

LTE Band4 Body Bottom High with QPSK_20M_100RB

Date: 2017-1-14

Electronics: DAE4 Sn1331

Medium: Body 1750 MHz

Medium parameters used: $f = 1745$ MHz; $\sigma = 1.526$ mho/m; $\epsilon_r = 53.329$; $\rho = 1000$ 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 – SN7307 ConvF(8.18, 8.18, 8.18)

Area Scan (111x61x1): Interpolated grid: dx=1.000 mm, dy=1.000 mm

Maximum value of SAR (interpolated) = 1.38 W/kg

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

Reference Value = 21.47 V/m; Power Drift = 0.08 dB

Peak SAR (extrapolated) = 1.84 W/kg

SAR(1 g) = 1.03 W/kg; SAR(10 g) = 0.524 W/kg

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

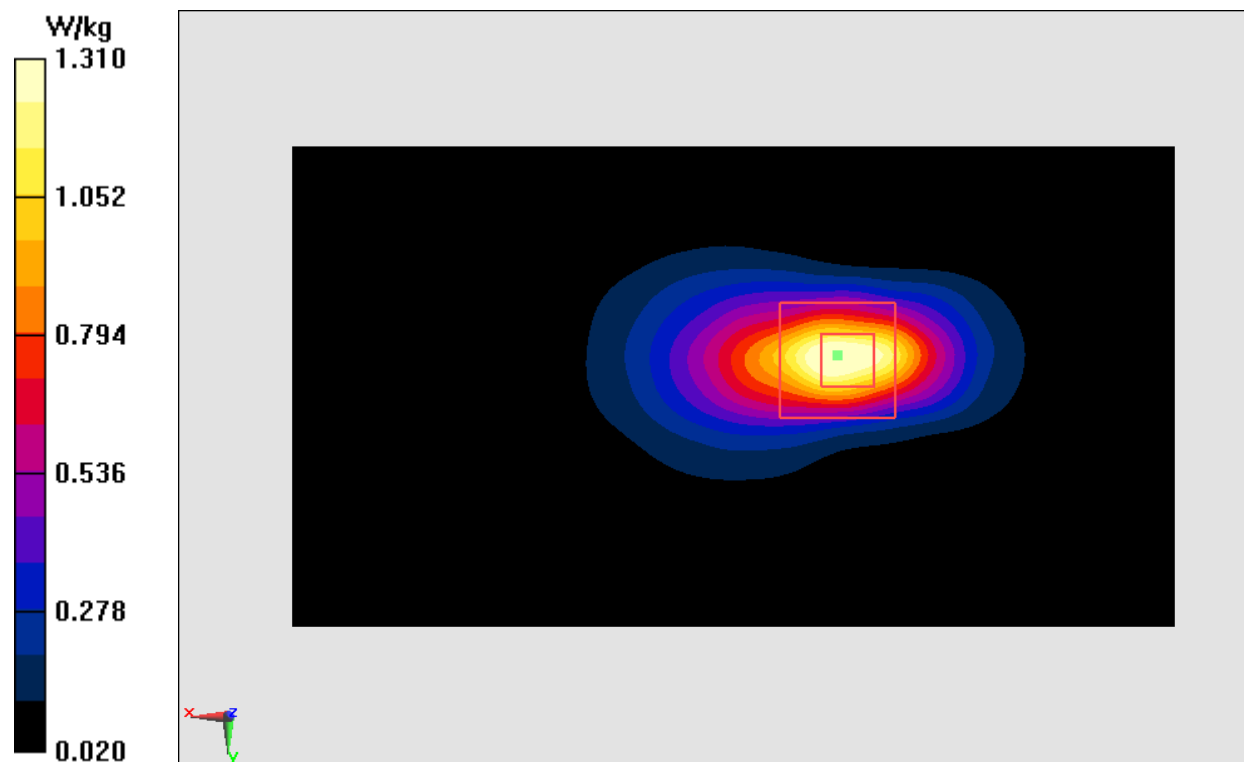


Fig.18 LTE Band4

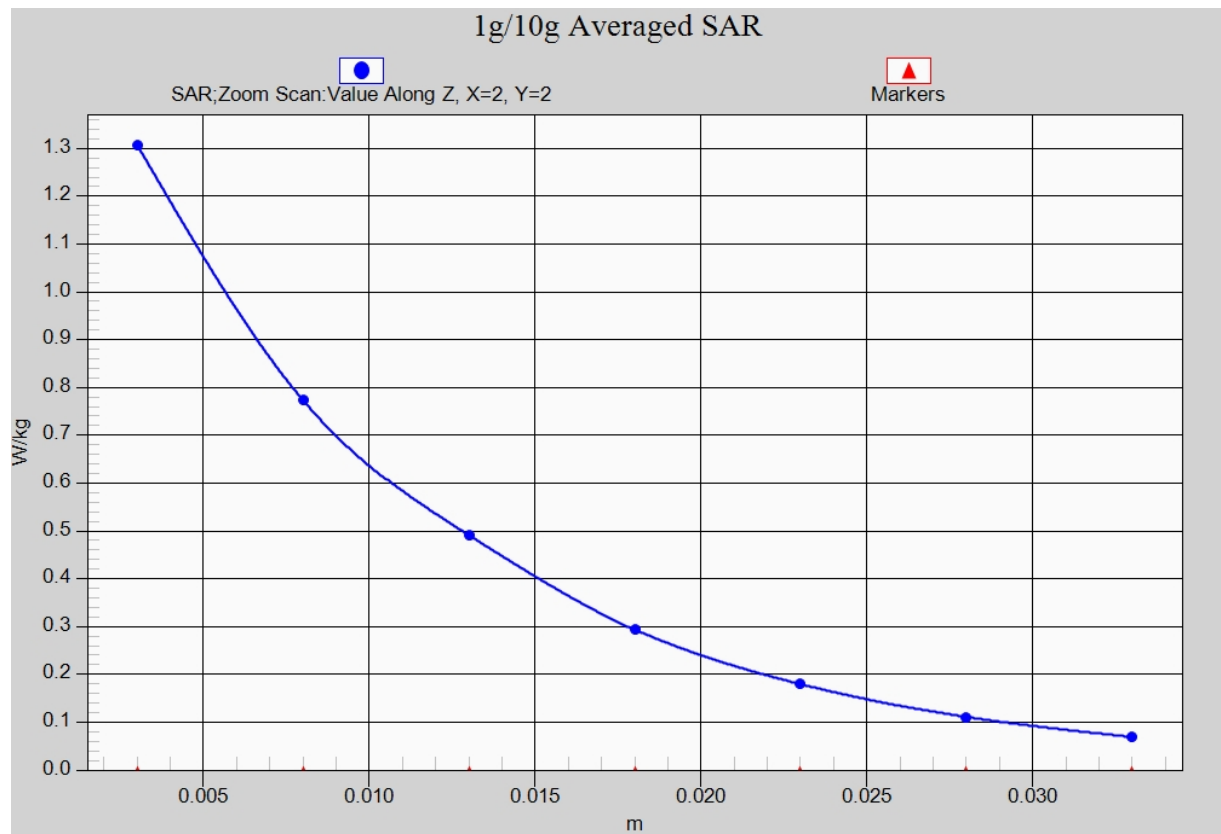


Fig. 18-1 Z-Scan at power reference point (LTE Band4)

LTE Band5 Left Cheek High with QPSK_10M_25RB_High – antenna1

Date: 2017-1-13

Electronics: DAE4 Sn1331

Medium: Head 850 MHz

Medium parameters used (interpolated): $f = 844$ MHz; $\sigma = 0.923$ mho/m; $\epsilon_r = 41.431$; $\rho = 1000$ 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 - SN7307 ConvF(10.01, 10.01, 10.01)

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

Maximum value of SAR (interpolated) = 0.244 W/kg

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

Reference Value = 6.130 V/m; Power Drift = 0.16 dB

Peak SAR (extrapolated) = 0.296 W/kg

SAR(1 g) = 0.224 W/kg; SAR(10 g) = 0.167 W/kg

Maximum value of SAR (measured) = 0.247 W/kg

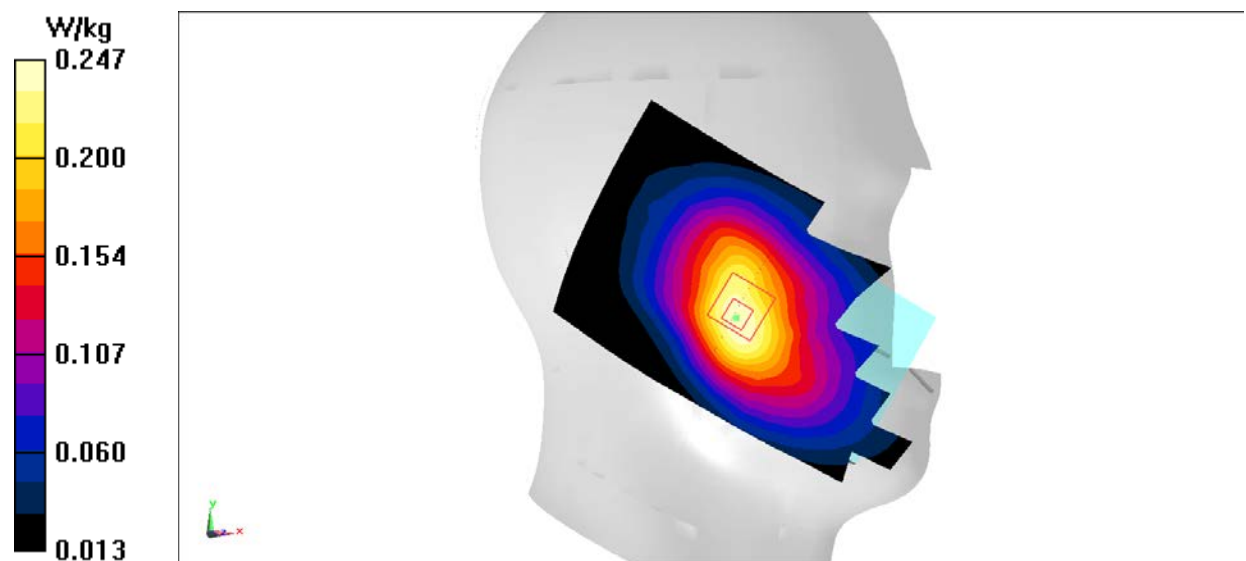


Fig.19 LTE Band5

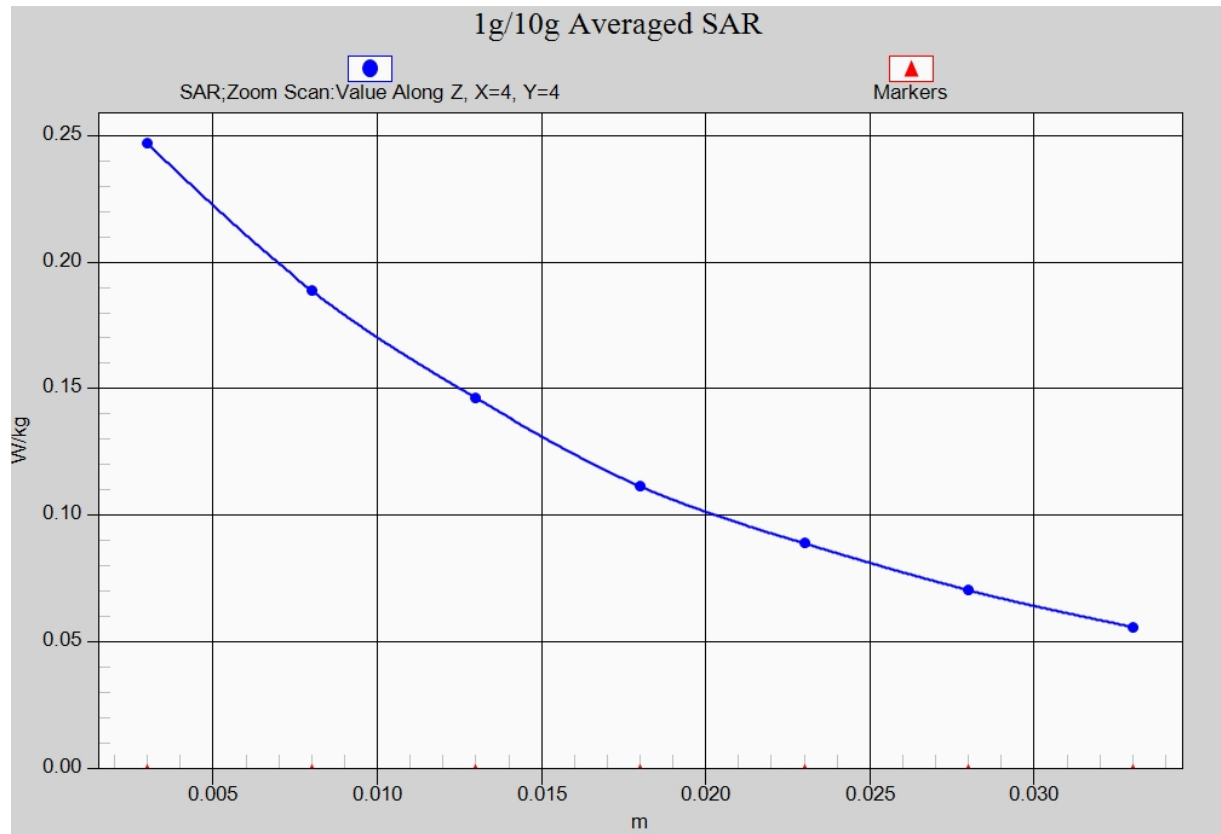


Fig. 19-1 Z-Scan at power reference point (LTE Band5)

LTE Band5 Body Left High with QPSK_10M_25RB_High – antenna1

Date: 2017-1-13

Electronics: DAE4 Sn1331

Medium: Body 850 MHz

Medium parameters used (interpolated): $f = 844$ MHz; $\sigma = 1.028$ mho/m; $\epsilon_r = 55.734$; $\rho = 1000$ 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 - SN7307 ConvF(9.83, 9.83, 9.83)

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

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

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

Reference Value = 16.25 V/m; Power Drift = 0.02 dB

Peak SAR (extrapolated) = 0.401 W/kg

SAR(1 g) = 0.276 W/kg; SAR(10 g) = 0.187 W/kg

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

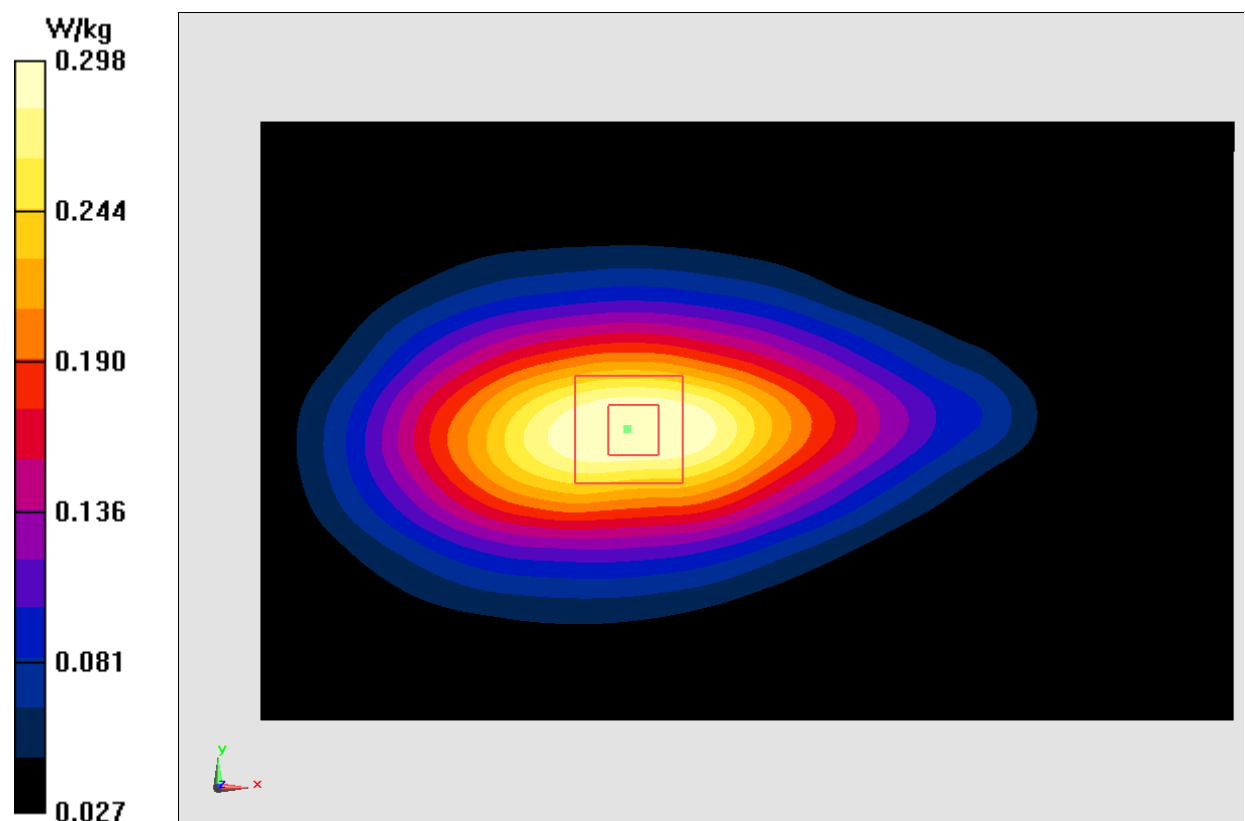


Fig.20 LTE Band5

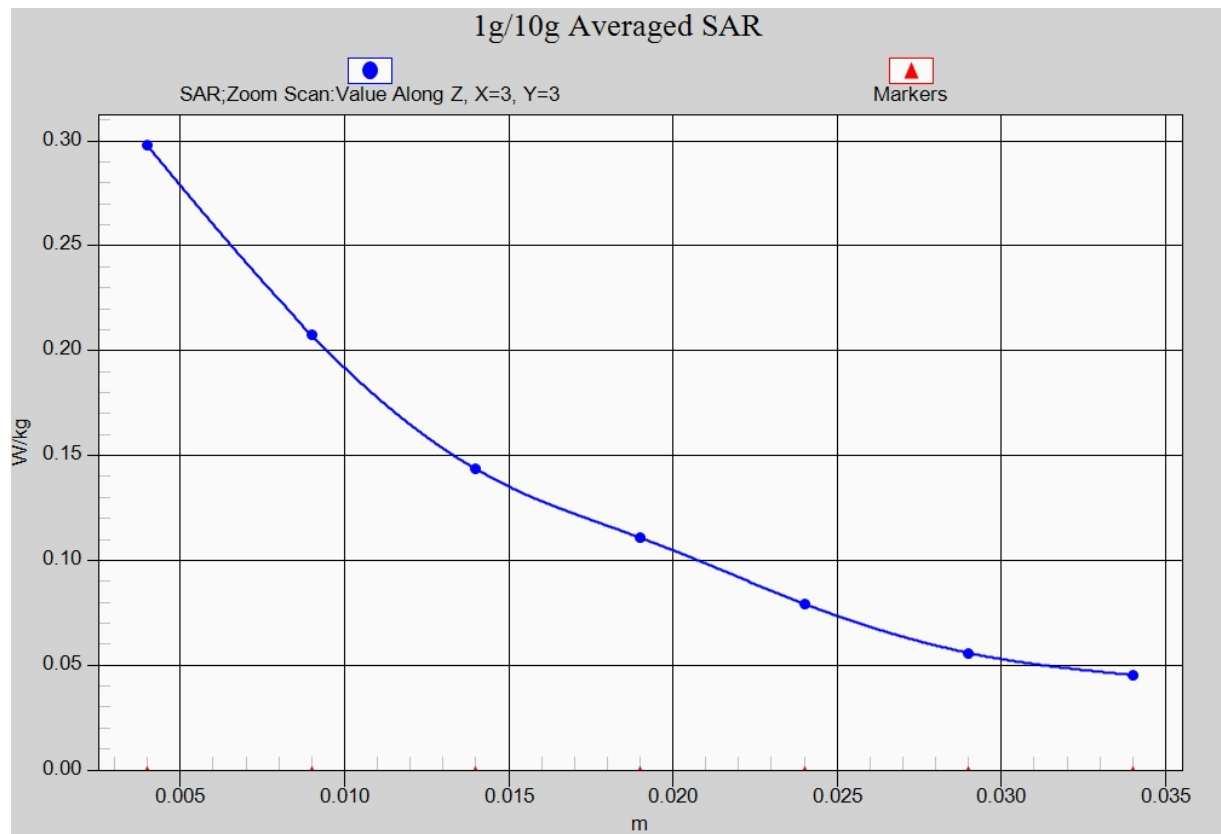


Fig. 20-1 Z-Scan at power reference point (LTE Band5)

LTE Band5 Left Cheek Low with QPSK_10M_1RB_High – antenna2

Date: 2017-1-13

Electronics: DAE4 Sn1331

Medium: Head 850 MHz

Medium parameters used (interpolated): $f = 829$ MHz; $\sigma = 0.909$ mho/m; $\epsilon_r = 41.651$; $\rho = 1000$ 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 - SN7307 ConvF(10.01, 10.01, 10.01)

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

Maximum value of SAR (interpolated) = 0.222 W/kg

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

Reference Value = 4.327 V/m; Power Drift = 0.05 dB

Peak SAR (extrapolated) = 0.272 W/kg

SAR(1 g) = 0.209 W/kg; SAR(10 g) = 0.159 W/kg

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

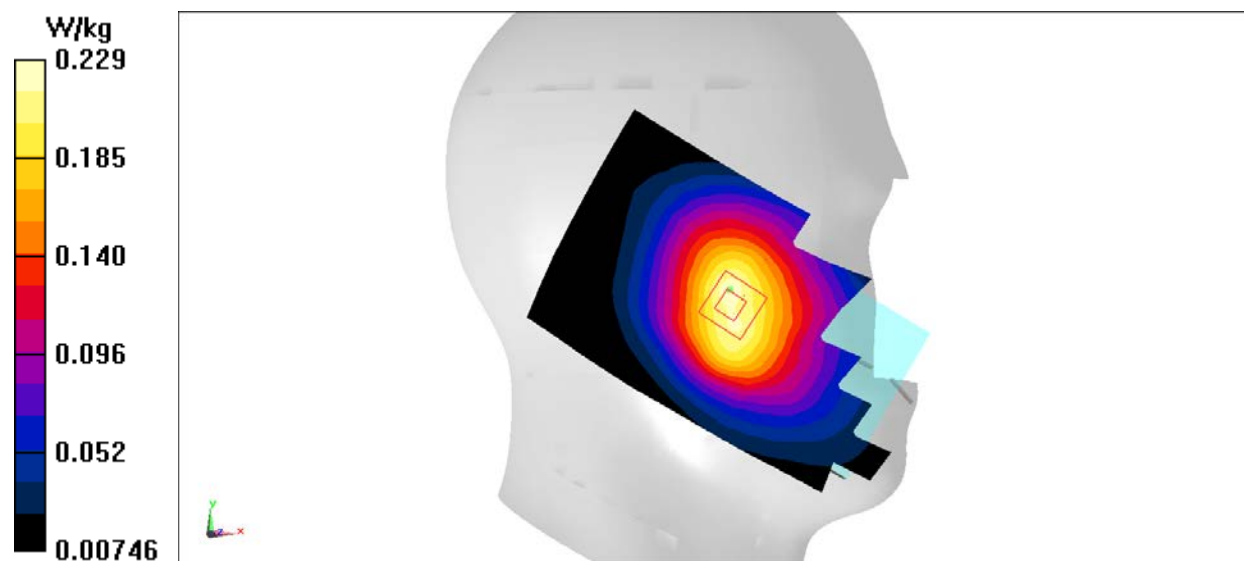


Fig.21 LTE Band5

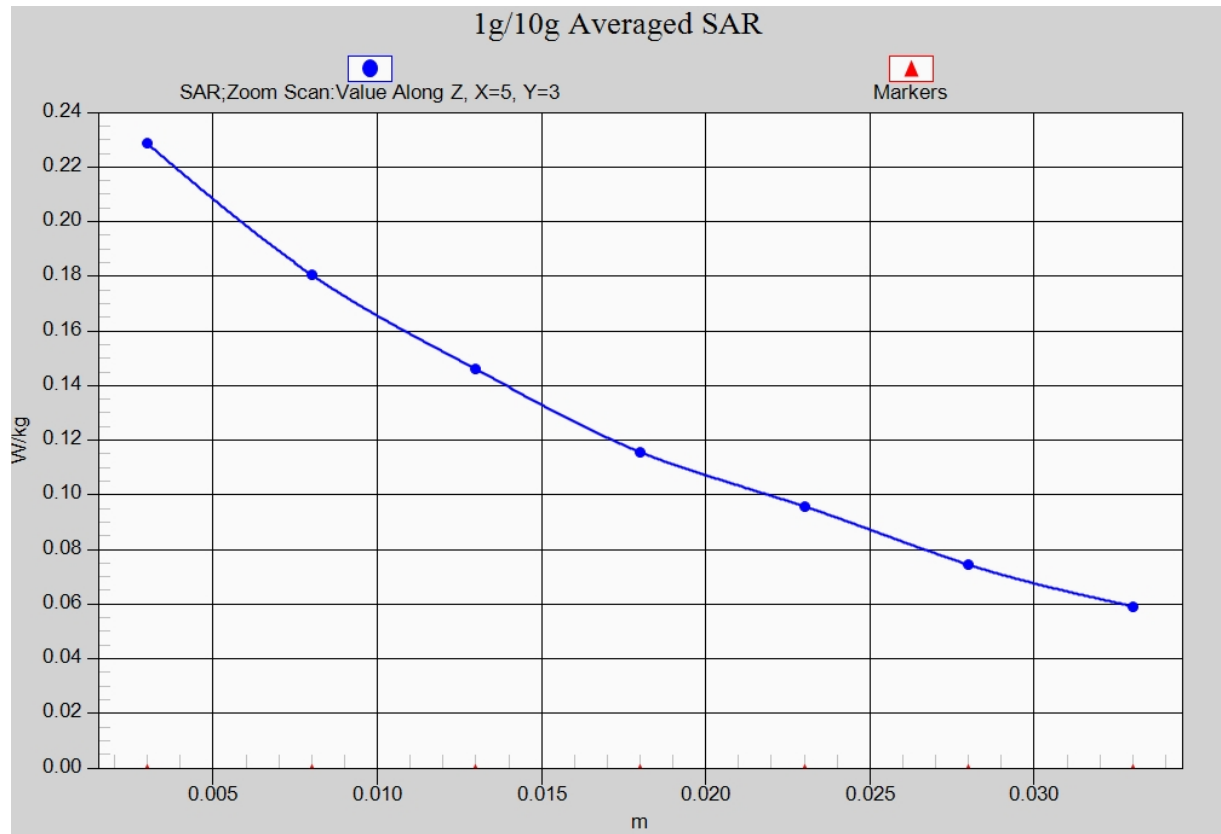


Fig. 21-1 Z-Scan at power reference point (LTE Band5)

LTE Band5 Body Bottom Low with QPSK_10M_1RB_High – antenna2

Date: 2017-1-13

Electronics: DAE4 Sn1331

Medium: Body 850 MHz

Medium parameters used (interpolated): $f = 829$ MHz; $\sigma = 1.015$ mho/m; $\epsilon_r = 55.894$; $\rho = 1000$ 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 - SN7307 ConvF(9.83, 9.83, 9.83)

Area Scan (111x61x1): Interpolated grid: $dx=1.000$ mm, $dy=1.000$ mm

Maximum value of SAR (interpolated) = 0.388 W/kg

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

Reference Value = 17.66 V/m; Power Drift = 0.04 dB

Peak SAR (extrapolated) = 0.507 W/kg

SAR(1 g) = 0.297 W/kg; SAR(10 g) = 0.177 W/kg

Maximum value of SAR (measured) = 0.367 W/kg

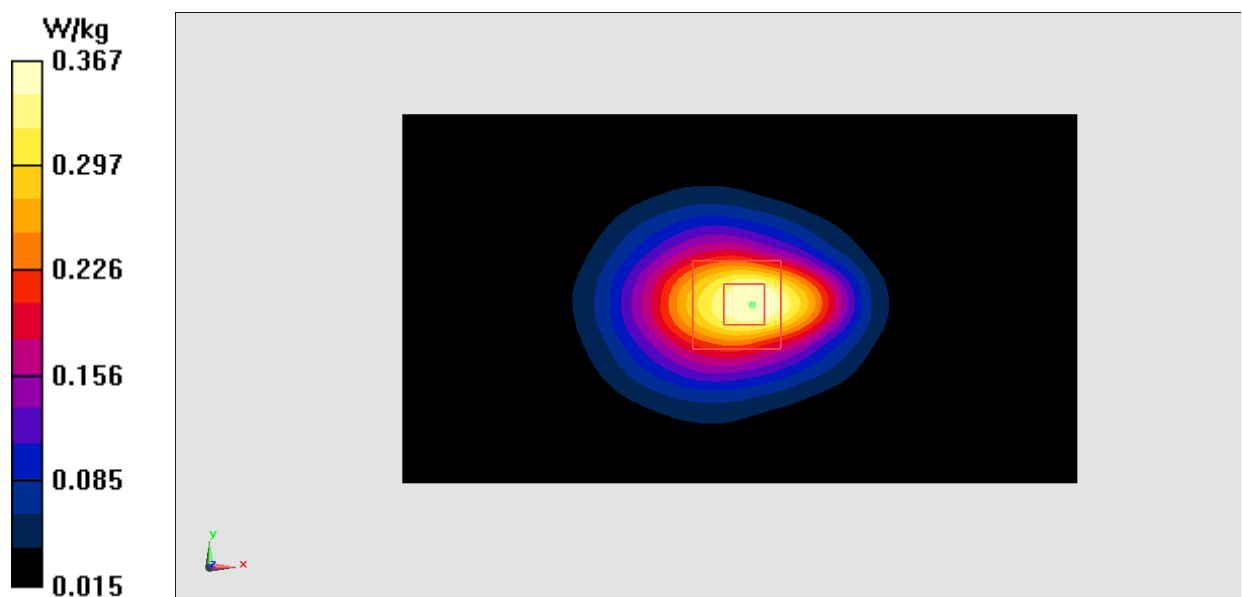


Fig.22 LTE Band5

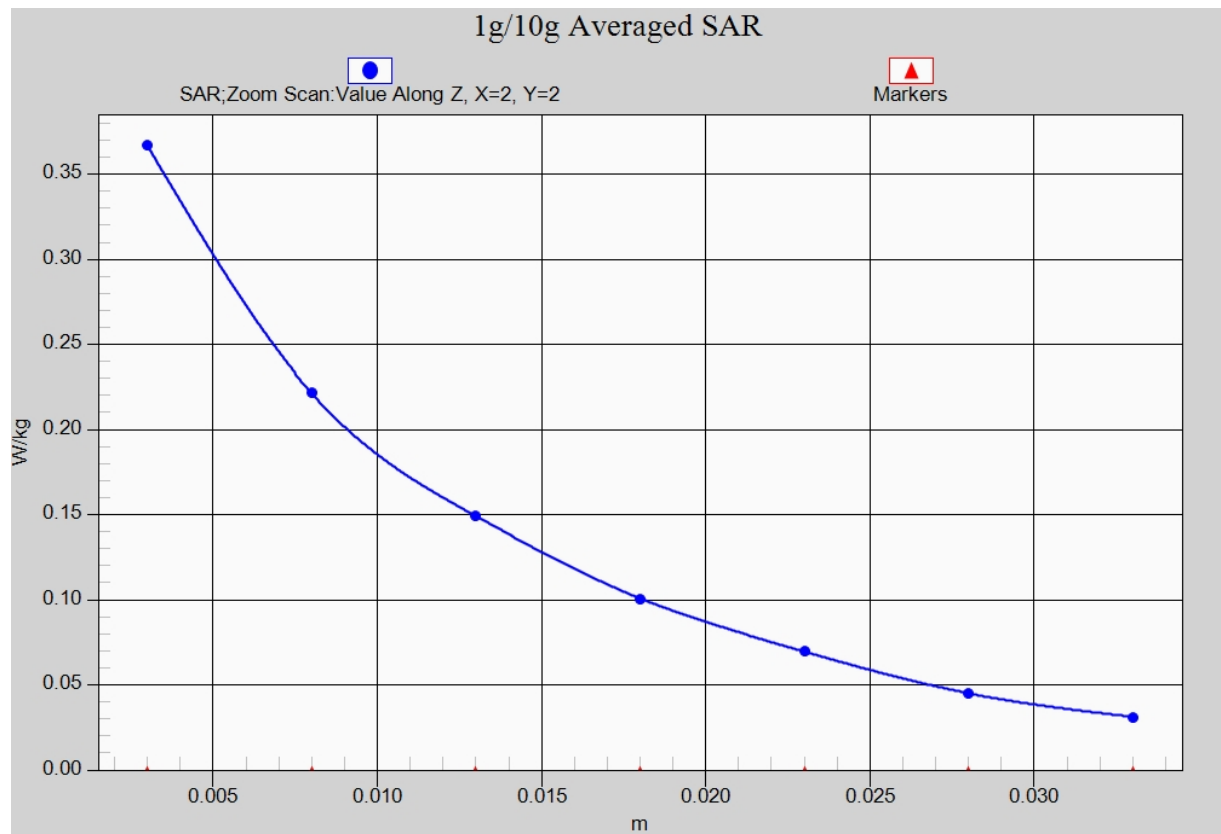


Fig. 22-1 Z-Scan at power reference point (LTE Band5)

LTE Band7 Right Cheek Middle with QPSK_20M_1RB_Low

Date: 2017-1-17

Electronics: DAE4 Sn1331

Medium: Head2600 MHz

Medium parameters used: $f = 2535$ MHz; $\sigma = 1.956$ mho/m; $\epsilon_r = 37.92$; $\rho = 1000$ kg/m³

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

Communication System: LTE Band7 Frequency: 2535 MHz Duty Cycle: 1:1

Probe: EX3DV4- SN7307 ConvF(7.21, 7.21, 7.21)

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

Maximum value of SAR (interpolated) = 0.185 W/kg

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

Reference Value = 3.368 V/m; Power Drift = 0.12 dB

Peak SAR (extrapolated) = 0.264 W/kg

SAR(1 g) = 0.146 W/kg; SAR(10 g) = 0.078 W/kg

Maximum value of SAR (measured) = 0.178 W/kg

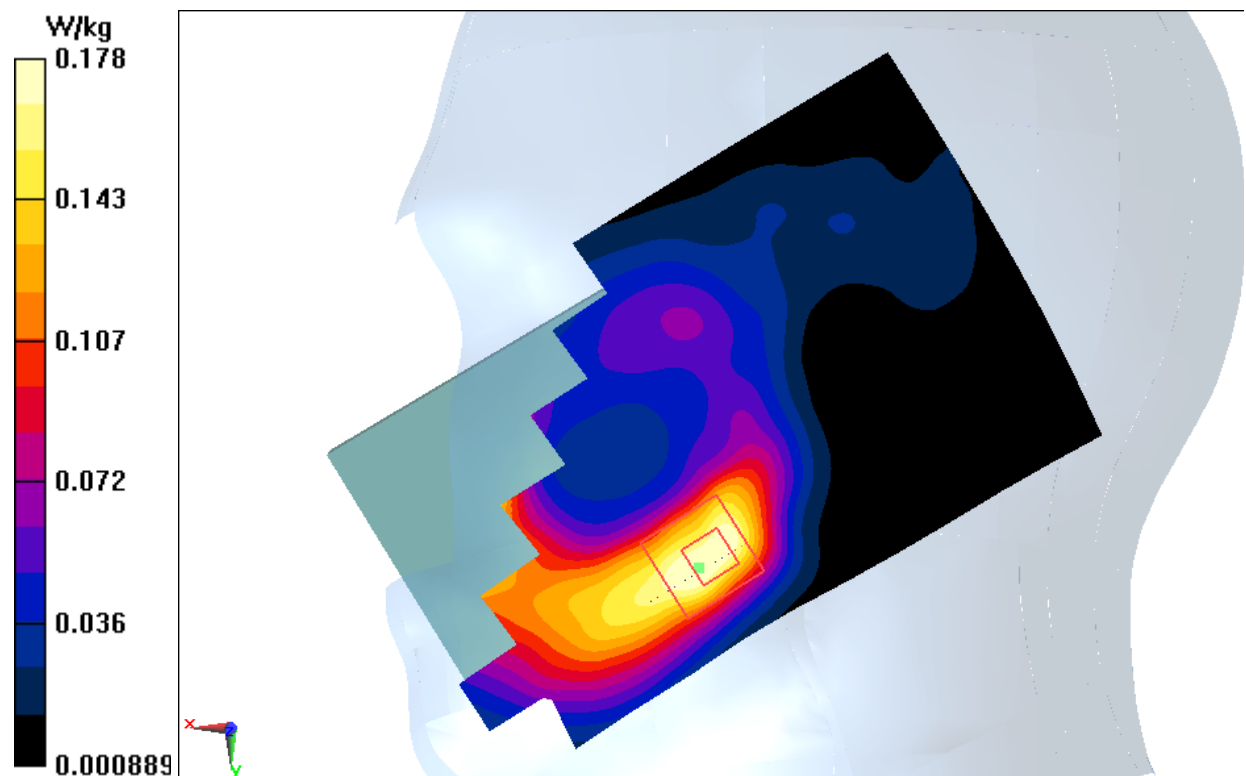


Fig.23 LTE Band7

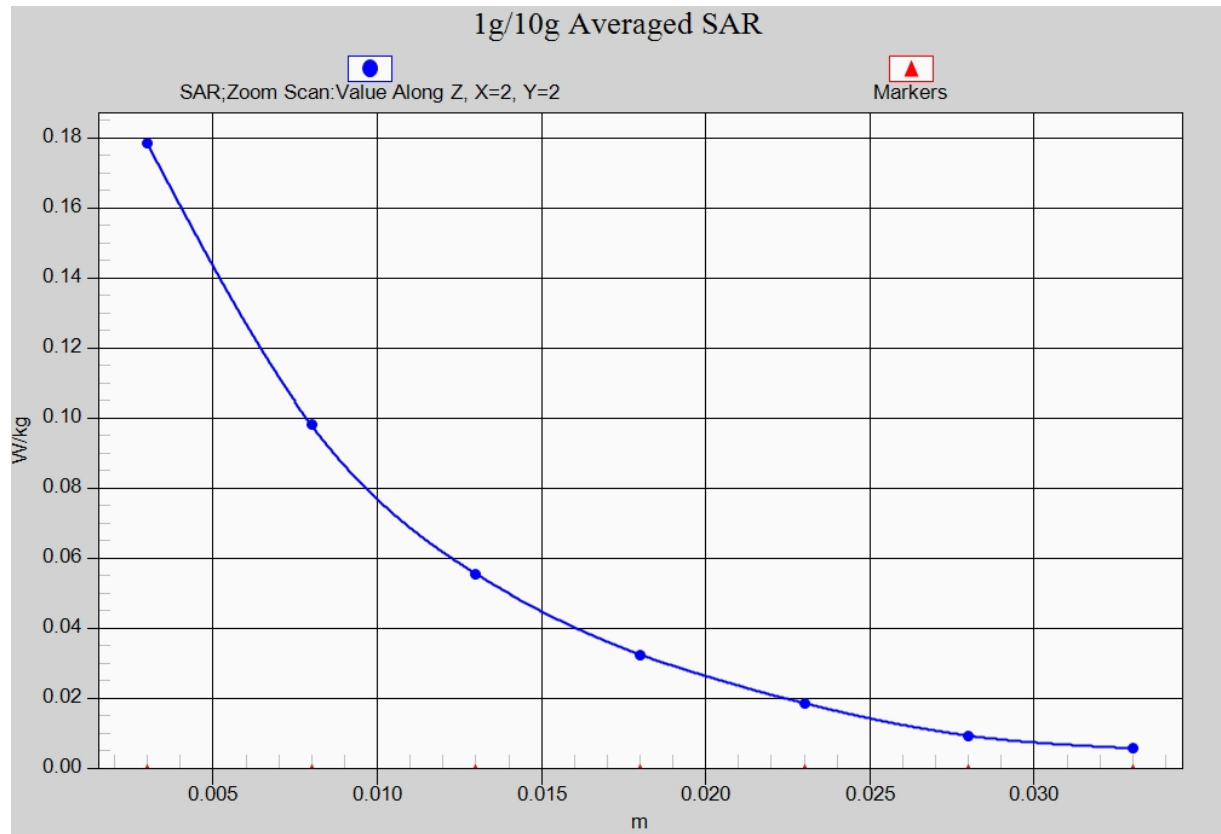


Fig. 23-1 Z-Scan at power reference point (LTE Band7)

LTE Band7 Body Bottom Middle with QPSK_20M_1RB_Low

Date: 2017-1-17

Electronics: DAE4 Sn1331

Medium: Body2600 MHz

Medium parameters used: $f = 2535$ MHz; $\sigma = 2.129$ mho/m; $\epsilon_r = 52.31$; $\rho = 1000$ kg/m³

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

Communication System: LTE Band7 Frequency: 2535 MHz Duty Cycle: 1:1

Probe: EX3DV4– SN7307 ConvF(7.03, 7.03, 7.03)

Area Scan (111x61x1): Interpolated grid: $dx=1.000$ mm, $dy=1.000$ mm

Maximum value of SAR (interpolated) = 1.34 W/kg

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

Reference Value = 20.12 V/m; Power Drift = -0.07 dB

Peak SAR (extrapolated) = 2.19 W/kg

SAR(1 g) = 1.08 W/kg; SAR(10 g) = 0.502 W/kg

Maximum value of SAR (measured) = 1.41 W/kg

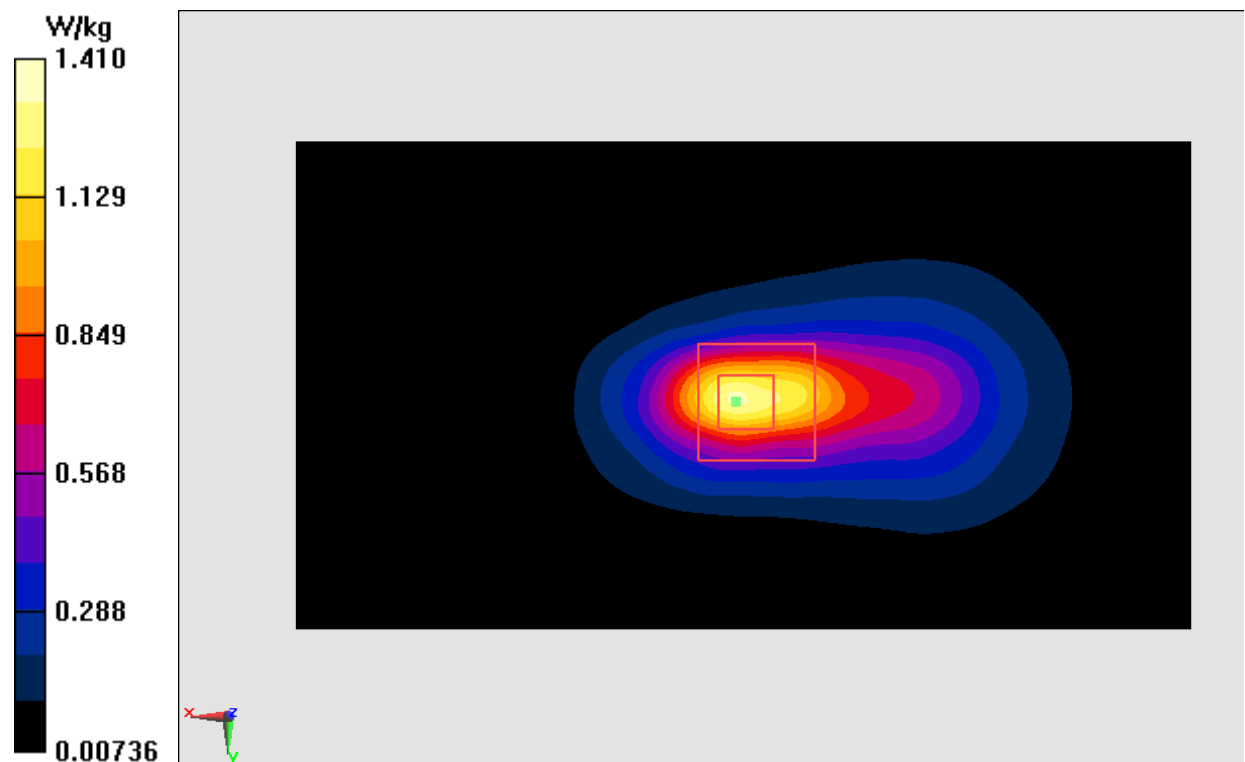


Fig.24 LTE Band7

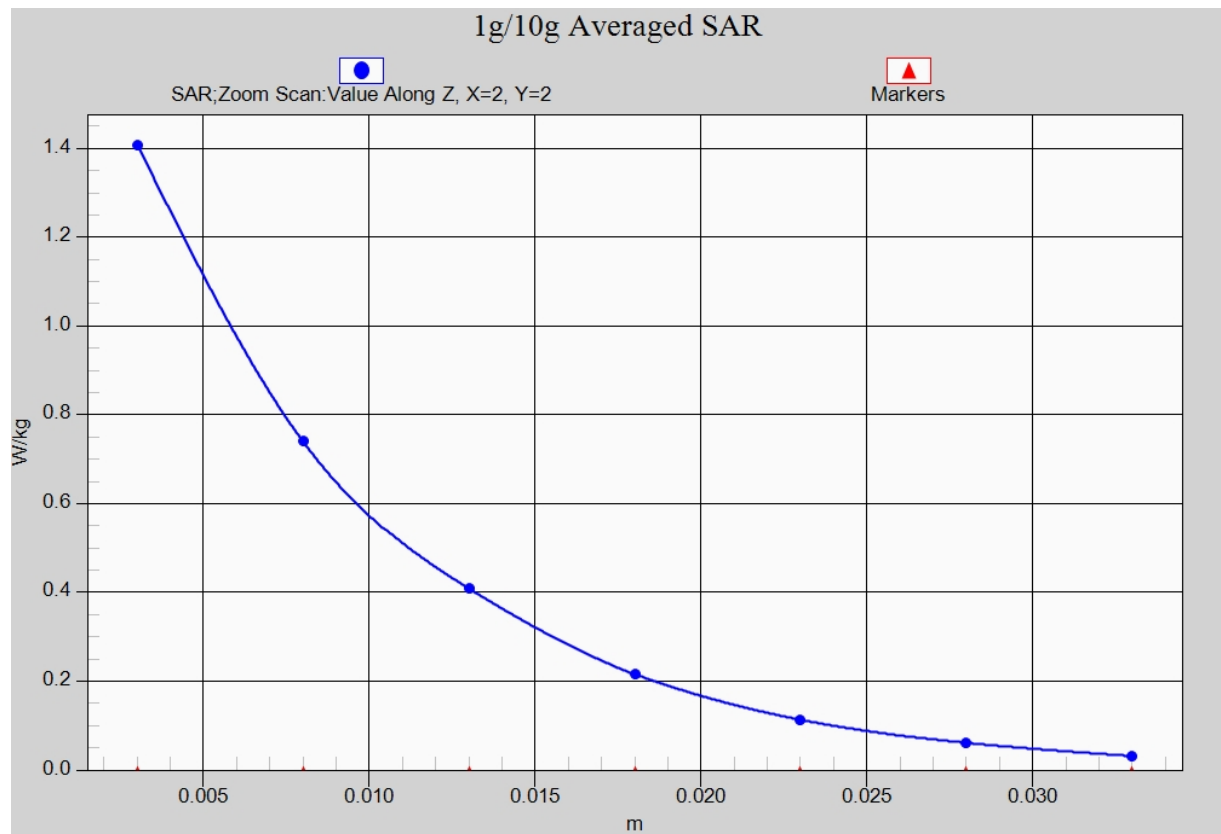


Fig. 24-1 Z-Scan at power reference point (LTE Band7)

LTE Band17 Left Cheek Middle with QPSK_10M_1RB_Middle – antenna1

Date: 2017-2-24

Electronics: DAE4 Sn1331

Medium: Head750 MHz

Medium parameters used: $f = 710$ MHz; $\sigma = 0.816$ mho/m; $\epsilon_r = 44.363$; $\rho = 1000$ 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– SN3846 ConvF(9.65, 9.65, 9.65)

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

Maximum value of SAR (interpolated) = 0.172 W/kg

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

Reference Value = 5.246 V/m; Power Drift = 0.06 dB

Peak SAR (extrapolated) = 0.201 W/kg

SAR(1 g) = 0.158 W/kg; SAR(10 g) = 0.125 W/kg

Maximum value of SAR (measured) = 0.169 W/kg

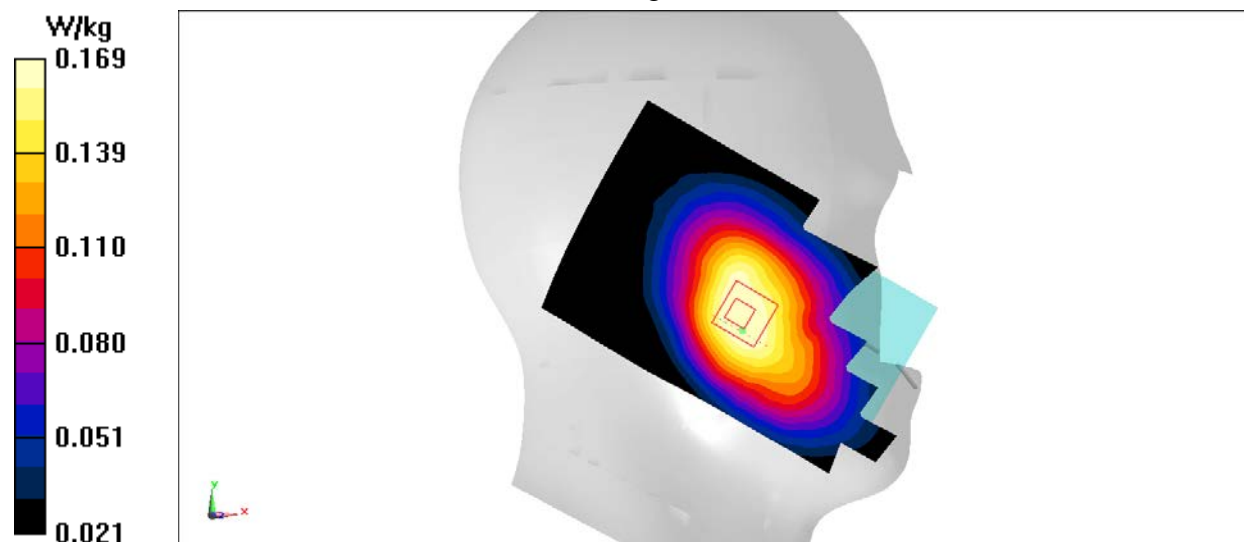


Fig.25 LTE Band17

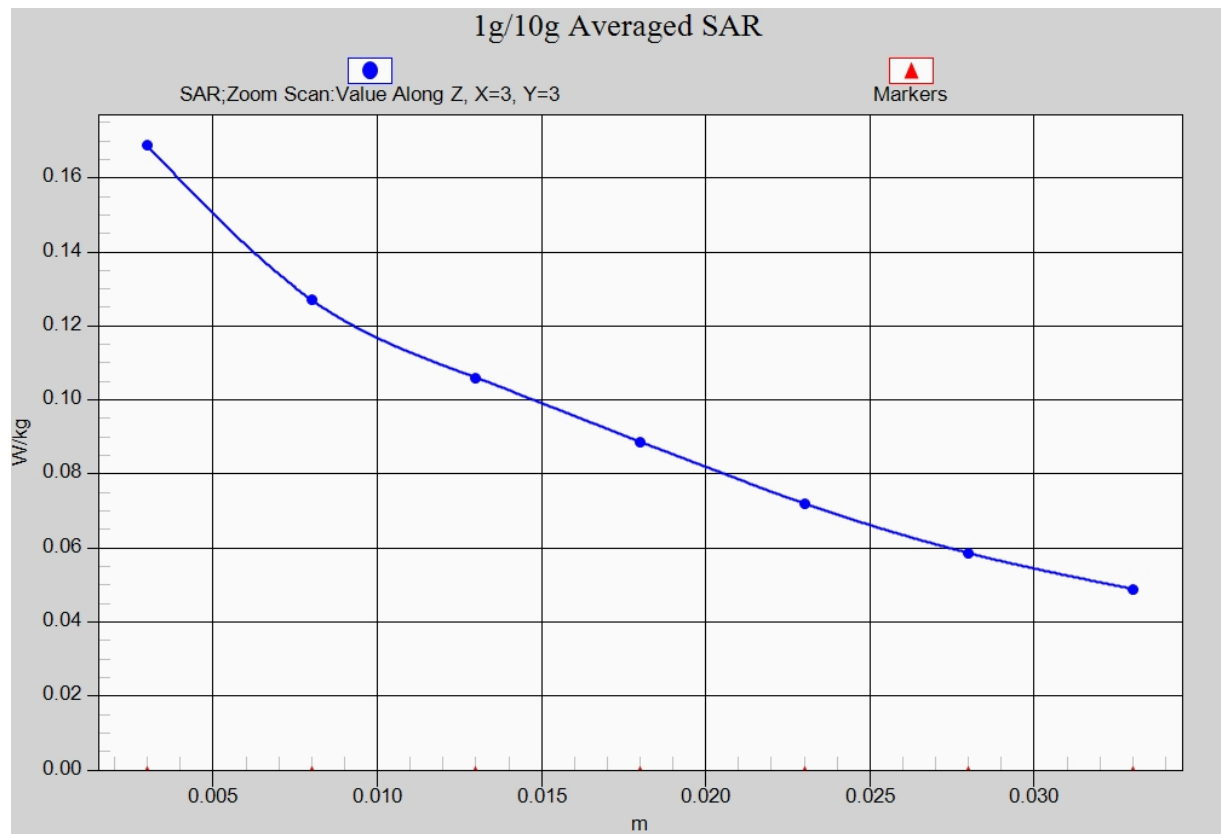


Fig. 25-1 Z-Scan at power reference point (LTE Band17)

LTE Band17 Body Left Middle with QPSK_10M_1RB_Middle – antenna1

Date: 2017-2-24

Electronics: DAE4 Sn1331

Medium: Body750 MHz

Medium parameters used: $f = 710$ MHz; $\sigma = 0.908$ mho/m; $\epsilon_r = 57.682$; $\rho = 1000$ 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– SN3846 ConvF(9.96, 9.96, 9.96)

Area Scan (111x61x1): Interpolated grid: dx=1.000 mm, dy=1.000 mm

Maximum value of SAR (interpolated) = 0.214 W/kg

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

Reference Value = 14.37 V/m; Power Drift = 0.13 dB

Peak SAR (extrapolated) = 0.250 W/kg

SAR(1 g) = 0.183 W/kg; SAR(10 g) = 0.130 W/kg

Maximum value of SAR (measured) = 0.207 W/kg

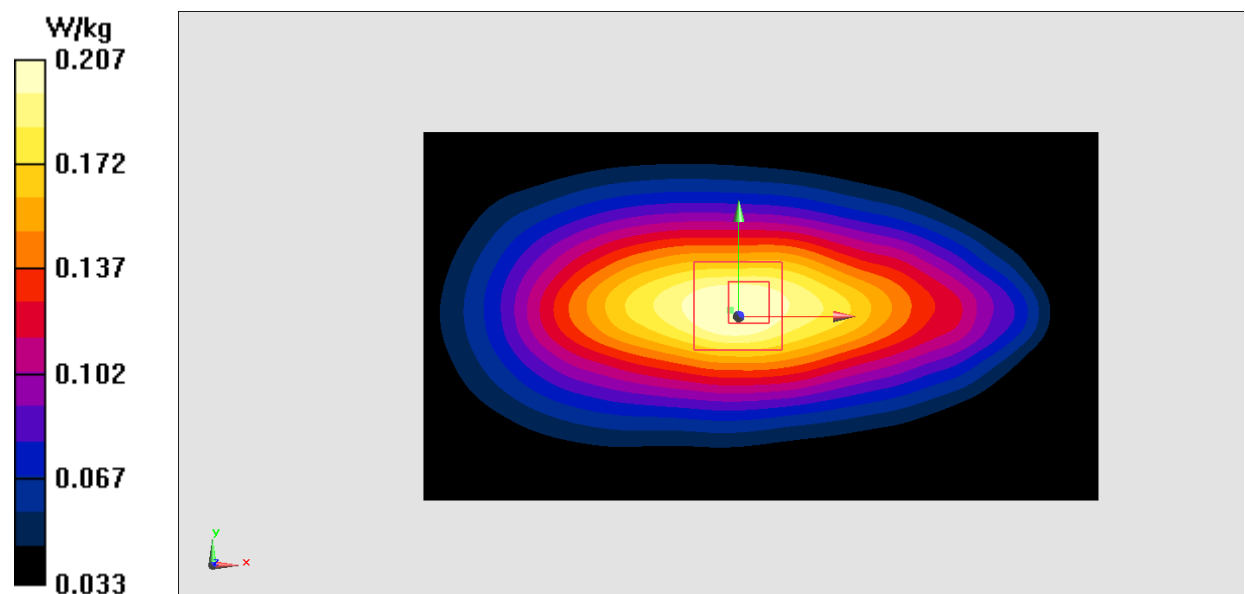


Fig.26 LTE Band17

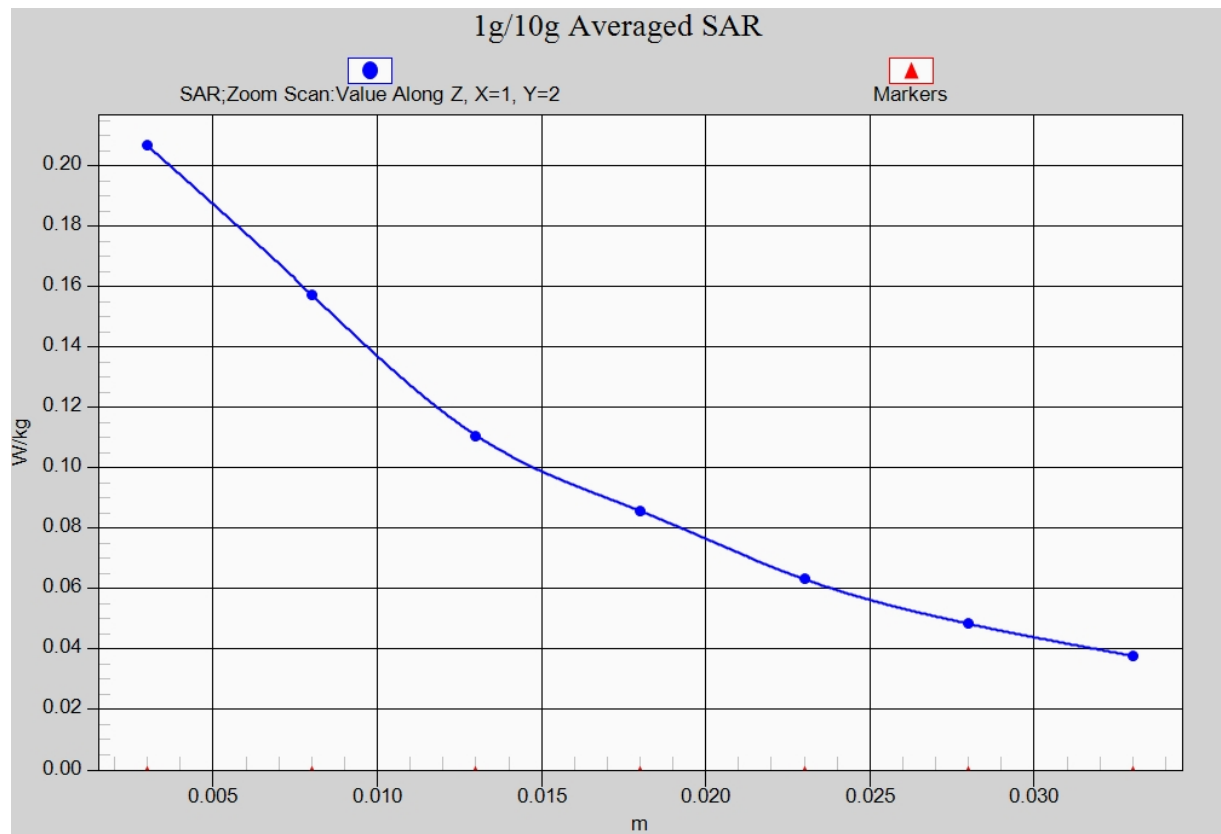


Fig. 26-1 Z-Scan at power reference point (LTE Band17)

LTE Band17 Right Cheek Middle with QPSK_10M_1RB_Middle – antenna2

Date: 2017-2-24

Electronics: DAE4 Sn1331

Medium: Head750 MHz

Medium parameters used: $f = 710$ MHz; $\sigma = 0.816$ mho/m; $\epsilon_r = 44.363$; $\rho = 1000$ 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– SN3846 ConvF(9.65, 9.65, 9.65)

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

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

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

Reference Value = 6.207 V/m; Power Drift = 0.03 dB

Peak SAR (extrapolated) = 0.196 W/kg

SAR(1 g) = 0.154 W/kg; SAR(10 g) = 0.121 W/kg

Maximum value of SAR (measured) = 0.170 W/kg

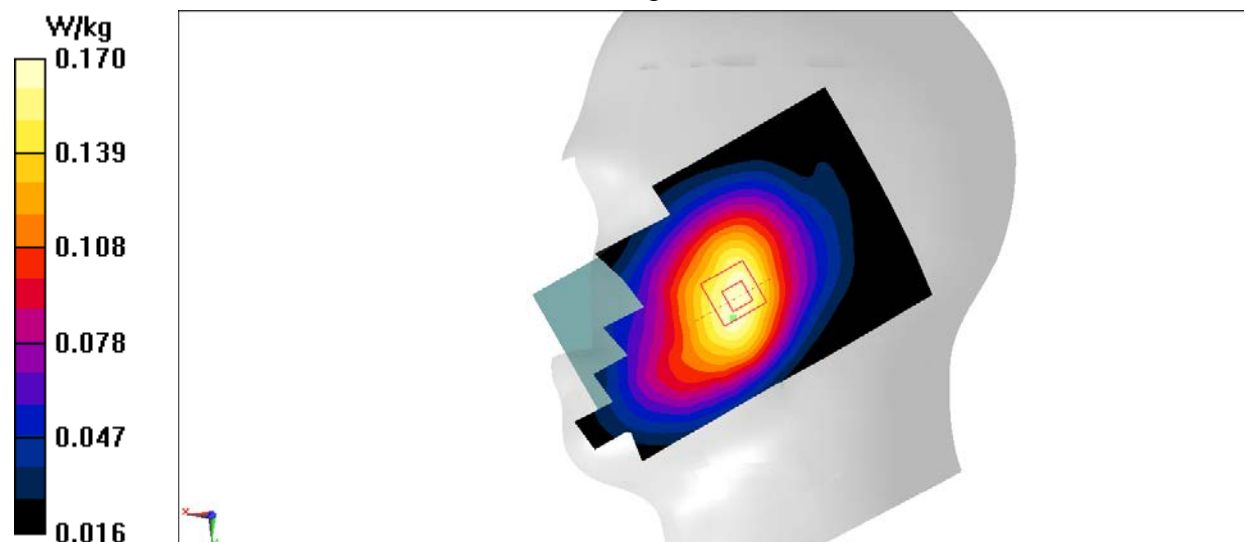


Fig.27 LTE Band17

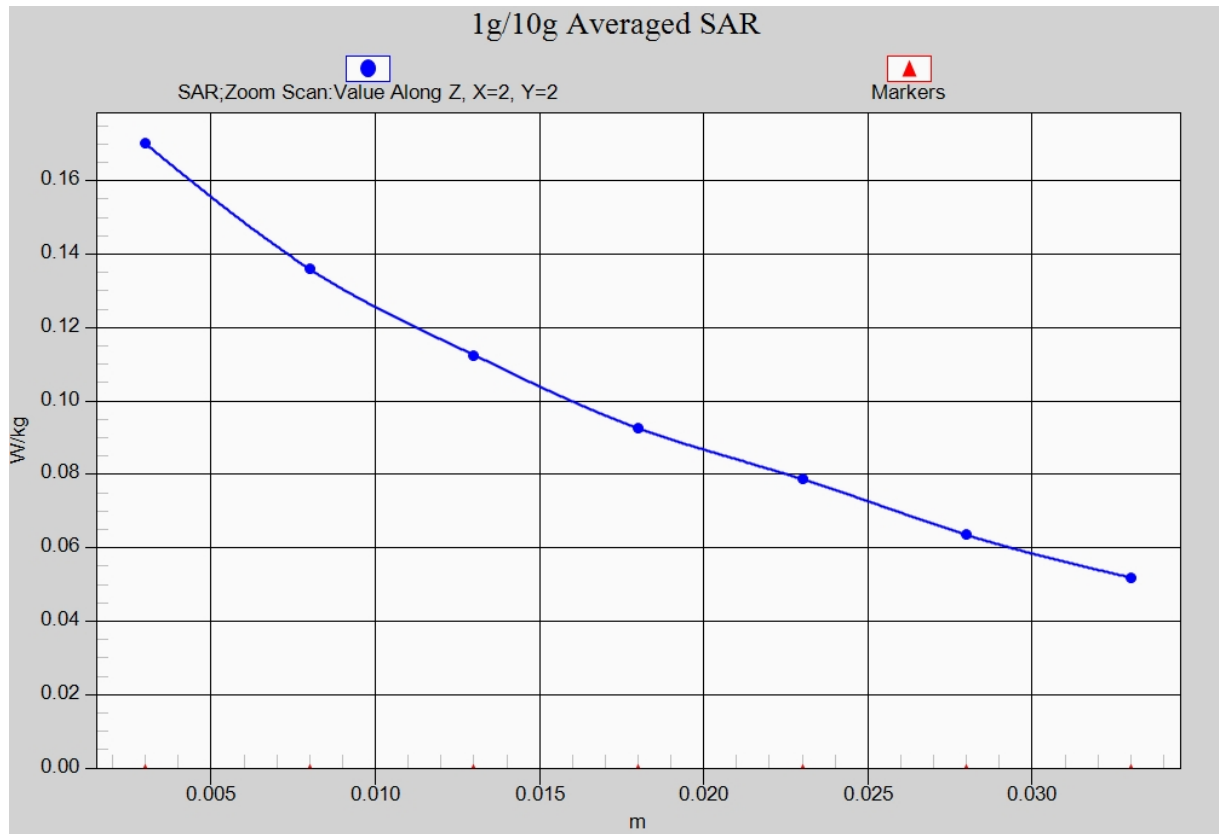


Fig. 27-1 Z-Scan at power reference point (LTE Band17)

LTE Band17 Body Right Middle with QPSK_10M_1RB_Middle – antenna2

Date: 2017-2-24

Electronics: DAE4 Sn1331

Medium: Body750 MHz

Medium parameters used: $f = 710$ MHz; $\sigma = 0.908$ mho/m; $\epsilon_r = 57.682$; $\rho = 1000$ 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– SN3846 ConvF(9.96, 9.96, 9.96)

Area Scan (111x61x1): 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: $dx=5$ mm, $dy=5$ mm, $dz=5$ mm

Reference Value = 16.71 V/m; Power Drift = 0.15 dB

Peak SAR (extrapolated) = 0.336 W/kg

SAR(1 g) = 0.245 W/kg; SAR(10 g) = 0.174 W/kg

Maximum value of SAR (measured) = 0.278 W/kg

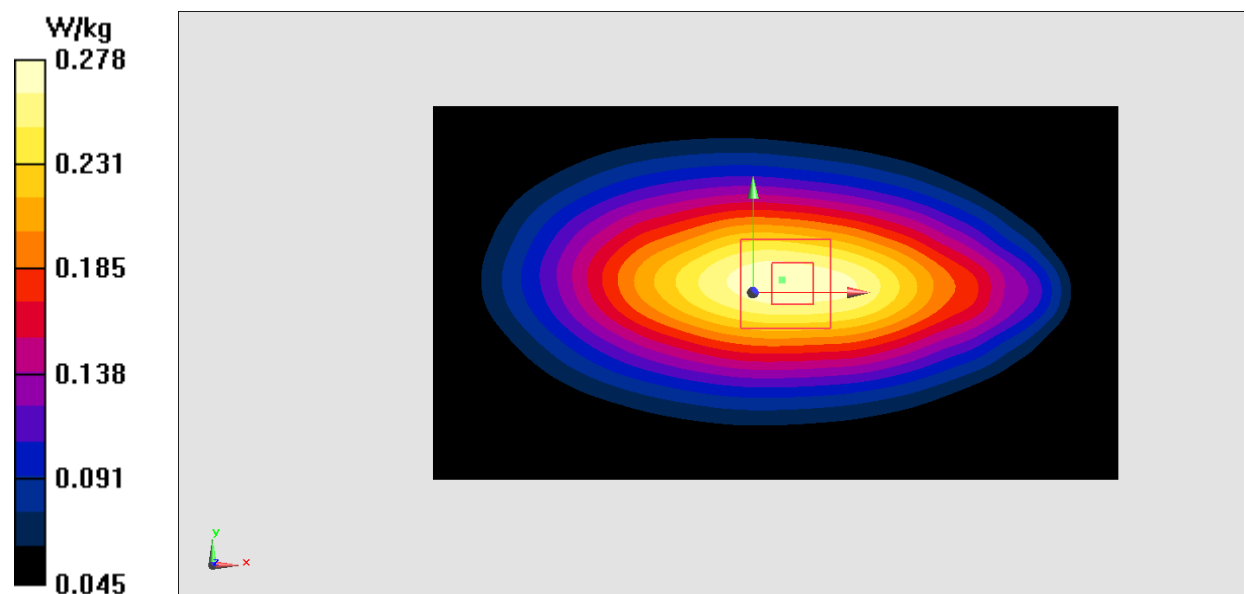


Fig.28 LTE Band17

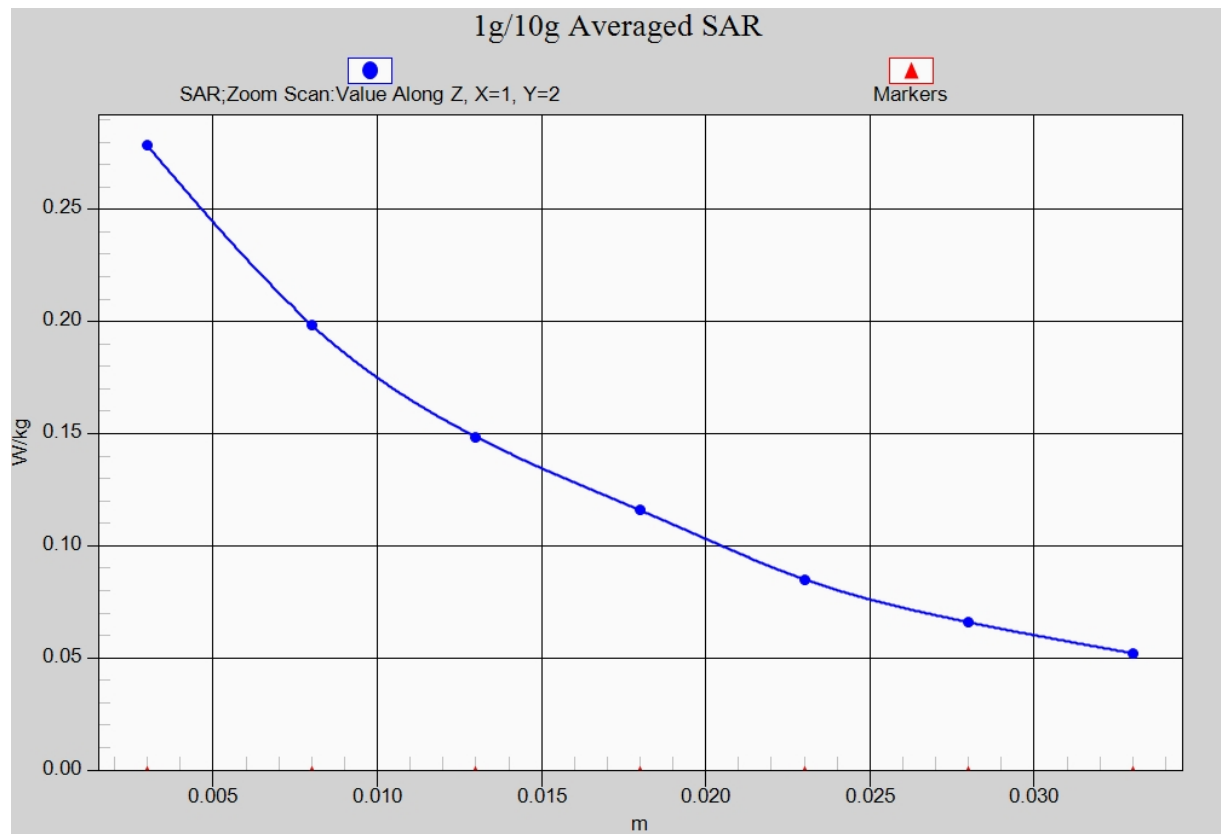


Fig. 28-1 Z-Scan at power reference point (LTE Band17)

LTE Band13 Left Cheek with QPSK_10M_1RB_Middle – antenna1

Date: 2017-1-12

Electronics: DAE4 Sn1331

Medium: Head750 MHz

Medium parameters used (interpolated): $f = 782$ MHz; $\sigma = 0.904$ mho/m; $\epsilon_r = 42.18$; $\rho = 1000$ kg/m³

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

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

Probe: EX3DV4– SN7307 ConvF(10.47, 10.47, 10.47)

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

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

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

Reference Value = 6.178 V/m; Power Drift = 0.15 dB

Peak SAR (extrapolated) = 0.266 W/kg

SAR(1 g) = 0.210 W/kg; SAR(10 g) = 0.161 W/kg

Maximum value of SAR (measured) = 0.227 W/kg

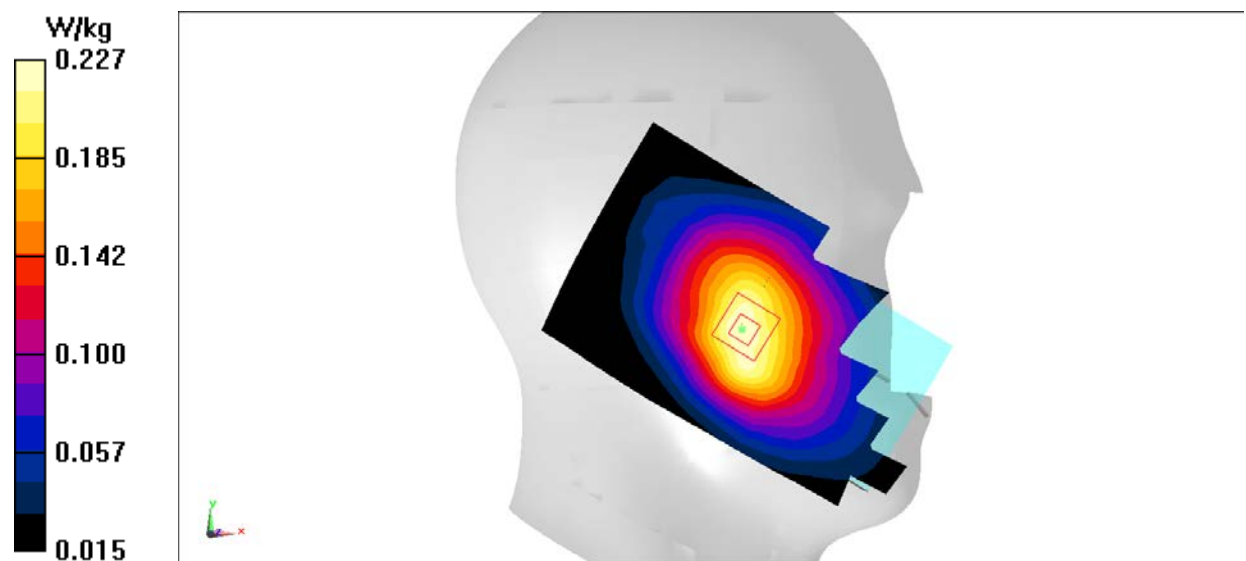


Fig.29 LTE Band13

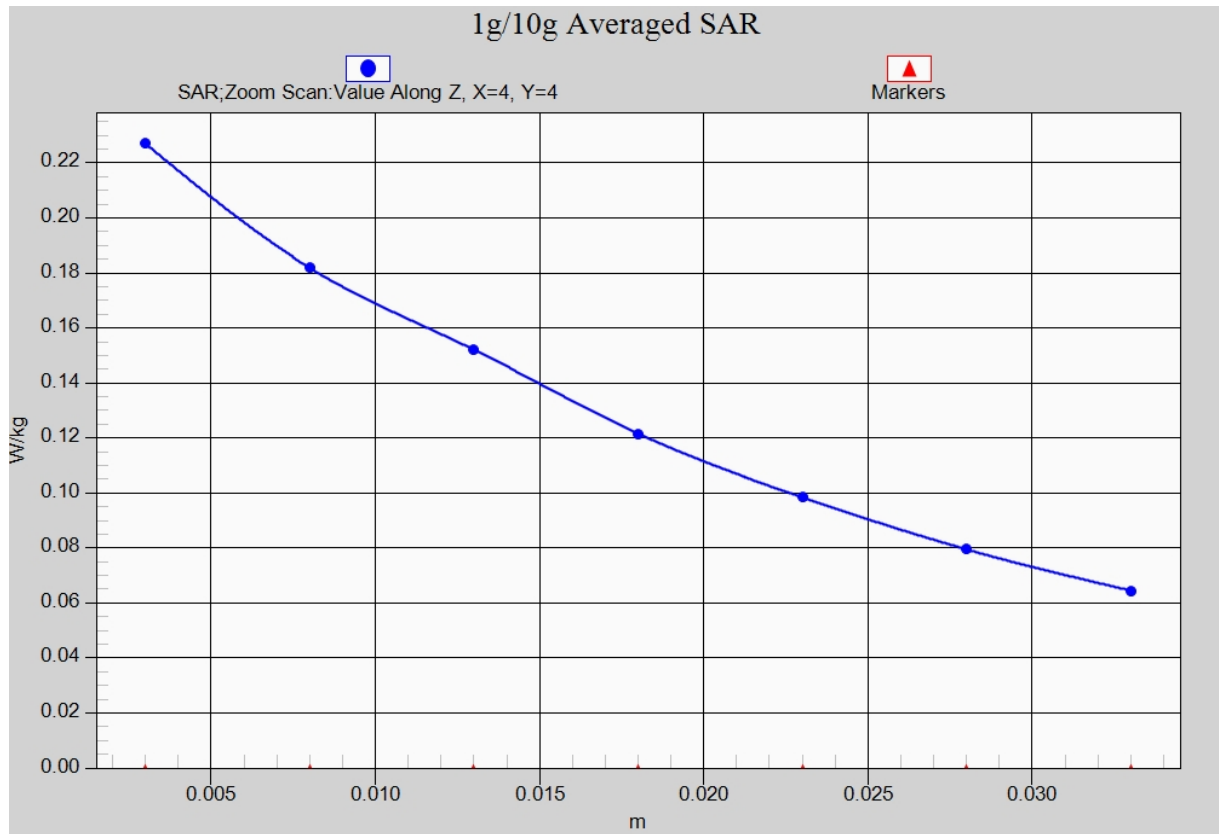


Fig. 29-1 Z-Scan at power reference point (LTE Band13)

LTE Band13 Body Left with QPSK_10M_1RB_Middle – antenna1

Date: 2017-1-12

Electronics: DAE4 Sn1331

Medium: Body750 MHz

Medium parameters used (interpolated): $f = 782$ MHz; $\sigma = 0.97$ mho/m; $\epsilon_r = 56.46$; $\rho = 1000$ kg/m³

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

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

Probe: EX3DV4– SN7307 ConvF(9.93, 9.93, 9.93)

Area Scan (121x61x1): Interpolated grid: dx=1.000 mm, dy=1.000 mm

Maximum value of SAR (interpolated) = 0.421 W/kg

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

Reference Value = 19.77 V/m; Power Drift = 0.02 dB

Peak SAR (extrapolated) = 0.516 W/kg

SAR(1 g) = 0.372 W/kg; SAR(10 g) = 0.259 W/kg

Maximum value of SAR (measured) = 0.425 W/kg

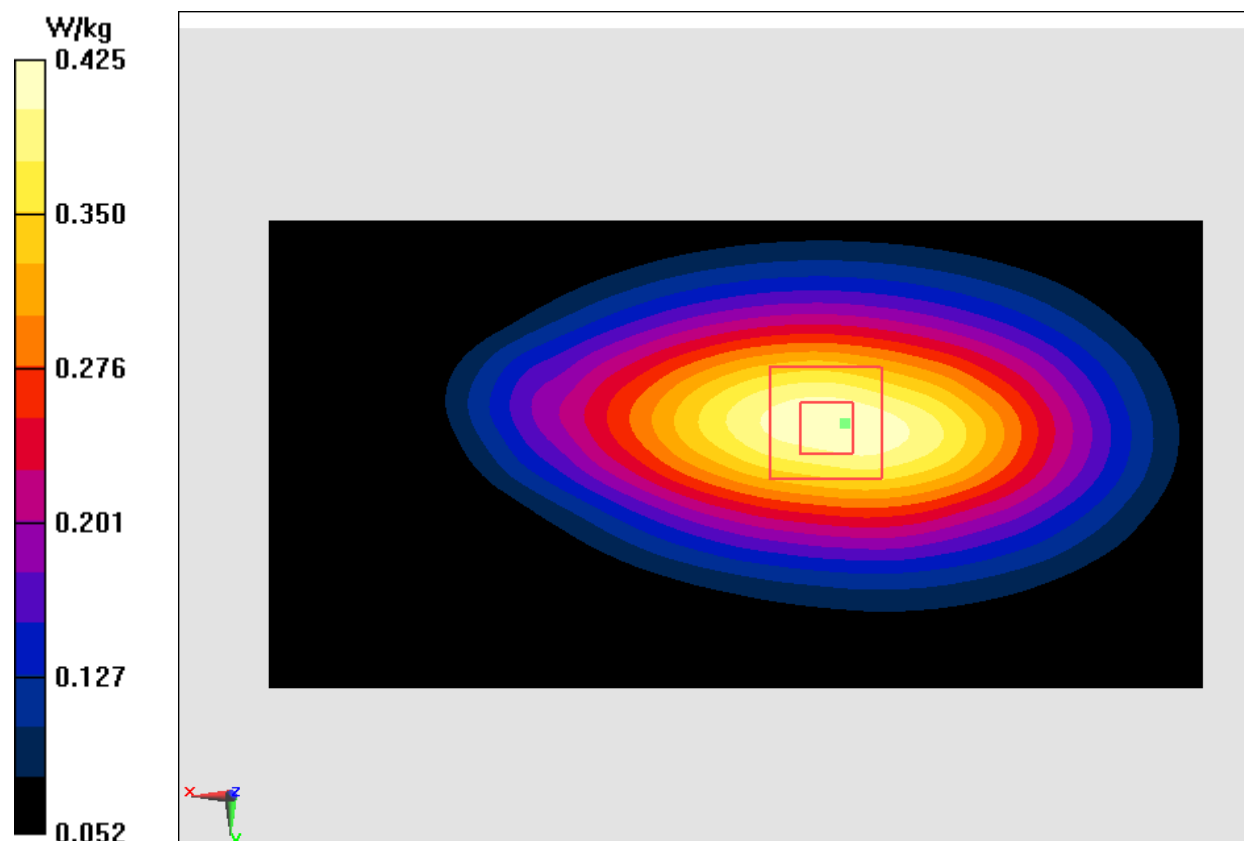


Fig.30 LTE Band13

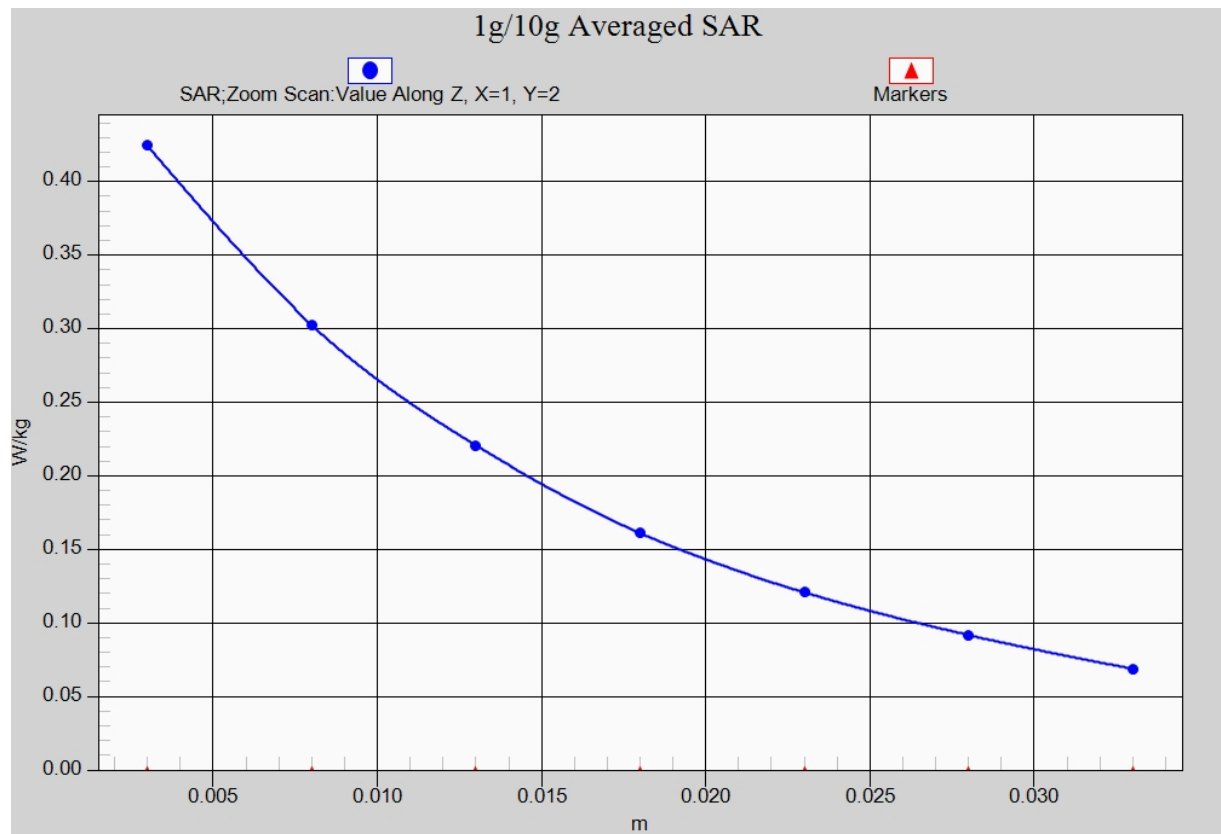


Fig. 30-1 Z-Scan at power reference point (LTE Band13)

LTE Band13 Left Cheek with QPSK_10M_1RB_Middle – antenna2

Date: 2017-1-12

Electronics: DAE4 Sn1331

Medium: Head750 MHz

Medium parameters used (interpolated): $f = 782$ MHz; $\sigma = 0.904$ mho/m; $\epsilon_r = 42.18$; $\rho = 1000$ kg/m³

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

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

Probe: EX3DV4– SN7307 ConvF(10.47, 10.47, 10.47)

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

Maximum value of SAR (interpolated) = 0.228 W/kg

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

Reference Value = 5.910 V/m; Power Drift = -0.09 dB

Peak SAR (extrapolated) = 0.262 W/kg

SAR(1 g) = 0.204 W/kg; SAR(10 g) = 0.154 W/kg

Maximum value of SAR (measured) = 0.222 W/kg

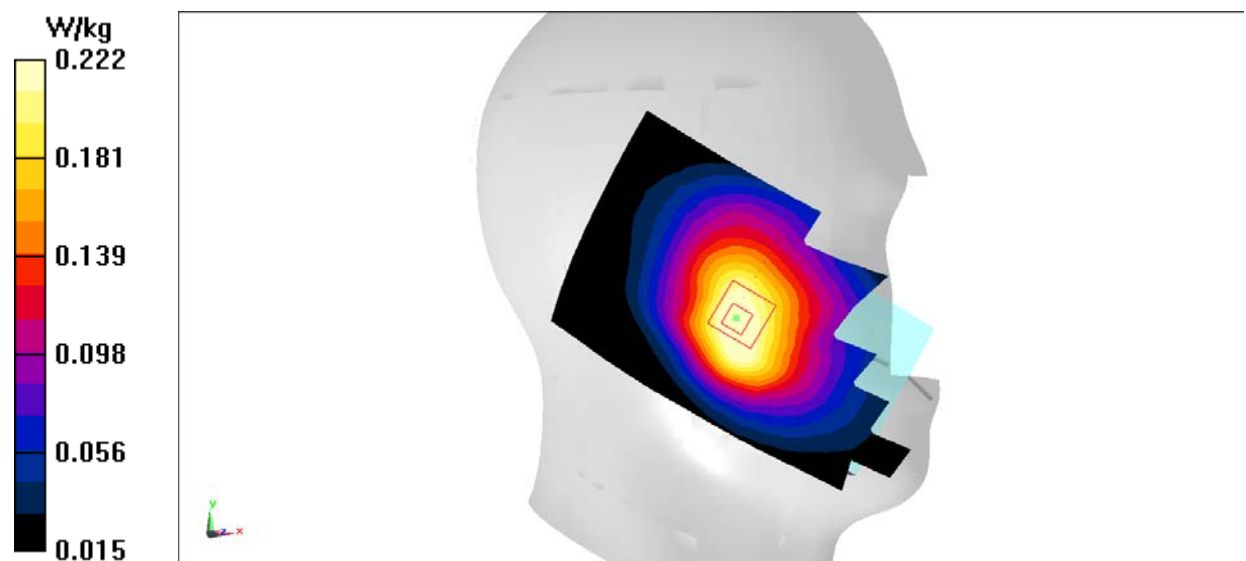


Fig.31 LTE Band13

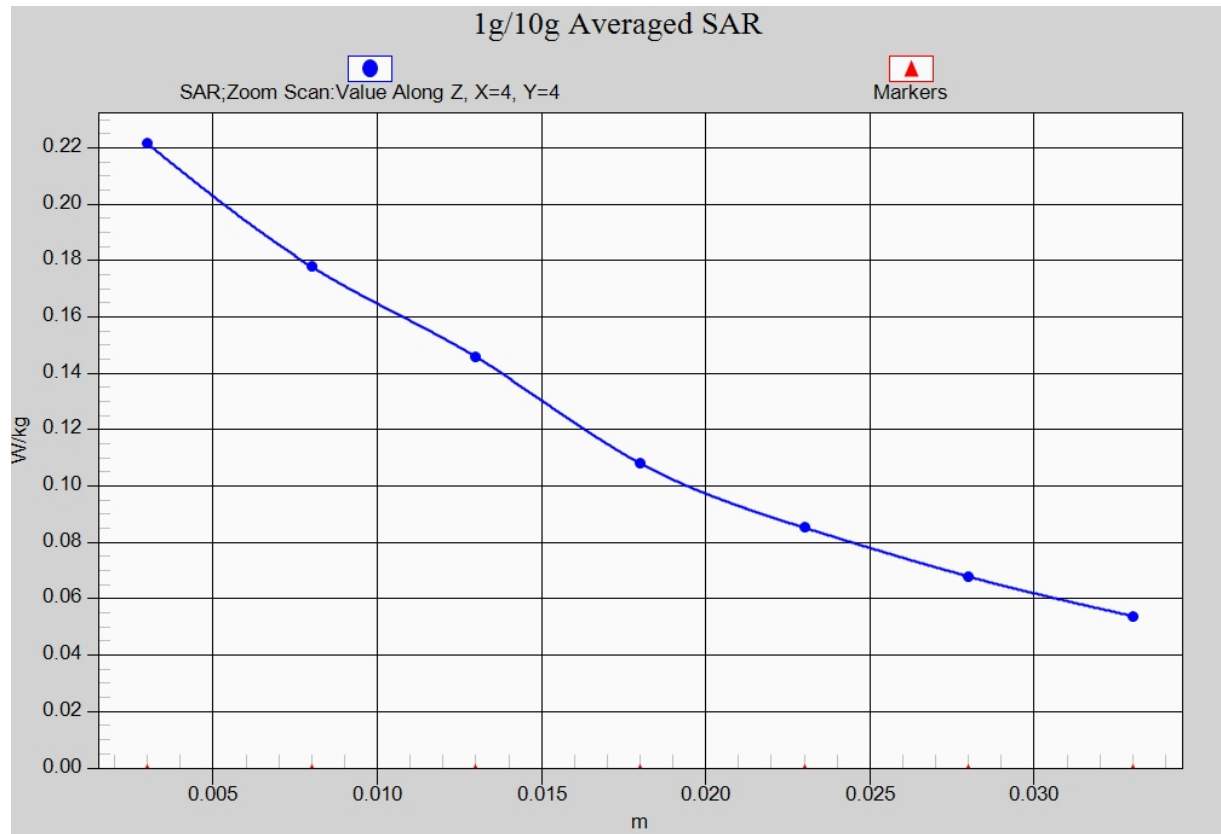


Fig. 31-1 Z-Scan at power reference point (LTE Band13)

LTE Band13 Body Right with QPSK_10M_1RB_Middle – antenna2

Date: 2017-1-12

Electronics: DAE4 Sn1331

Medium: Body750 MHz

Medium parameters used (interpolated): $f = 782$ MHz; $\sigma = 0.97$ mho/m; $\epsilon_r = 56.46$; $\rho = 1000$ kg/m³

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

Communication System: LTE Band13Frequency: 782 MHz Duty Cycle: 1:1

Probe: EX3DV4– SN7307 ConvF(9.93, 9.93, 9.93)

Area Scan (111x61x1): Interpolated grid: dx=1.000 mm, dy=1.000 mm

Maximum value of SAR (interpolated) = 0.270 W/kg

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

Reference Value = 16.72 V/m; Power Drift = 0.15 dB

Peak SAR (extrapolated) = 0.303 W/kg

SAR(1 g) = 0.250 W/kg; SAR(10 g) = 0.198 W/kg

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

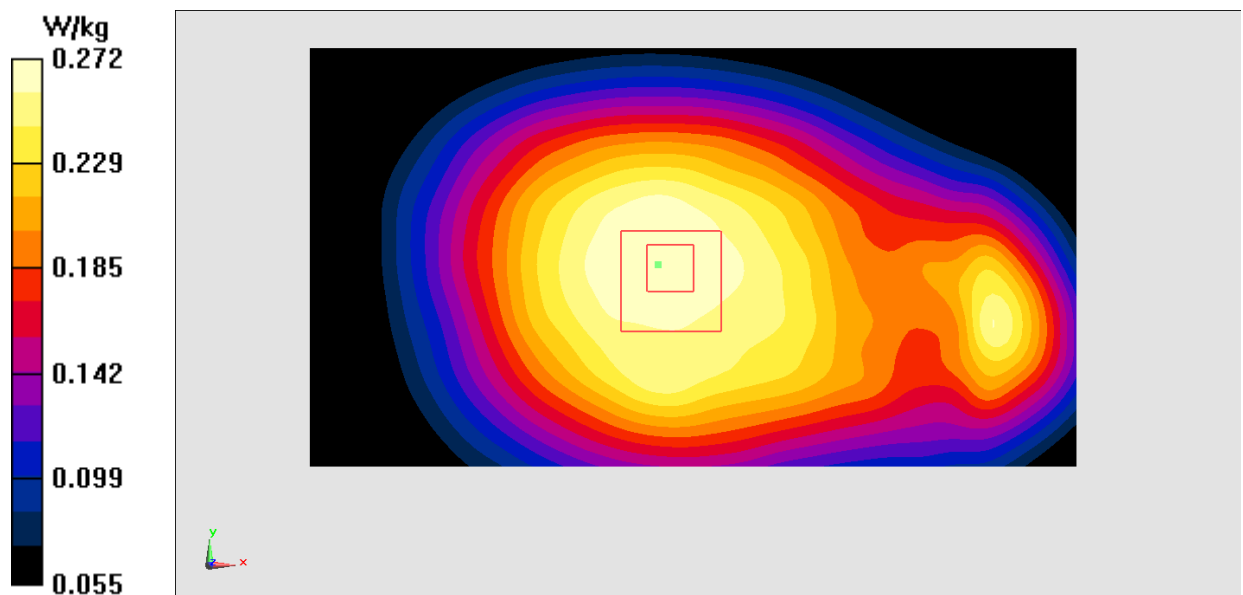


Fig.32 LTE Band13

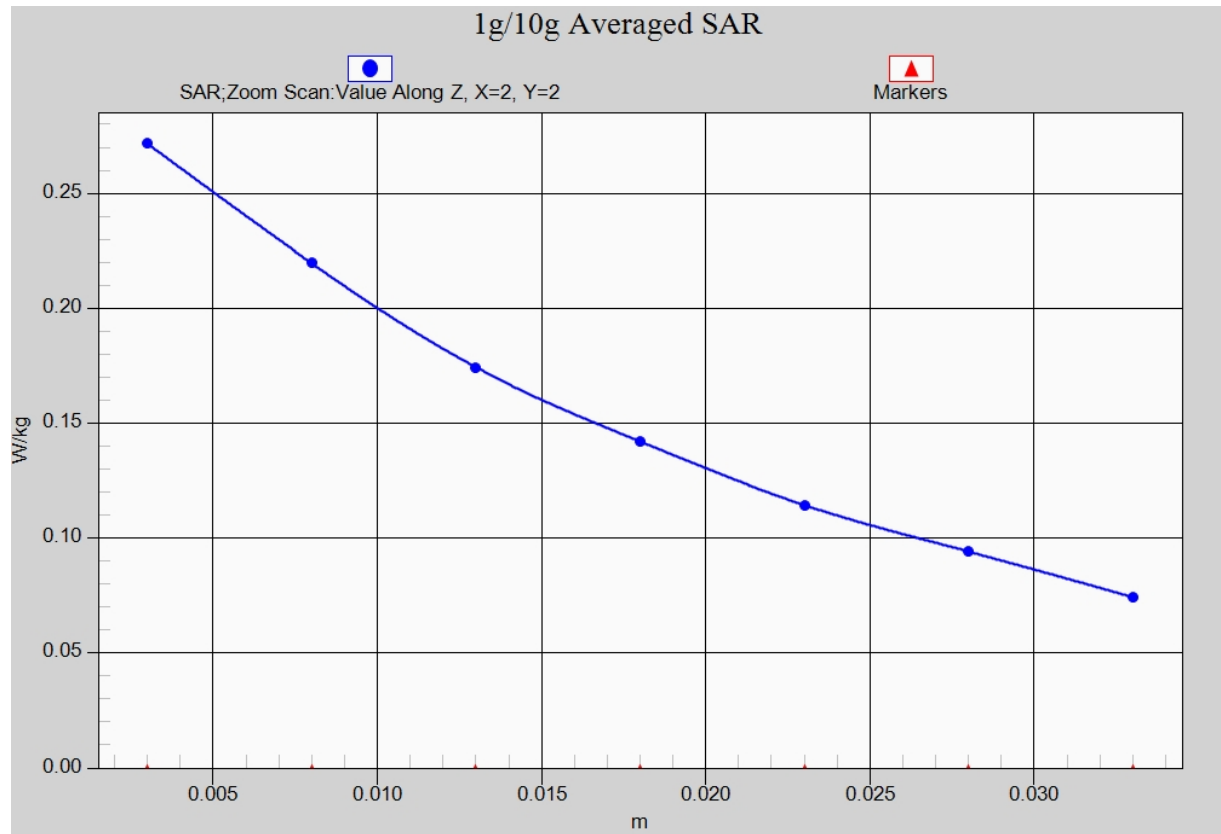


Fig. 32-1 Z-Scan at power reference point (LTE Band13)

LTE Band38 Right Cheek with QPSK_20M_1RB_Middle

Date: 2017-2-24

Electronics: DAE4 Sn1331

Medium: Head 2600 MHz

Medium parameters used: $f = 2595$ MHz; $\sigma = 1.991$ mho/m; $\epsilon_r = 37.53$; $\rho = 1000$ kg/m³

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

Communication System: LTE Band38 Frequency: 2600 MHz Duty Cycle: 1:1.58

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

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

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

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

Reference Value = 2.378 V/m; Power Drift = -0.03 dB

Peak SAR (extrapolated) = 0.196 W/kg

SAR(1 g) = 0.102 W/kg; SAR(10 g) = 0.052 W/kg

Maximum value of SAR (measured) = 0.125 W/kg

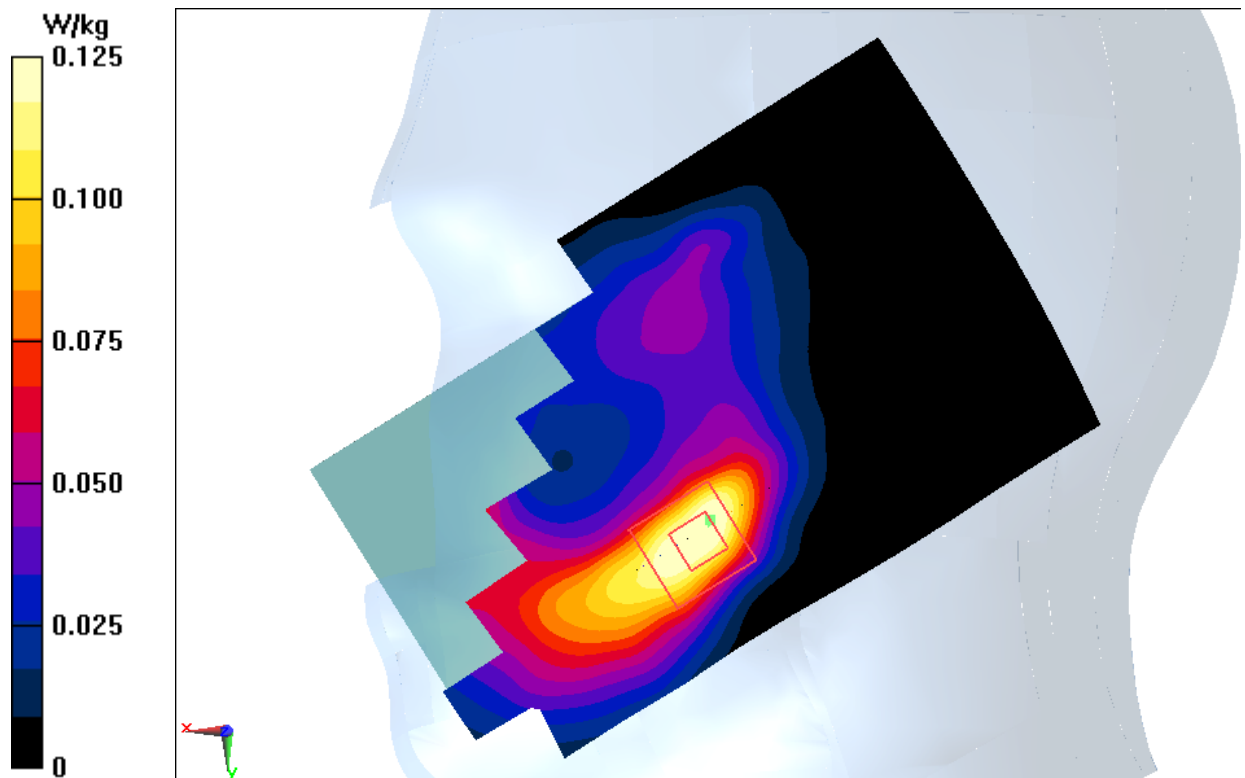


Fig.33 LTE Band38

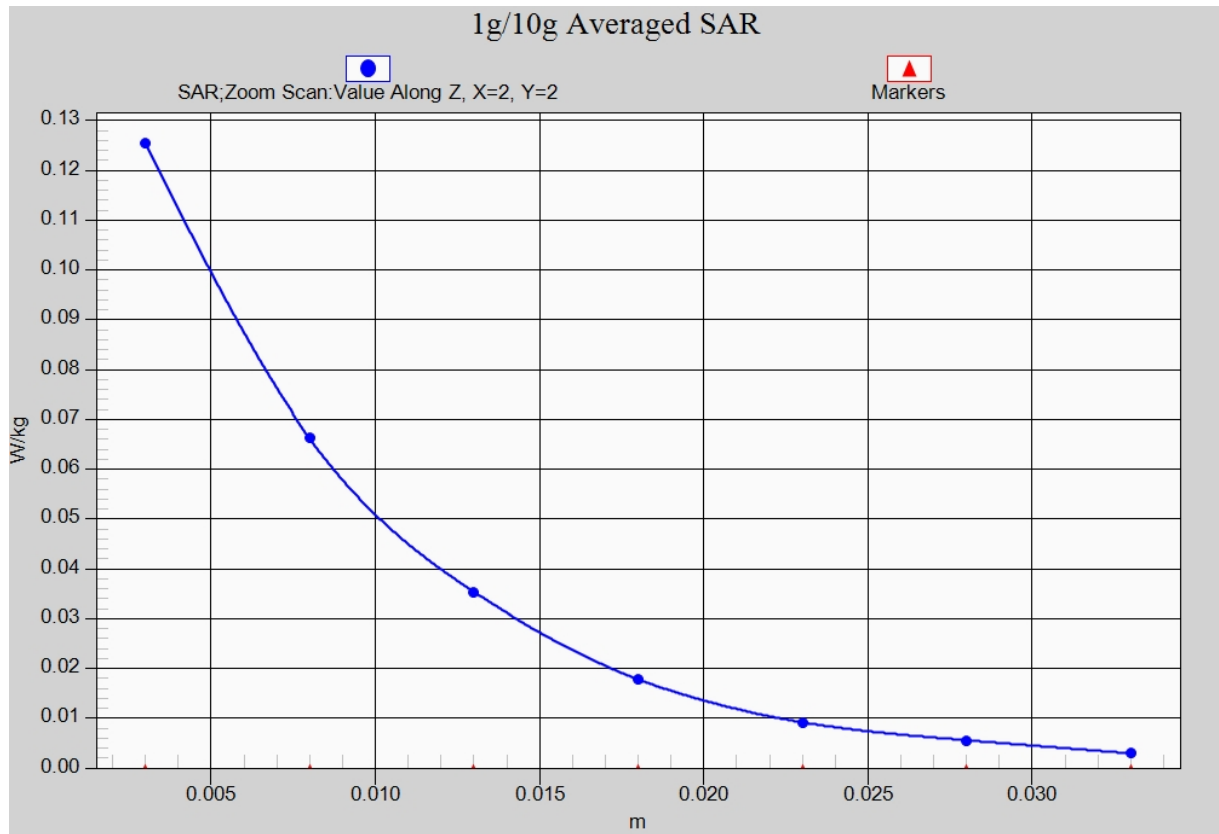


Fig. 33-1 Z-Scan at power reference point (LTE Band38)

LTE Band38 Body Bottom with QPSK_20M_1RB_Middle

Date: 2017-2-24

Electronics: DAE4 Sn1331

Medium: Body 2600 MHz

Medium parameters used: $f = 2595$ MHz; $\sigma = 2.117$ mho/m; $\epsilon_r = 52.953$; $\rho = 1000$ kg/m³

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

Communication System: LTE Band38 Frequency: 2595 MHz Duty Cycle: 1:1.58

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

Area Scan (111x61x1): 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: $dx=5$ mm, $dy=5$ mm, $dz=5$ mm

Reference Value = 20.69 V/m; Power Drift = -0.12 dB

Peak SAR (extrapolated) = 2.17 W/kg

SAR(1 g) = 1.07 W/kg; SAR(10 g) = 0.503 W/kg

Maximum value of SAR (measured) = 1.41 W/kg

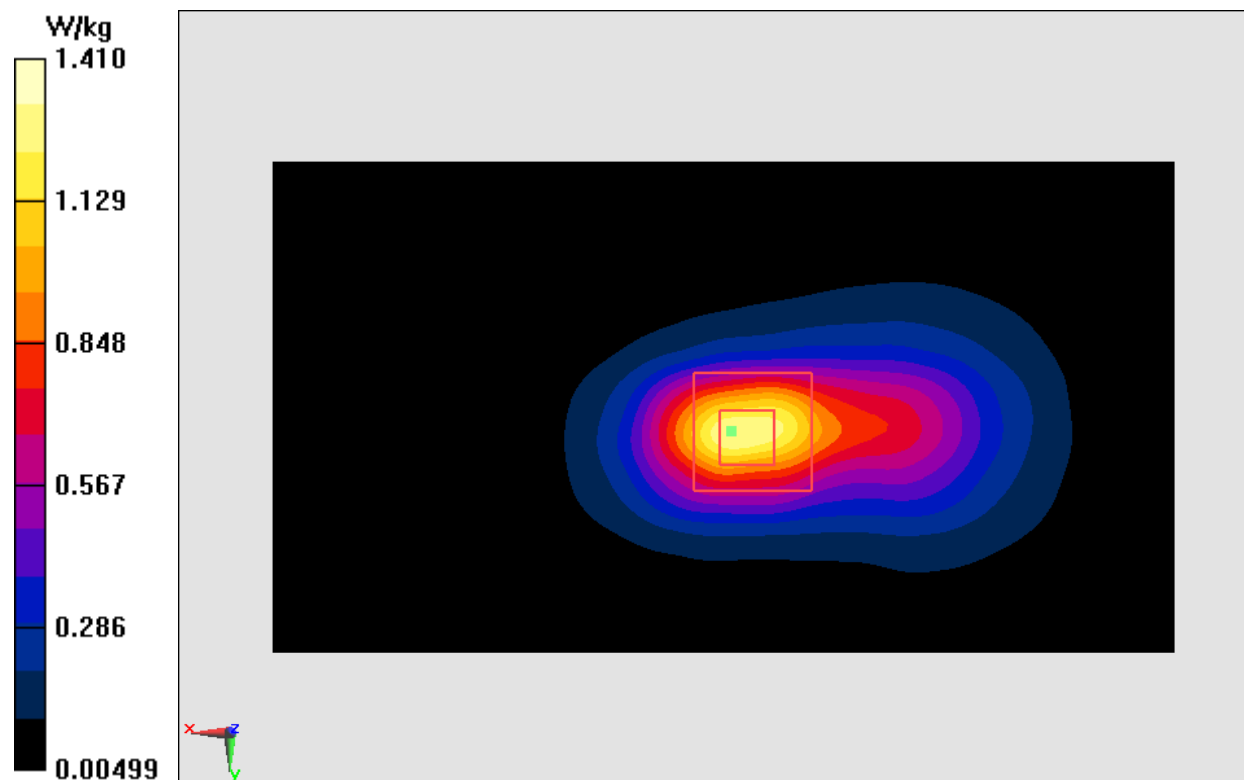


Fig.34 LTE Band38

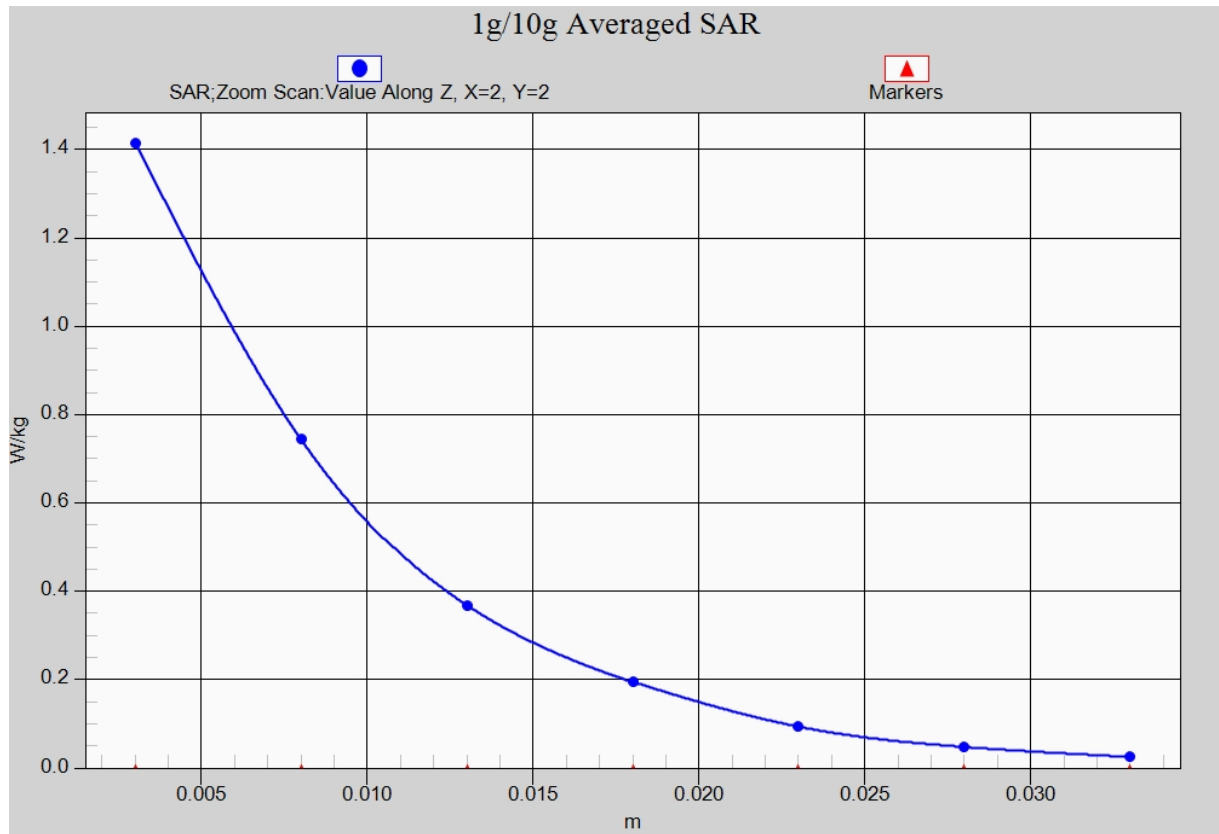


Fig. 34-1 Z-Scan at power reference point (LTE Band38)

Wifi 802.11b Left Cheek Channel 6

Date: 2017-1-16

Electronics: DAE4 Sn1331

Medium: Head 2450 MHz

Medium parameters used (interpolated): $f = 2437$ MHz; $\sigma = 1.804$ mho/m; $\epsilon_r = 38.47$; $\rho = 1000$ 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- SN7307 ConvF(7.36, 7.36, 7.36)

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

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

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

Reference Value = 5.528 V/m; Power Drift = 0.09 dB

Peak SAR (extrapolated) = 0.550 W/kg

SAR(1 g) = 0.285 W/kg; SAR(10 g) = 0.138 W/kg

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

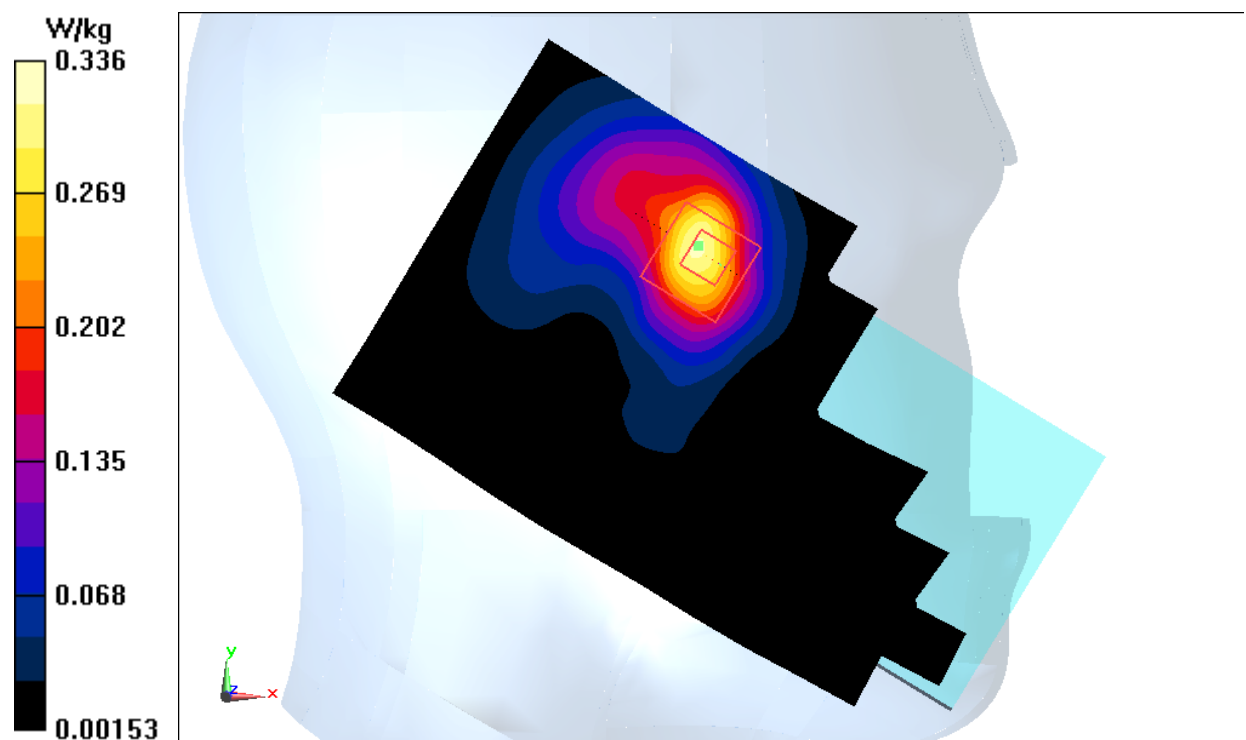


Fig.35 2450 MHz

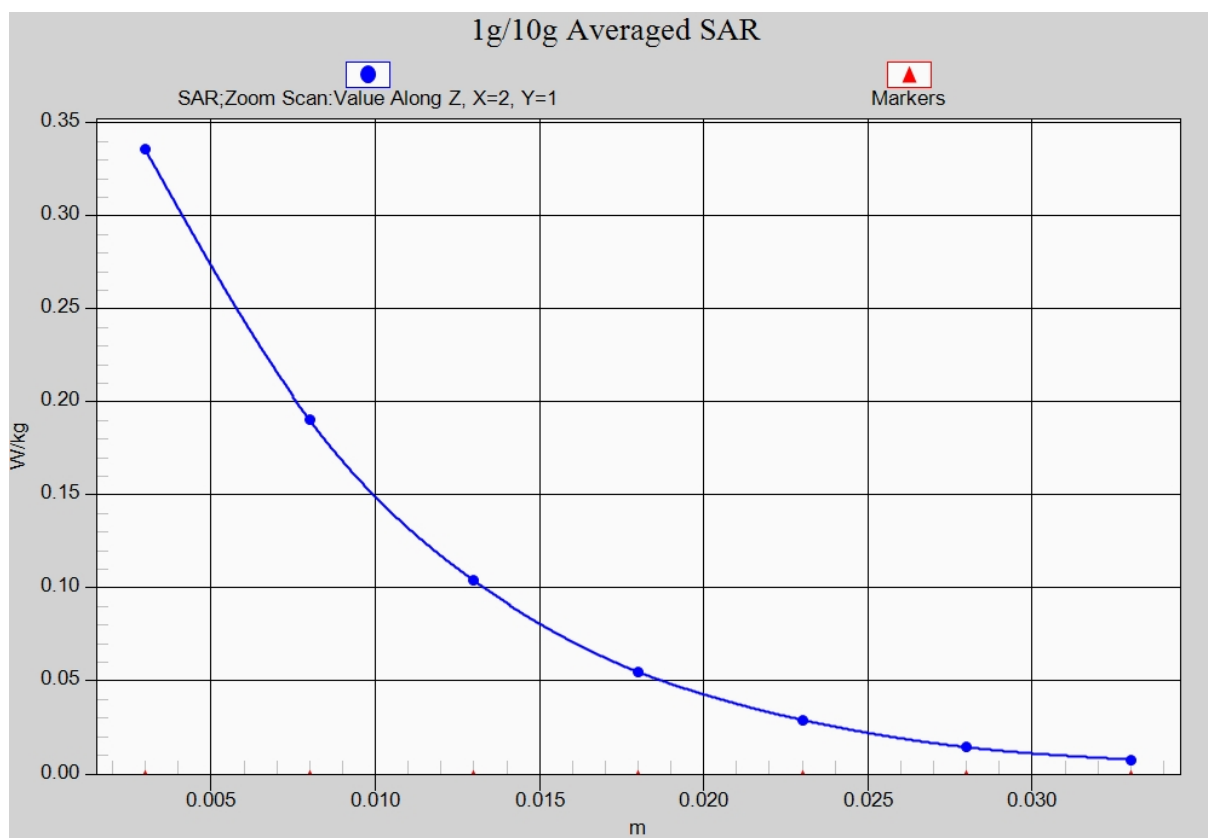


Fig. 35-1 Z-Scan at power reference point (2450 MHz)

Wifi 802.11b Body Rear Channel 6

Date: 2017-1-16

Electronics: DAE4 Sn1331

Medium: Body 2450 MHz

Medium parameters used (interpolated): $f = 2437$ MHz; $\sigma = 1.961$ mho/m; $\epsilon_r = 51.92$; $\rho = 1000$ 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 – SN7307 ConvF(7.22, 7.22, 7.22)

Area Scan (111x71x1): Interpolated grid: dx=1.000 mm, dy=1.000 mm

Maximum value of SAR (interpolated) = 0.579 W/kg

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

Reference Value = 4.834 V/m; Power Drift = 0.13 dB

Peak SAR (extrapolated) = 1.17 W/kg

SAR(1 g) = 0.548 W/kg; SAR(10 g) = 0.246 W/kg

Maximum value of SAR (measured) = 0.677 W/kg

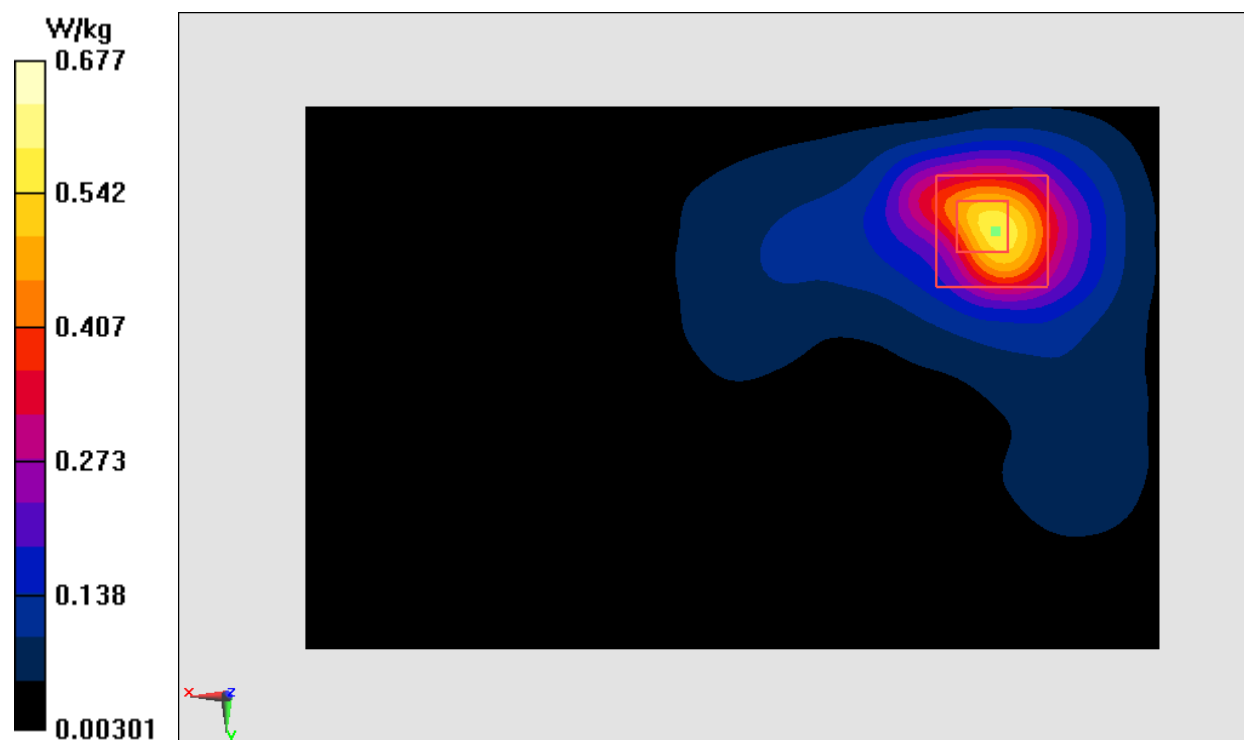


Fig.36 2450 MHz

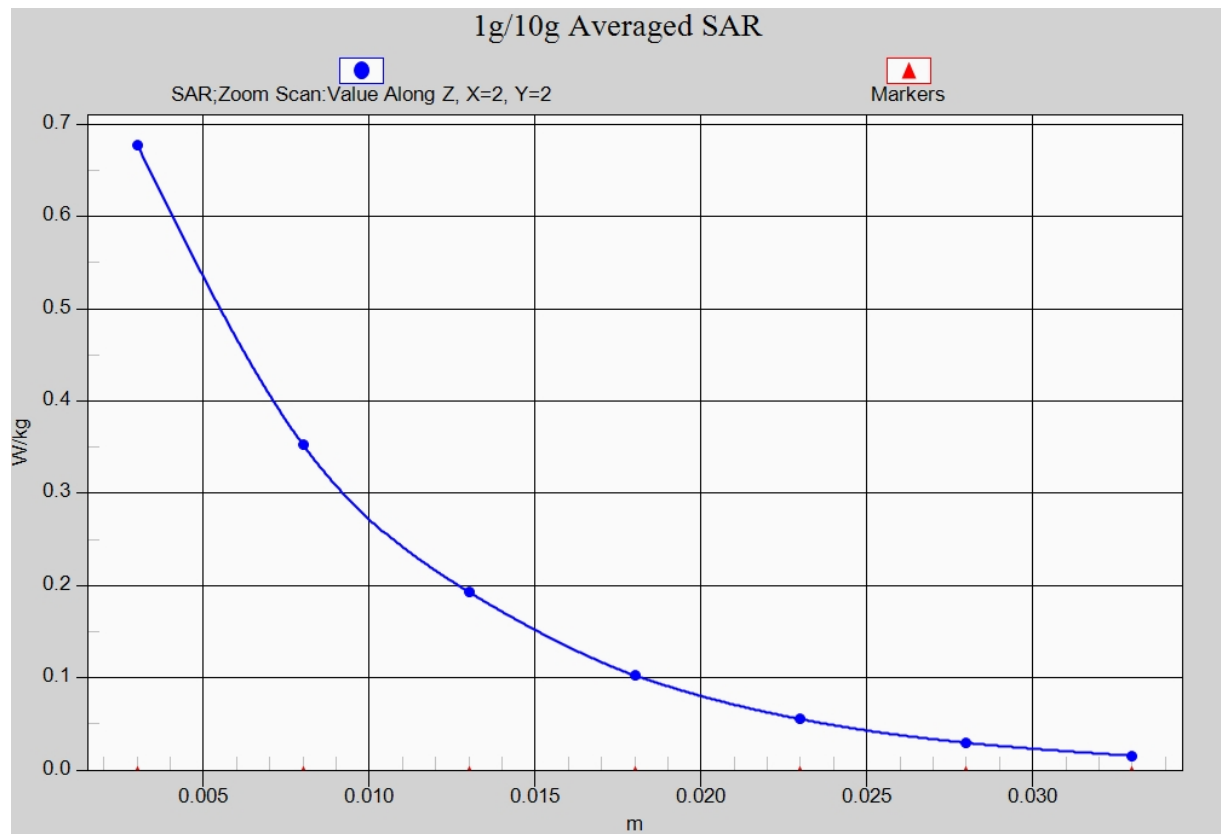


Fig. 36-1 Z-Scan at power reference point (2450 MHz)

Wifi 802.11a Left Cheek Channel 157

Date: 2017-2-13

Electronics: DAE4 Sn1331

Medium: Head 5 GHz

Medium parameters used: $f = 5785$ MHz; $\sigma = 5.426$ mho/m; $\epsilon_r = 35.168$; $\rho = 1000$ kg/m³

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

Communication System: Wlan 5G Frequency: 5785 MHz Duty Cycle: 1:1

Probe: EX3DV4 – SN7307 ConvF(4.45, 4.45, 4.45)

Area Scan (121x181x1): Interpolated grid: $dx=1.000$ mm, $dy=1.000$ mm

Maximum value of SAR (interpolated) = 0.0548 W/kg

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

Reference Value = 0 V/m; Power Drift = 0.00 dB

Peak SAR (extrapolated) = 0.160 W/kg

SAR(1 g) = 0.038 W/kg; SAR(10 g) = 0.013 W/kg

Maximum value of SAR (measured) = 0.0979 W/kg

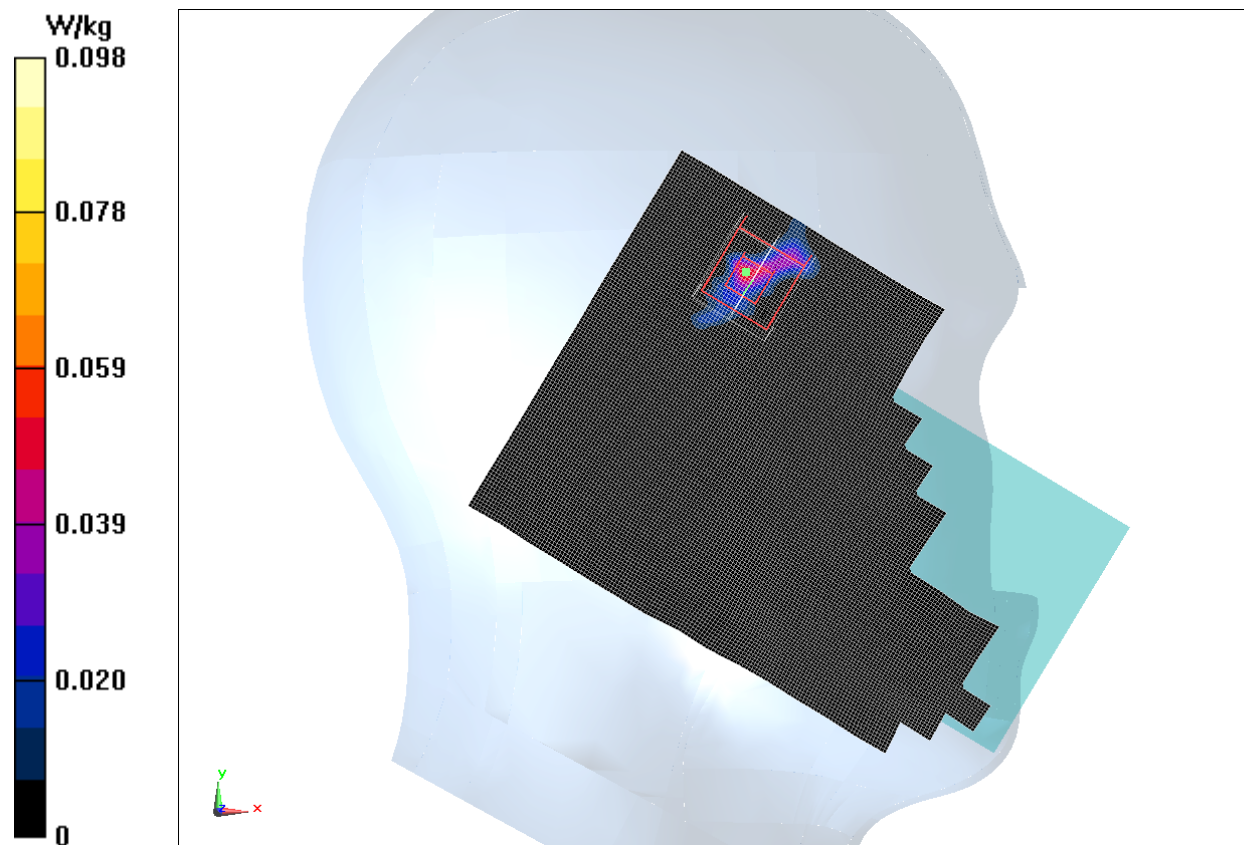


Fig.37 5GHz

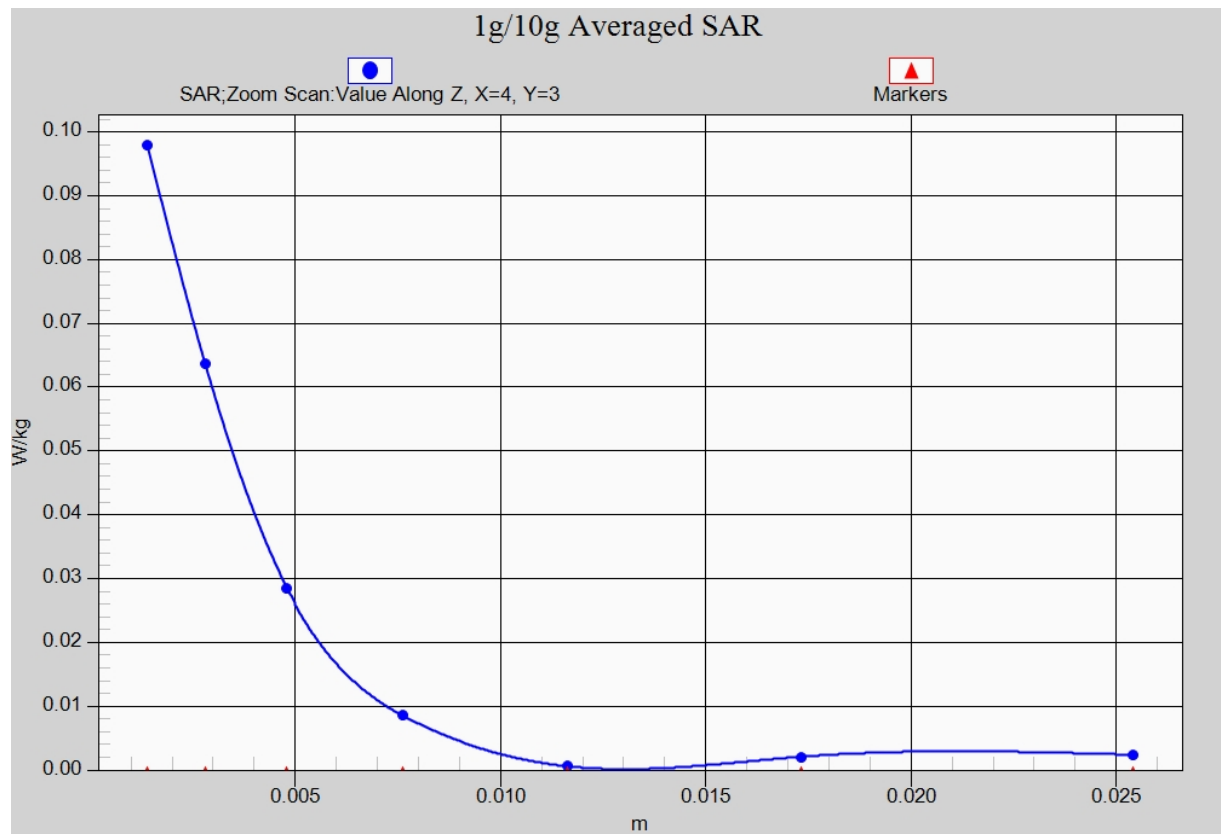


Fig. 37-1 Z-Scan at power reference point (5GHz)

Wifi 802.11a Rear Channel 64

Date: 2017-2-13

Electronics: DAE4 Sn1331

Medium: Body 5 GHz

Medium parameters used: $f = 5320$ MHz; $\sigma = 5.356$ mho/m; $\epsilon_r = 47.608$; $\rho = 1000$ 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 – SN7307 ConvF(4.29, 4.29, 4.29)

Area Scan (201x121x1): Interpolated grid: dx=1.000 mm, dy=1.000 mm

Maximum value of SAR (interpolated) = 0.673 W/kg

Zoom Scan (8x8x7)/Cube 0: Measurement grid: dx=4mm, dy=4mm, dz=1.4mm

Reference Value = 2.860 V/m; Power Drift = 0.05 dB

Peak SAR (extrapolated) = 1.89 W/kg

SAR(1 g) = 0.489 W/kg; SAR(10 g) = 0.182 W/kg

Maximum value of SAR (measured) = 1.14 W/kg

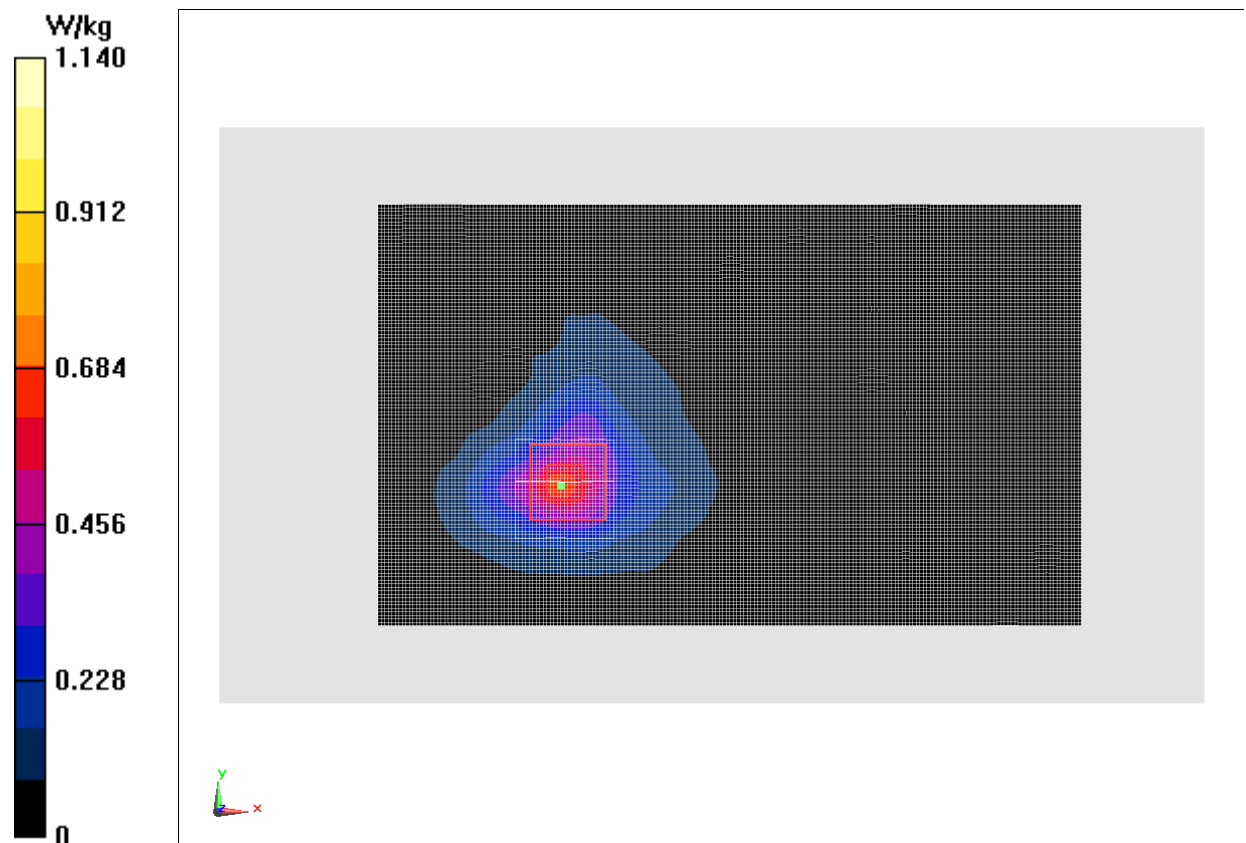


Fig.38 5GHz

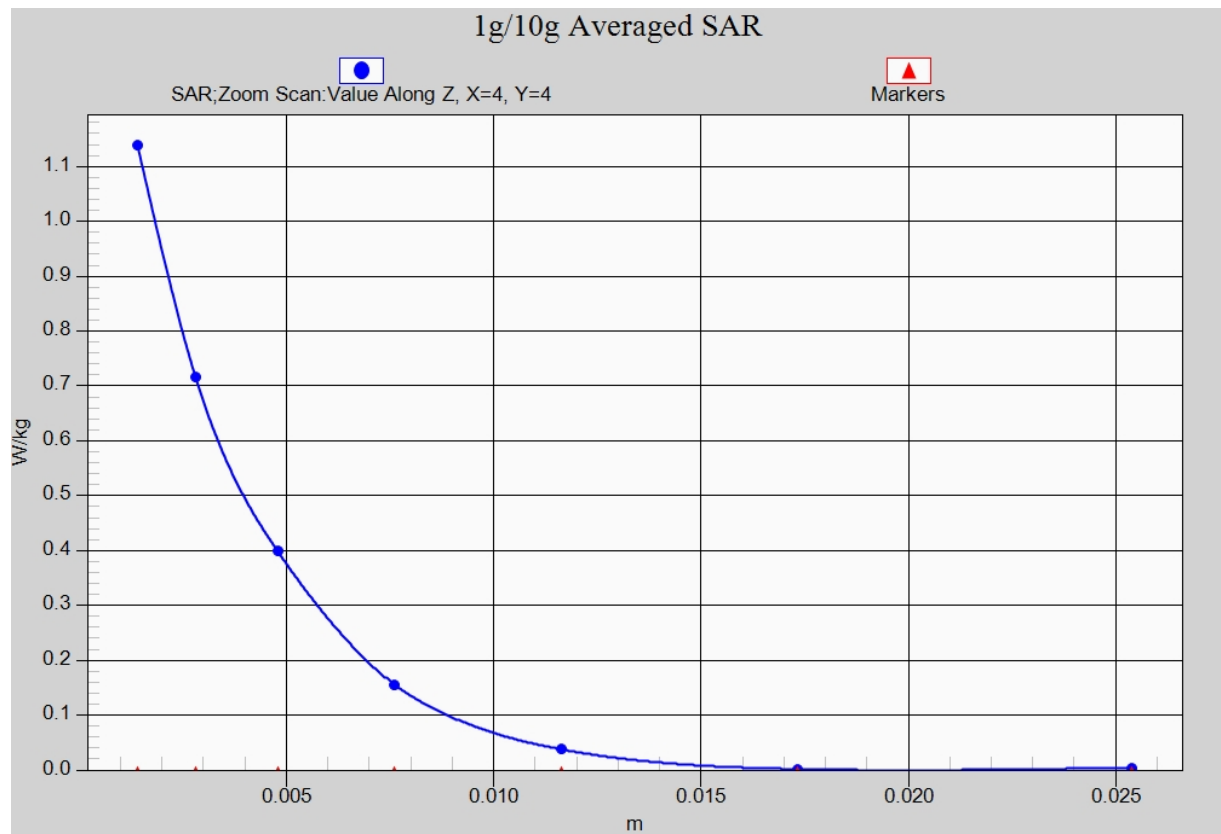


Fig. 38-1 Z-Scan at power reference point (5GHz)

ANNEX B System Verification Results

750MHz

Date: 2017-1-12

Electronics: DAE4 Sn1331

Medium: Head 750 MHz

Medium parameters used: $f = 750 \text{ MHz}$; $\sigma = 0.891 \text{ mho/m}$; $\epsilon_r = 42.21$; $\rho = 1000 \text{ kg/m}^3$

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

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

Probe: EX3DV4 – SN7307 ConvF(10.47, 10.47, 10.47)

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

Reference Value = 48.922 V/m ; Power Drift = -0.03 dB

Fast SAR: SAR(1 g) = 2.09 W/kg ; SAR(10 g) = 1.33 W/kg

Maximum value of SAR (interpolated) = 2.17 W/kg

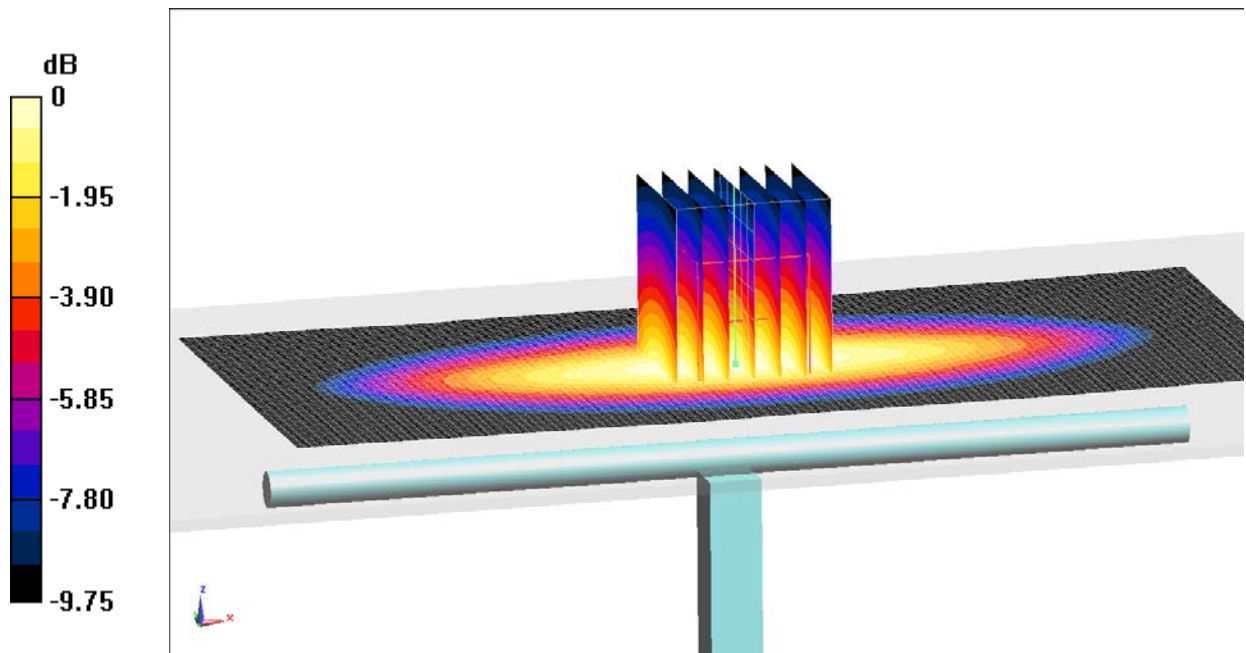
System Validation /Zoom Scan (7x7x7)/Cube 0: Measurement grid: $dx=5\text{mm}$, $dy=5\text{mm}$, $dz=5\text{mm}$

Reference Value = 48.922 V/m ; Power Drift = -0.03 dB

Peak SAR (extrapolated) = 2.81 W/kg

SAR(1 g) = 2.02 W/kg ; SAR(10 g) = 1.37 W/kg

Maximum value of SAR (measured) = 2.15 W/kg



0 dB = 2.15 W/kg = 3.32 dB W/kg

Fig.B.1 validation 750MHz 250mW

750MHz

Date: 2017-1-12

Electronics: DAE4 Sn1331

Medium: Body750 MHz

Medium parameters used: $f = 750 \text{ MHz}$; $\sigma = 0.954 \text{ mho/m}$; $\epsilon_r = 56.52$; $\rho = 1000 \text{ kg/m}^3$

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

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

Probe: EX3DV4 – SN7307 ConvF(9.93, 9.93, 9.93)

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

Reference Value = 50.975 V/m; Power Drift = 0.02 dB

Fast SAR: SAR(1 g) = 2.15W/kg; SAR(10 g) = 1.42 W/kg

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

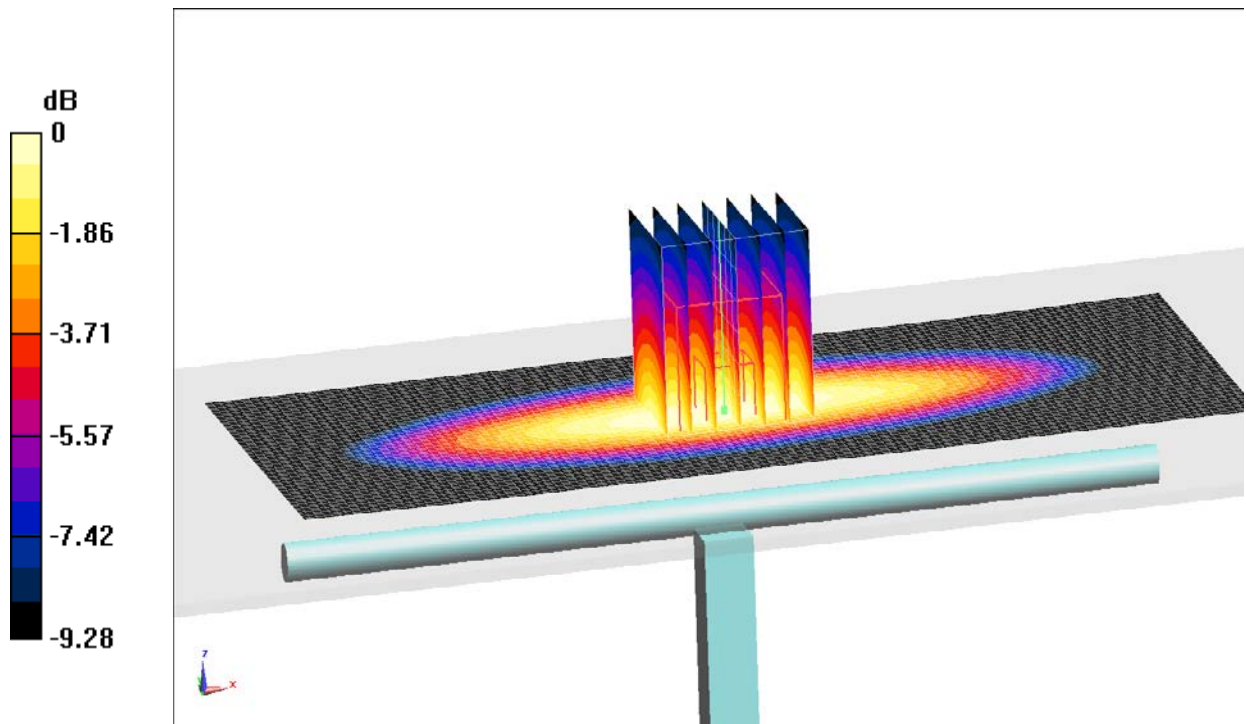
System Validation/Zoom Scan (7x7x7)/Cube 0: Measurement grid: $dx=5\text{mm}$, $dy=5\text{mm}$, $dz=5\text{mm}$

Reference Value = 50.975 V/m; Power Drift = 0.02 dB

Peak SAR (extrapolated) = 2.99 W/kg

SAR(1 g) = 2.11W/kg; SAR(10 g) = 1.39 W/kg

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



0 dB = 2.35W/kg = 3.71 dB W/kg

Fig.B.2 validation 750MHz 250mW

835MHz

Date: 2017-1-13

Electronics: DAE4 Sn1331

Medium: Head 850 MHz

Medium parameters used: $f = 835 \text{ MHz}$; $\sigma = 0.913 \text{ S/m}$; $\epsilon_r = 41.56$; $\rho = 1000 \text{ kg/m}^3$

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

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

Probe: EX3DV4 – SN7307ConvF(10.01, 10.01, 10.01)

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

Reference Value = 54.181 V/m ; Power Drift = -0.01 dB

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

Maximum value of SAR (interpolated) = 2.56 W/kg

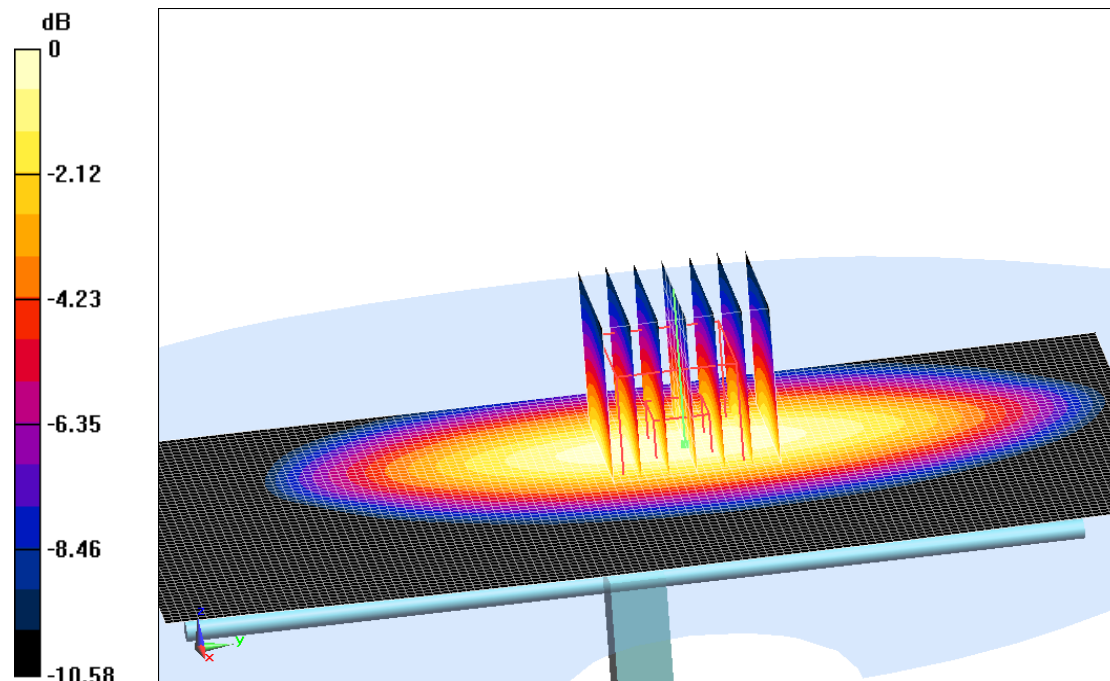
System Validation/Zoom Scan (7x7x7)/Cube 0: Measurement grid: $dx=5\text{mm}$, $dy=5\text{mm}$, $dz=5\text{mm}$

Reference Value = 54.181 V/m ; Power Drift = -0.01 dB

Peak SAR (extrapolated) = 3.08 W/kg

SAR(1 g) = 2.31 W/kg ; SAR(10 g) = 1.51 W/kg

Maximum value of SAR (measured) = 2.51 W/kg



0 dB = 2.51 W/kg = 4.00 dBW/kg

Fig.B.3 validation 835MHz 250mW

835MHz

Date: 2017-1-13

Electronics: DAE4 Sn1331

Medium: Body 850 MHz

Medium parameters used: $f = 835 \text{ MHz}$; $\sigma = 0.971 \text{ S/m}$; $\epsilon_r = 56.11$; $\rho = 1000 \text{ kg/m}^3$

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

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

Probe: EX3DV4 – SN7307ConvF(9.83, 9.83, 9.83)

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

Reference Value = 52.199 V/m ; Power Drift = 0.02 dB

Fast SAR: SAR(1 g) = 2.39 W/kg ; SAR(10 g) = 1.59 W/kg

Maximum value of SAR (interpolated) = 2.60 W/kg

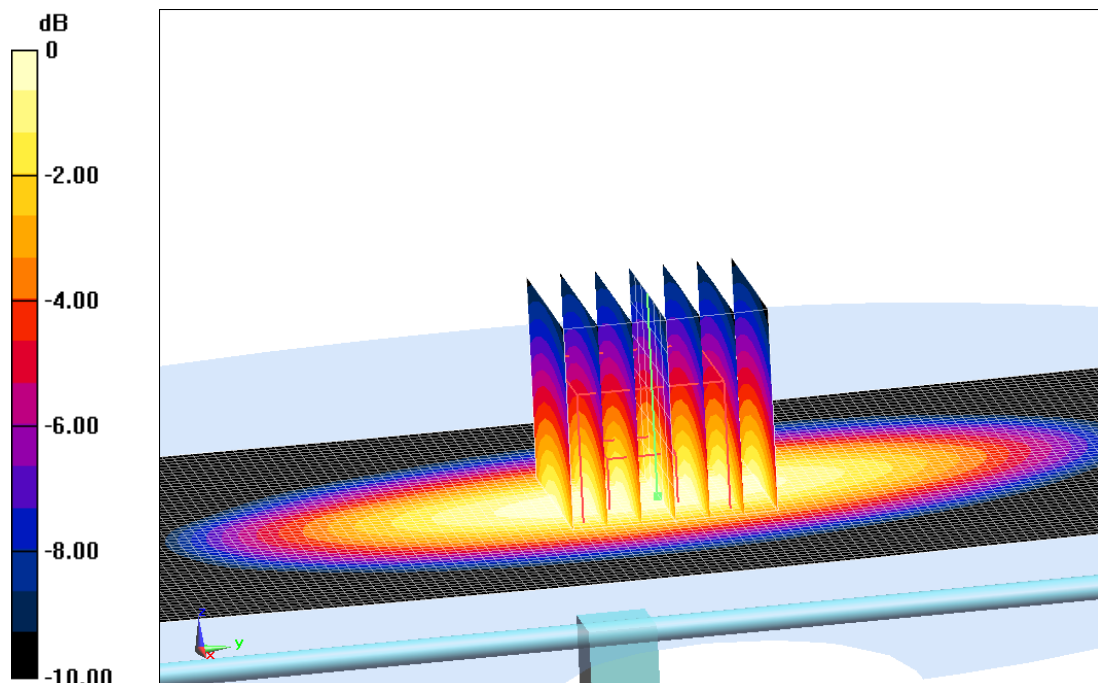
System Validation /Zoom Scan (7x7x7)/Cube 0: Measurement grid: $dx=5\text{mm}$, $dy=5\text{mm}$, $dz=5\text{mm}$

Reference Value = 52.199 V/m ; Power Drift = 0.02 dB

Peak SAR (extrapolated) = 3.12 W/kg

SAR(1 g) = 2.36 W/kg ; SAR(10 g) = 1.55 W/kg

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



0 dB = 2.69 W/kg = 4.30 dBW/kg

Fig.B.4 validation 835MHz 250mW