

## WCDMA 850 Right Cheek Low

Date/Time: 2016-11-8

Electronics: DAE4 Sn786

Medium: Head 850 MHz

Medium parameters used (interpolated):  $f = 826.4$  MHz;  $\sigma = 0.898$  S/m;  $\epsilon_r = 41.053$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Ambient Temperature: 22.0°C      Liquid Temperature: 21.5°C

Communication System: WCDMA Frequency: 826.4 MHz Duty Cycle: 1:1

Probe: EX3DV4 - SN3633 ConvF(9.15, 9.15, 9.15);

**Right Cheek Low/Area Scan (61x111x1):** Interpolated grid:  $dx=1.500$  mm,  $dy=1.500$  mm

Maximum value of SAR (interpolated) = 0.0662 W/kg

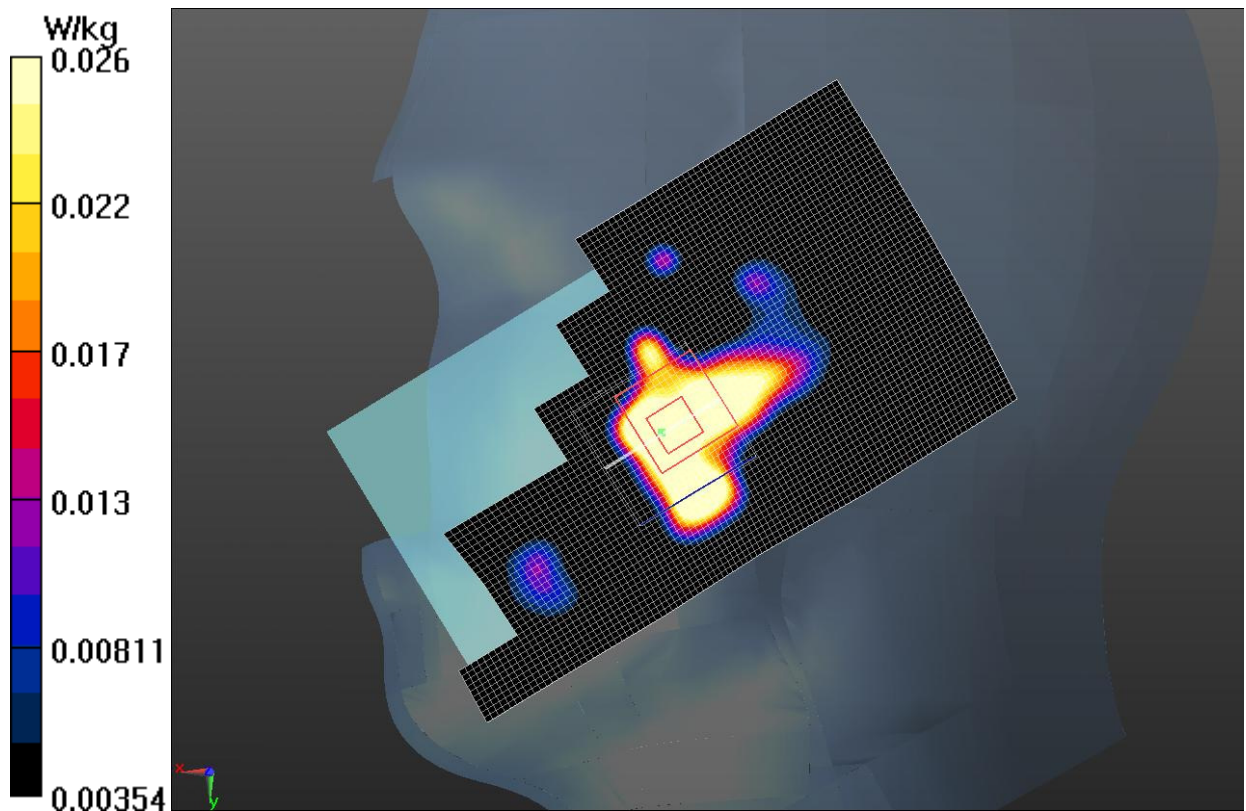
**Right Cheek Low/Zoom Scan (5x5x7)/Cube 0:** Measurement grid:  $dx=8$ mm,  $dy=8$ mm,  $dz=5$ mm

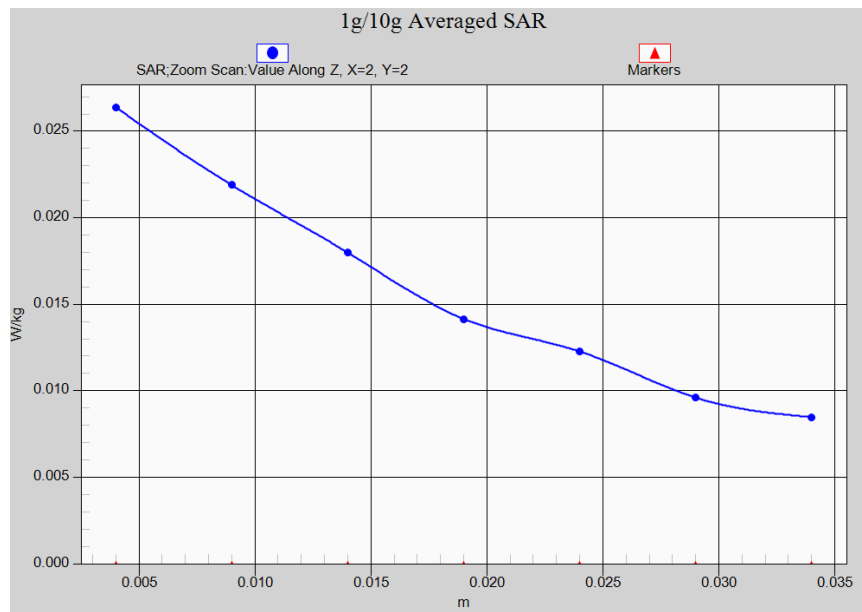
Reference Value = 0 V/m; Power Drift = 0.17 dB

Peak SAR (extrapolated) = 0.0450 W/kg

**SAR(1 g) = 0.024 W/kg; SAR(10 g) = 0.018 W/kg**

Maximum value of SAR (measured) = 0.0264 W/kg





**Fig.J-5:Z-Scan at power reference point (WCDMA 850 CH4132)**

## WCDMA 850 Body Rear Low

Date/Time: 2016-11-8

Electronics: DAE4 Sn786

Medium: Body 835 MHz

Medium parameters used (interpolated):  $f = 826.4$  MHz;  $\sigma = 0.953$  S/m;  $\epsilon_r = 53.733$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Ambient Temperature: 22.0°C Liquid Temperature: 21.5°C

Communication System: WCDMA Frequency: 826.4 MHz Duty Cycle: 1:1

Probe: EX3DV4 - SN3633 ConvF(9.14, 9.14, 9.14);

**Rear side Low/Area Scan (61x111x1):** Interpolated grid:  $dx=1.500$  mm,  $dy=1.500$  mm

Maximum value of SAR (interpolated) = 0.0596 W/kg

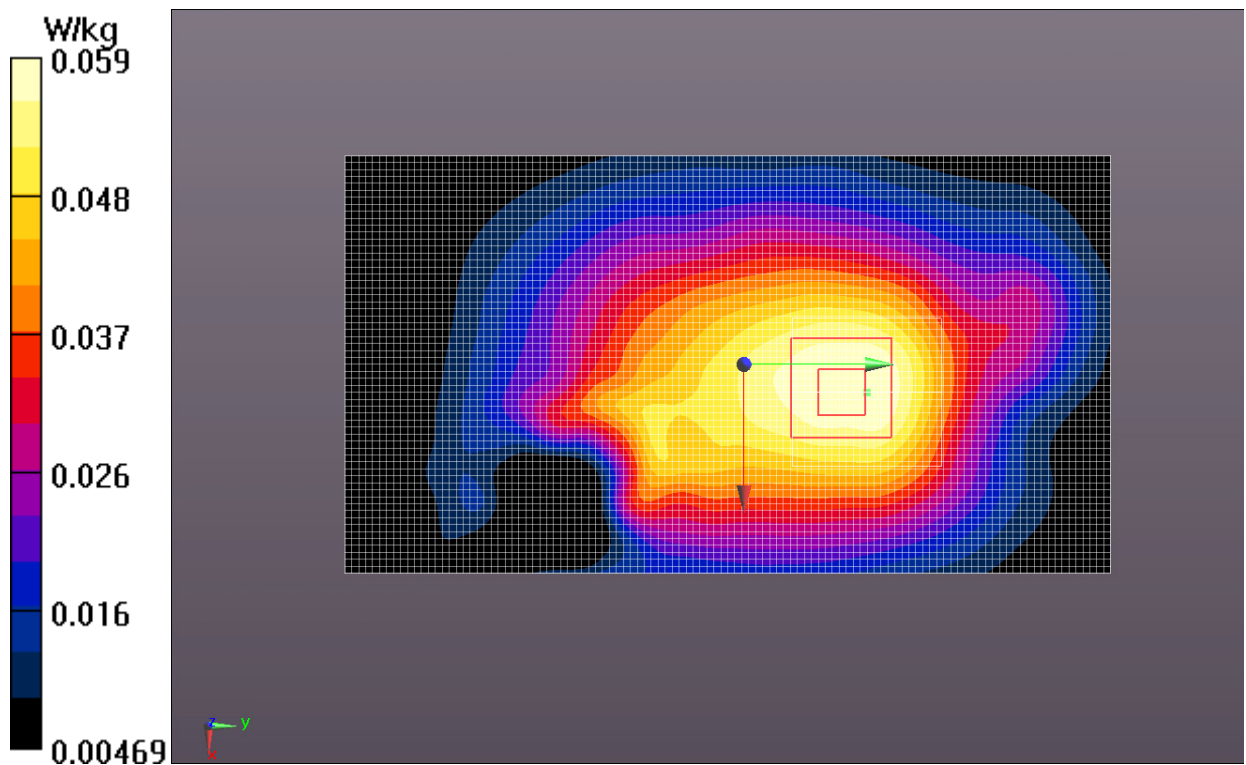
**Rear side Low/Zoom Scan (5x5x7)/Cube 0:** Measurement grid:  $dx=8$ mm,  $dy=8$ mm,  $dz=5$ mm

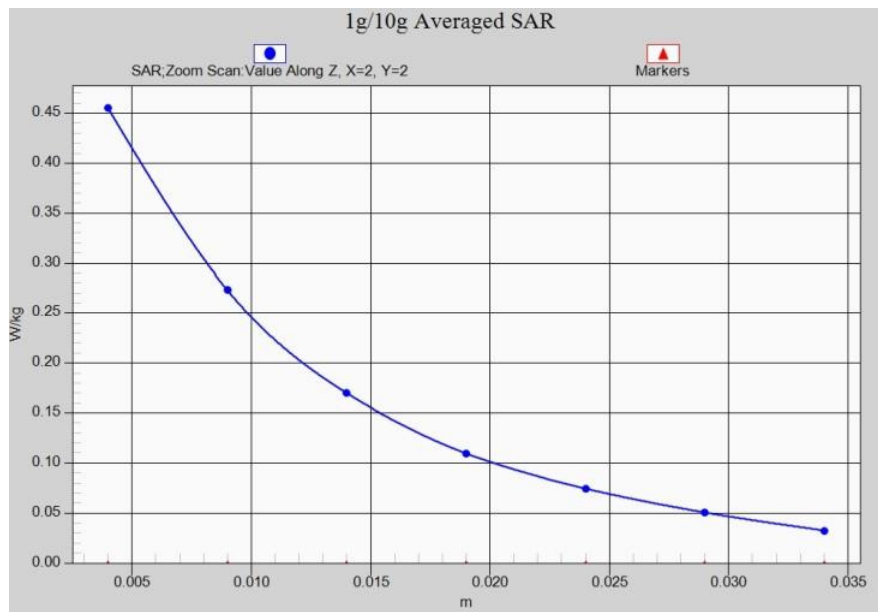
Reference Value = 11.988 V/m; Power Drift = 0.06 dB

Peak SAR (extrapolated) = 0.0720 W/kg

**SAR(1 g) = 0.056 W/kg; SAR(10 g) = 0.043 W/kg**

Maximum value of SAR (measured) = 0.0589 W/kg





**Fig.J-6:Z-Scan at power reference point (WCDMA850 CH4132)**

## WCDMA 1900 Left Cheek High

Date/Time: 2016-11-7

Electronics: DAE4 Sn786

Medium: Head 1900 MHz

Medium parameters used:  $f = 1908$  MHz;  $\sigma = 1.438$  S/m;  $\epsilon_r = 38.526$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Ambient Temperature: 22.0°C      Liquid Temperature: 21.5°C

Communication System: WCDMA Frequency: 1908 MHz Duty Cycle: 1:1

Probe: EX3DV4 - SN3633 ConvF(7.49, 7.49, 7.49);

**Left Cheek High/Area Scan (61x111x1):** Interpolated grid:  $dx=1.500$  mm,  $dy=1.500$  mm

Maximum value of SAR (interpolated) = 0.306 W/kg

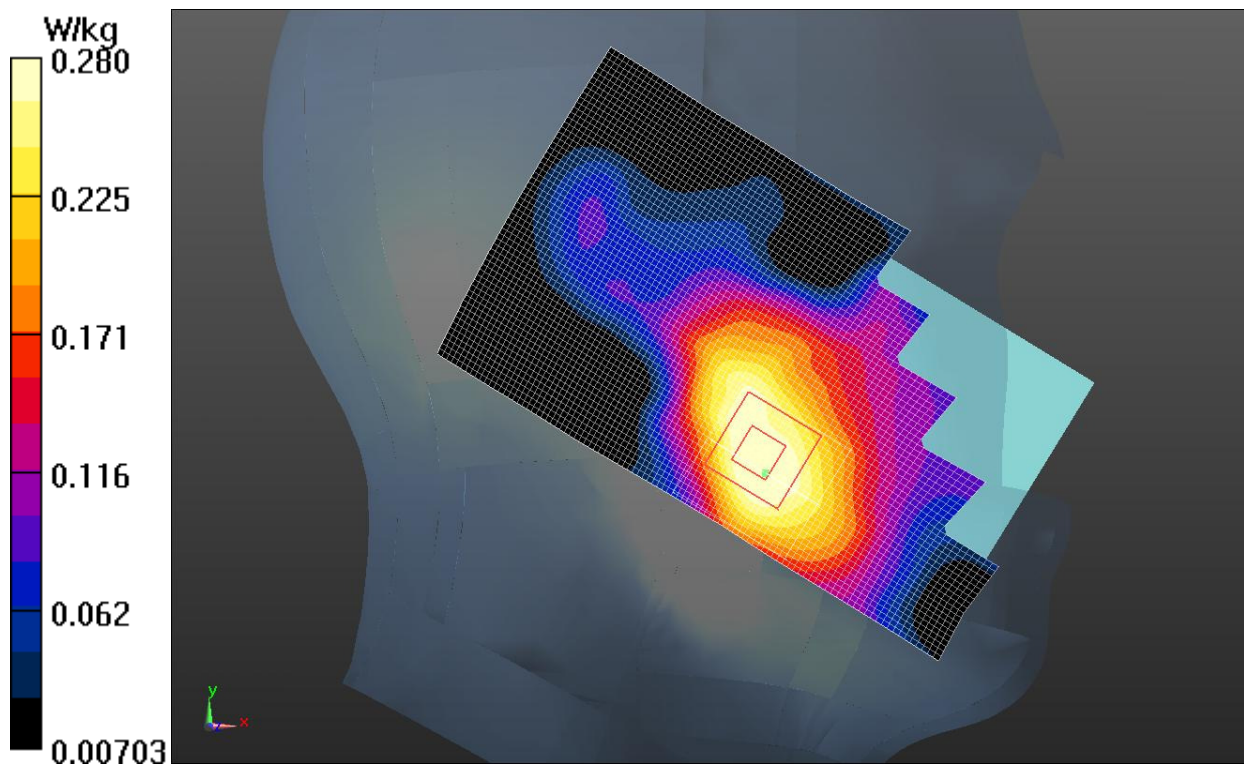
**Left Cheek High/Zoom Scan (5x5x7)/Cube 0:** Measurement grid:  $dx=8$ mm,  $dy=8$ mm,  $dz=5$ mm

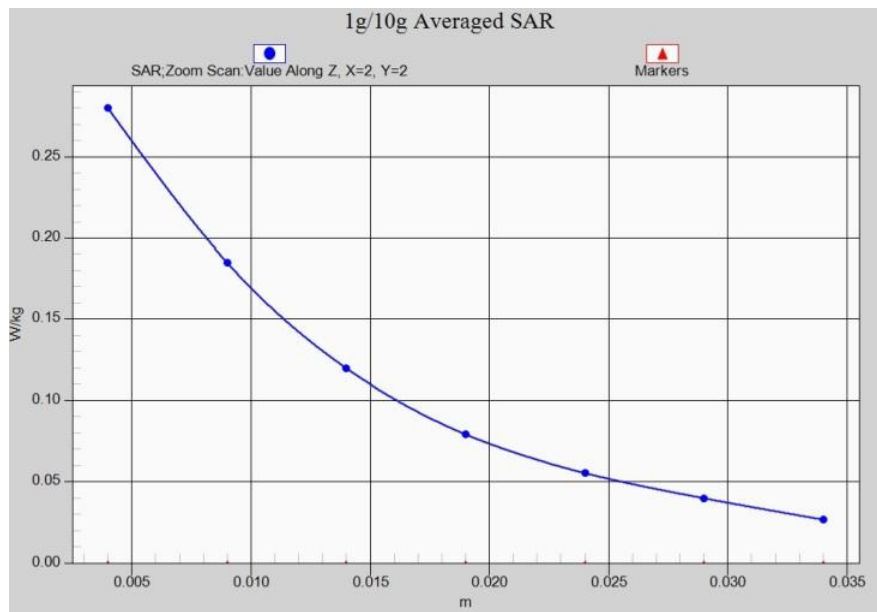
Reference Value = 6.046 V/m; Power Drift = -0.09 dB

Peak SAR (extrapolated) = 0.464 W/kg

**SAR(1 g) = 0.269 W/kg; SAR(10 g) = 0.171 W/kg**

Maximum value of SAR (measured) = 0.280 W/kg





**Fig.J-7:Z-Scan at power reference point (WCDMA1900 CH9538)**

## WCDMA 1900 Body Bottom High

Date/Time: 2016-11-7

Electronics: DAE4 Sn786

Medium: Body 1900MHz

Medium parameters used:  $f = 1908$  MHz;  $\sigma = 1.568$  S/m;  $\epsilon_r = 52.223$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Ambient Temperature: 22.0°C      Liquid Temperature: 21.5°C

Communication System: WCDMA Frequency: 1908 MHz Duty Cycle: 1:1

Probe: EX3DV4 - SN3633 ConvF(7.24, 7.24, 7.24);

**Bottom side High/Area Scan (41x61x1):** Interpolated grid: dx=1.500 mm, dy=1.500 mm

Maximum value of SAR (interpolated) = 0.723 W/kg

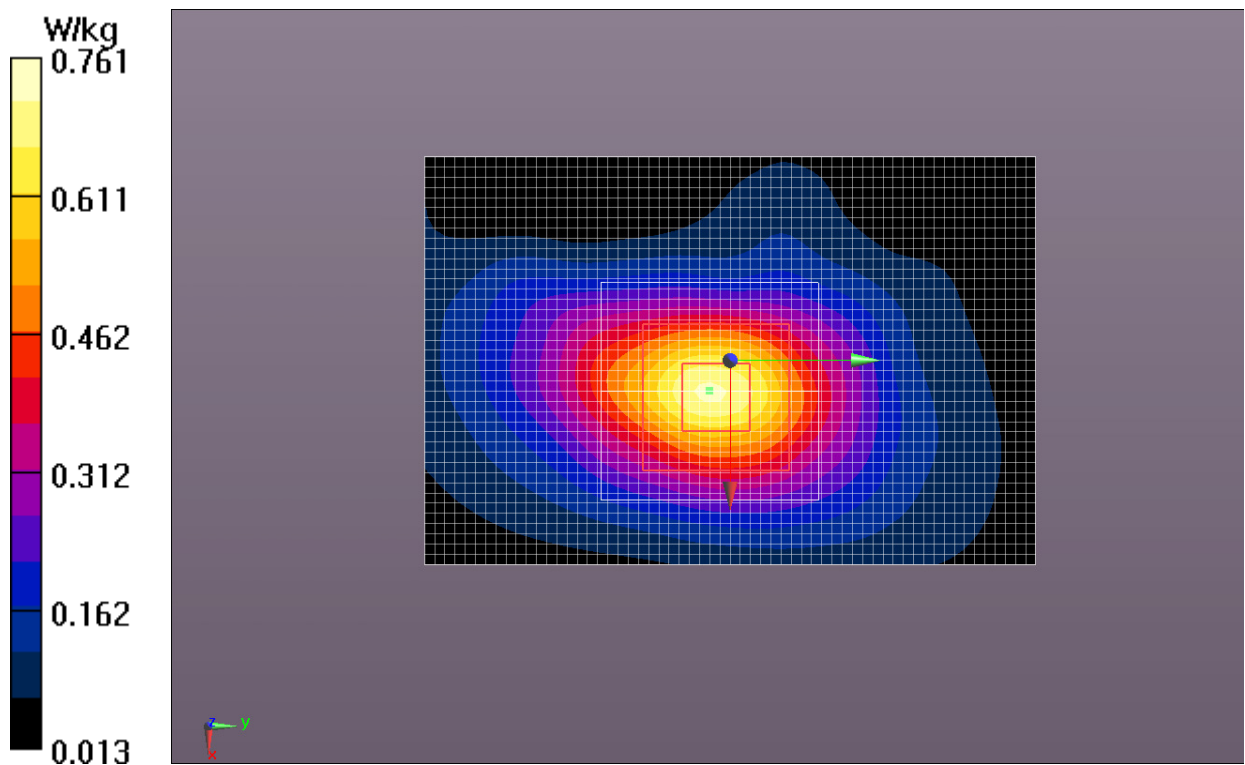
**Bottom side High/Zoom Scan (5x5x7)/Cube 0:** Measurement grid: dx=8mm, dy=8mm, dz=5mm

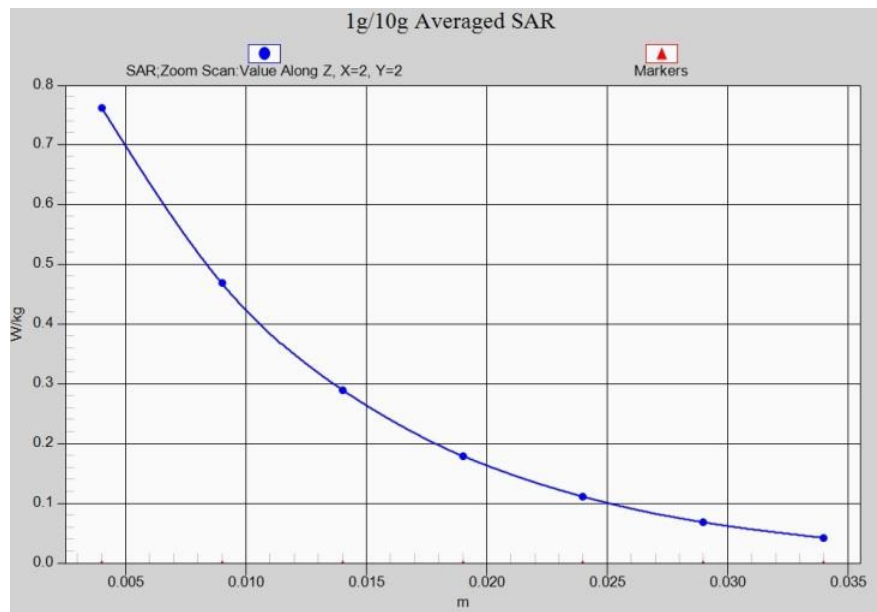
Reference Value = 20.598 V/m; Power Drift = -0.14dB

Peak SAR (extrapolated) = 1.12 W/kg

**SAR(1 g) = 0.672 W/kg; SAR(10 g) = 0.359 W/kg**

Maximum value of SAR (measured) = 0.761 W/kg





**Fig.J-8:Z-Scan at power reference point (WCDMA1900 CH9538)**

## WCDMA 1700 Left Cheek High

Date/Time: 2016-11-6

Electronics: DAE4 Sn786

Medium: Head 1800 MHz

Medium parameters used (interpolated):  $f = 1752.6$  MHz;  $\sigma = 1.326$  S/m;  $\epsilon_r = 39.133$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Ambient Temperature: 22.0°C      Liquid Temperature: 21.5°C

Communication System: WCDMA Frequency: 1752.6 MHz Duty Cycle: 1:1

Probe: EX3DV4 - SN3633 ConvF(7.95, 7.95, 7.95);

**Left Cheek High/Area Scan (61x111x1):** Interpolated grid:  $dx=1.500$  mm,  $dy=1.500$  mm

Maximum value of SAR (interpolated) = 0.419 W/kg

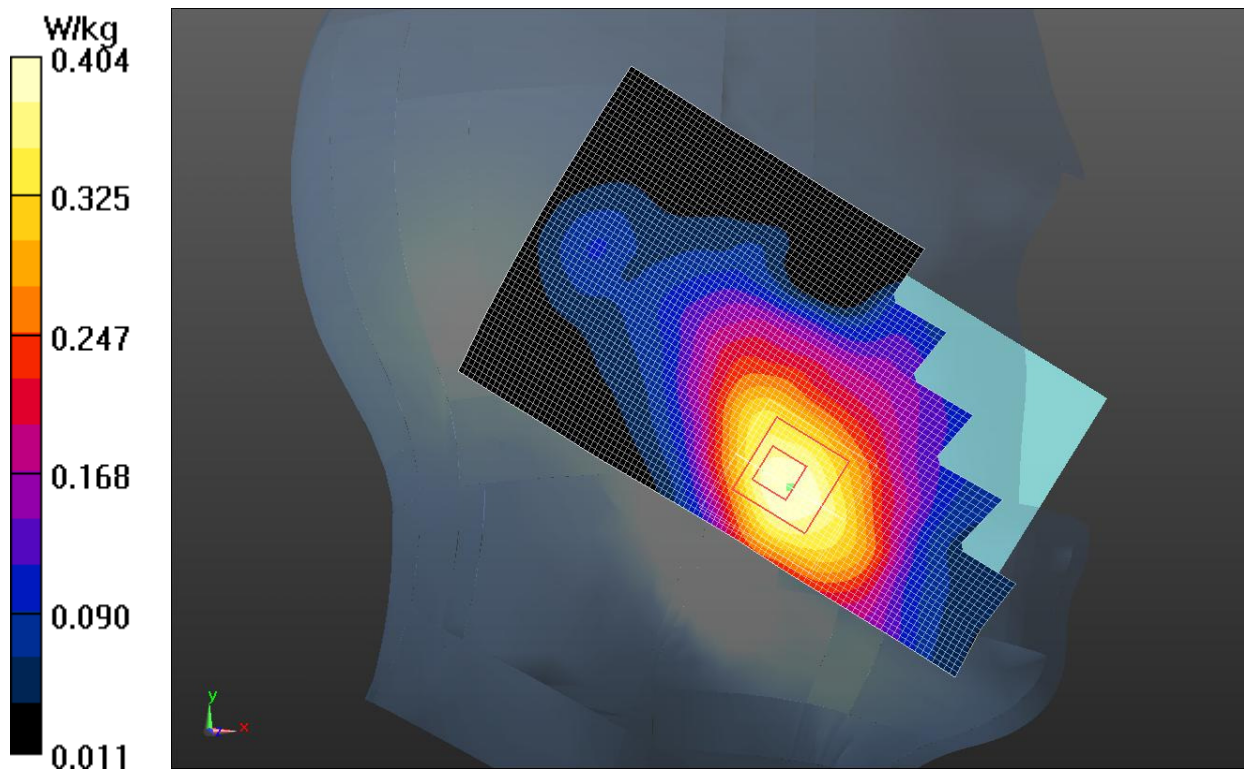
**Left Cheek High/Zoom Scan (5x5x7)/Cube 0:** Measurement grid:  $dx=8$ mm,  $dy=8$ mm,  $dz=5$ mm

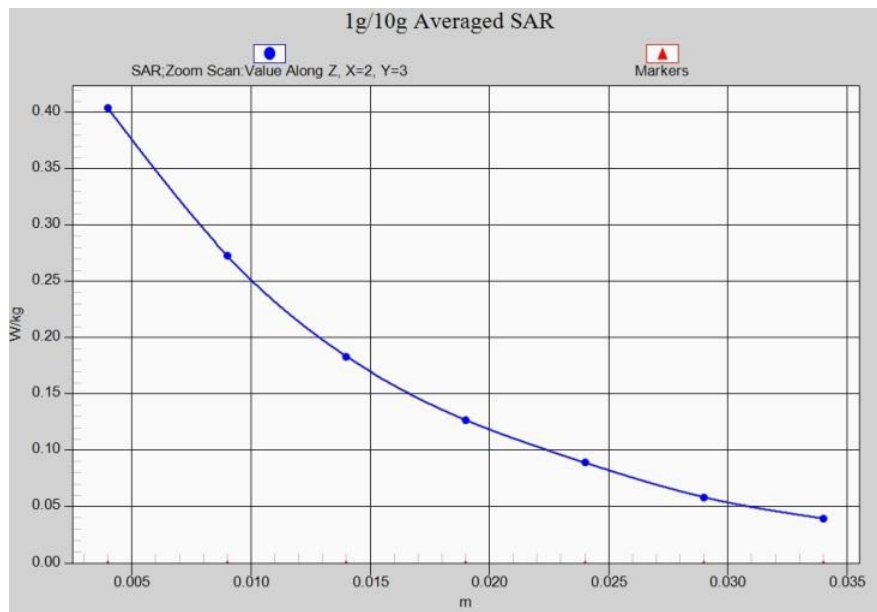
Reference Value = 7.267 V/m; Power Drift = 0.04 dB

Peak SAR (extrapolated) = 0.549 W/kg

**SAR(1 g) = 0.378 W/kg; SAR(10 g) = 0.249 W/kg**

Maximum value of SAR (measured) = 0.404 W/kg





**Fig.J-9:Z-Scan at power reference point (WCDMA1700CH1738)**

## WCDMA 1700 Body Bottom High

Date/Time: 2016-11-6

Electronics: DAE4 Sn786

Medium: Body 1800 MHz

Medium parameters used (interpolated):  $f = 1752.6$  MHz;  $\sigma = 1.448$  S/m;  $\epsilon_r = 52.585$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Ambient Temperature: 22.0°C      Liquid Temperature: 21.5°C

Communication System: WCDMA Frequency: 1752.6 MHz Duty Cycle: 1:1

Probe: EX3DV4 - SN3633 ConvF(7.63, 7.63, 7.63);

**Bottom side High /Area Scan (41x61x1):** Interpolated grid: dx=1.500 mm, dy=1.500 mm

Maximum value of SAR (interpolated) = 0.720 W/kg

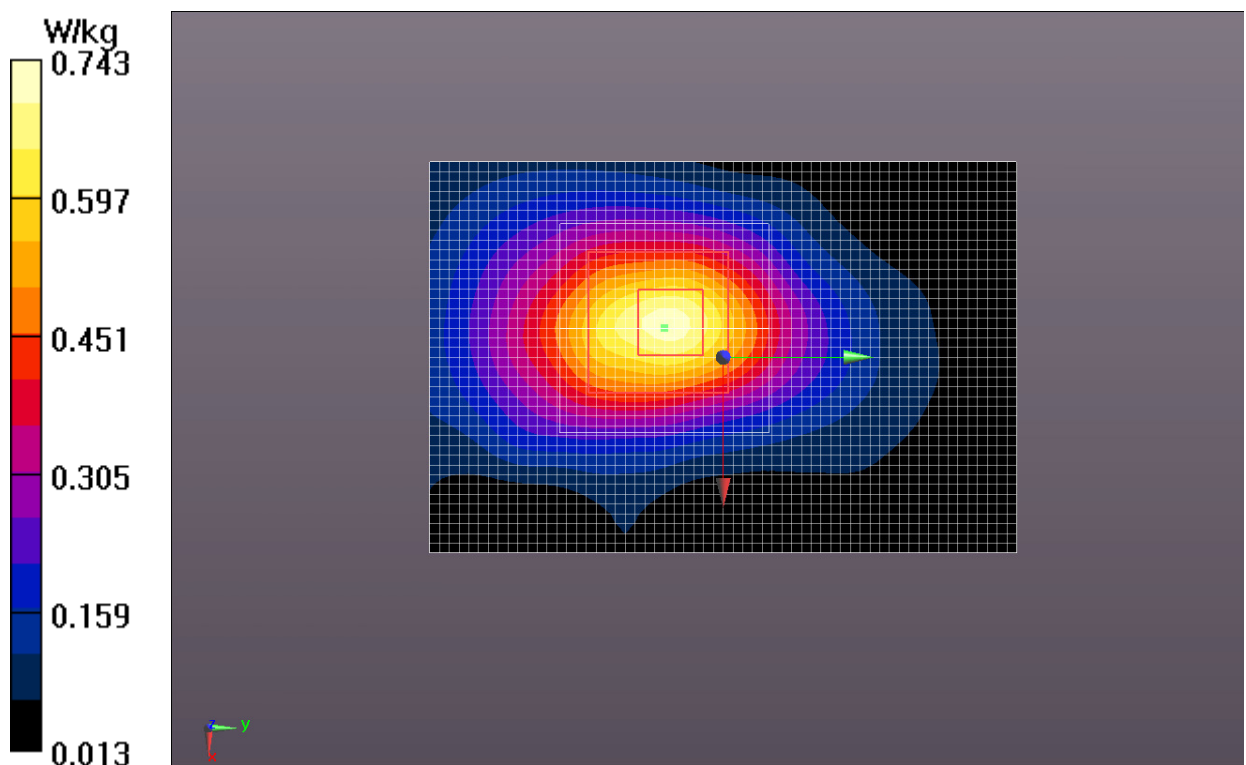
**Bottom side High /Zoom Scan (5x5x7)/Cube 0:** Measurement grid: dx=8mm, dy=8mm, dz=5mm

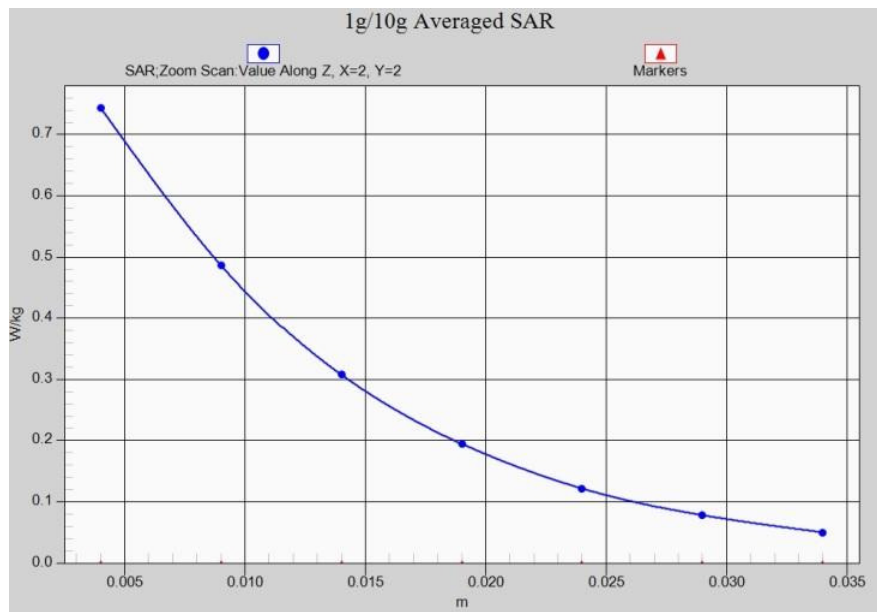
Reference Value = 19.238 V/m; Power Drift = 0.13dB

Peak SAR (extrapolated) = 1.05 W/kg

**SAR(1 g) = 0.665 W/kg; SAR(10 g) = 0.372 W/kg**

Maximum value of SAR (measured) = 0.743 W/kg





**Fig.J-10:Z-Scan at power reference point (WCDMA1700CH1738)**

## LTE Band 2 Left Cheek Low with QPSK\_20MHz\_1RB\_Low

Date/Time: 2016-11-7

Electronics: DAE4 Sn786

Medium: Head 1900 MHz

Medium parameters used:  $f = 1860$  MHz;  $\sigma = 1.401$  S/m;  $\epsilon_r = 38.715$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Ambient Temperature: 22.0°C      Liquid Temperature: 21.5°C

Communication System: LTE\_FDD Frequency: 1860 MHz Duty Cycle: 1:1

Probe: EX3DV4 - SN3633 ConvF(7.49, 7.49, 7.49);

**Left Cheek Low\_1RB\_Low/Area Scan (61x111x1):** Interpolated grid: dx=1.500 mm, dy=1.500 mm

Maximum value of SAR (interpolated) = 0.394 W/kg

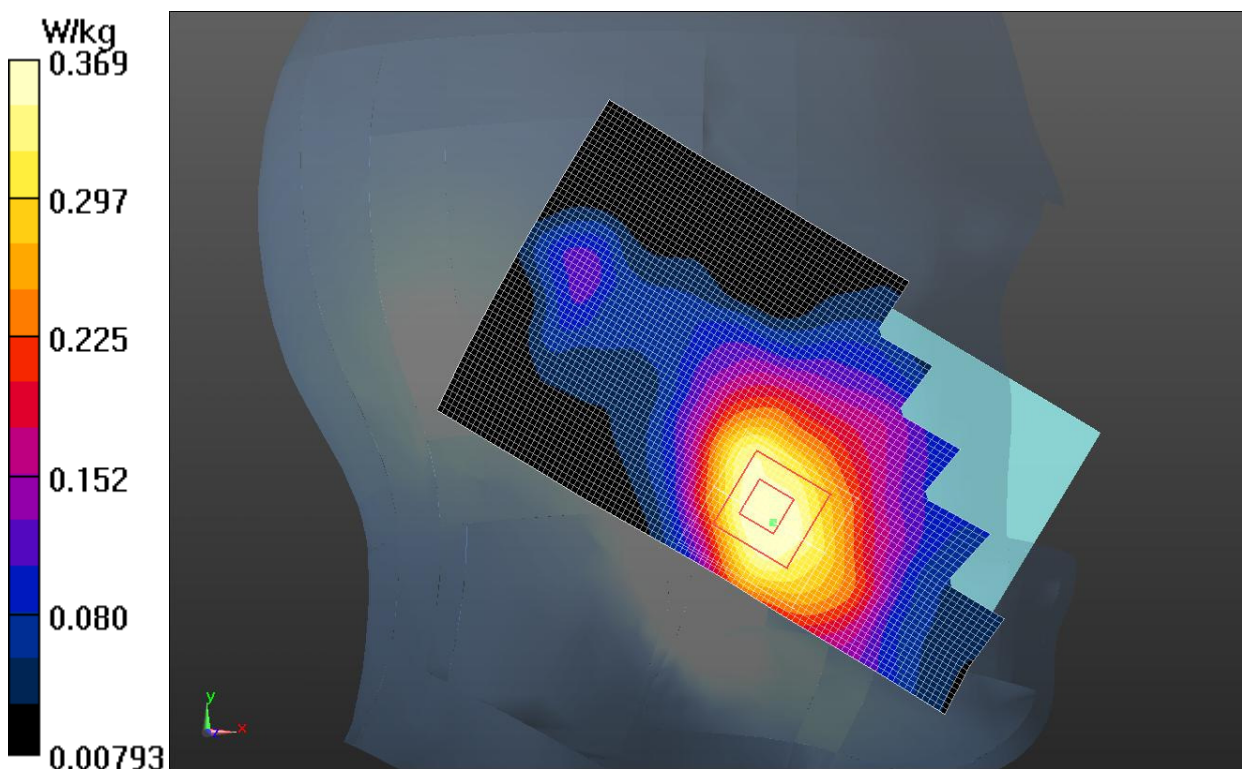
**Left Cheek Low\_1RB\_Low/Zoom Scan (5x5x7)/Cube 0:** Measurement grid: dx=8mm, dy=8mm, dz=5mm

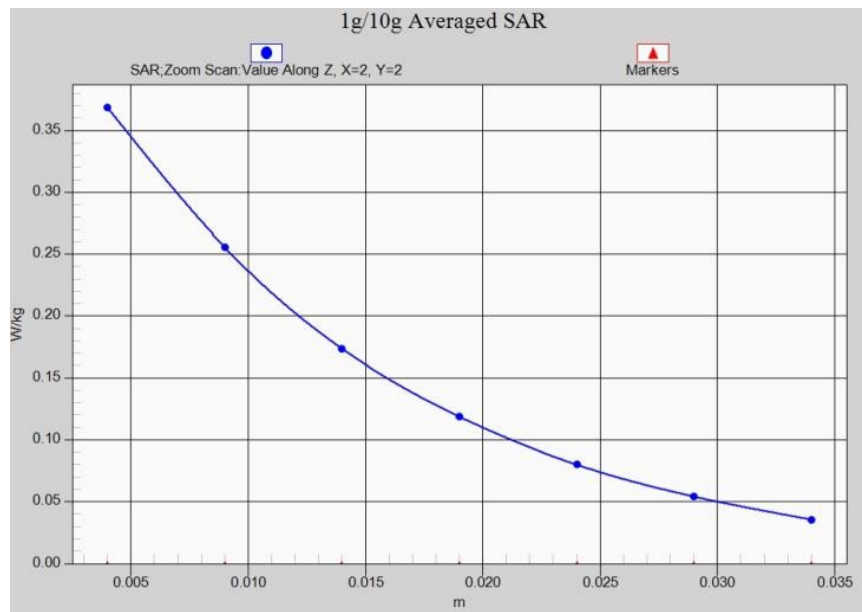
Reference Value = 7.777 V/m; Power Drift = 0.07 dB

Peak SAR (extrapolated) = 0.514 W/kg

**SAR(1 g) = 0.350 W/kg; SAR(10 g) = 0.227 W/kg**

Maximum value of SAR (measured) = 0.369 W/kg





**Fig.J-11:Z-Scan at power reference point (Band 2 CH18700)**

## LTE Band 2 Body Bottom low with QPSK\_20MHz\_1RB\_low

Date/Time: 2016-11-7

Electronics: DAE4 Sn786

Medium: Body 1900 MHz

Medium parameters used:  $f = 1860$  MHz;  $\sigma = 1.523$  S/m;  $\epsilon_r = 52.307$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Ambient Temperature: 22.0°C      Liquid Temperature: 21.5°C

Communication System: LTE\_FDD Frequency: 1860 MHz Duty Cycle: 1:1

Probe: EX3DV4 - SN3633 ConvF(7.24, 7.24, 7.24);

**Bottom side Low 1RB\_Low /Area Scan (41x61x1):** Interpolated grid: dx=1.500 mm, dy=1.500 mm

Maximum value of SAR (interpolated) = 0.715 W/kg

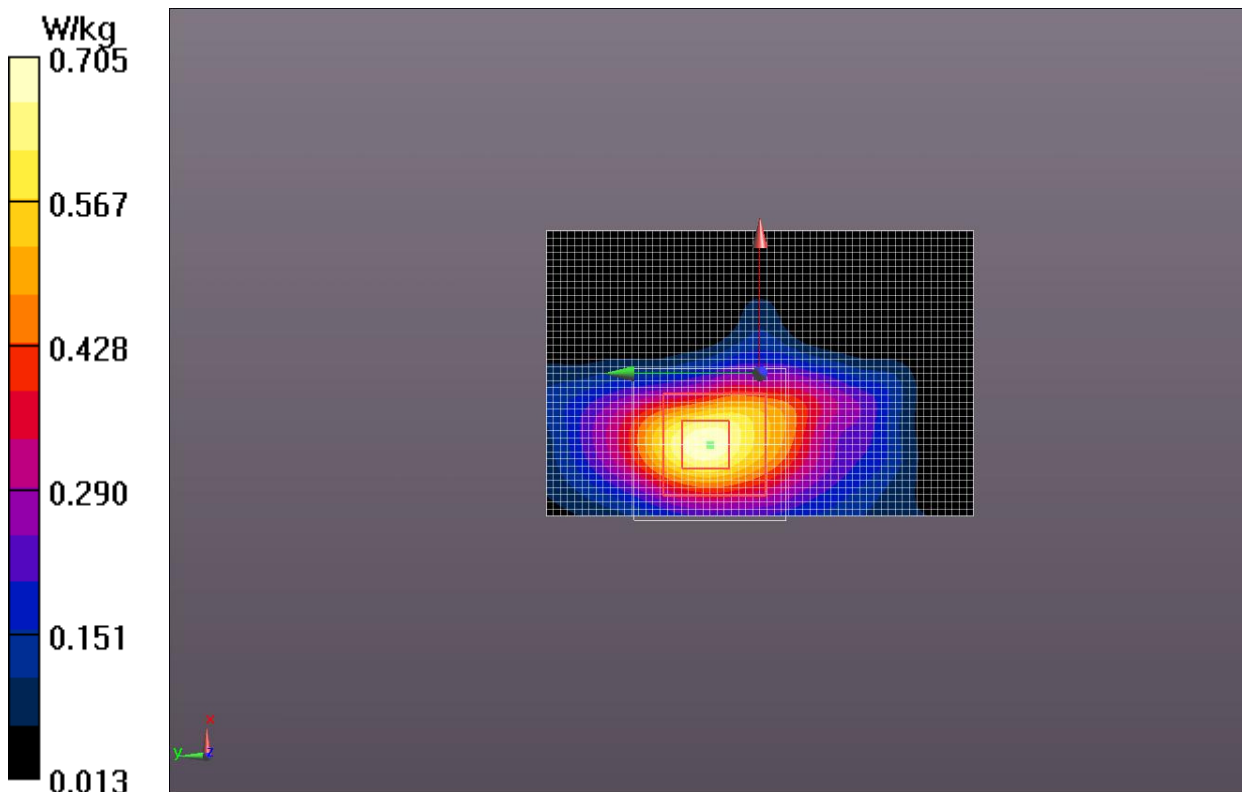
**Bottom side Low 1RB\_Low /Zoom Scan (5x5x7)/Cube 0:** Measurement grid: dx=8mm, dy=8mm, dz=5mm

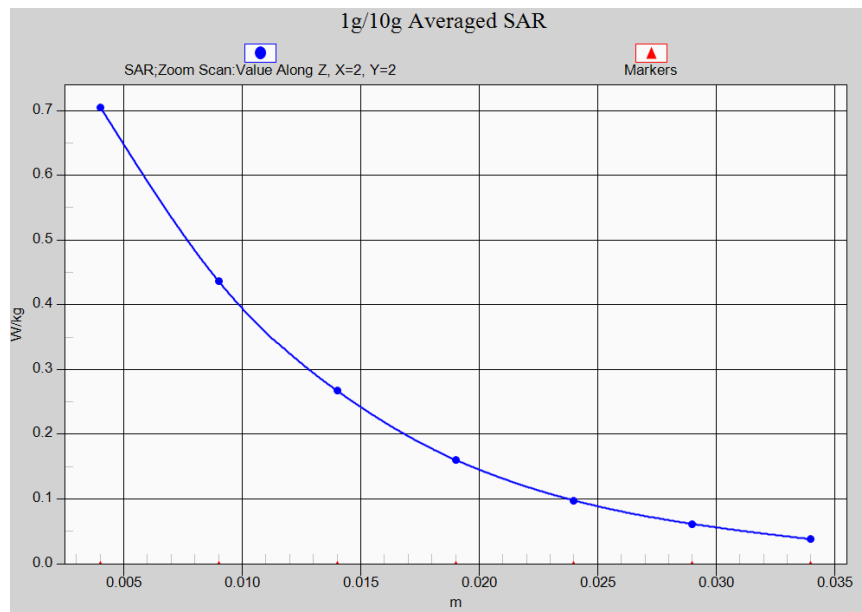
Reference Value = 13.404 V/m; Power Drift = -0.12 dB

Peak SAR (extrapolated) = 1.04 W/kg

**SAR(1 g) = 0.622 W/kg; SAR(10 g) = 0.332 W/kg**

Maximum value of SAR (measured) = 0.705 W/kg





**Fig.J-12:Z-Scan at power reference point (Band 2 CH18700)**

## LTE Band 4Left Cheek High with QPSK\_20MHz\_1RB\_High

Date/Time: 2016-11-6

Electronics: DAE4 Sn786

Medium: Head 1800 MHz

Medium parameters used (interpolated):  $f = 1745$  MHz;  $\sigma = 1.319$  S/m;  $\epsilon_r = 39.16$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Ambient Temperature: 22.0°C Liquid Temperature: 21.5°C

Communication System: LTE\_FDD Frequency: 1745 MHz Duty Cycle: 1:1

Probe: EX3DV4 - SN3633 ConvF(7.95, 7.95, 7.95);

**Left Cheek High\_1RB\_High/Area Scan (61x111x1):** Interpolated grid: dx=1.500 mm, dy=1.500 mm

Maximum value of SAR (interpolated) = 0.403 W/kg

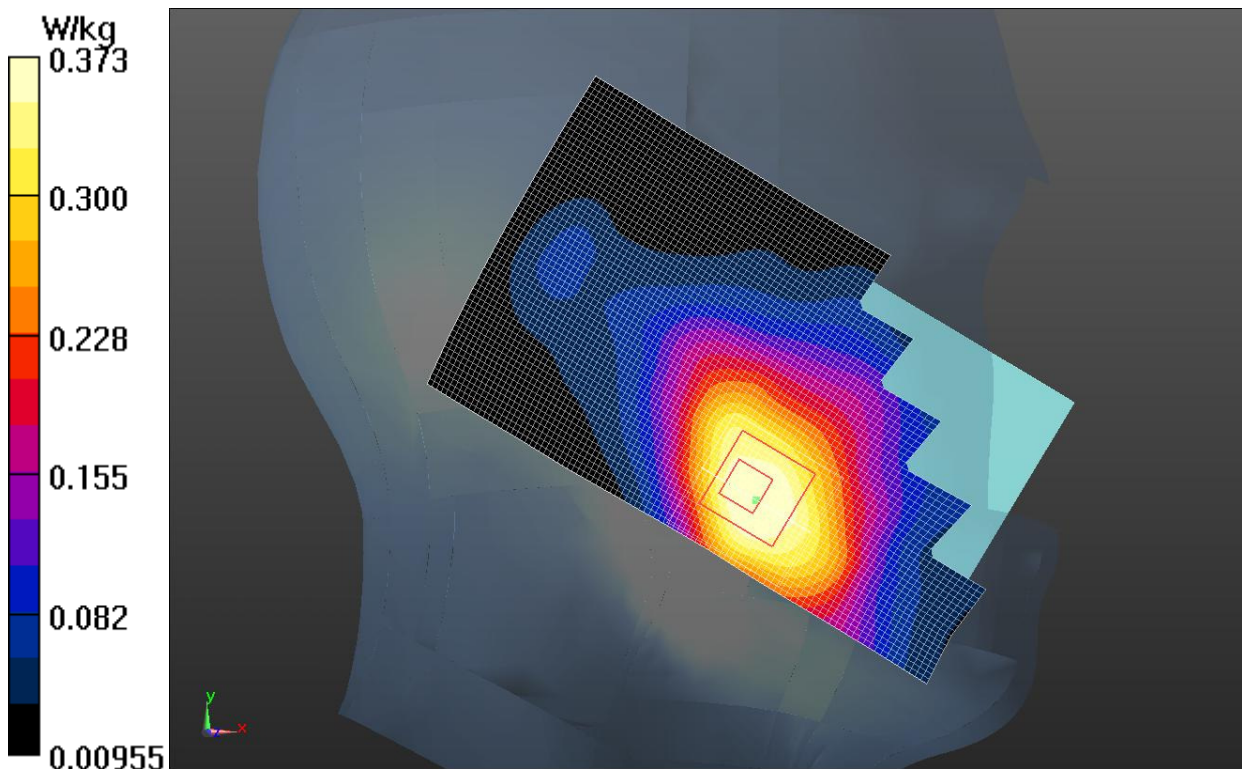
**Left Cheek High\_1RB\_High/Zoom Scan (5x5x7)/Cube 0:** Measurement grid: dx=8mm, dy=8mm, dz=5mm

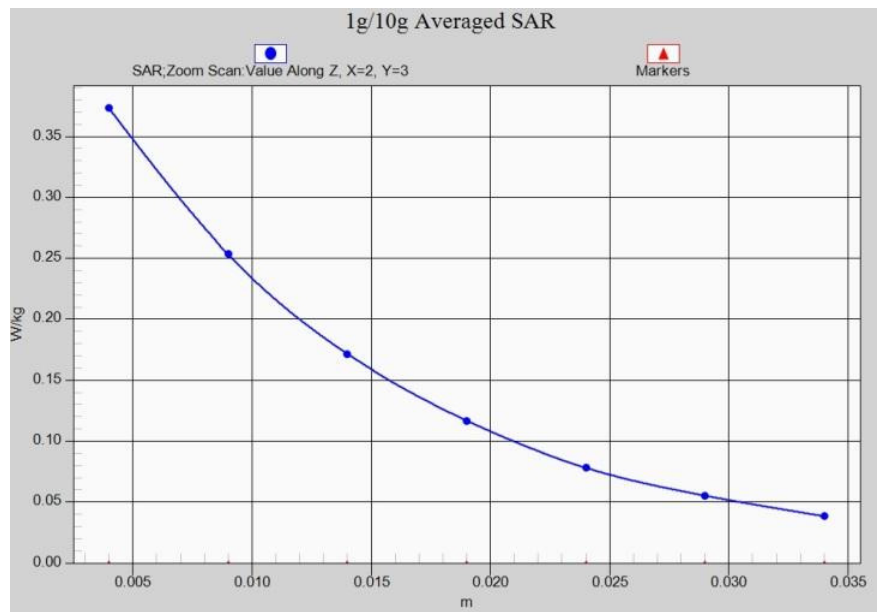
Reference Value = 7.093 V/m; Power Drift = -0.08 dB

Peak SAR (extrapolated) = 0.514 W/kg

**SAR(1 g) = 0.355 W/kg; SAR(10 g) = 0.238 W/kg**

Maximum value of SAR (measured) = 0.373 W/kg





**Fig.J-13:Z-Scan at power reference point (Band 4 CH20300)**

## LTE Band 4 Body Bottom High with QPSK\_20MHz\_1RB\_High

Date/Time: 2016-11-6

Electronics: DAE4 Sn786

Medium: Body 1800 MHz

Medium parameters used (interpolated):  $f = 1745$  MHz;  $\sigma = 1.443$  S/m;  $\epsilon_r = 52.601$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Ambient Temperature: 22.0°C      Liquid Temperature: 21.5°C

Communication System: LTE\_FDD Frequency: 1745 MHz Duty Cycle: 1:1

Probe: EX3DV4 - SN3633 ConvF(7.63, 7.63, 7.63);

**Bottom side High 1RB\_High/Area Scan (41x61x1):** Interpolated grid: dx=1.500 mm, dy=1.500 mm

Maximum value of SAR (interpolated) = 0.645 W/kg

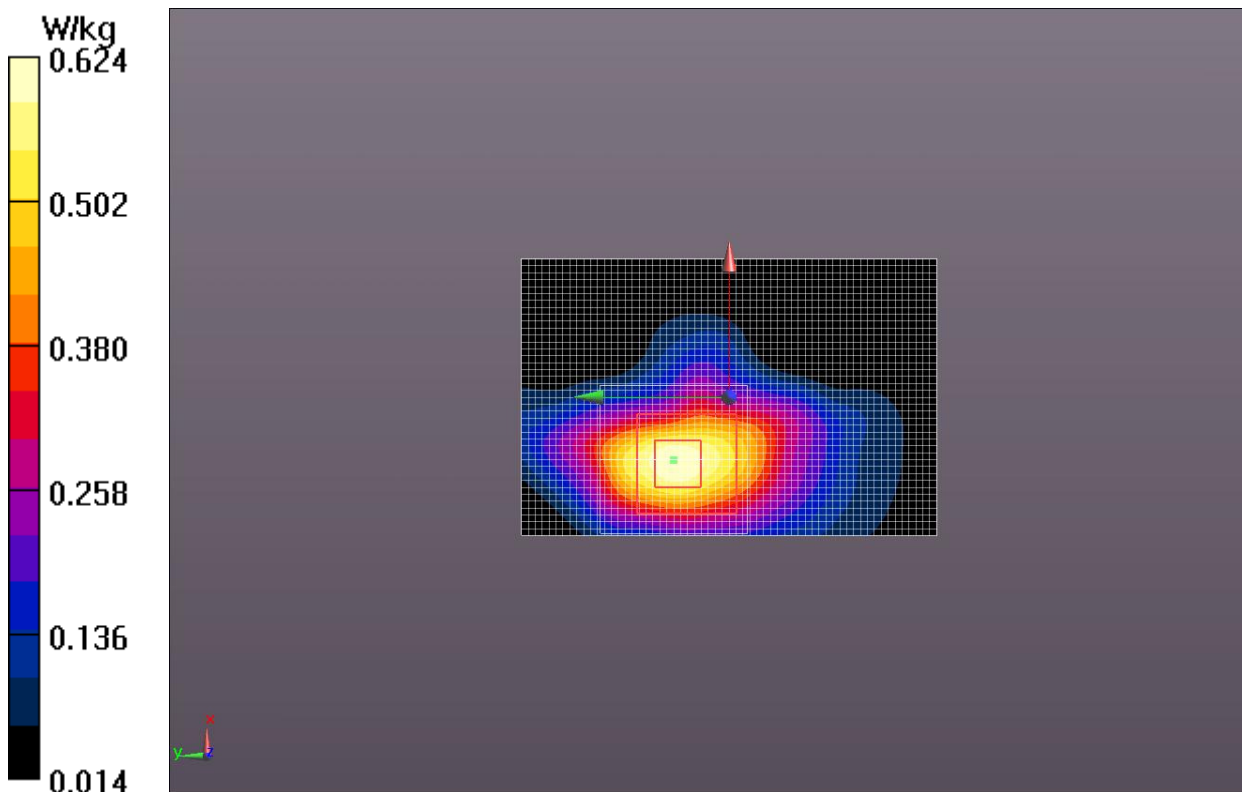
**Bottom side High 1RB\_High/Zoom Scan (5x5x7)/Cube 0:** Measurement grid: dx=8mm, dy=8mm, dz=5mm

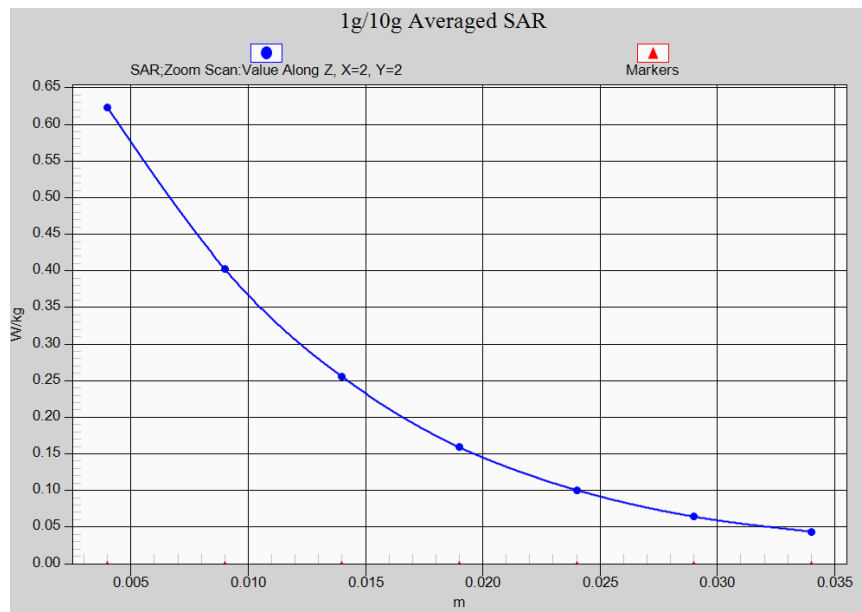
Reference Value = 13.398 V/m; Power Drift = 0.13 dB

Peak SAR (extrapolated) = 0.874 W/kg

**SAR(1 g) = 0.555 W/kg; SAR(10 g) = 0.311 W/kg**

Maximum value of SAR (measured) = 0.624 W/kg





**Fig.J-14:Z-Scan at power reference point (Band 4 CH20300)**

## LTE Band 12 Right Cheek Low with QPSK\_10MHz\_1RB\_High

Date/Time: 2016-11-8

Electronics: DAE4 Sn786

Medium: Head 750 MHz

Medium parameters used (interpolated):  $f = 711$  MHz;  $\sigma = 0.837$  S/m;  $\epsilon_r = 41.162$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Ambient Temperature: 22.0°C      Liquid Temperature: 21.5°C

Communication System: LTE\_FDD Frequency: 711 MHz Duty Cycle: 1:1

Probe: EX3DV4 - SN3633 ConvF(9.15, 9.15, 9.15);

**Right Cheek High\_1RB\_High/Area Scan (61x111x1):** Interpolated grid: dx=1.500 mm, dy=1.500 mm

Maximum value of SAR (interpolated) = 0.264 W/kg

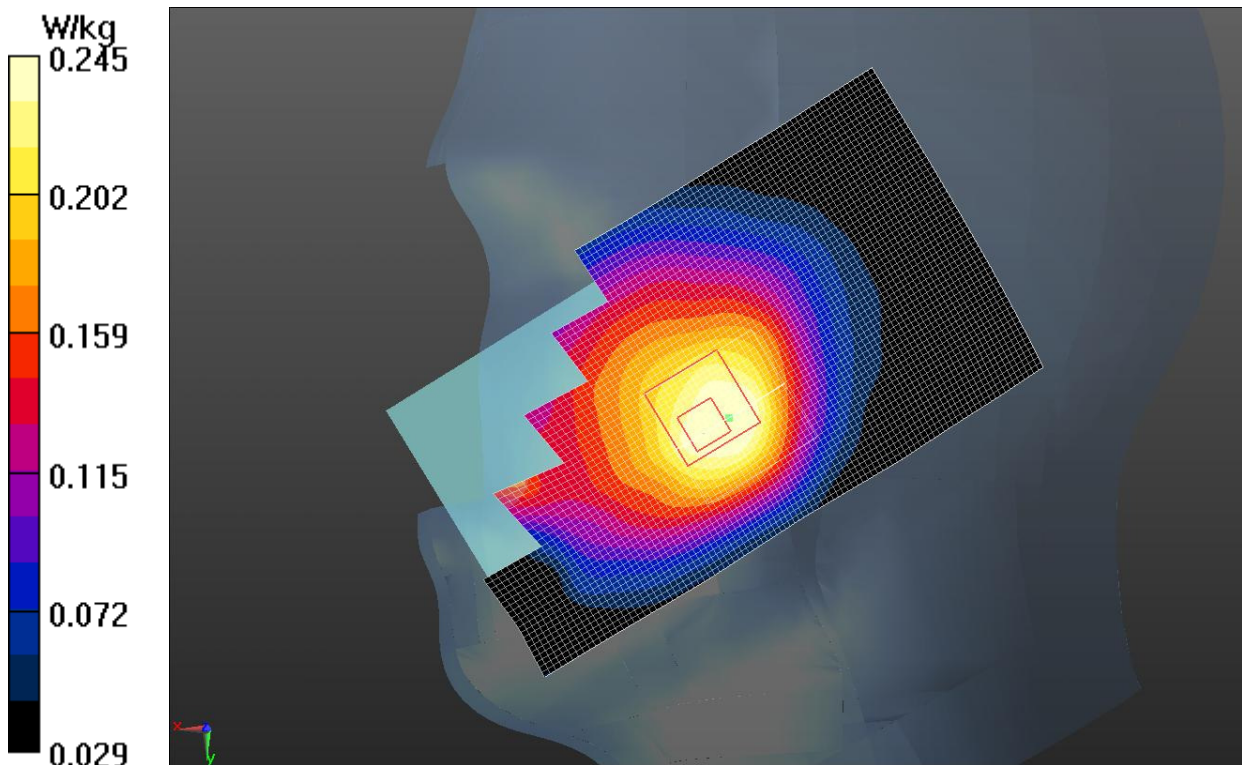
**Right Cheek High\_1RB\_High/Zoom Scan (5x5x7)/Cube 0:** Measurement grid: dx=8mm, dy=8mm, dz=5mm

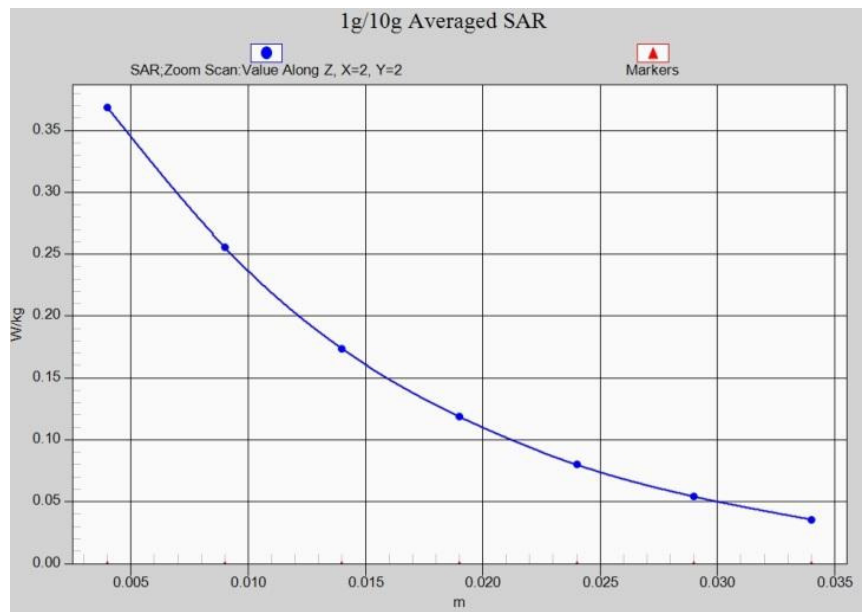
Reference Value = 5.337 V/m; Power Drift = -0.04 dB

Peak SAR (extrapolated) = 0.275 W/kg

**SAR(1 g) = 0.229 W/kg; SAR(10 g) = 0.186 W/kg**

Maximum value of SAR (measured) = 0.245 W/kg





**Fig.J-15:Z-Scan at power reference point ((Band 12 CH23130)**

## LTE Band 12 Body Rear High with QPSK\_10MHz\_1RB\_High

Date/Time: 2016-11-8

Electronics: DAE4 Sn786

Medium: Body 750 MHz

Medium parameters used (interpolated):  $f = 711$  MHz;  $\sigma = 0.892$  S/m;  $\epsilon_r = 54.345$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Ambient Temperature: 22.0°C      Liquid Temperature: 21.5°C

Communication System: LTE\_FDD Frequency: 711 MHz Duty Cycle: 1:1

Probe: EX3DV4 - SN3633 ConvF(9.15, 9.15, 9.15);

**Rear side High 1BR\_High/Area Scan (61x111x1):** Interpolated grid: dx=1.500 mm, dy=1.500 mm

Maximum value of SAR (interpolated) = 0.484 W/kg

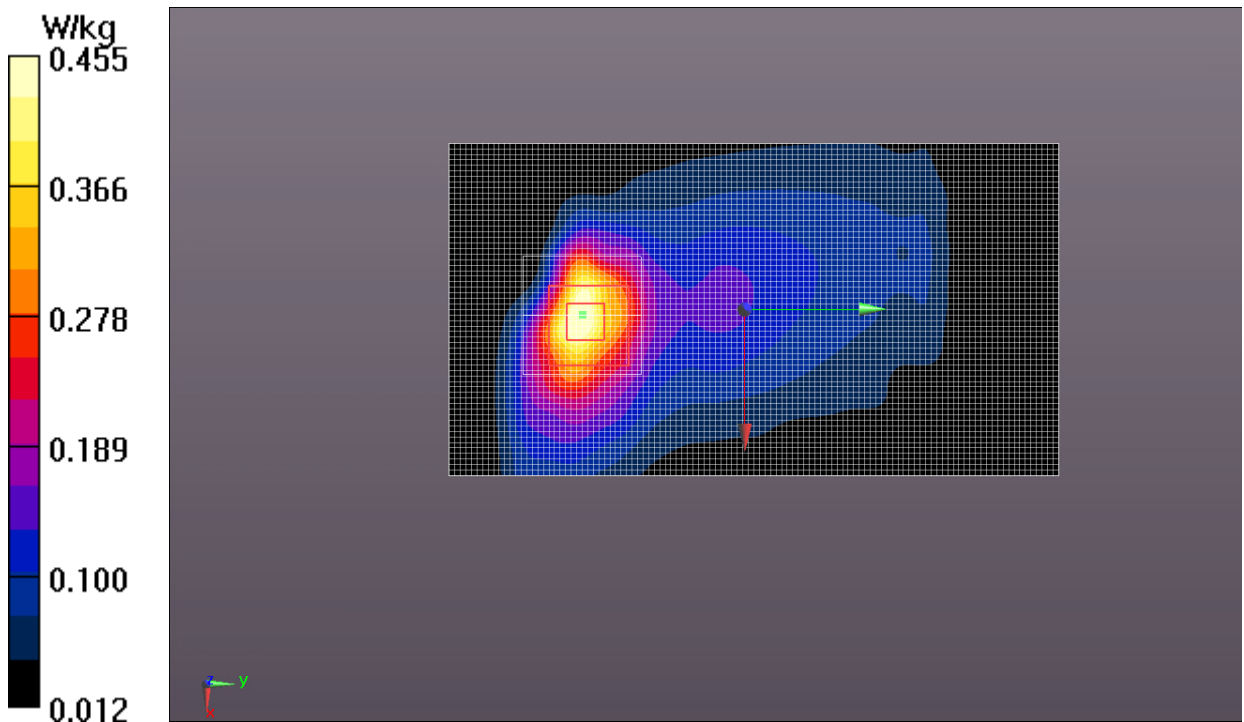
**Rear side High 1BR\_High/Zoom Scan (5x5x7)/Cube 0:** Measurement grid: dx=8mm, dy=8mm, dz=5mm

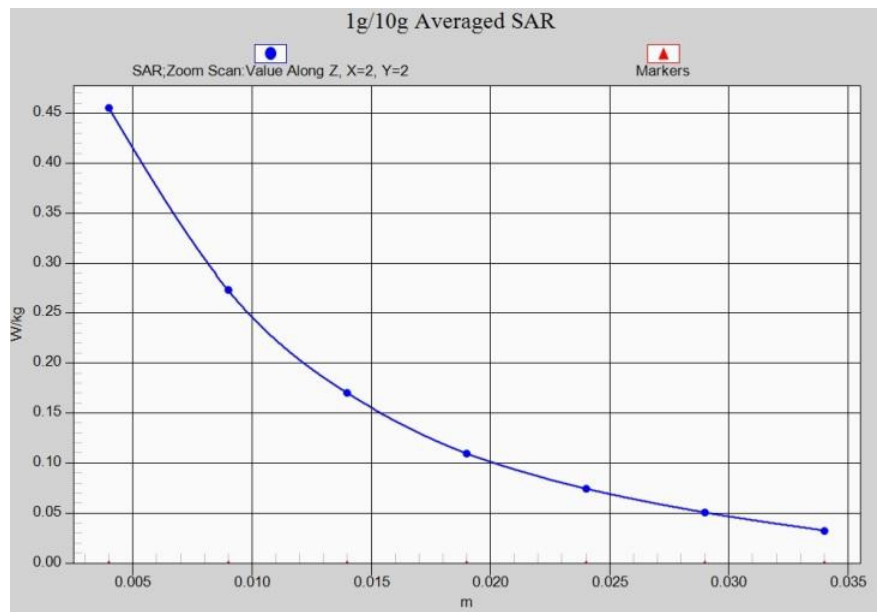
Reference Value = 16.869 V/m; Power Drift = 0.11 dB

Peak SAR (extrapolated) = 0.714 W/kg

**SAR(1 g) = 0.404 W/kg; SAR(10 g) = 0.221 W/kg**

Maximum value of SAR (measured) = 0.455 W/kg





**Fig.J-16:Z-Scan at power reference point ((Band 12 CH23130)**

## Wi-Fi 802.11b Left Cheek Channel 1

Date/Time: 2016-11-9

Electronics: DAE4 Sn786

Medium: Head 2450 MHz

Medium parameters used:  $f = 2412$  MHz;  $\sigma = 1.802$  S/m;  $\epsilon_r = 37.866$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Ambient Temperature: 22.0°C Liquid Temperature: 21.5°C

Communication System: WiFi Frequency: 2412 MHz Duty Cycle: 1:1

Probe: EX3DV4 - SN3633 ConvF(7.07, 7.07, 7.07);

**Left Cheek Low/Area Scan (61x111x1):** Interpolated grid:  $dx=1.000$  mm,  $dy=1.000$  mm

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

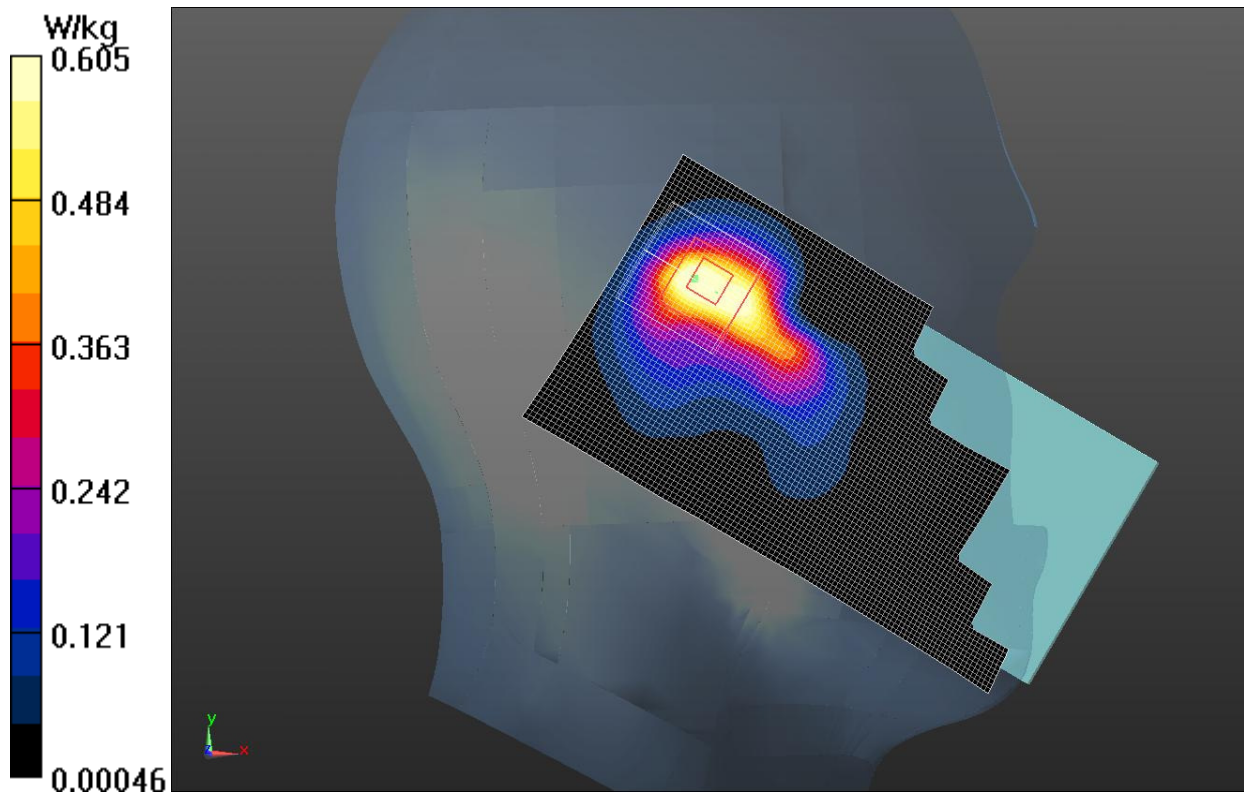
**Left Cheek Low/Zoom Scan (5x5x7)/Cube 0:** Measurement grid:  $dx=5$ mm,  $dy=5$ mm,  $dz=5$ mm

Reference Value = 10.136 V/m; Power Drift = 0.06 dB

Peak SAR (extrapolated) = 2.41 W/kg

**SAR(1 g) = 0.587 W/kg; SAR(10 g) = 0.282 W/kg**

Maximum value of SAR (measured) = 0.605 W/kg



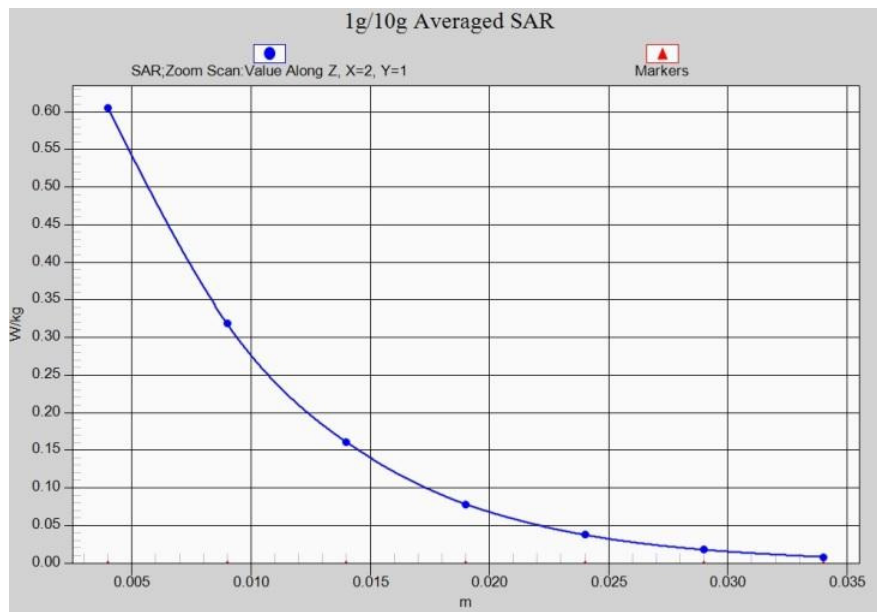


Fig.J-17:Z-Scan at power reference point (Wi-Fi 2450 MHz CH1)

## Wi-Fi 802.11b Body Rear Channel 1

Date/Time: 2016-11-9

Electronics: DAE4 Sn786

Medium: Body 2450 MHz

Medium parameters used:  $f = 2412$  MHz;  $\sigma = 1.864$  S/m;  $\epsilon_r = 53.378$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Ambient Temperature: 22.0°C      Liquid Temperature: 21.5°C

Communication System: WiFi Frequency: 2412 MHz Duty Cycle: 1:1

Probe: EX3DV4 - SN3633 ConvF(7, 7, 7);

**Rear side Low/Area Scan (61x111x1):** Interpolated grid:  $dx=1.000$  mm,  $dy=1.000$  mm

Maximum value of SAR (interpolated) = 0.160 W/kg

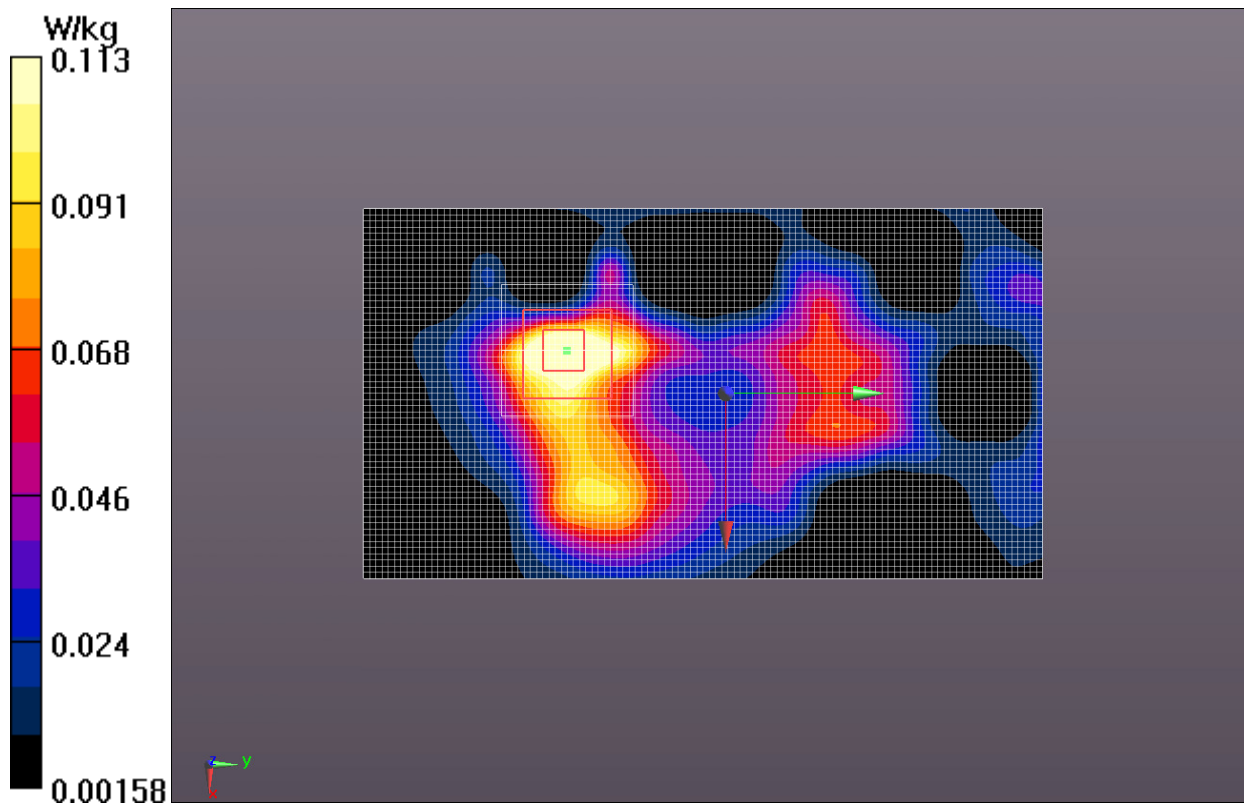
**Rear side Low/Zoom Scan (5x5x7)/Cube 0:** Measurement grid:  $dx=5$ mm,  $dy=5$ mm,  $dz=5$ mm

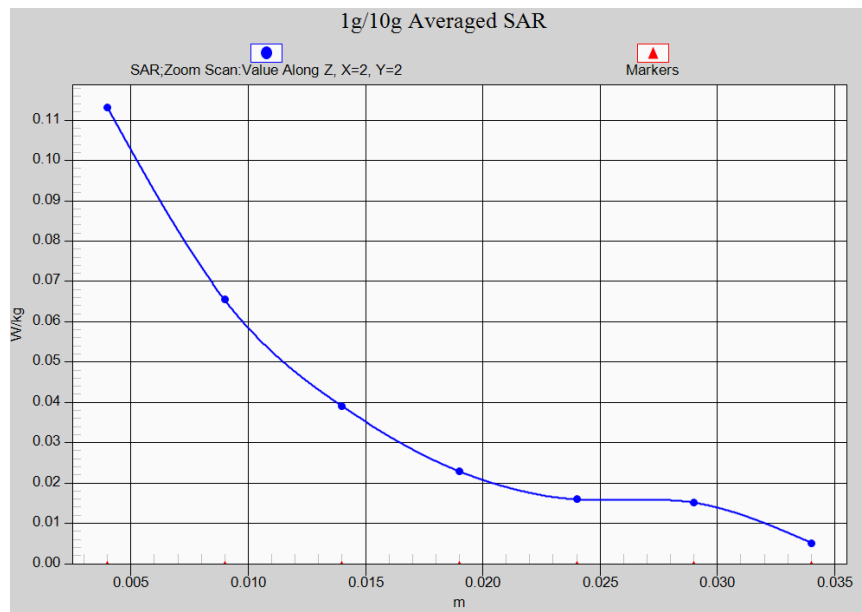
Reference Value = 3.371 V/m; Power Drift = 0.13 dB

Peak SAR (extrapolated) = 0.246 W/kg

**SAR(1 g) = 0.117 W/kg; SAR(10 g) = 0.056 W/kg**

Maximum value of SAR (measured) = 0.113 W/kg





**Fig.J-18:Z-Scan at power reference point (Wi-Fi 2450 MHz CH1)**