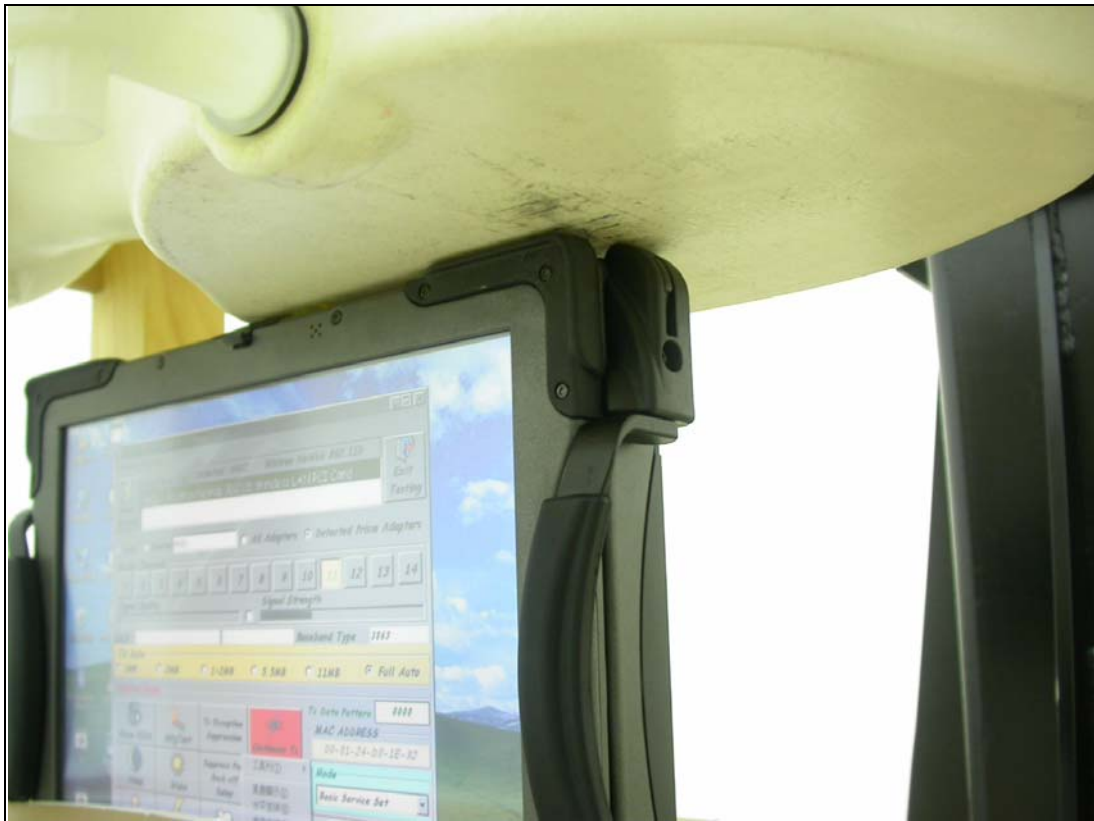


APPENDIX A: TEST CONFIGURATIONS AND TEST DATA

A1: TEST CONFIGURATION

Mode 1



Mode 2



Mode 3



EUT Photo





Liquid Level Photo

2450MHz D=151mm



A2: Test Data

Date/Time: 08/11/03 20:46:02

Test Laboratory: Advance Data Technology

REVOLUTION SERIES 3000 Mode 1

DUT: Notebook ; Type: REVOLUTION SERIES 3000 ; Test Channel Frequency: 2412 MHz

Communication System: 802.11b ; Frequency: 2412 MHz; Duty Cycle: 1:1; Modulation type: CCK
Medium: MSL2450 ($\sigma = 1.88$ mho/m, $\epsilon_r = 52.95$, $\rho = 1000$ kg/m³) ; Liquid level : 151mm

Phantom section: Flat Section ; Separation distance : 0mm(The tip of the EUT to the Phantom)

Antenna type : Internal Antenna ; Air temp. : 22.0 degrees ; Liquid temp. : 21.0 degrees

DASY4 Configuration:

- Probe: ET3DV6 - SN1686; ConvF(4.5, 4.5, 4.5); Calibrated: 2003/6/18

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

- Electronics: DAE3 Sn510;

- Phantom: SAM Twin Phantom V4.0; Type: QD 000 P40 CA; Serial: TP-1150

- Measurement SW: DASY4, V4.1 Build 47; Postprocessing SW: SEMCAD, V1.6 Build 115

Channel 1/Area Scan (61x101x1): Measurement grid: dx=15mm, dy=15mm

Reference Value = 9.01 V/m

Power Drift = -0.1 dB

Maximum value of SAR = 0.562 mW/g

Channel 1/Zoon Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

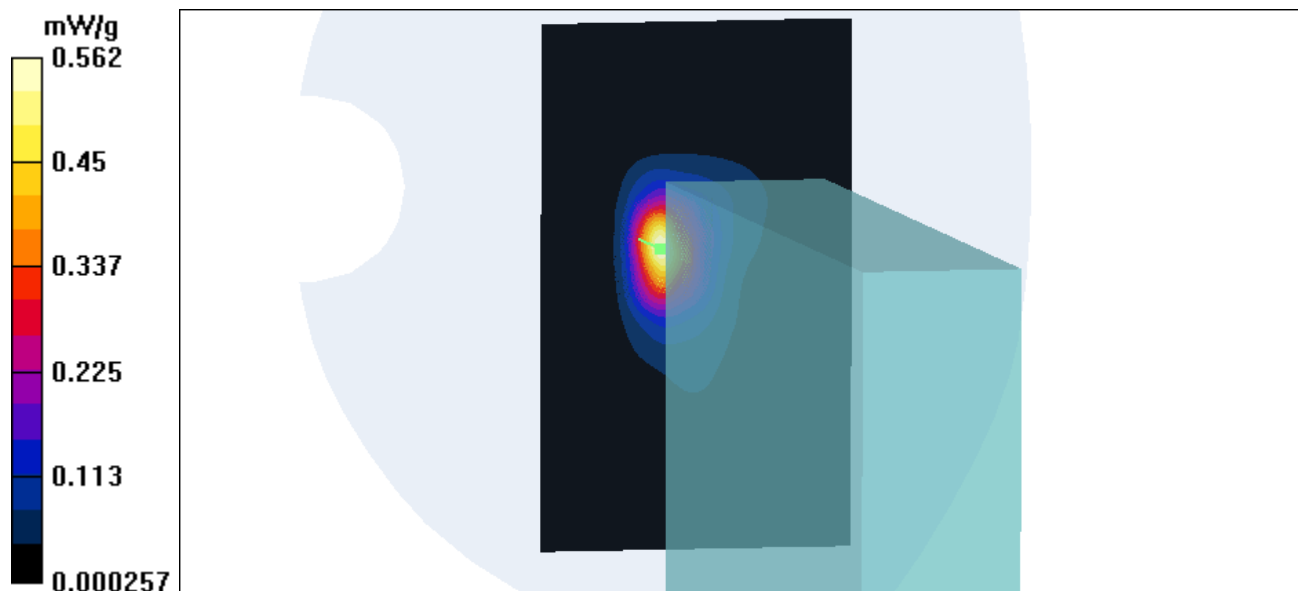
Peak SAR (extrapolated) = 1.63 W/kg

SAR(1 g) = 0.606 mW/g; SAR(10 g) = 0.223 mW/g

Reference Value = 9.01 V/m

Power Drift = -0.1 dB

Maximum value of SAR = 0.682 mW/g



Test Laboratory: Advance Data Technology

REVOLUTION SERIES 3000 Mode 1

DUT: Notebook ; Type: REVOLUTION SERIES 3000 ; Test Channel Frequency: 2437 MHz

Communication System: 802.11b ; Frequency: 2437 MHz; Duty Cycle: 1:1; Modulation type: CCK
Medium: MSL2450 ($\sigma = 1.9$ mho/m, $\epsilon_r = 52.87$, $\rho = 1000$ kg/m³) ; Liquid level : 151mm

Phantom section: Flat Section ; Separation distance : 0mm(The tip of the EUT to the Phantom)

Antenna type : Internal Antenna ; Air temp. : 22.0 degrees ; Liquid temp. : 21.0 degrees

DASY4 Configuration:

- Probe: ET3DV6 - SN1686; ConvF(4.5, 4.5, 4.5); Calibrated: 2003/6/18

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

- Electronics: DAE3 Sn510;

- Phantom: SAM Twin Phantom V4.0; Type: QD 000 P40 CA; Serial: TP-1150

- Measurement SW: DASY4, V4.1 Build 47; Postprocessing SW: SEMCAD, V1.6 Build 115

Channel 6/Area Scan (61x101x1): Measurement grid: dx=15mm, dy=15mm

Reference Value = 9.42 V/m

Power Drift = -0.1 dB

Maximum value of SAR = 0.626 mW/g

Channel 6/Zoon Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

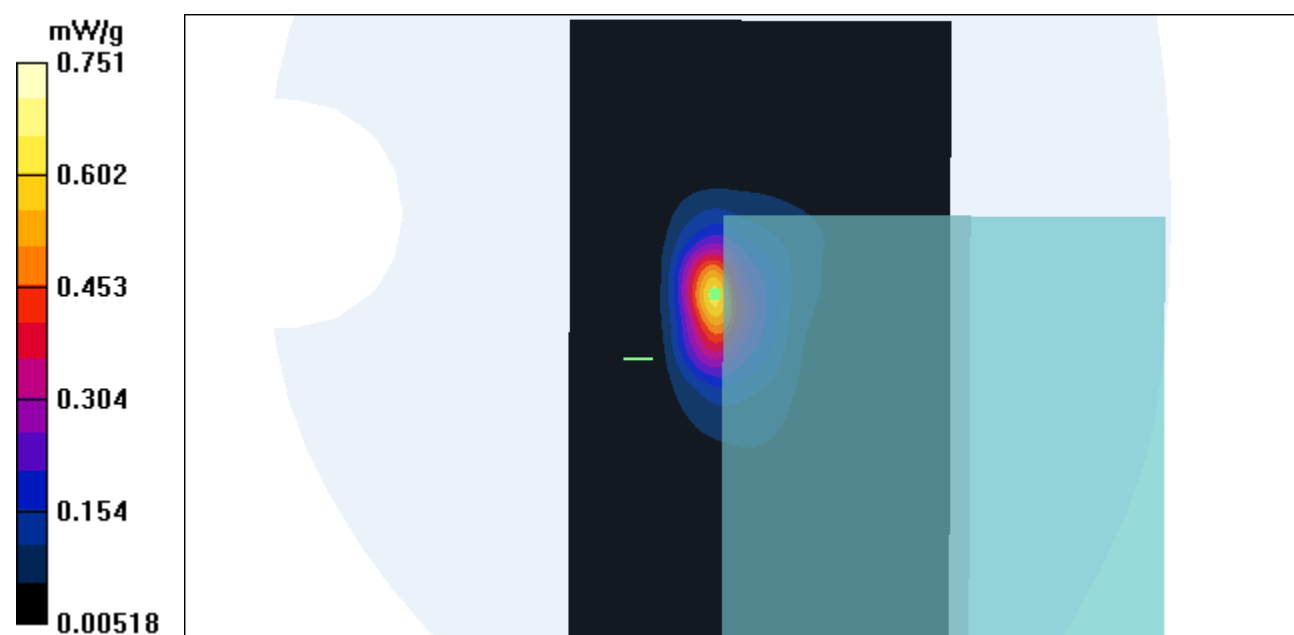
Peak SAR (extrapolated) = 1.8 W/kg

SAR(1 g) = 0.668 mW/g; SAR(10 g) = 0.245 mW/g

Reference Value = 9.42 V/m

Power Drift = -0.1 dB

Maximum value of SAR = 0.751 mW/g



Test Laboratory: Advance Data Technology

REVOLUTION SERIES 3000 Mode 1

DUT: Notebook ; Type: REVOLUTION SERIES 3000 ; Test Channel Frequency: 2462 MHz

Communication System: 802.11b ; Frequency: 2462 MHz; Duty Cycle: 1:1; Modulation type: CCK
Medium: MSL2450 ($\sigma = 1.94$ mho/m, $\epsilon_r = 52.76$, $\rho = 1000$ kg/m³) ; Liquid level : 151mm

Phantom section: Flat Section ; Separation distance : 0mm(The tip of the EUT to the Phantom)

Antenna type : Internal Antenna ; Air temp. : 22.0 degrees ; Liquid temp. : 21.0 degrees

DASY4 Configuration:

- Probe: ET3DV6 - SN1686; ConvF(4.5, 4.5, 4.5); Calibrated: 2003/6/18

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

- Electronics: DAE3 Sn510;

- Phantom: SAM Twin Phantom V4.0; Type: QD 000 P40 CA; Serial: TP-1150

- Measurement SW: DASY4, V4.1 Build 47; Postprocessing SW: SEMCAD, V1.6 Build 115

Channel 11/Area Scan (61x101x1): Measurement grid: dx=15mm, dy=15mm

Reference Value = 8.56 V/m

Power Drift = -0.06 dB

Maximum value of SAR = 0.523 mW/g

Channel 11/Zoon Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

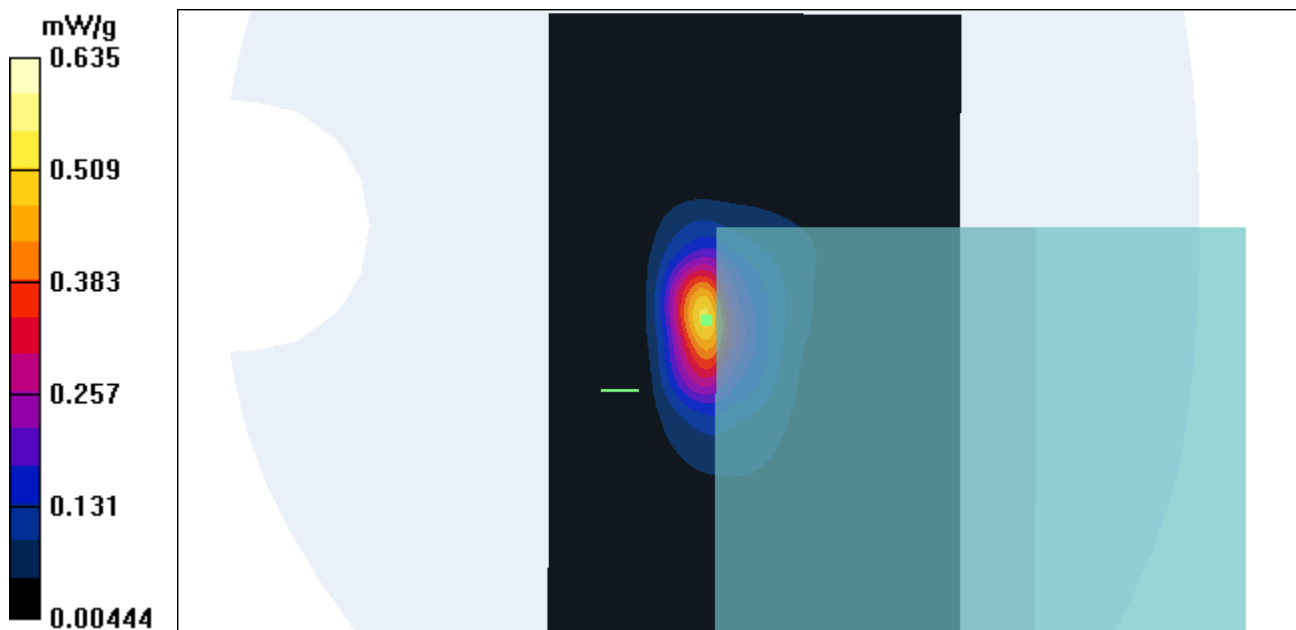
Peak SAR (extrapolated) = 1.52 W/kg

SAR(1 g) = 0.561 mW/g; SAR(10 g) = 0.202 mW/g

Reference Value = 8.56 V/m

Power Drift = -0.06 dB

Maximum value of SAR = 0.635 mW/g



Test Laboratory: Advance Data Technology

REVOLUTION SERIES 3000 Mode 2

DUT: Notebook ; Type: REVOLUTION SERIES 3000 ; Test Channel Frequency: 2412 MHz

Communication System: 802.11b ; Frequency: 2412 MHz; Duty Cycle: 1:1; Modulation type: CCK
Medium: MSL2450 ($\sigma = 1.88$ mho/m, $\epsilon_r = 52.95$, $\rho = 1000$ kg/m³) ; Liquid level : 151mm

Phantom section: Flat Section ; Separation distance : 0mm(The LCD panel of the EUT to the Phantom)

Antenna type : Internal Antenna ; Air temp. : 22.0 degrees ; Liquid temp. : 21.0 degrees

DASY4 Configuration:

- Probe: ET3DV6 - SN1686; ConvF(4.5, 4.5, 4.5); Calibrated: 2003/6/18
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn510;
- Phantom: SAM Twin Phantom V4.0; Type: QD 000 P40 CA; Serial: TP-1150
- Measurement SW: DASY4, V4.1 Build 47; Postprocessing SW: SEMCAD, V1.6 Build 115

Channel 1/Area Scan (61x101x1): Measurement grid: dx=15mm, dy=15mm

Reference Value = 3.04 V/m

Power Drift = -0.2 dB

Maximum value of SAR = 0.653 mW/g

Channel 1/Zoon Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

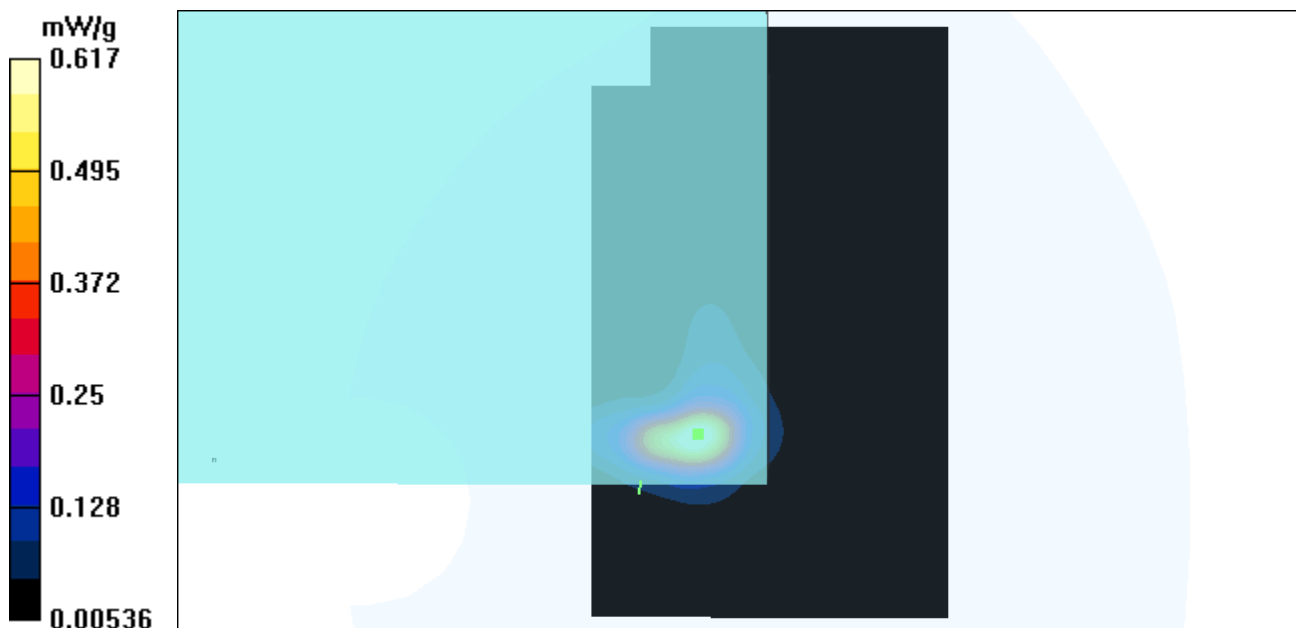
Peak SAR (extrapolated) = 1.64 W/kg

SAR(1 g) = 0.581 mW/g; SAR(10 g) = 0.213 mW/g

Reference Value = 3.04 V/m

Power Drift = -0.2 dB

Maximum value of SAR = 0.617 mW/g



Test Laboratory: Advance Data Technology

REVOLUTION SERIES 3000 Mode 2

DUT: Notebook ; Type: REVOLUTION SERIES 3000 ; Test Channel Frequency: 2437 MHz

Communication System: 802.11b ; Frequency: 2437 MHz; Duty Cycle: 1:1; Modulation type: CCK
Medium: MSL2450 ($\sigma = 1.9$ mho/m, $\epsilon_r = 52.87$, $\rho = 1000$ kg/m³) ; Liquid level : 151mm

Phantom section: Flat Section ; Separation distance : 0mm(The LCD panel of the EUT to the Phantom)

Antenna type : Internal Antenna ; Air temp. : 22.0 degrees ; Liquid temp. : 21.0 degrees

DASY4 Configuration:

- Probe: ET3DV6 - SN1686; ConvF(4.5, 4.5, 4.5); Calibrated: 2003/6/18
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn510;
- Phantom: SAM Twin Phantom V4.0; Type: QD 000 P40 CA; Serial: TP-1150
- Measurement SW: DASY4, V4.1 Build 47; Postprocessing SW: SEMCAD, V1.6 Build 115

Channel 6/Area Scan (61x101x1): Measurement grid: dx=15mm, dy=15mm

Reference Value = 3.1 V/m

Power Drift = -0.1 dB

Maximum value of SAR = 0.764 mW/g

Channel 6/Zoon Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

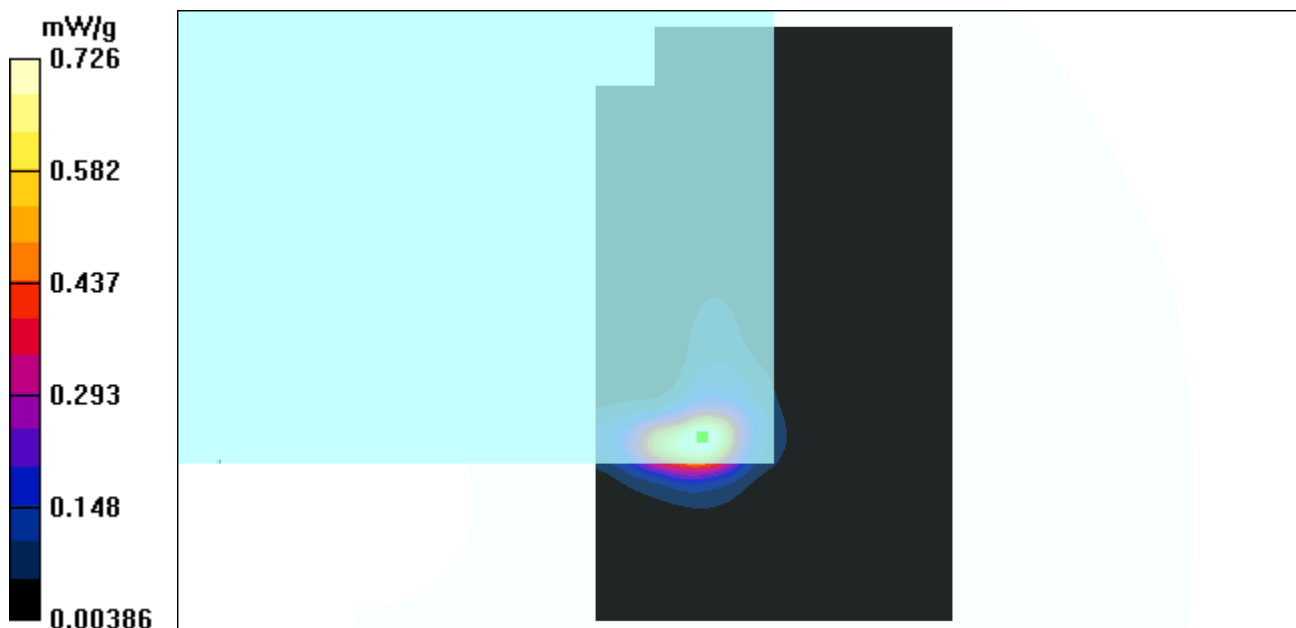
Peak SAR (extrapolated) = 1.94 W/kg

SAR(1 g) = 0.68 mW/g; SAR(10 g) = 0.25 mW/g

Reference Value = 3.1 V/m

Power Drift = -0.1 dB

Maximum value of SAR = 0.726 mW/g



Test Laboratory: Advance Data Technology

REVOLUTION SERIES 3000 Mode 2

DUT: Notebook ; Type: REVOLUTION SERIES 3000 ; Test Channel Frequency: 2462 MHz

Communication System: 802.11b ; Frequency: 2462 MHz; Duty Cycle: 1:1; Modulation type: CCK

Medium: MSL2450 ($\sigma = 1.94$ mho/m, $\epsilon_r = 52.76$, $\rho = 1000$ kg/m³) ; Liquid level : 151mm

Phantom section: Flat Section ; Separation distance : 0mm(The LCD panel of the EUT to the Phantom)

Antenna type : Internal Antenna ; Air temp. : 22.0 degrees ; Liquid temp. : 21.0 degrees

DASY4 Configuration:

- Probe: ET3DV6 - SN1686; ConvF(4.5, 4.5, 4.5); Calibrated: 2003/6/18

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

- Electronics: DAE3 Sn510;

- Phantom: SAM Twin Phantom V4.0; Type: QD 000 P40 CA; Serial: TP-1150

- Measurement SW: DASY4, V4.1 Build 47; Postprocessing SW: SEMCAD, V1.6 Build 115

Channel 11/Area Scan (61x101x1): Measurement grid: dx=15mm, dy=15mm

Reference Value = 2.51 V/m

Power Drift = -0.04 dB

Maximum value of SAR = 0.625 mW/g

Channel 11/Zoon Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

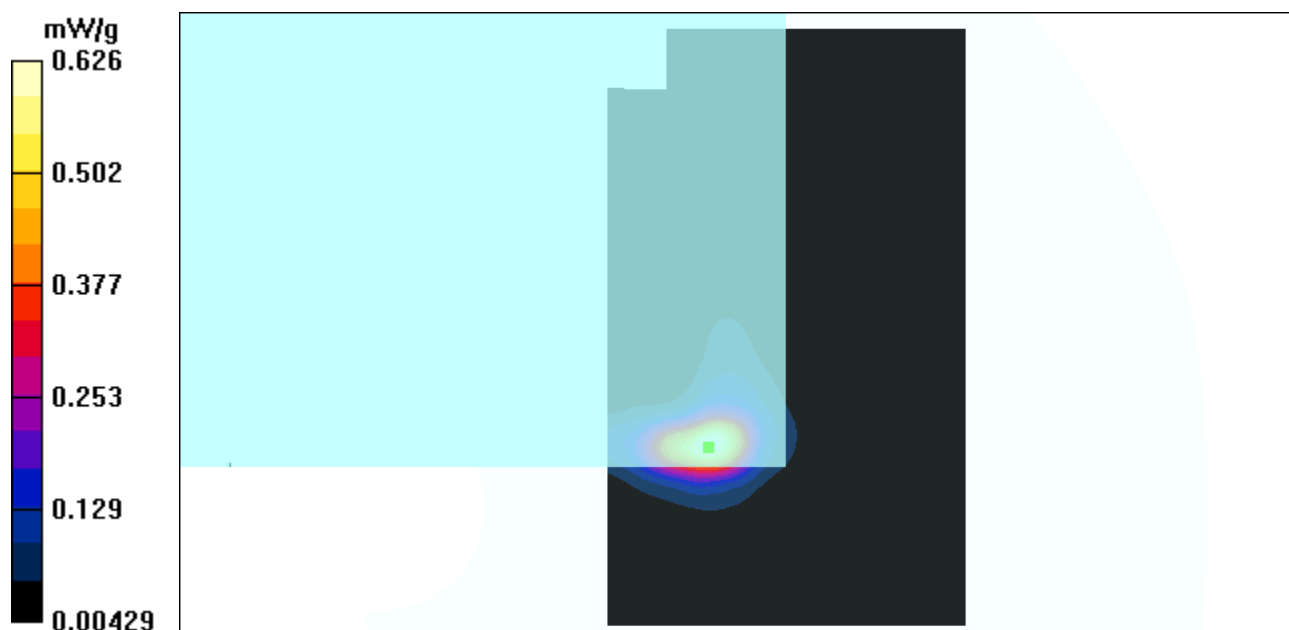
Peak SAR (extrapolated) = 1.59 W/kg

SAR(1 g) = 0.549 mW/g; SAR(10 g) = 0.198 mW/g

Reference Value = 2.51 V/m

Power Drift = -0.04 dB

Maximum value of SAR = 0.626 mW/g



Test Laboratory: Advance Data Technology

REVOLUTION SERIES 3000 Mode 3

DUT: Notebook ; Type: REVOLUTION SERIES 3000 ; Test Channel Frequency: 2412 MHz

Communication System: 802.11b ; Frequency: 2412 MHz; Duty Cycle: 1:1; Modulation type: CCK
Medium: MSL2450 ($\sigma = 1.88$ mho/m, $\epsilon_r = 52.95$, $\rho = 1000$ kg/m³) ; Liquid level : 151mm

Phantom section: Flat Section ; Separation distance : 0mm(The right 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 - SN1686; ConvF(4.5, 4.5, 4.5); Calibrated: 2003/6/18
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn510;
- Phantom: SAM Twin Phantom V4.0; Type: QD 000 P40 CA; Serial: TP-1150
- Measurement SW: DASY4, V4.1 Build 47; Postprocessing SW: SEMCAD, V1.6 Build 115

Channel 1/Area Scan (61x101x1): Measurement grid: dx=15mm, dy=15mm

Reference Value = 1.38 V/m

Power Drift = 0.2 dB

Maximum value of SAR = 0.013 mW/g

Channel 1/Zoon Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

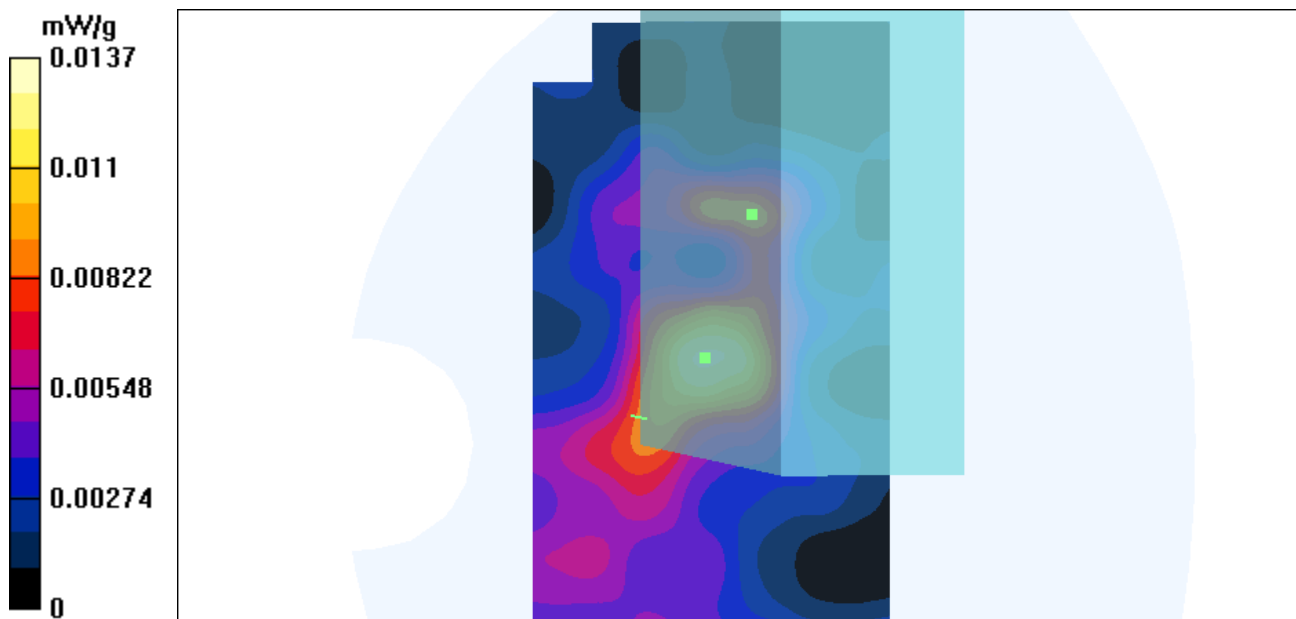
Peak SAR (extrapolated) = 0.0389 W/kg

SAR(1 g) = 0.0127 mW/g; SAR(10 g) = 0.00693 mW/g

Reference Value = 1.38 V/m

Power Drift = 0.2 dB

Maximum value of SAR = 0.0137 mW/g



Test Laboratory: Advance Data Technology

REVOLUTION SERIES 3000 Mode 3

DUT: Notebook ; Type: REVOLUTION SERIES 3000 ; Test Channel Frequency: 2437 MHz

Communication System: 802.11b ; Frequency: 2437 MHz; Duty Cycle: 1:1; Modulation type: CCK
Medium: MSL2450 ($\sigma = 1.9$ mho/m, $\epsilon_r = 52.87$, $\rho = 1000$ kg/m³) ; Liquid level : 151mm

Phantom section: Flat Section ; Separation distance : 0mm(The right 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 - SN1686; ConvF(4.5, 4.5, 4.5); Calibrated: 2003/6/18
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn510;
- Phantom: SAM Twin Phantom V4.0; Type: QD 000 P40 CA; Serial: TP-1150
- Measurement SW: DASY4, V4.1 Build 47; Postprocessing SW: SEMCAD, V1.6 Build 115

Channel 6/Area Scan (61x101x1): Measurement grid: dx=15mm, dy=15mm

Reference Value = 1.94 V/m

Power Drift = -0.4 dB

Maximum value of SAR = 0.0156 mW/g

Channel 6/Zoon Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

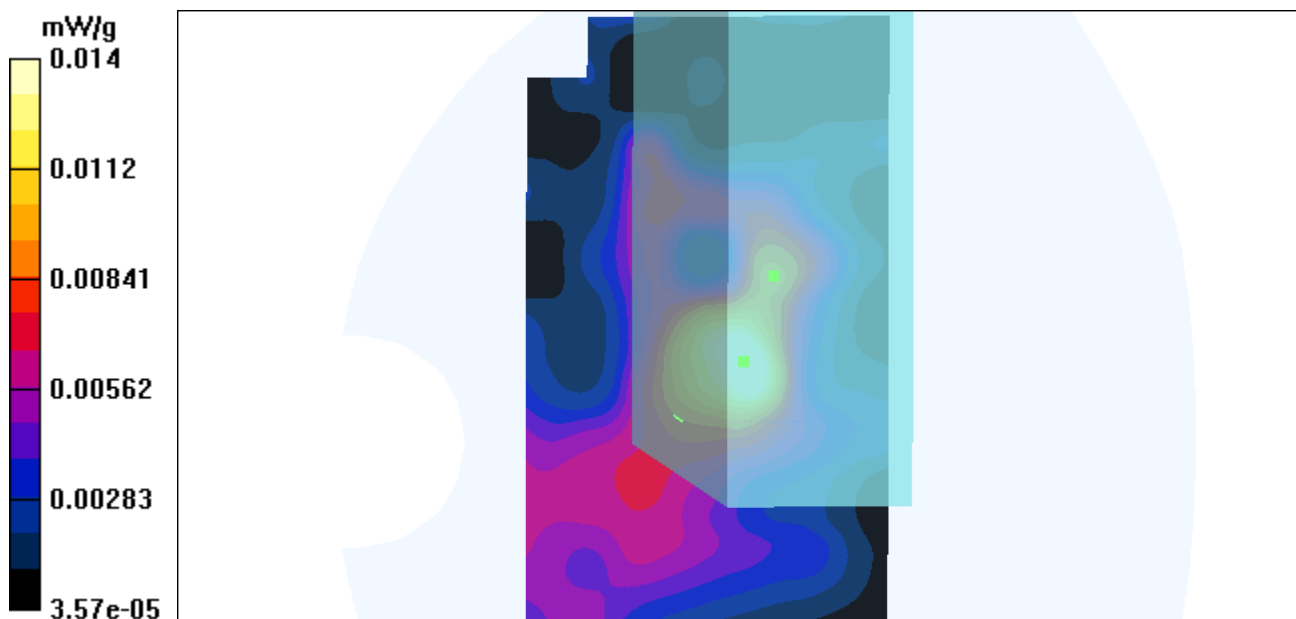
Peak SAR (extrapolated) = 0.0528 W/kg

SAR(1 g) = 0.0135 mW/g; SAR(10 g) = 0.00714 mW/g

Reference Value = 1.94 V/m

Power Drift = -0.4 dB

Maximum value of SAR = 0.014 mW/g



Test Laboratory: Advance Data Technology

REVOLUTION SERIES 3000 Mode 3

DUT: Notebook ; Type: REVOLUTION SERIES 3000 ; Test Channel Frequency: 2462 MHz

Communication System: 802.11b ; Frequency: 2462 MHz; Duty Cycle: 1:1; Modulation type: CCK
Medium: MSL2450 ($\sigma = 1.94$ mho/m, $\epsilon_r = 52.76$, $\rho = 1000$ kg/m³) ; Liquid level : 151mm

Phantom section: Flat Section ; Separation distance : 0mm(The right 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 - SN1686; ConvF(4.5, 4.5, 4.5); Calibrated: 2003/6/18
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn510;
- Phantom: SAM Twin Phantom V4.0; Type: QD 000 P40 CA; Serial: TP-1150
- Measurement SW: DASY4, V4.1 Build 47; Postprocessing SW: SEMCAD, V1.6 Build 115

Channel 11/Area Scan (61x101x1): Measurement grid: dx=15mm, dy=15mm

Reference Value = 1.59 V/m

Power Drift = 0.2 dB

Maximum value of SAR = 0.0106 mW/g

Channel 11/Zoon Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

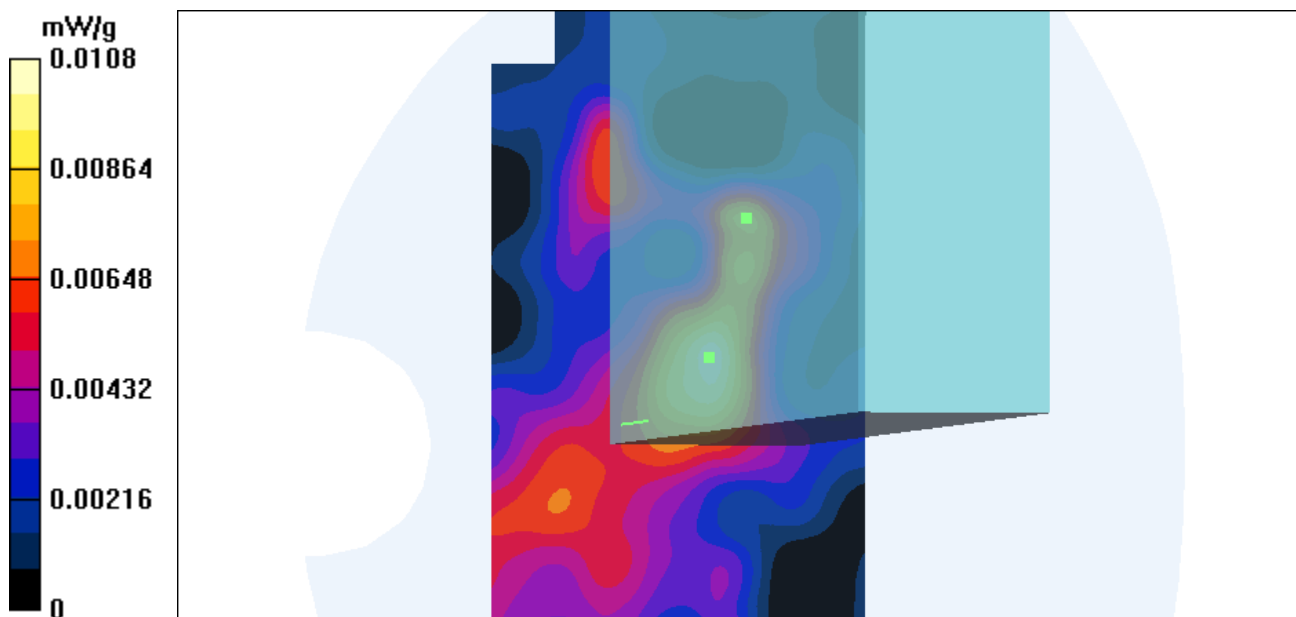
Peak SAR (extrapolated) = 0.0604 W/kg

SAR(1 g) = 0.0123 mW/g; SAR(10 g) = 0.00579 mW/g

Reference Value = 1.59 V/m

Power Drift = 0.2 dB

Maximum value of SAR = 0.0108 mW/g



Test Laboratory: Advance Data Technology

REVOLUTION SERIES 3000 Mode 2

**DUT: Notebook ; Type: REVOLUTION SERIES 3000 ; Test Channel Frequency: 2462 MHz
Frequency: 2437 MHz**

Communication System: 802.11b ; Frequency: 2462 MHz

Frequency: 2437 MHz; Duty Cycle: 1:1; Modulation type: CCK

Medium: MSL2450 ($\sigma = 1.94$ mho/m, $\epsilon_r = 52.76$, $\rho = 1000$ kg/m³)

($\sigma = 1.9$ mho/m, $\epsilon_r = 52.87$, $\rho = 1000$ kg/m³) ; Liquid level : 151mm

Phantom section: Flat Section ; Separation distance : 0mm(The LCD panel of the EUT to the Phantom)

Antenna type : External Antenna ; Air temp. : 22.0 degrees ; Liquid temp. : 21.0 degrees

DASY4 Configuration:

- Probe: ET3DV6 - SN1686; ConvF(4.5, 4.5, 4.5); Calibrated: 2003/6/18

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

- Electronics: DAE3 Sn510;

- Phantom: SAM Twin Phantom V4.0; Type: QD 000 P40 CA; Serial: TP-1150

- Measurement SW: DASY4, V4.1 Build 47; Postprocessing SW: SEMCAD, V1.6 Build 115

Channel 6/Zoon Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

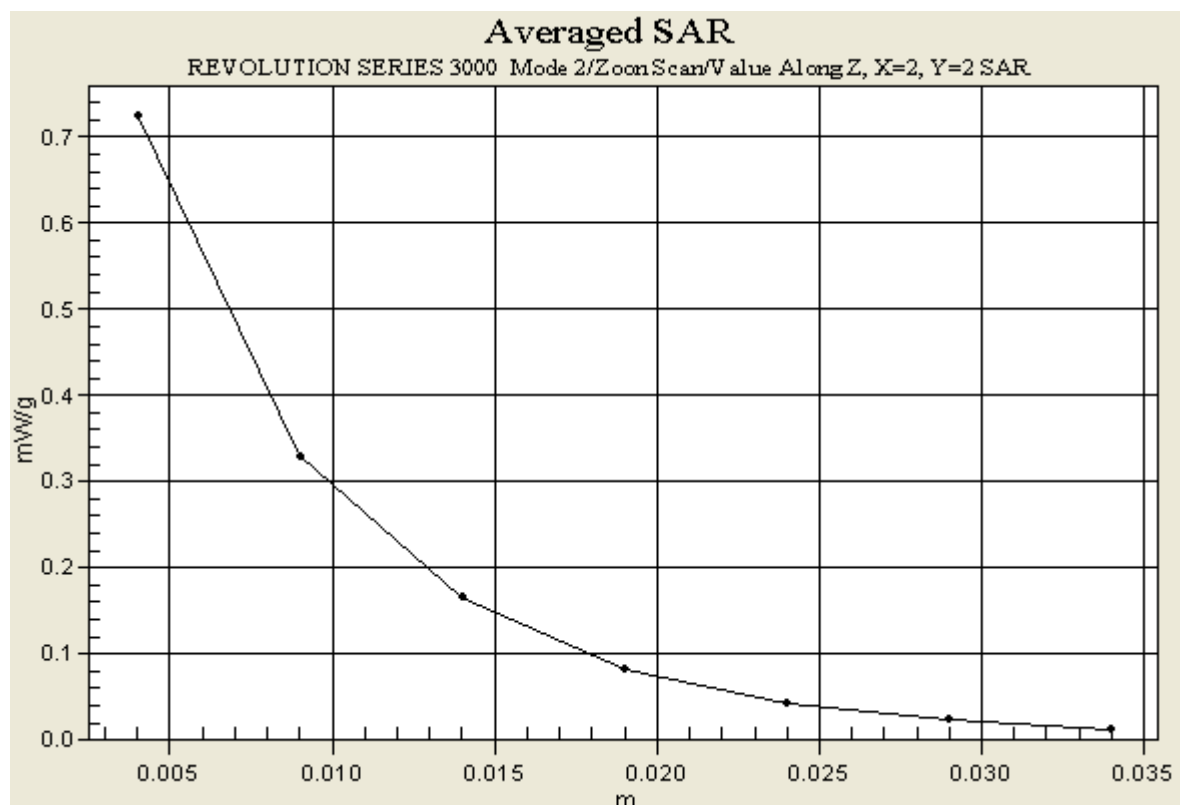
Peak SAR (extrapolated) = 1.94 W/kg

SAR(1 g) = 0.68 mW/g; SAR(10 g) = 0.25 mW/g

Reference Value = 3.1 V/m

Power Drift = -0.1 dB

Maximum value of SAR = 0.726 mW/g



A3:SYSTEM VALIDATION DATA

Date/Time: 08/11/03 11:35:44

Test Laboratory: Advance Data Technology

SystemPerformanceCheck-Body 2450-2003-08-11

DUT: Dipole 2450 MHz ; Type: D2450V2

Communication System: CW ; Frequency: 2450 MHz; Duty Cycle: 1:1; Modulation type: CW

Medium: MSL2450 ($\sigma = 1.92$ mho/m, $\epsilon_r = 52.81$, $\rho = 1000$ kg/m³) ; Liquid level : 151mm

Phantom section: Flat Section ; Separation distance : 10mm(The feetpoint of the dipole to the Phantom)

Air temp. : 22 degrees ; Liquid temp. : 21 degrees

DASY4 Configuration:

- Probe: ET3DV6 - SN1686; ConvF(4.5, 4.5, 4.5); Calibrated: 2003/6/18
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn510;
- Phantom: SAM Twin Phantom V4.0; Type: QD 000 P40 CA; Serial: TP-1150
- Measurement SW: DASY4, V4.1 Build 47; Postprocessing SW: SEMCAD, V1.6 Build 115

d=10mm, Pin=50mW/Area Scan (61x61x1): Measurement grid: dx=15mm, dy=15mm

Reference Value = 40.5 V/m

Power Drift = -0.06 dB

Maximum value of SAR = 2.92 mW/g

d=10mm, Pin=50mW/Zoom Scan (7x7x7) (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Peak SAR (extrapolated) = 5.95 W/kg

SAR(1 g) = 2.65 mW/g; SAR(10 g) = 1.19 mW/g

Reference Value = 40.5 V/m

Power Drift = -0.06 dB

Maximum value of SAR = 2.89 mW/g

