

APPENDIX A: TEST CONFIGURATIONS AND TEST DATA

A1: TEST CONFIGURATION



The bottom of the EUT to the flat phantom distance 0 mm

EUT Photo





Liquid Level Photo

MSL 2450MHz D=150mm



Date/Time: 2005/8/19 10:59:24

Test Laboratory: Advance Data Technology

223E10-bottom-11b-Mode 1

DUT: Notebook PC(with wireless card: Intel WM3B2200BG) ; Type: 223E10(with wireless card: Intel WM3B2200BG) ; 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; $\sigma = 1.96$ mho/m; $\epsilon_r = 51.2$; $\rho = 1000$ 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. : 23.0 degrees ; Liquid temp. : 22.2 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 (6x6x1): Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (measured) = 0.044 mW/g

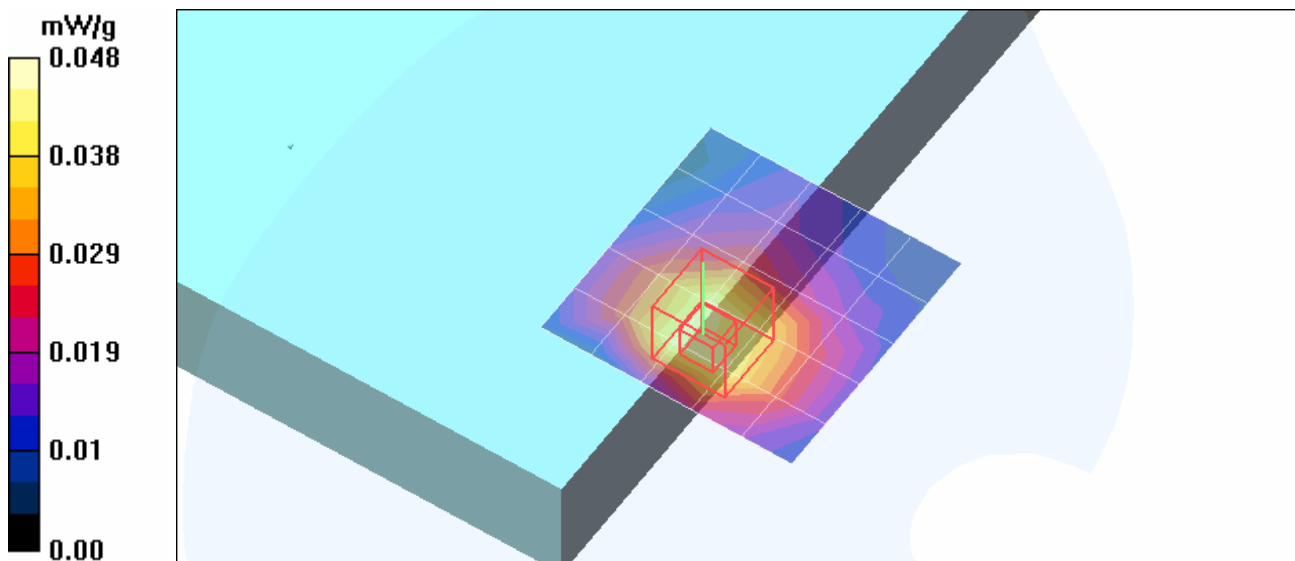
Low Channel 1/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

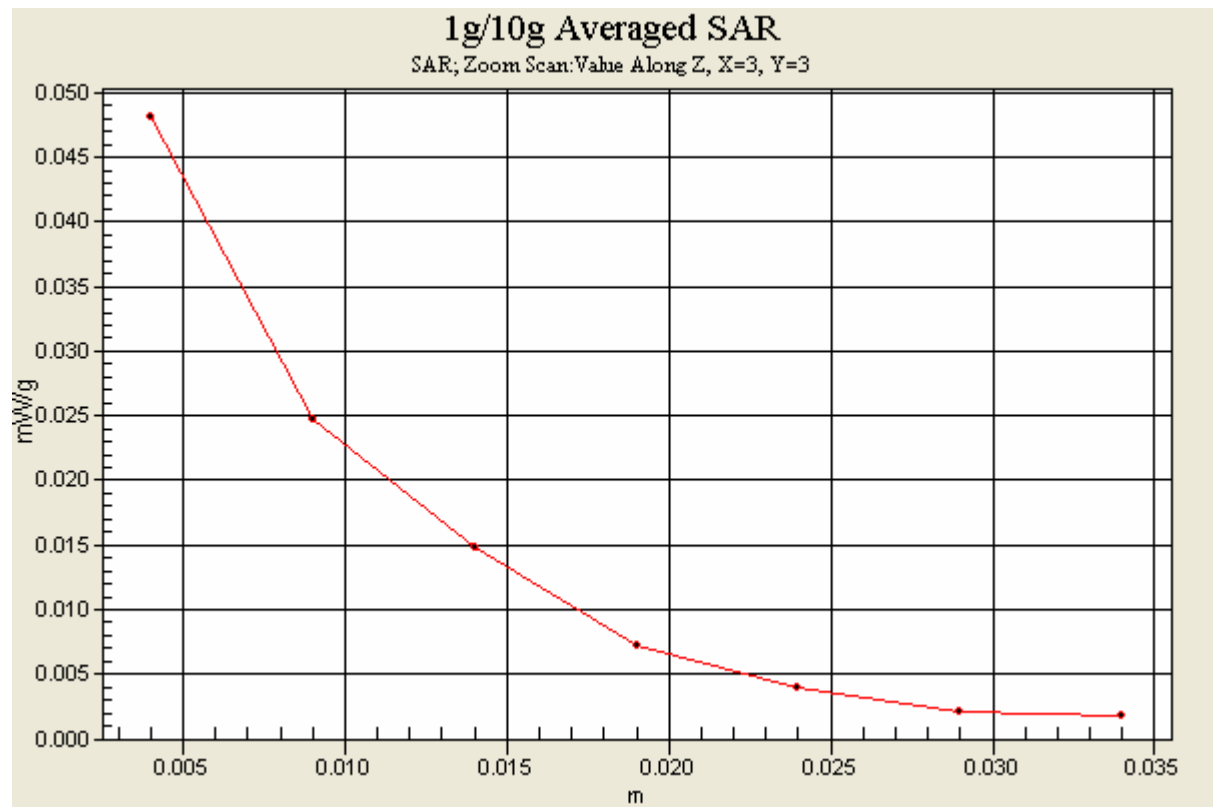
Reference Value = 4.98 V/m

Peak SAR (extrapolated) = 0.092 W/kg

SAR(1 g) = 0.045 mW/g; SAR(10 g) = 0.025 mW/g

Maximum value of SAR (measured) = 0.048 mW/g





Date/Time: 2005/8/19 11:17:47

Test Laboratory: Advance Data Technology

223E10-bottom-11b-Mode 1

DUT: Notebook PC(with wireless card: Intel WM3B2200BG) ; Type: 223E10(with wireless card: Intel WM3B2200BG) ; 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; $\sigma = 1.99$ mho/m; $\epsilon_r = 51.1$; $\rho = 1000$ 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. : 23.0 degrees ; Liquid temp. : 22.2 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

Middle Channel 6/Area Scan (6x6x1): Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (measured) = 0.037 mW/g

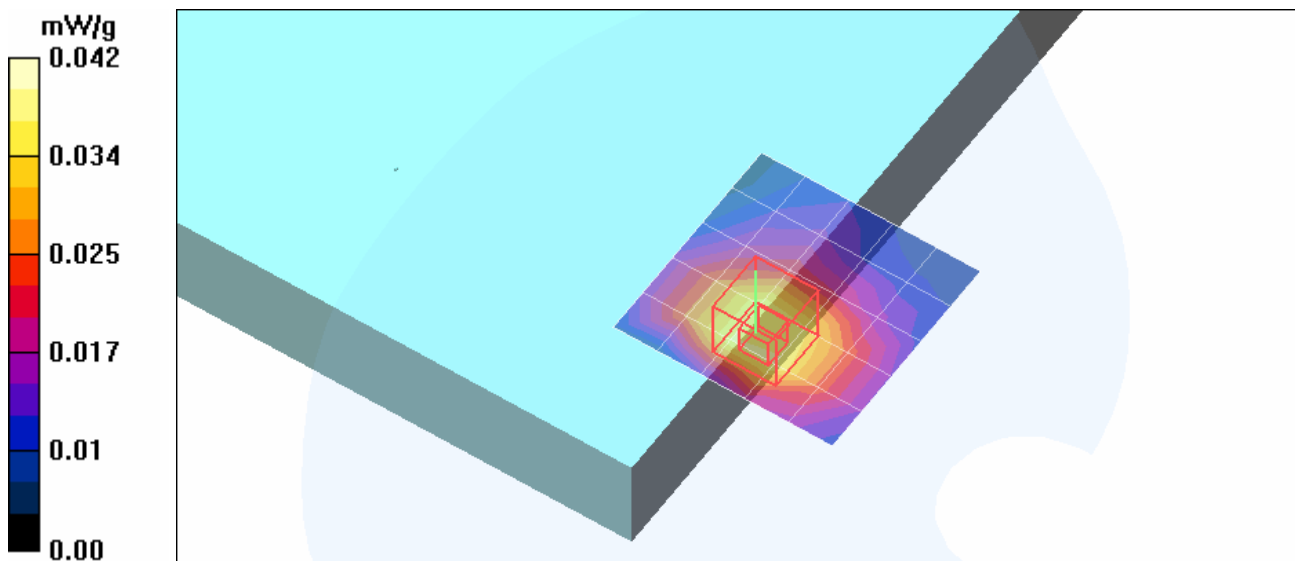
Middle Channel 6/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 4.54 V/m

Peak SAR (extrapolated) = 0.077 W/kg

SAR(1 g) = 0.040 mW/g; SAR(10 g) = 0.022 mW/g

Maximum value of SAR (measured) = 0.042 mW/g



Date/Time: 2005/8/19 11:34:30

Test Laboratory: Advance Data Technology

223E10-bottom-11b-Mode 1

DUT: Notebook PC(with wireless card: Intel WM3B2200BG) ; Type: 223E10(with wireless card: Intel WM3B2200BG) ; Test Frequency: 2462 MHz

Communication System: 802.11b ; Frequency: 2462 MHz ; Duty Cycle: 1:1 ; Modulation type: CCK
Medium: MSL2450 Medium parameters used: $f = 2462 \text{ MHz}$; $\sigma = 2.03 \text{ mho/m}$; $\epsilon_r = 51$; $\rho = 1000 \text{ kg/m}^3$; 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. : 23.0 degrees ; Liquid temp. : 22.2 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 (6x6x1): Measurement grid: $dx=15\text{mm}$, $dy=15\text{mm}$

Maximum value of SAR (measured) = 0.032 mW/g

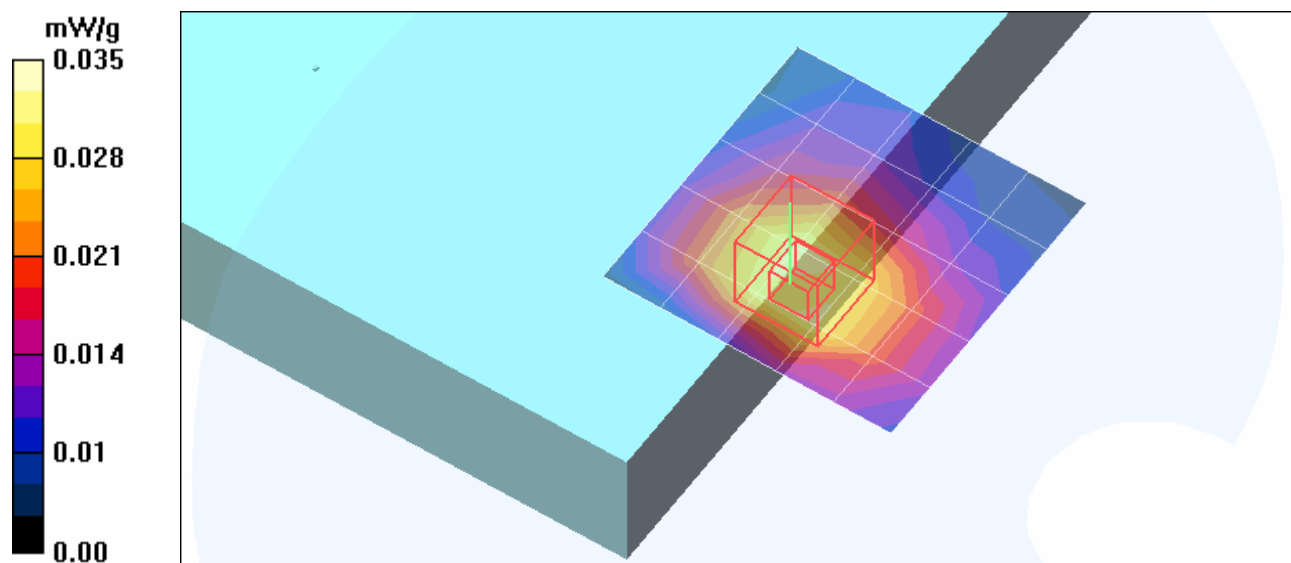
High Channel 11/Zoom Scan (7x7x7)/Cube 0: Measurement grid: $dx=5\text{mm}$, $dy=5\text{mm}$, $dz=5\text{mm}$

Reference Value = 4.09 V/m

Peak SAR (extrapolated) = 0.065 W/kg

SAR(1 g) = 0.033 mW/g; SAR(10 g) = 0.018 mW/g

Maximum value of SAR (measured) = 0.035 mW/g



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Test Laboratory: Advance Data Technology

223E10-bottom-11g-Mode 2

DUT: Notebook PC(with wireless card: Intel WM3B2200BG) ; Type: 223E10(with wireless card: Intel WM3B2200BG) ; 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; $\sigma = 1.96$ mho/m; $\epsilon_r = 51.2$; $\rho = 1000$ 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. : 23.0 degrees ; Liquid temp. : 22.2 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 (6x6x1): Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (measured) = 0.037 mW/g

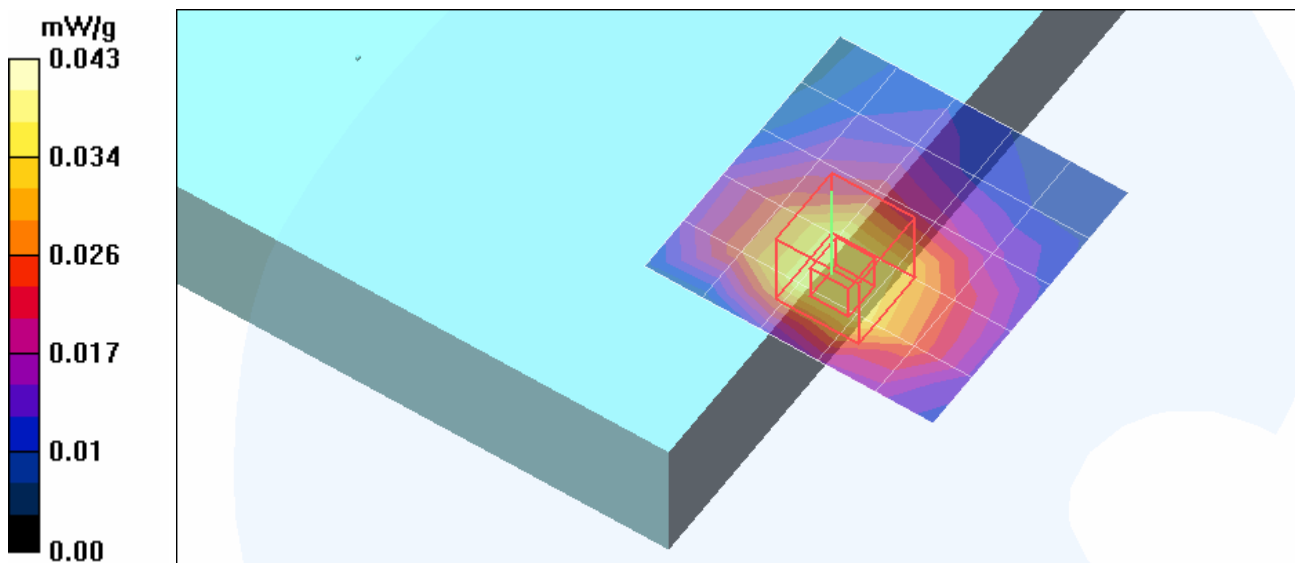
Low Channel 1/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 4.65 V/m

Peak SAR (extrapolated) = 0.082 W/kg

SAR(1 g) = 0.040 mW/g; SAR(10 g) = 0.022 mW/g

Maximum value of SAR (measured) = 0.043 mW/g



Date/Time: 2005/8/19 12:27:59

Test Laboratory: Advance Data Technology

223E10-bottom-11g-Mode 2

DUT: Notebook PC(with wireless card: Intel WM3B2200BG) ; Type: 223E10(with wireless card: Intel WM3B2200BG) ; Test Frequency: 2437 MHz

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

Medium: MSL2450 Medium parameters used: $f = 2437$ MHz; $\sigma = 1.99$ mho/m; $\epsilon_r = 51.1$; $\rho = 1000$ 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. : 23.0 degrees ; Liquid temp. : 22.2 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

Middle Channel 6/Area Scan (6x6x1): Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (measured) = 0.041 mW/g

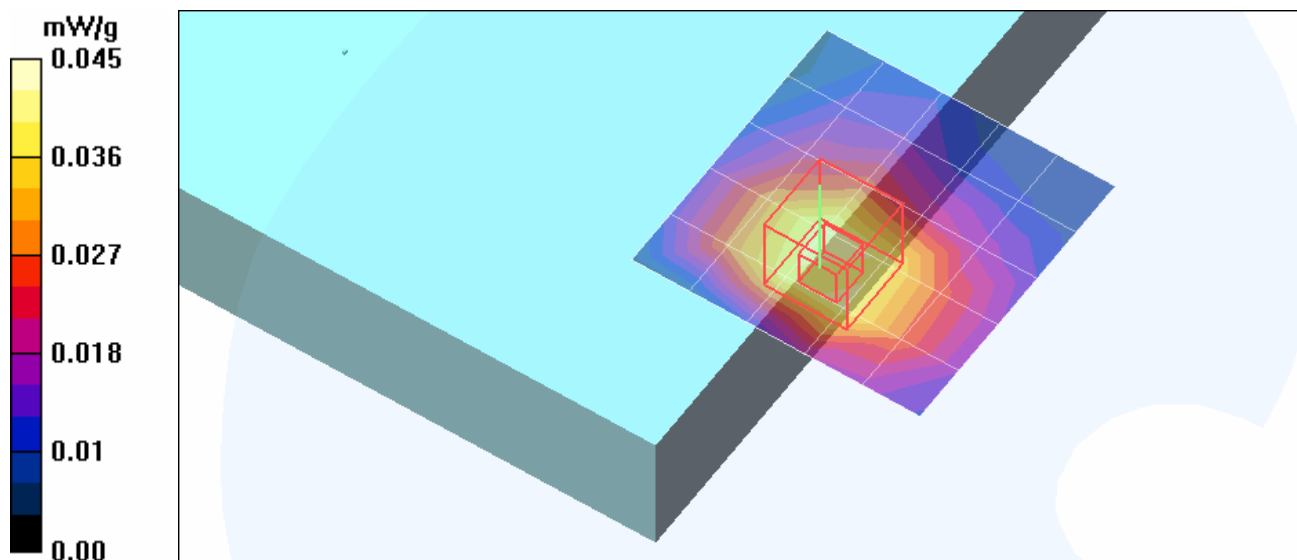
Middle Channel 6/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 4.65 V/m

Peak SAR (extrapolated) = 0.084 W/kg

SAR(1 g) = 0.042 mW/g; SAR(10 g) = 0.024 mW/g

Maximum value of SAR (measured) = 0.045 mW/g



Date/Time: 2005/8/19 12:43:30

Test Laboratory: Advance Data Technology

223E10-bottom-11g-Mode 2

DUT: Notebook PC(with wireless card: Intel WM3B2200BG) ; Type: 223E10(with wireless card: Intel WM3B2200BG) ; Test Frequency: 2462 MHz

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

Medium: MSL2450 Medium parameters used: $f = 2462$ MHz; $\sigma = 2.03$ mho/m; $\epsilon_r = 51$; $\rho = 1000$ 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. : 23.0 degrees ; Liquid temp. : 22.2 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 (6x6x1): Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (measured) = 0.035 mW/g

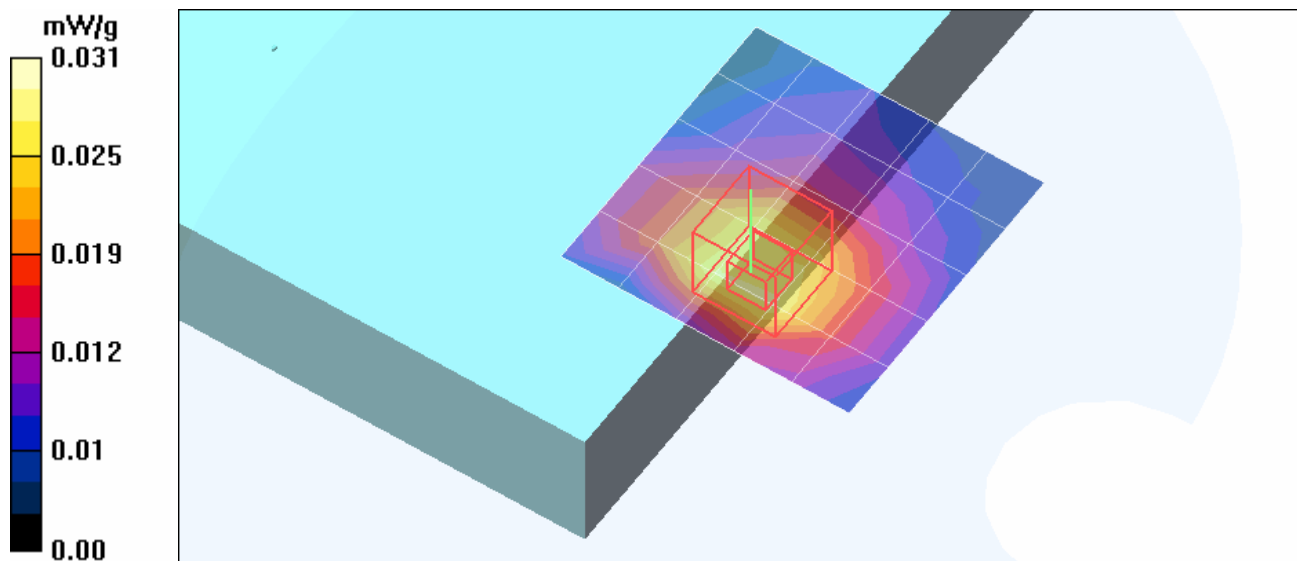
High Channel 11/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 4.42 V/m

Peak SAR (extrapolated) = 0.072 W/kg

SAR(1 g) = 0.026 mW/g; SAR(10 g) = 0.014 mW/g

Maximum value of SAR (measured) = 0.031 mW/g



Date/Time: 2005/8/19 09:41:02

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: $f = 2450$ MHz; $\sigma = 2.01$ mho/m; $\epsilon_r = 51$; $\rho = 1000$ kg/m³ ;
Liquid level : 150 mm

Phantom section: Flat Section ; Separation distance : 10 mm (The feetpoint of the dipole to the Phantom) Air temp. : 23.0 degrees ; Liquid temp. : 22.2 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) = 13.9 mW/g

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

Reference Value = 85.9 V/m; Power Drift = -0.205 dB

Peak SAR (extrapolated) = 27.5 W/kg

SAR(1 g) = 12.7 mW/g; SAR(10 g) = 5.85 mW/g

Maximum value of SAR (measured) = 14.6 mW/g

