

**Plot 13 System Performance Check at 2450 MHz Head TSL**

**DUT: Dipole 2450 MHz; Type: D2450V2; Serial: D2450V2 - SN: 786**

Date: 9/27/2017

Communication System: CW; Frequency: 2450 MHz; Duty Cycle: 1:1

Medium parameters used:  $f = 2450$  MHz;  $\sigma = 1.81$  mho/m;  $\epsilon_r = 38.7$ ;  $\rho = 1000$  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 – SN7351; ConvF(7.64, 7.64, 7.64); Calibrated: 12/20/2016;

Electronics: DAE4 - SD 000 D04 BK - SN918; Calibrated: 6/26/2017

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

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

**d=10mm, Pin=250mW/Area Scan (41x71x1):** Measurement grid: dx=12mm, dy=12mm

Maximum value of SAR (interpolated) = 21.11 mW/g

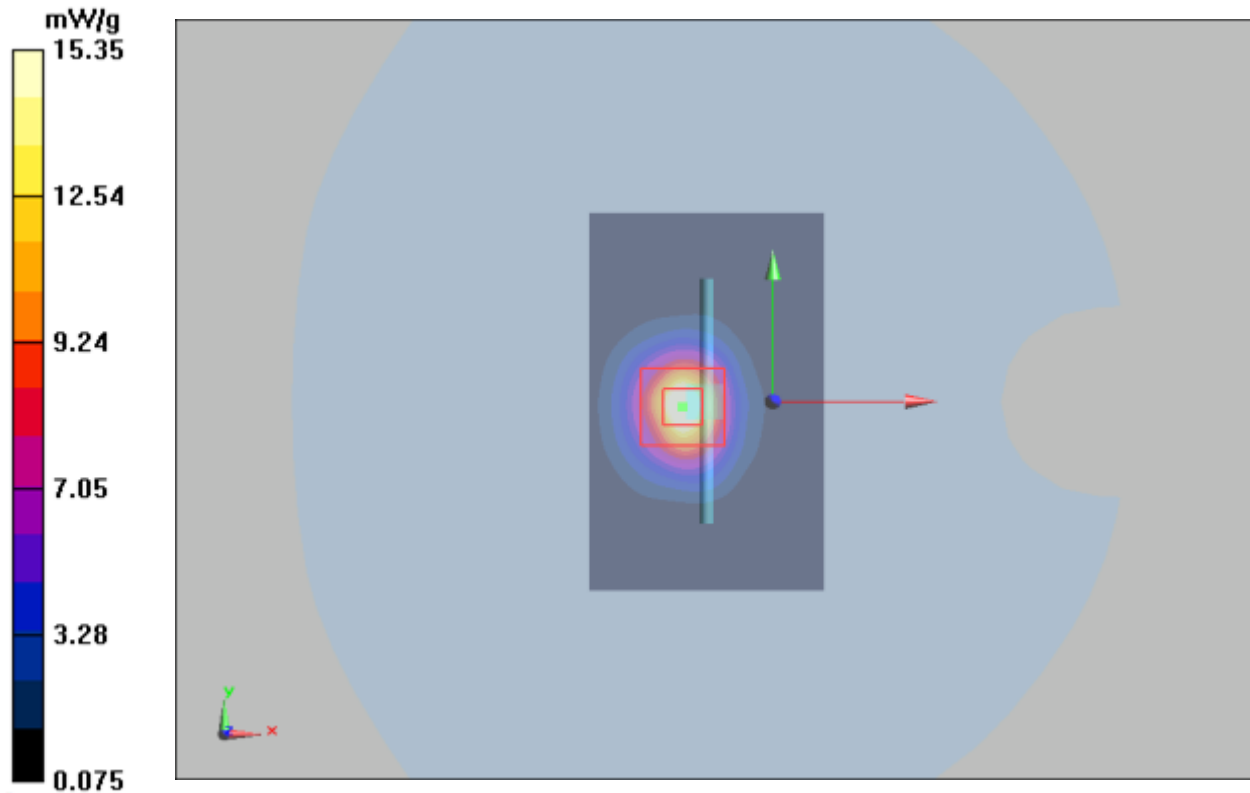
**d=10mm, Pin=250mW/Zoom Scan (7x7x7)/Cube 0:** Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 67.0 V/m; Power Drift = 0.06 dB

Peak SAR (extrapolated) = 28.0 W/kg

**SAR(1 g) = 13.20 mW/g; SAR(10 g) = 6.47 mW/g**

Maximum value of SAR (measured) = 15.35 mW/g



**Plot14 System Performance Check at 2450 MHz Head TSL**

**DUT: Dipole 2450 MHz; Type: D2450V2; Serial: D2450V2 - SN: 786**

Date: 10/26/2018

Communication System: CW; Frequency: 2450 MHz; Duty Cycle: 1:1

Medium parameters used:  $f = 2450$  MHz;  $\sigma = 1.81$  mho/m;  $\epsilon_r = 38.6$ ;  $\rho = 1000$  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(7.57, 7.57, 7.57); 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)

**d=10mm, Pin=250mW/Area Scan (41x71x1):** Measurement grid: dx=12mm, dy=12mm

Maximum value of SAR (interpolated) = 18.2 mW/g

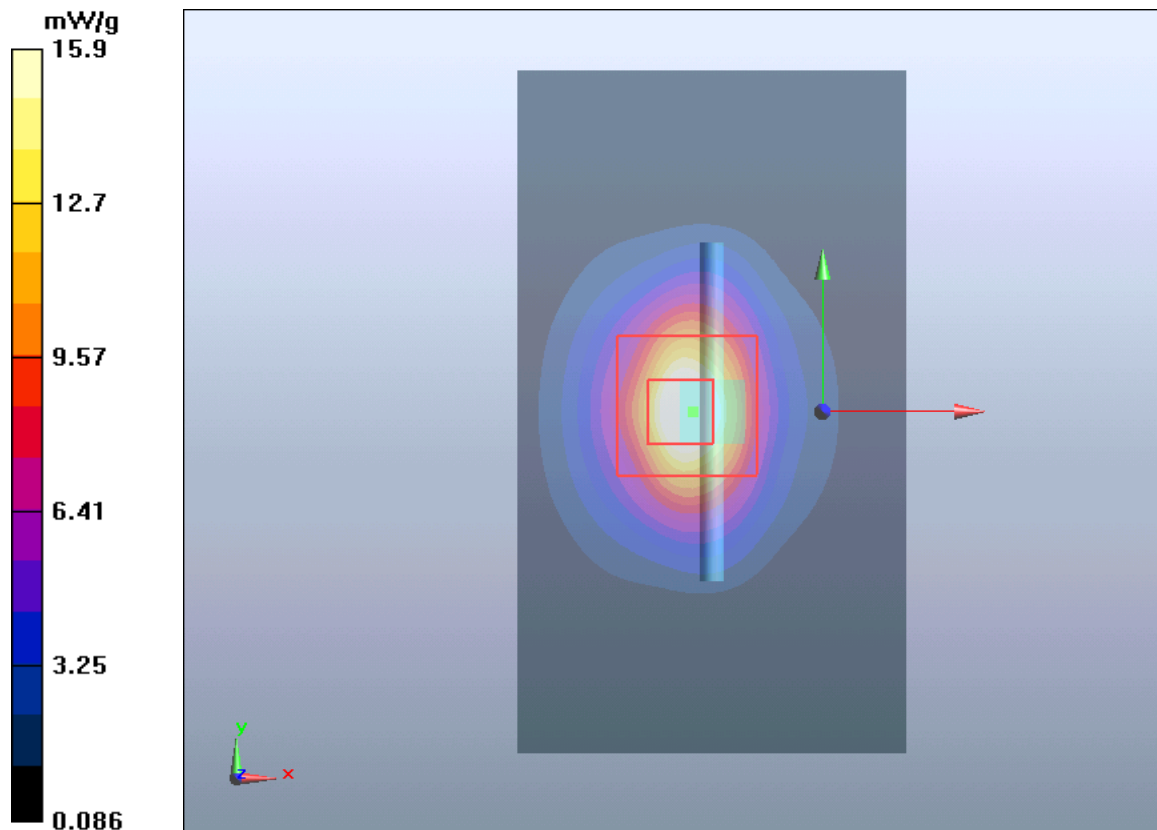
**d=10mm, Pin=250mW/Zoom Scan (7x7x7)/Cube 0:** Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 88.8 V/m; Power Drift = 0.075 dB

Peak SAR (extrapolated) = 30 W/kg

**SAR(1 g) = 13.7 mW/g; SAR(10 g) = 6.22 mW/g**

Maximum value of SAR (measured) = 15.9 mW/g



**Plot 15 System Performance Check at 2450 MHz Body TSL**

**DUT: Dipole 2450 MHz; Type: D2450V2; Serial: D2450V2 - SN: 786**

Date: 9/28/2017

Communication System: CW; Frequency: 2450 MHz; Duty Cycle: 1:1

Medium parameters used:  $f = 2450$  MHz;  $\sigma = 1.94$  mho/m;  $\epsilon_r = 52.9$ ;  $\rho = 1000$  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 - SN7351; ConvF(7.73, 7.73, 7.73); Calibrated: 12/20/2016;

Electronics: DAE4 - SD 000 D04 BK - SN918; Calibrated: 6/26/2017

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

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

**d=10mm, Pin=250mW/Area Scan (41x71x1):** Measurement grid: dx=12mm, dy=12mm

Maximum value of SAR (interpolated) = 16.21 mW/g

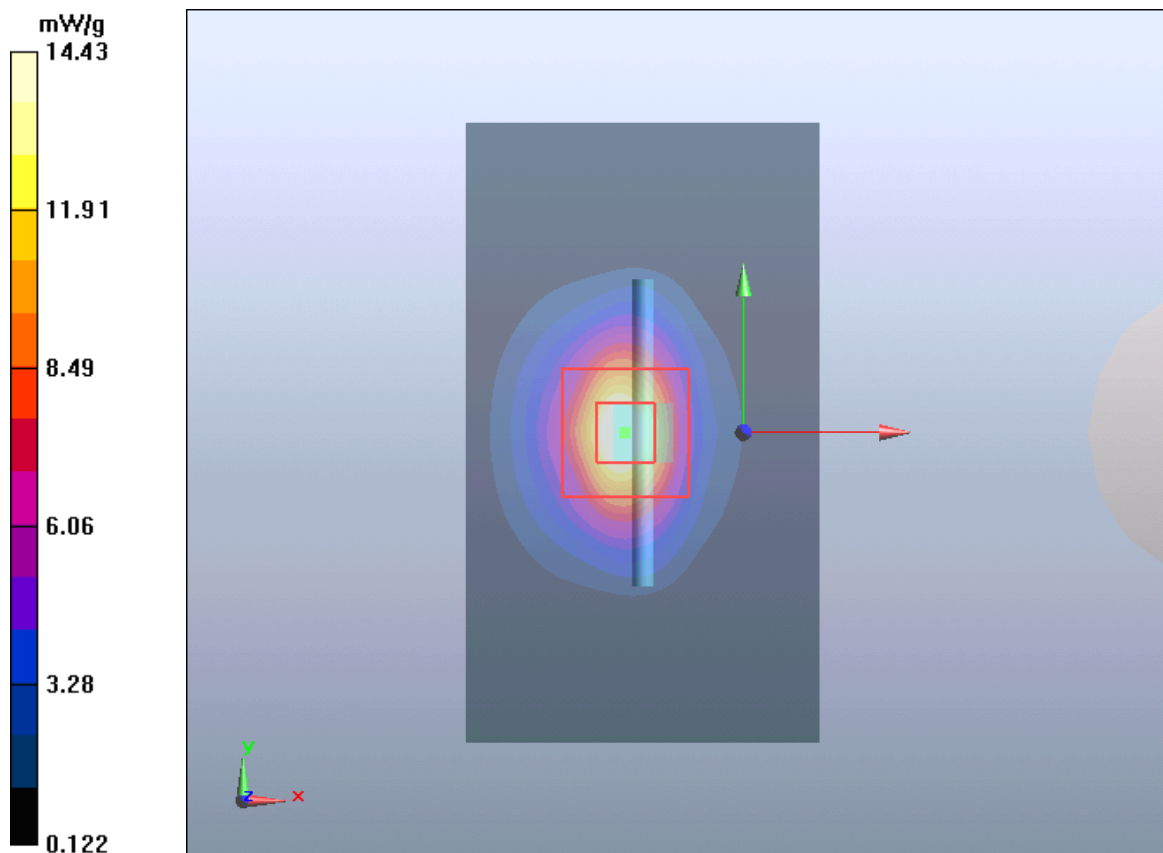
**d=10mm, Pin=250mW/Zoom Scan (7x7x7)/Cube 0:** Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 81.2 V/m; Power Drift = 0.031 dB

Peak SAR (extrapolated) = 25.4 W/kg

**SAR(1 g) = 13.2 mW/g; SAR(10 g) = 6.27 mW/g**

Maximum value of SAR (measured) = 14.43 mW/g



**Plot16 System Performance Check at 2450 MHz Body TSL**

**DUT: Dipole 2450 MHz; Type: D2450V2; Serial: D2450V2 - SN: 786**

Date: 10/26/2018

Communication System: CW; Frequency: 2450 MHz; Duty Cycle: 1:1

Medium parameters used:  $f = 2450$  MHz;  $\sigma = 1.98$  mho/m;  $\epsilon_r = 52.5$ ;  $\rho = 1000$  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(7.53, 7.53, 7.53); 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)

**d=10mm, Pin=250mW/Area Scan (41x71x1):** Measurement grid: dx=12mm, dy=12mm

Maximum value of SAR (interpolated) = 16 mW/g

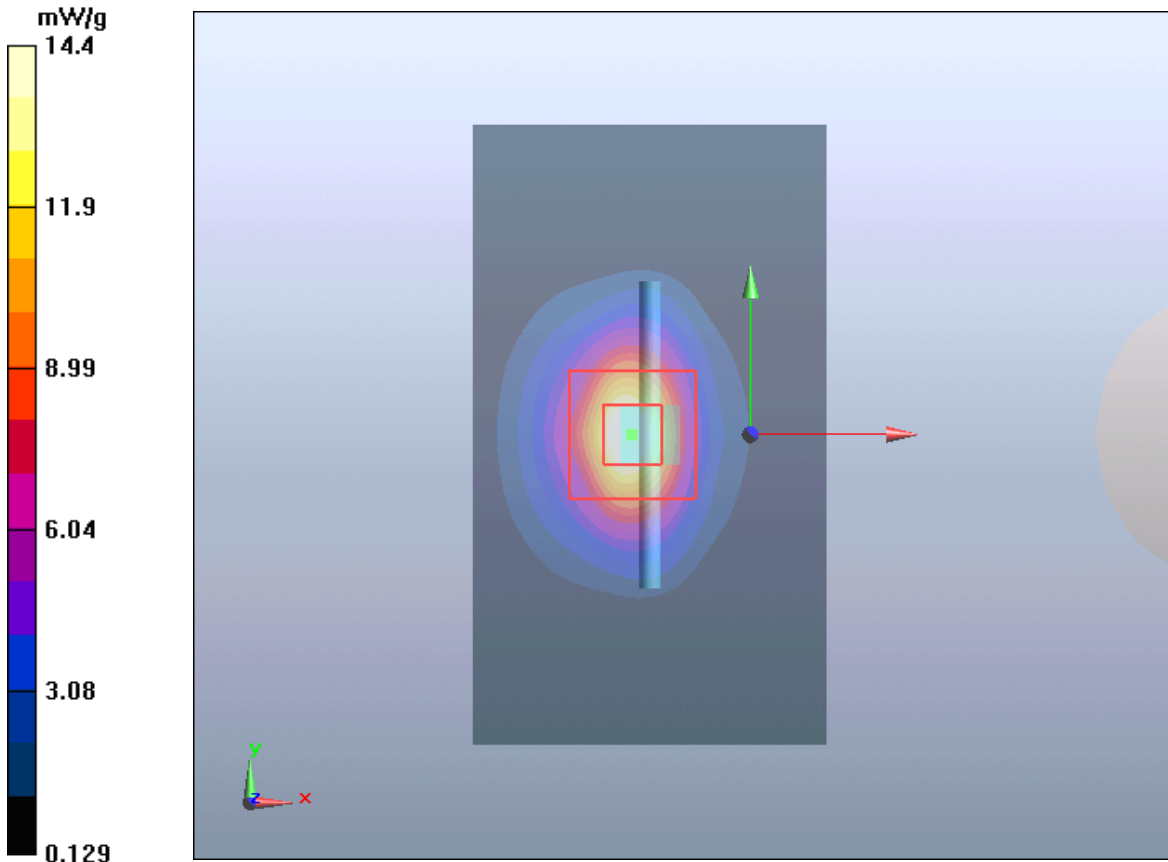
**d=10mm, Pin=250mW/Zoom Scan (7x7x7)/Cube 0:** Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 81.2 V/m; Power Drift = 0.003 dB

Peak SAR (extrapolated) = 25.4 W/kg

**SAR(1 g) = 12.5 mW/g; SAR(10 g) = 6.20 mW/g**

Maximum value of SAR (measured) = 14.4 mW/g



**Plot 17 System Performance Check at 2600 MHz Head TSL**

**DUT: Dipole 2600 MHz; Type: D2600V2; Serial: D2600V2 - SN: 1025**

Date: 9/27/2017

Communication System: CW; Frequency: 2600 MHz

Medium parameters used:  $f = 2600$  MHz;  $\sigma = 1.99$  mho/m;  $\epsilon_r = 38.3$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Phantom section: Flat Section

DASY5 Configuration:

Sensor-Surface: 4mm (Mechanical Surface Detection)

Probe: EX3DV4 - SN7351; ConvF(7.43, 7.43, 7.43); Calibrated: 12/20/2016;

Electronics: DAE4 - SD 000 D04 BK - SN918; Calibrated: 6/26/2017

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

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

**d=10mm, Pin=250mW/Area Scan (41x71x1):** Measurement grid: dx=12mm, dy=12mm

Maximum value of SAR (interpolated) = 17.32 mW/g

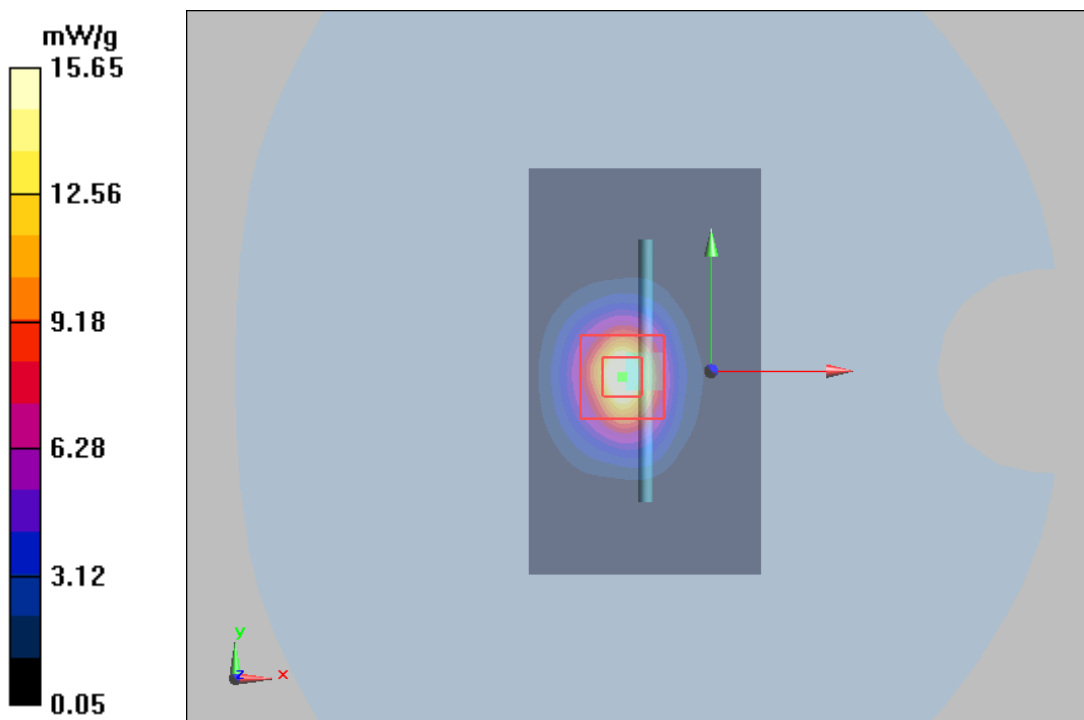
**d=10mm, Pin=250mW/Zoom Scan (7x7x7)/Cube 0:** Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 87.465 V/m; Power Drift = 0.146 dB

Peak SAR (extrapolated) = 31.85 W/kg

**SAR(1 g) = 13.94 mW/g; SAR(10 g) = 6.11 mW/g**

Maximum value of SAR (measured) = 15.66 mW/g



**Plot18 System Performance Check at 2600 MHz Head TSL**

**DUT: Dipole 2600 MHz; Type: D2600V2; Serial: D2600V2 - SN: 1025**

Date: 10/26/2018

Communication System: CW; Frequency: 2600 MHz

Medium parameters used:  $f = 2600$  MHz;  $\sigma = 2.01$  mho/m;  $\epsilon_r = 38.2$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Phantom section: Flat 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)

**d=10mm, Pin=250mW/Area Scan (41x71x1):** Measurement grid:dx=12mm, dy=12mm

Maximum value of SAR (interpolated) = 17.439 mW/g

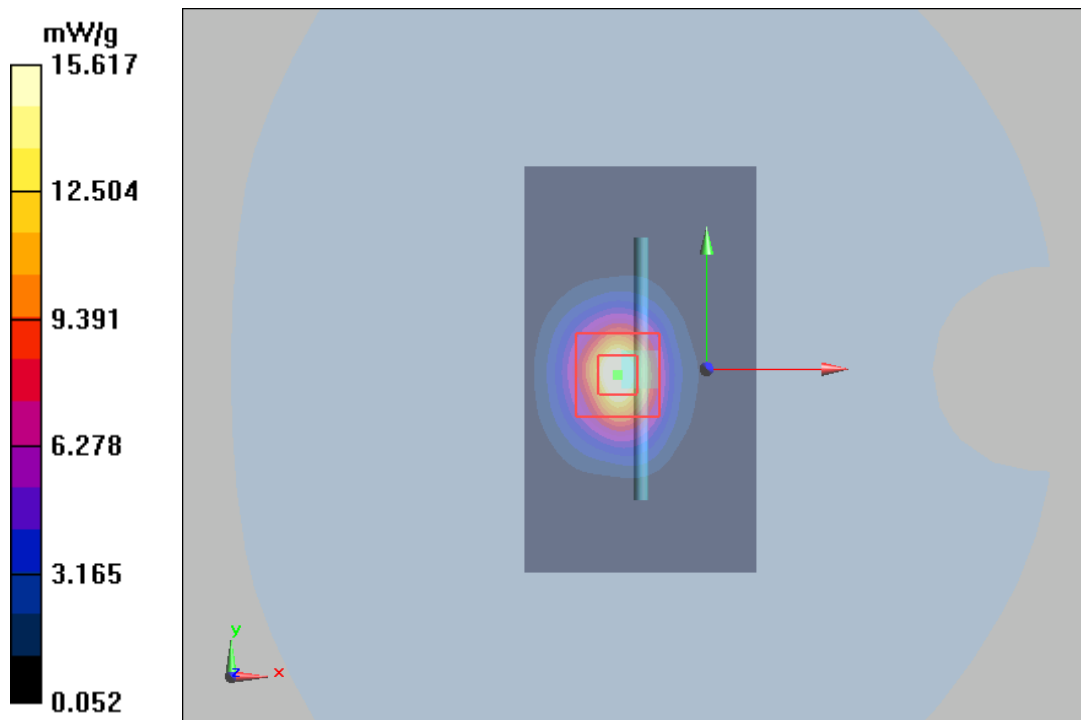
**d=10mm, Pin=250mW/Zoom Scan (7x7x7)/Cube 0:** Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 87.998 V/m; Power Drift = -0.04 dB

Peak SAR (extrapolated) = 31.858 W/kg

**SAR(1 g) = 13.9 mW/g; SAR(10 g) = 6.07 mW/g**

Maximum value of SAR (measured) = 15.617 mW/g



**Plot 19 System Performance Check at 2600 MHz Head TSL**

**DUT: Dipole 2600 MHz; Type: D2600V2; Serial: D2600V2 - SN: 1025**

Date: 11/16/2018

Communication System: CW; Frequency: 2600 MHz

Medium parameters used:  $f = 2600$  MHz;  $\sigma = 1.94$  mho/m;  $\epsilon_r = 38.4$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Phantom section: Flat 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)

**d=10mm, Pin=250mW/Area Scan (41x71x1):** Measurement grid: dx=12mm, dy=12mm

Maximum value of SAR (interpolated) = 17.59 mW/g

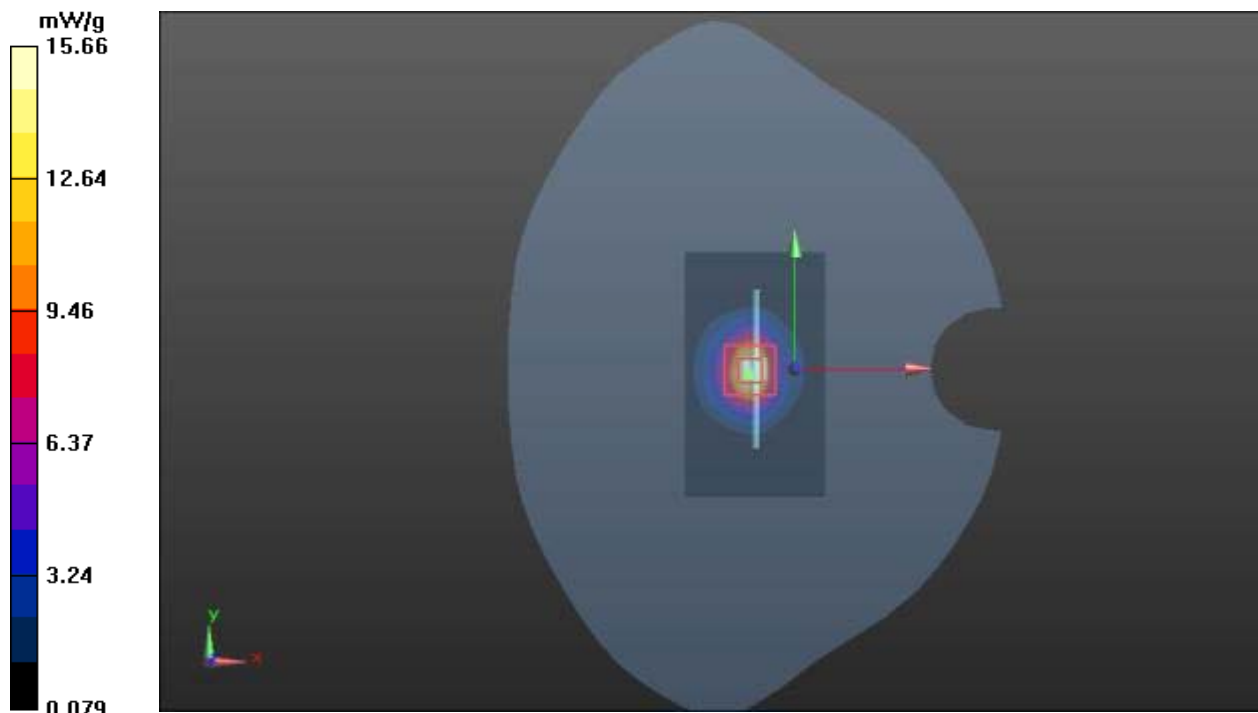
**d=10mm, Pin=250mW/Zoom Scan (7x7x7)/Cube 0:** Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 87.998 V/m; Power Drift = -0.04 dB

Peak SAR (extrapolated) = 31.858 W/kg

**SAR(1 g) = 13.88 mW/g; SAR(10 g) = 6.09 mW/g**

Maximum value of SAR (measured) = 15.66 mW/g



**Plot 20 System Performance Check at 2600 MHz Body TSL****DUT: Dipole 2600 MHz; Type: D2600V2; Serial: D2600V2 - SN: 1025**

Date: 9/28/2017

Communication System: CW; Frequency: 2600 MHz; Duty Cycle: 1:1

Medium parameters used:  $f = 2600$  MHz;  $\sigma = 2.24$  mho/m;  $\epsilon_r = 51.5$ ;  $\rho = 1000$  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 - SN7351; ConvF(7.52, 7.52, 7.52); Calibrated: 12/20/2016;

Electronics: DAE4 - SD 000 D04 BK - SN918; Calibrated: 6/26/2017

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

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

**d=10mm, Pin=250mW /Area Scan (41x71x1):** Measurement grid: dx=12mm, dy=12mm

Maximum value of SAR (interpolated) = 17.71 mW/g

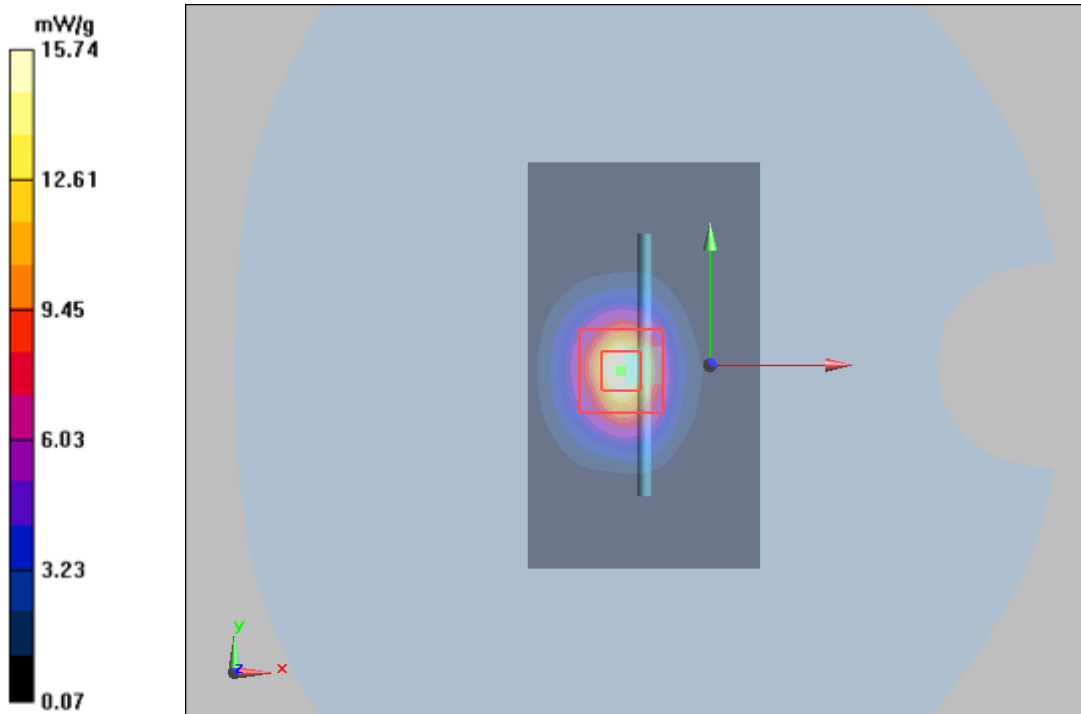
**d=10mm, Pin=250mW/Zoom Scan (7x7x7)/Cube 0:** Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 74.11 V/m; Power Drift = 0.022 dB

Peak SAR (extrapolated) = 28.42 W/kg

**SAR(1 g) = 13.76 mW/g; SAR(10 g) = 6.01 mW/g**

Maximum value of SAR (measured) = 15.74 mW/g





**Plot21 System Performance Check at 2600 MHz Body TSL****DUT: Dipole 2600 MHz; Type: D2600V2; Serial: D2600V2 - SN: 1025**

Date: 10/26/2018

Communication System: CW; Frequency: 2600 MHz; Duty Cycle: 1:1

Medium parameters used:  $f = 2600$  MHz;  $\sigma = 2.21$  mho/m;  $\epsilon_r = 51.7$ ;  $\rho = 1000$  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)

**d=10mm, Pin=250mW /Area Scan (41x71x1):** Measurement grid: dx=12mm, dy=12mm

Maximum value of SAR (interpolated) = 17.67 mW/g

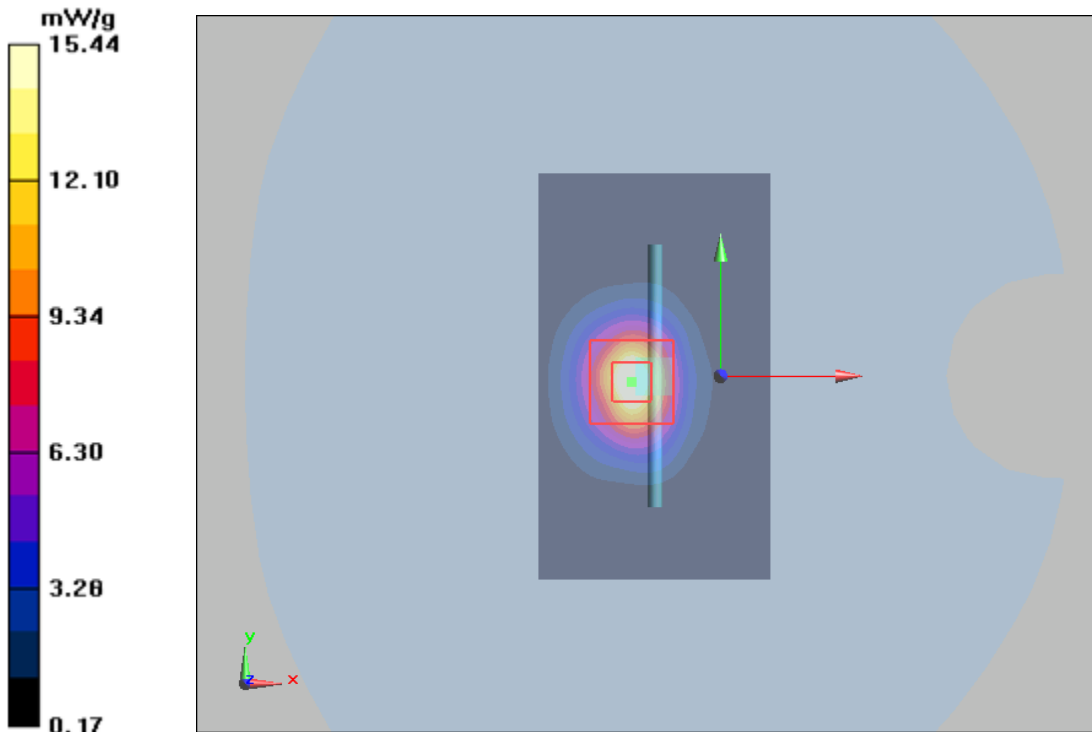
**d=10mm, Pin=250mW/Zoom Scan (7x7x7)/Cube 0:** Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 74 V/m; Power Drift = -0.14 dB

Peak SAR (extrapolated) = 28.5 W/kg

**SAR(1 g) = 13.55 mW/g; SAR(10 g) = 5.89 mW/g**

Maximum value of SAR (measured) = 15.44 mW/g



**Plot 22 System Performance Check at 5250 MHz Head TSL**

**DUT: Dipole 5250 MHz; Type: D5GHzV2; Serial: D5GHzV2 - SN: 1151**

Date: 9/27/2017

Communication System: CW; Frequency: 5250 MHz; Duty Cycle: 1:1

Medium parameters used:  $f = 5200 \text{ MHz}$ ;  $\sigma = 4.74 \text{ mho/m}$ ;  $\epsilon_r = 35.7$ ;  $\rho = 1000 \text{ kg/m}^3$

Ambient Temperature:  $22.3 \text{ }^\circ\text{C}$       Liquid Temperature:  $21.5 \text{ }^\circ\text{C}$

Phantom section: Flat Section

DASY5 Configuration:

Sensor-Surface: 1.4mm (Mechanical Surface Detection)

Probe: EX3DV4 - SN3677; ConvF(5.66, 5.66, 5.66); Calibrated: 1/23/2017;

Electronics: DAE4 Sn1291; Calibrated: 1/19/2017

Phantom: SAM 2; Type: SAM;

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

**d=10mm, Pin=100mW/Area Scan (61x101x1):** Measurement grid: dx=10mm, dy=10mm

Maximum value of SAR (interpolated) = 9.4 mW/g

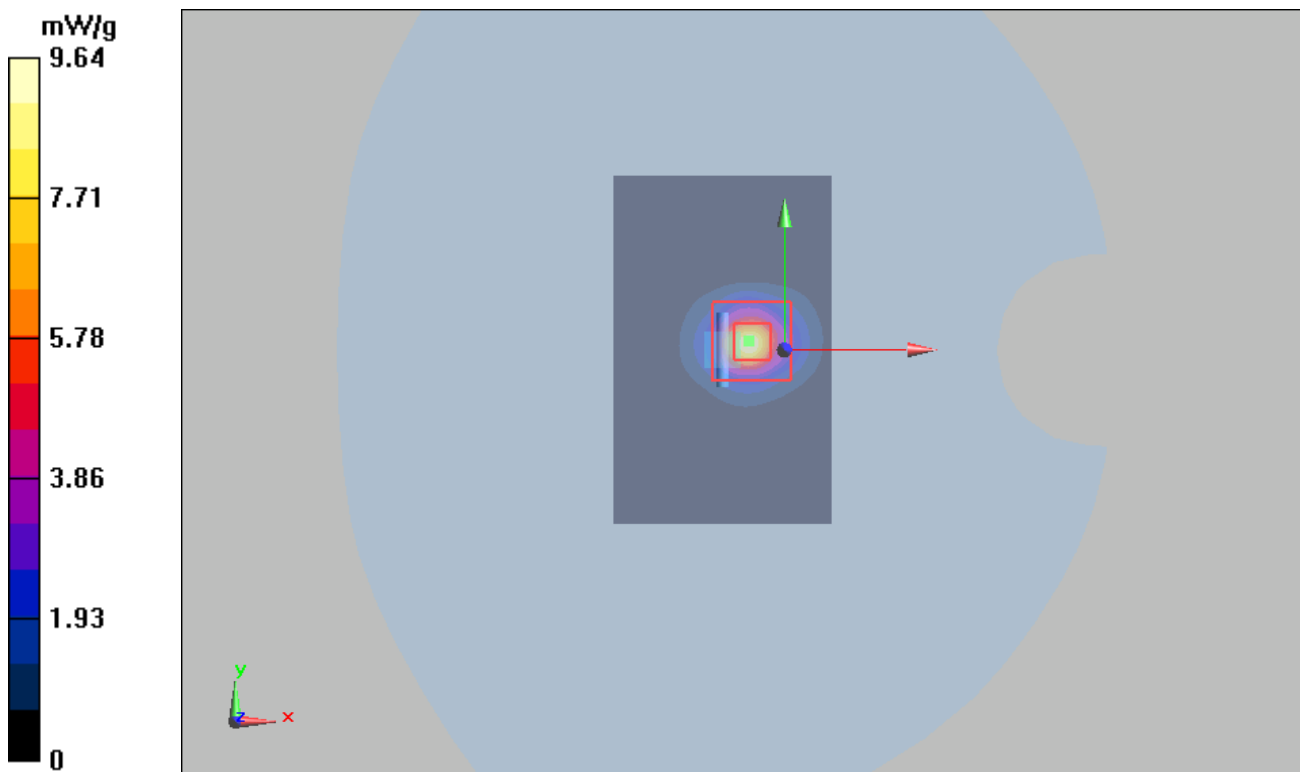
**d=10mm, Pin=100mW/Zoom Scan (7x7x12)/Cube 0:** Measurement grid: dx=4mm, dy=4mm, dz=2mm

Reference Value = 33.6 V/m; Power Drift = -0.15 dB

Peak SAR (extrapolated) = 52.2 W/kg

**SAR(1 g) = 7.54 mW/g; SAR(10 g) = 2.27 mW/g**

Maximum value of SAR (measured) = 9.64 mW/g



**Plot 23 System Performance Check at 5250 MHz Head TSL****DUT: Dipole 5250 MHz; Type: D5GHzV2; Serial: D5GHzV2 - SN: 1151**

Date: 10/27/2018

Communication System: CW; Frequency: 5250 MHz; Duty Cycle: 1:1

Medium parameters used:  $f = 5250$  MHz;  $\sigma = 4.80$  mho/m;  $\epsilon_r = 35.5$ ;  $\rho = 1000$  kg/m<sup>3</sup>

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

Phantom section: Flat Section

DASY5 Configuration:

Sensor-Surface: 1.4mm (Mechanical Surface Detection)

Probe: EX3DV4 - SN3677; ConvF(5.60, 5.60, 5.60); 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)

**d=10mm, Pin=100mW/Area Scan (61x101x1):** Measurement grid: dx=10mm, dy=10mm

Maximum value of SAR (interpolated) = 9.14 mW/g

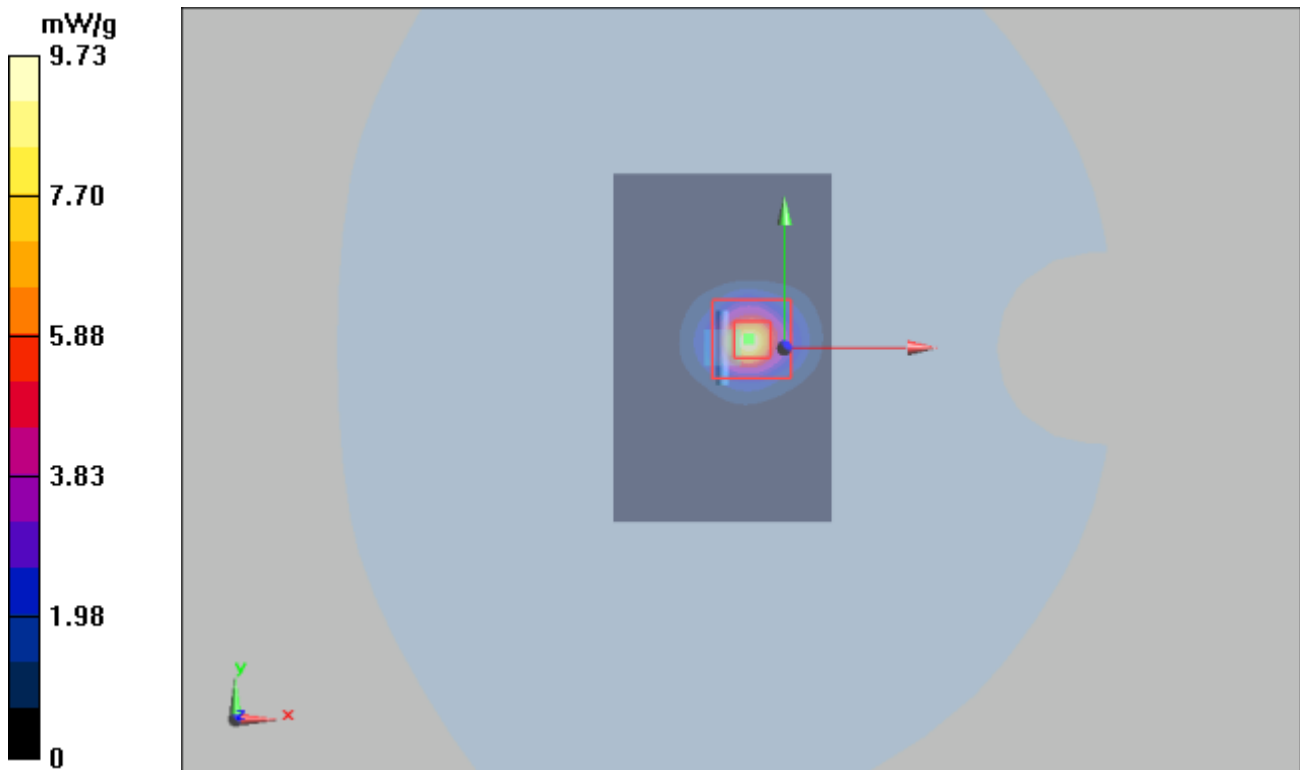
**d=10mm, Pin=100mW/Zoom Scan (7x7x12)/Cube 0:** Measurement grid: dx=4mm, dy=4mm, dz=2mm

Reference Value = 33.6 V/m; Power Drift = -0.095 dB

Peak SAR (extrapolated) = 52.2 W/kg

**SAR(1 g) = 7.87 mW/g; SAR(10 g) = 2.25 mW/g**

Maximum value of SAR (measured) = 9.73 mW/g



**Plot 24 System Performance Check at 5250 MHz Body TSL**

**DUT: Dipole 5250 MHz; Type: D5GHzV2; Serial: D5GHzV2 - SN: 1151**

Date: 9/29/2017

Communication System: CW; Frequency: 5250 MHz; Duty Cycle: 1:1

Medium parameters used:  $f = 5250 \text{ MHz}$ ;  $\sigma = 5.32 \text{ mho/m}$ ;  $\epsilon_r = 48.1$ ;  $\rho = 1000 \text{ kg/m}^3$

Ambient Temperature:  $22.3 \text{ }^\circ\text{C}$       Liquid Temperature:  $21.5 \text{ }^\circ\text{C}$

Phantom section: Flat Section

DASY5 Configuration:

Sensor-Surface: 1.4mm (Mechanical Surface Detection)

Probe: EX3DV4 - SN3677; ConvF(5.03, 5.03, 5.03); Calibrated: 1/23/2017;

Electronics: DAE4 Sn1291; Calibrated: 1/19/2017

Phantom: ELI v5.0 (30deg probe tilt); Type: QDOVA002AA;

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

**d=10mm, Pin=250mW/Area Scan (61x101x1):** Measurement grid: dx=10mm, dy=10mm

Maximum value of SAR (interpolated) = 7.69 mW/g

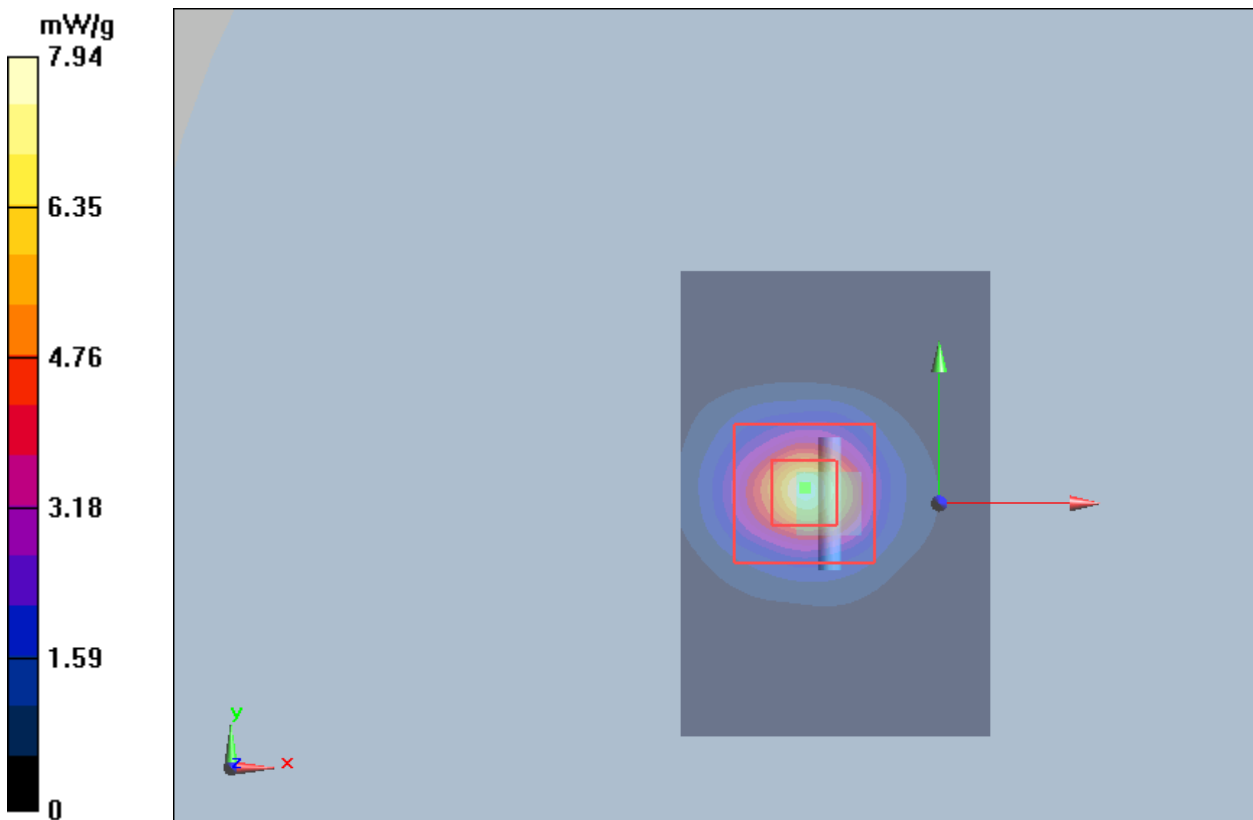
**d=10mm, Pin=250mW/Zoom Scan (7x7x12)/Cube 0:** Measurement grid: dx=4mm, dy=4mm, dz=2mm

Reference Value = 36.3 V/m; Power Drift = 0.0277 dB

Peak SAR (extrapolated) = 47.7 W/kg

**SAR(1 g) = 7.46 mW/g; SAR(10 g) = 2.16 mW/g**

Maximum value of SAR (measured) = 7.94 mW/g



**Plot 25 System Performance Check at 5250 MHz Body TSL**

**DUT: Dipole 5250 MHz; Type: D5GHzV2; Serial: D5GHzV2 - SN: 1151**

Date: 10/27/2018

Communication System: CW; Frequency: 5250 MHz; Duty Cycle: 1:1

Medium parameters used:  $f = 5250 \text{ MHz}$ ;  $\sigma = 5.32 \text{ mho/m}$ ;  $\epsilon_r = 48.1$ ;  $\rho = 1000 \text{ kg/m}^3$

Ambient Temperature:  $22.3 \text{ }^\circ\text{C}$       Liquid Temperature:  $21.5 \text{ }^\circ\text{C}$

Phantom section: Flat Section

DASY5 Configuration:

Sensor-Surface: 1.4mm (Mechanical Surface Detection)

Probe: EX3DV4 - SN3677; ConvF(5.04, 5.04, 5.04); 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)

**d=10mm, Pin=250mW/Area Scan (61x101x1):** Measurement grid: dx=10mm, dy=10mm

Maximum value of SAR (interpolated) = 7.61 mW/g

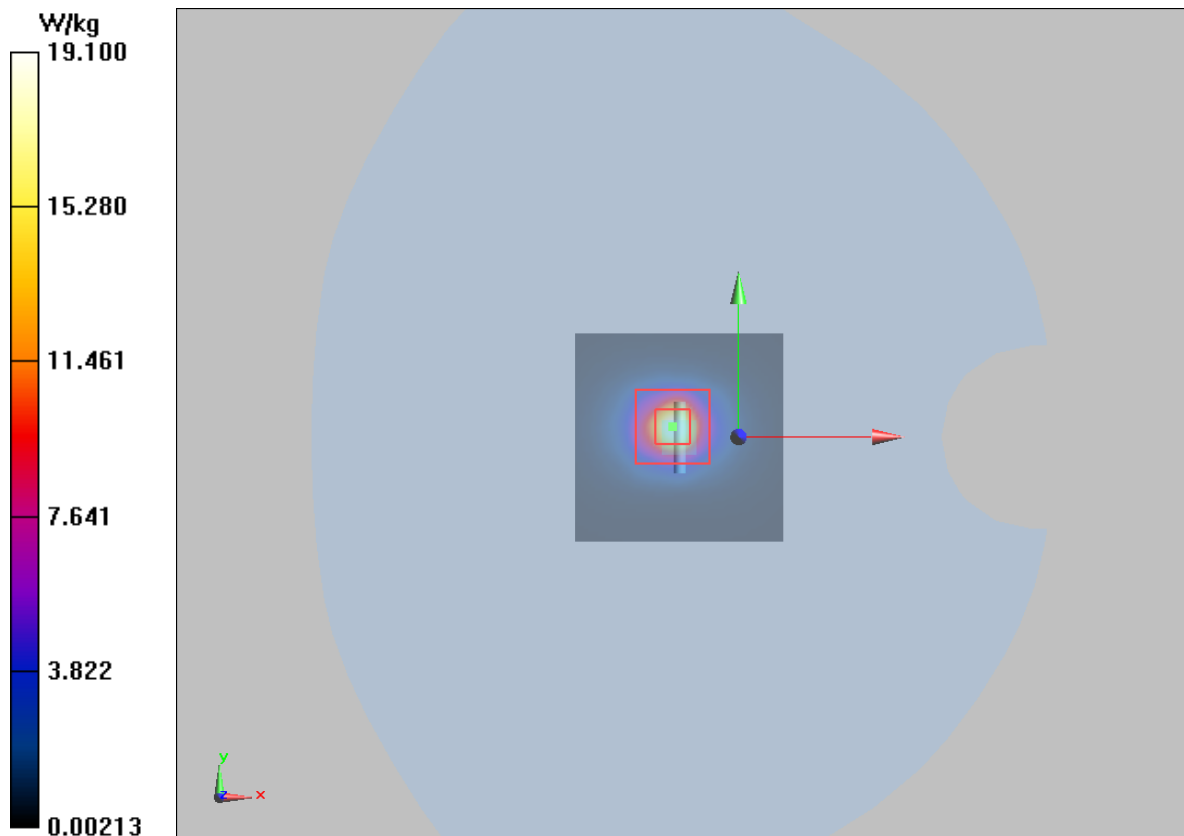
**d=10mm, Pin=250mW/Zoom Scan (7x7x12)/Cube 0:** Measurement grid: dx=4mm, dy=4mm, dz=2mm

Reference Value = 36.32 V/m; Power Drift = 0.02 dB

Peak SAR (extrapolated) = 47.62 W/kg

**SAR(1 g) = 7.46 mW/g; SAR(10 g) = 2.26 mW/g**

Maximum value of SAR (measured) = 19.1 mW/g



**Plot 26 System Performance Check at 5600 MHz Head TSL****DUT: Dipole 5600 MHz; Type: D5GHzV2; Serial: D5GHzV2 - SN: 1151**

Date: 9/27/2017

Communication System: CW; Frequency: 5600 MHz; Duty Cycle: 1:1

Medium parameters used:  $f = 5600$  MHz;  $\sigma = 5.19$  mho/m;  $\epsilon_r = 34.5$ ;  $\rho = 1000$  kg/m<sup>3</sup>

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

Phantom section: Flat Section

DASY5 Configuration:

Sensor-Surface: 1.4mm (Mechanical Surface Detection)

Probe: EX3DV4 - SN3677; ConvF(4.99, 4.99, 4.99); Calibrated: 1/23/2017;

Electronics: DAE4 Sn1291; Calibrated: 1/19/2017

Phantom: SAM 2; Type: SAM;

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

**d=10mm, Pin=100mW/Area Scan (61x101x1):** Measurement grid: dx=10mm, dy=10mm

Maximum value of SAR (interpolated) = 8.31 mW/g

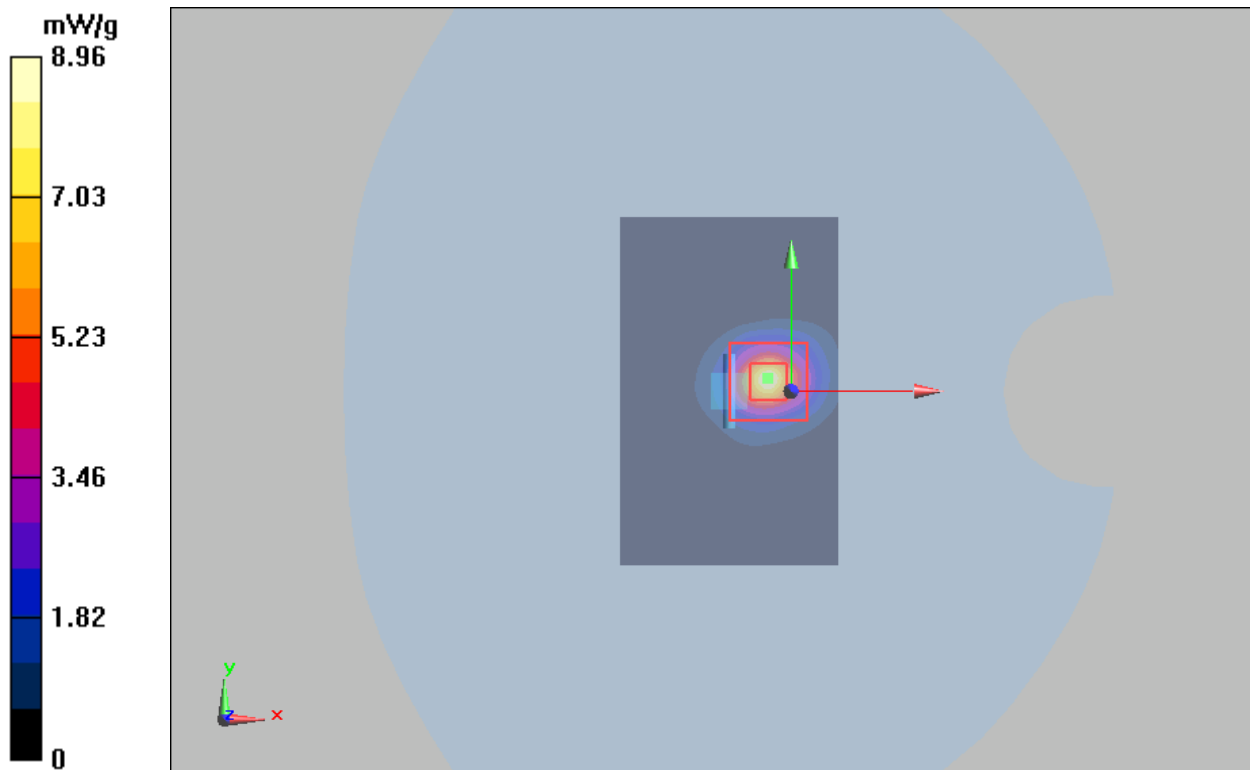
**d=10mm, Pin=100mW/Zoom Scan (7x7x12)/Cube 0:** Measurement grid: dx=4mm, dy=4mm, dz=2mm

Reference Value = 23.1 V/m; Power Drift = 0.044 dB

Peak SAR (extrapolated) = 23.4 W/kg

**SAR(1 g) = 8.04 mW/g; SAR(10 g) = 2.29 mW/g**

Maximum value of SAR (measured) = 8.96 mW/g



**Plot 27 System Performance Check at 5600 MHz Head TSL**

**DUT: Dipole 5600 MHz; Type: D5GHzV2; Serial: D5GHzV2 - SN: 1151**

Date: 10/28/2018

Communication System: CW; Frequency: 5600 MHz; Duty Cycle: 1:1

Medium parameters used:  $f = 5600$  MHz;  $\sigma = 5.21$  mho/m;  $\epsilon_r = 34.2$ ;  $\rho = 1000$  kg/m<sup>3</sup>

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

Phantom section: Flat Section

DASY5 Configuration:

Sensor-Surface: 1.4mm (Mechanical Surface Detection)

Probe: EX3DV4 - SN3677; ConvF(4.87, 4.87, 4.87); 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)

**d=10mm, Pin=100mW/Area Scan (61x101x1):** Measurement grid: dx=10mm, dy=10mm

Maximum value of SAR (interpolated) = 8.25 mW/g

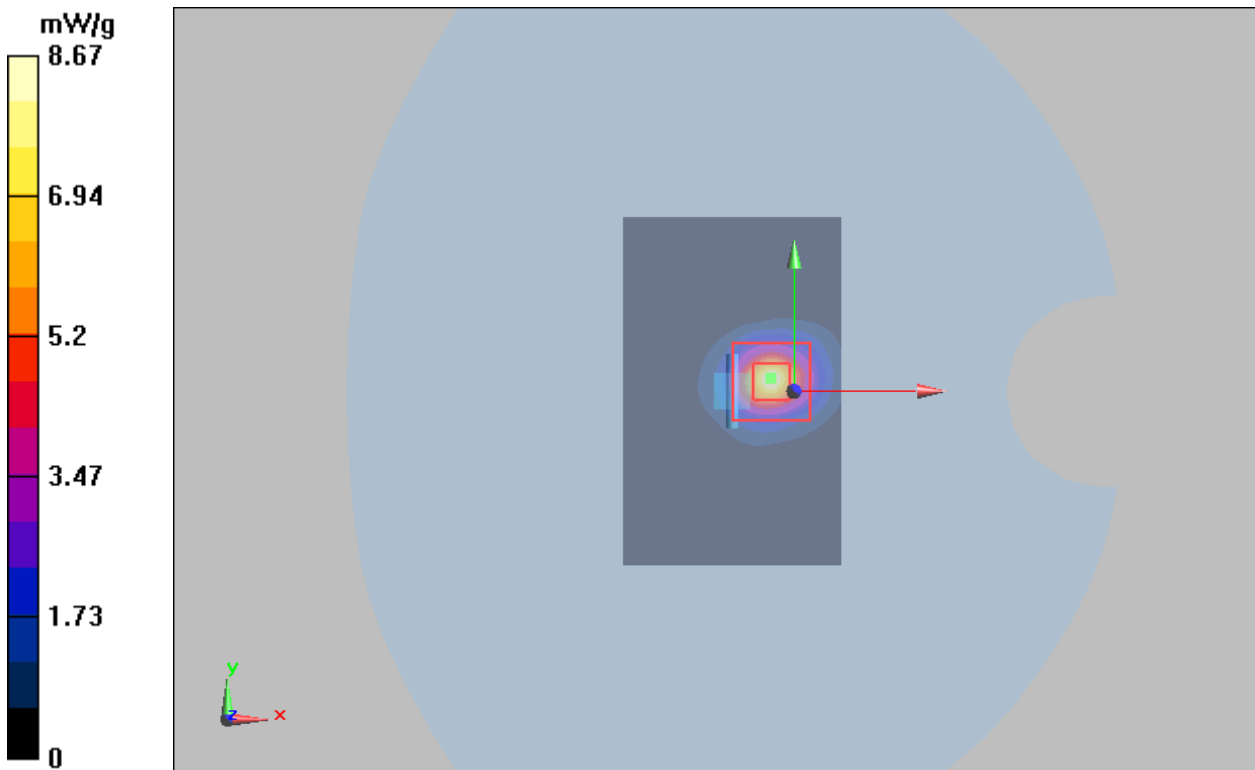
**d=10mm, Pin=100mW/Zoom Scan (7x7x12)/Cube 0:** Measurement grid: dx=4mm, dy=4mm, dz=2mm

Reference Value = 23.1 V/m; Power Drift = -0.028 dB

Peak SAR (extrapolated) = 22.9 W/kg

**SAR(1 g) = 7.67 mW/g; SAR(10 g) = 2.27 mW/g**

Maximum value of SAR (measured) = 8.67 mW/g



**Plot 28 System Performance Check at 5600 MHz Body TSL**

**DUT: Dipole 5600 MHz; Type: D5GHzV2; Serial: D5GHzV2 - SN: 1151**

Date: 9/29/2017

Communication System: CW; Frequency: 5600 MHz; Duty Cycle: 1:1

Medium parameters used:  $f = 5600$  MHz;  $\sigma = 5.78$  mho/m;  $\epsilon_r = 47.9$ ;  $\rho = 1000$  kg/m<sup>3</sup>

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

Phantom section: Flat Section

DASY5 Configuration:

Sensor-Surface: 1.4mm (Mechanical Surface Detection)

Probe: EX3DV4 - SN3677; ConvF(4.34, 4.34, 4.34); Calibrated: 1/23/2017;

Electronics: DAE4 Sn1291; Calibrated: 1/19/2017

Phantom: ELI v5.0 (30deg probe tilt); Type: QDOVA002AA;

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

**d=10mm, Pin=250mW/Area Scan (61x101x1):** Measurement grid: dx=10mm, dy=10mm

Maximum value of SAR (interpolated) = 7.84 mW/g

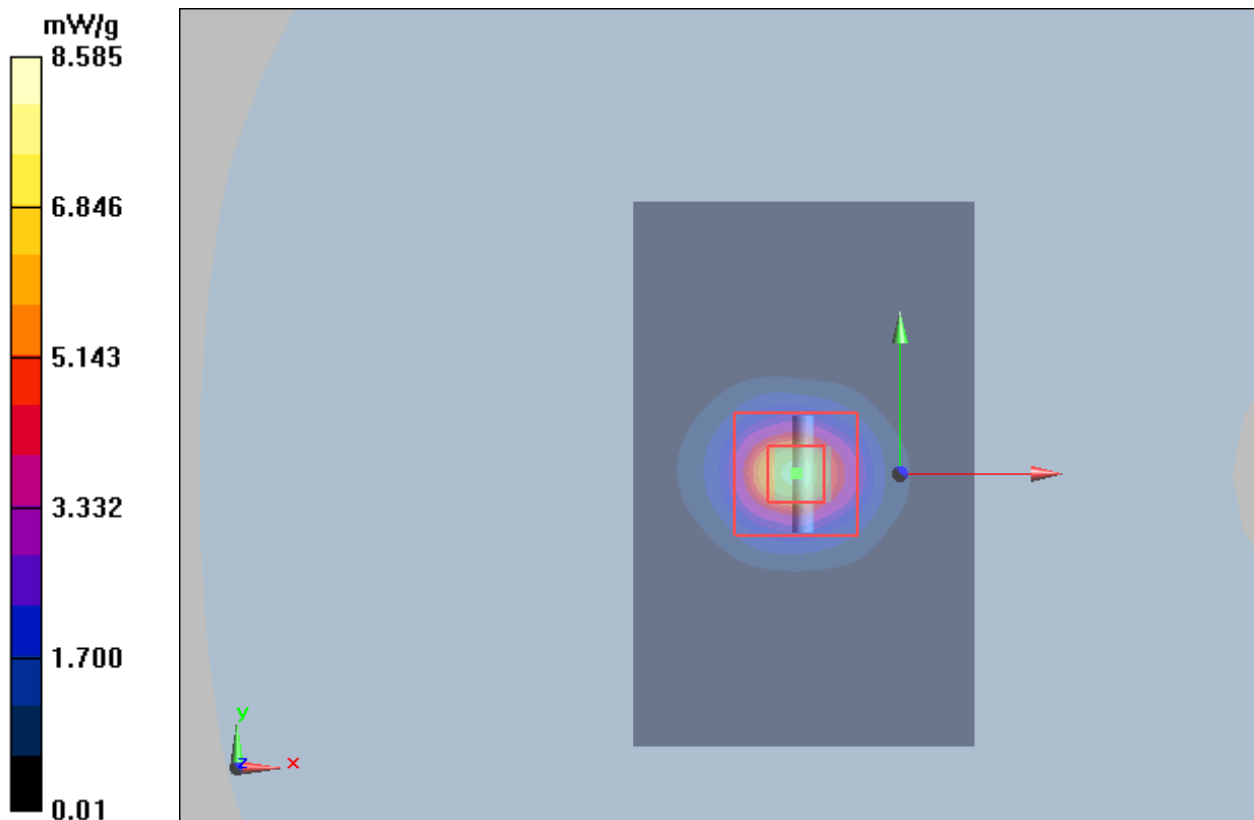
**d=10mm, Pin=250mW/Zoom Scan (7x7x12)/Cube 0:** Measurement grid: dx=4mm, dy=4mm, dz=2mm

Reference Value = 38 V/m; Power Drift = -0.018 dB

Peak SAR (extrapolated) = 22.6 W/kg

**SAR(1 g) = 8.10 mW/g; SAR(10 g) = 2.11 mW/g**

Maximum value of SAR (measured) = 8.585 mW/g





**Plot 29 System Performance Check at 5600 MHz Body TSL**

**DUT: Dipole 5600 MHz; Type: D5GHzV2; Serial: D5GHzV2 - SN: 1151**

Date: 10/28/2018

Communication System: CW; Frequency: 5600 MHz; Duty Cycle: 1:1

Medium parameters used:  $f = 5600$  MHz;  $\sigma = 5.86$  mho/m;  $\epsilon_r = 47.8$ ;  $\rho = 1000$  kg/m<sup>3</sup>

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

Phantom section: Flat Section

DASY5 Configuration:

Sensor-Surface: 1.4mm (Mechanical Surface Detection)

Probe: EX3DV4 - SN3677; ConvF(4.27, 4.27, 4.27); 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)

**d=10mm, Pin=250mW/Area Scan (61x101x1):** Measurement grid: dx=10mm, dy=10mm

Maximum value of SAR (interpolated) = 7.84 mW/g

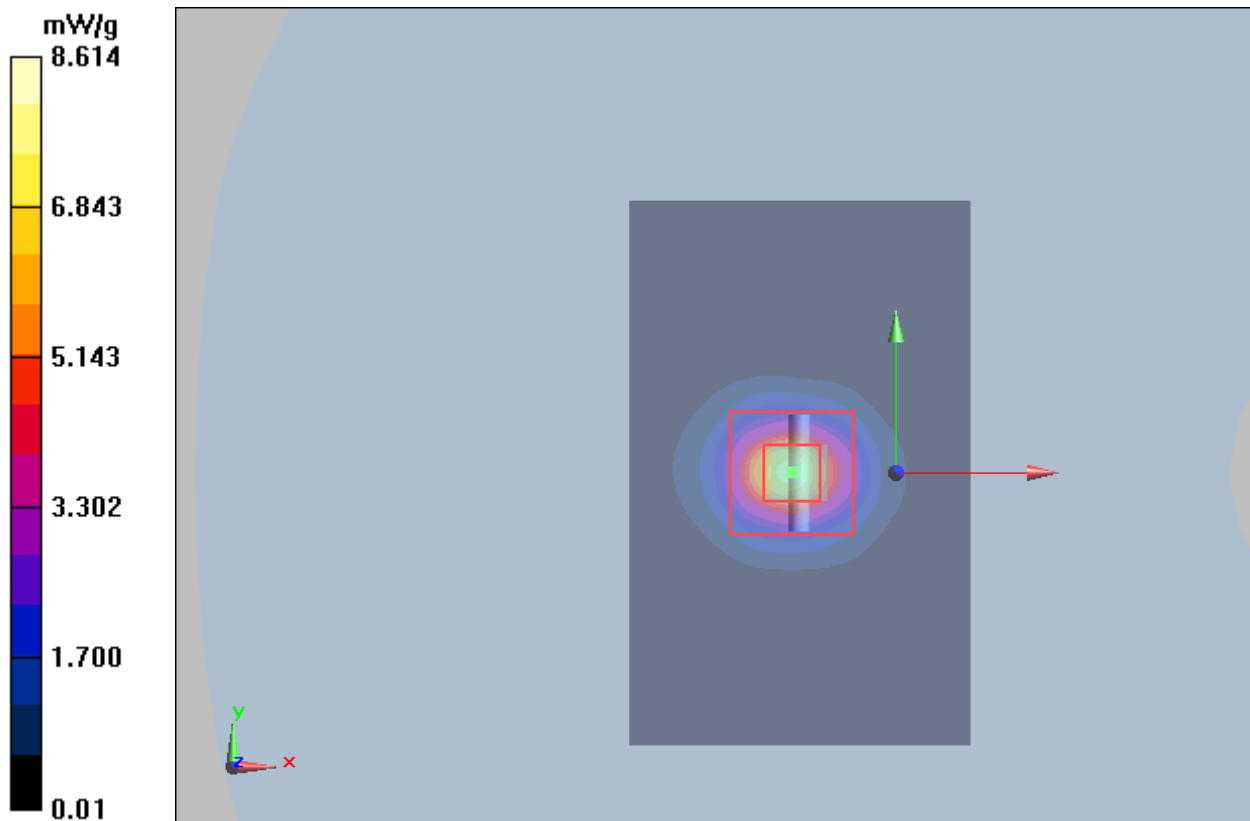
**d=10mm, Pin=250mW/Zoom Scan (7x7x12)/Cube 0:** Measurement grid: dx=4mm, dy=4mm, dz=2mm

Reference Value = 38.12 V/m; Power Drift = -0.07 dB

Peak SAR (extrapolated) = 22.67 W/kg

**SAR(1 g) = 8.04 mW/g; SAR(10 g) = 2.21 mW/g**

Maximum value of SAR (measured) = 8.614 mW/g



**Plot 30 System Performance Check at 5750 MHz Head TSL**

**DUT: Dipole 5750 MHz; Type: D5GHzV2; Serial: D5GHzV2 - SN: 1151**

Date: 9/27/2017

Communication System: CW; Frequency: 5750 MHz; Duty Cycle: 1:1

Medium parameters used:  $f = 5800$  MHz;  $\sigma = 5.28$  mho/m;  $\epsilon_r = 35$ ;  $\rho = 1000$  kg/m<sup>3</sup>

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

Phantom section: Flat Section

DASY5 Configuration:

Sensor-Surface: 1.4mm (Mechanical Surface Detection)

Probe: EX3DV4 - SN3677; ConvF(5.00, 5.00, 5.00); Calibrated: 1/23/2017;

Electronics: DAE4 Sn1291; Calibrated: 1/19/2017

Phantom: SAM 2; Type: SAM;

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

**d=10mm, Pin=100mW/Area Scan (61x101x1):** Measurement grid: dx=10mm, dy=10mm

Maximum value of SAR (interpolated) = 8.25 mW/g

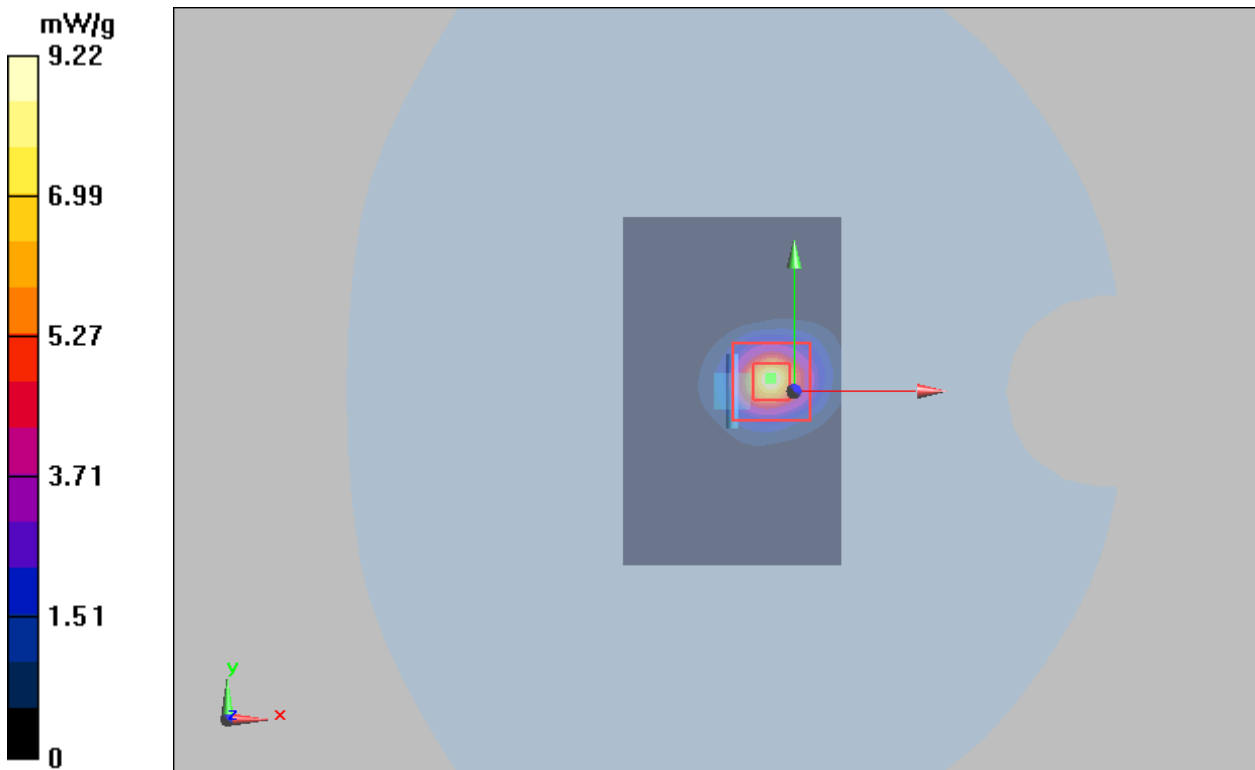
**d=10mm, Pin=100mW/Zoom Scan (7x7x12)/Cube 0:** Measurement grid: dx=4mm, dy=4mm, dz=2mm

Reference Value = 23.1 V/m; Power Drift = -0.008 dB

Peak SAR (extrapolated) = 22.9 W/kg

**SAR(1 g) = 7.72 mW/g; SAR(10 g) = 2.13 mW/g**

Maximum value of SAR (measured) = 9.22 mW/g



**Plot 31 System Performance Check at 5750 MHz Head TSL**

**DUT: Dipole 5750 MHz; Type: D5GHzV2; Serial: D5GHzV2 - SN: 1151**

Date: 10/29/2018

Communication System: CW; Frequency: 5750 MHz; Duty Cycle: 1:1

Medium parameters used:  $f = 5750 \text{ MHz}$ ;  $\sigma = 5.21 \text{ mho/m}$ ;  $\epsilon_r = 34.9$ ;  $\rho = 1000 \text{ kg/m}^3$

Ambient Temperature:  $22.3 \text{ }^\circ\text{C}$       Liquid Temperature:  $21.5 \text{ }^\circ\text{C}$

Phantom section: Flat Section

DASY5 Configuration:

Sensor-Surface: 1.4mm (Mechanical Surface Detection)

Probe: EX3DV4 - SN3677; ConvF(4.99, 4.99, 4.99); 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)

**d=10mm, Pin=100mW/Area Scan (61x101x1):** Measurement grid: dx=10mm, dy=10mm

Maximum value of SAR (interpolated) = 8.31 mW/g

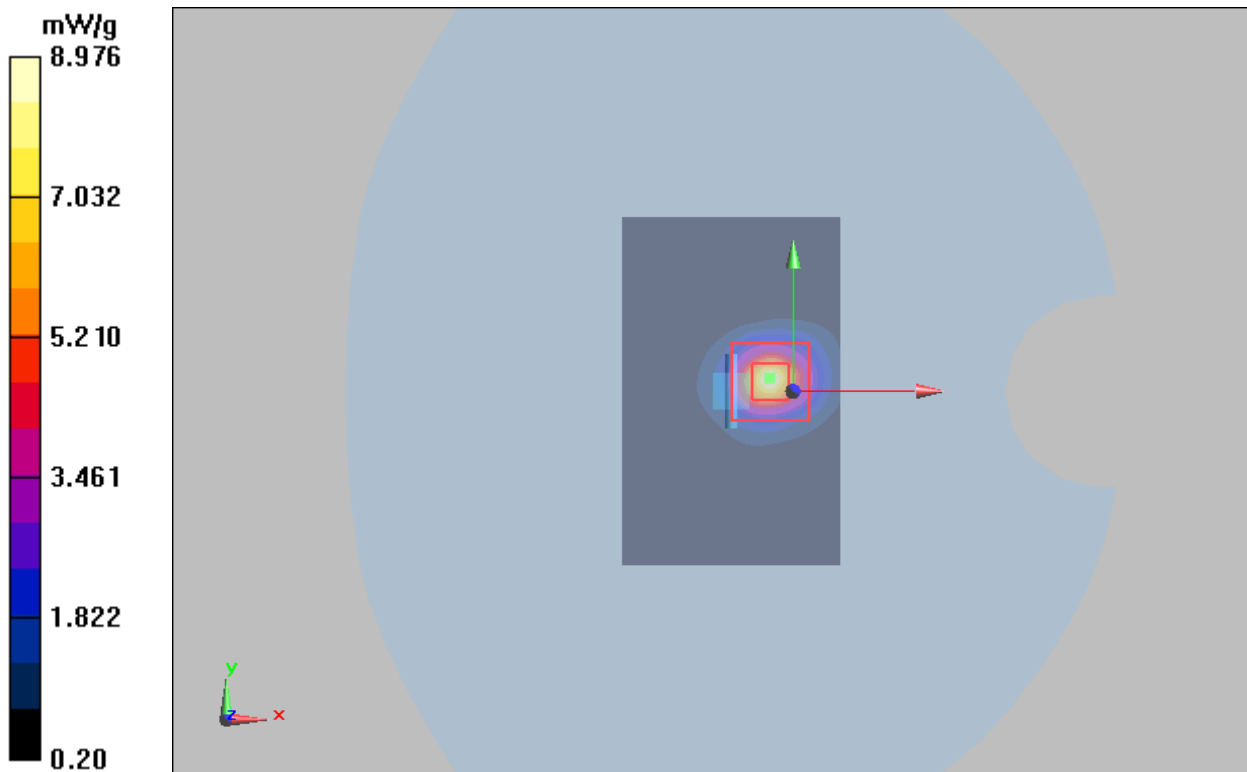
**d=10mm, Pin=100mW/Zoom Scan (7x7x12)/Cube 0:** Measurement grid: dx=4mm, dy=4mm, dz=2mm

Reference Value = 23.1 V/m; Power Drift = 0.044 dB

Peak SAR (extrapolated) = 23.4 W/kg

**SAR(1 g) = 7.66 mW/g; SAR(10 g) = 2.27 mW/g**

Maximum value of SAR (measured) = 8.976 mW/g



**Plot 32 System Performance Check at 5750 MHz Body TSL**

**DUT: Dipole 5750 MHz; Type: D5GHzV2; Serial: D5GHzV2 - SN: 1151**

Date: 9/29/2017

Communication System: CW; Frequency: 5750 MHz; Duty Cycle: 1:1

Medium parameters used:  $f = 5750 \text{ MHz}$ ;  $\sigma = 6.14 \text{ mho/m}$ ;  $\epsilon_r = 47.6$ ;  $\rho = 1000 \text{ kg/m}^3$

Ambient Temperature:  $22.3 \text{ }^\circ\text{C}$       Liquid Temperature:  $21.5 \text{ }^\circ\text{C}$

Phantom section: Flat Section

DASY5 Configuration:

Sensor-Surface: 1.4mm (Mechanical Surface Detection)

Probe: EX3DV4 - SN3677; ConvF(4.52, 4.52, 4.52); Calibrated: 1/23/2017;

Electronics: DAE4 Sn1291; Calibrated: 1/19/2017

Phantom: ELI v5.0 (30deg probe tilt); Type: QDOVA002AA;

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

**d=10mm, Pin=250mW/Area Scan (61x101x1):** Measurement grid: dx=10mm, dy=10mm

Maximum value of SAR (interpolated) = 7.84 mW/g

**d=10mm, Pin=250mW/Zoom Scan (7x7x12)/Cube 0:** Measurement grid: dx=4mm, dy=4mm,

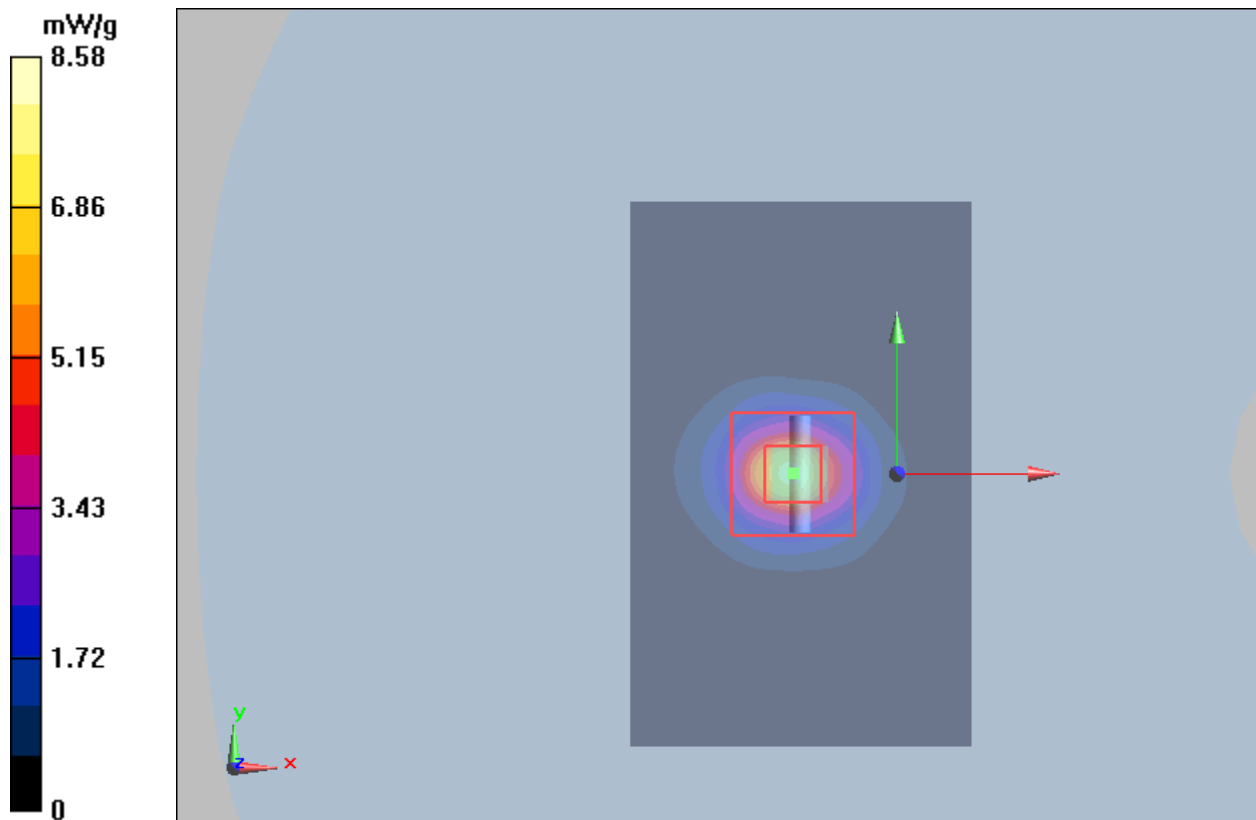
dz=2mm

Reference Value = 38 V/m; Power Drift = -0.018 dB

Peak SAR (extrapolated) = 22.6 W/kg

**SAR(1 g) = 7.15 mW/g; SAR(10 g) = 1.99 mW/g**

Maximum value of SAR (measured) = 8.58 mW/g



**Plot 33 System Performance Check at 5750 MHz Body TSL**

**DUT: Dipole 5750 MHz; Type: D5GHzV2; Serial: D5GHzV2 - SN: 1151**

Date: 10/29/2018

Communication System: CW; Frequency: 5750 MHz; Duty Cycle: 1:1

Medium parameters used:  $f = 5750 \text{ MHz}$ ;  $\sigma = 6.15 \text{ mho/m}$ ;  $\epsilon_r = 47.3$ ;  $\rho = 1000 \text{ kg/m}^3$

Ambient Temperature:  $22.3 \text{ }^\circ\text{C}$       Liquid Temperature:  $21.5 \text{ }^\circ\text{C}$

Phantom section: Flat Section

DASY5 Configuration:

Sensor-Surface: 1.4mm (Mechanical Surface Detection)

Probe: EX3DV4 - SN3677; ConvF(4.43, 4.43, 4.43); 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)

**d=10mm, Pin=250mW/Area Scan (61x101x1):** Measurement grid: dx=10mm, dy=10mm

Maximum value of SAR (interpolated) = 7.8 mW/g

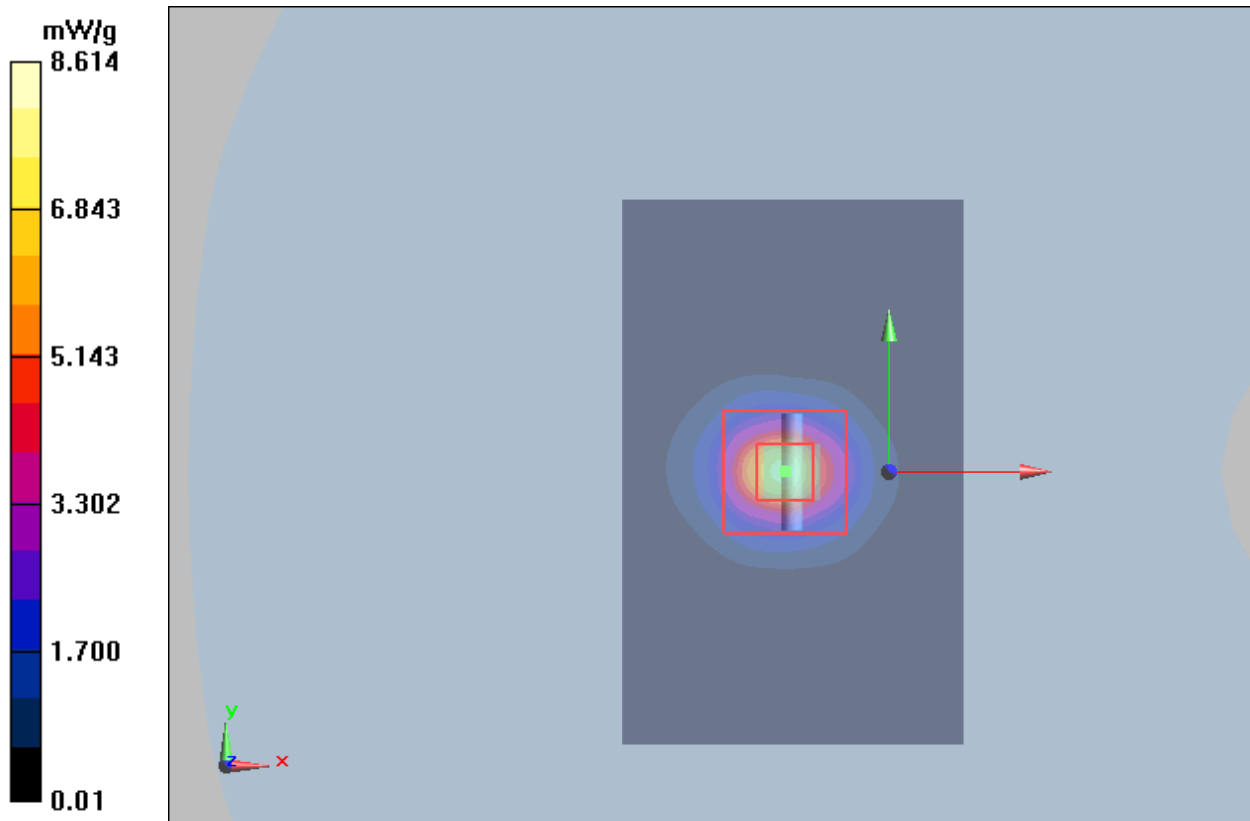
**d=10mm, Pin=250mW/Zoom Scan (7x7x12)/Cube 0:** Measurement grid: dx=4mm, dy=4mm, dz=2mm

Reference Value = 38.11 V/m; Power Drift = 0.02 dB

Peak SAR (extrapolated) = 22.64 W/kg

**SAR(1 g) = 7.13 mW/g; SAR(10 g) = 1.96 mW/g**

Maximum value of SAR (measured) = 8.614 mW/g



## ANNEX C: Highest Graph Results

### Antenna 1

#### Plot 34 GSM 850 Right Cheek Middle

Date: 9/27/2017

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

Medium parameters used:  $f = 837$  MHz;  $\sigma = 0.94$  S/m;  $\epsilon_r = 42.425$ ;  $\rho = 1000$  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(9.31, 9.31, 9.31); Calibrated: 1/23/2017;

Electronics: DAE4 Sn1291; Calibrated: 1/19/2017

Phantom: SAM 2; Type: QD000P40CD; Serial: TP:1666

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

**Right Cheek Middle/Area Scan (71x121x1):** Interpolated grid: dx=15mm, dy=15mm

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

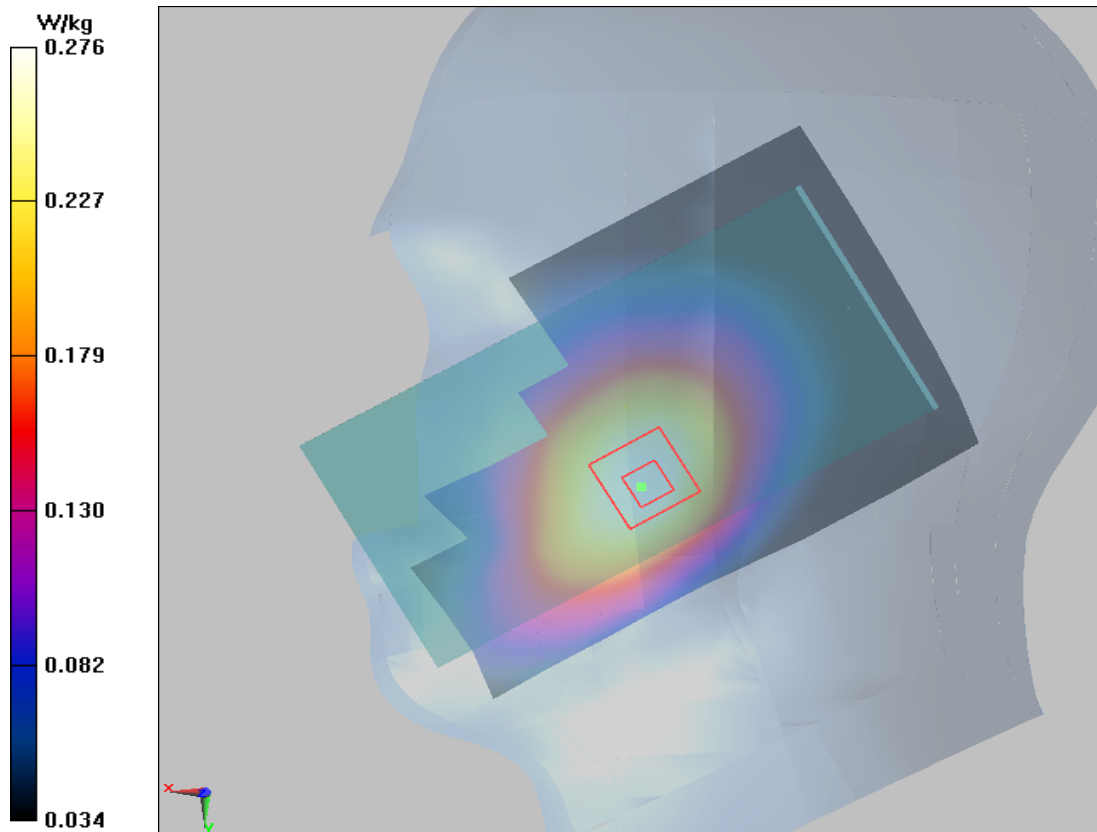
**Right Cheek Middle/Zoom Scan (5x5x7)/Cube 0:** Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 5.711 V/m; Power Drift = -0.15 dB

Peak SAR (extrapolated) = 0.329 W/kg

**SAR(1 g) = 0.263 W/kg; SAR(10 g) = 0.200 W/kg**

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



**Plot 35 GSM 850 Back Side Middle (Distance 15mm)**

Date: 9/28/2017

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

Medium parameters used:  $f = 837$  MHz;  $\sigma = 1.013$  S/m;  $\epsilon_r = 55.395$ ;  $\rho = 1000$  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(9.74, 9.74, 9.74); Calibrated: 1/23/2017;

Electronics: DAE4 Sn1291; Calibrated: 1/19/2017

Phantom: SAM 2; Type: QD000P40CD; Serial: TP:1666

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

**Back Side Middle/Area Scan (71x121x1):** Interpolated grid: dx=15mm, dy=15mm

Maximum value of SAR (interpolated) = 0.326 W/kg

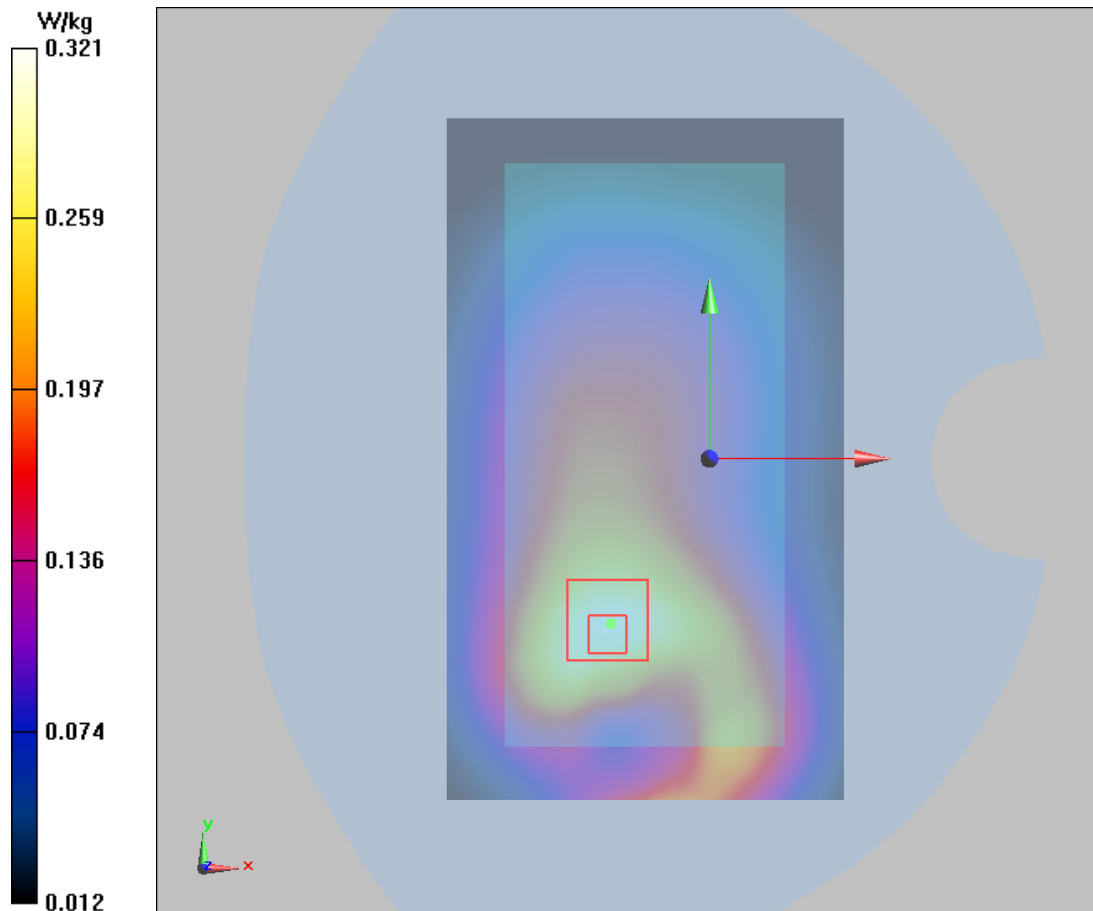
**Back Side Middle/Zoom Scan (5x5x7)/Cube 0:** Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 13.29 V/m; Power Drift = -0.08 dB

Peak SAR (extrapolated) = 0.410 W/kg

**SAR(1 g) = 0.304 W/kg; SAR(10 g) = 0.214 W/kg**

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



**Plot 36 GSM 850 GPRS (2Txslots) Back Side High (Distance 10mm)**

Date: 9/28/2017

Communication System: UID 0, GPRS 2TX (0); Frequency: 848.8 MHz; Duty Cycle: 1:4.14954

Medium parameters used:  $f = 849$  MHz;  $\sigma = 1.014$  S/m;  $\epsilon_r = 54.369$ ;  $\rho = 1000$  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(9.74, 9.74, 9.74); Calibrated: 1/23/2017;

Electronics: DAE4 Sn1291; Calibrated: 1/19/2017

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 (71x121x1):** Interpolated grid: dx=15mm, dy=15mm

Maximum value of SAR (interpolated) = 0.718 W/kg

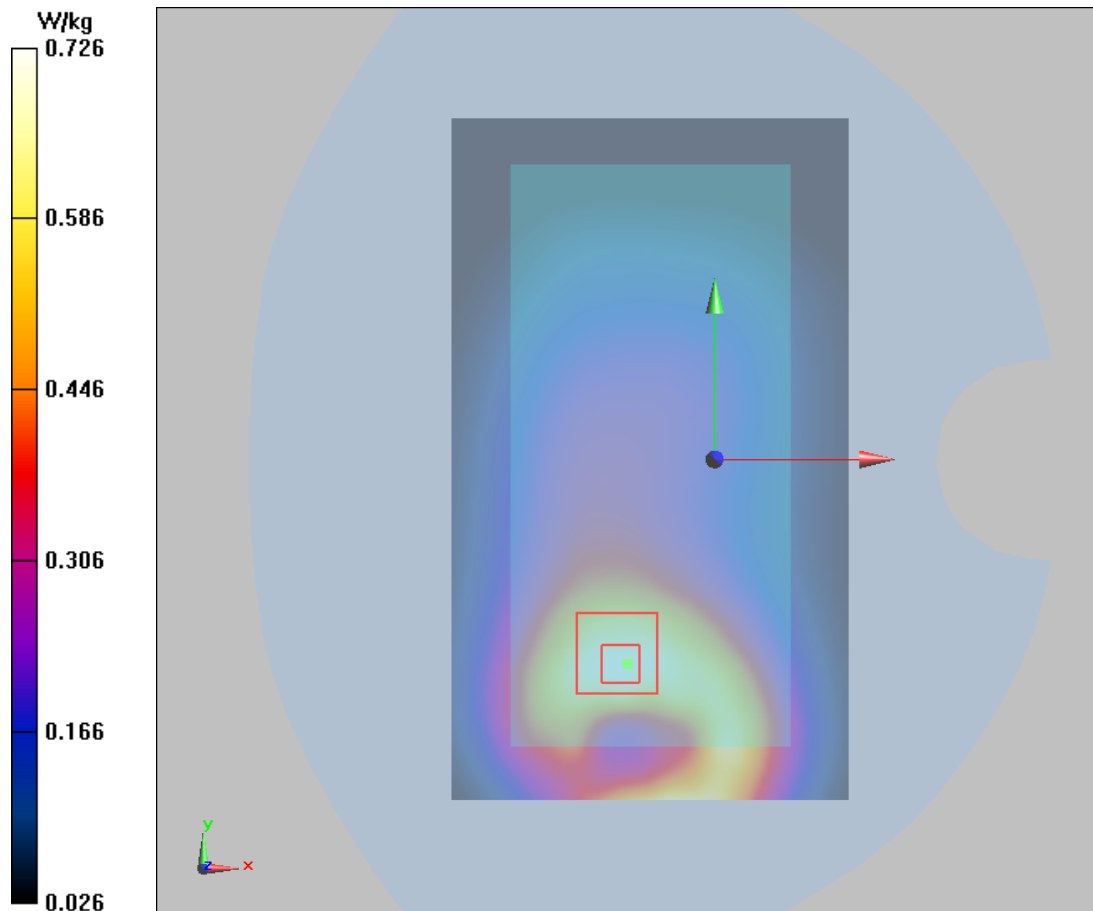
**Back Side High/Zoom Scan (5x5x7)/Cube 0:** Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 16.63 V/m; Power Drift = 0.07 dB

Peak SAR (extrapolated) = 0.983 W/kg

**SAR(1 g) = 0.678 W/kg; SAR(10 g) = 0.456 W/kg**

Maximum value of SAR (measured) = 0.726 W/kg





**Plot 37 GSM 1900 Right Cheek Middle (Hotspot Off)**

Date: 9/27/2017

Communication System: UID 0, GSM 1900 (0); Frequency: 1880 MHz; Duty Cycle: 1:8.30042

Medium parameters used:  $f = 1880$  MHz;  $\sigma = 1.37$  S/m;  $\epsilon_r = 40.575$ ;  $\rho = 1000$  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 – SN7351; ConvF(8.59, 8.59, 8.59); Calibrated: 12/20/2016;

Electronics: DAE4 - SD 000 D04 BK - SN918; Calibrated: 6/26/2017

Phantom: SAM 2; Type: SAM;

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

**Right Cheek Middle/Area Scan (71x121x1):** Interpolated grid: dx=15mm, dy=15mm

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

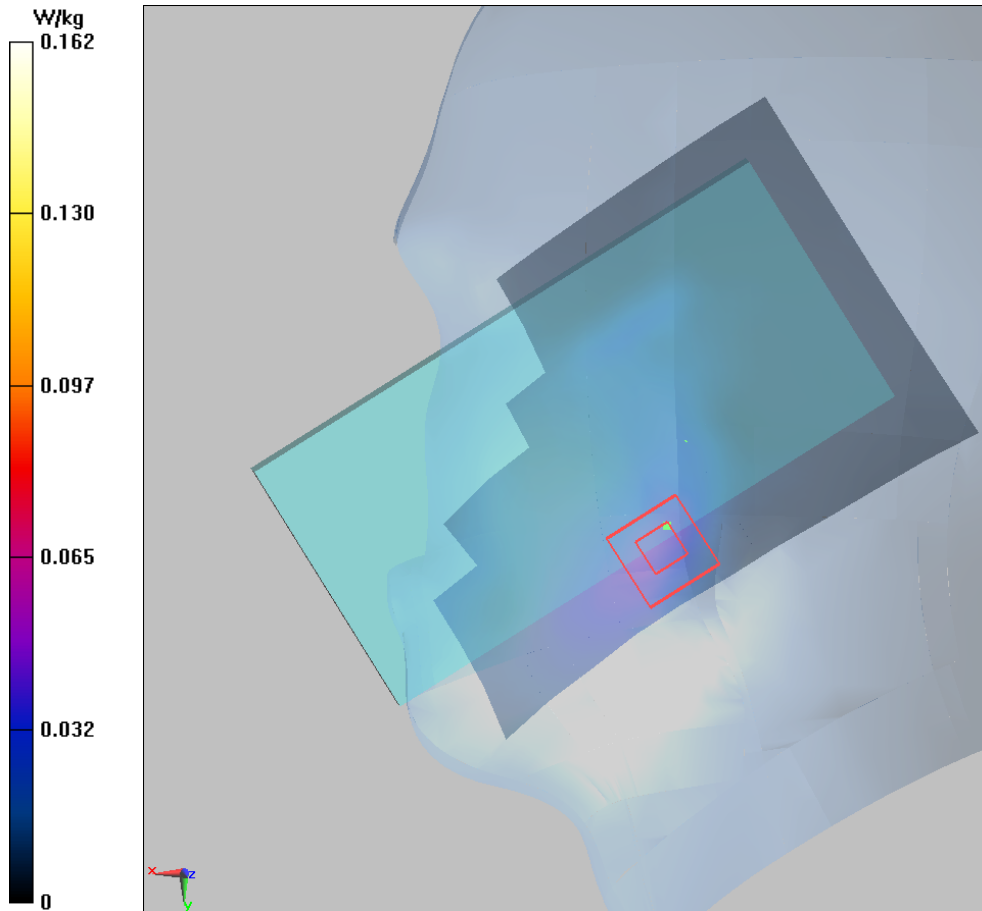
**Right Cheek Middle/Zoom Scan (5x5x7)/Cube 0:** Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 0.302V/m; Power Drift = 0.023dB

Peak SAR (extrapolated) = 2.09 W/kg

**SAR(1 g) = 0.15 W/kg; SAR(10 g) = 0.09 W/kg**

Maximum value of SAR (measured) = 0.162 W/kg



**Plot 38 GSM 1900 Back Side Middle (Hotspot Off, Distance 15mm)**

Date: 9/28/2017

Communication System: UID 0, GSM 1900 (0); Frequency: 1880 MHz; Duty Cycle: 1:8.30042

Medium parameters used:  $f = 1880$  MHz;  $\sigma = 1.49$  S/m;  $\epsilon_r = 51.207$ ;  $\rho = 1000$  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 - SN7351; ConvF(8.14, 8.14, 8.14); Calibrated: 12/20/2016;

Electronics: DAE4 - SD 000 D04 BK - SN918; Calibrated: 6/26/2017

Phantom: SAM 2; Type: SAM;

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

**Back Side Middle/Area Scan (71x121x1):** Interpolated grid: dx=15mm, dy=15mm

Maximum value of SAR (interpolated) = 0.26 W/kg

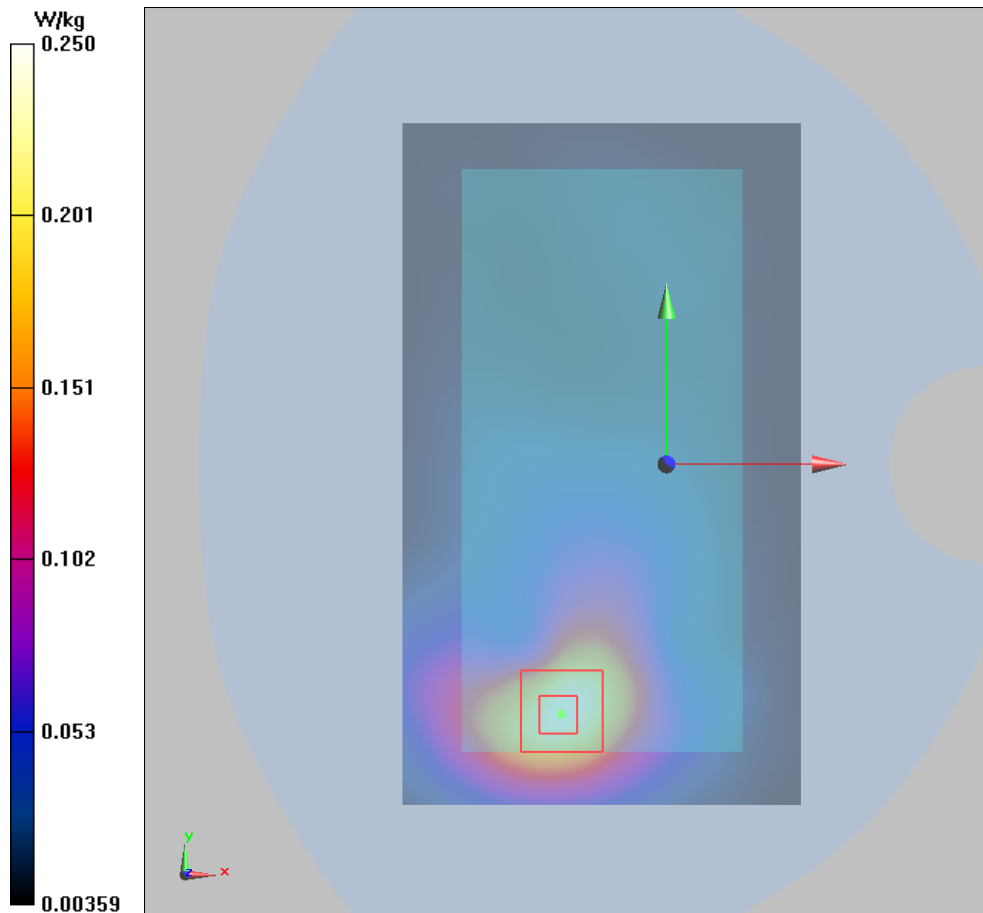
**Back Side Middle/Zoom Scan (5x5x7)/Cube 0:** Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 4.59 V/m; Power Drift = 0.014dB

Peak SAR (extrapolated) = 0.359 W/kg

**SAR(1 g) = 0.23 W/kg; SAR(10 g) = 0.135 W/kg**

Maximum value of SAR (measured) = 0.25 W/kg



**Plot 39 GSM 1900 GPRS (2Txslots) Bottom Edge Middle (Hotspot On, Distance 10mm)**

Date: 9/28/2017

Communication System: UID 0, GPRS 2TX (0); Frequency: 1880 MHz; Duty Cycle: 1:4.14954

Medium parameters used:  $f = 1880$  MHz;  $\sigma = 1.49$  S/m;  $\epsilon_r = 51.207$ ;  $\rho = 1000$  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 - SN7351; ConvF(8.14, 8.14, 8.14); Calibrated: 12/20/2016;

Electronics: DAE4 - SD 000 D04 BK - SN918; Calibrated: 6/26/2017

Phantom: SAM 2; Type: SAM;

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

**Bottom Edge Middle/Area Scan (51x111x1):** Interpolated grid: dx=10mm, dy=10mm

Maximum value of SAR (interpolated) = 0.56 W/kg

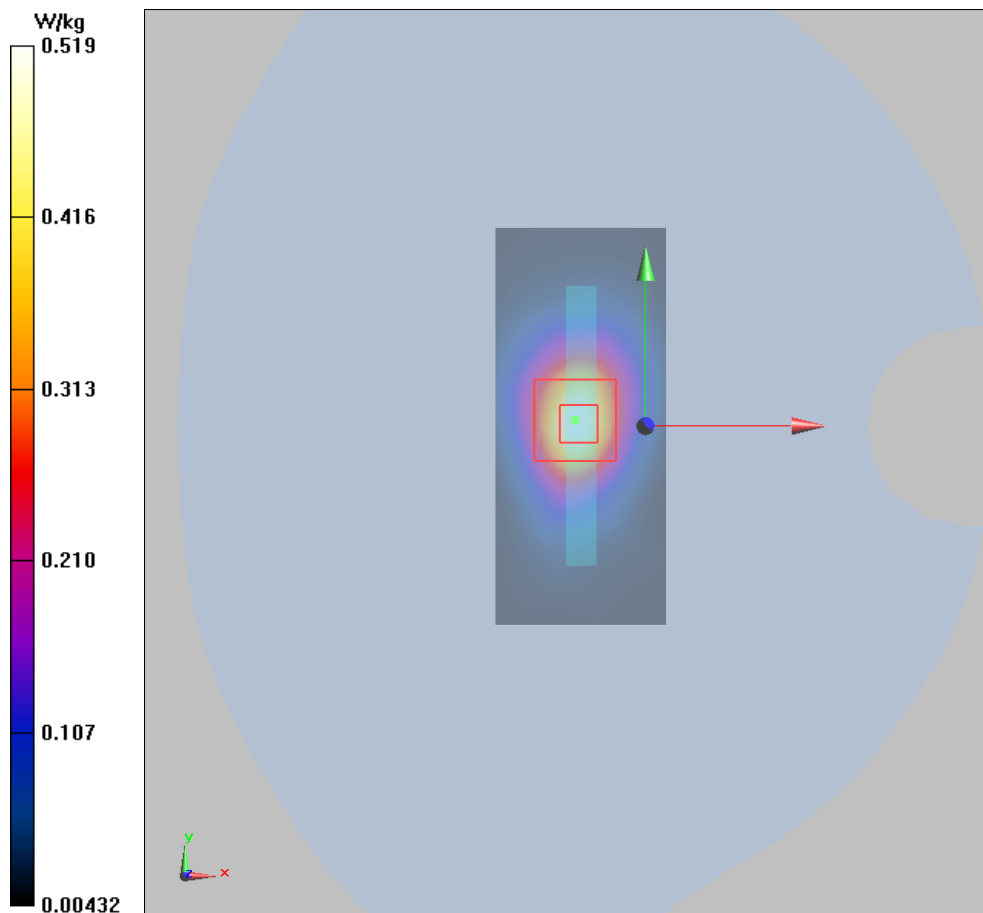
**Bottom Edge Middle/Zoom Scan (7x7x7)/Cube 0:** Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 18.71 V/m; Power Drift = 0.0dB

Peak SAR (extrapolated) = 0.781 W/kg

**SAR(1 g) = 0.461 W/kg; SAR(10 g) = 0.235 W/kg**

Maximum value of SAR (measured) = 0.519 W/kg



**Plot 40 GSM 1900 GPRS (2Txslots) Bottom Edge Middle (Hotspot Off, Distance 0mm)**

Date: 9/28/2017

Communication System: UID 0, 2 slot GPRS (0); Frequency: 1880 MHz; Duty Cycle: 1:4.14954

Medium parameters used:  $f = 1880$  MHz;  $\sigma = 1.49$  S/m;  $\epsilon_r = 51.207$ ;  $\rho = 1000$  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 - SN7351; ConvF(8.14, 8.14, 8.14); Calibrated: 12/20/2016;

Electronics: DAE4 - SD 000 D04 BK - SN918; Calibrated: 6/26/2017

Phantom: SAM 1; Type: QD000P40CD; Serial: TP:1666

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

**Bottom Edge Middle/Area Scan (51x111x1):** Interpolated grid: dx=10mm, dy=10mm

Maximum value of SAR (interpolated) = 3.54 W/kg

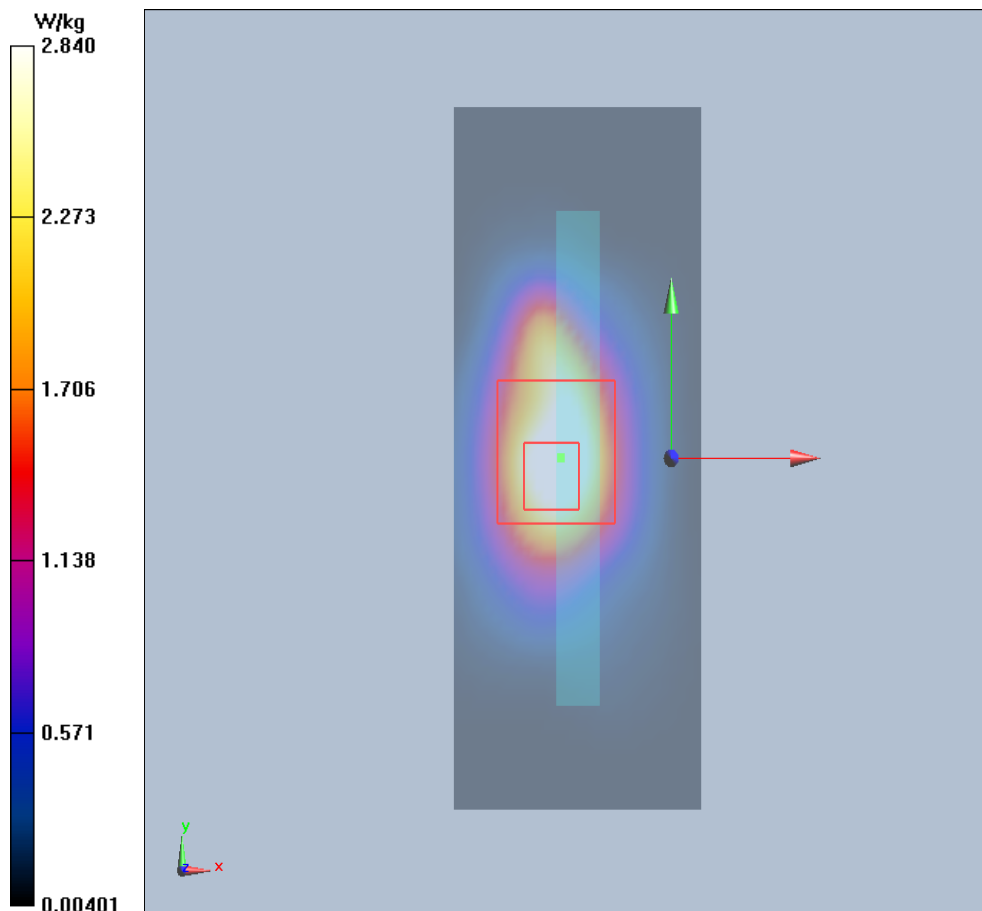
**Bottom Edge Middle/Zoom Scan (7x7x7)/Cube 0:** Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 34.36 V/m; Power Drift = 0.023 dB

Peak SAR (extrapolated) = 6.43 W/kg

**SAR(1 g) = 2.54 W/kg; SAR(10 g) = 1.23 W/kg**

Maximum value of SAR (measured) = 2.84 W/kg



**Plot 41 UMTS Band II Right Cheek Middle (Hotspot Off)**

Date: 9/27/2017

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

Medium parameters used:  $f = 1880$  MHz;  $\sigma = 1.37$  S/m;  $\epsilon_r = 40.575$ ;  $\rho = 1000$  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 – SN7351; ConvF(8.59, 8.59, 8.59); Calibrated: 12/20/2016;

Electronics: DAE4 - SD 000 D04 BK - SN918; Calibrated: 6/26/2017

Phantom: SAM 2; Type: SAM;

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

**Right Cheek Middle/Area Scan (71x121x1):** Interpolated grid: dx=15mm, dy=15mm

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

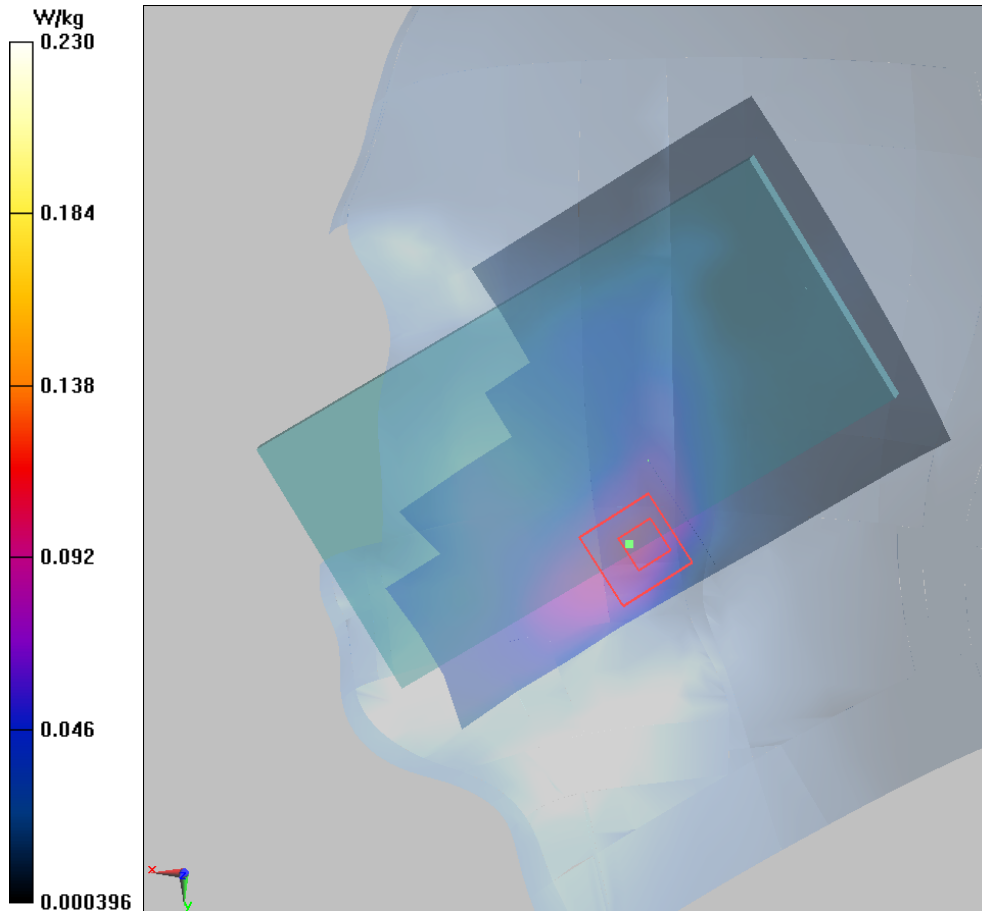
**Right Cheek Middle/Zoom Scan (5x5x7)/Cube 0:** Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 2.03 V/m; Power Drift =0.03 dB

Peak SAR (extrapolated) = 0.291 W/kg

**SAR(1 g) = 0.190 W/kg; SAR(10 g) = 0.158 W/kg**

Maximum value of SAR (measured) = 0.23W/kg



**Plot 42 UMTS Band II Front Side Middle (Hotspot Off, Distance 15mm)**

Date: 9/28/2017

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

Medium parameters used:  $f = 1880 \text{ MHz}$ ;  $\sigma = 1.49 \text{ S/m}$ ;  $\epsilon_r = 51.207$ ;  $\rho = 1000 \text{ kg/m}^3$

Ambient Temperature:  $22.3 \text{ }^\circ\text{C}$       Liquid Temperature:  $21.5 \text{ }^\circ\text{C}$

Phantom section: Flat Section

DASY5 Configuration:

Sensor-Surface: 4mm (Mechanical Surface Detection)

Probe: EX3DV4 - SN7351; ConvF(8.14, 8.14, 8.14); Calibrated: 12/20/2016;

Electronics: DAE4 - SD 000 D04 BK - SN918; Calibrated: 6/26/2017

Phantom: SAM 2; Type: SAM;

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

**Front Side Middle/Area Scan (71x121x1):** Interpolated grid:  $dx=15\text{mm}$ ,  $dy=15\text{mm}$

Maximum value of SAR (interpolated) =  $0.677 \text{ W/kg}$

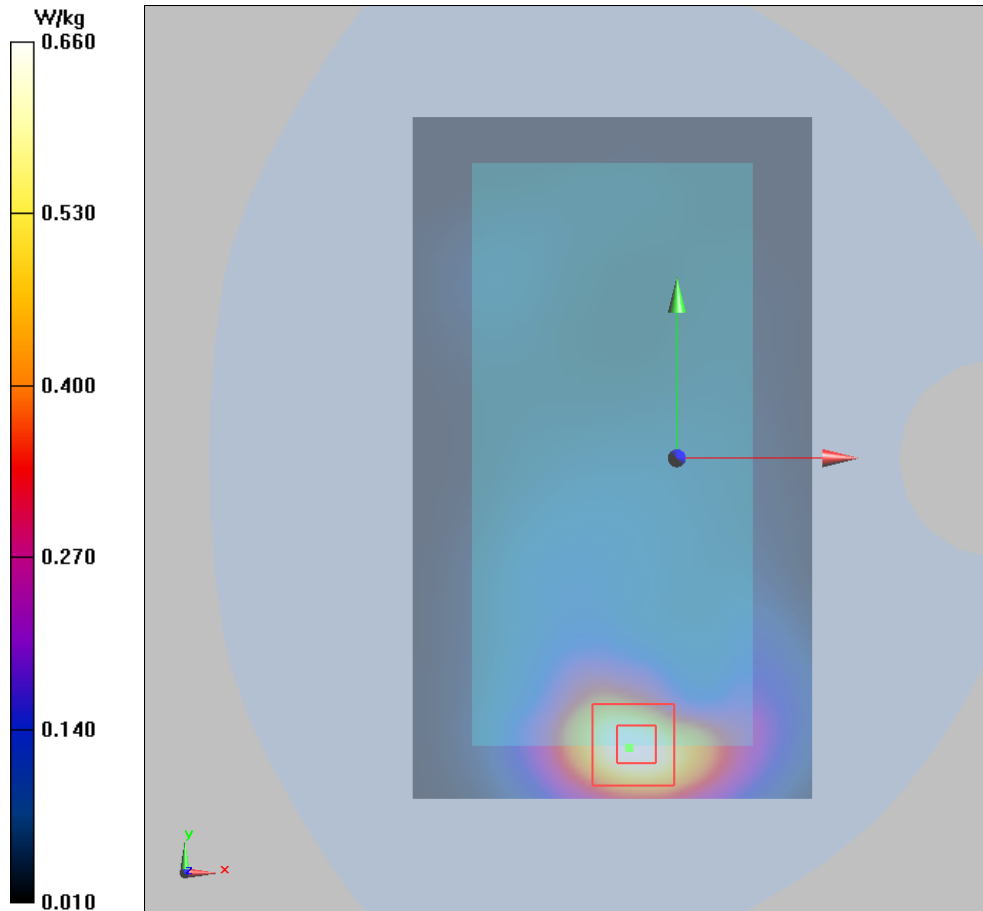
**Front Side Middle/Zoom Scan (5x5x7)/Cube 0:** Measurement grid:  $dx=8\text{mm}$ ,  $dy=8\text{mm}$ ,  $dz=5\text{mm}$

Reference Value =  $6.019 \text{ V/m}$ ; Power Drift =  $-0.03 \text{ dB}$

Peak SAR (extrapolated) =  $0.977 \text{ W/kg}$

**SAR(1 g) =  $0.507 \text{ W/kg}$ ; SAR(10 g) =  $0.352 \text{ W/kg}$**

Maximum value of SAR (measured) =  $0.660 \text{ W/kg}$



**Plot 43 UMTS Band II Bottom Edge Low (Hotspot On, Distance 10mm)**

Date: 9/28/2017

Communication System: UID 0, WCDMA II (0); Frequency: 1852.4 MHz; Duty Cycle: 1:1

Medium parameters used (interpolated):  $f = 1852.4$  MHz;  $\sigma = 1.462$  S/m;  $\epsilon_r = 51.27$ ;  $\rho = 1000$  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 - SN7351; ConvF(8.14, 8.14, 8.14); Calibrated: 12/20/2016;

Electronics: DAE4 - SD 000 D04 BK - SN918; Calibrated: 6/26/2017

Phantom: SAM 2; Type: SAM;

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

**Bottom Edge Low/Area Scan (51x111x1):** Interpolated grid: dx=10mm, dy=10mm

Maximum value of SAR (interpolated) = 0.817 W/kg

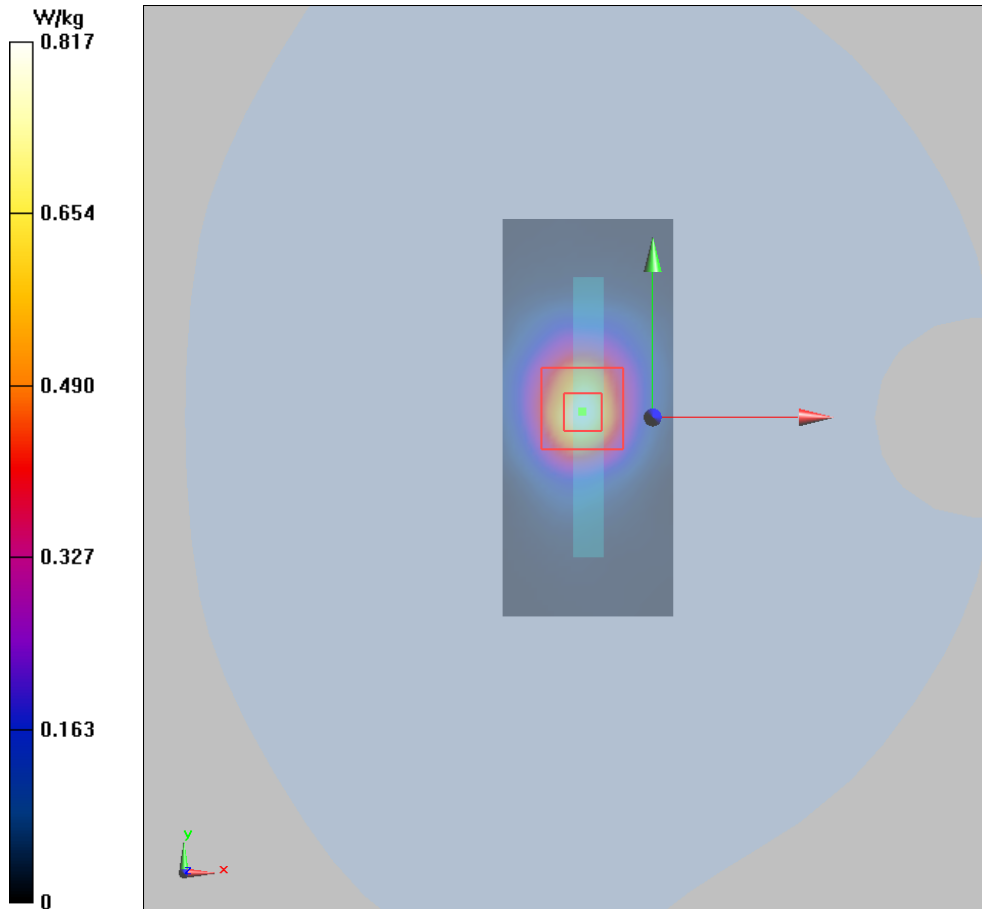
**Bottom Edge Low/Zoom Scan (7x7x7)/Cube 0:** Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 21.50 V/m; Power Drift = 0.08 dB

Peak SAR (extrapolated) = 1.06 W/kg

**SAR(1 g) = 0.766 W/kg; SAR(10 g) = 0.324 W/kg**

Maximum value of SAR (measured) = 0.817 W/kg



**Plot 44 UMTS Band II Bottom Edge Middle (Hotspot Off+Sensor Off, Distance 6mm)**

Date: 9/28/2017

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

Medium parameters used:  $f = 1880$  MHz;  $\sigma = 1.49$  S/m;  $\epsilon_r = 51.207$ ;  $\rho = 1000$  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 - SN7351; ConvF(8.14, 8.14, 8.14); Calibrated: 12/20/2016;

Electronics: DAE4 - SD 000 D04 BK - SN918; Calibrated: 6/26/2017

Phantom: SAM 2; Type: SAM;

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

**Bottom Edge Middle/Area Scan (51x111x1):** Interpolated grid: dx=10mm, dy=10mm

Maximum value of SAR (interpolated) = 4.88 W/kg

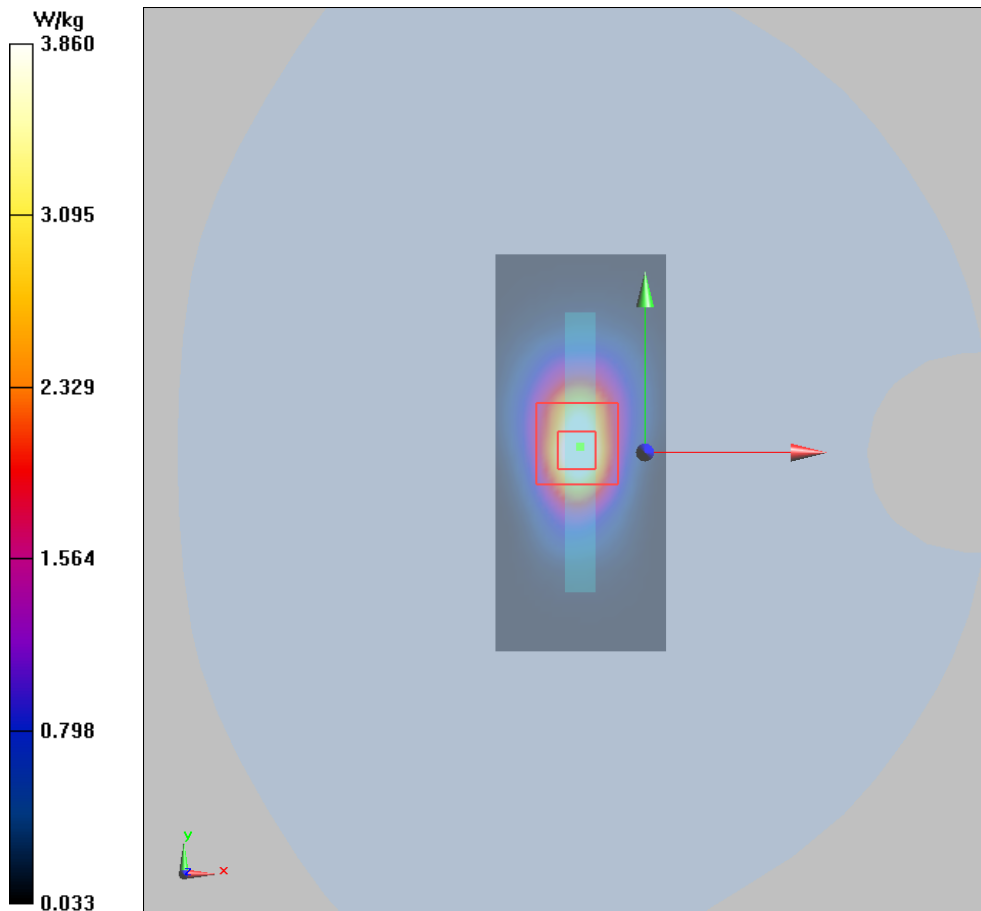
**Bottom Edge Middle/Zoom Scan (7x7x7)/Cube 0:** Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 51.07 V/m; Power Drift = -0.01 dB

Peak SAR (extrapolated) = 6.38 W/kg

**SAR(1 g) = 3.37 W/kg; SAR(10 g) = 1.95 W/kg**

Maximum value of SAR (measured) = 3.86 W/kg





**Plot 45 UMTS Band IV Left Cheek Middle (REC On+Hotspot Off, Battery 3)**

Date: 9/27/2017

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

Medium parameters used:  $f = 1733 \text{ MHz}$ ;  $\sigma = 1.351 \text{ S/m}$ ;  $\epsilon_r = 38.755$ ;  $\rho = 1000 \text{ kg/m}^3$

Ambient Temperature:  $22.3 \text{ }^\circ\text{C}$       Liquid Temperature:  $21.5 \text{ }^\circ\text{C}$

Phantom section: Left Section

DASY5 Configuration:

Sensor-Surface: 4mm (Mechanical Surface Detection)

Probe: EX3DV4 - SN3677; ConvF(8.60, 8.60, 8.60); Calibrated: 1/23/2017;

Electronics: DAE4 Sn1291; Calibrated: 1/19/2017

Phantom: SAM 1; Type: QD000P40CD; Serial: TP:1666

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

**Left Cheek Middle/Area Scan (71x121x1):** Interpolated grid:  $dx=15\text{mm}$ ,  $dy=15\text{mm}$

Maximum value of SAR (interpolated) =  $0.196 \text{ W/kg}$

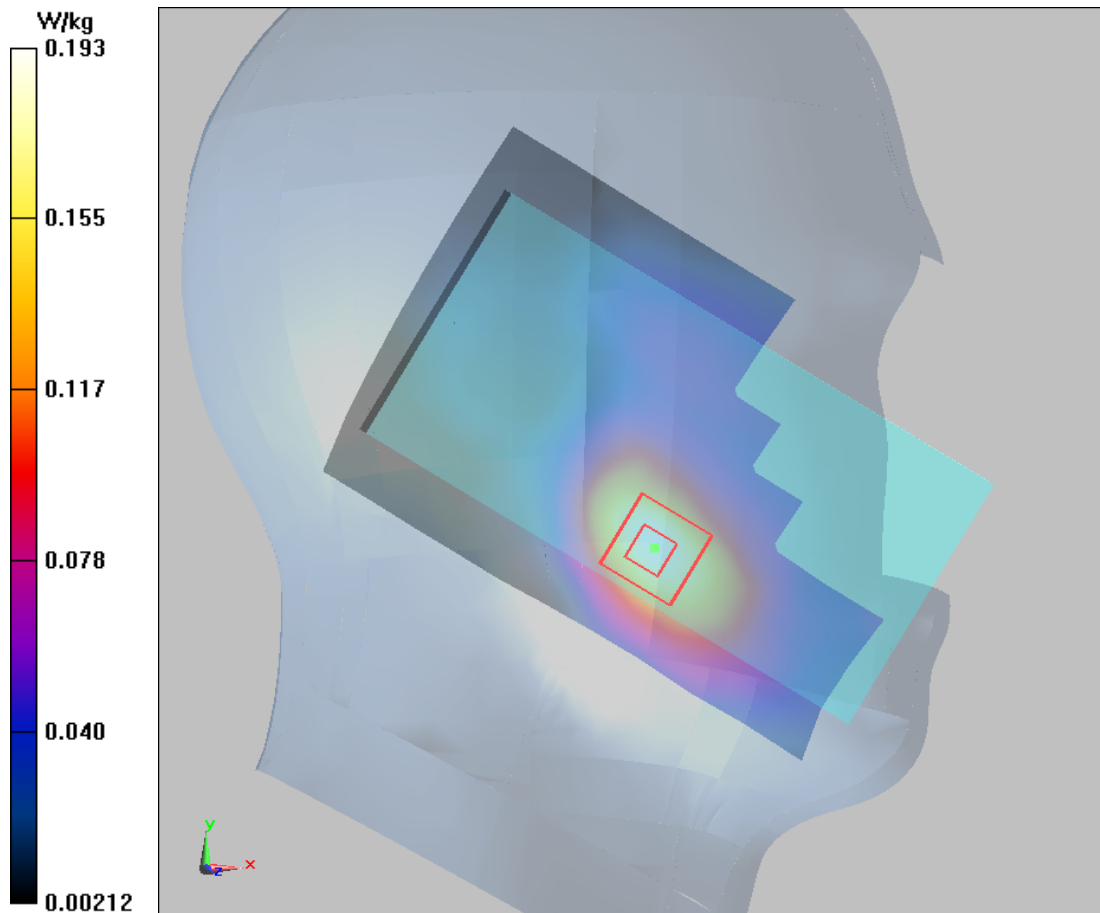
**Left Cheek Middle/Zoom Scan (5x5x7)/Cube 0:** Measurement grid:  $dx=8\text{mm}$ ,  $dy=8\text{mm}$ ,  $dz=5\text{mm}$

Reference Value =  $3.683 \text{ V/m}$ ; Power Drift =  $0.093 \text{ dB}$

Peak SAR (extrapolated) =  $0.271 \text{ W/kg}$

**SAR(1 g) =  $0.192 \text{ W/kg}$ ; SAR(10 g) =  $0.110 \text{ W/kg}$**

Maximum value of SAR (measured) =  $0.193 \text{ W/kg}$



**Plot 46 UMTS Band IV Front Side Middle (REC Off+Hotspot Off, Distance 15mm)**

Date: 9/28/2017

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

Medium parameters used:  $f = 1733$  MHz;  $\sigma = 1.418$  S/m;  $\epsilon_r = 51.915$ ;  $\rho = 1000$  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(8.39, 8.39, 8.39); Calibrated: 1/23/2017;

Electronics: DAE4 Sn1291; Calibrated: 1/19/2017

Phantom: SAM 1; Type: QD000P40CD; Serial: TP:1666

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

**Front Side Middle/Area Scan (71x121x1):** Interpolated grid: dx=15mm, dy=15mm

Maximum value of SAR (interpolated) = 0.658 W/kg

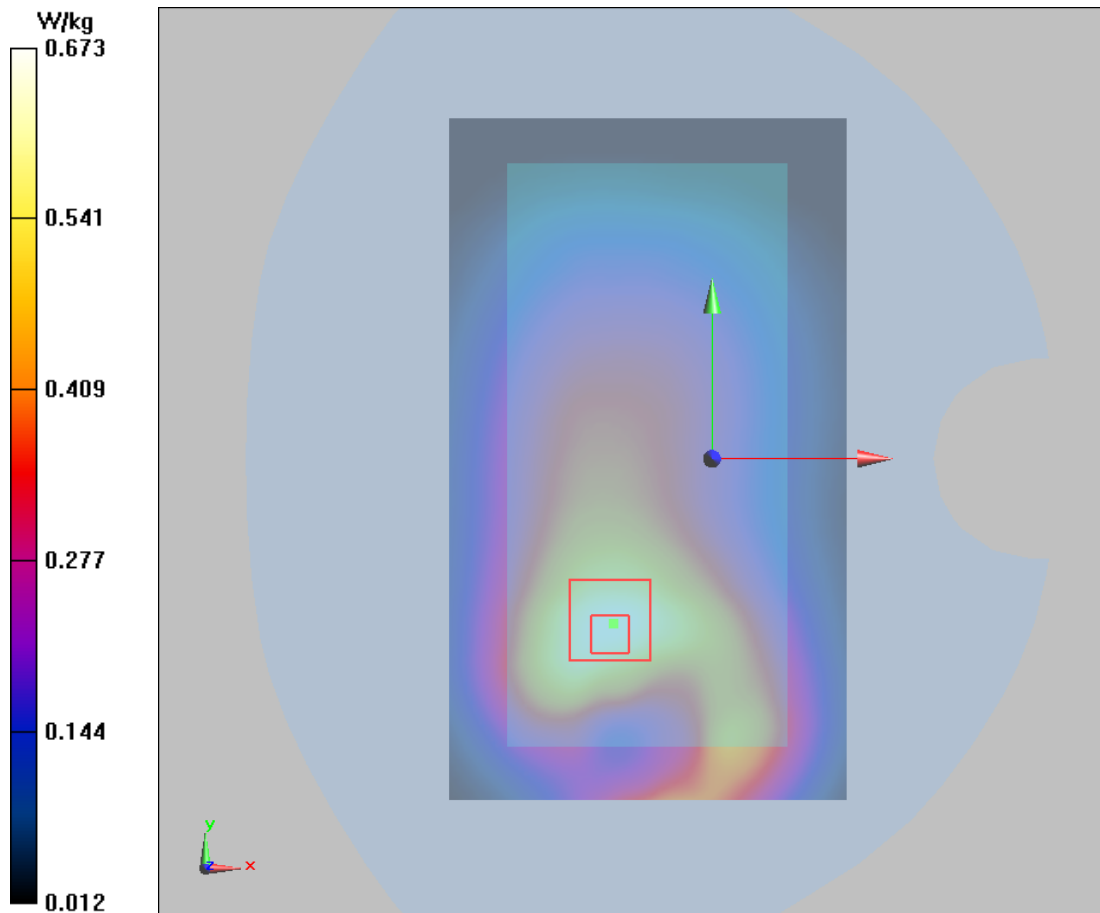
**Front Side Middle/Zoom Scan (5x5x7)/Cube 0:** Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 6.344 V/m; Power Drift = -0.05 dB

Peak SAR (extrapolated) = 0.968 W/kg

**SAR(1 g) = 0.658 W/kg; SAR(10 g) = 0.356 W/kg**

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



**Plot 47 UMTS Band IV Bottom Edge Middle (Hotspot On, Distance 10mm)**

Date: 9/28/2017

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

Medium parameters used:  $f = 1733 \text{ MHz}$ ;  $\sigma = 1.418 \text{ S/m}$ ;  $\epsilon_r = 51.915$ ;  $\rho = 1000 \text{ kg/m}^3$

Ambient Temperature:  $22.3 \text{ }^\circ\text{C}$       Liquid Temperature:  $21.5 \text{ }^\circ\text{C}$

Phantom section: Flat Section

DASY5 Configuration:

Sensor-Surface: 4mm (Mechanical Surface Detection)

Probe: EX3DV4 - SN3677; ConvF(8.39, 8.39, 8.39); Calibrated: 1/23/2017;

Electronics: DAE4 Sn1291; Calibrated: 1/19/2017

Phantom: SAM 1; Type: QD000P40CD; Serial: TP:1666

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

**Bottom Edge Middle/Area Scan (51x111x1):** Interpolated grid:  $dx=10\text{mm}$ ,  $dy=10\text{mm}$

Maximum value of SAR (interpolated) =  $0.487 \text{ W/kg}$

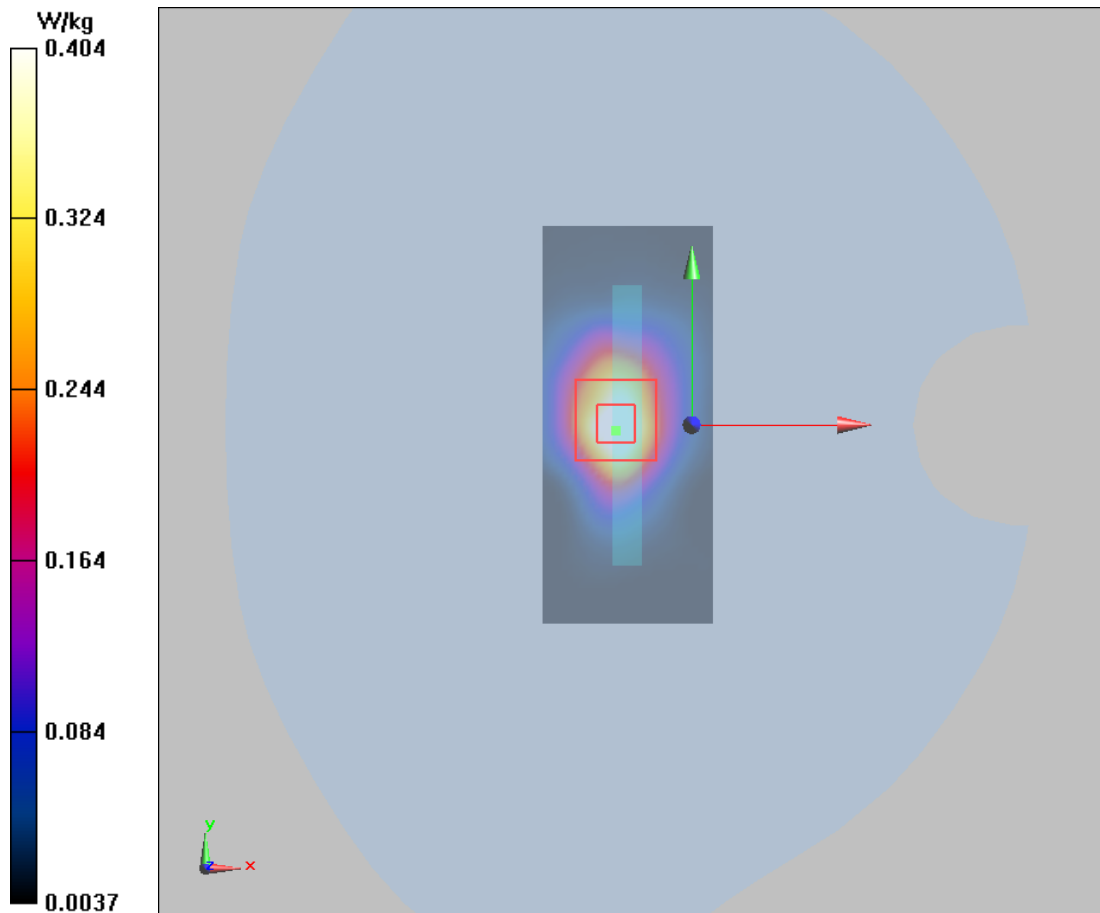
**Bottom Edge Middle/Zoom Scan (7x7x7)/Cube 0:** Measurement grid:  $dx=5\text{mm}$ ,  $dy=5\text{mm}$ ,  $dz=5\text{mm}$

Reference Value =  $16.60 \text{ V/m}$ ; Power Drift =  $0.10 \text{ dB}$

Peak SAR (extrapolated) =  $0.617 \text{ W/kg}$

**SAR(1 g) =  $0.392 \text{ W/kg}$ ; SAR(10 g) =  $0.196 \text{ W/kg}$**

Maximum value of SAR (measured) =  $0.404 \text{ W/kg}$



**Plot 48 UMTS Band IV Bottom Edge Middle (Hotspot Off+Sensor Off, Distance 6mm)**

Date: 9/28/2017

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

Medium parameters used:  $f = 1733$  MHz;  $\sigma = 1.418$  S/m;  $\epsilon_r = 51.915$ ;  $\rho = 1000$  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(8.39, 8.39, 8.39); Calibrated: 1/23/2017;

Electronics: DAE4 Sn1291; Calibrated: 1/19/2017

Phantom: SAM 1; Type: QD000P40CD; Serial: TP:1666

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

**Bottom Edge Middle/Area Scan (51x111x1):** Interpolated grid: dx=10mm, dy=10mm

Maximum value of SAR (interpolated) = 7.45 W/kg

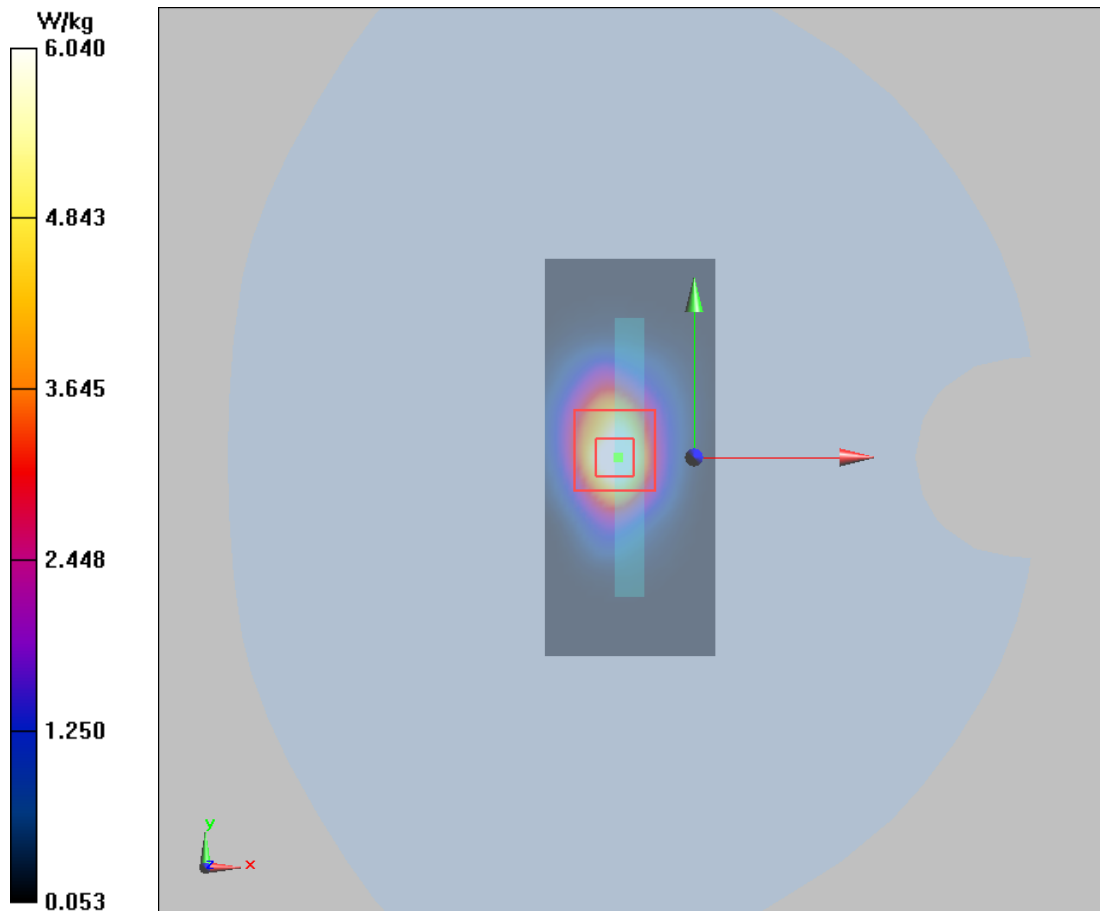
**Bottom Edge Middle/Zoom Scan (7x7x7)/Cube 0:** Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 61.88 V/m; Power Drift = 0.028 dB

Peak SAR (extrapolated) = 9.77 W/kg

**SAR(1 g) = 5.16 W/kg; SAR(10 g) = 2.207 W/kg**

Maximum value of SAR (measured) = 6.04 W/kg



**Plot 49 UMTS Band V Right Cheek Middle**

Date: 9/27/2017

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

Medium parameters used:  $f = 837$  MHz;  $\sigma = 0.934$  S/m;  $\epsilon_r = 41.065$ ;  $\rho = 1000$  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(9.31, 9.31, 9.31); Calibrated: 1/23/2017;

Electronics: DAE4 Sn1291; Calibrated: 1/19/2017

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 (71x121x1):** Interpolated grid: dx=15mm, dy=15mm

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

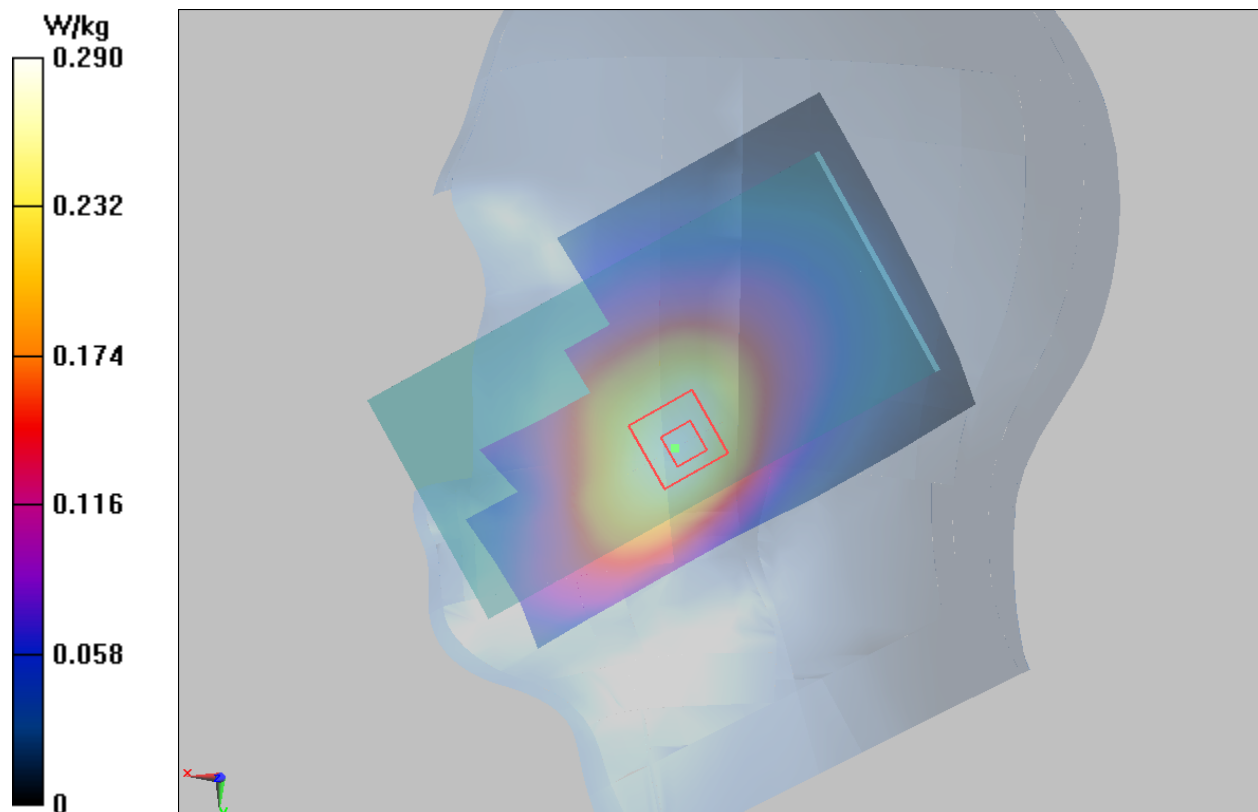
**Right Cheek Middle/Zoom Scan (5x5x7)/Cube 0:** Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 6.583 V/m; Power Drift = 0.14 dB

Peak SAR (extrapolated) = 0.340 W/kg

**SAR(1 g) = 0.273 W/kg; SAR(10 g) = 0.208 W/kg**

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



**Plot 50 UMTS Band V Front Side Middle (Distance 15mm)**

Date: 9/28/2017

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

Medium parameters used:  $f = 837$  MHz;  $\sigma = 1.013$  S/m;  $\epsilon_r = 55.395$ ;  $\rho = 1000$  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(9.74, 9.74, 9.74); Calibrated: 1/23/2017;

Electronics: DAE4 Sn1291; Calibrated: 1/19/2017

Phantom: SAM 2; Type: QD000P40CD; Serial: TP:1666

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

**Front Side Middle/Area Scan (71x121x1):** Interpolated grid: dx=15mm, dy=15mm

Maximum value of SAR (interpolated) = 0.351 W/kg

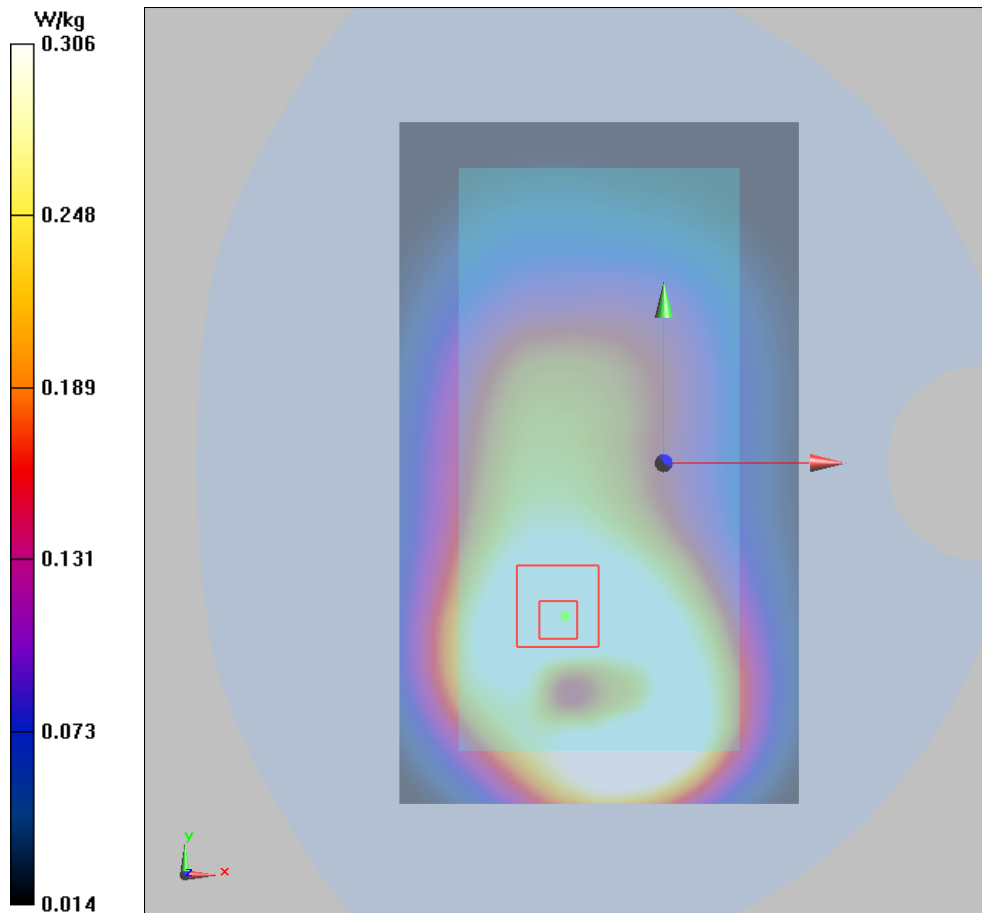
**Front Side Middle/Zoom Scan (5x5x7)/Cube 0:** Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 14.21 V/m; Power Drift = 0.014 dB

Peak SAR (extrapolated) = 0.587 W/kg

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

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



**Plot 51 UMTS Band V Back Side Middle (Distance 10mm)**

Date: 9/28/2017

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

Medium parameters used:  $f = 837$  MHz;  $\sigma = 1.001$  S/m;  $\epsilon_r = 54.375$ ;  $\rho = 1000$  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(9.74, 9.74, 9.74); Calibrated: 1/23/2017;

Electronics: DAE4 Sn1291; Calibrated: 1/19/2017

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 (71x121x1):** Interpolated grid: dx=15mm, dy=15mm

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

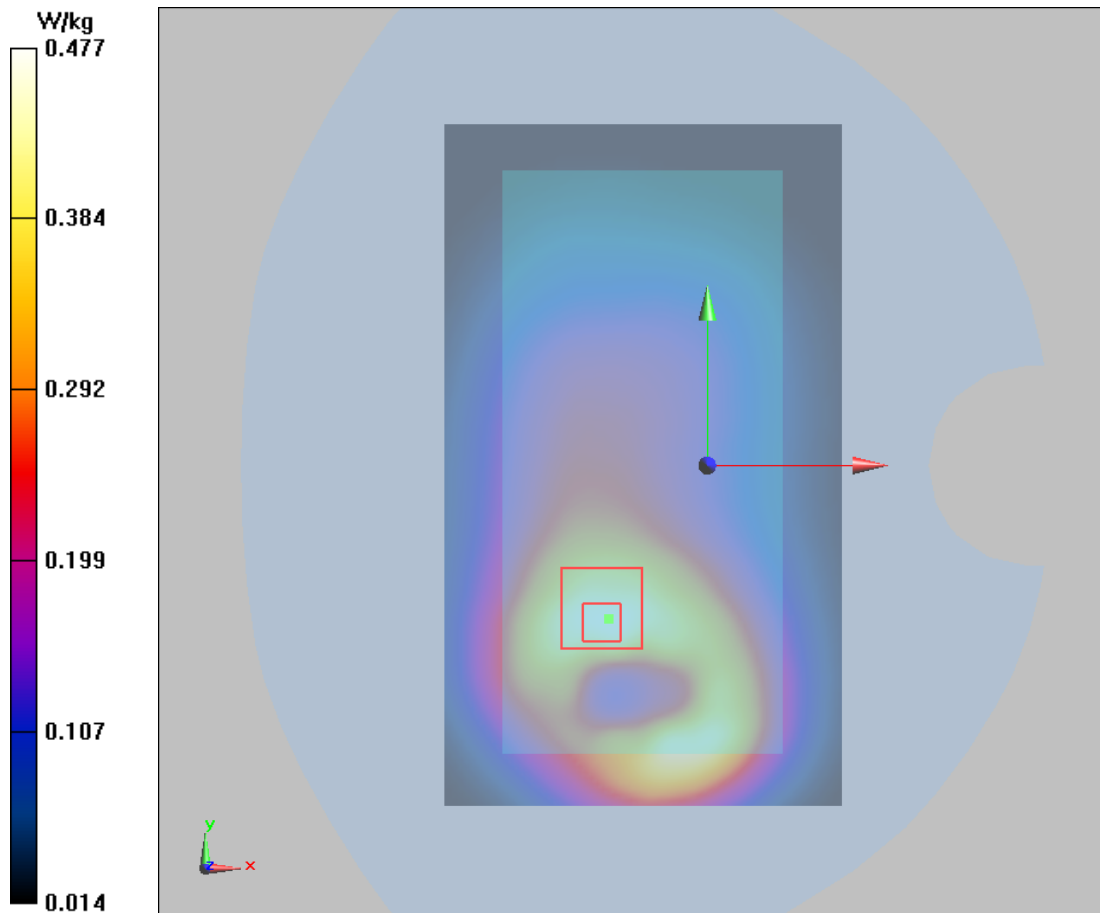
**Back Side Middle/Zoom Scan (5x5x7)/Cube 0:** Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 14.78 V/m; Power Drift = 0.06 dB

Peak SAR (extrapolated) = 0.630 W/kg

**SAR(1 g) = 0.447 W/kg; SAR(10 g) = 0.307 W/kg**

Maximum value of SAR (measured) = 0.477 W/kg



**Plot 52 LTE Band 2 1RB Right Cheek Middle (Hotspot Off, Battery 2)**

Date: 9/27/2017

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

Medium parameters used:  $f = 1880$  MHz;  $\sigma = 1.37$  S/m;  $\epsilon_r = 40.575$ ;  $\rho = 1000$  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 – SN7351; ConvF(8.59, 8.59, 8.59); Calibrated: 12/20/2016;

Electronics: DAE4 - SD 000 D04 BK - SN918; Calibrated: 6/26/2017

Phantom: SAM 2; Type: SAM;

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

**Right Cheek Middle/Area Scan (71x121x1):** Interpolated grid: dx=15mm, dy=15mm

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

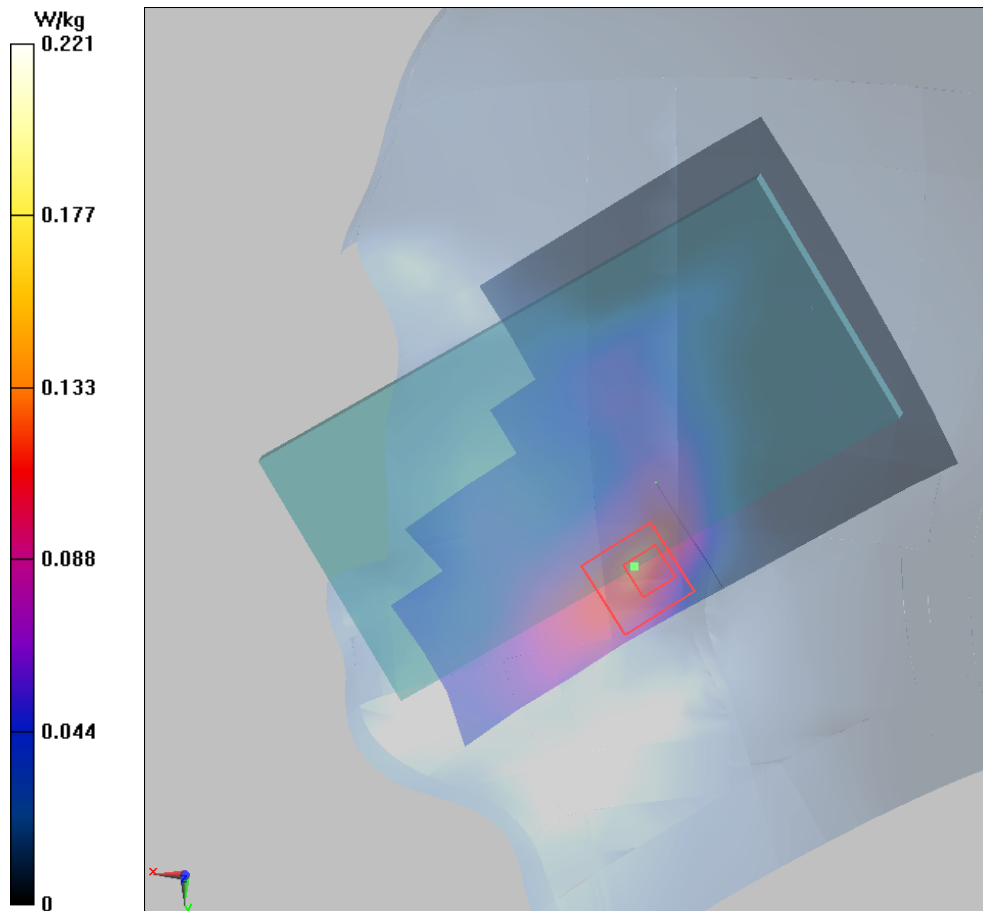
**Right Cheek Middle/Zoom Scan (5x5x7)/Cube 0:** Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 0.56 V/m; Power Drift = 0.004dB

Peak SAR (extrapolated) = 0.281 W/kg

**SAR(1 g) = 0.205 W/kg; SAR(10 g) = 0.168 W/kg**

Maximum value of SAR (measured) = 0.221 W/kg





**Plot 53 LTE Band 2 1RB Front Side Middle (Hotspot Off, Distance 15mm)**

Date: 9/28/2017

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

Medium parameters used:  $f = 1880$  MHz;  $\sigma = 1.49$  S/m;  $\epsilon_r = 51.207$ ;  $\rho = 1000$  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 - SN7351; ConvF(8.14, 8.14, 8.14); Calibrated: 12/20/2016;

Electronics: DAE4 - SD 000 D04 BK - SN918; Calibrated: 6/26/2017

Phantom: SAM 2; Type: SAM;

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

**Front Side Middle/Area Scan (71x121x1):** Interpolated grid: dx=15mm, dy=15mm

Maximum value of SAR (interpolated) = 0.549 W/kg

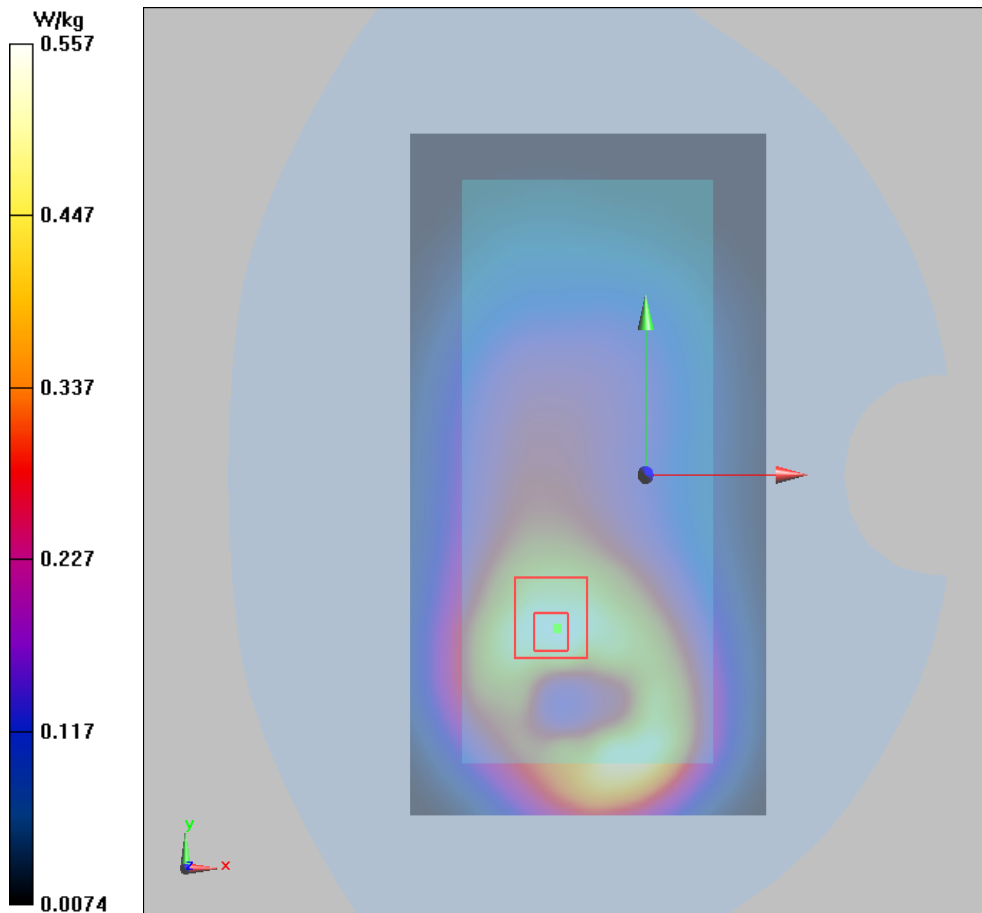
**Front Side Middle/Zoom Scan (5x5x7)/Cube 0:** Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 5.82 V/m; Power Drift = 0.008 dB

Peak SAR (extrapolated) = 0.827 W/kg

**SAR(1 g) = 0.504W/kg; SAR(10 g) = 0.285 W/kg**

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



**Plot 54 LTE Band 2 50%RB Bottom Edge Middle (Hotspot On, Distance 10mm)**

Date: 9/28/2017

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

Medium parameters used:  $f = 1880$  MHz;  $\sigma = 1.49$  S/m;  $\epsilon_r = 51.207$ ;  $\rho = 1000$  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 - SN7351; ConvF(8.14, 8.14, 8.14); Calibrated: 12/20/2016;

Electronics: DAE4 - SD 000 D04 BK - SN918; Calibrated: 6/26/2017

Phantom: SAM 2; Type: SAM;

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

**Bottom Edge Middle/Area Scan (51x111x1):** Interpolated grid: dx=10mm, dy=10mm

Maximum value of SAR (interpolated) = 0.80 W/kg

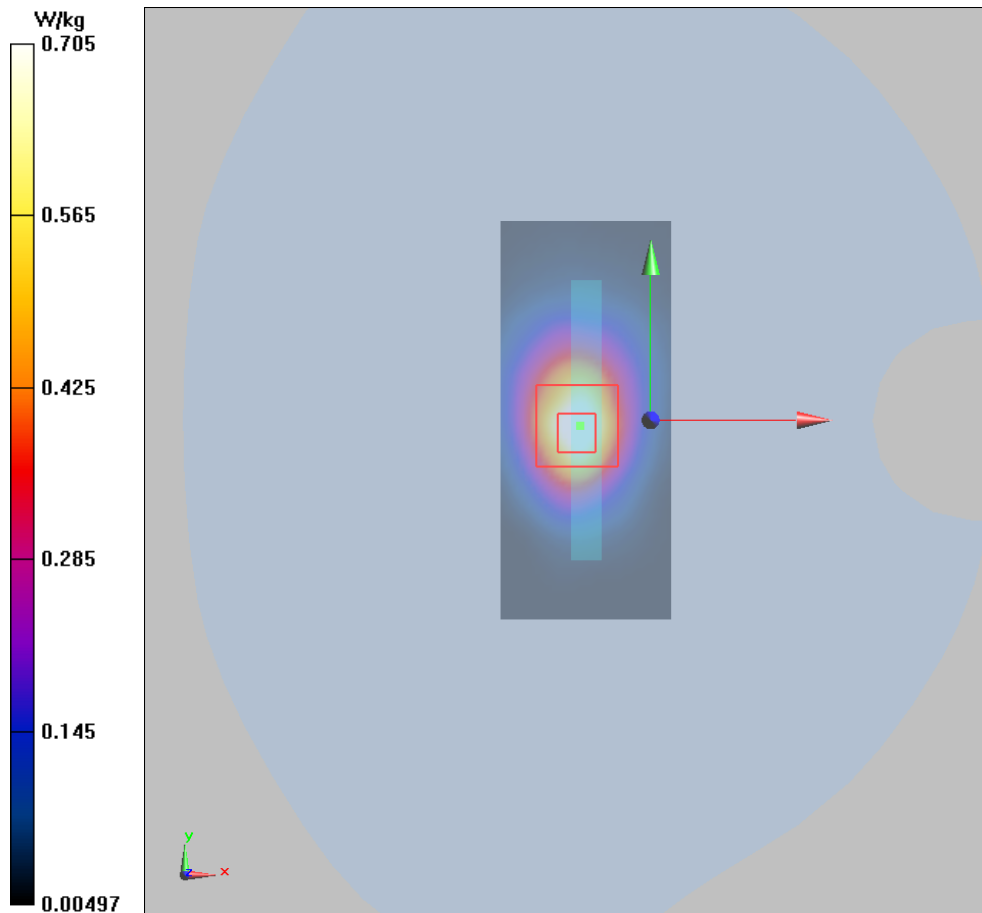
**Bottom Edge Middle/Zoom Scan (7x7x7)/Cube 0:** Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 21.58 V/m; Power Drift = 0.076 dB

Peak SAR (extrapolated) = 1.06 W/kg

**SAR(1 g) = 0.625 W/kg; SAR(10 g) = 0.328 W/kg**

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



**Plot 55 LTE Band 2 1RB Bottom Edge Middle (Hotspot Off+Sensor Off, Distance 6mm)**

Date: 9/28/2017

Communication System: UID 0, LTE\_FDD (0); Frequency: 1880 MHz; Duty Cycle: 1:1

Medium parameters used:  $f = 1880$  MHz;  $\sigma = 1.49$  S/m;  $\epsilon_r = 51.207$ ;  $\rho = 1000$  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 - SN7351; ConvF(8.14, 8.14, 8.14); Calibrated: 12/20/2016;

Electronics: DAE4 - SD 000 D04 BK - SN918; Calibrated: 6/26/2017

Phantom: SAM 1; Type: QD000P40CD; Serial: TP:1666

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

**Bottom Edge Middle/Area Scan (51x111x1):** Interpolated grid: dx=10mm, dy=10mm

Maximum value of SAR (interpolated) = 4.92 W/kg

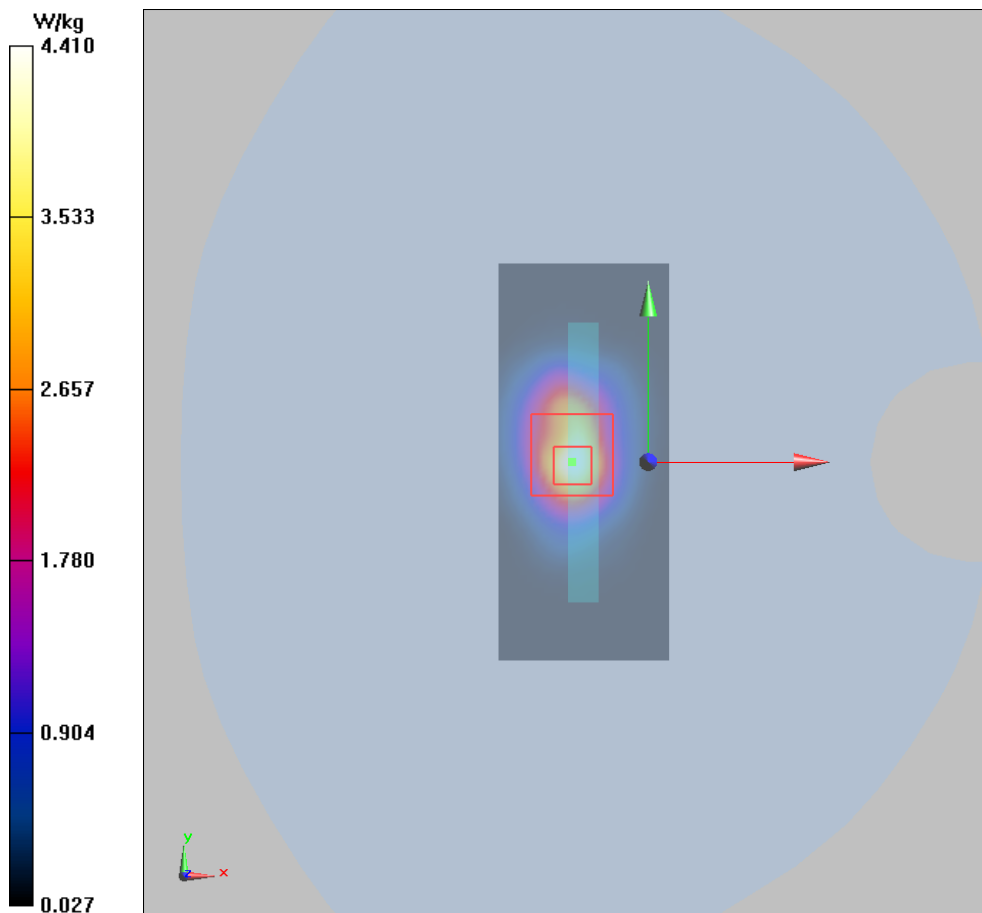
**Bottom Edge Middle/Zoom Scan (7x7x7)/Cube 0:** Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 50.01 V/m; Power Drift = 0.061dB

Peak SAR (extrapolated) = 5.98 W/kg

**SAR(1 g) = 4.32 W/kg; SAR(10 g) = 2.204 W/kg**

Maximum value of SAR (measured) = 4.41 W/kg



**Plot 56 CA\_2C 1RB Right Cheek Middle (Battery 2)**

Date: 11/16/2018

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

Medium parameters used:  $f = 1880$  MHz;  $\sigma = 1.37$  S/m;  $\epsilon_r = 40.57$ ;  $\rho = 1000$  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 (71x121x1):** Interpolated grid: dx=15 mm, dy=15 mm

Maximum value of SAR (interpolated) = 0.115 W/kg

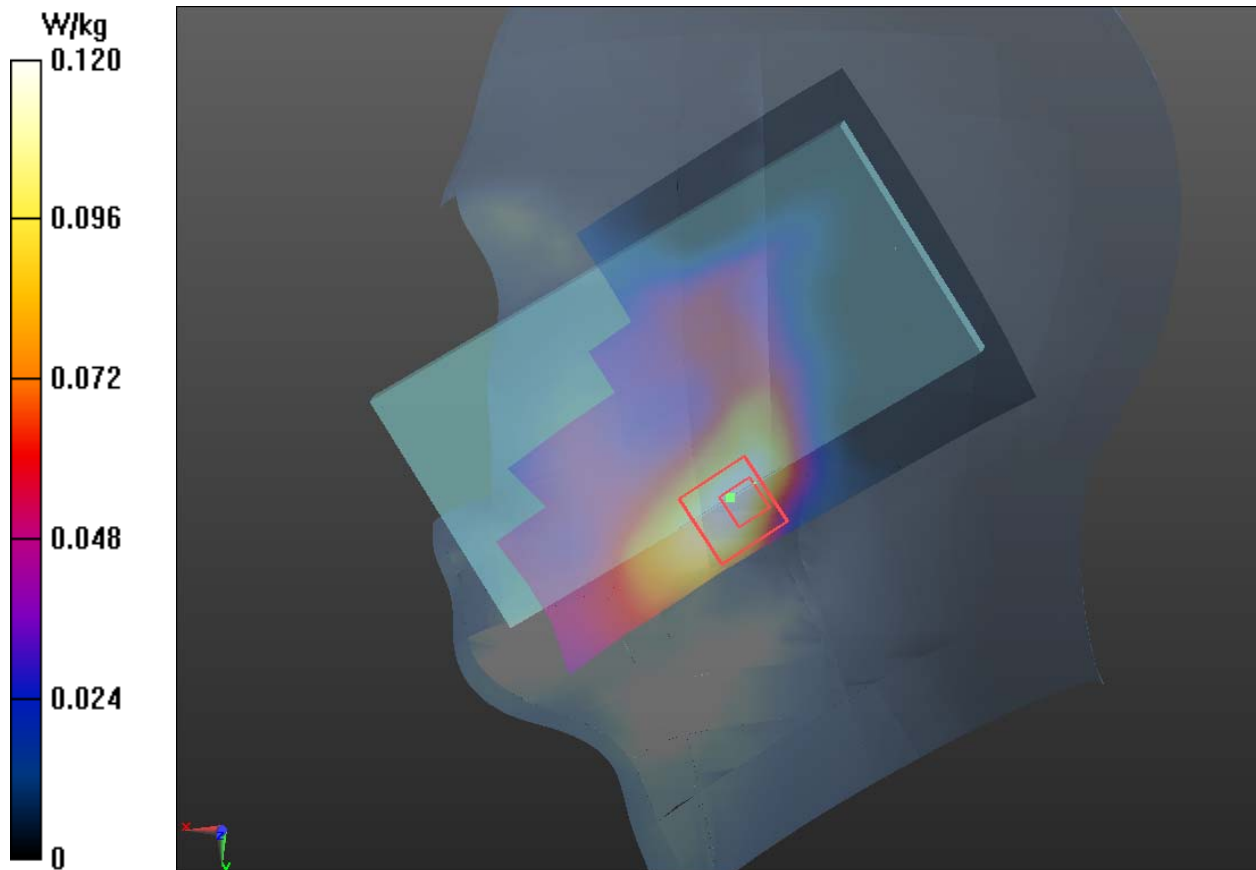
**Right Cheek Middle/Zoom Scan (5x5x7)/Cube 0:** Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 1.830 V/m; Power Drift = 0.100 dB

Peak SAR (extrapolated) = 0.172 W/kg

**SAR(1 g) = 0.112 W/kg; SAR(10 g) = 0.070 W/kg**

Maximum value of SAR (measured) = 0.120 W/kg



**Plot 57 CA\_2C 1RB Front Side Middle (Distance 15mm)**

Date: 11/16/2018

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

Medium parameters used:  $f = 1880$  MHz;  $\sigma = 1.48$  S/m;  $\epsilon_r = 51.60$ ;  $\rho = 1000$  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)

**Front Side Middle/Area Scan (71x121x1):** Interpolated grid: dx=15 mm, dy=15 mm

Maximum value of SAR (interpolated) = 0.462 W/kg

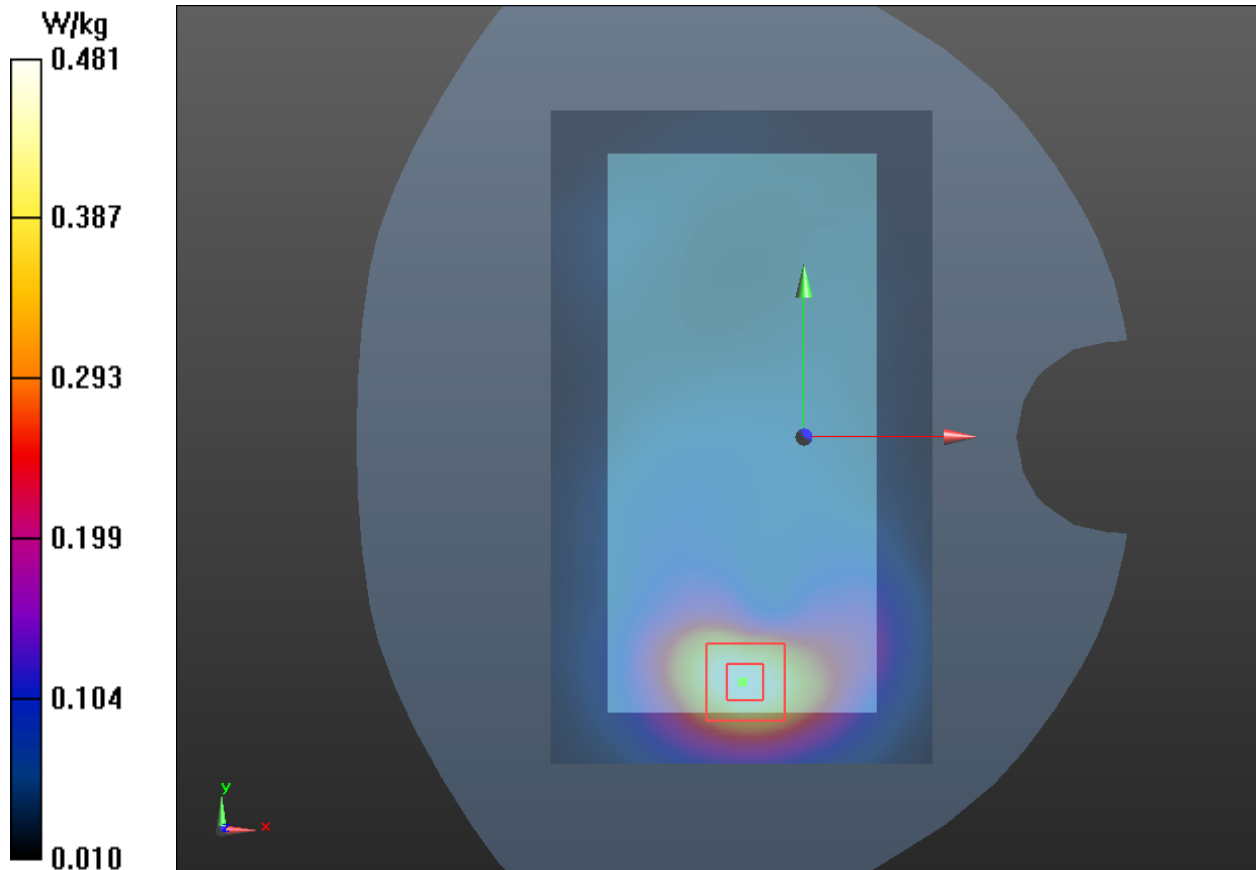
**Front Side Middle/Zoom Scan (5x5x7)/Cube 0:** Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 1.380 V/m; Power Drift = 0.042 dB

Peak SAR (extrapolated) = 0.544 W/kg

**SAR(1 g) = 0.430 W/kg; SAR(10 g) = 0.250 W/kg**

Maximum value of SAR (measured) = 0.481 W/kg



**Plot 58 CA\_2C 50%RB Bottom Edge Middle (Distance 10mm)**

Date: 11/16/2018

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

Medium parameters used:  $f = 1880$  MHz;  $\sigma = 1.48$  S/m;  $\epsilon_r = 51.60$ ;  $\rho = 1000$  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)

**Bottom Edge Middle/Area Scan (51x111x1):** Interpolated grid: dx=10 mm, dy=10 mm

Maximum value of SAR (interpolated) = 0.448 W/kg

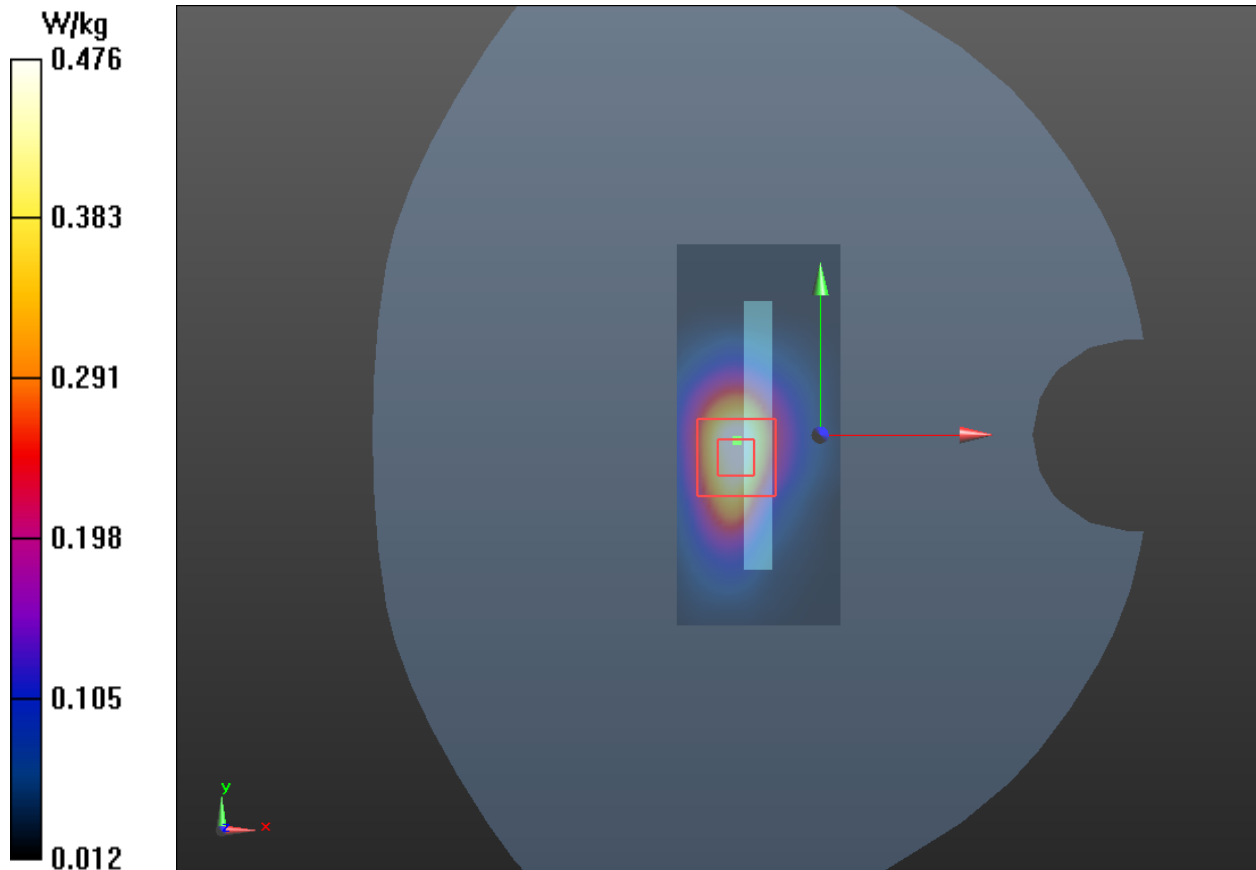
**Bottom Edge Middle/Zoom Scan (7x7x7)/Cube 0:** Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 12.29 V/m; Power Drift = 0.027 dB

Peak SAR (extrapolated) = 0.499 W/kg

**SAR(1 g) = 0.451 W/kg; SAR(10 g) = 0.240 W/kg**

Maximum value of SAR (measured) = 0.476 W/kg



**Plot 59 CA\_2C 50%RB Bottom Edge Middle (hotspot off+sensor on, Distance 0mm)**

Date: 11/16/2018

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

Medium parameters used:  $f = 1880$  MHz;  $\sigma = 1.48$  S/m;  $\epsilon_r = 51.60$ ;  $\rho = 1000$  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)

**Bottom Edge Middle/Area Scan (51x111x1):** Interpolated grid: dx=10 mm, dy=10 mm

Maximum value of SAR (interpolated) = 3.360 W/kg

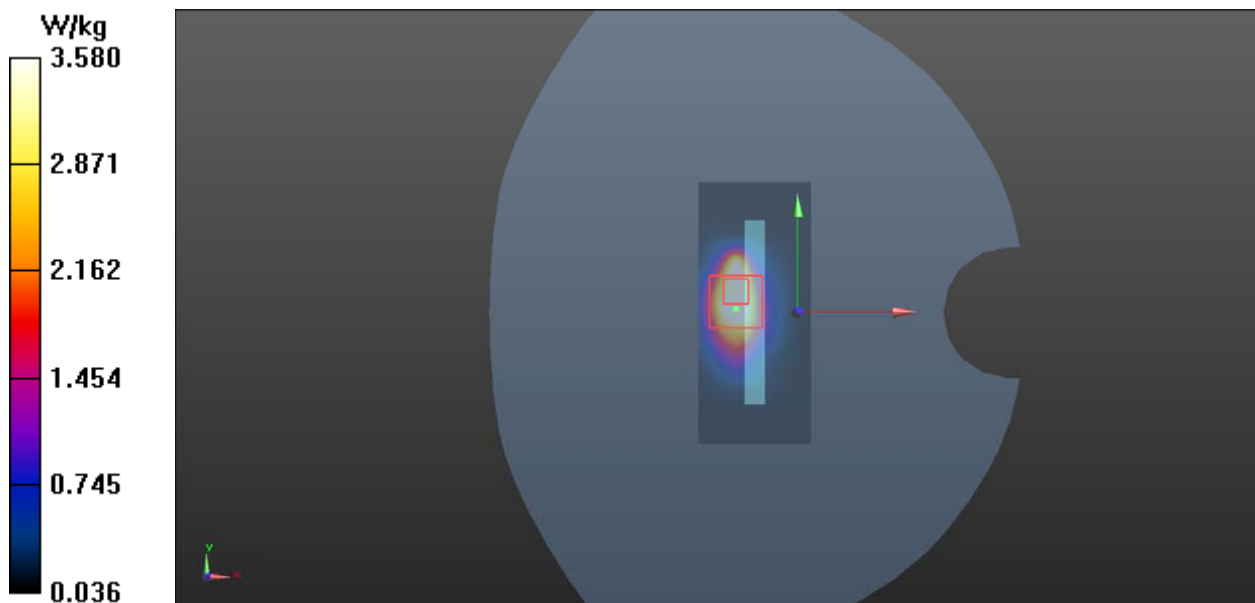
**Bottom Edge Middle/Zoom Scan (7x7x7)/Cube 0:** Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 39.80 V/m; Power Drift = -0.130 dB

Peak SAR (extrapolated) = 6.720 W/kg

**SAR(1 g) = 3.100 W/kg; SAR(10 g) = 1.550 W/kg**

Maximum value of SAR (measured) = 3.580 W/kg



**Plot 60 CA\_2C 1RB Bottom Edge Middle (Distance 6mm)**

Date: 11/16/2018

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

Medium parameters used:  $f = 1880$  MHz;  $\sigma = 1.48$  S/m;  $\epsilon_r = 51.60$ ;  $\rho = 1000$  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)

**Bottom Edge Middle/Area Scan (51x111x1):** Interpolated grid: dx=10 mm, dy=10 mm

Maximum value of SAR (interpolated) = 2.320 W/kg

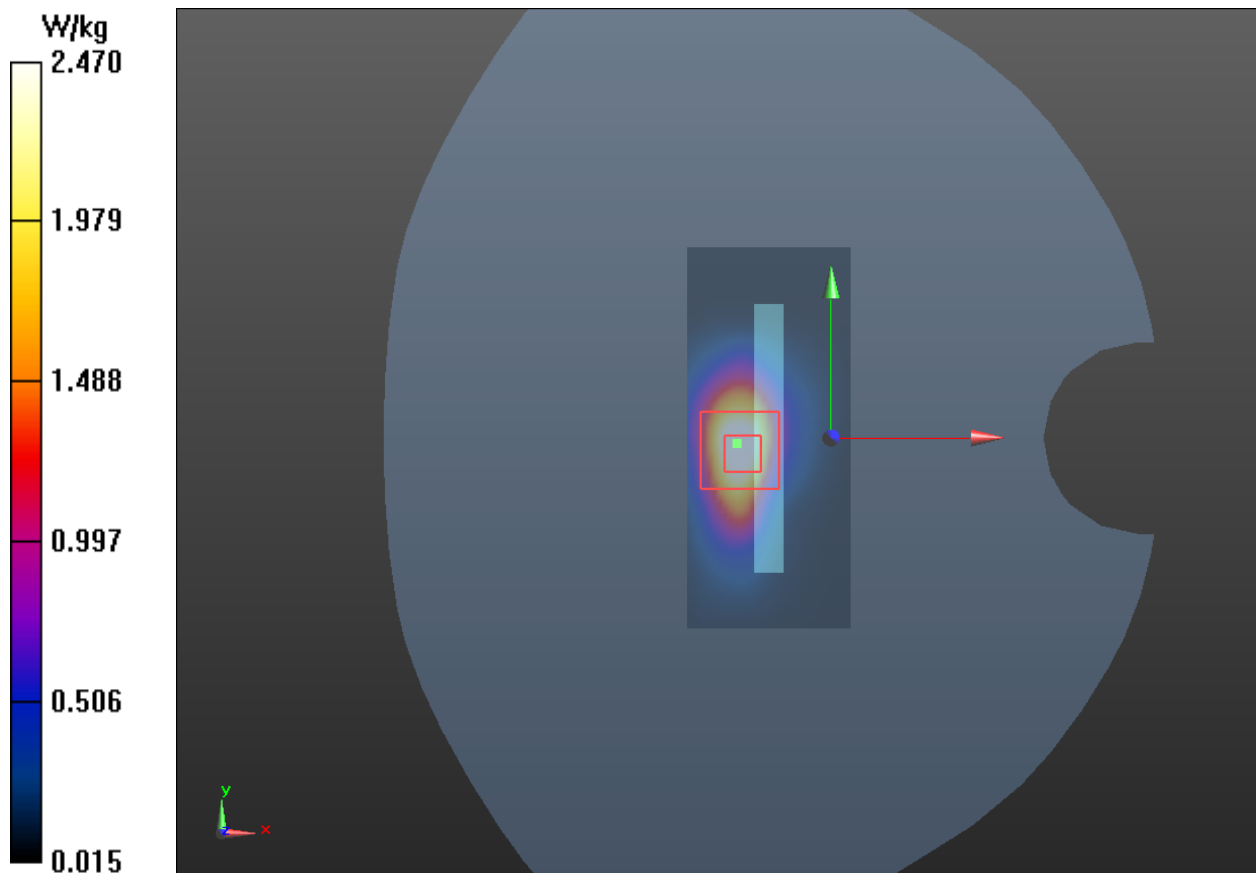
**Bottom Edge Middle/Zoom Scan (7x7x7)/Cube 0:** Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 24.70 V/m; Power Drift = 0.075 dB

Peak SAR (extrapolated) = 3.460 W/kg

**SAR(1 g) = 2.300 W/kg; SAR(10 g) = 1.310 W/kg**

Maximum value of SAR (measured) = 2.470 W/kg





**Plot 61 LTE Band 4 1RB Left Cheek Low (REC On+Hotspot Off)**

Date: 9/27/2017

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

Medium parameters used:  $f = 1720$  MHz;  $\sigma = 1.336$  S/m;  $\epsilon_r = 38.677$ ;  $\rho = 1000$  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(8.60, 8.60, 8.60); Calibrated: 1/23/2017;

Electronics: DAE4 Sn1291; Calibrated: 1/19/2017

Phantom: SAM 1; Type: QD000P40CD; Serial: TP:1666

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

**Left Cheek Low/Area Scan (71x121x1):** Interpolated grid: dx=15mm, dy=15mm

Maximum value of SAR (interpolated) = 0.230 W/kg

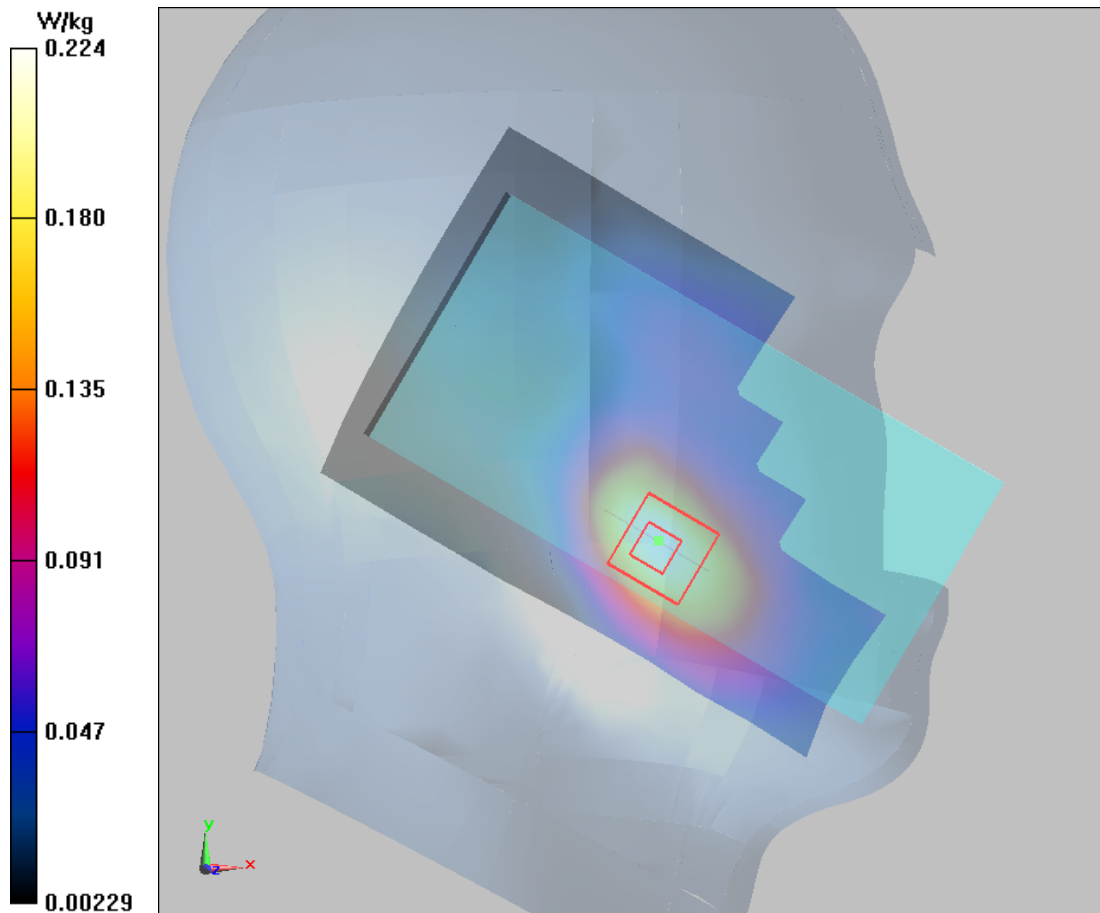
**Left Cheek Low/Zoom Scan (5x5x7)/Cube 0:** Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 3.856 V/m; Power Drift = 0.088 dB

Peak SAR (extrapolated) = 0.315 W/kg

**SAR(1 g) = 0.209 W/kg; SAR(10 g) = 0.131 W/kg**

Maximum value of SAR (measured) = 0.224 W/kg



**Plot 62 LTE Band 4 1RB Back Side Low (REC Off+Hotspot Off, Distance 15mm)**

Date: 9/28/2017

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

Medium parameters used:  $f = 1720$  MHz;  $\sigma = 1.406$  S/m;  $\epsilon_r = 51.959$ ;  $\rho = 1000$  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(8.39, 8.39, 8.39); Calibrated: 1/23/2017;

Electronics: DAE4 Sn1291; Calibrated: 1/19/2017

Phantom: SAM 1; Type: QD000P40CD; Serial: TP:1666

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

**Back Side Low/Area Scan (71x121x1):** Interpolated grid: dx=15mm, dy=15mm

Maximum value of SAR (interpolated) = 0.802 W/kg

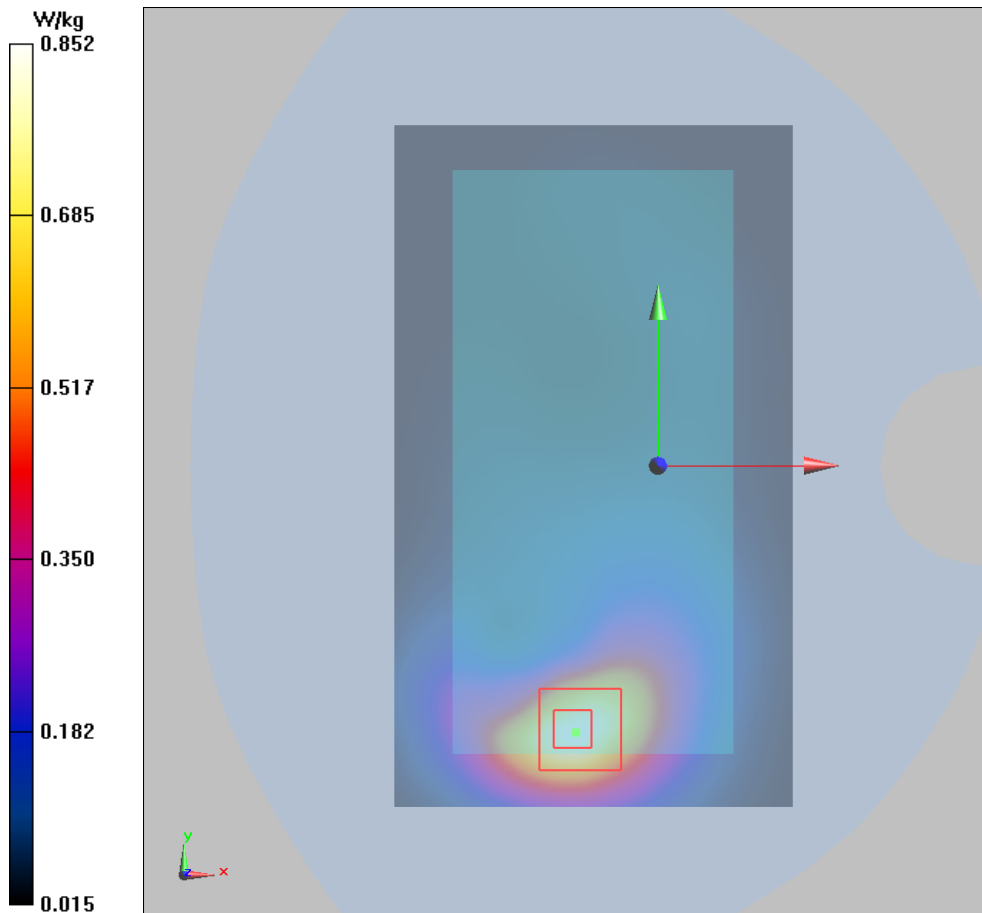
**Back Side Low/Zoom Scan (5x5x7)/Cube 0:** Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 6.1 V/m; Power Drift = 0.017 dB

Peak SAR (extrapolated) = 1.01 W/kg

**SAR(1 g) = 0.722 W/kg; SAR(10 g) = 0.403 W/kg**

Maximum value of SAR (measured) = 0.852 W/kg



**Plot 63 LTE Band 4 50%RB Bottom Edge High (Distance 10mm)**

Date: 9/28/2017

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

Medium parameters used:  $f = 1745$  MHz;  $\sigma = 1.429$  S/m;  $\epsilon_r = 51.879$ ;  $\rho = 1000$  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(8.39, 8.39, 8.39); Calibrated: 1/23/2017;

Electronics: DAE4 Sn1291; Calibrated: 1/19/2017

Phantom: SAM 1; Type: QD000P40CD; Serial: TP:1666

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

**Bottom Edge High/Area Scan (51x111x1):** Interpolated grid: dx=10mm, dy=10mm

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

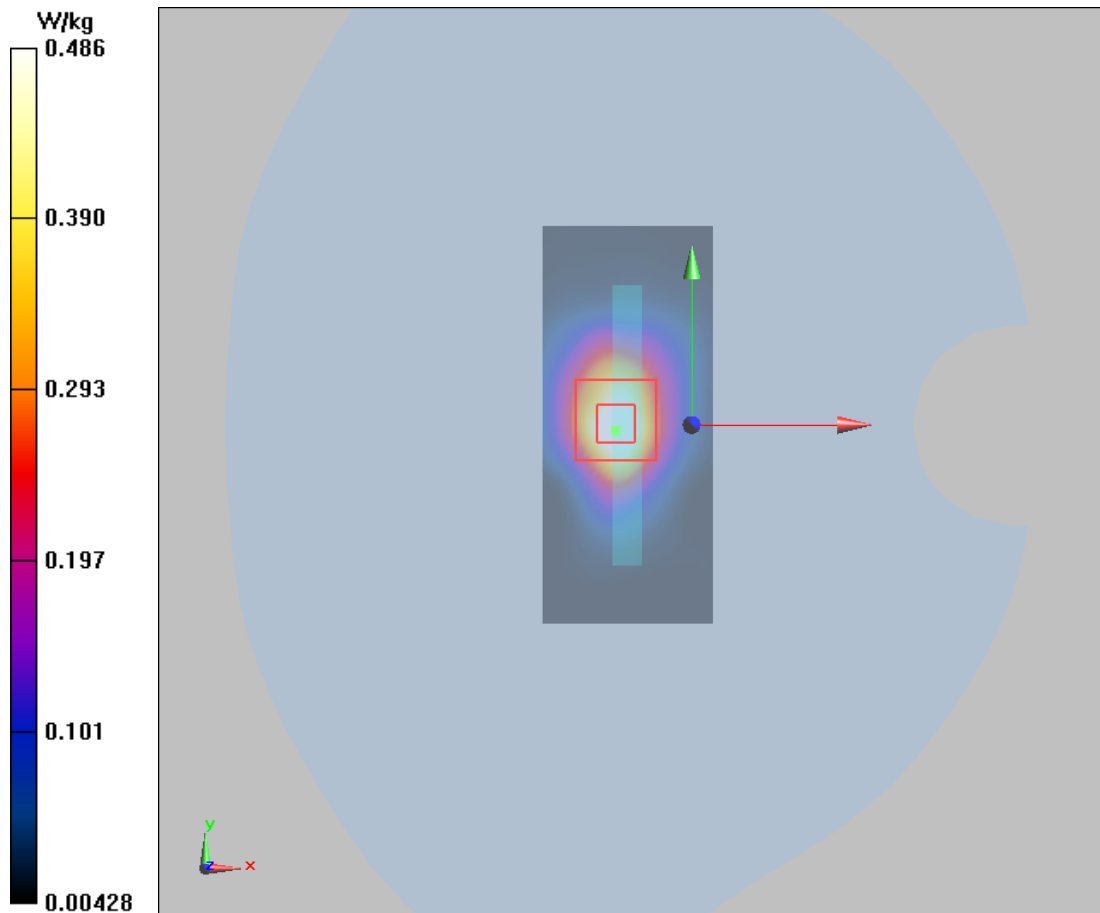
**Bottom Edge High/Zoom Scan (7x7x7)/Cube 0:** Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 16.73 V/m; Power Drift = 0.029 dB

Peak SAR (extrapolated) = 0.753 W/kg

**SAR(1 g) = 0.442 W/kg; SAR(10 g) = 0.241 W/kg**

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



**Plot 64 LTE Band 4 100%RB Bottom Edge Low (Hotspot Off+Sensor On, Distance 0mm)**

Date: 9/28/2017

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

Medium parameters used:  $f = 1720$  MHz;  $\sigma = 1.406$  S/m;  $\epsilon_r = 51.959$ ;  $\rho = 1000$  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(8.39, 8.39, 8.39); Calibrated: 1/23/2017;

Electronics: DAE4 Sn1291; Calibrated: 1/19/2017

Phantom: SAM 1; Type: QD000P40CD; Serial: TP:1666

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

**Bottom Edge Low/Area Scan (51x111x1):** Interpolated grid: dx=10mm, dy=10mm

Maximum value of SAR (interpolated) = 5.61 W/kg

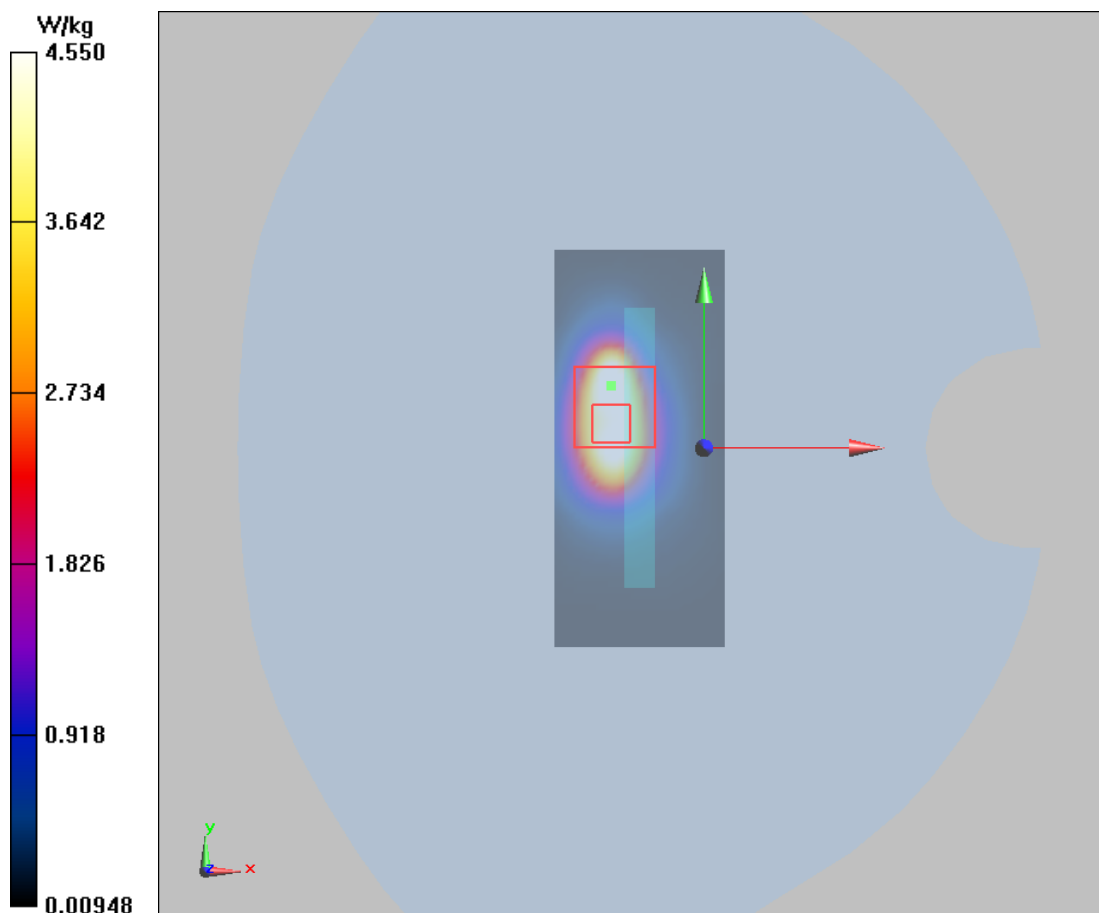
**Bottom Edge Low/Zoom Scan (7x7x7)/Cube 0:** Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 45.63 V/m; Power Drift = 0.052 dB

Peak SAR (extrapolated) = 9.65 W/kg

**SAR(1 g) = 4.04 W/kg; SAR(10 g) = 1.99 W/kg**

Maximum value of SAR (measured) = 4.55 W/kg



**Plot 65 LTE Band 5 1RB Right Cheek Low**

Date: 9/27/2017

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

Medium parameters used:  $f = 829$  MHz;  $\sigma = 0.932$  S/m;  $\epsilon_r = 42.527$ ;  $\rho = 1000$  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(9.31, 9.31, 9.31); Calibrated: 1/23/2017;

Electronics: DAE4 Sn1291; Calibrated: 1/19/2017

Phantom: SAM 2; Type: QD000P40CD; Serial: TP:1666

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

**Right Cheek Low/Area Scan (71x121x1):** Interpolated grid: dx=15mm, dy=15mm

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

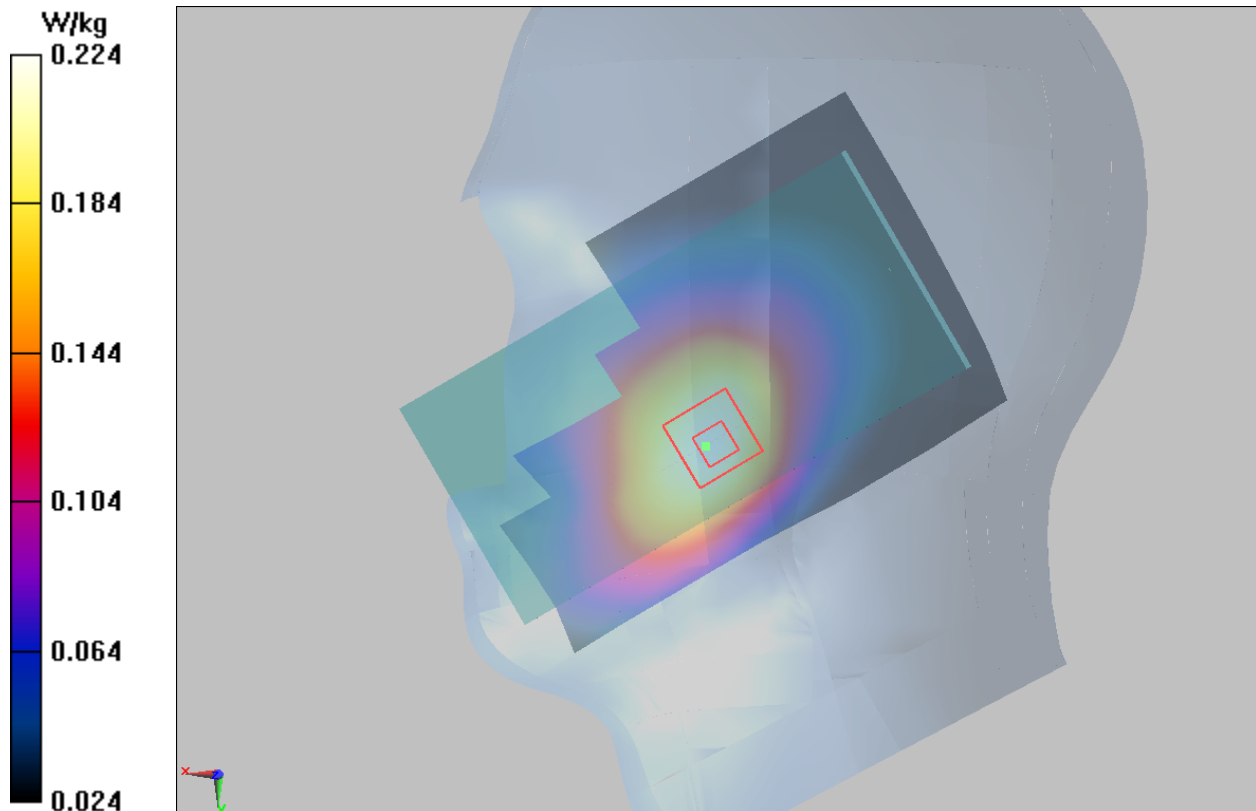
**Right Cheek Low/Zoom Scan (5x5x7)/Cube 0:** Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 5.599 V/m; Power Drift = 0.041 dB

Peak SAR (extrapolated) = 0.266 W/kg

**SAR(1 g) = 0.215 W/kg; SAR(10 g) = 0.164 W/kg**

Maximum value of SAR (measured) = 0.224 W/kg



**Plot 66 LTE Band 5 1RB Back Side Low (Distance 15mm)**

Date: 9/28/2017

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

Medium parameters used:  $f = 829 \text{ MHz}$ ;  $\sigma = 1.005 \text{ S/m}$ ;  $\epsilon_r = 55.487$ ;  $\rho = 1000 \text{ kg/m}^3$

Ambient Temperature:  $22.3 \text{ }^\circ\text{C}$       Liquid Temperature:  $21.5 \text{ }^\circ\text{C}$

Phantom section: Flat Section

DASY5 Configuration:

Sensor-Surface: 4mm (Mechanical Surface Detection)

Probe: EX3DV4 - SN3677; ConvF(9.74, 9.74, 9.74); Calibrated: 1/23/2017;

Electronics: DAE4 Sn1291; Calibrated: 1/19/2017

Phantom: SAM 2; Type: QD000P40CD; Serial: TP:1666

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

**Back Side Low/Area Scan (71x121x1):** Interpolated grid:  $dx=15\text{mm}$ ,  $dy=15\text{mm}$

Maximum value of SAR (interpolated) =  $0.249 \text{ W/kg}$

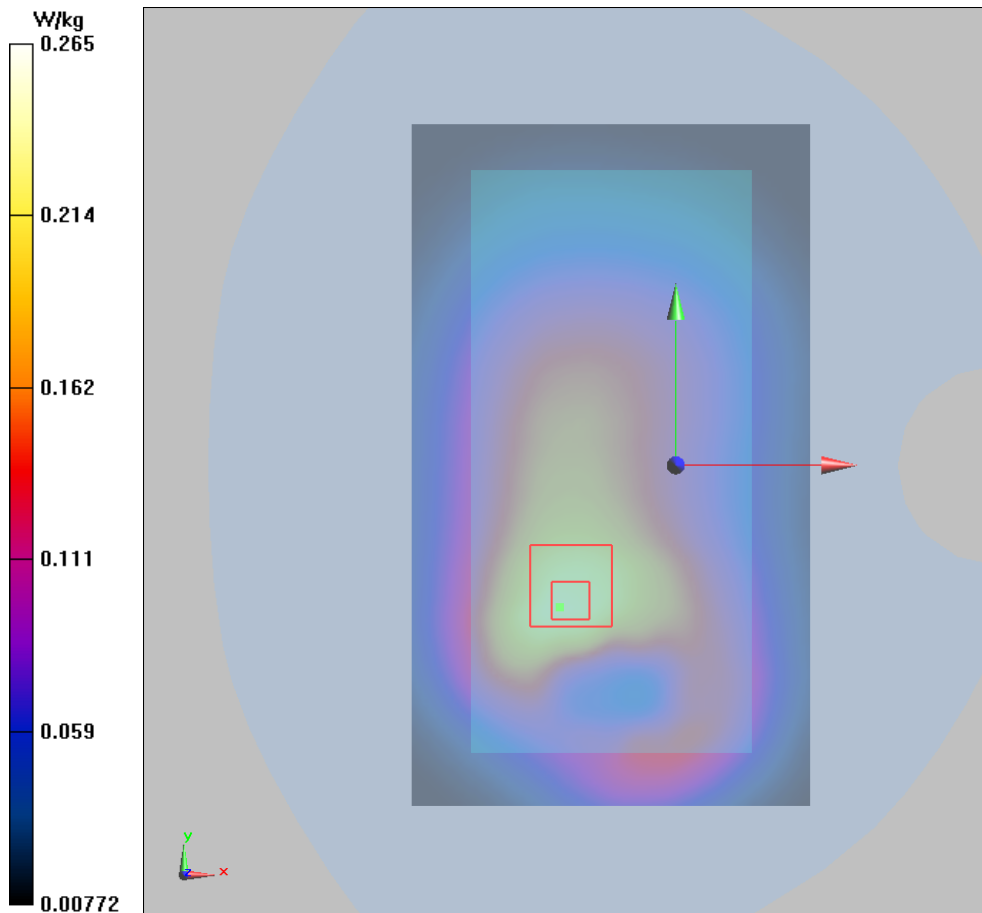
**Back Side Low/Zoom Scan (5x5x7)/Cube 0:** Measurement grid:  $dx=8\text{mm}$ ,  $dy=8\text{mm}$ ,  $dz=5\text{mm}$

Reference Value =  $12.62 \text{ V/m}$ ; Power Drift =  $0.018 \text{ dB}$

Peak SAR (extrapolated) =  $0.321 \text{ W/kg}$

**SAR(1 g) =  $0.22 \text{ W/kg}$ ; SAR(10 g) =  $0.157 \text{ W/kg}$**

Maximum value of SAR (measured) =  $0.265 \text{ W/kg}$



**Plot 67 LTE Band 5 1RB Back Side Low (Distance 10mm)**

Date: 9/28/2017

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

Medium parameters used:  $f = 829 \text{ MHz}$ ;  $\sigma = 1.005 \text{ S/m}$ ;  $\epsilon_r = 55.487$ ;  $\rho = 1000 \text{ kg/m}^3$

Ambient Temperature:  $22.3 \text{ }^\circ\text{C}$       Liquid Temperature:  $21.5 \text{ }^\circ\text{C}$

Phantom section: Flat Section

DASY5 Configuration:

Sensor-Surface: 4mm (Mechanical Surface Detection)

Probe: EX3DV4 - SN3677; ConvF(9.74, 9.74, 9.74); Calibrated: 1/23/2017;

Electronics: DAE4 Sn1291; Calibrated: 1/19/2017

Phantom: SAM 2; Type: QD000P40CD; Serial: TP:1666

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

**Back Side Low/Area Scan (71x121x1):** Interpolated grid:  $dx=15\text{mm}$ ,  $dy=15\text{mm}$

Maximum value of SAR (interpolated) =  $0.414 \text{ W/kg}$

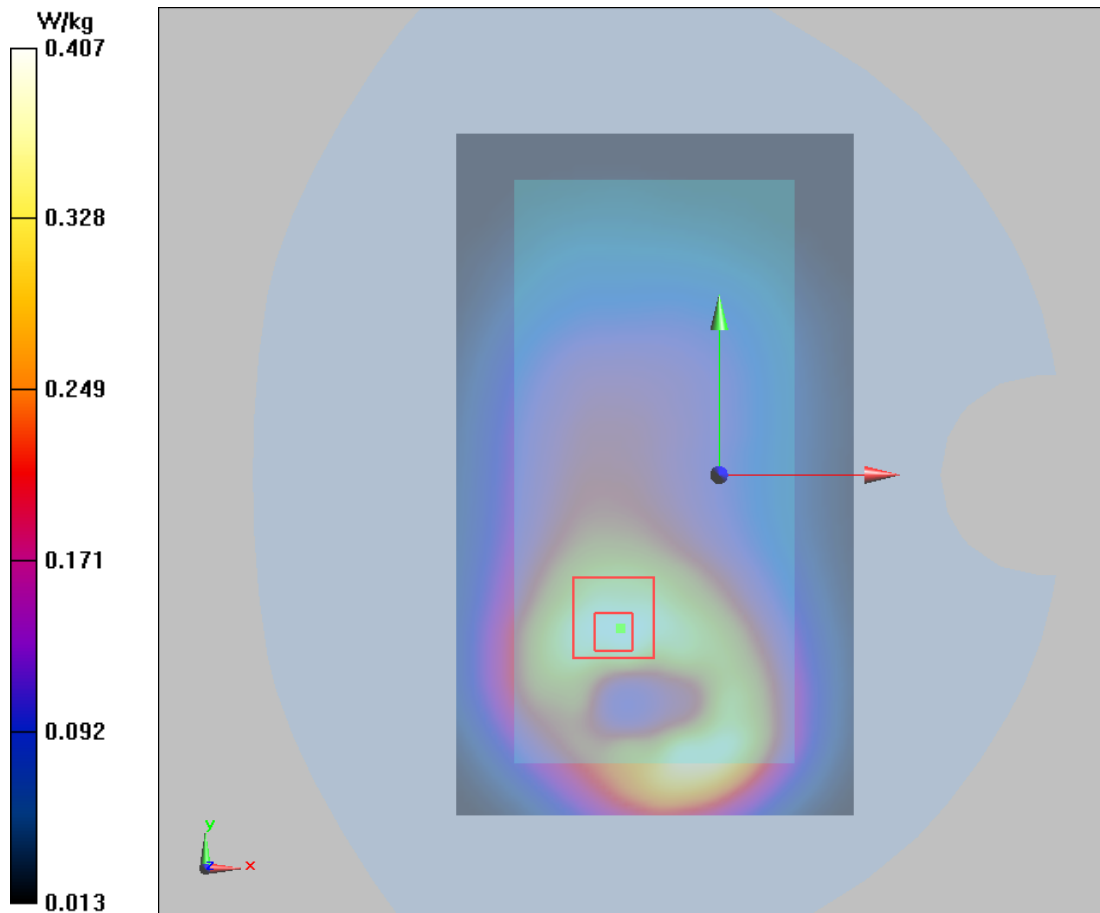
**Back Side Low/Zoom Scan (5x5x7)/Cube 0:** Measurement grid:  $dx=8\text{mm}$ ,  $dy=8\text{mm}$ ,  $dz=5\text{mm}$

Reference Value =  $13.83 \text{ V/m}$ ; Power Drift =  $-0.02 \text{ dB}$

Peak SAR (extrapolated) =  $0.539 \text{ W/kg}$

**SAR(1 g) =  $0.382 \text{ W/kg}$ ; SAR(10 g) =  $0.262 \text{ W/kg}$**

Maximum value of SAR (measured) =  $0.407 \text{ W/kg}$



**Plot 68 LTE Band 7 1RB Right Cheek Low (REC On+Hotspot Off, Battery 2)**

Date: 9/27/2017

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

Medium parameters used:  $f = 2510$  MHz;  $\sigma = 1.91$  S/m;  $\epsilon_r = 40.624$ ;  $\rho = 1000$  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 - SN7351; ConvF(7.43, 7.43, 7.43); Calibrated: 12/20/2016;

Electronics: DAE4 - SD 000 D04 BK - SN918; Calibrated: 6/26/2017

Phantom: SAM 2; Type: SAM;

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

**Right Cheek Low/Area Scan (91x151x1):** Interpolated grid: dx=12mm, dy=12mm

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

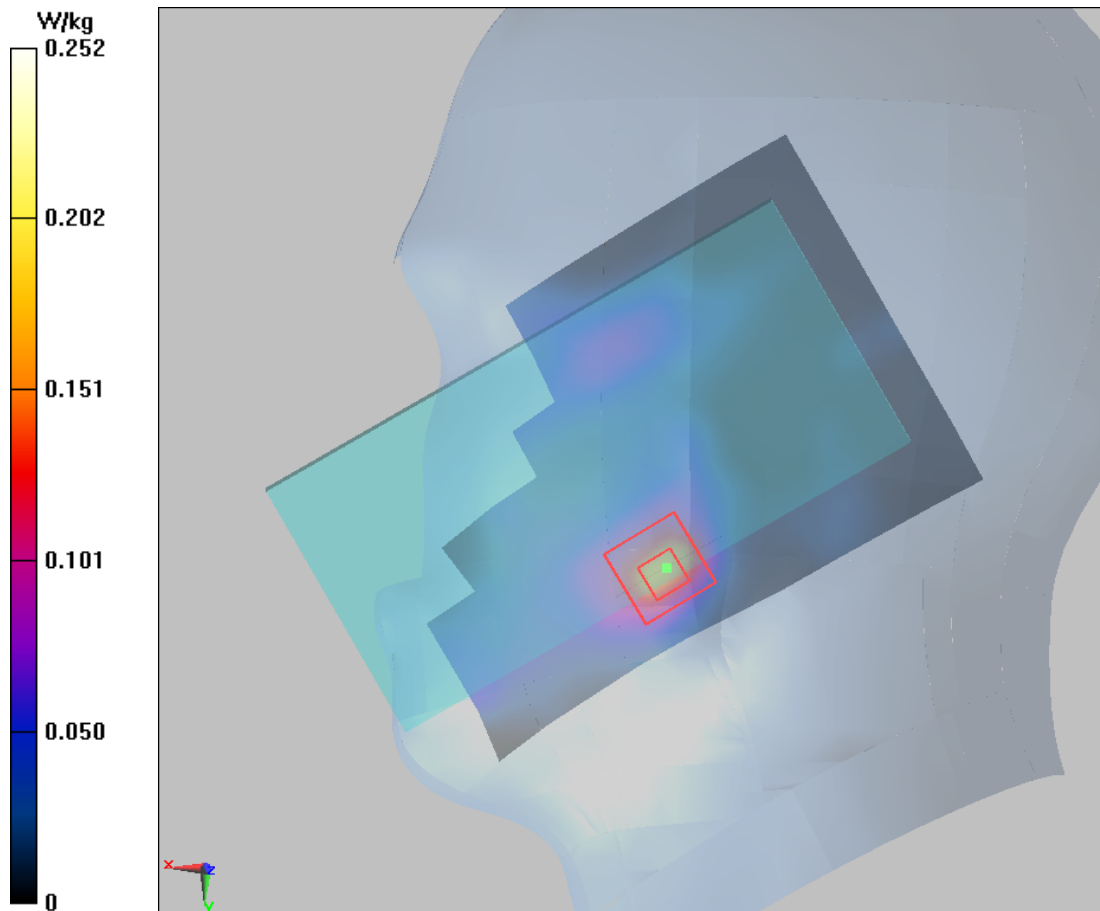
**Right Cheek Low/Zoom Scan (7x7x7)/Cube 0:** Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 2.390 V/m; Power Drift = -0.078 dB

Peak SAR (extrapolated) = 0.288 W/kg

**SAR(1 g) = 0.229 W/kg; SAR(10 g) = 0.102 W/kg**

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





**Plot 69 LTE Band 7 1RB Front Side Low (Hotspot Off, Distance 15mm)**

Date: 9/28/2017

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

Medium parameters used:  $f = 2510$  MHz;  $\sigma = 2.03$  S/m;  $\epsilon_r = 51.469$ ;  $\rho = 1000$  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 - SN7351; ConvF(7.52, 7.52, 7.52); Calibrated: 12/20/2016;

Electronics: DAE4 - SD 000 D04 BK - SN918; Calibrated: 6/26/2017

Phantom: SAM 2; Type: SAM;

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

**Front Side Low/Area Scan (91x151x1):** Interpolated grid: dx=12mm, dy=12mm

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

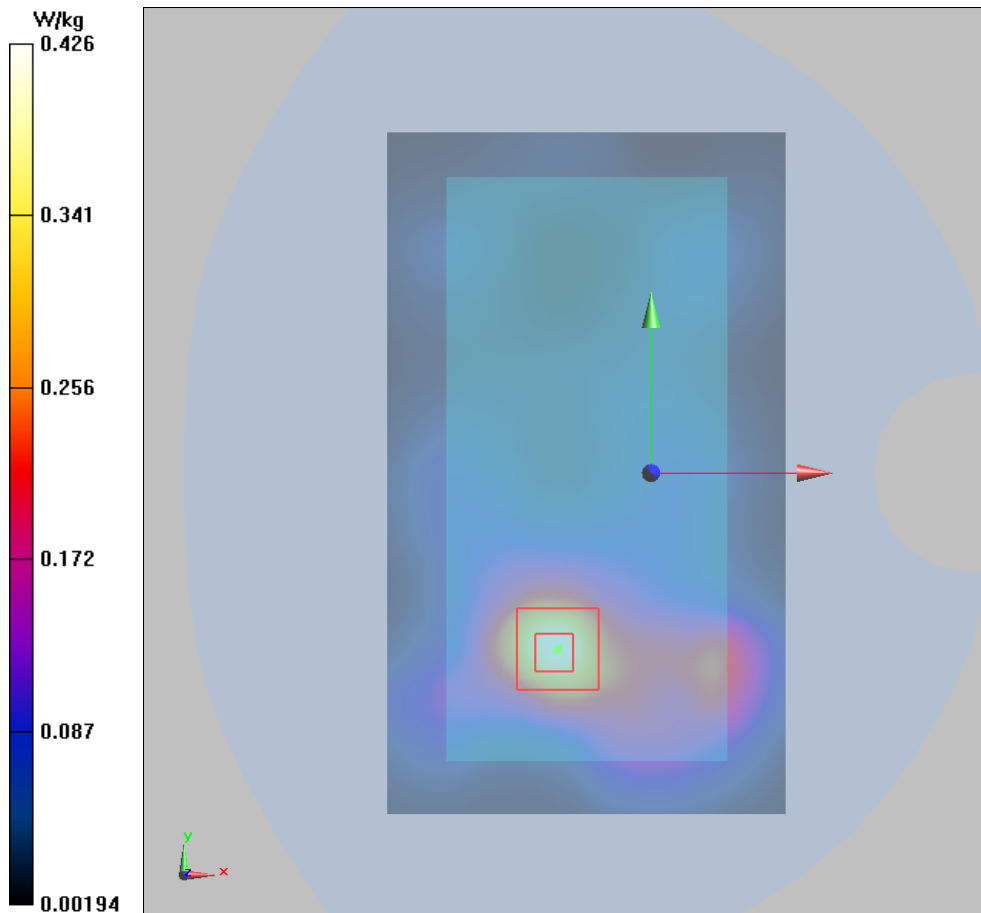
**Front Side Low/Zoom Scan (7x7x7)/Cube 0:** Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 3.876 V/m; Power Drift = -0.067 dB

Peak SAR (extrapolated) = 0.701 W/kg

**SAR(1 g) = 0.348 W/kg; SAR(10 g) = 0.194 W/kg**

Maximum value of SAR (measured) = 0.426 W/kg



**Plot 70 LTE Band 7 1RB Front Side Low (Distance 10mm)**

Date: 9/28/2017

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

Medium parameters used:  $f = 2510$  MHz;  $\sigma = 2.03$  S/m;  $\epsilon_r = 51.469$ ;  $\rho = 1000$  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 - SN7351; ConvF(7.52, 7.52, 7.52); Calibrated: 12/20/2016;

Electronics: DAE4 - SD 000 D04 BK - SN918; Calibrated: 6/26/2017

Phantom: SAM 2; Type: SAM;

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

**Front Side Low/Area Scan (91x151x1):** Interpolated grid: dx=12mm, dy=12mm

Maximum value of SAR (interpolated) = 0.511 W/kg

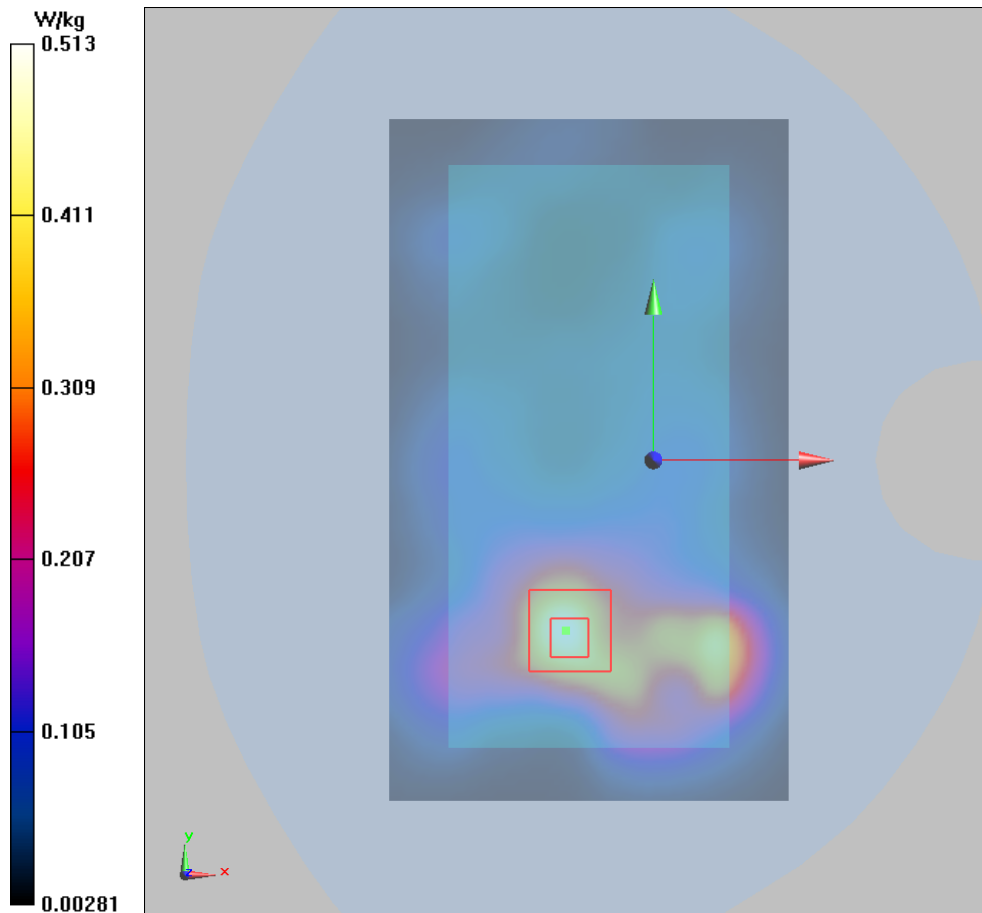
**Front Side Low/Zoom Scan (7x7x7)/Cube 0:** Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 4.438 V/m; Power Drift = -0.032 dB

Peak SAR (extrapolated) = 0.857 W/kg

**SAR(1 g) = 0.466 W/kg; SAR(10 g) = 0.243 W/kg**

Maximum value of SAR (measured) = 0.513 W/kg



**Plot 71 CA\_7C 1RB Right Cheek Low (Battery 2)**

Date: 10/26/2018

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

Medium parameters used:  $f = 2510$  MHz;  $\sigma = 1.91$  S/m;  $\epsilon_r = 40.624$ ;  $\rho = 1000$  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(7.16, 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)

**Right Cheek Low/Area Scan (91x151x1):** Interpolated grid: dx=12 mm, dy=12 mm

Maximum value of SAR (interpolated) = 0.145 W/kg

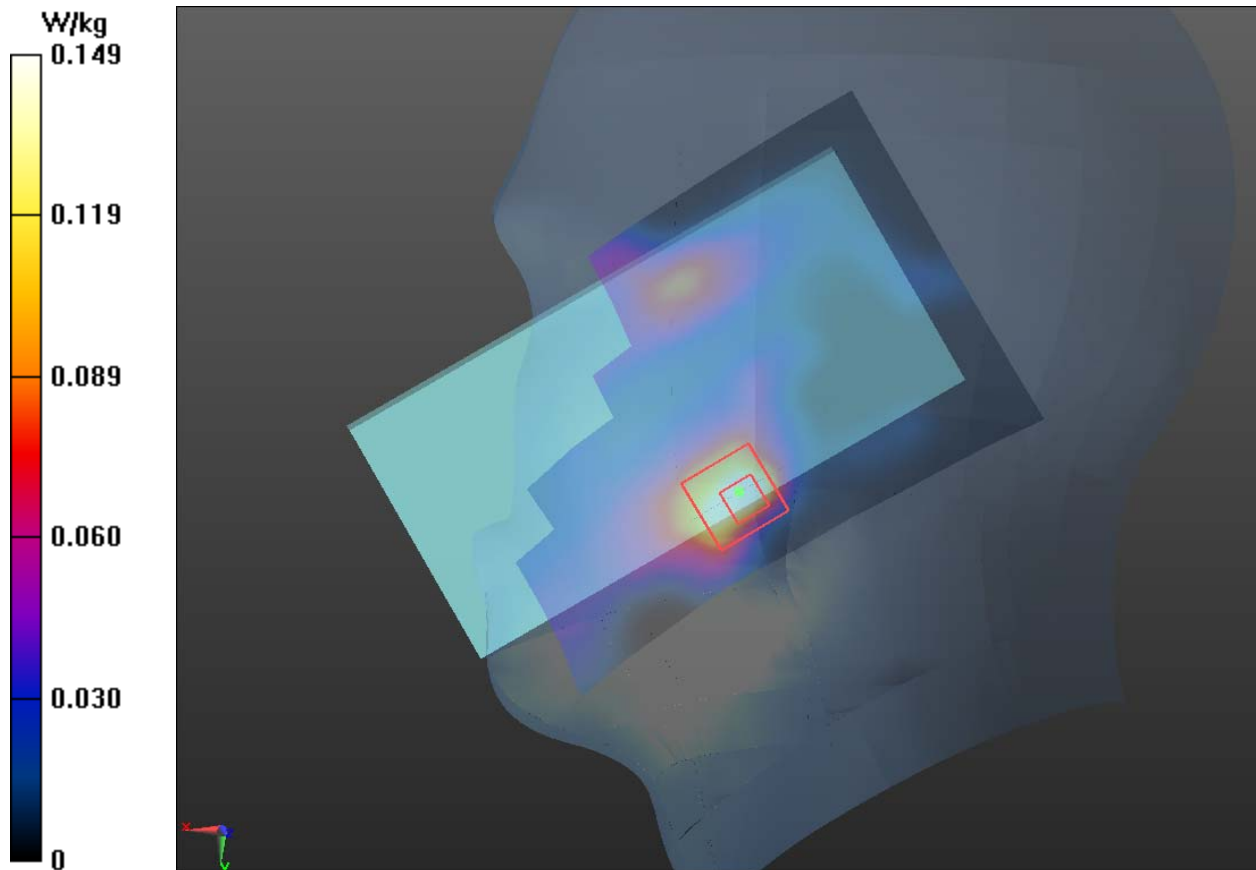
**Right Cheek Low/Zoom Scan (7x7x7)/Cube 0:** Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 2.180 V/m; Power Drift = 0.084 dB

Peak SAR (extrapolated) = 0.252 W/kg

**SAR(1 g) = 0.141 W/kg; SAR(10 g) = 0.069 W/kg**

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



**Plot 72 CA\_7C 1RB Front Side Low(Distance 15mm)**

Date: 10/26/2018

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

Medium parameters used:  $f = 2510$  MHz;  $\sigma = 2.03$  S/m;  $\epsilon_r = 51.469$ ;  $\rho = 1000$  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)

**Front Side Low/Area Scan (91x151x1):** Interpolated grid: dx=12 mm, dy=12 mm

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

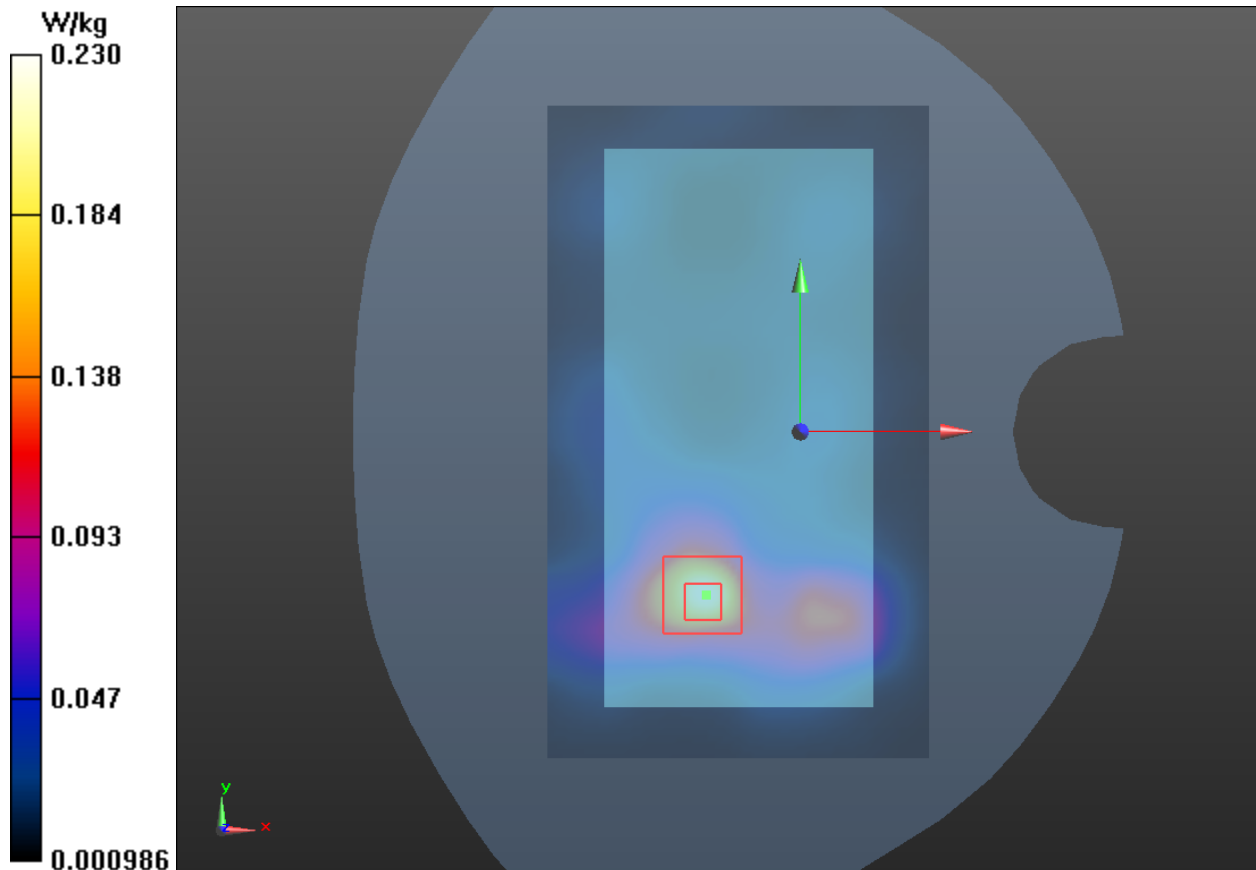
**Front Side Low/Zoom Scan (7x5x7)/Cube 0:** Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 2.152 V/m; Power Drift = 0.057 dB

Peak SAR (extrapolated) = 0.410 W/kg

**SAR(1 g) = 0.224 W/kg; SAR(10 g) = 0.115 W/kg**

Maximum value of SAR (measured) = 0.230 W/kg



**Plot 73 CA\_7C 1RB Front Side Low(Distance 10mm, hotspot on)**

Date: 10/26/2018

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

Medium parameters used:  $f = 2510$  MHz;  $\sigma = 2.03$  S/m;  $\epsilon_r = 51.469$ ;  $\rho = 1000$  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)

**Front Side Low/Area Scan (91x151x1):** Interpolated grid: dx=12 mm, dy=12 mm

Maximum value of SAR (interpolated) = 0.412 W/kg

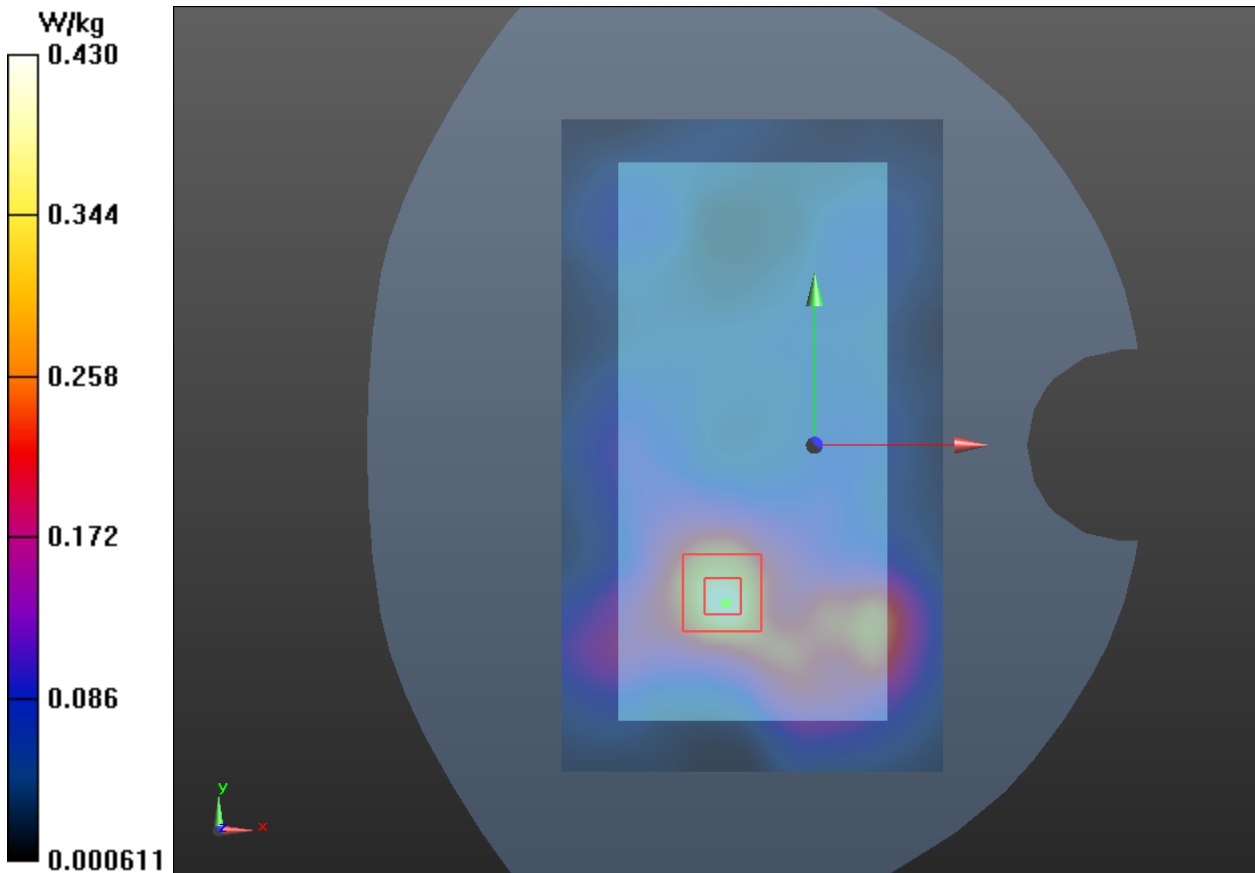
**Front Side Low/Zoom Scan (7x7x7)/Cube 0:** Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 4.271 V/m; Power Drift = 0.041 dB

Peak SAR (extrapolated) = 0.523 W/kg

**SAR(1 g) = 0.401 W/kg; SAR(10 g) = 0.207 W/kg**

Maximum value of SAR (measured) = 0.430 W/kg



**Plot 74 LTE Band 12 1RB Right Cheek High (Battery 2)**

Date: 9/27/2017

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(9.58, 9.58, 9.58); Calibrated: 1/23/2017;

Electronics: DAE4 Sn1291; Calibrated: 1/19/2017

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 (71x121x1):** Interpolated grid: dx=15mm, dy=15mm

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

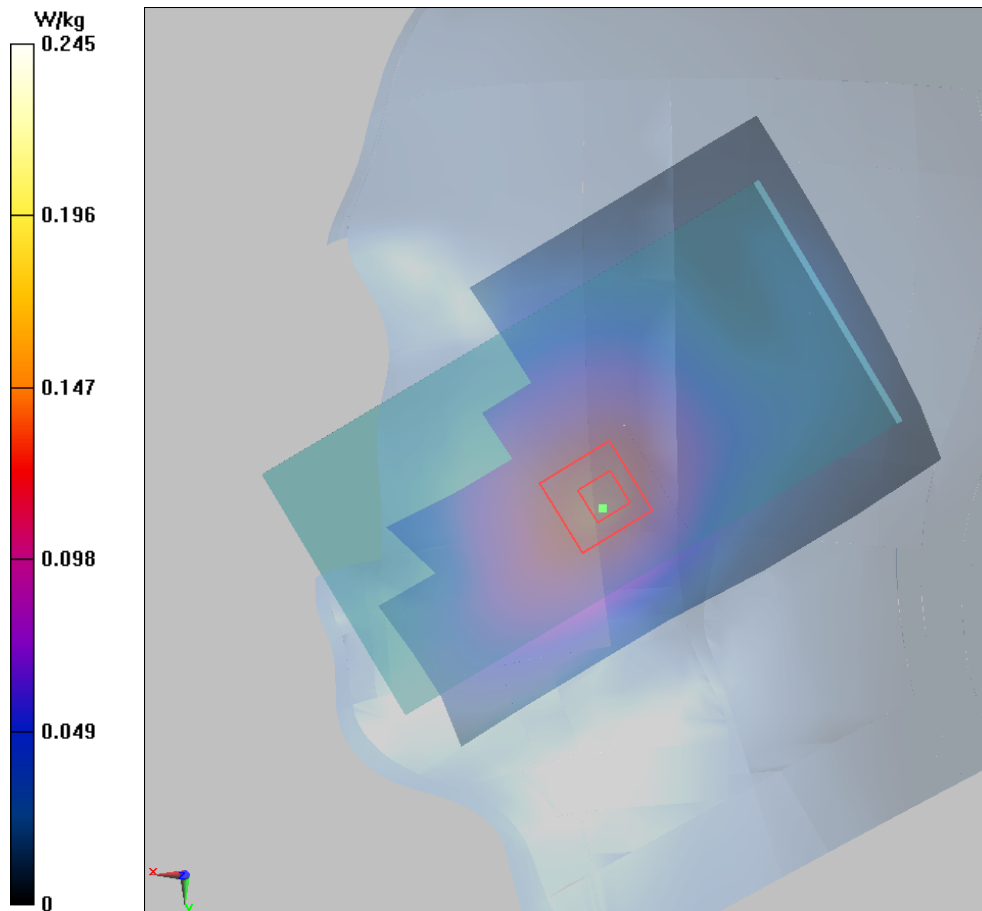
**Right Cheek High/Zoom Scan (5x5x7)/Cube 0:** Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 4.81 V/m; Power Drift = 0.02 dB

Peak SAR (extrapolated) = 0.267 W/kg

**SAR(1 g) = 0.211 W/kg; SAR(10 g) = 0.13 W/kg**

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



**Plot 75 LTE Band 12 1RB Back Side High (Distance 15mm)**

Date: 9/28/2017

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

Medium parameters used:  $f = 711 \text{ MHz}$ ;  $\sigma = 0.927 \text{ S/m}$ ;  $\epsilon_r = 55.371$ ;  $\rho = 1000 \text{ kg/m}^3$

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(9.99, 9.99, 9.99); Calibrated: 1/23/2017;

Electronics: DAE4 Sn1291; Calibrated: 1/19/2017

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 (71x121x1):** Interpolated grid: dx=15mm, dy=15mm

Maximum value of SAR (interpolated) = 0.201 W/kg

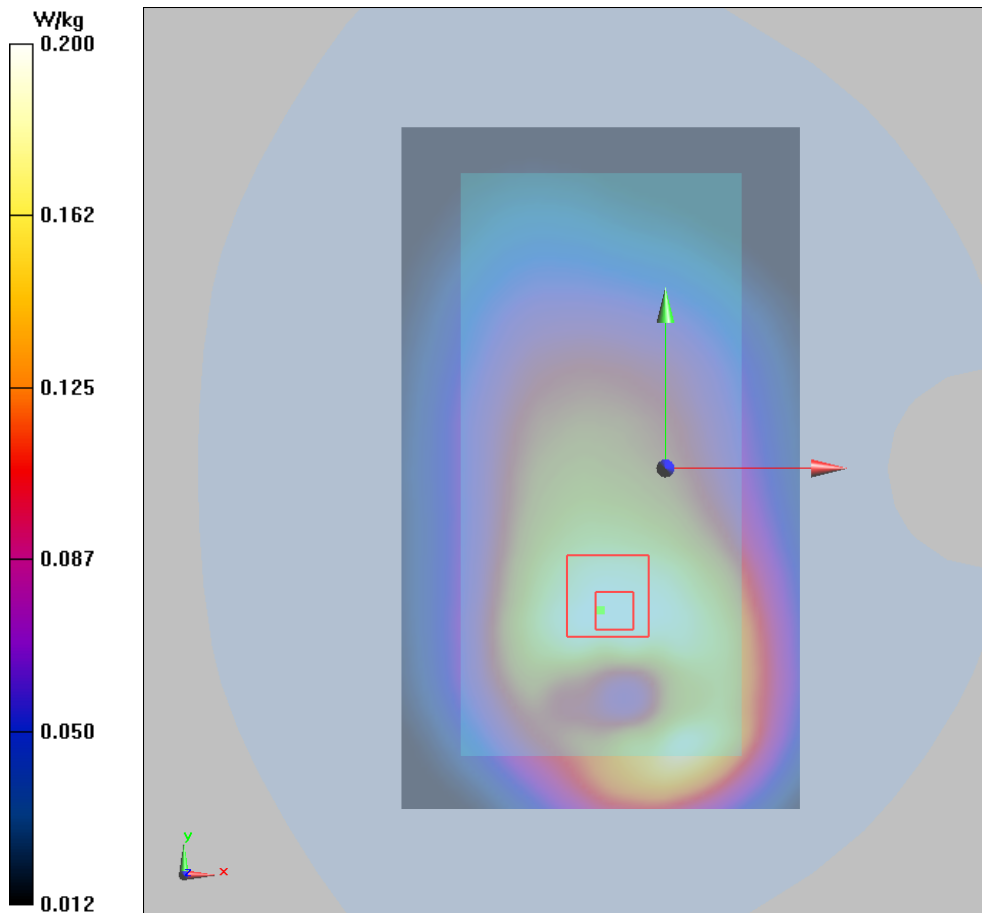
**Back Side High/Zoom Scan (5x5x7)/Cube 0:** Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 11.89 V/m; Power Drift = 0.094 dB

Peak SAR (extrapolated) = 0.241 W/kg

**SAR(1 g) = 0.188W/kg; SAR(10 g) = 0.131 W/kg**

Maximum value of SAR (measured) = 0.200W/kg



**Plot 76 LTE Band 12 1RB Front Side High (Distance 10mm)**

Date: 9/28/2017

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

Medium parameters used:  $f = 711 \text{ MHz}$ ;  $\sigma = 0.927 \text{ S/m}$ ;  $\epsilon_r = 55.371$ ;  $\rho = 1000 \text{ kg/m}^3$

Ambient Temperature:  $22.3 \text{ }^\circ\text{C}$       Liquid Temperature:  $21.5 \text{ }^\circ\text{C}$

Phantom section: Flat Section

DASY5 Configuration:

Sensor-Surface: 4mm (Mechanical Surface Detection)

Probe: EX3DV4 - SN3677; ConvF(9.99, 9.99, 9.99); Calibrated: 1/23/2017;

Electronics: DAE4 Sn1291; Calibrated: 1/19/2017

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

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

**Front Side High/Area Scan (71x121x1):** Interpolated grid:  $dx=15\text{mm}$ ,  $dy=15\text{mm}$

Maximum value of SAR (interpolated) =  $0.204 \text{ W/kg}$

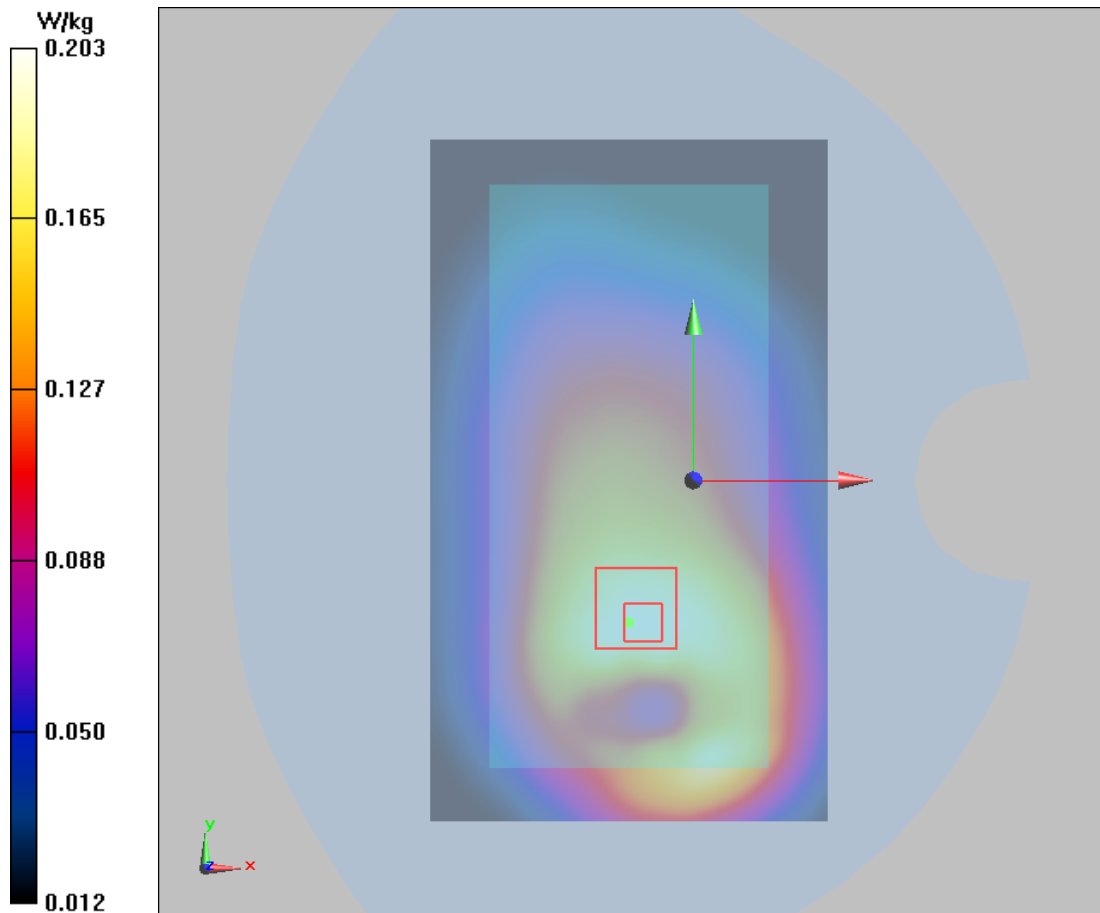
**Front Side High/Zoom Scan (5x5x7)/Cube 0:** Measurement grid:  $dx=8\text{mm}$ ,  $dy=8\text{mm}$ ,  $dz=5\text{mm}$

Reference Value =  $12.13 \text{ V/m}$ ; Power Drift =  $0.01 \text{ dB}$

Peak SAR (extrapolated) =  $0.248 \text{ W/kg}$

**SAR(1 g) =  $0.192 \text{ W/kg}$ ; SAR(10 g) =  $0.143 \text{ W/kg}$**

Maximum value of SAR (measured) =  $0.203 \text{ W/kg}$





**Plot 77 LTE Band 17 1RB Right Cheek Low**

Date: 9/27/2017

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

Medium parameters used:  $f = 709$  MHz;  $\sigma = 0.868$  S/m;  $\epsilon_r = 43.058$ ;  $\rho = 1000$  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(9.58, 9.58, 9.58); Calibrated: 1/23/2017;

Electronics: DAE4 Sn1291; Calibrated: 1/19/2017

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 (71x121x1):** Interpolated grid: dx=15mm, dy=15mm

Maximum value of SAR (interpolated) = 0.224 W/kg

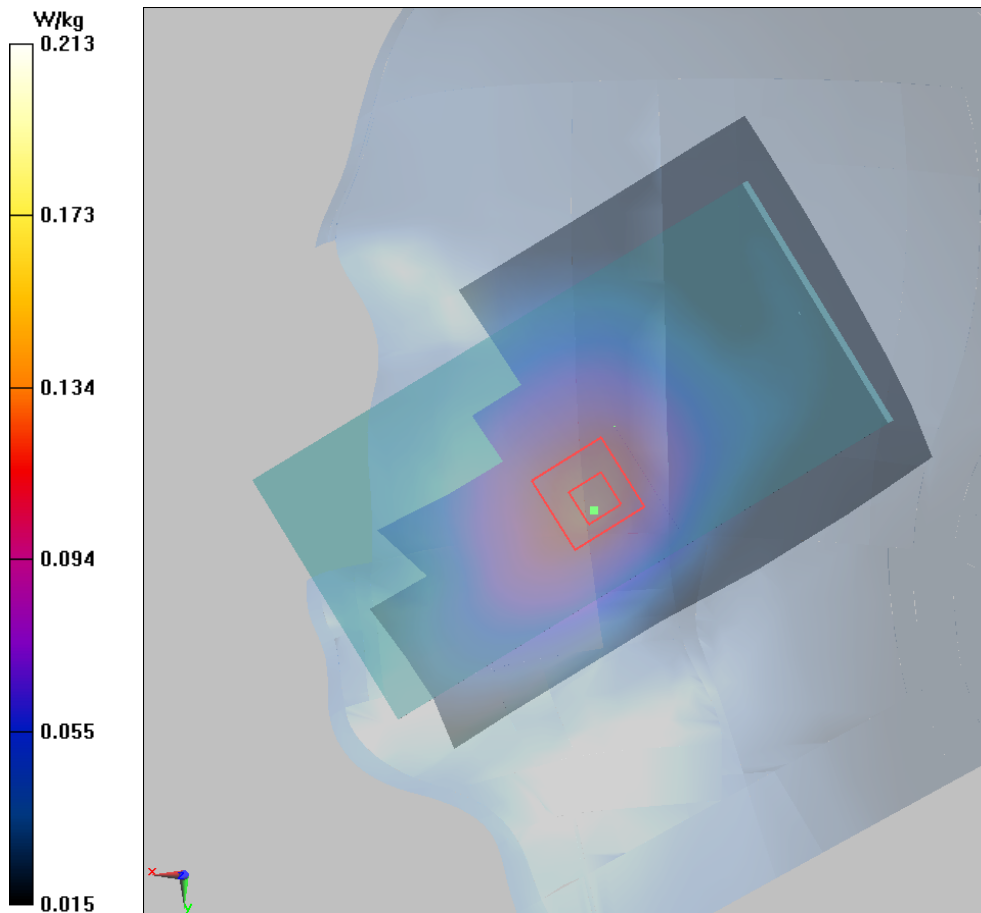
**Right Cheek Low/Zoom Scan (5x5x7)/Cube 0:** Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 4.84 V/m; Power Drift = 0.04 dB

Peak SAR (extrapolated) = 0.247 W/kg

**SAR(1 g) = 0.206 W/kg; SAR(10 g) = 0.177 W/kg**

Maximum value of SAR (measured) = 0.213 W/kg



**Plot 78 LTE Band 17 1RB Back Side Low (Distance 15mm)**

Date: 9/28/2017

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

Medium parameters used:  $f = 709 \text{ MHz}$ ;  $\sigma = 0.925 \text{ S/m}$ ;  $\epsilon_r = 55.396$ ;  $\rho = 1000 \text{ kg/m}^3$

Ambient Temperature:  $22.3 \text{ }^\circ\text{C}$       Liquid Temperature:  $21.5 \text{ }^\circ\text{C}$

Phantom section: Flat Section

DASY5 Configuration:

Sensor-Surface: 4mm (Mechanical Surface Detection)

Probe: EX3DV4 - SN3677; ConvF(9.99, 9.99, 9.99); Calibrated: 1/23/2017;

Electronics: DAE4 Sn1291; Calibrated: 1/19/2017

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 (71x121x1):** Interpolated grid:  $dx=15\text{mm}$ ,  $dy=15\text{mm}$

Maximum value of SAR (interpolated) =  $0.20 \text{ W/kg}$

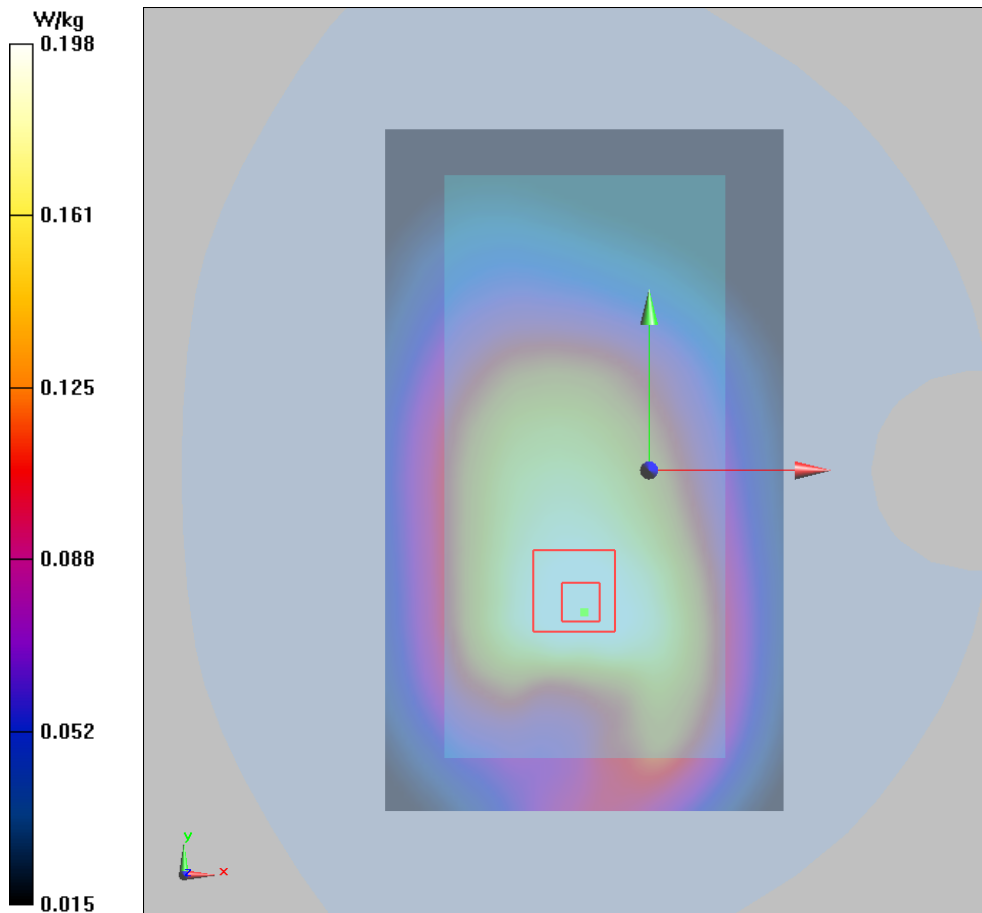
**Back Side Low/Zoom Scan (5x5x7)/Cube 0:** Measurement grid:  $dx=8\text{mm}$ ,  $dy=8\text{mm}$ ,  $dz=5\text{mm}$

Reference Value =  $13.25 \text{ V/m}$ ; Power Drift =  $0.055 \text{ dB}$

Peak SAR (extrapolated) =  $0.247 \text{ W/kg}$

**SAR(1 g) =  $0.184 \text{ W/kg}$ ; SAR(10 g) =  $0.146 \text{ W/kg}$**

Maximum value of SAR (measured) =  $0.198 \text{ W/kg}$



**Plot 79 LTE Band 17 1RB Back Side Low (Distance 10mm)**

Date: 9/28/2017

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

Medium parameters used:  $f = 709 \text{ MHz}$ ;  $\sigma = 0.925 \text{ S/m}$ ;  $\epsilon_r = 55.396$ ;  $\rho = 1000 \text{ kg/m}^3$

Ambient Temperature:  $22.3 \text{ }^\circ\text{C}$       Liquid Temperature:  $21.5 \text{ }^\circ\text{C}$

Phantom section: Flat Section

DASY5 Configuration:

Sensor-Surface: 4mm (Mechanical Surface Detection)

Probe: EX3DV4 - SN3677; ConvF(9.99, 9.99, 9.99); Calibrated: 1/23/2017;

Electronics: DAE4 Sn1291; Calibrated: 1/19/2017

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 (71x121x1):** Interpolated grid:  $dx=15\text{mm}$ ,  $dy=15\text{mm}$

Maximum value of SAR (interpolated) =  $0.205 \text{ W/kg}$

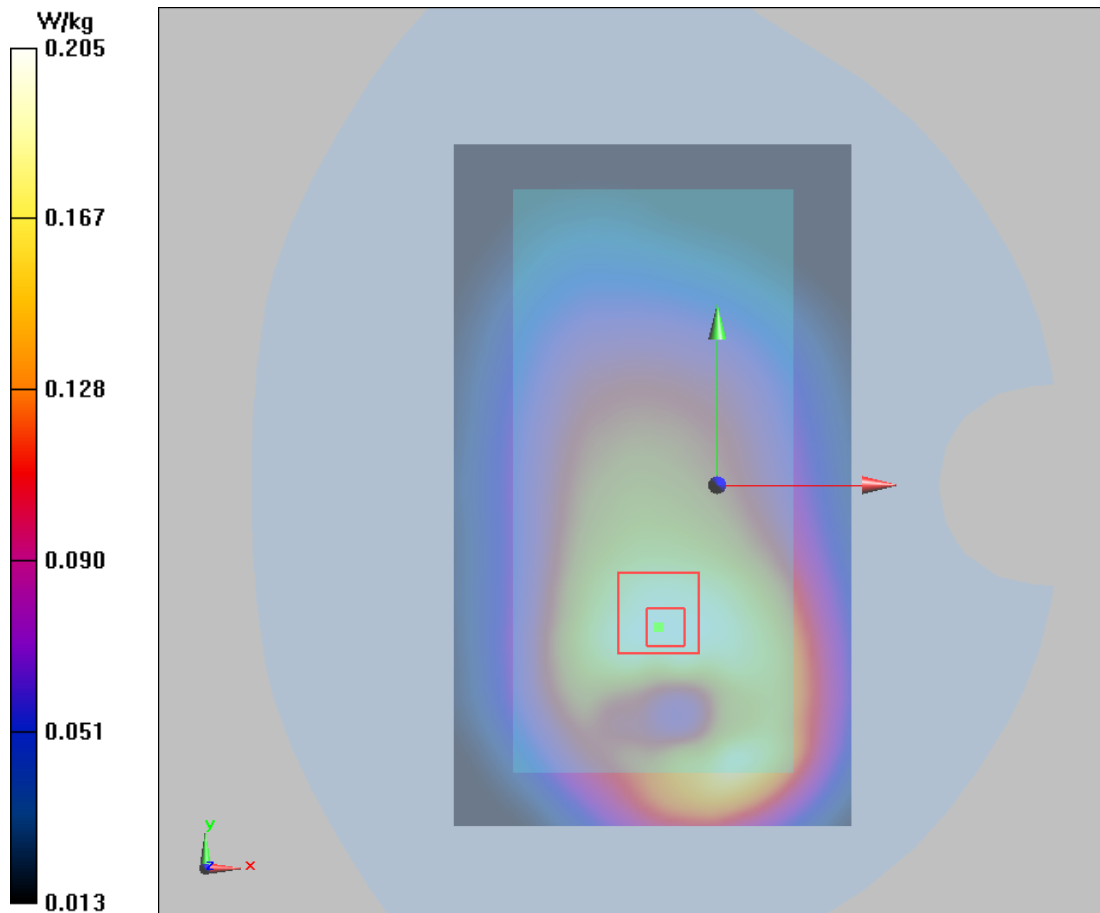
**Back Side Low/Zoom Scan (5x5x7)/Cube 0:** Measurement grid:  $dx=8\text{mm}$ ,  $dy=8\text{mm}$ ,  $dz=5\text{mm}$

Reference Value =  $12.23 \text{ V/m}$ ; Power Drift =  $0.01 \text{ dB}$

Peak SAR (extrapolated) =  $0.249 \text{ W/kg}$

**SAR(1 g) =  $0.194 \text{ W/kg}$ ; SAR(10 g) =  $0.145 \text{ W/kg}$**

Maximum value of SAR (measured) =  $0.205 \text{ W/kg}$



**Plot 80 LTE Band 26 1RB Right Cheek Low**

Date: 9/27/2017

Communication System: UID 0, LTE\_FDD (0); Frequency: 822.5 MHz;Duty Cycle: 1:1

Medium parameters used (interpolated):  $f = 822.5 \text{ MHz}$ ;  $\sigma = 0.926 \text{ S/m}$ ;  $\epsilon_r = 42.607$ ;  $\rho = 1000 \text{ kg/m}^3$

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(9.31, 9.31, 9.31); Calibrated: 1/23/2017;

Electronics: DAE4 Sn1291; Calibrated: 1/19/2017

Phantom: SAM 2; Type: QD000P40CD; Serial: TP:1666

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

**Right Cheek Low/Area Scan (71x121x1):** Interpolated grid: dx=15mm, dy=15mm

Maximum value of SAR (interpolated) = 0.202 W/kg

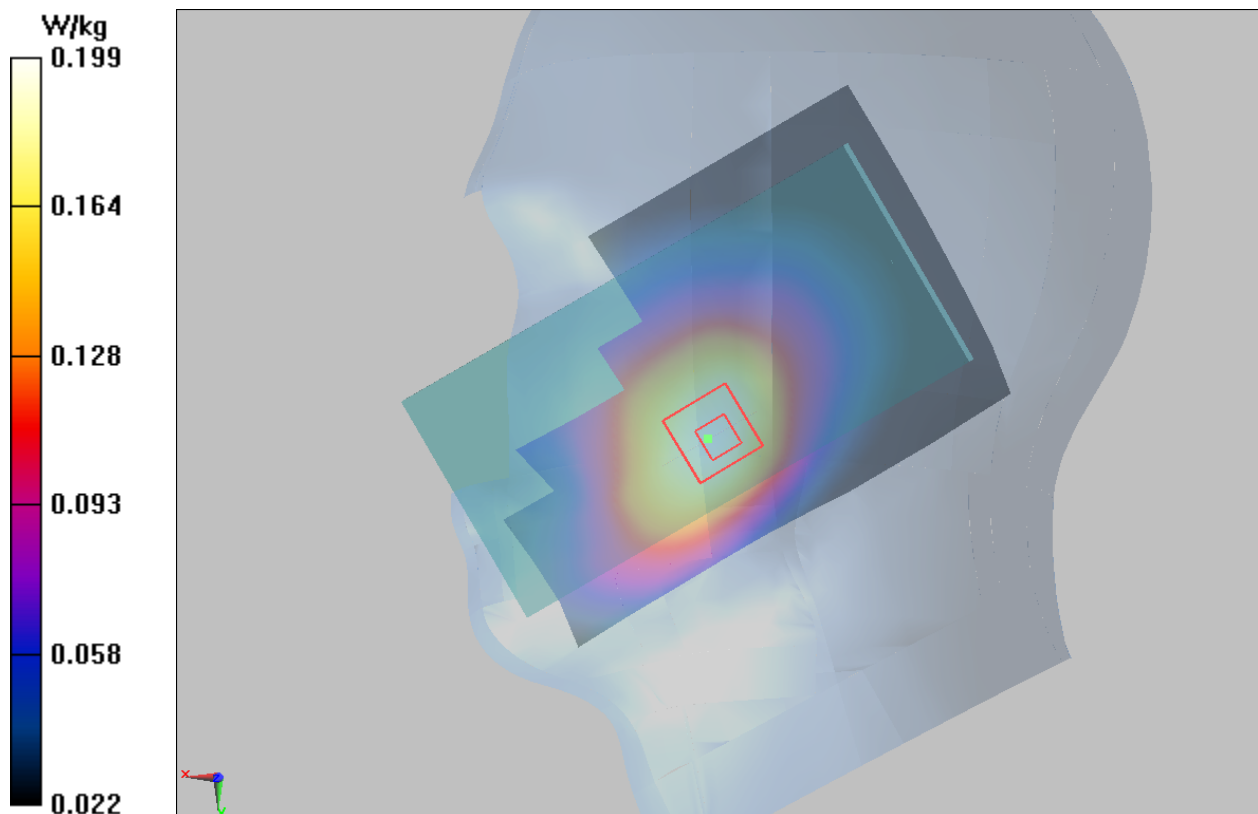
**Right Cheek Low/Zoom Scan (5x5x7)/Cube 0:** Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 5.289 V/m; Power Drift = 0.13 dB

Peak SAR (extrapolated) = 0.235 W/kg

**SAR(1 g) = 0.190 W/kg; SAR(10 g) = 0.146 W/kg**

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



**Plot 81 LTE Band 26 1RB Back Side Low (Distance 15mm)**

Date: 9/28/2017

Communication System: UID 0, LTE\_FDD (0); Frequency: 822.5 MHz; Duty Cycle: 1:1

Medium parameters used (interpolated):  $f = 822.5$  MHz;  $\sigma = 0.997$  S/m;  $\epsilon_r = 55.563$ ;  $\rho = 1000$  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(9.74, 9.74, 9.74); Calibrated: 1/23/2017;

Electronics: DAE4 Sn1291; Calibrated: 1/19/2017

Phantom: SAM 2; Type: QD000P40CD; Serial: TP:1666

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

**Back Side Low/Area Scan (71x121x1):** Interpolated grid: dx=15mm, dy=15mm

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

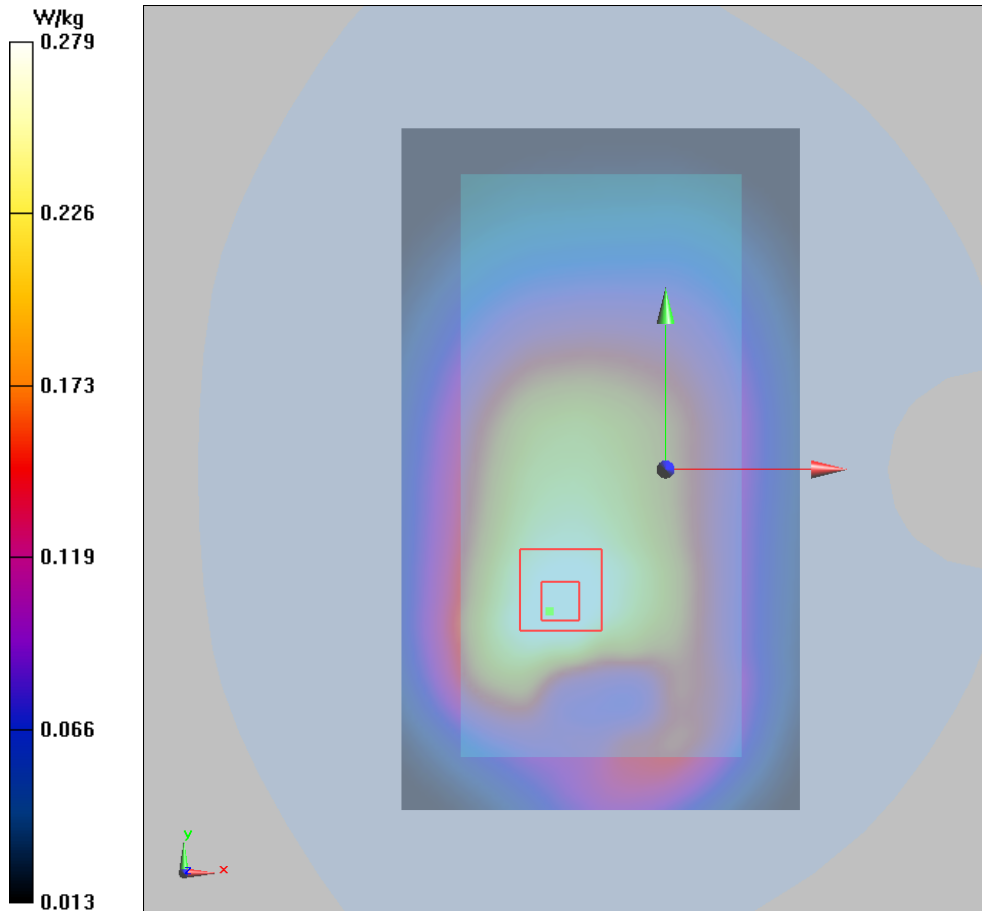
**Back Side Low/Zoom Scan (5x5x7)/Cube 0:** Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 15.00 V/m; Power Drift = 0.064 dB

Peak SAR (extrapolated) = 0.333 W/kg

**SAR(1 g) = 0.261 W/kg; SAR(10 g) = 0.186 W/kg**

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



**Plot 82 LTE Band 26 1RB Back Side Low (Distance 10mm)**

Date: 9/28/2017

Communication System: UID 0, LTE\_FDD (0); Frequency: 822.5 MHz; Duty Cycle: 1:1

Medium parameters used (interpolated):  $f = 822.5$  MHz;  $\sigma = 0.997$  S/m;  $\epsilon_r = 55.563$ ;  $\rho = 1000$  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(9.74, 9.74, 9.74); Calibrated: 1/23/2017;

Electronics: DAE4 Sn1291; Calibrated: 1/19/2017

Phantom: SAM 2; Type: QD000P40CD; Serial: TP:1666

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

**Back Side Low/Area Scan (71x121x1):** Interpolated grid: dx=15mm, dy=15mm

Maximum value of SAR (interpolated) = 0.334 W/kg

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

Reference Value = 13.03 V/m; Power Drift = 0.04 dB

Peak SAR (extrapolated) = 0.427 W/kg

**SAR(1 g) = 0.308 W/kg; SAR(10 g) = 0.215 W/kg**

Maximum value of SAR (measured) = 0.328 W/kg

