

WCDMA 850 Right Tilt High

Date: 2013-1-19

Electronics: DAE4 Sn771

Medium: Head 850 MHz

Medium parameters used (interpolated): $f = 846.6$ MHz; $\sigma = 0.893$ mho/m; $\epsilon_r = 40.673$; $\rho = 1000$ kg/m³

Ambient Temperature: 22.4°C Liquid Temperature: 21.9°C

Communication System: WCDMA; Frequency: 846.6 MHz; Duty Cycle: 1:1

Probe: ES3DV3 - SN3149 ConvF(6.26, 6.26, 6.26)

Tilt High/Area Scan (61x101x1): Measurement grid: dx=10 mm, dy=10 mm

Reference Value = 11.187 V/m; Power Drift = 0.06 dB

Fast SAR: SAR(1 g) = 0.280 W/kg; SAR(10 g) = 0.192 W/kg

Maximum value of SAR (interpolated) = 0.299 W/kg

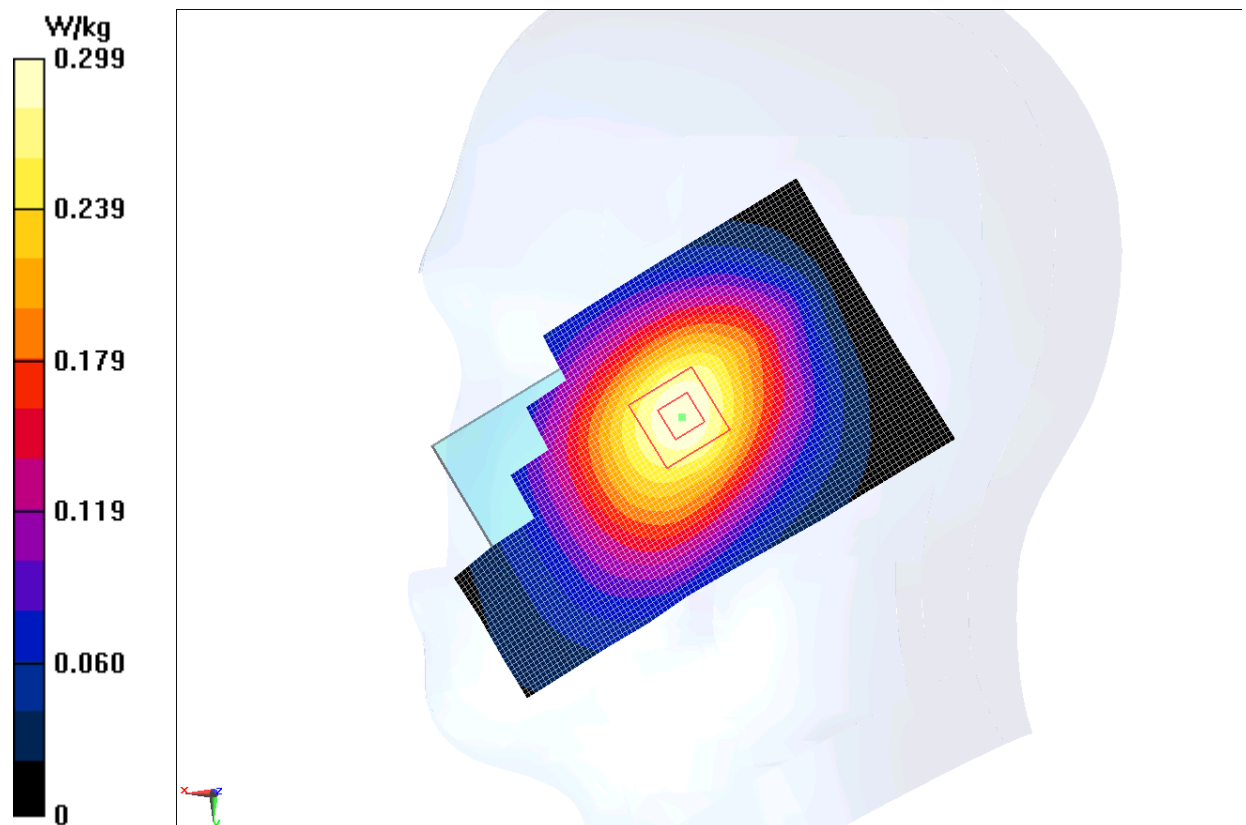


Fig. 56 WCDMA 850 CH4233

WCDMA 850 Right Tilt Middle

Date: 2013-1-19

Electronics: DAE4 Sn771

Medium: Head 850 MHz

Medium parameters used (interpolated): $f = 836.4$ MHz; $\sigma = 0.883$ mho/m; $\epsilon_r = 40.807$; $\rho = 1000$ kg/m³

Ambient Temperature: 22.4°C Liquid Temperature: 21.9°C

Communication System: WCDMA; Frequency: 836.4 MHz; Duty Cycle: 1:1

Probe: ES3DV3 - SN3149 ConvF(6.26, 6.26, 6.26)

Tilt Middle/Area Scan (61x101x1): Measurement grid: dx=10 mm, dy=10 mm

Reference Value = 12.340 V/m; Power Drift = 0.06 dB

Fast SAR: SAR(1 g) = 0.333 W/kg; SAR(10 g) = 0.229 W/kg

Maximum value of SAR (interpolated) = 0.355 W/kg

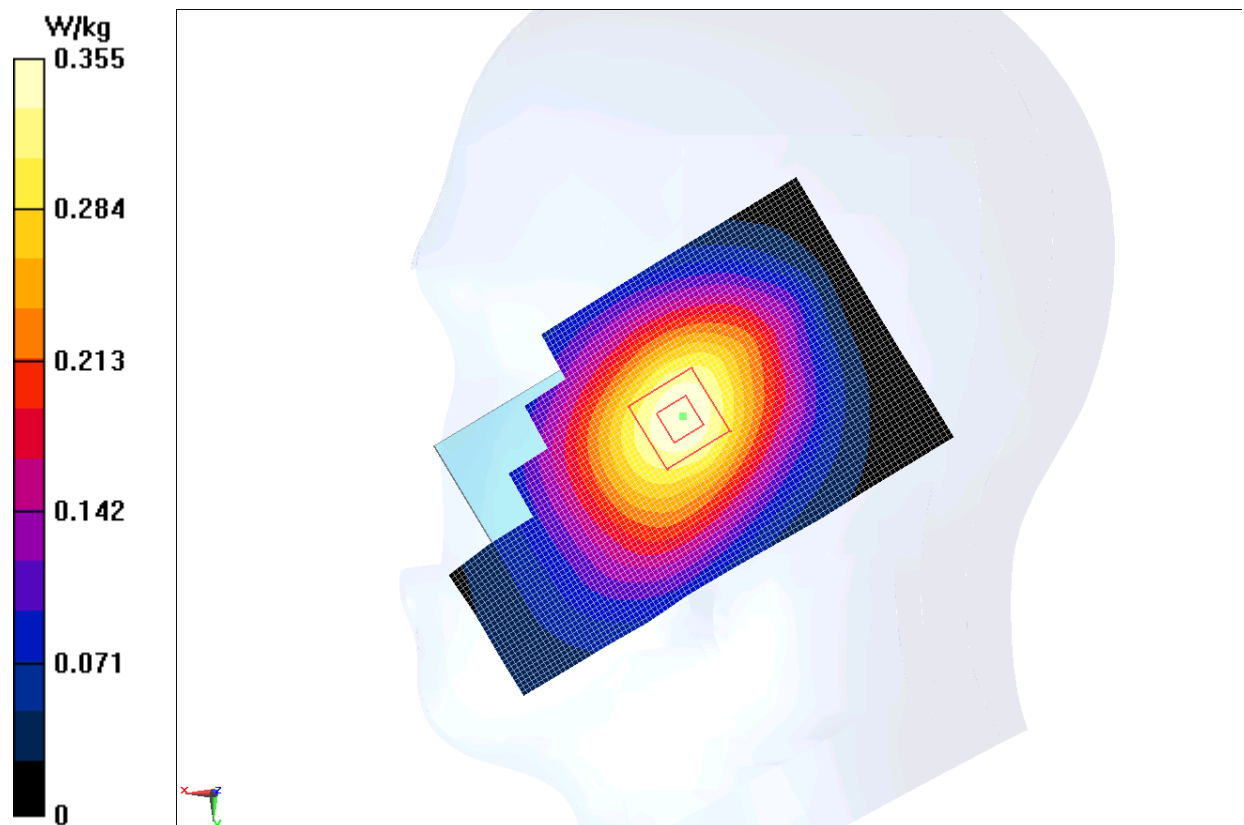


Fig. 57 WCDMA 850 CH4182

WCDMA 850 Right Tilt Low

Date: 2013-1-19

Electronics: DAE4 Sn771

Medium: Head 850 MHz

Medium parameters used (interpolated): $f = 826.4$ MHz; $\sigma = 0.873$ mho/m; $\epsilon_r = 40.929$; $\rho = 1000$ kg/m³

Ambient Temperature: 22.4°C Liquid Temperature: 21.9°C

Communication System: WCDMA; Frequency: 826.4 MHz; Duty Cycle: 1:1

Probe: ES3DV3 - SN3149 ConvF(6.26, 6.26, 6.26)

Tilt Low/Area Scan (61x101x1): Measurement grid: dx=10 mm, dy=10 mm

Reference Value = 11.052 V/m; Power Drift = 0.06 dB

Fast SAR: SAR(1 g) = 0.265 W/kg; SAR(10 g) = 0.183 W/kg

Maximum value of SAR (interpolated) = 0.282 W/kg

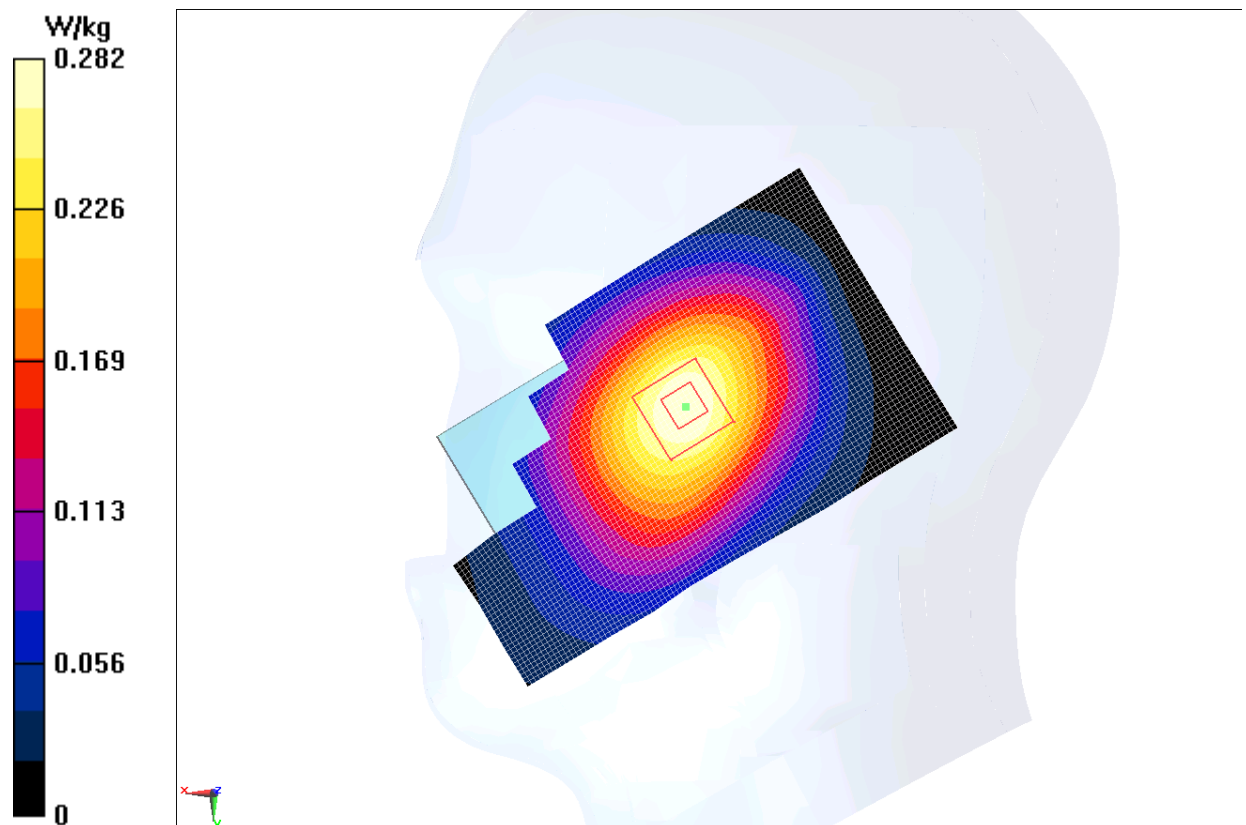


Fig. 58 WCDMA 850 CH4132

WCDMA 850 Body Towards Phantom Middle

Date: 2013-1-19

Electronics: DAE4 Sn771

Medium: Body 850 MHz

Medium parameters used (interpolated): $f = 836.4$ MHz; $\sigma = 0.989$ mho/m; $\epsilon_r = 55.57$; $\rho = 1000$ kg/m³

Ambient Temperature: 22.4°C Liquid Temperature: 21.9°C

Communication System: WCDMA; Frequency: 836.4 MHz; Duty Cycle: 1:1

Probe: ES3DV3 - SN3149 ConvF(6.14, 6.14, 6.14)

Toward Phantom Middle/Area Scan (61x101x1): Measurement grid: dx=10 mm, dy=10 mm

Maximum value of SAR (interpolated) = 0.765 W/kg

Toward Phantom Middle/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 27.375 V/m; Power Drift = -0.01 dB

Peak SAR (extrapolated) = 0.932 W/kg

SAR(1 g) = 0.719 W/kg; SAR(10 g) = 0.534 W/kg

Maximum value of SAR (measured) = 0.762 W/kg

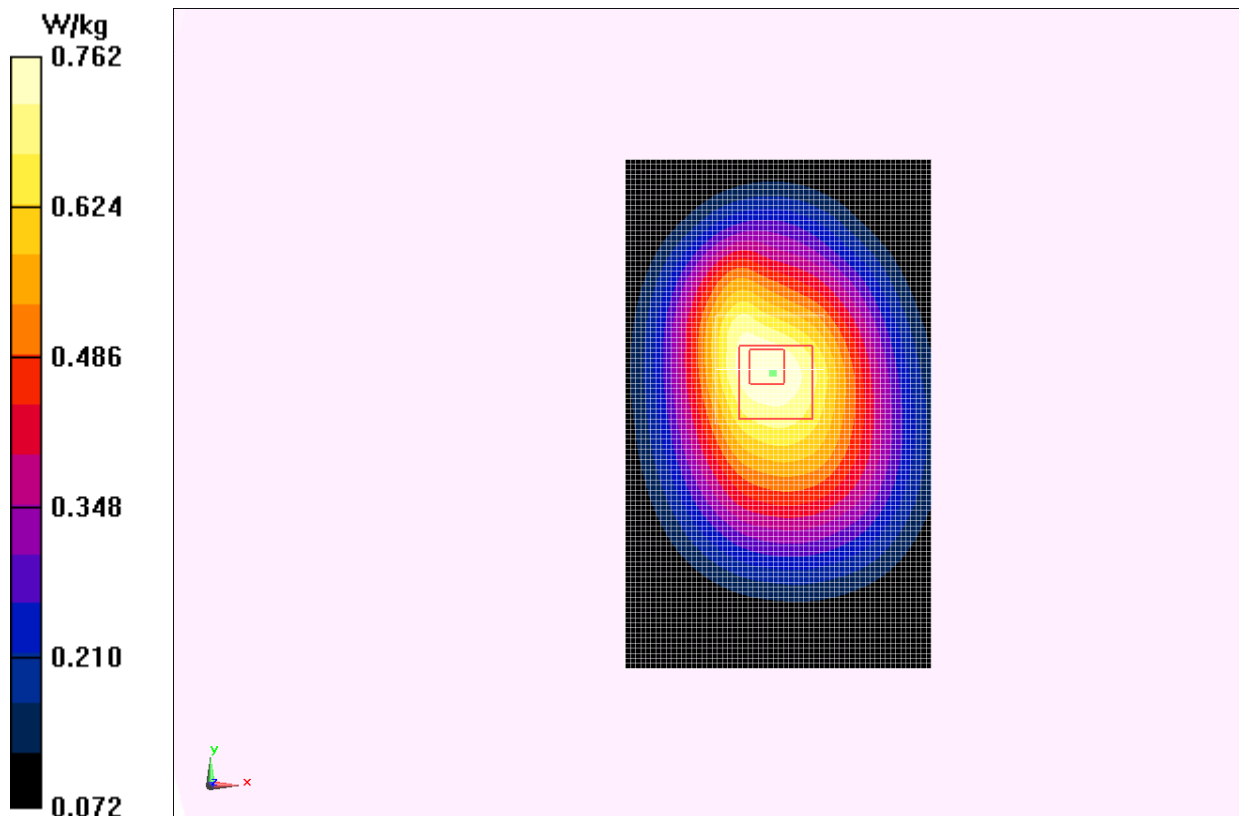


Fig. 59 WCDMA 850 CH4182

WCDMA 850 Body Towards Ground High

Date: 2013-1-19

Electronics: DAE4 Sn771

Medium: Body 850 MHz

Medium parameters used (interpolated): $f = 846.6$ MHz; $\sigma = 1.001$ mho/m; $\epsilon_r = 55.484$; $\rho = 1000$ kg/m³

Ambient Temperature: 22.4°C Liquid Temperature: 21.9°C

Communication System: WCDMA; Frequency: 846.6 MHz; Duty Cycle: 1:1

Probe: ES3DV3 - SN3149 ConvF(6.14, 6.14, 6.14)

Toward Ground High/Area Scan (61x101x1): Measurement grid: dx=10 mm, dy=10 mm

Maximum value of SAR (interpolated) = 1.04 W/kg

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

Reference Value = 31.575 V/m; Power Drift = 0.02 dB

Peak SAR (extrapolated) = 1.28 W/kg

SAR(1 g) = 0.992 W/kg; SAR(10 g) = 0.729 W/kg

Maximum value of SAR (measured) = 1.05 W/kg

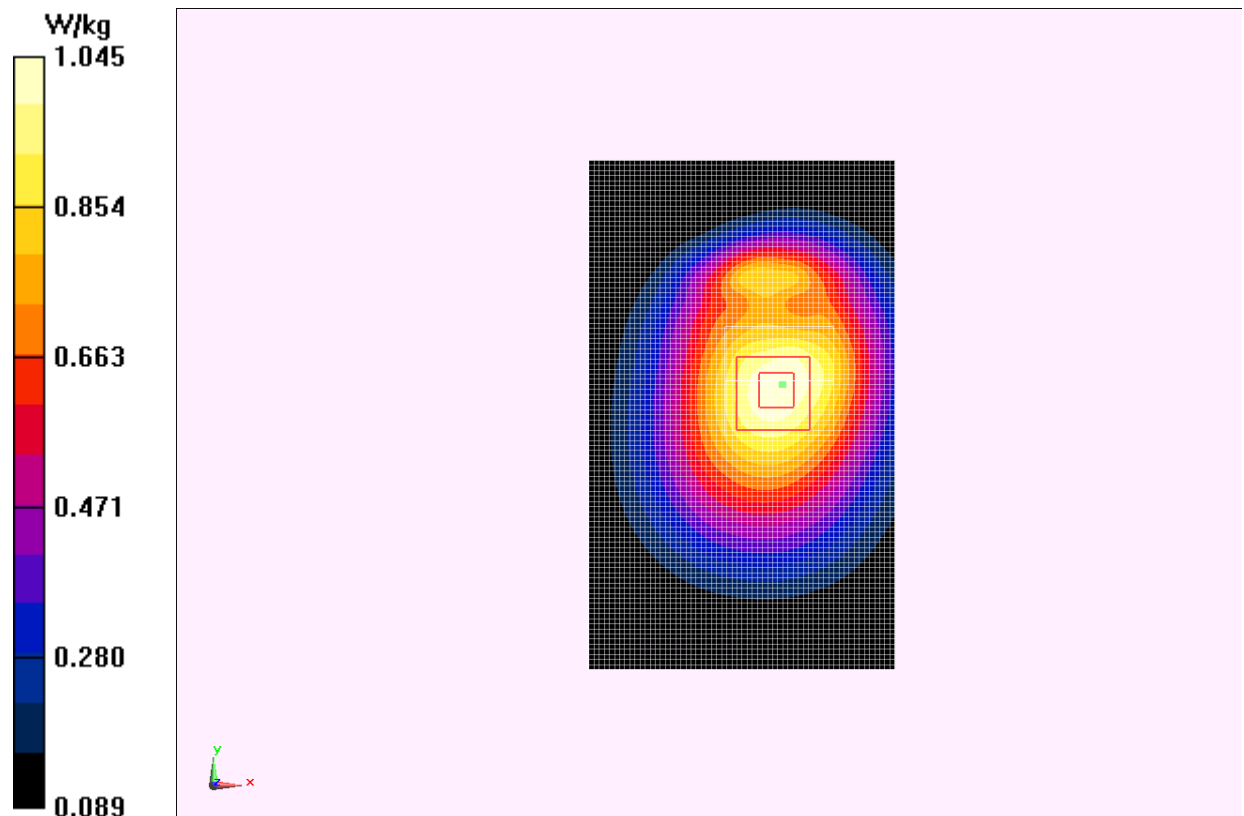


Fig. 60 WCDMA 850 CH4233

WCDMA 850 Body Towards Ground Middle

Date: 2013-1-19

Electronics: DAE4 Sn771

Medium: Body 850 MHz

Medium parameters used (interpolated): $f = 836.4$ MHz; $\sigma = 0.989$ mho/m; $\epsilon_r = 55.57$; $\rho = 1000$ kg/m³

Ambient Temperature: 22.4°C Liquid Temperature: 21.9°C

Communication System: WCDMA; Frequency: 836.4 MHz; Duty Cycle: 1:1

Probe: ES3DV3 - SN3149 ConvF(6.14, 6.14, 6.14)

Toward Ground Middle/Area Scan (61x101x1): Measurement grid: dx=10 mm, dy=10 mm

Maximum value of SAR (interpolated) = 1.10 W/kg

Toward Ground Middle/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 32.127 V/m; Power Drift = 0.01 dB

Peak SAR (extrapolated) = 1.35 W/kg

SAR(1 g) = 1.05 W/kg; SAR(10 g) = 0.764 W/kg

Maximum value of SAR (measured) = 1.11 W/kg

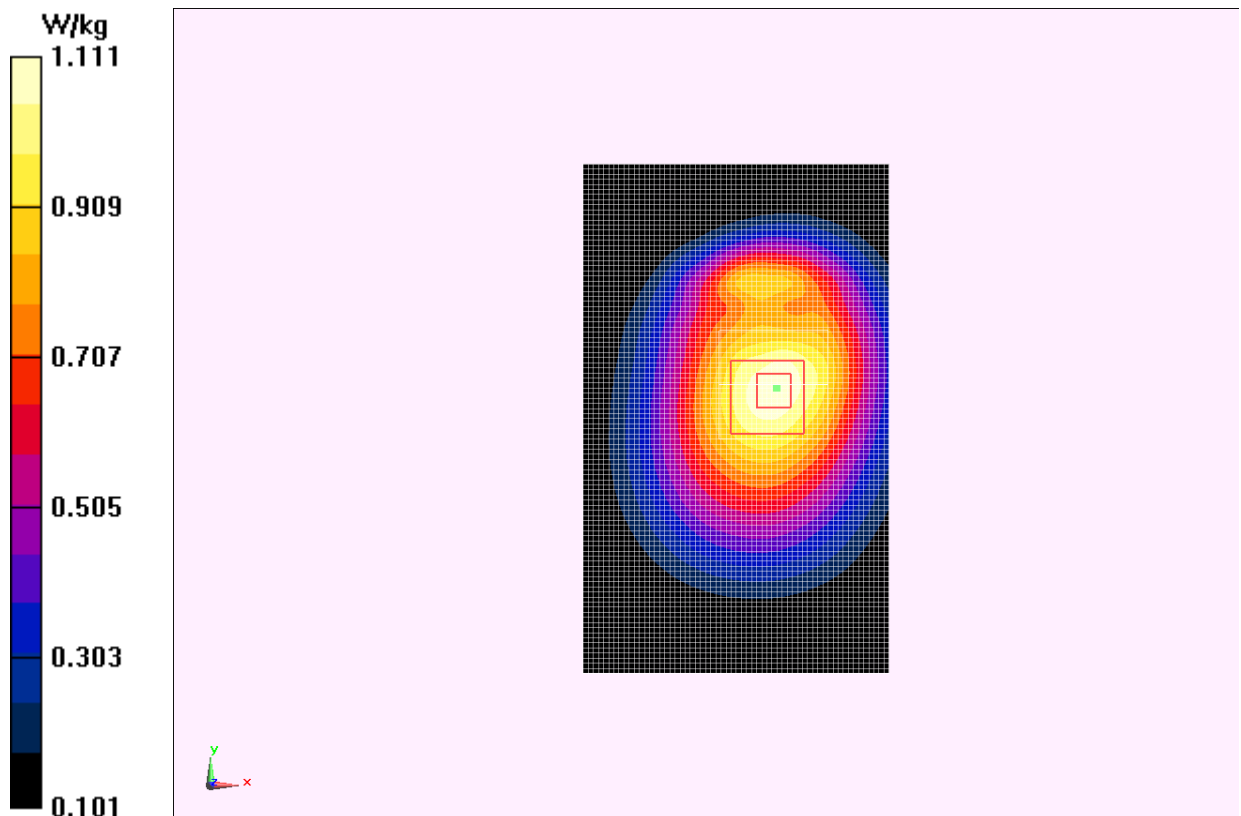


Fig. 61 WCDMA 850 CH4182

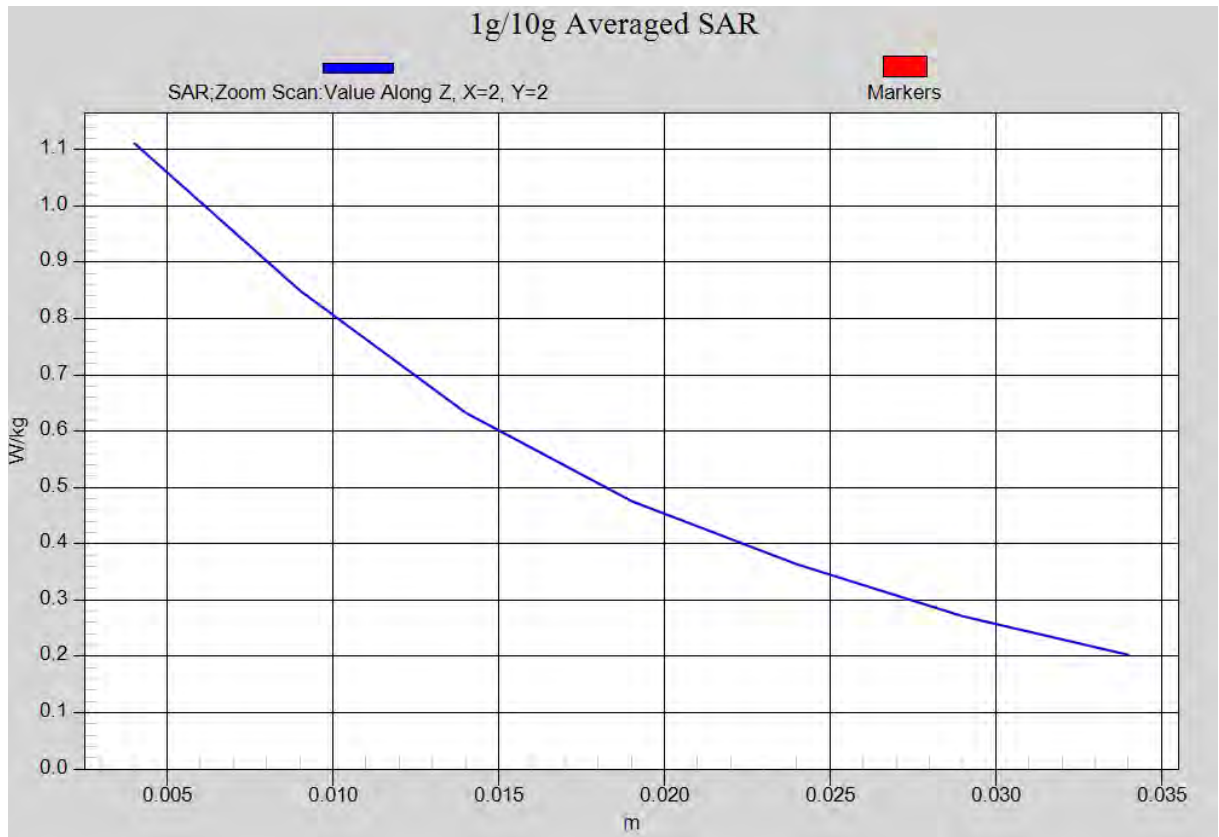


Fig. 61-1 Z-Scan at power reference point (WCDMA850 CH4182)

WCDMA 850 Body Towards Ground Low

Date: 2013-1-19

Electronics: DAE4 Sn771

Medium: Body 850 MHz

Medium parameters used (interpolated): $f = 826.4$ MHz; $\sigma = 0.978$ mho/m; $\epsilon_r = 55.673$; $\rho = 1000$ kg/m³

Ambient Temperature: 22.4°C Liquid Temperature: 21.9°C

Communication System: WCDMA; Frequency: 826.4 MHz; Duty Cycle: 1:1

Probe: ES3DV3 - SN3149 ConvF(6.14, 6.14, 6.14)

Toward Ground Low/Area Scan (61x101x1): Measurement grid: dx=10 mm, dy=10 mm

Maximum value of SAR (interpolated) = 0.989 W/kg

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

Reference Value = 30.378 V/m; Power Drift = 0.04 dB

Peak SAR (extrapolated) = 1.26 W/kg

SAR(1 g) = 0.948 W/kg; SAR(10 g) = 0.690 W/kg

Maximum value of SAR (measured) = 1.00 W/kg

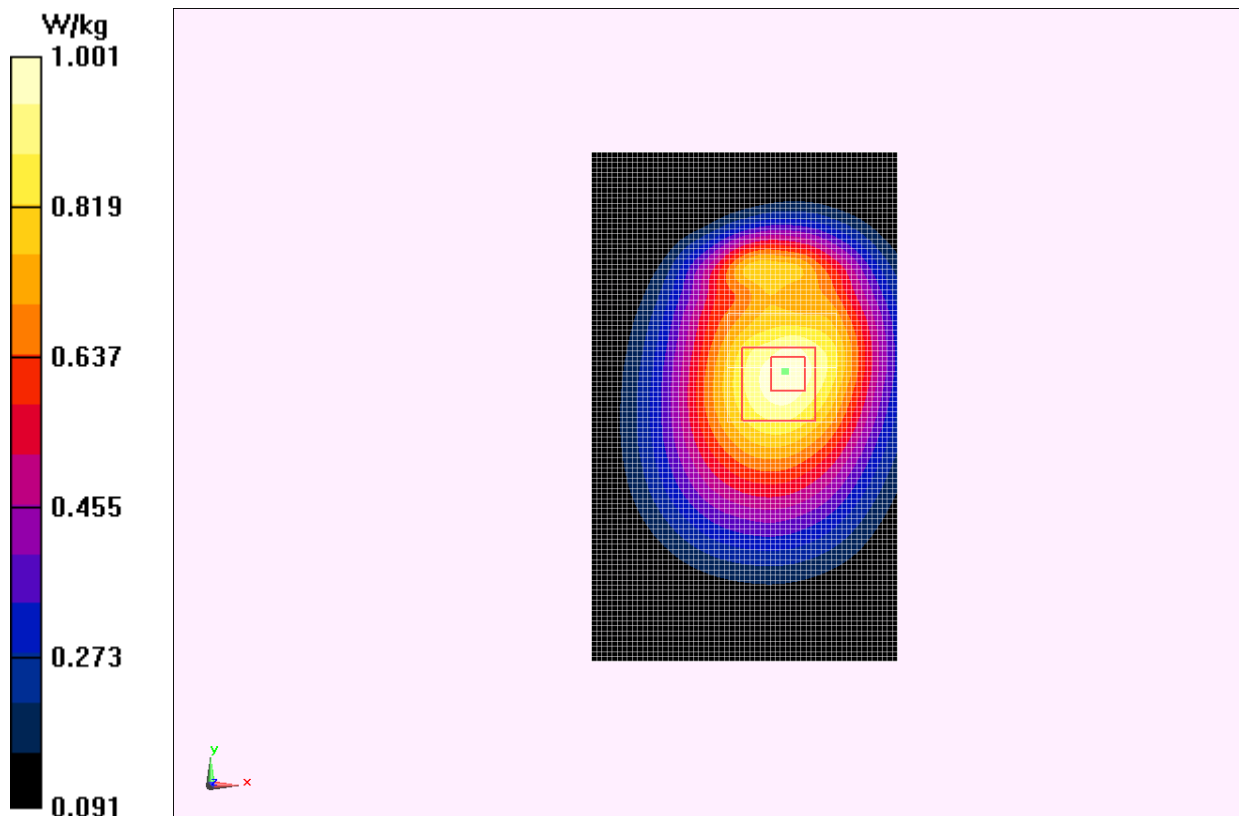


Fig. 62 WCDMA 850 CH4132

WCDMA 850 Body Left Side Middle

Date: 2013-1-19

Electronics: DAE4 Sn771

Medium: Body 850 MHz

Medium parameters used (interpolated): $f = 836.4$ MHz; $\sigma = 0.989$ mho/m; $\epsilon_r = 55.57$; $\rho = 1000$ kg/m³

Ambient Temperature: 22.4°C Liquid Temperature: 21.9°C

Communication System: WCDMA; Frequency: 836.4 MHz; Duty Cycle: 1:1

Probe: ES3DV3 - SN3149 ConvF(6.14, 6.14, 6.14)

Left Side Middle/Area Scan (61x101x1): Measurement grid: dx=10 mm, dy=10 mm

Maximum value of SAR (interpolated) = 0.697 W/kg

Left Side Middle/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 22.864 V/m; Power Drift = -0.06 dB

Peak SAR (extrapolated) = 0.900 W/kg

SAR(1 g) = 0.663 W/kg; SAR(10 g) = 0.468 W/kg

Maximum value of SAR (measured) = 0.705 W/kg

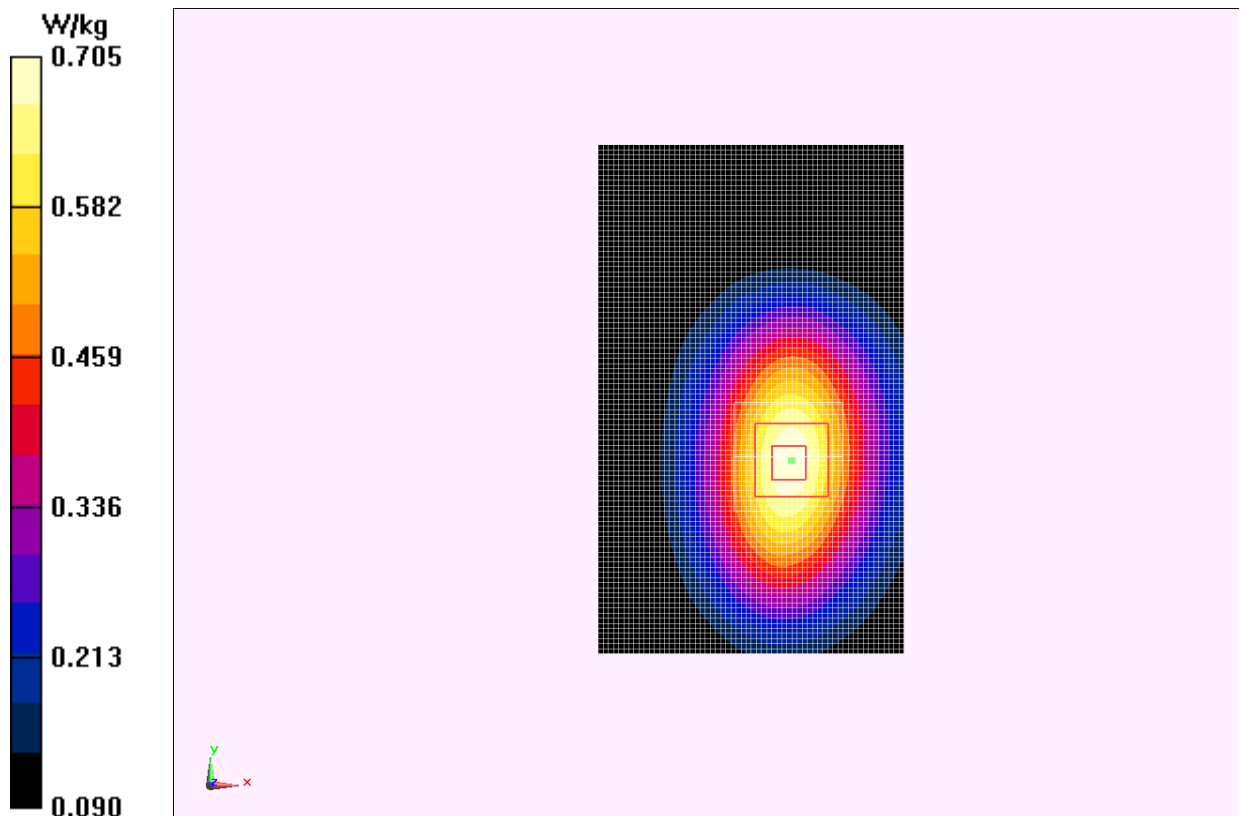


Fig. 63 WCDMA 850 CH4182

WCDMA 850 Body Right Side Middle

Date: 2013-1-19

Electronics: DAE4 Sn771

Medium: Body 850 MHz

Medium parameters used (interpolated): $f = 836.4$ MHz; $\sigma = 0.989$ mho/m; $\epsilon_r = 55.57$; $\rho = 1000$ kg/m³

Ambient Temperature: 22.4°C Liquid Temperature: 21.9°C

Communication System: WCDMA; Frequency: 836.4 MHz; Duty Cycle: 1:1

Probe: ES3DV3 - SN3149 ConvF(6.14, 6.14, 6.14)

Right Side Middle/Area Scan (61x101x1): Measurement grid: dx=10 mm, dy=10 mm

Maximum value of SAR (interpolated) = 0.613 W/kg

Right Side Middle/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 19.854 V/m; Power Drift = 0.01 dB

Peak SAR (extrapolated) = 0.773 W/kg

SAR(1 g) = 0.572 W/kg; SAR(10 g) = 0.402 W/kg

Maximum value of SAR (measured) = 0.608 W/kg

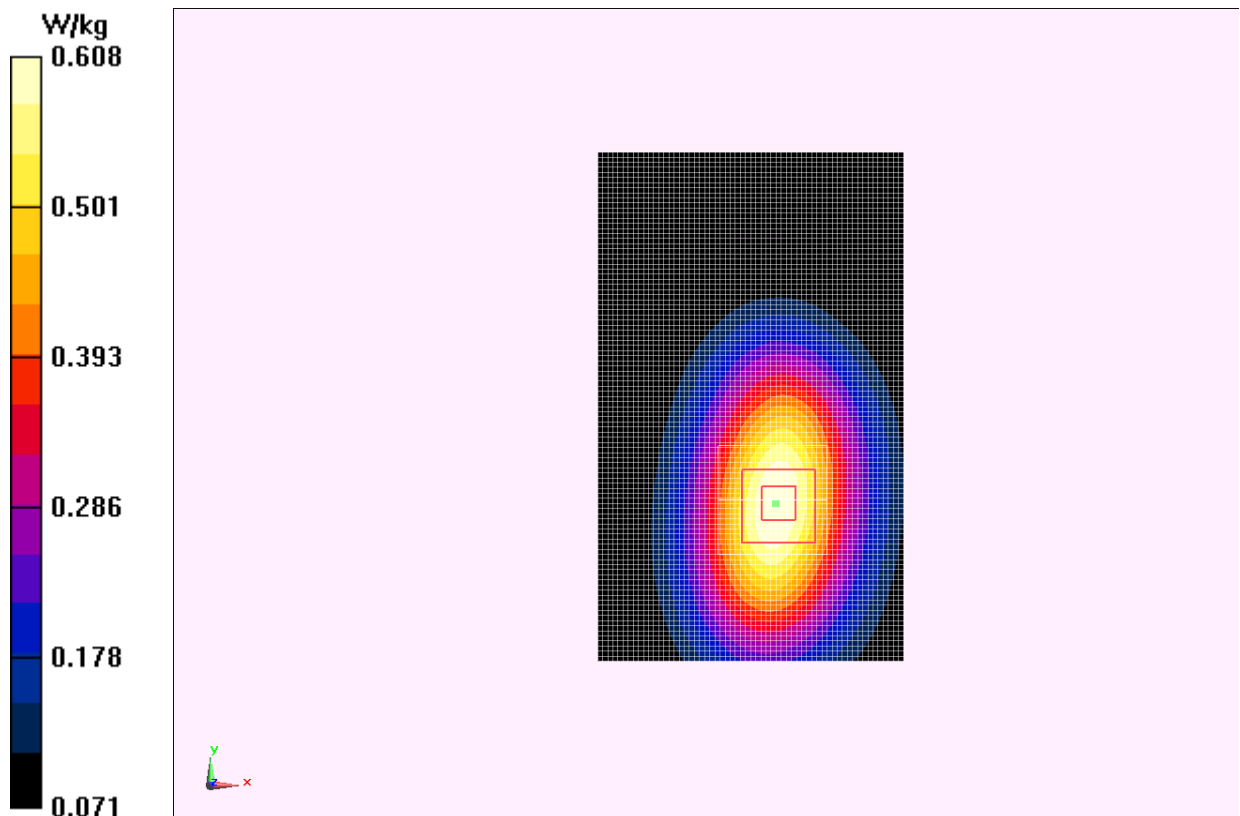


Fig. 64 WCDMA 850 CH4182

WCDMA 850 Body Bottom Side Middle

Date: 2013-1-19

Electronics: DAE4 Sn771

Medium: Body 850 MHz

Medium parameters used (interpolated): $f = 836.4$ MHz; $\sigma = 0.989$ mho/m; $\epsilon_r = 55.57$; $\rho = 1000$ kg/m³

Ambient Temperature: 22.4°C Liquid Temperature: 21.9°C

Communication System: WCDMA; Frequency: 836.4 MHz; Duty Cycle: 1:1

Probe: ES3DV3 - SN3149 ConvF(6.14, 6.14, 6.14)

Bottom Side Middle/Area Scan (61x101x1): Measurement grid: dx=10 mm, dy=10 mm

Maximum value of SAR (interpolated) = 0.109 W/kg

Bottom Side Middle/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 8.134 V/m; Power Drift = -0.11 dB

Peak SAR (extrapolated) = 0.161 W/kg

SAR(1 g) = 0.099 W/kg; SAR(10 g) = 0.059 W/kg

Maximum value of SAR (measured) = 0.110 W/kg

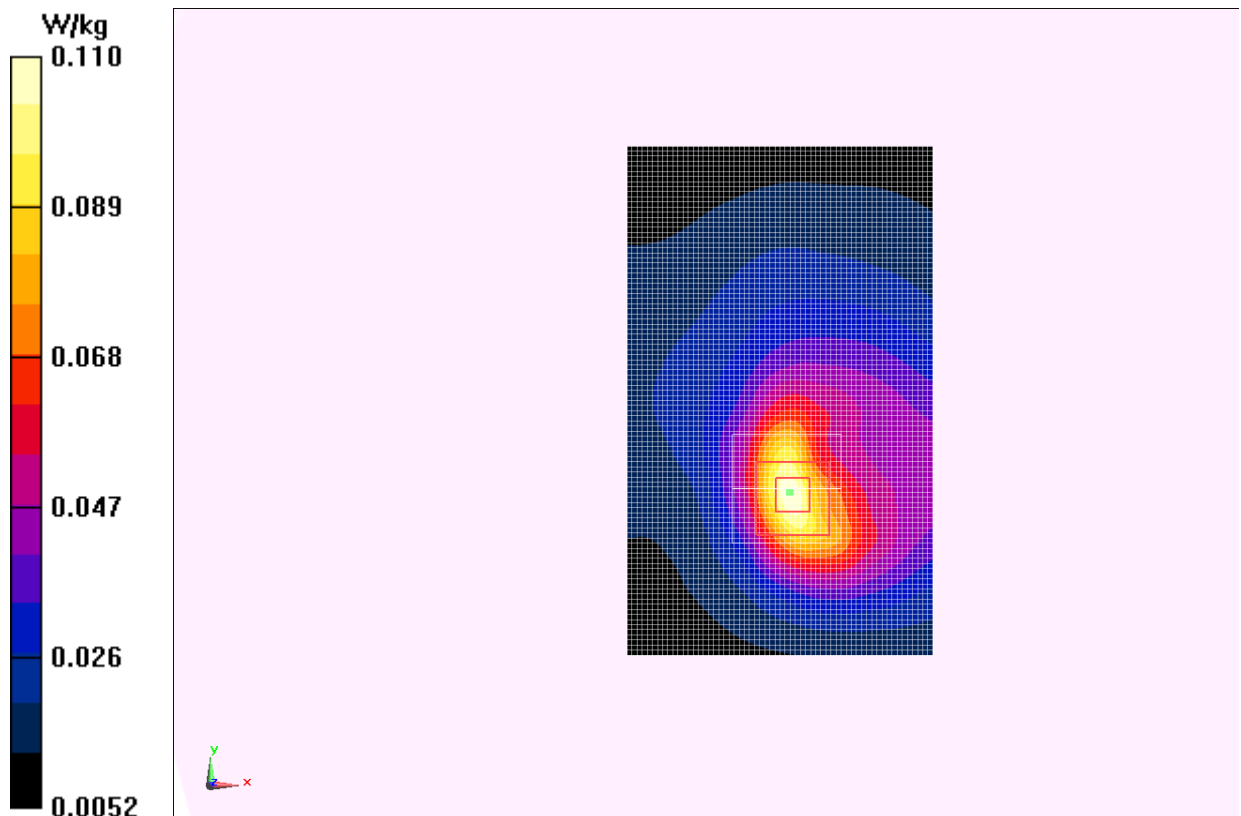


Fig. 65 WCDMA 850 CH4182

WCDMA 850 Body Towards Ground Middle with Headset CCB3160A11C2

Date: 2013-1-19

Electronics: DAE4 Sn771

Medium: Body 850 MHz

Medium parameters used (interpolated): $f = 836.4$ MHz; $\sigma = 0.989$ mho/m; $\epsilon_r = 55.57$; $\rho = 1000$ kg/m³

Ambient Temperature: 22.4°C Liquid Temperature: 21.9°C

Communication System: WCDMA; Frequency: 836.4 MHz; Duty Cycle: 1:1

Probe: ES3DV3 - SN3149 ConvF(6.14, 6.14, 6.14)

Toward Ground Middle/Area Scan (61x101x1): Measurement grid: dx=10 mm, dy=10 mm

Maximum value of SAR (interpolated) = 0.864 W/kg

Toward Ground Middle/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 23.344 V/m; Power Drift = -0.12 dB

Peak SAR (extrapolated) = 1.12 W/kg

SAR(1 g) = 0.713 W/kg; SAR(10 g) = 0.462 W/kg

Maximum value of SAR (measured) = 0.781 W/kg

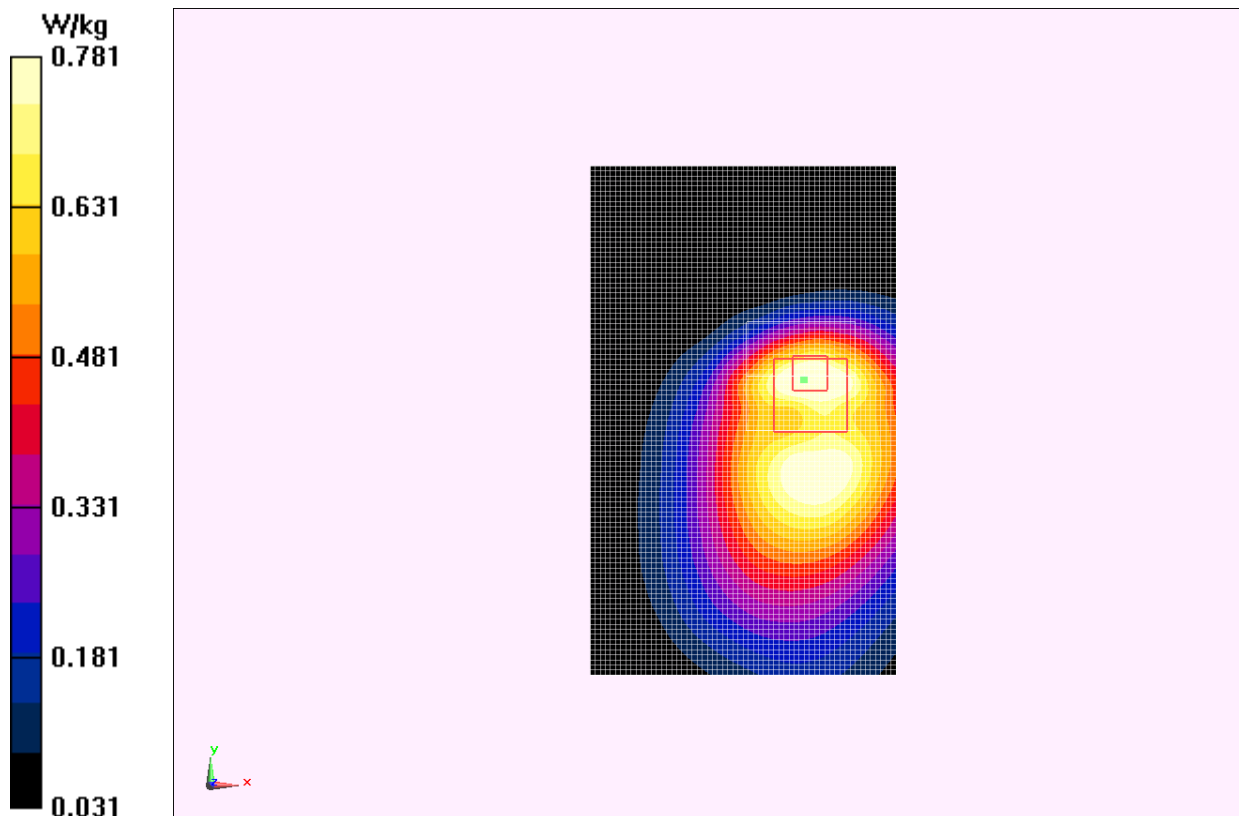


Fig. 66 WCDMA 850 CH4182

WCDMA 850 Body Towards Ground Middle with Headset CCB3160A11C4

Date: 2013-1-19

Electronics: DAE4 Sn771

Medium: Body 850 MHz

Medium parameters used (interpolated): $f = 836.4$ MHz; $\sigma = 0.989$ mho/m; $\epsilon_r = 55.57$; $\rho = 1000$ kg/m³

Ambient Temperature: 22.4°C Liquid Temperature: 21.9°C

Communication System: WCDMA; Frequency: 836.4 MHz; Duty Cycle: 1:1

Probe: ES3DV3 - SN3149 ConvF(6.14, 6.14, 6.14)

Toward Ground Middle/Area Scan (61x101x1): Measurement grid: dx=10 mm, dy=10 mm

Maximum value of SAR (interpolated) = 0.853 W/kg

Toward Ground Middle/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 23.054 V/m; Power Drift = -0.04 dB

Peak SAR (extrapolated) = 1.11 W/kg

SAR(1 g) = 0.707 W/kg; SAR(10 g) = 0.460 W/kg

Maximum value of SAR (measured) = 0.775 W/kg

Toward Ground Middle/Zoom Scan (7x7x7)/Cube 1: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 23.054 V/m; Power Drift = -0.04 dB

Peak SAR (extrapolated) = 0.976 W/kg

SAR(1 g) = 0.729 W/kg; SAR(10 g) = 0.526 W/kg

Maximum value of SAR (measured) = 0.772 W/kg

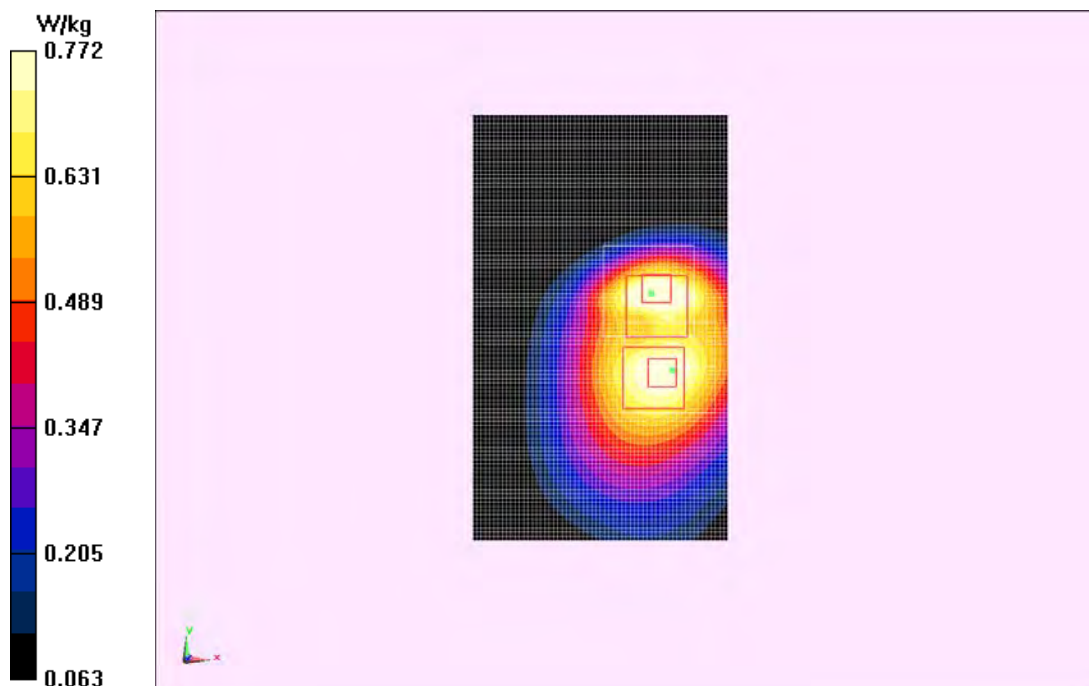


Fig. 67 WCDMA 850 CH4182

WCDMA 1900 Left Cheek High

Date: 2013-1-21

Electronics: DAE4 Sn771

Medium: Head 1900 MHz

Medium parameters used: $f = 1907.6$ MHz; $\sigma = 1.417$ mho/m; $\epsilon_r = 39.346$; $\rho = 1000$ kg/m³

Ambient Temperature: 22.3°C Liquid Temperature: 21.8°C

Communication System: WCDMA 1900 Frequency: 1907.6 MHz Duty Cycle: 1:1

Probe: ES3DV3 - SN3149 ConvF(5.19, 5.19, 5.19)

Cheek High/Area Scan (61x91x1): Measurement grid: dx=10 mm, dy=10 mm

Reference Value = 10.062 V/m; Power Drift = -0.15 dB

Fast SAR: SAR(1 g) = 0.604 mW/g; SAR(10 g) = 0.354 mW/g

Maximum value of SAR (interpolated) = 0.669 mW/g

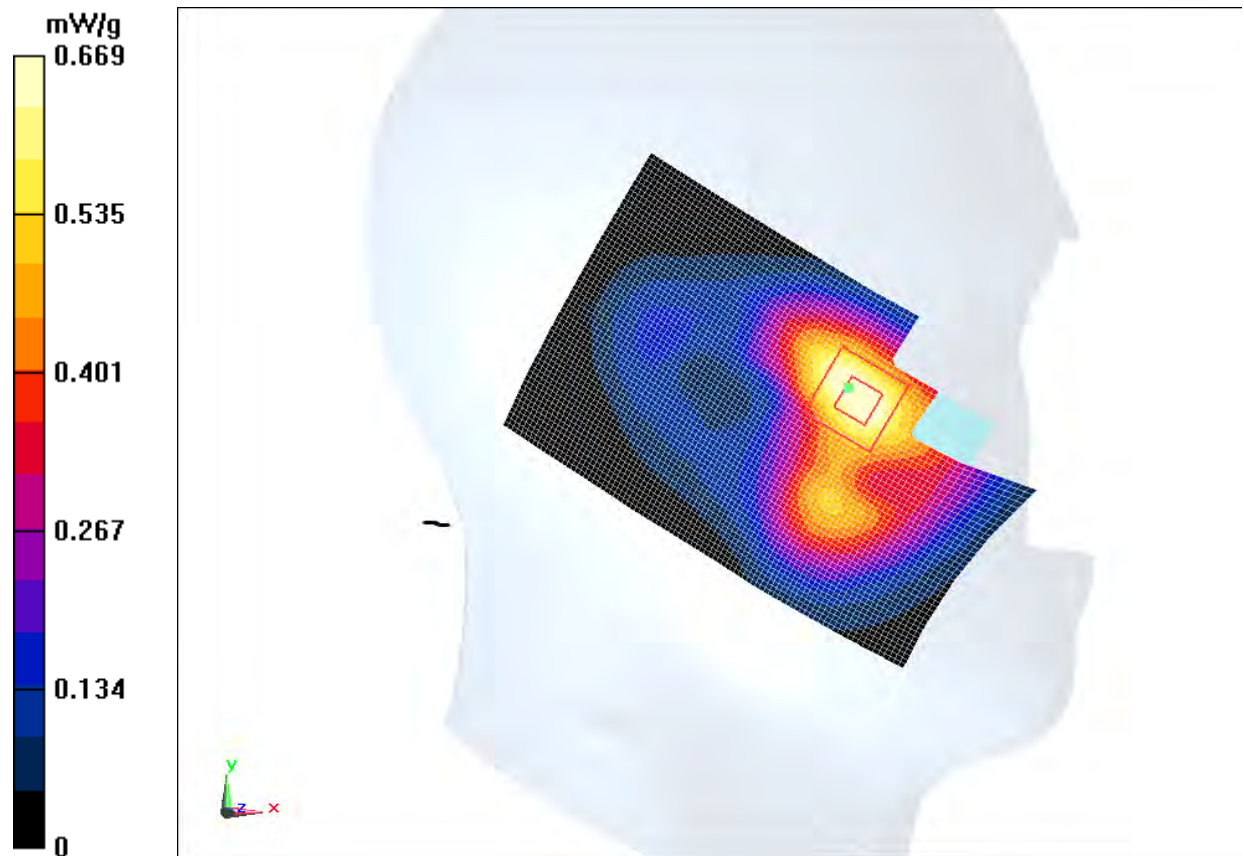


Fig. 68 WCDMA1900 CH9538

WCDMA 1900 Left Cheek Middle

Date: 2013-1-21

Electronics: DAE4 Sn771

Medium: Head GSM1900

Medium parameters used: $f = 1880$ MHz; $\sigma = 1.391$ mho/m; $\epsilon_r = 39.448$; $\rho = 1000$ kg/m³

Ambient Temperature: 22.3°C Liquid Temperature: 21.8°C

Communication System: WCDMA 1900 Frequency: 1880 MHz Duty Cycle: 1:1

Probe: ES3DV3 - SN3149 ConvF(5.19, 5.19, 5.19)

Cheek Middle/Area Scan (61x91x1): Measurement grid: dx=10 mm, dy=10 mm

Reference Value = 9.672 V/m; Power Drift = 0.02 dB

Fast SAR: SAR(1 g) = 0.479 mW/g; SAR(10 g) = 0.280 mW/g

Maximum value of SAR (interpolated) = 0.531 mW/g

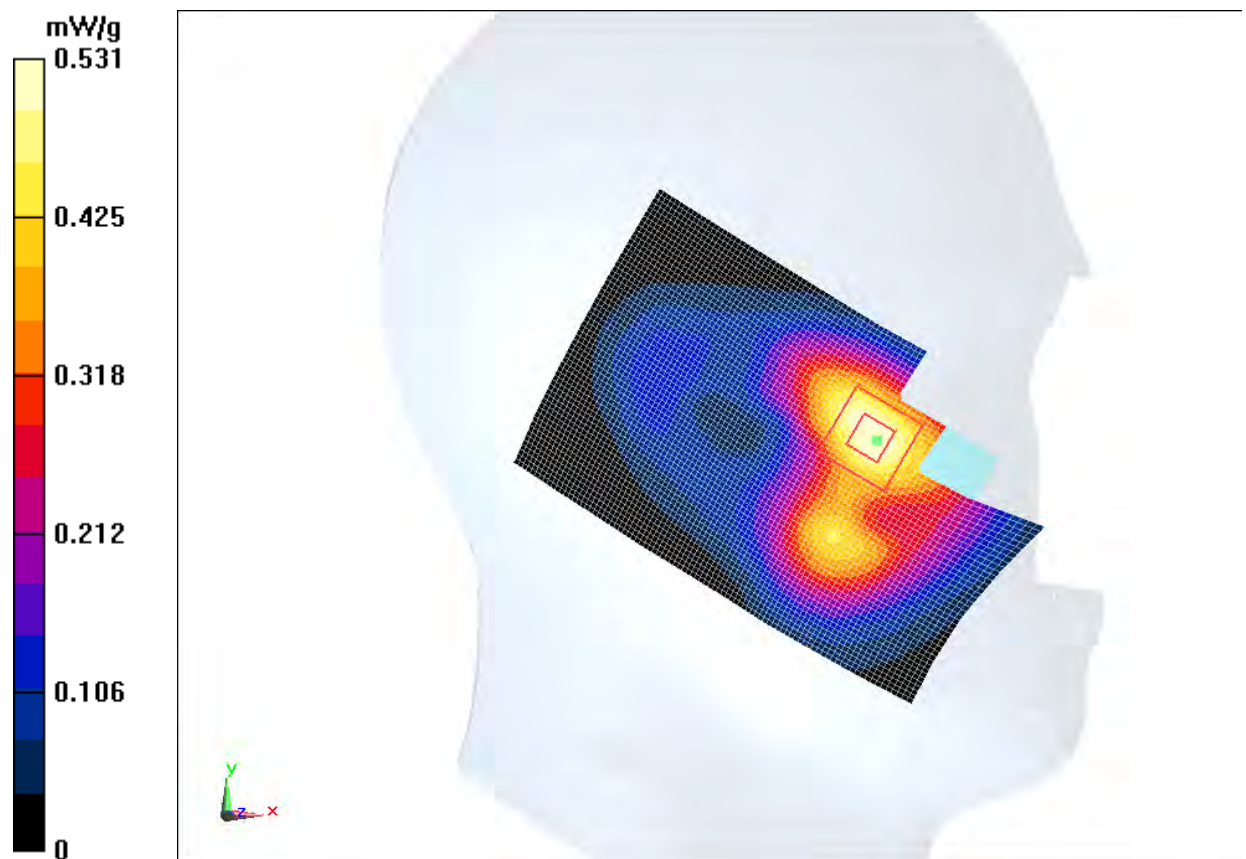


Fig. 69 WCDMA1900 CH9400

WCDMA 1900 Left Cheek Low

Date: 2013-1-21

Electronics: DAE4 Sn771

Medium: Head 1900 MHz

Medium parameters used (interpolated): $f = 1852.4$ MHz; $\sigma = 1.363$ mho/m; $\epsilon_r = 39.547$; $\rho = 1000$ kg/m³

Ambient Temperature: 22.3°C Liquid Temperature: 21.8°C

Communication System: WCDMA 1900 Frequency: 1852.4 MHz Duty Cycle: 1:1

Probe: ES3DV3 - SN3149 ConvF(5.19, 5.19, 5.19)

Cheek Low/Area Scan (61x91x1): Measurement grid: dx=10 mm, dy=10 mm

Reference Value = 10.512 V/m; Power Drift = 0.05 dB

Fast SAR: SAR(1 g) = 0.559 mW/g; SAR(10 g) = 0.328 mW/g

Maximum value of SAR (interpolated) = 0.621 mW/g

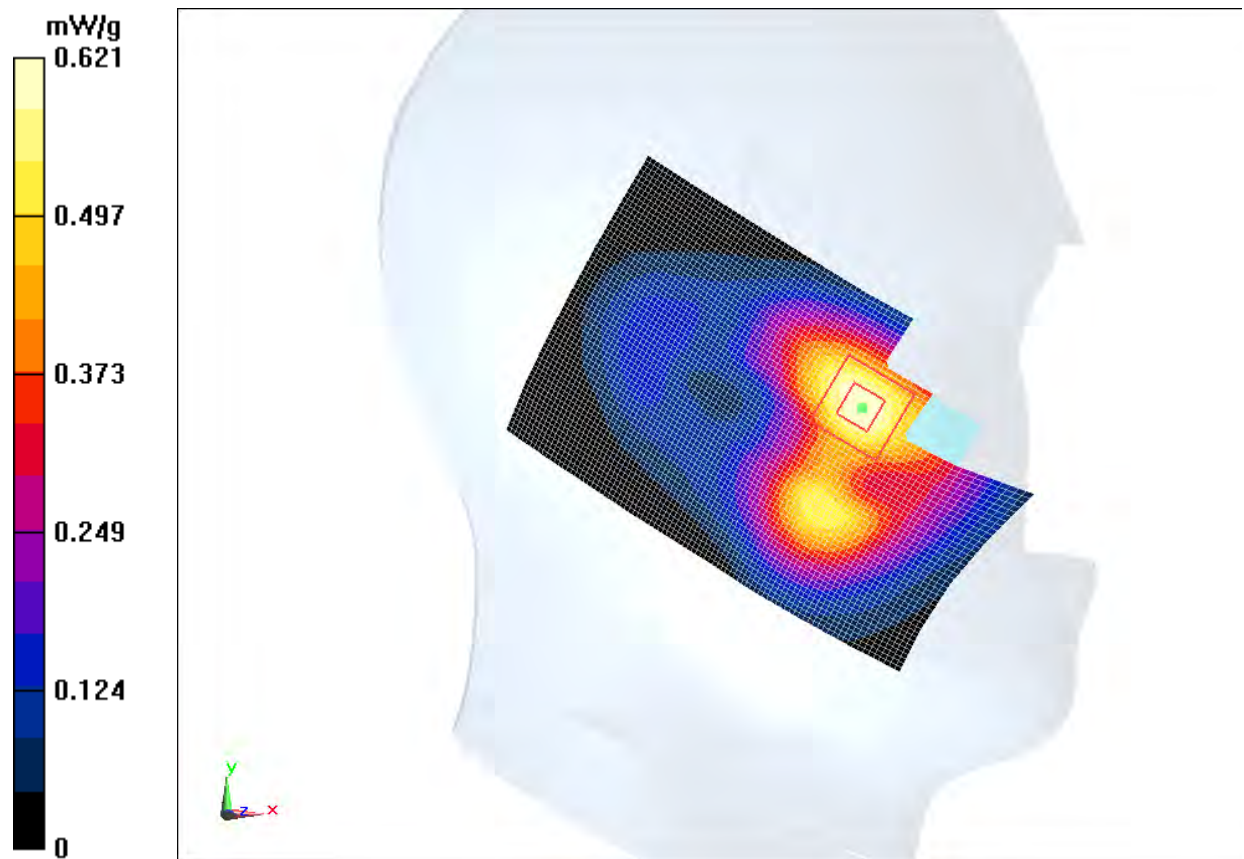


Fig. 70 WCDMA1900 CH9262

WCDMA 1900 Left Tilt High

Date: 2013-1-21

Electronics: DAE4 Sn771

Medium: Head 1900 MHz

Medium parameters used: $f = 1907.6$ MHz; $\sigma = 1.417$ mho/m; $\epsilon_r = 39.346$; $\rho = 1000$ kg/m³

Ambient Temperature: 22.3°C Liquid Temperature: 21.8°C

Communication System: WCDMA 1900 Frequency: 1907.6 MHz Duty Cycle: 1:1

Probe: ES3DV3 - SN3149 ConvF(5.19, 5.19, 5.19)

Tilt High/Area Scan (61x91x1): Measurement grid: dx=10 mm, dy=10 mm

Reference Value = 14.654 V/m; Power Drift = 0.04 dB

Fast SAR: SAR(1 g) = 0.283 mW/g; SAR(10 g) = 0.157 mW/g

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

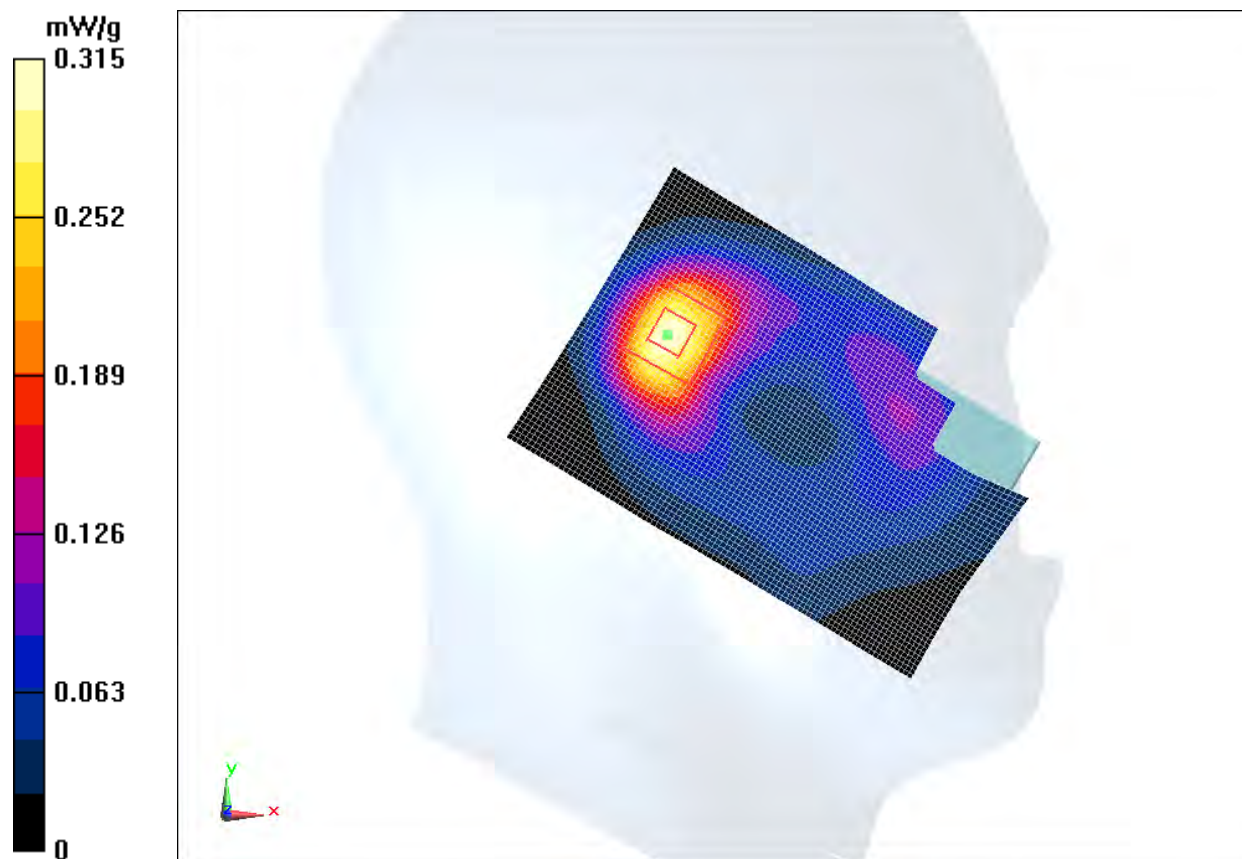


Fig. 71 WCDMA1900 CH9538

WCDMA 1900 Left Tilt Middle

Date: 2013-1-21

Electronics: DAE4 Sn771

Medium: Head GSM1900

Medium parameters used: $f = 1880$ MHz; $\sigma = 1.391$ mho/m; $\epsilon_r = 39.448$; $\rho = 1000$ kg/m³

Ambient Temperature: 22.3°C Liquid Temperature: 21.8°C

Communication System: WCDMA 1900 Frequency: 1880 MHz Duty Cycle: 1:1

Probe: ES3DV3 - SN3149 ConvF(5.19, 5.19, 5.19)

Tilt Middle/Area Scan (61x91x1): Measurement grid: dx=10 mm, dy=10 mm

Reference Value = 13.990 V/m; Power Drift = 0.01 dB

Fast SAR: SAR(1 g) = 0.243 mW/g; SAR(10 g) = 0.137 mW/g

Maximum value of SAR (interpolated) = 0.269 mW/g

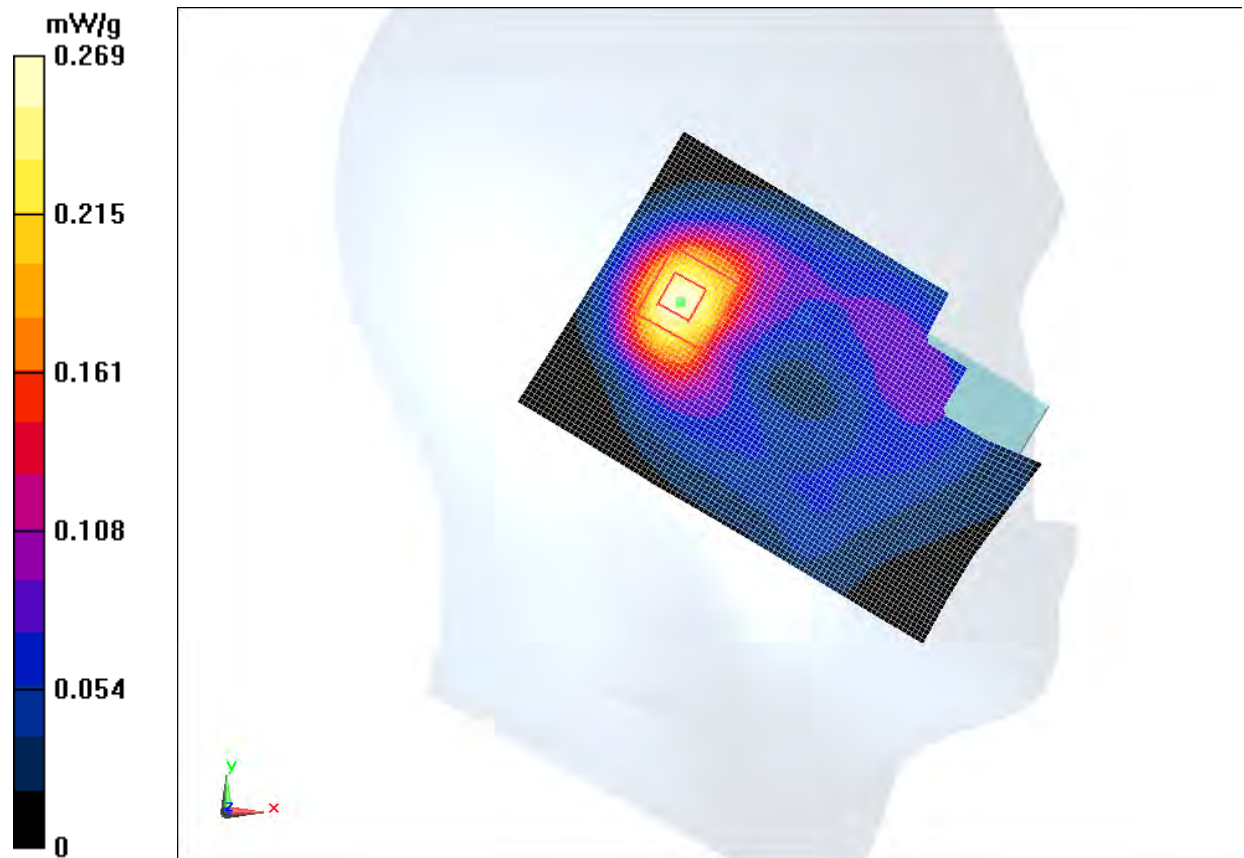


Fig. 72 WCDMA1900 CH9400

WCDMA 1900 Left Tilt Low

Date: 2013-1-21

Electronics: DAE4 Sn771

Medium: Head 1900 MHz

Medium parameters used (interpolated): $f = 1852.4$ MHz; $\sigma = 1.363$ mho/m; $\epsilon_r = 39.547$; $\rho = 1000$ kg/m³

Ambient Temperature: 22.3°C Liquid Temperature: 21.8°C

Communication System: WCDMA 1900 Frequency: 1852.4 MHz Duty Cycle: 1:1

Probe: ES3DV3 - SN3149 ConvF(5.19, 5.19, 5.19)

Tilt Low/Area Scan (61x91x1): Measurement grid: dx=10 mm, dy=10 mm

Reference Value = 15.326 V/m; Power Drift = -0.00 dB

Fast SAR: SAR(1 g) = 0.285 mW/g; SAR(10 g) = 0.162 mW/g

Maximum value of SAR (interpolated) = 0.316 mW/g

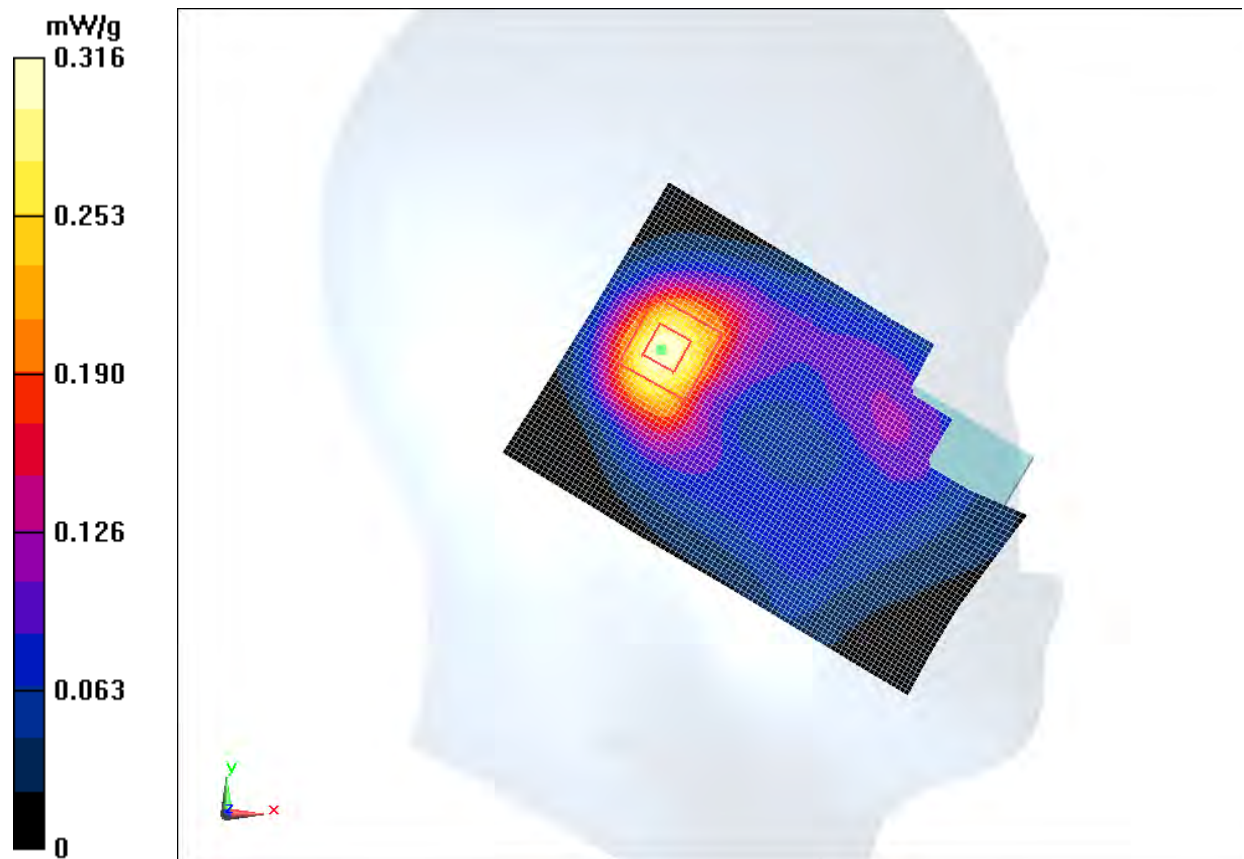


Fig. 73 WCDMA1900 CH9262

WCDMA 1900 Right Cheek High

Date: 2013-1-21

Electronics: DAE4 Sn771

Medium: Head 1900 MHz

Medium parameters used: $f = 1907.6$ MHz; $\sigma = 1.417$ mho/m; $\epsilon_r = 39.346$; $\rho = 1000$ kg/m³

Ambient Temperature: 22.3°C Liquid Temperature: 21.8°C

Communication System: WCDMA 1900 Frequency: 1907.6 MHz Duty Cycle: 1:1

Probe: ES3DV3 - SN3149 ConvF(5.19, 5.19, 5.19)

Cheek High/Area Scan (61x91x1): Measurement grid: dx=10 mm, dy=10 mm

Reference Value = 8.815 V/m; Power Drift = -0.12 dB

Fast SAR: SAR(1 g) = 0.939 mW/g; SAR(10 g) = 0.512 mW/g

Maximum value of SAR (interpolated) = 1.06 mW/g

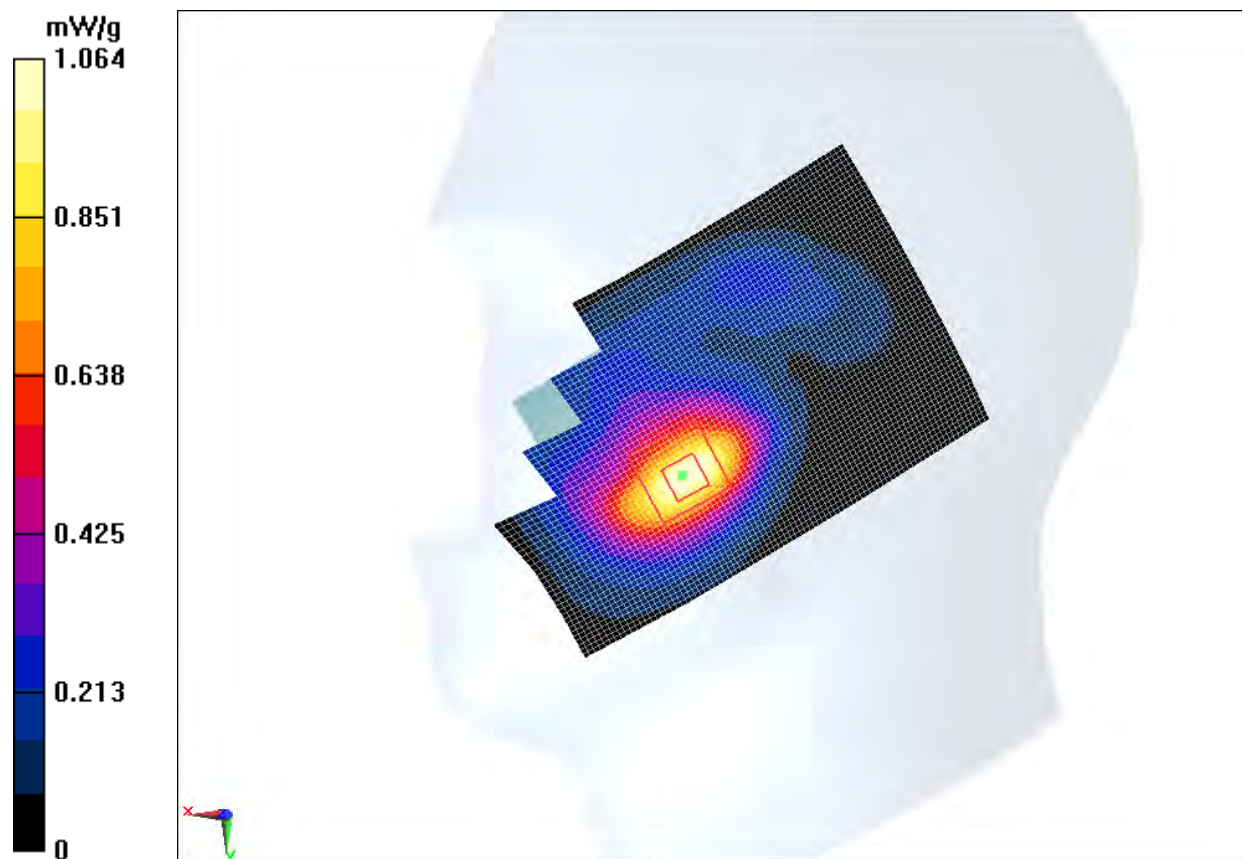


Fig. 74 WCDMA1900 CH9538

WCDMA 1900 Right Cheek Middle

Date: 2013-1-21

Electronics: DAE4 Sn771

Medium: Head GSM1900

Medium parameters used: $f = 1880$ MHz; $\sigma = 1.391$ mho/m; $\epsilon_r = 39.448$; $\rho = 1000$ kg/m³

Ambient Temperature: 22.3°C Liquid Temperature: 21.8°C

Communication System: WCDMA 1900 Frequency: 1880 MHz Duty Cycle: 1:1

Probe: ES3DV3 - SN3149 ConvF(5.19, 5.19, 5.19)

Cheek Middle/Area Scan (61x91x1): Measurement grid: dx=10 mm, dy=10 mm

Reference Value = 8.129 V/m; Power Drift = -0.06 dB

Fast SAR: SAR(1 g) = 0.868 mW/g; SAR(10 g) = 0.472 mW/g

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

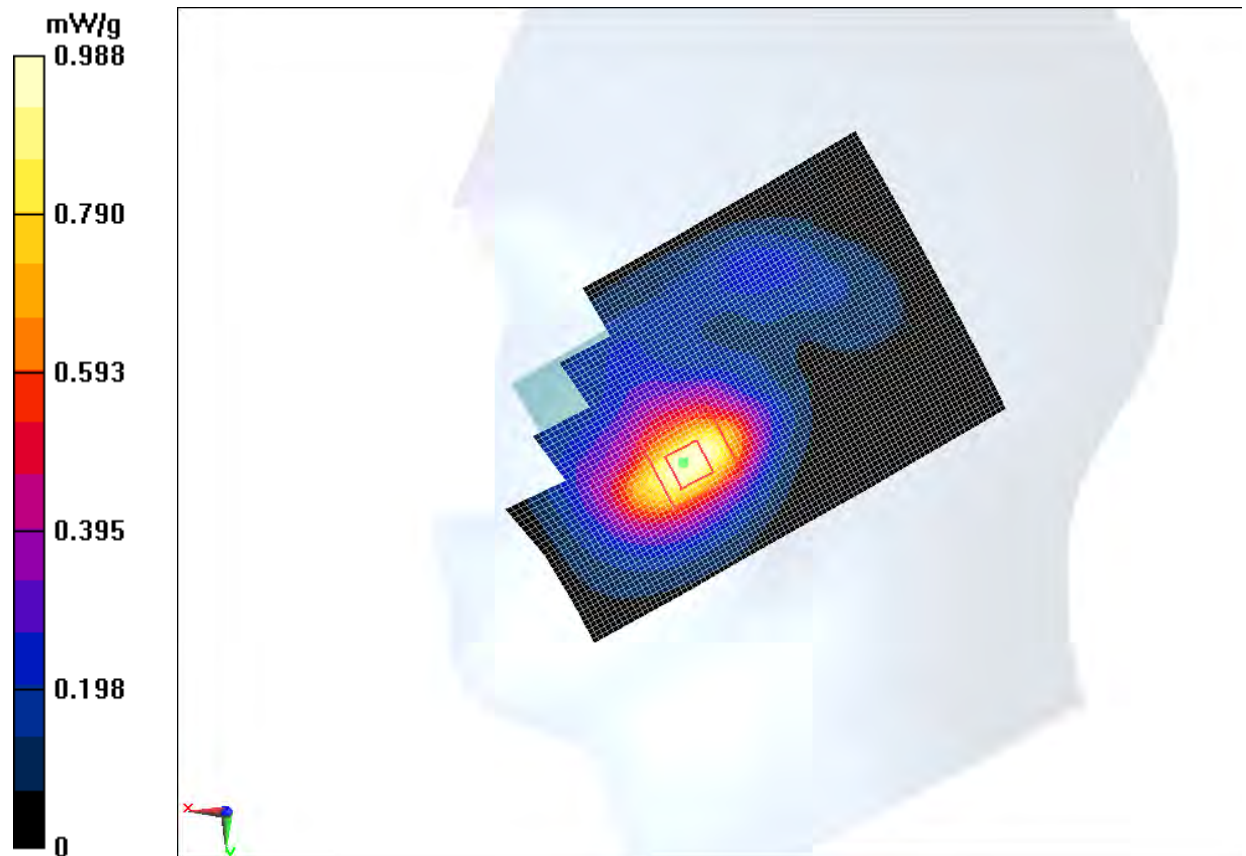


Fig. 75 WCDMA1900 CH9400

WCDMA 1900 Right Cheek Low

Date: 2013-1-21

Electronics: DAE4 Sn771

Medium: Head 1900 MHz

Medium parameters used (interpolated): $f = 1852.4$ MHz; $\sigma = 1.363$ mho/m; $\epsilon_r = 39.547$; $\rho = 1000$ kg/m³

Ambient Temperature: 22.3°C Liquid Temperature: 21.8°C

Communication System: WCDMA 1900 Frequency: 1852.4 MHz Duty Cycle: 1:1

Probe: ES3DV3 - SN3149 ConvF(5.19, 5.19, 5.19)

Cheek Low/Area Scan (61x91x1): Measurement grid: dx=10 mm, dy=10 mm

Maximum value of SAR (interpolated) = 1.14 mW/g

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

Reference Value = 8.233 V/m; Power Drift = 0.04 dB

Peak SAR (extrapolated) = 1.627 mW/g

SAR(1 g) = 1.03 mW/g; SAR(10 g) = 0.597 mW/g

Maximum value of SAR (measured) = 1.15 mW/g

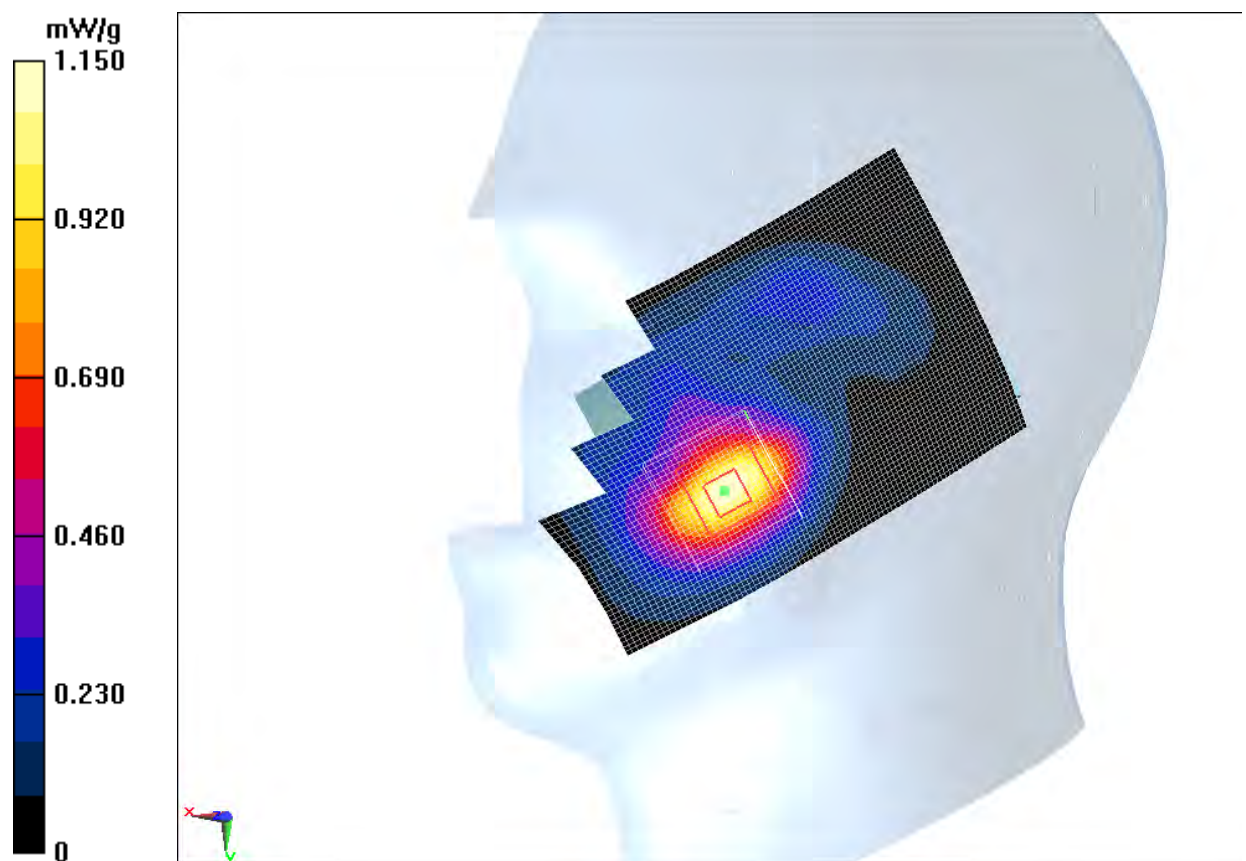


Fig. 76 WCDMA1900 CH9262

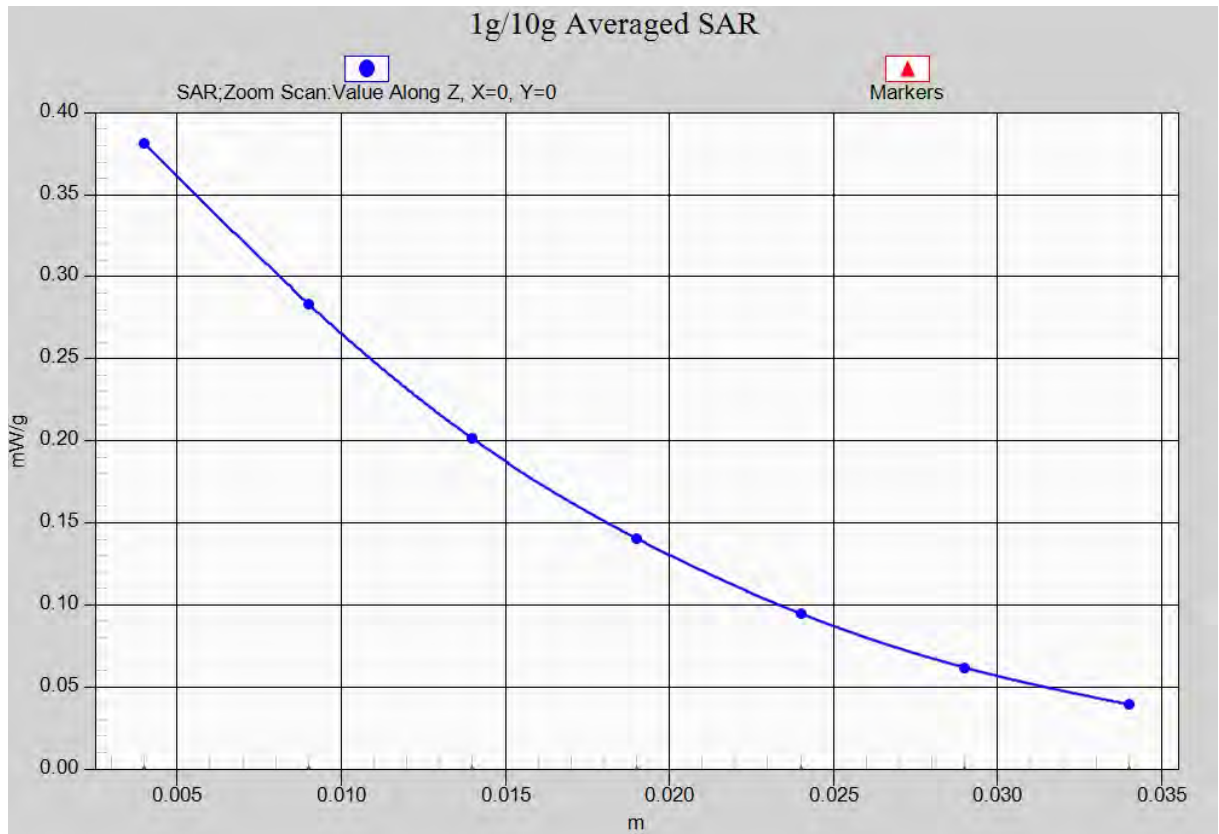


Fig. 76-1 Z-Scan at power reference point (WCDMA1900 CH9262)

WCDMA 1900 Right Tilt High

Date: 2013-1-21

Electronics: DAE4 Sn771

Medium: Head 1900 MHz

Medium parameters used: $f = 1907.6$ MHz; $\sigma = 1.417$ mho/m; $\epsilon_r = 39.346$; $\rho = 1000$ kg/m³

Ambient Temperature: 22.3°C Liquid Temperature: 21.8°C

Communication System: WCDMA 1900 Frequency: 1907.6 MHz Duty Cycle: 1:1

Probe: ES3DV3 - SN3149 ConvF(5.19, 5.19, 5.19)

Tilt High/Area Scan (61x91x1): Measurement grid: dx=10 mm, dy=10 mm

Reference Value = 13.072 V/m; Power Drift = 0.02 dB

Fast SAR: SAR(1 g) = 0.240 mW/g; SAR(10 g) = 0.133 mW/g

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

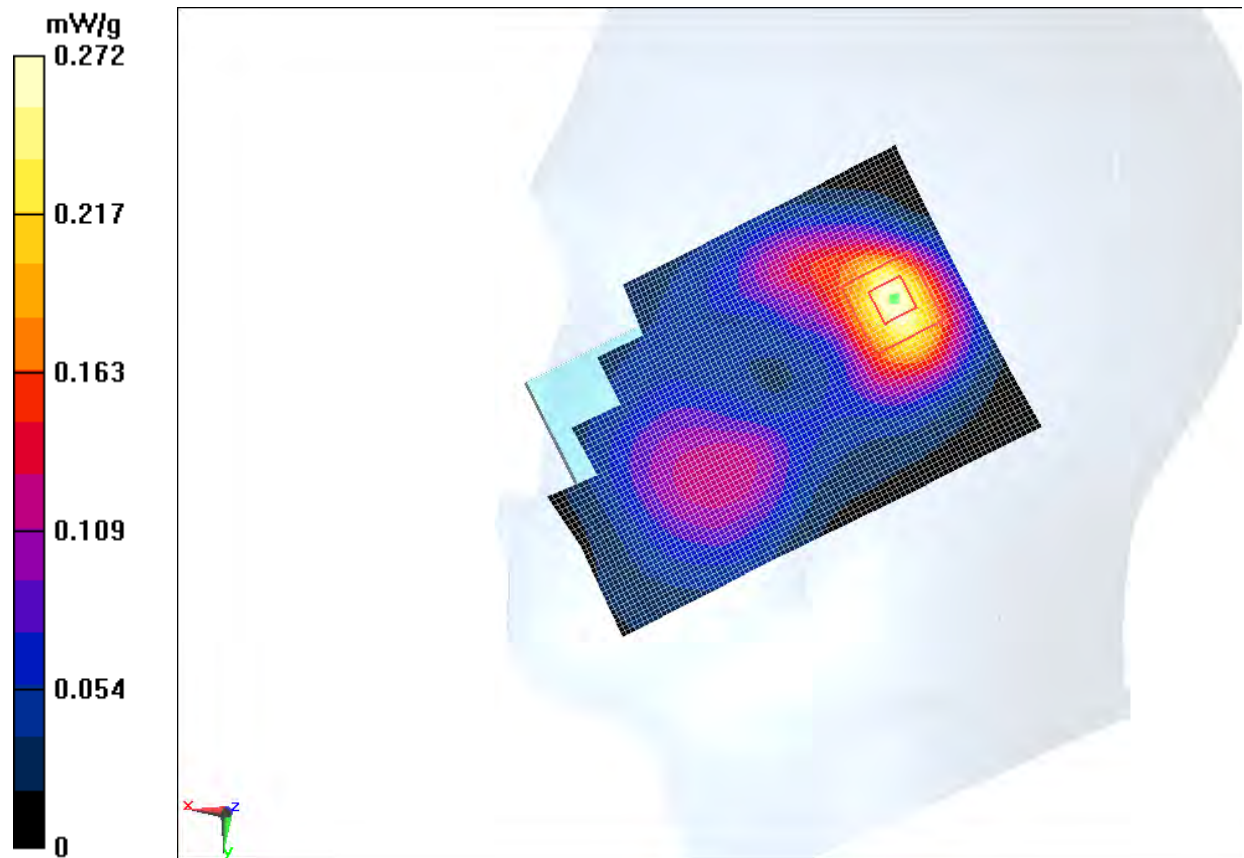


Fig. 77 WCDMA1900 CH9538

WCDMA 1900 Right Tilt Middle

Date: 2013-1-21

Electronics: DAE4 Sn771

Medium: Head GSM1900

Medium parameters used: $f = 1880$ MHz; $\sigma = 1.391$ mho/m; $\epsilon_r = 39.448$; $\rho = 1000$ kg/m³

Ambient Temperature: 22.3°C Liquid Temperature: 21.8°C

Communication System: WCDMA 1900 Frequency: 1880 MHz Duty Cycle: 1:1

Probe: ES3DV3 - SN3149 ConvF(5.19, 5.19, 5.19)

Tilt Middle/Area Scan (61x91x1): Measurement grid: dx=10 mm, dy=10 mm

Reference Value = 13.120 V/m; Power Drift = -0.04 dB

Fast SAR: SAR(1 g) = 0.238 mW/g; SAR(10 g) = 0.133 mW/g

Maximum value of SAR (interpolated) = 0.268 mW/g

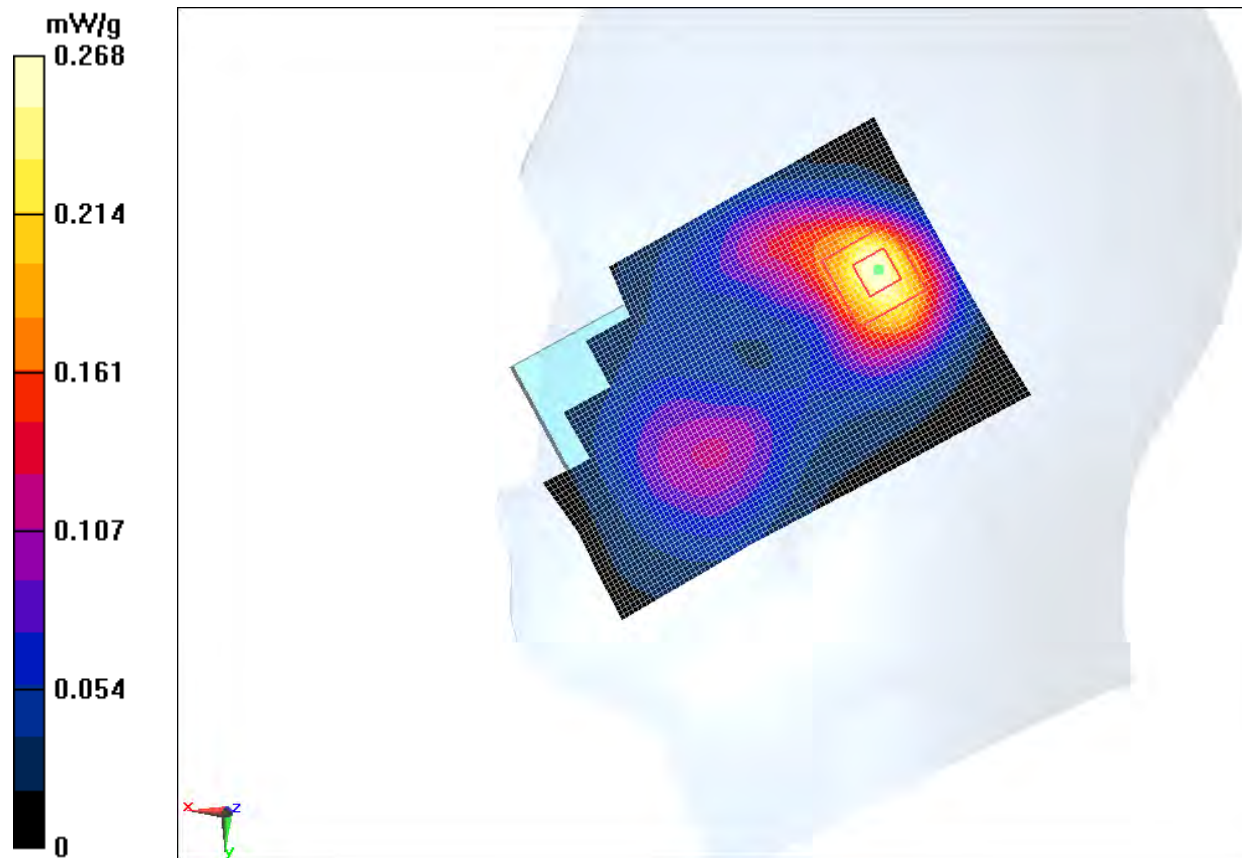


Fig. 78 WCDMA1900 CH9400

WCDMA 1900 Right Tilt Low

Date: 2013-1-21

Electronics: DAE4 Sn771

Medium: Head 1900 MHz

Medium parameters used (interpolated): $f = 1852.4$ MHz; $\sigma = 1.363$ mho/m; $\epsilon_r = 39.547$; $\rho = 1000$ kg/m³

Ambient Temperature: 22.3°C Liquid Temperature: 21.8°C

Communication System: WCDMA 1900 Frequency: 1852.4 MHz Duty Cycle: 1:1

Probe: ES3DV3 - SN3149 ConvF(5.19, 5.19, 5.19)

Tilt Low/Area Scan (61x91x1): Measurement grid: dx=10 mm, dy=10 mm

Reference Value = 14.089 V/m; Power Drift = -0.02 dB

Fast SAR: SAR(1 g) = 0.267 mW/g; SAR(10 g) = 0.151 mW/g

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

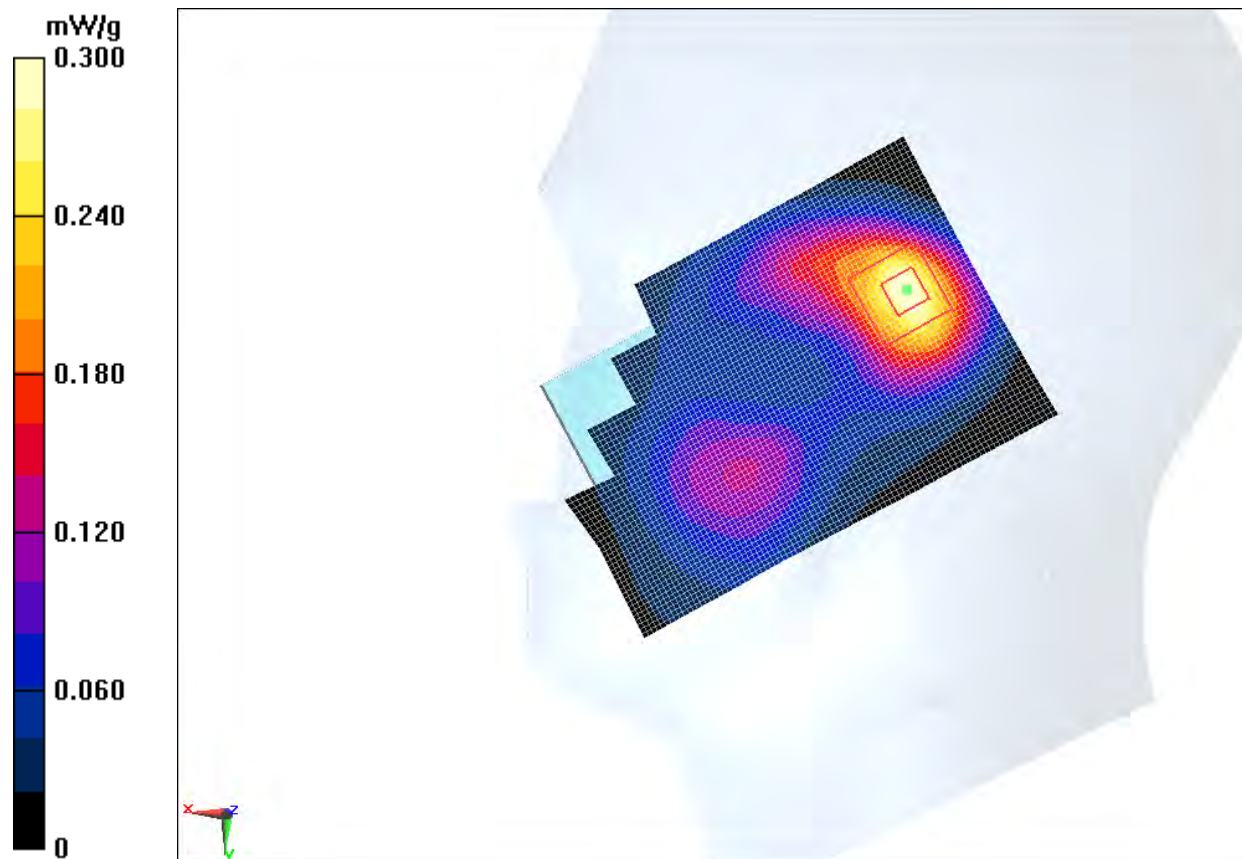


Fig. 79 WCDMA1900 CH9262

WCDMA 1900 Body Towards Phantom High

Date: 2013-1-21

Electronics: DAE4 Sn771

Medium: Body 1900 MHz

Medium parameters used: $f = 1907.6$ MHz; $\sigma = 1.519$ mho/m; $\epsilon_r = 52.218$; $\rho = 1000$ kg/m³

Ambient Temperature: 22.3°C Liquid Temperature: 21.8°C

Communication System: WCDMA 1900 Frequency: 1907.6 MHz Duty Cycle: 1:1

Probe: ES3DV3 - SN3149 ConvF(4.64, 4.64, 4.64)

Toward Phantom High/Area Scan (61x111x1): Measurement grid: dx=10 mm, dy=10 mm

Reference Value = 9.652 V/m; Power Drift = -0.10 dB

Fast SAR: SAR(1 g) = 0.762 mW/g; SAR(10 g) = 0.456 mW/g

Maximum value of SAR (interpolated) = 0.833 mW/g

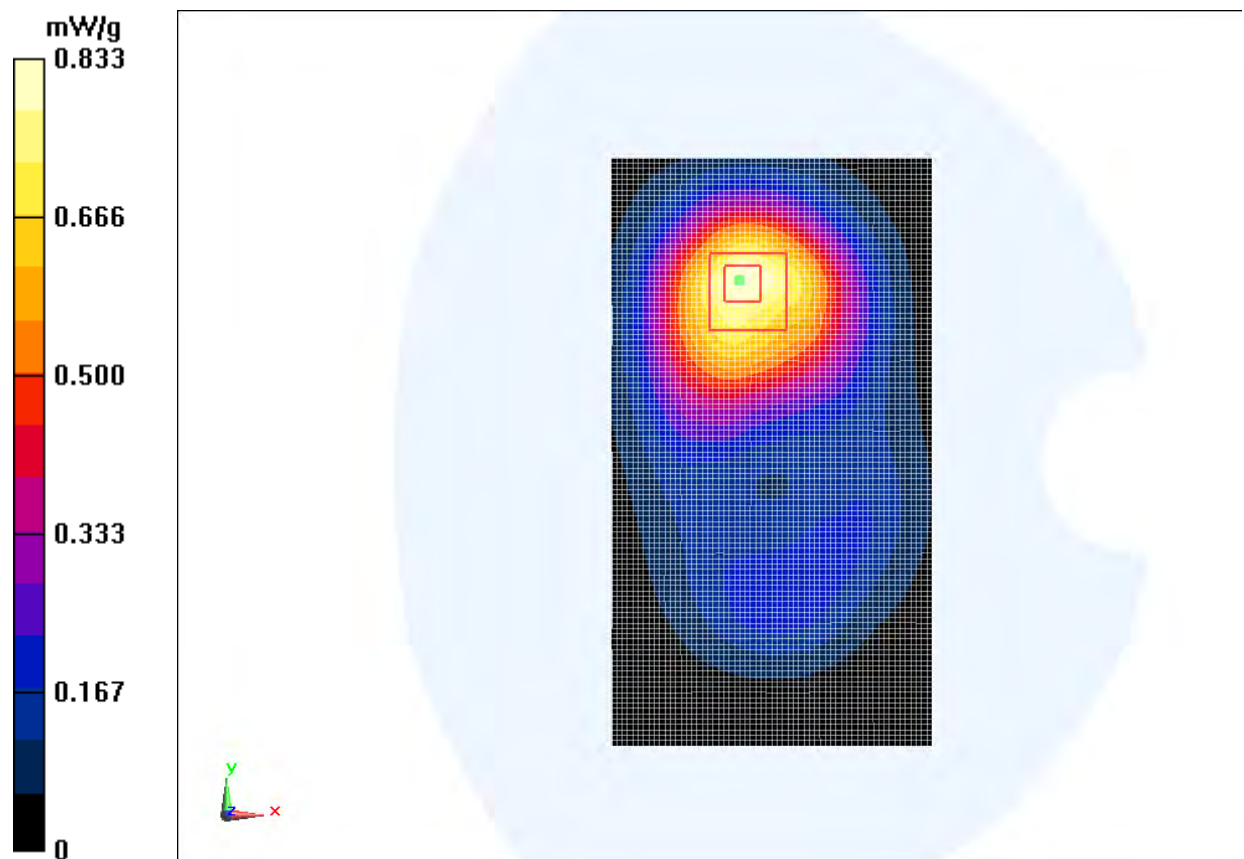


Fig. 80 WCDMA1900 CH9538

WCDMA 1900 Body Towards Ground High

Date: 2013-1-21

Electronics: DAE4 Sn771

Medium: Body 1900 MHz

Medium parameters used: $f = 1907.6$ MHz; $\sigma = 1.519$ mho/m; $\epsilon_r = 52.218$; $\rho = 1000$ kg/m³

Ambient Temperature: 22.3°C Liquid Temperature: 21.8°C

Communication System: WCDMA 1900 Frequency: 1907.6 MHz Duty Cycle: 1:1

Probe: ES3DV3 - SN3149 ConvF(4.64, 4.64, 4.64)

Toward Ground High/Area Scan (61x111x1): Measurement grid: dx=10mm, dy=10mm

Maximum value of SAR (interpolated) = 0.853 mW/g

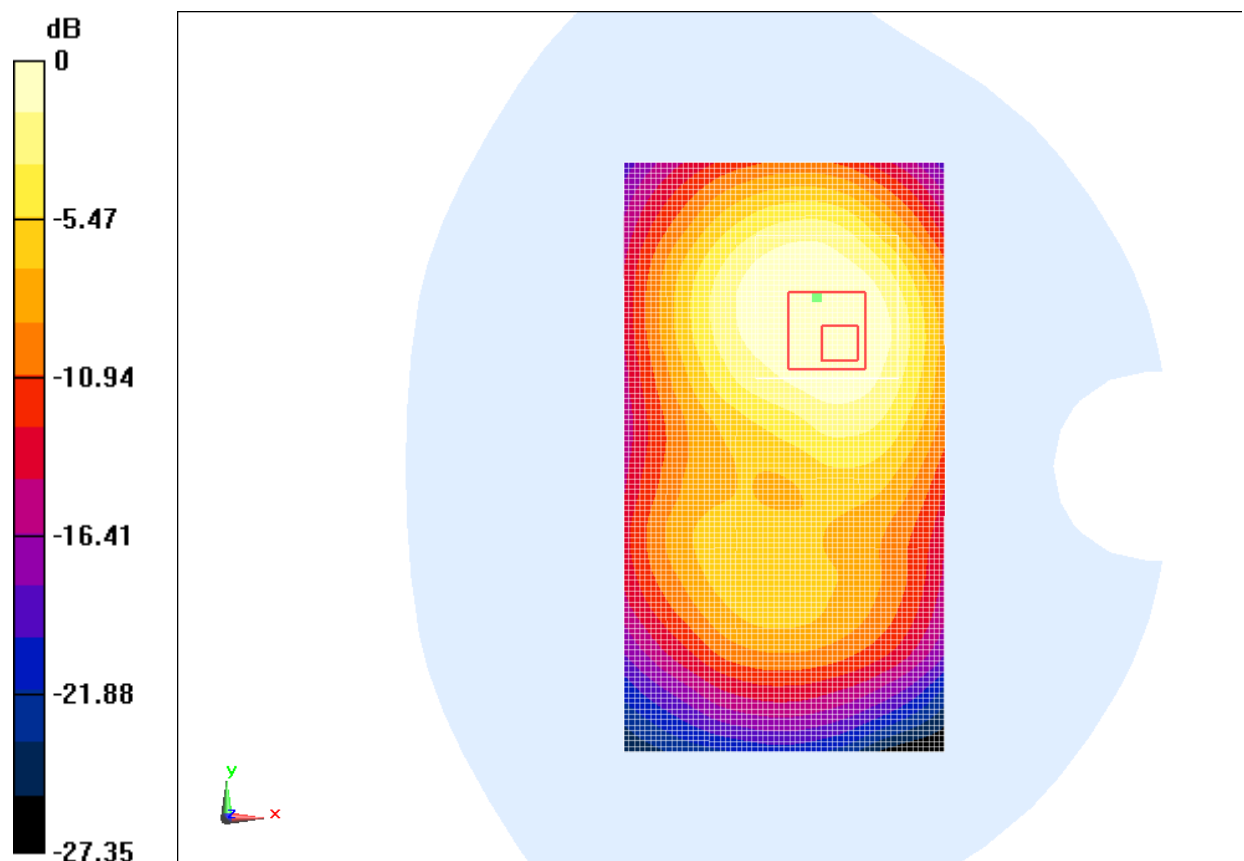
Toward Ground High/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 11.102 V/m; Power Drift = -0.01 dB

Peak SAR (extrapolated) = 1.208 mW/g

SAR(1 g) = 0.780 mW/g; SAR(10 g) = 0.497 mW/g

Maximum value of SAR (measured) = 0.845 mW/g



0 dB = 0.853 mW/g = -1.38 dB mW/g

Fig. 81 WCDMA1900 CH9538

WCDMA 1900 Body Left Side High

Date: 2013-1-21

Electronics: DAE4 Sn771

Medium: Body 1900 MHz

Medium parameters used: $f = 1907.6$ MHz; $\sigma = 1.519$ mho/m; $\epsilon_r = 52.218$; $\rho = 1000$ kg/m³

Ambient Temperature: 22.3°C Liquid Temperature: 21.8°C

Communication System: WCDMA 1900 Frequency: 1907.6 MHz Duty Cycle: 1:1

Probe: ES3DV3 - SN3149 ConvF(4.64, 4.64, 4.64)

Left Side High/Area Scan (61x111x1): Measurement grid: dx=10 mm, dy=10 mm

Reference Value = 8.249 V/m; Power Drift = -0.02 dB

Fast SAR: SAR(1 g) = 0.107 mW/g; SAR(10 g) = 0.061 mW/g

Maximum value of SAR (interpolated) = 0.121 mW/g

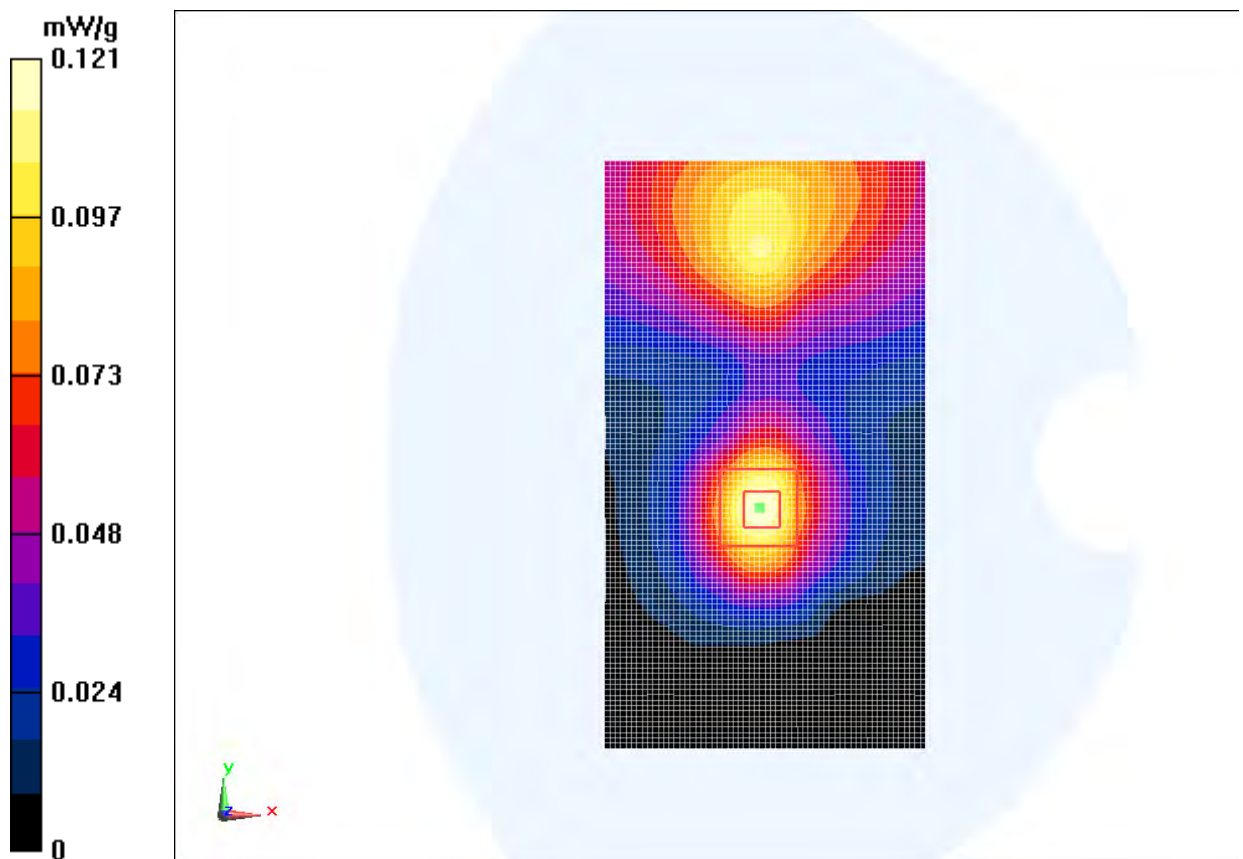


Fig. 82 WCDMA1900 CH9538

WCDMA 1900 Body Right Side High

Date: 2013-1-21

Electronics: DAE4 Sn771

Medium: Body 1900 MHz

Medium parameters used: $f = 1907.6$ MHz; $\sigma = 1.519$ mho/m; $\epsilon_r = 52.218$; $\rho = 1000$ kg/m³

Ambient Temperature: 22.3°C Liquid Temperature: 21.8°C

Communication System: WCDMA 1900 Frequency: 1907.6 MHz Duty Cycle: 1:1

Probe: ES3DV3 - SN3149 ConvF(4.64, 4.64, 4.64)

Right Side High/Area Scan (61x111x1): Measurement grid: dx=10 mm, dy=10 mm

Reference Value = 10.511 V/m; Power Drift = 0.03 dB

Fast SAR: SAR(1 g) = 0.184 mW/g; SAR(10 g) = 0.104 mW/g

Maximum value of SAR (interpolated) = 0.210 mW/g

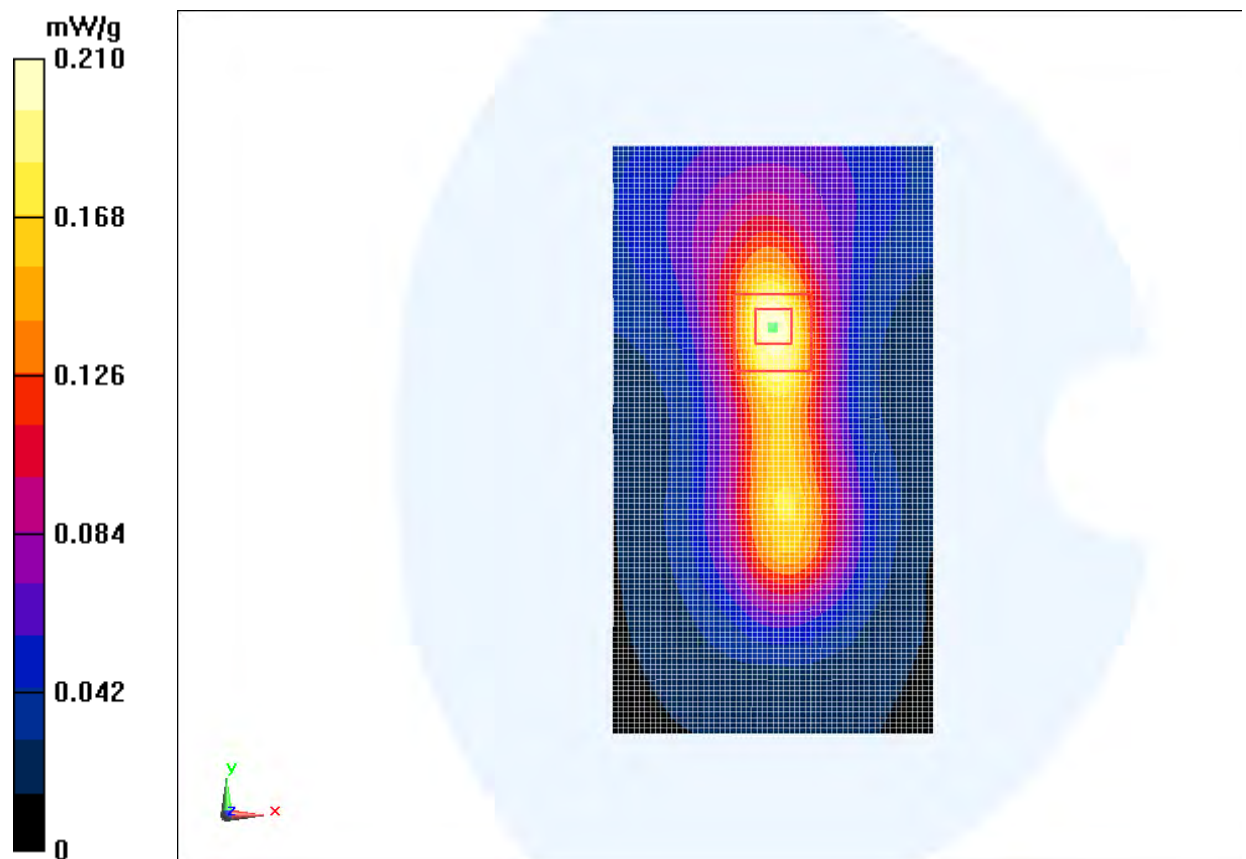


Fig. 83 WCDMA1900 CH9538

WCDMA 1900 Body Bottom Side High

Date: 2013-1-21

Electronics: DAE4 Sn771

Medium: Body 1900 MHz

Medium parameters used: $f = 1907.6$ MHz; $\sigma = 1.519$ mho/m; $\epsilon_r = 52.218$; $\rho = 1000$ kg/m³

Ambient Temperature: 22.3°C Liquid Temperature: 21.8°C

Communication System: WCDMA 1900 Frequency: 1907.6 MHz Duty Cycle: 1:1

Probe: ES3DV3 - SN3149 ConvF(4.64, 4.64, 4.64)

Bottom Side High/Area Scan (61x111x1): Measurement grid: dx=10 mm, dy=10 mm

Reference Value = 27.014 V/m; Power Drift = -0.03 dB

Fast SAR: SAR(1 g) = 0.903 mW/g; SAR(10 g) = 0.475 mW/g

Maximum value of SAR (interpolated) = 1.05 mW/g

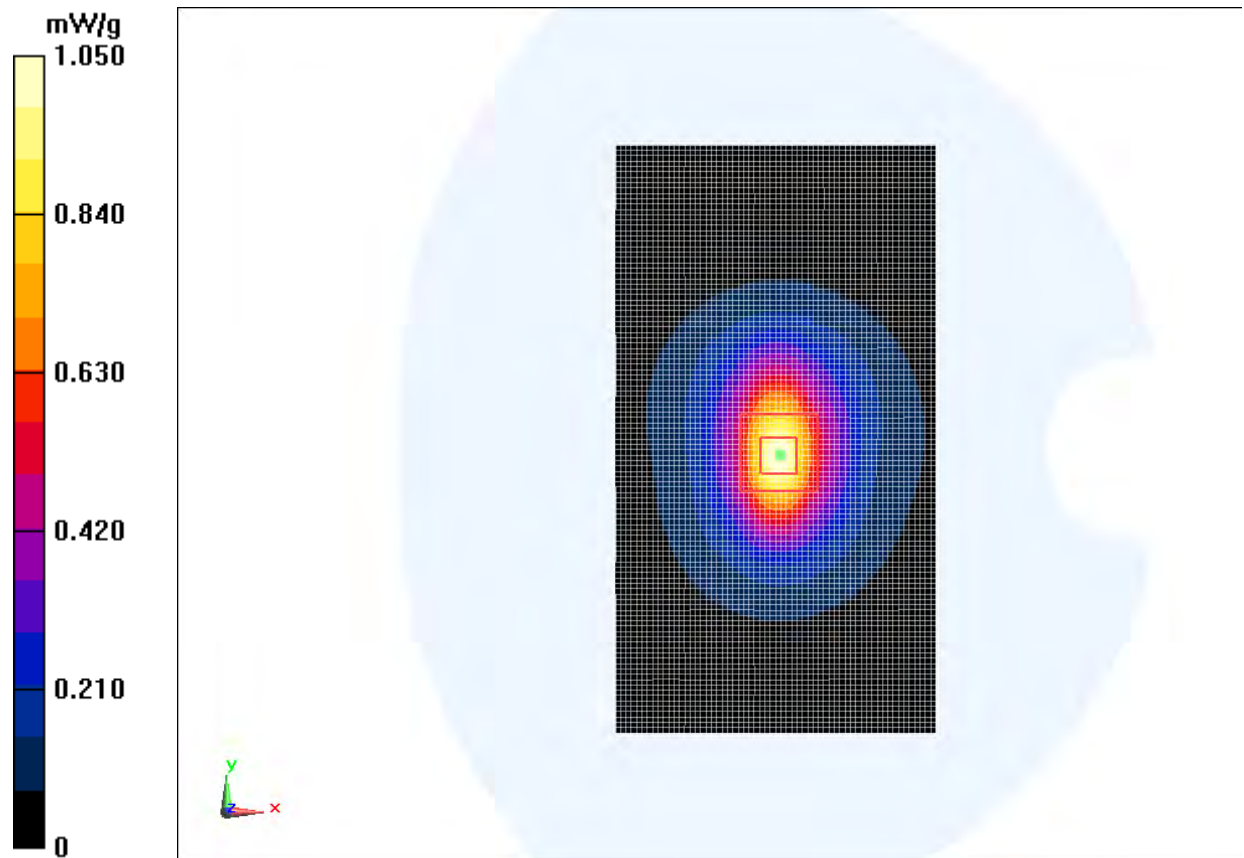


Fig. 84 WCDMA1900 CH9538

WCDMA 1900 Body Bottom Side Middle

Date: 2013-1-21

Electronics: DAE4 Sn771

Medium: Body 1900 MHz

Medium parameters used: $f = 1880$ MHz; $\sigma = 1.491$ mho/m; $\epsilon_r = 52.333$; $\rho = 1000$ kg/m³

Ambient Temperature: 22.3°C Liquid Temperature: 21.8°C

Communication System: WCDMA 1900 Frequency: 1880 MHz Duty Cycle: 1:1

Probe: ES3DV3 - SN3149 ConvF(4.64, 4.64, 4.64)

Bottom Side Middle/Area Scan (61x111x1): Measurement grid: dx=10 mm, dy=10 mm

Reference Value = 27.135 V/m; Power Drift = -0.05 dB

Fast SAR: SAR(1 g) = 0.893 mW/g; SAR(10 g) = 0.473 mW/g

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

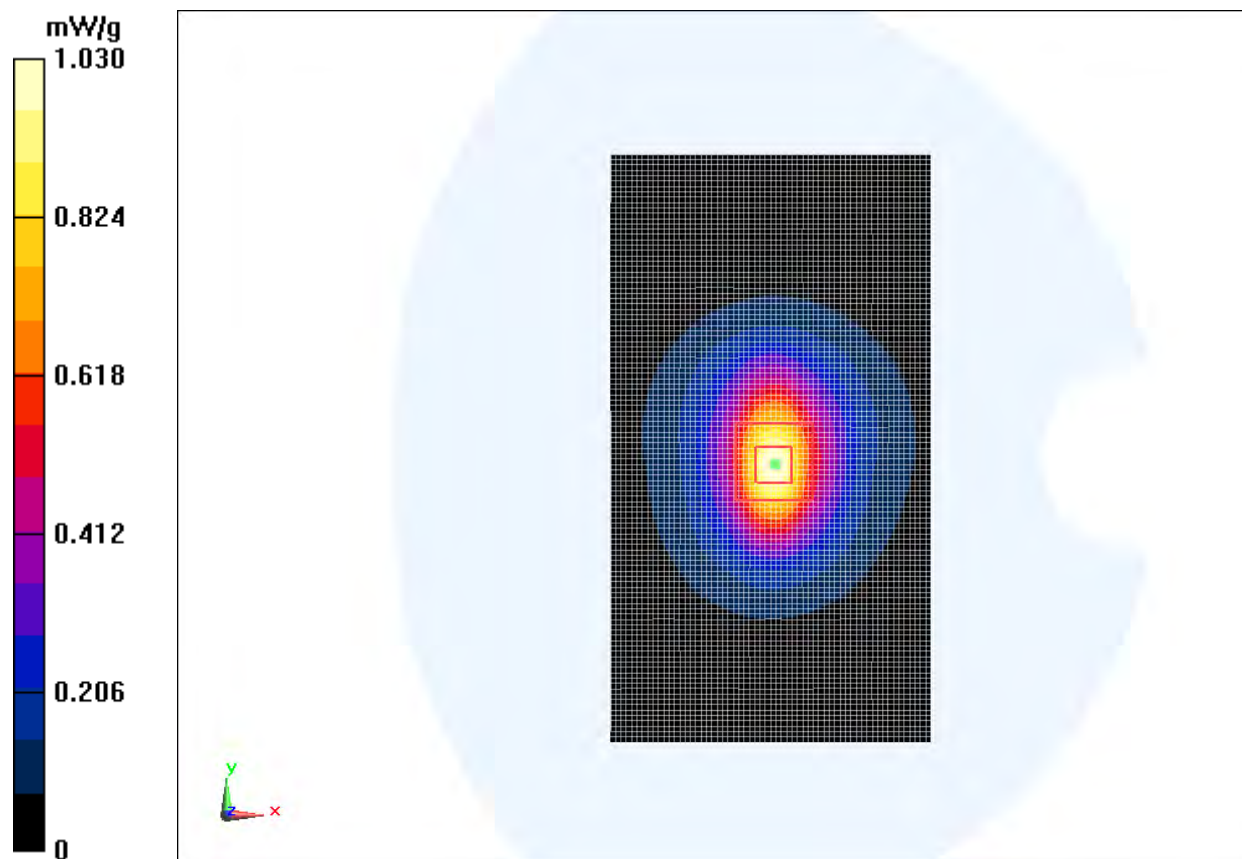


Fig. 85 WCDMA1900 CH9400

WCDMA 1900 Body Bottom Side Low

Date: 2013-1-21

Electronics: DAE4 Sn771

Medium: Body 1900 MHz

Medium parameters used (interpolated): $f = 1852.4$ MHz; $\sigma = 1.46$ mho/m; $\epsilon_r = 52.461$; $\rho = 1000$ kg/m³

Ambient Temperature: 22.3°C Liquid Temperature: 21.8°C

Communication System: WCDMA 1900 Frequency: 1852.4 MHz Duty Cycle: 1:1

Probe: ES3DV3 - SN3149 ConvF(4.64, 4.64, 4.64)

Bottom Side Low/Area Scan (61x111x1): Measurement grid: dx=10 mm, dy=10 mm

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

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

Reference Value = 28.472 V/m; Power Drift = 0.01 dB

Peak SAR (extrapolated) = 1.567 mW/g

SAR(1 g) = 0.990 mW/g; SAR(10 g) = 0.562 mW/g

Maximum value of SAR (measured) = 1.11 mW/g

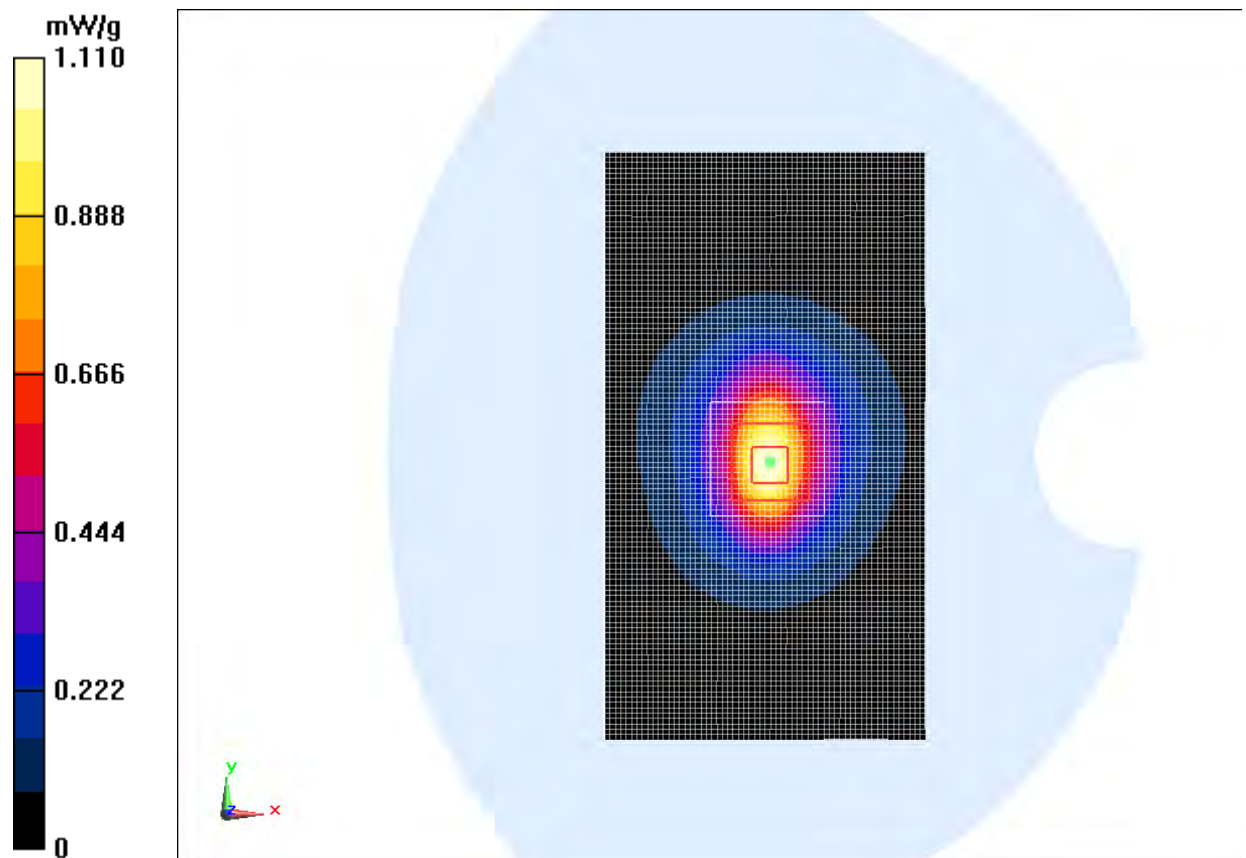


Fig. 86 WCDMA1900 CH9262

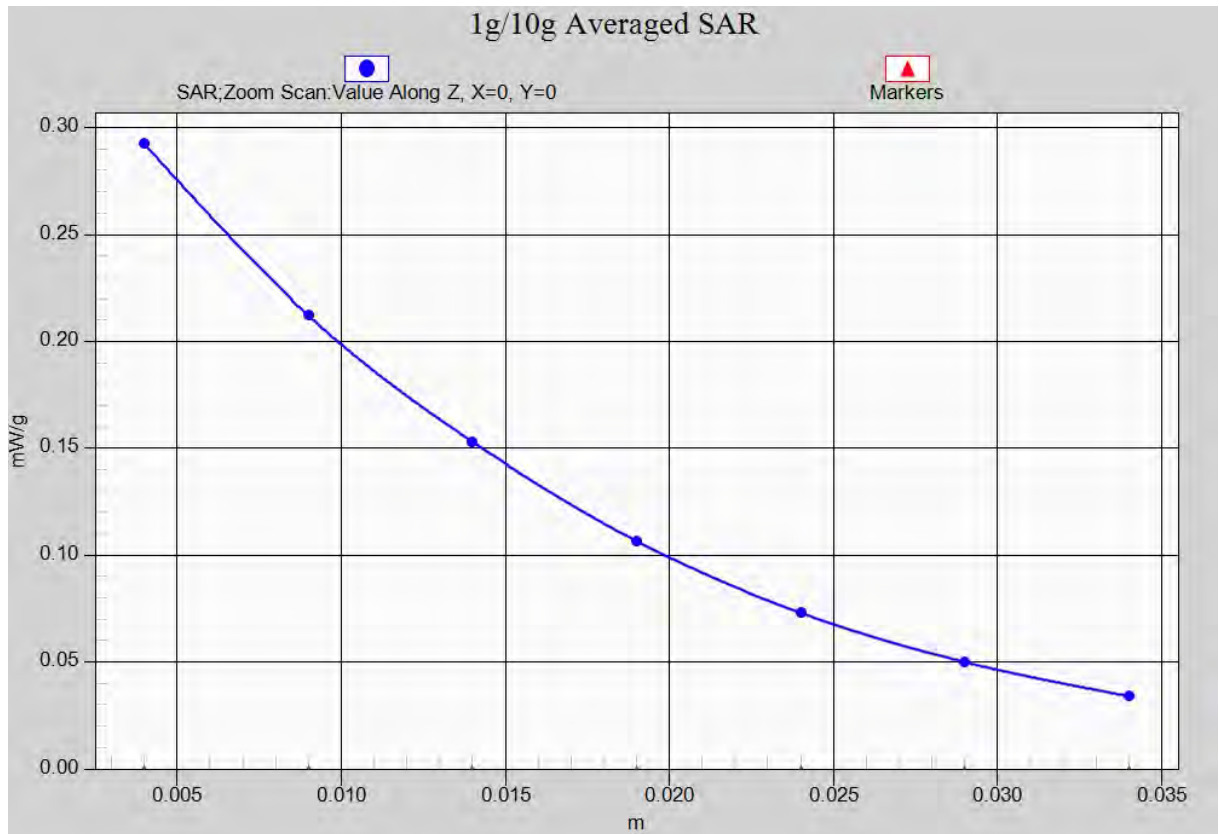


Fig. 86-1 Z-Scan at power reference point (WCDMA1900 CH9262)

WCDMA 1900 Body Bottom Side High with Headset CCB3160A11C2

Date: 2013-1-21

Electronics: DAE4 Sn771

Medium: Body 1900 MHz

Medium parameters used: $f = 1907.6$ MHz; $\sigma = 1.519$ mho/m; $\epsilon_r = 52.218$; $\rho = 1000$ kg/m³

Ambient Temperature: 22.3°C Liquid Temperature: 21.8°C

Communication System: WCDMA 1900 Frequency: 1907.6 MHz Duty Cycle: 1:1

Probe: ES3DV3 - SN3149 ConvF(4.64, 4.64, 4.64)

Bottom Side High/Area Scan (61x111x1): Measurement grid: dx=10 mm, dy=10 mm

Reference Value = 16.142 V/m; Power Drift = 0.01 dB

Fast SAR: SAR(1 g) = 0.806 mW/g; SAR(10 g) = 0.428 mW/g

Maximum value of SAR (interpolated) = 0.923 mW/g

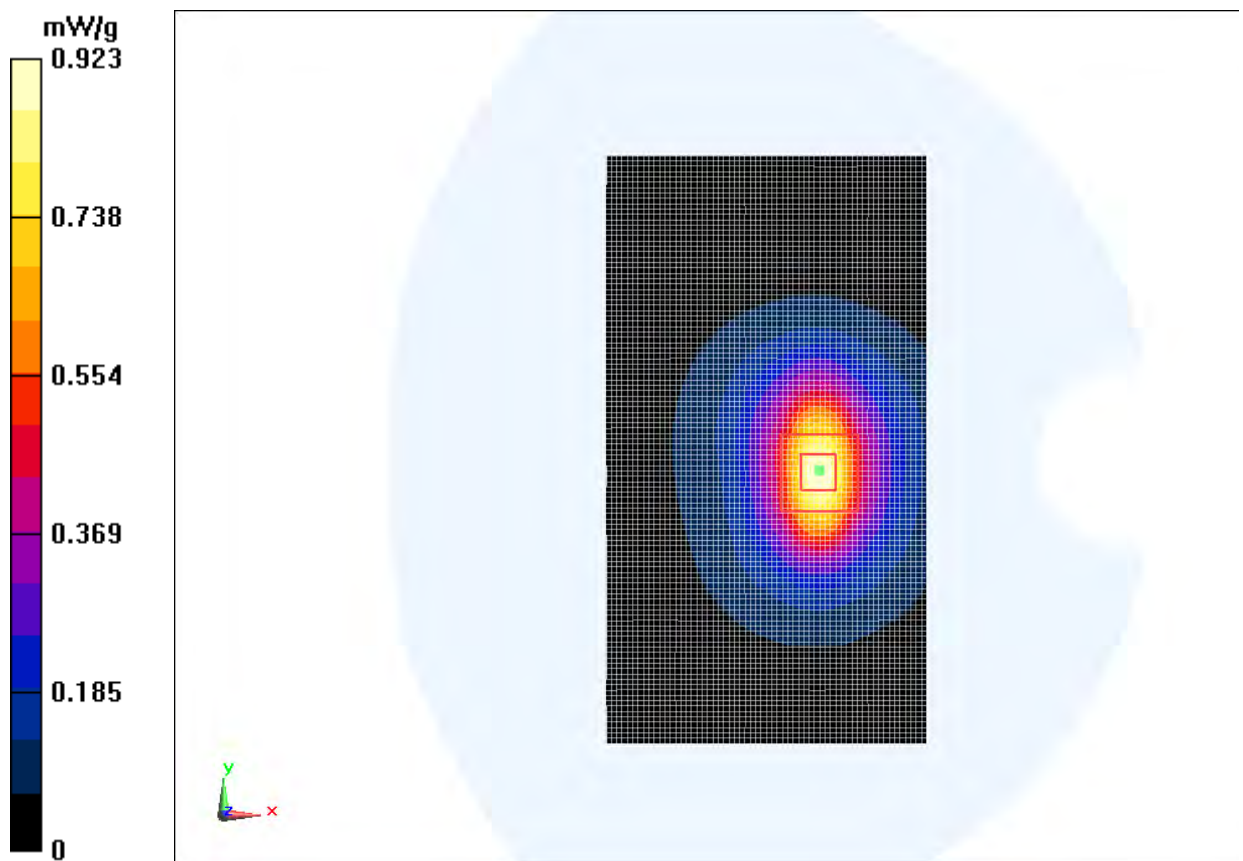


Fig. 87 WCDMA1900 CH9538

WCDMA 1900 Body Bottom Side Middle with Headset CCB3160A11C2

Date: 2013-1-21

Electronics: DAE4 Sn771

Medium: Body 1900 MHz

Medium parameters used: $f = 1880$ MHz; $\sigma = 1.491$ mho/m; $\epsilon_r = 52.333$; $\rho = 1000$ kg/m³

Ambient Temperature: 22.3°C Liquid Temperature: 21.8°C

Communication System: WCDMA 1900 Frequency: 1880 MHz Duty Cycle: 1:1

Probe: ES3DV3 - SN3149 ConvF(4.64, 4.64, 4.64)

Bottom Side Middle/Area Scan (61x111x1): Measurement grid: dx=10 mm, dy=10 mm

Reference Value = 16.494 V/m; Power Drift = 0.01 dB

Fast SAR: SAR(1 g) = 0.812 mW/g; SAR(10 g) = 0.435 mW/g

Maximum value of SAR (interpolated) = 0.926 mW/g

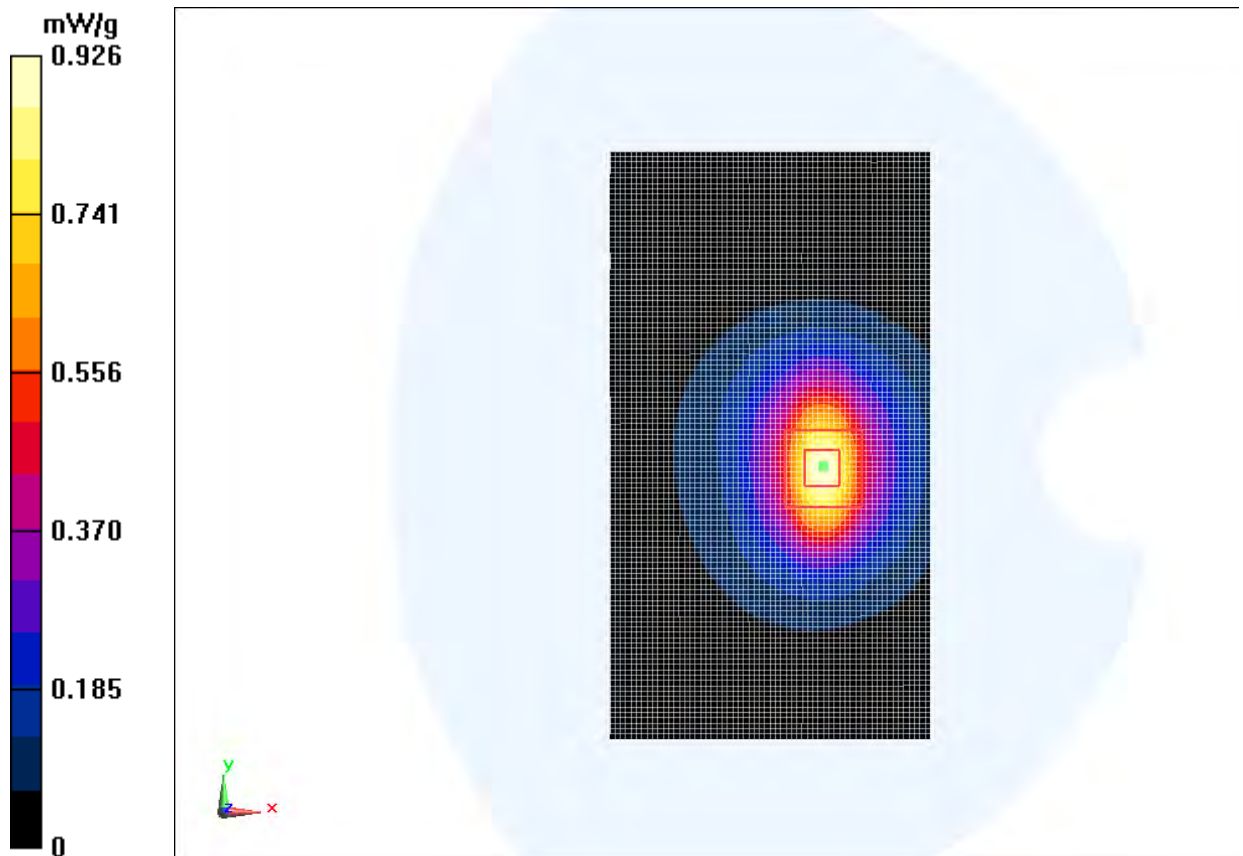


Fig. 88 WCDMA1900 CH9400

WCDMA 1900 Body Bottom Side Low with Headset CCB3160A11C2

Date: 2013-1-21

Electronics: DAE4 Sn771

Medium: Body 1900 MHz

Medium parameters used (interpolated): $f = 1852.4$ MHz; $\sigma = 1.46$ mho/m; $\epsilon_r = 52.461$; $\rho = 1000$ kg/m³

Ambient Temperature: 22.3°C Liquid Temperature: 21.8°C

Communication System: WCDMA 1900 Frequency: 1852.4 MHz Duty Cycle: 1:1

Probe: ES3DV3 - SN3149 ConvF(4.64, 4.64, 4.64)

Bottom Side Low/Area Scan (61x111x1): Measurement grid: dx=10 mm, dy=10 mm

Reference Value = 17.833 V/m; Power Drift = 0.01 dB

Fast SAR: SAR(1 g) = 0.926 mW/g; SAR(10 g) = 0.498 mW/g

Maximum value of SAR (interpolated) = 1.06 mW/g

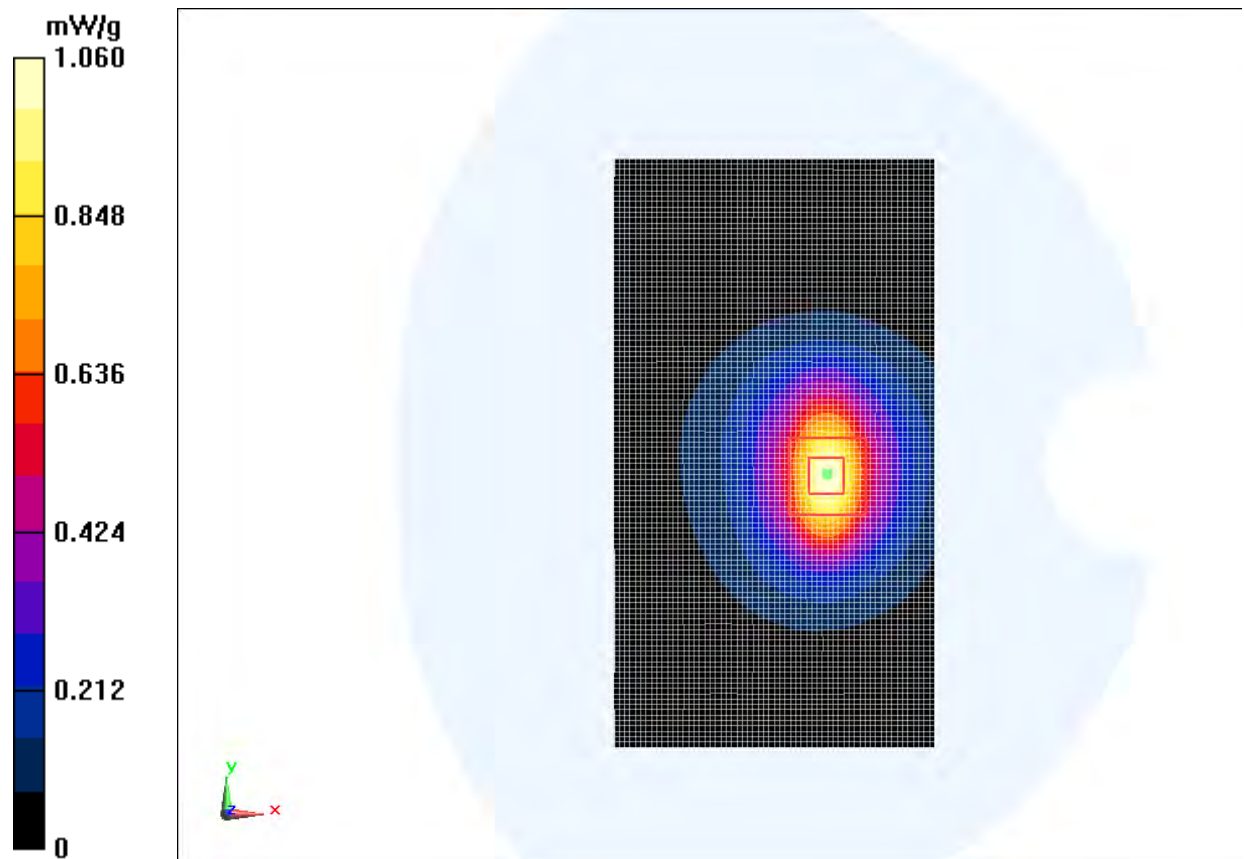


Fig. 89 WCDMA1900 CH9262

WCDMA 1900 Body Bottom Side High with Headset CCB3160A11C4

Date: 2013-1-21

Electronics: DAE4 Sn771

Medium: Body 1900 MHz

Medium parameters used: $f = 1907.6$ MHz; $\sigma = 1.519$ mho/m; $\epsilon_r = 52.218$; $\rho = 1000$ kg/m³

Ambient Temperature: 22.3°C Liquid Temperature: 21.8°C

Communication System: WCDMA 1900 Frequency: 1907.6 MHz Duty Cycle: 1:1

Probe: ES3DV3 - SN3149 ConvF(4.64, 4.64, 4.64)

Bottom Side High/Area Scan (61x111x1): Measurement grid: dx=10 mm, dy=10 mm

Reference Value = 15.666 V/m; Power Drift = 0.01 dB

Fast SAR: SAR(1 g) = 0.904 mW/g; SAR(10 g) = 0.481 mW/g

Maximum value of SAR (interpolated) = 1.05 mW/g

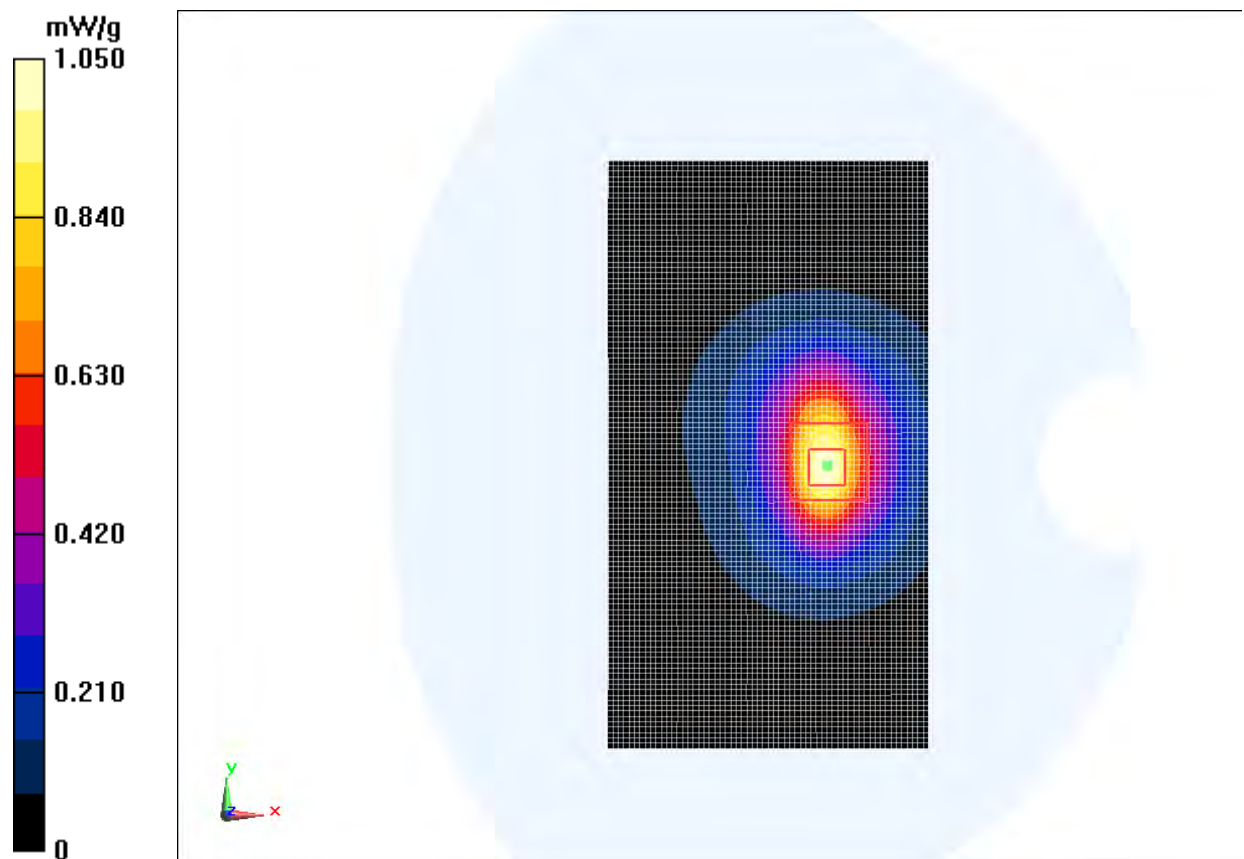


Fig. 90 WCDMA1900 CH9538

WCDMA 1900 Body Bottom Side Middle with Headset CCB3160A11C4

Date: 2013-1-21

Electronics: DAE4 Sn771

Medium: Body 1900 MHz

Medium parameters used: $f = 1880$ MHz; $\sigma = 1.491$ mho/m; $\epsilon_r = 52.333$; $\rho = 1000$ kg/m³

Ambient Temperature: 22.3°C Liquid Temperature: 21.8°C

Communication System: WCDMA 1900 Frequency: 1880 MHz Duty Cycle: 1:1

Probe: ES3DV3 - SN3149 ConvF(4.64, 4.64, 4.64)

Bottom Side Middle/Area Scan (61x111x1): Measurement grid: dx=10 mm, dy=10 mm

Reference Value = 16.038 V/m; Power Drift = 0.07 dB

Fast SAR: SAR(1 g) = 0.924 mW/g; SAR(10 g) = 0.492 mW/g

Maximum value of SAR (interpolated) = 1.07 mW/g

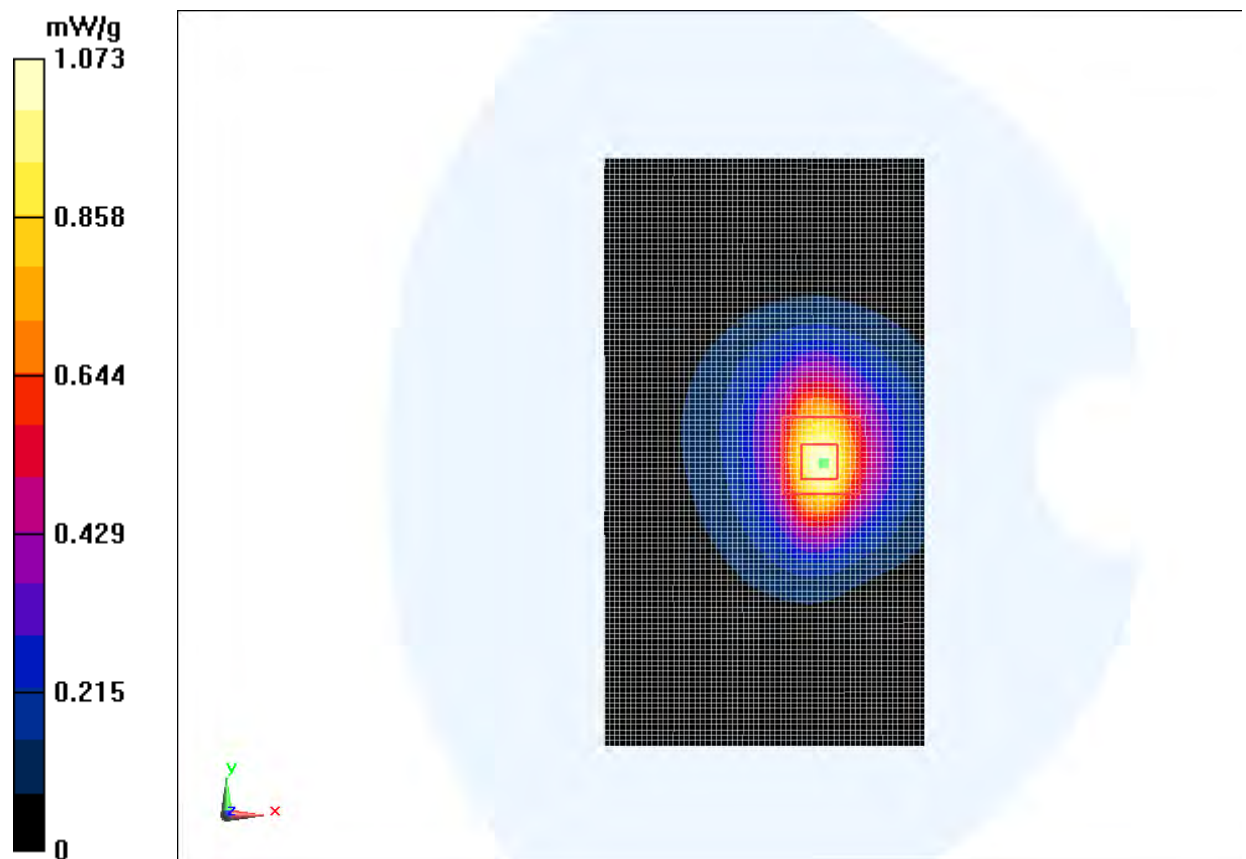


Fig. 91 WCDMA1900 CH9400

WCDMA 1900 Body Bottom Side Low with Headset CCB3160A11C4

Date: 2013-1-21

Electronics: DAE4 Sn771

Medium: Body 1900 MHz

Medium parameters used (interpolated): $f = 1852.4$ MHz; $\sigma = 1.46$ mho/m; $\epsilon_r = 52.461$; $\rho = 1000$ kg/m³

Ambient Temperature: 22.3°C Liquid Temperature: 21.8°C

Communication System: WCDMA 1900 Frequency: 1852.4 MHz Duty Cycle: 1:1

Probe: ES3DV3 - SN3149 ConvF(4.64, 4.64, 4.64)

Bottom Side Low/Area Scan (61x111x1): Measurement grid: dx=10 mm, dy=10 mm

Reference Value = 16.350 V/m; Power Drift = 0.02 dB

Fast SAR: SAR(1 g) = 0.927 mW/g; SAR(10 g) = 0.499 mW/g

Maximum value of SAR (interpolated) = 1.07 mW/g

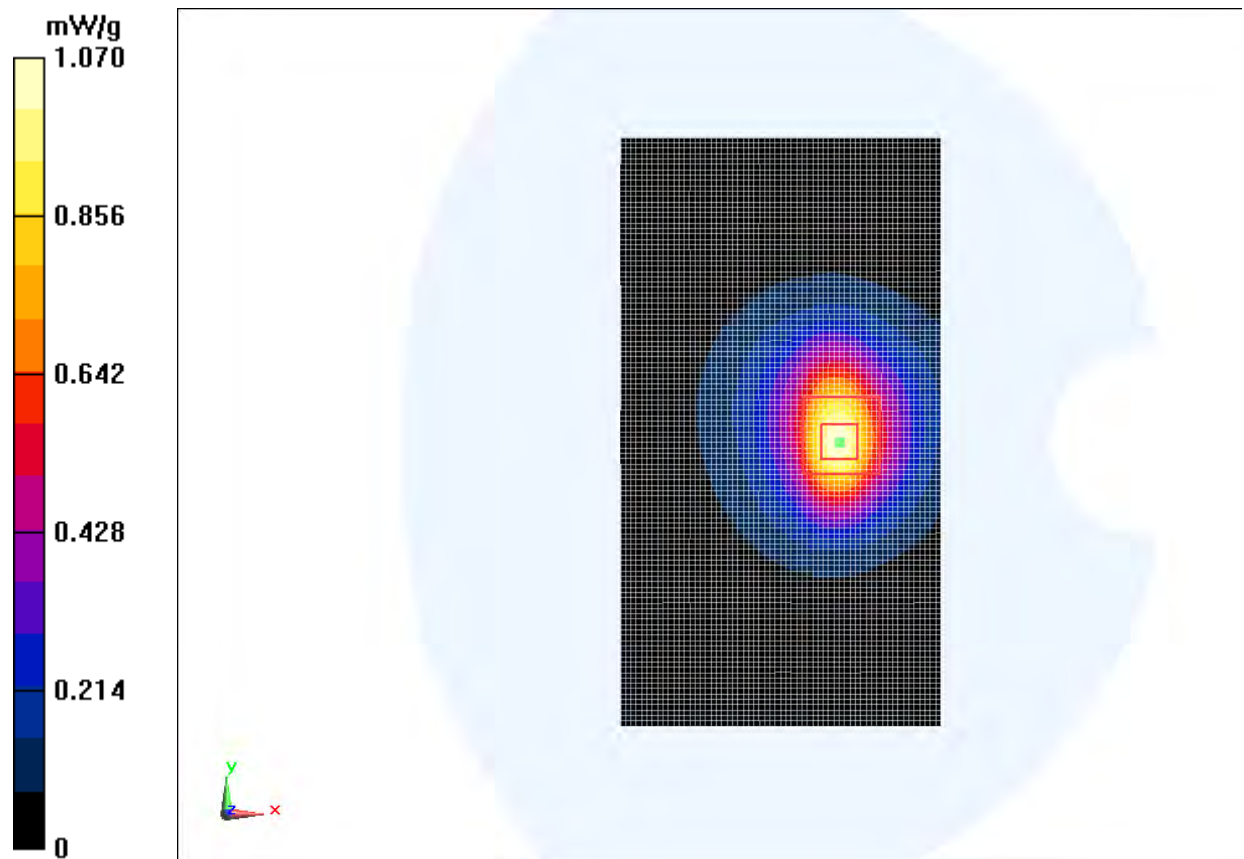


Fig. 92 WCDMA1900 CH9262

Wifi Left Cheek Low

Date: 2013-1-17

Electronics: DAE4 Sn771

Medium: Head 2450 MHz

Medium parameters used (interpolated): $f = 2412$ MHz; $\sigma = 1.803$ mho/m; $\epsilon_r = 38.832$; $\rho = 1000$ kg/m³

Ambient Temperature: 22.6°C Liquid Temperature: 22.0°C

Communication System: WLAN 2450 Frequency: 2412 MHz Duty Cycle: 1:1

Probe: ES3DV3 - SN3149 ConvF(4.49, 4.49, 4.49)

Cheek Low/Area Scan (91x141x1): Measurement grid: dx=10mm, dy=10mm

Maximum value of SAR (interpolated) = 0.132 mW/g

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

Reference Value = 5.426 V/m; Power Drift = 0.02 dB

Peak SAR (extrapolated) = 0.262 mW/g

SAR(1 g) = 0.112 mW/g; SAR(10 g) = 0.046 mW/g

Maximum value of SAR (measured) = 0.136 mW/g

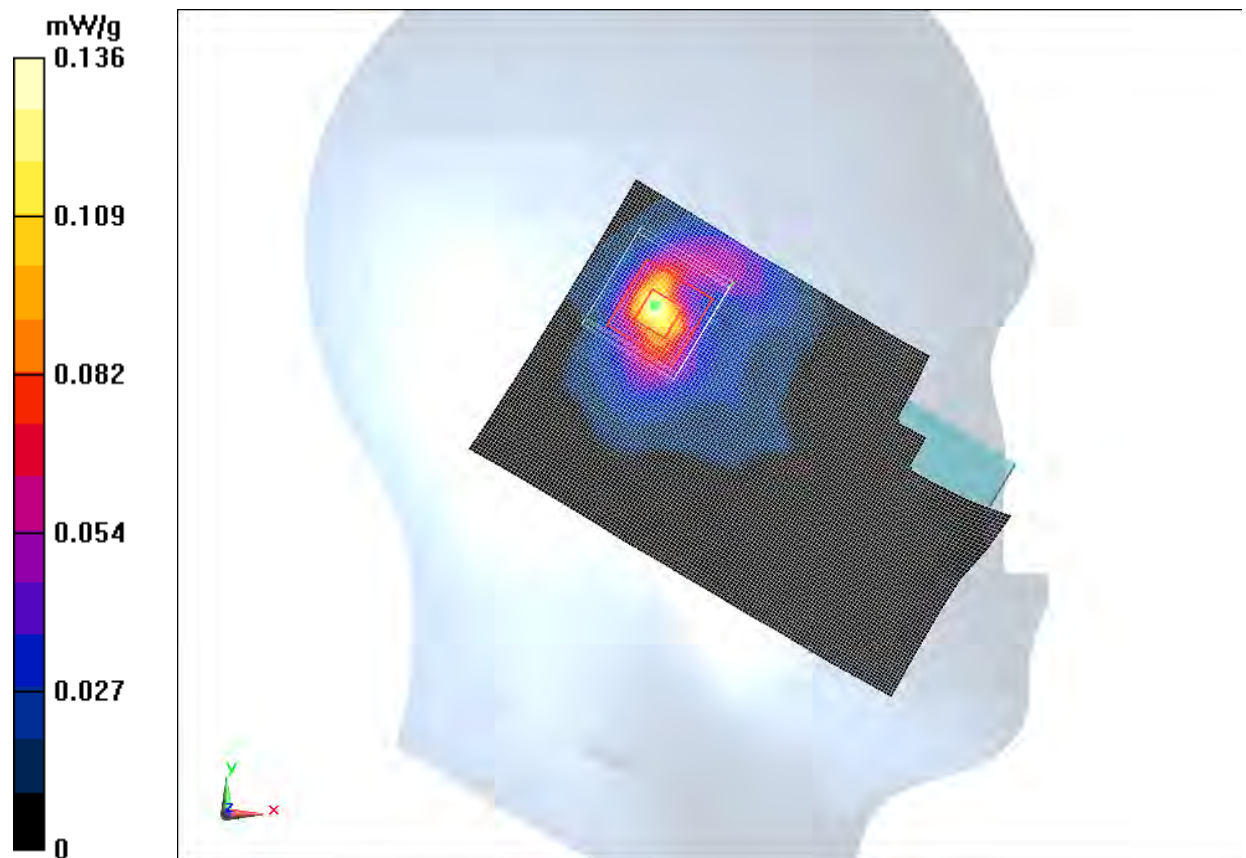


Fig. 93 2450 MHz CH1

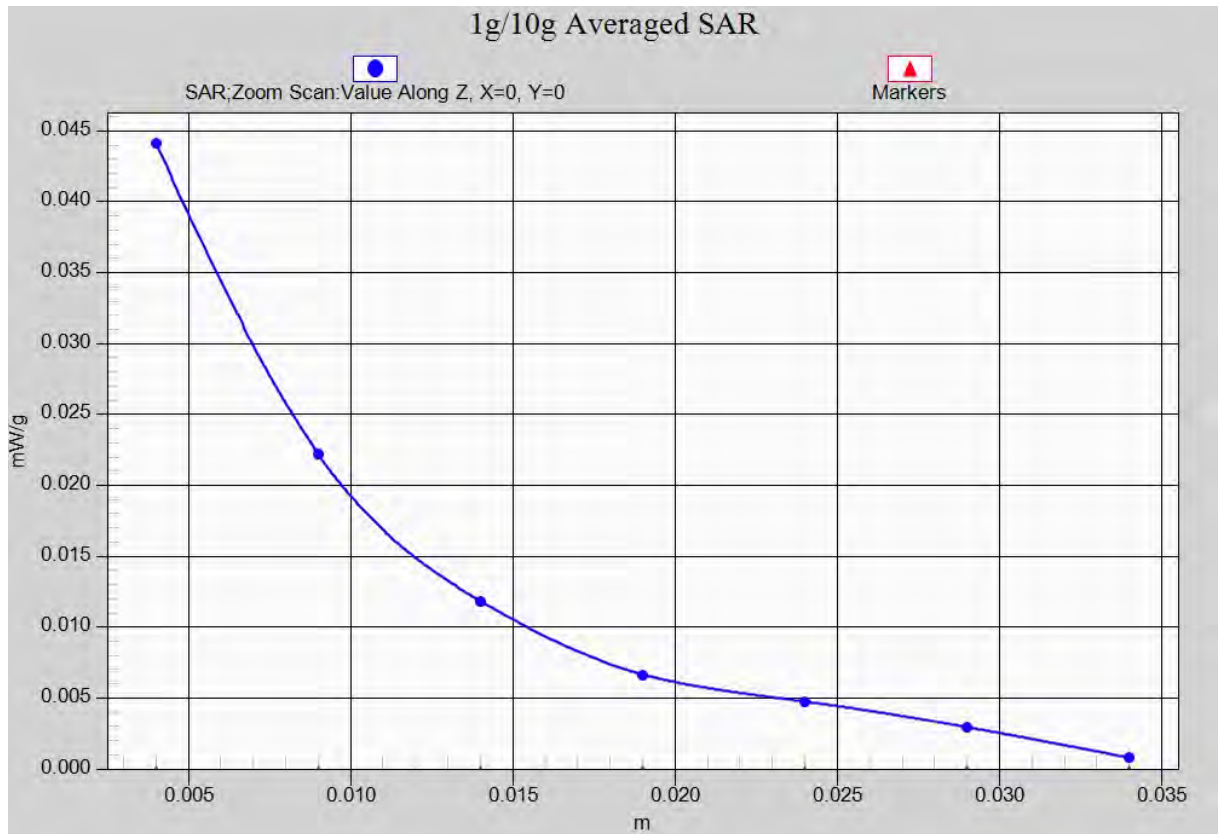


Fig. 93-1 Z-Scan at power reference point (2450 MHz CH1)

Wifi Left Tilt Low

Date: 2013-1-17

Electronics: DAE4 Sn771

Medium: Head 2450 MHz

Medium parameters used (interpolated): $f = 2412$ MHz; $\sigma = 1.803$ mho/m; $\epsilon_r = 38.832$; $\rho = 1000$ kg/m³

Ambient Temperature: 22.6°C Liquid Temperature: 22.0°C

Communication System: WLan 2450 Frequency: 2412 MHz Duty Cycle: 1:1

Probe: ES3DV3 - SN3149 ConvF(4.49, 4.49, 4.49)

Tilt Low/Area Scan (91x141x1): Measurement grid: dx=10mm, dy=10mm

Reference Value = 5.063 V/m; Power Drift = 0.15 dB

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

Maximum value of SAR (interpolated) = 0.0736 mW/g

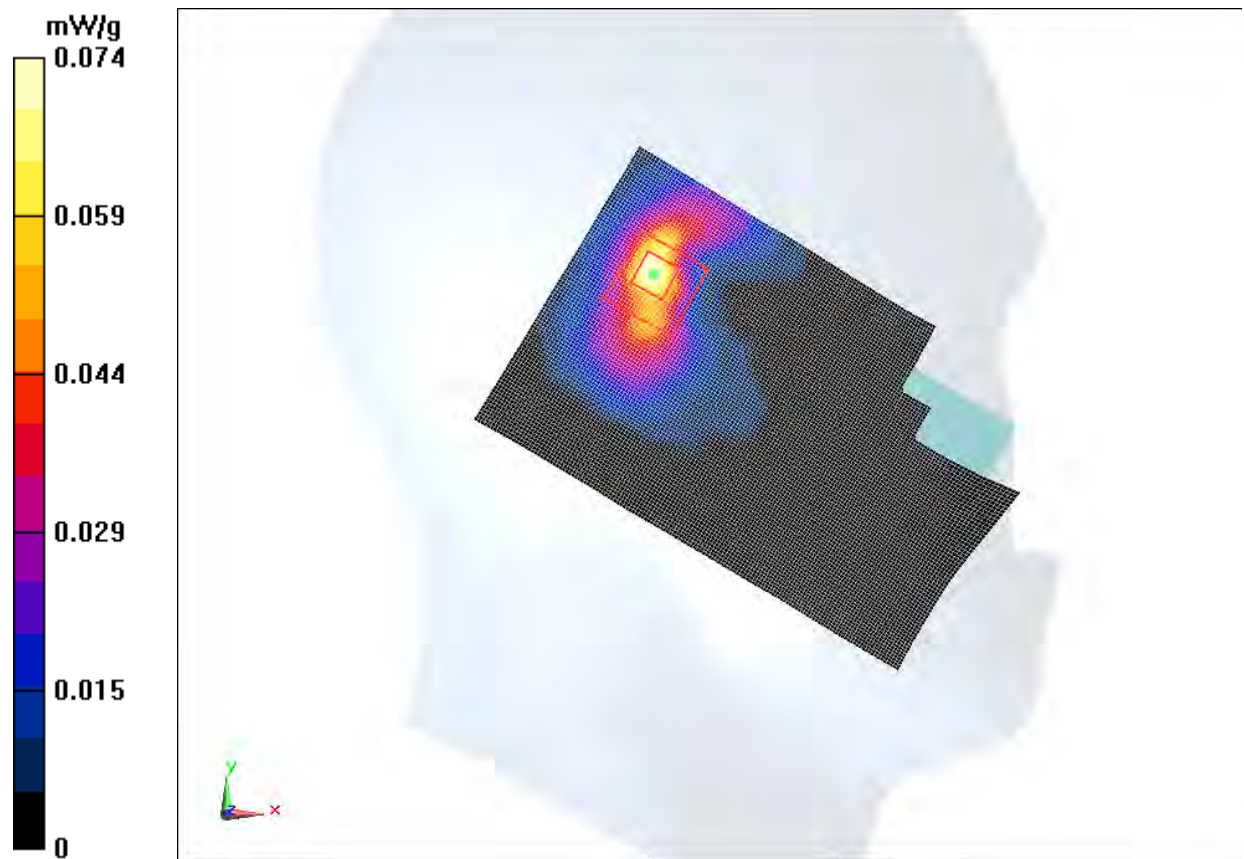


Fig. 94 2450 MHz CH1

Wifi Right Cheek Low

Date: 2013-1-17

Electronics: DAE4 Sn771

Medium: Head 2450 MHz

Medium parameters used (interpolated): $f = 2412$ MHz; $\sigma = 1.803$ mho/m; $\epsilon_r = 38.832$; $\rho = 1000$ kg/m³

Ambient Temperature: 22.6°C Liquid Temperature: 22.0°C

Communication System: WLan 2450 Frequency: 2412 MHz Duty Cycle: 1:1

Probe: ES3DV3 - SN3149 ConvF(4.49, 4.49, 4.49)

Cheek Low/Area Scan (91x141x1): Measurement grid: dx=10mm, dy=10mm

Reference Value = 5.819 V/m; Power Drift = -0.15 dB

Fast SAR: SAR(1 g) = 0.059 mW/g; SAR(10 g) = 0.029 mW/g

Maximum value of SAR (interpolated) = 0.0695 mW/g

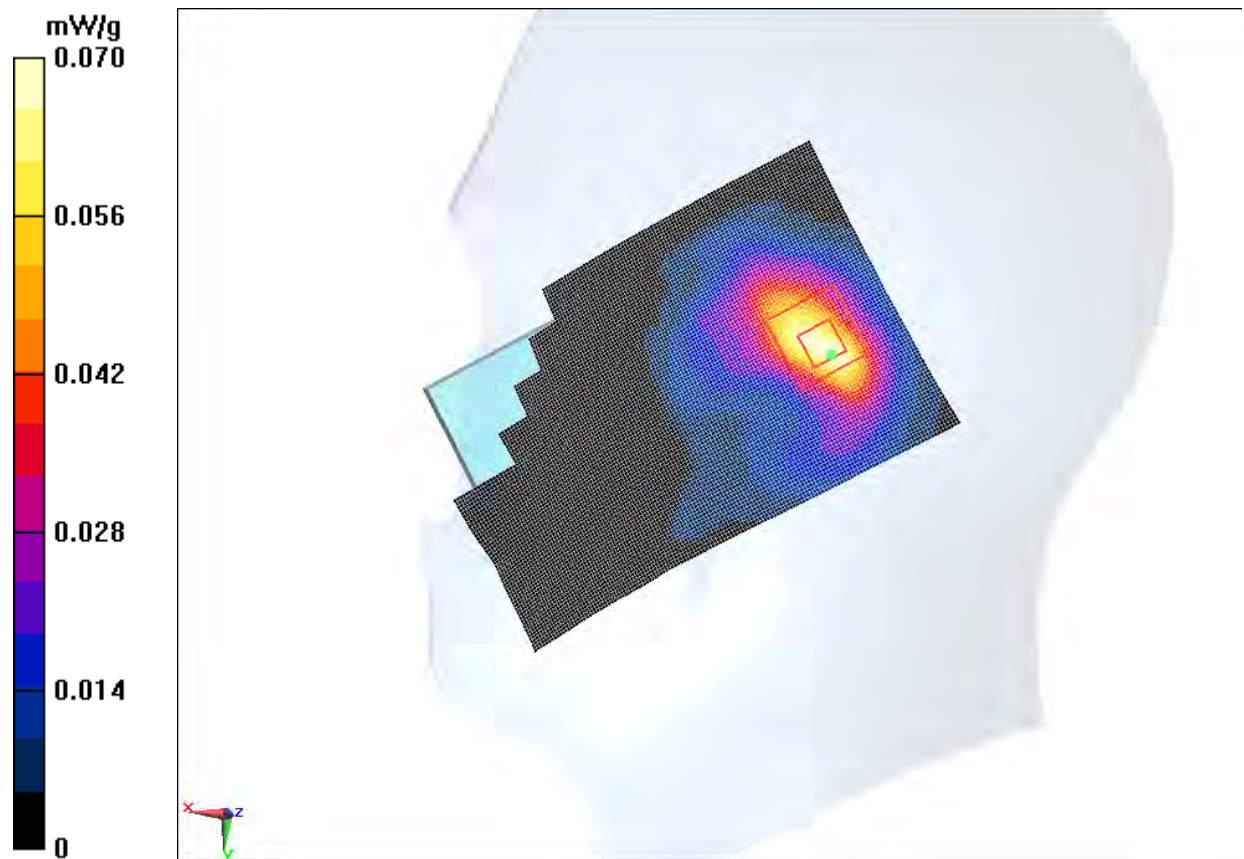


Fig. 95 2450 MHz CH1

Wifi Right Tilt Low

Date: 2013-1-17

Electronics: DAE4 Sn771

Medium: Head 2450 MHz

Medium parameters used (interpolated): $f = 2412$ MHz; $\sigma = 1.803$ mho/m; $\epsilon_r = 38.832$; $\rho = 1000$ kg/m³

Ambient Temperature: 22.6°C Liquid Temperature: 22.0°C

Communication System: WLan 2450 Frequency: 2412 MHz Duty Cycle: 1:1

Probe: ES3DV3 - SN3149 ConvF(4.49, 4.49, 4.49)

Tilt Low/Area Scan (91x141x1): Measurement grid: dx=10mm, dy=10mm

Reference Value = 5.064 V/m; Power Drift = 0.04 dB

Fast SAR: SAR(1 g) = 0.041 mW/g; SAR(10 g) = 0.020 mW/g

Maximum value of SAR (interpolated) = 0.0457 mW/g

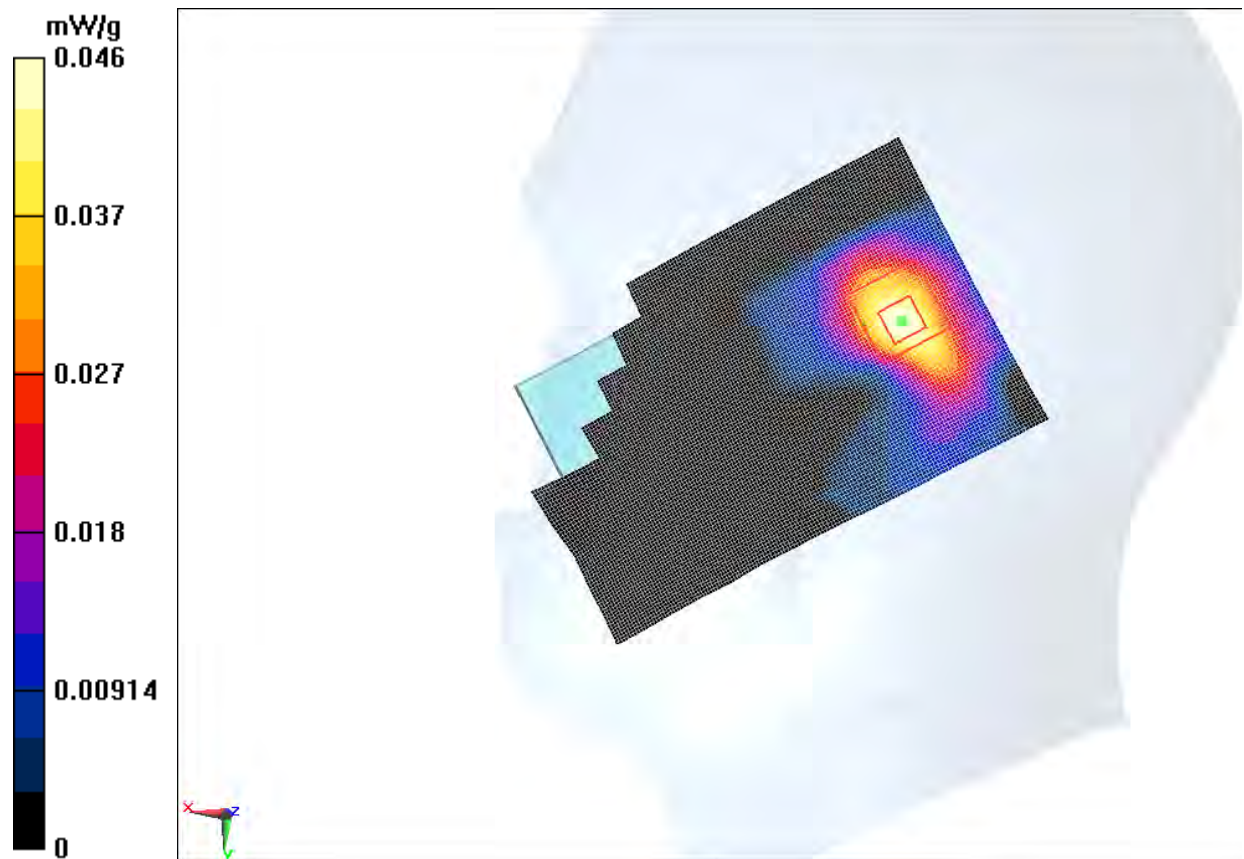


Fig. 96 2450 MHz CH1

Wifi Body Toward Phantom Low

Date: 2013-1-17

Electronics: DAE4 Sn771

Medium: 2450 Body

Medium parameters used (interpolated): $f = 2412$ MHz; $\sigma = 1.917$ mho/m; $\epsilon_r = 52.143$; $\rho = 1000$ kg/m³

Ambient Temperature: 22.6°C Liquid Temperature: 22.0°C

Communication System: WLan 2450 Frequency: 2412 MHz Duty Cycle: 1:1

Probe: ES3DV3 - SN3149 ConvF(4.15, 4.15, 4.15)

Toward Phantom Low/Area Scan (81x141x1): Measurement grid: dx=10mm, dy=10mm

Reference Value = 3.776 V/m; Power Drift = -0.07 dB

Fast SAR: SAR(1 g) = 0.031 mW/g; SAR(10 g) = 0.017 mW/g

Maximum value of SAR (interpolated) = 0.0338 mW/g

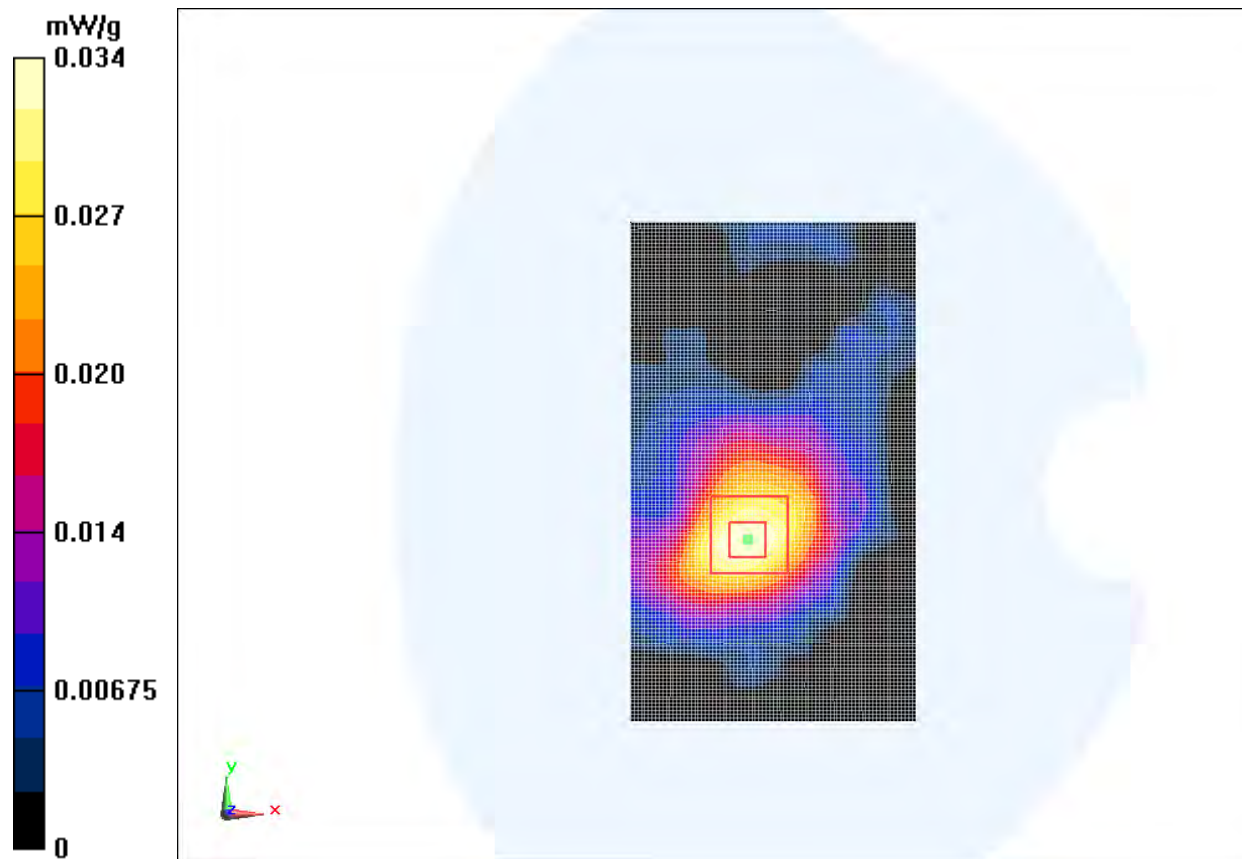


Fig. 97 2450 MHz CH1

Wifi Body Toward Ground Low

Date: 2013-1-17

Electronics: DAE4 Sn771

Medium: 2450 Body

Medium parameters used (interpolated): $f = 2412$ MHz; $\sigma = 1.917$ mho/m; $\epsilon_r = 52.143$; $\rho = 1000$ kg/m³

Ambient Temperature: 22.6°C Liquid Temperature: 22.0°C

Communication System: Wlan 2450 Frequency: 2412 MHz Duty Cycle: 1:1

Probe: ES3DV3 - SN3149 ConvF(4.15, 4.15, 4.15)

Toward Ground Low/Area Scan (81x141x1): Measurement grid: dx=10mm, dy=10mm

Maximum value of SAR (interpolated) = 0.122 mW/g

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

Reference Value = 3.477 V/m; Power Drift = -0.14 dB

Peak SAR (extrapolated) = 0.262 mW/g

SAR(1 g) = 0.102 mW/g; SAR(10 g) = 0.039 mW/g

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

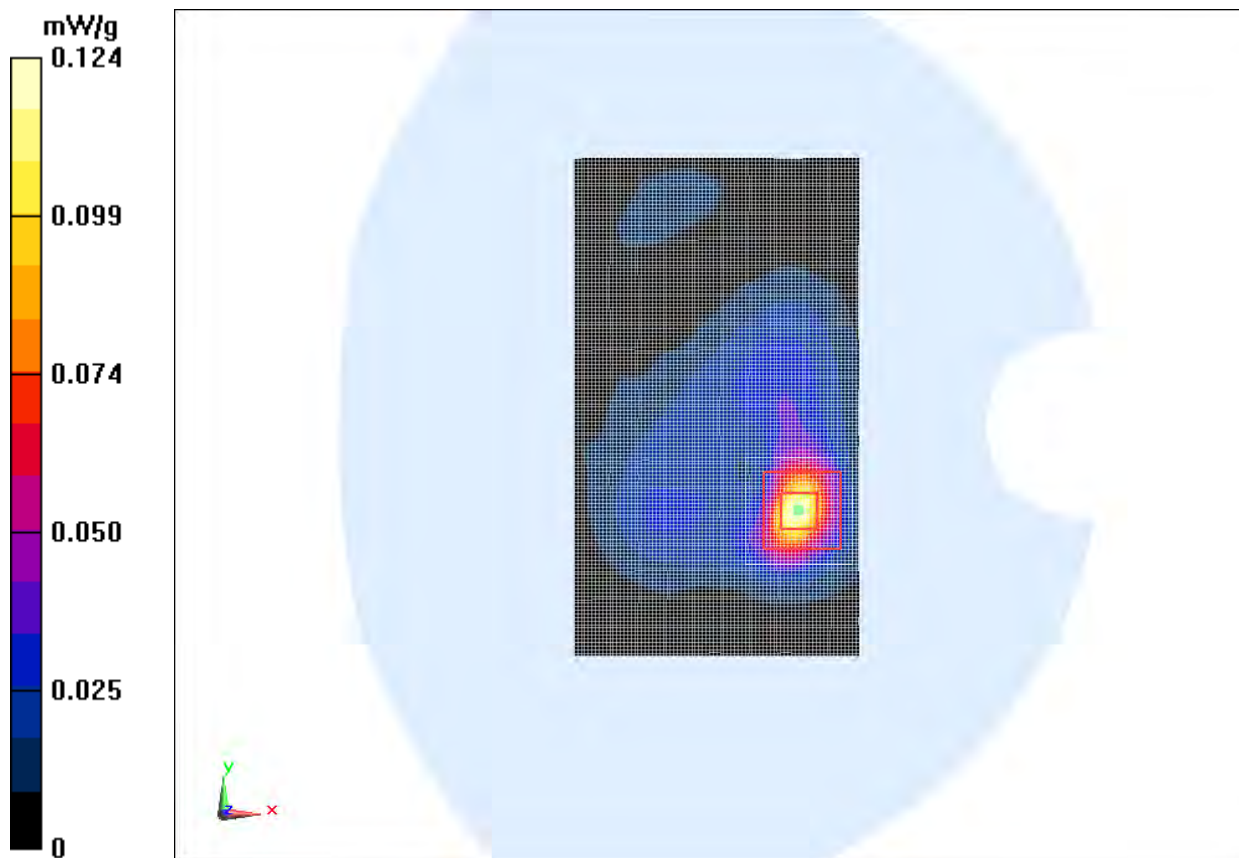


Fig. 98 2450 MHz CH1

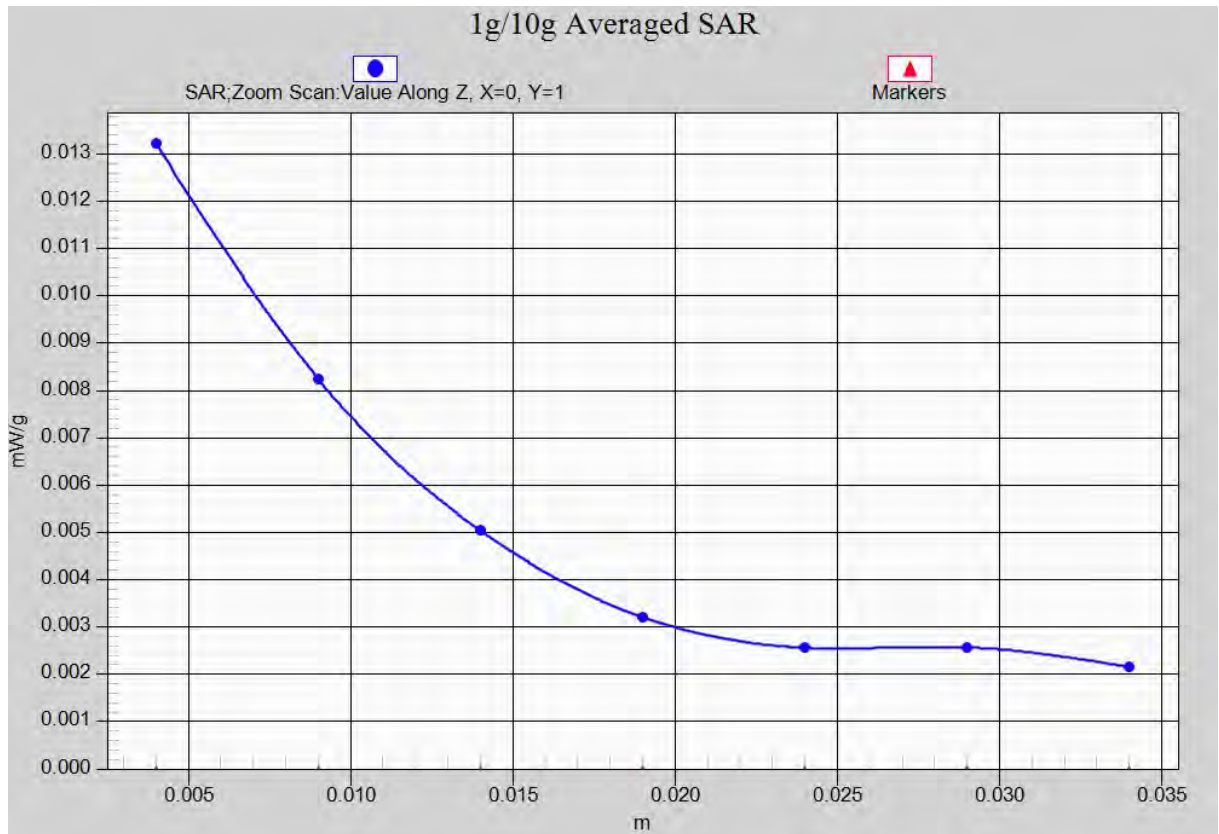


Fig. 98-1 Z-Scan at power reference point (2450 MHz CH1)

Wifi Body Right Side Low

Date: 2013-1-17

Electronics: DAE4 Sn771

Medium: 2450 Body

Medium parameters used (interpolated): $f = 2412$ MHz; $\sigma = 1.917$ mho/m; $\epsilon_r = 52.143$; $\rho = 1000$ kg/m³

Ambient Temperature: 22.6°C Liquid Temperature: 22.0°C

Communication System: Wlan 2450 Frequency: 2412 MHz Duty Cycle: 1:1

Probe: ES3DV3 - SN3149 ConvF(4.15, 4.15, 4.15)

Right Side Low/Area Scan (81x141x1): Measurement grid: dx=10mm, dy=10mm

Reference Value = 2.434 V/m; Power Drift = 0.10 dB

Fast SAR: SAR(1 g) = 0.057 mW/g; SAR(10 g) = 0.026 mW/g

Maximum value of SAR (interpolated) = 0.0674 mW/g

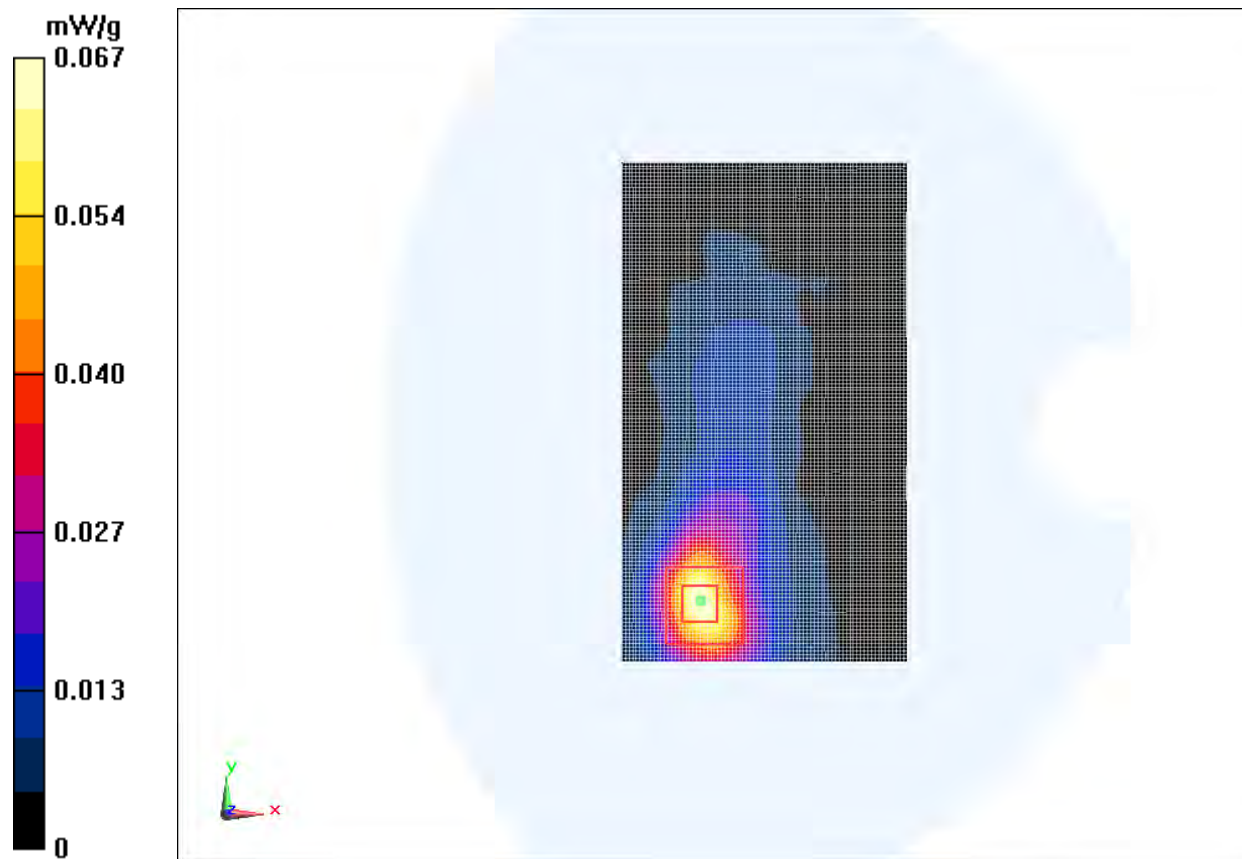


Fig. 99 2450 MHz CH1

Wifi Body Top Side Low

Date: 2013-1-17

Electronics: DAE4 Sn771

Medium: 2450 Body

Medium parameters used (interpolated): $f = 2412$ MHz; $\sigma = 1.917$ mho/m; $\epsilon_r = 52.143$; $\rho = 1000$ kg/m³

Ambient Temperature: 22.6°C Liquid Temperature: 22.0°C

Communication System: WLan 2450 Frequency: 2412 MHz Duty Cycle: 1:1

Probe: ES3DV3 - SN3149 ConvF(4.15, 4.15, 4.15)

Top Side Low/Area Scan (81x141x1): Measurement grid: dx=10mm, dy=10mm

Reference Value = 2.718 V/m; Power Drift = -0.13 dB

Fast SAR: SAR(1 g) = 0.018 mW/g; SAR(10 g) = 0.0088 mW/g

Maximum value of SAR (interpolated) = 0.0202 mW/g

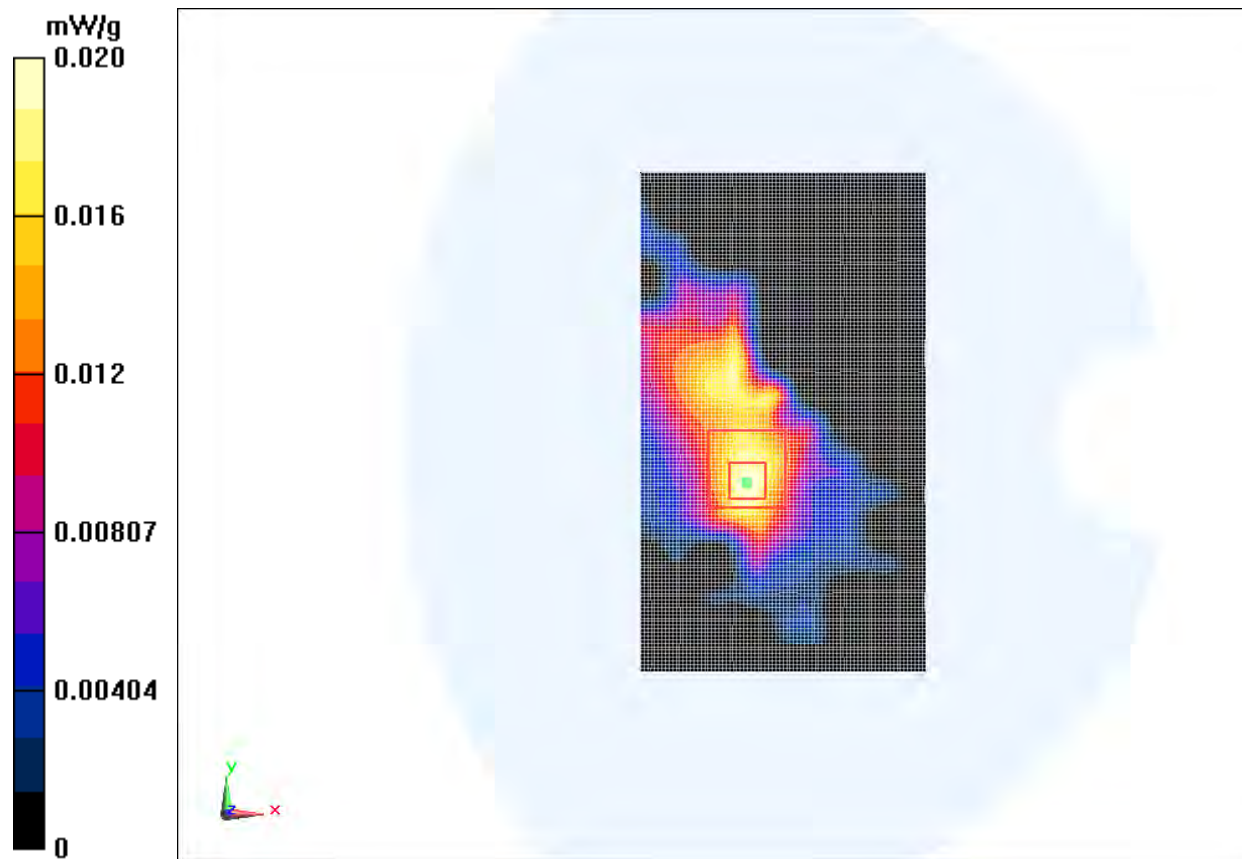


Fig. 100 2450 MHz CH1

WCDMA 1900 Right Cheek Low with Battery TLib50B

Date: 2013-1-21

Electronics: DAE4 Sn771

Medium: Head 1900 MHz

Medium parameters used (interpolated): $f = 1852.4$ MHz; $\sigma = 1.363$ mho/m; $\epsilon_r = 39.547$; $\rho = 1000$ kg/m³

Ambient Temperature: 22.3°C Liquid Temperature: 21.8°C

Communication System: WCDMA 1900 Frequency: 1852.4 MHz Duty Cycle: 1:1

Probe: ES3DV3 - SN3149 ConvF(5.19, 5.19, 5.19)

Cheek Low/Area Scan (61x91x1): Measurement grid: dx=10 mm, dy=10 mm

Maximum value of SAR (interpolated) = 1.14 mW/g

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

Reference Value = 8.245 V/m; Power Drift = 0.05 dB

Peak SAR (extrapolated) = 1.613 mW/g

SAR(1 g) = 1.02 mW/g; SAR(10 g) = 0.595 mW/g

Maximum value of SAR (measured) = 1.14 mW/g

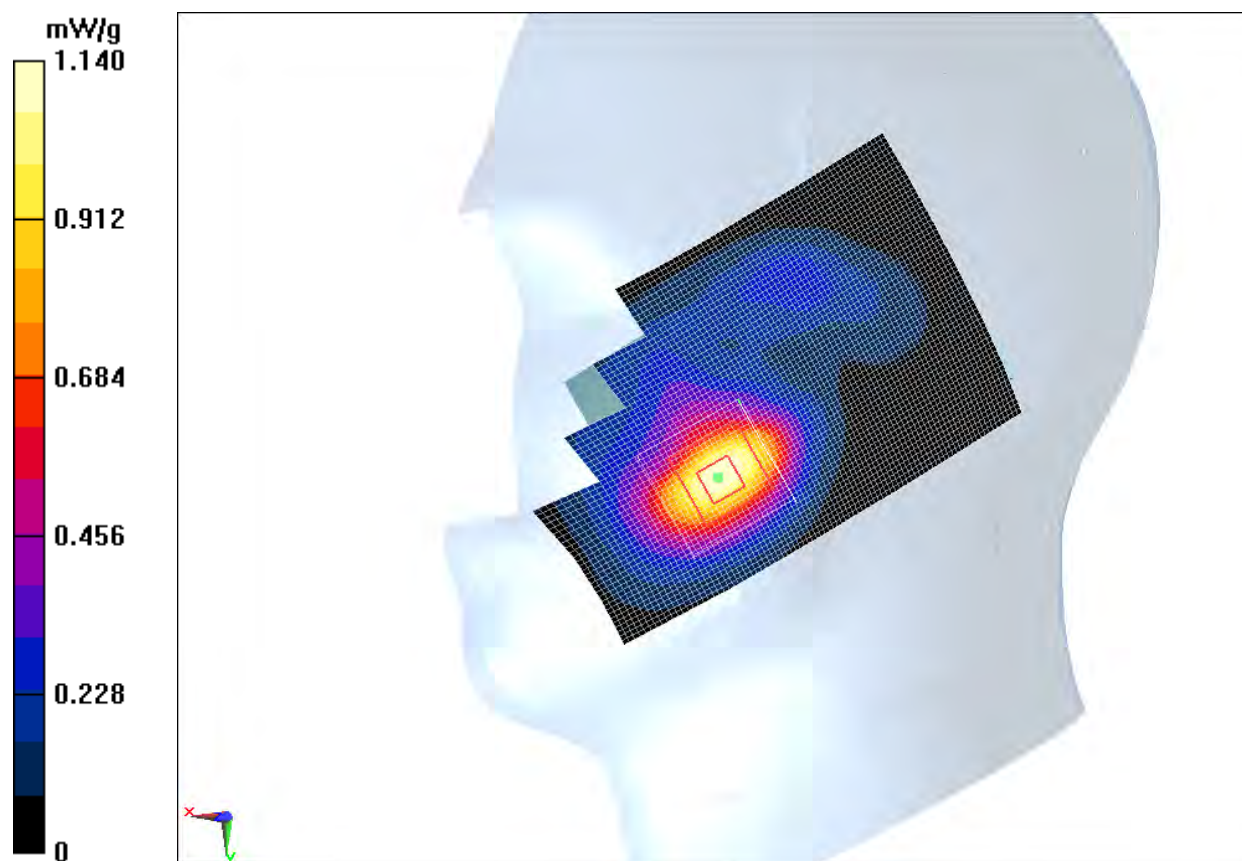


Fig. 101 WCDMA1900 CH9262

WCDMA 850 Body Towards Ground Middle with Battery TLib50B

Date: 2013-1-19

Electronics: DAE4 Sn771

Medium: Body 850 MHz

Medium parameters used (interpolated): $f = 836.4$ MHz; $\sigma = 0.989$ mho/m; $\epsilon_r = 55.57$; $\rho = 1000$ kg/m³

Ambient Temperature: 22.4°C Liquid Temperature: 21.9°C

Communication System: WCDMA; Frequency: 836.4 MHz; Duty Cycle: 1:1

Probe: ES3DV3 - SN3149 ConvF(6.14, 6.14, 6.14)

Toward Ground Middle/Area Scan (61x101x1): Measurement grid: dx=10 mm, dy=10 mm
Maximum value of SAR (interpolated) = 1.08 W/kg

Toward Ground Middle/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 29.304 V/m; Power Drift = -0.03 dB

Peak SAR (extrapolated) = 1.35 W/kg

SAR(1 g) = 1.03 W/kg; SAR(10 g) = 0.755 W/kg

Maximum value of SAR (measured) = 1.10 W/kg

Toward Ground Middle/Zoom Scan (7x7x7)/Cube 1: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 29.304 V/m; Power Drift = -0.03 dB

Peak SAR (extrapolated) = 1.18 W/kg

SAR(1 g) = 0.784 W/kg; SAR(10 g) = 0.565 W/kg

Maximum value of SAR (measured) = 0.924 W/kg

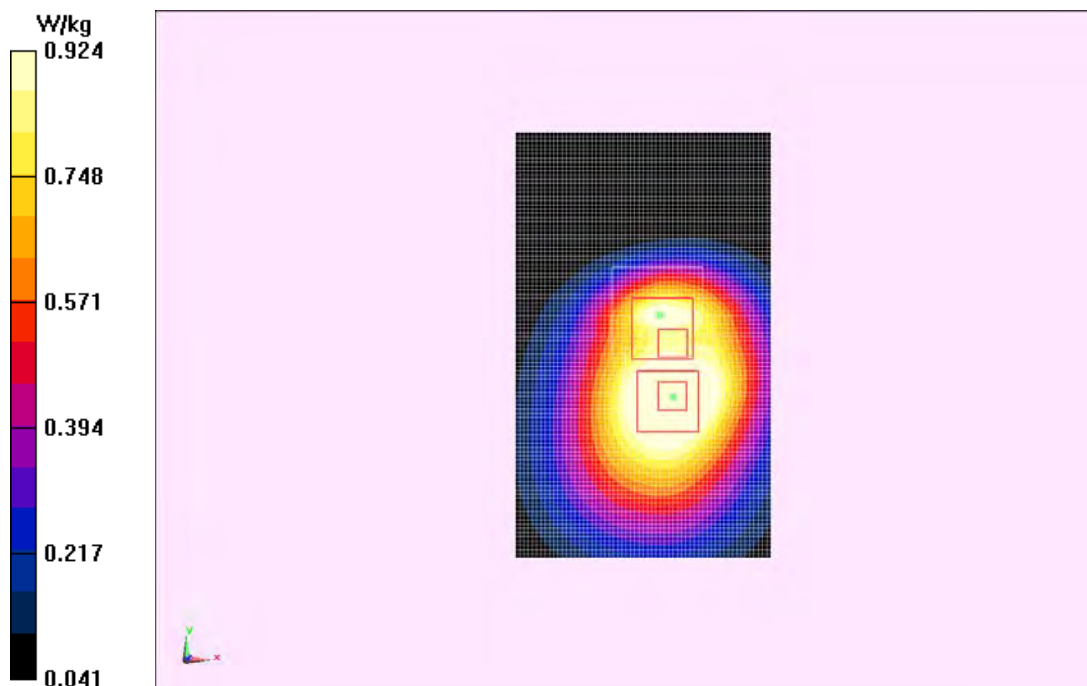


Fig. 102 WCDMA 850 CH4182

ANNEX B System Verification Results

835MHz

Date: 2013-1-19

Electronics: DAE4 Sn771

Medium: Head 850 MHz

Medium parameters used: $f = 835$ MHz; $\sigma = 0.882$ mho/m; $\epsilon_r = 40.83$; $\rho = 1000$ kg/m³

Ambient Temperature: 22.4°C Liquid Temperature: 21.9°C

Communication System: CW Frequency: 835 MHz Duty Cycle: 1:1

Probe: ES3DV3 - SN3149 ConvF(6.26, 6.26, 6.26)

System Validation /Area Scan (81x161x1): Measurement grid: dx=10mm, dy=10mm

Reference Value = 52.994 V/m; Power Drift = 0.082 dB

Fast SAR: SAR(1 g) = 2.37 mW/g; SAR(10 g) = 1.54 mW/g

Maximum value of SAR (interpolated) = 2.58 mW/g

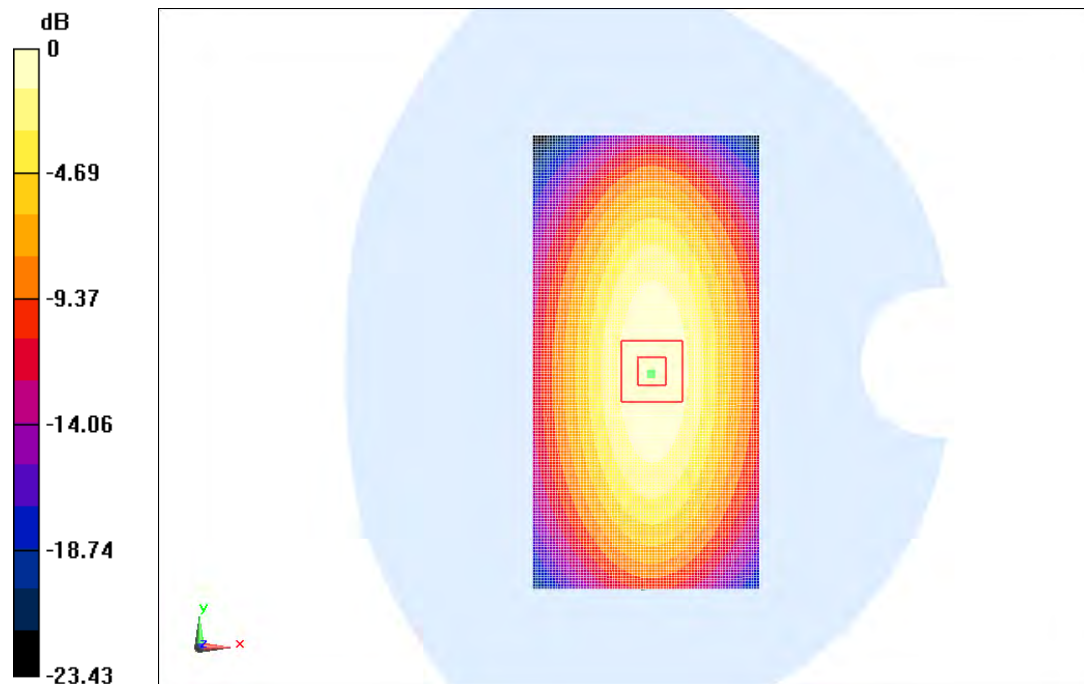
System Validation /Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 52.994 V/m; Power Drift = 0.082 dB

Peak SAR (extrapolated) = 3.542 W/kg

SAR(1 g) = 2.40 mW/g; SAR(10 g) = 1.57 mW/g

Maximum value of SAR (measured) = 2.59 mW/g



0 dB = 2.58 mW/g = 8.23 dB mW/g

Fig.B.1 validation 835MHz 250mW

835MHz

Date: 2013-1-19

Electronics: DAE4 Sn771

Medium: Body 850 MHz

Medium parameters used: $f = 835$ MHz; $\sigma = 0.984$ mho/m; $\epsilon_r = 55.58$; $\rho = 1000$ kg/m³

Ambient Temperature: 22.4°C Liquid Temperature: 21.9°C

Communication System: CW Frequency: 835 MHz Duty Cycle: 1:1

Probe: ES3DV3 - SN3149 ConvF(6.14, 6.14, 6.14)

System Validation /Area Scan (81x171x1): Measurement grid: dx=10mm, dy=10mm

Reference Value = 46.379 V/m; Power Drift = -0.095 dB

Fast SAR: SAR(1 g) = 2.41 mW/g; SAR(10 g) = 1.60 mW/g

Maximum value of SAR (interpolated) = 2.58 mW/g

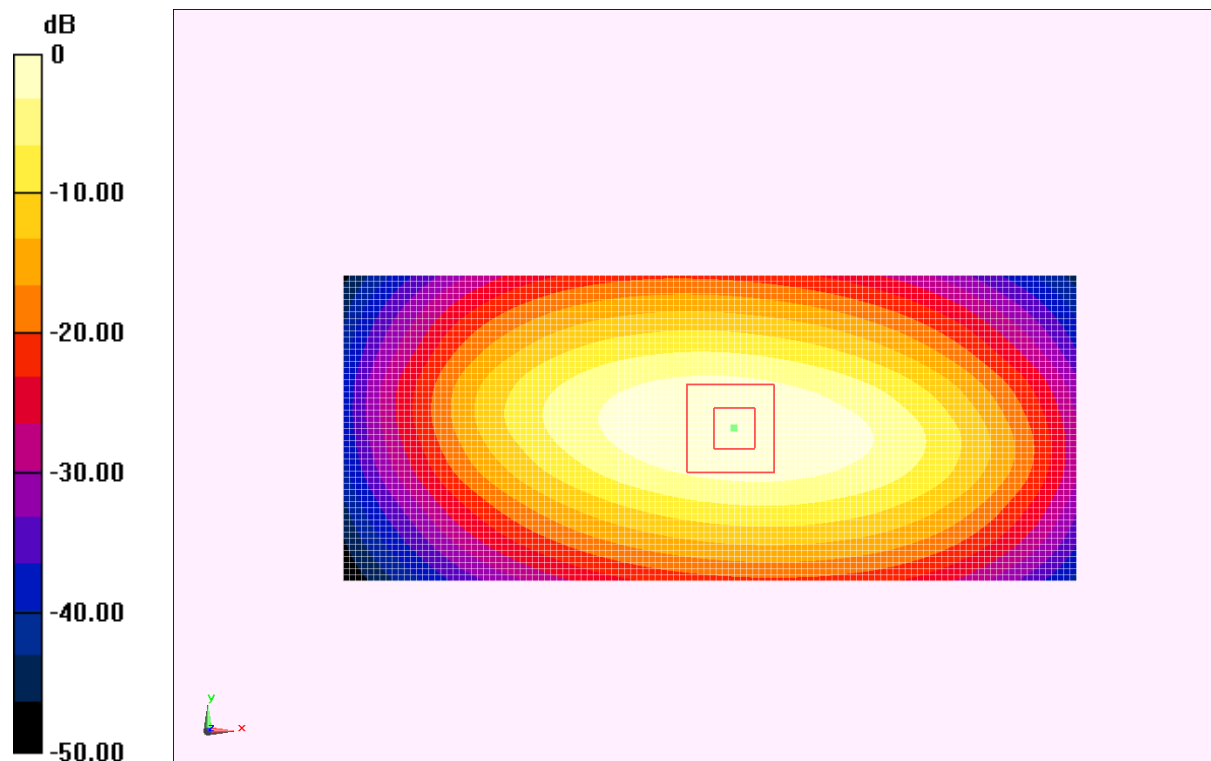
System Validation /Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 46.379 V/m; Power Drift = -0.095 dB

Peak SAR (extrapolated) = 3.573 W/kg

SAR(1 g) = 2.38 mW/g; SAR(10 g) = 1.58 mW/g

Maximum value of SAR (measured) = 2.58 mW/g



$$0 \text{ dB} = 2.58 \text{ mW/g} = 8.23 \text{ dB mW/g}$$

Fig.B.2 validation 835MHz 250mW

1900MHz

Date: 2013-1-21

Electronics: DAE4 Sn771

Medium: Head 1900 MHz

Medium parameters used: $f = 1900$ MHz; $\sigma = 1.408$ mho/m; $\epsilon_r = 39.37$; $\rho = 1000$ kg/m³

Ambient Temperature: 22.3°C Liquid Temperature: 21.8°C

Communication System: CW Frequency: 1900 MHz Duty Cycle: 1:1

Probe: ES3DV3 - SN3149 ConvF(5.19, 5.19, 5.19)

System Validation/Area Scan (81x121x1): Measurement grid: dx=10mm, dy=10mm

Reference Value = 94.923 V/m; Power Drift = -0.067 dB

Fast SAR: SAR(1 g) = 9.76 mW/g; SAR(10 g) = 5.13 mW/g

Maximum value of SAR (interpolated) = 11.1 mW/g

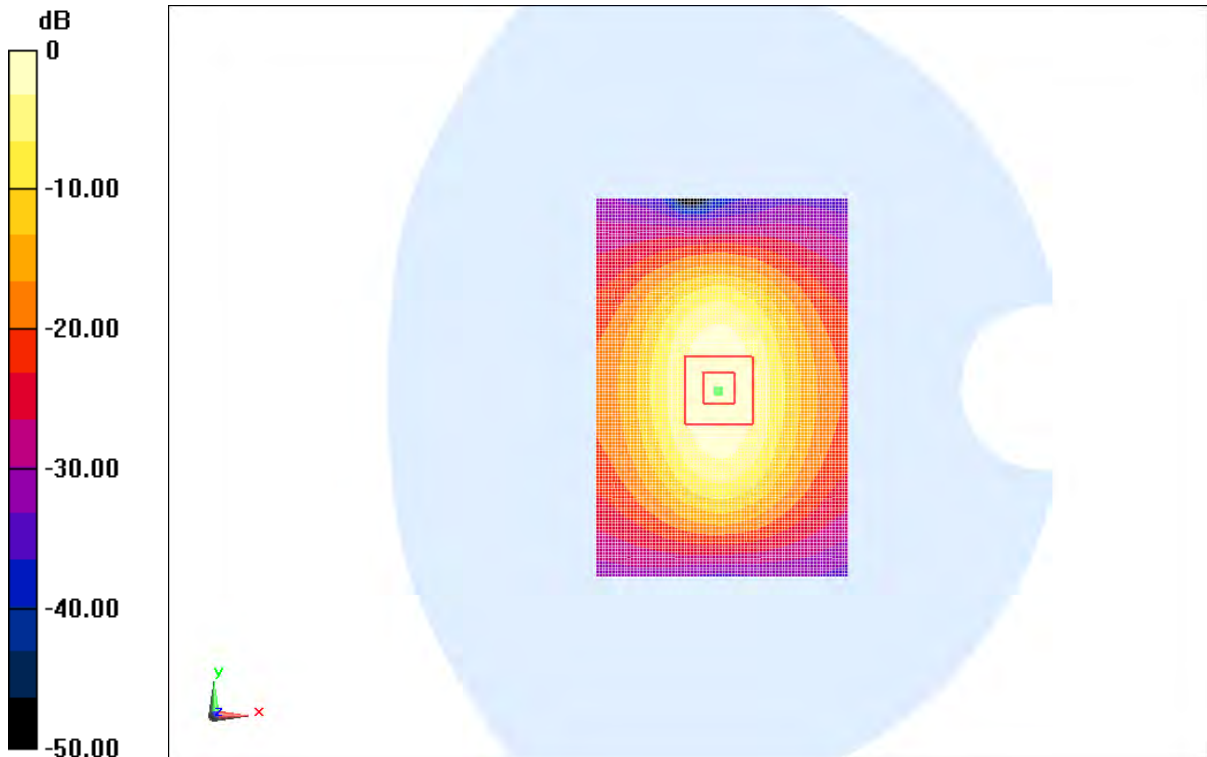
System Validation/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 94.923 V/m; Power Drift = -0.067 dB

Peak SAR (extrapolated) = 18.015 W/kg

SAR(1 g) = 9.69 mW/g; SAR(10 g) = 5.09 mW/g

Maximum value of SAR (measured) = 11.0 mW/g



0 dB = 11.1 mW/g = 20.91 dB mW/g

Fig.B.3 validation 1900MHz 250mW

1900MHz

Date: 2013-1-21

Electronics: DAE4 Sn771

Medium: Body 1900 MHz

Medium parameters used: $f = 1900$ MHz; $\sigma = 1.511$ mho/m; $\epsilon_r = 52.25$; $\rho = 1000$ kg/m³

Ambient Temperature: 22.3°C Liquid Temperature: 21.8°C

Communication System: CW Frequency: 1900 MHz Duty Cycle: 1:1

Probe: ES3DV3 - SN3149 ConvF(4.64, 4.64, 4.64)

System Validation/Area Scan (81x121x1): Measurement grid: dx=10mm, dy=10mm

Reference Value = 83.704 V/m; Power Drift = 0.05 dB

Fast SAR: SAR(1 g) = 10.1 mW/g; SAR(10 g) = 5.35 mW/g

Maximum value of SAR (interpolated) = 11.5 mW/g

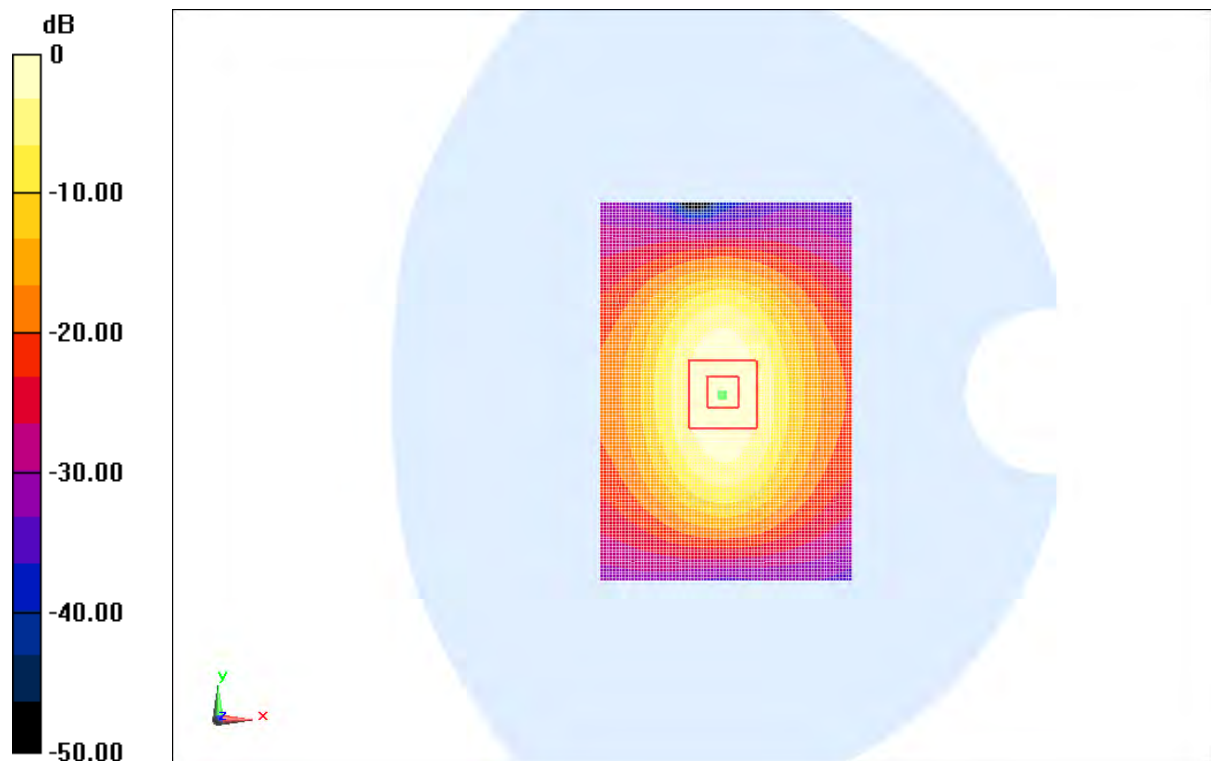
System Validation/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 83.704 V/m; Power Drift = 0.05 dB

Peak SAR (extrapolated) = 16.695 W/kg

SAR(1 g) = 10.1 mW/g; SAR(10 g) = 5.38 mW/g

Maximum value of SAR (measured) = 11.6 mW/g



0 dB = 11.5 mW/g = 21.21 dB mW/g

Fig.B.4 validation 1900MHz 250mW

2450MHz

Date: 2013-01-17

Electronics: DAE4 Sn771

Medium: Head 2450 MHz

Medium parameters used: $f = 2450$ MHz; $\sigma = 1.84$ mho/m; $\epsilon_r = 38.69$; $\rho = 1000$ kg/m³

Ambient Temperature: 22.6°C Liquid Temperature: 22.0°C

Communication System: CW Frequency: 2450 MHz Duty Cycle: 1:1

Probe: ES3DV3 - SN3149 ConvF(4.49, 4.49, 4.49)

System Validation /Area Scan (81x101x1): Measurement grid: dx=10mm, dy=10mm

Reference Value = 90.733 V/m; Power Drift = -0.16 dB

Fast SAR: SAR(1 g) = 13 mW/g; SAR(10 g) = 5.93 mW/g

Maximum value of SAR (interpolated) = 14.9 mW/g

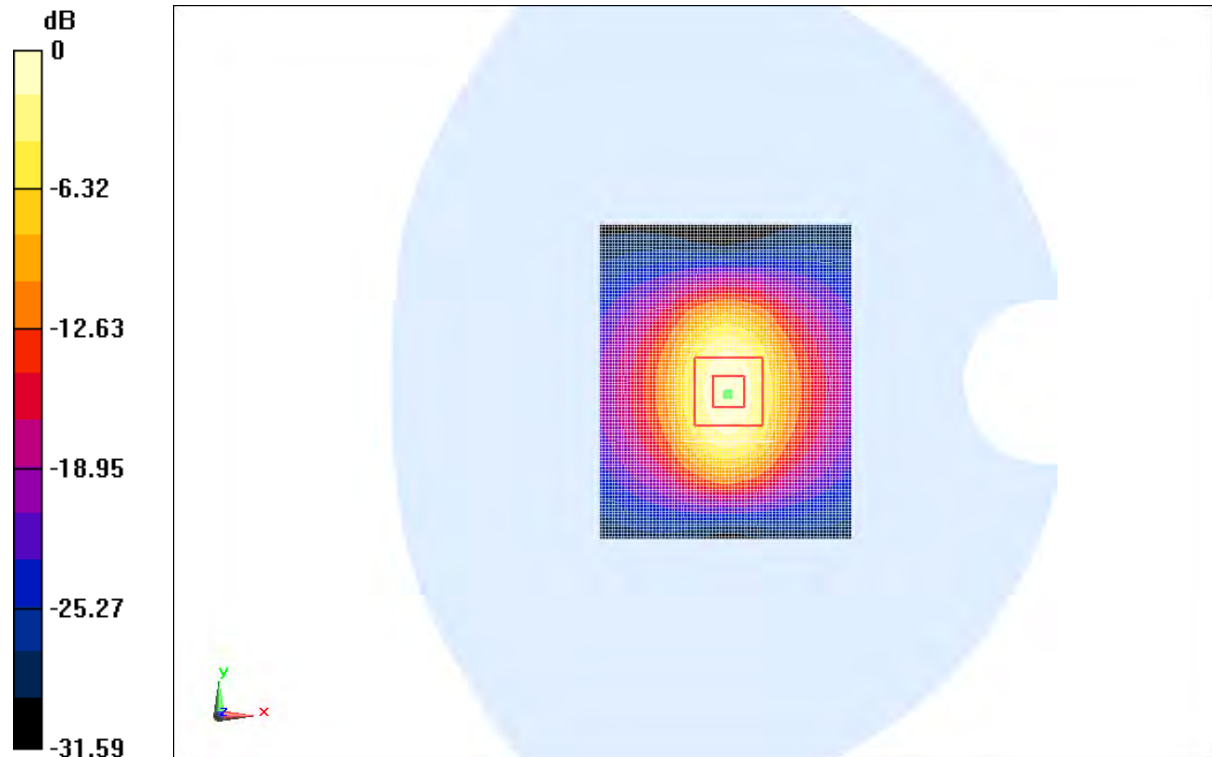
System Validation /Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 90.733 V/m; Power Drift = -0.16 dB

Peak SAR (extrapolated) = 27.993 mW/g

SAR(1 g) = 13 mW/g; SAR(10 g) = 5.9 mW/g

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



0 dB = 14.9 mW/g = 23.49 dB mW/g

Fig.B.5 validation 2450MHz 250mW

2450MHz

Date: 2013-1-17

Electronics: DAE4 Sn771

Medium: Body 2450 MHz

Medium parameters used: $f = 2450$ MHz; $\sigma = 1.964$ mho/m; $\epsilon_r = 52.03$; $\rho = 1000$ kg/m³

Ambient Temperature: 22.6°C Liquid Temperature: 22.0°C

Communication System: CW Frequency: 2450 MHz Duty Cycle: 1:1

Probe: ES3DV3 - SN3149 ConvF(4.15, 4.15, 4.15)

System Validation/Area Scan (81x101x1): Measurement grid: dx=10mm, dy=10mm

Reference Value = 93.518 V/m; Power Drift = -0.06 dB

Fast SAR: SAR(1 g) = 12.9 mW/g; SAR(10 g) = 5.97 mW/g

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

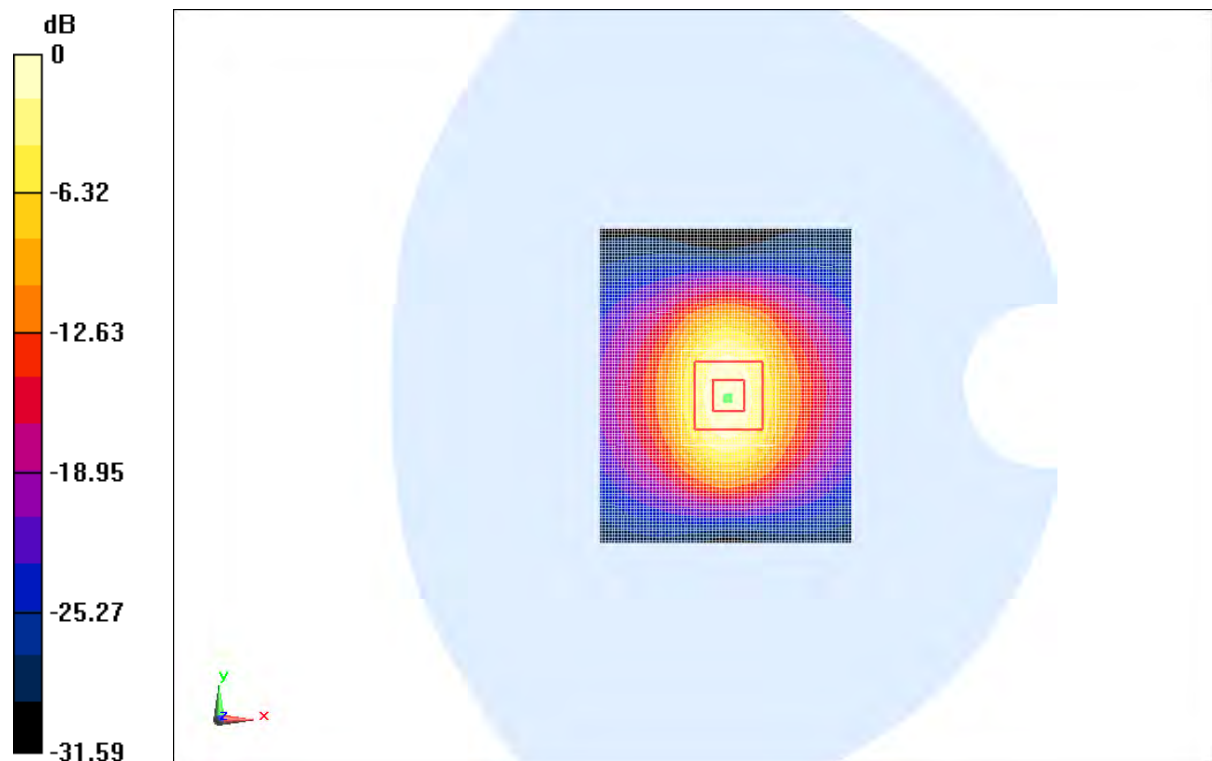
System Validation/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 93.518 V/m; Power Drift = -0.06 dB

Peak SAR (extrapolated) = 25.946 mW/g

SAR(1 g) = 12.8 mW/g; SAR(10 g) = 5.92 mW/g

Maximum value of SAR (measured) = 14.7 mW/g



0 dB = 14.8 mW/g = 23.41 dB mW/g

Fig.B.6 validation 2450MHz 250mW

The SAR system verification must be required that the area scan estimated 1-g SAR is within 3% of the zoom scan 1-g SAR.

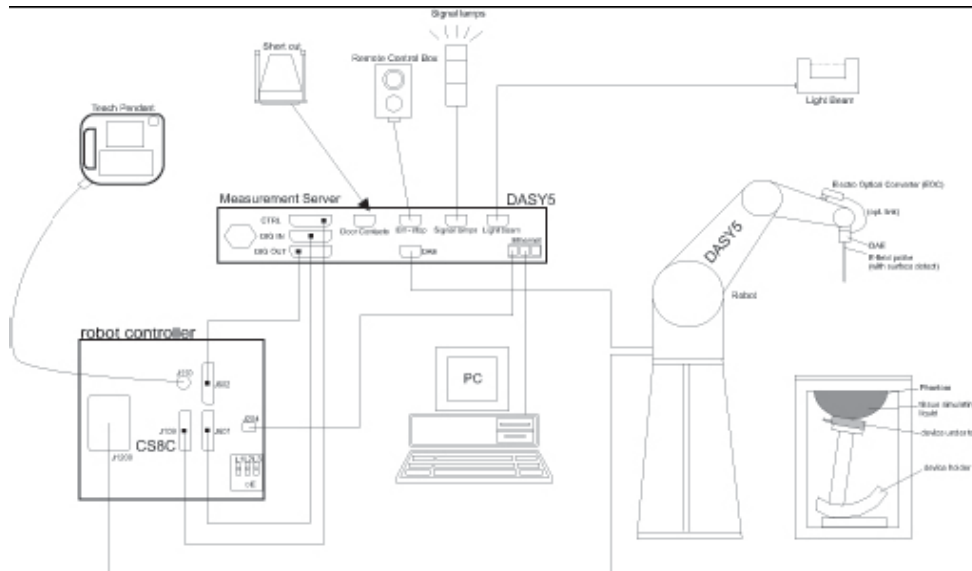
Table B.1 Comparison between area scan and zoom scan for system verification

Band	Position	Area scan (1g)	Zoom scan (1g)	Drift (%)
835	Head	2.37	2.40	-1.25
835	Body	2.41	2.38	1.26
1900	Head	9.76	9.69	0.72
1900	Body	10.1	10.1	0.00
2450	Head	13	13	0.00
2450	Body	12.9	12.8	0.78

ANNEX C SAR Measurement Setup

C.1 Measurement Set-up

The Dasy4 or DASY5 system for performing compliance tests is illustrated above graphically. This system consists of the following items:



Picture C.1 SAR Lab Test Measurement Set-up

- A standard high precision 6-axis robot (Stäubli TX=RX family) with controller, teach pendant and software. An arm extension for accommodating the data acquisition electronics (DAE).
- An isotropic field probe optimized and calibrated for the targeted measurement.
- A data acquisition electronics (DAE) which performs the signal amplification, signal multiplexing, AD-conversion, offset measurements, mechanical surface detection, collision detection, etc. The unit is battery powered with standard or rechargeable batteries. The signal is optically transmitted to the EOC.
- The Electro-optical converter (EOC) performs the conversion from optical to electrical signals for the digital communication to the DAE. To use optical surface detection, a special version of the EOC is required. The EOC signal is transmitted to the measurement server.
- The function of the measurement server is to perform the time critical tasks such as signal filtering, control of the robot operation and fast movement interrupts.
- The Light Beam used is for probe alignment. This improves the (absolute) accuracy of the probe positioning.
- A computer running WinXP and the DASY4 or DASY5 software.
- Remote control and teach pendant as well as additional circuitry for robot safety such as
- warning lamps, etc.
- The phantom, the device holder and other accessories according to the targeted measurement.