

APPENDIX A: TEST CONFIGURATIONS AND TEST DATA

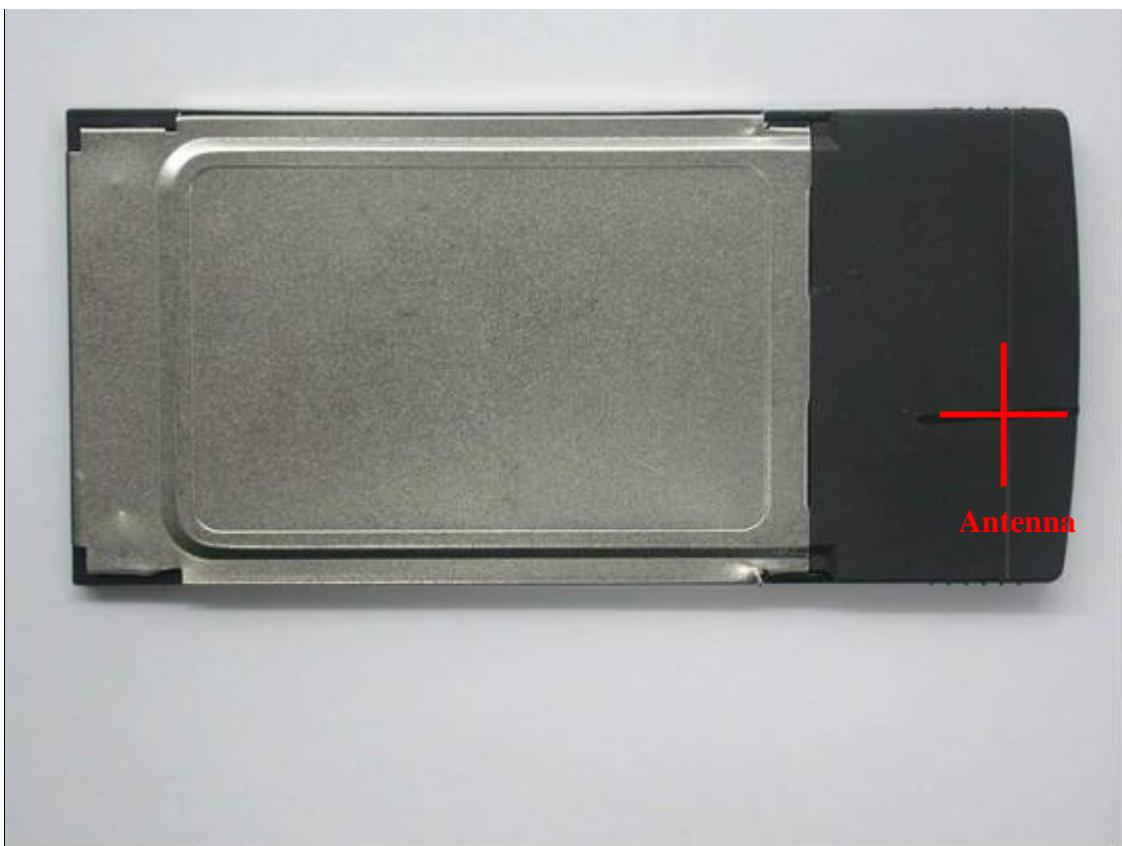
A1: TEST CONFIGURATION

Notebook: Dell D600



The Bottom of the EUT to the flat phantom distance 15 mm

EUT Photo



Liquid Level Photo

MSL 2450MHz D=150mm



Date/Time: 2005/7/21 11:58:25

Test Laboratory: Advance Data Technology

WCB-360A 11b Mode 1

DUT: WCB-360A ; Type: 11g MiMo WLAN Cardbus Adapter ; Test Frequency: 2412 MHz

Communication System: 802.11b ; Frequency: 2412 MHz ; Duty Cycle: 1:1 ; Modulation type: CCK
 Medium: MSL2450 Medium parameters used: $f = 2412 \text{ MHz}$; $\sigma = 1.93 \text{ mho/m}$; $\epsilon_r = 51.3$; $\rho = 1000 \text{ kg/m}^3$; Liquid level : 150mm

Phantom section: Flat Section ; Separation distance : 15 mm (The bottom side of the EUT to the Phantom)
 Antenna type : Internal Antenna ; Air temp. : 23.0 degrees ; Liquid temp. : 21.8 degrees

DASY4 Configuration:

- Probe: ET3DV6 - SN1790 ; ConvF(4.35, 4.35, 4.35) ; 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 1/Area Scan (6x11x1): Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (measured) = 0.360 mW/g

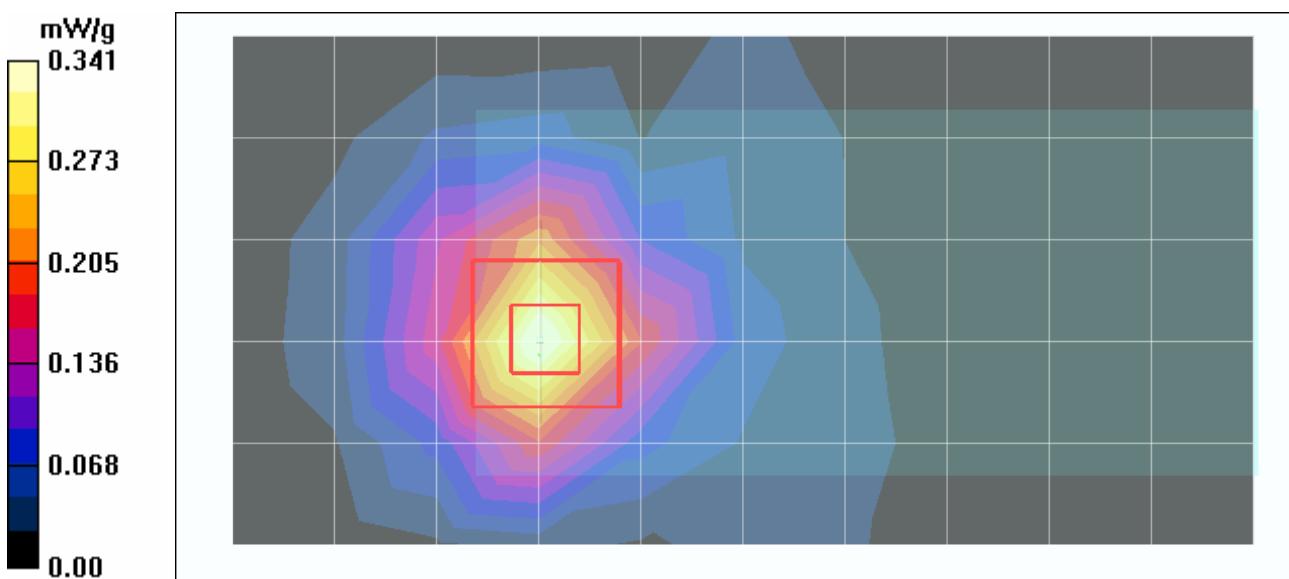
Low Channel 1/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 14.3 V/m

Peak SAR (extrapolated) = 0.652 W/kg

SAR(1 g) = 0.316 mW/g; SAR(10 g) = 0.163 mW/g

Maximum value of SAR (measured) = 0.341 mW/g



Date/Time: 2005/7/21 12:29:55

Test Laboratory: Advance Data Technology

WCB-360A 11b Mode 1

DUT: WCB-360A ; Type: 11g MiMo WLAN Cardbus Adapter ; Test Frequency: 2437 MHz

Communication System: 802.11b ; Frequency: 2437 MHz ; Duty Cycle: 1:1 ; Modulation type: CCK
 Medium: MSL2450 Medium parameters used: $f = 2437 \text{ MHz}$; $\sigma = 1.96 \text{ mho/m}$; $\epsilon_r = 51.2$; $\rho = 1000 \text{ kg/m}^3$; Liquid level : 150mm

Phantom section: Flat Section ; Separation distance : 15 mm (The bottom side of the EUT to the Phantom)
 Antenna type : Internal Antenna ; Air temp. : 23.0 degrees ; Liquid temp. : 21.8 degrees

DASY4 Configuration:

- Probe: ET3DV6 - SN1790 ; ConvF(4.35, 4.35, 4.35) ; 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

Mid Channel 6/Area Scan (6x11x1): Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (measured) = 0.400 mW/g

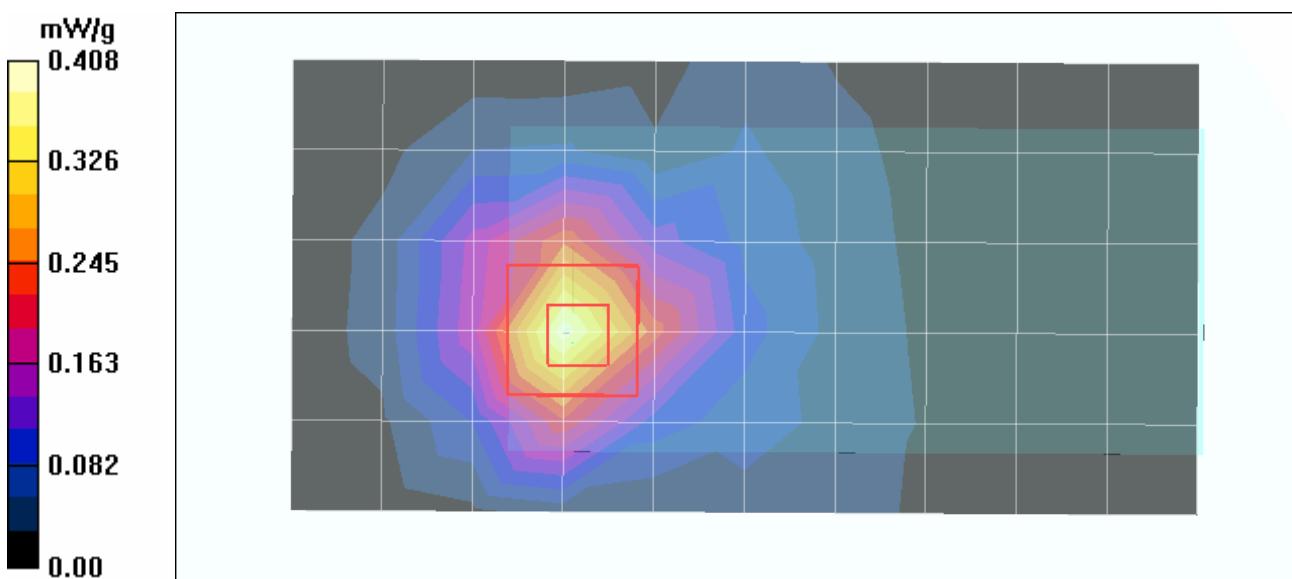
Mid Channel 6/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

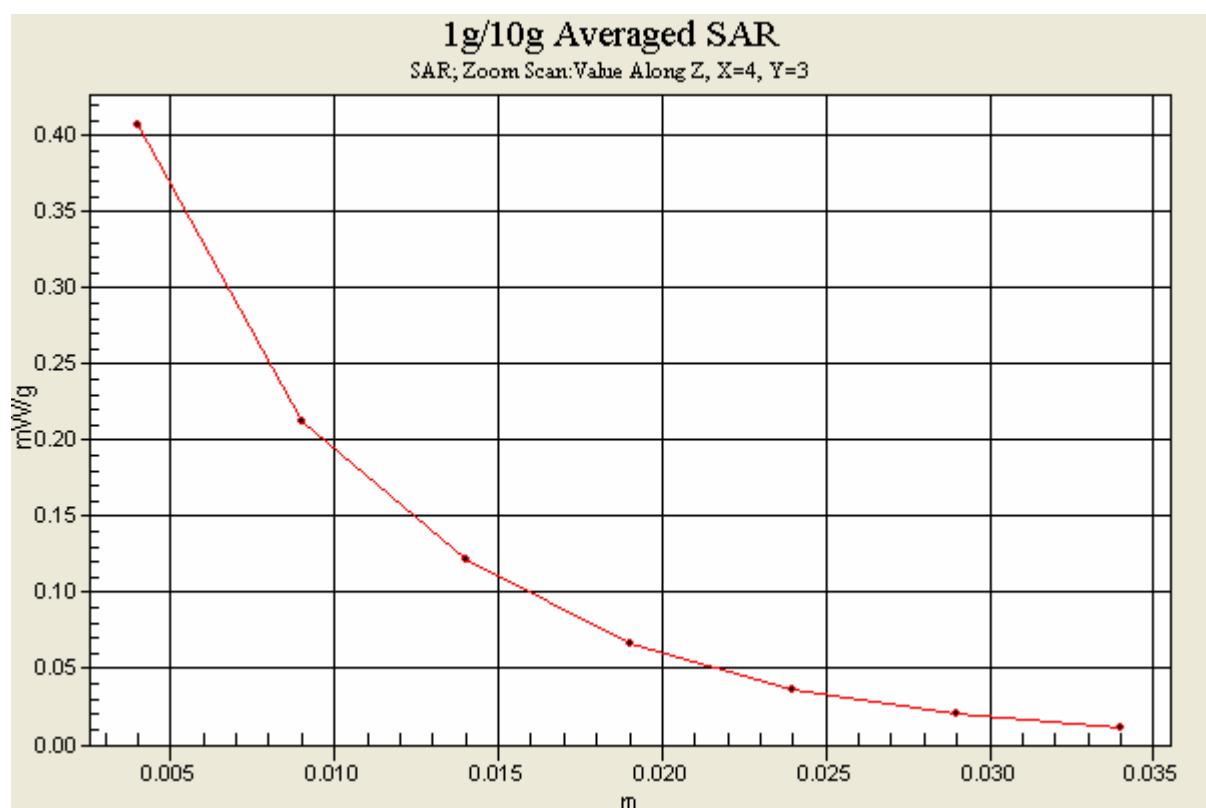
Reference Value = 15.2 V/m

Peak SAR (extrapolated) = 0.782 W/kg

SAR(1 g) = 0.375 mW/g; SAR(10 g) = 0.190 mW/g

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





Date/Time: 2005/7/21 13:11:26

Test Laboratory: Advance Data Technology

WCB-360A 11b Mode 1

DUT: WCB-360A ; Type: 11g MiMo WLAN Cardbus Adapter ; Test Frequency: 2462 MHz

Communication System: 802.11b ; Frequency: 2462 MHz ; Duty Cycle: 1:1 ; Modulation type: CCK
 Medium: MSL2450 Medium parameters used: $f = 2462 \text{ MHz}$; $\sigma = 2 \text{ mho/m}$; $\epsilon_r = 51.1$; $\rho = 1000 \text{ kg/m}^3$; Liquid level : 150mm

Phantom section: Flat Section ; Separation distance : 15 mm (The bottom side of the EUT to the Phantom)
 Antenna type : Internal Antenna ; Air temp. : 23.0 degrees ; Liquid temp. : 21.8 degrees

DASY4 Configuration:

- Probe: ET3DV6 - SN1790 ; ConvF(4.35, 4.35, 4.35) ; 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

Mid Channel 11/Area Scan (6x11x1): Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (measured) = 0.346 mW/g

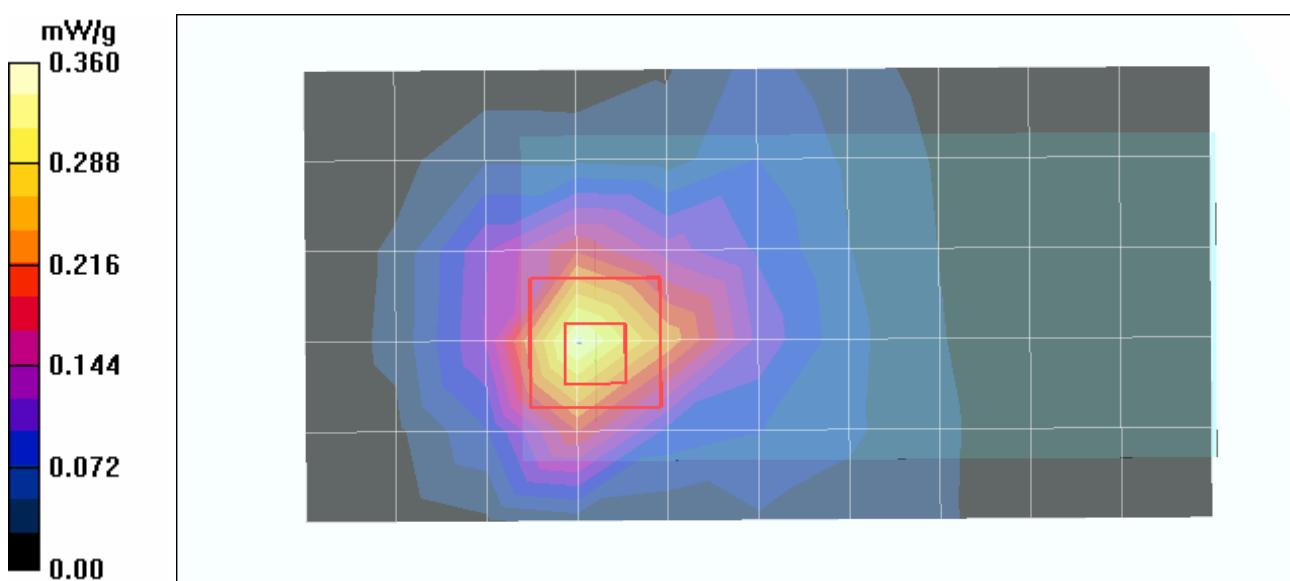
Mid Channel 11/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 13.7 V/m

Peak SAR (extrapolated) = 0.695 W/kg

SAR(1 g) = 0.329 mW/g; SAR(10 g) = 0.165 mW/g

Maximum value of SAR (measured) = 0.360 mW/g



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Test Laboratory: Advance Data Technology

WCB-360A 11g Mode 2

DUT: WCB-360A ; Type: 11g MiMo WLAN Cardbus Adapter ; Test Frequency: 2412 MHz

Communication System: 802.11g ; Frequency: 2412 MHz ; Duty Cycle: 1:1 ; Modulation type: OFDM
 Medium: MSL2450 Medium parameters used: $f = 2412 \text{ MHz}$; $\sigma = 1.93 \text{ mho/m}$; $\epsilon_r = 51.3$; $\rho = 1000 \text{ kg/m}^3$; Liquid level : 150mm

Phantom section: Flat Section ; Separation distance : 15 mm (The bottom side of the EUT to the Phantom)
 Antenna type : Internal Antenna ; Air temp. : 23.0 degrees ; Liquid temp. : 21.8 degrees

DASY4 Configuration:

- Probe: ET3DV6 - SN1790 ; ConvF(4.35, 4.35, 4.35) ; 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 1/Area Scan (6x11x1): Measurement grid: dx=15mm, dy=15mm

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

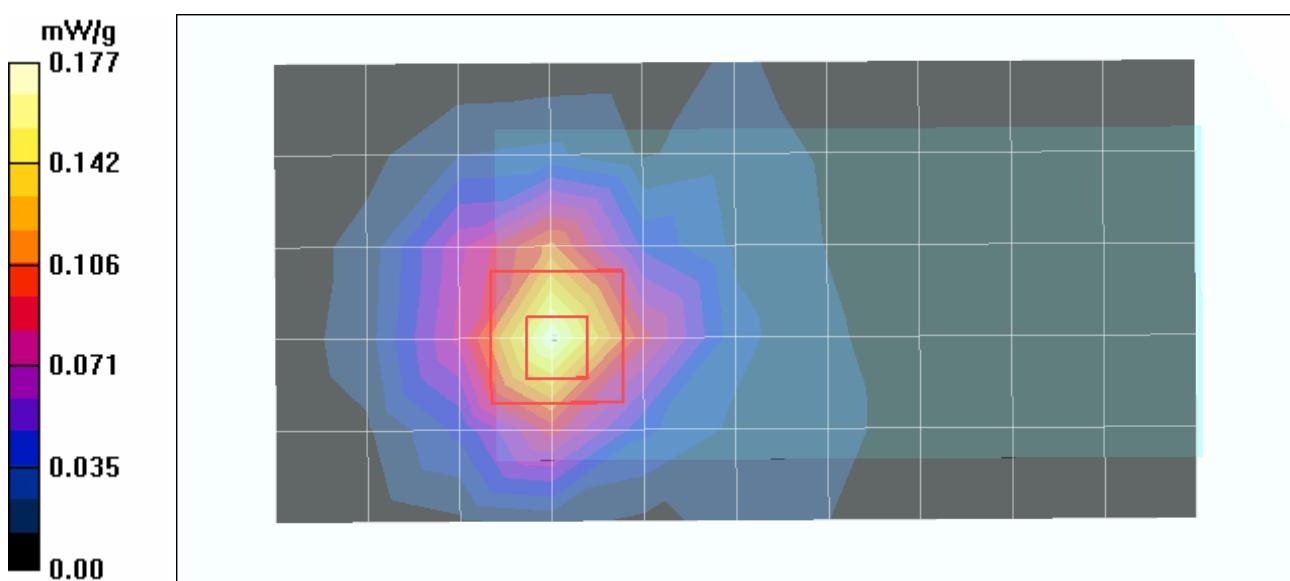
Low Channel 1/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 9.96 V/m

Peak SAR (extrapolated) = 0.360 W/kg

SAR(1 g) = 0.166 mW/g; SAR(10 g) = 0.084 mW/g

Maximum value of SAR (measured) = 0.177 mW/g



Date/Time: 2005/7/21 13:52:17

Test Laboratory: Advance Data Technology

WCB-360A 11g Mode 2

DUT: WCB-360A ; Type: 11g MiMo WLAN Cardbus Adapter ; Test Frequency: 2437 MHz

Communication System: 802.11g ; Frequency: 2437 MHz ; Duty Cycle: 1:1 ; Modulation type: OFDM
 Medium: MSL2450 Medium parameters used: $f = 2437 \text{ MHz}$; $\sigma = 1.96 \text{ mho/m}$; $\epsilon_r = 51.2$; $\rho = 1000 \text{ kg/m}^3$; Liquid level : 150mm

Phantom section: Flat Section ; Separation distance : 15 mm (The bottom side of the EUT to the Phantom)
 Antenna type : Internal Antenna ; Air temp. : 23.0 degrees ; Liquid temp. : 21.8 degrees

DASY4 Configuration:

- Probe: ET3DV6 - SN1790 ; ConvF(4.35, 4.35, 4.35) ; 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

Mid Channel 6/Area Scan (6x11x1): Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (measured) = 0.145 mW/g

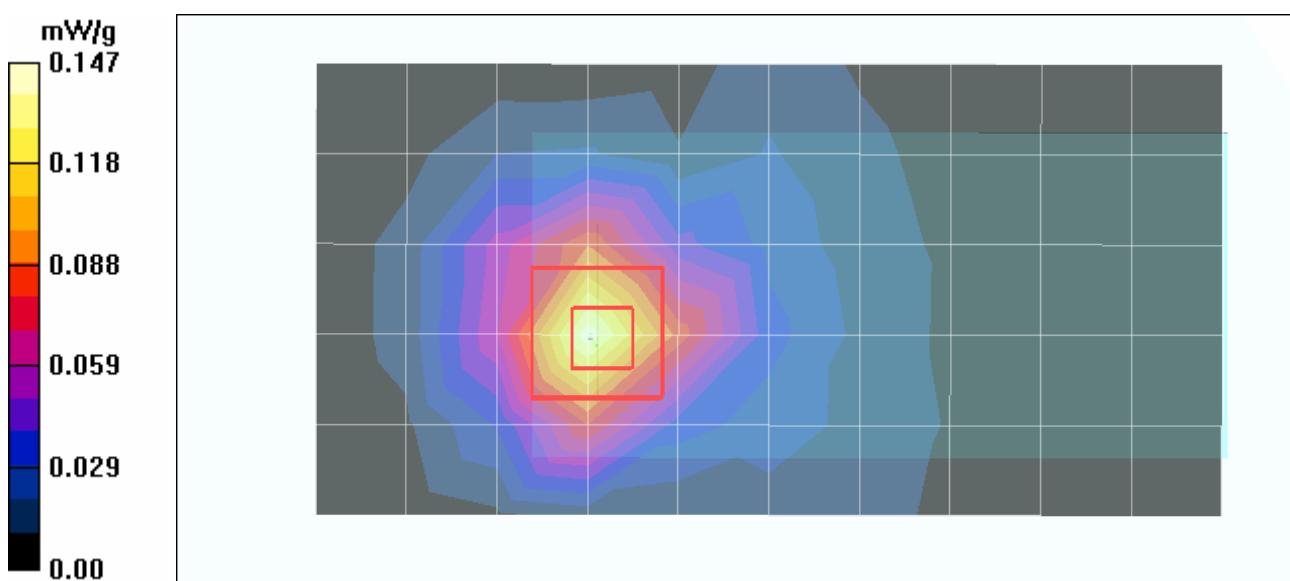
Mid Channel 6/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 9.08 V/m

Peak SAR (extrapolated) = 0.284 W/kg

SAR(1 g) = 0.135 mW/g; SAR(10 g) = 0.068 mW/g

Maximum value of SAR (measured) = 0.147 mW/g



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Test Laboratory: Advance Data Technology

WCB-360A 11g Mode 2

DUT: WCB-360A ; Type: 11g MiMo WLAN Cardbus Adapter ; Test Frequency: 2462 MHz

Communication System: 802.11g ; Frequency: 2462 MHz ; Duty Cycle: 1:1 ; Modulation type: OFDM
 Medium: MSL2450 Medium parameters used: $f = 2462 \text{ MHz}$; $\sigma = 2 \text{ mho/m}$; $\epsilon_r = 51.1$; $\rho = 1000 \text{ kg/m}^3$; Liquid level : 150mm

Phantom section: Flat Section ; Separation distance : 15 mm (The bottom side of the EUT to the Phantom)
 Antenna type : Internal Antenna ; Air temp. : 23.0 degrees ; Liquid temp. : 21.8 degrees

DASY4 Configuration:

- Probe: ET3DV6 - SN1790 ; ConvF(4.35, 4.35, 4.35) ; 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 11/Area Scan (6x11x1): Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (measured) = 0.140 mW/g

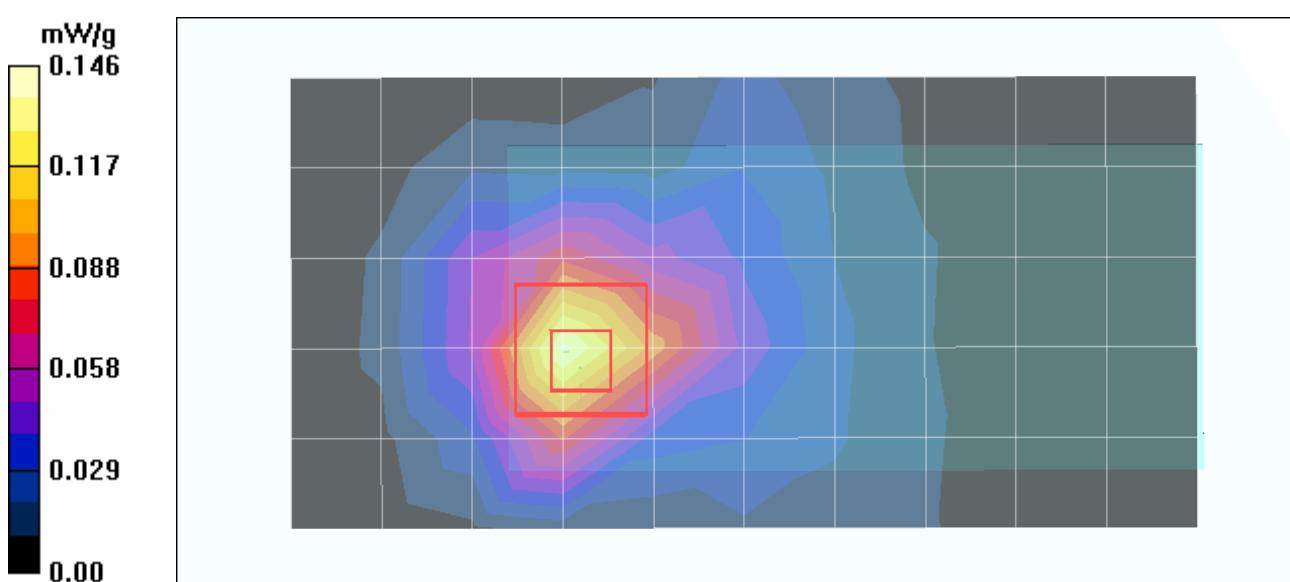
High Channel 11/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 8.83 V/m

Peak SAR (extrapolated) = 0.284 W/kg

SAR(1 g) = 0.133 mW/g; SAR(10 g) = 0.067 mW/g

Maximum value of SAR (measured) = 0.146 mW/g



Date/Time: 2005/7/21 14:28:38

Test Laboratory: Advance Data Technology

WCB-360A 11g-Turbo Mode 2

DUT: WCB-360A ; Type: 11g MiMo WLAN Cardbus Adapter ; Test Frequency: 2437 MHz

Communication System: 802.11g ; Frequency: 2437 MHz ; Duty Cycle: 1:1 ; Modulation type: OFDM
 Medium: MSL2450 Medium parameters used: $f = 2437 \text{ MHz}$; $\sigma = 1.96 \text{ mho/m}$; $\epsilon_r = 51.2$; $\rho = 1000 \text{ kg/m}^3$; Liquid level : 150mm

Phantom section: Flat Section ; Separation distance : 15 mm (The bottom side of the EUT to the Phantom)
 Antenna type : Internal Antenna ; Air temp. : 23.0 degrees ; Liquid temp. : 21.8 degrees

DASY4 Configuration:

- Probe: ET3DV6 - SN1790 ; ConvF(4.35, 4.35, 4.35) ; 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

Mid Channel 6 Turbo/Area Scan (6x11x1): Measurement grid: dx=15mm, dy=15mm
 Maximum value of SAR (measured) = 0.062 mW/g

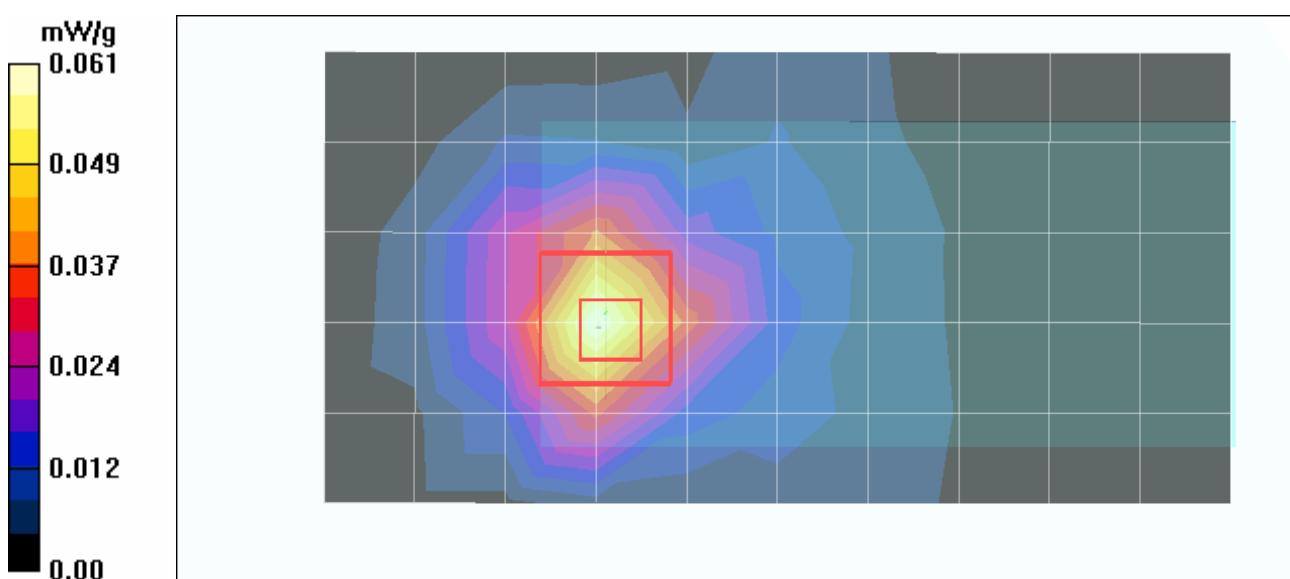
Mid Channel 6 Turbo/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm,
 dz=5mm

Reference Value = 5.99 V/m

Peak SAR (extrapolated) = 0.112 W/kg

SAR(1 g) = 0.056 mW/g; SAR(10 g) = 0.028 mW/g

Maximum value of SAR (measured) = 0.061 mW/g



Date/Time: 2005/7/21 09:49:53

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: $f = 2450 \text{ MHz}$; $\sigma = 1.98 \text{ mho/m}$; $\epsilon_r = 51.1$; $\rho = 1000 \text{ kg/m}^3$; Liquid level : 150 mm

Phantom section: Flat Section ; Separation distance : 10 mm (The feetpoint of the dipole to the Phantom) Air temp. : 23.0 degrees ; Liquid temp. : 21.8 degrees

DASY4 Configuration:

- Probe: ET3DV6 - SN1790 ; ConvF(4.35, 4.35, 4.35) ; 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 (5x7x1): Measurement grid: dx=15mm, dy=15mm
 Maximum value of SAR (measured) = 14.2 mW/g

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

Reference Value = 88.6 V/m; Power Drift = -0.189 dB

Peak SAR (extrapolated) = 27.3 W/kg

SAR(1 g) = 12.6 mW/g; SAR(10 g) = 5.86 mW/g

