

### WCDMA 1900 Body Rear High

Date: 2018-5-28

Electronics: DAE4 Sn1525

Medium: Body 1900 MHz

Medium parameters used (interpolated):  $f = 1907.6$  MHz;  $\sigma = 1.592$  mho/m;  $\epsilon_r = 53.15$ ;  $\rho = 1000$  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- SN7464 ConvF(8.32, 8.32, 8.32)

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

Maximum value of SAR (interpolated) = 1.28 W/kg

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

Reference Value = 8.127 V/m; Power Drift = 0.15 dB

Peak SAR (extrapolated) = 1.90 W/kg

SAR(1 g) = 1.08 W/kg; SAR(10 g) = 0.570 W/kg

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

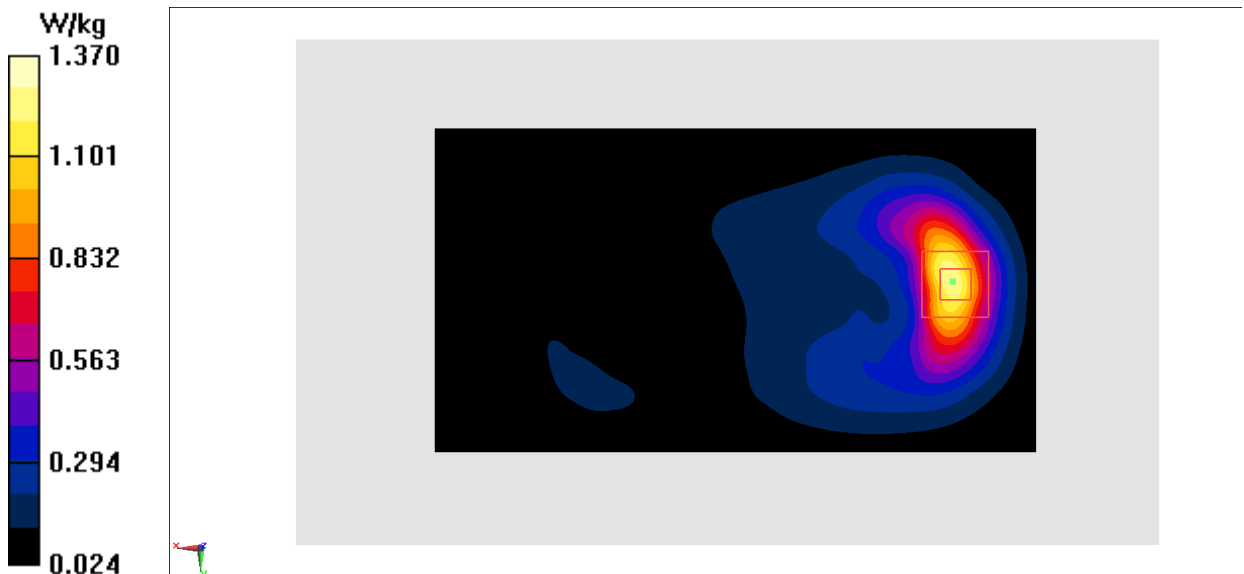
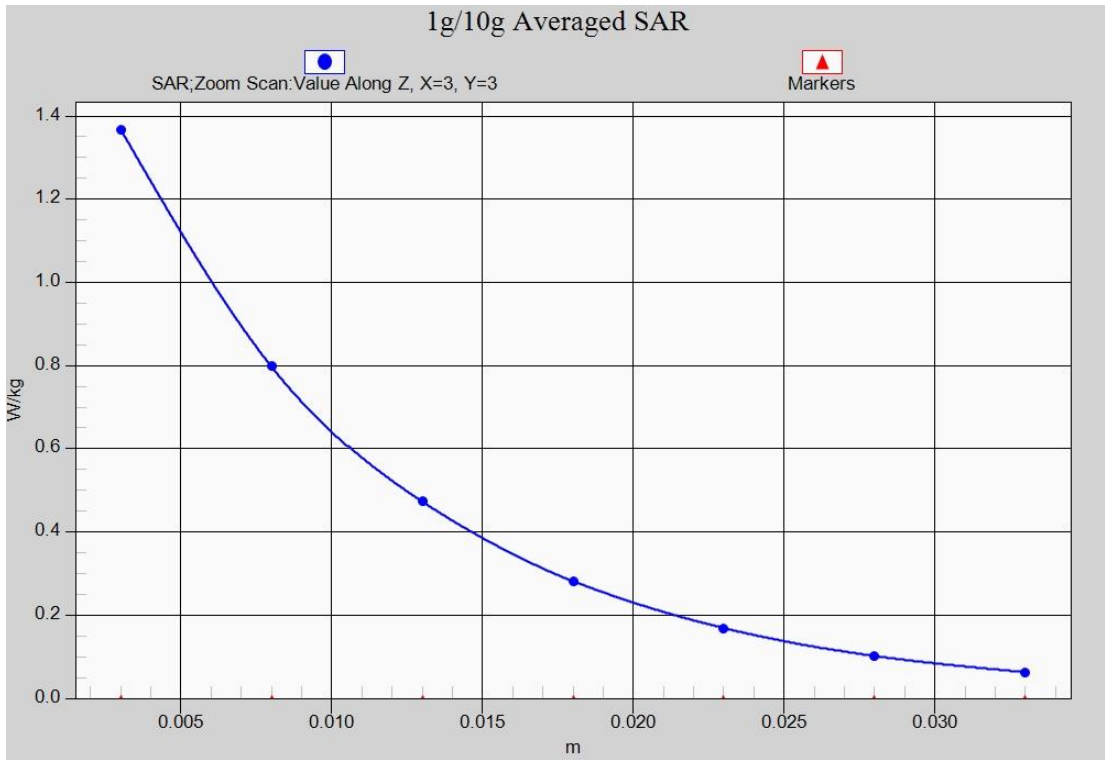


Fig.10 WCDMA1900



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

### LTE Band2 Right Cheek High with QPSK\_20M\_1RB\_Middle

Date: 2018-5-28

Electronics: DAE4 Sn1525

Medium: Head 1900 MHz

Medium parameters used:  $f = 1900$  MHz;  $\sigma = 1.432$  mho/m;  $\epsilon_r = 40.81$ ;  $\rho = 1000$  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– SN7464 ConvF(8.39, 8.39, 8.39)

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

Maximum value of SAR (interpolated) = 0.246 W/kg

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

Reference Value = 4.736 V/m; Power Drift = 0.07 dB

Peak SAR (extrapolated) = 0.291 W/kg

SAR(1 g) = 0.187 W/kg; SAR(10 g) = 0.113 W/kg

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

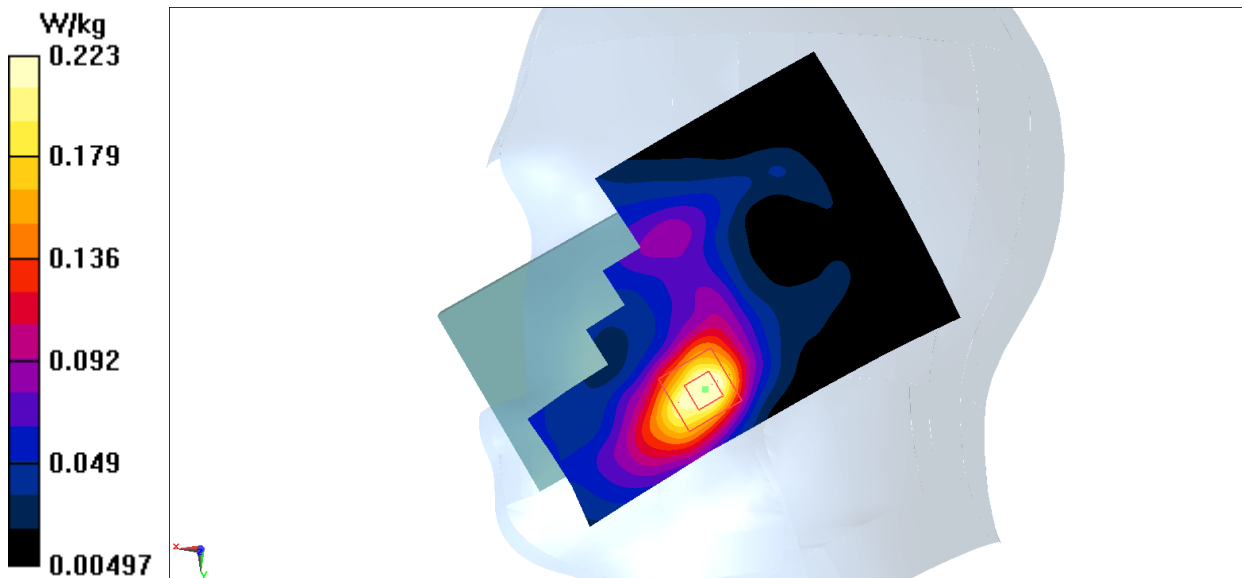


Fig.11 LTE Band2

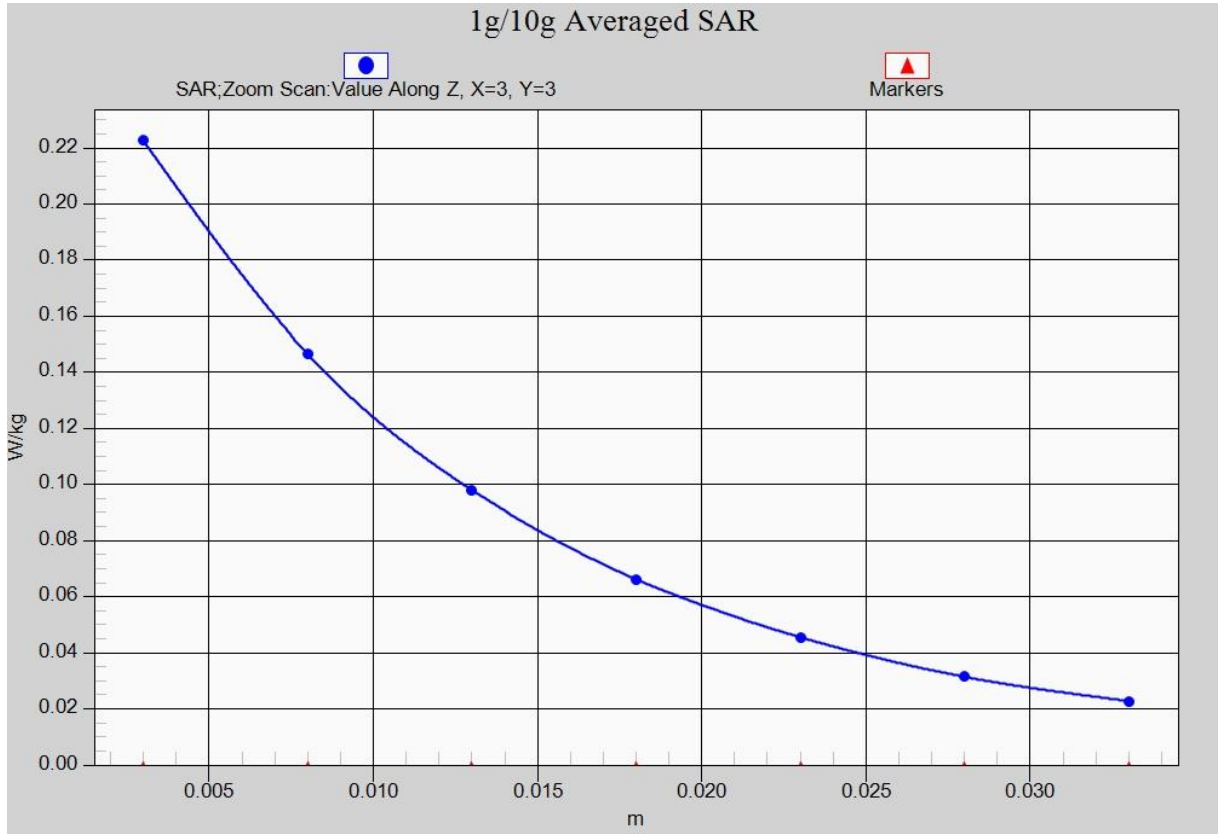


Fig. 11-1 Z-Scan at power reference point (LTE Band2)

### LTE Band2 Body Rear High with QPSK\_20M\_1RB\_Middle

Date: 2018-5-28

Electronics: DAE4 Sn1525

Medium: Body 1900 MHz

Medium parameters used:  $f = 1900$  MHz;  $\sigma = 1.548$  mho/m;  $\epsilon_r = 52.94$ ;  $\rho = 1000$  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– SN7464 ConvF(8.32, 8.32, 8.32)

**Area Scan (71x131x1):** 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:  $dx=5$ mm,  $dy=5$ mm,  $dz=5$ mm

Reference Value = 7.150 V/m; Power Drift = -0.06 dB

Peak SAR (extrapolated) = 1.84 W/kg

SAR(1 g) = 1.03 W/kg; SAR(10 g) = 0.539 W/kg

Maximum value of SAR (measured) = 1.30 W/kg

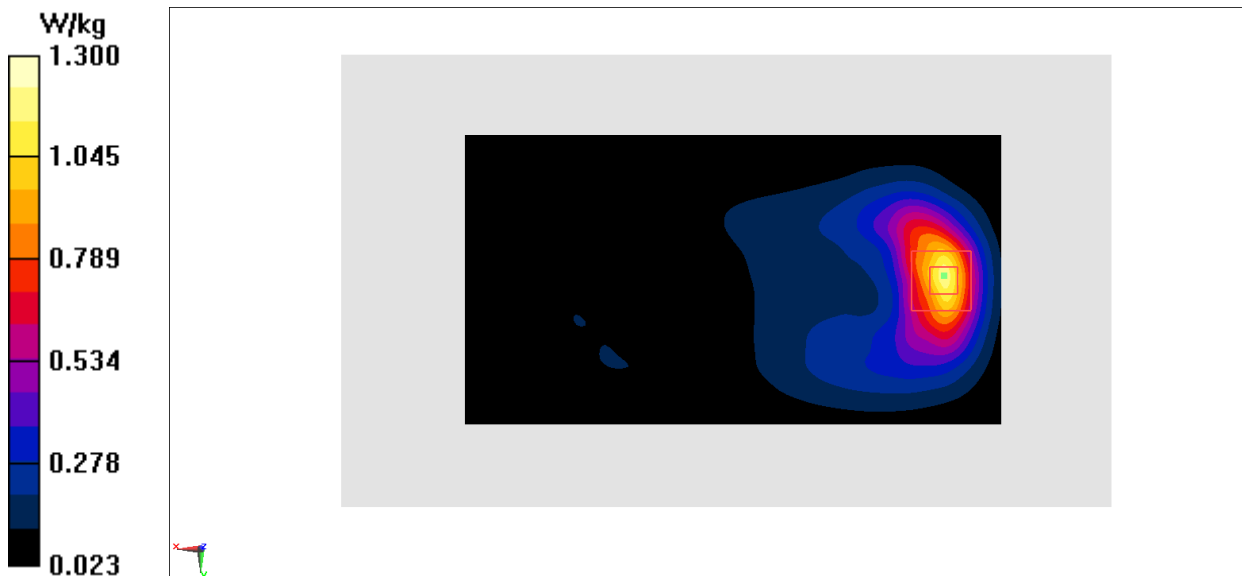


Fig.12 LTE Band2

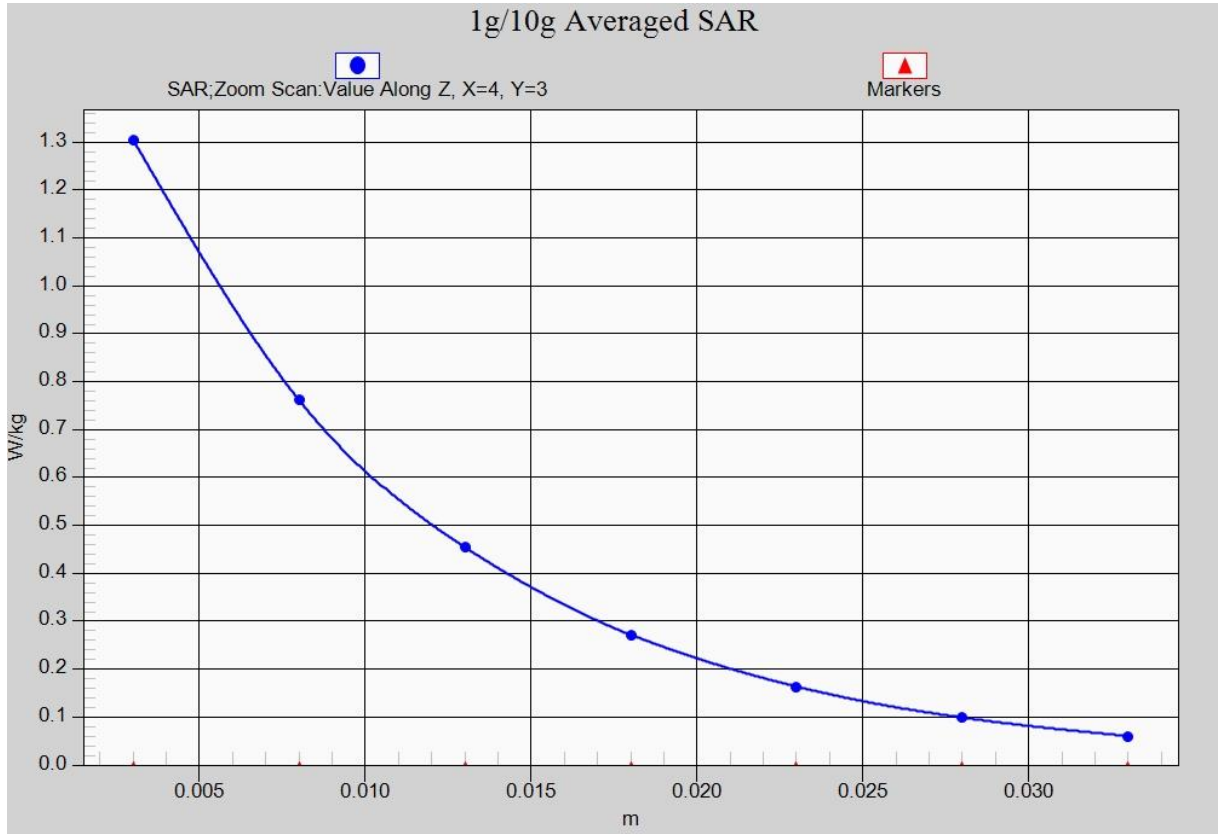


Fig. 12-1 Z-Scan at power reference point (LTE Band2)

### LTE Band5 Right Cheek Low with QPSK\_10M\_1RB\_High

Date: 2018-5-27

Electronics: DAE4 Sn1525

Medium: Head 850 MHz

Medium parameters used (interpolated):  $f = 829$  MHz;  $\sigma = 0.893$  mho/m;  $\epsilon_r = 42.061$ ;  $\rho = 1000$  kg/m<sup>3</sup>

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

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

Probe: EX3DV4 - SN7464 ConvF(10.28, 10.28, 10.28)

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

Maximum value of SAR (interpolated) = 0.199 W/kg

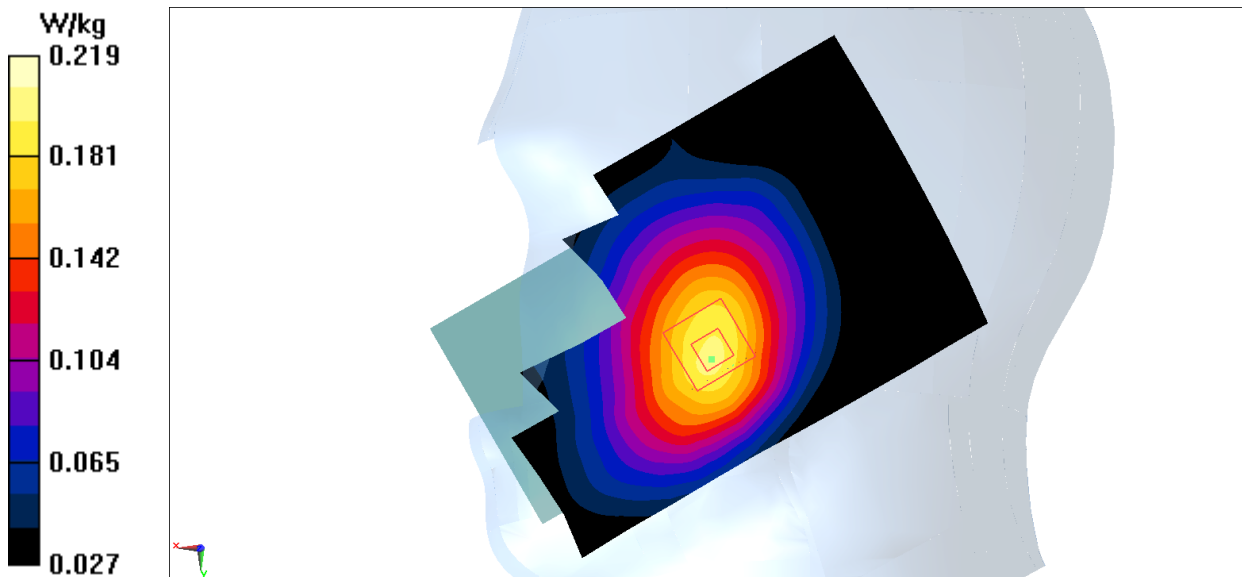
**Zoom Scan (7x7x7)/Cube 0:** Measurement grid:  $dx=5$ mm,  $dy=5$ mm,  $dz=5$ mm

Reference Value = 3.703 V/m; Power Drift = 0.02 dB

Peak SAR (extrapolated) = 0.225 W/kg

SAR(1 g) = 0.182 W/kg; SAR(10 g) = 0.139 W/kg

Maximum value of SAR (measured) = 0.219 W/kg



**Fig.13 LTE Band5**

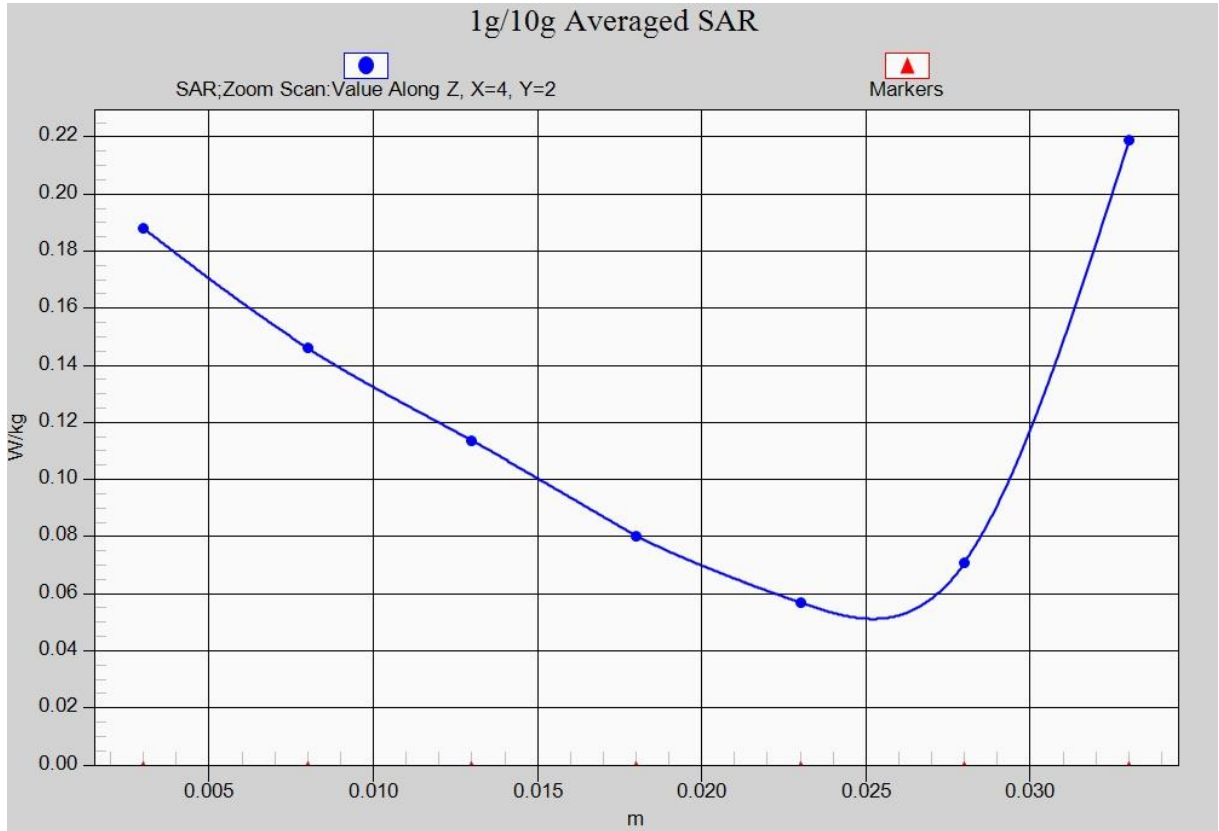


Fig. 13-1 Z-Scan at power reference point (LTE Band5)



### LTE Band5 Body Rear Low with QPSK\_10M\_1RB\_High

Date: 2018-5-27

Electronics: DAE4 Sn1525

Medium: Body 850 MHz

Medium parameters used (interpolated):  $f = 829$  MHz;  $\sigma = 1.012$  mho/m;  $\epsilon_r = 55.584$ ;  $\rho = 1000$  kg/m<sup>3</sup>

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

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

Probe: EX3DV4 - SN7464 ConvF(10.21, 10.21, 10.21)

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

Maximum value of SAR (interpolated) = 0.323 W/kg

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

Reference Value = 18.21 V/m; Power Drift = -0.05 dB

Peak SAR (extrapolated) = 0.367 W/kg

SAR(1 g) = 0.289 W/kg; SAR(10 g) = 0.222 W/kg

Maximum value of SAR (measured) = 0.318 W/kg

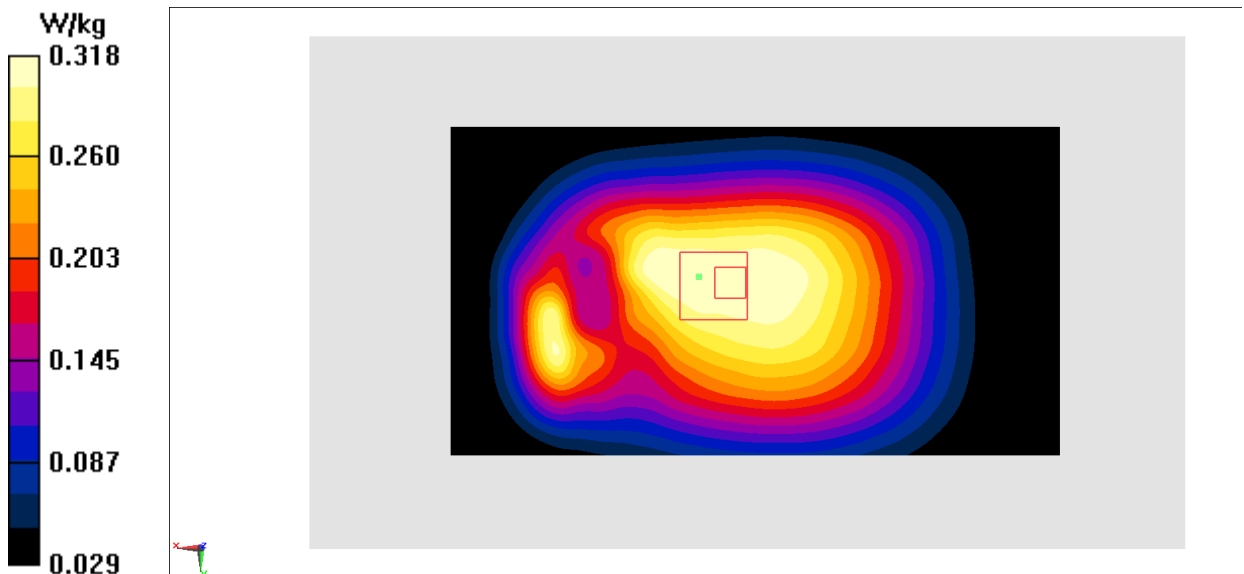


Fig.14 LTE Band5

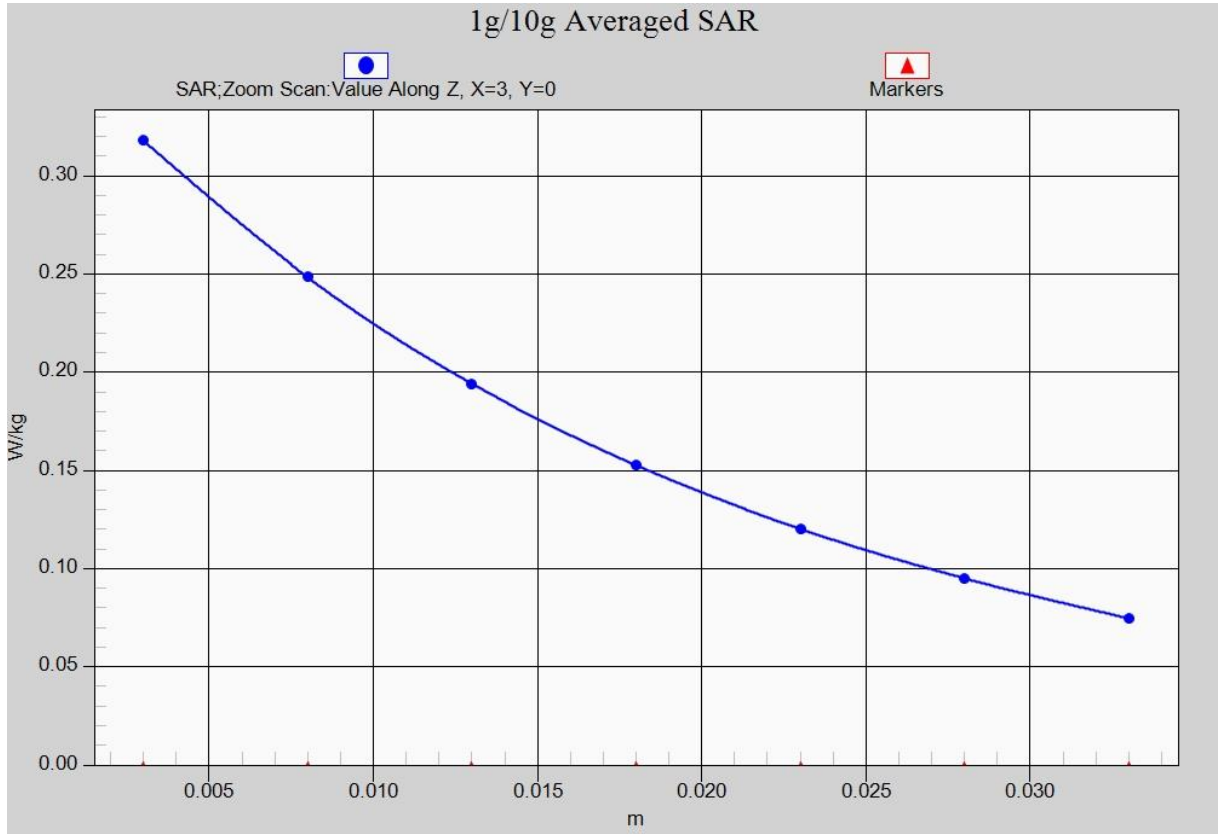


Fig. 14-1 Z-Scan at power reference point (LTE Band5)

### LTE Band7 Left Cheek Middle with QPSK\_20M\_1RB\_High

Date: 2018-5-30

Electronics: DAE4 Sn1525

Medium: Head 2600 MHz

Medium parameters used:  $f = 2535$  MHz;  $\sigma = 1.925$  mho/m;  $\epsilon_r = 38.2$ ;  $\rho = 1000$  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– SN7464 ConvF(7.76, 7.76, 7.76)

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

Maximum value of SAR (interpolated) = 0.494 W/kg

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

Reference Value = 8.900 V/m; Power Drift = 0.08 dB

Peak SAR (extrapolated) = 0.700 W/kg

SAR(1 g) = 0.362 W/kg; SAR(10 g) = 0.188 W/kg

Maximum value of SAR (measured) = 0.454 W/kg

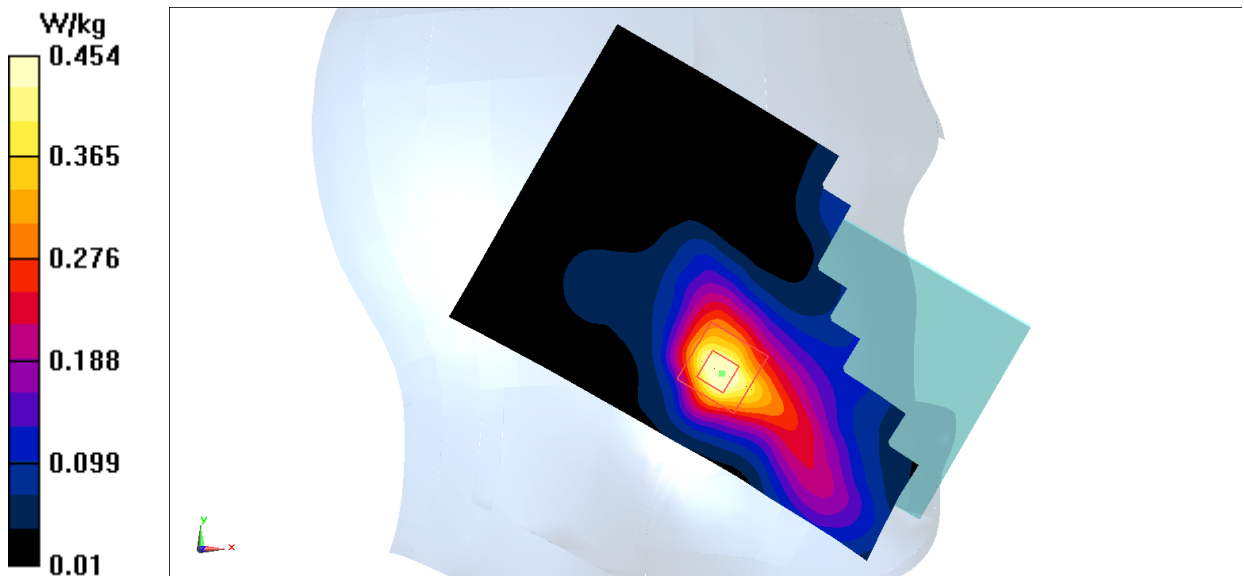


Fig.15 LTE Band7

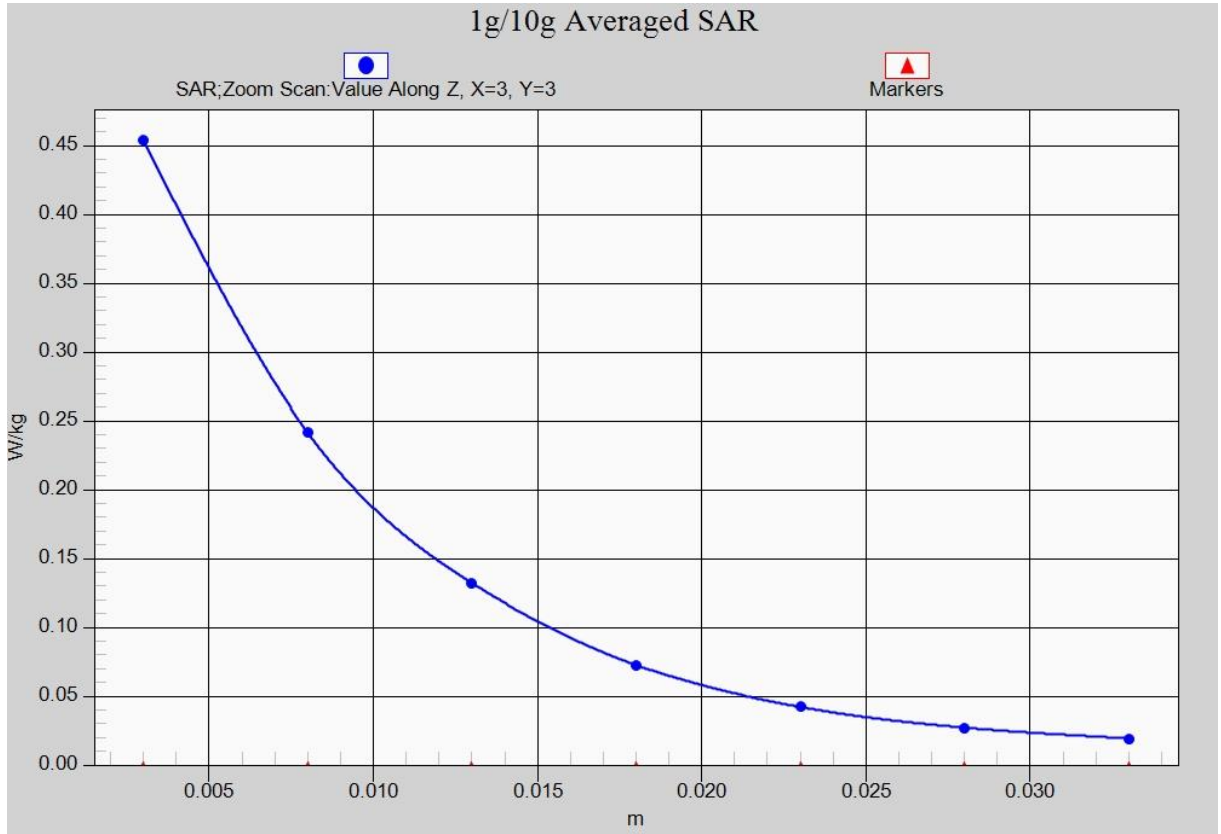


Fig. 15-1 Z-Scan at power reference point (LTE Band7)

### LTE Band7 Body Rear Middle with QPSK\_20M\_1RB\_High

Date: 2018-5-30

Electronics: DAE4 Sn1525

Medium: Body 2600 MHz

Medium parameters used:  $f = 2535$  MHz;  $\sigma = 2.212$  mho/m;  $\epsilon_r = 51.54$ ;  $\rho = 1000$  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– SN7464 ConvF(7.84, 7.84, 7.84)

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

Maximum value of SAR (interpolated) = 0.995 W/kg

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

Reference Value = 7.931 V/m; Power Drift = 0.03 dB

Peak SAR (extrapolated) = 1.38 W/kg

SAR(1 g) = 0.808 W/kg; SAR(10 g) = 0.442 W/kg

Maximum value of SAR (measured) = 0.989 W/kg

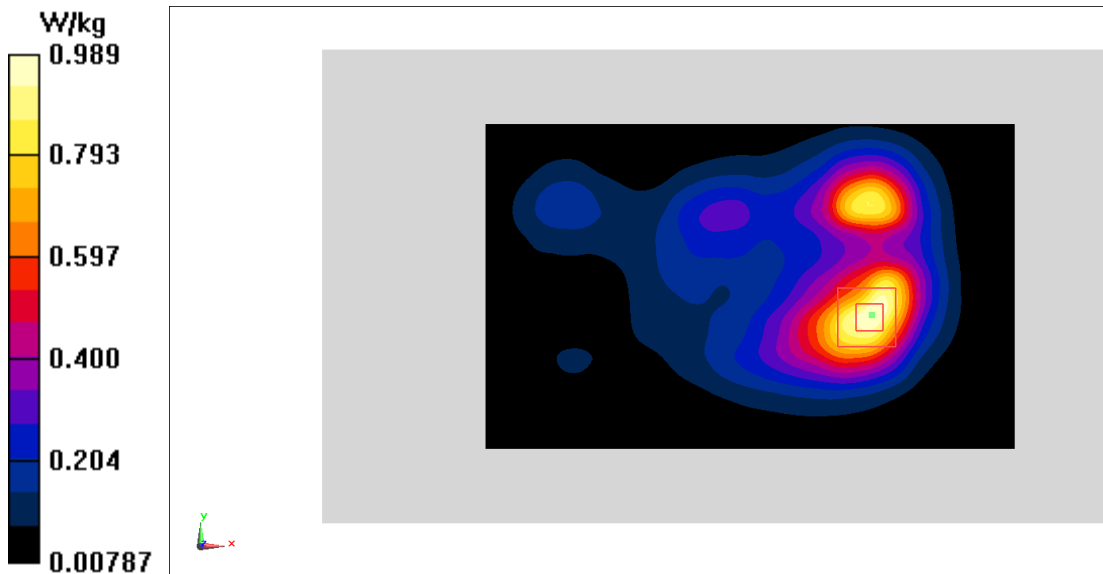


Fig.16 LTE Band7

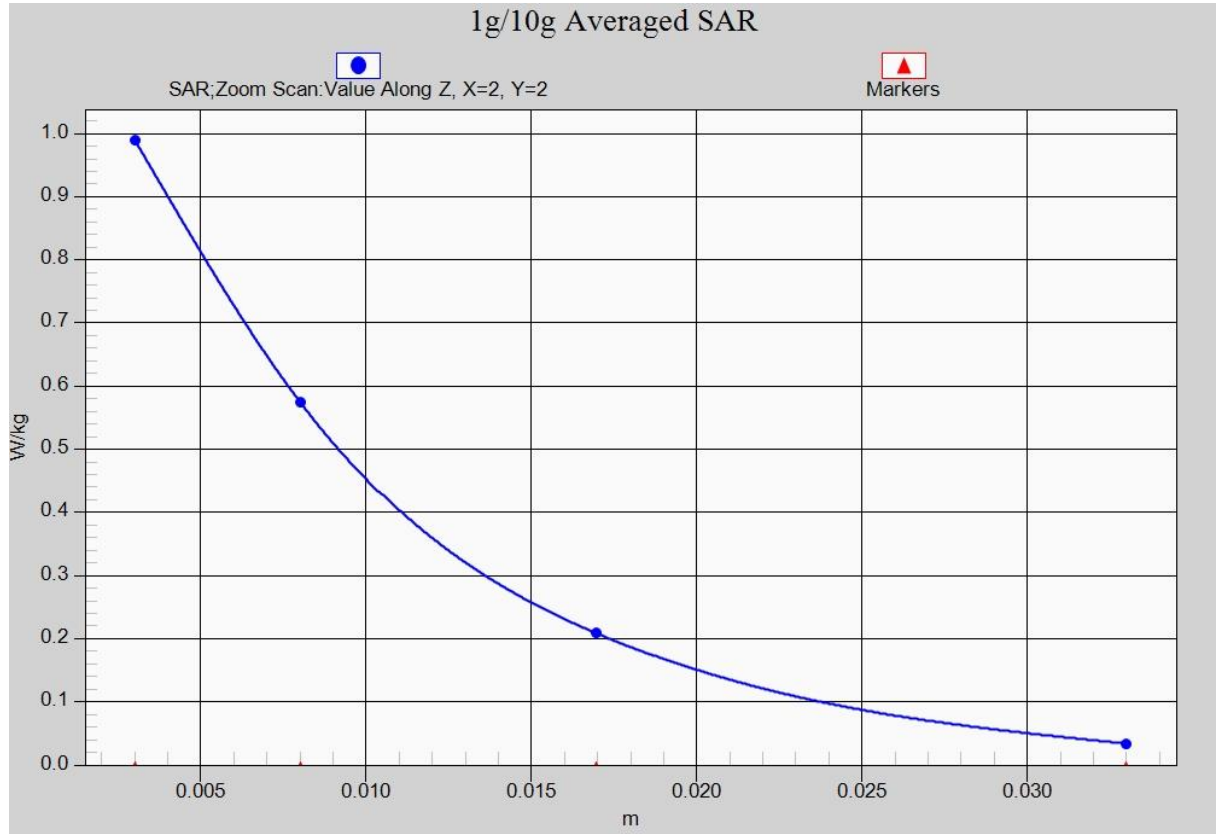


Fig. 16-1 Z-Scan at power reference point (LTE Band7)

### LTE Band12 Right Cheek High with QPSK\_10M\_1RB\_High

Date: 2018-5-29

Electronics: DAE4 Sn1525

Medium: Head 750 MHz

Medium parameters used (interpolated):  $f = 711$  MHz;  $\sigma = 0.859$  mho/m;  $\epsilon_r = 42.63$ ;  $\rho = 1000$  kg/m<sup>3</sup>

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

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

Probe: EX3DV4- SN7464 ConvF(10.57, 10.57, 10.57)

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

Maximum value of SAR (interpolated) = 0.147 W/kg

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

Reference Value = 4.452 V/m; Power Drift = 0.15 dB

Peak SAR (extrapolated) = 0.165 W/kg

SAR(1 g) = 0.135 W/kg; SAR(10 g) = 0.105 W/kg

Maximum value of SAR (measured) = 0.146 W/kg

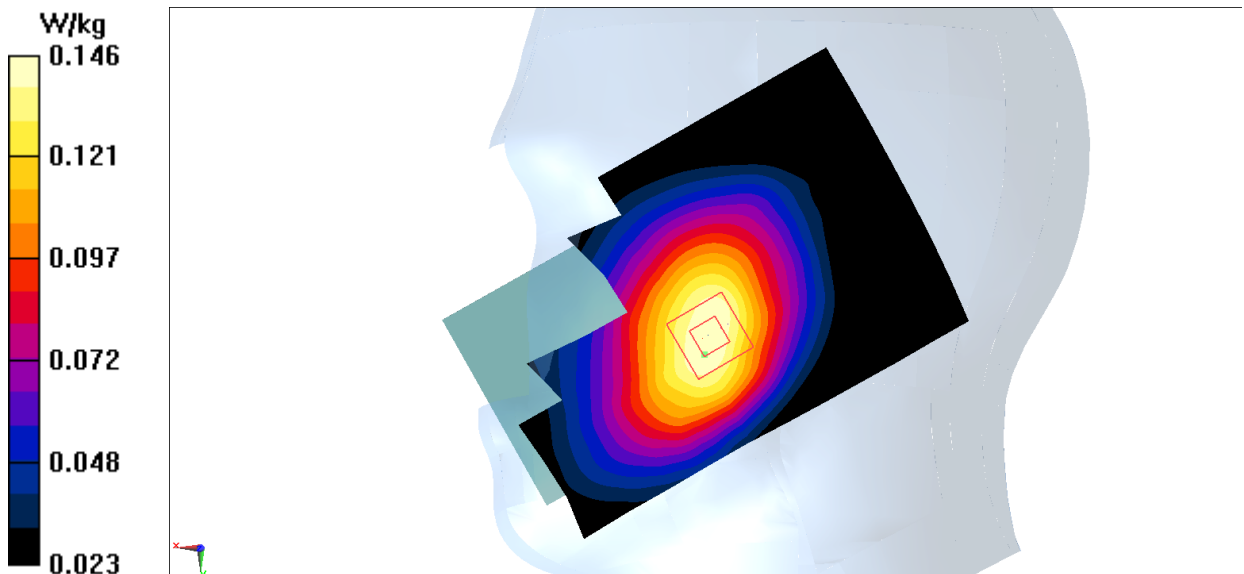


Fig.17 LTE Band12

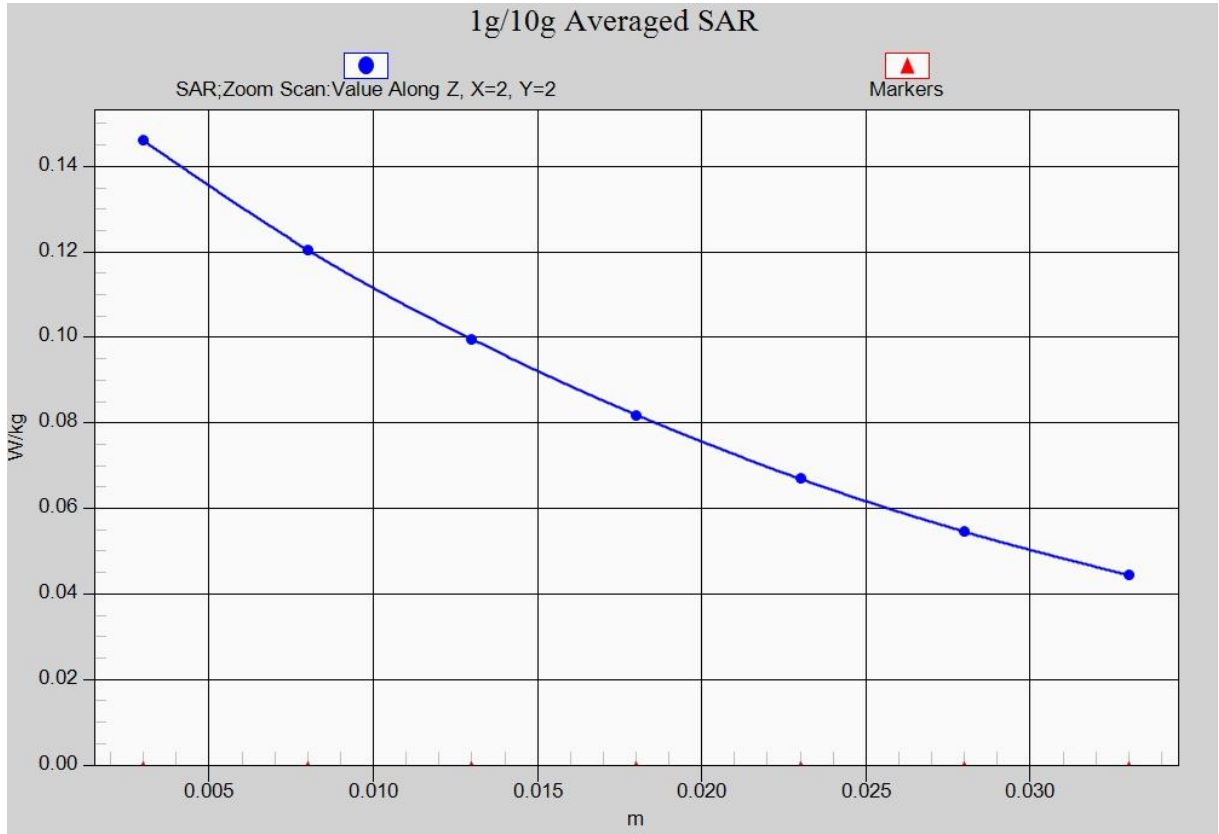


Fig. 17-1 Z-Scan at power reference point (LTE Band12)



**LTE Band12 Body Rear High with QPSK\_10M\_1RB\_High**

Date: 2018-5-29

Electronics: DAE4 Sn1525

Medium: Body750 MHz

Medium parameters used (interpolated):  $f = 711$  MHz;  $\sigma = 0.944$  mho/m;  $\epsilon_r = 56.56$ ;  $\rho = 1000$  kg/m<sup>3</sup>

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

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

Probe: EX3DV4– SN7464 ConvF(10.63, 10.63, 10.63)

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

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

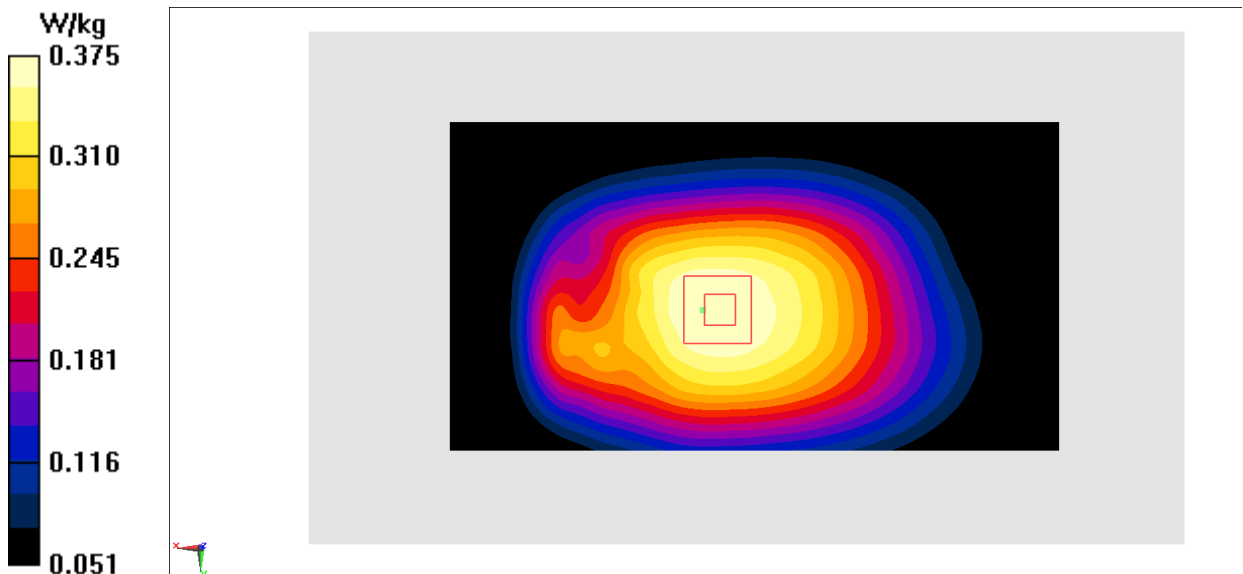
**Zoom Scan (7x7x7)/Cube 0:** Measurement grid:  $dx=5$ mm,  $dy=5$ mm,  $dz=5$ mm

Reference Value = 19.93 V/m; Power Drift = 0.12 dB

Peak SAR (extrapolated) = 0.428 W/kg

**SAR(1 g) = 0.346 W/kg; SAR(10 g) = 0.270 W/kg**

Maximum value of SAR (measured) = 0.375 W/kg



**Fig.18 LTE Band12**

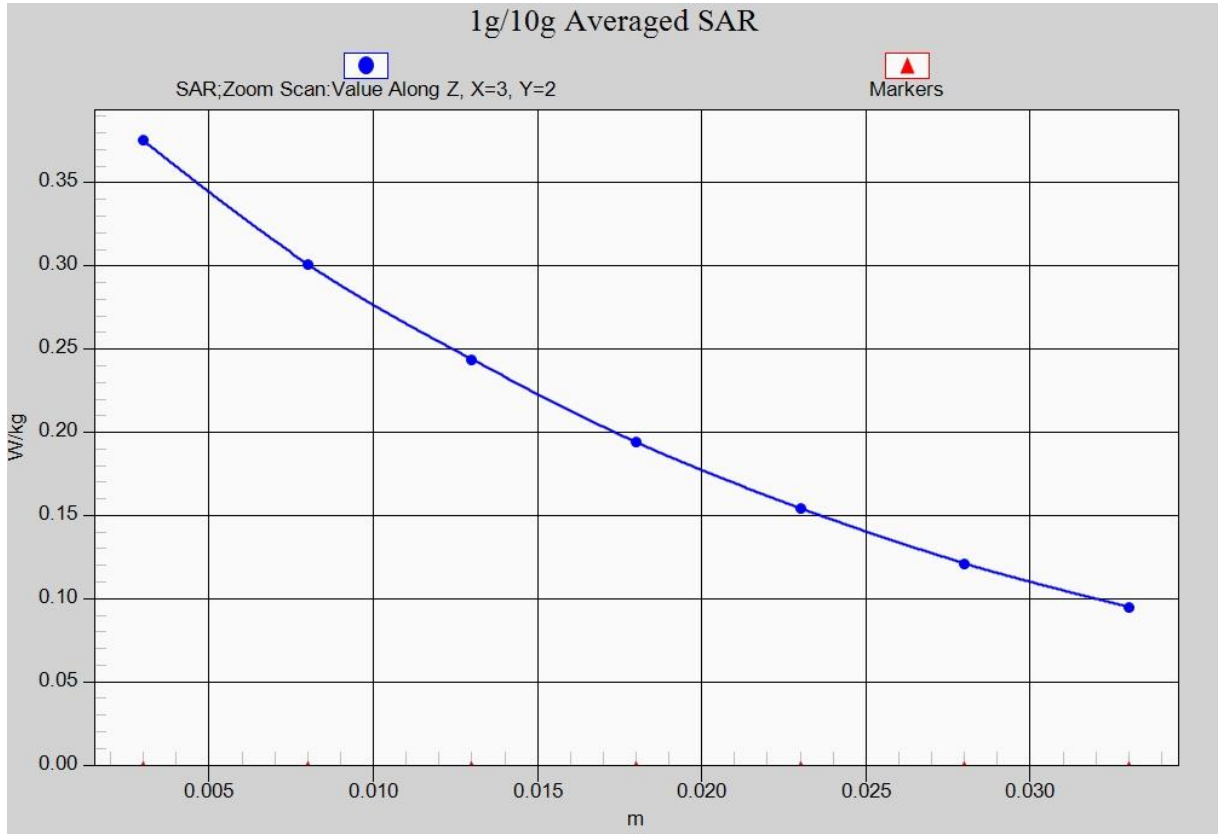


Fig. 18-1 Z-Scan at power reference point (LTE Band12)

### LTE Band13 Right Cheek with QPSK\_10M\_1RB\_Low

Date: 2018-5-29

Electronics: DAE4 Sn1525

Medium: Head 750 MHz

Medium parameters used (interpolated):  $f = 782$  MHz;  $\sigma = 0.887$  mho/m;  $\epsilon_r = 42.48$ ;  $\rho = 1000$  kg/m<sup>3</sup>

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

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

Probe: EX3DV4- SN7464 ConvF(10.57, 10.57, 10.57)

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

Maximum value of SAR (interpolated) = 0.150 W/kg

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

Reference Value = 3.856 V/m; Power Drift = -0.03 dB

Peak SAR (extrapolated) = 0.170 W/kg

SAR(1 g) = 0.134 W/kg; SAR(10 g) = 0.103 W/kg

Maximum value of SAR (measured) = 0.146 W/kg

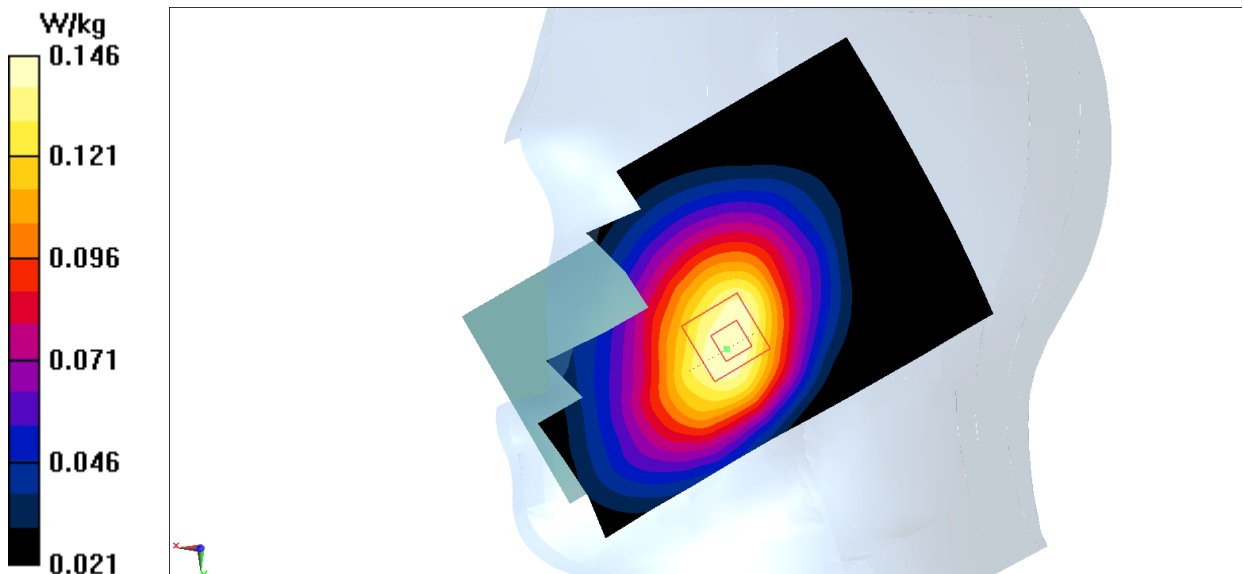


Fig.19 LTE Band13

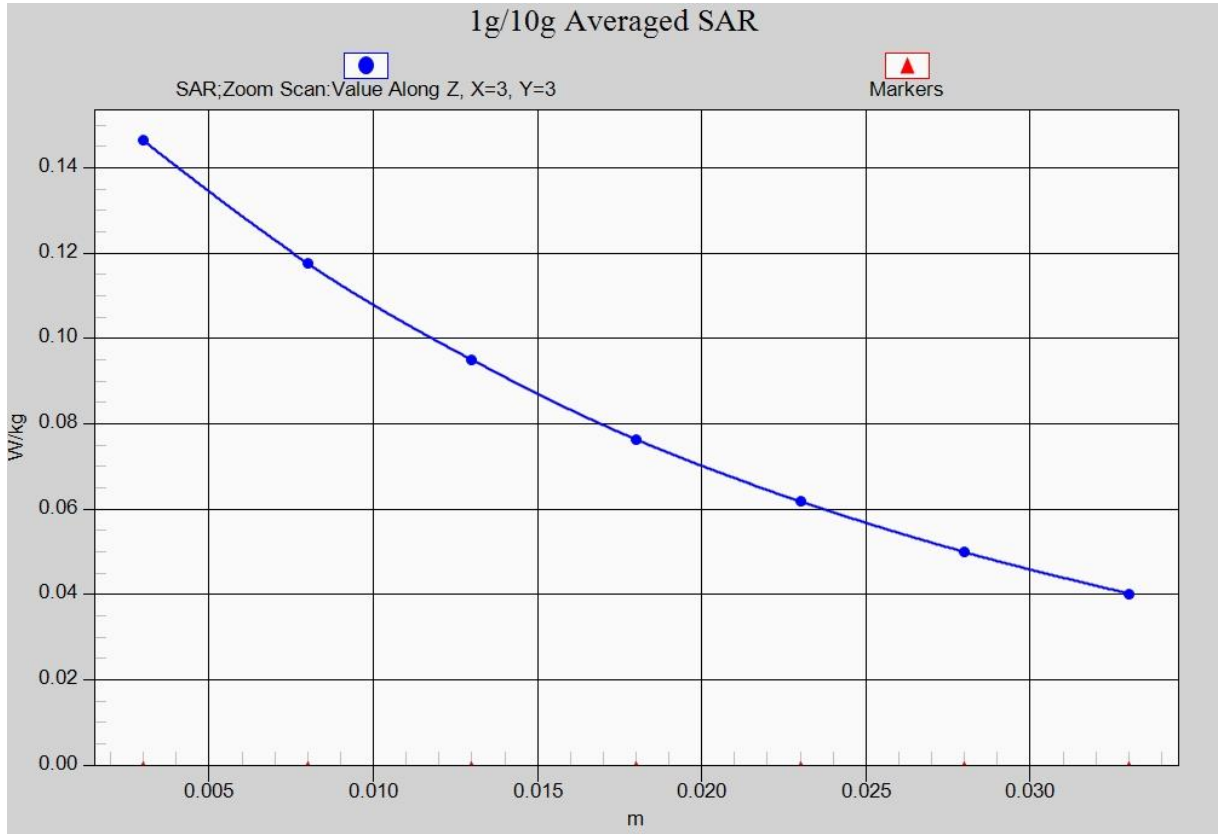


Fig. 19-1 Z-Scan at power reference point (LTE Band13)

### LTE Band13 Body Rear with QPSK\_10M\_1RB\_Low

Date: 2018-5-29

Electronics: DAE4 Sn1525

Medium: Body 750 MHz

Medium parameters used (interpolated):  $f = 782$  MHz;  $\sigma = 0.971$  mho/m;  $\epsilon_r = 56.47$ ;  $\rho = 1000$  kg/m<sup>3</sup>

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

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

Probe: EX3DV4- SN7464 ConvF(10.63, 10.63, 10.63)

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

Maximum value of SAR (interpolated) = 0.321 W/kg

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

Reference Value = 17.39 V/m; Power Drift = 0.00 dB

Peak SAR (extrapolated) = 0.537 W/kg

SAR(1 g) = 0.298 W/kg; SAR(10 g) = 0.167 W/kg

Maximum value of SAR (measured) = 0.359 W/kg

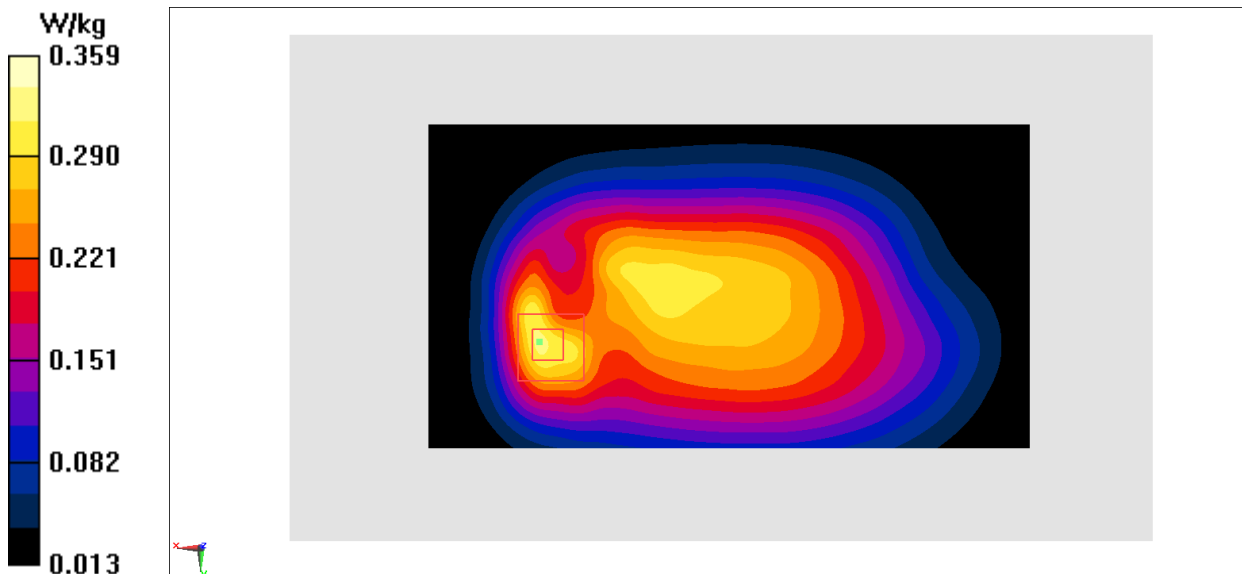


Fig.20 LTE Band13

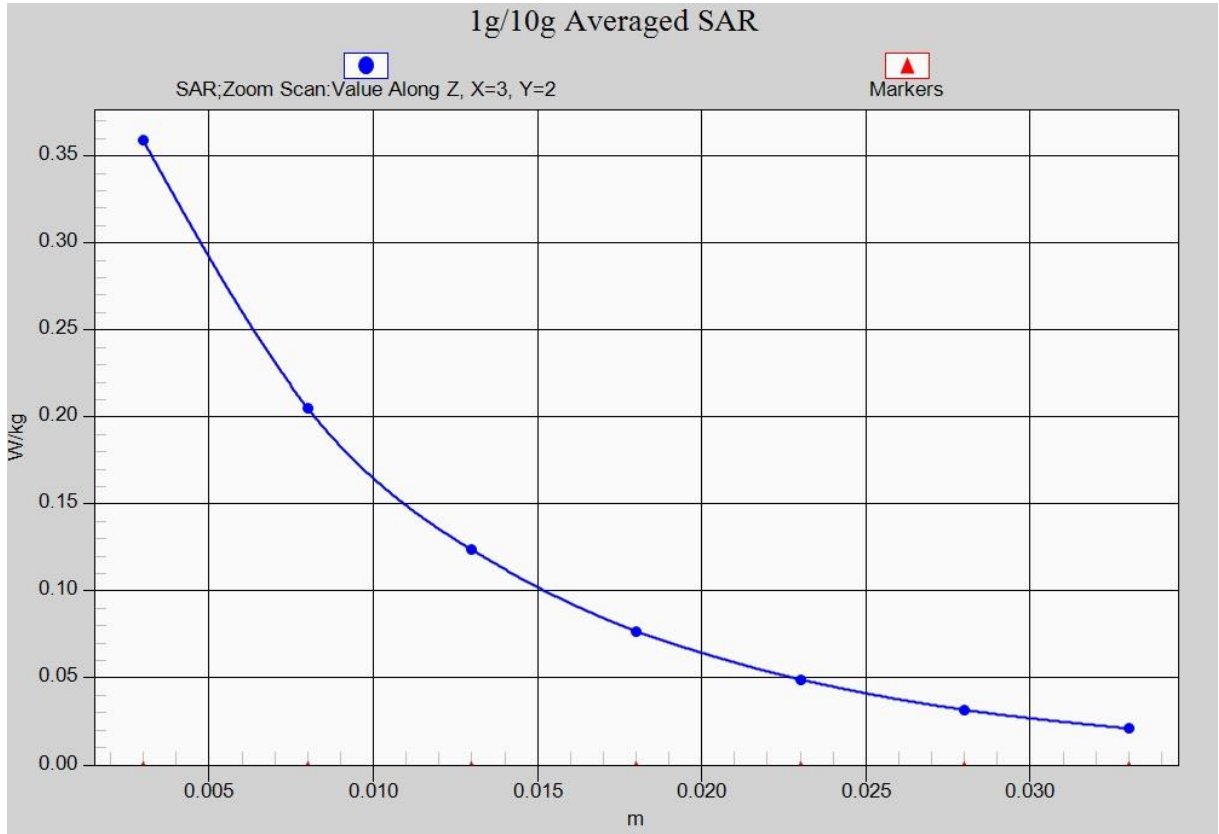


Fig. 20-1 Z-Scan at power reference point (LTE Band13)

### LTE Band 41 Left Cheek with QPSK\_20M\_1RB\_Low

Date: 2018-5-30

Electronics: DAE4 Sn1525

Medium: Head 2600 MHz

Medium parameters used:  $f = 2680$  MHz;  $\sigma = 2.008$  mho/m;  $\epsilon_r = 38.98$ ;  $\rho = 1000$  kg/m<sup>3</sup>

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

Communication System: LTE Band41 Frequency: 2680 MHz Duty Cycle: 1:1.58

Probe: EX3DV4 - SN7464 ConvF(7.76, 7.76, 7.76)

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

Maximum value of SAR (interpolated) = 0.208 W/kg

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

Reference Value = 9.173 V/m; Power Drift = -0.02 dB

Peak SAR (extrapolated) = 0.318 W/kg

SAR(1 g) = 0.155 W/kg; SAR(10 g) = 0.077 W/kg

Maximum value of SAR (measured) = 0.199 W/kg

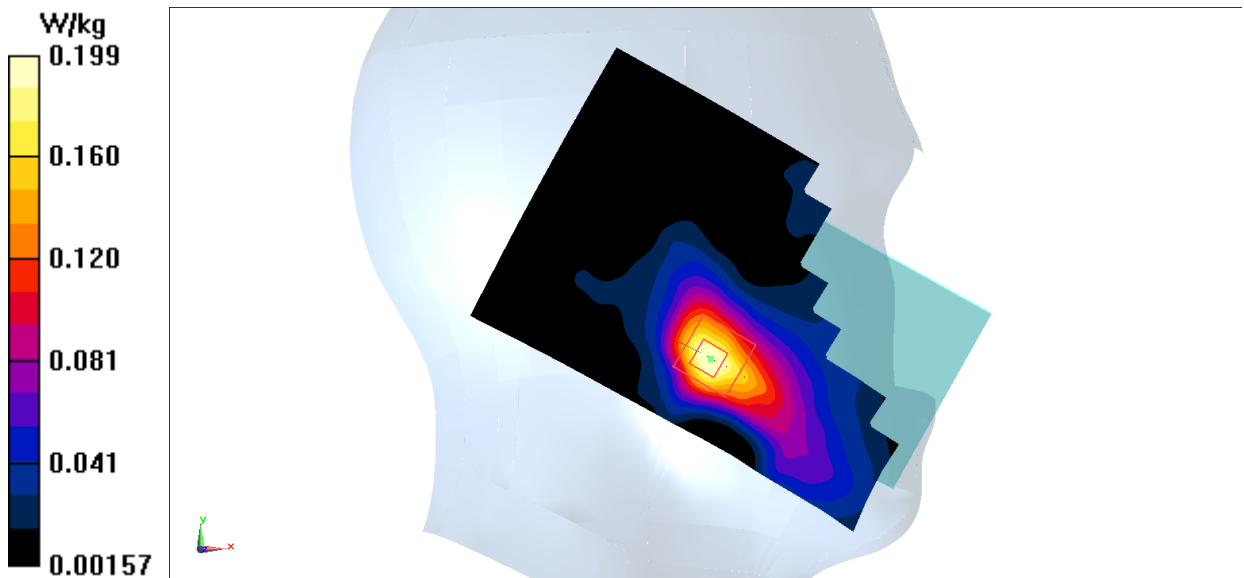


Fig.21 LTE Band 41

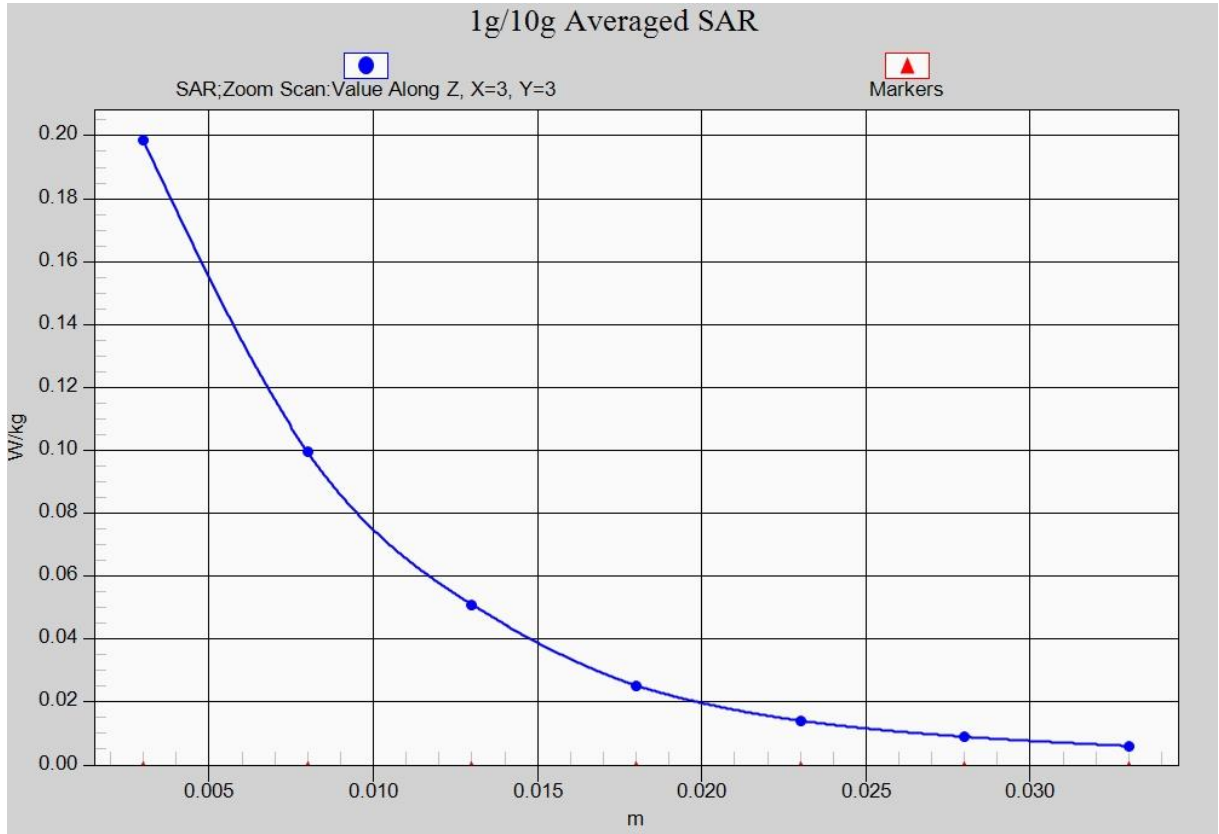


Fig. 21-1 Z-Scan at power reference point (LTE Band 41)



### LTE Band 41 Body Bottom with QPSK\_20M\_1RB\_Low

Date: 2018-5-30

Electronics: DAE4 Sn1525

Medium: Body 2600 MHz

Medium parameters use:  $f = 2680$  MHz;  $\sigma = 2.306$  mho/m;  $\epsilon_r = 51.329$ ;  $\rho = 1000$  kg/m<sup>3</sup>

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

Communication System: LTE Band41 Frequency: 2680 MHz Duty Cycle: 1:1.58

Probe: EX3DV4 - SN7464 ConvF(7.84, 7.84, 7.84)

**Area Scan (91x31x1):** Interpolated grid: dx=1.000 mm, dy=1.000 mm

Maximum value of SAR (interpolated) = 0.438 W/kg

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

Reference Value = 7.208 V/m; Power Drift = 0.13 dB

Peak SAR (extrapolated) = 0.639 W/kg

SAR(1 g) = 0.333 W/kg; SAR(10 g) = 0.163 W/kg

Maximum value of SAR (measured) = 0.432 W/kg

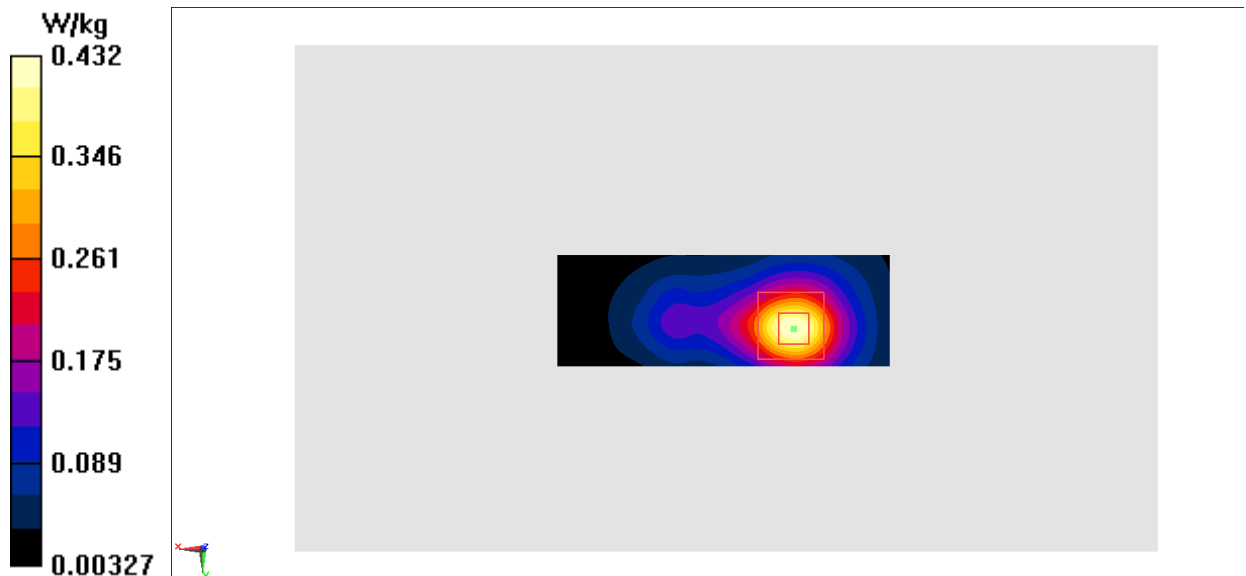


Fig.22 LTE Band 41

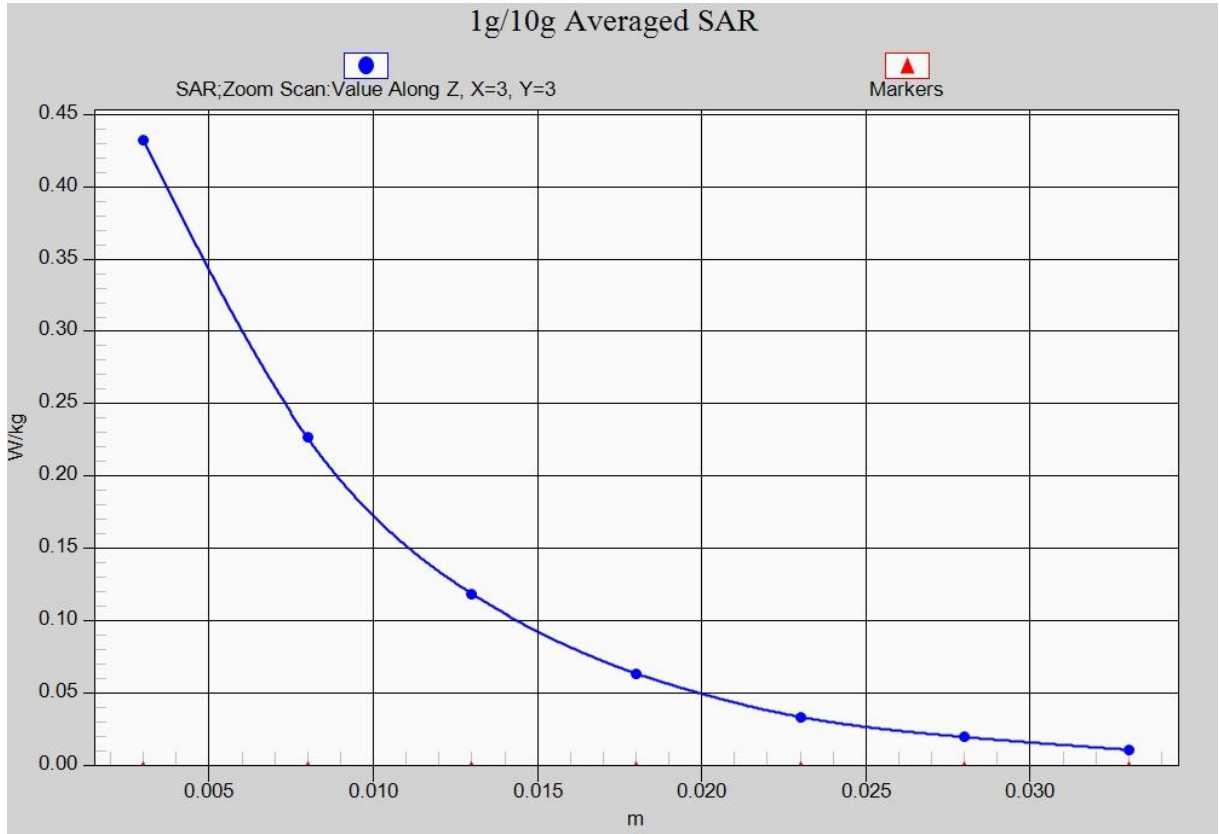


Fig. 22-1 Z-Scan at power reference point (LTE Band 41)

### LTE Band66 Right Cheek Low with QPSK\_20M\_1RB\_Middle

Date: 2018-5-29

Electronics: DAE4 Sn1525

Medium: Head 1750 MHz

Medium parameters used  $f = 1720$  MHz;  $\sigma = 1.378$  mho/m;  $\epsilon_r = 40.715$ ;  $\rho = 1000$  kg/m<sup>3</sup>

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

Communication System: LTE Band66 Frequency: 1720 MHz Duty Cycle: 1:1

Probe: EX3DV4 – SN7464 ConvF(8.70, 8.70, 8.70)

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

Maximum value of SAR (interpolated) = 0.266 W/kg

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

Reference Value = 5.709 V/m; Power Drift = 0.02 dB

Peak SAR (extrapolated) = 0.320 W/kg

SAR(1 g) = 0.214 W/kg; SAR(10 g) = 0.134 W/kg

Maximum value of SAR (measured) = 0.252 W/kg

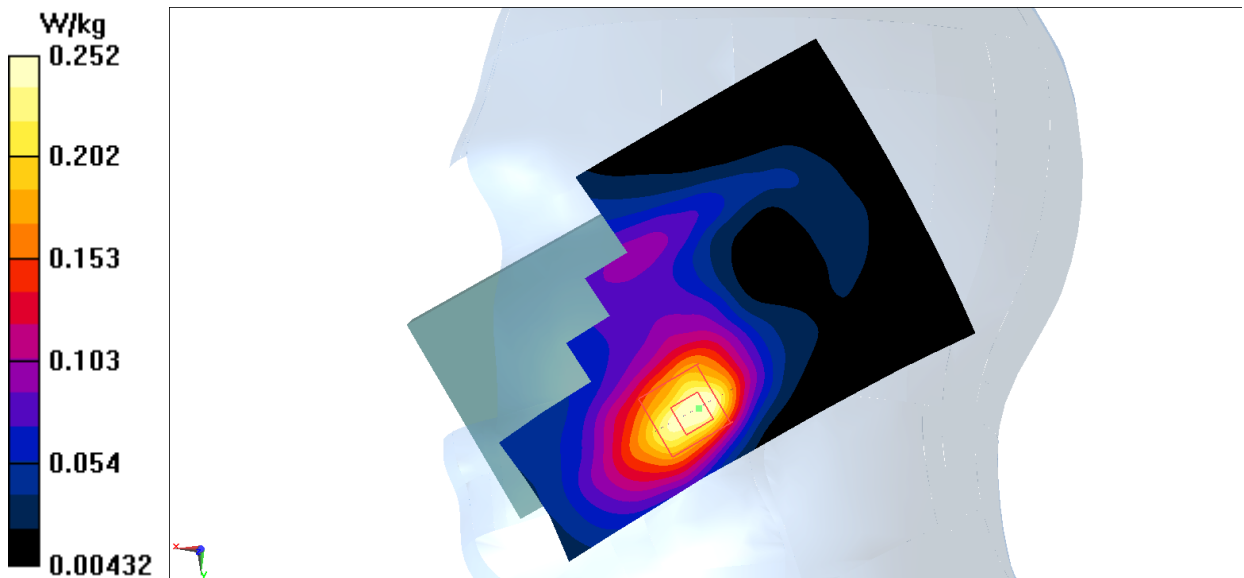


Fig.23 LTE Band66

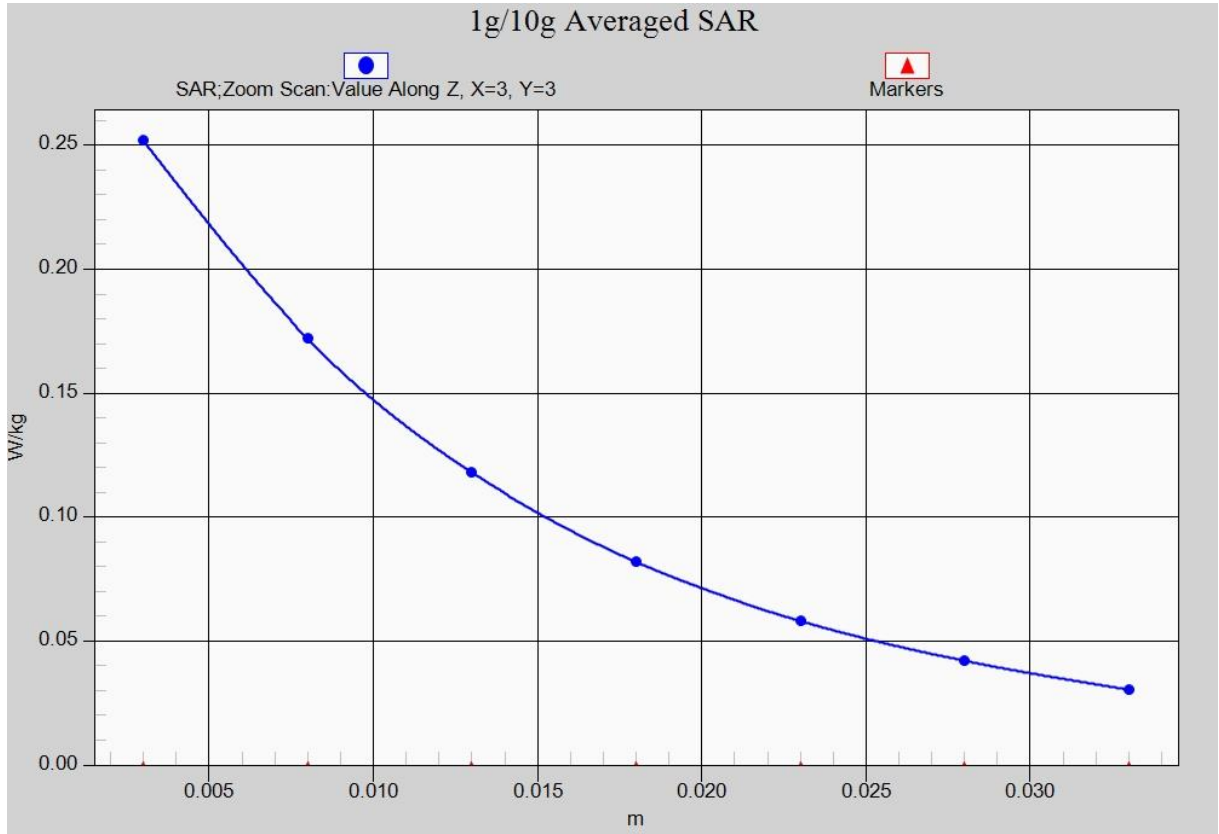


Fig. 23-1 Z-Scan at power reference point (LTE Band66)

### LTE Band66 Body Rear Low with QPSK\_20M\_1RB\_Middle

Date: 2018-5-29

Electronics: DAE4 Sn1525

Medium: Body 1750 MHz

Medium parameters used:  $f = 1720$  MHz;  $\sigma = 1.524$  mho/m;  $\epsilon_r = 53.504$ ;  $\rho = 1000$  kg/m<sup>3</sup>

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

Communication System: LTE Band66 Frequency: 1720 MHz Duty Cycle: 1:1

Probe: EX3DV4 – SN7464 ConvF(8.60, 8.60, 8.60)

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

Maximum value of SAR (interpolated) = 1.19 W/kg

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

Reference Value = 8.629 V/m; Power Drift = -0.10 dB

Peak SAR (extrapolated) = 1.64 W/kg

SAR(1 g) = 0.926 W/kg; SAR(10 g) = 0.496 W/kg

Maximum value of SAR (measured) = 1.16 W/kg

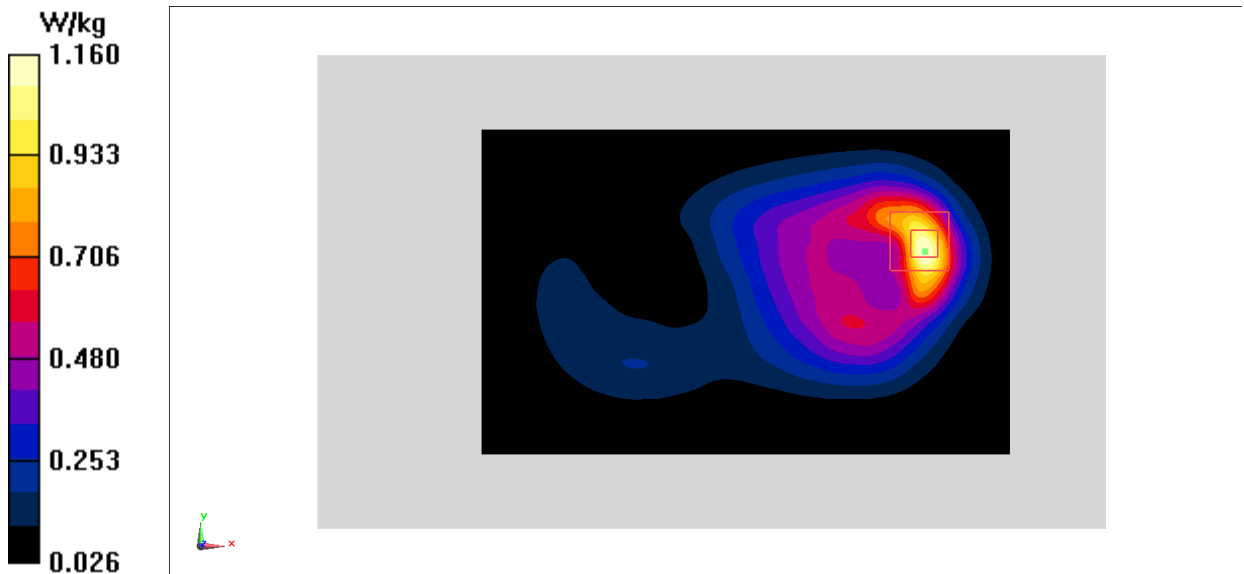


Fig.24 LTE Band66