

APPENDIX A: TEST DATA

Liquid Level Photo

Tissue MSL2450MHz D=150mm



Date/Time: 2007/1/3 19:56:09

Test Laboratory: Advance Data Technology

Body Worn-11b-CH1-Mode 1

DUT: IEEE 802.11b/g CF WLAN Module ; Type: DRCB-M1 ; Test Frequency: 2412 MHz

Communication System: 802.11b ; Frequency: 2412 MHz ; Duty Cycle: 1:1

Medium: MSL2450 Medium parameters used : $f = 2412$ MHz; $\sigma = 1.94$ mho/m; $\epsilon_r = 51.1$; $\rho = 1000$ kg/m³ ; Liquid Level : 150 mm

Phantom section: Flat Section ; DUT test position : Body ; Modulation Type: CCK

Separation Distance : 0 mm (The bottom side of the EUT to the Phantom)

Antenna Type : Printed Antenna ; Air Temp. : 22.8 degrees ; Liquid Temp. : 21.6 degrees

DASY4 Configuration:

- Probe: ET3DV6 - SN1790 ; ConvF(4.35, 4.35, 4.35) ; Calibrated: 2006/11/23
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn579 ; Calibrated: 2006/3/15
- Phantom: SAM 12 ; Type: SAM V4.0; Serial: TP 1202
- Measurement SW: DASY4, V4.7 Build 53 ; Postprocessing SW: SEMCAD, V1.8 Build 172

Low Channel 1/Area Scan (9x14x1): Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (measured) = 0.807 mW/g

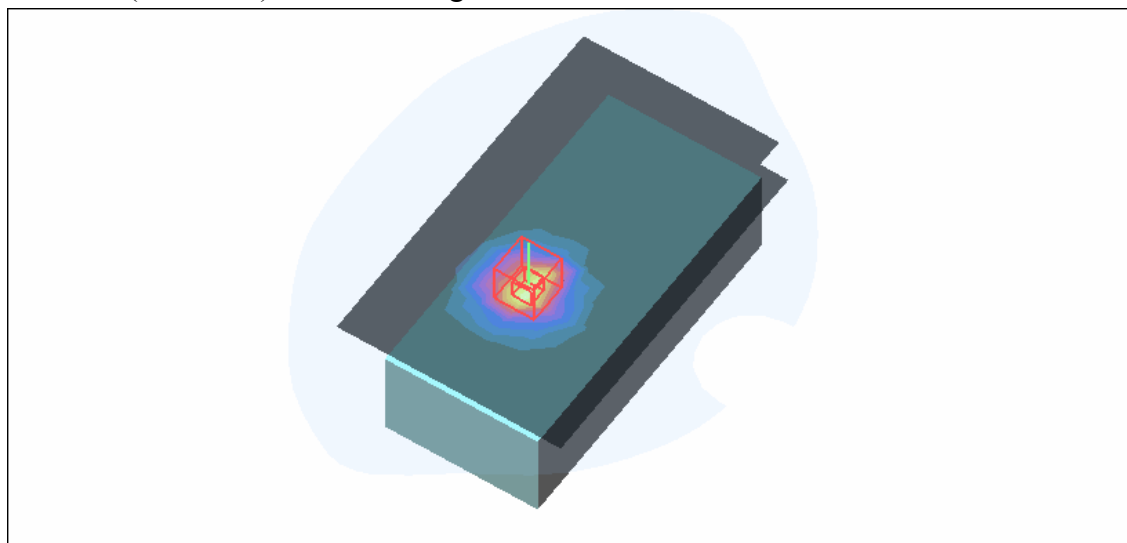
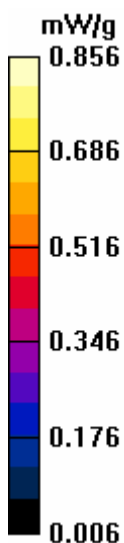
Low Channel 1/Zoom Scan (7x7x7) (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 5.93 V/m

Peak SAR (extrapolated) = 1.63 W/kg

SAR(1 g) = 0.792 mW/g; SAR(10 g) = 0.390 mW/g

Maximum value of SAR (measured) = 0.856 mW/g



Date/Time: 2007/1/3 20:25:31

Test Laboratory: Advance Data Technology

Body Worn-11b-CH6-Mode 1

DUT: IEEE 802.11b/g CF WLAN Module ; Type: DRCB-M1 ; Test Frequency: 2437 MHz

Communication System: 802.11b ; Frequency: 2437 MHz ; Duty Cycle: 1:1

Medium: MSL2450 Medium parameters used : $f = 2437$ MHz; $\sigma = 1.97$ mho/m; $\epsilon_r = 51$; $\rho = 1000$ kg/m³ ; Liquid Level : 150 mm

Phantom section: Flat Section ; DUT test position : Body ; Modulation Type: CCK

Separation Distance : 0 mm (The bottom side of the EUT to the Phantom)

Antenna Type : Printed Antenna ; Air Temp. : 22.8 degrees ; Liquid Temp. : 21.6 degrees

DASY4 Configuration:

- Probe: ET3DV6 - SN1790 ; ConvF(4.35, 4.35, 4.35) ; Calibrated: 2006/11/23
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn579 ; Calibrated: 2006/3/15
- Phantom: SAM 12 ; Type: SAM V4.0; Serial: TP 1202
- Measurement SW: DASY4, V4.7 Build 53 ; Postprocessing SW: SEMCAD, V1.8 Build 172

Mid Channel 6/Area Scan (9x14x1): Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (measured) = 0.763 mW/g

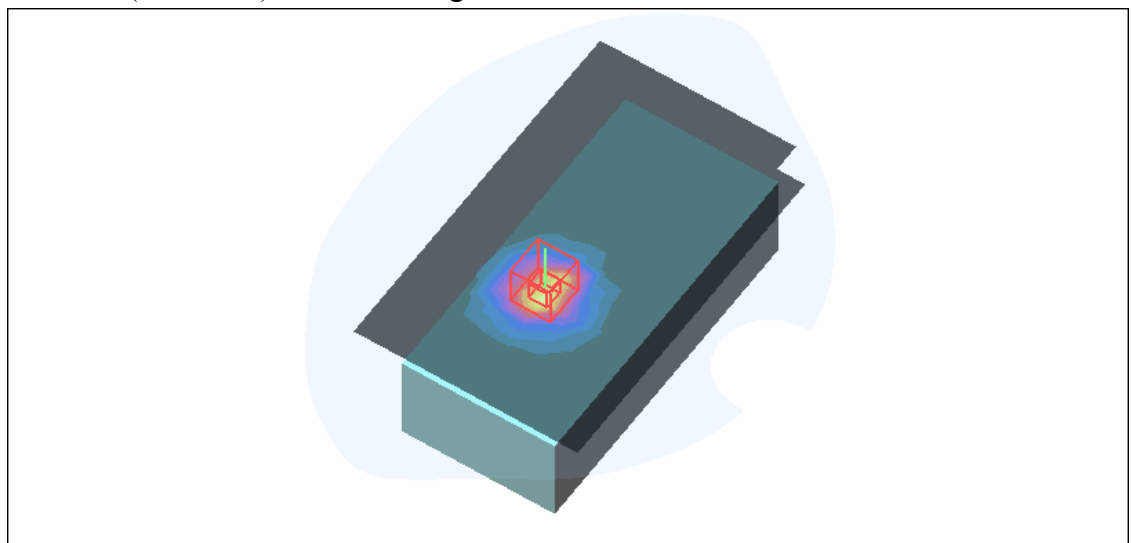
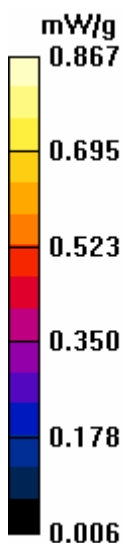
Mid Channel 6/Zoom Scan (7x7x7) (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 6.26 V/m

Peak SAR (extrapolated) = 1.65 W/kg

SAR(1 g) = 0.797 mW/g; SAR(10 g) = 0.398 mW/g

Maximum value of SAR (measured) = 0.867 mW/g



Date/Time: 2007/1/3 20:48:45

Test Laboratory: Advance Data Technology

Body Worn-11b-CH11-Mode 1

DUT: IEEE 802.11b/g CF WLAN Module ; Type: DRCB-M1 ; Test Frequency: 2462 MHz

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

Medium: MSL2450 Medium parameters used : $f = 2462$ MHz; $\sigma = 2.01$ mho/m; $\epsilon_r = 50.9$; $\rho = 1000$ kg/m³ ; Liquid Level : 150 mm

Phantom section: Flat Section ; DUT test position : Body ; Modulation Type: CCK

Separation Distance : 0 mm (The bottom side of the EUT to the Phantom)

Antenna Type : Printed Antenna ; Air Temp. : 22.8 degrees ; Liquid Temp. : 21.6 degrees

DASY4 Configuration:

- Probe: ET3DV6 - SN1790 ; ConvF(4.35, 4.35, 4.35) ; Calibrated: 2006/11/23
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn579 ; Calibrated: 2006/3/15
- Phantom: SAM 12 ; Type: SAM V4.0; Serial: TP 1202
- Measurement SW: DASY4, V4.7 Build 53 ; Postprocessing SW: SEMCAD, V1.8 Build 172

High Channel 11/Area Scan (9x14x1): Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (measured) = 0.855 mW/g

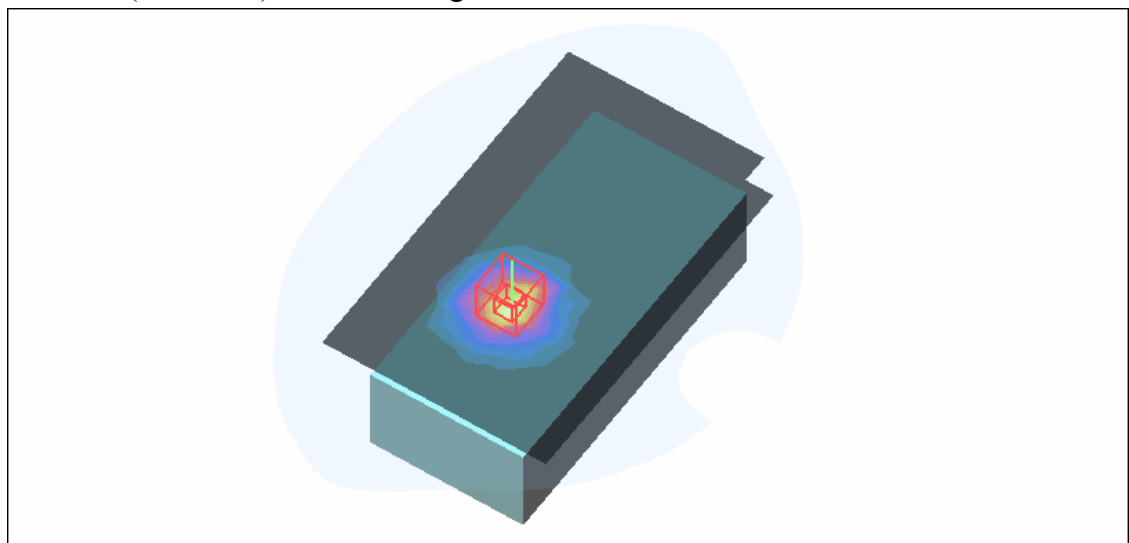
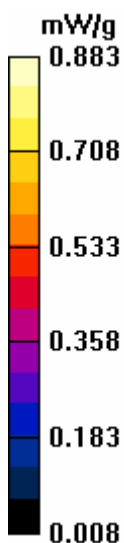
High Channel 11/Zoom Scan (7x7x7) (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

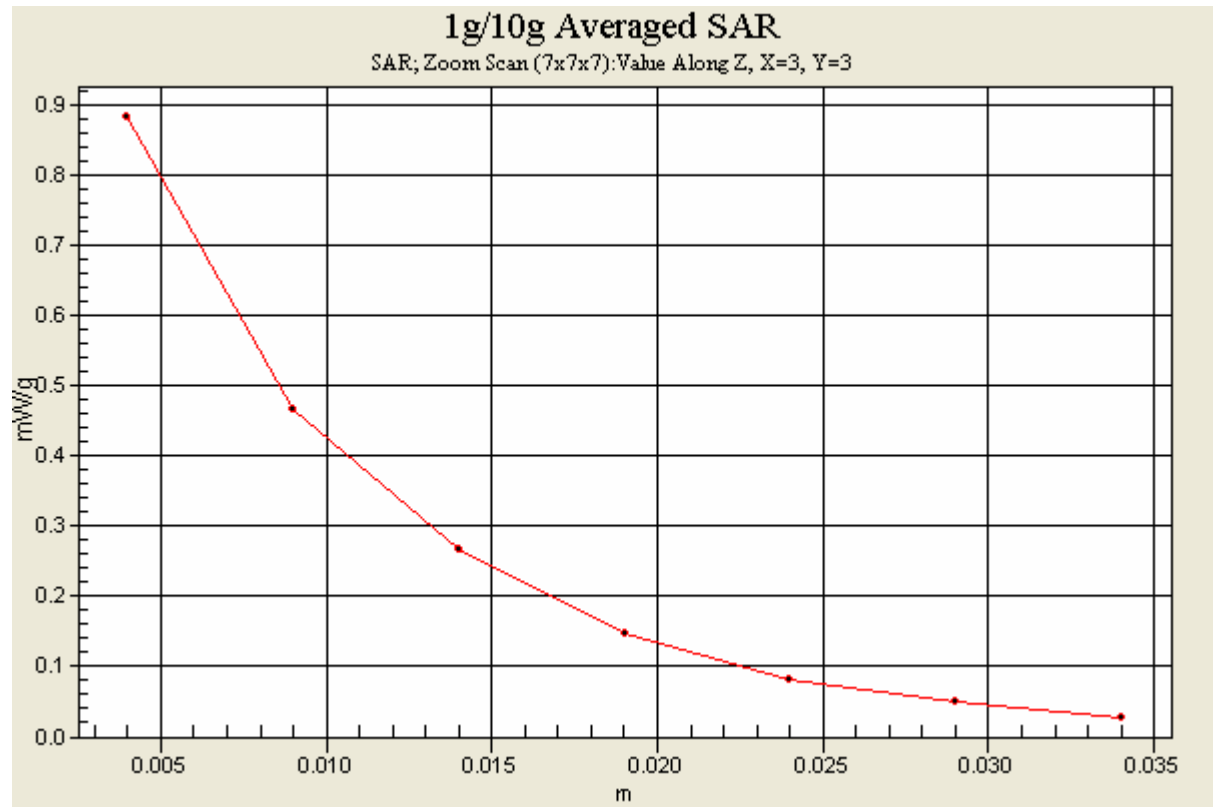
Reference Value = 6.80 V/m

Peak SAR (extrapolated) = 1.72 W/kg

SAR(1 g) = 0.822 mW/g; SAR(10 g) = 0.415 mW/g

Maximum value of SAR (measured) = 0.883 mW/g





Date/Time: 2007/1/3 21:16:31

Test Laboratory: Advance Data Technology

Body Worn-11g-CH1-Mode 2

DUT: IEEE 802.11b/g CF WLAN Module ; Type: DRCB-M1 ; Test Frequency: 2412 MHz

Communication System: 802.11g ; Frequency: 2412 MHz ; Duty Cycle: 1:1

Medium: MSL2450 Medium parameters used : $f = 2412$ MHz; $\sigma = 1.94$ mho/m; $\epsilon_r = 51.1$; $\rho = 1000$ kg/m³ ; Liquid Level : 150 mm

Phantom section: Flat Section ; DUT test position : Body ; Modulation Type: OFDM

Separation Distance : 0 mm (The bottom side of the EUT to the Phantom)

Antenna Type : Printed Antenna ; Air Temp. : 22.8 degrees ; Liquid Temp. : 21.6 degrees

DASY4 Configuration:

- Probe: ET3DV6 - SN1790 ; ConvF(4.35, 4.35, 4.35) ; Calibrated: 2006/11/23
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn579 ; Calibrated: 2006/3/15
- Phantom: SAM 12 ; Type: SAM V4.0; Serial: TP 1202
- Measurement SW: DASY4, V4.7 Build 53 ; Postprocessing SW: SEMCAD, V1.8 Build 172

Low Channel 1/Area Scan (9x14x1): Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (measured) = 0.433 mW/g

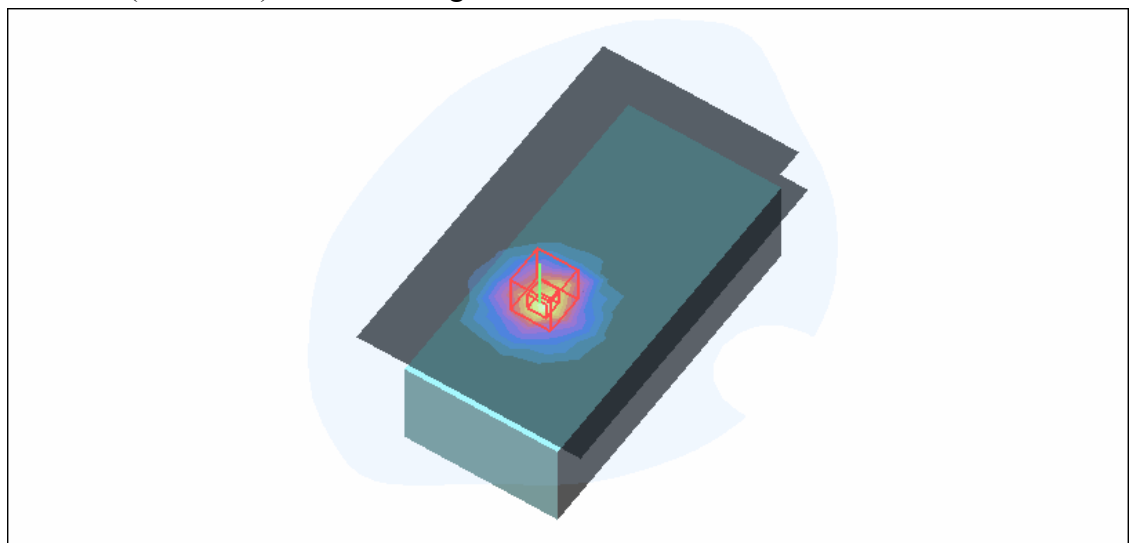
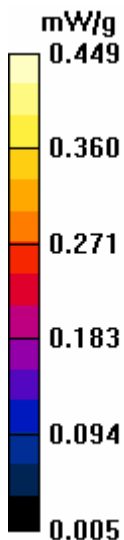
Low Channel 1/Zoom Scan (7x7x7) (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 4.67 V/m

Peak SAR (extrapolated) = 0.883 W/kg

SAR(1 g) = 0.422 mW/g; SAR(10 g) = 0.216 mW/g

Maximum value of SAR (measured) = 0.449 mW/g



Date/Time: 2007/1/3 21:43:43

Test Laboratory: Advance Data Technology

Body Worn-11g-CH6-Mode 2

DUT: IEEE 802.11b/g CF WLAN Module ; Type: DRCB-M1 ; Test Frequency: 2437 MHz

Communication System: 802.11g ; Frequency: 2437 MHz ; Duty Cycle: 1:1

Medium: MSL2450 Medium parameters used : $f = 2437$ MHz; $\sigma = 1.97$ mho/m; $\epsilon_r = 51$; $\rho = 1000$ kg/m³ ; Liquid Level : 150 mm

Phantom section: Flat Section ; DUT test position : Body ; Modulation Type: OFDM

Separation Distance : 0 mm (The bottom side of the EUT to the Phantom)

Antenna Type : Printed Antenna ; Air Temp. : 22.8 degrees ; Liquid Temp. : 21.6 degrees

DASY4 Configuration:

- Probe: ET3DV6 - SN1790 ; ConvF(4.35, 4.35, 4.35) ; Calibrated: 2006/11/23
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn579 ; Calibrated: 2006/3/15
- Phantom: SAM 12 ; Type: SAM V4.0; Serial: TP 1202
- Measurement SW: DASY4, V4.7 Build 53 ; Postprocessing SW: SEMCAD, V1.8 Build 172

Mid Channel 6/Area Scan (9x14x1): Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (measured) = 0.452 mW/g

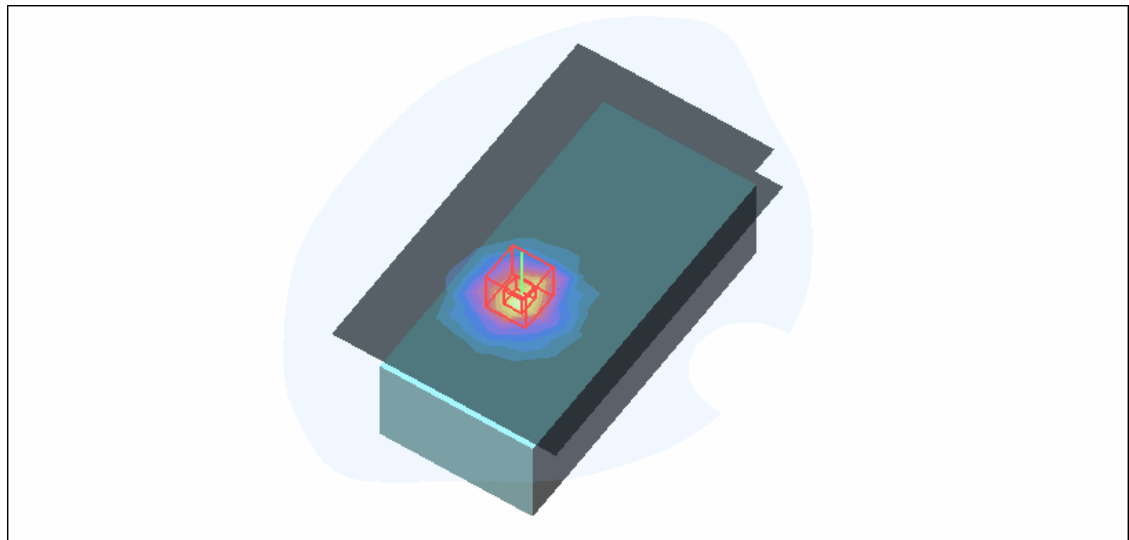
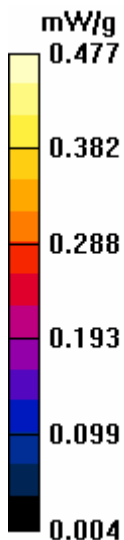
Mid Channel 6/Zoom Scan (7x7x7) (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 4.85 V/m

Peak SAR (extrapolated) = 0.933 W/kg

SAR(1 g) = 0.446 mW/g; SAR(10 g) = 0.227 mW/g

Maximum value of SAR (measured) = 0.477 mW/g



Date/Time: 2007/1/3 22:07:04

Test Laboratory: Advance Data Technology

Body Worn-11g-CH11-Mode 2

DUT: IEEE 802.11b/g CF WLAN Module ; Type: DRCB-M1 ; Test Frequency: 2462 MHz

Communication System: 802.11g ; Frequency: 2462 MHz ; Duty Cycle: 1:1

Medium: MSL2450 Medium parameters used : $f = 2462$ MHz; $\sigma = 2.01$ mho/m; $\epsilon_r = 50.9$; $\rho = 1000$ kg/m³ ; Liquid Level : 150 mm

Phantom section: Flat Section ; DUT test position : Body ; Modulation Type: OFDM

Separation Distance : 0 mm (The bottom side of the EUT to the Phantom)

Antenna Type : Printed Antenna ; Air Temp. : 22.8 degrees ; Liquid Temp. : 21.6 degrees

DASY4 Configuration:

- Probe: ET3DV6 - SN1790 ; ConvF(4.35, 4.35, 4.35) ; Calibrated: 2006/11/23
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn579 ; Calibrated: 2006/3/15
- Phantom: SAM 12 ; Type: SAM V4.0; Serial: TP 1202
- Measurement SW: DASY4, V4.7 Build 53 ; Postprocessing SW: SEMCAD, V1.8 Build 172

High Channel 11/Area Scan (9x14x1): Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (measured) = 0.408 mW/g

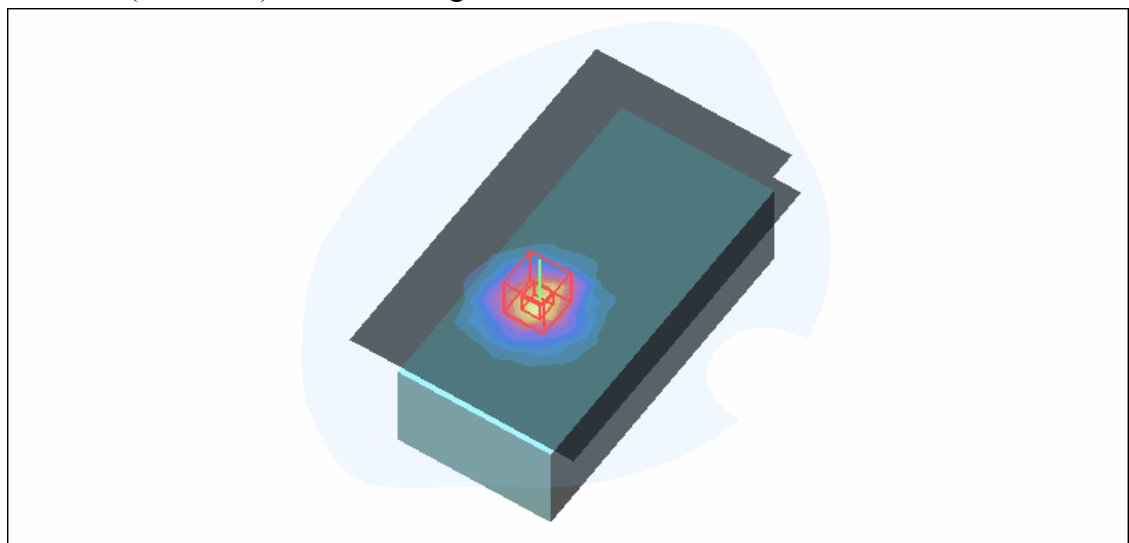
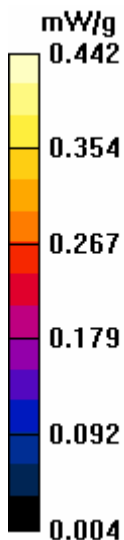
High Channel 11/Zoom Scan (7x7x7) (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 4.66 V/m

Peak SAR (extrapolated) = 0.862 W/kg

SAR(1 g) = 0.410 mW/g; SAR(10 g) = 0.207 mW/g

Maximum value of SAR (measured) = 0.442 mW/g



Date/Time: 2007/1/3 22:51:10

Test Laboratory: Advance Data Technology

Body Worn-11b-CH11-Mode 3

DUT: IEEE 802.11b/g CF WLAN Module ; Type: DRCB-M1 ; Test Frequency: 2462 MHz

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

Medium: MSL2450 Medium parameters used : $f = 2462$ MHz; $\sigma = 2.01$ mho/m; $\epsilon_r = 50.9$; $\rho = 1000$ kg/m³ ; Liquid Level : 150 mm

Phantom section: Flat Section ; DUT test position : Body ; Modulation Type: CCK

Separation Distance : 0 mm (The bottom side of the EUT to the Phantom)

Antenna Type : PIFA Antenna ; Air Temp. : 22.8 degrees ; Liquid Temp. : 21.6 degrees

DASY4 Configuration:

- Probe: ET3DV6 - SN1790 ; ConvF(4.35, 4.35, 4.35) ; Calibrated: 2006/11/23
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn579 ; Calibrated: 2006/3/15
- Phantom: SAM 12 ; Type: SAM V4.0; Serial: TP 1202
- Measurement SW: DASY4, V4.7 Build 53 ; Postprocessing SW: SEMCAD, V1.8 Build 172

High Channel 11/Area Scan (9x15x1): Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (measured) = 0.005 mW/g

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

Reference Value = 1.05 V/m

Peak SAR (extrapolated) = 0.015 W/kg

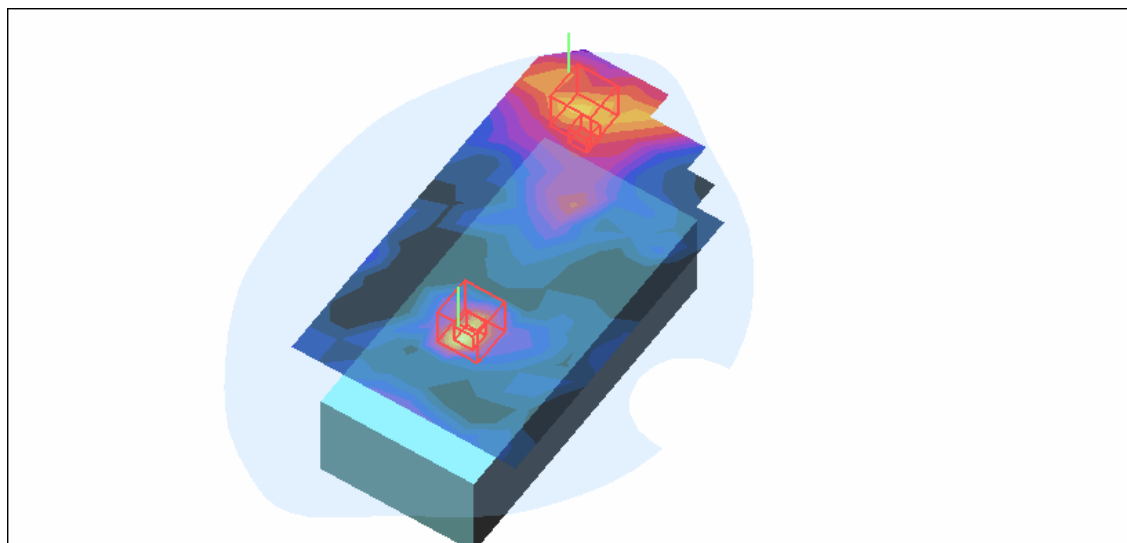
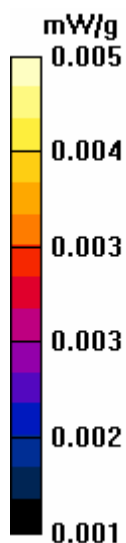
SAR(1 g) = 0.0045 mW/g; SAR(10 g) = 0.00257 mW/g

High Channel 11/Zoom Scan (7x7x7) (7x7x7)/Cube 1: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 1.05 V/m

Peak SAR (extrapolated) = 0.014 W/kg

SAR(1 g) = 0.00378 mW/g; SAR(10 g) = 0.00195 mW/g



Date/Time: 2007/1/3 23:24:12

Test Laboratory: Advance Data Technology

Body Worn-11b-CH11-Mode 4

DUT: IEEE 802.11b/g CF WLAN Module ; Type: DRCB-M1 ; Test Frequency: 2462 MHz

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

Medium: MSL2450 Medium parameters used : $f = 2462$ MHz; $\sigma = 2.01$ mho/m; $\epsilon_r = 50.9$; $\rho = 1000$ kg/m³ ; Liquid Level : 150 mm

Phantom section: Flat Section ; DUT test position : Body ; Modulation Type: CCK

Separation Distance : 0 mm (The bottom side of the EUT to the Phantom)

Antenna Type : Printed Antenna ; Air Temp. : 22.8 degrees ; Liquid Temp. : 21.6 degrees

DASY4 Configuration:

- Probe: ET3DV6 - SN1790 ; ConvF(4.35, 4.35, 4.35) ; Calibrated: 2006/11/23
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn579 ; Calibrated: 2006/3/15
- Phantom: SAM 12 ; Type: SAM V4.0; Serial: TP 1202
- Measurement SW: DASY4, V4.7 Build 53 ; Postprocessing SW: SEMCAD, V1.8 Build 172

High Channel 11/Area Scan (9x14x1): Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (measured) = 0.842 mW/g

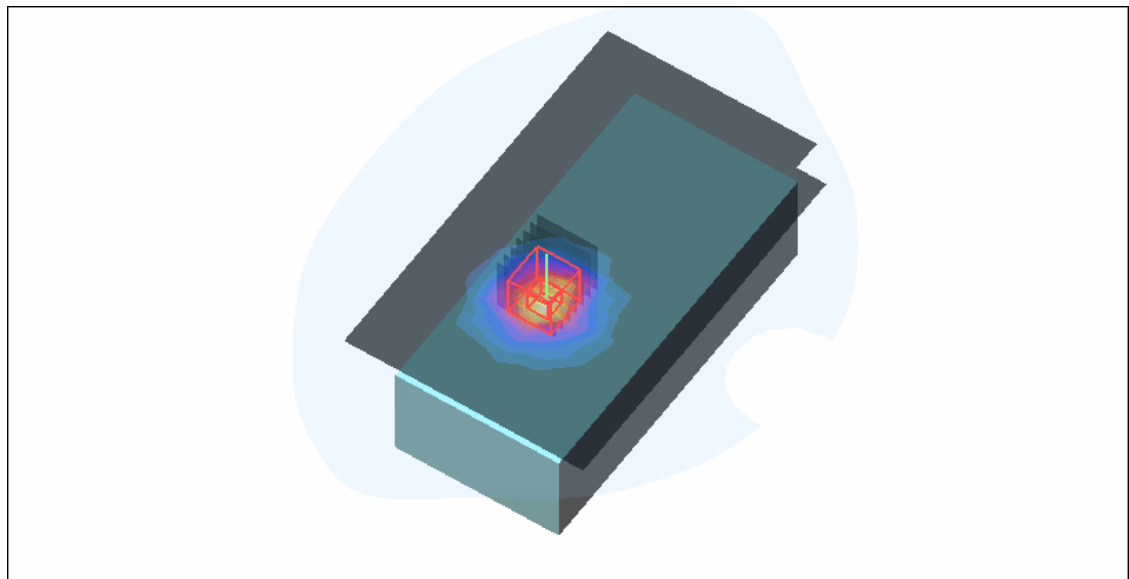
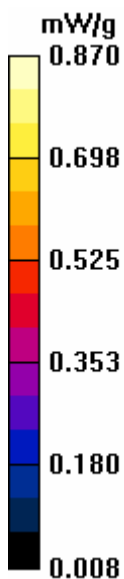
High Channel 11/Zoom Scan (7x7x7) (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 6.65 V/m

Peak SAR (extrapolated) = 1.70 W/kg

SAR(1 g) = 0.810 mW/g; SAR(10 g) = 0.409 mW/g

Maximum value of SAR (measured) = 0.870 mW/g



Date/Time: 2007/1/3 10:23:05

Test Laboratory: Advance Data Technology

System Validation Check-MSL 2450MHz

DUT: Dipole 2450 MHz ; Type: D2450V2 ; Serial: 737 ; Test Frequency: 2450 MHz

Communication System: CW ; Frequency: 2450 MHz; Duty Cycle: 1:1; Modulation type: CW
 Medium: MSL2450; Medium parameters used: $f = 2450 \text{ MHz}$; $\sigma = 1.99 \text{ mho/m}$; $\epsilon_r = 51$; $\rho = 1000 \text{ kg/m}^3$;
 Liquid level : 150 mm
 Phantom section: Flat Section ; Separation distance : 10 mm (The feetpoint of the dipole to the Phantom)
 Air temp. : 22.8 degrees ; Liquid temp. : 21.6 degrees

DASY4 Configuration:

- Probe: ET3DV6 - SN1790 ; ConvF(4.35, 4.35, 4.35) ; Calibrated: 2006/11/23
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn579; Calibrated: 2006/3/15
- Phantom: SAM 12; Type: SAM V4.0; Serial: TP 1202
- Measurement SW: DASY4, V4.7 Build 53; Postprocessing SW: SEMCAD, V1.8 Build 172

d=10mm, Pin=250mW/Area Scan (5x7x1): Measurement grid: dx=15mm, dy=15mm
 Maximum value of SAR (measured) = 15.5 mW/g

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

Reference Value = 91.8 V/m; Power Drift = -0.174 dB

Peak SAR (extrapolated) = 33.1 W/kg

SAR(1 g) = **14.1 mW/g**; SAR(10 g) = 6.36 mW/g

