; ρ = 1000 kg/m^3
Phantom section: Flat Section
Measurement Standard: DASY5 (IEEE/IEC/ANSI C63.19-2007)

DASY5 Configuration:

- Probe: ES3DV3 - SN3221; ConvF(4.87, 4.87, 4.87); Calibrated: 9/27/2012;
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn893; Calibrated: 9/27/2012
- Phantom: SAM_2with CRP v4.0; Type: QD000P40CC; Serial: TP:1548
- Measurement SW: DASY52, Version 52.8 (2); SEMCAD X Version 14.6.6 (6824)

GPRS 1900/Towards to ground-MID /Area Scan (41x81x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm
Reference Value = 11.545 V/m; Power Drift = -0.03 dB
Maximum value of SAR (interpolated) = 0.513 W/kg

GPRS 1900/Towards to ground-MID /Zoom Scan (5x5x7)/Cube 0:
Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 11.545 V/m; Power Drift = -0.03 dB
Peak SAR (extrapolated) = 0.705 mW/g
SAR(1 g) = 0.435 mW/g; SAR(10 g) = 0.253 mW/g
Maximum value of SAR (measured) = 0.476 W/kg