

WCDMA1900 Body Rear Low

Date: 2019-4-12

Electronics: DAE4 Sn1525

Medium: Body 1900 MHz

Medium parameters used (interpolated): $f = 1850.2$ MHz; $\sigma = 1.527$ mho/m; $\epsilon_r = 52.64$; $\rho = 1000$ kg/m³

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

Communication System: WCDMA 1900MHz GPRS Frequency: 1909.8 MHz Duty Cycle: 1:1

Probe: EX3DV4- SN7514 ConvF(7.53, 7.53, 7.53)

Area Scan (31x81x1): Interpolated grid: dx=1.000 mm, dy=1.000 mm

Maximum value of SAR (interpolated) = 0.838 W/kg

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

Reference Value = 17.12 V/m; Power Drift = -0.08 dB

Peak SAR (extrapolated) = 1.05 W/kg

SAR(1 g) = 0.612 W/kg; SAR(10 g) = 0.317 W/kg

Maximum value of SAR (measured) = 0.854 W/kg

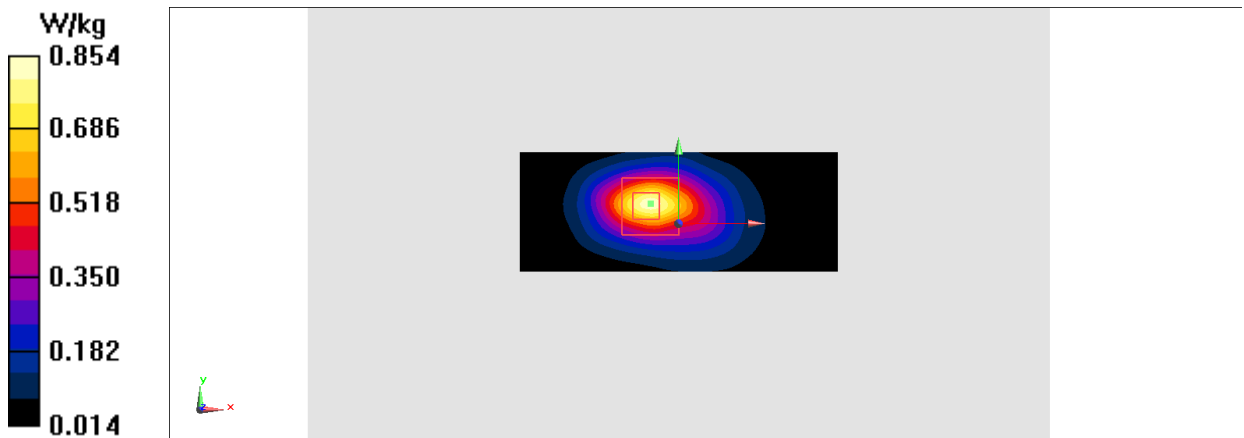


Fig.6 1900 MHz

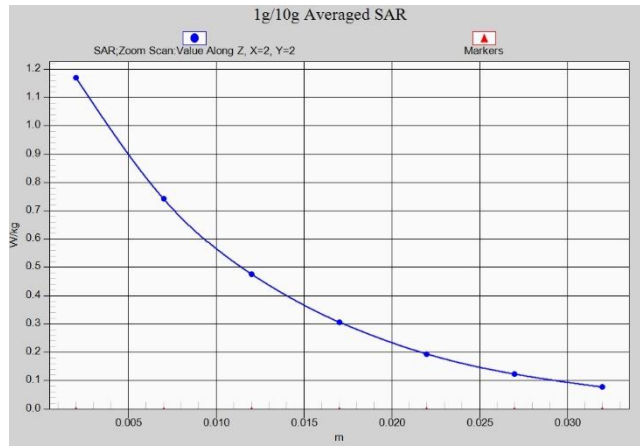


Fig. 6-1 Z-Scan at power reference point (1900 MHz)

LTE Band2 Left Cheek Low with QPSK_20M_1RB_Middle

Date: 2019-4-12

Electronics: DAE4 Sn1525

Medium: Head 1900 MHz

Medium parameters used: $f = 1880$ MHz; $\sigma = 1.393$ mho/m; $\epsilon_r = 40.69$; $\rho = 1000$ kg/m³

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

Communication System: LTE Band2 Frequency: 1880 MHz Duty Cycle: 1:1

Probe: EX3DV4– SN7514 ConvF(7.73, 7.73, 7.73)

Area Scan (71x151x1): Interpolated grid: dx=1.000 mm, dy=1.000 mm

Maximum value of SAR (interpolated) = 0.582 W/kg

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

Reference Value = 3.962 V/m; Power Drift = 0.01 dB

Peak SAR (extrapolated) = 0.623 W/kg

SAR(1 g) = 0.402 W/kg; SAR(10 g) = 0.268 W/kg

Maximum value of SAR (measured) = 0.539 W/kg

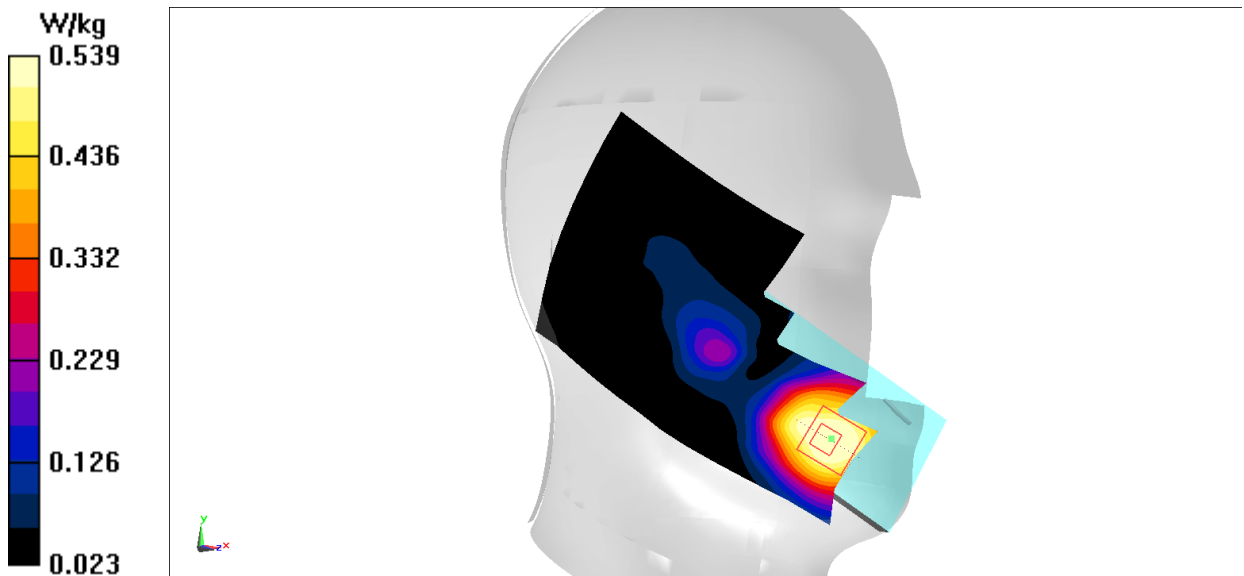


Fig.7 LTE Band2

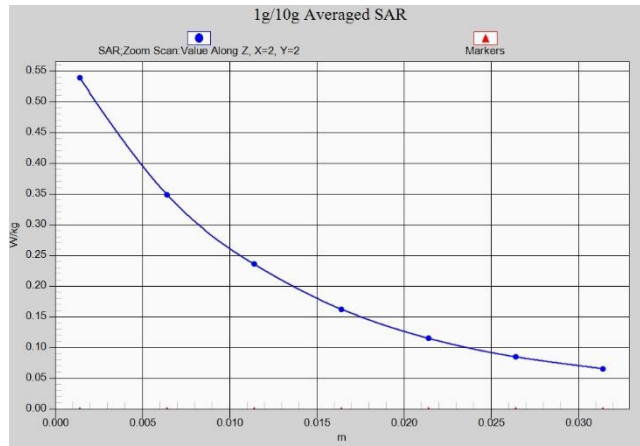


Fig. 7-1 Z-Scan at power reference point (LTE Band2)

LTE Band2 Body Rear Low with QPSK_20M_1RB_Middle

Date: 2019-4-12

Electronics: DAE4 Sn1525

Medium: Body 1900 MHz

Medium parameters used: $f = 1900$ MHz; $\sigma = 1.507$ mho/m; $\epsilon_r = 52.71$; $\rho = 1000$ kg/m³

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

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

Probe: EX3DV4– SN7514 ConvF(7.53, 7.53, 7.53)

Area Scan (91x61x1): 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 = 17.15 V/m; Power Drift = -0.05 dB

Peak SAR (extrapolated) = 1.67 W/kg

SAR(1 g) = 1.03 W/kg; SAR(10 g) = 0.621 W/kg

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

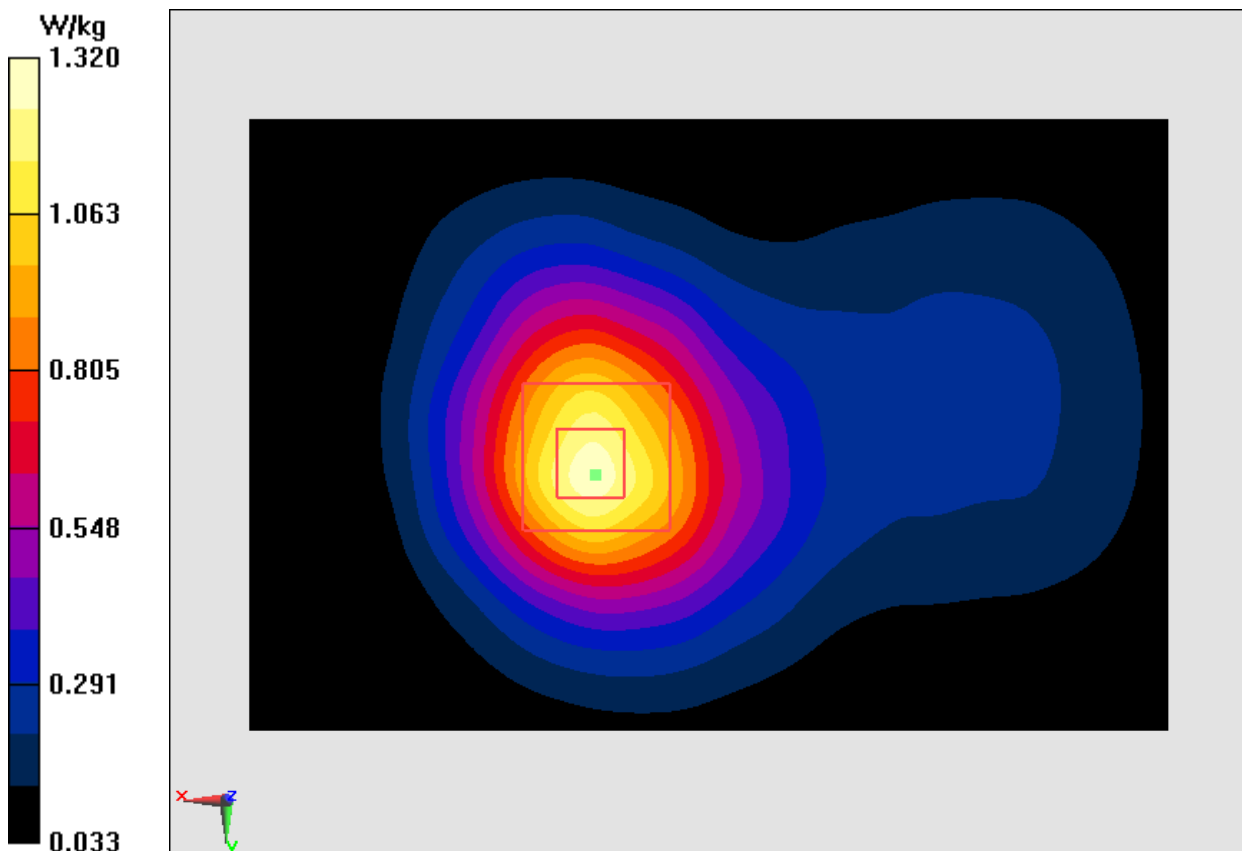


Fig.8 LTE Band2

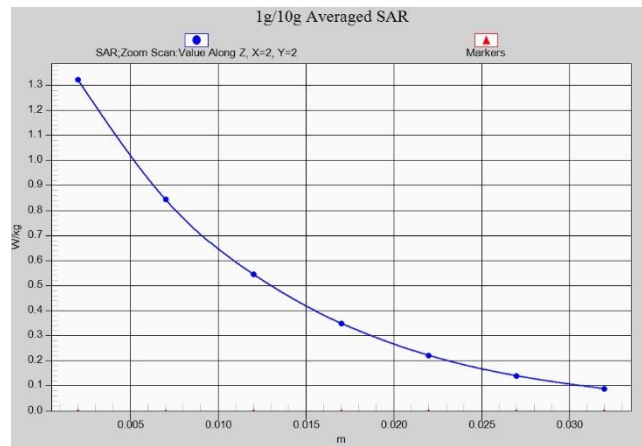


Fig. 8-1 Z-Scan at power reference point (LTE Band2)

LTE1750-FDD4_CH20300 Left Cheek with QPSK_20M_1RB_Middle

Date: 2019-4-11

Electronics: DAE4 Sn1525

Medium: Head 1750 MHz

Medium parameters used: $f = 1745$ MHz; $\sigma = 1.391$ mho/m; $\epsilon_r = 40.565$; $\rho = 1000$ kg/m³

Ambient Temperature: 22.5°C, Liquid Temperature: 22.3°C

Communication System: LTE1750-FDD4 1745 MHz Duty Cycle: 1:1

Probe: EX3DV4 – SN7514 ConvF(8.10, 8.10, 8.10)

Area Scan (71x151x1): Interpolated grid: dx=1.000 mm, dy=1.000 mm

Maximum value of SAR (interpolated) = 0.363 W/kg

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

Reference Value = 3.699 V/m; Power Drift = 0.08 dB

Peak SAR (extrapolated) = 0.420 W/kg

SAR(1 g) = 0.280 W/kg; SAR(10 g) = 0.186 W/kg

Maximum value of SAR (measured) = 0.370 W/kg

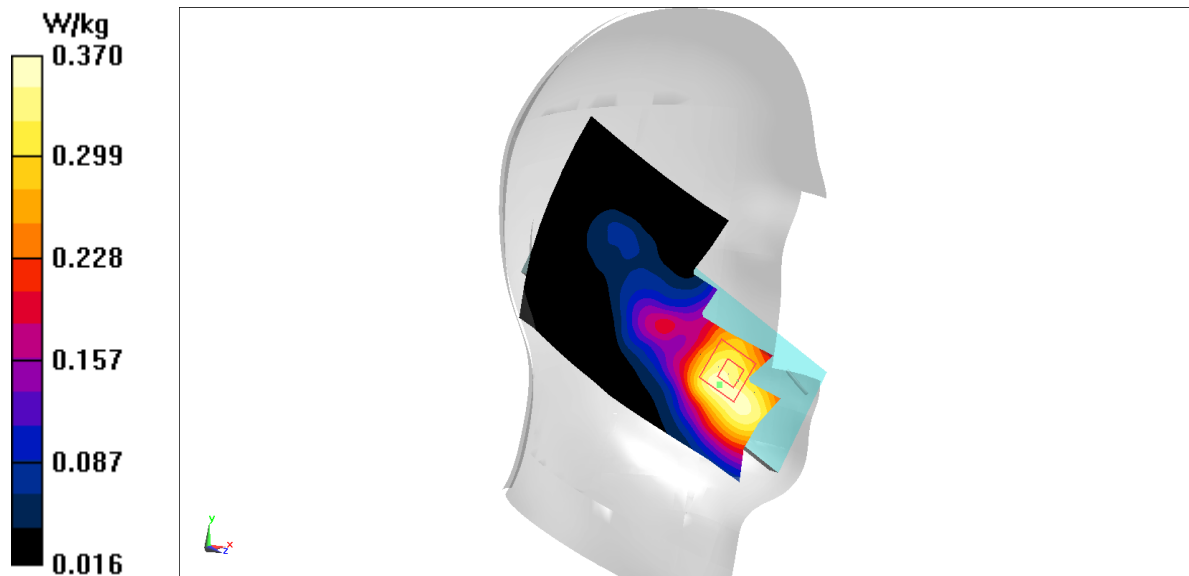


Fig.9 LTE Band4

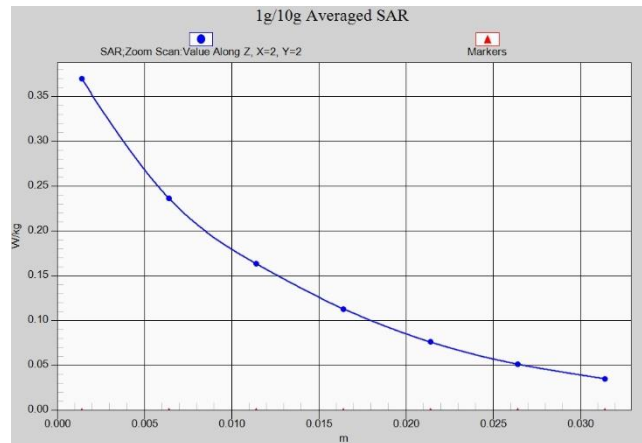


Fig. 9-1 Z-Scan at power reference point (LTE Band4)

LTE1750-FDD4_CH20300 Rear with QPSK_20M_1RB_High

Date: 2019-4-11

Electronics: DAE4 Sn1525

Medium: Body 1750 MHz

Medium parameters used: $f = 1745$ MHz; $\sigma = 1.481$ mho/m; $\epsilon_r = 54.294$; $\rho = 1000$ kg/m³

Ambient Temperature: 22.5°C, Liquid Temperature: 22.3°C

Communication System: LTE1750-FDD4 1745 MHz Duty Cycle: 1:1

Probe: EX3DV4 – SN7514 ConvF(7.82, 7.82, 7.82)

Area Scan (131x71x1): Interpolated grid: dx=1.000 mm, dy=1.000 mm

Maximum value of SAR (interpolated) = 1.42 W/kg

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

Reference Value = 13.77 V/m; Power Drift = -0.03 dB

Peak SAR (extrapolated) = 1.86 W/kg

SAR(1 g) = 1.18 W/kg; SAR(10 g) = 0.715 W/kg

Maximum value of SAR (measured) = 1.27 W/kg

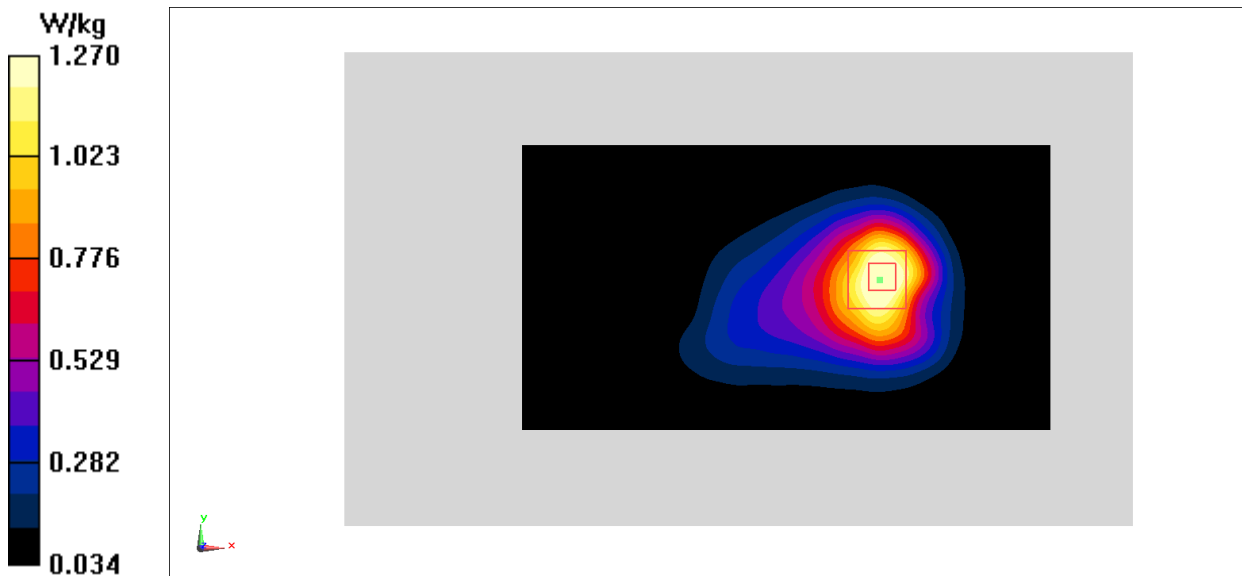


Fig A.10 LTE Band2

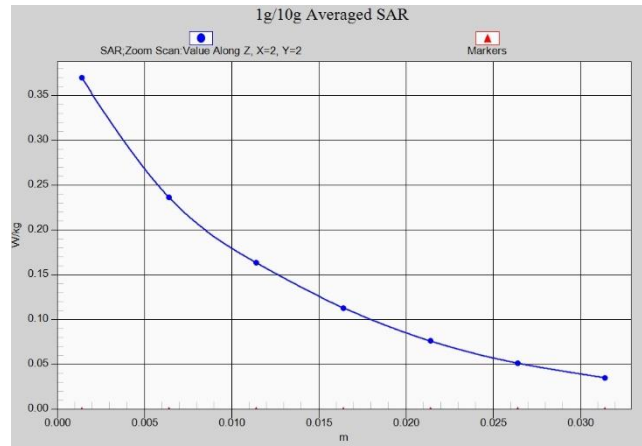


Fig. 10-1 Z-Scan at power reference point (LTE Band4)

LTE Band5 Right Cheek Low with QPSK_10M_1RB_Middle

Date: 2019-4-10

Electronics: DAE4 Sn1525

Medium: Head 835 MHz

Medium parameters used (interpolated): $f = 829$ MHz; $\sigma = 0.885$ mho/m; $\epsilon_r = 40.841$; $\rho = 1000$ 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 - SN7514 ConvF(9.09,9.09,9.09)

Area Scan (71x151x1): Interpolated grid: $dx=1.000$ mm, $dy=1.000$ mm

Maximum value of SAR (interpolated) = 0.851 W/kg

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

Reference Value = 7.808 V/m; Power Drift = 0.16 dB

Peak SAR (extrapolated) = 1.12 W/kg

SAR(1 g) = 0.632 W/kg; SAR(10 g) = 0.393 W/kg

Maximum value of SAR (measured) = 0.934 W/kg

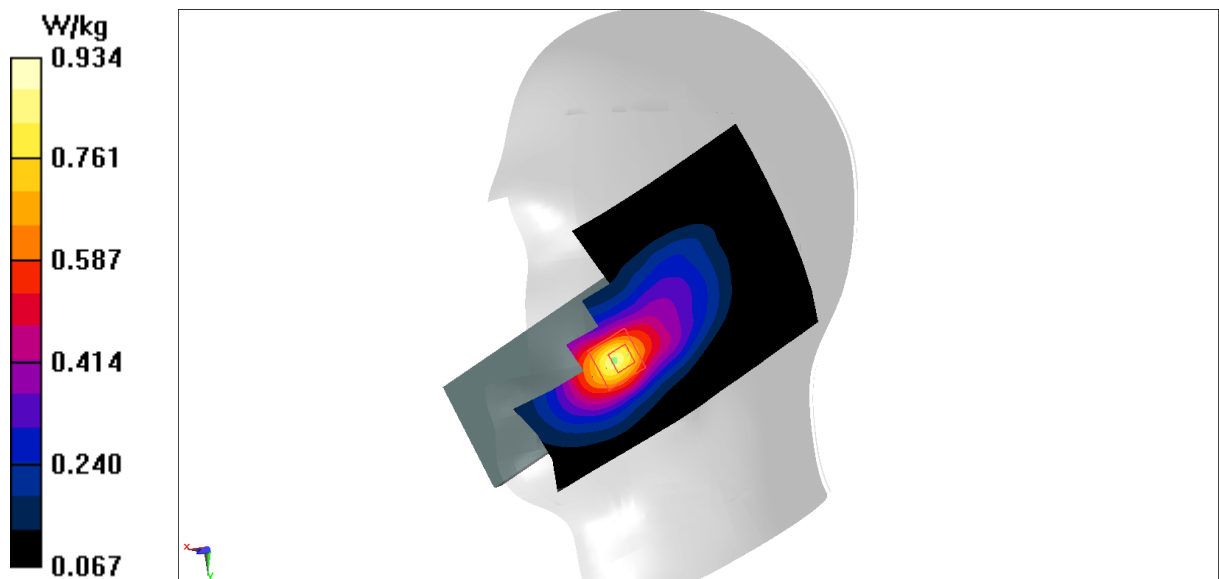


Fig.11 LTE Band5

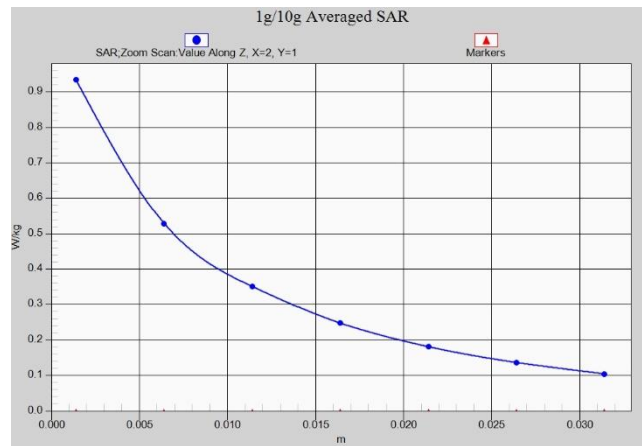


Fig. 11-1 Z-Scan at power reference point (LTE Band5)

LTE Band5 Body Rear Low with QPSK_10M_1RB_Middle

Date: 2019-4-10

Electronics: DAE4 Sn1525

Medium: Body 835 MHz

Medium parameters used (interpolated): $f = 829$ MHz; $\sigma = 1.011$ mho/m; $\epsilon_r = 55.394$; $\rho = 1000$ 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 - SN7514 ConvF(9.47, 9.47, 9.47)

Area Scan (91x61x1): Interpolated grid: dx=1.000 mm, dy=1.000 mm

Maximum value of SAR (interpolated) = 0.575 W/kg

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

Reference Value = 22.45 V/m; Power Drift = -0.07 dB

Peak SAR (extrapolated) = 0.706 W/kg

SAR(1 g) = 0.520 W/kg; SAR(10 g) = 0.376 W/kg

Maximum value of SAR (measured) = 0.625 W/kg

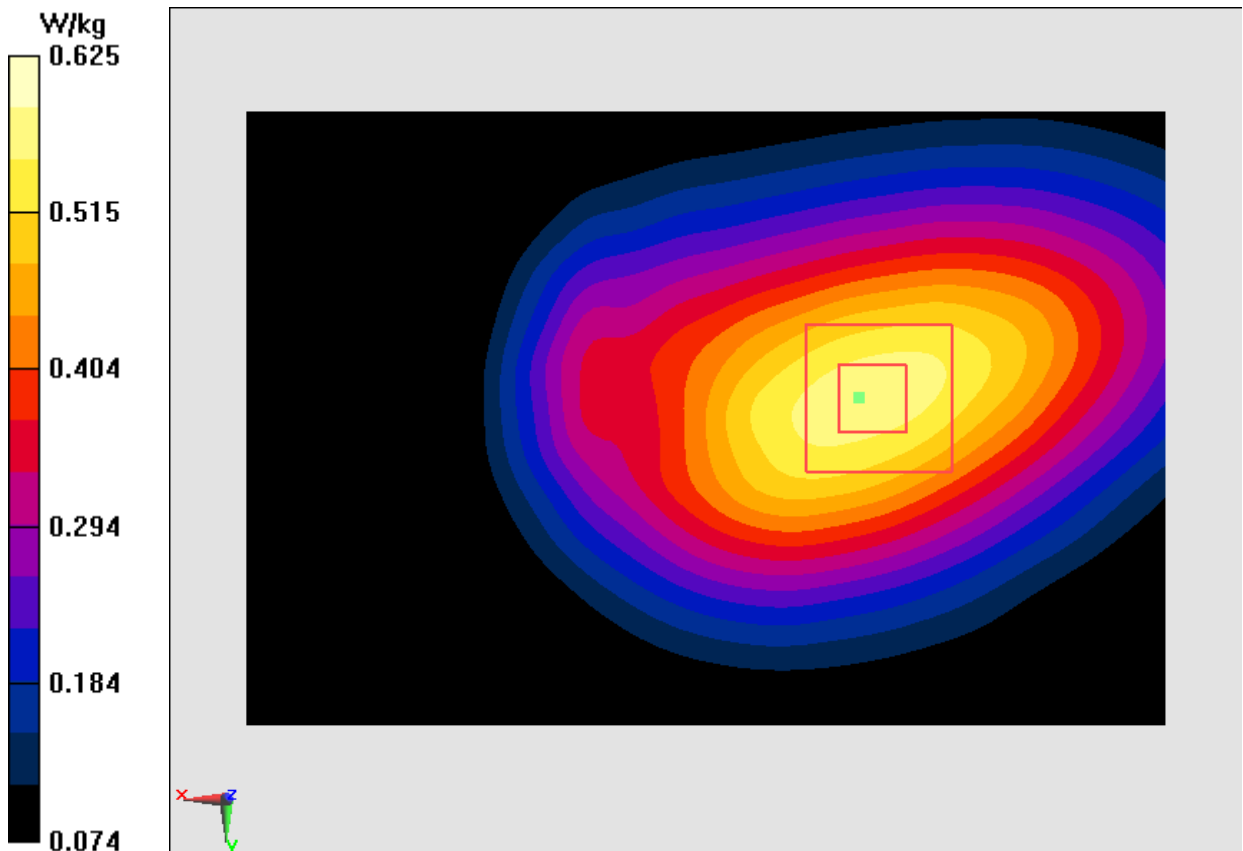


Fig.12 LTE Band5

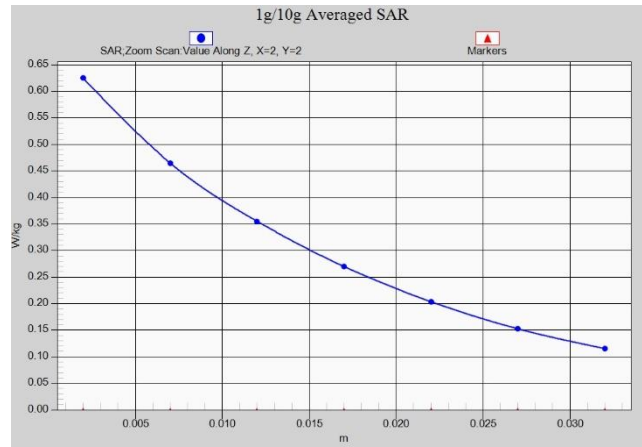


Fig. 12-1 Z-Scan at power reference point (LTE Band5)

LTE Band12 Right Cheek Low with QPSK_10M_1RB_Middle

Date: 2019-4-9

Electronics: DAE4 Sn1525

Medium: Head 750 MHz

Medium parameters used (interpolated): $f = 704$ MHz; $\sigma = 0.856$ mho/m; $\epsilon_r = 42.34$; $\rho = 1000$ kg/m³

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

Communication System: LTE Band12 Frequency: 704 MHz Duty Cycle: 1:1

Probe: EX3DV4– SN7514 ConvF(9.47, 9.47, 9.47)

Area Scan (71x151x1): Interpolated grid: $dx=1.000$ mm, $dy=1.000$ mm

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

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

Reference Value = 6.052 V/m; Power Drift = 0.02 dB

Peak SAR (extrapolated) = 0.771 W/kg

SAR(1 g) = 0.384 W/kg; SAR(10 g) = 0.240 W/kg

Maximum value of SAR (measured) = 0.567 W/kg

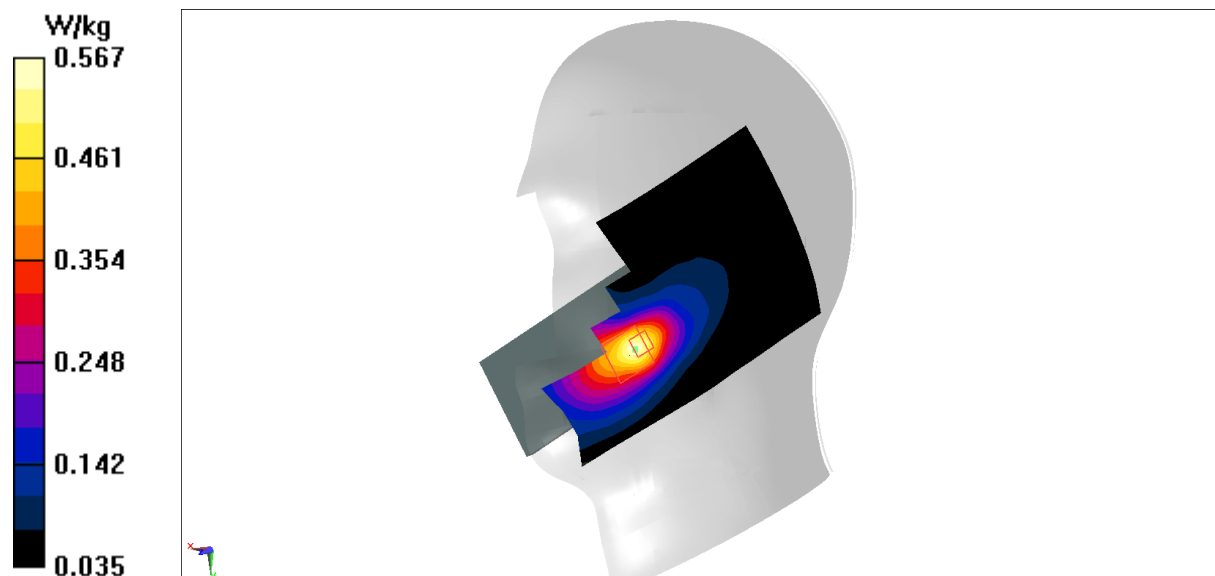


Fig.13 LTE Band12

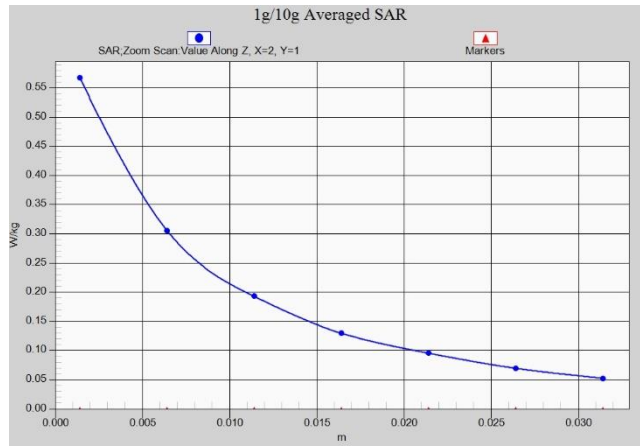


Fig. 13-1 Z-Scan at power reference point (LTE Band12)

LTE Band12 Body Rear Low with QPSK_10M_1RB_Middle

Date: 2019-4-9

Electronics: DAE4 Sn1525

Medium: Body750 MHz

Medium parameters used (interpolated): $f = 704$ MHz; $\sigma = 0.931$ mho/m; $\epsilon_r = 56.51$; $\rho = 1000$ kg/m³

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

Communication System: LTE Band12 Frequency: 704 MHz Duty Cycle: 1:1

Probe: EX3DV4- SN7514 ConvF(9.68, 9.68,9.68)

Area Scan (91x61x1): Interpolated grid: dx=1.000 mm, dy=1.000 mm

Maximum value of SAR (interpolated) = 0.370 W/kg

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

Reference Value = 19.64 V/m; Power Drift = 0.02 dB

Peak SAR (extrapolated) = 0.480 W/kg

SAR(1 g) = 0.349 W/kg; SAR(10 g) = 0.251 W/kg

Maximum value of SAR (measured) = 0.423 W/kg

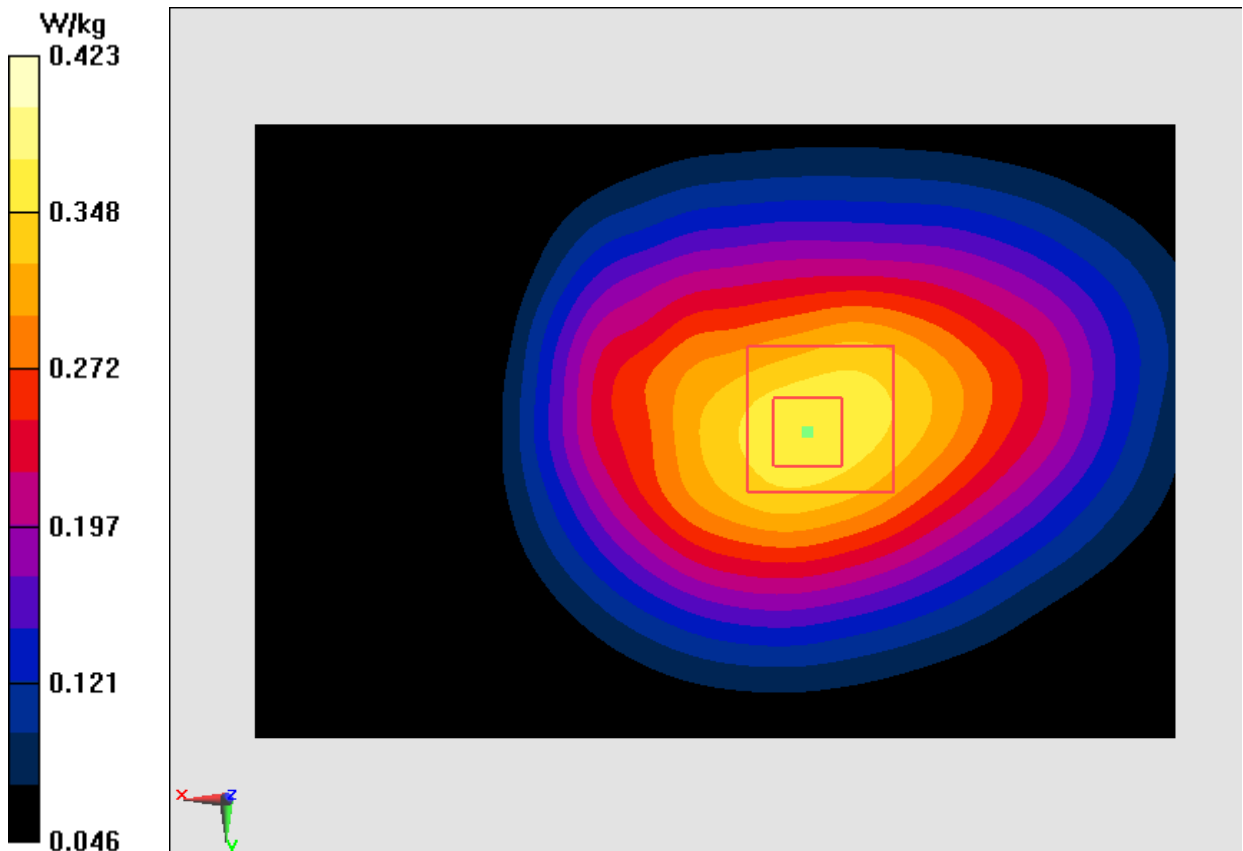


Fig.14 LTE Band12

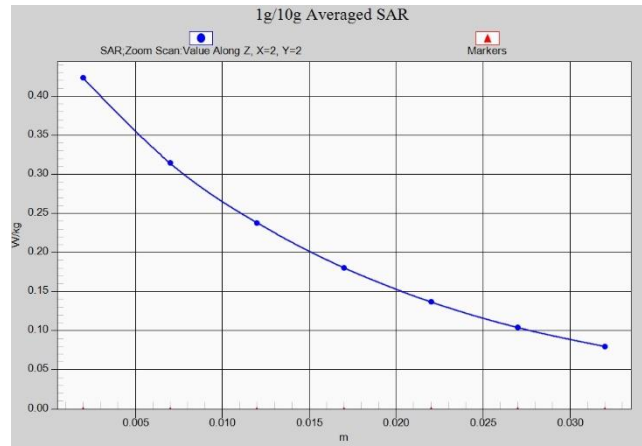


Fig. 14-1 Z-Scan at power reference point (LTE Band12)

LTE Band14 Right Cheek Middle with QPSK_10M_1RB_Middle

Date: 2019-4-9

Electronics: DAE4 Sn1525

Medium: Head 750 MHz

Medium parameters used (interpolated): $f = 793$ MHz; $\sigma = 0.92$ mho/m; $\epsilon_r = 41.986$; $\rho = 1000$ kg/m³

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

Communication System: LTE Band13 Frequency: 793 MHz Duty Cycle: 1:1

Probe: EX3DV4– SN7514 ConvF(9.47, 9.47, 9.47)

Area Scan (71x151x1): Interpolated grid: dx=1.000 mm, dy=1.000 mm

Maximum value of SAR (interpolated) = 0.667 W/kg

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

Reference Value = 6.758 V/m; Power Drift = -0.18 dB

Peak SAR (extrapolated) = 0.875 W/kg

SAR(1 g) = 0.538 W/kg; SAR(10 g) = 0.349 W/kg

Maximum value of SAR (measured) = 0.733 W/kg

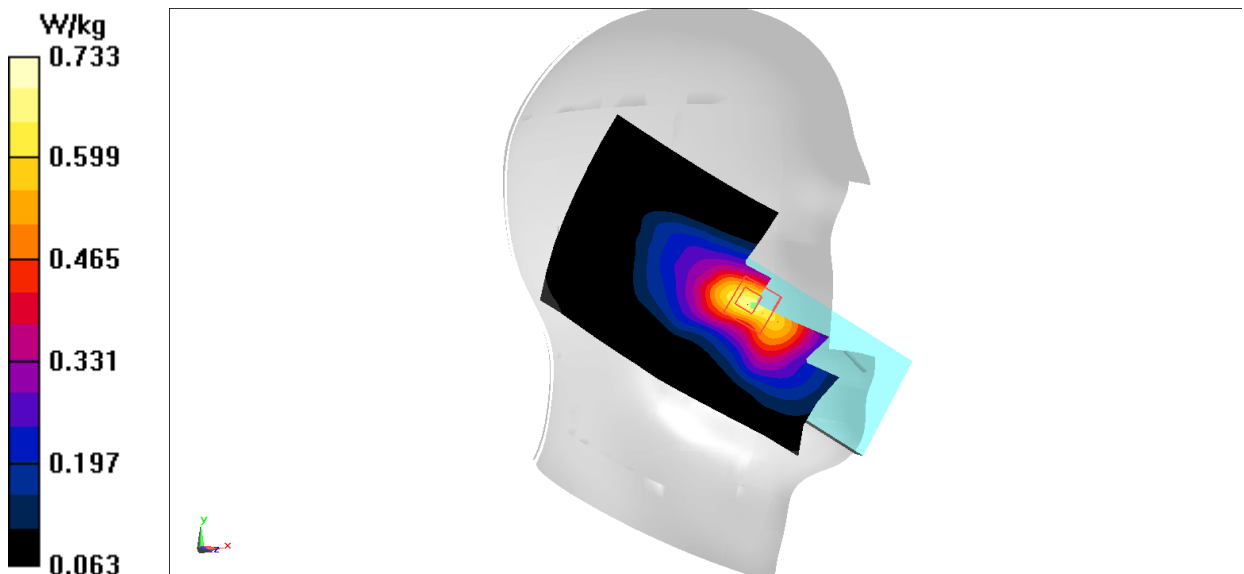


Fig.15 LTE Band14

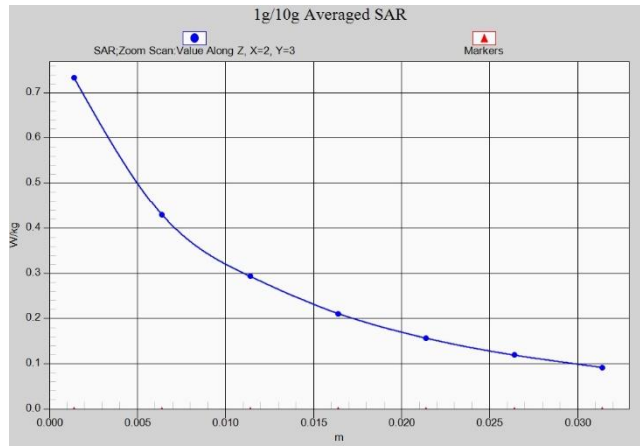


Fig. 15-1 Z-Scan at power reference point (LTE Band14)

LTE Band14 Body Rear Middle with QPSK_10M_1RB_Middle

Date: 2019-4-9

Electronics: DAE4 Sn1525

Medium: Body 750 MHz

Medium parameters used (interpolated): $f = 793$ MHz; $\sigma = 0.97$ mho/m; $\epsilon_r = 56.246$; $\rho = 1000$ kg/m³

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

Communication System: LTE Band13 Frequency: 793 MHz Duty Cycle: 1:1

Probe: EX3DV4- SN7514 ConvF(9.68, 9.68, 9.68)

Area Scan (91x61x1): Interpolated grid: dx=1.000 mm, dy=1.000 mm

Maximum value of SAR (interpolated) = 0.578 W/kg

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

Reference Value = 18.73 V/m; Power Drift = 0.13 dB

Peak SAR (extrapolated) = 0.722 W/kg

SAR(1 g) = 0.533 W/kg; SAR(10 g) = 0.381 W/kg

Maximum value of SAR (measured) = 0.632 W/kg

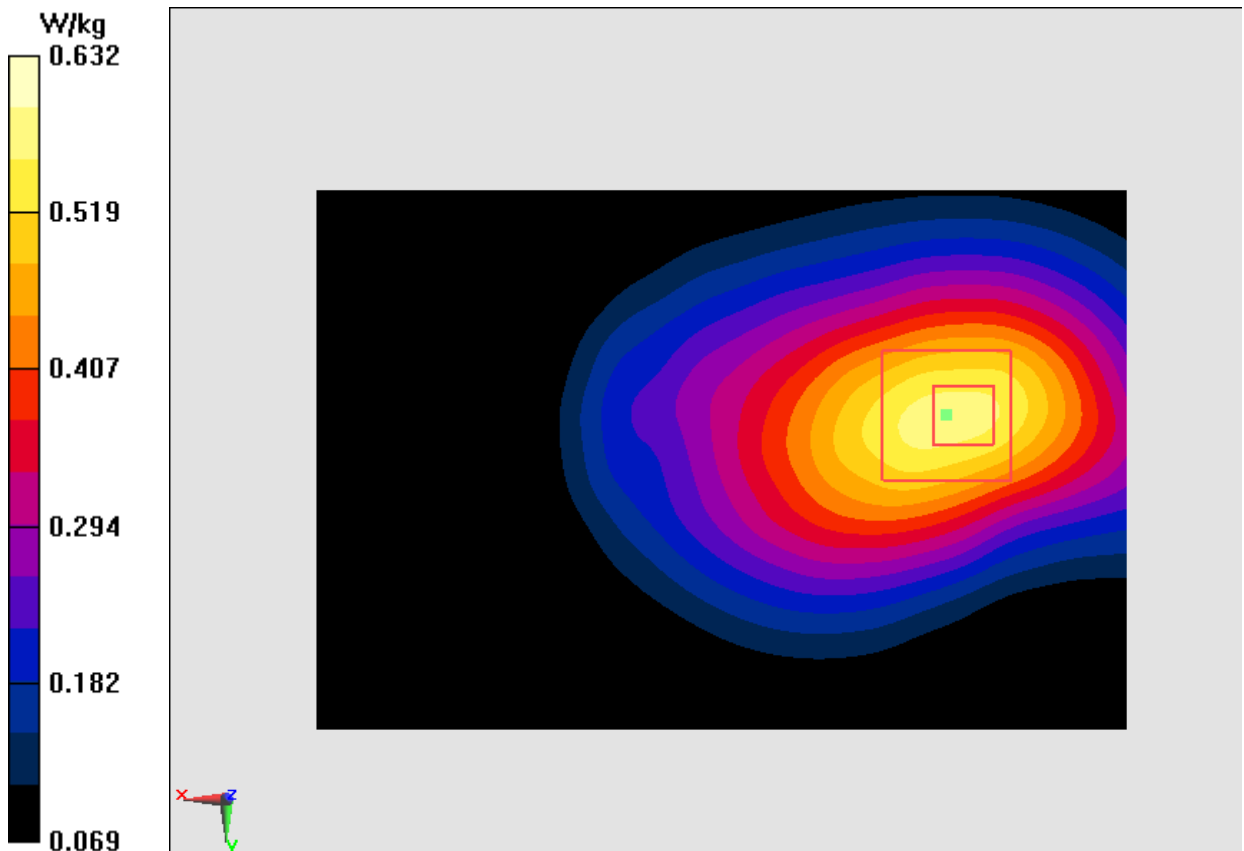


Fig.16 LTE Band14

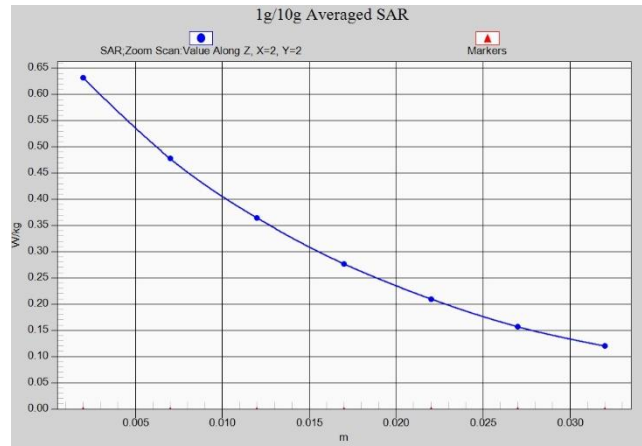


Fig. 16-1 Z-Scan at power reference point (LTE Band14)

Wifi 802.11b Left Cheek Channel 11

Date: 2019-4-13

Electronics: DAE4 Sn1525

Medium: Head 2450 MHz

Medium parameters used (interpolated): $f = 2412$ MHz; $\sigma = 1.787$ mho/m; $\epsilon_r = 39.75$; $\rho = 1000$ kg/m³

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

Communication System: WLAN 2450 Frequency: 2412 MHz Duty Cycle: 1:1

Probe: EX3DV4- SN7514 ConvF(6.95, 6.95,6.95)

Area Scan (91x181x1): Interpolated grid: $dx=1.000$ mm, $dy=1.000$ mm

Maximum value of SAR (interpolated) = 0.422 W/kg

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

Reference Value = 1.847 V/m; Power Drift = 0.09 dB

Peak SAR (extrapolated) = 0.455 W/kg

SAR(1 g) = 0.259 W/kg; SAR(10 g) = 0.139 W/kg

Maximum value of SAR (measured) = 0.378 W/kg

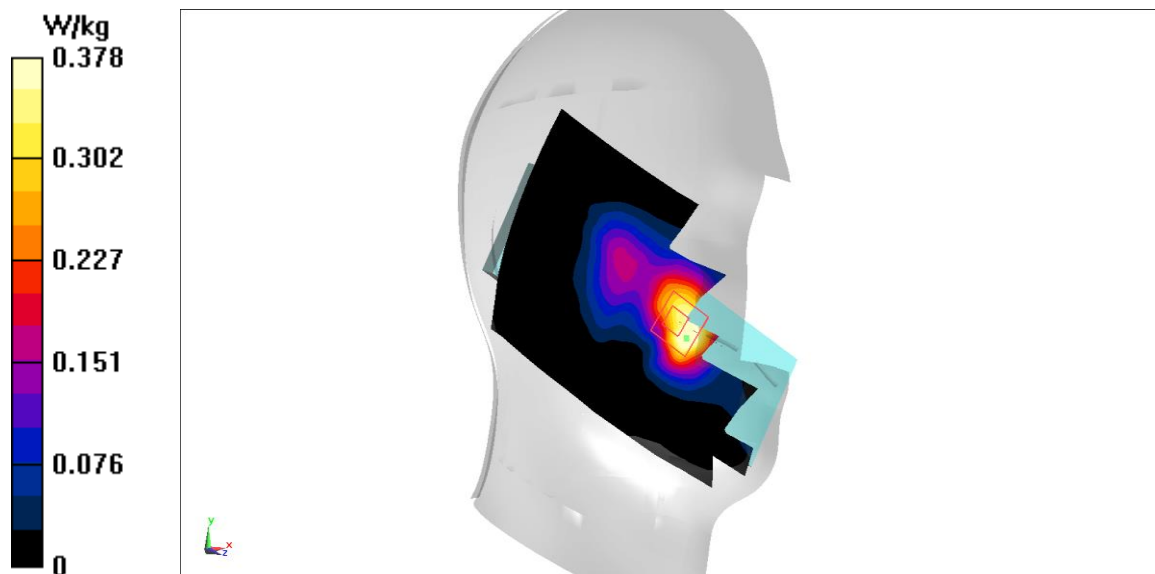


Fig.17 2450 MHz

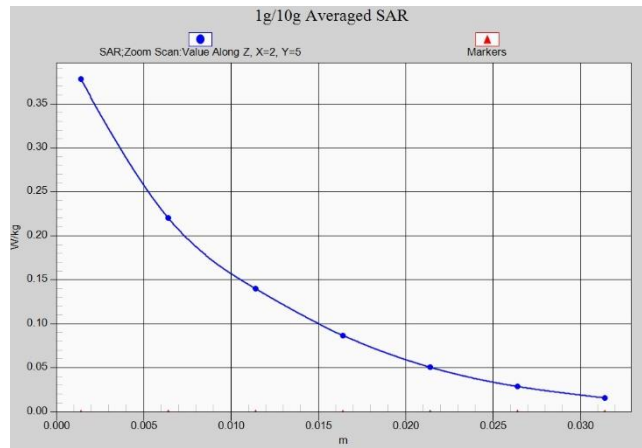


Fig. 17-1 Z-Scan at power reference point (2450 MHz)

Wifi 802.11b Body Rear Channel 1

Date: 2019-4-13

Electronics: DAE4 Sn1525

Medium: Body 2450 MHz

Medium parameters used (interpolated): $f = 2412$ MHz; $\sigma = 1.937$ mho/m; $\epsilon_r = 51.87$; $\rho = 1000$ kg/m³

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

Communication System: WLAN 2450 Frequency: 2412 MHz Duty Cycle: 1:1

Probe: EX3DV4 – SN7514 ConvF(7.13, 7.13, 7.13)

Area Scan (121x81x1): Interpolated grid: $dx=1.000$ mm, $dy=1.000$ mm

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

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

Reference Value = 5.498 V/m; Power Drift = 0.02 dB

Peak SAR (extrapolated) = 0.328 W/kg

SAR(1 g) = 0.181 W/kg; SAR(10 g) = 0.104 W/kg

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

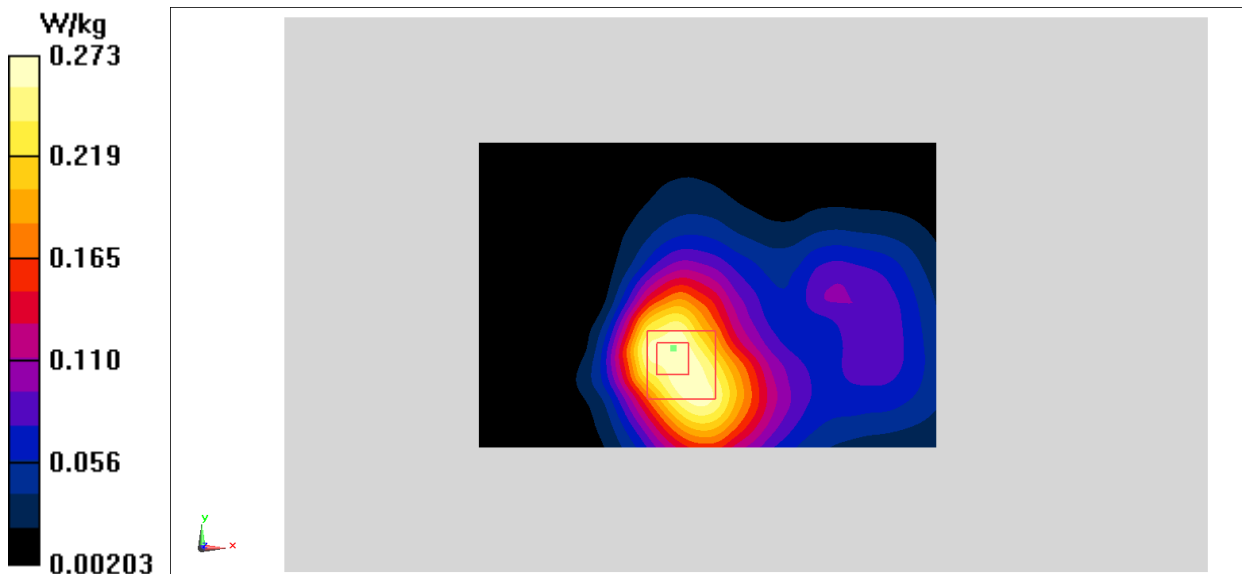


Fig.18 2450 MHz