

APPENDIX A: TEST CONFIGURATIONS AND TEST DATA

A1: TEST CONFIGURATION

Body Worn Position



The bottom of the EUT to the flat phantom distance 0 mm

EUT Photo





Liquid Level Photo

Tissue 1900MHz D=152mm



Test Laboratory: Advance Data Technology

IT7000-Bottom BodyWorn GPRS Mode 1

DUT: PDT(Portable Data Terminal) ; Type: IT7000(GSM) ; Test Channel 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; $\sigma = 1.5$ mho/m; $\epsilon_r = 50.9$; $\rho = 1000$ kg/m³ ; Liquid Level : 152mm

Phantom section: Flat Section ; DUT test position : Body ; Modulation Type: GMSK / UL 2 time slots
Separation Distance : 0 mm (The bottom side of the EUT to the Phantom)

Antenna Type : External Antenna ; Air Temp. : 23.0 degrees ; Liquid Temp. : 21.0 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, V4.5 Build 19 ; Postprocessing SW: SEMCAD, V1.8 Build 146

Low Channel 512/Area Scan (9x15x1): Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (measured) = 0.371 mW/g

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

Reference Value = 10.8 V/m

Peak SAR (extrapolated) = 0.525 W/kg

SAR(1 g) = 0.342 mW/g; SAR(10 g) = 0.207 mW/g

Maximum value of SAR (measured) = 0.374 mW/g

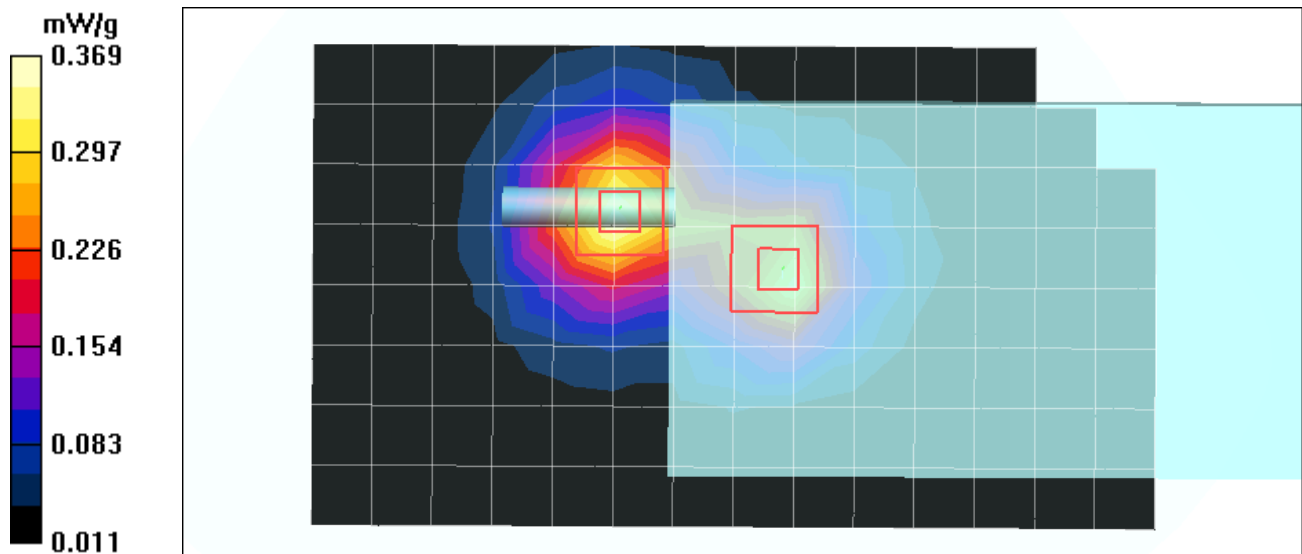
Low Channel 512/Zoom Scan (7x7x7) (7x7x7)/Cube 1: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 10.8 V/m

Peak SAR (extrapolated) = 0.477 W/kg

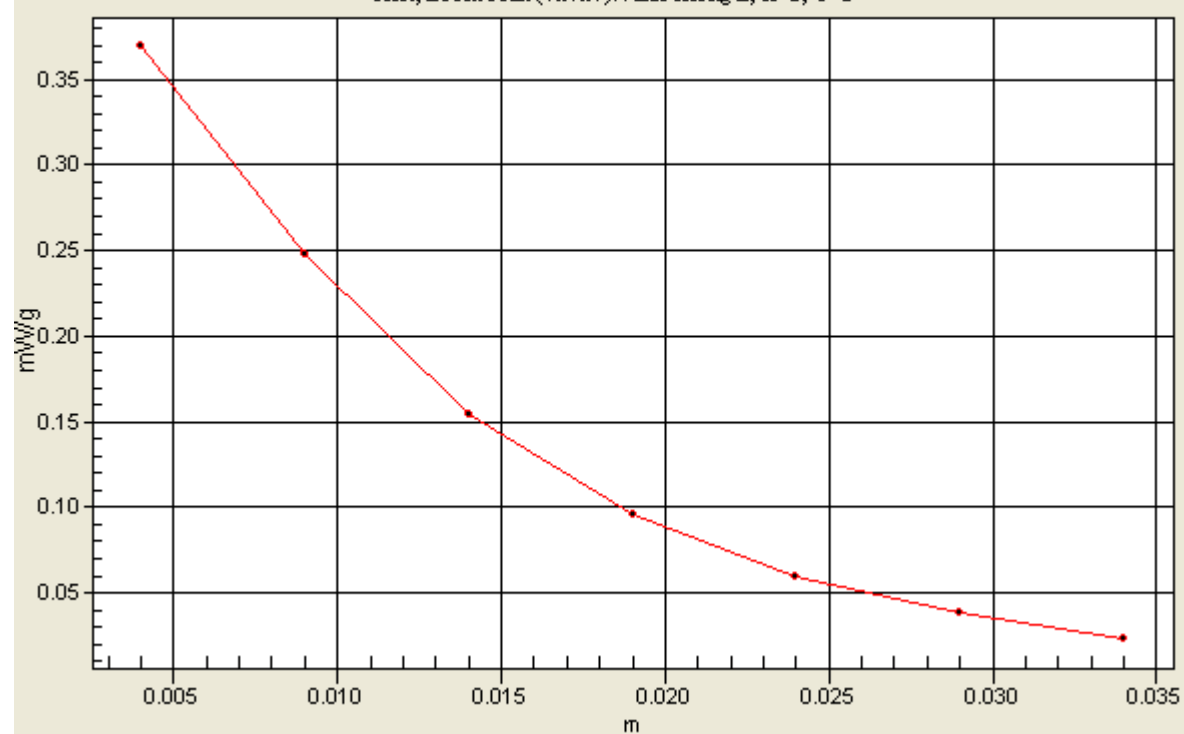
SAR(1 g) = 0.329 mW/g; SAR(10 g) = 0.192 mW/g

Maximum value of SAR (measured) = 0.369 mW/g



1g/10g Averaged SAR

SAR; Zoom Scan (7x7x7): Value Along Z, X=3, Y=3



Test Laboratory: Advance Data Technology

IT7000-Bottom BodyWorn GPRS Mode 1

DUT: PDT(Portable Data Terminal) ; Type: IT7000(GSM) ; Test Channel 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; $\epsilon_r = 50.8$; $\rho = 1000$ kg/m³ ; Liquid Level : 152mm

Phantom section: Flat Section ; DUT test position : Body ; Modulation Type: GMSK / UL 2 time slots
Separation Distance : 0 mm (The bottom side of the EUT to the Phantom)

Antenna Type : External Antenna ; Air Temp. : 23.0 degrees ; Liquid Temp. : 21.0 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, V4.5 Build 19 ; Postprocessing SW: SEMCAD, V1.8 Build 146

Middle Channel 661/Area Scan (9x15x1): Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (measured) = 0.233 mW/g

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

Reference Value = 8.47 V/m

Peak SAR (extrapolated) = 0.349 W/kg

SAR(1 g) = 0.221 mW/g; SAR(10 g) = 0.132 mW/g

Maximum value of SAR (measured) = 0.242 mW/g

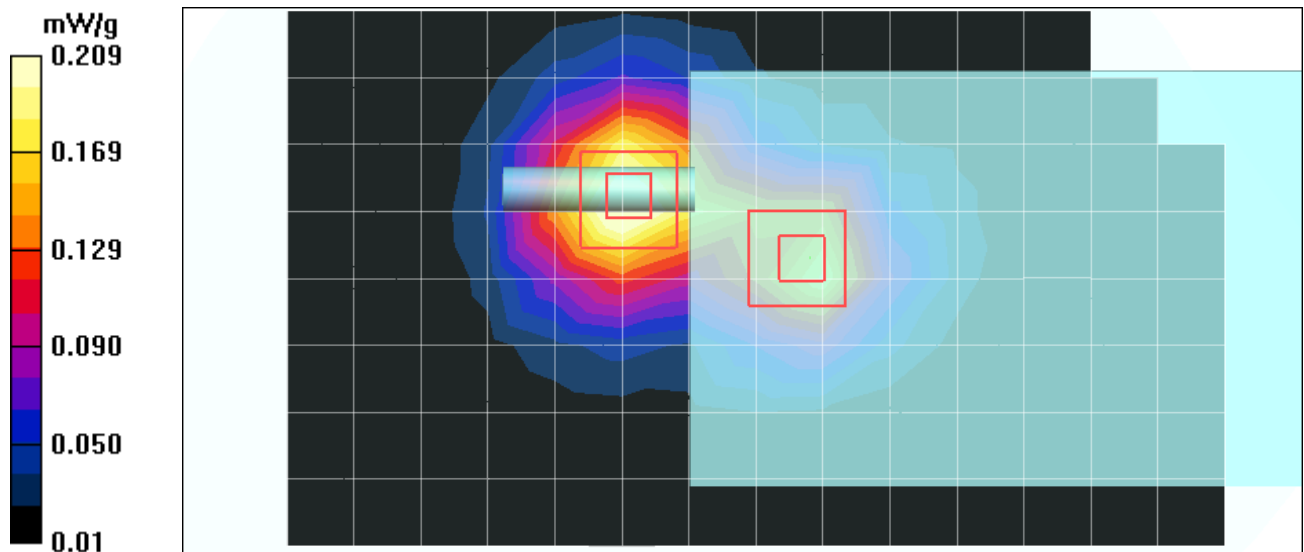
Middle Channel 661/Zoom Scan (7x7x7) (7x7x7)/Cube 1: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 8.47 V/m

Peak SAR (extrapolated) = 0.272 W/kg

SAR(1 g) = 0.186 mW/g; SAR(10 g) = 0.108 mW/g

Maximum value of SAR (measured) = 0.209 mW/g



Test Laboratory: Advance Data Technology

IT7000-Bottom BodyWorn GPRS Mode 1

DUT: PDT(Portable Data Terminal) ; Type: IT7000(GSM) ; Test Channel Frequency: 1909.8 MHz

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

Medium: MSL1900 Medium parameters used: $f = 1909.8 \text{ MHz}$; $\sigma = 1.57 \text{ mho/m}$; $\epsilon_r = 50.7$; $\rho = 1000 \text{ kg/m}^3$; Liquid Level : 152mm

Phantom section: Flat Section ; DUT test position : Body ; Modulation Type: GMSK / UL 2 time slots
Separation Distance : 0 mm (The bottom side of the EUT to the Phantom)

Antenna Type : External Antenna ; Air Temp. : 23.0 degrees ; Liquid Temp. : 21.0 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, V4.5 Build 19 ; Postprocessing SW: SEMCAD, V1.8 Build 146

High Channel 810/Area Scan (9x15x1): Measurement grid: $dx=15\text{mm}$, $dy=15\text{mm}$

Maximum value of SAR (measured) = 0.158 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 = 6.95 V/m

Peak SAR (extrapolated) = 0.237 W/kg

SAR(1 g) = 0.148 mW/g; SAR(10 g) = 0.089 mW/g

Maximum value of SAR (measured) = 0.163 mW/g

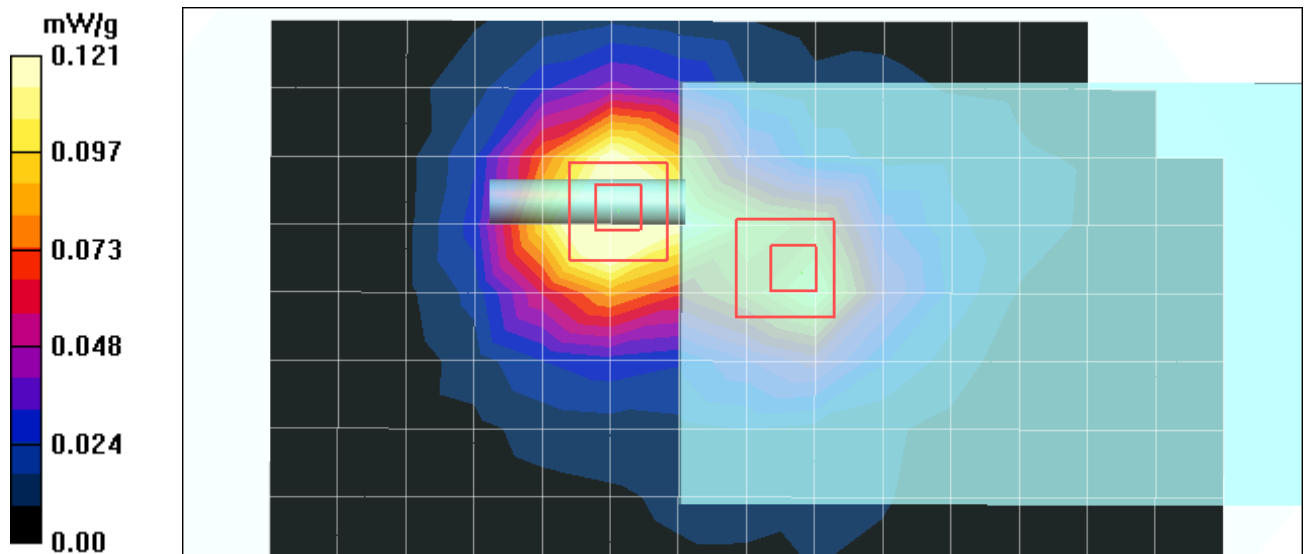
High Channel 810/Zoom Scan (7x7x7) (7x7x7)/Cube 1: Measurement grid: $dx=5\text{mm}$, $dy=5\text{mm}$, $dz=5\text{mm}$

Reference Value = 6.95 V/m

Peak SAR (extrapolated) = 0.159 W/kg

SAR(1 g) = 0.109 mW/g; SAR(10 g) = 0.064 mW/g

Maximum value of SAR (measured) = 0.121 mW/g



Test Laboratory: Advance Data Technology

System Validation Check MSL 1900MHz

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

Communication System: CW ; Frequency: 1900 MHz; Duty Cycle: 1:1; Modulation type: CW
Medium: MSL1900; Medium parameters used: $f = 1900$ MHz; $\sigma = 1.56$ mho/m; $\epsilon_r = 50.7$; $\rho = 1000$ kg/m³ ; Liquid level : 152 mm

Phantom section: Flat Section ; Separation distance : 10 mm (The feetpoint of the dipole to the Phantom) Air temp. : 23.0 degrees ; Liquid temp. : 21.0 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, V4.5 Build 19; Postprocessing SW: SEMCAD, V1.8 Build 146

d=10mm, Pin=250mW/Area Scan (7x7x1): Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (measured) = 10.9 mW/g

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

Reference Value = 89.9 V/m; Power Drift = -0.020 dB

Peak SAR (extrapolated) = 16.4 W/kg

SAR(1 g) = 9.6 mW/g; SAR(10 g) = 5.08 mW/g

