

APPENDIX A: TEST DATA

Liquid Level Photo

MSL 2450MHz D=154mm



Date/Time: 2008/9/2 02:06:42

Test Laboratory: Advance Data Technology

M01-11b-Ch11

DUT: D-Link DWA-130 Wireless N USB Adapter ; Type: DWA-130D1 ; Test Frequency: 2462 MHz

Communication System: 802.11b ; Frequency: 2462 MHz ; Duty Cycle: 1:1 ; Modulation type: DBPSK
 Medium: MSL2450 Medium parameters used: $f = 2462 \text{ MHz}$; $\sigma = 1.98 \text{ mho/m}$; $\epsilon_r = 53.9$; $\rho = 1000 \text{ kg/m}^3$; Liquid level : 154 mm
 Phantom section: Flat Section ; Separation distance : 5 mm (The bottom side of the EUT to the Phantom)
 Antenna type : printed Antenna ; Air temp. : 23.5 degrees ; Liquid temp. : 22.3 degrees

DASY4 Configuration:

- Probe: ET3DV6 - SN1790 ; ConvF(4.16, 4.16, 4.16) ; Calibrated: 2007/11/20
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn579 ; Calibrated: 2008/3/13
- Phantom: SAM 12 ; Type: SAM V4.0 ; Serial: TP 1202
- Measurement SW: DASY4, V4.7 Build 53 ; Postprocessing SW: SEMCAD, V1.8 Build 172

High Channel 11/Area Scan (4x8x1): Measurement grid: $dx=15\text{mm}$, $dy=15\text{mm}$
 Maximum value of SAR (measured) = 0.624 mW/g

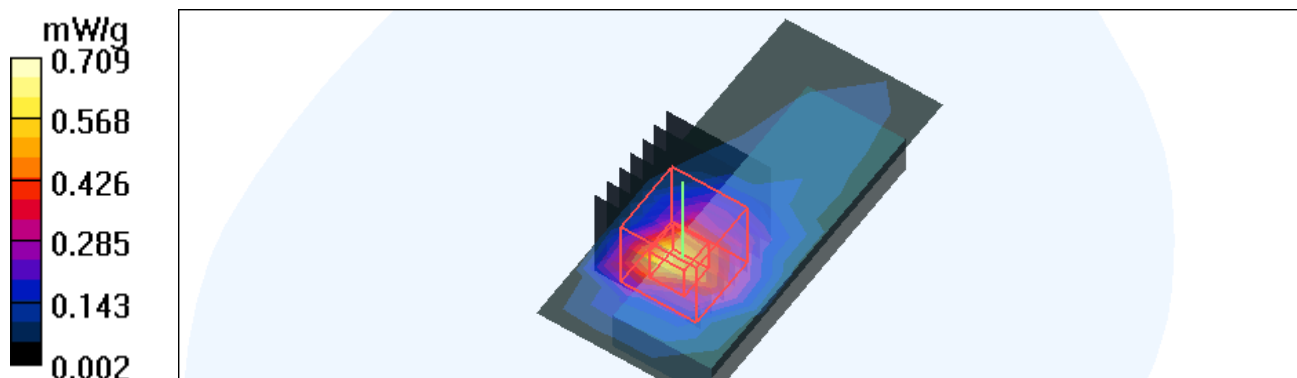
High Channel 11/Zoom Scan (7x7x7) (7x7x7)/Cube 0: Measurement grid: $dx=5\text{mm}$, $dy=5\text{mm}$, $dz=5\text{mm}$

Reference Value = 18.8 V/m

Peak SAR (extrapolated) = 1.38 W/kg

SAR(1 g) = 0.638 mW/g; SAR(10 g) = 0.283 mW/g

Maximum value of SAR (measured) = 0.709 mW/g



Date/Time: 2008/9/2 02:31:42

Test Laboratory: Advance Data Technology

M02-11g-Ch11

DUT: D-Link DWA-130 Wireless N USB Adapter ; Type: DWA-130D1 ; Test Frequency: 2462 MHz

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

Medium: MSL2450 Medium parameters used: $f = 2462 \text{ MHz}$; $\sigma = 1.98 \text{ mho/m}$; $\epsilon_r = 53.9$; $\rho = 1000$

kg/m^3 ; Liquid level : 154 mm

Phantom section: Flat Section ; Separation distance : 5 mm (The bottom side of the EUT to the Phantom)

Antenna type : printed Antenna ; Air temp. : 23.5 degrees ; Liquid temp. : 22.3 degrees

DASY4 Configuration:

- Probe: ET3DV6 - SN1790 ; ConvF(4.16, 4.16, 4.16) ; Calibrated: 2007/11/20
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn579 ; Calibrated: 2008/3/13
- Phantom: SAM 12 ; Type: SAM V4.0 ; Serial: TP 1202
- Measurement SW: DASY4, V4.7 Build 53 ; Postprocessing SW: SEMCAD, V1.8 Build 172

High Channel 11/Area Scan (4x8x1): Measurement grid: $dx=15\text{mm}$, $dy=15\text{mm}$

Maximum value of SAR (measured) = 0.681 mW/g

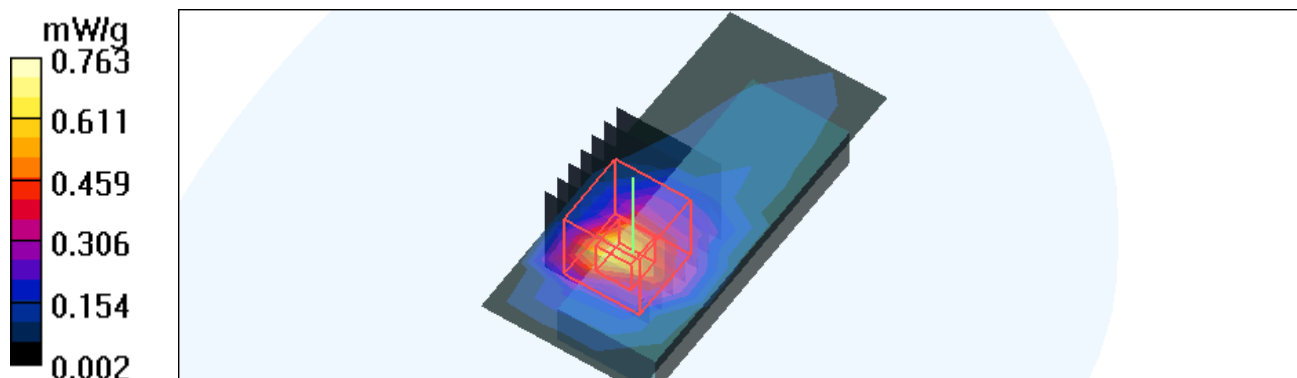
High Channel 11/Zoom Scan (7x7x7) (7x7x7)/Cube 0: Measurement grid: $dx=5\text{mm}$, $dy=5\text{mm}$, $dz=5\text{mm}$

Reference Value = 19.6 V/m

Peak SAR (extrapolated) = 1.56 W/kg

SAR(1 g) = 0.697 mW/g; SAR(10 g) = 0.312 mW/g

Maximum value of SAR (measured) = 0.763 mW/g



Date/Time: 2008/9/2 02:56:07

Test Laboratory: Advance Data Technology

M03-11n 20M-Ch1

DUT: D-Link DWA-130 Wireless N USB Adapter ; Type: DWA-130D1 ; Test Frequency: 2412 MHz

Communication System: 2.4G 11n span20 ; Frequency: 2412 MHz ; Duty Cycle: 1:1 ; Modulation type: BPSK

Medium: MSL2450 Medium parameters used: $f = 2412 \text{ MHz}$; $\sigma = 1.93 \text{ mho/m}$; $\epsilon_r = 54.2$; $\rho = 1000 \text{ kg/m}^3$; Liquid level : 154 mm

Phantom section: Flat Section ; Separation distance : 5 mm (The bottom side of the EUT to the Phantom)

Antenna type : printed Antenna ; Air temp. : 23.5 degrees ; Liquid temp. : 22.3 degrees

DASY4 Configuration:

- Probe: ET3DV6 - SN1790 ; ConvF(4.16, 4.16, 4.16) ; Calibrated: 2007/11/20
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn579 ; Calibrated: 2008/3/13
- Phantom: SAM 12 ; Type: SAM V4.0 ; Serial: TP 1202
- Measurement SW: DASY4, V4.7 Build 53 ; Postprocessing SW: SEMCAD, V1.8 Build 172

Low Channel 1/Area Scan (4x8x1): Measurement grid: $dx=15\text{mm}$, $dy=15\text{mm}$

Maximum value of SAR (measured) = 0.875 mW/g

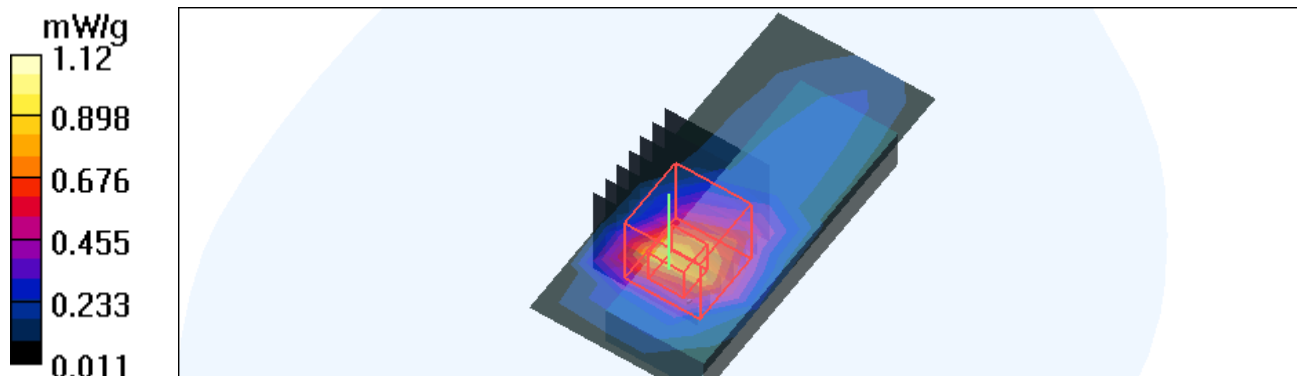
Low Channel 1/Zoom Scan (7x7x7) (7x7x7)/Cube 0: Measurement grid: $dx=5\text{mm}$, $dy=5\text{mm}$, $dz=5\text{mm}$

Reference Value = 24.3 V/m

Peak SAR (extrapolated) = 2.41 W/kg

SAR(1 g) = 1.01 mW/g; SAR(10 g) = 0.459 mW/g

Maximum value of SAR (measured) = 1.12 mW/g



Date/Time: 2008/9/2 03:21:56

Test Laboratory: Advance Data Technology

M03-11n 20M-Ch6

DUT: D-Link DWA-130 Wireless N USB Adapter ; Type: DWA-130D1 ; Test Frequency: 2437 MHz

Communication System: 2.4G 11n span20 ; Frequency: 2437 MHz ; Duty Cycle: 1:1 ; Modulation type: BPSK

Medium: MSL2450 Medium parameters used: $f = 2437$ MHz; $\sigma = 1.95$ mho/m; $\epsilon_r = 54.1$; $\rho = 1000$ kg/m³ ; Liquid level : 154 mm

Phantom section: Flat Section ; Separation distance : 5 mm (The bottom side of the EUT to the Phantom)

Antenna type : printed Antenna ; Air temp. : 23.5 degrees ; Liquid temp. : 22.3 degrees

DASY4 Configuration:

- Probe: ET3DV6 - SN1790 ; ConvF(4.16, 4.16, 4.16) ; Calibrated: 2007/11/20
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn579 ; Calibrated: 2008/3/13
- Phantom: SAM 12 ; Type: SAM V4.0 ; Serial: TP 1202
- Measurement SW: DASY4, V4.7 Build 53 ; Postprocessing SW: SEMCAD, V1.8 Build 172

Mid Channel 6/Area Scan (4x8x1): Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (measured) = 0.909 mW/g

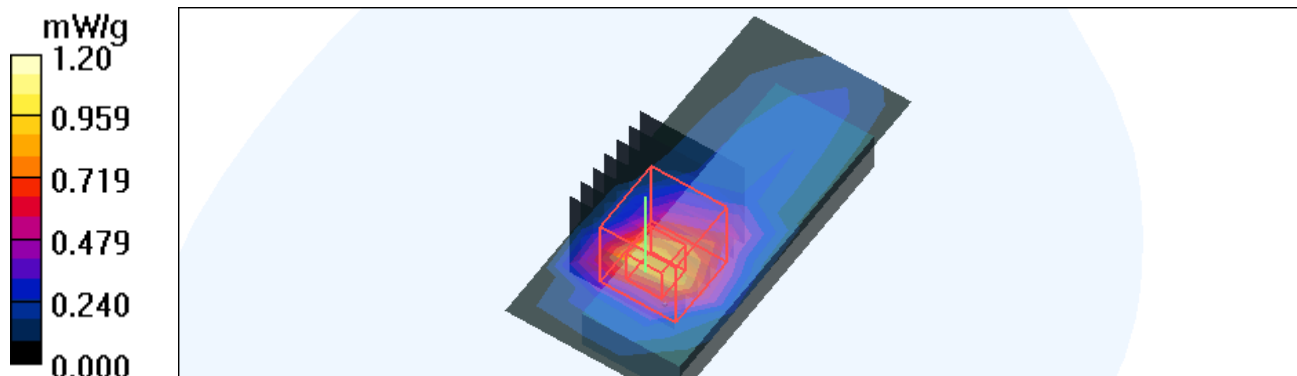
Mid Channel 6/Zoom Scan (7x7x7) (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

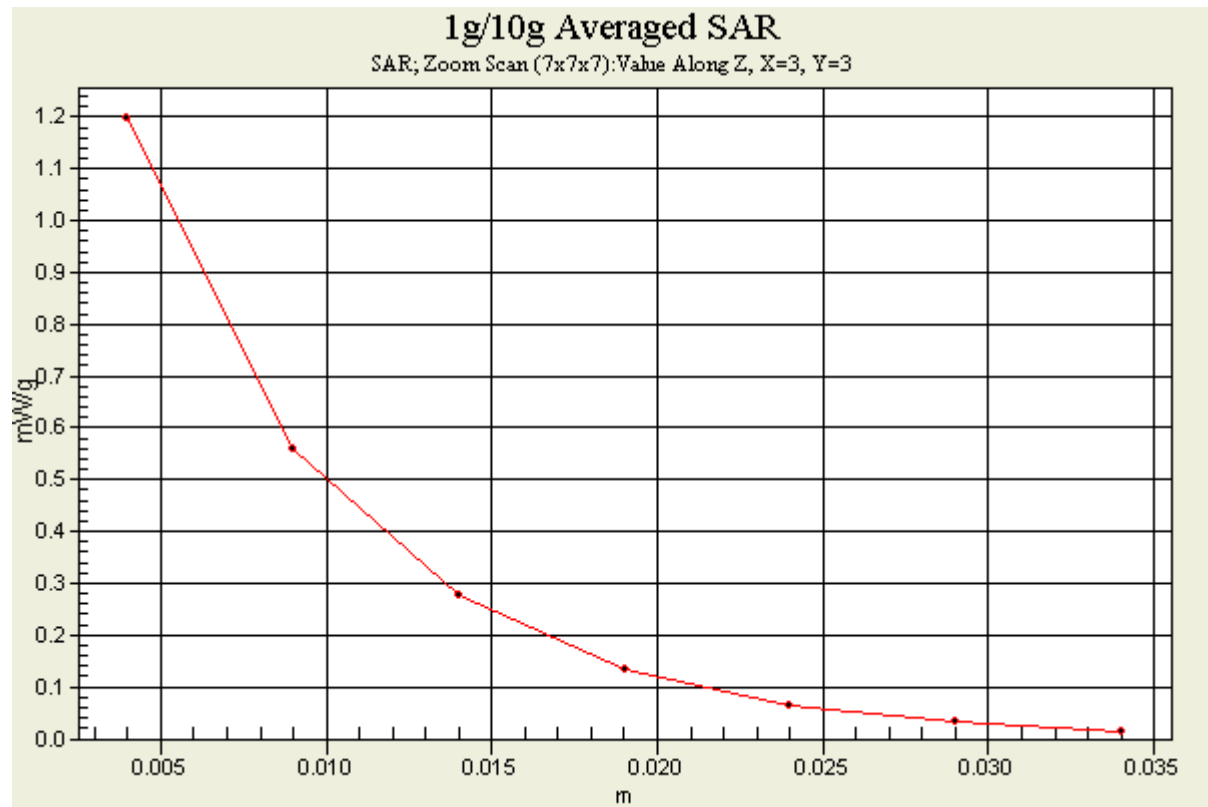
Reference Value = 24.3 V/m

Peak SAR (extrapolated) = 2.63 W/kg

SAR(1 g) = 1.03 mW/g; SAR(10 g) = 0.471 mW/g

Maximum value of SAR (measured) = 1.20 mW/g





Date/Time: 2008/9/2 03:46:38

Test Laboratory: Advance Data Technology

M03-11n 20M-Ch11

DUT: D-Link DWA-130 Wireless N USB Adapter ; Type: DWA-130D1 ; Test Frequency: 2462 MHz

Communication System: 2.4G 11n span20 ; Frequency: 2462 MHz ; Duty Cycle: 1:1 ; Modulation type: BPSK

Medium: MSL2450 Medium parameters used: $f = 2462$ MHz; $\sigma = 1.98$ mho/m; $\epsilon_r = 53.9$; $\rho = 1000$ kg/m³ ; Liquid level : 154 mm

Phantom section: Flat Section ; Separation distance : 5 mm (The bottom side of the EUT to the Phantom)

Antenna type : printed Antenna ; Air temp. : 23.5 degrees ; Liquid temp. : 22.3 degrees

DASY4 Configuration:

- Probe: ET3DV6 - SN1790 ; ConvF(4.16, 4.16, 4.16) ; Calibrated: 2007/11/20
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn579 ; Calibrated: 2008/3/13
- Phantom: SAM 12 ; Type: SAM V4.0 ; Serial: TP 1202
- Measurement SW: DASY4, V4.7 Build 53 ; Postprocessing SW: SEMCAD, V1.8 Build 172

High Channel 11/Area Scan (4x8x1): Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (measured) = 0.864 mW/g

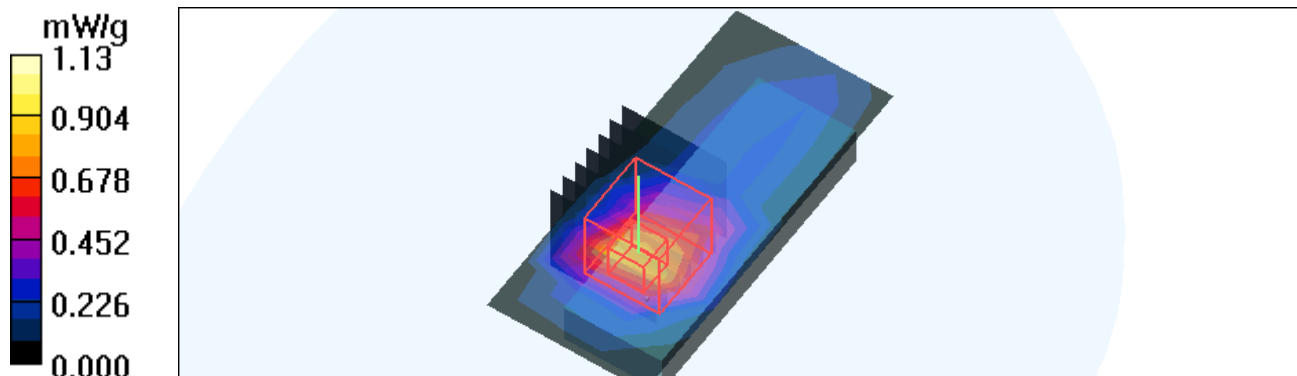
High Channel 11/Zoom Scan (7x7x7) (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 23.6 V/m

Peak SAR (extrapolated) = 2.47 W/kg

SAR(1 g) = **0.992 mW/g**; SAR(10 g) = 0.441 mW/g

Maximum value of SAR (measured) = 1.13 mW/g



Date/Time: 2008/9/2 04:11:38

Test Laboratory: Advance Data Technology

M04-11n 40M-Ch4

DUT: D-Link DWA-130 Wireless N USB Adapter ; Type: DWA-130D1 ; Test Frequency: 2437 MHz

Communication System: 802.11n 40MHz ; Frequency: 2437 MHz ; Duty Cycle: 1:1 ; Modulation type: BPSK

Medium: MSL2450 Medium parameters used: $f = 2437 \text{ MHz}$; $\sigma = 1.95 \text{ mho/m}$; $\epsilon_r = 54.1$; $\rho = 1000 \text{ kg/m}^3$; Liquid level : 154 mm

Phantom section: Flat Section ; Separation distance : 5 mm (The bottom side of the EUT to the Phantom)

Antenna type : printed Antenna ; Air temp. : 23.5 degrees ; Liquid temp. : 22.3 degrees

DASY4 Configuration:

- Probe: ET3DV6 - SN1790 ; ConvF(4.16, 4.16, 4.16) ; Calibrated: 2007/11/20
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn579 ; Calibrated: 2008/3/13
- Phantom: SAM 12 ; Type: SAM V4.0 ; Serial: TP 1202
- Measurement SW: DASY4, V4.7 Build 53 ; Postprocessing SW: SEMCAD, V1.8 Build 172

Mid. Channel/Area Scan (4x8x1): Measurement grid: $dx=15\text{mm}$, $dy=15\text{mm}$

Maximum value of SAR (measured) = 0.465 mW/g

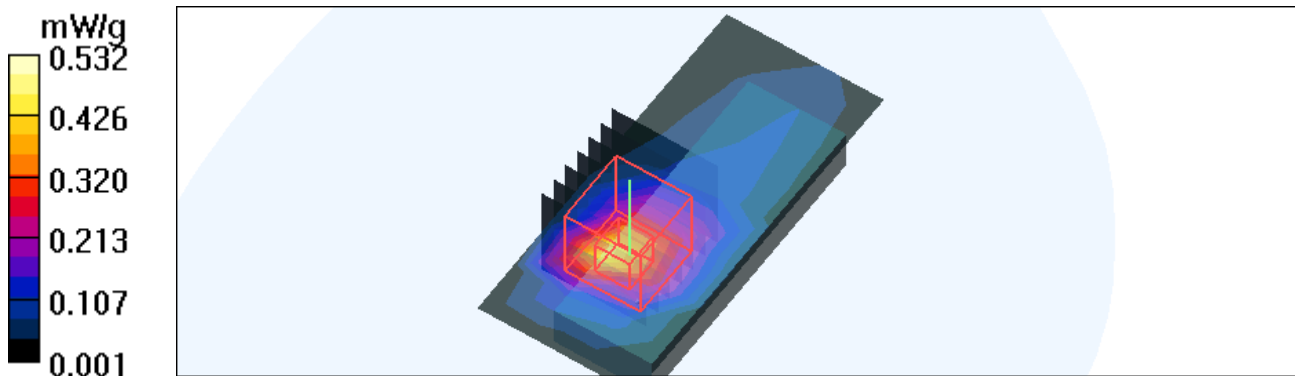
Mid. Channel/Zoom Scan (7x7x7) (7x7x7)/Cube 0: Measurement grid: $dx=5\text{mm}$, $dy=5\text{mm}$, $dz=5\text{mm}$

Reference Value = 16.1 V/m

Peak SAR (extrapolated) = 1.01 W/kg

SAR(1 g) = 0.481 mW/g; SAR(10 g) = 0.220 mW/g

Maximum value of SAR (measured) = 0.532 mW/g



Date/Time: 2008/9/2 04:45:16

Test Laboratory: Advance Data Technology

M05-11b-Ch11

DUT: D-Link DWA-130 Wireless N USB Adapter ; Type: DWA-130D1 ; Test Frequency: 2462 MHz

Communication System: 802.11b ; Frequency: 2462 MHz ; Duty Cycle: 1:1 ; Modulation type: DBPSK

Medium: MSL2450 Medium parameters used: $f = 2462 \text{ MHz}$; $\sigma = 1.98 \text{ mho/m}$; $\epsilon_r = 53.9$; $\rho = 1000$

kg/m^3 ; Liquid level : 154 mm

Phantom section: Flat Section ; Separation distance : 5 mm (The front side of the EUT to the Phantom)

Antenna type : printed Antenna ; Air temp. : 23.5 degrees ; Liquid temp. : 22.3 degrees

DASY4 Configuration:

- Probe: ET3DV6 - SN1790 ; ConvF(4.16, 4.16, 4.16) ; Calibrated: 2007/11/20
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn579 ; Calibrated: 2008/3/13
- Phantom: SAM 12 ; Type: SAM V4.0 ; Serial: TP 1202
- Measurement SW: DASY4, V4.7 Build 53 ; Postprocessing SW: SEMCAD, V1.8 Build 172

High Channel 11/Area Scan (4x8x1): Measurement grid: $dx=15\text{mm}$, $dy=15\text{mm}$

Maximum value of SAR (measured) = 0.452 mW/g

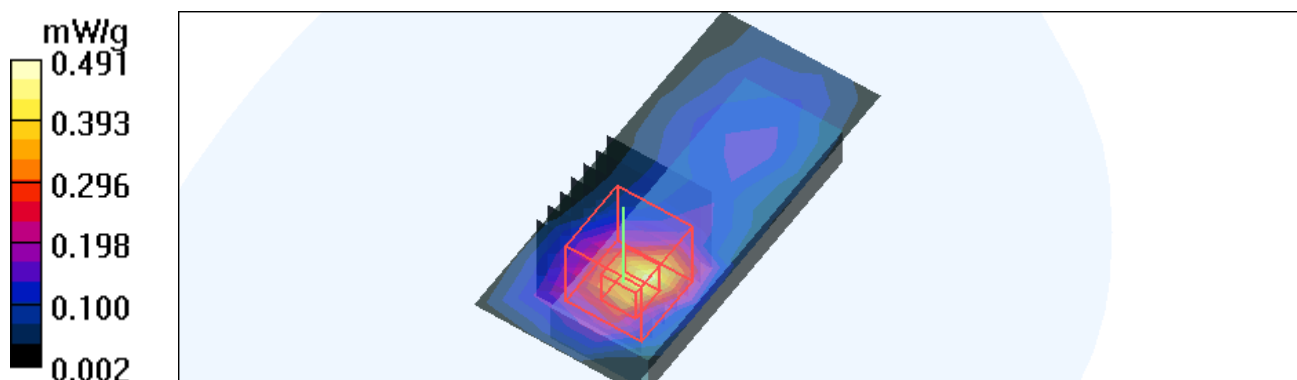
High Channel 11/Zoom Scan (7x7x7) (7x7x7)/Cube 0: Measurement grid: $dx=5\text{mm}$, $dy=5\text{mm}$, $dz=5\text{mm}$

Reference Value = 15.8 V/m

Peak SAR (extrapolated) = 0.980 W/kg

SAR(1 g) = **0.442 mW/g**; SAR(10 g) = 0.203 mW/g

Maximum value of SAR (measured) = 0.491 mW/g



Date/Time: 2008/9/2 05:11:26

Test Laboratory: Advance Data Technology

M06-11g-Ch11

DUT: D-Link DWA-130 Wireless N USB Adapter ; Type: DWA-130D1 ; Test Frequency: 2462 MHz

Communication System: 802.11g ; Frequency: 2462 MHz ; Duty Cycle: 1:1 ; Modulation type: BPSK
Medium: MSL2450 Medium parameters used: $f = 2462 \text{ MHz}$; $\sigma = 1.98 \text{ mho/m}$; $\epsilon_r = 53.9$; $\rho = 1000 \text{ kg/m}^3$; Liquid level : 154 mm

Phantom section: Flat Section ; Separation distance : 5 mm (The front side of the EUT to the Phantom)

Antenna type : printed Antenna ; Air temp. : 23.5 degrees ; Liquid temp. : 22.3 degrees

DASY4 Configuration:

- Probe: ET3DV6 - SN1790 ; ConvF(4.16, 4.16, 4.16) ; Calibrated: 2007/11/20
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn579 ; Calibrated: 2008/3/13
- Phantom: SAM 12 ; Type: SAM V4.0 ; Serial: TP 1202
- Measurement SW: DASY4, V4.7 Build 53 ; Postprocessing SW: SEMCAD, V1.8 Build 172

High Channel 11/Area Scan (4x8x1): Measurement grid: $dx=15\text{mm}$, $dy=15\text{mm}$

Maximum value of SAR (measured) = 0.501 mW/g

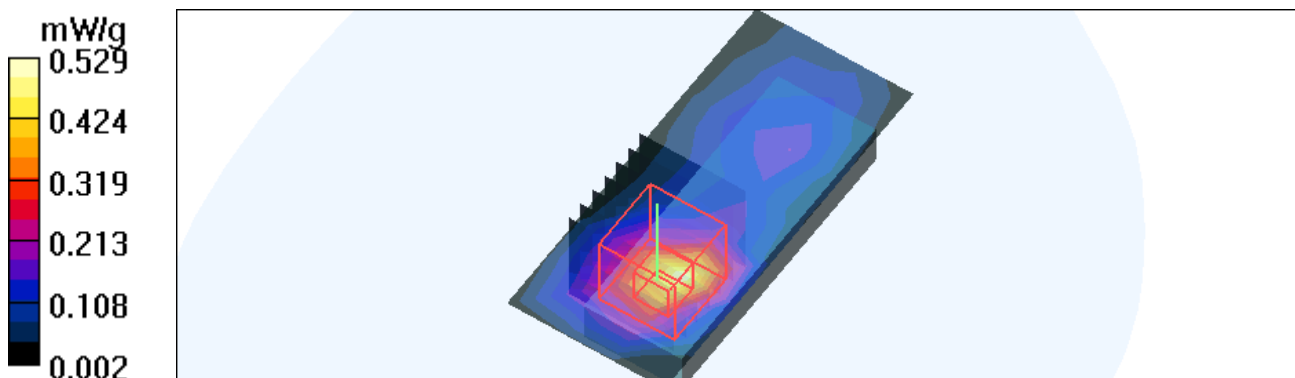
High Channel 11/Zoom Scan (7x7x7) (7x7x7)/Cube 0: Measurement grid: $dx=5\text{mm}$, $dy=5\text{mm}$, $dz=5\text{mm}$

Reference Value = 16.6 V/m

Peak SAR (extrapolated) = 1.05 W/kg

SAR(1 g) = 0.479 mW/g; SAR(10 g) = 0.222 mW/g

Maximum value of SAR (measured) = 0.529 mW/g



Date/Time: 2008/9/2 05:37:35

Test Laboratory: Advance Data Technology

M07-11n 20M-Ch11

DUT: D-Link DWA-130 Wireless N USB Adapter ; Type: DWA-130D1 ; Test Frequency: 2462 MHz

Communication System: 2.4G 11n span20 ; Frequency: 2462 MHz ; Duty Cycle: 1:1 ; Modulation type: BPSK

Medium: MSL2450 Medium parameters used: $f = 2462 \text{ MHz}$; $\sigma = 1.98 \text{ mho/m}$; $\epsilon_r = 53.9$; $\rho = 1000 \text{ kg/m}^3$; Liquid level : 154 mm

Phantom section: Flat Section ; Separation distance : 5 mm (The front side of the EUT to the Phantom)

Antenna type : printed Antenna ; Air temp. : 23.5 degrees ; Liquid temp. : 22.3 degrees

DASY4 Configuration:

- Probe: ET3DV6 - SN1790 ; ConvF(4.16, 4.16, 4.16) ; Calibrated: 2007/11/20
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn579 ; Calibrated: 2008/3/13
- Phantom: SAM 12 ; Type: SAM V4.0 ; Serial: TP 1202
- Measurement SW: DASY4, V4.7 Build 53 ; Postprocessing SW: SEMCAD, V1.8 Build 172

High Channel 11/Area Scan (4x8x1): Measurement grid: $dx=15\text{mm}$, $dy=15\text{mm}$

Maximum value of SAR (measured) = 0.462 mW/g

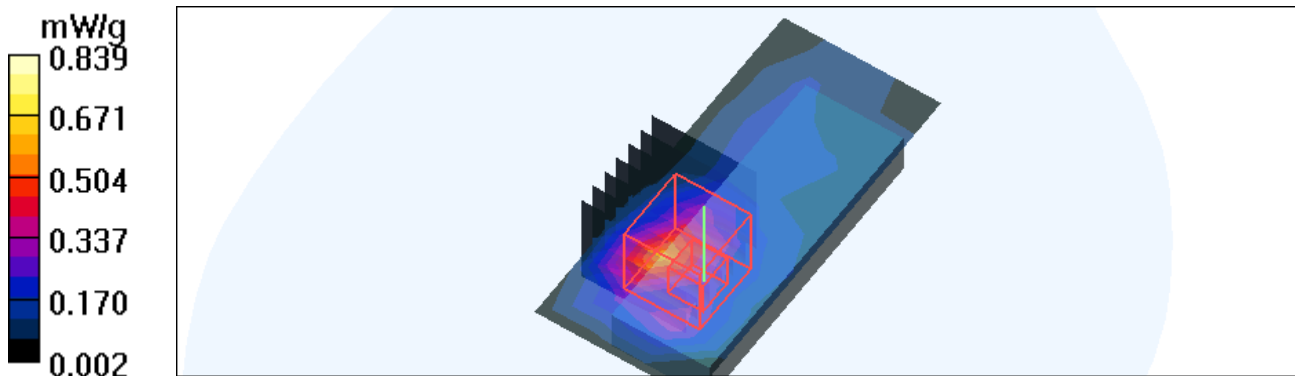
High Channel 11/Zoom Scan (7x7x7) (7x7x7)/Cube 0: Measurement grid: $dx=5\text{mm}$, $dy=5\text{mm}$, $dz=5\text{mm}$

Reference Value = 21.5 V/m

Peak SAR (extrapolated) = 1.78 W/kg

SAR(1 g) = **0.745 mW/g**; SAR(10 g) = 0.336 mW/g

Maximum value of SAR (measured) = 0.839 mW/g



Date/Time: 2008/9/2 06:03:16

Test Laboratory: Advance Data Technology

M08-11n 40M-Ch4

DUT: D-Link DWA-130 Wireless N USB Adapter ; Type: DWA-130D1 ; Test Frequency: 2437 MHz

Communication System: 802.11n 40MHz ; Frequency: 2437 MHz ; Duty Cycle: 1:1 ; Modulation type: BPSK

Medium: MSL2450 Medium parameters used: $f = 2437 \text{ MHz}$; $\sigma = 1.95 \text{ mho/m}$; $\epsilon_r = 54.1$; $\rho = 1000 \text{ kg/m}^3$; Liquid level : 154 mm

Phantom section: Flat Section ; Separation distance : 5 mm (The front side of the EUT to the Phantom)

Antenna type : printed Antenna ; Air temp. : 23.5 degrees ; Liquid temp. : 22.3 degrees

DASY4 Configuration:

- Probe: ET3DV6 - SN1790 ; ConvF(4.16, 4.16, 4.16) ; Calibrated: 2007/11/20
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn579 ; Calibrated: 2008/3/13
- Phantom: SAM 12 ; Type: SAM V4.0 ; Serial: TP 1202
- Measurement SW: DASY4, V4.7 Build 53 ; Postprocessing SW: SEMCAD, V1.8 Build 172

Mid. Channel4/Area Scan (4x8x1): Measurement grid: $dx=15\text{mm}$, $dy=15\text{mm}$

Maximum value of SAR (measured) = 0.369 mW/g

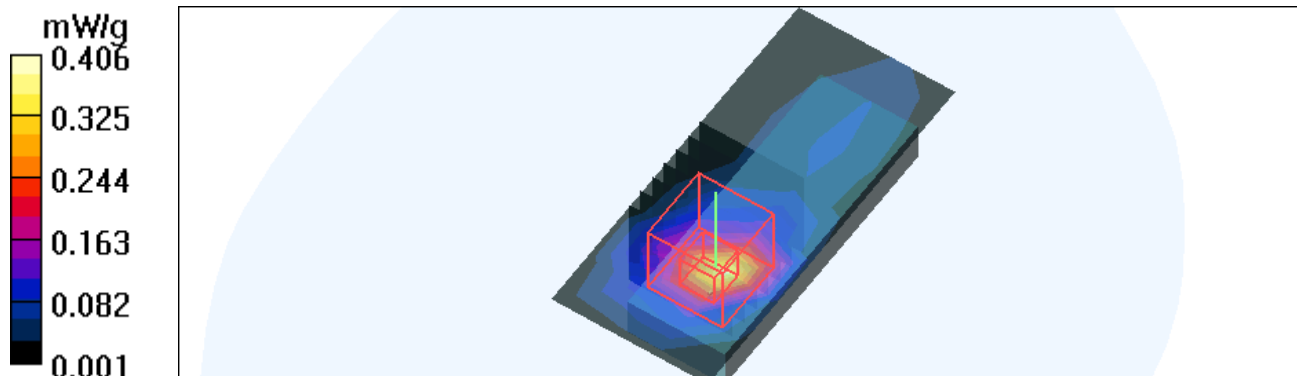
Mid. Channel4/Zoom Scan (7x7x7) (7x7x7)/Cube 0: Measurement grid: $dx=5\text{mm}$, $dy=5\text{mm}$, $dz=5\text{mm}$

Reference Value = 15.2 V/m

Peak SAR (extrapolated) = 1.34 W/kg

SAR(1 g) = 0.374 mW/g; SAR(10 g) = 0.152 mW/g

Maximum value of SAR (measured) = 0.406 mW/g



Date/Time: 2008/9/2 06:38:11

Test Laboratory: Advance Data Technology

M09-11b-Ch11

DUT: D-Link DWA-130 Wireless N USB Adapter ; Type: DWA-130D1 ; Test Frequency: 2462 MHz

Communication System: 802.11b ; Frequency: 2462 MHz ; Duty Cycle: 1:1 ; Modulation type: DBPSK

Medium: MSL2450 Medium parameters used: $f = 2462 \text{ MHz}$; $\sigma = 1.98 \text{ mho/m}$; $\epsilon_r = 53.9$; $\rho = 1000$

kg/m^3 ; Liquid level : 154 mm

Phantom section: Flat Section ; Separation distance : 5 mm (The edge side of the EUT to the Phantom)

Antenna type : printed Antenna ; Air temp. : 23.5 degrees ; Liquid temp. : 22.3 degrees

DASY4 Configuration:

- Probe: ET3DV6 - SN1790 ; ConvF(4.16, 4.16, 4.16) ; Calibrated: 2007/11/20
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn579 ; Calibrated: 2008/3/13
- Phantom: SAM 12 ; Type: SAM V4.0 ; Serial: TP 1202
- Measurement SW: DASY4, V4.7 Build 53 ; Postprocessing SW: SEMCAD, V1.8 Build 172

High Channel 11/Area Scan (4x8x1): Measurement grid: $dx=15\text{mm}$, $dy=15\text{mm}$

Maximum value of SAR (measured) = 0.253 mW/g

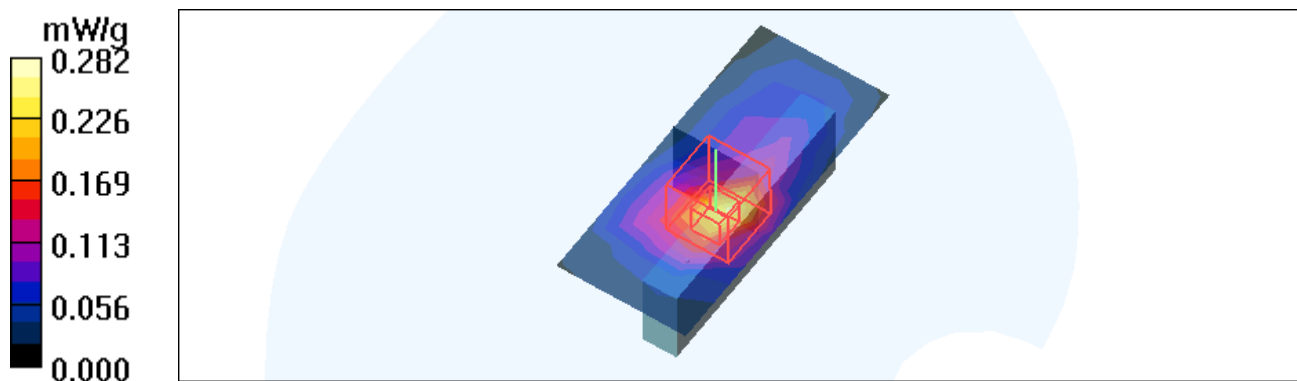
High Channel 11/Zoom Scan (7x7x7) (7x7x7)/Cube 0: Measurement grid: $dx=5\text{mm}$, $dy=5\text{mm}$, $dz=5\text{mm}$

Reference Value = 9.86 V/m

Peak SAR (extrapolated) = 0.648 W/kg

SAR(1 g) = 0.258 mW/g; SAR(10 g) = 0.117 mW/g

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



Date/Time: 2008/9/2 07:04:09

Test Laboratory: Advance Data Technology

M10-11g-Ch11

DUT: D-Link DWA-130 Wireless N USB Adapter ; Type: DWA-130D1 ; Test Frequency: 2462 MHz

Communication System: 2.4G 11n span20 ; Frequency: 2462 MHz ; Duty Cycle: 1:1 ; Modulation type: BPSK

Medium: MSL2450 Medium parameters used: $f = 2462$ MHz; $\sigma = 1.98$ mho/m; $\epsilon_r = 53.9$; $\rho = 1000$ kg/m³ ; Liquid level : 154 mm

Phantom section: Flat Section ; Separation distance : 5 mm (The edge side of the EUT to the Phantom)

Antenna type : printed Antenna ; Air temp. : 23.5 degrees ; Liquid temp. : 22.3 degrees

DASY4 Configuration:

- Probe: ET3DV6 - SN1790 ; ConvF(4.16, 4.16, 4.16) ; Calibrated: 2007/11/20
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn579 ; Calibrated: 2008/3/13
- Phantom: SAM 12 ; Type: SAM V4.0 ; Serial: TP 1202
- Measurement SW: DASY4, V4.7 Build 53 ; Postprocessing SW: SEMCAD, V1.8 Build 172

High Channel 11/Area Scan (4x8x1): Measurement grid: dx=15mm, dy=15mm

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

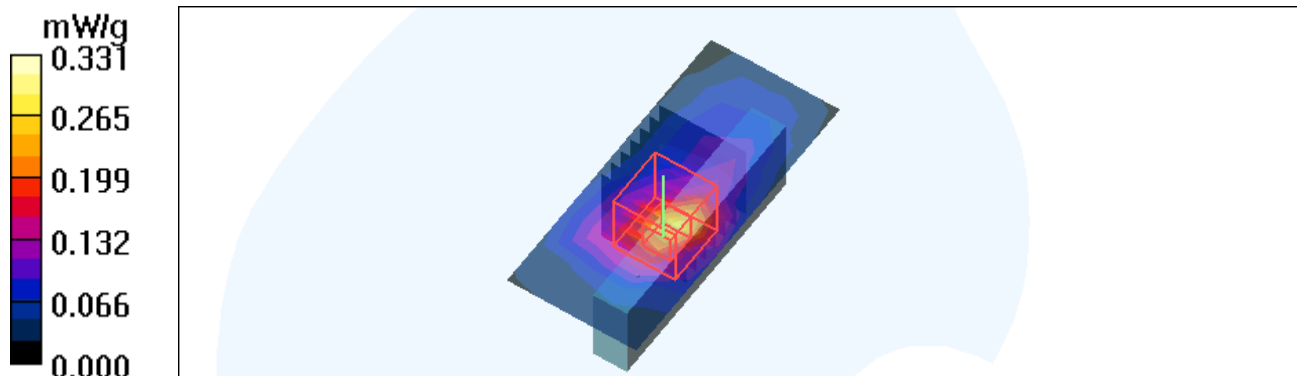
High Channel 11/Zoom Scan (7x7x7) (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 10.2 V/m

Peak SAR (extrapolated) = 0.726 W/kg

SAR(1 g) = **0.292 mW/g**; SAR(10 g) = 0.131 mW/g

Maximum value of SAR (measured) = 0.331 mW/g



Date/Time: 2008/9/2 07:31:52

Test Laboratory: Advance Data Technology

M11-11n 20M-Ch11

DUT: D-Link DWA-130 Wireless N USB Adapter ; Type: DWA-130D1 ; Test Frequency: 2462 MHz
 Communication System: 2.4G 11n span20 ; Frequency: 2462 MHz ; Duty Cycle: 1:1 ; Modulation type: BPSK

Medium: MSL2450 Medium parameters used: $f = 2462 \text{ MHz}$; $\sigma = 1.98 \text{ mho/m}$; $\epsilon_r = 53.9$; $\rho = 1000 \text{ kg/m}^3$; Liquid level : 154 mm

Phantom section: Flat Section ; Separation distance : 5 mm (The edge side of the EUT to the Phantom)

Antenna type : printed Antenna ; Air temp. : 23.5 degrees ; Liquid temp. : 22.3 degrees

DASY4 Configuration:

- Probe: ET3DV6 - SN1790 ; ConvF(4.16, 4.16, 4.16) ; Calibrated: 2007/11/20
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn579 ; Calibrated: 2008/3/13
- Phantom: SAM 12 ; Type: SAM V4.0 ; Serial: TP 1202
- Measurement SW: DASY4, V4.7 Build 53 ; Postprocessing SW: SEMCAD, V1.8 Build 172

High Channel 11/Area Scan (4x8x1): Measurement grid: $dx=15\text{mm}$, $dy=15\text{mm}$

Maximum value of SAR (measured) = 0.274 mW/g

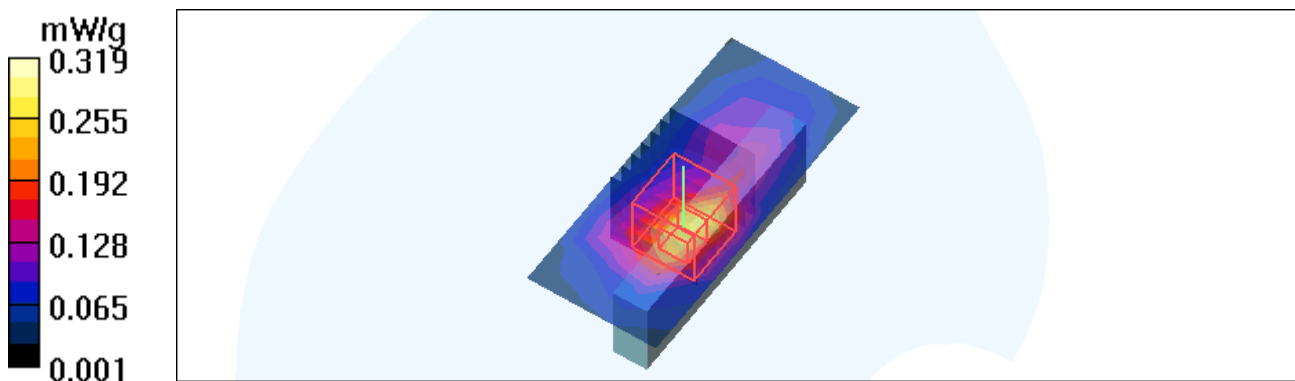
High Channel 11/Zoom Scan (7x7x7) (7x7x7)/Cube 0: Measurement grid: $dx=5\text{mm}$, $dy=5\text{mm}$, $dz=5\text{mm}$

Reference Value = 11.2 V/m

Peak SAR (extrapolated) = 1.75 W/kg

SAR(1 g) = 0.319 mW/g; SAR(10 g) = 0.137 mW/g

Maximum value of SAR (measured) = 0.319 mW/g



Date/Time: 2008/9/2 07:57:23

Test Laboratory: Advance Data Technology

M11-11n 40M-Ch4

DUT: D-Link DWA-130 Wireless N USB Adapter ; Type: DWA-130D1 ; Test Frequency: 2437 MHz

Communication System: 802.11n 40MHz ; Frequency: 2437 MHz ; Duty Cycle: 1:1 ; Modulation type: BPSK

Medium: MSL2450 Medium parameters used: $f = 2437 \text{ MHz}$; $\sigma = 1.95 \text{ mho/m}$; $\epsilon_r = 54.1$; $\rho = 1000 \text{ kg/m}^3$; Liquid level : 154 mm

Phantom section: Flat Section ; Separation distance : 5 mm (The edge side of the EUT to the Phantom)

Antenna type : printed Antenna ; Air temp. : 23.5 degrees ; Liquid temp. : 22.3 degrees

DASY4 Configuration:

- Probe: ET3DV6 - SN1790 ; ConvF(4.16, 4.16, 4.16) ; Calibrated: 2007/11/20
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn579 ; Calibrated: 2008/3/13
- Phantom: SAM 12 ; Type: SAM V4.0 ; Serial: TP 1202
- Measurement SW: DASY4, V4.7 Build 53 ; Postprocessing SW: SEMCAD, V1.8 Build 172

Mid Channel 4/Area Scan (4x8x1): Measurement grid: $dx=15\text{mm}$, $dy=15\text{mm}$

Maximum value of SAR (measured) = 0.239 mW/g

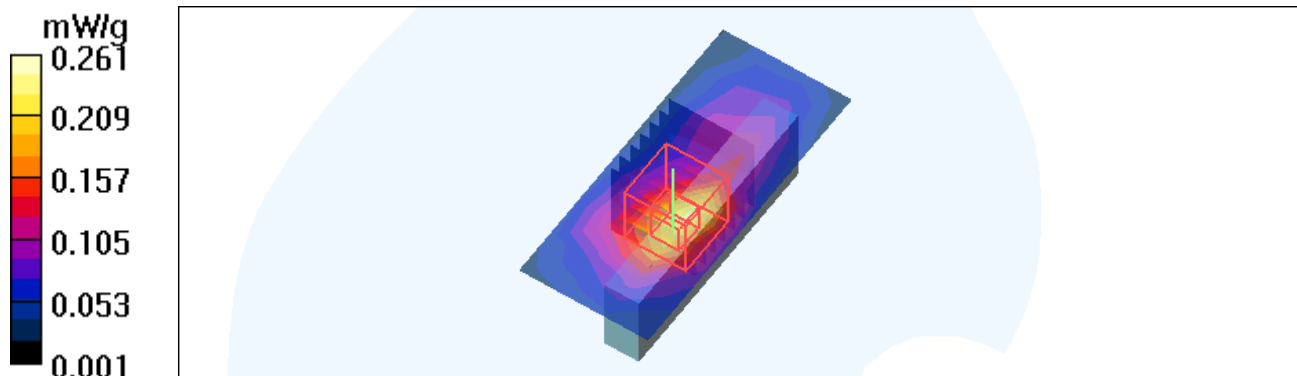
Mid Channel 4/Zoom Scan (7x7x7) (7x7x7)/Cube 0: Measurement grid: $dx=5\text{mm}$, $dy=5\text{mm}$, $dz=5\text{mm}$

Reference Value = 10.8 V/m

Peak SAR (extrapolated) = 0.573 W/kg

SAR(1 g) = 0.241 mW/g; SAR(10 g) = 0.114 mW/g

Maximum value of SAR (measured) = 0.261 mW/g



Date/Time: 2008/9/2 08:35:29

Test Laboratory: Advance Data Technology

M13-11b-Ch11

DUT: D-Link DWA-130 Wireless N USB Adapter ; Type: DWA-130D1 ; Test Frequency: 2462 MHz

Communication System: 802.11b ; Frequency: 2462 MHz ; Duty Cycle: 1:1 ; Modulation type: DBPSK

Medium: MSL2450 Medium parameters used: $f = 2462 \text{ MHz}$; $\sigma = 1.98 \text{ mho/m}$; $\epsilon_r = 53.9$; $\rho = 1000$

kg/m^3 ; Liquid level : 154 mm

Phantom section: Flat Section ; Separation distance : 5 mm (The edge side of the EUT to the Phantom)

Antenna type : printed Antenna ; Air temp. : 23.5 degrees ; Liquid temp. : 22.3 degrees

DASY4 Configuration:

- Probe: ET3DV6 - SN1790 ; ConvF(4.16, 4.16, 4.16) ; Calibrated: 2007/11/20
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn579 ; Calibrated: 2008/3/13
- Phantom: SAM 12 ; Type: SAM V4.0 ; Serial: TP 1202
- Measurement SW: DASY4, V4.7 Build 53 ; Postprocessing SW: SEMCAD, V1.8 Build 172

High Channel 11/Area Scan (4x8x1): Measurement grid: $dx=15\text{mm}$, $dy=15\text{mm}$

Maximum value of SAR (measured) = 0.315 mW/g

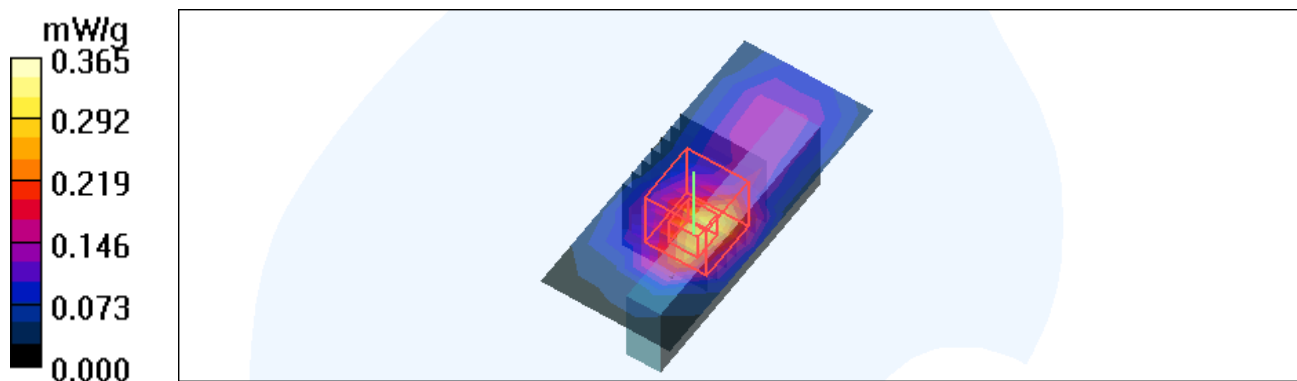
High Channel 11/Zoom Scan (7x7x7) (7x7x7)/Cube 0: Measurement grid: $dx=5\text{mm}$, $dy=5\text{mm}$, $dz=5\text{mm}$

Reference Value = 12.7 V/m

Peak SAR (extrapolated) = 0.727 W/kg

SAR(1 g) = 0.321 mW/g; SAR(10 g) = 0.148 mW/g

Maximum value of SAR (measured) = 0.365 mW/g



Date/Time: 2008/9/2 09:01:02

Test Laboratory: Advance Data Technology

M14-11g-Ch11

DUT: D-Link DWA-130 Wireless N USB Adapter ; Type: DWA-130D1 ; Test Frequency: 2462 MHz

Communication System: 802.11g ; Frequency: 2462 MHz ; Duty Cycle: 1:1 ; Modulation type: BPSK
Medium: MSL2450 Medium parameters used: $f = 2462 \text{ MHz}$; $\sigma = 1.98 \text{ mho/m}$; $\epsilon_r = 53.9$; $\rho = 1000 \text{ kg/m}^3$; Liquid level : 154 mm

Phantom section: Flat Section ; Separation distance : 5 mm (The edge side of the EUT to the Phantom)

Antenna type : printed Antenna ; Air temp. : 23.5 degrees ; Liquid temp. : 22.3 degrees

DASY4 Configuration:

- Probe: ET3DV6 - SN1790 ; ConvF(4.16, 4.16, 4.16) ; Calibrated: 2007/11/20
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn579 ; Calibrated: 2008/3/13
- Phantom: SAM 12 ; Type: SAM V4.0 ; Serial: TP 1202
- Measurement SW: DASY4, V4.7 Build 53 ; Postprocessing SW: SEMCAD, V1.8 Build 172

High Channel 11/Area Scan (4x8x1): Measurement grid: $dx=15\text{mm}$, $dy=15\text{mm}$

Maximum value of SAR (measured) = 0.398 mW/g

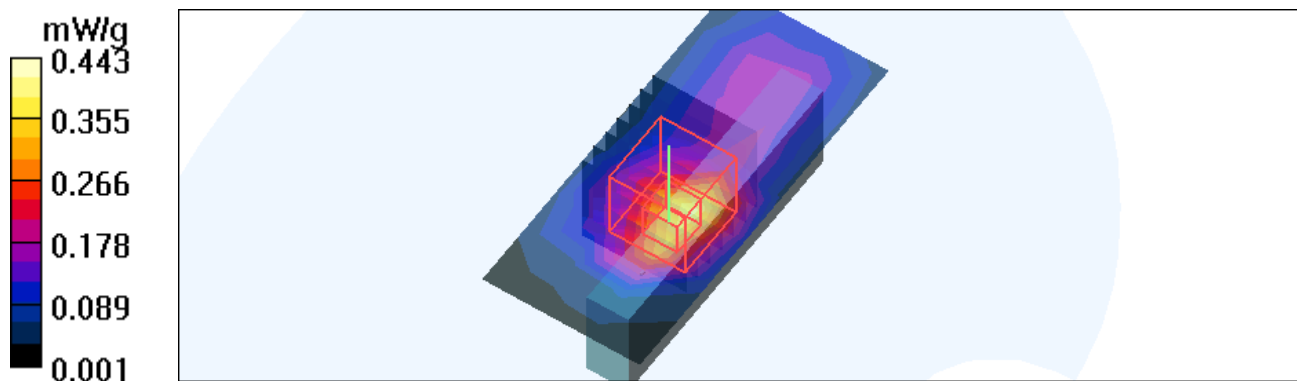
High Channel 11/Zoom Scan (7x7x7) (7x7x7)/Cube 0: Measurement grid: $dx=5\text{mm}$, $dy=5\text{mm}$, $dz=5\text{mm}$

Reference Value = 14.1 V/m

Peak SAR (extrapolated) = 0.908 W/kg

SAR(1 g) = 0.394 mW/g; SAR(10 g) = 0.181 mW/g

Maximum value of SAR (measured) = 0.443 mW/g



Date/Time: 2008/9/2 09:28:26

Test Laboratory: Advance Data Technology

M15-11n 20M-Ch11

DUT: D-Link DWA-130 Wireless N USB Adapter ; Type: DWA-130D1 ; Test Frequency: 2462 MHz

Communication System: 2.4G 11n span20 ; Frequency: 2462 MHz ; Duty Cycle: 1:1 ; Modulation type: BPSK

Medium: MSL2450 Medium parameters used: $f = 2462 \text{ MHz}$; $\sigma = 1.98 \text{ mho/m}$; $\epsilon_r = 53.9$; $\rho = 1000 \text{ kg/m}^3$; Liquid level : 154 mm

Phantom section: Flat Section ; Separation distance : 5 mm (The edge side of the EUT to the Phantom)

Antenna type : printed Antenna ; Air temp. : 23.5 degrees ; Liquid temp. : 22.3 degrees

DASY4 Configuration:

- Probe: ET3DV6 - SN1790 ; ConvF(4.16, 4.16, 4.16) ; Calibrated: 2007/11/20
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn579 ; Calibrated: 2008/3/13
- Phantom: SAM 12 ; Type: SAM V4.0 ; Serial: TP 1202
- Measurement SW: DASY4, V4.7 Build 53 ; Postprocessing SW: SEMCAD, V1.8 Build 172

High Channel 11/Area Scan (4x8x1): Measurement grid: $dx=15\text{mm}$, $dy=15\text{mm}$

Maximum value of SAR (measured) = 0.334 mW/g

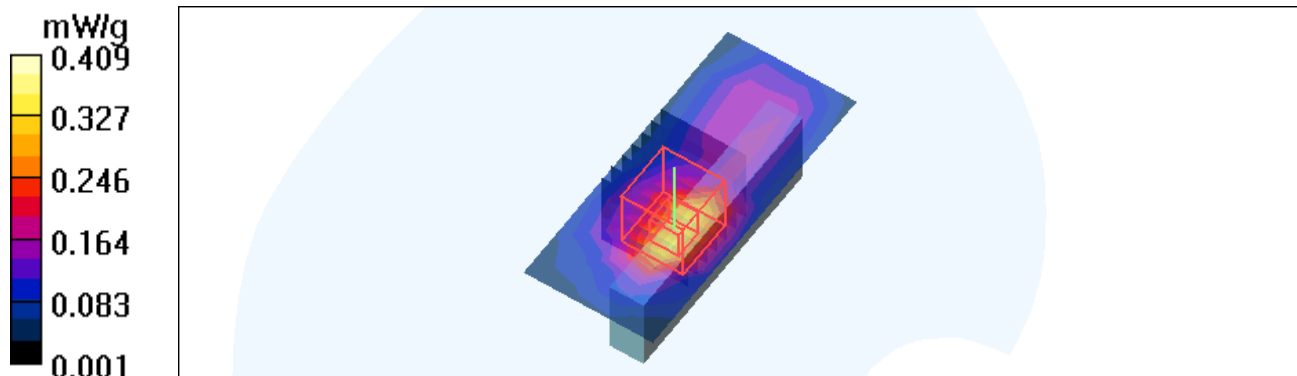
High Channel 11/Zoom Scan (7x7x7) (7x7x7)/Cube 0: Measurement grid: $dx=5\text{mm}$, $dy=5\text{mm}$, $dz=5\text{mm}$

Reference Value = 14.4 V/m

Peak SAR (extrapolated) = 0.841 W/kg

SAR(1 g) = 0.362 mW/g; SAR(10 g) = 0.168 mW/g

Maximum value of SAR (measured) = 0.409 mW/g



Date/Time: 2008/9/2 09:54:01

Test Laboratory: Advance Data Technology

M16-11n 40M-Ch4

DUT: D-Link DWA-130 Wireless N USB Adapter ; Type: DWA-130D1 ; Test Frequency: 2437 MHz

Communication System: 802.11n 40MHz ; Frequency: 2437 MHz ; Duty Cycle: 1:1 ; Modulation type: BPSK

Medium: MSL2450 Medium parameters used: $f = 2437$ MHz; $\sigma = 1.95$ mho/m; $\epsilon_r = 54.1$; $\rho = 1000$ kg/m³ ; Liquid level : 154 mm

Phantom section: Flat Section ; Separation distance : 5 mm (The edge side of the EUT to the Phantom)

Antenna type : printed Antenna ; Air temp. : 23.5 degrees ; Liquid temp. : 22.3 degrees

DASY4 Configuration:

- Probe: ET3DV6 - SN1790 ; ConvF(4.16, 4.16, 4.16) ; Calibrated: 2007/11/20
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn579 ; Calibrated: 2008/3/13
- Phantom: SAM 12 ; Type: SAM V4.0 ; Serial: TP 1202
- Measurement SW: DASY4, V4.7 Build 53 ; Postprocessing SW: SEMCAD, V1.8 Build 172

Mid Channel 4 2/Area Scan (4x8x1): Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (measured) = 0.299 mW/g

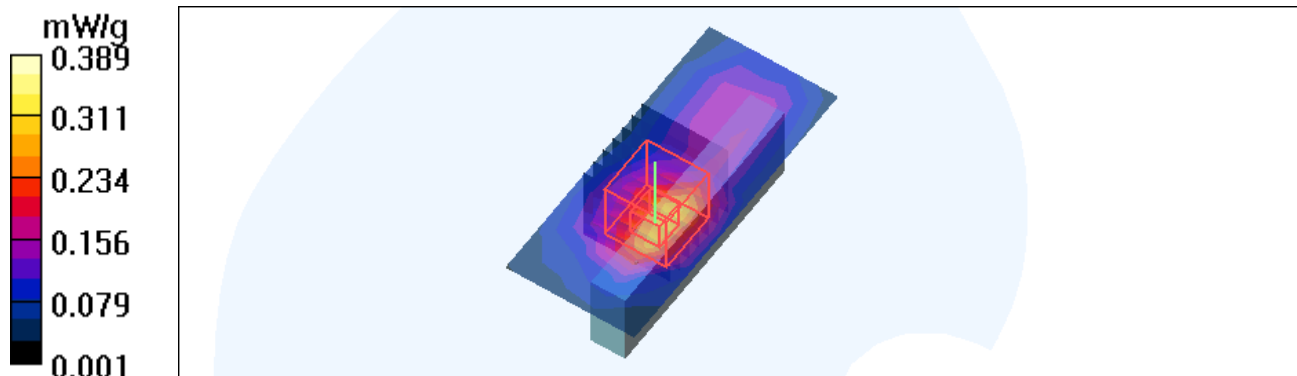
Mid Channel 4 2/Zoom Scan (7x7x7) (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 13.6 V/m

Peak SAR (extrapolated) = 0.799 W/kg

SAR(1 g) = 0.349 mW/g; SAR(10 g) = 0.164 mW/g

Maximum value of SAR (measured) = 0.389 mW/g



Date/Time: 2008/9/2 10:25:07

Test Laboratory: Advance Data Technology

M17-11b-Ch11

DUT: D-Link DWA-130 Wireless N USB Adapter ; Type: DWA-130D1 ; Test Frequency: 2462 MHz

Communication System: 802.11b ; Frequency: 2462 MHz ; Duty Cycle: 1:1 ; Modulation type: DBPSK

Medium: MSL2450 Medium parameters used: $f = 2462 \text{ MHz}$; $\sigma = 1.98 \text{ mho/m}$; $\epsilon_r = 53.9$; $\rho = 1000$

kg/m^3 ; Liquid level : 154 mm

Phantom section: Flat Section ; Separation distance : 5 mm (The top side of the EUT to the Phantom)

Antenna type : printed Antenna ; Air temp. : 23.5 degrees ; Liquid temp. : 22.3 degrees

DASY4 Configuration:

- Probe: ET3DV6 - SN1790 ; ConvF(4.16, 4.16, 4.16) ; Calibrated: 2007/11/20
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn579 ; Calibrated: 2008/3/13
- Phantom: SAM 12 ; Type: SAM V4.0 ; Serial: TP 1202
- Measurement SW: DASY4, V4.7 Build 53 ; Postprocessing SW: SEMCAD, V1.8 Build 172

High Channel 11/Area Scan (5x5x1): Measurement grid: $dx=15\text{mm}$, $dy=15\text{mm}$

Maximum value of SAR (measured) = 0.219 mW/g

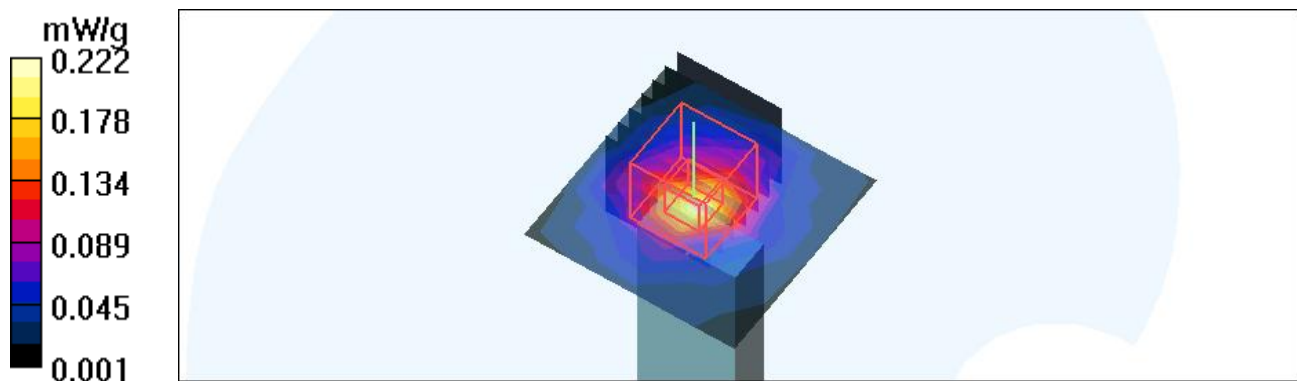
High Channel 11/Zoom Scan (7x7x7) (7x7x7)/Cube 0: Measurement grid: $dx=5\text{mm}$, $dy=5\text{mm}$, $dz=5\text{mm}$

Reference Value = 11.1 V/m

Peak SAR (extrapolated) = 0.455 W/kg

SAR(1 g) = 0.198 mW/g; SAR(10 g) = 0.090 mW/g

Maximum value of SAR (measured) = 0.222 mW/g



Date/Time: 2008/9/2 10:50:34

Test Laboratory: Advance Data Technology

M18-11g-Ch11

DUT: D-Link DWA-130 Wireless N USB Adapter ; Type: DWA-130D1 ; Test Frequency: 2462 MHz

Communication System: 802.11g ; Frequency: 2462 MHz ; Duty Cycle: 1:1 ; Modulation type: BPSK
Medium: MSL2450 Medium parameters used: $f = 2462 \text{ MHz}$; $\sigma = 1.98 \text{ mho/m}$; $\epsilon_r = 53.9$; $\rho = 1000 \text{ kg/m}^3$; Liquid level : 154 mm

Phantom section: Flat Section ; Separation distance : 5 mm (The top side of the EUT to the Phantom)

Antenna type : printed Antenna ; Air temp. : 23.5 degrees ; Liquid temp. : 22.3 degrees

DASY4 Configuration:

- Probe: ET3DV6 - SN1790 ; ConvF(4.16, 4.16, 4.16) ; Calibrated: 2007/11/20
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn579 ; Calibrated: 2008/3/13
- Phantom: SAM 12 ; Type: SAM V4.0 ; Serial: TP 1202
- Measurement SW: DASY4, V4.7 Build 53 ; Postprocessing SW: SEMCAD, V1.8 Build 172

High Channel 11/Area Scan (5x5x1): Measurement grid: $dx=15\text{mm}$, $dy=15\text{mm}$

Maximum value of SAR (measured) = 0.241 mW/g

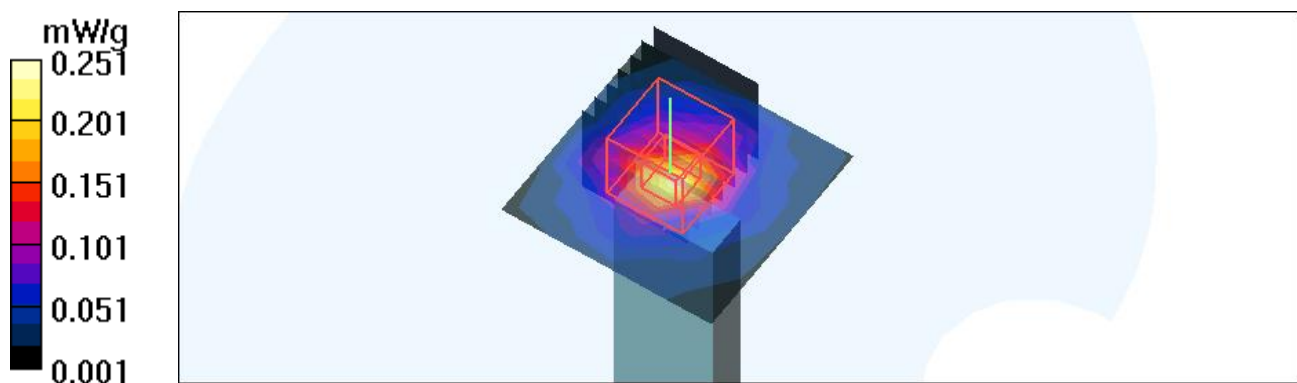
High Channel 11/Zoom Scan (7x7x7) (7x7x7)/Cube 0: Measurement grid: $dx=5\text{mm}$, $dy=5\text{mm}$, $dz=5\text{mm}$

Reference Value = 11.8 V/m

Peak SAR (extrapolated) = 0.509 W/kg

SAR(1 g) = 0.223 mW/g; SAR(10 g) = 0.101 mW/g

Maximum value of SAR (measured) = 0.251 mW/g



Date/Time: 2008/9/2 11:16:54

Test Laboratory: Advance Data Technology

M19-11n 20M-Ch11

DUT: D-Link DWA-130 Wireless N USB Adapter ; Type: DWA-130D1 ; Test Frequency: 2462 MHz

Communication System: 2.4G 11n span20 ; Frequency: 2462 MHz ; Duty Cycle: 1:1 ; Modulation type: BPSK

Medium: MSL2450 Medium parameters used: $f = 2462$ MHz; $\sigma = 1.98$ mho/m; $\epsilon_r = 53.9$; $\rho = 1000$ kg/m³ ; Liquid level : 154 mm

Phantom section: Flat Section ; Separation distance : 5 mm (The top side of the EUT to the Phantom)

Antenna type : printed Antenna ; Air temp. : 23.5 degrees ; Liquid temp. : 22.3 degrees

DASY4 Configuration:

- Probe: ET3DV6 - SN1790 ; ConvF(4.16, 4.16, 4.16) ; Calibrated: 2007/11/20
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn579 ; Calibrated: 2008/3/13
- Phantom: SAM 12 ; Type: SAM V4.0 ; Serial: TP 1202
- Measurement SW: DASY4, V4.7 Build 53 ; Postprocessing SW: SEMCAD, V1.8 Build 172

High Channel 11/Area Scan (5x5x1): Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (measured) = 0.265 mW/g

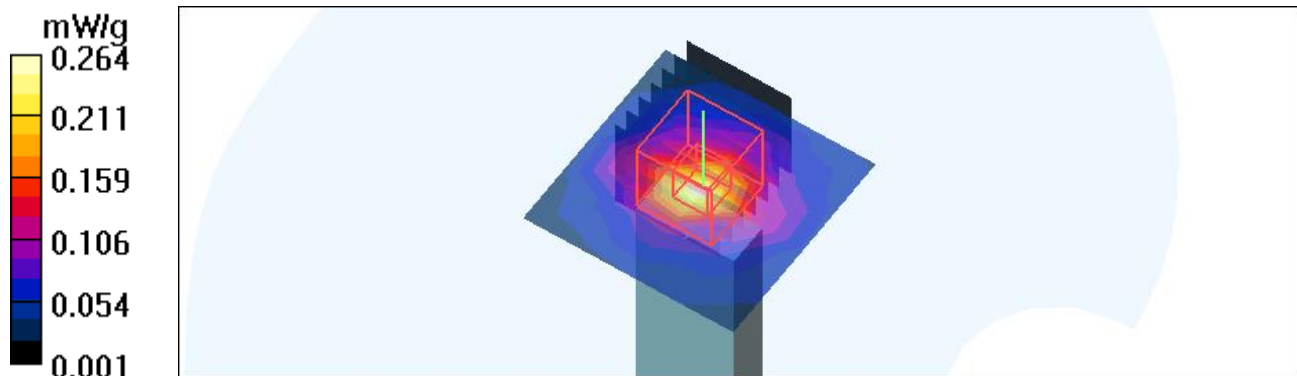
High Channel 11/Zoom Scan (7x7x7) (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 12.1 V/m

Peak SAR (extrapolated) = 0.538 W/kg

SAR(1 g) = **0.239 mW/g**; SAR(10 g) = 0.111 mW/g

Maximum value of SAR (measured) = 0.264 mW/g



Date/Time: 2008/9/2 11:41:18

Test Laboratory: Advance Data Technology

M20-11n 40M-Ch4

DUT: D-Link DWA-130 Wireless N USB Adapter ; Type: DWA-130D1 ; Test Frequency: 2437 MHz

Communication System: 802.11n 40MHz ; Frequency: 2437 MHz ; Duty Cycle: 1:1 ; Modulation type: BPSK

Medium: MSL2450 Medium parameters used: $f = 2437 \text{ MHz}$; $\sigma = 1.95 \text{ mho/m}$; $\epsilon_r = 54.1$; $\rho = 1000 \text{ kg/m}^3$; Liquid level : 154 mm

Phantom section: Flat Section ; Separation distance : 5 mm (The top side of the EUT to the Phantom)

Antenna type : printed Antenna ; Air temp. : 23.5 degrees ; Liquid temp. : 22.3 degrees

DASY4 Configuration:

- Probe: ET3DV6 - SN1790 ; ConvF(4.16, 4.16, 4.16) ; Calibrated: 2007/11/20
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn579 ; Calibrated: 2008/3/13
- Phantom: SAM 12 ; Type: SAM V4.0 ; Serial: TP 1202
- Measurement SW: DASY4, V4.7 Build 53 ; Postprocessing SW: SEMCAD, V1.8 Build 172

Mid. Channel 4/Area Scan (5x5x1): Measurement grid: $dx=15\text{mm}$, $dy=15\text{mm}$

Maximum value of SAR (measured) = 0.260 mW/g

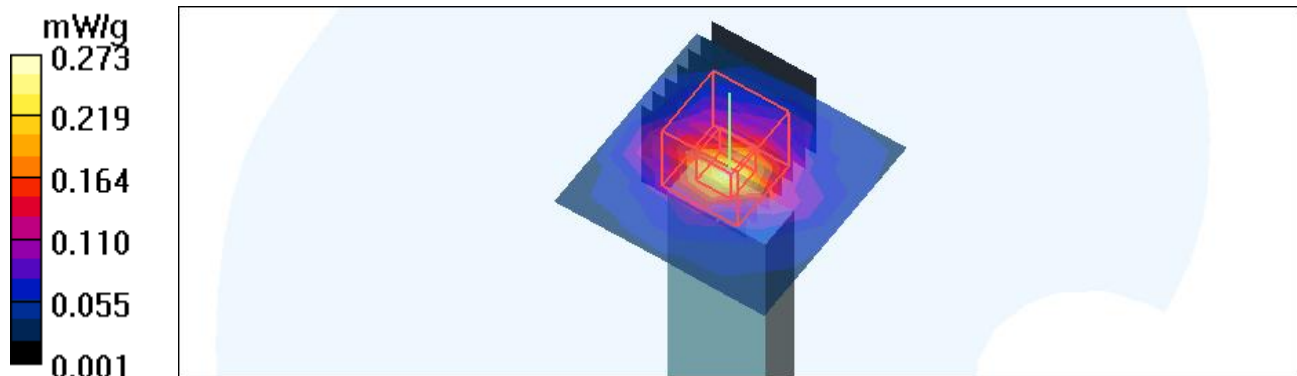
Mid. Channel 4/Zoom Scan (7x7x7) (7x7x7)/Cube 0: Measurement grid: $dx=5\text{mm}$, $dy=5\text{mm}$, $dz=5\text{mm}$

Reference Value = 12.2 V/m

Peak SAR (extrapolated) = 0.554 W/kg

SAR(1 g) = 0.244 mW/g; SAR(10 g) = 0.113 mW/g

Maximum value of SAR (measured) = 0.273 mW/g



Date/Time: 2008/9/2 01:01:27

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; $\sigma = 1.96$ mho/m; $\epsilon_r = 54.1$; $\rho = 1000$ kg/m³ ; Liquid level : 154 mm
 Phantom section: Flat Section ; Separation distance : 10 mm (The feetpoint of the dipole to the Phantom) Air temp. : 23.5 degrees ; Liquid temp. : 22.3 degrees

DASY4 Configuration:

- Probe: ET3DV6 - SN1790 ; ConvF(4.16, 4.16, 4.16) ; Calibrated: 2007/11/20
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn579; Calibrated: 2008/3/13
- Phantom: SAM 12; Type: SAM V4.0; Serial: TP 1202
- Measurement SW: DASY4, V4.7 Build 53; Postprocessing SW: SEMCAD, V1.8 Build 172

d=10mm, Pin=250mW/Area Scan (5x7x1): Measurement grid: dx=15mm, dy=15mm
 Maximum value of SAR (measured) = 14.4 mW/g

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

Reference Value = 90.9 V/m; Power Drift = -0.059 dB

Peak SAR (extrapolated) = 27.4 W/kg

SAR(1 g) = 13.2 mW/g; SAR(10 g) = 6.15 mW/g

Maximum value of SAR (measured) = 14.8 mW/g

