

APPENDIX A: TEST DATA

Liquid Level Photo

MSL 2450MHz D=150mm



Date/Time: 2005/5/5 09:31:39

Test Laboratory: Advance Data Technology

D600-11b-CH1-Mode 1

DUT: Compact Wireless-G USB Network Adapter with SpeedBooster ; Type: WUSB54GSC ; Test Frequency: 2412 MHz

Communication System: 802.11b ; Frequency: 2412 MHz ; Duty Cycle: 1:1 ; Modulation type: CCK
Medium: MSL2450 Medium parameters used: $f = 2412$ MHz; $\sigma = 1.98$ mho/m; $\epsilon_r = 53.8$; $\rho = 1000$ kg/m³ ; Liquid level : 150mm

Phantom section: Flat Section ; Separation distance : 0 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 - SN1753 ; ConvF(4.25, 4.25, 4.25) ; Calibrated: 2004/8/26
- 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 1/Area Scan (5x8x1): Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (measured) = 1.28 mW/g

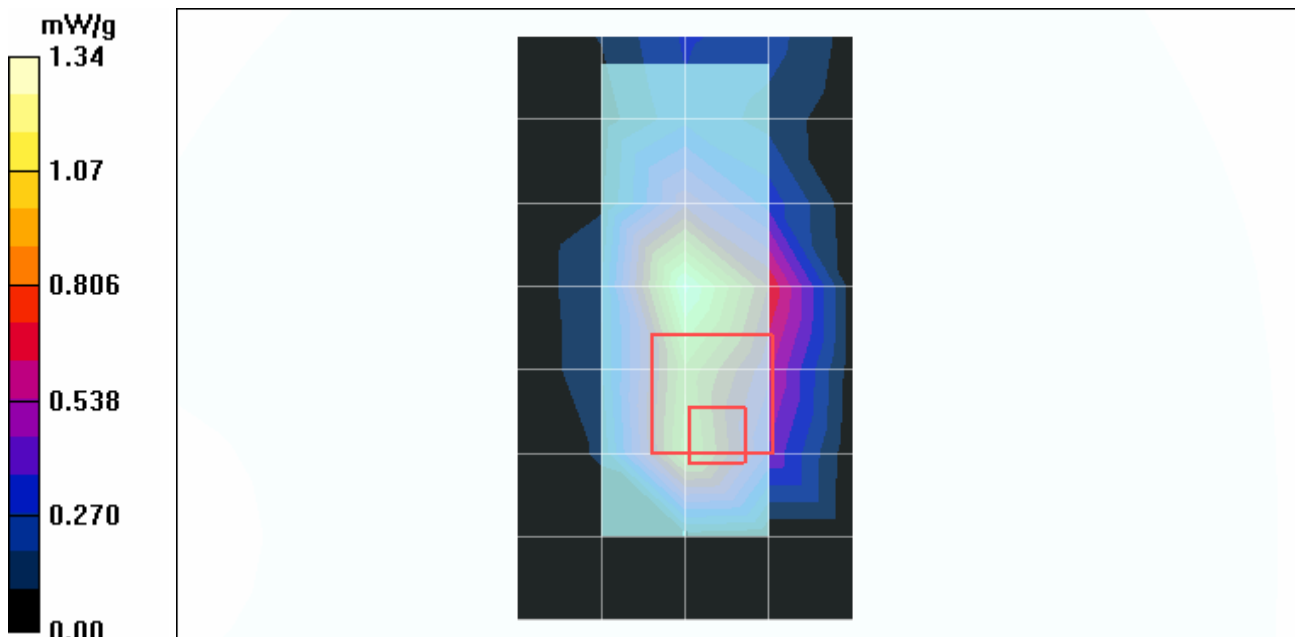
Low Channel 1/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

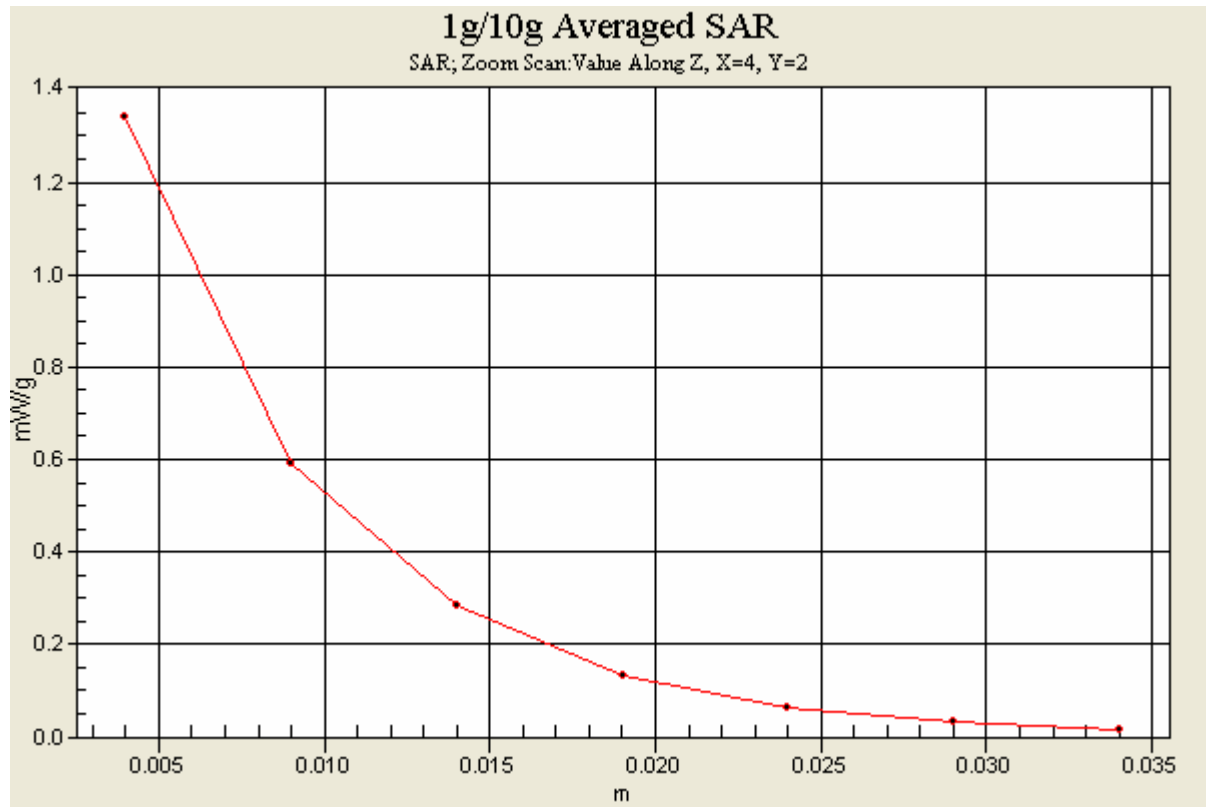
Reference Value = 4.83 V/m

Peak SAR (extrapolated) = 3.34 W/kg

SAR(1 g) = 1.21 mW/g; SAR(10 g) = 0.559 mW/g

Maximum value of SAR (measured) = 1.34 mW/g





Date/Time: 2005/5/5 09:50:12

Test Laboratory: Advance Data Technology

D600-11b-CH6-Mode 1

DUT: Compact Wireless-G USB Network Adapter with SpeedBooster ; Type: WUSB54GSC ; Test Frequency: 2437 MHz

Communication System: 802.11b ; Frequency: 2437 MHz ; Duty Cycle: 1:1 ; Modulation type: CCK
Medium: MSL2450 Medium parameters used: $f = 2437$ MHz; $\sigma = 2.02$ mho/m; $\epsilon_r = 53.7$; $\rho = 1000$ kg/m³ ; Liquid level : 150mm

Phantom section: Flat Section ; Separation distance : 0 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 - SN1753 ; ConvF(4.25, 4.25, 4.25) ; Calibrated: 2004/8/26
- 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

Mid Channel 6/Area Scan (5x8x1): Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (measured) = 1.16 mW/g

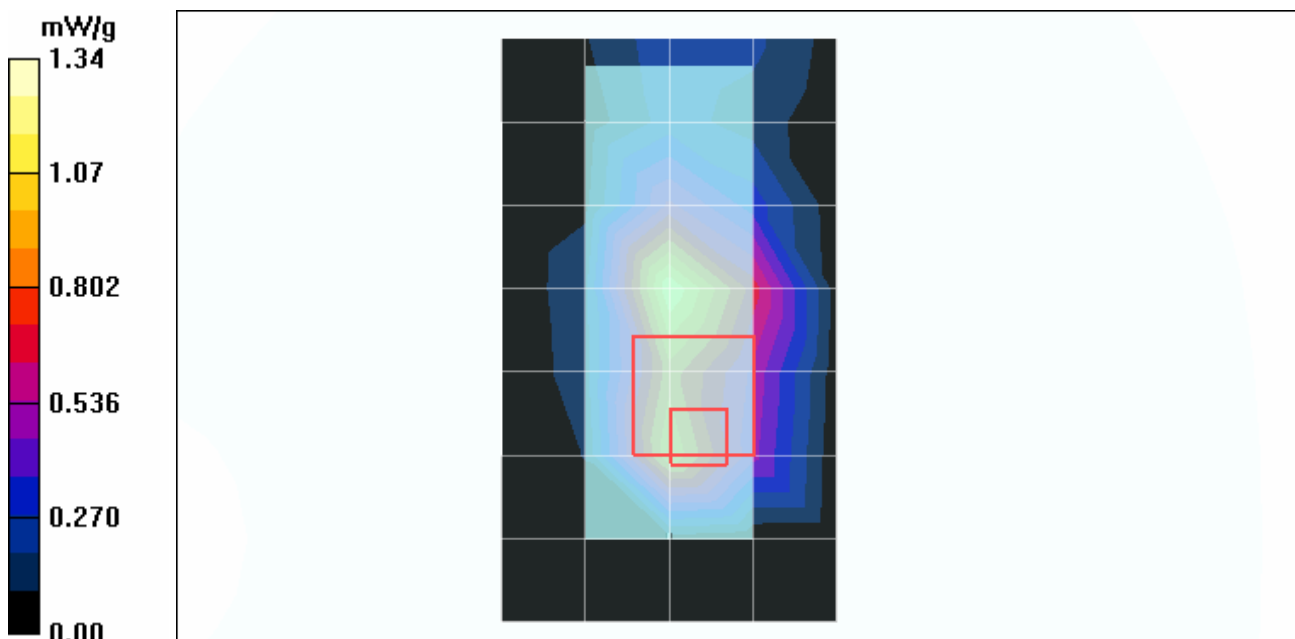
Mid Channel 6/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 5.18 V/m

Peak SAR (extrapolated) = 3.13 W/kg

SAR(1 g) = 1.13 mW/g; SAR(10 g) = 0.503 mW/g

Maximum value of SAR (measured) = 1.34 mW/g



Date/Time: 2005/5/5 10:09:25

Test Laboratory: Advance Data Technology

D600-11b-CH11-Mode 1

DUT: Compact Wireless-G USB Network Adapter with SpeedBooster ; Type: WUSB54GSC ; Test Frequency: 2462 MHz

Communication System: 802.11b ; Frequency: 2462 MHz ; Duty Cycle: 1:1 ; Modulation type: CCK
Medium: MSL2450 Medium parameters used: $f = 2462 \text{ MHz}$; $\sigma = 2.05 \text{ mho/m}$; $\epsilon_r = 53.6$; $\rho = 1000 \text{ kg/m}^3$; Liquid level : 150mm

Phantom section: Flat Section ; Separation distance : 0 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 - SN1753 ; ConvF(4.25, 4.25, 4.25) ; Calibrated: 2004/8/26
- 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 11/Area Scan (5x8x1): Measurement grid: $dx=15\text{mm}$, $dy=15\text{mm}$

Maximum value of SAR (measured) = 1.05 mW/g

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

Reference Value = 5.21 V/m

Peak SAR (extrapolated) = 2.95 W/kg

SAR(1 g) = 1.08 mW/g; SAR(10 g) = 0.459 mW/g

Maximum value of SAR (measured) = 1.21 mW/g

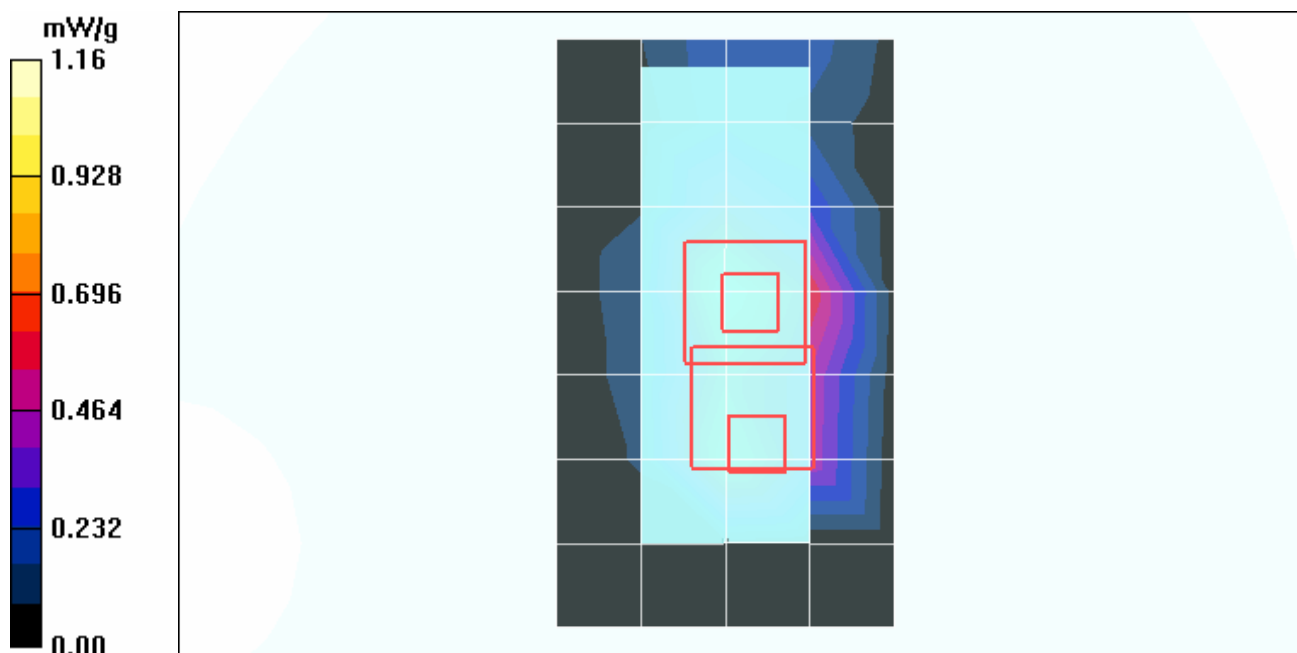
High Channel 11/Zoom Scan (7x7x7)/Cube 1: Measurement grid: $dx=5\text{mm}$, $dy=5\text{mm}$, $dz=5\text{mm}$

Reference Value = 5.21 V/m

Peak SAR (extrapolated) = 2.13 W/kg

SAR(1 g) = 1.04 mW/g; SAR(10 g) = 0.537 mW/g

Maximum value of SAR (measured) = 1.16 mW/g



Date/Time: 2005/5/5 10:28:46

Test Laboratory: Advance Data Technology

D600-11g-CH1-Mode 2

DUT: Compact Wireless-G USB Network Adapter with SpeedBooster ; Type: WUSB54GSC ; Test Frequency: 2412 MHz

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

Medium: MSL2450 Medium parameters used: $f = 2412$ MHz; $\sigma = 1.98$ mho/m; $\epsilon_r = 53.8$; $\rho = 1000$

kg/m³ ; Liquid level : 150mm

Phantom section: Flat Section ; Separation distance : 0 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 - SN1753 ; ConvF(4.25, 4.25, 4.25) ; Calibrated: 2004/8/26
- 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 1/Area Scan (5x8x1): Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (measured) = 0.391 mW/g

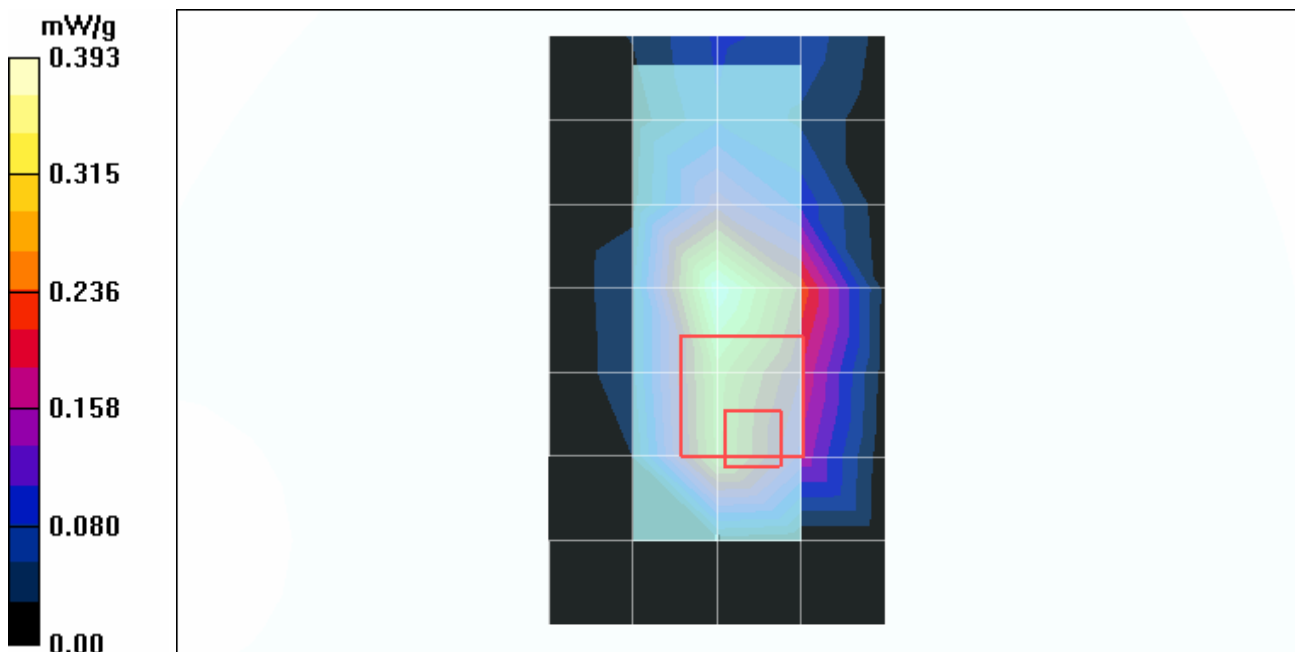
Low Channel 1/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 2.95 V/m

Peak SAR (extrapolated) = 0.876 W/kg

SAR(1 g) = 0.330 mW/g; SAR(10 g) = 0.159 mW/g

Maximum value of SAR (measured) = 0.393 mW/g



Date/Time: 2005/5/5 10:59:08

Test Laboratory: Advance Data Technology

3800-11b-CH1-Mode 3

DUT: Compact Wireless-G USB Network Adapter with SpeedBooster ; Type: WUSB54GSC ; Test Frequency: 2412 MHz

Communication System: 802.11b ; Frequency: 2412 MHz; Duty Cycle: 1:1; Modulation type: CCK
Medium: MSL2450 Medium parameters used: $f = 2412$ MHz; $\sigma = 1.98$ mho/m; $\epsilon_r = 53.8$; $\rho = 1000$ kg/m³ ; Liquid level : 150 mm

Phantom section: Flat Section ; Separation distance : 0 mm (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 - SN1753 ; ConvF(4.25, 4.25, 4.25) ; Calibrated: 2004/8/26
- 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 1/Area Scan (5x9x1): Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (measured) = 0.597 mW/g

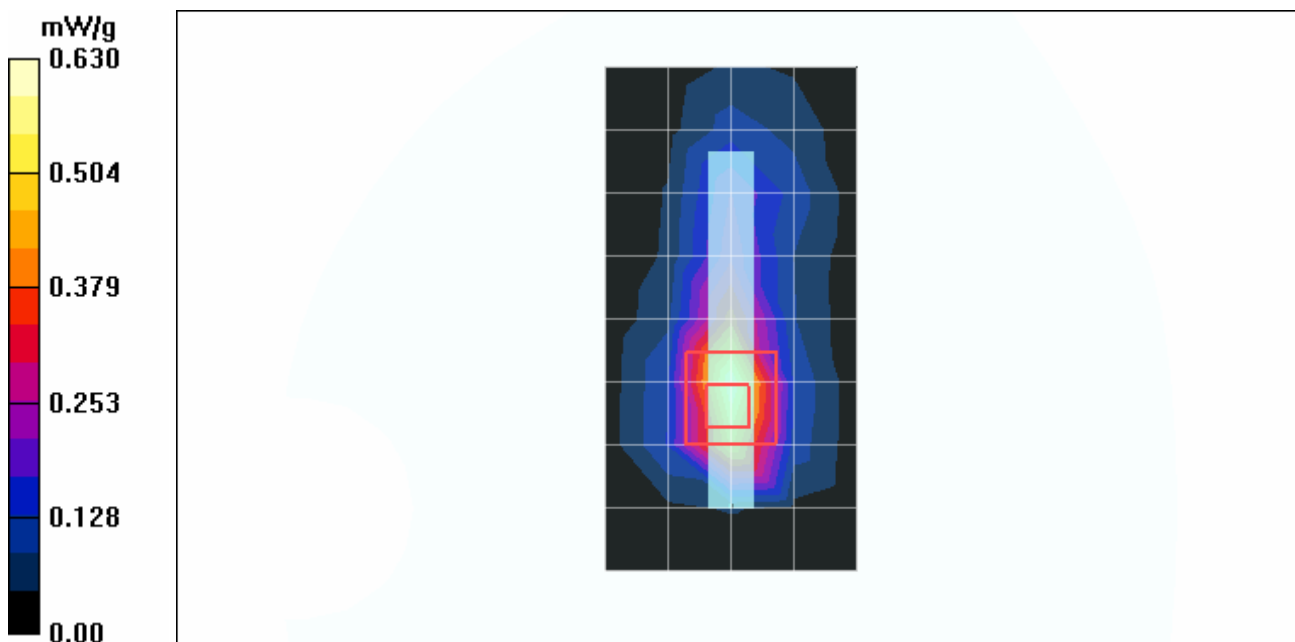
Low Channel 1/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

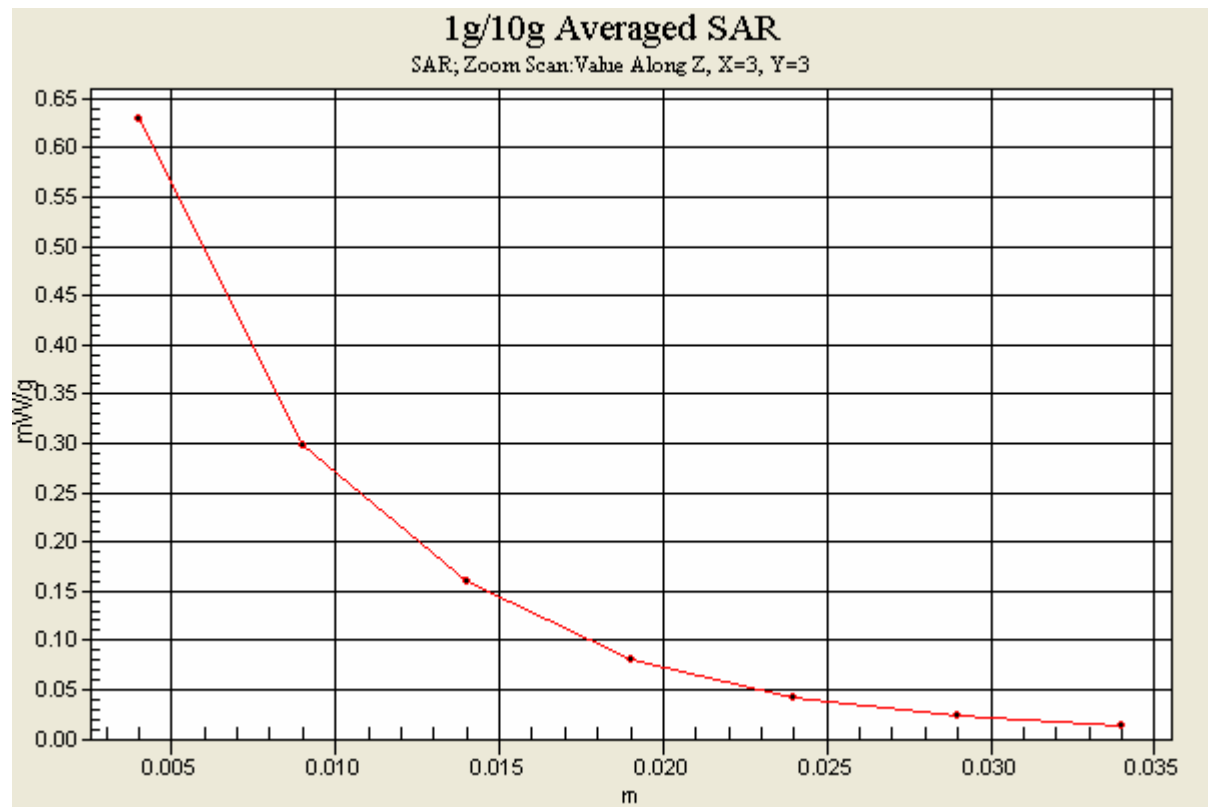
Reference Value = 5.38 V/m

Peak SAR (extrapolated) = 1.36 W/kg

SAR(1 g) = 0.562 mW/g; SAR(10 g) = 0.261 mW/g

Maximum value of SAR (measured) = 0.630 mW/g





Date/Time: 2005/5/5 11:34:54

Test Laboratory: Advance Data Technology

3800-11b-CH6-Mode 3

DUT: Compact Wireless-G USB Network Adapter with SpeedBooster ; Type: WUSB54GSC ; Test Frequency: 2437 MHz

Communication System: 802.11b ; Frequency: 2437 MHz; Duty Cycle: 1:1; Modulation type: CCK
Medium: MSL2450 Medium parameters used: $f = 2437 \text{ MHz}$; $\sigma = 2.02 \text{ mho/m}$; $\epsilon_r = 53.7$; $\rho = 1000 \text{ kg/m}^3$; Liquid level : 150 mm

Phantom section: Flat Section ; Separation distance : 0 mm (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 - SN1753 ; ConvF(4.25, 4.25, 4.25) ; Calibrated: 2004/8/26
- 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

Mid Channel 6/Area Scan (5x9x1): Measurement grid: $dx=15\text{mm}$, $dy=15\text{mm}$

Maximum value of SAR (measured) = 0.574 mW/g

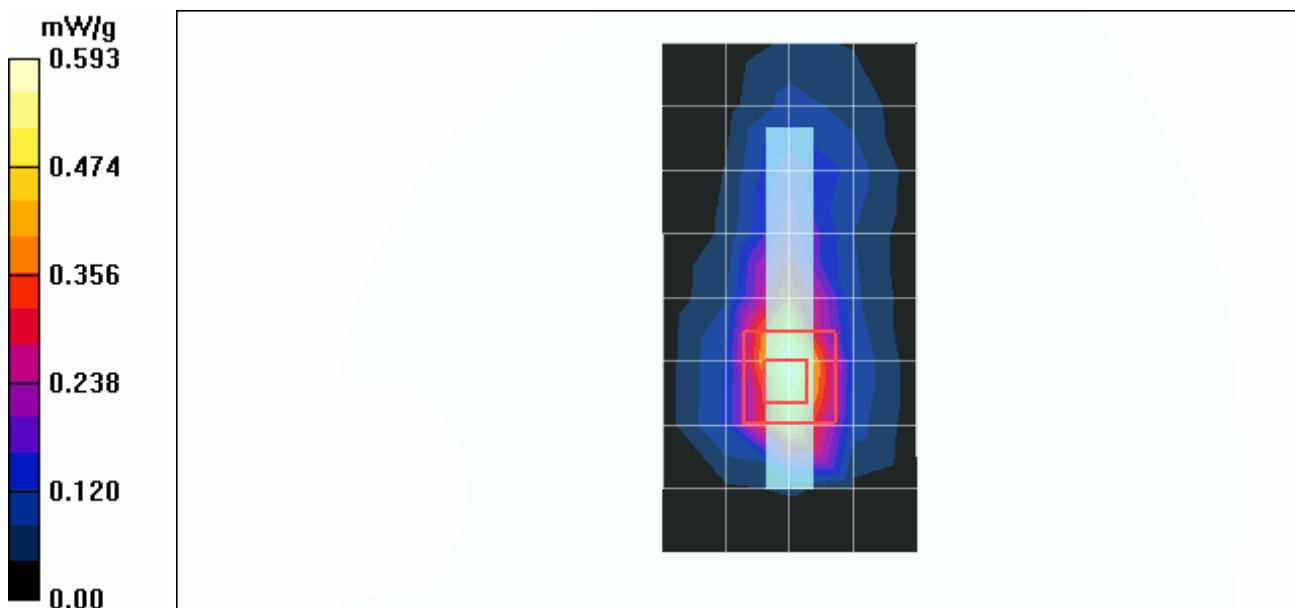
Mid Channel 6/Zoom Scan (7x7x7)/Cube 0: Measurement grid: $dx=5\text{mm}$, $dy=5\text{mm}$, $dz=5\text{mm}$

Reference Value = 5.17 V/m

Peak SAR (extrapolated) = 1.29 W/kg

SAR(1 g) = 0.532 mW/g; SAR(10 g) = 0.245 mW/g

Maximum value of SAR (measured) = 0.593 mW/g



Date/Time: 2005/5/5 11:50:56

Test Laboratory: Advance Data Technology

3800-11b-CH11-Mode 3

DUT: Compact Wireless-G USB Network Adapter with SpeedBooster ; Type: WUSB54GSC ; Test Frequency: 2462 MHz

Communication System: 802.11b ; Frequency: 2462 MHz; Duty Cycle: 1:1; Modulation type: CCK
Medium: MSL2450 Medium parameters used: $f = 2462 \text{ MHz}$; $\sigma = 2.05 \text{ mho/m}$; $\epsilon_r = 53.6$; $\rho = 1000 \text{ kg/m}^3$; Liquid level : 150 mm

Phantom section: Flat Section ; Separation distance : 0 mm (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 - SN1753 ; ConvF(4.25, 4.25, 4.25) ; Calibrated: 2004/8/26
- 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 11/Area Scan (5x9x1): Measurement grid: $dx=15\text{mm}$, $dy=15\text{mm}$

Maximum value of SAR (measured) = 0.555 mW/g

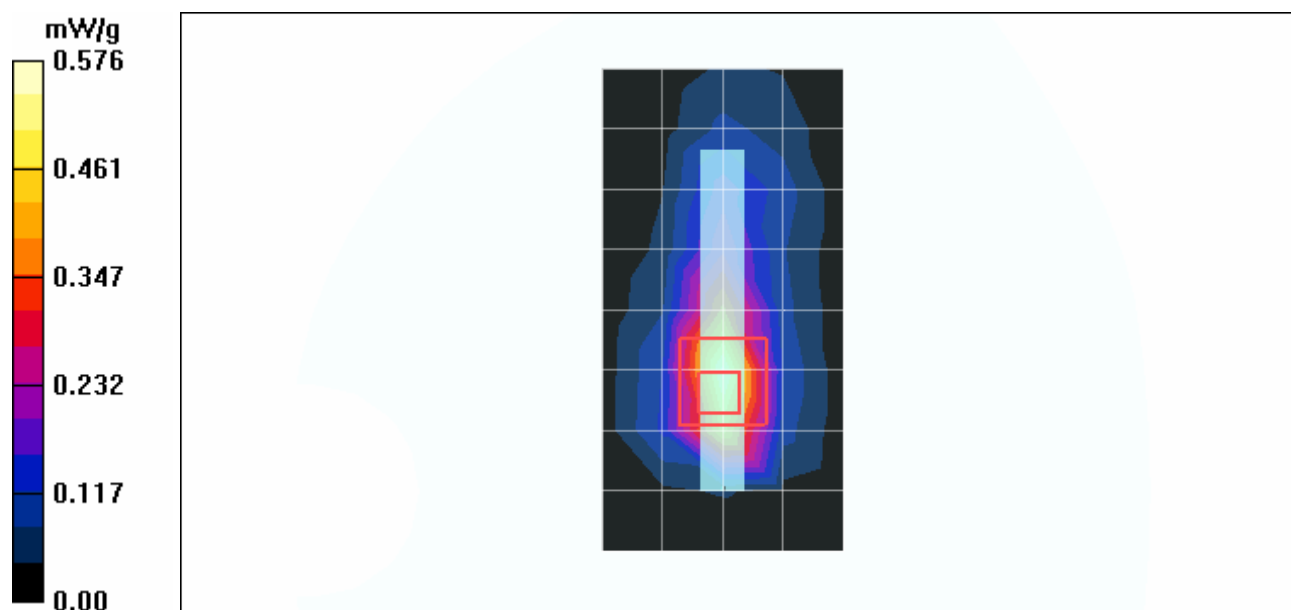
High Channel 11/Zoom Scan (7x7x7)/Cube 0: Measurement grid: $dx=5\text{mm}$, $dy=5\text{mm}$, $dz=5\text{mm}$

Reference Value = 4.99 V/m

Peak SAR (extrapolated) = 1.28 W/kg

SAR(1 g) = 0.524 mW/g; SAR(10 g) = 0.240 mW/g

Maximum value of SAR (measured) = 0.576 mW/g



Test Laboratory: Advance Data Technology

3800-11g-CH1-Mode 4

DUT: Compact Wireless-G USB Network Adapter with SpeedBooster ; Type: WUSB54GSC ; Test Frequency: 2412 MHz

Communication System: 802.11g ; Frequency: 2412 MHz; Duty Cycle: 1:1; Modulation type: OFDM
Medium: MSL2450 Medium parameters used: $f = 2412$ MHz; $\sigma = 1.98$ mho/m; $\epsilon_r = 53.8$; $\rho = 1000$ kg/m³ ; Liquid level : 150 mm

Phantom section: Flat Section ; Separation distance : 0 mm (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 - SN1753 ; ConvF(4.25, 4.25, 4.25) ; Calibrated: 2004/8/26
- 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 1 /Area Scan (5x9x1): Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (measured) = 0.176 mW/g

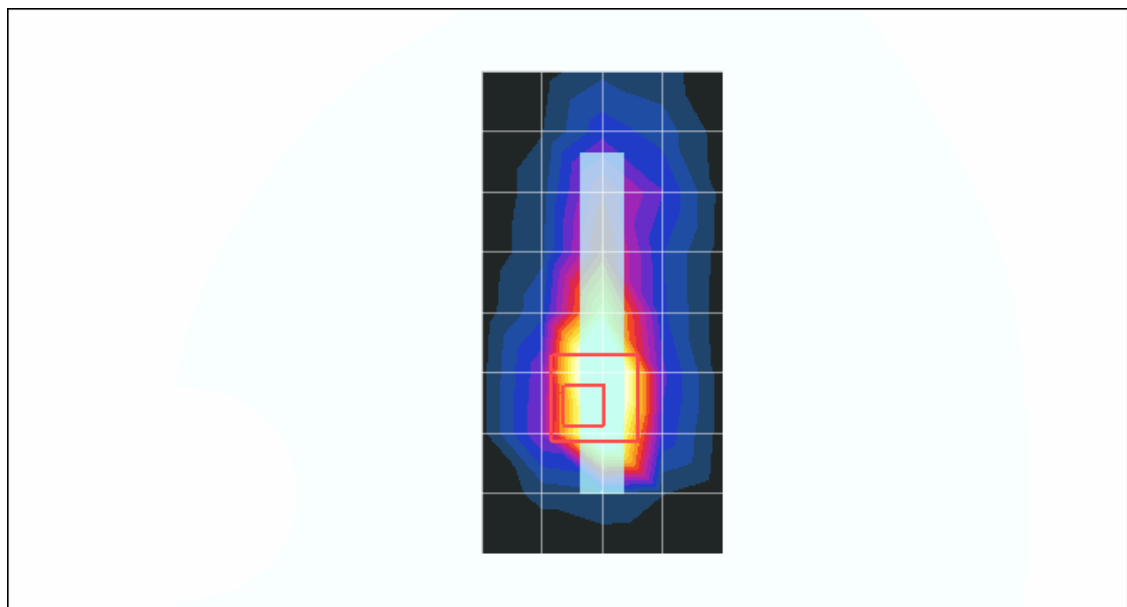
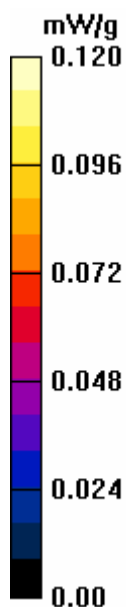
Low Channel 1 /Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 2.86 V/m

Peak SAR (extrapolated) = 0.488 W/kg

SAR(1 g) = 0.089 mW/g; SAR(10 g) = 0.040 mW/g

Maximum value of SAR (measured) = 0.120 mW/g



Date/Time: 2005/5/5 09:10:03

Test Laboratory: Advance Data Technology

System Validation Check-MSL 2450MHz 2005-05-05

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: $f = 2450$ MHz; $\sigma = 2.03$ mho/m; $\epsilon_r = 53.7$; $\rho = 1000$ kg/m³ ; 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 - SN1753 ; ConvF(4.25, 4.25, 4.25) ; Calibrated: 2004/8/26
- 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 (5x7x1): Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (measured) = 13.7 mW/g

d=10mm, Pin=250mW/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 86.5 V/m; Power Drift = -0.137 dB
Peak SAR (extrapolated) = 27.1 W/kg

SAR(1 g) = 12.7 mW/g; SAR(10 g) = 5.85 mW/g
Maximum value of SAR (measured) = 13.6 mW/g

