

**APPENDIX A: TEST DATA**  
**Liquid Level Photo**

**MSL 2450MHz D=155mm**



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:  $f = 2412$  MHz;  $\sigma = 1.95$  mho/m;  $\epsilon_r = 51.1$ ;  $\rho = 1000$  kg/m<sup>3</sup> ; Liquid level : 155 mm

Phantom section: Flat Section ; Separation distance : 12 mm (The bottom side of the EUT to the Phantom)  
 Antenna type : Printed Antenna ; Air temp. : 22.2 degrees ; Liquid temp. : 21.3 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) = 0.944 mW/g

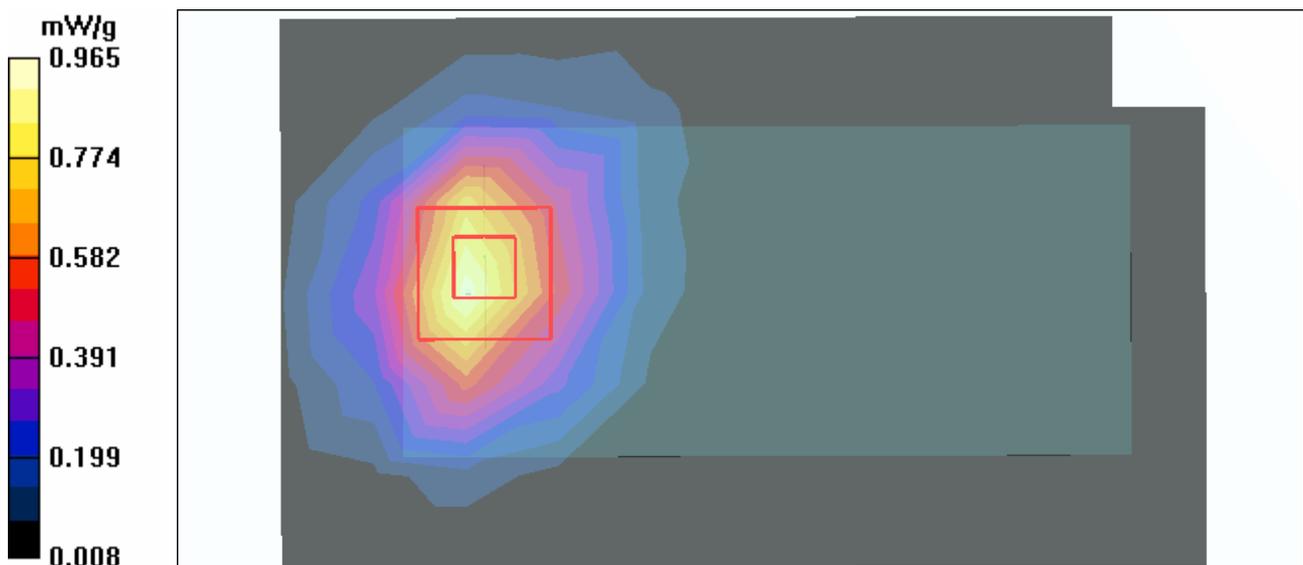
**Low Channel 1/Zoom Scan (7x7x7) (7x7x7)/Cube 0:** Measurement grid: dx=5mm, dy=5mm, dz=5mm

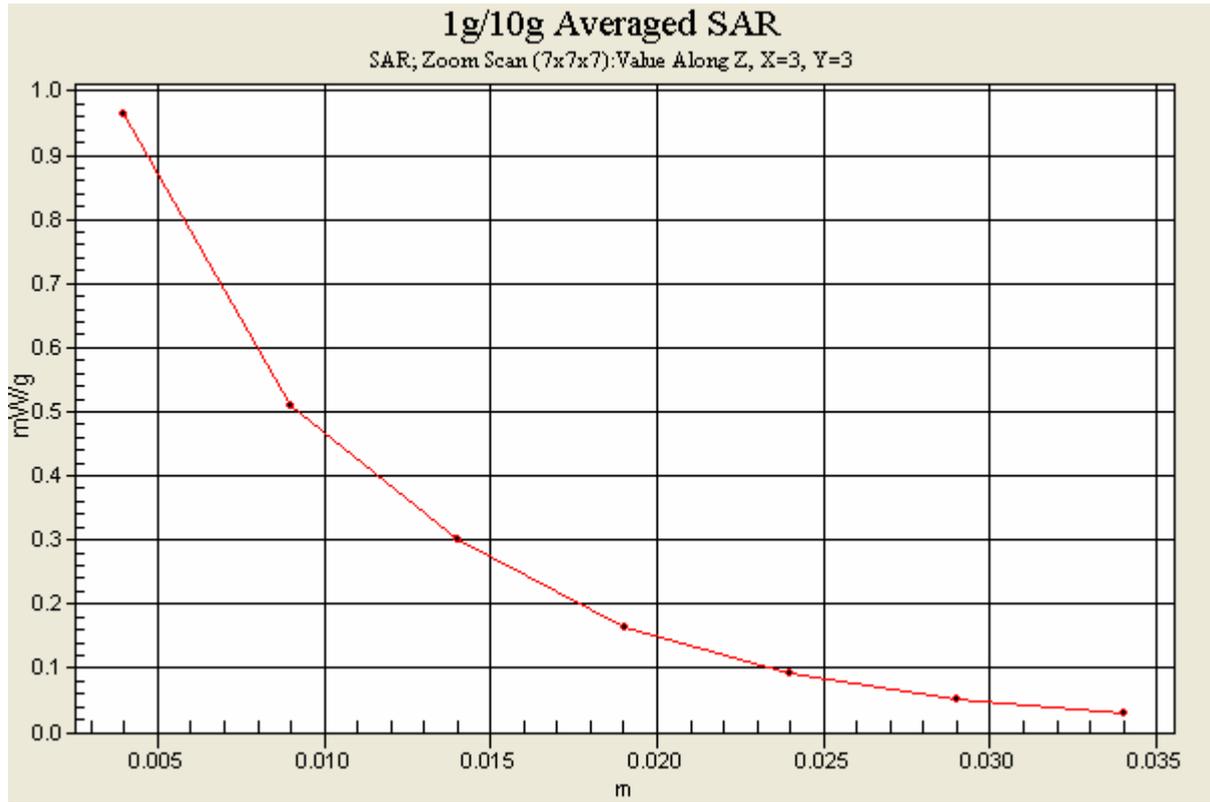
Reference Value = 22.3 V/m

Peak SAR (extrapolated) = 1.89 W/kg

**SAR(1 g) = 0.904 mW/g; SAR(10 g) = 0.469 mW/g**

Maximum value of SAR (measured) = 0.965 mW/g





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## 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:  $f = 2437 \text{ MHz}$ ;  $\sigma = 1.99 \text{ mho/m}$ ;  $\epsilon_r = 51$ ;  $\rho = 1000 \text{ kg/m}^3$  ; Liquid level : 155 mm

Phantom section: Flat Section ; Separation distance : 12 mm (The bottom side of the EUT to the Phantom)  
 Antenna type : Printed Antenna ; Air temp. : 22.2 degrees ; Liquid temp. : 21.3 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:  $dx=15\text{mm}$ ,  $dy=15\text{mm}$   
 Maximum value of SAR (measured) = 0.758 mW/g

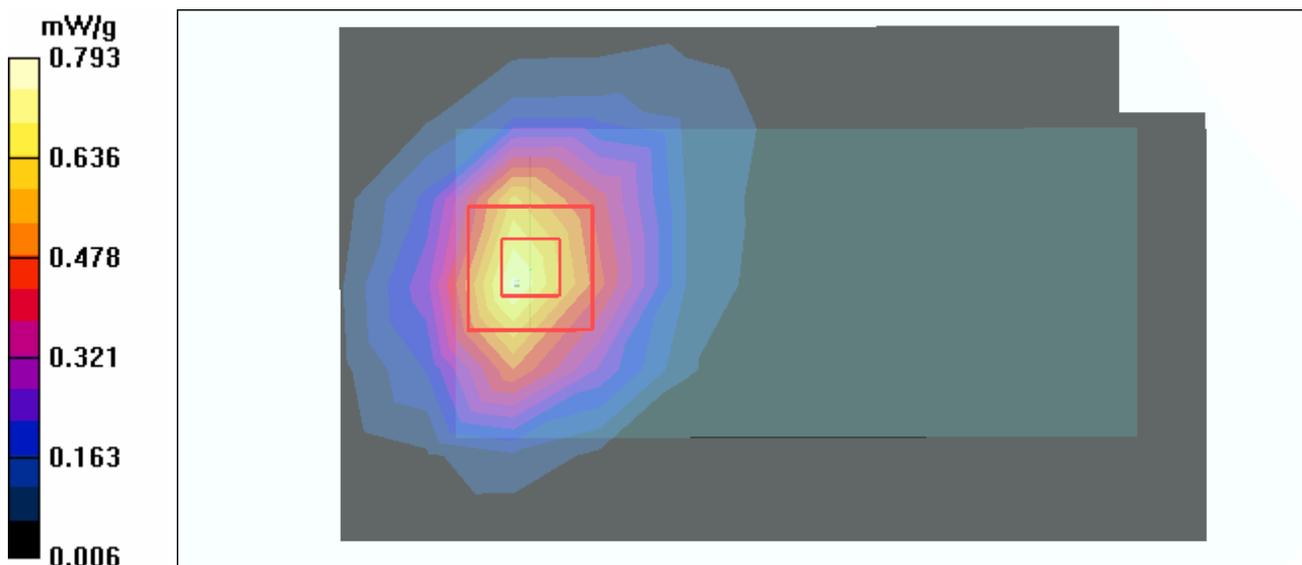
**Mid Channel 6/Zoom Scan (7x7x7) (7x7x7)/Cube 0:** Measurement grid:  $dx=5\text{mm}$ ,  $dy=5\text{mm}$ ,  $dz=5\text{mm}$

Reference Value = 20.1 V/m

Peak SAR (extrapolated) = 1.54 W/kg

**SAR(1 g) = 0.739 mW/g; SAR(10 g) = 0.386 mW/g**

Maximum value of SAR (measured) = 0.793 mW/g



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## 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:  $f = 2462$  MHz;  $\sigma = 2.02$  mho/m;  $\epsilon_r = 51$ ;  $\rho = 1000$  kg/m<sup>3</sup> ; Liquid level : 155 mm

Phantom section: Flat Section ; Separation distance : 12 mm (The bottom side of the EUT to the Phantom)  
 Antenna type : Printed Antenna ; Air temp. : 22.2 degrees ; Liquid temp. : 21.3 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) = 0.531 mW/g

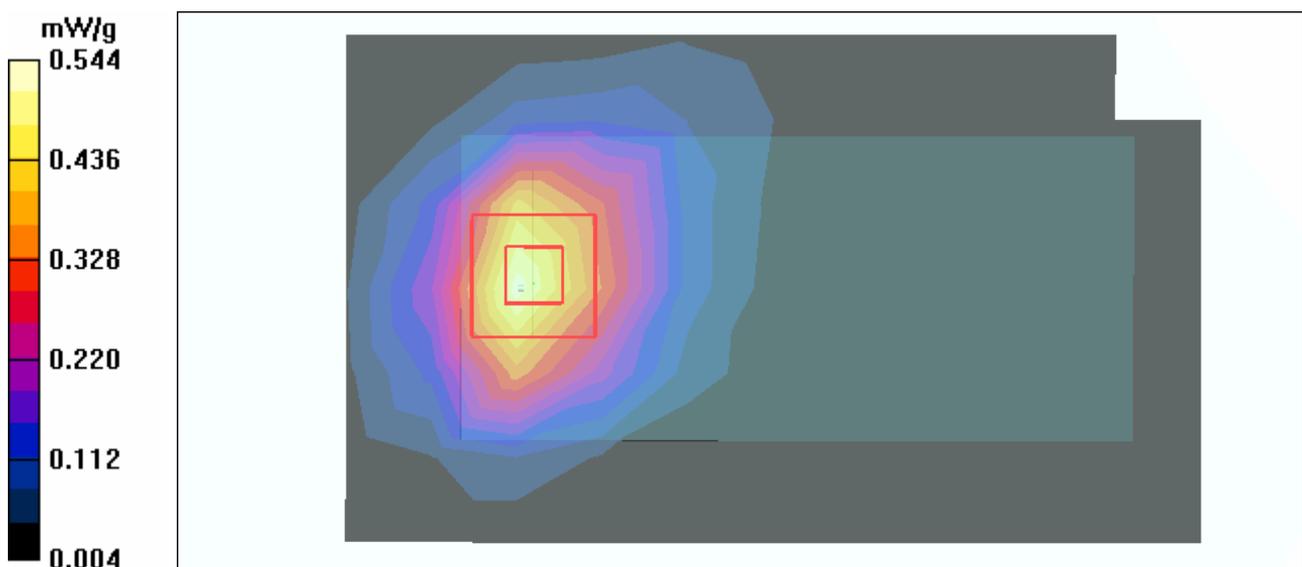
**High Channel 11/Zoom Scan (7x7x7) (7x7x7)/Cube 0:** Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 16.6 V/m

Peak SAR (extrapolated) = 1.07 W/kg

**SAR(1 g) = 0.507 mW/g; SAR(10 g) = 0.265 mW/g**

Maximum value of SAR (measured) = 0.544 mW/g



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## 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:  $f = 2412 \text{ MHz}$ ;  $\sigma = 1.95 \text{ mho/m}$ ;  $\epsilon_r = 51.1$ ;  $\rho = 1000 \text{ kg/m}^3$  ; Liquid level : 155 mm

Phantom section: Flat Section ; Separation distance : 12 mm (The bottom side of the EUT to the Phantom)  
 Antenna type : Printed Antenna ; Air temp. : 22.2 degrees ; Liquid temp. : 21.3 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:  $dx=15\text{mm}$ ,  $dy=15\text{mm}$   
 Maximum value of SAR (measured) = 0.526 mW/g

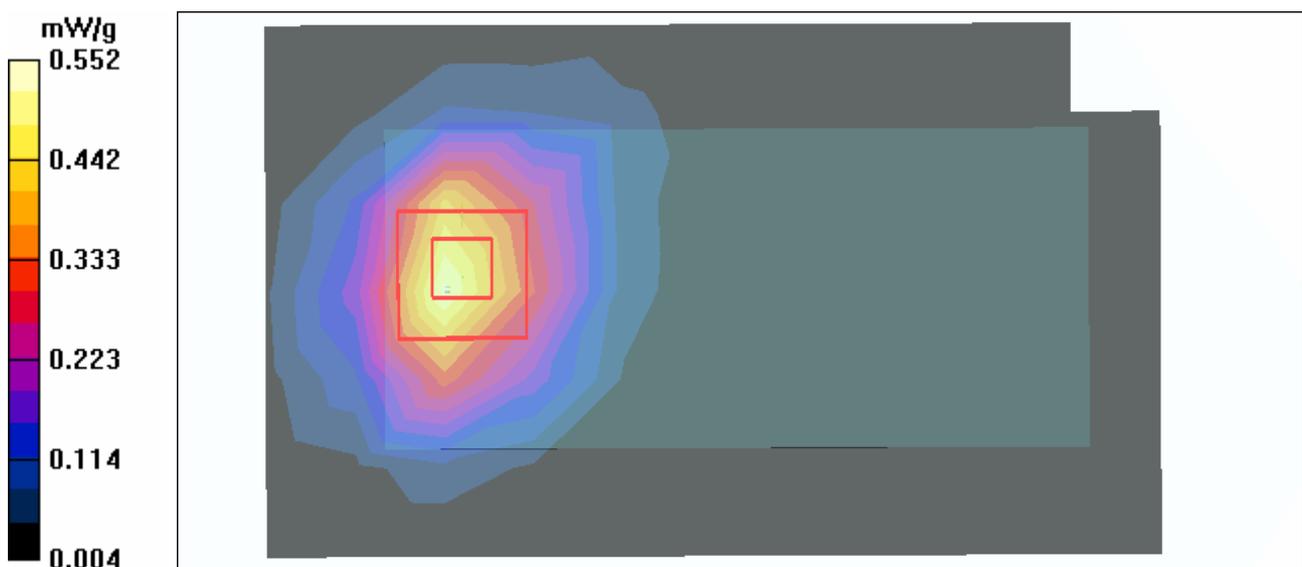
**Low Channel 1/Zoom Scan (7x7x7) (7x7x7)/Cube 0:** Measurement grid:  $dx=5\text{mm}$ ,  $dy=5\text{mm}$ ,  $dz=5\text{mm}$

Reference Value = 16.2 V/m

Peak SAR (extrapolated) = 1.07 W/kg

**SAR(1 g) = 0.514 mW/g; SAR(10 g) = 0.266 mW/g**

Maximum value of SAR (measured) = 0.552 mW/g



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## 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:  $f = 2437$  MHz;  $\sigma = 1.99$  mho/m;  $\epsilon_r = 51$ ;  $\rho = 1000$  kg/m<sup>3</sup> ; Liquid level : 155 mm

Phantom section: Flat Section ; Separation distance : 12 mm (The bottom side of the EUT to the Phantom)  
Antenna type : Printed Antenna ; Air temp. : 22.2 degrees ; Liquid temp. : 21.3 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) = 0.622 mW/g

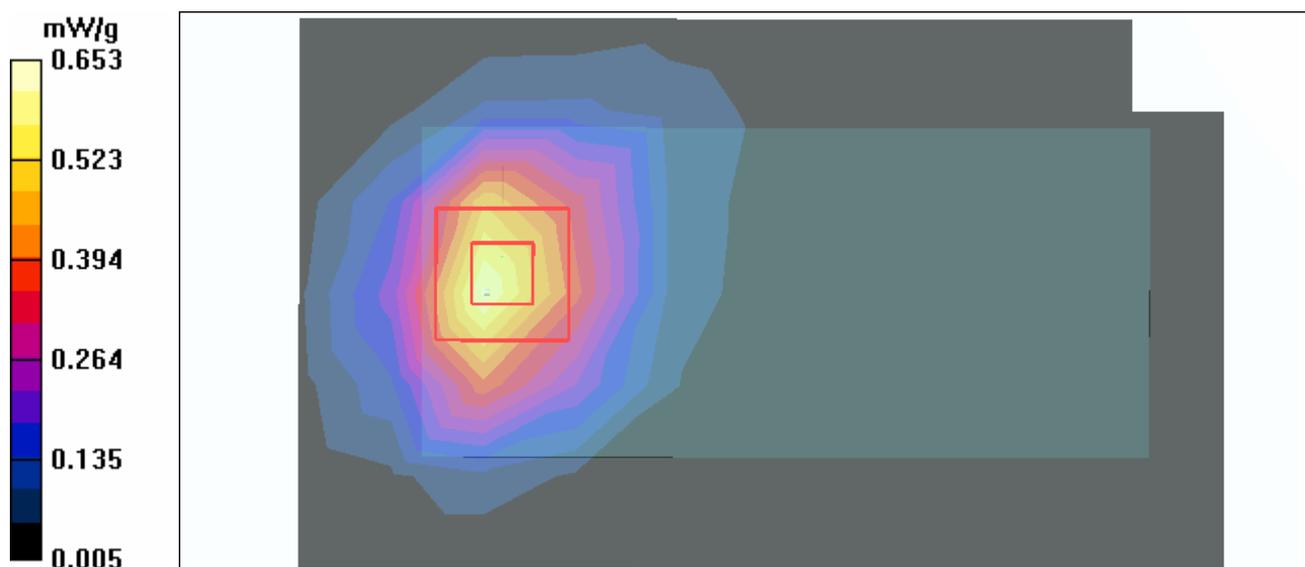
**Mid Channel 6/Zoom Scan (7x7x7) (7x7x7)/Cube 0:** Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 17.8 V/m

Peak SAR (extrapolated) = 1.26 W/kg

**SAR(1 g) = 0.605 mW/g; SAR(10 g) = 0.314 mW/g**

Maximum value of SAR (measured) = 0.653 mW/g



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## 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:  $f = 2462$  MHz;  $\sigma = 2.02$  mho/m;  $\epsilon_r = 51$ ;  $\rho = 1000$  kg/m<sup>3</sup> ; Liquid level : 155 mm

Phantom section: Flat Section ; Separation distance : 12 mm (The bottom side of the EUT to the Phantom)  
 Antenna type : Printed Antenna ; Air temp. : 22.2 degrees ; Liquid temp. : 21.3 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) = 0.470 mW/g

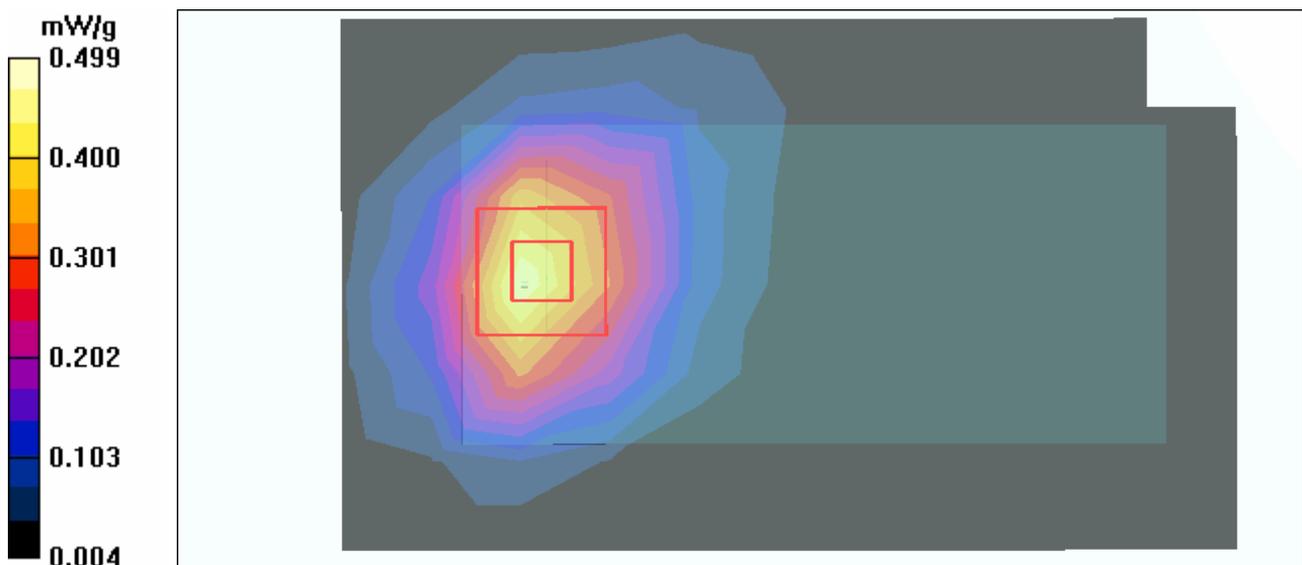
**High Channel 11/Zoom Scan (7x7x7) (7x7x7)/Cube 0:** Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 15.1 V/m

Peak SAR (extrapolated) = 0.980 W/kg

**SAR(1 g) = 0.467 mW/g; SAR(10 g) = 0.244 mW/g**

Maximum value of SAR (measured) = 0.499 mW/g



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## 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:  $f = 2450$  MHz;  $\sigma = 2.01$  mho/m;  $\epsilon_r = 51$ ;  $\rho = 1000$  kg/m<sup>3</sup> ;  
 Liquid level : 155 mm  
 Phantom section: Flat Section ; Separation distance : 10 mm (The feetpoint of the dipole to the Phantom)  
 Air temp. : 22.2 degrees ; Liquid temp. : 21.3 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) = 15.3 mW/g

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

Reference Value = 90.8 V/m; Power Drift = -0.092 dB

Peak SAR (extrapolated) = 30.5 W/kg

**SAR(1 g) = 13.4 mW/g; SAR(10 g) = 6.17 mW/g**

Maximum value of SAR (measured) = 15.0 mW/g

