Fig. 1-1   Z-Scan at power reference point (850 MHz)

850 Body Rear Low

Date: 2015-08-04

Electronics: DAE4 Sn777

Medium: Body 850 MHz

Medium parameters used (interpolated): f = 824.2 MHz; σ = 0.938 S/m; ε_r = 55.623; ρ = 1000 kg/m^3

Ambient Temperature: 22.5 ^{o}C   Liquid Temperature: 22.0 ^{o}C

Communication System: GSM 850 GPRS Frequency: 824.2 MHz Duty Cycle: 1:2

Probe: EX3DV4 - SN3846 ConvF(9.09, 9.09, 9.09)

Area Scan (131x81x1): Interpolated grid: dx=1.000 mm, dy=1.000 mm

Maximum value of SAR (interpolated) = 0.149 W/kg

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

Reference Value = 6.510 V/m; Power Drift = 0.03 dB

Peak SAR (extrapolated) = 0.244 W/kg

SAR(1 g) = 0.111 W/kg; SAR(10 g) = 0.053 W/kg
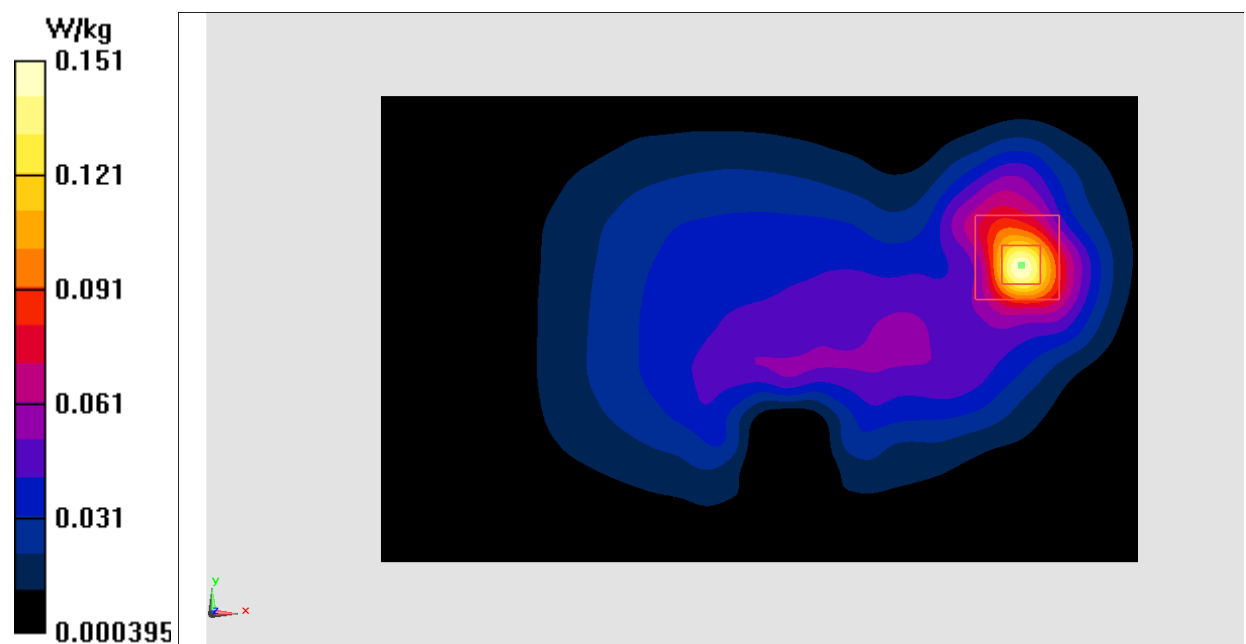
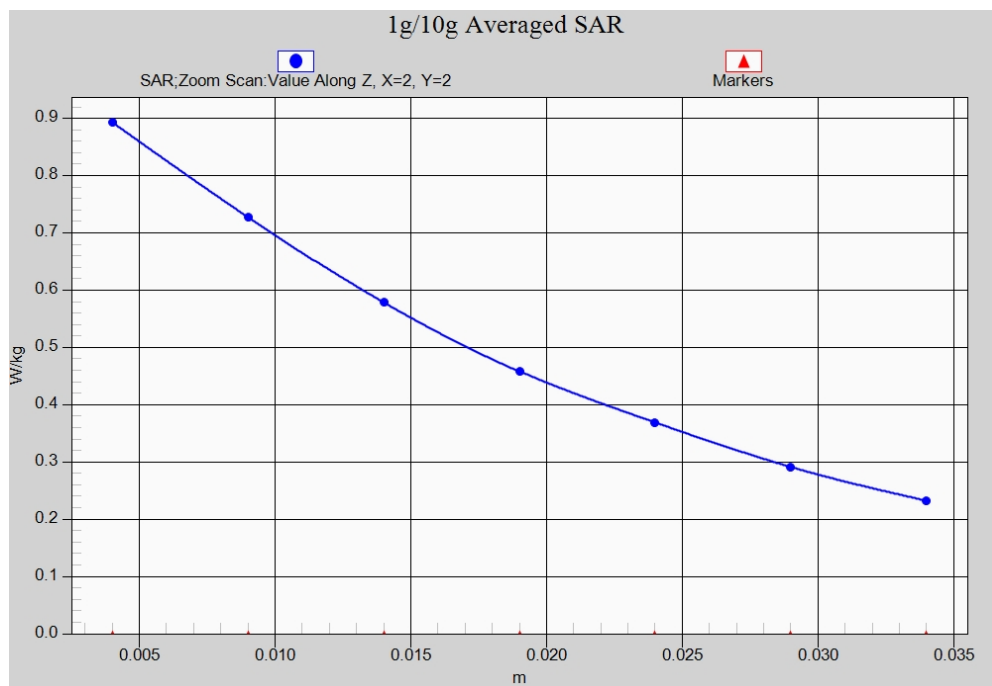Maximum value of SAR (measured) = 0.151 W/kg

Fig.2 850 MHz

Fig. 2-1   Z-Scan at power reference point (850 MHz)

1900 Left Cheek High

Date: 2015-08-06

Electronics: DAE4 Sn777

Medium: Head 1900 MHz

Medium parameters used (interpolated): f = 1909.8 MHz; σ = 1.431 S/m; ε_r = 40.384; ρ = 1000 kg/m^3

Ambient Temperature: 22.5 ^{o}C   Liquid Temperature: 22.0 ^{o}C

Communication System: GSM 1900MHz Frequency: 1909.8 MHz Duty Cycle: 1:8.3

Probe: EX3DV4 - SN3846 ConvF(7.26, 7.26, 7.26)

Area Scan (71x121x1): Interpolated grid: dx=1.000 mm, dy=1.000 mm

Maximum value of SAR (interpolated) = 0.209 W/kg

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

Reference Value = 4.114 V/m; Power Drift = 0.17 dB

Peak SAR (extrapolated) = 0.251 W/kg

SAR(1 g) = 0.175 W/kg; SAR(10 g) = 0.109 W/kg
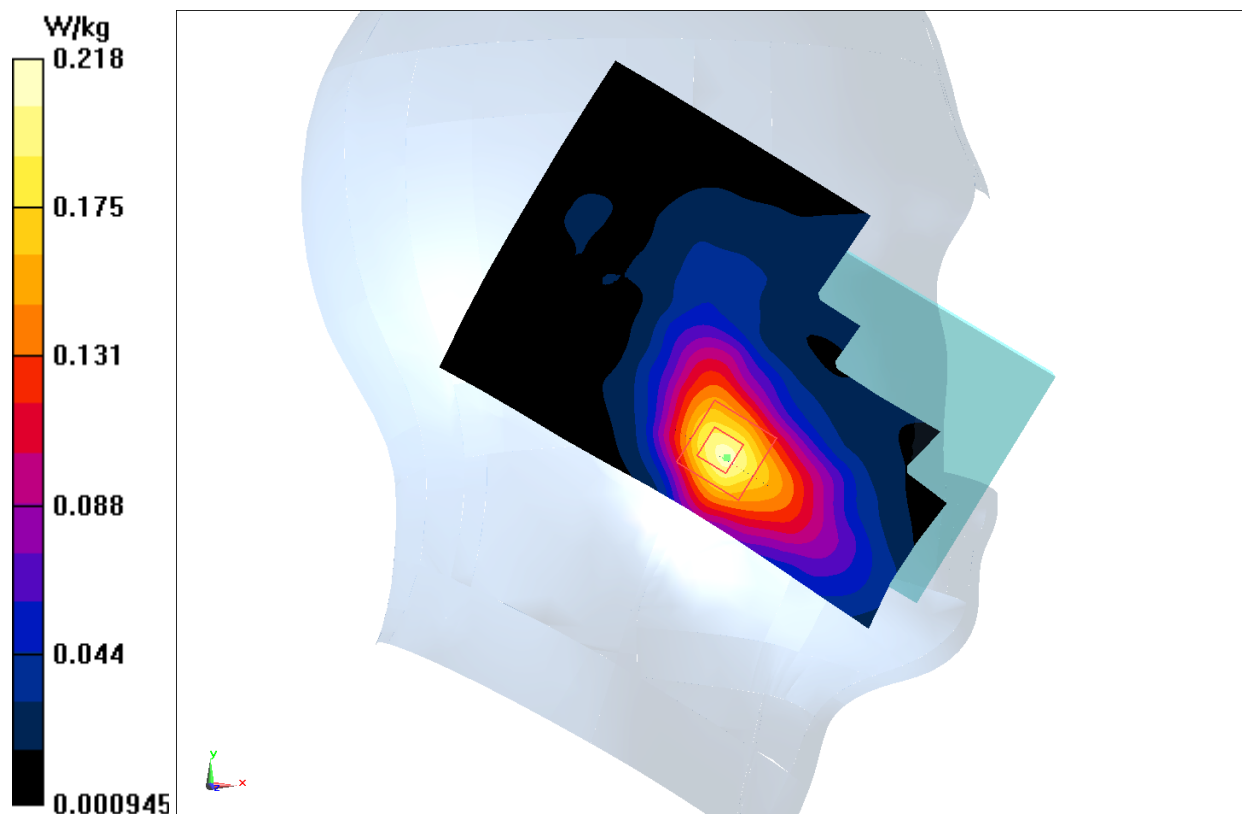
Maximum value of SAR (measured) = 0.218 W/kg
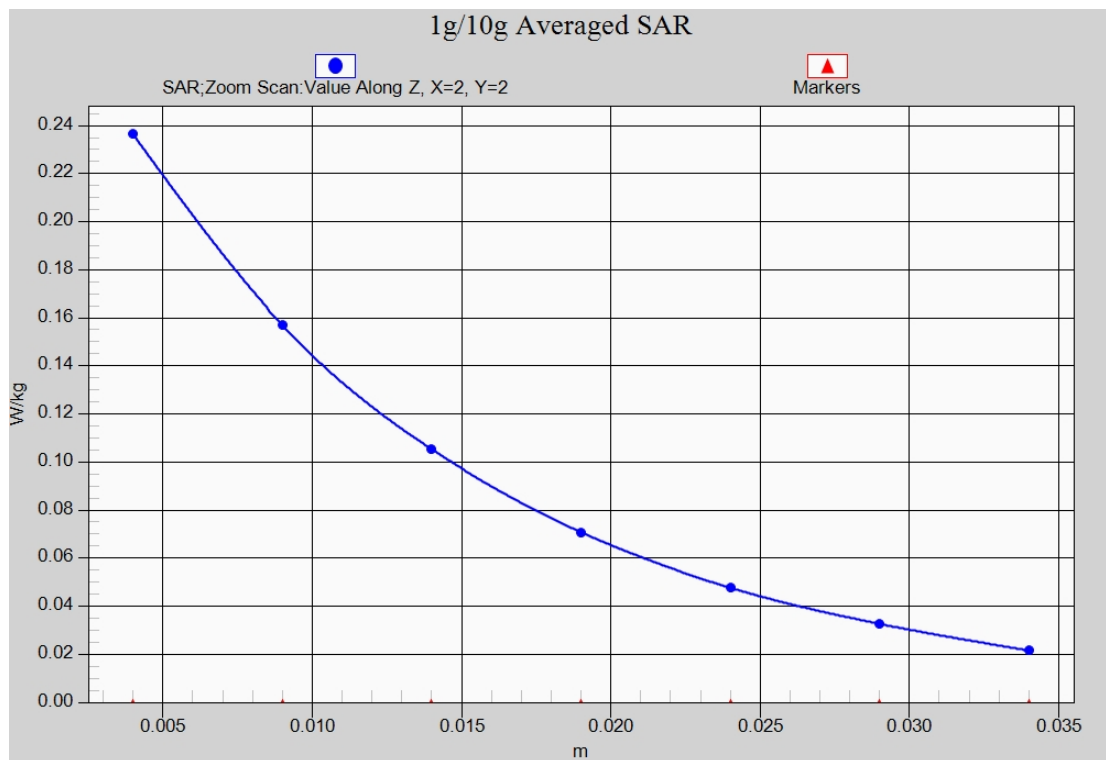

Fig.3 1900 MHz

Fig. 3-1　Z-Scan at power reference point (1900 MHz)

1900 Body Bottom High

Date: 2015-08-06

Electronics: DAE4 Sn777

Medium: Body 1900 MHz

Medium parameters used (interpolated): f = 1909.8 MHz; σ = 1.491 S/m; ε_r = 52.958; ρ = 1000 kg/m^3

Ambient Temperature: 22.5 ^{o}C   Liquid Temperature: 22.0 ^{o}C

Communication System: GSM 1900MHz GPRS Frequency: 1909.8 MHz Duty Cycle: 1:2

Probe: EX3DV4 - SN3846 ConvF(7.15, 7.15, 7.15)

Area Scan (131x81x1): Interpolated grid: dx=1.000 mm, dy=1.000 mm

Maximum value of SAR (interpolated) = 1.02 W/kg

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

Reference Value = 23.24 V/m; Power Drift = -0.05 dB

Peak SAR (extrapolated) = 2.07 W/kg

SAR(1 g) = 0.772 W/kg; SAR(10 g) = 0.398 W/kg

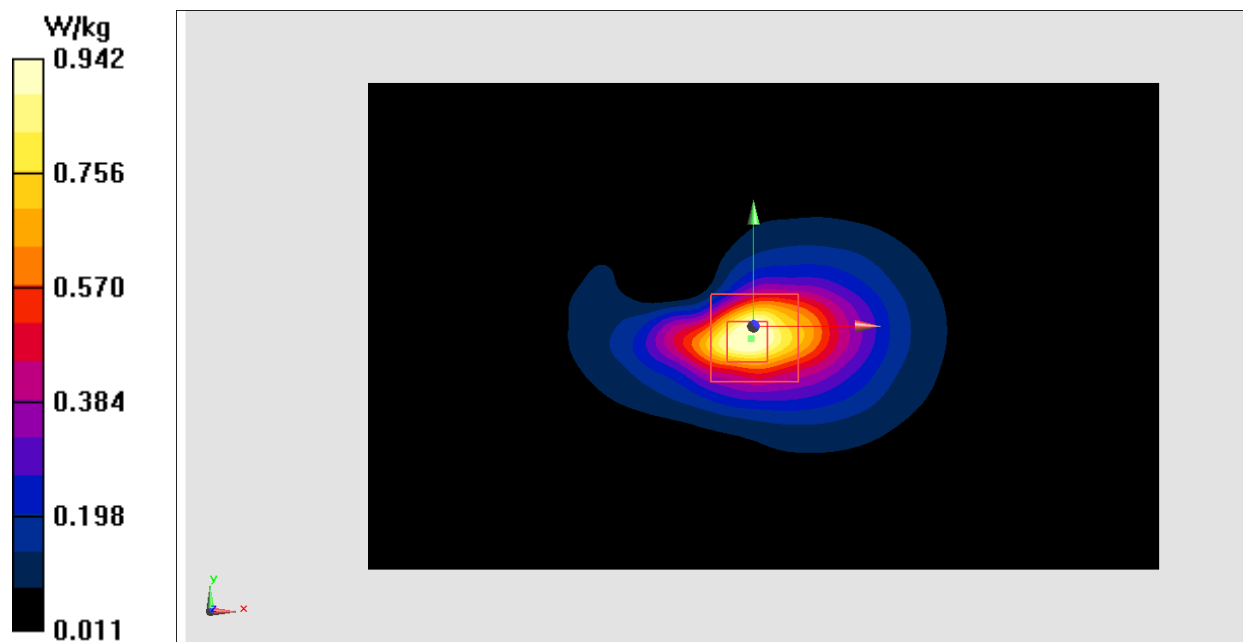Maximum value of SAR (measured) = 0.942 W/kg
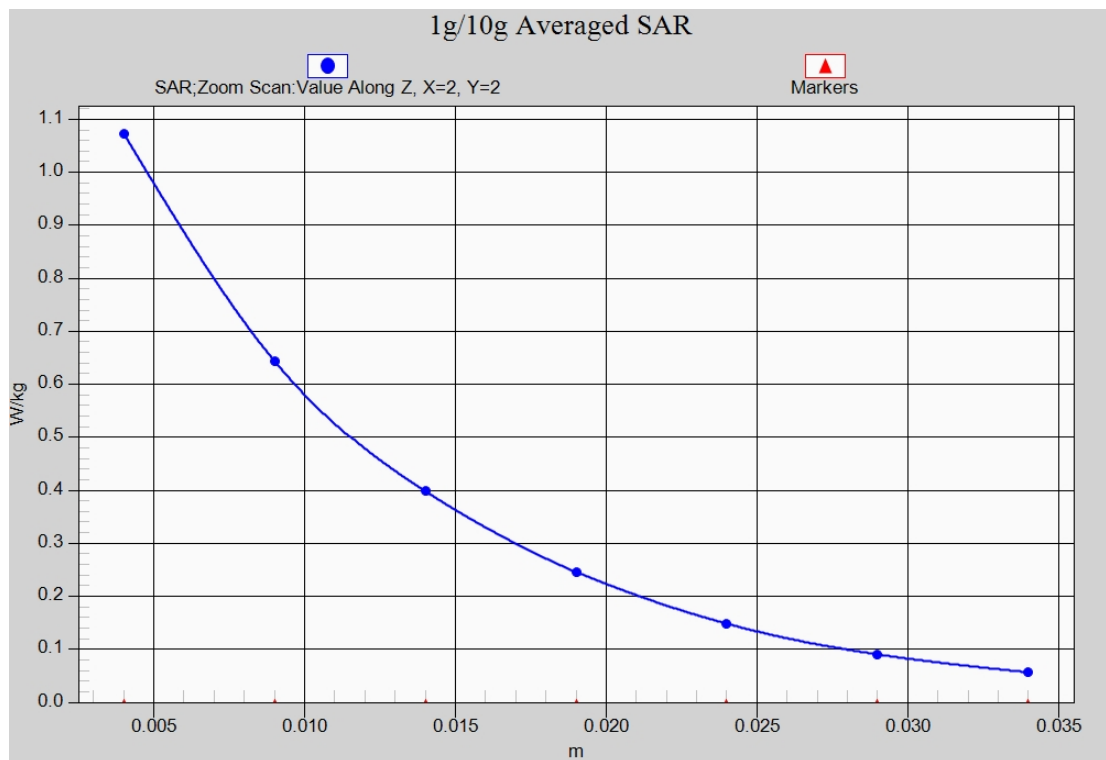

Fig.4 1900 MHz

Fig.4-1   Z-Scan at power reference point (1900 MHz)

WCDMA 850 Right Cheek Low

Date: 2015-08-04

Electronics: DAE4 Sn777

Medium: Head 850 MHz

Medium parameters used (interpolated): f = 826.4 MHz; σ = 0.941 S/m; ε_r = 43.219; ρ = 1000 kg/m^3

Ambient Temperature: 22.5 ^{o}C   Liquid Temperature: 22.0 ^{o}C

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

Probe: EX3DV4 - SN3846 ConvF (9.18, 9.18, 9.18)

Area Scan (81x131x1): Interpolated grid: dx=1.000 mm, dy=1.000 mm

Maximum value of SAR (interpolated) = 0.0103 W/kg

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

Reference Value = 0 V/m; Power Drift = 0.19dB

Peak SAR (extrapolated) = 0.00931 W/kg

SAR(1 g) = 0.00736 W/kg; SAR(10 g) = 0.00589 W/kg
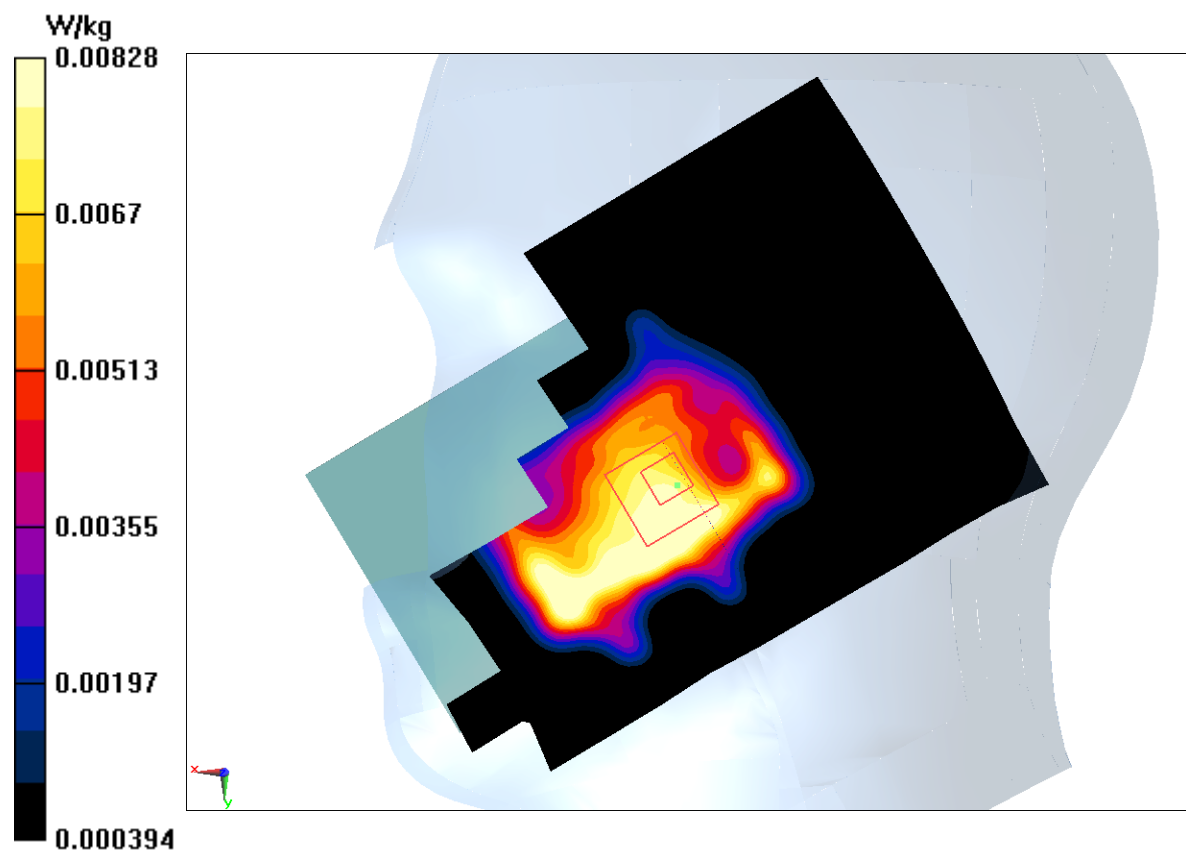
Maximum value of SAR (measured) = 0.00828 W/kg
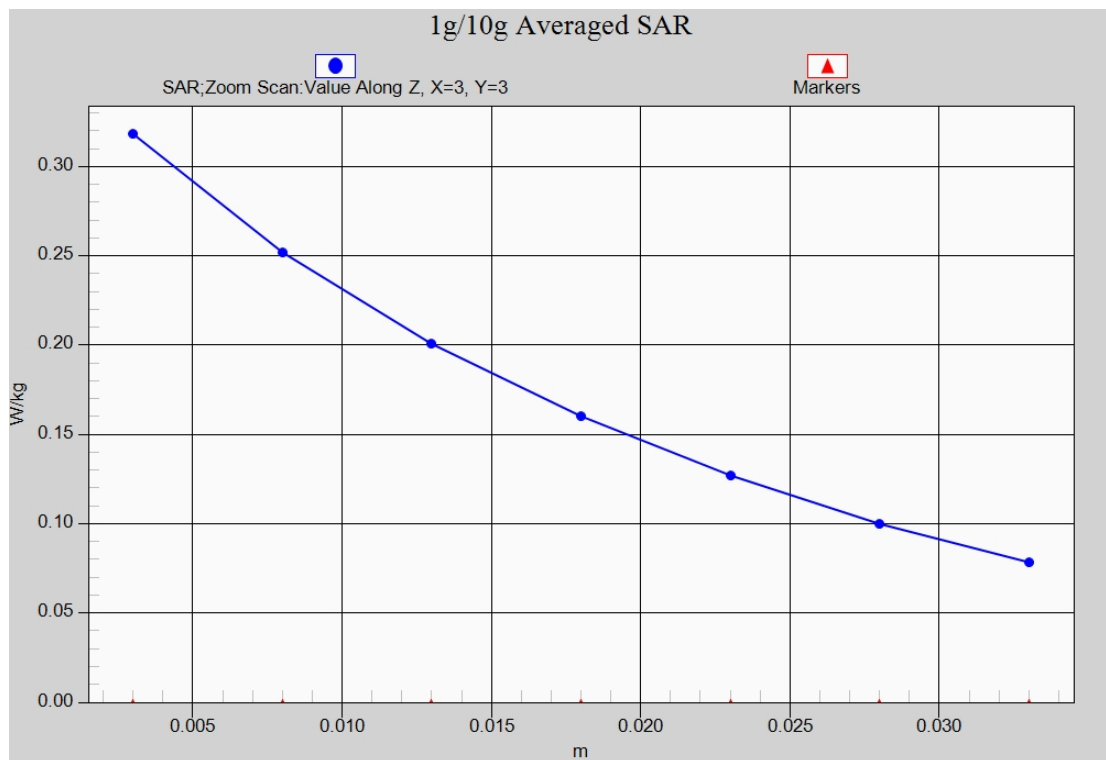

Fig.5 WCDMA 850

Fig. 5-1 Z-Scan at power reference point (WCDMA 850)

WCDMA 850 Body Rear Low

Date: 2015-08-04

Electronics: DAE4 Sn777

Medium: Body 850 MHz

Medium parameters used (interpolated): f = 826.4 MHz; σ = 0.974 S/m; ε_r = 54.724; ρ = 1000 kg/m^3

Ambient Temperature: 22.5 ^{o}C   Liquid Temperature: 22.0 ^{o}C

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

Probe: EX3DV4 - SN3846 ConvF(9.09, 9.09, 9.09)

Area Scan (131x81x1): Interpolated grid: dx=1.000 mm, dy=1.000 mm

Maximum value of SAR (interpolated) = 0.0646 W/kg

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

Reference Value = 3.535 V/m; Power Drift = -0.06 dB

Peak SAR (extrapolated) = 0.111 W/kg

SAR(1 g) = 0.051 W/kg; SAR(10 g) = 0.025 W/kg

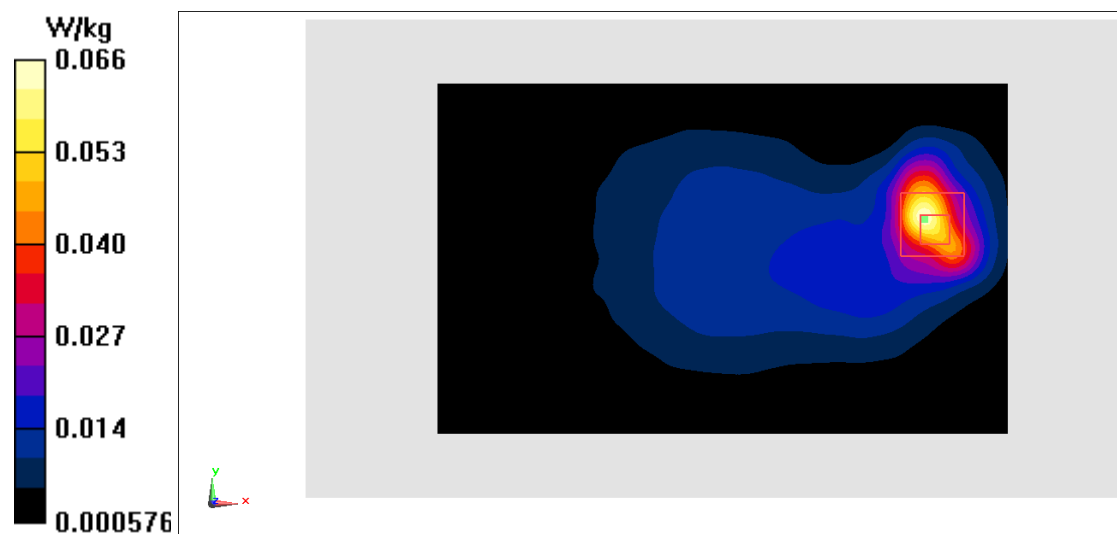Maximum value of SAR (measured) = 0.0657 W/kg
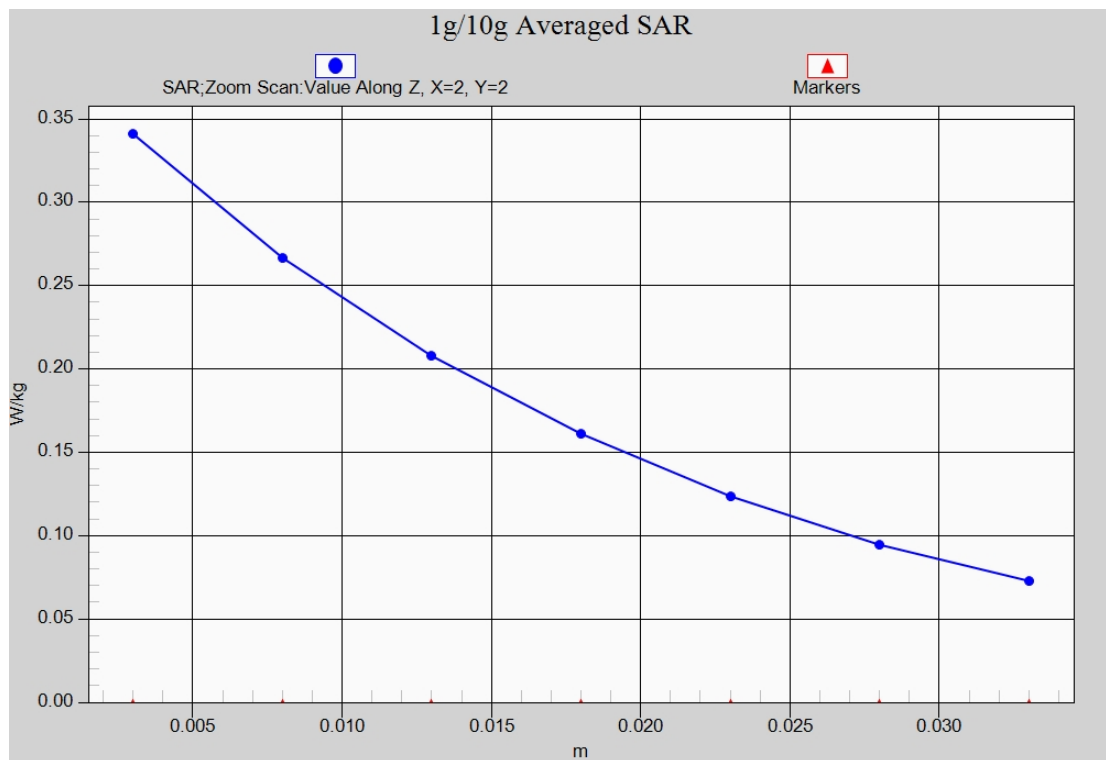

Fig.6 WCDMA 850

Fig. 6-1   Z-Scan at power reference point (WCDMA850)

WCDMA 1700 Left Cheek Low

Date: 2015-08-05

Electronics: DAE4 Sn777

Medium: Head 1750 MHz

Medium parameters used (interpolated): f = 1712.4 MHz; σ = 1.334 S/m; $ε_r$ = 39.526; ρ = 1000 kg/m^3

Ambient Temperature: 22.5 ^{o}C   Liquid Temperature: 22.0 ^{o}C

Communication System: WCDMA 1700 Frequency: 1712.4 MHz Duty Cycle: 1:1

Probe: EX3DV4 - SN3846 ConvF(7.64, 7.64, 7.64)

Area Scan (71x121x1): Interpolated grid: dx=1.000 mm, dy=1.000 mm

Maximum value of SAR (interpolated) = 0.693 W/kg

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

Reference Value = 8.812 V/m; Power Drift = 0.03 dB

Peak SAR (extrapolated) = 0.885 W/kg

SAR(1 g) = 0.599 W/kg; SAR(10 g) = 0.381 W/kg
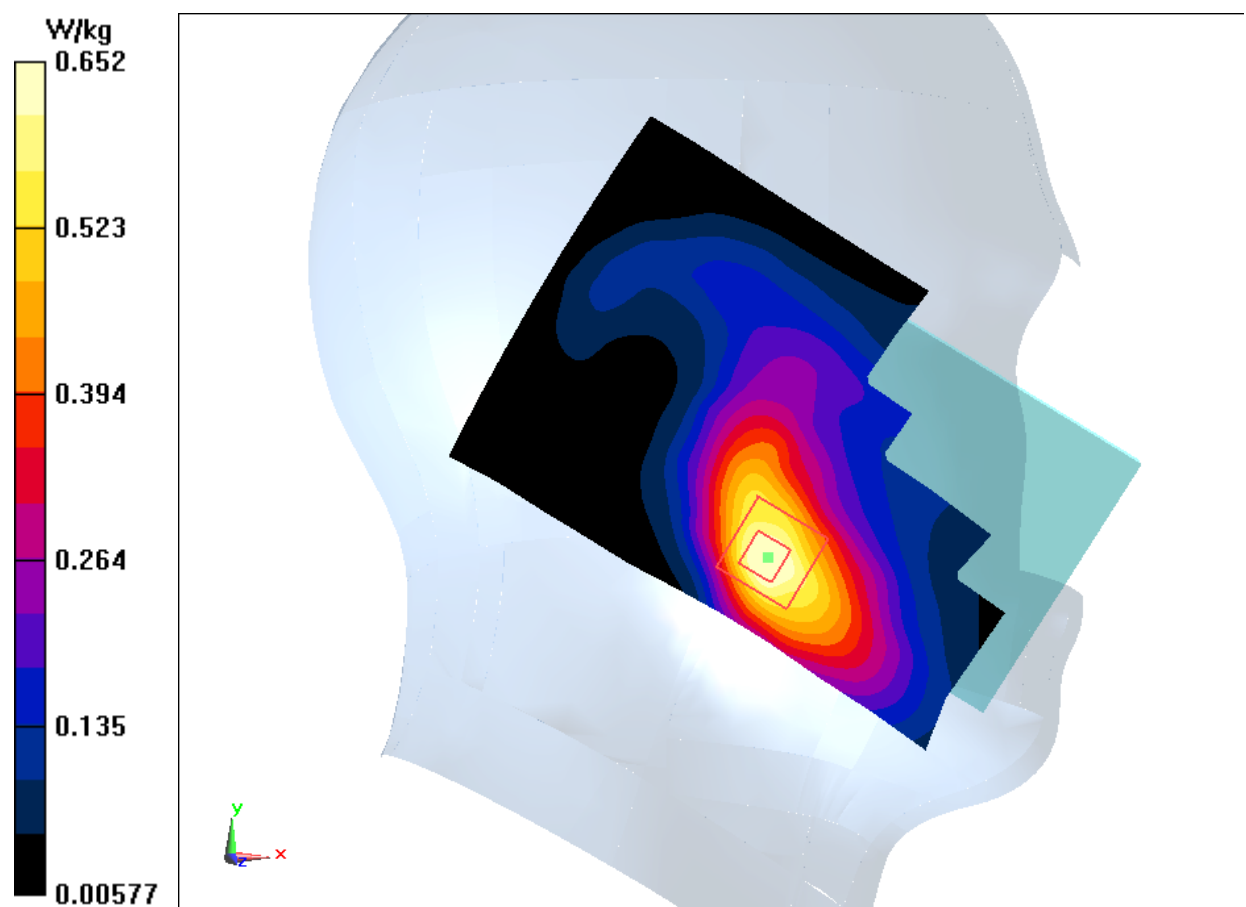
Maximum value of SAR (measured) = 0.652 W/kg
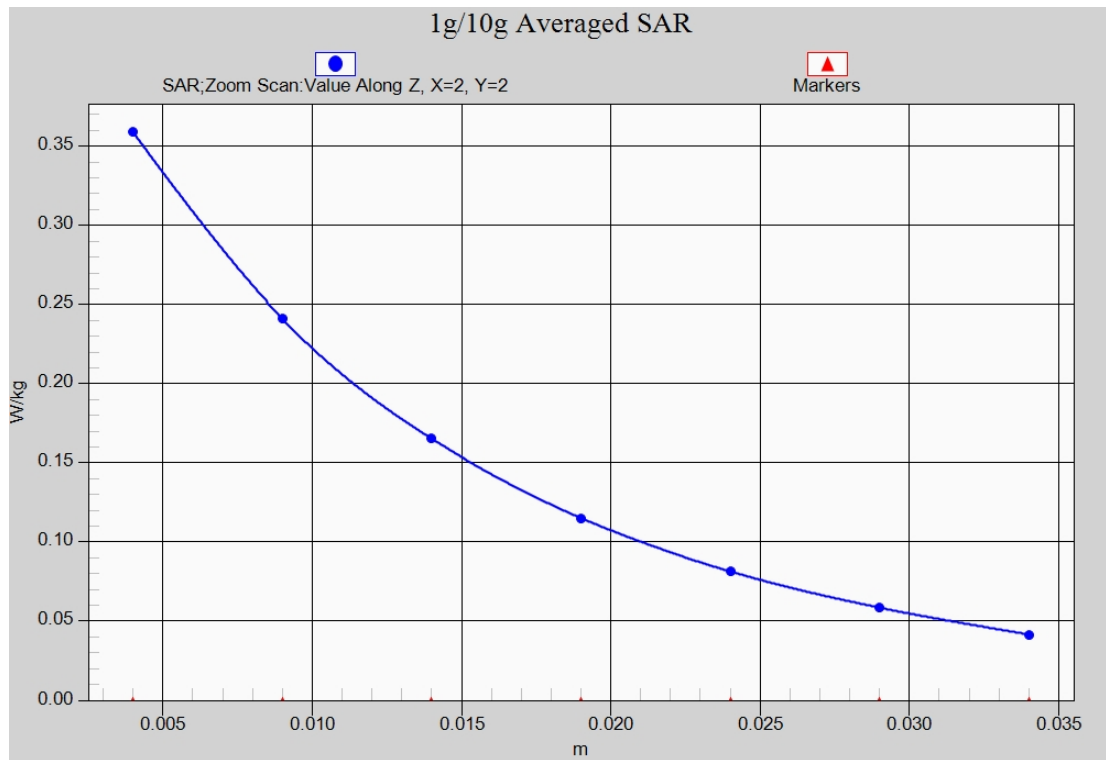

Fig.7 WCDMA1700

Fig. 7-1 Z-Scan at power reference point (WCDMA1700)

WCDMA 1700 Body Rear Low

Date: 2015-08-05

Electronics: DAE4 Sn777

Medium: Body 1900 MHz

Medium parameters used(interpolated): f = 1712.4 MHz; σ = 1.474 S/m; ε_r = 52.691; ρ = 1000 kg/m^3

Ambient Temperature: 22.5 ^{o}C   Liquid Temperature: 22.0 ^{o}C

Communication System: WCDMA 1700 Frequency: 1880 MHz Duty Cycle: 1:1

Probe: EX3DV4 - SN3846 ConvF(7.43, 7.43, 7.43)

Area Scan (121x71x1): Interpolated grid: dx=1.000 mm, dy=1.000 mm

Maximum value of SAR (interpolated) = 1.26 W/kg

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

Reference Value = 17.02 V/m; Power Drift = -0.16 dB

Peak SAR (extrapolated) = 1.49 W/kg

SAR(1 g) = 0.955 W/kg; SAR(10 g) = 0.630 W/kg
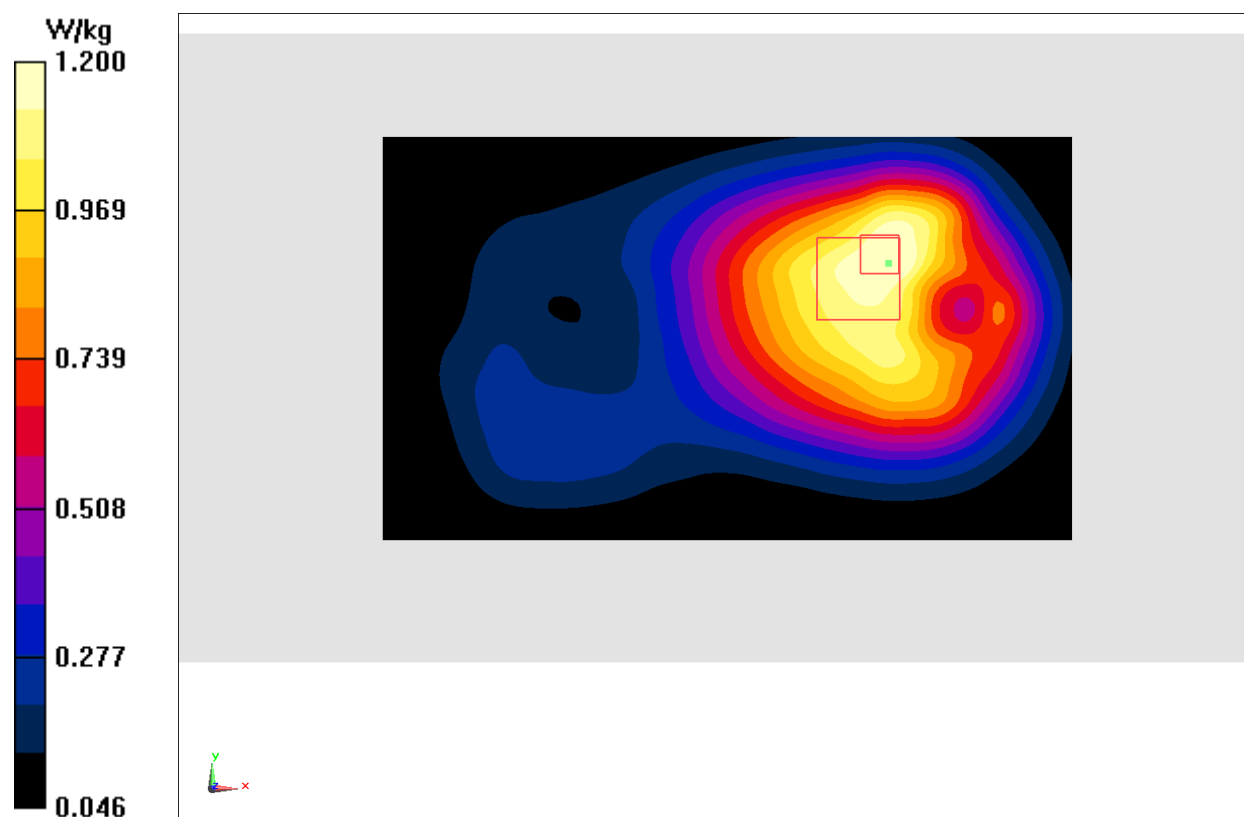
Maximum value of SAR (measured) = 1.20 W/kg
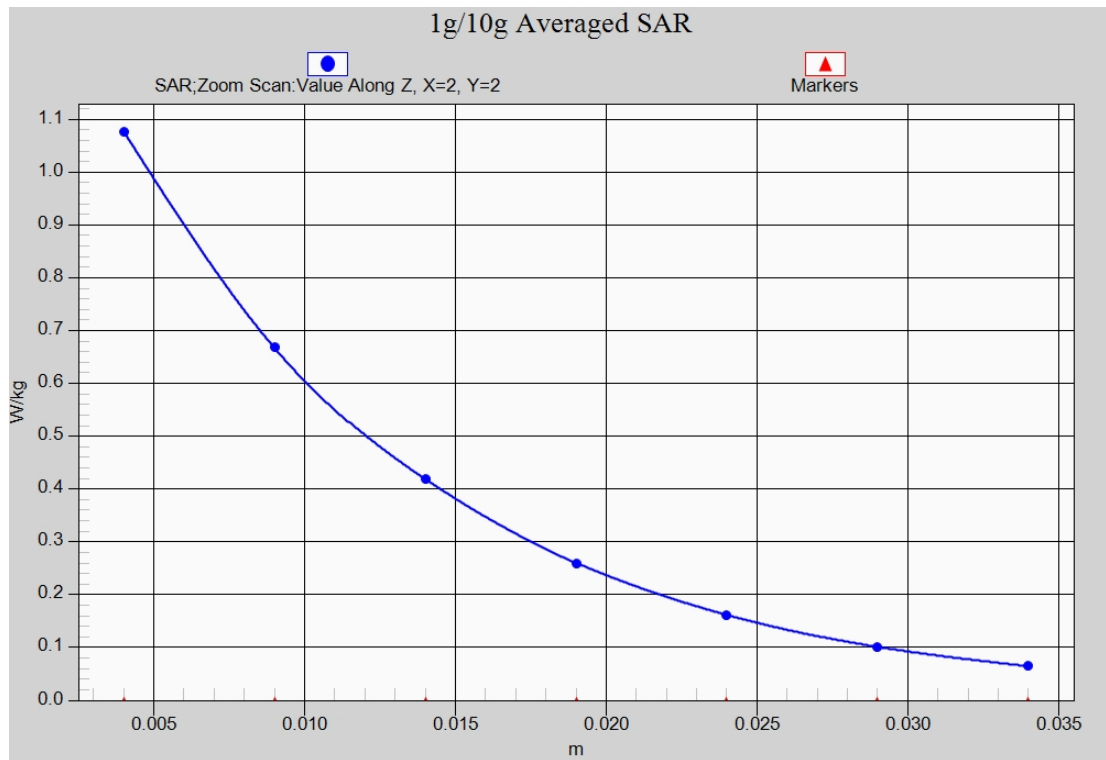

Fig.8 WCDMA1900

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

WCDMA 1900 Left Cheek Middle

Date: 2015-08-06

Electronics: DAE4 Sn777

Medium: Head 1900 MHz

Medium parameters used (interpolated): f = 1880 MHz; σ = 1.384 S/m; ε_r = 40.374; ρ = 1000 kg/m^3

Ambient Temperature: 22.5 ^{o}C   Liquid Temperature: 22.0 ^{o}C

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

Probe: EX3DV4 - SN3846 ConvF(7.26, 7.26, 7.26)

Area Scan (71x121x1): Interpolated grid: dx=1.000 mm, dy=1.000 mm

Maximum value of SAR (interpolated) = 0.529 W/kg

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

Reference Value = 6.634 V/m; Power Drift = 0.18 dB

Peak SAR (extrapolated) = 0.632 W/kg

SAR(1 g) = 0.442 W/kg; SAR(10 g) = 0.280 W/kg

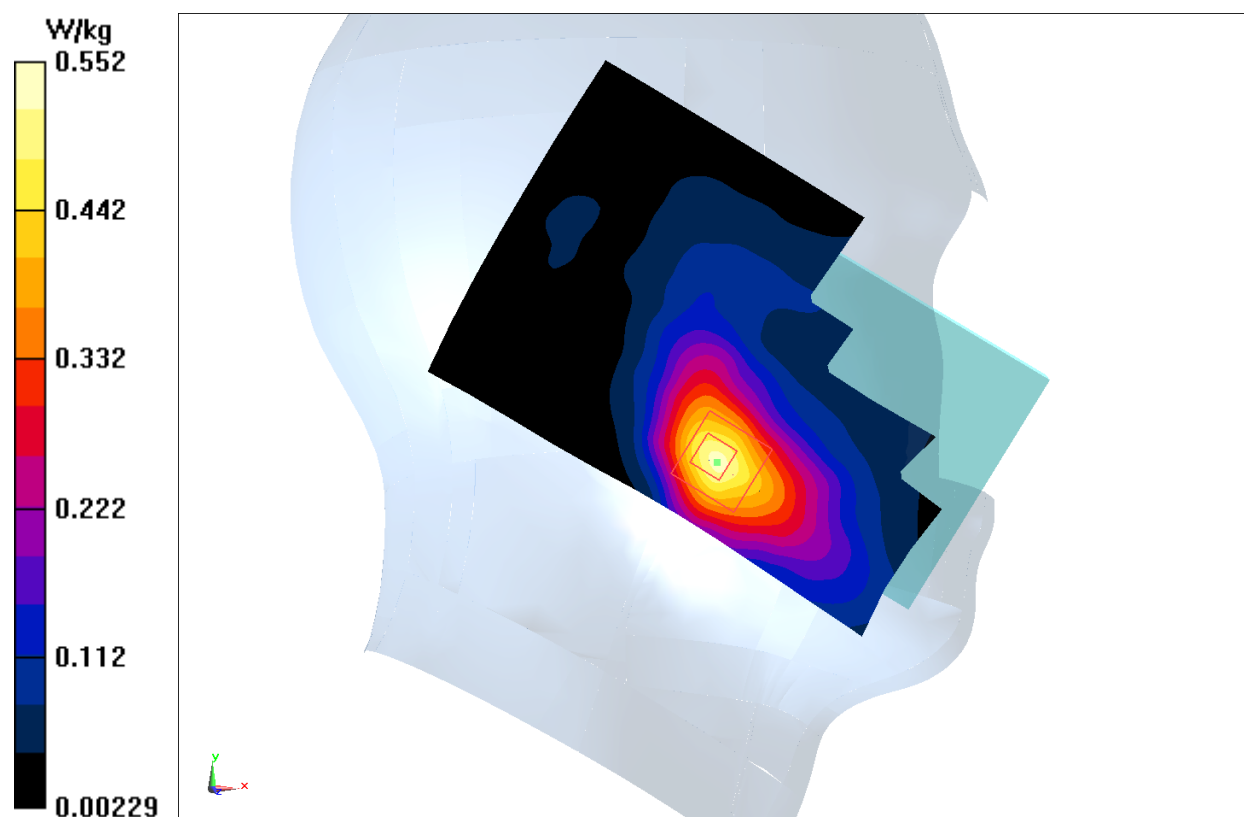Maximum value of SAR (measured) = 0.552 W/kg
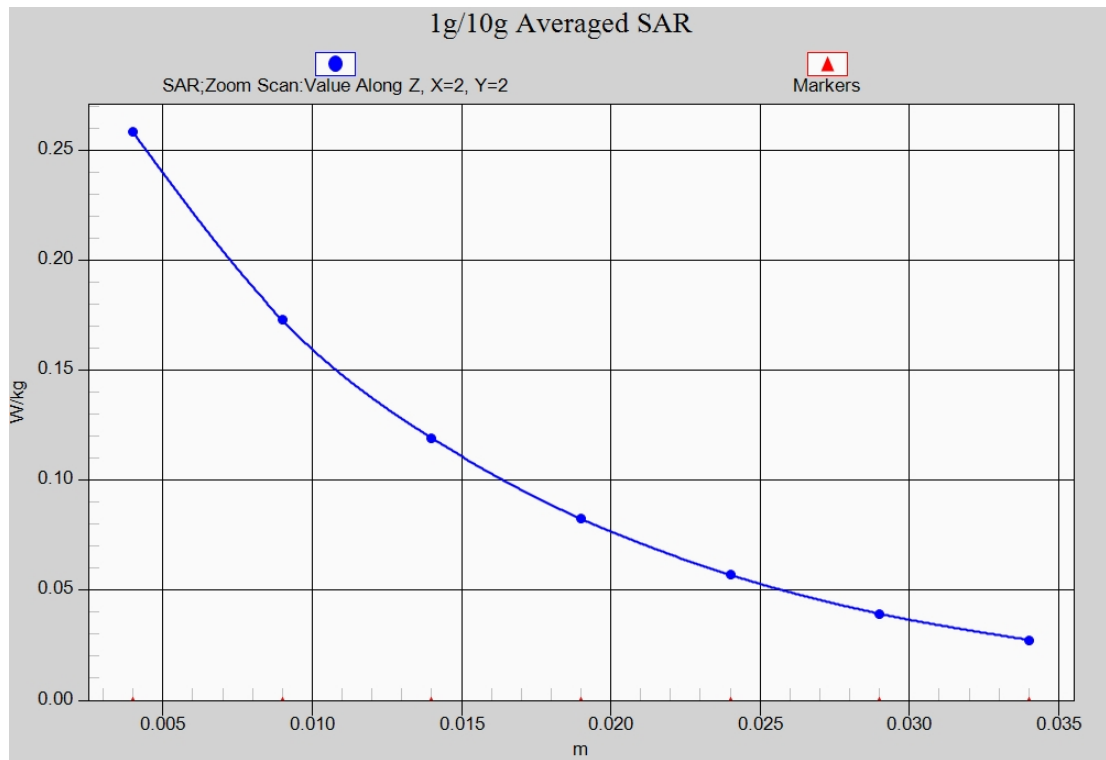

Fig.9 WCDMA1900

Fig. 9-1   Z-Scan at power reference point (WCDMA1900)

WCDMA 1900 Body Bottom High

Date: 2015-08-06

Electronics: DAE4 Sn777

Medium: Body 1900 MHz

Medium parameters used(interpolated): f = 1907.6 MHz; σ = 1.491 S/m; ε_r = 52.948; ρ = 1000 kg/m^3

Ambient Temperature: 22.5 ^{o}C   Liquid Temperature: 22.0 ^{o}C

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

Probe: EX3DV4 - SN3846 ConvF(7.15, 7.15, 7.15)

Area Scan (121x71x1): Interpolated grid: dx=1.000 mm, dy=1.000 mm

Maximum value of SAR (interpolated) = 1.36 W/kg

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

Reference Value = 23.33 V/m; Power Drift = 0.05 dB

Peak SAR (extrapolated) = 1.68 W/kg

SAR(1 g) = 0.981 W/kg; SAR(10 g) = 0.514 W/kg
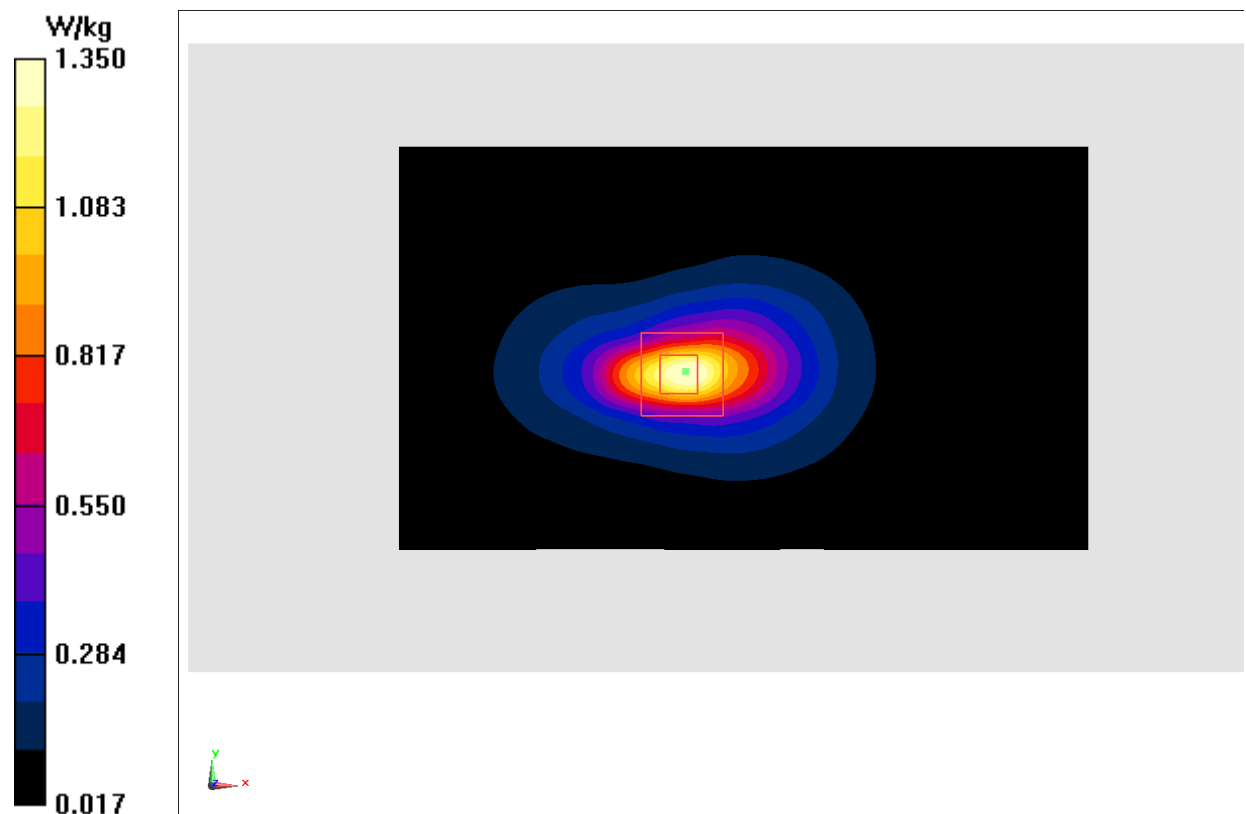
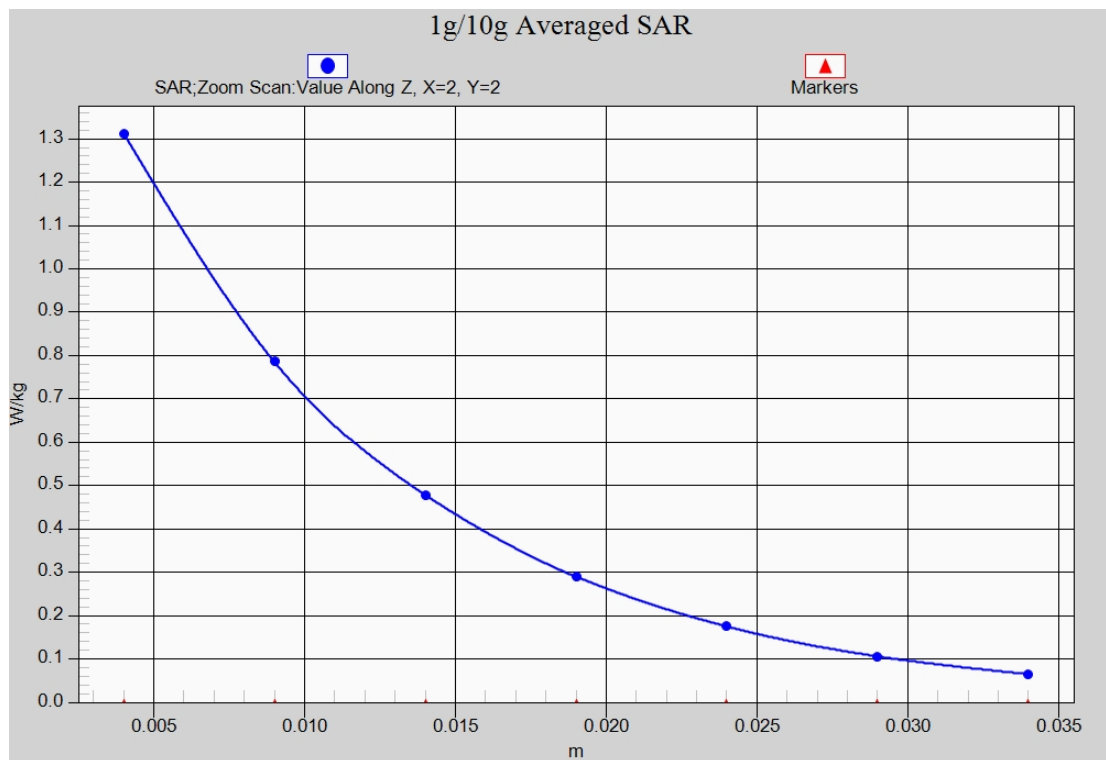Maximum value of SAR (measured) = 1.35 W/kg

Fig.10 WCDMA1900

Fig. 10-1　Z-Scan at power reference point (WCDMA1900)

LTE Band2 Right Cheek Low with QPSK_20M_1RB_Middle

Date: 2015-08-06

Electronics: DAE4 Sn777

Medium: Head 1900 MHz

Medium parameters used: f = 1860 MHz; σ = 1.347 mho/m; εr = 40.235; ρ = 1000 kg/m³

Ambient Temperature: 22.5 °C   Liquid Temperature: 22.0 °C

Communication System: LTE Band2 Frequency: 1860 MHz Duty Cycle: 1:1

Probe: EX3DV4 - SN3846 ConvF(7.26, 7.26, 7.26)

Area Scan (71x121x1): Interpolated grid: dx=1.000 mm, dy=1.000 mm

Maximum value of SAR (interpolated) = 0.467 W/kg

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

Reference Value = 4.879 V/m; Power Drift = 0.12 dB

Peak SAR (extrapolated) = 0.520 W/kg

SAR(1 g) = 0.354 W/kg; SAR(10 g) = 0.223 W/kg
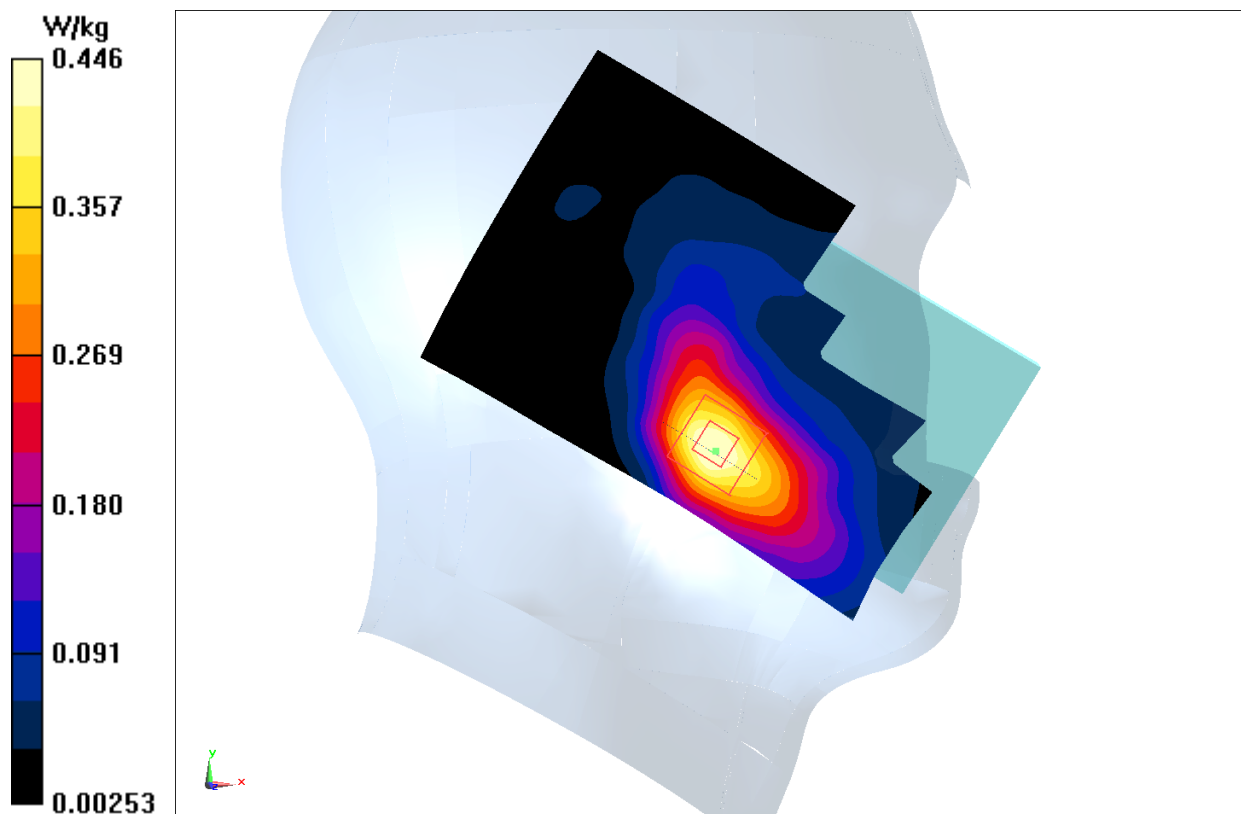
Maximum value of SAR (measured) = 0.446 W/kg

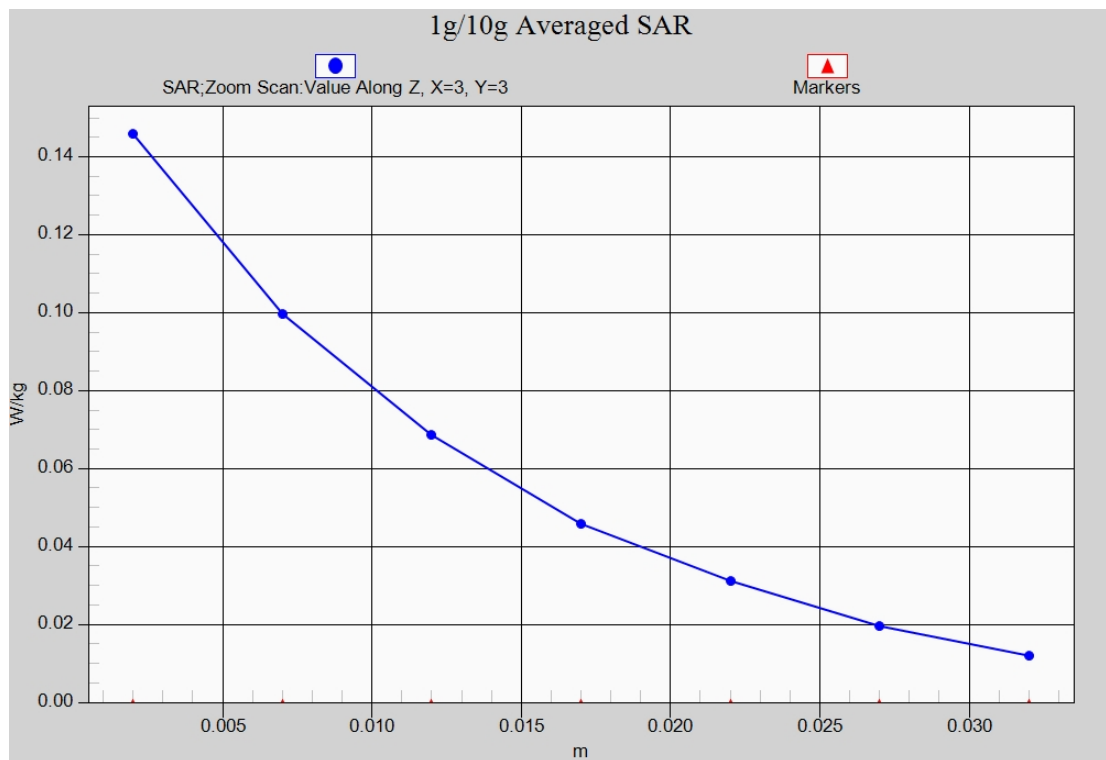
Fig.11 LTE Band2

Fig. 11-1   Z-Scan at power reference point (LTE Band2)

LTE Band2 Body Bottom Low with QPSK_20M_1RB_Middle

Date: 2015-08-06

Electronics: DAE4 Sn777

Medium: Body 1900 MHz

Medium parameters used: f = 1860 MHz; σ = 1.469 mho/m; εr = 54.176; ρ = 1000 kg/m^3

Ambient Temperature: 22.5 ^{o}C   Liquid Temperature: 22.0 ^{o}C

Communication System: LTE Band4 Frequency: 1860 MHz Duty Cycle: 1:1

Probe: EX3DV4 - SN3846 ConvF(7.15, 7.15, 7.15)

Area Scan (131x81x1): Interpolated grid: dx=1.000 mm, dy=1.000 mm

Maximum value of SAR (interpolated) = 0.743 W/kg

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

Reference Value = 21.56 V/m; Power Drift = 0.02 dB

Peak SAR (extrapolated) = 1.00 W/kg

SAR(1 g) = 0.599 W/kg; SAR(10 g) = 0.324 W/kg

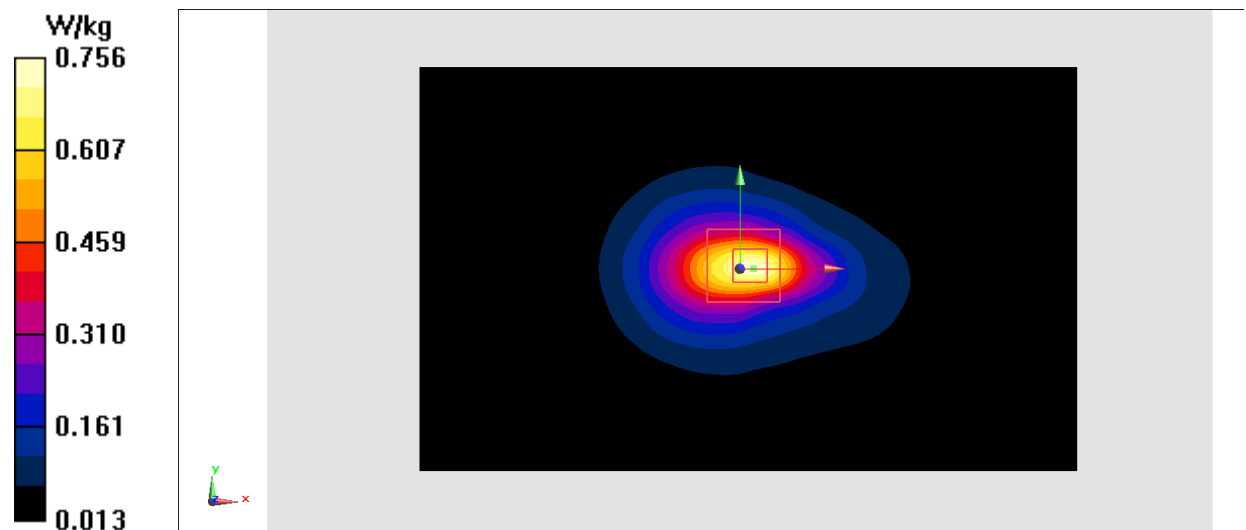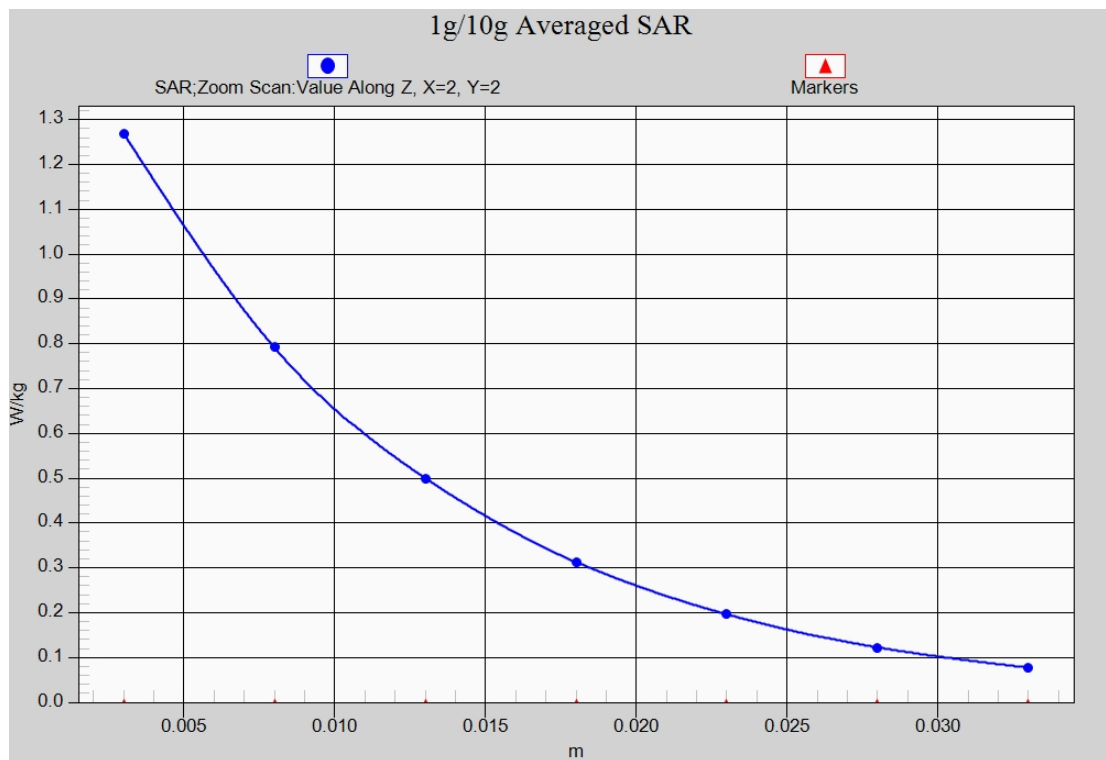Maximum value of SAR (measured) = 0.756 W/kg

Fig.12 LTE Band2

Fig. 12-1　Z-Scan at power reference point (LTE Band2)

LTE Band4 Left Cheek Low with QPSK_20M_1RB_Low

Date: 2015-08-05

Electronics: DAE4 Sn777

Medium: Head 1750 MHz

Medium parameters used: f = 1720 MHz; σ = 1.325 S/m; $ε_r$ = 39.557; ρ = 1000 kg/m^3

Ambient Temperature: 22.5 ^{o}C   Liquid Temperature: 22.0 ^{o}C

Communication System: LTE Band4 Frequency: 1720 MHz Duty Cycle: 1:1

Probe: EX3DV4 - SN3846 ConvF(7.64, 7.64, 7.64)

Area Scan (71x121x1): Interpolated grid: dx=1.000 mm, dy=1.000 mm

Maximum value of SAR (interpolated) = 0.410 W/kg

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

Reference Value = 7.253 V/m; Power Drift = 0.10 dB

Peak SAR (extrapolated) = 0.549 W/kg

SAR(1 g) = 0.364 W/kg; SAR(10 g) = 0.229 W/kg

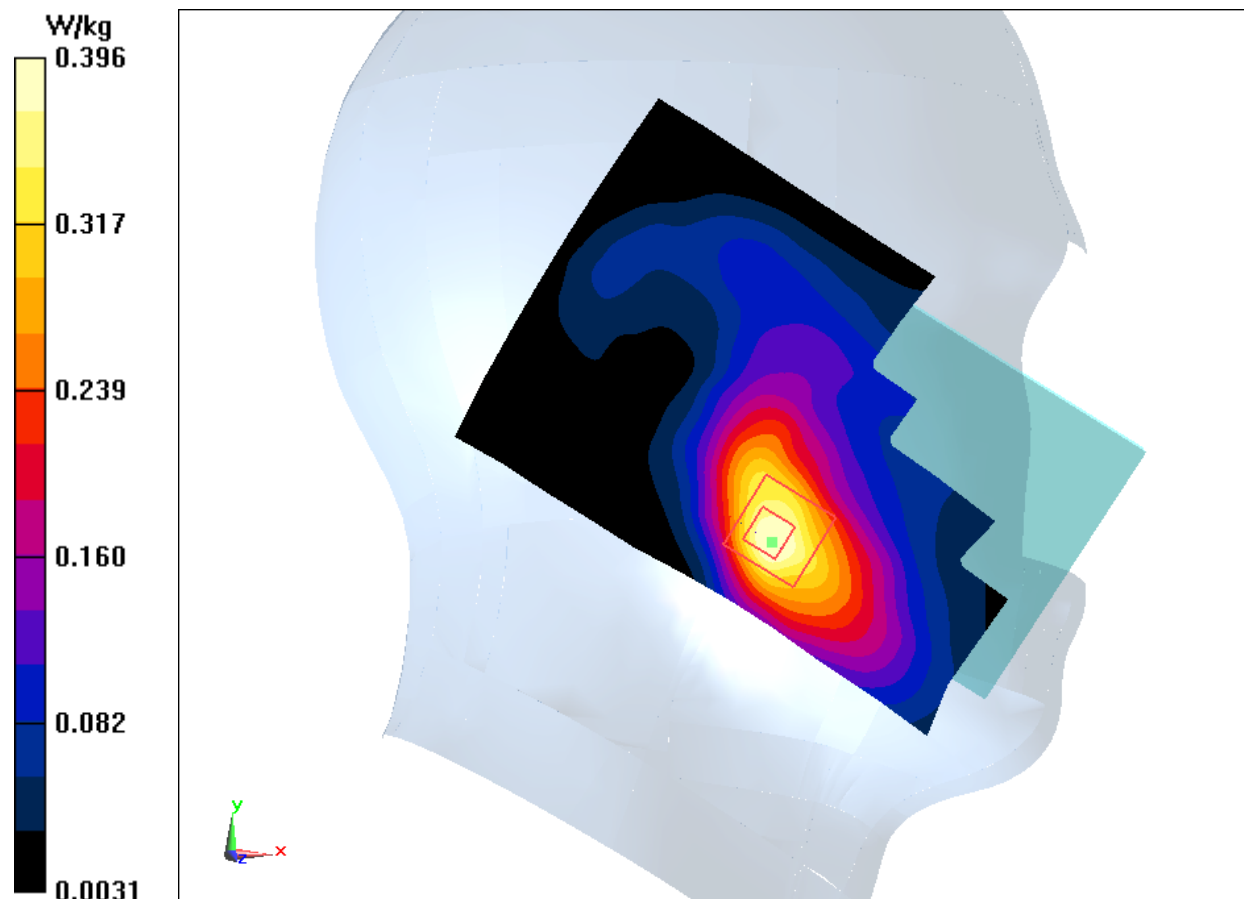Maximum value of SAR (measured) = 0.396 W/kg
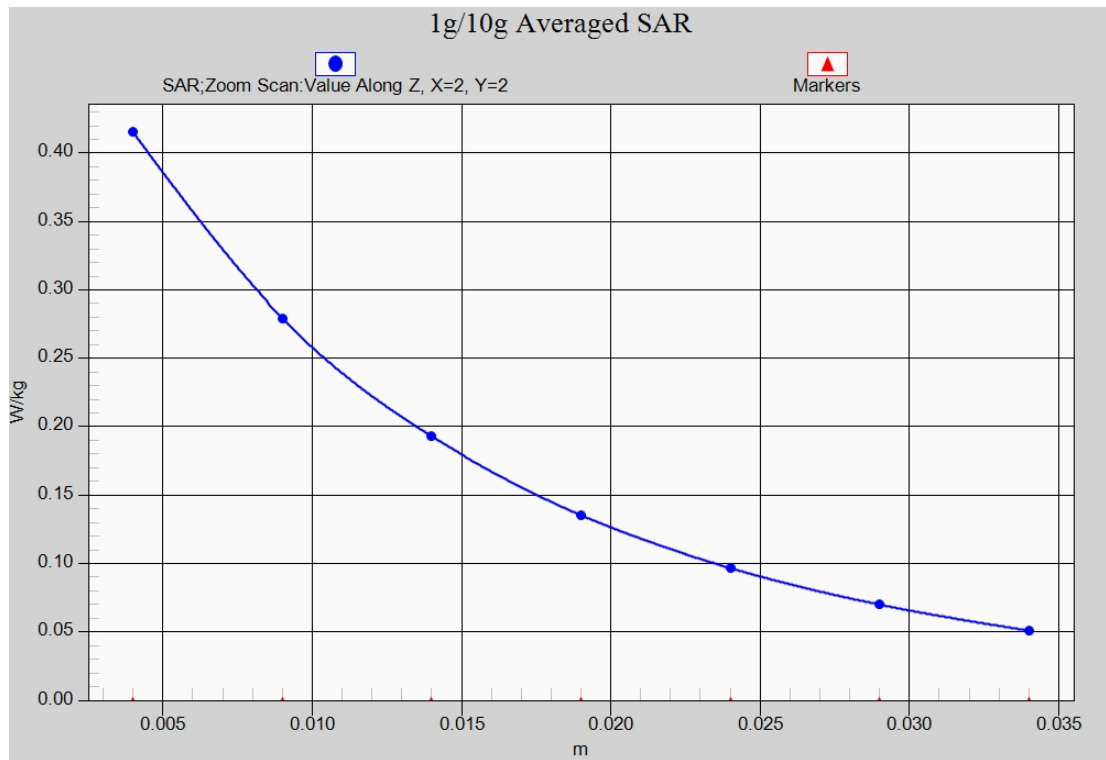

Fig.13 LTE Band4

Fig. 13-1   Z-Scan at power reference point (LTE Band4)

LTE Band4 Body Rear Low with QPSK_20M_1RB_Low

Date: 2015-08-05

Electronics: DAE4 Sn777

Medium: Body 1750 MHz

Medium parameters used: f = 1720 MHz; σ = 1.467 S/m; ε_r = 52.732; ρ = 1000 kg/m^3

Ambient Temperature: 22.5 ^{o}C   Liquid Temperature: 22.0 ^{o}C

Communication System: LTE Band4 Frequency: 1720 MHz Duty Cycle: 1:1

Probe: EX3DV4 - SN3846 ConvF(7.43, 7.43, 7.43)

Area Scan (121x71x1): Interpolated grid: dx=1.000 mm, dy=1.000 mm

Maximum value of SAR (interpolated) = 1.02 W/kg

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

Reference Value = 17.40 V/m; Power Drift = 0.12 dB

Peak SAR (extrapolated) = 1.21 W/kg

SAR(1 g) = 0.783 W/kg; SAR(10 g) = 0.527 W/kg

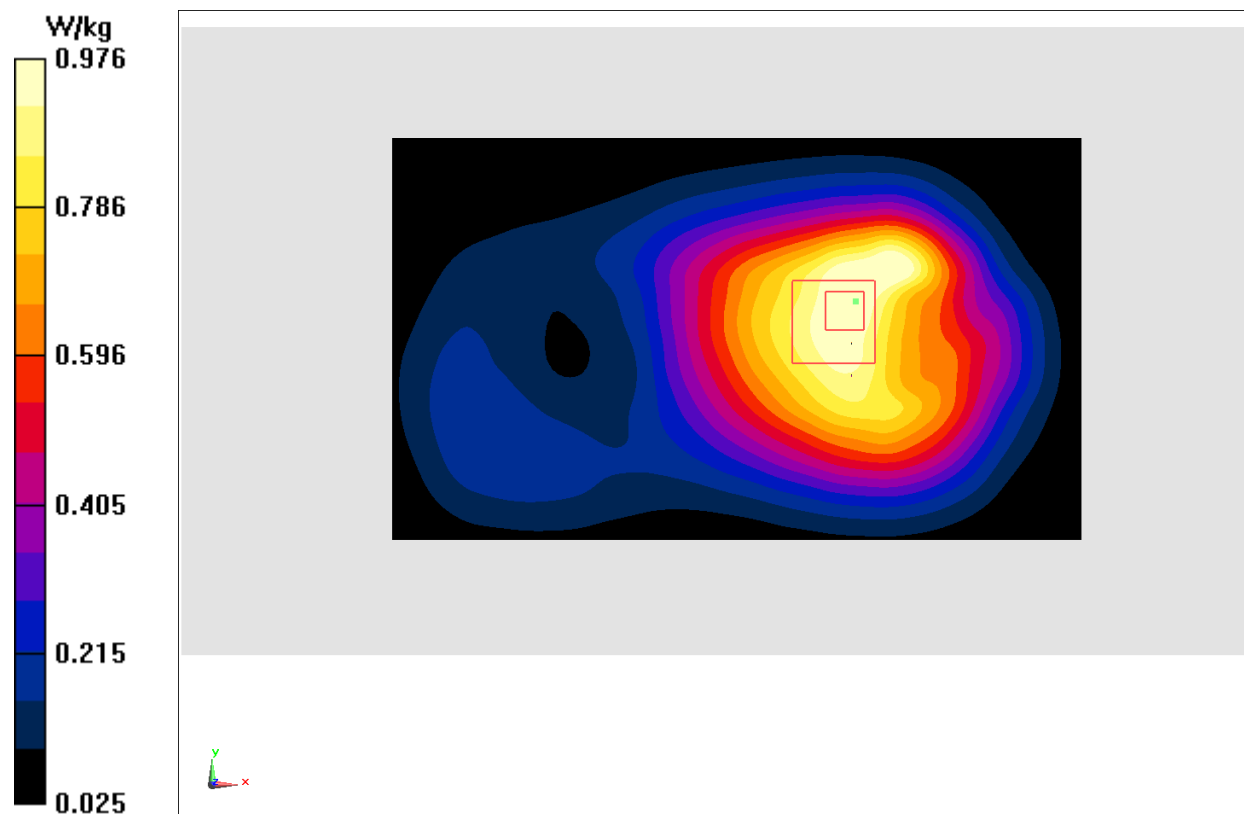Maximum value of SAR (measured) = 0.976 W/kg
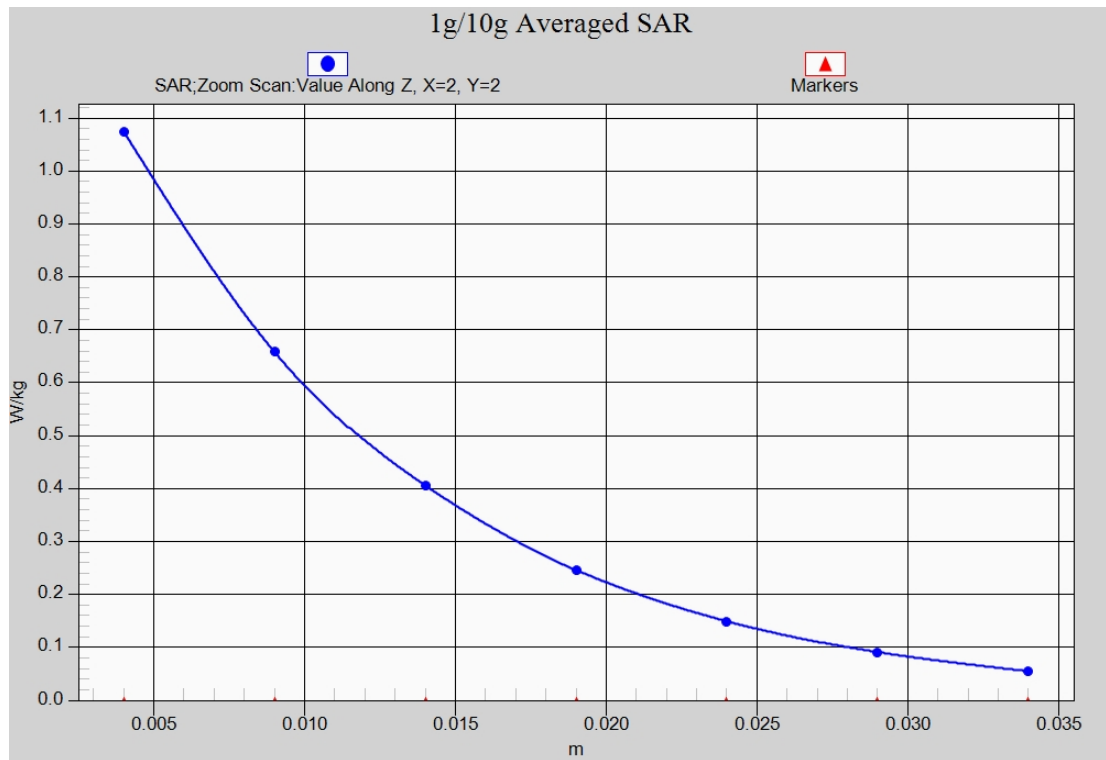

Fig.14 LTE Band4

Fig. 14-1   Z-Scan at power reference point (LTE Band4)

LTE Band12 Right Cheek High with QPSK_10M_1RB_Low

Date: 2015-08-07

Electronics: DAE4 Sn777

Medium: Head750 MHz

Medium parameters used(interpolated): f = 711 MHz; σ = 0.862 S/m; ε_r = 43.841; ρ = 1000 kg/m^3

Ambient Temperature: 22.5 ^{o}C   Liquid Temperature: 22.0 ^{o}C

Communication System: LTE Band12Frequency: 711 MHz Duty Cycle: 1:1

Probe: EX3DV4 - SN3846 ConvF(9.53, 9.53, 9.53)

Area Scan (81x131x1): Interpolated grid: dx=1.000 mm, dy=1.000 mm

Maximum value of SAR (interpolated) = 0.225 W/kg

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

Reference Value = 5.407 V/m; Power Drift = 0.13 dB

Peak SAR (extrapolated) = 0.255 W/kg

SAR(1 g) = 0.216 W/kg; SAR(10 g) = 0.171 W/kg
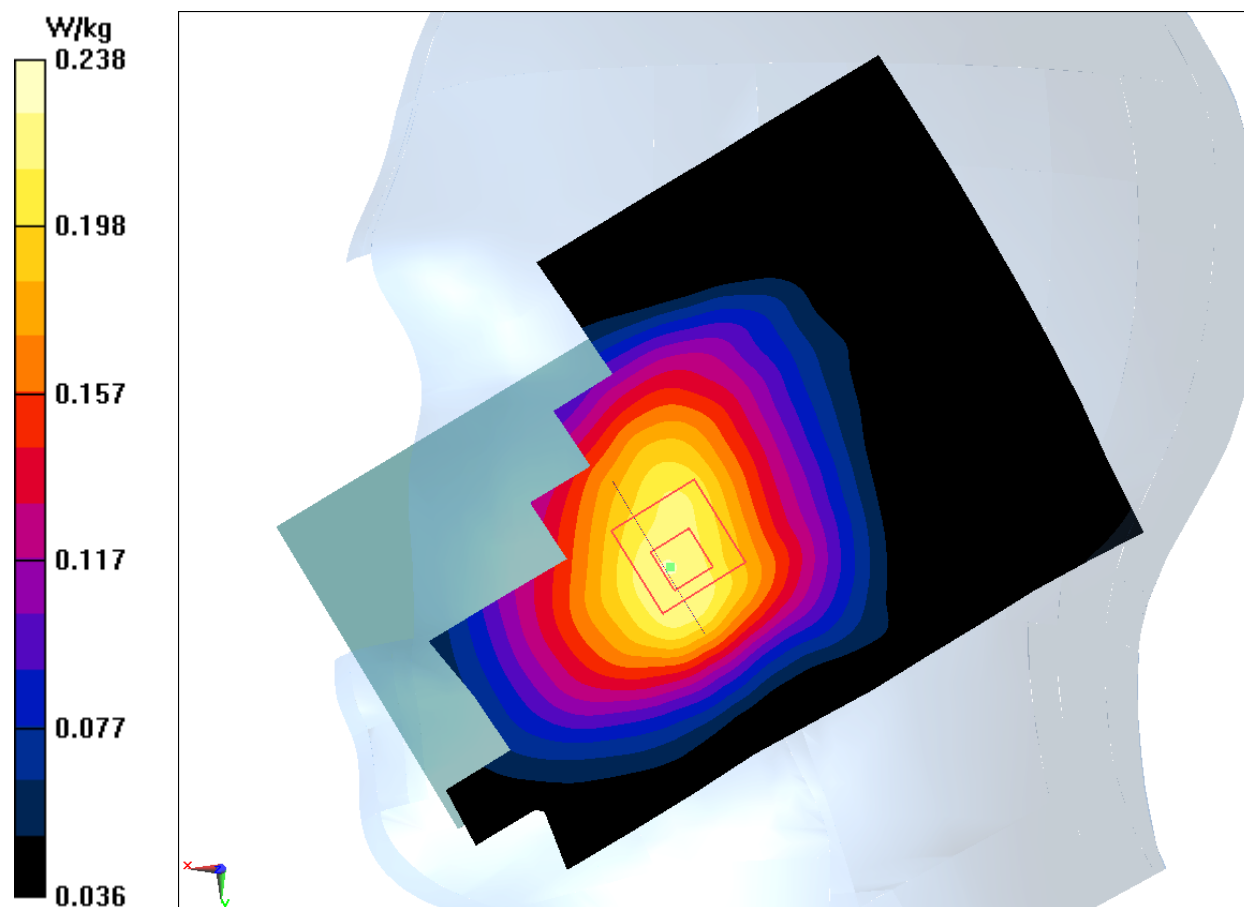
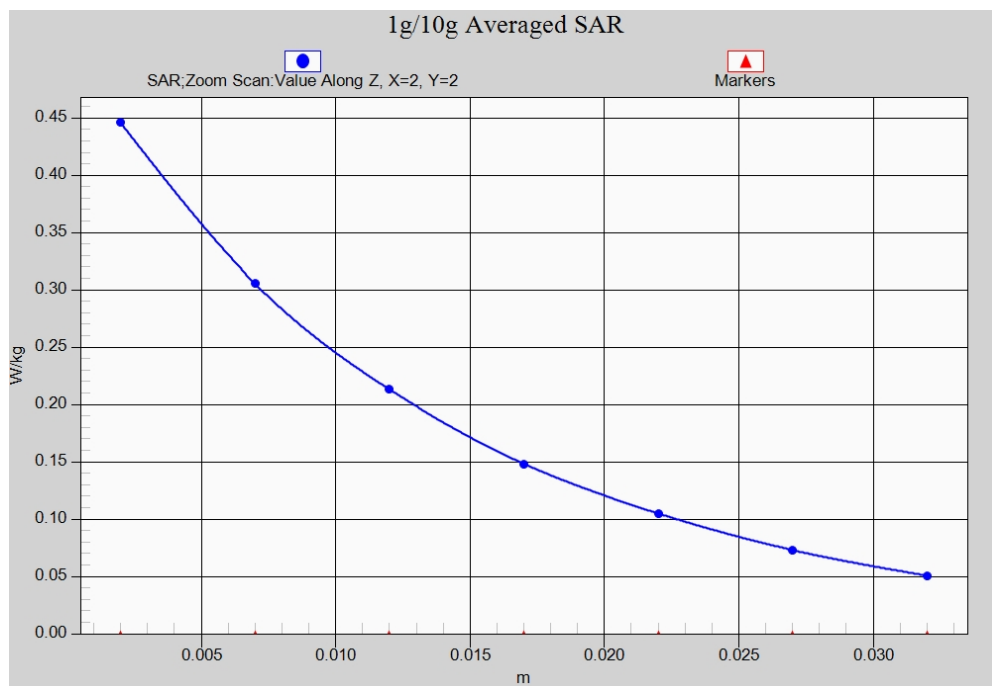Maximum value of SAR (measured) = 0.238 W/kg

Fig.15 LTE Band12

Fig. 15-1   Z-Scan at power reference point (LTE Band12)

LTE Band12 Body Rear High with QPSK_10M_1RB_Low

Date: 2015-08-07

Electronics: DAE4 Sn777

Medium: Body750 MHz

Medium parameters used(interpolated): f = 711 MHz; σ = 0.8898 S/m; ε_r = 55.869; ρ = 1000 kg/m^3

Ambient Temperature: 22.5 ^{o}C   Liquid Temperature: 22.0 ^{o}C

Communication System: LTE Band12Frequency: 711 MHz Duty Cycle: 1:1

Probe: EX3DV4 - SN3846 ConvF(9.18, 9.18, 9.18)

Area Scan (131x81x1): Interpolated grid: dx=1.000 mm, dy=1.000 mm

Maximum value of SAR (interpolated) = 0.412 W/kg

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

Reference Value = 17.51 V/m; Power Drift = -0.10 dB

Peak SAR (extrapolated) = 0.633 W/kg

SAR(1 g) = 0.337 W/kg; SAR(10 g) = 0.258 W/kg

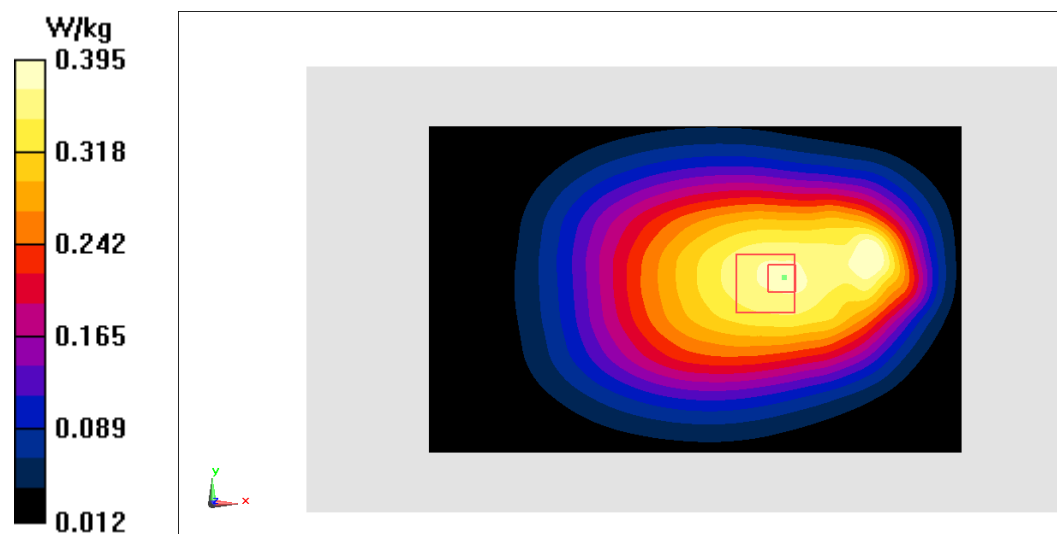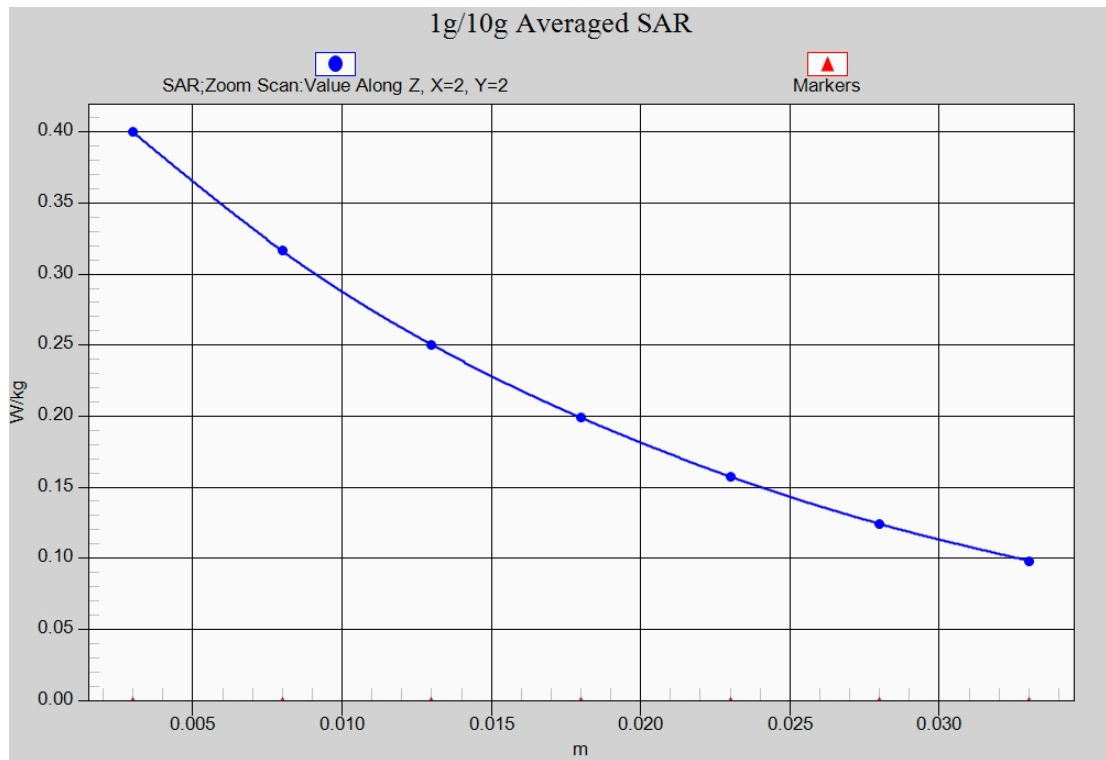Maximum value of SAR (measured) = 0.395 W/kg

Fig.16 LTE Band12

Fig. 16-1 Z-Scan at power reference point (LTE Band12)