

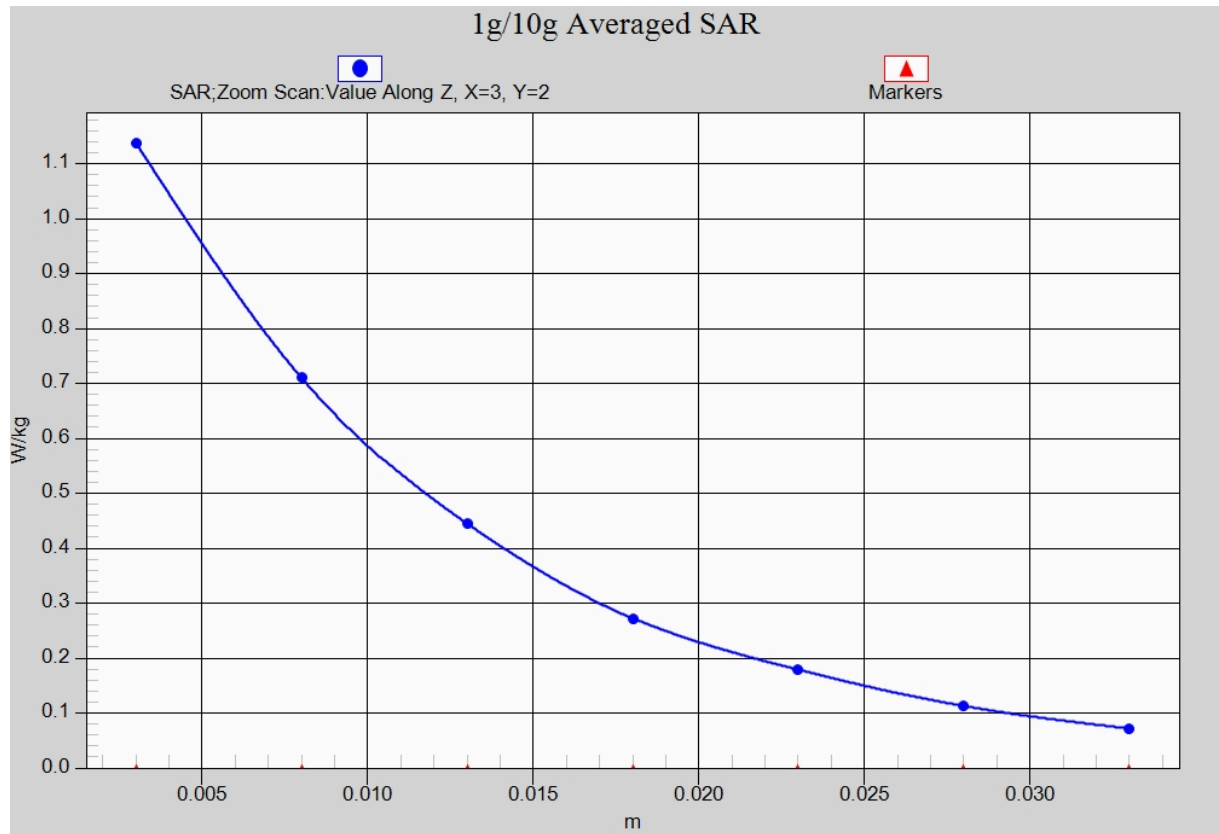


Fig. 21-1 Z-Scan at power reference point (LTE Band4)

LTE Band5 Left Cheek High with QPSK_10M_1RB_Middle

Date: 2017-6-3

Electronics: DAE4 Sn1331

Medium: Head 850 MHz

Medium parameters used (interpolated): $f = 844$ MHz; $\sigma = 0.894$ mho/m; $\epsilon_r = 41.10$; $\rho = 1000$ kg/m³

Ambient Temperature: 22.9°C Liquid Temperature: 22.5°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) = 0.308 W/kg

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

Reference Value = 8.595 V/m; Power Drift = -0.06 dB

Peak SAR (extrapolated) = 0.347 W/kg

SAR(1 g) = 0.266 W/kg; SAR(10 g) = 0.203 W/kg

Maximum value of SAR (measured) = 0.298 W/kg

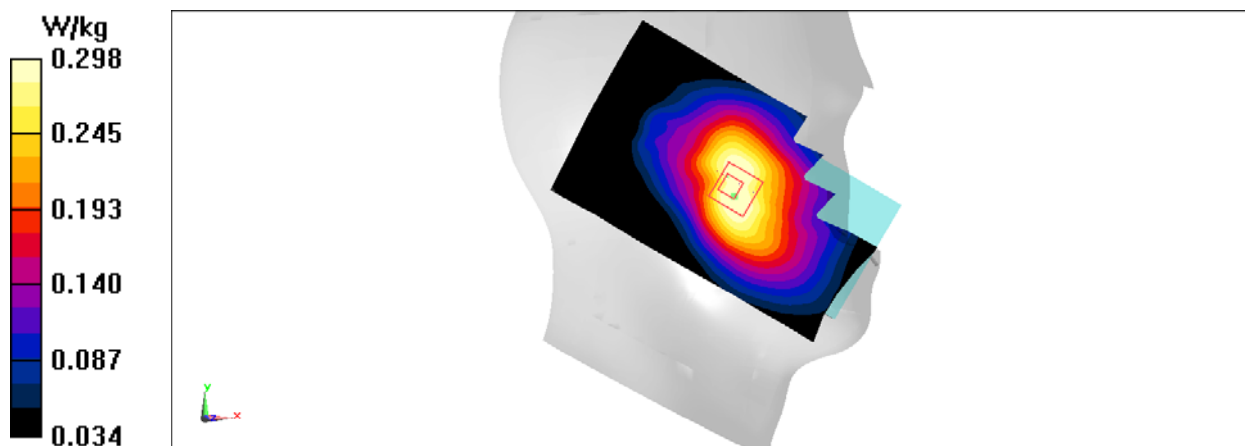


Fig.22 LTE Band5

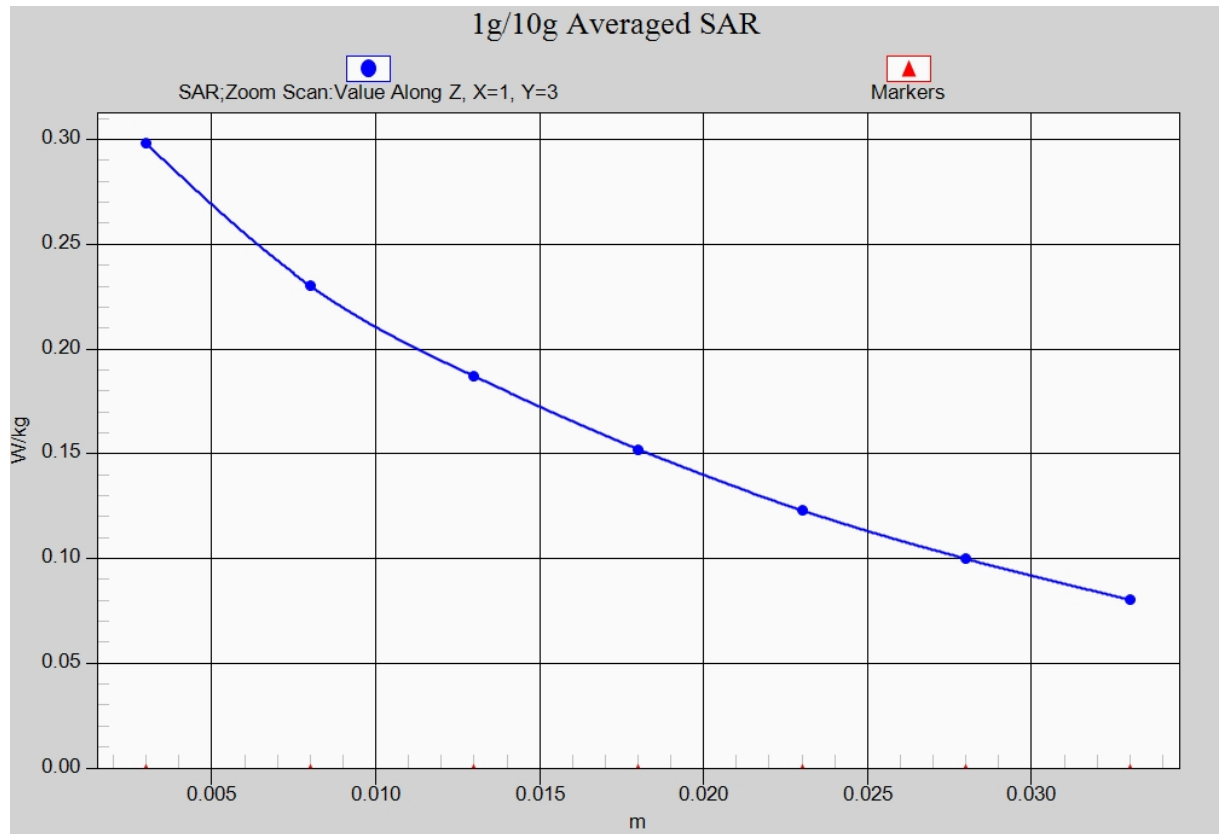


Fig. 22-1 Z-Scan at power reference point (LTE Band5)

LTE Band5 Body Rear High with QPSK_10M_1RB_Middle 10mm

Date: 2017-6-3

Electronics: DAE4 Sn1331

Medium: Body 850 MHz

Medium parameters used (interpolated): $f = 844$ MHz; $\sigma = 0.989$ mho/m; $\epsilon_r = 54.73$; $\rho = 1000$ kg/m³

Ambient Temperature: 22.9°C Liquid Temperature: 22.5°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) = 0.358 W/kg

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

Reference Value = 17.83 V/m; Power Drift = 0.11 dB

Peak SAR (extrapolated) = 0.394 W/kg

SAR(1 g) = 0.319 W/kg; SAR(10 g) = 0.249 W/kg

Maximum value of SAR (measured) = 0.347 W/kg

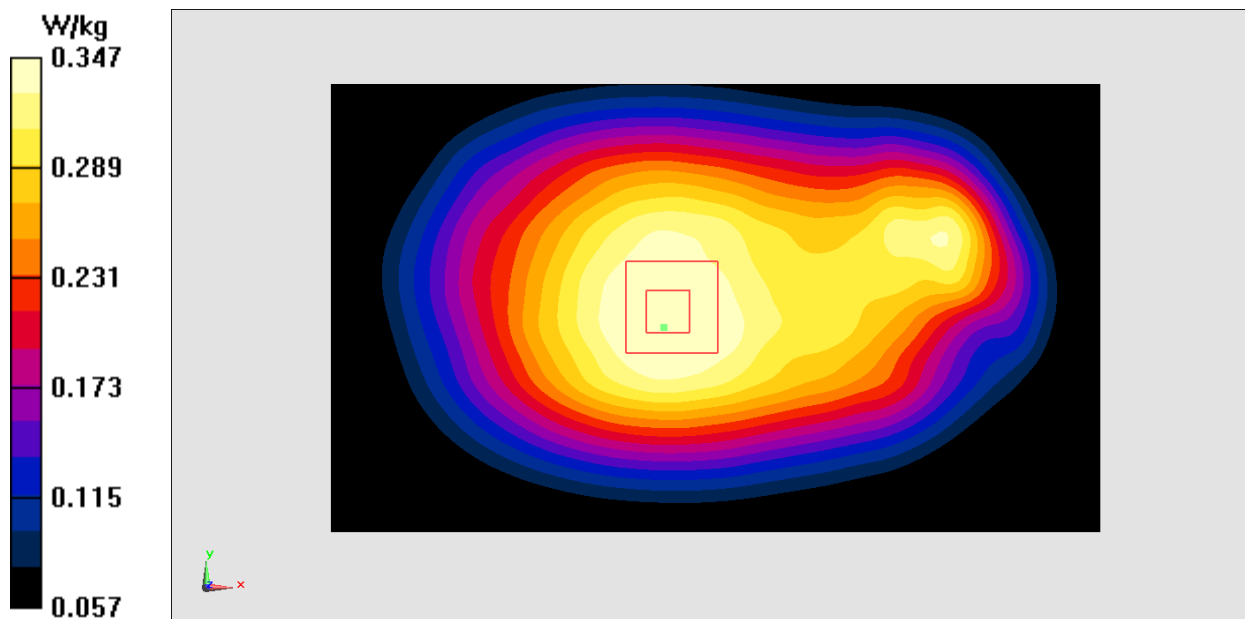


Fig.23 LTE Band5

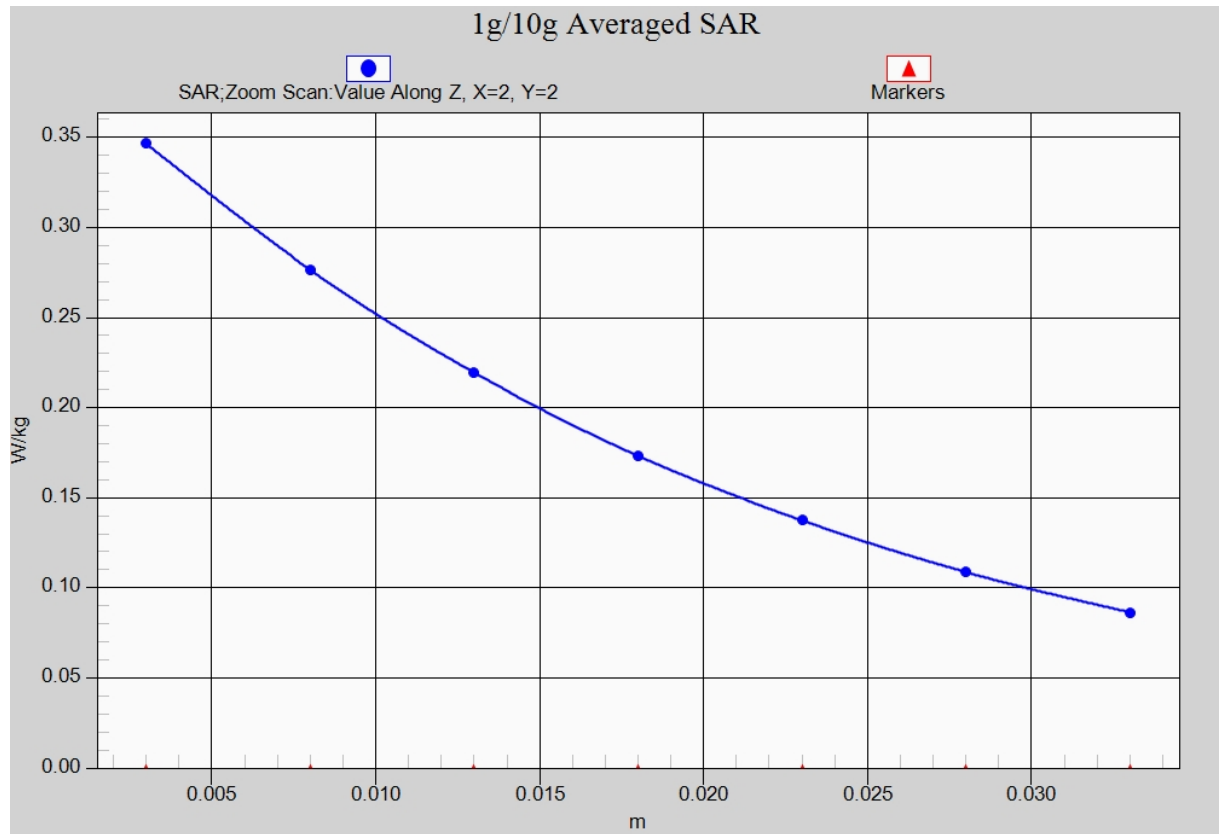


Fig. 23-1 Z-Scan at power reference point (LTE Band5)

LTE Band5 Body Rear High with QPSK_10M_1RB_Middle 15mm

Date: 2017-6-3

Electronics: DAE4 Sn1331

Medium: Body 850 MHz

Medium parameters used (interpolated): $f = 844$ MHz; $\sigma = 0.989$ mho/m; $\epsilon_r = 54.73$; $\rho = 1000$ kg/m³

Ambient Temperature: 22.9°C Liquid Temperature: 22.5°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) = 0.182 W/kg

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

Reference Value = 11.98 V/m; Power Drift = 0.12 dB

Peak SAR (extrapolated) = 0.207 W/kg

SAR(1 g) = 0.166 W/kg; SAR(10 g) = 0.128 W/kg

Maximum value of SAR (measured) = 0.182 W/kg

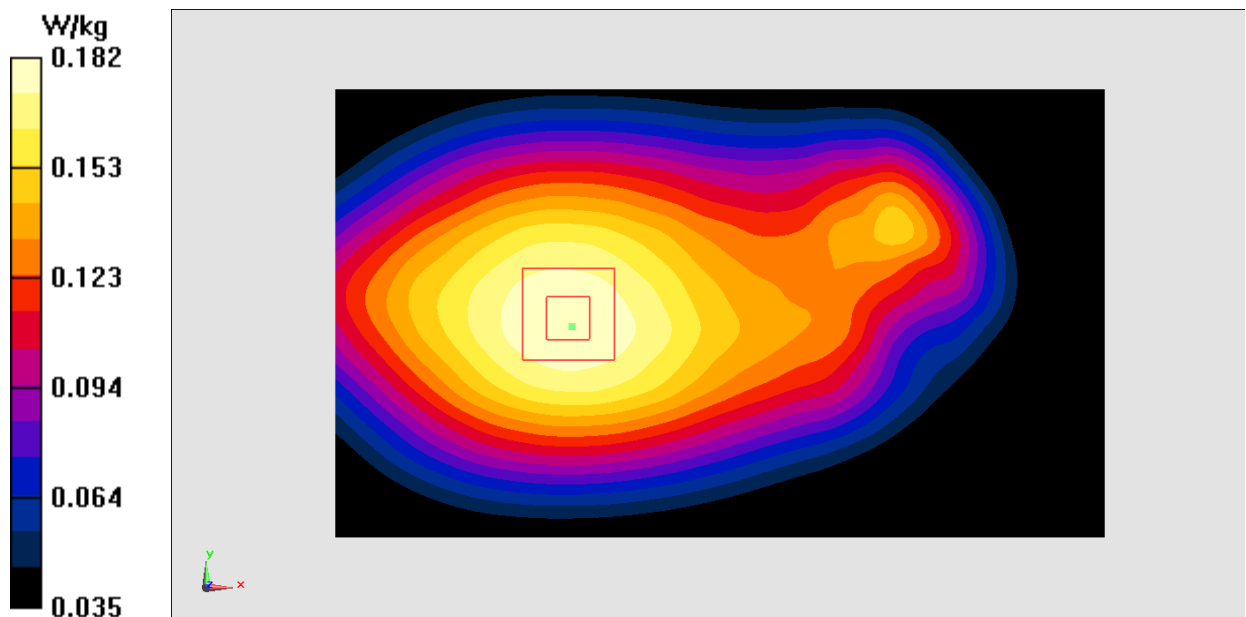


Fig.24 LTE Band5

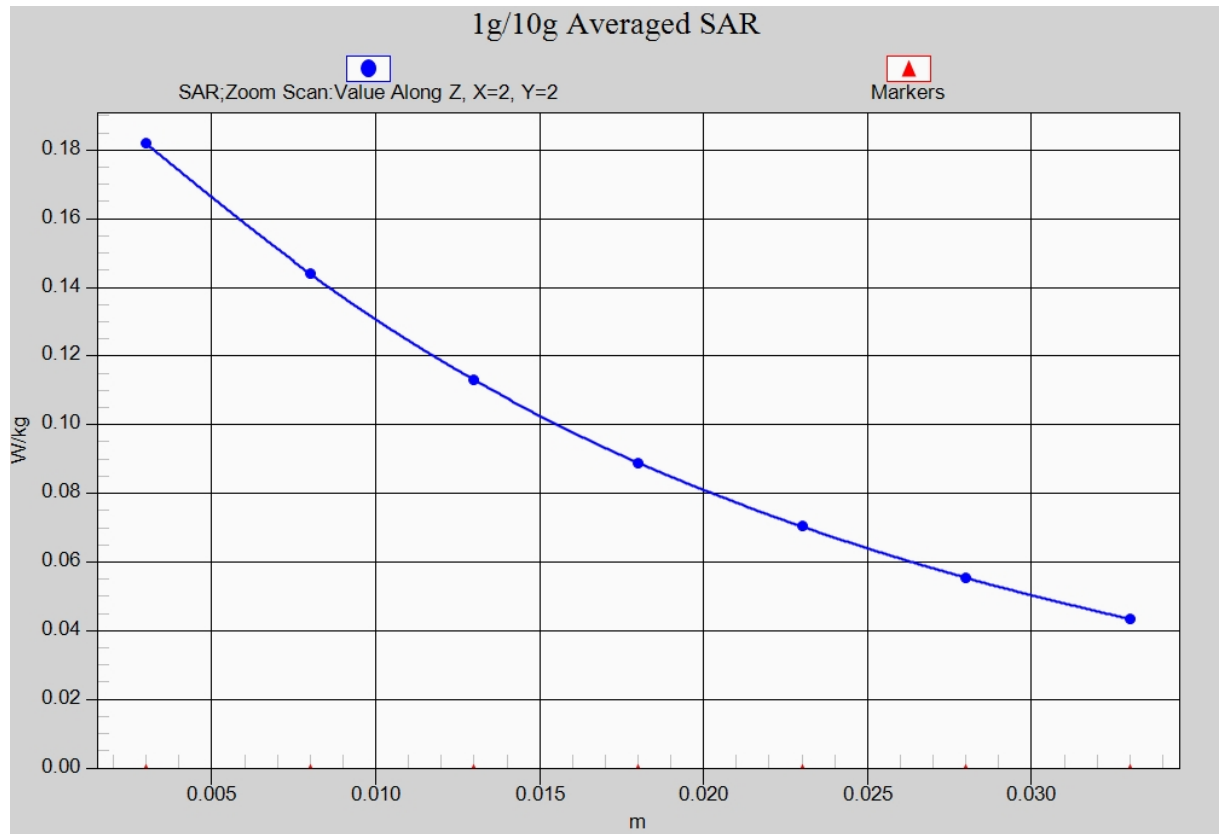


Fig. 24-1 Z-Scan at power reference point (LTE Band5)

LTE Band12 Left Cheek High with QPSK_10M_1RB_Middle

Date: 2017-6-2

Electronics: DAE4 Sn1331

Medium: Head750 MHz

Medium parameters used (interpolated): $f = 711$ MHz; $\sigma = 0.881$ mho/m; $\epsilon_r = 41.65$; $\rho = 1000$ 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– 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) = 0.295 W/kg

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

Reference Value = 9.456 V/m; Power Drift = -0.06 dB

Peak SAR (extrapolated) = 0.343 W/kg

SAR(1 g) = 0.273 W/kg; SAR(10 g) = 0.214 W/kg

Maximum value of SAR (measured) = 0.299 W/kg

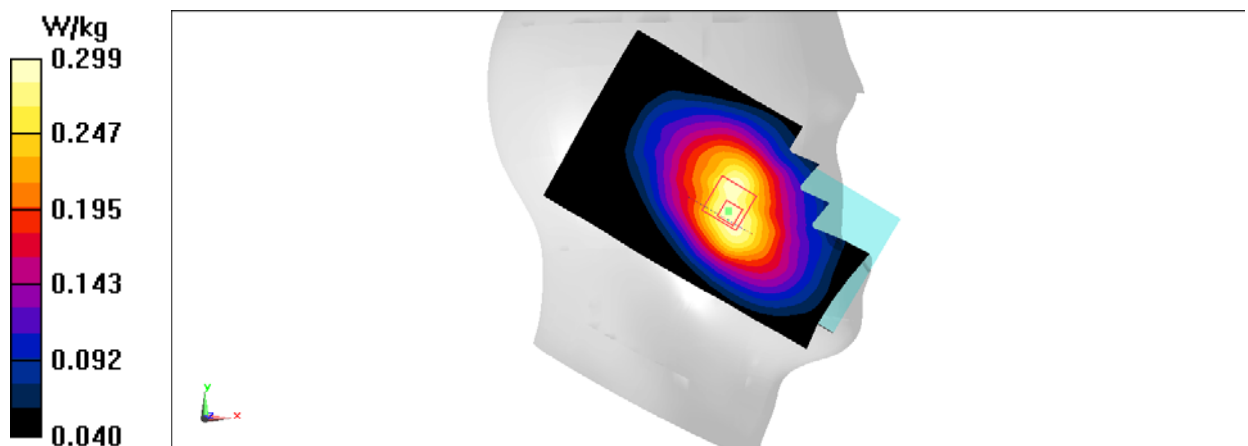


Fig.25 LTE Band12

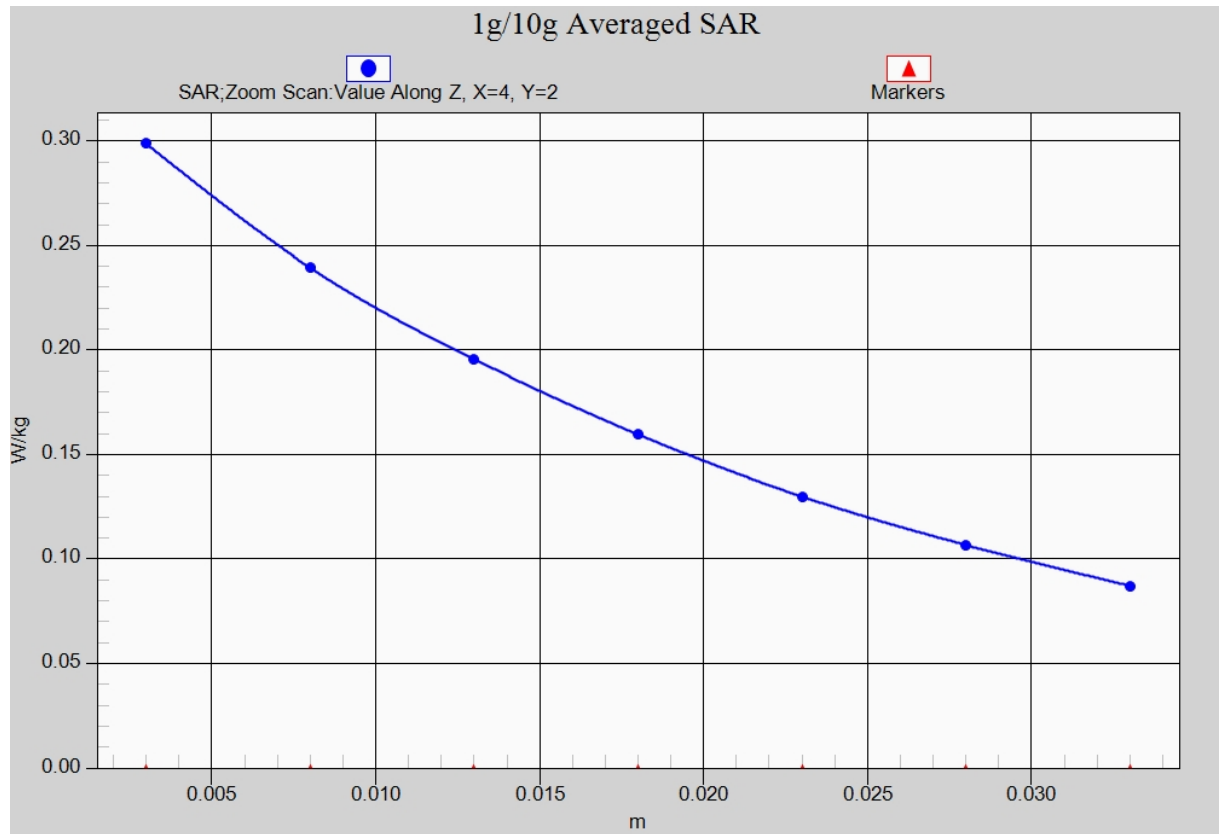


Fig. 25-1 Z-Scan at power reference point (LTE Band12)

LTE Band12 Body Rear High with QPSK_10M_1RB_Middle 10mm

Date: 2017-6-2

Electronics: DAE4 Sn1331

Medium: Body750 MHz

Medium parameters used (interpolated): $f = 711$ MHz; $\sigma = 0.964$ mho/m; $\epsilon_r = 56.25$; $\rho = 1000$ kg/m³

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

Communication System: LTE Band12Frequency: 711 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) = 0.276 W/kg

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

Reference Value = 16.61 V/m; Power Drift = 0.05 dB

Peak SAR (extrapolated) = 0.304 W/kg

SAR(1 g) = 0.240 W/kg; SAR(10 g) = 0.190 W/kg

Maximum value of SAR (measured) = 0.267 W/kg

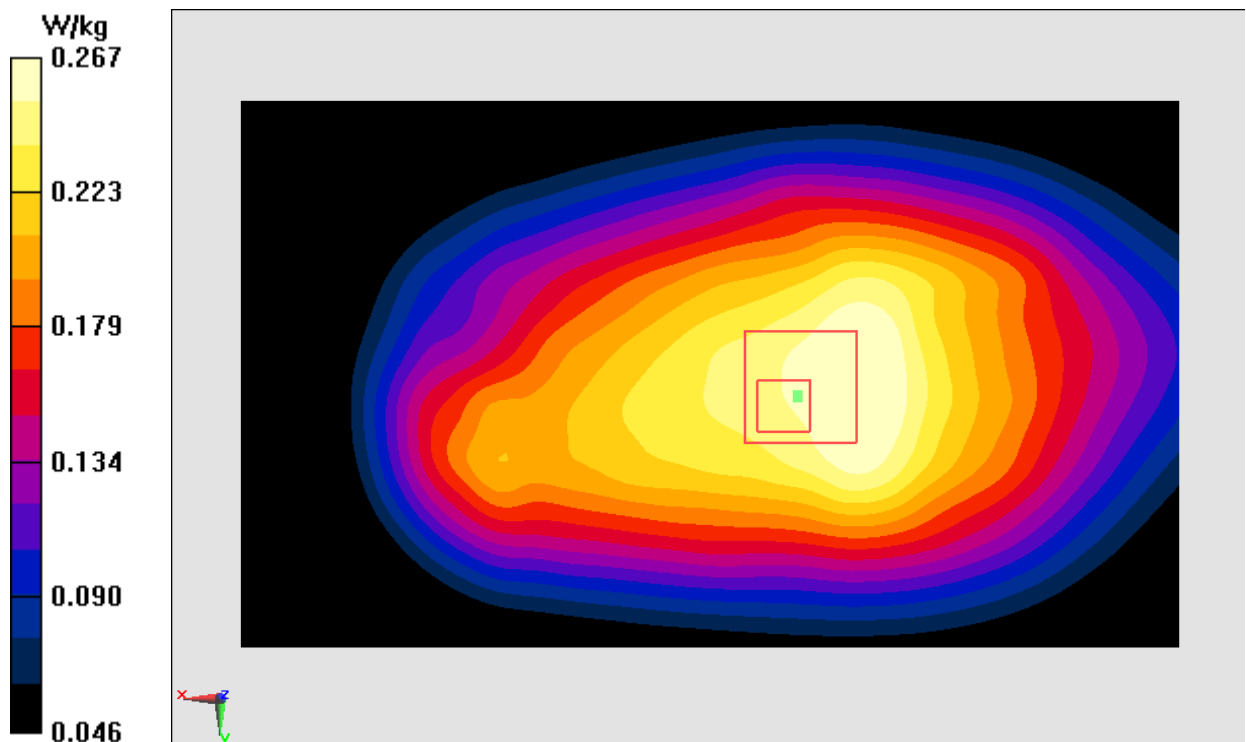


Fig.26 LTE Band12

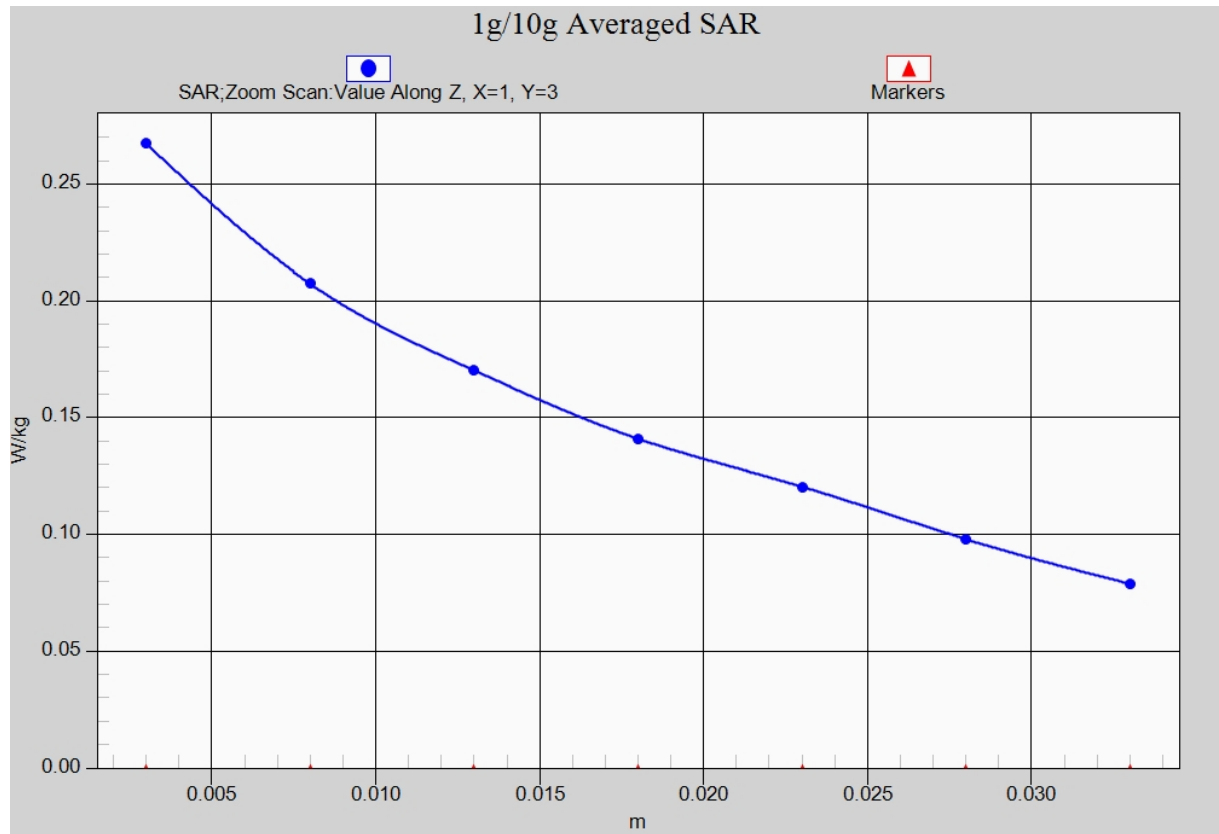


Fig. 26-1 Z-Scan at power reference point (LTE Band12)

LTE Band12 Body Rear High with QPSK_10M_1RB_Middle 15mm

Date: 2017-6-2

Electronics: DAE4 Sn1331

Medium: Body750 MHz

Medium parameters used (interpolated): $f = 711$ MHz; $\sigma = 0.964$ mho/m; $\epsilon_r = 56.25$; $\rho = 1000$ kg/m³

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

Communication System: LTE Band12Frequency: 711 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) = 0.230 W/kg

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

Reference Value = 15.94 V/m; Power Drift = -0.05 dB

Peak SAR (extrapolated) = 0.258 W/kg

SAR(1 g) = 0.211 W/kg; SAR(10 g) = 0.167 W/kg

Maximum value of SAR (measured) = 0.229 W/kg

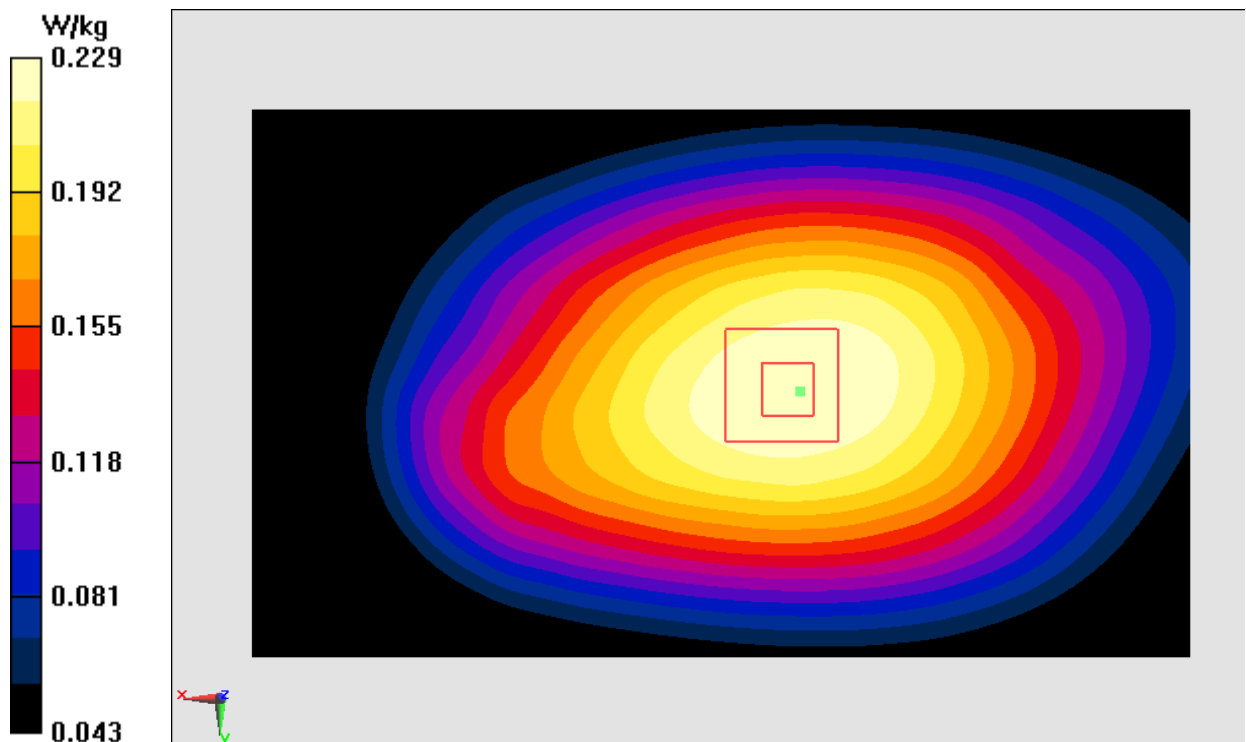


Fig.27 LTE Band12

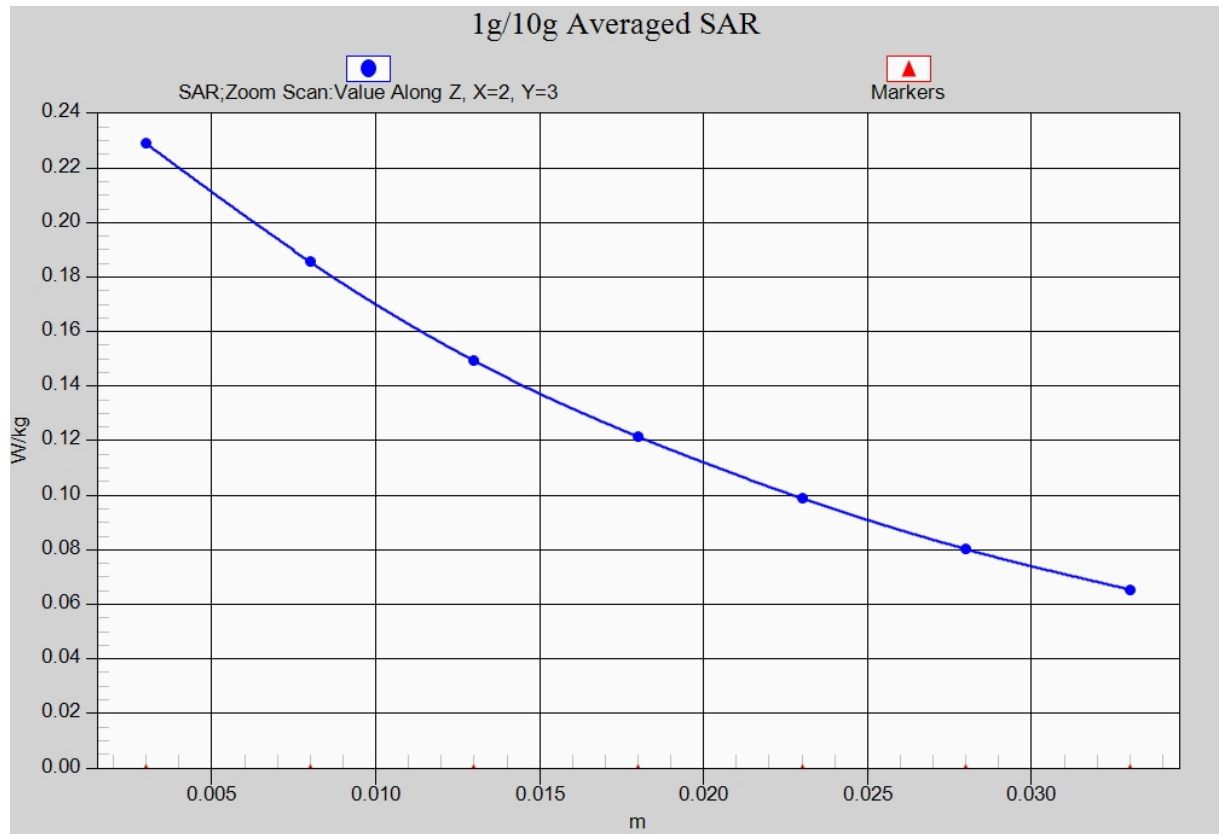


Fig. 27-1 Z-Scan at power reference point (LTE Band12)

LTE Band30 Right Cheek with QPSK_10M_1RB_Middle

Date: 2017-6-6

Electronics: DAE4 Sn1331

Medium: Head 2300 MHz

Medium parameters used: $f = 2310$ MHz; $\sigma = 1.635$ mho/m; $\epsilon_r = 38.84$; $\rho = 1000$ kg/m³

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

Communication System: LTE Band30 Frequency: 2310 MHz Duty Cycle: 1:1

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

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

Maximum value of SAR (interpolated) = 0.188 W/kg

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

Reference Value = 4.100 V/m; Power Drift = -0.04 dB

Peak SAR (extrapolated) = 0.207 W/kg

SAR(1 g) = 0.124 W/kg; SAR(10 g) = 0.070 W/kg

Maximum value of SAR (measured) = 0.148 W/kg

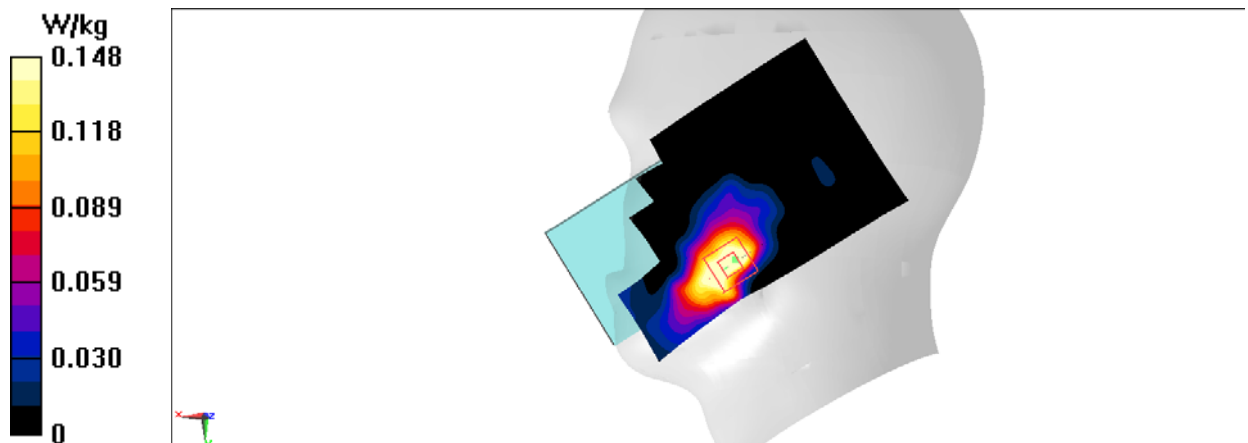


Fig.28 LTE Band30

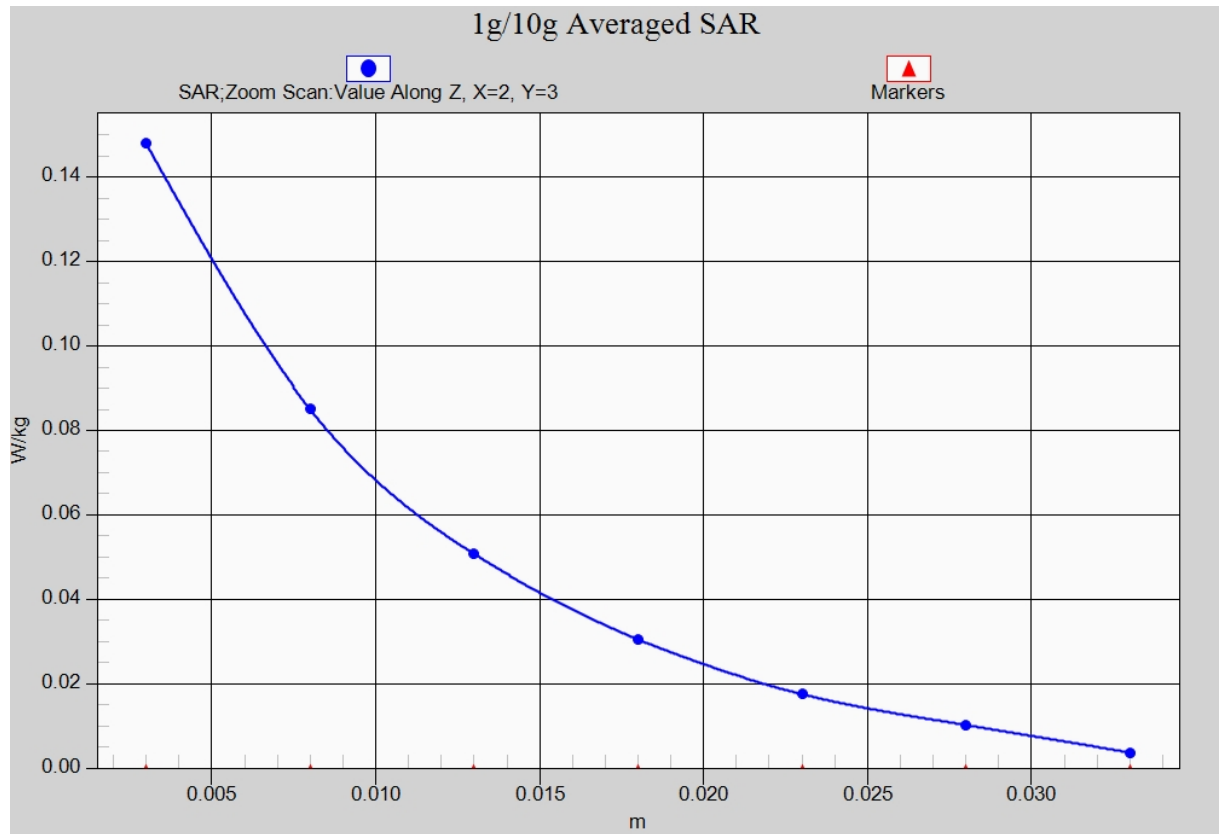


Fig. 28-1 Z-Scan at power reference point (LTE Band30)

LTE Band30 Body Front with QPSK_10M_1RB_Middle 10mm

Date: 2017-6-6

Electronics: DAE4 Sn1331

Medium: Body 2300 MHz

Medium parameters used: $f = 2310$ MHz; $\sigma = 1.811$ mho/m; $\epsilon_r = 52.14$; $\rho = 1000$ kg/m³

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

Communication System: LTE Band30 Frequency: 2310 MHz Duty Cycle: 1:1

Probe: EX3DV4- SN3846 ConvF(7.55, 7.55, 7.55)

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

Maximum value of SAR (interpolated) = 0.639 W/kg

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

Reference Value = 3.919 V/m; Power Drift = 0.13 dB

Peak SAR (extrapolated) = 1.23 W/kg

SAR(1 g) = 0.597 W/kg; SAR(10 g) = 0.276 W/kg

Maximum value of SAR (measured) = 0.725 W/kg

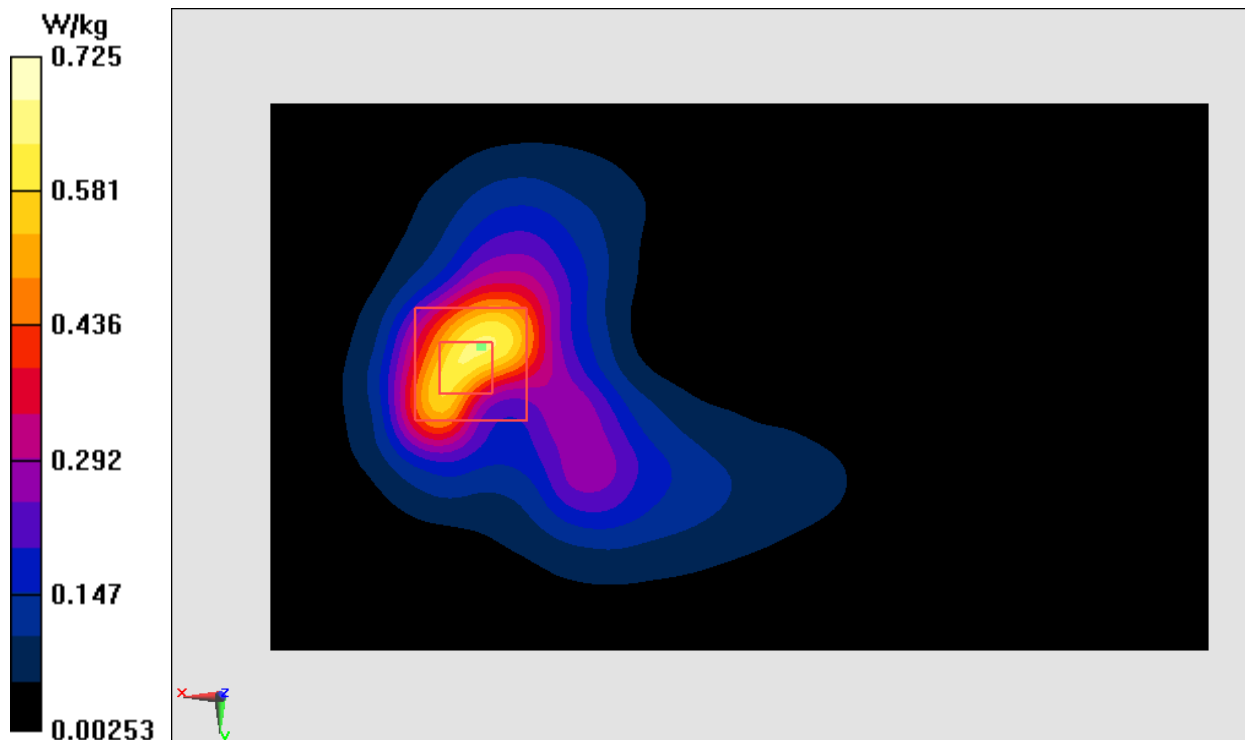


Fig.29 LTE Band30

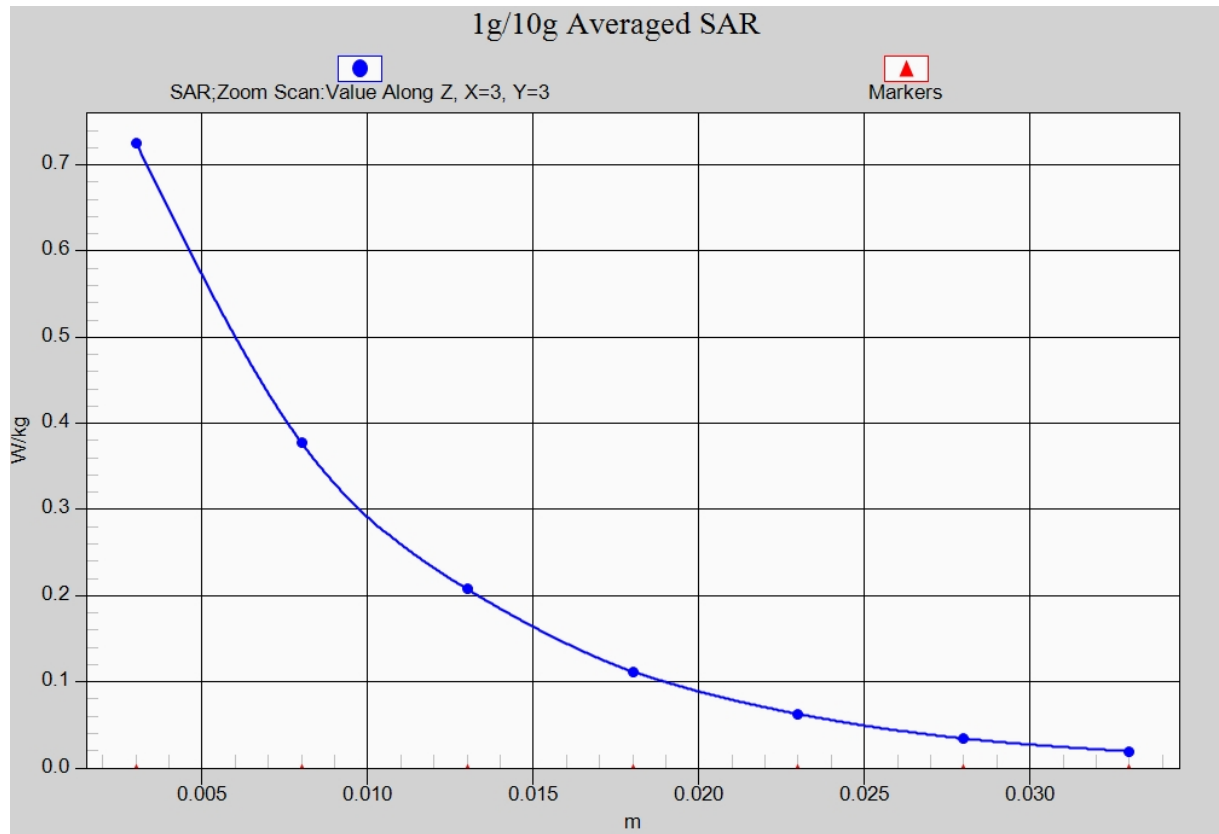


Fig. 29-1 Z-Scan at power reference point (LTE Band30)

LTE Band30 Body Front with QPSK_10M_1RB_Middle 15mm

Date: 2017-6-6

Electronics: DAE4 Sn1331

Medium: Body 2300 MHz

Medium parameters used: $f = 2310$ MHz; $\sigma = 1.811$ mho/m; $\epsilon_r = 52.14$; $\rho = 1000$ kg/m³

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

Communication System: LTE Band30 Frequency: 2310 MHz Duty Cycle: 1:1

Probe: EX3DV4- SN3846 ConvF(7.55, 7.55, 7.55)

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

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

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

Reference Value = 3.531 V/m; Power Drift = 0.06 dB

Peak SAR (extrapolated) = 0.861 W/kg

SAR(1 g) = 0.430 W/kg; SAR(10 g) = 0.214 W/kg

Maximum value of SAR (measured) = 0.546 W/kg

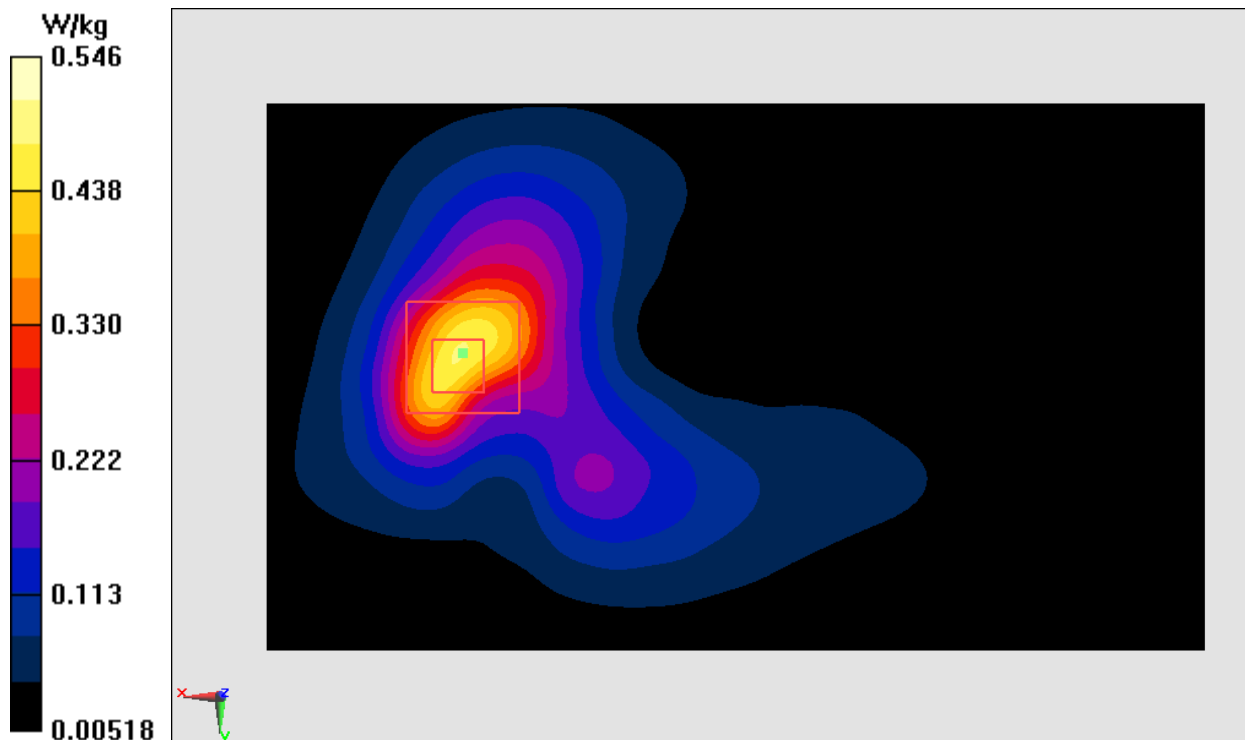


Fig.30 LTE Band30

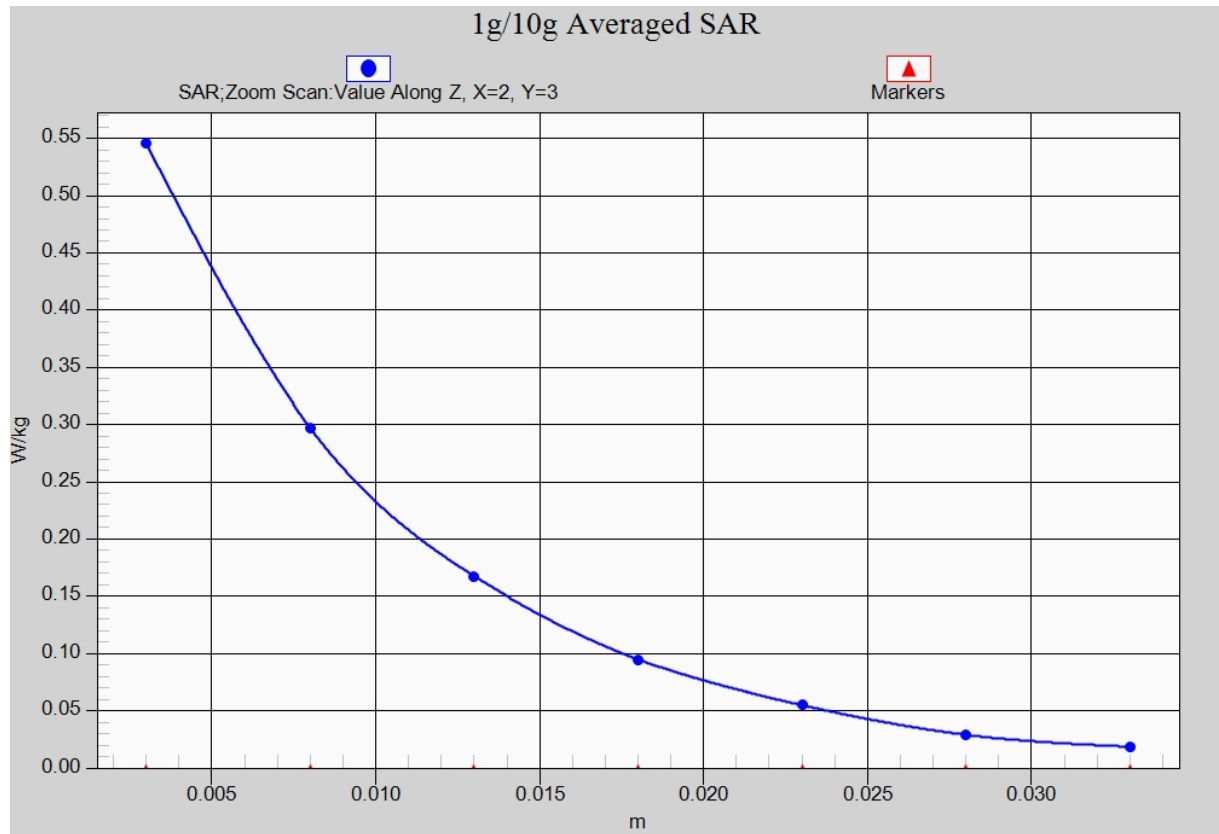


Fig. 30-1 Z-Scan at power reference point (LTE Band30)

Wifi 802.11b Left Cheek Channel 6

Date: 2017-6-7

Electronics: DAE4 Sn1331

Medium: Head 2450 MHz

Medium parameters used (interpolated): $f = 2437$ MHz; $\sigma = 1.803$ mho/m; $\epsilon_r = 40.00$; $\rho = 1000$ 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- SN3846 ConvF(7.22, 7.22, 7.22)

Area Scan (91x161x1): Interpolated grid: $dx=1.000$ mm, $dy=1.000$ mm

Maximum value of SAR (interpolated) = 0.915 W/kg

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

Reference Value = 7.347 V/m; Power Drift = 0.07 dB

Peak SAR (extrapolated) = 2.00 W/kg

SAR(1 g) = 0.622 W/kg; SAR(10 g) = 0.204 W/kg

Maximum value of SAR (measured) = 0.958 W/kg

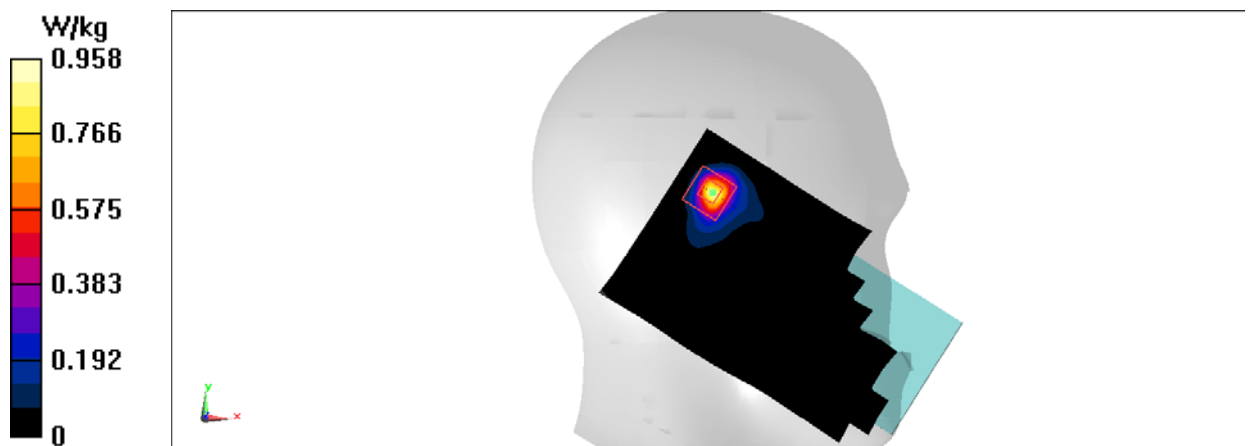


Fig.31 2450 MHz

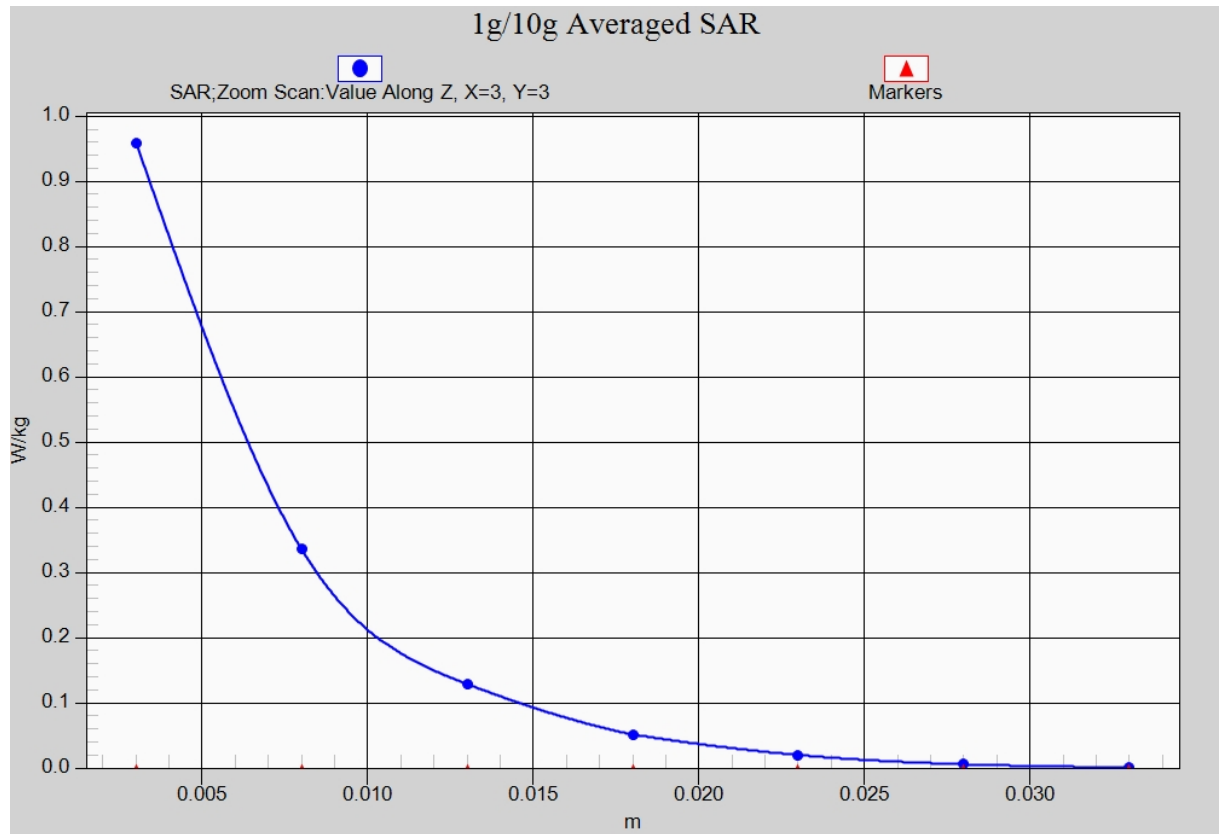


Fig. 31-1 Z-Scan at power reference point (2450 MHz)

Wifi 802.11b Body Front Channel 6 10mm

Date: 2017-6-7

Electronics: DAE4 Sn1331

Medium: Body 2450 MHz

Medium parameters used (interpolated): $f = 2437$ MHz; $\sigma = 1.971$ mho/m; $\epsilon_r = 52.80$; $\rho = 1000$ 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 – 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) = 0.396 W/kg

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

Reference Value = 4.334 V/m; Power Drift = -0.10 dB

Peak SAR (extrapolated) = 0.786 W/kg

SAR(1 g) = 0.354 W/kg; SAR(10 g) = 0.151 W/kg

Maximum value of SAR (measured) = 0.444 W/kg

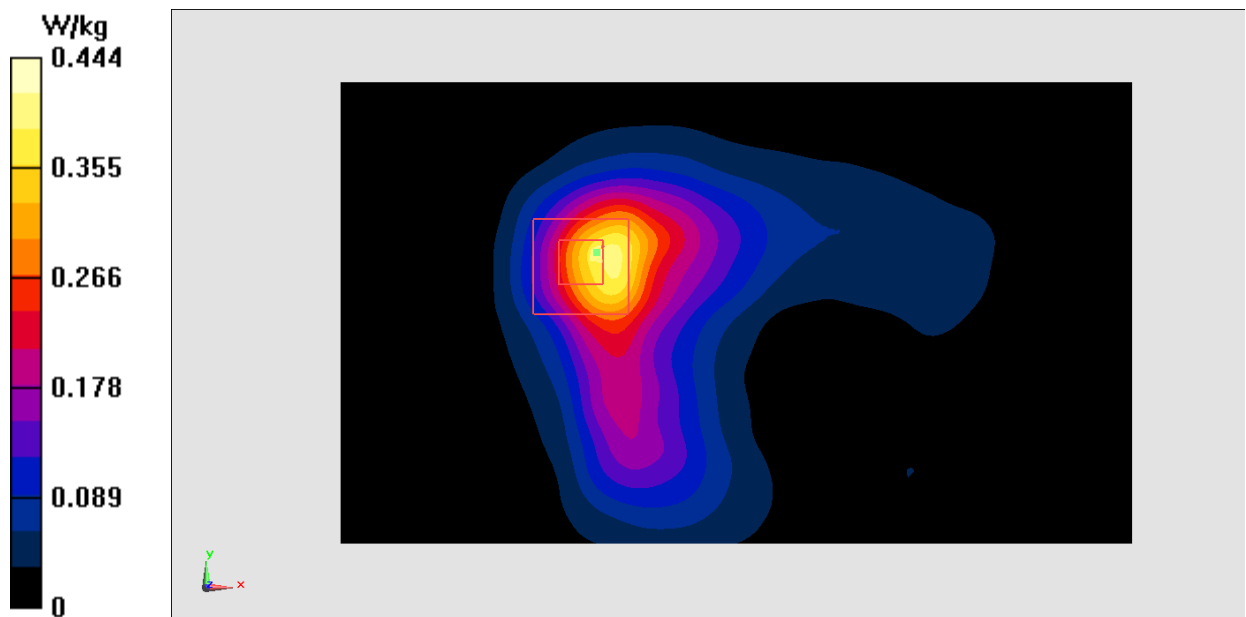


Fig.32 2450 MHz

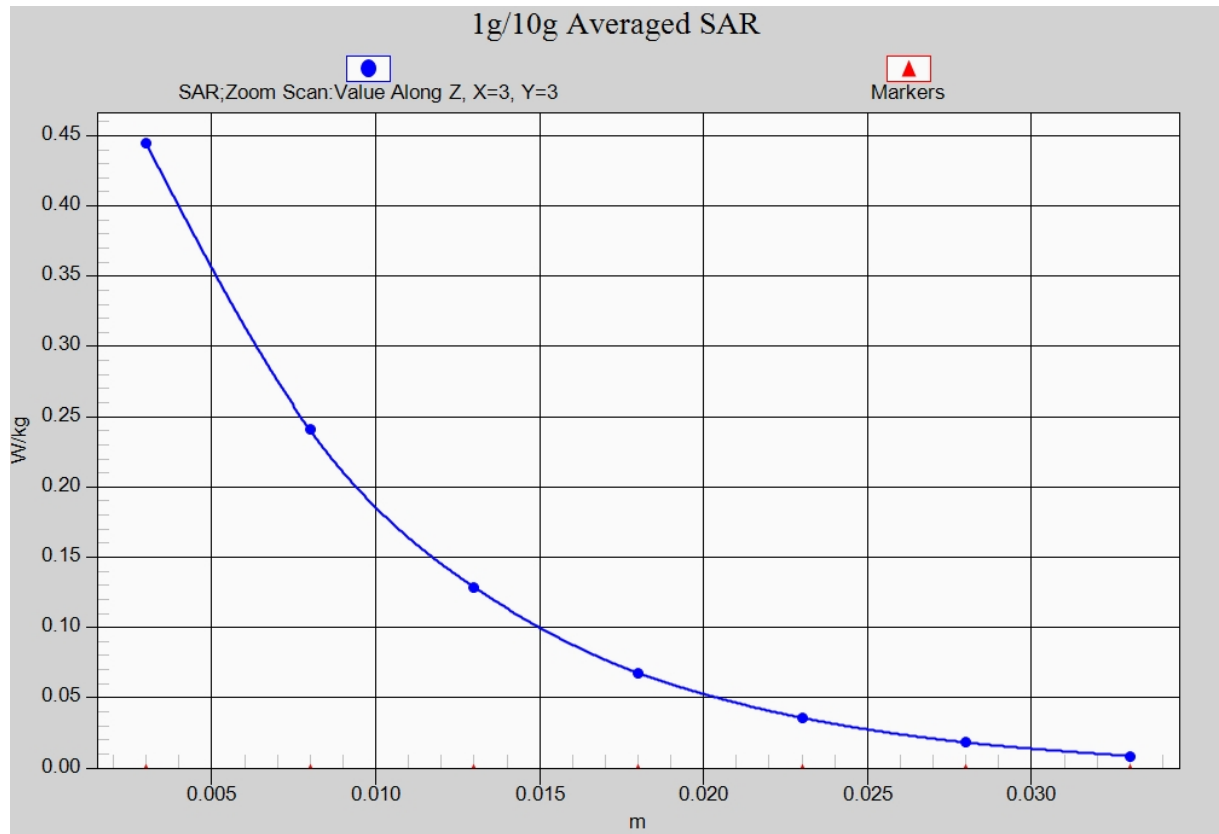


Fig. 32-1 Z-Scan at power reference point (2450 MHz)

Wifi 802.11b Body Front Channel 6 15mm

Date: 2017-6-7

Electronics: DAE4 Sn1331

Medium: Body 2450 MHz

Medium parameters used (interpolated): $f = 2437$ MHz; $\sigma = 1.971$ mho/m; $\epsilon_r = 52.80$; $\rho = 1000$ 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 – 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) = 0.153 W/kg

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

Reference Value = 2.398 V/m; Power Drift = 0.01 dB

Peak SAR (extrapolated) = 0.261 W/kg

SAR(1 g) = 0.135 W/kg; SAR(10 g) = 0.064 W/kg

Maximum value of SAR (measured) = 0.161 W/kg

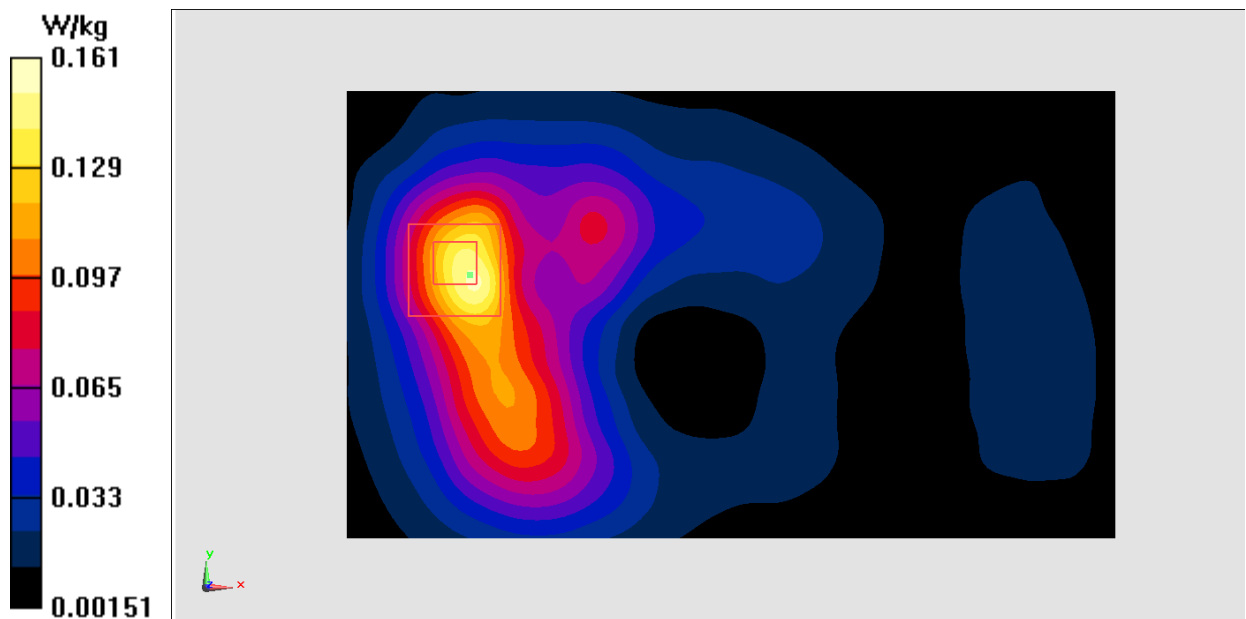


Fig.33 2450 MHz

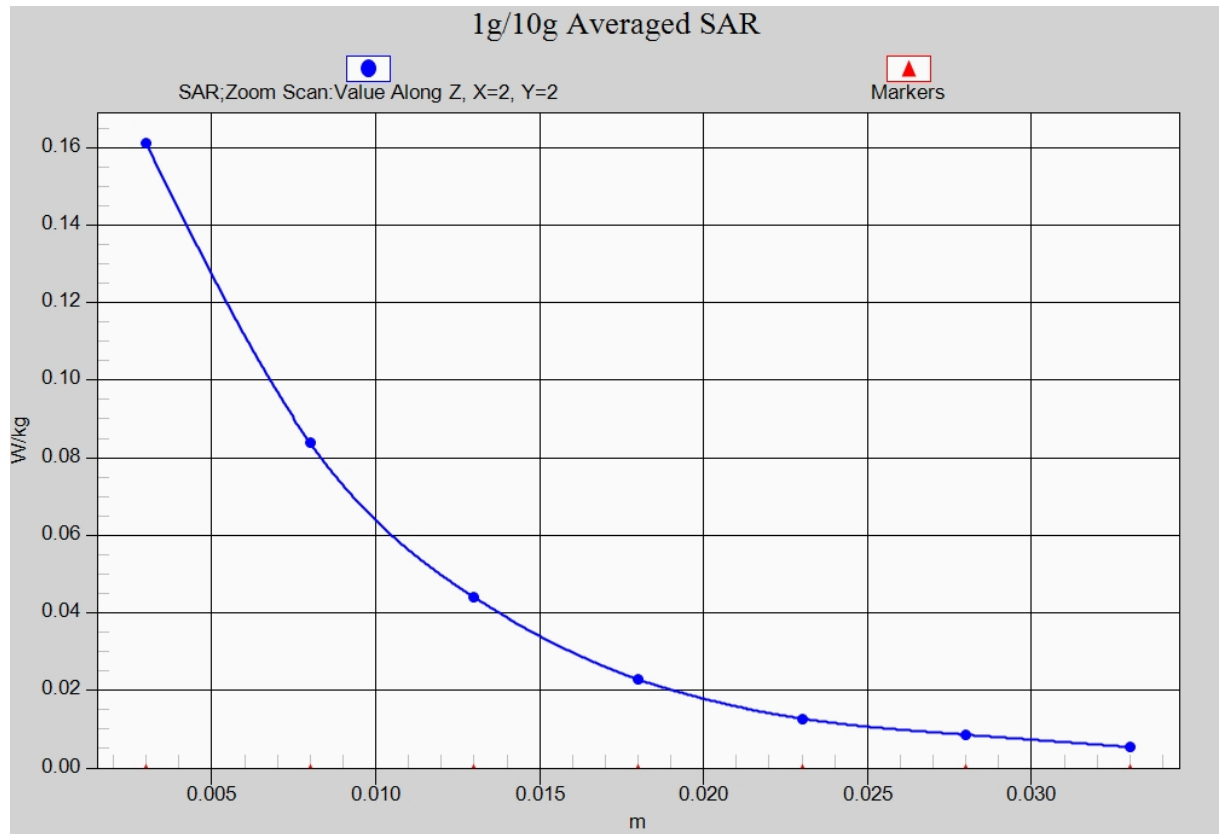


Fig. 33-1 Z-Scan at power reference point (2450 MHz)

Wifi 802.11a Left Cheek Channel 64

Date: 2017-6-9

Electronics: DAE4 Sn1331

Medium: Head 5 GHz

Medium parameters used: $f = 5320$ MHz; $\sigma = 4.730$ mho/m; $\epsilon_r = 35.51$; $\rho = 1000$ kg/m³

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

Communication System: Wlan 5G Frequency: 5320 MHz Duty Cycle: 1:1

Probe: EX3DV4 – SN3846 ConvF(4.72, 4.72, 4.72)

Area Scan (91x161x1): Interpolated grid: $dx=1.000$ mm, $dy=1.000$ mm

Maximum value of SAR (interpolated) = 0.939 W/kg

Zoom Scan (7x7x7)/Cube 0: Measurement grid: $dx=4$ mm, $dy=4$ mm, $dz=1.4$ mm

Reference Value = 6.066 V/m; Power Drift = 0.16 dB

Peak SAR (extrapolated) = 3.07 W/kg

SAR(1 g) = 0.619 W/kg; SAR(10 g) = 0.188 W/kg

Maximum value of SAR (measured) = 1.65 W/kg

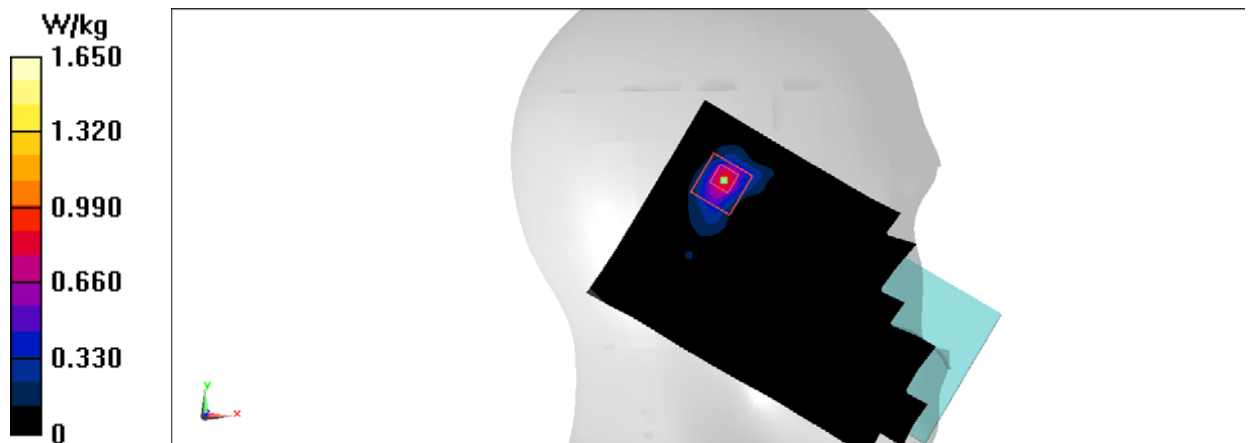


Fig.34 5GHz

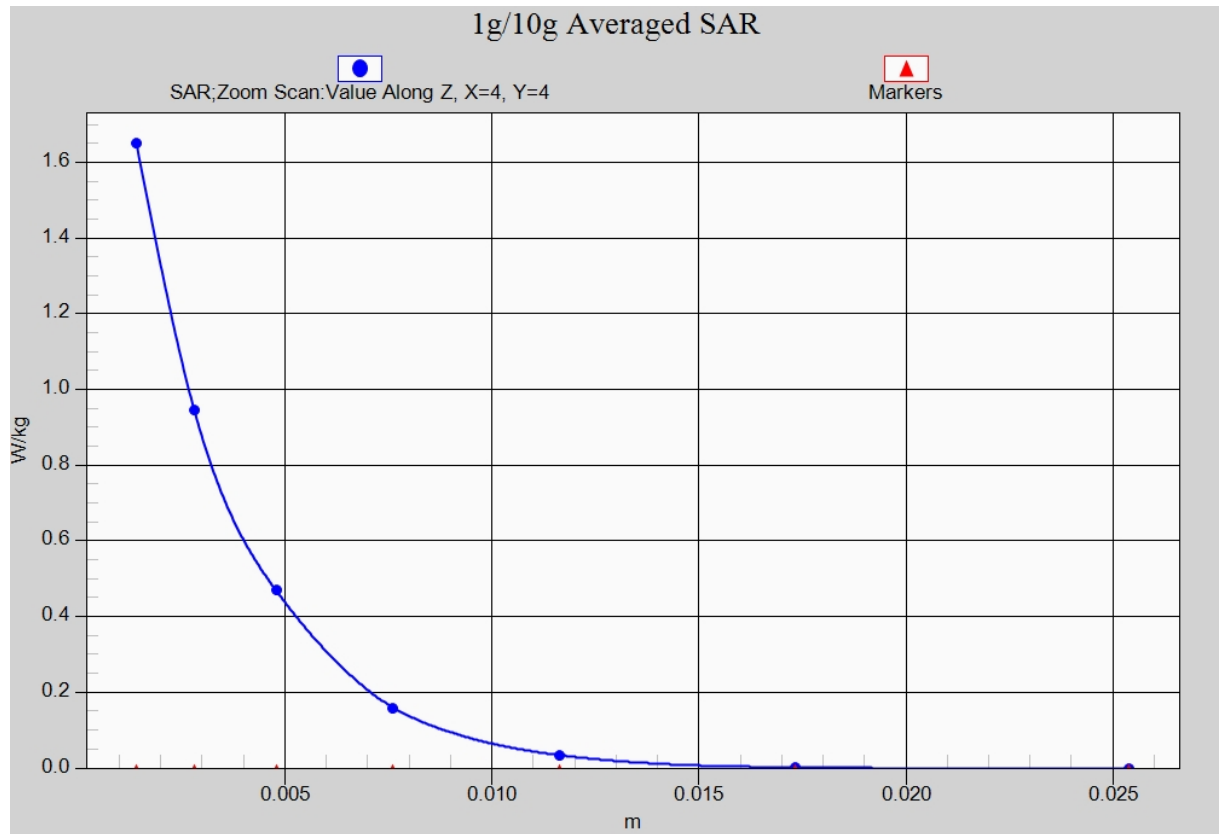


Fig. 34-1 Z-Scan at power reference point (5GHz)

Wifi 802.11a Front Channel 60 10mm

Date: 2017-6-9

Electronics: DAE4 Sn1331

Medium: Body 5 GHz

Medium parameters used: $f = 5300$ MHz; $\sigma = 5.455$ mho/m; $\epsilon_r = 49.04$; $\rho = 1000$ kg/m³

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

Communication System: Wlan 5G Frequency: 5300 MHz Duty Cycle: 1:1

Probe: EX3DV4 – SN3846 ConvF(4.18, 4.18, 4.18)

Area Scan (171x101x1): Interpolated grid: $dx=1.000$ mm, $dy=1.000$ mm

Maximum value of SAR (interpolated) = 0.301 W/kg

Zoom Scan (7x7x7)/Cube 0: Measurement grid: $dx=4$ mm, $dy=4$ mm, $dz=1.4$ mm

Reference Value = 1.465 V/m; Power Drift = -0.11 dB

Peak SAR (extrapolated) = 0.845 W/kg

SAR(1 g) = 0.224 W/kg; SAR(10 g) = 0.080 W/kg

Maximum value of SAR (measured) = 0.503 W/kg

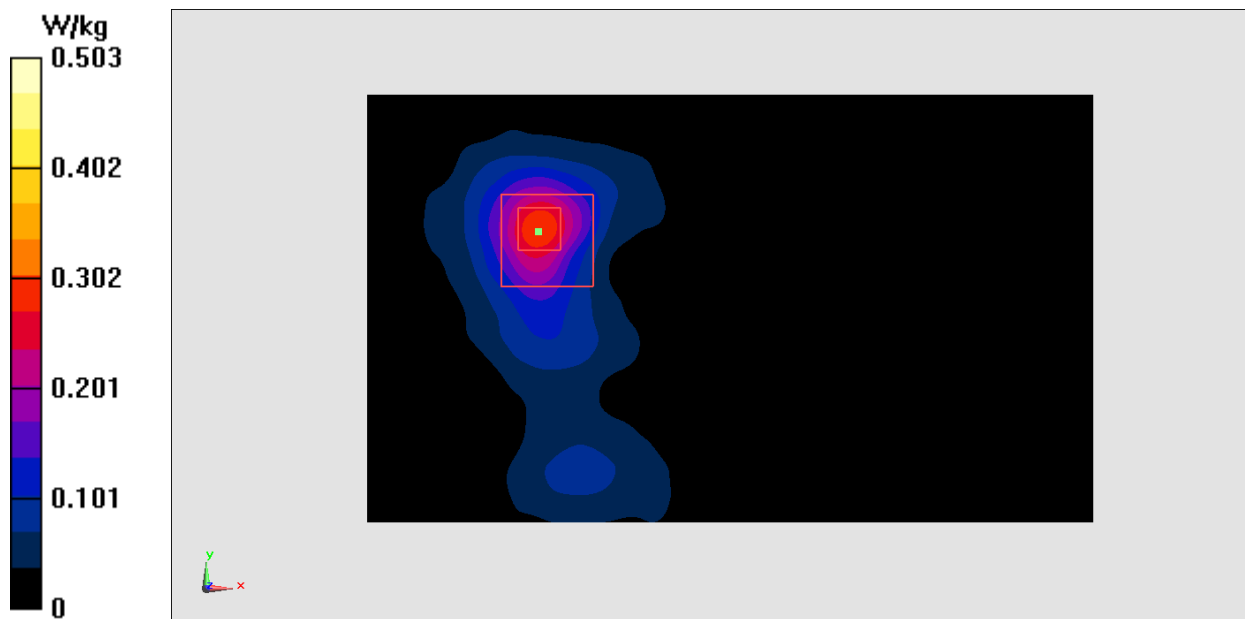


Fig.35 5GHz

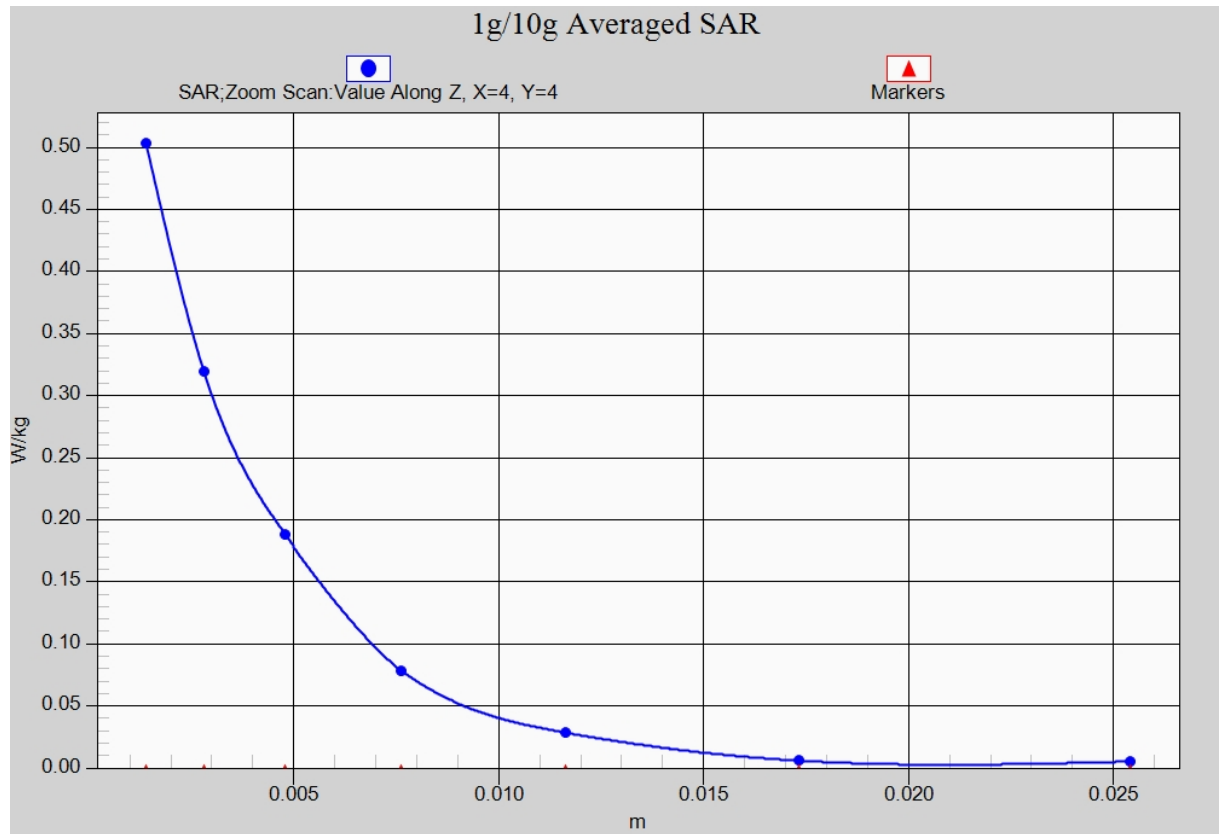


Fig. 35-1 Z-Scan at power reference point (5GHz)

Wifi 802.11a Rear Channel 60 15mm

Date: 2017-6-9

Electronics: DAE4 Sn1331

Medium: Body 5 GHz

Medium parameters used: $f = 5300$ MHz; $\sigma = 5.455$ mho/m; $\epsilon_r = 49.04$; $\rho = 1000$ kg/m³

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

Communication System: Wlan 5G Frequency: 5300 MHz Duty Cycle: 1:1

Probe: EX3DV4 – SN3846 ConvF(4.18, 4.18, 4.18)

Area Scan (171x101x1): Interpolated grid: $dx=1.000$ mm, $dy=1.000$ mm

Maximum value of SAR (interpolated) = 0.173 W/kg

Zoom Scan (7x7x7)/Cube 0: Measurement grid: $dx=4$ mm, $dy=4$ mm, $dz=1.4$ mm

Reference Value = 1.348 V/m; Power Drift = 0.12 dB

Peak SAR (extrapolated) = 0.413 W/kg

SAR(1 g) = 0.117 W/kg; SAR(10 g) = 0.049 W/kg

Maximum value of SAR (measured) = 0.251 W/kg

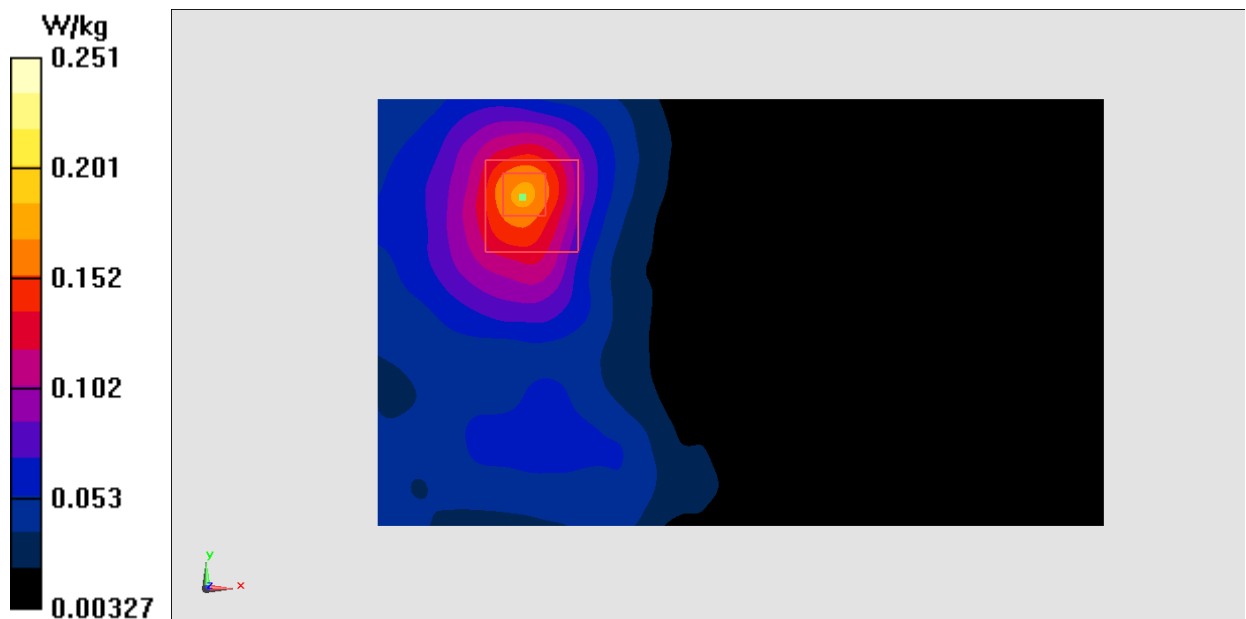


Fig.36 5GHz

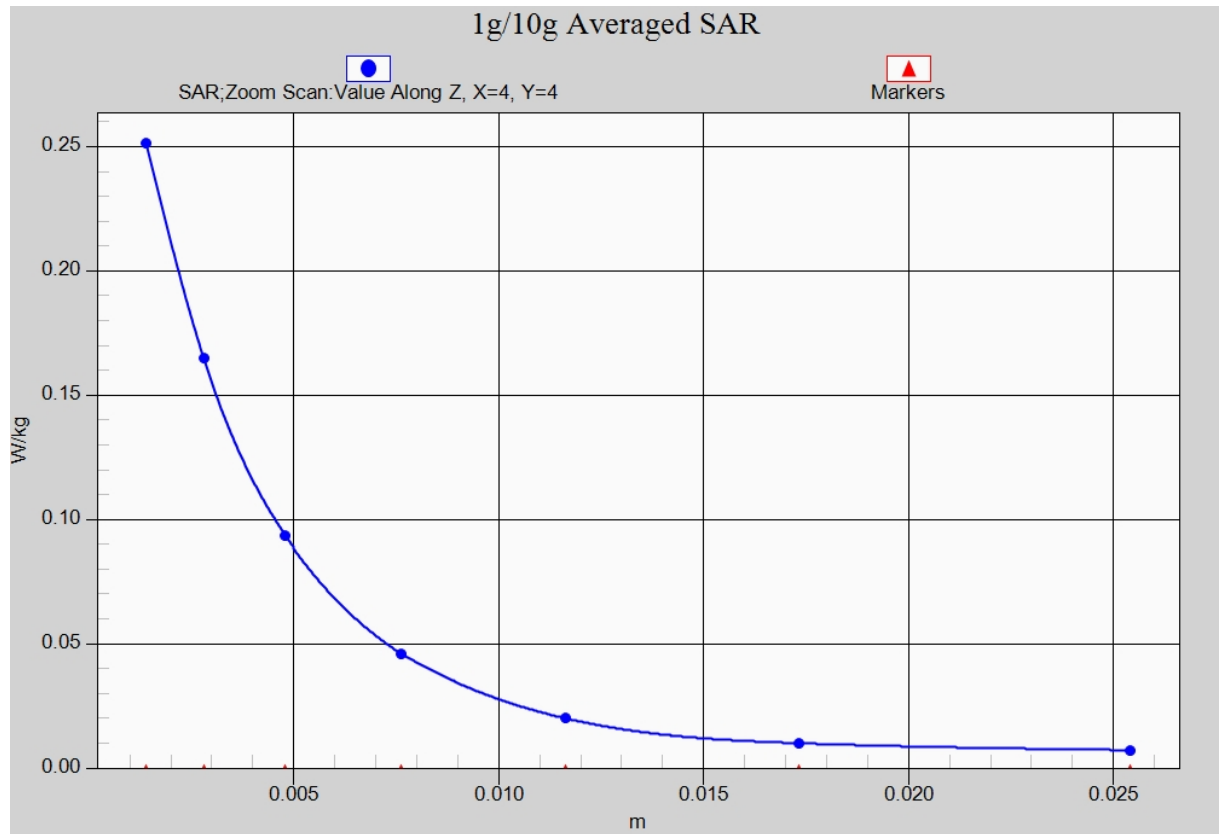


Fig. 36-1 Z-Scan at power reference point (5GHz)

ANNEX B System Verification Results

750 MHz

Date: 6/2/2017

Electronics: DAE4 Sn1331

Medium: Head 750 MHz

Medium parameters used: $f = 750 \text{ MHz}$; $\sigma = 0.88 \text{ mho/m}$; $\epsilon_r = 41.71$; $\rho = 1000 \text{ kg/m}^3$

Ambient Temperature: 22.5°C Liquid Temperature: 23.3°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 = 58.49 V/m ; Power Drift = .01

Fast SAR: SAR(1 g) = 2.05 W/kg ; SAR(10 g) = 1.35 W/kg

Maximum value of SAR (interpolated) = 2.71 W/kg

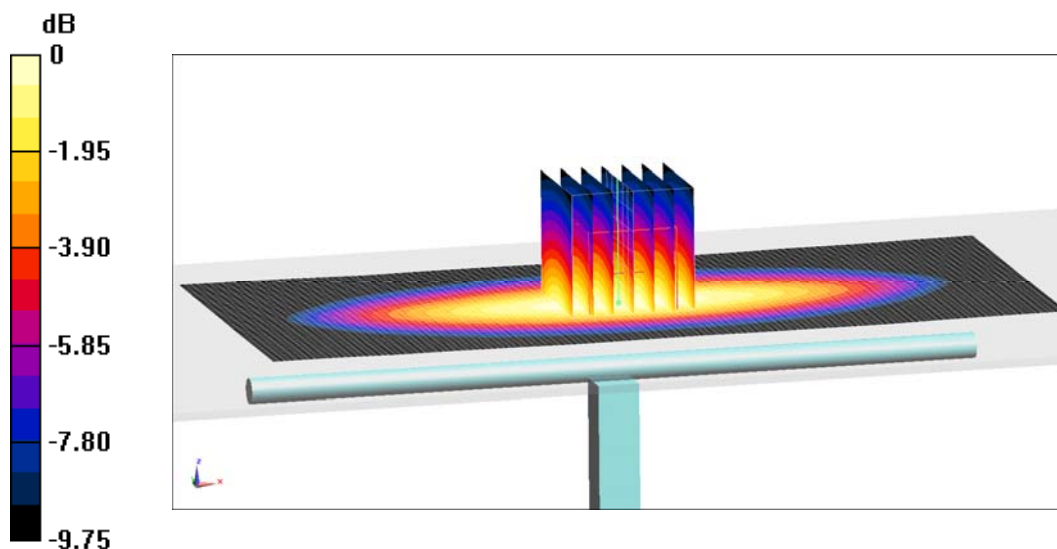
System Validation /Zoom Scan (7x7x7)/Cube 0: Measurement grid: $dx=5\text{mm}$, $dy=5\text{mm}$, $dz=5\text{mm}$

Reference Value = 58.49 V/m ; Power Drift = .01 dB

Peak SAR (extrapolated) = 3.22 W/kg

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

Maximum value of SAR (measured) = 2.84 W/kg



0 dB = 2.84 W/kg = 4.53 dB W/kg

Fig.B.1 validation 750 MHz 250mW

750 MHz

Date: 6/2/2017

Electronics: DAE4 Sn1331

Medium: Body 750 MHz

Medium parameters used: $f = 750 \text{ MHz}$; $\sigma = 0.963 \text{ mho/m}$; $\epsilon_r = 56.33$; $\rho = 1000 \text{ kg/m}^3$

Ambient Temperature: 22.5°C Liquid Temperature: 23.3°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 = 57.1 V/m ; Power Drift = .01

Fast SAR: SAR(1 g) = 2.22 W/kg ; SAR(10 g) = 1.47 W/kg

Maximum value of SAR (interpolated) = 2.84 W/kg

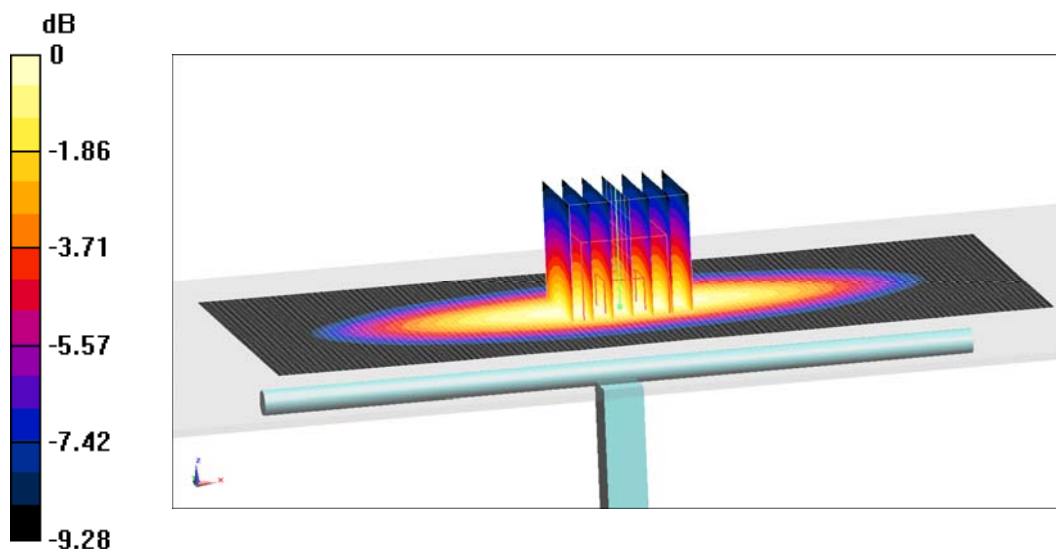
System Validation /Zoom Scan (7x7x7)/Cube 0: Measurement grid: $dx=5\text{mm}$, $dy=5\text{mm}$, $dz=5\text{mm}$

Reference Value = 57.1 V/m ; Power Drift = .01 dB

Peak SAR (extrapolated) = 3.41 W/kg

SAR(1 g) = 2.16 W/kg ; SAR(10 g) = 1.43 W/kg

Maximum value of SAR (measured) = 2.95 W/kg



0 dB = 2.95 W/kg = 4.70 dB W/kg

Fig.B.2 validation 750 MHz 250mW

835 MHz

Date: 6/3/2017

Electronics: DAE4 Sn1331

Medium: Head 835 MHz

Medium parameters used: $f = 835$ MHz; $\sigma = 0.884$ mho/m; $\epsilon_r = 41.55$; $\rho = 1000$ kg/m³

Ambient Temperature: 22.5°C Liquid Temperature: 23.3°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 mm, dy=1.000 mm

Reference Value = 61.39 V/m; Power Drift = .01

Fast SAR: SAR(1 g) = 2.38 W/kg; SAR(10 g) = 1.55 W/kg

Maximum value of SAR (interpolated) = 3.24 W/kg

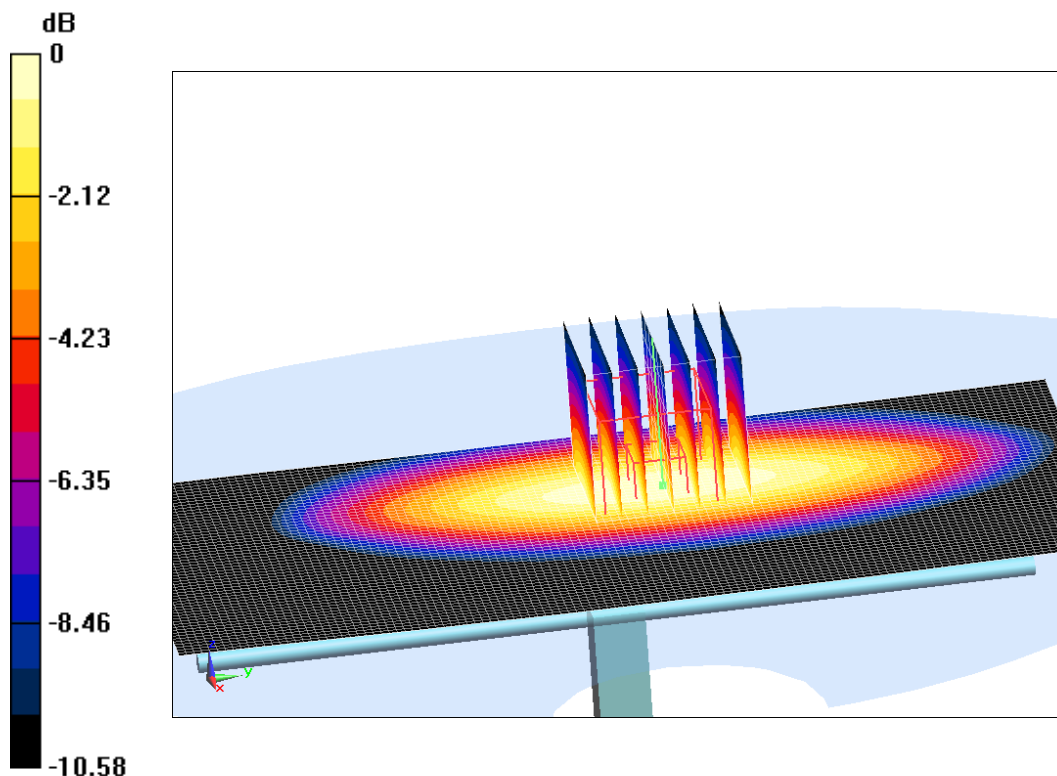
System Validation /Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value =61.39 V/m; Power Drift = .01 dB

Peak SAR (extrapolated) = 3.67 W/kg

SAR(1 g) = 2.31 W/kg; SAR(10 g) = 1.54 W/kg

Maximum value of SAR (measured) = 3.32 W/kg



0 dB = 3.32 W/kg = 5.21 dB W/kg

Fig.B.3 validation 835 MHz 250mW

835 MHz

Date: 6/3/2017

Electronics: DAE4 Sn1331

Medium: Body 835 MHz

Medium parameters used: $f = 835 \text{ MHz}$; $\sigma = 0.978 \text{ mho/m}$; $\epsilon_r = 55.33$; $\rho = 1000 \text{ kg/m}^3$

Ambient Temperature: 22.5°C Liquid Temperature: 23.3°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 = 60.56 V/m ; Power Drift = .02

Fast SAR: SAR(1 g) = 2.38 W/kg ; SAR(10 g) = 1.6 W/kg

Maximum value of SAR (interpolated) = 3.38 W/kg

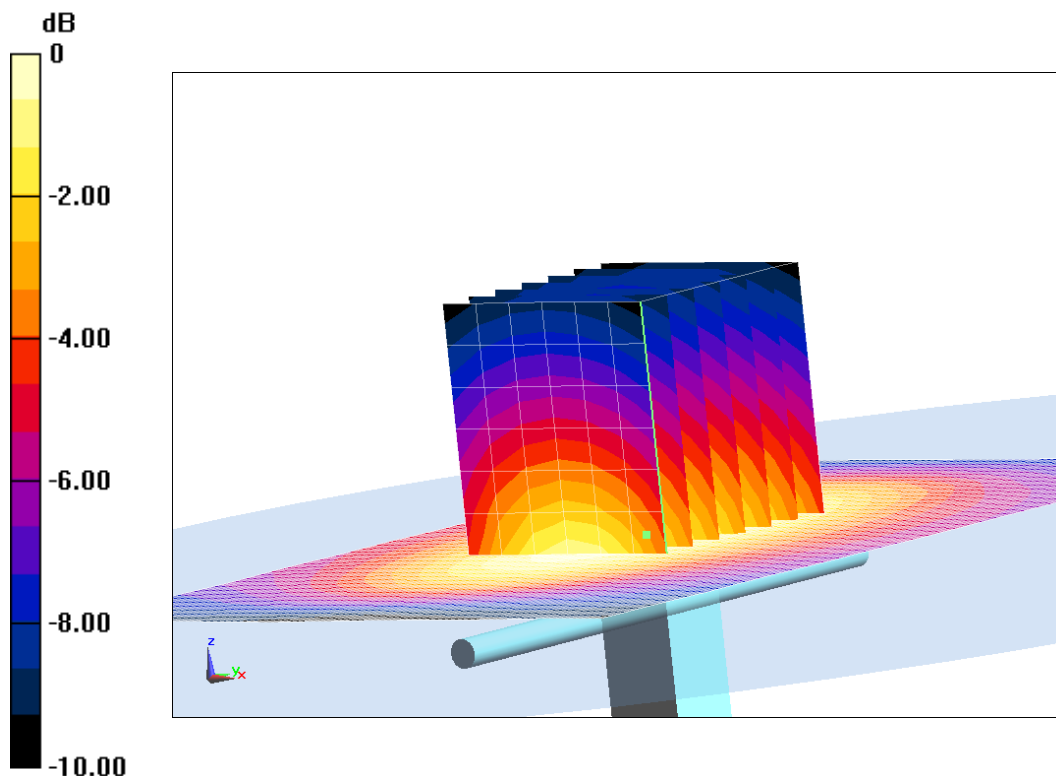
System Validation /Zoom Scan (7x7x7)/Cube 0: Measurement grid: $dx=5\text{mm}$, $dy=5\text{mm}$, $dz=5\text{mm}$

Reference Value = 60.56 V/m ; Power Drift = .02 dB

Peak SAR (extrapolated) = 3.74 W/kg

SAR(1 g) = 2.42 W/kg ; SAR(10 g) = 1.58 W/kg

Maximum value of SAR (measured) = 3.35 W/kg



0 dB = 3.35 W/kg = 5.25 dB W/kg

Fig.B.4 validation 835 MHz 250mW

1750 MHz

Date: 6/4/2017

Electronics: DAE4 Sn1331

Medium: Head 1750 MHz

Medium parameters used: $f = 1750$ MHz; $\sigma = 1.383$ mho/m; $\epsilon_r = 39.85$; $\rho = 1000$ kg/m³

Ambient Temperature: 22.5°C Liquid Temperature: 23.3°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 = 107.48 V/m; Power Drift = .01

Fast SAR: SAR(1 g) = 9.04 W/kg; SAR(10 g) = 4.96 W/kg

Maximum value of SAR (interpolated) = 14.37 W/kg

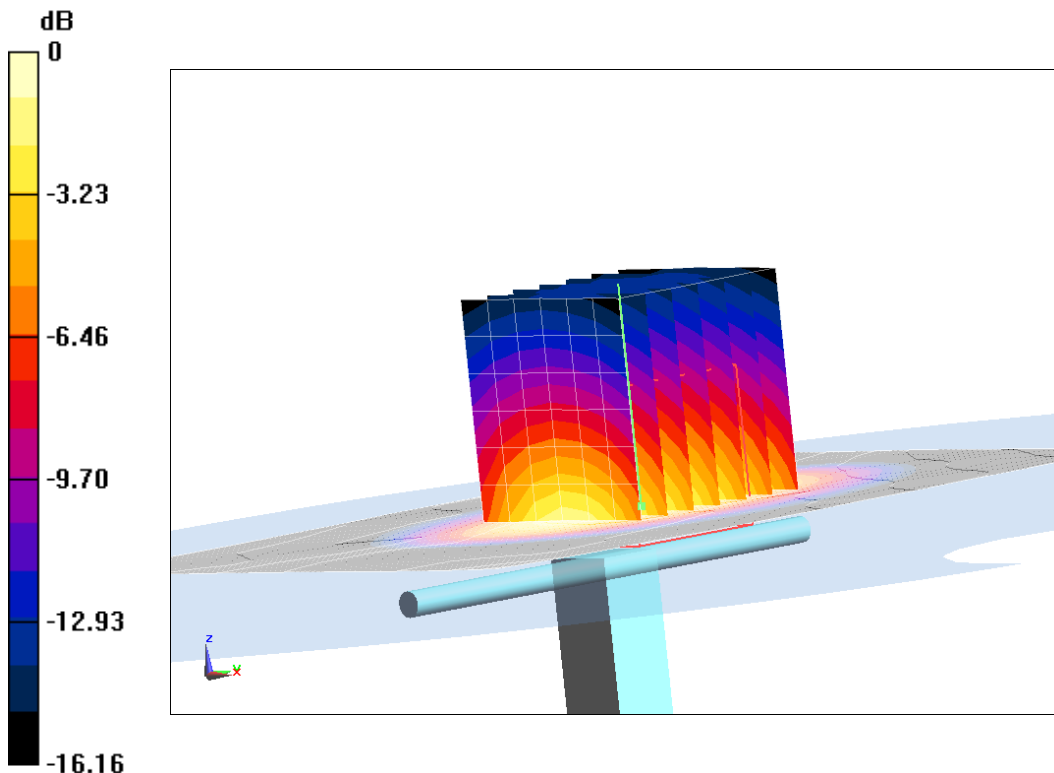
System Validation /Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value =107.48 V/m; Power Drift = .01 dB

Peak SAR (extrapolated) = 16.73 W/kg

SAR(1 g) = 9.2 W/kg; SAR(10 g) = 4.82 W/kg

Maximum value of SAR (measured) = 14.14 W/kg



0 dB = 14.14 W/kg = 11.5 dB W/kg

Fig.B.5 validation 1750 MHz 250mW

1750 MHz

Date: 6/4/2017

Electronics: DAE4 Sn1331

Medium: Body 1750 MHz

Medium parameters used: $f = 1750$ MHz; $\sigma = 1.477$ mho/m; $\epsilon_r = 53.26$; $\rho = 1000$ kg/m³

Ambient Temperature: 22.5°C Liquid Temperature: 23.3°C

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

Probe: EX3DV4 – SN3846 ConvF(7.9,7.9,7.9)

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

Reference Value = 99.77 V/m; Power Drift = -.01

Fast SAR: SAR(1 g) = 9.23 W/kg; SAR(10 g) = 4.91 W/kg

Maximum value of SAR (interpolated) = 13.5 W/kg

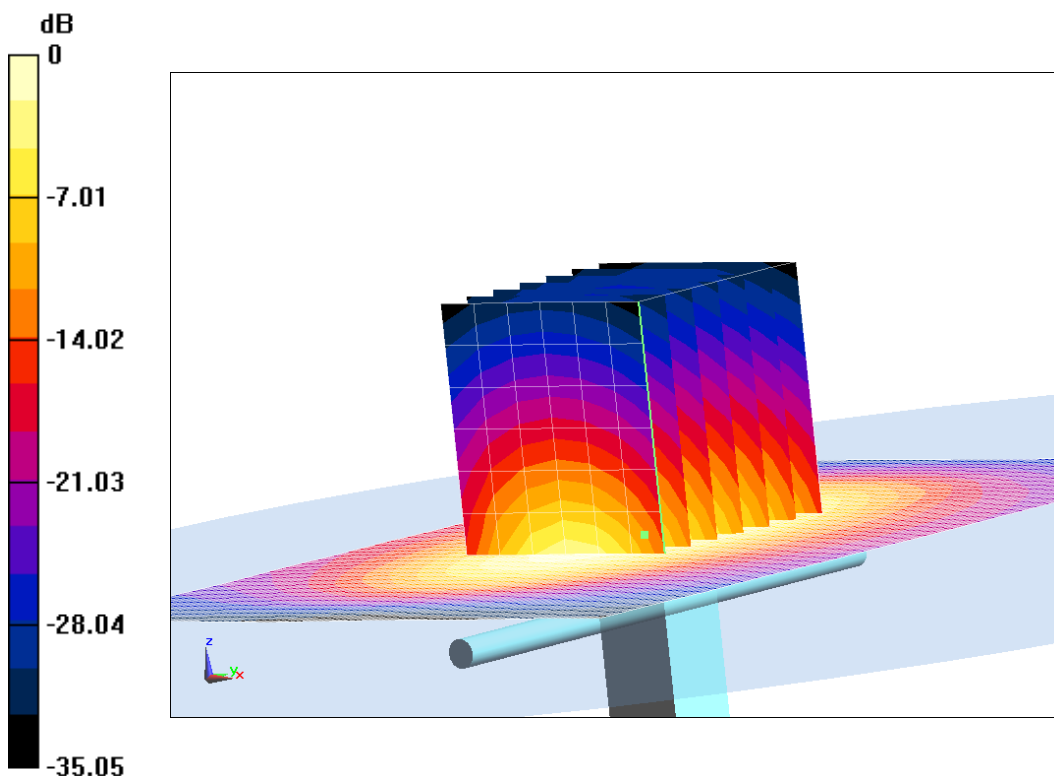
System Validation /Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value =99.77 V/m; Power Drift = -.01 dB

Peak SAR (extrapolated) = 16.09 W/kg

SAR(1 g) = 9.42 W/kg; SAR(10 g) = 4.88 W/kg

Maximum value of SAR (measured) = 13.78 W/kg



0 dB = 13.78 W/kg = 11.39 dB W/kg

Fig.B.6 validation 1750 MHz 250mW