

## APPENDIX A: TEST DATA

### Liquid Level Photo

MSL 2450MHz D=152mm



Date/Time: 2006/11/9 11:13:29

Test Laboratory: Advance Data Technology

## N800C-11b-CH1-Mode 1

**DUT: D-Link DWA-642 RangeBooster N™ Notebook Adapter ; Type: DWA-642 ; Test Frequency: 2412 MHz**

Communication System: 802.11b ; Frequency: 2412 MHz ; Duty Cycle: 1:1 ; Modulation type: DBPSK  
 Medium: MSL2450 Medium parameters used:  $f = 2412 \text{ MHz}$ ;  $\sigma = 1.94 \text{ mho/m}$ ;  $\epsilon_r = 53.8$ ;  $\rho = 1000 \text{ kg/m}^3$  ; Liquid level : 152 mm

Phantom section: Flat Section ; Separation distance : 10 mm (The Bottom side of the EUT to the Phantom)  
 Antenna type : PIFA Antenna ; Air temp. : 22.4 degrees ; Liquid temp. : 21.2 degrees

DASY4 Configuration:

- Probe: EX3DV4 - SN3578; ConvF(6.47, 6.47, 6.47) ; Calibrated: 2006/3/20
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn579 ; Calibrated: 2006/3/15
- Phantom: SAM 12 ; Type: SAM V4.0 ; Serial: TP 1202
- Measurement SW: DASY4, V4.7 Build 44 ; Postprocessing SW: SEMCAD, V1.8 Build 171

**Low Channel 1/Area Scan (7x10x1):** Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (measured) = 0.234 mW/g

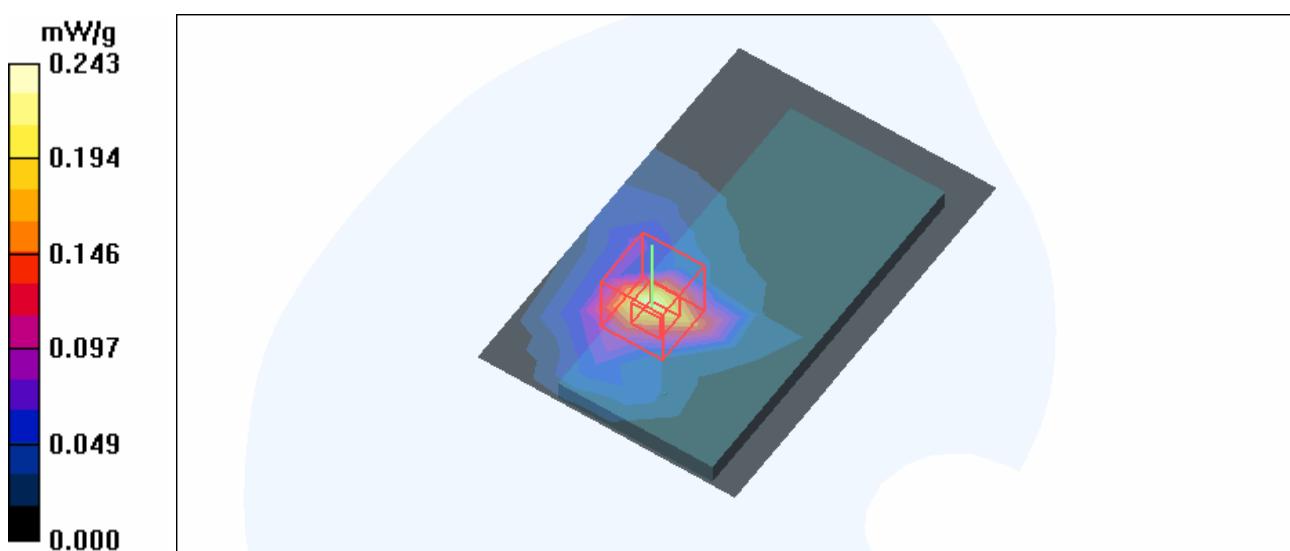
**Low Channel 1/Zoom Scan (7x7x7) (7x7x7)/Cube 0:** Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 4.50 V/m

Peak SAR (extrapolated) = 0.530 W/kg

**SAR(1 g) = 0.219 mW/g; SAR(10 g) = 0.093 mW/g**

Maximum value of SAR (measured) = 0.243 mW/g



Date/Time: 2006/11/9 11:34:28

Test Laboratory: Advance Data Technology

## N800C-11b-CH6-Mode 1

**DUT: D-Link DWA-642 RangeBooster N™ Notebook Adapter ; Type: DWA-642 ; Test Frequency: 2437 MHz**

Communication System: 802.11b ; Frequency: 2437 MHz ; Duty Cycle: 1:1 ; Modulation type: DBPSK  
 Medium: MSL2450 Medium parameters used:  $f = 2437 \text{ MHz}$ ;  $\sigma = 1.97 \text{ mho/m}$ ;  $\epsilon_r = 53.7$ ;  $\rho = 1000 \text{ kg/m}^3$  ; Liquid level : 152 mm

Phantom section: Flat Section ; Separation distance : 10 mm (The Bottom side of the EUT to the Phantom)  
 Antenna type : PIFA Antenna ; Air temp. : 22.4 degrees ; Liquid temp. : 21.2 degrees

DASY4 Configuration:

- Probe: EX3DV4 - SN3578; ConvF(6.47, 6.47, 6.47) ; Calibrated: 2006/3/20
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn579 ; Calibrated: 2006/3/15
- Phantom: SAM 12 ; Type: SAM V4.0 ; Serial: TP 1202
- Measurement SW: DASY4, V4.7 Build 44 ; Postprocessing SW: SEMCAD, V1.8 Build 171

**Mid Channel 6/Area Scan (7x10x1):** Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (measured) = 0.399 mW/g

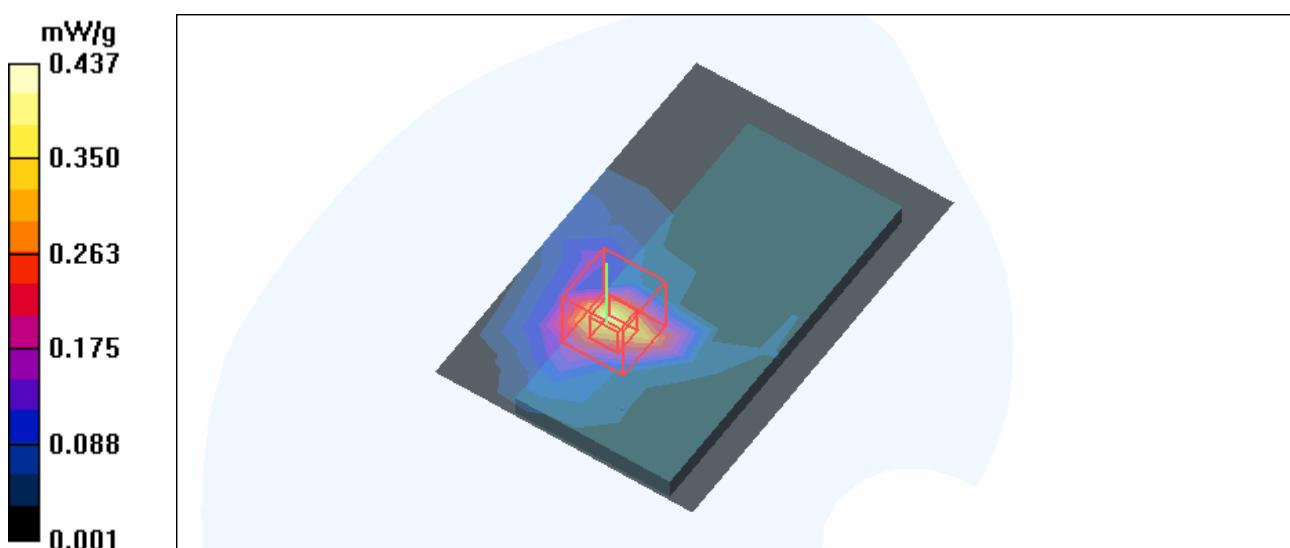
**Mid Channel 6/Zoom Scan (7x7x7) (7x7x7)/Cube 0:** Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 4.89 V/m

Peak SAR (extrapolated) = 0.936 W/kg

**SAR(1 g) = 0.397 mW/g; SAR(10 g) = 0.171 mW/g**

Maximum value of SAR (measured) = 0.437 mW/g



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Test Laboratory: Advance Data Technology

## N800C-11b-CH11-Mode 1

**DUT: D-Link DWA-642 RangeBooster N™ Notebook Adapter ; Type: DWA-642 ; Test Frequency: 2462 MHz**

Communication System: 802.11b ; Frequency: 2462 MHz ; Duty Cycle: 1:1 ; Modulation type: DBPSK  
 Medium: MSL2450 Medium parameters used:  $f = 2462 \text{ MHz}$ ;  $\sigma = 2.01 \text{ mho/m}$ ;  $\epsilon_r = 53.5$ ;  $\rho = 1000 \text{ kg/m}^3$  ; Liquid level : 152 mm

Phantom section: Flat Section ; Separation distance : 10 mm (The Bottom side of the EUT to the Phantom)  
 Antenna type : PIFA Antenna ; Air temp. : 22.4 degrees ; Liquid temp. : 21.2 degrees

DASY4 Configuration:

- Probe: EX3DV4 - SN3578; ConvF(6.47, 6.47, 6.47) ; Calibrated: 2006/3/20
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn579 ; Calibrated: 2006/3/15
- Phantom: SAM 12 ; Type: SAM V4.0 ; Serial: TP 1202
- Measurement SW: DASY4, V4.7 Build 44 ; Postprocessing SW: SEMCAD, V1.8 Build 171

**High Channel 11/Area Scan (7x10x1):** Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (measured) = 0.534 mW/g

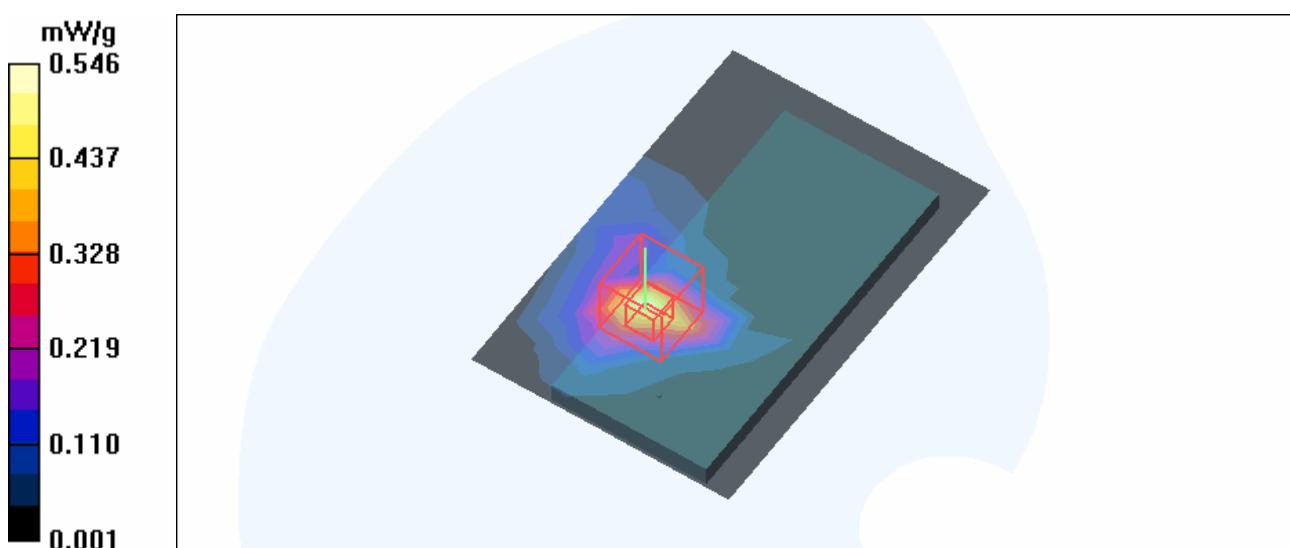
**High Channel 11/Zoom Scan (7x7x7) (7x7x7)/Cube 0:** Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 5.42 V/m

Peak SAR (extrapolated) = 1.18 W/kg

**SAR(1 g) = 0.502 mW/g; SAR(10 g) = 0.220 mW/g**

Maximum value of SAR (measured) = 0.546 mW/g



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Test Laboratory: Advance Data Technology

## N800C-11g-CH1-Mode 2

**DUT: D-Link DWA-642 RangeBooster N™ Notebook Adapter ; Type: DWA-642 ; Test Frequency: 2412 MHz**

Communication System: 802.11g ; Frequency: 2412 MHz ; Duty Cycle: 1:1 ; Modulation type: BPSK  
 Medium: MSL2450 Medium parameters used:  $f = 2412 \text{ MHz}$ ;  $\sigma = 1.94 \text{ mho/m}$ ;  $\epsilon_r = 53.8$ ;  $\rho = 1000 \text{ kg/m}^3$  ; Liquid level : 152 mm

Phantom section: Flat Section ; Separation distance : 10 mm (The Bottom side of the EUT to the Phantom)  
 Antenna type : PIFA Antenna ; Air temp. : 22.4 degrees ; Liquid temp. : 21.2 degrees

DASY4 Configuration:

- Probe: EX3DV4 - SN3578; ConvF(6.47, 6.47, 6.47) ; Calibrated: 2006/3/20
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn579 ; Calibrated: 2006/3/15
- Phantom: SAM 12 ; Type: SAM V4.0 ; Serial: TP 1202
- Measurement SW: DASY4, V4.7 Build 44 ; Postprocessing SW: SEMCAD, V1.8 Build 171

**Low Channel 1/Area Scan (7x10x1):** Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (measured) = 0.052 mW/g

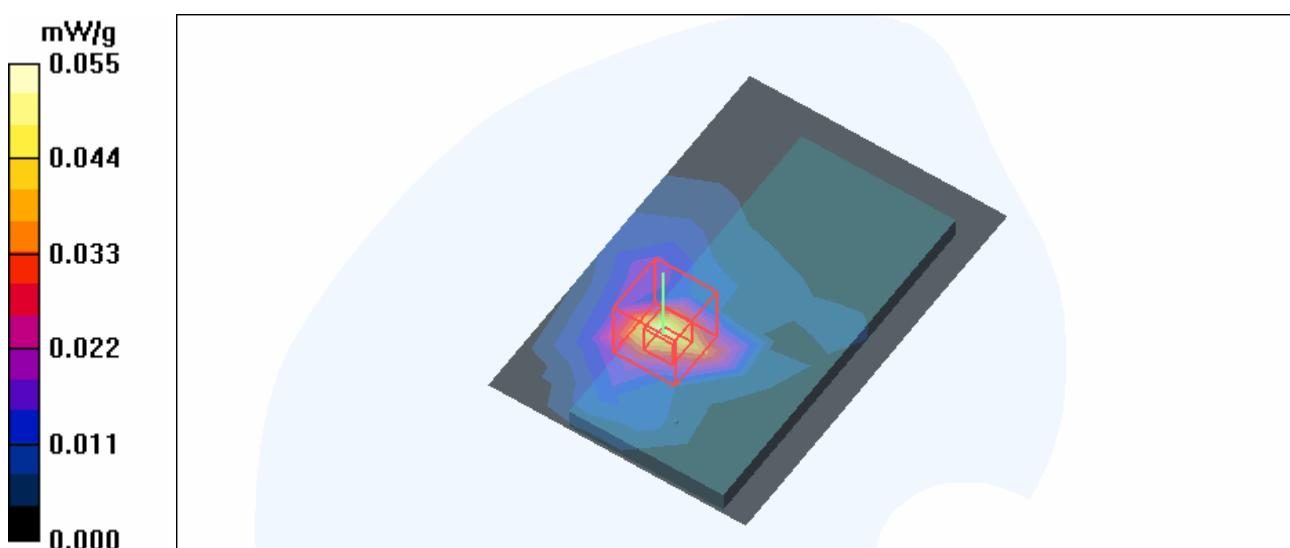
**Low Channel 1/Zoom Scan (7x7x7) (7x7x7)/Cube 0:** Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 2.13 V/m

Peak SAR (extrapolated) = 0.118 W/kg

**SAR(1 g) = 0.050 mW/g; SAR(10 g) = 0.021 mW/g**

Maximum value of SAR (measured) = 0.055 mW/g



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Test Laboratory: Advance Data Technology

## N800C-11g-CH6-Mode 2

**DUT: D-Link DWA-642 RangeBooster N™ Notebook Adapter ; Type: DWA-642 ; Test Frequency: 2437 MHz**

Communication System: 802.11g ; Frequency: 2437 MHz ; Duty Cycle: 1:1 ; Modulation type: BPSK  
 Medium: MSL2450 Medium parameters used:  $f = 2437 \text{ MHz}$ ;  $\sigma = 1.97 \text{ mho/m}$ ;  $\epsilon_r = 53.7$ ;  $\rho = 1000 \text{ kg/m}^3$  ; Liquid level : 152 mm

Phantom section: Flat Section ; Separation distance : 10 mm (The Bottom side of the EUT to the Phantom)  
 Antenna type : PIFA Antenna ; Air temp. : 22.4 degrees ; Liquid temp. : 21.2 degrees

DASY4 Configuration:

- Probe: EX3DV4 - SN3578; ConvF(6.47, 6.47, 6.47) ; Calibrated: 2006/3/20
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn579 ; Calibrated: 2006/3/15
- Phantom: SAM 12 ; Type: SAM V4.0 ; Serial: TP 1202
- Measurement SW: DASY4, V4.7 Build 44 ; Postprocessing SW: SEMCAD, V1.8 Build 171

**Mid Channel 6/Area Scan (7x10x1):** Measurement grid: dx=15mm, dy=15mm

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

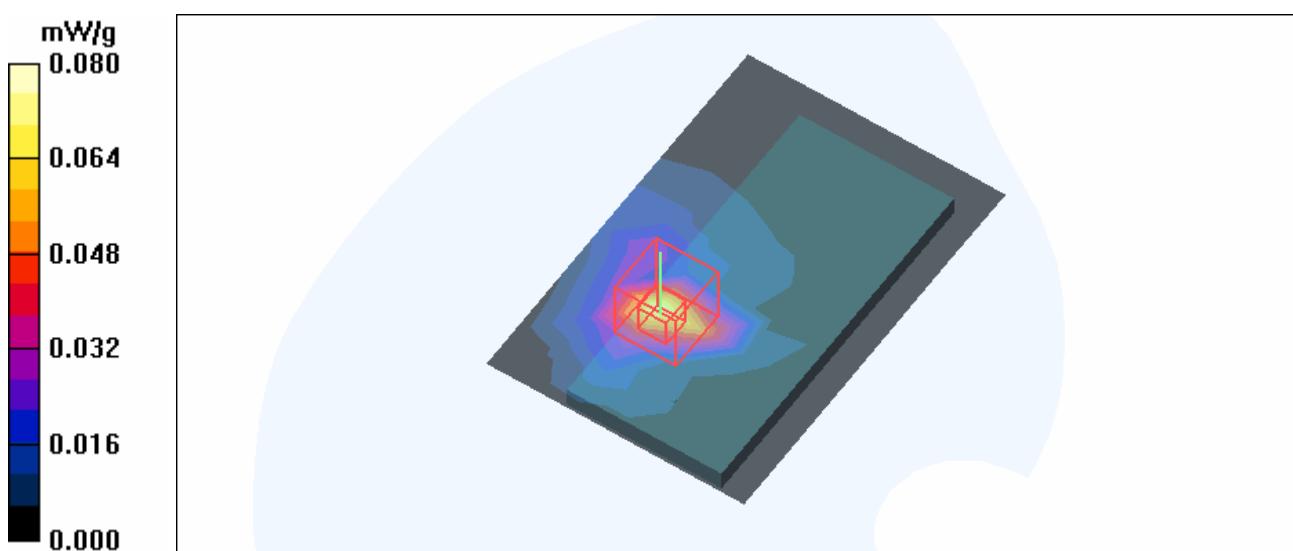
**Mid Channel 6/Zoom Scan (7x7x7) (7x7x7)/Cube 0:** Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 2.18 V/m

Peak SAR (extrapolated) = 0.170 W/kg

**SAR(1 g) = 0.072 mW/g; SAR(10 g) = 0.032 mW/g**

Maximum value of SAR (measured) = 0.080 mW/g



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Test Laboratory: Advance Data Technology

## N800C-11g-CH11-Mode 2

**DUT: D-Link DWA-642 RangeBooster N™ Notebook Adapter ; Type: DWA-642 ; Test Frequency: 2462 MHz**

Communication System: 802.11g ; Frequency: 2462 MHz ; Duty Cycle: 1:1 ; Modulation type: BPSK  
 Medium: MSL2450 Medium parameters used:  $f = 2462 \text{ MHz}$ ;  $\sigma = 2.01 \text{ mho/m}$ ;  $\epsilon_r = 53.5$ ;  $\rho = 1000 \text{ kg/m}^3$  ; Liquid level : 152 mm

Phantom section: Flat Section ; Separation distance : 10 mm (The Bottom side of the EUT to the Phantom)  
 Antenna type : PIFA Antenna ; Air temp. : 22.4 degrees ; Liquid temp. : 21.2 degrees

DASY4 Configuration:

- Probe: EX3DV4 - SN3578; ConvF(6.47, 6.47, 6.47) ; Calibrated: 2006/3/20
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn579 ; Calibrated: 2006/3/15
- Phantom: SAM 12 ; Type: SAM V4.0 ; Serial: TP 1202
- Measurement SW: DASY4, V4.7 Build 44 ; Postprocessing SW: SEMCAD, V1.8 Build 171

**High Channel 11/Area Scan (7x10x1):** Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (measured) = 0.054 mW/g

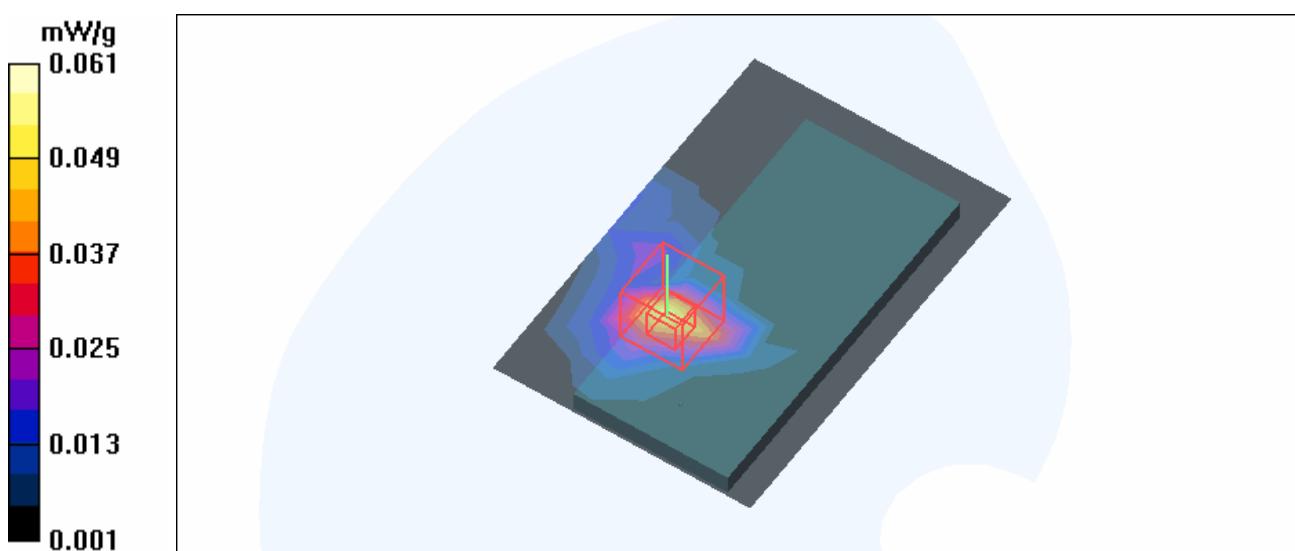
**High Channel 11/Zoom Scan (7x7x7) (7x7x7)/Cube 0:** Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 1.76 V/m

Peak SAR (extrapolated) = 0.128 W/kg

**SAR(1 g) = 0.055 mW/g; SAR(10 g) = 0.024 mW/g**

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



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Test Laboratory: Advance Data Technology

## N800C-SPAN20-Single-CH1-Mode 3

**DUT: D-Link DWA-642 RangeBooster N™ Notebook Adapter ; Type: DWA-642 ; Test Frequency: 2412 MHz**

Communication System: 802.11n ; Frequency: 2412 MHz ; Duty Cycle: 1:1 ; Modulation type: BPSK  
 Medium: MSL2450 Medium parameters used:  $f = 2412 \text{ MHz}$ ;  $\sigma = 1.94 \text{ mho/m}$ ;  $\epsilon_r = 53.8$ ;  $\rho = 1000 \text{ kg/m}^3$  ; Liquid level : 152 mm

Phantom section: Flat Section ; Separation distance : 10 mm (The Bottom side of the EUT to the Phantom)  
 Antenna type : PIFA Antenna ; Air temp. : 22.4 degrees ; Liquid temp. : 21.2 degrees

DASY4 Configuration:

- Probe: EX3DV4 - SN3578; ConvF(6.47, 6.47, 6.47) ; Calibrated: 2006/3/20
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn579 ; Calibrated: 2006/3/15
- Phantom: SAM 12 ; Type: SAM V4.0 ; Serial: TP 1202
- Measurement SW: DASY4, V4.7 Build 44 ; Postprocessing SW: SEMCAD, V1.8 Build 171

**Low Channel 1/Area Scan (7x10x1):** Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (measured) = 0.071 mW/g

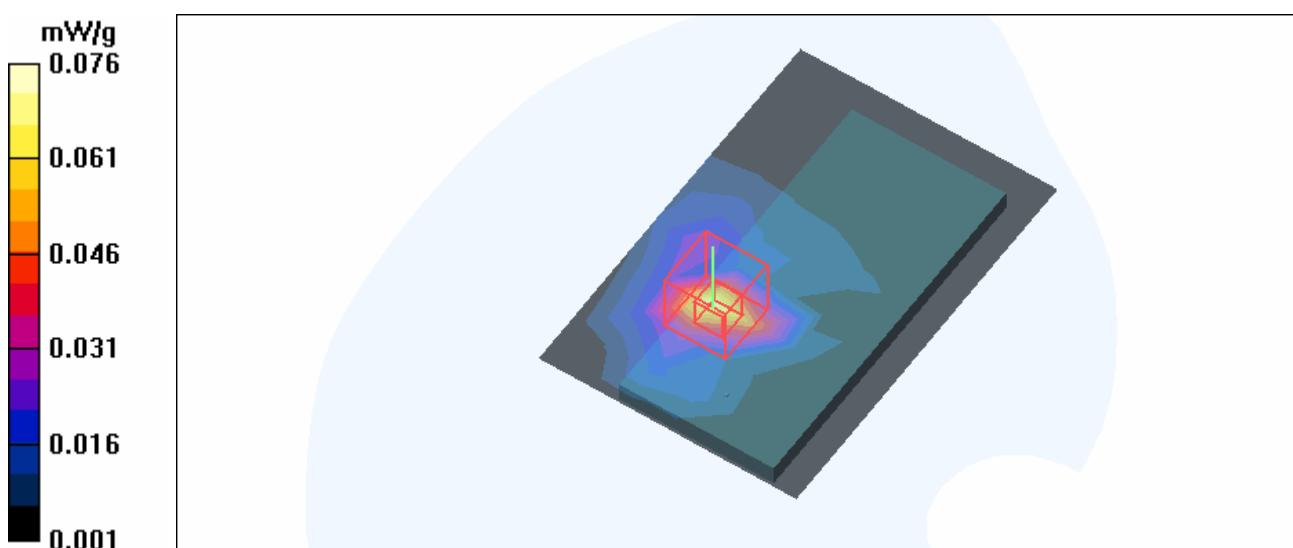
**Low Channel 1/Zoom Scan (7x7x7) (7x7x7)/Cube 0:** Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 2.52 V/m

Peak SAR (extrapolated) = 0.168 W/kg

**SAR(1 g) = 0.069 mW/g; SAR(10 g) = 0.029 mW/g**

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



Date/Time: 2006/11/9 13:29:57

Test Laboratory: Advance Data Technology

### N800C-SPAN20-Single-CH6-Mode 3

**DUT: D-Link DWA-642 RangeBooster N™ Notebook Adapter ; Type: DWA-642 ; Test Frequency: 2437 MHz**

Communication System: 802.11n ; Frequency: 2437 MHz ; Duty Cycle: 1:1 ; Modulation type: BPSK  
 Medium: MSL2450 Medium parameters used:  $f = 2437 \text{ MHz}$ ;  $\sigma = 1.97 \text{ mho/m}$ ;  $\epsilon_r = 53.7$ ;  $\rho = 1000 \text{ kg/m}^3$  ; Liquid level : 152 mm

Phantom section: Flat Section ; Separation distance : 10 mm (The Bottom side of the EUT to the Phantom)  
 Antenna type : PIFA Antenna ; Air temp. : 22.4 degrees ; Liquid temp. : 21.2 degrees

DASY4 Configuration:

- Probe: EX3DV4 - SN3578; ConvF(6.47, 6.47, 6.47) ; Calibrated: 2006/3/20
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn579 ; Calibrated: 2006/3/15
- Phantom: SAM 12 ; Type: SAM V4.0 ; Serial: TP 1202
- Measurement SW: DASY4, V4.7 Build 44 ; Postprocessing SW: SEMCAD, V1.8 Build 171

**Mid Channel 6/Area Scan (7x10x1):** Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (measured) = 0.124 mW/g

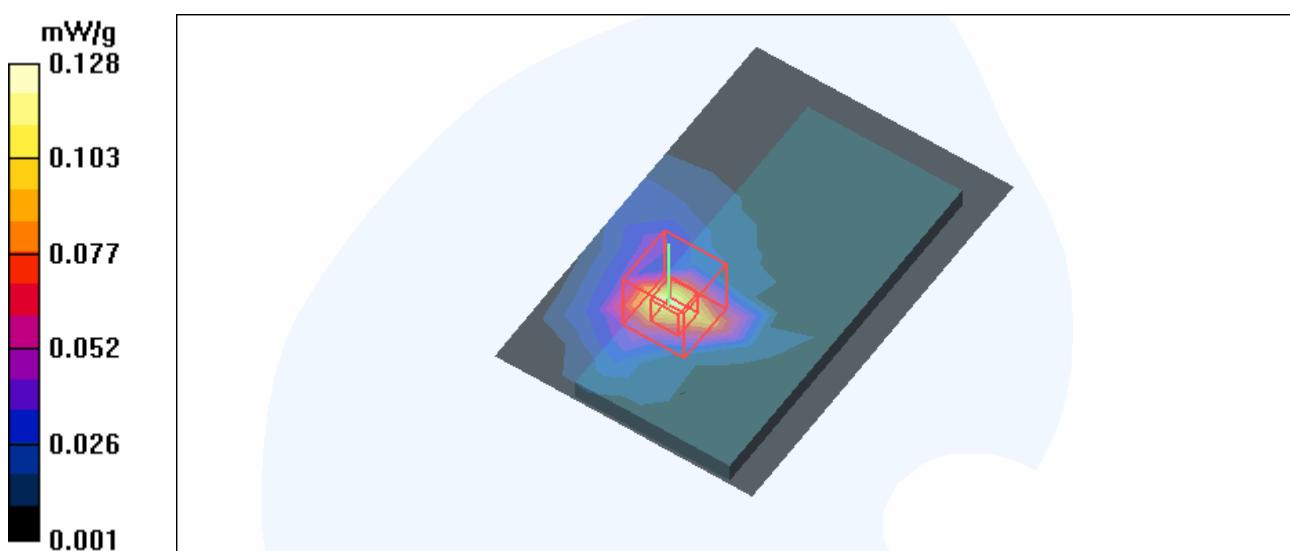
**Mid Channel 6/Zoom Scan (7x7x7) (7x7x7)/Cube 0:** Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 2.96 V/m

Peak SAR (extrapolated) = 0.272 W/kg

**SAR(1 g) = 0.116 mW/g; SAR(10 g) = 0.050 mW/g**

Maximum value of SAR (measured) = 0.128 mW/g



Date/Time: 2006/11/9 13:48:11

Test Laboratory: Advance Data Technology

## N800C-SPAN20-Single-CH11-Mode 3

**DUT: D-Link DWA-642 RangeBooster N™ Notebook Adapter ; Type: DWA-642 ; Test Frequency: 2462 MHz**

Communication System: 802.11n ; Frequency: 2462 MHz ; Duty Cycle: 1:1 ; Modulation type: BPSK  
 Medium: MSL2450 Medium parameters used:  $f = 2462 \text{ MHz}$ ;  $\sigma = 2.01 \text{ mho/m}$ ;  $\epsilon_r = 53.5$ ;  $\rho = 1000 \text{ kg/m}^3$  ; Liquid level : 152 mm

Phantom section: Flat Section ; Separation distance : 10 mm (The Bottom side of the EUT to the Phantom)  
 Antenna type : PIFA Antenna ; Air temp. : 22.4 degrees ; Liquid temp. : 21.2 degrees

DASY4 Configuration:

- Probe: EX3DV4 - SN3578; ConvF(6.47, 6.47, 6.47) ; Calibrated: 2006/3/20
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn579 ; Calibrated: 2006/3/15
- Phantom: SAM 12 ; Type: SAM V4.0 ; Serial: TP 1202
- Measurement SW: DASY4, V4.7 Build 44 ; Postprocessing SW: SEMCAD, V1.8 Build 171

**High Channel 11/Area Scan (7x10x1):** Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (measured) = 0.069 mW/g

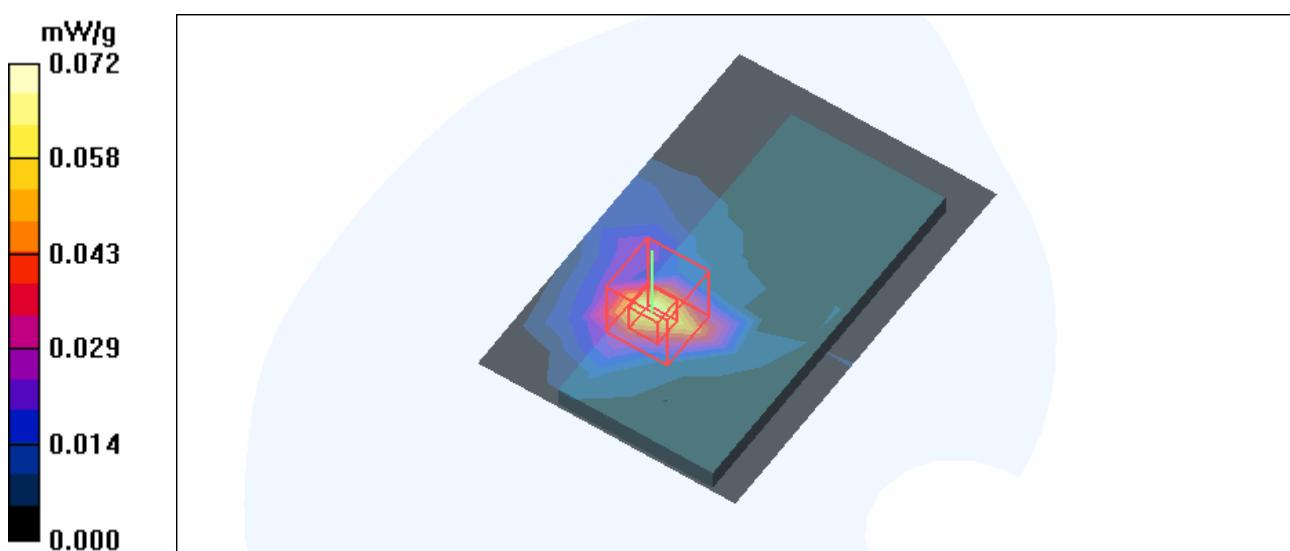
**High Channel 11/Zoom Scan (7x7x7) (7x7x7)/Cube 0:** Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 2.03 V/m

Peak SAR (extrapolated) = 0.155 W/kg

**SAR(1 g) = 0.067 mW/g; SAR(10 g) = 0.030 mW/g**

Maximum value of SAR (measured) = 0.072 mW/g



Date/Time: 2006/11/9 14:07:55

Test Laboratory: Advance Data Technology

## N800C-SPAN20-Dual-CH1-Mode 4

**DUT: D-Link DWA-642 RangeBooster N™ Notebook Adapter ; Type: DWA-642 ; Test Frequency: 2412 MHz**

Communication System: 802.11n ; Frequency: 2412 MHz ; Duty Cycle: 1:1 ; Modulation type: BPSK  
 Medium: MSL2450 Medium parameters used:  $f = 2412 \text{ MHz}$ ;  $\sigma = 1.94 \text{ mho/m}$ ;  $\epsilon_r = 53.8$ ;  $\rho = 1000 \text{ kg/m}^3$  ; Liquid level : 152 mm

Phantom section: Flat Section ; Separation distance : 10 mm (The Bottom side of the EUT to the Phantom)  
 Antenna type : PIFA Antenna ; Air temp. : 22.4 degrees ; Liquid temp. : 21.2 degrees

DASY4 Configuration:

- Probe: EX3DV4 - SN3578; ConvF(6.47, 6.47, 6.47) ; Calibrated: 2006/3/20
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn579 ; Calibrated: 2006/3/15
- Phantom: SAM 12 ; Type: SAM V4.0 ; Serial: TP 1202
- Measurement SW: DASY4, V4.7 Build 44 ; Postprocessing SW: SEMCAD, V1.8 Build 171

**Low Channel 1/Area Scan (7x10x1):** Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (measured) = 0.172 mW/g

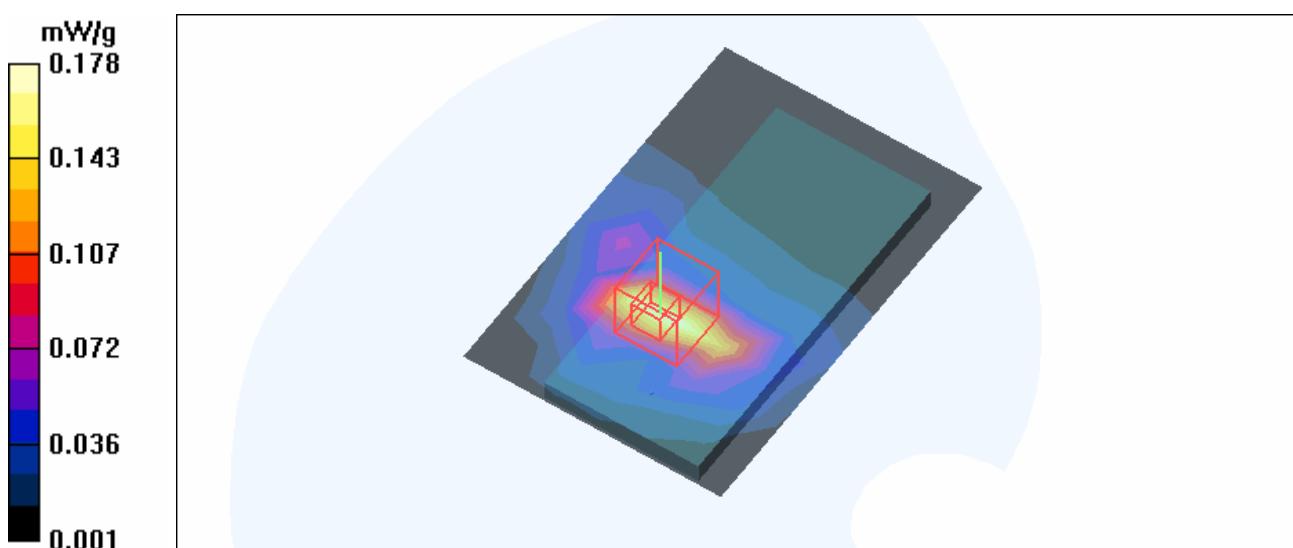
**Low Channel 1/Zoom Scan (7x7x7) (7x7x7)/Cube 0:** Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 4.61 V/m

Peak SAR (extrapolated) = 0.375 W/kg

**SAR(1 g) = 0.163 mW/g; SAR(10 g) = 0.076 mW/g**

Maximum value of SAR (measured) = 0.178 mW/g



Date/Time: 2006/11/9 14:27:51

Test Laboratory: Advance Data Technology

## N800C-SPAN20-Dual-CH6-Mode 4

**DUT: D-Link DWA-642 RangeBooster N™ Notebook Adapter ; Type: DWA-642 ; Test Frequency: 2437 MHz**

Communication System: 802.11n ; Frequency: 2437 MHz ; Duty Cycle: 1:1 ; Modulation type: BPSK  
 Medium: MSL2450 Medium parameters used:  $f = 2437 \text{ MHz}$ ;  $\sigma = 1.97 \text{ mho/m}$ ;  $\epsilon_r = 53.7$ ;  $\rho = 1000 \text{ kg/m}^3$  ; Liquid level : 152 mm

Phantom section: Flat Section ; Separation distance : 10 mm (The Bottom side of the EUT to the Phantom)  
 Antenna type : PIFA Antenna ; Air temp. : 22.4 degrees ; Liquid temp. : 21.2 degrees

DASY4 Configuration:

- Probe: EX3DV4 - SN3578; ConvF(6.47, 6.47, 6.47) ; Calibrated: 2006/3/20
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn579 ; Calibrated: 2006/3/15
- Phantom: SAM 12 ; Type: SAM V4.0 ; Serial: TP 1202
- Measurement SW: DASY4, V4.7 Build 44 ; Postprocessing SW: SEMCAD, V1.8 Build 171

**Mid Channel 6/Area Scan (7x10x1):** Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (measured) = 0.423 mW/g

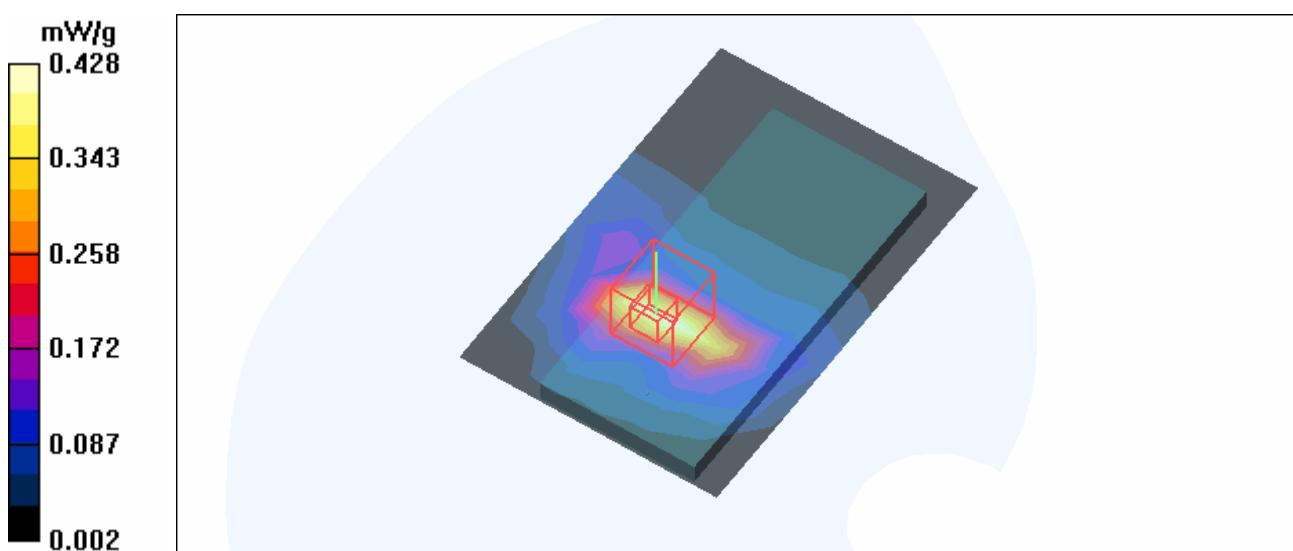
**Mid Channel 6/Zoom Scan (7x7x7) (7x7x7)/Cube 0:** Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 7.63 V/m

Peak SAR (extrapolated) = 0.888 W/kg

**SAR(1 g) = 0.392 mW/g; SAR(10 g) = 0.185 mW/g**

Maximum value of SAR (measured) = 0.428 mW/g



Date/Time: 2006/11/9 14:46:42

Test Laboratory: Advance Data Technology

## N800C-SPAN20-Dual-CH11-Mode 4

**DUT: D-Link DWA-642 RangeBooster N™ Notebook Adapter ; Type: DWA-642 ; Test Frequency: 2462 MHz**

Communication System: 802.11n ; Frequency: 2462 MHz ; Duty Cycle: 1:1 ; Modulation type: BPSK  
 Medium: MSL2450 Medium parameters used:  $f = 2462 \text{ MHz}$ ;  $\sigma = 2.01 \text{ mho/m}$ ;  $\epsilon_r = 53.5$ ;  $\rho = 1000 \text{ kg/m}^3$  ; Liquid level : 152 mm

Phantom section: Flat Section ; Separation distance : 10 mm (The Bottom side of the EUT to the Phantom)  
 Antenna type : PIFA Antenna ; Air temp. : 22.4 degrees ; Liquid temp. : 21.2 degrees

DASY4 Configuration:

- Probe: EX3DV4 - SN3578; ConvF(6.47, 6.47, 6.47) ; Calibrated: 2006/3/20
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn579 ; Calibrated: 2006/3/15
- Phantom: SAM 12 ; Type: SAM V4.0 ; Serial: TP 1202
- Measurement SW: DASY4, V4.7 Build 44 ; Postprocessing SW: SEMCAD, V1.8 Build 171

**High Channel 11/Area Scan (7x10x1):** Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (measured) = 0.118 mW/g

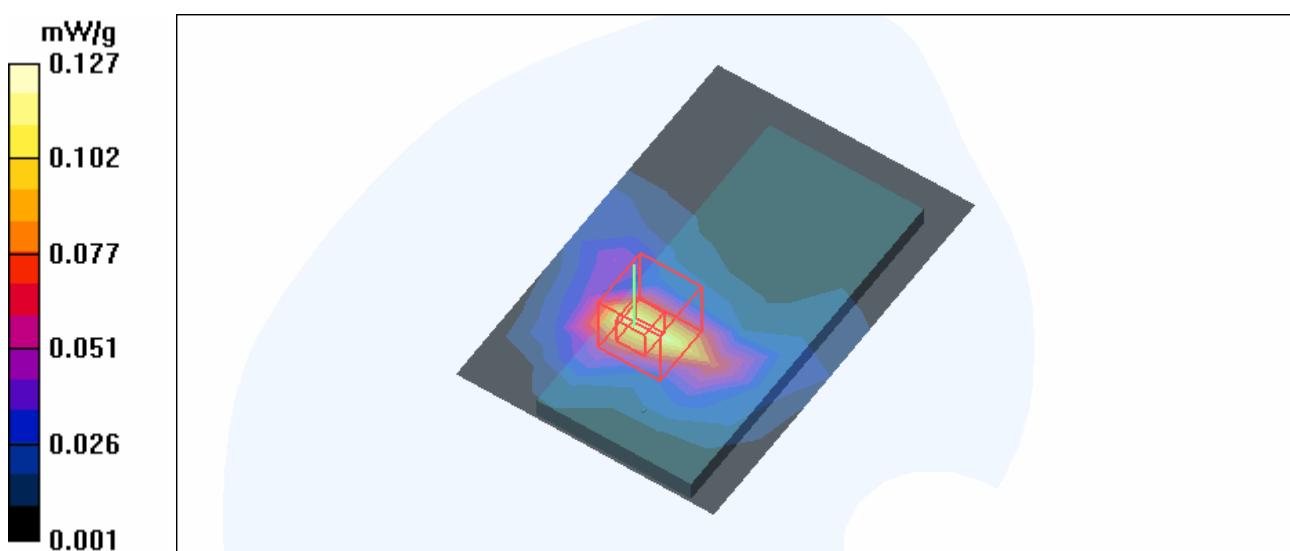
**High Channel 11/Zoom Scan (7x7x7) (7x7x7)/Cube 0:** Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 3.86 V/m

Peak SAR (extrapolated) = 0.270 W/kg

**SAR(1 g) = 0.116 mW/g; SAR(10 g) = 0.054 mW/g**

Maximum value of SAR (measured) = 0.127 mW/g



Date/Time: 2006/11/9 15:10:32

Test Laboratory: Advance Data Technology

## N800C-SPAN40-Single-CH1-Mode 5

**DUT: D-Link DWA-642 RangeBooster N™ Notebook Adapter ; Type: DWA-642 ; Test Frequency: 2422 MHz**

Communication System: 802.11n ; Frequency: 2422 MHz ; Duty Cycle: 1:1 ; Modulation type: BPSK  
 Medium: MSL2450 Medium parameters used :  $f = 2422 \text{ MHz}$ ;  $\sigma = 1.95 \text{ mho/m}$ ;  $\epsilon_r = 53.8$ ;  $\rho = 1000 \text{ kg/m}^3$  ; Liquid level : 152 mm

Phantom section: Flat Section ; Separation distance : 10 mm (The Bottom side of the EUT to the Phantom)  
 Antenna type : PIFA Antenna ; Air temp. : 22.4 degrees ; Liquid temp. : 21.2 degrees

DASY4 Configuration:

- Probe: EX3DV4 - SN3578; ConvF(6.47, 6.47, 6.47) ; Calibrated: 2006/3/20
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn579 ; Calibrated: 2006/3/15
- Phantom: SAM 12 ; Type: SAM V4.0 ; Serial: TP 1202
- Measurement SW: DASY4, V4.7 Build 44 ; Postprocessing SW: SEMCAD, V1.8 Build 171

**Low Channel 1/Area Scan (7x10x1):** Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (measured) = 0.102 mW/g

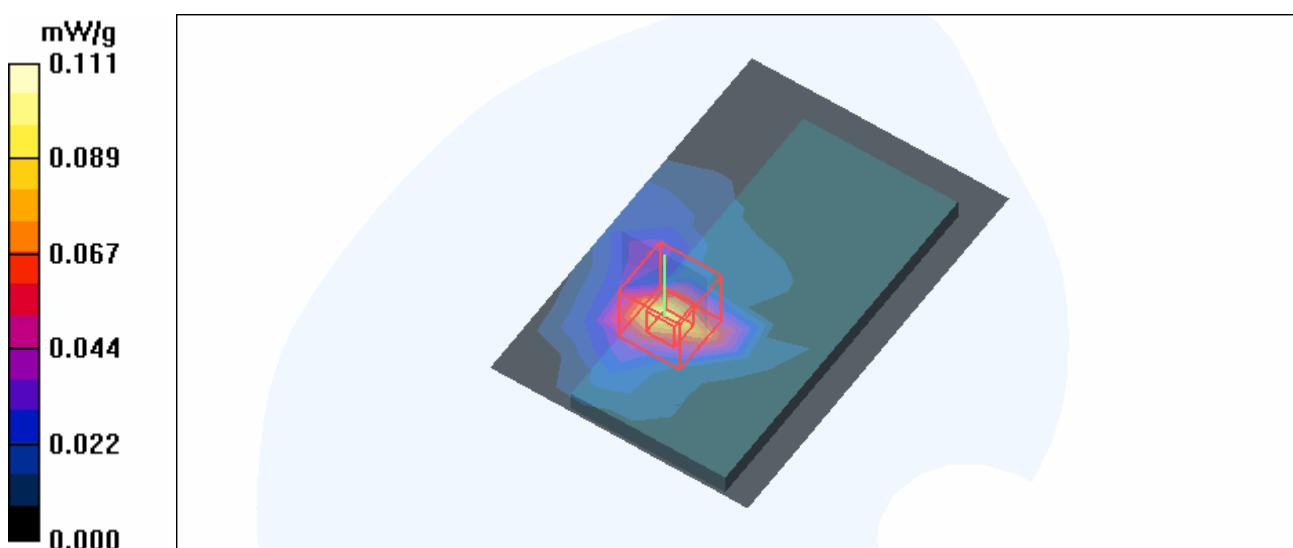
**Low Channel 1/Zoom Scan (7x7x7) (7x7x7)/Cube 0:** Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 2.52 V/m

Peak SAR (extrapolated) = 0.239 W/kg

**SAR(1 g) = 0.101 mW/g; SAR(10 g) = 0.044 mW/g**

Maximum value of SAR (measured) = 0.111 mW/g



Date/Time: 2006/11/9 15:29:01

Test Laboratory: Advance Data Technology

## N800C-SPAN40-Single-CH4-Mode 5

**DUT: D-Link DWA-642 RangeBooster N™ Notebook Adapter ; Type: DWA-642 ; Test Frequency: 2437 MHz**

Communication System: 802.11n ; Frequency: 2437 MHz ; Duty Cycle: 1:1 ; Modulation type: BPSK  
 Medium: MSL2450 Medium parameters used:  $f = 2437 \text{ MHz}$ ;  $\sigma = 1.97 \text{ mho/m}$ ;  $\epsilon_r = 53.7$ ;  $\rho = 1000 \text{ kg/m}^3$  ; Liquid level : 152 mm

Phantom section: Flat Section ; Separation distance : 10 mm (The Bottom side of the EUT to the Phantom)  
 Antenna type : PIFA Antenna ; Air temp. : 22.4 degrees ; Liquid temp. : 21.2 degrees

DASY4 Configuration:

- Probe: EX3DV4 - SN3578; ConvF(6.47, 6.47, 6.47) ; Calibrated: 2006/3/20
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn579 ; Calibrated: 2006/3/15
- Phantom: SAM 12 ; Type: SAM V4.0 ; Serial: TP 1202
- Measurement SW: DASY4, V4.7 Build 44 ; Postprocessing SW: SEMCAD, V1.8 Build 171

**Mid Channel 4/Area Scan (7x10x1):** Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (measured) = 0.108 mW/g

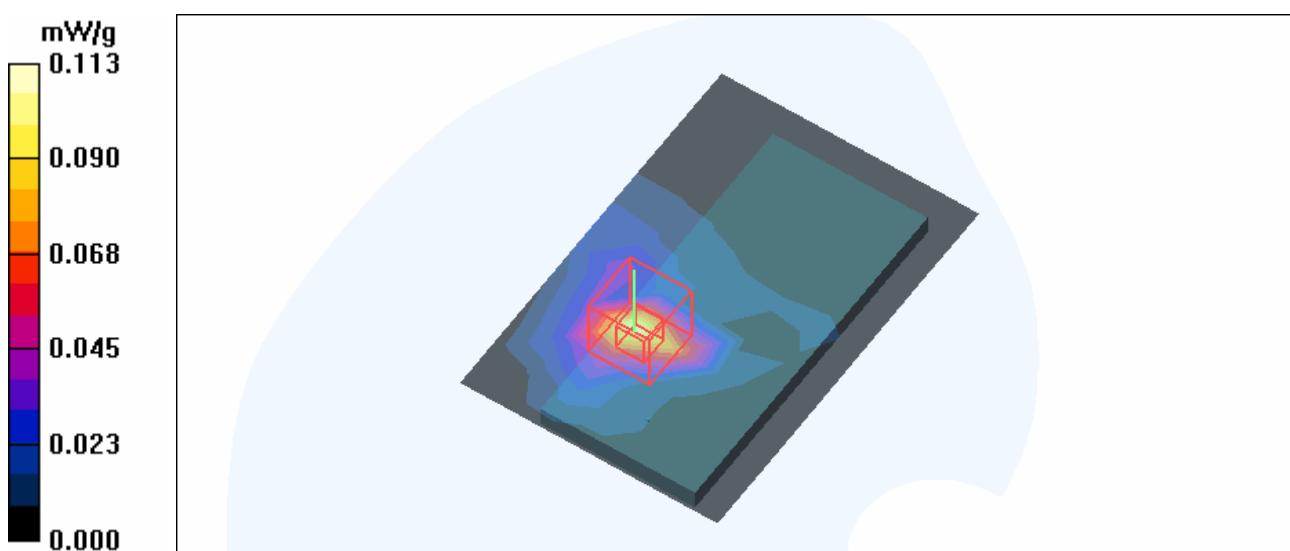
**Mid Channel 4/Zoom Scan (7x7x7) (7x7x7)/Cube 0:** Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 2.80 V/m

Peak SAR (extrapolated) = 0.240 W/kg

**SAR(1 g) = 0.102 mW/g; SAR(10 g) = 0.044 mW/g**

Maximum value of SAR (measured) = 0.113 mW/g



Date/Time: 2006/11/9 15:47:31

Test Laboratory: Advance Data Technology

## N800C-SPAN40-Single-CH7-Mode 5

**DUT: D-Link DWA-642 RangeBooster N™ Notebook Adapter ; Type: DWA-642 ; Test Frequency: 2452 MHz**

Communication System: 802.11n ; Frequency: 2452 MHz ; Duty Cycle: 1:1 ; Modulation type: BPSK  
 Medium: MSL2450 Medium parameters used :  $f = 2452 \text{ MHz}$ ;  $\sigma = 1.99 \text{ mho/m}$ ;  $\epsilon_r = 53.6$ ;  $\rho = 1000 \text{ kg/m}^3$  ; Liquid level : 152 mm

Phantom section: Flat Section ; Separation distance : 10 mm (The Bottom side of the EUT to the Phantom)  
 Antenna type : PIFA Antenna ; Air temp. : 22.4 degrees ; Liquid temp. : 21.2 degrees

DASY4 Configuration:

- Probe: EX3DV4 - SN3578; ConvF(6.47, 6.47, 6.47) ; Calibrated: 2006/3/20
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn579 ; Calibrated: 2006/3/15
- Phantom: SAM 12 ; Type: SAM V4.0 ; Serial: TP 1202
- Measurement SW: DASY4, V4.7 Build 44 ; Postprocessing SW: SEMCAD, V1.8 Build 171

**High Channel 7/Area Scan (7x10x1):** Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (measured) = 0.083 mW/g

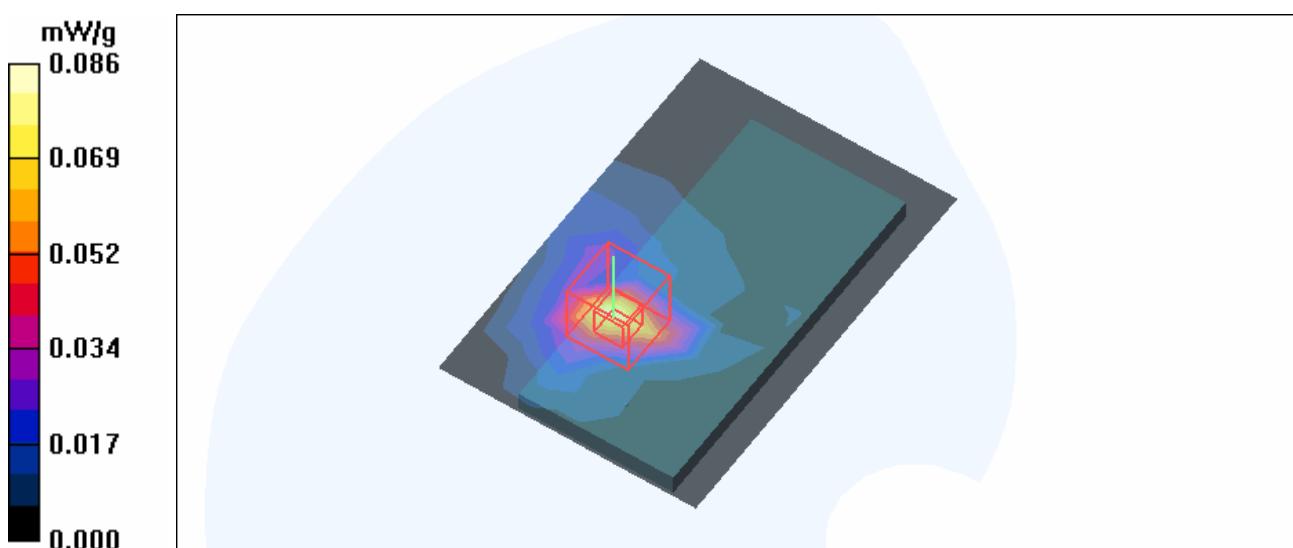
**High Channel 7/Zoom Scan (7x7x7) (7x7x7)/Cube 0:** Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 2.30 V/m

Peak SAR (extrapolated) = 0.184 W/kg

**SAR(1 g) = 0.078 mW/g; SAR(10 g) = 0.034 mW/g**

Maximum value of SAR (measured) = 0.086 mW/g



Date/Time: 2006/11/9 16:09:43

Test Laboratory: Advance Data Technology

## N800C-SPAN40-Dual-CH1-Mode 6

**DUT: D-Link DWA-642 RangeBooster N™ Notebook Adapter ; Type: DWA-642 ; Test Frequency: 2422 MHz**

Communication System: 802.11n ; Frequency: 2422 MHz ; Duty Cycle: 1:1 ; Modulation type: BPSK  
 Medium: MSL2450 Medium parameters used :  $f = 2422 \text{ MHz}$ ;  $\sigma = 1.95 \text{ mho/m}$ ;  $\epsilon_r = 53.8$ ;  $\rho = 1000 \text{ kg/m}^3$  ; Liquid level : 152 mm

Phantom section: Flat Section ; Separation distance : 10 mm (The Bottom side of the EUT to the Phantom)  
 Antenna type : PIFA Antenna ; Air temp. : 22.4 degrees ; Liquid temp. : 21.2 degrees

DASY4 Configuration:

- Probe: EX3DV4 - SN3578; ConvF(6.47, 6.47, 6.47) ; Calibrated: 2006/3/20
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn579 ; Calibrated: 2006/3/15
- Phantom: SAM 12 ; Type: SAM V4.0 ; Serial: TP 1202
- Measurement SW: DASY4, V4.7 Build 44 ; Postprocessing SW: SEMCAD, V1.8 Build 171

**Low Channel 1/Area Scan (7x10x1):** Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (measured) = 0.141 mW/g

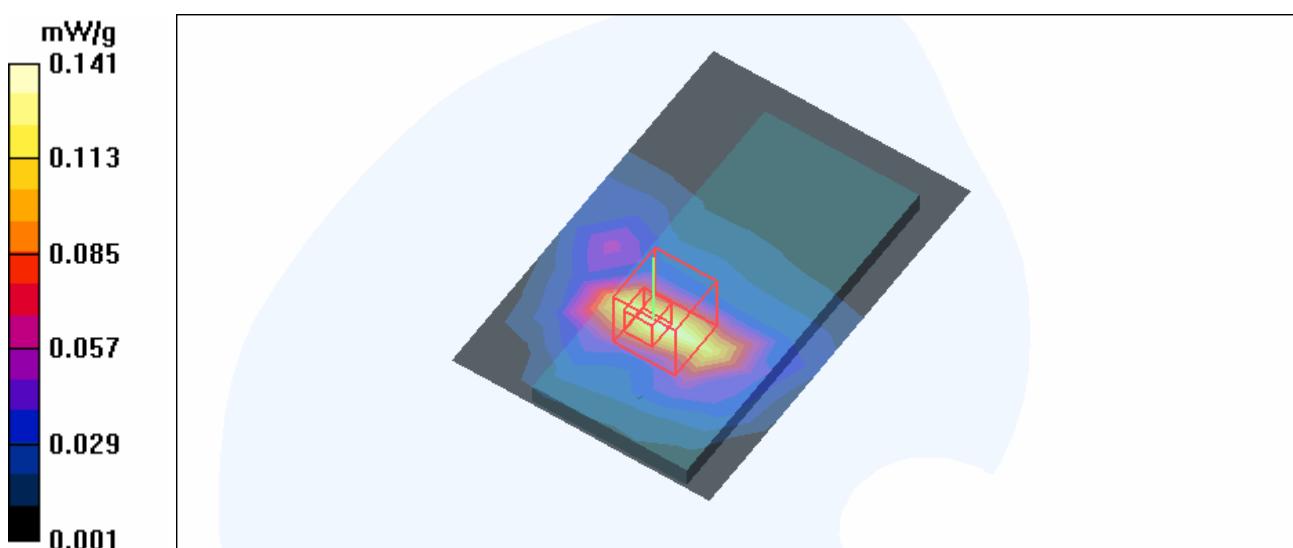
**Low Channel 1/Zoom Scan (7x7x7) (7x7x7)/Cube 0:** Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 4.17 V/m

Peak SAR (extrapolated) = 0.289 W/kg

**SAR(1 g) = 0.128 mW/g; SAR(10 g) = 0.062 mW/g**

Maximum value of SAR (measured) = 0.138 mW/g



Date/Time: 2006/11/9 16:28:39

Test Laboratory: Advance Data Technology

## N800C-SPAN40-Dual-CH4-Mode 6

**DUT: D-Link DWA-642 RangeBooster N™ Notebook Adapter ; Type: DWA-642 ; Test Frequency: 2437 MHz**

Communication System: 802.11n ; Frequency: 2437 MHz ; Duty Cycle: 1:1 ; Modulation type: BPSK  
 Medium: MSL2450 Medium parameters used:  $f = 2437 \text{ MHz}$ ;  $\sigma = 1.97 \text{ mho/m}$ ;  $\epsilon_r = 53.7$ ;  $\rho = 1000 \text{ kg/m}^3$  ; Liquid level : 152 mm

Phantom section: Flat Section ; Separation distance : 10 mm (The Bottom side of the EUT to the Phantom)  
 Antenna type : PIFA Antenna ; Air temp. : 22.4 degrees ; Liquid temp. : 21.2 degrees

DASY4 Configuration:

- Probe: EX3DV4 - SN3578; ConvF(6.47, 6.47, 6.47) ; Calibrated: 2006/3/20
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn579 ; Calibrated: 2006/3/15
- Phantom: SAM 12 ; Type: SAM V4.0 ; Serial: TP 1202
- Measurement SW: DASY4, V4.7 Build 44 ; Postprocessing SW: SEMCAD, V1.8 Build 171

**Mid Channel 4/Area Scan (7x10x1):** Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (measured) = 0.185 mW/g

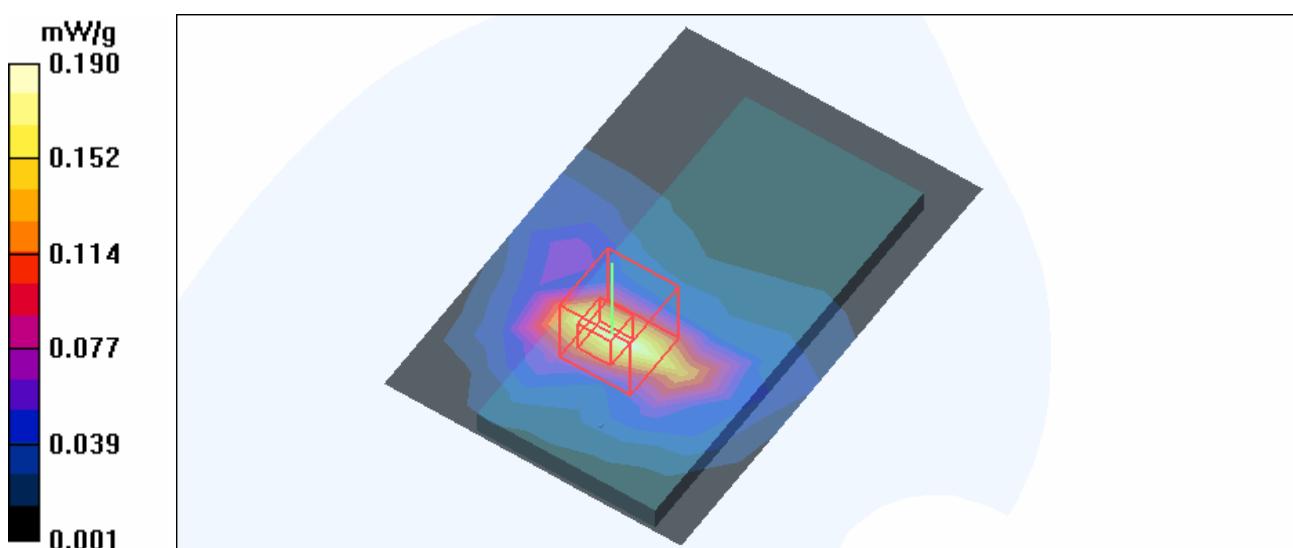
**Mid Channel 4/Zoom Scan (7x7x7) (7x7x7)/Cube 0:** Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 4.85 V/m

Peak SAR (extrapolated) = 0.402 W/kg

**SAR(1 g) = 0.174 mW/g; SAR(10 g) = 0.081 mW/g**

Maximum value of SAR (measured) = 0.190 mW/g



Date/Time: 2006/11/9 16:49:04

Test Laboratory: Advance Data Technology

## N800C-SPAN40-Dual-CH7-Mode 6

**DUT: D-Link DWA-642 RangeBooster N™ Notebook Adapter ; Type: DWA-642 ; Test Frequency: 2452 MHz**

Communication System: 802.11n ; Frequency: 2452 MHz ; Duty Cycle: 1:1 ; Modulation type: BPSK  
 Medium: MSL2450 Medium parameters used :  $f = 2452 \text{ MHz}$ ;  $\sigma = 1.99 \text{ mho/m}$ ;  $\epsilon_r = 53.6$ ;  $\rho = 1000 \text{ kg/m}^3$  ; Liquid level : 152 mm

Phantom section: Flat Section ; Separation distance : 10 mm (The Bottom side of the EUT to the Phantom)  
 Antenna type : PIFA Antenna ; Air temp. : 22.4 degrees ; Liquid temp. : 21.2 degrees

DASY4 Configuration:

- Probe: EX3DV4 - SN3578; ConvF(6.47, 6.47, 6.47) ; Calibrated: 2006/3/20
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn579 ; Calibrated: 2006/3/15
- Phantom: SAM 12 ; Type: SAM V4.0 ; Serial: TP 1202
- Measurement SW: DASY4, V4.7 Build 44 ; Postprocessing SW: SEMCAD, V1.8 Build 171

**High Channel 7/Area Scan (7x10x1):** Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (measured) = 0.134 mW/g

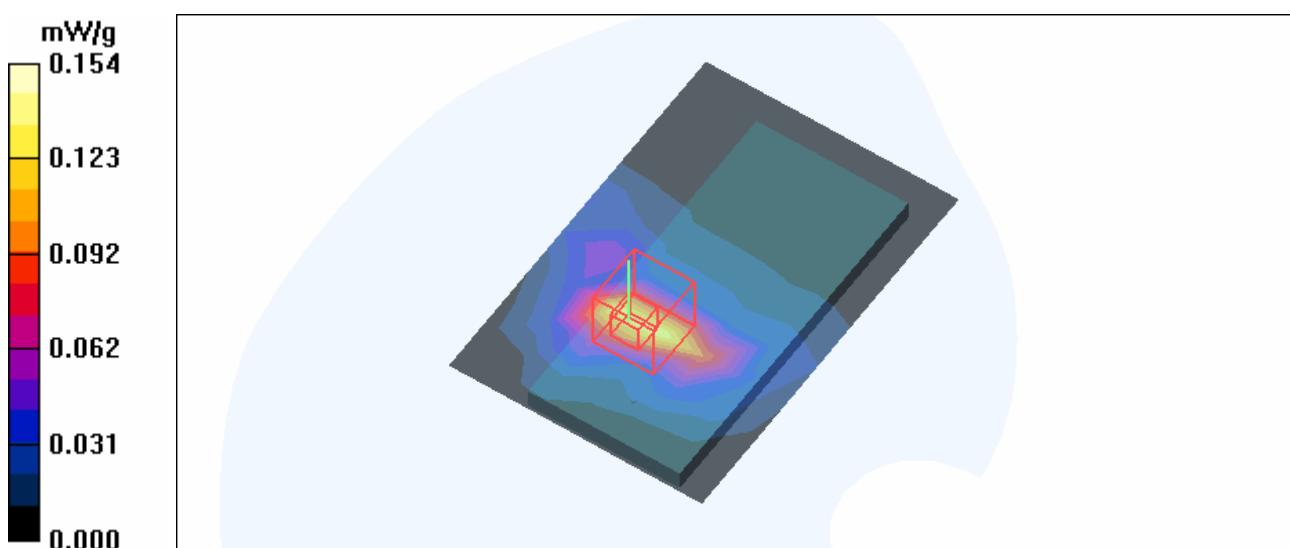
**High Channel 7/Zoom Scan (7x7x7) (7x7x7)/Cube 0:** Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 3.97 V/m

Peak SAR (extrapolated) = 0.319 W/kg

**SAR(1 g) = 0.139 mW/g; SAR(10 g) = 0.066 mW/g**

Maximum value of SAR (measured) = 0.154 mW/g



Date/Time: 2006/11/9 17:14:38

Test Laboratory: Advance Data Technology

## D600-11b-CH11-Mode 7

**DUT: D-Link DWA-642 RangeBooster N™ Notebook Adapter ; Type: DWA-642 ; Test Frequency: 2462 MHz**

Communication System: 802.11b ; Frequency: 2462 MHz ; Duty Cycle: 1:1 ; Modulation type: DBPSK  
 Medium: MSL2450 Medium parameters used:  $f = 2462 \text{ MHz}$ ;  $\sigma = 2.01 \text{ mho/m}$ ;  $\epsilon_r = 53.5$ ;  $\rho = 1000 \text{ kg/m}^3$  ; Liquid level : 152 mm

Phantom section: Flat Section ; Separation distance : 12 mm (The Bottom side of the EUT to the Phantom)  
 Antenna type : PIFA Antenna ; Air temp. : 22.4 degrees ; Liquid temp. : 21.2 degrees

DASY4 Configuration:

- Probe: EX3DV4 - SN3578; ConvF(6.47, 6.47, 6.47) ; Calibrated: 2006/3/20
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn579 ; Calibrated: 2006/3/15
- Phantom: SAM 12 ; Type: SAM V4.0 ; Serial: TP 1202
- Measurement SW: DASY4, V4.7 Build 44 ; Postprocessing SW: SEMCAD, V1.8 Build 171

**High Channel 11/Area Scan (7x10x1):** Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (measured) = 0.477 mW/g

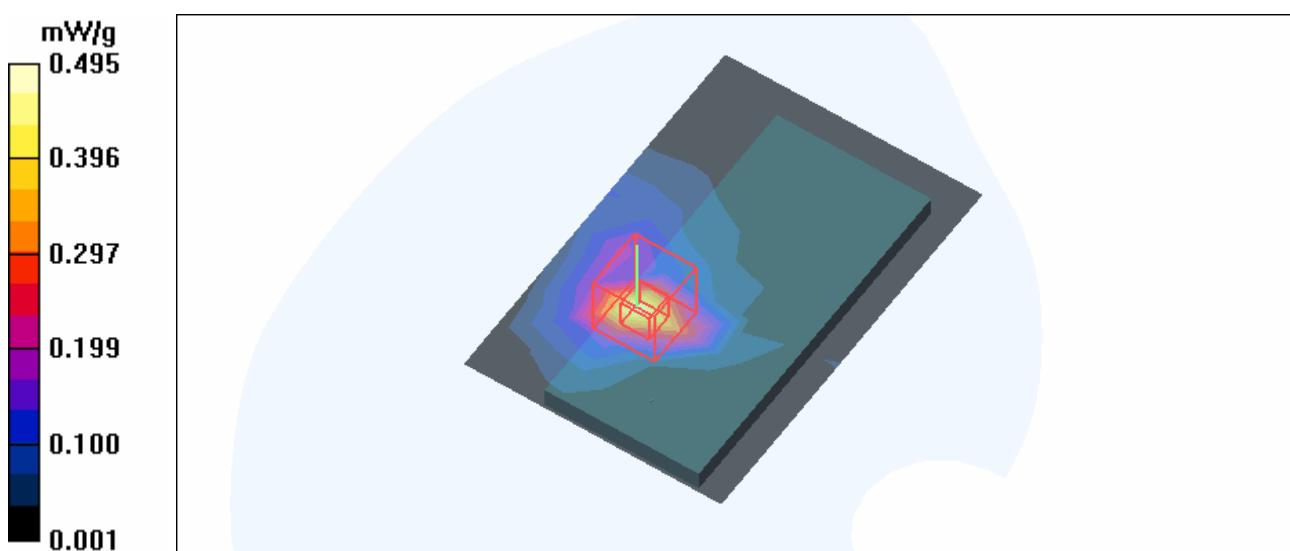
**High Channel 11/Zoom Scan (7x7x7) (7x7x7)/Cube 0:** Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 4.62 V/m

Peak SAR (extrapolated) = 1.06 W/kg

**SAR(1 g) = 0.456 mW/g; SAR(10 g) = 0.202 mW/g**

Maximum value of SAR (measured) = 0.495 mW/g



Date/Time: 2006/11/9 17:35:03

Test Laboratory: Advance Data Technology

## D600-11g-CH6-Mode 8

**DUT: D-Link DWA-642 RangeBooster N™ Notebook Adapter ; Type: DWA-642 ; Test Frequency: 2437 MHz**

Communication System: 802.11g ; Frequency: 2437 MHz ; Duty Cycle: 1:1 ; Modulation type: BPSK  
 Medium: MSL2450 Medium parameters used:  $f = 2437 \text{ MHz}$ ;  $\sigma = 1.97 \text{ mho/m}$ ;  $\epsilon_r = 53.7$ ;  $\rho = 1000 \text{ kg/m}^3$  ; Liquid level : 152 mm

Phantom section: Flat Section ; Separation distance : 12 mm (The Bottom side of the EUT to the Phantom)  
 Antenna type : PIFA Antenna ; Air temp. : 22.4 degrees ; Liquid temp. : 21.2 degrees

DASY4 Configuration:

- Probe: EX3DV4 - SN3578; ConvF(6.47, 6.47, 6.47) ; Calibrated: 2006/3/20
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn579 ; Calibrated: 2006/3/15
- Phantom: SAM 12 ; Type: SAM V4.0 ; Serial: TP 1202
- Measurement SW: DASY4, V4.7 Build 44 ; Postprocessing SW: SEMCAD, V1.8 Build 171

**Mid Channel 6/Area Scan (7x10x1):** Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (measured) = 0.026 mW/g

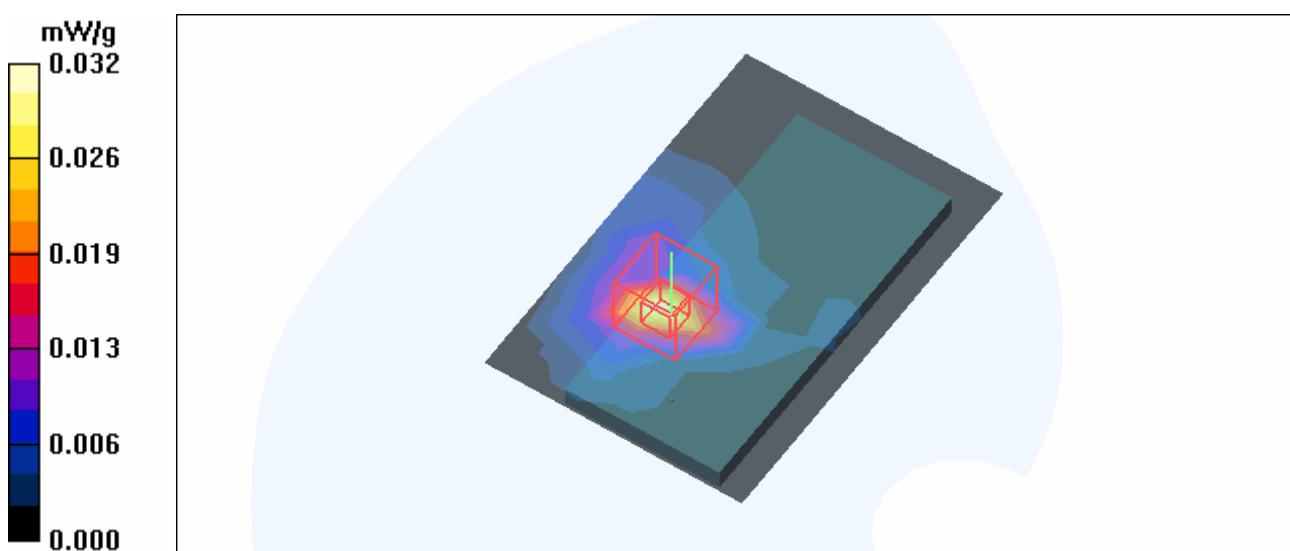
**Mid Channel 6/Zoom Scan (7x7x7) (7x7x7)/Cube 0:** Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 1.94 V/m

Peak SAR (extrapolated) = 0.069 W/kg

**SAR(1 g) = 0.030 mW/g; SAR(10 g) = 0.014 mW/g**

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



Date/Time: 2006/11/9 17:53:55

Test Laboratory: Advance Data Technology

## D600-SPAN20-Single-CH6-Mode 9

**DUT: D-Link DWA-642 RangeBooster N™ Notebook Adapter ; Type: DWA-642 ; Test Frequency: 2437 MHz**

Communication System: 802.11n ; Frequency: 2437 MHz ; Duty Cycle: 1:1 ; Modulation type: BPSK  
 Medium: MSL2450 Medium parameters used:  $f = 2437 \text{ MHz}$ ;  $\sigma = 1.97 \text{ mho/m}$ ;  $\epsilon_r = 53.7$ ;  $\rho = 1000 \text{ kg/m}^3$  ; Liquid level : 152 mm

Phantom section: Flat Section ; Separation distance : 12 mm (The Bottom side of the EUT to the Phantom)  
 Antenna type : PIFA Antenna ; Air temp. : 22.4 degrees ; Liquid temp. : 21.2 degrees

DASY4 Configuration:

- Probe: EX3DV4 - SN3578; ConvF(6.47, 6.47, 6.47) ; Calibrated: 2006/3/20
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn579 ; Calibrated: 2006/3/15
- Phantom: SAM 12 ; Type: SAM V4.0 ; Serial: TP 1202
- Measurement SW: DASY4, V4.7 Build 44 ; Postprocessing SW: SEMCAD, V1.8 Build 171

**Mid Channel 6/Area Scan (7x10x1):** Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (measured) = 0.113 mW/g

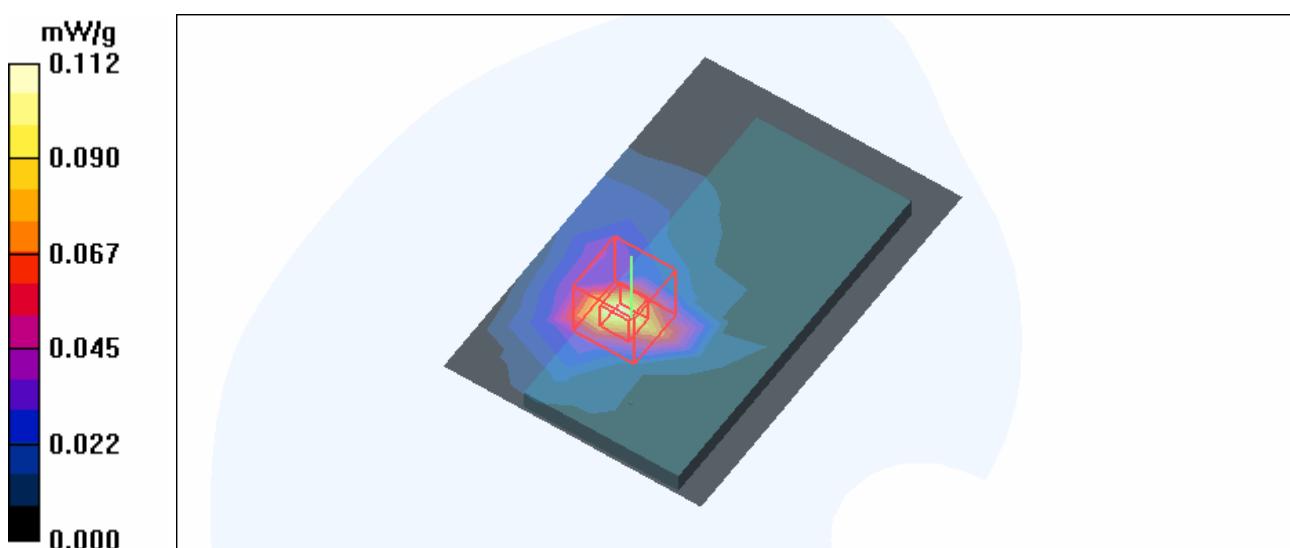
**Mid Channel 6/Zoom Scan (7x7x7) (7x7x7)/Cube 0:** Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 2.40 V/m

Peak SAR (extrapolated) = 0.236 W/kg

**SAR(1 g) = 0.101 mW/g; SAR(10 g) = 0.044 mW/g**

Maximum value of SAR (measured) = 0.112 mW/g



Date/Time: 2006/11/9 18:09:22

Test Laboratory: Advance Data Technology

## D600-SPAN20-Dual-CH6-Mode 10

**DUT: D-Link DWA-642 RangeBooster N™ Notebook Adapter ; Type: DWA-642 ; Test Frequency: 2437 MHz**

Communication System: 802.11n ; Frequency: 2437 MHz ; Duty Cycle: 1:1 ; Modulation type: BPSK  
 Medium: MSL2450 Medium parameters used:  $f = 2437 \text{ MHz}$ ;  $\sigma = 1.97 \text{ mho/m}$ ;  $\epsilon_r = 53.7$ ;  $\rho = 1000 \text{ kg/m}^3$  ; Liquid level : 152 mm

Phantom section: Flat Section ; Separation distance : 12 mm (The Bottom side of the EUT to the Phantom)  
 Antenna type : PIFA Antenna ; Air temp. : 22.4 degrees ; Liquid temp. : 21.2 degrees

DASY4 Configuration:

- Probe: EX3DV4 - SN3578; ConvF(6.47, 6.47, 6.47) ; Calibrated: 2006/3/20
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn579 ; Calibrated: 2006/3/15
- Phantom: SAM 12 ; Type: SAM V4.0 ; Serial: TP 1202
- Measurement SW: DASY4, V4.7 Build 44 ; Postprocessing SW: SEMCAD, V1.8 Build 171

**Mid Channel 6/Area Scan (7x10x1):** Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (measured) = 0.386 mW/g

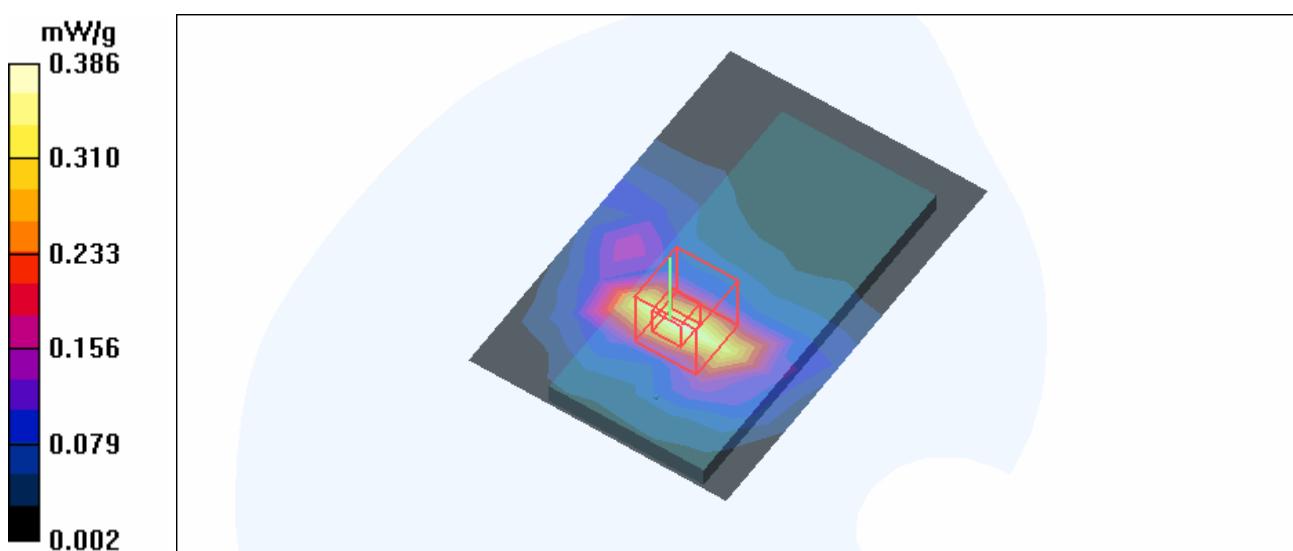
**Mid Channel 6/Zoom Scan (7x7x7) (7x7x7)/Cube 0:** Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 6.93 V/m

Peak SAR (extrapolated) = 0.743 W/kg

**SAR(1 g) = 0.340 mW/g; SAR(10 g) = 0.168 mW/g**

Maximum value of SAR (measured) = 0.368 mW/g



Date/Time: 2006/11/9 18:31:52

Test Laboratory: Advance Data Technology

## D600-SPAN40-Single-CH4-Mode 11

**DUT: D-Link DWA-642 RangeBooster N™ Notebook Adapter ; Type: DWA-642 ; Test Frequency: 2437 MHz**

Communication System: 802.11n ; Frequency: 2437 MHz ; Duty Cycle: 1:1 ; Modulation type: BPSK  
 Medium: MSL2450 Medium parameters used:  $f = 2437 \text{ MHz}$ ;  $\sigma = 1.97 \text{ mho/m}$ ;  $\epsilon_r = 53.7$ ;  $\rho = 1000 \text{ kg/m}^3$  ; Liquid level : 152 mm

Phantom section: Flat Section ; Separation distance : 12 mm (The Bottom side of the EUT to the Phantom)  
 Antenna type : PIFA Antenna ; Air temp. : 22.4 degrees ; Liquid temp. : 21.2 degrees

DASY4 Configuration:

- Probe: EX3DV4 - SN3578; ConvF(6.47, 6.47, 6.47) ; Calibrated: 2006/3/20
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn579 ; Calibrated: 2006/3/15
- Phantom: SAM 12 ; Type: SAM V4.0 ; Serial: TP 1202
- Measurement SW: DASY4, V4.7 Build 44 ; Postprocessing SW: SEMCAD, V1.8 Build 171

**Mid Channel 4/Area Scan (7x10x1):** Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (measured) = 0.093 mW/g

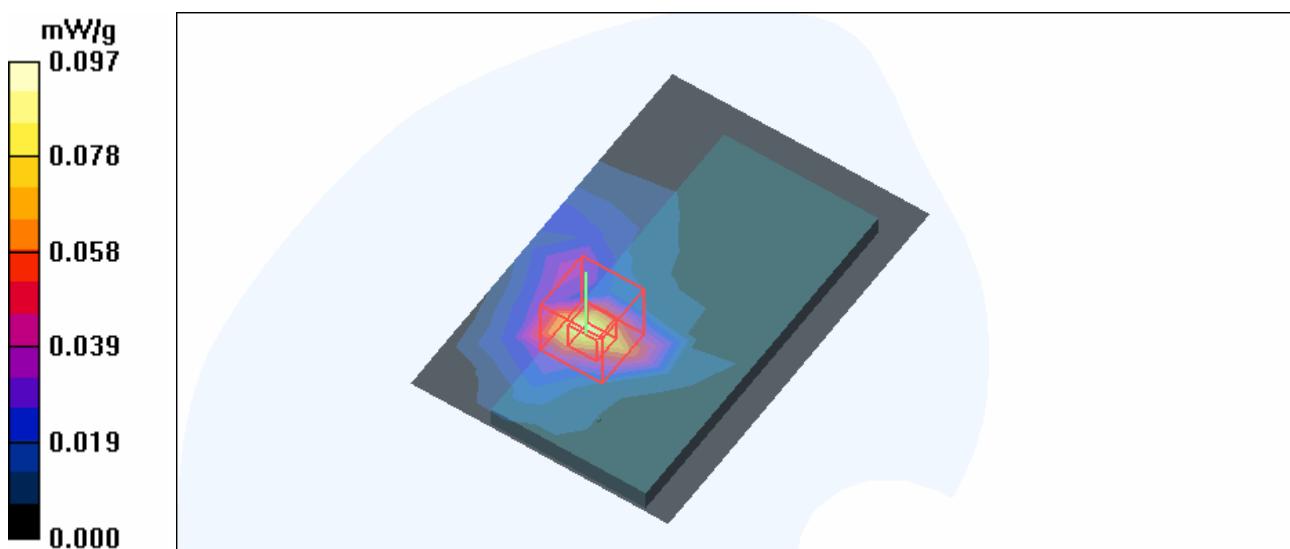
**Mid Channel 4/Zoom Scan (7x7x7) (7x7x7)/Cube 0:** Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 2.27 V/m

Peak SAR (extrapolated) = 0.202 W/kg

**SAR(1 g) = 0.087 mW/g; SAR(10 g) = 0.038 mW/g**

Maximum value of SAR (measured) = 0.097 mW/g



Date/Time: 2006/11/9 19:19:10

Test Laboratory: Advance Data Technology

## D600-SPAN40-Dual-CH4-Mode 12

**DUT: D-Link DWA-642 RangeBooster N™ Notebook Adapter ; Type: DWA-642 ; Test Frequency: 2437 MHz**

Communication System: 802.11n ; Frequency: 2437 MHz ; Duty Cycle: 1:1 ; Modulation type: BPSK  
 Medium: MSL2450 Medium parameters used:  $f = 2437 \text{ MHz}$ ;  $\sigma = 1.97 \text{ mho/m}$ ;  $\epsilon_r = 53.7$ ;  $\rho = 1000 \text{ kg/m}^3$  ; Liquid level : 152 mm

Phantom section: Flat Section ; Separation distance : 12 mm (The Bottom side of the EUT to the Phantom)  
 Antenna type : PIFA Antenna ; Air temp. : 22.4 degrees ; Liquid temp. : 21.2 degrees

DASY4 Configuration:

- Probe: EX3DV4 - SN3578; ConvF(6.47, 6.47, 6.47) ; Calibrated: 2006/3/20
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn579 ; Calibrated: 2006/3/15
- Phantom: SAM 12 ; Type: SAM V4.0 ; Serial: TP 1202
- Measurement SW: DASY4, V4.7 Build 44 ; Postprocessing SW: SEMCAD, V1.8 Build 171

**Mid Channel 4/Area Scan (7x10x1):** Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (measured) = 0.186 mW/g

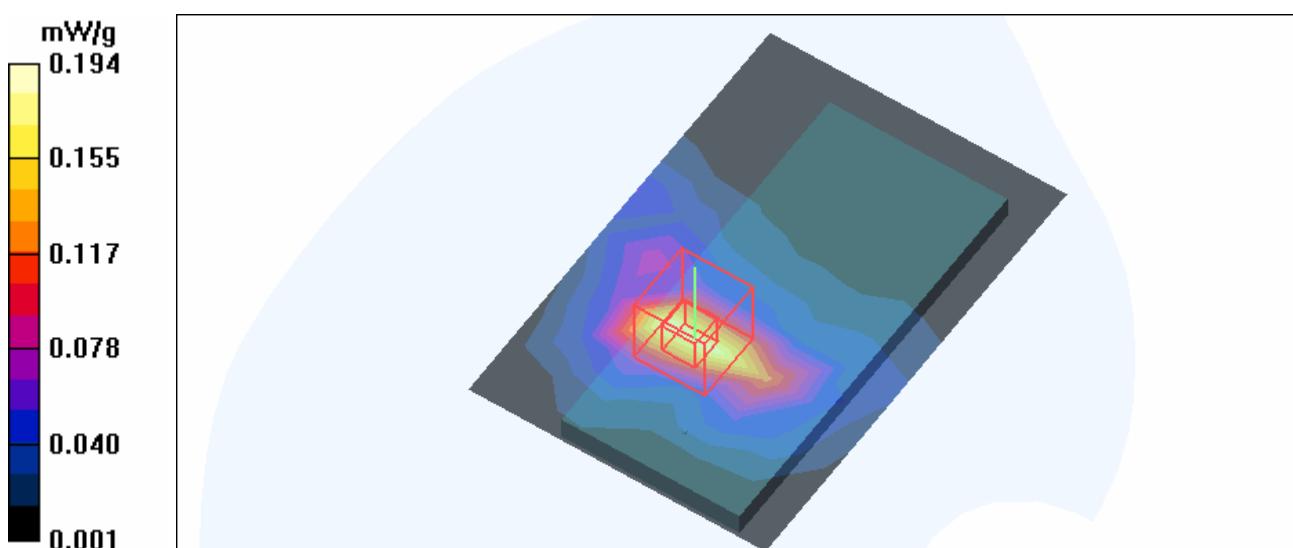
**Mid Channel 4/Zoom Scan (7x7x7) (7x7x7)/Cube 0:** Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 4.51 V/m

Peak SAR (extrapolated) = 0.401 W/kg

**SAR(1 g) = 0.179 mW/g; SAR(10 g) = 0.085 mW/g**

Maximum value of SAR (measured) = 0.194 mW/g



Date/Time: 2006/11/9 19:42:54

Test Laboratory: Advance Data Technology

## C600-11b-CH11-Mode 13

**DUT: D-Link DWA-642 RangeBooster N™ Notebook Adapter ; Type: DWA-642 ; Test Frequency: 2462 MHz**

Communication System: 802.11b ; Frequency: 2462 MHz ; Duty Cycle: 1:1 ; Modulation type: DBPSK  
 Medium: MSL2450 Medium parameters used:  $f = 2462 \text{ MHz}$ ;  $\sigma = 2.01 \text{ mho/m}$ ;  $\epsilon_r = 53.5$ ;  $\rho = 1000 \text{ kg/m}^3$  ; Liquid level : 152 mm

Phantom section: Flat Section ; Separation distance : 14 mm (The Bottom side of the EUT to the Phantom)  
 Antenna type : PIFA Antenna ; Air temp. : 22.4 degrees ; Liquid temp. : 21.2 degrees

DASY4 Configuration:

- Probe: EX3DV4 - SN3578; ConvF(6.47, 6.47, 6.47) ; Calibrated: 2006/3/20
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn579 ; Calibrated: 2006/3/15
- Phantom: SAM 12 ; Type: SAM V4.0 ; Serial: TP 1202
- Measurement SW: DASY4, V4.7 Build 44 ; Postprocessing SW: SEMCAD, V1.8 Build 171

**High Channel 11/Area Scan (7x10x1):** Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (measured) = 0.225 mW/g

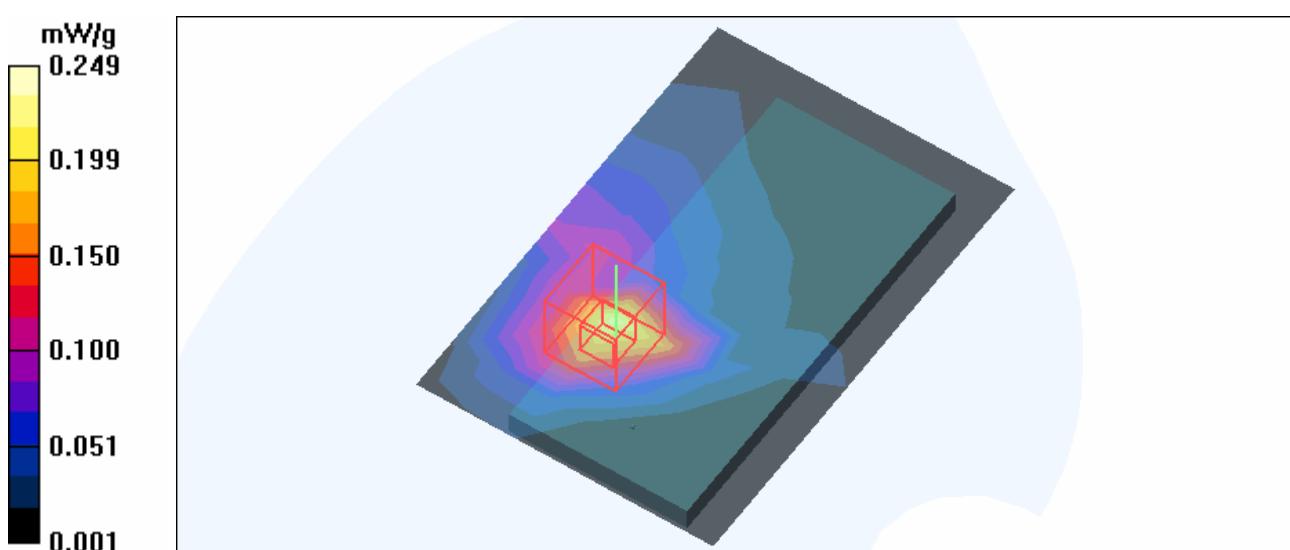
**High Channel 11/Zoom Scan (7x7x7) (7x7x7)/Cube 0:** Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 5.91 V/m

Peak SAR (extrapolated) = 0.516 W/kg

**SAR(1 g) = 0.230 mW/g; SAR(10 g) = 0.109 mW/g**

Maximum value of SAR (measured) = 0.249 mW/g



Date/Time: 2006/11/9 20:18:44

Test Laboratory: Advance Data Technology

## C600-11g-CH6-Mode 14

**DUT: D-Link DWA-642 RangeBooster N™ Notebook Adapter ; Type: DWA-642 ; Test Frequency: 2437 MHz**

Communication System: 802.11g ; Frequency: 2437 MHz ; Duty Cycle: 1:1 ; Modulation type: BPSK  
 Medium: MSL2450 Medium parameters used:  $f = 2437 \text{ MHz}$ ;  $\sigma = 1.97 \text{ mho/m}$ ;  $\epsilon_r = 53.7$ ;  $\rho = 1000 \text{ kg/m}^3$  ; Liquid level : 152 mm

Phantom section: Flat Section ; Separation distance : 14 mm (The Bottom side of the EUT to the Phantom)  
 Antenna type : PIFA Antenna ; Air temp. : 22.4 degrees ; Liquid temp. : 21.2 degrees

DASY4 Configuration:

- Probe: EX3DV4 - SN3578; ConvF(6.47, 6.47, 6.47) ; Calibrated: 2006/3/20
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn579 ; Calibrated: 2006/3/15
- Phantom: SAM 12 ; Type: SAM V4.0 ; Serial: TP 1202
- Measurement SW: DASY4, V4.7 Build 44 ; Postprocessing SW: SEMCAD, V1.8 Build 171

**Mid Channel 6/Area Scan (7x10x1):** Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (measured) = 0.066 mW/g

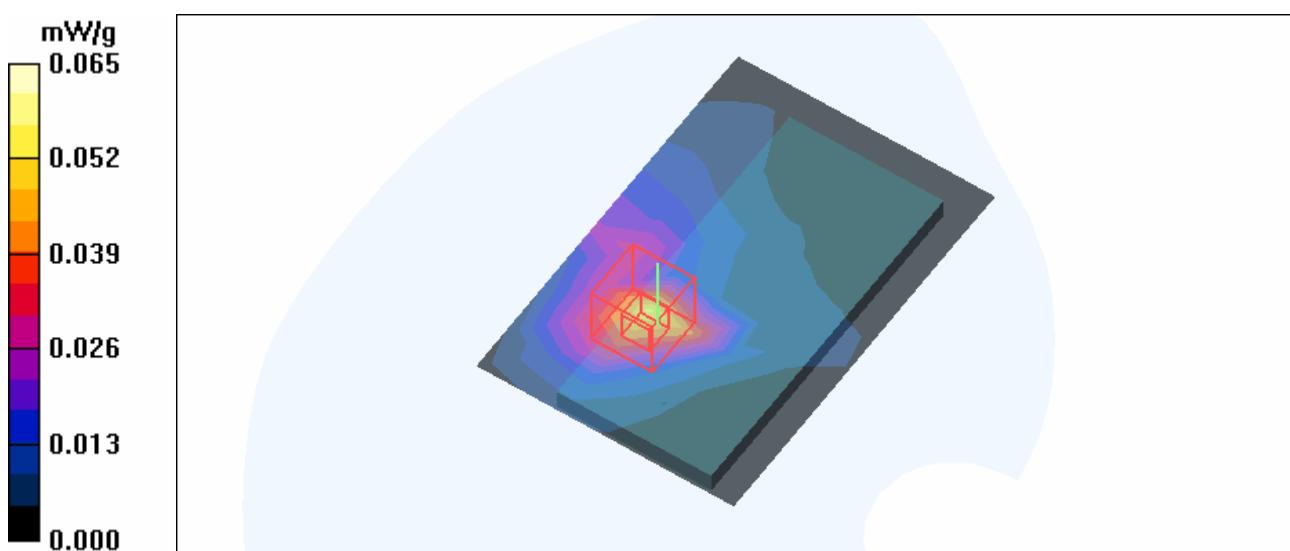
**Mid Channel 6/Zoom Scan (7x7x7) (7x7x7)/Cube 0:** Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 1.81 V/m

Peak SAR (extrapolated) = 0.138 W/kg

**SAR(1 g) = 0.059 mW/g; SAR(10 g) = 0.026 mW/g**

Maximum value of SAR (measured) = 0.065 mW/g



Date/Time: 2006/11/9 20:43:57

Test Laboratory: Advance Data Technology

## C600-SPAN20-Single-CH6-Mode 15

**DUT: D-Link DWA-642 RangeBooster N™ Notebook Adapter ; Type: DWA-642 ; Test Frequency: 2437 MHz**

Communication System: 802.11n ; Frequency: 2437 MHz ; Duty Cycle: 1:1 ; Modulation type: BPSK  
 Medium: MSL2450 Medium parameters used:  $f = 2437 \text{ MHz}$ ;  $\sigma = 1.97 \text{ mho/m}$ ;  $\epsilon_r = 53.7$ ;  $\rho = 1000 \text{ kg/m}^3$  ; Liquid level : 152 mm

Phantom section: Flat Section ; Separation distance : 14 mm (The Bottom side of the EUT to the Phantom)  
 Antenna type : PIFA Antenna ; Air temp. : 22.4 degrees ; Liquid temp. : 21.2 degrees

DASY4 Configuration:

- Probe: EX3DV4 - SN3578; ConvF(6.47, 6.47, 6.47) ; Calibrated: 2006/3/20
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn579 ; Calibrated: 2006/3/15
- Phantom: SAM 12 ; Type: SAM V4.0 ; Serial: TP 1202
- Measurement SW: DASY4, V4.7 Build 44 ; Postprocessing SW: SEMCAD, V1.8 Build 171

**Mid Channel 6/Area Scan (7x10x1):** Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (measured) = 0.047 mW/g

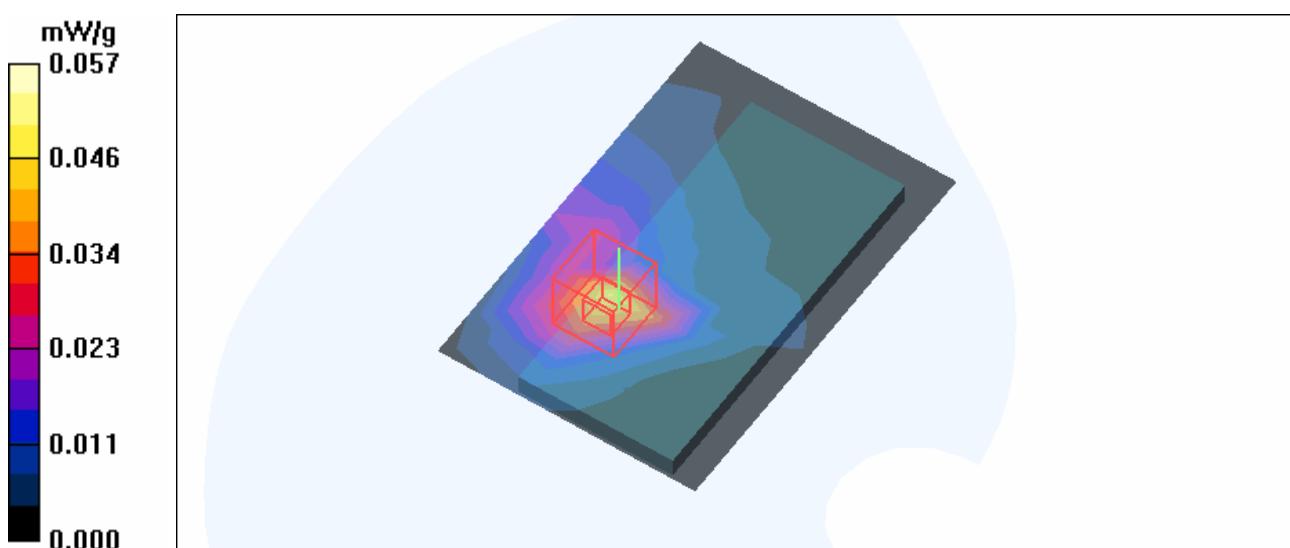
**Mid Channel 6/Zoom Scan (7x7x7) (7x7x7)/Cube 0:** Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 2.63 V/m

Peak SAR (extrapolated) = 0.122 W/kg

**SAR(1 g) = 0.053 mW/g; SAR(10 g) = 0.025 mW/g**

Maximum value of SAR (measured) = 0.057 mW/g



Date/Time: 2006/11/9 21:03:53

Test Laboratory: Advance Data Technology

## D600-SPAN20-Dual-CH6-Mode 16

**DUT: D-Link DWA-642 RangeBooster N™ Notebook Adapter ; Type: DWA-642 ; Test Frequency: 2437 MHz**

Communication System: 802.11n; Frequency: 2437 MHz ; Duty Cycle: 1:1 ; Modulation type: BPSK  
 Medium: MSL2450 Medium parameters used:  $f = 2437 \text{ MHz}$ ;  $\sigma = 1.97 \text{ mho/m}$ ;  $\epsilon_r = 53.7$ ;  $\rho = 1000 \text{ kg/m}^3$  ; Liquid level : 152 mm

Phantom section: Flat Section ; Separation distance : 14 mm (The Bottom side of the EUT to the Phantom)  
 Antenna type : PIFA Antenna ; Air temp. : 22.4 degrees ; Liquid temp. : 21.2 degrees

DASY4 Configuration:

- Probe: EX3DV4 - SN3578; ConvF(6.47, 6.47, 6.47) ; Calibrated: 2006/3/20
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn579 ; Calibrated: 2006/3/15
- Phantom: SAM 12 ; Type: SAM V4.0 ; Serial: TP 1202
- Measurement SW: DASY4, V4.7 Build 44 ; Postprocessing SW: SEMCAD, V1.8 Build 171

**Mid Channel 6/Area Scan (7x10x1):** Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (measured) = 0.150 mW/g

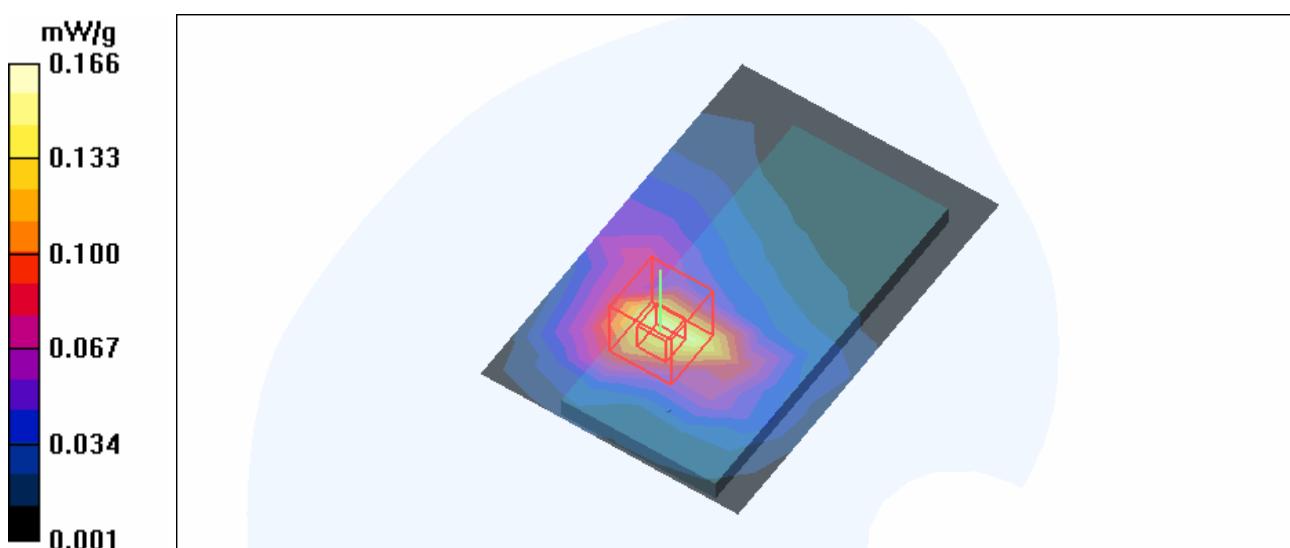
**Mid Channel 6/Zoom Scan (7x7x7) (7x7x7)/Cube 0:** Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 6.48 V/m

Peak SAR (extrapolated) = 0.345 W/kg

**SAR(1 g) = 0.154 mW/g; SAR(10 g) = 0.076 mW/g**

Maximum value of SAR (measured) = 0.166 mW/g



Date/Time: 2006/11/9 21:22:28

Test Laboratory: Advance Data Technology

## C600-SPAN40-Single-CH4-Mode 17

**DUT: D-Link DWA-642 RangeBooster N™ Notebook Adapter ; Type: DWA-642 ; Test Frequency: 2437 MHz**

Communication System: 802.11n ; Frequency: 2437 MHz ; Duty Cycle: 1:1 ; Modulation type: BPSK  
 Medium: MSL2450 Medium parameters used:  $f = 2437 \text{ MHz}$ ;  $\sigma = 1.97 \text{ mho/m}$ ;  $\epsilon_r = 53.7$ ;  $\rho = 1000 \text{ kg/m}^3$  ; Liquid level : 152 mm

Phantom section: Flat Section ; Separation distance : 14 mm (The Bottom side of the EUT to the Phantom)  
 Antenna type : PIFA Antenna ; Air temp. : 22.4 degrees ; Liquid temp. : 21.2 degrees

DASY4 Configuration:

- Probe: EX3DV4 - SN3578; ConvF(6.47, 6.47, 6.47) ; Calibrated: 2006/3/20
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn579 ; Calibrated: 2006/3/15
- Phantom: SAM 12 ; Type: SAM V4.0 ; Serial: TP 1202
- Measurement SW: DASY4, V4.7 Build 44 ; Postprocessing SW: SEMCAD, V1.8 Build 171

**Mid Channel 4/Area Scan (7x10x1):** Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (measured) = 0.040 mW/g

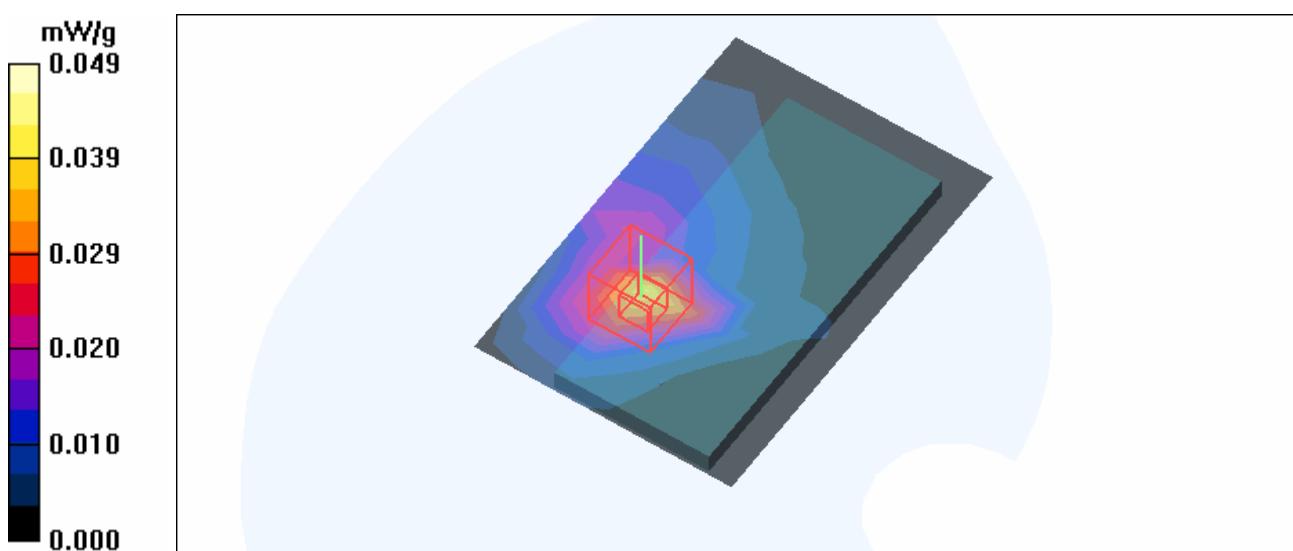
**Mid Channel 4/Zoom Scan (7x7x7) (7x7x7)/Cube 0:** Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 2.35 V/m

Peak SAR (extrapolated) = 0.104 W/kg

**SAR(1 g) = 0.046 mW/g; SAR(10 g) = 0.021 mW/g**

Maximum value of SAR (measured) = 0.049 mW/g



Date/Time: 2006/11/9 21:56:18

Test Laboratory: Advance Data Technology

## C600-SPAN40-Dual-CH4-Mode 18

**DUT: D-Link DWA-642 RangeBooster N™ Notebook Adapter ; Type: DWA-642 ; Test Frequency: 2437 MHz**

Communication System: 802.11n ; Frequency: 2437 MHz ; Duty Cycle: 1:1 ; Modulation type: BPSK  
 Medium: MSL2450 Medium parameters used:  $f = 2437 \text{ MHz}$ ;  $\sigma = 1.97 \text{ mho/m}$ ;  $\epsilon_r = 53.7$ ;  $\rho = 1000 \text{ kg/m}^3$  ; Liquid level : 152 mm

Phantom section: Flat Section ; Separation distance : 14 mm (The Bottom side of the EUT to the Phantom)  
 Antenna type : PIFA Antenna ; Air temp. : 22.4 degrees ; Liquid temp. : 21.2 degrees

DASY4 Configuration:

- Probe: EX3DV4 - SN3578; ConvF(6.47, 6.47, 6.47) ; Calibrated: 2006/3/20
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn579 ; Calibrated: 2006/3/15
- Phantom: SAM 12 ; Type: SAM V4.0 ; Serial: TP 1202
- Measurement SW: DASY4, V4.7 Build 44 ; Postprocessing SW: SEMCAD, V1.8 Build 171

**Mid Channel 4/Area Scan (7x10x1):** Measurement grid: dx=15mm, dy=15mm

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

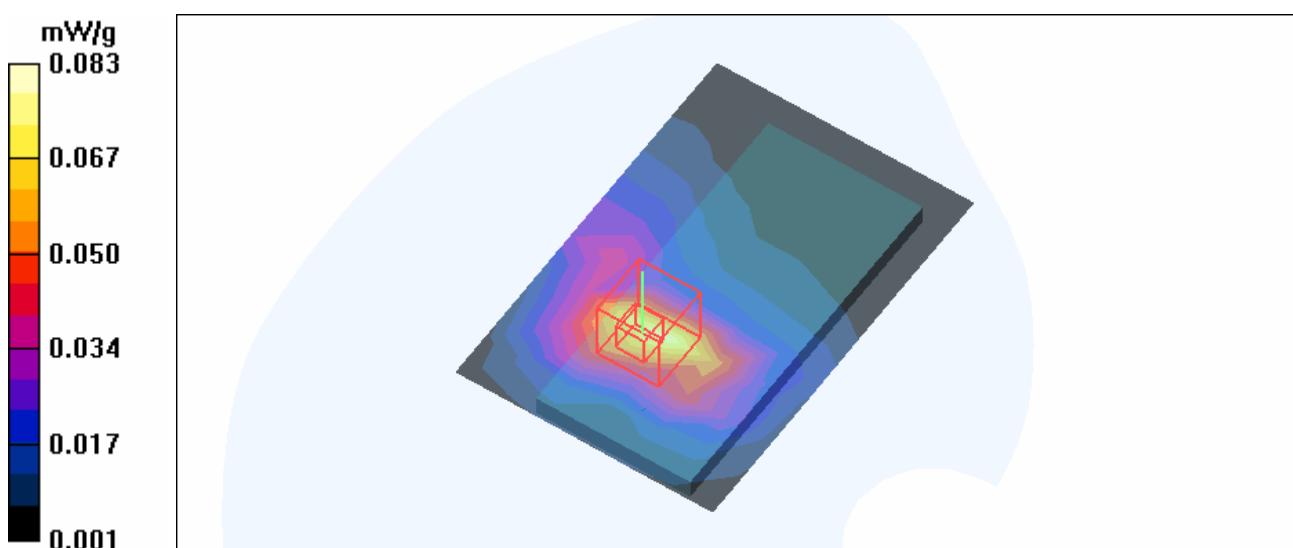
**Mid Channel 4/Zoom Scan (7x7x7) (7x7x7)/Cube 0:** Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 4.74 V/m

Peak SAR (extrapolated) = 0.171 W/kg

**SAR(1 g) = 0.077 mW/g; SAR(10 g) = 0.039 mW/g**

Maximum value of SAR (measured) = 0.083 mW/g



Date/Time: 2006/11/9 09:59:16

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:  $f = 2450 \text{ MHz}$ ;  $\sigma = 1.99 \text{ mho/m}$ ;  $\epsilon_r = 53.6$ ;  $\rho = 1000 \text{ kg/m}^3$  ; Liquid level : 152 mm

Phantom section: Flat Section ; Separation distance : 10 mm (The feetpoint of the dipole to the Phantom) Air temp. : 22.4 degrees ; Liquid temp. : 21.2 degrees

DASY4 Configuration:

- Probe: EX3DV4 - SN3578; ConvF(6.47, 6.47, 6.47) ; Calibrated: 2006/3/20
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn579; Calibrated: 2006/3/15
- Phantom: SAM 12; Type: SAM V4.0; Serial: TP 1202
- Measurement SW: DASY4, V4.7 Build 44; Postprocessing SW: SEMCAD, V1.8 Build 171

**d=10mm, Pin=250mW/Area Scan (5x7x1):** Measurement grid: dx=15mm, dy=15mm  
 Maximum value of SAR (measured) = 14.9 mW/g

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

Reference Value = 89.2 V/m; Power Drift = -0.102 dB

Peak SAR (extrapolated) = 30.4 W/kg

**SAR(1 g) = 13.4 mW/g; SAR(10 g) = 6.15 mW/g**

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

