

ANNEX A Graph Results

850 Right Cheek High

Date: 2017-4-19

Electronics: DAE4 Sn1331

Medium: Head 850 MHz

Medium parameters used (interpolated): $f = 848.8$ MHz; $\sigma = 0.896$ mho/m; $\epsilon_r = 41.06$; $\rho = 1000$ kg/m³

Ambient Temperature: 22.4°C Liquid Temperature: 22.2°C

Communication System: GSM 850 Frequency: 848.8 MHz Duty Cycle: 1:8.3

Probe: EX3DV4 – SN3846 ConvF(9.33, 9.33, 9.33)

Area Scan (71x131x1): Interpolated grid: dx=1.000 mm, dy=1.000 mm

Maximum value of SAR (interpolated) = 0.309 W/kg

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

Reference Value = 5.290 V/m; Power Drift = 0.02 dB

Peak SAR (extrapolated) = 0.358 W/kg

SAR(1 g) = 0.283 W/kg; SAR(10 g) = 0.216 W/kg

Maximum value of SAR (measured) = 0.306 W/kg

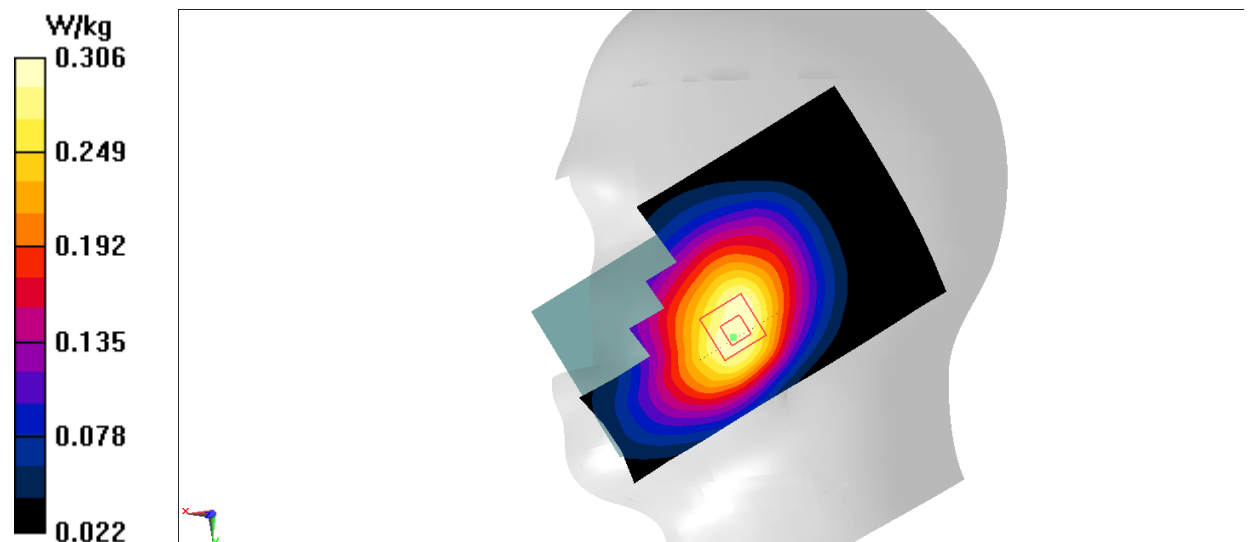


Fig.1 850MHz

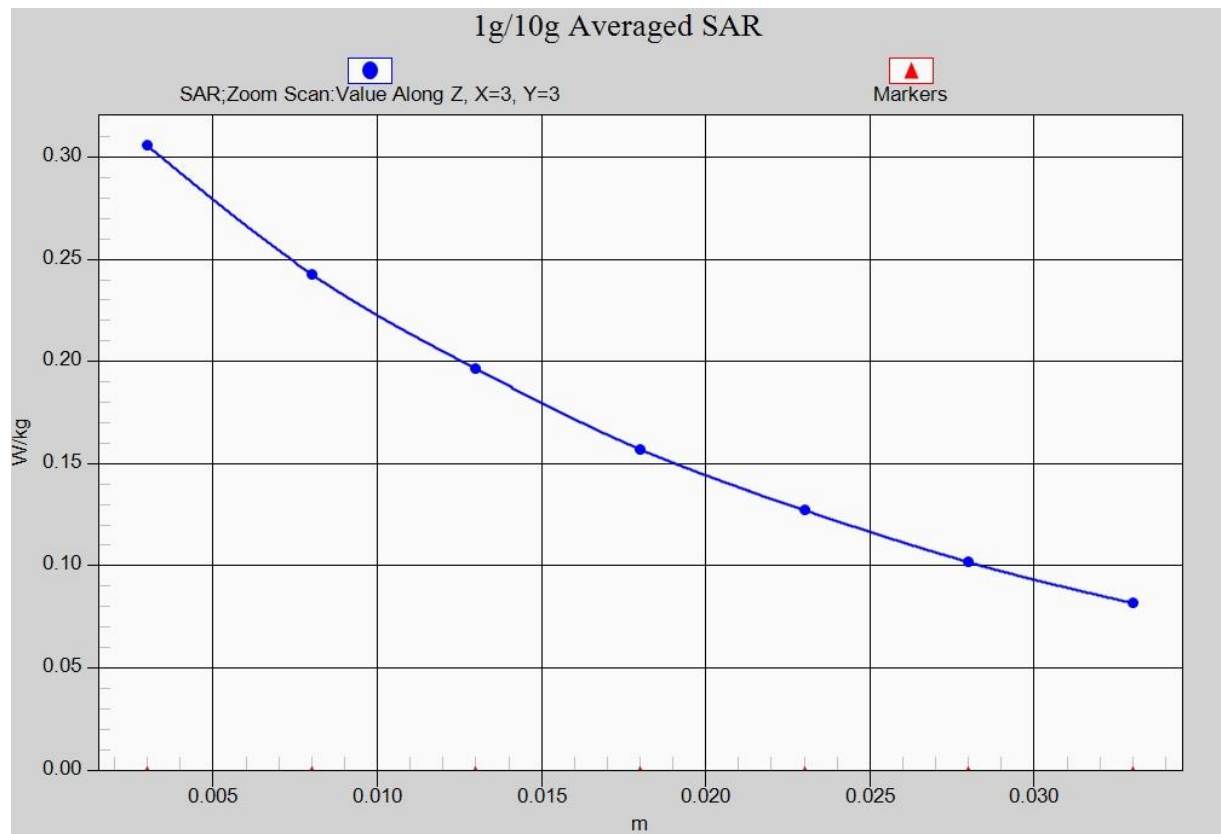


Fig. 1-1 Z-Scan at power reference point (850 MHz)

850 Body Rear High

Date: 2017-4-19

Electronics: DAE4 Sn1331

Medium: Body 850 MHz

Medium parameters used (interpolated): $f = 848.8$ MHz; $\sigma = 0.982$ mho/m; $\epsilon_r = 54.25$; $\rho = 1000$ kg/m³

Ambient Temperature: 22.4°C Liquid Temperature: 22.2°C

Communication System: GSM 850 GPRS Frequency: 848.8 MHz Duty Cycle: 1:2

Probe: EX3DV4 – SN3846 ConvF(9.52, 9.52, 9.52)

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

Maximum value of SAR (interpolated) = 0.610 W/kg

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

Reference Value = 21.18 V/m; Power Drift = -0.18 dB

Peak SAR (extrapolated) = 0.734 W/kg

SAR(1 g) = 0.531 W/kg; SAR(10 g) = 0.385 W/kg

Maximum value of SAR (measured) = 0.592 W/kg

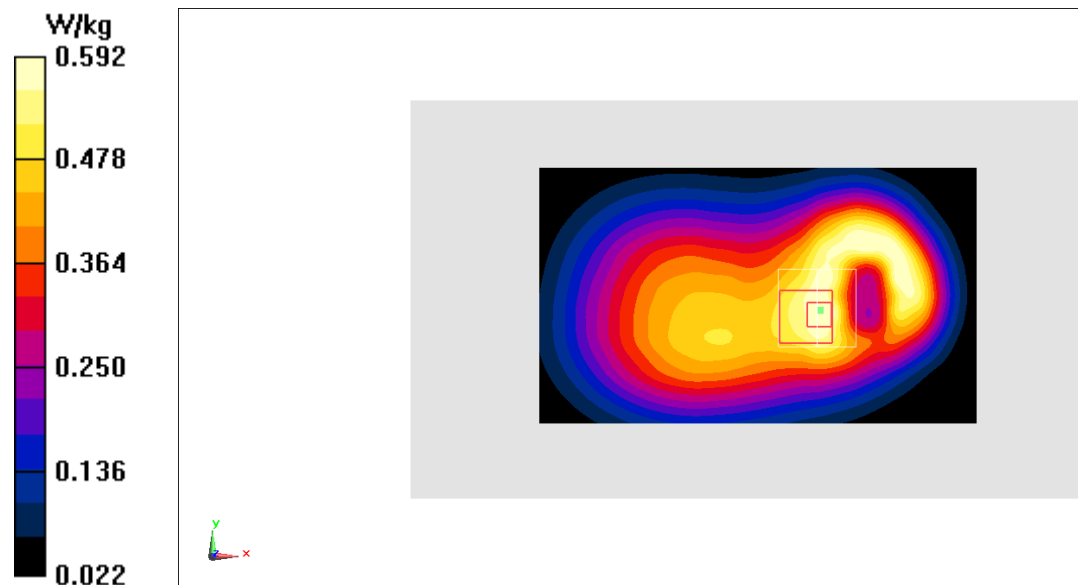


Fig.2 850 MHz

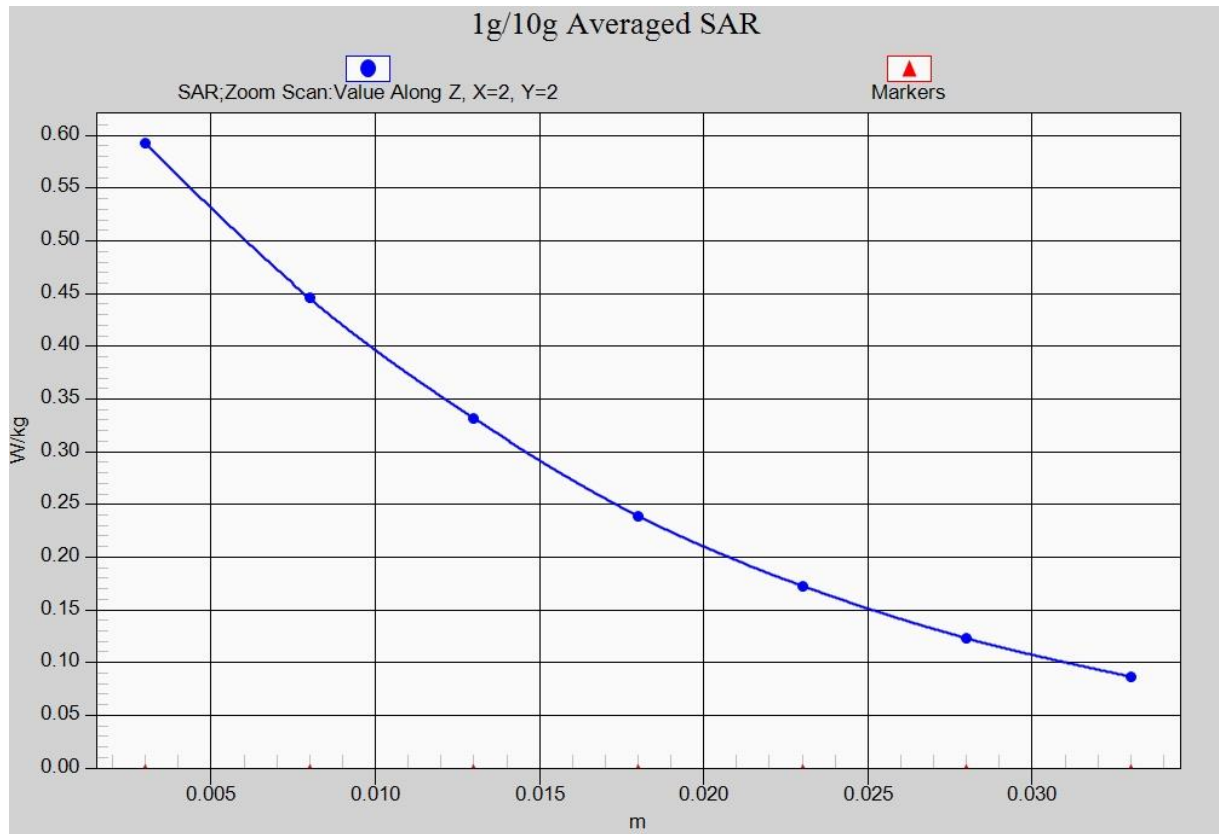


Fig. 2-1 Z-Scan at power reference point (850 MHz)

1900 Left Cheek High

Date: 2017-4-21

Electronics: DAE4 Sn1331

Medium: Head 1900 MHz

Medium parameters used: $f = 1910$ MHz; $\sigma = 1.396$ mho/m; $\epsilon_r = 41.05$; $\rho = 1000$ kg/m³

Ambient Temperature: 22.4°C Liquid Temperature: 22.2°C

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

Probe: EX3DV4– SN3846 ConvF(7.89, 7.89, 7.89)

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

Maximum value of SAR (interpolated) = 0.258 W/kg

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

Reference Value = 5.190 V/m; Power Drift = 0.09 dB

Peak SAR (extrapolated) = 0.350 W/kg

SAR(1 g) = 0.222 W/kg; SAR(10 g) = 0.135 W/kg

Maximum value of SAR (measured) = 0.264 W/kg

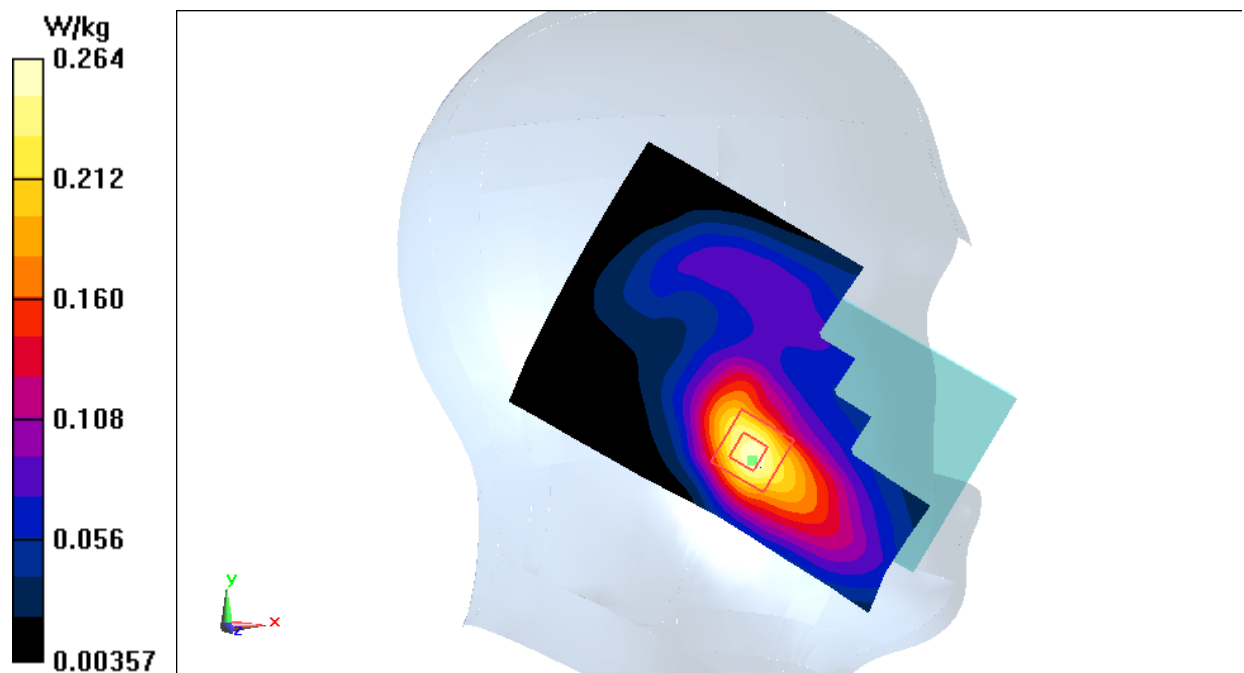


Fig.3 1900 MHz

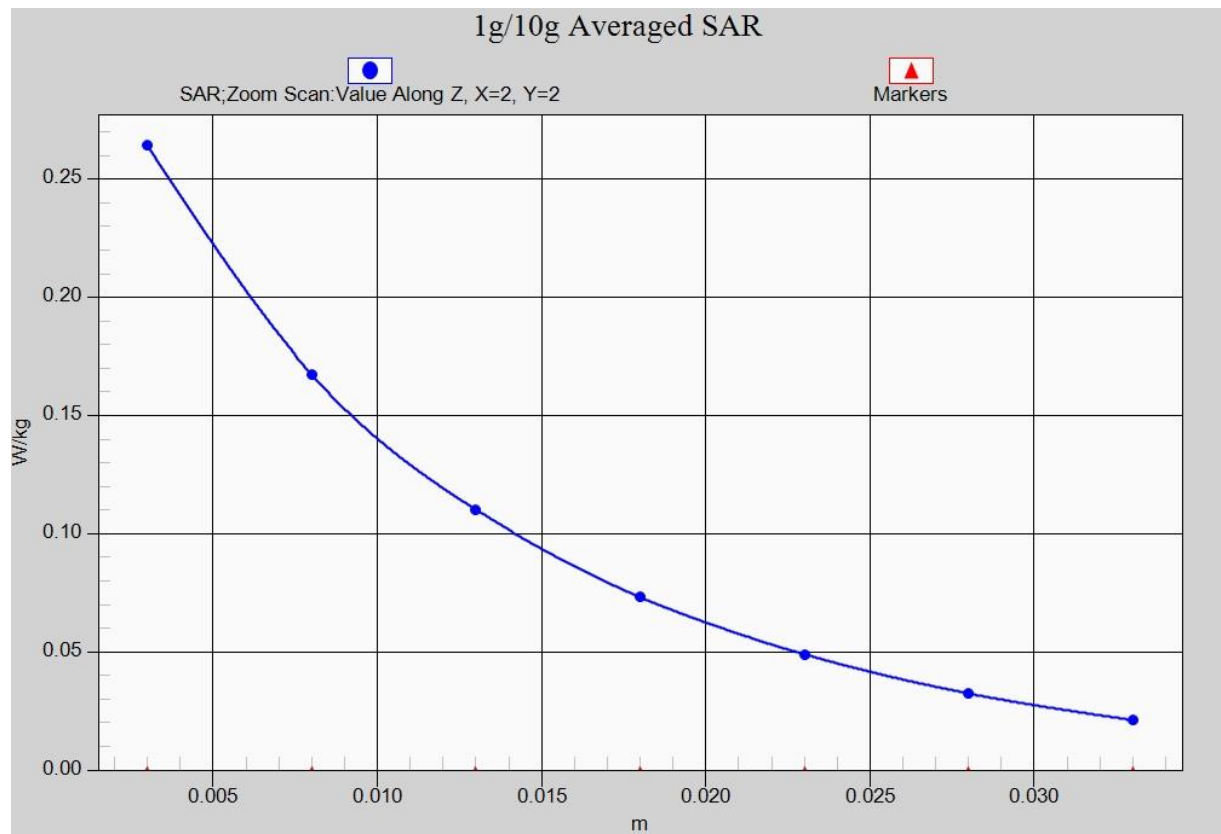


Fig. 3-1 Z-Scan at power reference point (1900 MHz)

1900 Body Front High

Date: 2017-4-21

Electronics: DAE4 Sn1331

Medium: Body 1900 MHz

Medium parameters used: $f = 1910$ MHz; $\sigma = 1.563$ mho/m; $\epsilon_r = 52.42$; $\rho = 1000$ kg/m³

Ambient Temperature: 22.4°C Liquid Temperature: 22.2°C

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

Probe: EX3DV4– SN3846 ConvF(7.57, 7.57, 7.57)

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

Maximum value of SAR (interpolated) = 0.821 W/kg

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

Reference Value = 16.46 V/m; Power Drift = -0.16 dB

Peak SAR (extrapolated) = 1.14 W/kg

SAR(1 g) = 0.676 W/kg; SAR(10 g) = 0.386 W/kg

Maximum value of SAR (measured) = 0.833 W/kg

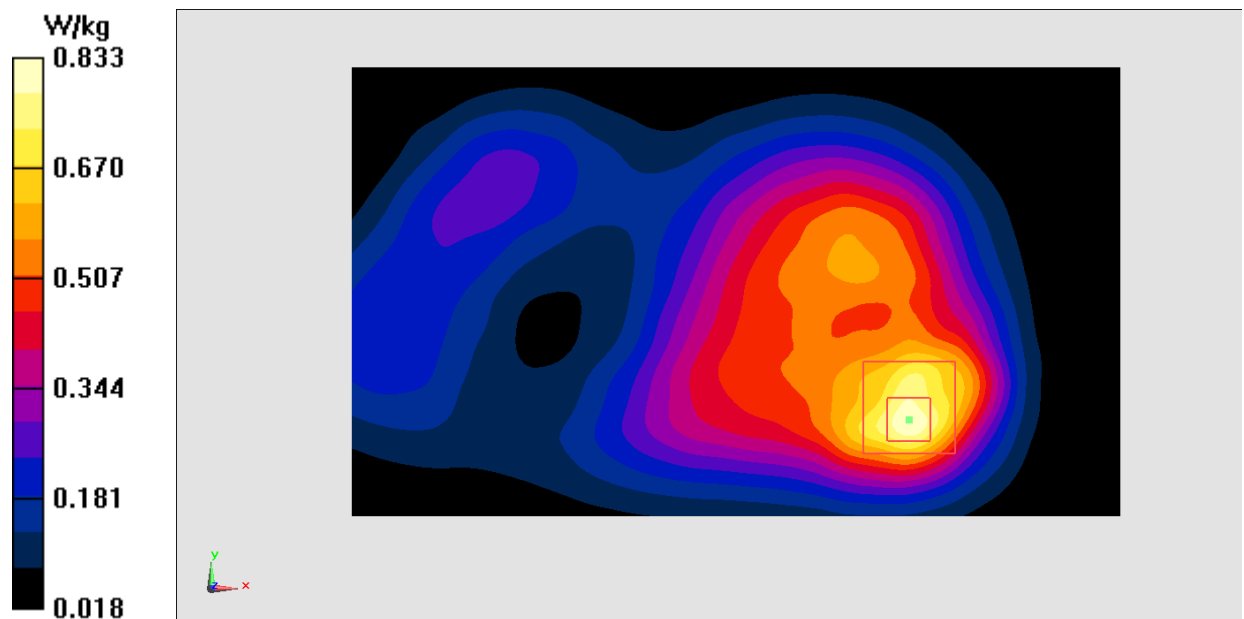


Fig.4 1900 MHz

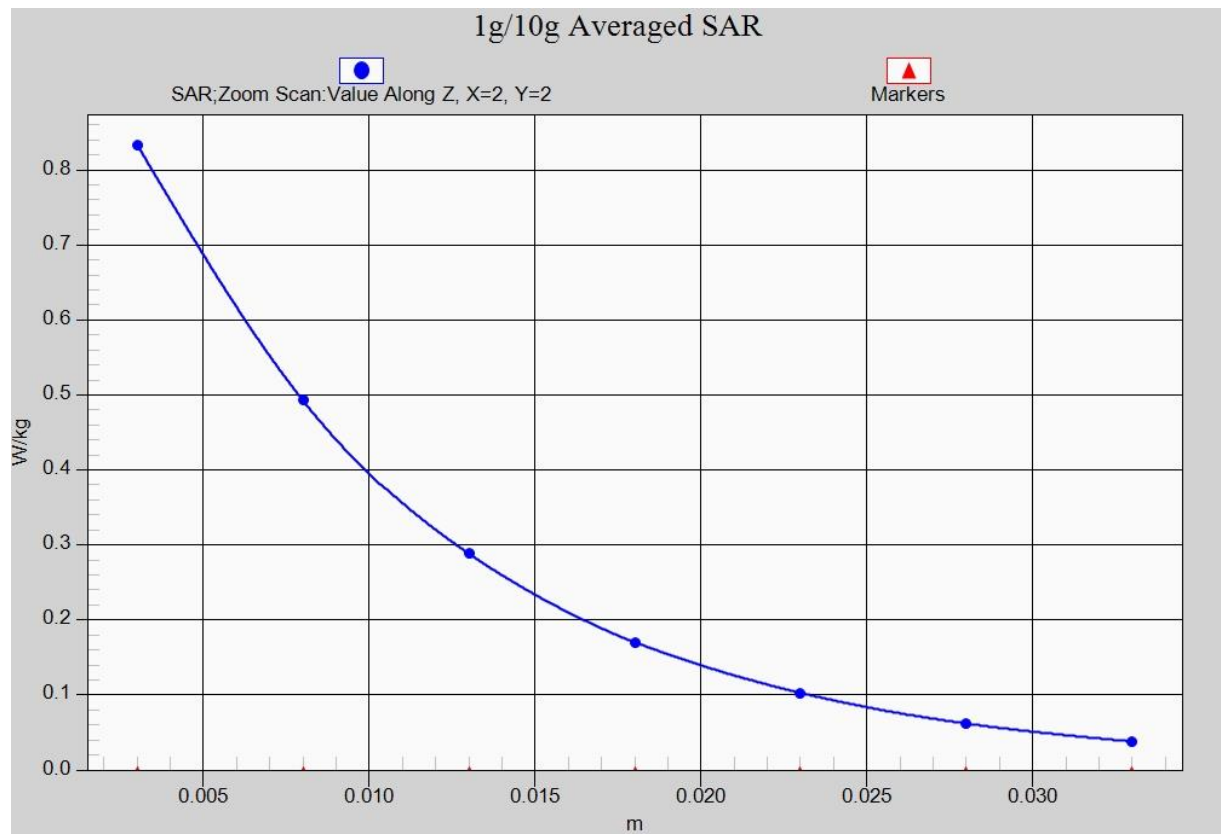


Fig. 4-1 Z-Scan at power reference point (1900 MHz)

WCDMA 850 Right Cheek High

Date: 2017-4-19

Electronics: DAE4 Sn1331

Medium: Head 850 MHz

Medium parameters used (interpolated): $f = 846.6$ MHz; $\sigma = 0.893$ mho/m; $\epsilon_r = 41.065$; $\rho = 1000$ kg/m³

Ambient Temperature: 22.4°C Liquid Temperature: 22.2°C

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

Probe: EX3DV4 – SN3846 ConvF(9.33, 9.33, 9.33)

Area Scan (71x131x1): Interpolated grid: dx=1.000 mm, dy=1.000 mm

Maximum value of SAR (interpolated) = 0.245 W/kg

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

Reference Value = 4.505 V/m; Power Drift = 0.14 dB

Peak SAR (extrapolated) = 0.285 W/kg

SAR(1 g) = 0.226 W/kg; SAR(10 g) = 0.173 W/kg

Maximum value of SAR (measured) = 0.245 W/kg

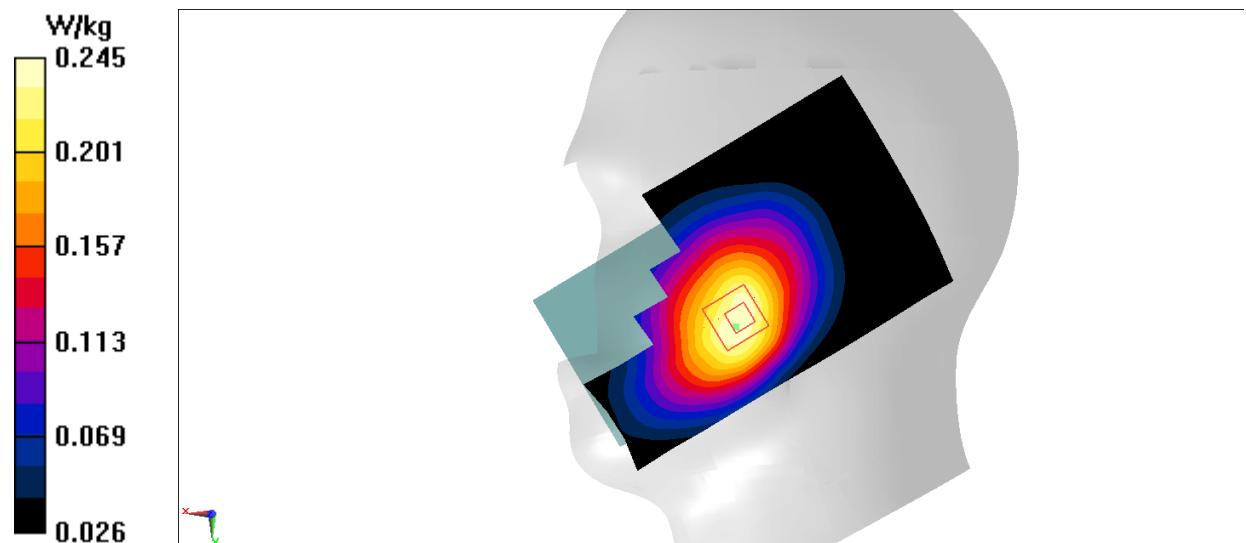


Fig.5 WCDMA 850

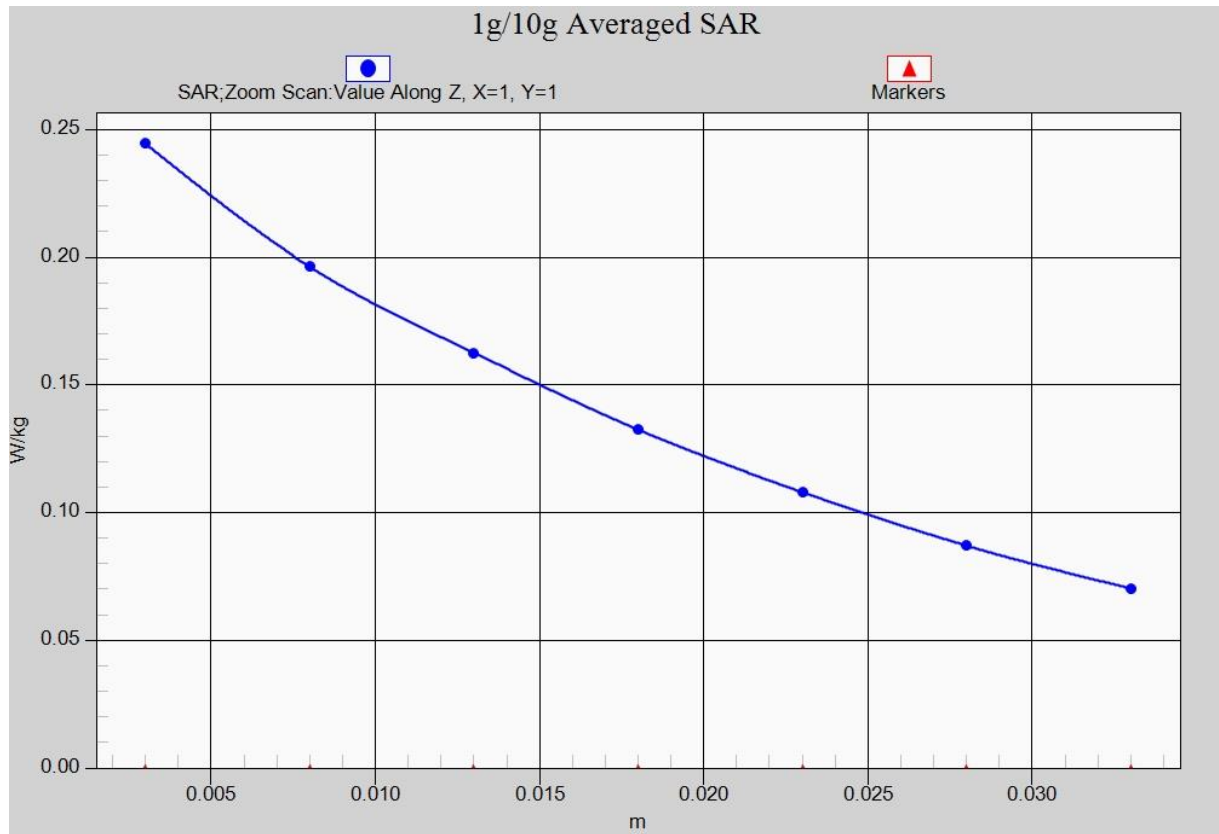


Fig. 5-1 Z-Scan at power reference point (850 MHz)

WCDMA 850 Body Rear High

Date: 2017-4-19

Electronics: DAE4 Sn1331

Medium: Body 850 MHz

Medium parameters used (interpolated): $f = 846.6$ MHz; $\sigma = 0.979$ mho/m; $\epsilon_r = 54.256$; $\rho = 1000$ kg/m³

Ambient Temperature: 22.4°C Liquid Temperature: 22.2°C

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

Probe: EX3DV4 – SN3846 ConvF(9.52, 9.52, 9.52)

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

Maximum value of SAR (interpolated) = 0.352 W/kg

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

Reference Value = 15.98 V/m; Power Drift = 0.08 dB

Peak SAR (extrapolated) = 0.423 W/kg

SAR(1 g) = 0.309 W/kg; SAR(10 g) = 0.225 W/kg

Maximum value of SAR (measured) = 0.345 W/kg

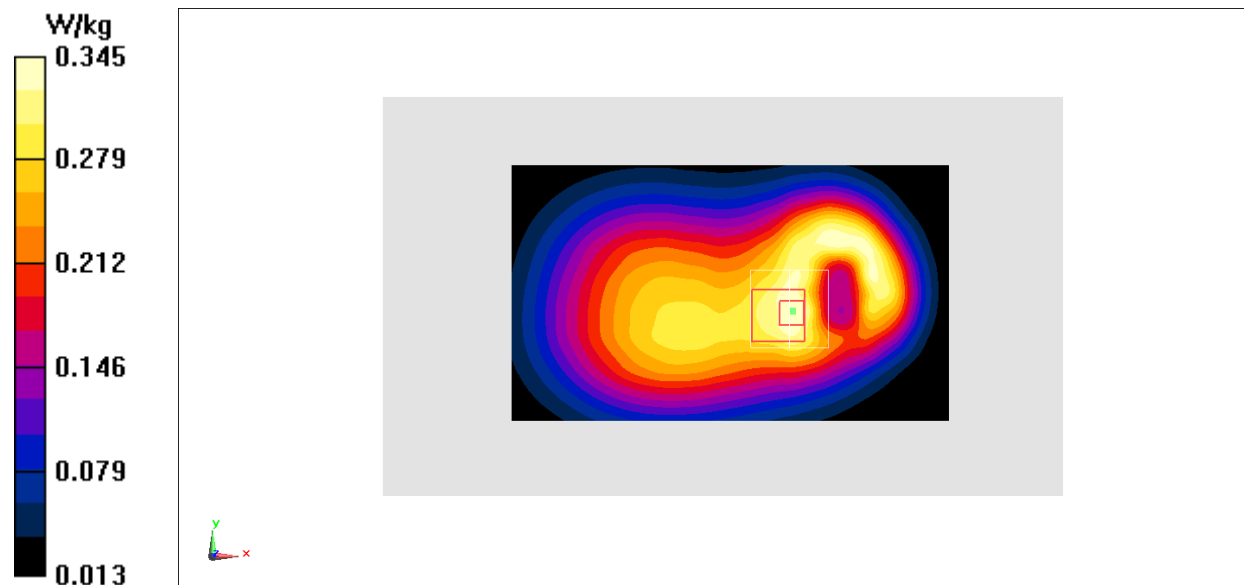


Fig.6 WCDMA 850

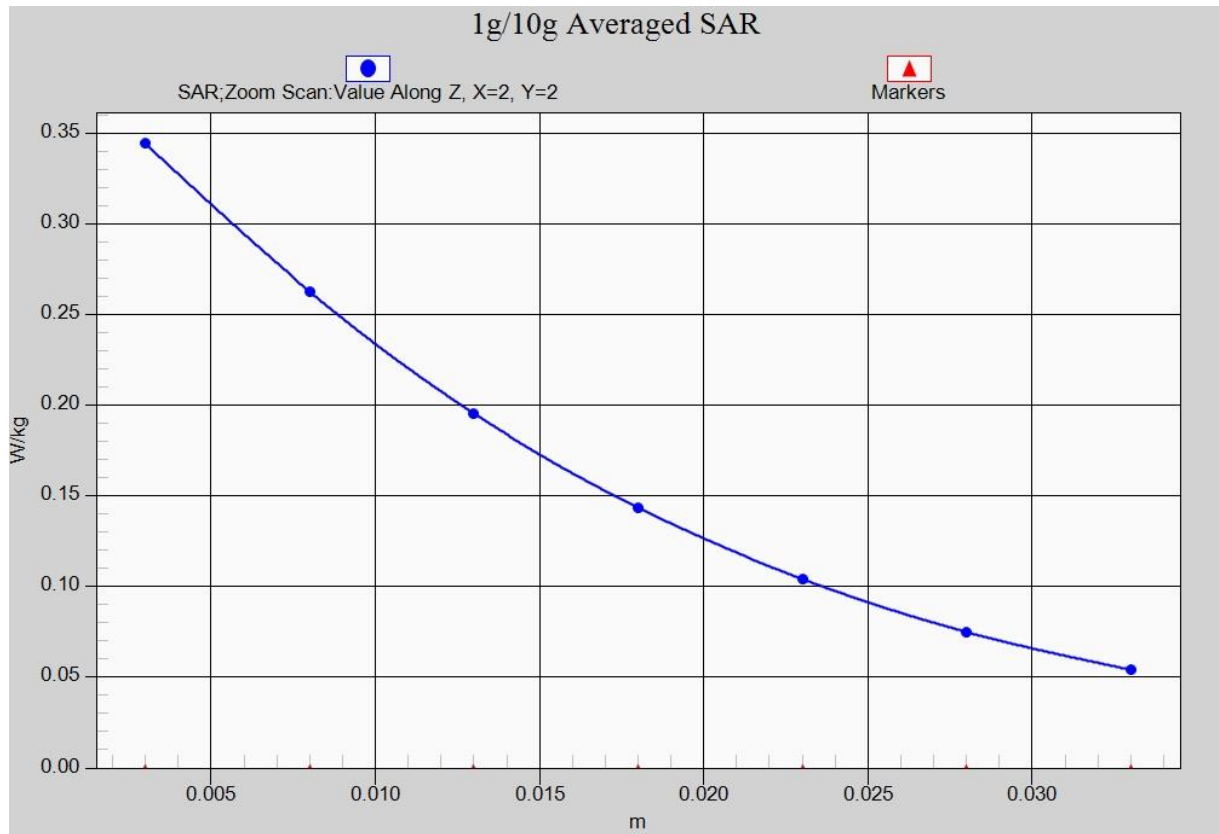


Fig. 6-1 Z-Scan at power reference point (WCDMA850)

WCDMA 1700 Left Cheek Middle

Date: 2017-4-20

Electronics: DAE4 Sn1331

Medium: Head 1750 MHz

Medium parameters used (interpolated): $f = 1732.4$ MHz; $\sigma = 1.361$ mho/m; $\epsilon_r = 39.257$; $\rho = 1000$ kg/m³

Ambient Temperature: 22.4°C Liquid Temperature: 22.2°C

Communication System: WCDMA 1750 Frequency: 1732.4 MHz Duty Cycle: 1:1

Probe: EX3DV4– SN3846 ConvF(8.16, 8.16, 8.16)

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

Maximum value of SAR (interpolated) = 0.379 W/kg

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

Reference Value = 5.518 V/m; Power Drift = 0.05 dB

Peak SAR (extrapolated) = 0.483 W/kg

SAR(1 g) = 0.333 W/kg; SAR(10 g) = 0.213 W/kg

Maximum value of SAR (measured) = 0.389 W/kg

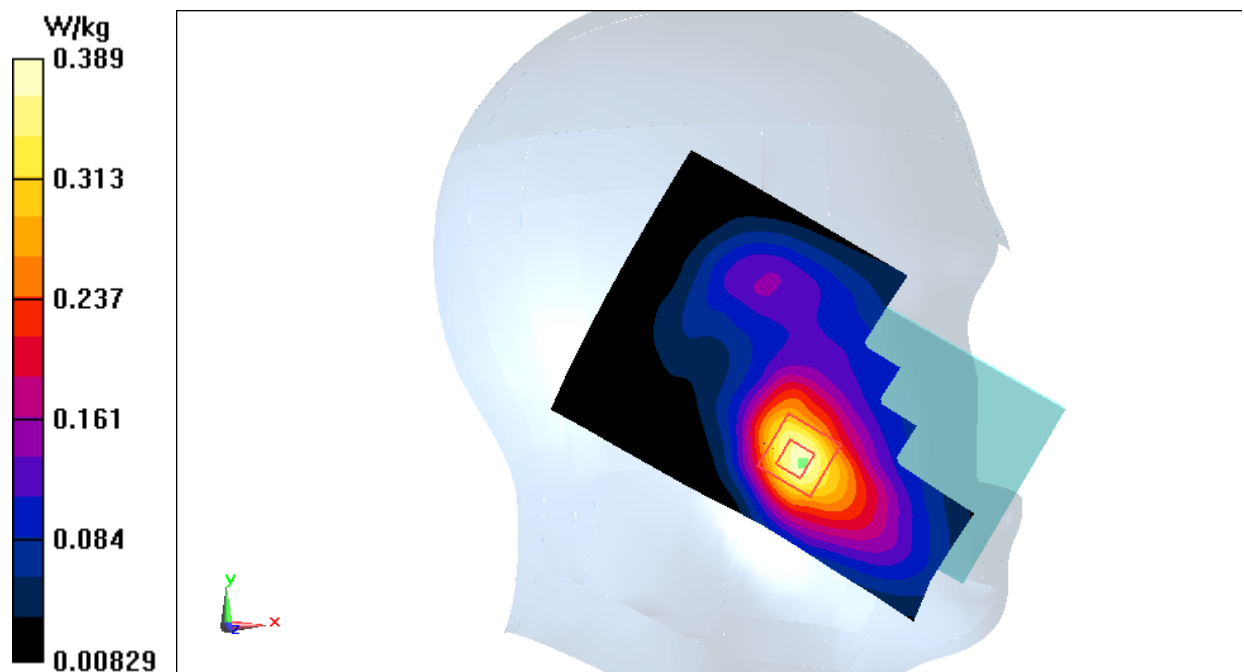


Fig.7 WCDMA1700

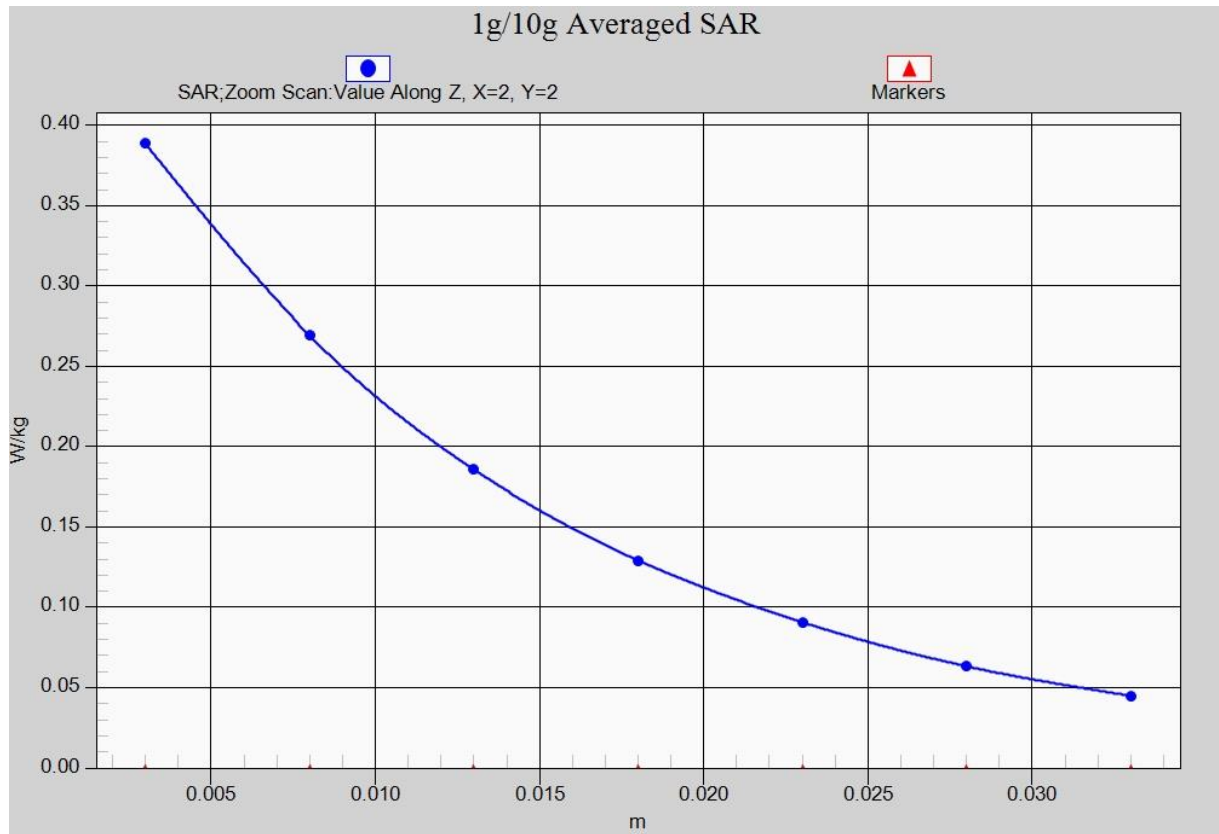


Fig. 7-1 Z-Scan at power reference point (WCDMA1700)

WCDMA 1700 Body Rear Middle

Date: 2017-4-20

Electronics: DAE4 Sn1331

Medium: Body 1750 MHz

Medium parameters used (interpolated): $f = 1732.4$ MHz; $\sigma = 1.478$ mho/m; $\epsilon_r = 52.328$; $\rho = 1000$ kg/m³

Ambient Temperature: 22.4°C Liquid Temperature: 22.2°C

Communication System: WCDMA 1900 Frequency: 1732.4 MHz Duty Cycle: 1:1

Probe: EX3DV4– SN3846 ConvF(7.90, 7.90, 7.90)

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

Maximum value of SAR (interpolated) = 0.475 W/kg

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

Reference Value = 12.34 V/m; Power Drift = -0.14 dB

Peak SAR (extrapolated) = 0.595 W/kg

SAR(1 g) = 0.419 W/kg; SAR(10 g) = 0.283 W/kg

Maximum value of SAR (measured) = 0.475 W/kg

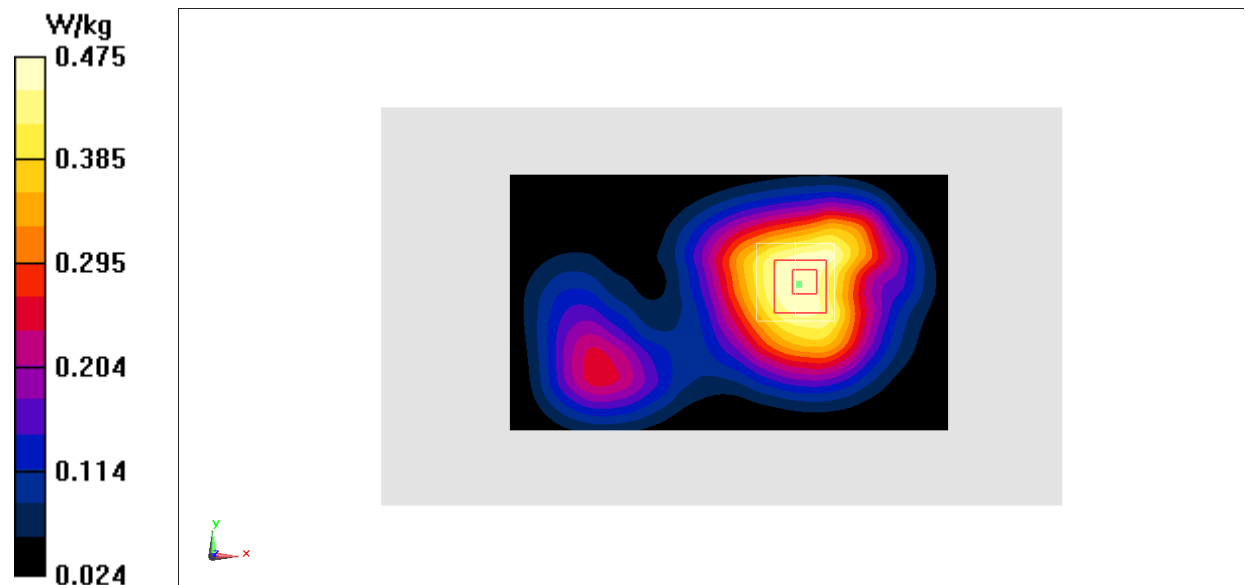


Fig.8 WCDMA1700

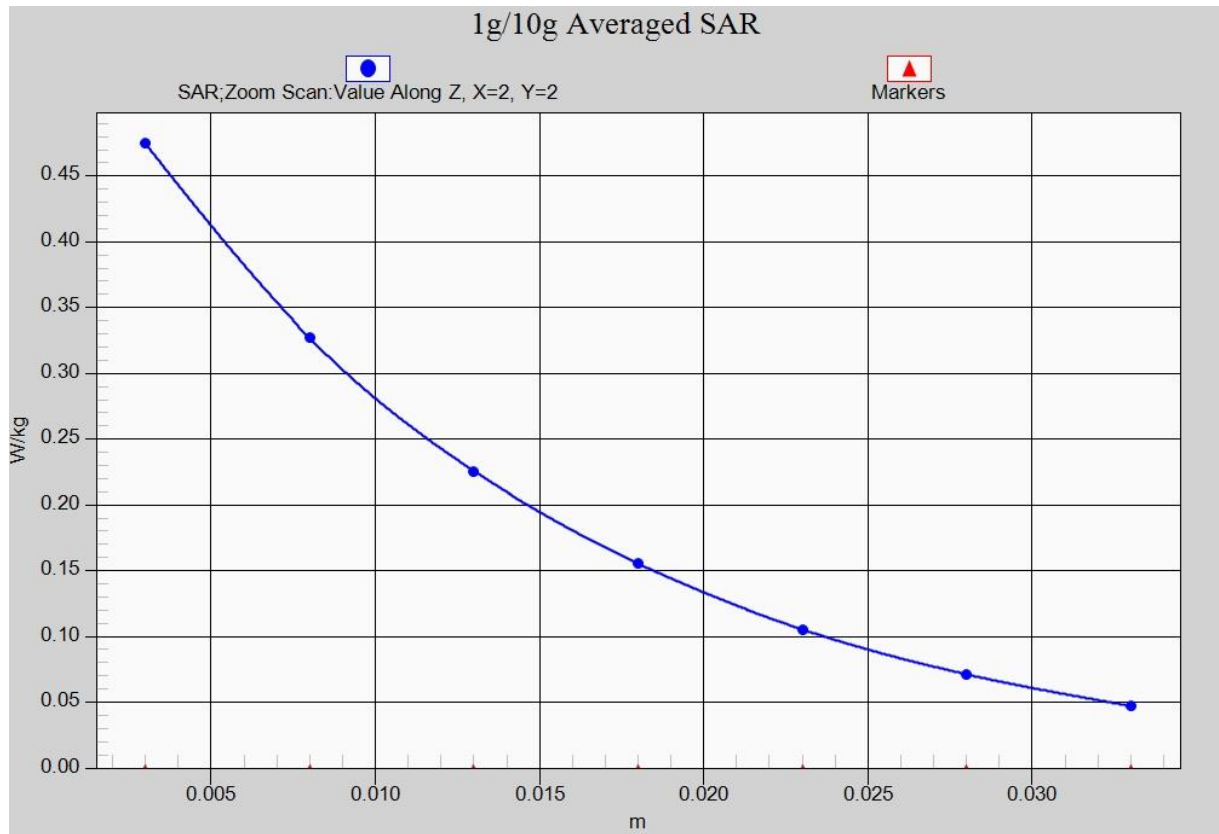


Fig. 8-1 Z-Scan at power reference point (WCDMA1700)

WCDMA 1900 Left Cheek Middle

Date: 2017-4-21

Electronics: DAE4 Sn1331

Medium: Head 1900 MHz

Medium parameters used: $f = 1880$ MHz; $\sigma = 1.445$ mho/m; $\epsilon_r = 41.056$; $\rho = 1000$ kg/m³

Ambient Temperature: 22.4°C Liquid Temperature: 22.2°C

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

Probe: EX3DV4– SN3846 ConvF(7.89, 7.89, 7.89)

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

Maximum value of SAR (interpolated) = 0.694 W/kg

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

Reference Value = 7.516 V/m; Power Drift = 0.15 dB

Peak SAR (extrapolated) = 0.919 W/kg

SAR(1 g) = 0.597 W/kg; SAR(10 g) = 0.365 W/kg

Maximum value of SAR (measured) = 0.712 W/kg

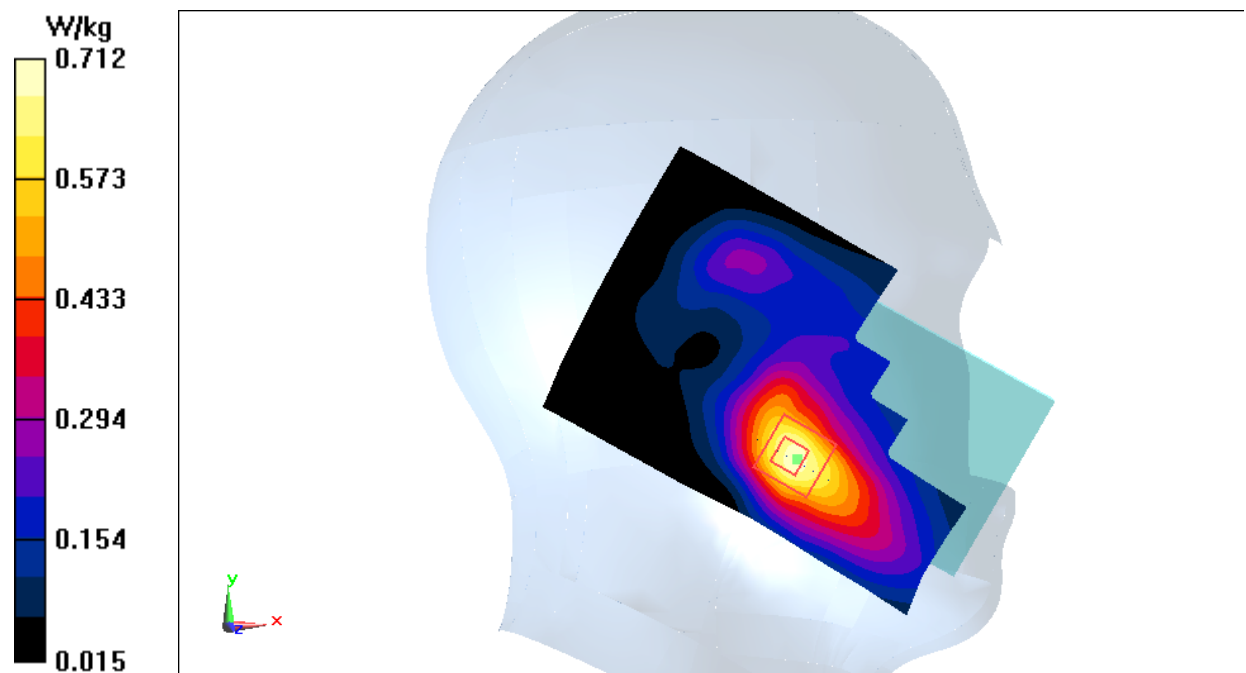


Fig.9 WCDMA1900

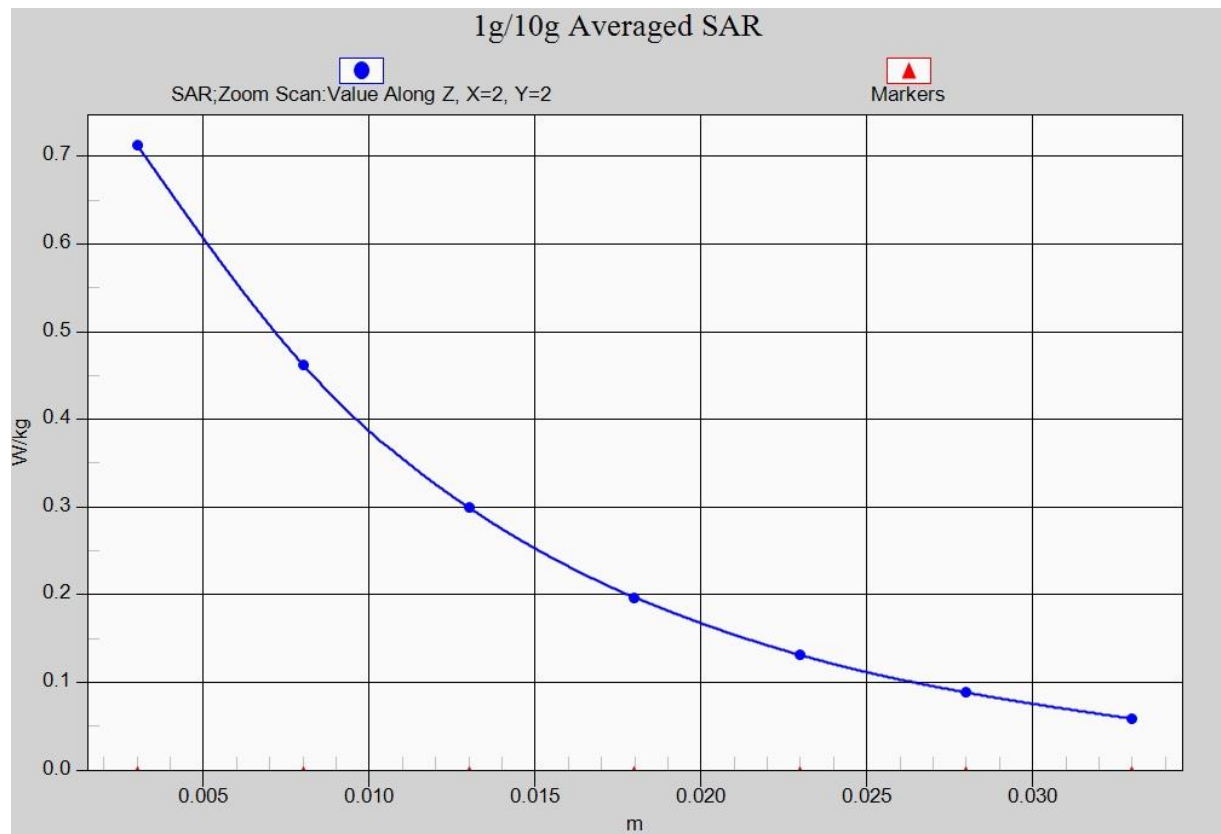


Fig. 9-1 Z-Scan at power reference point (WCDMA1900)

WCDMA 1900 Body Front Middle

Date: 2017-4-21

Electronics: DAE4 Sn1331

Medium: Body 1900 MHz

Medium parameters used: $f = 1880$ MHz; $\sigma = 1.519$ mho/m; $\epsilon_r = 52.85$; $\rho = 1000$ kg/m³

Ambient Temperature: 22.4°C Liquid Temperature: 22.2°C

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

Probe: EX3DV4– SN3846 ConvF(7.57, 7.57, 7.57)

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

Maximum value of SAR (interpolated) = 1.06 W/kg

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

Reference Value = 16.37 V/m; Power Drift = -0.06 dB

Peak SAR (extrapolated) = 1.45 W/kg

SAR(1 g) = 0.872 W/kg; SAR(10 g) = 0.493 W/kg

Maximum value of SAR (measured) = 1.09 W/kg

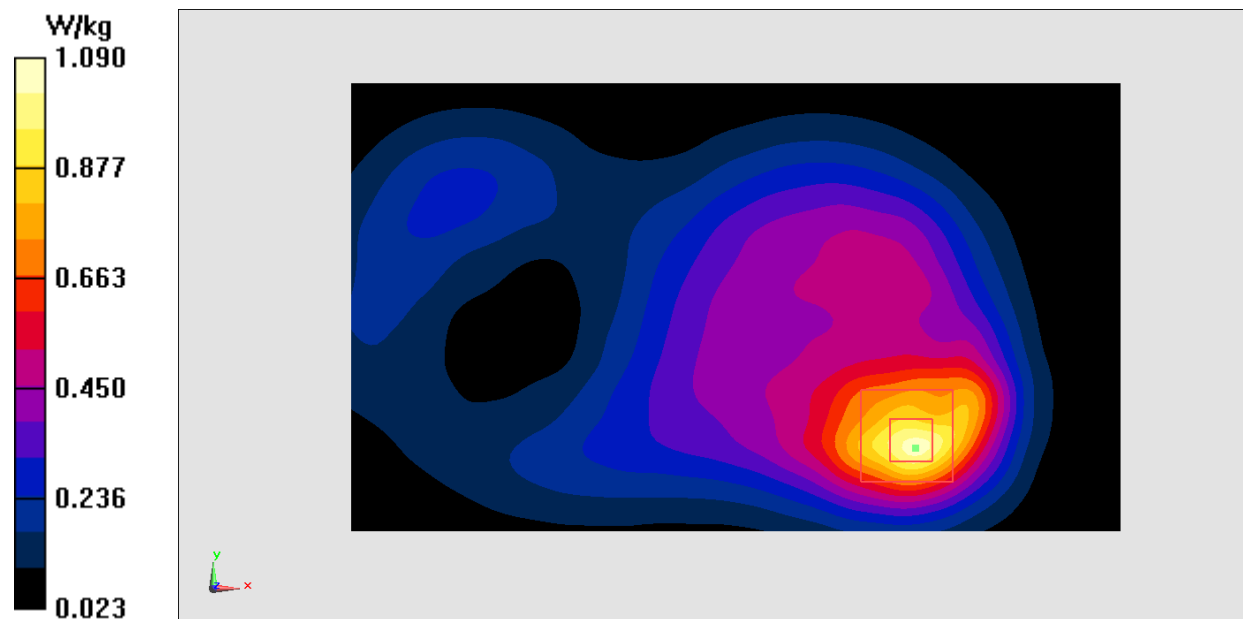


Fig.10 WCDMA1900

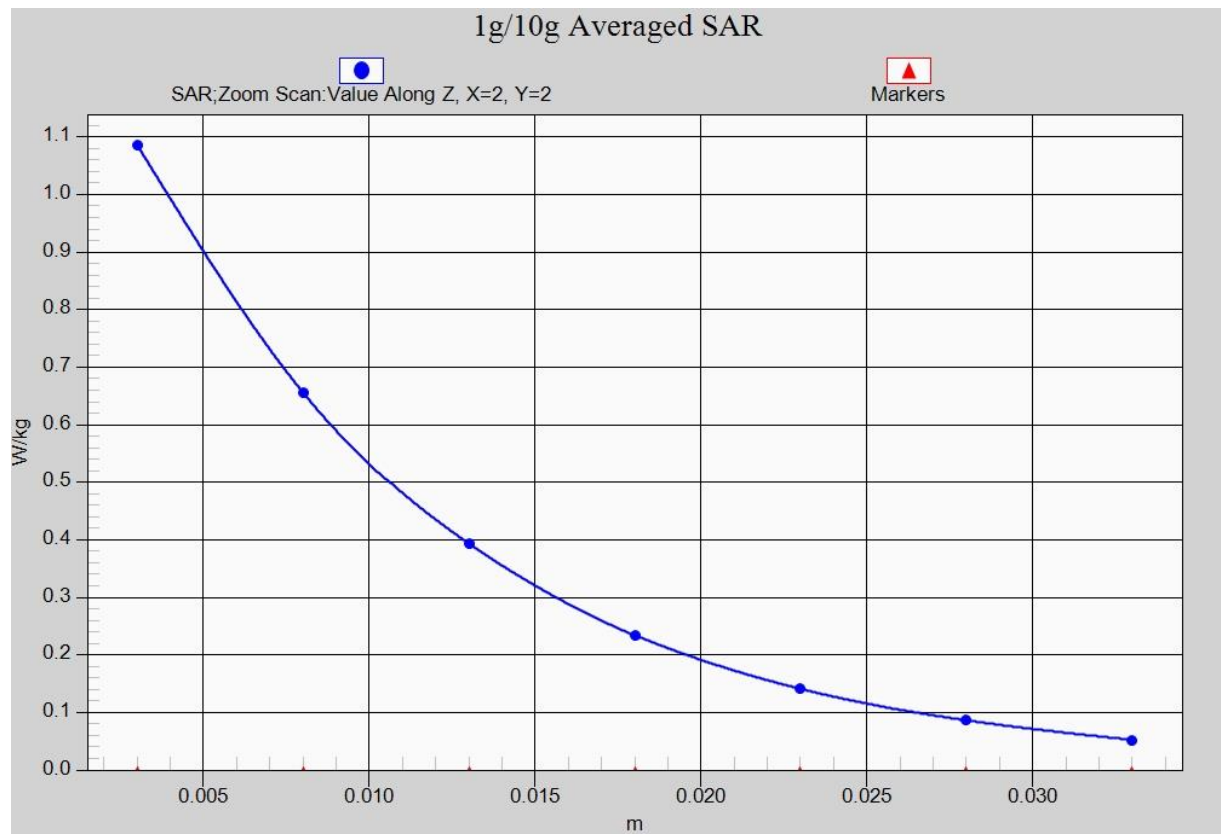


Fig. 10-1 Z-Scan at power reference point (WCDMA1900)

LTE Band2 Left Cheek Middle with QPSK_20M_1RB_Low

Date: 2017-4-21

Electronics: DAE4 Sn1331

Medium: Head 1900 MHz

Medium parameters used: $f = 1880$ MHz; $\sigma = 1.478$ mho/m; $\epsilon_r = 40.134$; $\rho = 1000$ kg/m³

Ambient Temperature: 22.4°C Liquid Temperature: 22.2°C

Communication System: LTE Band2 Frequency: 1880 MHz Duty Cycle: 1:1

Probe: EX3DV4– SN3846 ConvF(7.89, 7.89, 7.89)

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

Maximum value of SAR (interpolated) = 0.618 W/kg

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

Reference Value = 7.822 V/m; Power Drift = 0.10 dB

Peak SAR (extrapolated) = 0.823 W/kg

SAR(1 g) = 0.540 W/kg; SAR(10 g) = 0.331 W/kg

Maximum value of SAR (measured) = 0.640 W/kg

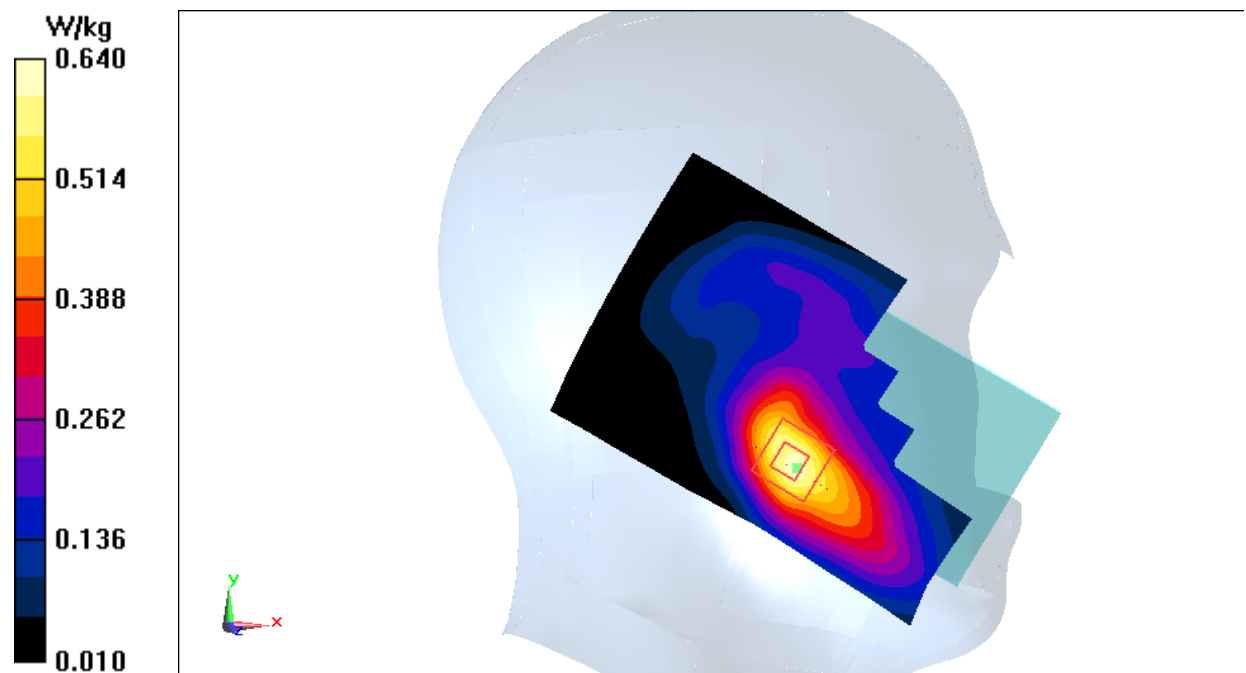


Fig.11 LTE Band2

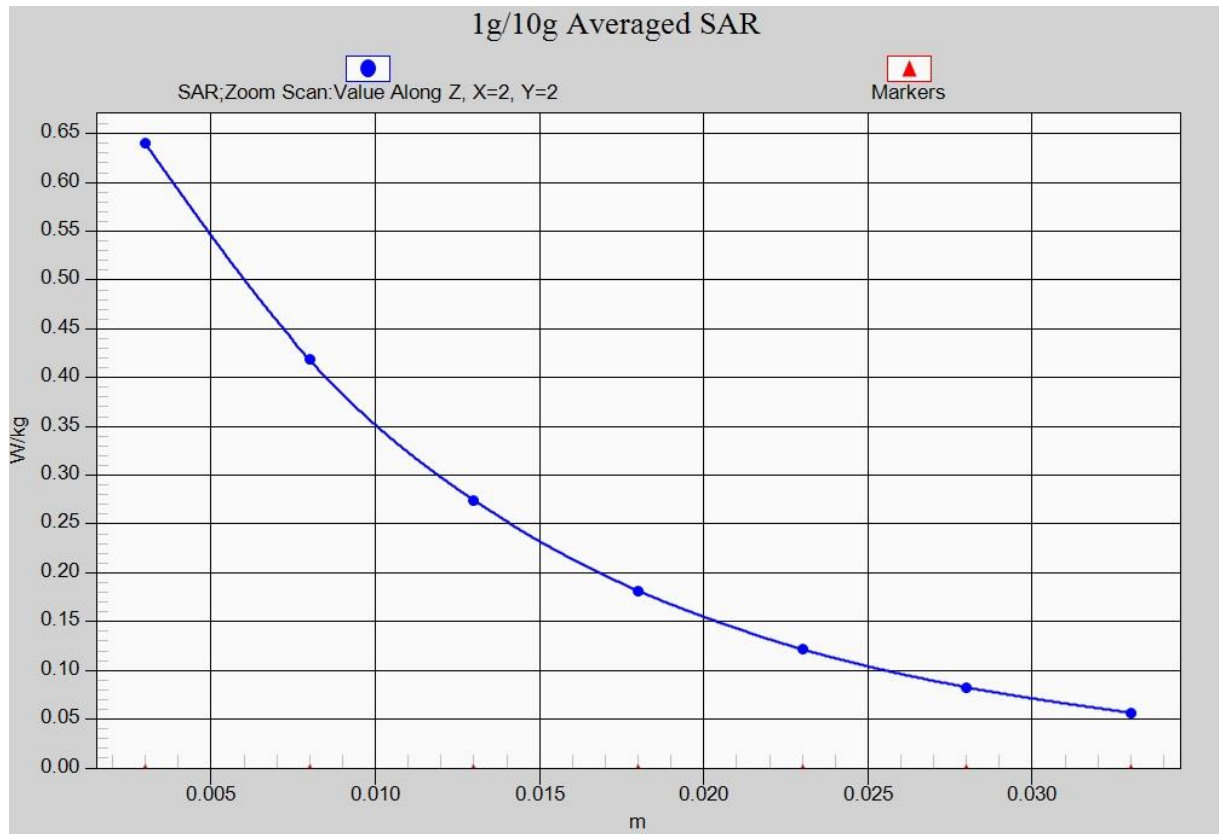


Fig. 11-1 Z-Scan at power reference point (LTE Band2)

LTE Band2 Body Front Middle with QPSK_20M_1RB_Low

Date: 2017-4-21

Electronics: DAE4 Sn1331

Medium: Body 1900 MHz

Medium parameters used: $f = 1880$ MHz; $\sigma = 1.519$ mho/m; $\epsilon_r = 52.85$; $\rho = 1000$ kg/m³

Ambient Temperature: 22.4°C Liquid Temperature: 22.2°C

Communication System: LTE Band2 Frequency: 1880 MHz Duty Cycle: 1:1

Probe: EX3DV4– SN3846 ConvF(7.57, 7.57, 7.57)

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

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

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

Reference Value = 16.95 V/m; Power Drift = 0.05 dB

Peak SAR (extrapolated) = 1.46 W/kg

SAR(1 g) = 0.881 W/kg; SAR(10 g) = 0.498 W/kg

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

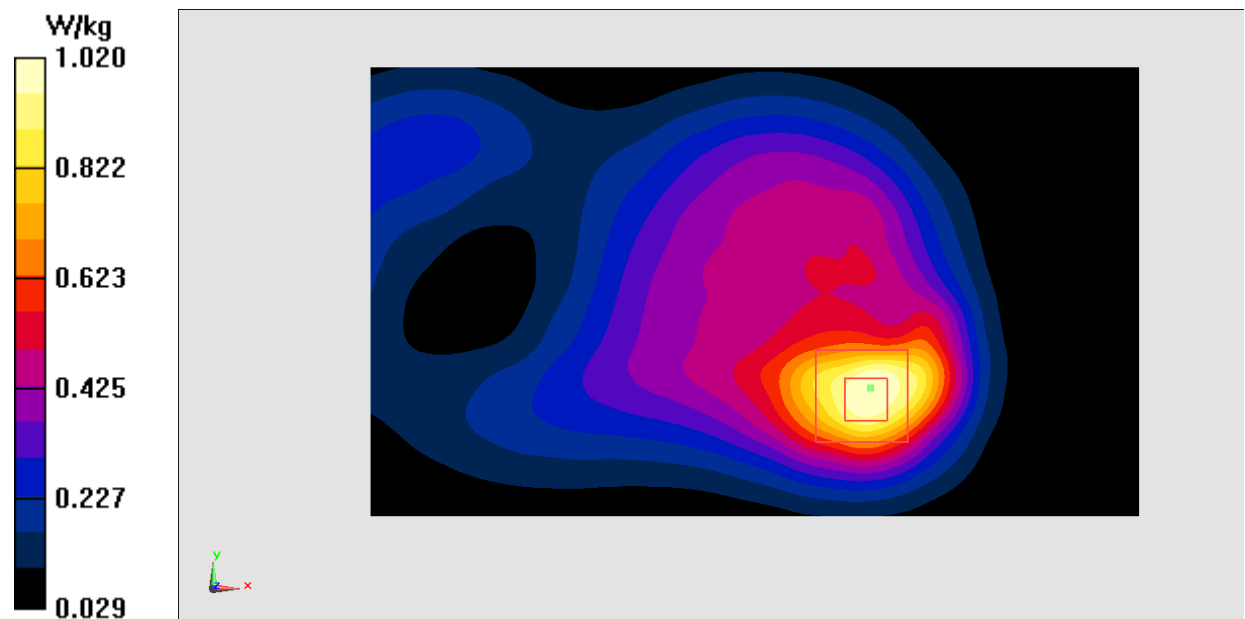


Fig.12 LTE Band2

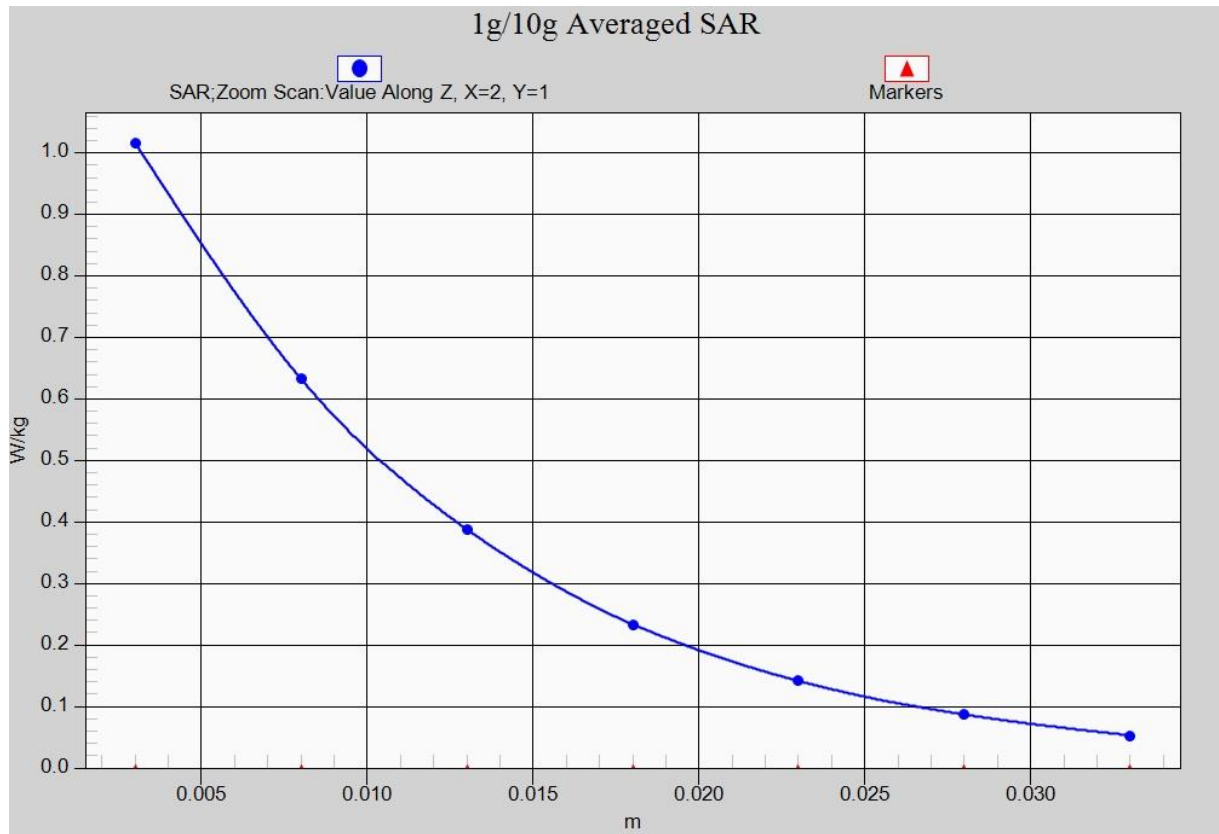


Fig. 12-1 Z-Scan at power reference point (LTE Band2)

LTE Band4 Left Cheek High with QPSK_20M_1RB_Low

Date: 2017-4-20

Electronics: DAE4 Sn1331

Medium: Head 1750 MHz

Medium parameters used $f = 1745$ MHz; $\sigma = 1.364$ mho/m; $\epsilon_r = 39.117$; $\rho = 1000$ kg/m³

Ambient Temperature: 22.4°C Liquid Temperature: 22.2°C

Communication System: LTE Band4 Frequency: 174MHz Duty Cycle: 1:1

Probe: EX3DV4 – SN3846 ConvF(8.16, 8.16, 8.16)

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

Maximum value of SAR (interpolated) = 0.316 W/kg

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

Reference Value = 4.670 V/m; Power Drift = 0.07 dB

Peak SAR (extrapolated) = 0.397 W/kg

SAR(1 g) = 0.275 W/kg; SAR(10 g) = 0.176 W/kg

Maximum value of SAR (measured) = 0.320 W/kg

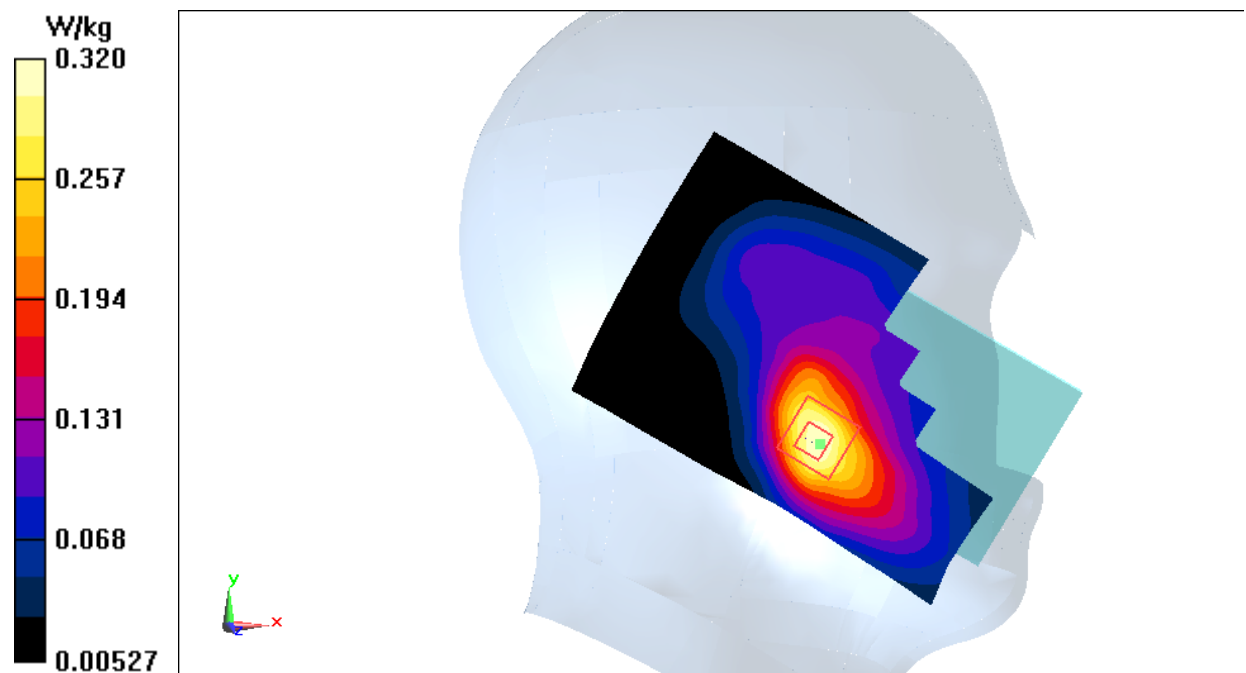


Fig.13 LTE Band4

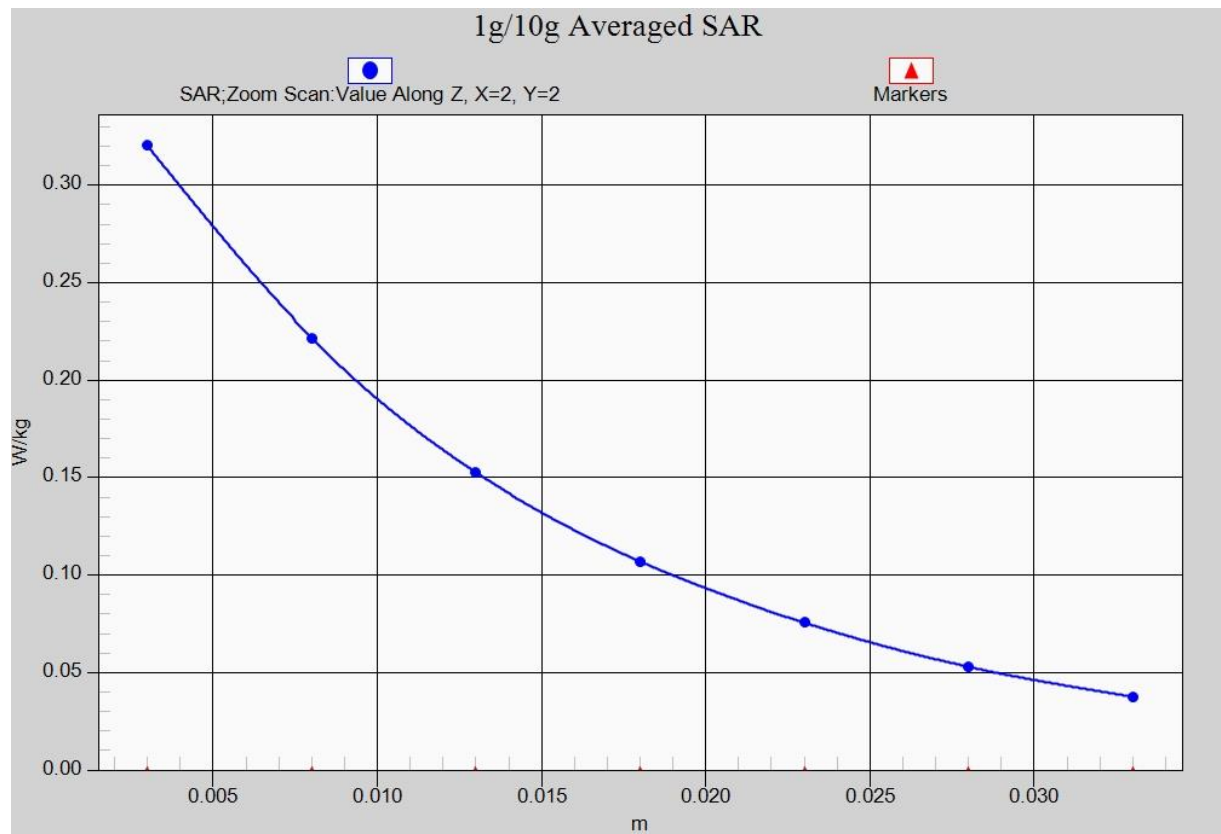


Fig. 13-1 Z-Scan at power reference point (LTE Band4)

LTE Band4 Body Rear High with QPSK_20M_1RB_Low

Date: 2017-4-20

Electronics: DAE4 Sn1331

Medium: Body 1750 MHz

Medium parameters used: $f = 1745$ MHz; $\sigma = 1.52$ mho/m; $\epsilon_r = 52.159$; $\rho = 1000$ kg/m³

Ambient Temperature: 22.4°C Liquid Temperature: 22.2°C

Communication System: LTE Band4 Frequency: 1745 MHz Duty Cycle: 1:1

Probe: EX3DV4 – SN3846 ConvF(7.90, 7.90, 7.90)

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

Maximum value of SAR (interpolated) = 0.525 W/kg

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

Reference Value = 13.04 V/m; Power Drift = -0.13 dB

Peak SAR (extrapolated) = 0.653 W/kg

SAR(1 g) = 0.461 W/kg; SAR(10 g) = 0.313 W/kg

Maximum value of SAR (measured) = 0.525 W/kg

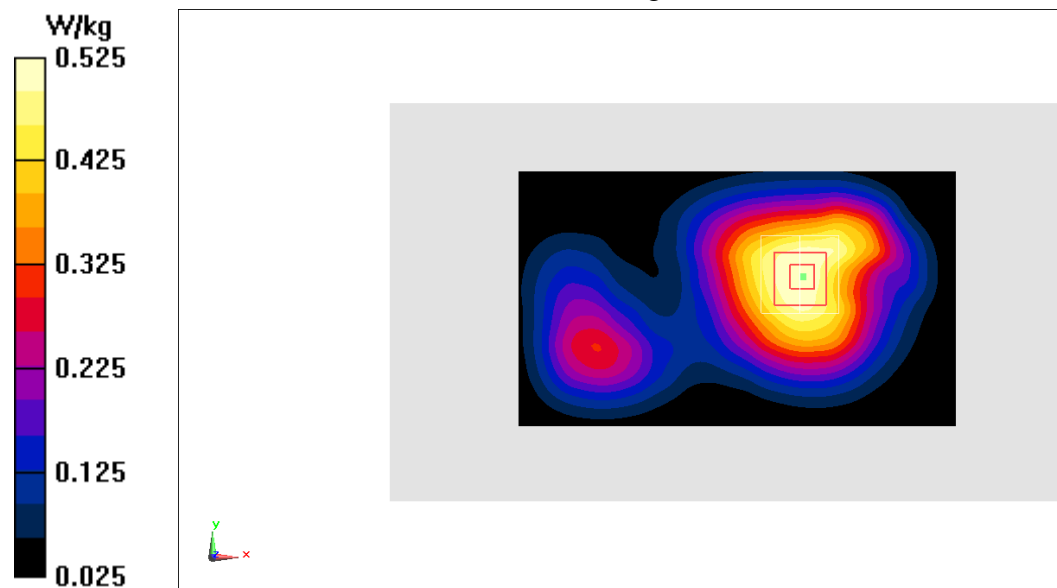


Fig.14 LTE Band4

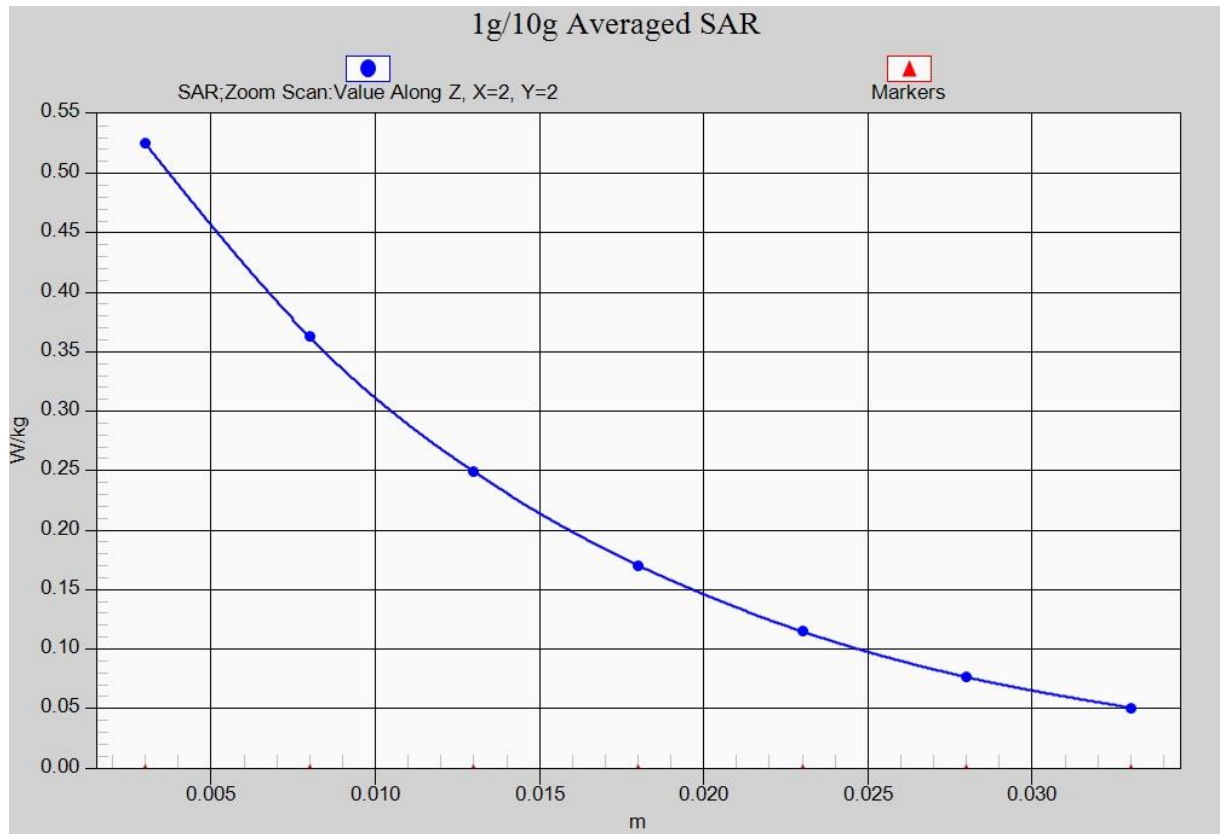


Fig. 14-1 Z-Scan at power reference point (LTE Band4)

LTE Band5 Right Cheek High with QPSK_10M_1RB_Middle

Date: 2017-4-19

Electronics: DAE4 Sn1331

Medium: Head 850 MHz

Medium parameters used (interpolated): $f = 844$ MHz; $\sigma = 0.902$ mho/m; $\epsilon_r = 40.971$; $\rho = 1000$ kg/m³

Ambient Temperature: 22.4°C Liquid Temperature: 22.2°C

Communication System: LTE Band5 Frequency: 844 MHz Duty Cycle: 1:1

Probe: EX3DV4 - SN3846 ConvF(9.33, 9.33, 9.33)

Area Scan (71x131x1): Interpolated grid: dx=1.000 mm, dy=1.000 mm

Maximum value of SAR (interpolated) = 0.234 W/kg

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

Reference Value = 4.684 V/m; Power Drift = -0.01 dB

Peak SAR (extrapolated) = 0.266 W/kg

SAR(1 g) = 0.212 W/kg; SAR(10 g) = 0.163 W/kg

Maximum value of SAR (measured) = 0.230 W/kg

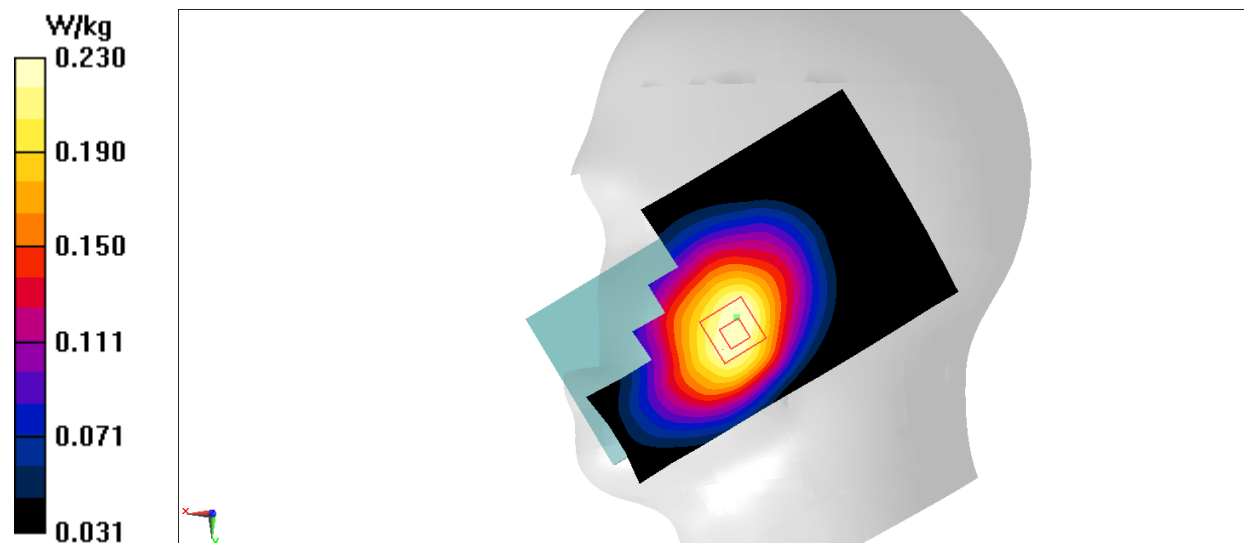


Fig.15 LTE Band5

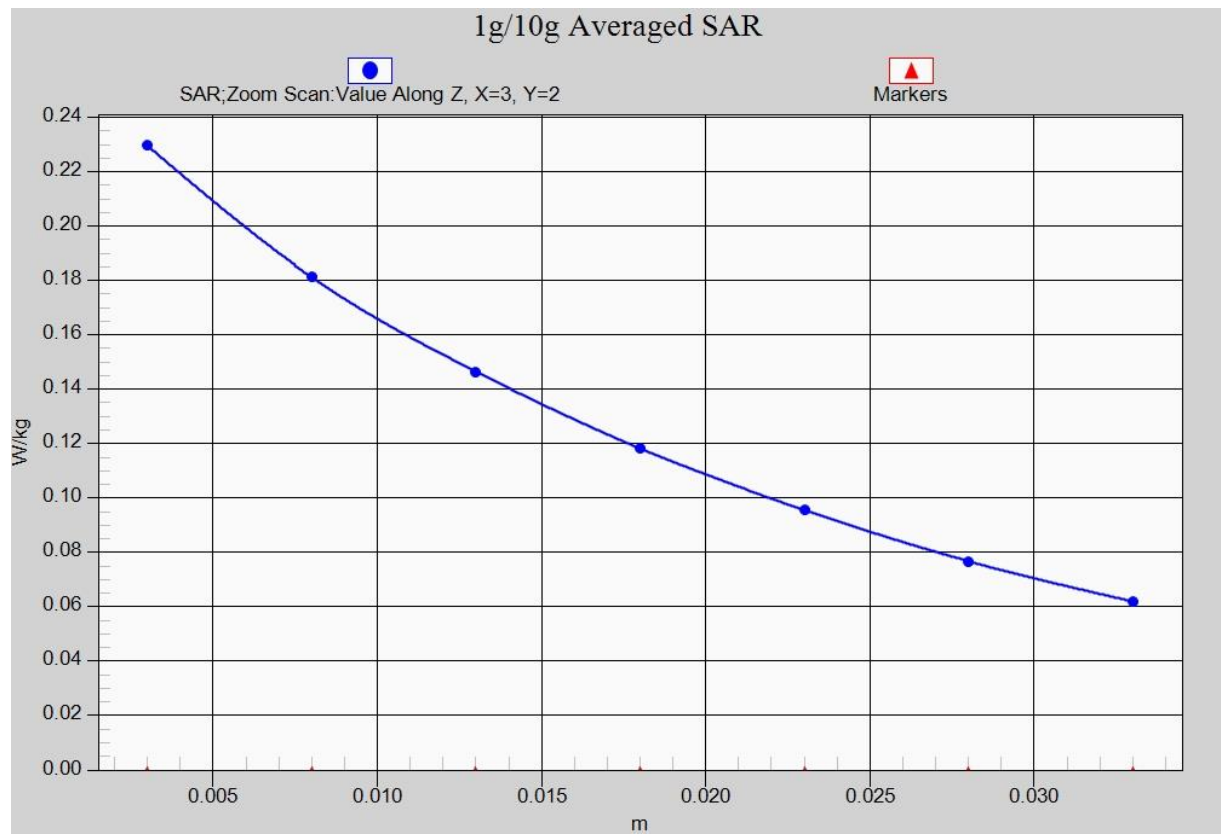


Fig. 15-1 Z-Scan at power reference point (LTE Band5)

LTE Band5 Body Rear High with QPSK_10M_1RB_Middle

Date: 2017-4-19

Electronics: DAE4 Sn1331

Medium: Body 850 MHz

Medium parameters used (interpolated): $f = 844$ MHz; $\sigma = 1.034$ mho/m; $\epsilon_r = 53.914$; $\rho = 1000$ kg/m³

Ambient Temperature: 22.4°C Liquid Temperature: 22.2°C

Communication System: LTE Band5 Frequency: 844 MHz Duty Cycle: 1:1

Probe: EX3DV4 - SN3846 ConvF(9.52, 9.52, 9.52)

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

Maximum value of SAR (interpolated) = 0.342 W/kg

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

Reference Value = 15.49 V/m; Power Drift = 0.03 dB

Peak SAR (extrapolated) = 0.460 W/kg

SAR(1 g) = 0.279 W/kg; SAR(10 g) = 0.172 W/kg

Maximum value of SAR (measured) = 0.331 W/kg

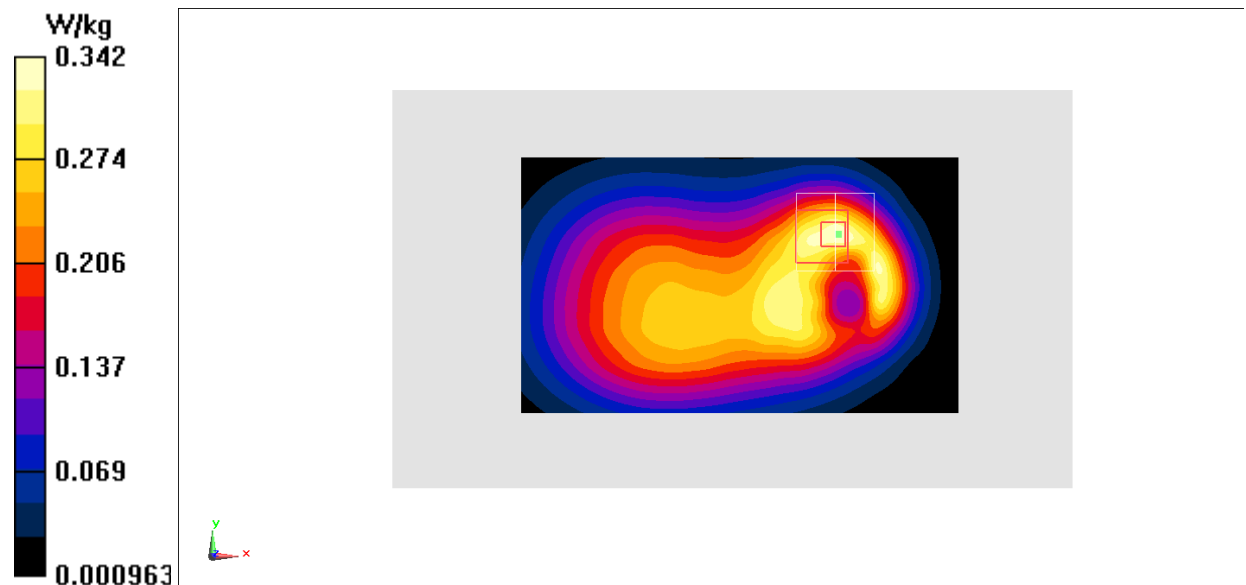


Fig.16 LTE Band5

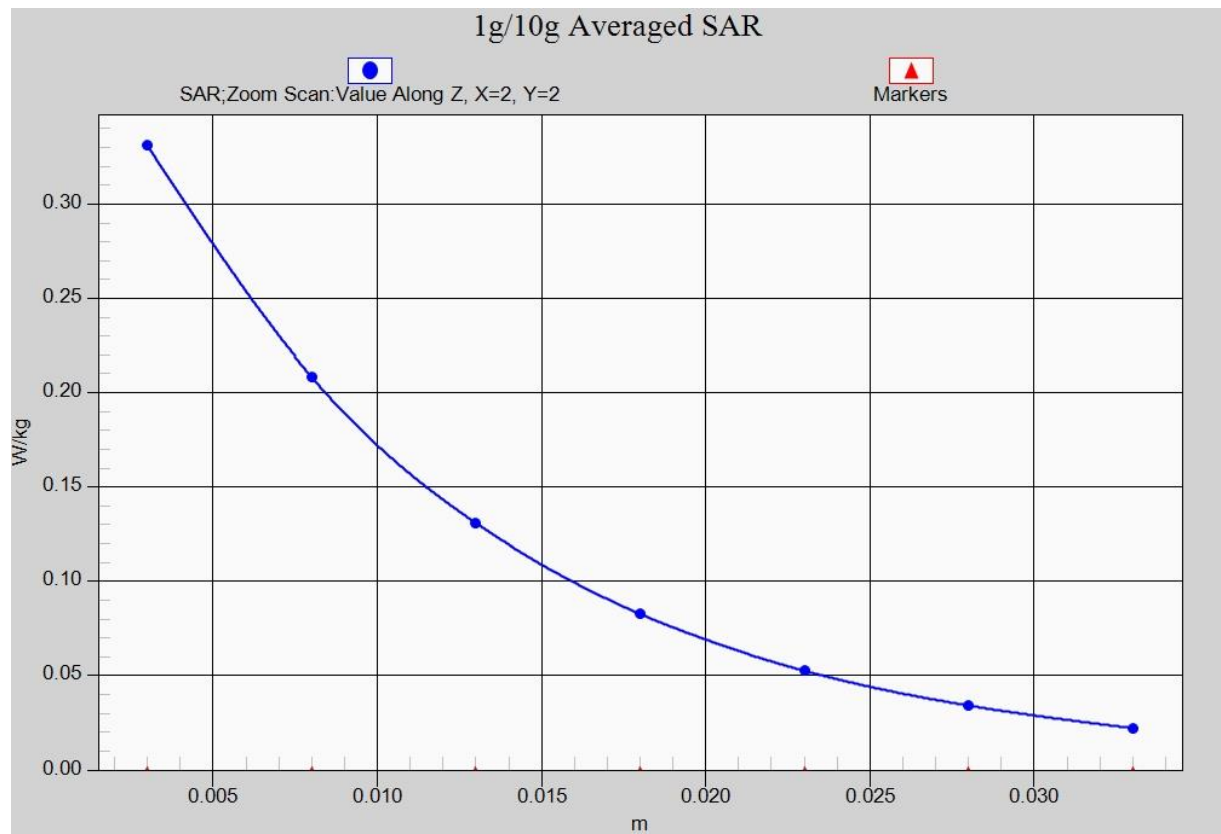


Fig. 16-1 Z-Scan at power reference point (LTE Band5)

LTE Band7 Left Cheek High with QPSK_20M_1RB_High

Date: 2017-4-22

Electronics: DAE4 Sn1331

Medium: Head2600 MHz

Medium parameters used: $f = 2560$ MHz; $\sigma = 1.962$ mho/m; $\epsilon_r = 38.66$; $\rho = 1000$ kg/m³

Ambient Temperature: 22.4°C Liquid Temperature: 22.2°C

Communication System: LTE Band7 Frequency: 2560 MHz Duty Cycle: 1:1

Probe: EX3DV4– SN3846 ConvF(7.12, 7.12, 7.12)

Area Scan (71x131x1): Interpolated grid: $dx=1.000$ mm, $dy=1.000$ mm

Maximum value of SAR (interpolated) = 0.935 W/kg

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

Reference Value = 4.403 V/m; Power Drift = 0.01 dB

Peak SAR (extrapolated) = 1.53 W/kg

SAR(1 g) = 0.822 W/kg; SAR(10 g) = 0.430 W/kg

Maximum value of SAR (measured) = 0.951 W/kg

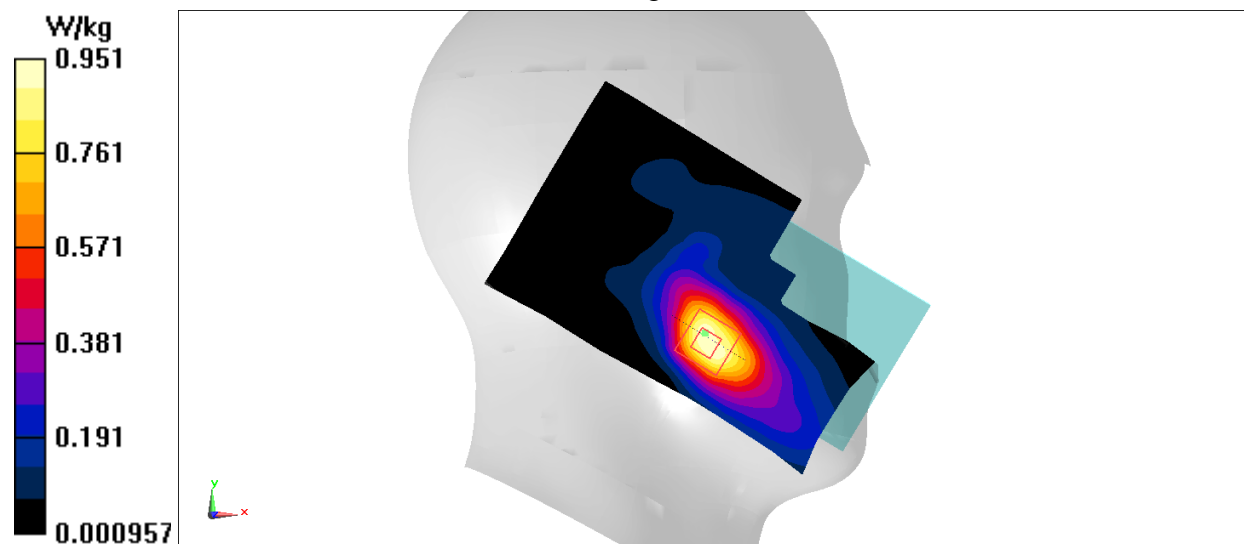


Fig.17 LTE Band7

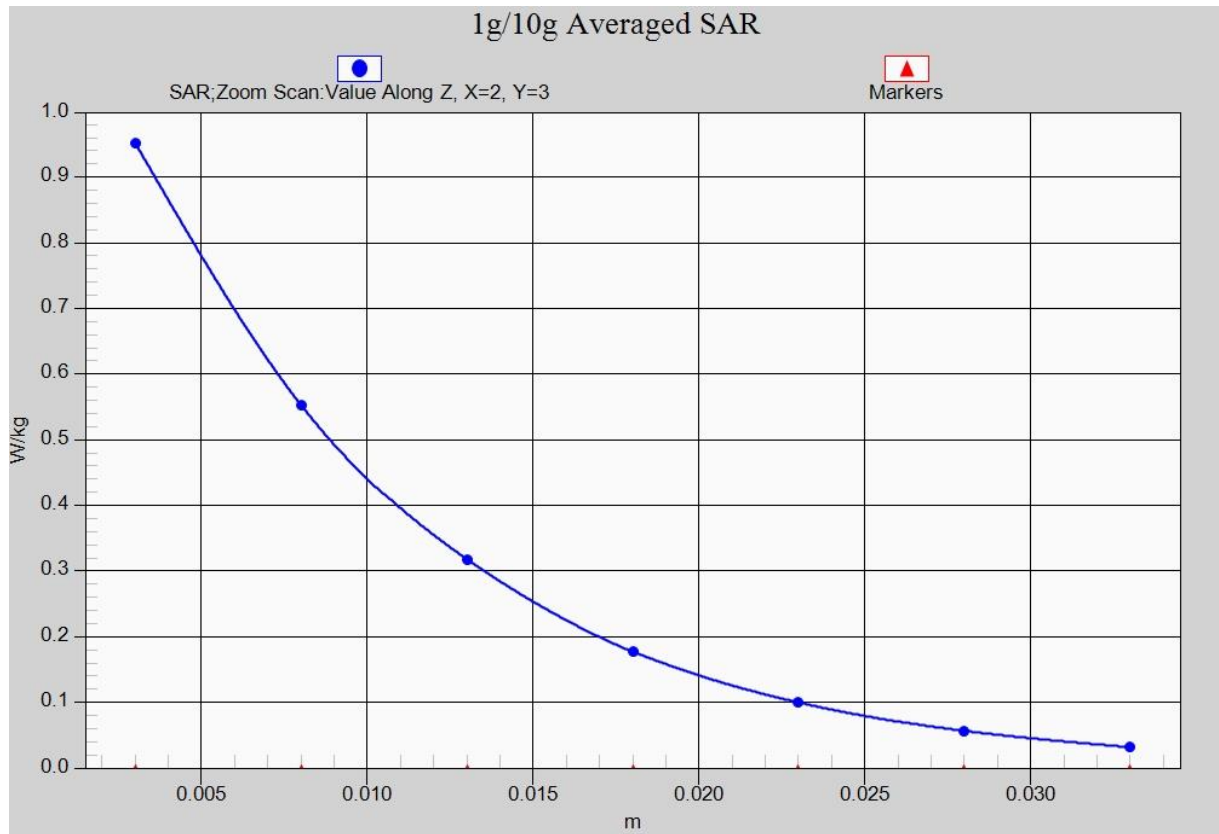


Fig. 17-1 Z-Scan at power reference point (LTE Band7)

LTE Band7 Body Rear High with QPSK_20M_1RB_High

Date: 2017-4-22

Electronics: DAE4 Sn1331

Medium: Body2600 MHz

Medium parameters used: $f = 2560$ MHz; $\sigma = 2.176$ mho/m; $\epsilon_r = 53.22$; $\rho = 1000$ kg/m³

Ambient Temperature: 22.4°C Liquid Temperature: 22.2°C

Communication System: LTE Band7 Frequency: 2560 MHz Duty Cycle: 1:1

Probe: EX3DV4– SN3846 ConvF(7.25, 7.25, 7.25)

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

Maximum value of SAR (interpolated) = 1.35 W/kg

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

Reference Value = 12.34 V/m; Power Drift = 0.09 dB

Peak SAR (extrapolated) = 1.80 W/kg

SAR(1 g) = 0.939 W/kg; SAR(10 g) = 0.500 W/kg

Maximum value of SAR (measured) = 1.18 W/kg

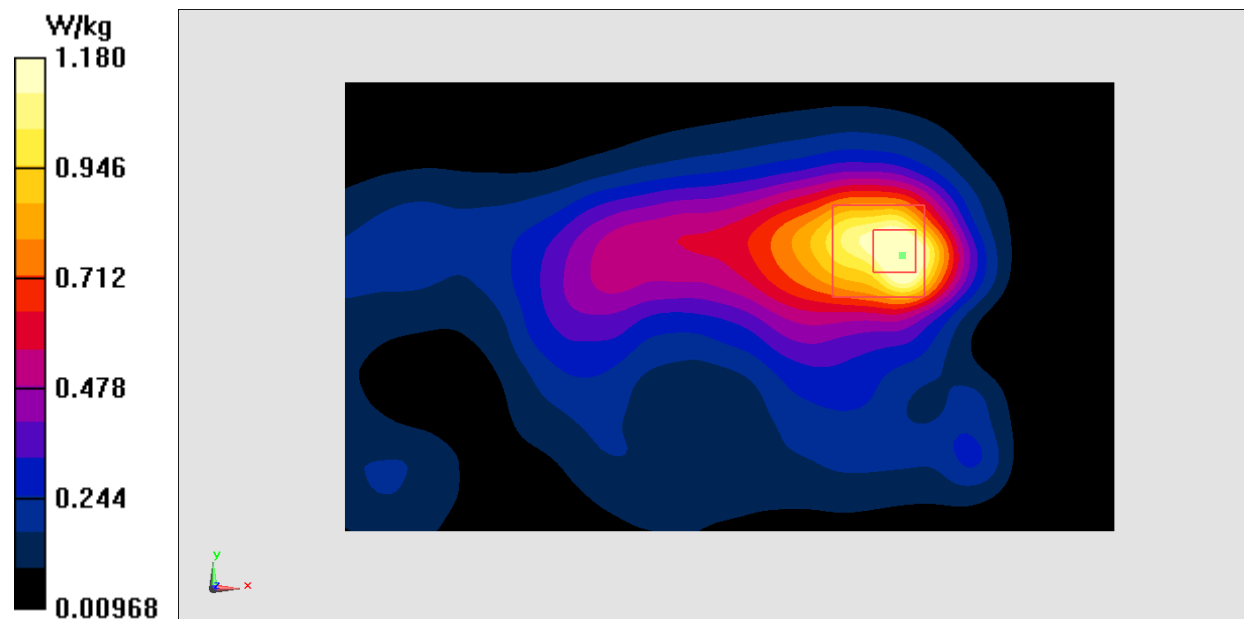


Fig.18 LTE Band7

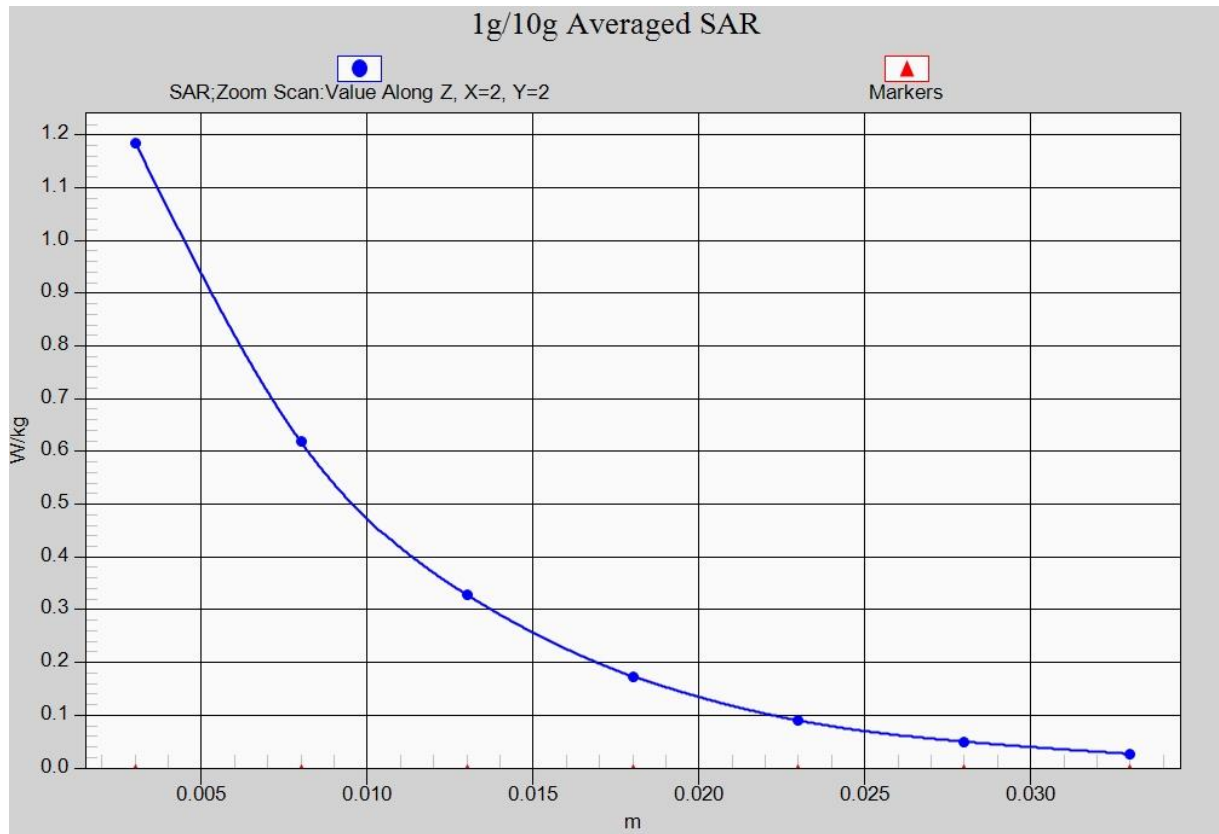


Fig. 18-1 Z-Scan at power reference point (LTE Band7)

LTE Band12 Left Cheek Low with QPSK_10M_1RB_Low

Date: 2017-4-23

Electronics: DAE4 Sn1331

Medium: Head750 MHz

Medium parameters used (interpolated): $f = 704$ MHz; $\sigma = 0.856$ mho/m; $\epsilon_r = 42.83$; $\rho = 1000$ kg/m³

Ambient Temperature: 22.4°C Liquid Temperature: 22.2°C

Communication System: LTE Band12 Frequency: 704 MHz Duty Cycle: 1:1

Probe: EX3DV4– SN3846 ConvF(9.65, 9.65, 9.65)

Area Scan (71x131x1): Interpolated grid: dx=1.000 mm, dy=1.000 mm

Maximum value of SAR (interpolated) = 0.112 W/kg

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

Reference Value = 2.878 V/m; Power Drift = 0.02 dB

Peak SAR (extrapolated) = 0.123 W/kg

SAR(1 g) = 0.104 W/kg; SAR(10 g) = 0.084 W/kg

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

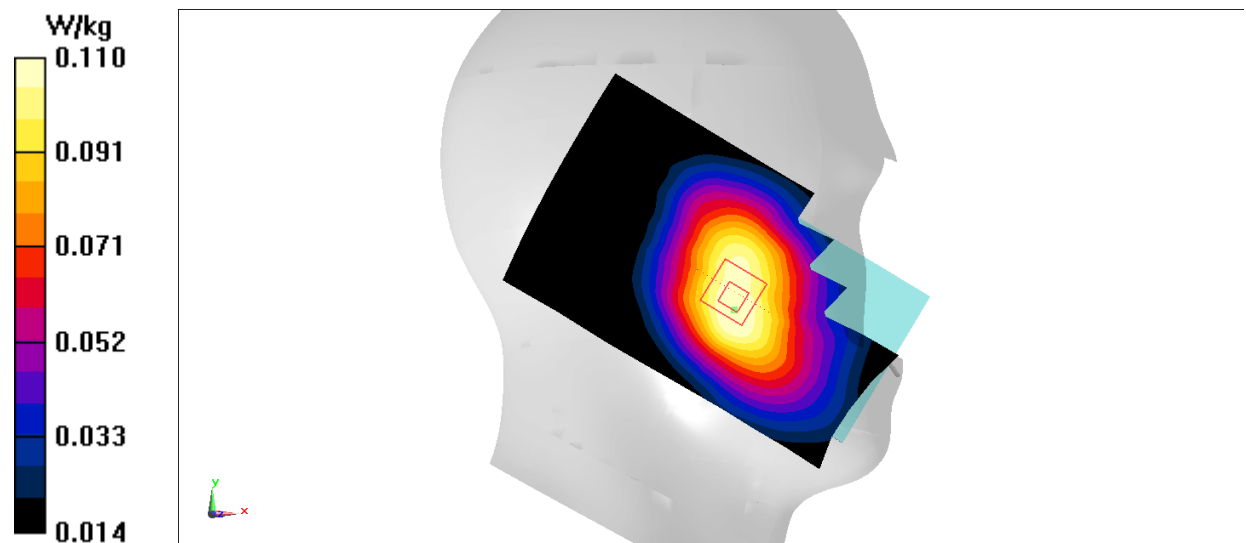


Fig.19 LTE Band12

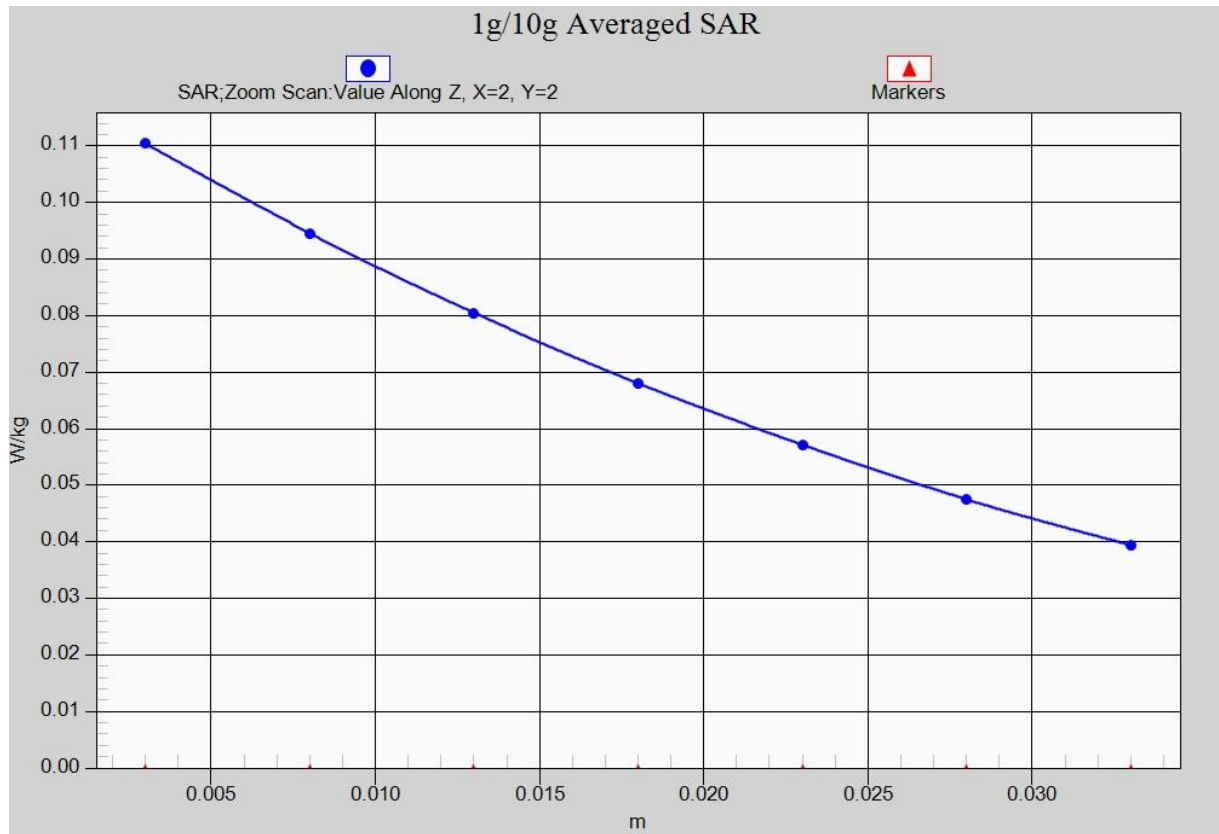


Fig. 19-1 Z-Scan at power reference point (LTE Band12)

LTE Band12 Body Rear Low with QPSK_10M_1RB_Low

Date: 2017-4-23

Electronics: DAE4 Sn1331

Medium: Body750 MHz

Medium parameters used (interpolated): $f = 704$ MHz; $\sigma = 0.929$ mho/m; $\epsilon_r = 54.43$; $\rho = 1000$ kg/m³

Ambient Temperature: 22.4°C Liquid Temperature: 22.2°C

Communication System: LTE Band12 Frequency: 704 MHz Duty Cycle: 1:1

Probe: EX3DV4– SN3846 ConvF(9.96, 9.96, 9.96)

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

Maximum value of SAR (interpolated) = 0.277 W/kg

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

Reference Value = 17.39 V/m; Power Drift = 0.02 dB

Peak SAR (extrapolated) = 0.316 W/kg

SAR(1 g) = 0.255 W/kg; SAR(10 g) = 0.201 W/kg

Maximum value of SAR (measured) = 0.276 W/kg

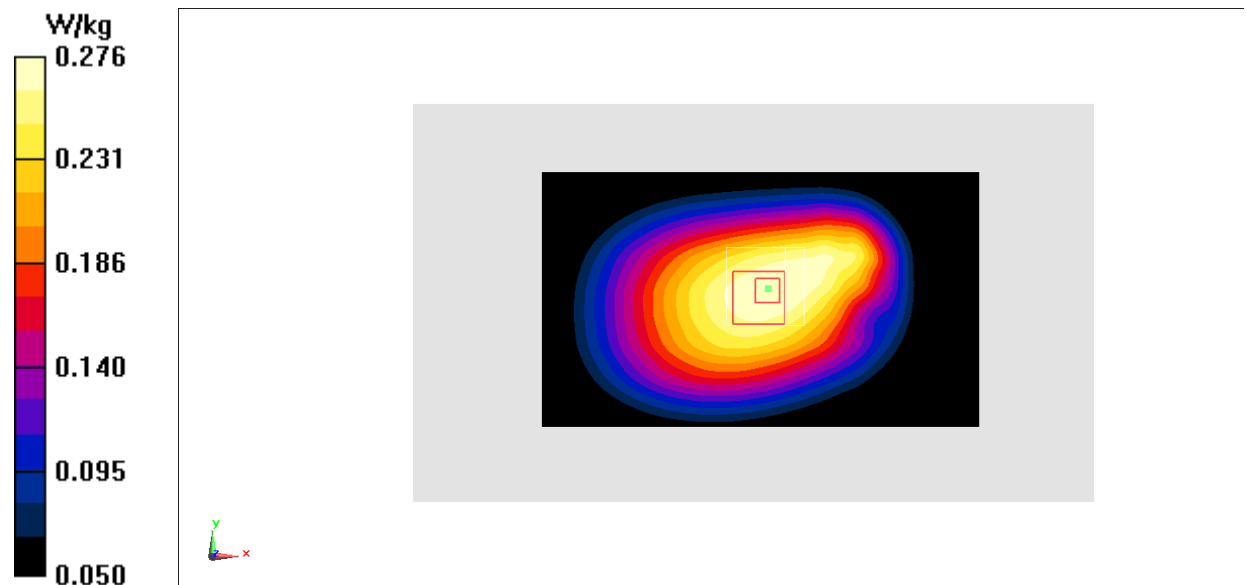


Fig.20 LTE Band12

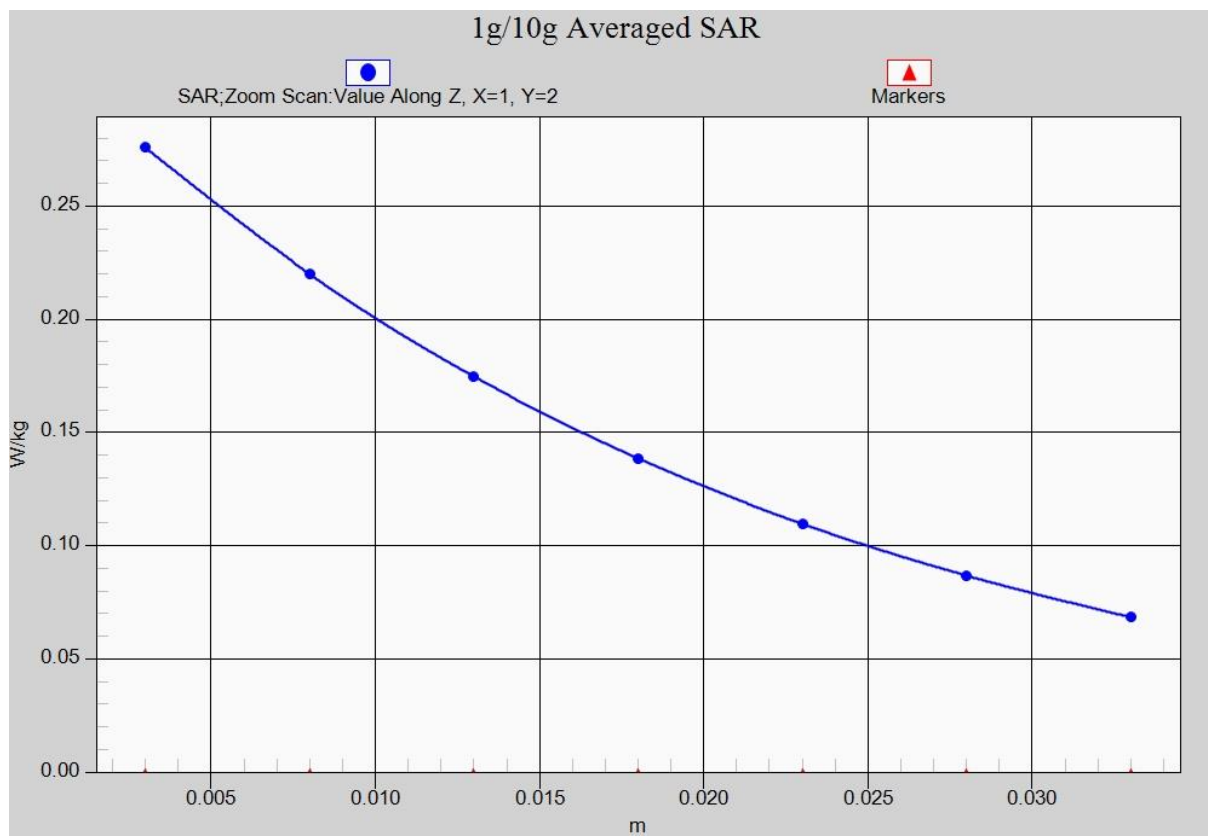


Fig. 20-1 Z-Scan at power reference point (LTE Band12)

LTE Band13 Left Cheek with QPSK_10M_1RB_High

Date: 2017-4-23

Electronics: DAE4 Sn1331

Medium: Head750 MHz

Medium parameters used (interpolated): $f = 782$ MHz; $\sigma = 0.899$ mho/m; $\epsilon_r = 42.77$; $\rho = 1000$ kg/m³

Ambient Temperature: 22.4°C Liquid Temperature: 22.2°C

Communication System: LTE Band13 Frequency: 782 MHz Duty Cycle: 1:1

Probe: EX3DV4– SN3846 ConvF(9.65, 9.65, 9.65)

Area Scan (71x131x1): Interpolated grid: dx=1.000 mm, dy=1.000 mm

Maximum value of SAR (interpolated) = 0.131 W/kg

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

Reference Value = 9.136 V/m; Power Drift = -0.04 dB

Peak SAR (extrapolated) = 0.145 W/kg

SAR(1 g) = 0.117 W/kg; SAR(10 g) = 0.091 W/kg

Maximum value of SAR (measured) = 0.127 W/kg

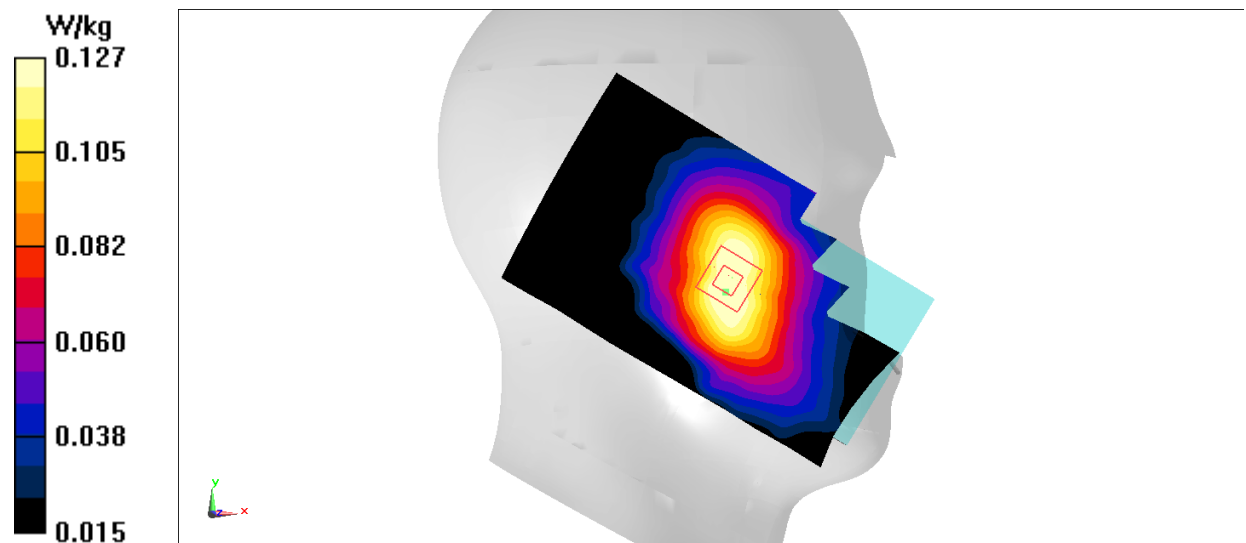


Fig.21 LTE Band13

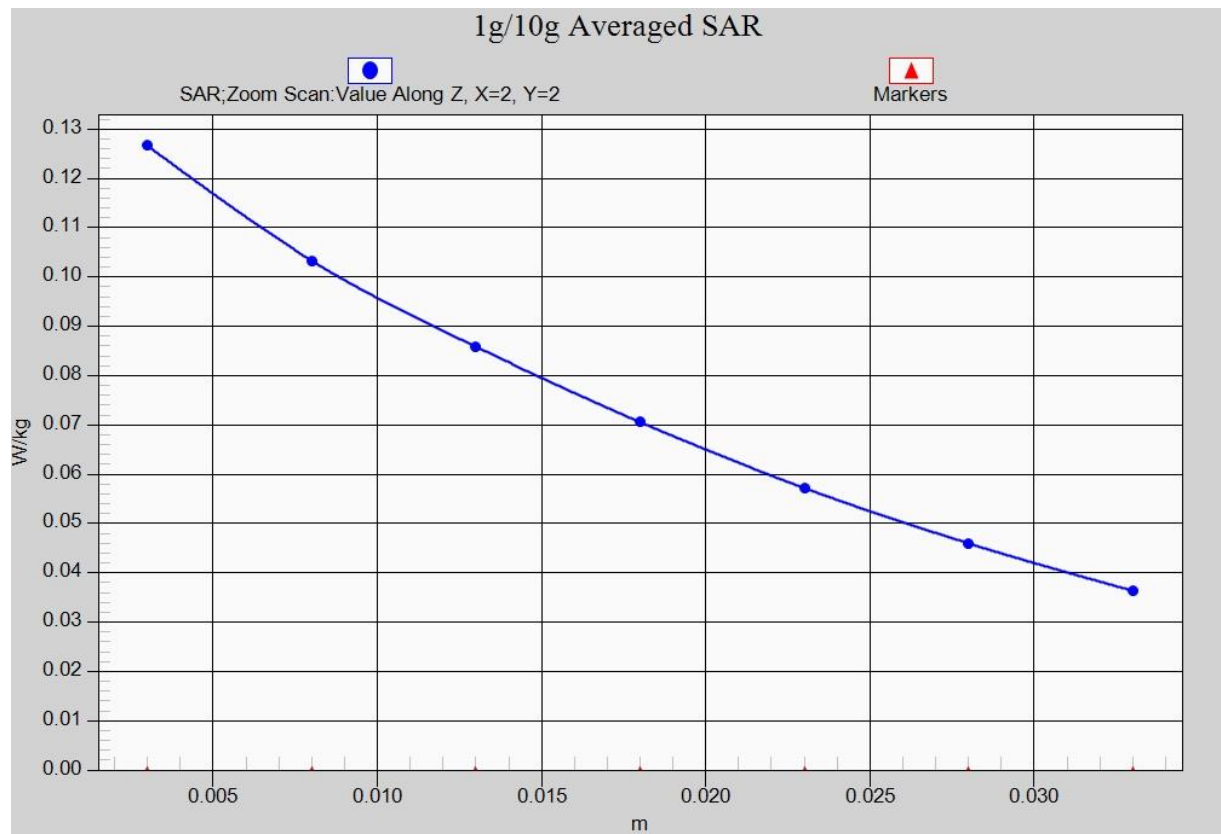


Fig. 21-1 Z-Scan at power reference point (LTE Band13)

LTE Band13 Body Rear with QPSK_10M_1RB_High

Date: 2017-4-23

Electronics: DAE4 Sn1331

Medium: Body750 MHz

Medium parameters used (interpolated): $f = 782$ MHz; $\sigma = 0.958$ mho/m; $\epsilon_r = 54.28$; $\rho = 1000$ kg/m³

Ambient Temperature: 22.4°C Liquid Temperature: 22.2°C

Communication System: LTE Band13 Frequency: 782 MHz Duty Cycle: 1:1

Probe: EX3DV4– SN3846 ConvF(9.96, 9.96, 9.96)

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

Maximum value of SAR (interpolated) = 0.335 W/kg

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

Reference Value = 18.07 V/m; Power Drift = 0.07 dB

Peak SAR (extrapolated) = 0.381 W/kg

SAR(1 g) = 0.310 W/kg; SAR(10 g) = 0.244 W/kg

Maximum value of SAR (measured) = 0.336 W/kg

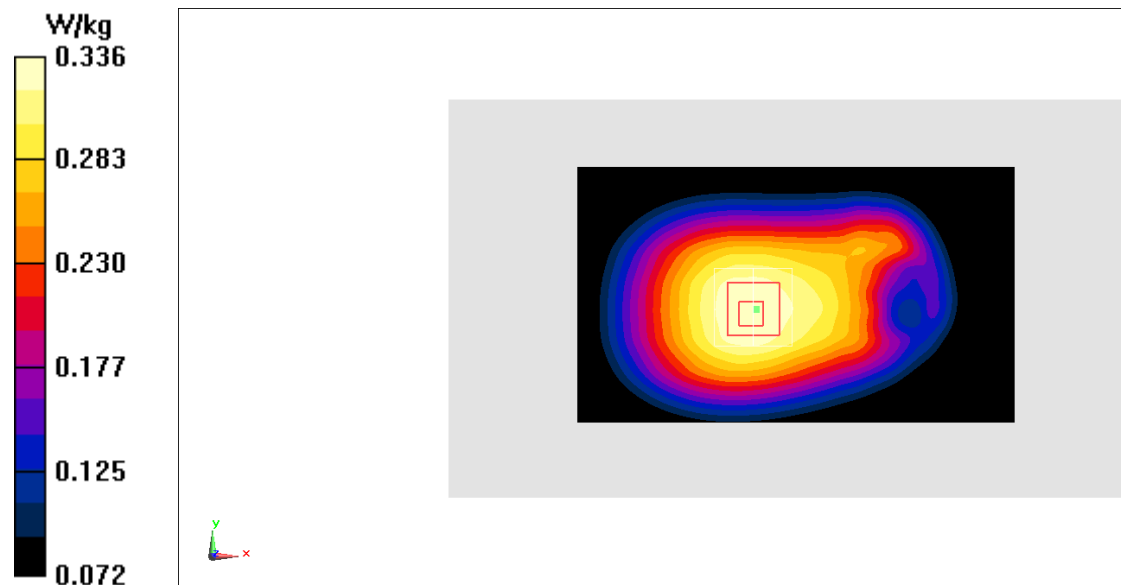


Fig.22 LTE Band13

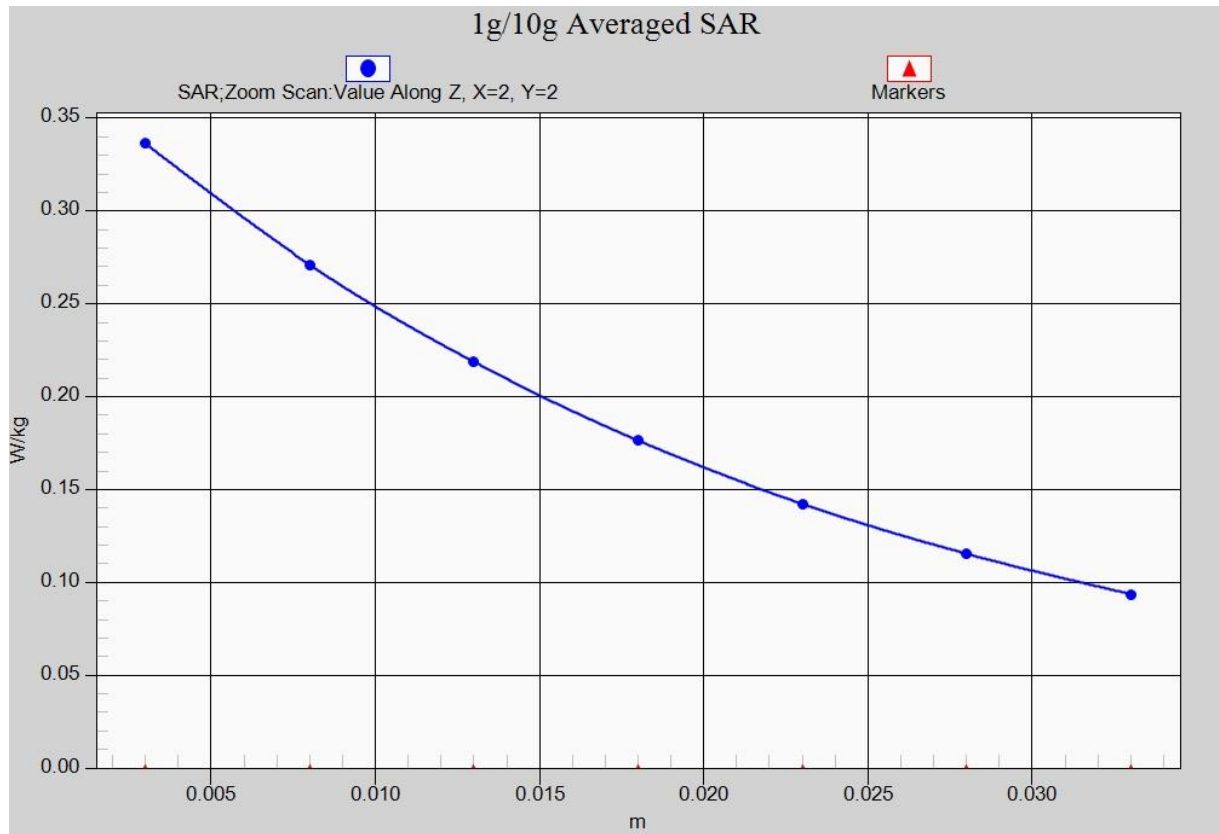


Fig. 22-1 Z-Scan at power reference point (LTE Band13)

Wifi 802.11b Right Cheek Channel 6

Date: 2017-4-24

Electronics: DAE4 Sn1331

Medium: Head 2450 MHz

Medium parameters used (interpolated): $f = 2437$ MHz; $\sigma = 1.824$ mho/m; $\epsilon_r = 39.25$; $\rho = 1000$ kg/m³

Ambient Temperature: 22.4°C Liquid Temperature: 22.2°C

Communication System: Wlan 2450 Frequency: 2437 MHz Duty Cycle: 1:1

Probe: EX3DV4- SN3846 ConvF(7.22, 7.22, 7.22)

Area Scan (91x161x1): Interpolated grid: dx=1.200 mm, dy=1.200 mm

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

Zoom Scan (8x8x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 13.56 V/m; Power Drift = -0.08 dB

Peak SAR (extrapolated) = 1.45 W/kg

SAR(1 g) = 0.653 W/kg; SAR(10 g) = 0.320 W/kg

Maximum value of SAR (measured) = 0.847 W/kg

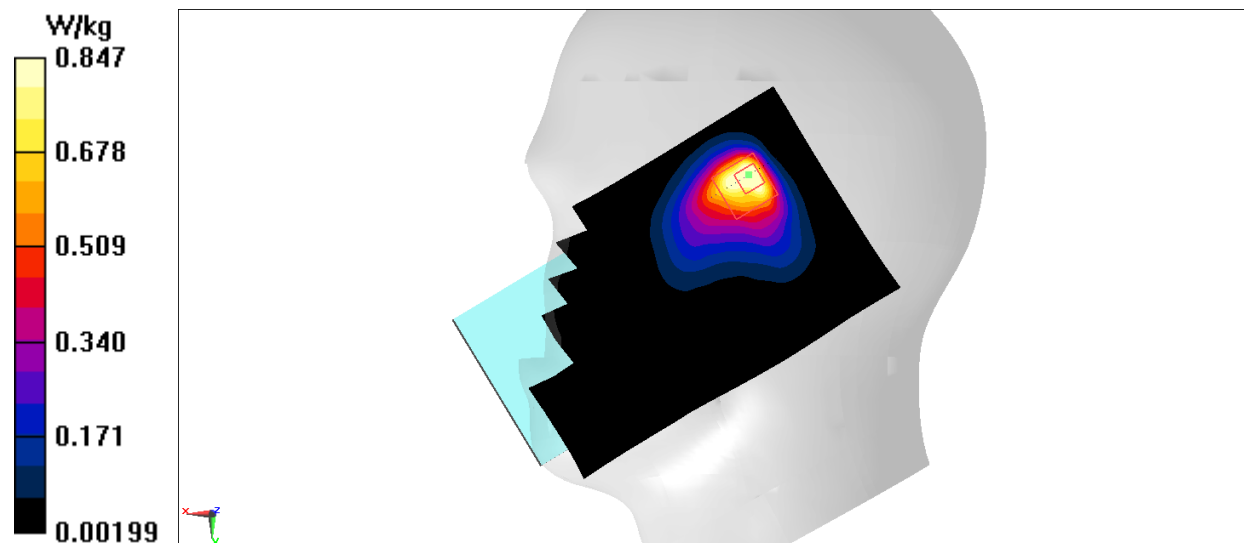


Fig.23 2450 MHz

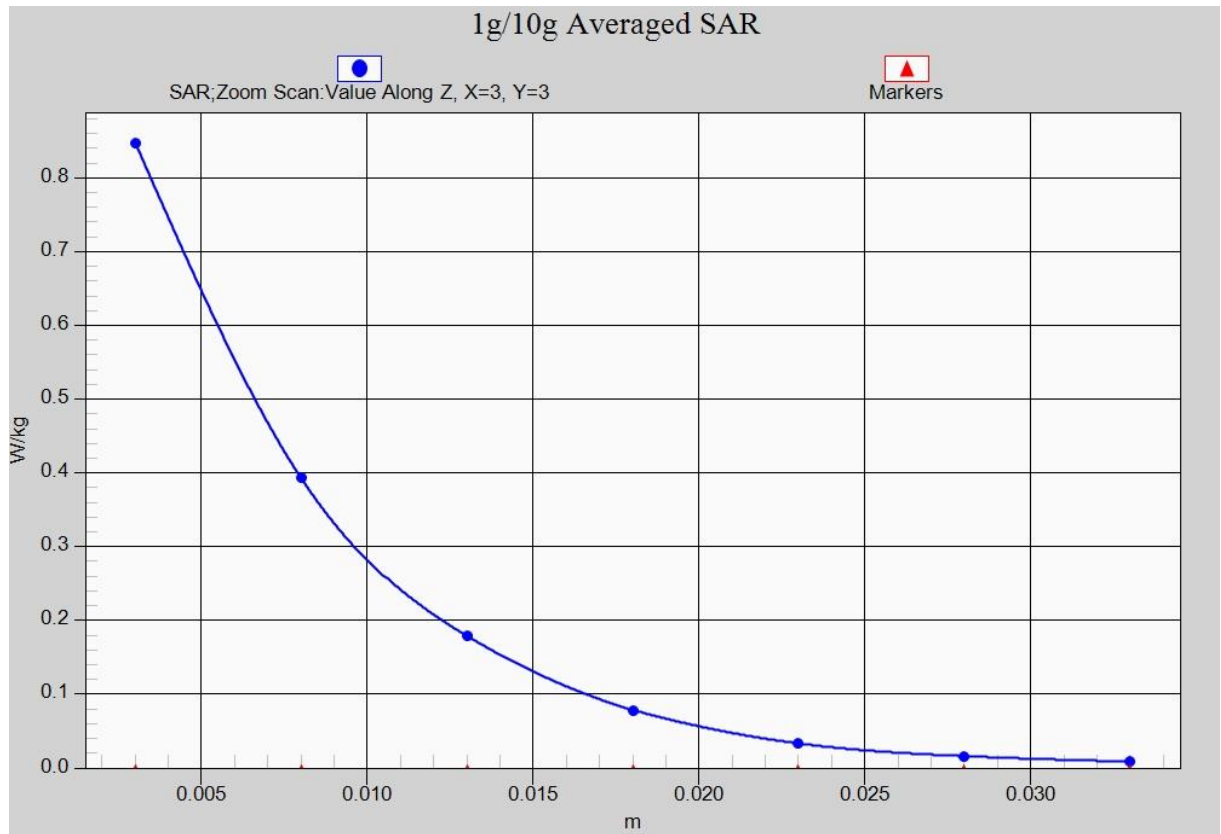


Fig. 23-1 Z-Scan at power reference point (2450 MHz)

Wifi 802.11b Body Rear Channel 6

Date: 2017-4-24

Electronics: DAE4 Sn1331

Medium: Body 2450 MHz

Medium parameters used (interpolated): $f = 2437$ MHz; $\sigma = 1.922$ mho/m; $\epsilon_r = 52.55$; $\rho = 1000$ kg/m³

Ambient Temperature: 22.4°C Liquid Temperature: 22.2°C

Communication System: WLan 2450 Frequency: 2437 MHz Duty Cycle: 1:1

Probe: EX3DV4 – SN3846 ConvF(7.31, 7.31, 7.31)

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

Maximum value of SAR (interpolated) = 0.242 W/kg

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

Reference Value = 2.319 V/m; Power Drift = -0.12 dB

Peak SAR (extrapolated) = 0.264 W/kg

SAR(1 g) = 0.132 W/kg; SAR(10 g) = 0.064 W/kg

Maximum value of SAR (measured) = 0.156 W/kg

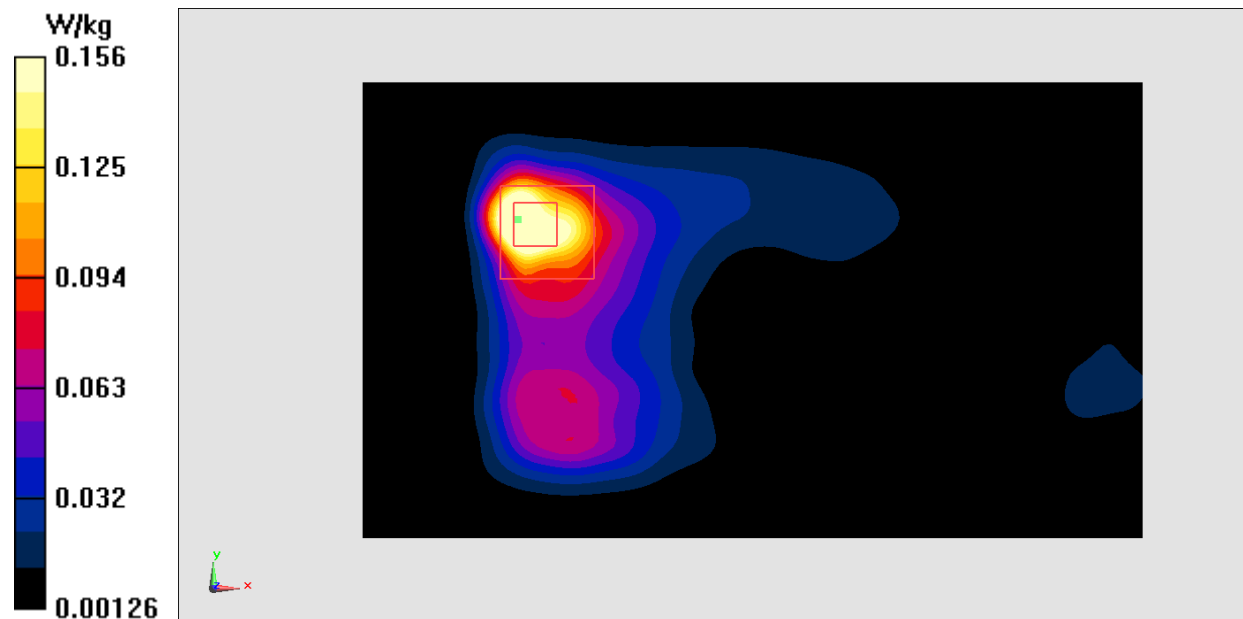


Fig.24 2450 MHz

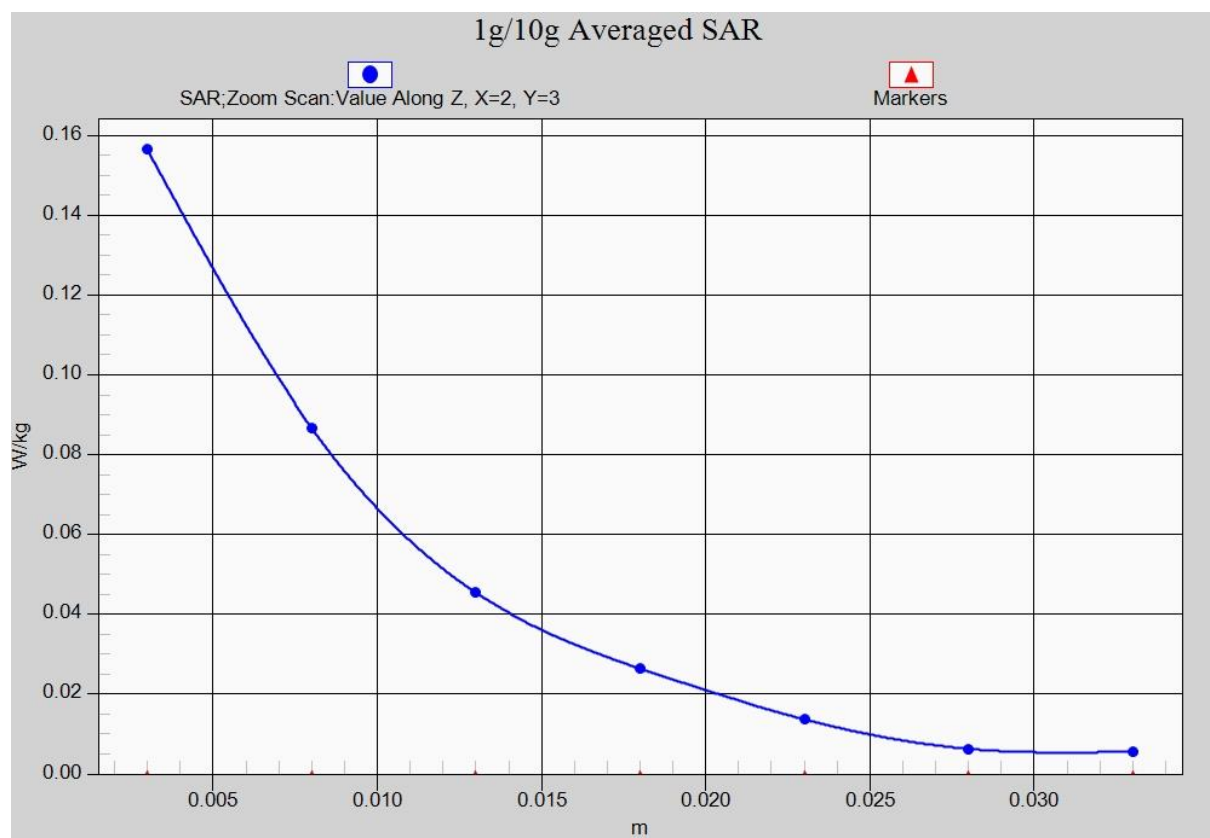


Fig. 24-1 Z-Scan at power reference point (2450 MHz)

ANNEX B System Verification Results

750MHz

Date: 2017-4-23

Electronics: DAE4 Sn1331

Medium: Head 750 MHz

Medium parameters used: $f = 750 \text{ MHz}$; $\sigma = 0.886 \text{ mho/m}$; $\epsilon_r = 42.8$; $\rho = 1000 \text{ kg/m}^3$

Ambient Temperature: 22.4°C Liquid Temperature: 22.2°C

Communication System: CW Frequency: 750 MHz Duty Cycle: 1:1

Probe: EX3DV4– SN3846 ConvF(9.65, 9.65, 9.65)

System Validation /Area Scan (81x191x1): Interpolated grid: $dx=1.000 \text{ mm}$, $dy=1.000 \text{ mm}$

Reference Value = 51.372 V/m ; Power Drift = -0.08 dB

Fast SAR: SAR(1 g) = 2.21 W/kg ; SAR(10 g) = 1.44 W/kg

Maximum value of SAR (interpolated) = 2.35 W/kg

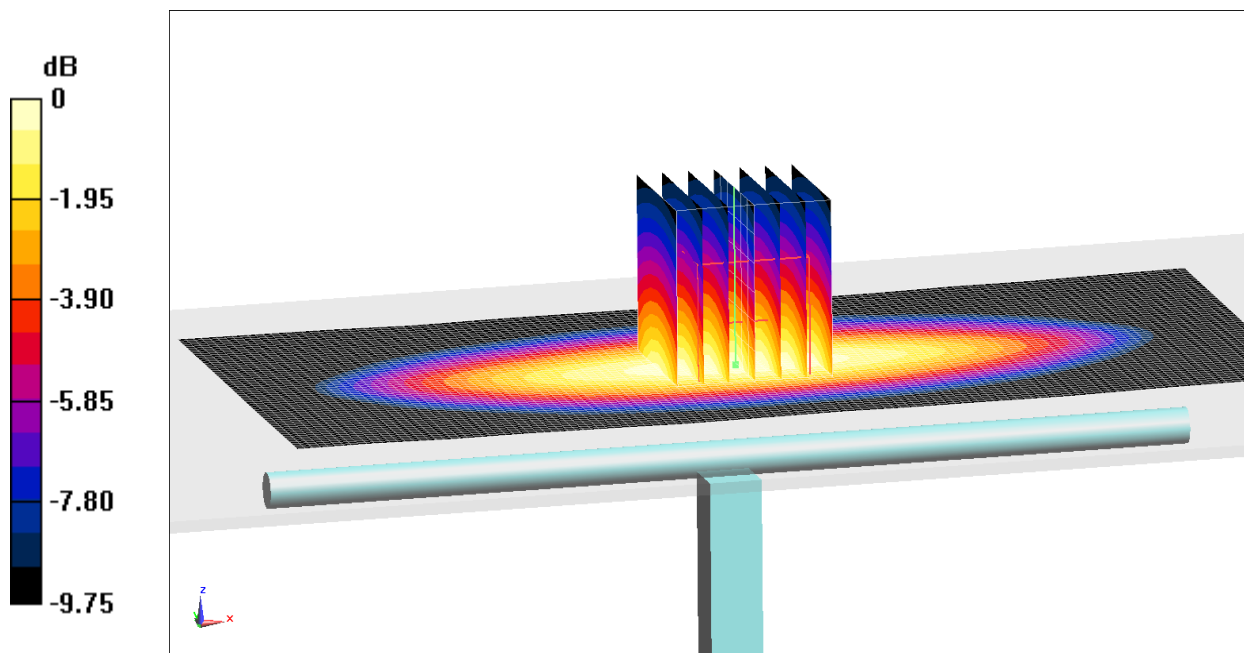
System Validation /Zoom Scan (7x7x7)/Cube 0: Measurement grid: $dx=5\text{mm}$, $dy=5\text{mm}$, $dz=5\text{mm}$

Reference Value = 51.372 V/m ; Power Drift = -0.08 dB

Peak SAR (extrapolated) = 3.02 W/kg

SAR(1 g) = 2.16 W/kg ; SAR(10 g) = 1.41 W/kg

Maximum value of SAR (measured) = 2.32 W/kg



0 dB = 2.32 W/kg = 3.65 dB W/kg

Fig.B.1 validation 750MHz 250mW

750MHz

Date: 2017-4-23

Electronics: DAE4 Sn1331

Medium: Body750 MHz

Medium parameters used: $f = 750 \text{ MHz}$; $\sigma = 0.942 \text{ mho/m}$; $\epsilon_r = 54.34$; $\rho = 1000 \text{ kg/m}^3$

Ambient Temperature: 22.4°C Liquid Temperature: 22.2°C

Communication System: CW Frequency: 750 MHz Duty Cycle: 1:1

Probe: EX3DV4– SN3846 ConvF(9.96, 9.96, 9.96)

System Validation/Area Scan (81x191x1): Interpolated grid: $dx=1.000 \text{ mm}$, $dy=1.000 \text{ mm}$

Reference Value = 50.936 V/m ; Power Drift = 0.09 dB

Fast SAR: SAR(1 g) = 2.26 W/kg ; SAR(10 g) = 1.47 W/kg

Maximum value of SAR (interpolated) = 2.32 W/kg

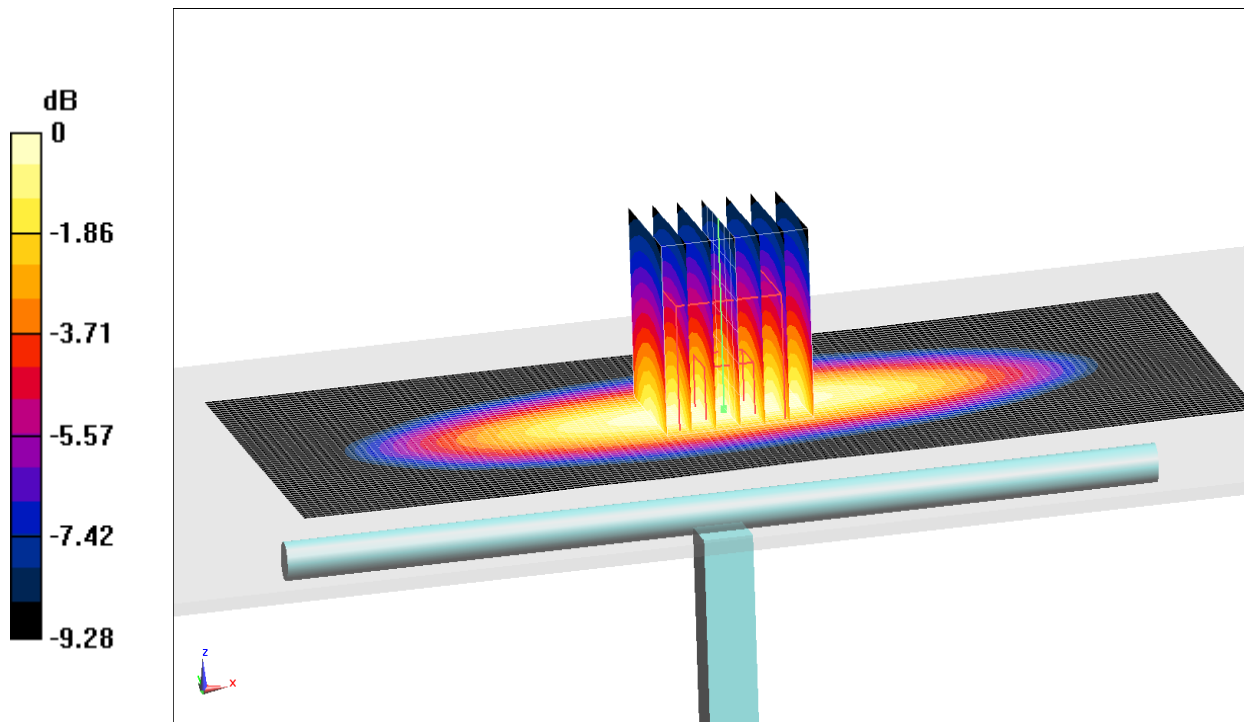
System Validation/Zoom Scan (7x7x7)/Cube 0: Measurement grid: $dx=5\text{mm}$, $dy=5\text{mm}$, $dz=5\text{mm}$

Reference Value = 50.936 V/m ; Power Drift = 0.09 dB

Peak SAR (extrapolated) = 2.98 W/kg

SAR(1 g) = 2.21 W/kg ; SAR(10 g) = 1.45 W/kg

Maximum value of SAR (measured) = 2.30 W/kg



$0 \text{ dB} = 2.30 \text{ W/kg} = 3.62 \text{ dB W/kg}$

Fig.B.2 validation 750MHz 250mW

835 MHz

Date: 2017-4-19

Electronics: DAE4 Sn1331

Medium: Head835 MHz

Medium parameters used: $f = 835 \text{ MHz}$; $\sigma = 0.892 \text{ mho/m}$; $\epsilon_r = 41.1$; $\rho = 1000 \text{ kg/m}^3$

Ambient Temperature: 22.4°C Liquid Temperature: 22.2°C

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

Probe: EX3DV4 – SN3846 ConvF(9.33, 9.33, 9.33)

System Validation /Area Scan (81x191x1): Interpolated grid: $dx=1.000 \text{ mm}$, $dy=1.000 \text{ mm}$

Reference Value = 59.5 V/m ; Power Drift = 0.02

Fast SAR: SAR(1 g) = 2.34 W/kg ; SAR(10 g) = 1.52 W/kg

Maximum value of SAR (interpolated) = 3.22 W/kg

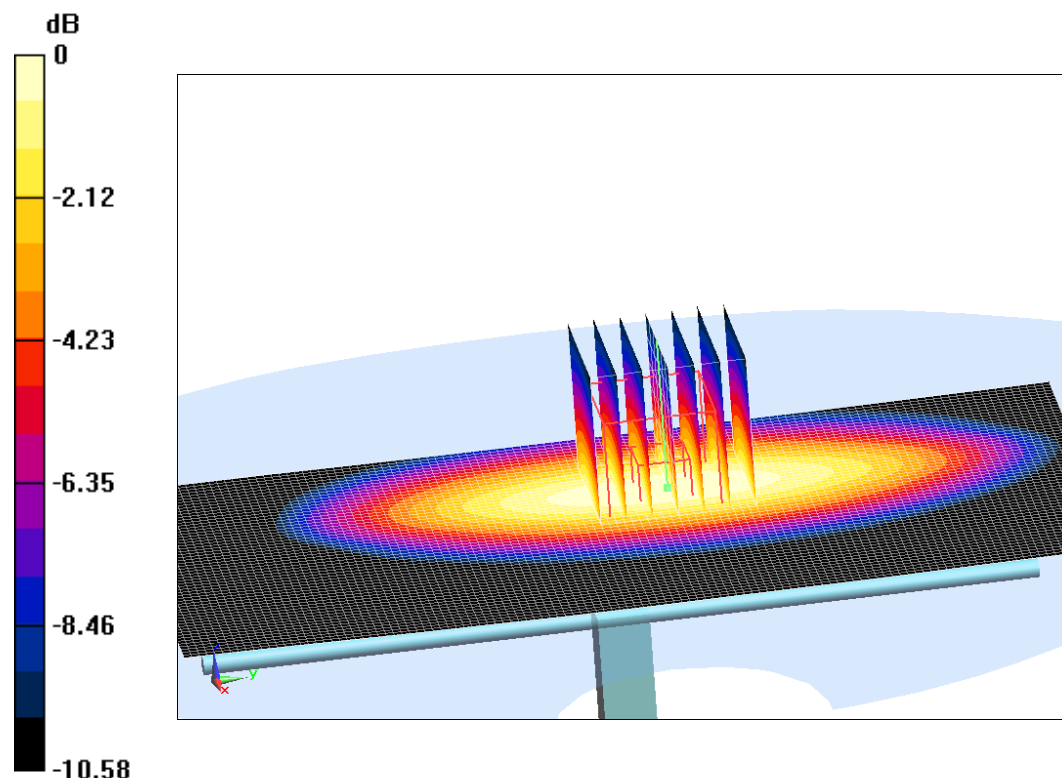
System Validation /Zoom Scan (7x7x7)/Cube 0: Measurement grid: $dx=5\text{mm}$, $dy=5\text{mm}$, $dz=5\text{mm}$

Reference Value = 59.5 V/m ; Power Drift = 0.02 dB

Peak SAR (extrapolated) = 3.64 W/kg

SAR(1 g) = 2.33 W/kg ; SAR(10 g) = 1.55 W/kg

Maximum value of SAR (measured) = 3.37 W/kg



0 dB = 3.37 W/kg = 5.28 dB W/kg

Fig.B.3 validation 835 MHz 250mW

835 MHz

Date: 2017-4-19

Electronics: DAE4 Sn1331

Medium: Body835 MHz

Medium parameters used: $f = 835 \text{ MHz}$; $\sigma = 0.977 \text{ mho/m}$; $\epsilon_r = 54.29$; $\rho = 1000 \text{ kg/m}^3$

Ambient Temperature: 22.4°C Liquid Temperature: 22.2°C

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

Probe: EX3DV4 – SN3846 ConvF(9.52,9.52,9.52)

System Validation /Area Scan (81x191x1): Interpolated grid: $dx=1.000 \text{ mm}$, $dy=1.000 \text{ mm}$

Reference Value = 60.21 V/m ; Power Drift = -0.01

Fast SAR: SAR(1 g) = 2.34 W/kg ; SAR(10 g) = 1.54 W/kg

Maximum value of SAR (interpolated) = 3.33 W/kg

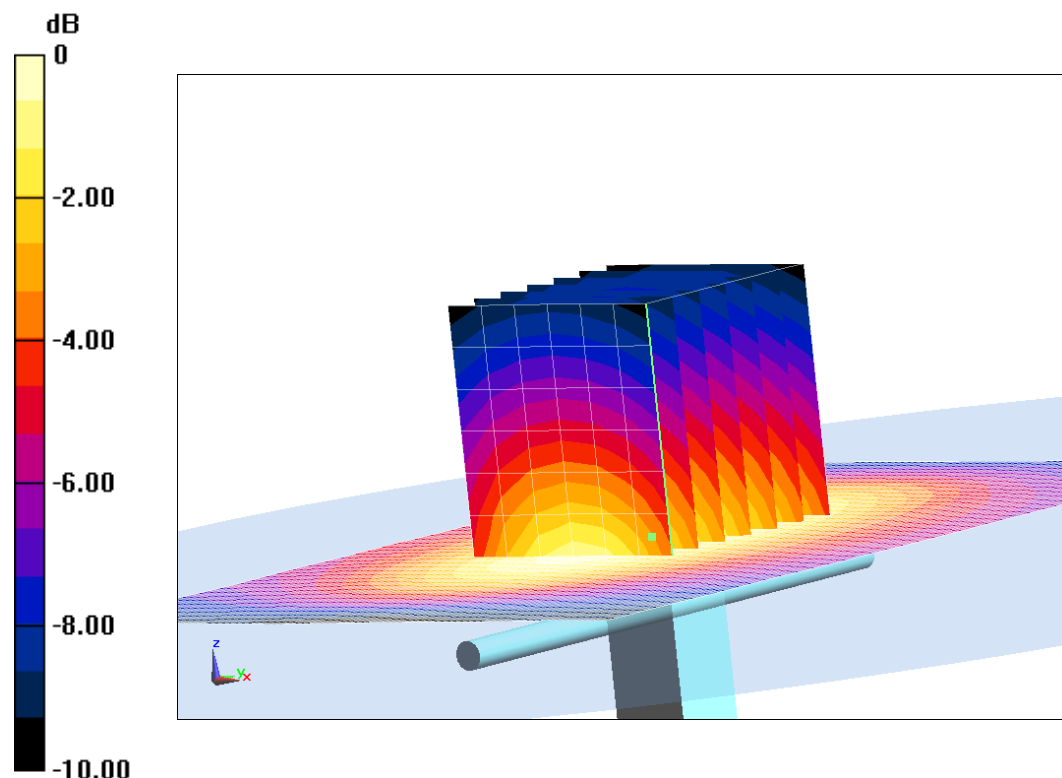
System Validation /Zoom Scan (7x7x7)/Cube 0: Measurement grid: $dx=5\text{mm}$, $dy=5\text{mm}$, $dz=5\text{mm}$

Reference Value = 60.21 V/m ; Power Drift = -0.01 dB

Peak SAR (extrapolated) = 3.68 W/kg

SAR(1 g) = 2.39 W/kg ; SAR(10 g) = 1.56 W/kg

Maximum value of SAR (measured) = 3.29 W/kg



$0 \text{ dB} = 3.29 \text{ W/kg} = 5.17 \text{ dB W/kg}$

Fig.B.4 validation 835 MHz 250mW

1750MHz

Date: 2017-4-20

Electronics: DAE4 Sn1331

Medium: Head 1750 MHz

Medium parameters used: $f=1750$ MHz; $\sigma=1.386$ mho/m; $\epsilon_r=39.14$; $\rho=1000$ kg/m³

Ambient Temperature: 22.4°C Liquid Temperature: 22.2°C

Communication System: CW Frequency: 1750 MHz Duty Cycle: 1:1

Probe: EX3DV4– SN3846 ConvF(8.16, 8.16,8.16)

System Validation/Area Scan (81x121x1): Interpolated grid: $dx=1.000$ mm, $dy=1.000$ mm

Reference Value = 92.801 V/m; Power Drift = -0.06 dB

Fast SAR: SAR(1 g) = 9.47 W/kg; SAR(10 g) = 5.11 W/kg

Maximum value of SAR (interpolated) = 10.5 W/kg

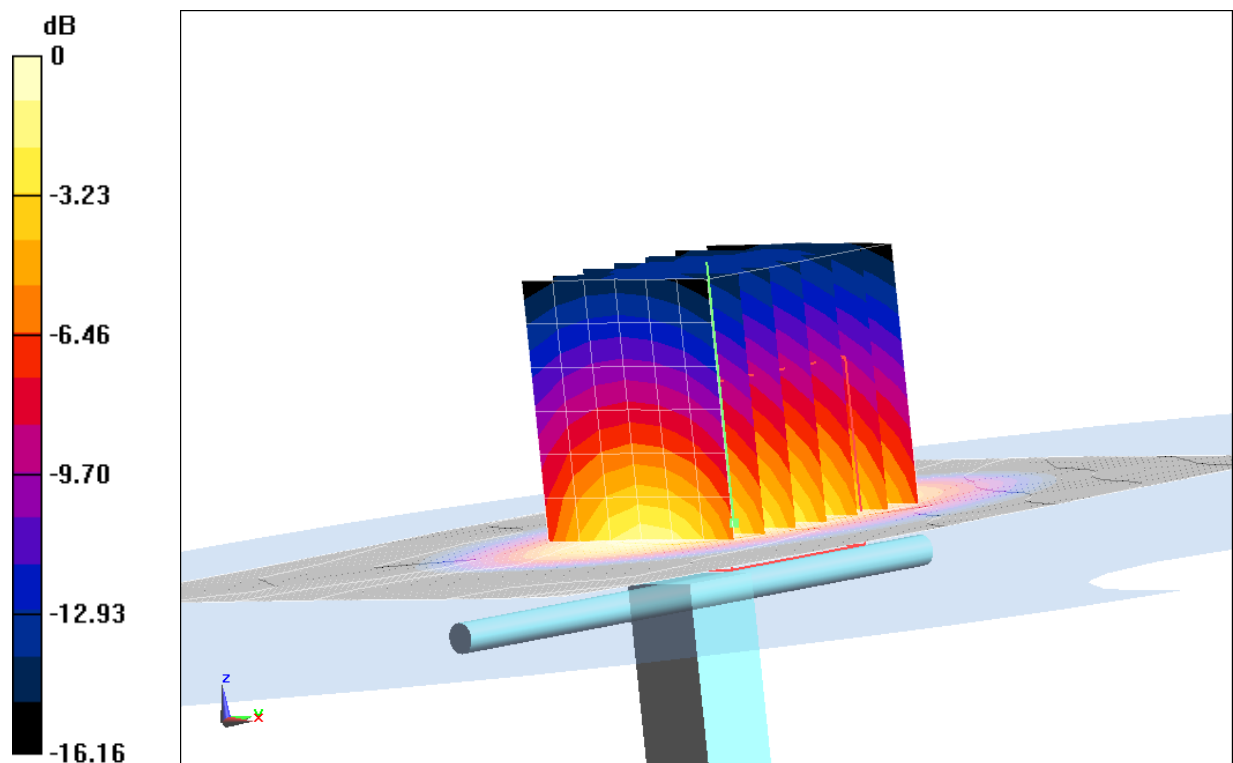
System Validation/Zoom Scan (7x7x7)/Cube 0: Measurement grid: $dx=5$ mm, $dy=5$ mm, $dz=5$ mm

Reference Value = 92.801 V/m; Power Drift = -0.06 dB

Peak SAR (extrapolated) = 16.02 W/kg

SAR(1 g) = 9.37 W/kg; SAR(10 g) = 5.03 W/kg

Maximum value of SAR (measured) = 10.4 W/kg



0 dB = 10.4W/kg = 10.17 dB W/kg

Fig.B.5 validation 1750MHz 250mW

1750MHz

Date: 2017-4-20

Electronics: DAE4 Sn1331

Medium: Body 1750 MHz

Medium parameters used: $f=1750$ MHz; $\sigma = 1.505$ mho/m; $\epsilon_r = 52.25$; $\rho = 1000$ kg/m³

Ambient Temperature: 22.4°C Liquid Temperature: 22.2°C

Communication System: CW Frequency: 1750 MHz Duty Cycle: 1:1

Probe: EX3DV4– SN3846 ConvF(7.90, 7.90, 7.90)

System Validation/Area Scan (81x121x1): Interpolated grid: $dx=1.000$ mm, $dy=1.000$ mm

Reference Value = 96.76 V/m; Power Drift = -0.04 dB

Fast SAR: SAR(1 g) = 9.26 W/kg; SAR(10 g) = 4.91 W/kg

Maximum value of SAR (interpolated) = 10.2 W/kg

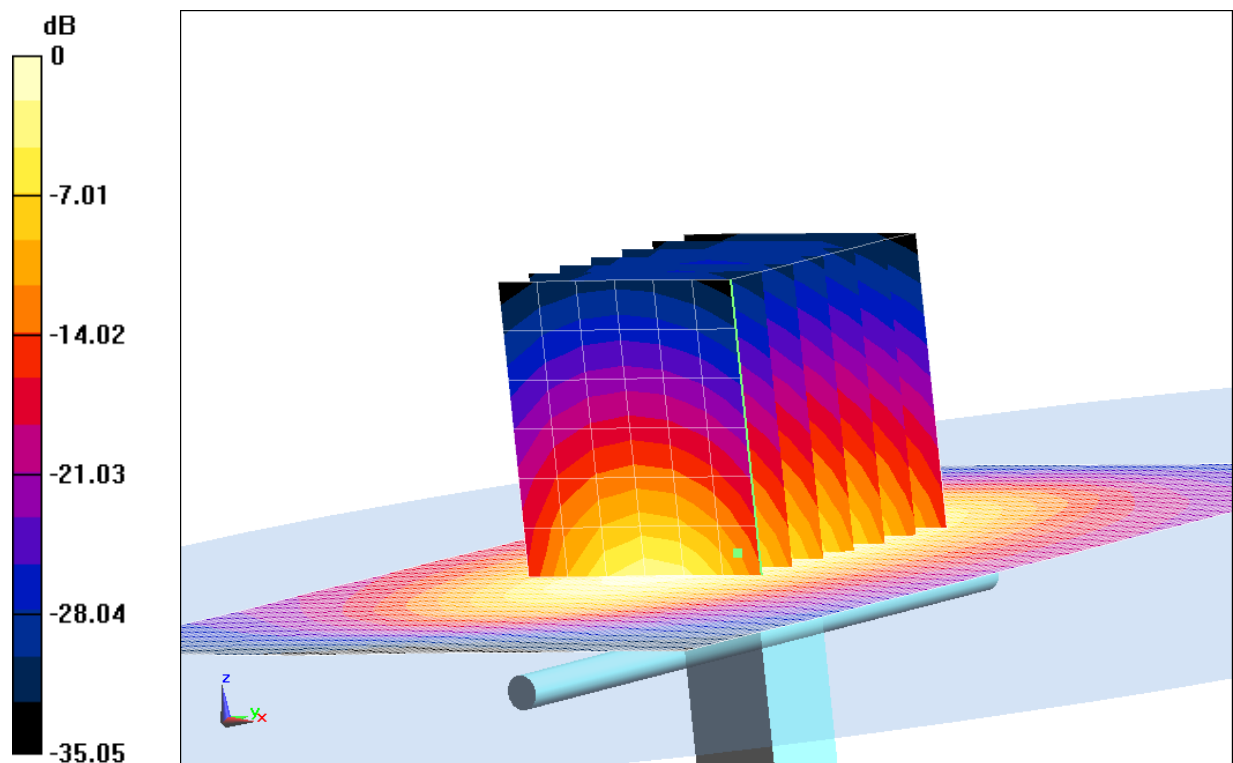
System Validation/Zoom Scan (7x7x7)/Cube 0: Measurement grid: $dx=5$ mm, $dy=5$ mm, $dz=5$ mm

Reference Value = 96.76 V/m; Power Drift = -0.04 dB

Peak SAR (extrapolated) = 16.31 W/kg

SAR(1 g) = 9.36 W/kg; SAR(10 g) = 4.99 W/kg

Maximum value of SAR (measured) = 10.3 W/kg



0 dB = 10.3 W/kg = 10.13 dB W/kg

Fig.B.6 validation 1750MHz 250mW

1900 MHz

Date: 2017-4-21

Electronics: DAE4 Sn1331

Medium: Head1900 MHz

Medium parameters used: $f = 1900$ MHz; $\sigma = 1.408$ mho/m; $\epsilon_r = 40.74$; $\rho = 1000$ kg/m³

Ambient Temperature: 22.4°C Liquid Temperature: 22.2°C

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

Probe: EX3DV4 – SN3846 ConvF(7.89, 7.89, 7.89)

System Validation /Area Scan (81x191x1): Interpolated grid: dx=1.000 mm, dy=1.000 mm

Reference Value = 109.73 V/m; Power Drift = -0.01

Fast SAR: SAR(1 g) = 10.38W/kg; SAR(10 g) = 5.2 W/kg

Maximum value of SAR (interpolated) = 15.43 W/kg

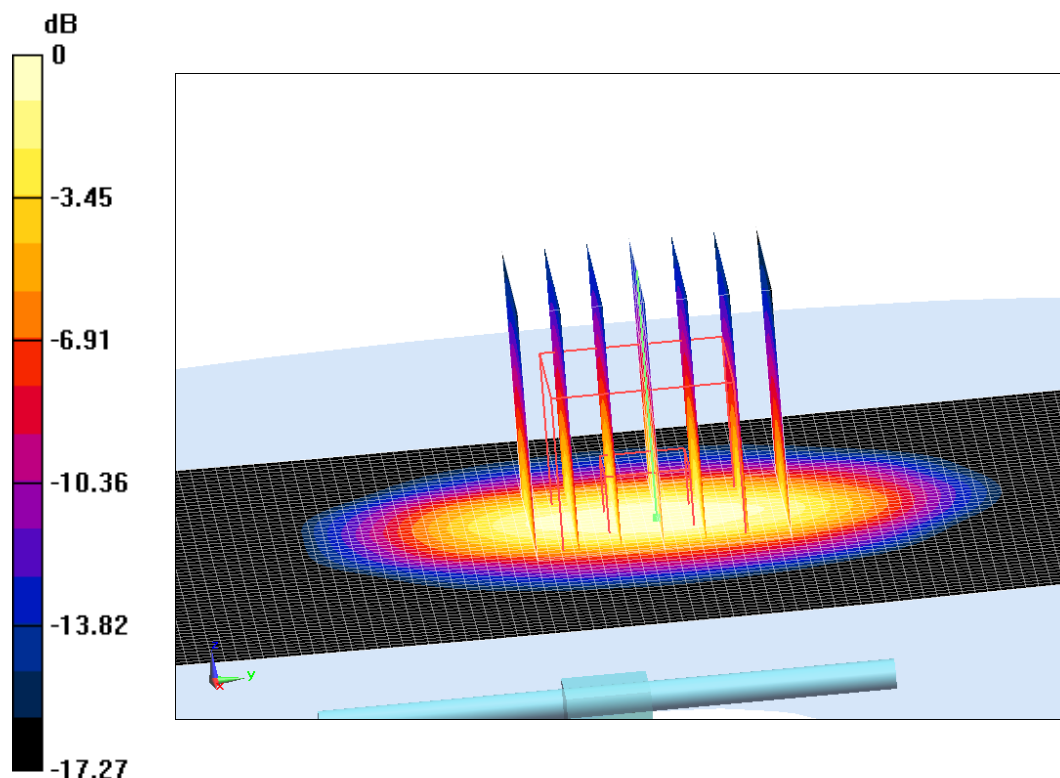
System Validation /Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 109.73 V/m; Power Drift = -0.01 dB

Peak SAR (extrapolated) = 18.98 W/kg

SAR(1 g) = 10.19W/kg; SAR(10 g) = 5.31 W/kg

Maximum value of SAR (measured) = 16.02 W/kg



0 dB = 16.02W/kg = 12.05 dB W/kg

Fig.B.7 validation 1900 MHz 250mW

1900 MHz

Date: 2017-4-21

Electronics: DAE4 Sn1331

Medium: Body1900 MHz

Medium parameters used: $f = 1900$ MHz; $\sigma = 1.515$ mho/m; $\epsilon_r = 52.48$; $\rho = 1000$ kg/m³

Ambient Temperature: 22.4°C Liquid Temperature: 22.2°C

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

Probe: EX3DV4 – SN3846 ConvF(7.57, 7.57, 7.57)

System Validation /Area Scan (81x191x1): Interpolated grid: dx=1.000 mm, dy=1.000 mm

Reference Value = 104.7 V/m; Power Drift = -0.02

Fast SAR: SAR(1 g) = 10.12W/kg; SAR(10 g) = 5.27 W/kg

Maximum value of SAR (interpolated) = 14.77 W/kg

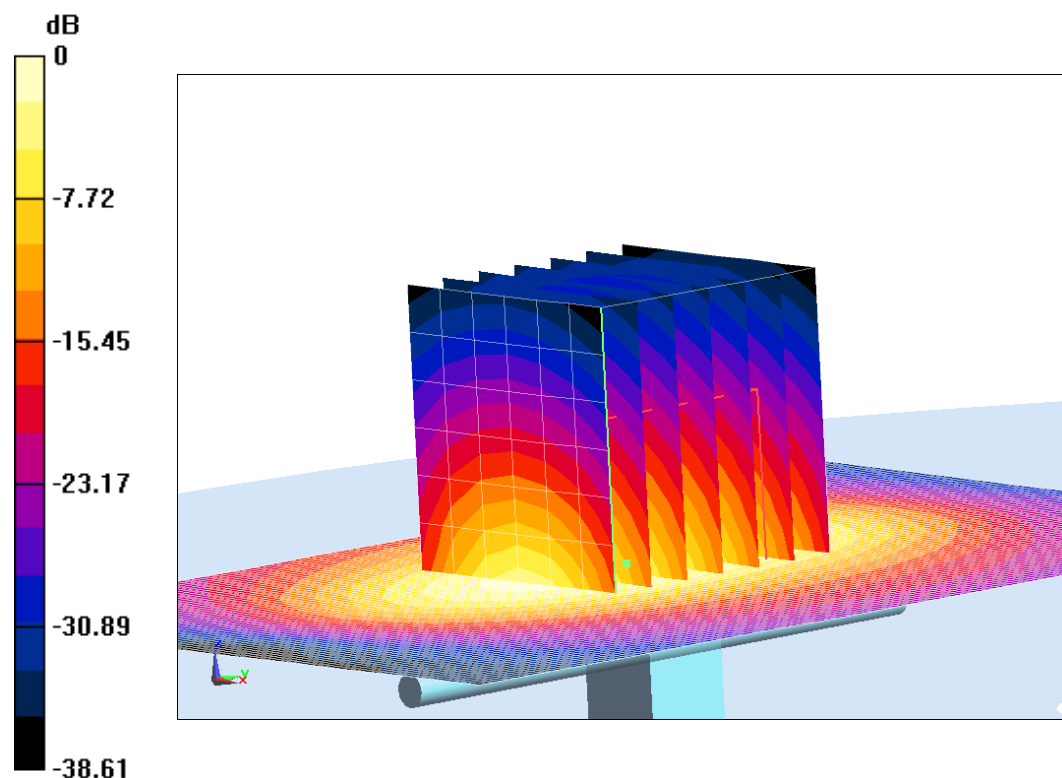
System Validation /Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 104.7 V/m; Power Drift = -0.02 dB

Peak SAR (extrapolated) = 17.4 W/kg

SAR(1 g) = 10.35W/kg; SAR(10 g) = 5.28 W/kg

Maximum value of SAR (measured) = 15.2 W/kg



0 dB = 15.2W/kg = 11.82 dB W/kg

Fig.B.8 validation 1900 MHz 250mW

2450 MHz

Date: 2017-4-24

Electronics: DAE4 Sn1331

Medium: Head2450 MHz

Medium parameters used: $f = 2450$ MHz; $\sigma = 1.836$ mho/m; $\epsilon_r = 39.19$; $\rho = 1000$ kg/m³

Ambient Temperature: 22.4°C Liquid Temperature: 22.2°C

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

Probe: EX3DV4 – SN3846 ConvF(7.22,7.22,7.22)

System Validation /Area Scan (81x191x1): Interpolated grid: dx=1.000 mm, dy=1.000 mm

Reference Value = 115.9 V/m; Power Drift = 0

Fast SAR: SAR(1 g) = 13.16W/kg; SAR(10 g) = 6.08 W/kg

Maximum value of SAR (interpolated) = 22.25 W/kg

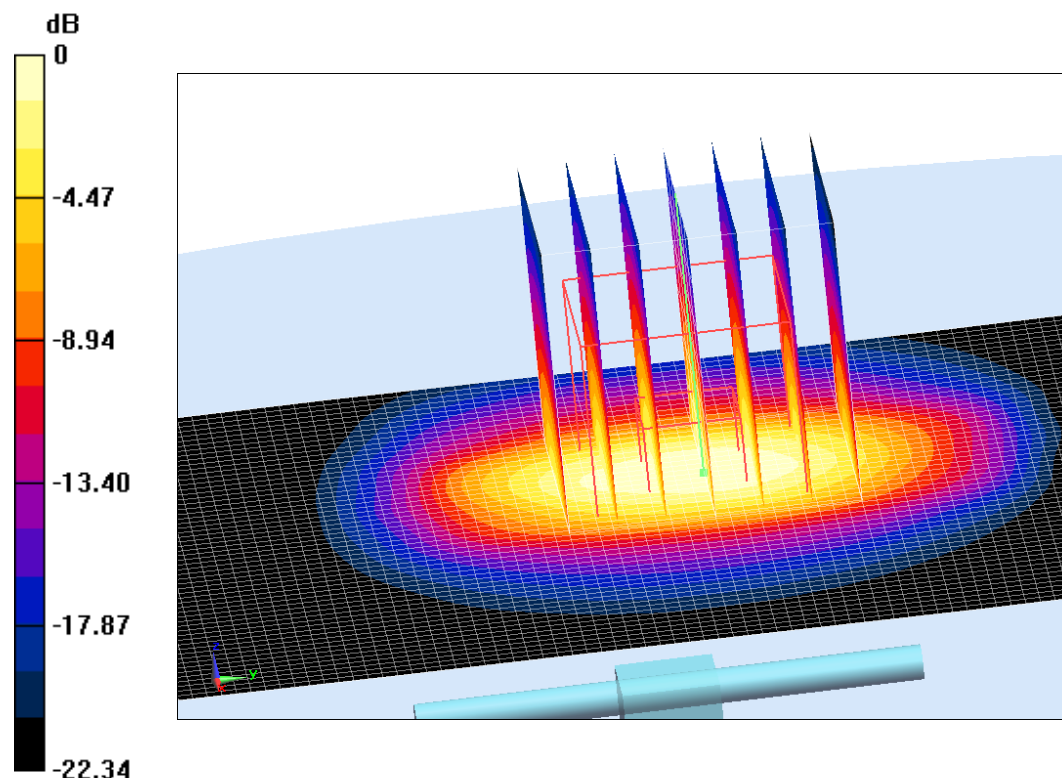
System Validation /Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 115.9 V/m; Power Drift = 0 dB

Peak SAR (extrapolated) = 27.85 W/kg

SAR(1 g) = 13.19W/kg; SAR(10 g) = 6.25 W/kg

Maximum value of SAR (measured) = 22.02 W/kg



0 dB = 22.02W/kg = 13.43 dB W/kg

Fig.B.9 validation 2450 MHz 250mW

2450 MHz

Date: 2017-4-24

Electronics: DAE4 Sn1331

Medium: Body2450 MHz

Medium parameters used: $f = 2450$ MHz; $\sigma = 1.938$ mho/m; $\epsilon_r = 52.52$; $\rho = 1000$ kg/m³

Ambient Temperature: 22.4°C Liquid Temperature: 22.2°C

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

Probe: EX3DV4 – SN3846 ConvF(7.31,7.31,7.31)

System Validation /Area Scan (81x191x1): Interpolated grid: dx=1.000 mm, dy=1.000 mm

Reference Value = 106.02 V/m; Power Drift = 0

Fast SAR: SAR(1 g) = 13.2W/kg; SAR(10 g) = 6.18 W/kg

Maximum value of SAR (interpolated) = 21.73 W/kg

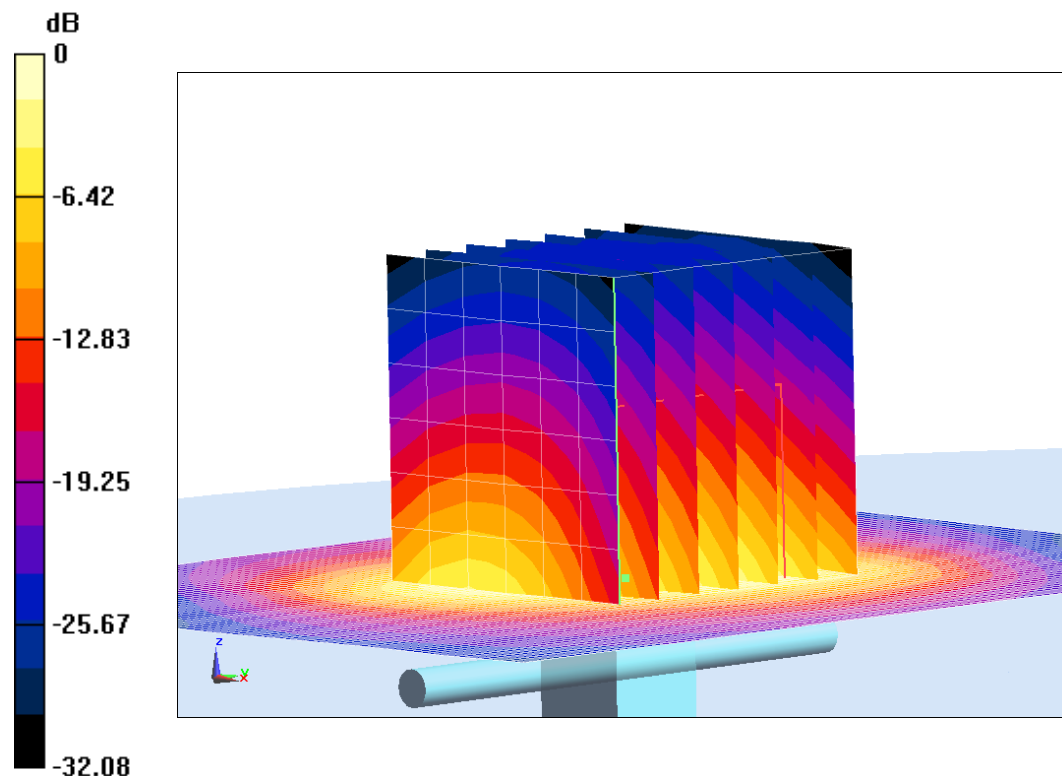
System Validation /Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 106.02 V/m; Power Drift = 0 dB

Peak SAR (extrapolated) = 26.34 W/kg

SAR(1 g) = 13.3W/kg; SAR(10 g) = 6.12 W/kg

Maximum value of SAR (measured) = 21.42 W/kg



0 dB = 21.42W/kg = 13.31 dB W/kg

Fig.B.10 validation 2450 MHz 250mW

2600 MHz

Date: 2017-4-22

Electronics: DAE4 Sn1331

Medium: Head2600 MHz

Medium parameters used: $f = 2600$ MHz; $\sigma = 1.938$ mho/m; $\epsilon_r = 38.8$; $\rho = 1000$ kg/m³

Ambient Temperature: 22.4°C Liquid Temperature: 22.2°C

Communication System: CW Frequency: 2600 MHz Duty Cycle: 1:1

Probe: EX3DV4 – SN3846 ConvF(7.12,7.12,7.12)

System Validation /Area Scan (81x191x1): Interpolated grid: dx=1.000 mm, dy=1.000 mm

Reference Value = 115.2 V/m; Power Drift = 0.01

Fast SAR: SAR(1 g) = 13.98W/kg; SAR(10 g) = 6.23 W/kg

Maximum value of SAR (interpolated) = 24 W/kg

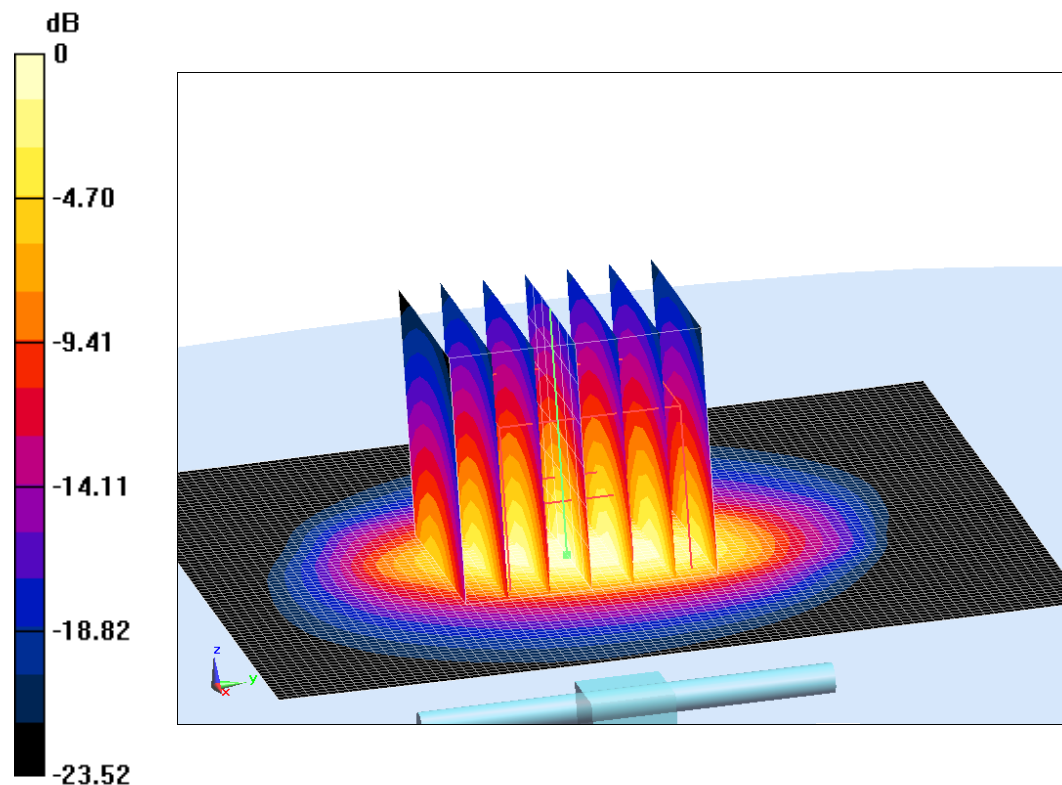
System Validation /Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 115.2 V/m; Power Drift = 0.01 dB

Peak SAR (extrapolated) = 31.04 W/kg

SAR(1 g) = 13.93W/kg; SAR(10 g) = 6.37 W/kg

Maximum value of SAR (measured) = 24.66 W/kg



0 dB = 24.66W/kg = 13.92 dB W/kg

Fig.B.11 validation 2600 MHz 250mW

2600 MHz

Date: 2017-4-22

Electronics: DAE4 Sn1331

Medium: Body2600 MHz

Medium parameters used: $f = 2600$ MHz; $\sigma = 2.167$ mho/m; $\epsilon_r = 53.29$; $\rho = 1000$ kg/m³

Ambient Temperature: 22.4°C Liquid Temperature: 22.2°C

Communication System: CW Frequency: 2600 MHz Duty Cycle: 1:1

Probe: EX3DV4 – SN3846 ConvF(7.25,7.25,7.25)

System Validation /Area Scan (81x191x1): Interpolated grid: dx=1.000 mm, dy=1.000 mm

Reference Value = 107.45 V/m; Power Drift = 0.01

Fast SAR: SAR(1 g) = 14.25W/kg; SAR(10 g) = 6.42 W/kg

Maximum value of SAR (interpolated) = 23.06 W/kg

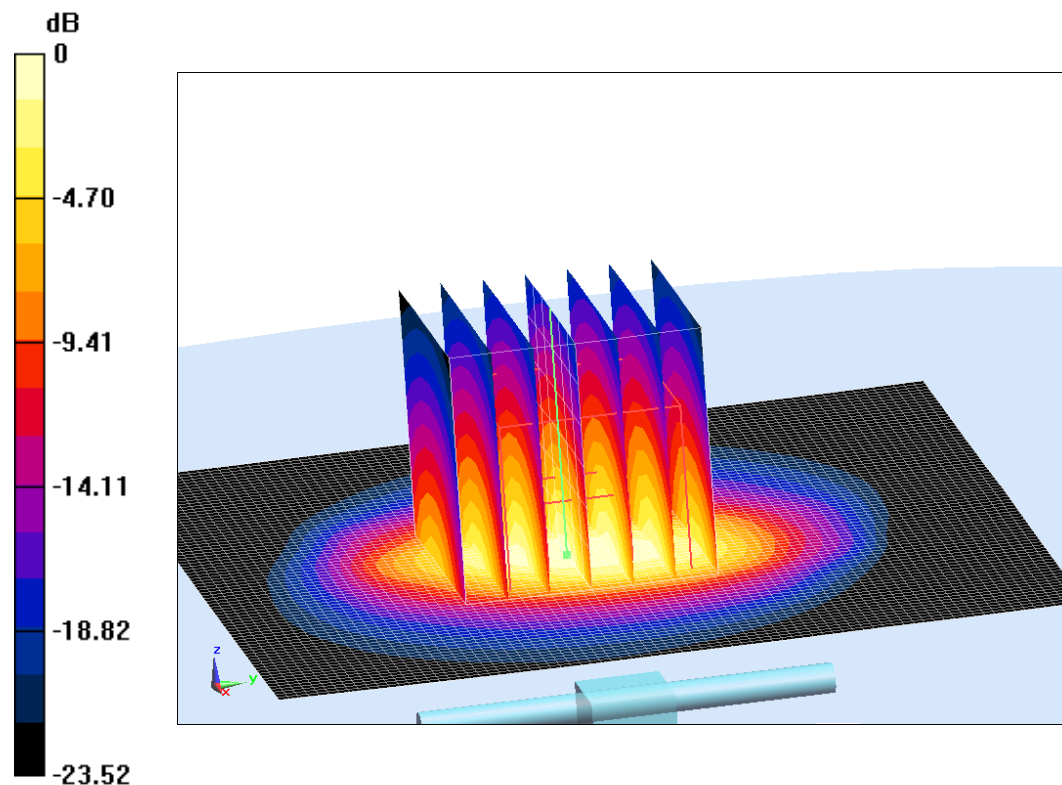
System Validation /Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 107.45 V/m; Power Drift = 0.01 dB

Peak SAR (extrapolated) = 29.23 W/kg

SAR(1 g) = 13.93W/kg; SAR(10 g) = 6.27 W/kg

Maximum value of SAR (measured) = 23.14 W/kg



0 dB = 23.14W/kg = 13.64 dB W/kg

Fig.B.12 validation 2600 MHz 250mW

750 MHz

Date: 9/18/2017

Electronics: DAE4 Sn1331

Medium: Head 750 MHz

Medium parameters used: $f = 750 \text{ MHz}$; $\sigma = 0.894 \text{ mho/m}$; $\epsilon_r = 42.1$; $\rho = 1000 \text{ kg/m}^3$

Ambient Temperature: 22.5°C Liquid Temperature: 22.3°C

Communication System: CW Frequency: 750 MHz Duty Cycle: 1:1

Probe: EX3DV4 – SN3846 ConvF(9.65,9.65,9.65)

System Validation /Area Scan (81x191x1): Interpolated grid: $dx=1.000 \text{ mm}$, $dy=1.000 \text{ mm}$

Reference Value = 59.81 V/m ; Power Drift = 0.02

Fast SAR: SAR(1 g) = 2.05 W/kg ; SAR(10 g) = 1.38 W/kg

Maximum value of SAR (interpolated) = 2.72 W/kg

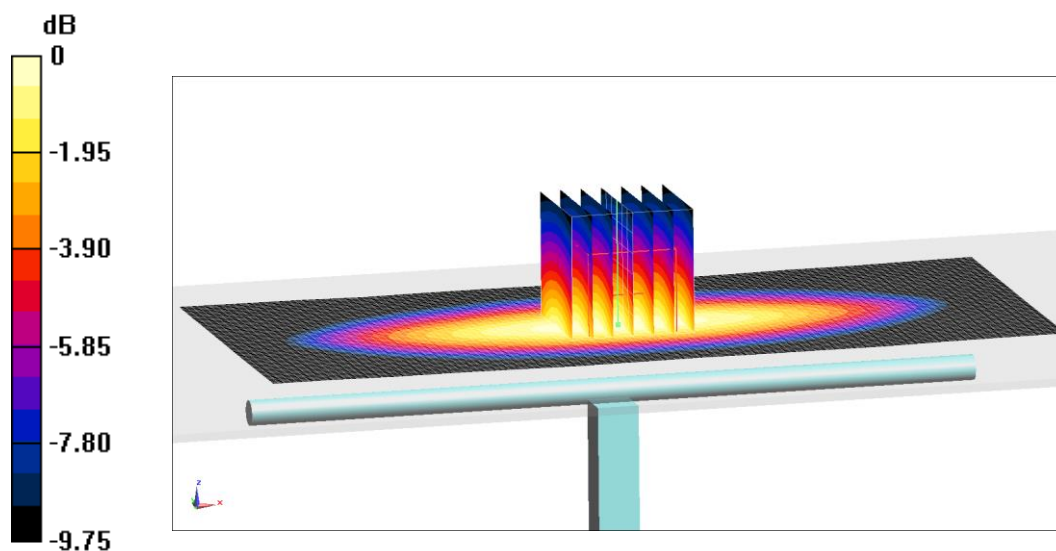
System Validation /Zoom Scan (7x7x7)/Cube 0: Measurement grid: $dx=5\text{mm}$, $dy=5\text{mm}$, $dz=5\text{mm}$

Reference Value = 59.81 V/m ; Power Drift = 0.02 dB

Peak SAR (extrapolated) = 3.25 W/kg

SAR(1 g) = 2.07 W/kg ; SAR(10 g) = 1.38 W/kg

Maximum value of SAR (measured) = 2.86 W/kg



0 dB = 2.86 W/kg = 4.56 dB W/kg

Fig.B.13 validation 750 MHz 250mW

750 MHz

Date: 9/18/2017

Electronics: DAE4 Sn1331

Medium: Body 750 MHz

Medium parameters used: $f = 750 \text{ MHz}$; $\sigma = 0.961 \text{ mho/m}$; $\epsilon_r = 55.12$; $\rho = 1000 \text{ kg/m}^3$

Ambient Temperature: 22.5°C Liquid Temperature: 22.3°C

Communication System: CW Frequency: 750 MHz Duty Cycle: 1:1

Probe: EX3DV4 – SN3846 ConvF(9.96,9.96,9.96)

System Validation /Area Scan (81x191x1): Interpolated grid: $dx=1.000 \text{ mm}$, $dy=1.000 \text{ mm}$

Reference Value = 58.29 V/m ; Power Drift = -0.01

Fast SAR: SAR(1 g) = 2.17 W/kg ; SAR(10 g) = 1.47 W/kg

Maximum value of SAR (interpolated) = 3.29 W/kg

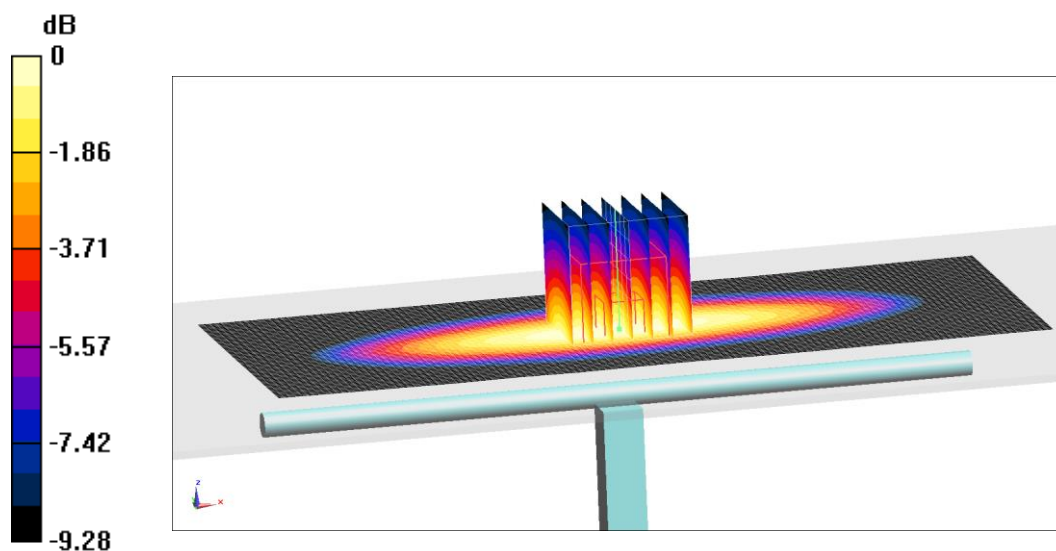
System Validation /Zoom Scan (7x7x7)/Cube 0: Measurement grid: $dx=5\text{mm}$, $dy=5\text{mm}$, $dz=5\text{mm}$

Reference Value = 58.29 V/m ; Power Drift = -0.01 dB

Peak SAR (extrapolated) = 3.29 W/kg

SAR(1 g) = 2.21 W/kg ; SAR(10 g) = 1.41 W/kg

Maximum value of SAR (measured) = 2.93 W/kg



$0 \text{ dB} = 2.93 \text{ W/kg} = 4.67 \text{ dB W/kg}$

Fig.B.14 validation 750 MHz 250mW

835 MHz

Date: 9/19/2017

Electronics: DAE4 Sn1331

Medium: Head 835 MHz

Medium parameters used: $f = 835 \text{ MHz}$; $\sigma = 0.915 \text{ mho/m}$; $\epsilon_r = 41.75$; $\rho = 1000 \text{ kg/m}^3$

Ambient Temperature: 22.5°C Liquid Temperature: 22.3°C

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

Probe: EX3DV4 – SN3846 ConvF(9.33,9.33,9.33)

System Validation /Area Scan (81x191x1): Interpolated grid: $dx=1.000 \text{ mm}$, $dy=1.000 \text{ mm}$

Reference Value = 64.82 V/m ; Power Drift = -0.1

Fast SAR: SAR(1 g) = 2.37 W/kg ; SAR(10 g) = 1.52 W/kg

Maximum value of SAR (interpolated) = 3.7 W/kg

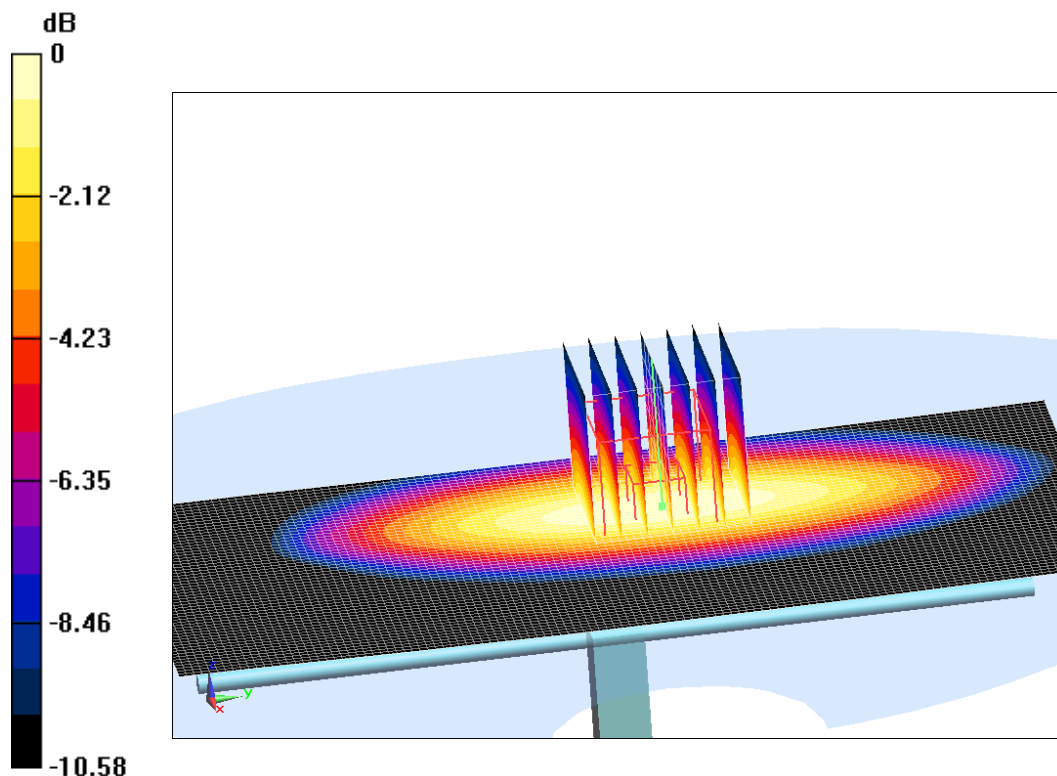
System Validation /Zoom Scan (7x7x7)/Cube 0: Measurement grid: $dx=5\text{mm}$, $dy=5\text{mm}$, $dz=5\text{mm}$

Reference Value = 64.82 V/m ; Power Drift = -0.1 dB

Peak SAR (extrapolated) = 4.01 W/kg

SAR(1 g) = 2.37 W/kg ; SAR(10 g) = 1.54 W/kg

Maximum value of SAR (measured) = 3.62 W/kg



0 dB = 3.62 W/kg = 5.59 dB W/kg

Fig.B.15 validation 835 MHz 250mW

835 MHz

Date: 9/19/2017

Electronics: DAE4 Sn1331

Medium: Body 835 MHz

Medium parameters used: $f = 835 \text{ MHz}$; $\sigma = 0.987 \text{ mho/m}$; $\epsilon_r = 54.13$; $\rho = 1000 \text{ kg/m}^3$

Ambient Temperature: 22.5°C Liquid Temperature: 22.3°C

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

Probe: EX3DV4 – SN3846 ConvF(9.52,9.52,9.52)

System Validation /Area Scan (81x191x1): Interpolated grid: $dx=1.000 \text{ mm}$, $dy=1.000 \text{ mm}$

Reference Value = 60.45 V/m ; Power Drift = 0.09

Fast SAR: SAR(1 g) = 2.45 W/kg ; SAR(10 g) = 1.56 W/kg

Maximum value of SAR (interpolated) = 3.48 W/kg

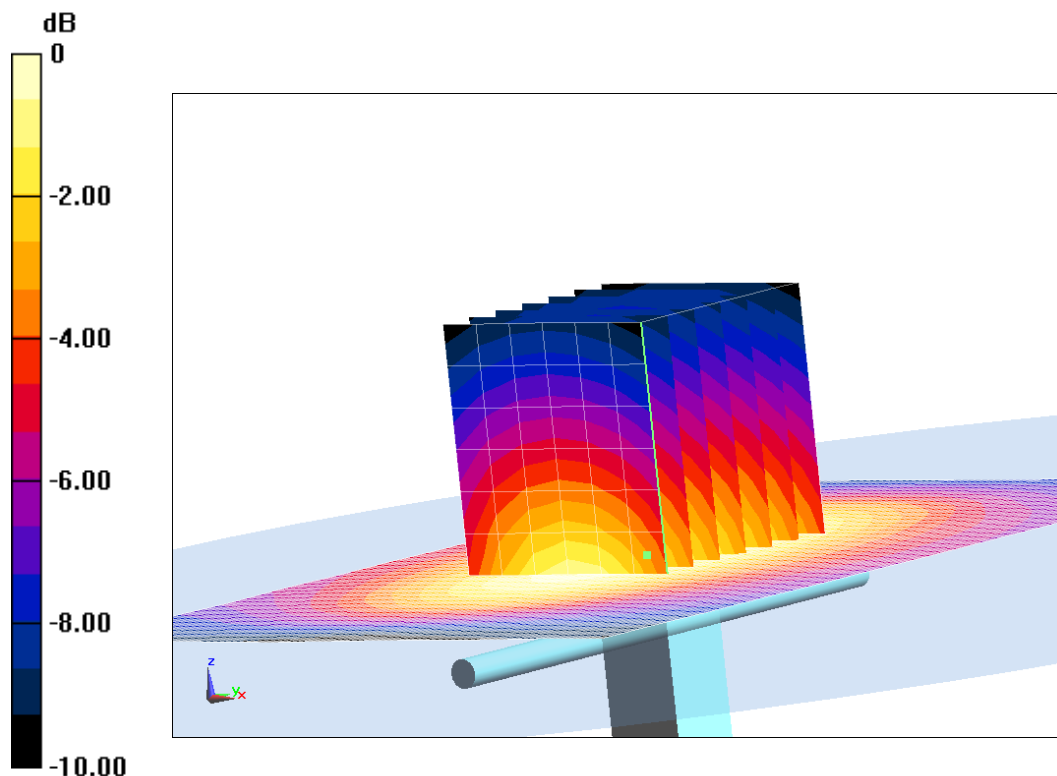
System Validation /Zoom Scan (7x7x7)/Cube 0: Measurement grid: $dx=5\text{mm}$, $dy=5\text{mm}$, $dz=5\text{mm}$

Reference Value = 60.45 V/m ; Power Drift = 0.09 dB

Peak SAR (extrapolated) = 3.64 W/kg

SAR(1 g) = 2.4 W/kg ; SAR(10 g) = 1.59 W/kg

Maximum value of SAR (measured) = 3.21 W/kg



0 dB = 3.21 W/kg = 5.07 dB W/kg

Fig.B.16 validation 835 MHz 250mW

1750 MHz

Date: 9/20/2017

Electronics: DAE4 Sn1331

Medium: Head 1750 MHz

Medium parameters used: $f = 1750$ MHz; $\sigma = 1.365$ mho/m; $\epsilon_r = 40.5$; $\rho = 1000$ kg/m³

Ambient Temperature: 22.5°C Liquid Temperature: 22.3°C

Communication System: CW Frequency: 1750 MHz Duty Cycle: 1:1

Probe: EX3DV4 – SN3846 ConvF(8.16,8.16,8.16)

System Validation /Area Scan (81x191x1): Interpolated grid: dx=1.000 mm, dy=1.000 mm

Reference Value = 106.74 V/m; Power Drift = -0.02

Fast SAR: SAR(1 g) = 9.28 W/kg; SAR(10 g) = 4.93 W/kg

Maximum value of SAR (interpolated) = 14.92 W/kg

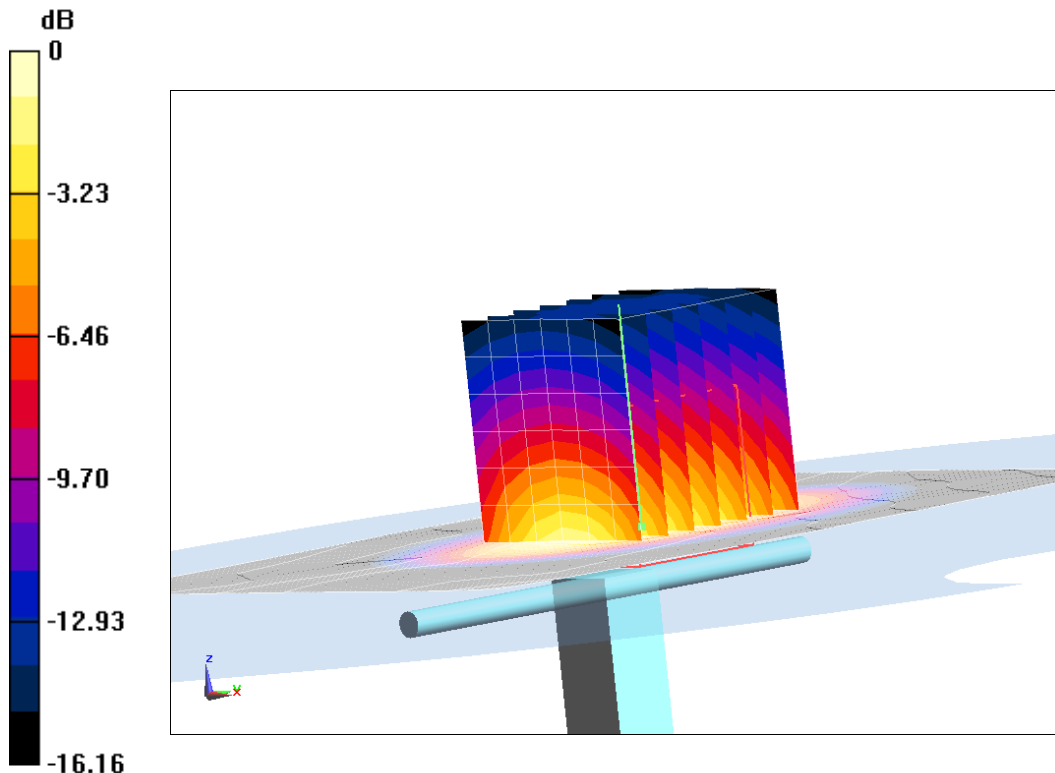
System Validation /Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value =106.74 V/m; Power Drift = -0.02 dB

Peak SAR (extrapolated) = 18.16 W/kg

SAR(1 g) = 9.11 W/kg; SAR(10 g) = 4.94 W/kg

Maximum value of SAR (measured) = 14.32 W/kg



0 dB = 14.32 W/kg = 11.56 dB W/kg

Fig.B.17 validation 1750 MHz 250mW