

APPENDIX A: TEST DATA

Liquid Level Photo

MSL 2450MHz D=150mm



Date/Time: 2006/10/8 11:50:18

Test Laboratory: Advance Data Technology

G430-11b-CH1-Mode 1

DUT: N1 Wireless ExpressCard ; Type: F5D8071 ; Test Frequency: 2412 MHz

Communication System: 802.11b ; Frequency: 2412 MHz ; Duty Cycle: 1:1 ; Modulation type: DBPSK

Medium: MSL2450 Medium parameters used: $f = 2412 \text{ MHz}$; $\sigma = 1.93 \text{ mho/m}$; $\epsilon_r = 53.5$; $\rho = 1000$

kg/m^3 ; Liquid level : 150 mm

Phantom section: Flat Section ; Separation distance :14 mm (The bottom side of the EUT to the Phantom)

Antenna type : Printed Antenna ; Air temp. : 22.3 degrees ; Liquid temp. : 21.1 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 (5x10x1): Measurement grid: $dx=15\text{mm}$, $dy=15\text{mm}$

Maximum value of SAR (measured) = 0.874 mW/g

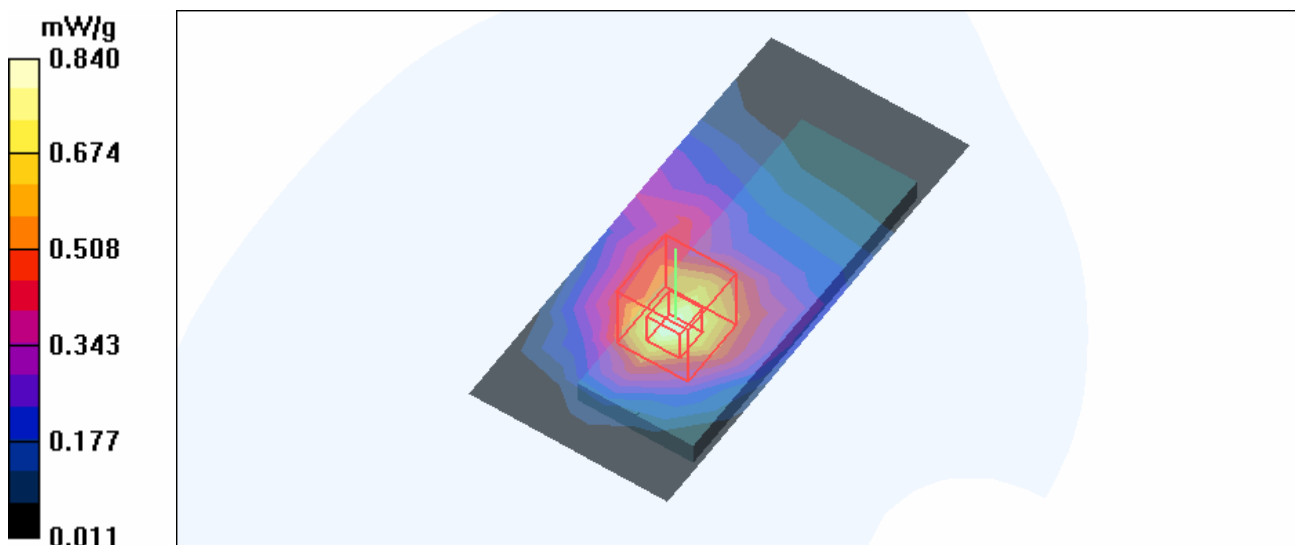
Low Channel 1/Zoom Scan (7x7x7) (7x7x7)/Cube 0: Measurement grid: $dx=5\text{mm}$, $dy=5\text{mm}$, $dz=5\text{mm}$

Reference Value = 16.7 V/m

Peak SAR (extrapolated) = 1.60 W/kg

SAR(1 g) = 0.776 mW/g; SAR(10 g) = 0.415 mW/g

Maximum value of SAR (measured) = 0.840 mW/g



Date/Time: 2006/10/8 12:07:03

Test Laboratory: Advance Data Technology

G430-11b-CH6-Mode 1

DUT: N1 Wireless ExpressCard ; Type: F5D8071 ; Test Frequency: 2437 MHz

Communication System: 802.11b ; Frequency: 2437 MHz ; Duty Cycle: 1:1 ; Modulation type: DBPSK

Medium: MSL2450 Medium parameters used: $f = 2437 \text{ MHz}$; $\sigma = 1.97 \text{ mho/m}$; $\epsilon_r = 53.4$; $\rho = 1000$

kg/m^3 ; Liquid level : 150 mm

Phantom section: Flat Section ; Separation distance :14 mm (The bottom side of the EUT to the Phantom)

Antenna type : Printed Antenna ; Air temp. : 22.3 degrees ; Liquid temp. : 21.1 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 (5x10x1): Measurement grid: $dx=15\text{mm}$, $dy=15\text{mm}$

Maximum value of SAR (measured) = 0.976 mW/g

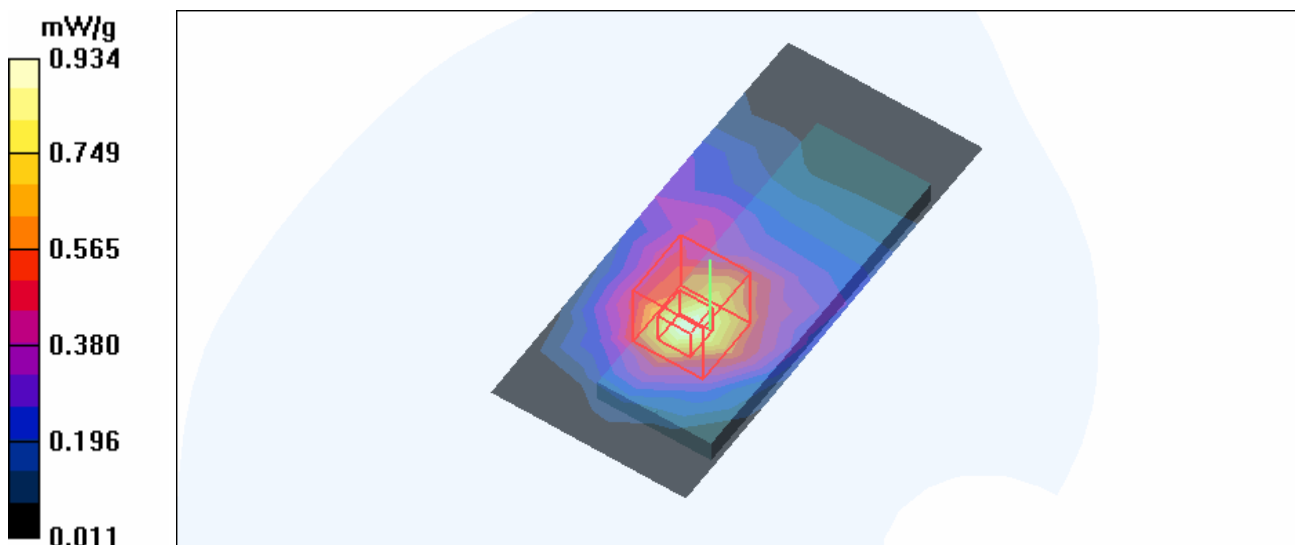
Mid Channel 6/Zoom Scan (7x7x7) (7x7x7)/Cube 0: Measurement grid: $dx=5\text{mm}$, $dy=5\text{mm}$, $dz=5\text{mm}$

Reference Value = 16.7 V/m

Peak SAR (extrapolated) = 1.80 W/kg

SAR(1 g) = 0.857 mW/g; SAR(10 g) = 0.455 mW/g

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



Date/Time: 2006/10/8 12:23:08

Test Laboratory: Advance Data Technology

G430-11b-CH11-Mode 1

DUT: N1 Wireless ExpressCard ; Type: F5D8071 ; Test Frequency: 2462 MHz

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

Medium: MSL2450 Medium parameters used: $f = 2462$ MHz; $\sigma = 2$ mho/m; $\epsilon_r = 53.3$; $\rho = 1000$

kg/m³ ; Liquid level : 150 mm

Phantom section: Flat Section ; Separation distance :14 mm (The bottom side of the EUT to the Phantom)

Antenna type : Printed Antenna ; Air temp. : 22.3 degrees ; Liquid temp. : 21.1 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 (5x10x1): Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (measured) = 1.00 mW/g

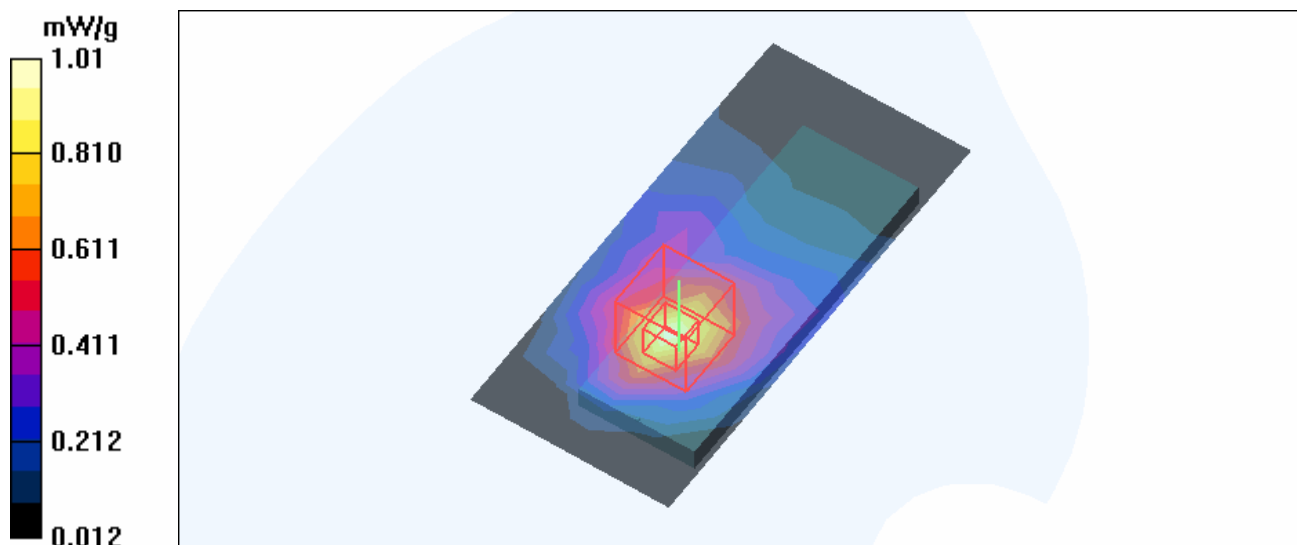
High Channel 11/Zoom Scan (7x7x7) (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

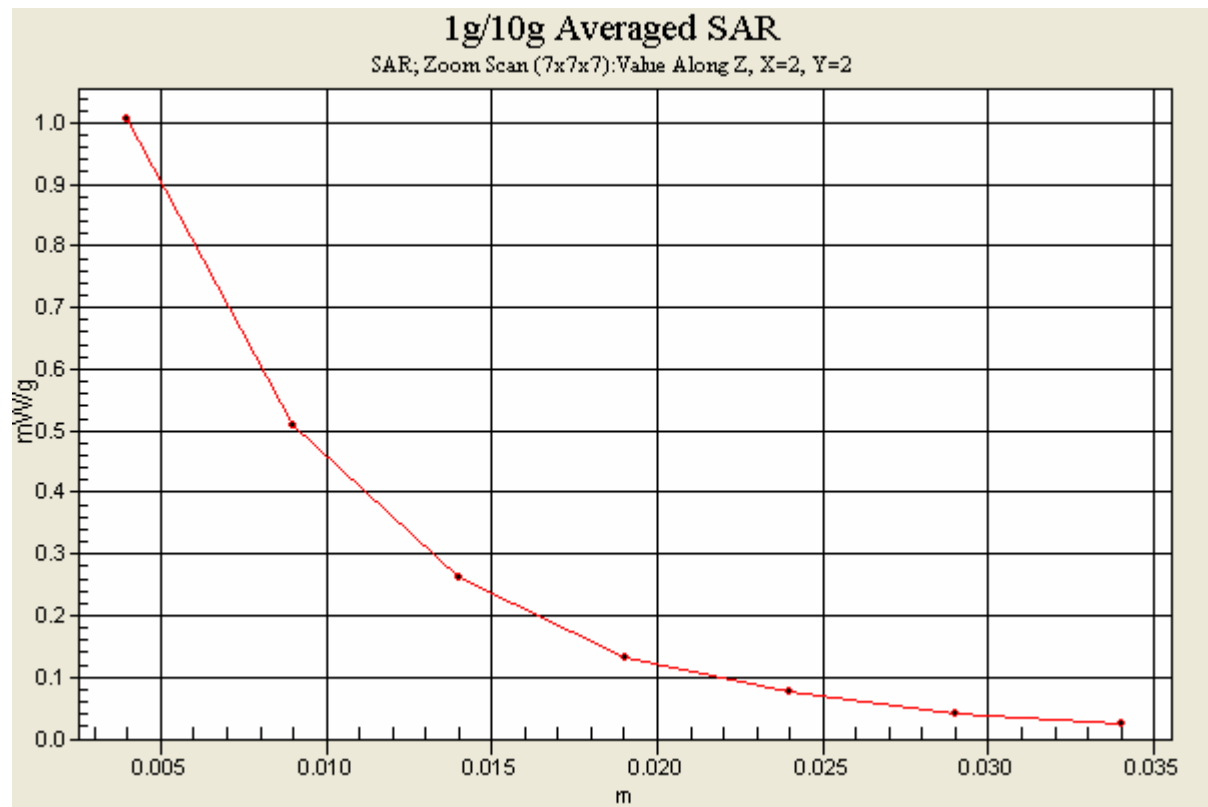
Reference Value = 17.8 V/m

Peak SAR (extrapolated) = 2.14 W/kg

SAR(1 g) = 0.934 mW/g; SAR(10 g) = 0.483 mW/g

Maximum value of SAR (measured) = 1.01 mW/g





Date/Time: 2006/10/8 12:43:52

Test Laboratory: Advance Data Technology

G430-11g-CH1-Mode 2

DUT: N1 Wireless ExpressCard ; Type: F5D8071 ; Test Frequency: 2412 MHz

Communication System: 802.11g ; Frequency: 2412 MHz ; Duty Cycle: 1:1 ; Modulation type: BPSK
 Medium: MSL2450 Medium parameters used: $f = 2412 \text{ MHz}$; $\sigma = 1.93 \text{ mho/m}$; $\epsilon_r = 53.5$; $\rho = 1000 \text{ kg/m}^3$; Liquid level : 150 mm
 Phantom section: Flat Section ; Separation distance :14 mm (The bottom side of the EUT to the Phantom)
 Antenna type : Printed Antenna ; Air temp. : 22.3 degrees ; Liquid temp. : 21.1 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 (5x10x1): Measurement grid: $dx=15\text{mm}$, $dy=15\text{mm}$
 Maximum value of SAR (measured) = 0.376 mW/g

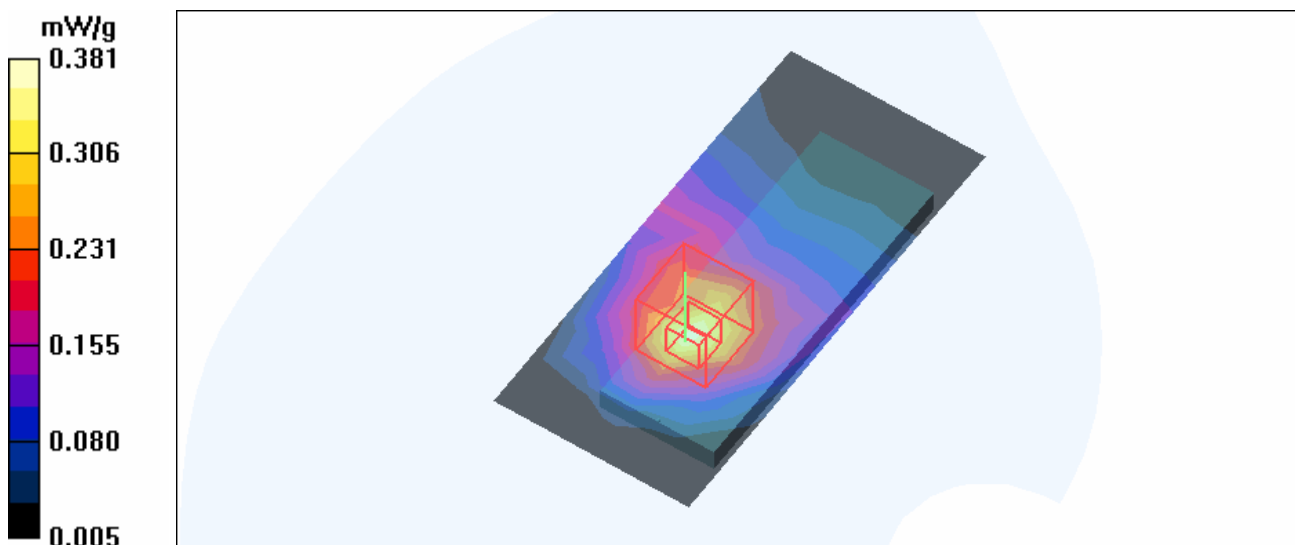
Low Channel 1/Zoom Scan (7x7x7) (7x7x7)/Cube 0: Measurement grid: $dx=5\text{mm}$, $dy=5\text{mm}$, $dz=5\text{mm}$

Reference Value = 10.7 V/m

Peak SAR (extrapolated) = 0.751 W/kg

SAR(1 g) = 0.352 mW/g; SAR(10 g) = 0.184 mW/g

Maximum value of SAR (measured) = 0.381 mW/g



Date/Time: 2006/10/8 13:00:02

Test Laboratory: Advance Data Technology

G430-11g-CH6-Mode 2

DUT: N1 Wireless ExpressCard ; Type: F5D8071 ; Test Frequency: 2437 MHz

Communication System: 802.11g ; Frequency: 2437 MHz ; Duty Cycle: 1:1 ; Modulation type: BPSK
 Medium: MSL2450 Medium parameters used: $f = 2437 \text{ MHz}$; $\sigma = 1.97 \text{ mho/m}$; $\epsilon_r = 53.4$; $\rho = 1000 \text{ kg/m}^3$; Liquid level : 150 mm
 Phantom section: Flat Section ; Separation distance : 14 mm (The bottom side of the EUT to the Phantom)
 Antenna type : Printed Antenna ; Air temp. : 22.3 degrees ; Liquid temp. : 21.1 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 (5x10x1): Measurement grid: $dx=15\text{mm}$, $dy=15\text{mm}$

Maximum value of SAR (measured) = 0.995 mW/g

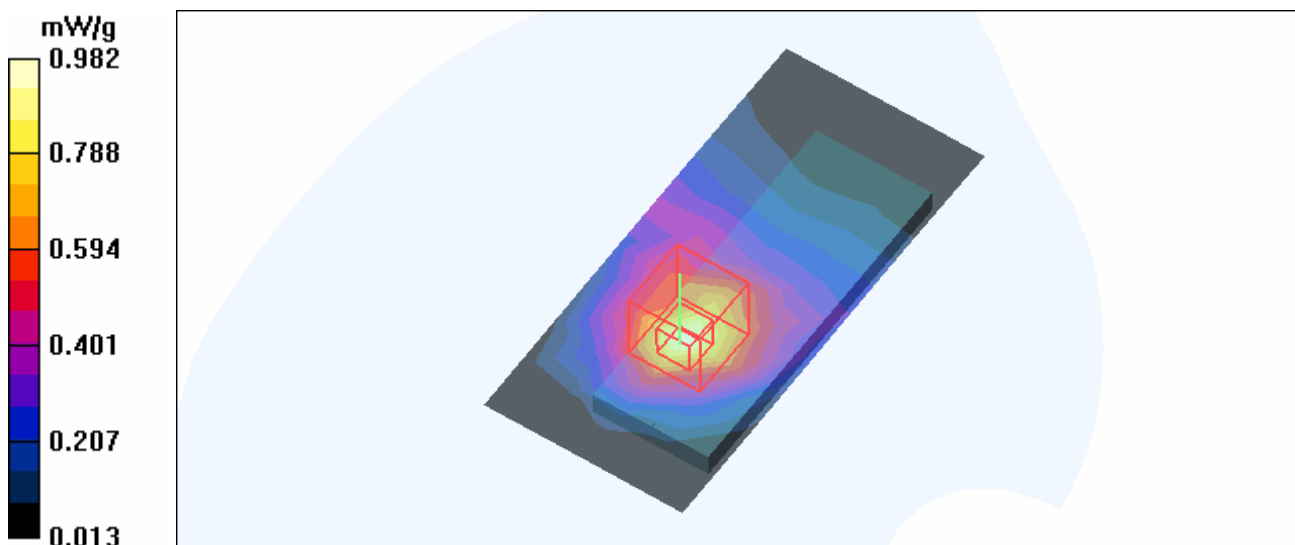
Mid Channel 6/Zoom Scan (7x7x7) (7x7x7)/Cube 0: Measurement grid: $dx=5\text{mm}$, $dy=5\text{mm}$, $dz=5\text{mm}$

Reference Value = 16.7 V/m

Peak SAR (extrapolated) = 1.96 W/kg

SAR(1 g) = 0.916 mW/g; SAR(10 g) = 0.478 mW/g

Maximum value of SAR (measured) = 0.982 mW/g



Date/Time: 2006/10/8 13:16:35

Test Laboratory: Advance Data Technology

G430-11g-CH11-Mode 2

DUT: N1 Wireless ExpressCard ; Type: F5D8071 ; Test Frequency: 2462 MHz

Communication System: 802.11g ; Frequency: 2462 MHz ; Duty Cycle: 1:1 ; Modulation type: BPSK
 Medium: MSL2450 Medium parameters used: $f = 2462$ MHz; $\sigma = 2$ mho/m; $\epsilon_r = 53.3$; $\rho = 1000$ kg/m³ ; Liquid level : 150 mm
 Phantom section: Flat Section ; Separation distance : 14 mm (The bottom side of the EUT to the Phantom)
 Antenna type : Printed Antenna ; Air temp. : 22.3 degrees ; Liquid temp. : 21.1 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 (5x10x1): Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (measured) = 0.383 mW/g

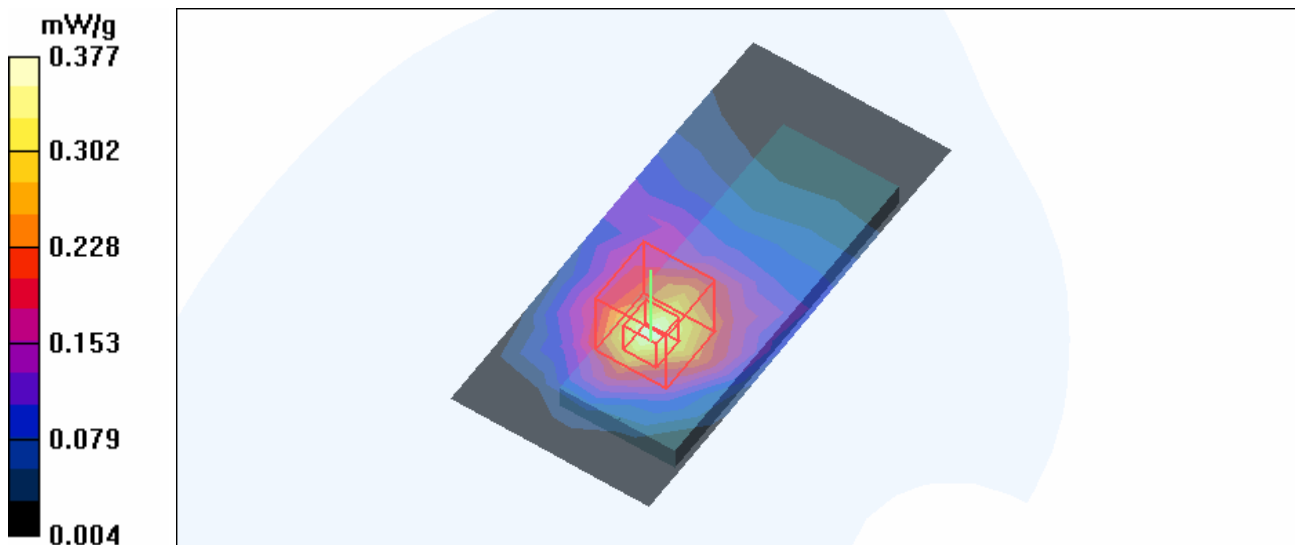
High Channel 11/Zoom Scan (7x7x7) (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 10.7 V/m

Peak SAR (extrapolated) = 0.748 W/kg

SAR(1 g) = 0.353 mW/g; SAR(10 g) = 0.183 mW/g

Maximum value of SAR (measured) = 0.377 mW/g



Date/Time: 2006/10/8 13:34:42

Test Laboratory: Advance Data Technology

G430-SAPN20-CH1-Mode 3

DUT: N1 Wireless ExpressCard ; Type: F5D8071 ; Test Frequency: 2412 MHz

Communication System: 802.11n ; Frequency: 2412 MHz ; Duty Cycle: 1:1 ; Modulation type: BPSK
Medium: MSL2450 Medium parameters used: $f = 2412$ MHz; $\sigma = 1.93$ mho/m; $\epsilon_r = 53.5$; $\rho = 1000$ kg/m³ ; Liquid level : 150 mm

Phantom section: Flat Section ; Separation distance : 14 mm (The bottom side of the EUT to the Phantom)
Antenna type : Printed Antenna ; Air temp. : 22.3 degrees ; Liquid temp. : 21.1 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 (5x10x1): Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (measured) = 0.322 mW/g

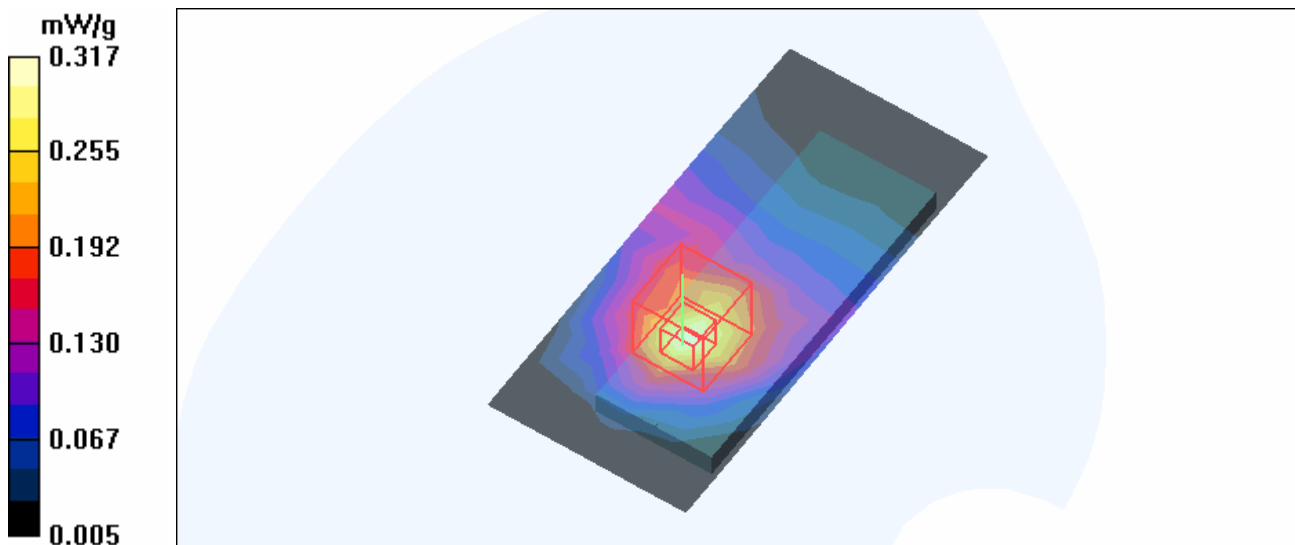
Low Channel 1/Zoom Scan (7x7x7) (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 9.78 V/m

Peak SAR (extrapolated) = 0.617 W/kg

SAR(1 g) = 0.297 mW/g; SAR(10 g) = 0.158 mW/g

Maximum value of SAR (measured) = 0.317 mW/g



Date/Time: 2006/10/8 13:51:04

Test Laboratory: Advance Data Technology

G430-SAPN20-CH6-Mode 3

DUT: N1 Wireless ExpressCard ; Type: F5D8071 ; Test Frequency: 2437 MHz

Communication System: 802.11n ; Frequency: 2437 MHz ; Duty Cycle: 1:1 ; Modulation type: BPSK
Medium: MSL2450 Medium parameters used: $f = 2437$ MHz; $\sigma = 1.97$ mho/m; $\epsilon_r = 53.4$; $\rho = 1000$ kg/m³ ; Liquid level : 150 mm

Phantom section: Flat Section ; Separation distance : 14 mm (The bottom side of the EUT to the Phantom)
Antenna type : Printed Antenna ; Air temp. : 22.3 degrees ; Liquid temp. : 21.1 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 (5x10x1): Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (measured) = 0.987 mW/g

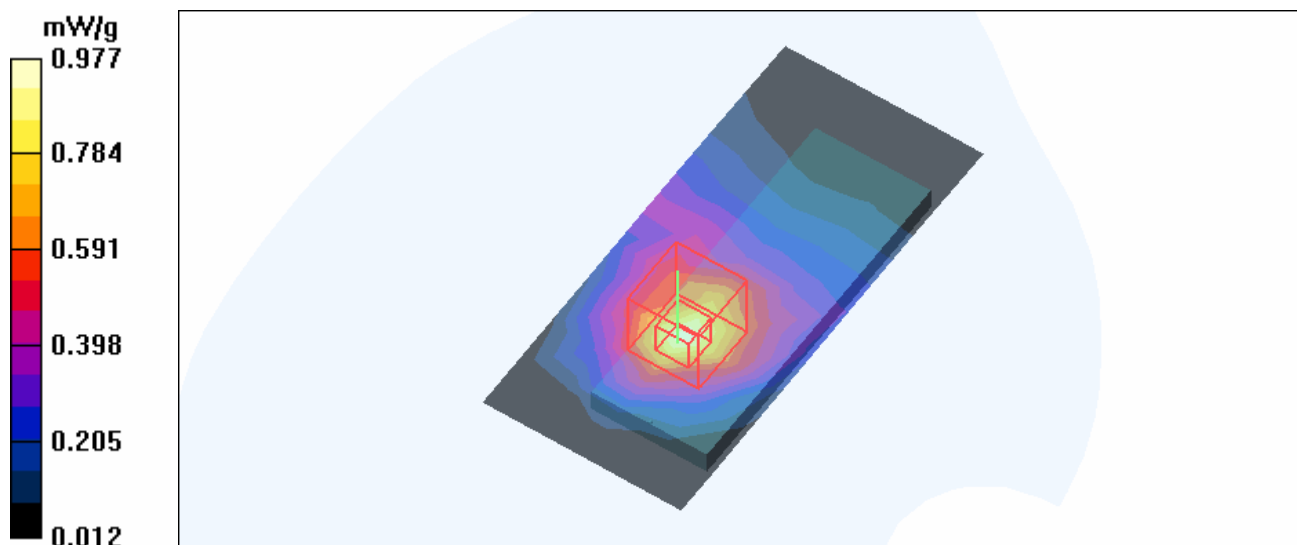
Mid Channel 6/Zoom Scan (7x7x7) (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 16.6 V/m

Peak SAR (extrapolated) = 1.93 W/kg

SAR(1 g) = 0.909 mW/g; SAR(10 g) = 0.475 mW/g

Maximum value of SAR (measured) = 0.977 mW/g



Date/Time: 2006/10/8 14:07:27

Test Laboratory: Advance Data Technology

G430-SAPN20-CH11-Mode 3

DUT: N1 Wireless ExpressCard ; Type: F5D8071 ; Test Frequency: 2462 MHz

Communication System: 802.11n ; Frequency: 2462 MHz ; Duty Cycle: 1:1 ; Modulation type: BPSK
Medium: MSL2450 Medium parameters used: $f = 2462$ MHz; $\sigma = 2$ mho/m; $\epsilon_r = 53.3$; $\rho = 1000$ kg/m³ ; Liquid level : 150 mm

Phantom section: Flat Section ; Separation distance : 14 mm (The bottom side of the EUT to the Phantom)
Antenna type : Printed Antenna ; Air temp. : 22.3 degrees ; Liquid temp. : 21.1 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 (5x10x1): Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (measured) = 0.295 mW/g

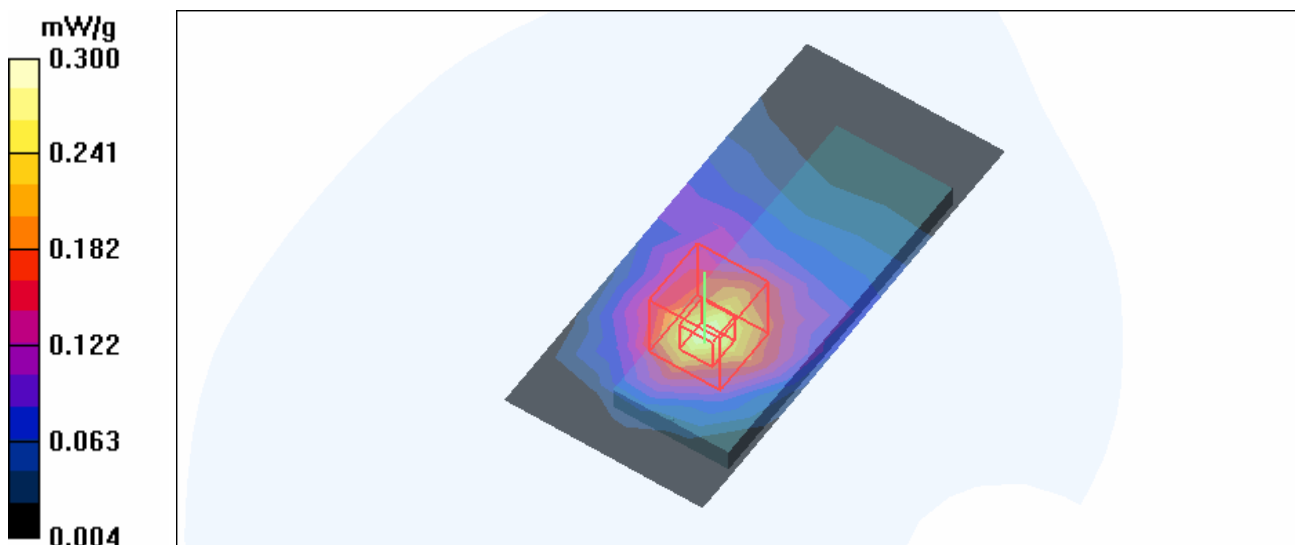
High Channel 11/Zoom Scan (7x7x7) (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 9.33 V/m

Peak SAR (extrapolated) = 0.593 W/kg

SAR(1 g) = 0.278 mW/g; SAR(10 g) = 0.144 mW/g

Maximum value of SAR (measured) = 0.300 mW/g



Date/Time: 2006/10/8 14:26:54

Test Laboratory: Advance Data Technology

G430-SAPN40-CH1-Mode 4

DUT: N1 Wireless ExpressCard ; Type: F5D8071 ; Test Frequency: 2422 MHz

Communication System: 802.11n ; Frequency: 2422 MHz ; Duty Cycle: 1:1 ; Modulation type: BPSK
 Medium: MSL2450 Medium parameters used : $f = 2422$ MHz; $\sigma = 1.95$ mho/m; $\epsilon_r = 53.5$; $\rho = 1000$ kg/m³ ; Liquid level : 150 mm
 Phantom section: Flat Section ; Separation distance : 14 mm (The bottom side of the EUT to the Phantom)
 Antenna type : Printed Antenna ; Air temp. : 22.3 degrees ; Liquid temp. : 21.1 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 (5x10x1): Measurement grid: dx=15mm, dy=15mm
 Maximum value of SAR (measured) = 0.220 mW/g

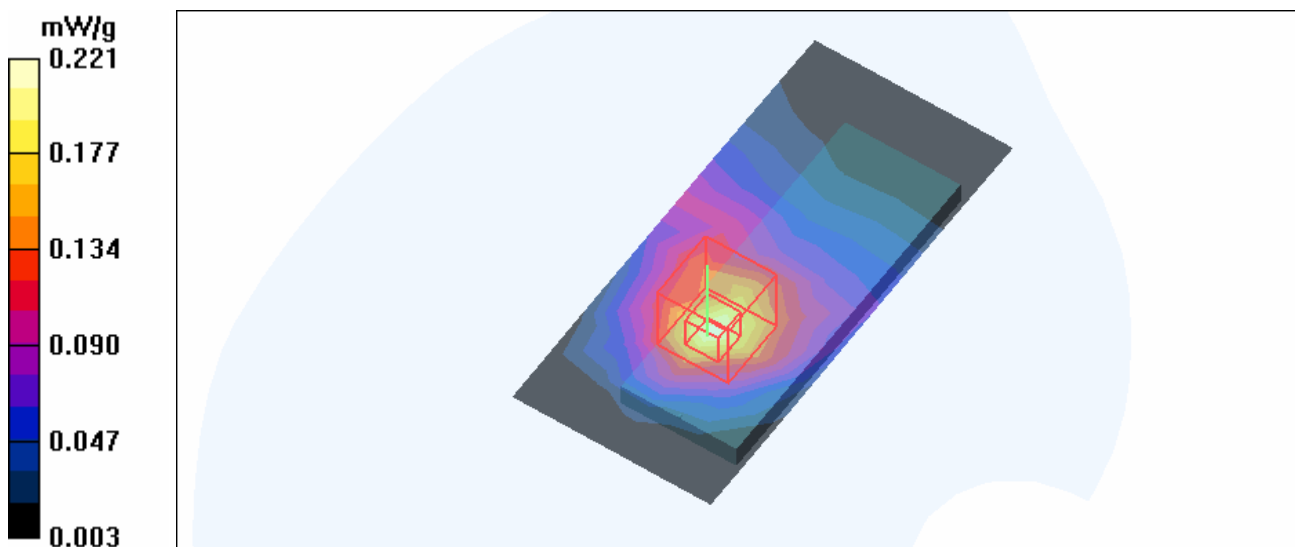
Low Channel 1/Zoom Scan (7x7x7) (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 8.09 V/m

Peak SAR (extrapolated) = 0.434 W/kg

SAR(1 g) = 0.207 mW/g; SAR(10 g) = 0.110 mW/g

Maximum value of SAR (measured) = 0.221 mW/g



Date/Time: 2006/10/8 14:45:09

Test Laboratory: Advance Data Technology

G430-SAPN40-CH4-Mode 4

DUT: N1 Wireless ExpressCard ; Type: F5D8071 ; Test Frequency: 2437 MHz

Communication System: 802.11n ; Frequency: 2437 MHz ; Duty Cycle: 1:1 ; Modulation type: BPSK
Medium: MSL2450 Medium parameters used: $f = 2437$ MHz; $\sigma = 1.97$ mho/m; $\epsilon_r = 53.4$; $\rho = 1000$ kg/m³ ; Liquid level : 150 mm

Phantom section: Flat Section ; Separation distance : 14 mm (The bottom side of the EUT to the Phantom)
Antenna type : Printed Antenna ; Air temp. : 22.3 degrees ; Liquid temp. : 21.1 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 (5x10x1): Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (measured) = 0.353 mW/g

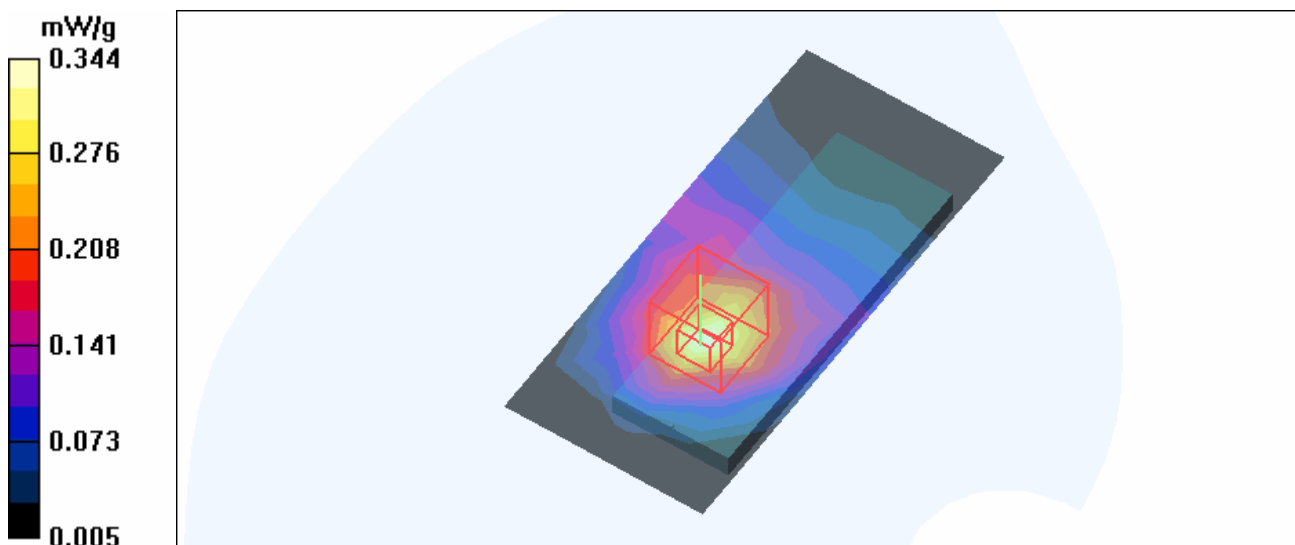
Mid Channel 4/Zoom Scan (7x7x7) (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 9.96 V/m

Peak SAR (extrapolated) = 0.677 W/kg

SAR(1 g) = 0.324 mW/g; SAR(10 g) = 0.170 mW/g

Maximum value of SAR (measured) = 0.344 mW/g



Date/Time: 2006/10/8 15:01:30

Test Laboratory: Advance Data Technology

G430-SAPN40-CH7-Mode 4

DUT: N1 Wireless ExpressCard ; Type: F5D8071 ; Test Frequency: 2452 MHz

Communication System: 802.11n ; Frequency: 2452 MHz ; Duty Cycle: 1:1 ; Modulation type: BPSK
 Medium: MSL2450 Medium parameters used : $f = 2452$ MHz; $\sigma = 1.99$ mho/m; $\epsilon_r = 53.3$; $\rho = 1000$ kg/m³ ; Liquid level : 150 mm
 Phantom section: Flat Section ; Separation distance : 14 mm (The bottom side of the EUT to the Phantom)
 Antenna type : Printed Antenna ; Air temp. : 22.3 degrees ; Liquid temp. : 21.1 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 (5x10x1): Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (measured) = 0.171 mW/g

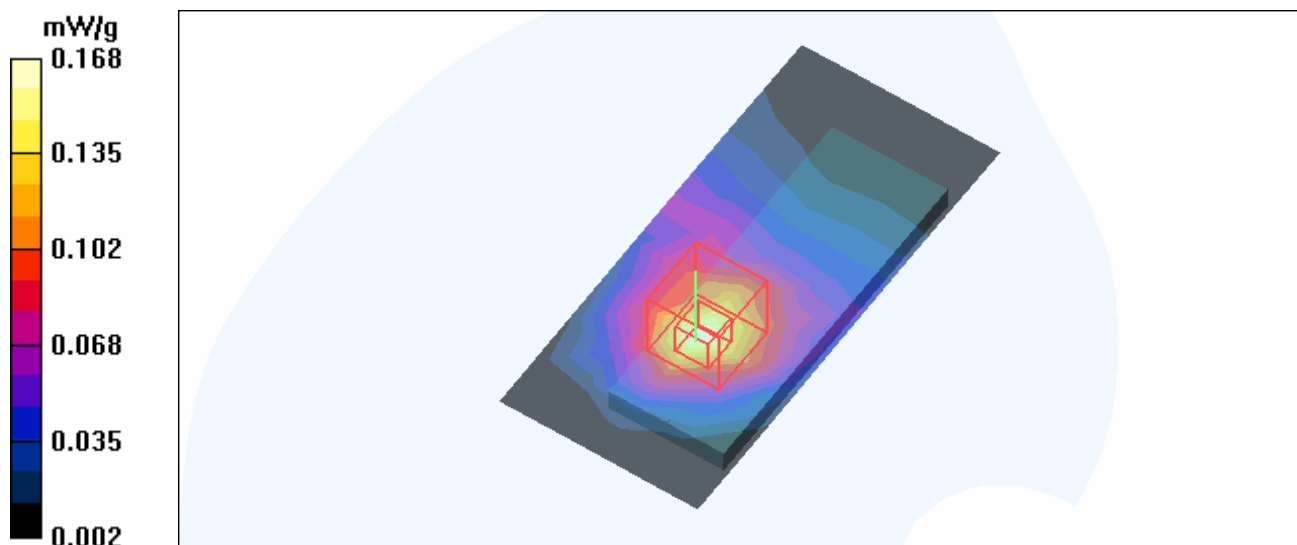
High Channel 7/Zoom Scan (7x7x7) (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 7.03 V/m

Peak SAR (extrapolated) = 0.330 W/kg

SAR(1 g) = 0.158 mW/g; SAR(10 g) = 0.083 mW/g

Maximum value of SAR (measured) = 0.168 mW/g



Date/Time: 2006/10/8 15:24:00

Test Laboratory: Advance Data Technology

G410-11b-CH11-Mode 5

DUT: N1 Wireless ExpressCard ; Type: F5D8071 ; Test Frequency: 2462 MHz

Communication System: 802.11b ; Frequency: 2462 MHz ; Duty Cycle: 1:1 ; Modulation type: DBPSK
 Medium: MSL2450 Medium parameters used: $f = 2462 \text{ MHz}$; $\sigma = 2 \text{ mho/m}$; $\epsilon_r = 53.3$; $\rho = 1000 \text{ kg/m}^3$; Liquid level : 150 mm
 Phantom section: Flat Section ; Separation distance : 15 mm (The bottom side of the EUT to the Phantom)
 Antenna type : Printed Antenna ; Air temp. : 22.3 degrees ; Liquid temp. : 21.1 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 (5x10x1): Measurement grid: $dx=15\text{mm}$, $dy=15\text{mm}$
 Maximum value of SAR (measured) = 0.783 mW/g

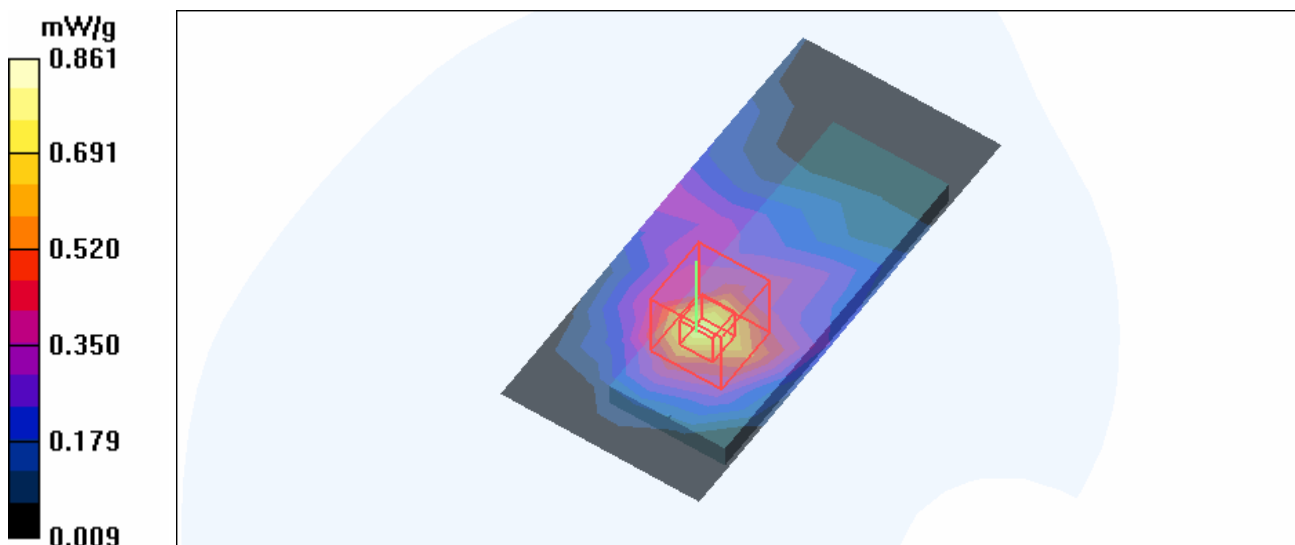
High Channel 11/Zoom Scan (7x7x7) (7x7x7)/Cube 0: Measurement grid: $dx=5\text{mm}$, $dy=5\text{mm}$, $dz=5\text{mm}$

Reference Value = 15.2 V/m

Peak SAR (extrapolated) = 1.79 W/kg

SAR(1 g) = 0.760 mW/g; SAR(10 g) = 0.391 mW/g

Maximum value of SAR (measured) = 0.861 mW/g



Date/Time: 2006/10/8 15:41:19

Test Laboratory: Advance Data Technology

G430-11g-CH6-Mode 6

DUT: N1 Wireless ExpressCard ; Type: F5D8071 ; Test Frequency: 2437 MHz

Communication System: 802.11g ; Frequency: 2437 MHz ; Duty Cycle: 1:1 ; Modulation type: BPSK
 Medium: MSL2450 Medium parameters used: $f = 2437 \text{ MHz}$; $\sigma = 1.97 \text{ mho/m}$; $\epsilon_r = 53.4$; $\rho = 1000 \text{ kg/m}^3$; Liquid level : 150 mm
 Phantom section: Flat Section ; Separation distance : 15 mm (The bottom side of the EUT to the Phantom)
 Antenna type : Printed Antenna ; Air temp. : 22.3 degrees ; Liquid temp. : 21.1 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 (5x10x1): Measurement grid: $dx=15\text{mm}$, $dy=15\text{mm}$

Maximum value of SAR (measured) = 0.630 mW/g

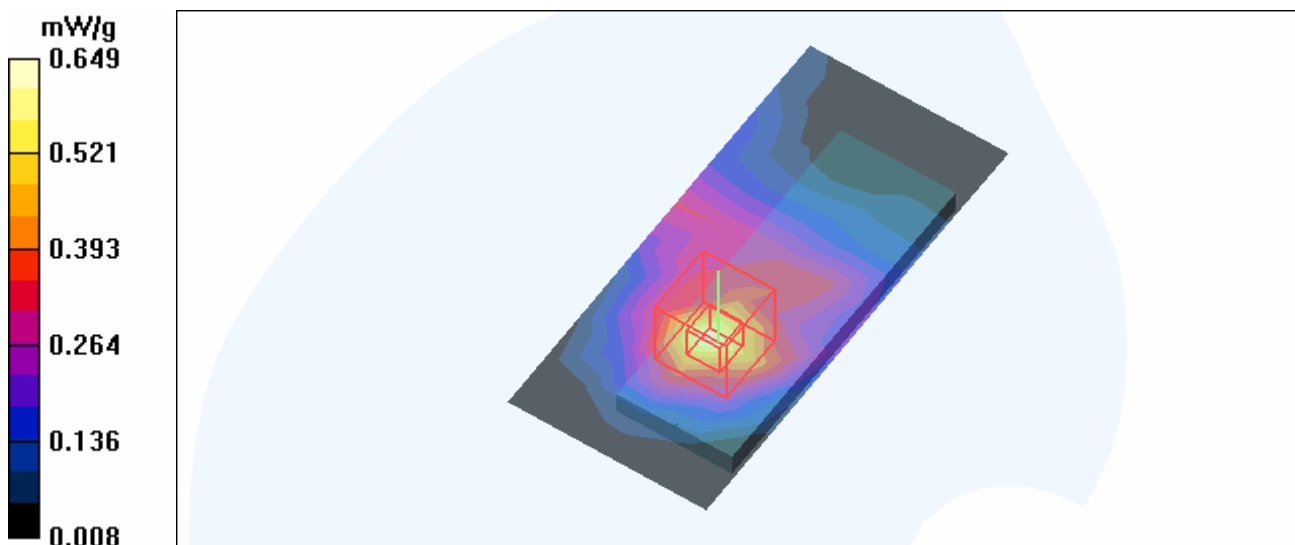
Mid Channel 6/Zoom Scan (7x7x7) (7x7x7)/Cube 0: Measurement grid: $dx=5\text{mm}$, $dy=5\text{mm}$, $dz=5\text{mm}$

Reference Value = 14.1 V/m

Peak SAR (extrapolated) = 1.24 W/kg

SAR(1 g) = 0.600 mW/g; SAR(10 g) = 0.313 mW/g

Maximum value of SAR (measured) = 0.649 mW/g



Date/Time: 2006/10/8 15:58:56

Test Laboratory: Advance Data Technology

G430-SAPN20-CH6-Mode 7

DUT: N1 Wireless ExpressCard ; Type: F5D8071 ; Test Frequency: 2437 MHz

Communication System: 802.11n ; Frequency: 2437 MHz ; Duty Cycle: 1:1 ; Modulation type: BPSK
Medium: MSL2450 Medium parameters used: $f = 2437$ MHz; $\sigma = 1.97$ mho/m; $\epsilon_r = 53.4$; $\rho = 1000$ kg/m³ ; Liquid level : 150 mm

Phantom section: Flat Section ; Separation distance : 15 mm (The bottom side of the EUT to the Phantom)
Antenna type : Printed Antenna ; Air temp. : 22.3 degrees ; Liquid temp. : 21.1 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 (5x10x1): Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (measured) = 0.813 mW/g

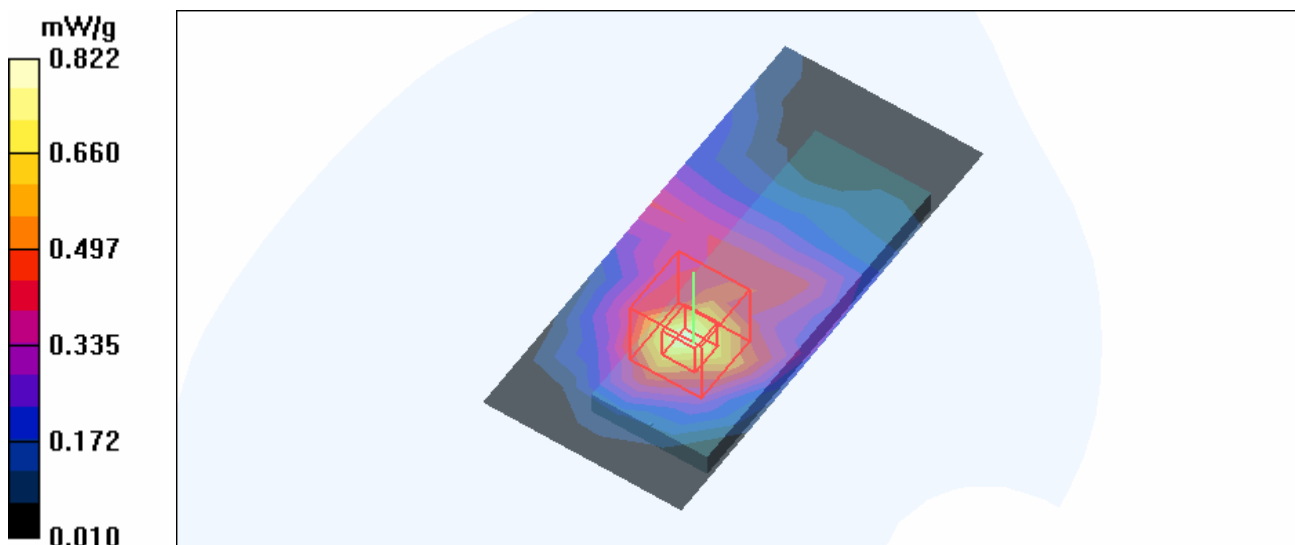
Mid Channel 6/Zoom Scan (7x7x7) (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 16.1 V/m

Peak SAR (extrapolated) = 1.56 W/kg

SAR(1 g) = 0.761 mW/g; SAR(10 g) = 0.396 mW/g

Maximum value of SAR (measured) = 0.822 mW/g



Date/Time: 2006/10/8 16:19:02

Test Laboratory: Advance Data Technology

G410-SAPN40-CH4-Mode 8

DUT: N1 Wireless ExpressCard ; Type: F5D8071 ; Test Frequency: 2437 MHz

Communication System: 802.11n ; Frequency: 2437 MHz ; Duty Cycle: 1:1 ; Modulation type: BPSK
 Medium: MSL2450 Medium parameters used: $f = 2437$ MHz; $\sigma = 1.97$ mho/m; $\epsilon_r = 53.4$; $\rho = 1000$ kg/m³ ; Liquid level : 150 mm
 Phantom section: Flat Section ; Separation distance : 15 mm (The bottom side of the EUT to the Phantom)
 Antenna type : Printed Antenna ; Air temp. : 22.3 degrees ; Liquid temp. : 21.1 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 (5x10x1): Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (measured) = 0.291 mW/g

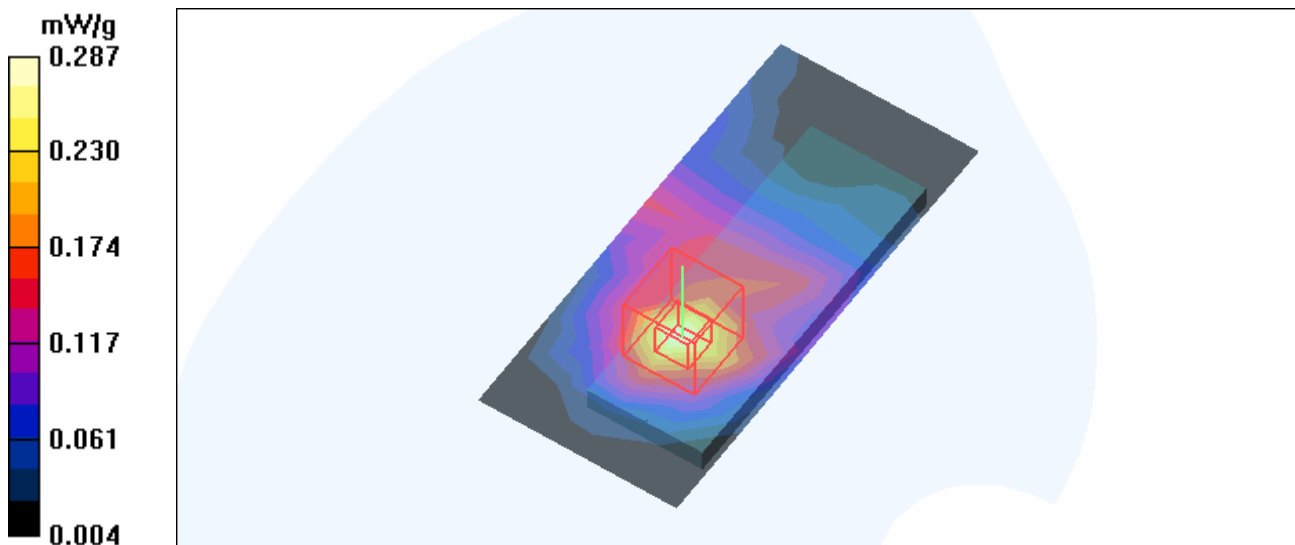
Mid Channel 4/Zoom Scan (7x7x7) (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 9.64 V/m

Peak SAR (extrapolated) = 0.549 W/kg

SAR(1 g) = 0.268 mW/g; SAR(10 g) = 0.141 mW/g

Maximum value of SAR (measured) = 0.287 mW/g



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Test Laboratory: Advance Data Technology

6125-11b-CH11-Mode 9

DUT: N1 Wireless ExpressCard ; Type: F5D8071 ; Test Frequency: 2462 MHz

Communication System: 802.11b ; Frequency: 2462 MHz ; Duty Cycle: 1:1 ; Modulation type: DBPSK
 Medium: MSL2450 Medium parameters used: $f = 2462 \text{ MHz}$; $\sigma = 2 \text{ mho/m}$; $\epsilon_r = 53.3$; $\rho = 1000 \text{ kg/m}^3$; Liquid level : 150 mm
 Phantom section: Flat Section ; Separation distance : 16 mm (The bottom side of the EUT to the Phantom)
 Antenna type : Printed Antenna ; Air temp. : 22.3 degrees ; Liquid temp. : 21.1 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 (5x10x1): Measurement grid: $dx=15\text{mm}$, $dy=15\text{mm}$

Maximum value of SAR (measured) = 0.730 mW/g

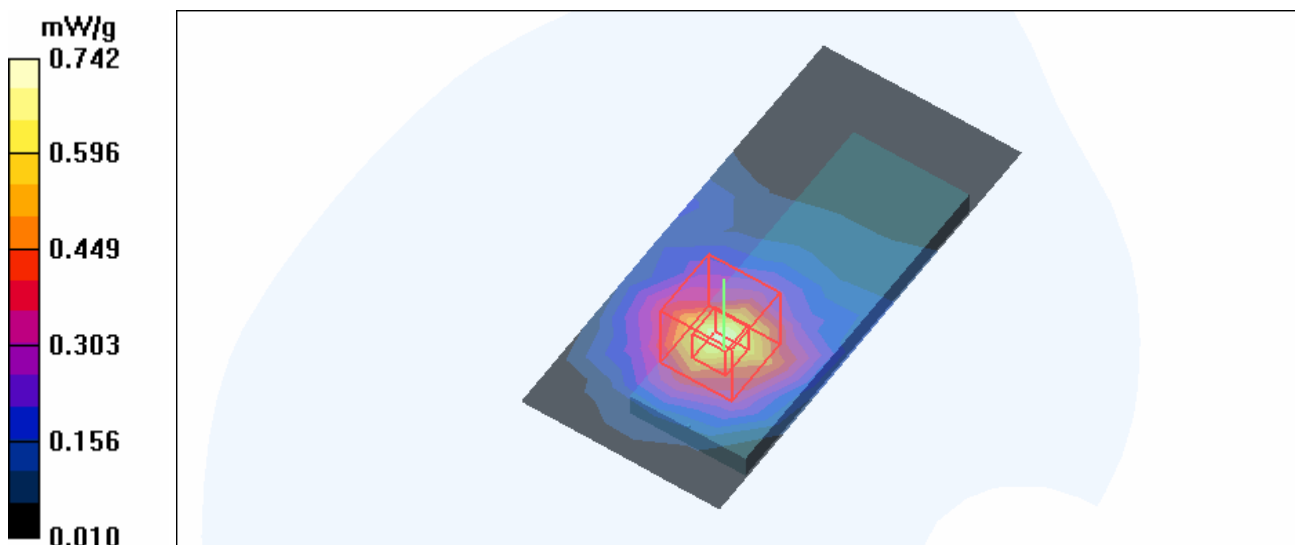
High Channel 11/Zoom Scan (7x7x7) (7x7x7)/Cube 0: Measurement grid: $dx=5\text{mm}$, $dy=5\text{mm}$, $dz=5\text{mm}$

Reference Value = 14.0 V/m

Peak SAR (extrapolated) = 1.45 W/kg

SAR(1 g) = 0.689 mW/g; SAR(10 g) = 0.352 mW/g

Maximum value of SAR (measured) = 0.742 mW/g



Date/Time: 2006/10/8 17:20:37

Test Laboratory: Advance Data Technology

6125-11g-CH6-Mode 10

DUT: N1 Wireless ExpressCard ; Type: F5D8071 ; Test Frequency: 2437 MHz

Communication System: 802.11g ; Frequency: 2437 MHz ; Duty Cycle: 1:1 ; Modulation type: BPSK
Medium: MSL2450 Medium parameters used: $f = 2437$ MHz; $\sigma = 1.97$ mho/m; $\epsilon_r = 53.4$; $\rho = 1000$ kg/m³ ; Liquid level : 150 mm

Phantom section: Flat Section ; Separation distance : 16 mm (The bottom side of the EUT to the Phantom)

Antenna type : Printed Antenna ; Air temp. : 22.3 degrees ; Liquid temp. : 21.1 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 (5x10x1): Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (measured) = 0.689 mW/g

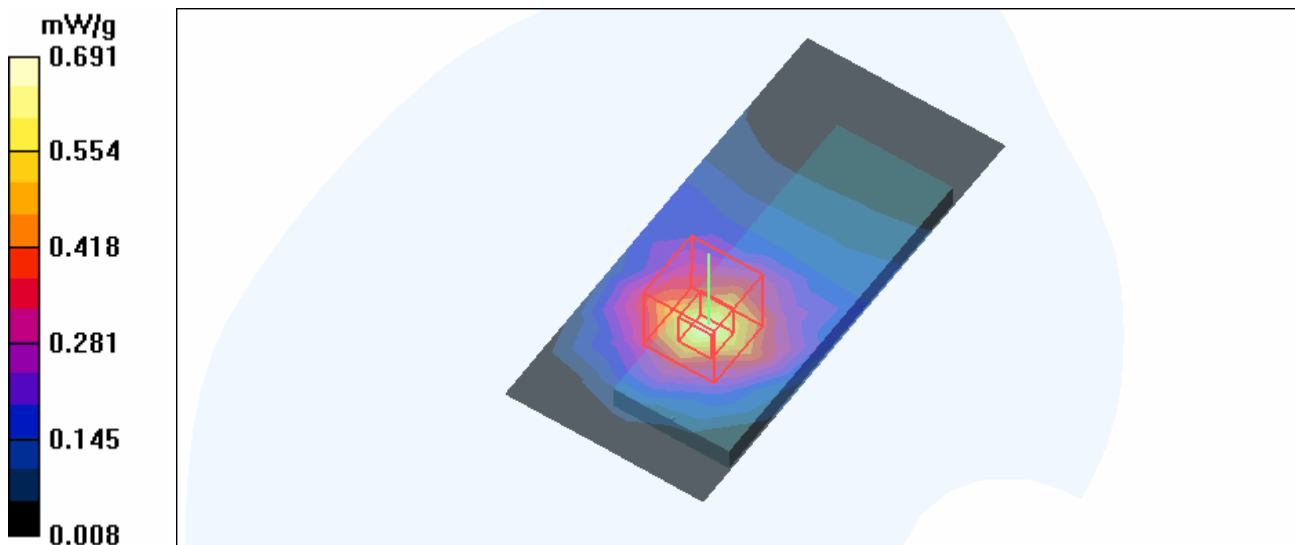
Mid Channel 6/Zoom Scan (7x7x7) (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 15.1 V/m

Peak SAR (extrapolated) = 1.34 W/kg

SAR(1 g) = 0.641 mW/g; SAR(10 g) = 0.330 mW/g

Maximum value of SAR (measured) = 0.691 mW/g



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Test Laboratory: Advance Data Technology

6125-SAPN20-CH6-Mode 11

DUT: N1 Wireless ExpressCard ; Type: F5D8071 ; Test Frequency: 2437 MHz

Communication System: 802.11n ; Frequency: 2437 MHz ; Duty Cycle: 1:1 ; Modulation type: BPSK
Medium: MSL2450 Medium parameters used: $f = 2437$ MHz; $\sigma = 1.97$ mho/m; $\epsilon_r = 53.4$; $\rho = 1000$ kg/m³ ; Liquid level : 150 mm

Phantom section: Flat Section ; Separation distance : 16 mm (The bottom side of the EUT to the Phantom)
Antenna type : Printed Antenna ; Air temp. : 22.3 degrees ; Liquid temp. : 21.1 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 (5x10x1): Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (measured) = 0.765 mW/g

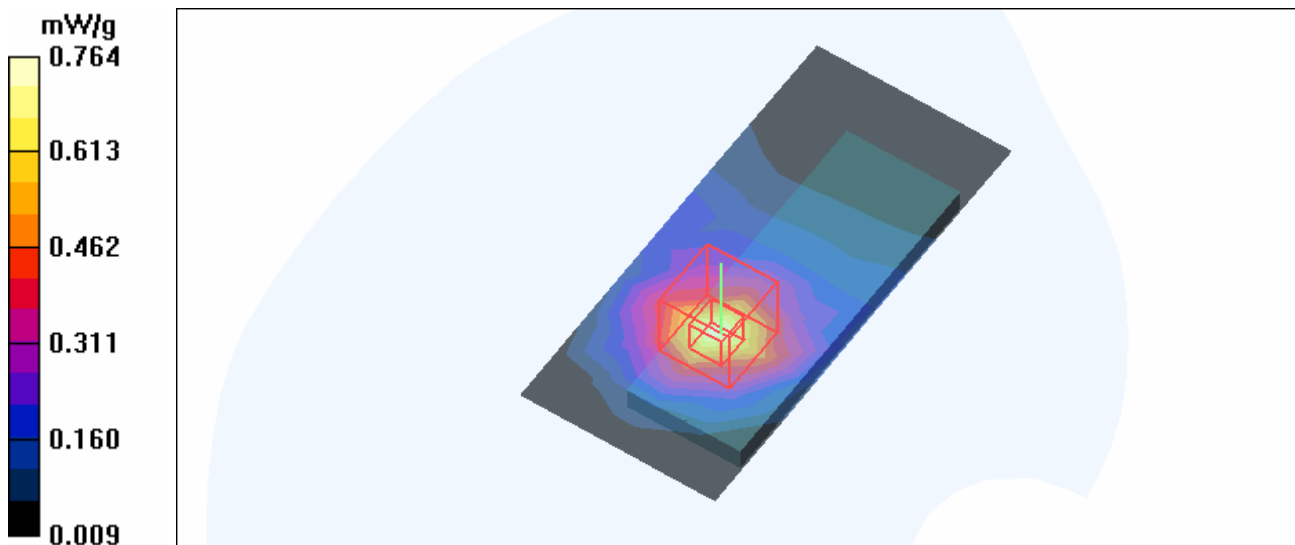
Mid Channel 6/Zoom Scan (7x7x7) (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 15.0 V/m

Peak SAR (extrapolated) = 1.52 W/kg

SAR(1 g) = 0.706 mW/g; SAR(10 g) = 0.362 mW/g

Maximum value of SAR (measured) = 0.764 mW/g



Date/Time: 2006/10/8 18:06:50

Test Laboratory: Advance Data Technology

6125-SAPN40-CH4-Mode 12

DUT: N1 Wireless ExpressCard ; Type: F5D8071 ; Test Frequency: 2437 MHz

Communication System: 802.11n ; Frequency: 2437 MHz ; Duty Cycle: 1:1 ; Modulation type: BPSK
Medium: MSL2450 Medium parameters used: $f = 2437$ MHz; $\sigma = 1.97$ mho/m; $\epsilon_r = 53.4$; $\rho = 1000$ kg/m³ ; Liquid level : 150 mm

Phantom section: Flat Section ; Separation distance : 16 mm (The bottom side of the EUT to the Phantom)
Antenna type : Printed Antenna ; Air temp. : 22.3 degrees ; Liquid temp. : 21.1 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 (5x10x1): Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (measured) = 0.254 mW/g

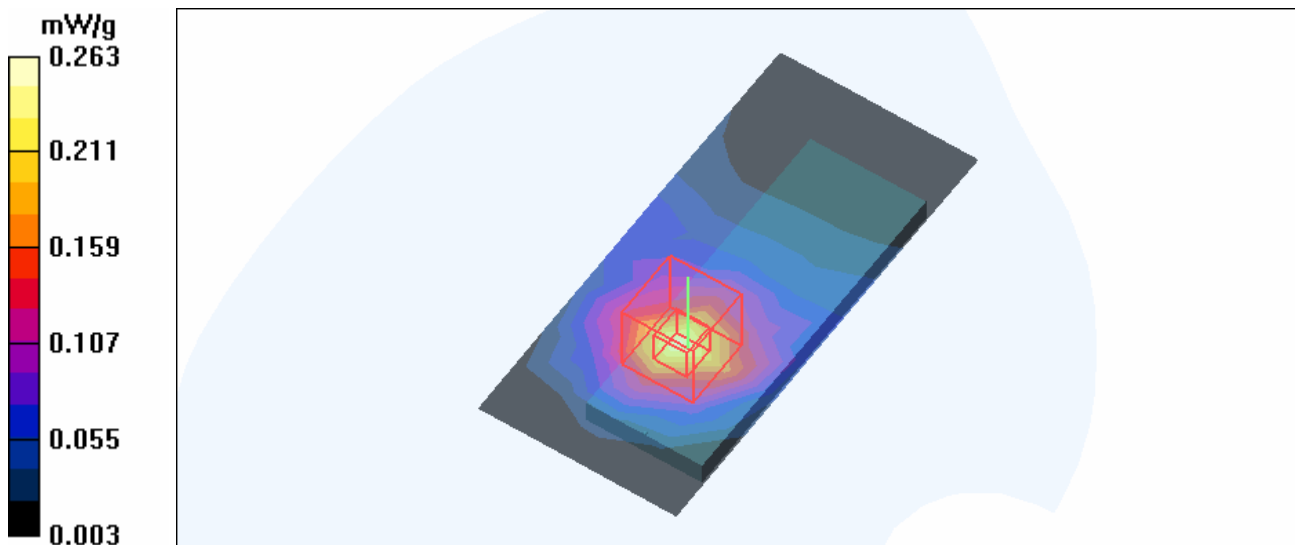
Mid Channel 4/Zoom Scan (7x7x7) (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 8.33 V/m

Peak SAR (extrapolated) = 0.509 W/kg

SAR(1 g) = 0.244 mW/g; SAR(10 g) = 0.126 mW/g

Maximum value of SAR (measured) = 0.263 mW/g



Date/Time: 2006/10/8 10:55:13

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; $\sigma = 1.99$ mho/m; $\epsilon_r = 53.3$; $\rho = 1000$ kg/m³ ; Liquid level : 150 mm
 Phantom section: Flat Section ; Separation distance : 10 mm (The feetpoint of the dipole to the Phantom)
 Air temp. : 22.3 degrees ; Liquid temp. : 21.1 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) = 15.7 mW/g

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

Reference Value = 89.4 V/m; Power Drift = -0.077 dB

Peak SAR (extrapolated) = 30.5 W/kg

SAR(1 g) = 13.7 mW/g; SAR(10 g) = 6.30 mW/g

Maximum value of SAR (measured) = 15.4 mW/g

