

## WCDMA 1900 Right Cheek High

Date: 2016-1-23

Electronics: DAE4 Sn777

Medium: Head 1900 MHz

Medium parameters used (interpolated):  $f = 1907.6$  MHz;  $\sigma = 1.435$  mho/m;  $\epsilon_r = 39.976$ ;  $\rho = 1000$  kg/m<sup>3</sup>

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

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

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

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

Maximum value of SAR (interpolated) = 0.210 W/kg

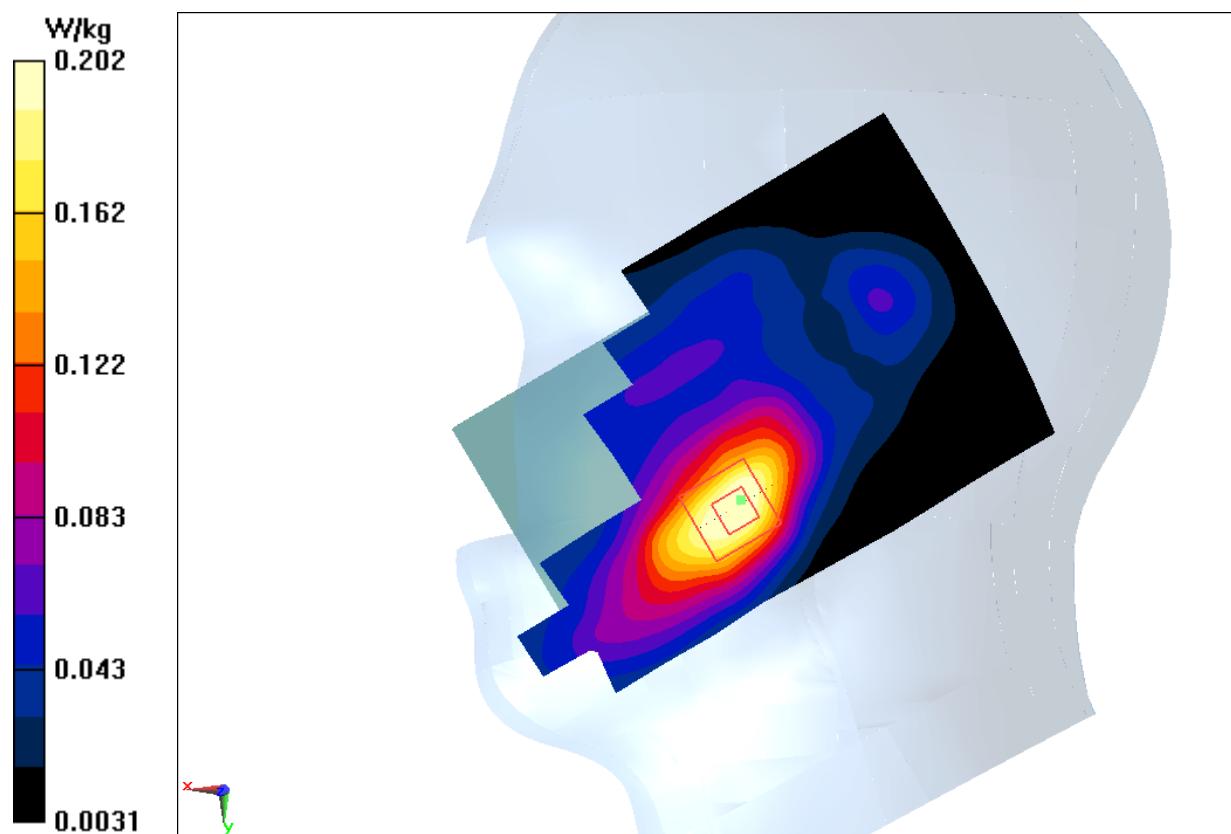
**Zoom Scan (7x7x7)/Cube 0:** Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 6.014 V/m; Power Drift = 0.12 dB

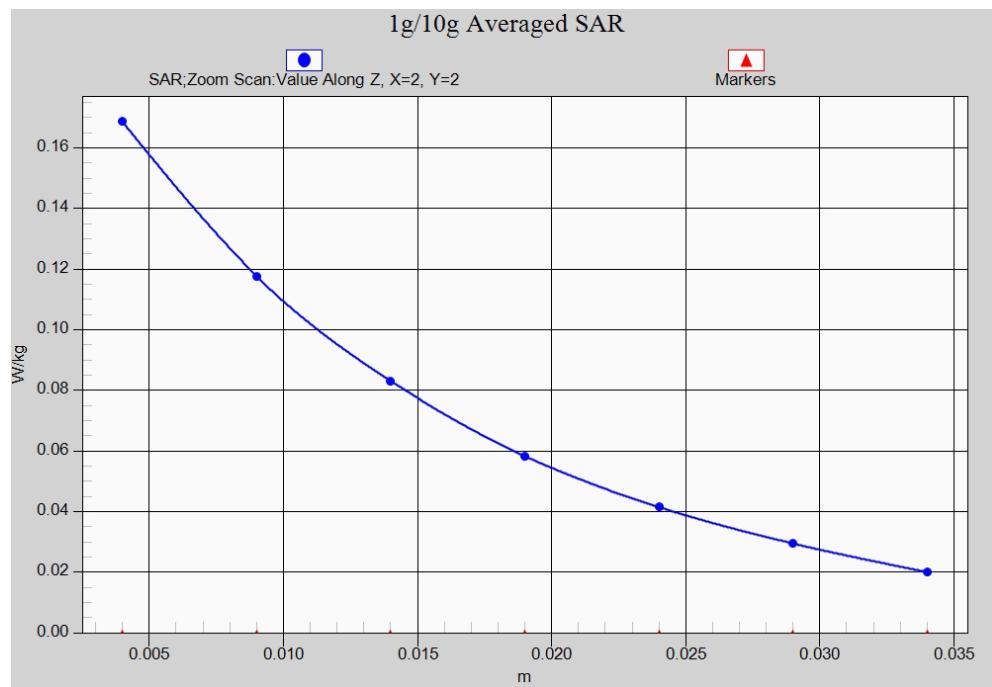
Peak SAR (extrapolated) = 0.259 W/kg

**SAR(1 g) = 0.171 W/kg; SAR(10 g) = 0.107 W/kg**

Maximum value of SAR (measured) = 0.202 W/kg



**Fig.7 WCDMA1900**



**Fig. 7-1 Z-Scan at power reference point (WCDMA850)**

## WCDMA 1900 Body Bottom High

Date: 2016-1-23

Electronics: DAE4 Sn777

Medium: Body 1900 MHz

Medium parameters used:  $f = 1907.6$  MHz;  $\sigma = 1.567$  mho/m;  $\epsilon_r = 52.732$ ;  $\rho = 1000$  kg/m<sup>3</sup>

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

Communication System: WCDMA 1900 Frequency: 1907.6 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) = 1.30 W/kg

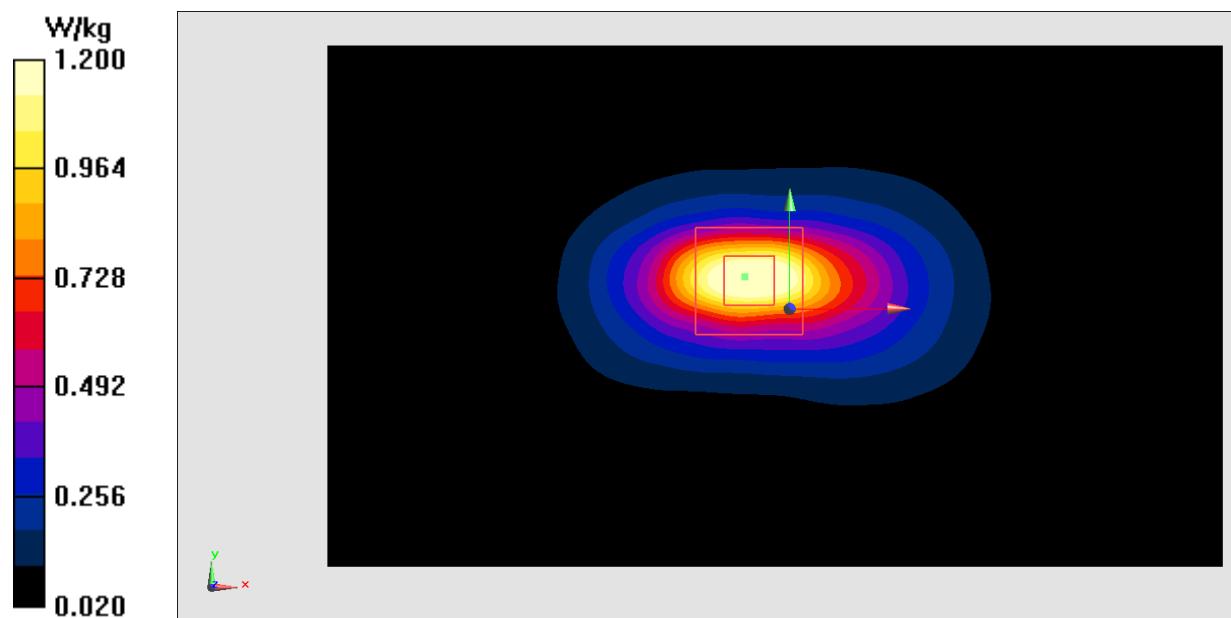
**Zoom Scan (7x7x7)/Cube 0:** Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 24.10 V/m; Power Drift = 0.02 dB

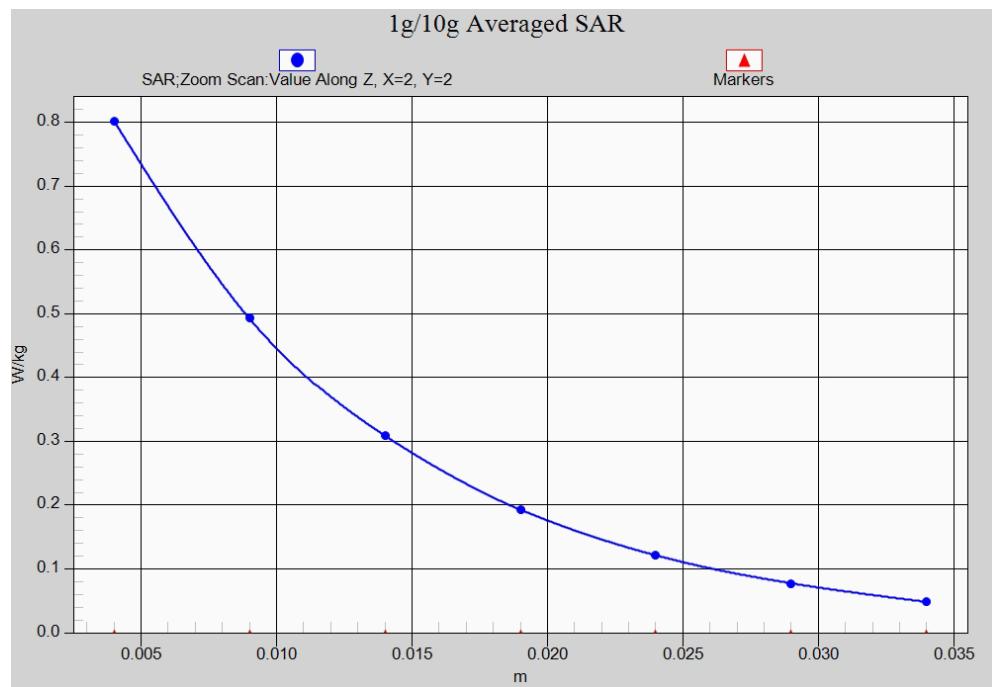
Peak SAR (extrapolated) = 1.87 W/kg

**SAR(1 g) = 1.08 W/kg; SAR(10 g) = 0.560 W/kg**

Maximum value of SAR (measured) = 1.20 W/kg



**Fig.8 WCDMA1900**



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

**LTE Band2 Right Cheek High with QPSK\_20M\_1RB\_High**

Date: 2016-1-23

Electronics: DAE4 Sn777

Medium: Head 1900 MHz

Medium parameters used:  $f = 1900$  MHz;  $\sigma = 1.436$  mho/m;  $\epsilon_r = 40.663$ ;  $\rho = 1000$  kg/m<sup>3</sup>

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

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

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

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

Maximum value of SAR (interpolated) = 0.215 W/kg

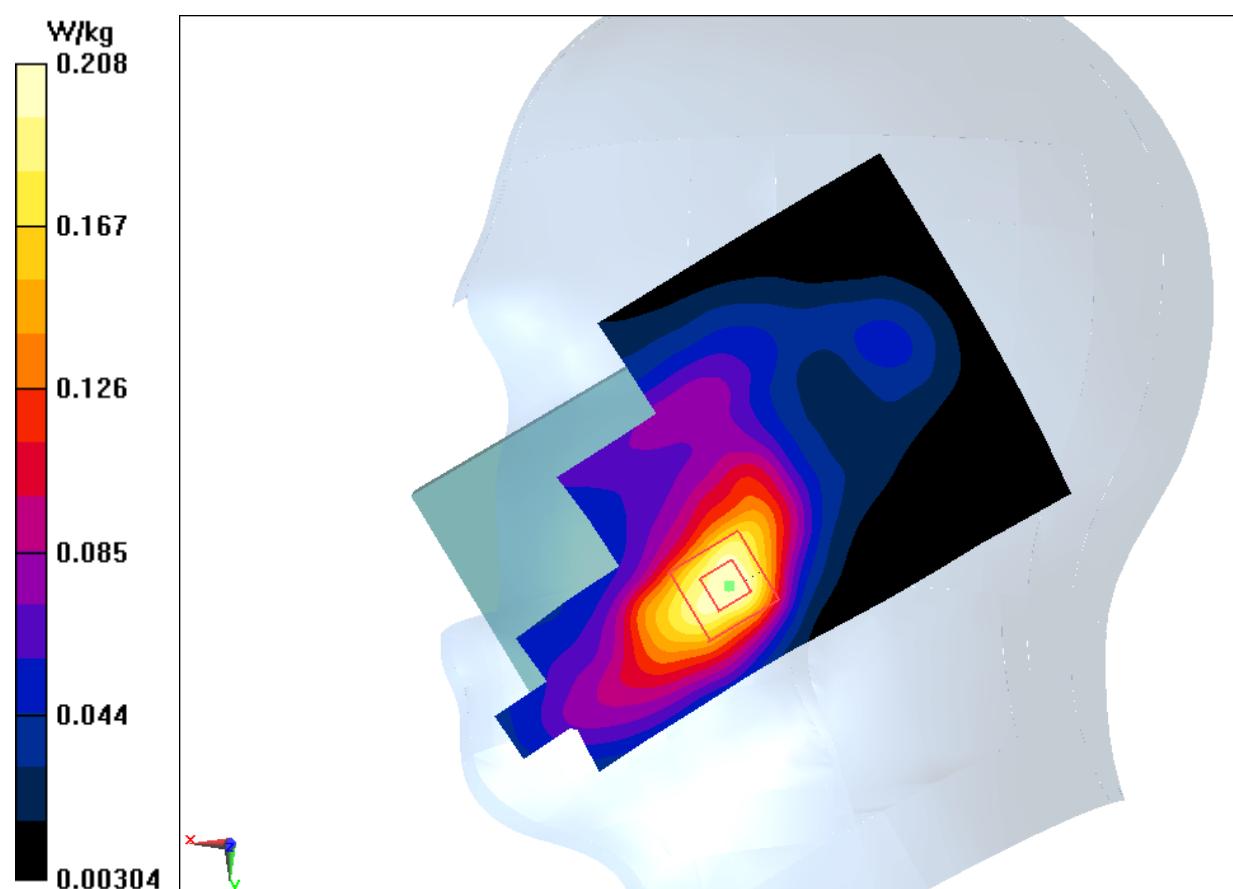
**Zoom Scan (7x7x7)/Cube 0:** Measurement grid: dx=5mm, dy=5mm, dz=5mm

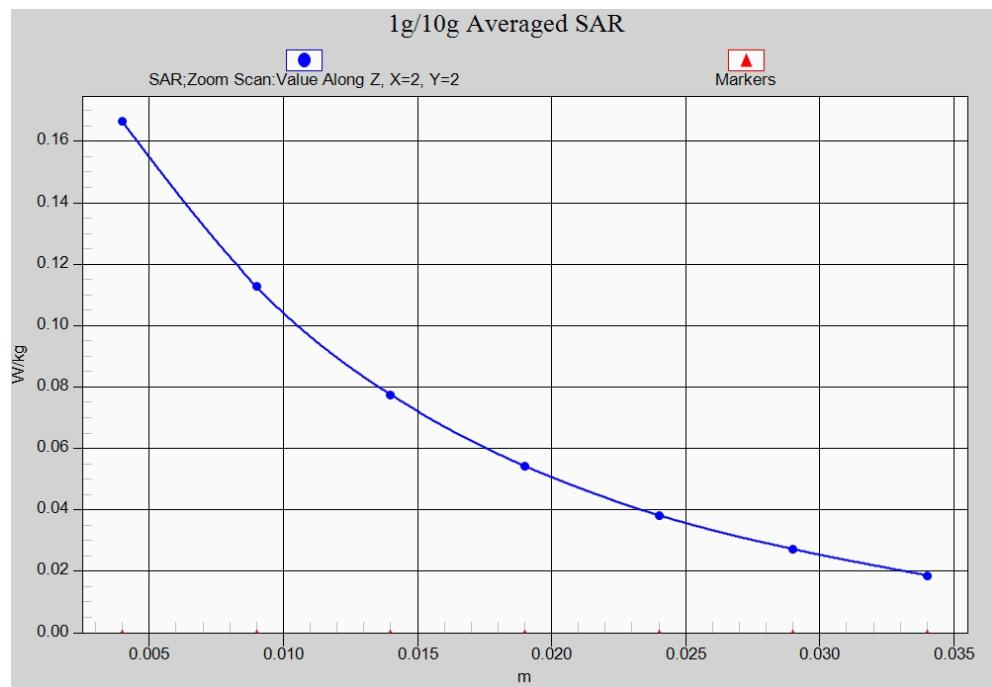
Reference Value = 5.674 V/m; Power Drift = 0.12 dB

Peak SAR (extrapolated) = 0.266 W/kg

**SAR(1 g) = 0.176 W/kg; SAR(10 g) = 0.111 W/kg**

Maximum value of SAR (measured) = 0.208 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\_High**

Date: 2016-1-23

Electronics: DAE4 Sn777

Medium: Body 1900 MHz

Medium parameters used:  $f = 1900$  MHz;  $\sigma = 1.557$  mho/m;  $\epsilon_r = 52.93$ ;  $\rho = 1000$  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 - 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) = 1.51 W/kg

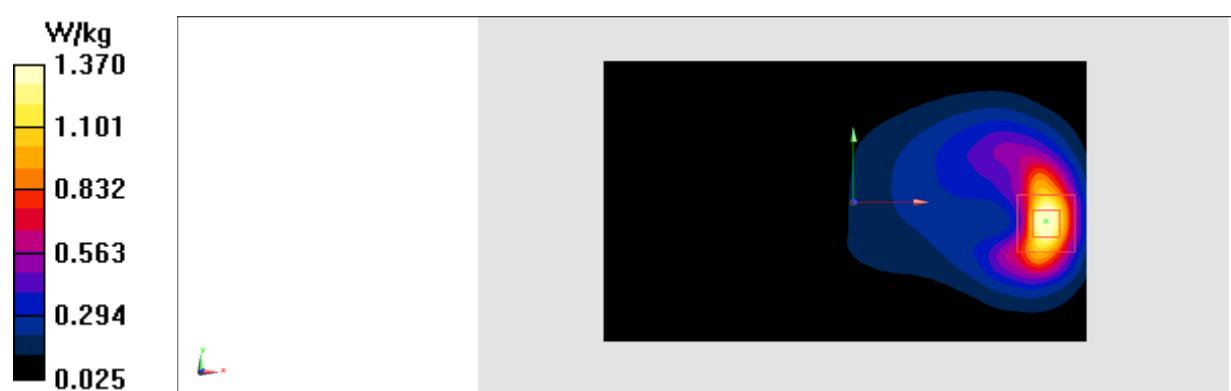
**Zoom Scan (7x7x7)/Cube 0:** Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 9.107 V/m; Power Drift = -0.13 dB

Peak SAR (extrapolated) = 2.09 W/kg

**SAR(1 g) = 1.18 W/kg; SAR(10 g) = 0.605 W/kg**

Maximum value of SAR (measured) = 1.37 W/kg

**Fig.10 LTE Band2**

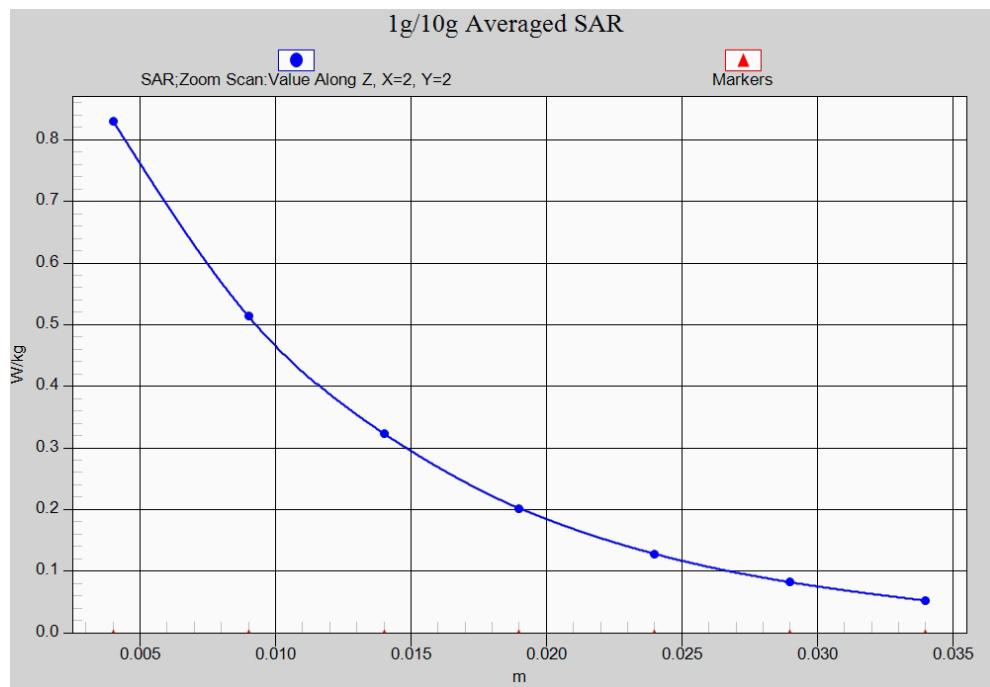


Fig. 10-1 Z-Scan at power reference point (LTE Band2)

### LTE Band4 Right Cheek High with QPSK\_20M\_1RB\_Low

Date: 2016-1-22

Electronics: DAE4 Sn777

Medium: Head 1750 MHz

Medium parameters used:  $f = 1745$  MHz;  $\sigma = 1.475$  mho/m;  $\epsilon_r = 39.643$ ;  $\rho = 1000$  kg/m<sup>3</sup>

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

Communication System: LTE Band4 Frequency: 1745 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) = 0.224 W/kg

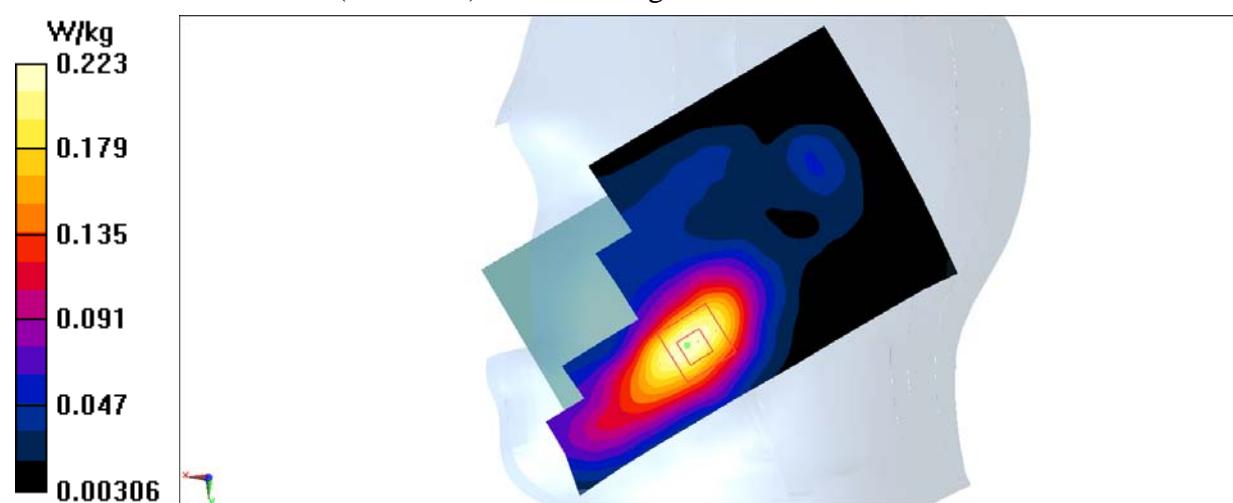
**Zoom Scan (7x7x7)/Cube 0:** Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 5.535 V/m; Power Drift = -0.19 dB

Peak SAR (extrapolated) = 0.268 W/kg

**SAR(1 g) = 0.174 W/kg; SAR(10 g) = 0.108 W/kg**

Maximum value of SAR (measured) = 0.223 W/kg



**Fig.11 LTE Band4**

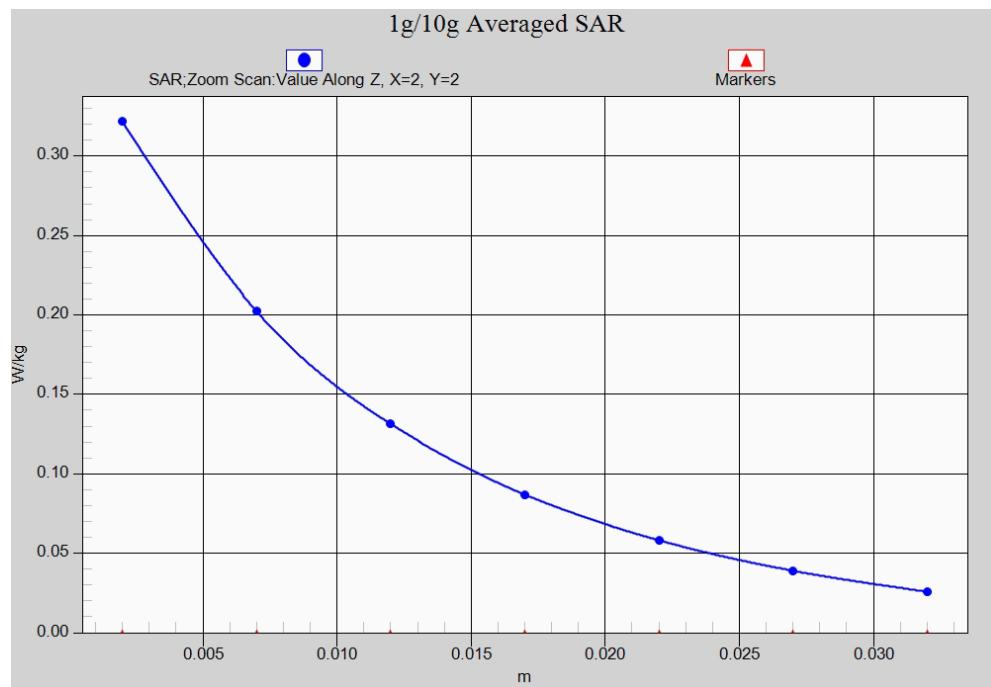


Fig. 11-1 Z-Scan at power reference point (LTE Band4)

### LTE Band4 Body Rear High with QPSK\_20M\_1RB\_Low

Date: 2016-1-22

Electronics: DAE4 Sn777

Medium: Body 1750 MHz

Medium parameters used:  $f = 1745$  MHz;  $\sigma = 1.493$  mho/m;  $\epsilon_r = 52.885$ ;  $\rho = 1000$  kg/m<sup>3</sup>

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

Communication System: LTE Band4 Frequency: 1745 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) = 1.25 W/kg

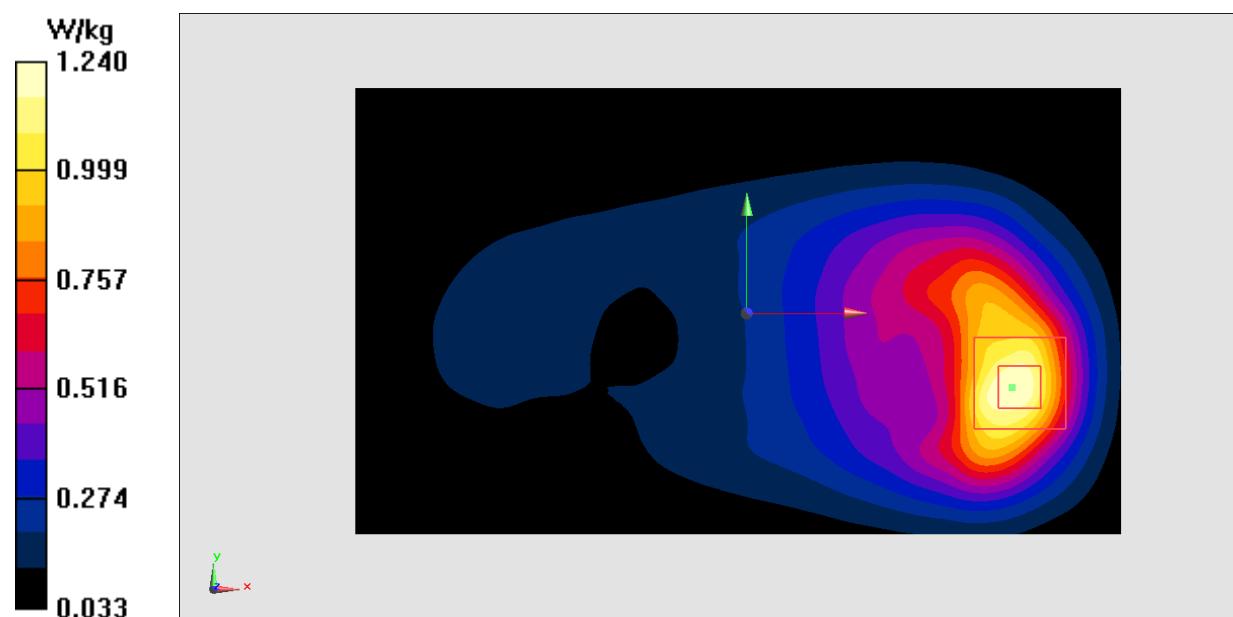
**Zoom Scan (7x7x7)/Cube 0:** Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 11.79 V/m; Power Drift = -0.17 dB

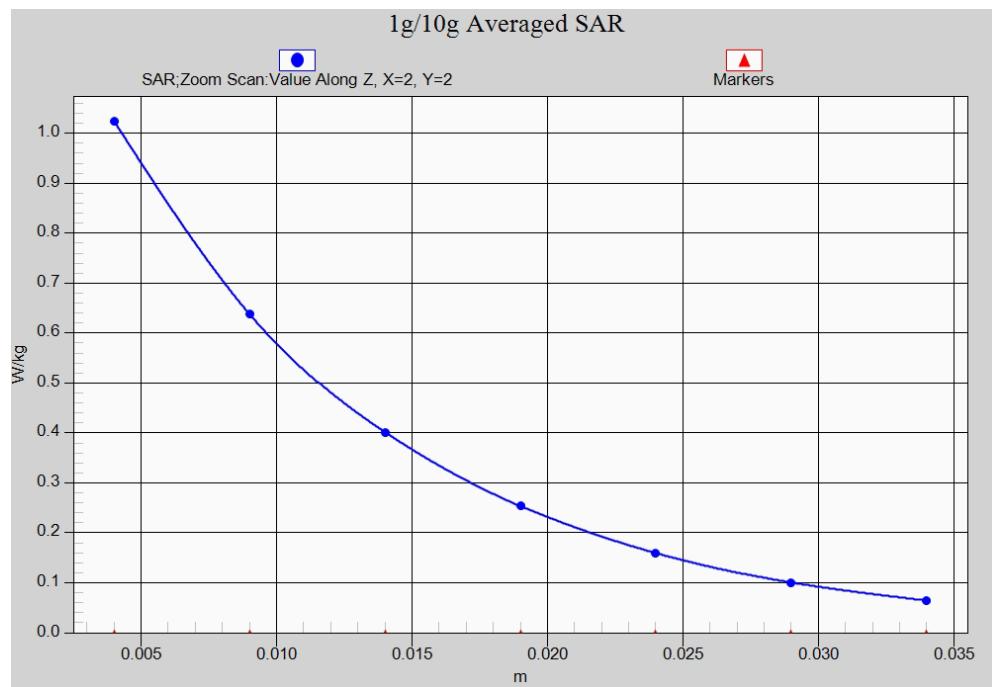
Peak SAR (extrapolated) = 1.94 W/kg

**SAR(1 g) = 1.15 W/kg; SAR(10 g) = 0.626 W/kg**

Maximum value of SAR (measured) = 1.24 W/kg



**Fig.12 LTE Band4**



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

**LTE Band7 Right Cheek High with QPSK\_20M\_1RB\_High**

Date: 2016-1-25

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/m<sup>3</sup>

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

Maximum value of SAR (interpolated) = 0.564 W/kg

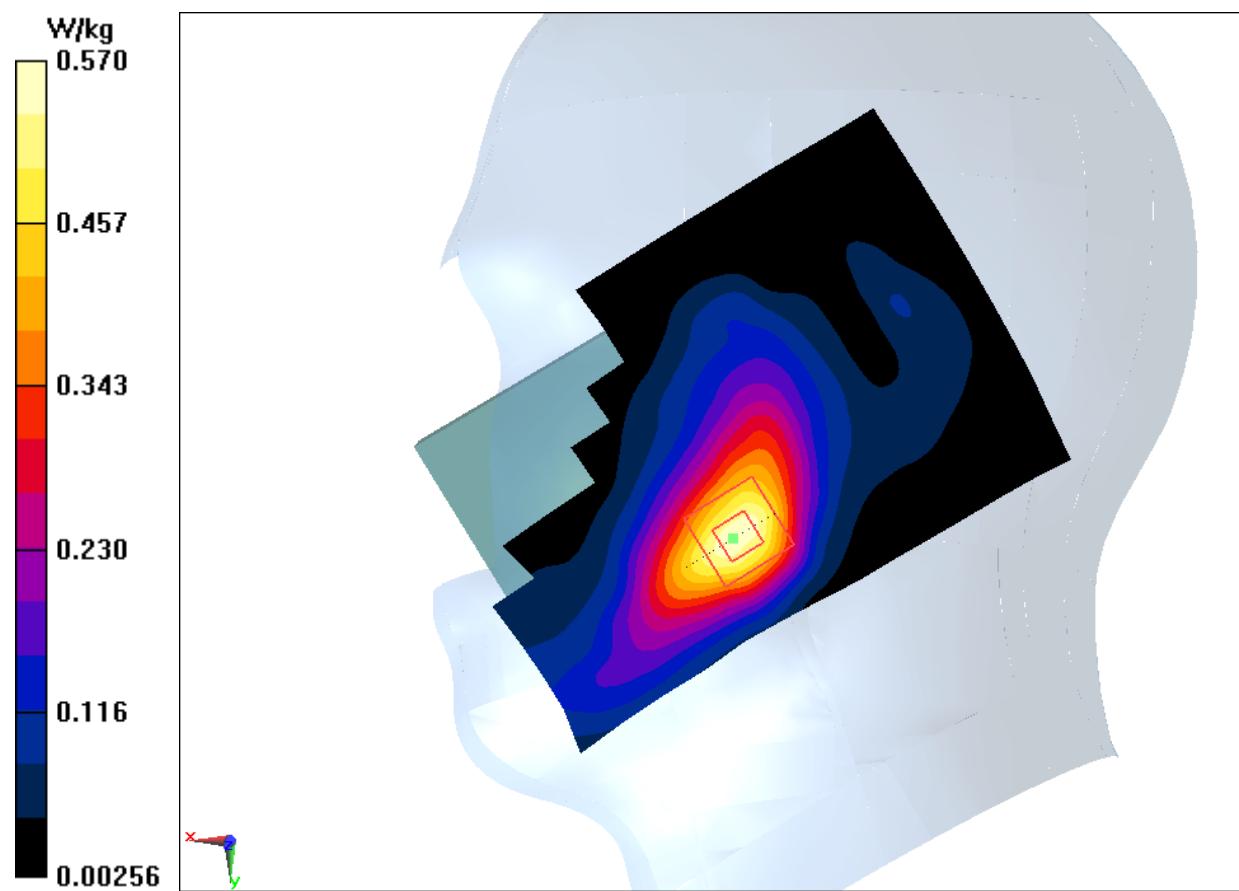
**Zoom Scan (7x7x7)/Cube 0:** Measurement grid: dx=5mm, dy=5mm, dz=5mm

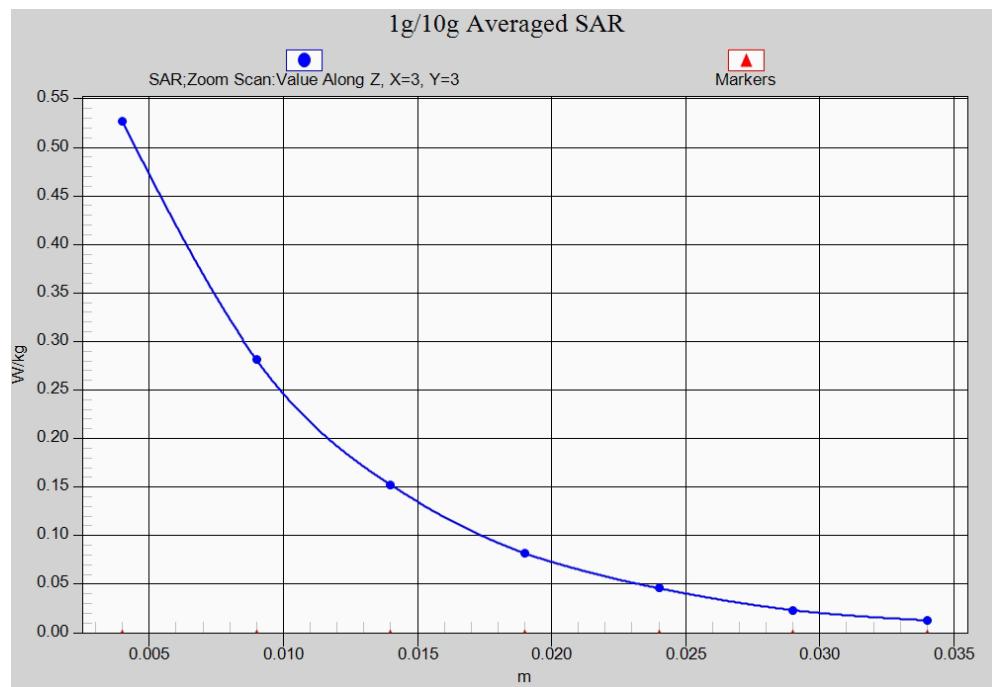
Reference Value = 6.034 V/m; Power Drift = -0.16 dB

Peak SAR (extrapolated) = 0.846 W/kg

**SAR(1 g) = 0.462 W/kg; SAR(10 g) = 0.249 W/kg**

Maximum value of SAR (measured) = 0.570 W/kg

**Fig.13 LTE Band7**



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

**LTE Band7 Body Bottom Middle with QPSK\_20M\_1RB\_High**

Date: 2016-1-25

Electronics: DAE4 Sn777

Medium: Body 2600 MHz

Medium parameters used:  $f = 2535$  MHz;  $\sigma = 1.995$  mho/m;  $\epsilon_r = 50.945$ ;  $\rho = 1000$  kg/m<sup>3</sup>

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

Communication System: LTE Band7 Frequency: 2535 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) = 1.50 W/kg

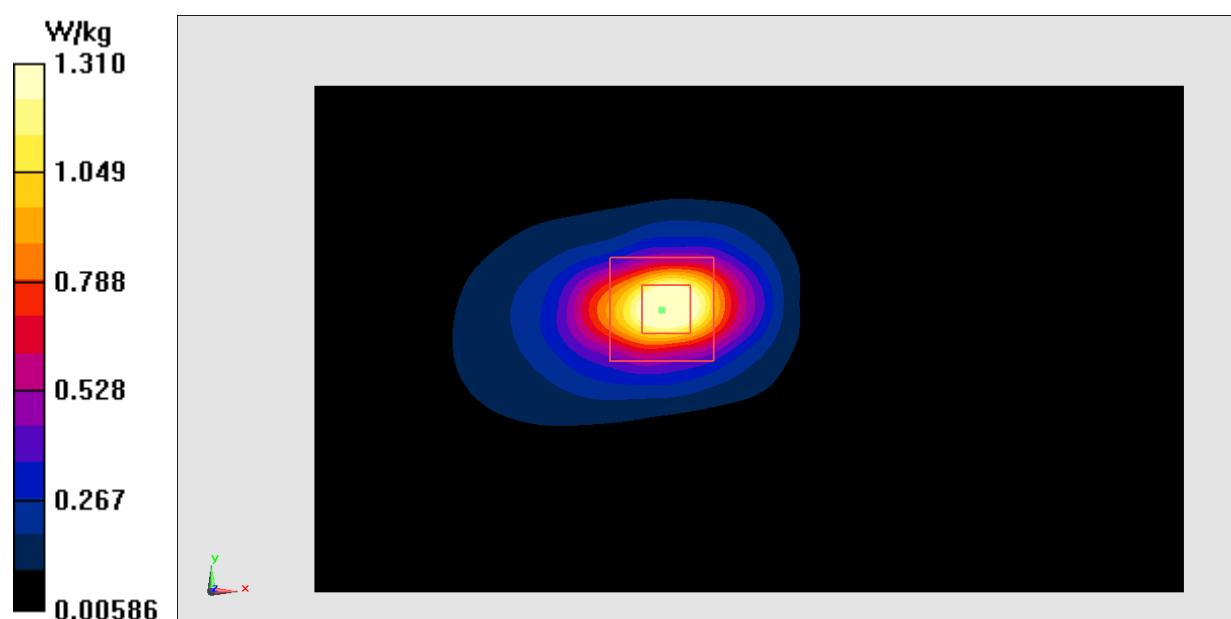
**Zoom Scan (7x7x7)/Cube 0:** Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 12.22 V/m; Power Drift = 0.03 dB

Peak SAR (extrapolated) = 2.28 W/kg

**SAR(1 g) = 1.15 W/kg; SAR(10 g) = 0.515 W/kg**

Maximum value of SAR (measured) = 1.31 W/kg

**Fig.14 LTE Band7**

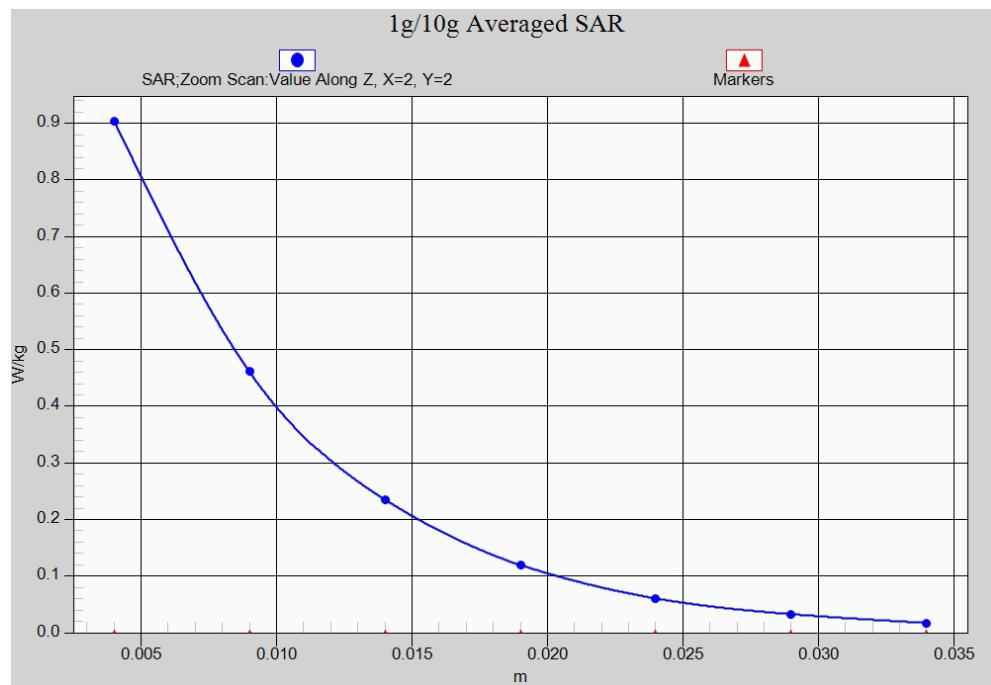


Fig. 14-1 Z-Scan at power reference point (LTE Band7)

**LTE Band 13 Left Cheek Middle with QPSK\_10M\_1RB\_Low**

Date: 2016-1-20

Electronics: DAE4 Sn777

Medium: Head 750 MHz

Medium parameters used (interpolated):  $f = 782$  MHz;  $\sigma = 0.915$  mho/m;  $\epsilon_r = 42.985$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Ambient Temperature: 22.2°C      Liquid Temperature: 21.7°C

Communication System: LTE Band13 Frequency: 782 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) = 0.252 W/kg

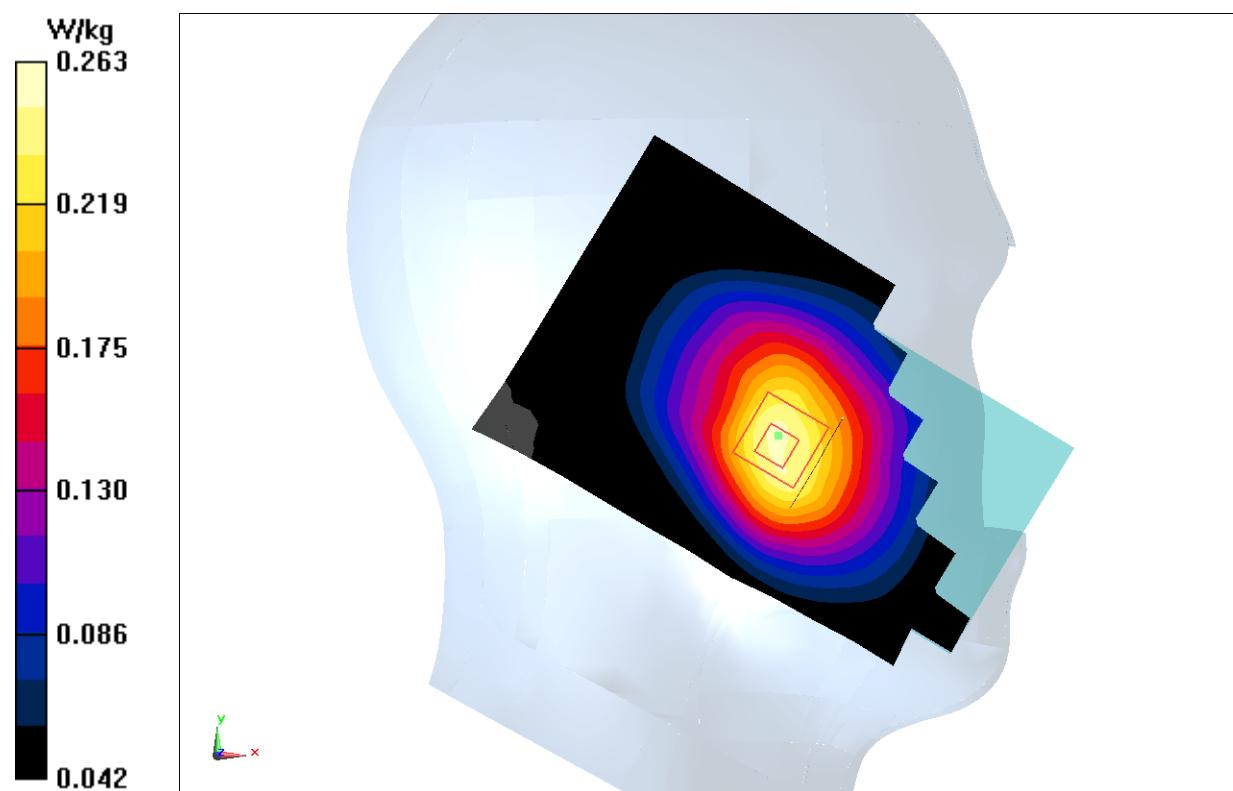
**Zoom Scan (7x7x7)/Cube 0:** Measurement grid: dx=5mm, dy=5mm, dz=5mm

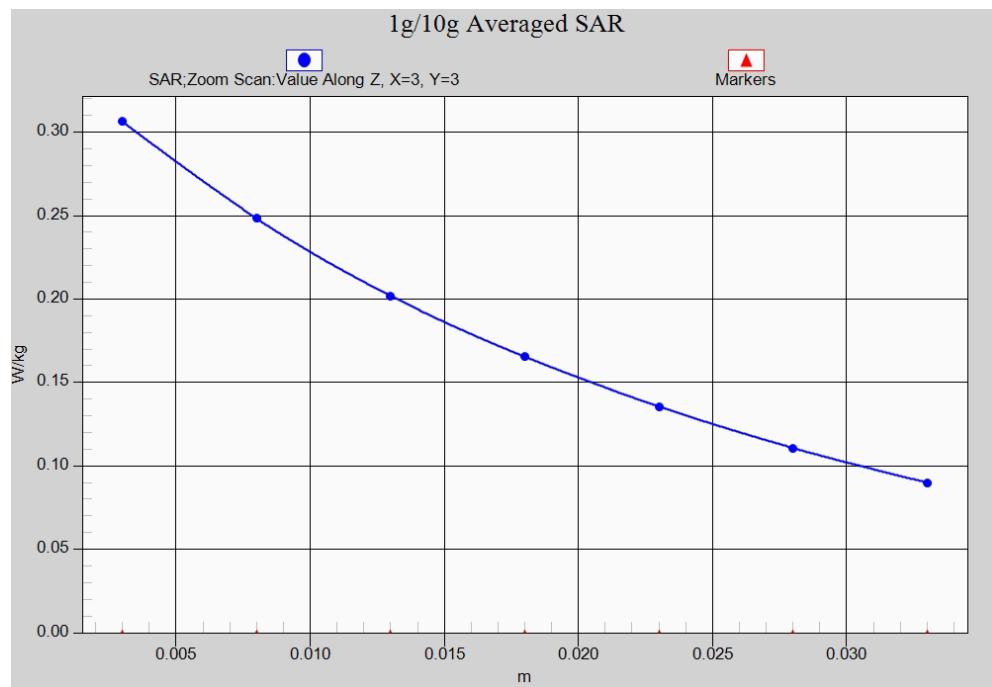
Reference Value = 7.731 V/m; Power Drift = 0.04 dB

Peak SAR (extrapolated) = 0.296 W/kg

**SAR(1 g) = 0.237 W/kg; SAR(10 g) = 0.183 W/kg**

Maximum value of SAR (measured) = 0.263 W/kg

**Fig.15 LTE Band 13**



**Fig. 15-1 Z-Scan at power reference point (LTE Band13)**

### LTE Band 13 Body Rear Middle with QPSK\_10M\_1RB\_Low

Date: 2016-1-20

Electronics: DAE4 Sn777

Medium: Body 750 MHz

Medium parameters used (interpolated):  $f = 782$  MHz;  $\sigma = 0.945$  mho/m;  $\epsilon_r = 56.885$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Ambient Temperature: 22.2°C      Liquid Temperature: 21.7°C

Communication System: LTE Band13 Frequency: 782 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) = 0.506 W/kg

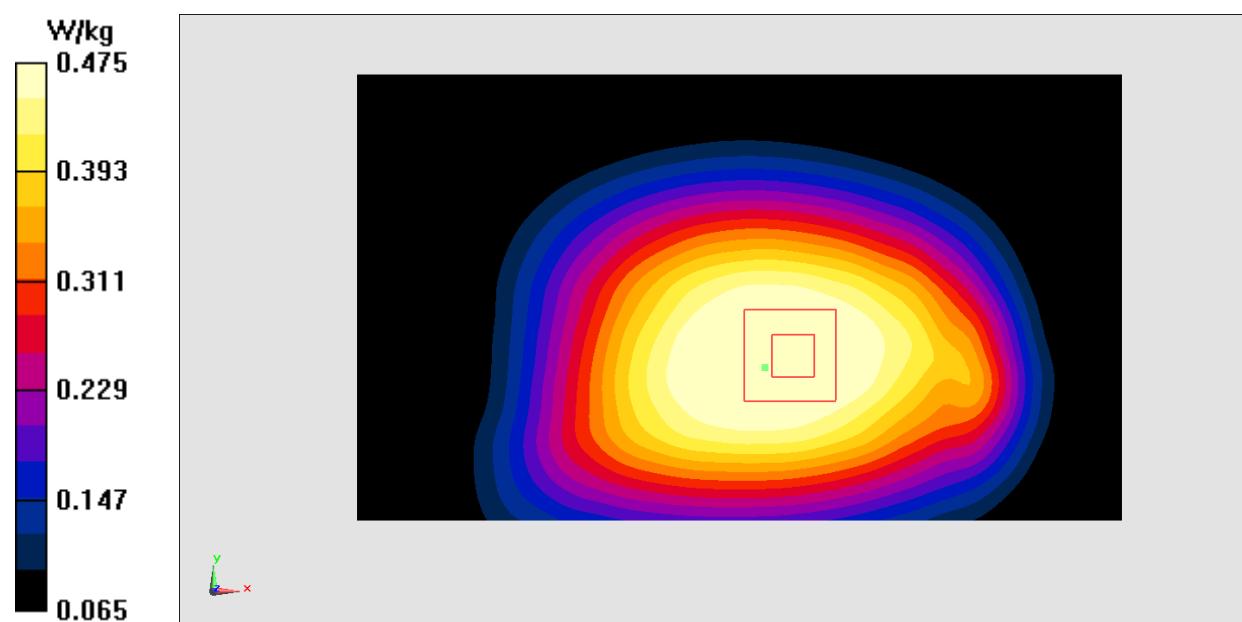
**Zoom Scan (7x7x7)/Cube 0:** Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 21.09 V/m; Power Drift = -0.18 dB

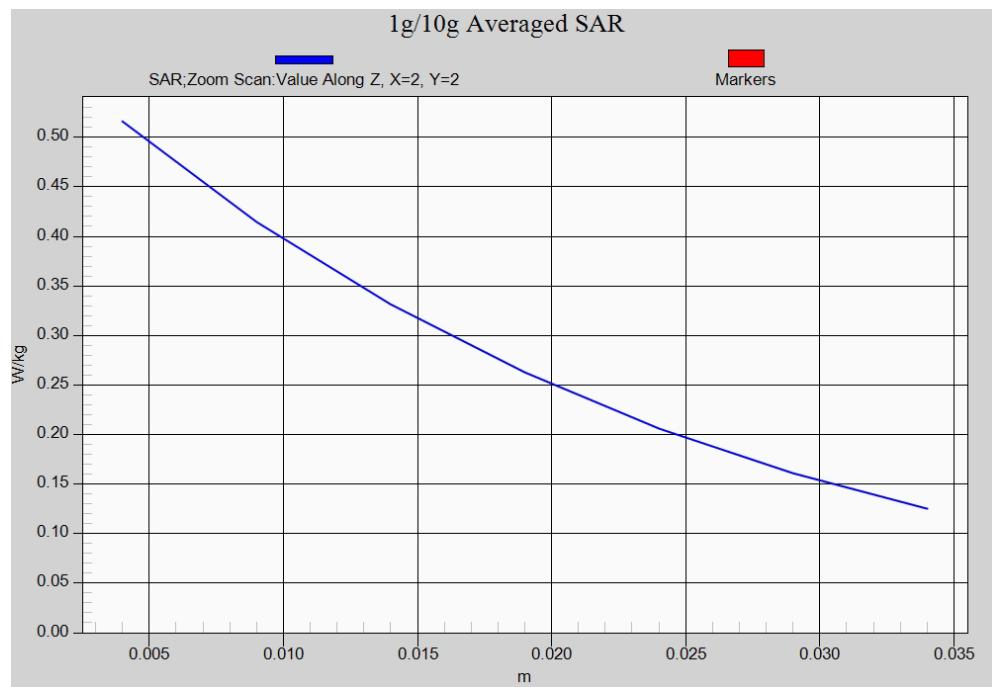
Peak SAR (extrapolated) = 0.567 W/kg

**SAR(1 g) = 0.456 W/kg; SAR(10 g) = 0.352 W/kg**

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



**Fig.16 LTE Band 13**



**Fig.16-1 Z-Scan at power reference point (LTE Band13)**

**LTE Band17 Right Cheek Middle with QPSK\_10M\_1RB\_Low**

Date: 2016-1-20

Electronics: DAE4 Sn777

Medium: Head 750 MHz

Medium parameters used (interpolated):  $f = 710$  MHz;  $\sigma = 0.852$  mho/m;  $\epsilon_r = 42.768$ ;  $\rho = 1000$  kg/m<sup>3</sup>

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) = 0.118 W/kg

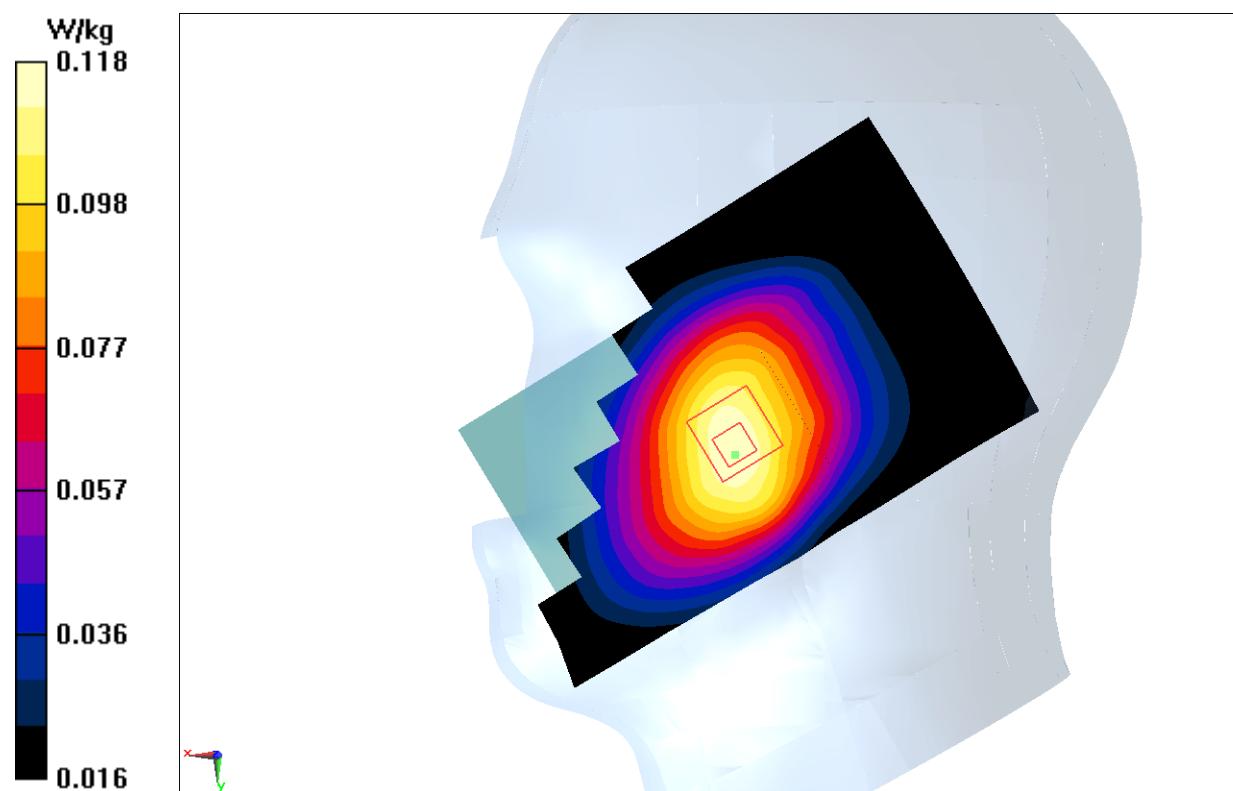
**Zoom Scan (7x7x7)/Cube 0:** Measurement grid: dx=5mm, dy=5mm, dz=5mm

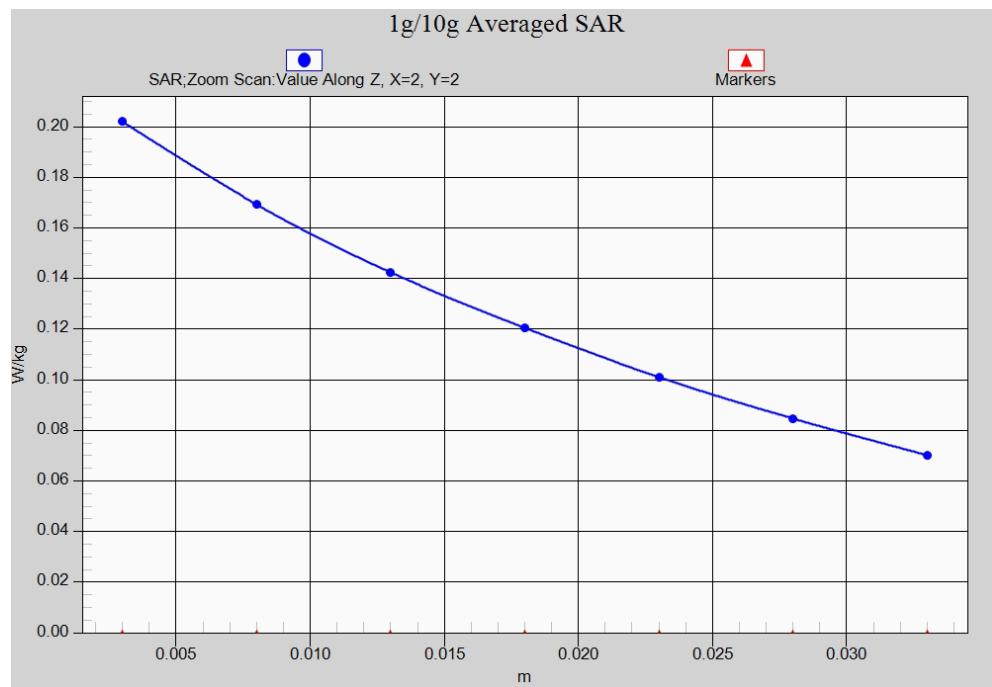
Reference Value = 4.093 V/m; Power Drift = 0.06 dB

Peak SAR (extrapolated) = 0.132 W/kg

**SAR(1 g) = 0.109 W/kg; SAR(10 g) = 0.088 W/kg**

Maximum value of SAR (measured) = 0.118 W/kg

**Fig.17 LTE Band17**



**Fig. 17-1 Z-Scan at power reference point (LTE Band17)**

**LTE Band17 Body Rear Middle with QPSK\_10M\_1RB\_Low**

Date: 2016-1-20

Electronics: DAE4 Sn777

Medium: Body 750 MHz

Medium parameters used (interpolated):  $f = 710$  MHz;  $\sigma = 0.905$  mho/m;  $\epsilon_r = 56.529$ ;  $\rho = 1000$  kg/m<sup>3</sup>

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) = 0.240 W/kg

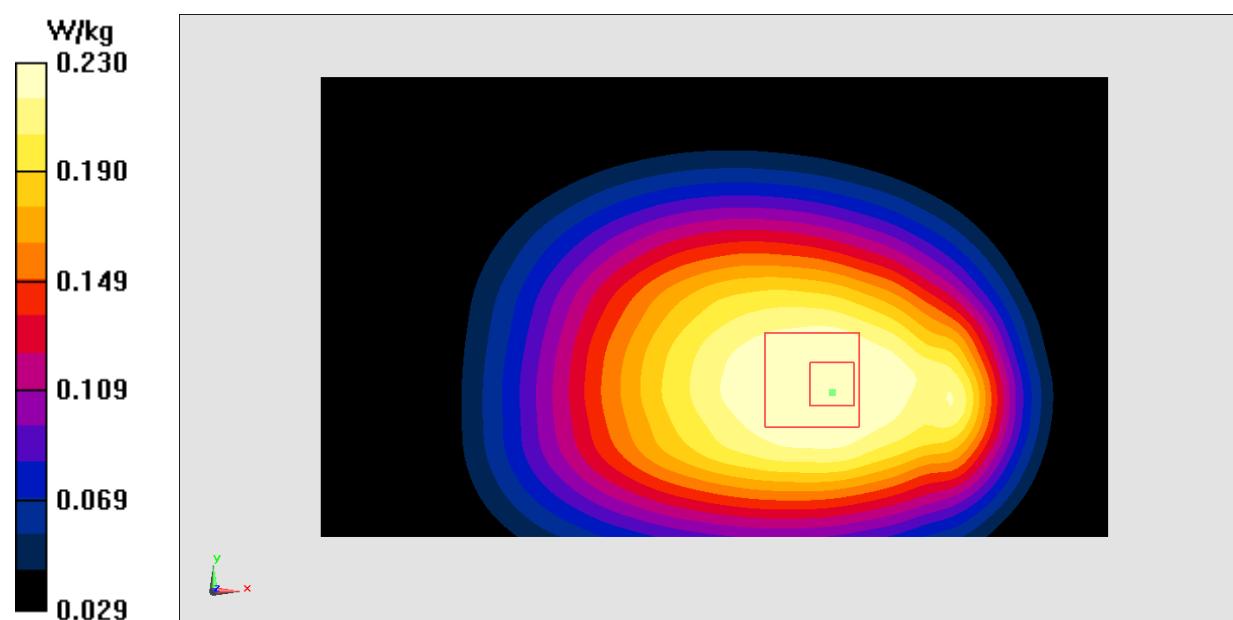
**Zoom Scan (7x7x7)/Cube 0:** Measurement grid: dx=5mm, dy=5mm, dz=5mm

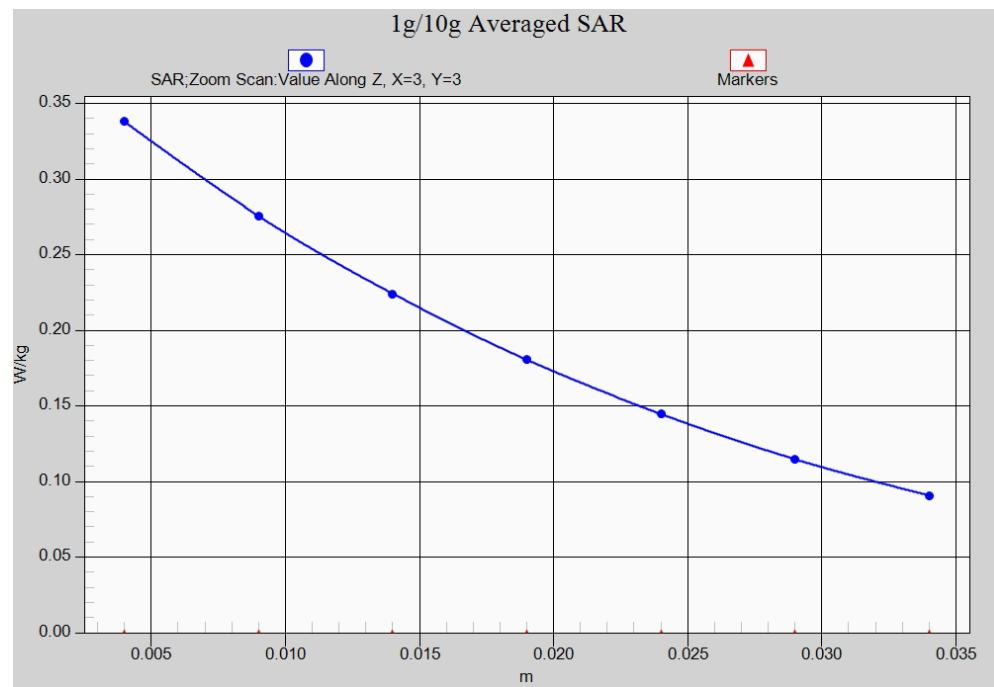
Reference Value = 14.23 V/m; Power Drift = -0.04 dB

Peak SAR (extrapolated) = 0.277 W/kg

**SAR(1 g) = 0.220 W/kg; SAR(10 g) = 0.170 W/kg**

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

**Fig.18 LTE Band17**



**Fig. 18-1 Z-Scan at power reference point (LTE Band17)**

## Wifi 802.11b Right Cheek Channel 6

Date: 2016-1-24

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/m<sup>3</sup>

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 (91x141x1):** Interpolated grid: dx=1.000 mm, dy=1.000 mm

Maximum value of SAR (interpolated) = 0.142 W/kg

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

Reference Value = 4.900 V/m; Power Drift = 0.13 dB

Peak SAR (extrapolated) = 0.313 W/kg

**SAR(1 g) = 0.120 W/kg; SAR(10 g) = 0.055 W/kg**

Maximum value of SAR (measured) = 0.167 W/kg

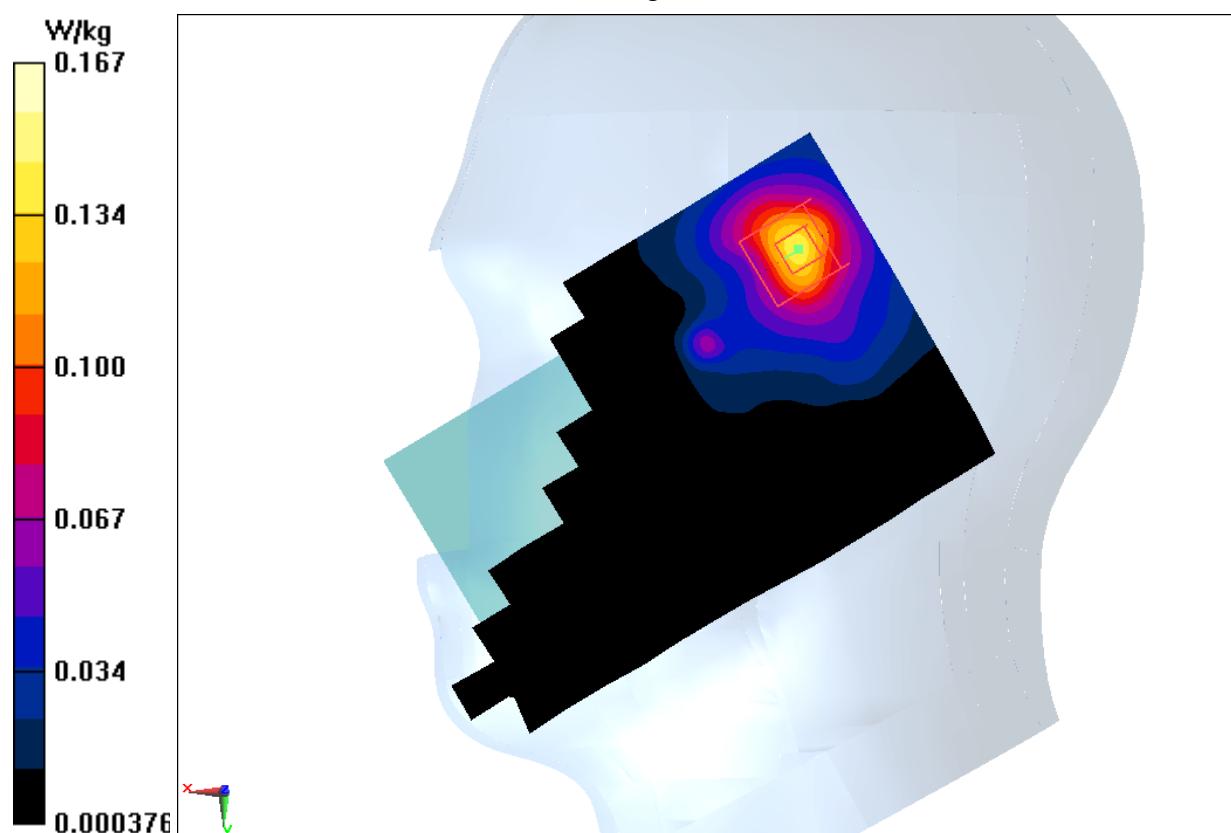
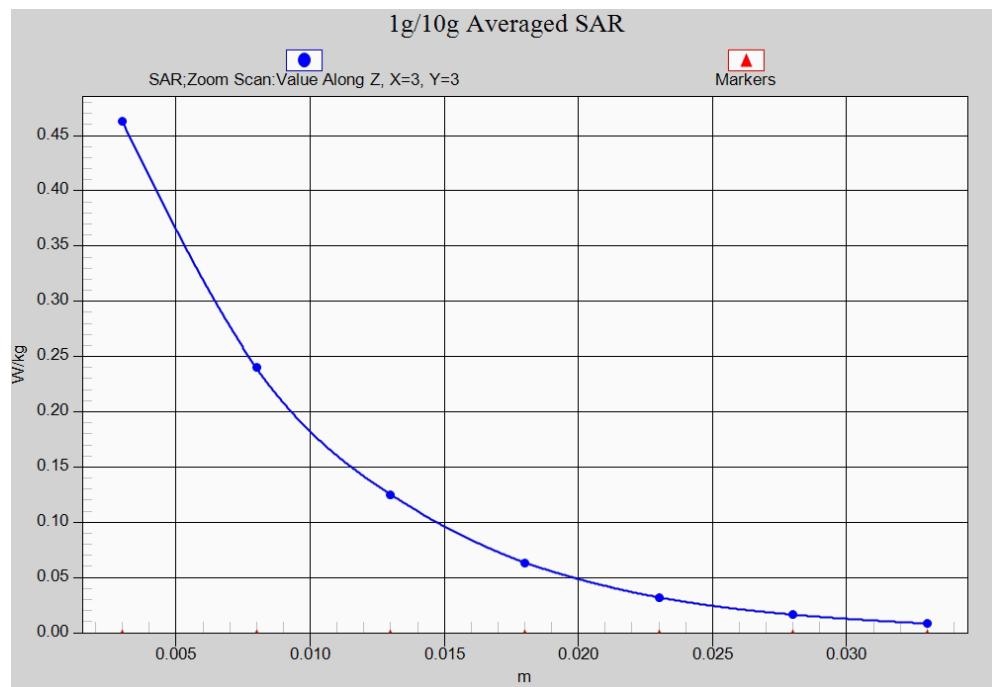


Fig.19 2450 MHz



**Fig. 19-1 Z-Scan at power reference point (2450 MHz)**

## Wifi 802.11b Body Rear Channel 6

Date: 2016-1-24

Electronics: DAE4 Sn777

Medium: Body 2450 MHz

Medium parameters used (interpolated):  $f = 2437$  MHz;  $\sigma = 2.053$  mho/m;  $\epsilon_r = 50.893$ ;  $\rho = 1000$  kg/m<sup>3</sup>

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(7.35, 7.35, 7.35)

**Area Scan (141x91x1):** Interpolated grid: dx=1.000 mm, dy=1.000 mm

Maximum value of SAR (interpolated) = 0.376 W/kg

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

Reference Value = 4.816 V/m; Power Drift = -0.05 dB

Peak SAR (extrapolated) = 0.536 W/kg

**SAR(1 g) = 0.283 W/kg; SAR(10 g) = 0.134 W/kg**

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

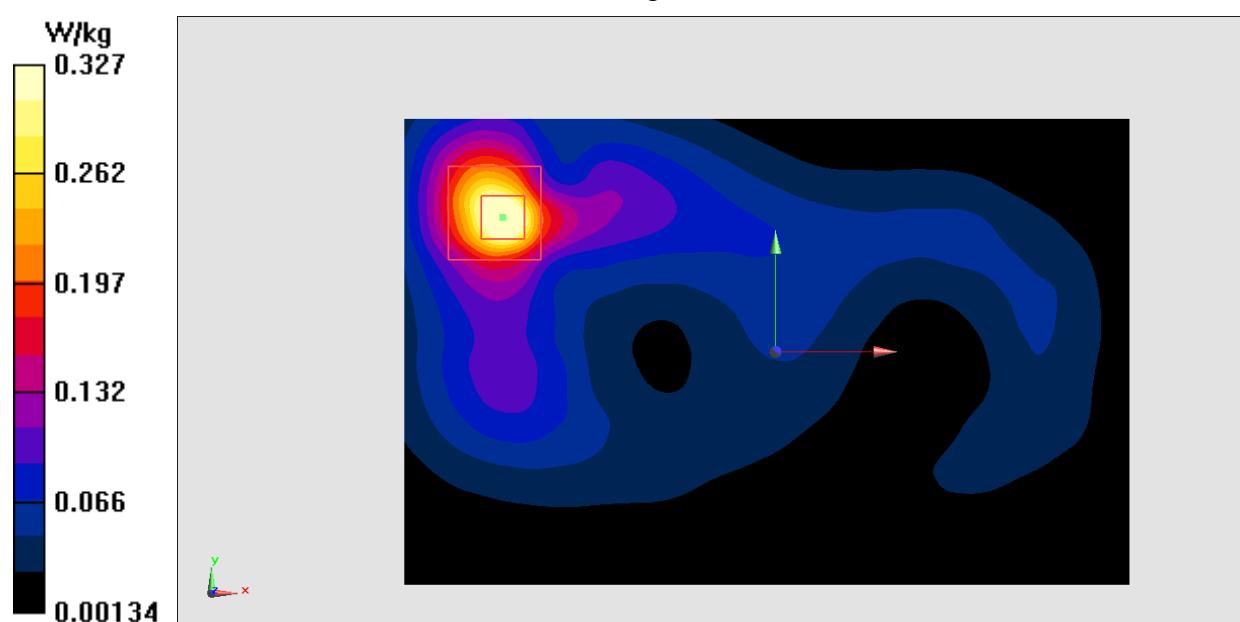


Fig.20 2450 MHz