

## APPENDIX A: TEST DATA

### Liquid Level Photo

MSL 2450MHz D=150mm



Date/Time: 2006/6/16 17:38:59

Test Laboratory: Advance Data Technology

## C600-11b-CH1-Mode 1

**DUT: Dynex Wireless 11G NB Card ; Type: DX-WGNBC ; Test Frequency: 2412 MHz**

Communication System: 802.11b ; Frequency: 2412 MHz ; Duty Cycle: 1:1 ; Modulation type: CCK  
 Medium: MSL2450 Medium parameters used:  $f = 2412 \text{ MHz}$ ;  $\sigma = 1.93 \text{ mho/m}$ ;  $\epsilon_r = 51.7$ ;  $\rho = 1000 \text{ kg/m}^3$  ; Liquid level : 150 mm

Phantom section: Flat Section ; Separation distance : 12 mm (The bottom side of the EUT to the Phantom)  
 Antenna type : Printed Antenna ; Air temp. : 23.2 degrees ; Liquid temp. : 22.1 degrees

DASY4 Configuration:

- Probe: ET3DV6 - SN1687 ; ConvF(4.13, 4.13, 4.13) ; Calibrated: 2005/9/15
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn510 ; Calibrated: 2005/8/17
- Phantom: SAM 12 ; Type: SAM V4.0 ; Serial: TP 1202
- Measurement SW: DASY4, V4.6 Build 23 ; Postprocessing SW: SEMCAD, V1.8 Build 161

**Low Channel 1/Area Scan (7x11x1):** Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (measured) = 0.934 mW/g

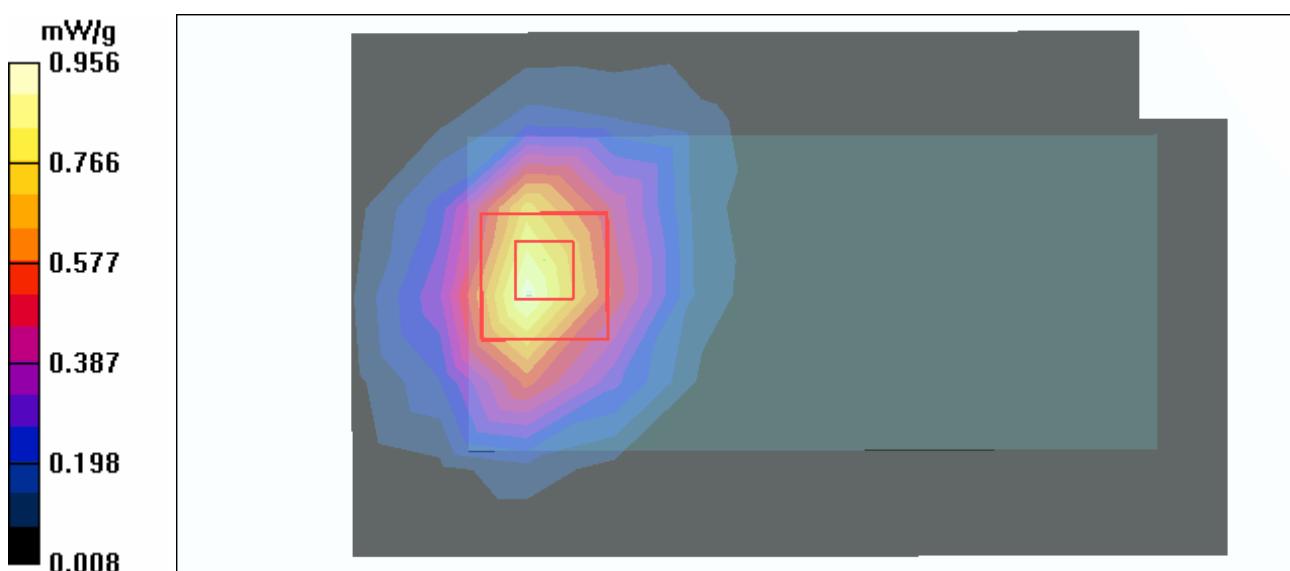
**Low Channel 1/Zoom Scan (7x7x7) (7x7x7)/Cube 0:** Measurement grid: dx=5mm, dy=5mm, dz=5mm

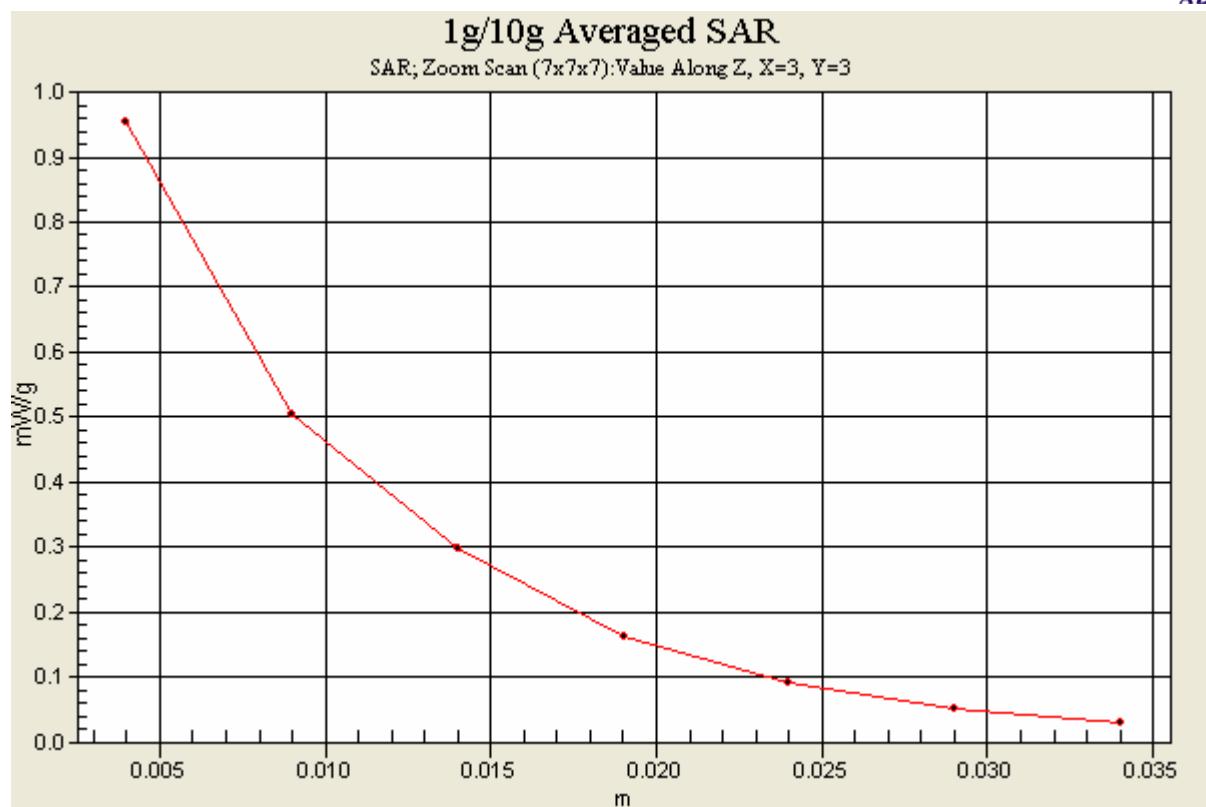
Reference Value = 23.0 V/m

Peak SAR (extrapolated) = 1.87 W/kg

**SAR(1 g) = 0.894 mW/g; SAR(10 g) = 0.464 mW/g**

Maximum value of SAR (measured) = 0.956 mW/g





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Test Laboratory: Advance Data Technology

## C600-11b-CH6-Mode 1

**DUT: Dynex Wireless 11G NB Card ; Type: DX-WGNBC ; Test Frequency: 2437 MHz**

Communication System: 802.11b ; Frequency: 2437 MHz ; Duty Cycle: 1:1 ; Modulation type: CCK  
 Medium: MSL2450 Medium parameters used:  $f = 2437 \text{ MHz}$ ;  $\sigma = 1.97 \text{ mho/m}$ ;  $\epsilon_r = 51.6$ ;  $\rho = 1000 \text{ kg/m}^3$  ; Liquid level : 150 mm

Phantom section: Flat Section ; Separation distance : 12 mm (The bottom side of the EUT to the Phantom)  
 Antenna type : Printed Antenna ; Air temp. : 23.2 degrees ; Liquid temp. : 22.1 degrees

DASY4 Configuration:

- Probe: ET3DV6 - SN1687 ; ConvF(4.13, 4.13, 4.13) ; Calibrated: 2005/9/15
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn510 ; Calibrated: 2005/8/17
- Phantom: SAM 12 ; Type: SAM V4.0 ; Serial: TP 1202
- Measurement SW: DASY4, V4.6 Build 23 ; Postprocessing SW: SEMCAD, V1.8 Build 161

**Mid Channel 6/Area Scan (7x11x1):** Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (measured) = 0.786 mW/g

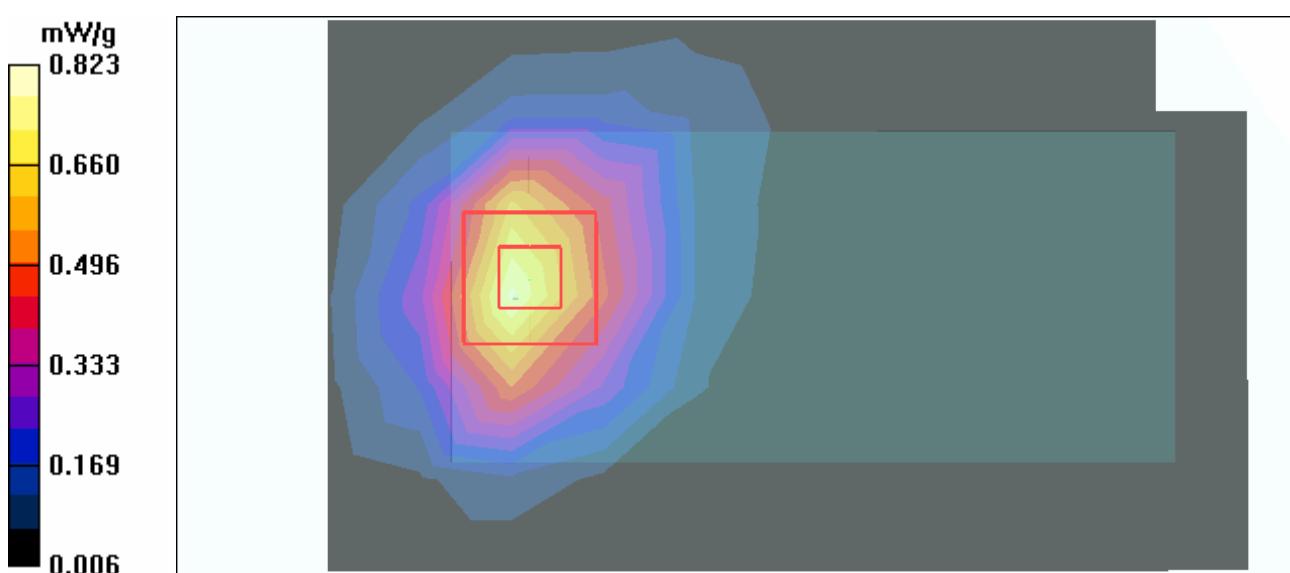
**Mid Channel 6/Zoom Scan (7x7x7) (7x7x7)/Cube 0:** Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 21.0 V/m

Peak SAR (extrapolated) = 1.60 W/kg

**SAR(1 g) = 0.766 mW/g; SAR(10 g) = 0.400 mW/g**

Maximum value of SAR (measured) = 0.823 mW/g



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Test Laboratory: Advance Data Technology

## C600-11b-CH11-Mode 1

**DUT: Dynex Wireless 11G NB Card ; Type: DX-WGNBC ; Test Frequency: 2462 MHz**

Communication System: 802.11b ; Frequency: 2462 MHz ; Duty Cycle: 1:1 ; Modulation type: CCK  
 Medium: MSL2450 Medium parameters used:  $f = 2462 \text{ MHz}$ ;  $\sigma = 2 \text{ mho/m}$ ;  $\epsilon_r = 51.6$ ;  $\rho = 1000 \text{ kg/m}^3$  ; Liquid level : 150 mm

Phantom section: Flat Section ; Separation distance : 12 mm (The bottom side of the EUT to the Phantom)  
 Antenna type : Printed Antenna ; Air temp. : 23.2 degrees ; Liquid temp. : 22.1 degrees

DASY4 Configuration:

- Probe: ET3DV6 - SN1687 ; ConvF(4.13, 4.13, 4.13) ; Calibrated: 2005/9/15
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn510 ; Calibrated: 2005/8/17
- Phantom: SAM 12 ; Type: SAM V4.0 ; Serial: TP 1202
- Measurement SW: DASY4, V4.6 Build 23 ; Postprocessing SW: SEMCAD, V1.8 Build 161

**High Channel 11/Area Scan (7x11x1):** Measurement grid: dx=15mm, dy=15mm  
 Maximum value of SAR (measured) = 0.559 mW/g

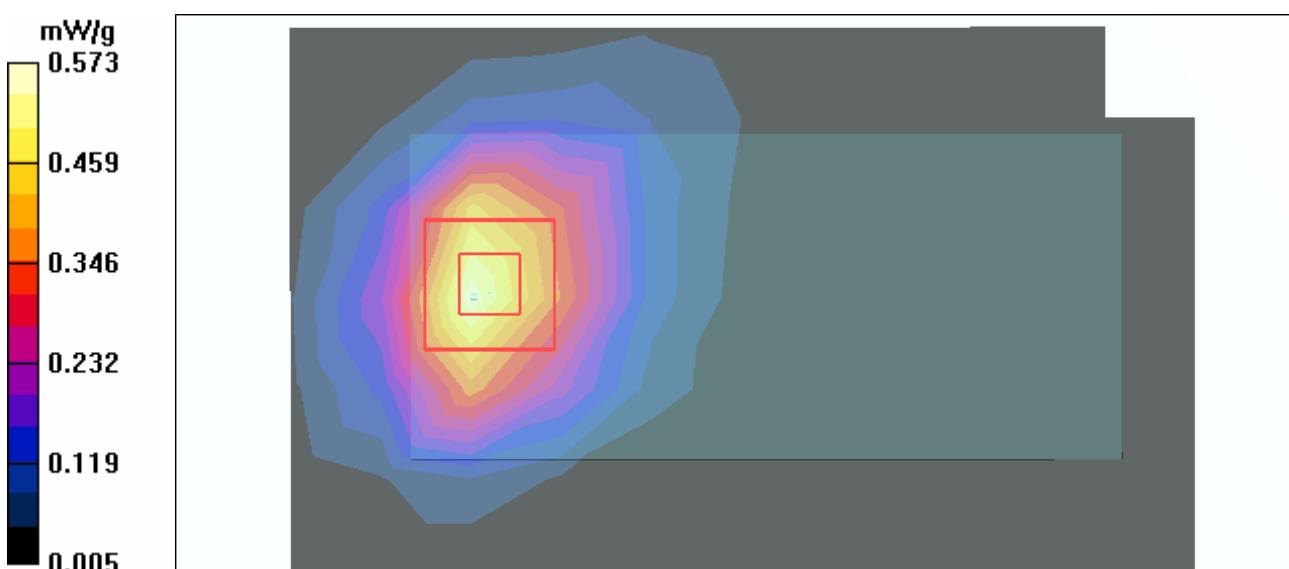
**High Channel 11/Zoom Scan (7x7x7) (7x7x7)/Cube 0:** Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 17.7 V/m

Peak SAR (extrapolated) = 1.12 W/kg

**SAR(1 g) = 0.534 mW/g; SAR(10 g) = 0.279 mW/g**

Maximum value of SAR (measured) = 0.573 mW/g



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Test Laboratory: Advance Data Technology

## C600-11g-CH1-Mode 2

**DUT: Dynex Wireless 11G NB Card ; Type: DX-WGNBC ; Test Frequency: 2412 MHz**

Communication System: 802.11g ; Frequency: 2412 MHz ; Duty Cycle: 1:1 ; Modulation type: OFDM  
 Medium: MSL2450 Medium parameters used:  $f = 2412 \text{ MHz}$ ;  $\sigma = 1.93 \text{ mho/m}$ ;  $\epsilon_r = 51.7$ ;  $\rho = 1000 \text{ kg/m}^3$  ; Liquid level : 150 mm

Phantom section: Flat Section ; Separation distance : 12 mm (The bottom side of the EUT to the Phantom)  
 Antenna type : Printed Antenna ; Air temp. : 23.2 degrees ; Liquid temp. : 22.1 degrees

DASY4 Configuration:

- Probe: ET3DV6 - SN1687 ; ConvF(4.13, 4.13, 4.13) ; Calibrated: 2005/9/15
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn510 ; Calibrated: 2005/8/17
- Phantom: SAM 12 ; Type: SAM V4.0 ; Serial: TP 1202
- Measurement SW: DASY4, V4.6 Build 23 ; Postprocessing SW: SEMCAD, V1.8 Build 161

**Low Channel 1/Area Scan (7x11x1):** Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (measured) = 0.521 mW/g

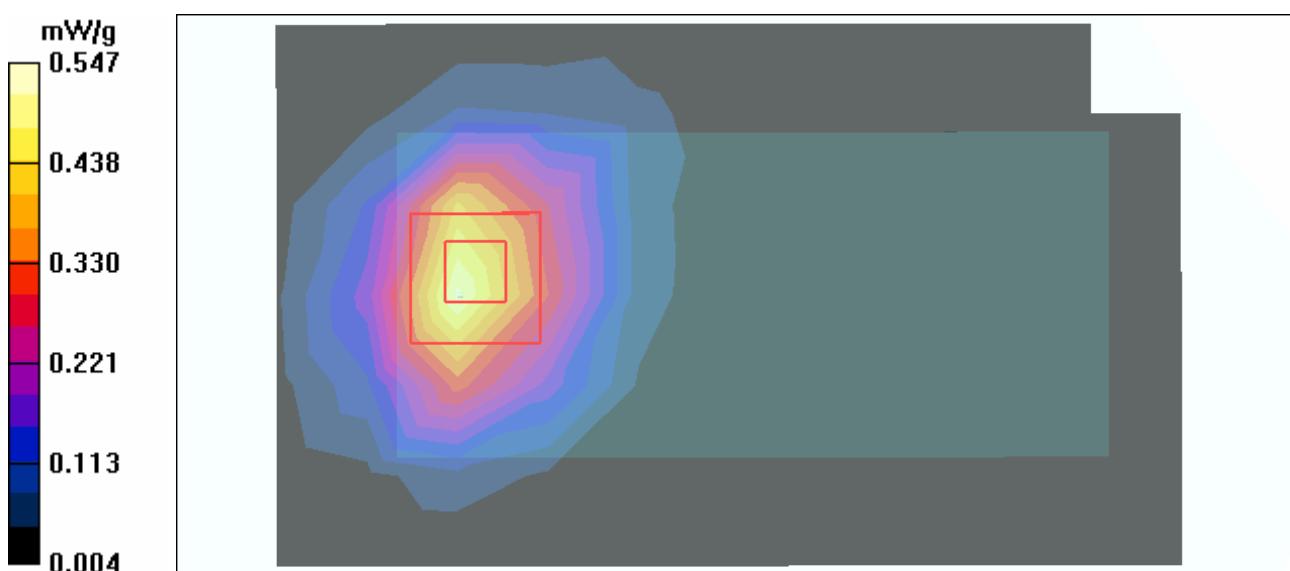
**Low Channel 1/Zoom Scan (7x7x7) (7x7x7)/Cube 0:** Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 17.4 V/m

Peak SAR (extrapolated) = 1.05 W/kg

**SAR(1 g) = 0.509 mW/g; SAR(10 g) = 0.263 mW/g**

Maximum value of SAR (measured) = 0.547 mW/g



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Test Laboratory: Advance Data Technology

## C600-11g-CH6-Mode 2

**DUT: Dynex Wireless 11G NB Card ; Type: DX-WGNBC ; Test Frequency: 2437 MHz**

Communication System: 802.11g ; Frequency: 2437 MHz ; Duty Cycle: 1:1 ; Modulation type: OFDM  
 Medium: MSL2450 Medium parameters used:  $f = 2437 \text{ MHz}$ ;  $\sigma = 1.97 \text{ mho/m}$ ;  $\epsilon_r = 51.6$ ;  $\rho = 1000 \text{ kg/m}^3$  ; Liquid level : 150 mm

Phantom section: Flat Section ; Separation distance : 12 mm (The bottom side of the EUT to the Phantom)  
 Antenna type : Printed Antenna ; Air temp. : 23.2 degrees ; Liquid temp. : 22.1 degrees

DASY4 Configuration:

- Probe: ET3DV6 - SN1687 ; ConvF(4.13, 4.13, 4.13) ; Calibrated: 2005/9/15
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn510 ; Calibrated: 2005/8/17
- Phantom: SAM 12 ; Type: SAM V4.0 ; Serial: TP 1202
- Measurement SW: DASY4, V4.6 Build 23 ; Postprocessing SW: SEMCAD, V1.8 Build 161

**Mid Channel 6/Area Scan (7x11x1):** Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (measured) = 0.644 mW/g

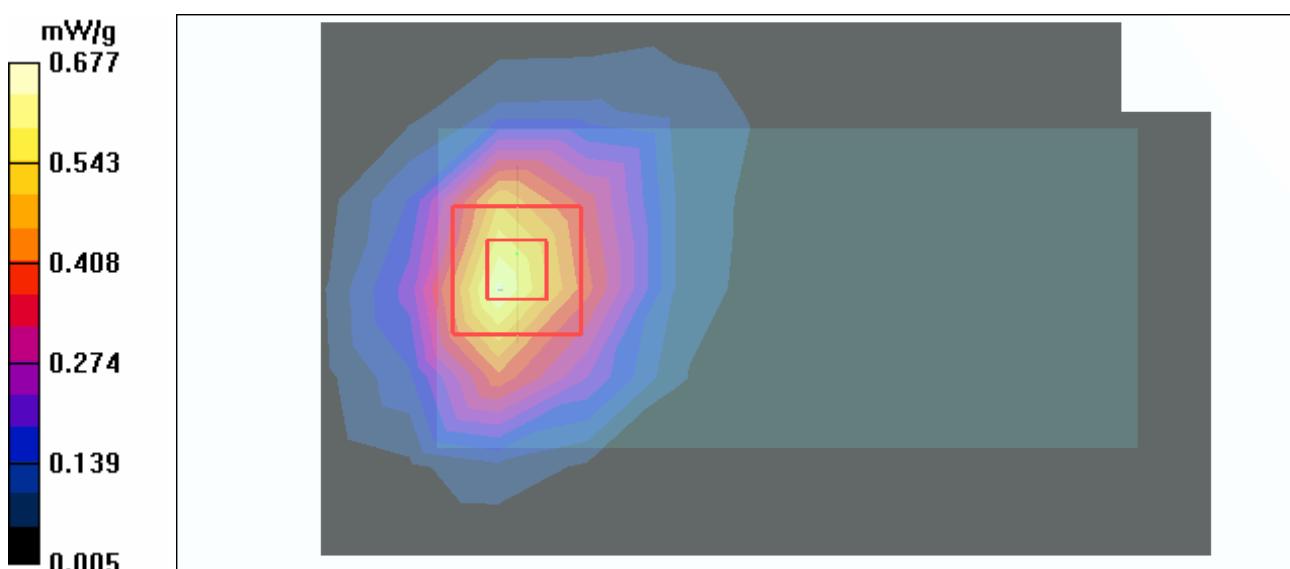
**Mid Channel 6/Zoom Scan (7x7x7) (7x7x7)/Cube 0:** Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 18.7 V/m

Peak SAR (extrapolated) = 1.31 W/kg

**SAR(1 g) = 0.627 mW/g; SAR(10 g) = 0.326 mW/g**

Maximum value of SAR (measured) = 0.677 mW/g



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Test Laboratory: Advance Data Technology

## C600-11g-CH11-Mode 2

**DUT: Dynex Wireless 11G NB Card ; Type: DX-WGNBC ; Test Frequency: 2462 MHz**

Communication System: 802.11g ; Frequency: 2462 MHz ; Duty Cycle: 1:1 ; Modulation type: OFDM  
 Medium: MSL2450 Medium parameters used:  $f = 2462 \text{ MHz}$ ;  $\sigma = 2 \text{ mho/m}$ ;  $\epsilon_r = 51.6$ ;  $\rho = 1000 \text{ kg/m}^3$  ; Liquid level : 150 mm

Phantom section: Flat Section ; Separation distance : 12 mm (The bottom side of the EUT to the Phantom)  
 Antenna type : Printed Antenna ; Air temp. : 23.2 degrees ; Liquid temp. : 22.1 degrees

DASY4 Configuration:

- Probe: ET3DV6 - SN1687 ; ConvF(4.13, 4.13, 4.13) ; Calibrated: 2005/9/15
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn510 ; Calibrated: 2005/8/17
- Phantom: SAM 12 ; Type: SAM V4.0 ; Serial: TP 1202
- Measurement SW: DASY4, V4.6 Build 23 ; Postprocessing SW: SEMCAD, V1.8 Build 161

**High Channel 11/Area Scan (7x11x1):** Measurement grid: dx=15mm, dy=15mm  
 Maximum value of SAR (measured) = 0.495 mW/g

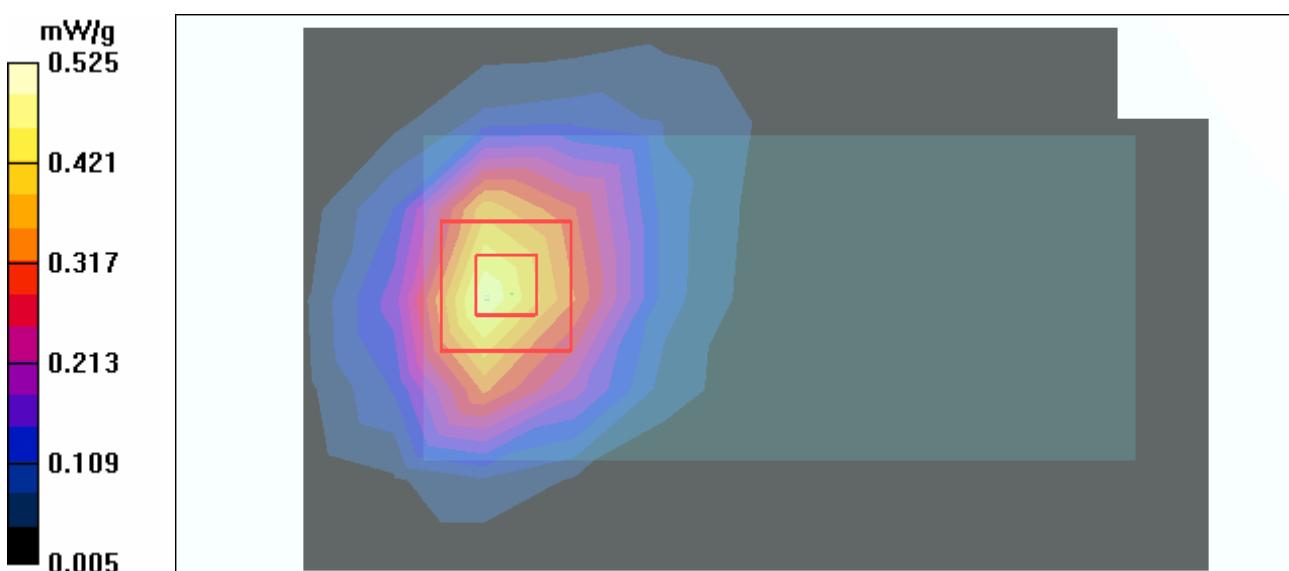
**High Channel 11/Zoom Scan (7x7x7) (7x7x7)/Cube 0:** Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 16.3 V/m

Peak SAR (extrapolated) = 1.03 W/kg

**SAR(1 g) = 0.492 mW/g; SAR(10 g) = 0.257 mW/g**

Maximum value of SAR (measured) = 0.525 mW/g



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Test Laboratory: Advance Data Technology

## System Validation Check-MSL 2450MHz

**DUT: Dipole 2450 MHz ; Type: D2450V2 ; Serial: 716 ; Test Frequency: 2450 MHz**

Communication System: CW ; Frequency: 2450 MHz; Duty Cycle: 1:1; Modulation type: CW  
 Medium: MSL2450; Medium parameters used:  $f = 2450 \text{ MHz}$ ;  $\sigma = 1.99 \text{ mho/m}$ ;  $\epsilon_r = 51.6$ ;  $\rho = 1000 \text{ kg/m}^3$  ; Liquid level : 150 mm

Phantom section: Flat Section ; Separation distance : 10 mm (The feetpoint of the dipole to the Phantom) Air temp. : 23.2 degrees ; Liquid temp. : 22.1 degrees

DASY4 Configuration:

- Probe: ET3DV6 - SN1687 ; ConvF(4.13, 4.13, 4.13) ; Calibrated: 2005/9/15
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn510; Calibrated: 2005/8/17
- Phantom: SAM 12; Type: SAM V4.0; Serial: TP 1202
- Measurement SW: DASY4, V4.6 Build 23; Postprocessing SW: SEMCAD, V1.8 Build 161

**d=10mm, Pin=250mW/Area Scan (5x7x1):** Measurement grid: dx=15mm, dy=15mm  
 Maximum value of SAR (measured) = 15.4 mW/g

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

Reference Value = 91.4 V/m; Power Drift = -0.044 dB

Peak SAR (extrapolated) = 30.4 W/kg

**SAR(1 g) = 13.5 mW/g; SAR(10 g) = 6.2 mW/g**

Maximum value of SAR (measured) = 14.9 mW/g

