

ANNEX A GRAPH RESULTS

GSM850 Head

Date: 2024-08-30

Electronics: DAE4 Sn1807

Medium: H700-6000M

Medium parameters used: $f = 835$ MHz; $\sigma = 0.938$ S/m; $\epsilon_r = 42.88$; $\rho = 1000$ kg/m³

Ambient Temperature: 23.3°C Liquid Temperature: 22.5°C

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

Probe: EX3DV4 - SN3846 ConvF(9.89, 9.89, 9.89)

Area Scan (81x121x1): Interpolated grid: $dx=1.500$ mm, $dy=1.500$ mm

Maximum value of SAR (interpolated) = 0.985 W/kg

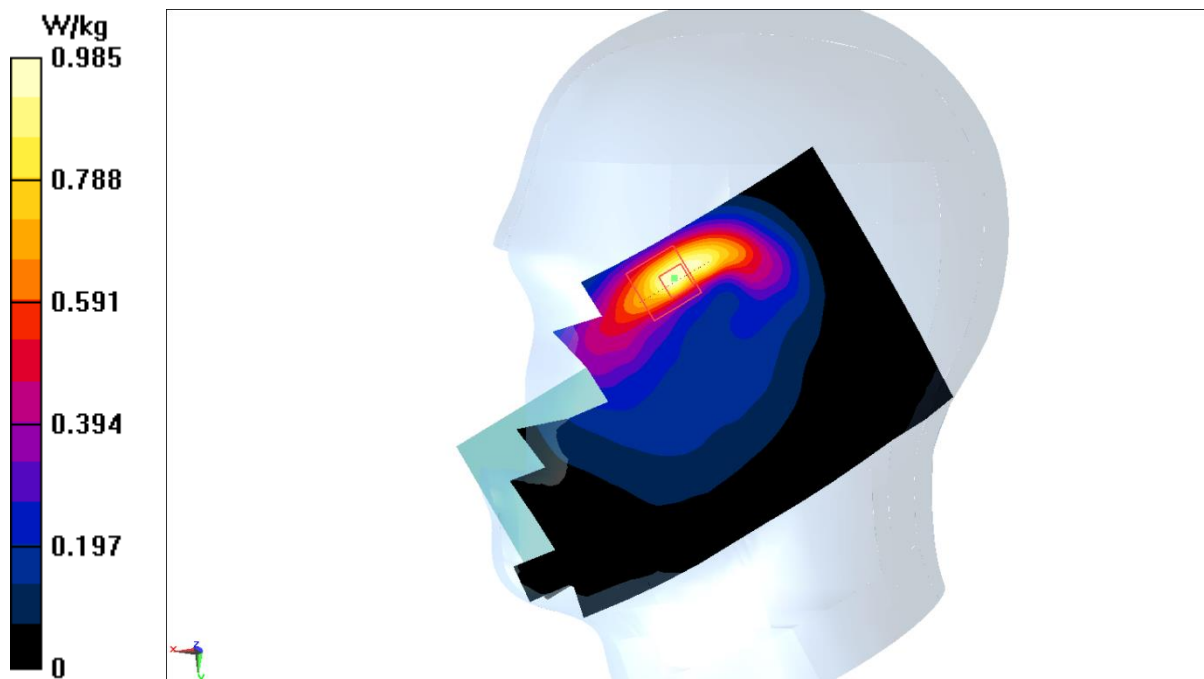
Zoom Scan (5x5x7)/Cube 0: Measurement grid: $dx=8$ mm, $dy=8$ mm, $dz=5$ mm

Reference Value = 9.270 V/m; Power Drift = -0.09 dB

Peak SAR (extrapolated) = 1.27 W/kg

SAR(1 g) = 0.647 W/kg; SAR(10 g) = 0.370 W/kg

Maximum value of SAR (measured) = 1.03 W/kg

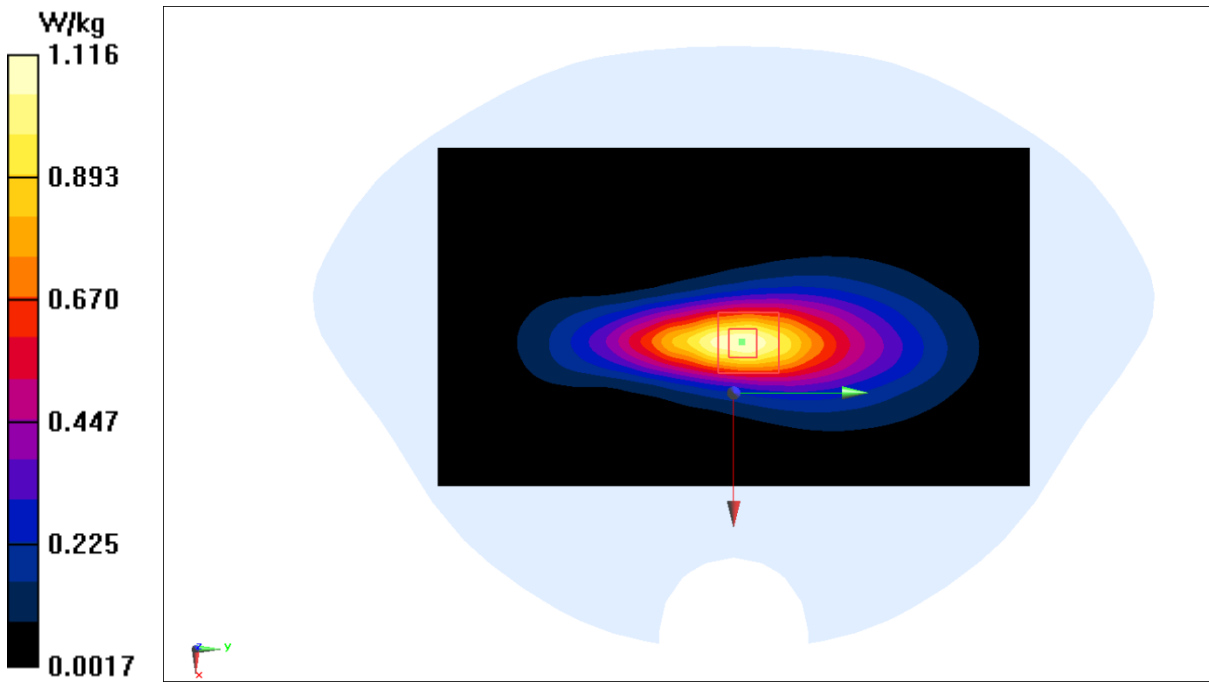


GSM850 Body 10mm

Date: 2024-08-30
Electronics: DAE4 Sn1807
Medium: H700-6000M
Medium parameters used: $f = 835\text{ MHz}$; $\sigma = 0.938\text{ S/m}$; $\epsilon_r = 42.88$; $\rho = 1000\text{ kg/m}^3$
Ambient Temperature:23.3°C Liquid Temperature: 22.5°C
Communication System: GSM 850 (0) Frequency: 836.6 MHz Duty Cycle: 1:8.30042
Probe: EX3DV4 - SN3846 ConvF(9.89, 9.89, 9.89)

Area Scan (81x141x1): Interpolated grid: $dx=1.500\text{ mm}$, $dy=1.500\text{ mm}$
Maximum value of SAR (interpolated) = 1.12 W/kg

Zoom Scan (6x7x7)/Cube 0: Measurement grid: $dx=8\text{mm}$, $dy=8\text{mm}$, $dz=5\text{mm}$
Reference Value = 30.60 V/m; Power Drift = 0.02 dB
Peak SAR (extrapolated) = 1.41 W/kg
 $\text{SAR}(1\text{ g}) = 0.788\text{ W/kg}$; $\text{SAR}(10\text{ g}) = 0.465\text{ W/kg}$
Maximum value of SAR (measured) = 1.17 W/kg

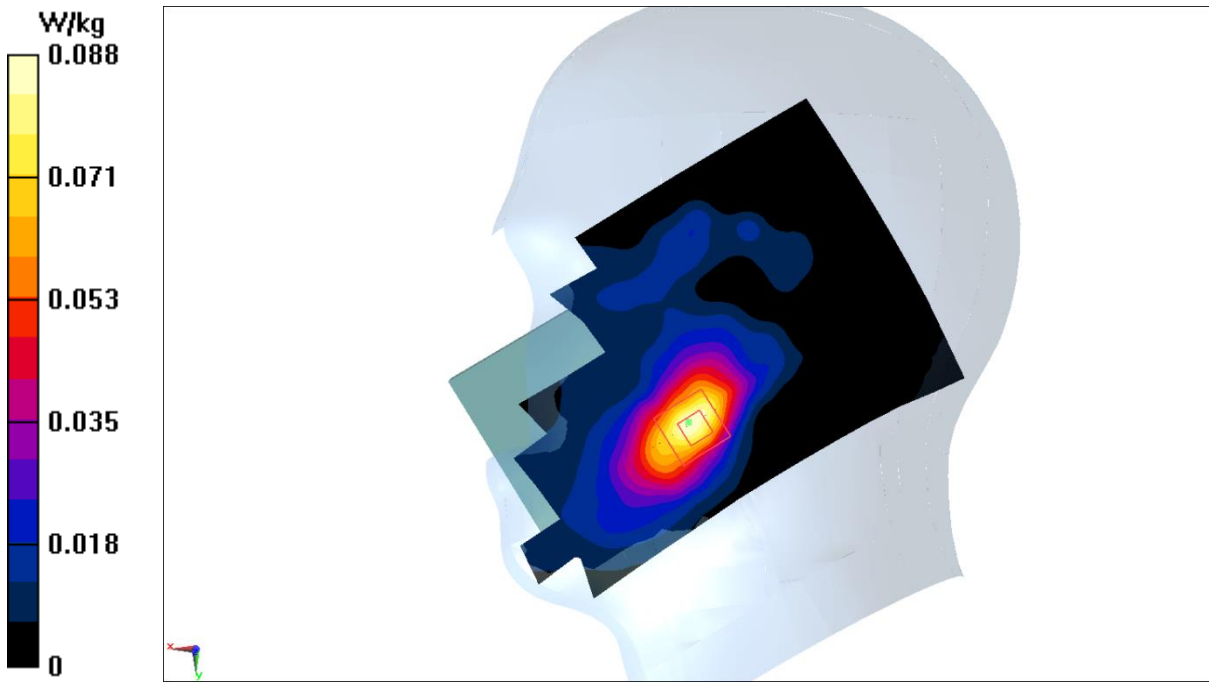


GSM1900 Head

Date: 2024-09-06
Electronics: DAE4 Sn1807
Medium: H700-6000M
Medium parameters used: $f = 1910\text{ MHz}$; $\sigma = 1.469\text{ S/m}$; $\epsilon_r = 41.03$; $\rho = 1000\text{ kg/m}^3$
Ambient Temperature: 23.3°C Liquid Temperature: 22.5°C
Communication System: GSM 1900 4TX (0) Frequency: 1909.8 MHz Duty Cycle: 1: 1.99986
Probe: EX3DV4 - SN3846 ConvF(7.95, 7.95, 7.95)

Area Scan (81x121x1): Interpolated grid: $dx=1.500\text{ mm}$, $dy=1.500\text{ mm}$
Maximum value of SAR (interpolated) = 0.0885 W/kg

Zoom Scan (5x5x7)/Cube 0: Measurement grid: $dx=8\text{ mm}$, $dy=8\text{ mm}$, $dz=5\text{ mm}$
Reference Value = 2.001 V/m ; Power Drift = 0.16 dB
Peak SAR (extrapolated) = 0.0950 W/kg
 $\text{SAR}(1\text{ g}) = 0.059\text{ W/kg}$; $\text{SAR}(10\text{ g}) = 0.036\text{ W/kg}$
Maximum value of SAR (measured) = 0.0777 W/kg

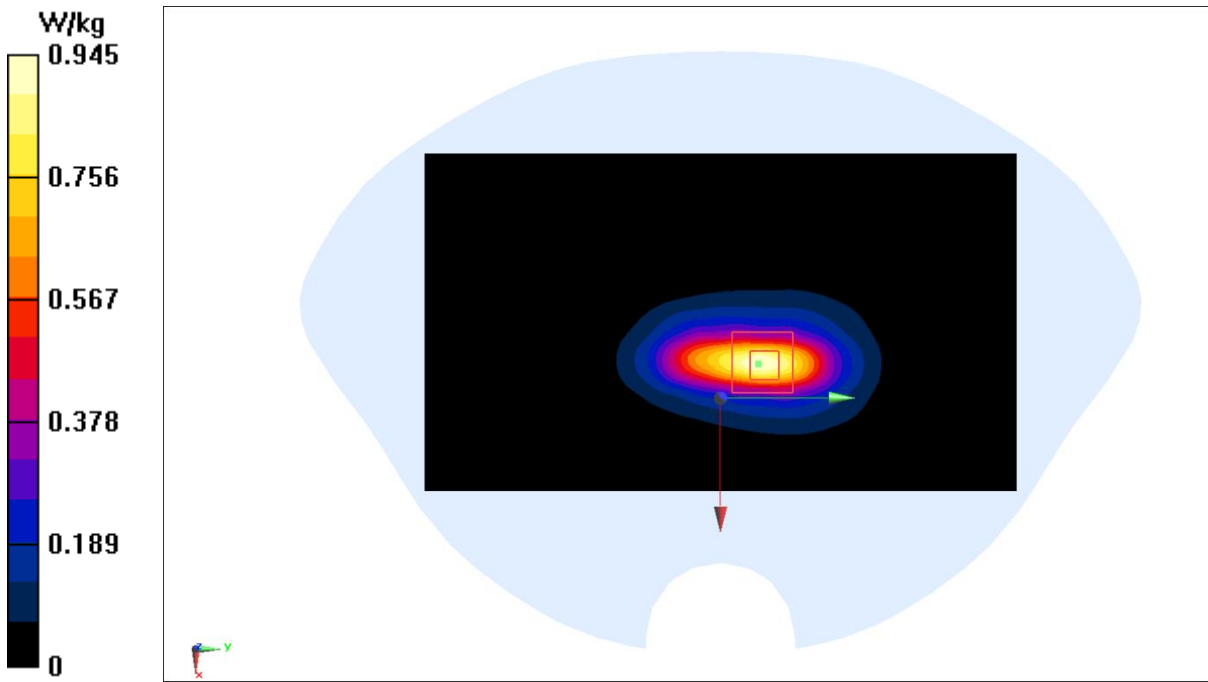


GSM1900 Body 10mm

Date: 2024-09-06
Electronics: DAE4 Sn1807
Medium: H700-6000M
Medium parameters used: $f = 1910\text{ MHz}$; $\sigma = 1.469\text{ S/m}$; $\epsilon_r = 41.03$; $\rho = 1000\text{ kg/m}^3$
Ambient Temperature: 23.3°C Liquid Temperature: 22.5°C
Communication System: GSM 1900 4TX (0) Frequency: 1909.8 MHz Duty Cycle: 1: 1.99986
Probe: EX3DV4 - SN3846 ConvF(7.95, 7.95, 7.95)

Area Scan (81x141x1): Interpolated grid: $dx=1.500\text{ mm}$, $dy=1.500\text{ mm}$
Maximum value of SAR (interpolated) = 0.945 W/kg

Zoom Scan (6x7x7)/Cube 0: Measurement grid: $dx=8\text{mm}$, $dy=8\text{mm}$, $dz=5\text{mm}$
Reference Value = 18.14 V/m; Power Drift = -0.03 dB
Peak SAR (extrapolated) = 1.11 W/kg
 $\text{SAR}(1\text{ g}) = 0.622\text{ W/kg}$; $\text{SAR}(10\text{ g}) = 0.325\text{ W/kg}$
Maximum value of SAR (measured) = 0.941 W/kg

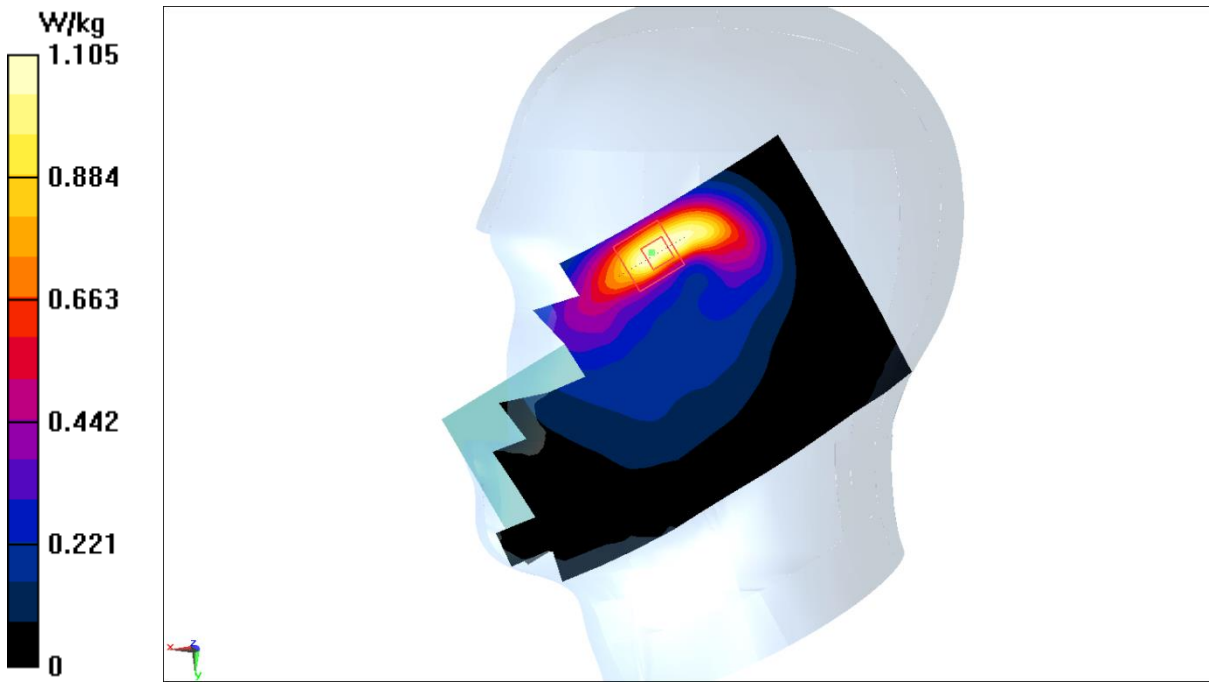


WCDMA850 Head

Date: 2024-08-30
Electronics: DAE4 Sn1807
Medium: H700-6000M
Medium parameters used: $f = 845\text{ MHz}$; $\sigma = 0.942\text{ S/m}$; $\epsilon_r = 42.84$; $\rho = 1000\text{ kg/m}^3$
Ambient Temperature: 23.3°C Liquid Temperature: 22.5°C
Communication System: WCDMA850 (B5) (0) Frequency: 846.6 MHz Duty Cycle: 1:1
Probe: EX3DV4 - SN3846 ConvF(9.89, 9.89, 9.89)

Area Scan (81x121x1): Interpolated grid: $dx=1.500\text{ mm}$, $dy=1.500\text{ mm}$
Maximum value of SAR (interpolated) = 1.11 W/kg

Zoom Scan (5x5x7)/Cube 0: Measurement grid: $dx=8\text{ mm}$, $dy=8\text{ mm}$, $dz=5\text{ mm}$
Reference Value = 10.53 V/m ; Power Drift = 0.03 dB
Peak SAR (extrapolated) = 1.37 W/kg
 $\text{SAR}(1\text{ g}) = 0.709\text{ W/kg}$; $\text{SAR}(10\text{ g}) = 0.407\text{ W/kg}$
Maximum value of SAR (measured) = 1.09 W/kg

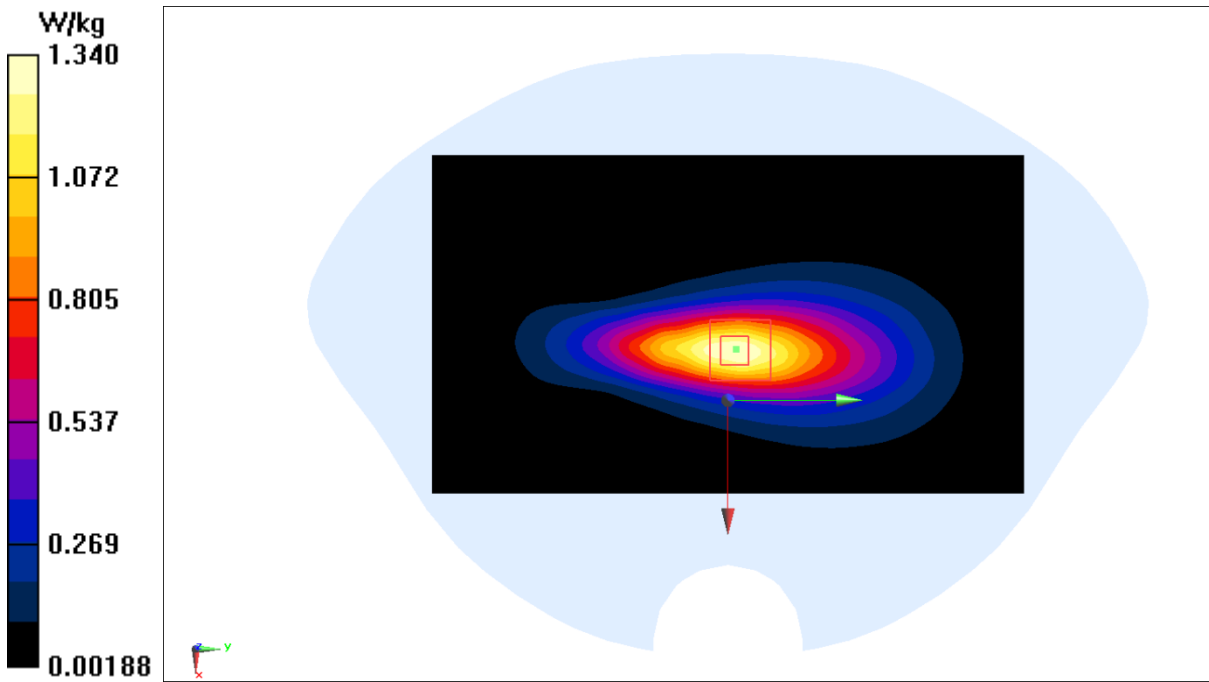


WCDMA850 Body 10mm

Date: 2024-08-30
Electronics: DAE4 Sn1807
Medium: H700-6000M
Medium parameters used: $f = 845\text{ MHz}$; $\sigma = 0.942\text{ S/m}$; $\epsilon_r = 42.84$; $\rho = 1000\text{ kg/m}^3$
Ambient Temperature: 23.3°C Liquid Temperature: 22.5°C
Communication System: WCDMA850 (B5) (0) Frequency: 846.6 MHz Duty Cycle: 1:1
Probe: EX3DV4 - SN3846 ConvF(9.89, 9.89, 9.89)

Area Scan (81x141x1): Interpolated grid: $dx=1.500\text{ mm}$, $dy=1.500\text{ mm}$
Maximum value of SAR (interpolated) = 1.34 W/kg

Zoom Scan (6x7x7)/Cube 0: Measurement grid: $dx=8\text{ mm}$, $dy=8\text{ mm}$, $dz=5\text{ mm}$
Reference Value = 33.42 V/m ; Power Drift = -0.15 dB
Peak SAR (extrapolated) = 1.71 W/kg
 $\text{SAR}(1\text{ g}) = 0.932\text{ W/kg}$; $\text{SAR}(10\text{ g}) = 0.554\text{ W/kg}$
Maximum value of SAR (measured) = 1.39 W/kg

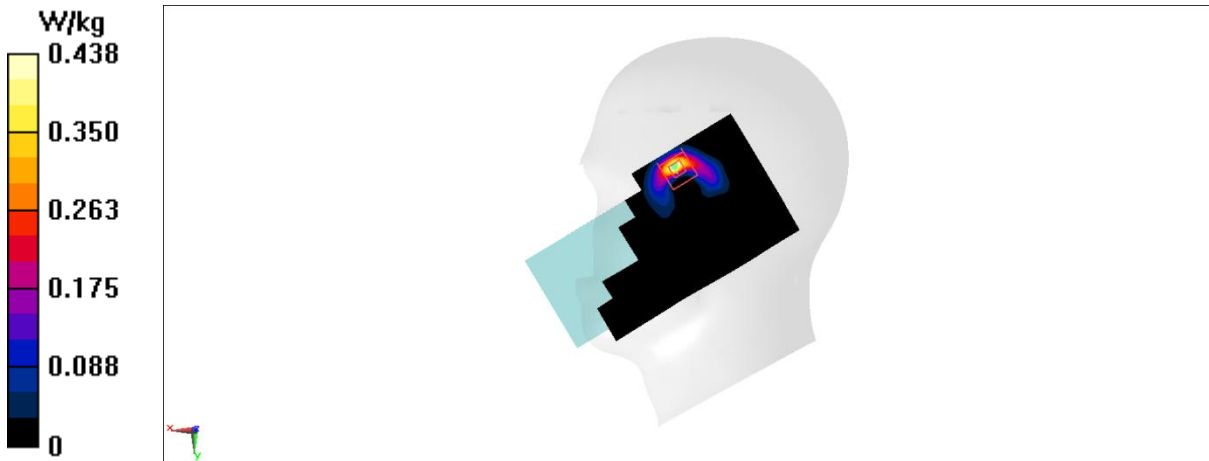


WCDMA1700 Head

Date: 2024-08-31
Electronics: DAE4 Sn1807
Medium: H700-6000M
Medium parameters used: $f = 1730\text{ MHz}$; $\sigma = 1.384\text{ S/m}$; $\epsilon_r = 41.8$; $\rho = 1000\text{ kg/m}^3$
Ambient Temperature:23.3°C Liquid Temperature: 22.5°C
Communication System: WCDMA1700 (B4) (0) Frequency: 1732.4 MHz Duty Cycle: 1:1
Probe: EX3DV4 - SN3846 ConvF(8.25, 8.25, 8.25)

Area Scan (71x131x1): Interpolated grid: $dx=1.500\text{ mm}$, $dy=1.500\text{ mm}$
Maximum value of SAR (interpolated) = 0.438 W/kg

Zoom Scan (5x5x7)/Cube 0: Measurement grid: $dx=8\text{mm}$, $dy=8\text{mm}$, $dz=5\text{mm}$
Reference Value = 3.880 V/m; Power Drift = -0.08 dB
Peak SAR (extrapolated) = 0.680 W/kg
 $\text{SAR}(1\text{ g}) = 0.334\text{ W/kg}$; $\text{SAR}(10\text{ g}) = 0.147\text{ W/kg}$
Maximum value of SAR (measured) = 0.537 W/kg



WCDMA1700 Body 10mm

Date: 2024-08-31

Electronics: DAE4 Sn1807

Medium: H700-6000M

Medium parameters used: $f = 1730\text{ MHz}$; $\sigma = 1.384\text{ S/m}$; $\epsilon_r = 41.8$; $\rho = 1000\text{ kg/m}^3$

Ambient Temperature:23.3°C Liquid Temperature: 22.5°C

Communication System: WCDMA1700 (B4) (0) Frequency: 1732.4 MHz Duty Cycle: 1:1

Probe: EX3DV4 - SN3846 ConvF(8.25, 8.25, 8.25)

Area Scan (81x141x1): Interpolated grid: $dx=1.500\text{ mm}$, $dy=1.500\text{ mm}$

Maximum value of SAR (interpolated) = 1.10 W/kg

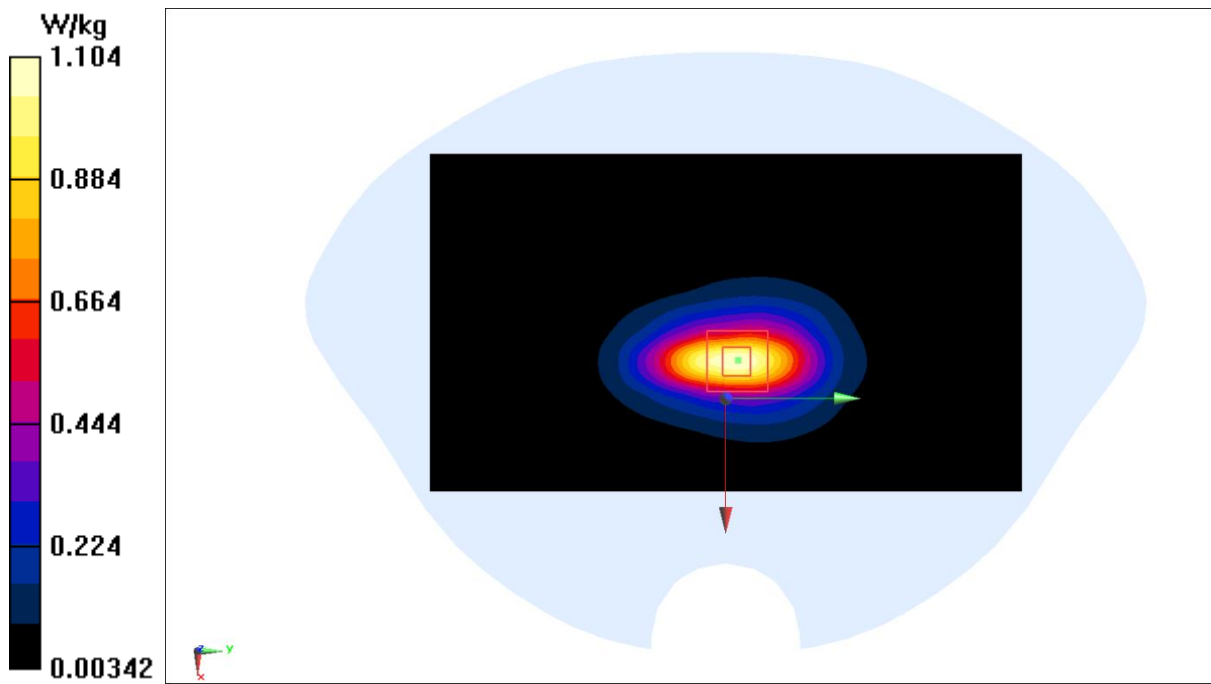
Zoom Scan (6x7x7)/Cube 0: Measurement grid: $dx=8\text{mm}$, $dy=8\text{mm}$, $dz=5\text{mm}$

Reference Value = 22.94 V/m; Power Drift = -0.05 dB

Peak SAR (extrapolated) = 1.28 W/kg

SAR(1 g) = 0.727 W/kg; SAR(10 g) = 0.403 W/kg

Maximum value of SAR (measured) = 1.07 W/kg

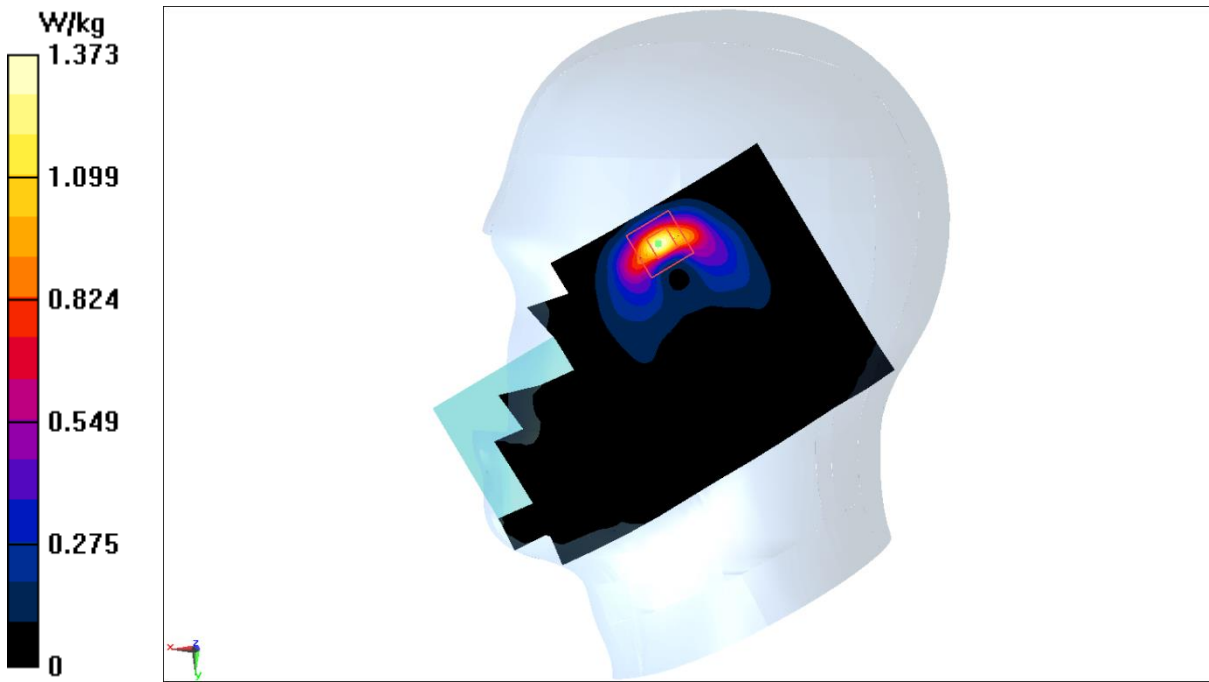


WCDMA1900 Head

Date: 2024-09-06
Electronics: DAE4 Sn1807
Medium: H700-6000M
Medium parameters used: $f = 1850\text{ MHz}$; $\sigma = 1.426\text{ S/m}$; $\epsilon_r = 41.12$; $\rho = 1000\text{ kg/m}^3$
Ambient Temperature:23.3°C Liquid Temperature: 22.5°C
Communication System: WCDMA1900 (B2) (0) Frequency: 1852.4 MHz Duty Cycle: 1:1
Probe: EX3DV4 - SN3846 ConvF(7.95, 7.95, 7.95)

Area Scan (81x121x1): Interpolated grid: $dx=1.500\text{ mm}$, $dy=1.500\text{ mm}$
Maximum value of SAR (interpolated) = 1.37 W/kg

Zoom Scan (5x5x7)/Cube 0: Measurement grid: $dx=8\text{mm}$, $dy=8\text{mm}$, $dz=5\text{mm}$
Reference Value = 8.126 V/m; Power Drift = 0.04 dB
Peak SAR (extrapolated) = 1.64 W/kg
 $\text{SAR}(1\text{ g}) = 0.814\text{ W/kg}$; $\text{SAR}(10\text{ g}) = 0.368\text{ W/kg}$
Maximum value of SAR (measured) = 1.41 W/kg



WCDMA1900 Body 10mm

Date: 2024-09-06

Electronics: DAE4 Sn1807

Medium: H700-6000M

Medium parameters used: $f = 1880$ MHz; $\sigma = 1.448$ S/m; $\epsilon_r = 41.07$; $\rho = 1000$ kg/m³

Ambient Temperature: 23.3°C Liquid Temperature: 22.5°C

Communication System: WCDMA1900 (B2) (0) Frequency: 1880 MHz Duty Cycle: 1:1

Probe: EX3DV4 - SN3846 ConvF(7.95, 7.95, 7.95)

Area Scan (81x141x1): Interpolated grid: $dx=1.500$ mm, $dy=1.500$ mm

Maximum value of SAR (interpolated) = 0.811 W/kg

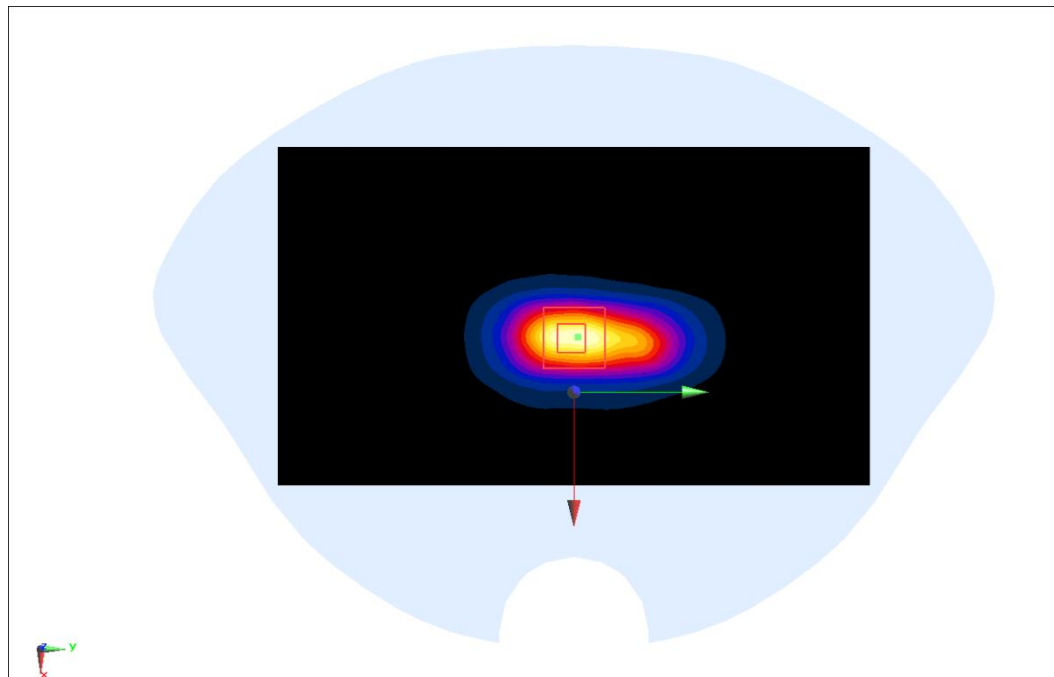
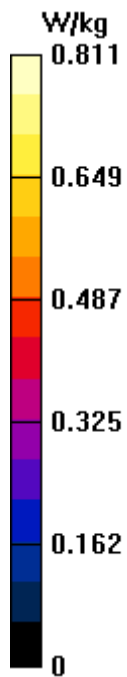
Zoom Scan (6x7x7)/Cube 0: Measurement grid: $dx=8$ mm, $dy=8$ mm, $dz=5$ mm

Reference Value = 20.72 V/m; Power Drift = 0.04 dB

Peak SAR (extrapolated) = 1.07 W/kg

SAR(1 g) = 0.591 W/kg; SAR(10 g) = 0.305 W/kg

Maximum value of SAR (measured) = 0.894 W/kg

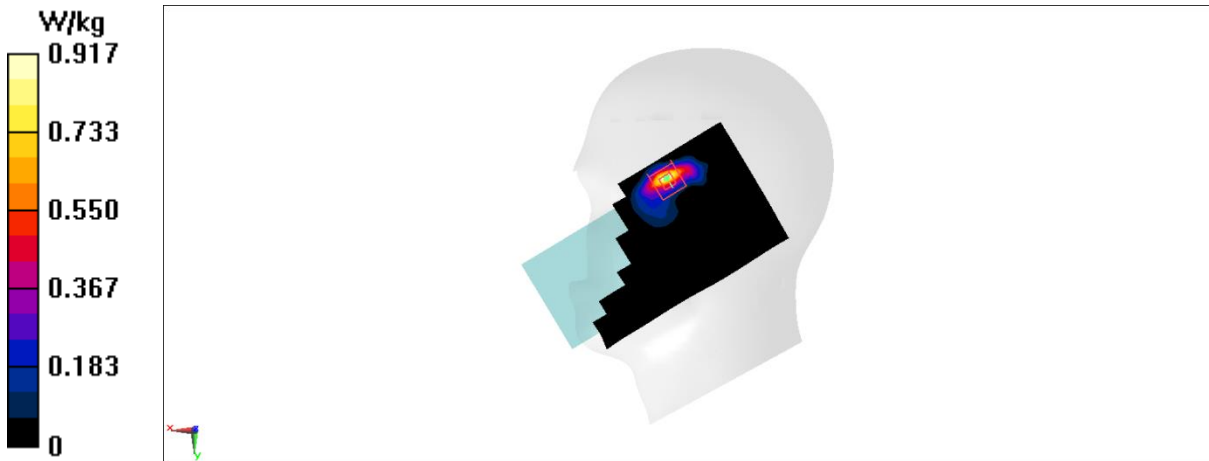


LTE Band7 Head

Date: 2024-09-14
Electronics: DAE4 Sn1807
Medium: H700-6000M
Medium parameters used: $f = 2535 \text{ MHz}$; $\sigma = 1.9 \text{ S/m}$; $\epsilon_r = 40.15$; $\rho = 1000 \text{ kg/m}^3$
Ambient Temperature: 23.3°C Liquid Temperature: 22.5°C
Communication System: LTE Band7 (0) Frequency: 2535 MHz Duty Cycle: 1:1
Probe: EX3DV4 - SN3846 ConvF(7.43, 7.43, 7.43)

Area Scan (91x161x1): Interpolated grid: $dx=1.200 \text{ mm}$, $dy=1.200 \text{ mm}$
Maximum value of SAR (interpolated) = 0.917 W/kg

Zoom Scan (7x7x7)/Cube 0: Measurement grid: $dx=5\text{mm}$, $dy=5\text{mm}$, $dz=5\text{mm}$
Reference Value = 0.9170 V/m ; Power Drift = 0.03 dB
Peak SAR (extrapolated) = 2.11 W/kg
 $\text{SAR}(1 \text{ g}) = 0.776 \text{ W/kg}$; $\text{SAR}(10 \text{ g}) = 0.286 \text{ W/kg}$
Maximum value of SAR (measured) = 1.40 W/kg



LTE Band7 Body 10mm

Date: 2024-09-14

Electronics: DAE4 Sn1807

Medium: H700-6000M

Medium parameters used: $f = 2560$ MHz; $\sigma = 1.918$ S/m; $\epsilon_r = 40.13$; $\rho = 1000$ kg/m³

Ambient Temperature: 23.3°C Liquid Temperature: 22.5°C

Communication System: LTE Band7 (0) Frequency: 2560 MHz Duty Cycle: 1:1

Probe: EX3DV4 - SN3846 ConvF(7.28, 7.28, 7.28)

Area Scan (91x161x1): Interpolated grid: $dx=1.200$ mm, $dy=1.200$ mm

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

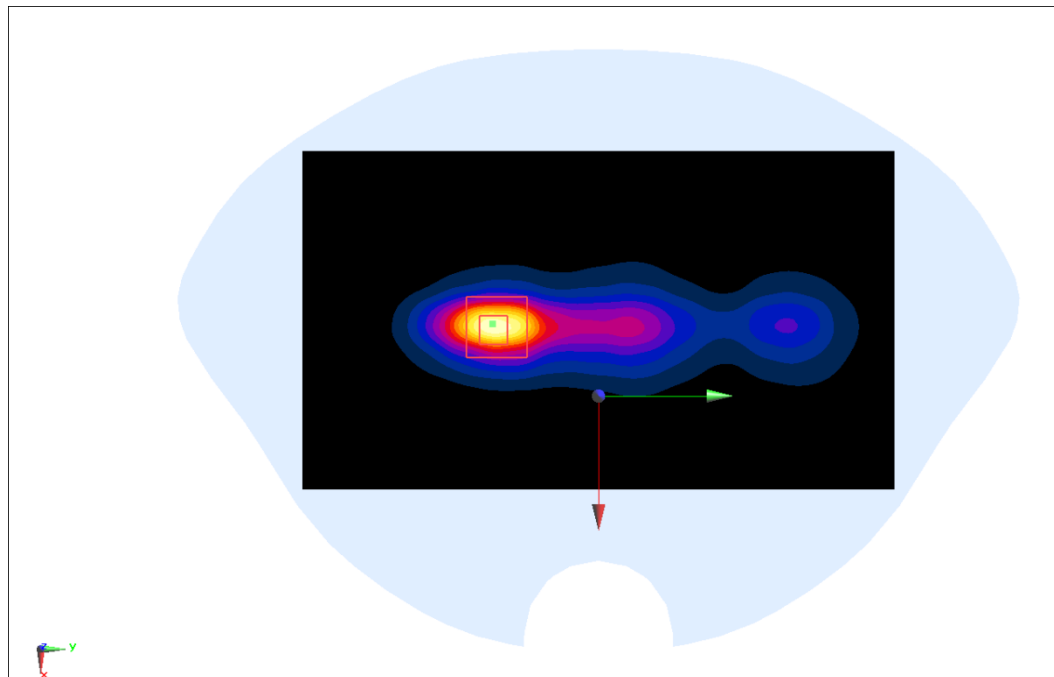
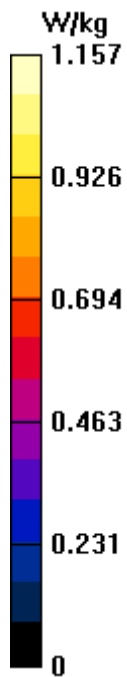
Zoom Scan (7x7x7)/Cube 0: Measurement grid: $dx=5$ mm, $dy=5$ mm, $dz=5$ mm

Reference Value = 11.75 V/m; Power Drift = -0.05 dB

Peak SAR (extrapolated) = 1.55 W/kg

SAR(1 g) = 0.740 W/kg; SAR(10 g) = 0.333 W/kg

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



LTE Band12 Head

Date: 2024-09-01

Electronics: DAE4 Sn1807

Medium: H700-6000M

Medium parameters used: $f = 710$ MHz; $\sigma = 0.914$ S/m; $\epsilon_r = 43.2$; $\rho = 1000$ kg/m³

Ambient Temperature: 23.3°C Liquid Temperature: 22.5°C

Communication System: LTE Band12 (0) Frequency: 711 MHz Duty Cycle: 1:1

Probe: EX3DV4 - SN3846 ConvF(9.89, 9.89, 9.89)

Area Scan (81x121x1): Interpolated grid: $dx=1.500$ mm, $dy=1.500$ mm

Maximum value of SAR (interpolated) = 1.05 W/kg

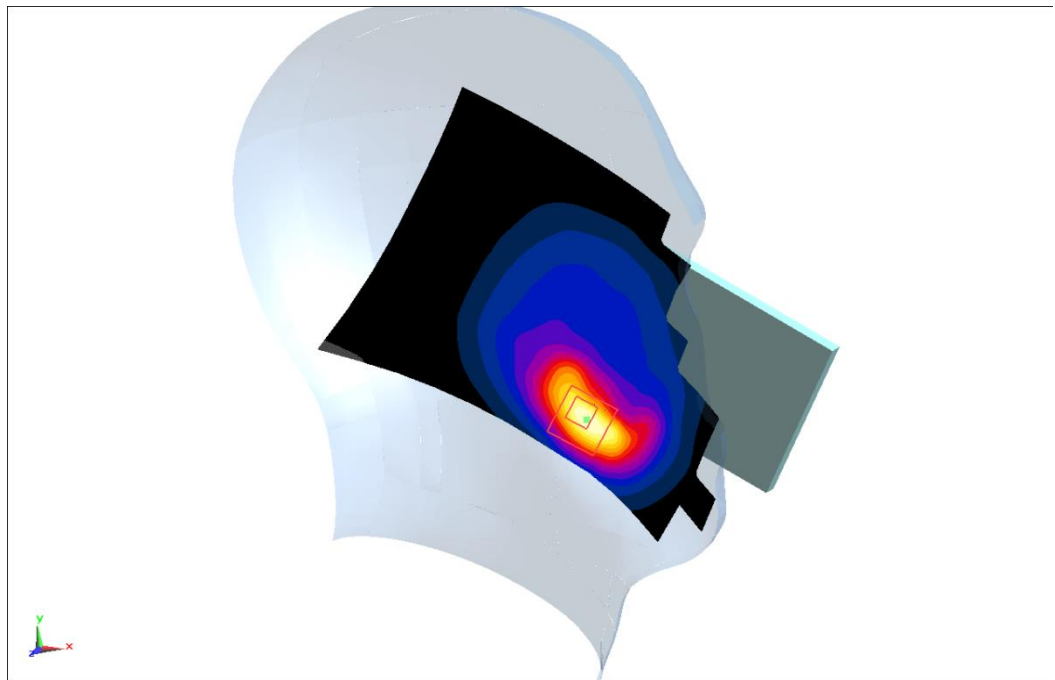
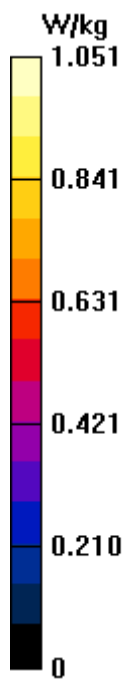
Zoom Scan (5x5x7)/Cube 0: Measurement grid: $dx=8$ mm, $dy=8$ mm, $dz=5$ mm

Reference Value = 9.197 V/m; Power Drift = 0.06 dB

Peak SAR (extrapolated) = 1.90 W/kg

SAR(1 g) = 0.865 W/kg; SAR(10 g) = 0.470 W/kg

Maximum value of SAR (measured) = 1.24 W/kg



LTE Band12 Body 10mm

Date: 2024-09-01

Electronics: DAE4 Sn1807

Medium: H700-6000M

Medium parameters used: $f = 705\text{ MHz}$; $\sigma = 0.912\text{ S/m}$; $\epsilon_r = 43.22$; $\rho = 1000\text{ kg/m}^3$

Ambient Temperature:23.3°C Liquid Temperature: 22.5°C

Communication System: LTE Band12 (0) Frequency: 704 MHz Duty Cycle: 1:1

Probe: EX3DV4 - SN3846 ConvF(9.89, 9.89, 9.89)

Area Scan (81x141x1): Interpolated grid: $dx=1.500\text{ mm}$, $dy=1.500\text{ mm}$

Maximum value of SAR (interpolated) = 1.14 W/kg

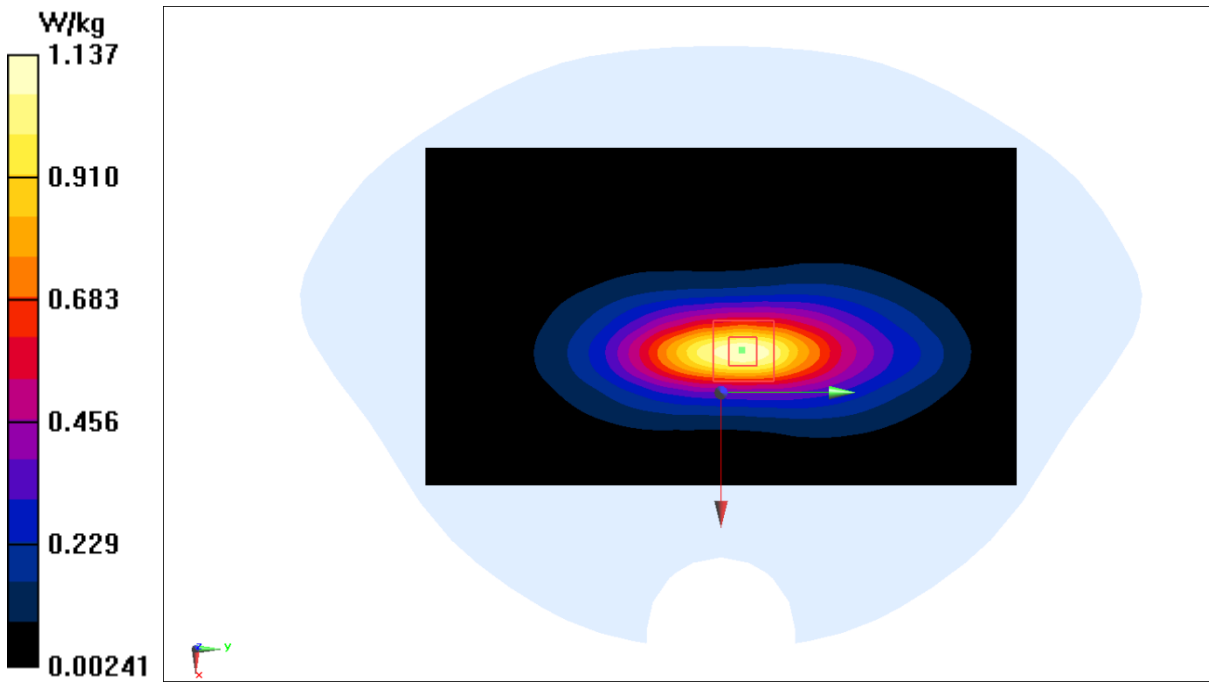
Zoom Scan (6x7x7)/Cube 0: Measurement grid: $dx=8\text{mm}$, $dy=8\text{mm}$, $dz=5\text{mm}$

Reference Value = 30.67 V/m; Power Drift = -0.07 dB

Peak SAR (extrapolated) = 1.42 W/kg

SAR(1 g) = 0.794 W/kg; SAR(10 g) = 0.476 W/kg

Maximum value of SAR (measured) = 1.17 W/kg

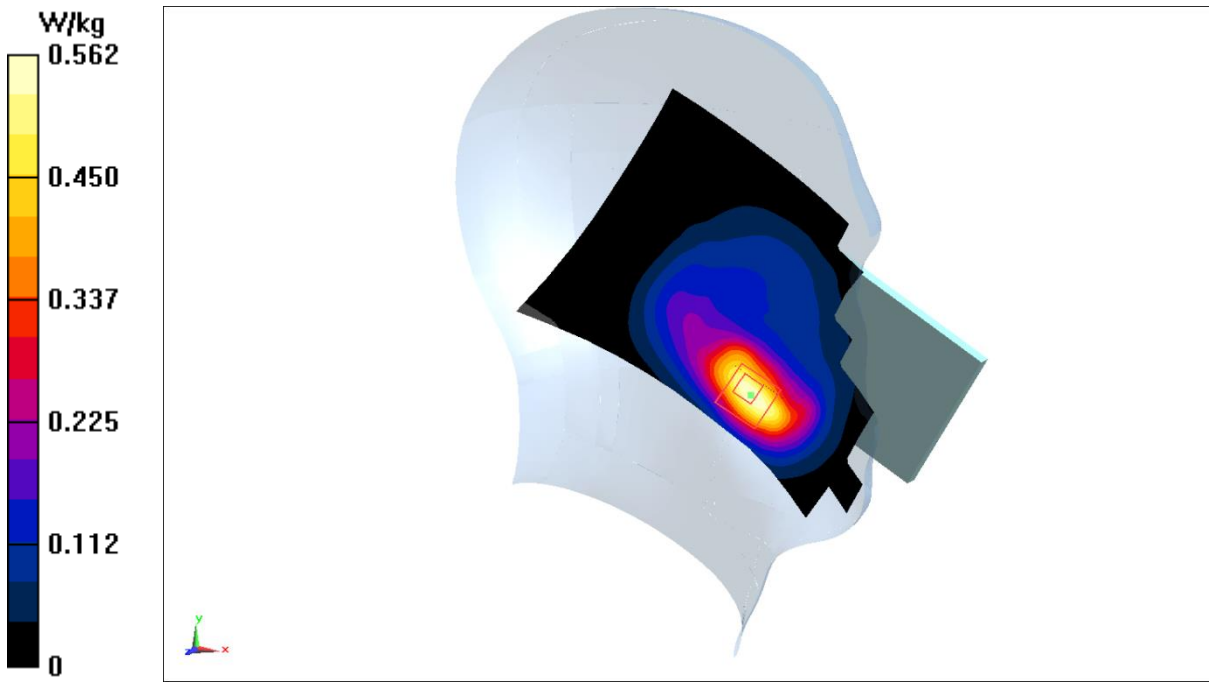


LTE Band13 Head

Date: 2024-09-01
Electronics: DAE4 Sn1807
Medium: H700-6000M
Medium parameters used: $f = 780 \text{ MHz}$; $\sigma = 0.938 \text{ S/m}$; $\epsilon_r = 43.02$; $\rho = 1000 \text{ kg/m}^3$
Ambient Temperature: 23.3°C Liquid Temperature: 22.5°C
Communication System: LTE Band13 (0) Frequency: 782 MHz Duty Cycle: 1:1
Probe: EX3DV4 - SN3846 ConvF(9.89, 9.89, 9.89)

Area Scan (81x121x1): Interpolated grid: $dx=1.500 \text{ mm}$, $dy=1.500 \text{ mm}$
Maximum value of SAR (interpolated) = 0.562 W/kg

Zoom Scan (5x5x7)/Cube 0: Measurement grid: $dx=8\text{mm}$, $dy=8\text{mm}$, $dz=5\text{mm}$
Reference Value = 7.183 V/m ; Power Drift = 0.18 dB
Peak SAR (extrapolated) = 1.07 W/kg
 $\text{SAR}(1 \text{ g}) = 0.498 \text{ W/kg}$; $\text{SAR}(10 \text{ g}) = 0.273 \text{ W/kg}$
Maximum value of SAR (measured) = 0.676 W/kg

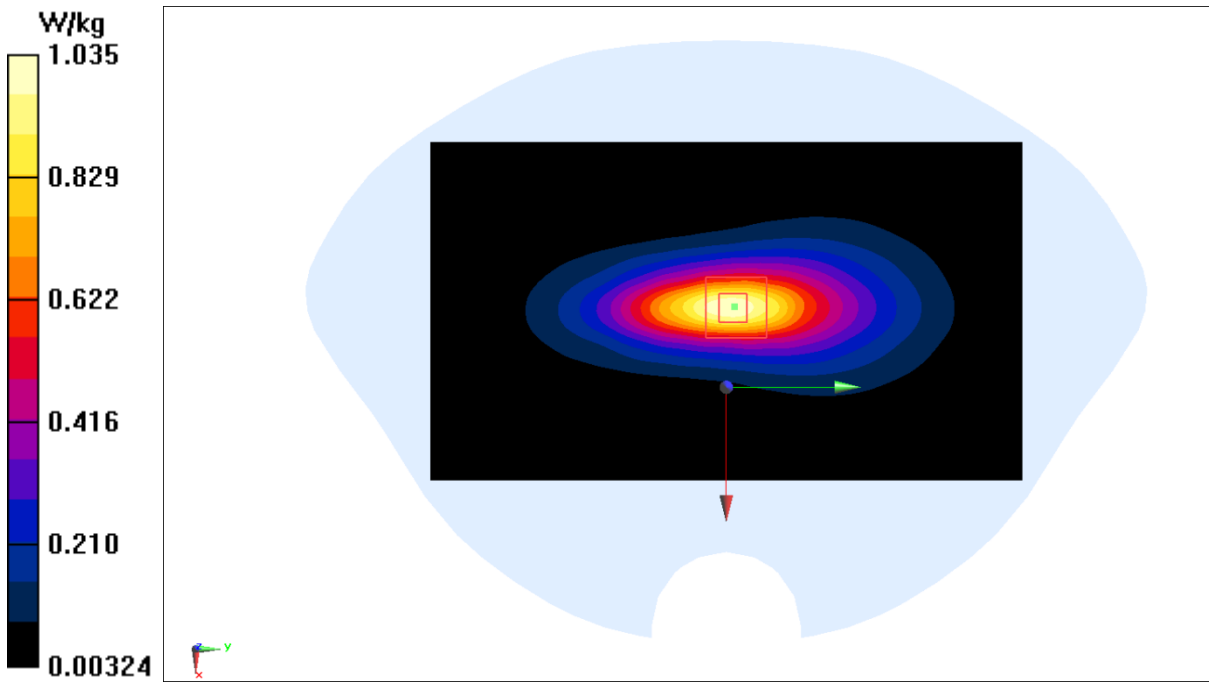


LTE Band13 Body 10mm

Date: 2024-09-01
Electronics: DAE4 Sn1807
Medium: H700-6000M
Medium parameters used: $f = 780\text{ MHz}$; $\sigma = 0.938\text{ S/m}$; $\epsilon_r = 43.02$; $\rho = 1000\text{ kg/m}^3$
Ambient Temperature: 23.3°C Liquid Temperature: 22.5°C
Communication System: LTE Band13 (0) Frequency: 782 MHz Duty Cycle: 1:1
Probe: EX3DV4 - SN3846 ConvF(9.89, 9.89, 9.89)

Area Scan (81x141x1): Interpolated grid: $dx=1.500\text{ mm}$, $dy=1.500\text{ mm}$
Maximum value of SAR (interpolated) = 1.04 W/kg

Zoom Scan (6x7x7)/Cube 0: Measurement grid: $dx=8\text{ mm}$, $dy=8\text{ mm}$, $dz=5\text{ mm}$
Reference Value = 21.62 V/m; Power Drift = 0.01 dB
Peak SAR (extrapolated) = 1.25 W/kg
 $\text{SAR}(1\text{ g}) = 0.687\text{ W/kg}$; $\text{SAR}(10\text{ g}) = 0.410\text{ W/kg}$
Maximum value of SAR (measured) = 1.02 W/kg

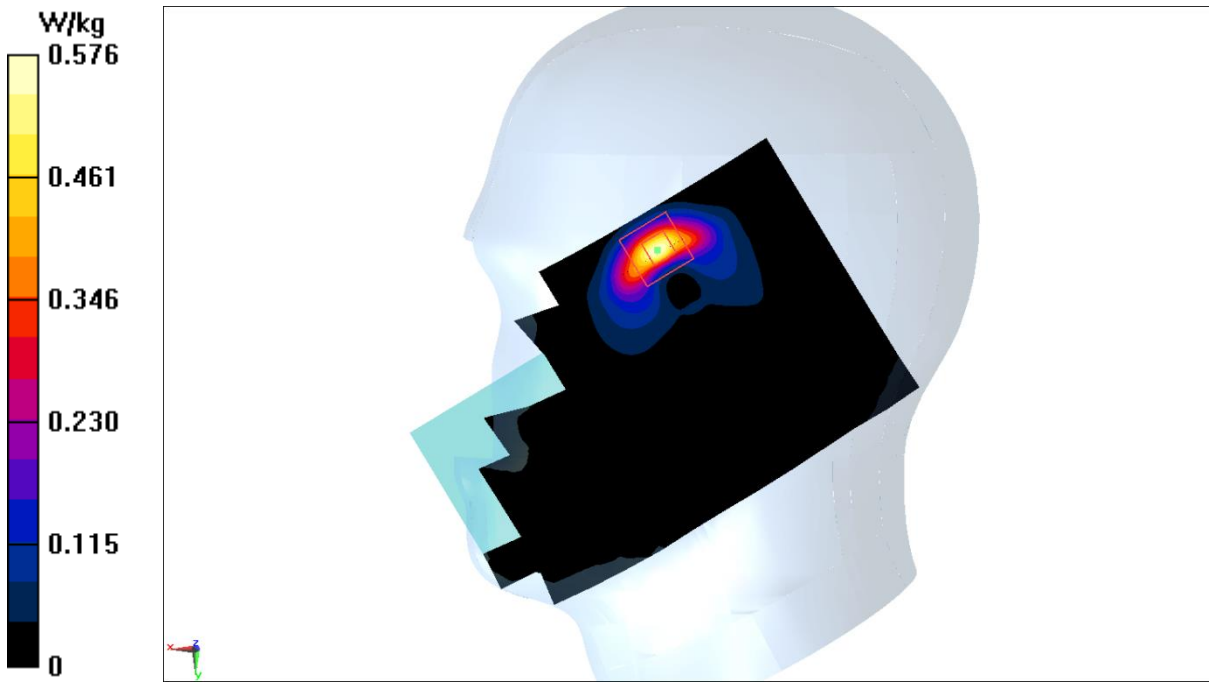


LTE Band25 Head

Date: 2024-09-07
Electronics: DAE4 Sn1807
Medium: H700-6000M
Medium parameters used: $f = 1905 \text{ MHz}$; $\sigma = 1.481 \text{ S/m}$; $\epsilon_r = 40.57$; $\rho = 1000 \text{ kg/m}^3$
Ambient Temperature: 23.3°C Liquid Temperature: 22.5°C
Communication System: LTE Band25 (0) Frequency: 1905 MHz Duty Cycle: 1:1
Probe: EX3DV4 - SN3846 ConvF(7.95, 7.95, 7.95)

Area Scan (81x121x1): Interpolated grid: $dx=1.500 \text{ mm}$, $dy=1.500 \text{ mm}$
Maximum value of SAR (interpolated) = 0.576 W/kg

Zoom Scan (5x5x7)/Cube 0: Measurement grid: $dx=8\text{mm}$, $dy=8\text{mm}$, $dz=5\text{mm}$
Reference Value = 3.864 V/m ; Power Drift = 0.16 dB
Peak SAR (extrapolated) = 0.669 W/kg
 $\text{SAR}(1 \text{ g}) = 0.319 \text{ W/kg}$; $\text{SAR}(10 \text{ g}) = 0.141 \text{ W/kg}$
Maximum value of SAR (measured) = 0.575 W/kg

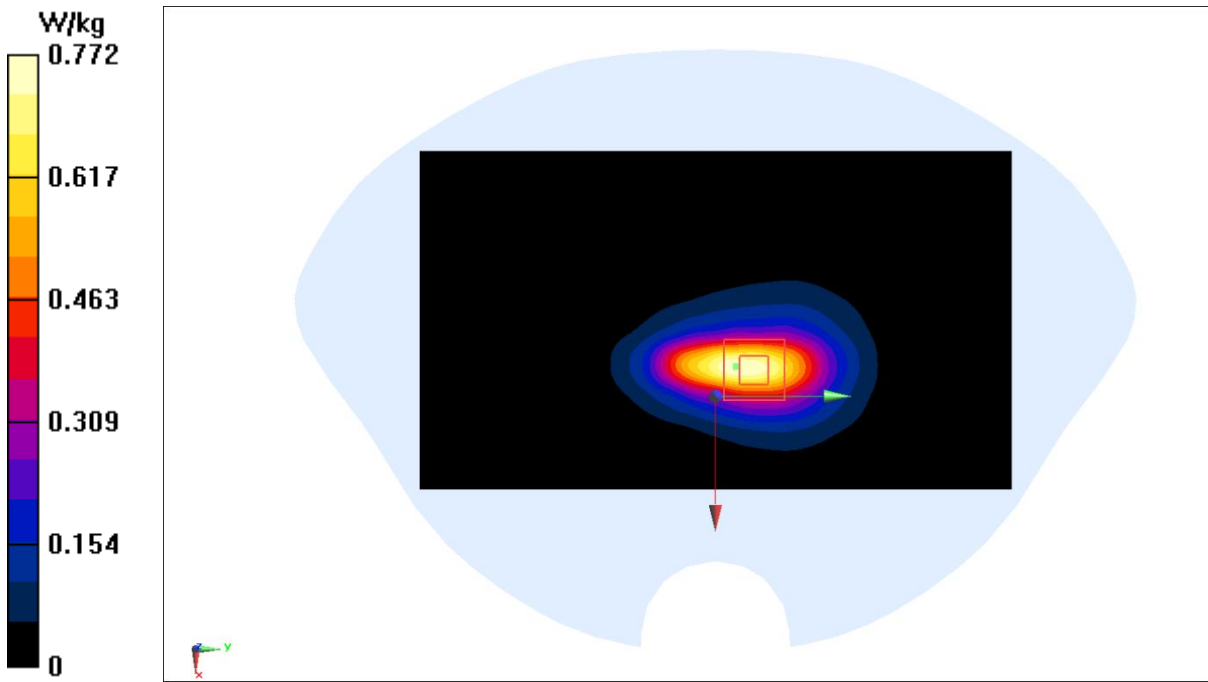


LTE Band25 Body 10mm

Date: 2024-09-07
Electronics: DAE4 Sn1807
Medium: H700-6000M
Medium parameters used: $f = 1905\text{ MHz}$; $\sigma = 1.481\text{ S/m}$; $\epsilon_r = 40.57$; $\rho = 1000\text{ kg/m}^3$
Ambient Temperature: 23.3°C Liquid Temperature: 22.5°C
Communication System: LTE Band25 (0) Frequency: 1905 MHz Duty Cycle: 1:1
Probe: EX3DV4 - SN3846 ConvF(7.95, 7.95, 7.95)

Area Scan (81x141x1): Interpolated grid: $dx=1.500\text{ mm}$, $dy=1.500\text{ mm}$
Maximum value of SAR (interpolated) = 0.772 W/kg

Zoom Scan (6x8x7)/Cube 0: Measurement grid: $dx=8\text{ mm}$, $dy=8\text{ mm}$, $dz=5\text{ mm}$
Reference Value = 15.82 V/m; Power Drift = 0.04 dB
Peak SAR (extrapolated) = 0.921 W/kg
 $\text{SAR}(1\text{ g}) = 0.526\text{ W/kg}$; $\text{SAR}(10\text{ g}) = 0.284\text{ W/kg}$
Maximum value of SAR (measured) = 0.755 W/kg



LTE Band26 Head

Date: 9/14/2024

Electronics: DAE4 Sn549

Medium: H700-6000M

Medium parameters used (interpolated): $f = 831.5$ MHz; $\sigma = 0.926$ S/m; $\epsilon_r = 42.5$; $\rho = 1000$ kg/m³

Ambient Temperature: 23.3°C Liquid Temperature: 22.5°C

Communication System: LTE Band26 15M (0) Frequency: 831.5 MHz Duty Cycle: 1:1

Probe: EX3DV4 - SN7517 ConvF(9.85, 9.85, 9.85)

Area Scan (91x131x1): Interpolated grid: $dx=1.500$ mm, $dy=1.500$ mm

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

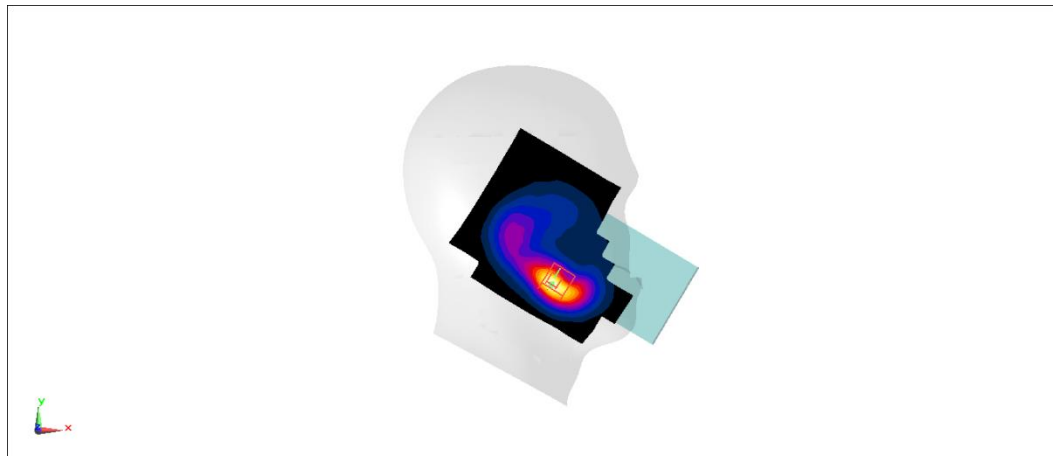
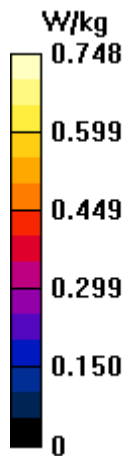
Zoom Scan (5x5x7)/Cube 0: Measurement grid: $dx=8$ mm, $dy=8$ mm, $dz=5$ mm

Reference Value = 12.93 V/m; Power Drift = -0.11 dB

Peak SAR (extrapolated) = 1.75 W/kg

SAR(1 g) = 0.782 W/kg; SAR(10 g) = 0.425 W/kg

Maximum value of SAR (measured) = 1.24 W/kg



LTE Band26 Body 10mm

Date: 9/14/2024

Electronics: DAE4 Sn549

Medium: H700-6000M

Medium parameters used (interpolated): $f = 841.5$ MHz; $\sigma = 0.93$ S/m; $\epsilon_r = 42.47$; $\rho = 1000$ kg/m³

Ambient Temperature: 23.3°C Liquid Temperature: 22.5°C

Communication System: LTE Band26 15M (0) Frequency: 841.5 MHz Duty Cycle: 1:1

Probe: EX3DV4 - SN7517 ConvF(9.85, 9.85, 9.85)

Area Scan (81x141x1): Interpolated grid: $dx=1.500$ mm, $dy=1.500$ mm

Maximum value of SAR (interpolated) = 0.988 W/kg

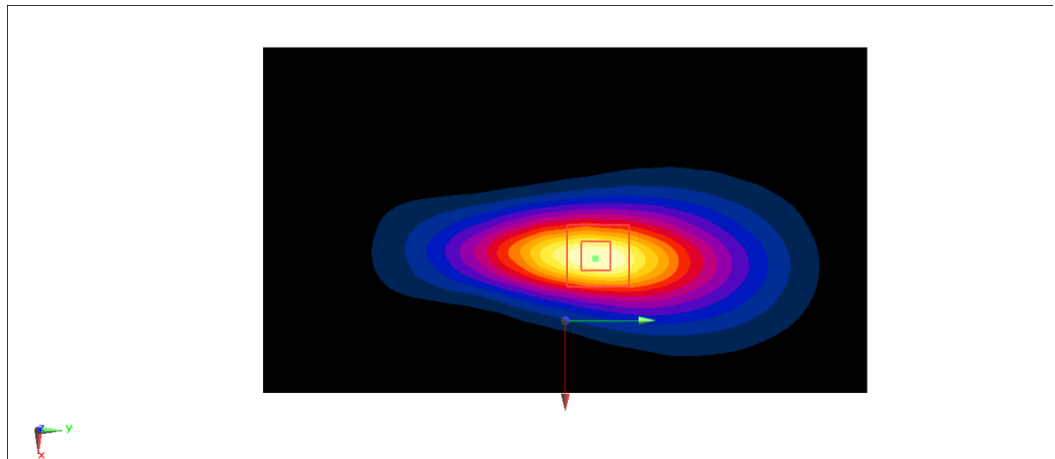
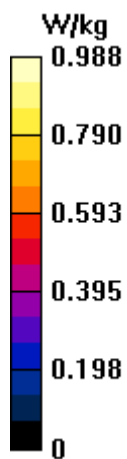
Zoom Scan (5x5x7)/Cube 0: Measurement grid: $dx=8$ mm, $dy=8$ mm, $dz=5$ mm

Reference Value = 30.66 V/m; Power Drift = -0.14 dB

Peak SAR (extrapolated) = 1.78 W/kg

SAR(1 g) = 0.953 W/kg; SAR(10 g) = 0.557 W/kg

Maximum value of SAR (measured) = 1.46 W/kg



LTE Band38 Head

Date: 2024-09-05

Electronics: DAE4 Sn1807

Medium: H700-6000M

Medium parameters used: $f = 2595$ MHz; $\sigma = 1.965$ S/m; $\epsilon_r = 40.48$; $\rho = 1000$ kg/m³

Ambient Temperature: 23.3°C Liquid Temperature: 22.5°C

Communication System: LTE Band38 (0) Frequency: 2595 MHz Duty Cycle: 1:1.5787

Probe: EX3DV4 - SN3846 ConvF(7.28, 7.28, 7.28)

Area Scan (101x151x1): Interpolated grid: $dx=1.200$ mm, $dy=1.200$ mm

Maximum value of SAR (interpolated) = 1.15 W/kg

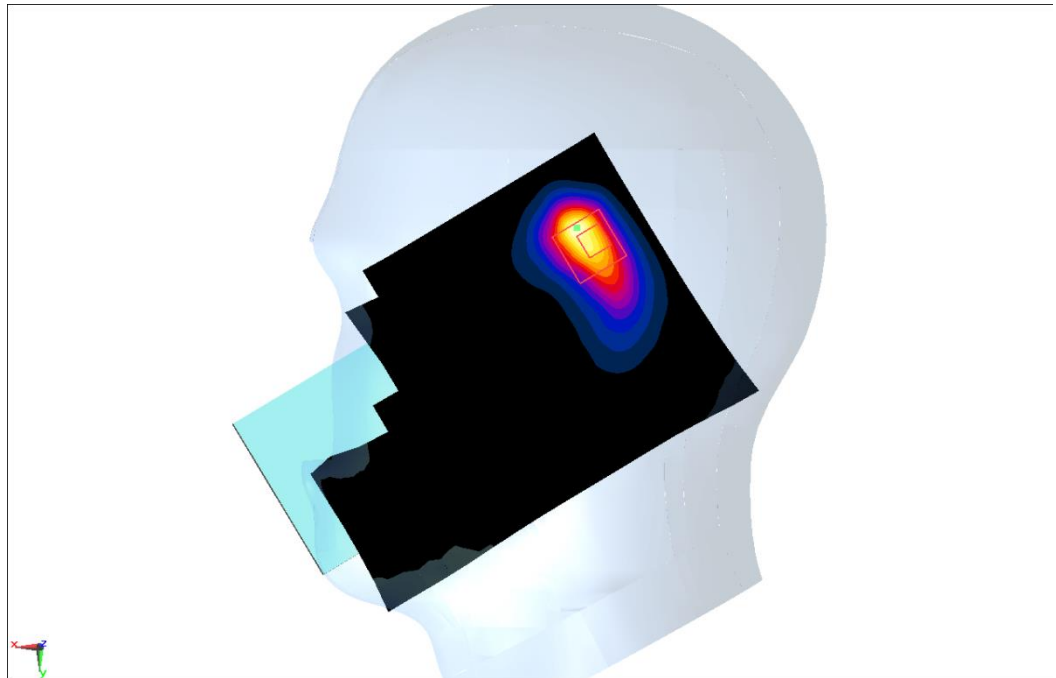
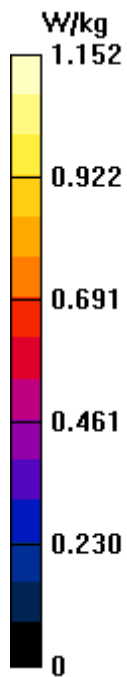
Zoom Scan (9x7x7)/Cube 0: Measurement grid: $dx=5$ mm, $dy=5$ mm, $dz=5$ mm

Reference Value = 9.523 V/m; Power Drift = 0.12 dB

Peak SAR (extrapolated) = 1.42 W/kg

SAR(1 g) = 0.637 W/kg; SAR(10 g) = 0.308 W/kg

Maximum value of SAR (measured) = 1.10 W/kg



LTE Band38 Body 10mm

Date: 2024-09-05

Electronics: DAE4 Sn1807

Medium: H700-6000M

Medium parameters used: $f = 2595$ MHz; $\sigma = 1.965$ S/m; $\epsilon_r = 40.48$; $\rho = 1000$ kg/m³

Ambient Temperature: 23.3°C Liquid Temperature: 22.5°C

Communication System: LTE Band38 (0) Frequency: 2595 MHz Duty Cycle: 1:1.5787

Probe: EX3DV4 - SN3846 ConvF(7.28, 7.28, 7.28)

Area Scan (101x171x1): Interpolated grid: $dx=1.200$ mm, $dy=1.200$ mm

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

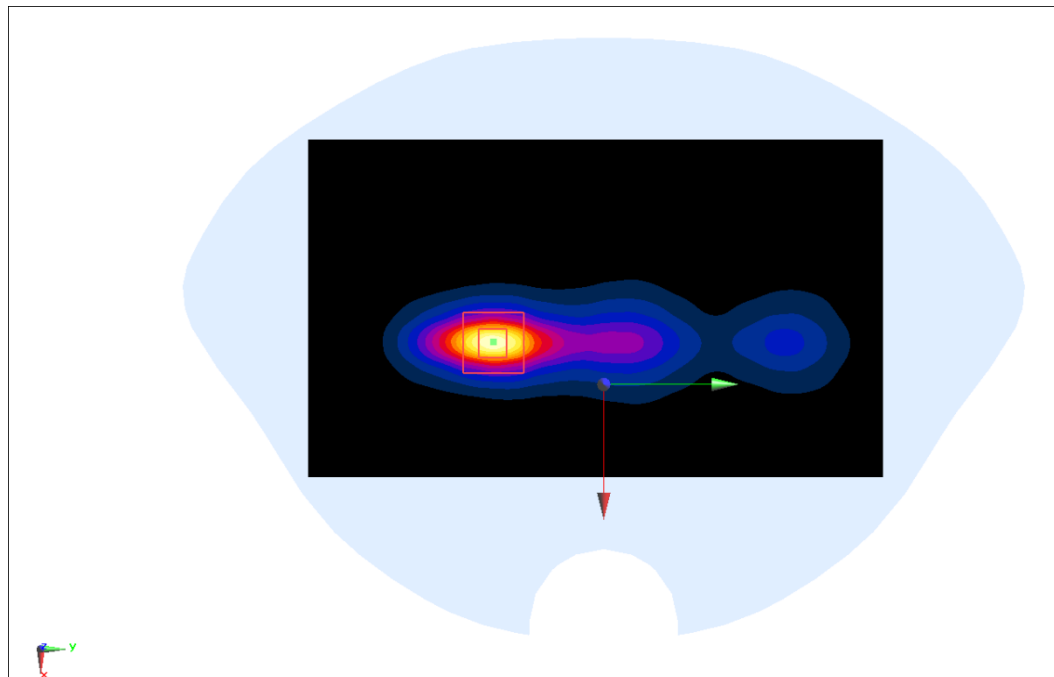
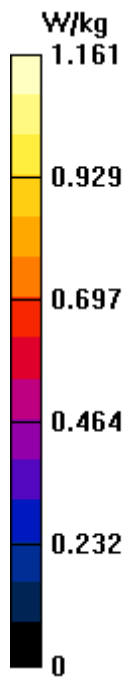
Zoom Scan (9x10x7)/Cube 0: Measurement grid: $dx=5$ mm, $dy=5$ mm, $dz=5$ mm

Reference Value = 11.97 V/m; Power Drift = 0.03 dB

Peak SAR (extrapolated) = 1.45 W/kg

SAR(1 g) = 0.697 W/kg; SAR(10 g) = 0.313 W/kg

Maximum value of SAR (measured) = 1.12 W/kg

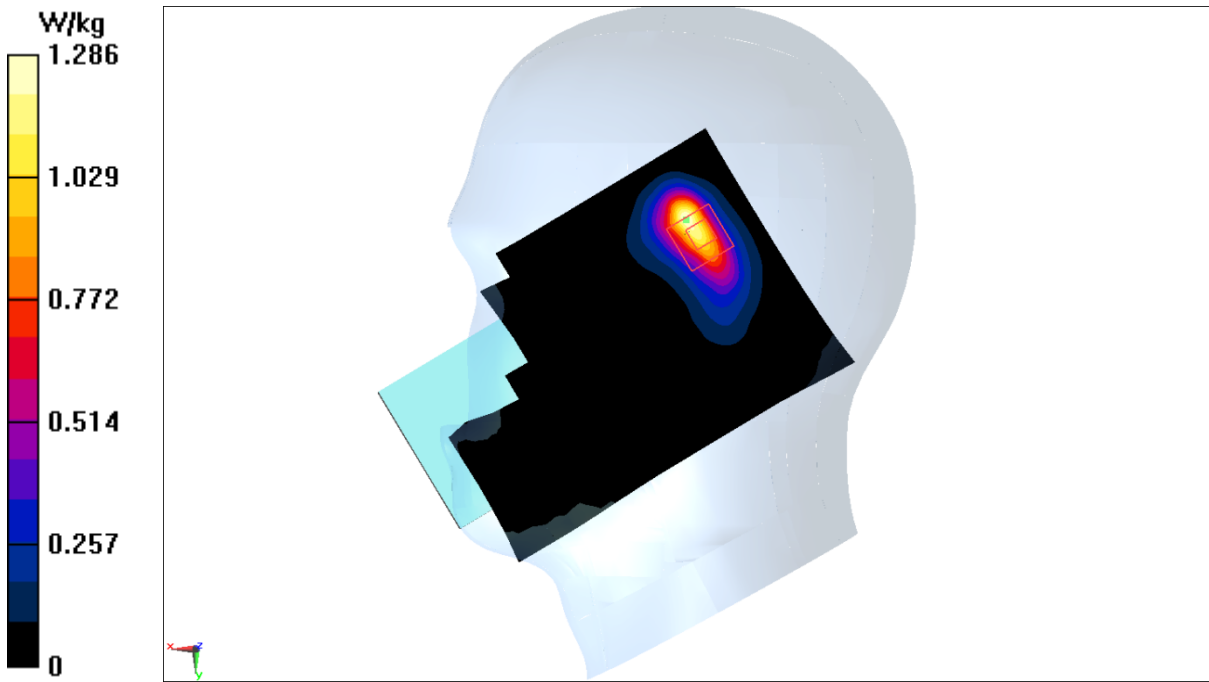


LTE Band41 PC2 Head

Date: 2024-09-10
Electronics: DAE4 Sn1807
Medium: H700-6000M
Medium parameters used: $f = 2595 \text{ MHz}$; $\sigma = 1.928 \text{ S/m}$; $\epsilon_r = 39.7$; $\rho = 1000 \text{ kg/m}^3$
Ambient Temperature: 23.3°C Liquid Temperature: 22.5°C
Communication System: LTE Band41 (0) Frequency: 2593 MHz Duty Cycle: 1:2.30994
Probe: EX3DV4 - SN3846 ConvF(7.28, 7.28, 7.28)

Area Scan (101x151x1): Interpolated grid: $dx=1.200 \text{ mm}$, $dy=1.200 \text{ mm}$
Maximum value of SAR (interpolated) = 1.29 W/kg

Zoom Scan (9x7x7)/Cube 0: Measurement grid: $dx=5\text{mm}$, $dy=5\text{mm}$, $dz=5\text{mm}$
Reference Value = 11.14 V/m; Power Drift = 0.11 dB
Peak SAR (extrapolated) = 1.41 W/kg
 $\text{SAR}(1 \text{ g}) = 0.640 \text{ W/kg}$; $\text{SAR}(10 \text{ g}) = 0.310 \text{ W/kg}$
Maximum value of SAR (measured) = 1.10 W/kg



LTE Band41 PC2 Body 10mm

Date: 2024-09-10

Electronics: DAE4 Sn1807

Medium: H700-6000M

Medium parameters used: $f = 2595$ MHz; $\sigma = 1.928$ S/m; $\epsilon_r = 39.7$; $\rho = 1000$ kg/m³

Ambient Temperature: 23.3°C Liquid Temperature: 22.5°C

Communication System: LTE Band41 (0) Frequency: 2593 MHz Duty Cycle: 1:2.30994

Probe: EX3DV4 - SN3846 ConvF(7.28, 7.28, 7.28)

Area Scan (101x171x1): Interpolated grid: $dx=1.200$ mm, $dy=1.200$ mm

Maximum value of SAR (interpolated) = 1.13 W/kg

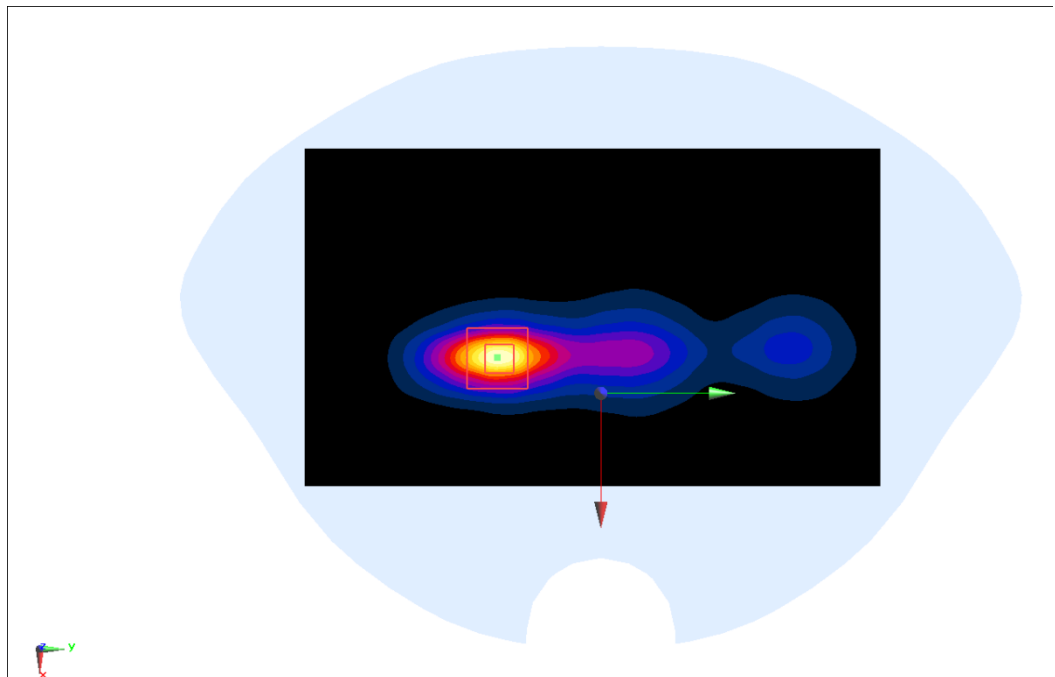
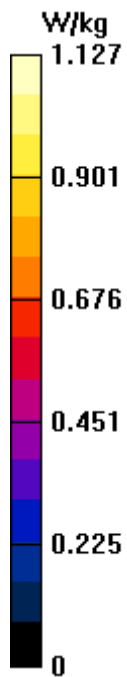
Zoom Scan (9x10x7)/Cube 0: Measurement grid: $dx=5$ mm, $dy=5$ mm, $dz=5$ mm

Reference Value = 11.75 V/m; Power Drift = 0.04 dB

Peak SAR (extrapolated) = 1.42 W/kg

SAR(1 g) = 0.679 W/kg; SAR(10 g) = 0.305 W/kg

Maximum value of SAR (measured) = 1.09 W/kg

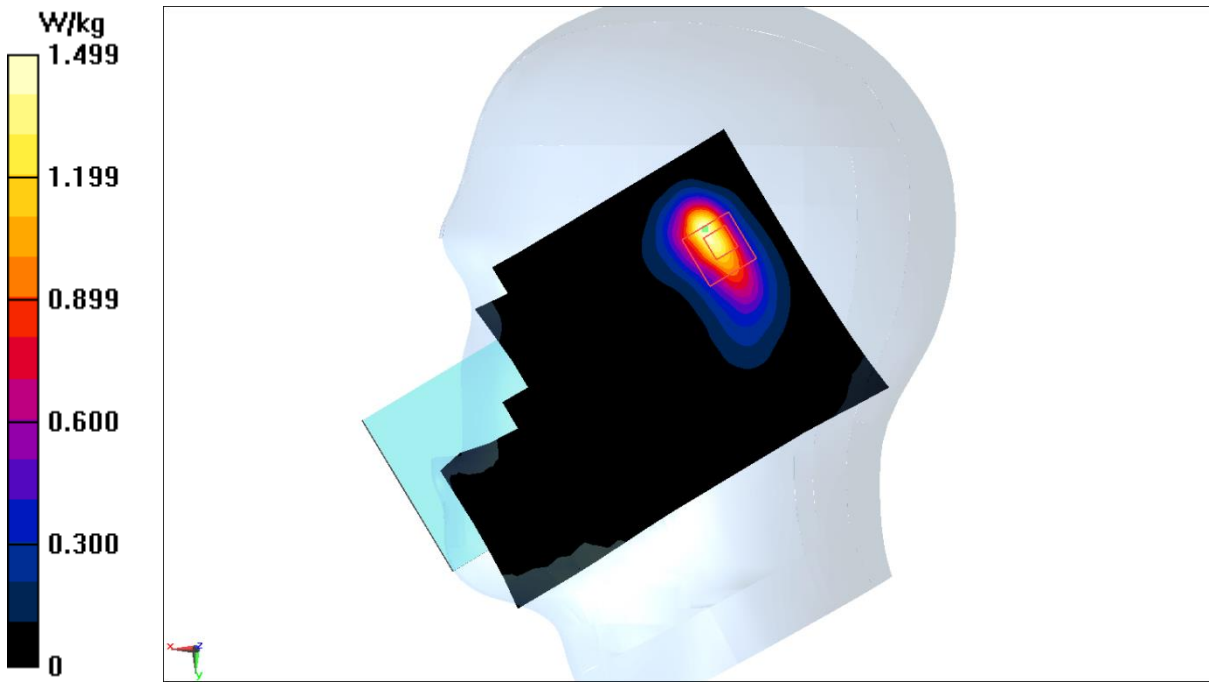


LTE Band41 PC3 Head

Date: 2024-09-10
Electronics: DAE4 Sn1807
Medium: H700-6000M
Medium parameters used: $f = 2595 \text{ MHz}$; $\sigma = 1.928 \text{ S/m}$; $\epsilon_r = 39.7$; $\rho = 1000 \text{ kg/m}^3$
Ambient Temperature: 23.3°C Liquid Temperature: 22.5°C
Communication System: LTE Band41 (0) Frequency: 2593 MHz Duty Cycle: 1:1.5787
Probe: EX3DV4 - SN3846 ConvF(7.28, 7.28, 7.28)

Area Scan (101x151x1): Interpolated grid: $dx=1.200 \text{ mm}$, $dy=1.200 \text{ mm}$
Maximum value of SAR (interpolated) = 1.50 W/kg

Zoom Scan (9x7x7)/Cube 0: Measurement grid: $dx=5\text{mm}$, $dy=5\text{mm}$, $dz=5\text{mm}$
Reference Value = 11.74 V/m; Power Drift = 0.08 dB
Peak SAR (extrapolated) = 1.68 W/kg
 $\text{SAR}(1 \text{ g}) = 0.743 \text{ W/kg}$; $\text{SAR}(10 \text{ g}) = 0.354 \text{ W/kg}$
Maximum value of SAR (measured) = 1.29 W/kg



LTE Band41 PC3 Body 10mm

Date: 2024-09-10

Electronics: DAE4 Sn1807

Medium: H700-6000M

Medium parameters used: $f = 2595$ MHz; $\sigma = 1.928$ S/m; $\epsilon_r = 39.7$; $\rho = 1000$ kg/m³

Ambient Temperature: 23.3°C Liquid Temperature: 22.5°C

Communication System: LTE Band41 (0) Frequency: 2593 MHz Duty Cycle: 1:1.5787

Probe: EX3DV4 - SN3846 ConvF(7.28, 7.28, 7.28)

Area Scan (101x171x1): Interpolated grid: $dx=1.200$ mm, $dy=1.200$ mm

Maximum value of SAR (interpolated) = 1.23 W/kg

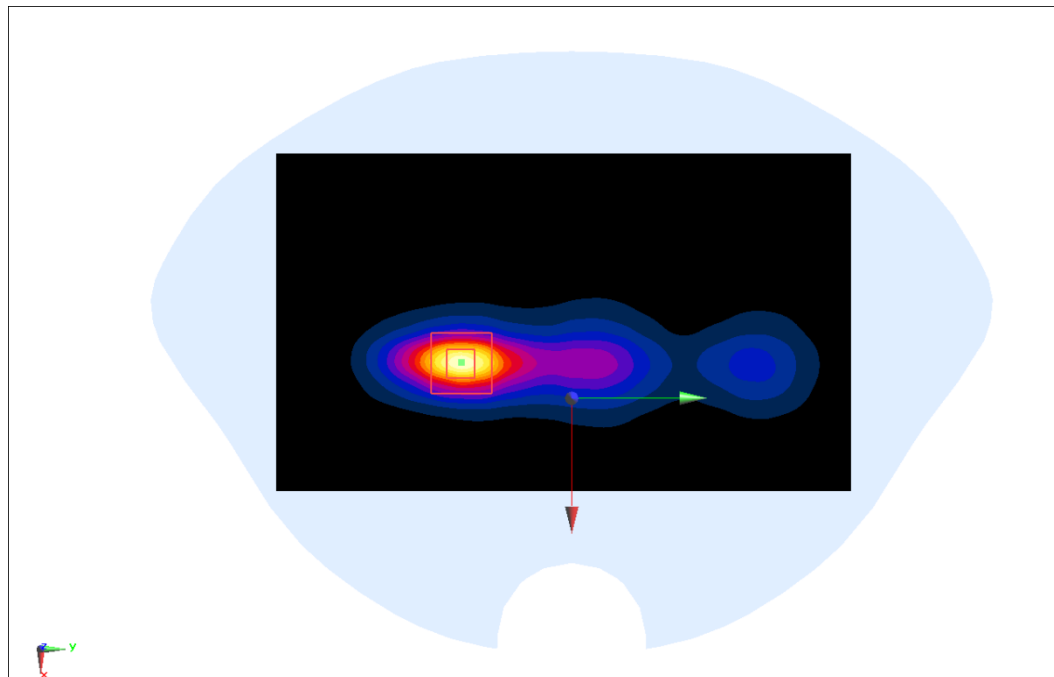
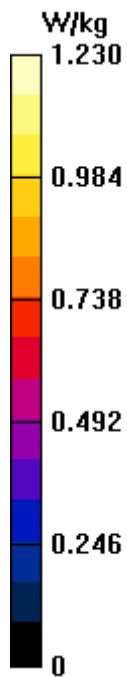
Zoom Scan (9x10x7)/Cube 0: Measurement grid: $dx=5$ mm, $dy=5$ mm, $dz=5$ mm

Reference Value = 12.04 V/m; Power Drift = -0.04 dB

Peak SAR (extrapolated) = 1.55 W/kg

SAR(1 g) = 0.733 W/kg; SAR(10 g) = 0.330 W/kg

Maximum value of SAR (measured) = 1.18 W/kg

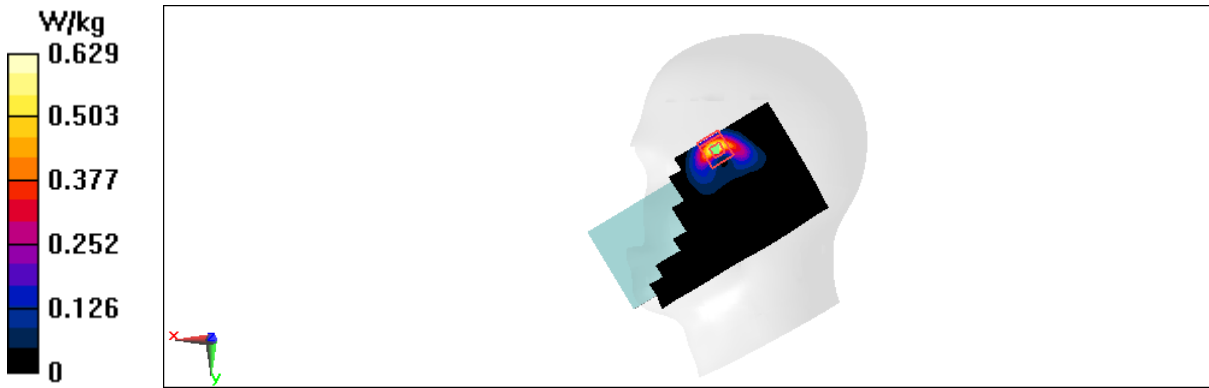


LTE Band66 Head

Date: 2024-08-31
Electronics: DAE4 Sn1807
Medium: H700-6000M
Medium parameters used: $f = 1745 \text{ MHz}$; $\sigma = 1.39 \text{ S/m}$; $\epsilon_r = 41.78$; $\rho = 1000 \text{ kg/m}^3$
Ambient Temperature: 23.3°C Liquid Temperature: 22.5°C
Communication System: LTE Band66 (0) Frequency: 1745 MHz Duty Cycle: 1:1
Probe: EX3DV4 - SN3846 ConvF(8.25, 8.25, 8.25)

Area Scan (91x161x1): Interpolated grid: $dx=1.200 \text{ mm}$, $dy=1.200 \text{ mm}$
Maximum value of SAR (interpolated) = 0.629 W/kg

Zoom Scan (7x7x7)/Cube 0: Measurement grid: $dx=5\text{mm}$, $dy=5\text{mm}$, $dz=5\text{mm}$
Reference Value = 3.239 V/m ; Power Drift = 0.04 dB
Peak SAR (extrapolated) = 1.25 W/kg
 $\text{SAR}(1 \text{ g}) = 0.523 \text{ W/kg}$; $\text{SAR}(10 \text{ g}) = 0.225 \text{ W/kg}$
Maximum value of SAR (measured) = 0.846 W/kg

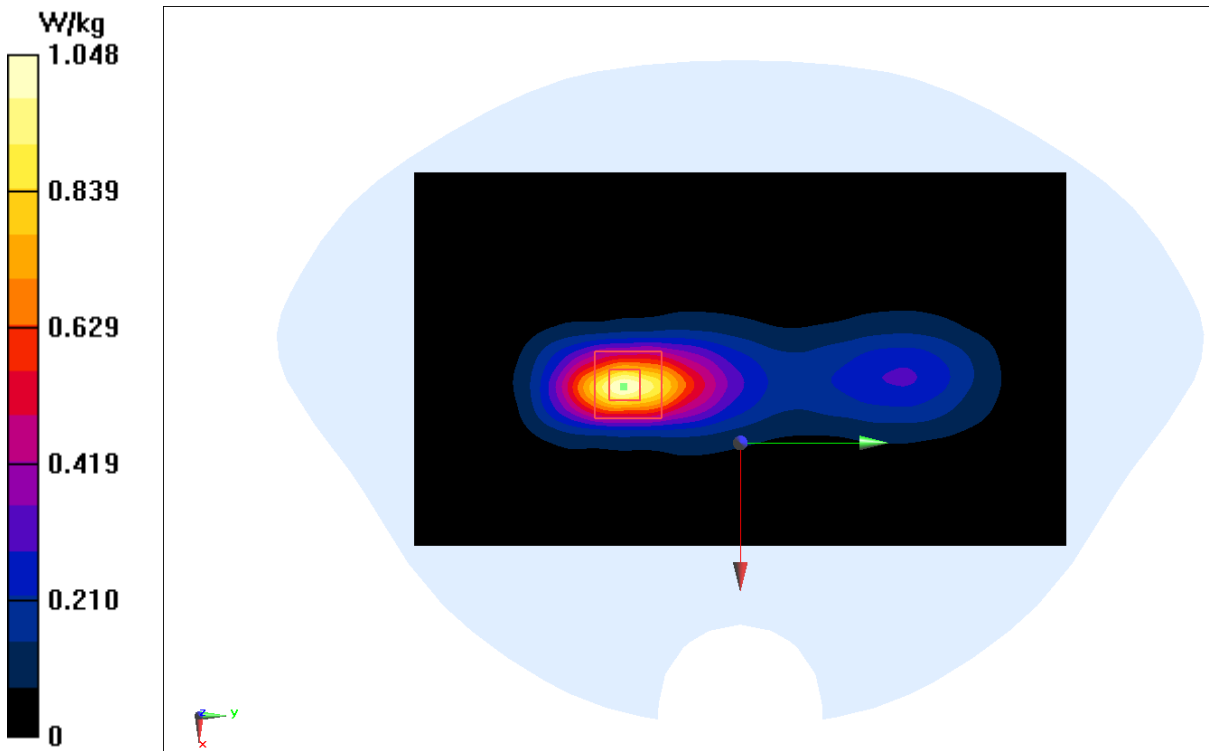


LTE Band66 Body 10mm

Date: 2024-08-31
Electronics: DAE4 Sn1807
Medium: H700-6000M
Medium parameters used: $f = 1745\text{ MHz}$; $\sigma = 1.39\text{ S/m}$; $\epsilon_r = 41.78$; $\rho = 1000\text{ kg/m}^3$
Ambient Temperature: 23.3°C Liquid Temperature: 22.5°C
Communication System: LTE Band66 (0) Frequency: 1745 MHz Duty Cycle: 1:1
Probe: EX3DV4 - SN3846 ConvF(8.25, 8.25, 8.25)

Area Scan (81x141x1): Interpolated grid: $dx=1.500\text{ mm}$, $dy=1.500\text{ mm}$
Maximum value of SAR (interpolated) = 1.05 W/kg

Zoom Scan (6x7x7)/Cube 0: Measurement grid: $dx=8\text{ mm}$, $dy=8\text{ mm}$, $dz=5\text{ mm}$
Reference Value = 12.73 V/m; Power Drift = -0.08 dB
Peak SAR (extrapolated) = 1.33 W/kg
 $\text{SAR}(1\text{ g}) = 0.725\text{ W/kg}$; $\text{SAR}(10\text{ g}) = 0.370\text{ W/kg}$
Maximum value of SAR (measured) = 1.12 W/kg



N2 Head

Date: 2024-09-04

Electronics: DAE4 Sn1807

Medium: H700-6000M

Medium parameters used: $f = 1880$ MHz; $\sigma = 1.419$ S/m; $\epsilon_r = 40.24$; $\rho = 1000$ kg/m³

Ambient Temperature: 23.3°C Liquid Temperature: 22.5°C

Communication System: 5G NR N2 15kHz (0) Frequency: 1880 MHz Duty Cycle: 1:1

Probe: EX3DV4 - SN3846 ConvF(7.95, 7.95, 7.95)

Area Scan (81x121x1): Interpolated grid: $dx=1.500$ mm, $dy=1.500$ mm

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

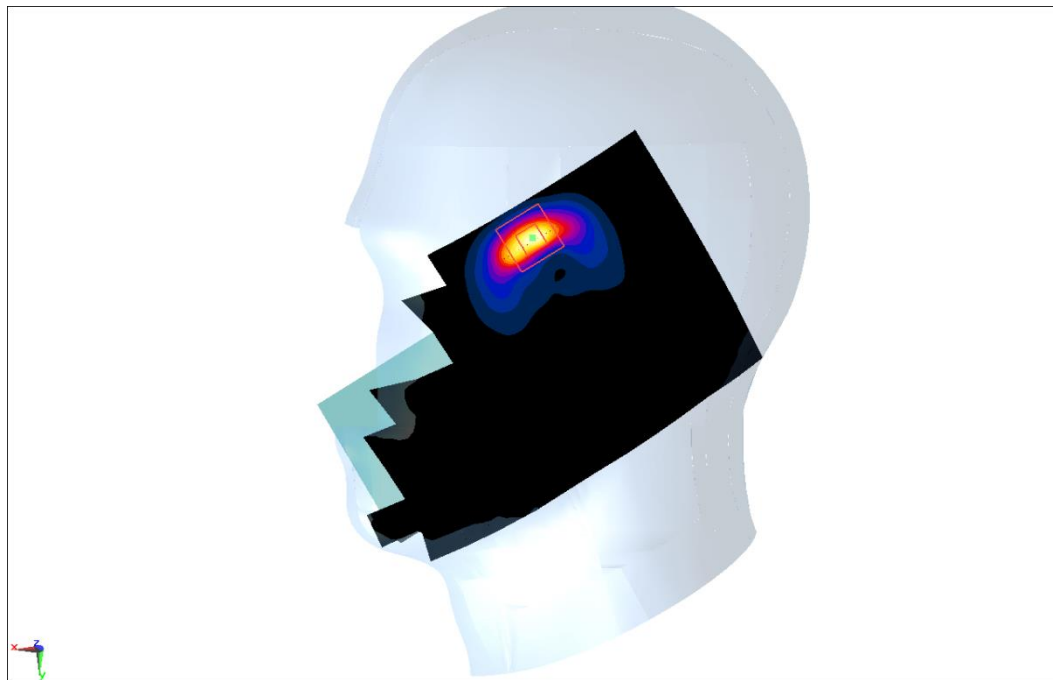
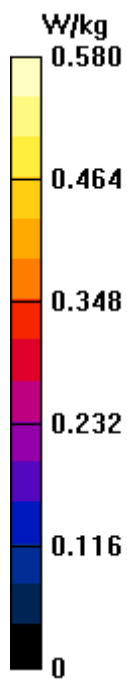
Zoom Scan (5x5x7)/Cube 0: Measurement grid: $dx=8$ mm, $dy=8$ mm, $dz=5$ mm

Reference Value = 3.559 V/m; Power Drift = 0.15 dB

Peak SAR (extrapolated) = 0.740 W/kg

SAR(1 g) = 0.353 W/kg; SAR(10 g) = 0.156 W/kg

Maximum value of SAR (measured) = 0.633 W/kg



N2 Body 10mm

Date: 2024-09-04

Electronics: DAE4 Sn1807

Medium: H700-6000M

Medium parameters used: $f = 1880$ MHz; $\sigma = 1.419$ S/m; $\epsilon_r = 40.24$; $\rho = 1000$ kg/m³

Ambient Temperature: 23.3°C Liquid Temperature: 22.5°C

Communication System: 5G NR N2 15kHz (0) Frequency: 1880 MHz Duty Cycle: 1:1

Probe: EX3DV4 - SN3846 ConvF(7.95, 7.95, 7.95)

Area Scan (81x141x1): Interpolated grid: $dx=1.500$ mm, $dy=1.500$ mm

Maximum value of SAR (interpolated) = 0.668 W/kg

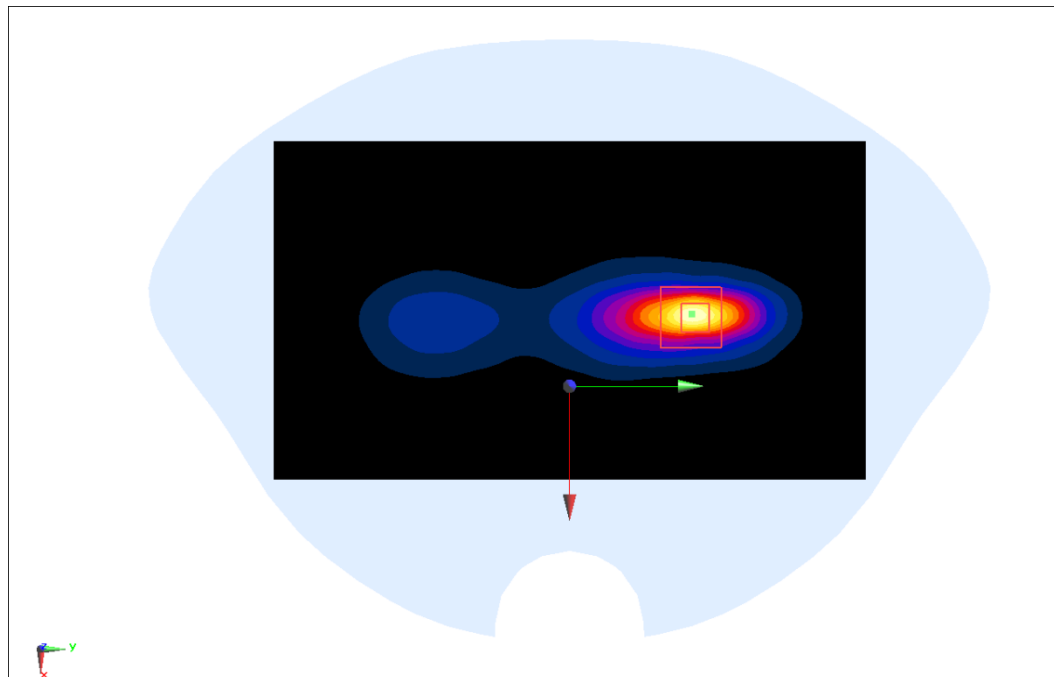
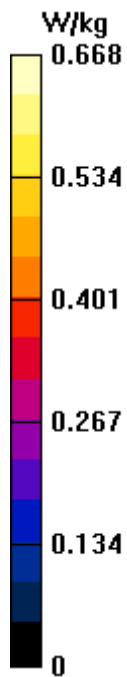
Zoom Scan (6x7x7)/Cube 0: Measurement grid: $dx=8$ mm, $dy=8$ mm, $dz=5$ mm

Reference Value = 7.297 V/m; Power Drift = 0.14 dB

Peak SAR (extrapolated) = 0.825 W/kg

SAR(1 g) = 0.440 W/kg; SAR(10 g) = 0.217 W/kg

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



N5 Head

Date: 2024-09-16

Electronics: DAE4 Sn1807

Medium: H700-6000M

Medium parameters used: $f = 825$ MHz; $\sigma = 0.918$ S/m; $\epsilon_r = 42.16$; $\rho = 1000$ kg/m³

Ambient Temperature: 23.3°C Liquid Temperature: 22.5°C

Communication System: 5G NR N5 15kHz (0) Frequency: 826.5 MHz Duty Cycle: 1:1

Probe: EX3DV4 - SN3846 ConvF(9.89, 9.89, 9.89)

Area Scan (81x121x1): Interpolated grid: $dx=1.500$ mm, $dy=1.500$ mm

Maximum value of SAR (interpolated) = 0.508 W/kg

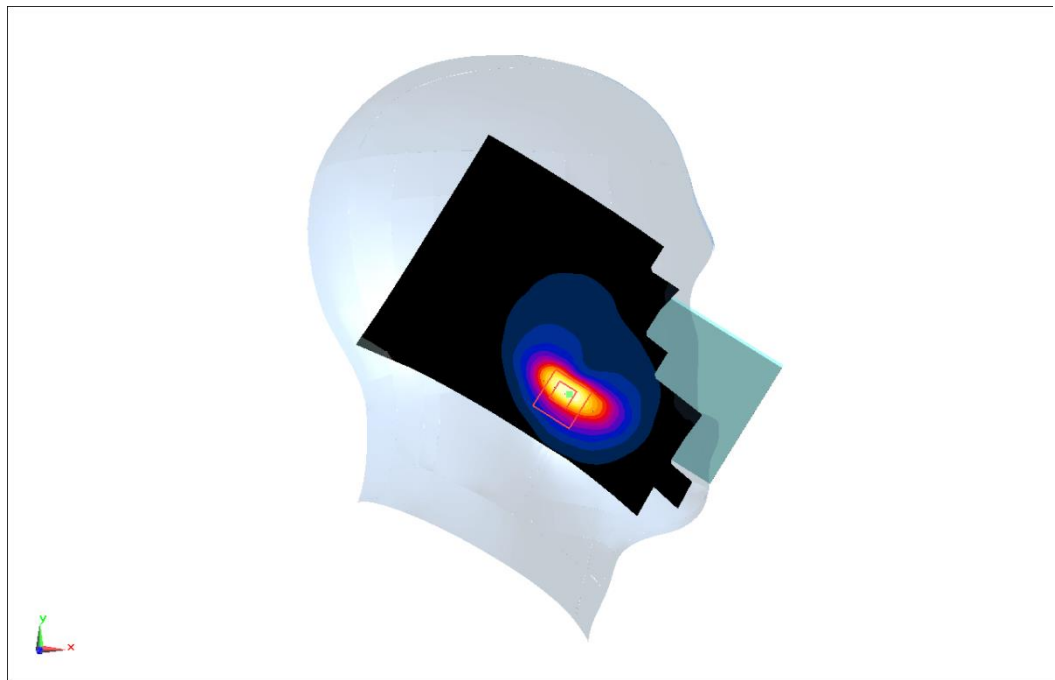
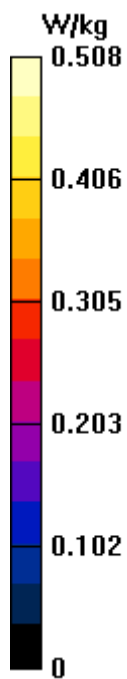
Zoom Scan (5x5x7)/Cube 0: Measurement grid: $dx=8$ mm, $dy=8$ mm, $dz=5$ mm

Reference Value = 4.146 V/m; Power Drift = 0.02 dB

Peak SAR (extrapolated) = 0.620 W/kg

SAR(1 g) = 0.293 W/kg; SAR(10 g) = 0.154 W/kg

Maximum value of SAR (measured) = 0.491 W/kg



N5 Body 10mm

Date: 2024-09-16

Electronics: DAE4 Sn1807

Medium: H700-6000M

Medium parameters used: $f = 825$ MHz; $\sigma = 0.918$ S/m; $\epsilon_r = 42.16$; $\rho = 1000$ kg/m³

Ambient Temperature: 23.3°C Liquid Temperature: 22.5°C

Communication System: 5G NR N5 15kHz (0) Frequency: 826.5 MHz Duty Cycle: 1:1

Probe: EX3DV4 - SN3846 ConvF(9.89, 9.89, 9.89)

Area Scan (81x141x1): Interpolated grid: $dx=1.500$ mm, $dy=1.500$ mm

Maximum value of SAR (interpolated) = 0.340 W/kg

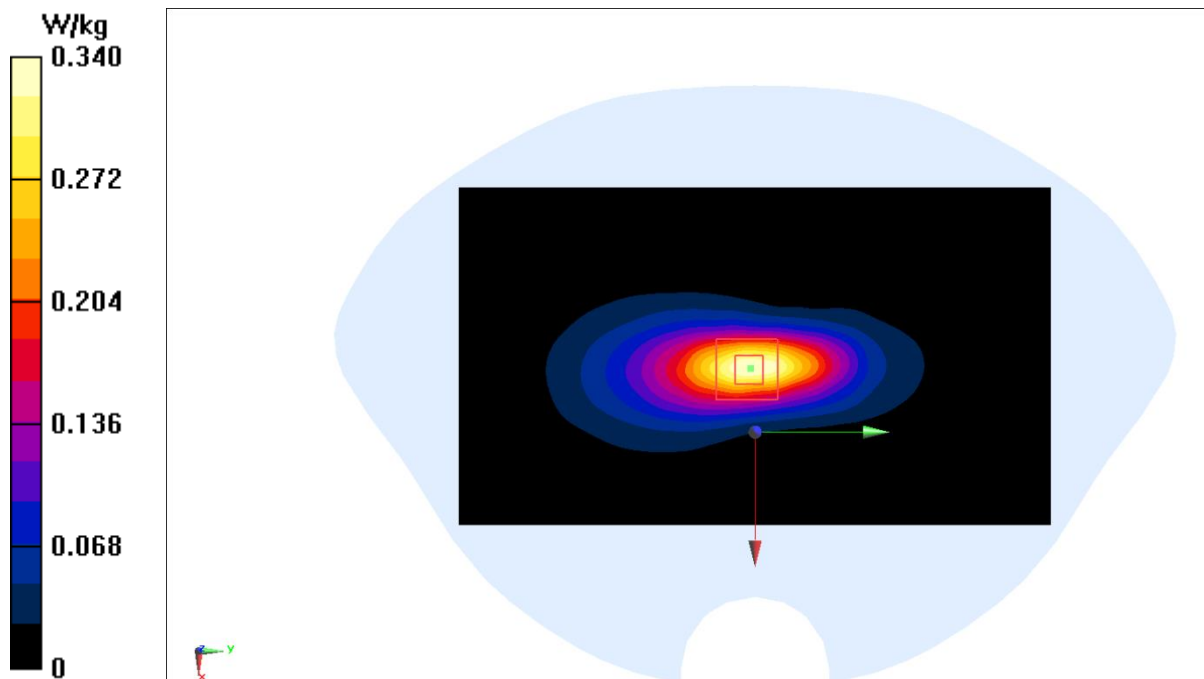
Zoom Scan (6x7x7)/Cube 0: Measurement grid: $dx=8$ mm, $dy=8$ mm, $dz=5$ mm

Reference Value = 15.25 V/m; Power Drift = -0.01 dB

Peak SAR (extrapolated) = 0.438 W/kg

SAR(1 g) = 0.231 W/kg; SAR(10 g) = 0.131 W/kg

Maximum value of SAR (measured) = 0.355 W/kg



N7 Head

Date: 2024-09-12

Electronics: DAE4 Sn1807

Medium: H700-6000M

Medium parameters used: $f = 2535$ MHz; $\sigma = 1.871$ S/m; $\epsilon_r = 39.54$; $\rho = 1000$ kg/m³

Ambient Temperature: 23.3°C Liquid Temperature: 22.5°C

Communication System: 5G NR N7 15kHz (0) Frequency: 2535 MHz Duty Cycle: 1:1

Probe: EX3DV4 - SN3846 ConvF(7.43, 7.43, 7.43)

Area Scan (101x151x1): Interpolated grid: $dx=1.200$ mm, $dy=1.200$ mm

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

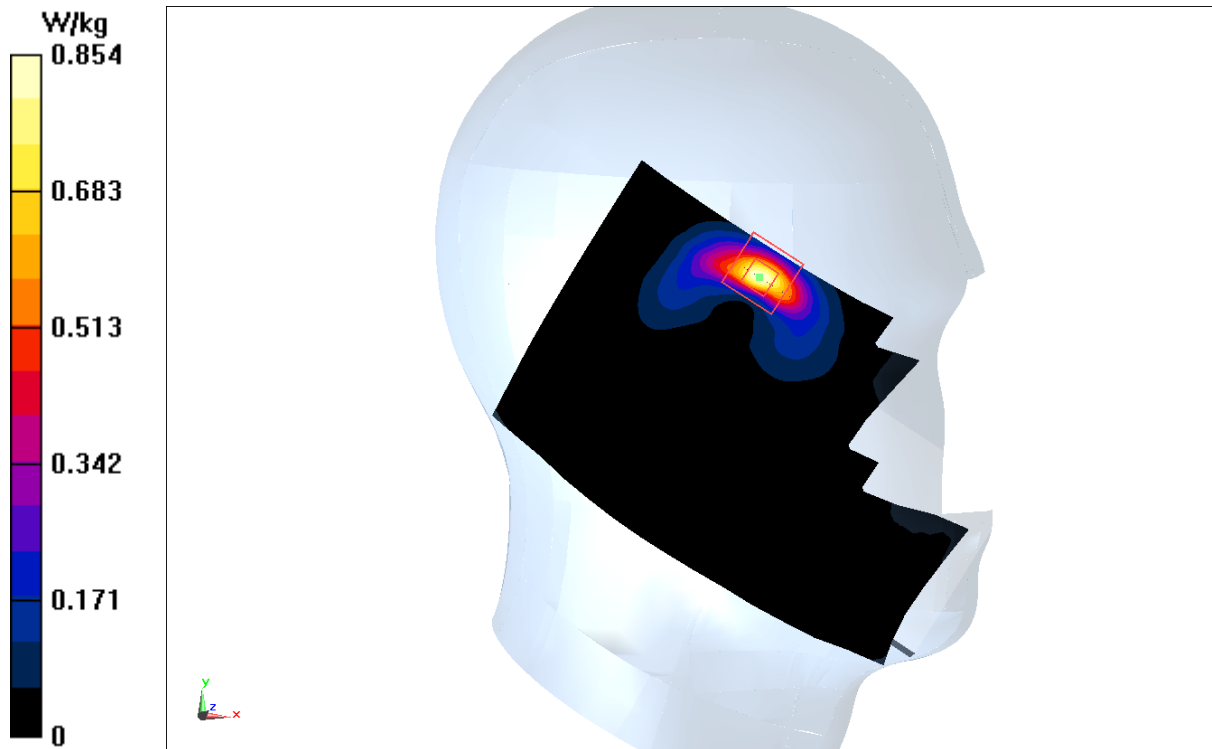
Zoom Scan (7x7x7)/Cube 0: Measurement grid: $dx=5$ mm, $dy=5$ mm, $dz=5$ mm

Reference Value = 3.915 V/m; Power Drift = 0.14 dB

Peak SAR (extrapolated) = 1.15 W/kg

SAR(1 g) = 0.467 W/kg; SAR(10 g) = 0.184 W/kg

Maximum value of SAR (measured) = 0.848 W/kg



N7 Body 10mm

Date: 2024-09-12

Electronics: DAE4 Sn1807

Medium: H700-6000M

Medium parameters used: $f = 2565$ MHz; $\sigma = 1.892$ S/m; $\epsilon_r = 39.51$; $\rho = 1000$ kg/m³

Ambient Temperature: 23.3°C Liquid Temperature: 22.5°C

Communication System: 5G NR N7 15kHz (0) Frequency: 2567.5 MHz Duty Cycle: 1:1

Probe: EX3DV4 - SN3846 ConvF(7.28, 7.28, 7.28)

Area Scan (81x171x1): Interpolated grid: $dx=1.200$ mm, $dy=1.200$ mm

Maximum value of SAR (interpolated) = 0.652 W/kg

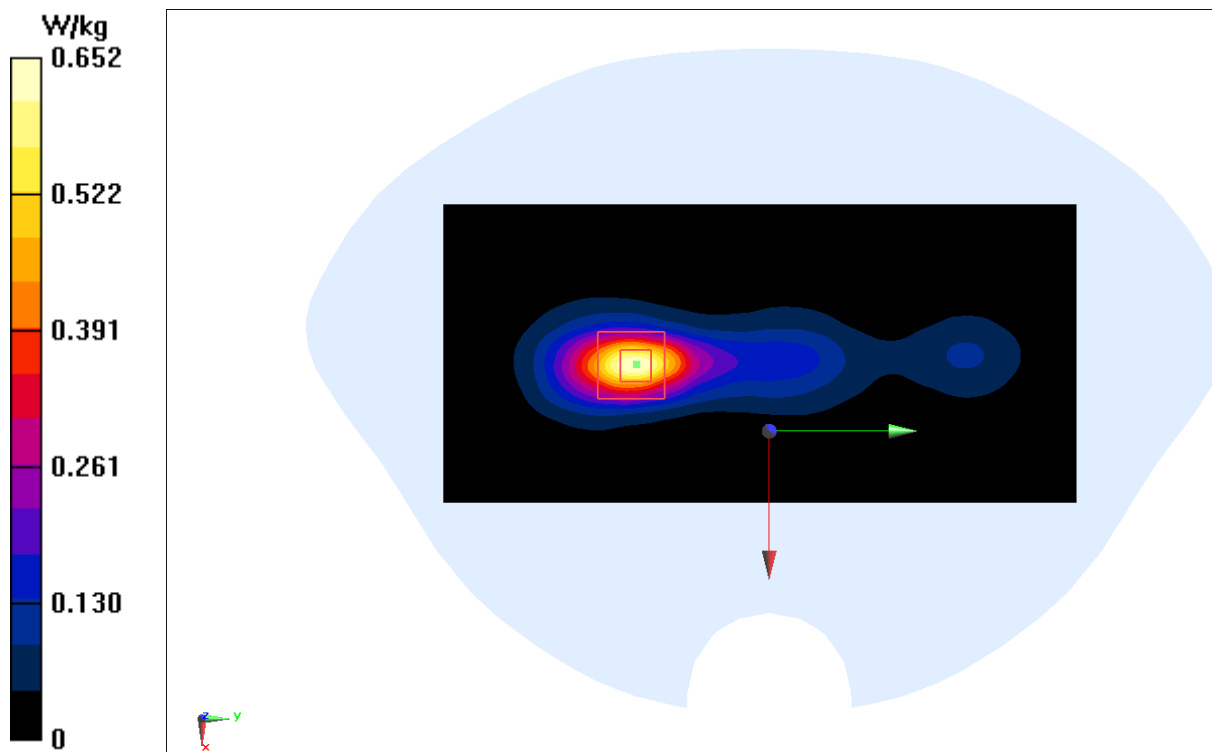
Zoom Scan (9x10x7)/Cube 0: Measurement grid: $dx=5$ mm, $dy=5$ mm, $dz=5$ mm

Reference Value = 7.108 V/m; Power Drift = 0.14 dB

Peak SAR (extrapolated) = 0.826 W/kg

SAR(1 g) = 0.393 W/kg; SAR(10 g) = 0.178 W/kg

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



N12 Head

Date: 2024-09-01

Electronics: DAE4 Sn1807

Medium: H700-6000M

Medium parameters used: $f = 700$ MHz; $\sigma = 0.91$ S/m; $\epsilon_r = 43.25$; $\rho = 1000$ kg/m³

Ambient Temperature: 23.3°C Liquid Temperature: 22.5°C

Communication System: 5G NR N12 15kHz (0) Frequency: 701.5 MHz Duty Cycle: 1:1

Probe: EX3DV4 - SN3846 ConvF(9.89, 9.89, 9.89)

Area Scan (81x121x1): Interpolated grid: $dx=1.500$ mm, $dy=1.500$ mm

Maximum value of SAR (interpolated) = 0.473 W/kg

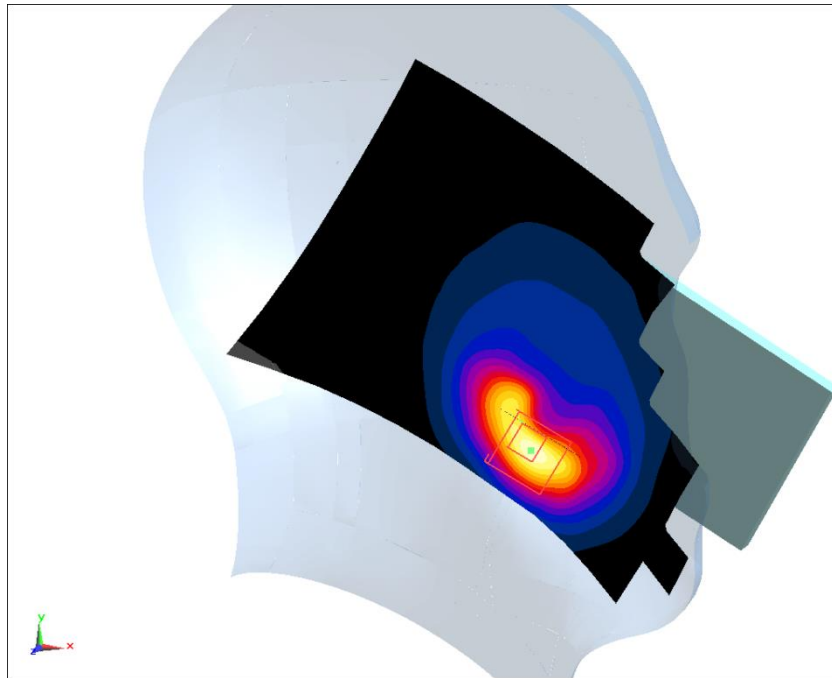
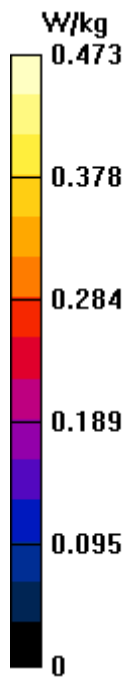
Zoom Scan (5x5x7)/Cube 0: Measurement grid: $dx=8$ mm, $dy=8$ mm, $dz=5$ mm

Reference Value = 4.675 V/m; Power Drift = 0.18 dB

Peak SAR (extrapolated) = 0.947 W/kg

SAR(1 g) = 0.392 W/kg; SAR(10 g) = 0.200 W/kg

Maximum value of SAR (measured) = 0.592 W/kg



N12 Body 10mm

Date: 2024-09-01

Electronics: DAE4 Sn1807

Medium: H700-6000M

Medium parameters used: $f = 715\text{ MHz}$; $\sigma = 0.916\text{ S/m}$; $\epsilon_r = 43.19$; $\rho = 1000\text{ kg/m}^3$

Ambient Temperature:23.3°C Liquid Temperature: 22.5°C

Communication System: 5G NR N12 15kHz (0) Frequency: 713.5 MHz Duty Cycle: 1:1

Probe: EX3DV4 - SN3846 ConvF(9.89, 9.89, 9.89)

Area Scan (81x141x1): Interpolated grid: $dx=1.500\text{ mm}$, $dy=1.500\text{ mm}$

Maximum value of SAR (interpolated) = 0.619 W/kg

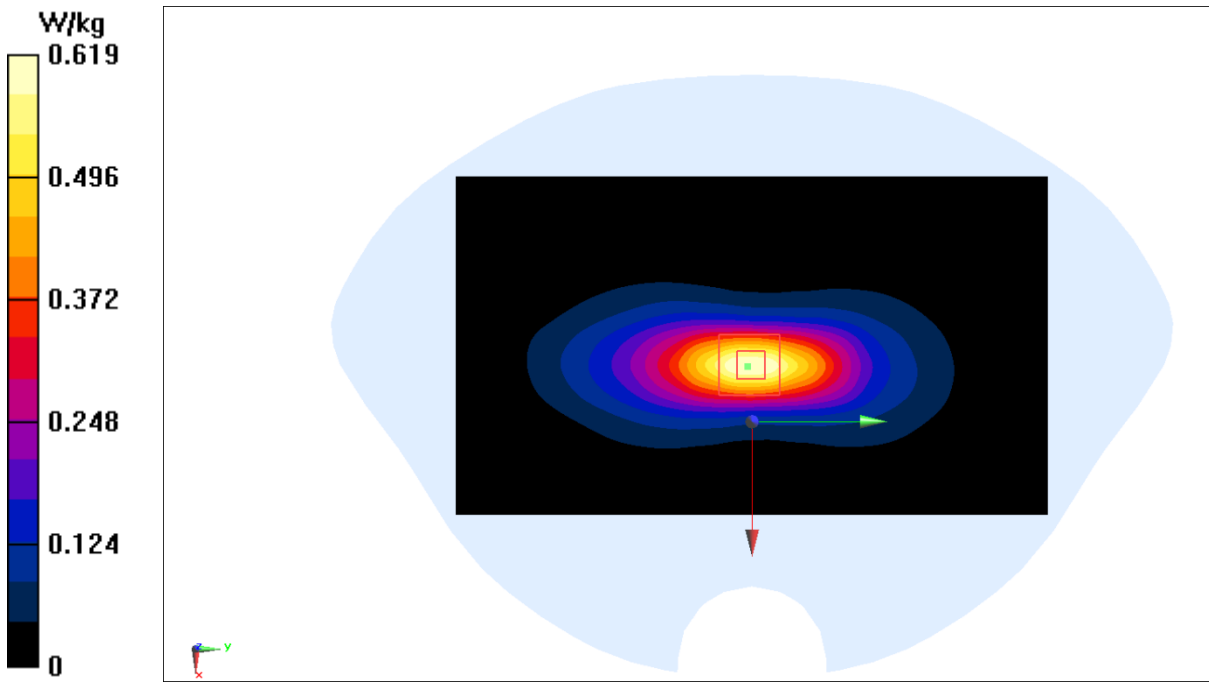
Zoom Scan (6x7x7)/Cube 0: Measurement grid: $dx=8\text{mm}$, $dy=8\text{mm}$, $dz=5\text{mm}$

Reference Value = 23.51 V/m; Power Drift = -0.05 dB

Peak SAR (extrapolated) = 0.803 W/kg

SAR(1 g) = 0.448 W/kg; SAR(10 g) = 0.263 W/kg

Maximum value of SAR (measured) = 0.671 W/kg



N25 Head

Date: 2024-09-04

Electronics: DAE4 Sn1807

Medium: H700-6000M

Medium parameters used: $f = 1850$ MHz; $\sigma = 1.397$ S/m; $\epsilon_r = 40.29$; $\rho = 1000$ kg/m³

Ambient Temperature: 23.3°C Liquid Temperature: 22.5°C

Communication System: 5G NR N25 15kHz (0) Frequency: 1852.5 MHz Duty Cycle: 1:1

Probe: EX3DV4 - SN3846 ConvF(7.95, 7.95, 7.95)

Area Scan (81x121x1): Interpolated grid: $dx=1.500$ mm, $dy=1.500$ mm

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

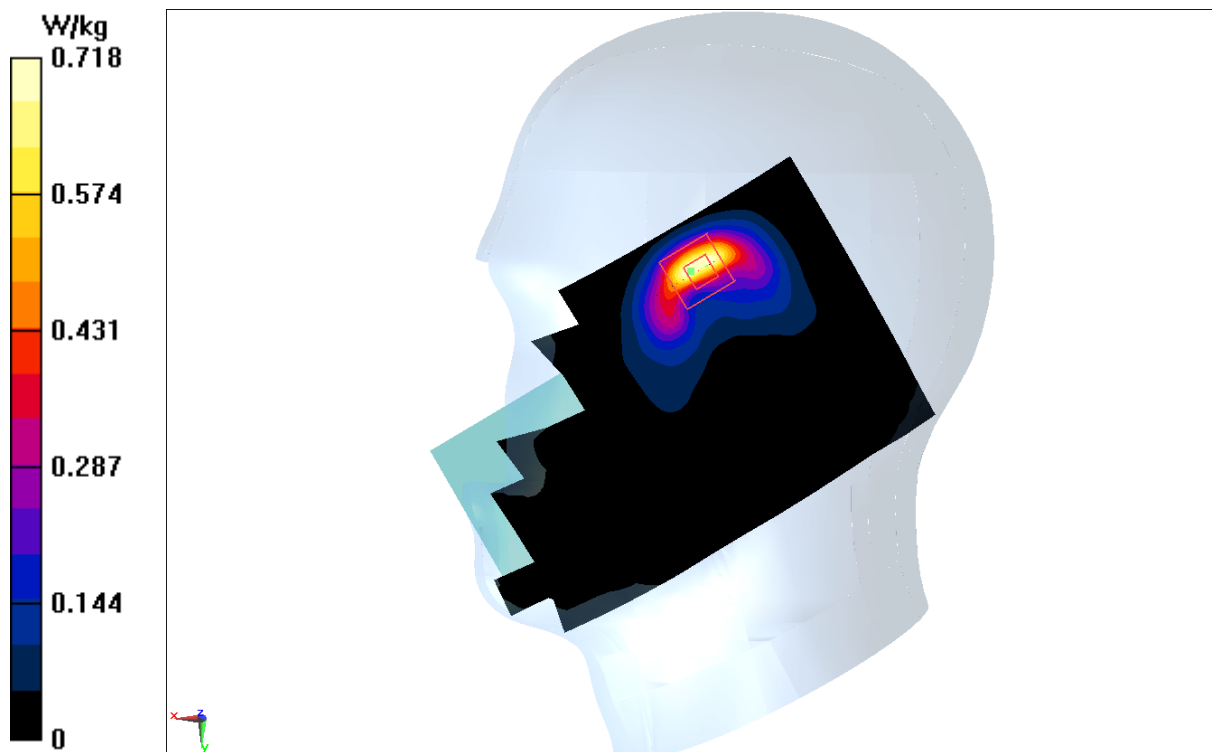
Zoom Scan (5x5x7)/Cube 0: Measurement grid: $dx=8$ mm, $dy=8$ mm, $dz=5$ mm

Reference Value = 5.653 V/m; Power Drift = 0.07 dB

Peak SAR (extrapolated) = 1.32 W/kg

SAR(1 g) = 0.615 W/kg; SAR(10 g) = 0.277 W/kg

Maximum value of SAR (measured) = 0.924 W/kg



N25 Body 10mm

Date: 2024-09-04

Electronics: DAE4 Sn1807

Medium: H700-6000M

Medium parameters used: $f = 1850$ MHz; $\sigma = 1.397$ S/m; $\epsilon_r = 40.29$; $\rho = 1000$ kg/m³

Ambient Temperature: 23.3°C Liquid Temperature: 22.5°C

Communication System: 5G NR N25 15kHz (0) Frequency: 1852.5 MHz Duty Cycle: 1:1

Probe: EX3DV4 - SN3846 ConvF(7.95, 7.95, 7.95)

Area Scan (81x141x1): Interpolated grid: $dx=1.500$ mm, $dy=1.500$ mm

Maximum value of SAR (interpolated) = 0.937 W/kg

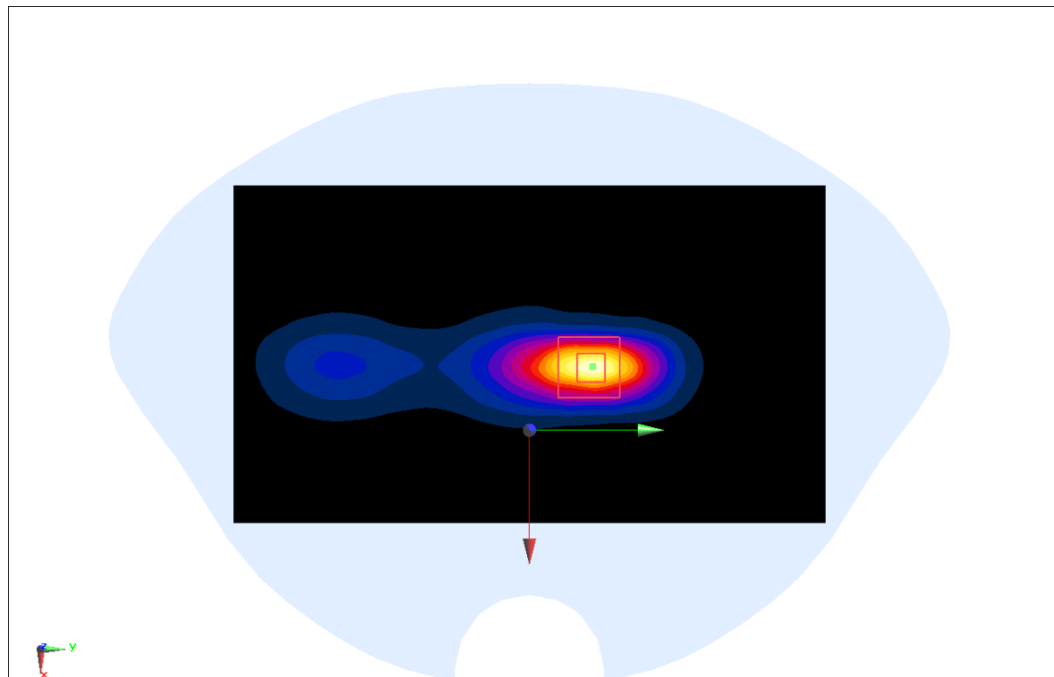
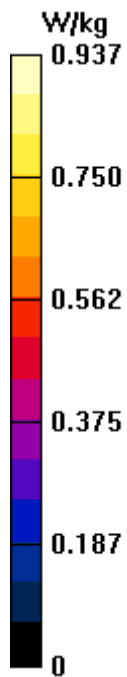
Zoom Scan (6x7x7)/Cube 0: Measurement grid: $dx=8$ mm, $dy=8$ mm, $dz=5$ mm

Reference Value = 14.93 V/m; Power Drift = 0.05 dB

Peak SAR (extrapolated) = 1.22 W/kg

SAR(1 g) = 0.648 W/kg; SAR(10 g) = 0.320 W/kg

Maximum value of SAR (measured) = 0.988 W/kg

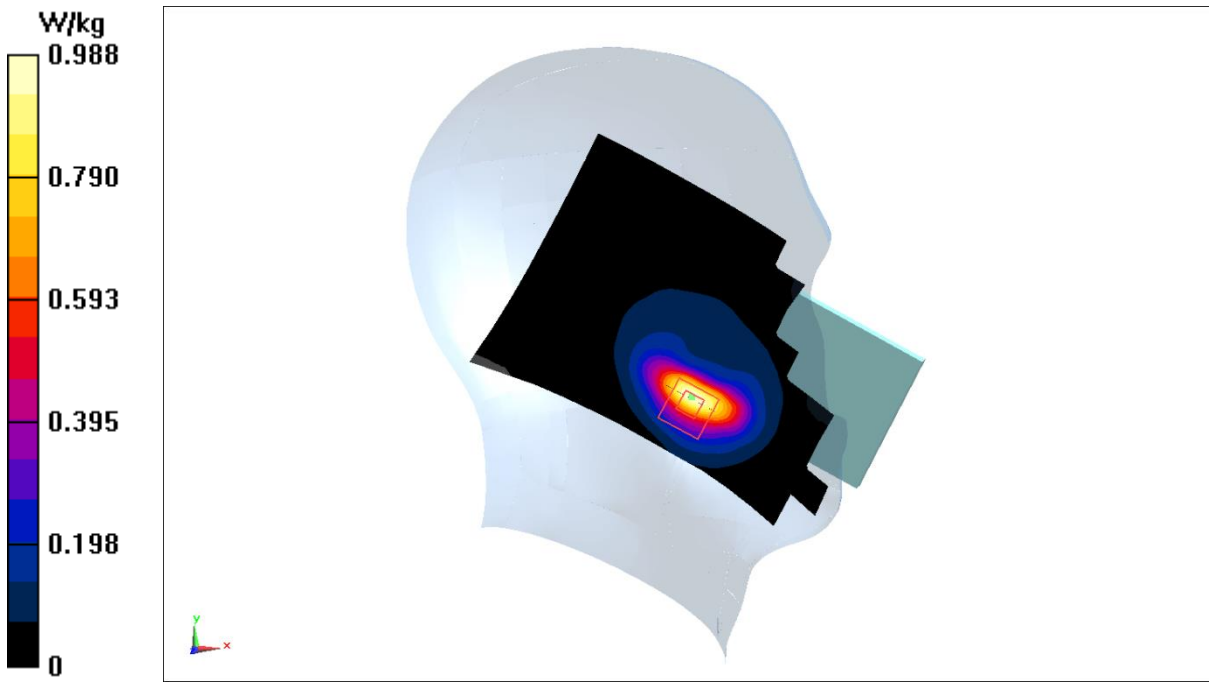


N26 Head

Date: 2024-09-16
Electronics: DAE4 Sn1807
Medium: H700-6000M
Medium parameters used: $f = 815 \text{ MHz}$; $\sigma = 0.914 \text{ S/m}$; $\epsilon_r = 42.17$; $\rho = 1000 \text{ kg/m}^3$
Ambient Temperature: 23.3°C Liquid Temperature: 22.5°C
Communication System: 5G NR N26 15kHz (0) Frequency: 816.5 MHz Duty Cycle: 1:1
Probe: EX3DV4 - SN3846 ConvF(9.89, 9.89, 9.89)

Area Scan (81x121x1): Interpolated grid: $dx=1.500 \text{ mm}$, $dy=1.500 \text{ mm}$
Maximum value of SAR (interpolated) = 0.988 W/kg

Zoom Scan (5x5x7)/Cube 0: Measurement grid: $dx=8\text{mm}$, $dy=8\text{mm}$, $dz=5\text{mm}$
Reference Value = 6.031 V/m ; Power Drift = -0.02 dB
Peak SAR (extrapolated) = 1.35 W/kg
 $\text{SAR}(1 \text{ g}) = 0.591 \text{ W/kg}$; $\text{SAR}(10 \text{ g}) = 0.295 \text{ W/kg}$
Maximum value of SAR (measured) = 1.03 W/kg



N26 Body 10mm

Date: 2024-09-16

Electronics: DAE4 Sn1807

Medium: H700-6000M

Medium parameters used: $f = 815 \text{ MHz}$; $\sigma = 0.914 \text{ S/m}$; $\epsilon_r = 42.17$; $\rho = 1000 \text{ kg/m}^3$

Ambient Temperature: 23.3°C Liquid Temperature: 22.5°C

Communication System: 5G NR N26 15kHz (0) Frequency: 816.5 MHz Duty Cycle: 1:1

Probe: EX3DV4 - SN3846 ConvF(9.89, 9.89, 9.89)

Area Scan (81x141x1): Interpolated grid: $dx=1.500 \text{ mm}$, $dy=1.500 \text{ mm}$

Maximum value of SAR (interpolated) = 0.623 W/kg

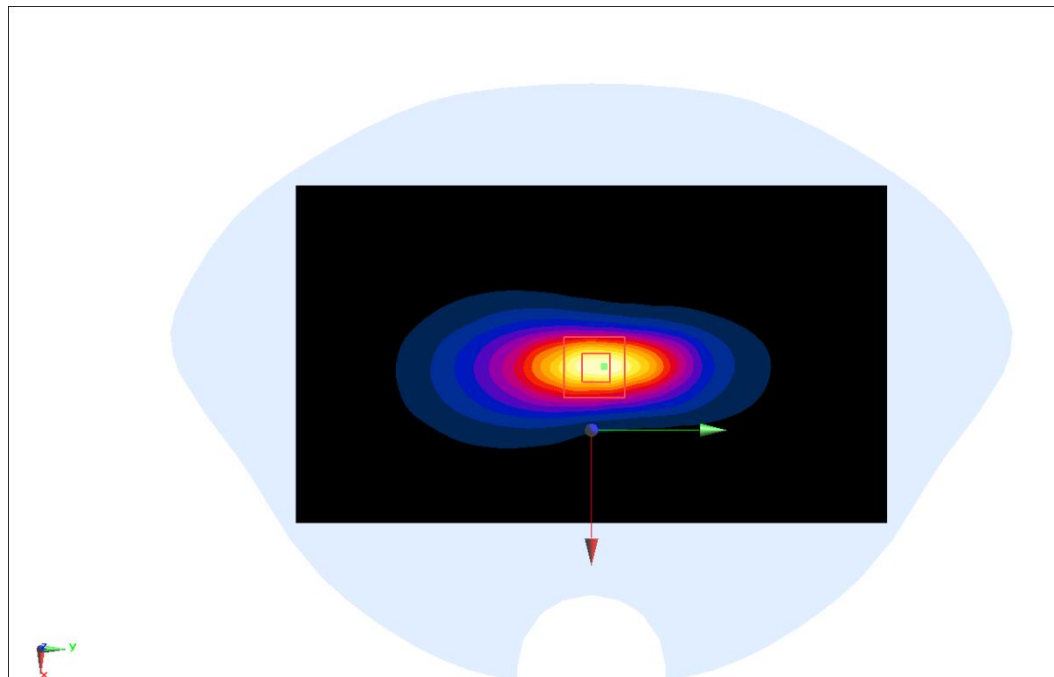
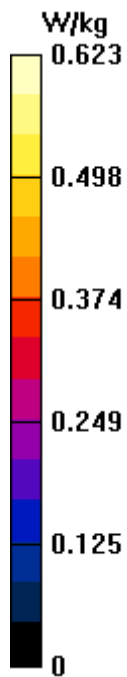
Zoom Scan (6x6x7)/Cube 0: Measurement grid: $dx=8\text{mm}$, $dy=8\text{mm}$, $dz=5\text{mm}$

Reference Value = 21.15 V/m ; Power Drift = -0.16 dB

Peak SAR (extrapolated) = 0.798 W/kg

SAR(1 g) = 0.419 W/kg ; SAR(10 g) = 0.236 W/kg

Maximum value of SAR (measured) = 0.631 W/kg



N38 Head

Date: 2024-09-18

Electronics: DAE4 Sn1807

Medium: H700-6000M

Medium parameters used: $f = 2595$ MHz; $\sigma = 1.936$ S/m; $\epsilon_r = 39.87$; $\rho = 1000$ kg/m³

Ambient Temperature: 23.3°C Liquid Temperature: 22.5°C

Communication System: 5G NR N38 30kHz (0) Frequency: 2595 MHz Duty Cycle: 1:1

Probe: EX3DV4 - SN3846 ConvF(7.28, 7.28, 7.28)

Area Scan (101x151x1): Interpolated grid: $dx=1.200$ mm, $dy=1.200$ mm

Maximum value of SAR (interpolated) = 0.816 W/kg

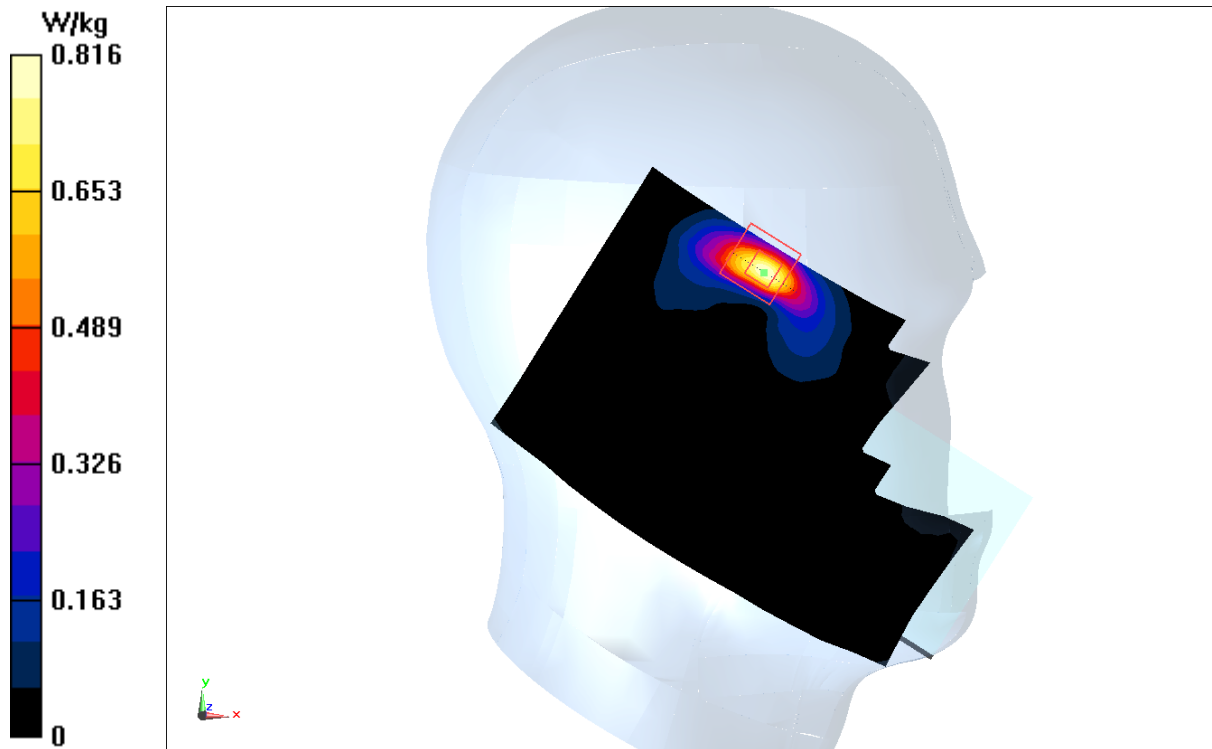
Zoom Scan (7x7x7)/Cube 0: Measurement grid: $dx=5$ mm, $dy=5$ mm, $dz=5$ mm

Reference Value = 2.698 V/m; Power Drift = 0.18 dB

Peak SAR (extrapolated) = 1.12 W/kg

SAR(1 g) = 0.466 W/kg; SAR(10 g) = 0.184 W/kg

Maximum value of SAR (measured) = 0.866 W/kg



N38 Body 10mm

Date: 2024-09-18

Electronics: DAE4 Sn1807

Medium: H700-6000M

Medium parameters used: $f = 2575 \text{ MHz}$; $\sigma = 1.92 \text{ S/m}$; $\epsilon_r = 39.9$; $\rho = 1000 \text{ kg/m}^3$

Ambient Temperature: 23.3°C Liquid Temperature: 22.5°C

Communication System: 5G n38 (0) Frequency: 2575 MHz Duty Cycle: 1:1

Probe: EX3DV4 - SN3846 ConvF(7.28, 7.28, 7.28)

Area Scan (91x171x1): Interpolated grid: $dx=1.200 \text{ mm}$, $dy=1.200 \text{ mm}$

Maximum value of SAR (interpolated) = 1.31 W/kg

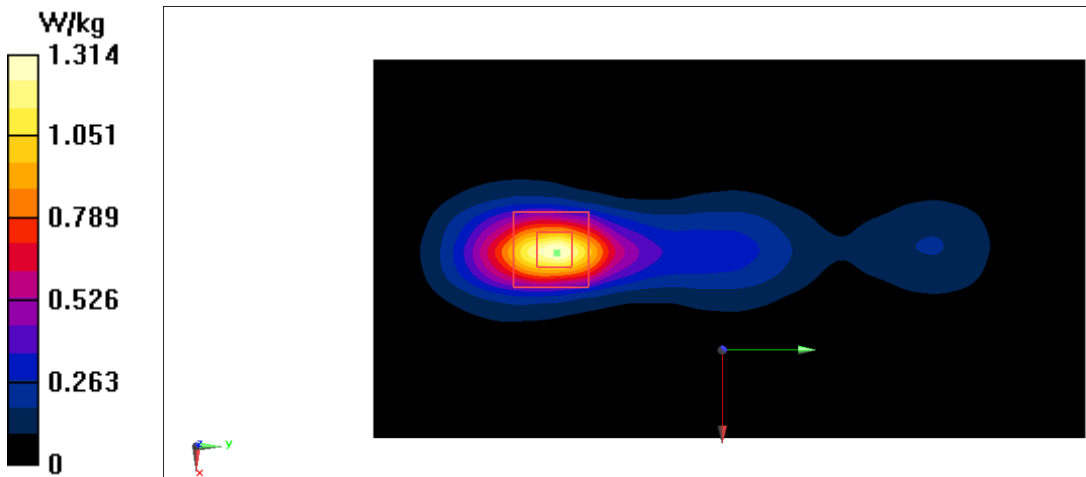
Zoom Scan (7x7x7)/Cube 0: Measurement grid: $dx=5\text{mm}$, $dy=5\text{mm}$, $dz=5\text{mm}$

Reference Value = 13.87 V/m ; Power Drift = -0.19 dB

Peak SAR (extrapolated) = 1.64 W/kg

SAR(1 g) = 0.780 W/kg ; SAR(10 g) = 0.349 W/kg

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

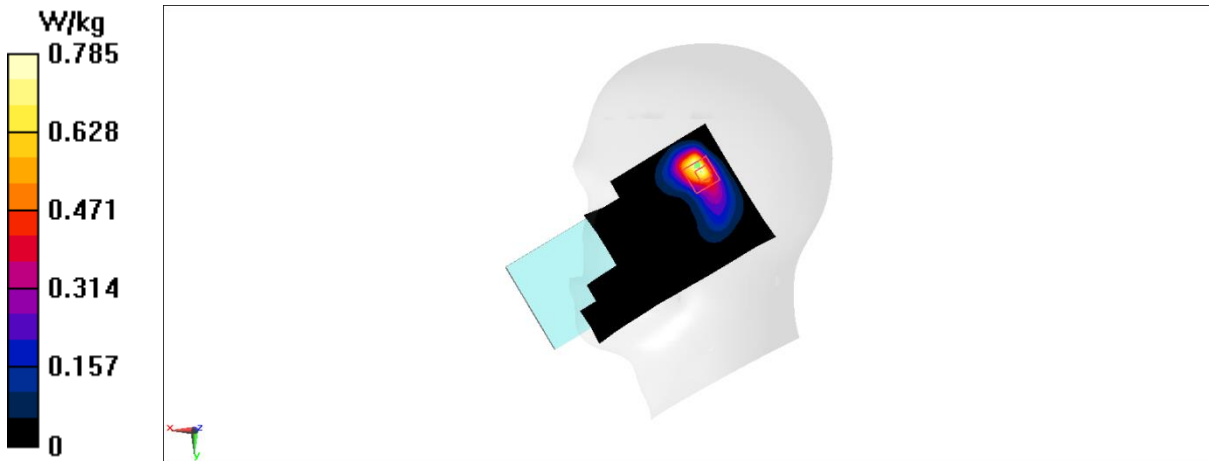


N41 Head

Date: 2024-09-20
Electronics: DAE4 Sn1807
Medium: H700-6000M
Medium parameters used (interpolated): $f = 2500\text{ MHz}$; $\sigma = 1.881\text{ S/m}$; $\epsilon_r = 40.41$; $\rho = 1000\text{ kg/m}^3$
Ambient Temperature:23.3°C Liquid Temperature: 22.5°C
Communication System: 5G n41 (0) Frequency: 2501.01 MHz Duty Cycle: 1:1
Probe: EX3DV4 - SN3846 ConvF(7.43, 7.43, 7.43)

Area Scan (101x151x1): Interpolated grid: $dx=1.200\text{ mm}$, $dy=1.200\text{ mm}$
Maximum value of SAR (interpolated) = 0.785 W/kg

Zoom Scan (8x7x7)/Cube 0: Measurement grid: $dx=5\text{mm}$, $dy=5\text{mm}$, $dz=5\text{mm}$
Reference Value = 14.72 V/m; Power Drift = -0.08 dB
Peak SAR (extrapolated) = 0.987 W/kg
 $\text{SAR}(1\text{ g}) = 0.428\text{ W/kg}$; $\text{SAR}(10\text{ g}) = 0.197\text{ W/kg}$
Maximum value of SAR (measured) = 0.751 W/kg



N41 Body 10mm

Date: 2024-09-20

Electronics: DAE4 Sn1807

Medium: H700-6000M

Medium parameters used: $f = 2455$ MHz; $\sigma = 1.848$ S/m; $\epsilon_r = 40.48$; $\rho = 1000$ kg/m³

Ambient Temperature: 23.3°C Liquid Temperature: 22.5°C

Communication System: 5G NR N41 30kHz (0) Frequency: 2455.02 MHz Duty Cycle: 1:1

Probe: EX3DV4 - SN3846 ConvF(7.43, 7.43, 7.43)

Area Scan (81x171x1): Interpolated grid: $dx=1.200$ mm, $dy=1.200$ mm

Maximum value of SAR (interpolated) = 0.874 W/kg

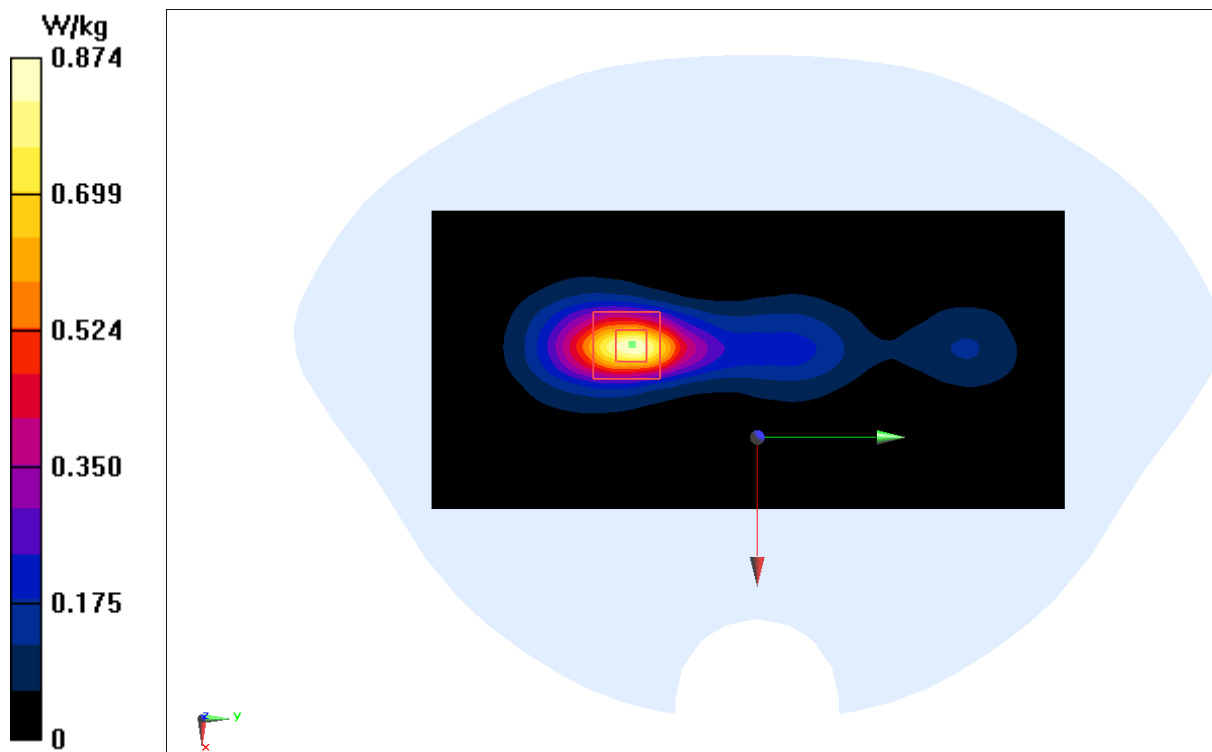
Zoom Scan (9x10x7)/Cube 0: Measurement grid: $dx=5$ mm, $dy=5$ mm, $dz=5$ mm

Reference Value = 6.083 V/m; Power Drift = 0.08 dB

Peak SAR (extrapolated) = 1.09 W/kg

SAR(1 g) = 0.512 W/kg; SAR(10 g) = 0.232 W/kg

Maximum value of SAR (measured) = 0.826 W/kg

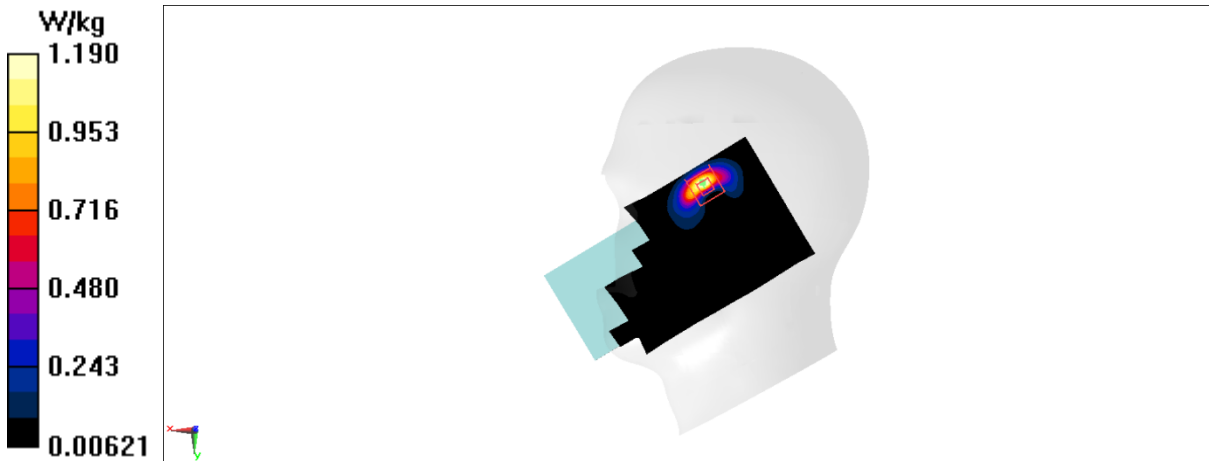


N66 Head

Date: 9/6/2024
Electronics: DAE4 Sn1331
Medium: H700-6000M
Medium parameters used (interpolated): $f = 1777.5\text{ MHz}$; $\sigma = 1.383\text{ S/m}$; $\epsilon_r = 41.12$; $\rho = 1000\text{ kg/m}^3$
Ambient Temperature:23.3°C Liquid Temperature: 22.5°C
Communication System: 5G N66 (0) Frequency: 1777.5 MHz Duty Cycle: 1:1
Probe: EX3DV4 - SN7673 ConvF(8.45, 8.45, 8.45)

Area Scan (71x121x1): Interpolated grid: $dx=1.500\text{ mm}$, $dy=1.500\text{ mm}$
Maximum value of SAR (interpolated) = 1.30 W/kg

Zoom Scan (5x5x7)/Cube 0: Measurement grid: $dx=8\text{mm}$, $dy=8\text{mm}$, $dz=5\text{mm}$
Reference Value = 4.345 V/m; Power Drift = 0.17 dB
Peak SAR (extrapolated) = 1.71 W/kg
 $\text{SAR}(1\text{ g}) = 0.754\text{ W/kg}$; $\text{SAR}(10\text{ g}) = 0.320\text{ W/kg}$
Maximum value of SAR (measured) = 1.19 W/kg



N66 Body 10mm

Date: 9/6/2024

Electronics: DAE4 Sn1331

Medium: H700-6000M

Medium parameters used (interpolated): $f = 1777.5$ MHz; $\sigma = 1.383$ S/m; $\epsilon_r = 41.12$; $\rho = 1000$ kg/m³

Ambient Temperature: 23.3°C Liquid Temperature: 22.5°C

Communication System: 5G N66 (0) Frequency: 1777.5 MHz Duty Cycle: 1:1

Probe: EX3DV4 - SN7673 ConvF(8.45, 8.45, 8.45)

Area Scan (71x121x1): Interpolated grid: $dx=1.500$ mm, $dy=1.500$ mm

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

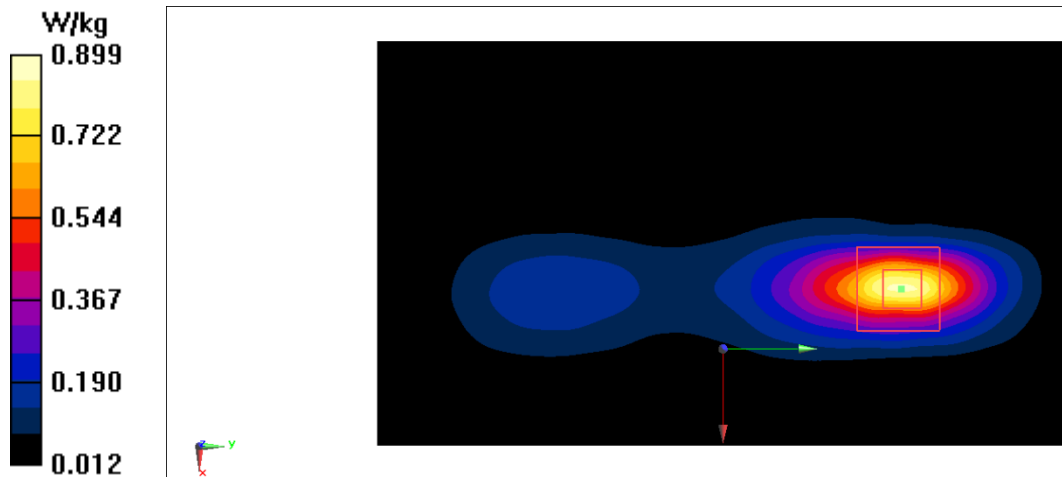
Zoom Scan (5x5x7)/Cube 0: Measurement grid: $dx=8$ mm, $dy=8$ mm, $dz=5$ mm

Reference Value = 9.089 V/m; Power Drift = -0.15 dB

Peak SAR (extrapolated) = 1.08 W/kg

SAR(1 g) = 0.580 W/kg; SAR(10 g) = 0.289 W/kg

Maximum value of SAR (measured) = 0.899 W/kg

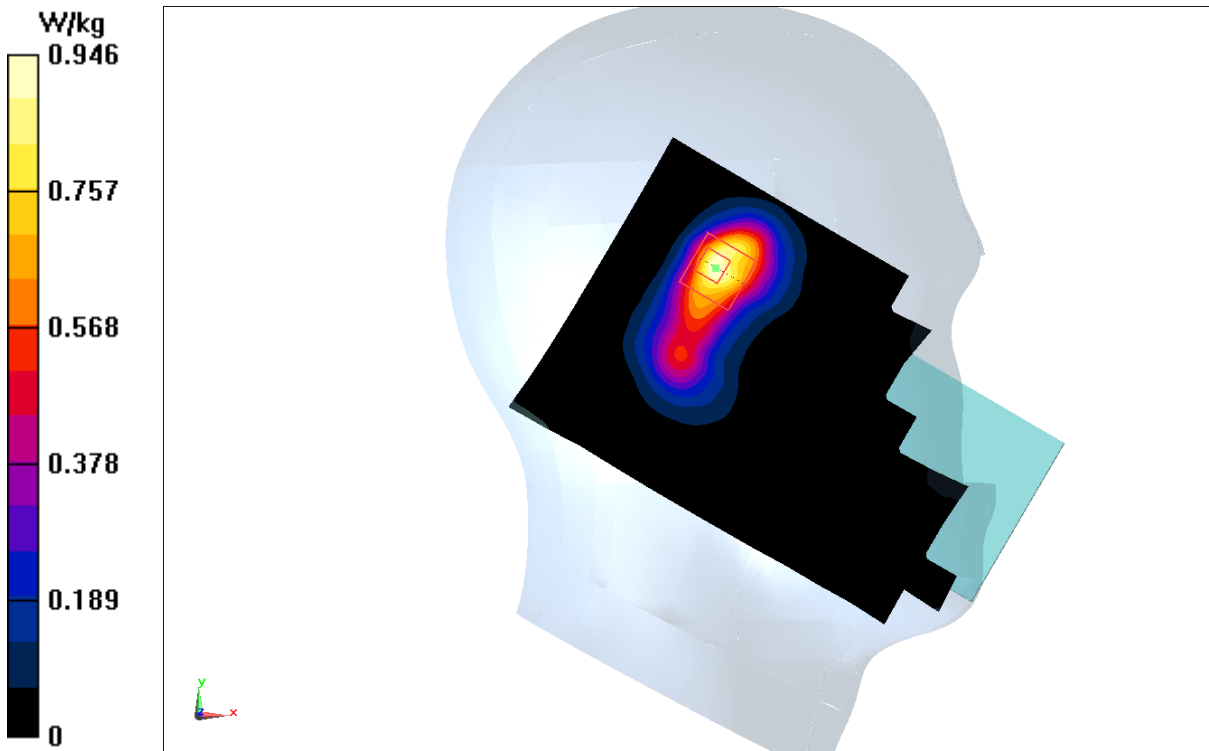


WIFI2.4G Head

Date: 2024-09-21
Electronics: DAE4 Sn1807
Medium: H700-6000M
Medium parameters used: $f = 2470\text{ MHz}$; $\sigma = 1.879\text{ S/m}$; $\epsilon_r = 40.86$; $\rho = 1000\text{ kg/m}^3$
Ambient Temperature: 23.3°C Liquid Temperature: 22.5°C
Communication System: WIFI 2450 (0) Frequency: 2472 MHz Duty Cycle: 1:1
Probe: EX3DV4 - SN3846 ConvF(7.43, 7.43, 7.43)

Area Scan (91x171x1): Interpolated grid: $dx=1.200\text{ mm}$, $dy=1.200\text{ mm}$
Maximum value of SAR (interpolated) = 0.946 W/kg

Zoom Scan (7x7x7)/Cube 0: Measurement grid: $dx=5\text{mm}$, $dy=5\text{mm}$, $dz=5\text{mm}$
Reference Value = 14.52 V/m ; Power Drift = 0.11 dB
Peak SAR (extrapolated) = 1.54 W/kg
 $\text{SAR}(1\text{ g}) = 0.686\text{ W/kg}$; $\text{SAR}(10\text{ g}) = 0.323\text{ W/kg}$
Maximum value of SAR (measured) = 1.14 W/kg



WiFi2.4G Body 10mm

Date: 2024-09-21

Electronics: DAE4 Sn1807

Medium: H700-6000M

Medium parameters used: $f = 2410$ MHz; $\sigma = 1.833$ S/m; $\epsilon_r = 40.96$; $\rho = 1000$ kg/m³

Ambient Temperature: 23.3°C Liquid Temperature: 22.5°C

Communication System: 1WiFi 2450 (0) Frequency: 2412 MHz Duty Cycle: 1:1

Probe: EX3DV4 - SN3846 ConvF(7.43, 7.43, 7.43)

Area Scan (91x171x1): Interpolated grid: $dx=1.200$ mm, $dy=1.200$ mm

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

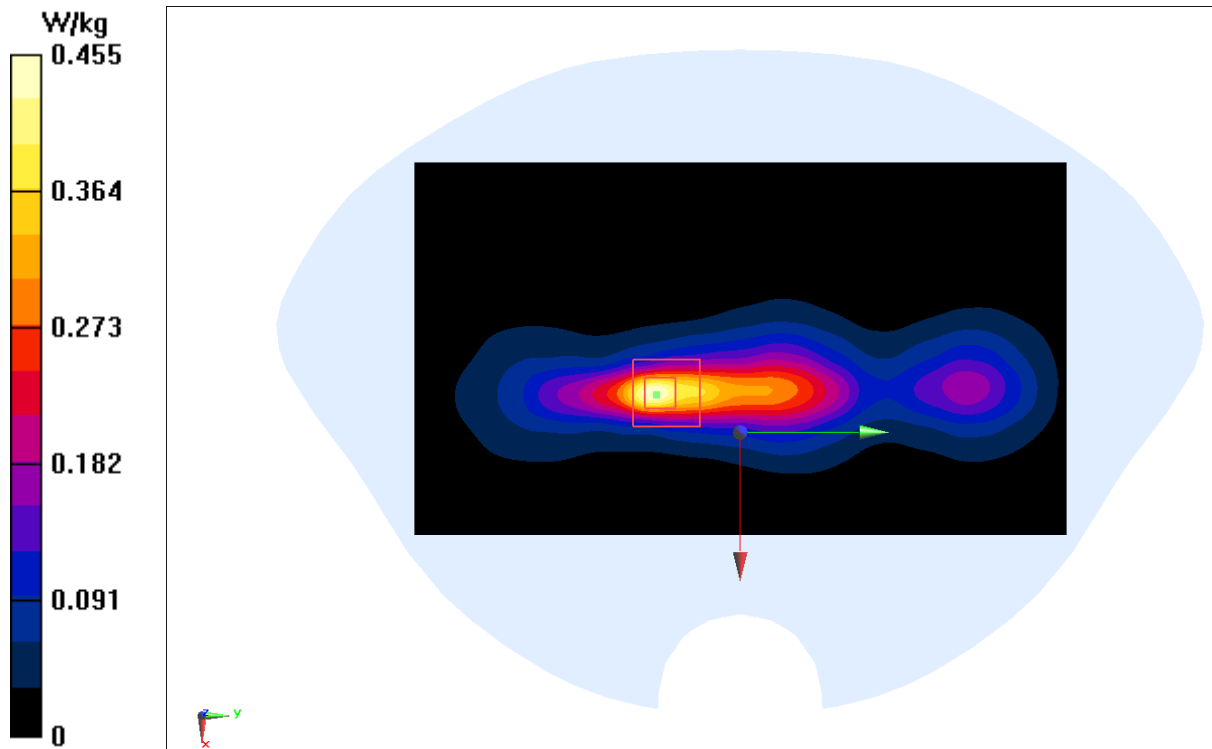
Zoom Scan (9x11x7)/Cube 0: Measurement grid: $dx=5$ mm, $dy=5$ mm, $dz=5$ mm

Reference Value = 10.45 V/m; Power Drift = -0.12 dB

Peak SAR (extrapolated) = 0.567 W/kg

SAR(1 g) = 0.275 W/kg; SAR(10 g) = 0.126 W/kg

Maximum value of SAR (measured) = 0.450 W/kg

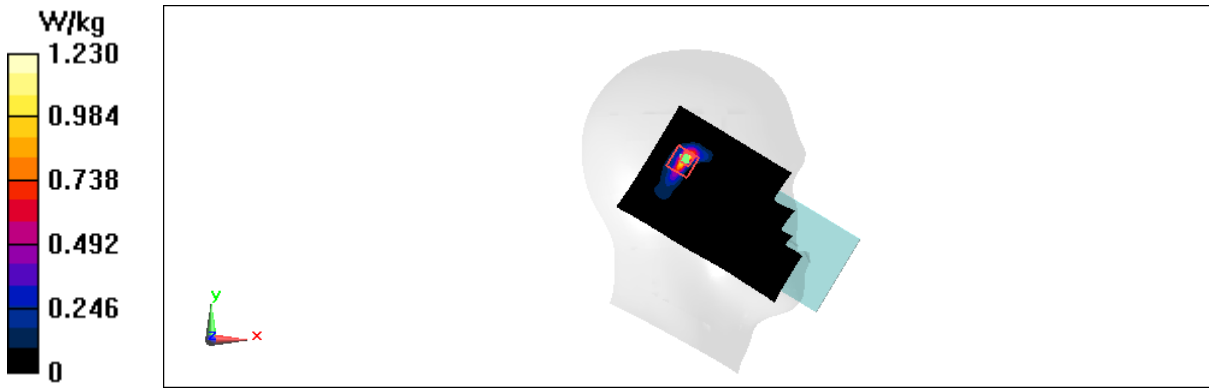


WIFI5G Head

Date: 2024-09-23
Electronics: DAE4 Sn1807
Medium: H700-6000M
Medium parameters used: $f = 5765 \text{ MHz}$; $\sigma = 5.169 \text{ S/m}$; $\epsilon_r = 35.53$; $\rho = 1000 \text{ kg/m}^3$
Ambient Temperature: 23.3°C Liquid Temperature: 22.5°C
Communication System: UID 0, WLan 11a (0) Frequency: 5765 MHz Duty Cycle: 1:1
Probe: EX3DV4 - SN3846 ConvF(4.9, 4.9, 4.9)

Area Scan (111x171x1): Interpolated grid: $dx=1.000 \text{ mm}$, $dy=1.000 \text{ mm}$
Maximum value of SAR (interpolated) = 1.23 W/kg

Zoom Scan (9x8x7)/Cube 0: Measurement grid: $dx=4\text{mm}$, $dy=4\text{mm}$, $dz=1.4\text{mm}$
Reference Value = 3.208 V/m ; Power Drift = -0.04 dB
Peak SAR (extrapolated) = 2.72 W/kg
 $\text{SAR}(1 \text{ g}) = 0.467 \text{ W/kg}$; $\text{SAR}(10 \text{ g}) = 0.124 \text{ W/kg}$
Maximum value of SAR (measured) = 1.42 W/kg



WIFI5G Body 10mm

Date: 2024-09-23

Electronics: DAE4 Sn1807

Medium: H700-6000M

Medium parameters used: $f = 5690$ MHz; $\sigma = 5.081$ S/m; $\epsilon_r = 35.65$; $\rho = 1000$ kg/m³

Ambient Temperature: 23.3°C Liquid Temperature: 22.5°C

Communication System: WLAN 11a (0) Frequency: 5690 MHz Duty Cycle: 1:1

Probe: EX3DV4 - SN3846 ConvF(4.75, 4.75, 4.75)

Area Scan (121x221x1): Interpolated grid: $dx=1.000$ mm, $dy=1.000$ mm

Maximum value of SAR (interpolated) = 0.839 W/kg

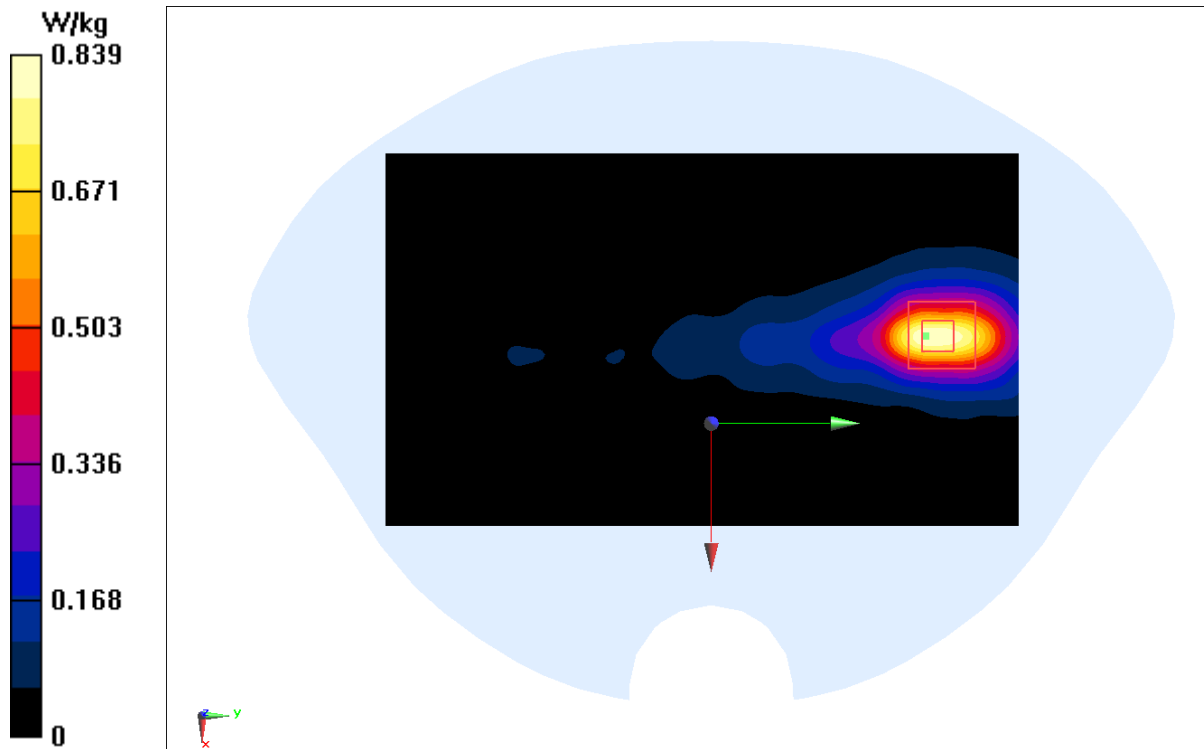
Zoom Scan (8x8x7)/Cube 0: Measurement grid: $dx=4$ mm, $dy=4$ mm, $dz=1.4$ mm

Reference Value = 1.998 V/m; Power Drift = 0.13 dB

Peak SAR (extrapolated) = 1.39 W/kg

SAR(1 g) = 0.357 W/kg; SAR(10 g) = 0.139 W/kg

Maximum value of SAR (measured) = 0.791 W/kg

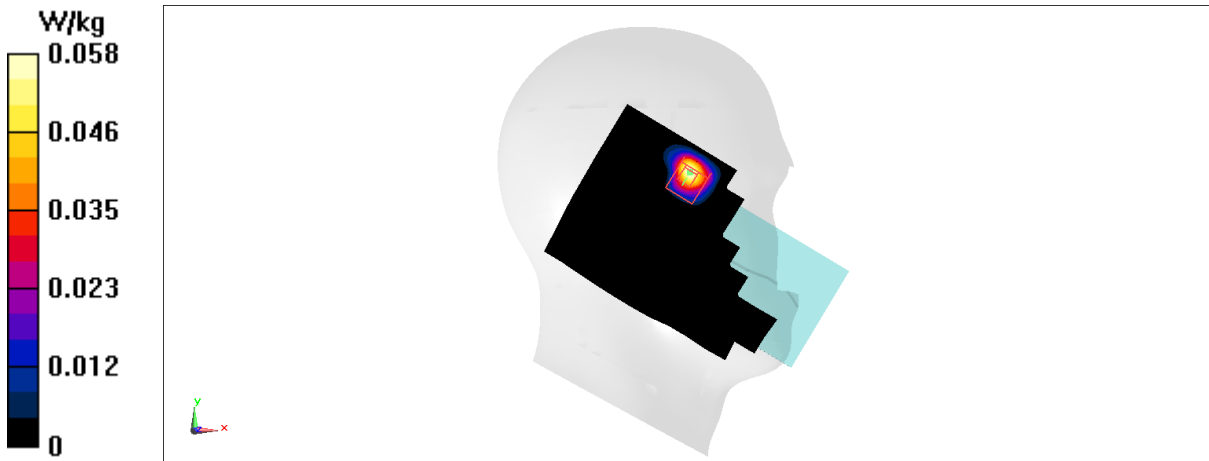


BT Head

Date: 2024-09-21
Electronics: DAE4 Sn1807
Medium: H700-6000M
Medium parameters used: $f = 2400\text{ MHz}$; $\sigma = 1.825\text{ S/m}$; $\epsilon_r = 40.97$; $\rho = 1000\text{ kg/m}^3$
Ambient Temperature:23.3°C Liquid Temperature: 22.5°C
Communication System: UID 0, BT (0) Frequency: 2402 MHz Duty Cycle: 1:1
Probe: EX3DV4 - SN3846 ConvF(7.43, 7.43, 7.43)

Area Scan (91x171x1): Interpolated grid: $dx=1.200\text{ mm}$, $dy=1.200\text{ mm}$
Maximum value of SAR (interpolated) = 0.0580 W/kg

Zoom Scan (7x7x7)/Cube 0: Measurement grid: $dx=5\text{mm}$, $dy=5\text{mm}$, $dz=5\text{mm}$
Reference Value = 1.252 V/m; Power Drift = 0.19 dB
Peak SAR (extrapolated) = 0.190 W/kg
 $SAR(1\text{ g}) = 0.071\text{ W/kg}$; $SAR(10\text{ g}) = 0.021\text{ W/kg}$
Maximum value of SAR (measured) = 0.130 W/kg



ANNEX B SYSTEM VALIDATION RESULTS

750MHz

Date: 2024-09-01

Electronics: DAE4 Sn1807

Medium: H700-6000M

Medium parameters used: $f = 750 \text{ MHz}$; $\sigma = 0.928 \text{ S/m}$; $\epsilon_r = 43.11$; $\rho = 1000 \text{ kg/m}^3$

Ambient Temperature: 23.3°C Liquid Temperature: 22.5°C

Communication System: CW (0) Frequency: 750 MHz Duty Cycle: 1:1

Probe: EX3DV4 - SN3846 ConvF(9.89, 9.89, 9.89)

Area Scan (131x61x1): Interpolated grid: $dx=1.500 \text{ mm}$, $dy=1.500 \text{ mm}$

Maximum value of SAR (interpolated) = 2.79 W/kg

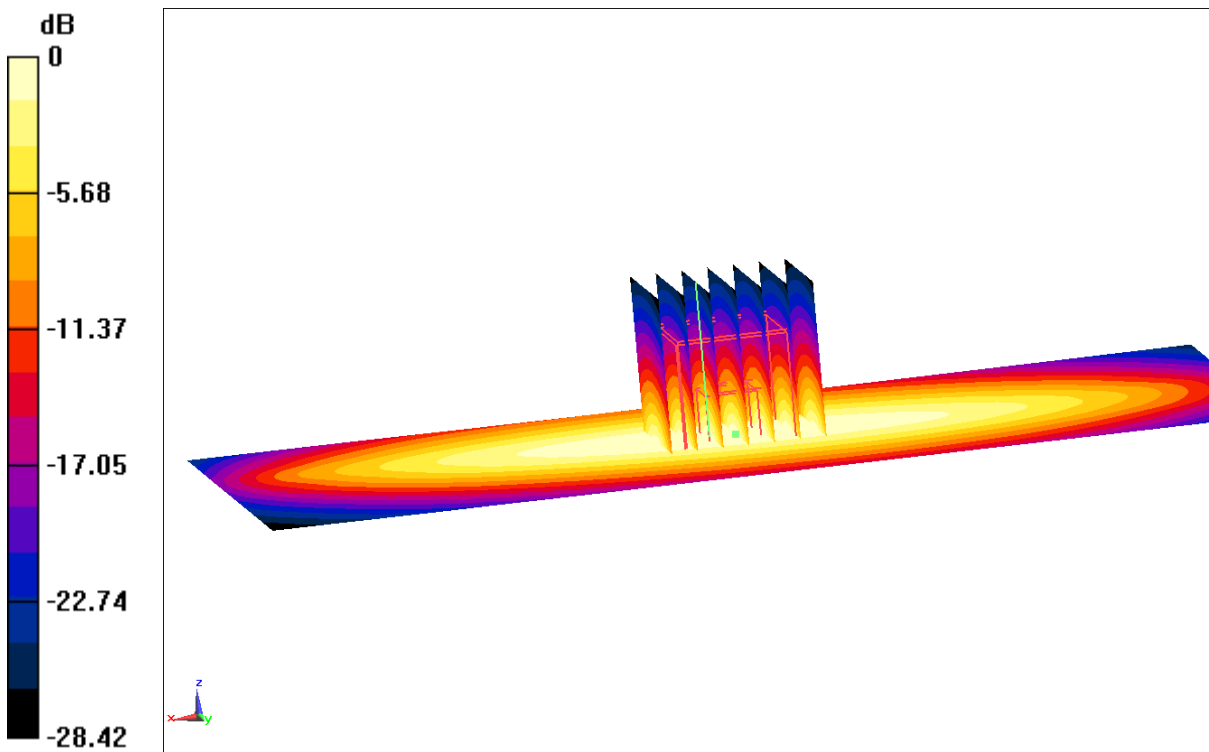
Zoom Scan (7x7x7) (7x7x7)/Cube 0: Measurement grid: $dx=5\text{mm}$, $dy=5\text{mm}$, $dz=5\text{mm}$

Reference Value = 54.68 V/m; Power Drift = -0.7 dB

Peak SAR (extrapolated) = 3.17 W/kg

SAR(1 g) = 2.15 W/kg; SAR(10 g) = 1.44 W/kg

Maximum value of SAR (measured) = 2.82 W/kg



0 dB = 2.77 W/kg = 4.42 dBW/kg

835MHz

Date: 2024-08-30

Electronics: DAE4 Sn1807

Medium: H700-6000M

Medium parameters used: $f = 835 \text{ MHz}$; $\sigma = 0.938 \text{ S/m}$; $\epsilon_r = 42.88$; $\rho = 1000 \text{ kg/m}^3$

Ambient Temperature: 23.3°C Liquid Temperature: 22.5°C

Communication System: CW (0) Frequency: 835 MHz Duty Cycle: 1:1

Probe: EX3DV4 - SN3846 ConvF(9.89, 9.89, 9.89)

Area Scan (131x61x1): Interpolated grid: $dx=1.500 \text{ mm}$, $dy=1.500 \text{ mm}$

Maximum value of SAR (interpolated) = 3.22 W/kg

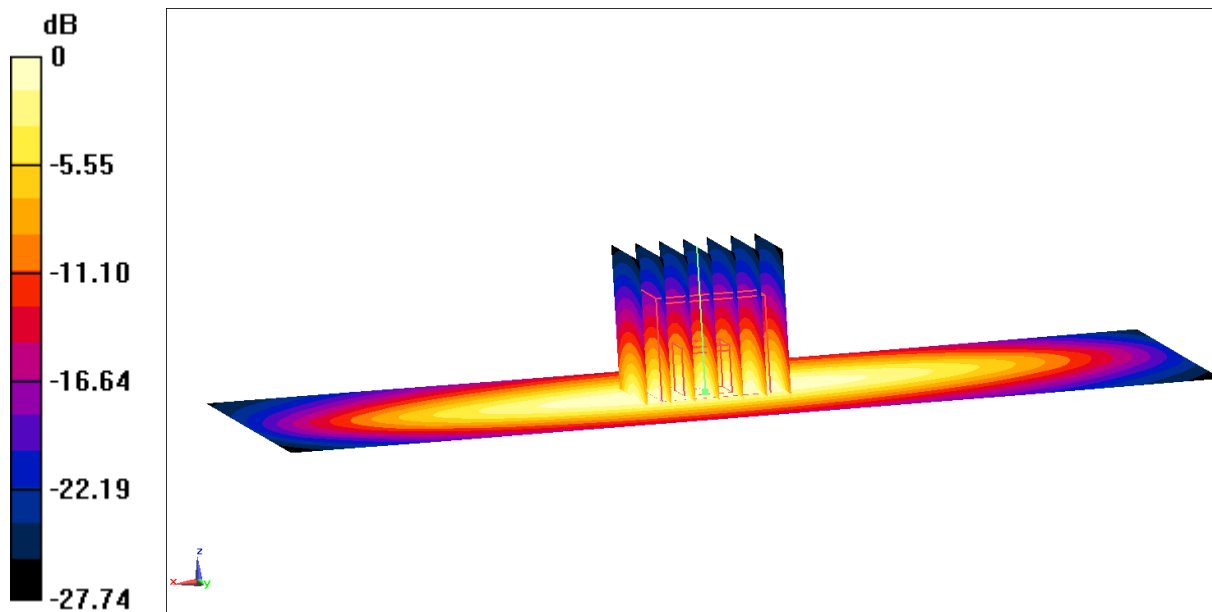
Zoom Scan (7x7x7) (7x7x7)/Cube 0: Measurement grid: $dx=5\text{mm}$, $dy=5\text{mm}$, $dz=5\text{mm}$

Reference Value = 58.69 V/m ; Power Drift = 0.15 dB

Peak SAR (extrapolated) = 3.63 W/kg

SAR(1 g) = 2.43 W/kg ; SAR(10 g) = 1.61 W/kg

Maximum value of SAR (measured) = 3.20 W/kg



0 dB = 3.19 W/kg = 5.04 dBW/kg

835MHz

Date: 9/14/2024

Electronics: DAE4 Sn549

Medium: H700-6000M

Medium parameters used: $f = 835 \text{ MHz}$; $\sigma = 0.928 \text{ S/m}$; $\epsilon_r = 42.49$; $\rho = 1000 \text{ kg/m}^3$

Ambient Temperature: 23.3°C Liquid Temperature: 22.5°C

Communication System: CW (0) Frequency: 835 MHz Duty Cycle: 1:1

Probe: EX3DV4 - SN7517 ConvF(9.85, 9.85, 9.85)

Area Scan (131x61x1): Interpolated grid: $dx=1.500 \text{ mm}$, $dy=1.500 \text{ mm}$

Maximum value of SAR (interpolated) = 3.23 W/kg

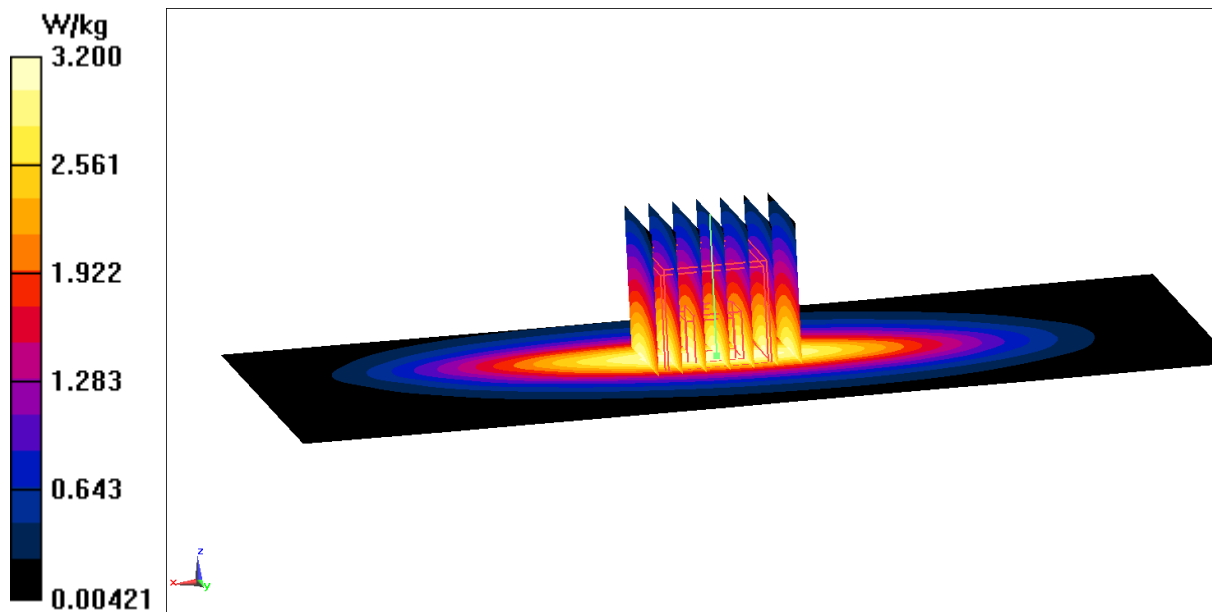
Zoom Scan (7x7x7) (7x7x7)/Cube 0: Measurement grid: $dx=5\text{mm}$, $dy=5\text{mm}$, $dz=5\text{mm}$

Reference Value = 57.81 V/m ; Power Drift = 0.19 dB

Peak SAR (extrapolated) = 3.67 W/kg

SAR(1 g) = 2.45 W/kg ; SAR(10 g) = 1.62 W/kg

Maximum value of SAR (measured) = 3.23 W/kg



835MHz

Date: 2024-09-16

Electronics: DAE4 Sn1807

Medium: H700-6000M

Medium parameters used: $f = 835 \text{ MHz}$; $\sigma = 0.921 \text{ S/m}$; $\epsilon_r = 42.14$; $\rho = 1000 \text{ kg/m}^3$

Ambient Temperature: 23.3°C Liquid Temperature: 22.5°C

Communication System: CW (0) Frequency: 835 MHz Duty Cycle: 1:1

Probe: EX3DV4 - SN3846 ConvF(9.89, 9.89, 9.89)

Area Scan (131x61x1): Interpolated grid: $dx=1.500 \text{ mm}$, $dy=1.500 \text{ mm}$

Maximum value of SAR (interpolated) = 3.28 W/kg

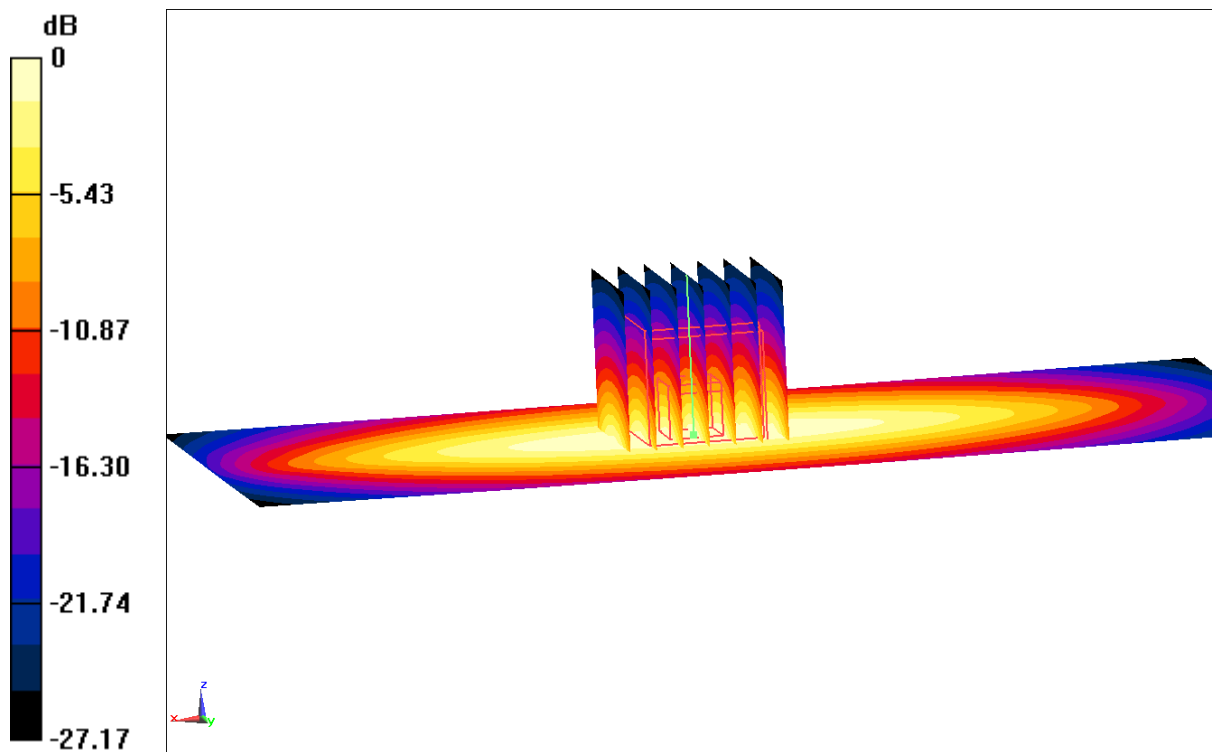
Zoom Scan (7x7x7) (7x7x7)/Cube 0: Measurement grid: $dx=5\text{mm}$, $dy=5\text{mm}$, $dz=5\text{mm}$

Reference Value = 59.25 V/m ; Power Drift = -0.14 dB

Peak SAR (extrapolated) = 3.74 W/kg

SAR(1 g) = 2.43 W/kg ; SAR(10 g) = 1.59 W/kg

Maximum value of SAR (measured) = 3.27 W/kg



1750MHz

Date: 2024-08-31

Electronics: DAE4 Sn1807

Medium: H700-6000M

Medium parameters used: $f = 1750\text{ MHz}$; $\sigma = 1.393\text{ S/m}$; $\epsilon_r = 41.77$; $\rho = 1000\text{ kg/m}^3$

Ambient Temperature:23.3°C Liquid Temperature: 22.5°C

Communication System: CW (0) Frequency: 1750 MHz Duty Cycle: 1:1

Probe: EX3DV4 - SN3846 ConvF(8.25, 8.25, 8.25)

Area Scan (61x61x1): Interpolated grid: $dx=1.500\text{ mm}$, $dy=1.500\text{ mm}$

Maximum value of SAR (interpolated) = 13.9 W/kg

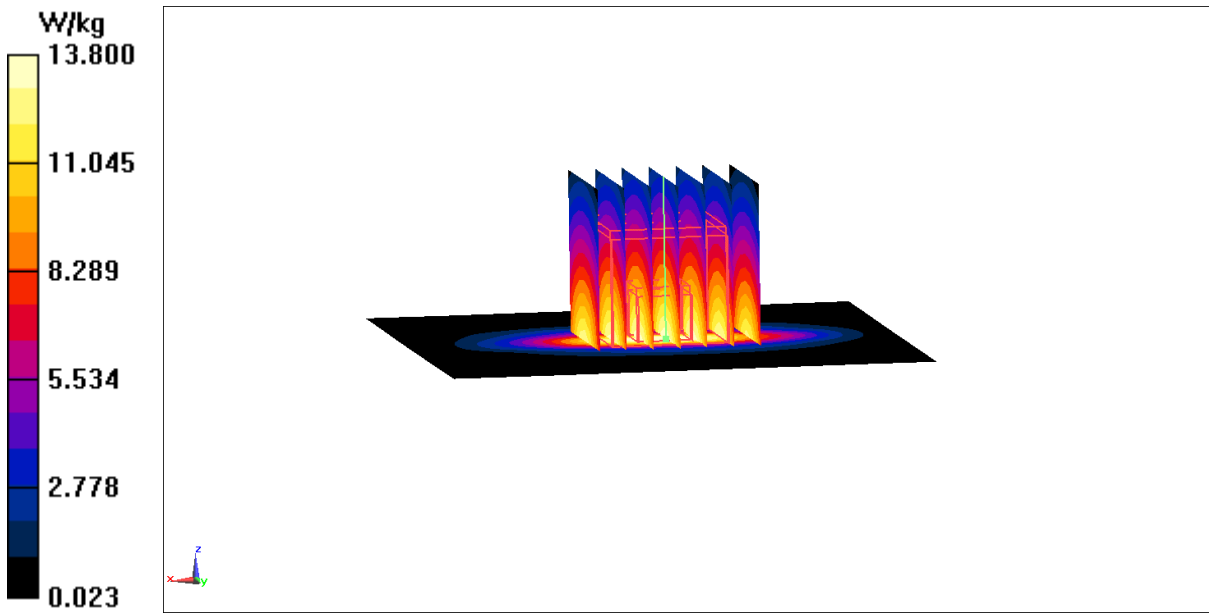
Zoom Scan (7x7x7) (7x7x7)/Cube 0: Measurement grid: $dx=5\text{mm}$, $dy=5\text{mm}$, $dz=5\text{mm}$

Reference Value = 97.58 V/m; Power Drift = -0.15 dB

Peak SAR (extrapolated) = 16.4 W/kg

SAR(1 g) = 9.09 W/kg; SAR(10 g) = 4.89 W/kg

Maximum value of SAR (measured) = 13.8 W/kg



1750MHz

Date: 9/6/2024

Electronics: DAE4 Sn1331

Medium: H700-6000M

Medium parameters used: $f = 1750$ MHz; $\sigma = 1.372$ S/m; $\epsilon_r = 41.14$; $\rho = 1000$ kg/m³

Ambient Temperature: 23.3°C Liquid Temperature: 22.5°C

Communication System: CW (0) Frequency: 1750 MHz Duty Cycle: 1:1

Probe: EX3DV4 - SN7673 ConvF(8.45, 8.45, 8.45)

Area Scan (61x61x1): Interpolated grid: $dx=1.500$ mm, $dy=1.500$ mm

Maximum value of SAR (interpolated) = 13.9 W/kg

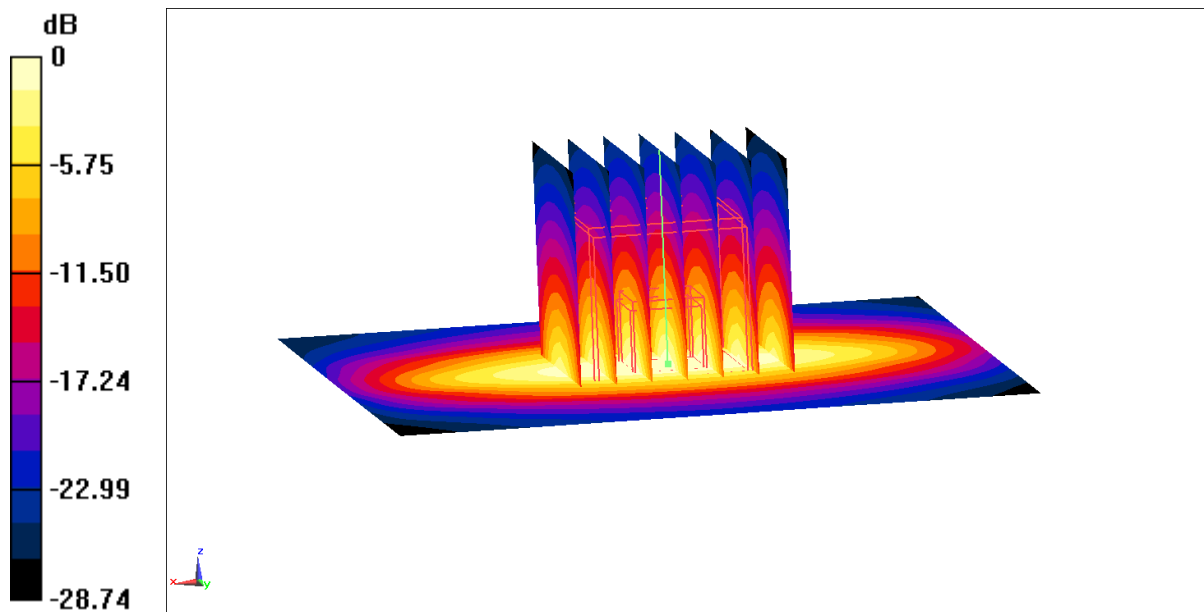
Zoom Scan (7x7x7) (7x7x7)/Cube 0: Measurement grid: $dx=5$ mm, $dy=5$ mm, $dz=5$ mm

Reference Value = 96.14 V/m; Power Drift = -0.11 dB

Peak SAR (extrapolated) = 16.5 W/kg

SAR(1 g) = 9.13 W/kg; SAR(10 g) = 4.91 W/kg

Maximum value of SAR (measured) = 13.9 W/kg



0 dB = 13.8 W/kg = 11.40 dBW/kg

1900MHz

Date: 2024-09-06

Electronics: DAE4 Sn1807

Medium: H700-6000M

Medium parameters used: $f = 1900$ MHz; $\sigma = 1.462$ S/m; $\epsilon_r = 41.05$; $\rho = 1000$ kg/m³

Ambient Temperature: 23.3°C Liquid Temperature: 22.5°C

Communication System: CW (0) Frequency: 1900 MHz Duty Cycle: 1:1

Probe: EX3DV4 - SN3846 ConvF(7.95, 7.95, 7.95)

Area Scan (61x61x1): Interpolated grid: $dx=1.500$ mm, $dy=1.500$ mm

Maximum value of SAR (interpolated) = 15.2 W/kg

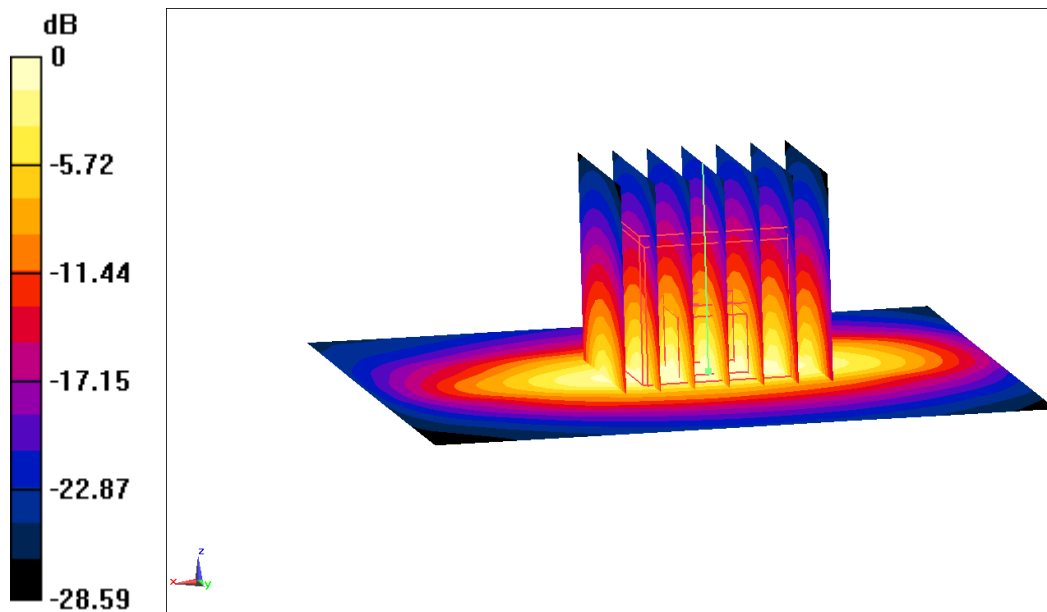
Zoom Scan (7x7x7) (7x7x7)/Cube 0: Measurement grid: $dx=5$ mm, $dy=5$ mm, $dz=5$ mm

Reference Value = 95.89 V/m; Power Drift = -0.04 dB

Peak SAR (extrapolated) = 18.2 W/kg

SAR(1 g) = 9.93 W/kg; SAR(10 g) = 5.19 W/kg

Maximum value of SAR (measured) = 15.3 W/kg



0 dB = 15.3 W/kg = 11.85 dBW/kg

1900MHz

Date: 2024-09-07

Electronics: DAE4 Sn1807

Medium: H700-6000M

Medium parameters used: $f = 1900$ MHz; $\sigma = 1.448$ S/m; $\epsilon_r = 40.68$; $\rho = 1000$ kg/m³

Ambient Temperature: 23.3°C Liquid Temperature: 22.5°C

Communication System: CW (0) Frequency: 1900 MHz Duty Cycle: 1:1

Probe: EX3DV4 - SN3846 ConvF(7.95, 7.95, 7.95)

Area Scan (61x61x1): Interpolated grid: $dx=1.500$ mm, $dy=1.500$ mm

Maximum value of SAR (interpolated) = 15.1 W/kg

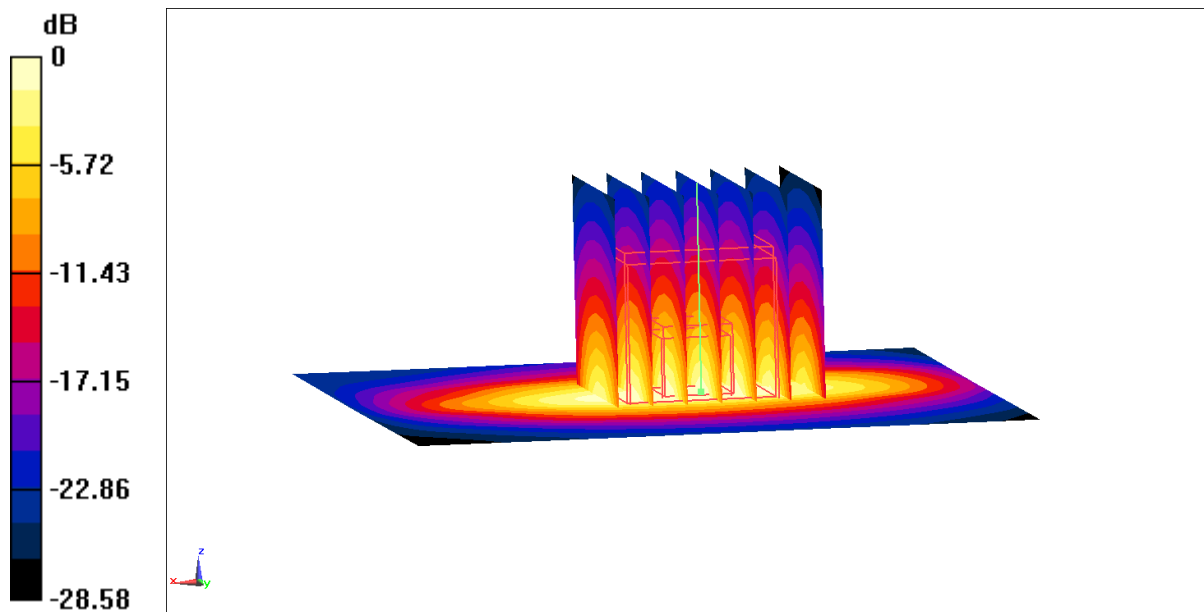
Zoom Scan (7x7x7) (7x7x7)/Cube 0: Measurement grid: $dx=5$ mm, $dy=5$ mm, $dz=5$ mm

Reference Value = 95.65 V/m; Power Drift = 0.18 dB

Peak SAR (extrapolated) = 18.2 W/kg

SAR(1 g) = 9.87 W/kg; SAR(10 g) = 5.15 W/kg

Maximum value of SAR (measured) = 15.2 W/kg



0 dB = 15.1 W/kg = 11.79 dBW/kg

1900MHz

Date: 2024-09-04

Electronics: DAE4 Sn1807

Medium: H700-6000M

Medium parameters used: $f = 1900$ MHz; $\sigma = 1.432$ S/m; $\epsilon_r = 40.22$; $\rho = 1000$ kg/m³

Ambient Temperature: 23.3°C Liquid Temperature: 22.5°C

Communication System: CW (0) Frequency: 1900 MHz Duty Cycle: 1:1

Probe: EX3DV4 - SN3846 ConvF(7.95, 7.95, 7.95)

Area Scan (61x61x1): Interpolated grid: $dx=1.500$ mm, $dy=1.500$ mm

Maximum value of SAR (interpolated) = 15.6 W/kg

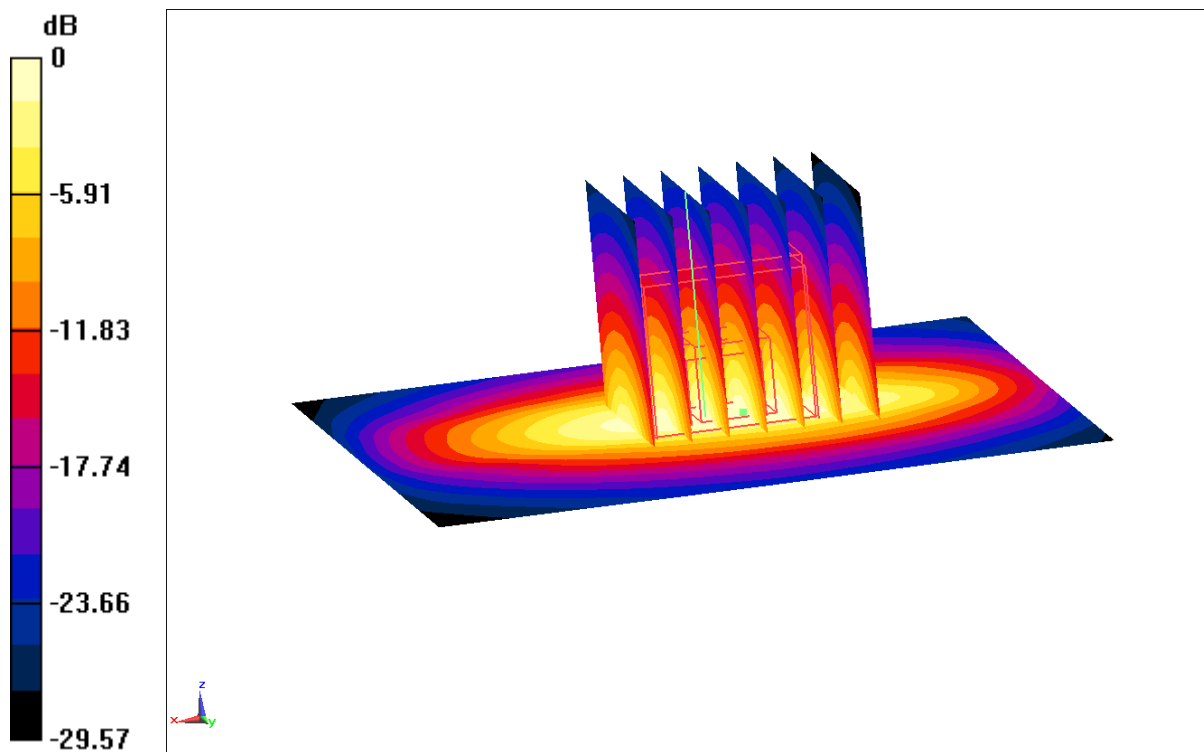
Zoom Scan (7x7x7) (7x7x7)/Cube 0: Measurement grid: $dx=5$ mm, $dy=5$ mm, $dz=5$ mm

Reference Value = 98.68 V/m; Power Drift = -0.06 dB

Peak SAR (extrapolated) = 19.1 W/kg

SAR(1 g) = 9.94 W/kg; SAR(10 g) = 5.14 W/kg

Maximum value of SAR (measured) = 15.4 W/kg



0 dB = 15.5 W/kg = 11.90 dBW/kg

2450MHz

Date: 2024-09-21

Electronics: DAE4 Sn1807

Medium: H700-6000M

Medium parameters used: $f = 2450$ MHz; $\sigma = 1.864$ S/m; $\epsilon_r = 40.9$; $\rho = 1000$ kg/m³

Ambient Temperature: 23.3°C Liquid Temperature: 22.5°C

Communication System: CW (0) Frequency: 2450 MHz Duty Cycle: 1:1

Probe: EX3DV4 - SN3846 ConvF(7.43, 7.43, 7.43)

Area Scan (61x61x1): Interpolated grid: $dx=1.200$ mm, $dy=1.200$ mm

Maximum value of SAR (interpolated) = 21.8 W/kg

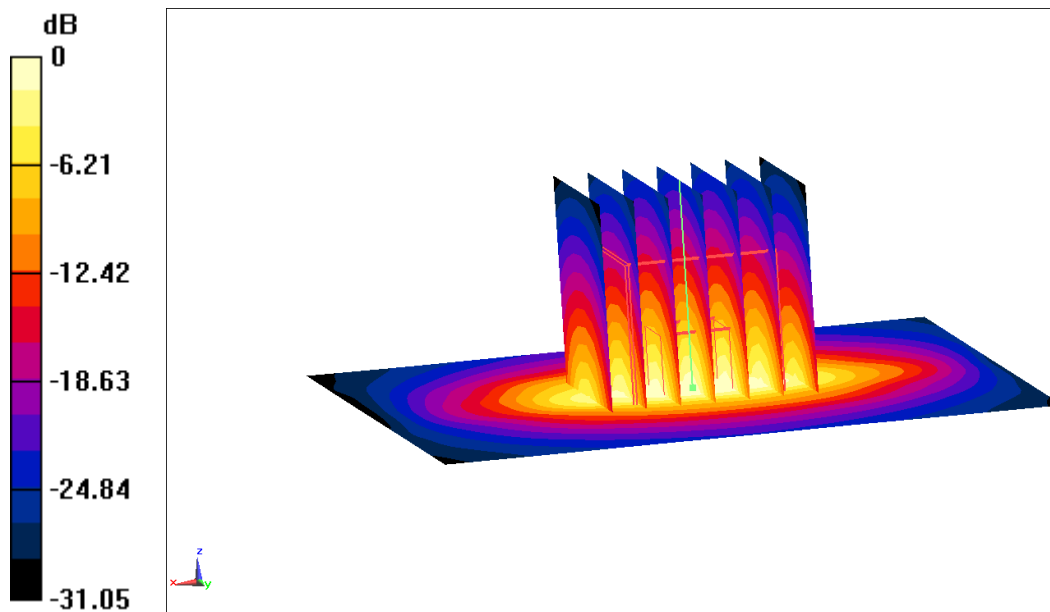
Zoom Scan (7x7x7) (7x7x7)/Cube 0: Measurement grid: $dx=5$ mm, $dy=5$ mm, $dz=5$ mm

Reference Value = 106.2 V/m; Power Drift = -0.15 dB

Peak SAR (extrapolated) = 27.7 W/kg

SAR(1 g) = 13.6 W/kg; SAR(10 g) = 6.39 W/kg

Maximum value of SAR (measured) = 22.6 W/kg



0 dB = 21.9 W/kg = 13.40 dBW/kg

2600MHz

Date: 2024-09-14

Electronics: DAE4 Sn1807

Medium: H700-6000M

Medium parameters used: $f = 2600$ MHz; $\sigma = 1.949$ S/m; $\epsilon_r = 40.07$; $\rho = 1000$ kg/m³

Ambient Temperature: 23.3°C Liquid Temperature: 22.5°C

Communication System: CW (0) Frequency: 2600 MHz Duty Cycle: 1:1

Probe: EX3DV4 - SN3846 ConvF(7.28, 7.28, 7.28)

Area Scan (61x61x1): Interpolated grid: $dx=1.200$ mm, $dy=1.200$ mm

Maximum value of SAR (interpolated) = 22.7 W/kg

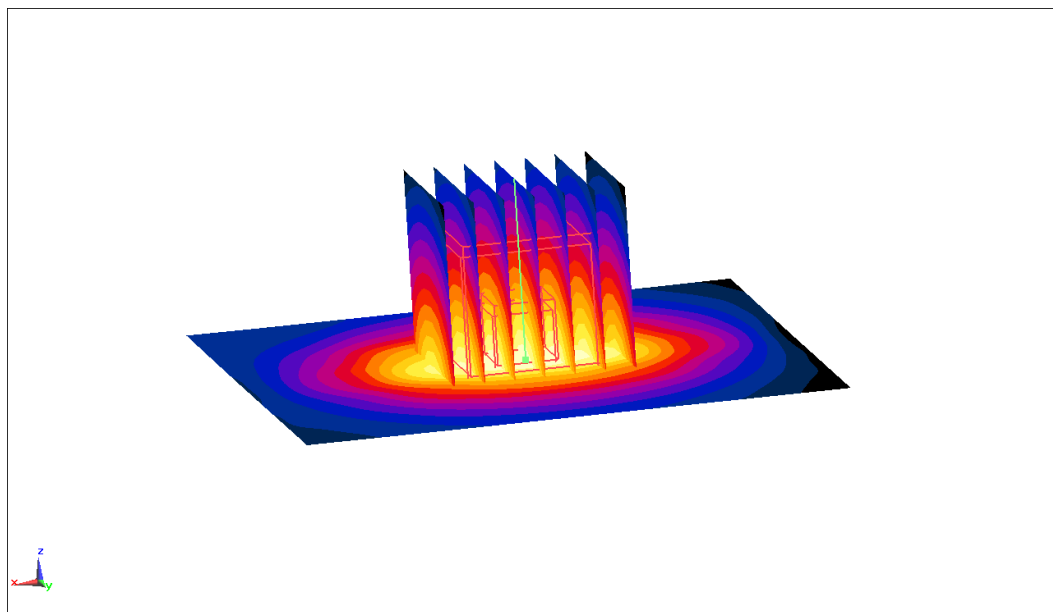
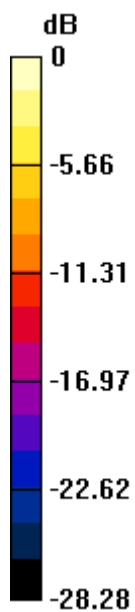
Zoom Scan (7x7x7) (7x7x7)/Cube 0: Measurement grid: $dx=5$ mm, $dy=5$ mm, $dz=5$ mm

Reference Value = 102.9 V/m; Power Drift = -0.07 dB

Peak SAR (extrapolated) = 28.3 W/kg

SAR(1 g) = 13.6 W/kg; SAR(10 g) = 6.14 W/kg

Maximum value of SAR (measured) = 22.8 W/kg



0 dB = 22.7 W/kg = 13.56 dBW/kg

2600MHz

Date: 2024-09-09

Electronics: DAE4 Sn1807

Medium: H700-6000M

Medium parameters used: $f = 2600$ MHz; $\sigma = 1.969$ S/m; $\epsilon_r = 40.48$; $\rho = 1000$ kg/m³

Ambient Temperature: 23.3°C Liquid Temperature: 22.5°C

Communication System: CW (0) Frequency: 2600 MHz Duty Cycle: 1:1

Probe: EX3DV4 - SN3846 ConvF(7.28, 7.28, 7.28)

Area Scan (61x61x1): Interpolated grid: $dx=1.200$ mm, $dy=1.200$ mm

Maximum value of SAR (interpolated) = 23.8 W/kg

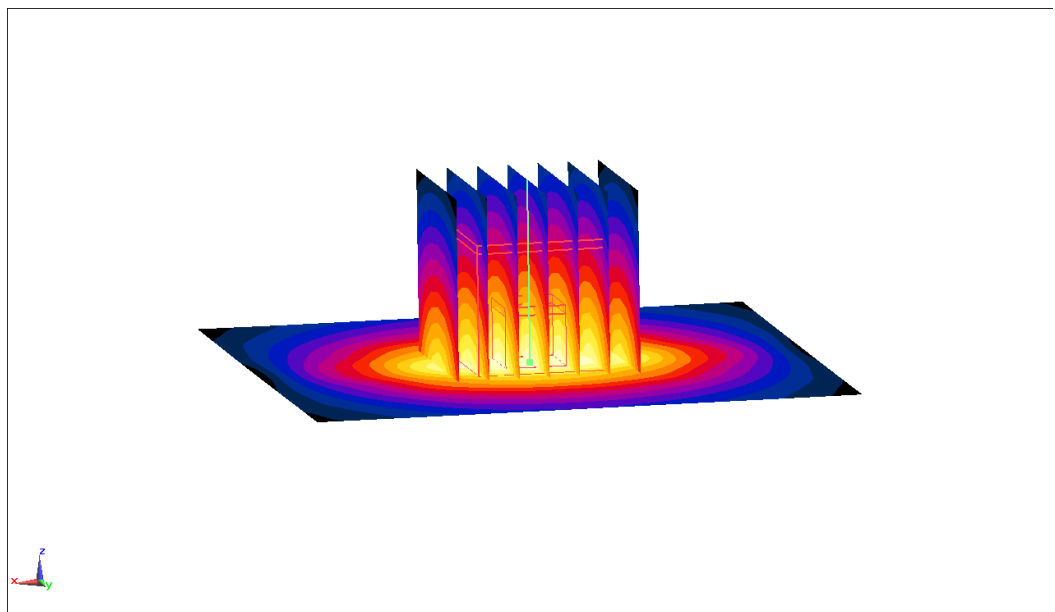
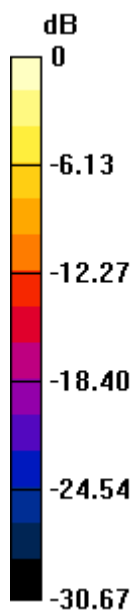
Zoom Scan (7x7x7) (7x7x7)/Cube 0: Measurement grid: $dx=5$ mm, $dy=5$ mm, $dz=5$ mm

Reference Value = 102.5 V/m; Power Drift = 0.18 dB

Peak SAR (extrapolated) = 29.1 W/kg

SAR(1 g) = 13.9 W/kg; SAR(10 g) = 6.31 W/kg

Maximum value of SAR (measured) = 23.7 W/kg



0 dB = 23.9 W/kg = 13.78 dBW/kg

2600MHz

Date: 2024-09-10

Electronics: DAE4 Sn1807

Medium: H700-6000M

Medium parameters used: $f = 2600$ MHz; $\sigma = 1.932$ S/m; $\epsilon_r = 39.7$; $\rho = 1000$ kg/m³

Ambient Temperature: 23.3°C Liquid Temperature: 22.5°C

Communication System: CW (0) Frequency: 2600 MHz Duty Cycle: 1:1

Probe: EX3DV4 - SN3846 ConvF(7.28, 7.28, 7.28)

Area Scan (61x61x1): Interpolated grid: $dx=1.200$ mm, $dy=1.200$ mm

Maximum value of SAR (interpolated) = 23.9 W/kg

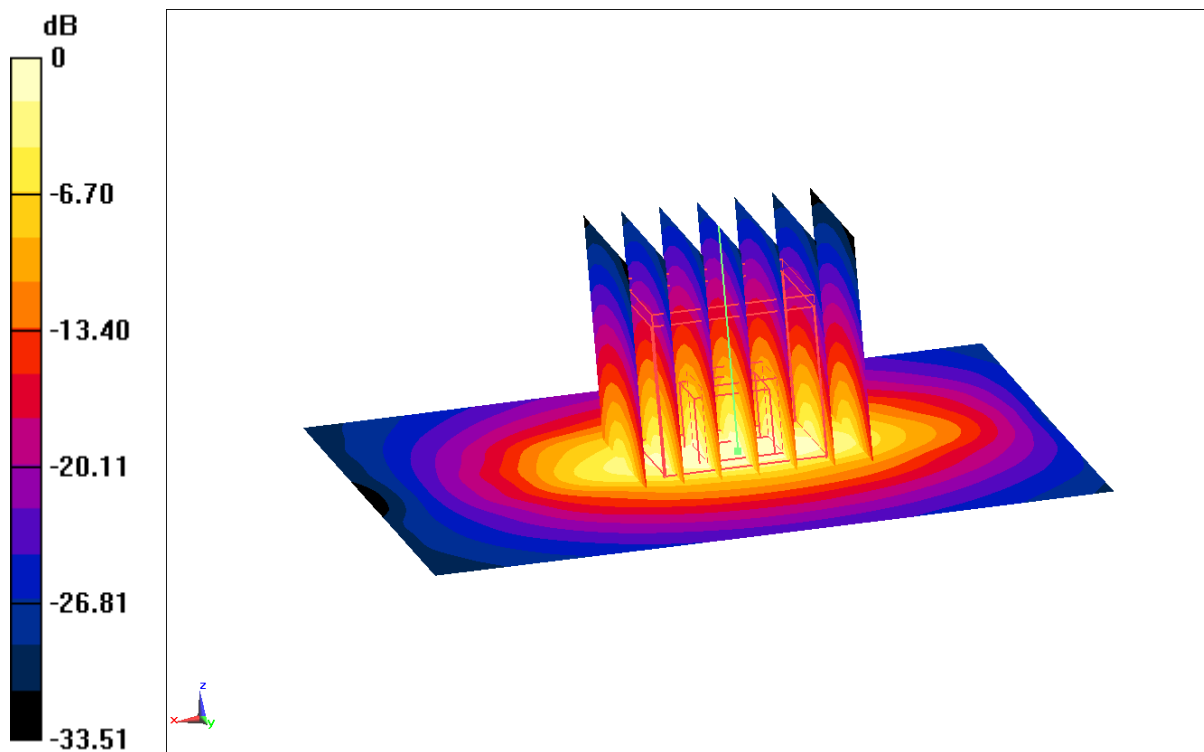
Zoom Scan (7x7x7) (7x7x7)/Cube 0: Measurement grid: $dx=5$ mm, $dy=5$ mm, $dz=5$ mm

Reference Value = 102.5 V/m; Power Drift = 0.11 dB

Peak SAR (extrapolated) = 31.6 W/kg

SAR(1 g) = 13.9 W/kg; SAR(10 g) = 6.15 W/kg

Maximum value of SAR (measured) = 24.4 W/kg



0 dB = 23.8 W/kg = 13.77 dBW/kg

2600MHz

Date: 2024-09-12

Electronics: DAE4 Sn1807

Medium: H700-6000M

Medium parameters used: $f = 2600$ MHz; $\sigma = 1.92$ S/m; $\epsilon_r = 39.46$; $\rho = 1000$ kg/m³

Ambient Temperature: 23.3°C Liquid Temperature: 22.5°C

Communication System: CW (0) Frequency: 2600 MHz Duty Cycle: 1:1

Probe: EX3DV4 - SN3846 ConvF(7.28, 7.28, 7.28)

Area Scan (61x61x1): Interpolated grid: $dx=1.200$ mm, $dy=1.200$ mm

Maximum value of SAR (interpolated) = 24.1 W/kg

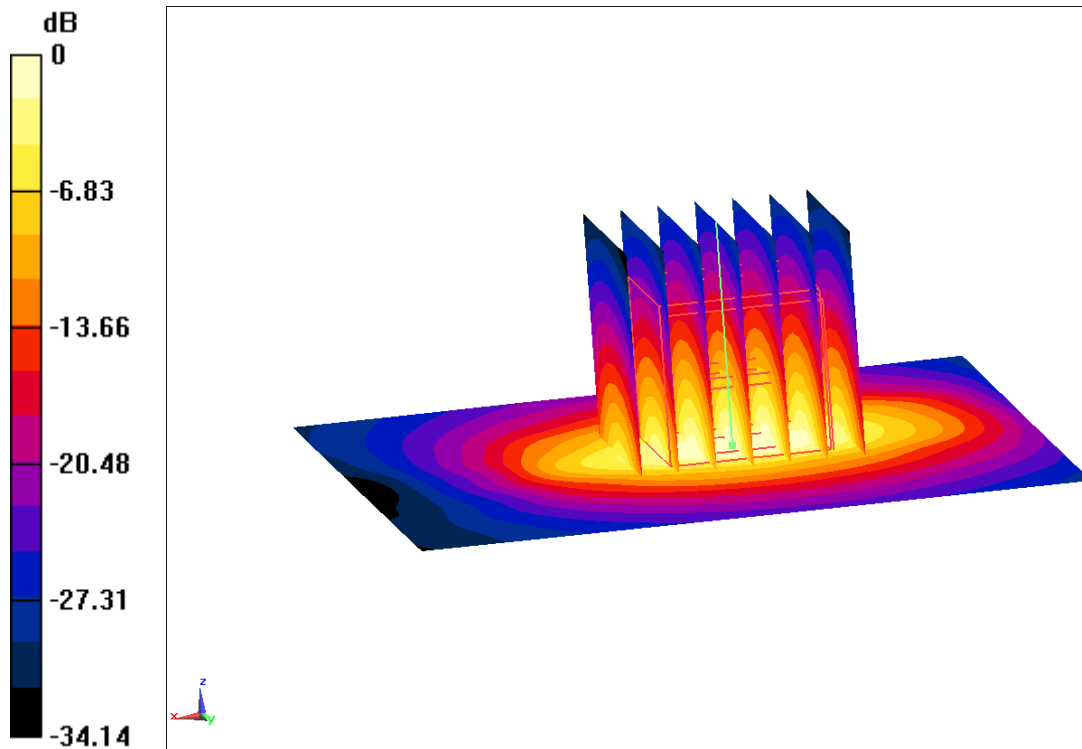
Zoom Scan (7x7x7) (7x7x7)/Cube 0: Measurement grid: $dx=5$ mm, $dy=5$ mm, $dz=5$ mm

Reference Value = 101.8 V/m; Power Drift = -0.15 dB

Peak SAR (extrapolated) = 31.1 W/kg

SAR(1 g) = 13.9 W/kg; SAR(10 g) = 6.17 W/kg

Maximum value of SAR (measured) = 24.0 W/kg



0 dB = 24.0 W/kg = 13.80 dBW/kg

2600MHz

Date: 2024-09-18

Electronics: DAE4 Sn1807

Medium: H700-6000M

Medium parameters used: $f = 2600$ MHz; $\sigma = 1.939$ S/m; $\epsilon_r = 39.87$; $\rho = 1000$ kg/m³

Ambient Temperature: 23.3°C Liquid Temperature: 22.5°C

Communication System: CW (0) Frequency: 2600 MHz Duty Cycle: 1:1

Probe: EX3DV4 - SN3846 ConvF(7.28, 7.28, 7.28)

Area Scan (61x61x1): Interpolated grid: $dx=1.200$ mm, $dy=1.200$ mm

Maximum value of SAR (interpolated) = 24.5 W/kg

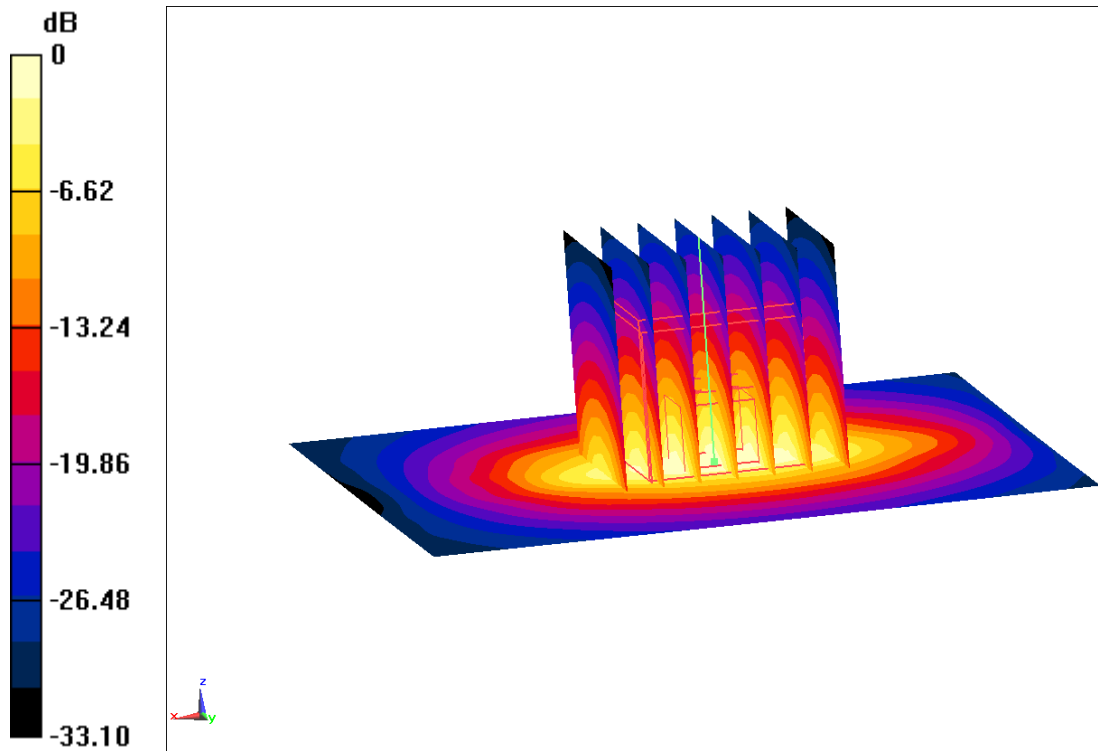
Zoom Scan (7x7x7) (7x7x7)/Cube 0: Measurement grid: $dx=5$ mm, $dy=5$ mm, $dz=5$ mm

Reference Value = 107.2 V/m; Power Drift = -0.16 dB

Peak SAR (extrapolated) = 31.2 W/kg

SAR(1 g) = 14.3 W/kg; SAR(10 g) = 6.35 W/kg

Maximum value of SAR (measured) = 24.7 W/kg



0 dB = 24.4 W/kg = 13.87 dBW/kg

2600MHz

Date: 2024-09-20

Electronics: DAE4 Sn1807

Medium: H700-6000M

Medium parameters used: $f = 2600$ MHz; $\sigma = 1.959$ S/m; $\epsilon_r = 40.27$; $\rho = 1000$ kg/m³

Ambient Temperature: 23.3°C Liquid Temperature: 22.5°C

Communication System: CW (0) Frequency: 2600 MHz Duty Cycle: 1:1

Probe: EX3DV4 - SN3846 ConvF(7.28, 7.28, 7.28)

Area Scan (61x61x1): Interpolated grid: $dx=1.200$ mm, $dy=1.200$ mm

Maximum value of SAR (interpolated) = 23.5 W/kg

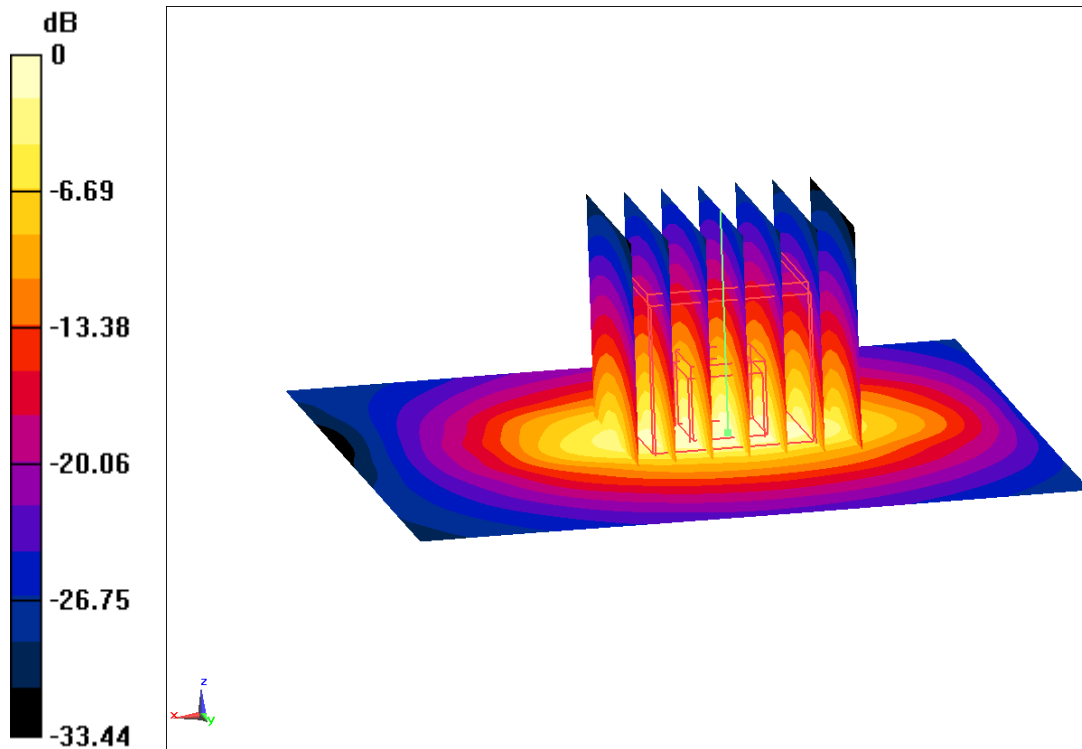
Zoom Scan (7x7x7) (7x7x7)/Cube 0: Measurement grid: $dx=5$ mm, $dy=5$ mm, $dz=5$ mm

Reference Value = 101.7 V/m; Power Drift = -0.18 dB

Peak SAR (extrapolated) = 30.3 W/kg

SAR(1 g) = 13.8 W/kg; SAR(10 g) = 6.15 W/kg

Maximum value of SAR (measured) = 23.6 W/kg



0 dB = 23.4 W/kg = 13.69 dBW/kg

5250MHz

Date: 2024-09-23

Electronics: DAE4 Sn1807

Medium: H700-6000M

Medium parameters used: $f = 5250$ MHz; $\sigma = 4.587$ S/m; $\epsilon_r = 36.39$; $\rho = 1000$ kg/m³

Ambient Temperature: 23.3°C Liquid Temperature: 22.5°C

Communication System: CW (0) Frequency: 5250 MHz Duty Cycle: 1:1

Probe: EX3DV4 - SN3846 ConvF(5.45, 5.45, 5.45)

Area Scan (91x91x1): Interpolated grid: $dx=1.000$ mm, $dy=1.000$ mm

Maximum value of SAR (interpolated) = 18.7 W/kg

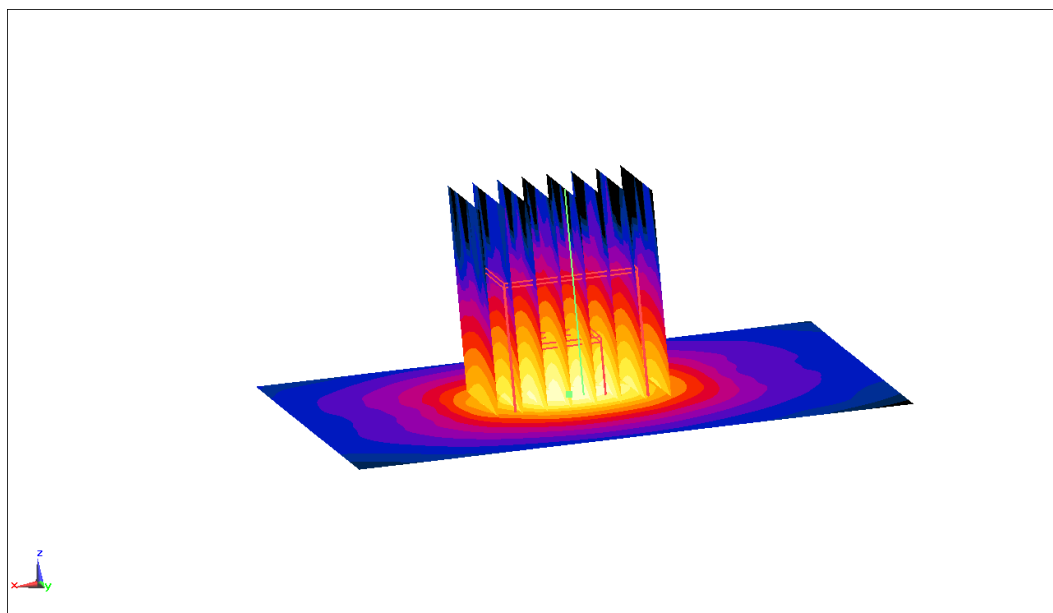
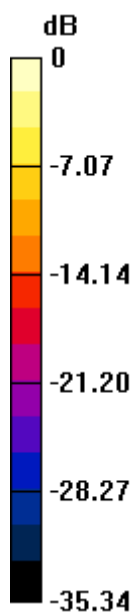
Zoom Scan (4x4x1.4mm, graded), $dist=1.4$ mm (8x8x8)/Cube 0: Measurement grid: $dx=4$ mm, $dy=4$ mm, $dz=1.4$ mm

Reference Value = 67.11 V/m; Power Drift = -0.14 dB

Peak SAR (extrapolated) = 31.8 W/kg

SAR(1 g) = 7.94 W/kg; SAR(10 g) = 2.28 W/kg

Maximum value of SAR (measured) = 18.5 W/kg



0 dB = 18.7 W/kg = 12.72 dBW/kg

5250MHz

Date: 2024-09-25

Electronics: DAE4 Sn1807

Medium: H700-6000M

Medium parameters used: $f = 5250$ MHz; $\sigma = 4.559$ S/m; $\epsilon_r = 36.17$; $\rho = 1000$ kg/m³

Ambient Temperature: 23.3°C Liquid Temperature: 22.5°C

Communication System: CW (0) Frequency: 5250 MHz Duty Cycle: 1:1

Probe: EX3DV4 - SN3846 ConvF(5.45, 5.45, 5.45)

Area Scan (91x91x1): Interpolated grid: $dx=1.000$ mm, $dy=1.000$ mm

Maximum value of SAR (interpolated) = 18.1 W/kg

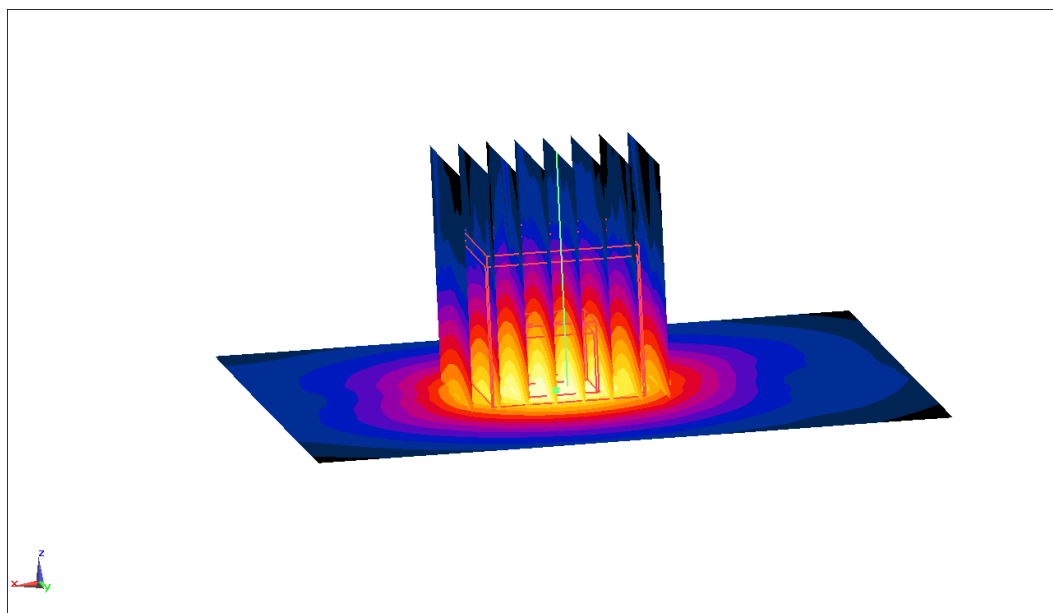
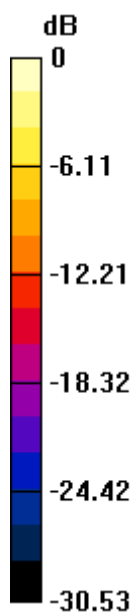
Zoom Scan (4x4x1.4mm, graded), $dist=1.4$ mm (8x8x8)/Cube 0: Measurement grid: $dx=4$ mm, $dy=4$ mm, $dz=1.4$ mm

Reference Value = 65.67 V/m; Power Drift = -0.01 dB

Peak SAR (extrapolated) = 31.6 W/kg

SAR(1 g) = 7.79 W/kg; SAR(10 g) = 2.23 W/kg

Maximum value of SAR (measured) = 17.9 W/kg



0 dB = 18.0 W/kg = 12.55 dBW/kg

5600MHz

Date: 2024-09-23

Electronics: DAE4 Sn1807

Medium: H700-6000M

Medium parameters used: $f = 5600$ MHz; $\sigma = 4.98$ S/m; $\epsilon_r = 35.77$; $\rho = 1000$ kg/m³

Ambient Temperature: 23.3°C Liquid Temperature: 22.5°C

Communication System: CW (0) Frequency: 5600 MHz Duty Cycle: 1:1

Probe: EX3DV4 - SN3846 ConvF(4.75, 4.75, 4.75)

Area Scan (91x91x1): Interpolated grid: $dx=1.000$ mm, $dy=1.000$ mm

Maximum value of SAR (interpolated) = 19.9 W/kg

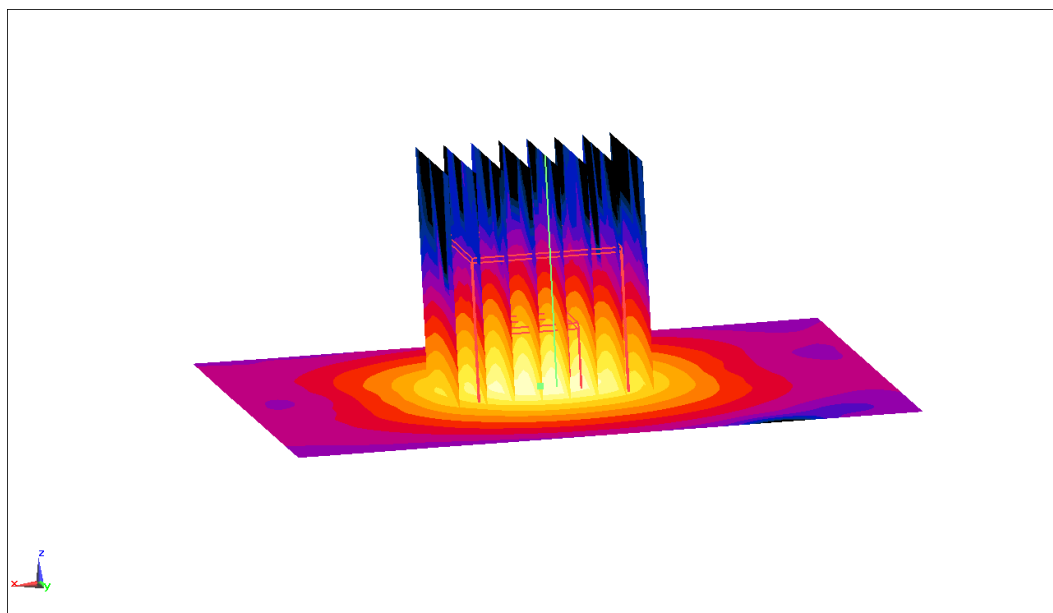
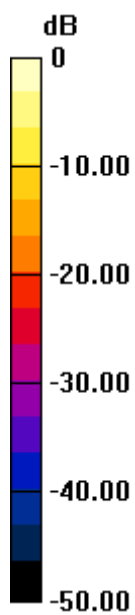
Zoom Scan (4x4x1.4mm, graded), $dist=1.4$ mm (8x8x8)/Cube 0: Measurement grid: $dx=4$ mm, $dy=4$ mm, $dz=1.4$ mm

Reference Value = 67.15 V/m; Power Drift = -0.17 dB

Peak SAR (extrapolated) = 36.1 W/kg

SAR(1 g) = 8.22 W/kg; SAR(10 g) = 2.34 W/kg

Maximum value of SAR (measured) = 19.8 W/kg



0 dB = 19.9 W/kg = 12.99 dBW/kg

5600MHz

Date: 2024-09-25

Electronics: DAE4 Sn1807

Medium: H700-6000M

Medium parameters used: $f = 5600$ MHz; $\sigma = 4.95$ S/m; $\epsilon_r = 35.56$; $\rho = 1000$ kg/m³

Ambient Temperature: 23.3°C Liquid Temperature: 22.5°C

Communication System: CW (0) Frequency: 5600 MHz Duty Cycle: 1:1

Probe: EX3DV4 - SN3846 ConvF(4.75, 4.75, 4.75)

Area Scan (91x91x1): Interpolated grid: $dx=1.000$ mm, $dy=1.000$ mm

Maximum value of SAR (interpolated) = 19.8 W/kg

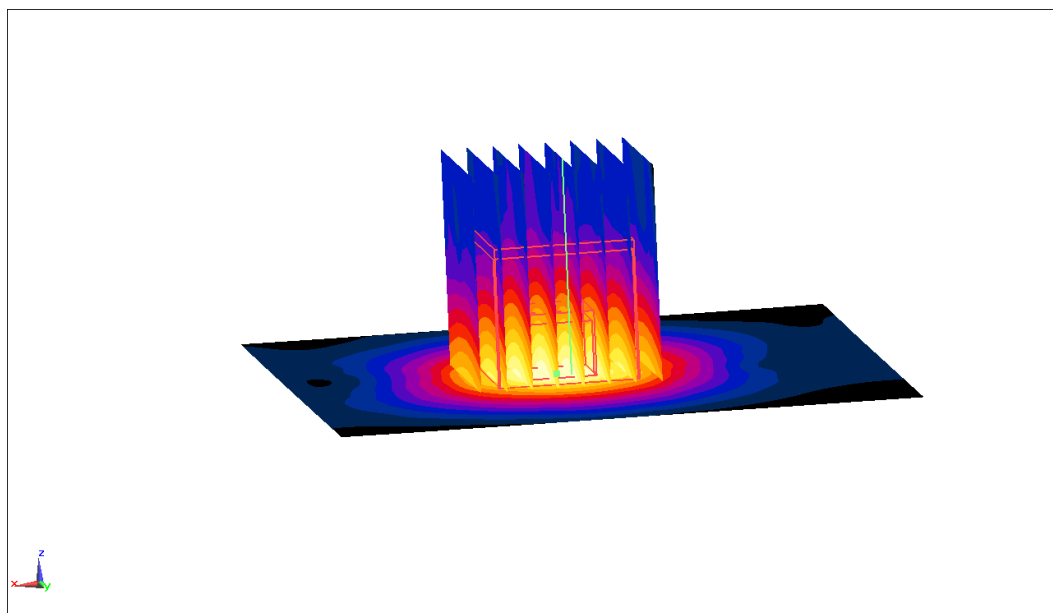
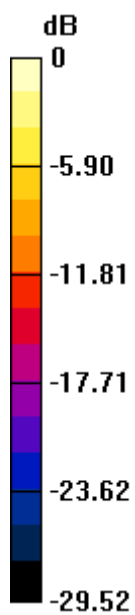
Zoom Scan (4x4x1.4mm, graded), $dist=1.4$ mm (8x8x8)/Cube 0: Measurement grid: $dx=4$ mm, $dy=4$ mm, $dz=1.4$ mm

Reference Value = 66.59 V/m; Power Drift = -0.01 dB

Peak SAR (extrapolated) = 35.8 W/kg

SAR(1 g) = 8.13 W/kg; SAR(10 g) = 2.32 W/kg

Maximum value of SAR (measured) = 19.2 W/kg



0 dB = 19.8 W/kg = 12.97 dBW/kg

5750MHz

Date: 2024-09-23

Electronics: DAE4 Sn1807

Medium: H700-6000M

Medium parameters used: $f = 5750$ MHz; $\sigma = 5.151$ S/m; $\epsilon_r = 35.56$; $\rho = 1000$ kg/m³

Ambient Temperature: 23.3°C Liquid Temperature: 22.5°C

Communication System: CW (0) Frequency: 5750 MHz Duty Cycle: 1:1

Probe: EX3DV4 - SN3846 ConvF(4.9, 4.9, 4.9)

Area Scan (91x91x1): Interpolated grid: $dx=1.000$ mm, $dy=1.000$ mm

Maximum value of SAR (interpolated) = 19.5 W/kg

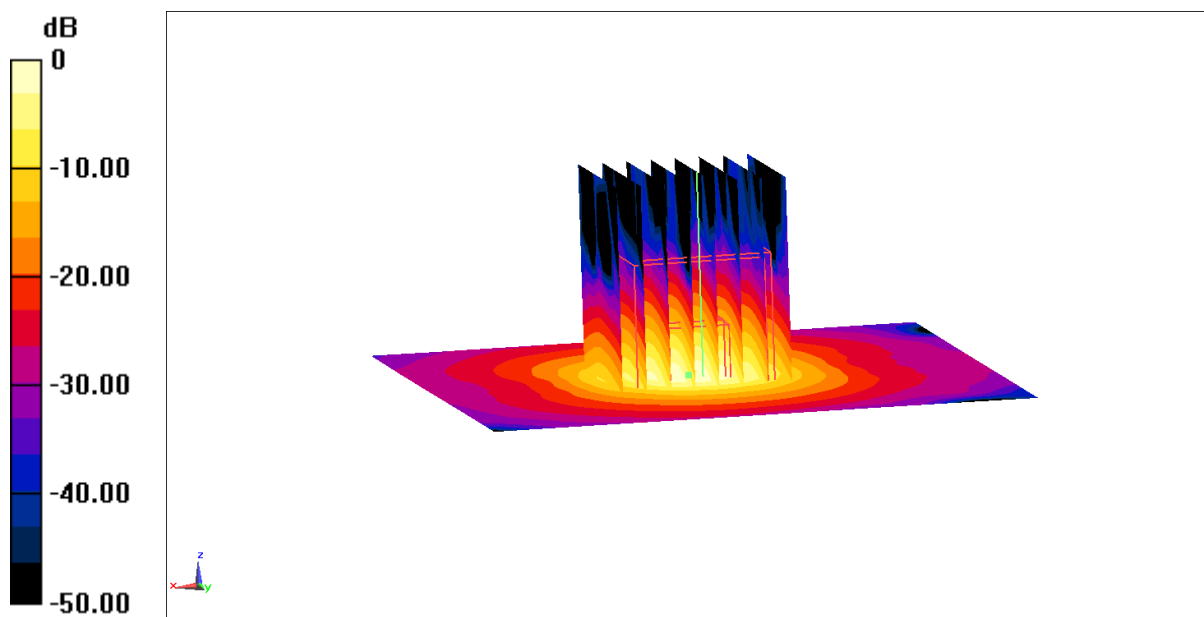
Zoom Scan (4x4x1.4mm, graded), $dist=1.4$ mm (8x8x8)/Cube 0: Measurement grid: $dx=4$ mm, $dy=4$ mm, $dz=1.4$ mm

Reference Value = 65.35 V/m; Power Drift = -0.08 dB

Peak SAR (extrapolated) = 36.9 W/kg

SAR(1 g) = 7.93 W/kg; SAR(10 g) = 2.24 W/kg

Maximum value of SAR (measured) = 19.6 W/kg



0 dB = 19.4 W/kg = 12.88 dBW/kg

5750MHz

Date: 2024-09-25

Electronics: DAE4 Sn1807

Medium: H700-6000M

Medium parameters used: $f = 5750$ MHz; $\sigma = 5.12$ S/m; $\epsilon_r = 35.35$; $\rho = 1000$ kg/m³

Ambient Temperature: 23.3°C Liquid Temperature: 22.5°C

Communication System: CW (0) Frequency: 5750 MHz Duty Cycle: 1:1

Probe: EX3DV4 - SN3846 ConvF(4.9, 4.9, 4.9)

Area Scan (91x91x1): Interpolated grid: $dx=1.000$ mm, $dy=1.000$ mm

Maximum value of SAR (interpolated) = 19.4 W/kg

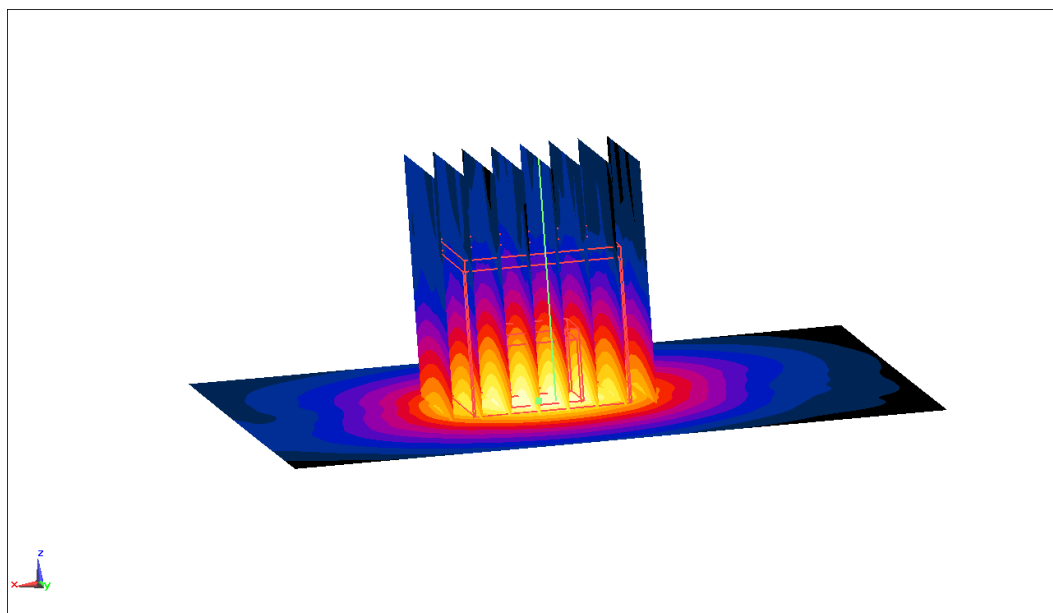
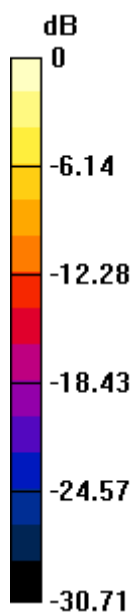
Zoom Scan (4x4x1.4mm, graded), $dist=1.4$ mm (8x8x8)/Cube 0: Measurement grid: $dx=4$ mm, $dy=4$ mm, $dz=1.4$ mm

Reference Value = 64.91 V/m; Power Drift = -0.12 dB

Peak SAR (extrapolated) = 36.8 W/kg

SAR(1 g) = 7.94 W/kg; SAR(10 g) = 2.27 W/kg

Maximum value of SAR (measured) = 19.0 W/kg



0 dB = 19.3 W/kg = 12.86 dBW/kg

6.5GHz

Device Under Test Properties

Model, Manufacturer	Dimensions [mm]	IMEI	DUT Type
Device,	20.0 x 20.0 x 8.0		Phone

Exposure Conditions

Phantom Section, TSL	Position, Test Distance [mm]	Band	Group, UID	Frequency [MHz], Channel Number	Conversion Factor	TSL Conductivity [S/m]	TSL Permittivity
Flat, -	EDGE TOP, 5.00	Validation band	CW, 0--	6500.000, 6500	5.18	6.22	33.2

Hardware Setup

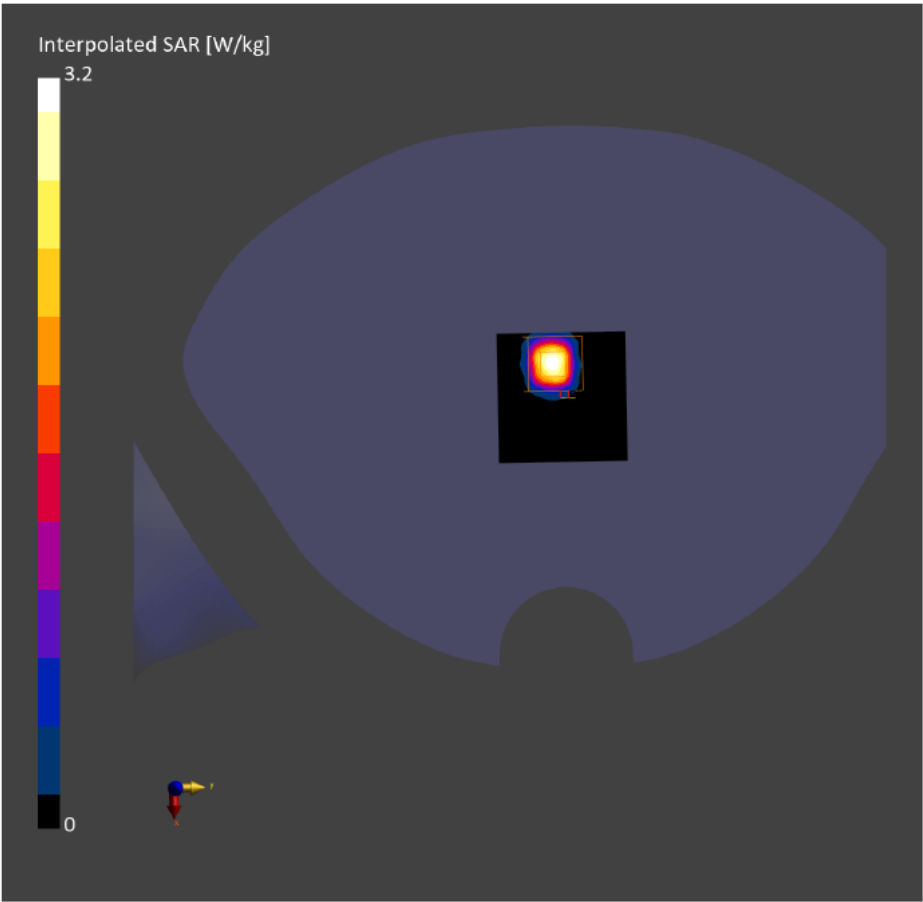
Phantom	TSL, Measured Date	Probe, Calibration Date	DAE, Calibration Date
Twin-SAM V5.0 (30deg probe tilt) - xxxx	H650-7000M	EX3DV4 - SN7464, 2024-01-22	DAE4 Sn1556, 2024-01-03

Scans Setup

	Area Scan	Zoom Scan
Grid Extents [mm]	51.0 x 51.0	22.0 x 22.0 x 22.0
Grid Steps [mm]	8.5 x 8.5	3.4 x 3.4 x 1.4
Sensor Surface [mm]	3.0	1.4
Graded Grid	N/A	Yes
Grading Ratio	N/A	1.4
MAIA	N/A	N/A
Surface Detection	VMS	All points
Scan Method	Measured	Measured

Measurement Results

	Area Scan	Zoom Scan
Date	2024-09-27, 17:02	2024-09-27, 17:19
psSAR1g [W/Kg]	2.37	28.6
psSAR10g [W/Kg]	0.604	5.16
Power Drift [dB]	0.06	0.17
Power Scaling	Disabled	Disabled
Scaling Factor [dB]		
TSL Correction	No correction	No correction
M2/M1 [%]		50.6
Dist 3dB Peak [mm]		4.6



13MHz

Date: 9/30/2024

Electronics: DAE4 Sn1524

Medium: 13M

Medium parameters used: $f = 13 \text{ MHz}$; $\sigma = 0.716 \text{ S/m}$; $\epsilon_r = 52.35$; $\rho = 1000 \text{ kg/m}^3$

Ambient Temperature: 23.3°C Liquid Temperature: 22.5°C

Communication System: UID 0, CW (0) Frequency: 13 MHz Duty Cycle: 1:1

Probe: EX3DV4 - SN7464 ConvF(17.62, 17.62, 17.62)

Area Scan (101x111x1): Interpolated grid: $dx=1.000 \text{ mm}$, $dy=1.000 \text{ mm}$

Maximum value of SAR (interpolated) = 0.194 W/kg

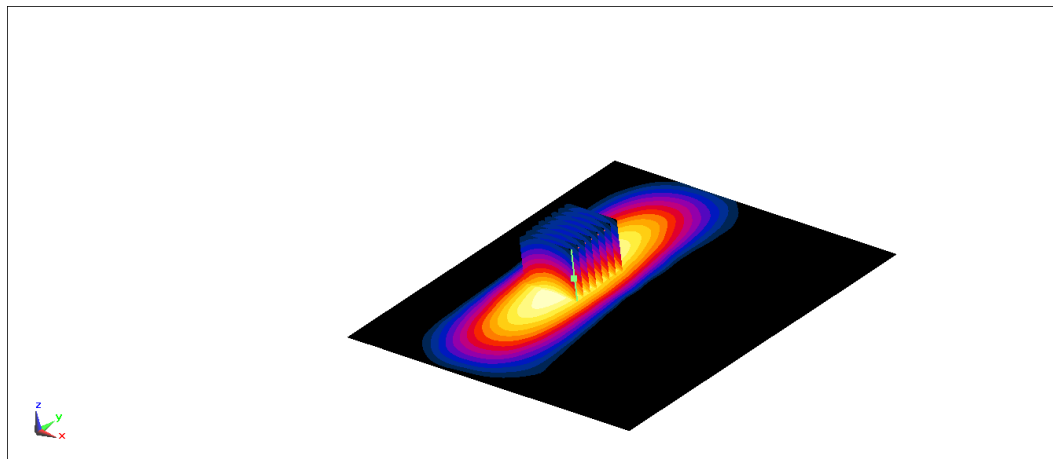
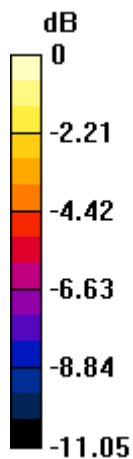
Zoom Scan (4x4x1.4mm, graded), dist=1.4mm (8x8x7)/Cube 0: Measurement grid: $dx=4\text{mm}$, $dy=4\text{mm}$, $dz=1.4\text{mm}$

Reference Value = 4.005 V/m; Power Drift = 0.13 dB

Peak SAR (extrapolated) = 0.274 W/kg

SAR(1 g) = 0.521 W/kg; SAR(10 g) = 0.322 W/kg

Maximum value of SAR (measured) = 0.187 W/kg



$$0 \text{ dB} = 0.187 \text{ W/kg} = -7.28 \text{ dBW/kg}$$

10GHz

Measurement Report for Device, FRONT, Validation band, CW, Channel 10000 (10000.0 MHz)

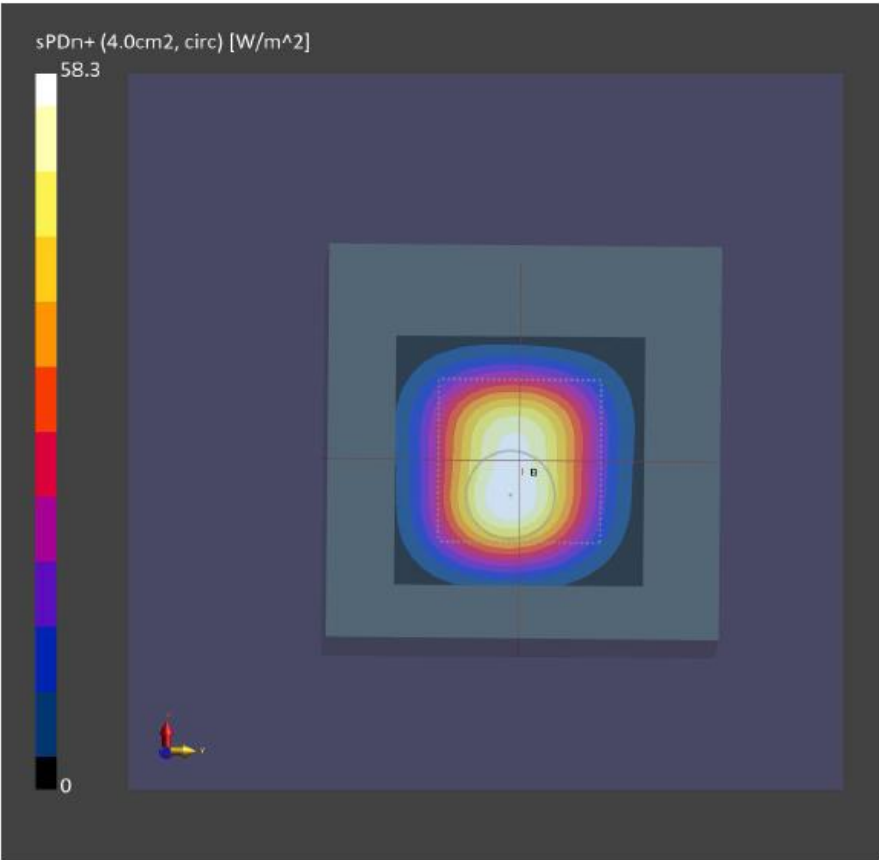
Device Under Test Properties			
Model, Manufacturer	Dimensions [mm]	IMEI	DUT Type
Device,	100.0 x 100.0 x 100.0		Phone

Exposure Conditions					
Phantom Section	Position, Test Distance [mm]	Band	Group, UID	Frequency [MHz], Channel Number	Conversion Factor
5G	FRONT, 2.00	Validation band	CW, 0--	10000.0, 10000	1.0

Hardware Setup			
Phantom	Medium	Probe, Calibration Date	DAE, Calibration Date
mmWave - xxxx	Air -	EUmmWV4 - SN9492_F1-55GHz, 2024-05-28	DAE4 Sn1556, 2024-01-03

Scans Setup	
Scan Type	5G Scan
Grid Extents [mm]	60.0 x 60.0
Grid Steps [lambda]	0.06808848581238543 x 0.06808848581238543
Sensor Surface [mm]	2.0
MAIA	N/A

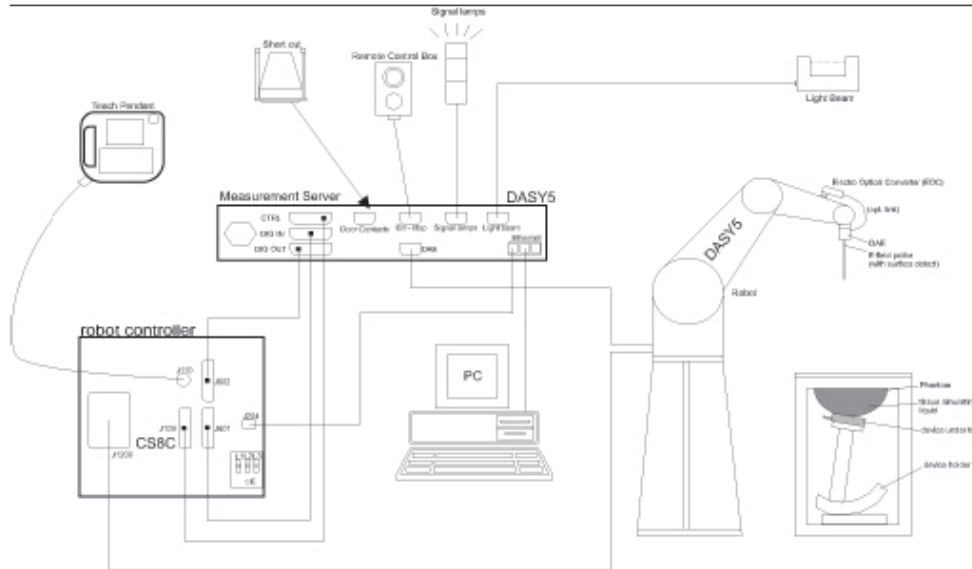
Measurement Results	
Scan Type	5G Scan
Date	2024-10-01, 12:43
Avg. Area [cm2]	4.00
psPDn+ [W/m2]	58.3
psPDtot+ [W/m2]	58.4
psPDmod+ [W/m2]	58.8
E_max [V/m]	159
Power Drift [dB]	0.01



ANNEX C SAR Measurement Setup

C.1 Measurement Set-up

The Dasy5 or DASY6 system for performing compliance tests is illustrated above graphically. This system consists of the following items:



Picture C.1 SAR Lab Test Measurement Set-up

- A standard high precision 6-axis robot (Stäubli TX=RX family) with controller, teach pendant and software. An arm extension for accommodating the data acquisition electronics (DAE).
- An isotropic field probe optimized and calibrated for the targeted measurement.
- A data acquisition electronics (DAE) which performs the signal amplification, signal multiplexing, AD-conversion, offset measurements, mechanical surface detection, collision detection, etc. The unit is battery powered with standard or rechargeable batteries. The signal is optically transmitted to the EOC.
- The Electro-optical converter (EOC) performs the conversion from optical to electrical signals for the digital communication to the DAE. To use optical surface detection, a special version of the EOC is required. The EOC signal is transmitted to the measurement server.
- The function of the measurement server is to perform the time critical tasks such as signal filtering, control of the robot operation and fast movement interrupts.
- The Light Beam used is for probe alignment. This improves the (absolute) accuracy of the probe positioning.
- A computer running WinXP and the DASY5 or DASY6 software.
- Remote control and teach pendant as well as additional circuitry for robot safety such as warning lamps, etc.
- The phantom, the device holder and other accessories according to the targeted measurement.

C.2 Dasy5 E-field Probe System

The SAR measurements were conducted with the dosimetric probe designed in the classical triangular configuration and optimized for dosimetric evaluation. The probe is constructed using the thick film technique; with printed resistive lines on ceramic substrates. The probe is equipped with an optical multifiber line ending at the front of the probe tip. It is connected to the EOC box on the robot arm and provides an automatic detection of the phantom surface. Half of the fibers are connected to a pulsed infrared transmitter, the other half to a synchronized receiver. As the probe approaches the surface, the reflection from the surface produces a coupling from the transmitting to the receiving fibers. This reflection increases first during the approach, reaches maximum and then decreases. If the probe is flatly touching the surface, the coupling is zero. The distance of the coupling maximum to the surface is independent of the surface reflectivity and largely independent of the surface to probe angle. The DASY5 or DASY6 software reads the reflection during a software approach and looks for the maximum using 2nd order curve fitting. The approach is stopped at reaching the maximum.

Probe Specifications:

Model: ES3DV3, EX3DV4
Frequency 10MHz — 6.0GHz(EX3DV4)
Range: 10MHz — 4GHz(ES3DV3)
Calibration: In head and body simulating tissue at
Frequencies from 835 up to 5800MHz
Linearity: ± 0.2 dB(30 MHz to 6 GHz) for EX3DV4
 ± 0.2 dB(30 MHz to 4 GHz) for ES3DV3
Dynamic Range: 10 mW/kg — 100W/kg
Probe Length: 330 mm
Probe Tip
Length: 20 mm
Body Diameter: 12 mm
Tip Diameter: 2.5 mm (3.9 mm for ES3DV3)
Tip-Center: 1 mm (2.0mm for ES3DV3)
Application: SAR Dosimetry Testing
Compliance tests of mobile phones
Dosimetry in strong gradient fields



Picture C.2 Near-field Probe



Picture C.3 E-field Probe

C.3 E-field Probe Calibration

Each E-Probe/Probe Amplifier combination has unique calibration parameters. A TEM cell calibration procedure is conducted to determine the proper amplifier settings to enter in the probe parameters. The amplifier settings are determined for a given frequency by subjecting the probe to a known E-field density (1 mW/cm²) using an RF Signal generator, TEM cell, and RF Power Meter.

The free space E-field from amplified probe outputs is determined in a test chamber. This calibration can be performed in a TEM cell if the frequency is below 1 GHz and in a waveguide or

other methodologies above 1 GHz for free space. For the free space calibration, the probe is placed in the volumetric center of the cavity and at the proper orientation with the field. The probe is then rotated 360 degrees until the three channels show the maximum reading. The power density readings equates to 1 mW/cm².

E-field temperature correlation calibration is performed in a flat phantom filled with the appropriate simulated brain tissue. The E-field in the medium correlates with the temperature rise in the dielectric medium. For temperature correlation calibration a RF transparent thermistor-based temperature probe is used in conjunction with the E-field probe.

$$SAR = C \frac{\Delta T}{\Delta t}$$

Where:

Δt = Exposure time (30 seconds),

C = Heat capacity of tissue (brain or muscle),

ΔT = Temperature increase due to RF exposure.

$$SAR = \frac{|E|^2 \cdot \sigma}{\rho}$$

Where:

σ = Simulated tissue conductivity,

ρ = Tissue density (kg/m³).

C.4 Other Test Equipment

C.4.1 Data Acquisition Electronics(DAE)

The data acquisition electronics consist of a highly sensitive electrometer-grade preamplifier with auto-zeroing, a channel and gain-switching multiplexer, a fast 16 bit AD-converter and a command decoder with a control logic unit. Transmission to the measurement server is accomplished through an optical downlink for data and status information, as well as an optical uplink for commands and the clock.

The mechanical probe mounting device includes two different sensor systems for frontal and sideways probe contacts. They are used for mechanical surface detection and probe collision detection.

The input impedance of the DAE is 200 MOhm; the inputs are symmetrical and floating. Common mode rejection is above 80 dB.



PictureC.4: DAE

C.4.2 Robot

The SPEAG DASY system uses the high precision robots (DASY5: RX160L) type from Stäubli SA (France). For the 6-axis controller system, the robot controller version from Stäubli is used. The Stäubli robot series have many features that are important for our application:

- High precision (repeatability 0.02mm)
- High reliability (industrial design)
- Low maintenance costs (virtually maintenance free due to direct drive gears; no belt drives)
- Jerk-free straight movements (brushless synchron motors; no stepper motors)
- Low ELF interference (motor control fields shielded via the closed metallic construction shields)



Picture C.5 DASY 5

C.4.3 Measurement Server

The Measurement server is based on a PC/104 CPU board with CPU (DASY5: 400 MHz, Intel Celeron), chipdisk (DASY5: 128MB), RAM DASY5: 128MB). The necessary circuits for communication with the DAE electronic box, as well as the 16 bit AD converter system for optical detection and digital I/O interface are contained on the DASY I/O board, which is directly connected to the PC/104 bus of the CPU board.

The measurement server performs all real-time data evaluation of field measurements and surface detection, controls robot movements and handles safety operation. The PC operating system cannot interfere with these time critical processes. All connections are supervised by a watchdog, and disconnection of any of the cables to the measurement server will automatically disarm the robot and disable all program-controlled robot movements. Furthermore, the measurement server is equipped with an expansion port which is reserved for future applications. Please note that this expansion port does not have a standardized pinout, and therefore only devices provided by SPEAG can be connected. Devices from any other supplier could seriously damage the measurement server.



Picture C.6 Server for DASY 5