WCDMA 1900 Body Bottom Edge High

Date: 2013-7-15
Electronics: DAE4 Sn771
Medium: Body 1900 MHz
Medium parameters used (interpolated): f = 1907.6 MHz; σ = 1.547 mho/m; εr = 52.221; ρ = 1000 kg/m^3
Ambient Temperature: 22.7°C Liquid Temperature: 22.2°C
Communication System: WCDMA 1900 Frequency: 1907.6 MHz Duty Cycle: 1:1
Probe: EX3DV4 - SN3846 ConvF(7.37, 7.37, 7.37)

Bottom Edge High/Area Scan (71x111x1): Interpolated grid: dx=1.000 mm, dy=1.000 mm
Maximum value of SAR (interpolated) = 0.890 W/kg

Bottom Edge High/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 24.284 V/m; Power Drift = -0.06 dB
Peak SAR (extrapolated) = 1.54 W/kg
SAR(1 g) = 0.887 W/kg; SAR(10 g) = 0.467 W/kg
Maximum value of SAR (measured) = 0.985 W/kg

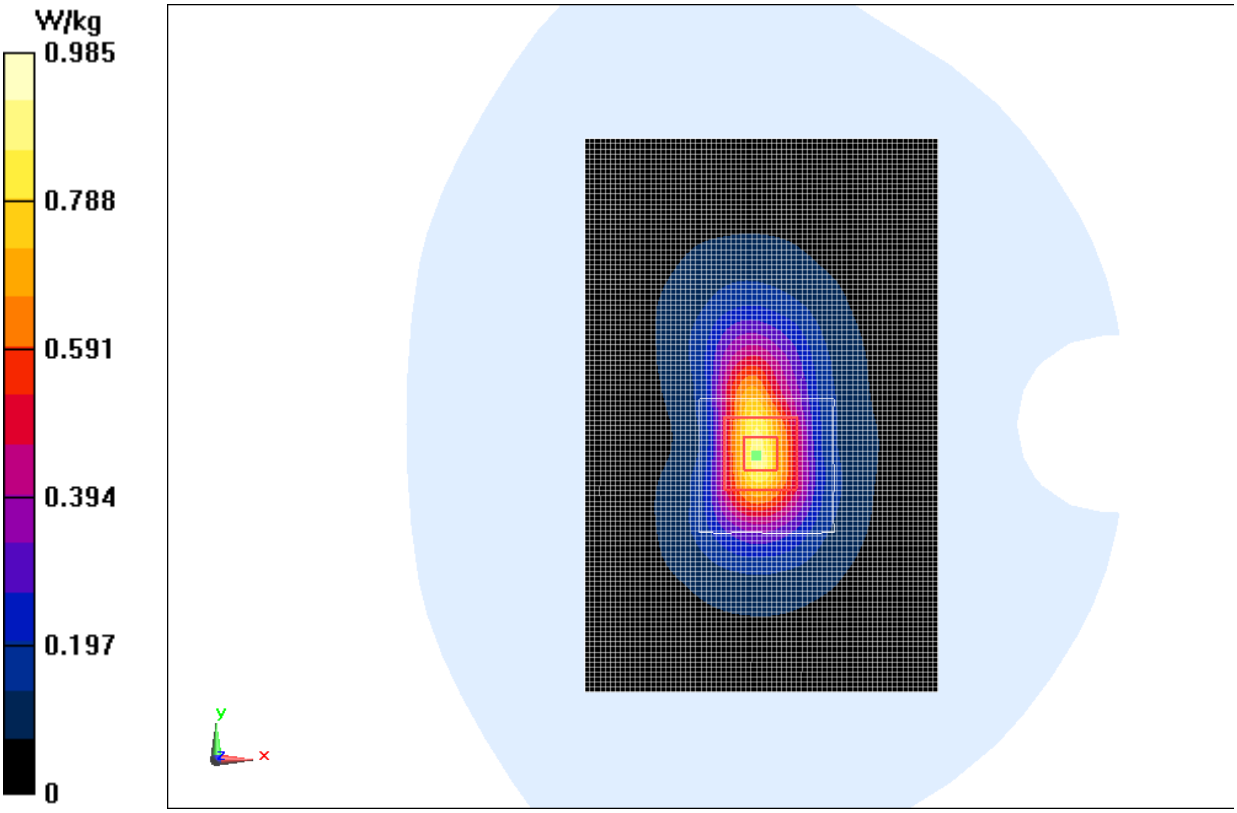


Fig.8 WCDMA1900 CH9538

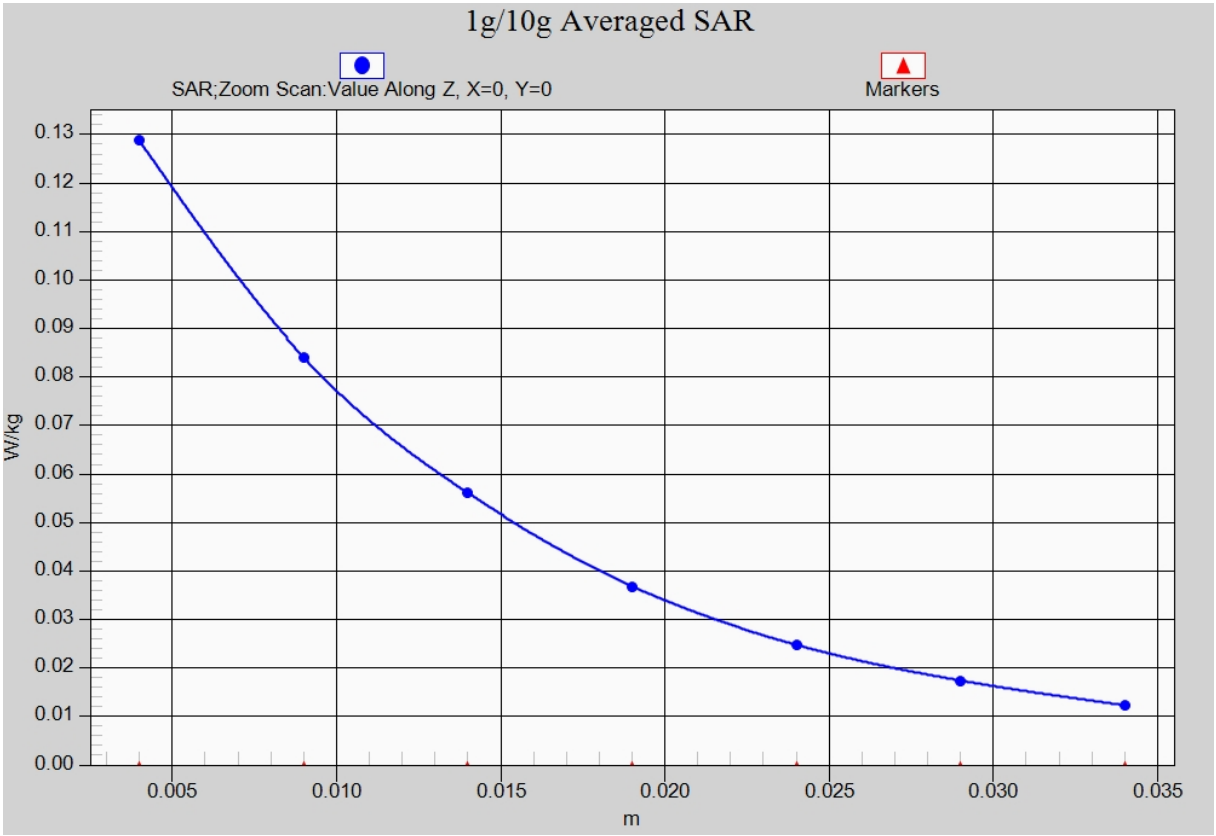


Fig. 8-1 Z-Scan at power reference point (WCDMA1900 CH9538)

LTE Band2 Left Cheek Low with QPSK_20M_1RB_High
Date: 2013-7-15
Electronics: DAE4 Sn771
Medium: Head 1900 MHz
Medium parameters used: f = 1860 MHz; σ = 1.372 mho/m; εr = 39.363; ρ = 1000 kg/m^3
Ambient Temperature: 22.7°C Liquid Temperature: 22.2°C
Communication System: LTE Band2 Frequency: 1860 MHz Duty Cycle: 1:1
Probe: EX3DV4 - SN3846 ConvF(8.01, 8.01, 8.01)

Cheek Low/Area Scan (61x111x1): Interpolated grid: dx=1.000 mm, dy=1.000 mm
Maximum value of SAR (interpolated) = 0.595 W/kg

Cheek Low/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 8.507 V/m; Power Drift = 0.14 dB
Peak SAR (extrapolated) = 0.815 W/kg
SAR(1 g) = 0.540 W/kg; SAR(10 g) = 0.336 W/kg
Maximum value of SAR (measured) = 0.589 W/kg

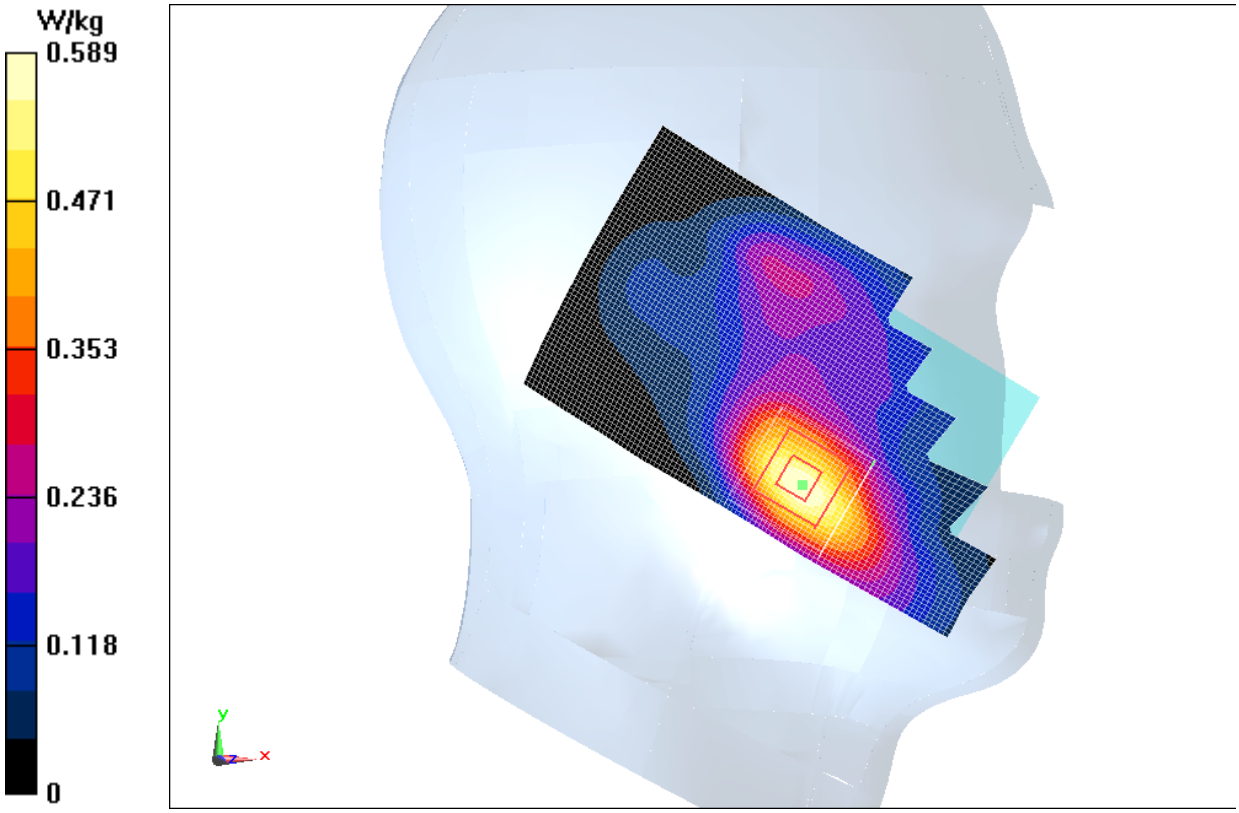


Fig.9 LTE Band2 CH18700

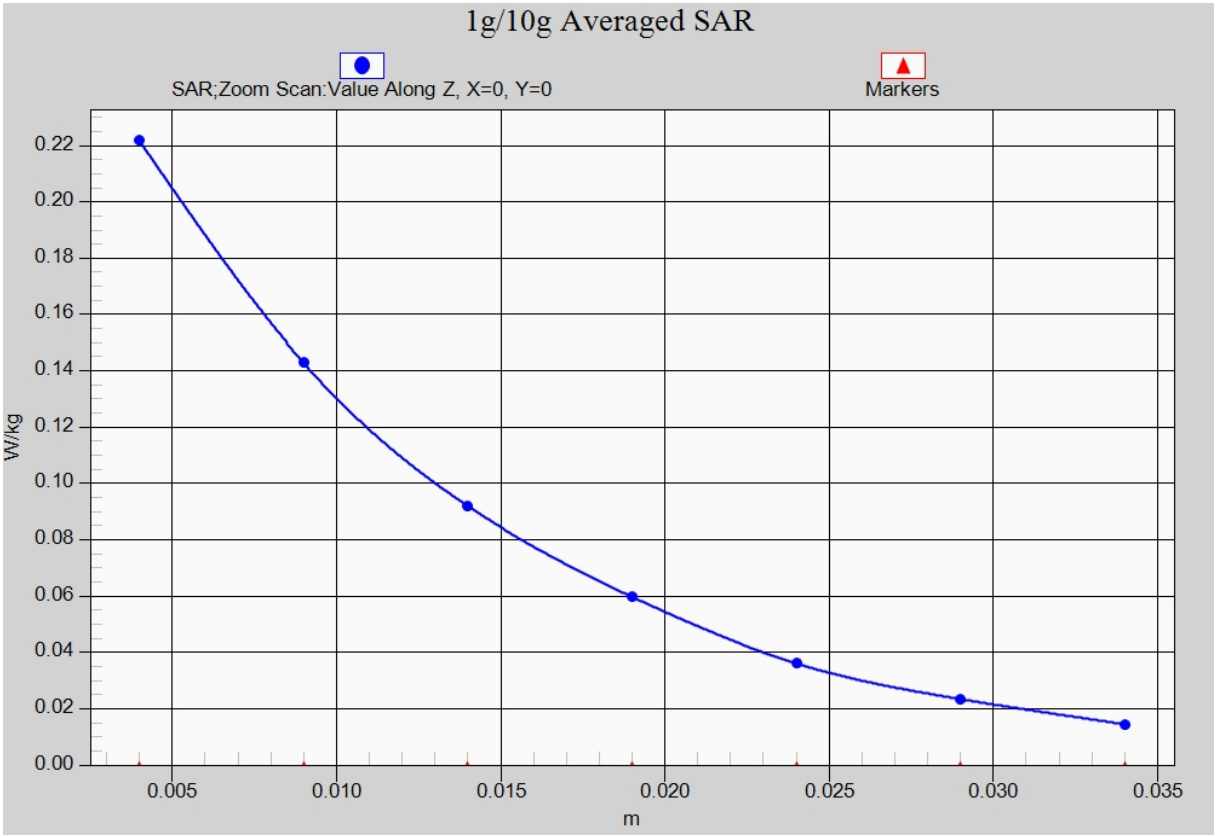


Fig. 9-1 Z-Scan at power reference point (LTE Band2 CH18700)

LTE Band2 Body Bottom Edge High with QPSK_20M_1RB_High
Date: 2013-7-15
Electronics: DAE4 Sn771
Medium: Body 1900 MHz
Medium parameters used: f = 1900 MHz; σ = 1.538 mho/m; εr = 52.24; ρ = 1000 kg/m^3
Ambient Temperature: 22.7°C Liquid Temperature: 22.2°C
Communication System: LTE Band2 Frequency: 1900 MHz Duty Cycle: 1:1
Probe: EX3DV4 - SN3846 ConvF(7.37, 7.37, 7.37)

Bottom Edge High/Area Scan (71x111x1): Interpolated grid: dx=1.000 mm, dy=1.000 mm
Maximum value of SAR (interpolated) = 1.09 W/kg

Bottom Edge High/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 29.290 V/m; Power Drift = -0.08 dB
Peak SAR (extrapolated) = 1.69 W/kg
SAR(1 g) = 1.05 W/kg; SAR(10 g) = 0.574 W/kg
Maximum value of SAR (measured) = 1.19 W/kg

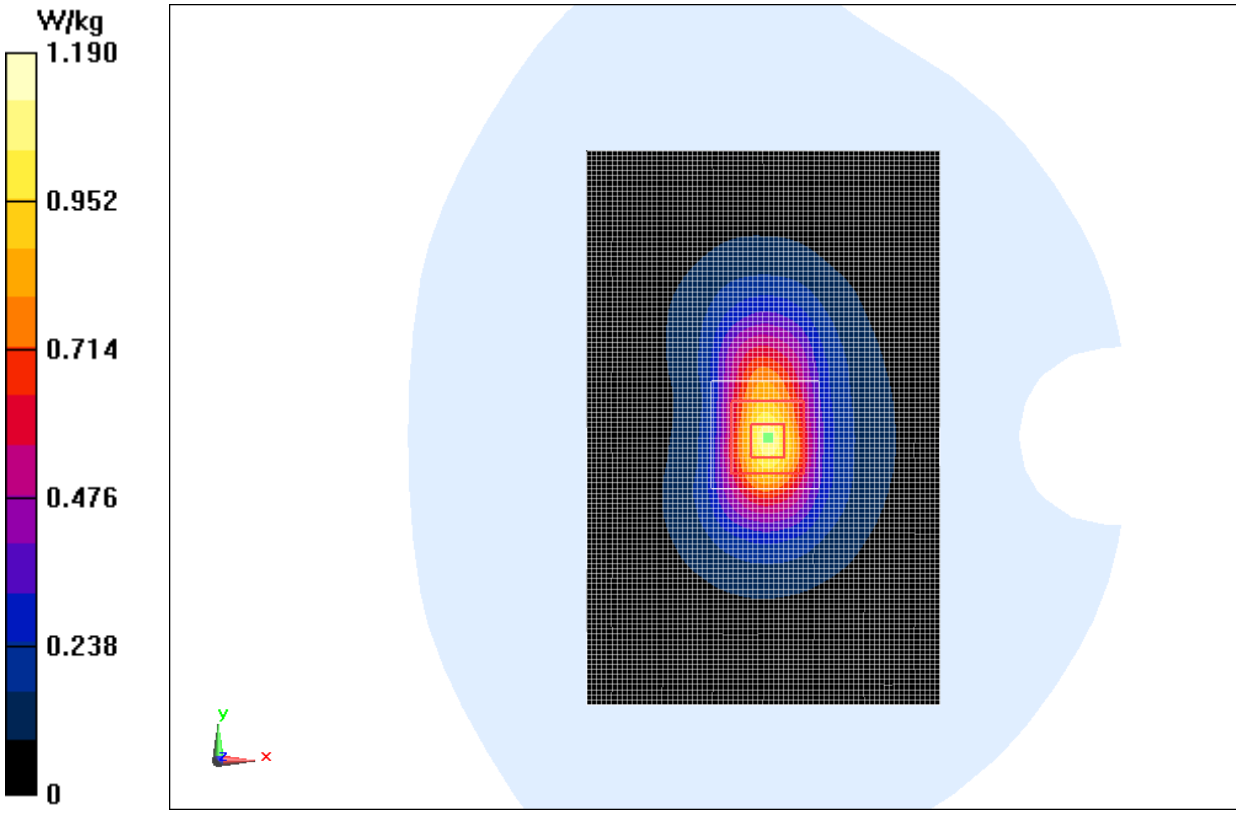


Fig.10 LTE Band2 CH19100

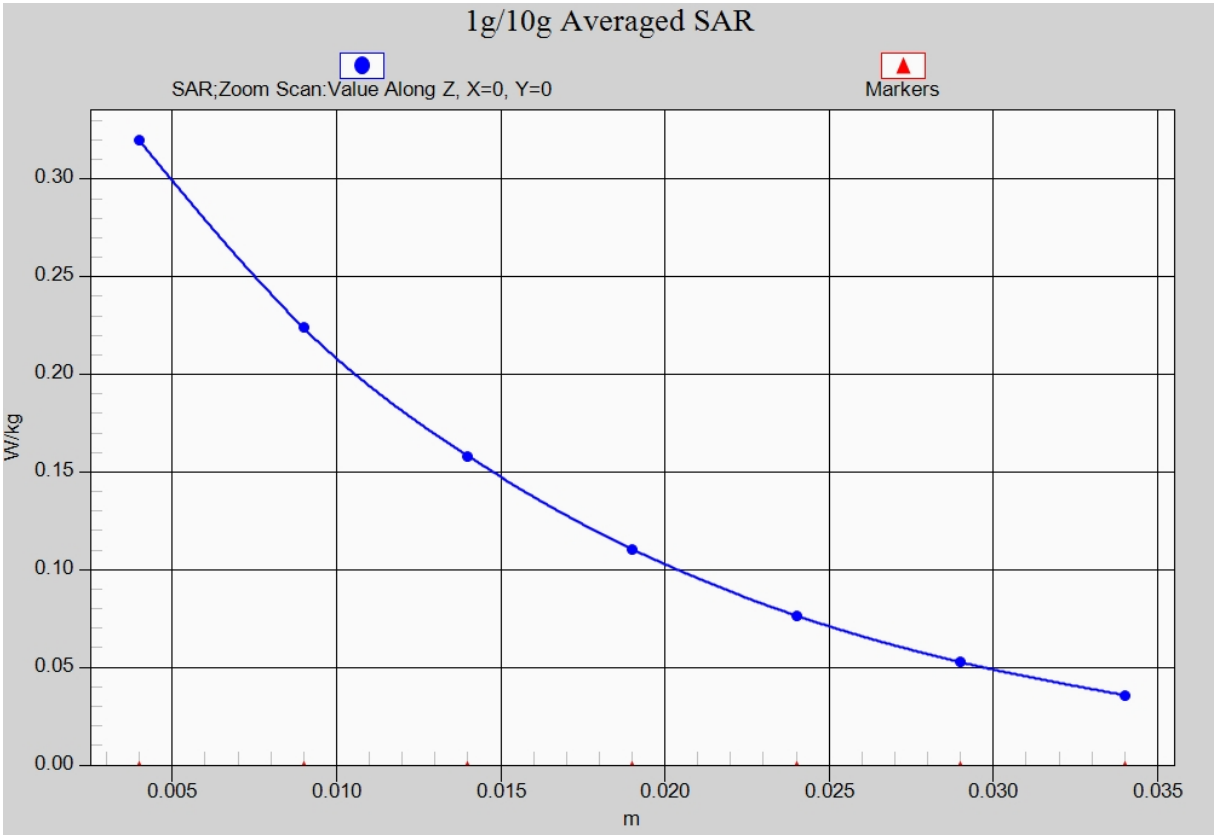


Fig. 10-1 Z-Scan at power reference point (LTE Band2 CH19100)

LTE Band4 Right Cheek High with QPSK_20M_1RB_High
Date: 2013-7-14
Electronics: DAE4 Sn771
Medium: Head 1750 MHz
Medium parameters used: f = 1745 MHz; σ = 1.372 mho/m; εr = 40.515; ρ = 1000 kg/m^3
Ambient Temperature: 22.7°C Liquid Temperature: 22.2°C
Communication System: LTE Band4 Frequency: 1745 MHz Duty Cycle: 1:1
Probe: EX3DV4 - SN3846 ConvF(8.39, 8.39, 8.39)

Cheek High/Area Scan (61x111x1): Interpolated grid: dx=1.000 mm, dy=1.000 mm
Maximum value of SAR (interpolated) = 0.406 W/kg

Cheek High/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 9.408 V/m; Power Drift = -0.11 dB
Peak SAR (extrapolated) = 0.540 W/kg
SAR(1 g) = 0.363 W/kg; SAR(10 g) = 0.230 W/kg
Maximum value of SAR (measured) = 0.389 W/kg

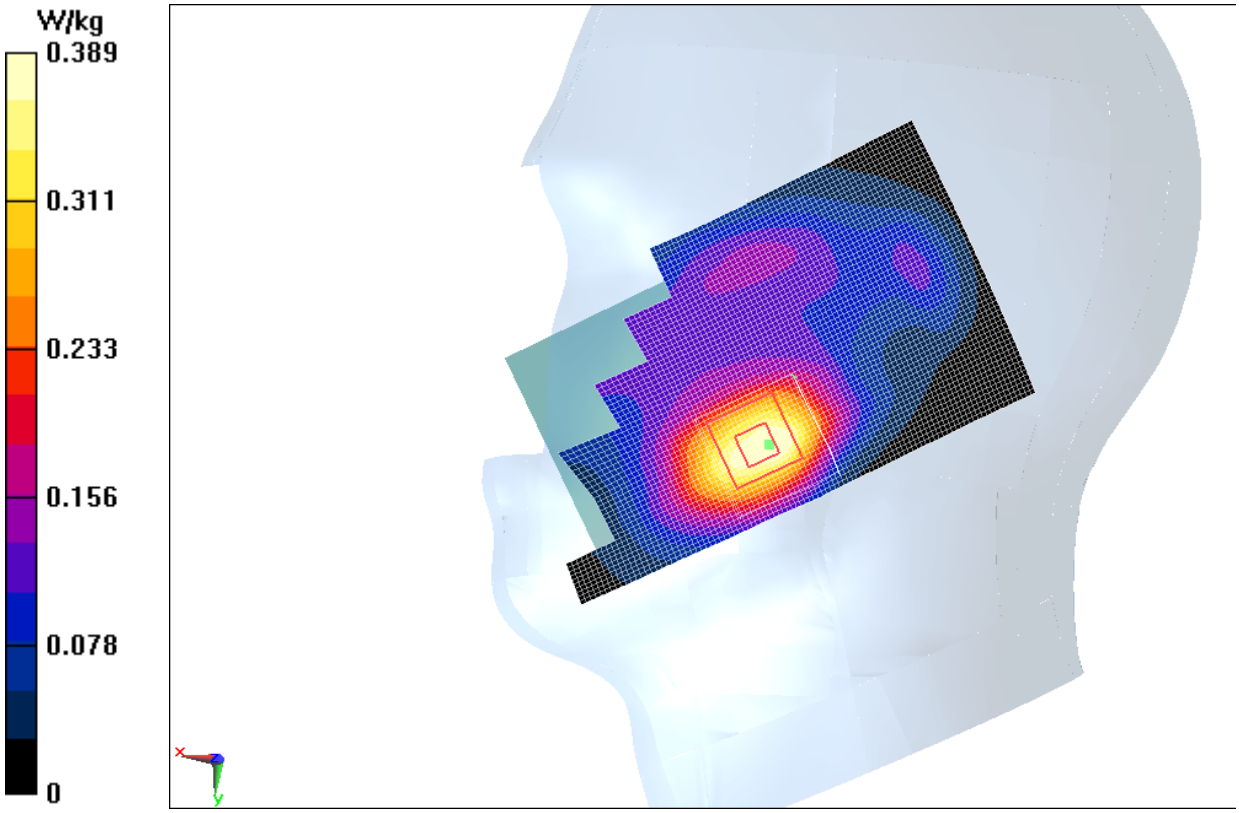


Fig.11 LTE Band4 CH20300

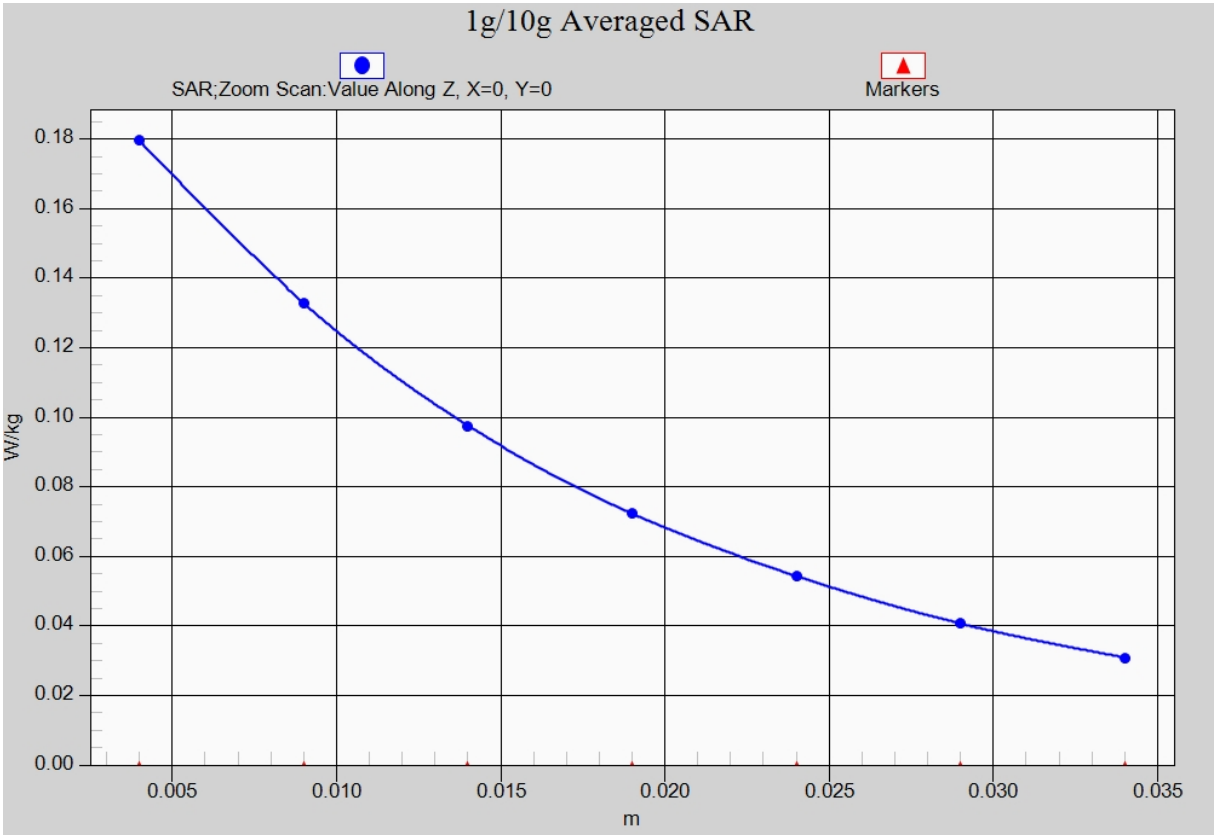


Fig. 11-1 Z-Scan at power reference point (LTE Band4 CH20300)

LTE Band4 Body Rear Middle with QPSK_20M_1RB_High
Date: 2013-7-14
Electronics: DAE4 Sn771
Medium: Body 1750 MHz
Medium parameters used (interpolated): f = 1732.5 MHz; σ = 1.492 mho/m; εr = 53.964; ρ = 1000 kg/m^3
Ambient Temperature: 22.7°C Liquid Temperature: 22.2°C
Communication System: LTE Band4 Frequency: 1732.5 MHz Duty Cycle: 1:1
Probe: EX3DV4 - SN3846 ConvF(7.63, 7.63, 7.63)

Rear Middle/Area Scan (71x111x1): Interpolated grid: dx=1.000 mm, dy=1.000 mm
Maximum value of SAR (interpolated) = 0.972 W/kg

Rear Middle/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 11.803 V/m; Power Drift = 0.04 dB
Peak SAR (extrapolated) = 1.30 W/kg
SAR(1 g) = 0.894 W/kg; SAR(10 g) = 0.570 W/kg
Maximum value of SAR (measured) = 0.963 W/kg

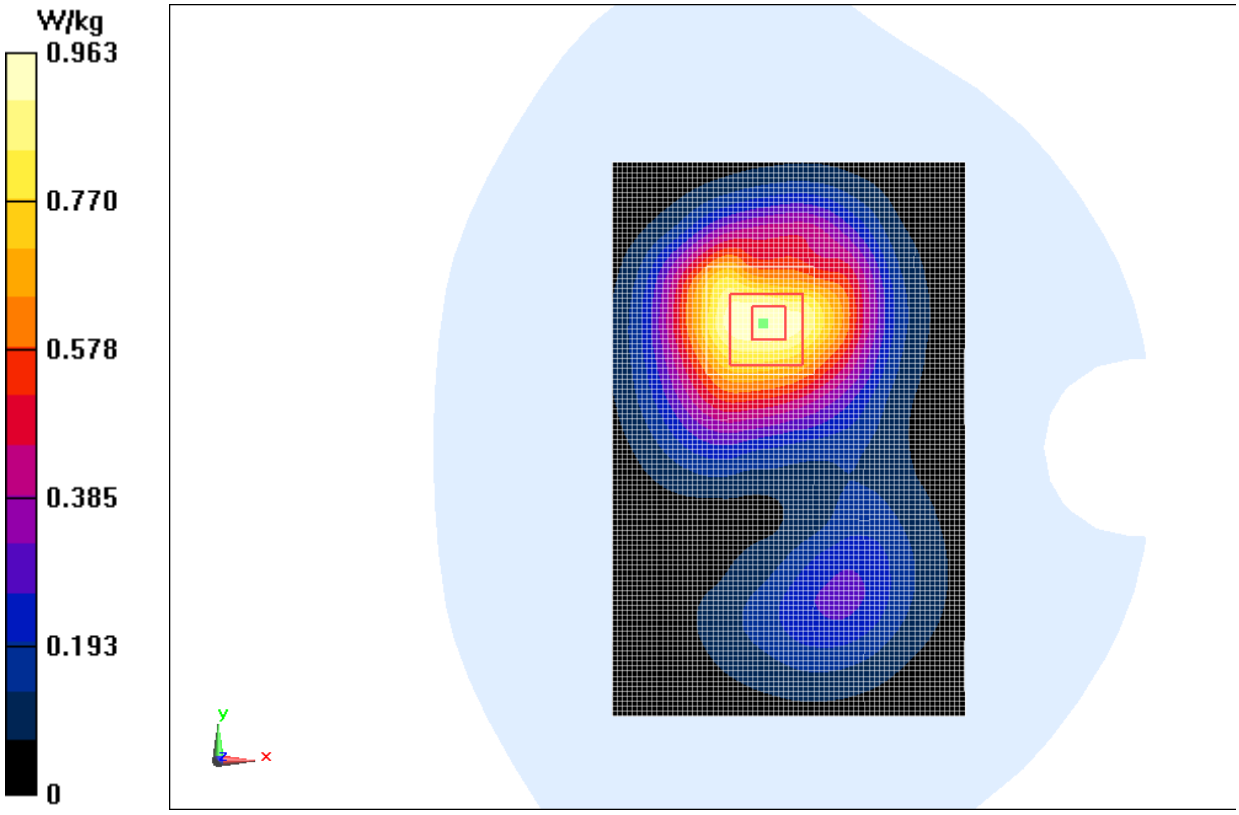


Fig.12 LTE Band4 CH20175

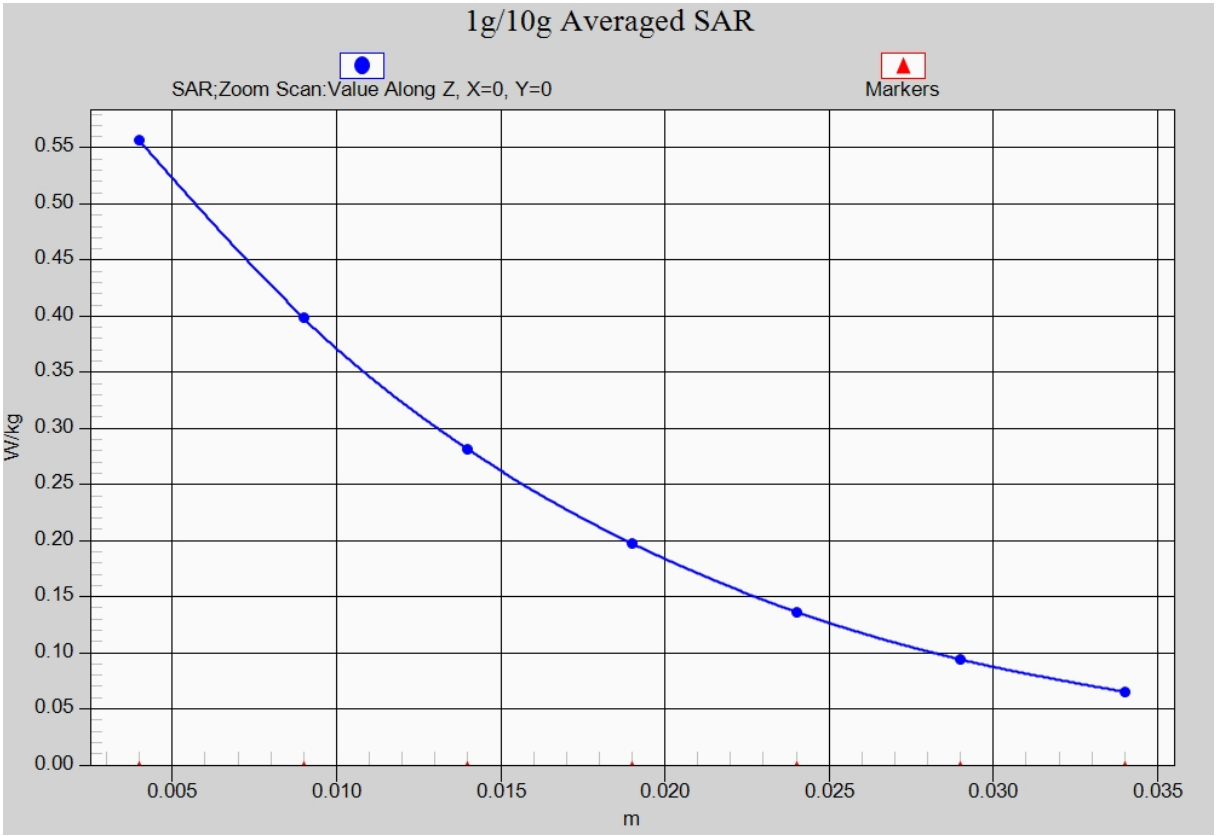


Fig. 12-1 Z-Scan at power reference point (LTE Band4 CH20175)

LTE Band5 Right Cheek High with QPSK_10M_1RB_Middle
Date: 2013-7-13
Electronics: DAE4 Sn771
Medium: Head 850 MHz
Medium parameters used (interpolated): f = 844 MHz; σ = 0.926 mho/m; εr = 42.225; ρ = 1000 kg/m^3
Ambient Temperature: 22.6°C Liquid Temperature: 22.1°C
Communication System: LTE Band5 Frequency: 844 MHz Duty Cycle: 1:1
Probe: EX3DV4 - SN3846 ConvF(9.18, 9.18, 9.18)

Cheek High/Area Scan (61x101x1): Interpolated grid: dx=1.000 mm, dy=1.000 mm
Maximum value of SAR (interpolated) = 0.425 W/kg

Cheek High/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 7.543 V/m; Power Drift = 0.17 dB
Peak SAR (extrapolated) = 0.490 W/kg
SAR(1 g) = 0.405 W/kg; SAR(10 g) = 0.312 W/kg
Maximum value of SAR (measured) = 0.423 W/kg

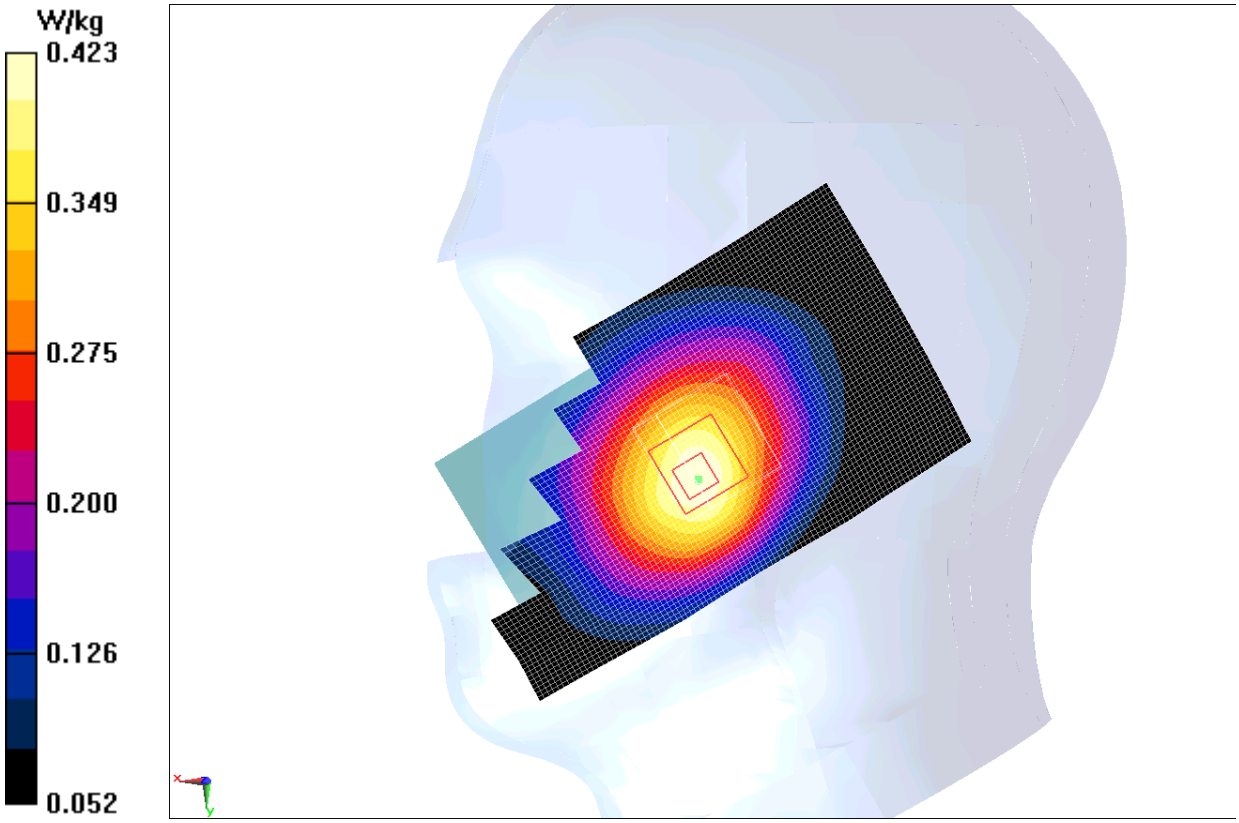


Fig.13 LTE Band5 CH20600

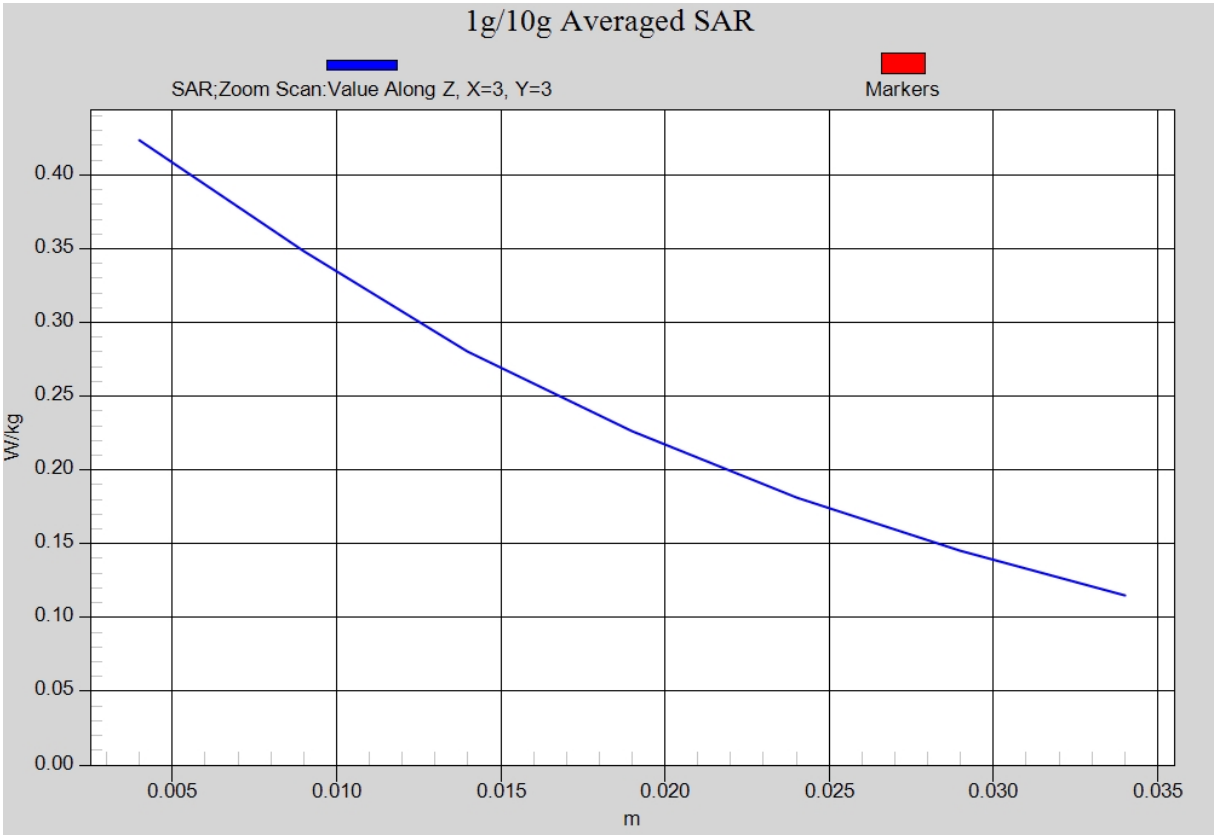


Fig. 13-1 Z-Scan at power reference point (LTE Band5 CH20600)

LTE Band5 Body Rear High with QPSK_10M_1RB_Middle
Date: 2013-7-13
Electronics: DAE4 Sn771
Medium: Body 850 MHz
Medium parameters used (interpolated): f = 844 MHz; σ = 0.973 mho/m; εr = 54.468; ρ = 1000 kg/m^3
Ambient Temperature: 22.6°C Liquid Temperature: 22.1°C
Communication System: LTE Band5 Frequency: 844 MHz Duty Cycle: 1:1
Probe: EX3DV4 - SN3846 ConvF(9.04, 9.04, 9.04)

Rear High/Area Scan (61x101x1): Interpolated grid: dx=1.000 mm, dy=1.000 mm
Maximum value of SAR (interpolated) = 0.633 W/kg

Rear High/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 24.651 V/m; Power Drift = 0.07 dB
Peak SAR (extrapolated) = 0.744 W/kg
SAR(1 g) = 0.612 W/kg; SAR(10 g) = 0.471 W/kg
Maximum value of SAR (measured) = 0.640 W/kg

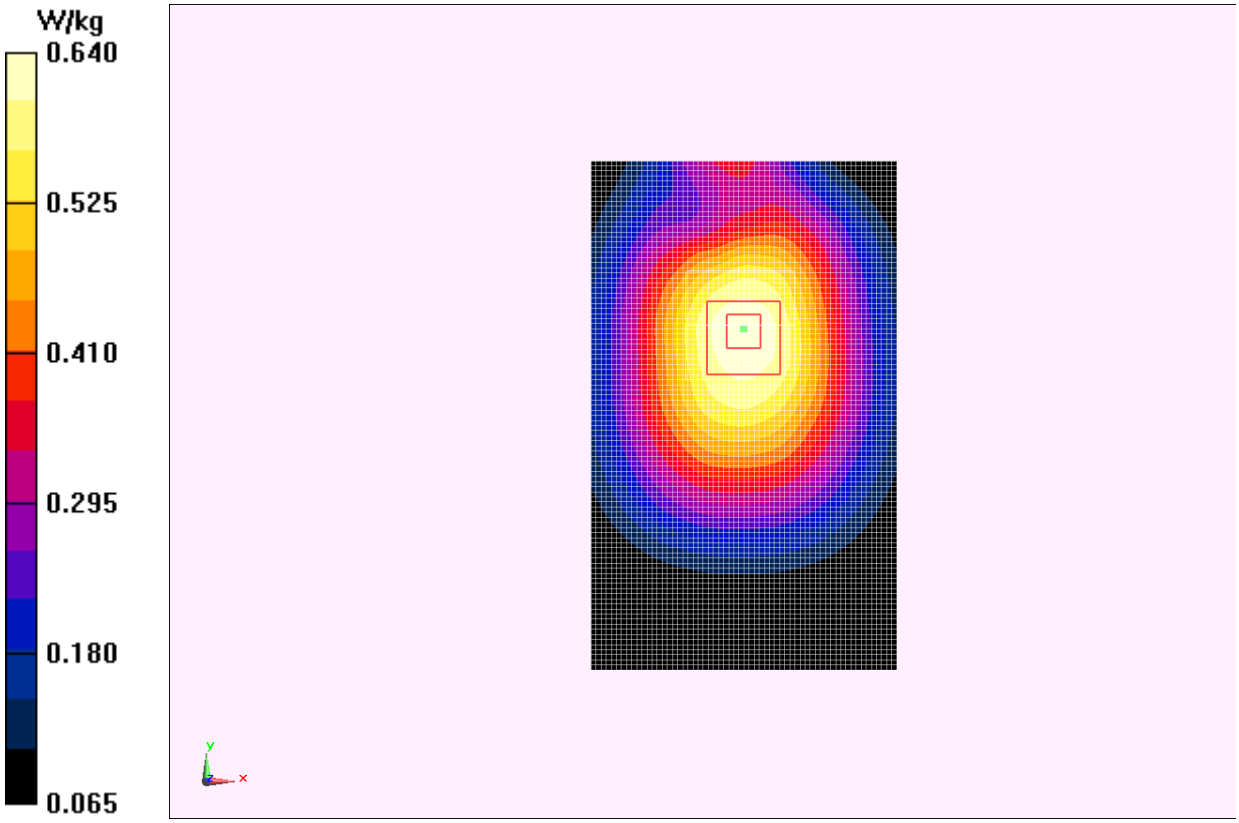


Fig.14 LTE Band5 CH20600

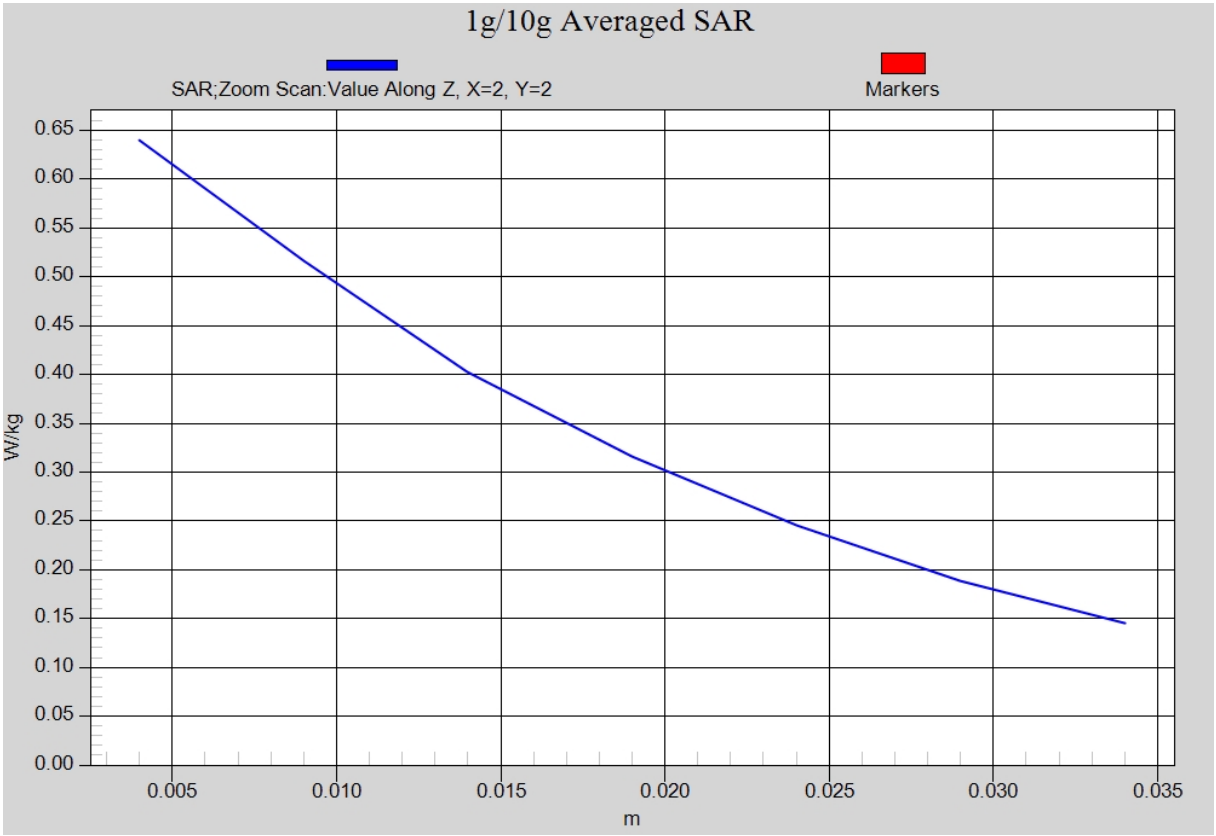


Fig. 14-1 Z-Scan at power reference point (LTE Band5 CH20600)

LTE Band17 Left Cheek Middle with QPSK_10M_1RB_High
Date: 2013-7-12
Electronics: DAE4 Sn771
Medium: Head 750 MHz
Medium parameters used: f = 710 MHz; σ = 0.842 mho/m; εr = 42.54; ρ = 1000 kg/m^3
Ambient Temperature: 22.6°C Liquid Temperature: 22.1°C
Communication System: LTE Band17 Frequency: 710 MHz Duty Cycle: 1:1
Probe: EX3DV4 - SN3846 ConvF(9.53, 9.53, 9.53)

Cheek Middle/Area Scan (61x101x1): Interpolated grid: dx=1.000 mm, dy=1.000 mm
Maximum value of SAR (interpolated) = 0.273 W/kg

Cheek Middle/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 5.148 V/m; Power Drift = -0.08 dB
Peak SAR (extrapolated) = 0.335 W/kg
SAR(1 g) = 0.268 W/kg; SAR(10 g) = 0.208 W/kg
Maximum value of SAR (measured) = 0.284 W/kg

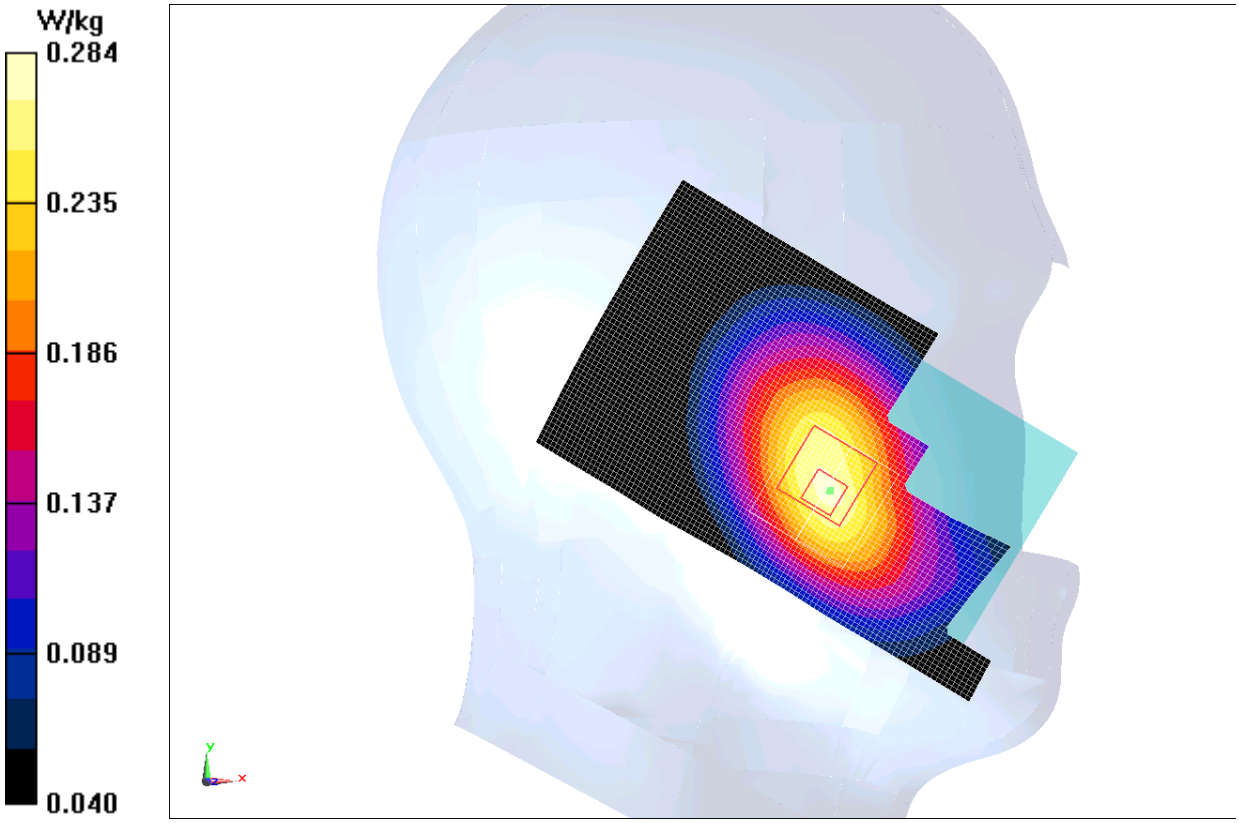


Fig.15 LTE Band17 CH23790

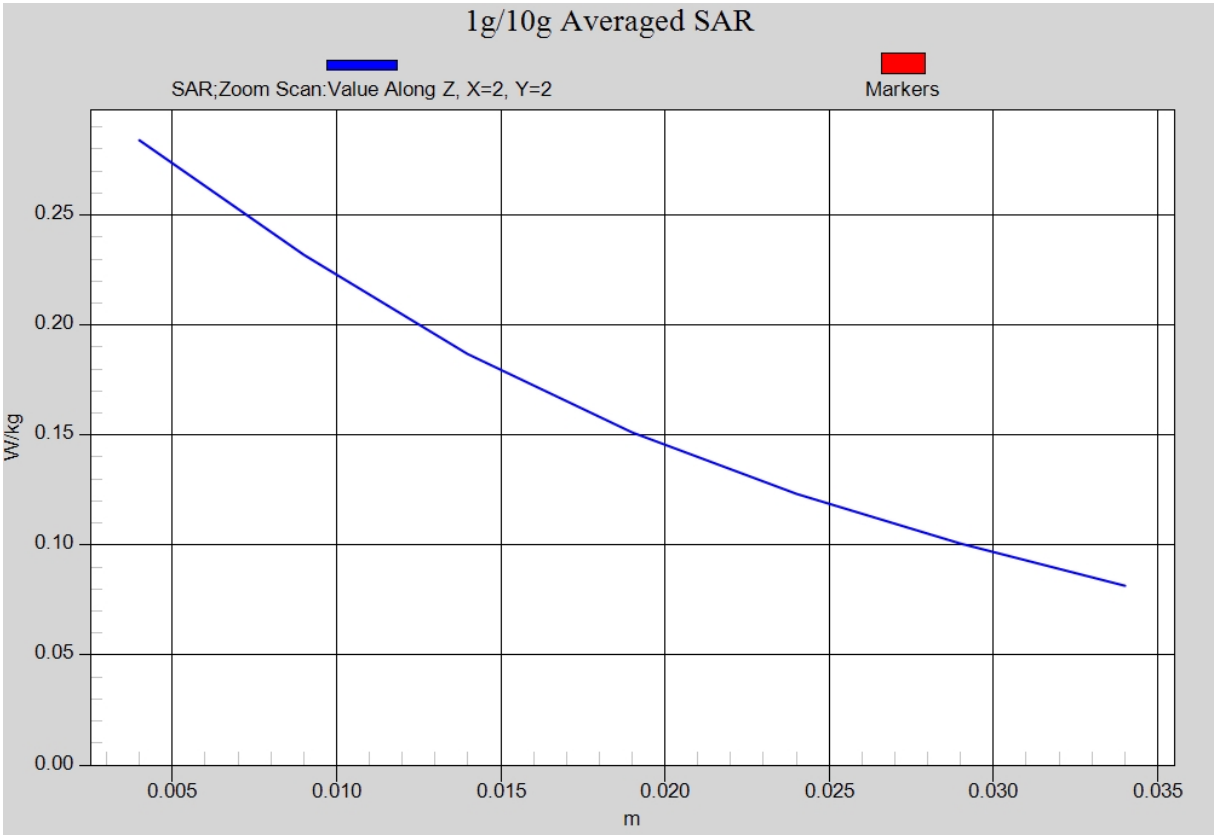


Fig. 15-1 Z-Scan at power reference point (LTE Band17 CH23790)

LTE Band17 Body Rear Middle with QPSK_10M_1RB_High
Date: 2013-7-12
Electronics: DAE4 Sn771
Medium: Body 750 MHz
Medium parameters used: f = 710 MHz; σ = 0.958 mho/m; εr = 55.77; ρ = 1000 kg/m^3
Ambient Temperature: 22.6°C Liquid Temperature: 22.1°C
Communication System: LTE Band17 Frequency: 710 MHz Duty Cycle: 1:1
Probe: EX3DV4 - SN3846 ConvF(9.28, 9.28, 9.28)

Rear Middle/Area Scan (61x101x1): Interpolated grid: dx=1.000 mm, dy=1.000 mm
Maximum value of SAR (interpolated) = 0.553 W/kg

Rear Middle/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 18.057 V/m; Power Drift = 0.03 dB
Peak SAR (extrapolated) = 0.660 W/kg
SAR(1 g) = 0.527 W/kg; SAR(10 g) = 0.403 W/kg
Maximum value of SAR (measured) = 0.554 W/kg

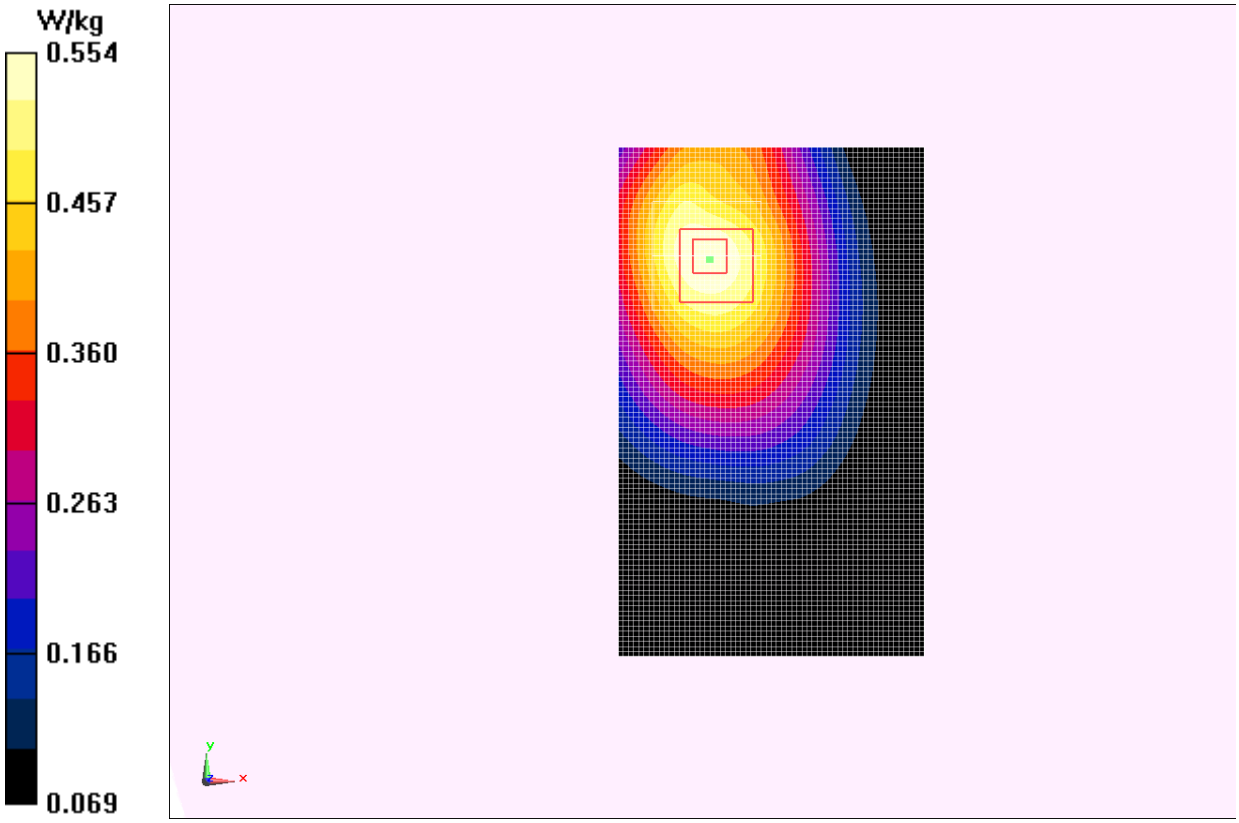


Fig.16 LTE Band17 CH23790

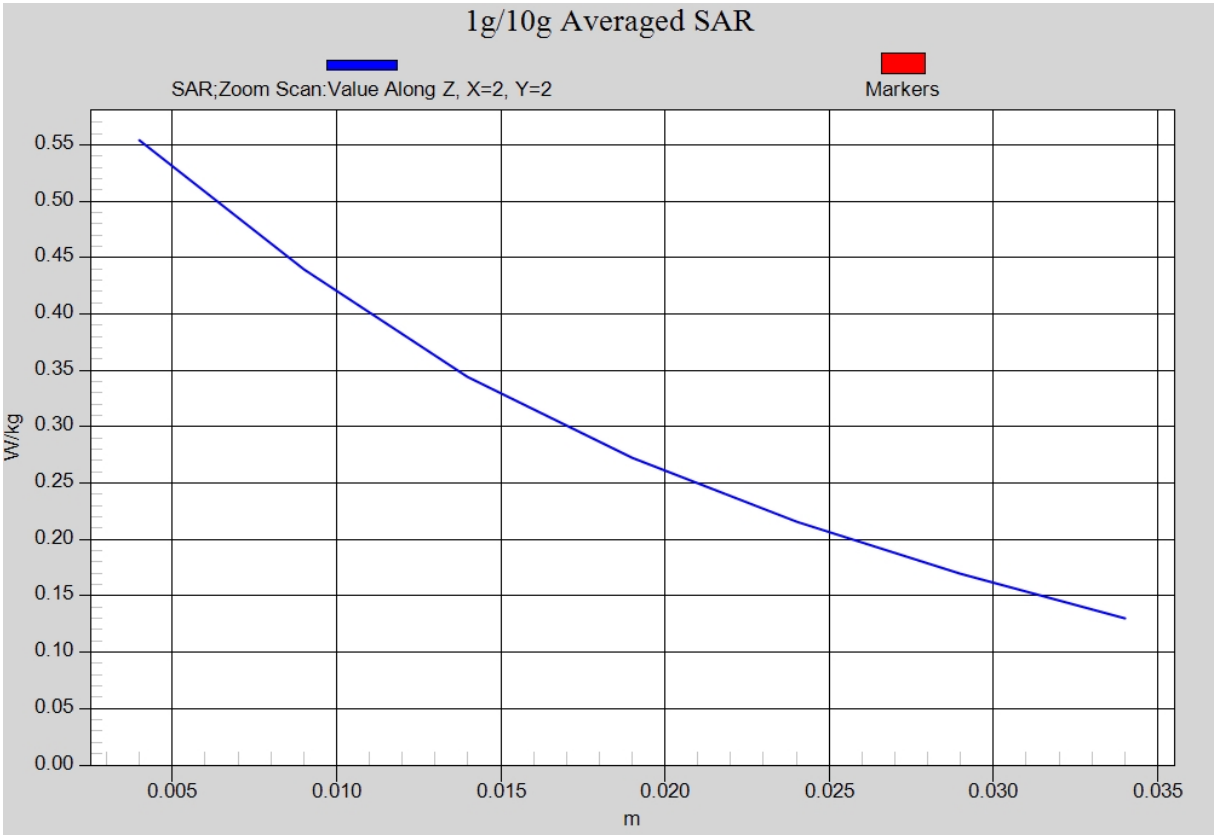


Fig. 16-1 Z-Scan at power reference point (LTE Band17 CH23790)

Wifi 802.11b Right Cheek Channel 6

Date: 2013-7-5
Electronics: DAE4 Sn771
Medium: Head 2450 MHz
Medium parameters used (interpolated): f = 2437 MHz; σ = 1.812 mho/m; ε_r = 39.79; ρ = 1000 kg/m^3
Ambient Temperature: 22.6°C Liquid Temperature: 22.1°C
Communication System: WLan 2450 Frequency: 2437 MHz Duty Cycle: 1:1
Probe: EX3DV4 - SN3846 ConvF(7.13, 7.13, 7.13)

Cheek Middle/Area Scan (91x171x1): Interpolated grid: dx=1.000 mm, dy=1.000 mm
Maximum value of SAR (interpolated) = 0.224 W/kg

Cheek Middle/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 3.100 V/m; Power Drift = 0.14 dB
Peak SAR (extrapolated) = 0.396 W/kg
SAR(1 g) = 0.195 W/kg; SAR(10 g) = 0.095 W/kg
Maximum value of SAR (measured) = 0.217 W/kg

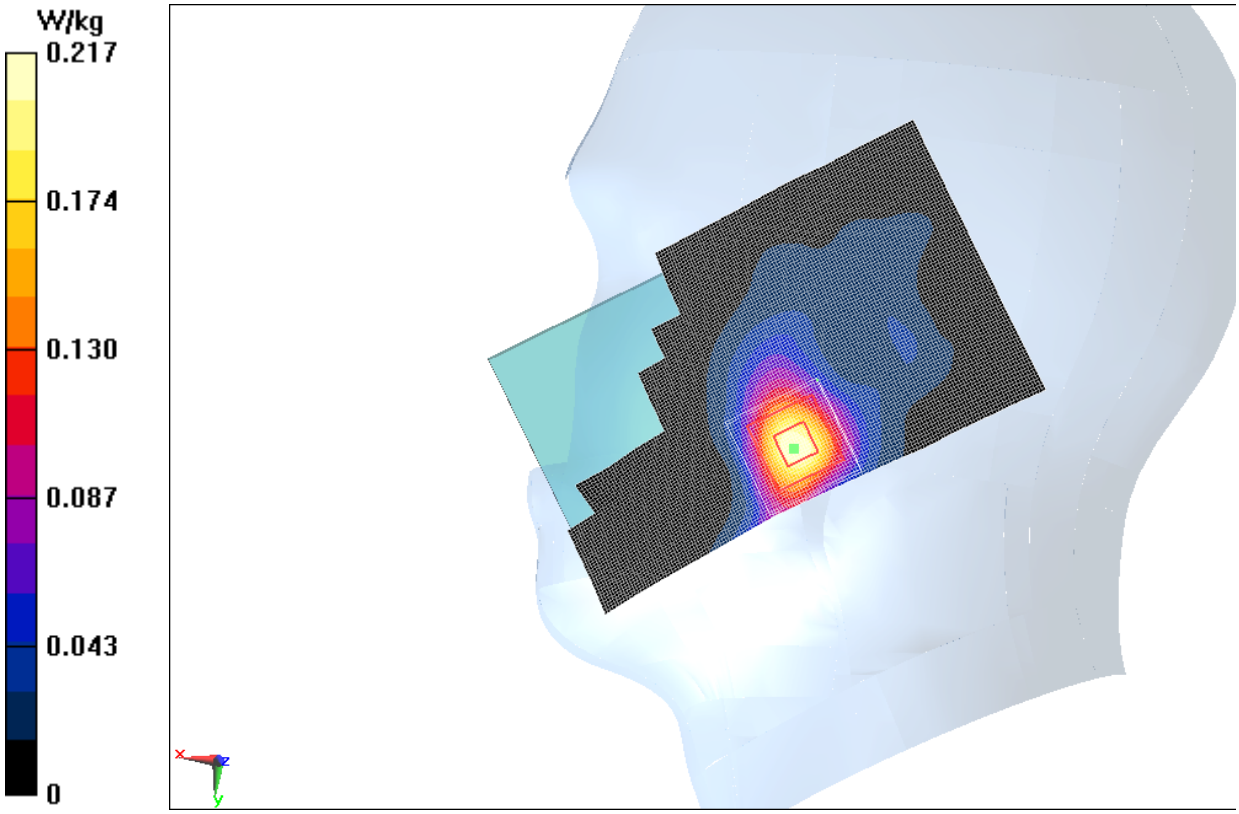


Fig.17 2450 MHz CH6

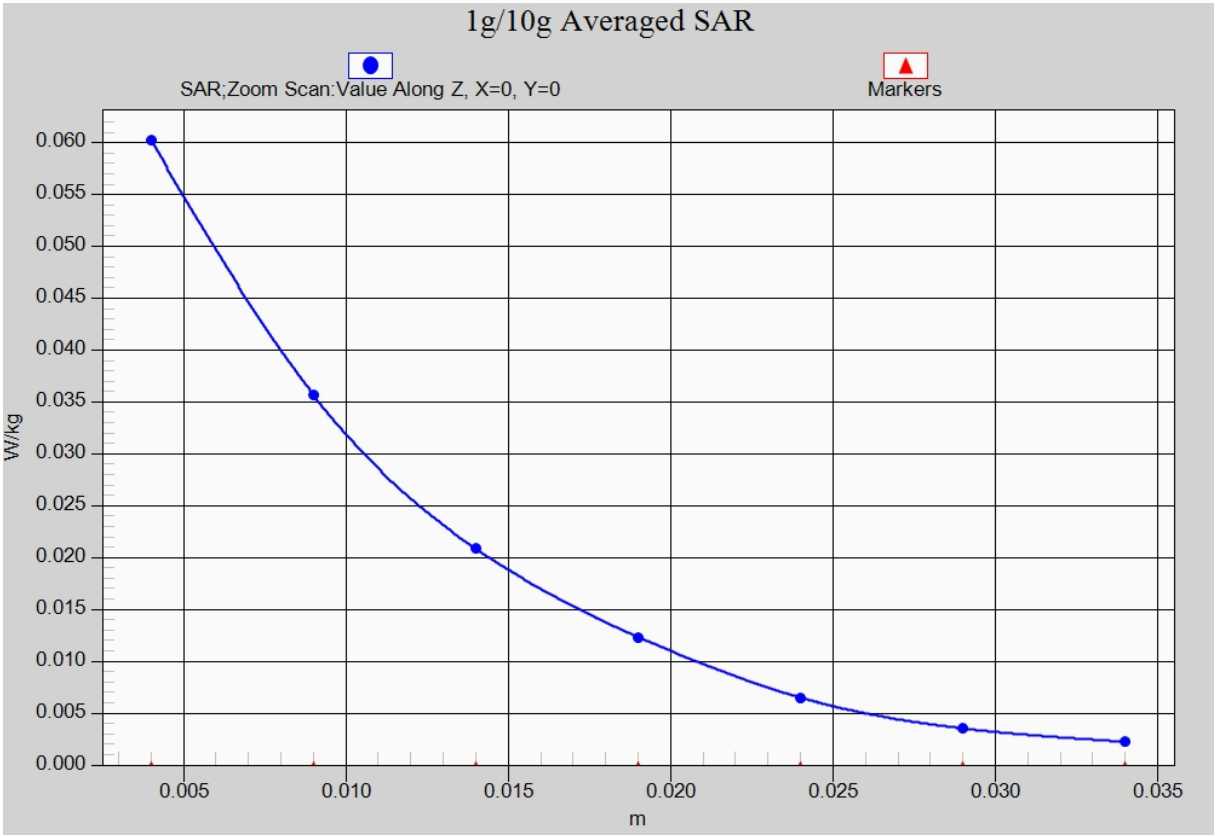


Fig. 17-1 Z-Scan at power reference point (2450 MHz CH6)

Wifi 802.11b Body Rear Channel 6
Date: 2013-7-5
Electronics: DAE4 Sn771
Medium: Body 2450 MHz
Medium parameters used (interpolated): f = 2437 MHz; σ = 1.947 mho/m; ε_r = 52.287; ρ = 1000 kg/m^3
Ambient Temperature: 22.6°C Liquid Temperature: 22.1°C
Communication System: WLan 2450 Frequency: 2437 MHz Duty Cycle: 1:1
Probe: EX3DV4 - SN3846 ConvF(7.00, 7.00, 7.00)

Rear Middle/Area Scan (111x171x1): Interpolated grid: dx=1.000 mm, dy=1.000 mm
Maximum value of SAR (interpolated) = 0.212 W/kg

Rear Middle/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 6.384 V/m; Power Drift = 0.16 dB
Peak SAR (extrapolated) = 0.433 W/kg
SAR(1 g) = 0.200 W/kg; SAR(10 g) = 0.103 W/kg
Maximum value of SAR (measured) = 0.213 W/kg

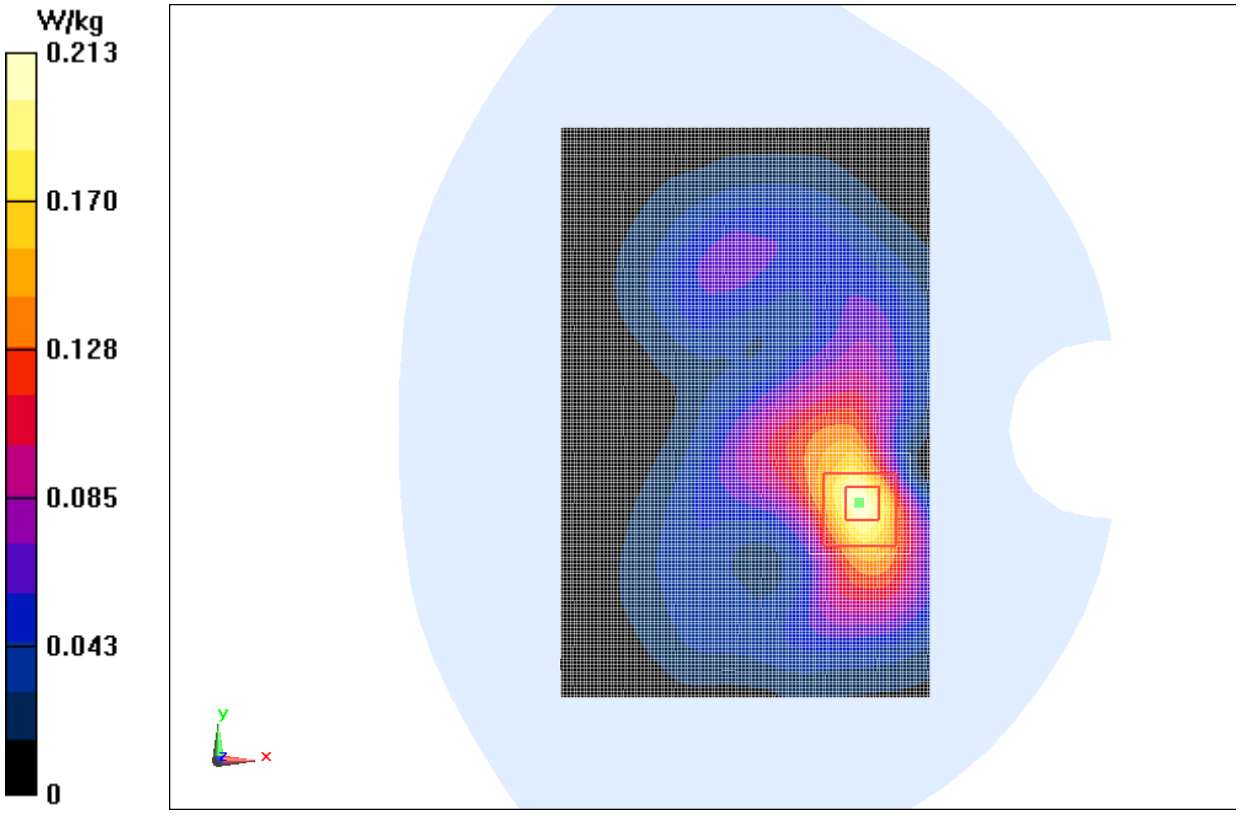


Fig.18 2450 MHz CH6

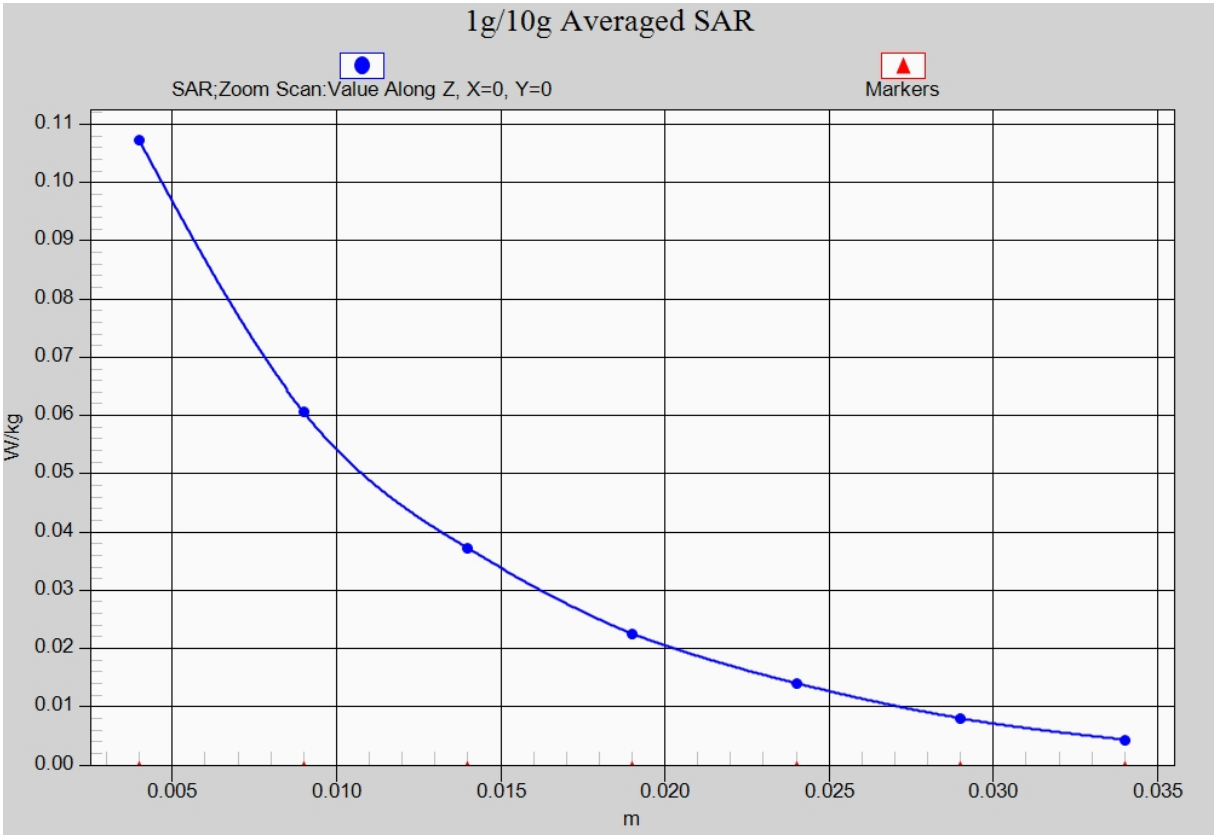


Fig. 18-1 Z-Scan at power reference point (2450 MHz CH6)

Wifi 802.11a Right Cheek Channel 149
Date: 2013-7-16
Electronics: DAE4 Sn771
Medium: Head 5800 MHz
Medium parameters used: f = 5745 MHz; σ = 5.252 mho/m; ε_r = 35.95; ρ = 1000 kg/m^3
Ambient Temperature: 22.5°C Liquid Temperature: 22.0°C
Communication System: WLan 5G Frequency: 5745 MHz Duty Cycle: 1:1
Probe: EX3DV4 - SN3846 ConvF(4.28, 4.28, 4.28)

Cheek/Area Scan (91x161x1): Interpolated grid: dx=1.000 mm, dy=1.000 mm
Maximum value of SAR (interpolated) = 0.128 W/kg

Cheek/Zoom Scan (8x8x8)/Cube 0: Measurement grid: dx=4mm, dy=4mm, dz=4mm
Reference Value = 1.191 V/m; Power Drift = -0.17 dB
Peak SAR (extrapolated) = 0.485 W/kg
SAR(1 g) = 0.105 W/kg; SAR(10 g) = 0.034 W/kg
Maximum value of SAR (measured) = 0.129 W/kg

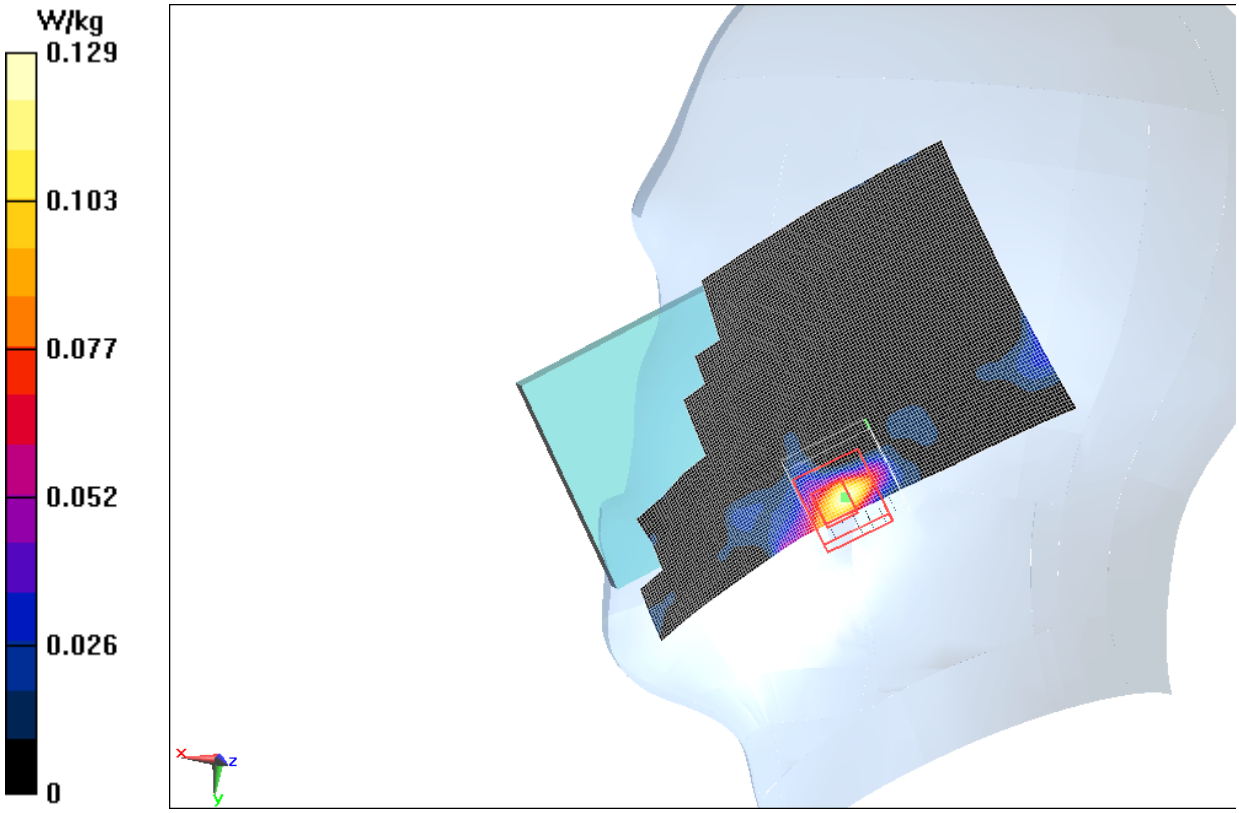


Fig.19 5GHz CH149

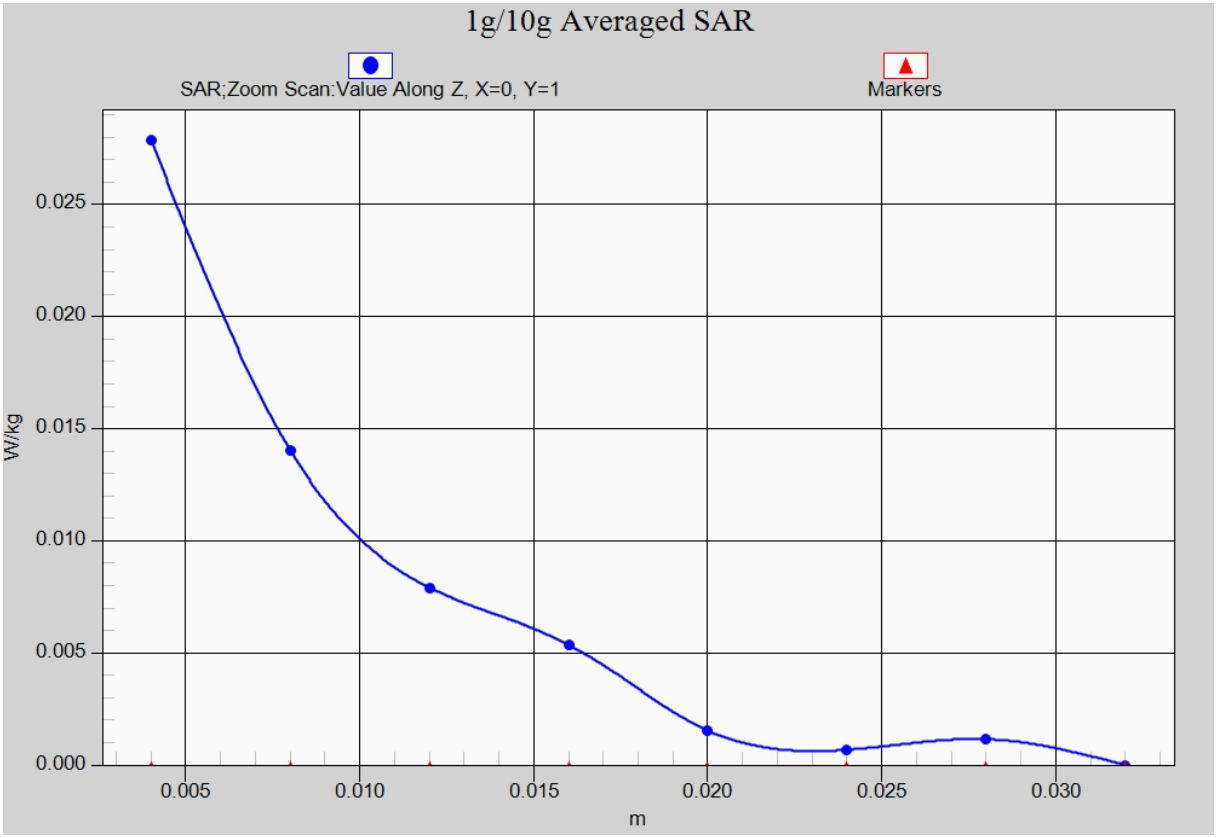


Fig. 19-1 Z-Scan at power reference point (5GHz CH149)

Wifi 802.11a Rear Channel 149
Date: 2013-7-16
Electronics: DAE4 Sn771
Medium: Body 5800 MHz
Medium parameters used: f = 5745 MHz; σ = 6.017 mho/m; ε_r = 48.834; ρ = 1000 kg/m^3
Ambient Temperature: 22.5°C Liquid Temperature: 22.0°C
Communication System: WLan 5G Frequency: 5745 MHz Duty Cycle: 1:1
Probe: EX3DV4 - SN3846 ConvF(3.92, 3.92, 3.92)

Rear/Area Scan (111x171x1): Interpolated grid: dx=1.000 mm, dy=1.000 mm
Maximum value of SAR (interpolated) = 0.256 W/kg

Rear/Zoom Scan (9x9x8)/Cube 0: Measurement grid: dx=4mm, dy=4mm, dz=4mm
Reference Value = 1.758 V/m; Power Drift = 0.16 dB
Peak SAR (extrapolated) = 0.785 W/kg
SAR(1 g) = 0.236 W/kg; SAR(10 g) = 0.085 W/kg
Maximum value of SAR (measured) = 0.253 W/kg

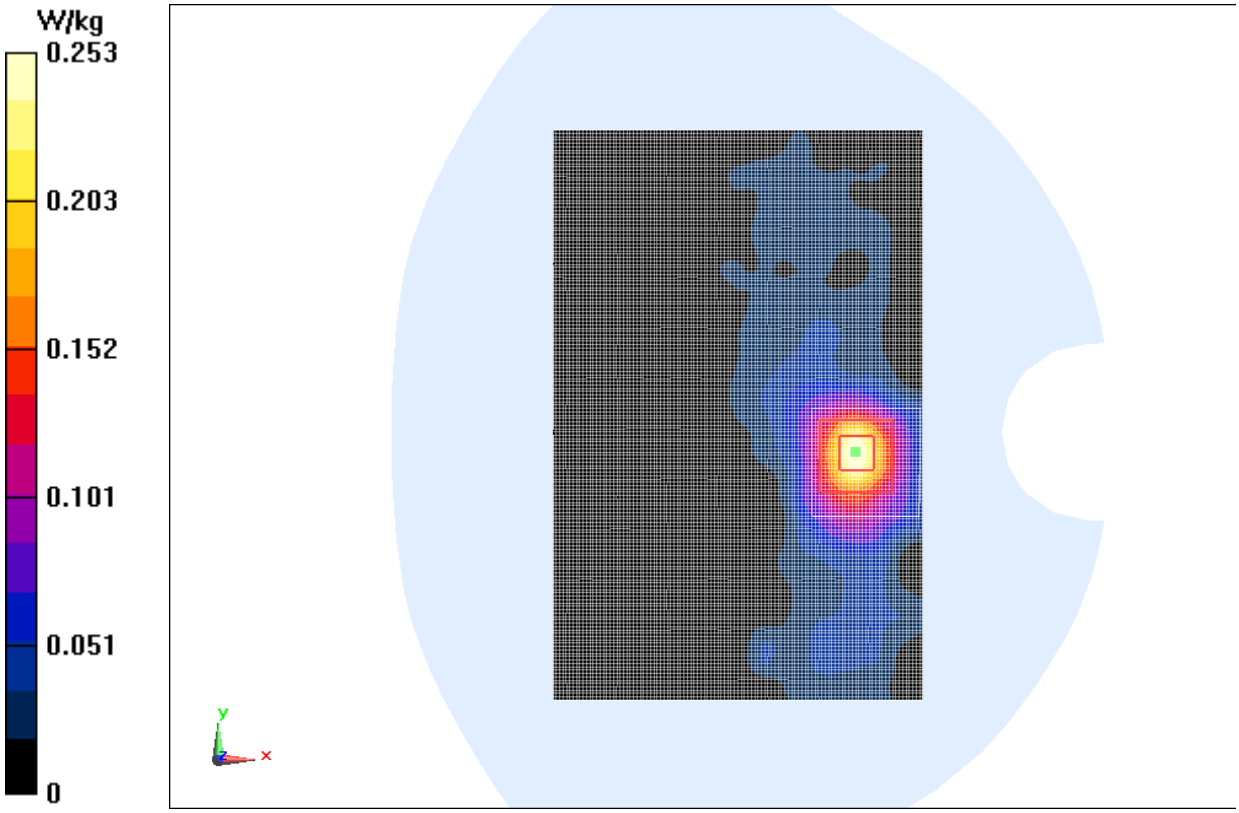


Fig.20 5GHz CH149

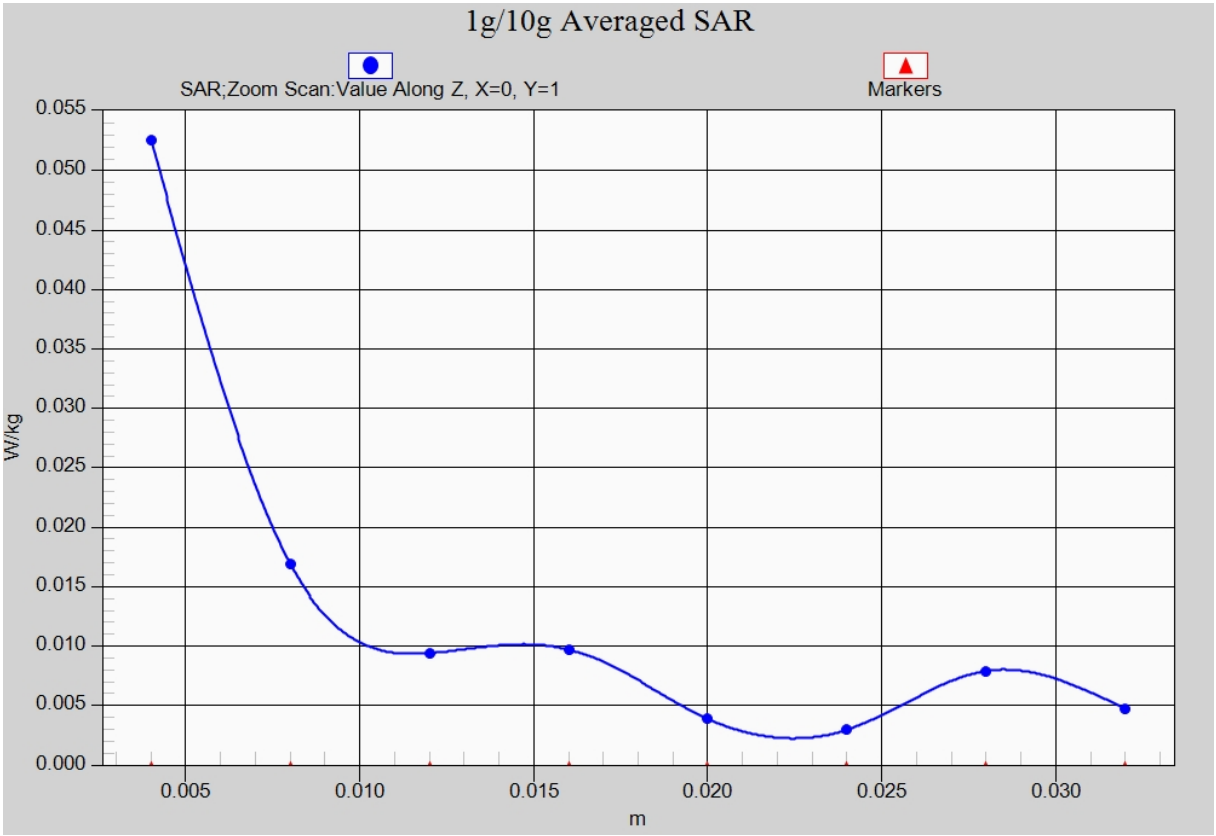


Fig. 20-1 Z-Scan at power reference point (5GHz CH149)

Wifi 802.11n Right Cheek Channel 149

Date: 2013-7-16
Electronics: DAE4 Sn771
Medium: Head 5800 MHz
Medium parameters used: f = 5745 MHz; σ = 5.252 mho/m; ε_r = 35.95; ρ = 1000 kg/m^3
Ambient Temperature: 22.5°C Liquid Temperature: 22.0°C
Communication System: WLan 5G Frequency: 5745 MHz Duty Cycle: 1:1
Probe: EX3DV4 - SN3846 ConvF(4.28, 4.28, 4.28)

Cheek/Area Scan (91x161x1): Interpolated grid: dx=1.000 mm, dy=1.000 mm
Maximum value of SAR (interpolated) = 0.0670 W/kg

Cheek/Zoom Scan (8x8x8)/Cube 0: Measurement grid: dx=4mm, dy=4mm, dz=4mm
Reference Value = 0.999 V/m; Power Drift = 0.14 dB
Peak SAR (extrapolated) = 0.200 W/kg
SAR(1 g) = 0.063 W/kg; SAR(10 g) = 0.020 W/kg
Maximum value of SAR (measured) = 0.0897 W/kg

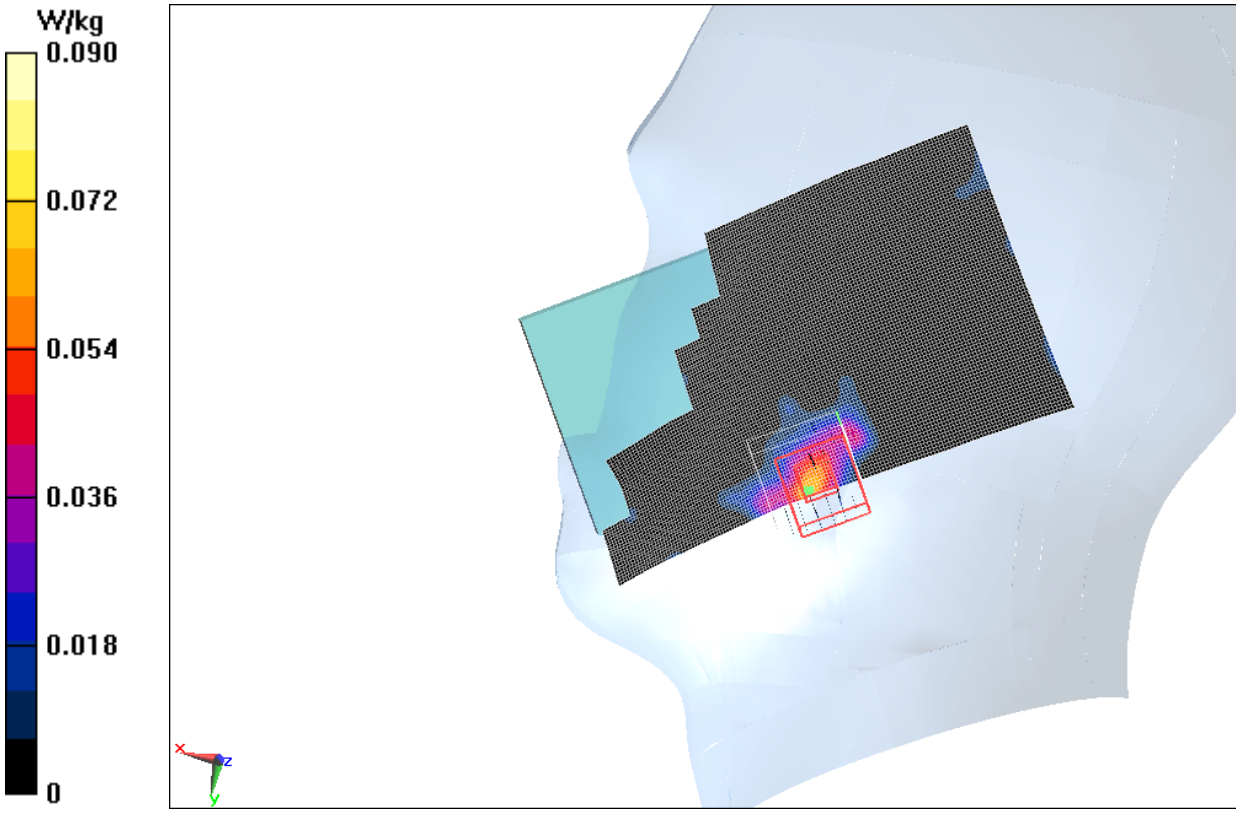


Fig.21 5GHz CH149

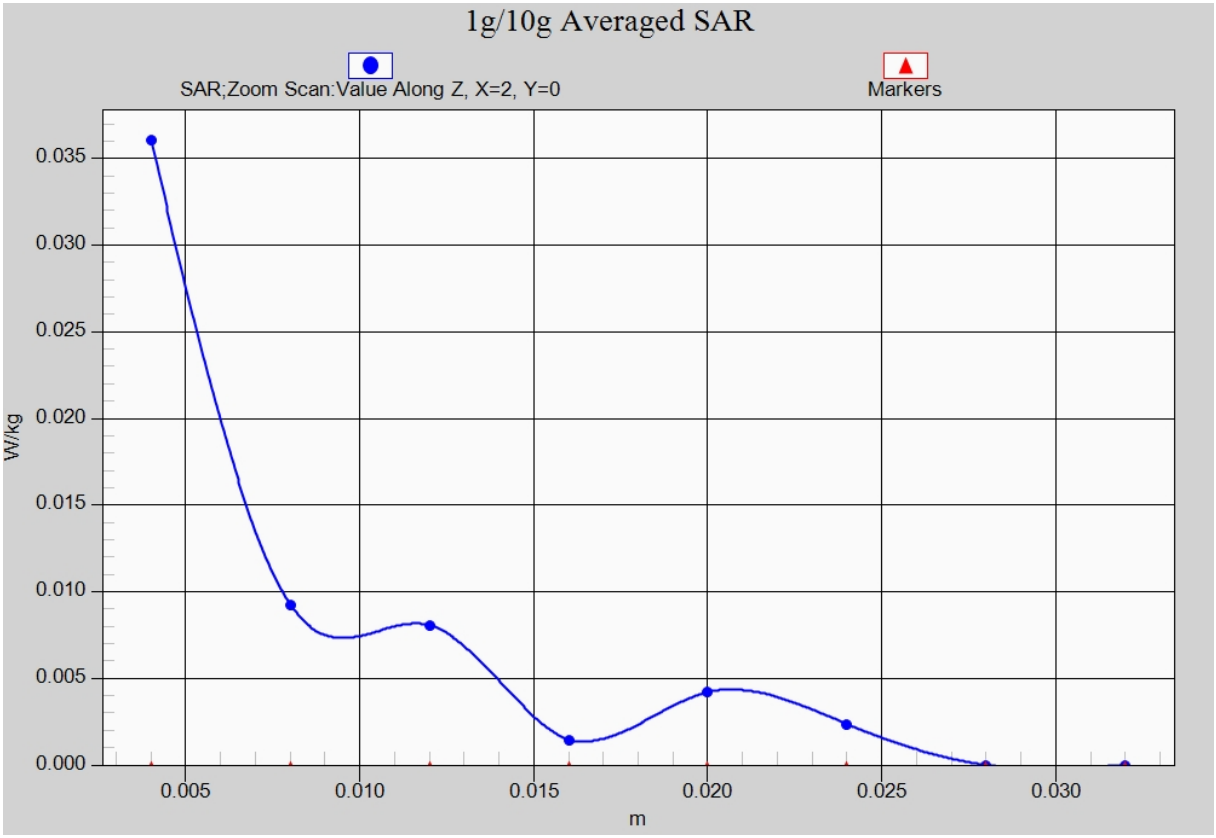


Fig. 21-1 Z-Scan at power reference point (5GHz CH149)

Wifi 802.11n Rear Channel 149

Date: 2013-7-16
Electronics: DAE4 Sn771
Medium: Body 5800 MHz
Medium parameters used: f = 5745 MHz; σ = 6.017 mho/m; ε_r = 48.834; ρ = 1000 kg/m^3
Ambient Temperature: 22.5°C Liquid Temperature: 22.0°C
Communication System: WLan 5G Frequency: 5745 MHz Duty Cycle: 1:1
Probe: EX3DV4 - SN3846 ConvF(3.92, 3.92, 3.92)

Rear/Area Scan (111x171x1): Interpolated grid: dx=1.000 mm, dy=1.000 mm
Maximum value of SAR (interpolated) = 0.150 W/kg

Rear/Zoom Scan (10x9x8)/Cube 0: Measurement grid: dx=4mm, dy=4mm, dz=4mm
Reference Value = 1.654 V/m; Power Drift = -0.16 dB
Peak SAR (extrapolated) = 0.505 W/kg
SAR(1 g) = 0.124 W/kg; SAR(10 g) = 0.047 W/kg
Maximum value of SAR (measured) = 0.145 W/kg

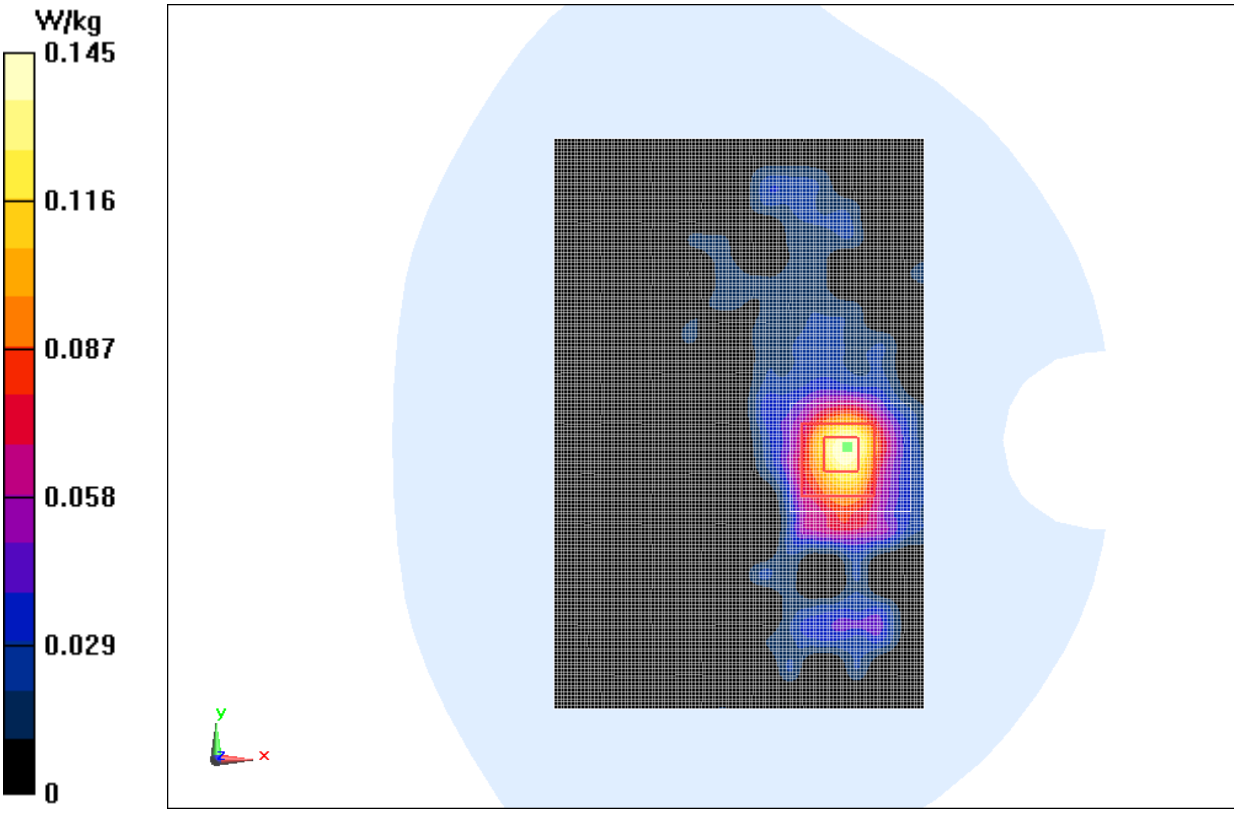


Fig.22 5GHz CH149

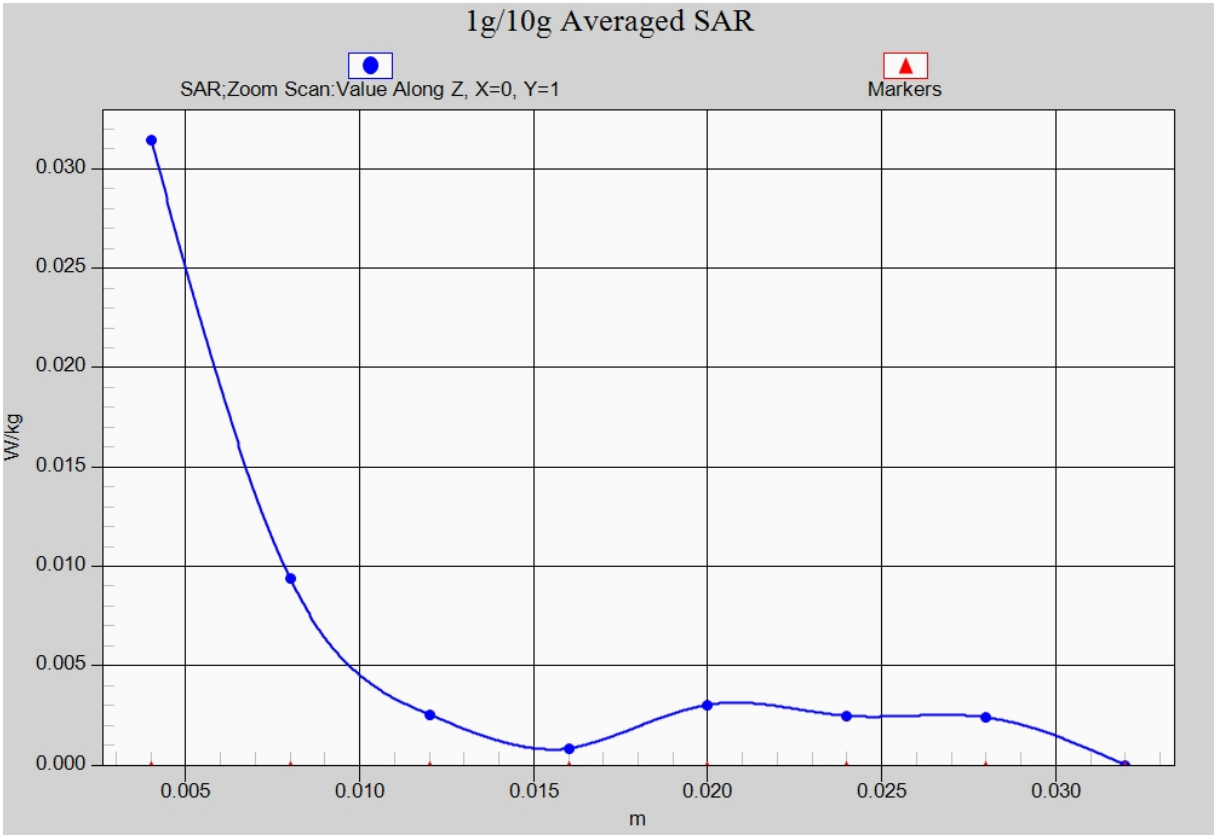


Fig. 22-1 Z-Scan at power reference point (5GHz CH149)

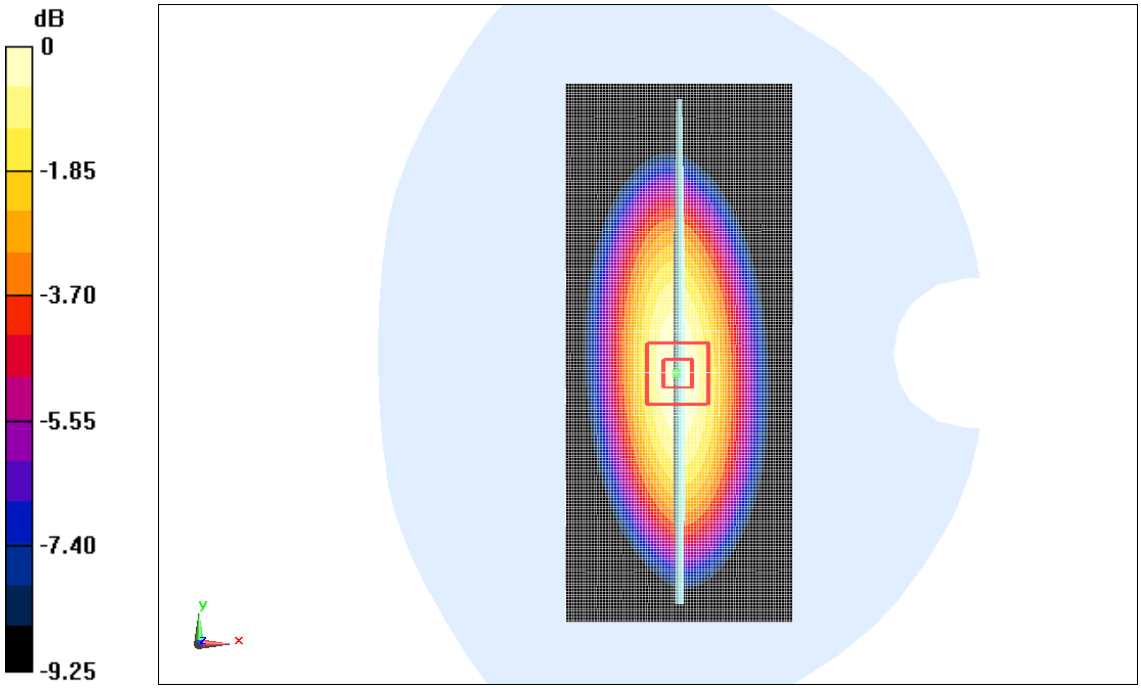
ANNEX B System Verification Results

750MHz

Date: 2013-7-12
Electronics: DAE4 Sn771
Medium: Head 750 MHz
Medium parameters used: f = 750 MHz; σ = 0.882 mho/m; ε_r = 42.86; ρ = 1000 kg/m^3
Ambient Temperature: 22.6°C Liquid Temperature: 22.1°C
Communication System: CW Frequency: 750 MHz Duty Cycle: 1:1
Probe: EX3DV4 - SN3846 ConvF(9.53, 9.53, 9.53)

System Validation /Area Scan (81x191x1): Measurement grid: dx=10mm, dy=10mm
Reference Value = 49.957 V/m; Power Drift = 0.11 dB
Fast SAR: SAR(1 g) = 2.13 W/kg; SAR(10 g) = 1.42 W/kg
Maximum value of SAR (interpolated) = 2.25 W/kg

System Validation /Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 49.957 V/m; Power Drift = 0.11 dB
Peak SAR (extrapolated) = 2.97 W/kg
SAR(1 g) = 2.09 W/kg; SAR(10 g) = 1.40 W/kg
Maximum value of SAR (measured) = 2.25 W/kg



0 dB = 2.25 W/kg = 3.52 dB W/kg

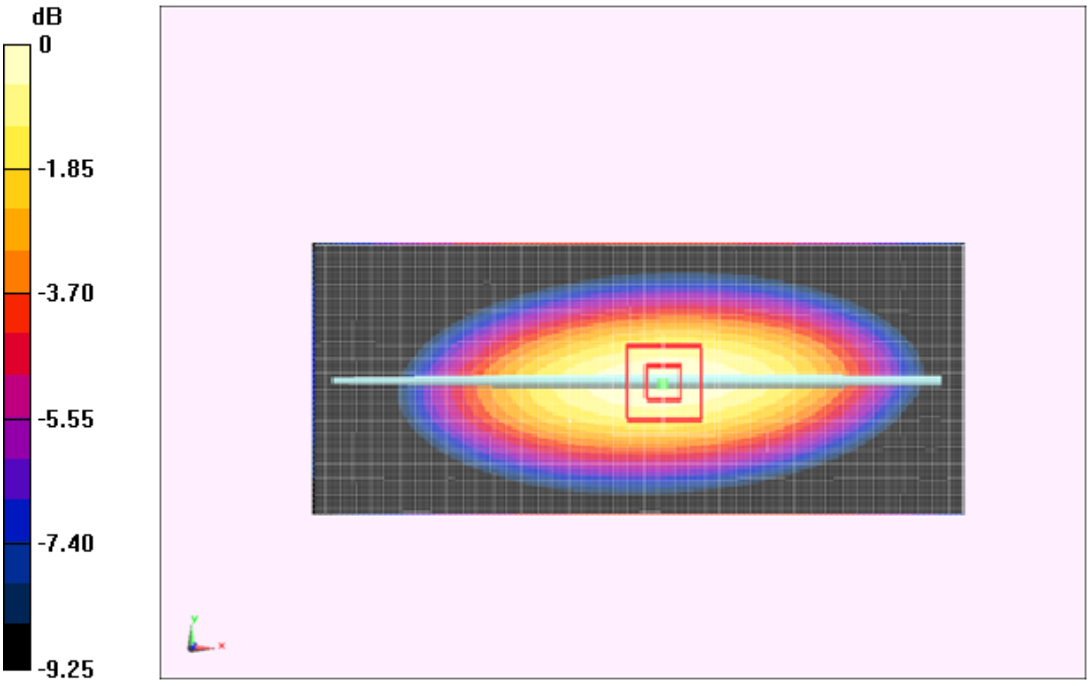
Fig.B.1 validation 750MHz 250mW

750MHz

Date: 2013-7-12
Electronics: DAE4 Sn771
Medium: Body 750 MHz
Medium parameters used: f = 750 MHz; σ = 0.978 mho/m; ε_r = 54.97; ρ = 1000 kg/m^3
Ambient Temperature: 22.6°C Liquid Temperature: 22.1°C
Communication System: CW Frequency: 750 MHz Duty Cycle: 1:1
Probe: EX3DV4 - SN3846 ConvF(9.28, 9.28, 9.28)

System Validation /Area Scan (81x191x1): Measurement grid: dx=10mm, dy=10mm
Reference Value = 51.052 V/m; Power Drift = 0.09 dB
Fast SAR: SAR(1 g) = 2.19 W/kg; SAR(10 g) = 1.44 W/kg
Maximum value of SAR (interpolated) = 2.33 W/kg

System Validation /Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 51.052 V/m; Power Drift = 0.09 dB
Peak SAR (extrapolated) = 3.07 W/kg
SAR(1 g) = 2.17 W/kg; SAR(10 g) = 1.43 W/kg
Maximum value of SAR (measured) = 2.33 W/kg



0 dB = 2.33 W/kg = 3.67 dB W/kg

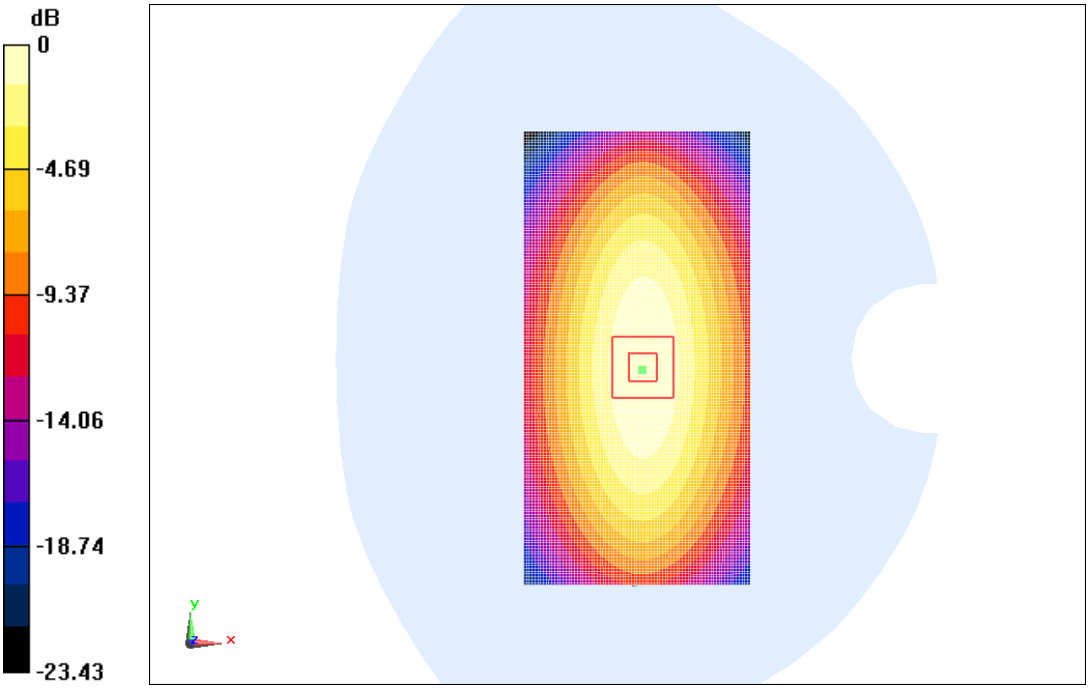
Fig.B.2 validation 750MHz 250mW

835MHz

Date: 2013-7-13
Electronics: DAE4 Sn771
Medium: Head 850 MHz
Medium parameters used: f = 835 MHz; σ = 0.916 mho/m; ε_r = 42.35; ρ = 1000 kg/m^3
Ambient Temperature: 22.6°C Liquid Temperature: 22.1°C
Communication System: CW Frequency: 835 MHz Duty Cycle: 1:1
Probe: EX3DV4 - SN3846 ConvF(9.18, 9.18, 9.18)

System Validation /Area Scan (81x161x1): Measurement grid: dx=10mm, dy=10mm
Reference Value = 52.177 V/m; Power Drift = -0.08 dB
Fast SAR: SAR(1 g) = 2.34 W/kg; SAR(10 g) = 1.53 W/kg
Maximum value of SAR (interpolated) = 2.55 W/kg

System Validation /Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 52.177 V/m; Power Drift = -0.08 dB
Peak SAR (extrapolated) = 3.503 W/kg
SAR(1 g) = 2.37 W/kg; SAR(10 g) = 1.55 W/kg
Maximum value of SAR (measured) = 2.56 W/kg



0 dB = 2.55 W/kg = 8.13 dB W/kg

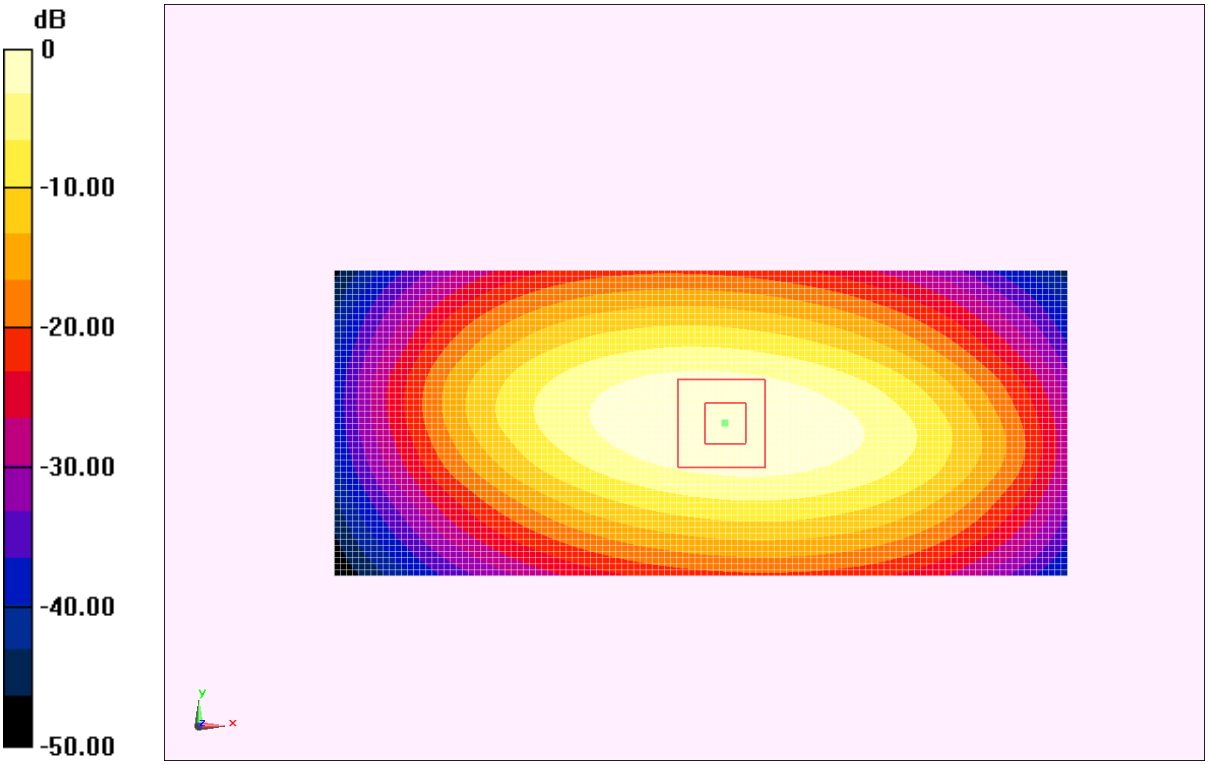
Fig.B.3 validation 835MHz 250mW

835MHz

Date: 2013-7-13
Electronics: DAE4 Sn771
Medium: Body 850 MHz
Medium parameters used: f = 835 MHz; σ = 0.964 mho/m; ε_r = 54.58; ρ = 1000 kg/m^3
Ambient Temperature: 22.6°C Liquid Temperature: 22.1°C
Communication System: CW Frequency: 835 MHz Duty Cycle: 1:1
Probe: EX3DV4 - SN3846 ConvF(9.04, 9.04, 9.04)

System Validation /Area Scan (81x171x1): Measurement grid: dx=10mm, dy=10mm
Reference Value = 46.209 V/m; Power Drift = 0.13 dB
Fast SAR: SAR(1 g) = 2.36 W/kg; SAR(10 g) = 1.57 W/kg
Maximum value of SAR (interpolated) = 2.57 W/kg

System Validation /Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 46.209 V/m; Power Drift = 0.13 dB
Peak SAR (extrapolated) = 3.579 W/kg
SAR(1 g) = 2.38 W/kg; SAR(10 g) = 1.58 W/kg
Maximum value of SAR (measured) = 2.57 W/kg



0 dB = 2.57 W/kg = 8.20 dB W/kg

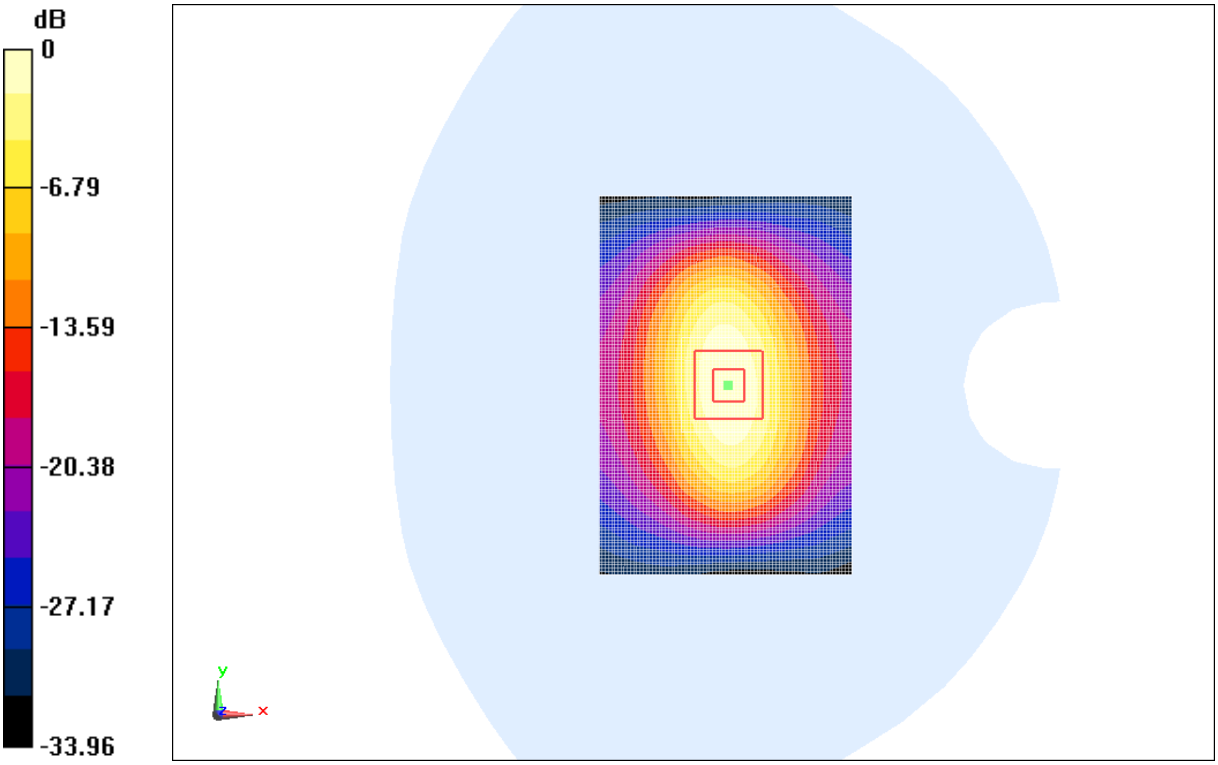
Fig.B.4 validation 835MHz 250mW

1750MHz

Date: 2013-7-14
Electronics: DAE4 Sn771
Medium: Head 1750 MHz
Medium parameters used: f=1750 MHz; σ = 1.377 mho/m; εr = 40.49; ρ = 1000 kg/m^3
Ambient Temperature: 22.7°C Liquid Temperature: 22.2°C
Communication System: CW Frequency: 1750 MHz Duty Cycle: 1:1
Probe: EX3DV4 - SN3846 ConvF(8.39, 8.39, 8.39)

System Validation/Area Scan (81x121x1): Measurement grid: dx=10mm, dy=10mm
Reference Value = 92.215 V/m; Power Drift = 0.08 dB
Fast SAR: SAR(1 g) = 9.27 W/kg; SAR(10 g) = 4.96 W/kg
Maximum value of SAR (interpolated) = 10.4 W/kg

System Validation/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 92.215 V/m; Power Drift = 0.08 dB
Peak SAR (extrapolated) = 16.35 W/kg
SAR(1 g) = 9.26 W/kg; SAR(10 g) = 4.95 W/kg
Maximum value of SAR (measured) = 10.4 W/kg



0 dB = 10.4 W/kg = 20.34 dB W/kg

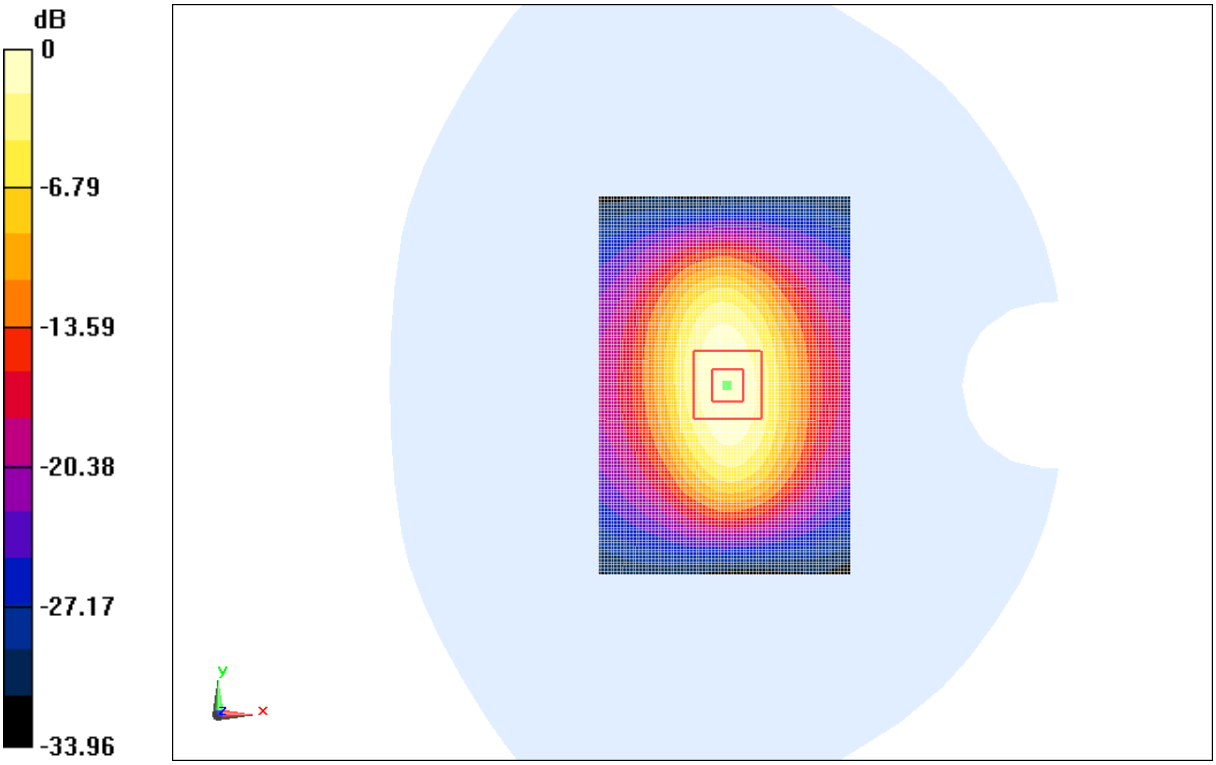
Fig.B.5 validation 1750MHz 250mW

1750MHz

Date: 2013-7-14
Electronics: DAE4 Sn771
Medium: Body 1750 MHz
Medium parameters used: f=1750 MHz; σ = 1.506 mho/m; εr = 53.91; ρ = 1000 kg/m^3
Ambient Temperature: 22.7°C Liquid Temperature: 22.2°C
Communication System: CW Frequency: 1750 MHz Duty Cycle: 1:1
Probe: EX3DV4 - SN3846 ConvF(7.63, 7.63, 7.63)

System Validation/Area Scan (81x121x1): Measurement grid: dx=10mm, dy=10mm
Reference Value = 91.632 V/m; Power Drift = -0.06 dB
Fast SAR: SAR(1 g) = 9.13 W/kg; SAR(10 g) = 4.95 W/kg
Maximum value of SAR (interpolated) = 10.5 W/kg

System Validation/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 91.632 V/m; Power Drift = -0.06 dB
Peak SAR (extrapolated) = 14.77 W/kg
SAR(1 g) = 9.11 W/kg; SAR(10 g) = 4.93 W/kg
Maximum value of SAR (measured) = 10.5 W/kg



0 dB = 10.5 W/kg = 20.42 dB W/kg

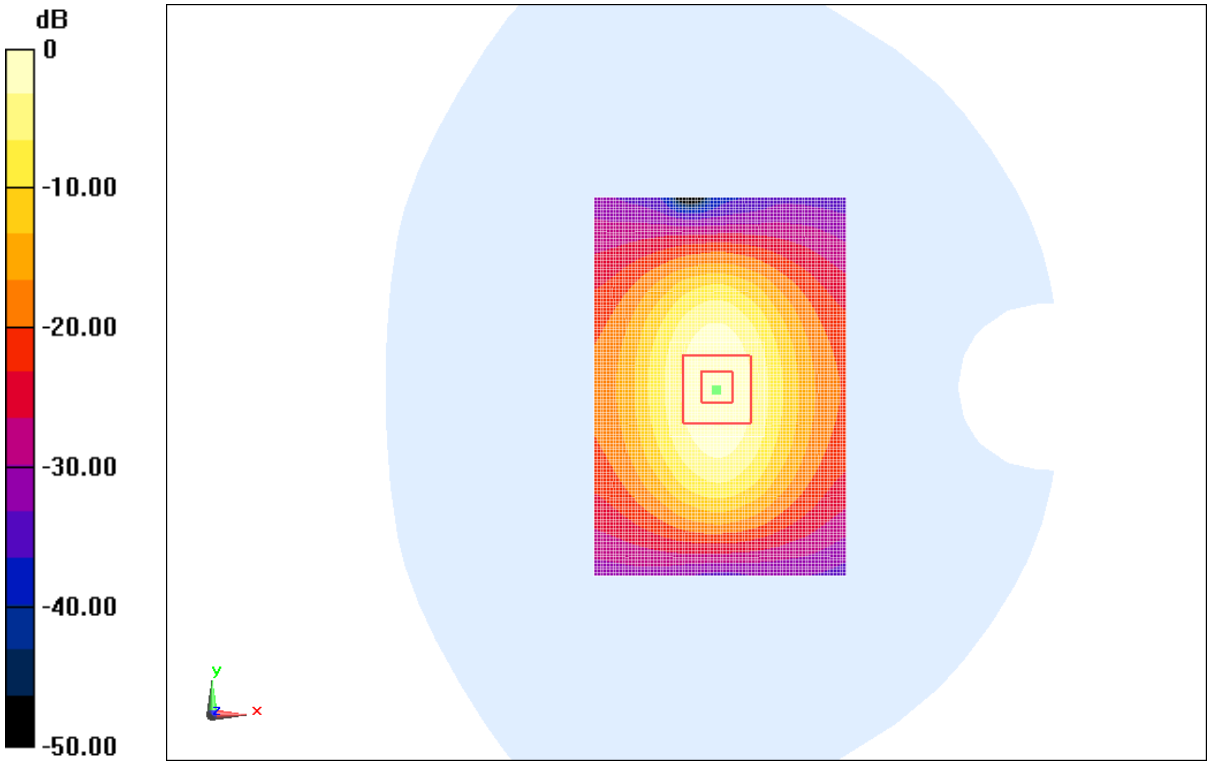
Fig.B.6 validation 1750MHz 250mW

1900MHz

Date: 2013-7-15
Electronics: DAE4 Sn771
Medium: Head 1900 MHz
Medium parameters used: f = 1900 MHz; σ = 1.414 mho/m; ε_r = 39.29; ρ = 1000 kg/m^3
Ambient Temperature: 22.7°C Liquid Temperature: 22.2°C
Communication System: CW Frequency: 1900 MHz Duty Cycle: 1:1
Probe: EX3DV4 - SN3846 ConvF(8.01, 8.01, 8.01)

System Validation/Area Scan (81x121x1): Measurement grid: dx=10mm, dy=10mm
Reference Value = 92.388 V/m; Power Drift = -0.07 dB
Fast SAR: SAR(1 g) = 9.64 W/kg; SAR(10 g) = 5.09 W/kg
Maximum value of SAR (interpolated) = 11.0 W/kg

System Validation/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 92.388 V/m; Power Drift = -0.07 dB
Peak SAR (extrapolated) = 17.906 W/kg
SAR(1 g) = 9.59 W/kg; SAR(10 g) = 5.06 W/kg
Maximum value of SAR (measured) = 10.9 W/kg



0 dB = 11.0 W/kg = 20.83 dB W/kg

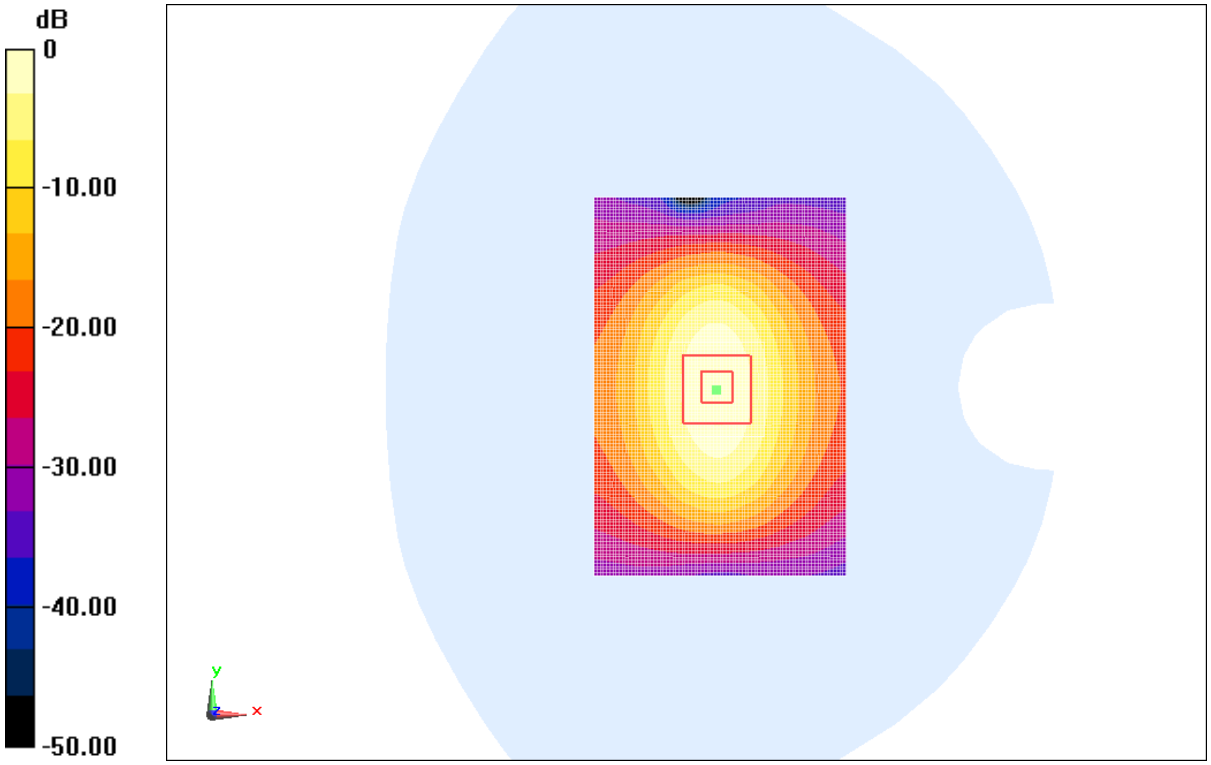
Fig.B.7 validation 1900MHz 250mW

1900MHz

Date: 2013-7-15
Electronics: DAE4 Sn771
Medium: Body 1900 MHz
Medium parameters used: f = 1900 MHz; σ = 1.538 mho/m; ε_r = 52.24; ρ = 1000 kg/m^3
Ambient Temperature: 22.7°C Liquid Temperature: 22.2°C
Communication System: CW Frequency: 1900 MHz Duty Cycle: 1:1
Probe: EX3DV4 - SN3846 ConvF(7.37, 7.37, 7.37)

System Validation/Area Scan (81x121x1): Measurement grid: dx=10mm, dy=10mm
Reference Value = 85.491 V/m; Power Drift = 0.05 dB
Fast SAR: SAR(1 g) = 10.1 W/kg; SAR(10 g) = 5.37 W/kg
Maximum value of SAR (interpolated) = 11.5 W/kg

System Validation/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 85.491 V/m; Power Drift = 0.05 dB
Peak SAR (extrapolated) = 16.71 W/kg
SAR(1 g) = 10.2 W/kg; SAR(10 g) = 5.44 W/kg
Maximum value of SAR (measured) = 11.6 W/kg



0 dB = 11.5 W/kg = 21.21 dB W/kg

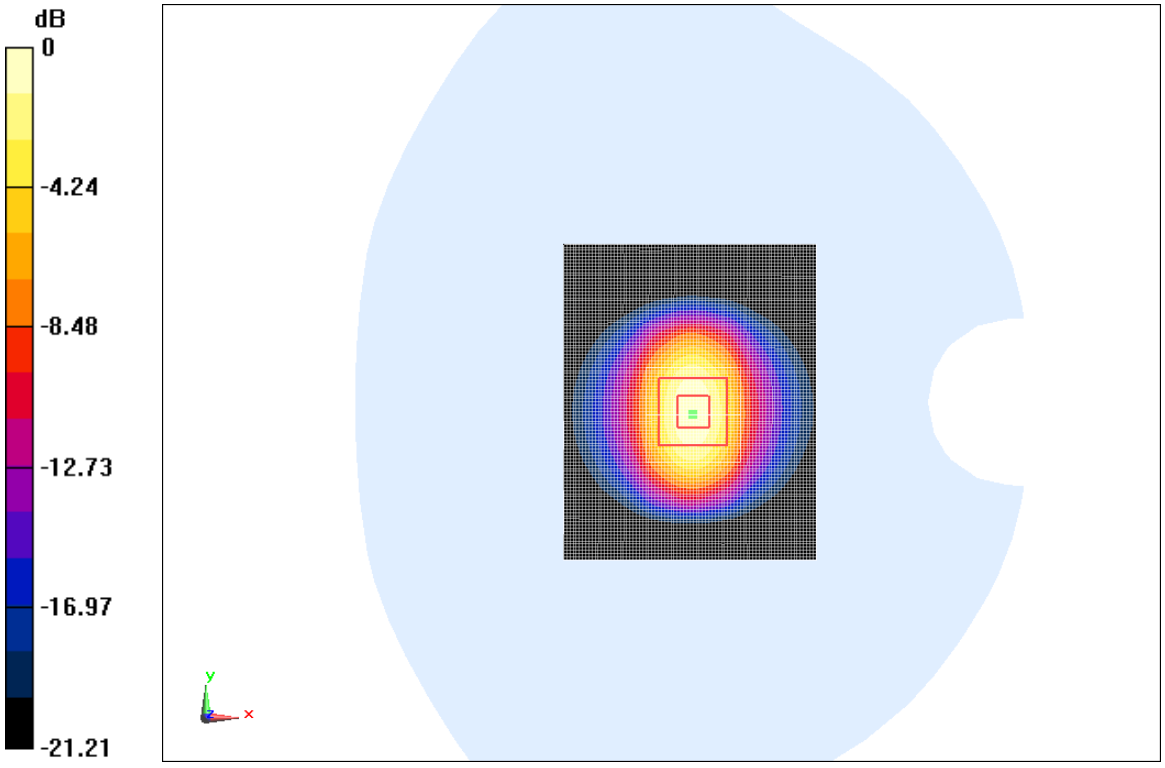
Fig.B.8 validation 1900MHz 250mW

2450MHz

Date: 2013-7-5
Electronics: DAE4 Sn771
Medium: Head 2450 MHz
Medium parameters used: f = 2450 MHz; σ = 1.825 mho/m; ε_r = 39.73; ρ = 1000 kg/m^3
Ambient Temperature: 22.6°C Liquid Temperature: 22.1°C
Communication System: CW Frequency: 2450 MHz Duty Cycle: 1:1
Probe: EX3DV4 - SN3846 ConvF(7.13, 7.13, 7.13)

System Validation /Area Scan (81x101x1): Measurement grid: dx=10mm, dy=10mm
Maximum value of SAR (interpolated) = 14.8 W/kg

System Validation /Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 92.945 V/m; Power Drift = -0.05 dB
Peak SAR (extrapolated) = 25.91 W/kg
SAR(1 g) = 12.8 W/kg; SAR(10 g) = 5.95 W/kg
Maximum value of SAR (measured) = 14.7 W/kg



0 dB = 14.8 W/kg = 23.40 dB W/kg

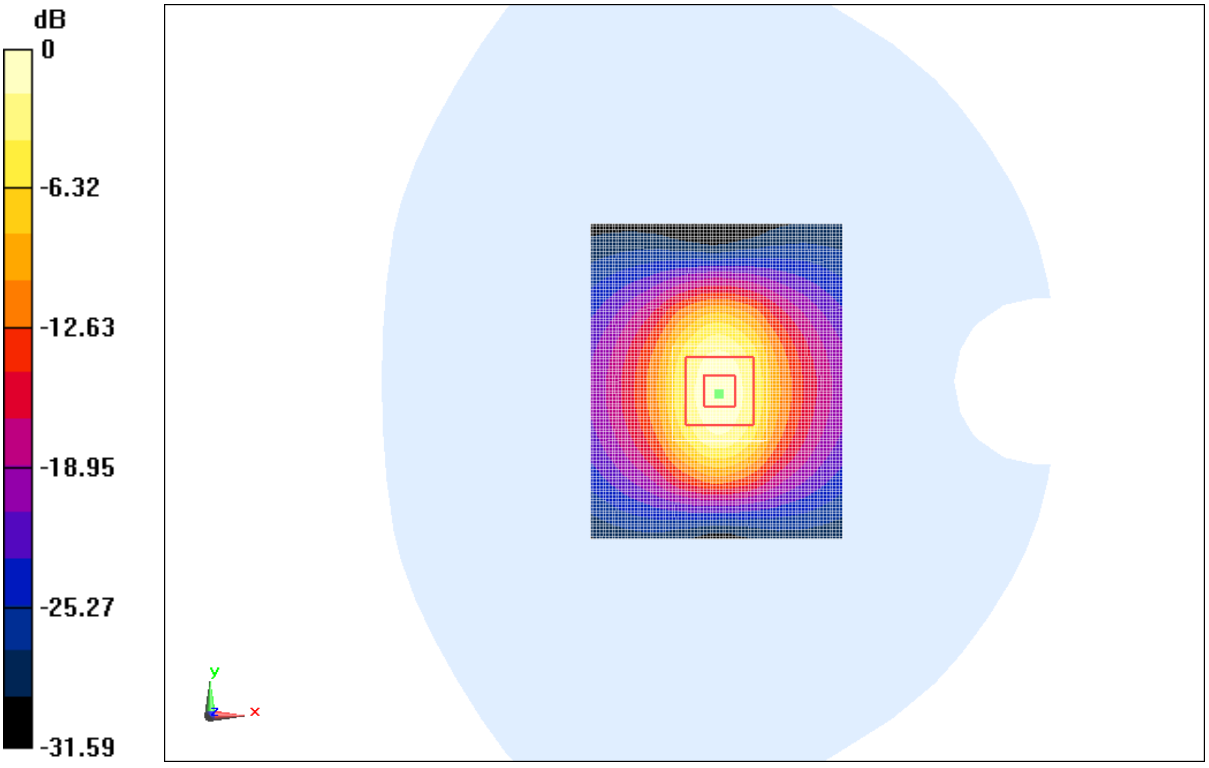
Fig.B.9 validation 2450MHz 250mW

2450MHz

Date: 2013-7-5
Electronics: DAE4 Sn771
Medium: Body 2450 MHz
Medium parameters used: f = 2450 MHz; σ = 1.961 mho/m; ε_r = 52.24; ρ = 1000 kg/m^3
Ambient Temperature: 22.6°C Liquid Temperature: 22.1°C
Communication System: CW Frequency: 2450 MHz Duty Cycle: 1:1
Probe: EX3DV4 - SN3846 ConvF(7.00, 7.00, 7.00)

System Validation/Area Scan (81x101x1): Measurement grid: dx=10mm, dy=10mm
Maximum value of SAR (interpolated) = 14.9 W/kg

System Validation/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 96.875 V/m; Power Drift = -0.07 dB
Peak SAR (extrapolated) = 26.01 W/kg
SAR(1 g) = 12.9 W/kg; SAR(10 g) = 6.02 W/kg
Maximum value of SAR (measured) = 14.8 W/kg



0 dB = 14.9 W/kg = 23.46 dB W/kg

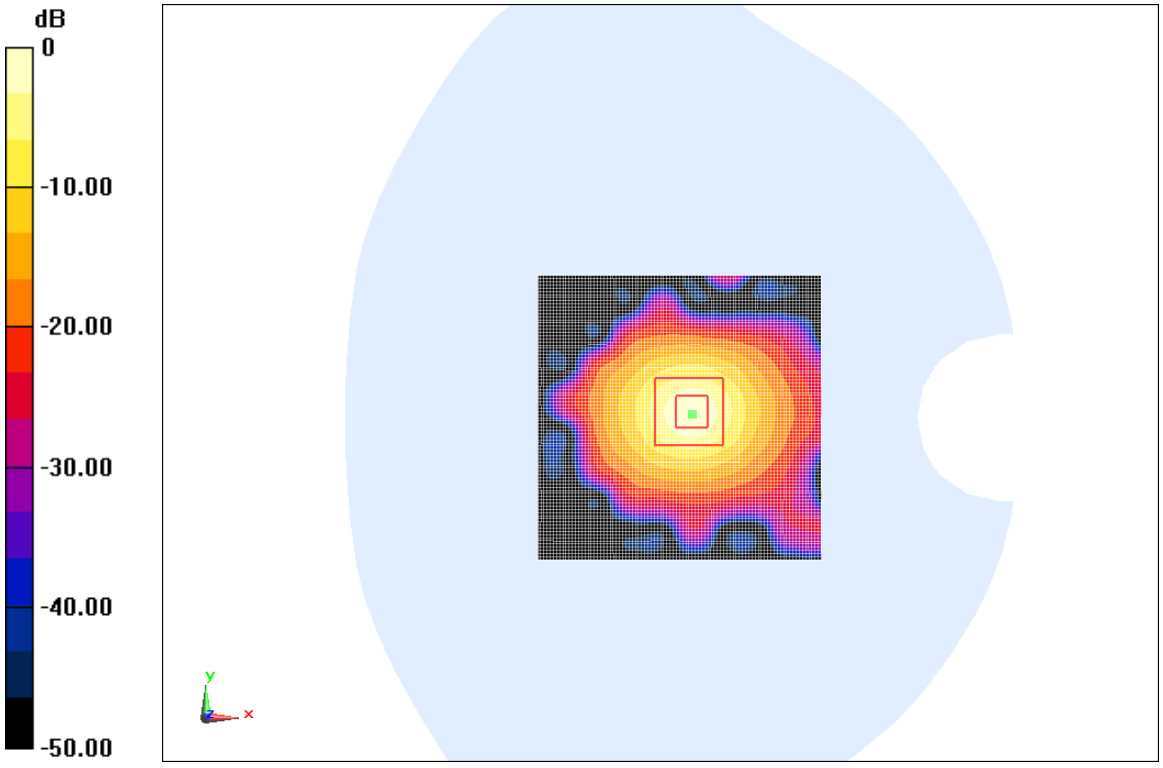
Fig.B.10 validation 2450MHz 250mW

5800MHz

Date: 2013-7-16
Electronics: DAE4 Sn771
Medium: Head 5800 MHz
Medium parameters used: f = 5800 MHz; σ = 5.325 mho/m; ε_r = 35.84; ρ = 1000 kg/m^3
Ambient Temperature: 22.5°C Liquid Temperature: 22.0°C
Communication System: CW Frequency: 5800 MHz Duty Cycle: 1:1
Probe: EX3DV4 - SN3846 ConvF(4.28, 4.28, 4.28)

System Validation /Area Scan (91x91x1): Measurement grid: dx=10mm, dy=10mm
Maximum value of SAR (interpolated) = 9.67 W/kg

System Validation /Zoom Scan (8x8x8)/Cube 0: Measurement grid: dx=4mm, dy=4mm, dz=4mm
Reference Value = 55.956 V/m; Power Drift = 0.09 dB
Peak SAR (extrapolated) = 33.768 W/kg
SAR(1 g) = 7.96 W/kg; SAR(10 g) = 2.26 W/kg
Maximum value of SAR (measured) = 9.71 W/kg



0 dB = 9.67 W/kg = 19.71 dB W/kg

Fig.B.11 validation 5800MHz 100mW