

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

1900 Body Rear High

Date: 2015-8-20

Electronics: DAE4 Sn777

Medium: Body 1900 MHz

Medium parameters used: $f = 1910 \text{ MHz}$; $\sigma = 1.561 \text{ mho/m}$; $\epsilon_r = 54.028$; $\rho = 1000 \text{ kg/m}^3$

Ambient Temperature: 22.9°C Liquid Temperature: 22.5°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 (121x71x1): Interpolated grid: $dx=1.000 \text{ mm}$, $dy=1.000 \text{ mm}$

Maximum value of SAR (interpolated) = 0.674 W/kg

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

Reference Value = 8.322 V/m; Power Drift = 0.05 dB

Peak SAR (extrapolated) = 0.879 W/kg

SAR(1 g) = 0.511 W/kg; SAR(10 g) = 0.319 W/kg

Maximum value of SAR (measured) = 0.656 W/kg

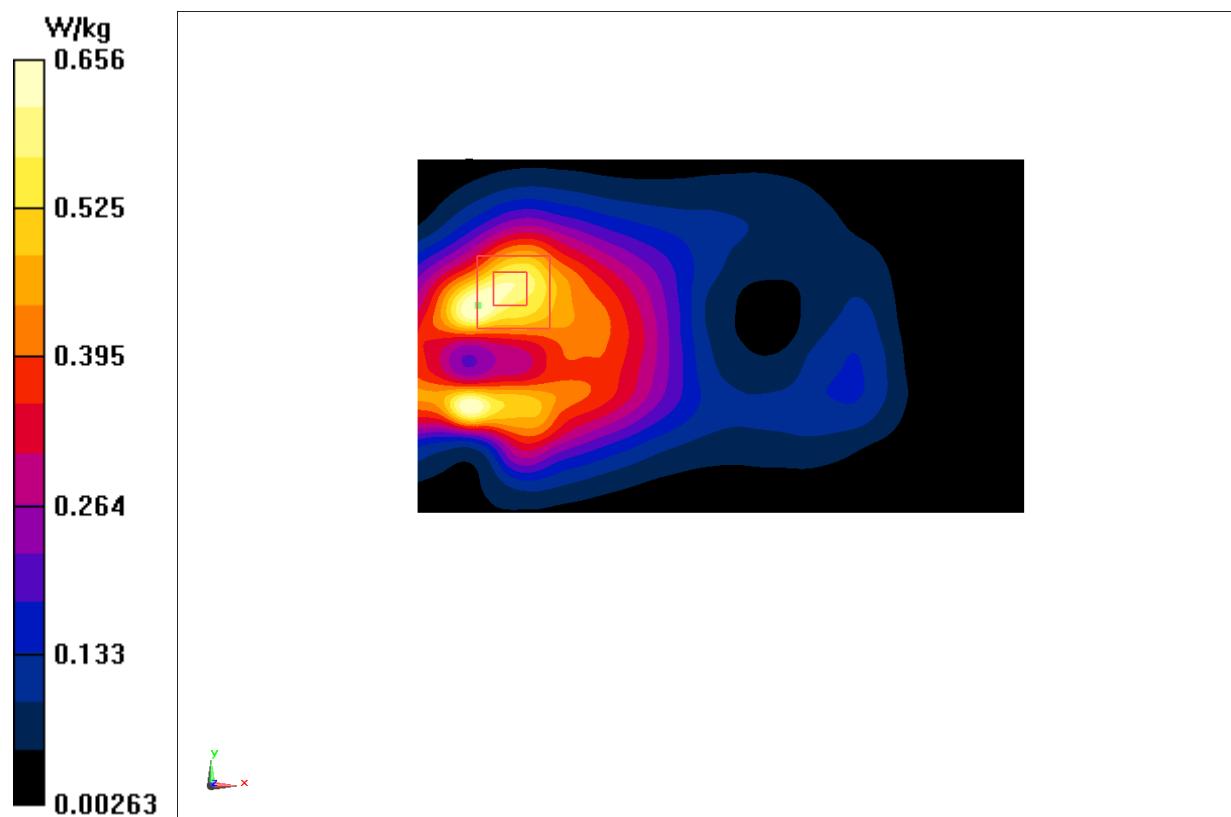


Fig.4 1900 MHz

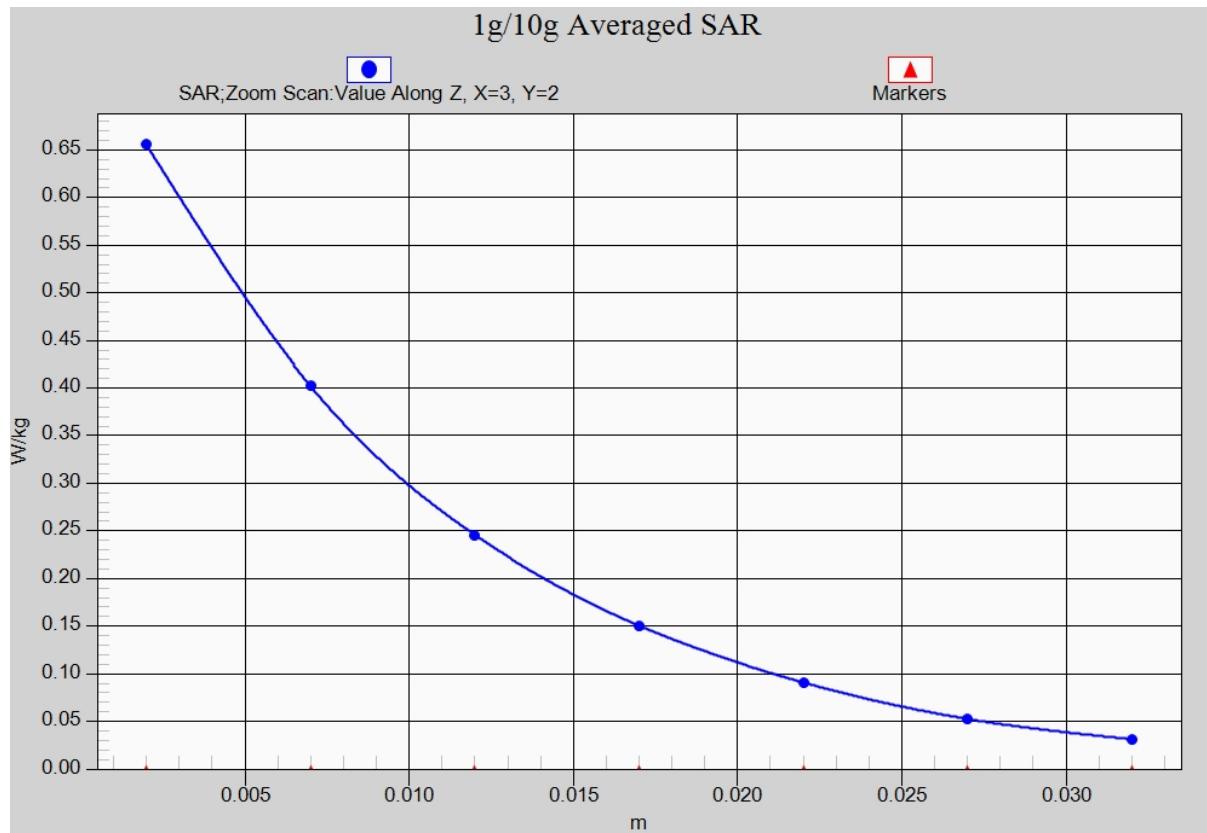


Fig.4-1 Z-Scan at power reference point (1900 MHz)

WCDMA 850 Right Cheek Middle

Date: 2015-8-19

Electronics: DAE4 Sn777

Medium: Head 850 MHz

Medium parameters used (interpolated): $f = 836.4$ MHz; $\sigma = 0.919$ mho/m; $\epsilon_r = 41.553$; $\rho = 1000$ kg/m³

Ambient Temperature: 22.9°C Liquid Temperature: 22.5°C

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

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

Area Scan (81x121x1): Interpolated grid: dx=1.000 mm, dy=1.000 mm

Maximum value of SAR (interpolated) = 0.377 W/kg

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

Reference Value = 6.770 V/m; Power Drift = 0.12dB

Peak SAR (extrapolated) = 0.473 W/kg

SAR(1 g) = 0.379 W/kg; SAR(10 g) = 0.292 W/kg

Maximum value of SAR (measured) = 0.428 W/kg

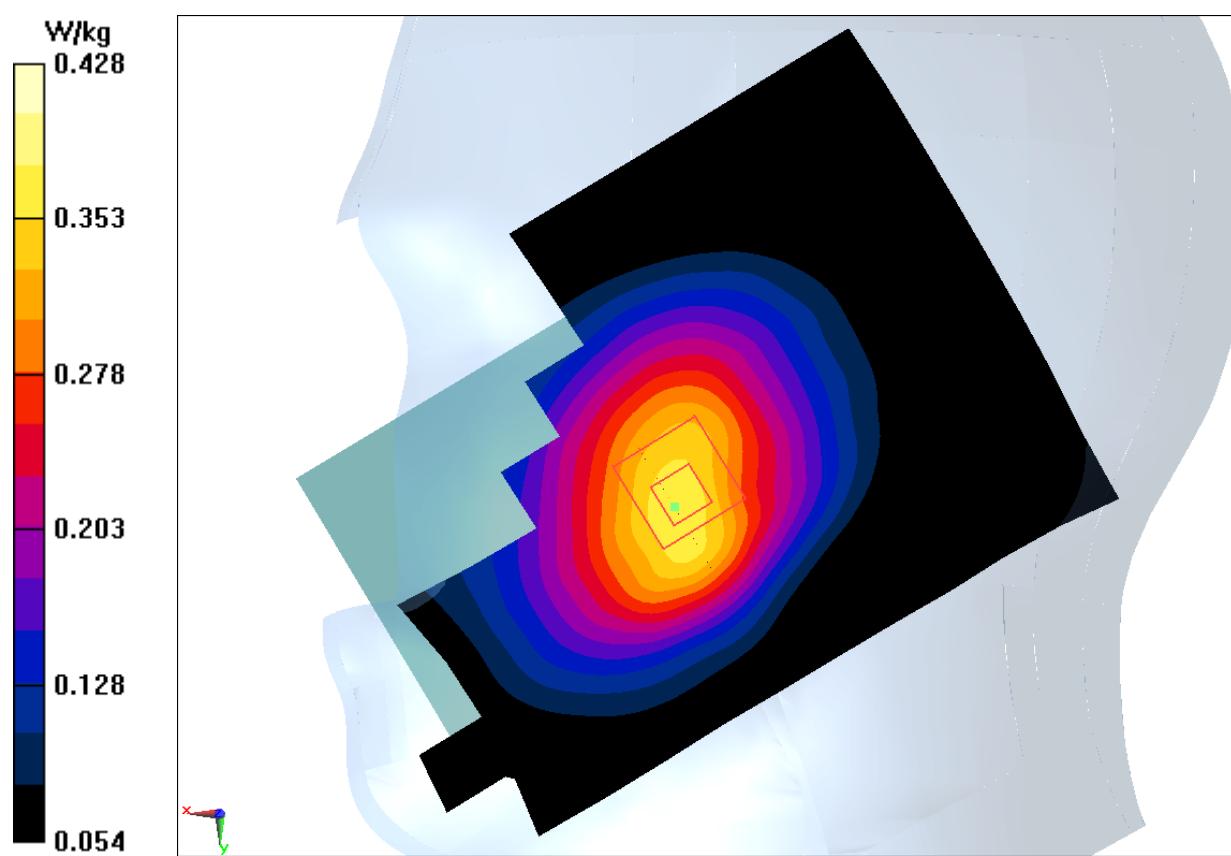


Fig.5 WCDMA 850

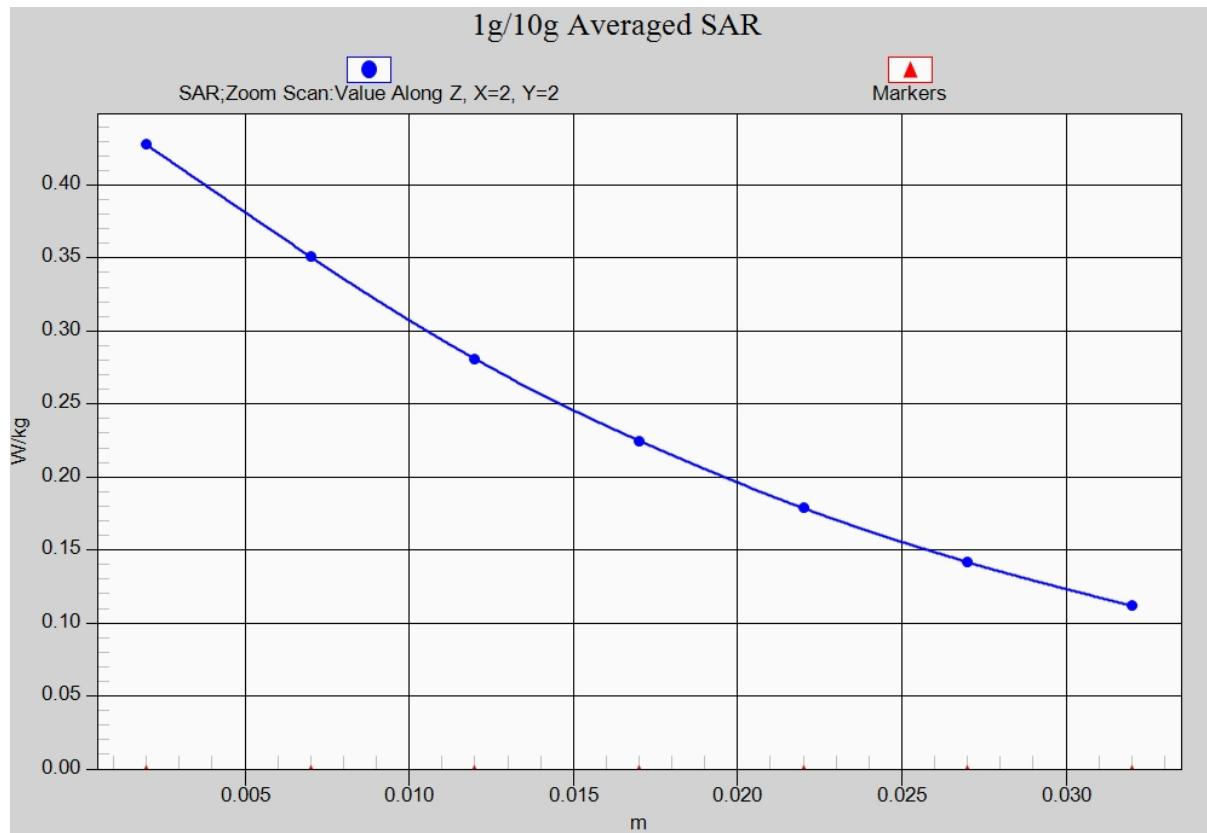


Fig. 5-1 Z-Scan at power reference point (WCDMA 850)

WCDMA 850 Body Rear Low

Date: 2015-10-18

Electronics: DAE4 Sn777

Medium: Body 850 MHz

Medium parameters used (interpolated): $f = 826.4$ MHz; $\sigma = 0.962$ mho/m; $\epsilon_r = 56.053$; $\rho = 1000$ kg/m³

Ambient Temperature: 22.9°C Liquid Temperature: 22.5°C

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

Probe: EX3DV4 - SN3617 ConvF(9.71, 9.71, 9.71)

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

Maximum value of SAR (interpolated) = 0.740 W/kg

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

Reference Value = 25.17 V/m; Power Drift = 0.00 dB

Peak SAR (extrapolated) = 0.791 W/kg

SAR(1 g) = 0.632 W/kg; SAR(10 g) = 0.484 W/kg

Maximum value of SAR (measured) = 0.719 W/kg

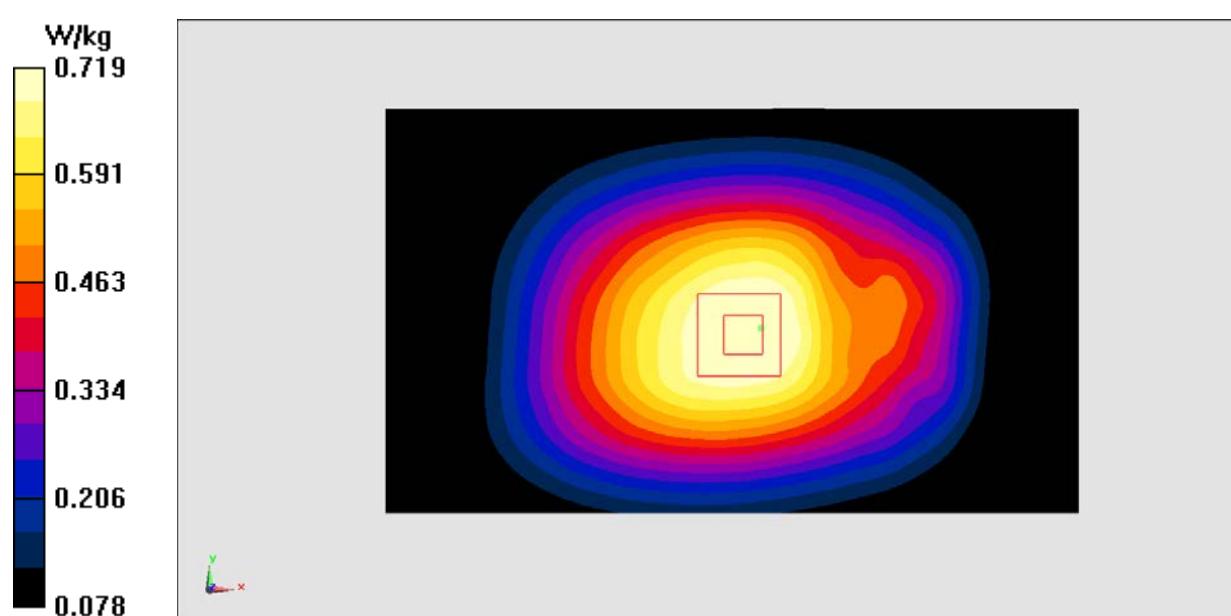


Fig.6 WCDMA 850

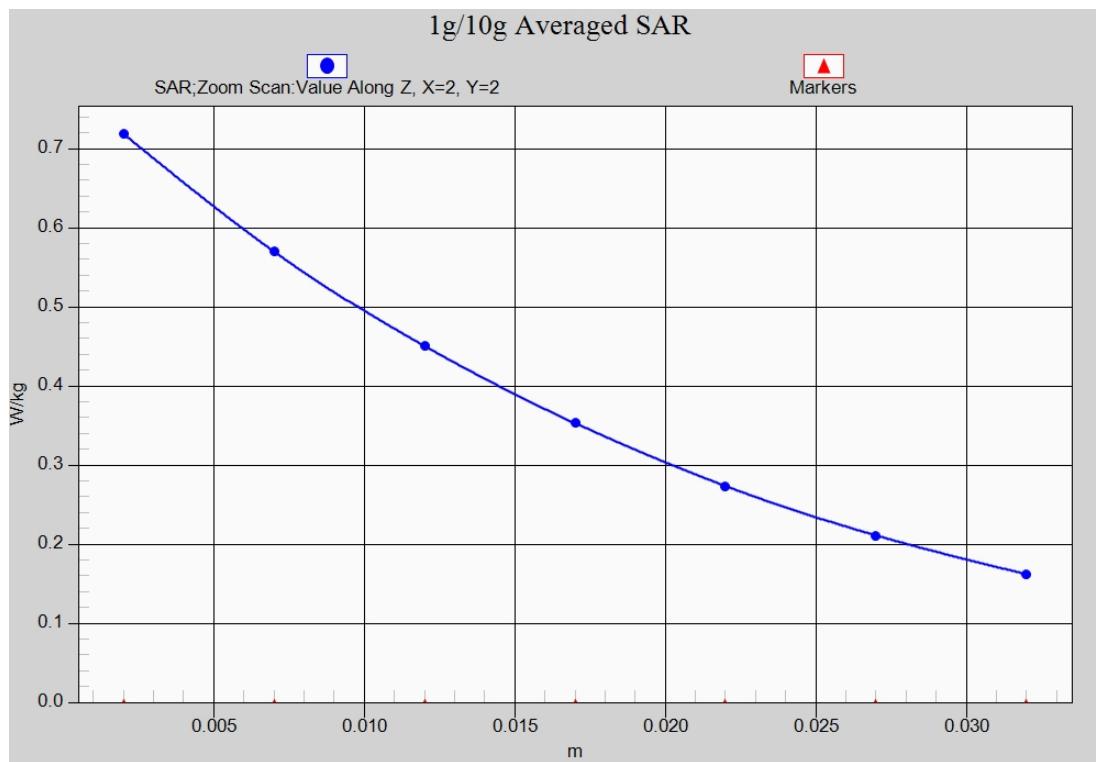


Fig. 6-1 Z-Scan at power reference point (WCDMA850)

WCDMA 1900 Left Cheek Low

Date: 2015-8-20

Electronics: DAE4 Sn777

Medium: Head 1900 MHz

Medium parameters used (interpolated): $f = 1852.4$ MHz; $\sigma = 1.385$ mho/m; $\epsilon_r = 39.995$; $\rho = 1000$ kg/m³

Ambient Temperature: 22.9°C Liquid Temperature: 22.5°C

Communication System: WCDMA 1900 Frequency: 1852.4 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) = 0.656 W/kg

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

Reference Value = 9.811 V/m; Power Drift = 0.08 dB

Peak SAR (extrapolated) = 0.785 W/kg

SAR(1 g) = 0.533 W/kg; SAR(10 g) = 0.331 W/kg

Maximum value of SAR (measured) = 0.682 W/kg

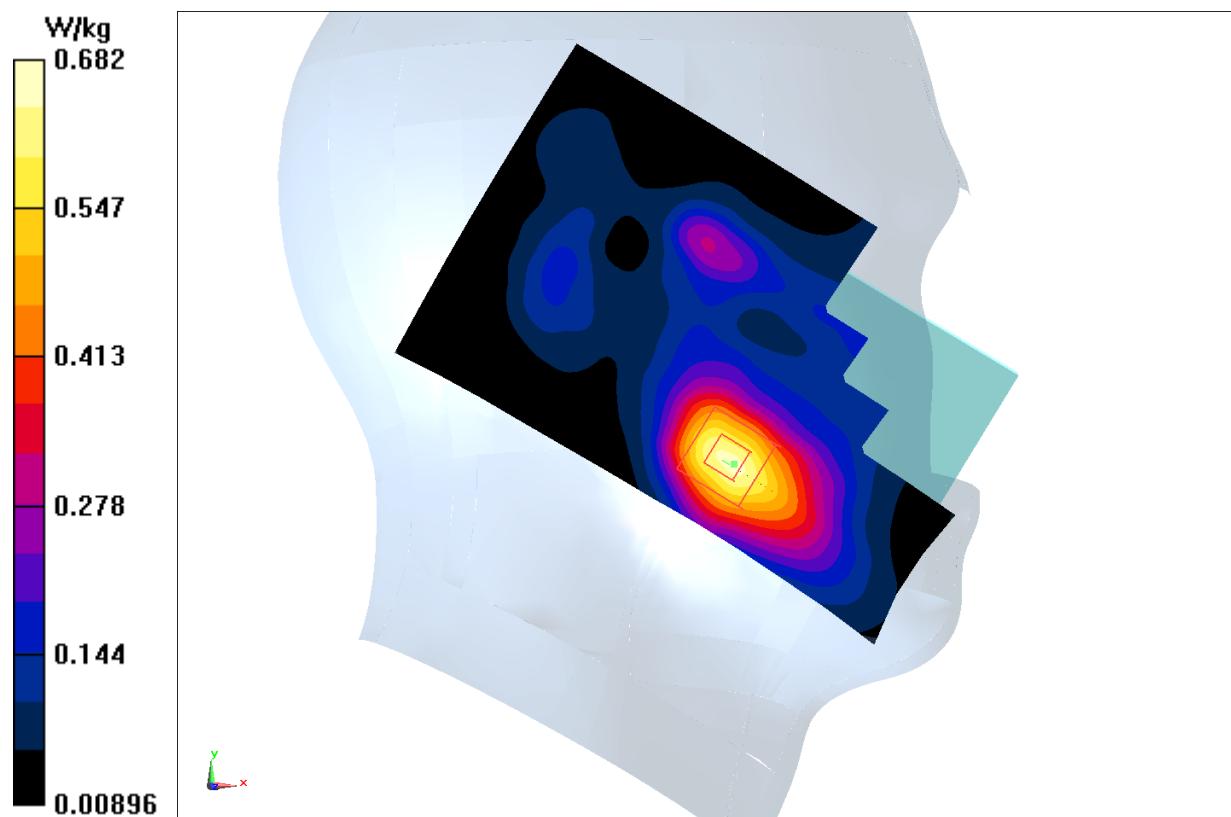


Fig.7 WCDMA1900

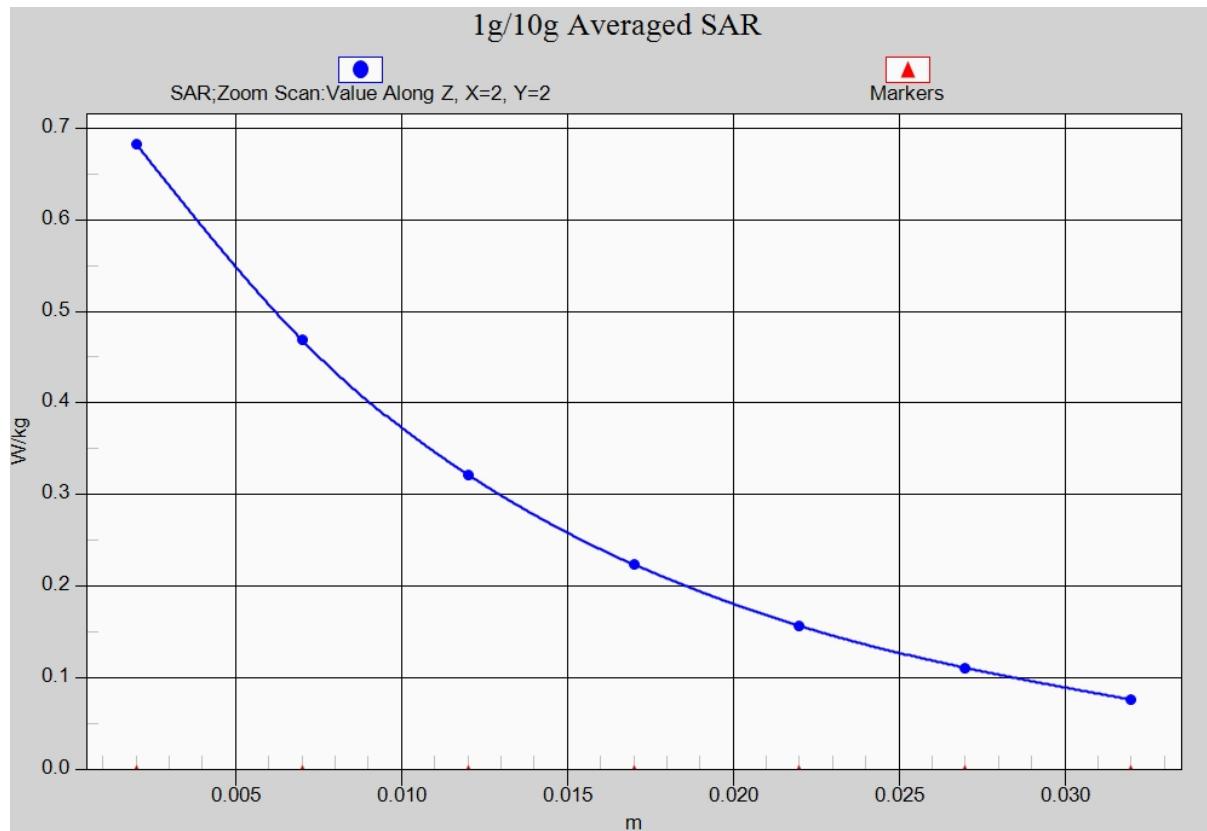


Fig. 7-1 Z-Scan at power reference point (WCDMA1900)

WCDMA 1900 Body Rear Middle

Date: 2015-10-20

Electronics: DAE4 Sn777

Medium: Body 1900 MHz

Medium parameters used: $f = 1880$ MHz; $\sigma = 1.467$ mho/m; $\epsilon_r = 52.574$; $\rho = 1000$ kg/m³

Ambient Temperature: 22.9°C Liquid Temperature: 22.5°C

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

Probe: EX3DV4 - SN3617 ConvF(7.74, 7.74, 7.74)

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 = 12.93 V/m; Power Drift = 0.08 dB

Peak SAR (extrapolated) = 1.39 W/kg

SAR(1 g) = 0.807 W/kg; SAR(10 g) = 0.459 W/kg

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

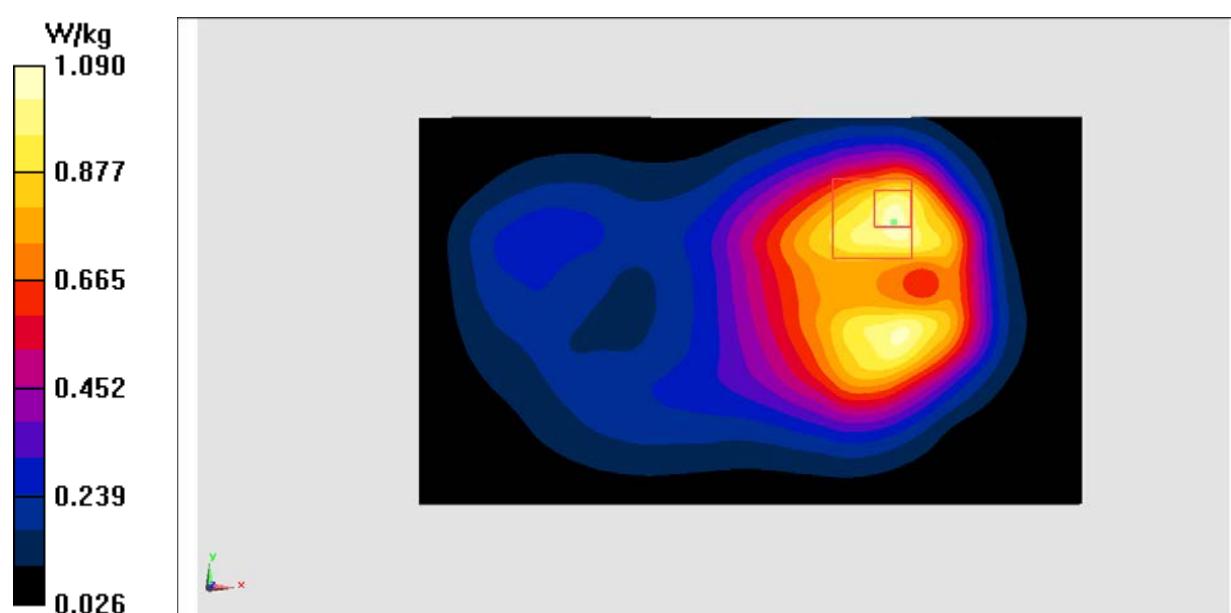


Fig.8 WCDMA1900

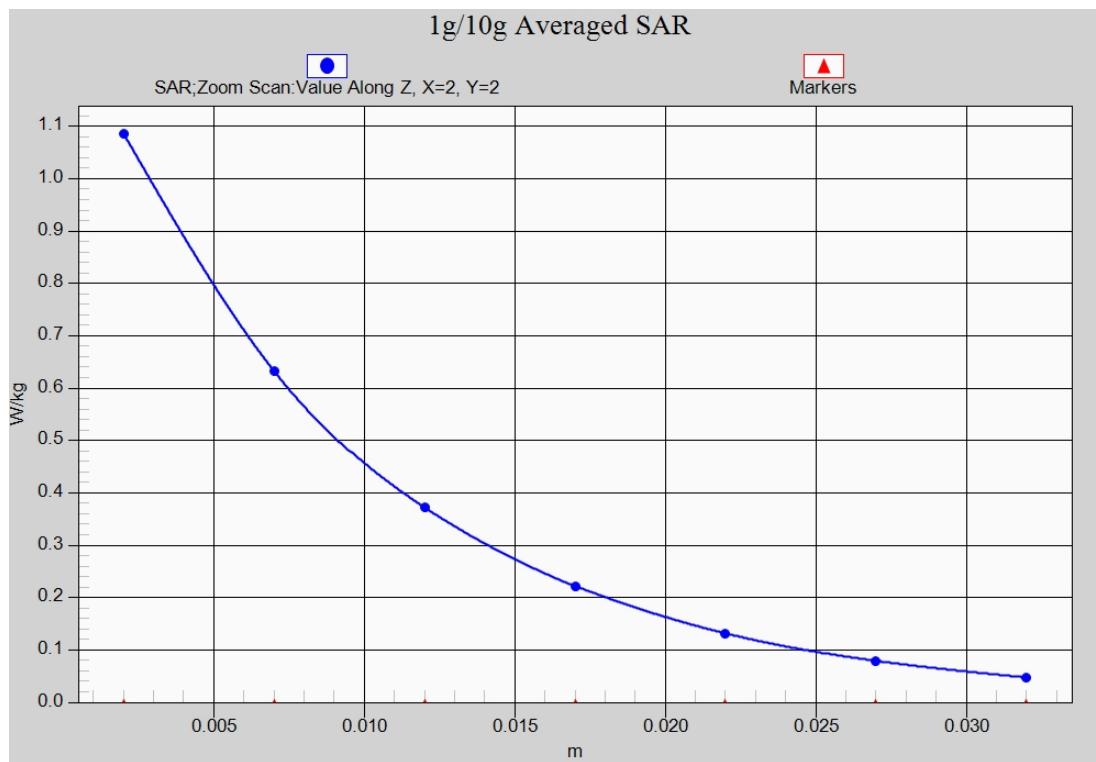


Fig. 8-1 Z-Scan at power reference point (WCDMA1900)

LTE Band2 Left Cheek High with QPSK_20M_1RB_Low

Date: 2015-8-20

Electronics: DAE4 Sn777

Medium: Head 1900 MHz

Medium parameters used: $f = 1900 \text{ MHz}$; $\sigma = 1.427 \text{ mho/m}$; $\epsilon_r = 39.78$; $\rho = 1000 \text{ kg/m}^3$ Ambient Temperature: 22.9°C Liquid Temperature: 22.5°C

Communication System: LTE Band2 Frequency: 1900 MHz Duty Cycle: 1:1

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

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

Maximum value of SAR (interpolated) = 0.533 W/kg

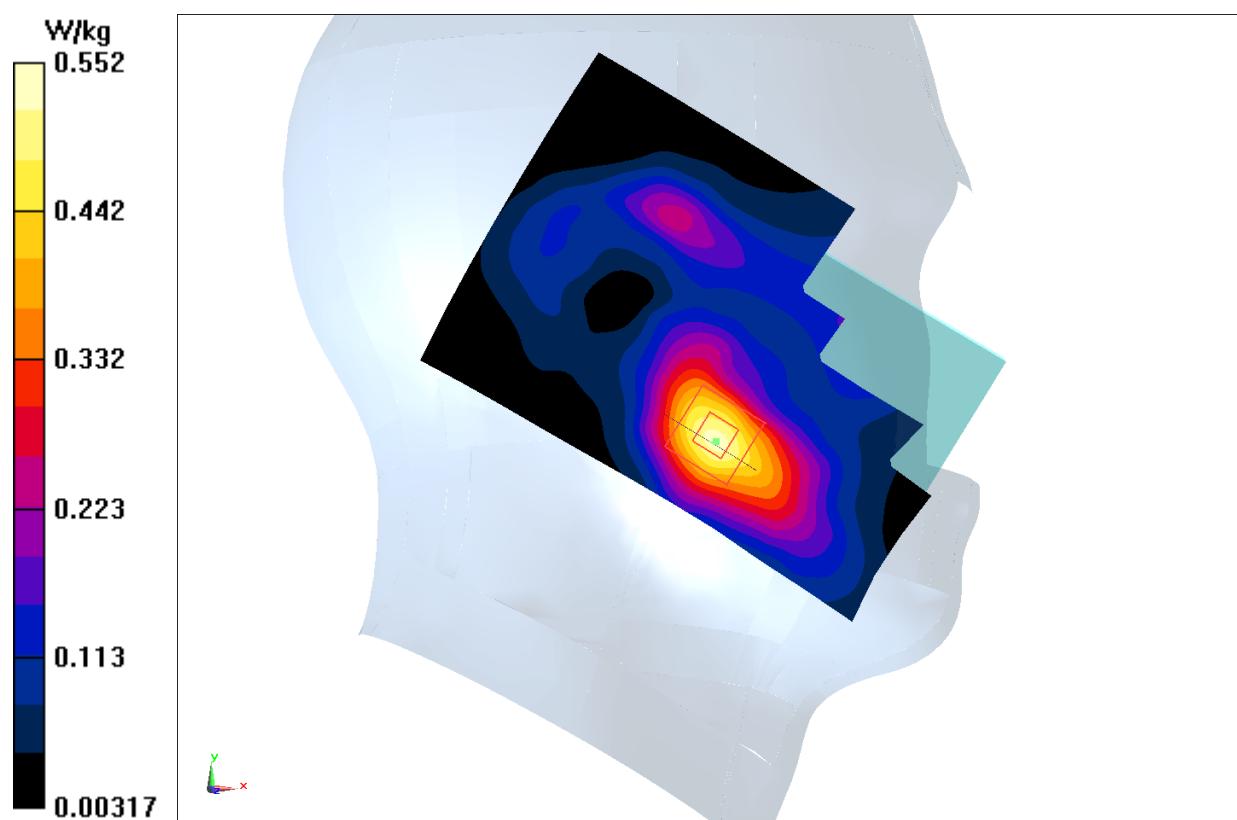
Zoom Scan (7x7x7)/Cube 0: Measurement grid: $dx=5\text{mm}$, $dy=5\text{mm}$, $dz=5\text{mm}$

Reference Value = 9.137 V/m; Power Drift = 0.09 dB

Peak SAR (extrapolated) = 0.646 W/kg

SAR(1 g) = 0.429 W/kg; SAR(10 g) = 0.259 W/kg

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

**Fig.9 LTE Band2**

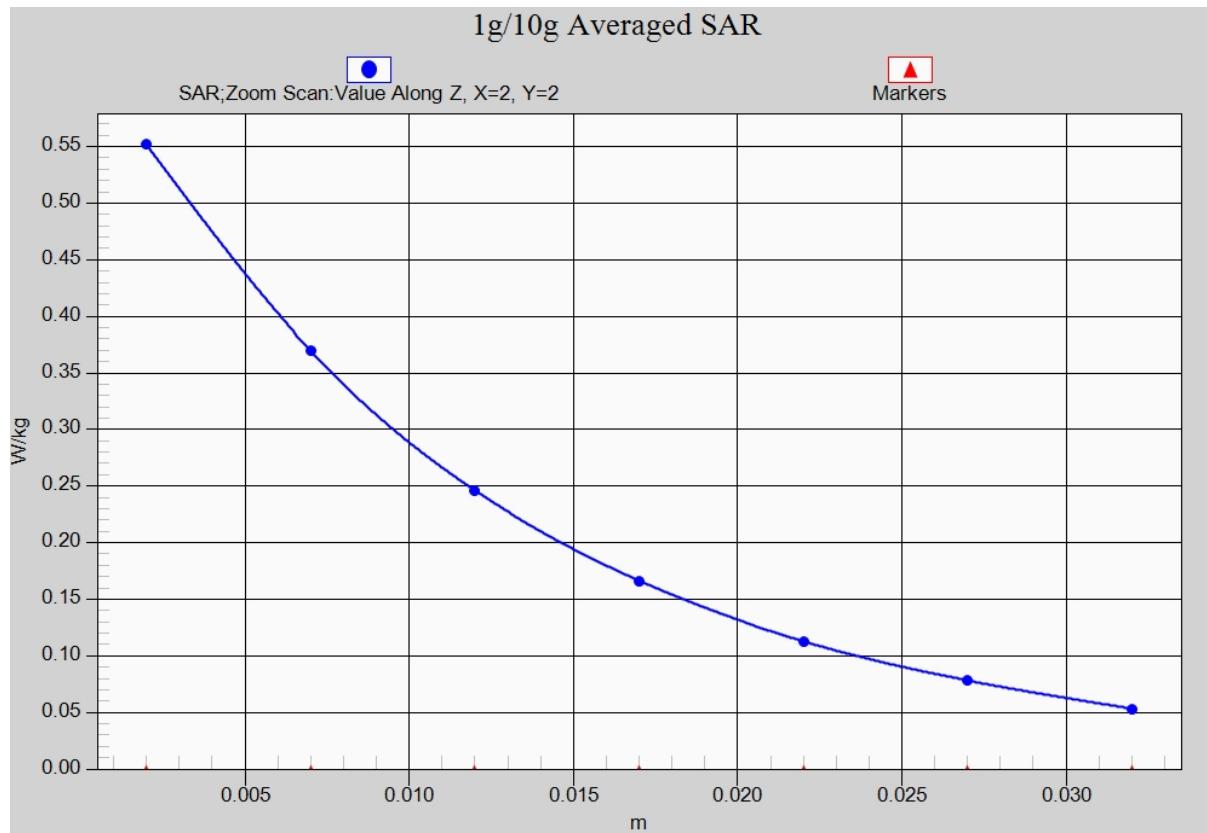


Fig. 9-1 Z-Scan at power reference point (LTE Band2)

LTE Band2 Body Rear High with QPSK_20M_1RB_Low

Date: 2015-8-20

Electronics: DAE4 Sn777

Medium: Body 1900 MHz

Medium parameters used: $f = 1900 \text{ MHz}$; $\sigma = 1.55 \text{ mho/m}$; $\epsilon_r = 54.05$; $\rho = 1000 \text{ kg/m}^3$ Ambient Temperature: 22.9°C Liquid Temperature: 22.5°C

Communication System: LTE Band4 Frequency: 1900 MHz Duty Cycle: 1:1

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

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

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

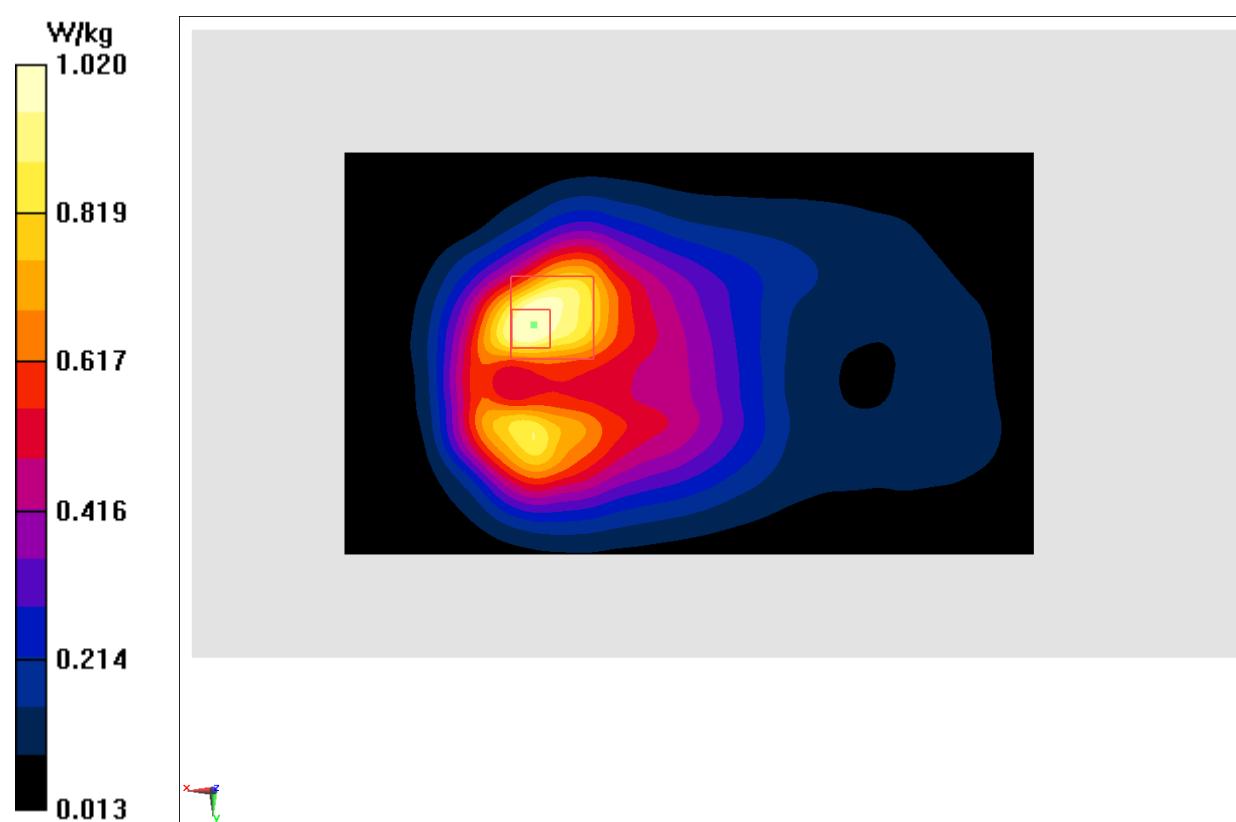
Zoom Scan (7x7x7)/Cube 0: Measurement grid: $dx=5\text{mm}$, $dy=5\text{mm}$, $dz=5\text{mm}$

Reference Value = 13.11 V/m; Power Drift = -0.02 dB

Peak SAR (extrapolated) = 1.32 W/kg

SAR(1 g) = 0.760 W/kg; SAR(10 g) = 0.458 W/kg

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

**Fig.10 LTE Band2**

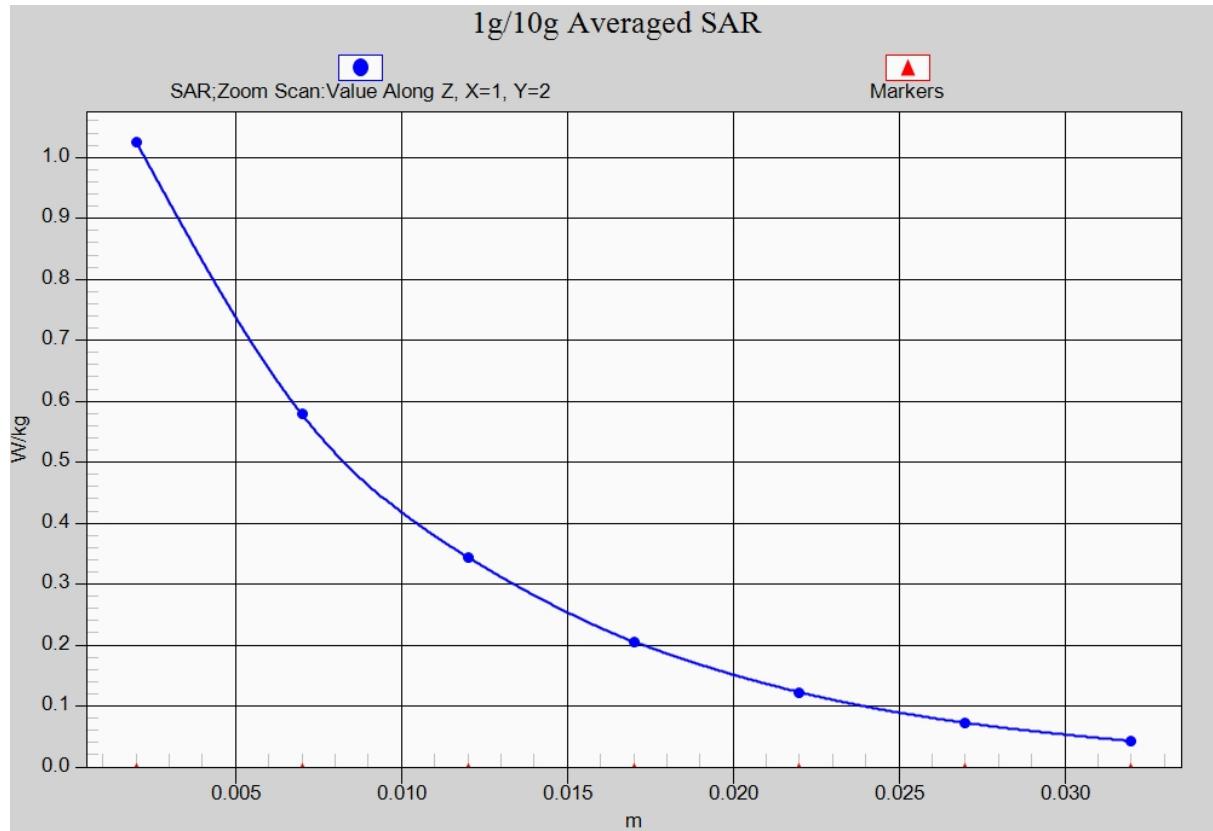


Fig. 10-1 Z-Scan at power reference point (LTE Band2)

LTE Band4 Left Cheek High with QPSK_20M_1RB_Middle

Date: 2015-8-21

Electronics: DAE4 Sn777

Medium: Head 1750 MHz

Medium parameters used: $f = 1745$ MHz; $\sigma = 1.41$ mho/m; $\epsilon_r = 40.567$; $\rho = 1000$ kg/m 3

Ambient Temperature: 22.9°C Liquid Temperature: 22.5°C

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

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

Area Scan (61x111x1): Interpolated grid: dx=1.000 mm, dy=1.000 mm

Maximum value of SAR (interpolated) = 0.519 W/kg

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

Reference Value = 9.445 V/m; Power Drift = -0.05 dB

Peak SAR (extrapolated) = 0.675 W/kg

SAR(1 g) = 0.435 W/kg; SAR(10 g) = 0.266 W/kg

Maximum value of SAR (measured) = 0.478 W/kg

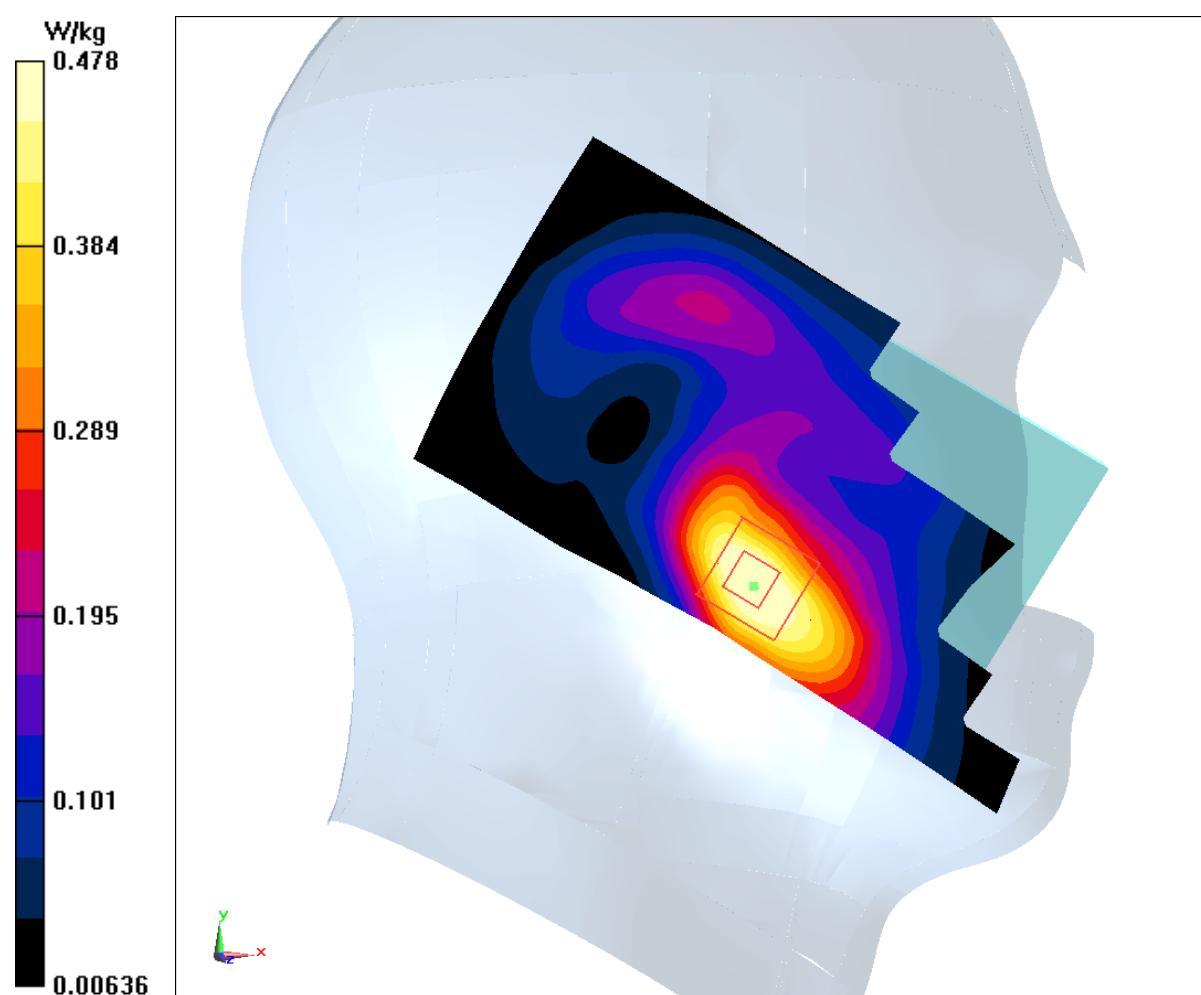


Fig.11 LTE Band4

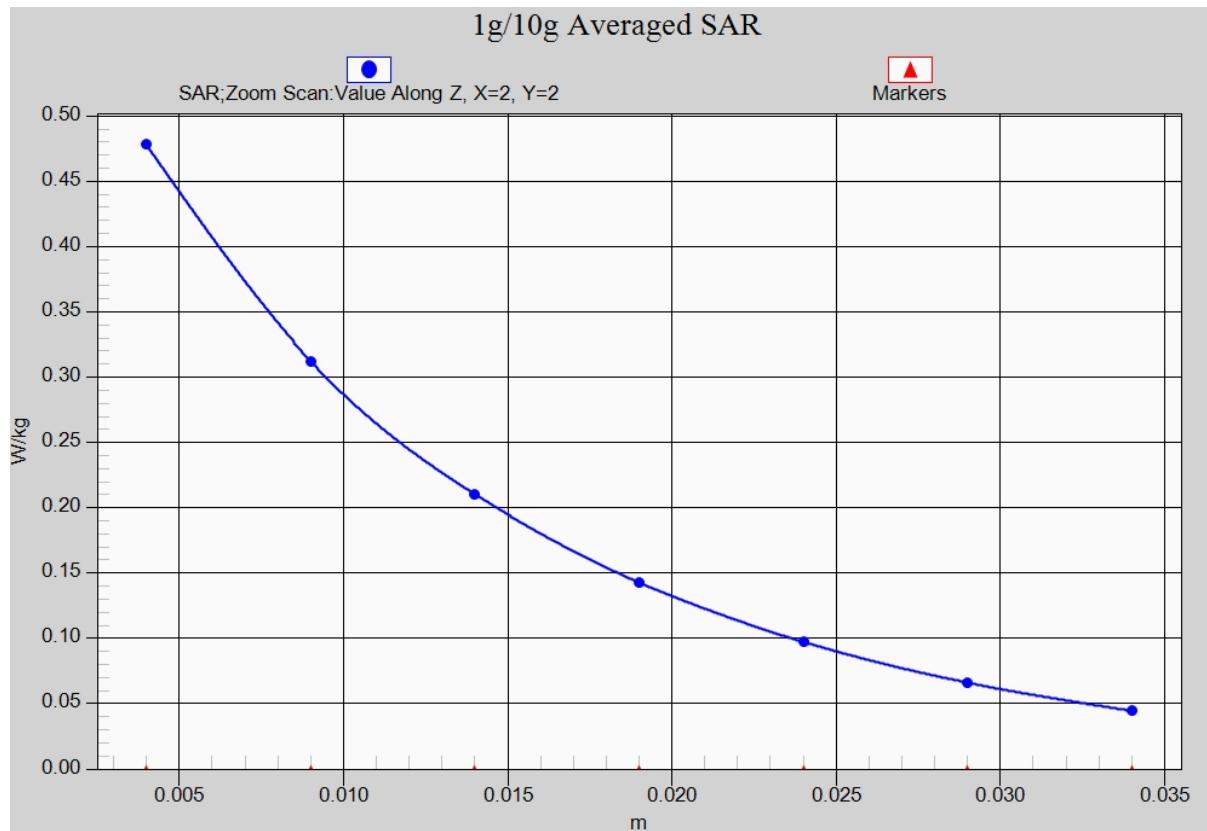


Fig. 11-1 Z-Scan at power reference point (LTE Band4)

LTE Band4 Body Rear High with QPSK_20M_1RB_Middle

Date: 2015-8-21

Electronics: DAE4 Sn777

Medium: Body 1750 MHz

Medium parameters used: $f = 1745$ MHz; $\sigma = 1.484$ mho/m; $\epsilon_r = 52.432$; $\rho = 1000$ kg/m³

Ambient Temperature: 22.9°C Liquid Temperature: 22.5°C

Communication System: LTE Band4 Frequency: 1745 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) = 0.944 W/kg

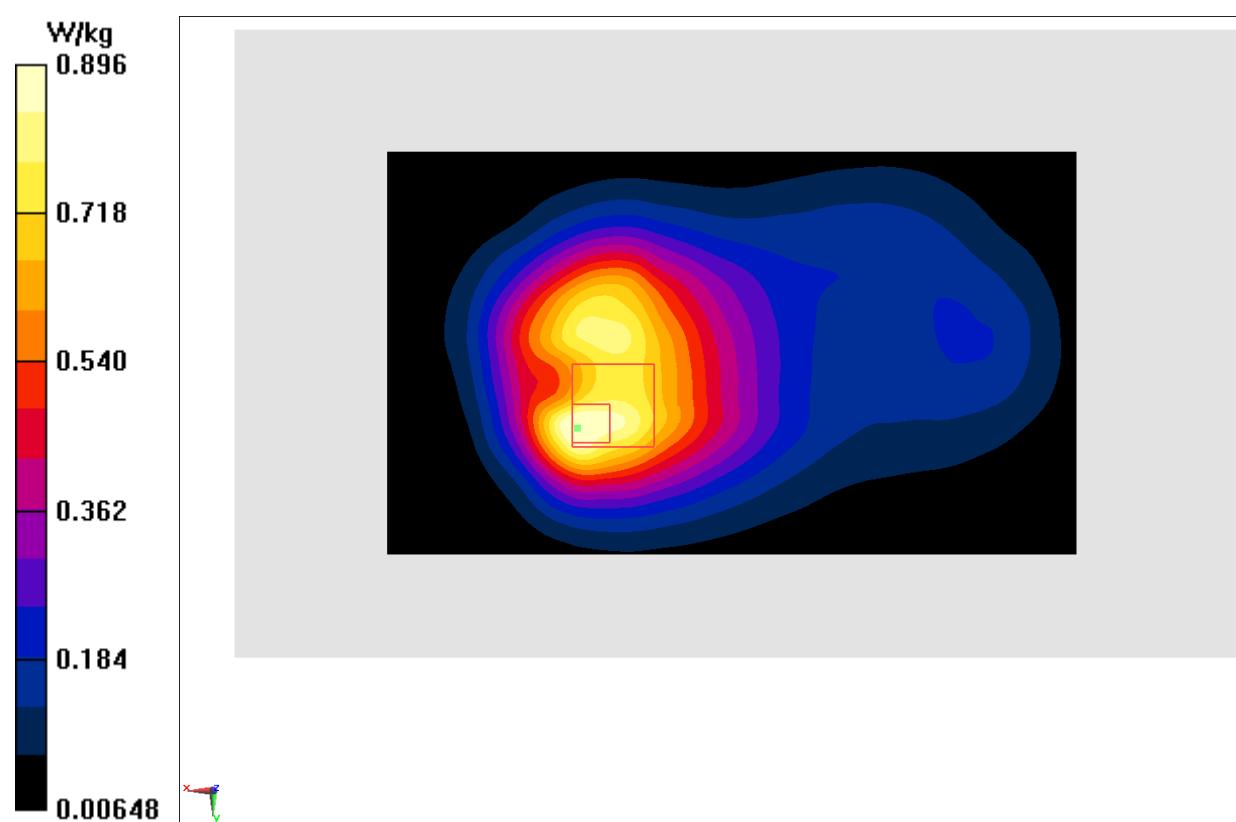
Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 12.55 V/m; Power Drift = 0.03 dB

Peak SAR (extrapolated) = 1.11 W/kg

SAR(1 g) = 0.678 W/kg; SAR(10 g) = 0.417 W/kg

Maximum value of SAR (measured) = 0.896 W/kg

**Fig.12 LTE Band4**

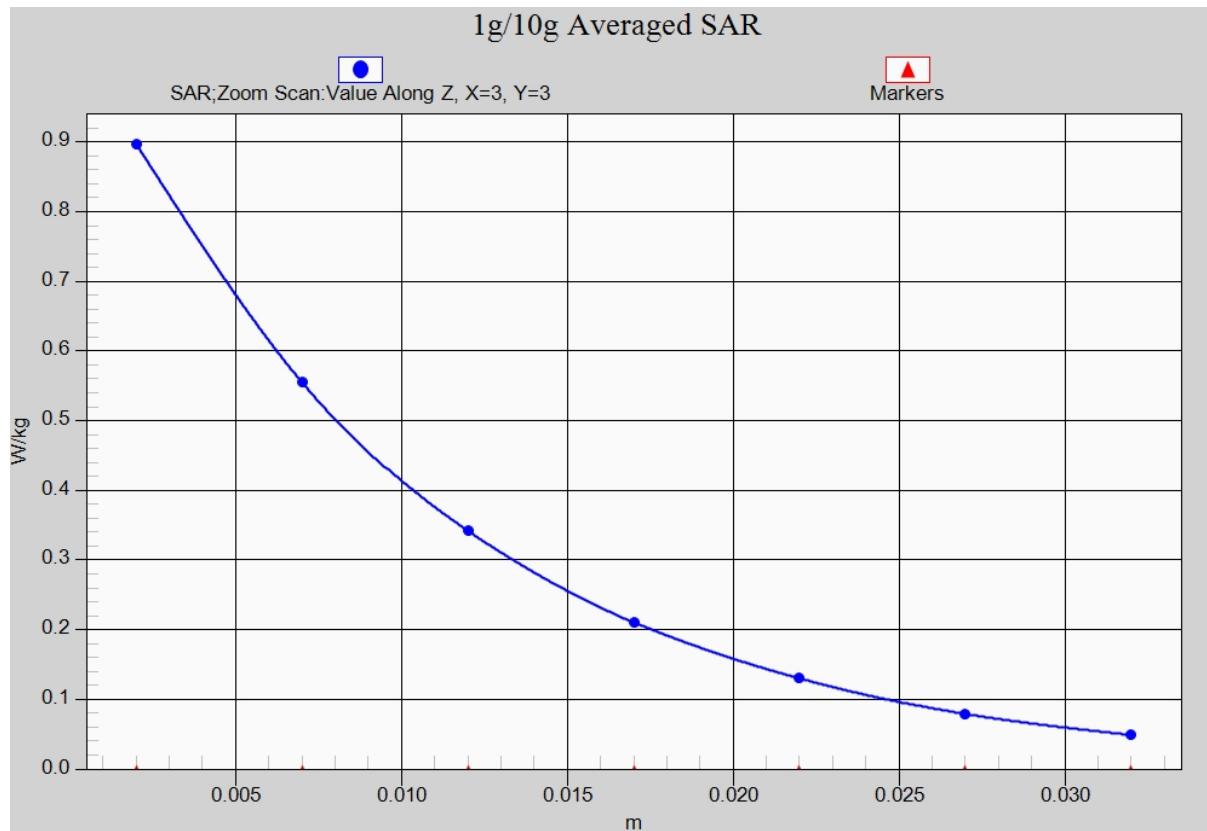


Fig. 12-1 Z-Scan at power reference point (LTE Band4)

LTE Band7 Left Cheek High with QPSK_20M_1RB_Low

Date: 2015-10-22

Electronics: DAE4 Sn777

Medium: Head 2600 MHz

Medium parameters used: $f = 2560$ MHz; $\sigma = 1.904$ mho/m; $\epsilon_r = 38.442$; $\rho = 1000$ kg/m³

Ambient Temperature: 22.9°C Liquid Temperature: 22.5°C

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

Probe: EX3DV4 - SN3617 ConvF(7.21, 7.21, 7.21)

Area Scan (81x141x1): Interpolated grid: dx=1.000 mm, dy=1.000 mm

Maximum value of SAR (interpolated) = 1.17 W/kg

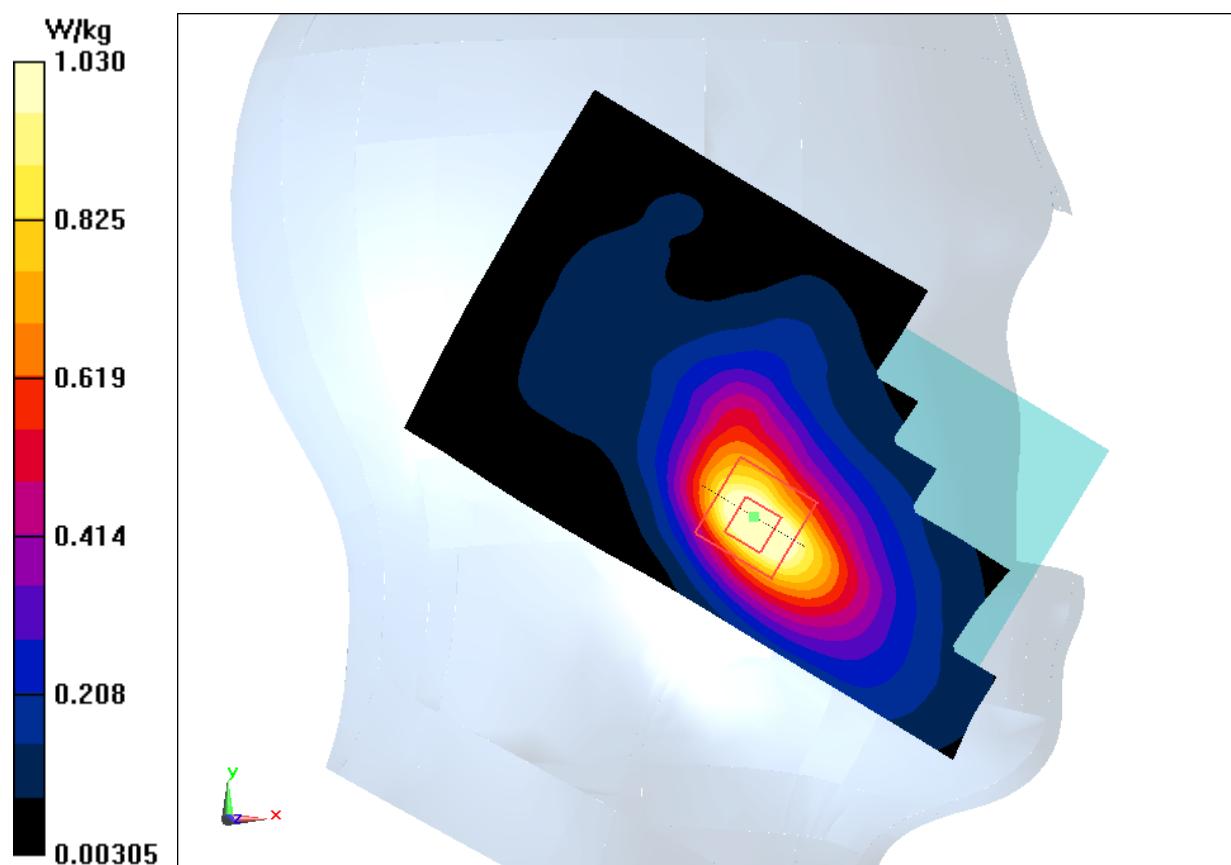
Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 7.135 V/m; Power Drift = 0.16 dB

Peak SAR (extrapolated) = 1.84 W/kg

SAR(1 g) = 0.956 W/kg; SAR(10 g) = 0.503 W/kg

Maximum value of SAR (measured) = 1.03 W/kg

**Fig.13 LTE Band7**

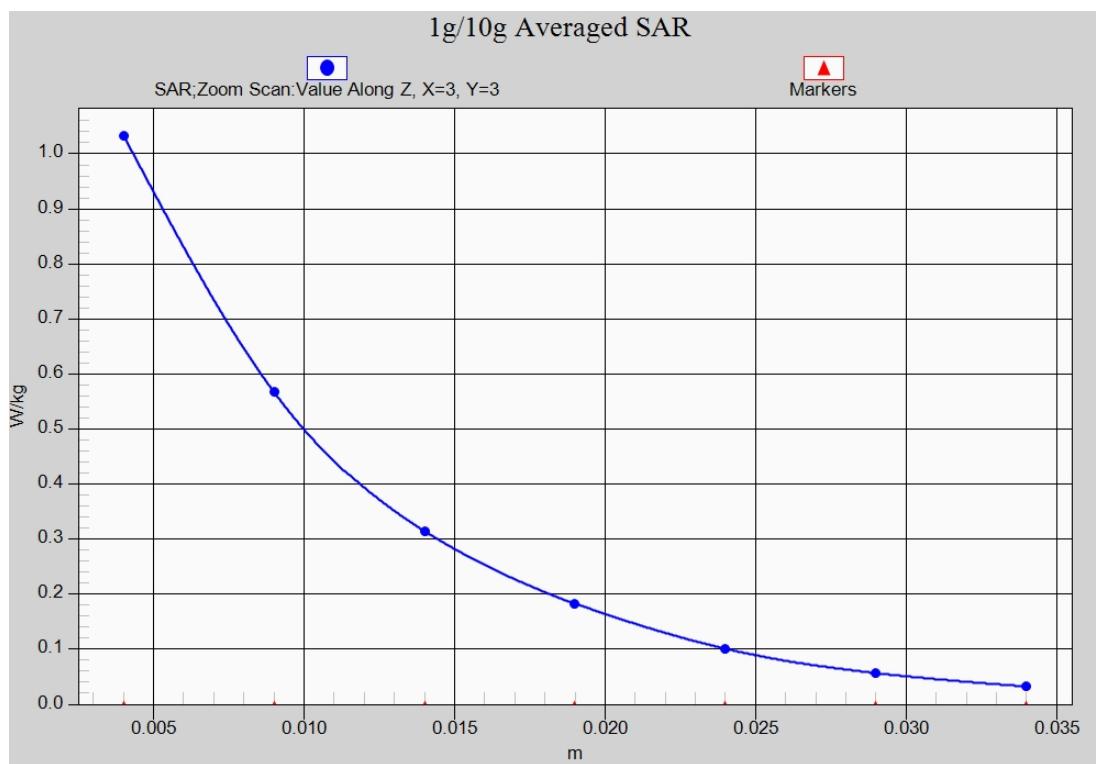


Fig. 13-1 Z-Scan at power reference point (LTE Band7)

LTE Band7 Body Rear High with QPSK_20M_1RB_Low

Date: 2015-10-22

Electronics: DAE4 Sn777

Medium: Body 2600 MHz

Medium parameters used: $f = 2560$ MHz; $\sigma = 2.004$ mho/m; $\epsilon_r = 51.052$; $\rho = 1000$ kg/m³

Ambient Temperature: 22.9°C Liquid Temperature: 22.5°C

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

Probe: EX3DV4 - SN3617 ConvF(7.20, 7.20, 7.20)

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

Maximum value of SAR (interpolated) = 1.51 W/kg

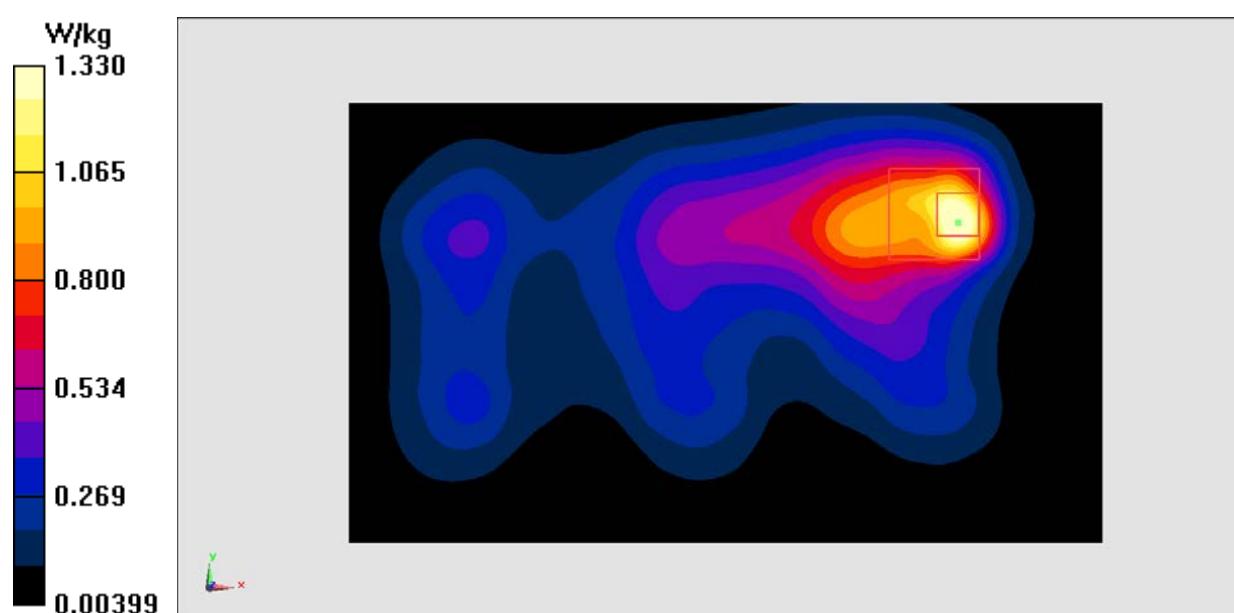
Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 11.41 V/m; Power Drift = 0.12 dB

Peak SAR (extrapolated) = 1.81 W/kg

SAR(1 g) = 0.841 W/kg; SAR(10 g) = 0.396 W/kg

Maximum value of SAR (measured) = 1.33 W/kg

**Fig.14 LTE Band7**

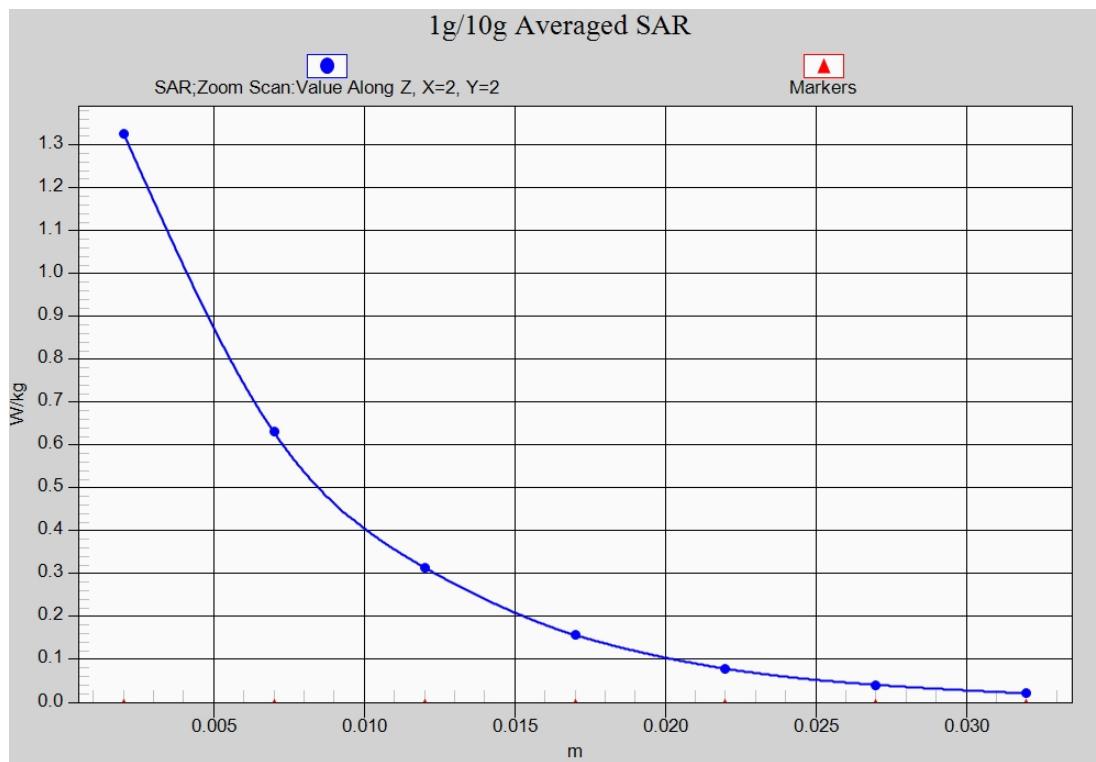


Fig. 14-1 Z-Scan at power reference point (LTE Band7)

Wifi 802.11b Left Cheek Channel 6

Date: 2015-10-21

Electronics: DAE4 Sn777

Medium: Head 2450 MHz

Medium parameters used (interpolated): $f = 2437$ MHz; $\sigma = 1.843$ mho/m; $\epsilon_r = 40.022$; $\rho = 1000$ kg/m³

Ambient Temperature: 22.9°C Liquid Temperature: 22.5°C

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

Probe: EX3DV4 - SN3617 ConvF(7.24, 7.24, 7.24)

Area Scan (91x151x1): Interpolated grid: dx=1.000 mm, dy=1.000 mm

Maximum value of SAR (interpolated) = 0.795 W/kg

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

Reference Value = 10.36 V/m; Power Drift = -0.12 dB

Peak SAR (extrapolated) = 1.39 W/kg

SAR(1 g) = 0.626 W/kg; SAR(10 g) = 0.289 W/kg

Maximum value of SAR (measured) = 0.836 W/kg

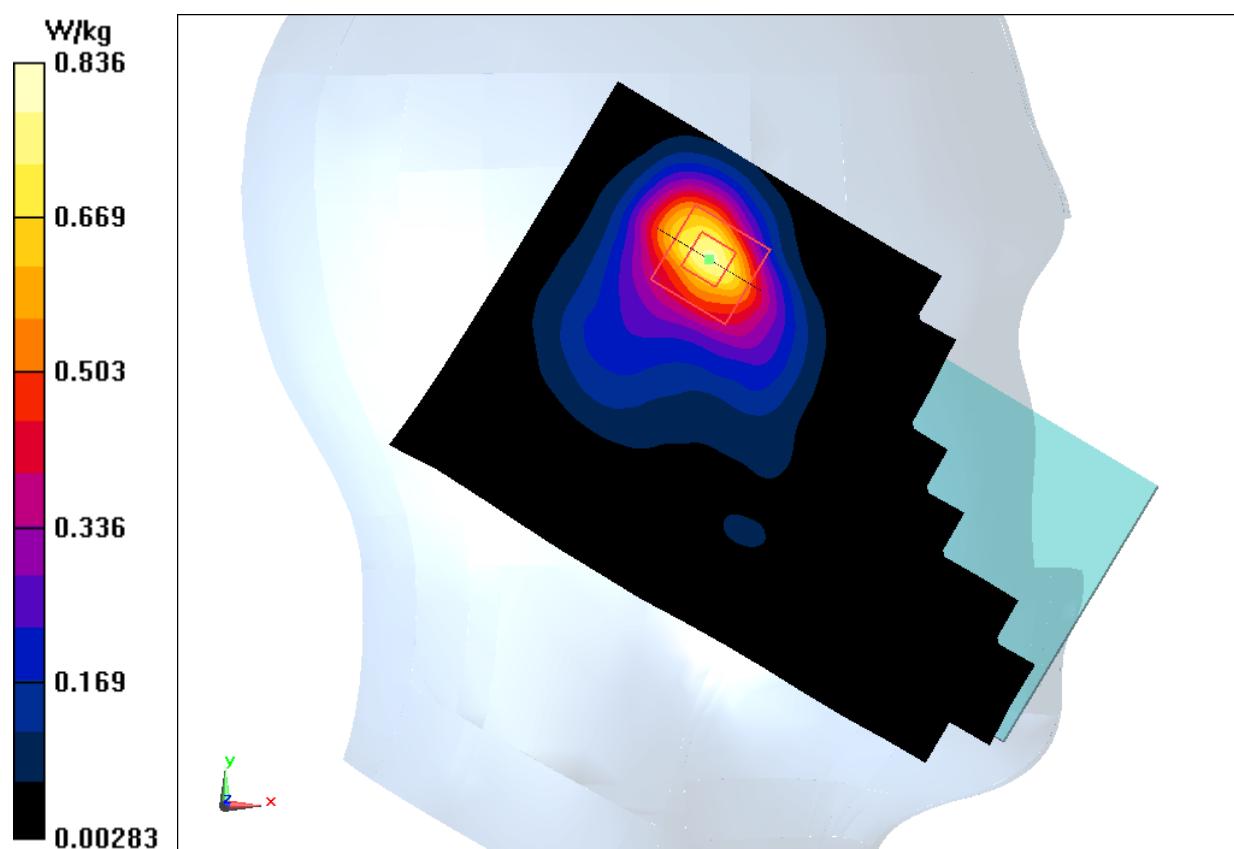


Fig.15 2450 MHz

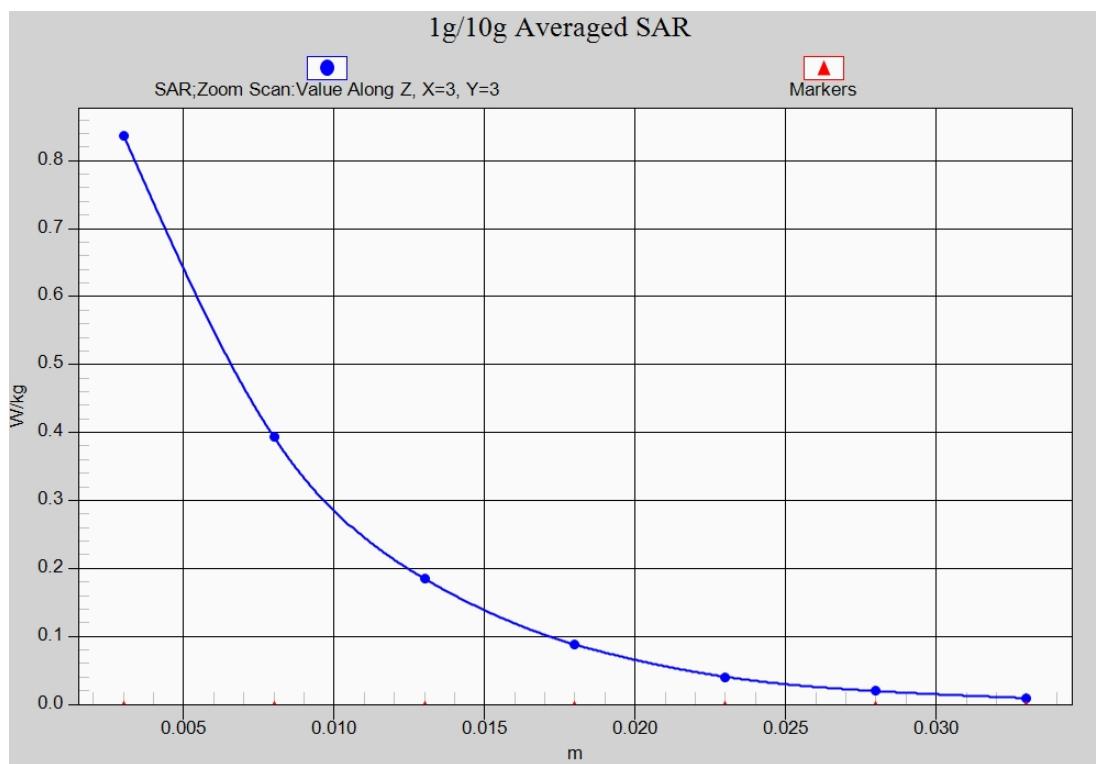


Fig. 15-1 Z-Scan at power reference point (2450 MHz)

Wifi 802.11b Body Top Channel 11

Date: 2015-8-23

Electronics: DAE4 Sn777

Medium: Body 2450 MHz

Medium parameters used (interpolated): $f = 2462$ MHz; $\sigma = 1.984$ mho/m; $\epsilon_r = 51.773$; $\rho = 1000$ kg/m³

Ambient Temperature: 22.9°C Liquid Temperature: 22.5°C

Communication System: WLan 2450 Frequency: 2462 MHz Duty Cycle: 1:1

Probe: EX3DV4 - SN3846 ConvF(6.90, 6.90, 6.90)

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 = 10.63 V/m; Power Drift = -0.12 dB

Peak SAR (extrapolated) = 0.499 W/kg

SAR(1 g) = 0.272 W/kg; SAR(10 g) = 0.144 W/kg

Maximum value of SAR (measured) = 0.303 W/kg

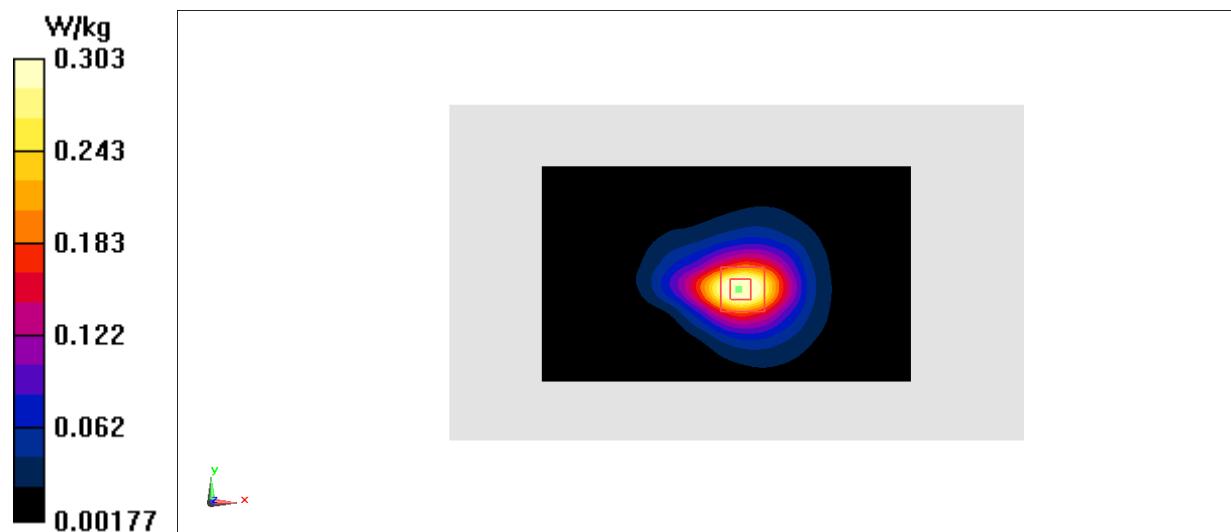


Fig.16 2450 MHz

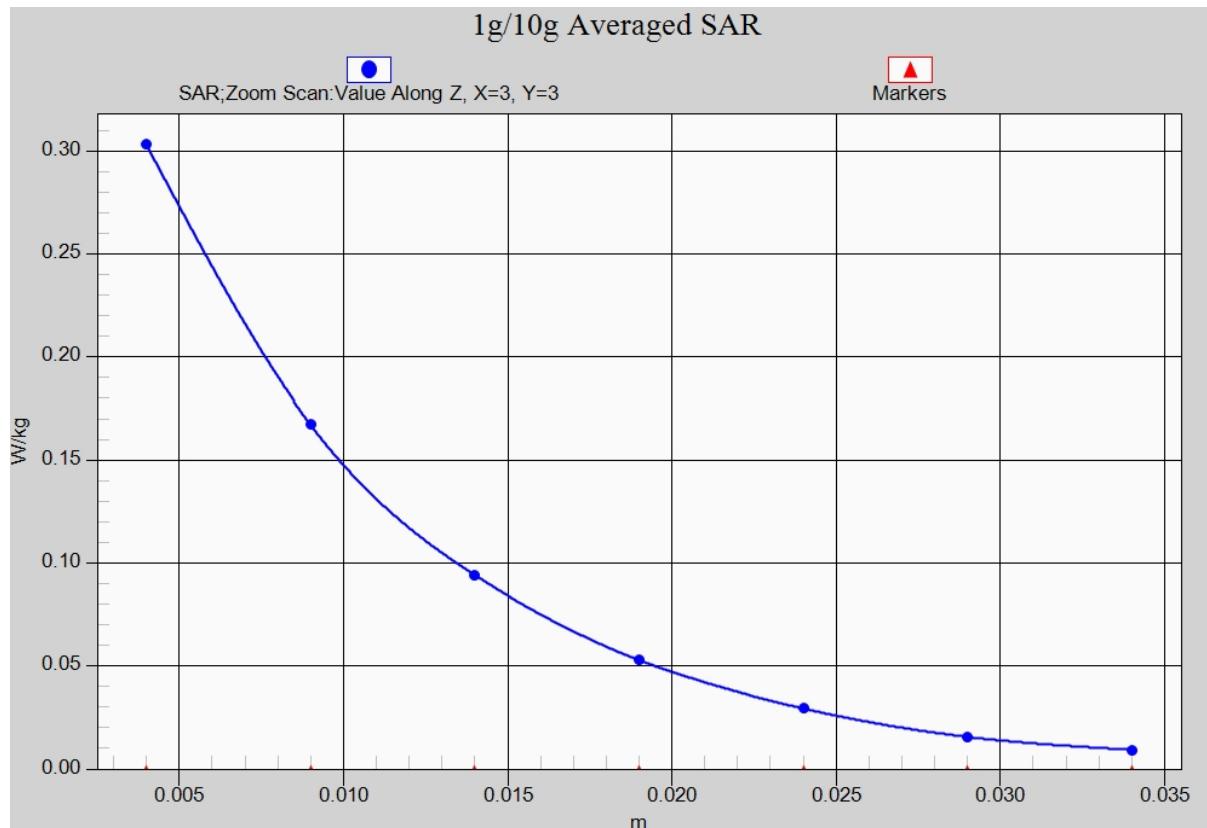


Fig. 16-1 Z-Scan at power reference point (2450 MHz)

WCDMA 1700 Left Cheek High

Date: 2015-10-19

Electronics: DAE4 Sn777

Medium: Head 1750 MHz

Medium parameters used (interpolated): $f = 1752.6$ MHz; $\sigma = 1.347$ mho/m; $\epsilon_r = 40.113$; $\rho = 1000$ kg/m³

Ambient Temperature: 22.9°C Liquid Temperature: 22.5°C

Communication System: WCDMA 1700 Frequency: 1752.6 MHz Duty Cycle: 1:1

Probe: EX3DV4 - SN3617 ConvF(8.34, 8.34, 8.34)

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

Maximum value of SAR (interpolated) = 0.587 W/kg

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

Reference Value = 11.01 V/m; Power Drift = 0.07 dB

Peak SAR (extrapolated) = 0.769 W/kg

SAR(1 g) = 0.491 W/kg; SAR(10 g) = 0.301 W/kg

Maximum value of SAR (measured) = 0.574 W/kg

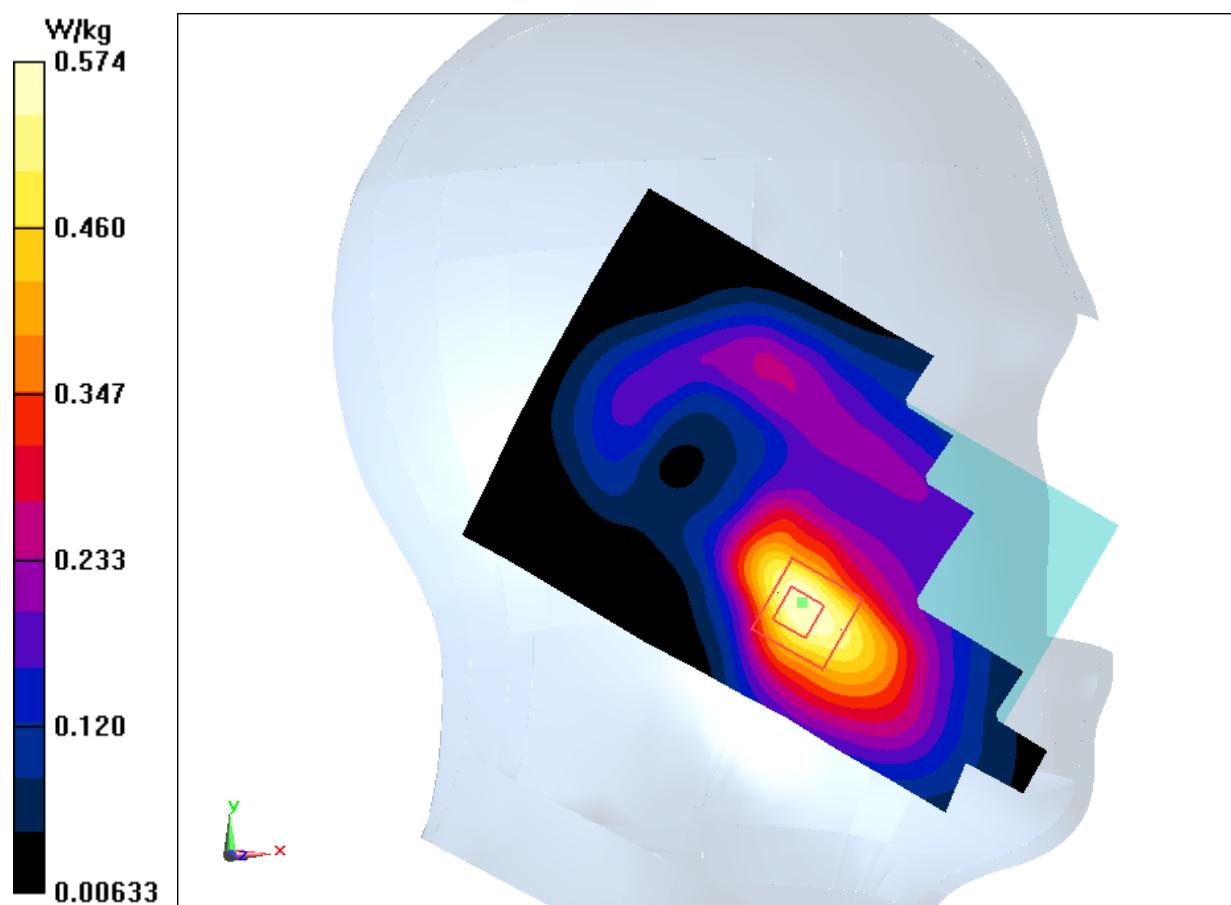


Fig.17 1700MHz

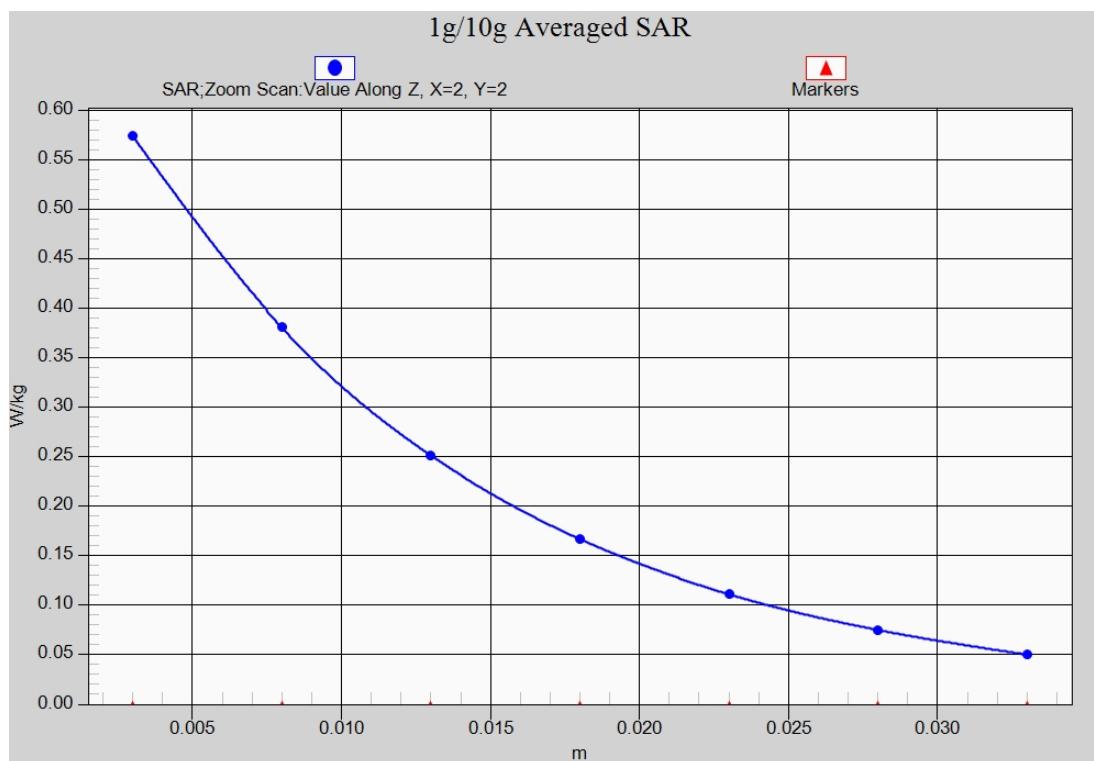


Fig. 17-1 Z-Scan at power reference point (1700 MHz)

WCDMA 1700 Body Rear Low

Date: 2015-10-19

Electronics: DAE4 Sn777

Medium: Body 1750 MHz

Medium parameters used (interpolated): $f = 1712.4$ MHz; $\sigma = 1.462$ mho/m; $\epsilon_r = 52.662$; $\rho = 1000$ kg/m³

Ambient Temperature: 22.9°C Liquid Temperature: 22.5°C

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

Probe: EX3DV4 - SN3617 ConvF(7.96, 7.96, 7.96)

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

Maximum value of SAR (interpolated) = 1.32 W/kg

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

Reference Value = 12.92 V/m; Power Drift = -0.01 dB

Peak SAR (extrapolated) = 1.56 W/kg

SAR(1 g) = 0.961 W/kg; SAR(10 g) = 0.578 W/kg

Maximum value of SAR (measured) = 1.21 W/kg

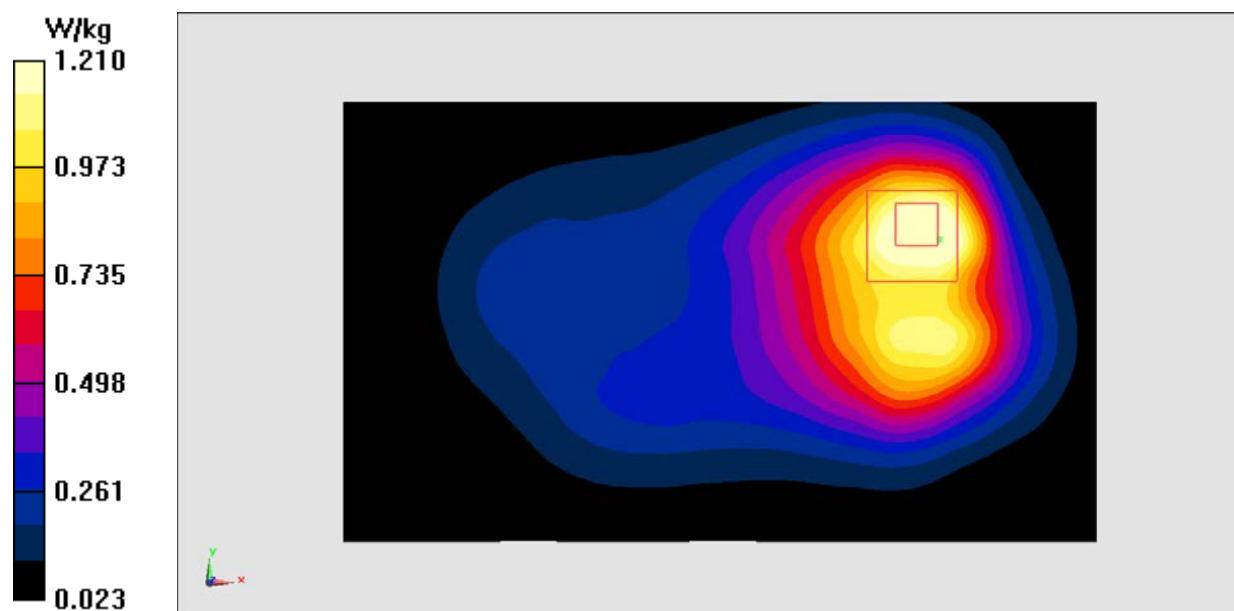


Fig.18 1700 MHz

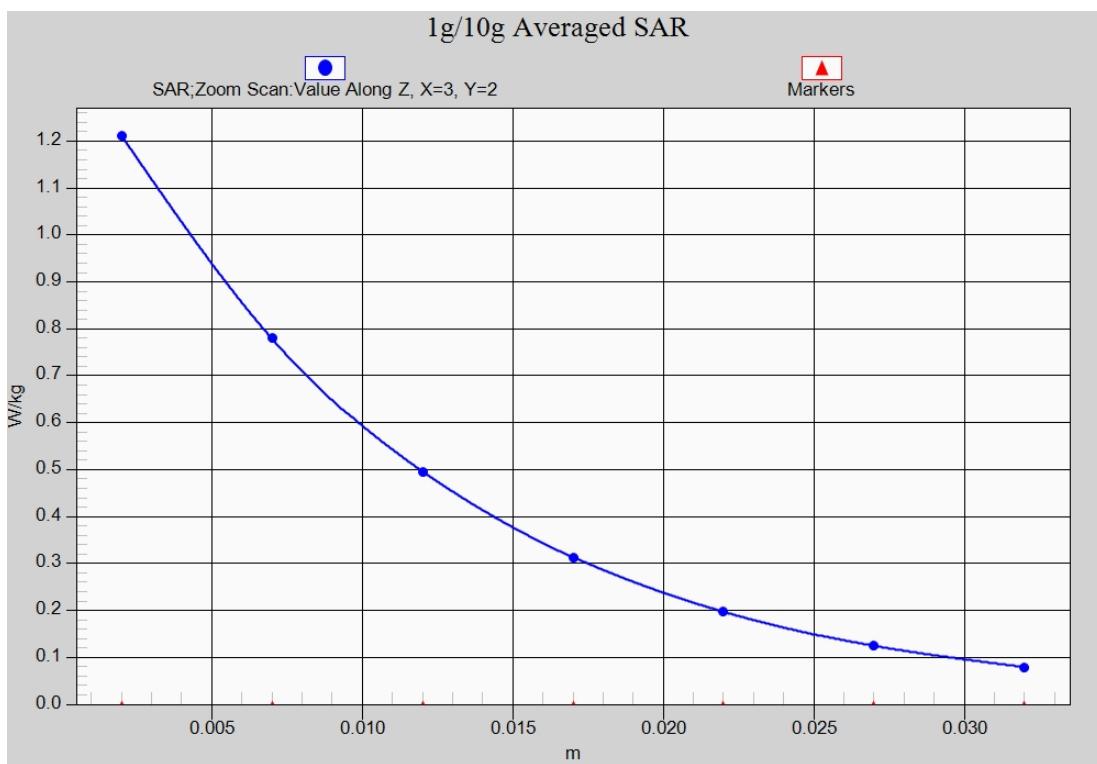


Fig. 18-1 Z-Scan at power reference point (1700 MHz)

LTE Band5 Right Cheek Middle with QPSK_10M_1RB_Low

Date: 2015-10-18

Electronics: DAE4 Sn777

Medium: Head 850 MHz

Medium parameters used (interpolated): $f = 829$ MHz; $\sigma = 0.913$ mho/m; $\epsilon_r = 40.868$; $\rho = 1000$ kg/m³

Ambient Temperature: 22.9°C Liquid Temperature: 22.5°C

Communication System: LTE Band5 Frequency: 829 MHz Duty Cycle: 1:1

Probe: EX3DV4 - SN3617 ConvF(9.56, 9.56, 9.56)

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

Maximum value of SAR (interpolated) = 0.327 W/kg

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

Reference Value = 5.389 V/m; Power Drift = -0.05 dB

Peak SAR (extrapolated) = 0.377 W/kg

SAR(1 g) = 0.301 W/kg; SAR(10 g) = 0.232 W/kg

Maximum value of SAR (measured) = 0.333 W/kg

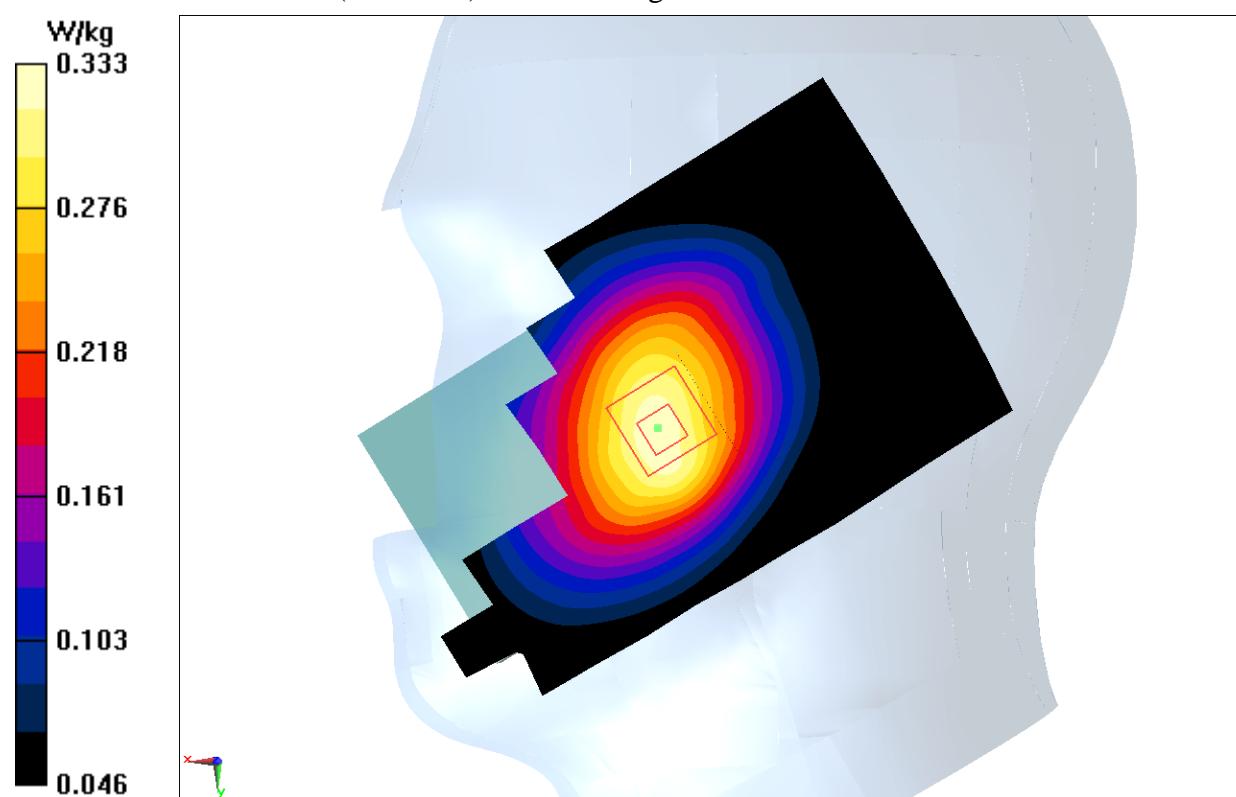


Fig.19 LTE Band5

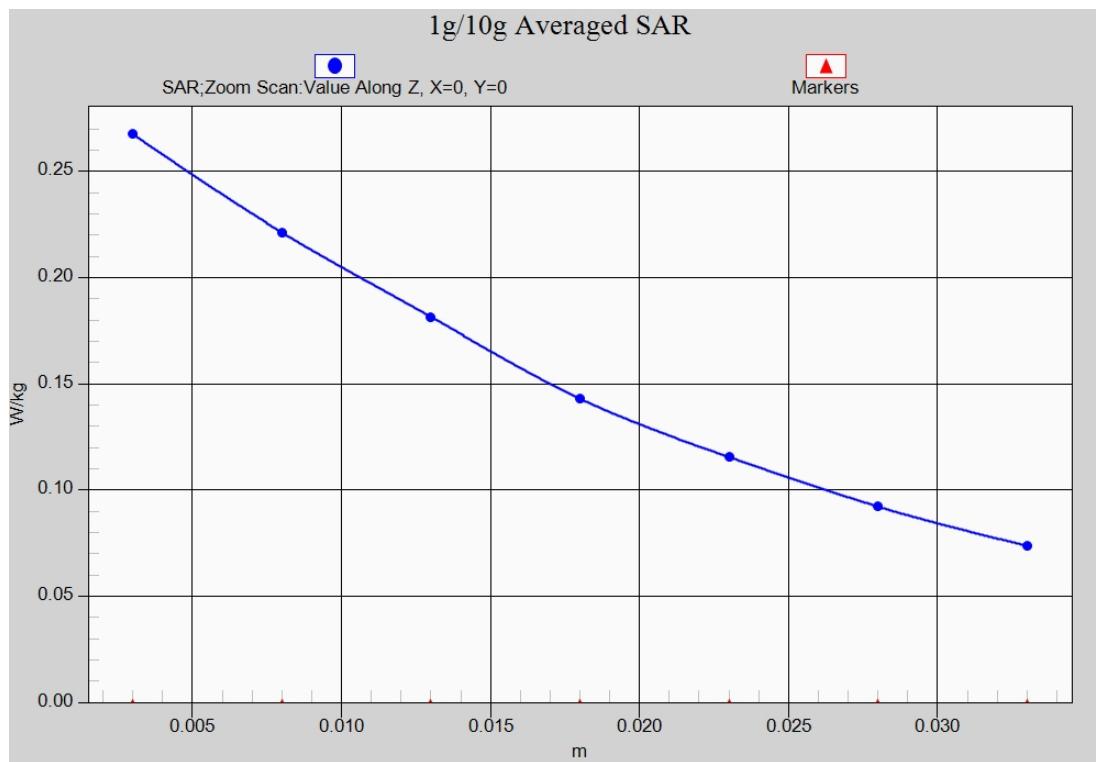


Fig. 19-1 Z-Scan at power reference point (LTE Band5)

LTE Band5 Body Rear Middle with QPSK_10M_1RB_Middle

Date: 2015-10-18

Electronics: DAE4 Sn777

Medium: Body 850 MHz

Medium parameters used (interpolated): $f = 829$ MHz; $\sigma = 0.958$ mho/m; $\epsilon_r = 56.035$; $\rho = 1000$ kg/m³

Ambient Temperature: 22.9°C Liquid Temperature: 22.5°C

Communication System: LTE Band5 Frequency: 829 MHz Duty Cycle: 1:1

Probe: EX3DV4 - SN3617 ConvF(9.71, 9.71, 9.71)

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

Maximum value of SAR (interpolated) = 0.586 W/kg

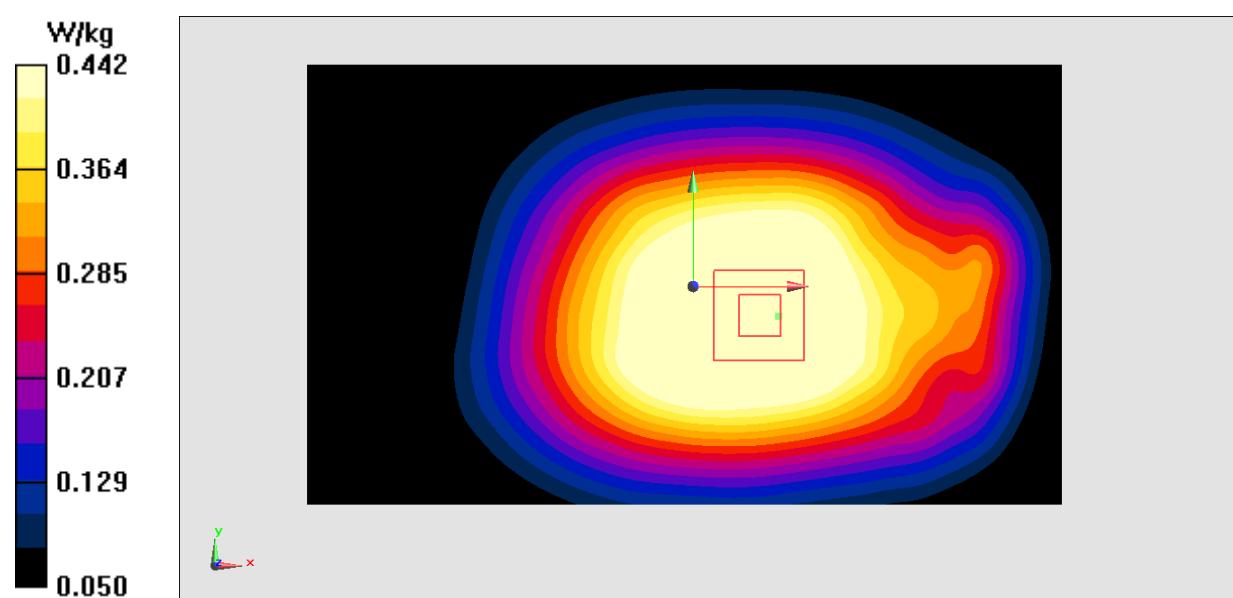
Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 22.33 V/m; Power Drift = 0.07 dB

Peak SAR (extrapolated) = 0.506 W/kg

SAR(1 g) = 0.406 W/kg; SAR(10 g) = 0.312 W/kg

Maximum value of SAR (measured) = 0.442 W/kg

**Fig.20 LTE Band5**

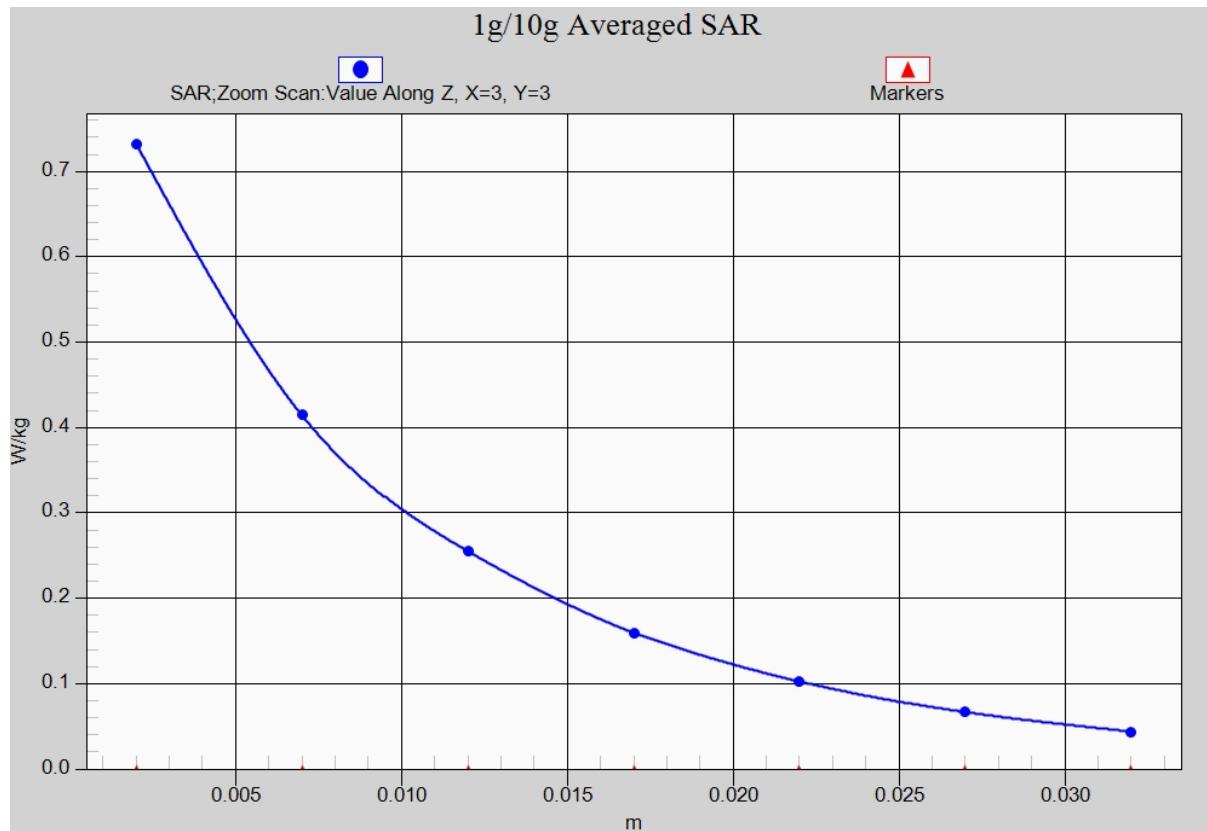


Fig. 20-1 Z-Scan at power reference point (LTE Band5)

LTE Band12 Left Cheek High with QPSK_10M_1RB_Low

Date: 2015-10-17

Electronics: DAE4 Sn777

Medium: Head 750 MHz

Medium parameters used (interpolated): $f = 711$ MHz; $\sigma = 0.869$ mho/m; $\epsilon_r = 42.832$; $\rho = 1000$ kg/m³

Ambient Temperature: 22.9°C Liquid Temperature: 22.5°C

Communication System: LTE Band12 Frequency: 711 MHz Duty Cycle: 1:1

Probe: EX3DV4 - SN3617 ConvF(9.98, 9.98, 9.98)

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

Maximum value of SAR (interpolated) = 0.281 W/kg

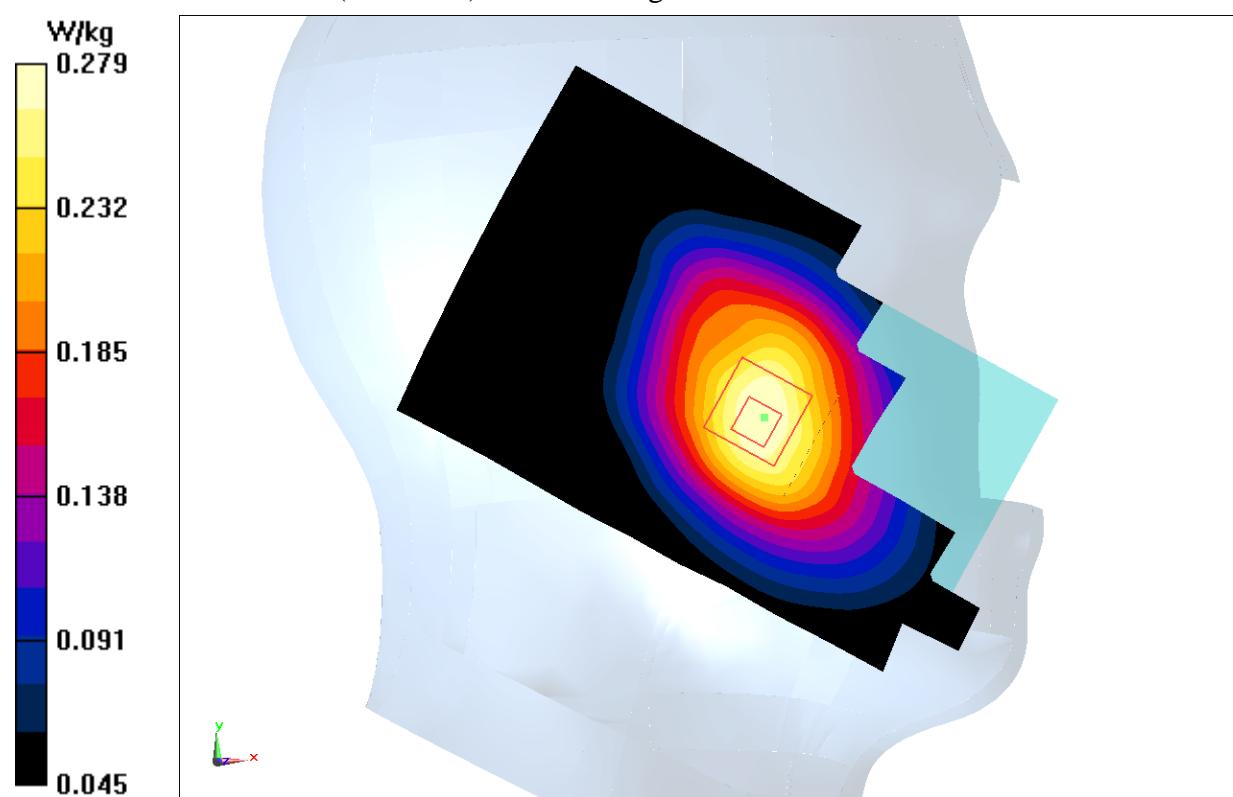
Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 4.382 V/m; Power Drift = 0.19 dB

Peak SAR (extrapolated) = 0.308 W/kg

SAR(1 g) = 0.255 W/kg; SAR(10 g) = 0.200 W/kg

Maximum value of SAR (measured) = 0.279 W/kg

**Fig.21 LTE Band12**

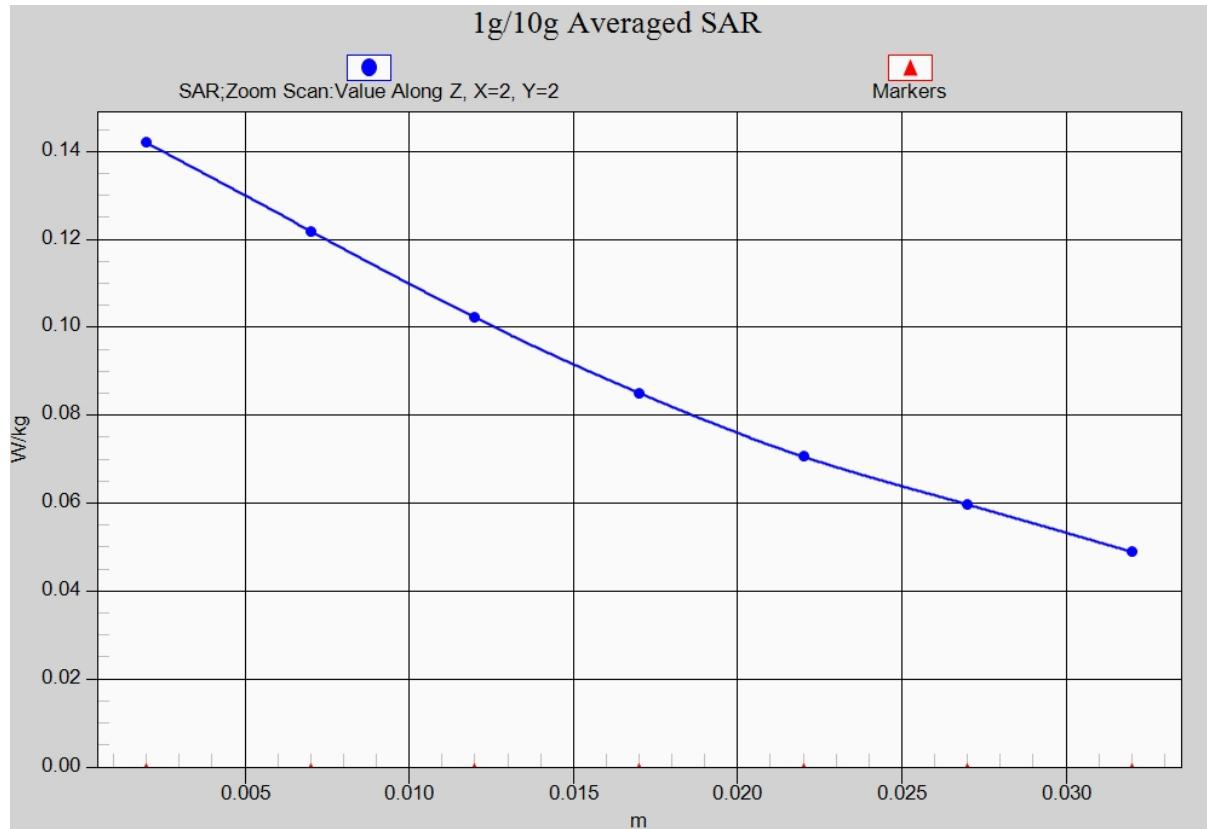


Fig. 21-1 Z-Scan at power reference point (LTE Band12)

LTE Band12 Body Rear High with QPSK_10M_1RB_Low

Date: 2015-10-17

Electronics: DAE4 Sn777

Medium: Body 750 MHz

Medium parameters used (interpolated): $f = 711$ MHz; $\sigma = 0.921$ mho/m; $\epsilon_r = 56.574$; $\rho = 1000$ kg/m³

Ambient Temperature: 22.9°C Liquid Temperature: 22.5°C

Communication System: LTE Band12 Frequency: 711 MHz Duty Cycle: 1:1

Probe: EX3DV4 - SN3617 ConvF(9.76, 9.76, 9.76)

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

Maximum value of SAR (interpolated) = 0.441 W/kg

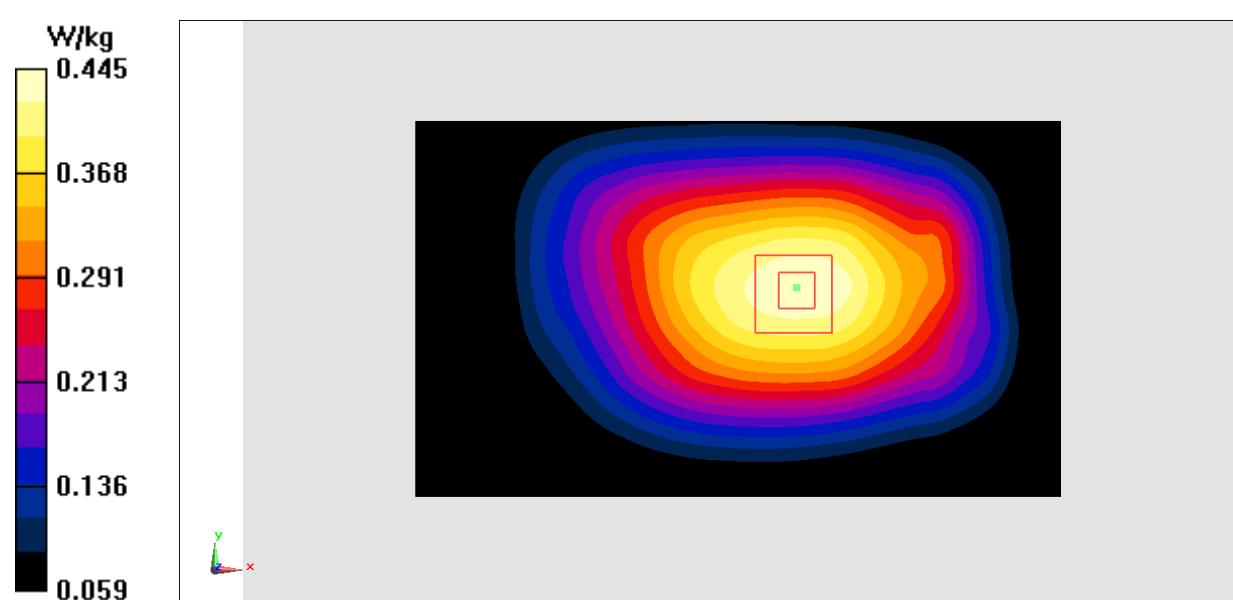
Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 20.32 V/m; Power Drift = -0.01 dB

Peak SAR (extrapolated) = 0.501 W/kg

SAR(1 g) = 0.404 W/kg; SAR(10 g) = 0.308 W/kg

Maximum value of SAR (measured) = 0.445 W/kg

**Fig.22 LTE Band12**

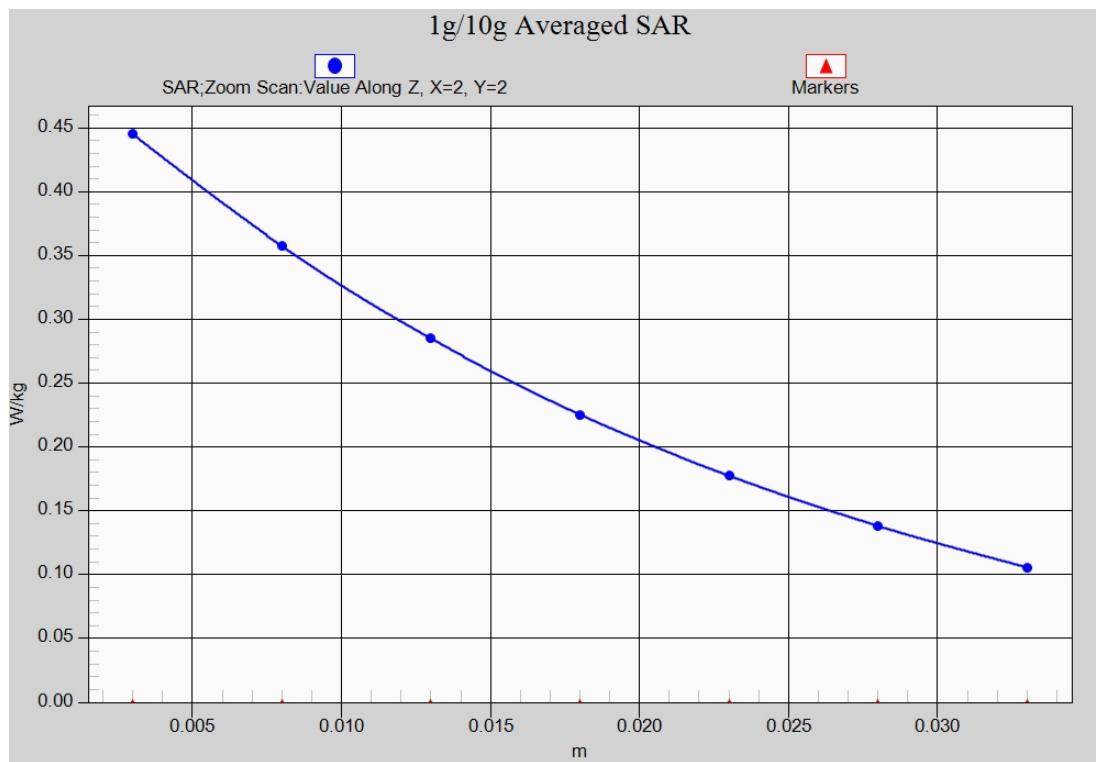


Fig. 22-1 Z-Scan at power reference point (LTE Band12)

LTE Band17 Right Cheek Middle with QPSK_10M_1RB_Low

Date: 2015-10-17

Electronics: DAE4 Sn777

Medium: Head 750 MHz

Medium parameters used (interpolated): $f = 710$ MHz; $\sigma = 0.857$ mho/m; $\epsilon_r = 42.773$; $\rho = 1000$ kg/m³

Ambient Temperature: 22.9°C Liquid Temperature: 22.5°C

Communication System: LTE Band17 Frequency: 710 MHz Duty Cycle: 1:1

Probe: EX3DV4 - SN3617 ConvF(9.98, 9.98, 9.98)

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

Maximum value of SAR (interpolated) = 0.272 W/kg

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

Reference Value = 5.388 V/m; Power Drift = 0.13 dB

Peak SAR (extrapolated) = 0.313 W/kg

SAR(1 g) = 0.254 W/kg; SAR(10 g) = 0.200 W/kg

Maximum value of SAR (measured) = 0.273 W/kg

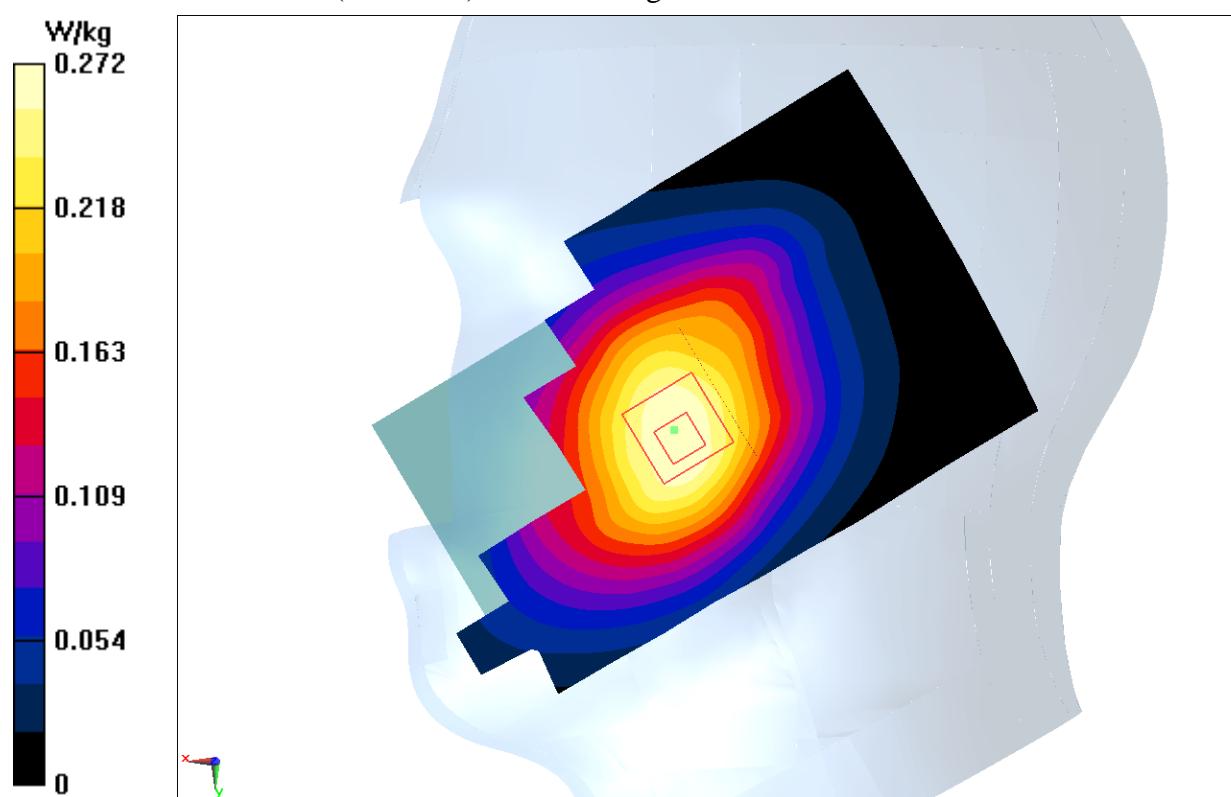


Fig.23 LTE Band17

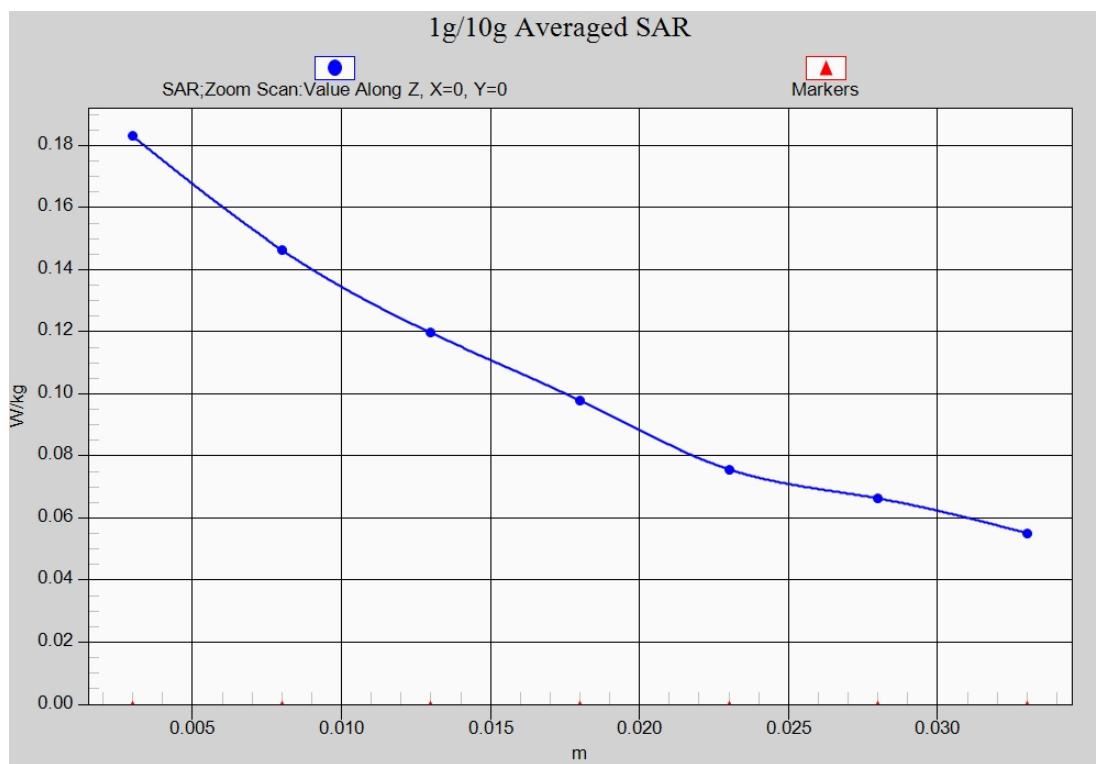


Fig. 23-1 Z-Scan at power reference point (LTE Band17)

LTE Band17 Body Rear Middle with QPSK_10M_1RB_Low

Date: 2015-10-13

Electronics: DAE4 Sn777

Medium: Body 750 MHz

Medium parameters used (interpolated): $f = 710$ MHz; $\sigma = 0.911$ mho/m; $\epsilon_r = 56.536$; $\rho = 1000$ kg/m³

Ambient Temperature: 22.9°C Liquid Temperature: 22.5°C

Communication System: LTE Band17 Frequency: 710 MHz Duty Cycle: 1:1

Probe: EX3DV4 - SN3617 ConvF(9.76, 9.76, 9.76)

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

Maximum value of SAR (interpolated) = 0.452 W/kg

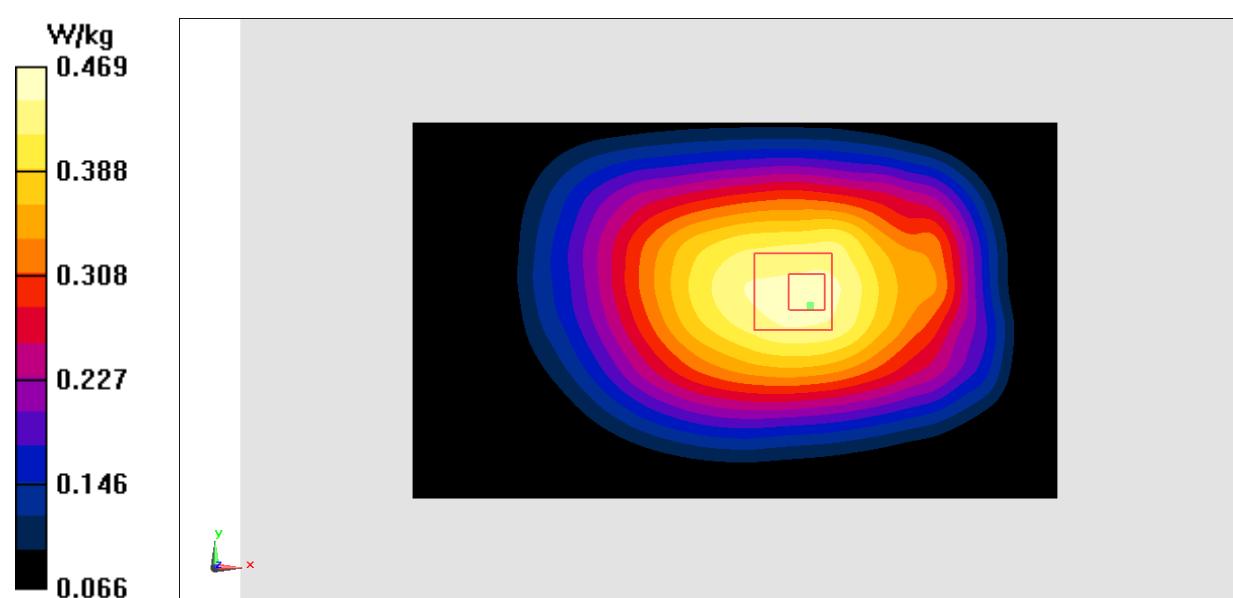
Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 20.75 V/m; Power Drift = 0.03 dB

Peak SAR (extrapolated) = 0.548 W/kg

SAR(1 g) = 0.429 W/kg; SAR(10 g) = 0.328 W/kg

Maximum value of SAR (measured) = 0.469 W/kg

**Fig.24 LTE Band17**

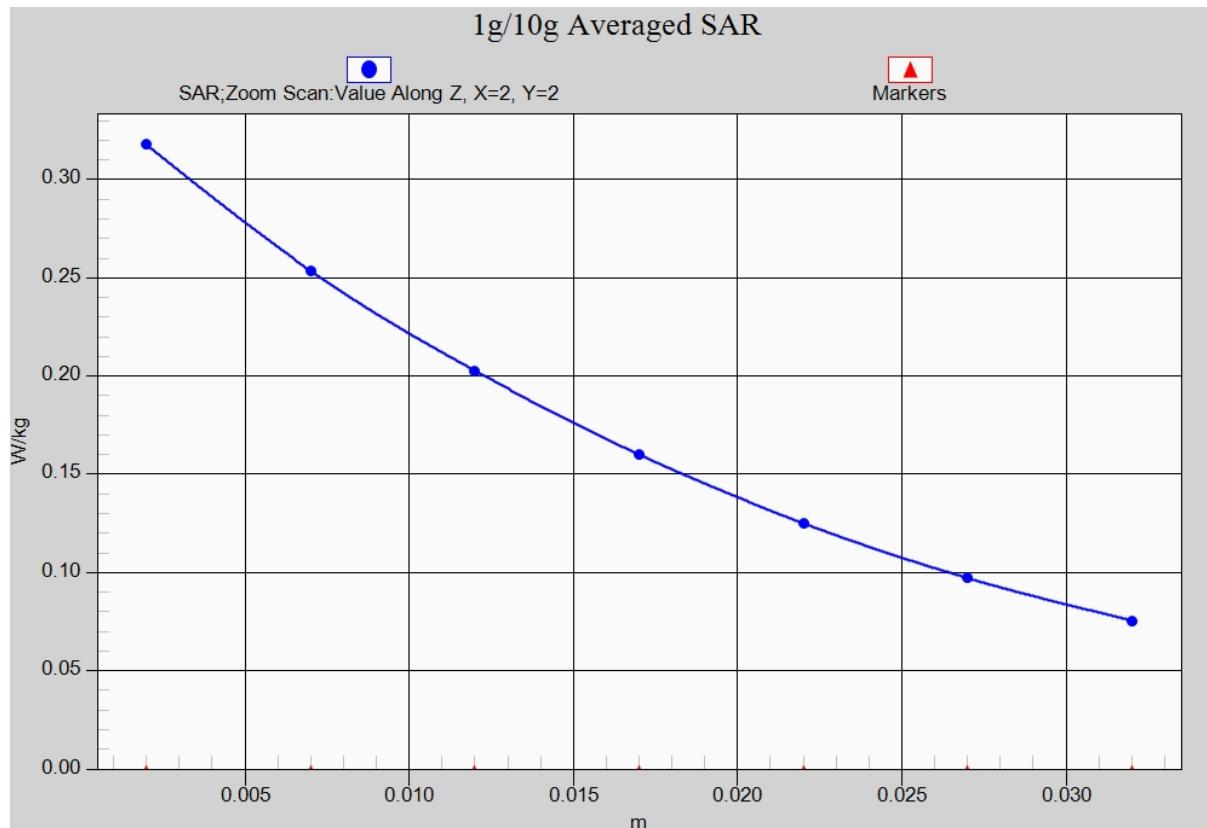


Fig. 24-1 Z-Scan at power reference point (LTE Band17)

ANNEX B System Verification Results

835MHz

Date: 2015-8-19

Electronics: DAE4 Sn777

Medium: Head 850 MHz

Medium parameters used: $f = 835 \text{ MHz}$; $\sigma = 0.918 \text{ mho/m}$; $\epsilon_r = 41.57$; $\rho = 1000 \text{ kg/m}^3$

Ambient Temperature: 22.9°C Liquid Temperature: 22.5°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 (61x121x1): Interpolated grid: $dx=1.000 \text{ mm}$, $dy=1.000 \text{ mm}$

Reference Value = 52.298 V/m; Power Drift = -0.09 dB

SAR(1 g) = 2.29 W/kg; SAR(10 g) = 1.50 W/kg

Maximum value of SAR (interpolated) = 2.67 W/kg

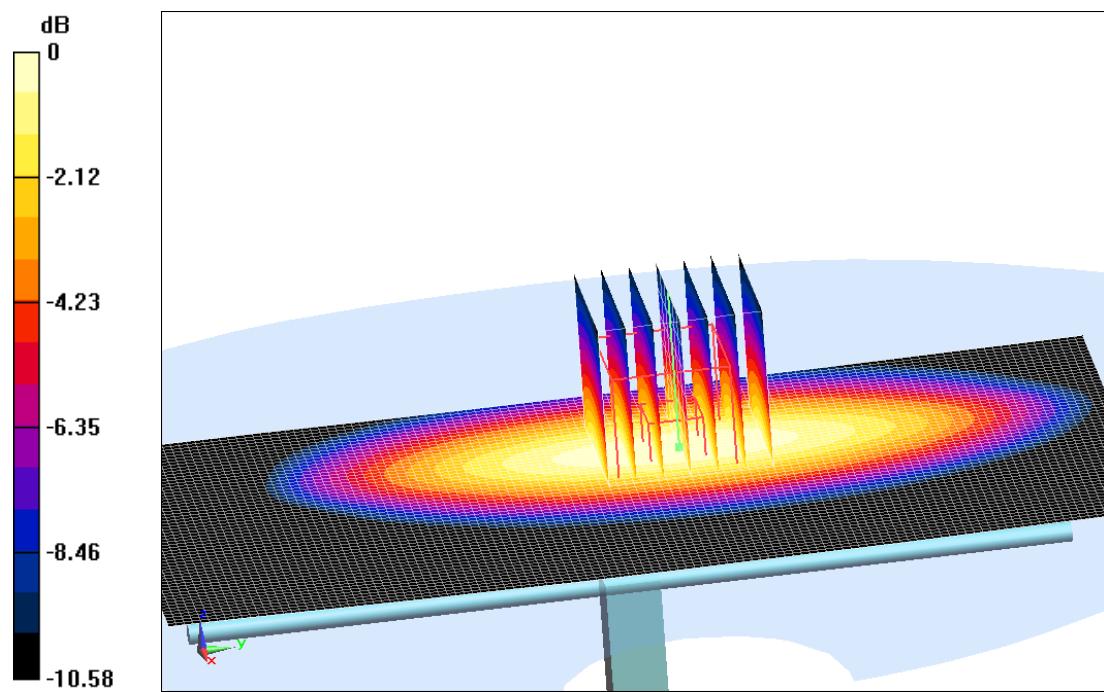
System Validation /Zoom Scan (7x7x7)/Cube 0: Measurement grid: $dx=5\text{mm}$, $dy=5\text{mm}$, $dz=5\text{mm}$

Reference Value = 52.298 V/m; Power Drift = -0.09 dB

Peak SAR (extrapolated) = 3.46 W/kg

SAR(1 g) = 2.27 W/kg; SAR(10 g) = 1.49 W/kg

Maximum value of SAR (measured) = 2.69 W/kg



$$0 \text{ dB} = 2.69 \text{ W/kg} = 4.30 \text{ dBW/kg}$$

Fig.B.1 validation 835MHz 250mW

835MHz

Date: 2015-8-19

Electronics: DAE4 Sn777

Medium: Body 850 MHz

Medium parameters used: $f = 835 \text{ MHz}$; $\sigma = 0.985 \text{ S/m}$; $\epsilon_r = 54.13$; $\rho = 1000 \text{ kg/m}^3$

Ambient Temperature: 22.9°C Liquid Temperature: 22.5°C

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

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

System Validation /Area Scan (61x121x1): Interpolated grid: $dx=1.000 \text{ mm}$, $dy=1.000 \text{ mm}$

Reference Value = 52.13 V/m; Power Drift = -0.11 dB

Fast SAR: $\text{SAR}(1 \text{ g}) = 2.42 \text{ W/kg}$; $\text{SAR}(10 \text{ g}) = 1.59 \text{ W/kg}$

Maximum value of SAR (interpolated) = 2.77 W/kg

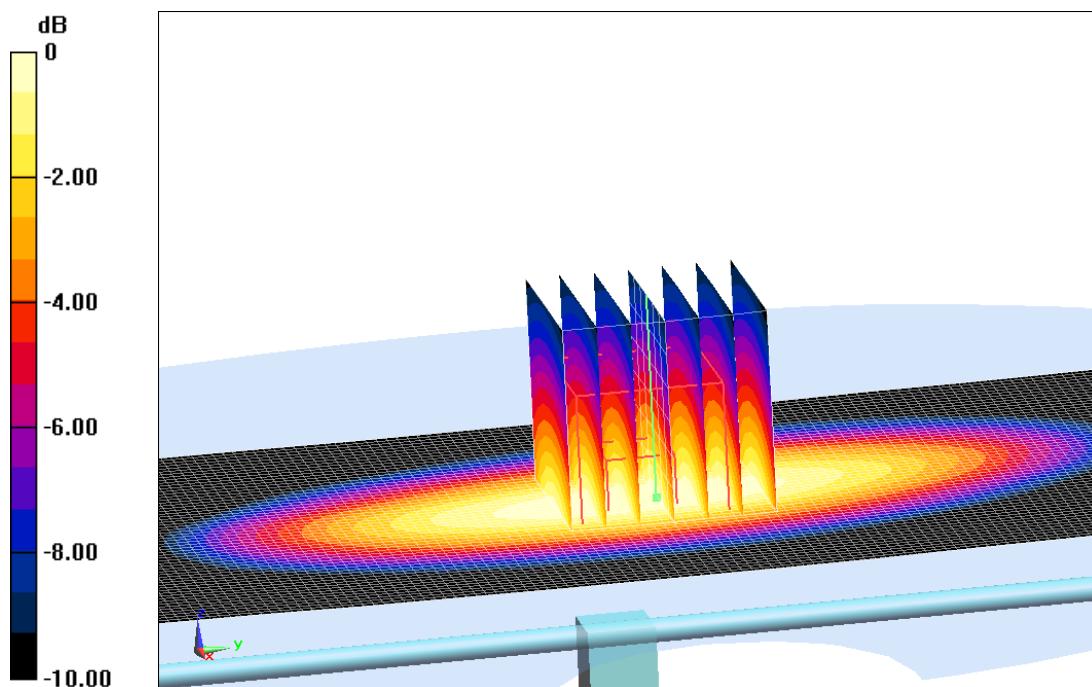
System Validation /Zoom Scan (7x7x7)/Cube 0: Measurement grid: $dx=5\text{mm}$, $dy=5\text{mm}$, $dz=5\text{mm}$

Reference Value = 52.13 V/m; Power Drift = -0.11 dB

Peak SAR (extrapolated) = 3.44 W/kg

SAR(1 g) = 2.38 W/kg; SAR(10 g) = 1.57 W/kg

Maximum value of SAR (measured) = 2.75 W/kg



$$0 \text{ dB} = 2.75 \text{ W/kg} = 4.39 \text{ dBW/kg}$$

Fig.B.2 validation 835MHz 250mW

1750MHz

Date: 2015-8-21

Electronics: DAE4 Sn777

Medium: Head 1750 MHz

Medium parameters used: $f=1750$ MHz; $\sigma = 1.416$ mho/m; $\epsilon_r = 40.55$; $\rho = 1000$ kg/m³

Ambient Temperature: 22.9°C Liquid Temperature: 22.5°C

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

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

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

Reference Value = 89.709 V/m; Power Drift = 0.08 dB

Fast SAR: SAR(1 g) = 9.22 W/kg; SAR(10 g) = 4.95 W/kg

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

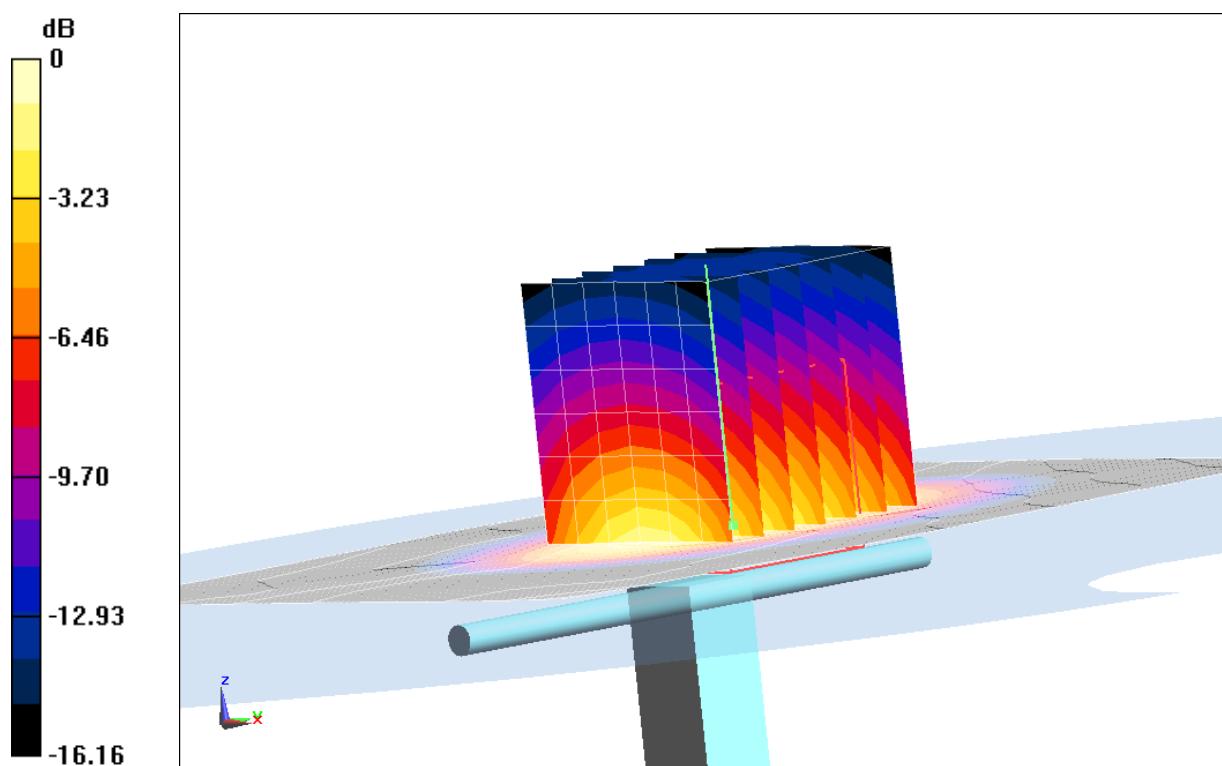
System Validation/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 89.709 V/m; Power Drift = 0.08 dB

Peak SAR (extrapolated) = 15.67 W/kg

SAR(1 g) = 9.13 W/kg; SAR(10 g) = 4.87 W/kg

Maximum value of SAR (measured) = 10.1 W/kg



$$0 \text{ dB} = 10.1 \text{ W/kg} = 10.04 \text{ dB W/kg}$$

Fig.B.3 validation 1750MHz 250mW

1750MHz

Date: 2015-8-21

Electronics: DAE4 Sn777

Medium: Body 1750 MHz

Medium parameters used: $f=1750$ MHz; $\sigma = 1.489$ mho/m; $\epsilon_r = 52.4$; $\rho = 1000$ kg/m 3

Ambient Temperature: 22.9°C Liquid Temperature: 22.5°C

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

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

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

Reference Value = 97.701 V/m; Power Drift = -0.05 dB

Fast SAR: SAR(1 g) = 9.71 W/kg; SAR(10 g) = 5.28 W/kg

Maximum value of SAR (interpolated) = 10.9 W/kg

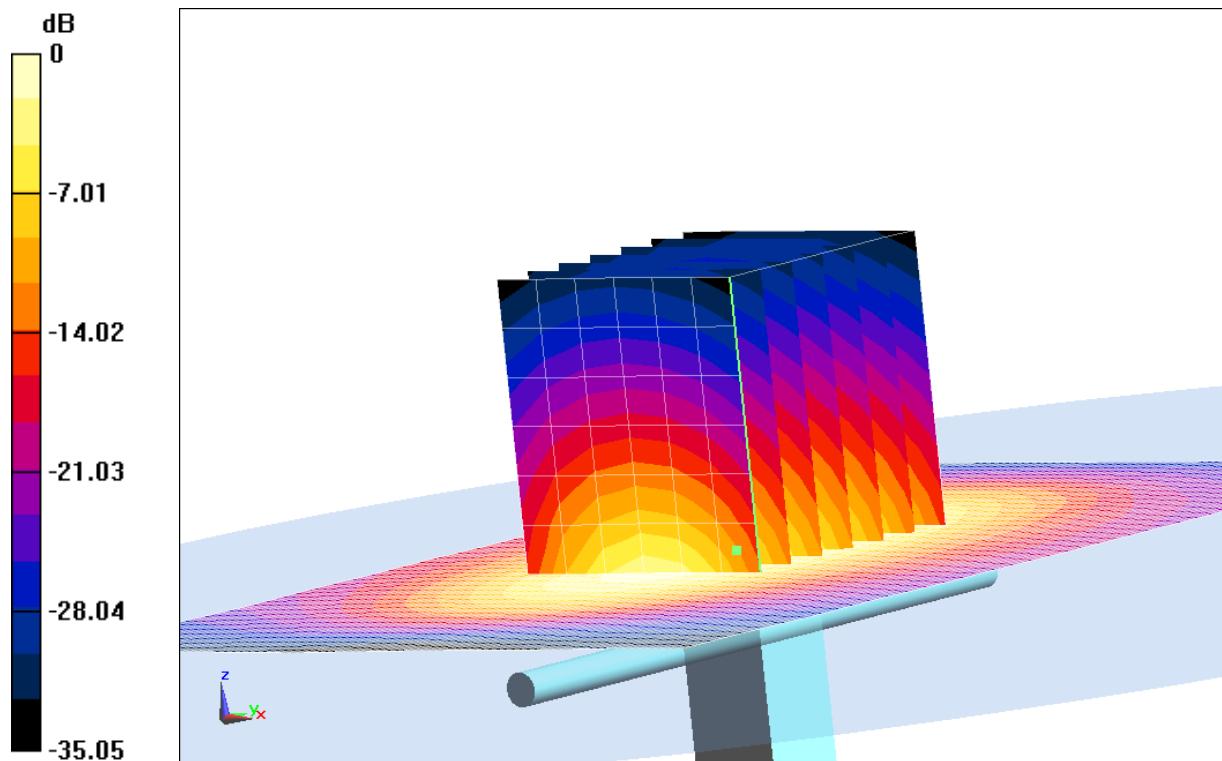
System Validation/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 97.701 V/m; Power Drift = -0.05 dB

Peak SAR (extrapolated) = 16.6 W/kg

SAR(1 g) = 9.57 W/kg; SAR(10 g) = 5.15 W/kg

Maximum value of SAR (measured) = 10.7 W/kg



$$0 \text{ dB} = 10.7 \text{ W/kg} = 10.29 \text{ dB W/kg}$$

Fig.B.4 validation 1750MHz 250mW

1900MHz

Date: 2015-8-20

Electronics: DAE4 Sn777

Medium: Head 1900 MHz

Medium parameters used: $f = 1900 \text{ MHz}$; $\sigma = 1.427 \text{ mho/m}$; $\epsilon_r = 39.78$; $\rho = 1000 \text{ kg/m}^3$

Ambient Temperature: 22.9°C Liquid Temperature: 22.5°C

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

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

System Validation /Area Scan (61x81x1): Interpolated grid: $dx=1.000 \text{ mm}$, $dy=1.000 \text{ mm}$

Reference Value = 93.275 V/m; Power Drift = -0.02 dB

SAR(1 g) = 10.1 W/kg; SAR(10 g) = 5.36 W/kg

Maximum value of SAR (interpolated) = 12.5 W/kg

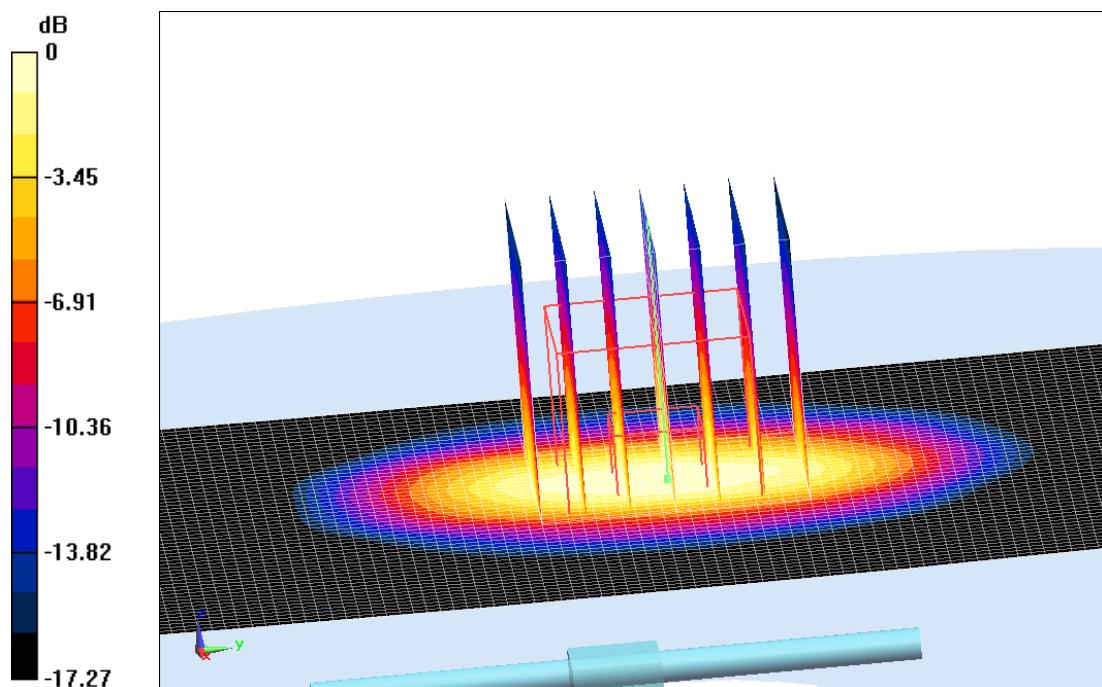
System Validation /Zoom Scan (7x7x7)/Cube 0: Measurement grid: $dx=5\text{mm}$, $dy=5\text{mm}$, $dz=5\text{mm}$

Reference Value = 93.275 V/m; Power Drift = -0.02 dB

Peak SAR (extrapolated) = 18.2 W/kg

SAR(1 g) = 9.93 W/kg; SAR(10 g) = 5.24 W/kg

Maximum value of SAR (measured) = 12.3 W/kg



$$0 \text{ dB} = 12.3 \text{ W/kg} = 10.90 \text{ dBW/kg}$$

Fig.B.5 validation 1900MHz 250mW

1900MHz

Date: 2015-8-20

Electronics: DAE4 Sn777

Medium: Body 1900 MHz

Medium parameters used: $f = 1900 \text{ MHz}$; $\sigma = 1.55 \text{ S/m}$; $\epsilon_r = 54.05$; $\rho = 1000 \text{ kg/m}^3$

Ambient Temperature: 22.9°C Liquid Temperature: 22.5°C

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

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

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

Reference Value = 92.906 V/m; Power Drift = 0.04 dB

Fast SAR: $\text{SAR}(1 \text{ g}) = 10.5 \text{ W/kg}$; $\text{SAR}(10 \text{ g}) = 5.63 \text{ W/kg}$

Maximum value of SAR (interpolated) = 12.4 W/kg

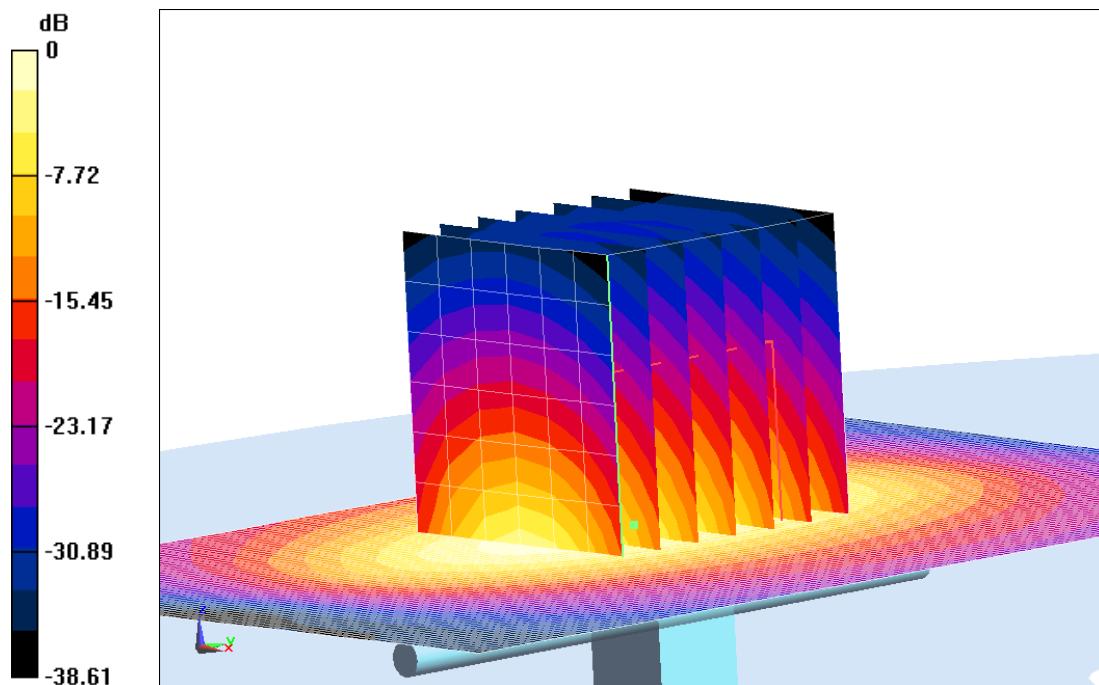
System Validation/Zoom Scan (7x7x7)/Cube 0: Measurement grid: $dx=5\text{mm}$, $dy=5\text{mm}$, $dz=5\text{mm}$

Reference Value = 92.906 V/m; Power Drift = 0.04 dB

Peak SAR (extrapolated) = 19.03 W/kg

SAR(1 g) = 10.4 W/kg; SAR(10 g) = 5.54 W/kg

Maximum value of SAR (measured) = 12.3 W/kg



0 dB = 12.3 W/kg = 10.90 dB W/kg

Fig.B.6 validation 1900MHz 250mW

2450MHz

Date: 2015-8-23

Electronics: DAE4 Sn777

Medium: Head 2450 MHz

Medium parameters used: $f = 2450 \text{ MHz}$; $\sigma = 1.822 \text{ mho/m}$; $\epsilon_r = 38.01$; $\rho = 1000 \text{ kg/m}^3$

Ambient Temperature: 22.9°C Liquid Temperature: 22.5°C

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

Probe: EX3DV4 - SN3846 ConvF(6.56, 6.56, 6.56)

System Validation /Area Scan (61x81x1): Interpolated grid: $dx=1.000 \text{ mm}$, $dy=1.000 \text{ mm}$

Reference Value = 92.003 V/m; Power Drift = -0.07 dB

SAR(1 g) = 13.7 W/kg; SAR(10 g) = 6.55 W/kg

Maximum value of SAR (interpolated) = 17.9 W/kg

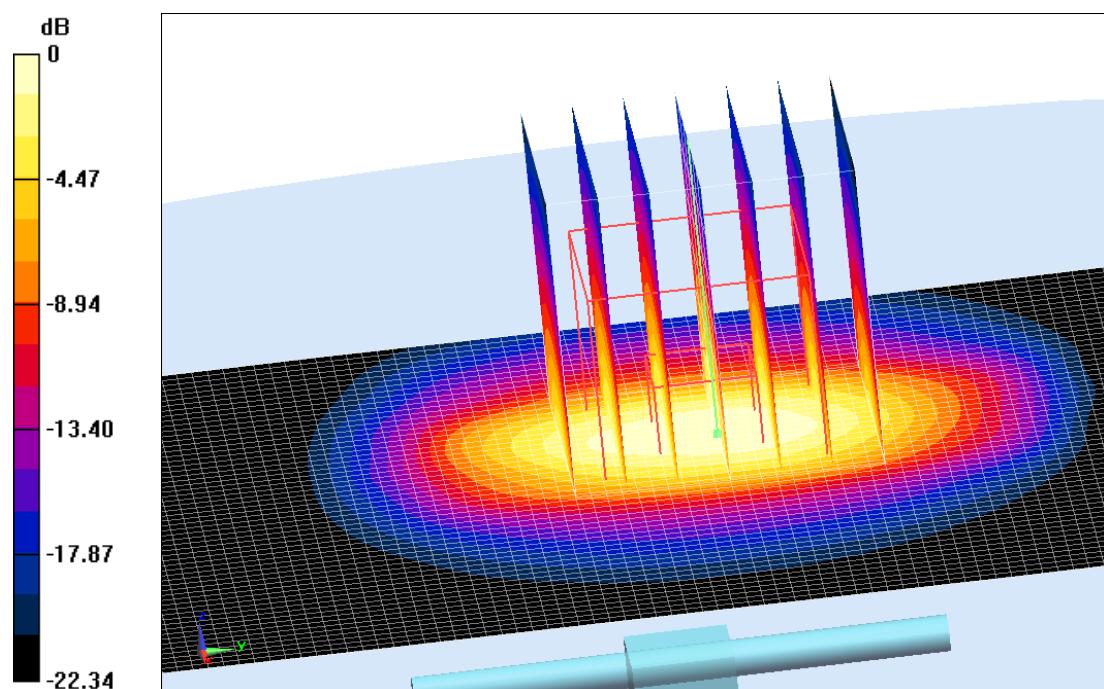
System Validation /Zoom Scan (7x7x7)/Cube 0: Measurement grid: $dx=5\text{mm}$, $dy=5\text{mm}$, $dz=5\text{mm}$

Reference Value = 92.003 V/m; Power Drift = -0.07 dB

Peak SAR (extrapolated) = 27.51 W/kg

SAR(1 g) = 13.5 W/kg; SAR(10 g) = 6.41 W/kg

Maximum value of SAR (measured) = 16.7 W/kg



$$0 \text{ dB} = 16.7 \text{ W/kg} = 12.22 \text{ dBW/kg}$$

Fig.B.7 validation 2450MHz 250mW

2450MHz

Date: 2015-8-23

Electronics: DAE4 Sn777

Medium: Body 2450 MHz

Medium parameters used: $f = 2450 \text{ MHz}$; $\sigma = 1.974 \text{ S/m}$; $\epsilon_r = 51.63$; $\rho = 1000 \text{ kg/m}^3$

Ambient Temperature: 22.9°C Liquid Temperature: 22.5°C

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

Probe: EX3DV4 - SN3846 ConvF(6.90, 6.90, 6.90)

System Validation/Area Scan (81x101x1): Interpolated grid: $dx=1.000 \text{ mm}$, $dy=1.000 \text{ mm}$

Reference Value = 90.139 V/m; Power Drift = -0.06 dB

SAR(1 g) = 12.5 W/kg; SAR(10 g) = 5.96 W/kg

Maximum value of SAR (interpolated) = 14.3 W/kg

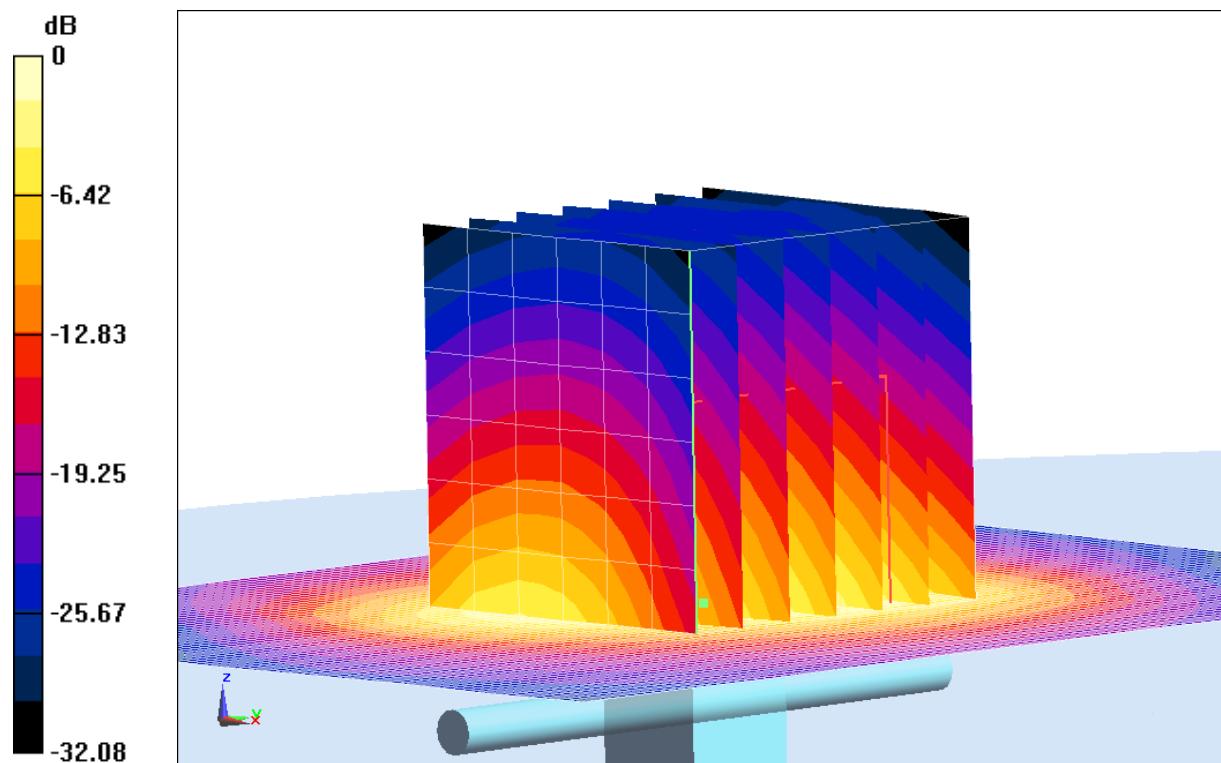
System Validation/Zoom Scan (7x7x7)/Cube 0: Measurement grid: $dx=5\text{mm}$, $dy=5\text{mm}$, $dz=5\text{mm}$

Reference Value = 90.139 V/m; Power Drift = -0.06 dB

Peak SAR (extrapolated) = 24.72 W/kg

SAR(1 g) = 12.6 W/kg; SAR(10 g) = 6.05 W/kg

Maximum value of SAR (measured) = 14.4 W/kg



$$0 \text{ dB} = 14.4 \text{ W/kg} = 11.58 \text{ dB W/kg}$$

Fig.B.8 validation 2450MHz 250mW

2600MHz

Date: 2015-8-22

Electronics: DAE4 Sn777

Medium: Head 2600 MHz

Medium parameters used: $f = 2600 \text{ MHz}$; $\sigma = 2.018 \text{ mho/m}$; $\epsilon_r = 38.33$; $\rho = 1000 \text{ kg/m}^3$

Ambient Temperature: 22.9°C Liquid Temperature: 22.5°C

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

Probe: EX3DV4 - SN3846 ConvF(6.50, 6.50, 6.50)

System Validation /Area Scan (81x81x1): Interpolated grid: $dx=1.000 \text{ mm}$, $dy=1.000 \text{ mm}$

Reference Value = 79.537 V/m; Power Drift = 0.02 dB

SAR(1 g) = 14.5 W/kg; SAR(10 g) = 6.51 W/kg

Maximum value of SAR (interpolated) = 22.5 W/kg

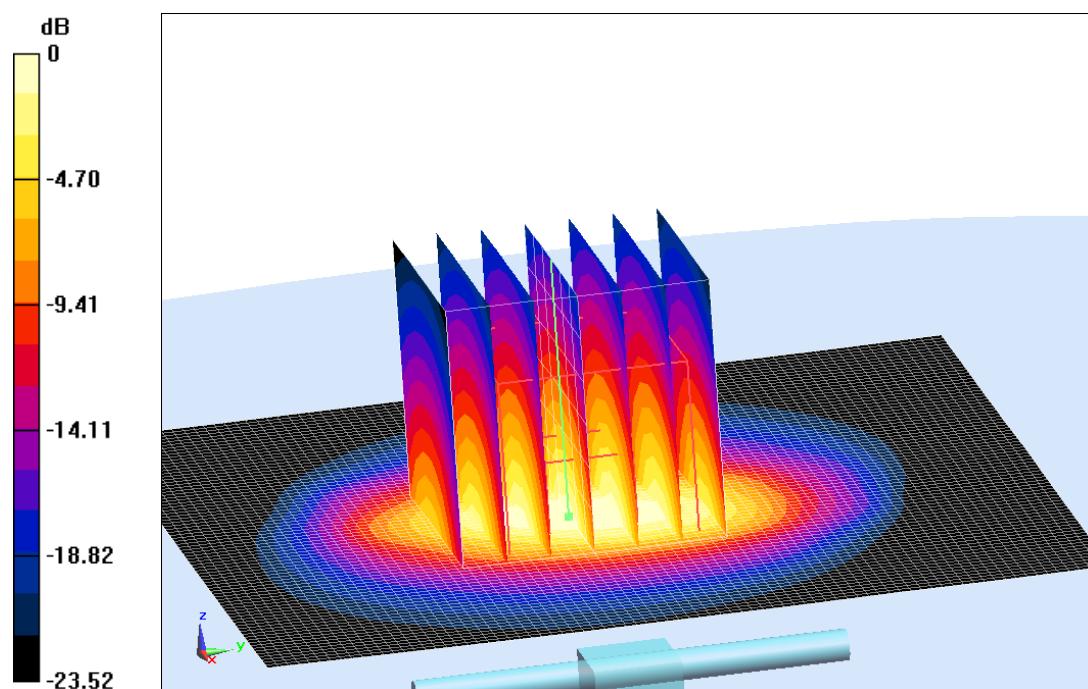
System Validation /Zoom Scan (7x7x7)/Cube 0: Measurement grid: $dx=5\text{mm}$, $dy=5\text{mm}$, $dz=5\text{mm}$

Reference Value = 79.537 V/m; Power Drift = 0.02 dB

Peak SAR (extrapolated) = 30.98 W/kg

SAR(1 g) = 14.3 W/kg; SAR(10 g) = 6.33 W/kg

Maximum value of SAR (measured) = 22.3 W/kg



$$0 \text{ dB} = 22.3 \text{ W/kg} = 13.48 \text{ dBW/kg}$$

Fig.B.9 validation 2600MHz 250mW

2600MHz

Date: 2015-8-22

Electronics: DAE4 Sn777

Medium: Body 2600 MHz

Medium parameters used: $f = 2600 \text{ MHz}$; $\sigma = 2.243 \text{ mho/m}$; $\epsilon_r = 51.6$; $\rho = 1000 \text{ kg/m}^3$

Ambient Temperature: 22.9°C Liquid Temperature: 22.5°C

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

Probe: EX3DV4 - SN3846 ConvF(6.68, 6.68, 6.68)

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

Reference Value = 85.162 V/m; Power Drift = 0.05 dB

Fast SAR: $\text{SAR}(1 \text{ g}) = 14.8 \text{ W/kg}$; $\text{SAR}(10 \text{ g}) = 6.71 \text{ W/kg}$

Maximum value of SAR (interpolated) = 22.7 W/kg

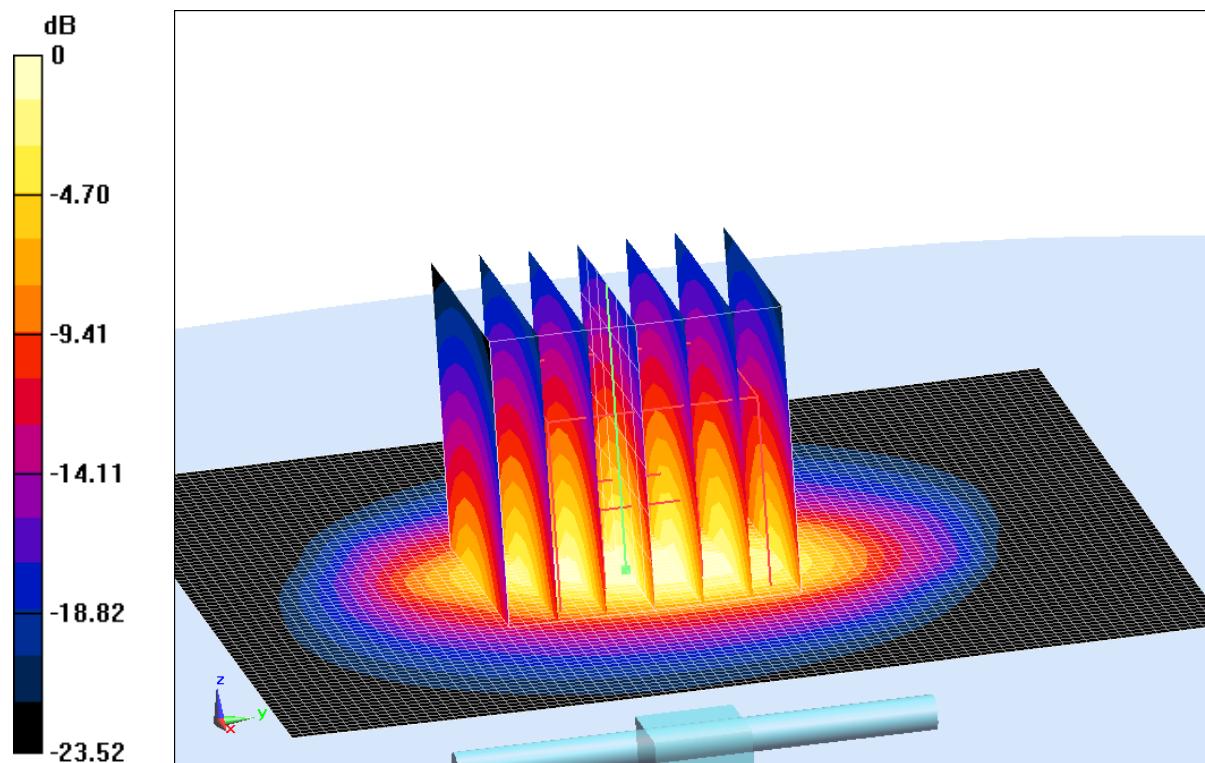
System Validation /Zoom Scan (7x7x7)/Cube 0: Measurement grid: $dx=5\text{mm}$, $dy=5\text{mm}$, $dz=5\text{mm}$

Reference Value = 85.162 V/m; Power Drift = 0.05 dB

Peak SAR (extrapolated) = 31.4 W/kg

SAR(1 g) = 14.6 W/kg; SAR(10 g) = 6.56 W/kg

Maximum value of SAR (measured) = 22.5 W/kg



$$0 \text{ dB} = 22.5 \text{ W/kg} = 13.52 \text{ dB W/kg}$$

Fig.B.10 validation 2600MHz 250mW

750MHz

Date: 2015-10-17

Electronics: DAE4 Sn777

Medium: Head 750 MHz

Medium parameters used: $f = 750 \text{ MHz}$; $\sigma = 0.912 \text{ mho/m}$; $\epsilon_r = 43.08$; $\rho = 1000 \text{ kg/m}^3$

Ambient Temperature: 22.9°C Liquid Temperature: 22.5°C

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

Probe: EX3DV4 - SN3617 ConvF(9.98, 9.98, 9.98)

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

Reference Value = 49.848 V/m; Power Drift = -0.09 dB

Fast SAR: $\text{SAR}(1 \text{ g}) = 2.08 \text{ W/kg}$; $\text{SAR}(10 \text{ g}) = 1.37 \text{ W/kg}$

Maximum value of SAR (interpolated) = 2.23 W/kg

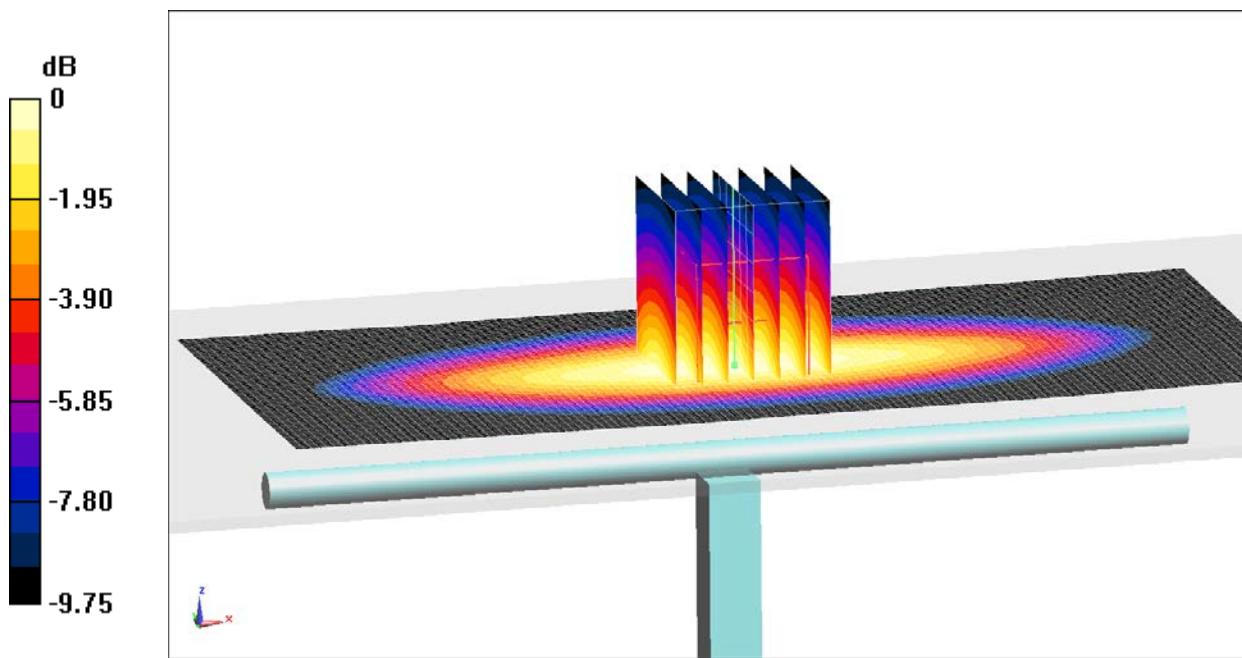
System Validation /Zoom Scan (7x7x7)/Cube 0: Measurement grid: $dx=5\text{mm}$, $dy=5\text{mm}$, $dz=5\text{mm}$

Reference Value = 49.848 V/m; Power Drift = -0.09 dB

Peak SAR (extrapolated) = 2.88 W/kg

SAR(1 g) = 2.07 W/kg; SAR(10 g) = 1.35 W/kg

Maximum value of SAR (measured) = 2.19 W/kg



$$0 \text{ dB} = 2.19 \text{ W/kg} = 3.40 \text{ dB W/kg}$$

Fig.B.11 validation 750MHz 250mW

750MHz

Date: 2015-10-17

Electronics: DAE4 Sn777

Medium: Body750 MHz

Medium parameters used: $f = 750 \text{ MHz}$; $\sigma = 0.946 \text{ mho/m}$; $\epsilon_r = 56.98$; $\rho = 1000 \text{ kg/m}^3$

Ambient Temperature: 22.9°C Liquid Temperature: 22.5°C

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

Probe: EX3DV4 - SN3617 ConvF(9.76, 9.76, 9.76)

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

Reference Value = 51.994 V/m; Power Drift = -0.06 dB

Fast SAR: $\text{SAR}(1 \text{ g}) = 2.24 \text{ W/kg}$; $\text{SAR}(10 \text{ g}) = 1.49 \text{ W/kg}$

Maximum value of SAR (interpolated) = 2.39 W/kg

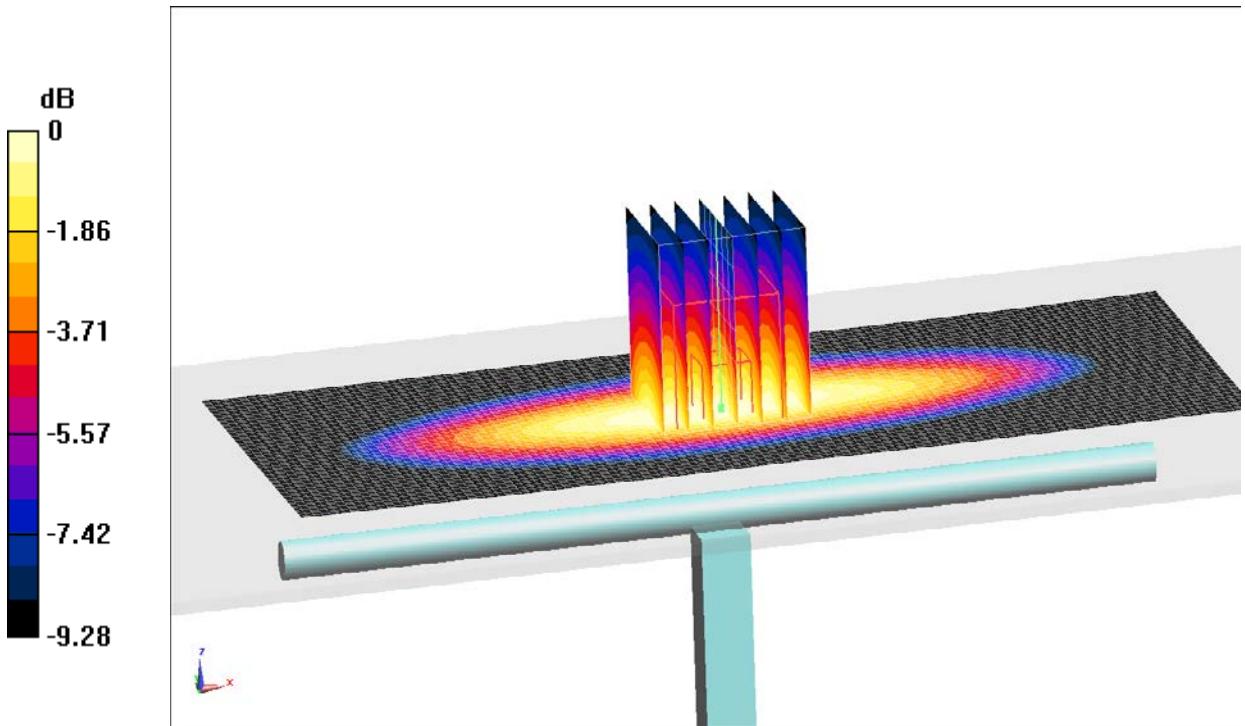
System Validation/Zoom Scan (7x7x7)/Cube 0: Measurement grid: $dx=5\text{mm}$, $dy=5\text{mm}$, $dz=5\text{mm}$

Reference Value = 51.994 V/m; Power Drift = -0.06 dB

Peak SAR (extrapolated) = 3.06 W/kg

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

Maximum value of SAR (measured) = 2.38 W/kg



0 dB = 2.38 W/kg = 3.76 dB W/kg

Fig.B.12 validation 750MHz 250mW

835MHz

Date: 2015-10-18

Electronics: DAE4 Sn777

Medium: Head 850 MHz

Medium parameters used: $f = 835 \text{ MHz}$; $\sigma = 0.921 \text{ S/m}$; $\epsilon_r = 41.12$; $\rho = 1000 \text{ kg/m}^3$

Ambient Temperature: 22.9°C Liquid Temperature: 22.5°C

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

Probe: EX3DV4 - SN3617 ConvF(9.56, 9.56, 9.56)

System Validation/Area Scan (61x121x1): Interpolated grid: $dx=1.000 \text{ mm}$, $dy=1.000 \text{ mm}$

Reference Value = 53.737 V/m; Power Drift = -0.09 dB

Fast SAR: $\text{SAR}(1 \text{ g}) = 2.29 \text{ W/kg}$; $\text{SAR}(10 \text{ g}) = 1.51 \text{ W/kg}$

Maximum value of SAR (interpolated) = 2.59 W/kg

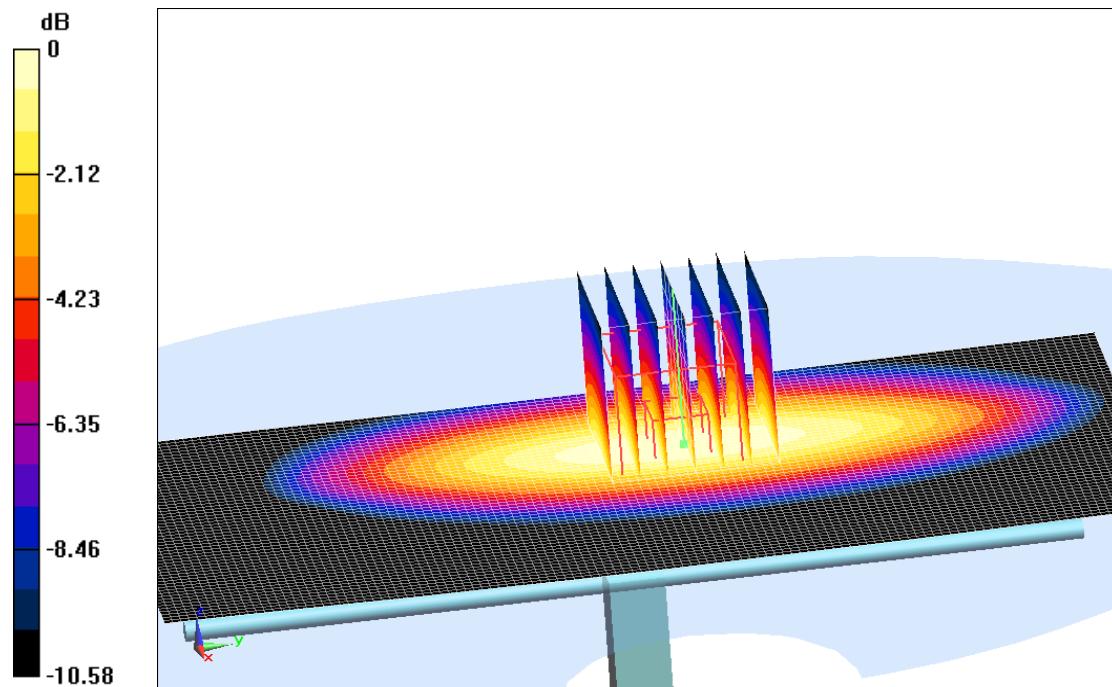
System Validation/Zoom Scan (7x7x7)/Cube 0: Measurement grid: $dx=5\text{mm}$, $dy=5\text{mm}$, $dz=5\text{mm}$

Reference Value = 53.737 V/m; Power Drift = -0.09 dB

Peak SAR (extrapolated) = 3.05 W/kg

SAR(1 g) = 2.27 W/kg; SAR(10 g) = 1.49 W/kg

Maximum value of SAR (measured) = 2.42 W/kg



$0 \text{ dB} = 2.42 \text{ W/kg} = 3.84 \text{ dBW/kg}$

Fig.B.13 validation 835MHz 250mW

835MHz

Date: 2015-10-18

Electronics: DAE4 Sn777

Medium: Body 850 MHz

Medium parameters used: $f = 835 \text{ MHz}$; $\sigma = 0.972 \text{ S/m}$; $\epsilon_r = 56.23$; $\rho = 1000 \text{ kg/m}^3$

Ambient Temperature: 22.9°C Liquid Temperature: 22.5°C

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

Probe: EX3DV4 - SN3617 ConvF(9.71, 9.71, 9.71)

System Validation /Area Scan (61x121x1): Interpolated grid: $dx=1.000 \text{ mm}$, $dy=1.000 \text{ mm}$

Reference Value = 52.528 V/m; Power Drift = 0.04 dB

Fast SAR: $\text{SAR}(1 \text{ g}) = 2.33 \text{ W/kg}$; $\text{SAR}(10 \text{ g}) = 1.60 \text{ W/kg}$

Maximum value of SAR (interpolated) = 2.64 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 = 52.528 V/m; Power Drift = 0.04 dB

Peak SAR (extrapolated) = 3.17 W/kg

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

Maximum value of SAR (measured) = 2.67 W/kg

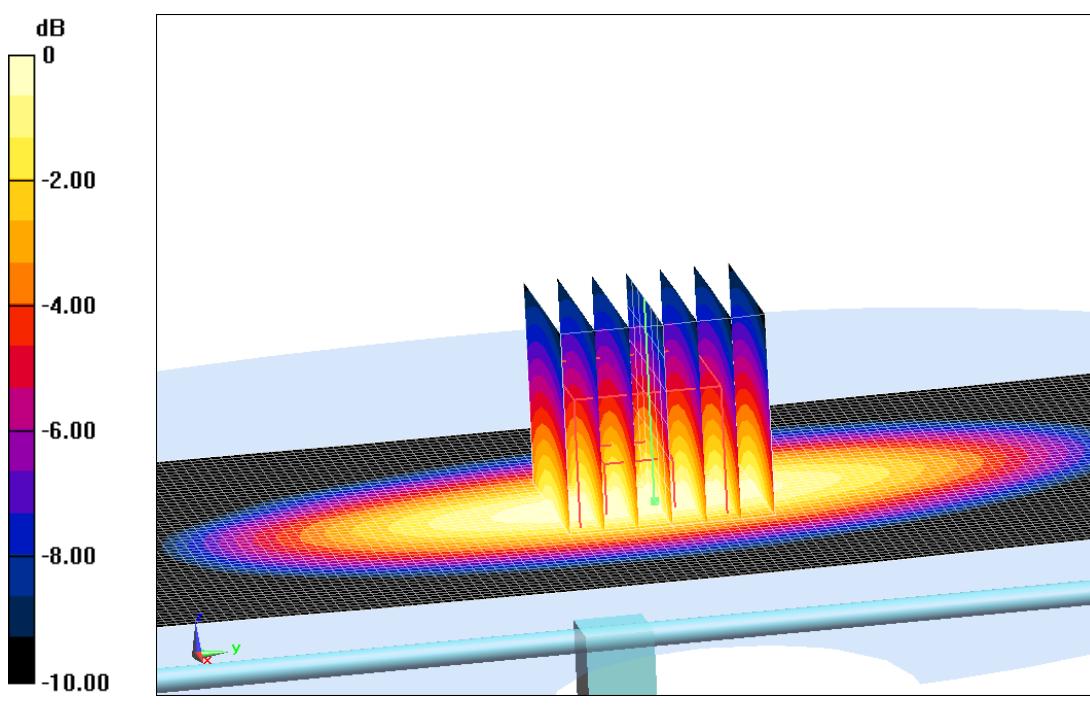


Fig.B.14 validation 835MHz 250mW

1750MHz

Date: 2015-10-19

Electronics: DAE4 Sn777

Medium: Head 1750 MHz

Medium parameters used: $f=1750$ MHz; $\sigma = 1.331$ mho/m; $\epsilon_r = 39.53$; $\rho = 1000$ kg/m³

Ambient Temperature: 22.9°C Liquid Temperature: 22.5°C

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

Probe: EX3DV4 - SN3617 ConvF(8.34, 8.34, 8.34)

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

Reference Value = 89.045 V/m; Power Drift = 0.08 dB

Fast SAR: SAR(1 g) = 9.18 W/kg; SAR(10 g) = 4.91 W/kg

Maximum value of SAR (interpolated) = 9.93 W/kg

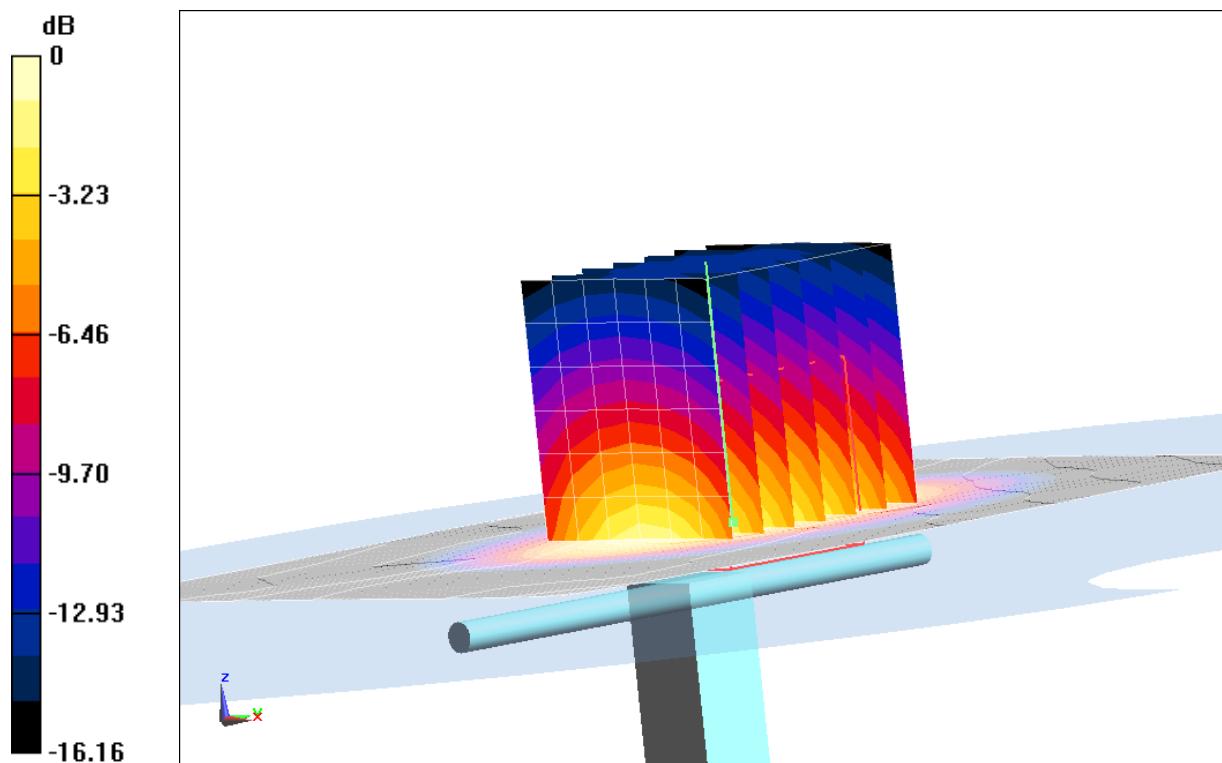
System Validation/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 89.045 V/m; Power Drift = 0.08 dB

Peak SAR (extrapolated) = 15.52 W/kg

SAR(1 g) = 9.10 W/kg; SAR(10 g) = 4.82 W/kg

Maximum value of SAR (measured) = 9.98 W/kg



0 dB = 9.98 W/kg = 10.0 dB W/kg

Fig.B.15 validation 1750MHz 250mW

1750MHz

Date: 2015-10-19

Electronics: DAE4 Sn777

Medium: Body 1750 MHz

Medium parameters used: $f=1750 \text{ MHz}$; $\sigma = 1.472 \text{ mho/m}$; $\epsilon_r = 52.7$; $\rho = 1000 \text{ kg/m}^3$

Ambient Temperature: 22.9°C Liquid Temperature: 22.5°C

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

Probe: EX3DV4 - SN3617 ConvF(7.96, 7.96, 7.96)

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

Reference Value = 96.252 V/m; Power Drift = -0.05 dB

Fast SAR: $\text{SAR}(1 \text{ g}) = 9.61 \text{ W/kg}$; $\text{SAR}(10 \text{ g}) = 5.18 \text{ W/kg}$

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

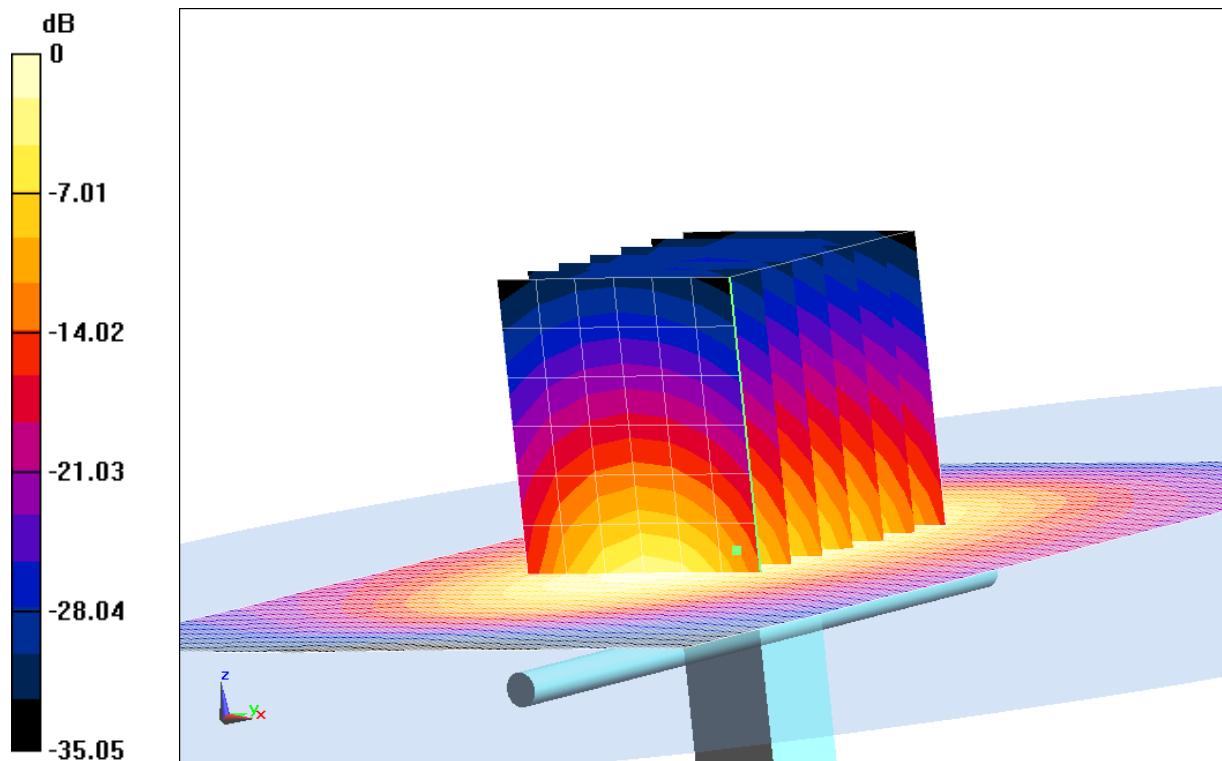
System Validation/Zoom Scan (7x7x7)/Cube 0: Measurement grid: $dx=5\text{mm}$, $dy=5\text{mm}$, $dz=5\text{mm}$

Reference Value = 96.252 V/m; Power Drift = -0.05 dB

Peak SAR (extrapolated) = 15.6 W/kg

SAR(1 g) = 9.42 W/kg; SAR(10 g) = 5.05 W/kg

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



$$0 \text{ dB} = 10.3 \text{ W/kg} = 10.1 \text{ dB W/kg}$$

Fig.B.16 validation 1750MHz 250mW

1900MHz

Date: 2015-10-20

Electronics: DAE4 Sn777

Medium: Head 1900 MHz

Medium parameters used: $f = 1900 \text{ MHz}$; $\sigma = 1.408 \text{ mho/m}$; $\epsilon_r = 40.54$; $\rho = 1000 \text{ kg/m}^3$

Ambient Temperature: 22.9°C Liquid Temperature: 22.5°C

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

Probe: EX3DV4 - SN3617 ConvF(8.07, 8.07, 8.07)

System Validation /Area Scan (61x81x1): Interpolated grid: $dx=1.000 \text{ mm}$, $dy=1.000 \text{ mm}$

Reference Value = 93.844 V/m; Power Drift = -0.02 dB

SAR(1 g) = 10.5 W/kg; SAR(10 g) = 5.42 W/kg

Maximum value of SAR (interpolated) = 12.8 W/kg

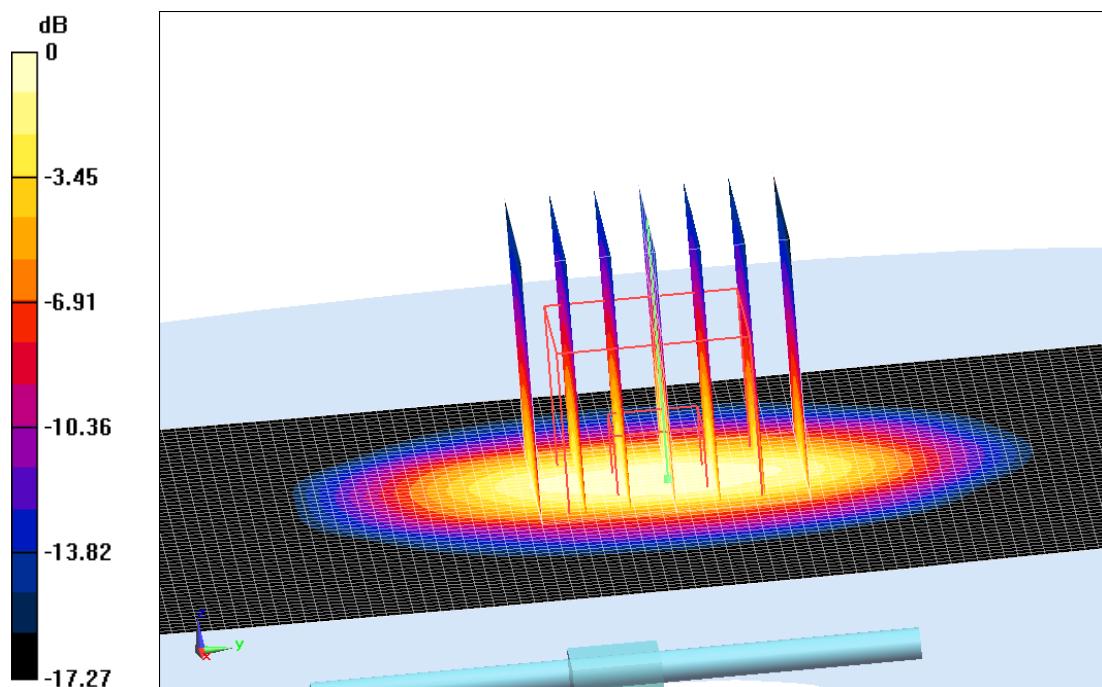
System Validation /Zoom Scan (7x7x7)/Cube 0: Measurement grid: $dx=5\text{mm}$, $dy=5\text{mm}$, $dz=5\text{mm}$

Reference Value = 93.844 V/m; Power Drift = -0.02 dB

Peak SAR (extrapolated) = 18.2 W/kg

SAR(1 g) = 10.2 W/kg; SAR(10 g) = 5.36 W/kg

Maximum value of SAR (measured) = 12.4 W/kg



$$0 \text{ dB} = 12.4 \text{ W/kg} = 10.9 \text{ dBW/kg}$$

Fig.B.17 validation 1900MHz 250mW

1900MHz

Date: 2015-10-20

Electronics: DAE4 Sn777

Medium: Body 1900 MHz

Medium parameters used: $f = 1900 \text{ MHz}$; $\sigma = 1.557 \text{ S/m}$; $\epsilon_r = 52.93$; $\rho = 1000 \text{ kg/m}^3$

Ambient Temperature: 22.9°C Liquid Temperature: 22.5°C

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

Probe: EX3DV4 - SN3617 ConvF(7.74, 7.74, 7.74)

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

Reference Value = 92.321 V/m; Power Drift = 0.04 dB

Fast SAR: $\text{SAR}(1 \text{ g}) = 10.4 \text{ W/kg}$; $\text{SAR}(10 \text{ g}) = 5.58 \text{ W/kg}$

Maximum value of SAR (interpolated) = 12.3 W/kg

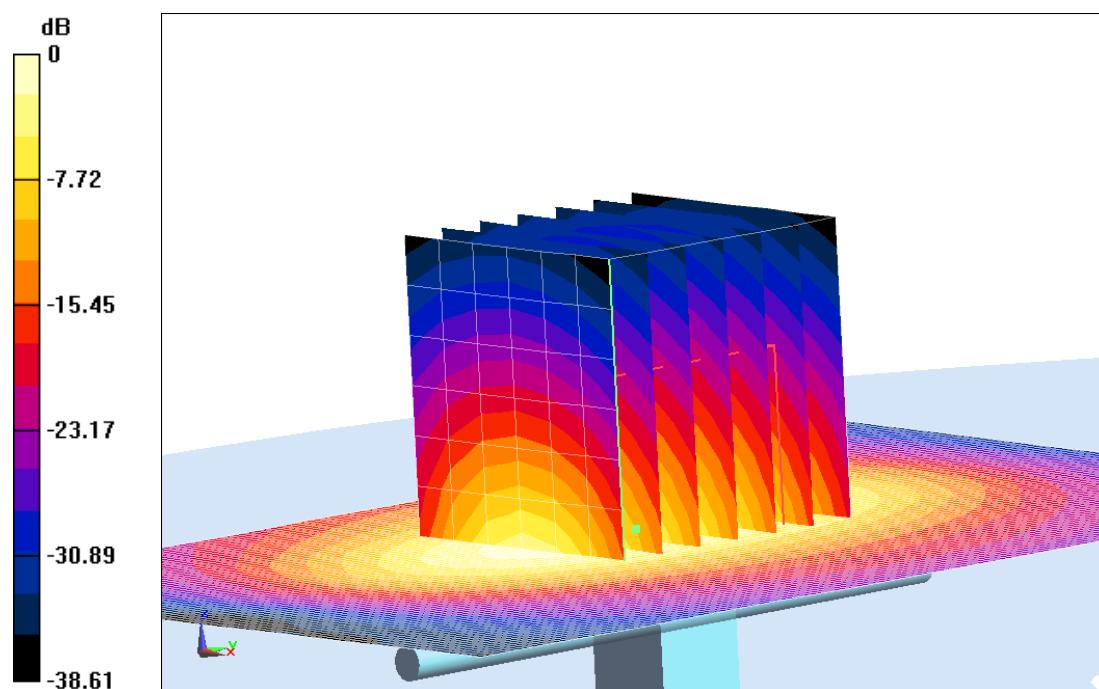
System Validation/Zoom Scan (7x7x7)/Cube 0: Measurement grid: $dx=5\text{mm}$, $dy=5\text{mm}$, $dz=5\text{mm}$

Reference Value = 92.321 V/m; Power Drift = 0.04 dB

Peak SAR (extrapolated) = 19.03 W/kg

SAR(1 g) = 10.3 W/kg; SAR(10 g) = 5.36 W/kg

Maximum value of SAR (measured) = 12.2 W/kg



0 dB = 12.2 W/kg = 10.9 dB W/kg

Fig.B.18 validation 1900MHz 250mW

2450MHz

Date: 2015-10-21

Electronics: DAE4 Sn777

Medium: Head 2450 MHz

Medium parameters used: $f = 2450 \text{ MHz}$; $\sigma = 1.866 \text{ mho/m}$; $\epsilon_r = 40.22$; $\rho = 1000 \text{ kg/m}^3$

Ambient Temperature: 22.9°C Liquid Temperature: 22.5°C

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

Probe: EX3DV4 - SN3617 ConvF(7.24, 7.24, 7.24)

System Validation /Area Scan (61x81x1): Interpolated grid: $dx=1.000 \text{ mm}$, $dy=1.000 \text{ mm}$

Reference Value = 91.464 V/m; Power Drift = -0.07 dB

SAR(1 g) = 13.6 W/kg; SAR(10 g) = 6.38 W/kg

Maximum value of SAR (interpolated) = 17.7 W/kg

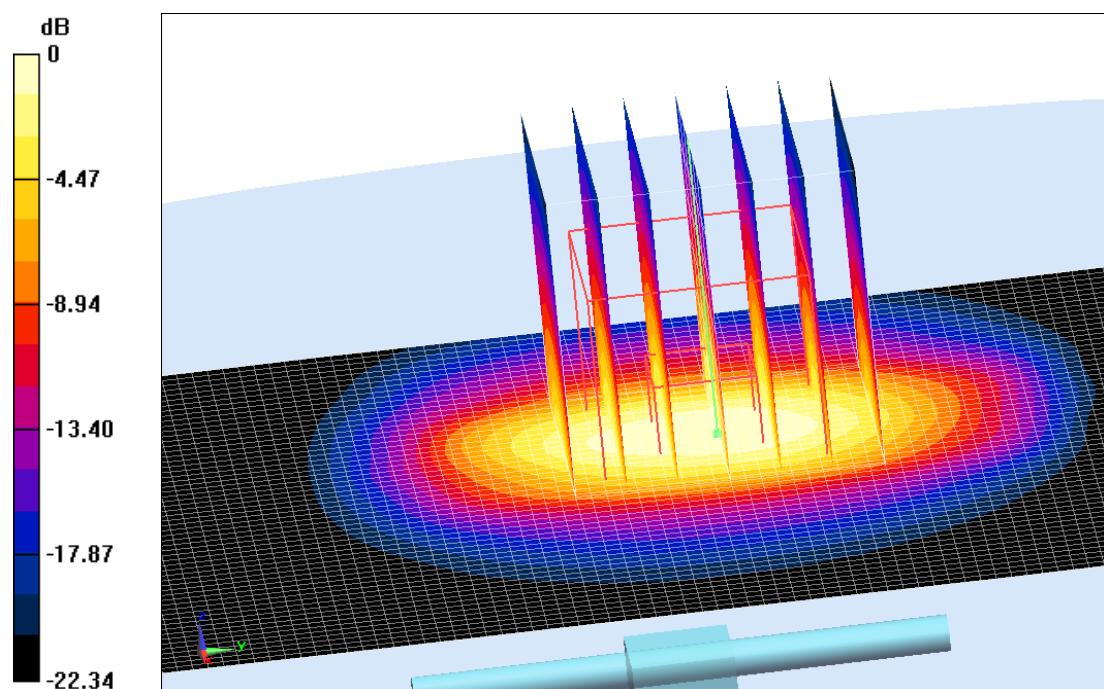
System Validation /Zoom Scan (7x7x7)/Cube 0: Measurement grid: $dx=5\text{mm}$, $dy=5\text{mm}$, $dz=5\text{mm}$

Reference Value = 91.464 V/m; Power Drift = -0.07 dB

Peak SAR (extrapolated) = 27.51 W/kg

SAR(1 g) = 13.4 W/kg; SAR(10 g) = 6.26 W/kg

Maximum value of SAR (measured) = 16.5 W/kg



$$0 \text{ dB} = 16.5 \text{ W/kg} = 12.17 \text{ dBW/kg}$$

Fig.B.19 validation 2450MHz 250mW

2450MHz

Date: 2015-10-21

Electronics: DAE4 Sn777

Medium: Body 2450 MHz

Medium parameters used: $f = 2450 \text{ MHz}$; $\sigma = 2.018 \text{ S/m}$; $\epsilon_r = 50.88$; $\rho = 1000 \text{ kg/m}^3$

Ambient Temperature: 22.9°C Liquid Temperature: 22.5°C

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

Probe: EX3DV4 - SN3617 ConvF(7.35, 7.35, 7.35)

System Validation/Area Scan (81x101x1): Interpolated grid: $dx=1.000 \text{ mm}$, $dy=1.000 \text{ mm}$

Reference Value = 91.325 V/m; Power Drift = -0.06 dB

SAR(1 g) = 13.4 W/kg; SAR(10 g) = 6.25 W/kg

Maximum value of SAR (interpolated) = 14.4 W/kg

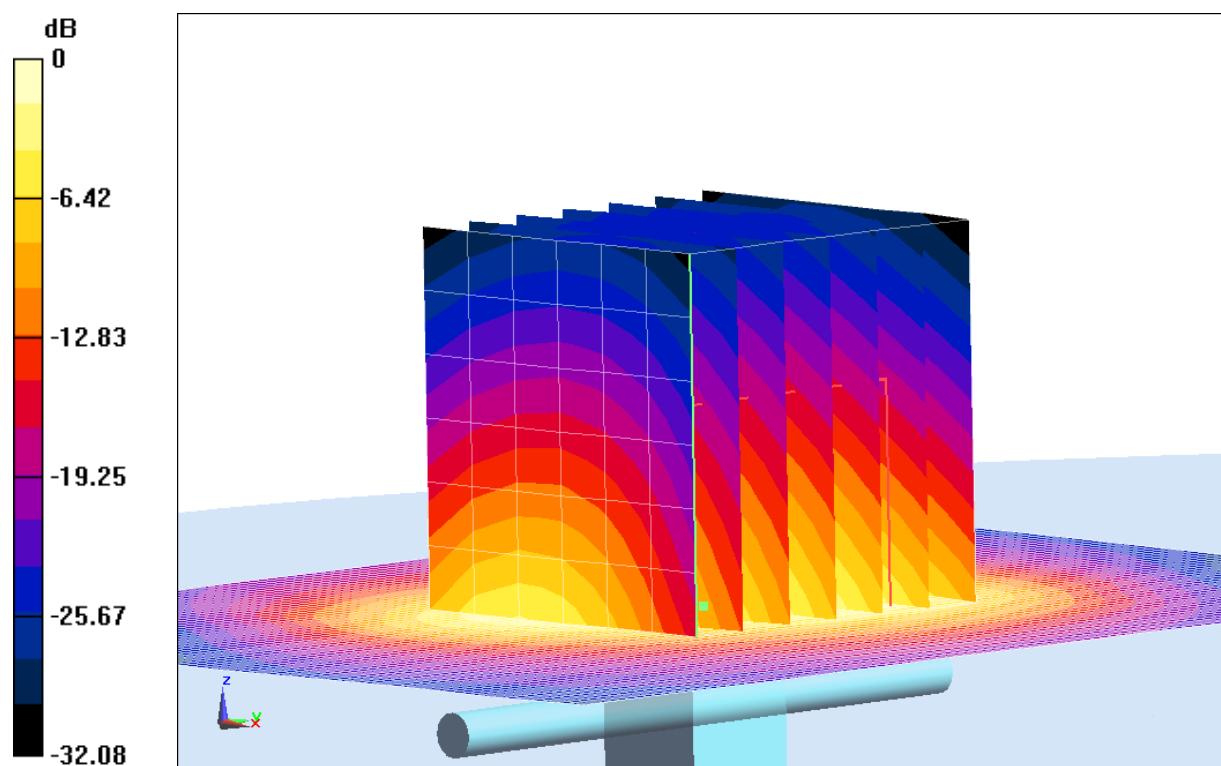
System Validation/Zoom Scan (7x7x7)/Cube 0: Measurement grid: $dx=5\text{mm}$, $dy=5\text{mm}$, $dz=5\text{mm}$

Reference Value = 91.325 V/m; Power Drift = -0.06 dB

Peak SAR (extrapolated) = 24.72 W/kg

SAR(1 g) = 13.1 W/kg; SAR(10 g) = 6.14 W/kg

Maximum value of SAR (measured) = 14.6 W/kg



$$0 \text{ dB} = 14.6 \text{ W/kg} = 11.64 \text{ dB W/kg}$$

Fig.B.20 validation 2450MHz 250mW

2600MHz

Date: 2015-10-22

Electronics: DAE4 Sn777

Medium: Head 2600 MHz

Medium parameters used: $f = 2600 \text{ MHz}$; $\sigma = 1.926 \text{ mho/m}$; $\epsilon_r = 38.86$; $\rho = 1000 \text{ kg/m}^3$

Ambient Temperature: 22.9°C Liquid Temperature: 22.5°C

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

Probe: EX3DV4 - SN3617 ConvF(7.21, 7.21, 7.21)

System Validation /Area Scan (81x81x1): Interpolated grid: $dx=1.000 \text{ mm}$, $dy=1.000 \text{ mm}$

Reference Value = 79.993 V/m; Power Drift = 0.02 dB

SAR(1 g) = 14.6 W/kg; SAR(10 g) = 6.50 W/kg

Maximum value of SAR (interpolated) = 22.6 W/kg

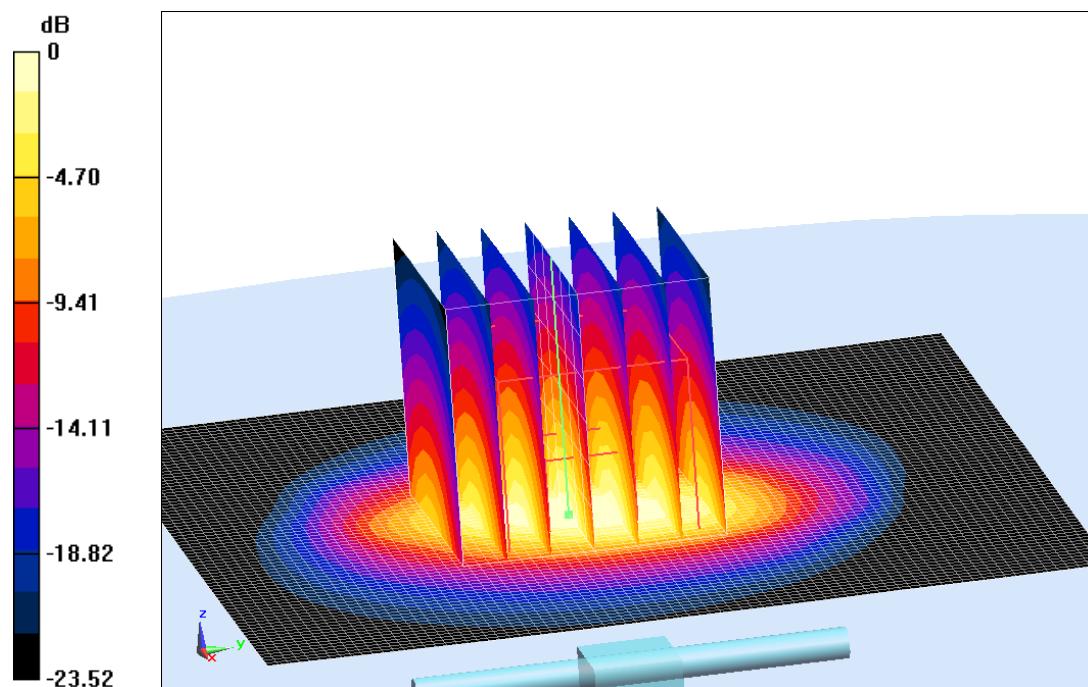
System Validation /Zoom Scan (7x7x7)/Cube 0: Measurement grid: $dx=5\text{mm}$, $dy=5\text{mm}$, $dz=5\text{mm}$

Reference Value = 79.993 V/m; Power Drift = 0.02 dB

Peak SAR (extrapolated) = 30.98 W/kg

SAR(1 g) = 14.5 W/kg; SAR(10 g) = 6.41 W/kg

Maximum value of SAR (measured) = 22.4 W/kg



$$0 \text{ dB} = 22.4 \text{ W/kg} = 13.5 \text{ dBW/kg}$$

Fig.B.21 validation 2600MHz 250mW

2600MHz

Date: 2015-10-22

Electronics: DAE4 Sn777

Medium: Body 2600 MHz

Medium parameters used: $f = 2600 \text{ MHz}$; $\sigma = 2.13 \text{ mho/m}$; $\epsilon_r = 51.17$; $\rho = 1000 \text{ kg/m}^3$

Ambient Temperature: 22.9°C Liquid Temperature: 22.5°C

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

Probe: EX3DV4 - SN3617 ConvF(7.20, 7.20, 7.20)

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

Reference Value = 84.588 V/m; Power Drift = 0.05 dB

Fast SAR: $\text{SAR}(1 \text{ g}) = 14.7 \text{ W/kg}$; $\text{SAR}(10 \text{ g}) = 6.63 \text{ W/kg}$

Maximum value of SAR (interpolated) = 22.6 W/kg

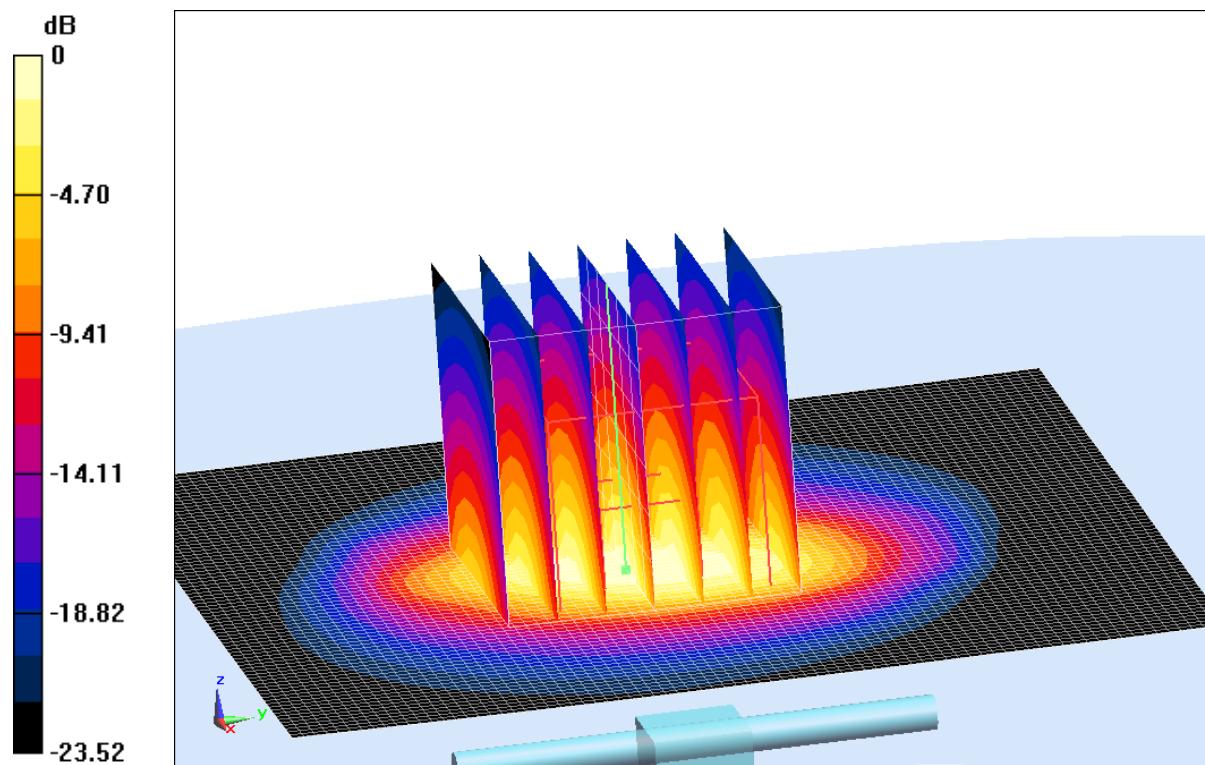
System Validation /Zoom Scan (7x7x7)/Cube 0: Measurement grid: $dx=5\text{mm}$, $dy=5\text{mm}$, $dz=5\text{mm}$

Reference Value = 84.588 V/m; Power Drift = 0.05 dB

Peak SAR (extrapolated) = 31.4 W/kg

SAR(1 g) = 14.5 W/kg; SAR(10 g) = 6.51 W/kg

Maximum value of SAR (measured) = 22.4 W/kg



$0 \text{ dB} = 22.5 \text{ W/kg} = 13.5 \text{ dB W/kg}$

Fig.B.22 validation 2600MHz 250mW