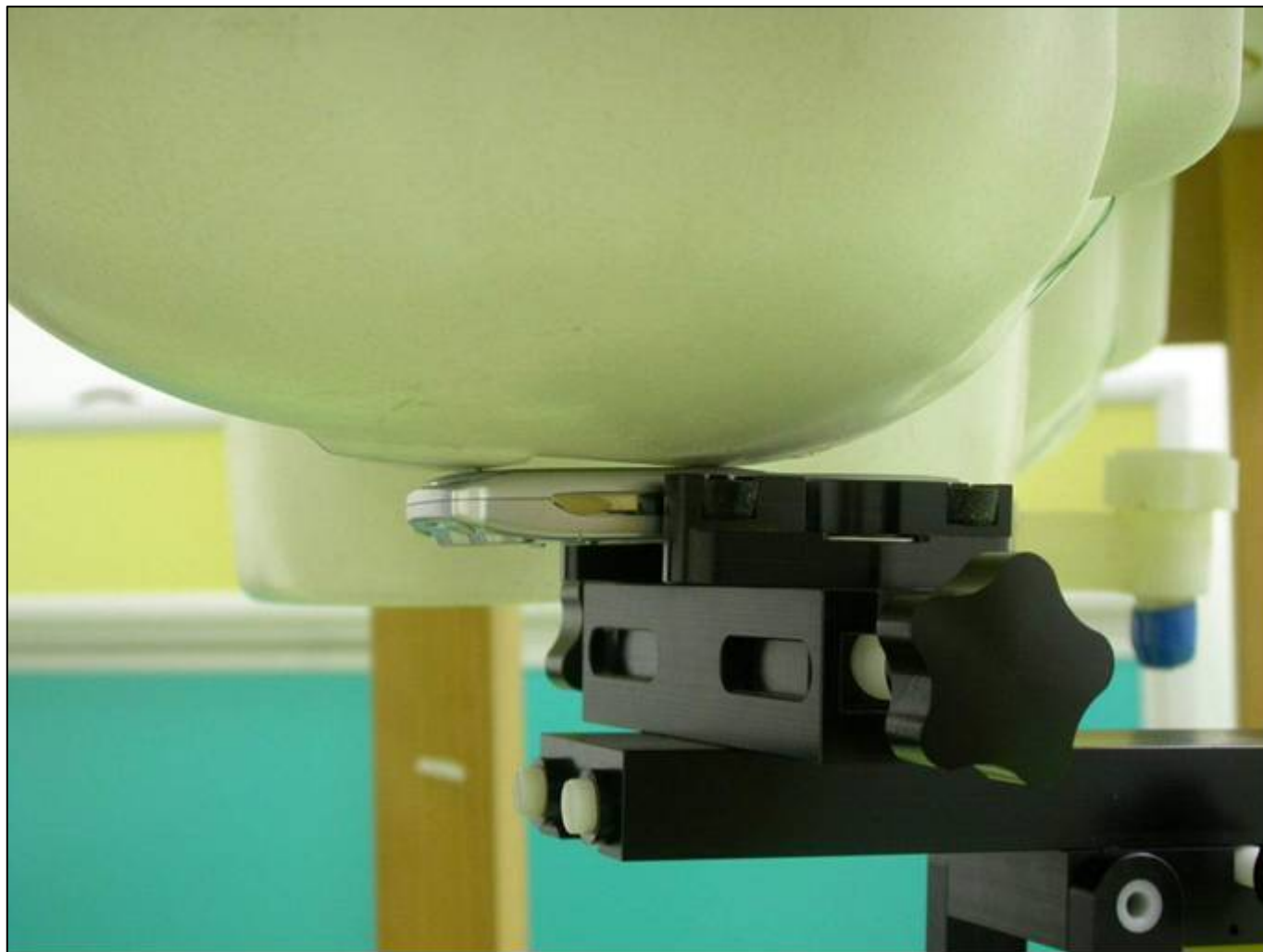


APPENDIX A: TEST CONFIGURATIONS AND TEST DATA
A1: TEST CONFIGURATION

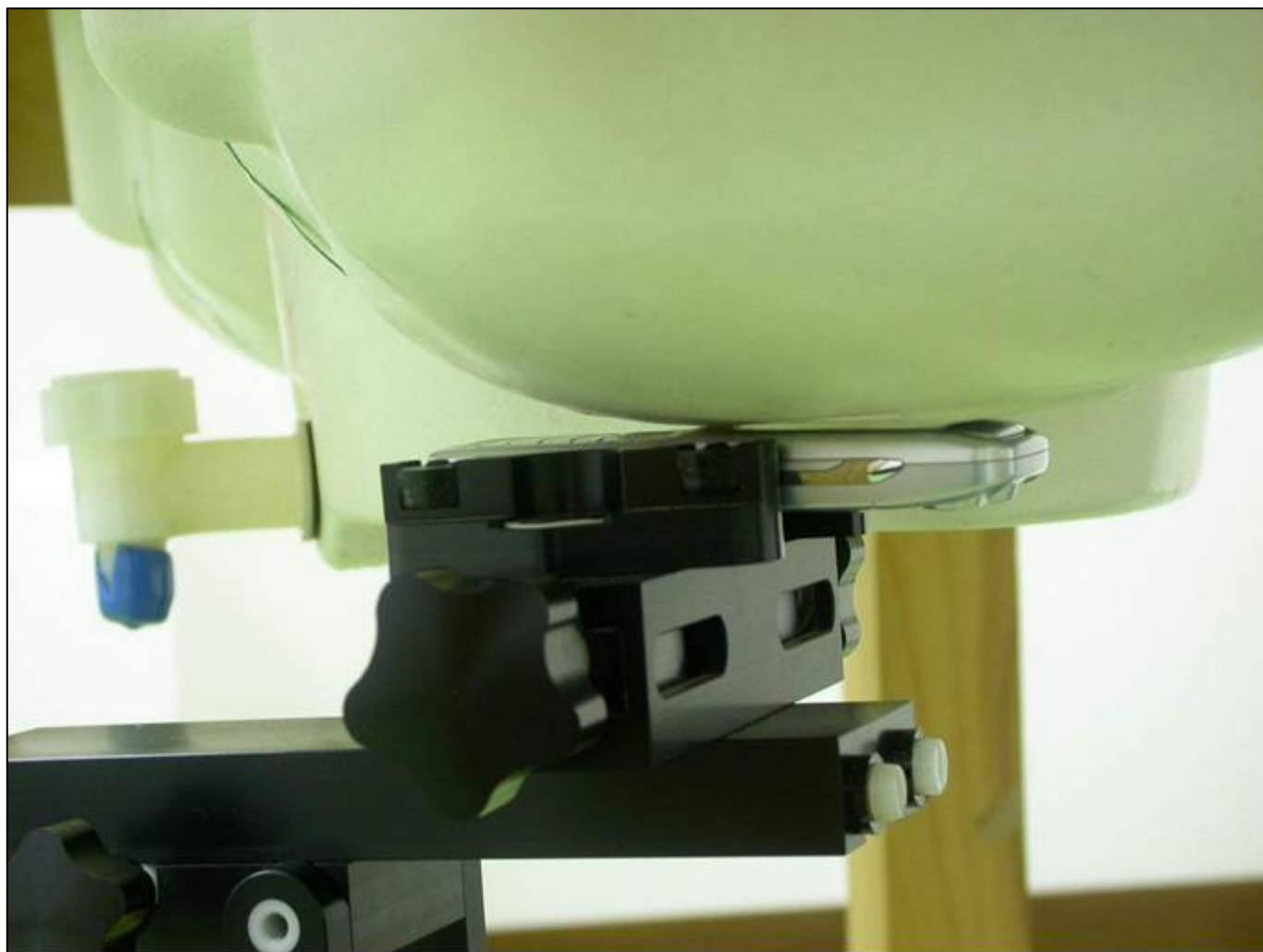
Right Head Cheek Position



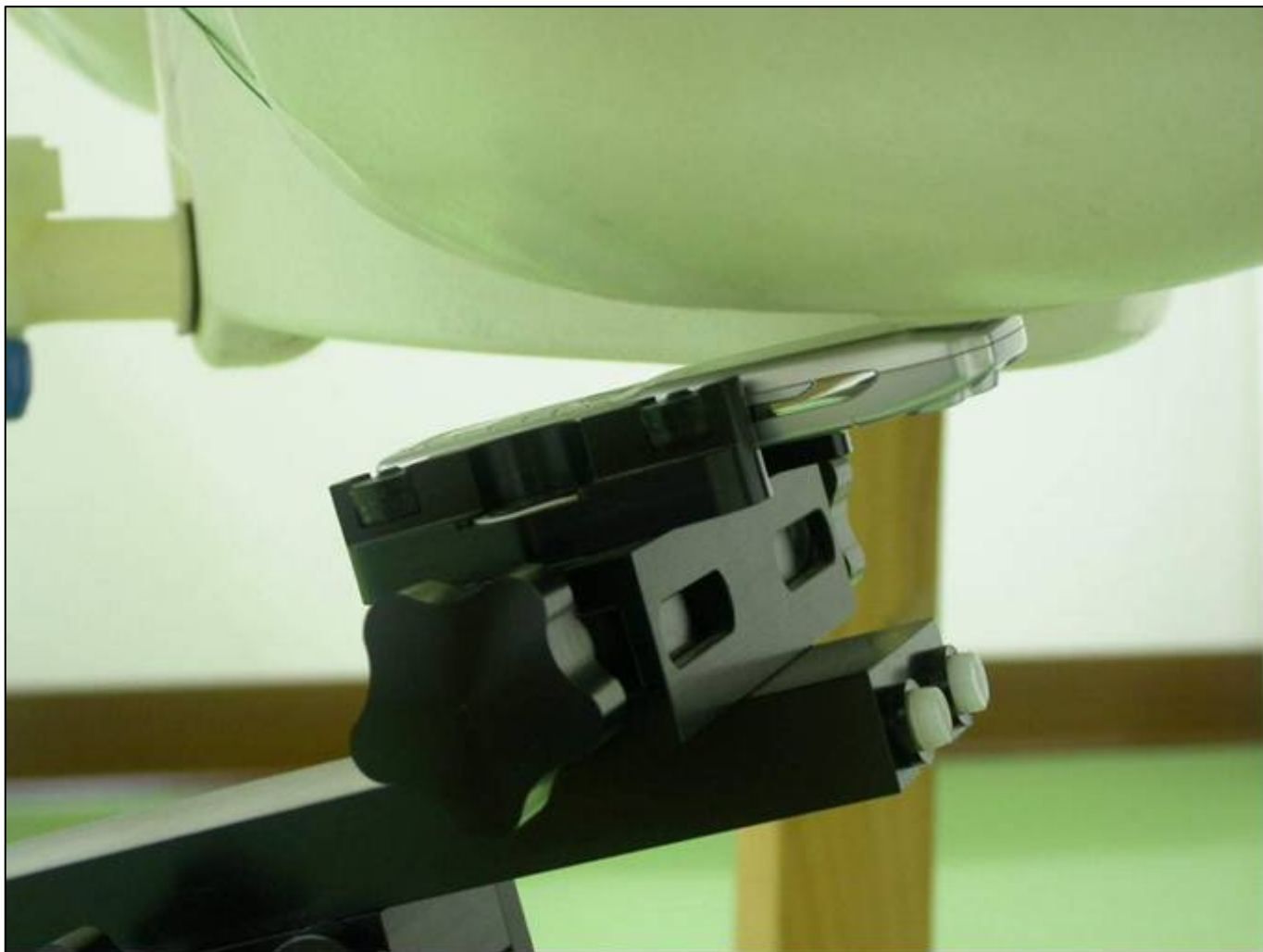
Right Head Tilt Position



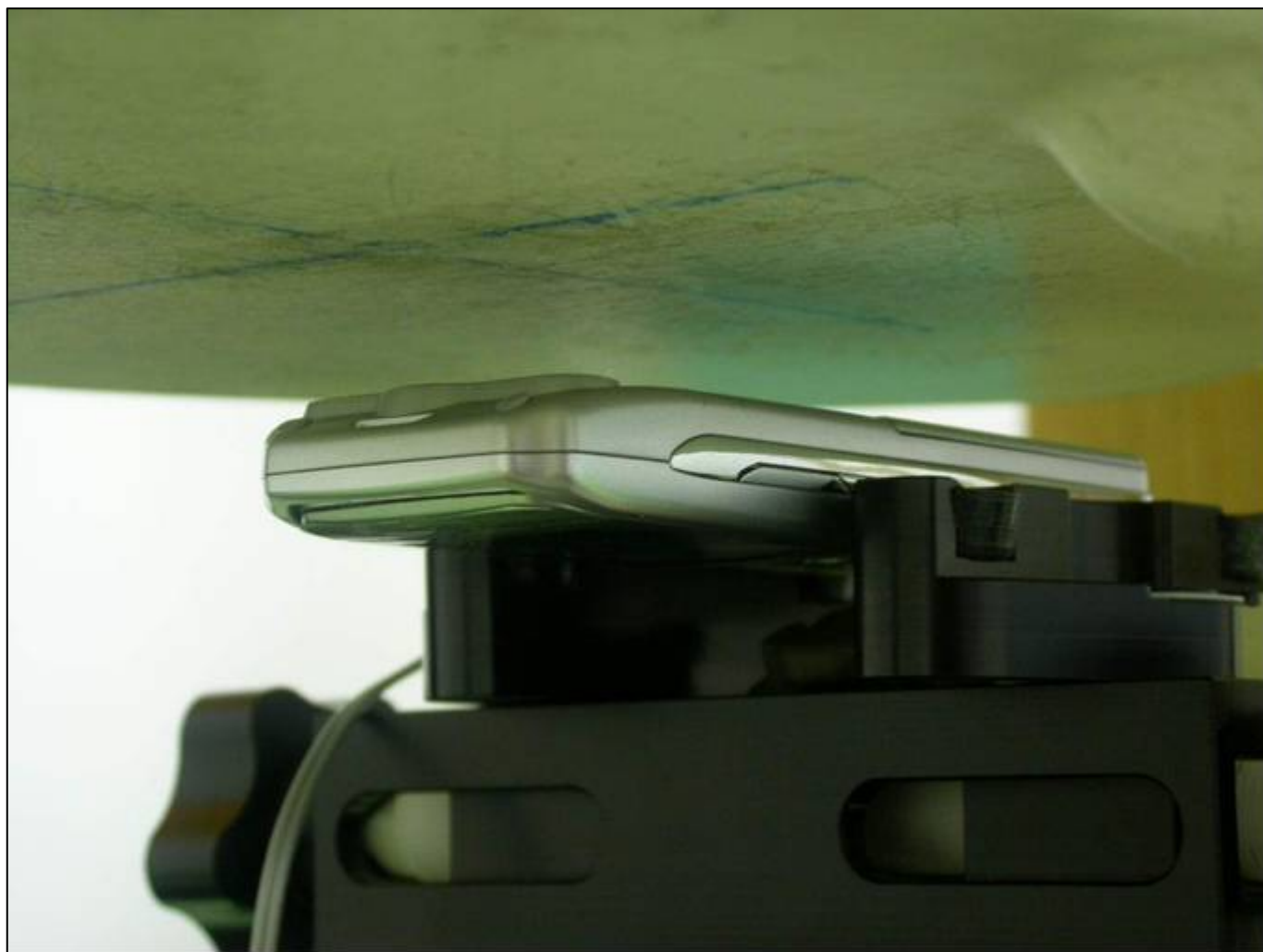
Left Head Cheek Position



Left Head Tilt Position

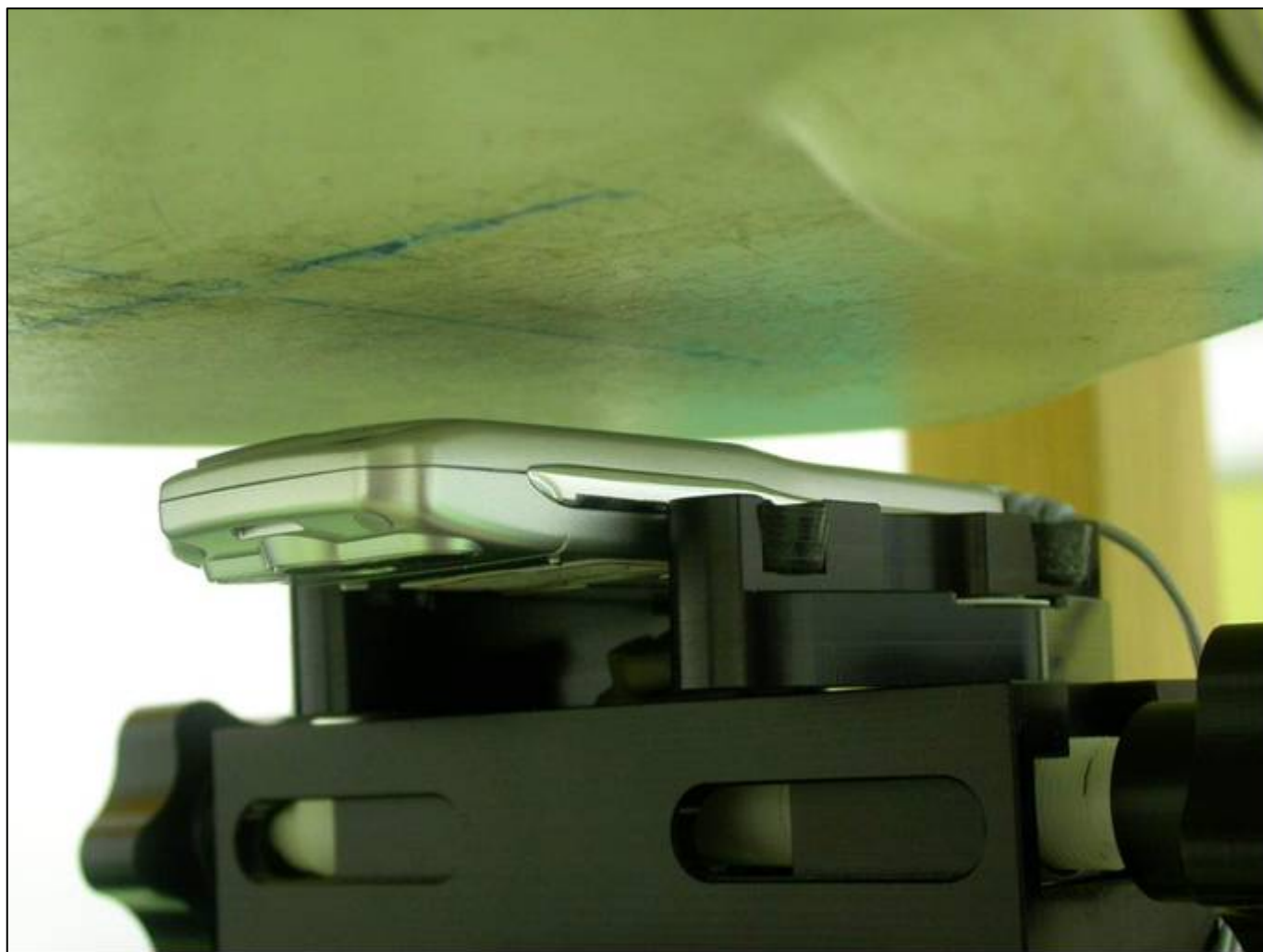


Body Worn Position



The bottom of the EUT to the flat phantom distance 15 mm

Body Worn Position



The front of the EUT to the flat phantom distance 15 mm

EUT Photo





Liquid Level Photo

Tissue HSL1900MHz D=155mm



Tissue MSL1900MHz D=151mm



Test Laboratory: Advance Data Technology

Right Head-Cheek-PCS1900-Ch512-Mode 1

DUT: Tri-Band GSM GPRS Mobile Phone ; Type: S789+ ; Test Frequency: 1850.2 MHz

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

Phantom: SAM 12 Medium parameters used: $f = 1850.2$ MHz; $\sigma = 1.37$ mho/m; $\epsilon_r = 39.1$; $\rho = 1000$ kg/m³ ; Liquid level: 155 mm

Phantom section: Right Section ; DUT test position : Cheek ; Modulation type: GMSK

Antenna type : Internal Antenna ; Air temp. : 21.9 degrees ; Liquid temp. : 20.7 degrees

DASY4 Configuration:

- Probe: ET3DV6 - SN1790; ConvF(5.26, 5.26, 5.26) ; Calibrated: 2004/12/20
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn579; Calibrated: 2005/3/23
- Phantom: SAM 12; Type: SAM V4.0; Serial: TP 1202
- Measurement SW: DASY4, V4.6 Build 23; Postprocessing SW: SEMCAD, V1.8 Build 160

Touch position - Low Channel 512/Area Scan (5x9x1): Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (measured) = 0.777 mW/g

Touch position - Low Channel 512/Zoom Scan (7x7x7) (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 19.0 V/m

Peak SAR (extrapolated) = 1.41 W/kg

SAR(1 g) = 0.714 mW/g; SAR(10 g) = 0.368 mW/g

Maximum value of SAR (measured) = 0.795 mW/g

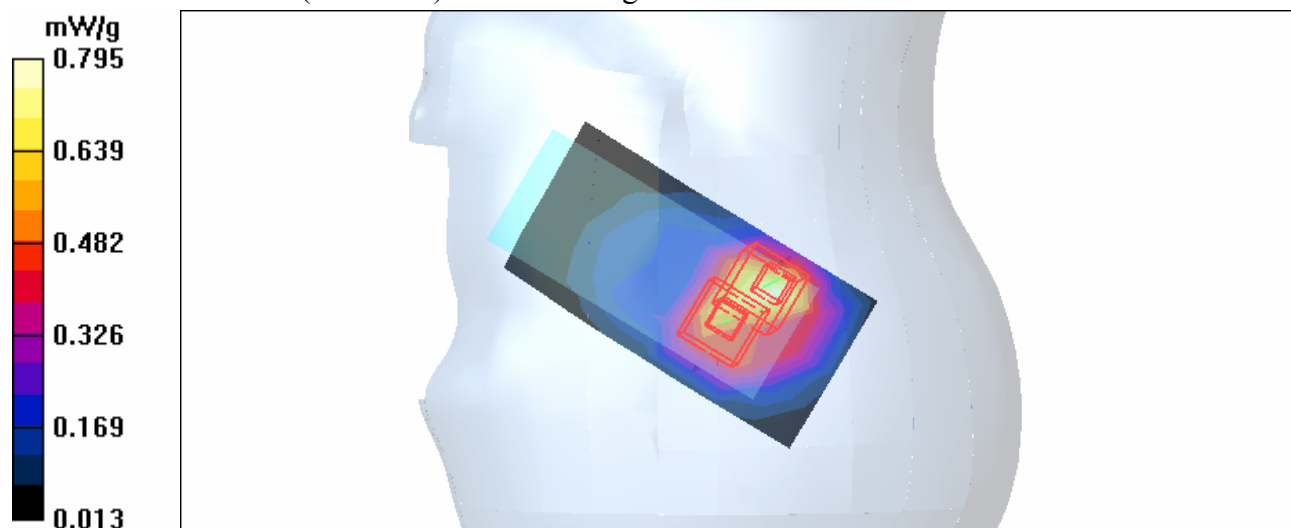
Touch position - Low Channel 512/Zoom Scan (7x7x7) (7x7x7)/Cube 1: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 19.0 V/m

Peak SAR (extrapolated) = 1.10 W/kg

SAR(1 g) = 0.596 mW/g; SAR(10 g) = 0.342 mW/g

Maximum value of SAR (measured) = 0.654 mW/g



Test Laboratory: Advance Data Technology

Right Head-Cheek-PCS1900-Ch661-Mode 1

DUT: Tri-Band GSM GPRS Mobile Phone ; Type: S789+ ; Test Frequency: 1880 MHz

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

Phantom: SAM 12 Medium parameters used: $f = 1880$ MHz; $\sigma = 1.4$ mho/m; $\epsilon_r = 39$; $\rho = 1000$ kg/m³ ;
Liquid level: 155 mm

Phantom section: Right Section ; DUT test position : Cheek ; Modulation type: GMSK

Antenna type : Internal Antenna ; Air temp. : 21.9 degrees ; Liquid temp. : 20.7 degrees

DASY4 Configuration:

- Probe: ET3DV6 - SN1790; ConvF(5.26, 5.26, 5.26) ; Calibrated: 2004/12/20
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn579; Calibrated: 2005/3/23
- Phantom: SAM 12; Type: SAM V4.0; Serial: TP 1202
- Measurement SW: DASY4, V4.6 Build 23; Postprocessing SW: SEMCAD, V1.8 Build 160

Touch position - Mid Channel 661/Area Scan (5x9x1): Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (measured) = 0.888 mW/g

Touch position - Mid Channel 661/Zoom Scan (7x7x7) (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 19.6 V/m

Peak SAR (extrapolated) = 1.67 W/kg

SAR(1 g) = 0.828 mW/g; SAR(10 g) = 0.418 mW/g

Maximum value of SAR (measured) = 0.917 mW/g

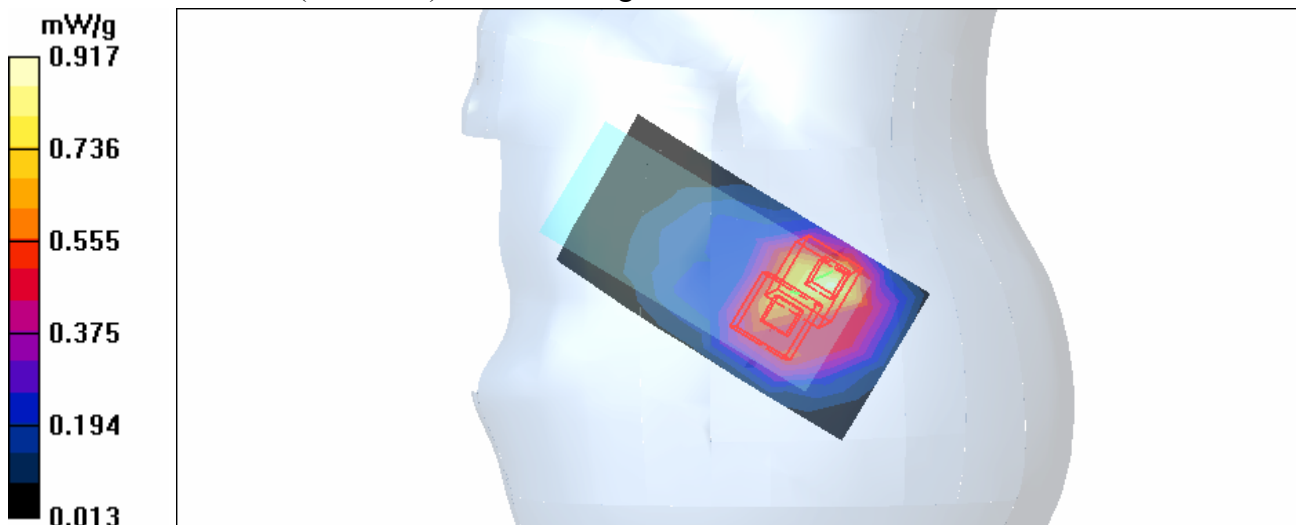
Touch position - Mid Channel 661/Zoom Scan (7x7x7) (7x7x7)/Cube 1: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 19.6 V/m

Peak SAR (extrapolated) = 1.22 W/kg

SAR(1 g) = 0.641 mW/g; SAR(10 g) = 0.368 mW/g

Maximum value of SAR (measured) = 0.725 mW/g



Test Laboratory: Advance Data Technology

Right Head-Cheek-PCS1900-Ch810-Mode 1

DUT: Tri-Band GSM GPRS Mobile Phone ; Type: S789+ ; Test Frequency: 1909.8 MHz

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

Phantom: SAM 12 Medium parameters used: $f = 1909.8$ MHz; $\sigma = 1.43$ mho/m; $\epsilon_r = 38.8$; $\rho = 1000$ kg/m³ ; Liquid level: 155 mm

Phantom section: Right Section ; DUT test position : Cheek ; Modulation type: GMSK

Antenna type : Internal Antenna ; Air temp. : 21.9 degrees ; Liquid temp. : 20.7 degrees

DASY4 Configuration:

- Probe: ET3DV6 - SN1790; ConvF(5.26, 5.26, 5.26) ; Calibrated: 2004/12/20
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn579; Calibrated: 2005/3/23
- Phantom: SAM 12; Type: SAM V4.0; Serial: TP 1202
- Measurement SW: DASY4, V4.6 Build 23; Postprocessing SW: SEMCAD, V1.8 Build 160

Touch position - High Channel 810/Area Scan (5x9x1): Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (measured) = 1.13 mW/g

Touch position - High Channel 810/Zoom Scan (7x7x7) (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 19.3 V/m

Peak SAR (extrapolated) = 2.24 W/kg

SAR(1 g) = 1.12 mW/g; SAR(10 g) = 0.561 mW/g

Maximum value of SAR (measured) = 1.22 mW/g

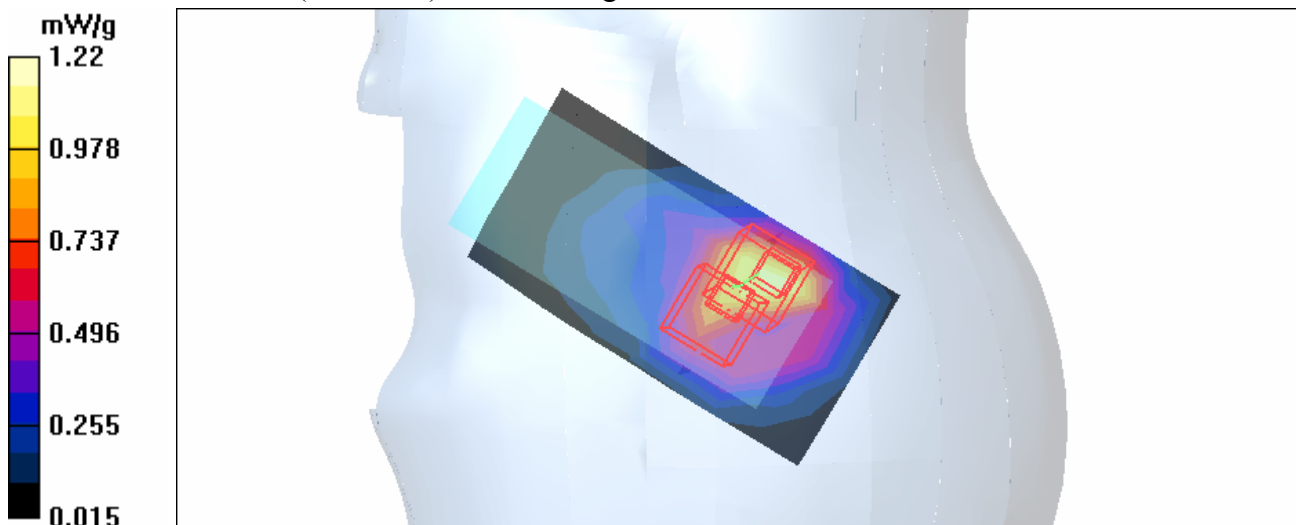
Touch position - High Channel 810/Zoom Scan (7x7x7) (7x7x7)/Cube 1: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 19.3 V/m

Peak SAR (extrapolated) = 1.72 W/kg

SAR(1 g) = 0.840 mW/g; SAR(10 g) = 0.457 mW/g

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



Test Laboratory: Advance Data Technology

Right Head-Tilt-PCS1900-Ch512-Mode 2

DUT: Tri-Band GSM GPRS Mobile Phone ; Type: S789+ ; Test Frequency: 1850.2 MHz

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

Medium: HSL1900 Medium parameters used: $f = 1850.2$ MHz; $\sigma = 1.37$ mho/m; $\epsilon_r = 39.1$; $\rho = 1000$ kg/m³ ; Liquid level: 155 mm

Phantom section: Right Section ; DUT test position : Tilt ; Modulation type: GMSK

Antenna type : Internal Antenna ; Air temp. : 21.9 degrees ; Liquid temp. : 20.7 degrees

DASY4 Configuration:

- Probe: ET3DV6 - SN1790 ; ConvF(5.26, 5.26, 5.26) ; Calibrated: 2004/12/20
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn579; Calibrated: 2005/3/23
- Phantom: SAM 12; Type: SAM V4.0; Serial: TP 1202
- Measurement SW: DASY4, V4.6 Build 23; Postprocessing SW: SEMCAD, V1.8 Build 160

Tilt position - Low Channel 512/Area Scan (5x9x1): Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (measured) = 0.892 mW/g

Tilt position - Low Channel 512/Zoom Scan (7x7x7) (7x7x7)/Cube 0: Measurement grid:

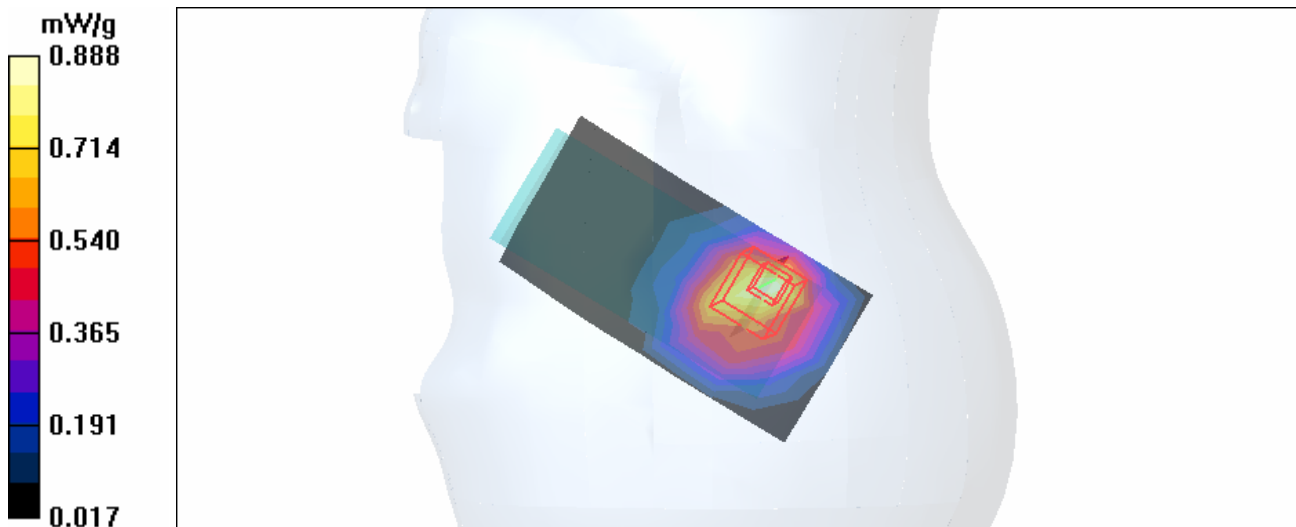
dx=5mm, dy=5mm, dz=5mm

Reference Value = 21.7 V/m

Peak SAR (extrapolated) = 1.51 W/kg

SAR(1 g) = 0.801 mW/g; SAR(10 g) = 0.435 mW/g

Maximum value of SAR (measured) = 0.888 mW/g



Test Laboratory: Advance Data Technology

Right Head-Tilt-PCS1900-Ch661-Mode 2

DUT: Tri-Band GSM GPRS Mobile Phone ; Type: S789+ ; Test Frequency: 1880 MHz

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

Medium: HSL1900 Medium parameters used: $f = 1880$ MHz; $\sigma = 1.4$ mho/m; $\epsilon_r = 39$; $\rho = 1000$ kg/m³ ;

Liquid level: 155 mm

Phantom section: Right Section ; DUT test position : Tilt ; Modulation type: GMSK

Antenna type : Internal Antenna ; Air temp. : 21.9 degrees ; Liquid temp. : 20.7 degrees

DASY4 Configuration:

- Probe: ET3DV6 - SN1790 ; ConvF(5.26, 5.26, 5.26) ; Calibrated: 2004/12/20
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn579; Calibrated: 2005/3/23
- Phantom: SAM 12; Type: SAM V4.0; Serial: TP 1202
- Measurement SW: DASY4, V4.6 Build 23; Postprocessing SW: SEMCAD, V1.8 Build 160

Tilt position - Mid Channel 661/Area Scan (5x9x1): Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (measured) = 0.993 mW/g

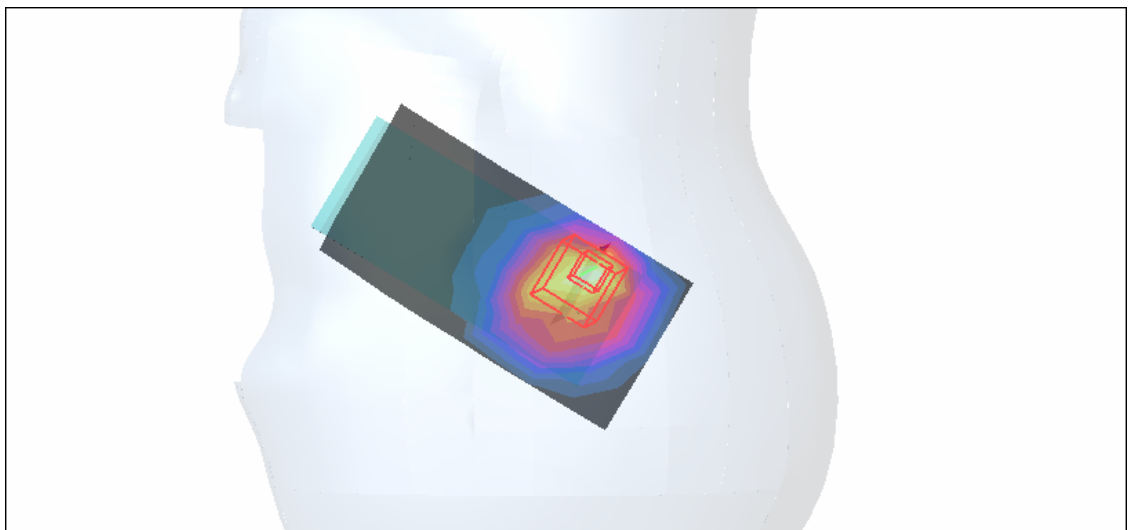
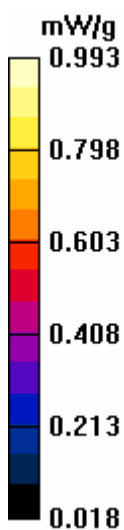
Tilt position - Mid Channel 661/Zoom Scan (7x7x7) (7x7x7)/Cube 0: Measurement grid:

dx=5mm, dy=5mm, dz=5mm

Reference Value = 22.7 V/m

Peak SAR (extrapolated) = 1.71 W/kg

SAR(1 g) = 0.897 mW/g; SAR(10 g) = 0.483 mW/g



Test Laboratory: Advance Data Technology

Right Head-Tilt-PCS1900-Ch810-Mode 2

DUT: Tri-Band GSM GPRS Mobile Phone ; Type: S789+ ; Test Frequency: 1909.8 MHz

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

Medium: HSL1900 Medium parameters used: $f = 1909.8 \text{ MHz}$; $\sigma = 1.43 \text{ mho/m}$; $\epsilon_r = 38.8$; $\rho = 1000 \text{ kg/m}^3$; Liquid level: 155 mm

Phantom section: Right Section ; DUT test position : Tilt ; Modulation type: GMSK

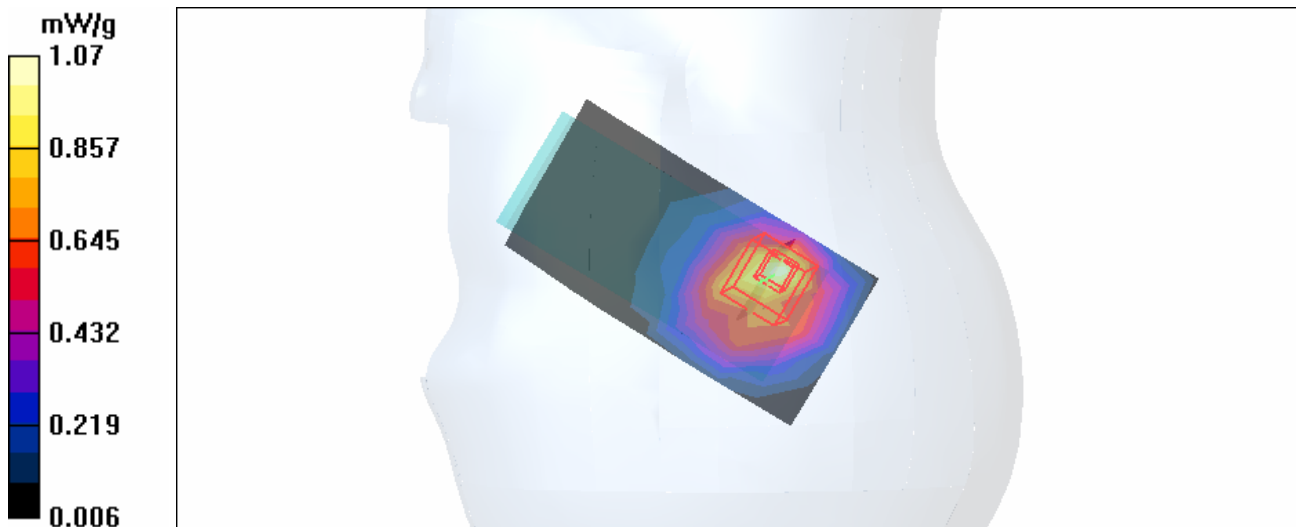
Antenna type : Internal Antenna ; Air temp. : 21.9 degrees ; Liquid temp. : 20.7 degrees

DASY4 Configuration:

- Probe: ET3DV6 - SN1790 ; ConvF(5.26, 5.26, 5.26) ; Calibrated: 2004/12/20
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn579; Calibrated: 2005/3/23
- Phantom: SAM 12; Type: SAM V4.0; Serial: TP 1202
- Measurement SW: DASY4, V4.6 Build 23; Postprocessing SW: SEMCAD, V1.8 Build 160

Tilt position - High Channel 810/Area Scan (5x9x1): Measurement grid: $dx=15\text{mm}$, $dy=15\text{mm}$
Maximum value of SAR (measured) = 1.07 mW/g

Tilt position - High Channel 810/Zoom Scan (7x7x7) (7x7x7)/Cube 0: Measurement grid:
 $dx=5\text{mm}$, $dy=5\text{mm}$, $dz=5\text{mm}$
Reference Value = 23.4 V/m
Peak SAR (extrapolated) = 1.84 W/kg
SAR(1 g) = 0.955 mW/g; SAR(10 g) = 0.508 mW/g
Maximum value of SAR (measured) = 1.04 mW/g



Test Laboratory: Advance Data Technology

Left Head-Cheek-PCS1900-Ch512-Mode 3

DUT: Tri-Band GSM GPRS Mobile Phone ; Type: S789+ ; Test Frequency: 1850.2 MHz

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

Phantom: SAM 12 Medium parameters used: $f = 1850.2$ MHz; $\sigma = 1.37$ mho/m; $\epsilon_r = 39.1$; $\rho = 1000$ kg/m³ ; Liquid level: 155 mm

Phantom section: Left Section ; DUT test position : Cheek ; Modulation type: GMSK

Antenna type : Internal Antenna ; Air temp. : 21.9 degrees ; Liquid temp. : 20.7 degrees

DASY4 Configuration:

- Probe: ET3DV6 - SN1790; ConvF(5.26, 5.26, 5.26) ; Calibrated: 2004/12/20
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn579; Calibrated: 2005/3/23
- Phantom: SAM 12; Type: SAM V4.0; Serial: TP 1202
- Measurement SW: DASY4, V4.6 Build 23; Postprocessing SW: SEMCAD, V1.8 Build 160

Touch position - Low Channel 512/Area Scan (5x9x1): Measurement grid: dx=15mm, dy=15mm

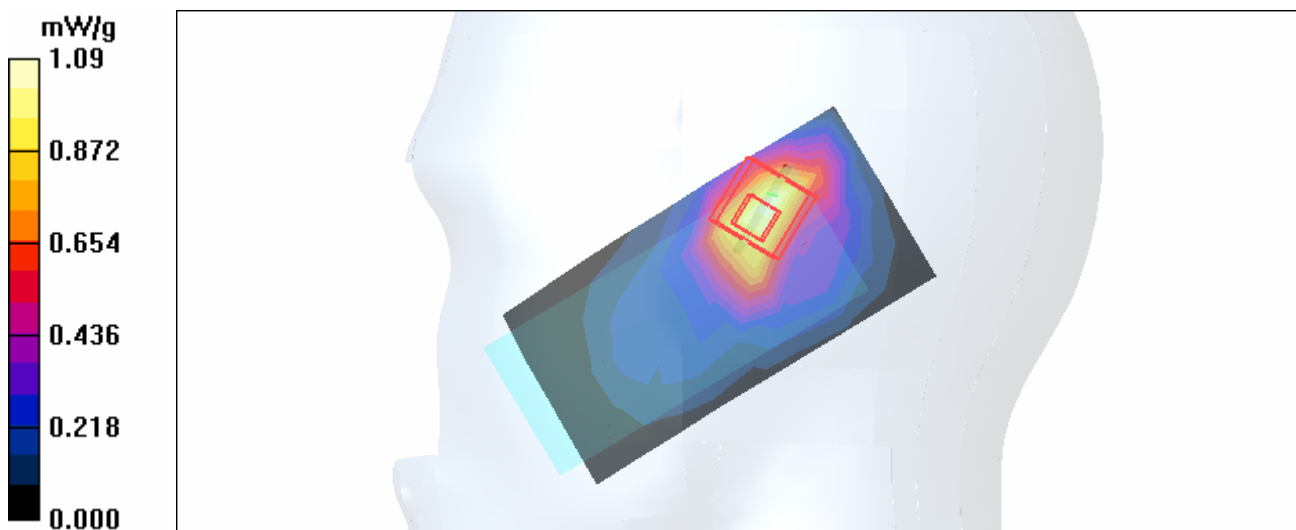
Maximum value of SAR (measured) = 1.09 mW/g

Touch position - Low Channel 512/Zoom Scan (7x7x7) (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 18.0 V/m

Peak SAR (extrapolated) = 2.43 W/kg

SAR(1 g) = 0.995 mW/g; SAR(10 g) = 0.496 mW/g



Test Laboratory: Advance Data Technology

Left Head-Cheek-PCS1900-Ch661-Mode 3

DUT: Tri-Band GSM GPRS Mobile Phone ; Type: S789+ ; Test Frequency: 1880 MHz

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

Phantom: SAM 12 Medium parameters used: $f = 1880$ MHz; $\sigma = 1.4$ mho/m; $\epsilon_r = 39$; $\rho = 1000$ kg/m³ ;

Liquid level: 155 mm

Phantom section: Left Section ; DUT test position : Cheek ; Modulation type: GMSK

Antenna type : Internal Antenna ; Air temp. : 21.9 degrees ; Liquid temp. : 20.7 degrees

DASY4 Configuration:

- Probe: ET3DV6 - SN1790; ConvF(5.26, 5.26, 5.26) ; Calibrated: 2004/12/20
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn579; Calibrated: 2005/3/23
- Phantom: SAM 12; Type: SAM V4.0; Serial: TP 1202
- Measurement SW: DASY4, V4.6 Build 23; Postprocessing SW: SEMCAD, V1.8 Build 160

Touch position - Mid Channel 661/Area Scan (5x9x1): Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (measured) = 1.42 mW/g

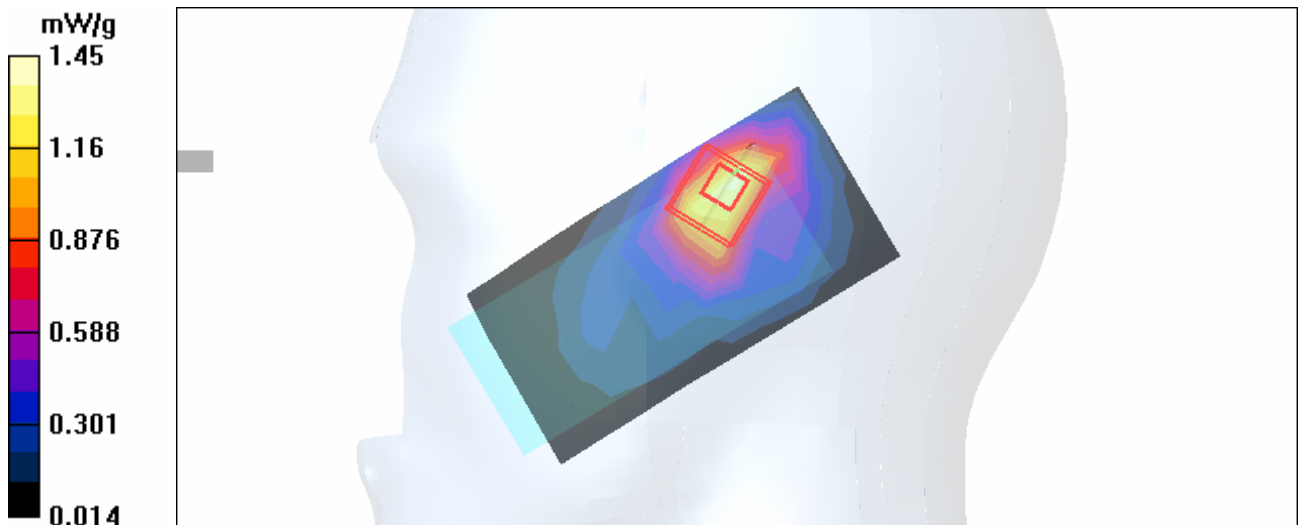
Touch position - Mid Channel 661/Zoom Scan (7x7x7) (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 18.7 V/m

Peak SAR (extrapolated) = 2.82 W/kg

SAR(1 g) = 1.29 mW/g; SAR(10 g) = 0.641 mW/g

Maximum value of SAR (measured) = 1.45 mW/g



Test Laboratory: Advance Data Technology

Left Head-Cheek-PCS1900-Ch810-Mode 3

DUT: Tri-Band GSM GPRS Mobile Phone ; Type: S789+ ; Test Frequency: 1909.8 MHz

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

Phantom: SAM 12 Medium parameters used: $f = 1909.8 \text{ MHz}$; $\sigma = 1.43 \text{ mho/m}$; $\epsilon_r = 38.8$; $\rho = 1000 \text{ kg/m}^3$; Liquid level: 155 mm

Phantom section: Left Section ; DUT test position : Cheek ; Modulation type: GMSK

Antenna type : Internal Antenna ; Air temp. : 21.9 degrees ; Liquid temp. : 20.7 degrees

DASY4 Configuration:

- Probe: ET3DV6 - SN1790; ConvF(5.26, 5.26, 5.26) ; Calibrated: 2004/12/20
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn579; Calibrated: 2005/3/23
- Phantom: SAM 12; Type: SAM V4.0; Serial: TP 1202
- Measurement SW: DASY4, V4.6 Build 23; Postprocessing SW: SEMCAD, V1.8 Build 160

Touch position - High Channel 810/Area Scan (5x9x1): Measurement grid: $dx=15\text{mm}$, $dy=15\text{mm}$

Maximum value of SAR (measured) = 1.56 mW/g

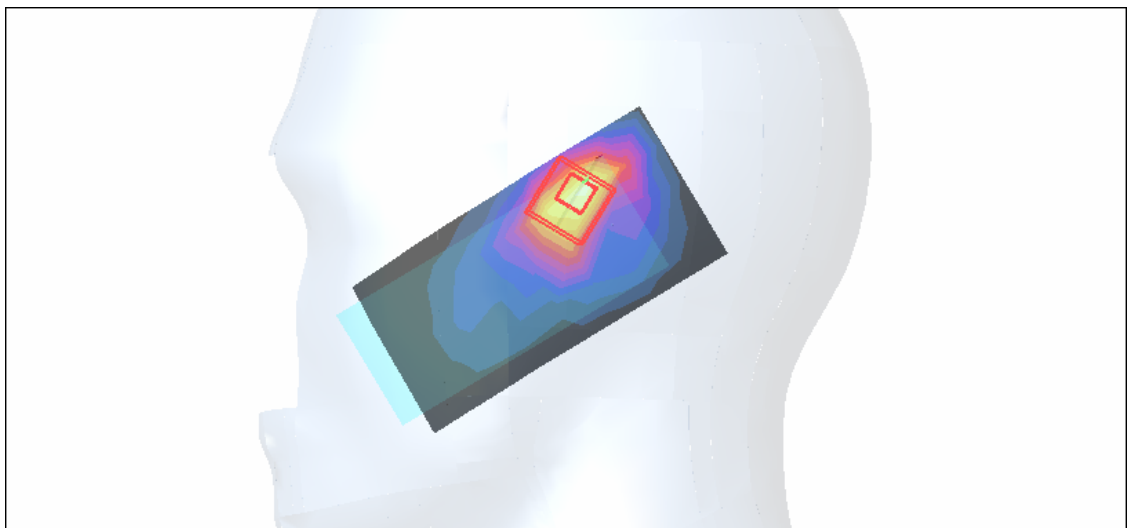
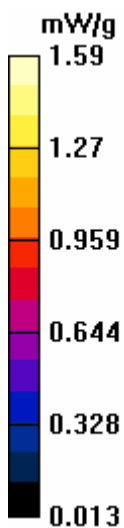
Touch position - High Channel 810/Zoom Scan (7x7x7) (7x7x7)/Cube 0: Measurement grid: $dx=5\text{mm}$, $dy=5\text{mm}$, $dz=5\text{mm}$

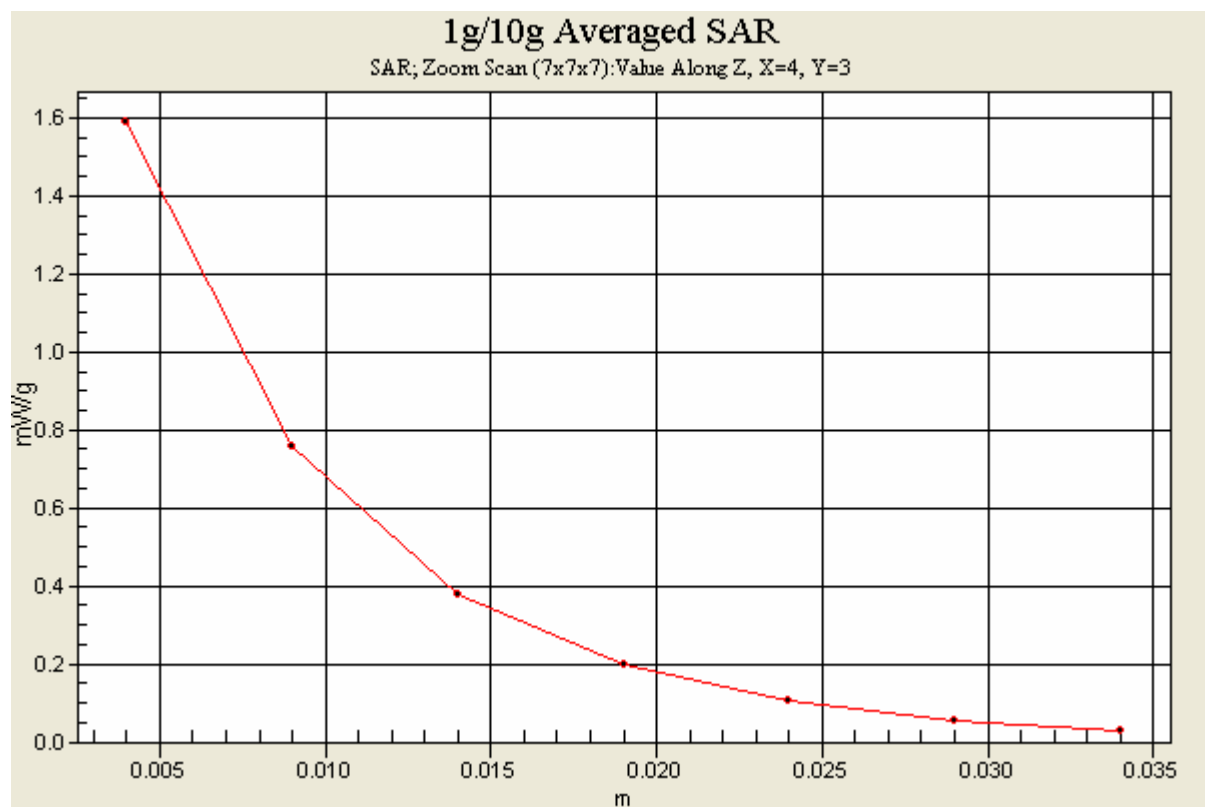
Reference Value = 18.8 V/m

Peak SAR (extrapolated) = 3.10 W/kg

SAR(1 g) = 1.41 mW/g; SAR(10 g) = 0.696 mW/g

Maximum value of SAR (measured) = 1.59 mW/g





Test Laboratory: Advance Data Technology

Left Head-Tilt-PCS1900-Ch512-Mode 4

DUT: Tri-Band GSM GPRS Mobile Phone ; Type: S789+ ; Test Frequency: 1850.2 MHz

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

Medium: HSL1900 Medium parameters used: $f = 1850.2$ MHz; $\sigma = 1.37$ mho/m; $\epsilon_r = 39.1$; $\rho = 1000$ kg/m³ ; Liquid level: 155 mm

Phantom section: Left Section ; DUT test position : Tilt ; Modulation type: GMSK

Antenna type : Internal Antenna ; Air temp. : 21.9 degrees ; Liquid temp. : 20.7 degrees

DASY4 Configuration:

- Probe: ET3DV6 - SN1790 ; ConvF(5.26, 5.26, 5.26) ; Calibrated: 2004/12/20
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn579; Calibrated: 2005/3/23
- Phantom: SAM 12; Type: SAM V4.0; Serial: TP 1202
- Measurement SW: DASY4, V4.6 Build 23; Postprocessing SW: SEMCAD, V1.8 Build 160

Tilt position - Low Channel 512/Area Scan (5x9x1): Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (measured) = 0.971 mW/g

Tilt position - Low Channel 512/Zoom Scan (7x7x7) (7x7x7)/Cube 0: Measurement grid:

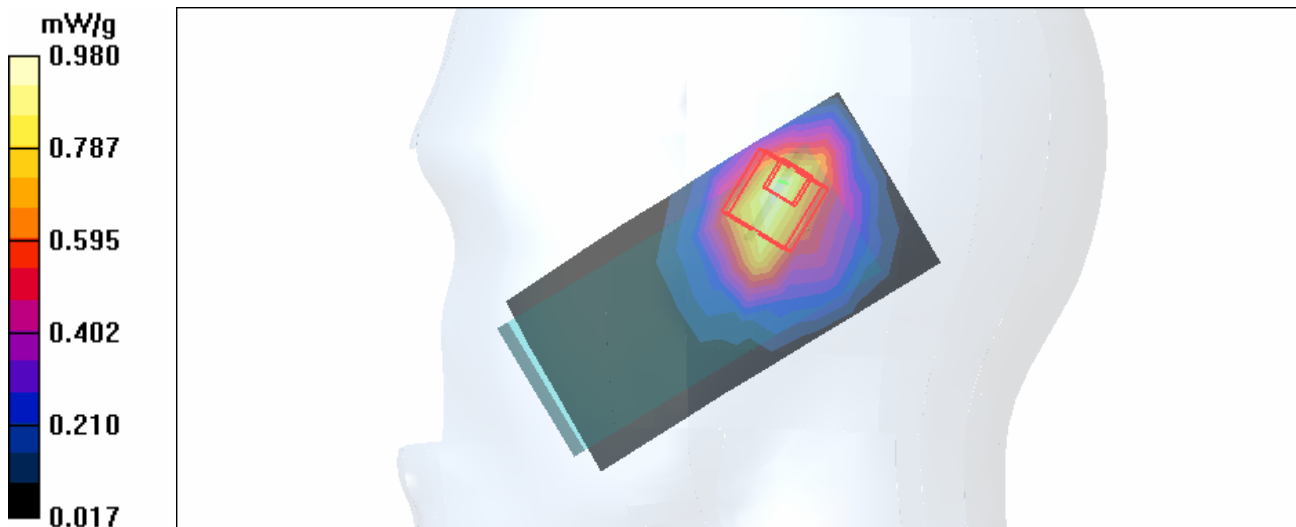
dx=5mm, dy=5mm, dz=5mm

Reference Value = 21.8 V/m

Peak SAR (extrapolated) = 1.81 W/kg

SAR(1 g) = 0.881 mW/g; SAR(10 g) = 0.463 mW/g

Maximum value of SAR (measured) = 0.980 mW/g



Test Laboratory: Advance Data Technology

Left Head-Tilt-PCS1900-Ch661-Mode 4

DUT: Tri-Band GSM GPRS Mobile Phone ; Type: S789+ ; Test Frequency: 1880 MHz

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

Medium: HSL1900 Medium parameters used: $f = 1880$ MHz; $\sigma = 1.4$ mho/m; $\epsilon_r = 39$; $\rho = 1000$ kg/m³ ;

Liquid level: 155 mm

Phantom section: Left Section ; DUT test position : Tilt ; Modulation type: GMSK

Antenna type : Internal Antenna ; Air temp. : 21.9 degrees ; Liquid temp. : 20.7 degrees

DASY4 Configuration:

- Probe: ET3DV6 - SN1790 ; ConvF(5.26, 5.26, 5.26) ; Calibrated: 2004/12/20
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn579; Calibrated: 2005/3/23
- Phantom: SAM 12; Type: SAM V4.0; Serial: TP 1202
- Measurement SW: DASY4, V4.6 Build 23; Postprocessing SW: SEMCAD, V1.8 Build 160

Tilt position - Mid Channel 661/Area Scan (5x9x1): Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (measured) = 1.13 mW/g

Tilt position - Mid Channel 661/Zoom Scan (7x7x7) (7x7x7)/Cube 0: Measurement grid:

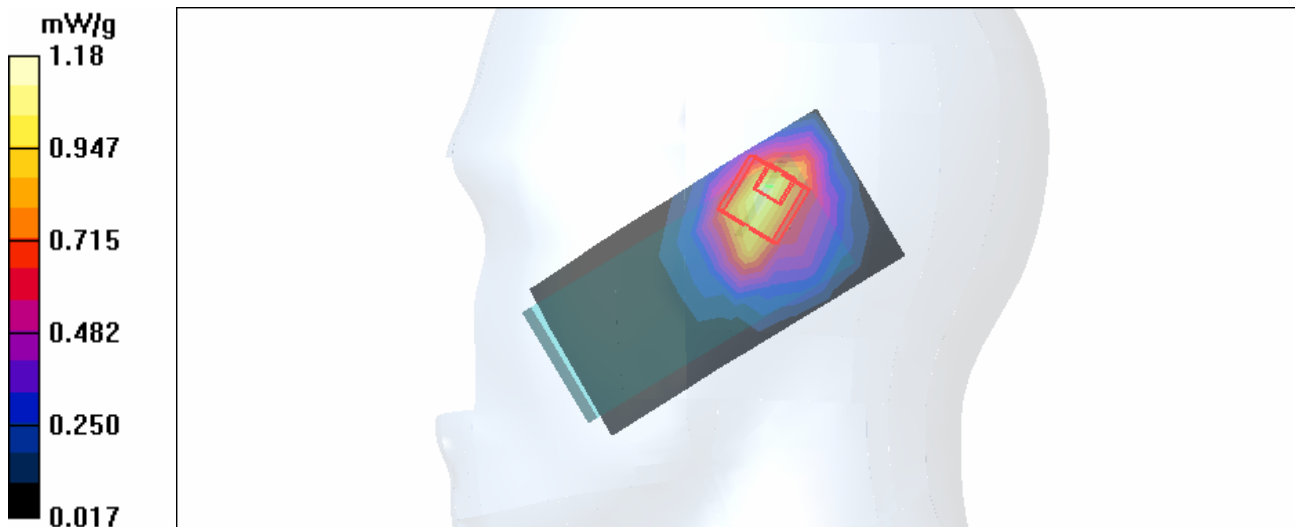
dx=5mm, dy=5mm, dz=5mm

Reference Value = 23.1 V/m

Peak SAR (extrapolated) = 2.19 W/kg

SAR(1 g) = 1.05 mW/g; SAR(10 g) = 0.539 mW/g

Maximum value of SAR (measured) = 1.18 mW/g



Test Laboratory: Advance Data Technology

Left Head-Tilt-PCS1900-Ch810-Mode 4

DUT: Tri-Band GSM GPRS Mobile Phone ; Type: S789+ ; Test Frequency: 1909.8 MHz

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

Medium: HSL1900 Medium parameters used: $f = 1909.8 \text{ MHz}$; $\sigma = 1.43 \text{ mho/m}$; $\epsilon_r = 38.8$; $\rho = 1000 \text{ kg/m}^3$; Liquid level: 155 mm

Phantom section: Left Section ; DUT test position : Tilt ; Modulation type: GMSK

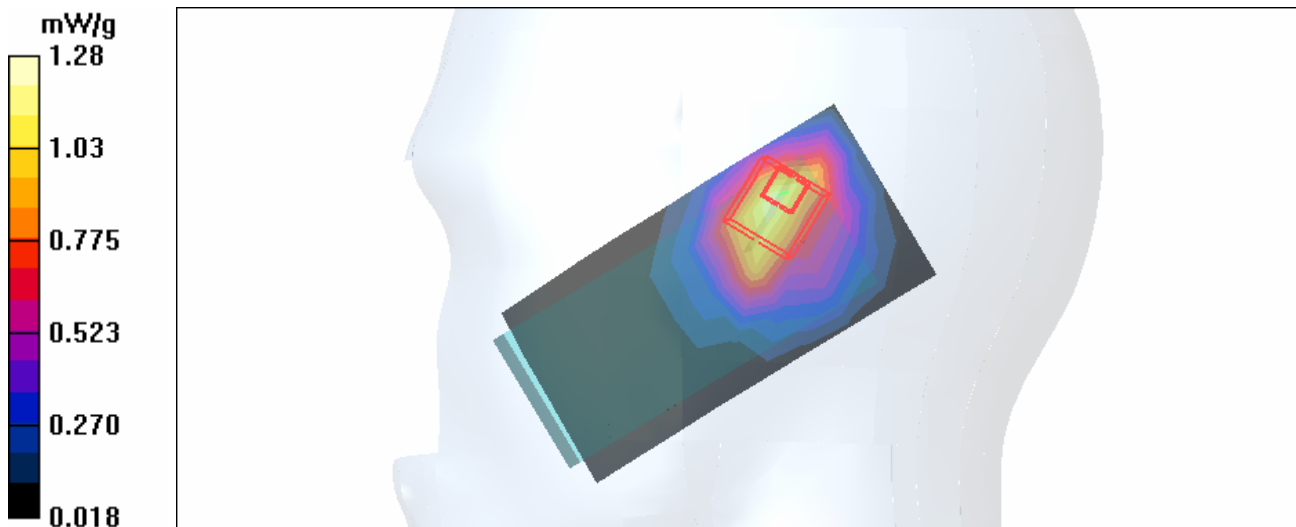
Antenna type : Internal Antenna ; Air temp. : 21.9 degrees ; Liquid temp. : 20.7 degrees

DASY4 Configuration:

- Probe: ET3DV6 - SN1790 ; ConvF(5.26, 5.26, 5.26) ; Calibrated: 2004/12/20
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn579; Calibrated: 2005/3/23
- Phantom: SAM 12; Type: SAM V4.0; Serial: TP 1202
- Measurement SW: DASY4, V4.6 Build 23; Postprocessing SW: SEMCAD, V1.8 Build 160

Tilt position - High Channel 810/Area Scan (5x9x1): Measurement grid: $dx=15\text{mm}$, $dy=15\text{mm}$
Maximum value of SAR (measured) = 1.22 mW/g

Tilt position - High Channel 810/Zoom Scan (7x7x7) (7x7x7)/Cube 0: Measurement grid:
 $dx=5\text{mm}$, $dy=5\text{mm}$, $dz=5\text{mm}$
Reference Value = 23.5 V/m
Peak SAR (extrapolated) = 2.32 W/kg
SAR(1 g) = 1.12 mW/g; SAR(10 g) = 0.577 mW/g
Maximum value of SAR (measured) = 1.28 mW/g



Test Laboratory: Advance Data Technology

BodyWorn-GPRS1900-Ch512-Keypad Down-Mode 5

DUT: Tri-Band GSM GPRS Mobile Phone ; Type: S789+ ; Test Frequency: 1850.2 MHz

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

Medium: MSL1900 Medium parameters used: $f = 1850.2$ MHz; $\sigma = 1.51$ mho/m; $\epsilon_r = 52$; $\rho = 1000$ kg/m³ ; Liquid Level : 151 mm

Phantom section: Flat Section ; DUT test position : Body ; Modulation Type: GMSK / UL 2 time slots

Separation Distance : 15 mm (The bottom side of the EUT to the Phantom)

Antenna Type : Internal Antenna ; Air Temp. : 22.0degrees ; Liquid Temp. : 20.9degrees

DASY4 Configuration:

- Probe: ET3DV6 - SN1790 ; ConvF(4.71, 4.71, 4.71) ; Calibrated: 2004/12/20

- Sensor-Surface: 4mm (Mechanical Surface Detection)

- Electronics: DAE3 Sn579 ; Calibrated: 2005/3/23

- Phantom: SAM 12 ; Type: SAM V4.0; Serial: TP 1202

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

Low Channel 512/Area Scan (5x9x1): Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (measured) = 0.861 mW/g

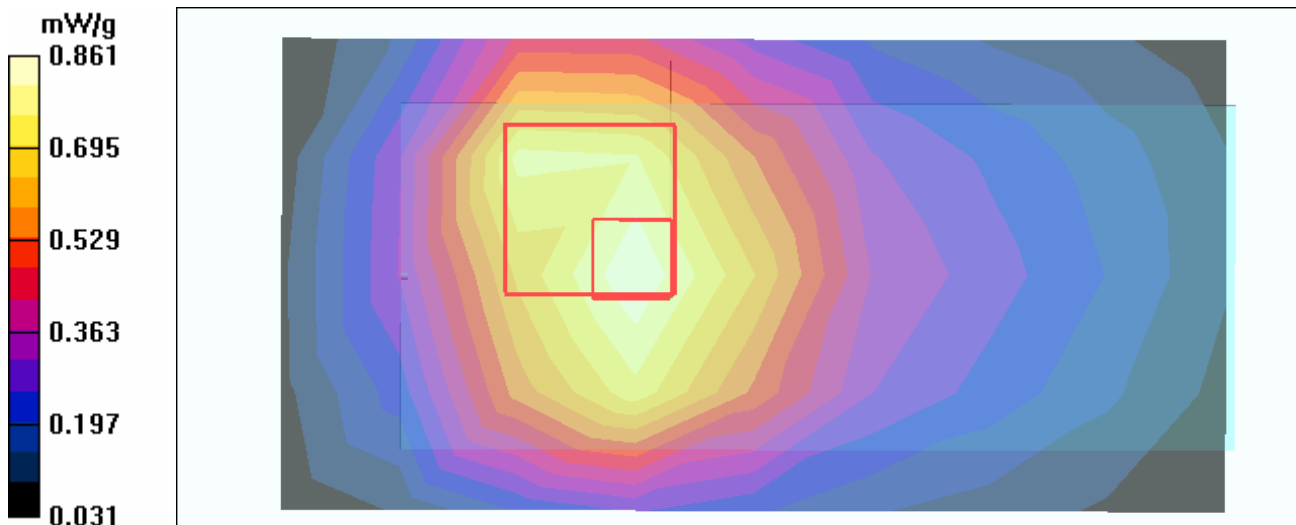
Low Channel 512/Zoom Scan (7x7x7) (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 15.5 V/m

Peak SAR (extrapolated) = 1.24 W/kg

SAR(1 g) = 0.750 mW/g; SAR(10 g) = 0.447 mW/g

Maximum value of SAR (measured) = 0.851 mW/g



Test Laboratory: Advance Data Technology

BodyWorn-GPRS1900-Ch661-Keypad Down-Mode 5

DUT: Tri-Band GSM GPRS Mobile Phone ; Type: S789+ ; Test Frequency: 1880 MHz

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

Medium: MSL1900 Medium parameters used: $f = 1880$ MHz; $\sigma = 1.54$ mho/m; $\epsilon_r = 51.8$; $\rho = 1000$ kg/m³ ; Liquid Level : 151 mm

Phantom section: Flat Section ; DUT test position : Body ; Modulation Type: GMSK / UL 2 time slots

Separation Distance : 15 mm (The bottom side of the EUT to the Phantom)

Antenna Type : Internal Antenna ; Air Temp. : 22.0degrees ; Liquid Temp. : 20.9degrees

DASY4 Configuration:

- Probe: ET3DV6 - SN1790 ; ConvF(4.71, 4.71, 4.71) ; Calibrated: 2004/12/20

- Sensor-Surface: 4mm (Mechanical Surface Detection)

- Electronics: DAE3 Sn579 ; Calibrated: 2005/3/23

- Phantom: SAM 12 ; Type: SAM V4.0; Serial: TP 1202

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

Mid Channel 661/Area Scan (5x9x1): Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (measured) = 0.964 mW/g

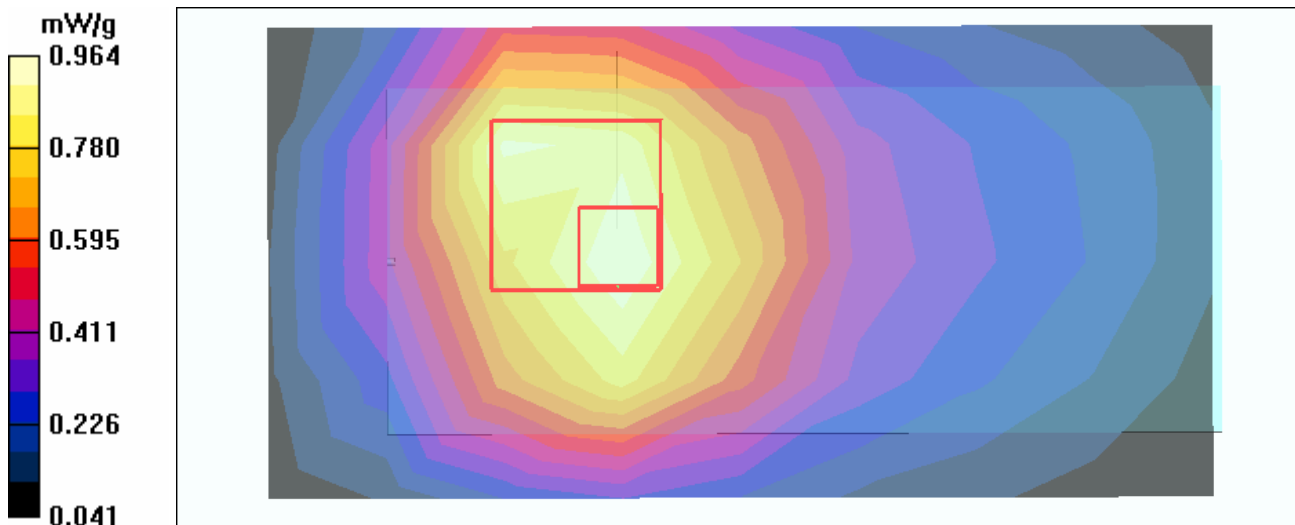
Mid Channel 661/Zoom Scan (7x7x7) (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

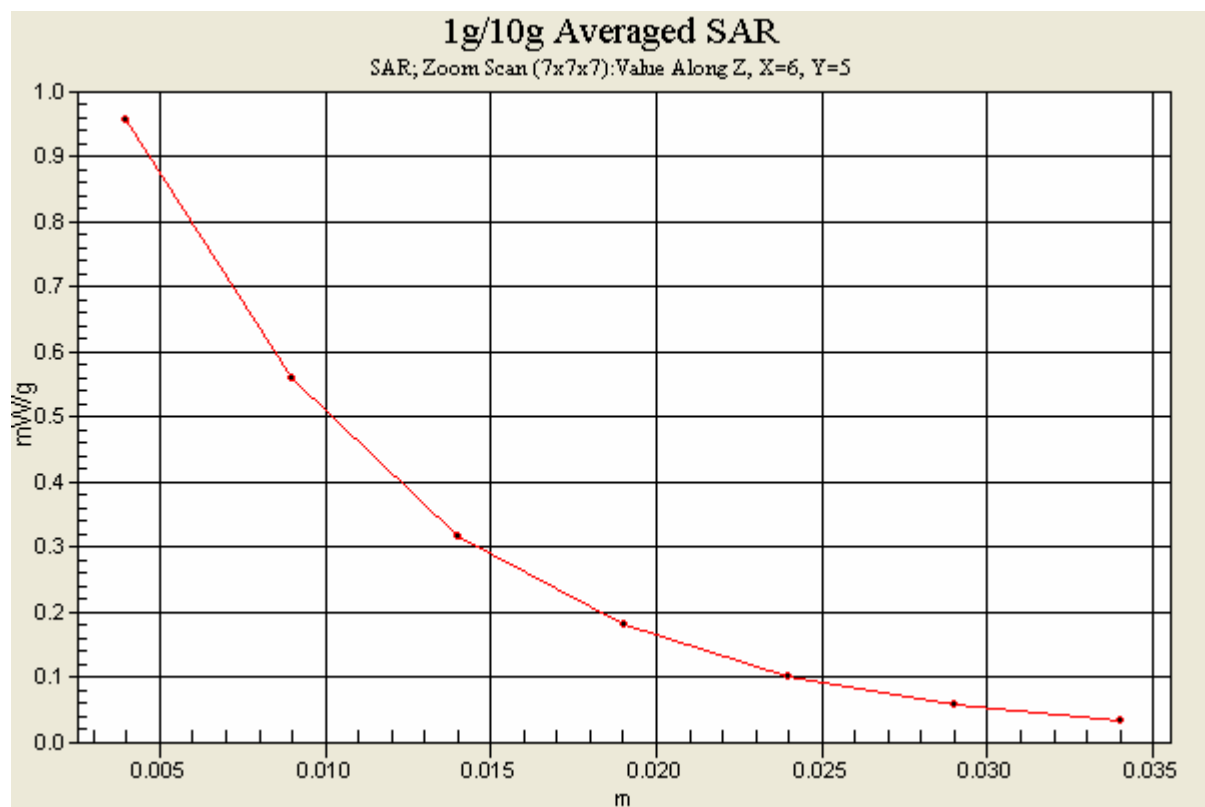
Reference Value = 17.5 V/m

Peak SAR (extrapolated) = 1.40 W/kg

SAR(1 g) = 0.859 mW/g; SAR(10 g) = 0.523 mW/g

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





Test Laboratory: Advance Data Technology

BodyWorn-GPRS1900-Ch810-Keypad Down-Mode 5

DUT: Tri-Band GSM GPRS Mobile Phone ; Type: S789+ ; Test Frequency: 1909.8 MHz

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

Medium: MSL1900 Medium parameters used: $f = 1909.8$ MHz; $\sigma = 1.57$ mho/m; $\epsilon_r = 51.7$; $\rho = 1000$ kg/m³ ; Liquid Level : 151 mm

Phantom section: Flat Section ; DUT test position : Body ; Modulation Type: GMSK / UL 2 time slots
Separation Distance : 15 mm (The bottom side of the EUT to the Phantom)

Antenna Type : Internal Antenna ; Air Temp. : 22.0degrees ; Liquid Temp. : 20.9degrees

DASY4 Configuration:

- Probe: ET3DV6 - SN1790 ; ConvF(4.71, 4.71, 4.71) ; Calibrated: 2004/12/20
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn579 ; Calibrated: 2005/3/23
- Phantom: SAM 12 ; Type: SAM V4.0; Serial: TP 1202
- Measurement SW: DASY4, V4.6 Build 23 ; Postprocessing SW: SEMCAD, V1.8 Build 160

High Channel 810/Area Scan (5x9x1): Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (measured) = 0.910 mW/g

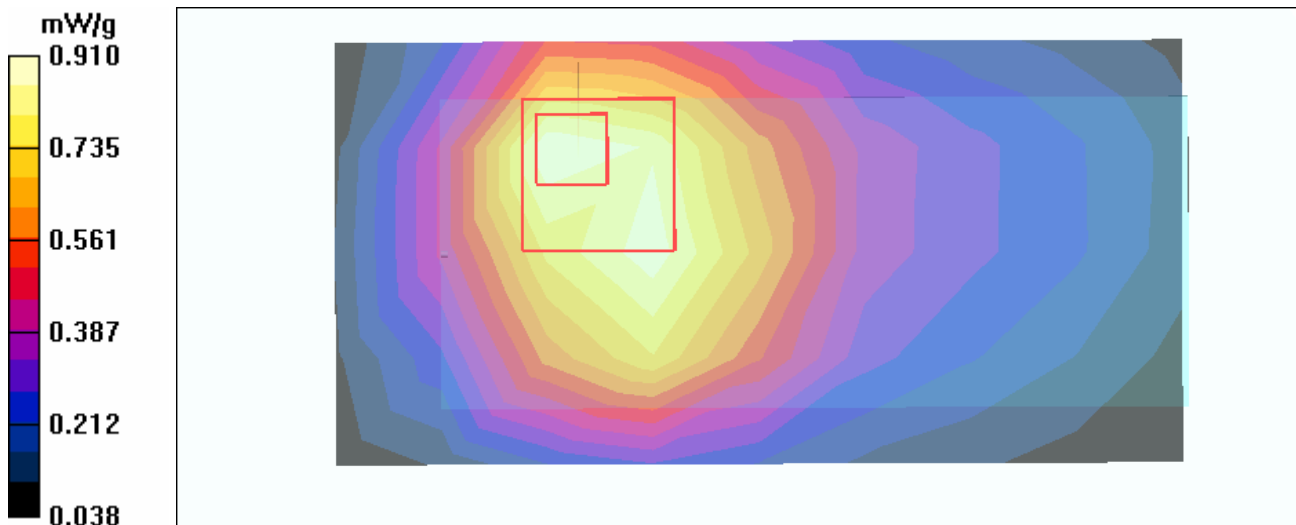
High Channel 810/Zoom Scan (7x7x7) (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 17.2 V/m

Peak SAR (extrapolated) = 1.31 W/kg

SAR(1 g) = 0.823 mW/g; SAR(10 g) = 0.505 mW/g

Maximum value of SAR (measured) = 0.892 mW/g



Test Laboratory: Advance Data Technology

BodyWorn-GPRS1900-Ch512-Keypad Up-Mode 6

DUT: Tri-Band GSM GPRS Mobile Phone ; Type: S789+ ; Test Frequency: 1850.2 MHz

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

Medium: MSL1900 Medium parameters used: $f = 1850.2$ MHz; $\sigma = 1.51$ mho/m; $\epsilon_r = 52$; $\rho = 1000$ kg/m³ ; Liquid Level : 151 mm

Phantom section: Flat Section ; DUT test position : Body ; Modulation Type: GMSK / UL 2 time slots

Separation Distance : 15 mm (The front side of the EUT to the Phantom)

Antenna Type : Internal Antenna ; Air Temp. : 22.0degrees ; Liquid Temp. : 20.9degrees

DASY4 Configuration:

- Probe: ET3DV6 - SN1790 ; ConvF(4.71, 4.71, 4.71) ; Calibrated: 2004/12/20

- Sensor-Surface: 4mm (Mechanical Surface Detection)

- Electronics: DAE3 Sn579 ; Calibrated: 2005/3/23

- Phantom: SAM 12 ; Type: SAM V4.0; Serial: TP 1202

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

Low Channel 512/Area Scan (5x9x1): Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (measured) = 0.588 mW/g

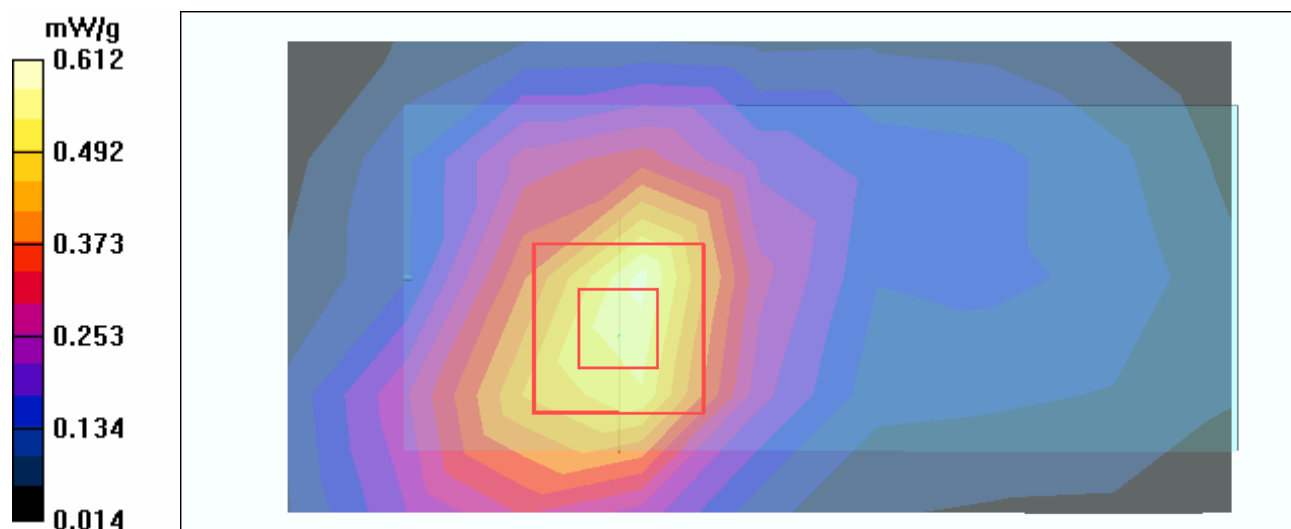
Low Channel 512/Zoom Scan (7x7x7) (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 10.1 V/m

Peak SAR (extrapolated) = 0.883 W/kg

SAR(1 g) = 0.548 mW/g; SAR(10 g) = 0.313 mW/g

Maximum value of SAR (measured) = 0.612 mW/g



Test Laboratory: Advance Data Technology

BodyWorn-GPRS1900-Ch661-Keypad Up-Mode 6

DUT: Tri-Band GSM GPRS Mobile Phone ; Type: S789+ ; Test Frequency: 1880 MHz

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

Medium: MSL1900 Medium parameters used: $f = 1880$ MHz; $\sigma = 1.54$ mho/m; $\epsilon_r = 51.8$; $\rho = 1000$ kg/m³ ; Liquid Level : 151 mm

Phantom section: Flat Section ; DUT test position : Body ; Modulation Type: GMSK / UL 2 time slots
Separation Distance : 15 mm (The front side of the EUT to the Phantom)

Antenna Type : Internal Antenna ; Air Temp. : 22.0degrees ; Liquid Temp. : 20.9degrees

DASY4 Configuration:

- Probe: ET3DV6 - SN1790 ; ConvF(4.71, 4.71, 4.71) ; Calibrated: 2004/12/20
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn579 ; Calibrated: 2005/3/23
- Phantom: SAM 12 ; Type: SAM V4.0; Serial: TP 1202
- Measurement SW: DASY4, V4.6 Build 23 ; Postprocessing SW: SEMCAD, V1.8 Build 160

Mid Channel 661/Area Scan (5x9x1): Measurement grid: dx=15mm, dy=15mm

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

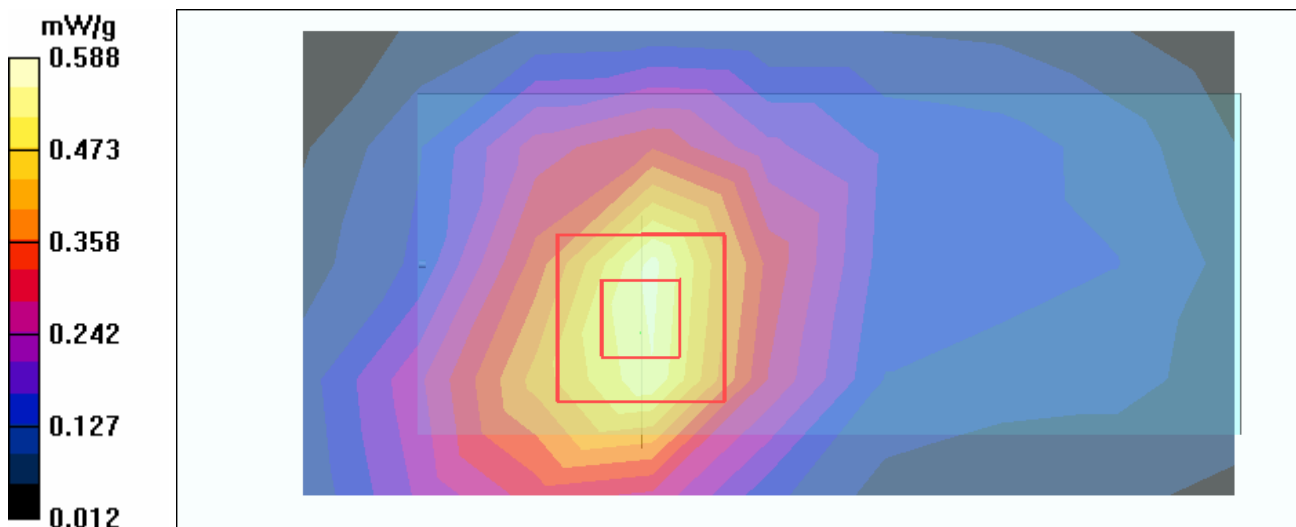
Mid Channel 661/Zoom Scan (7x7x7) (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 10.4 V/m

Peak SAR (extrapolated) = 0.855 W/kg

SAR(1 g) = 0.531 mW/g; SAR(10 g) = 0.305 mW/g

Maximum value of SAR (measured) = 0.588 mW/g



Test Laboratory: Advance Data Technology

BodyWorn-GPRS1900-Ch810-Keypad Up-Mode 6

DUT: Tri-Band GSM GPRS Mobile Phone ; Type: S789+ ; Test Frequency: 1909.8 MHz

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

Medium: MSL1900 Medium parameters used: $f = 1909.8 \text{ MHz}$; $\sigma = 1.57 \text{ mho/m}$; $\epsilon_r = 51.7$; $\rho = 1000 \text{ kg/m}^3$; Liquid Level : 151 mm

Phantom section: Flat Section ; DUT test position : Body ; Modulation Type: GMSK / UL 2 time slots
Separation Distance : 15 mm (The front side of the EUT to the Phantom)

Antenna Type : Internal Antenna ; Air Temp. : 22.0degrees ; Liquid Temp. : 20.9degrees

DASY4 Configuration:

- Probe: ET3DV6 - SN1790 ; ConvF(4.71, 4.71, 4.71) ; Calibrated: 2004/12/20
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn579 ; Calibrated: 2005/3/23
- Phantom: SAM 12 ; Type: SAM V4.0; Serial: TP 1202
- Measurement SW: DASY4, V4.6 Build 23 ; Postprocessing SW: SEMCAD, V1.8 Build 160

High Channel 810/Area Scan (5x9x1): Measurement grid: $dx=15\text{mm}$, $dy=15\text{mm}$

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

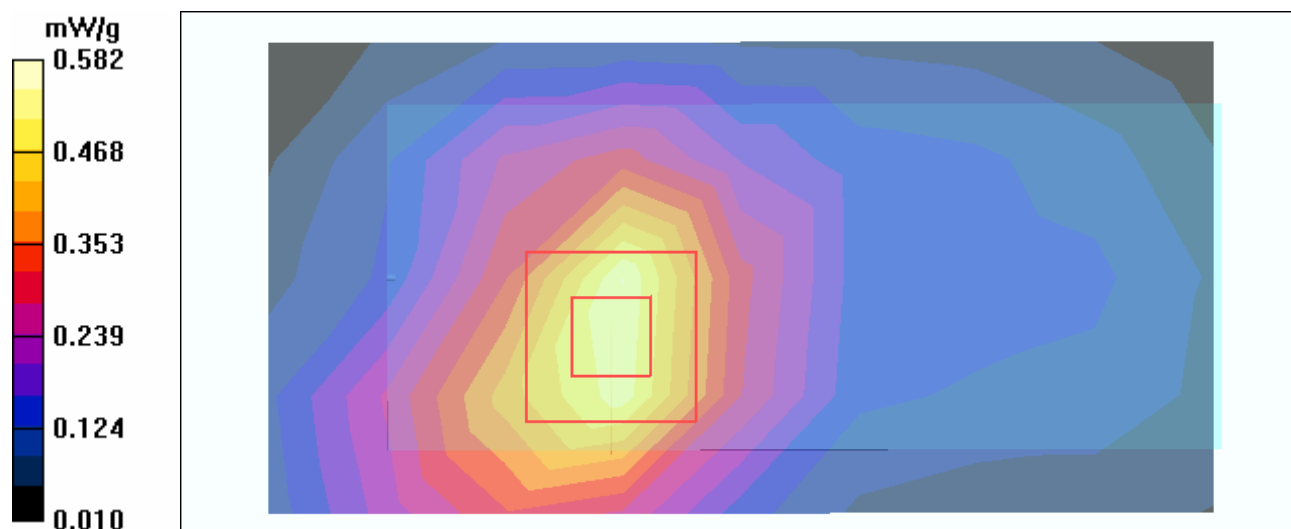
High Channel 810/Zoom Scan (7x7x7) (7x7x7)/Cube 0: Measurement grid: $dx=5\text{mm}$, $dy=5\text{mm}$, $dz=5\text{mm}$

Reference Value = 10.00 V/m

Peak SAR (extrapolated) = 0.864 W/kg

SAR(1 g) = 0.523 mW/g; SAR(10 g) = 0.298 mW/g

Maximum value of SAR (measured) = 0.582 mW/g



Test Laboratory: Advance Data Technology

System Validation Check-HSL 1900MHz

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

Communication System: CW ; Frequency: 1900 MHz; Duty Cycle: 1:1; Modulation type: CW
Medium: HSL1900; Medium parameters used: $f = 1900$ MHz; $\sigma = 1.42$ mho/m; $\epsilon_r = 38.9$; $\rho = 1000$ kg/m³ ; Liquid level : 155 mm

Phantom section: Flat Section ; Separation distance : 10 mm (The feetpoint of the dipole to the Phantom) Air temp. : 21.9 degrees ; Liquid temp. : 20.7 degrees

DASY4 Configuration:

- Probe: ET3DV6 - SN1790 ; ConvF(5.26, 5.26, 5.26) ; Calibrated: 2004/12/20
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn579; Calibrated: 2005/3/23
- Phantom: SAM 12; Type: SAM V4.0; Serial: TP 1202
- Measurement SW: DASY4, V4.6 Build 23; Postprocessing SW: SEMCAD, V1.8 Build 160

d=10mm, Pin=250mW/Area Scan (7x7x1): Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (measured) = 10.6 mW/g

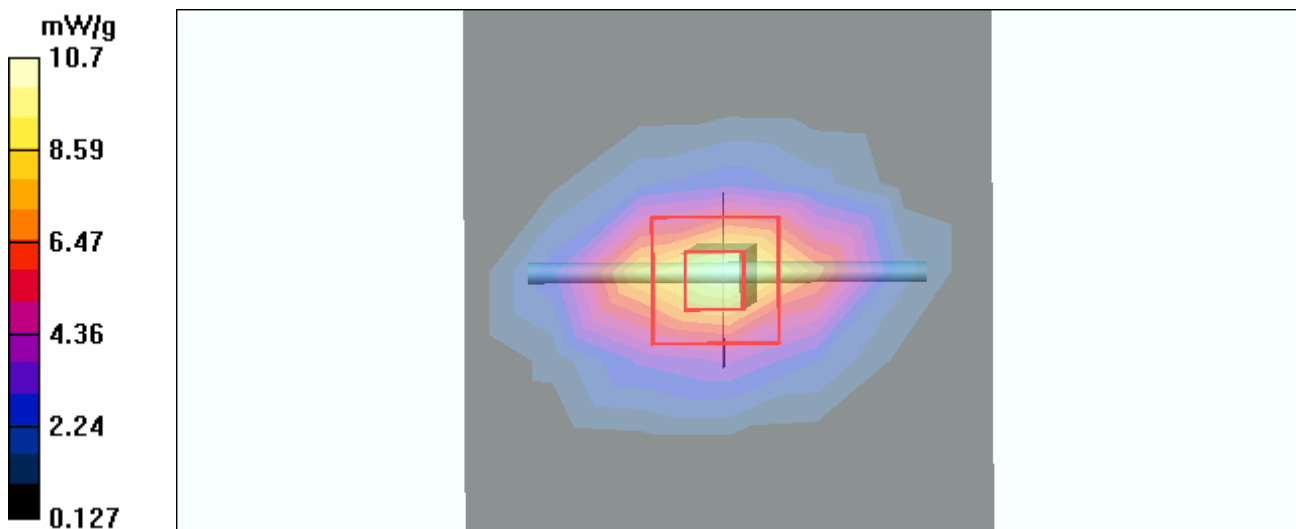
d=10mm, Pin=250mW/Zoom Scan (7x7x7) (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 92.1 V/m; Power Drift = -0.072 dB

Peak SAR (extrapolated) = 17.4 W/kg

SAR(1 g) = 9.48 mW/g; SAR(10 g) = 4.87 mW/g

Maximum value of SAR (measured) = 10.7 mW/g



Test Laboratory: Advance Data Technology

System Validation Check-MSL 1900MHz

DUT: Dipole 1900 MHz ; Type: D1900V2 ; Serial: 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; $\epsilon_r = 51.7$; $\rho = 1000$ kg/m³ ; Liquid level : 151 mm
Phantom section: Flat Section ; Separation distance : 10 mm (The feetpoint of the dipole to the Phantom)
Air temp. : 22.0 degrees ; Liquid temp. : 20.9 degrees

DASY4 Configuration:

- Probe: ET3DV6 - SN1790 ; ConvF(4.71, 4.71, 4.71) ; Calibrated: 2004/12/20
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn579; Calibrated: 2005/3/23
- Phantom: SAM 12; Type: SAM V4.0; Serial: TP 1202
- Measurement SW: DASY4, V4.6 Build 23; Postprocessing SW: SEMCAD, V1.8 Build 160

d=10mm, Pin=250mW/Area Scan (7x7x1): Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (measured) = 10.6 mW/g

d=10mm, Pin=250mW/Zoom Scan (7x7x7) (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 89.1 V/m; Power Drift = -0.077 dB

Peak SAR (extrapolated) = 16.5 W/kg

SAR(1 g) = 9.55 mW/g; SAR(10 g) = 4.97 mW/g

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

