

# Plot 59 LTE Band 5 1RB Back Side Low (Distance 15mm)

Date: 7/9/2018

Communication System: UID 0, LTE\_FDD (0); Frequency: 829 MHz; Duty Cycle: 1:1

Medium parameters used:  $f = 829$  MHz;  $\sigma = 0.967$  S/m;  $\epsilon_r = 53.861$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Ambient Temperature: 22.3 °C Liquid Temperature: 21.5 °C

Phantom section: Flat Section

DASY5 Configuration:

Sensor-Surface: 4mm (Mechanical Surface Detection)

Probe: EX3DV4 - SN3677; ConvF(9.32, 9.32, 9.32); Calibrated: 5/29/2018;

Electronics: DAE4 SN1317; Calibrated: 3/23/2018

Phantom: SAM1; Type: SAM; Serial: TP-1534

Measurement SW: DASY52, Version 52.8 (8); SEMCAD X Version 14.6.10 (7331)

**Back Side Low/Area Scan (71x131x1):** Interpolated grid: dx=1.500 mm, dy=1.500 mm

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

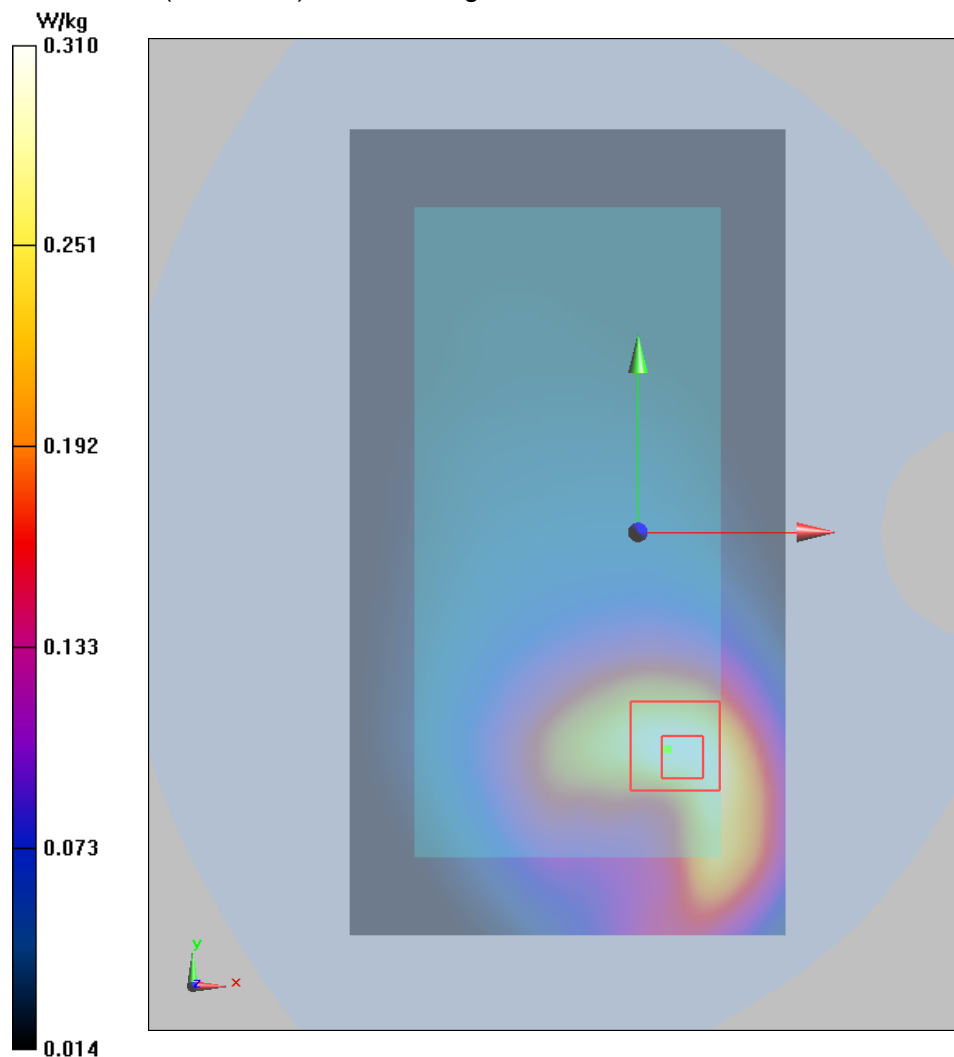
**Back Side Low/Zoom Scan (5x5x7)/Cube 0:** Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 6.481 V/m; Power Drift = 0.058 dB

Peak SAR (extrapolated) = 0.446 W/kg

**SAR(1 g) = 0.291 W/kg; SAR(10 g) = 0.185 W/kg**

Maximum value of SAR (measured) = 0.310 W/kg



# Plot 60 LTE Band 5 1RB Back Side Low (Distance 10mm)

Date: 7/9/2018

Communication System: UID 0, LTE\_FDD (0); Frequency: 829 MHz; Duty Cycle: 1:1

Medium parameters used:  $f = 829$  MHz;  $\sigma = 0.967$  S/m;  $\epsilon_r = 53.861$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Ambient Temperature: 22.3 °C Liquid Temperature: 21.5 °C

Phantom section: Flat Section

DASY5 Configuration:

Sensor-Surface: 4mm (Mechanical Surface Detection)

Probe: EX3DV4 - SN3677; ConvF(9.32, 9.32, 9.32); Calibrated: 5/29/2018;

Electronics: DAE4 SN1317; Calibrated: 3/23/2018

Phantom: SAM1; Type: SAM; Serial: TP-1534

Measurement SW: DASY52, Version 52.8 (8); SEMCAD X Version 14.6.10 (7331)

**Back Side Low/Area Scan (71x131x1):** Interpolated grid: dx=1.500 mm, dy=1.500 mm

Maximum value of SAR (interpolated) = 0.565 W/kg

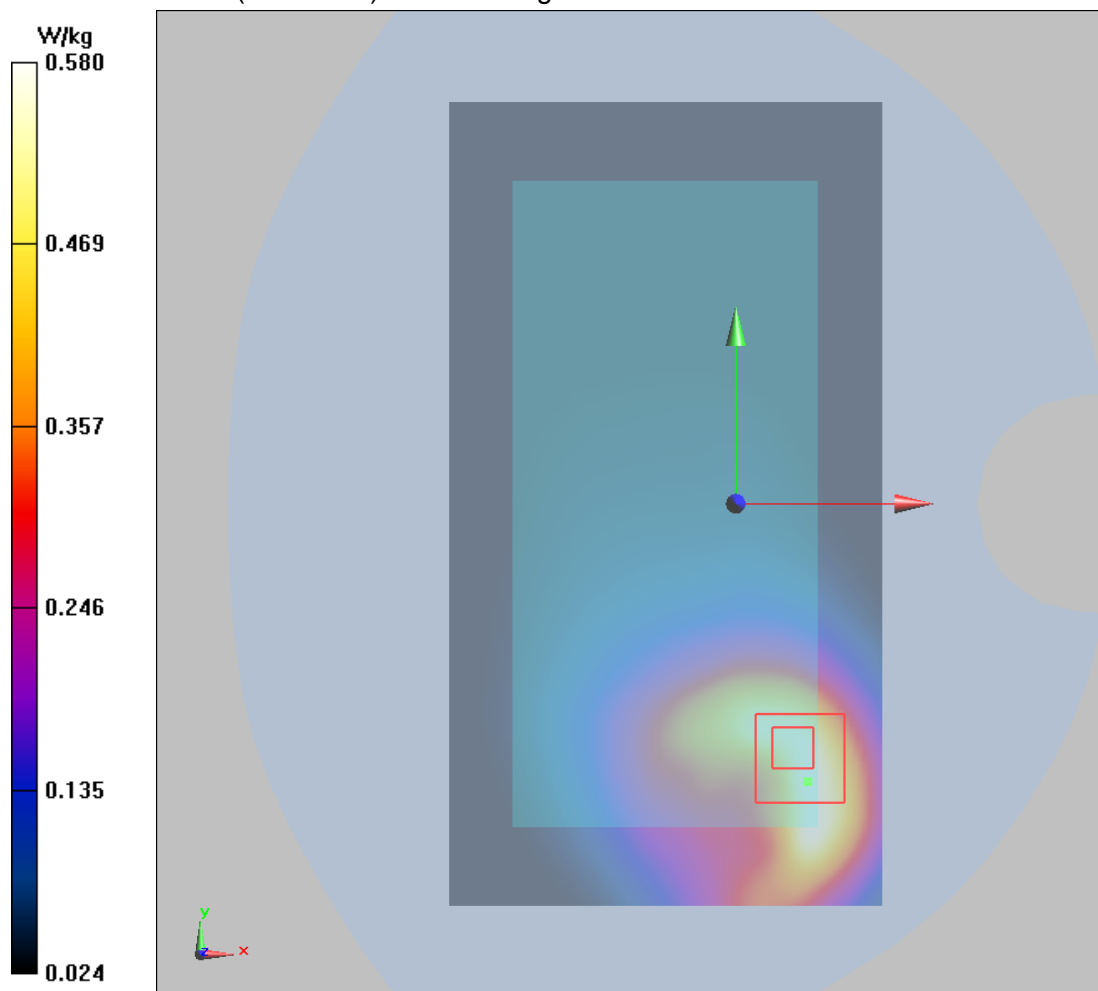
**Back Side Low/Zoom Scan (5x5x7)/Cube 0:** Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 7.065 V/m; Power Drift = 0.02 dB

Peak SAR (extrapolated) = 0.908 W/kg

**SAR(1 g) = 0.543 W/kg; SAR(10 g) = 0.315 W/kg**

Maximum value of SAR (measured) = 0.580 W/kg



# Plot 61 LTE Band 7 1RB Left Cheek Low

Date: 6/28/2018

Communication System: UID 0, LTE\_FDD (0); Frequency: 2510 MHz; Duty Cycle: 1:1

Medium parameters used:  $f = 2510$  MHz;  $\sigma = 1.913$  S/m;  $\epsilon_r = 39.535$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Ambient Temperature: 22.3 °C Liquid Temperature: 21.5 °C

Phantom section: Left Section

DASY5 Configuration:

Sensor-Surface: 4mm (Mechanical Surface Detection)

Probe: EX3DV4 - SN3677; ConvF(7.28, 7.28, 7.28); Calibrated: 5/29/2018;

Electronics: DAE4 SN1317; Calibrated: 3/23/2018

Phantom: SAM1; Type: SAM; Serial: TP-1534

Measurement SW: DASY52, Version 52.8 (8); SEMCAD X Version 14.6.10 (7331)

**Left Cheek Low/Area Scan (91x171x1):** Interpolated grid: dx=1.200 mm, dy=1.200 mm

Maximum value of SAR (interpolated) = 0.263 W/kg

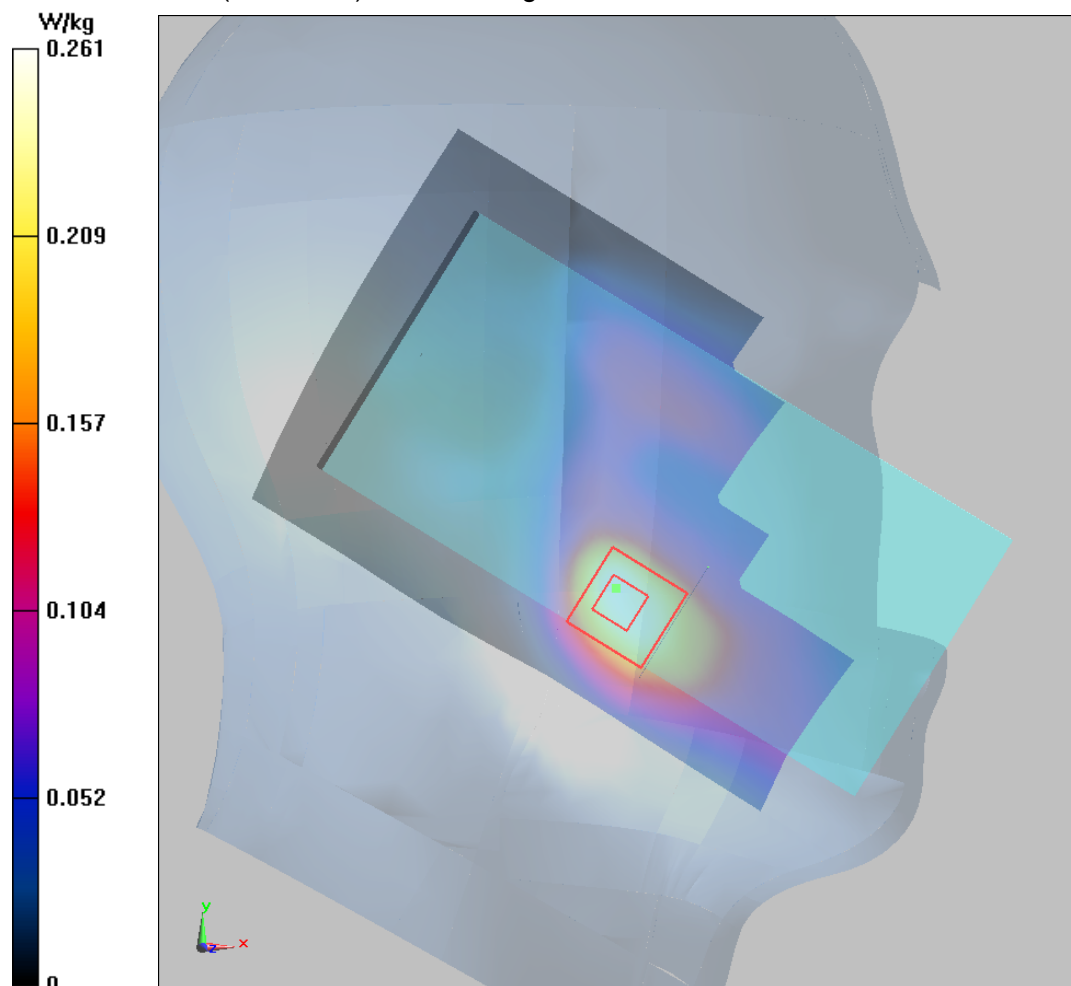
**Left Cheek Low/Zoom Scan (7x7x7)/Cube 0:** Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 2.698 V/m; Power Drift = 0.04 dB

Peak SAR (extrapolated) = 0.454 W/kg

**SAR(1 g) = 0.245 W/kg; SAR(10 g) = 0.131 W/kg**

Maximum value of SAR (measured) = 0.261 W/kg



## Plot 62 LTE Band 7 1RB Back Side Low (Distance 15mm)

Date: 26/25/2018

Communication System: UID 0, LTE (0); Frequency: 2510 MHz; Duty Cycle: 1:1

Medium parameters used:  $f = 2510$  MHz;  $\sigma = 2.045$  S/m;  $\epsilon_r = 50.913$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Ambient Temperature: 22.3 °C Liquid Temperature: 21.5 °C

Phantom section: Flat Section

DASY5 Configuration:

Sensor-Surface: 4mm (Mechanical Surface Detection)

Probe: EX3DV4 - SN3677; ConvF(7.16, 7.16, 7.16); Calibrated: 5/29/2018;

Electronics: DAE4 SN1317; Calibrated: 3/23/2018

Phantom: SAM1; Type: SAM; Serial: TP-1534

Measurement SW: DASY52, Version 52.8 (8); SEMCAD X Version 14.6.10 (7331)

**Back Side Low/Area Scan (91x171x1):** Interpolated grid: dx=1.200 mm, dy=1.200 mm

Maximum value of SAR (interpolated) = 0.387 W/kg

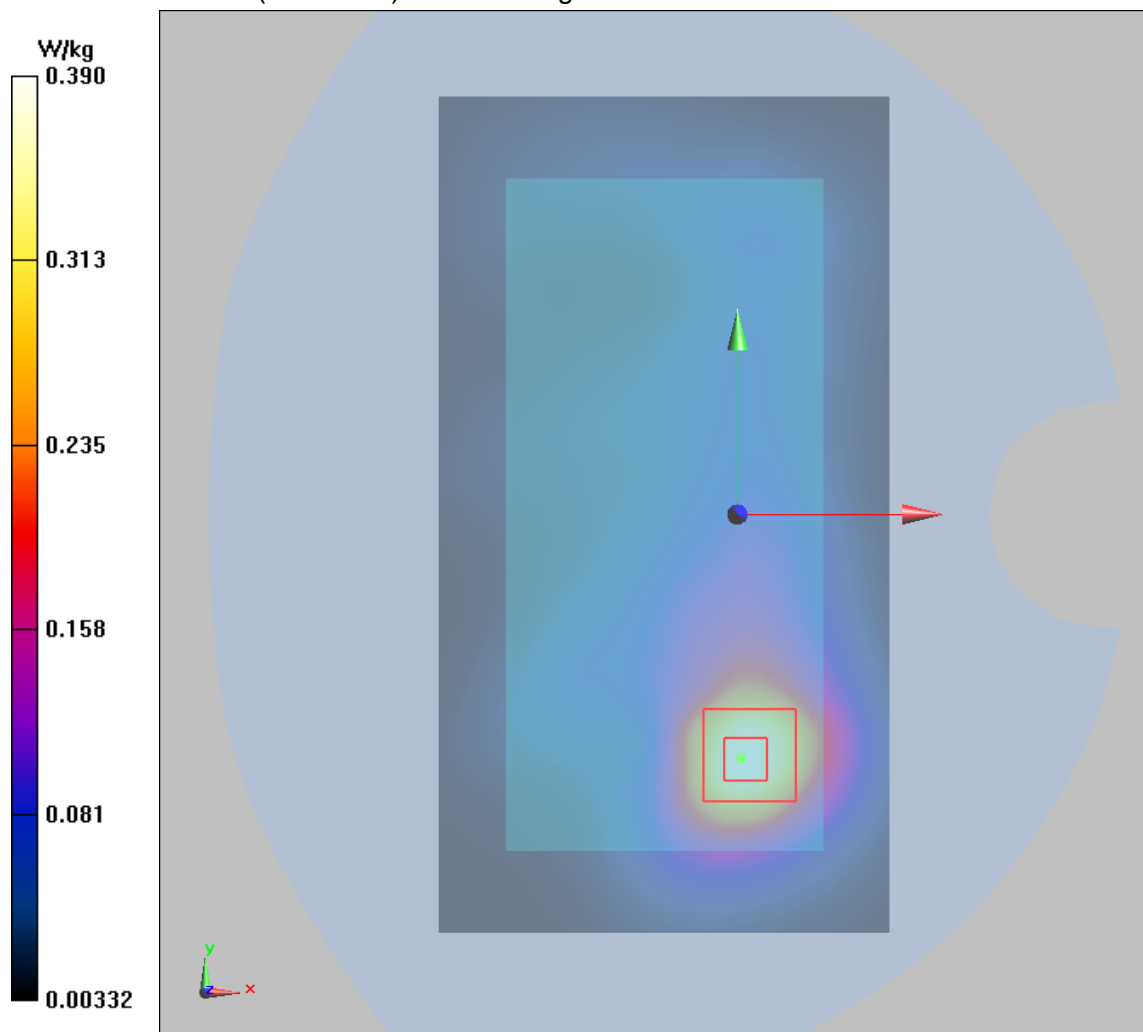
**Back Side Low/Zoom Scan (7x7x7)/Cube 0:** Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 5.244 V/m; Power Drift = 0.02 dB

Peak SAR (extrapolated) = 0.625 W/kg

**SAR(1 g) = 0.355 W/kg; SAR(10 g) = 0.190 W/kg**

Maximum value of SAR (measured) = 0.390 W/kg



# Plot 63 LTE Band 7 1RB Back Side Low (Distance 10mm)

Date: 6/26/2018

8Communication System: UID 0, LTE (0); Frequency: 2510 MHz;Duty Cycle: 1:1

Medium parameters used:  $f = 2510$  MHz;  $\sigma = 2.045$  S/m;  $\epsilon_r = 50.913$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Ambient Temperature:22.3 °C Liquid Temperature: 21.5°C

Phantom section: Flat Section

DASY5 Configuration:

Sensor-Surface: 4mm (Mechanical Surface Detection)

Probe: EX3DV4 - SN3677; ConvF(7.16, 7.16, 7.16); Calibrated: 5/29/2018;

Electronics: DAE4 SN1317; Calibrated: 3/23/2018

Phantom: SAM1; Type: SAM; Serial: TP-1534

Measurement SW: DASY52, Version 52.8 (8); SEMCAD X Version 14.6.10 (7331)

**Back Side Low/Area Scan (91x171x1):** Interpolated grid: dx=1.000 mm, dy=1.000 mm

Maximum value of SAR (interpolated) = 0.660 W/kg

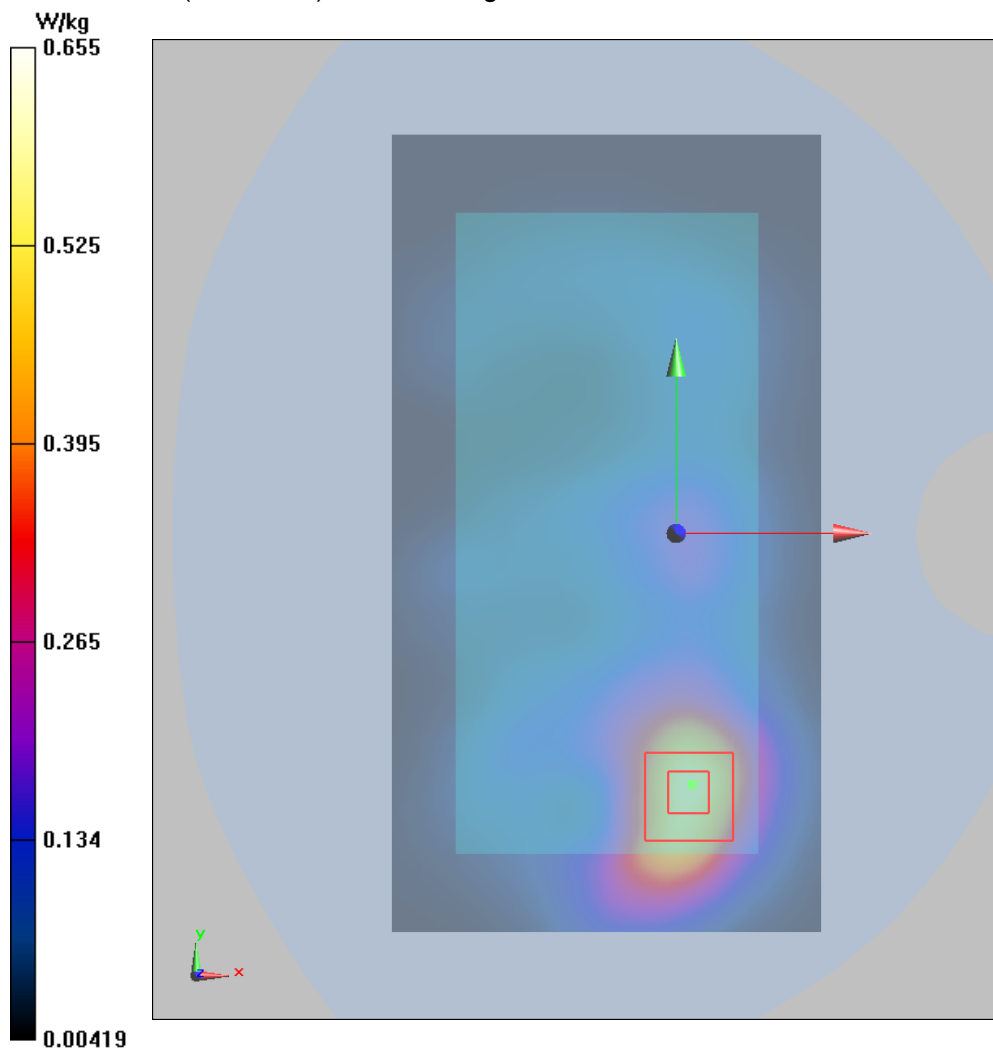
**Back Side Low/Zoom Scan (7x7x7)/Cube 0:** Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 7.379 V/m; Power Drift = -0.12 dB

Peak SAR (extrapolated) = 0.884 W/kg

**SAR(1 g) = 0.613 W/kg; SAR(10 g) = 0.336 W/kg**

Maximum value of SAR (measured) = 0.655 W/kg



## Plot 64 LTE Band 12 1RB Right Cheek High

Date: 7/2/2018

Communication System: UID 0, LTE (0); Frequency: 711 MHz; Duty Cycle: 1:1

Medium parameters used:  $f = 800$  MHz;  $\sigma = 0.876$  S/m;  $\epsilon_r = 41.825$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Ambient Temperature: 22.3 °C Liquid Temperature: 21.5 °C

Phantom section: Right Section

DASY5 Configuration:

Sensor-Surface: 4mm (Mechanical Surface Detection)

Probe: EX3DV4 - SN3677; ConvF(9.40, 9.40, 9.40); Calibrated: 5/29/2018;

Electronics: DAE4 SN1317; Calibrated: 3/23/2018

Phantom: SAM1; Type: SAM; Serial: TP-1534

Measurement SW: DASY52, Version 52.8 (8); SEMCAD X Version 14.6.10 (7331)

**Right Cheek High/Area Scan (71x131x1):** Interpolated grid: dx=1.500 mm, dy=1.500 mm

Maximum value of SAR (interpolated) = 0.0408 W/kg

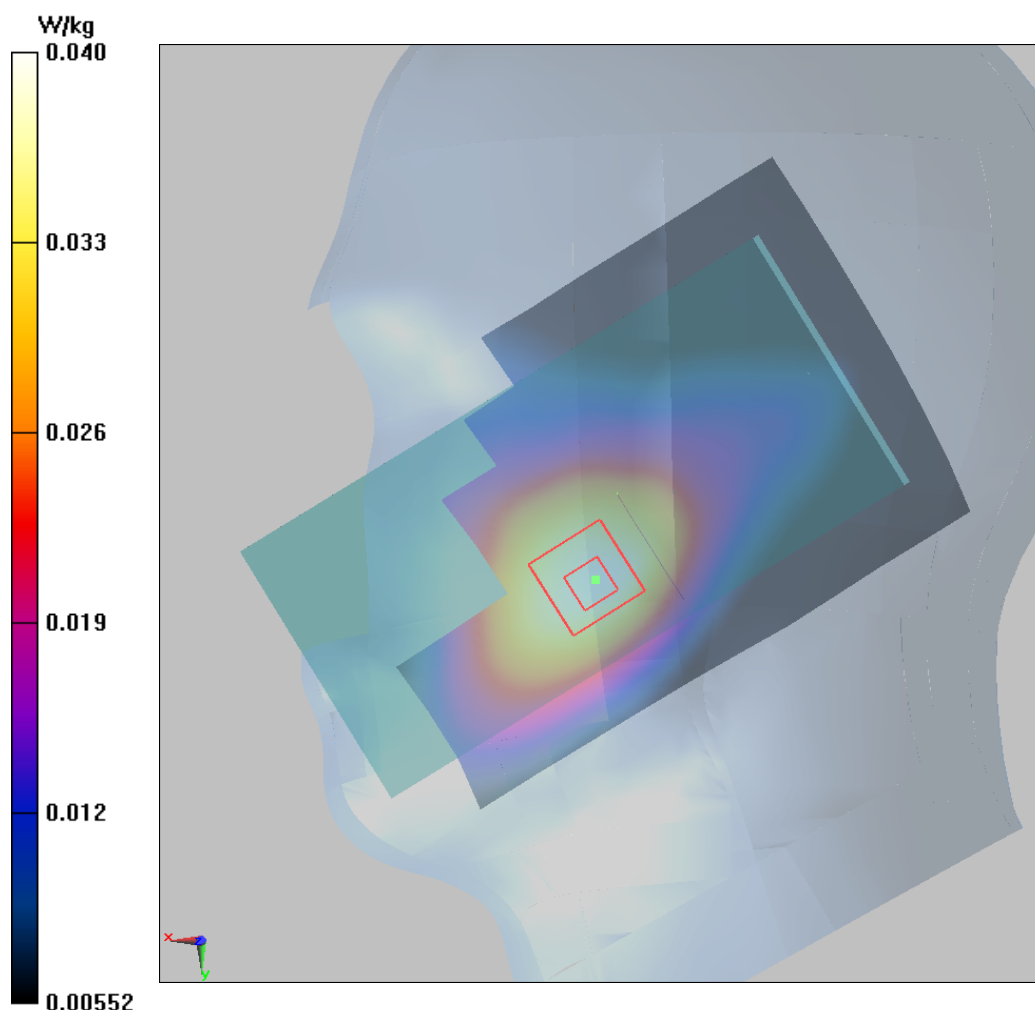
**Right Cheek High/Zoom Scan (5x5x7)/Cube 0:** Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 3.477 V/m; Power Drift = -0.12 dB

Peak SAR (extrapolated) = 0.0460 W/kg

**SAR(1 g) = 0.039 W/kg; SAR(10 g) = 0.030 W/kg**

Maximum value of SAR (measured) = 0.040 W/kg



# Plot 65 LTE Band 12 1RB Back Side High (Distance 15mm)

Date: 7/6/2018

Communication System: UID 0, LTE (0); Frequency: 711 MHz; Duty Cycle: 1:1

Medium parameters used:  $f = 711$  MHz;  $\sigma = 0.932$  S/m;  $\epsilon_r = 57.311$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Ambient Temperature: 22.3 °C Liquid Temperature: 21.5 °C

Phantom section: Flat Section

DASY5 Configuration:

Sensor-Surface: 4mm (Mechanical Surface Detection)

Probe: EX3DV4 - SN3677; ConvF(9.79, 9.79, 9.79); Calibrated: 5/29/2018;

Electronics: DAE4 SN1317; Calibrated: 3/23/2018

Phantom: SAM1; Type: SAM; Serial: TP-1534

Measurement SW: DASY52, Version 52.8 (8); SEMCAD X Version 14.6.10 (7331)

**Back Side High/Area Scan (71x131x1):** Interpolated grid: dx=1.500 mm, dy=1.500 mm

Maximum value of SAR (interpolated) = 0.149 W/kg

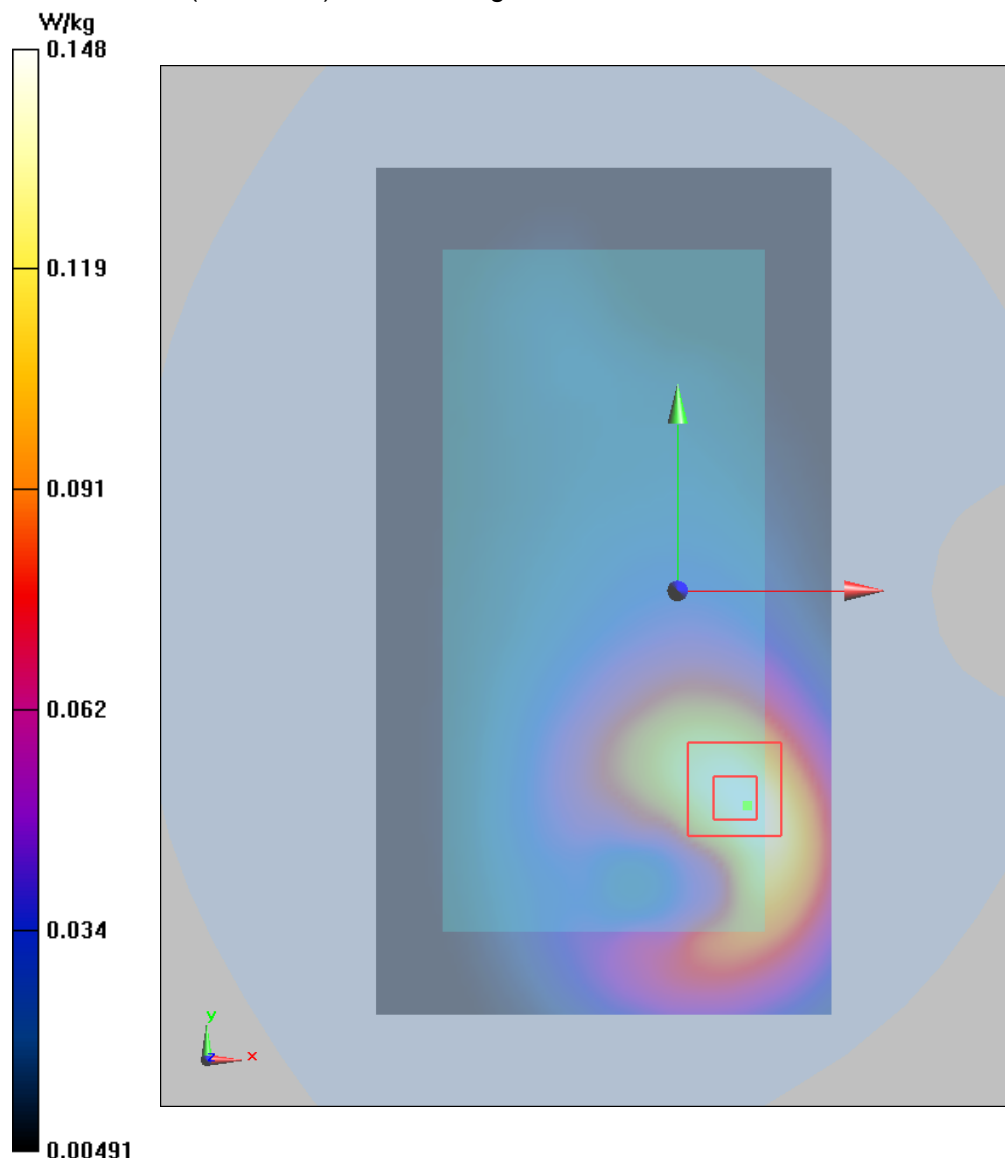
**Back Side High/Zoom Scan (5x5x7)/Cube 0:** Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 5.406 V/m; Power Drift = -0.06 dB

Peak SAR (extrapolated) = 0.209 W/kg

**SAR(1 g) = 0.138 W/kg; SAR(10 g) = 0.089 W/kg**

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



# Plot 66 LTE Band 12 1RB Back Side High (Distance 10mm)

Date: 7/6/2018

Communication System: UID 0, LTE (0); Frequency: 711 MHz; Duty Cycle: 1:1

Medium parameters used:  $f = 711$  MHz;  $\sigma = 0.932$  S/m;  $\epsilon_r = 57.311$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Ambient Temperature: 22.3 °C Liquid Temperature: 21.5 °C

Phantom section: Flat Section

DASY5 Configuration:

Sensor-Surface: 4mm (Mechanical Surface Detection)

Probe: EX3DV4 - SN3677; ConvF(9.79, 9.79, 9.79); Calibrated: 5/29/2018;

Electronics: DAE4 SN1317; Calibrated: 3/23/2018

Phantom: SAM1; Type: SAM; Serial: TP-1534

Measurement SW: DASY52, Version 52.8 (8); SEMCAD X Version 14.6.10 (7331)

**Back Side High/Area Scan (71x131x1):** Interpolated grid: dx=1.500 mm, dy=1.500 mm

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

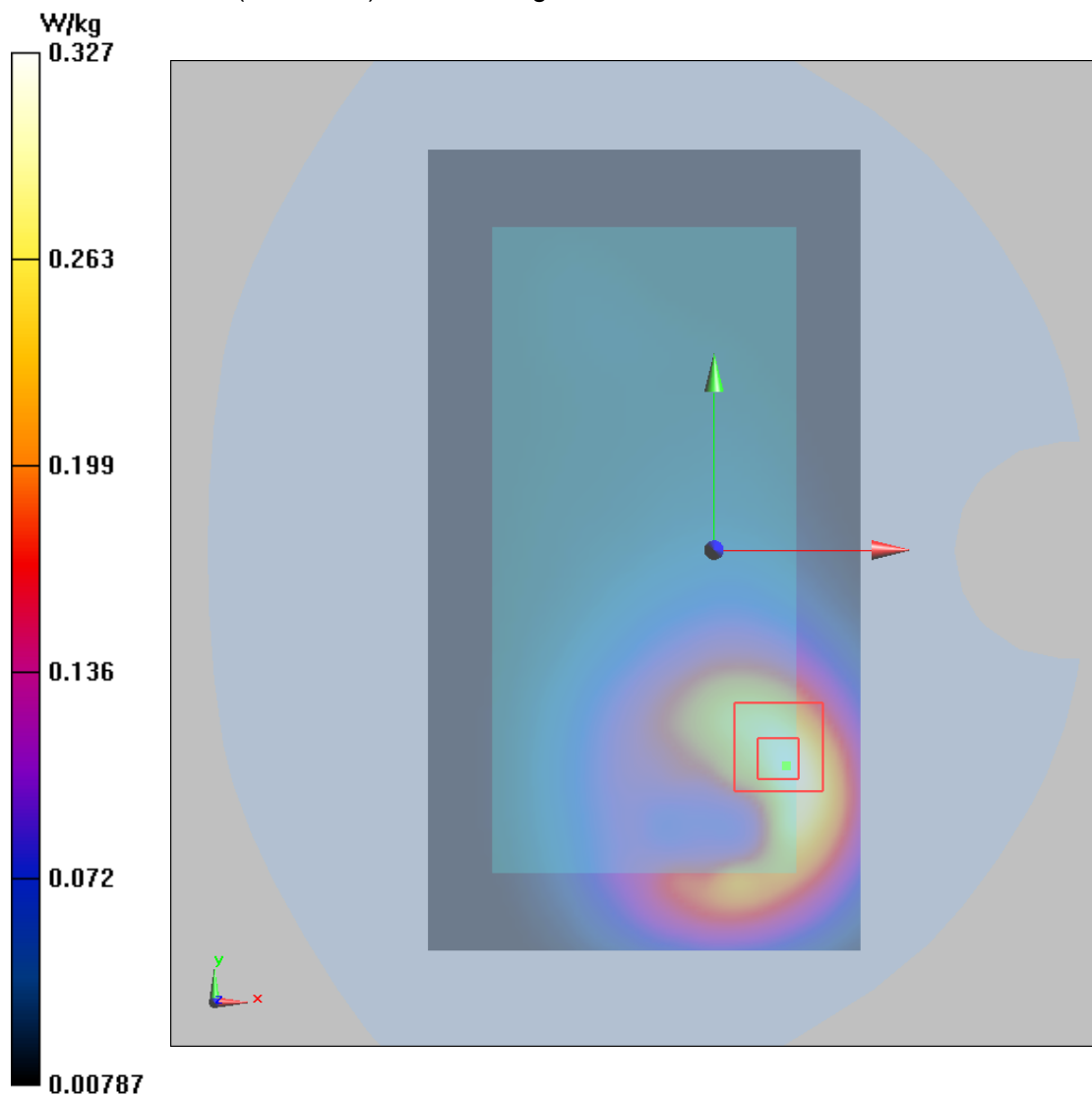
**Back Side High/Zoom Scan (5x5x7)/Cube 0:** Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 5.675 V/m; Power Drift = -0.03 dB

Peak SAR (extrapolated) = 0.514 W/kg

**SAR(1 g) = 0.300 W/kg; SAR(10 g) = 0.177 W/kg**

Maximum value of SAR (measured) = 0.327 W/kg





## Plot 67 LTE Band 17 1RB Right Cheek Middle

Date: 7/2/2018

Communication System: UID 0, LTE (0); Frequency: 710 MHz; Duty Cycle: 1:1

Medium parameters used:  $f = 800$  MHz;  $\sigma = 0.876$  S/m;  $\epsilon_r = 41.825$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Ambient Temperature: 22.3 °C Liquid Temperature: 21.5 °C

Phantom section: Right Section

DASY5 Configuration:

Sensor-Surface: 4mm (Mechanical Surface Detection)

Probe: EX3DV4 - SN3677; ConvF(9.40, 9.40, 9.40); Calibrated: 5/29/2018;

Electronics: DAE4 SN1317; Calibrated: 3/23/2018

Phantom: SAM1; Type: SAM; Serial: TP-1534

Measurement SW: DASY52, Version 52.8 (8); SEMCAD X Version 14.6.10 (7331)

**Right Cheek Middle/Area Scan (71x131x1):** Interpolated grid: dx=1.500 mm, dy=1.500 mm

Maximum value of SAR (interpolated) = 0.0341 W/kg

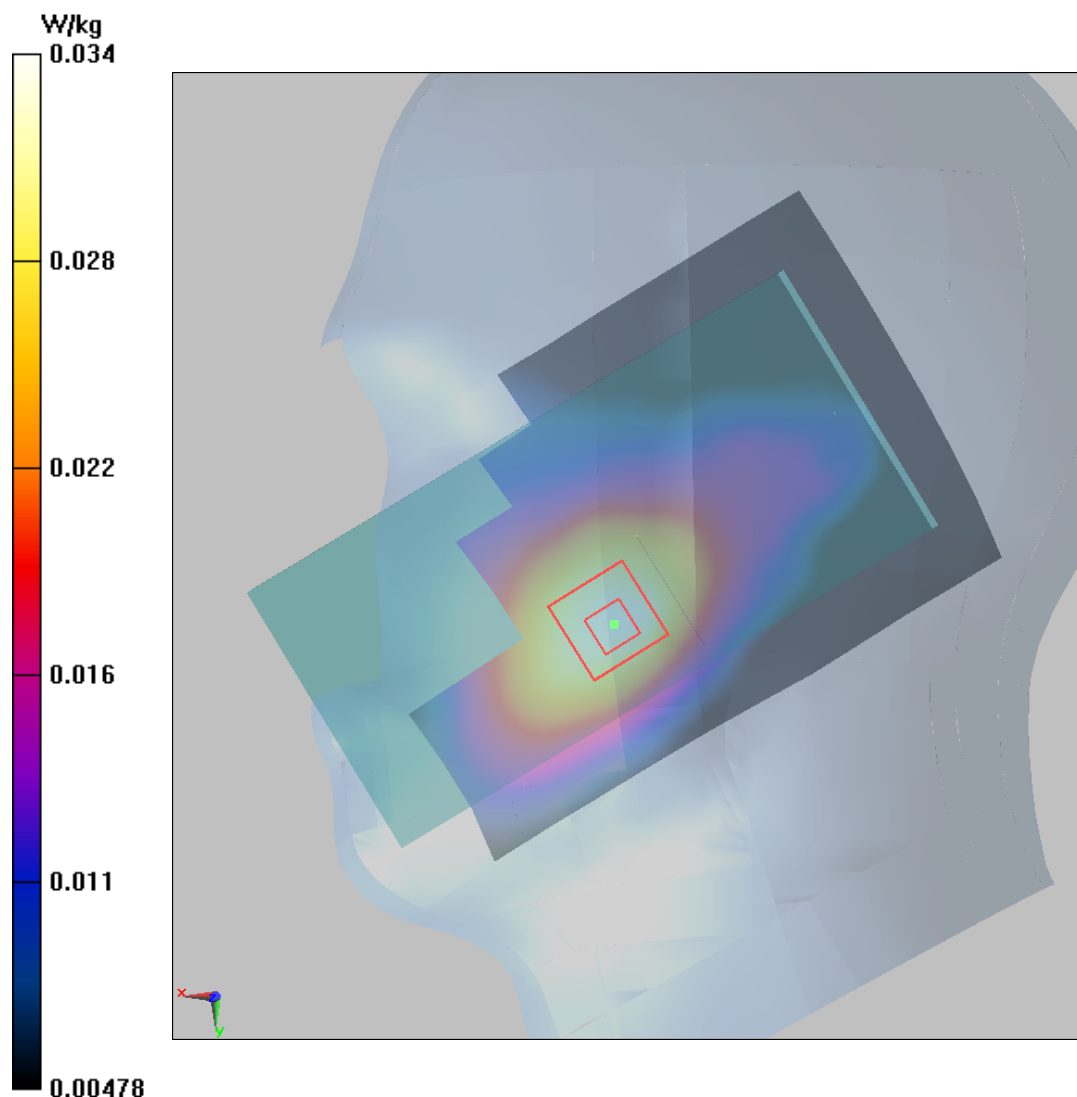
**Right Cheek Middle/Zoom Scan (5x5x7)/Cube 0:** Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 3.029 V/m; Power Drift = 0.069 dB

Peak SAR (extrapolated) = 0.0390 W/kg

**SAR(1 g) = 0.032 W/kg; SAR(10 g) = 0.026 W/kg**

Maximum value of SAR (measured) = 0.0338 W/kg



# **Plot 68 LTE Band 17 1RB Back Side Middle (Distance 15mm)**

Date: 7/6/2018

Communication System: UID 0, LTE (0); Frequency: 710 MHz; Duty Cycle: 1:1

Medium parameters used:  $f = 710$  MHz;  $\sigma = 0.931$  S/m;  $\epsilon_r = 57.326$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Ambient Temperature: 22.3 °C Liquid Temperature: 21.5 °C

Phantom section: Flat Section

DASY5 Configuration:

Sensor-Surface: 4mm (Mechanical Surface Detection)

Probe: EX3DV4 - SN3677; ConvF(9.79, 9.79, 9.79); Calibrated: 5/29/2018;

Electronics: DAE4 SN1317; Calibrated: 3/23/2018

Phantom: SAM1; Type: SAM; Serial: TP-1534

Measurement SW: DASY52, Version 52.8 (8); SEMCAD X Version 14.6.10 (7331)

**Back Side Middle/Area Scan (71x131x1):** Interpolated grid: dx=1.500 mm, dy=1.500 mm

Maximum value of SAR (interpolated) = 0.122 W/kg

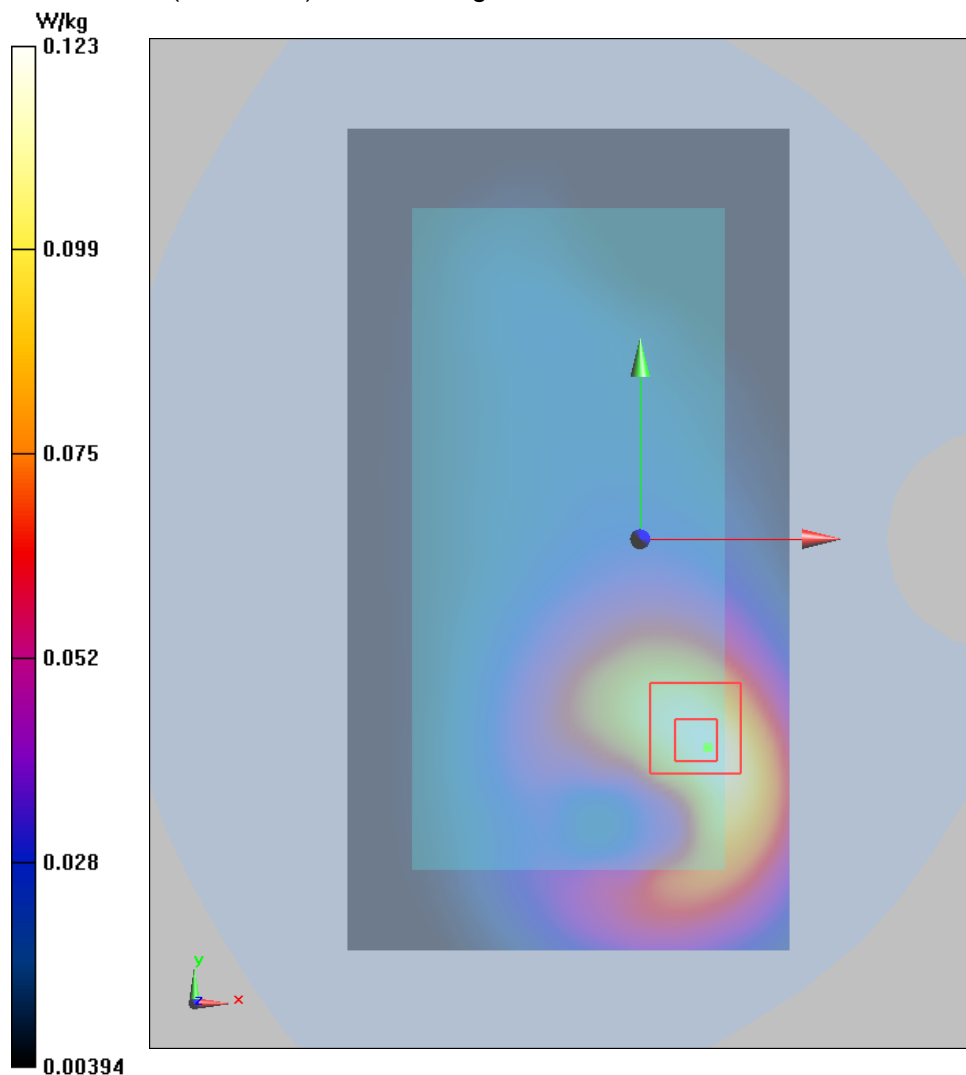
**Back Side Middle/Zoom Scan (5x5x7)/Cube 0:** Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 5.200 V/m; Power Drift = -0.12 dB

Peak SAR (extrapolated) = 0.174 W/kg

**SAR(1 g) = 0.114 W/kg; SAR(10 g) = 0.073 W/kg**

Maximum value of SAR (measured) = 0.123 W/kg



# Plot 69 LTE Band 17 1RB Back Side Middle (Distance 10mm)

Date: 7/6/2018

Communication System: UID 0, LTE (0); Frequency: 710 MHz; Duty Cycle: 1:1

Medium parameters used:  $f = 710$  MHz;  $\sigma = 0.931$  S/m;  $\epsilon_r = 57.326$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Ambient Temperature: 22.3 °C Liquid Temperature: 21.5 °C

Phantom section: Flat Section

DASY5 Configuration:

Sensor-Surface: 4mm (Mechanical Surface Detection)

Probe: EX3DV4 - SN3677; ConvF(9.79, 9.79, 9.79); Calibrated: 5/29/2018;

Electronics: DAE4 SN1317; Calibrated: 3/23/2018

Phantom: SAM1; Type: SAM; Serial: TP-1534

Measurement SW: DASY52, Version 52.8 (8); SEMCAD X Version 14.6.10 (7331)

**Back Side Middle/Area Scan (71x131x1):** Interpolated grid: dx=1.500 mm, dy=1.500 mm

Maximum value of SAR (interpolated) = 0.276 W/kg

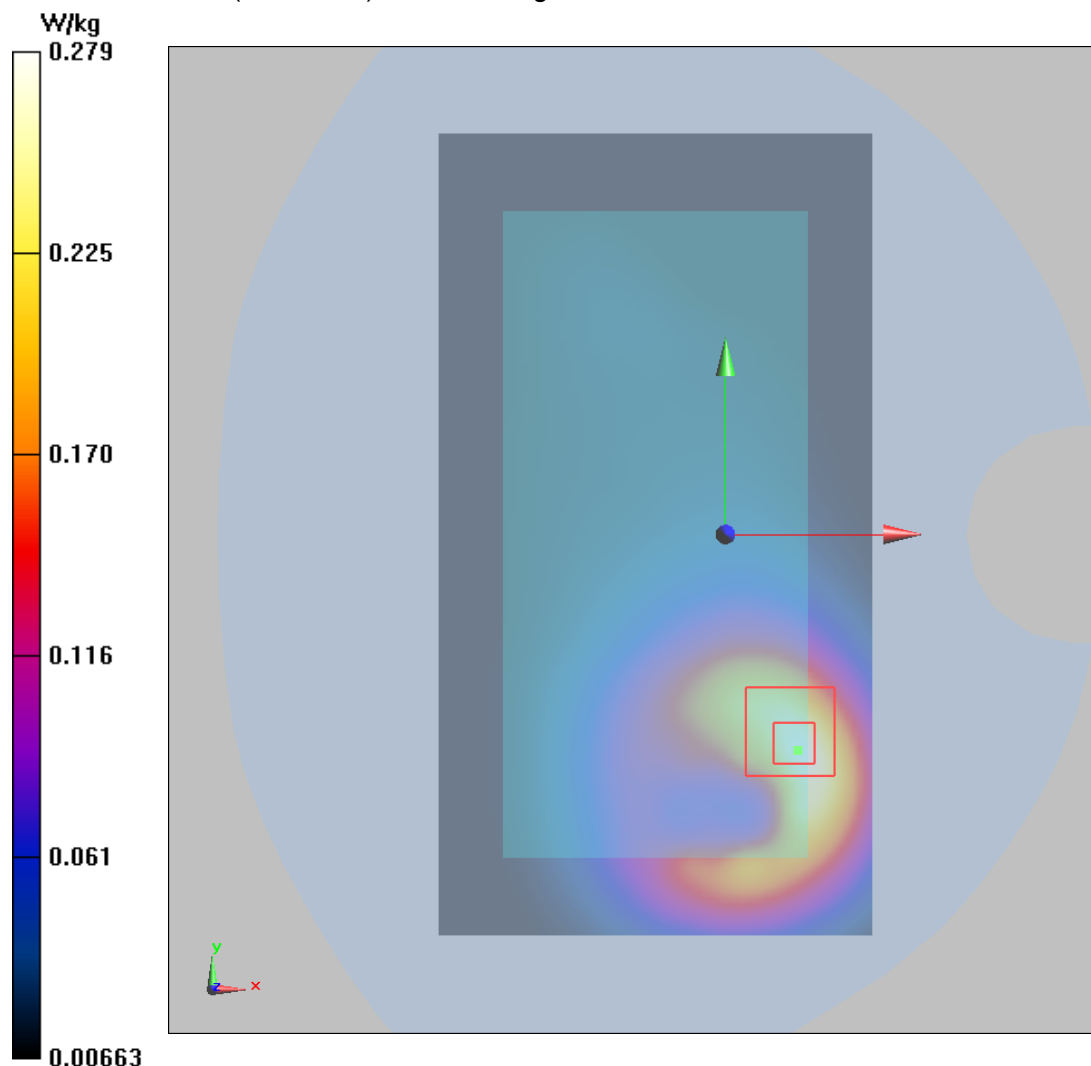
**Back Side Middle/Zoom Scan (5x5x7)/Cube 0:** Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 5.331 V/m; Power Drift = 0.07 dB

Peak SAR (extrapolated) = 0.440 W/kg

**SAR(1 g) = 0.256 W/kg; SAR(10 g) = 0.151 W/kg**

Maximum value of SAR (measured) = 0.279 W/kg



# Plot 70 LTE Band 26 1RB Left Cheek Middle

Date: 7/5/2018

Communication System: UID 0, LTE (0); Frequency: 831.5 MHz; Duty Cycle: 1:1

Medium parameters used (interpolated):  $f = 831.5$  MHz;  $\sigma = 0.904$  S/m;  $\epsilon_r = 41.509$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Ambient Temperature: 22.3 °C Liquid Temperature: 21.5 °C

Phantom section: Left Section

DASY5 Configuration:

Sensor-Surface: 4mm (Mechanical Surface Detection)

Probe: EX3DV4 - SN3677; ConvF(9.10, 9.10, 9.10); Calibrated: 5/29/2018;

Electronics: DAE4 SN1317; Calibrated: 3/23/2018

Phantom: SAM1; Type: SAM; Serial: TP-1534

Measurement SW: DASY52, Version 52.8 (8); SEMCAD X Version 14.6.10 (7331)

**Left Cheek Middle/Area Scan (71x131x1):** Interpolated grid: dx=1.500 mm, dy=1.500 mm

Maximum value of SAR (interpolated) = 0.0540 W/kg

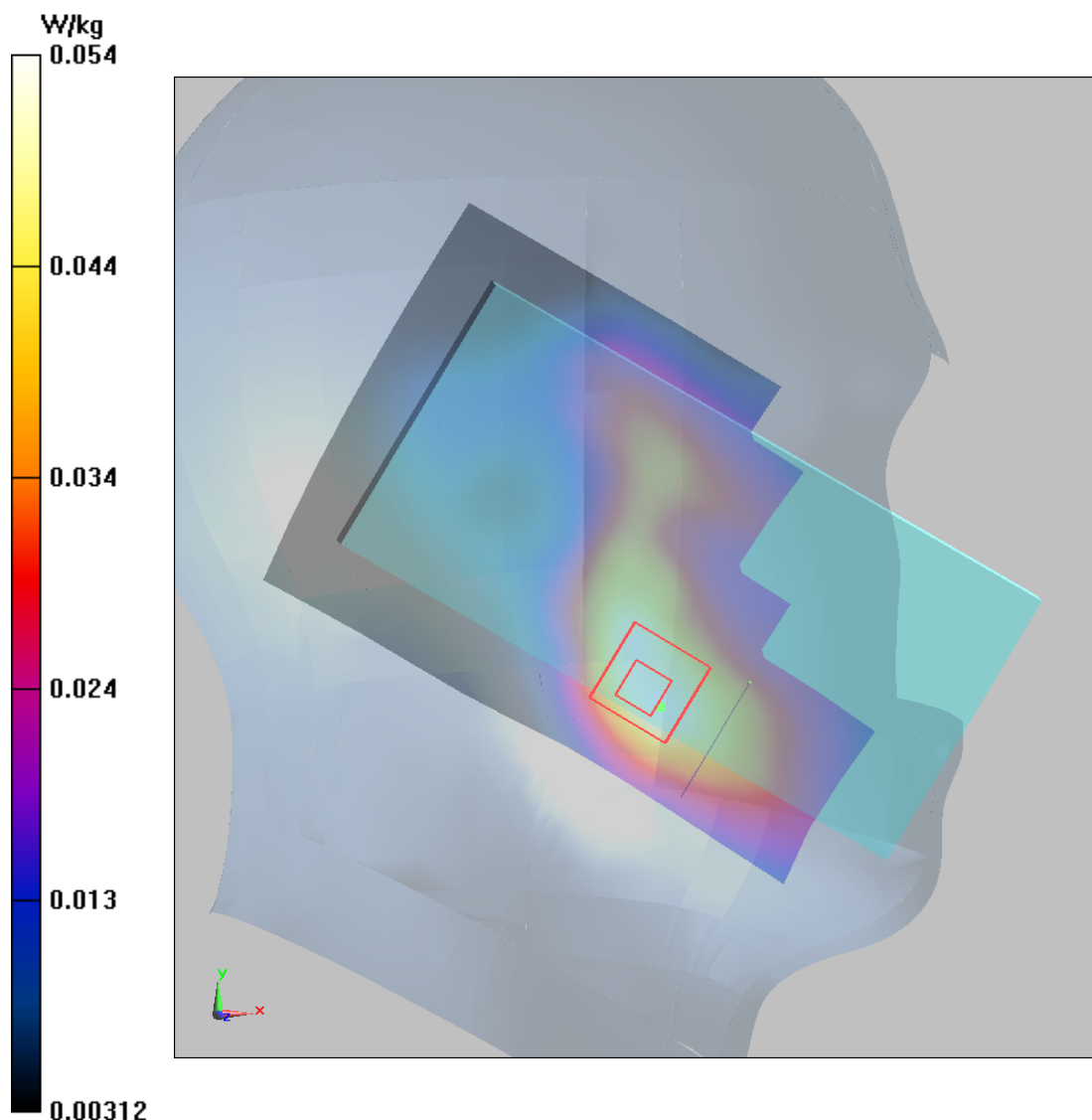
**Left Cheek Middle/Zoom Scan (5x5x7)/Cube 0:** Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 4.736 V/m; Power Drift = 0.041 dB

Peak SAR (extrapolated) = 0.0710 W/kg

**SAR(1 g) = 0.051 W/kg; SAR(10 g) = 0.034 W/kg**

Maximum value of SAR (measured) = 0.0544 W/kg



# Plot 71 LTE Band 26 1RB Back Side Middle (Distance 15mm)

Date: 7/8/2018

Communication System: UID 0, LTE\_FDD (0); Frequency: 831.5 MHz; Duty Cycle: 1:1

Medium parameters used (interpolated):  $f = 831.5$  MHz;  $\sigma = 0.969$  S/m;  $\epsilon_r = 53.84$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Ambient Temperature: 22.3 °C Liquid Temperature: 21.5 °C

Phantom section: Flat Section

DASY5 Configuration:

Sensor-Surface: 4mm (Mechanical Surface Detection)

Probe: EX3DV4 - SN3677; ConvF(9.32, 9.32, 9.32); Calibrated: 5/29/2018;

Electronics: DAE4 SN1317; Calibrated: 3/23/2018

Phantom: SAM1; Type: SAM; Serial: TP-1534

Measurement SW: DASY52, Version 52.8 (8); SEMCAD X Version 14.6.10 (7331)

**Back Side Middle/Area Scan (71x131x1):** Interpolated grid: dx=1.500 mm, dy=1.500 mm

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

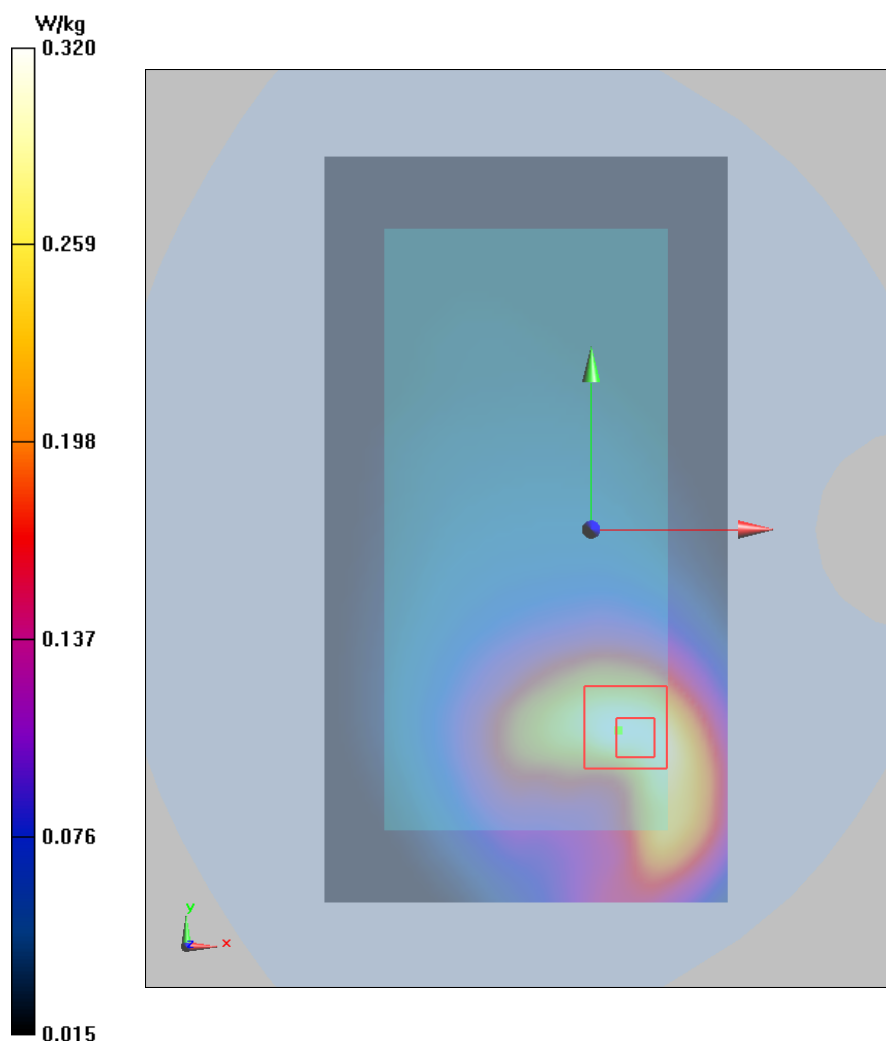
**Back Side Middle/Zoom Scan (5x5x7)/Cube 0:** Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 7.029 V/m; Power Drift = 0.02 dB

Peak SAR (extrapolated) = 0.462 W/kg

**SAR(1 g) = 0.301 W/kg; SAR(10 g) = 0.191 W/kg**

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



## Plot 72 LTE Band 26 1RB Back Side Middle (Distance 10mm)

Date: 7/8/2018

Communication System: UID 0, LTE\_FDD (0); Frequency: 831.5 MHz; Duty Cycle: 1:1

Medium parameters used (interpolated):  $f = 831.5$  MHz;  $\sigma = 0.969$  S/m;  $\epsilon_r = 53.84$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Ambient Temperature: 22.3 °C Liquid Temperature: 21.5 °C

Phantom section: Flat Section

DASY5 Configuration:

Sensor-Surface: 4mm (Mechanical Surface Detection)

Probe: EX3DV4 - SN3677; ConvF(9.32, 9.32, 9.32); Calibrated: 5/29/2018;

Electronics: DAE4 SN1317; Calibrated: 3/23/2018

Phantom: SAM1; Type: SAM; Serial: TP-1534

Measurement SW: DASY52, Version 52.8 (8); SEMCAD X Version 14.6.10 (7331)

**Back Side Middle/Area Scan (71x131x1):** Interpolated grid: dx=1.500 mm, dy=1.500 mm

Maximum value of SAR (interpolated) = 0.584 W/kg

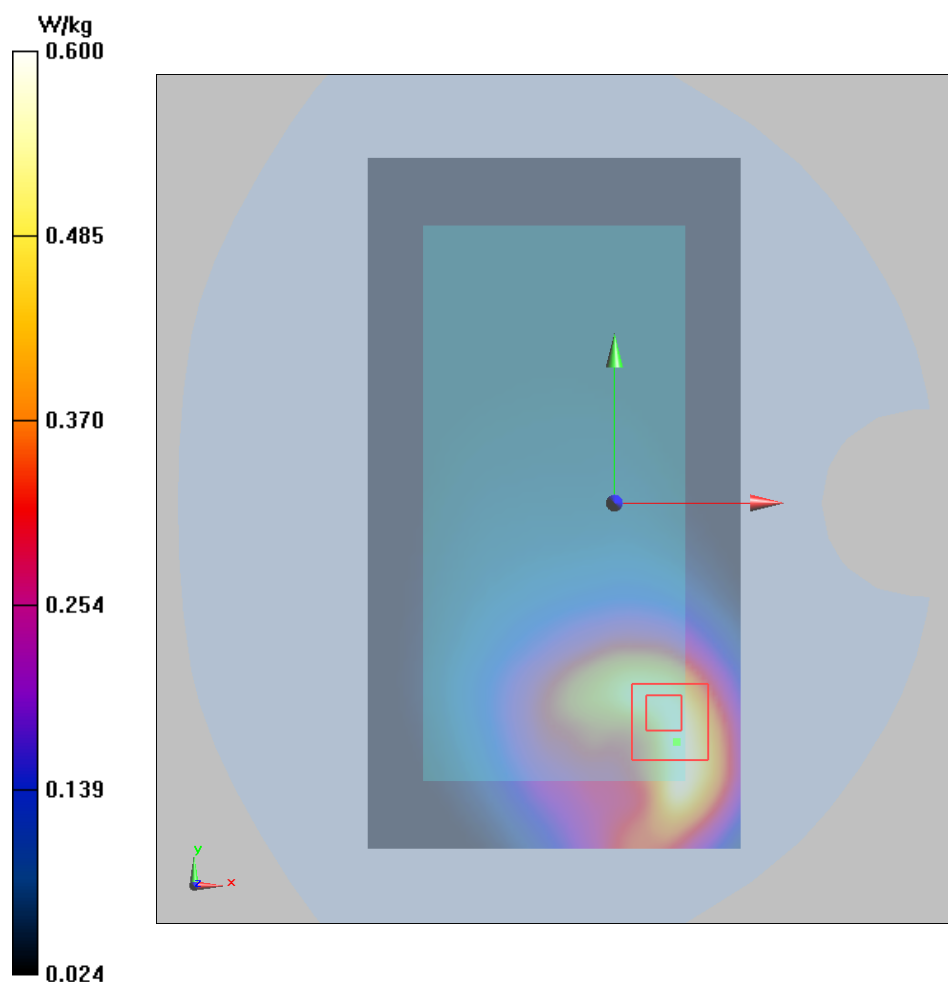
**Back Side Middle/Zoom Scan (5x5x7)/Cube 0:** Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 7.106 V/m; Power Drift = 0.11 dB

Peak SAR (extrapolated) = 0.941 W/kg

**SAR(1 g) = 0.562 W/kg; SAR(10 g) = 0.326 W/kg**

Maximum value of SAR (measured) = 0.600 W/kg



## Plot 73 LTE Band 38 1RB Left Cheek High

Date: 6/28/2018

Communication System: UID 0, LTE\_TDD (0); Frequency: 2610 MHz; Duty Cycle: 1:1.57979

Medium parameters used:  $f = 2610$  MHz;  $\sigma = 2.028$  S/m;  $\epsilon_r = 39.226$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Ambient Temperature: 22.3 °C Liquid Temperature: 21.5 °C

Phantom section: Left Section

DASY5 Configuration:

Sensor-Surface: 4mm (Mechanical Surface Detection)

Probe: EX3DV4 - SN3677; ConvF(7.28, 7.28, 7.28); Calibrated: 5/29/2018;

Electronics: DAE4 SN1317; Calibrated: 3/23/2018

Phantom: SAM1; Type: SAM; Serial: TP-1534

Measurement SW: DASY52, Version 52.8 (8); SEMCAD X Version 14.6.10 (7331)

**Left Cheek High/Area Scan (91x171x1):** Interpolated grid: dx=1.200 mm, dy=1.200 mm

Maximum value of SAR (interpolated) = 0.177 W/kg

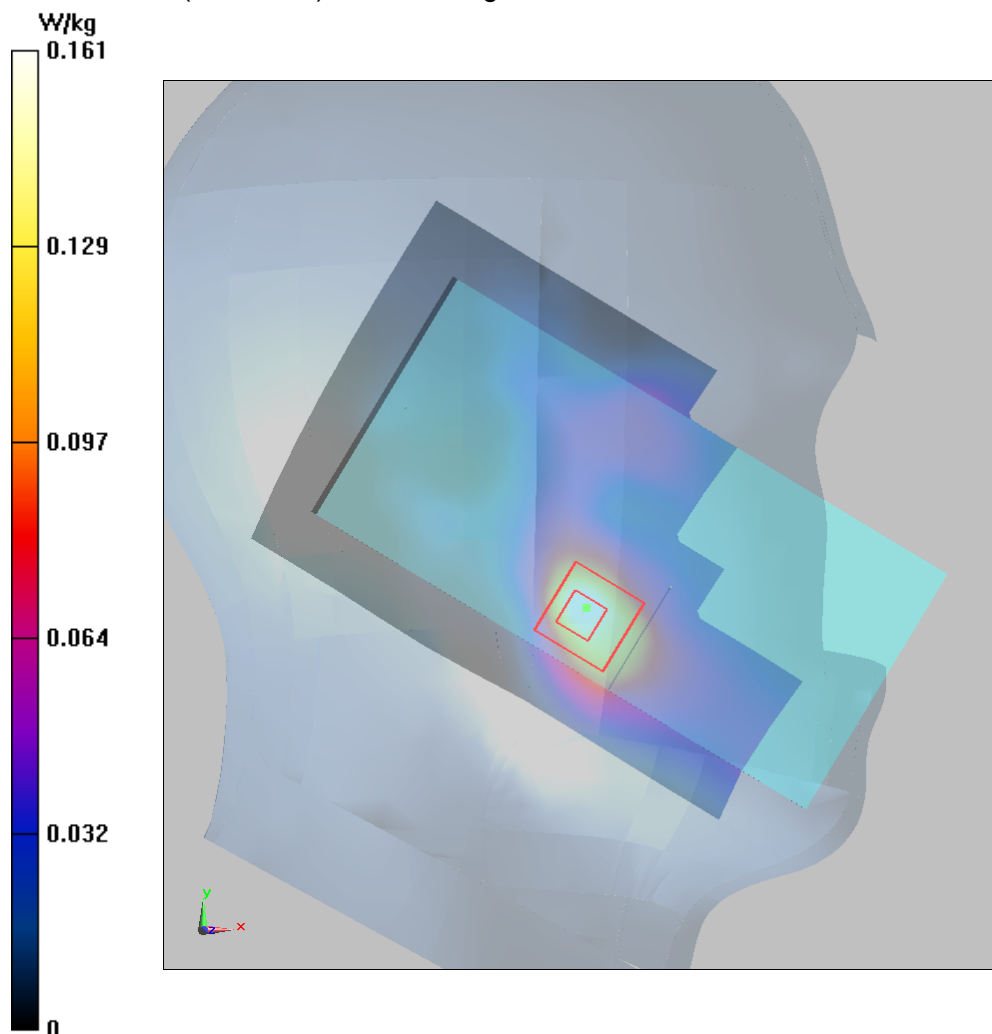
**Left Cheek High/Zoom Scan (7x7x7)/Cube 0:** Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 2.167 V/m; Power Drift = -0.13 dB

Peak SAR (extrapolated) = 0.304 W/kg

**SAR(1 g) = 0.152 W/kg; SAR(10 g) = 0.077 W/kg**

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



# **Plot 74 LTE Band 38 1RB Back Side High (Distance 15mm)**

Date: 6/26/2018

Communication System: UID 0, LTE (0); Frequency: 2610 MHz; Duty Cycle: 1:1.57979

Medium parameters used:  $f = 2610$  MHz;  $\sigma = 2.169$  S/m;  $\epsilon_r = 50.634$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Ambient Temperature: 22.3 °C      Liquid Temperature: 21.5 °C

Phantom section: Flat Section

DASY5 Configuration:

Sensor-Surface: 4mm (Mechanical Surface Detection)

Probe: EX3DV4 - SN3677; ConvF(7.16, 7.16, 7.16); Calibrated: 5/29/2018;

Electronics: DAE4 SN1317; Calibrated: 3/23/2018

Phantom: SAM1; Type: SAM; Serial: TP-1534

Measurement SW: DASY52, Version 52.8 (8); SEMCAD X Version 14.6.10 (7331)

**Back Side High/Area Scan (91x171x1):** Interpolated grid: dx=1.200 mm, dy=1.200 mm

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

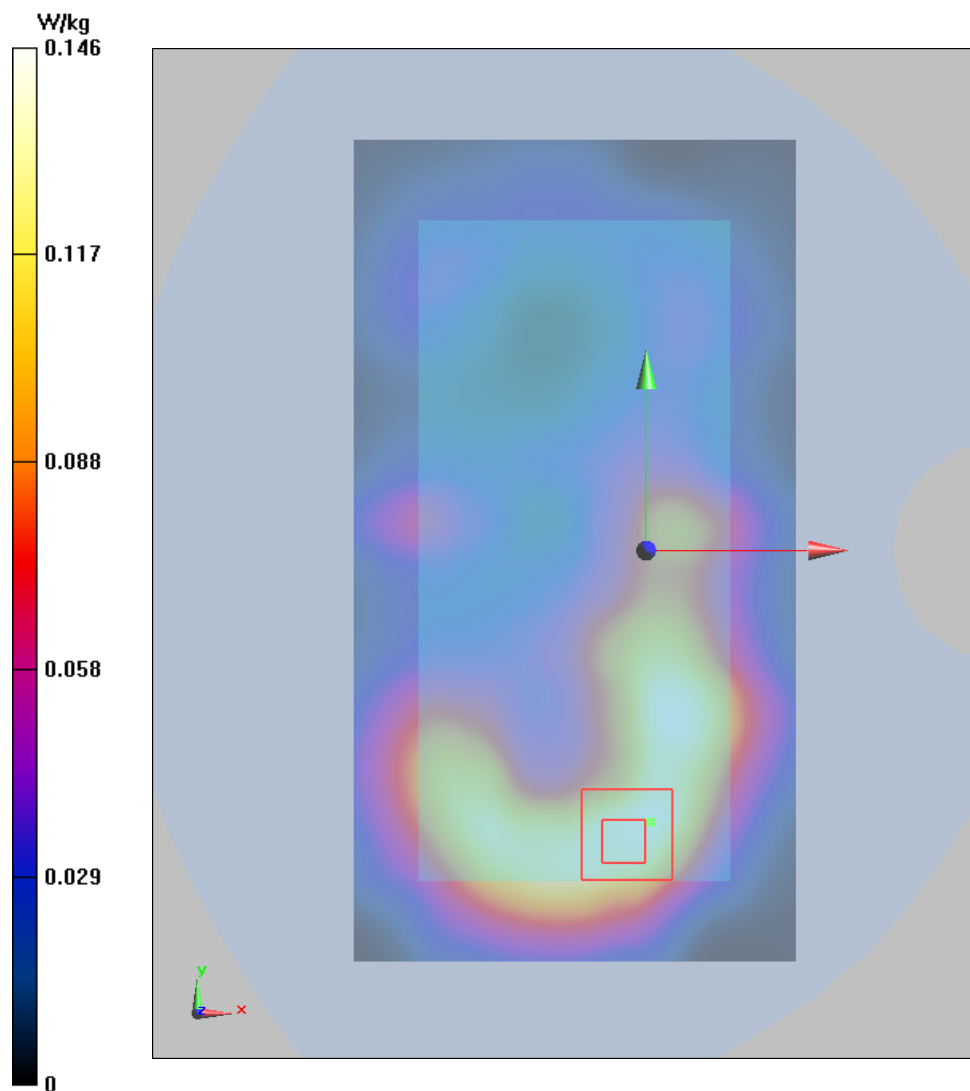
**Back Side High/Zoom Scan (7x7x7)/Cube 0:** Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 3.456 V/m; Power Drift = -0.17 dB

Peak SAR (extrapolated) = 0.253 W/kg

**SAR(1 g) = 0.136 W/kg; SAR(10 g) = 0.073 W/kg**

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





# Plot 75 LTE Band 38 1RB Bottom Edge High (Distance 10mm)

Date: 6/26/2018

Communication System: UID 0, LTE (0); Frequency: 2610 MHz; Duty Cycle: 1:1.57979

Medium parameters used:  $f = 2610$  MHz;  $\sigma = 2.169$  S/m;  $\epsilon_r = 50.634$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Ambient Temperature: 22.3 °C Liquid Temperature: 21.5 °C

Phantom section: Flat Section

DASY5 Configuration:

Sensor-Surface: 4mm (Mechanical Surface Detection)

Probe: EX3DV4 - SN3677; ConvF(7.16, 7.16, 7.16); Calibrated: 5/29/2018;

Electronics: DAE4 SN1317; Calibrated: 3/23/2018

Phantom: SAM1; Type: SAM; Serial: TP-1534

Measurement SW: DASY52, Version 52.8 (8); SEMCAD X Version 14.6.10 (7331)

**Bottom Edge High/Area Scan (41x91x1):** Interpolated grid: dx=1.000 mm, dy=1.000 mm

Maximum value of SAR (interpolated) = 0.501 W/kg

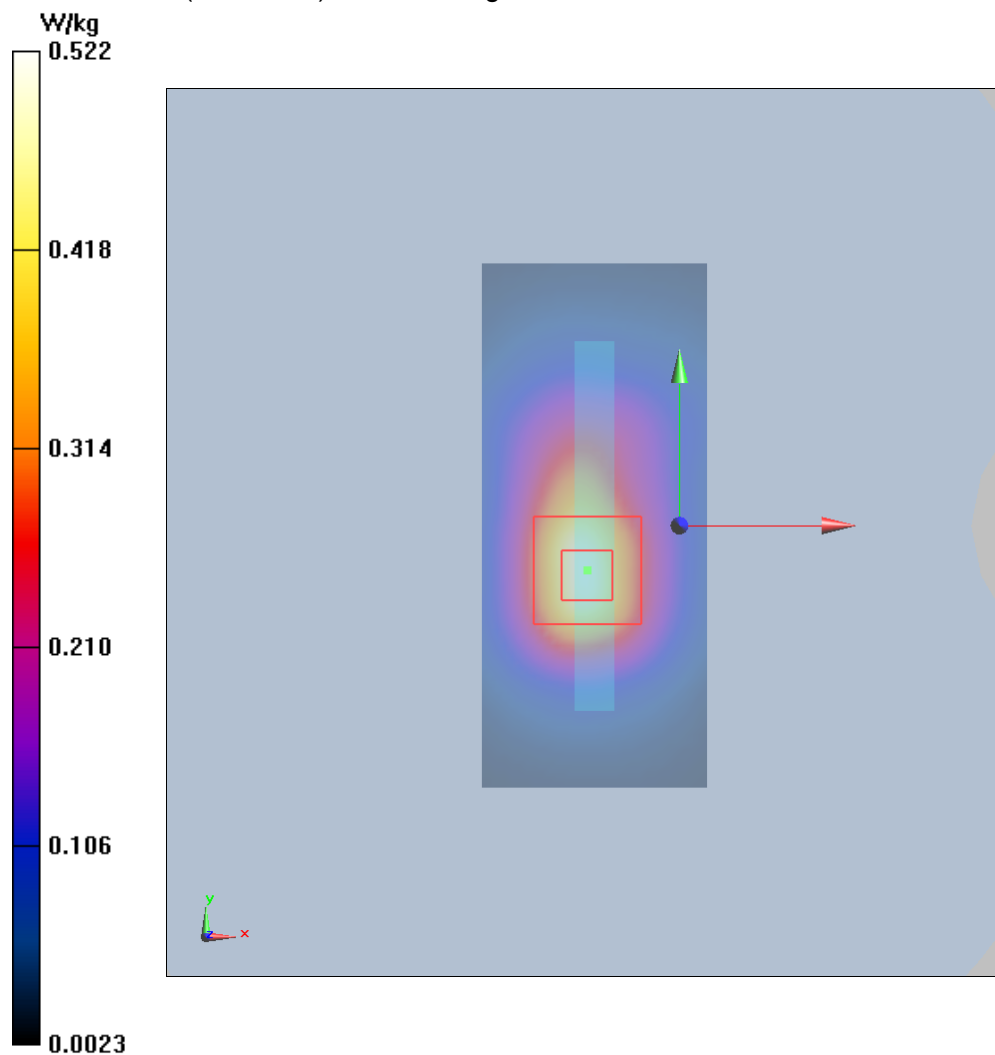
**Bottom Edge High/Zoom Scan (7x7x7)/Cube 0:** Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 14.28 V/m; Power Drift = 0.08 dB

Peak SAR (extrapolated) = 0.892 W/kg

**SAR(1 g) = 0.461 W/kg; SAR(10 g) = 0.226 W/kg**

Maximum value of SAR (measured) = 0.522 W/kg



## Plot 76 LTE Band 41 1RB Left Cheek Middle

Date: 7/19/2018

Communication System: UID 0, LTE\_TDD (0); Frequency: 2615 MHz; Duty Cycle: 1:1.57979

Medium parameters used:  $f = 2615$  MHz;  $\sigma = 2.034$  S/m;  $\epsilon_r = 39.21$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Ambient Temperature: 22.3 °C Liquid Temperature: 21.5 °C

Phantom section: Left Section

DASY5 Configuration:

Sensor-Surface: 4mm (Mechanical Surface Detection)

Probe: EX3DV4 - SN3677; ConvF(7.28, 7.28, 7.28); Calibrated: 5/29/2018;

Electronics: DAE4 SN1317; Calibrated: 3/23/2018

Phantom: SAM1; Type: SAM; Serial: TP-1534

Measurement SW: DASY52, Version 52.8 (8); SEMCAD X Version 14.6.10 (7331)

**Left Cheek Middle/Area Scan (91x171x1):** Interpolated grid: dx=1.200 mm, dy=1.200 mm

Maximum value of SAR (interpolated) = 0.151 W/kg

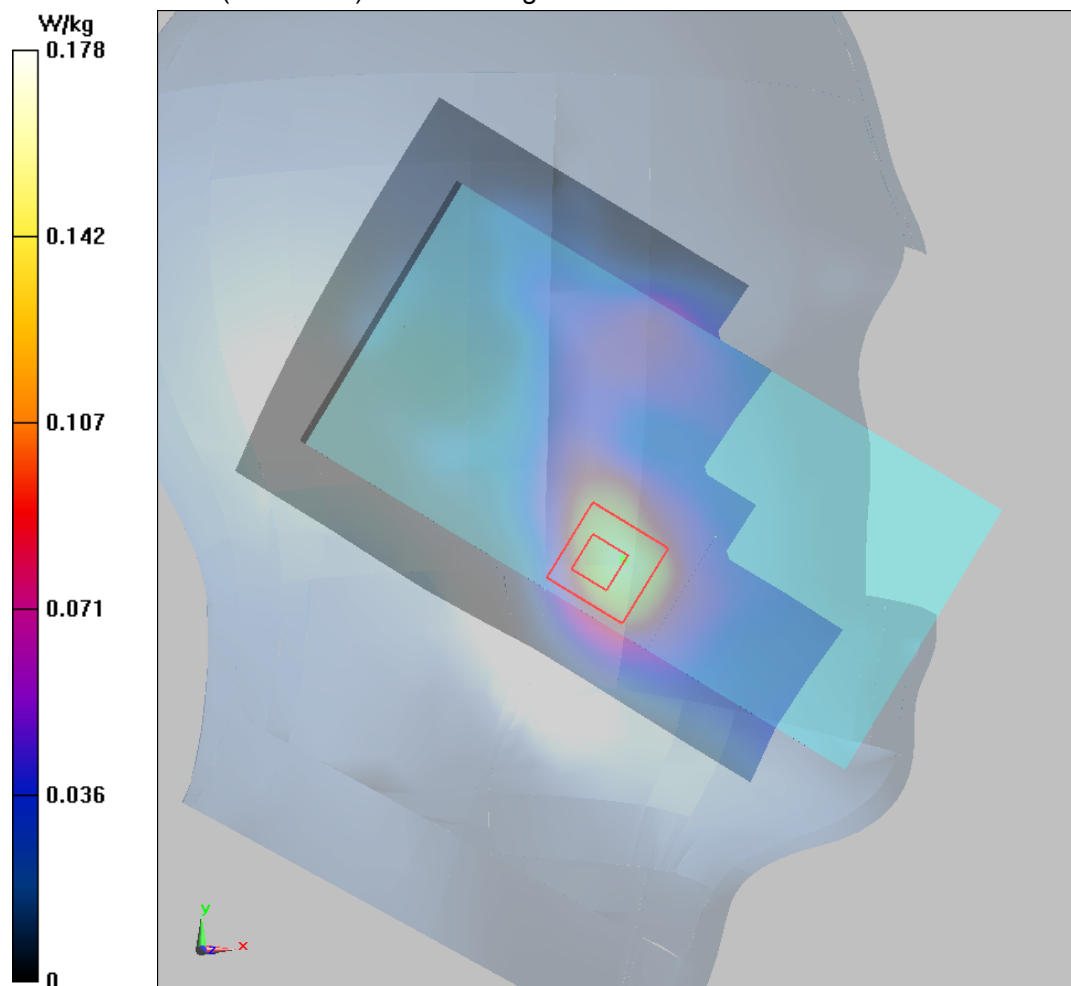
**Left Cheek Middle/Zoom Scan (7x7x7)/Cube 0:** Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 2.034 V/m; Power Drift = 0.010dB

Peak SAR (extrapolated) = 0.371 W/kg

**SAR(1 g) = 0.163 W/kg; SAR(10 g) = 0.079 W/kg**

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



# Plot 77 LTE Band 41 1RB Back Side Middle (Distance 15mm)

Date: 7/19/2018

Communication System: UID 0, LTE (0); Frequency: 2615 MHz; Duty Cycle: 1:1.57979

Medium parameters used:  $f = 2615$  MHz;  $\sigma = 2.176$  S/m;  $\epsilon_r = 50.62$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Ambient Temperature: 22.3 °C Liquid Temperature: 21.5 °C

Phantom section: Flat Section

DASY5 Configuration:

Sensor-Surface: 4mm (Mechanical Surface Detection)

Probe: EX3DV4 - SN3677; ConvF(7.16, 7.16, 7.16); Calibrated: 5/29/2018;

Electronics: DAE4 SN1317; Calibrated: 3/23/2018

Phantom: SAM1; Type: SAM; Serial: TP-1534

Measurement SW: DASY52, Version 52.8 (8); SEMCAD X Version 14.6.10 (7331)

**Back Side Middle/Area Scan (91x171x1):** Interpolated grid: dx=1.200 mm, dy=1.200 mm

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

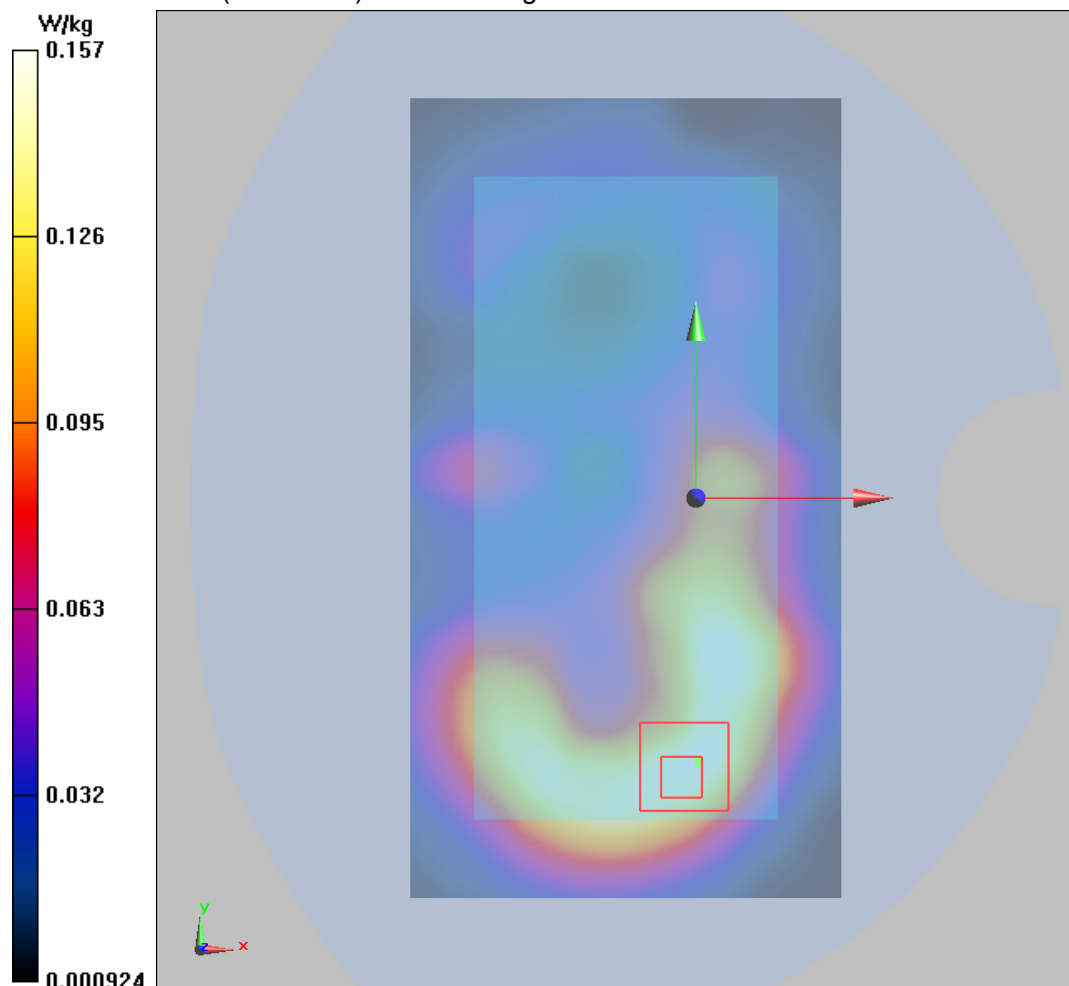
**Back Side Middle/Zoom Scan (7x7x7)/Cube 0:** Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 3.718 V/m; Power Drift = -0.14 dB

Peak SAR (extrapolated) = 0.273 W/kg

**SAR(1 g) = 0.145 W/kg; SAR(10 g) = 0.079 W/kg**

Maximum value of SAR (measured) = 0.157 W/kg



## Plot 78 LTE Band 41 1RB Bottom Edge Middle (Distance 10mm)

Date: 7/19/2018

Communication System: UID 0, LTE (0); Frequency: 2615 MHz; Duty Cycle: 1:1.57979

Medium parameters used:  $f = 2615$  MHz;  $\sigma = 2.176$  S/m;  $\epsilon_r = 50.62$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Ambient Temperature: 22.3 °C Liquid Temperature: 21.5 °C

Phantom section: Flat Section

DASY5 Configuration:

Sensor-Surface: 4mm (Mechanical Surface Detection)

Probe: EX3DV4 - SN3677; ConvF(7.16, 7.16, 7.16); Calibrated: 5/29/2018;

Electronics: DAE4 SN1317; Calibrated: 3/23/2018

Phantom: SAM1; Type: SAM; Serial: TP-1534

Measurement SW: DASY52, Version 52.8 (8); SEMCAD X Version 14.6.10 (7331)

**Bottom Edge Middle/Area Scan (51x111x1):** Interpolated grid: dx=1.000 mm, dy=1.000 mm

Maximum value of SAR (interpolated) = 0.529 W/kg

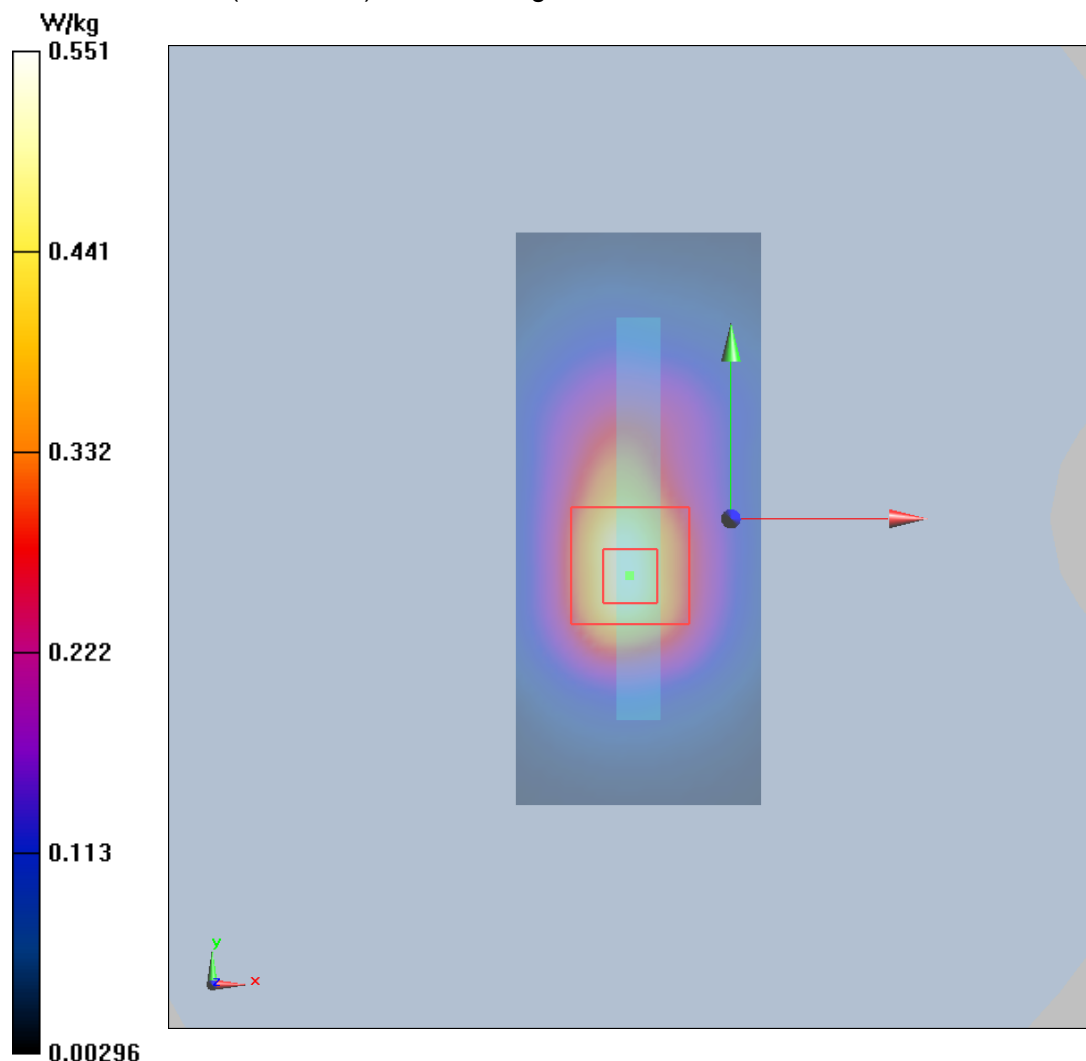
**Bottom Edge Middle/Zoom Scan (7x7x7)/Cube 0:** Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 14.71 V/m; Power Drift = 0.02 dB

Peak SAR (extrapolated) = 0.943 W/kg

**SAR(1 g) = 0.482 W/kg; SAR(10 g) = 0.239 W/kg**

Maximum value of SAR (measured) = 0.551 W/kg



## Antenna 2

### Plot 79 GSM 850 Right Cheek High Middle

Date: 7/4/2018

Communication System: UID 0, GSM 850 (0); Frequency: 836.6 MHz; Duty Cycle: 1:8.30042

Medium parameters used:  $f = 837$  MHz;  $\sigma = 0.908$  S/m;  $\epsilon_r = 41.317$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Ambient Temperature: 22.3 °C Liquid Temperature: 21.5 °C

Phantom section: Right Section

DASY5 Configuration:

Sensor-Surface: 4mm (Mechanical Surface Detection)

Probe: EX3DV4 - SN3677; ConvF(9.10, 9.10, 9.10); Calibrated: 5/29/2018;

Electronics: DAE4 SN1317; Calibrated: 3/23/2018

Phantom: SAM1; Type: SAM; Serial: TP-1534

Measurement SW: DASY52, Version 52.8 (8); SEMCAD X Version 14.6.10 (7331)

**Right Cheek Middle/Area Scan (71x131x1):** Interpolated grid: dx=1.500 mm, dy=1.500 mm

Maximum value of SAR (interpolated) = 0.603 W/kg

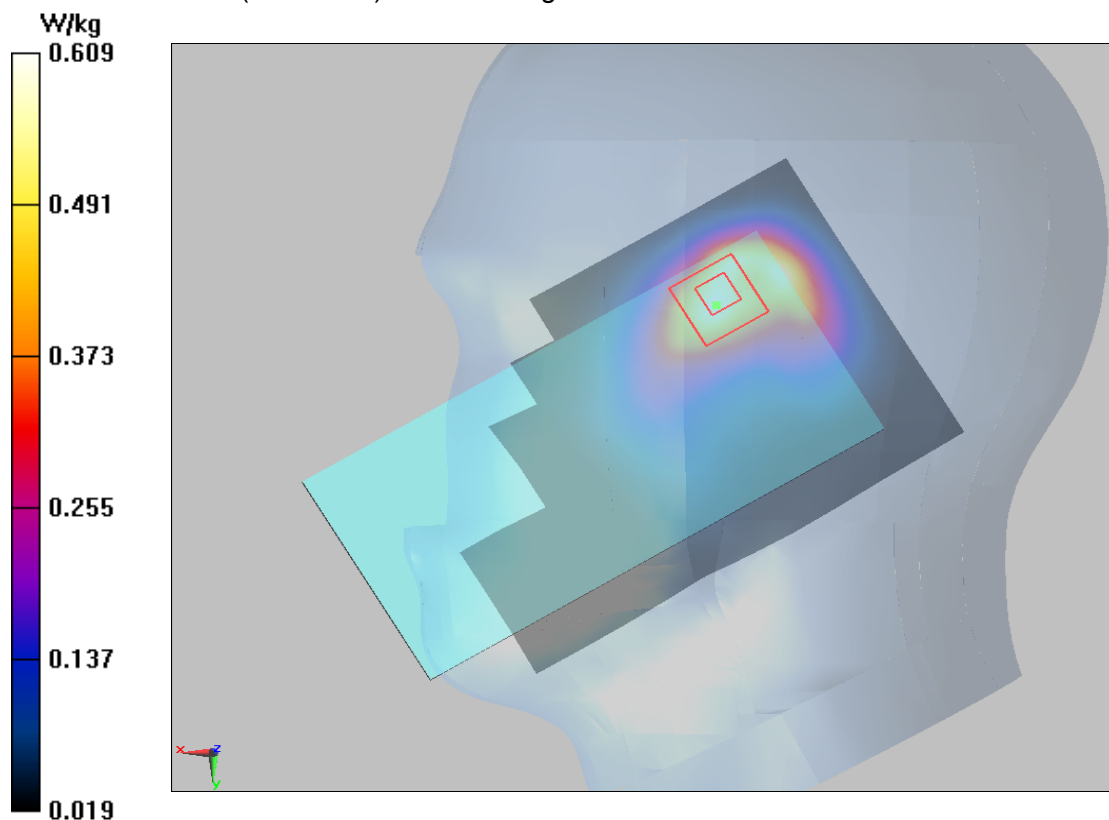
**Right Cheek Middle/Zoom Scan (5x5x7)/Cube 0:** Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 17.63 V/m; Power Drift = 0.07 dB

Peak SAR (extrapolated) = 1.01 W/kg

**SAR(1 g) = 0.540 W/kg; SAR(10 g) = 0.305 W/kg**

Maximum value of SAR (measured) = 0.609 W/kg



# Plot 80 GSM 850 Back Side Middle (Distance 15mm)

Date: 7/8/2018

Communication System: UID 0, GSM (0); Frequency: 836.6 MHz; Duty Cycle: 1:8.30042

Medium parameters used:  $f = 837$  MHz;  $\sigma = 0.974$  S/m;  $\epsilon_r = 53.795$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Ambient Temperature: 22.3 °C Liquid Temperature: 21.5 °C

Phantom section: Flat Section

DASY5 Configuration:

Sensor-Surface: 4mm (Mechanical Surface Detection)

Probe: EX3DV4 - SN3677; ConvF(9.32, 9.32, 9.32); Calibrated: 5/29/2018;

Electronics: DAE4 SN1317; Calibrated: 3/23/2018

Phantom: SAM1; Type: SAM; Serial: TP-1534

Measurement SW: DASY52, Version 52.8 (8); SEMCAD X Version 14.6.10 (7331)

**Back Side Middle/Area Scan (71x131x1):** Interpolated grid: dx=1.500 mm, dy=1.500 mm

Maximum value of SAR (interpolated) = 0.290 W/kg

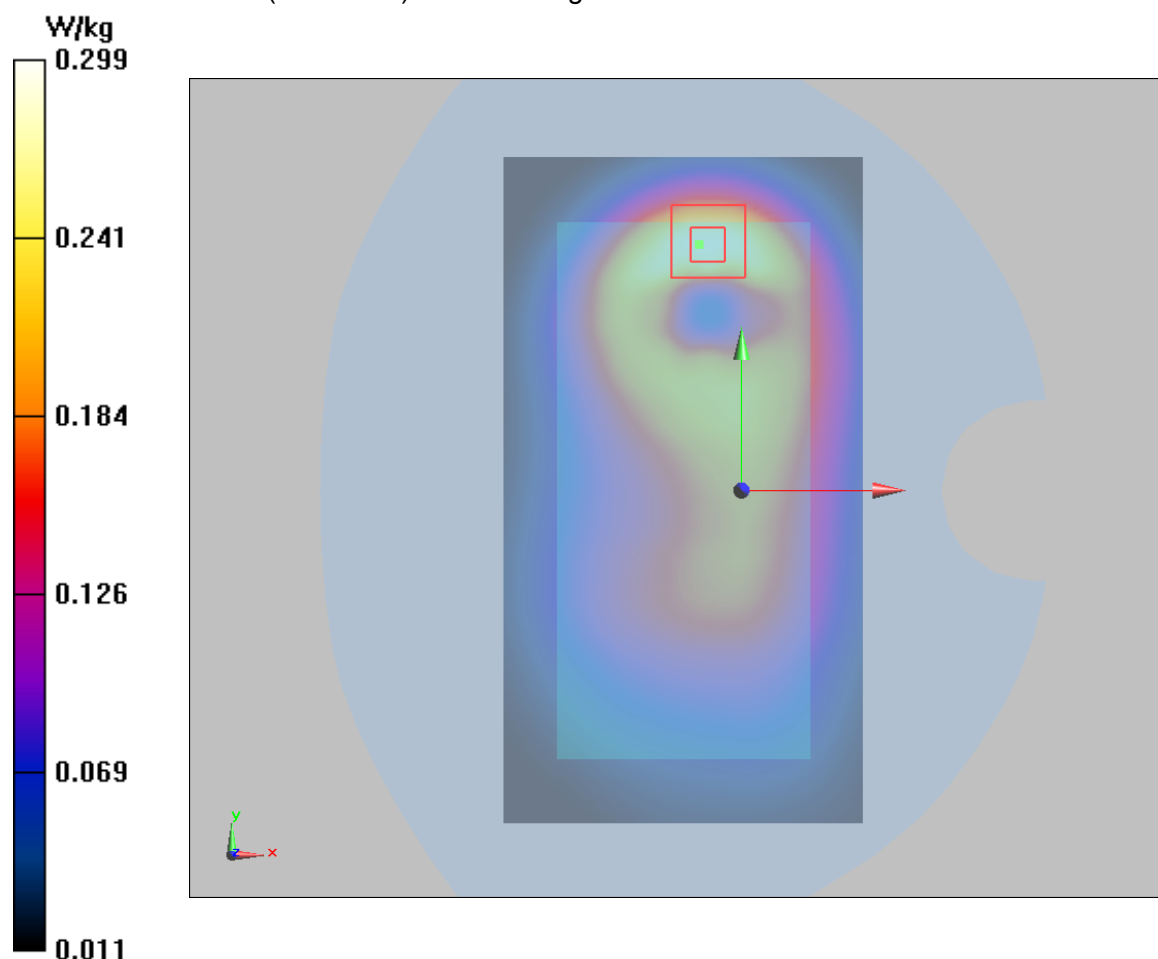
**Back Side Middle/Zoom Scan (5x5x7)/Cube 0:** Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 12.08 V/m; Power Drift = -0.08 dB

Peak SAR (extrapolated) = 0.450 W/kg

**SAR(1 g) = 0.278 W/kg; SAR(10 g) = 0.166 W/kg**

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



# Plot 81 GSM 850 GPRS (4Txslots) Back Side Middle (Distance 10mm)

Date: 7/9/2018

Communication System: UID 0, 4 slot GPRS (0); Frequency: 836.6 MHz; Duty Cycle: 1:2.07491

Medium parameters used:  $f = 837$  MHz;  $\sigma = 0.974$  S/m;  $\epsilon_r = 53.795$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Ambient Temperature: 22.3 °C Liquid Temperature: 21.5 °C

Phantom section: Flat Section

DASY5 Configuration:

Sensor-Surface: 4mm (Mechanical Surface Detection)

Probe: EX3DV4 - SN3677; ConvF(9.32, 9.32, 9.32); Calibrated: 5/29/2018;

Electronics: DAE4 SN1317; Calibrated: 3/23/2018

Phantom: SAM1; Type: SAM; Serial: TP-1534

Measurement SW: DASY52, Version 52.8 (8); SEMCAD X Version 14.6.10 (7331)

**Back Side Middle/Area Scan (71x131x1):** Interpolated grid: dx=1.500 mm, dy=1.500 mm

Maximum value of SAR (interpolated) = 0.603 W/kg

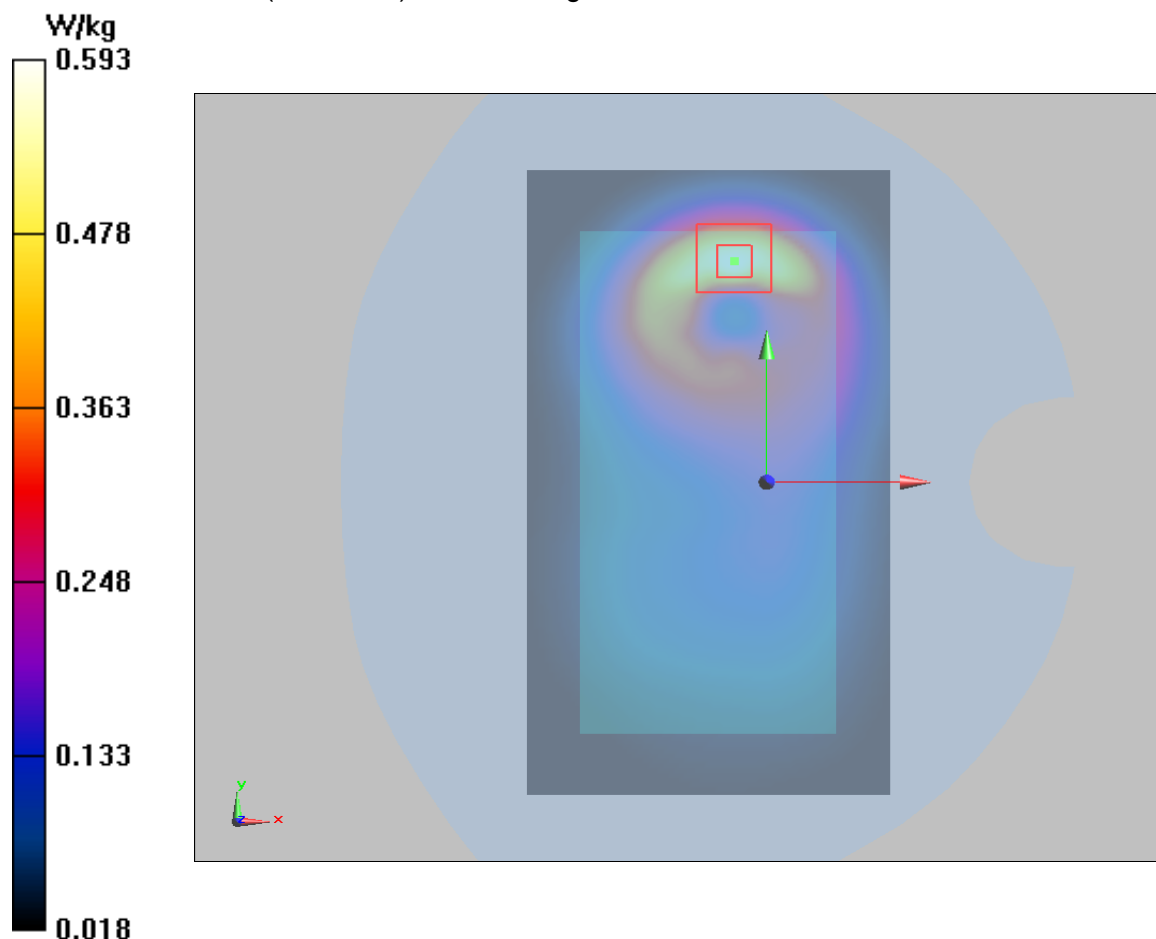
**Back Side Middle/Zoom Scan (5x5x7)/Cube 0:** Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 12.26 V/m; Power Drift = -0.033 dB

Peak SAR (extrapolated) = 0.935 W/kg

**SAR(1 g) = 0.538 W/kg; SAR(10 g) = 0.305 W/kg**

Maximum value of SAR (measured) = 0.593 W/kg



## Plot 82 GSM 1900 Right Cheek Middle

Date: 7/1/2018

Communication System: UID 0, GSM (0); Frequency: 1880 MHz; Duty Cycle: 1:8.30042

Medium parameters used:  $f = 1880$  MHz;  $\sigma = 1.36$  S/m;  $\epsilon_r = 39.14$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Ambient Temperature: 22.3 °C Liquid Temperature: 21.5 °C

Phantom section: Right Section

DASY5 Configuration:

Sensor-Surface: 4mm (Mechanical Surface Detection)

Probe: EX3DV4 - SN3677; ConvF(7.96, 7.96, 7.96); Calibrated: 5/29/2018;

Electronics: DAE4 SN1317; Calibrated: 3/23/2018

Phantom: SAM1; Type: SAM; Serial: TP-1534

Measurement SW: DASY52, Version 52.8 (8); SEMCAD X Version 14.6.10 (7331)

**Right Cheek Middle/Area Scan (71x131x1):** Interpolated grid: dx=1.500 mm, dy=1.500 mm

Maximum value of SAR (interpolated) = 0.557 W/kg

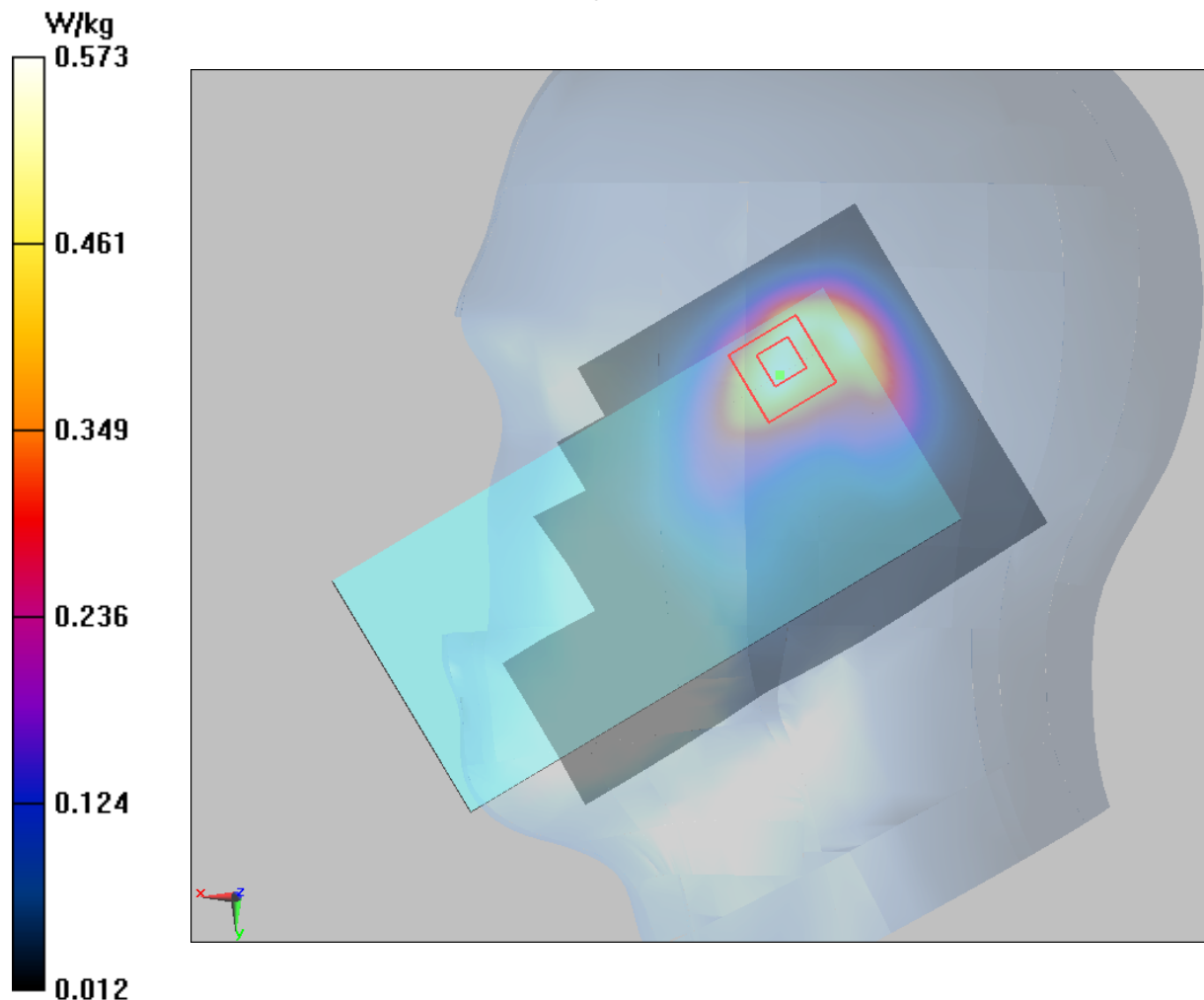
**Right Cheek Middle/Zoom Scan (5x5x7)/Cube 0:** Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 15.33 V/m; Power Drift = -0.01 dB

Peak SAR (extrapolated) = 1.11 W/kg

**SAR(1 g) = 0.531 W/kg; SAR(10 g) = 0.293 W/kg**

Maximum value of SAR (measured) = 0.573 W/kg





# **Plot 83 GSM 1900 Back Side Middle (Distance 15mm)**

Date: 7/1/2018

Communication System: UID 0, GSM (0); Frequency: 1880 MHz; Duty Cycle: 1:8.30042

Medium parameters used:  $f = 1880$  MHz;  $\sigma = 1.489$  S/m;  $\epsilon_r = 52.896$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Ambient Temperature: 22.3 °C      Liquid Temperature: 21.5 °C

Phantom section: Flat Section

DASY5 Configuration:

Sensor-Surface: 4mm (Mechanical Surface Detection)

Probe: EX3DV4 - SN3677; ConvF(7.70, 7.70, 7.70); Calibrated: 5/29/2018;

Electronics: DAE4 SN1317; Calibrated: 3/23/2018

Phantom: SAM1; Type: SAM; Serial: TP-1534

Measurement SW: DASY52, Version 52.8 (8); SEMCAD X Version 14.6.10 (7331)

**Back Side Middle/Area Scan (71x131x1):** Interpolated grid: dx=1.500 mm, dy=1.500 mm

Maximum value of SAR (interpolated) = 0.129 W/kg

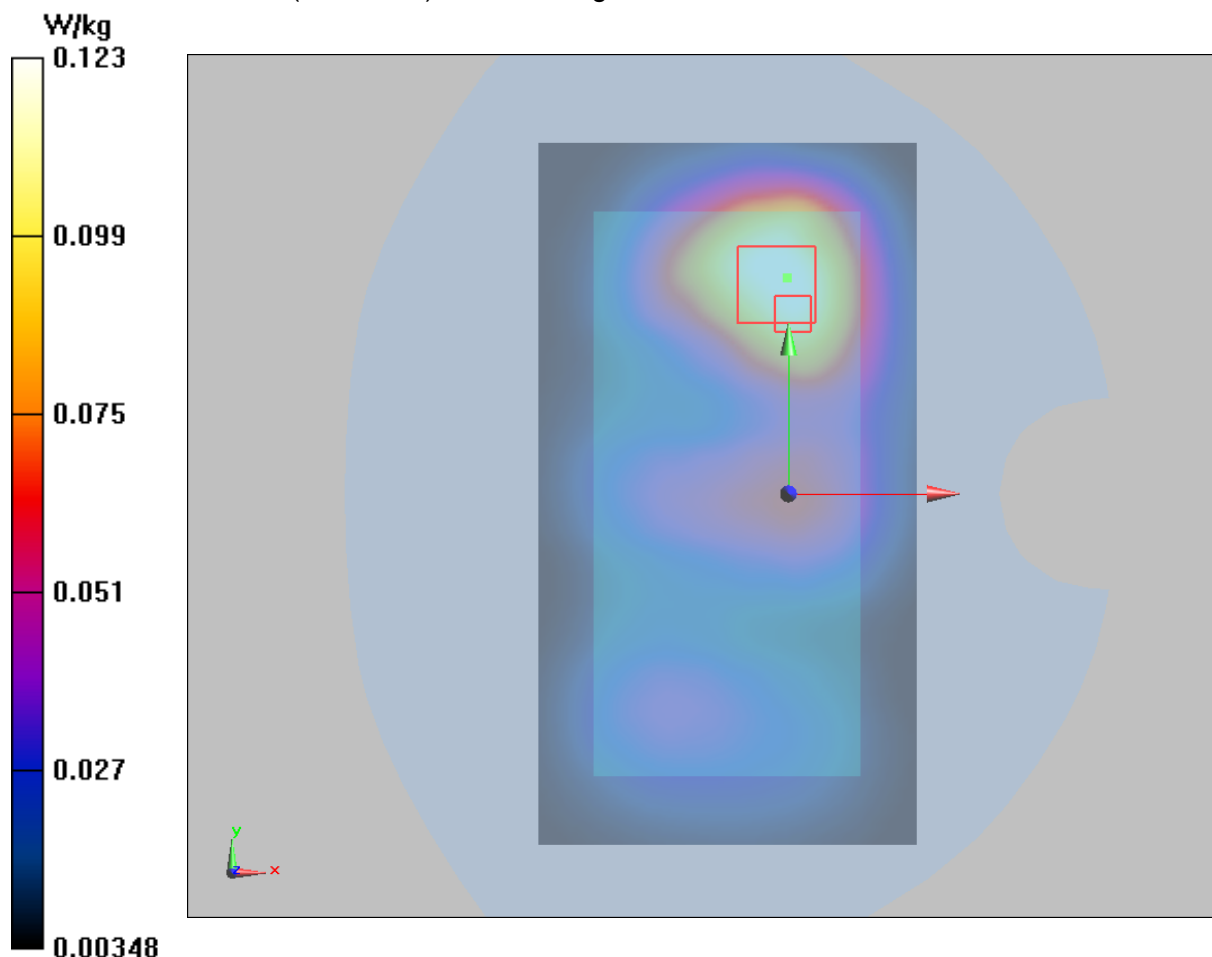
**Back Side Middle/Zoom Scan (5x5x7)/Cube 0:** Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 6.070 V/m; Power Drift = -0.04 dB

Peak SAR (extrapolated) = 0.185 W/kg

**SAR(1 g) = 0.113 W/kg; SAR(10 g) = 0.070 W/kg**

Maximum value of SAR (measured) = 0.123 W/kg



# **Plot 84 GSM 1900 GPRS (4Txslots) Top Edge Middle (Distance 10mm)**

Date: 7/1/2018

Communication System: UID 0, 4 slot GPRS (0); Frequency: 1880 MHz; Duty Cycle: 1:2.07491

Medium parameters used:  $f = 1880$  MHz;  $\sigma = 1.489$  S/m;  $\epsilon_r = 52.896$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Ambient Temperature: 22.3 °C Liquid Temperature: 21.5 °C

Phantom section: Flat Section

DASY5 Configuration:

Sensor-Surface: 4mm (Mechanical Surface Detection)

Probe: EX3DV4 - SN3677; ConvF(7.70, 7.70, 7.70); Calibrated: 5/29/2018;

Electronics: DAE4 SN1317; Calibrated: 3/23/2018

Phantom: SAM1; Type: SAM; Serial: TP-1534

Measurement SW: DASY52, Version 52.8 (8); SEMCAD X Version 14.6.10 (7331)

**Top Edge Middle/Area Scan (51x111x1):** Interpolated grid: dx=1.000 mm, dy=1.000 mm

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

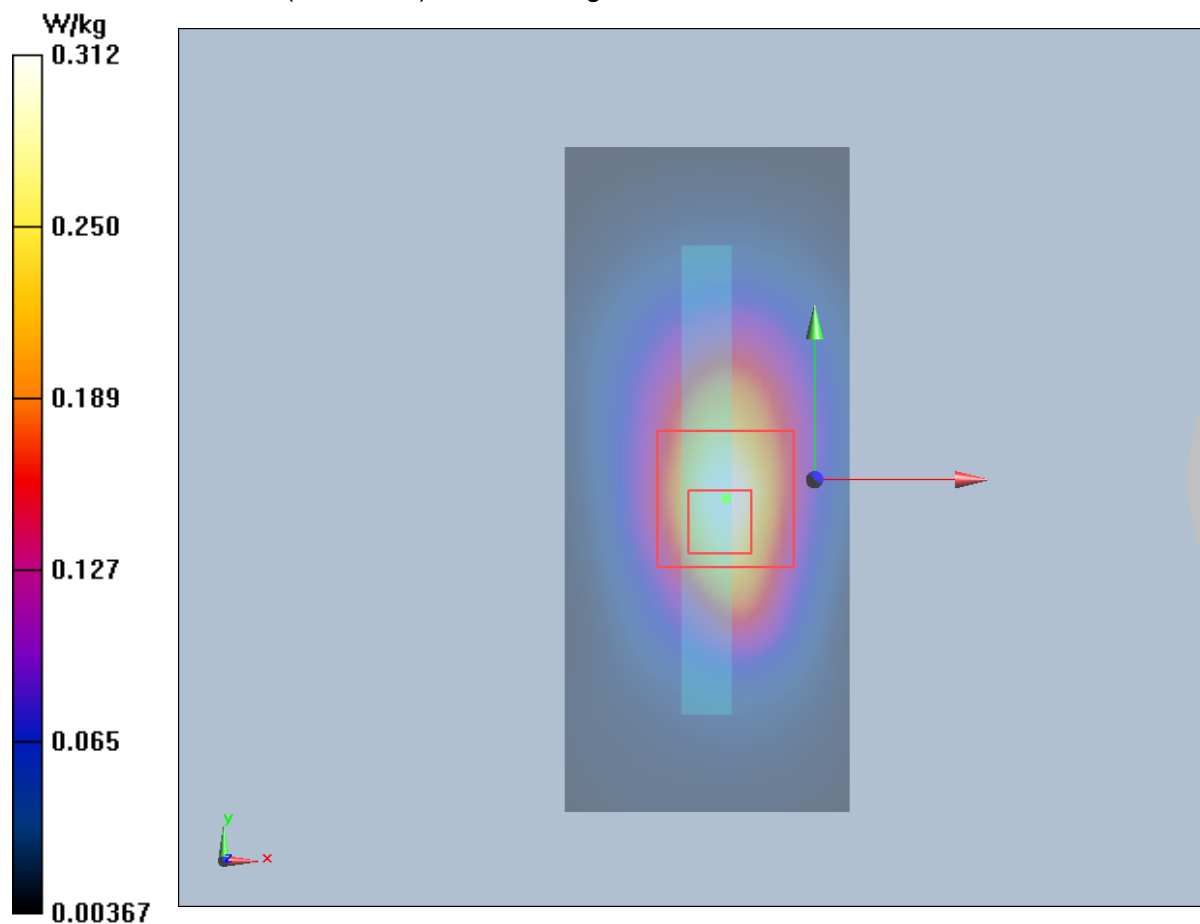
**Top Edge Middle/Zoom Scan (7x7x7)/Cube 0:** Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 14.04 V/m; Power Drift = -0.027 dB

Peak SAR (extrapolated) = 0.515 W/kg

**SAR(1 g) = 0.278 W/kg; SAR(10 g) = 0.142 W/kg**

Maximum value of SAR (measured) = 0.312 W/kg



## Plot 85 UMTS Band II Right Tilt Middle

Date: 6/30/2018

Communication System: UID 0, WCDMA (0); Frequency: 1880 MHz; Duty Cycle: 1:1

Medium parameters used:  $f = 1880$  MHz;  $\sigma = 1.36$  S/m;  $\epsilon_r = 39.14$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Ambient Temperature: 22.3 °C Liquid Temperature: 21.5 °C

Phantom section: Right Section

DASY5 Configuration:

Sensor-Surface: 4mm (Mechanical Surface Detection)

Probe: EX3DV4 - SN3677; ConvF(7.96, 7.96, 7.96); Calibrated: 5/29/2018;

Electronics: DAE4 SN1317; Calibrated: 3/23/2018

Phantom: SAM1; Type: SAM; Serial: TP-1534

Measurement SW: DASY52, Version 52.8 (8); SEMCAD X Version 14.6.10 (7331)

**Right Tilt Middle/Area Scan (71x131x1):** Interpolated grid: dx=1.500 mm, dy=1.500 mm

Maximum value of SAR (interpolated) = 0.940 W/kg

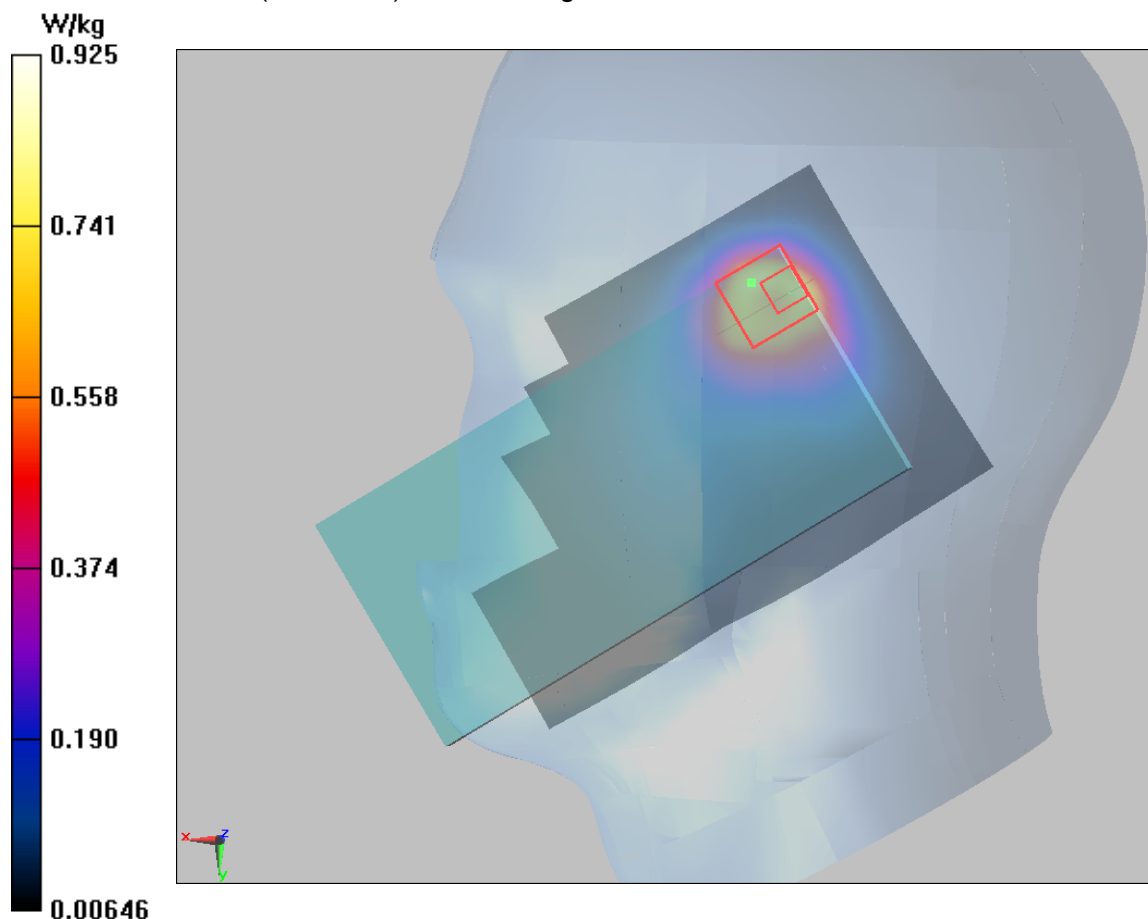
**Right Tilt Middle/Zoom Scan (5x5x7)/Cube 0:** Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 17.34 V/m; Power Drift = 0.13 dB

Peak SAR (extrapolated) = 1.89 W/kg

**SAR(1 g) = 0.784 W/kg; SAR(10 g) = 0.372 W/kg**

Maximum value of SAR (measured) = 0.925 W/kg



# **Plot 86 UMTS Band II Back Side Middle (Distance 15mm)**

Date: 6/29/2018

Communication System: UID 0, WCDMA (0); Frequency: 1880 MHz; Duty Cycle: 1:1  
Medium parameters used:  $f = 1880$  MHz;  $\sigma = 1.489$  S/m;  $\epsilon_r = 52.896$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Ambient Temperature: 22.3 °C Liquid Temperature: 21.5 °C

Phantom section: Flat Section

DASY5 Configuration:

Sensor-Surface: 4mm (Mechanical Surface Detection)

Probe: EX3DV4 - SN3677; ConvF(7.70, 7.70, 7.70); Calibrated: 5/29/2018;

Electronics: DAE4 SN1317; Calibrated: 3/23/2018

Phantom: SAM1; Type: SAM; Serial: TP-1534

Measurement SW: DASY52, Version 52.8 (8); SEMCAD X Version 14.6.10 (7331)

**Back Side Middle/Area Scan (71x131x1):** Interpolated grid: dx=1.500 mm, dy=1.500 mm

Maximum value of SAR (interpolated) = 0.154 W/kg

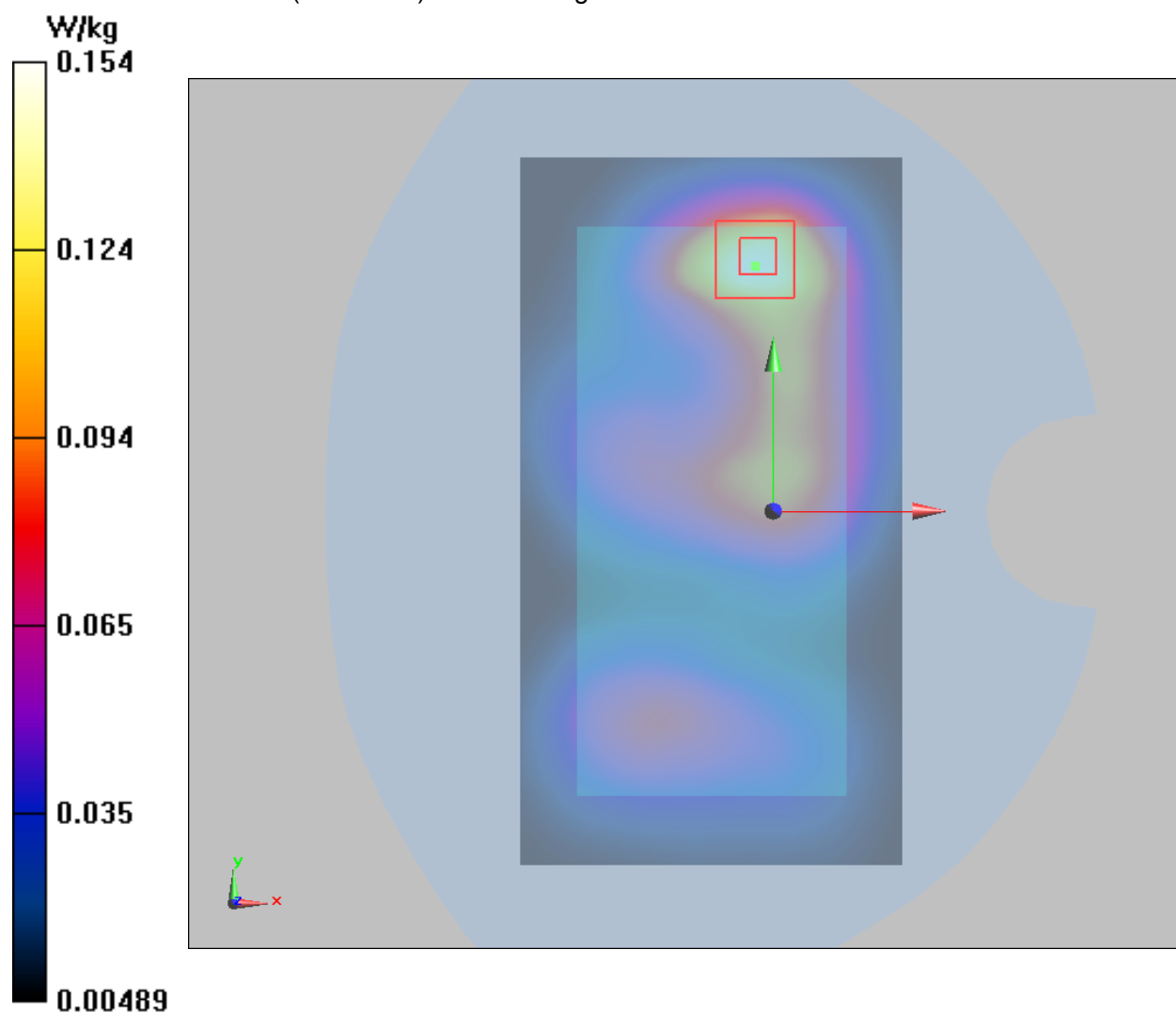
**Back Side Middle/Zoom Scan (5x5x7)/Cube 0:** Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 6.998 V/m; Power Drift = -0.03 dB

Peak SAR (extrapolated) = 0.239 W/kg

**SAR(1 g) = 0.141 W/kg; SAR(10 g) = 0.080 W/kg**

Maximum value of SAR (measured) = 0.154 W/kg



# **Plot 87 UMTS Band II Top Edge Middle (Distance 10mm)**

Date: 6/29/2018

Communication System: UID 0, WCDMA (0); Frequency: 1880 MHz; Duty Cycle: 1:1  
Medium parameters used:  $f = 1880$  MHz;  $\sigma = 1.489$  S/m;  $\epsilon_r = 52.896$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Ambient Temperature: 22.3 °C      Liquid Temperature: 21.5 °C

Phantom section: Flat Section

DASY5 Configuration:

Sensor-Surface: 4mm (Mechanical Surface Detection)

Probe: EX3DV4 - SN3677; ConvF(7.70, 7.70, 7.70); Calibrated: 5/29/2018;

Electronics: DAE4 SN1317; Calibrated: 3/23/2018

Phantom: SAM1; Type: SAM; Serial: TP-1534

Measurement SW: DASY52, Version 52.8 (8); SEMCAD X Version 14.6.10 (7331)

**Top Edge Middle/Area Scan (51x91x1):** Interpolated grid: dx=1.000 mm, dy=1.000 mm

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

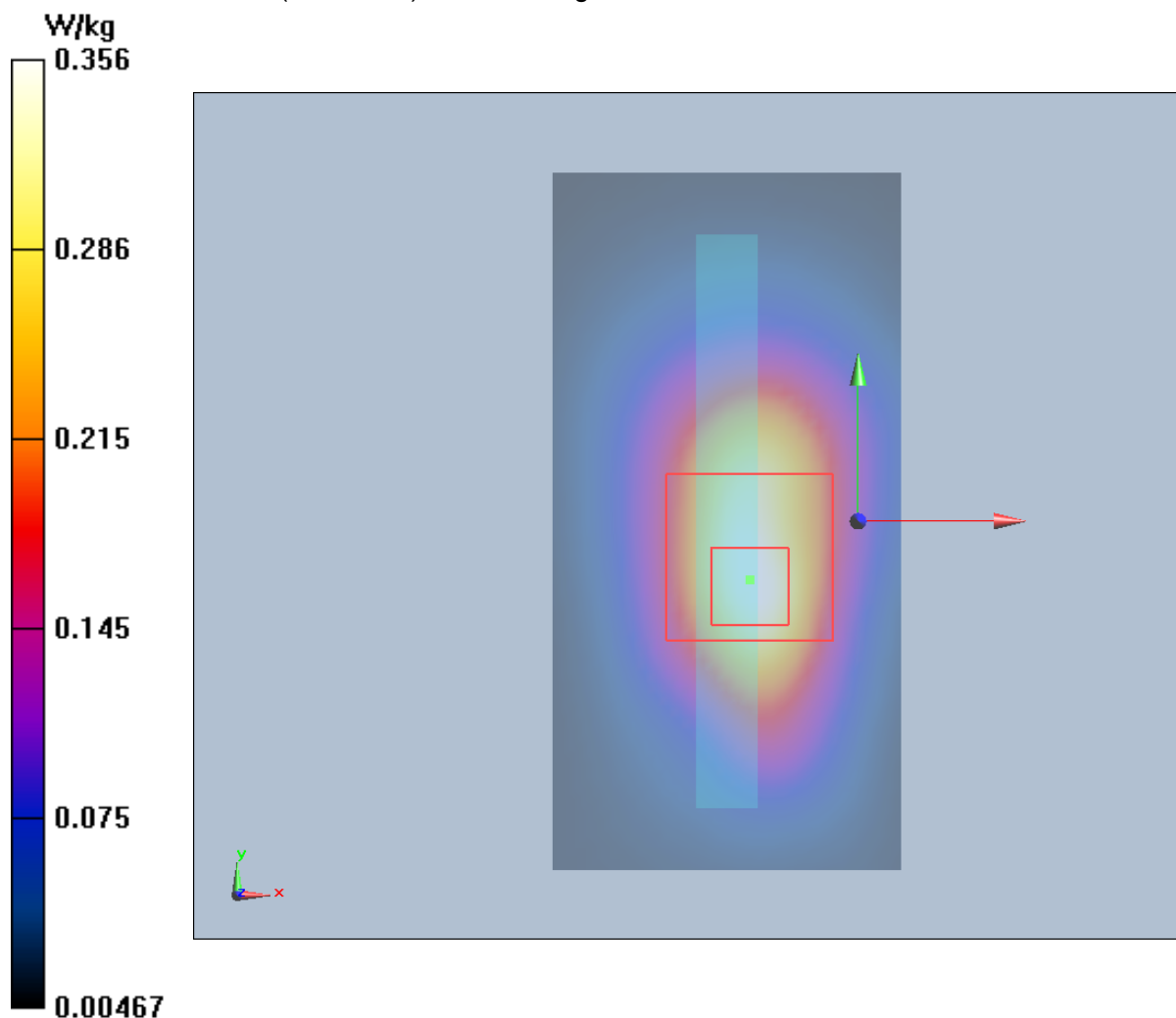
**Top Edge Middle/Zoom Scan (7x7x7)/Cube 0:** Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 14.86 V/m; Power Drift = -0.026 dB

Peak SAR (extrapolated) = 0.571 W/kg

**SAR(1 g) = 0.316 W/kg; SAR(10 g) = 0.169 W/kg**

Maximum value of SAR (measured) = 0.356 W/kg



## Plot 88 UMTS Band IV Right Tilt Low

Date: 7/7/2018

Communication System: UID 0, WCDMA (0); Frequency: 1712.4 MHz; Duty Cycle: 1:1

Medium parameters used (interpolated):  $f = 1712.4$  MHz;  $\sigma = 1.293$  S/m;  $\epsilon_r = 40.879$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Ambient Temperature: 22.3 °C Liquid Temperature: 21.5 °C

Phantom section: Right Section

DASY5 Configuration:

Sensor-Surface: 4mm (Mechanical Surface Detection)

Probe: EX3DV4 - SN3677; ConvF(8.19, 8.19, 8.19); Calibrated: 5/29/2018;

Electronics: DAE4 SN1317; Calibrated: 3/23/2018

Phantom: SAM1; Type: SAM; Serial: TP-1534

Measurement SW: DASY52, Version 52.8 (8); SEMCAD X Version 14.6.10 (7331)

**Right Tilt Low/Area Scan (71x131x1):** Interpolated grid: dx=1.500 mm, dy=1.500 mm

Maximum value of SAR (interpolated) = 0.707 W/kg

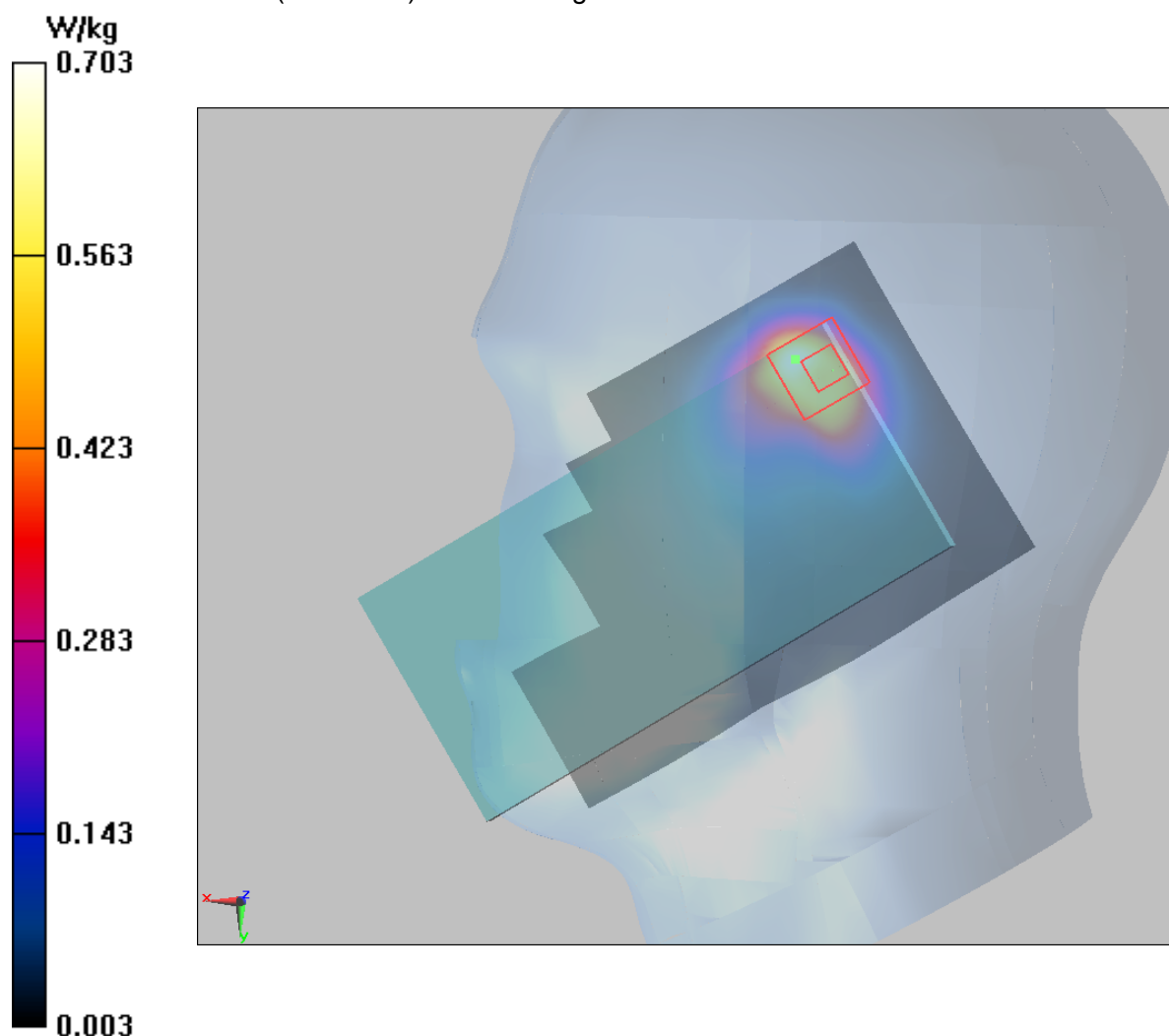
**Right Tilt Low/Zoom Scan (5x5x7)/Cube 0:** Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 14.27 V/m; Power Drift = 0.13 dB

Peak SAR (extrapolated) = 1.50 W/kg

**SAR(1 g) = 0.595 W/kg; SAR(10 g) = 0.265 W/kg**

Maximum value of SAR (measured) = 0.703 W/kg



# Plot 89 UMTS Band IV Back Side Middle (Distance 15mm)

Date: 7/11/2018

Communication System: UID 0, WCDMA (0); Frequency: 1732.6 MHz; Duty Cycle: 1:1

Medium parameters used:  $f = 1733$  MHz;  $\sigma = 1.478$  S/m;  $\epsilon_r = 52.899$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Ambient Temperature: 22.3 °C      Liquid Temperature: 21.5 °C

Phantom section: Flat Section

DASY5 Configuration:

Sensor-Surface: 4mm (Mechanical Surface Detection)

Probe: EX3DV4 - SN3677; ConvF(7.91, 7.91, 7.91); Calibrated: 5/29/2018;

Electronics: DAE4 SN1317; Calibrated: 3/23/2018

Phantom: SAM1; Type: SAM; Serial: TP-1534

Measurement SW: DASY52, Version 52.8 (8); SEMCAD X Version 14.6.10 (7331)

**Back Side Middle/Area Scan (71x131x1):** Interpolated grid: dx=1.500 mm, dy=1.500 mm

Maximum value of SAR (interpolated) = 0.152 W/kg

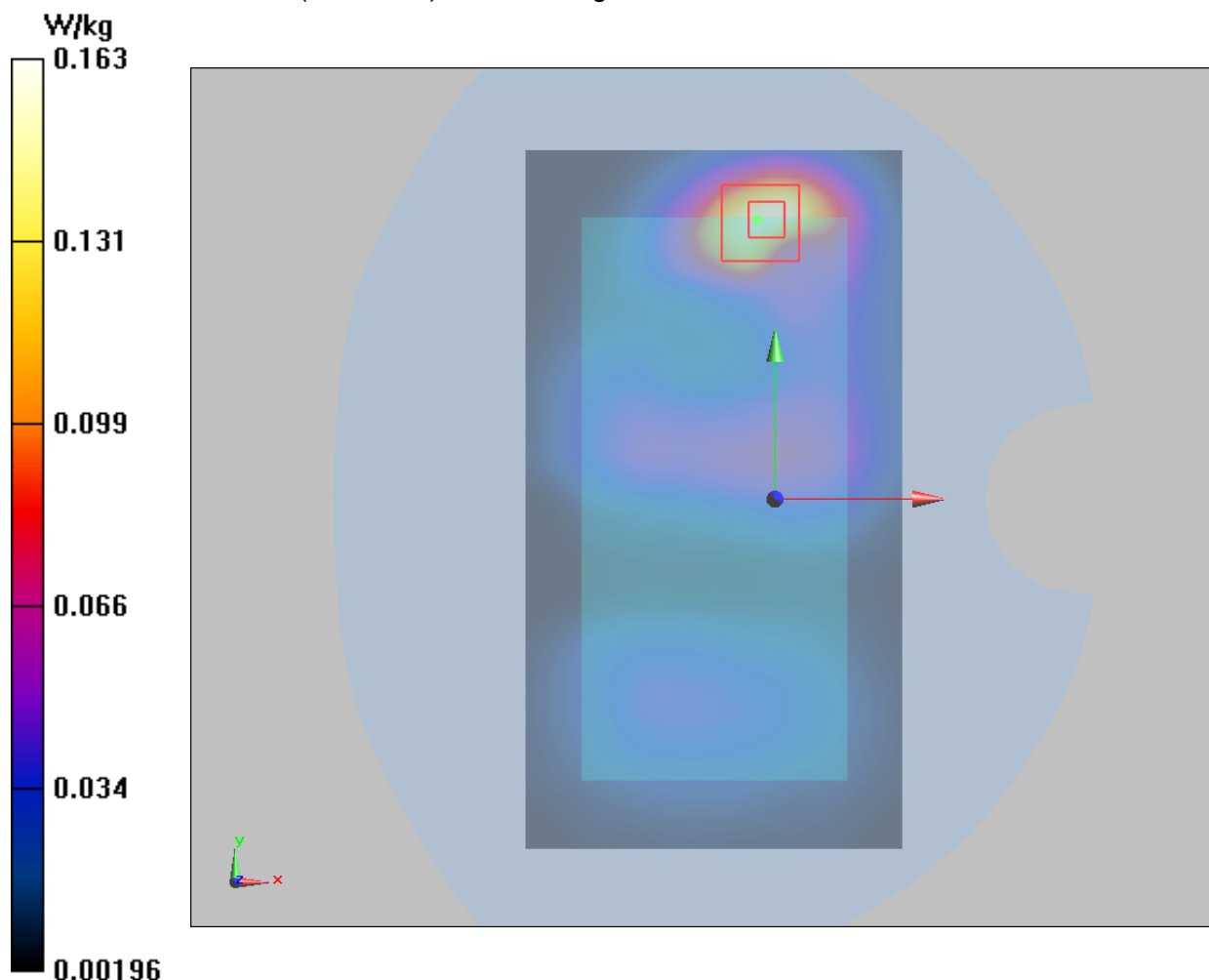
**Back Side Middle/Zoom Scan (5x5x7)/Cube 0:** Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 5.226 V/m; Power Drift = 0.18 dB

Peak SAR (extrapolated) = 0.262 W/kg

**SAR(1 g) = 0.147 W/kg; SAR(10 g) = 0.079 W/kg**

Maximum value of SAR (measured) = 0.163 W/kg



# Plot 90 UMTS Band IV Back Side Middle (Distance 10mm)

Date: 7/10/2018

Communication System: UID 0, WCDMA (0); Frequency: 1732.6 MHz; Duty Cycle: 1:1

Medium parameters used:  $f = 1733$  MHz;  $\sigma = 1.478$  S/m;  $\epsilon_r = 52.899$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Ambient Temperature: 22.3 °C      Liquid Temperature: 21.5 °C

Phantom section: Flat Section

DASY5 Configuration:

Sensor-Surface: 4mm (Mechanical Surface Detection)

Probe: EX3DV4 - SN3677; ConvF(7.91, 7.91, 7.91); Calibrated: 5/29/2018;

Electronics: DAE4 SN1317; Calibrated: 3/23/2018

Phantom: SAM1; Type: SAM; Serial: TP-1534

Measurement SW: DASY52, Version 52.8 (8); SEMCAD X Version 14.6.10 (7331)

**Back Side Middle/Area Scan (71x131x1):** Interpolated grid: dx=1.500 mm, dy=1.500 mm

Maximum value of SAR (interpolated) = 0.344 W/kg

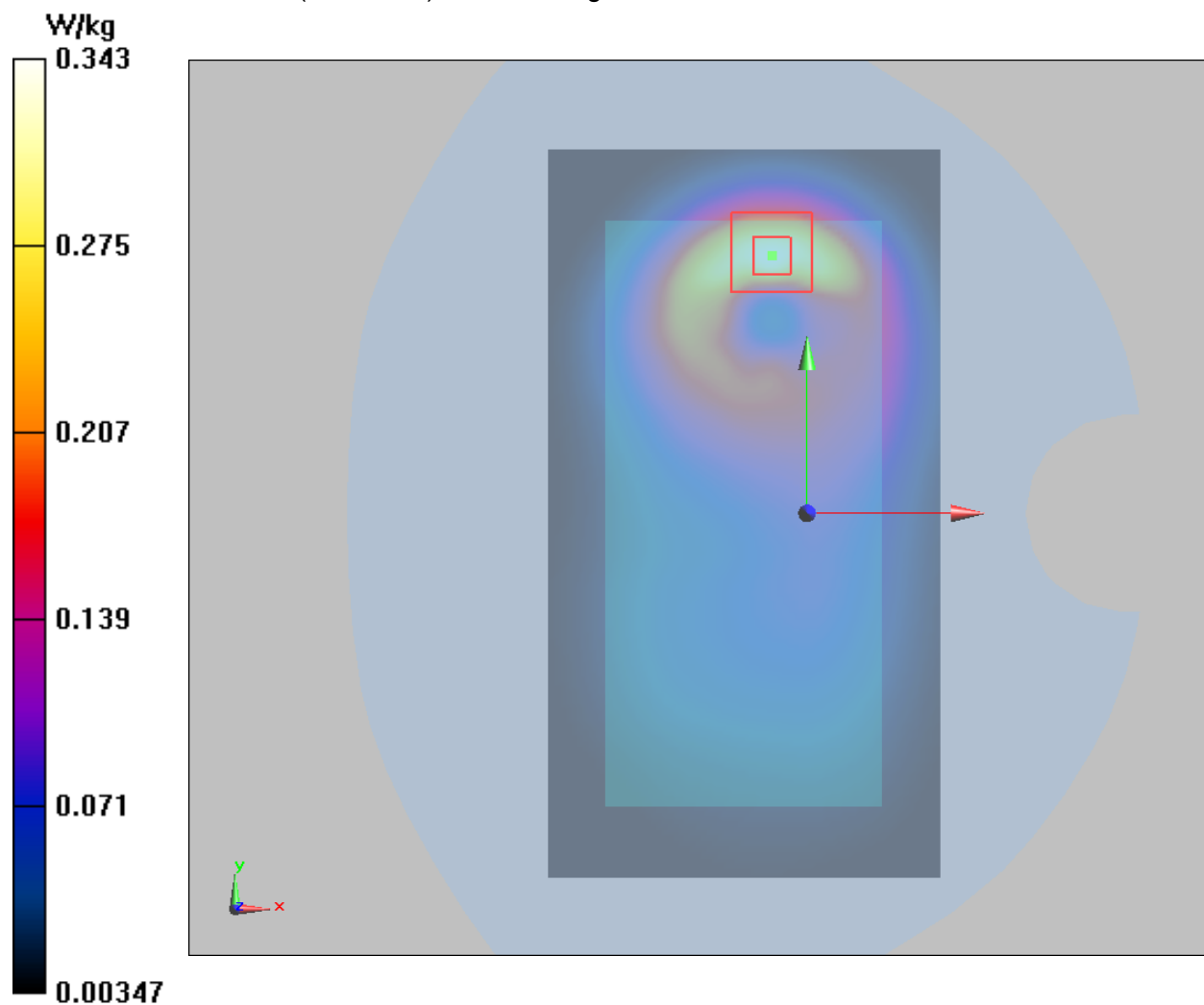
**Back Side Middle/Zoom Scan (5x5x7)/Cube 0:** Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 4.405 V/m; Power Drift = -0.04 dB

Peak SAR (extrapolated) = 0.588 W/kg

**SAR(1 g) = 0.307 W/kg; SAR(10 g) = 0.156 W/kg**

Maximum value of SAR (measured) = 0.343 W/kg





## Plot 91 UMTS Band V Right Cheek High

Date: 7/4/2018

Communication System: UID 0, WCDMA V (0); Frequency: 846.6 MHz; Duty Cycle: 1:1

Medium parameters used:  $f = 847$  MHz;  $\sigma = 0.917$  S/m;  $\epsilon_r = 41.318$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Ambient Temperature: 22.3 °C Liquid Temperature: 21.5 °C

Phantom section: Right Section

DASY5 Configuration:

Sensor-Surface: 4mm (Mechanical Surface Detection)

Probe: EX3DV4 - SN3677; ConvF(9.10, 9.10, 9.10); Calibrated: 5/29/2018;

Electronics: DAE4 SN1317; Calibrated: 3/23/2018

Phantom: SAM1; Type: SAM; Serial: TP-1534

Measurement SW: DASY52, Version 52.8 (8); SEMCAD X Version 14.6.10 (7331)

**Right Cheek High/Area Scan (71x131x1):** Interpolated grid: dx=1.500 mm, dy=1.500 mm

Maximum value of SAR (interpolated) = 0.775 W/kg

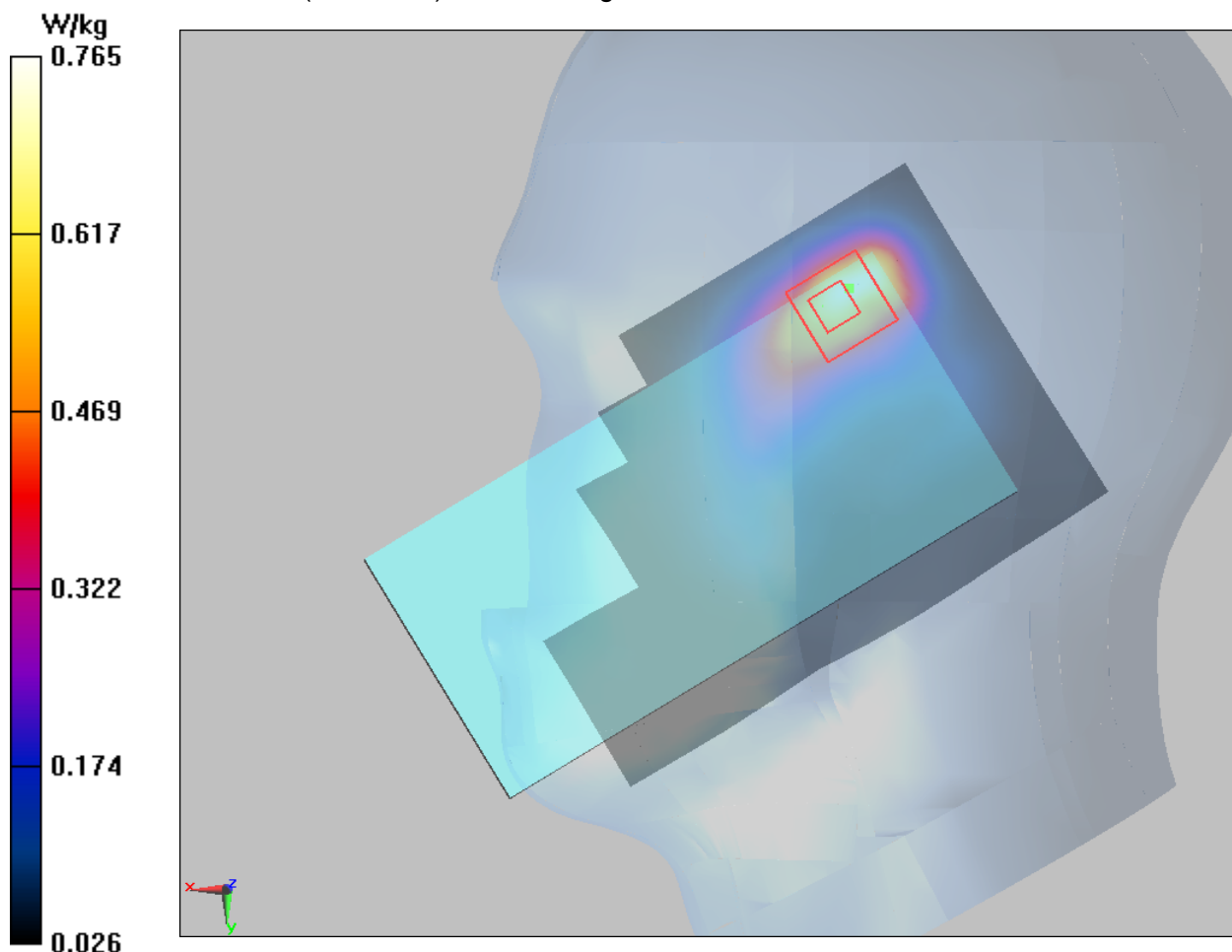
**Right Cheek High/Zoom Scan (5x5x7)/Cube 0:** Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 18.27 V/m; Power Drift = -0.03 dB

Peak SAR (extrapolated) = 1.32 W/kg

**SAR(1 g) = 0.684 W/kg; SAR(10 g) = 0.376 W/kg**

Maximum value of SAR (measured) = 0.765 W/kg



## Plot 92 UMTS Band V Back Side High (Distance 15mm)

Date: 7/5/2018

Communication System: UID 0, WCDMA (0); Frequency: 836.6 MHz; Duty Cycle: 1:1

Medium parameters used:  $f = 837$  MHz;  $\sigma = 0.974$  S/m;  $\epsilon_r = 53.795$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Ambient Temperature: 22.3 °C Liquid Temperature: 21.5 °C

Phantom section: Flat Section

DASY5 Configuration:

Sensor-Surface: 4mm (Mechanical Surface Detection)

Probe: EX3DV4 - SN3677; ConvF(9.32, 9.32, 9.32); Calibrated: 5/29/2018;

Electronics: DAE4 SN1317; Calibrated: 3/23/2018

Phantom: SAM1; Type: SAM; Serial: TP-1534

Measurement SW: DASY52, Version 52.8 (8); SEMCAD X Version 14.6.10 (7331)

**Back Side Middle/Area Scan (71x131x1):** Interpolated grid: dx=1.500 mm, dy=1.500 mm

Maximum value of SAR (interpolated) = 0.263 W/kg

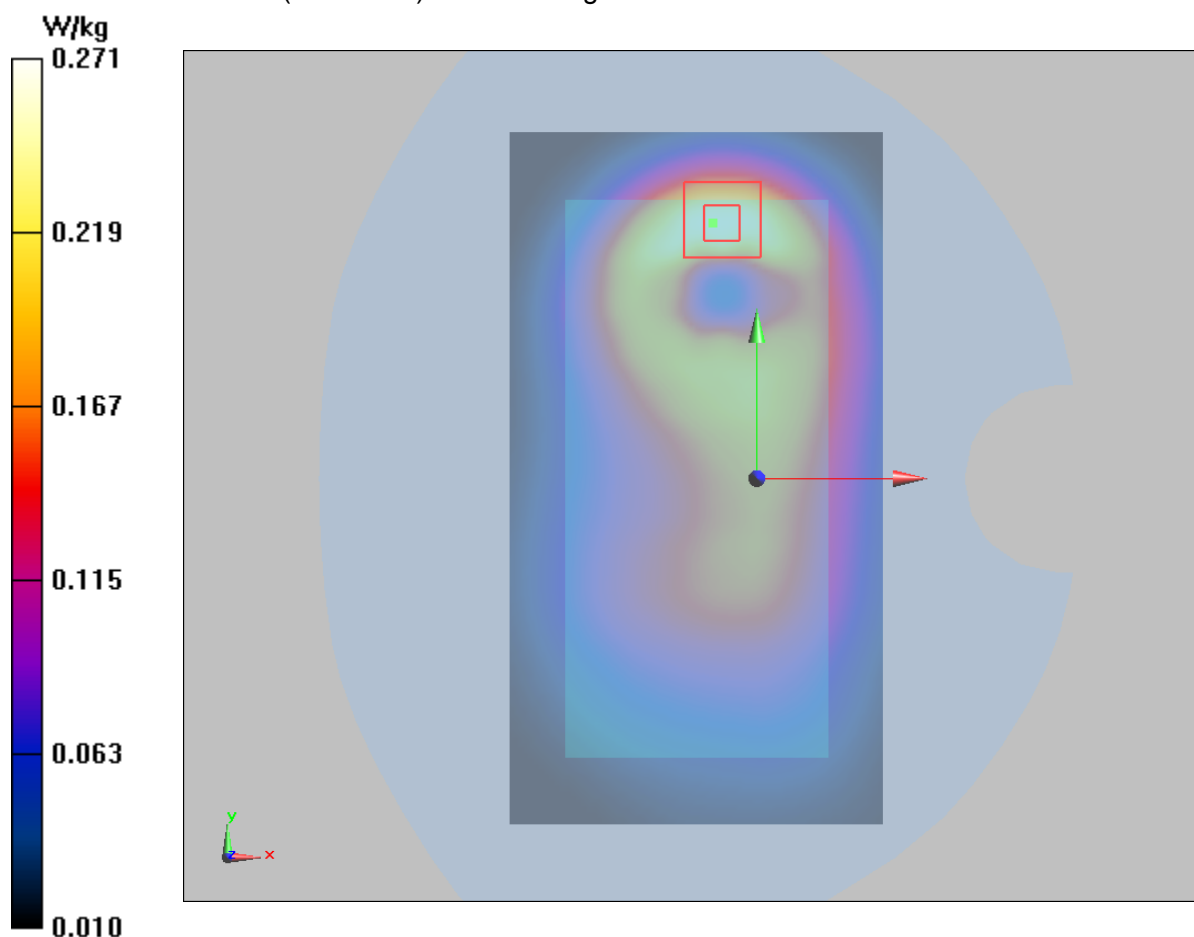
**Back Side Middle/Zoom Scan (5x5x7)/Cube 0:** Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 12.39 V/m; Power Drift = -0.09 dB

Peak SAR (extrapolated) = 0.396 W/kg

**SAR(1 g) = 0.248 W/kg; SAR(10 g) = 0.149 W/kg**

Maximum value of SAR (measured) = 0.271 W/kg



## Plot 93 UMTS Band V Back Side High (Distance 10mm)

Date: 7/5/2018

Communication System: UID 0, WCDMA (0); Frequency: 846.6 MHz; Duty Cycle: 1:1

Medium parameters used:  $f = 847$  MHz;  $\sigma = 0.983$  S/m;  $\epsilon_r = 53.694$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Ambient Temperature: 22.3 °C Liquid Temperature: 21.5 °C

Phantom section: Flat Section

DASY5 Configuration:

Sensor-Surface: 4mm (Mechanical Surface Detection)

Probe: EX3DV4 - SN3677; ConvF(9.32, 9.32, 9.32); Calibrated: 5/29/2018;

Electronics: DAE4 SN1317; Calibrated: 3/23/2018

Phantom: SAM1; Type: SAM; Serial: TP-1534

Measurement SW: DASY52, Version 52.8 (8); SEMCAD X Version 14.6.10 (7331)

**Back Side High/Area Scan (71x131x1):** Interpolated grid: dx=1.500 mm, dy=1.500 mm

Maximum value of SAR (interpolated) = 0.762 W/kg

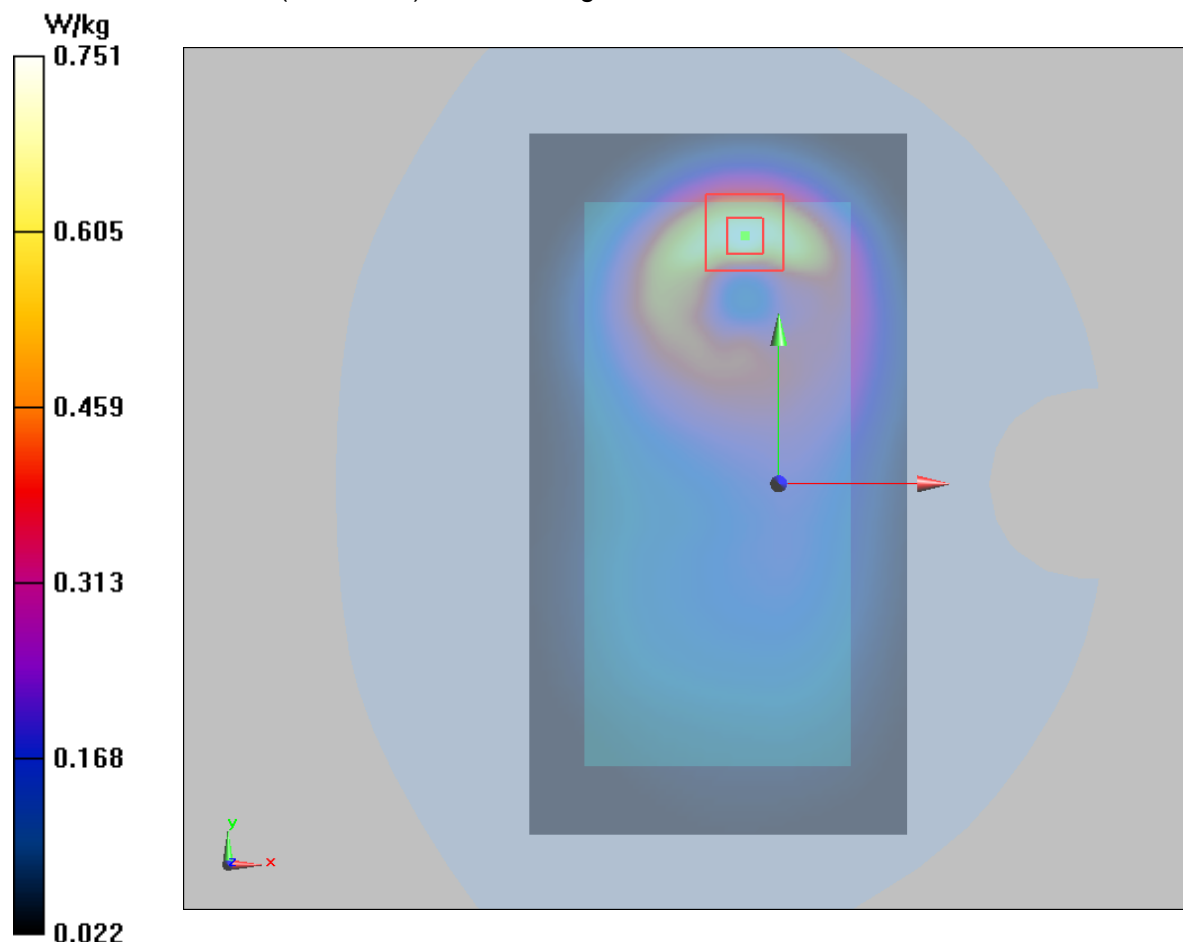
**Back Side High/Zoom Scan (5x5x7)/Cube 0:** Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 13.58 V/m; Power Drift = -0.05 dB

Peak SAR (extrapolated) = 1.19 W/kg

**SAR(1 g) = 0.672 W/kg; SAR(10 g) = 0.377 W/kg**

Maximum value of SAR (measured) = 0.751 W/kg



# Plot 94 LTE Band 2 1RB Right Tilt Low

Date: 6/30/2018

Communication System: UID 0, LTE\_FDD (0); Frequency: 1860 MHz; Duty Cycle: 1:1

Medium parameters used:  $f = 1860$  MHz;  $\sigma = 1.342$  S/m;  $\epsilon_r = 39.202$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Ambient Temperature: 22.3 °C Liquid Temperature: 21.5 °C

Phantom section: Right Section

DASY5 Configuration:

Sensor-Surface: 4mm (Mechanical Surface Detection)

Probe: EX3DV4 - SN3677; ConvF(7.96, 7.96, 7.96); Calibrated: 5/29/2018;

Electronics: DAE4 SN1317; Calibrated: 3/23/2018

Phantom: SAM1; Type: SAM; Serial: TP-1534

Measurement SW: DASY52, Version 52.8 (8); SEMCAD X Version 14.6.10 (7331)

**Right Tilt Low/Area Scan (71x131x1):** Interpolated grid: dx=1.500 mm, dy=1.500 mm

Maximum value of SAR (interpolated) = 0.863 W/kg

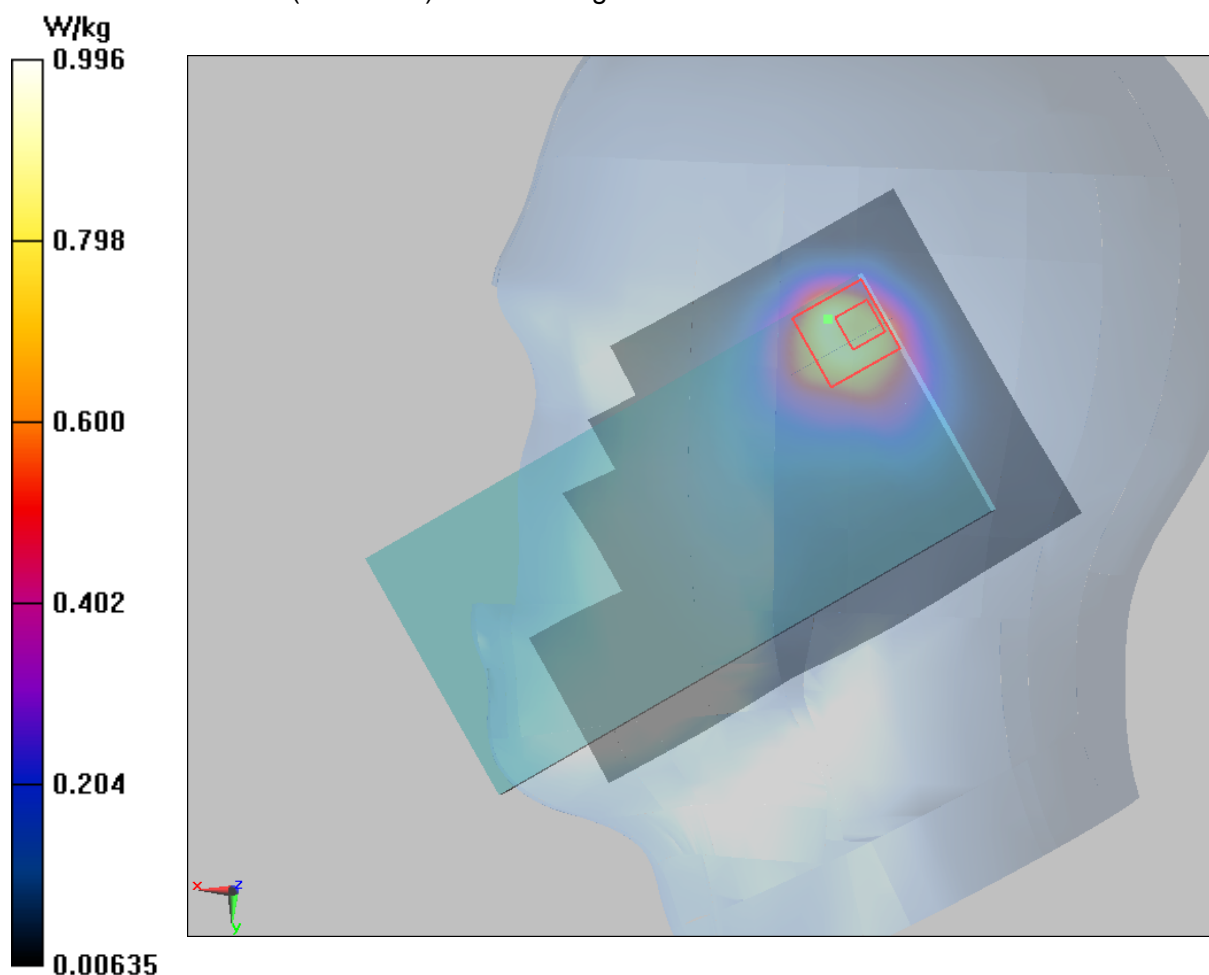
**Right Tilt Low/Zoom Scan (5x5x7)/Cube 0:** Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 18.03 V/m; Power Drift = -0.08 dB

Peak SAR (extrapolated) = 2.17 W/kg

**SAR(1 g) = 0.848 W/kg; SAR(10 g) = 0.389 W/kg**

Maximum value of SAR (measured) = 0.996 W/kg



# Plot 95 LTE Band 2 50%RB Back Side High (Distance 15mm)

Date: 6/29/2018

Communication System: UID 0, LTE\_FDD (0); Frequency: 1900 MHz; Duty Cycle: 1:1

Medium parameters used:  $f = 1900$  MHz;  $\sigma = 1.508$  S/m;  $\epsilon_r = 52.751$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Ambient Temperature: 22.3 °C Liquid Temperature: 21.5 °C

Phantom section: Flat Section

DASY5 Configuration:

Sensor-Surface: 4mm (Mechanical Surface Detection)

Probe: EX3DV4 - SN3677; ConvF(7.70, 7.70, 7.70); Calibrated: 5/29/2018;

Electronics: DAE4 SN1317; Calibrated: 3/23/2018

Phantom: SAM1; Type: SAM; Serial: TP-1534

Measurement SW: DASY52, Version 52.8 (8); SEMCAD X Version 14.6.10 (7331)

**Back Side High/Area Scan (71x131x1):** Interpolated grid: dx=1.500 mm, dy=1.500 mm

Maximum value of SAR (interpolated) = 0.166 W/kg

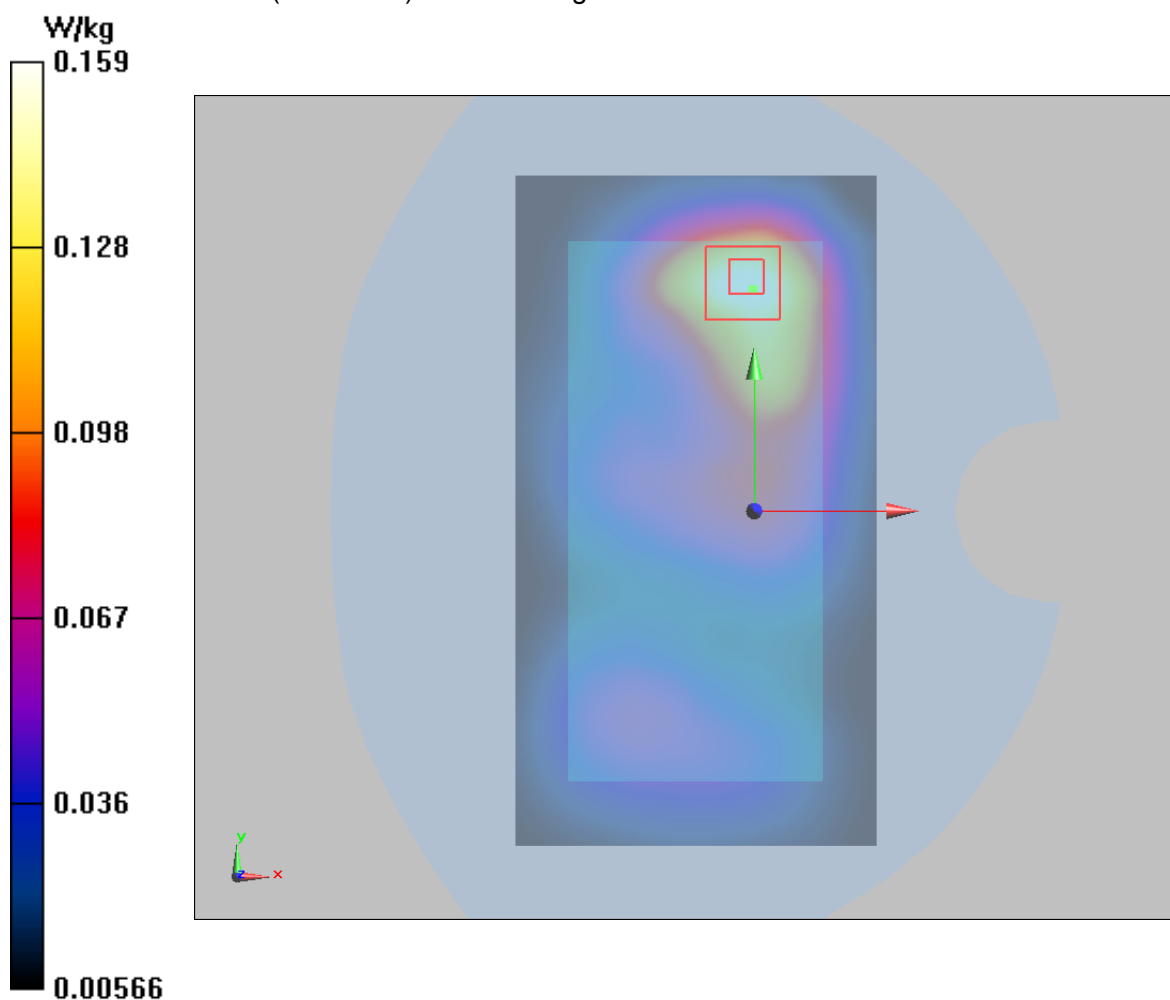
**Back Side High/Zoom Scan (5x5x7)/Cube 0:** Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 6.634 V/m; Power Drift = 0.05 dB

Peak SAR (extrapolated) = 0.254 W/kg

**SAR(1 g) = 0.151 W/kg; SAR(10 g) = 0.088 W/kg**

Maximum value of SAR (measured) = 0.159 W/kg



# Plot 96 LTE Band 2 50%RB Top Edge High (Distance 10mm)

Date: 6/29/2018

Communication System: UID 0, LTE\_FDD (0); Frequency: 1900 MHz; Duty Cycle: 1:1

Medium parameters used:  $f = 1900$  MHz;  $\sigma = 1.508$  S/m;  $\epsilon_r = 52.751$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Ambient Temperature: 22.3 °C Liquid Temperature: 21.5 °C

Phantom section: Flat Section

DASY5 Configuration:

Sensor-Surface: 4mm (Mechanical Surface Detection)

Probe: EX3DV4 - SN3677; ConvF(7.70, 7.70, 7.70); Calibrated: 5/29/2018;

Electronics: DAE4 SN1317; Calibrated: 3/23/2018

Phantom: SAM1; Type: SAM; Serial: TP-1534

Measurement SW: DASY52, Version 52.8 (8); SEMCAD X Version 14.6.10 (7331)

**Top Edge High/Area Scan (51x91x1):** Interpolated grid: dx=1.000 mm, dy=1.000 mm

Maximum value of SAR (interpolated) = 0.406 W/kg

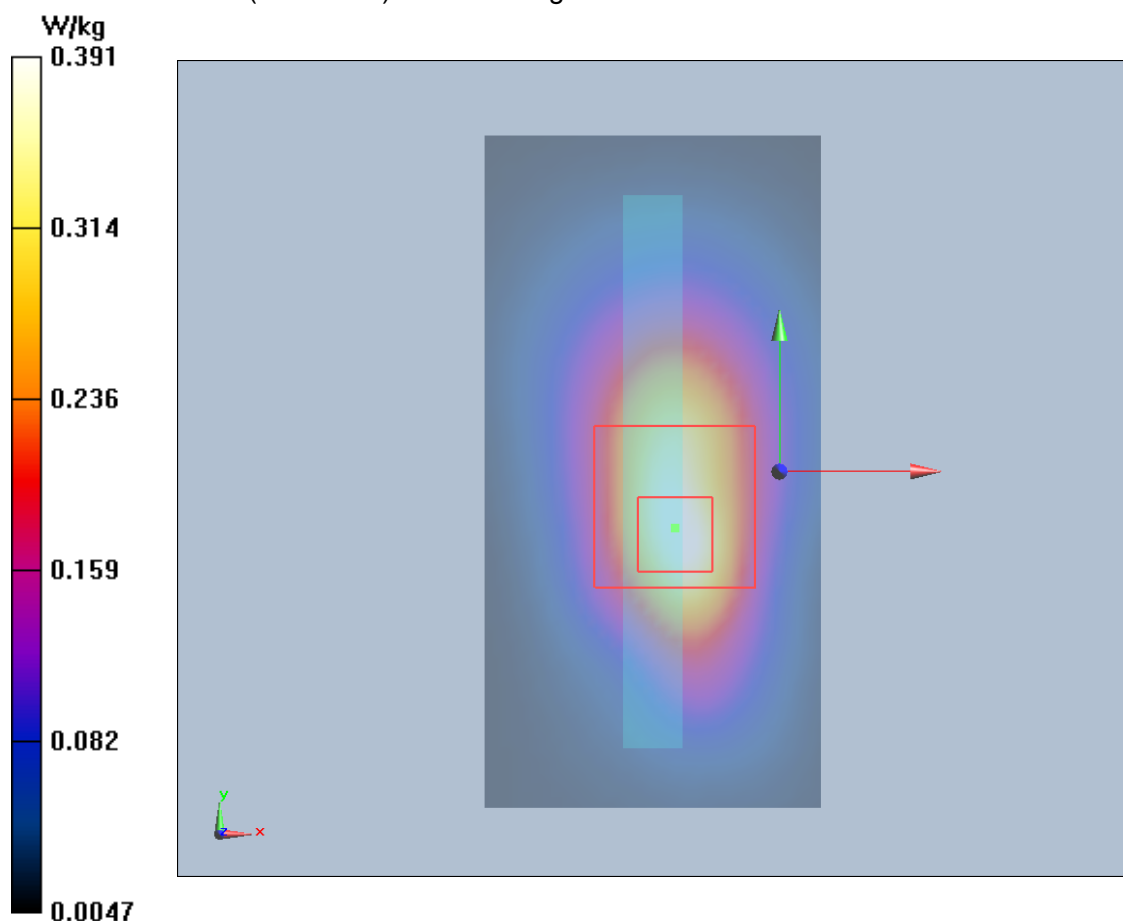
**Top Edge High/Zoom Scan (7x7x7)/Cube 0:** Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 15.30 V/m; Power Drift = -0.030 dB

Peak SAR (extrapolated) = 0.625 W/kg

**SAR(1 g) = 0.345 W/kg; SAR(10 g) = 0.179 W/kg**

Maximum value of SAR (measured) = 0.391 W/kg



## Plot 97 LTE Band 4 50%RB Right Tilt Low

Date: 7/7/2018

Communication System: UID 0, LTE\_FDD (0); Frequency: 1720 MHz; Duty Cycle: 1:1

Medium parameters used:  $f = 1720$  MHz;  $\sigma = 1.302$  S/m;  $\epsilon_r = 40.836$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Ambient Temperature: 22.3 °C Liquid Temperature: 21.5 °C

Phantom section: Right Section

DASY5 Configuration:

Sensor-Surface: 4mm (Mechanical Surface Detection)

Probe: EX3DV4 - SN3677; ConvF(8.19, 8.19, 8.19); Calibrated: 5/29/2018;

Electronics: DAE4 SN1317; Calibrated: 3/23/2018

Phantom: SAM1; Type: SAM; Serial: TP-1534

Measurement SW: DASY52, Version 52.8 (8); SEMCAD X Version 14.6.10 (7331)

**Right Tilt Low/Area Scan (71x131x1):** Interpolated grid: dx=1.500 mm, dy=1.500 mm

Maximum value of SAR (interpolated) = 0.548 W/kg

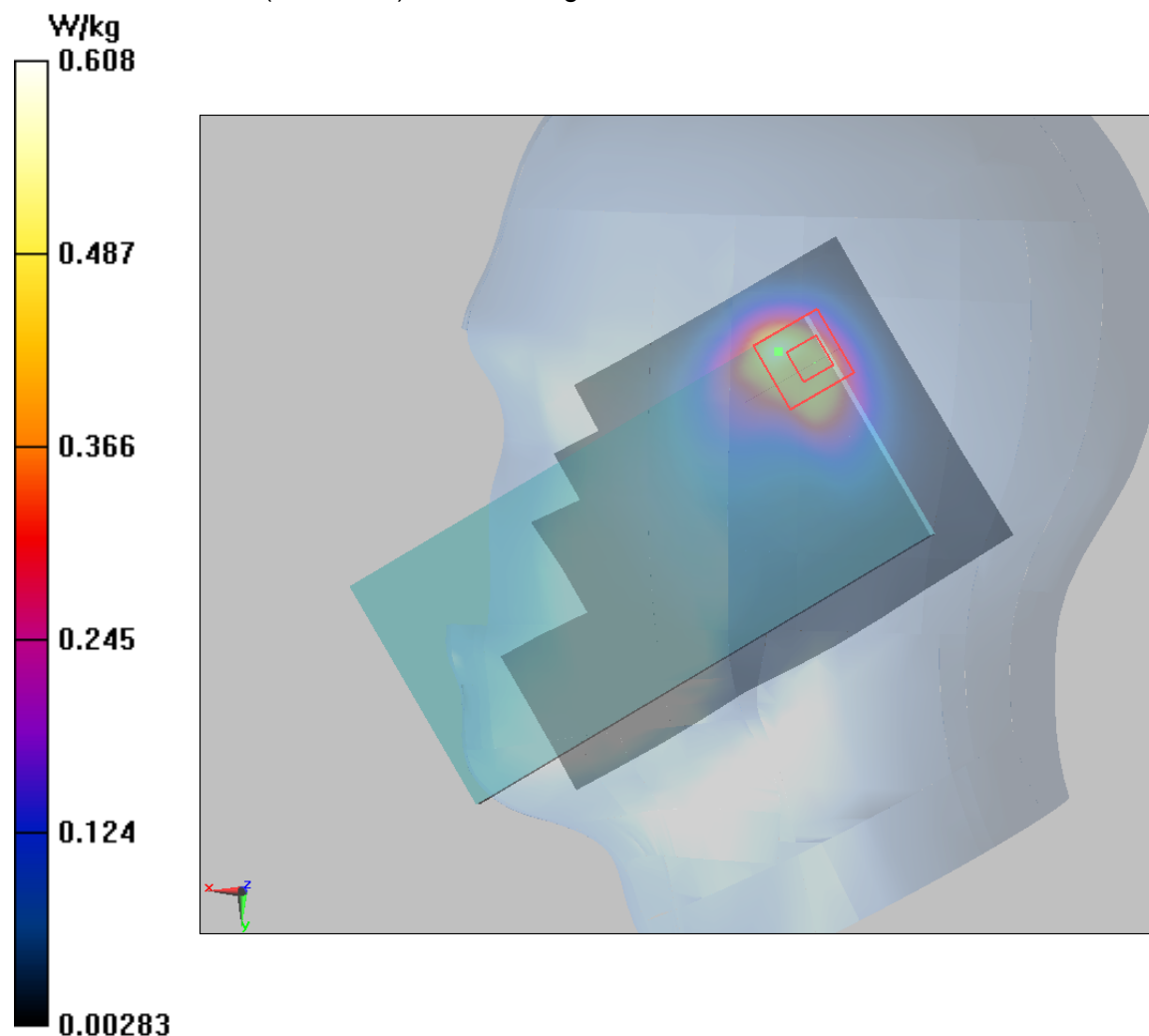
**Right Tilt Low/Zoom Scan (5x5x7)/Cube 0:** Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 13.46 V/m; Power Drift = 0.07 dB

Peak SAR (extrapolated) = 1.23 W/kg

**SAR(1 g) = 0.500 W/kg; SAR(10 g) = 0.223 W/kg**

Maximum value of SAR (measured) = 0.608 W/kg



# Plot 98 LTE Band 4 1RB Back Side High (Distance 15mm)

Date: 7/10/2018

Communication System: UID 0, LTE\_FDD (0); Frequency: 1745 MHz; Duty Cycle: 1:1

Medium parameters used:  $f = 1745$  MHz;  $\sigma = 1.491$  S/m;  $\epsilon_r = 52.877$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Ambient Temperature: 22.3 °C Liquid Temperature: 21.5 °C

Phantom section: Flat Section

DASY5 Configuration:

Sensor-Surface: 4mm (Mechanical Surface Detection)

Probe: EX3DV4 - SN3677; ConvF(7.91, 7.91, 7.91); Calibrated: 5/29/2018;

Electronics: DAE4 SN1317; Calibrated: 3/23/2018

Phantom: SAM1; Type: SAM; Serial: TP-1534

Measurement SW: DASY52, Version 52.8 (8); SEMCAD X Version 14.6.10 (7331)

**Back Side High/Area Scan (71x131x1):** Interpolated grid: dx=1.500 mm, dy=1.500 mm

Maximum value of SAR (interpolated) = 0.133 W/kg

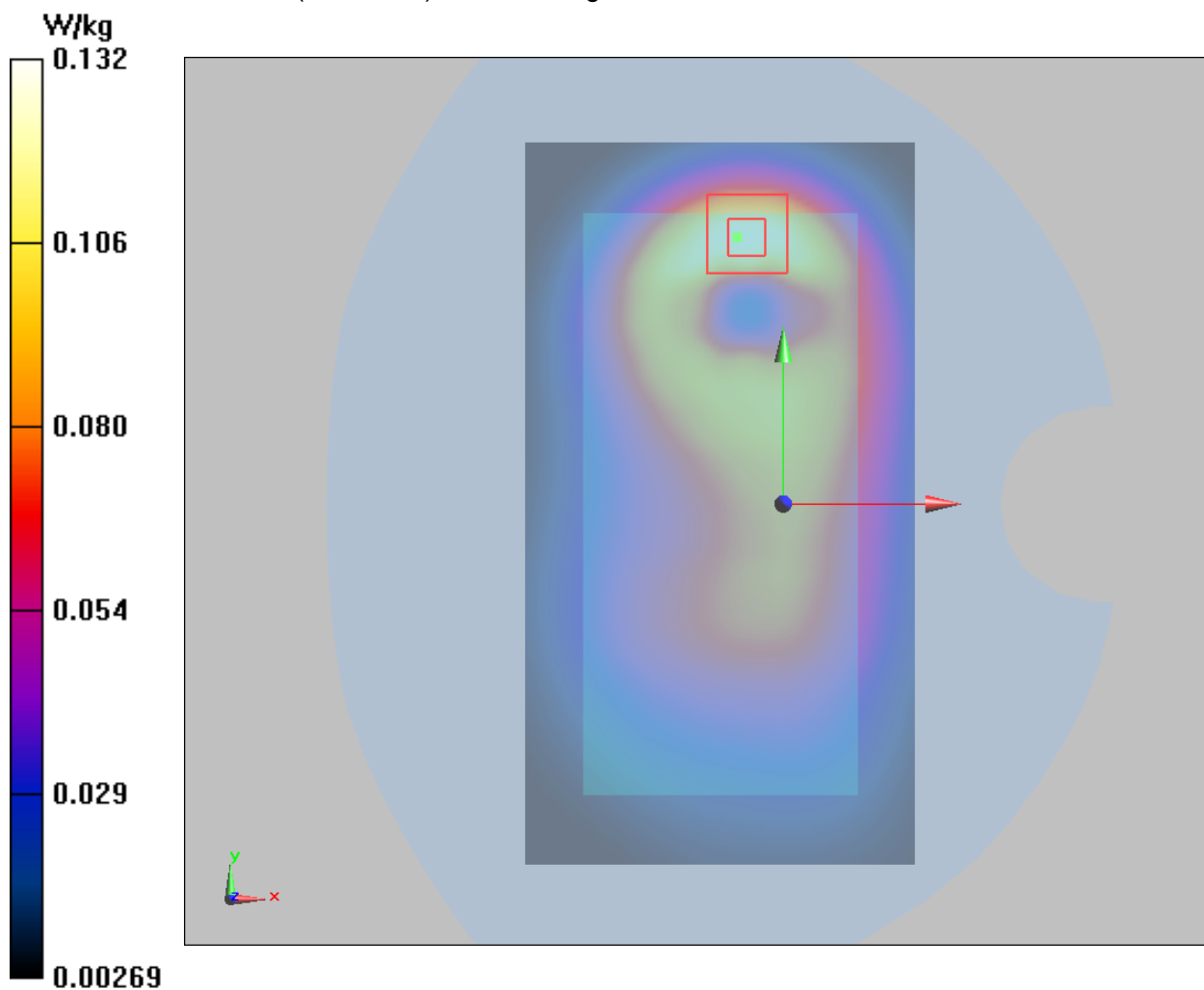
**Back Side High/Zoom Scan (5x5x7)/Cube 0:** Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 3.637 V/m; Power Drift = 0.18 dB

Peak SAR (extrapolated) = 0.207 W/kg

**SAR(1 g) = 0.119 W/kg; SAR(10 g) = 0.066 W/kg**

Maximum value of SAR (measured) = 0.132 W/kg





# Plot 99 LTE Band 4 1RB Top Edge High (Distance 10mm)

Date: 7/10/2018

Communication System: UID 0, LTE\_FDD (0); Frequency: 1745 MHz; Duty Cycle: 1:1

Medium parameters used:  $f = 1745$  MHz;  $\sigma = 1.491$  S/m;  $\epsilon_r = 52.877$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Ambient Temperature: 22.3 °C Liquid Temperature: 21.5 °C

Phantom section: Flat Section

DASY5 Configuration:

Sensor-Surface: 4mm (Mechanical Surface Detection)

Probe: EX3DV4 - SN3677; ConvF(7.91, 7.91, 7.91); Calibrated: 5/29/2018;

Electronics: DAE4 SN1317; Calibrated: 3/23/2018

Phantom: SAM1; Type: SAM; Serial: TP-1534

Measurement SW: DASY52, Version 52.8 (8); SEMCAD X Version 14.6.10 (7331)

**Top Edge High/Area Scan (51x91x1):** Interpolated grid: dx=1.000 mm, dy=1.000 mm

Maximum value of SAR (interpolated) = 0.372 W/kg

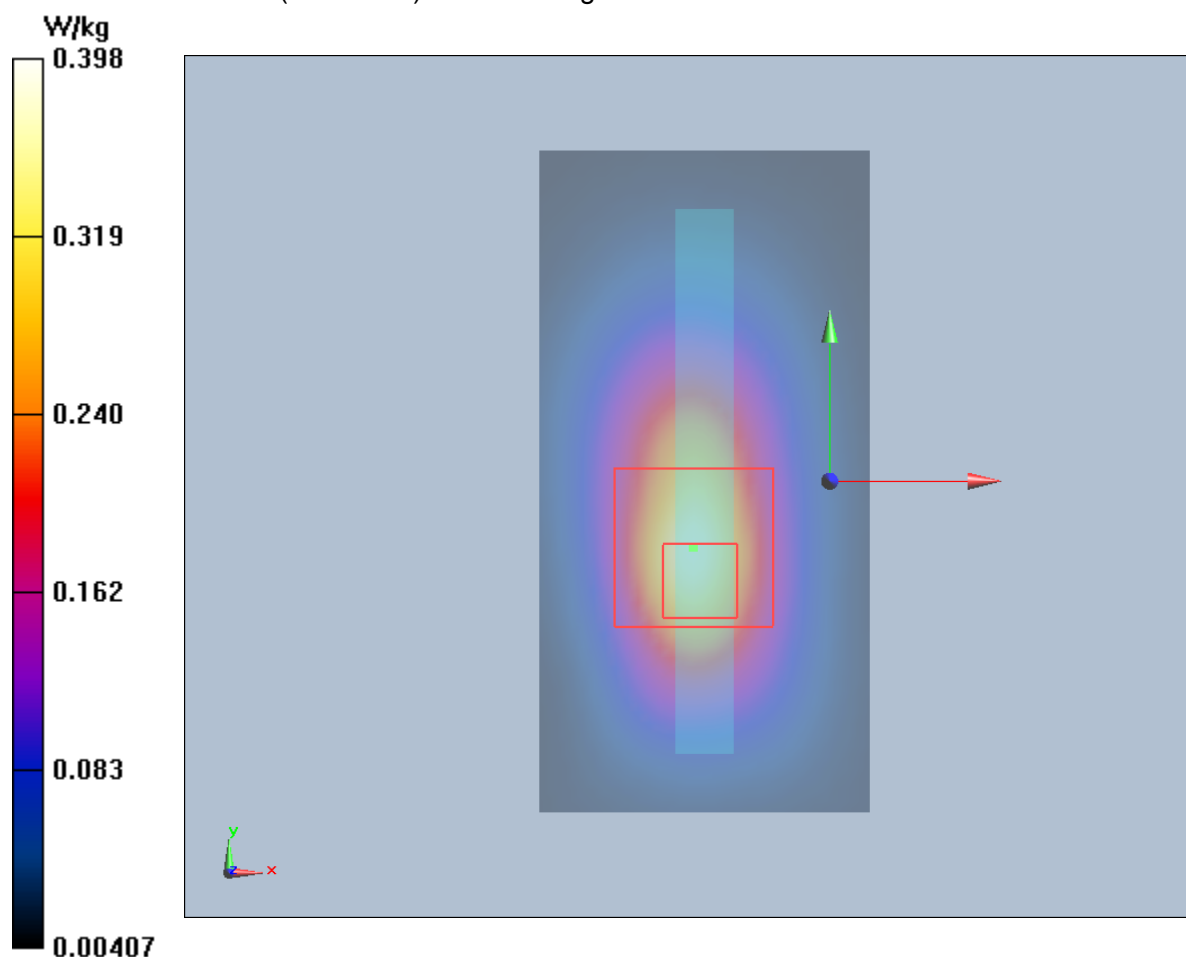
**Top Edge High/Zoom Scan (7x7x7)/Cube 0:** Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 14.58 V/m; Power Drift = 0.05 dB

Peak SAR (extrapolated) = 0.697 W/kg

**SAR(1 g) = 0.348 W/kg; SAR(10 g) = 0.167 W/kg**

Maximum value of SAR (measured) = 0.398 W/kg



## Plot 100 LTE Band 5 1RB Right Cheek Middle

Date: 7/5/2018

Communication System: UID 0, LTE (0); Frequency: 836.5 MHz; Duty Cycle: 1:1

Medium parameters used (interpolated):  $f = 836.5$  MHz;  $\sigma = 0.908$  S/m;  $\epsilon_r = 41.389$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Ambient Temperature: 22.3 °C Liquid Temperature: 21.5 °C

Phantom section: Right Section

DASY5 Configuration:

Sensor-Surface: 4mm (Mechanical Surface Detection)

Probe: EX3DV4 - SN3677; ConvF(9.10, 9.10, 9.10); Calibrated: 5/29/2018;

Electronics: DAE4 SN1317; Calibrated: 3/23/2018

Phantom: SAM1; Type: SAM; Serial: TP-1534

Measurement SW: DASY52, Version 52.8 (8); SEMCAD X Version 14.6.10 (7331)

**Right Cheek Middle/Area Scan (71x131x1):** Interpolated grid: dx=1.500 mm, dy=1.500 mm

Maximum value of SAR (interpolated) = 0.744 W/kg

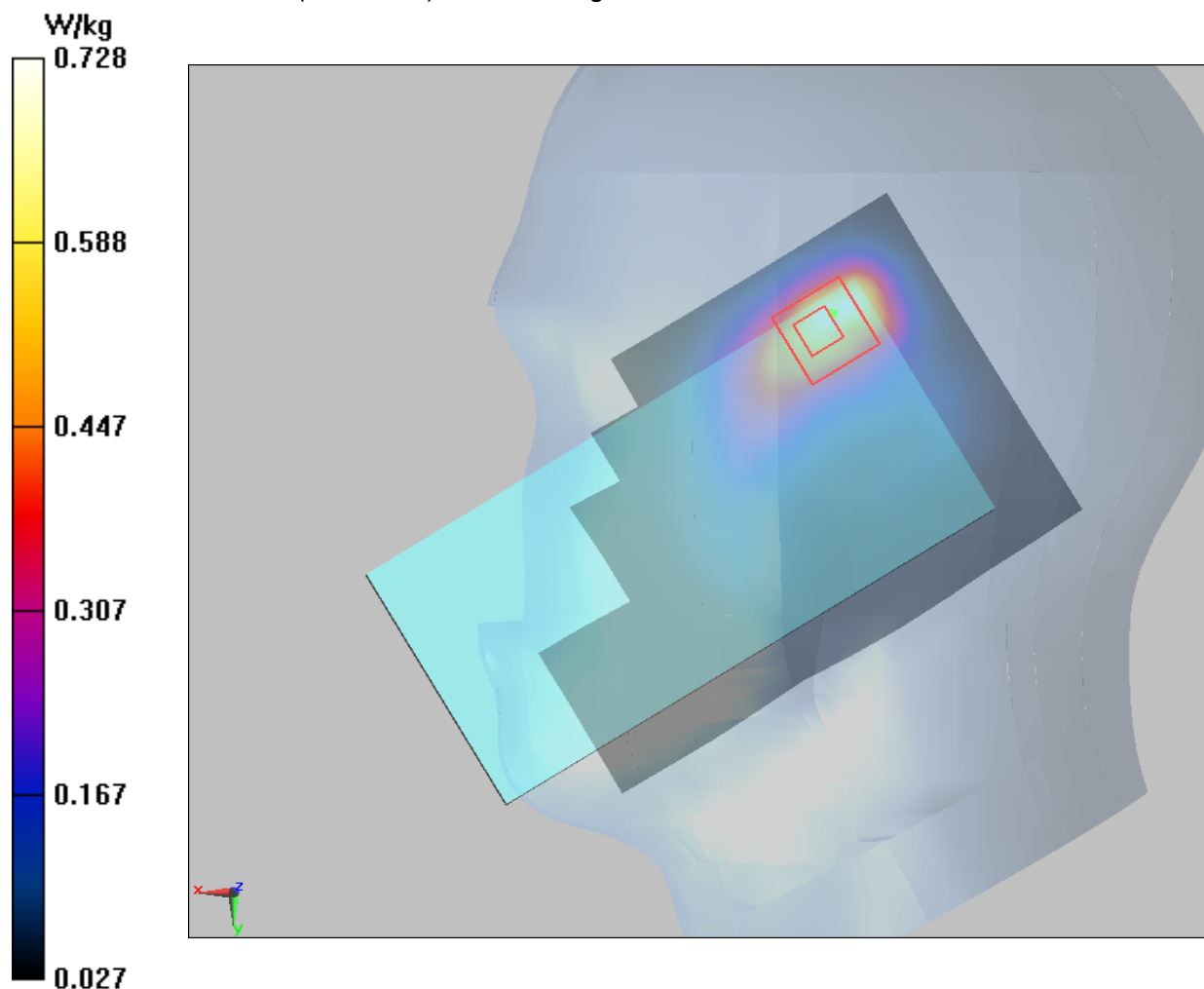
**Right Cheek Middle/Zoom Scan (5x5x7)/Cube 0:** Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 16.45 V/m; Power Drift = 0.01 dB

Peak SAR (extrapolated) = 1.24 W/kg

**SAR(1 g) = 0.656 W/kg; SAR(10 g) = 0.369 W/kg**

Maximum value of SAR (measured) = 0.728 W/kg



# Plot 101 LTE Band 5 1RB Back Side Low (Distance 15mm)

Date: 7/8/2018

Communication System: UID 0, LTE\_FDD (0); Frequency: 829 MHz; Duty Cycle: 1:1

Medium parameters used:  $f = 829$  MHz;  $\sigma = 0.967$  S/m;  $\epsilon_r = 53.861$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Ambient Temperature: 22.3 °C Liquid Temperature: 21.5 °C

Phantom section: Flat Section

DASY5 Configuration:

Sensor-Surface: 4mm (Mechanical Surface Detection)

Probe: EX3DV4 - SN3677; ConvF(9.32, 9.32, 9.32); Calibrated: 5/29/2018;

Electronics: DAE4 SN1317; Calibrated: 3/23/2018

Phantom: SAM1; Type: SAM; Serial: TP-1534

Measurement SW: DASY52, Version 52.8 (8); SEMCAD X Version 14.6.10 (7331)

**Back Side Low/Area Scan (71x131x1):** Interpolated grid: dx=1.500 mm, dy=1.500 mm

Maximum value of SAR (interpolated) = 0.288 W/kg

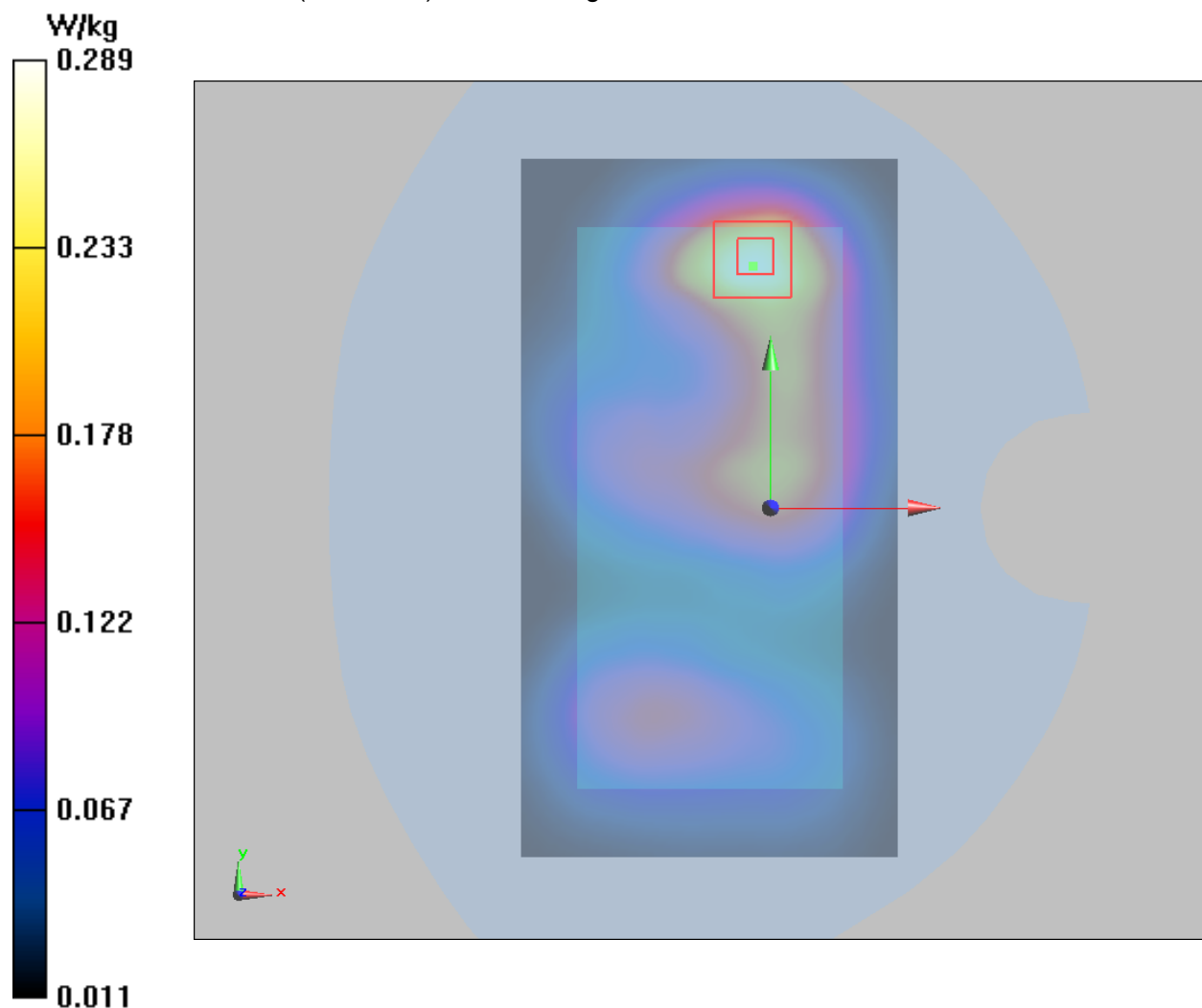
**Back Side Low/Zoom Scan (5x5x7)/Cube 0:** Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 11.46 V/m; Power Drift = -0.07 dB

Peak SAR (extrapolated) = 0.422 W/kg

**SAR(1 g) = 0.263 W/kg; SAR(10 g) = 0.159 W/kg**

Maximum value of SAR (measured) = 0.289 W/kg



## Plot 102 LTE Band 5 1RB Back Side High (Distance 10mm)

Date: 7/8/2018

Communication System: UID 0, LTE\_FDD (0); Frequency: 844 MHz; Duty Cycle: 1:1

Medium parameters used:  $f = 844$  MHz;  $\sigma = 0.98$  S/m;  $\epsilon_r = 53.721$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Ambient Temperature: 22.3 °C Liquid Temperature: 21.5 °C

Phantom section: Flat Section

DASY5 Configuration:

Sensor-Surface: 4mm (Mechanical Surface Detection)

Probe: EX3DV4 - SN3677; ConvF(9.32, 9.32, 9.32); Calibrated: 5/29/2018;

Electronics: DAE4 SN1317; Calibrated: 3/23/2018

Phantom: SAM1; Type: SAM; Serial: TP-1534

Measurement SW: DASY52, Version 52.8 (8); SEMCAD X Version 14.6.10 (7331)

**Back Side High/Area Scan (71x131x1):** Interpolated grid: dx=1.500 mm, dy=1.500 mm

Maximum value of SAR (interpolated) = 0.674 W/kg

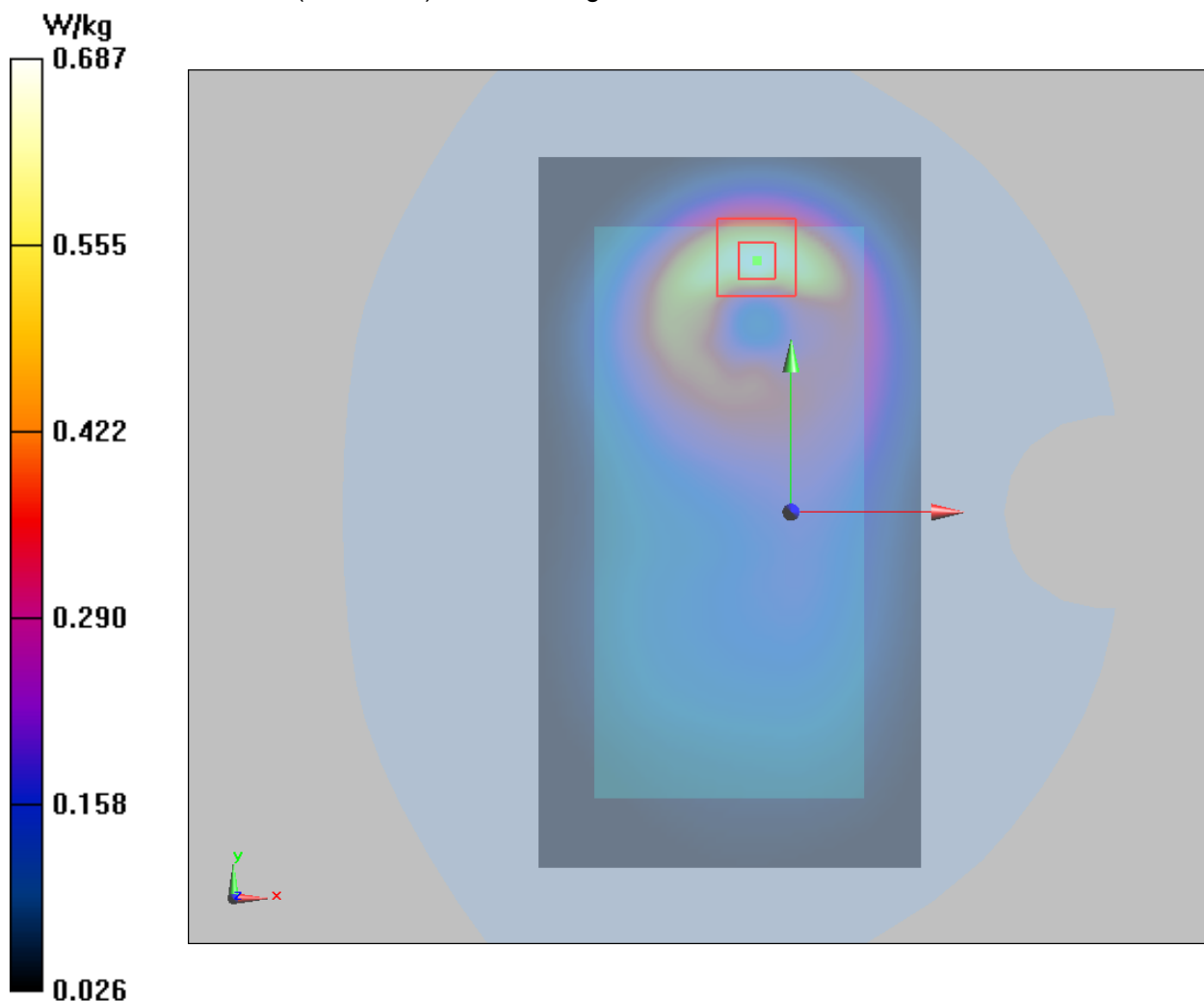
**Back Side High/Zoom Scan (5x5x7)/Cube 0:** Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 11.93 V/m; Power Drift = -0.14 dB

Peak SAR (extrapolated) = 1.12 W/kg

**SAR(1 g) = 0.641 W/kg; SAR(10 g) = 0.363 W/kg**

Maximum value of SAR (measured) = 0.687 W/kg



# **Plot 103 LTE Band 7 1RB Right Cheek Low**

Date: 6/28/2018

Communication System: UID 0, LTE\_FDD (0); Frequency: 2510 MHz; Duty Cycle: 1:1

Medium parameters used:  $f = 2510$  MHz;  $\sigma = 1.913$  S/m;  $\epsilon_r = 39.535$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Ambient Temperature: 22.3 °C      Liquid Temperature: 21.5 °C

Phantom section: Right Section

DASY5 Configuration:

Sensor-Surface: 4mm (Mechanical Surface Detection)

Probe: EX3DV4 - SN3677; ConvF(7.28, 7.28, 7.28); Calibrated: 5/29/2018;

Electronics: DAE4 SN1317; Calibrated: 3/23/2018

Phantom: SAM1; Type: SAM; Serial: TP-1534

Measurement SW: DASY52, Version 52.8 (8); SEMCAD X Version 14.6.10 (7331)

**Right Cheek Low/Area Scan (91x171x1):** Interpolated grid: dx=1.200 mm, dy=1.200 mm

Maximum value of SAR (interpolated) = 0.748 W/kg

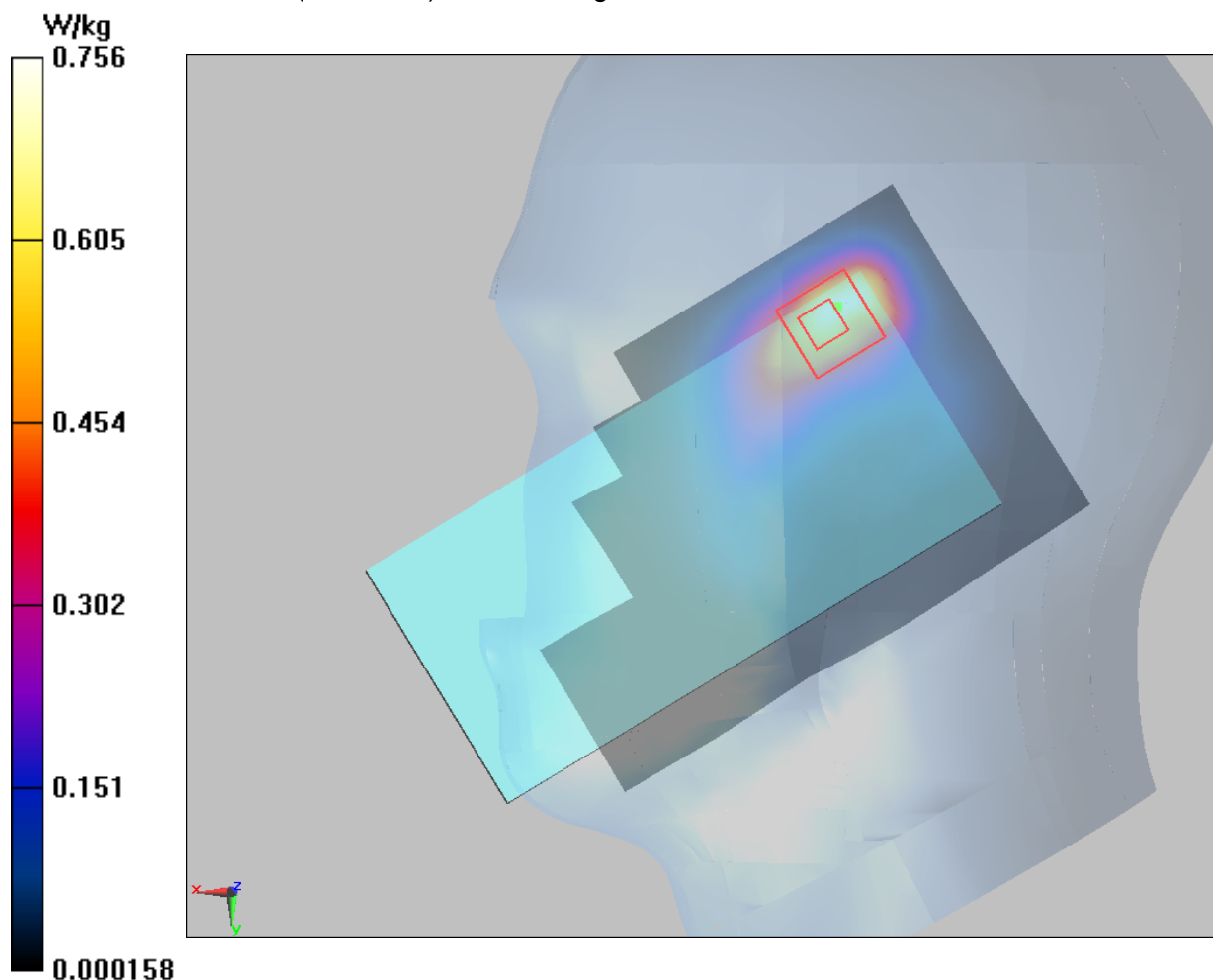
**Right Cheek Low/Zoom Scan (7x7x7)/Cube 0:** Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 7.422 V/m; Power Drift = 0.031 dB

Peak SAR (extrapolated) = 1.58 W/kg

**SAR(1 g) = 0.657 W/kg; SAR(10 g) = 0.307 W/kg**

Maximum value of SAR (measured) = 0.756 W/kg



# Plot 104 LTE Band 7 50%RB Back Side Low (Distance 15mm)

Date: 6/25/2018

Communication System: UID 0, LTE (0); Frequency: 2510 MHz; Duty Cycle: 1:1

Medium parameters used:  $f = 2510$  MHz;  $\sigma = 2.045$  S/m;  $\epsilon_r = 50.913$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Ambient Temperature: 22.3 °C Liquid Temperature: 21.5 °C

Phantom section: Flat Section

DASY5 Configuration:

Sensor-Surface: 4mm (Mechanical Surface Detection)

Probe: EX3DV4 - SN3677; ConvF(7.16, 7.16, 7.16); Calibrated: 5/29/2018;

Electronics: DAE4 SN1317; Calibrated: 3/23/2018

Phantom: SAM1; Type: SAM; Serial: TP-1534

Measurement SW: DASY52, Version 52.8 (8); SEMCAD X Version 14.6.10 (7331)

**Back Side Low/Area Scan (91x171x1):** Interpolated grid: dx=1.200 mm, dy=1.200 mm

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

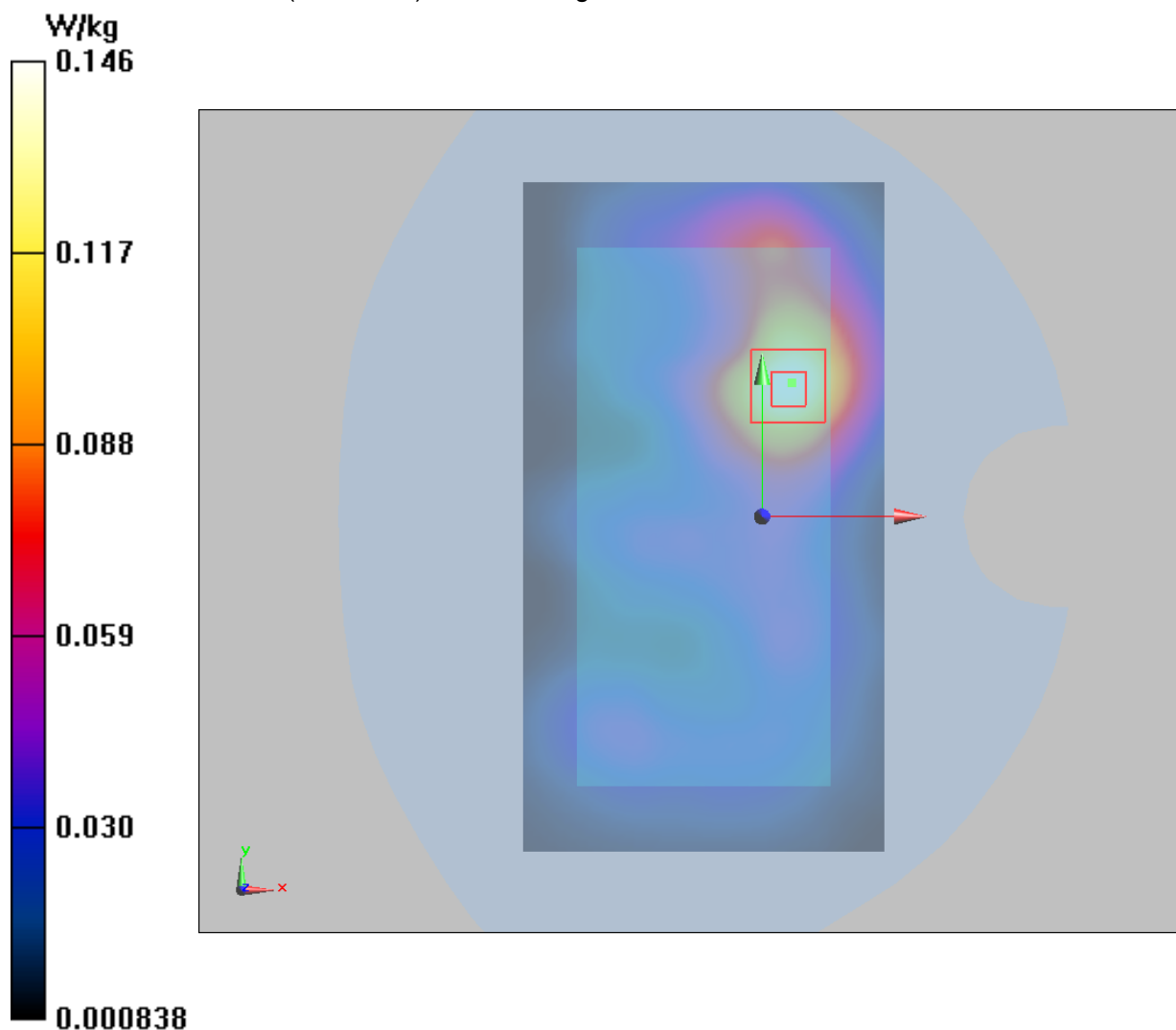
**Back Side Low/Zoom Scan (7x7x7)/Cube 0:** Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 4.128 V/m; Power Drift = 0.18 dB

Peak SAR (extrapolated) = 0.239 W/kg

**SAR(1 g) = 0.135 W/kg; SAR(10 g) = 0.076 W/kg**

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



# Plot 105 LTE Band 7 50%RB Left Edge Low (Distance 10mm)

Date: 6/25/2018

Communication System: UID 0, LTE (0); Frequency: 2510 MHz; Duty Cycle: 1:1

Medium parameters used:  $f = 2510$  MHz;  $\sigma = 2.045$  S/m;  $\epsilon_r = 50.913$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Ambient Temperature: 22.3 °C Liquid Temperature: 21.5 °C

Phantom section: Flat Section

DASY5 Configuration:

Sensor-Surface: 4mm (Mechanical Surface Detection)

Probe: EX3DV4 - SN3677; ConvF(7.16, 7.16, 7.16); Calibrated: 5/29/2018;

Electronics: DAE4 SN1317; Calibrated: 3/23/2018

Phantom: SAM1; Type: SAM; Serial: TP-1534

Measurement SW: DASY52, Version 52.8 (8); SEMCAD X Version 14.6.10 (7331)

**Left Edge Low/Area Scan (51x201x1):** Interpolated grid: dx=1.000 mm, dy=1.000 mm

Maximum value of SAR (interpolated) = 0.486 W/kg

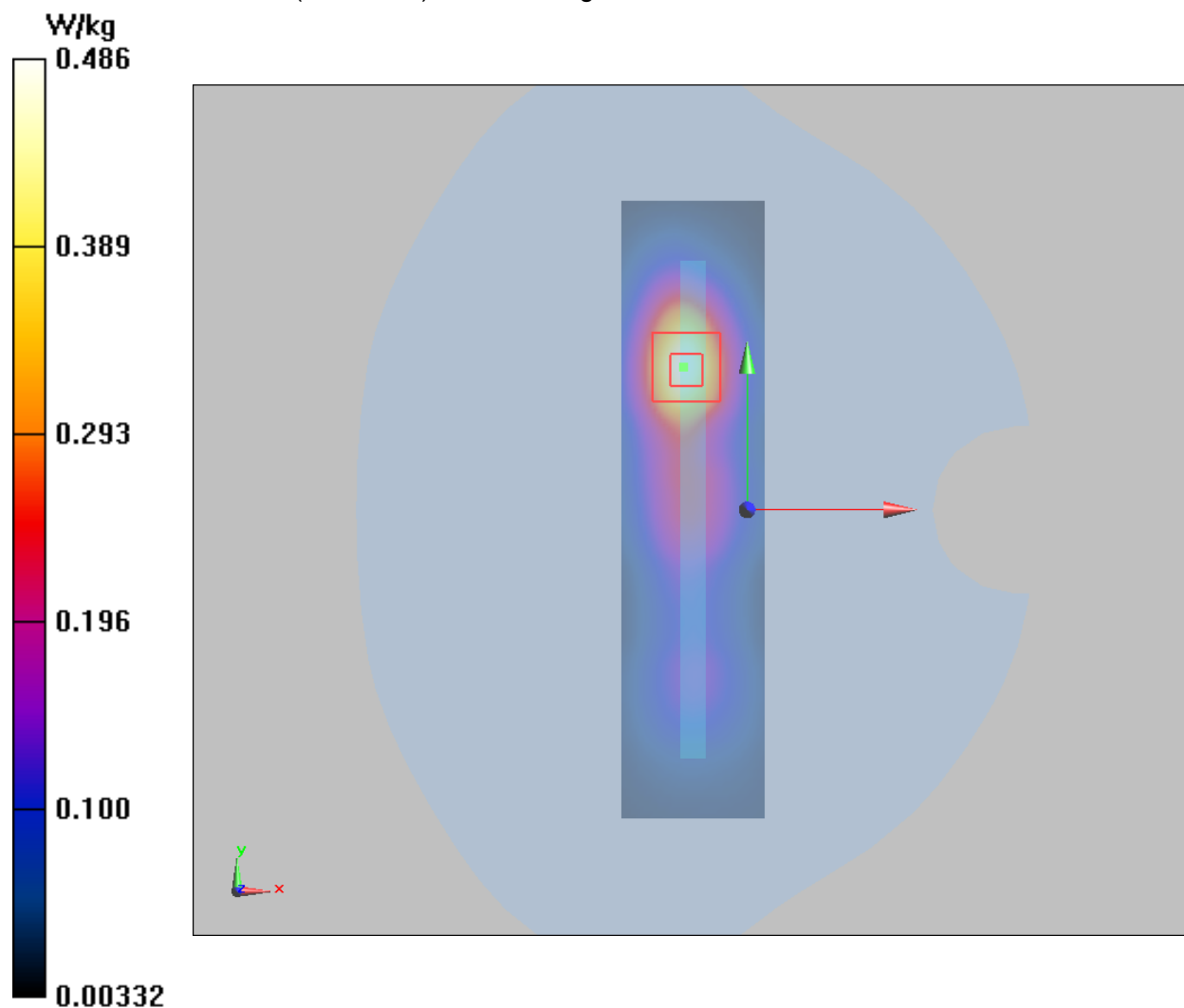
**Left Edge Low/Zoom Scan (7x7x7)/Cube 0:** Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 10.92 V/m; Power Drift = -0.04 dB

Peak SAR (extrapolated) = 0.787 W/kg

**SAR(1 g) = 0.436 W/kg; SAR(10 g) = 0.226 W/kg**

Maximum value of SAR (measured) = 0.486 W/kg



# Plot 106 LTE Band 12 50%RB Right Tilt High

Date: 7/2/2018

Communication System: UID 0, LTE (0); Frequency: 711 MHz; Duty Cycle: 1:1

Medium parameters used:  $f = 711$  MHz;  $\sigma = 0.87$  S/m;  $\epsilon_r = 43.041$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Ambient Temperature: 22.3 °C Liquid Temperature: 21.5 °C

Phantom section: Right Section

DASY5 Configuration:

Sensor-Surface: 4mm (Mechanical Surface Detection)

Probe: EX3DV4 - SN3677; ConvF(9.40, 9.40, 9.40); Calibrated: 5/29/2018;

Electronics: DAE4 SN1317; Calibrated: 3/23/2018

Phantom: SAM1; Type: SAM; Serial: TP-1534

Measurement SW: DASY52, Version 52.8 (8); SEMCAD X Version 14.6.10 (7331)

**Right Tilt High/Area Scan (71x131x1):** Interpolated grid: dx=1.500 mm, dy=1.500 mm

Maximum value of SAR (interpolated) = 0.694 W/kg

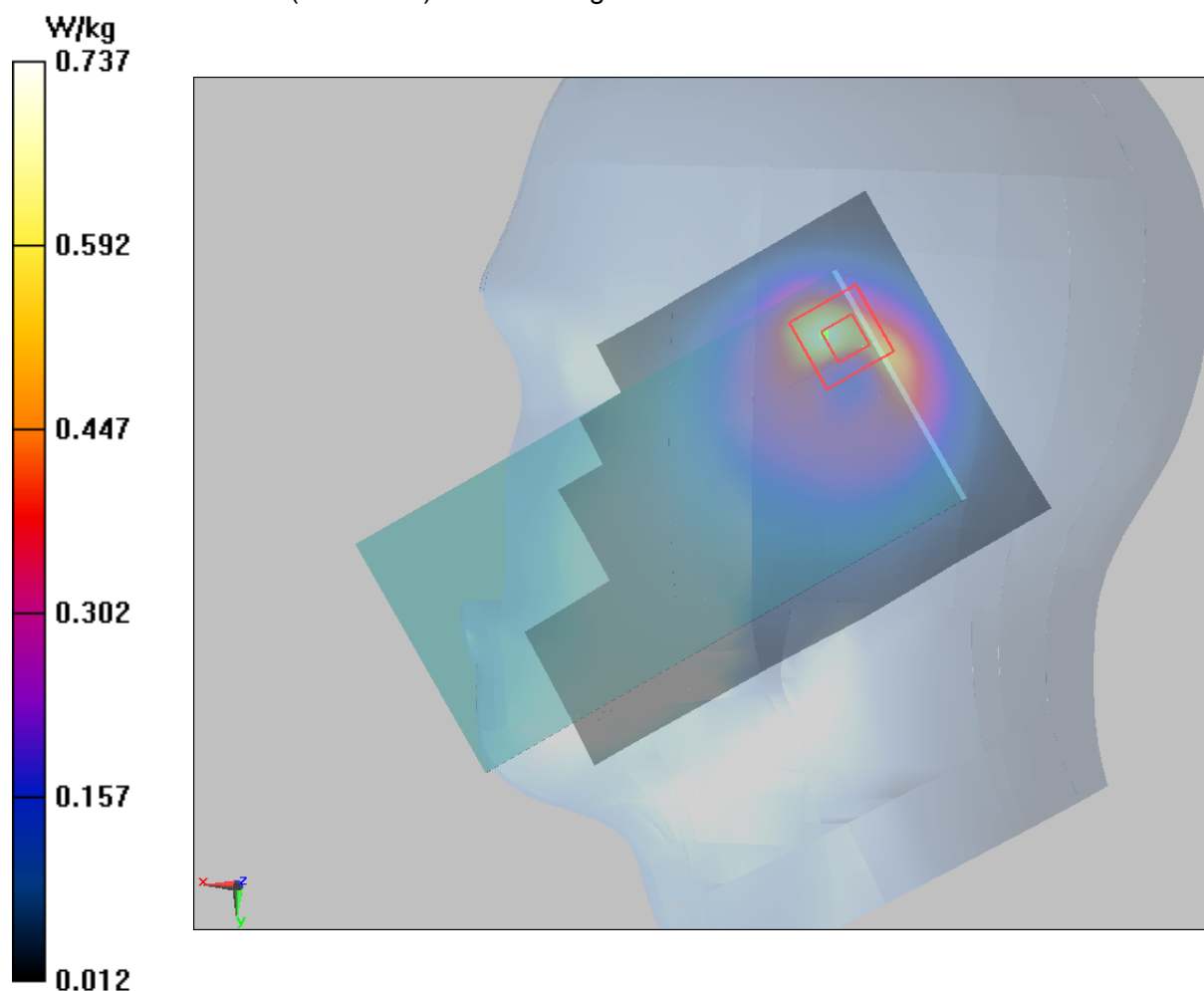
**Right Tilt High/Zoom Scan (5x5x7)/Cube 0:** Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 23.74 V/m; Power Drift = 0.01 dB

Peak SAR (extrapolated) = 1.68 W/kg

**SAR(1 g) = 0.669 W/kg; SAR(10 g) = 0.321 W/kg**

Maximum value of SAR (measured) = 0.737 W/kg





# Plot 107 LTE Band 12 1RB Back Side Low (Distance 15mm)

Date: 7/3/2018

Communication System: UID 0, LTE (0); Frequency: 704 MHz; Duty Cycle: 1:1

Medium parameters used:  $f = 704$  MHz;  $\sigma = 0.926$  S/m;  $\epsilon_r = 57.382$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Ambient Temperature: 22.3 °C Liquid Temperature: 21.5 °C

Phantom section: Flat Section

DASY5 Configuration:

Sensor-Surface: 4mm (Mechanical Surface Detection)

Probe: EX3DV4 - SN3677; ConvF(9.79, 9.79, 9.79); Calibrated: 5/29/2018;

Electronics: DAE4 SN1317; Calibrated: 3/23/2018

Phantom: SAM1; Type: SAM; Serial: TP-1534

Measurement SW: DASY52, Version 52.8 (8); SEMCAD X Version 14.6.10 (7331)

**Back Side Low/Area Scan (71x131x1):** Interpolated grid: dx=1.500 mm, dy=1.500 mm

Maximum value of SAR (interpolated) = 0.143 W/kg

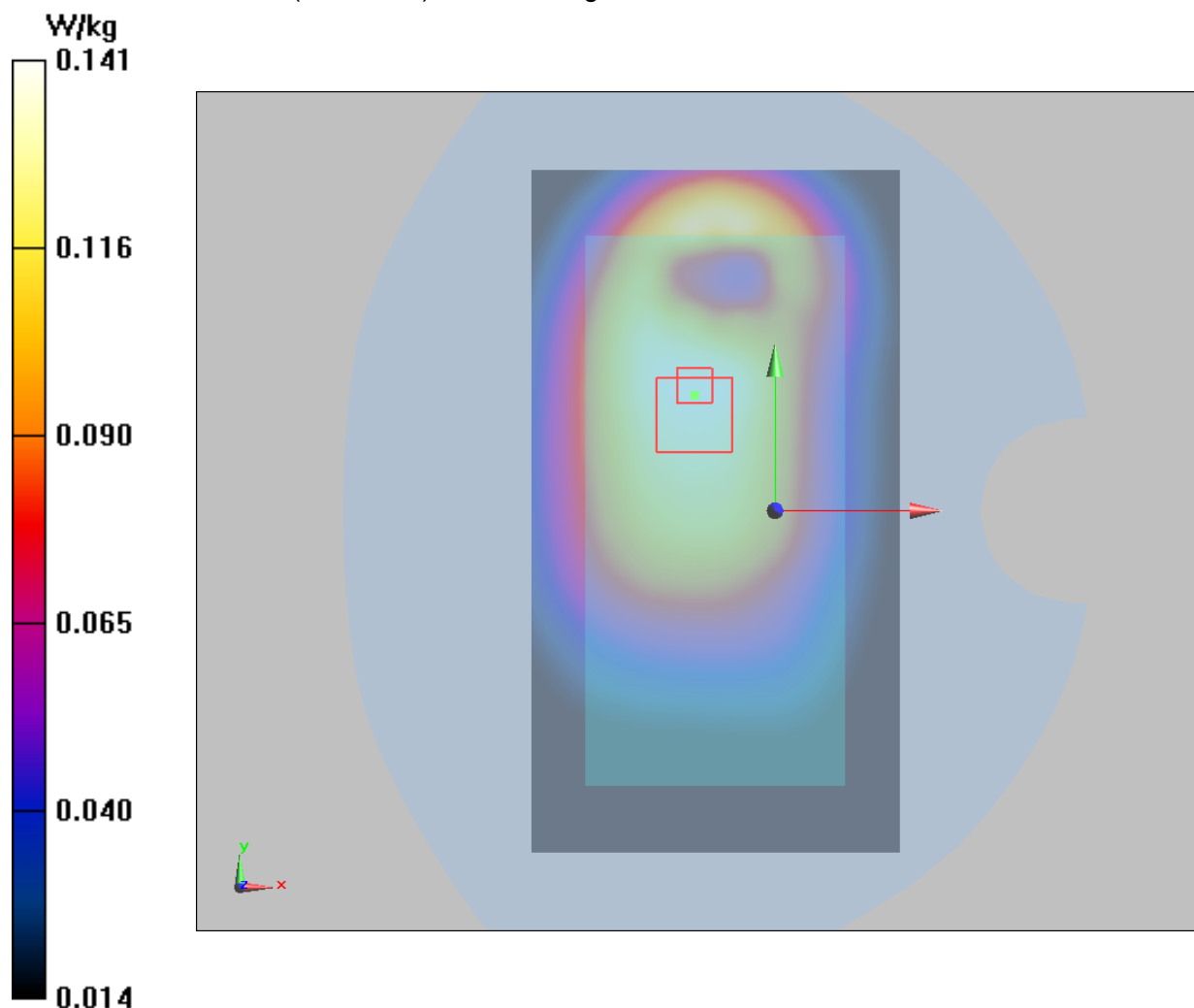
**Back Side Low/Zoom Scan (5x5x7)/Cube 0:** Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 11.36 V/m; Power Drift = 0.02 dB

Peak SAR (extrapolated) = 0.177 W/kg

**SAR(1 g) = 0.136 W/kg; SAR(10 g) = 0.104 W/kg**

Maximum value of SAR (measured) = 0.141 W/kg



# Plot 108 LTE Band 12 1RB Back Side Low (Distance 10mm)

Date: 7/3/2018

Communication System: UID 0, LTE (0); Frequency: 704 MHz; Duty Cycle: 1:1

Medium parameters used:  $f = 704$  MHz;  $\sigma = 0.926$  S/m;  $\epsilon_r = 57.382$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Ambient Temperature: 22.3 °C Liquid Temperature: 21.5 °C

Phantom section: Flat Section

DASY5 Configuration:

Sensor-Surface: 4mm (Mechanical Surface Detection)

Probe: EX3DV4 - SN3677; ConvF(9.79, 9.79, 9.79); Calibrated: 5/29/2018;

Electronics: DAE4 SN1317; Calibrated: 3/23/2018

Phantom: SAM1; Type: SAM; Serial: TP-1534

Measurement SW: DASY52, Version 52.8 (8); SEMCAD X Version 14.6.10 (7331)

**Back Side Low/Area Scan (71x131x1):** Interpolated grid: dx=1.500 mm, dy=1.500 mm

Maximum value of SAR (interpolated) = 0.585 W/kg

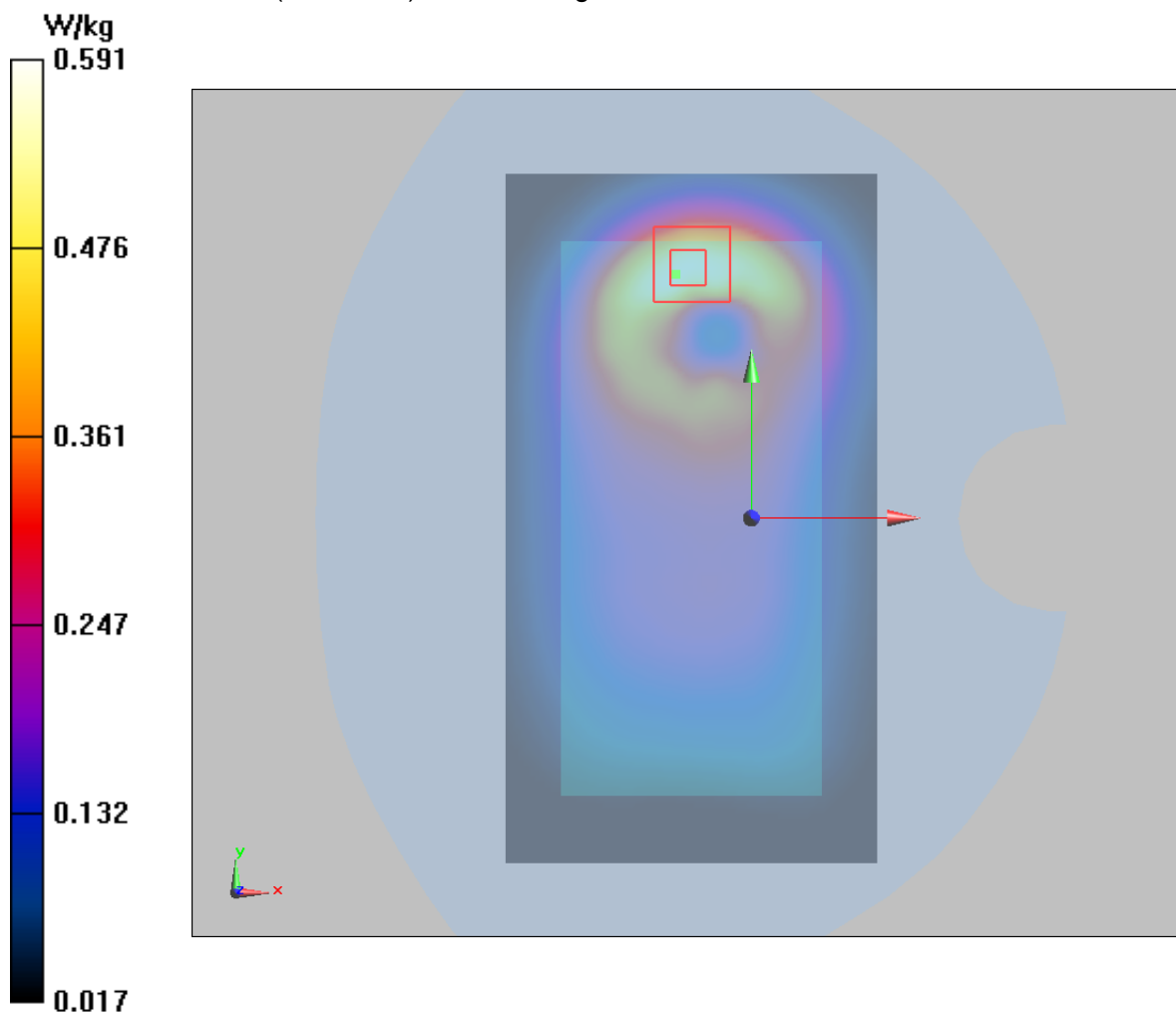
**Back Side Low/Zoom Scan (5x5x7)/Cube 0:** Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 15.82 V/m; Power Drift = 0.11 dB

Peak SAR (extrapolated) = 0.939 W/kg

**SAR(1 g) = 0.535 W/kg; SAR(10 g) = 0.305 W/kg**

Maximum value of SAR (measured) = 0.591 W/kg



## Plot 109 LTE Band 17 50%RB Right Cheek High

Date: 7/2/2018

Communication System: UID 0, LTE (0); Frequency: 711 MHz; Duty Cycle: 1:1

Medium parameters used:  $f = 711$  MHz;  $\sigma = 0.854$  S/m;  $\epsilon_r = 43.191$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Ambient Temperature: 22.3 °C Liquid Temperature: 21.5 °C

Phantom section: Right Section

DASY5 Configuration:

Sensor-Surface: 4mm (Mechanical Surface Detection)

Probe: EX3DV4 - SN3677; ConvF(9.40, 9.40, 9.40); Calibrated: 5/29/2018;

Electronics: DAE4 SN1317; Calibrated: 3/23/2018

Phantom: SAM1; Type: SAM; Serial: TP-1534

Measurement SW: DASY52, Version 52.8 (8); SEMCAD X Version 14.6.10 (7331)

**Right Cheek High/Area Scan (71x131x1):** Interpolated grid: dx=1.500 mm, dy=1.500 mm

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

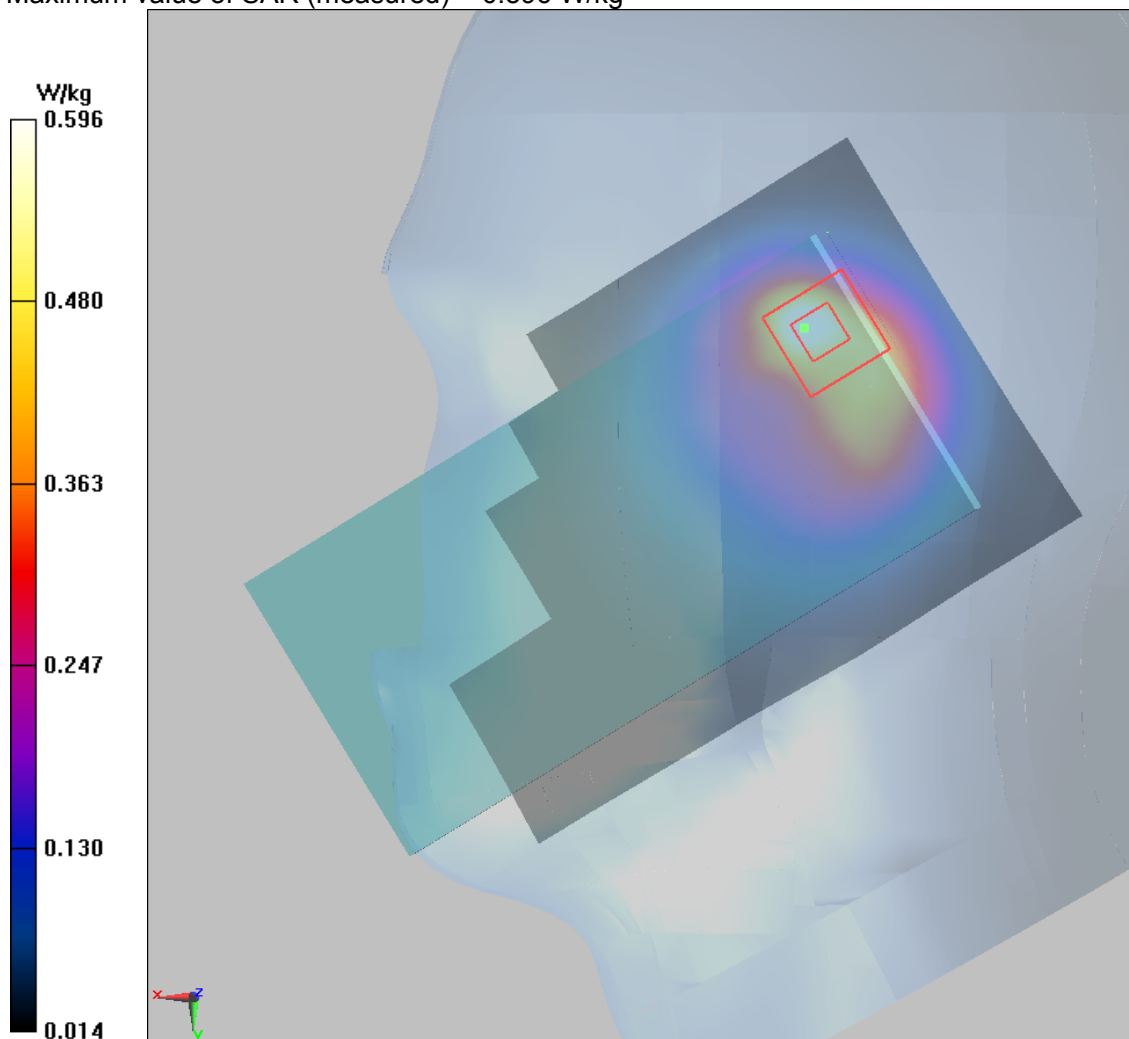
**Right Cheek High/Zoom Scan (5x5x7)/Cube 0:** Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 17.33 V/m; Power Drift = 0.04 dB

Peak SAR (extrapolated) = 1.14 W/kg

**SAR(1 g) = 0.544 W/kg; SAR(10 g) = 0.288 W/kg**

Maximum value of SAR (measured) = 0.596 W/kg



# Plot 110 LTE Band 17 1RB Back Side Low (Distance 15mm)

Date: 7/6/2018

Communication System: UID 0, LTE (0); Frequency: 709 MHz; Duty Cycle: 1:1

Medium parameters used:  $f = 709$  MHz;  $\sigma = 0.93$  S/m;  $\epsilon_r = 57.33$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Ambient Temperature: 22.3 °C Liquid Temperature: 21.5 °C

Phantom section: Flat Section

DASY5 Configuration:

Sensor-Surface: 4mm (Mechanical Surface Detection)

Probe: EX3DV4 - SN3677; ConvF(9.79, 9.79, 9.79); Calibrated: 5/29/2018;

Electronics: DAE4 SN1317; Calibrated: 3/23/2018

Phantom: SAM1; Type: SAM; Serial: TP-1534

Measurement SW: DASY52, Version 52.8 (8); SEMCAD X Version 14.6.10 (7331)

**Back Side Low/Area Scan (71x131x1):** Interpolated grid: dx=1.500 mm, dy=1.500 mm

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

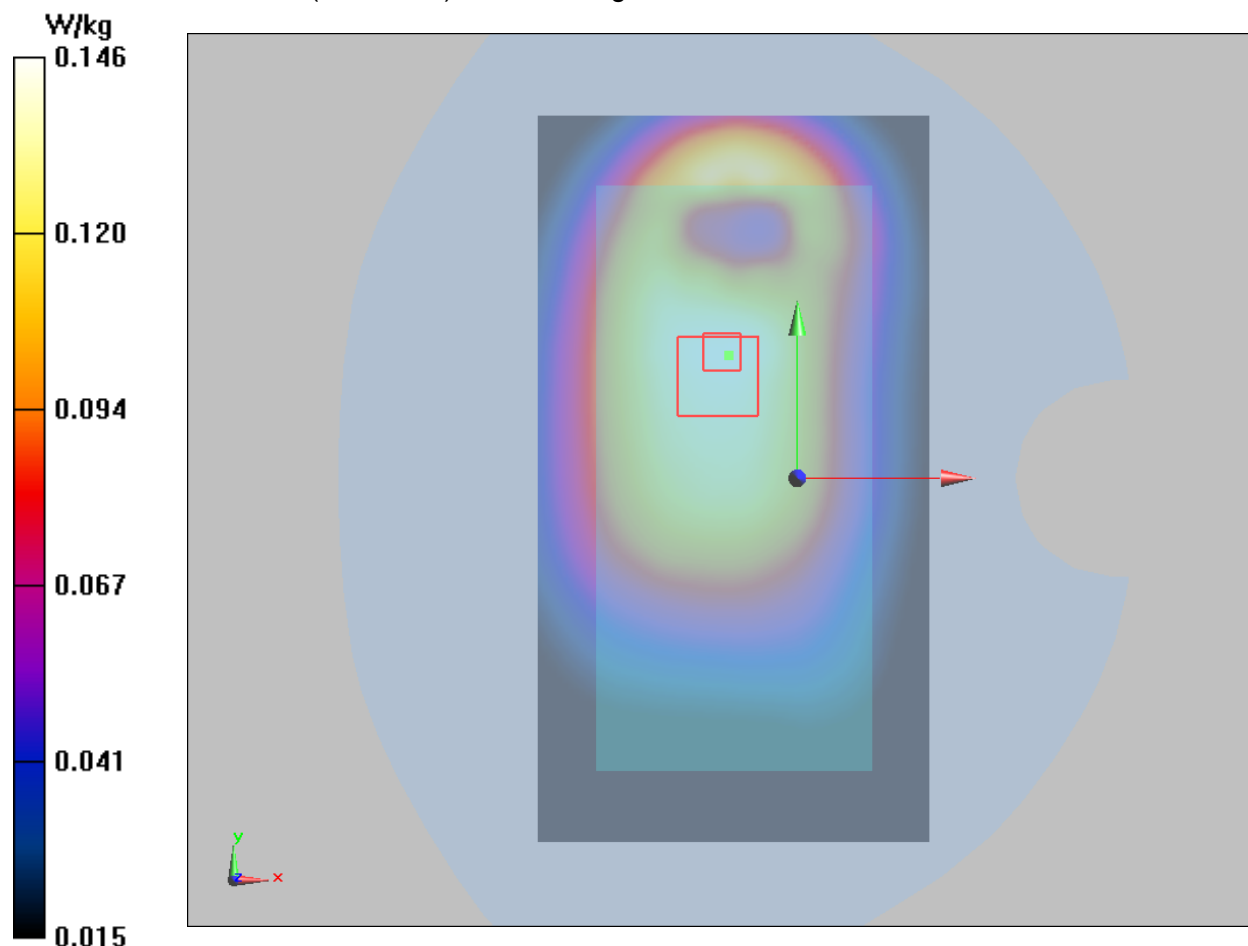
**Back Side Low/Zoom Scan (5x5x7)/Cube 0:** Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 11.81 V/m; Power Drift = 0.02 dB

Peak SAR (extrapolated) = 0.180 W/kg

**SAR(1 g) = 0.140 W/kg; SAR(10 g) = 0.109 W/kg**

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



# Plot 111 LTE Band 17 1RB Back Side Low (Distance 10mm)

Date: 7/6/2018

Communication System: UID 0, LTE (0); Frequency: 709 MHz; Duty Cycle: 1:1

Medium parameters used:  $f = 709$  MHz;  $\sigma = 0.93$  S/m;  $\epsilon_r = 57.33$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Ambient Temperature: 22.3 °C Liquid Temperature: 21.5 °C

Phantom section: Flat Section

DASY5 Configuration:

Sensor-Surface: 4mm (Mechanical Surface Detection)

Probe: EX3DV4 - SN3677; ConvF(9.79, 9.79, 9.79); Calibrated: 5/29/2018;

Electronics: DAE4 SN1317; Calibrated: 3/23/2018

Phantom: SAM1; Type: SAM; Serial: TP-1534

Measurement SW: DASY52, Version 52.8 (8); SEMCAD X Version 14.6.10 (7331)

**Back Side Low/Area Scan (71x131x1):** Interpolated grid: dx=1.500 mm, dy=1.500 mm

Maximum value of SAR (interpolated) = 0.591 W/kg

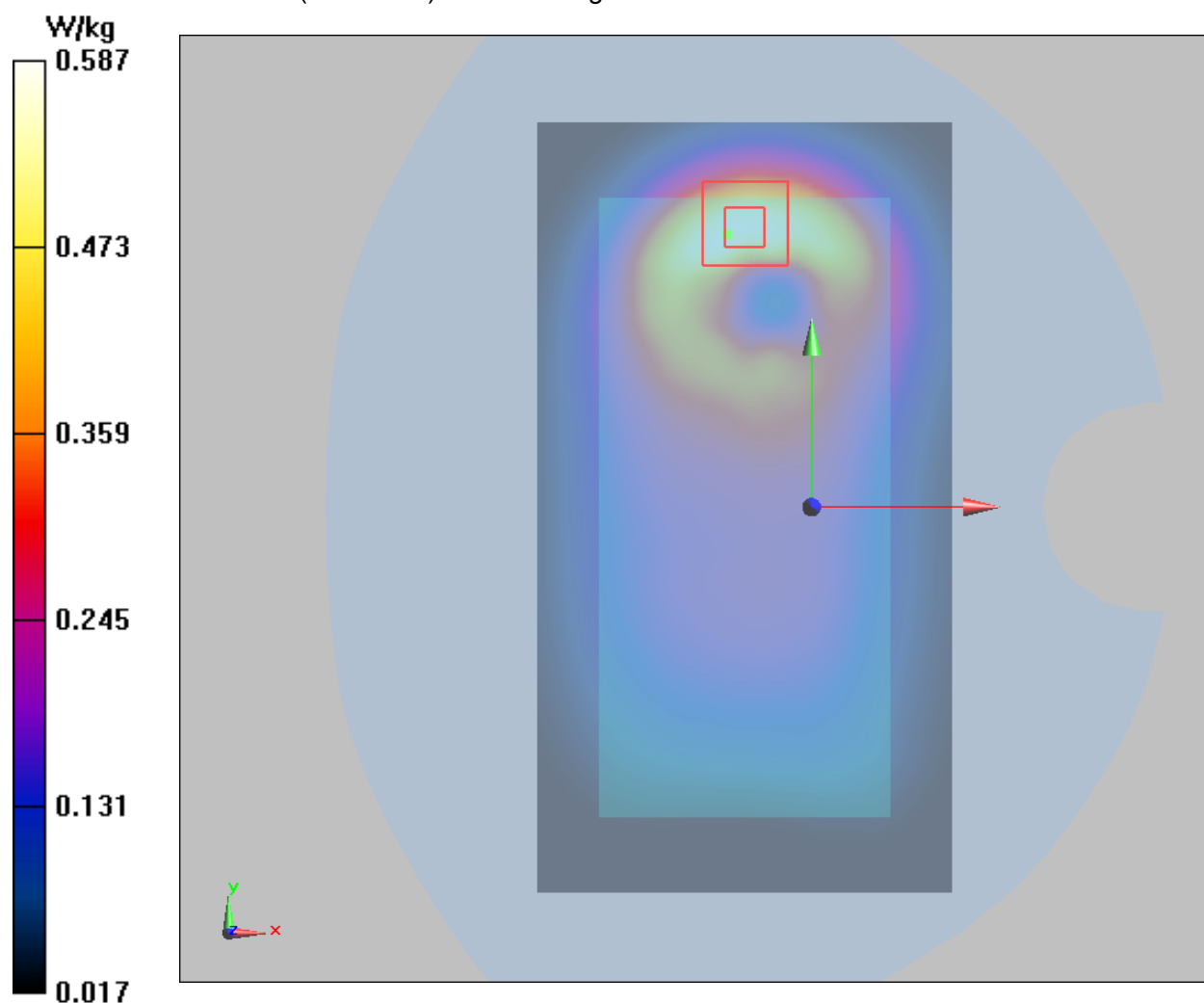
**Back Side Low/Zoom Scan (5x5x7)/Cube 0:** Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 15.95 V/m; Power Drift = -0.05 dB

Peak SAR (extrapolated) = 0.938 W/kg

**SAR(1 g) = 0.534 W/kg; SAR(10 g) = 0.305 W/kg**

Maximum value of SAR (measured) = 0.587 W/kg



## Plot 112 LTE Band 26 50%RB Right Cheek High

Date: 7/4/2018

Communication System: UID 0, LTE (0); Frequency: 841.5 MHz; Duty Cycle: 1:1

Medium parameters used (interpolated):  $f = 841.5$  MHz;  $\sigma = 0.912$  S/m;  $\epsilon_r = 41.387$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Ambient Temperature: 22.3 °C Liquid Temperature: 21.5 °C

Phantom section: Right Section

DASY5 Configuration:

Sensor-Surface: 4mm (Mechanical Surface Detection)

Probe: EX3DV4 - SN3677; ConvF(9.10, 9.10, 9.10); Calibrated: 5/29/2018;

Electronics: DAE4 SN1317; Calibrated: 3/23/2018

Phantom: SAM1; Type: SAM; Serial: TP-1534

Measurement SW: DASY52, Version 52.8 (8); SEMCAD X Version 14.6.10 (7331)

**Right Cheek High/Area Scan (71x131x1):** Interpolated grid: dx=1.500 mm, dy=1.500 mm

Maximum value of SAR (interpolated) = 0.702 W/kg

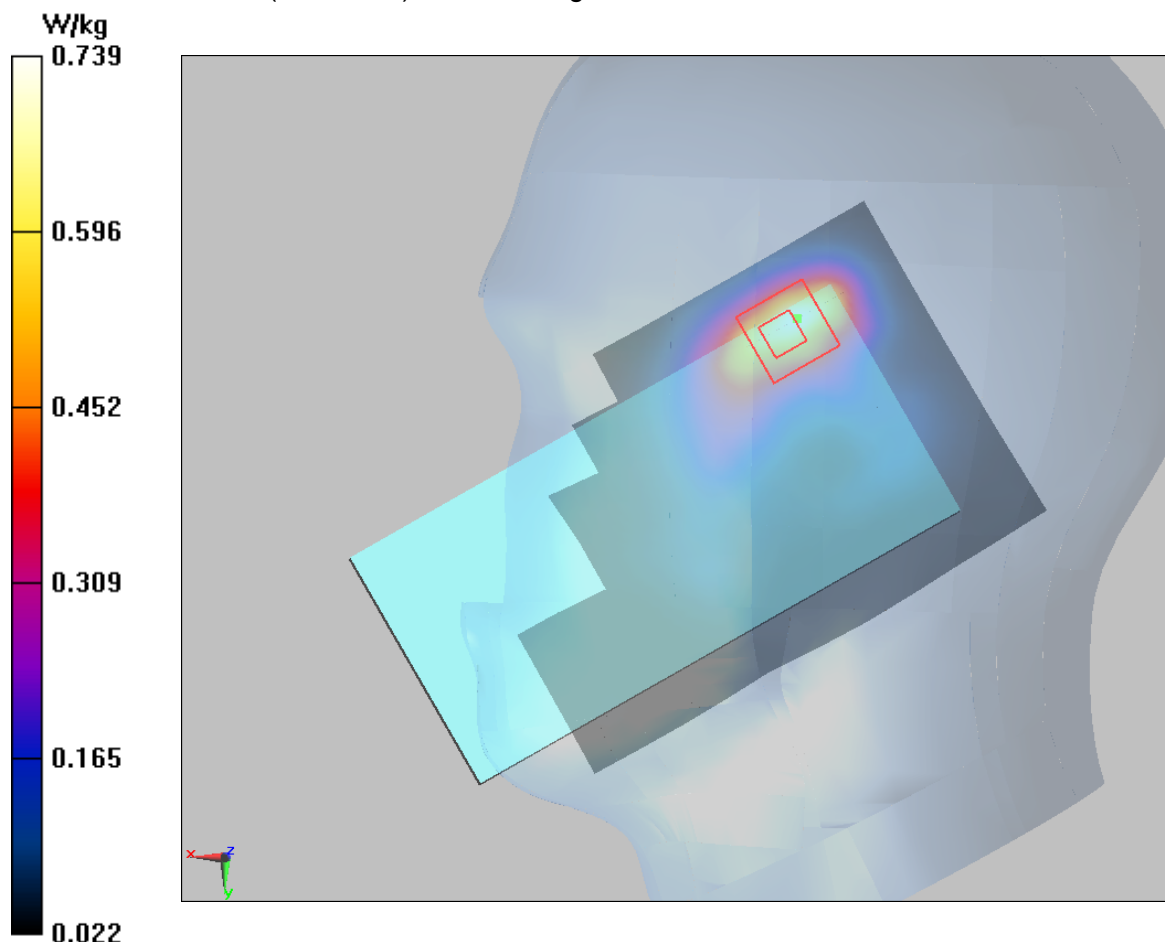
**Right Cheek High/Zoom Scan (5x5x7)/Cube 0:** Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 19.44 V/m; Power Drift = -0.09 dB

Peak SAR (extrapolated) = 1.32 W/kg

**SAR(1 g) = 0.660 W/kg; SAR(10 g) = 0.355 W/kg**

Maximum value of SAR (measured) = 0.739 W/kg



# Plot 113 LTE Band 26 1RB Back Side Middle (Distance 15mm)

Date: 7/8/2018

Communication System: UID 0, LTE\_FDD (0); Frequency: 831.5 MHz; Duty Cycle: 1:1

Medium parameters used (interpolated):  $f = 831.5$  MHz;  $\sigma = 0.969$  S/m;  $\epsilon_r = 53.84$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Ambient Temperature: 22.3 °C Liquid Temperature: 21.5 °C

Phantom section: Flat Section

DASY5 Configuration:

Sensor-Surface: 4mm (Mechanical Surface Detection)

Probe: EX3DV4 - SN3677; ConvF(9.32, 9.32, 9.32); Calibrated: 5/29/2018;

Electronics: DAE4 SN1317; Calibrated: 3/23/2018

Phantom: SAM1; Type: SAM; Serial: TP-1534

Measurement SW: DASY52, Version 52.8 (8); SEMCAD X Version 14.6.10 (7331)

**Back Side Middle/Area Scan (71x131x1):** Interpolated grid: dx=1.500 mm, dy=1.500 mm

Maximum value of SAR (interpolated) = 0.277 W/kg

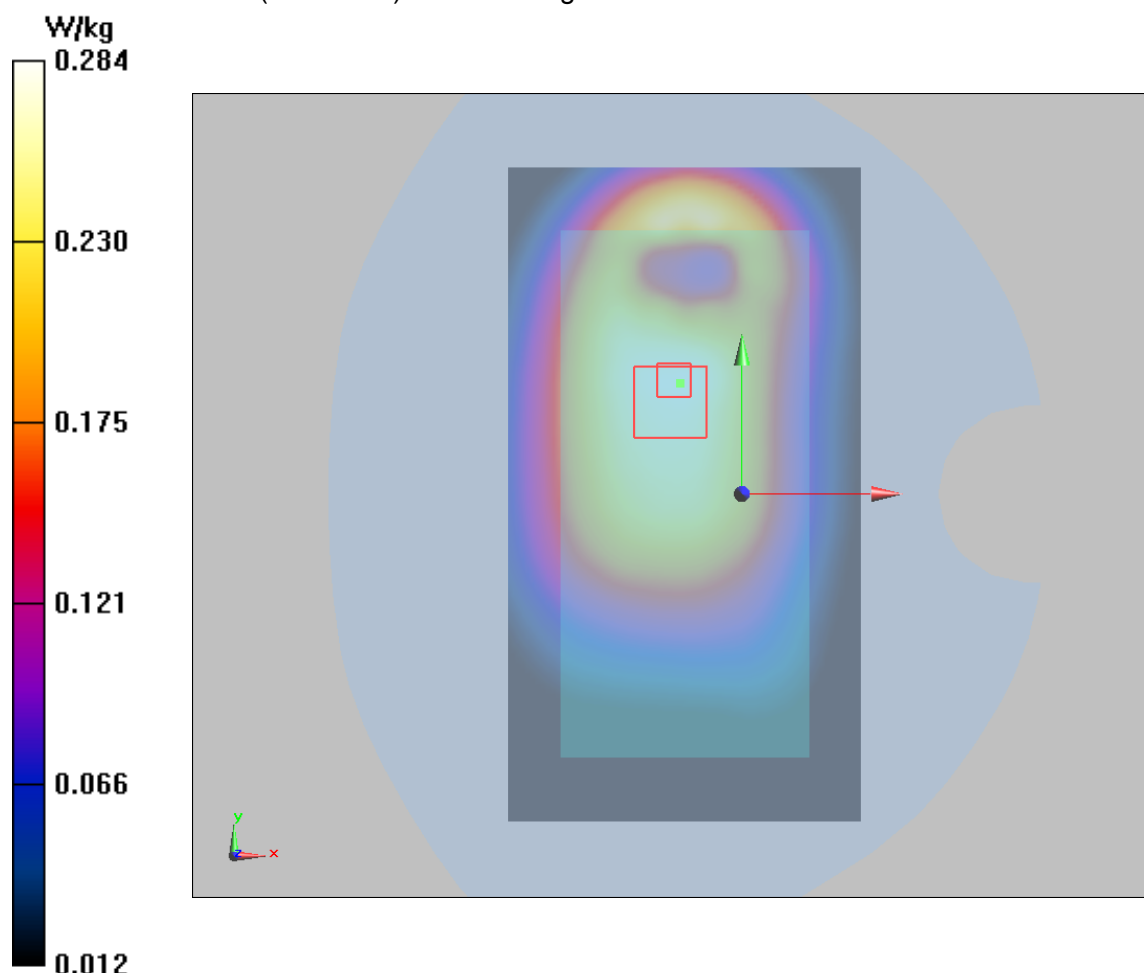
**Back Side Middle/Zoom Scan (5x5x7)/Cube 0:** Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 11.71 V/m; Power Drift = -0.06 dB

Peak SAR (extrapolated) = 0.421 W/kg

**SAR(1 g) = 0.263 W/kg; SAR(10 g) = 0.159 W/kg**

Maximum value of SAR (measured) = 0.284 W/kg



# Plot 114 LTE Band 26 1RB Back Side Middle (Distance 10mm)

Date: 7/8/2018

Communication System: UID 0, LTE\_FDD (0); Frequency: 831.5 MHz; Duty Cycle: 1:1

Medium parameters used (interpolated):  $f = 831.5$  MHz;  $\sigma = 0.969$  S/m;  $\epsilon_r = 53.84$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Ambient Temperature: 22.3 °C Liquid Temperature: 21.5 °C

Phantom section: Flat Section

DASY5 Configuration:

Sensor-Surface: 4mm (Mechanical Surface Detection)

Probe: EX3DV4 - SN3677; ConvF(9.32, 9.32, 9.32); Calibrated: 5/29/2018;

Electronics: DAE4 SN1317; Calibrated: 3/23/2018

Phantom: SAM1; Type: SAM; Serial: TP-1534

Measurement SW: DASY52, Version 52.8 (8); SEMCAD X Version 14.6.10 (7331)

**Back Side Middle/Area Scan (71x131x1):** Interpolated grid: dx=1.500 mm, dy=1.500 mm

Maximum value of SAR (interpolated) = 0.532 W/kg

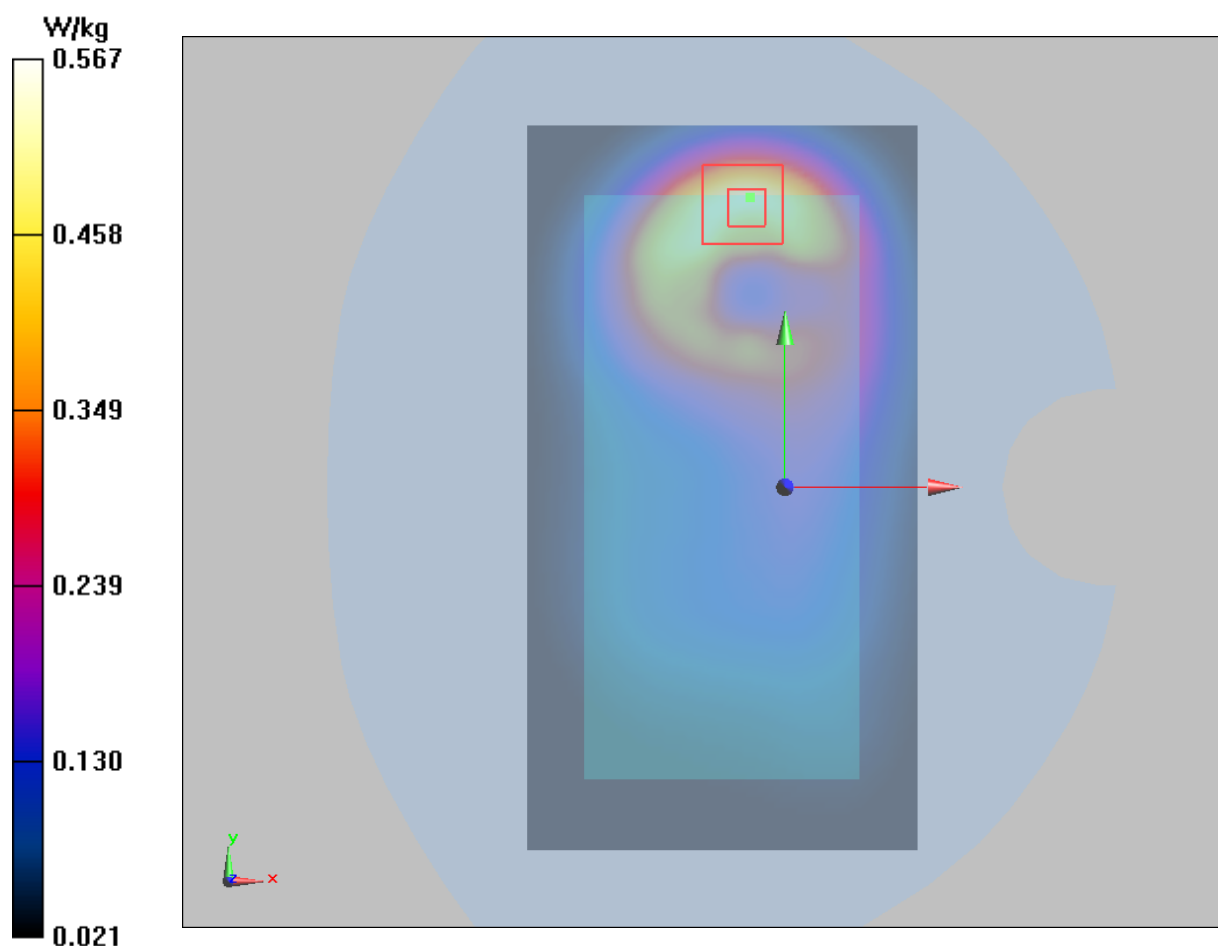
**Back Side Middle/Zoom Scan (5x5x7)/Cube 0:** Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 11.94 V/m; Power Drift = -0.07 dB

Peak SAR (extrapolated) = 0.929 W/kg

**SAR(1 g) = 0.538 W/kg; SAR(10 g) = 0.306 W/kg**

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





# Plot 115 LTE Band 38 1RB Right Cheek High

Date: 6/28/2018

Communication System: UID 0, LTE\_TDD (0); Frequency: 2610 MHz; Duty Cycle: 1:1.57979

Medium parameters used:  $f = 2610$  MHz;  $\sigma = 2.028$  S/m;  $\epsilon_r = 39.226$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Ambient Temperature: 22.3 °C Liquid Temperature: 21.5 °C

Phantom section: Right Section

DASY5 Configuration:

Sensor-Surface: 4mm (Mechanical Surface Detection)

Probe: EX3DV4 - SN3677; ConvF(7.28, 7.28, 7.28); Calibrated: 5/29/2018;

Electronics: DAE4 SN1317; Calibrated: 3/23/2018

Phantom: SAM1; Type: SAM; Serial: TP-1534

Measurement SW: DASY52, Version 52.8 (8); SEMCAD X Version 14.6.10 (7331)

**Right Cheek High/Area Scan (91x171x1):** Interpolated grid: dx=1.200 mm, dy=1.200 mm

Maximum value of SAR (interpolated) = 0.620 W/kg

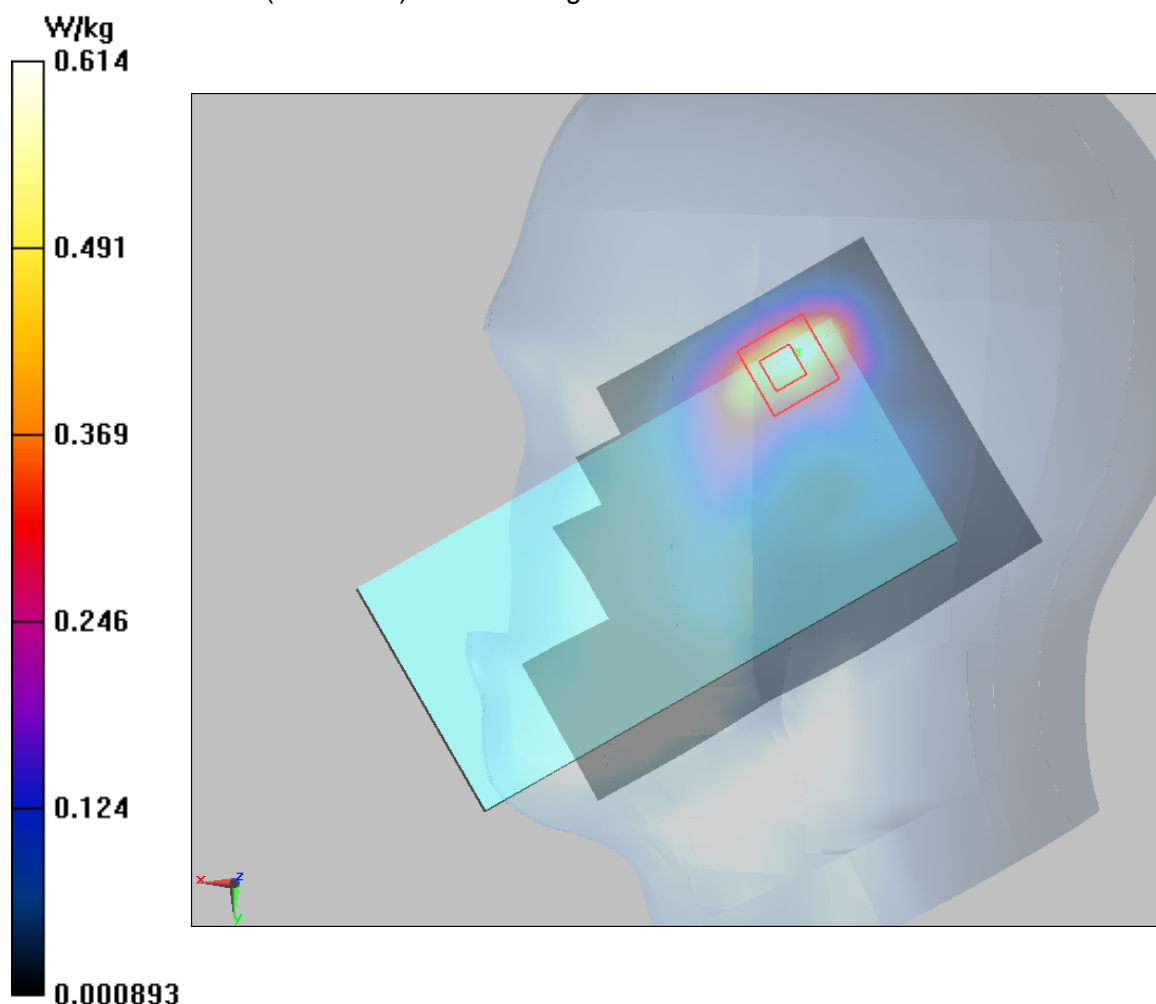
**Right Cheek High/Zoom Scan (7x7x7)/Cube 0:** Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 6.792 V/m; Power Drift = 0.032 dB

Peak SAR (extrapolated) = 1.31 W/kg

**SAR(1 g) = 0.538 W/kg; SAR(10 g) = 0.250 W/kg**

Maximum value of SAR (measured) = 0.614 W/kg



# Plot 116 LTE Band 38 1RB Back Side High (Distance 15mm)

Date: 6/25/2018

Communication System: UID 0, LTE (0); Frequency: 2610 MHz; Duty Cycle: 1:1.57979

Medium parameters used:  $f = 2610$  MHz;  $\sigma = 2.169$  S/m;  $\epsilon_r = 50.634$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Ambient Temperature: 22.3 °C Liquid Temperature: 21.5 °C

Phantom section: Flat Section

DASY5 Configuration:

Sensor-Surface: 4mm (Mechanical Surface Detection)

Probe: EX3DV4 - SN3677; ConvF(7.16, 7.16, 7.16); Calibrated: 5/29/2018;

Electronics: DAE4 SN1317; Calibrated: 3/23/2018

Phantom: SAM1; Type: SAM; Serial: TP-1534

Measurement SW: DASY52, Version 52.8 (8); SEMCAD X Version 14.6.10 (7331)

**Back Side High/Area Scan (91x171x1):** Interpolated grid: dx=1.200 mm, dy=1.500 mm

Maximum value of SAR (interpolated) = 0.130 W/kg

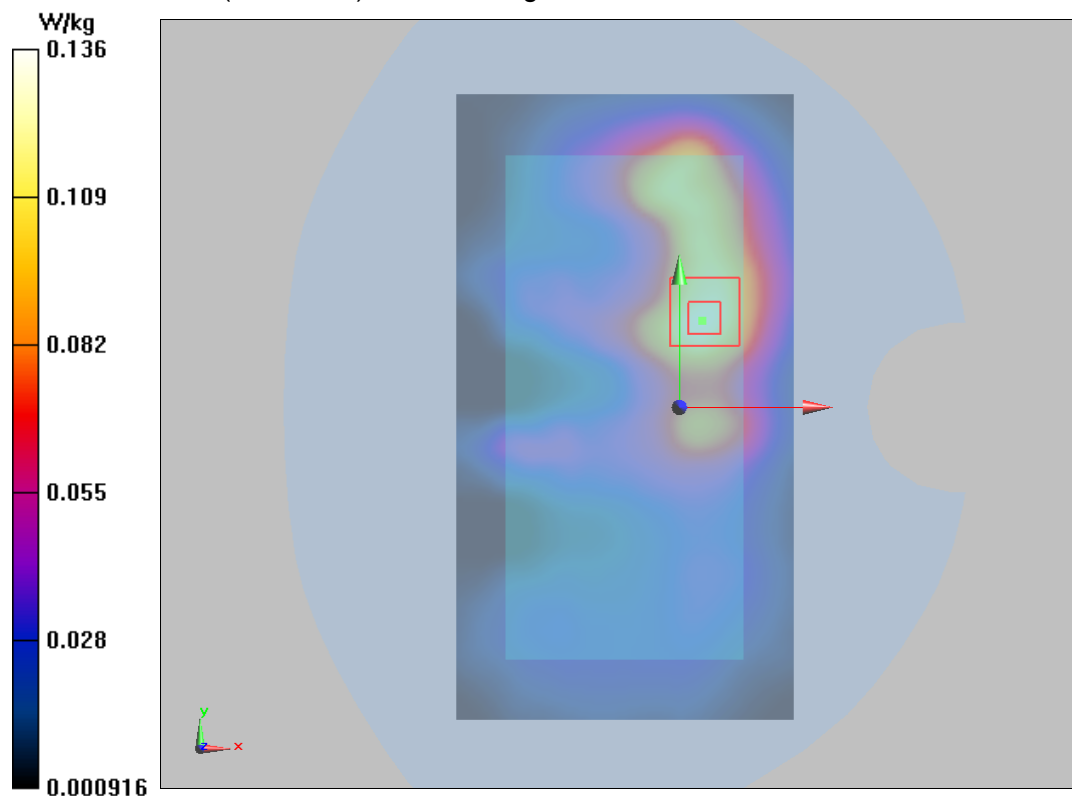
**Back Side High/Zoom Scan (7x7x7)/Cube 0:** Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 4.015 V/m; Power Drift = -0.09 dB

Peak SAR (extrapolated) = 0.222 W/kg

**SAR(1 g) = 0.124 W/kg; SAR(10 g) = 0.069 W/kg**

Maximum value of SAR (measured) = 0.136 W/kg



# Plot 117 LTE Band 38 1RB Left Edge High (Distance 10mm)

Date: 6/25/2018

Communication System: UID 0, LTE (0); Frequency: 2610 MHz; Duty Cycle: 1:1.57979

Medium parameters used:  $f = 2610$  MHz;  $\sigma = 2.169$  S/m;  $\epsilon_r = 50.634$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Ambient Temperature: 22.3 °C      Liquid Temperature: 21.5 °C

Phantom section: Flat Section

DASY5 Configuration:

Sensor-Surface: 4mm (Mechanical Surface Detection)

Probe: EX3DV4 - SN3677; ConvF(7.16, 7.16, 7.16); Calibrated: 5/29/2018;

Electronics: DAE4 SN1317; Calibrated: 3/23/2018

Phantom: SAM1; Type: SAM; Serial: TP-1534

Measurement SW: DASY52, Version 52.8 (8); SEMCAD X Version 14.6.10 (7331)

**Left Edge High/Area Scan (111x201x1):** Interpolated grid: dx=1.000 mm, dy=1.000 mm

Maximum value of SAR (interpolated) = 0.501 W/kg

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

Reference Value = 10.26 V/m; Power Drift = -0.01 dB

Peak SAR (extrapolated) = 0.840 W/kg

**SAR(1 g) = 0.448 W/kg; SAR(10 g) = 0.225 W/kg**

Maximum value of SAR (measured) = 0.498 W/kg

