Deutscher Akkreditierungs Rat

DAT-P-152/98-01

Appendix for the Report

Dosimetric Assessment of the Portable Device GI0452 from Option (FCC ID: NCMOGI0452) tested in one host product

According to the FCC Requirements

SAR Distribution Plots

May 20, 2009

IMST GmbH
Carl-Friedrich-Gauß-Str. 2
D-47475 Kamp-Lintfort

Customer

Option N.V.
Gaston Geenslaan 14
B-3001 Leuven

Table of Contents

1 SAR Distribution Plots, GPRS 850 Body

Test Laboratory: IMST GmbH, DASY Blue (I); File Name: 452_bahh_1.da4

DUT: Option ; Type: Pico Racer iCon 452; Serial: 004401441131147
Program Name: Body

Communication System: GPRS 850; Frequency: 848.8 MHz;Duty Cycle: 1:4
Medium parameters used: f = 848.8 MHz; σ = 1 mho/m; ε_r = 56.9; ρ = 1000 kg/m^3
Phantom section: Flat Section

DASY4 Configuration:
- Probe: ET3DV6R - SN1669; ConvF(5.89, 5.89, 5.89); Calibrated: 10.02.2009
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn335; Calibrated: 09.02.2009
- Phantom: SAM Sugar 1059; Type: Speag; Serial: 1059
- Measurement SW: DASY4, V4.7 Build 71; Postprocessing SW: SEMCAD, V1.8 Build 184

GPRS 850/Area Scan (9x15x1): Measurement grid: dx=10mm, dy=10mm
Maximum value of SAR (measured) = 1.16 mW/g
GPRS 850/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 12.8 V/m; Power Drift = -0.024 dB
Peak SAR (extrapolated) = 1.67 W/kg
SAR(1 g) = 1.12 mW/g; SAR(10 g) = 0.718 mW/g
Maximum value of SAR (measured) = 1.23 mW/g

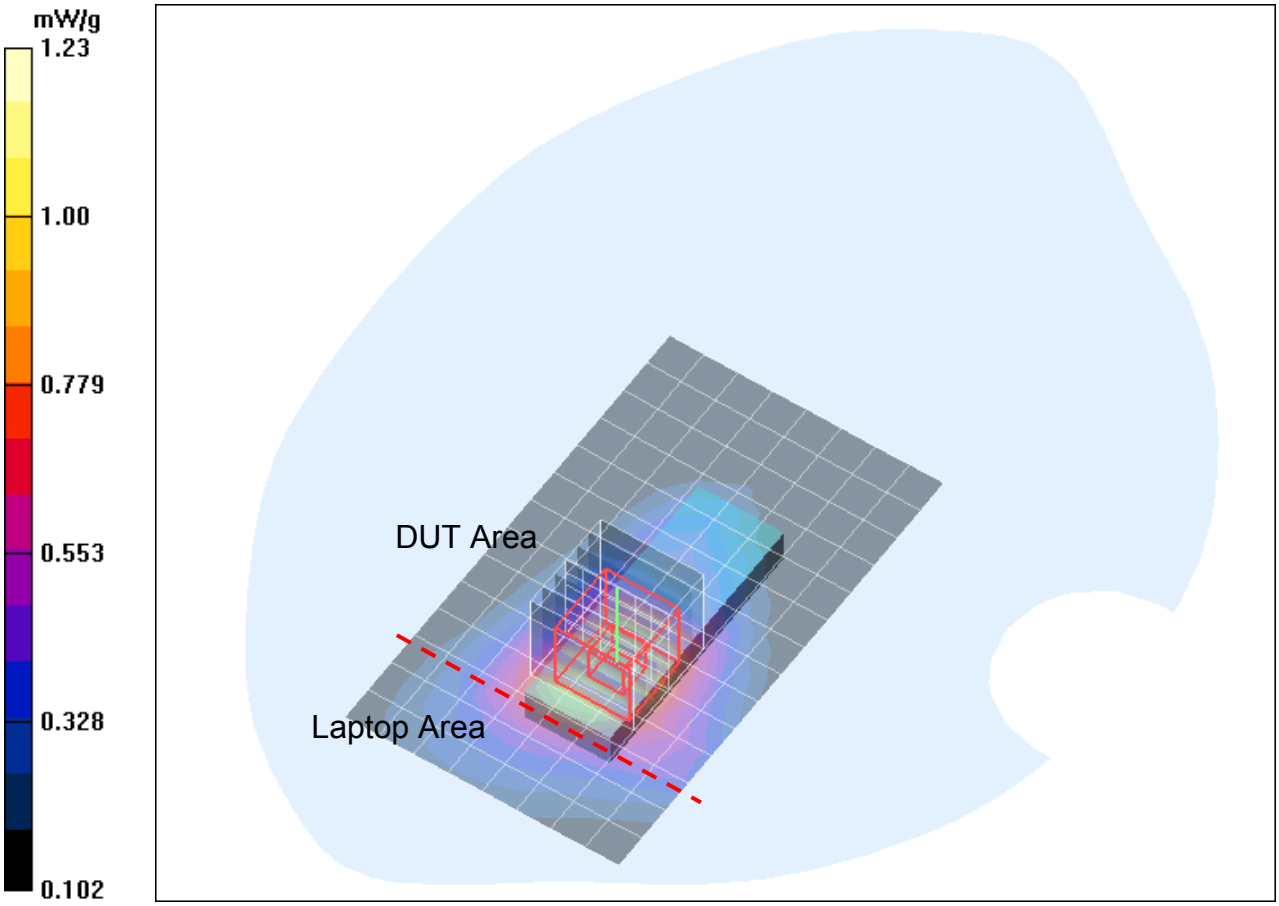

Fig. 1: Worst case SAR distribution for GPRS 850 (Class 10), channel 251, Position A (Fujitsu Siemens Amilo Pro, March 10, 2009; Ambient Temperature: 21.9°C; Liquid Temperature: 21.3°C).

Test Laboratory: IMST GmbH, DASY Blue (I); File Name: 452_bahl_2.da4

DUT: Option ; Type: Pico Racer iCon 452; Serial: 004401441131147
Program Name: Body

Communication System: GPRS 850; Frequency: 824.2 MHz;Duty Cycle: 1:4
Medium parameters used: f = 824.2 MHz; σ = 0.99 mho/m; ε_r = 57.1; ρ = 1000 kg/m^3
Phantom section: Flat Section

DASY4 Configuration:
- Probe: ET3DV6R - SN1669; ConvF(5.89, 5.89, 5.89); Calibrated: 10.02.2009
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn335; Calibrated: 09.02.2009
- Phantom: SAM Sugar 1059; Type: Speag; Serial: 1059
- Measurement SW: DASY4, V4.7 Build 71; Postprocessing SW: SEMCAD, V1.8 Build 184

GPRS 850/Area Scan (9x15x1): Measurement grid: dx=10mm, dy=10mm
Maximum value of SAR (measured) = 0.949 mW/g
GPRS 850/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 26.0 V/m; Power Drift = -0.083 dB
Peak SAR (extrapolated) = 1.36 W/kg
SAR(1 g) = 0.900 mW/g; SAR(10 g) = 0.581 mW/g
Maximum value of SAR (measured) = 0.976 mW/g

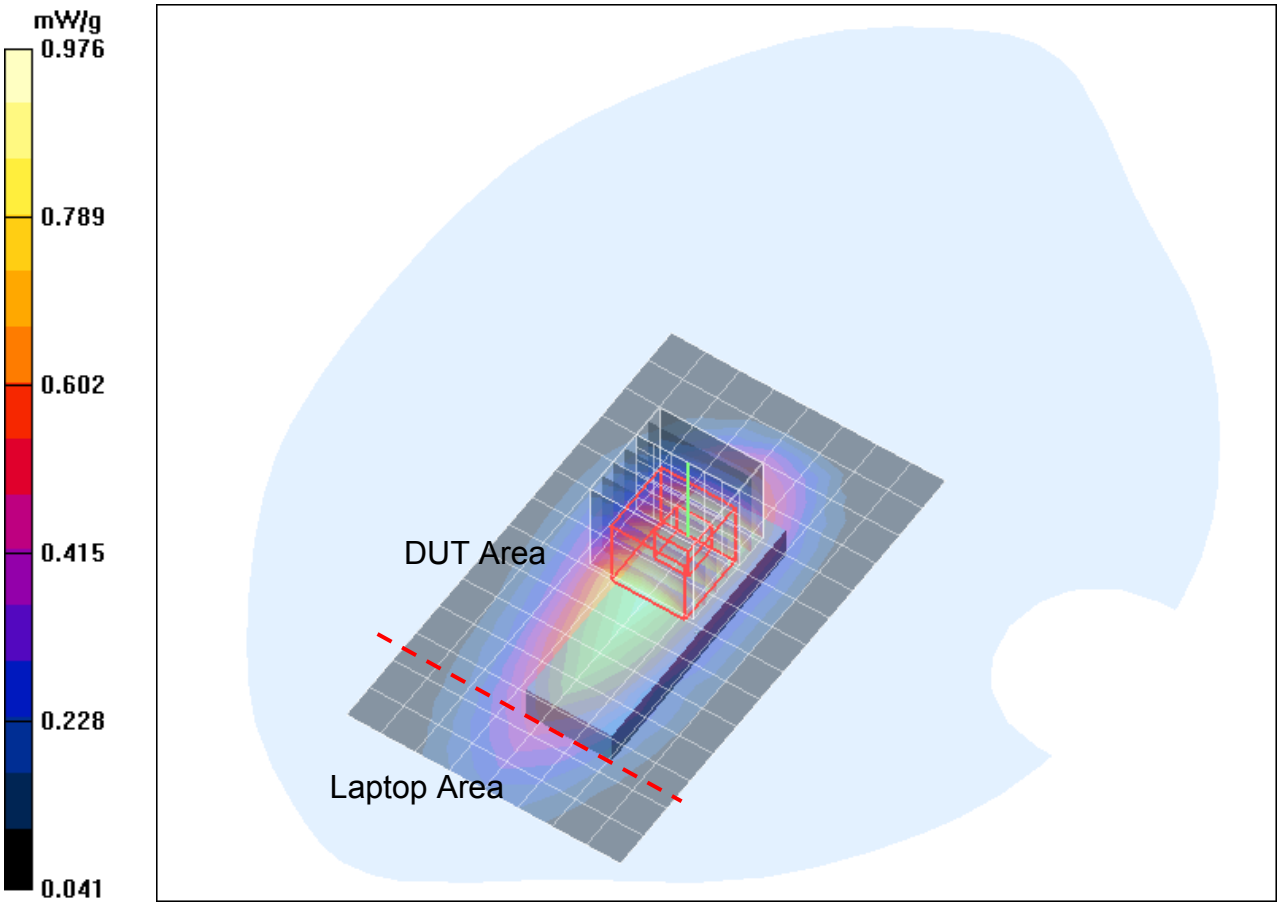

Fig. 2: Worst case SAR distribution for GPRS 850 (Class 10), channel 128, Position B (Fujitsu Siemens Amilo Pro, March 10, 2009; Ambient Temperature: 21.9°C; Liquid Temperature: 21.3°C).

Test Laboratory: IMST GmbH, DASY Blue (I); File Name: 452_bahm_3.da4

DUT: Option ; Type: Pico Racer iCon 452; Serial: 004401441131147
Program Name: Body

Communication System: GPRS 850; Frequency: 836.6 MHz;Duty Cycle: 1:4
Medium parameters used: f = 836.6 MHz; σ = 1 mho/m; ε_r = 57; ρ = 1000 kg/m^3
Phantom section: Flat Section

DASY4 Configuration:
- Probe: ET3DV6R - SN1669; ConvF(5.89, 5.89, 5.89); Calibrated: 10.02.2009
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn335; Calibrated: 09.02.2009
- Phantom: SAM Sugar 1059; Type: Speag; Serial: 1059
- Measurement SW: DASY4, V4.7 Build 71; Postprocessing SW: SEMCAD, V1.8 Build 184

GPRS 850/Area Scan (9x15x1): Measurement grid: dx=10mm, dy=10mm
Maximum value of SAR (measured) = 0.663 mW/g
GPRS 850/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 11.6 V/m; Power Drift = 0.030 dB
Peak SAR (extrapolated) = 0.964 W/kg
SAR(1 g) = 0.650 mW/g; SAR(10 g) = 0.423 mW/g
Maximum value of SAR (measured) = 0.711 mW/g

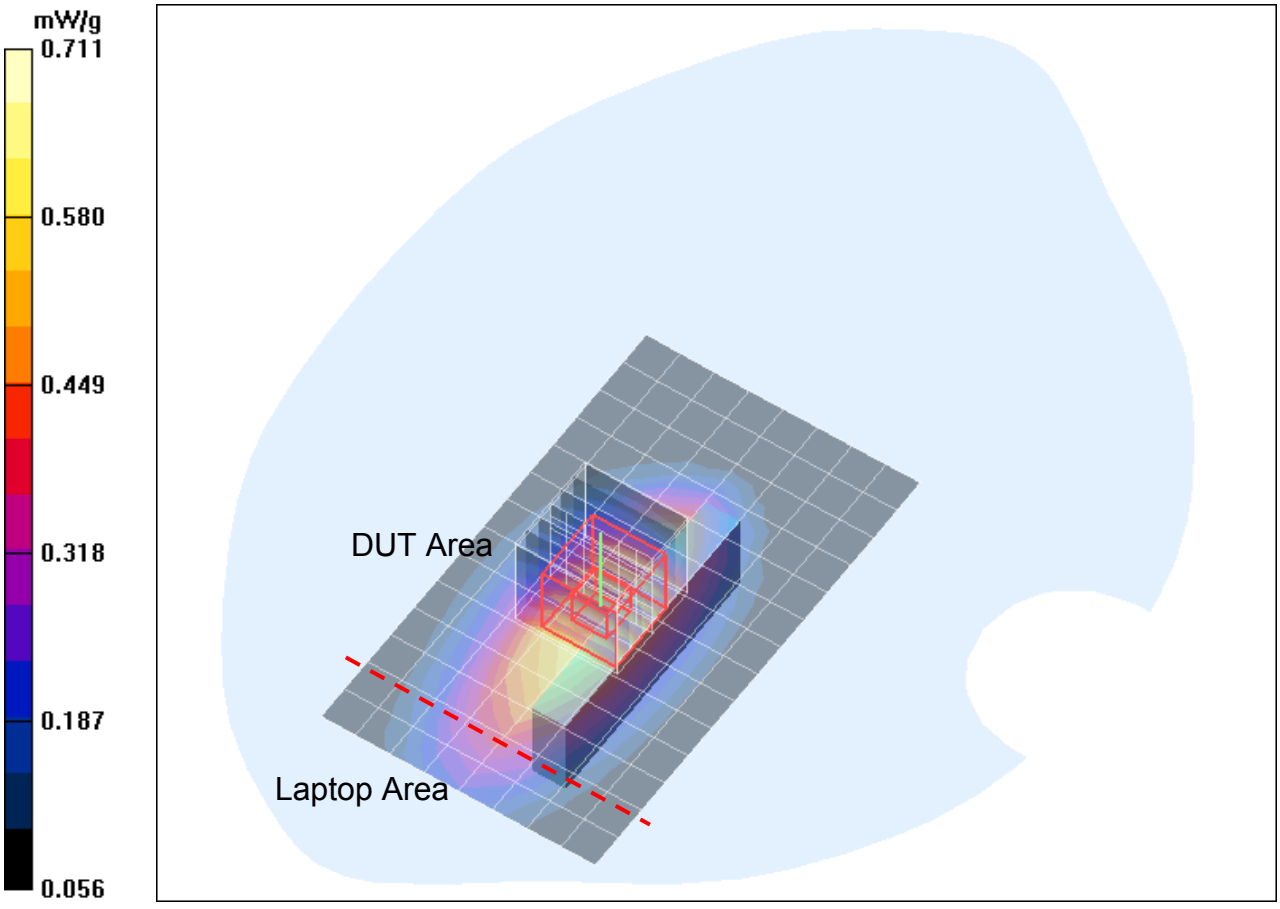

Fig. 3: SAR distribution for GPRS 850 (Class 10), channel 190, Position C (Fujitsu Siemens Amilo Pro, March 10, 2009; Ambient Temperature: 21.9°C; Liquid Temperature: 21.3°C).

Test Laboratory: IMST GmbH, DASY Blue (I); File Name: 452_bahm_4.da4

DUT: Option ; Type: Pico Racer iCon 452; Serial: 004401441131147
Program Name: Body

Communication System: GPRS 850; Frequency: 836.6 MHz;Duty Cycle: 1:4
Medium parameters used: f = 836.6 MHz; σ = 1 mho/m; ε_r = 57; ρ = 1000 kg/m^3
Phantom section: Flat Section

DASY4 Configuration:
- Probe: ET3DV6R - SN1669; ConvF(5.89, 5.89, 5.89); Calibrated: 10.02.2009
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn335; Calibrated: 09.02.2009
- Phantom: SAM Sugar 1059; Type: Speag; Serial: 1059
- Measurement SW: DASY4, V4.7 Build 71; Postprocessing SW: SEMCAD, V1.8 Build 184

GPRS 850/Area Scan (9x15x1): Measurement grid: dx=10mm, dy=10mm
Maximum value of SAR (measured) = 0.483 mW/g
GPRS 850/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 13.7 V/m; Power Drift = -0.183 dB
Peak SAR (extrapolated) = 0.696 W/kg
SAR(1 g) = 0.450 mW/g; SAR(10 g) = 0.298 mW/g
Maximum value of SAR (measured) = 0.488 mW/g

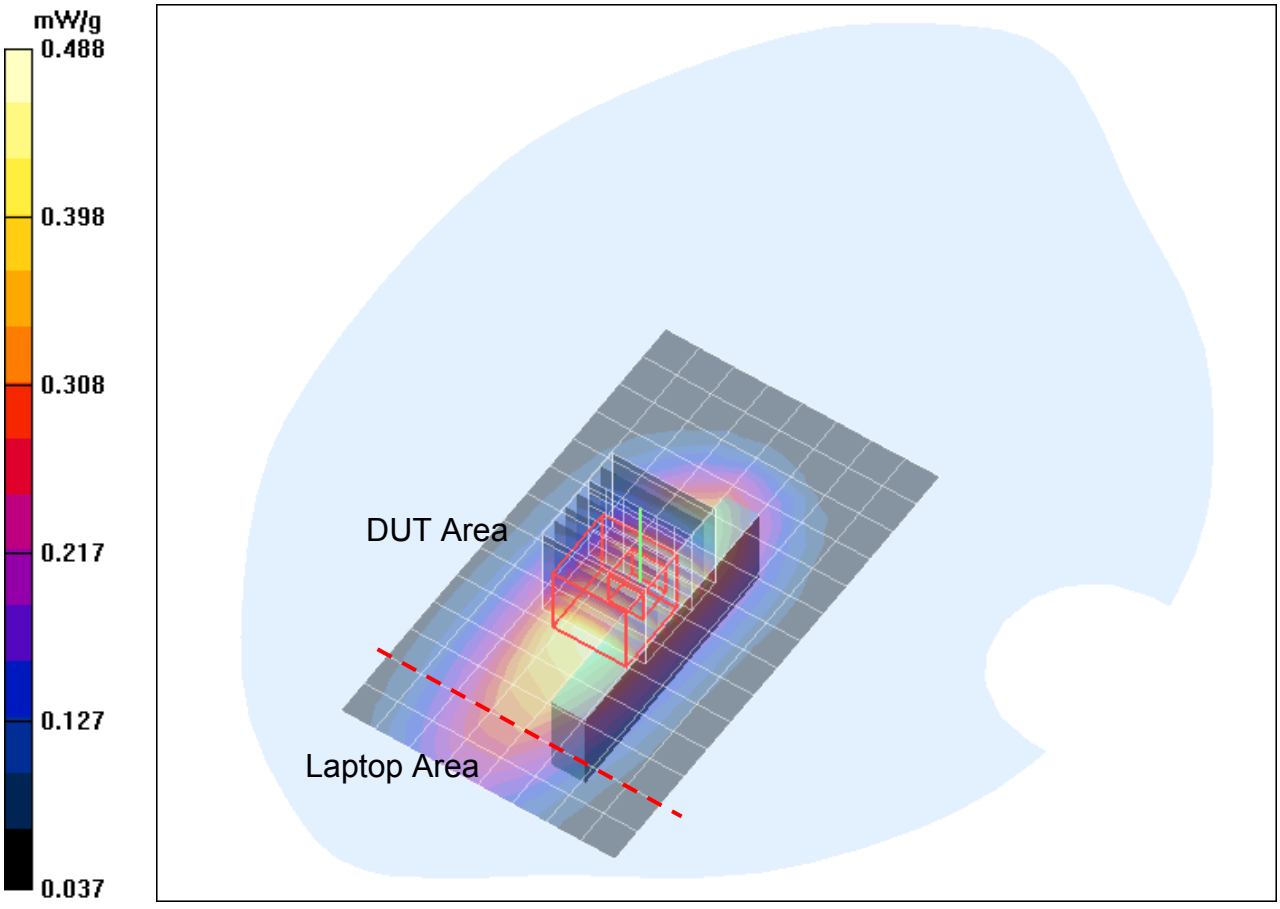

Fig. 4: SAR distribution for GPRS 850 (Class 10), channel 190, Position D (Fujitsu Siemens Amilo Pro, March 10, 2009; Ambient Temperature: 21.9°C; Liquid Temperature: 21.3°C).

2 SAR Distribution Plots, GPRS 1900 Body

Test Laboratory: IMST GmbH, DASY Blue (I); File Name: 452_bphl_1.da4

DUT: Option ; Type: Pico Racer iCon 452; Serial: 004401441131147
Program Name: Body

Communication System: GPRS 1900; Frequency: 1850.2 MHz;Duty Cycle: 1:4
Medium parameters used: f = 1850.2 MHz; σ = 1.47 mho/m; ε_r = 53; ρ = 1000 kg/m^3
Phantom section: Flat Section

DASY4 Configuration:
- Probe: EX3DV4 - SN3536; ConvF(8.15, 8.15, 8.15); Calibrated: 19.09.2008
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn631; Calibrated: 17.09.2008
- Phantom: SAM Glycol 1176; Type: Speag; Serial: 1176
- Measurement SW: DASY4, V4.7 Build 71; Postprocessing SW: SEMCAD, V1.8 Build 184

GPRS 1900/Area Scan (9x15x1): Measurement grid: dx=10mm, dy=10mm
Maximum value of SAR (measured) = 0.998 mW/g
GPRS 1900/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 11.7 V/m; Power Drift = 0.077 dB
Peak SAR (extrapolated) = 1.76 W/kg
SAR(1 g) = 1.01 mW/g; SAR(10 g) = 0.532 mW/g
Maximum value of SAR (measured) = 1.13 mW/g
GPRS 1900/Zoom Scan (7x7x7)/Cube 1: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 11.7 V/m; Power Drift = 0.077 dB
Peak SAR (extrapolated) = 1.45 W/kg
SAR(1 g) = 0.861 mW/g; SAR(10 g) = 0.475 mW/g
Maximum value of SAR (measured) = 0.974 mW/g

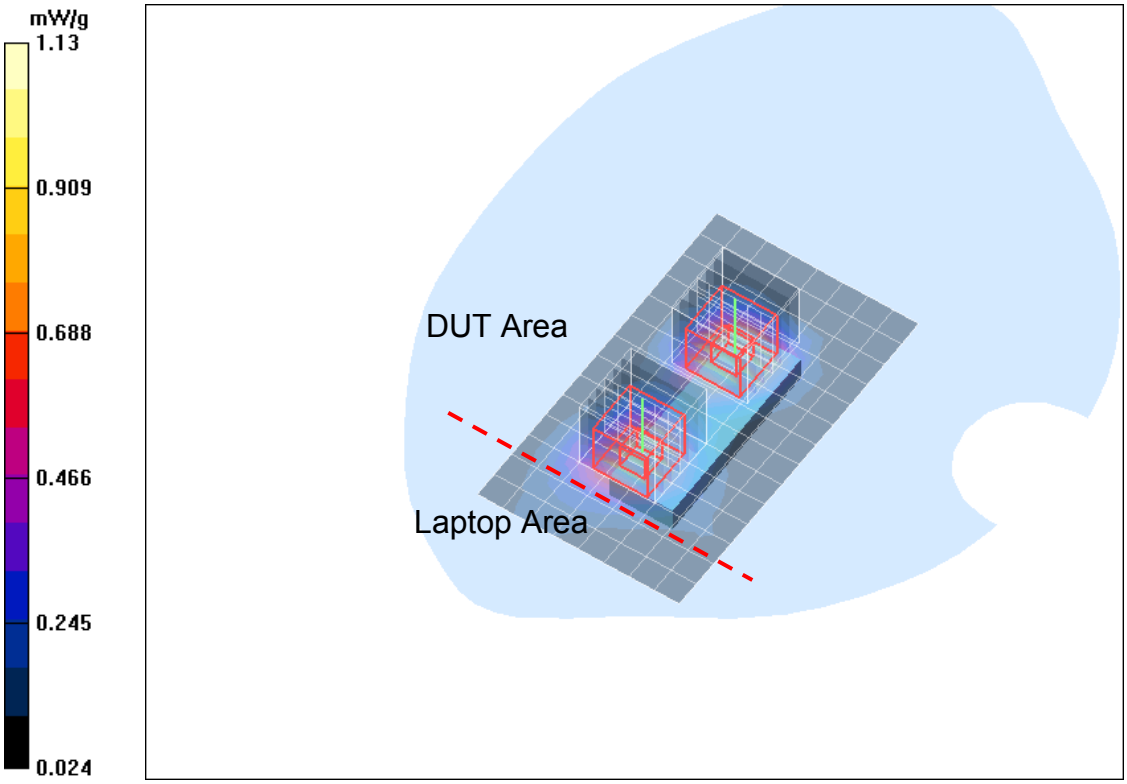

Fig. 5: SAR distribution for GPRS 1900 (Class 10), channel 512, Position A (Fujitsu Siemens Amilo Pro, March 09, 2009; Ambient Temperature: 22.2°C; Liquid Temperature: 21.4°C).

Test Laboratory: IMST GmbH, DASY Blue (I); File Name: 452_bphm_1.da4

DUT: Option ; Type: Pico Racer iCon 452; Serial: 004401441131147
Program Name: Body

Communication System: GPRS 1900; Frequency: 1880 MHz;Duty Cycle: 1:4
Medium parameters used: f = 1880 MHz; σ = 1.51 mho/m; ε_r = 52.9; ρ = 1000 kg/m^3
Phantom section: Flat Section

DASY4 Configuration:
- Probe: EX3DV4 - SN3536; ConvF(8.15, 8.15, 8.15); Calibrated: 19.09.2008
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn631; Calibrated: 17.09.2008
- Phantom: SAM Glycol 1176; Type: Speag; Serial: 1176
- Measurement SW: DASY4, V4.7 Build 71; Postprocessing SW: SEMCAD, V1.8 Build 184

GPRS 1900/Area Scan (9x15x1): Measurement grid: dx=10mm, dy=10mm
Maximum value of SAR (measured) = 1.13 mW/g
GPRS 1900/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 12.3 V/m; Power Drift = 0.024 dB
Peak SAR (extrapolated) = 1.97 W/kg
SAR(1 g) = 1.12 mW/g; SAR(10 g) = 0.588 mW/g
Maximum value of SAR (measured) = 1.26 mW/g
GPRS 1900/Zoom Scan (7x7x7)/Cube 1: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 12.3 V/m; Power Drift = 0.024 dB
Peak SAR (extrapolated) = 1.61 W/kg
SAR(1 g) = 0.950 mW/g; SAR(10 g) = 0.520 mW/g
Maximum value of SAR (measured) = 1.06 mW/g

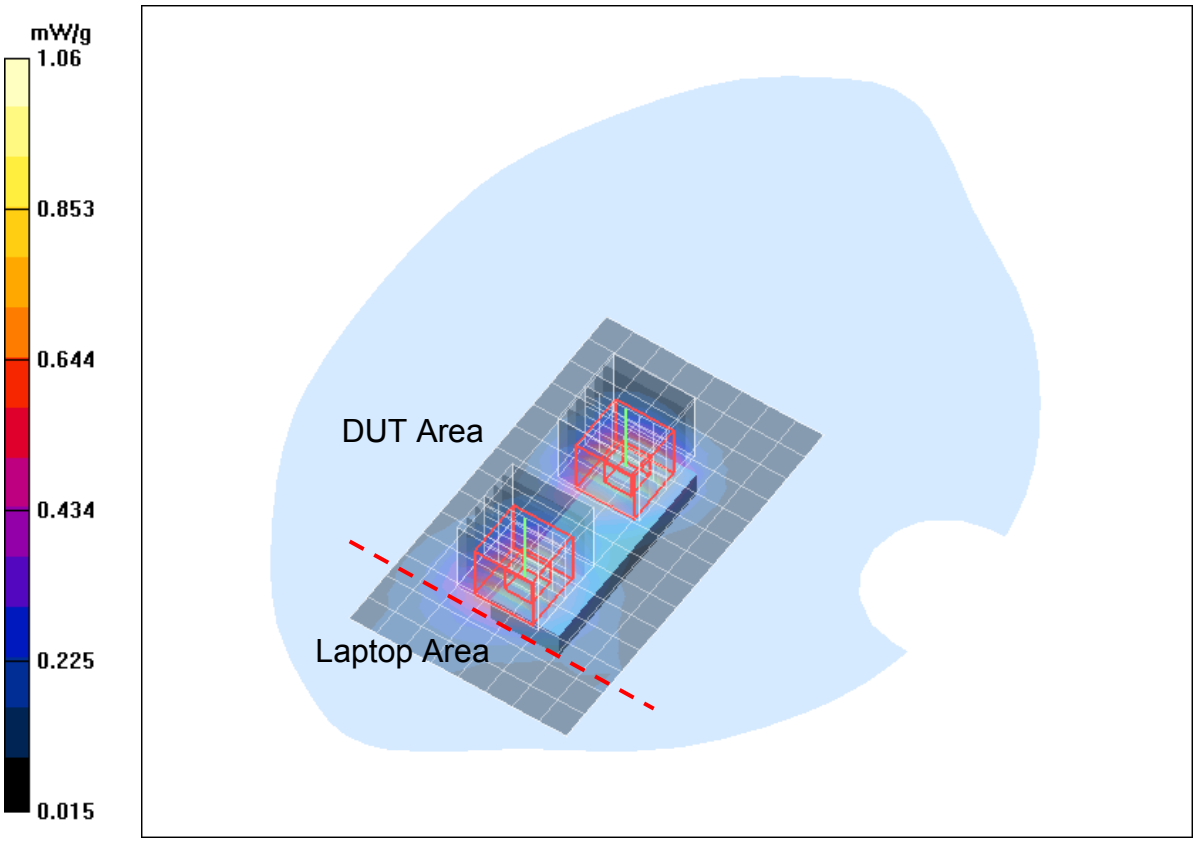

Fig. 6: SAR distribution for GPRS 1900 (Class 10), channel 661, Position A (Fujitsu Siemens Amilo Pro, March 09, 2009; Ambient Temperature: 22.2°C; Liquid Temperature: 21.4°C).

Test Laboratory: IMST GmbH, DASY Blue (I); File Name: 452_bphh_1.da4

DUT: Option ; Type: Pico Racer iCon 452; Serial: 004401441131147
Program Name: Body

Communication System: GPRS 1900; Frequency: 1909.8 MHz;Duty Cycle: 1:4
Medium parameters used: f = 1909.8 MHz; σ = 1.55 mho/m; ε_r = 52.8; ρ = 1000 kg/m^3
Phantom section: Flat Section

DASY4 Configuration:
- Probe: EX3DV4 - SN3536; ConvF(8.15, 8.15, 8.15); Calibrated: 19.09.2008
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn631; Calibrated: 17.09.2008
- Phantom: SAM Glycol 1176; Type: Speag; Serial: 1176
- Measurement SW: DASY4, V4.7 Build 71; Postprocessing SW: SEMCAD, V1.8 Build 184

GPRS 1900/Area Scan (9x15x1): Measurement grid: dx=10mm, dy=10mm
Maximum value of SAR (measured) = 1.24 mW/g
GPRS 1900/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 12.5 V/m; Power Drift = -0.163 dB
Peak SAR (extrapolated) = 2.03 W/kg
SAR(1 g) = 1.2 mW/g; SAR(10 g) = 0.634 mW/g
Maximum value of SAR (measured) = 1.38 mW/g
GPRS 1900/Zoom Scan (7x7x7)/Cube 1: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 12.5 V/m; Power Drift = -0.163 dB
Peak SAR (extrapolated) = 1.63 W/kg
SAR(1 g) = 0.961 mW/g; SAR(10 g) = 0.521 mW/g
Maximum value of SAR (measured) = 1.07 mW/g

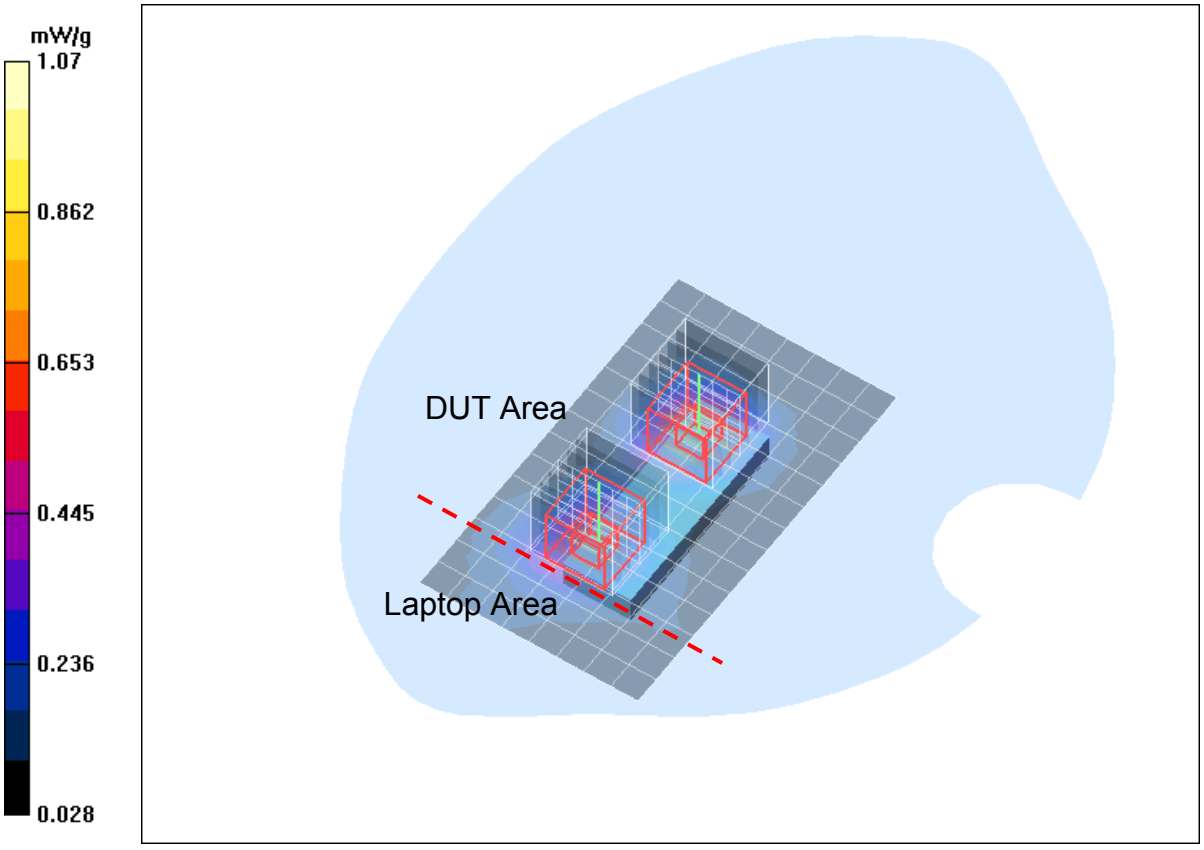

Fig. 7: SAR distribution for GPRS 1900 (Class 10), channel 810, Position A (Fujitsu Siemens Amilo Pro, March 09, 2009; Ambient Temperature: 22.2°C; Liquid Temperature: 21.4°C).

Test Laboratory: IMST GmbH, DASY Blue (I); File Name: 452_bphh_2.da4

DUT: Option ; Type: Pico Racer iCon 452; Serial: 004401441131147
Program Name: Body

Communication System: GPRS 1900; Frequency: 1909.8 MHz;Duty Cycle: 1:4
Medium parameters used: f = 1909.8 MHz; σ = 1.55 mho/m; ε_r = 52.8; ρ = 1000 kg/m^3
Phantom section: Flat Section

DASY4 Configuration:
- Probe: EX3DV4 - SN3536; ConvF(8.15, 8.15, 8.15); Calibrated: 19.09.2008
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn631; Calibrated: 17.09.2008
- Phantom: SAM Glycol 1176; Type: Speag; Serial: 1176
- Measurement SW: DASY4, V4.7 Build 71; Postprocessing SW: SEMCAD, V1.8 Build 184

GPRS 1900/Area Scan (9x15x1): Measurement grid: dx=10mm, dy=10mm
Maximum value of SAR (measured) = 1.32 mW/g
GPRS 1900/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 11.5 V/m; Power Drift = -0.028 dB
Peak SAR (extrapolated) = 2.15 W/kg
SAR(1 g) = 1.2 mW/g; SAR(10 g) = 0.635 mW/g
Maximum value of SAR (measured) = 1.33 mW/g
GPRS 1900/Zoom Scan (7x7x7)/Cube 1: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 11.5 V/m; Power Drift = -0.028 dB
Peak SAR (extrapolated) = 1.42 W/kg
SAR(1 g) = 0.780 mW/g; SAR(10 g) = 0.435 mW/g
Maximum value of SAR (measured) = 0.956 mW/g

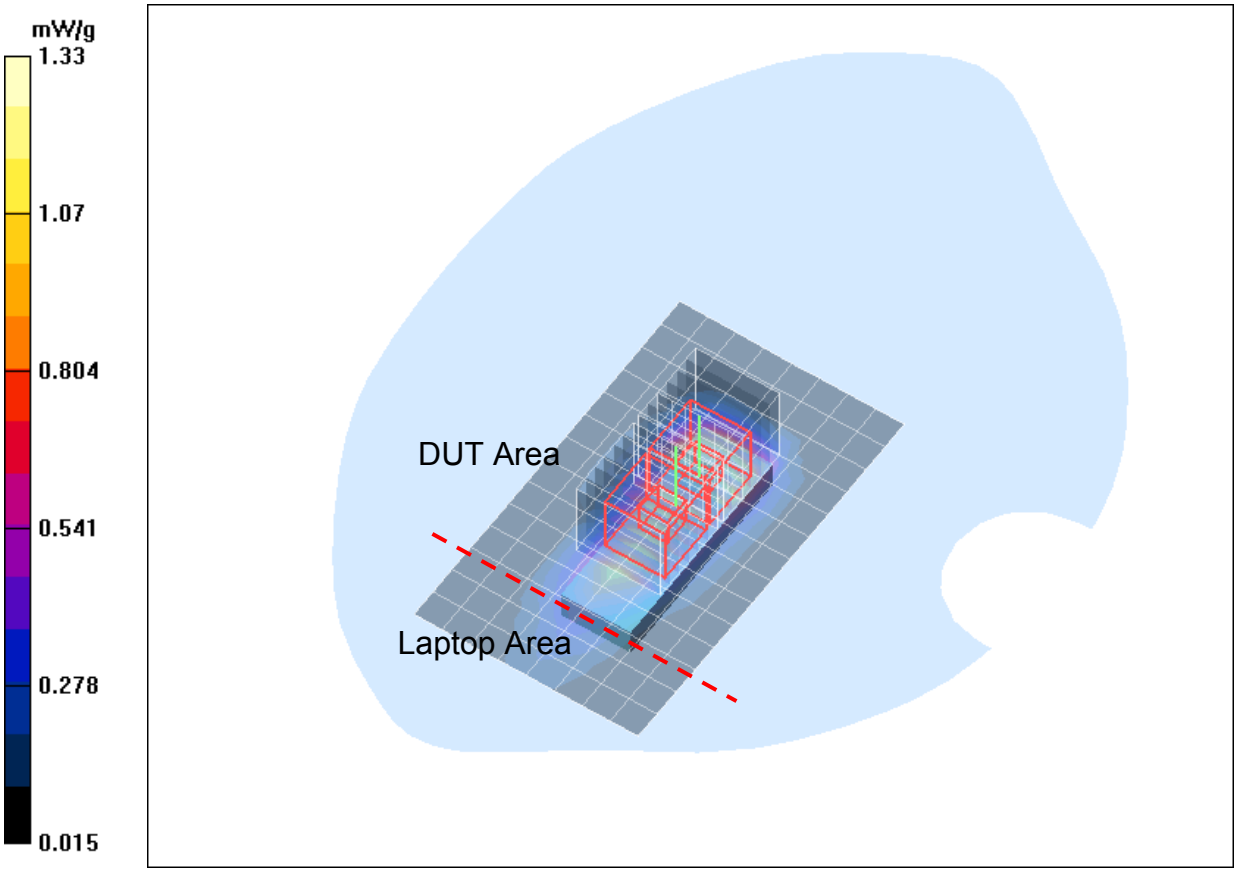

Fig. 8: Worst case SAR distribution for GPRS 1900 (Class 10), channel 810, Position B (Fujitsu Siemens Amilo Pro, March 09, 2009; Ambient Temperature: 22.2°C; Liquid Temperature: 21.4°C).

Test Laboratory: IMST GmbH, DASY Blue (I); File Name: 452_bphm_3.da4

DUT: Option ; Type: Pico Racer iCon 452; Serial: 004401441131147
Program Name: Body

Communication System: GPRS 1900; Frequency: 1880 MHz;Duty Cycle: 1:4
Medium parameters used: f = 1880 MHz; σ = 1.51 mho/m; ε_r = 52.9; ρ = 1000 kg/m^3
Phantom section: Flat Section

DASY4 Configuration:
- Probe: EX3DV4 - SN3536; ConvF(8.15, 8.15, 8.15); Calibrated: 19.09.2008
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn631; Calibrated: 17.09.2008
- Phantom: SAM Glycol 1176; Type: Speag; Serial: 1176
- Measurement SW: DASY4, V4.7 Build 71; Postprocessing SW: SEMCAD, V1.8 Build 184

GPRS 1900/Area Scan (9x15x1): Measurement grid: dx=10mm, dy=10mm
Maximum value of SAR (measured) = 0.892 mW/g
GPRS 1900/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 10.9 V/m; Power Drift = 0.141 dB
Peak SAR (extrapolated) = 1.49 W/kg
SAR(1 g) = 0.847 mW/g; SAR(10 g) = 0.463 mW/g
Maximum value of SAR (measured) = 0.945 mW/g

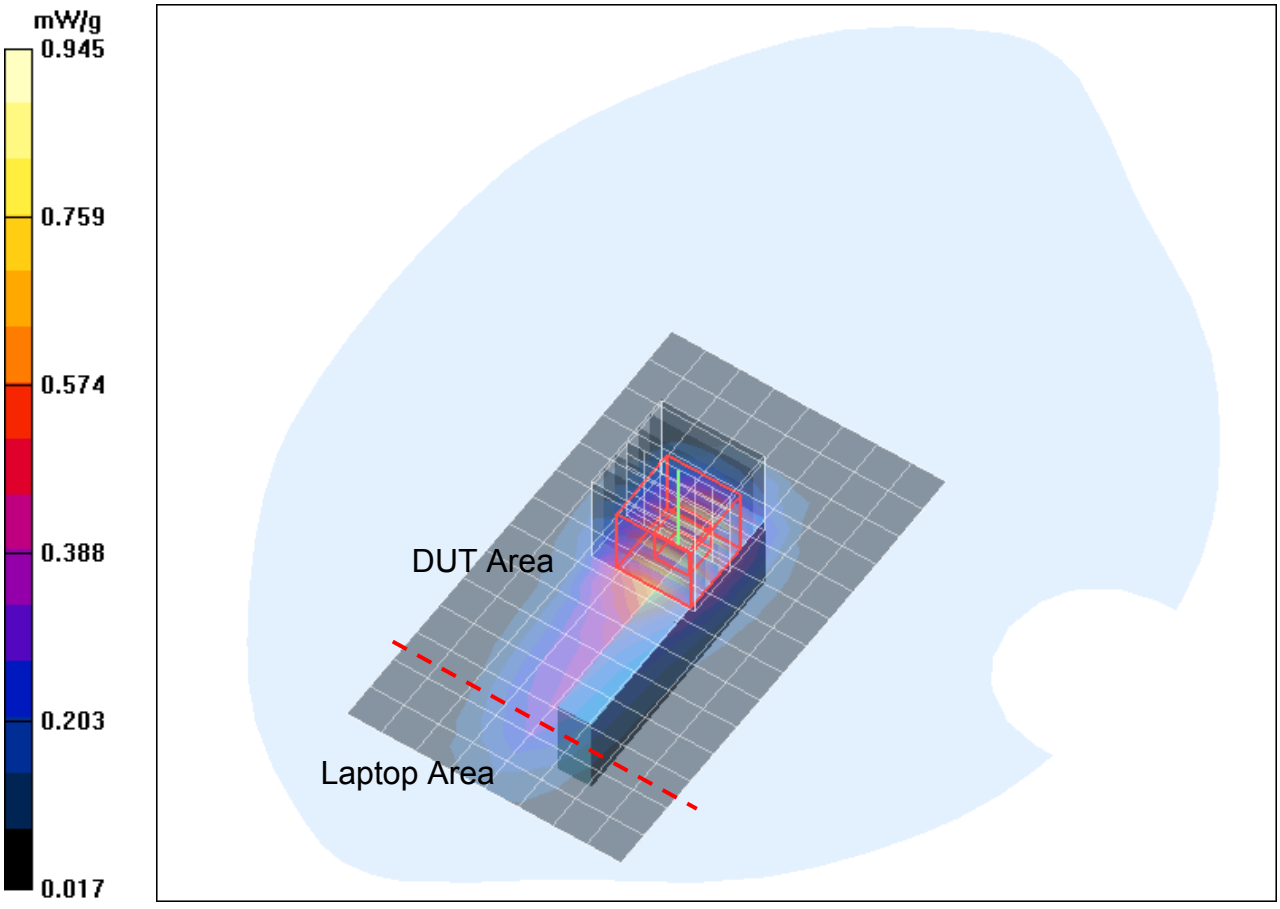

Fig. 9: SAR distribution for GPRS 1900 (Class 10), channel 661, Position C (Fujitsu Siemens Amilo Pro, March 09, 2009; Ambient Temperature: 22.2°C; Liquid Temperature: 21.4°C).

Test Laboratory: IMST GmbH, DASY Blue (I); File Name: 452_bphm_4.da4

DUT: Option ; Type: Pico Racer iCon 452; Serial: 004401441131147
Program Name: Body

Communication System: GPRS 1900; Frequency: 1880 MHz;Duty Cycle: 1:4
Medium parameters used: f = 1880 MHz; σ = 1.51 mho/m; ε_r = 52.9; ρ = 1000 kg/m^3
Phantom section: Flat Section

DASY4 Configuration:
- Probe: EX3DV4 - SN3536; ConvF(8.15, 8.15, 8.15); Calibrated: 19.09.2008
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn631; Calibrated: 17.09.2008
- Phantom: SAM Glycol 1176; Type: Speag; Serial: 1176
- Measurement SW: DASY4, V4.7 Build 71; Postprocessing SW: SEMCAD, V1.8 Build 184

GPRS 1900/Area Scan (9x15x1): Measurement grid: dx=10mm, dy=10mm
Maximum value of SAR (measured) = 0.519 mW/g
GPRS 1900/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 8.52 V/m; Power Drift = -0.162 dB
Peak SAR (extrapolated) = 0.864 W/kg
SAR(1 g) = 0.502 mW/g; SAR(10 g) = 0.282 mW/g
Maximum value of SAR (measured) = 0.552 mW/g

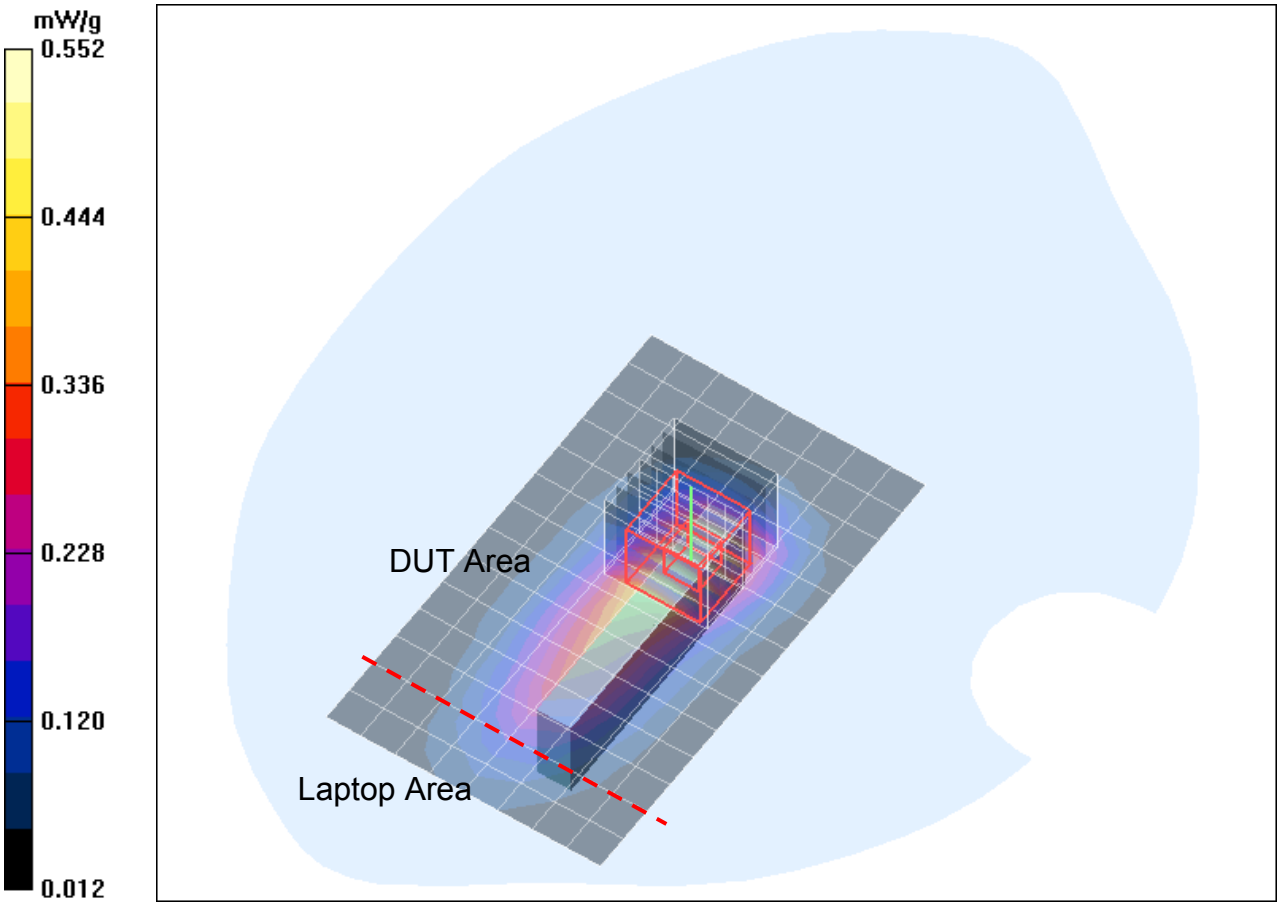

Fig. 10: SAR distribution for GPRS 1900 (Class 10), channel 661, Position D (Fujitsu Siemens Amilo Pro, March 09, 2009; Ambient Temperature: 22.2°C; Liquid Temperature: 21.4°C).

3 SAR Distribution Plots, WCDMA FCC V Body

Test Laboratory: IMST GmbH, DASY Blue (I); File Name: 452_buVhl_1.da4

DUT: Option ; Type: Pico Racer iCon 452; Serial: 004401441131147
Program Name: Body

Communication System: WCDMA (FDD) Band V; Frequency: 826.4 MHz;Duty Cycle: 1:1
Medium parameters used: f = 826.4 MHz; σ = 0.992 mho/m; ε_r = 57.1; ρ = 1000 kg/m^3
Phantom section: Flat Section

DASY4 Configuration:
- Probe: ET3DV6R - SN1669; ConvF(5.89, 5.89, 5.89); Calibrated: 10.02.2009
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn335; Calibrated: 09.02.2009
- Phantom: SAM Sugar 1059; Type: Speag; Serial: 1059
- Measurement SW: DASY4, V4.7 Build 71; Postprocessing SW: SEMCAD, V1.8 Build 184

FDD V/Area Scan (9x15x1): Measurement grid: dx=10mm, dy=10mm
Maximum value of SAR (measured) = 0.924 mW/g
FDD V/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 16.0 V/m; Power Drift = 0.116 dB
Peak SAR (extrapolated) = 1.33 W/kg
SAR(1 g) = 0.921 mW/g; SAR(10 g) = 0.602 mW/g
Maximum value of SAR (measured) = 1.01 mW/g

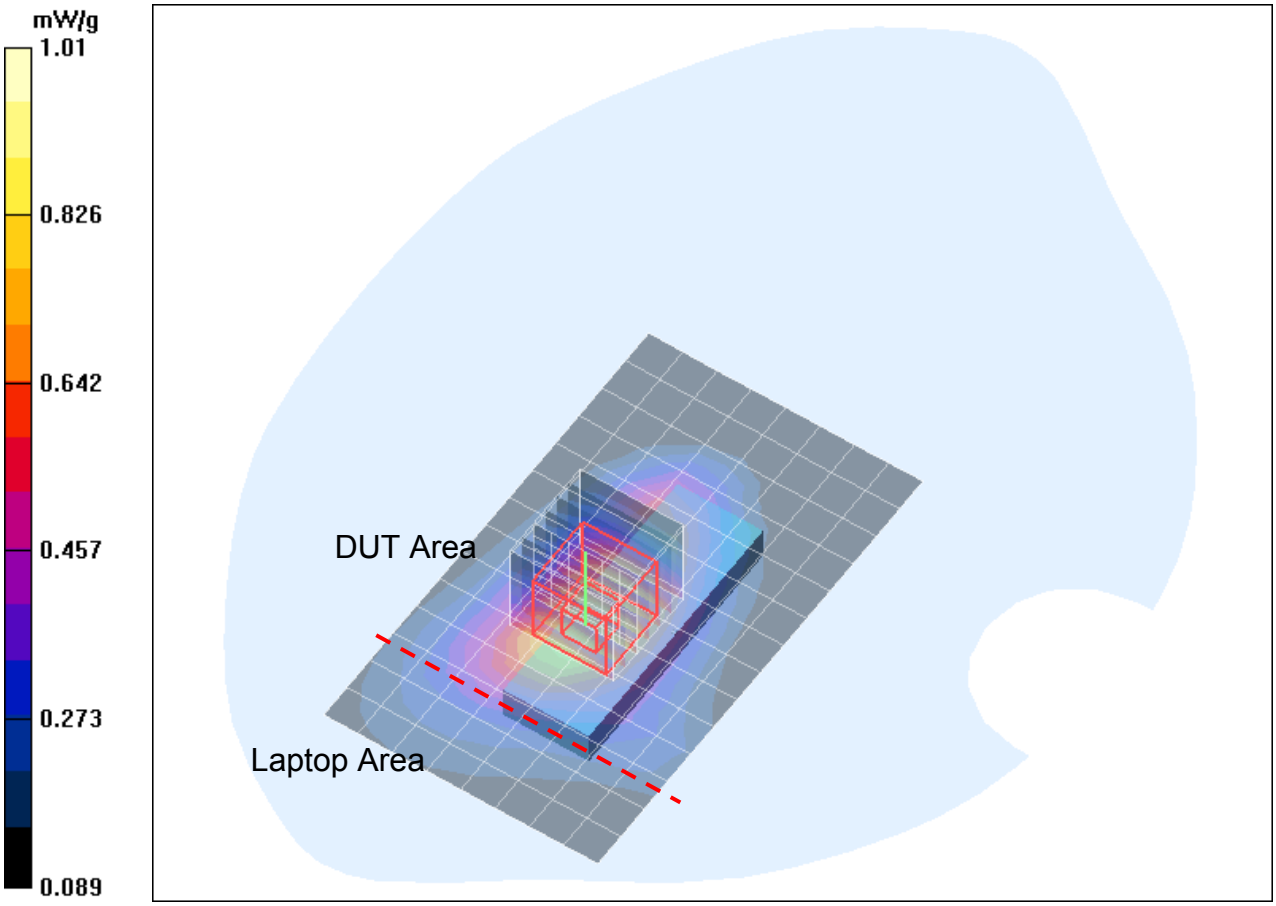

Fig. 11: Worst case SAR distribution for WCDMA V, channel 4132, Position A (Fujitsu Siemens Amilo Pro, March 10, 2009; Ambient Temperature: 22.1°C; Liquid Temperature: 21.3°C).

Test Laboratory: IMST GmbH, DASY Blue (I); File Name: 452_buVhm_2.da4

DUT: Option ; Type: Pico Racer iCon 452; Serial: 004401441131147
Program Name: Body

Communication System: WCDMA (FDD) Band V; Frequency: 836.5 MHz;Duty Cycle: 1:1
Medium parameters used: f = 836.6 MHz; σ = 1 mho/m; ε_r = 57; ρ = 1000 kg/m^3
Phantom section: Flat Section

DASY4 Configuration:
- Probe: ET3DV6R - SN1669; ConvF(5.89, 5.89, 5.89); Calibrated: 10.02.2009
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn335; Calibrated: 09.02.2009
- Phantom: SAM Sugar 1059; Type: Speag; Serial: 1059
- Measurement SW: DASY4, V4.7 Build 71; Postprocessing SW: SEMCAD, V1.8 Build 184

FDD V/Area Scan (9x15x1): Measurement grid: dx=10mm, dy=10mm
Maximum value of SAR (measured) = 0.580 mW/g
FDD V/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 14.0 V/m; Power Drift = 0.134 dB
Peak SAR (extrapolated) = 0.816 W/kg
SAR(1 g) = 0.557 mW/g; SAR(10 g) = 0.367 mW/g
Maximum value of SAR (measured) = 0.601 mW/g
FDD V/Zoom Scan (7x7x7)/Cube 1: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 14.0 V/m; Power Drift = 0.134 dB
Peak SAR (extrapolated) = 0.803 W/kg
SAR(1 g) = 0.433 mW/g; SAR(10 g) = 0.232 mW/g
Maximum value of SAR (measured) = 0.544 mW/g

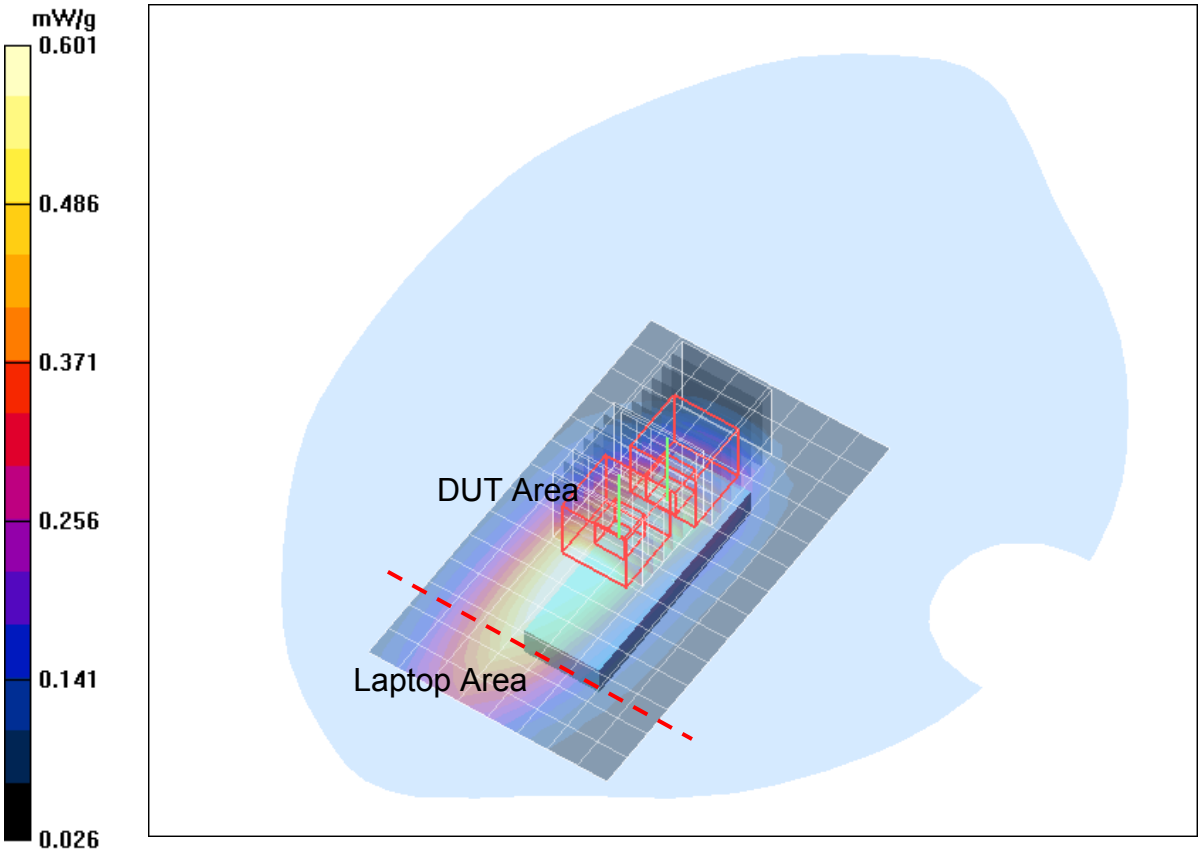

Fig. 12: SAR distribution for WCDMA V, channel 4183, Position B (Fujitsu Siemens Amilo Pro, March 10, 2009; Ambient Temperature: 22.1°C; Liquid Temperature: 21.3°C).

Test Laboratory: IMST GmbH, DASY Blue (I); File Name: 452_buVhm_3.da4

DUT: Option ; Type: Pico Racer iCon 452; Serial: 004401441131147
Program Name: Body

Communication System: WCDMA (FDD) Band V; Frequency: 836.5 MHz;Duty Cycle: 1:1
Medium parameters used: f = 836.6 MHz; σ = 1 mho/m; ε_r = 57; ρ = 1000 kg/m^3
Phantom section: Flat Section

DASY4 Configuration:
- Probe: ET3DV6R - SN1669; ConvF(5.89, 5.89, 5.89); Calibrated: 10.02.2009
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn335; Calibrated: 09.02.2009
- Phantom: SAM Sugar 1059; Type: Speag; Serial: 1059
- Measurement SW: DASY4, V4.7 Build 71; Postprocessing SW: SEMCAD, V1.8 Build 184

FDD V/Area Scan (9x15x1): Measurement grid: dx=10mm, dy=10mm
Maximum value of SAR (measured) = 0.433 mW/g
FDD V/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 9.35 V/m; Power Drift = -0.070 dB
Peak SAR (extrapolated) = 0.600 W/kg
SAR(1 g) = 0.405 mW/g; SAR(10 g) = 0.269 mW/g
Maximum value of SAR (measured) = 0.440 mW/g

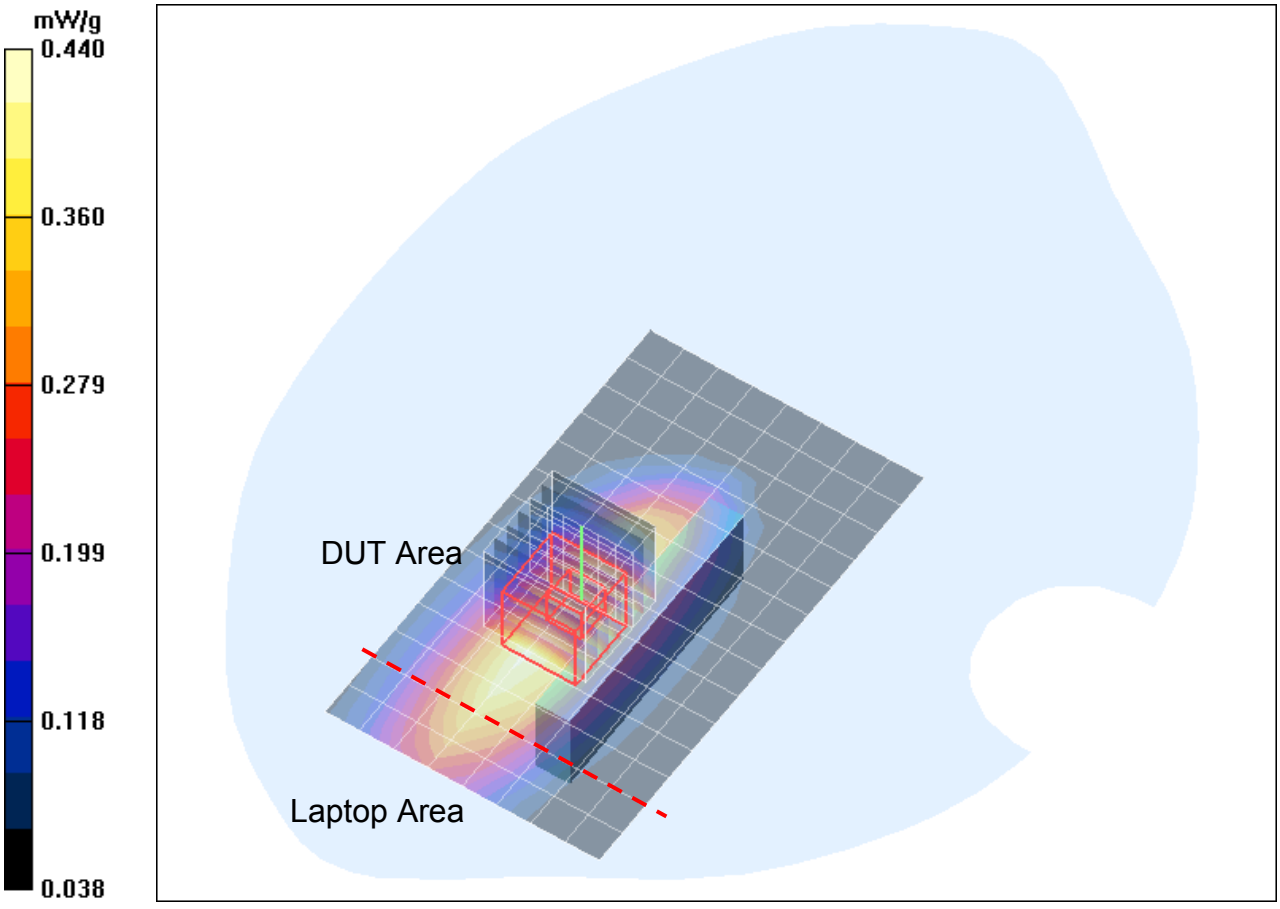

Fig. 13: SAR distribution for WCDMA V, channel 4183, Position C (Fujitsu Siemens Amilo Pro, March 10, 2009; Ambient Temperature: 22.1°C; Liquid Temperature: 21.3°C).

Test Laboratory: IMST GmbH, DASY Blue (I); File Name: 452_buVhm_4.da4

DUT: Option ; Type: Pico Racer iCon 452; Serial: 004401441131147
Program Name: Body

Communication System: WCDMA (FDD) Band V; Frequency: 836.5 MHz;Duty Cycle: 1:1
Medium parameters used: f = 836.6 MHz; σ = 1 mho/m; ε_r = 57; ρ = 1000 kg/m^3
Phantom section: Flat Section

DASY4 Configuration:
- Probe: ET3DV6R - SN1669; ConvF(5.89, 5.89, 5.89); Calibrated: 10.02.2009
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn335; Calibrated: 09.02.2009
- Phantom: SAM Sugar 1059; Type: Speag; Serial: 1059
- Measurement SW: DASY4, V4.7 Build 71; Postprocessing SW: SEMCAD, V1.8 Build 184

FDD V/Area Scan (9x15x1): Measurement grid: dx=10mm, dy=10mm
Maximum value of SAR (measured) = 0.397 mW/g
FDD V/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 12.2 V/m; Power Drift = -0.016 dB
Peak SAR (extrapolated) = 0.568 W/kg
SAR(1 g) = 0.375 mW/g; SAR(10 g) = 0.244 mW/g
Maximum value of SAR (measured) = 0.405 mW/g

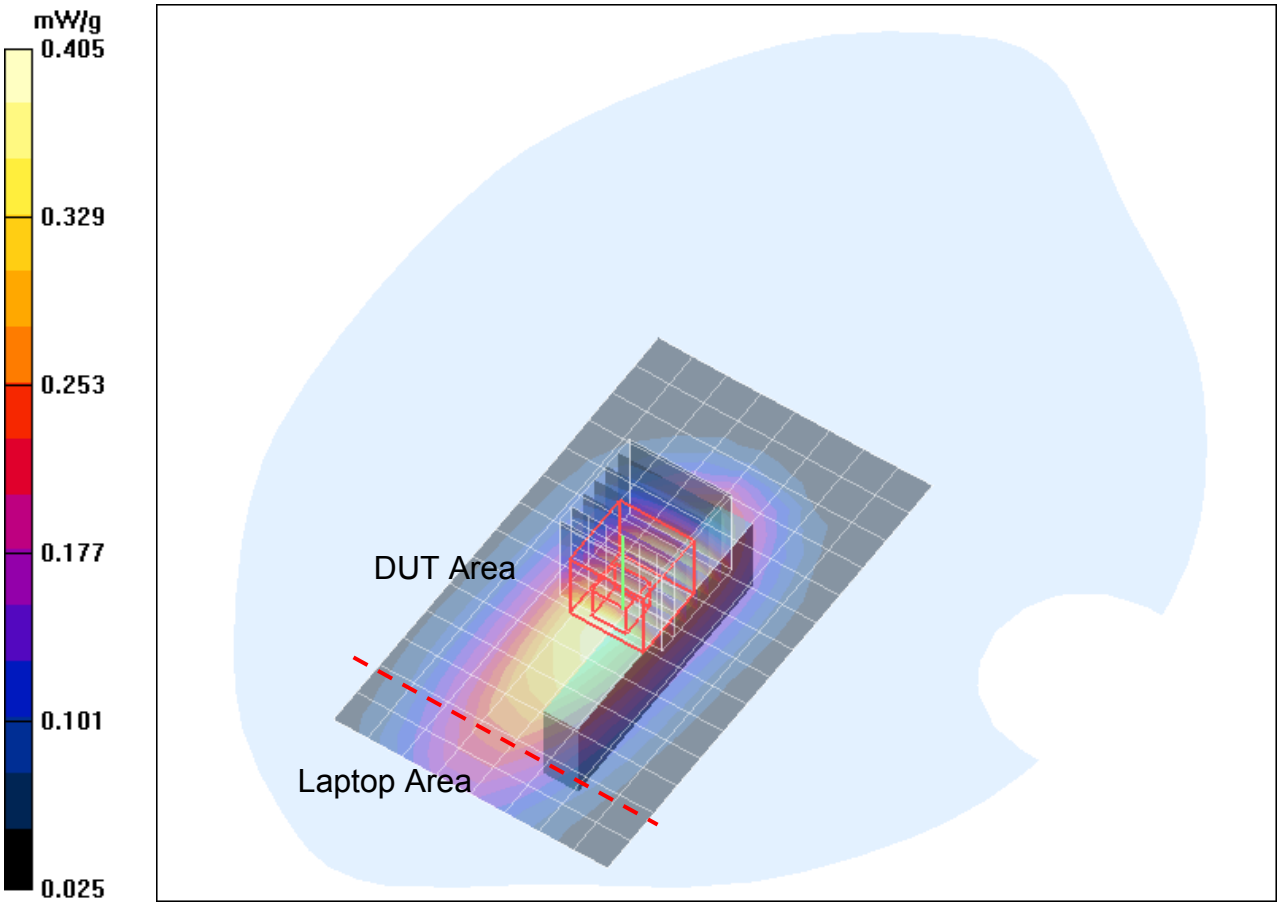

Fig. 14: SAR distribution for WCDMA V, channel 4183, Position D (Fujitsu Siemens Amilo Pro, March 10, 2009; Ambient Temperature: 22.1°C; Liquid Temperature: 21.3°C).

4 SAR Distribution Plots, WCDMA FDD IV Body

Test Laboratory: Imst GmbH, DASY Yellow (II); File Name: 452_bulVhm_1.da4

DUT: Option ; Type: Pico Racer iCon 452; Serial: 004401441131147
Program Name: Body

Communication System: WCDMA (FDD) Band IV; Frequency: 1732.6 MHz;Duty Cycle: 1:1
Medium parameters used: f = 1732.6 MHz; σ = 1.51 mho/m; ε_r = 51.6; ρ = 1000 kg/m^3
Phantom section: Flat Section

DASY4 Configuration:
- Probe: ET3DV6R - SN1669 add; ConvF(4.75, 4.75, 4.75); Calibrated: 17.03.2009
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn335; Calibrated: 09.02.2009
- Phantom: SAM Glycol 1176; Type: Speag; Serial: 1176
- Measurement SW: DASY4, V4.7 Build 71; Postprocessing SW: SEMCAD, V1.8 Build 184

FDD IV/Area Scan (9x15x1): Measurement grid: dx=10mm, dy=10mm
Maximum value of SAR (measured) = 1.55 mW/g
FDD IV/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 16.6 V/m; Power Drift = -0.019 dB
Peak SAR (extrapolated) = 1.87 W/kg
SAR(1 g) = 1.51 mW/g; SAR(10 g) = 0.848 mW/g
Maximum value of SAR (measured) = 1.70 mW/g

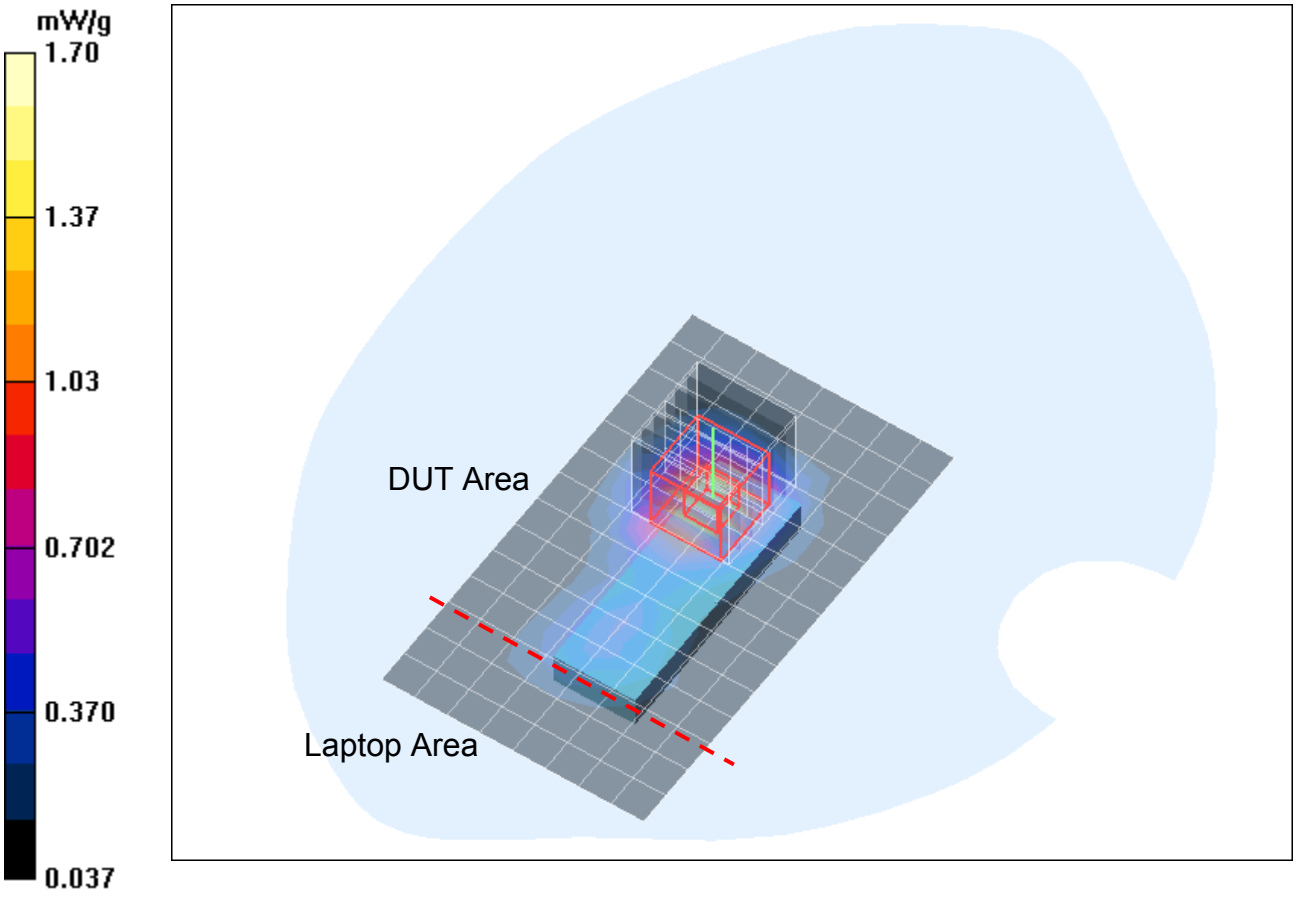

Fig. 15: Worst Case SAR distribution for WCDMA IV, channel 1413, Position A (Fujitsu Siemens Amilo Pro, March 19, 2009; Ambient Temperature: 22.0°C; Liquid Temperature: 21.2°C).

Test Laboratory: IMST GmbH, DASY Blue (I); File Name: 452_bulVhl_2.da4

DUT: Option ; Type: Pico Racer iCon 452; Serial: 004401441131147
Program Name: Body

Communication System: WCDMA (FDD) Band IV; Frequency: 1712.4 MHz;Duty Cycle: 1:1
Medium parameters used: f = 1712.4 MHz; σ = 1.5 mho/m; ε_r = 51.8; ρ = 1000 kg/m^3
Phantom section: Flat Section

DASY4 Configuration:
- Probe: ET3DV6R - SN1669 add; ConvF(4.75, 4.75, 4.75); Calibrated: 17.03.2009
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn335; Calibrated: 09.02.2009
- Phantom: SAM Glycol 1176; Type: Speag; Serial: 1176
- Measurement SW: DASY4, V4.7 Build 71; Postprocessing SW: SEMCAD, V1.8 Build 184

FDD IV/Area Scan (9x15x1): Measurement grid: dx=10mm, dy=10mm
Maximum value of SAR (measured) = 0.780 mW/g
FDD IV/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 19.9 V/m; Power Drift = -0.016 dB
Peak SAR (extrapolated) = 1.06 W/kg
SAR(1 g) = 0.727 mW/g; SAR(10 g) = 0.413 mW/g
Maximum value of SAR (measured) = 0.822 mW/g
FDD IV/Zoom Scan (7x7x7)/Cube 1: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 19.9 V/m; Power Drift = -0.016 dB
Peak SAR (extrapolated) = 0.909 W/kg
SAR(1 g) = 0.695 mW/g; SAR(10 g) = 0.423 mW/g
Maximum value of SAR (measured) = 0.776 mW/g

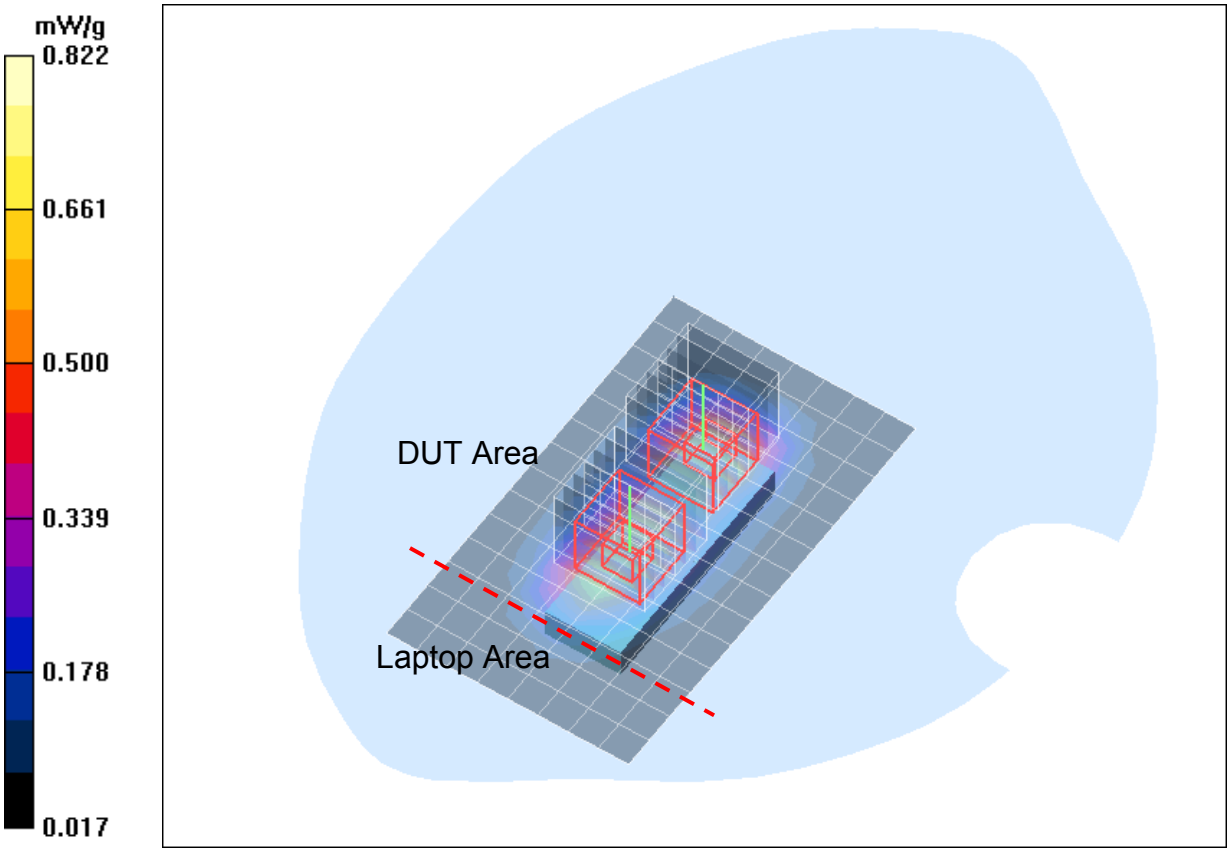

Fig. 16: SAR distribution for WCDMA IV, channel 1312, Position B (Fujitsu Siemens Amilo Pro, March 19, 2009; Ambient Temperature: 22.0°C; Liquid Temperature: 21.2°C).

Test Laboratory: Imst GmbH, DASY Yellow (II); File Name: 452_bulVhm_2.da4

DUT: Option ; Type: Pico Racer iCon 452; Serial: 004401441131147
Program Name: Body

Communication System: WCDMA (FDD) Band IV; Frequency: 1732.6 MHz;Duty Cycle: 1:1
Medium parameters used: f = 1732.6 MHz; σ = 1.51 mho/m; ε_r = 51.6; ρ = 1000 kg/m^3
Phantom section: Flat Section

DASY4 Configuration:
- Probe: ET3DV6R - SN1669 add; ConvF(4.75, 4.75, 4.75); Calibrated: 17.03.2009
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn335; Calibrated: 09.02.2009
- Phantom: SAM Glycol 1176; Type: Speag; Serial: 1176
- Measurement SW: DASY4, V4.7 Build 71; Postprocessing SW: SEMCAD, V1.8 Build 184

FDD IV/Area Scan (9x15x1): Measurement grid: dx=10mm, dy=10mm
Maximum value of SAR (measured) = 1.01 mW/g
FDD IV/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 22.4 V/m; Power Drift = -0.045 dB
Peak SAR (extrapolated) = 1.38 W/kg
SAR(1 g) = 0.933 mW/g; SAR(10 g) = 0.522 mW/g
Maximum value of SAR (measured) = 1.07 mW/g
FDD IV/Zoom Scan (7x7x7)/Cube 1: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 22.4 V/m; Power Drift = -0.045 dB
Peak SAR (extrapolated) = 0.999 W/kg
SAR(1 g) = 0.750 mW/g; SAR(10 g) = 0.453 mW/g
Maximum value of SAR (measured) = 0.848 mW/g

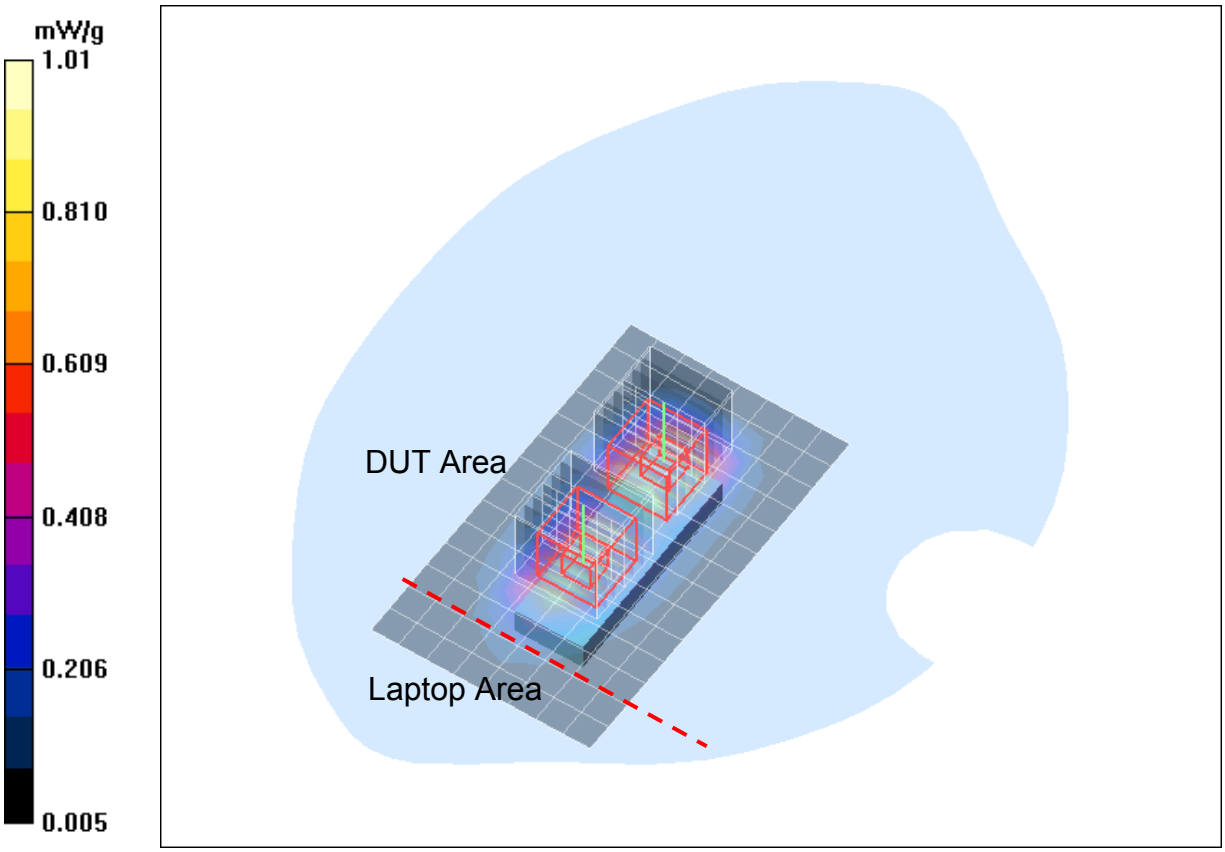

Fig. 17: SAR distribution for WCDMA IV, channel 1413, Position B (Fujitsu Siemens Amilo Pro, March 19, 2009; Ambient Temperature: 22.0°C; Liquid Temperature: 21.2°C).

Test Laboratory: IMST GmbH, DASY Blue (I); File Name: 452_bulVhh_2.da4

DUT: Option ; Type: Pico Racer iCon 452; Serial: 004401441131147
Program Name: Body

Communication System: WCDMA (FDD) Band IV; Frequency: 1752.6 MHz;Duty Cycle: 1:1
Medium parameters used: f = 1752.6 MHz; σ = 1.53 mho/m; ε_r = 51.6; ρ = 1000 kg/m^3
Phantom section: Flat Section

DASY4 Configuration:
- Probe: ET3DV6R - SN1669 add; ConvF(4.75, 4.75, 4.75); Calibrated: 17.03.2009
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn335; Calibrated: 09.02.2009
- Phantom: SAM Glycol 1176; Type: Speag; Serial: 1176
- Measurement SW: DASY4, V4.7 Build 71; Postprocessing SW: SEMCAD, V1.8 Build 184

FDD IV/Area Scan (9x15x1): Measurement grid: dx=10mm, dy=10mm
Maximum value of SAR (measured) = 0.940 mW/g
FDD IV/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 21.6 V/m; Power Drift = -0.092 dB
Peak SAR (extrapolated) = 1.25 W/kg
SAR(1 g) = 0.852 mW/g; SAR(10 g) = 0.471 mW/g
Maximum value of SAR (measured) = 0.971 mW/g
FDD IV/Zoom Scan (7x7x7)/Cube 1: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 21.6 V/m; Power Drift = -0.092 dB
Peak SAR (extrapolated) = 0.803 W/kg
SAR(1 g) = 0.597 mW/g; SAR(10 g) = 0.359 mW/g
Maximum value of SAR (measured) = 0.670 mW/g

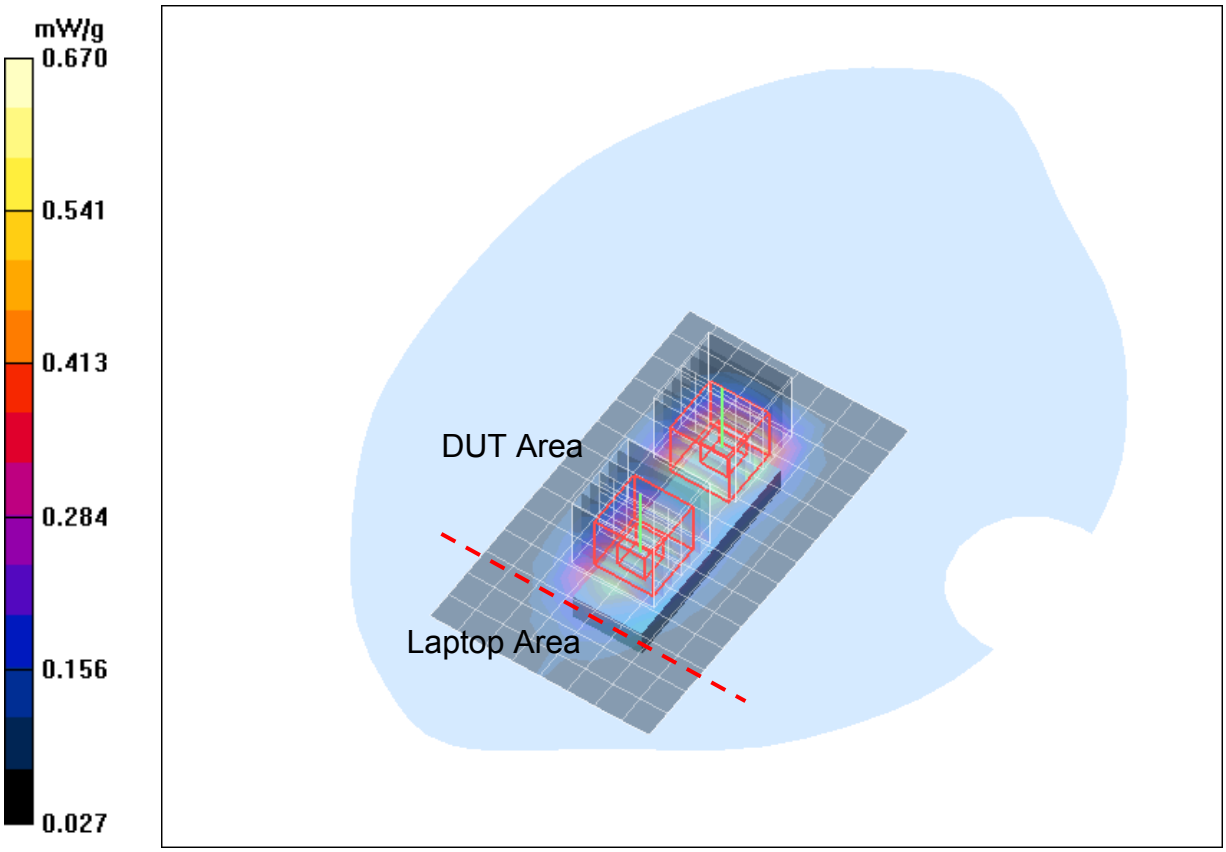

Fig. 18: SAR distribution for WCDMA IV, channel 1513, Position B (Fujitsu Siemens Amilo Pro, March 19, 2009; Ambient Temperature: 22.0°C; Liquid Temperature: 21.2°C).

Test Laboratory: Imst GmbH, DASY Yellow (II); File Name: 452_bulVhm_3.da4

DUT: Option ; Type: Pico Racer iCon 452; Serial: 004401441131147
Program Name: Body

Communication System: WCDMA (FDD) Band IV; Frequency: 1732.6 MHz;Duty Cycle: 1:1
Medium parameters used: f = 1732.6 MHz; σ = 1.51 mho/m; ε_r = 51.6; ρ = 1000 kg/m^3
Phantom section: Flat Section

DASY4 Configuration:
- Probe: ET3DV6R - SN1669 add; ConvF(4.75, 4.75, 4.75); Calibrated: 17.03.2009
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn335; Calibrated: 09.02.2009
- Phantom: SAM Glycol 1176; Type: Speag; Serial: 1176
- Measurement SW: DASY4, V4.7 Build 71; Postprocessing SW: SEMCAD, V1.8 Build 184

FDD IV/Area Scan (9x15x1): Measurement grid: dx=10mm, dy=10mm
Maximum value of SAR (measured) = 0.586 mW/g
FDD IV/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 9.56 V/m; Power Drift = -0.132 dB
Peak SAR (extrapolated) = 0.829 W/kg
SAR(1 g) = 0.563 mW/g; SAR(10 g) = 0.328 mW/g
Maximum value of SAR (measured) = 0.634 mW/g
FDD IV/Zoom Scan (7x7x7)/Cube 1: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 9.56 V/m; Power Drift = -0.132 dB
Peak SAR (extrapolated) = 0.685 W/kg
SAR(1 g) = 0.501 mW/g; SAR(10 g) = 0.312 mW/g
Maximum value of SAR (measured) = 0.553 mW/g

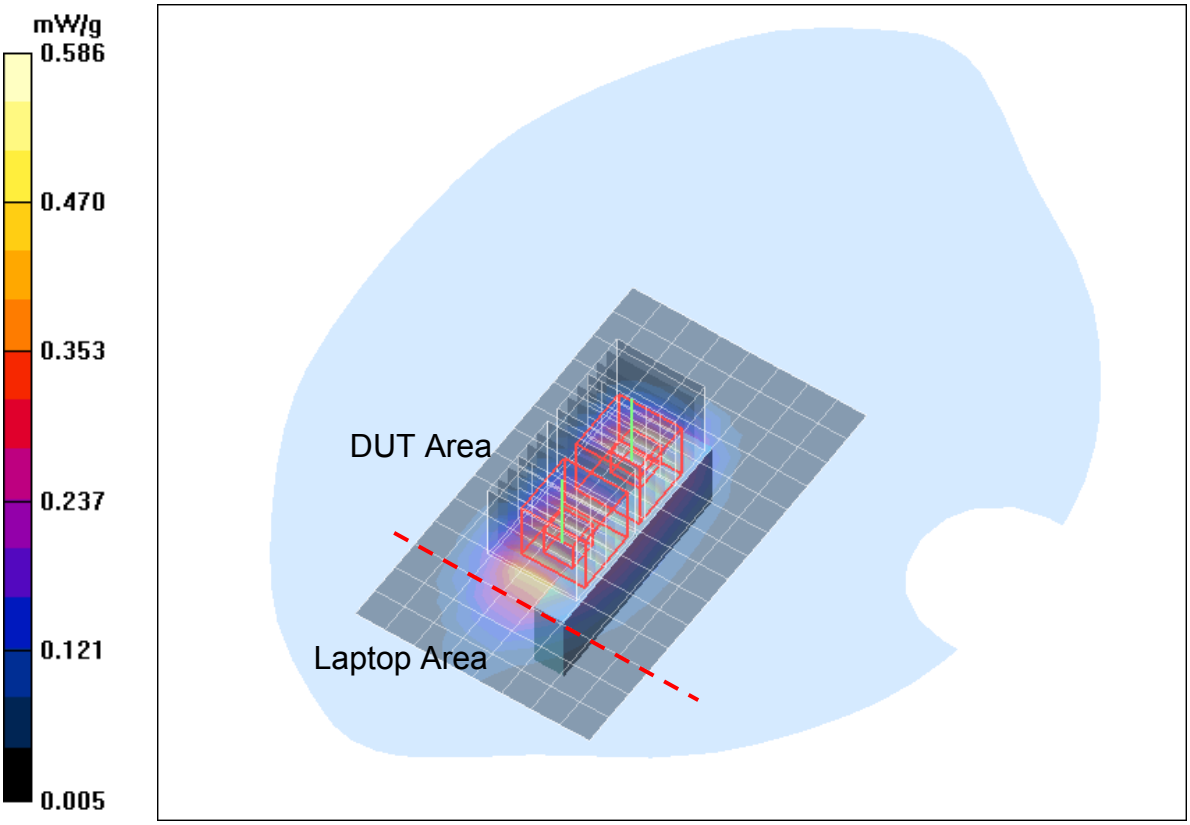

Fig. 19: SAR distribution for WCDMA IV, channel 1413, Position C (Fujitsu Siemens Amilo Pro, March 19, 2009; Ambient Temperature: 22.0°C; Liquid Temperature: 21.2°C).

Test Laboratory: Imst GmbH, DASY Yellow (II); File Name: 452_bulVhm_4.da4

DUT: Option ; Type: Pico Racer iCon 452; Serial: 004401441131147
Program Name: Body

Communication System: WCDMA (FDD) Band IV; Frequency: 1732.6 MHz;Duty Cycle: 1:1
Medium parameters used: f = 1732.6 MHz; σ = 1.51 mho/m; ε_r = 51.6; ρ = 1000 kg/m^3
Phantom section: Flat Section

DASY4 Configuration:
- Probe: ET3DV6R - SN1669 add; ConvF(4.75, 4.75, 4.75); Calibrated: 17.03.2009
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn335; Calibrated: 09.02.2009
- Phantom: SAM Glycol 1176; Type: Speag; Serial: 1176
- Measurement SW: DASY4, V4.7 Build 71; Postprocessing SW: SEMCAD, V1.8 Build 184

FDD IV/Area Scan (9x15x1): Measurement grid: dx=10mm, dy=10mm
Maximum value of SAR (measured) = 0.463 mW/g
FDD IV/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 5.53 V/m; Power Drift = -0.086 dB
Peak SAR (extrapolated) = 0.609 W/kg
SAR(1 g) = 0.422 mW/g; SAR(10 g) = 0.254 mW/g
Maximum value of SAR (measured) = 0.472 mW/g

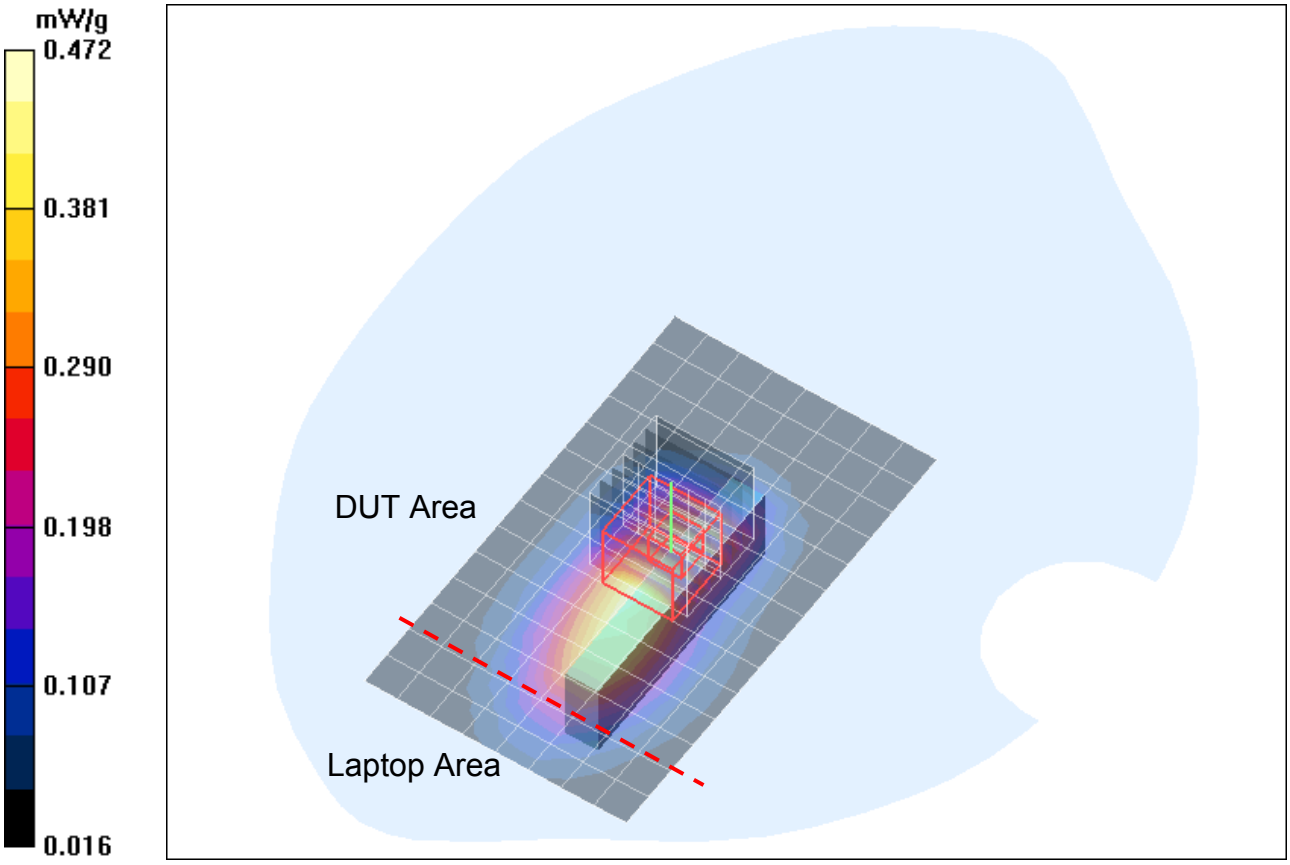

Fig. 20: SAR distribution for WCDMA IV, channel 1413, Position D (Fujitsu Siemens Amilo Pro, March 19, 2009; Ambient Temperature: 22.0°C; Liquid Temperature: 21.2°C).

Test Laboratory: Imst GmbH, DASY Yellow (II); File Name: 452_bulVhm_1_HSDPA.da4

DUT: Option ; Type: Pico Racer iCon 452; Serial: 004401441131147
Program Name: Body

Communication System: WCDMA (FDD) Band IV; Frequency: 1732.6 MHz;Duty Cycle: 1:1
Medium parameters used: f = 1732.6 MHz; σ = 1.51 mho/m; ε_r = 51.6; ρ = 1000 kg/m^3
Phantom section: Flat Section

DASY4 Configuration:
- Probe: ET3DV6R - SN1669 add; ConvF(4.75, 4.75, 4.75); Calibrated: 17.03.2009
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn335; Calibrated: 09.02.2009
- Phantom: SAM Glycol 1176; Type: Speag; Serial: 1176
- Measurement SW: DASY4, V4.7 Build 71; Postprocessing SW: SEMCAD, V1.8 Build 184

FDD IV/Area Scan (9x15x1): Measurement grid: dx=10mm, dy=10mm
Maximum value of SAR (measured) = 1.18 mW/g
FDD IV/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 12.6 V/m; Power Drift = 0.103 dB
Peak SAR (extrapolated) = 1.69 W/kg
SAR(1 g) = 1.16 mW/g; SAR(10 g) = 0.626 mW/g
Maximum value of SAR (measured) = 1.33 mW/g
FDD IV/Zoom Scan (7x7x7)/Cube 1: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 12.6 V/m; Power Drift = 0.103 dB
Peak SAR (extrapolated) = 1.08 W/kg
SAR(1 g) = 0.786 mW/g; SAR(10 g) = 0.447 mW/g
Maximum value of SAR (measured) = 0.906 mW/g

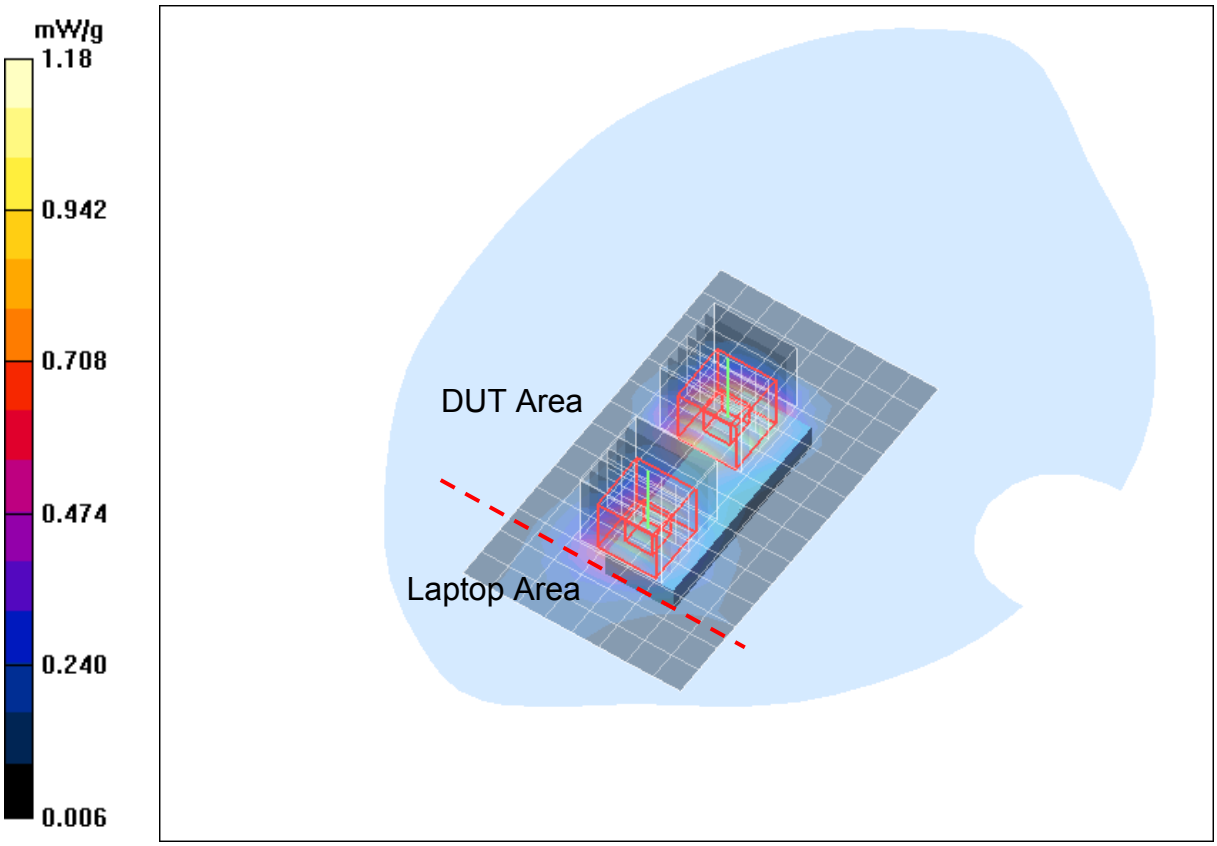

Fig. 21: SAR distribution for WCDMA IV, channel 1413, Position A (Fujitsu Siemens Amilo Pro, March 19, 2009; Ambient Temperature: 22.0°C; Liquid Temperature: 21.2°C).

Test Laboratory: IMST GmbH, DASY Blue (I); File Name: 452_bulVhl_1_HSUPA.da4

DUT: Option ; Type: Pico Racer iCon 452; Serial: 004401441131147

Program Name: Body

Communication System: WCDMA (FDD) Band IV; Frequency: 1712.4 MHz;Duty Cycle: 1:1
Medium parameters used: f = 1712.4 MHz; σ = 1.5 mho/m; ε_r = 51.8; ρ = 1000 kg/m^3
Phantom section: Flat Section

DASY4 Configuration:
- Probe: ET3DV6R - SN1669 add; ConvF(4.75, 4.75, 4.75); Calibrated: 17.03.2009
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn335; Calibrated: 09.02.2009
- Phantom: SAM Glycol 1176; Type: Speag; Serial: 1176
- Measurement SW: DASY4, V4.7 Build 71; Postprocessing SW: SEMCAD, V1.8 Build 184

FDD IV/Area Scan (9x15x1): Measurement grid: dx=10mm, dy=10mm
Maximum value of SAR (measured) = 1.06 mW/g
FDD IV/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 13.0 V/m; Power Drift = -0.157 dB
Peak SAR (extrapolated) = 1.52 W/kg
SAR(1 g) = 1.04 mW/g; SAR(10 g) = 0.564 mW/g
Maximum value of SAR (measured) = 1.19 mW/g
FDD IV/Zoom Scan (7x7x7)/Cube 1: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 13.0 V/m; Power Drift = -0.157 dB
Peak SAR (extrapolated) = 0.993 W/kg
SAR(1 g) = 0.717 mW/g; SAR(10 g) = 0.405 mW/g
Maximum value of SAR (measured) = 0.829 mW/g

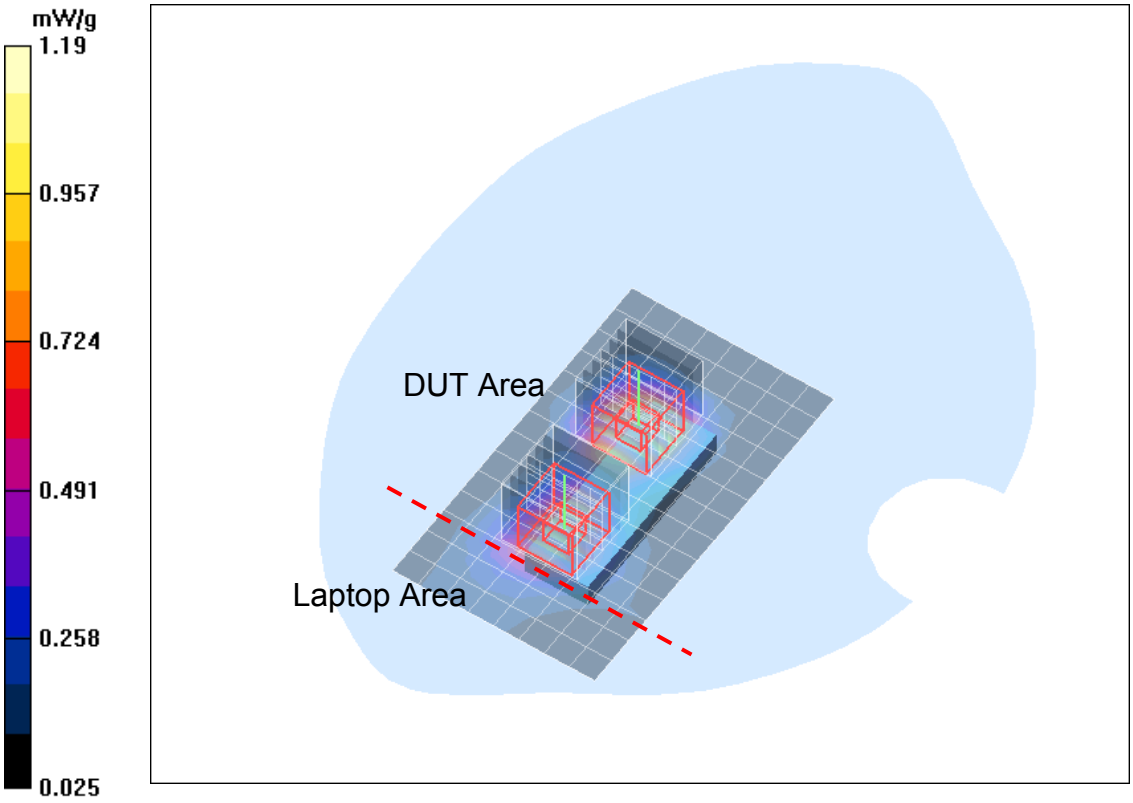

Fig. 22: SAR distribution for WCDMA IV with HSUPA activated, channel 1312, Position A (Fujitsu Siemens Amilo Pro, March 19, 2009; Ambient Temperature: 22.0°C; Liquid Temperature: 21.2°C).

5 SAR Distribution Plots, WCDMA FDD II Body

Test Laboratory: IMST GmbH, DASY Blue (I); File Name: 452_bullhl_1_c.da4

DUT: Option ; Type: Pico Racer iCon 452; Serial: 004401441131147
Program Name: Body

Communication System: WCDMA FDD Band II; Frequency: 1852.4 MHz;Duty Cycle: 1:1
Medium parameters used: f = 1852.4 MHz; σ = 1.47 mho/m; ε_r = 52.8; ρ = 1000 kg/m^3
Phantom section: Flat Section

DASY4 Configuration:
- Probe: EX3DV4 - SN3536; ConvF(8.15, 8.15, 8.15); Calibrated: 19.09.2008
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn335; Calibrated: 09.02.2009
- Phantom: SAM Glycol 1176; Type: Speag; Serial: 1176
- Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 186

FDD II/Area Scan (8x14x1): Measurement grid: dx=10mm, dy=10mm
Maximum value of SAR (measured) = 1.53 mW/g
FDD II/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 16.5 V/m; Power Drift = 0.023 dB
Peak SAR (extrapolated) = 2.52 W/kg
SAR(1 g) = 1.5 mW/g; SAR(10 g) = 0.827 mW/g
Maximum value of SAR (measured) = 1.64 mW/g
FDD II/Zoom Scan (7x7x7)/Cube 1: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 16.5 V/m; Power Drift = 0.023 dB
Peak SAR (extrapolated) = 1.26 W/kg
SAR(1 g) = 0.768 mW/g; SAR(10 g) = 0.434 mW/g
Maximum value of SAR (measured) = 0.862 mW/g

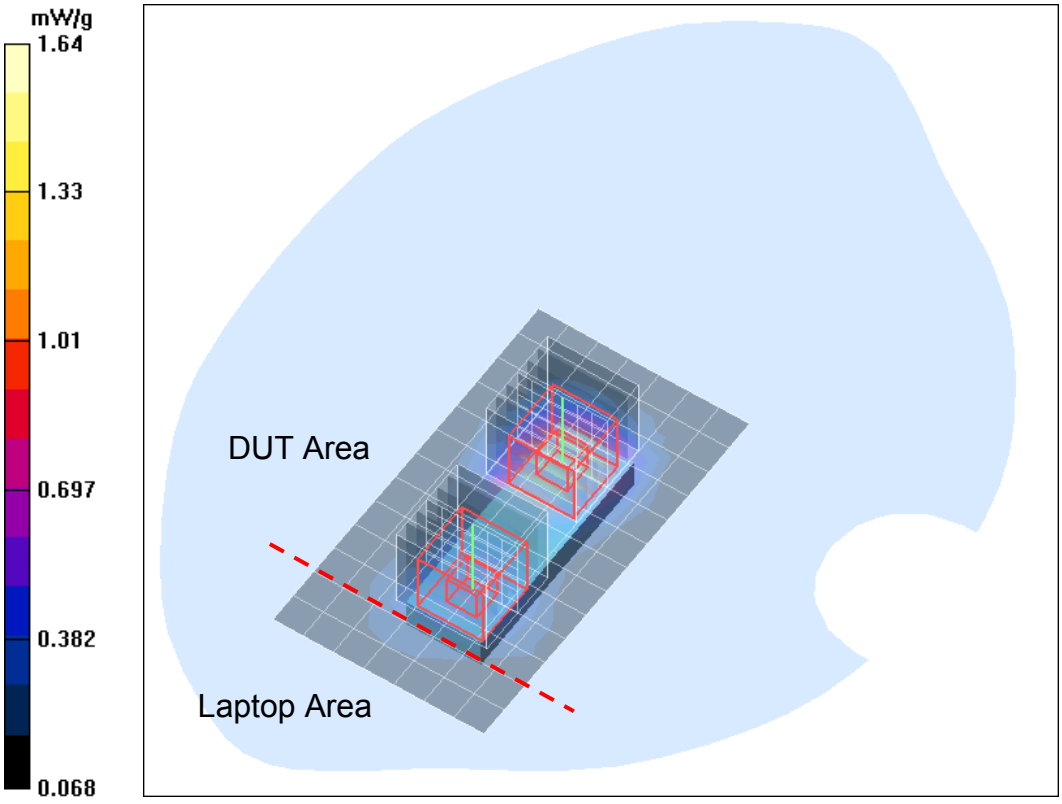

Fig. 23: SAR distribution for WCDMA II, channel 9262, Position A (Fujitsu Siemens Amilo Pro, May 19, 2009; Ambient Temperature: 22.1°C; Liquid Temperature: 21.4°C).

Test Laboratory: IMST GmbH, DASY Blue (I); File Name: 452_bullhm_1_c.da4

DUT: Option ; Type: Pico Racer iCon 452; Serial: 004401441131147
Program Name: Body

Communication System: WCDMA FDD Band II; Frequency: 1880 MHz;Duty Cycle: 1:1
Medium parameters used: f = 1880 MHz; σ = 1.53 mho/m; ε_r = 52.7; ρ = 1000 kg/m^3
Phantom section: Flat Section

DASY4 Configuration:
- Probe: EX3DV4 - SN3536; ConvF(8.15, 8.15, 8.15); Calibrated: 19.09.2008
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn335; Calibrated: 09.02.2009
- Phantom: SAM Glycol 1176; Type: Speag; Serial: 1176
- Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 186

FDD II/Area Scan (8x14x1): Measurement grid: dx=10mm, dy=10mm
Maximum value of SAR (measured) = 1.53 mW/g
FDD II/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 16.4 V/m; Power Drift = -0.073 dB
Peak SAR (extrapolated) = 2.58 W/kg
SAR(1 g) = 1.51 mW/g; SAR(10 g) = 0.824 mW/g
Maximum value of SAR (measured) = 1.68 mW/g
FDD II/Zoom Scan (7x7x7)/Cube 1: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 16.4 V/m; Power Drift = -0.073 dB
Peak SAR (extrapolated) = 1.30 W/kg
SAR(1 g) = 0.783 mW/g; SAR(10 g) = 0.440 mW/g
Maximum value of SAR (measured) = 0.874 mW/g

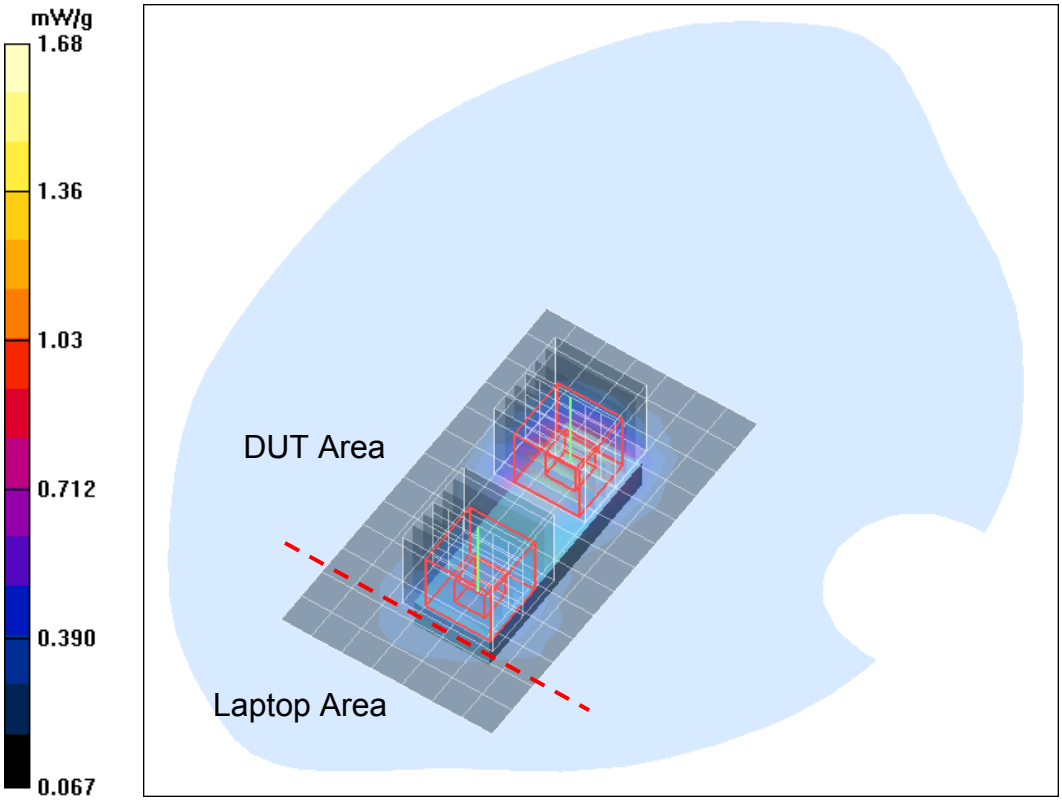

Fig. 24: SAR distribution for WCDMA II, channel 9400, Position A (Fujitsu Siemens Amilo Pro, May 19, 2009; Ambient Temperature: 22.1°C; Liquid Temperature: 21.4°C).

Test Laboratory: IMST GmbH, DASY Blue (I); File Name: 452_bullhh_1_c.da4

DUT: Option ; Type: Pico Racer iCon 452; Serial: 004401441131147
Program Name: Body

Communication System: WCDMA FDD Band II; Frequency: 1907.6 MHz;Duty Cycle: 1:1
Medium parameters used: f = 1907.6 MHz; σ = 1.58 mho/m; ε_r = 52.8; ρ = 1000 kg/m^3
Phantom section: Flat Section

DASY4 Configuration:
- Probe: EX3DV4 - SN3536; ConvF(8.15, 8.15, 8.15); Calibrated: 19.09.2008
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn335; Calibrated: 09.02.2009
- Phantom: SAM Glycol 1176; Type: Speag; Serial: 1176
- Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 186

FDD II/Area Scan (8x14x1): Measurement grid: dx=10mm, dy=10mm
Maximum value of SAR (measured) = 1.53 mW/g
FDD II/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 16.0 V/m; Power Drift = -0.018 dB
Peak SAR (extrapolated) = 2.62 W/kg
SAR(1 g) = 1.51 mW/g; SAR(10 g) = 0.823 mW/g
Maximum value of SAR (measured) = 1.69 mW/g
FDD II/Zoom Scan (7x7x7)/Cube 1: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 16.0 V/m; Power Drift = -0.018 dB
Peak SAR (extrapolated) = 1.31 W/kg
SAR(1 g) = 0.781 mW/g; SAR(10 g) = 0.439 mW/g
Maximum value of SAR (measured) = 0.881 mW/g

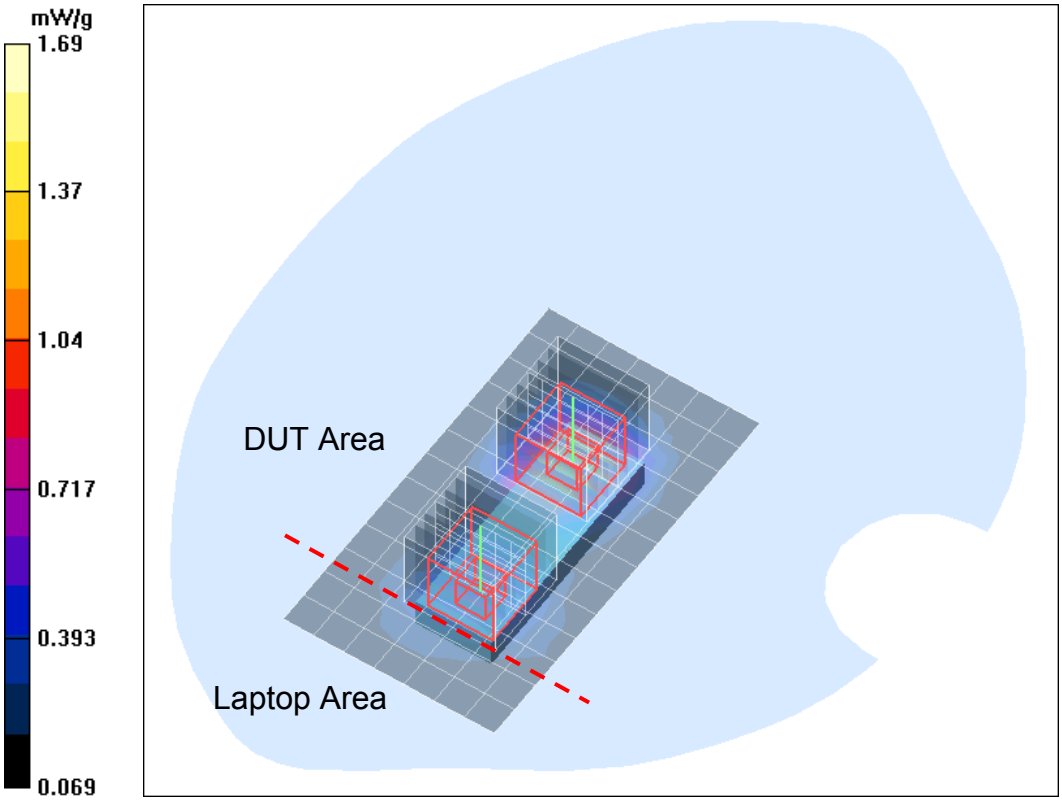

Fig. 25: SAR distribution for WCDMA II, channel 9538, Position A (Fujitsu Siemens Amilo Pro, May 19, 2009; Ambient Temperature: 22.1°C; Liquid Temperature: 21.4°C).

Test Laboratory: IMST GmbH, DASY Blue (I); File Name: 452_bullhl_2_c.da4

DUT: Option ; Type: Pico Racer iCon 452; Serial: 004401441131147
Program Name: Body

Communication System: WCDMA FDD Band II; Frequency: 1852.4 MHz;Duty Cycle: 1:1
Medium parameters used: f = 1852.4 MHz; σ = 1.47 mho/m; ε_r = 52.8; ρ = 1000 kg/m^3
Phantom section: Flat Section

DASY4 Configuration:
- Probe: EX3DV4 - SN3536; ConvF(8.15, 8.15, 8.15); Calibrated: 19.09.2008
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn335; Calibrated: 09.02.2009
- Phantom: SAM Glycol 1176; Type: Speag; Serial: 1176
- Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 186

FDD II/Area Scan (8x14x1): Measurement grid: dx=10mm, dy=10mm
Maximum value of SAR (measured) = 1.33 mW/g
FDD II/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 13.6 V/m; Power Drift = 0.011 dB
Peak SAR (extrapolated) = 2.31 W/kg
SAR(1 g) = 1.35 mW/g; SAR(10 g) = 0.754 mW/g
Maximum value of SAR (measured) = 1.50 mW/g

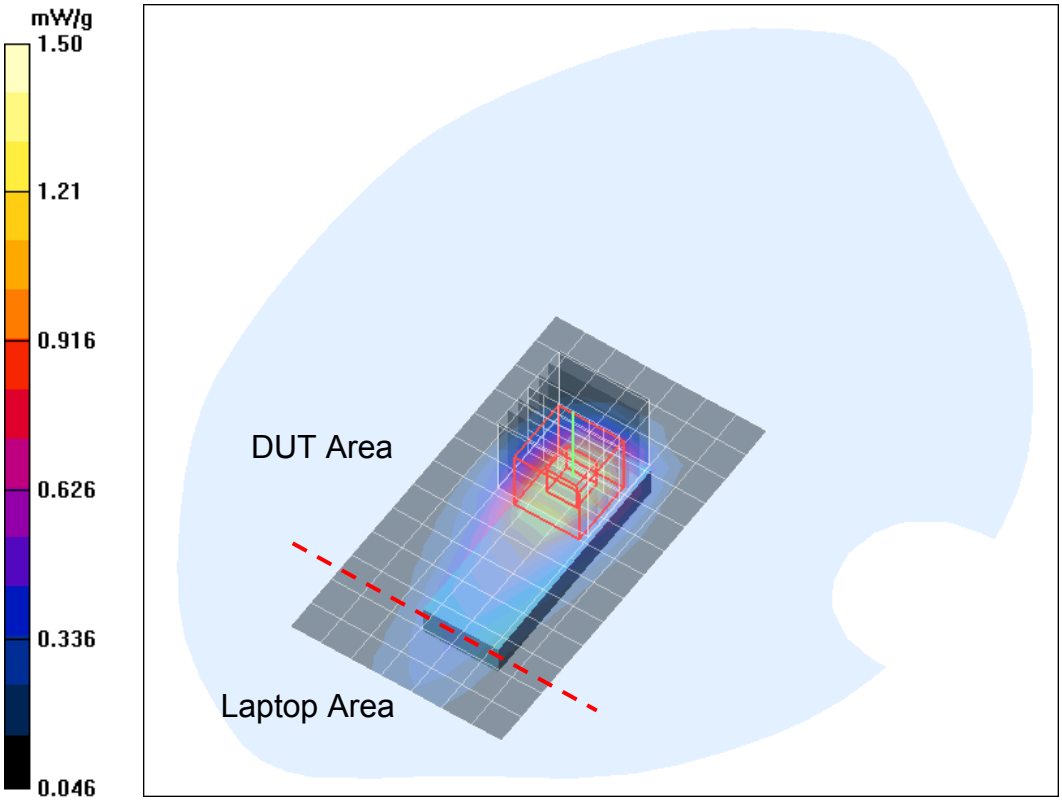

Fig. 26: Worst case SAR distribution for WCDMA II, channel 9262, Position B (Fujitsu Siemens Amilo Pro, May 19, 2009; Ambient Temperature: 22.1°C; Liquid Temperature: 21.4°C).

Test Laboratory: IMST GmbH, DASY Blue (I); File Name: 452_bullhm_2_c.da4

DUT: Option ; Type: Pico Racer iCon 452; Serial: 004401441131147
Program Name: Body

Communication System: WCDMA FDD Band II; Frequency: 1880 MHz;Duty Cycle: 1:1
Medium parameters used: f = 1880 MHz; σ = 1.53 mho/m; ε_r = 52.7; ρ = 1000 kg/m^3
Phantom section: Flat Section

DASY4 Configuration:
- Probe: EX3DV4 - SN3536; ConvF(8.15, 8.15, 8.15); Calibrated: 19.09.2008
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn335; Calibrated: 09.02.2009
- Phantom: SAM Glycol 1176; Type: Speag; Serial: 1176
- Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 186

FDD II/Area Scan (8x14x1): Measurement grid: dx=10mm, dy=10mm
Maximum value of SAR (measured) = 1.53 mW/g
FDD II/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 13.6 V/m; Power Drift = -0.134 dB
Peak SAR (extrapolated) = 1.85 W/kg
SAR(1 g) = 1.05 mW/g; SAR(10 g) = 0.590 mW/g
Maximum value of SAR (measured) = 1.23 mW/g
FDD II/Zoom Scan (7x7x7)/Cube 1: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 13.6 V/m; Power Drift = -0.134 dB
Peak SAR (extrapolated) = 2.48 W/kg
SAR(1 g) = 1.22 mW/g; SAR(10 g) = 0.701 mW/g
Maximum value of SAR (measured) = 1.90 mW/g

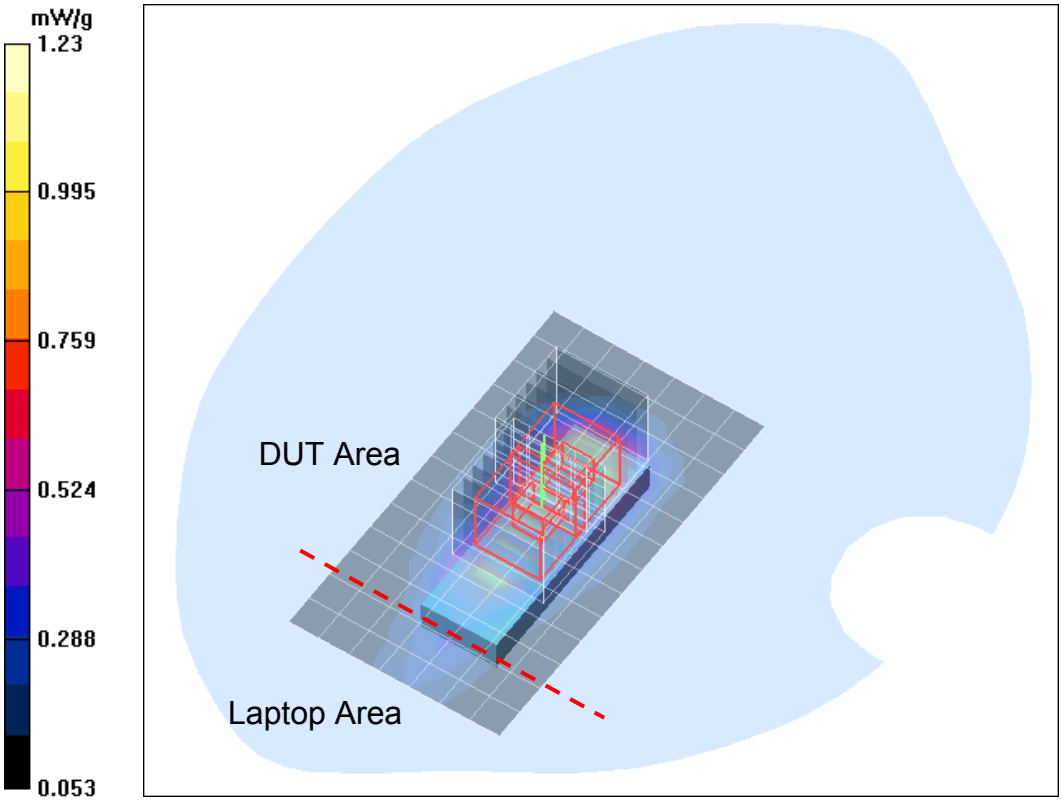

Fig. 27: Worst case SAR distribution for WCDMA II, channel 9400, Position B (Fujitsu Siemens Amilo Pro, May 19, 2009; Ambient Temperature: 22.1°C; Liquid Temperature: 21.4°C).

Test Laboratory: IMST GmbH, DASY Blue (I); File Name: 452_bullhh_2_c.da4

DUT: Option ; Type: Pico Racer iCon 452; Serial: 004401441131147
Program Name: Body

Communication System: WCDMA FDD Band II; Frequency: 1907.6 MHz;Duty Cycle: 1:1
Medium parameters used: f = 1907.6 MHz; σ = 1.58 mho/m; ε_r = 52.8; ρ = 1000 kg/m^3
Phantom section: Flat Section

DASY4 Configuration:
- Probe: EX3DV4 - SN3536; ConvF(8.15, 8.15, 8.15); Calibrated: 19.09.2008
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn335; Calibrated: 09.02.2009
- Phantom: SAM Glycol 1176; Type: Speag; Serial: 1176
- Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 186

FDD II/Area Scan (8x14x1): Measurement grid: dx=10mm, dy=10mm
Maximum value of SAR (measured) = 1.29 mW/g
FDD II/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 14.0 V/m; Power Drift = 0.034 dB
Peak SAR (extrapolated) = 2.34 W/kg
SAR(1 g) = 1.29 mW/g; SAR(10 g) = 0.698 mW/g
Maximum value of SAR (measured) = 1.42 mW/g
FDD II/Zoom Scan (7x7x7)/Cube 1: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 14.0 V/m; Power Drift = 0.034 dB
Peak SAR (extrapolated) = 1.73 W/kg
SAR(1 g) = 1.02 mW/g; SAR(10 g) = 0.590 mW/g
Maximum value of SAR (measured) = 1.14 mW/g

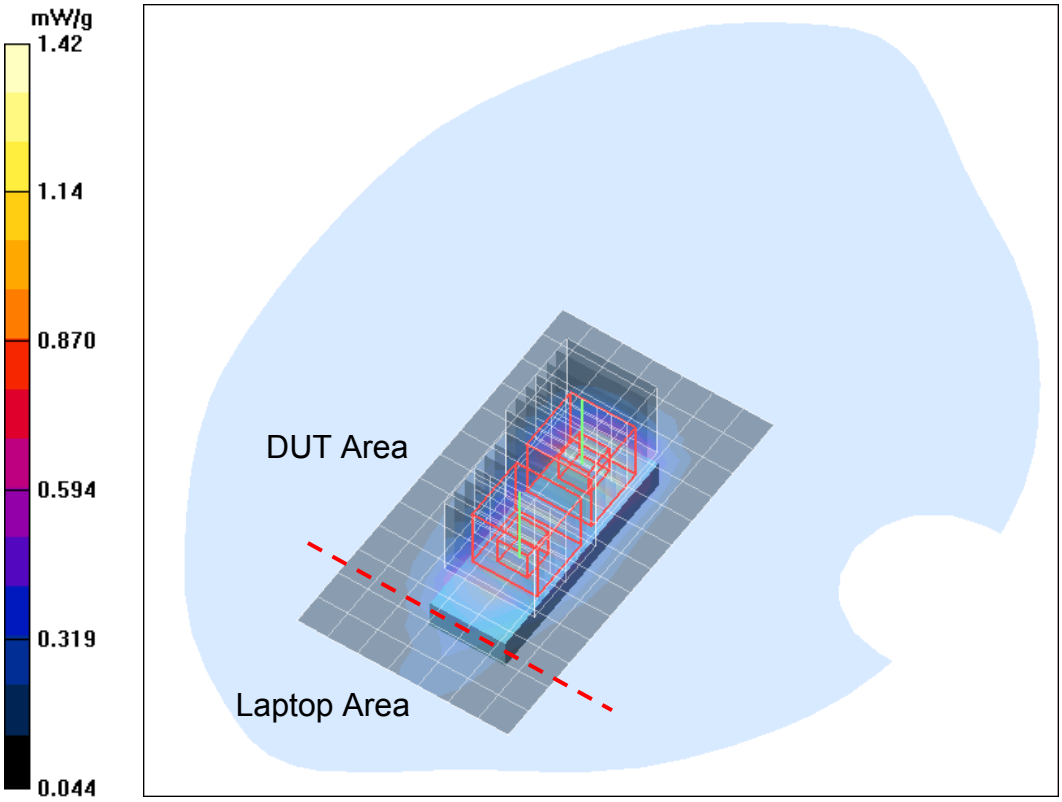

Fig. 28: Worst case SAR distribution for WCDMA II, channel 9538, Position B (Fujitsu Siemens Amilo Pro, May 19, 2009; Ambient Temperature: 22.1°C; Liquid Temperature: 21.4°C).

Test Laboratory: IMST GmbH, DASY Blue (I); File Name: 452_bullhm_3_c.da4

DUT: Option ; Type: Pico Racer iCon 452; Serial: 004401441131147
Program Name: Body

Communication System: WCDMA FDD Band II; Frequency: 1880 MHz;Duty Cycle: 1:1
Medium parameters used: f = 1880 MHz; σ = 1.53 mho/m; ε_r = 52.7; ρ = 1000 kg/m^3
Phantom section: Flat Section

DASY4 Configuration:
- Probe: EX3DV4 - SN3536; ConvF(8.15, 8.15, 8.15); Calibrated: 19.09.2008
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn335; Calibrated: 09.02.2009
- Phantom: SAM Glycol 1176; Type: Speag; Serial: 1176
- Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 186

FDD II/Area Scan (8x14x1): Measurement grid: dx=10mm, dy=10mm
Maximum value of SAR (measured) = 0.819 mW/g
FDD II/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 14.2 V/m; Power Drift = 0.138 dB
Peak SAR (extrapolated) = 1.35 W/kg
SAR(1 g) = 0.761 mW/g; SAR(10 g) = 0.422 mW/g
Maximum value of SAR (measured) = 0.842 mW/g

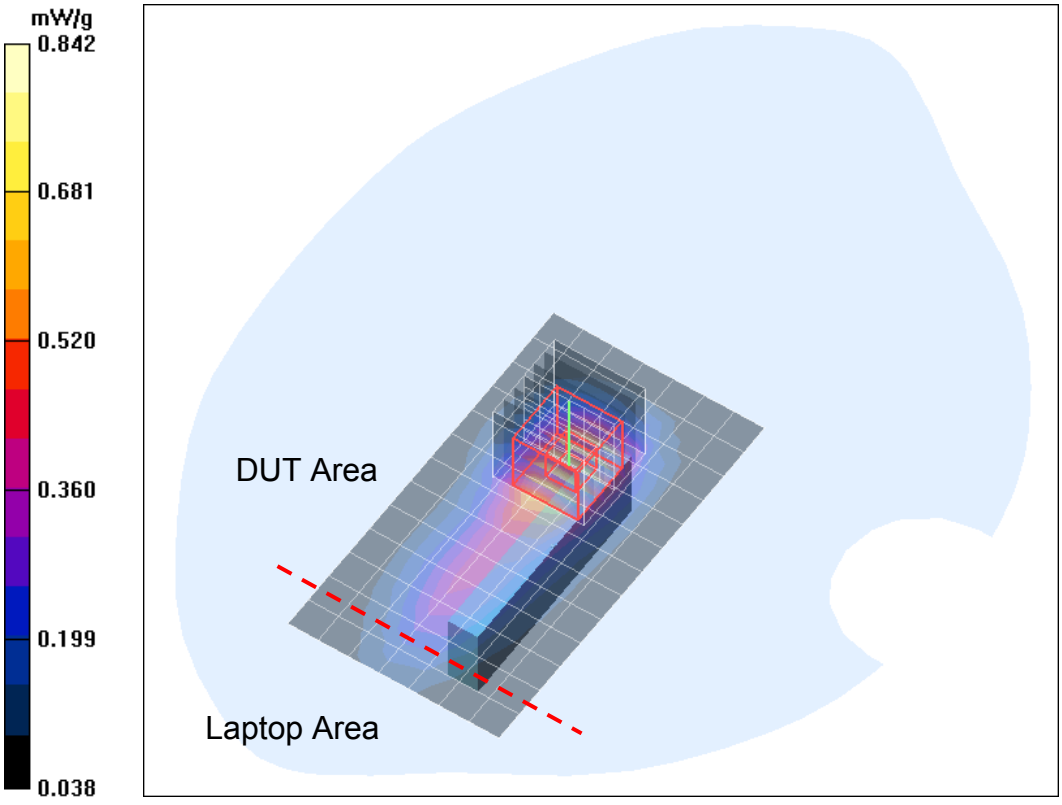

Fig. 29: SAR distribution for WCDMA II, channel 9400, Position C (Fujitsu Siemens Amilo Pro, May 19, 2009; Ambient Temperature: 22.1°C; Liquid Temperature: 21.4°C).

Test Laboratory: IMST GmbH, DASY Blue (I); File Name: 452_bullhm_4_c.da4

DUT: Option ; Type: Pico Racer iCon 452; Serial: 004401441131147
Program Name: Body

Communication System: WCDMA FDD Band II; Frequency: 1880 MHz;Duty Cycle: 1:1
Medium parameters used: f = 1880 MHz; σ = 1.53 mho/m; ε_r = 52.7; ρ = 1000 kg/m^3
Phantom section: Flat Section

DASY4 Configuration:
- Probe: EX3DV4 - SN3536; ConvF(8.15, 8.15, 8.15); Calibrated: 19.09.2008
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn335; Calibrated: 09.02.2009
- Phantom: SAM Glycol 1176; Type: Speag; Serial: 1176
- Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 186

FDD II/Area Scan (8x14x1): Measurement grid: dx=10mm, dy=10mm
Maximum value of SAR (measured) = 0.601 mW/g
FDD II/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 13.2 V/m; Power Drift = -0.014 dB
Peak SAR (extrapolated) = 1.01 W/kg
SAR(1 g) = 0.564 mW/g; SAR(10 g) = 0.305 mW/g
Maximum value of SAR (measured) = 0.627 mW/g
FDD II/Zoom Scan (7x7x7)/Cube 1: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 13.2 V/m; Power Drift = -0.014 dB
Peak SAR (extrapolated) = 0.570 W/kg
SAR(1 g) = 0.345 mW/g; SAR(10 g) = 0.201 mW/g
Maximum value of SAR (measured) = 0.379 mW/g

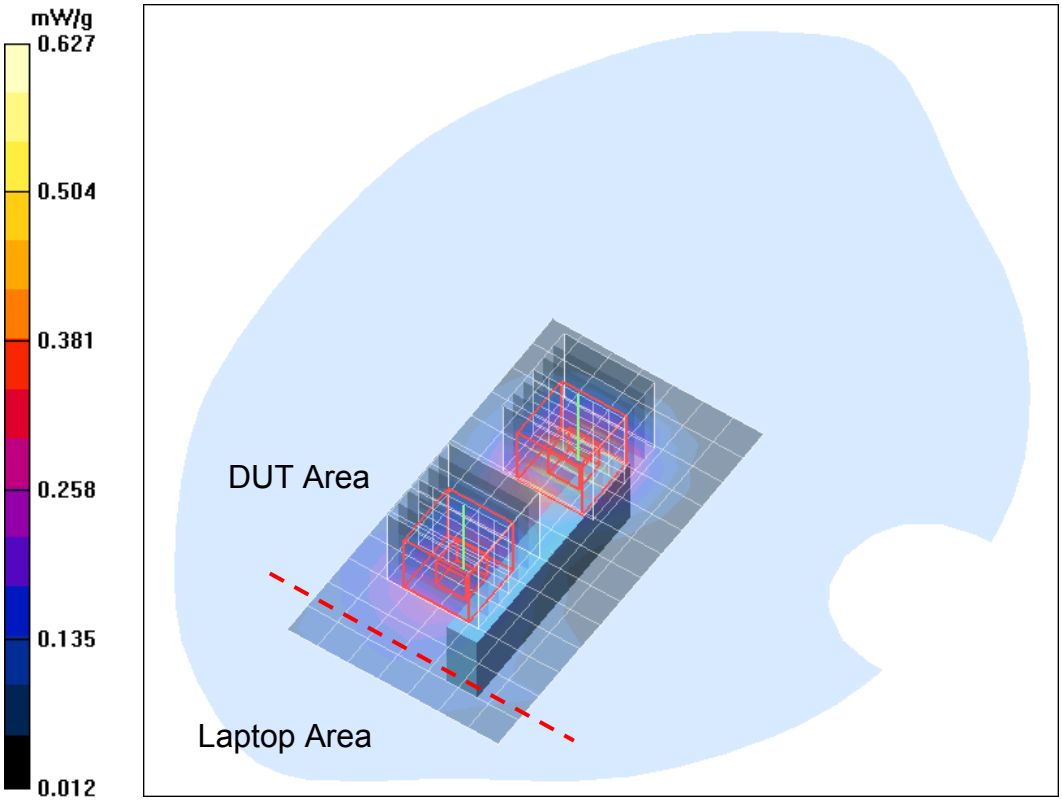

Fig. 30: SAR distribution for WCDMA II, channel 9400 Position D (Fujitsu Siemens Amilo Pro, May 19, 2009; Ambient Temperature: 22.1°C; Liquid Temperature: 21.4°C).

Test Laboratory: IMST GmbH, DASY Blue (I); File Name: 452_bullhh_1_c_HSDPA.da4

DUT: Option ; Type: Pico Racer iCon 452; Serial: 004401441131147
Program Name: Body

Communication System: WCDMA FDD Band II; Frequency: 1907.6 MHz;Duty Cycle: 1:1
Medium parameters used: f = 1907.6 MHz; σ = 1.58 mho/m; ε_r = 52.8; ρ = 1000 kg/m^3
Phantom section: Flat Section

DASY4 Configuration:
- Probe: EX3DV4 - SN3536; ConvF(8.15, 8.15, 8.15); Calibrated: 19.09.2008
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn335; Calibrated: 09.02.2009
- Phantom: SAM Glycol 1176; Type: Speag; Serial: 1176
- Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 186

FDD II/Area Scan (8x14x1): Measurement grid: dx=10mm, dy=10mm
Maximum value of SAR (measured) = 1.65 mW/g
FDD II/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 16.8 V/m; Power Drift = -0.179 dB
Peak SAR (extrapolated) = 2.80 W/kg
SAR(1 g) = 1.57 mW/g; SAR(10 g) = 0.833 mW/g
Maximum value of SAR (measured) = 1.74 mW/g
FDD II/Zoom Scan (7x7x7)/Cube 1: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 16.8 V/m; Power Drift = -0.179 dB
Peak SAR (extrapolated) = 1.93 W/kg
SAR(1 g) = 1.15 mW/g; SAR(10 g) = 0.638 mW/g
Maximum value of SAR (measured) = 1.28 mW/g

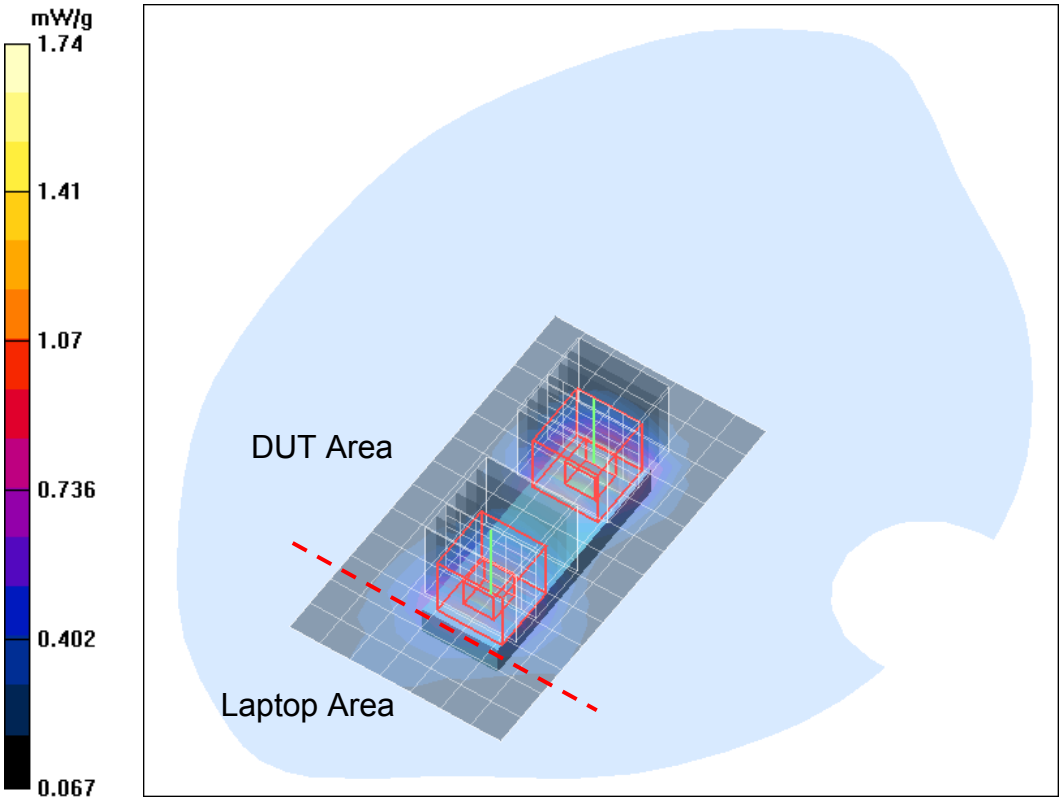

Fig. 31: SAR distribution for WCDMA II with HSDPA activated, channel 9538, Position A (Fujitsu Siemens Amilo Pro, May 19, 2009; Ambient Temperature: 22.1°C; Liquid Temperature: 21.4°C).

Test Laboratory: IMST GmbH, DASY Blue (I); File Name: 452_bullhh_1_c_HSUPA.da4

DUT: Option ; Type: Pico Racer iCon 452; Serial: 004401441131147
Program Name: Body

Communication System: WCDMA FDD Band II; Frequency: 1907.6 MHz;Duty Cycle: 1:1
Medium parameters used: f = 1907.6 MHz; σ = 1.58 mho/m; ε_r = 52.8; ρ = 1000 kg/m^3
Phantom section: Flat Section

DASY4 Configuration:
- Probe: EX3DV4 - SN3536; ConvF(8.15, 8.15, 8.15); Calibrated: 19.09.2008
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn335; Calibrated: 09.02.2009
- Phantom: SAM Glycol 1176; Type: Speag; Serial: 1176
- Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 186

FDD II/Area Scan (8x14x1): Measurement grid: dx=10mm, dy=10mm
Maximum value of SAR (measured) = 1.51 mW/g
FDD II/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 15.5 V/m; Power Drift = 0.081 dB
Peak SAR (extrapolated) = 2.54 W/kg
SAR(1 g) = 1.44 mW/g; SAR(10 g) = 0.756 mW/g
Maximum value of SAR (measured) = 1.59 mW/g
FDD II/Zoom Scan (7x7x7)/Cube 1: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 15.5 V/m; Power Drift = 0.081 dB
Peak SAR (extrapolated) = 1.73 W/kg
SAR(1 g) = 1.03 mW/g; SAR(10 g) = 0.577 mW/g
Maximum value of SAR (measured) = 1.14 mW/g

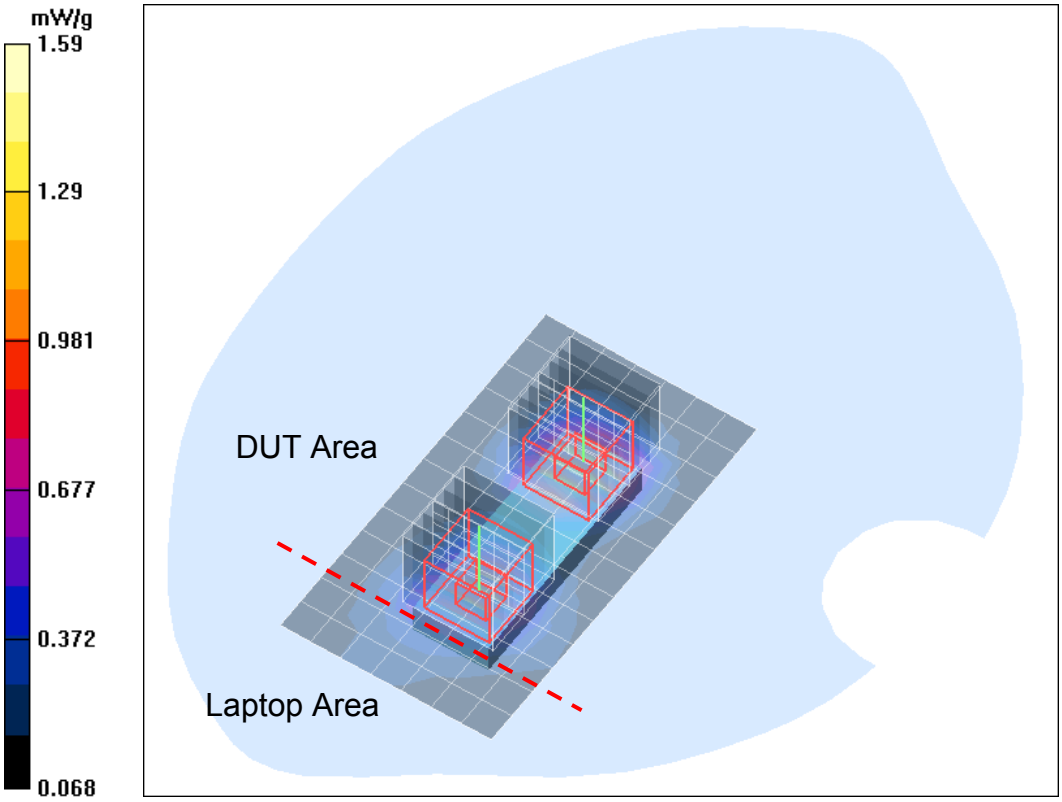

Fig. 32: SAR distribution for WCDMA II with HSUPA activated, channel 9538, Position A (Fujitsu Siemens Amilo Pro, May 19, 2009; Ambient Temperature: 22.1°C; Liquid Temperature: 21.4°C).

6 SAR z-axis scans (Validation)

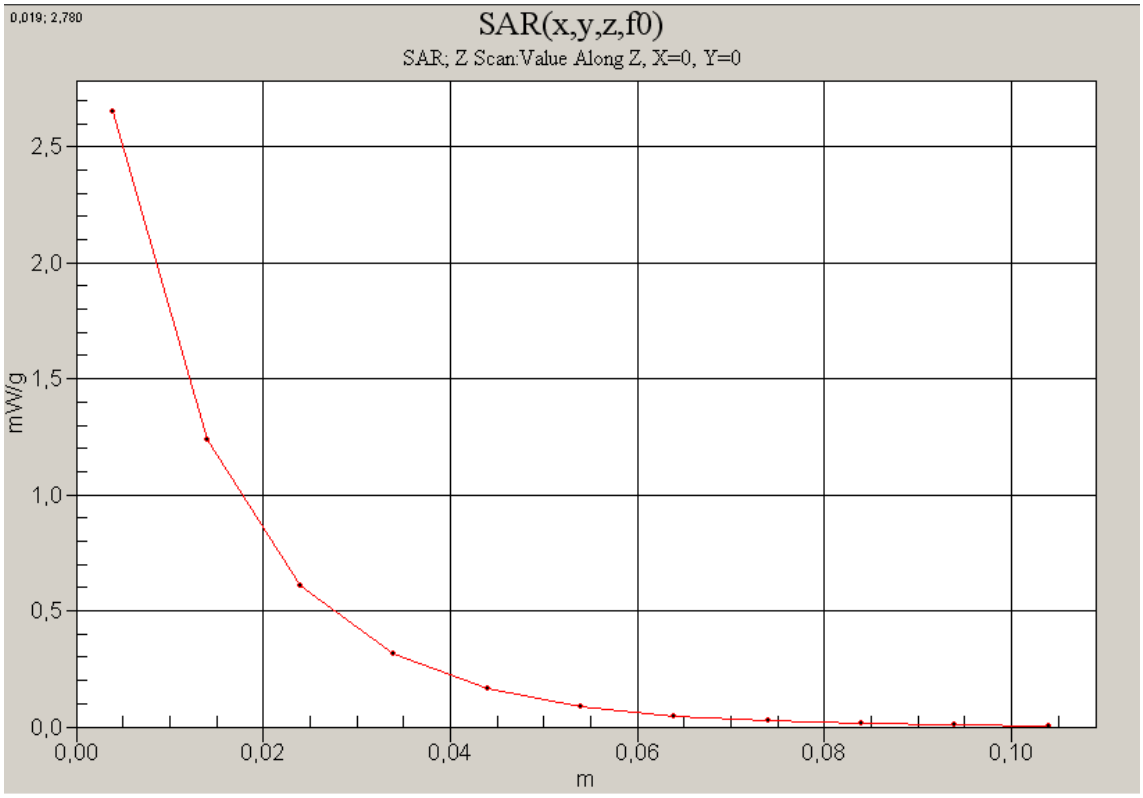

Fig. 33: SAR versus liquid depth, 835 MHz, (GPRS 850 and WCDMA V) body (March 10, 2009; Ambient Temperature: 22.0°C; Liquid Temperature: 21.3°C).

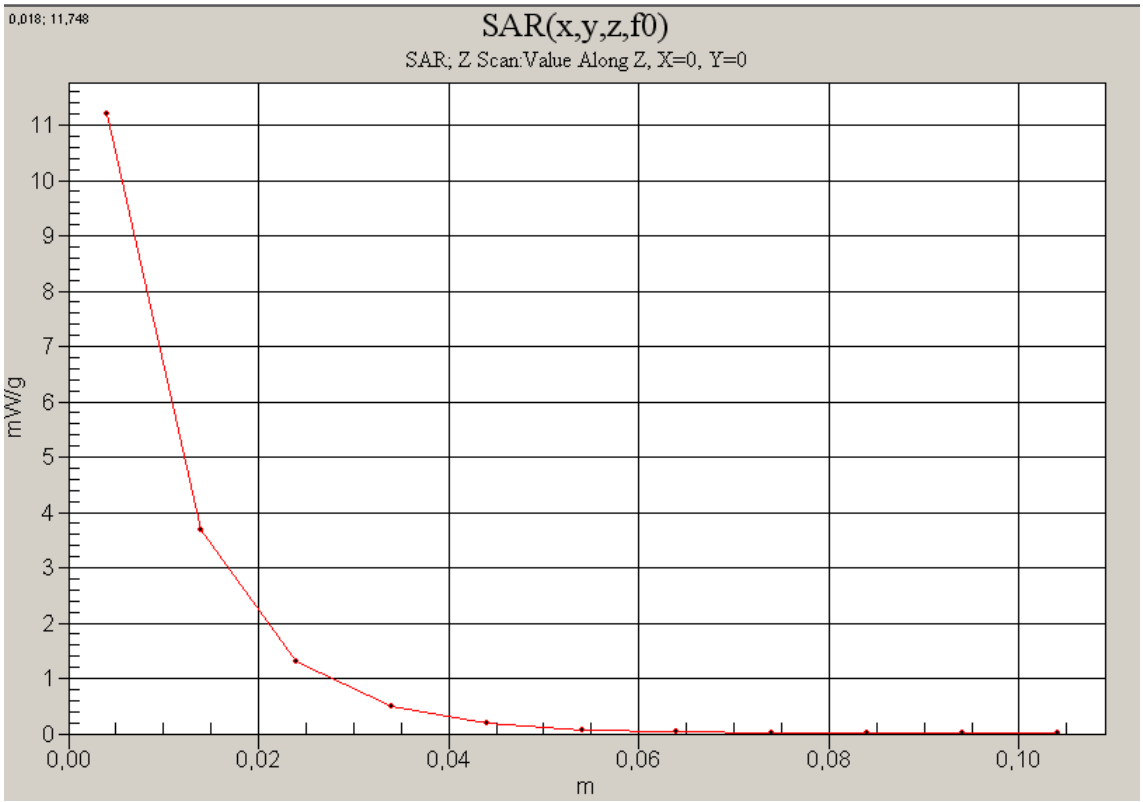

Fig. 34: SAR versus liquid depth, 1900 MHz (GPRS 1900), body (March 09, 2009; Ambient Temperature: 22.2°C; Liquid Temperature: 21.4°C).

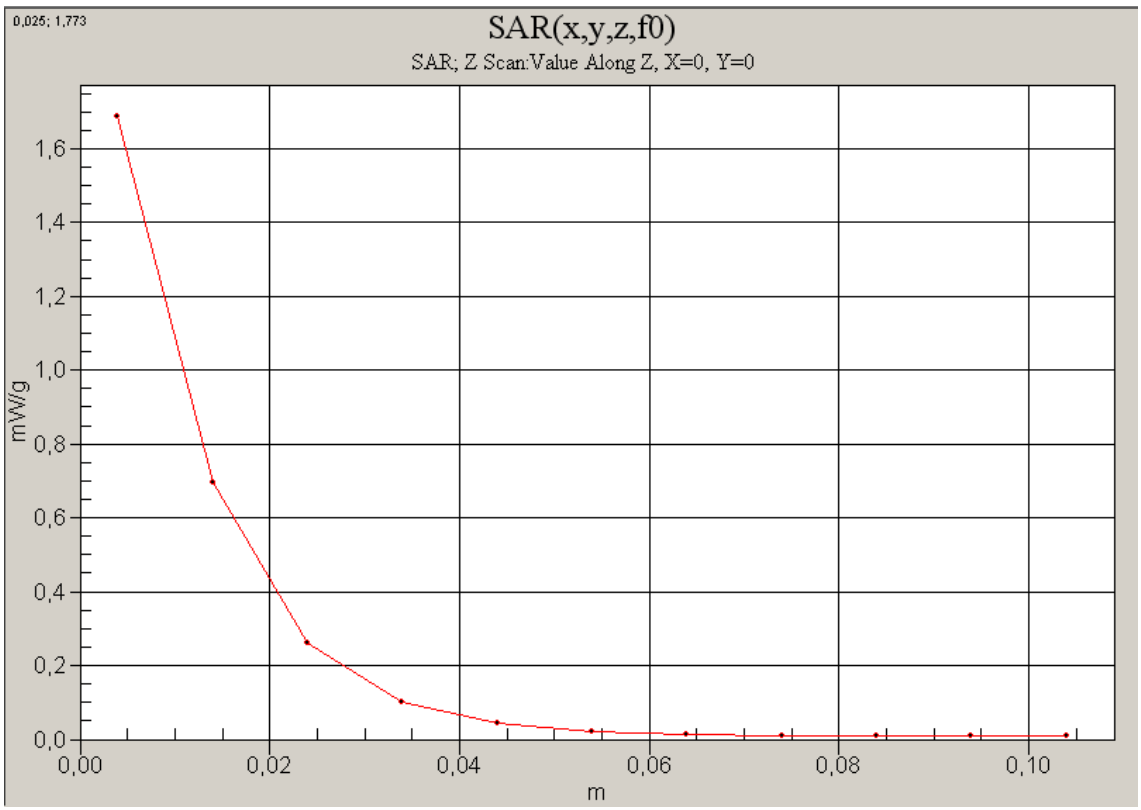

Fig. 35: SAR versus liquid depth, body: WCDMA IV, channel 1413, Position A (Fujitsu Siemens Amilo Pro , March 19, 2009; Ambient Temperature: 22.0°C; Liquid Temperature: 21.2°C).

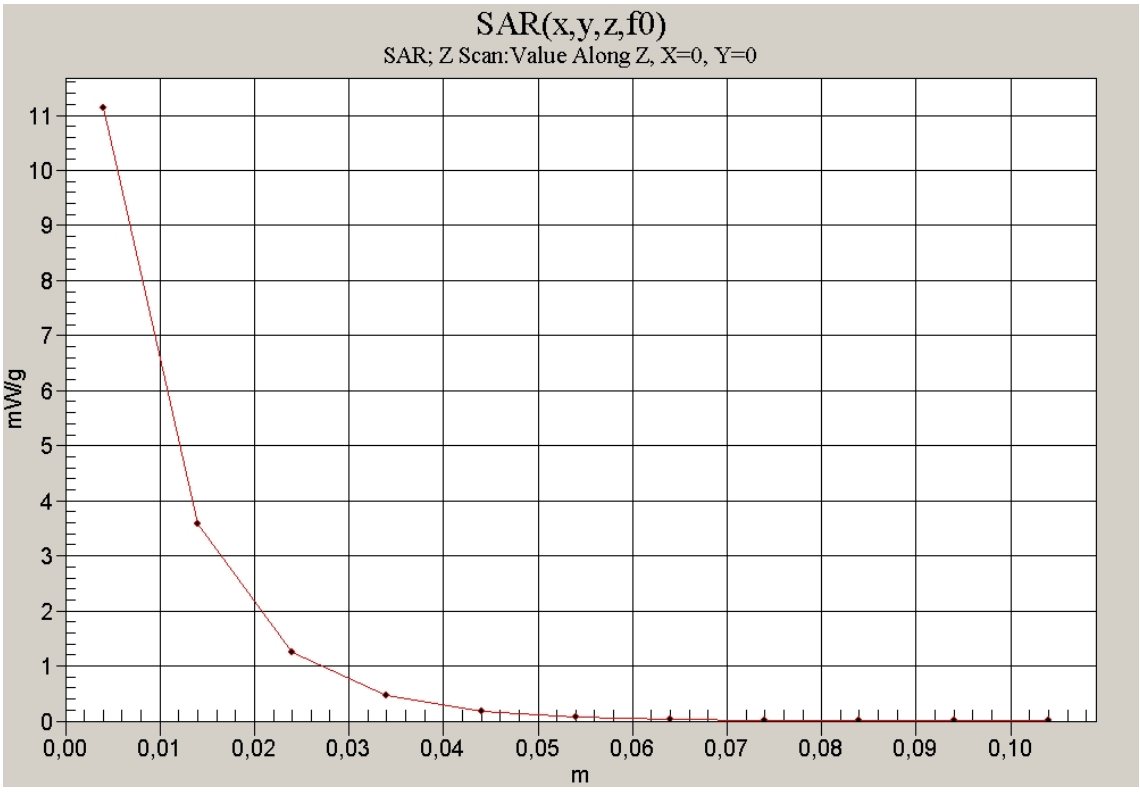

Fig. 36: SAR versus liquid depth, 1900 MHz (FDD II), body (May 19, 2009; Ambient Temperature: 21.9°C; Liquid Temperature: 21.3°C).

7 SAR z-axis scans (Measurements)

The following pictures show the plots of SAR versus liquid depth for the worst case values.

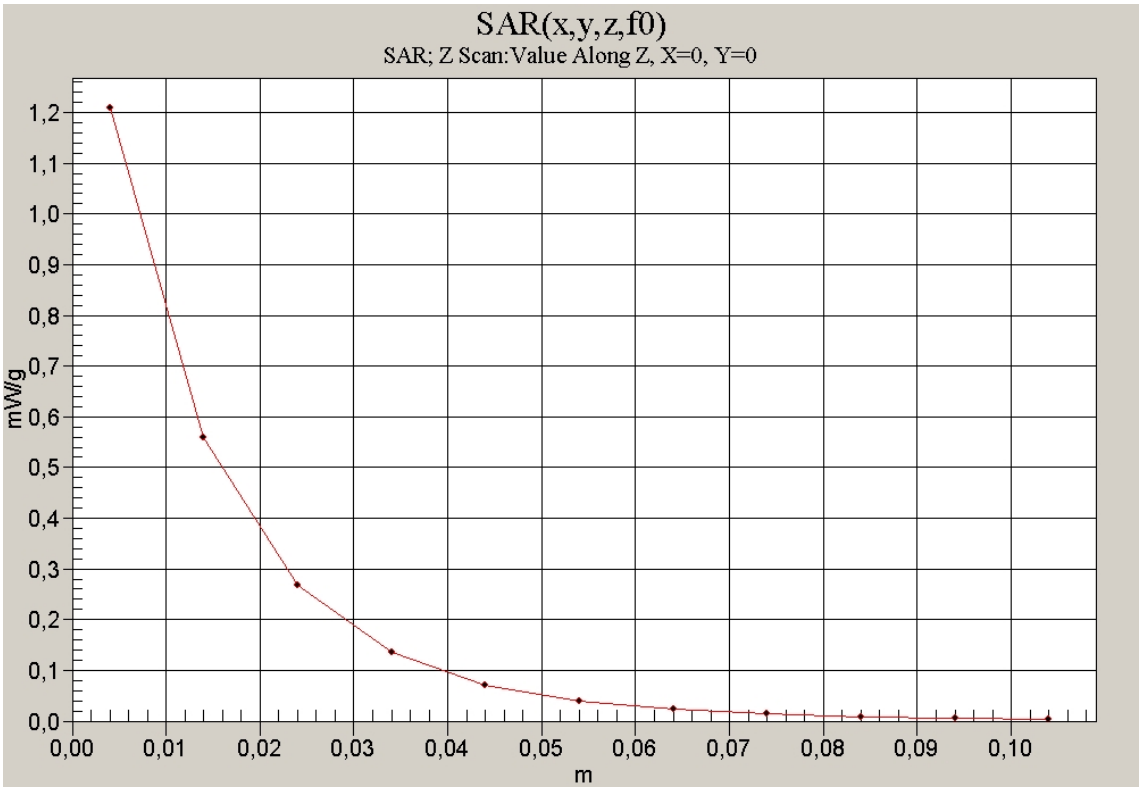

Fig. 37: SAR versus liquid depth, body: GPRS 850 (Class 10), channel 251, Position A (Fujitsu Siemens Amilo Pro, March 10, 2009; Ambient Temperature: 21.9°C; Liquid Temperature: 21.3°C).

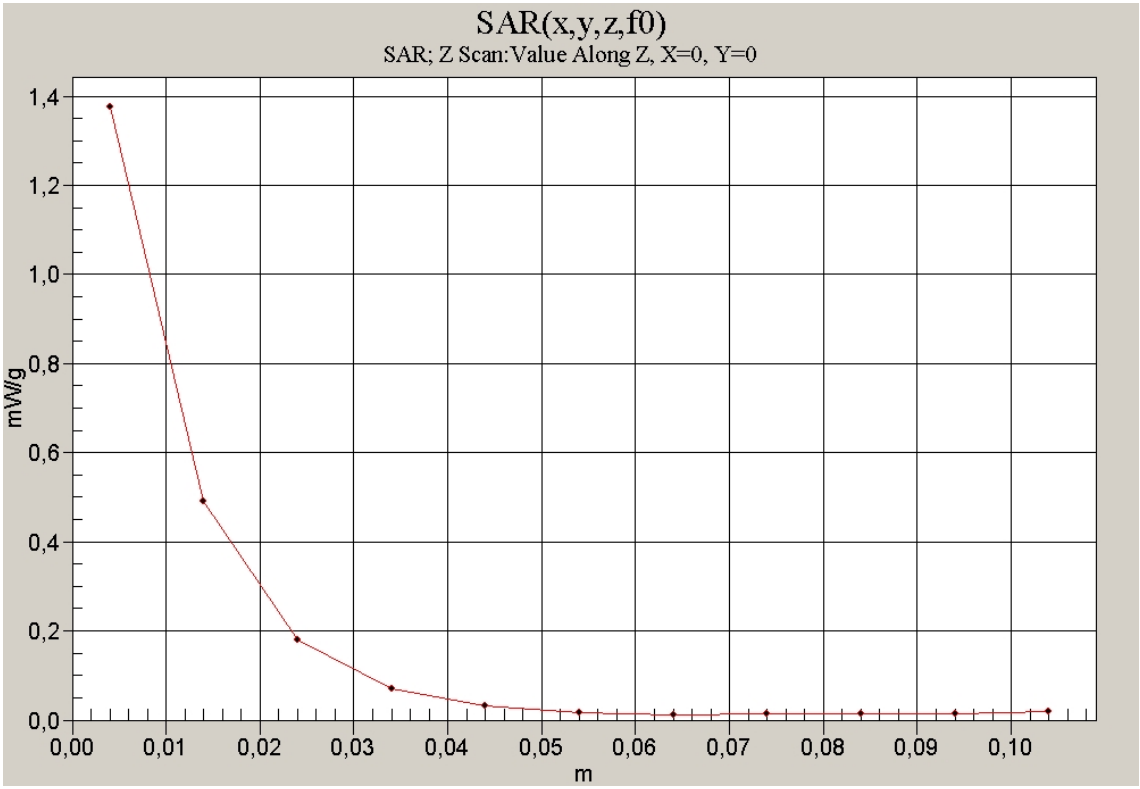

Fig. 38: SAR versus liquid depth, body: GPRS 1900 (Class 10), channel 810, Position A (Fujitsu Siemens Amilo Pro , March 09, 2009; Ambient Temperature: 22.2°C; Liquid Temperature: 21.4°C).

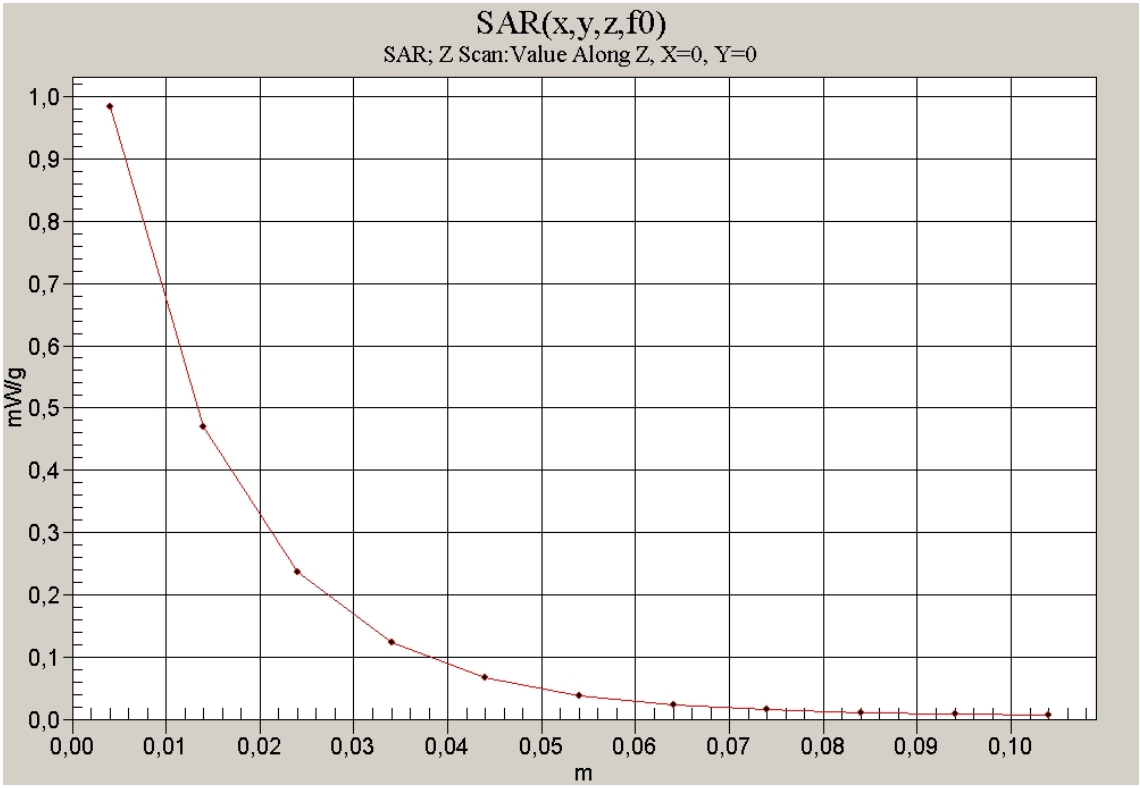

Fig. 39: SAR versus liquid depth, body: WCDMA V, channel 4133, Position A, (Fujitsu Siemens Amilo Pro, March 10, 2009; Ambient Temperature: 22.1°C; Liquid Temperature: 21.3°C).

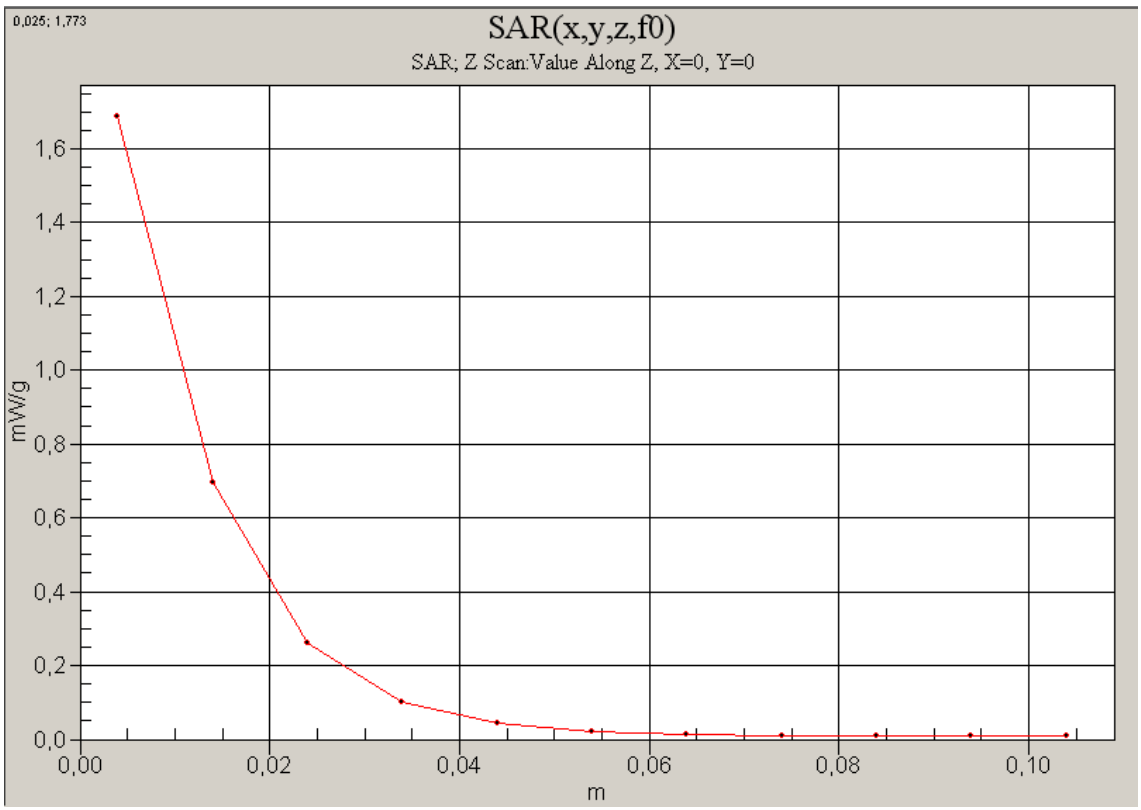

Fig. 40: SAR versus liquid depth, body: WCDMA IV, channel 1413, Position A (Fujitsu Siemens Amilo Pro , March 19, 2009; Ambient Temperature: 22.0°C; Liquid Temperature: 21.2°C).

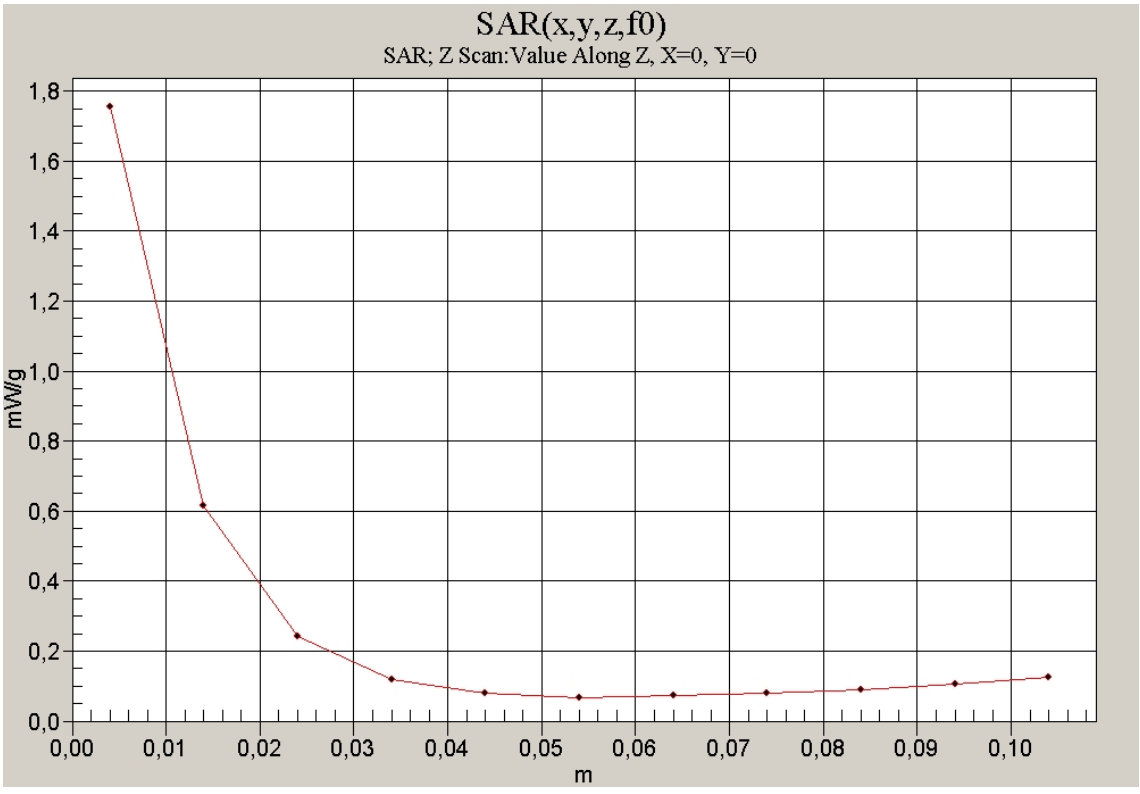

Fig. 41: SAR versus liquid depth, body: WCDMA II, channel 9538, Position A, HSDPA activated (Fujitsu Siemens Amilo Pro , May 19, 2009; Ambient Temperature: 22.1°C; Liquid Temperature: 21.4°C).