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

Notebook: DELL C600

The Bottom of the EUT to the flat phantom distance 11 mm

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Notebook: Compaq EVO N800C

The Bottom of the EUT to the flat phantom distance 10 mm

Notebook: Dell D600

The Bottom of the EUT to the flat phantom distance 13 mm

EUT Photo

Liquid Level Photo

MSL 1900MHz D=150mm

Test Laboratory: Advance Data Technology

E612 PCS1900 with GPRS C600 Mode 1

DUT: UMTS/GSM/GPRS datacard ; Type: E612 ; Test Frequency: 1850.2 MHz

Communication System: PCS 1900 ; Frequency: 1850.2 MHz ; Duty Cycle: 1:4 ; Modulation type: GMSK / UL 2 time slots
Medium: MSL1900 Medium parameters used: f = 1850.2 MHz; σ = 1.5 mho/m; ε_r = 50.9; ρ = 1000 kg/m^3 ; Liquid level : 150mm
Phantom section: Flat Section ; Separation distance : 11 mm (The bottom side of the EUT to the Phantom)
Antenna type : Internal Antenna ; Air temp. : 22.0 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 (7x11x1): Measurement grid: dx=15mm, dy=15mm
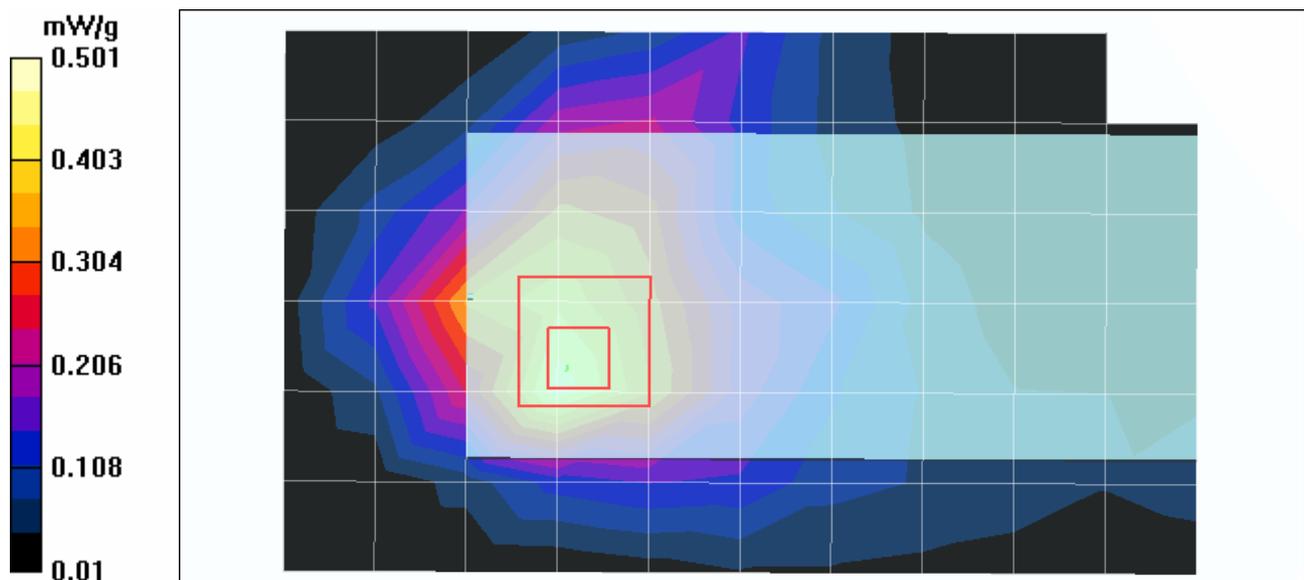Maximum value of SAR (measured) = 0.461 mW/g

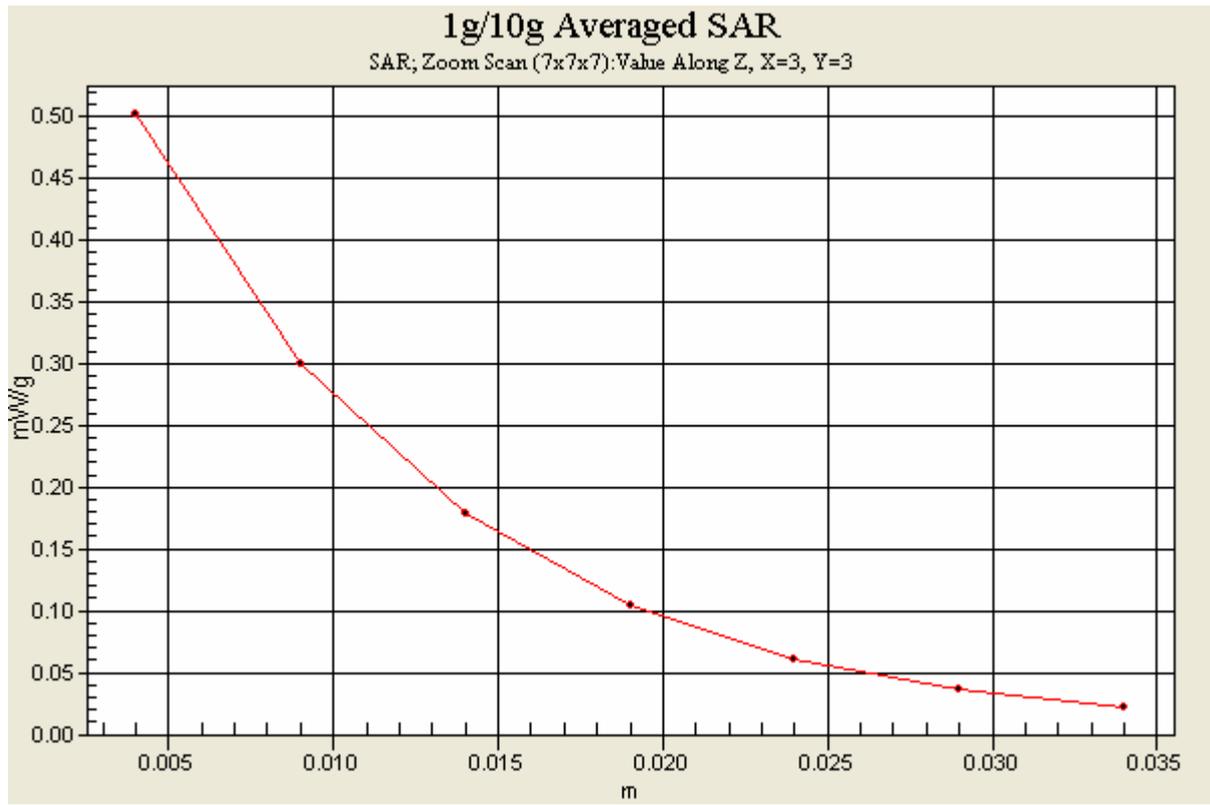**Low Channel 512/Zoom Scan (7x7x7) (7x7x7)/Cube 0:** Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 16.4 V/m
Peak SAR (extrapolated) = 0.757 W/kg
SAR(1 g) = 0.451 mW/g; SAR(10 g) = 0.256 mW/g
Maximum value of SAR (measured) = 0.501 mW/g

1g/10g Averaged SAR
SAR; Zoom Scan (7x7x7):Value Along Z, X=3, Y=3

Test Laboratory: Advance Data Technology

E612 PCS1900 with GPRS C600 Mode 1

DUT: UMTS/GSM/GPRS datacard ; Type: E612 ; Test Frequency: 1880 MHz

Communication System: PCS 1900 ; Frequency: 1880 MHz ; Duty Cycle: 1:4 ; Modulation type: GMSK / UL 2 time slots

Medium: MSL1900 Medium parameters used: f = 1880 MHz; σ = 1.54 mho/m; ε_r = 50.8; ρ = 1000 kg/m^3 ; Liquid level : 150mm

Phantom section: Flat Section ; Separation distance : 11 mm (The bottom side of the EUT to the Phantom)

Antenna type : Internal Antenna ; Air temp. : 22.0 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 (7x11x1): Measurement grid: dx=15mm, dy=15mm
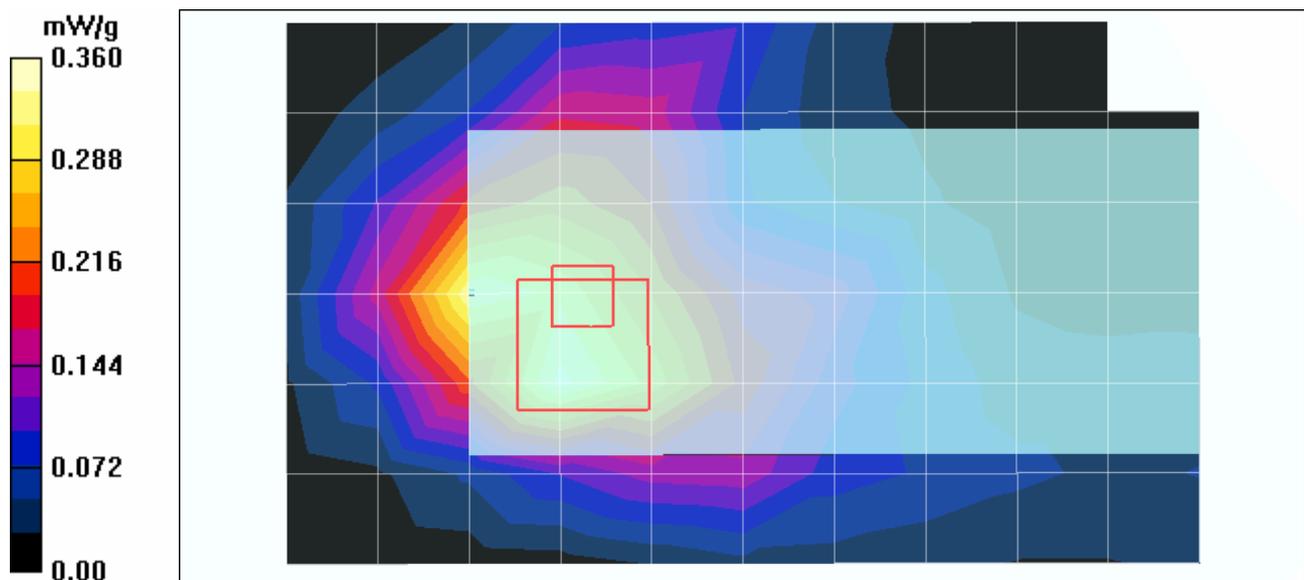Maximum value of SAR (measured) = 0.346 mW/g

Middle Channel 661/Zoom Scan (7x7x7) (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 15.9 V/m
Peak SAR (extrapolated) = 0.694 W/kg
SAR(1 g) = 0.326 mW/g; SAR(10 g) = 0.164 mW/g
Maximum value of SAR (measured) = 0.360 mW/g

Test Laboratory: Advance Data Technology

E612 PCS1900 with GPRS C600 Mode 1

DUT: UMTS/GSM/GPRS datacard ; Type: E612 ; Test Frequency: 1909.8 MHz

Communication System: PCS 1900 ; Frequency: 1909.8 MHz ; Duty Cycle: 1:4 ; Modulation type: GMSK / UL 2 time slots
Medium: MSL1900 Medium parameters used: f = 1909.8 MHz; σ = 1.57 mho/m; ε_r = 50.7; ρ = 1000 kg/m^3 ; Liquid level : 150mm
Phantom section: Flat Section ; Separation distance : 11 mm (The bottom side of the EUT to the Phantom)
Antenna type : Internal Antenna ; Air temp. : 22.0 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 (7x11x1): Measurement grid: dx=15mm, dy=15mm
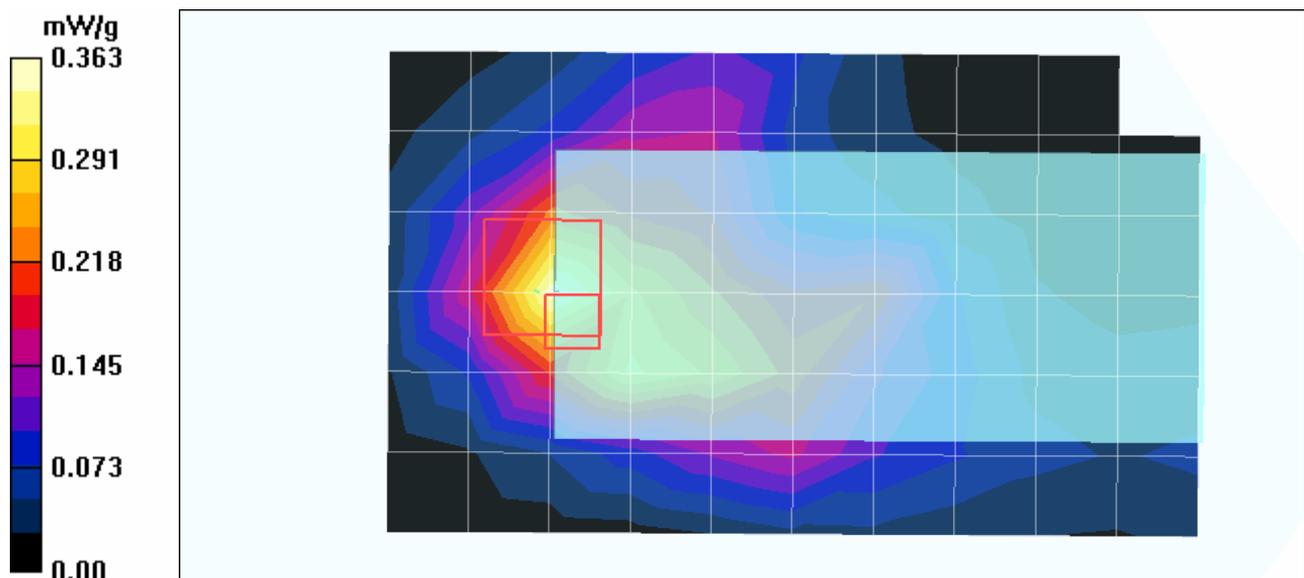Maximum value of SAR (measured) = 0.354 mW/g

High Channel 810/Zoom Scan (7x7x7) (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 16.0 V/m
Peak SAR (extrapolated) = 0.794 W/kg
SAR(1 g) = 0.326 mW/g; SAR(10 g) = 0.160 mW/g
Maximum value of SAR (measured) = 0.363 mW/g

Test Laboratory: Advance Data Technology

E612 PCS1900 with GPRS N800C Mode 2

DUT: UMTS/GSM/GPRS datacard ; Type: E612 ; Test Frequency: 1850.2 MHz

Communication System: PCS 1900 ; Frequency: 1850.2 MHz ; Duty Cycle: 1:4 ; Modulation type: GMSK / UL 2 time slots
Medium: MSL1900 Medium parameters used: f = 1850.2 MHz; σ = 1.5 mho/m; ε_r = 50.9; ρ = 1000 kg/m^3 ; Liquid level : 150mm
Phantom section: Flat Section ; Separation distance : 10 mm (The bottom side of the EUT to the Phantom)
Antenna type : Internal Antenna ; Air temp. : 22.0 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 (7x11x1): Measurement grid: dx=15mm, dy=15mm
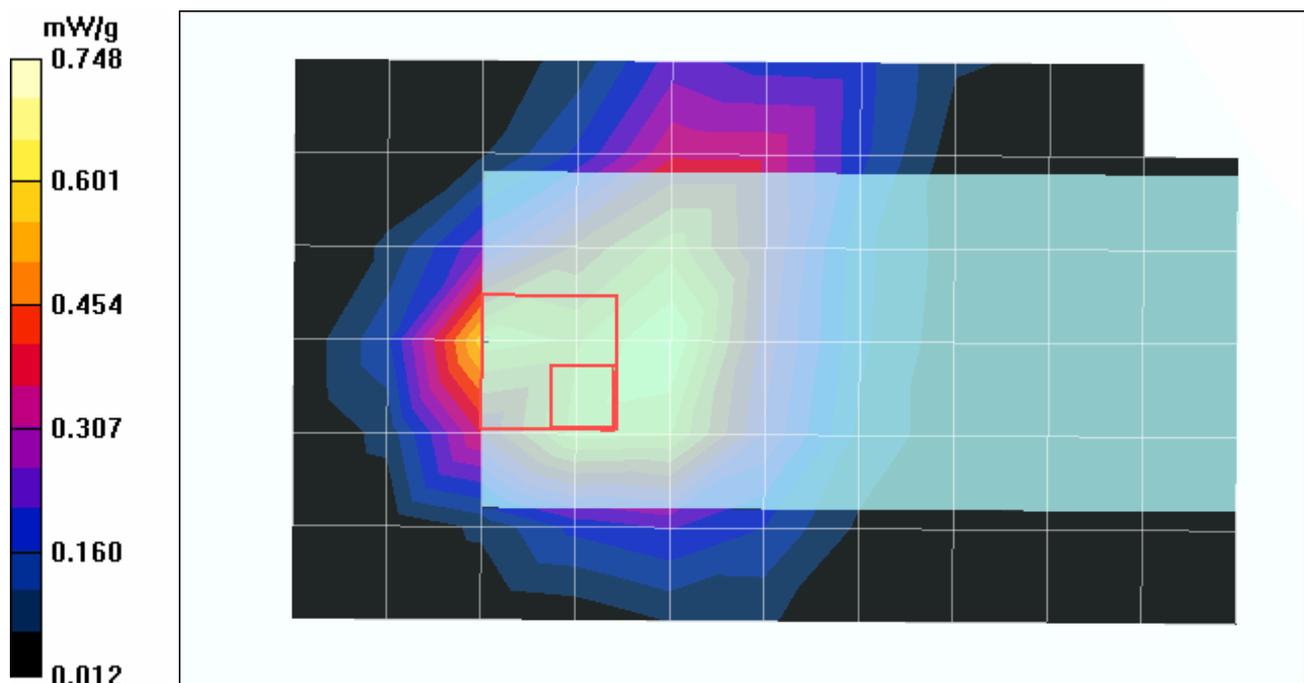Maximum value of SAR (measured) = 0.656 mW/g
Low Channel 512/Zoom Scan (7x7x7) (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
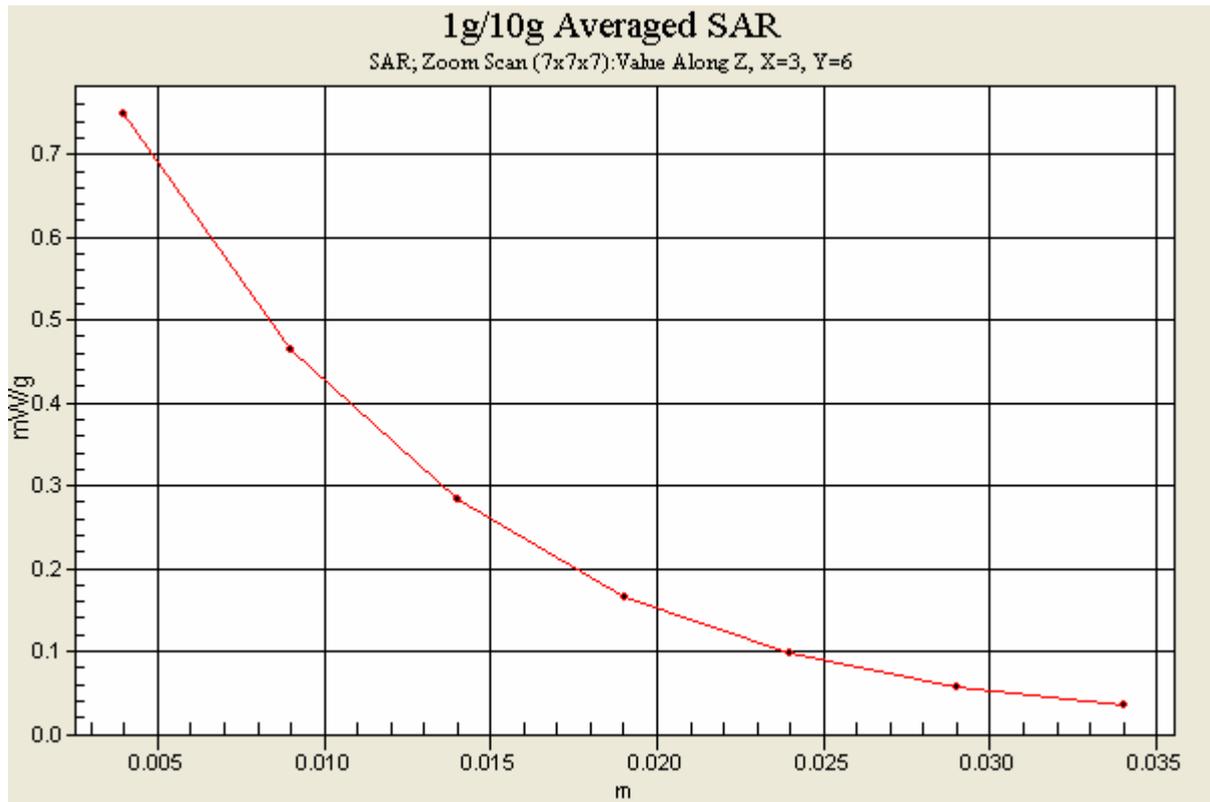Reference Value = 20.9 V/m
Peak SAR (extrapolated) = 1.09 W/kg
SAR(1 g) = 0.587 mW/g; SAR(10 g) = 0.333 mW/g
Maximum value of SAR (measured) = 0.748 mW/g

1g/10g Averaged SAR

SAR; Zoom Scan (7x7x7):Value Along Z, X=3, Y=6

Test Laboratory: Advance Data Technology

E612 PCS1900 with GPRS N800C Mode 2

DUT: UMTS/GSM/GPRS datacard ; Type: E612 ; Test Frequency: 1880 MHz

Communication System: PCS 1900 ; Frequency: 1880 MHz ; Duty Cycle: 1:4 ; Modulation type: GMSK / UL 2 time slots

Medium: MSL1900 Medium parameters used: f = 1880 MHz; σ = 1.54 mho/m; ε_r = 50.8; ρ = 1000 kg/m^3 ; Liquid level : 150mm

Phantom section: Flat Section ; Separation distance : 10 mm (The bottom side of the EUT to the Phantom)

Antenna type : Internal Antenna ; Air temp. : 22.0 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 (7x11x1): Measurement grid: dx=15mm, dy=15mm
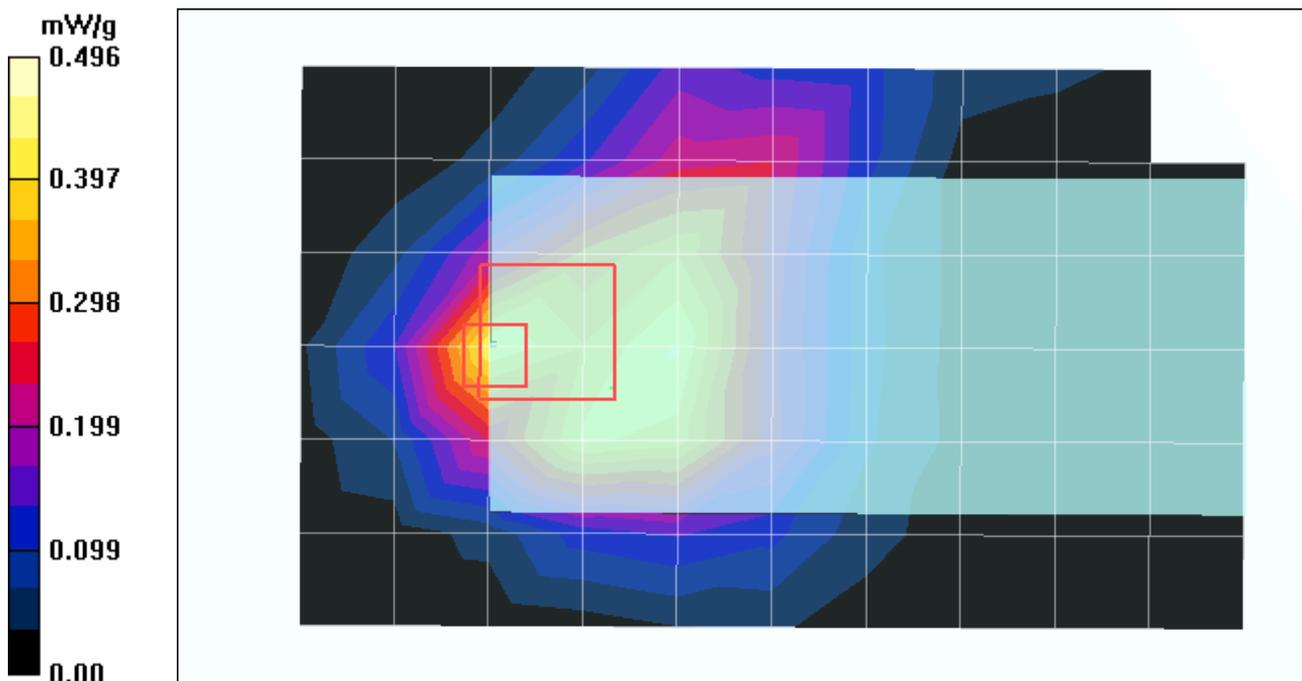
Maximum value of SAR (measured) = 0.436 mW/g

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

Reference Value = 18.2 V/m

Peak SAR (extrapolated) = 1.07 W/kg

SAR(1 g) = 0.431 mW/g; SAR(10 g) = 0.216 mW/g

Maximum value of SAR (measured) = 0.496 mW/g

Test Laboratory: Advance Data Technology

E612 PCS1900 with GPRS N800C Mode 2

DUT: UMTS/GSM/GPRS datacard ; Type: E612 ; Test Frequency: 1909.8 MHz
Communication System: PCS 1900 ; Frequency: 1909.8 MHz ; Duty Cycle: 1:4 ; Modulation type: GMSK / UL 2 time slots
Medium: MSL1900 Medium parameters used: f = 1909.8 MHz; σ = 1.57 mho/m; ε_r = 50.7; ρ = 1000 kg/m^3 ; Liquid level : 150mm
Phantom section: Flat Section ; Separation distance : 10 mm (The bottom side of the EUT to the Phantom)
Antenna type : Internal Antenna ; Air temp. : 22.0 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 (7x11x1): Measurement grid: dx=15mm, dy=15mm
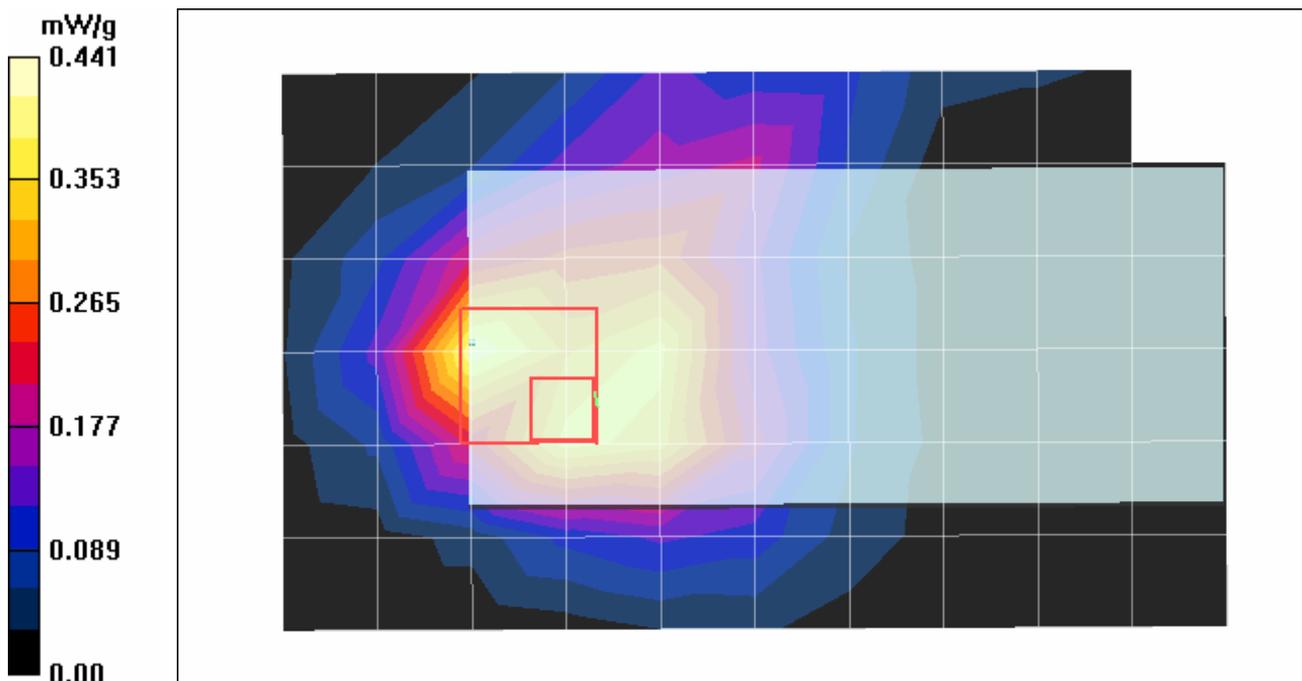Maximum value of SAR (measured) = 0.408 mW/g

High Channel 810/Zoom Scan (7x7x7) (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 17.3 V/m
Peak SAR (extrapolated) = 0.706 W/kg
SAR(1 g) = 0.358 mW/g; SAR(10 g) = 0.204 mW/g
Maximum value of SAR (measured) = 0.441 mW/g

Test Laboratory: Advance Data Technology

E612 PCS1900 with GPRS D600 Mode 3

DUT: UMTS/GSM/GPRS datacard ; Type: E612 ; Test Frequency: 1850.2 MHz

Communication System: PCS 1900 ; Frequency: 1850.2 MHz ; Duty Cycle: 1:4 ; Modulation type: GMSK / UL 2 time slots

Medium: MSL1900 Medium parameters used: f = 1850.2 MHz; σ = 1.5 mho/m; ε_r = 50.9; ρ = 1000 kg/m^3 ; Liquid level : 150mm

Phantom section: Flat Section ; Separation distance : 13 mm (The bottom side of the EUT to the Phantom)

Antenna type : Internal Antenna ; Air temp. : 22.0 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 (7x11x1): Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (measured) = 0.411 mW/g

Low Channel 512/Zoom Scan (7x7x7) (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm;Reference Value = 18.1 V/m;Peak SAR (extrapolated) = 0.596 W/kg

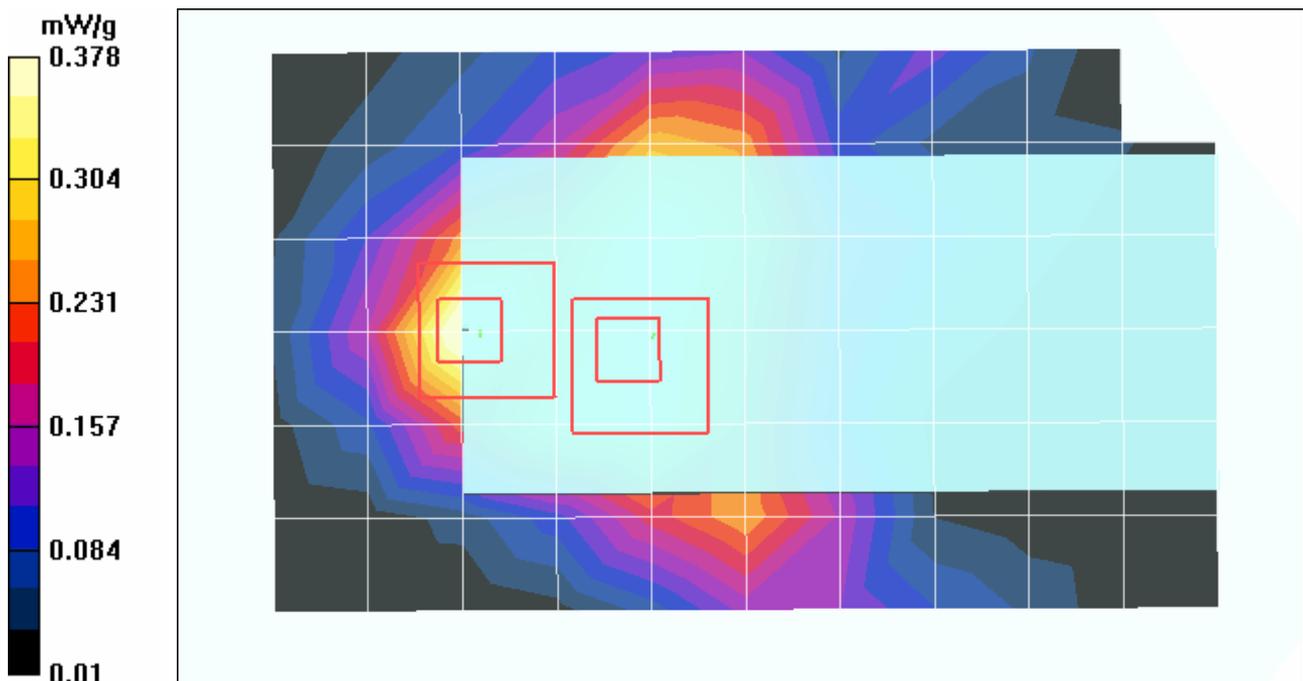**SAR(1 g) = 0.356 mW/g; SAR(10 g) = 0.204 mW/g**
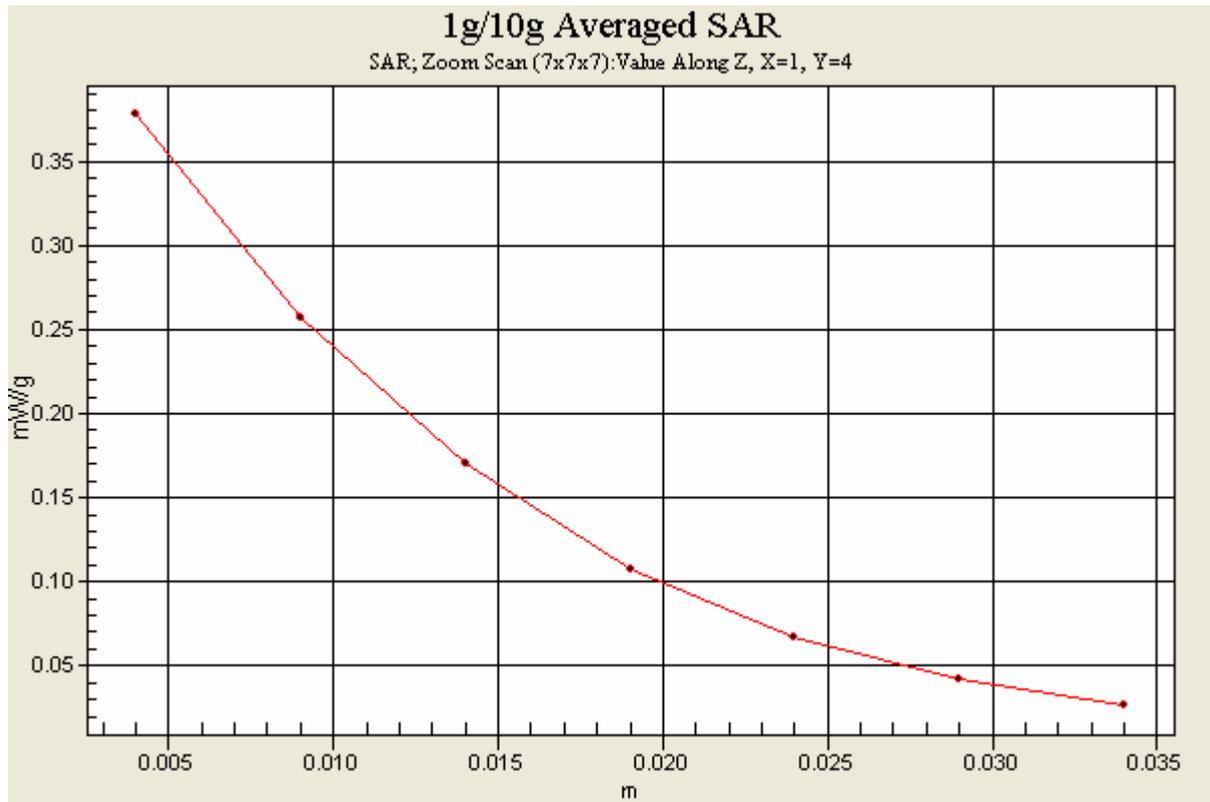
Maximum value of SAR (measured) = 0.392 mW/g

Low Channel 512/Zoom Scan (7x7x7) (7x7x7)/Cube 1: Measurement grid: dx=5mm, dy=5mm, dz=5mm;Reference Value = 18.1 V/m

Peak SAR (extrapolated) = 0.548 W/kg

SAR(1 g) = 0.349 mW/g; SAR(10 g) = 0.217 mW/g

Maximum value of SAR (measured) = 0.378 mW/g

1g/10g Averaged SAR

SAR; Zoom Scan (7x7x7):Value Along Z, X=1, Y=4

Test Laboratory: Advance Data Technology

E612 PCS1900 with GPRS D600 Mode 3
DUT: UMTS/GSM/GPRS datacard ; Type: E612 ; Test Frequency: 1880 MHz
Communication System: PCS 1900 ; Frequency: 1880 MHz ; Duty Cycle: 1:4 ; Modulation type: GMSK / UL 2 time slots
Medium: MSL1900 Medium parameters used: f = 1880 MHz; σ = 1.54 mho/m; ε_r = 50.8; ρ = 1000 kg/m^3 ; Liquid level : 150mm
Phantom section: Flat Section ; Separation distance : 13 mm (The bottom side of the EUT to the Phantom)
Antenna type : Internal Antenna ; Air temp. : 22.0 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 (7x11x1): Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (measured) = 0.336 mW/g
Middle Channel 661/Zoom Scan (7x7x7) (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm;Reference Value = 15.9 V/m
Peak SAR (extrapolated) = 0.504 W/kg
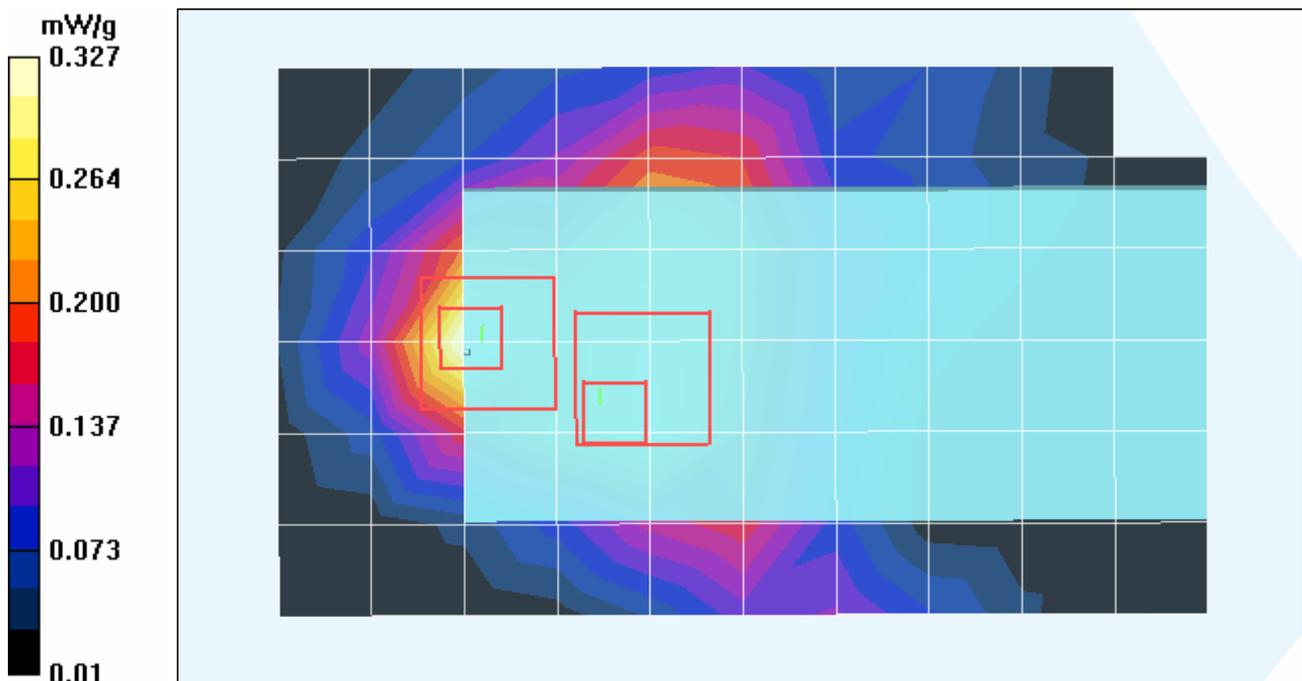**SAR(1 g) = 0.302 mW/g; SAR(10 g) = 0.172 mW/g**
Maximum value of SAR (measured) = 0.330 mW/g
Middle Channel 661/Zoom Scan (7x7x7) (7x7x7)/Cube 1: Measurement grid: dx=5mm, dy=5mm, dz=5mm;Reference Value = 15.9 V/m
Peak SAR (extrapolated) = 0.498 W/kg
SAR(1 g) = 0.292 mW/g; SAR(10 g) = 0.175 mW/g
Maximum value of SAR (measured) = 0.327 mW/g

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Test Laboratory: Advance Data Technology

E612 PCS1900 with GPRS D600 Mode 3

DUT: UMTS/GSM/GPRS datacard ; Type: E612 ; Test Frequency: 1909.8 MHz

Communication System: PCS 1900 ; Frequency: 1909.8 MHz ; Duty Cycle: 1:4 ; Modulation type: GMSK / UL 2 time solts

Medium: MSL1900 Medium parameters used: f = 1909.8 MHz; σ = 1.57 mho/m; ε_r = 50.7; ρ = 1000 kg/m^3 ; Liquid level : 150mm

Phantom section: Flat Section ; Separation distance : 13 mm (The bottom side of the EUT to the Phantom)

Antenna type : Internal Antenna ; Air temp. : 22.0 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 (7x11x1): Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (measured) = 0.313 mW/g

High Channel 810/Zoom Scan (7x7x7) (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm;Reference Value = 15.2 V/m;Peak SAR (extrapolated) = 0.472 W/kg
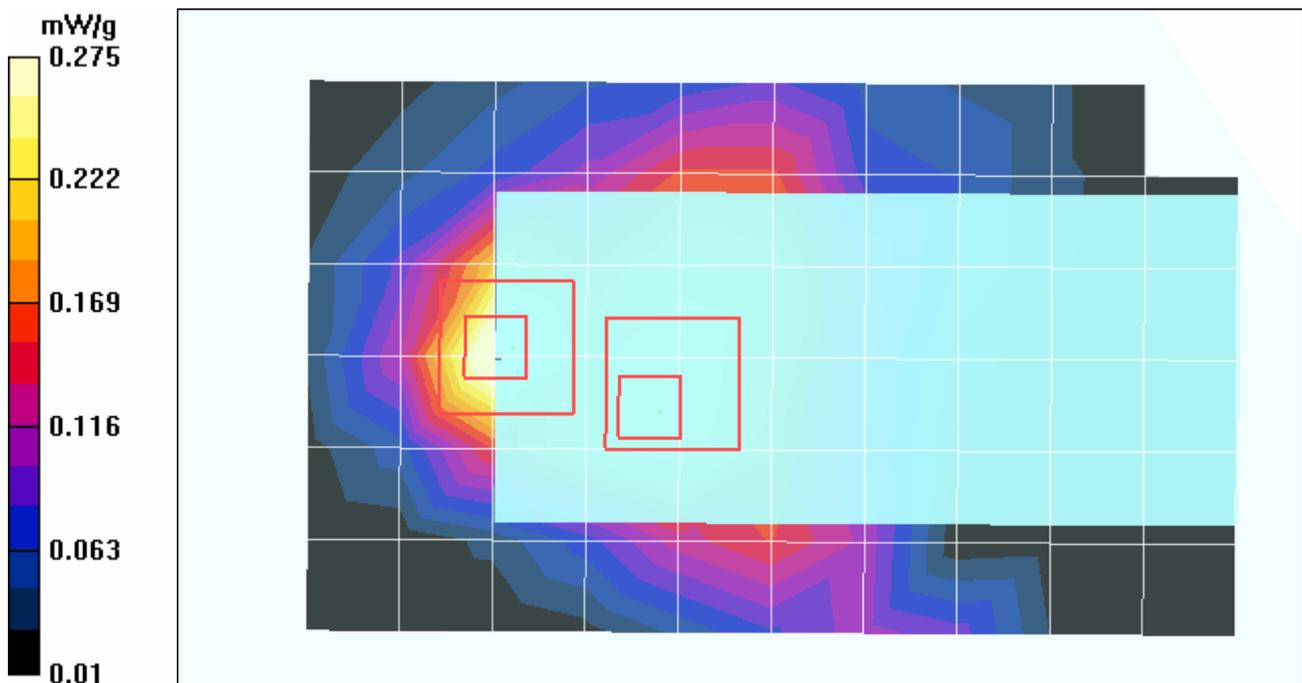
SAR(1 g) = 0.281 mW/g; SAR(10 g) = 0.156 mW/g

Maximum value of SAR (measured) = 0.306 mW/g

High Channel 810/Zoom Scan (7x7x7) (7x7x7)/Cube 1: Measurement grid: dx=5mm, dy=5mm, dz=5mm;Reference Value = 15.2 V/m

Peak SAR (extrapolated) = 0.416 W/kg

SAR(1 g) = 0.253 mW/g; SAR(10 g) = 0.153 mW/g

Maximum value of SAR (measured) = 0.275 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; σ = 1.56 mho/m; ε_r = 50.7; ρ = 1000 kg/m^3 ; Liquid level : 150 mm
Phantom section: Flat Section ; Separation distance : 10 mm (The feetpoint of the dipole to the Phantom)Air temp. : 22.0 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