

## APPENDIX A: TEST CONFIGURATIONS AND TEST DATA

### A1: TEST CONFIGURATION

#### Position of Horizontal EUT



**The Bottom of the EUT to the flat phantom distance 6 mm**

## Position of Vertical EUT



The Bottom of the EUT to the flat phantom distance 9 mm

EUT Photo

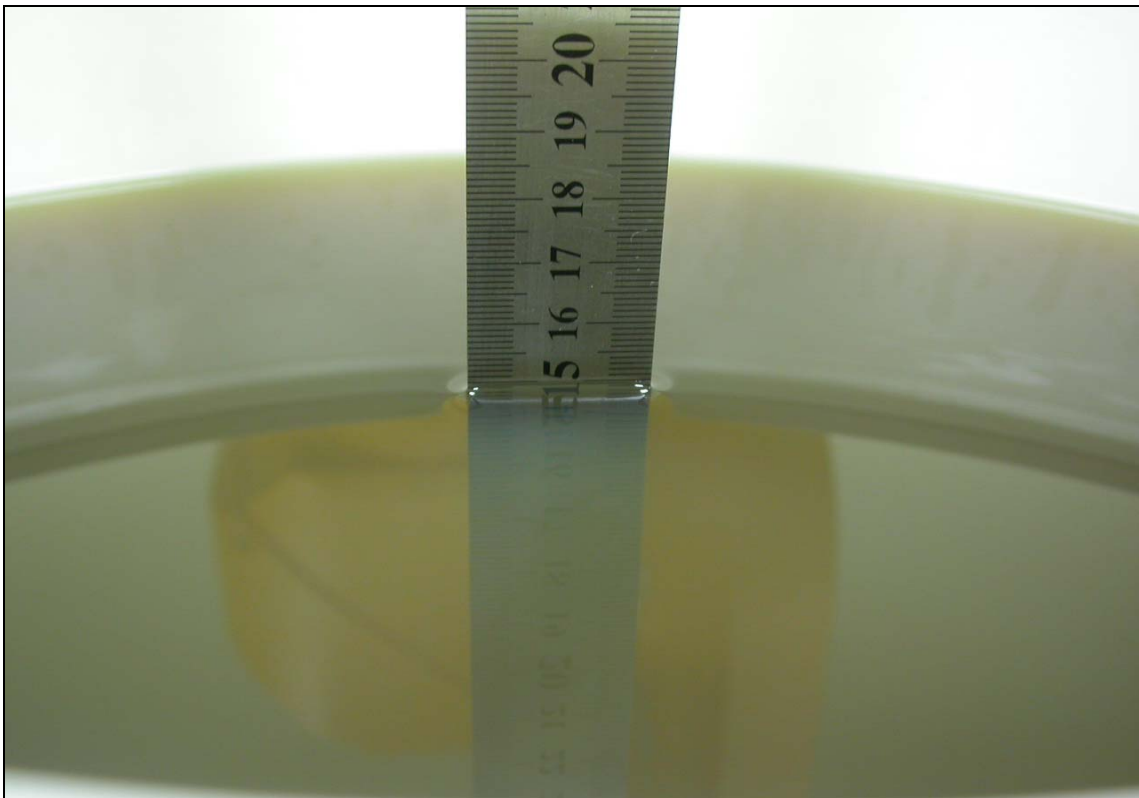


## Liquid Level Photo

MSL 2450MHz D=150mm



MSL 5000MHz D=150mm



Test Laboratory: Advance Data Technology

**Gray WUB-410Z Horizontal Mode 1 11b**

**DUT: USB2.0 802.11a/b/g Wireless Network Adapter ; Type: WUB-410Z ; Test Frequency: 2412 MHz**

Communication System: 802.11b ; Frequency: 2412 MHz ; Duty Cycle: 1:1 ; Modulation type: CCK  
 Medium: MSL2450 Medium parameters used:  $f = 2412 \text{ MHz}$ ;  $\sigma = 1.98 \text{ mho/m}$ ;  $\epsilon_r = 54$ ;  $\rho = 1000 \text{ kg/m}^3$  ; Liquid level : 150mm

Phantom section: Flat Section ; Separation distance : 6 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 - 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 (5x12x1):** Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (measured) = 0.988 mW/g

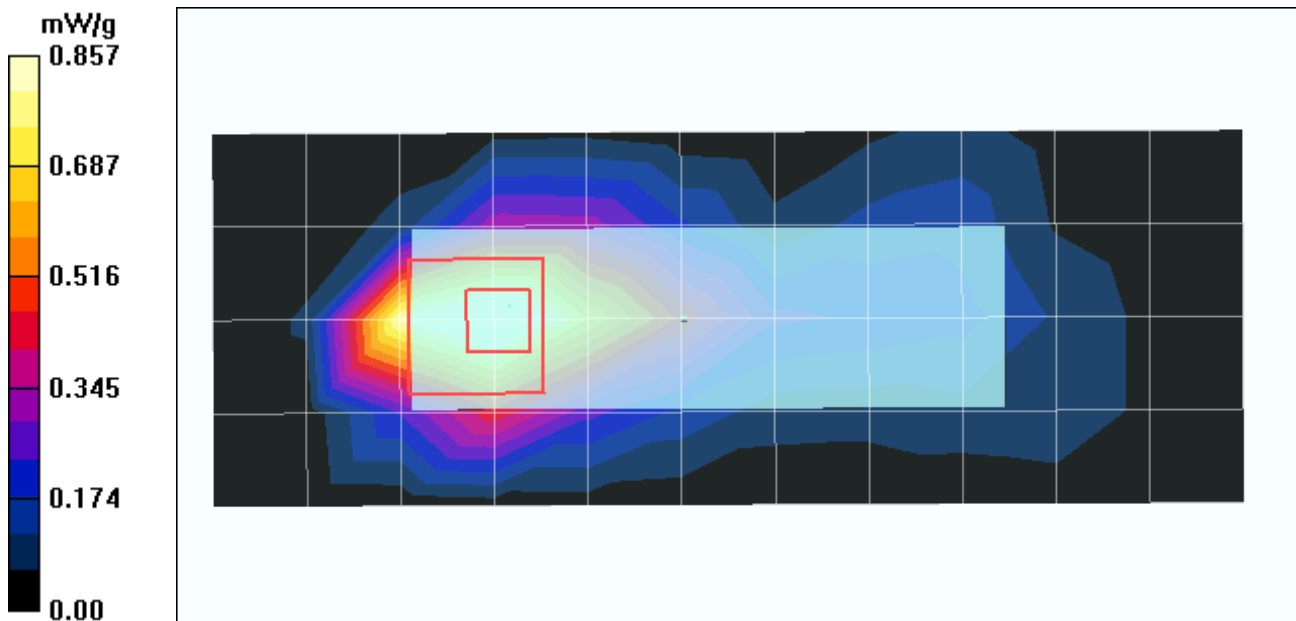
**Low Channel 1/Zoom Scan (7x7x7)/Cube 0:** Measurement grid: dx=5mm, dy=5mm, dz=5mm

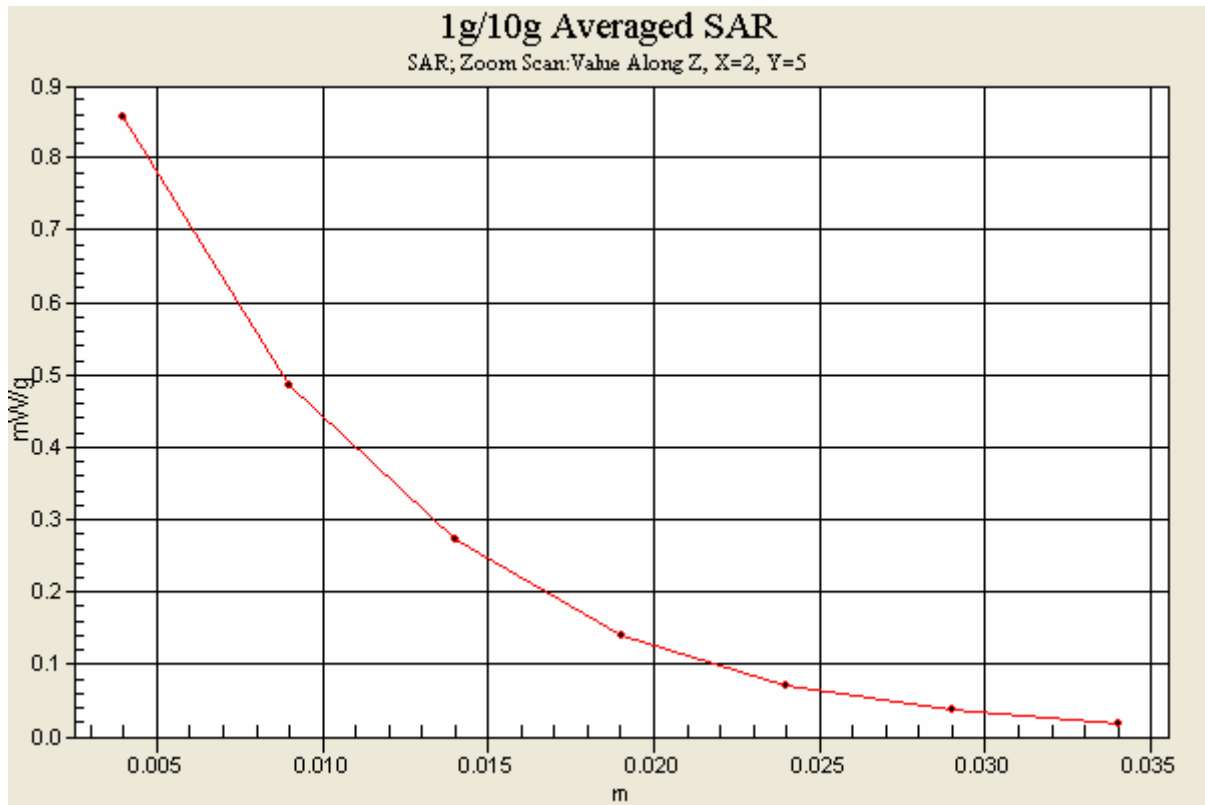
Reference Value = 16.8 V/m

Peak SAR (extrapolated) = 1.92 W/kg

**SAR(1 g) = 0.787 mW/g; SAR(10 g) = 0.387 mW/g**

Maximum value of SAR (measured) = 0.857 mW/g





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## Gray WUB-410Z Horizontal Mode 1 11b

**DUT: USB2.0 802.11a/b/g Wireless Network Adapter ; Type: WUB-410Z ; 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;  $\epsilon_r = 53.9$ ;  $\rho = 1000$  kg/m<sup>3</sup> ; Liquid level : 150mm

Phantom section: Flat Section ; Separation distance : 6 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 - 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 (5x12x1):** Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (measured) = 0.586 mW/g

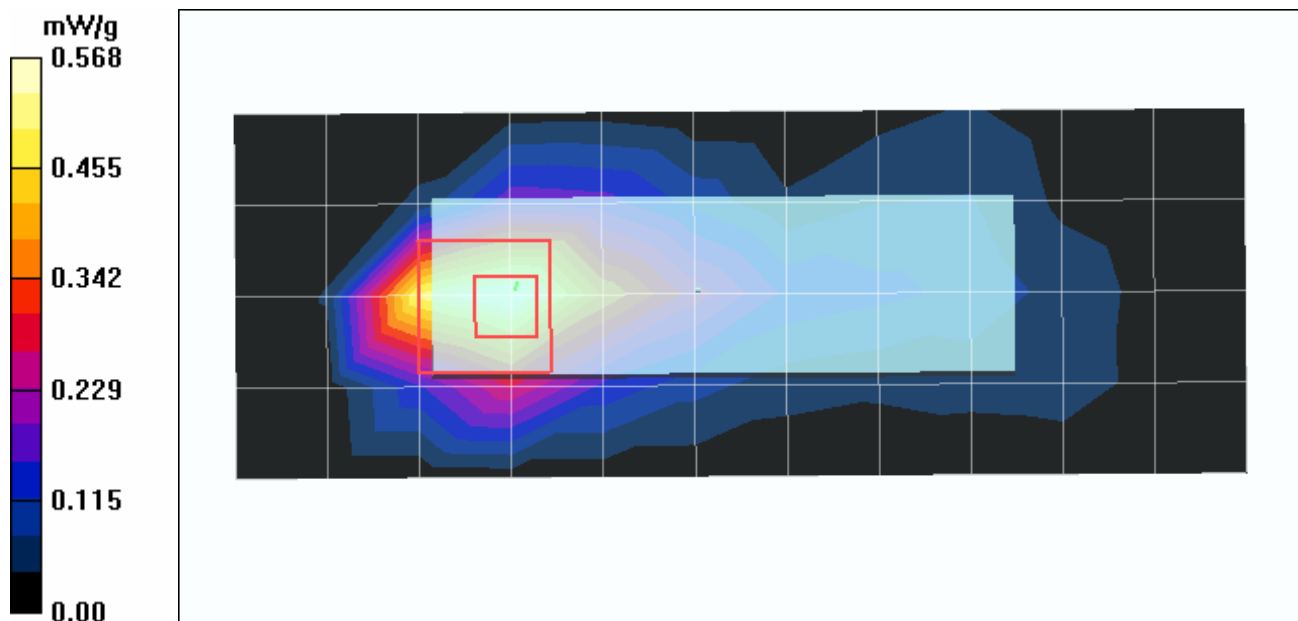
**Mid Channel 6/Zoom Scan (7x7x7)/Cube 0:** Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 11.8 V/m

Peak SAR (extrapolated) = 1.32 W/kg

**SAR(1 g) = 0.522 mW/g; SAR(10 g) = 0.254 mW/g**

Maximum value of SAR (measured) = 0.568 mW/g



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## Gray WUB-410Z Horizontal Mode 1 11b

**DUT: USB2.0 802.11a/b/g Wireless Network Adapter ; Type: WUB-410Z ; Test Frequency: 2462 MHz**

Communication System: 802.11b ; Frequency: 2462 MHz ; Duty Cycle: 1:1 ; Modulation type: CCK  
 Medium: MSL2450 Medium parameters used:  $f = 2462 \text{ MHz}$ ;  $\sigma = 2.04 \text{ mho/m}$ ;  $\epsilon_r = 53.8$ ;  $\rho = 1000 \text{ kg/m}^3$  ; Liquid level : 150mm

Phantom section: Flat Section ; Separation distance : 6 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 - 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 (5x12x1):** Measurement grid:  $dx=15\text{mm}$ ,  $dy=15\text{mm}$

Maximum value of SAR (measured) = 0.533 mW/g

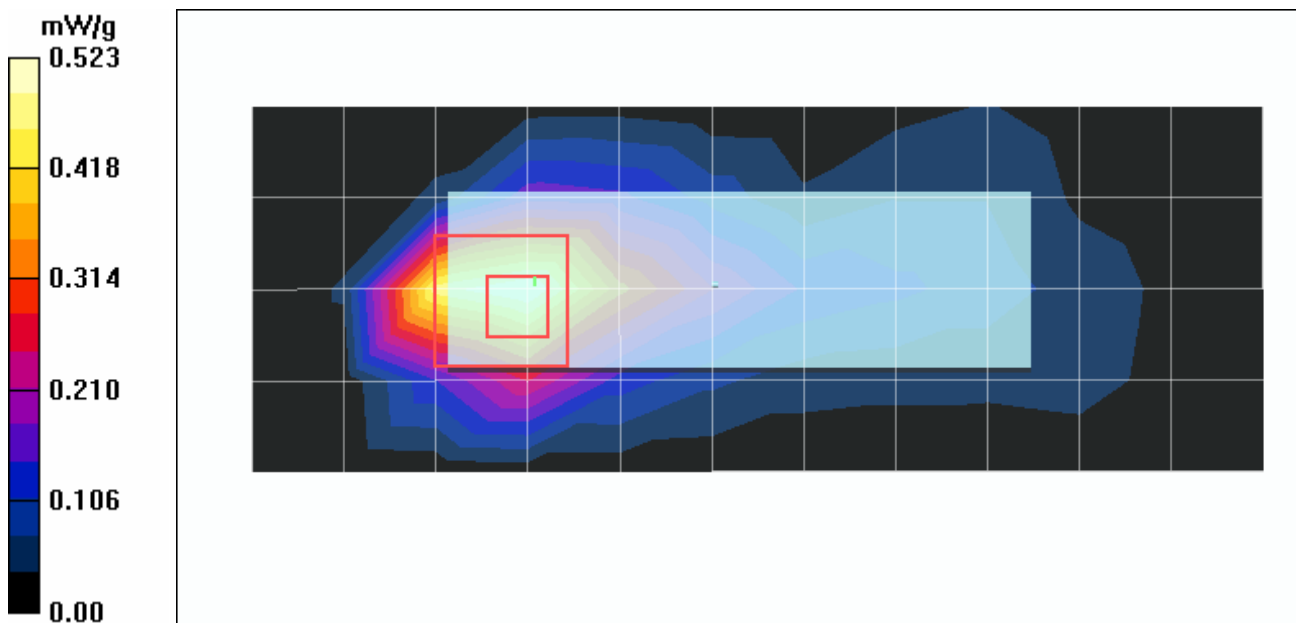
**High Channel 11/Zoom Scan (7x7x7)/Cube 0:** Measurement grid:  $dx=5\text{mm}$ ,  $dy=5\text{mm}$ ,  $dz=5\text{mm}$

Reference Value = 10.8 V/m

Peak SAR (extrapolated) = 1.26 W/kg

**SAR(1 g) = 0.483 mW/g; SAR(10 g) = 0.235 mW/g**

Maximum value of SAR (measured) = 0.523 mW/g





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## Gray WUB-410Z Horizontal Mode 2 11g

**DUT: USB2.0 802.11a/b/g Wireless Network Adapter ; Type: WUB-410Z ; 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;  $\epsilon_r = 54$ ;  $\rho = 1000$  kg/m<sup>3</sup> ; Liquid level : 150mm

Phantom section: Flat Section ; Separation distance : 6 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 - 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 (5x12x1):** Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (measured) = 0.472 mW/g

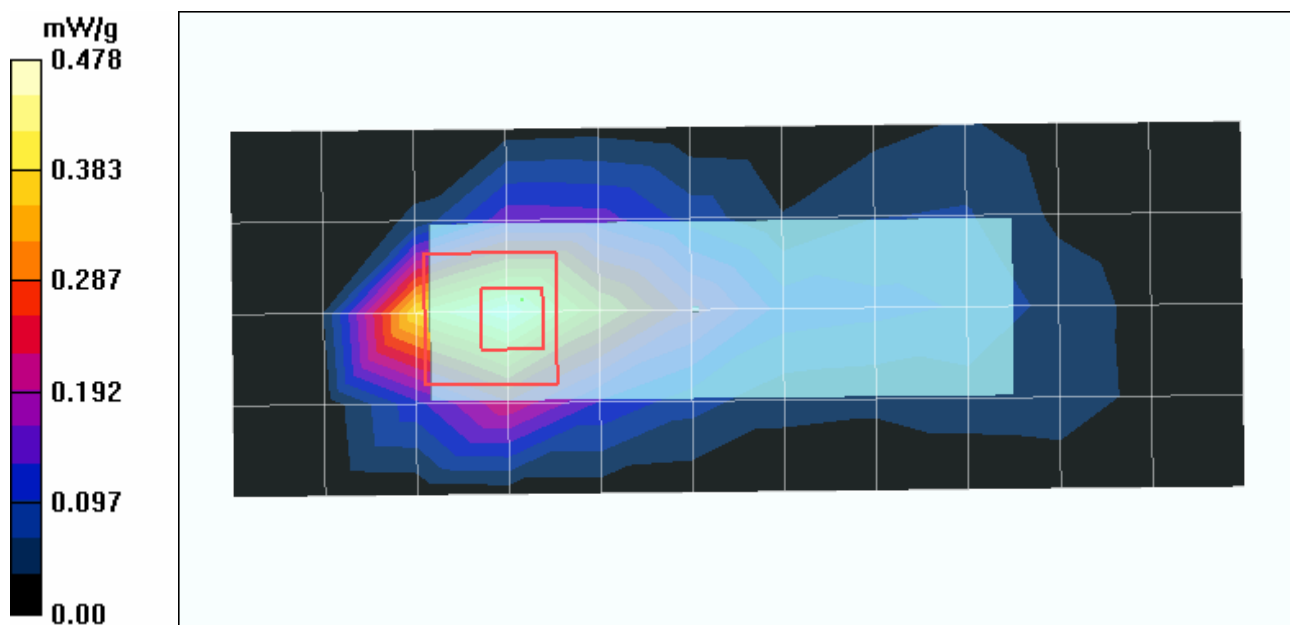
**Low Channel 1/Zoom Scan (7x7x7)/Cube 0:** Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 10.8 V/m

Peak SAR (extrapolated) = 1.10 W/kg

**SAR(1 g) = 0.442 mW/g; SAR(10 g) = 0.217 mW/g**

Maximum value of SAR (measured) = 0.478 mW/g



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## Gray WUB-410Z Horizontal Mode 2 11g

**DUT: USB2.0 802.11a/b/g Wireless Network Adapter ; Type: WUB-410Z ; Test Frequency: 2437 MHz**

Communication System: 802.11g ; Frequency: 2437 MHz ; Duty Cycle: 1:1 ; Modulation type: OFDM  
 Medium: MSL2450 Medium parameters used:  $f = 2437 \text{ MHz}$ ;  $\sigma = 2.02 \text{ mho/m}$ ;  $\epsilon_r = 53.9$ ;  $\rho = 1000 \text{ kg/m}^3$  ; Liquid level : 150mm

Phantom section: Flat Section ; Separation distance : 6 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 - 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 (5x12x1):** Measurement grid:  $dx=15\text{mm}$ ,  $dy=15\text{mm}$

Maximum value of SAR (measured) = 0.505 mW/g

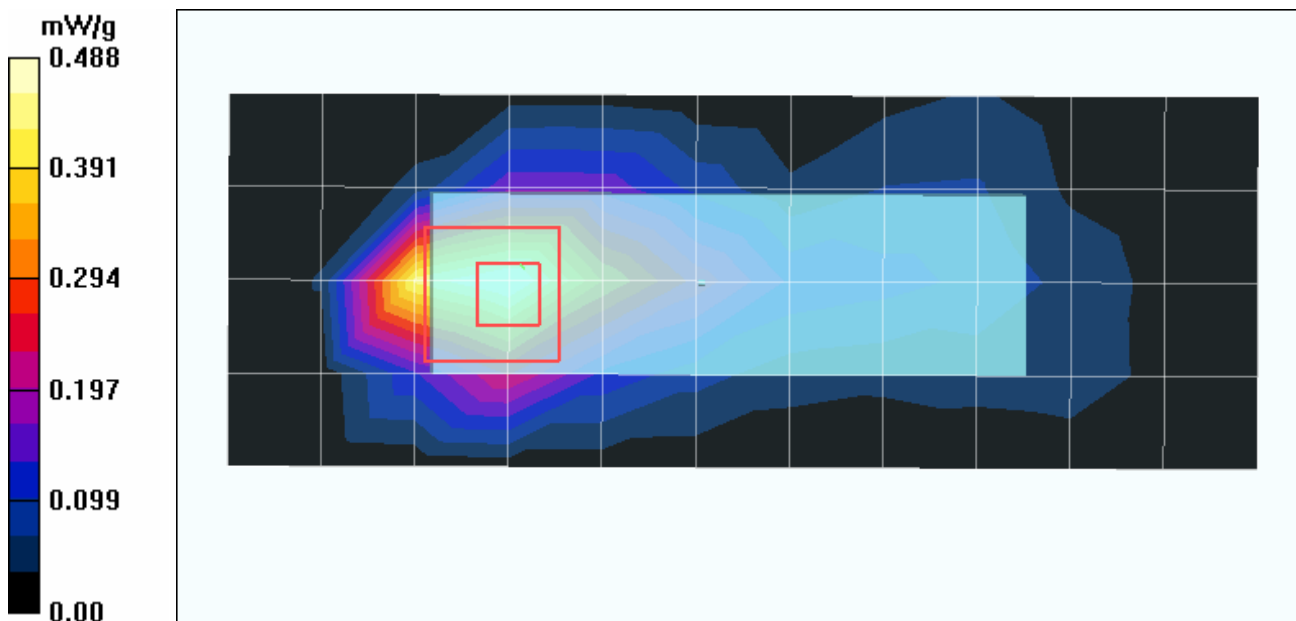
**Mid Channel 6/Zoom Scan (7x7x7)/Cube 0:** Measurement grid:  $dx=5\text{mm}$ ,  $dy=5\text{mm}$ ,  $dz=5\text{mm}$

Reference Value = 11.0 V/m

Peak SAR (extrapolated) = 1.18 W/kg

**SAR(1 g) = 0.458 mW/g; SAR(10 g) = 0.225 mW/g**

Maximum value of SAR (measured) = 0.488 mW/g



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## Gray WUB-410Z Horizontal Mode 2 11g

**DUT: USB2.0 802.11a/b/g Wireless Network Adapter; Type: WUB-410Z ; 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;  $\sigma = 2.04$  mho/m;  $\epsilon_r = 53.8$ ;  $\rho = 1000$  kg/m<sup>3</sup> ; Liquid level : 150mm

Phantom section: Flat Section ; Separation distance : 6 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 - 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 (5x12x1):** Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (measured) = 0.502 mW/g

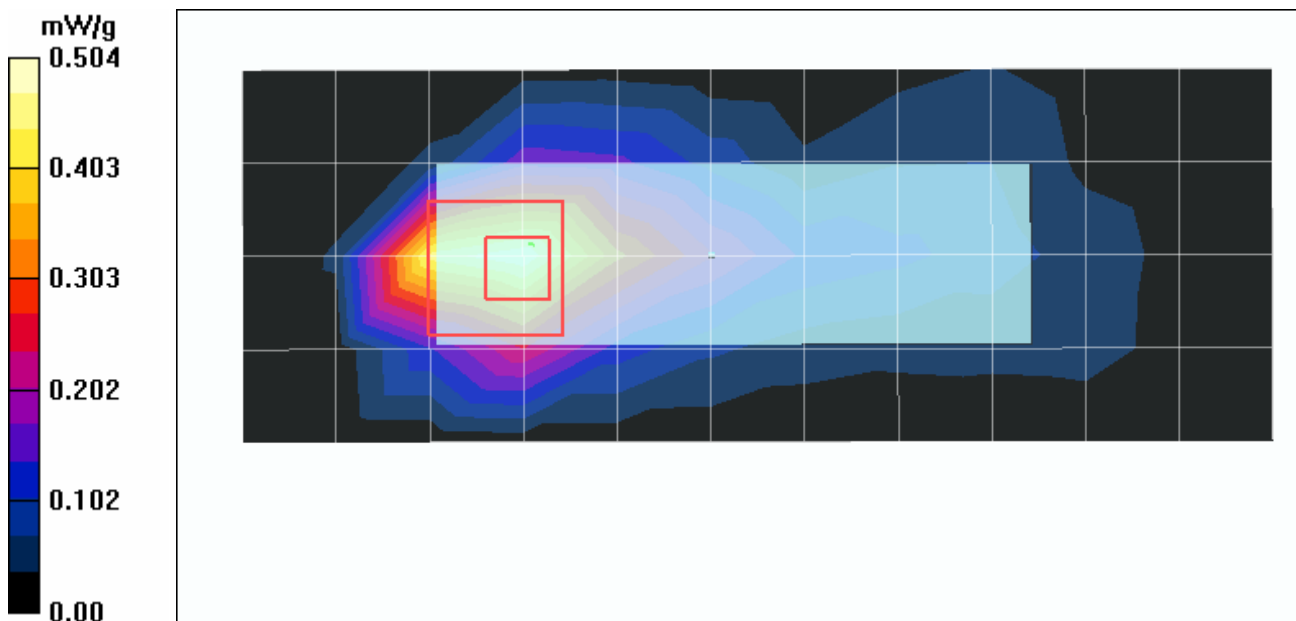
**High Channel 11/Zoom Scan (7x7x7)/Cube 0:** Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 10.6 V/m

Peak SAR (extrapolated) = 1.20 W/kg

**SAR(1 g) = 0.465 mW/g; SAR(10 g) = 0.226 mW/g**

Maximum value of SAR (measured) = 0.504 mW/g



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### Gray WUB-410Z Vertical Mode 3 11b

**DUT: Wireless 802.11a/b/g Wireless Network Adapter; Type: WUB-410Z; Test Frequency: 2412 MHz**

Communication System: 802.11b ; Frequency: 2412 MHz ; Duty Cycle: 1:1 ; Modulation type: CCK  
 Medium: MSL2450 Medium parameters used:  $f = 2412 \text{ MHz}$ ;  $\sigma = 1.98 \text{ mho/m}$ ;  $\epsilon_r = 54$ ;  $\rho = 1000 \text{ kg/m}^3$  ; Liquid level : 150mm

Phantom section: Flat Section ; Separation distance : 6 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 - 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 (5x12x1):** Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (measured) = 0.475 mW/g

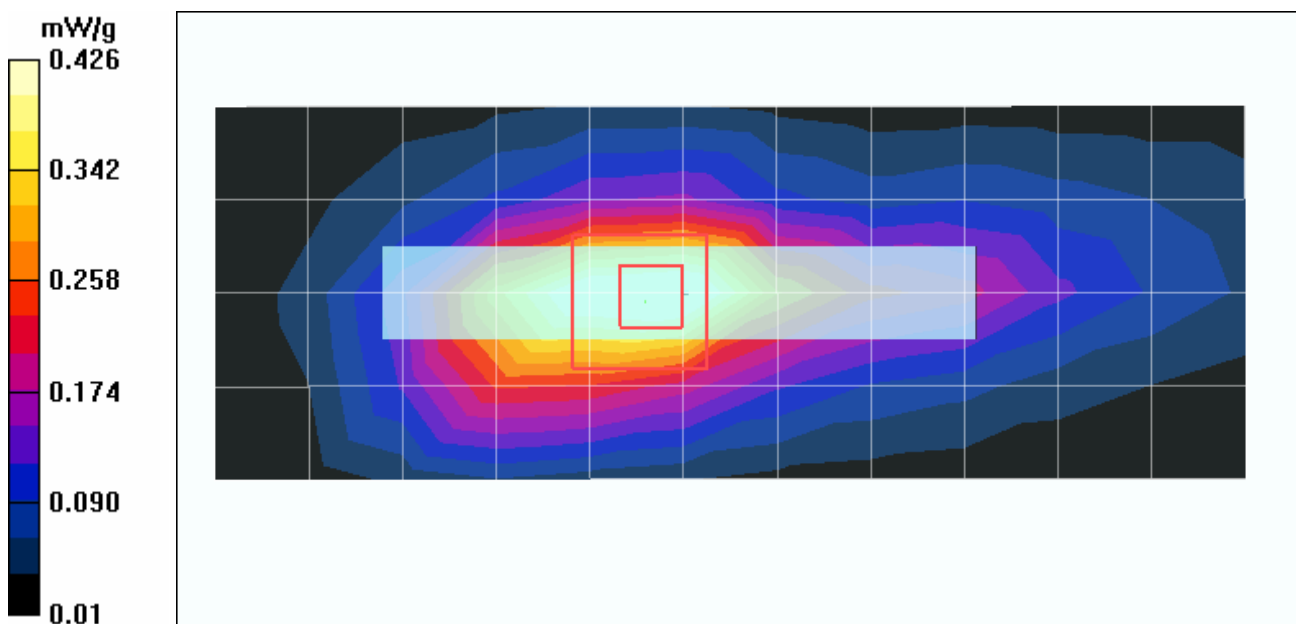
**Low Channel 1/Zoom Scan (7x7x7)/Cube 0:** Measurement grid: dx=5mm, dy=5mm, dz=5mm

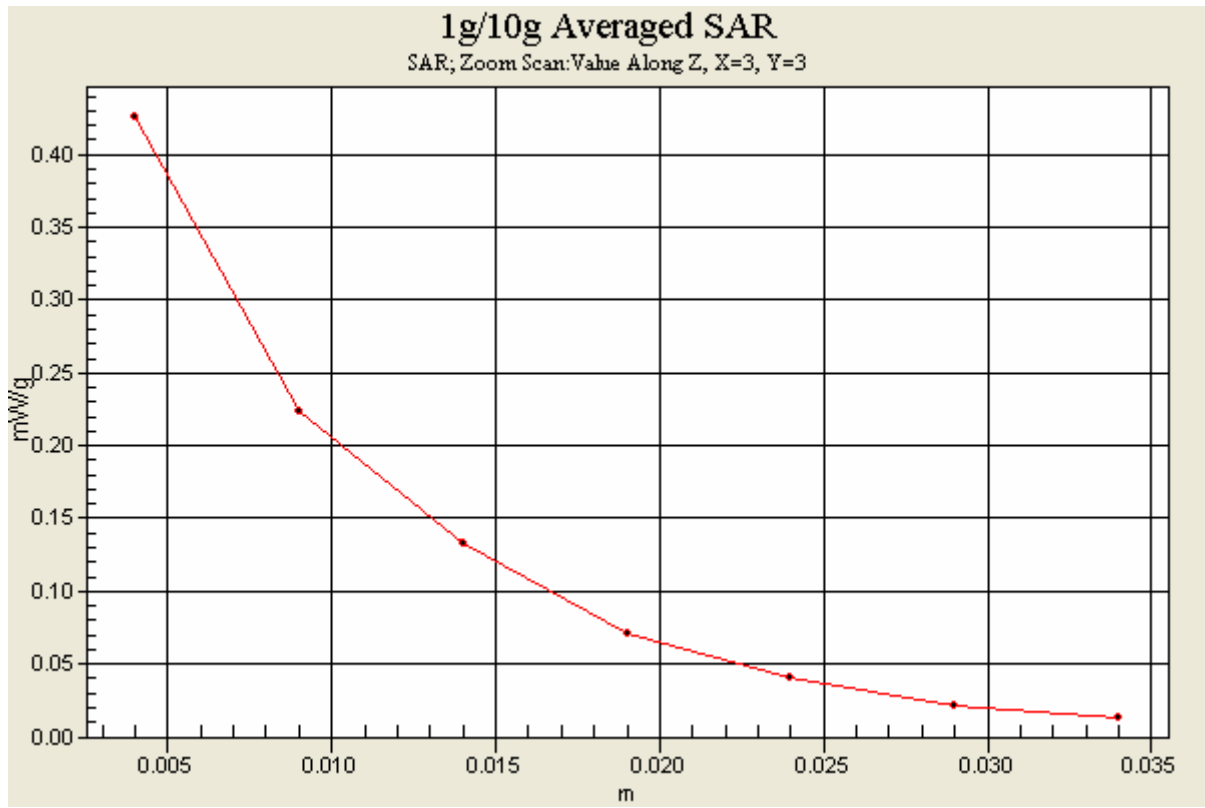
Reference Value = 17.5 V/m

Peak SAR (extrapolated) = 0.805 W/kg

**SAR(1 g) = 0.392 mW/g; SAR(10 g) = 0.207 mW/g**

Maximum value of SAR (measured) = 0.426 mW/g





Test Laboratory: Advance Data Technology

### Gray WUB-410Z Vertical Mode 3 11b

**DUT: Wireless 802.11a/b/g Wireless Network Adapter; Type: WUB-410Z; 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;  $\epsilon_r = 53.9$ ;  $\rho = 1000$  kg/m<sup>3</sup> ; Liquid level : 150mm

Phantom section: Flat Section ; Separation distance : 6 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 - 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 (5x12x1):** Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (measured) = 0.272 mW/g

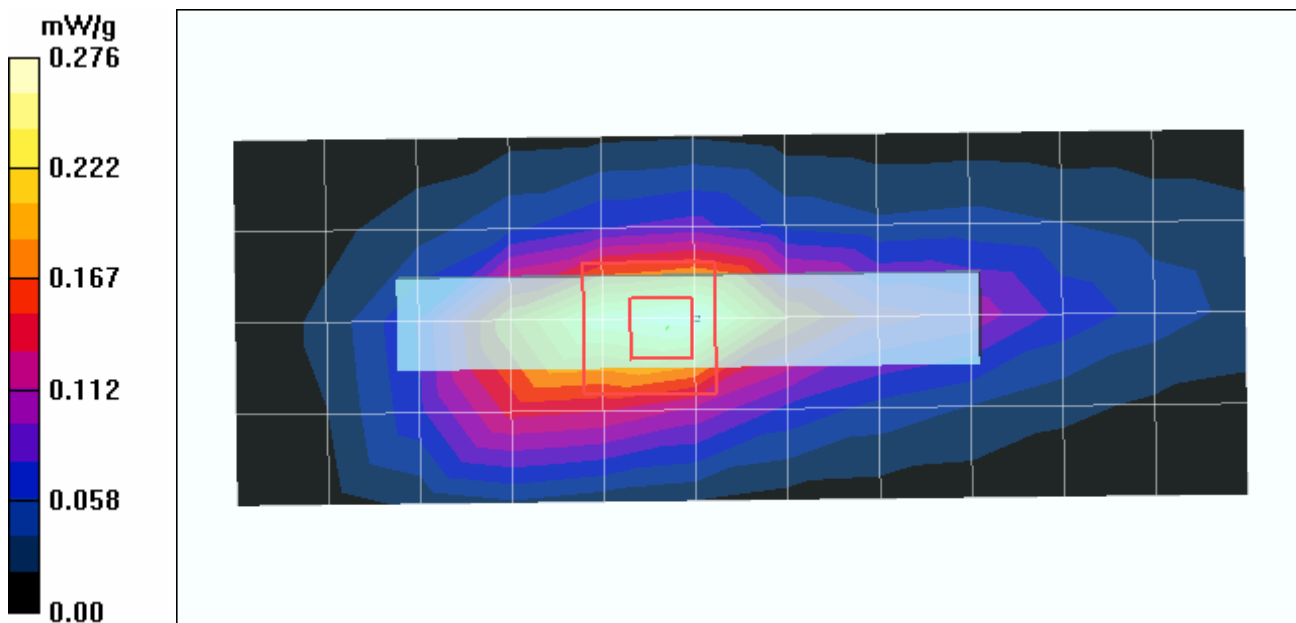
**Mid Channel 6/Zoom Scan (7x7x7)/Cube 0:** Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 12.4 V/m

Peak SAR (extrapolated) = 0.526 W/kg

**SAR(1 g) = 0.255 mW/g; SAR(10 g) = 0.133 mW/g**

Maximum value of SAR (measured) = 0.276 mW/g



Test Laboratory: Advance Data Technology

## Gray WUB-410Z Vertical Mode 3 11b

**DUT: Wireless 802.11a/b/g Wireless Network Adapter; Type: WUB-410Z; 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;  $\sigma = 2.04$  mho/m;  $\epsilon_r = 53.8$ ;  $\rho = 1000$  kg/m<sup>3</sup> ; Liquid level : 150mm

Phantom section: Flat Section ; Separation distance : 6 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 - 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 (5x12x1):** Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (measured) = 0.252 mW/g

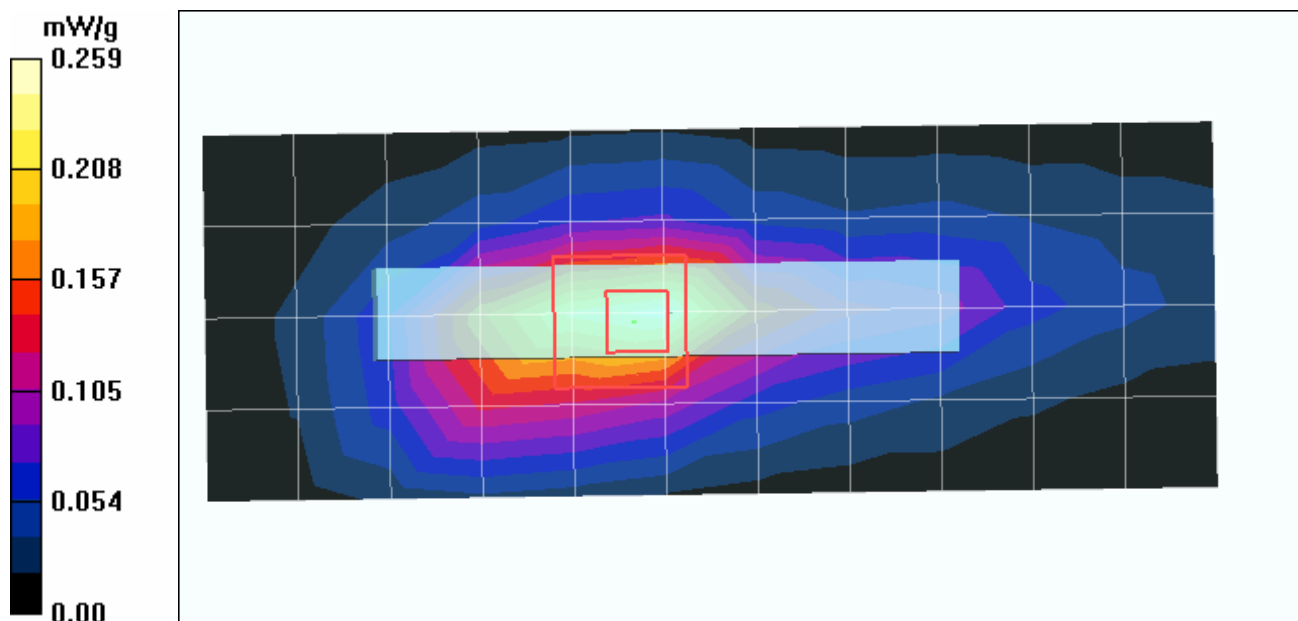
**High Channel 11/Zoom Scan (7x7x7)/Cube 0:** Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 11.8 V/m

Peak SAR (extrapolated) = 0.499 W/kg

**SAR(1 g) = 0.236 mW/g; SAR(10 g) = 0.122 mW/g**

Maximum value of SAR (measured) = 0.259 mW/g



Test Laboratory: Advance Data Technology

## Gray WUB-410Z Vertical Mode 4 11g

**DUT: Wireless 802.11a/b/g Wireless Network Adapter; Type: WUB-410Z; 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;  $\epsilon_r = 54$ ;  $\rho = 1000$  kg/m<sup>3</sup> ; Liquid level : 150mm

Phantom section: Flat Section ; Separation distance : 9 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 - 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 (5x12x1):** Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (measured) = 0.226 mW/g

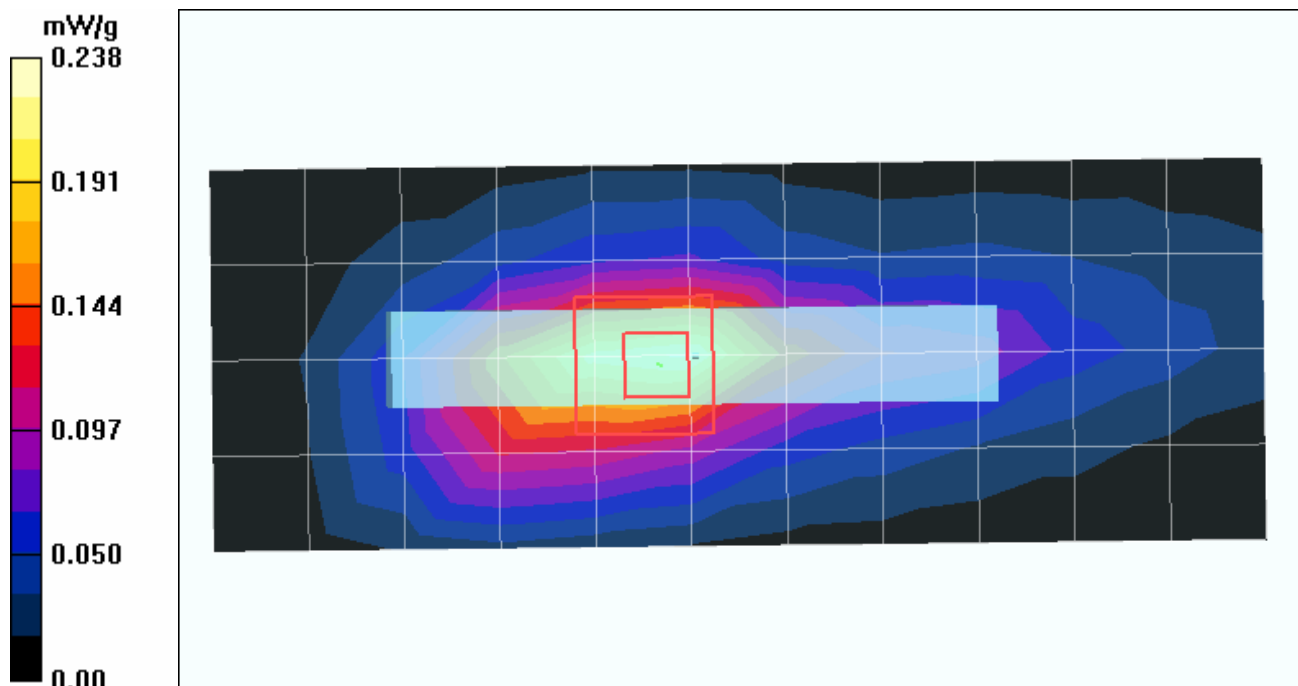
**Low Channel 1/Zoom Scan (7x7x7)/Cube 0:** Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 11.2 V/m

Peak SAR (extrapolated) = 0.451 W/kg

**SAR(1 g) = 0.217 mW/g; SAR(10 g) = 0.114 mW/g**

Maximum value of SAR (measured) = 0.238 mW/g





Test Laboratory: Advance Data Technology

## Gray WUB-410Z Vertical Mode 4 11g

**DUT: Wireless 802.11a/b/g Wireless Network Adapter; Type: WUB-410Z; 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;  $\sigma = 2.02$  mho/m;  $\epsilon_r = 53.9$ ;  $\rho = 1000$  kg/m<sup>3</sup> ; Liquid level : 150mm

Phantom section: Flat Section ; Separation distance : 9 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 - 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 (5x12x1):** Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (measured) = 0.235 mW/g

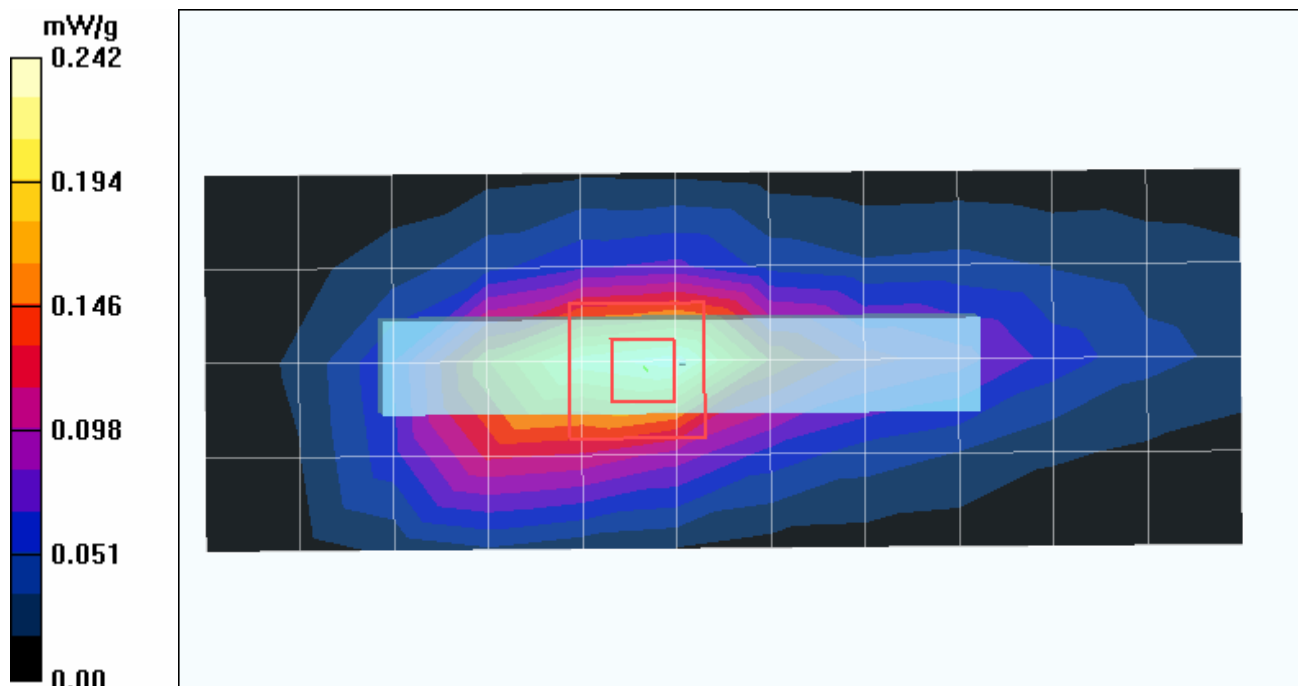
**Mid Channel 6/Zoom Scan (7x7x7)/Cube 0:** Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 11.3 V/m

Peak SAR (extrapolated) = 0.460 W/kg

**SAR(1 g) = 0.223 mW/g; SAR(10 g) = 0.116 mW/g**

Maximum value of SAR (measured) = 0.242 mW/g



Test Laboratory: Advance Data Technology

## Gray WUB-410Z Vertical Mode 4 11g

**DUT: Wireless 802.11a/b/g Wireless Network Adapter; Type: WUB-410Z; 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;  $\sigma = 2.04$  mho/m;  $\epsilon_r = 53.8$ ;  $\rho = 1000$  kg/m<sup>3</sup> ; Liquid level : 150mm

Phantom section: Flat Section ; Separation distance : 9 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 - 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 (5x12x1):** Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (measured) = 0.240 mW/g

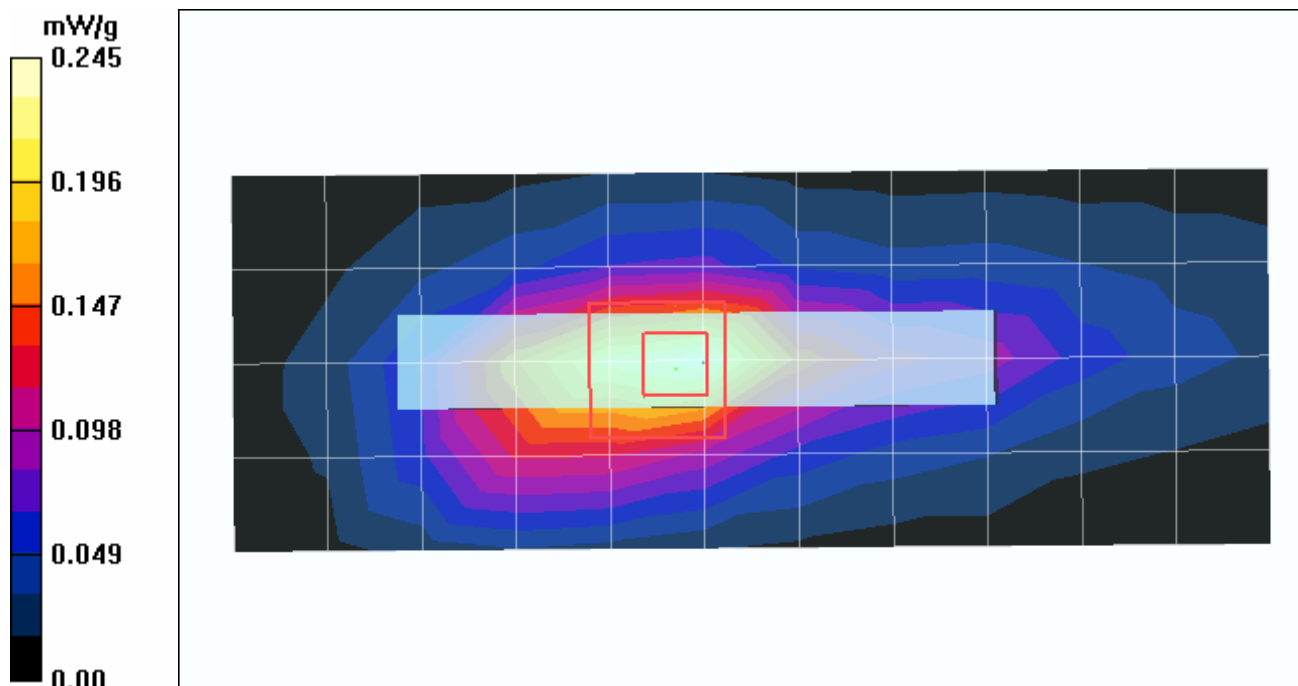
**High Channel 11/Zoom Scan (7x7x7)/Cube 0:** Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 11.4 V/m

Peak SAR (extrapolated) = 0.471 W/kg

**SAR(1 g) = 0.226 mW/g; SAR(10 g) = 0.117 mW/g**

Maximum value of SAR (measured) = 0.245 mW/g



Test Laboratory: Advance Data Technology

**Gray WUB-410Z Horizontal Mode 5 11a Normal**

**DUT: USB2.0 802.11a/b/g Wireless Network Adapter; Type: WUB-410Z ; Test Frequency: 5180 MHz**

Communication System: 802.11a ; Frequency: 5180 MHz ; Duty Cycle: 1:1 ; Modulation type: OFDM  
 Medium: MSL5800 Medium parameters used:  $f = 5180 \text{ MHz}$ ;  $\sigma = 5.28 \text{ mho/m}$ ;  $\epsilon_r = 48$ ;  $\rho = 1000 \text{ kg/m}^3$  ; Liquid level : 150mm

Phantom section: Flat Section ; Separation distance : 6 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: EX3DV3 - SN3506 ; ConvF(4.57, 4.57, 4.57) ; Calibrated: 2004/3/19
- Sensor-Surface: 2mm (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 5180/Area Scan (5x12x1):** Measurement grid:  $dx=10\text{mm}$ ,  $dy=10\text{mm}$

Maximum value of SAR (measured) = 1.23 mW/g

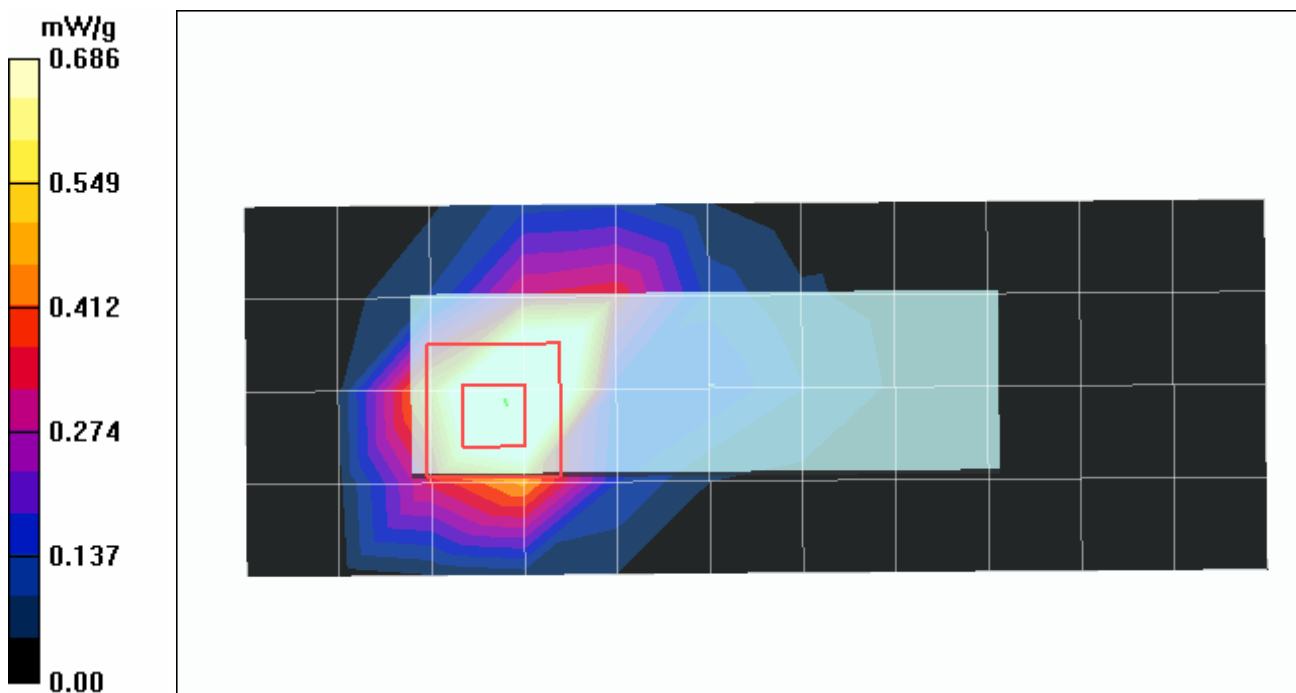
**Low Channel 5180/Zoom Scan (7x7x7)/Cube 0:** Measurement grid:  $dx=4.3\text{mm}$ ,  $dy=4.3\text{mm}$ ,  $dz=3\text{mm}$

Reference Value = 5.35 V/m

Peak SAR (extrapolated) = 3.37 W/kg

**SAR(1 g) = 0.728 mW/g; SAR(10 g) = 0.220 mW/g**

Maximum value of SAR (measured) = 0.686 mW/g



Test Laboratory: Advance Data Technology

**Gray WUB-410Z Horizontal Mode 5 11a Normal**

**DUT: USB2.0 802.11a/b/g Wireless Network Adapter ; Type: WUB-410Z ; Test Frequency: 5240 MHz**

Communication System: 802.11a ; Frequency: 5240 MHz ; Duty Cycle: 1:1 ; Modulation type: OFDM  
 Medium: MSL5800 Medium parameters used:  $f = 5240$  MHz;  $\sigma = 5.37$  mho/m;  $\epsilon_r = 48$ ;  $\rho = 1000$  kg/m<sup>3</sup> ; Liquid level : 150mm

Phantom section: Flat Section ; Separation distance : 6 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: EX3DV3 - SN3506 ; ConvF(4.57, 4.57, 4.57) ; Calibrated: 2004/3/19
- Sensor-Surface: 2mm (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 5240/Area Scan (5x12x1):** Measurement grid: dx=10mm, dy=10mm

Maximum value of SAR (measured) = 1.03 mW/g

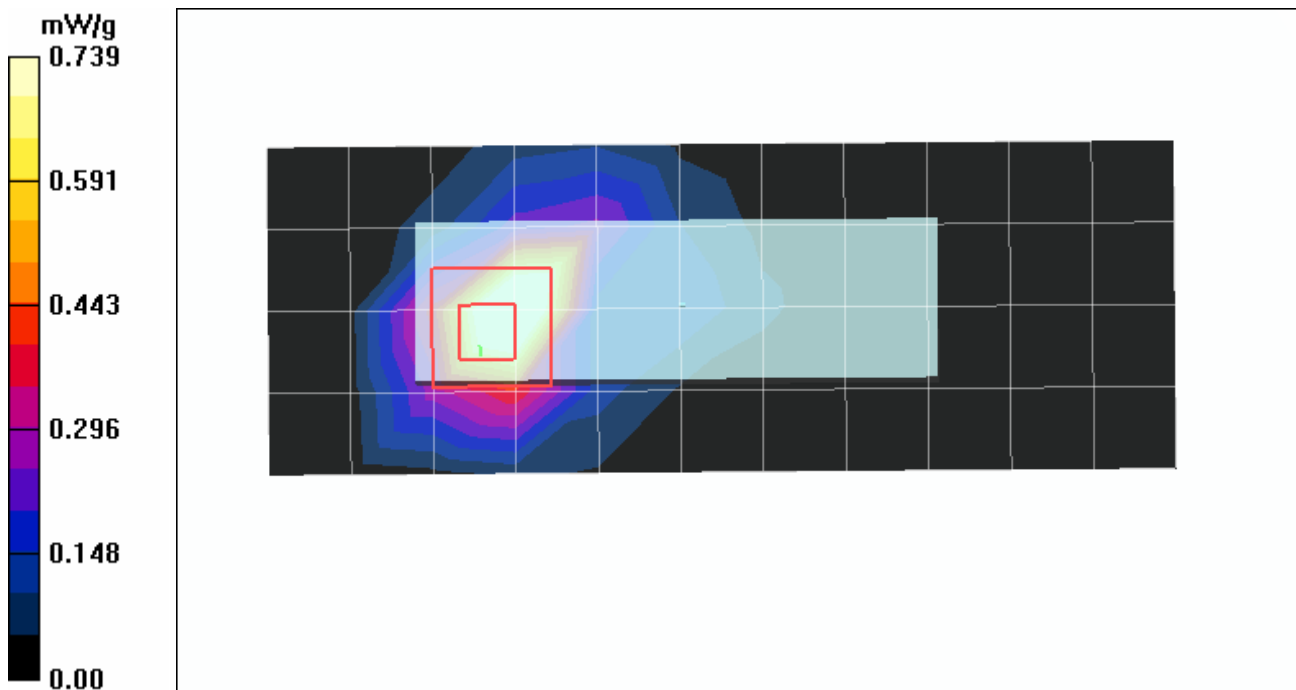
**Mid Channel 5240/Zoom Scan (7x7x7)/Cube 0:** Measurement grid: dx=4.3mm, dy=4.3mm, dz=3mm

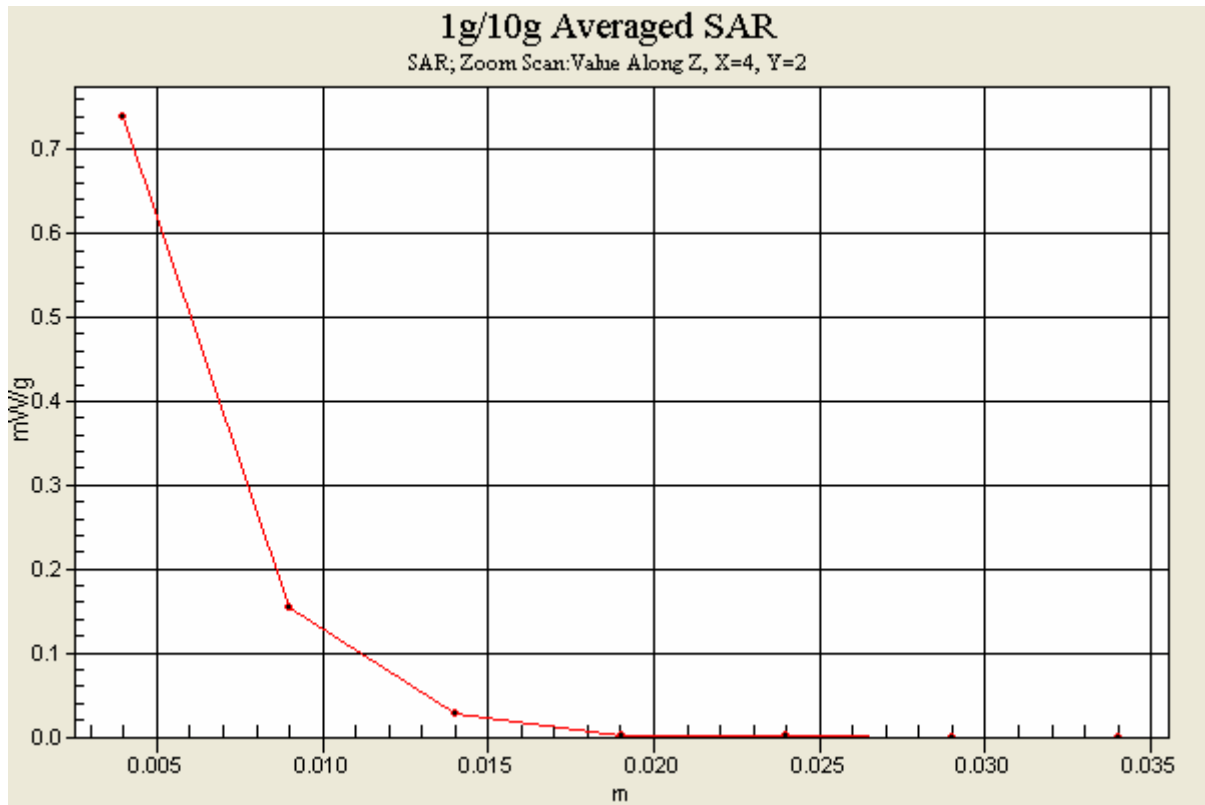
Reference Value = 3.96 V/m

Peak SAR (extrapolated) = 3.78 W/kg

**SAR(1 g) = 0.793 mW/g; SAR(10 g) = 0.244 mW/g**

Maximum value of SAR (measured) = 0.739 mW/g





Test Laboratory: Advance Data Technology

**Gray WUB-410Z Horizontal Mode 5 11a Normal**

**DUT: USB2.0 802.11a/b/g Wireless Network Adapter; Type: WUB-410Z; Test Frequency: 5260 MHz**

Communication System: 802.11a ; Frequency: 5260 MHz ; Duty Cycle: 1:1 ; Modulation type: OFDM

Medium: MSL5800 Medium parameters used:  $f = 5260$  MHz;  $\sigma = 5.4$  mho/m;  $\epsilon_r = 48$ ;  $\rho = 1000$

kg/m<sup>3</sup> ; Liquid level : 150mm

Phantom section: Flat Section ; Separation distance : 6 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: EX3DV3 - SN3506 ; ConvF(4.57, 4.57, 4.57) ; Calibrated: 2004/3/19

- Sensor-Surface: 2mm (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 5260/Area Scan (5x12x1):** Measurement grid: dx=10mm, dy=10mm

Maximum value of SAR (measured) = 0.876 mW/g

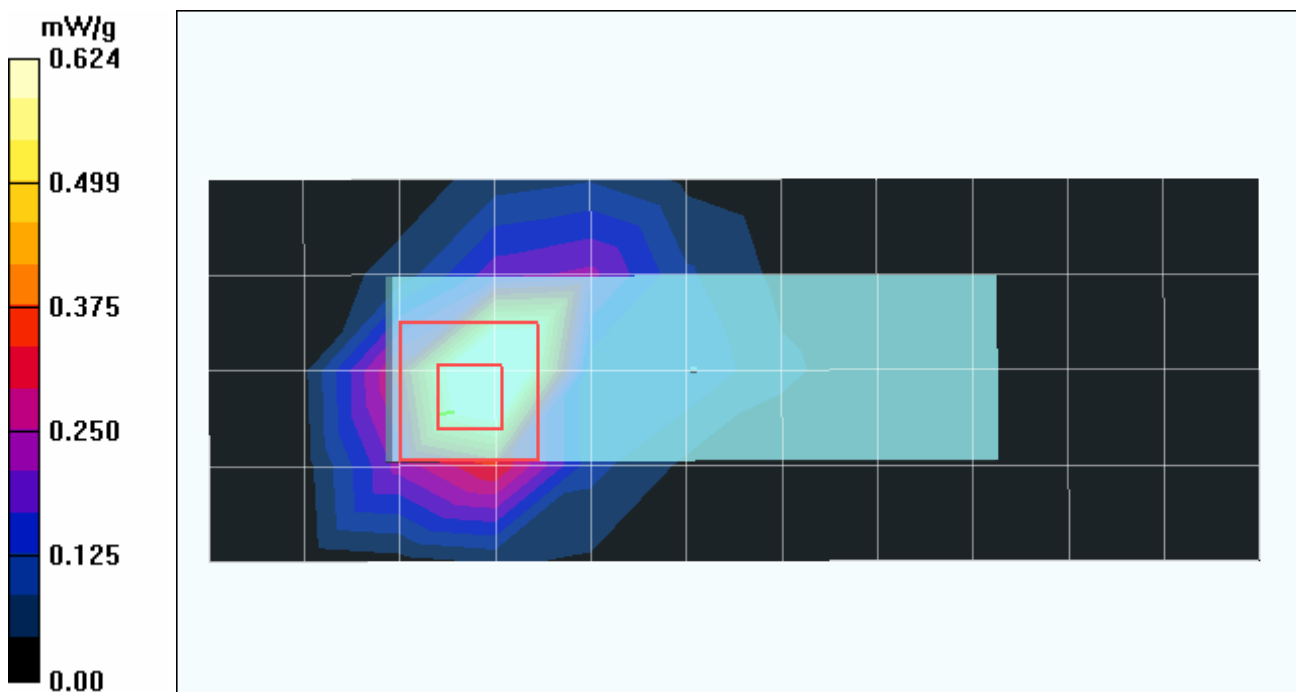
**Mid Channel 5260/Zoom Scan (7x7x7)/Cube 0:** Measurement grid: dx=4.3mm, dy=4.3mm, dz=3mm

Reference Value = 3.63 V/m

Peak SAR (extrapolated) = 3.20 W/kg

**SAR(1 g) = 0.673 mW/g; SAR(10 g) = 0.204 mW/g**

Maximum value of SAR (measured) = 0.624 mW/g



Test Laboratory: Advance Data Technology

**Gray WUB-410Z Horizontal Mode 5 11a Normal**

**DUT: USB2.0 802.11a/b/g Wireless Network Adapter ; Type: WUB-410Z ; Test Frequency: 5320 MHz**

Communication System: 802.11a ; Frequency: 5320 MHz ; Duty Cycle: 1:1 ; Modulation type: OFDM  
 Medium: MSL5800 Medium parameters used:  $f = 5320 \text{ MHz}$ ;  $\sigma = 5.49 \text{ mho/m}$ ;  $\epsilon_r = 47.9$ ;  $\rho = 1000 \text{ kg/m}^3$  ; Liquid level : 150mm

Phantom section: Flat Section ; Separation distance : 6 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: EX3DV3 - SN3506 ; ConvF(4.57, 4.57, 4.57) ; Calibrated: 2004/3/19
- Sensor-Surface: 2mm (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 5320/Area Scan (5x12x1):** Measurement grid: dx=10mm, dy=10mm

Maximum value of SAR (measured) = 0.785 mW/g

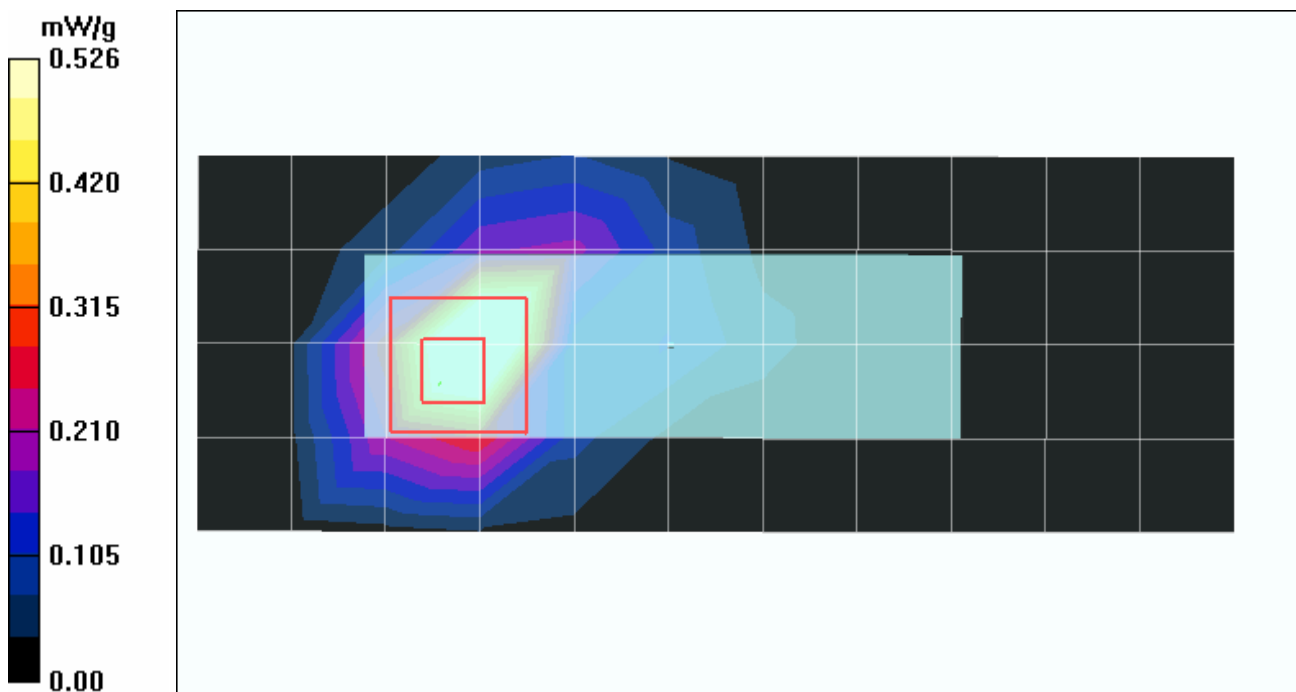
**Mid Channel 5320/Zoom Scan (7x7x7)/Cube 0:** Measurement grid: dx=4.3mm, dy=4.3mm, dz=3mm

Reference Value = 3.48 V/m

Peak SAR (extrapolated) = 2.76 W/kg

**SAR(1 g) = 0.564 mW/g; SAR(10 g) = 0.169 mW/g**

Maximum value of SAR (measured) = 0.526 mW/g



Test Laboratory: Advance Data Technology

**Gray WUB-410Z Horizontal Mode 5 11a Normal**

**DUT: USB2.0 802.11a/b/g Wireless Network Adapter ; Type: WUB-410Z ; Test Frequency: 5745 MHz**

Communication System: 802.11a ; Frequency: 5745 MHz ; Duty Cycle: 1:1 ; Modulation type: OFDM  
 Medium: MSL5800 Medium parameters used:  $f = 5745 \text{ MHz}$ ;  $\sigma = 6.15 \text{ mho/m}$ ;  $\epsilon_r = 46.9$ ;  $\rho = 1000 \text{ kg/m}^3$  ; Liquid level : 150mm

Phantom section: Flat Section ; Separation distance : 6 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: EX3DV3 - SN3506 ; ConvF(4.19, 4.19, 4.19) ; Calibrated: 2004/3/19
- Sensor-Surface: 2mm (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 5745/Area Scan (5x12x1):** Measurement grid: dx=10mm, dy=10mm

Maximum value of SAR (measured) = 0.459 mW/g

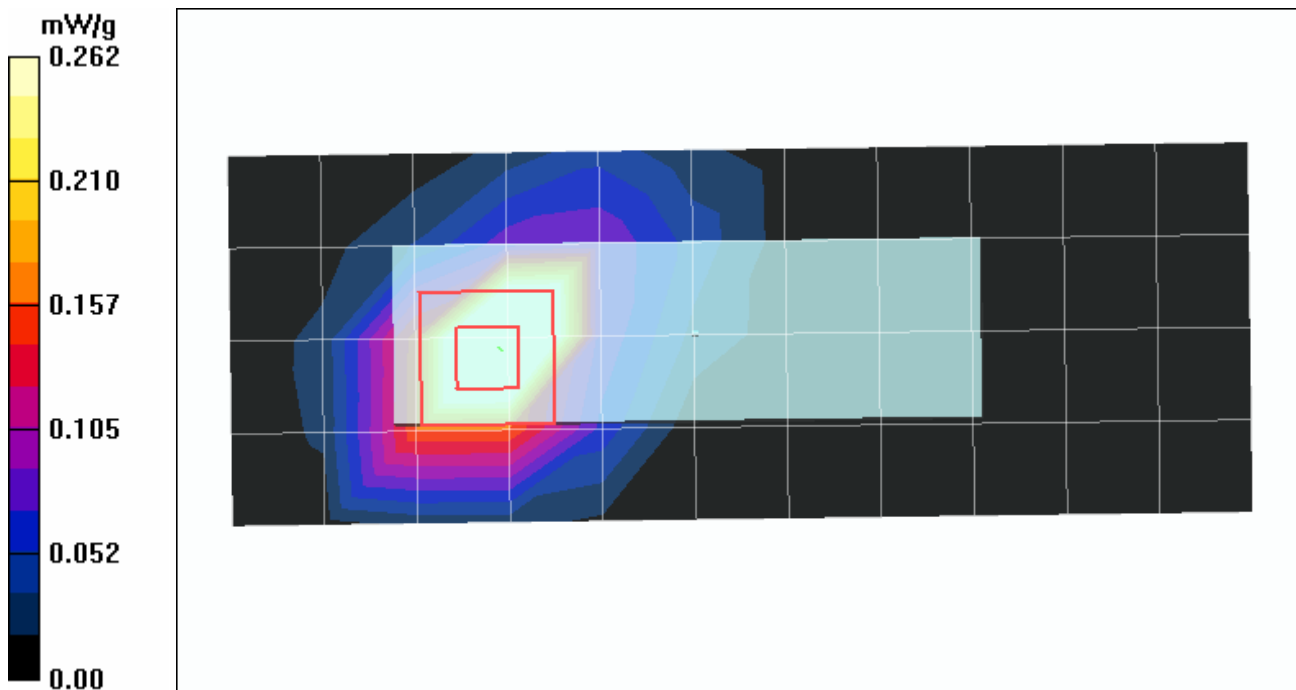
**Mid Channel 5745/Zoom Scan (7x7x7)/Cube 0:** Measurement grid: dx=4.3mm, dy=4.3mm, dz=3mm

Reference Value = 1.66 V/m

Peak SAR (extrapolated) = 0.703 W/kg

**SAR(1 g) = 0.230 mW/g; SAR(10 g) = 0.078 mW/g**

Maximum value of SAR (measured) = 0.262 mW/g





Test Laboratory: Advance Data Technology

**Gray WUB-410Z Horizontal Mode 5 11a Normal**

**DUT: USB2.0 802.11a/b/g Wireless Network Adapter; Type: WUB-410Z; Test Frequency: 5785 MHz**

Communication System: 802.11a ; Frequency: 5785 MHz ; Duty Cycle: 1:1 ; Modulation type: OFDM  
 Medium: MSL5800 Medium parameters used:  $f = 5785 \text{ MHz}$ ;  $\sigma = 6.22 \text{ mho/m}$ ;  $\epsilon_r = 46.9$ ;  $\rho = 1000 \text{ kg/m}^3$  ; Liquid level : 150mm

Phantom section: Flat Section ; Separation distance : 6 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: EX3DV3 - SN3506 ; ConvF(4.19, 4.19, 4.19) ; Calibrated: 2004/3/19
- Sensor-Surface: 2mm (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 5785/Area Scan (5x12x1):** Measurement grid: dx=10mm, dy=10mm

Maximum value of SAR (measured) = 0.522 mW/g

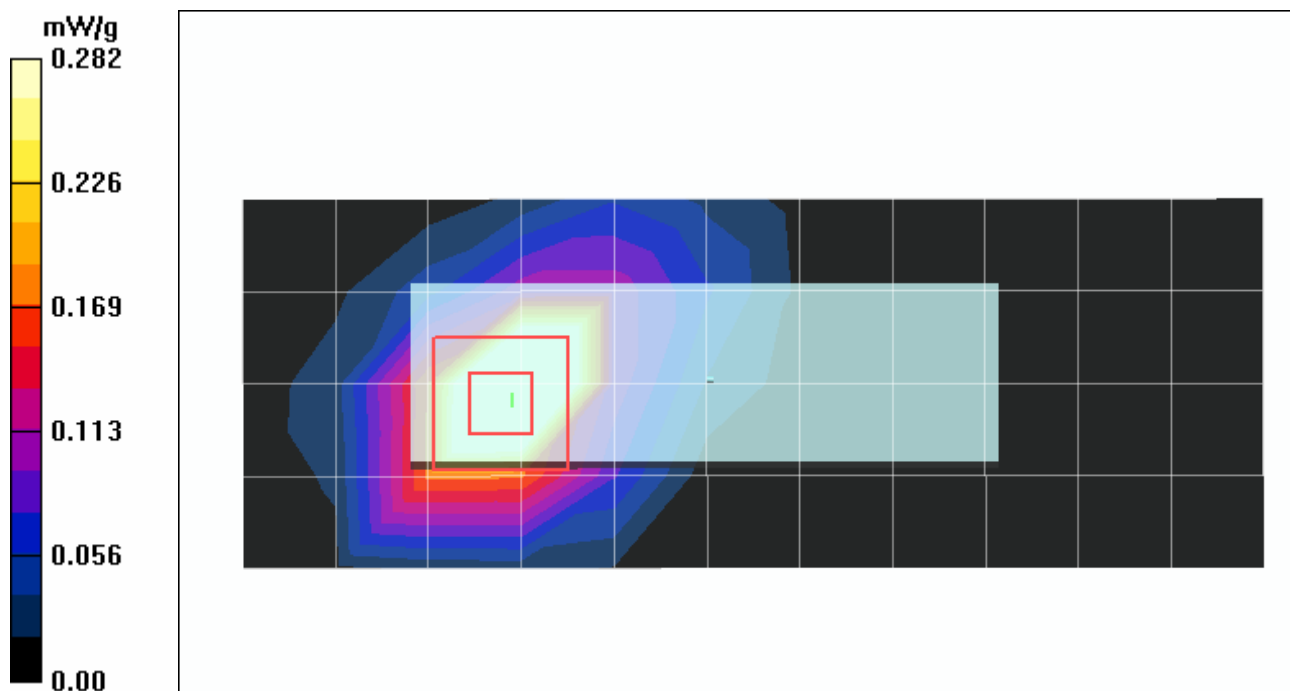
**Mid Channel 5785/Zoom Scan (7x7x7)/Cube 0:** Measurement grid: dx=4.3mm, dy=4.3mm, dz=3mm

Reference Value = 1.78 V/m

Peak SAR (extrapolated) = 0.759 W/kg

**SAR(1 g) = 0.245 mW/g; SAR(10 g) = 0.084 mW/g**

Maximum value of SAR (measured) = 0.282 mW/g



Test Laboratory: Advance Data Technology

**Gray WUB-410Z Horizontal Mode 5 11a Normal**

**DUT: USB2.0 802.11a/b/g Wireless Network Adapter; Type: WUB-410Z; Test Frequency: 5825 MHz**

Communication System: 802.11a ; Frequency: 5825 MHz ; Duty Cycle: 1:1 ; Modulation type: OFDM  
 Medium: MSL5800 Medium parameters used:  $f = 5825 \text{ MHz}$ ;  $\sigma = 6.27 \text{ mho/m}$ ;  $\epsilon_r = 46.8$ ;  $\rho = 1000 \text{ kg/m}^3$  ; Liquid level : 150mm

Phantom section: Flat Section ; Separation distance : 6 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: EX3DV3 - SN3506 ; ConvF(4.19, 4.19, 4.19) ; Calibrated: 2004/3/19
- Sensor-Surface: 2mm (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 5825/Area Scan (5x12x1):** Measurement grid: dx=10mm, dy=10mm

Maximum value of SAR (measured) = 0.481 mW/g

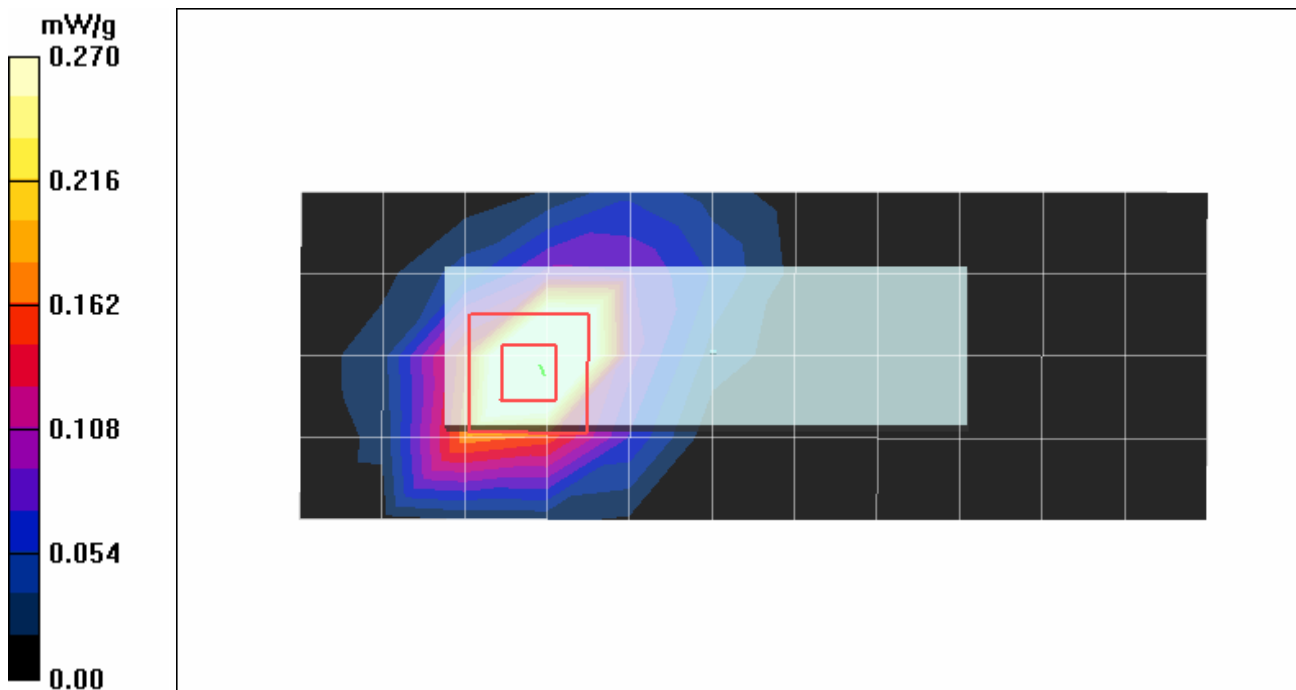
**High Channel 5825/Zoom Scan (7x7x7)/Cube 0:** Measurement grid: dx=4.3mm, dy=4.3mm, dz=3mm

Reference Value = 1.54 V/m

Peak SAR (extrapolated) = 0.731 W/kg

**SAR(1 g) = 0.235 mW/g; SAR(10 g) = 0.081 mW/g**

Maximum value of SAR (measured) = 0.270 mW/g



Test Laboratory: Advance Data Technology

**Gray WUB-410Z Vertical Mode 6 11a Normal**

**DUT: USB2.0 802.11a/b/g Wireless Network Adapter ; Type: WUB-410Z ; Test Frequency: 5180 MHz**

Communication System: 802.11a ; Frequency: 5180 MHz ; Duty Cycle: 1:1 ; Modulation type: OFDM  
 Medium: MSL5800 Medium parameters used:  $f = 5180 \text{ MHz}$ ;  $\sigma = 5.28 \text{ mho/m}$ ;  $\epsilon_r = 48$ ;  $\rho = 1000 \text{ kg/m}^3$  ; Liquid level : 150mm

Phantom section: Flat Section ; Separation distance : 9 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: EX3DV3 - SN3506 ; ConvF(4.57, 4.57, 4.57) ; Calibrated: 2004/3/19
- Sensor-Surface: 2mm (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 5180/Area Scan (5x12x1):** Measurement grid:  $dx=10\text{mm}$ ,  $dy=10\text{mm}$

Maximum value of SAR (measured) = 0.359 mW/g

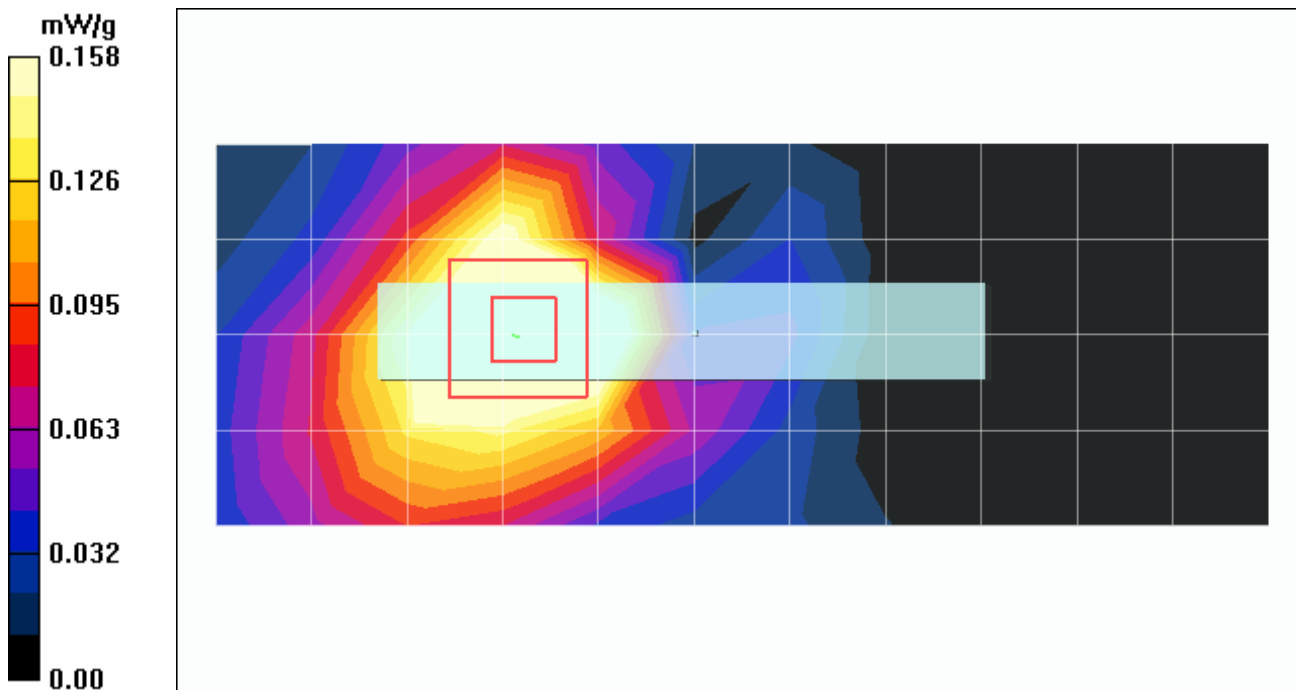
**Low Channel 5180/Zoom Scan (7x7x7)/Cube 0:** Measurement grid:  $dx=4.3\text{mm}$ ,  $dy=4.3\text{mm}$ ,  $dz=3\text{mm}$

Reference Value = 2.43 V/m

Peak SAR (extrapolated) = 0.398 W/kg

**SAR(1 g) = 0.138 mW/g; SAR(10 g) = 0.051 mW/g**

Maximum value of SAR (measured) = 0.158 mW/g



Test Laboratory: Advance Data Technology

**Gray WUB-410Z Vertical Mode 6 11a Normal**

**DUT: USB2.0 802.11a/b/g Wireless Network Adapter; Type: WUB-410Z; Test Frequency: 5240 MHz**

Communication System: 802.11a ; Frequency: 5240 MHz ; Duty Cycle: 1:1 ; Modulation type: OFDM  
 Medium: MSL5800 Medium parameters used:  $f = 5240$  MHz;  $\sigma = 5.37$  mho/m;  $\epsilon_r = 48$ ;  $\rho = 1000$  kg/m<sup>3</sup> ; Liquid level : 150mm

Phantom section: Flat Section ; Separation distance : 9 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: EX3DV3 - SN3506 ; ConvF(4.57, 4.57, 4.57) ; Calibrated: 2004/3/19
- Sensor-Surface: 2mm (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 5240/Area Scan (5x12x1):** Measurement grid: dx=10mm, dy=10mm

Maximum value of SAR (measured) = 0.281 mW/g

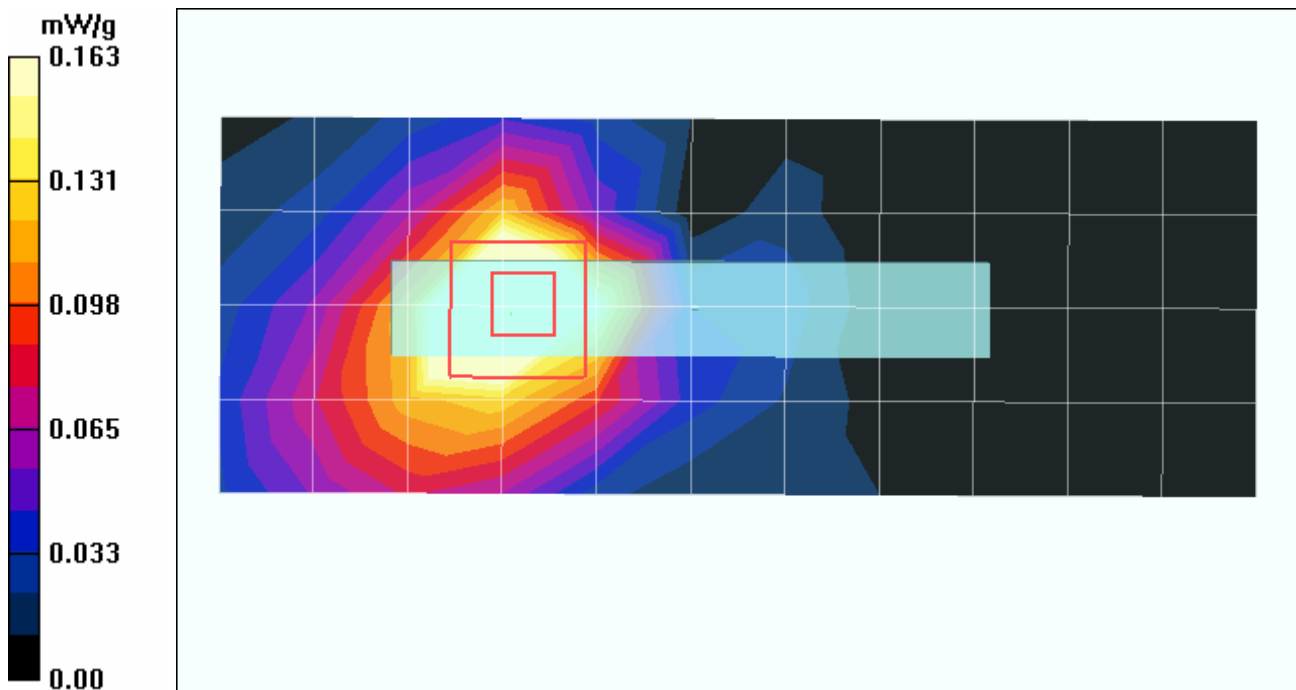
**Mid Channel 5240/Zoom Scan (7x7x7)/Cube 0:** Measurement grid: dx=4.3mm, dy=4.3mm, dz=3mm

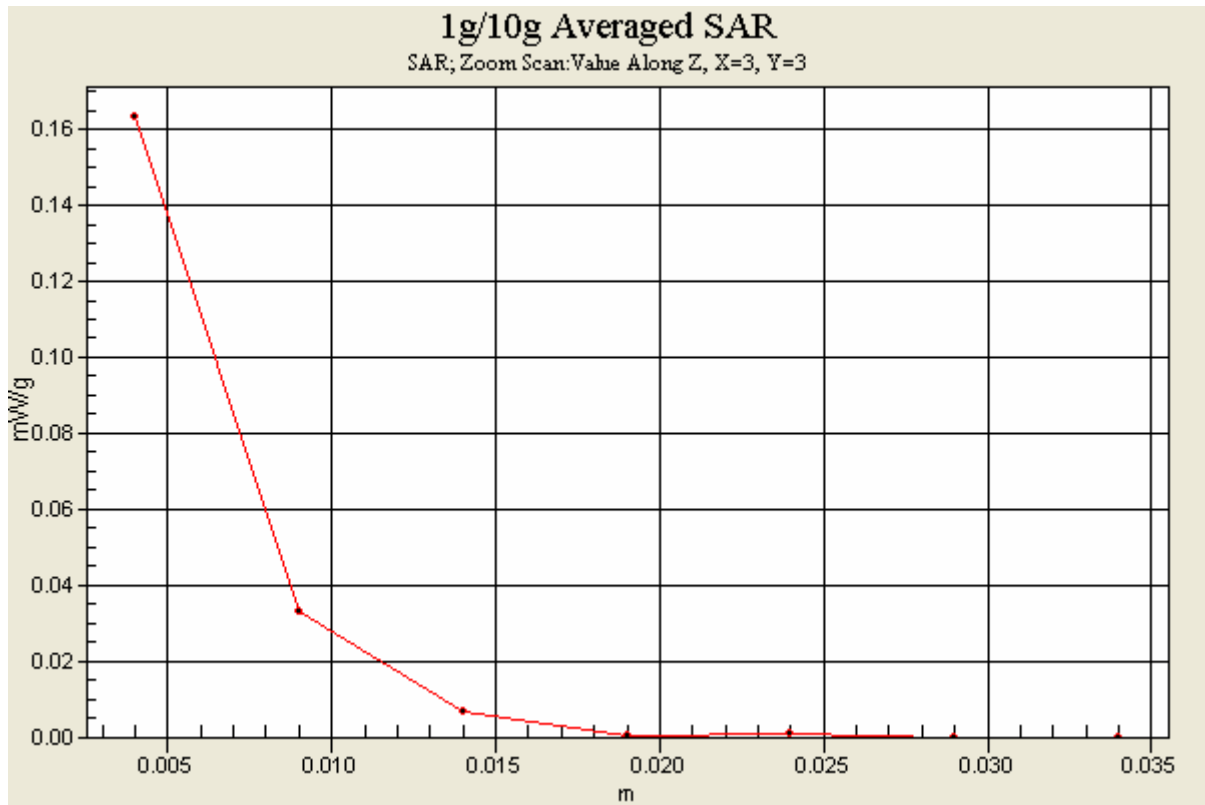
Reference Value = 1.66 V/m

Peak SAR (extrapolated) = 0.434 W/kg

**SAR(1 g) = 0.147 mW/g; SAR(10 g) = 0.054 mW/g**

Maximum value of SAR (measured) = 0.163 mW/g





Test Laboratory: Advance Data Technology

**Gray WUB-410Z Vertical Mode 6 11a Normal**

**DUT: USB2.0 802.11a/b/g Wireless Network Adapter; Type: WUB-410Z; Test Frequency: 5260 MHz**

Communication System: 802.11a ; Frequency: 5260 MHz ; Duty Cycle: 1:1 ; Modulation type: OFDM  
 Medium: MSL5800 Medium parameters used:  $f = 5260$  MHz;  $\sigma = 5.4$  mho/m;  $\epsilon_r = 48$ ;  $\rho = 1000$  kg/m<sup>3</sup> ; Liquid level : 150mm

Phantom section: Flat Section ; Separation distance : 9 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: EX3DV3 - SN3506 ; ConvF(4.57, 4.57, 4.57) ; Calibrated: 2004/3/19
- Sensor-Surface: 2mm (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 5260/Area Scan (5x12x1):** Measurement grid: dx=10mm, dy=10mm

Maximum value of SAR (measured) = 0.236 mW/g

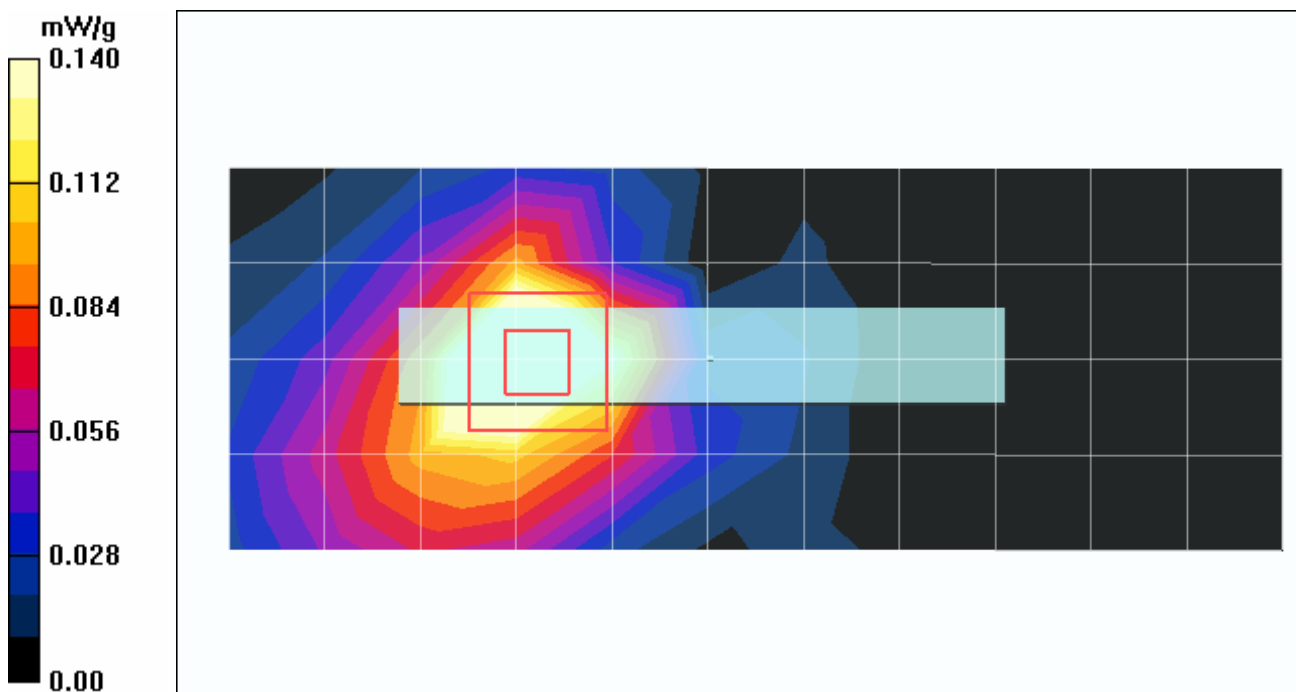
**Mid Channel 5260/Zoom Scan (7x7x7)/Cube 0:** Measurement grid: dx=4.3mm, dy=4.3mm, dz=3mm

Reference Value = 1.59 V/m

Peak SAR (extrapolated) = 0.360 W/kg

**SAR(1 g) = 0.123 mW/g; SAR(10 g) = 0.044 mW/g**

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



Test Laboratory: Advance Data Technology

**Gray WUB-410Z Vertical Mode 6 11a Normal**

**DUT: USB2.0 802.11a/b/g Wireless Network Adapter ; Type: WUB-410Z ; Test Frequency: 5320 MHz**

Communication System: 802.11a ; Frequency: 5320 MHz ; Duty Cycle: 1:1 ; Modulation type: OFDM  
 Medium: MSL5800 Medium parameters used:  $f = 5320$  MHz;  $\sigma = 5.49$  mho/m;  $\epsilon_r = 47.9$ ;  $\rho = 1000$  kg/m<sup>3</sup> ; Liquid level : 150mm

Phantom section: Flat Section ; Separation distance : 9 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: EX3DV3 - SN3506 ; ConvF(4.57, 4.57, 4.57) ; Calibrated: 2004/3/19
- Sensor-Surface: 2mm (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 5320/Area Scan (5x12x1):** Measurement grid: dx=10mm, dy=10mm

Maximum value of SAR (measured) = 0.203 mW/g

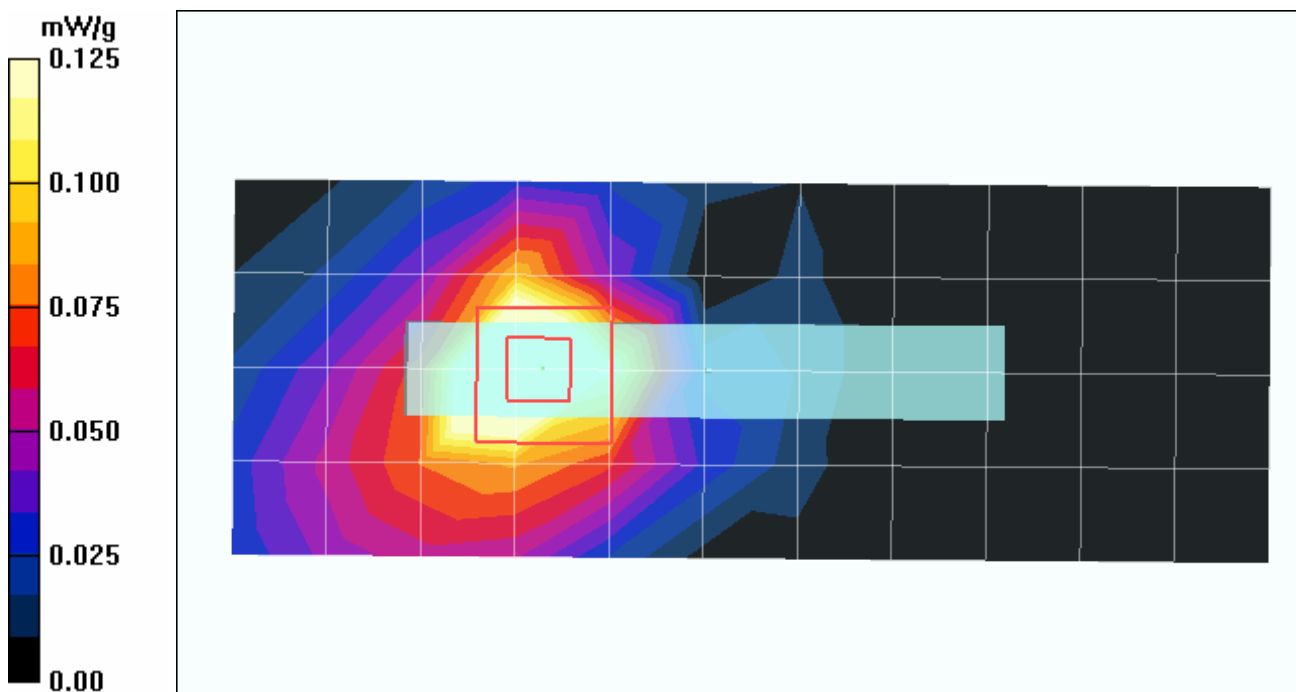
**Mid Channel 5320/Zoom Scan (7x7x7)/Cube 0:** Measurement grid: dx=4.3mm, dy=4.3mm, dz=3mm

Reference Value = 1.53 V/m

Peak SAR (extrapolated) = 0.288 W/kg

**SAR(1 g) = 0.104 mW/g; SAR(10 g) = 0.038 mW/g**

Maximum value of SAR (measured) = 0.125 mW/g



Test Laboratory: Advance Data Technology

**Gray WUB-410Z Vertical Mode 6 11a Normal**

**DUT: USB2.0 802.11a/b/g Wireless Network Adapter; Type: WUB-410Z; Test Frequency: 5745 MHz**

Communication System: 802.11a ; Frequency: 5745 MHz ; Duty Cycle: 1:1 ; Modulation type: OFDM  
 Medium: MSL5800 Medium parameters used:  $f = 5745 \text{ MHz}$ ;  $\sigma = 6.15 \text{ mho/m}$ ;  $\epsilon_r = 46.9$ ;  $\rho = 1000 \text{ kg/m}^3$  ; Liquid level : 150mm

Phantom section: Flat Section ; Separation distance : 9 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: EX3DV3 - SN3506 ; ConvF(4.19, 4.19, 4.19) ; Calibrated: 2004/3/19
- Sensor-Surface: 2mm (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 5745/Area Scan (5x12x1):** Measurement grid: dx=10mm, dy=10mm

Maximum value of SAR (measured) = 0.076 mW/g

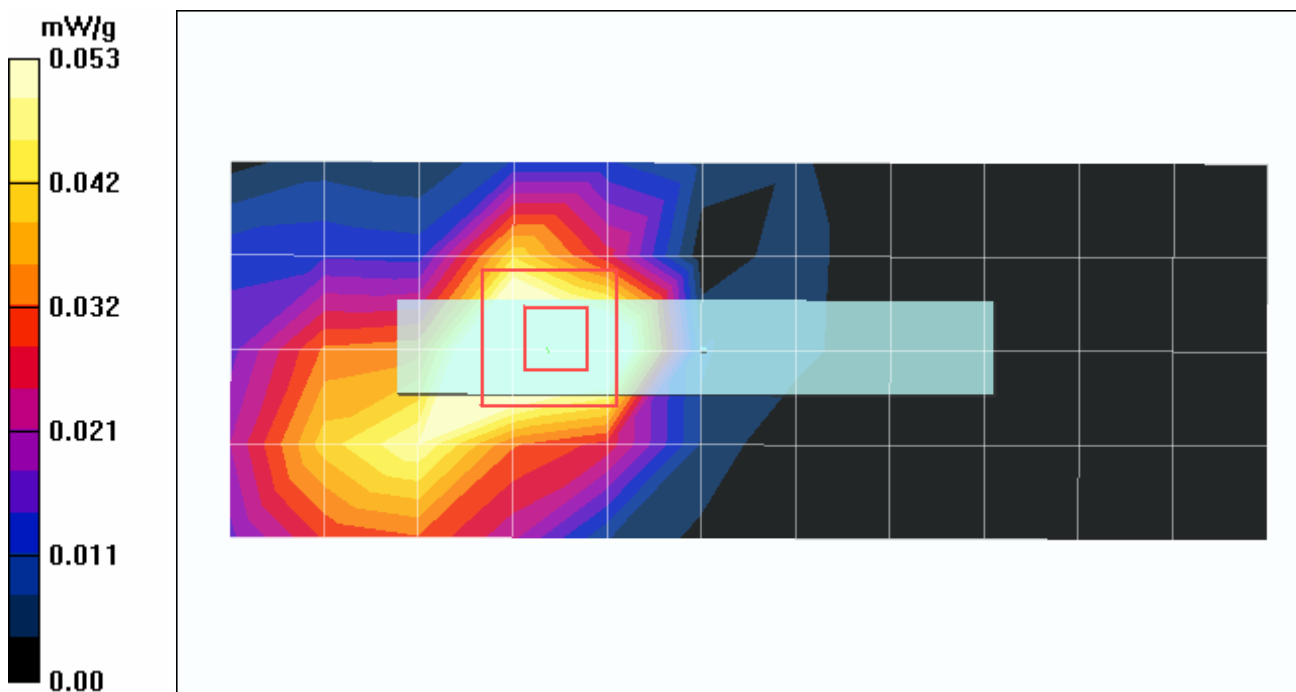
**Mid Channel 5745/Zoom Scan (7x7x7)/Cube 0:** Measurement grid: dx=4.3mm, dy=4.3mm, dz=3mm

Reference Value = 0.485 V/m

Peak SAR (extrapolated) = 0.244 W/kg

**SAR(1 g) = 0.057 mW/g; SAR(10 g) = 0.020 mW/g**

Maximum value of SAR (measured) = 0.053 mW/g





Test Laboratory: Advance Data Technology

**Gray WUB-410Z Vertical Mode 6 11a Normal**

**DUT: USB2.0 802.11a/b/g Wireless Network Adapter; Type: WUB-410Z ; Test Frequency: 5785 MHz**

Communication System: 802.11a ; Frequency: 5785 MHz ; Duty Cycle: 1:1 ; Modulation type: OFDM  
 Medium: MSL5800 Medium parameters used:  $f = 5785 \text{ MHz}$ ;  $\sigma = 6.22 \text{ mho/m}$ ;  $\epsilon_r = 46.9$ ;  $\rho = 1000 \text{ kg/m}^3$  ; Liquid level : 150mm

Phantom section: Flat Section ; Separation distance : 9 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: EX3DV3 - SN3506 ; ConvF(4.19, 4.19, 4.19) ; Calibrated: 2004/3/19
- Sensor-Surface: 2mm (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 5785/Area Scan (5x12x1):** Measurement grid: dx=10mm, dy=10mm

Maximum value of SAR (measured) = 0.078 mW/g

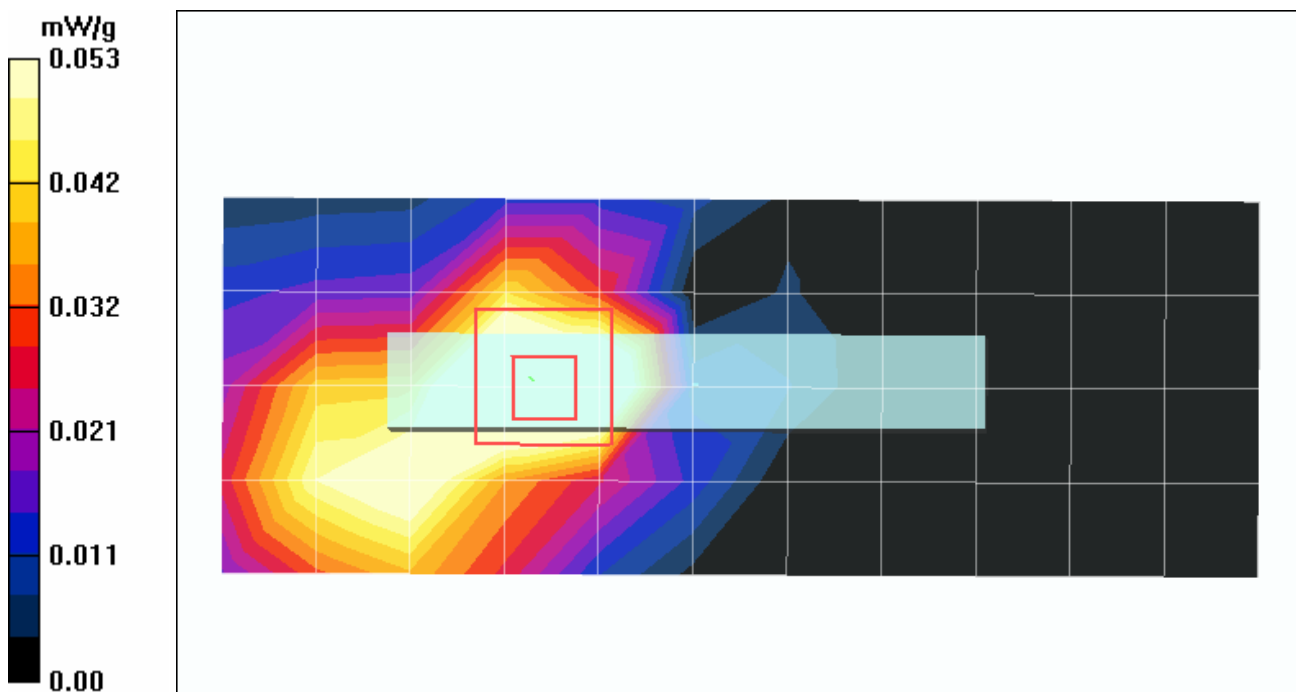
**Mid Channel 5785/Zoom Scan (7x7x7)/Cube 0:** Measurement grid: dx=4.3mm, dy=4.3mm, dz=3mm

Reference Value = 0.780 V/m

Peak SAR (extrapolated) = 0.265 W/kg

**SAR(1 g) = 0.057 mW/g; SAR(10 g) = 0.020 mW/g**

Maximum value of SAR (measured) = 0.053 mW/g



Test Laboratory: Advance Data Technology

**Gray WUB-410Z Vertical Mode 6 11a Normal**

**DUT: USB2.0 802.11a/b/g Wireless Network Adapter; Type: WUB-410Z; Test Frequency: 5825 MHz**

Communication System: 802.11a ; Frequency: 5825 MHz ; Duty Cycle: 1:1 ; Modulation type: OFDM  
 Medium: MSL5800 Medium parameters used:  $f = 5825 \text{ MHz}$ ;  $\sigma = 6.27 \text{ mho/m}$ ;  $\epsilon_r = 46.8$ ;  $\rho = 1000 \text{ kg/m}^3$  ; Liquid level : 150mm

Phantom section: Flat Section ; Separation distance : 9 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: EX3DV3 - SN3506 ; ConvF(4.19, 4.19, 4.19) ; Calibrated: 2004/3/19
- Sensor-Surface: 2mm (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 5825/Area Scan (5x12x1):** Measurement grid: dx=10mm, dy=10mm

Maximum value of SAR (measured) = 0.074 mW/g

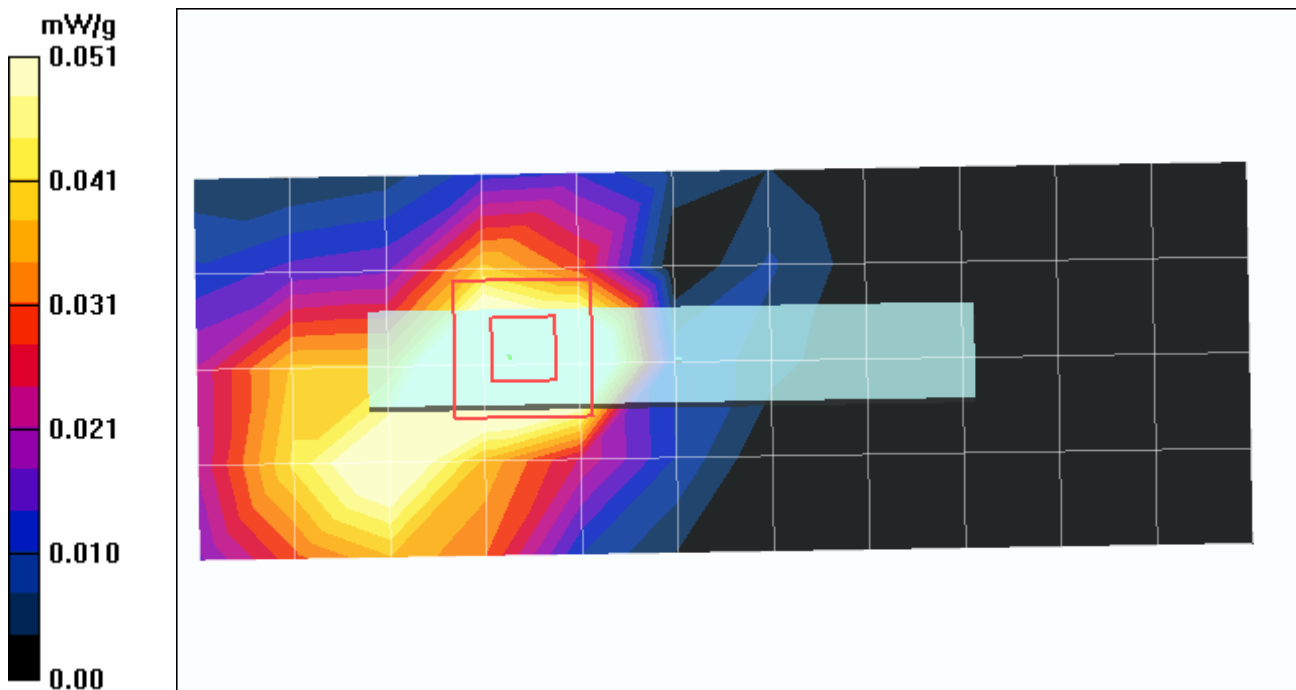
**High Channel 5825/Zoom Scan (7x7x7)/Cube 0:** Measurement grid: dx=4.3mm, dy=4.3mm, dz=3mm

Reference Value = 0.849 V/m

Peak SAR (extrapolated) = 0.204 W/kg

**SAR(1 g) = 0.050 mW/g; SAR(10 g) = 0.018 mW/g**

Maximum value of SAR (measured) = 0.051 mW/g



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;  $\sigma = 2.04$  mho/m;  $\epsilon_r = 53.9$ ;  $\rho = 1000$  kg/m<sup>3</sup> ; 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:

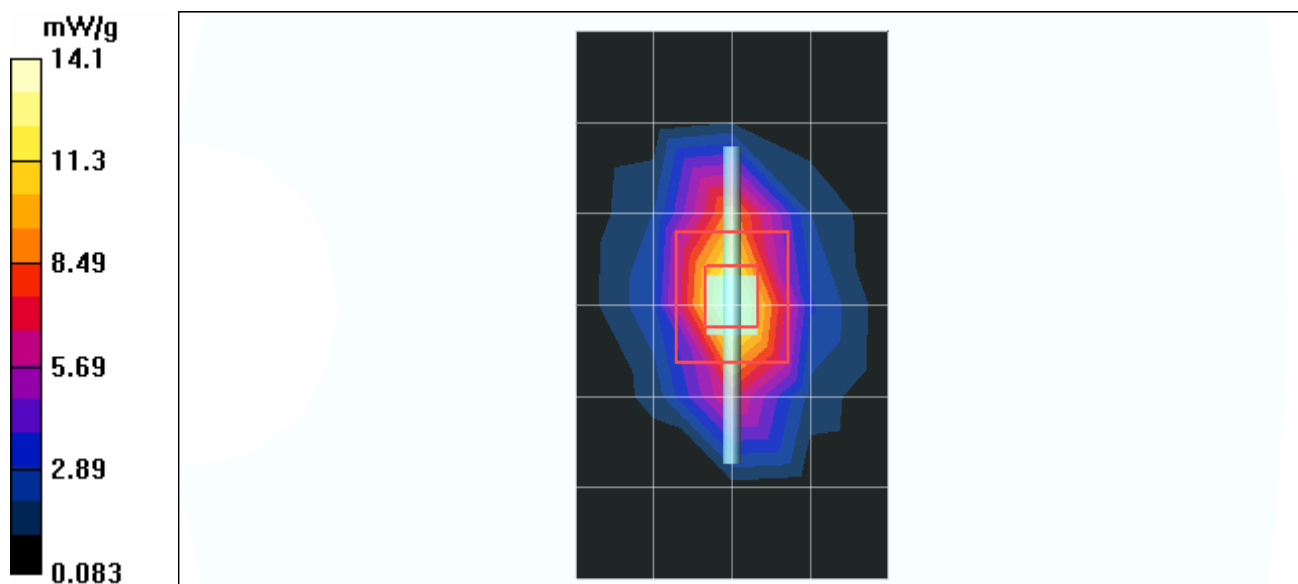
- Probe: ET3DV6 - SN1790 ; ConvF(4.35, 4.35, 4.35) ; Calibrated: 2004/12/20
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn579; Calibrated: 2005/3/23
- Phantom: SAM 12; Type: SAM V4.0; Serial: TP 1202
- Measurement SW: DASY4, V4.5 Build 19; Postprocessing SW: SEMCAD, V1.8 Build 146

**d=10mm, Pin=250mW/Area Scan (5x7x1):** Measurement grid: dx=15mm, dy=15mm  
 Maximum value of SAR (measured) = 14.1 mW/g

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

Reference Value = 89.8 V/m; Power Drift = -0.110 dB  
 Peak SAR (extrapolated) = 27.3 W/kg

**SAR(1 g) = 12.5 mW/g; SAR(10 g) = 5.86 mW/g**  
 Maximum value of SAR (measured) = 14.1 mW/g



Test Laboratory: Advance Data Technology

## System Validation Check-MSL 5GHz

**DUT: Dipole 5 GHz ; Type: D5GHzV2 ; Serial: 1019 ; Test Frequency: 5200 MHz**

Communication System: CW ; Frequency: 5200 MHz; Duty Cycle: 1:1; Modulation type: CW  
 Medium: MSL5800; Medium parameters used:  $f = 5200$  MHz;  $\sigma = 5.31$  mho/m;  $\epsilon_r = 48$ ;  $\rho = 1000$  kg/m<sup>3</sup> ;  
 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

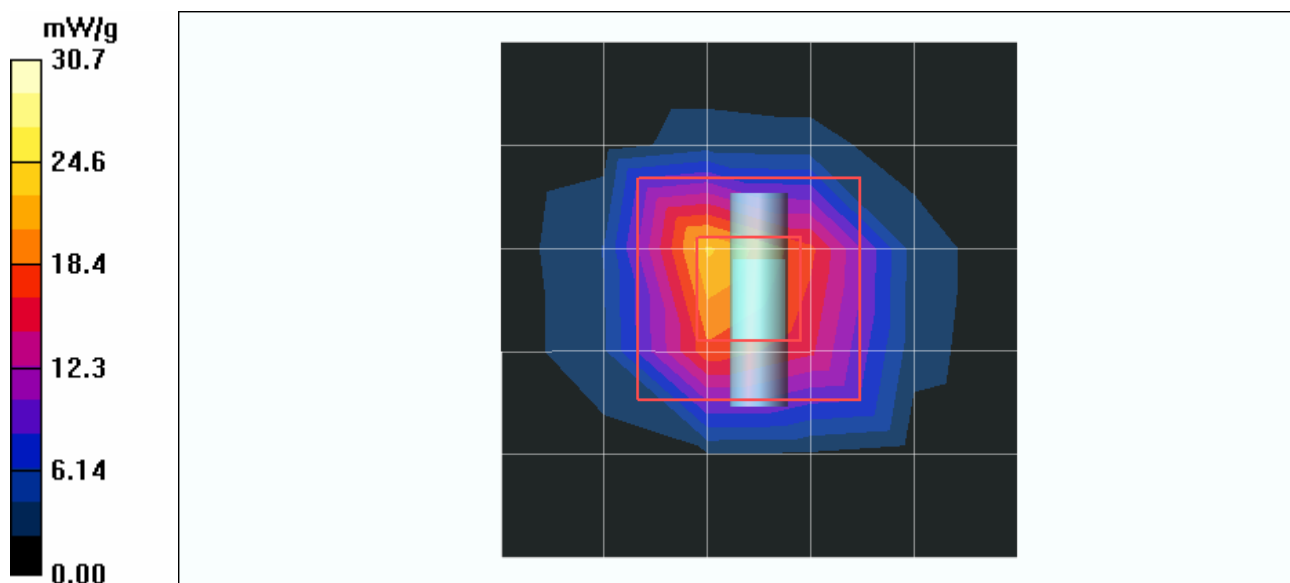
DASY4 Configuration:

- Probe: EX3DV3 - SN3506 ; ConvF(4.57, 4.57, 4.57) ; Calibrated: 2004/3/19
- Sensor-Surface: 2mm (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

**f=5200, d=10mm, Pin=250mW/Area Scan (6x6x1):** Measurement grid: dx=10mm, dy=10mm  
 Maximum value of SAR (measured) = 23.0 mW/g

**f=5200, d=10mm, Pin=250mW/Zoom Scan (8x8x8)/Cube 0:** Measurement grid: dx=4.3mm, dy=4.3mm, dz=3mm  
 Reference Value = 83.8 V/m; Power Drift = -0.056 dB  
 Peak SAR (extrapolated) = 66.4 W/kg

**SAR(1 g) = 18.4 mW/g; SAR(10 g) = 5.13 mW/g**  
 Maximum value of SAR (measured) = 30.7 mW/g



Test Laboratory: Advance Data Technology

## System Validation Check-MSL 5GHz

**DUT: Dipole 5 GHz ; Type: D5GHzV2 ; Serial: 1019 ; Test Frequency: 5800 MHz**

Communication System: CW ; Frequency: 5800 MHz; Duty Cycle: 1:1; Modulation type: CW  
 Medium: MSL5800; Medium parameters used:  $f = 5800$  MHz;  $\sigma = 6.24$  mho/m;  $\epsilon_r = 46.9$ ;  $\rho = 1000$  kg/m<sup>3</sup> ; 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: EX3DV3 - SN3506 ; ConvF(4.19, 4.19, 4.19) ; Calibrated: 2004/3/19
- Sensor-Surface: 2mm (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

**f=5800, d=10mm, Pin=250mW/Area Scan (7x7x1):** Measurement grid: dx=10mm, dy=10mm  
 Maximum value of SAR (measured) = 31.0 mW/g

**f=5800, d=10mm, Pin=250mW/Zoom Scan (8x8x8)/Cube 0:** Measurement grid: dx=4.3mm, dy=4.3mm, dz=3mm  
 Reference Value = 75.1 V/m; Power Drift = 0.025 dB  
 Peak SAR (extrapolated) = 73.2 W/kg

**SAR(1 g) = 17.3 mW/g; SAR(10 g) = 4.75 mW/g**  
 Maximum value of SAR (measured) = 29.5 mW/g

