

Plot 55 NR Band n2 1RB Right Cheek High

Date: 2022/4/12

Communication System: UID 0, 5G NR (0); Frequency: 1860 MHz; Duty Cycle: 1:1

Medium parameters used: $f = 1860$ MHz; $\sigma = 1.407$ S/m; $\epsilon_r = 39.071$; $\rho = 1000$ kg/m³

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

Phantom section: Right Section

DASY5 Configuration:

Sensor-Surface: 1.4mm (Mechanical Surface Detection)

Probe: EX3DV4 – SN7543; ConvF(8.20, 8.20, 8.20); Calibrated: 2021/12/28

Electronics: DAE4 SN1291; Calibrated: 2022/3/24

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

Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.14 (7483)

Right Cheek High/Area Scan (8x14x1): Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (measured) = 0.408 W/kg

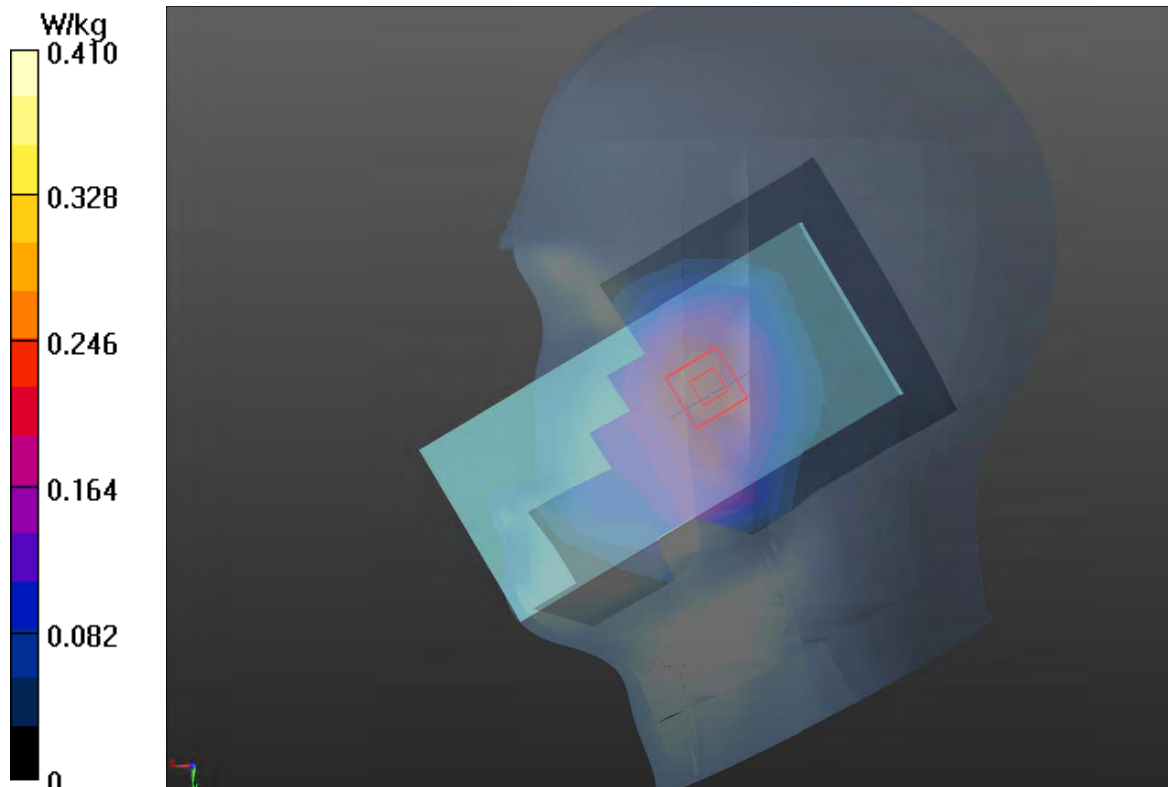
Right Cheek High/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 0.5500 V/m; Power Drift = -0.010 dB

Peak SAR (extrapolated) = 0.0520 W/kg

SAR(1 g) = 0.401 W/kg; SAR(10 g) = 0.227 W/kg

Maximum value of SAR (measured) = 0.410 W/kg



Plot 56 NR Band n5 50%RB Left Cheek Low

Date: 2022/3/25

Communication System: UID 0, 5G NR (0); Frequency: 834 MHz; Duty Cycle: 1:1

Medium parameters used: $f = 834$ MHz; $\sigma = 0.953$ S/m; $\epsilon_r = 39.907$; $\rho = 1000$ kg/m³

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

Phantom section: Left Section

DASY5 Configuration:

Sensor-Surface: 1.4mm (Mechanical Surface Detection)

Probe: EX3DV4 – SN7543; ConvF(9.89, 9.89, 9.89); Calibrated: 2021/12/28

Electronics: DAE4 SN1291; Calibrated: 2022/3/24

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

Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.14 (7483)

Left Cheek Low/Area Scan (8x14x1): Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (measured) = 0.170 W/kg

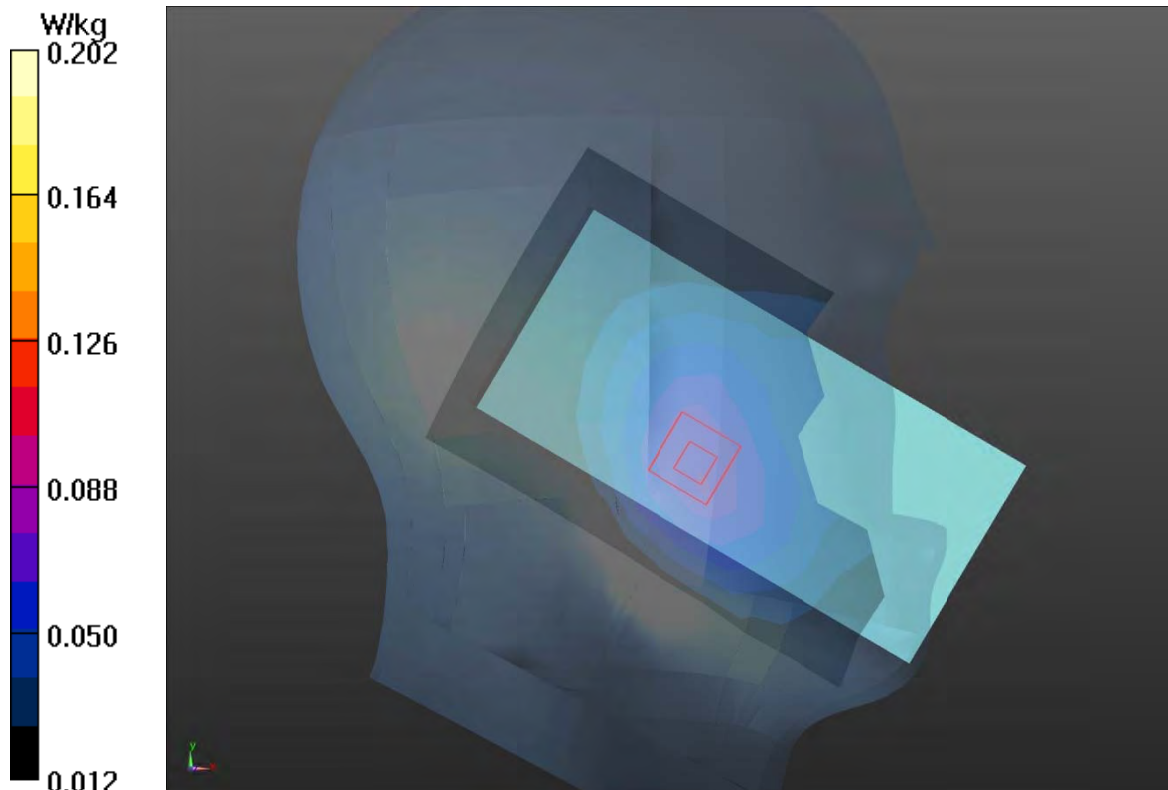
Left Cheek Low/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 2.646 V/m; Power Drift = -0.012 dB

Peak SAR (extrapolated) = 0.0980 W/kg

SAR(1 g) = 0.167W/kg; SAR(10 g) = 0.112 W/kg

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



Plot 57 NR Band n7 1RB Right Cheek Middle

Date: 2022/4/8

Communication System: UID 0, 5G NR (0); Frequency: 2535 MHz; Duty Cycle: 1:1

Medium parameters used: $f = 2535$ MHz; $\sigma = 1.894$ S/m; $\epsilon_r = 40.308$; $\rho = 1000$ kg/m³

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

Phantom section: Right Section

DASY5 Configuration:

Sensor-Surface: 1.4mm (Mechanical Surface Detection)

Probe: EX3DV4 – SN7543; ConvF(7.24, 7.24, 7.24); Calibrated: 2021/12/28

Electronics: DAE4 SN1291; Calibrated: 2022/3/24

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

Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.14 (7483)

Right Cheek Middle/Area Scan (10x18x1): Measurement grid: dx=12mm, dy=12mm

Maximum value of SAR (measured) = 0.793 W/kg

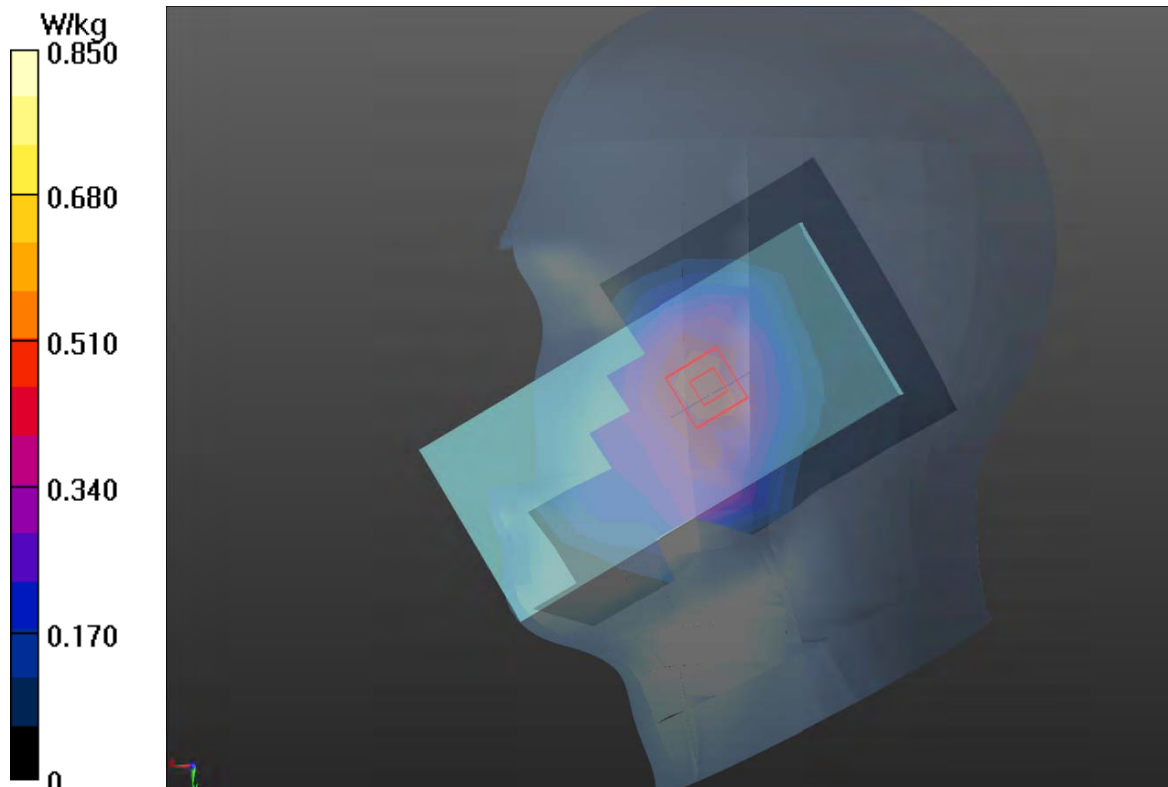
Right Cheek Middle/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 0.5760 V/m; Power Drift = 0.037 dB

Peak SAR (extrapolated) = 0.0740 W/kg

SAR(1 g) = 0.709W/kg; SAR(10 g) = 0.324 W/kg

Maximum value of SAR (measured) = 0.850 W/kg



Plot 58 NR Band n38 1RB Right Cheek High

Date: 2022/4/14

Communication System: UID 0, 5G NR (0); Frequency: 2610 MHz; Duty Cycle: 1:4

Medium parameters used: $f = 2610$ MHz; $\sigma = 1.984$ S/m; $\epsilon_r = 40.073$; $\rho = 1000$ kg/m³

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

Phantom section: Right Section

DASY5 Configuration:

Sensor-Surface: 1.4mm (Mechanical Surface Detection)

Probe: EX3DV4 – SN7543; ConvF(7.24, 7.24, 7.24); Calibrated: 2021/12/28

Electronics: DAE4 SN1291; Calibrated: 2022/3/24

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

Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.14 (7483)

Right Cheek High/Area Scan (10x18x1): Measurement grid: dx=12mm, dy=12mm

Maximum value of SAR (measured) = 0.790 W/kg

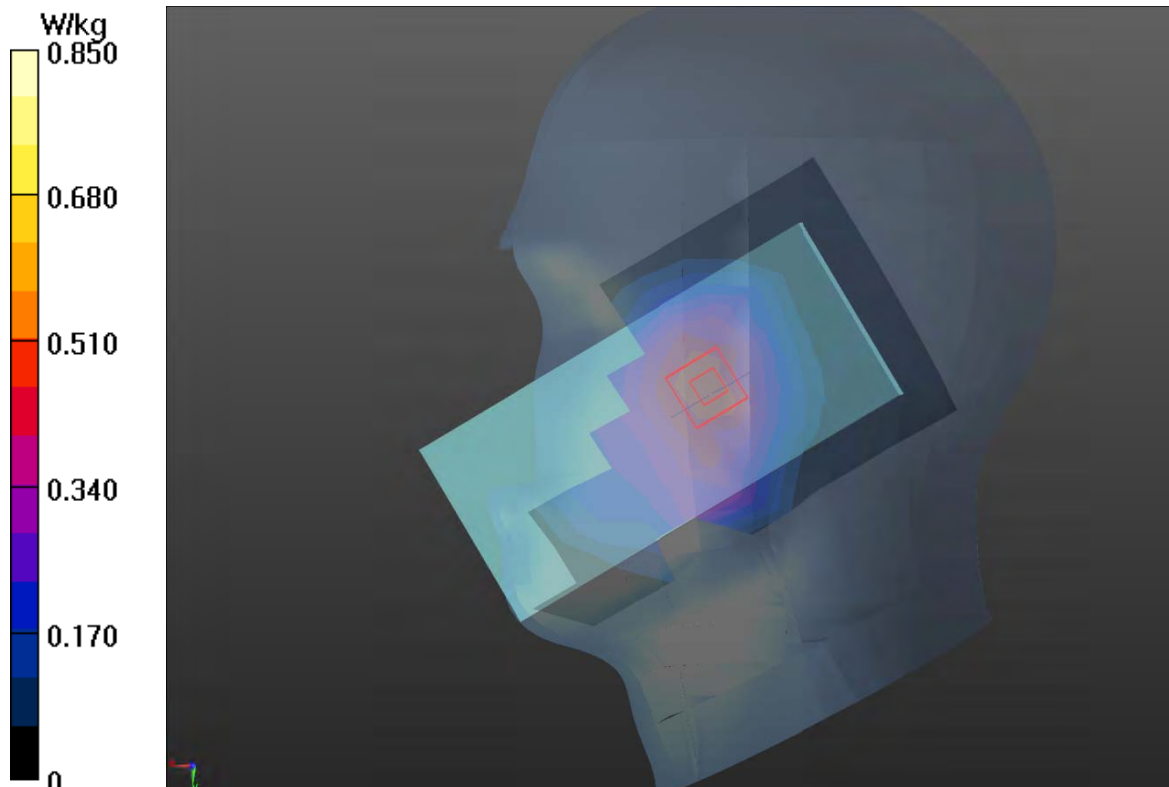
Right Cheek High/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 0.5780 V/m; Power Drift = -0.09 dB

Peak SAR (extrapolated) = 0.0780 W/kg

SAR(1 g) = 0.752W/kg; SAR(10 g) = 0.342 W/kg

Maximum value of SAR (measured) = 0.850W/kg



Plot 59 NR Band n41 1RB Right Cheek Low

Date: 2022/5/13

Communication System: UID 0, 5G NR (0); Frequency: 2546.01 MHz; Duty Cycle: 1:4

Medium parameters used (interpolated): $f = 2546.01$ MHz; $\sigma = 1.953$ S/m; $\epsilon_r = 37.275$; $\rho = 1000$ kg/m³

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

Phantom section: Right Section

DASY5 Configuration:

Sensor-Surface: 1.4mm (Mechanical Surface Detection)

Probe: EX3DV4 – SN7543; ConvF(7.24, 7.24, 7.24); Calibrated: 2021/12/28

Electronics: DAE4 SN1291; Calibrated: 2022/3/24

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

Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.14 (7483)

Right Cheek Low/Area Scan (10x18x1): Measurement grid: dx=12mm, dy=12mm

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

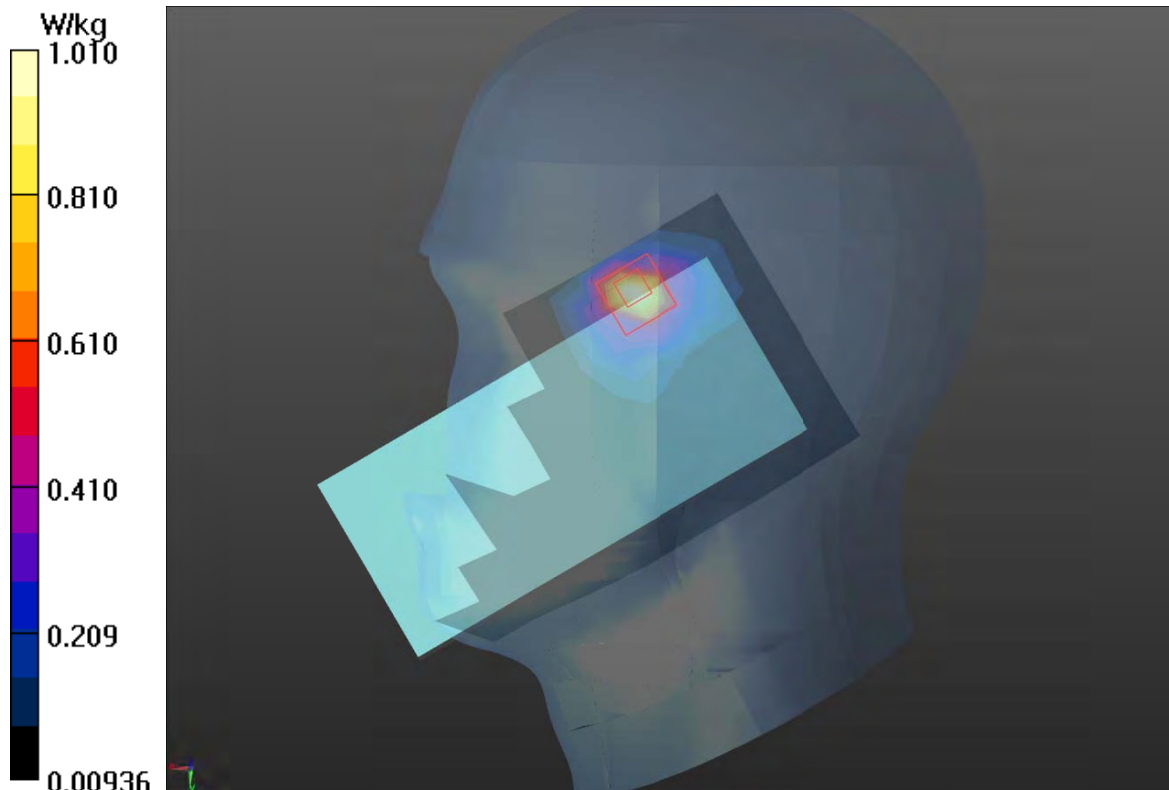
Right Cheek Low/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 4.768 V/m; Power Drift = -0.02 dB

Peak SAR (extrapolated) = 1.41 W/kg

SAR(1 g) = 0.594 W/kg; SAR(10 g) = 0.256 W/kg

Maximum value of SAR (measured) = 1.01 W/kg



Plot 60 NR Band n66 1RB Right Cheek Low

Date: 2022/4/20

Communication System: UID 0, 5G NR (0); Frequency: 1720 MHz; Duty Cycle: 1:1

Medium parameters used: $f = 1720$ MHz; $\sigma = 1.284$ S/m; $\epsilon_r = 38.855$; $\rho = 1000$ kg/m³

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

Phantom section: Right Section

DASY5 Configuration:

Sensor-Surface: 1.4mm (Mechanical Surface Detection)

Probe: EX3DV4 – SN7543; ConvF(8.42, 8.42, 8.42); Calibrated: 2021/12/28

Electronics: DAE4 SN1291; Calibrated: 2022/3/24

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

Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.14 (7483)

Right Cheek Low/Area Scan (8x14x1): Measurement grid: dx=15mm, dy=15mm

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

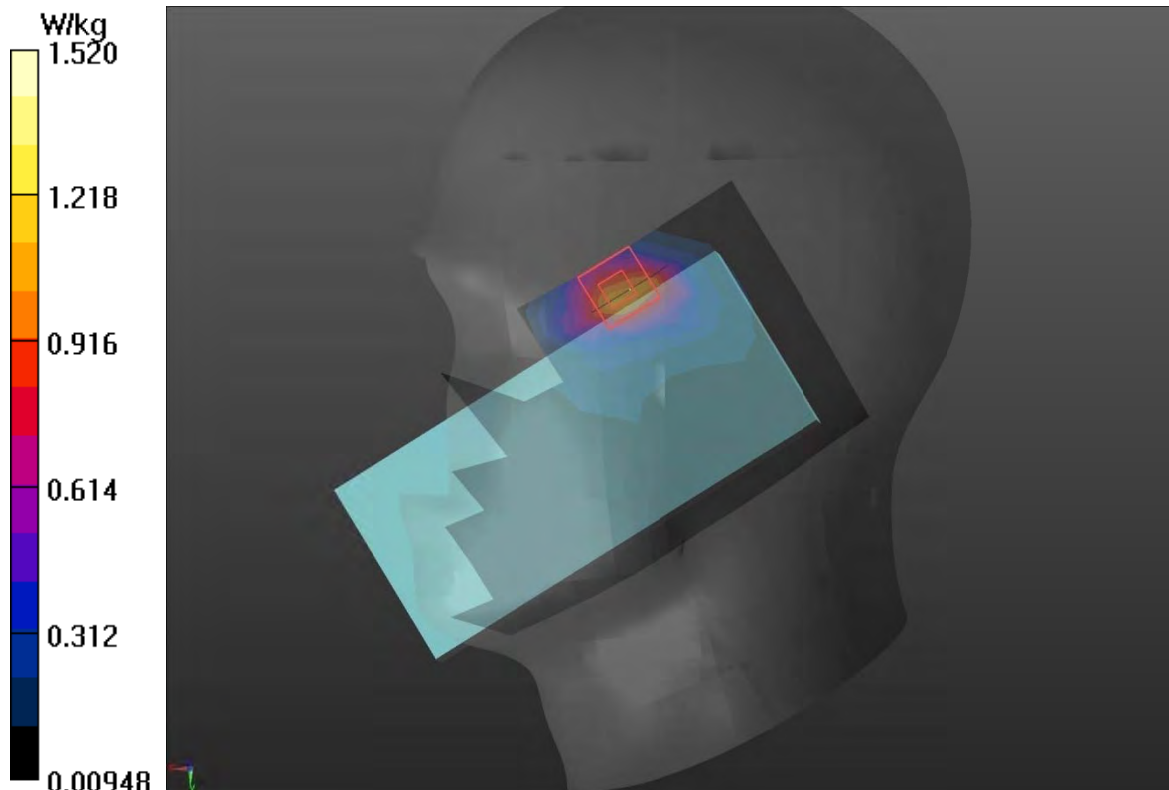
Right Cheek Low/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 8.649 V/m; Power Drift = 0.05 dB

Peak SAR (extrapolated) = 1.91 W/kg

SAR(1 g) = 0.358 W/kg; SAR(10 g) = 0.171 W/kg

Maximum value of SAR (measured) = 1.52 W/kg



Plot 61 NR Band n77 1RB Left Tilt Low

Date: 2022/4/5

Communication System: UID 0, 5G NR (0); Frequency: 3500 MHz; Duty Cycle: 1:4

Medium parameters used: $f = 3500$ MHz; $\sigma = 2.807$ S/m; $\epsilon_r = 38.115$; $\rho = 1000$ kg/m³

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

Phantom section: Left Section

DASY5 Configuration:

Sensor-Surface: 1.4mm (Mechanical Surface Detection)

Probe: EX3DV4 – SN7543; ConvF(6.79, 6.79, 6.79); Calibrated: 2021/12/28

Electronics: DAE4 SN1291; Calibrated: 2022/3/24

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

Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.14 (7483)

Left Tilt Low/Area Scan (12x21x1): Measurement grid: dx=10mm, dy=10mm

Maximum value of SAR (measured) = 0.110 W/kg

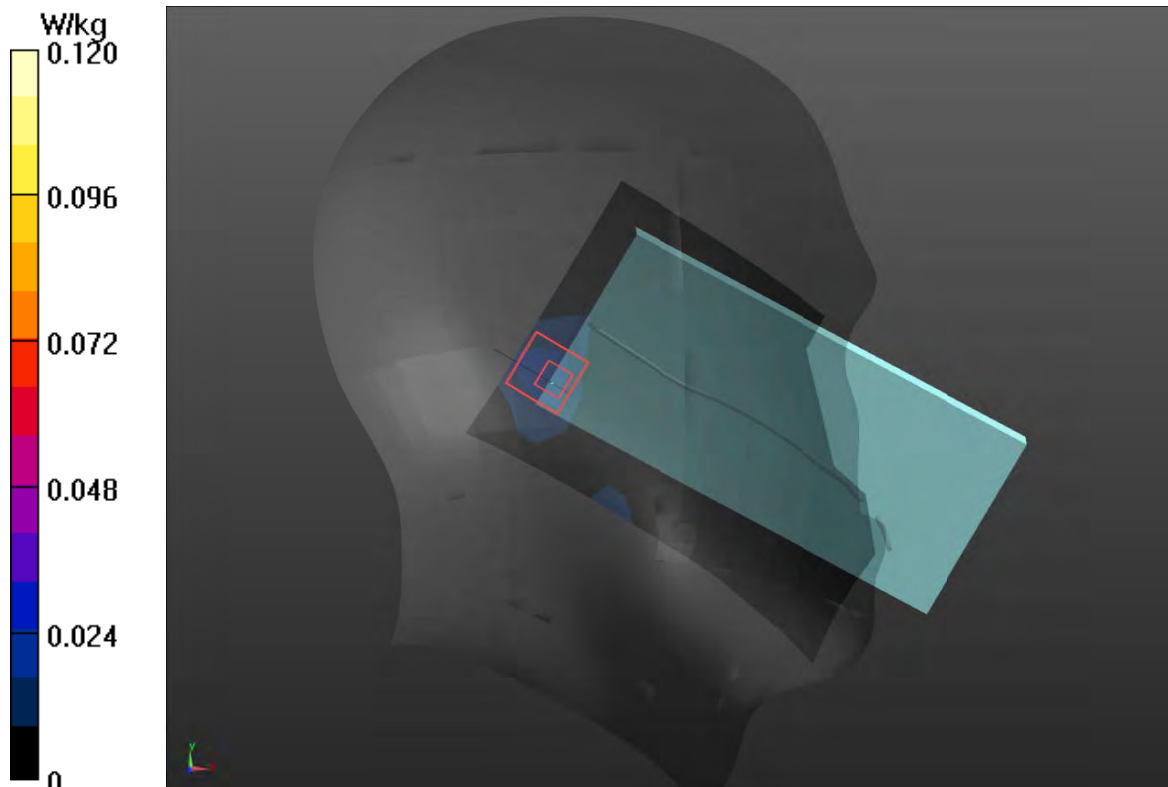
Left Tilt Low/Zoom Scan (7x7x12)/Cube 0: Measurement grid: dx=4mm, dy=4mm, dz=2mm

Reference Value = 1.362 V/m; Power Drift = 0.047 dB

Peak SAR (extrapolated) = 0.0350 W/kg

SAR(1 g) = 0.099 W/kg; SAR(10 g) = 0.042 W/kg

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



Plot 62 NR Band n78 50%RB Right Cheek Low

Date: 2022/4/9

Communication System: UID 0, 5G NR (0); Frequency: 3750 MHz; Duty Cycle: 1:4

Medium parameters used (interpolated): $f = 3750$ MHz; $\sigma = 3.088$ S/m; $\epsilon_r = 37.562$; $\rho = 1000$ kg/m³

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

Phantom section: Right Section

DASY5 Configuration:

Sensor-Surface: 1.4mm (Mechanical Surface Detection)

Probe: EX3DV4 – SN7543; ConvF(6.51, 6.51, 6.51); Calibrated: 2021/12/28

Electronics: DAE4 SN1291; Calibrated: 2022/3/24

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

Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.14 (7483)

Right Cheek Low/Area Scan (12x21x1): Measurement grid: dx=10mm, dy=10mm

Maximum value of SAR (measured) = 0.13 W/kg

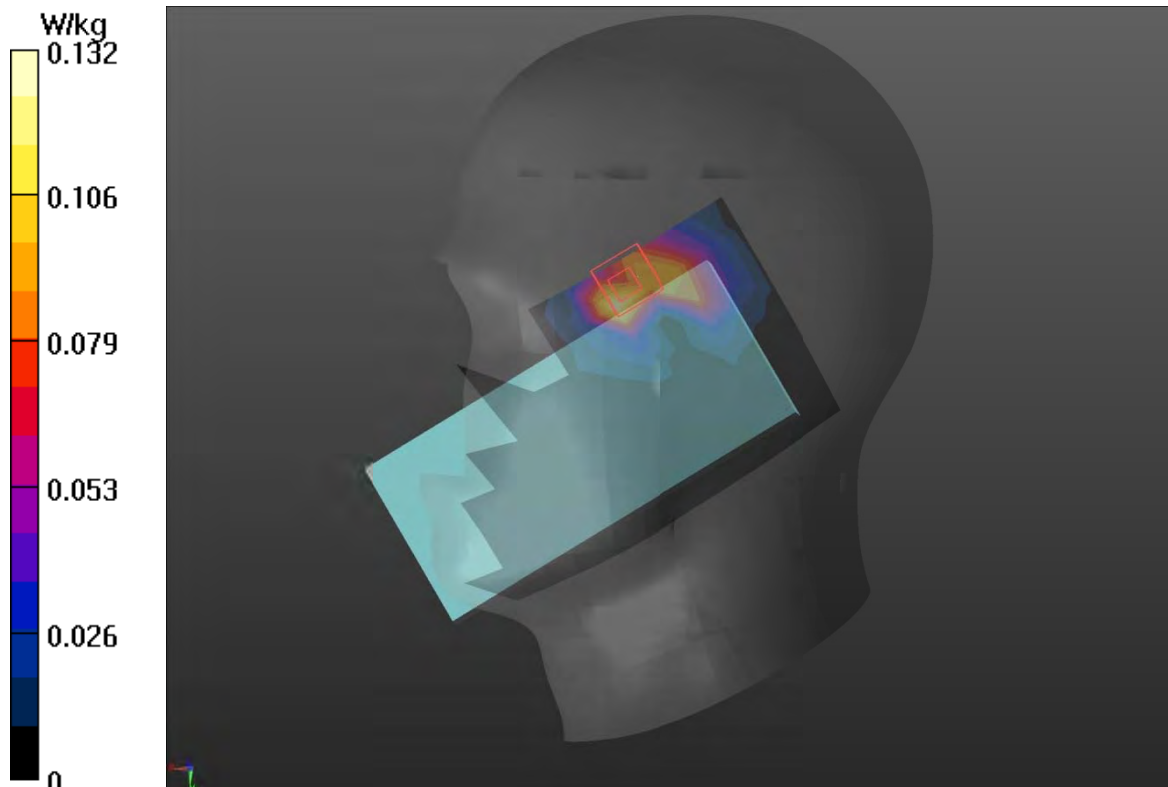
Right Cheek Low/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=4mm, dy=4mm, dz=2mm

Reference Value = 1.601 V/m; Power Drift = 0.029 dB

Peak SAR (extrapolated) = 0.274 W/kg

SAR(1 g) = 0.091 W/kg; SAR(10 g) = 0.035 W/kg

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



Plot 63 802.11b Left Cheek Low

Date: 2022/5/1

Communication System: UID 0, 802.11b (0); Frequency: 2412 MHz; Duty Cycle: 1:1

Medium parameters used: $f = 2412$ MHz; $\sigma = 1.801$ S/m; $\epsilon_r = 37.737$; $\rho = 1000$ kg/m³

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

Phantom section: Left Section

DASY5 Configuration:

Sensor-Surface: 1.4mm (Mechanical Surface Detection)

Probe: EX3DV4 – SN7543; ConvF(7.49, 7.49, 7.49); Calibrated: 2021/12/28

Electronics: DAE4 SN1291; Calibrated: 2022/3/24

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

Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.14 (7483)

Left Cheek Low/Area Scan (10x18x1): Measurement grid: dx=12mm, dy=12mm

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

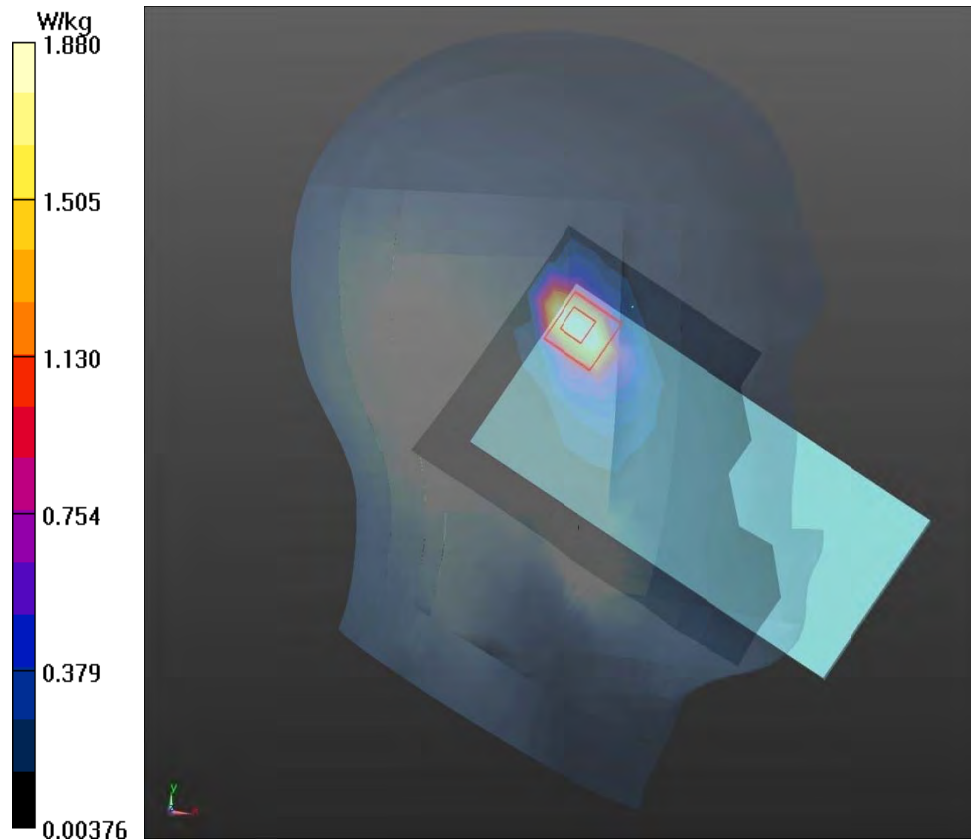
Left Cheek Low/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 3.424 V/m; Power Drift = 0.089 dB

Peak SAR (extrapolated) = 3.59 W/kg

SAR(1 g) = 0.946 W/kg; SAR(10 g) = 0.386 W/kg

Maximum value of SAR (measured) = 1.88 W/kg



Plot 64 802.11a U-NII-2C Left Cheek Middle

Date: 2022/5/3

Communication System: UID 0, 802.11a (0); Frequency: 5580 MHz; Duty Cycle: 1:1

Medium parameters used: $f = 5580$ MHz; $\sigma = 5.258$ S/m; $\epsilon_r = 35.664$; $\rho = 1000$ kg/m³

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

Phantom section: Left Section

DASY5 Configuration:

Sensor-Surface: 1.4mm (Mechanical Surface Detection)

Probe: EX3DV4 – SN7543; ConvF(4.81, 4.81, 4.81); Calibrated: 2021/12/28

Electronics: DAE4 SN1291; Calibrated: 2022/3/24

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

Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.14 (7483)

Left Cheek Middle/Area Scan (12x21x1): Measurement grid: dx=10mm, dy=10mm

Maximum value of SAR (measured) = 0.646 W/kg

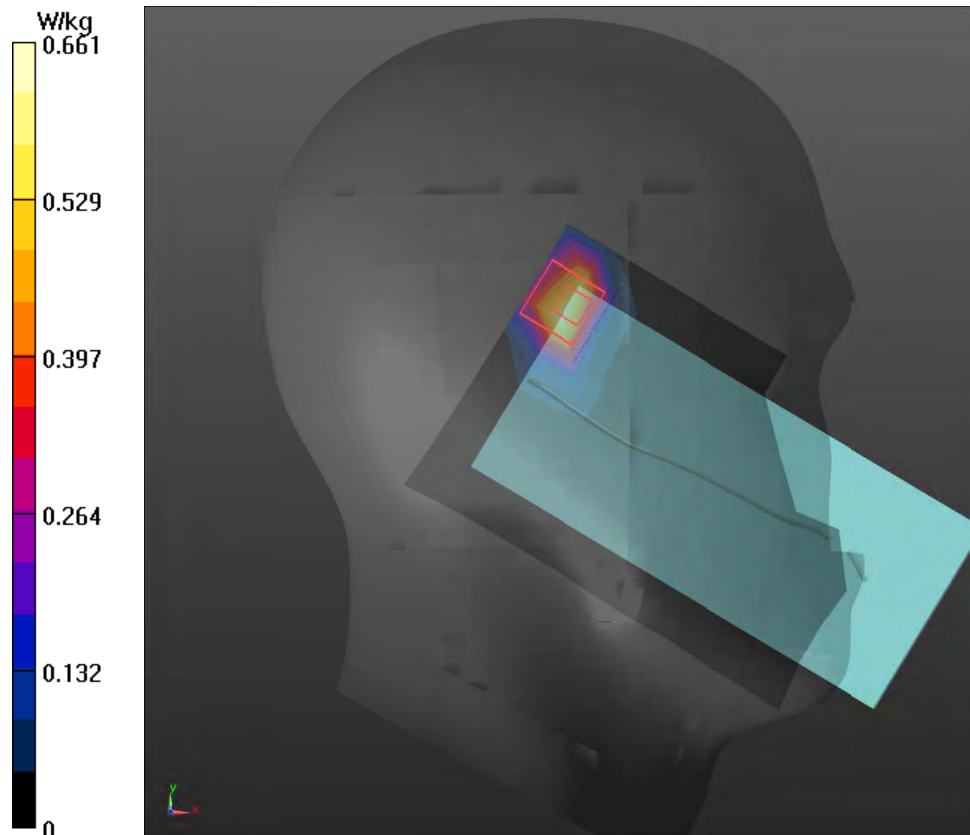
Left Cheek Middle/Zoom Scan (7x7x12)/Cube 0: Measurement grid: dx=4mm, dy=4mm, dz=2mm

Reference Value = 2.932 V/m; Power Drift = 0.010 dB

Peak SAR (extrapolated) = 1.45 W/kg

SAR(1 g) = 0.316 W/kg; SAR(10 g) = 0.101 W/kg

Maximum value of SAR (measured) = 0.661 W/kg



Plot 65 Bluetooth Left Cheek High

Date: 2022/4/11

Communication System: UID 0, BT (0); Frequency: 2480 MHz; Duty Cycle: 1:1.31

Medium parameters used: $f = 2480$ MHz; $\sigma = 1.878$ S/m; $\epsilon_r = 37.511$; $\rho = 1000$ kg/m³

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

Phantom section: Left Section

DASY5 Configuration:

Sensor-Surface: 1.4mm (Mechanical Surface Detection)

Probe: EX3DV4 - SN3677; ConvF(7.50, 7.50, 7.50); Calibrated: 2021/8/12

Electronics: DAE4 SN1692; Calibrated: 2021/10/4

Phantom: SAM 2; Type: QD000P40CD; Serial: TP:1524

Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.14 (7483)

Left Cheek High/Area Scan (10x15x1): Measurement grid: dx=12mm, dy=12mm

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

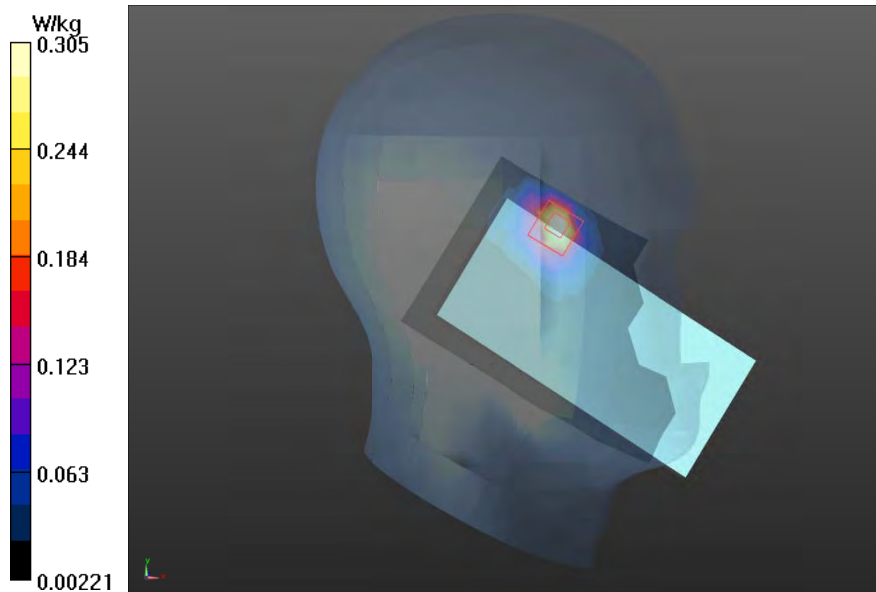
Left Cheek High/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 2.551 V/m; Power Drift = 0.011 dB

Peak SAR (extrapolated) = 0.441 W/kg

SAR(1 g) = 0.184 W/kg; SAR(10 g) = 0.079 W/kg

Maximum value of SAR (measured) = 0.305 W/kg



Plot 66 GSM 850 Back Side Middle (Distance 15mm)

Date: 2022/3/23

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

Medium parameters used: $f = 836.6 \text{ MHz}$; $\sigma = 0.953 \text{ S/m}$; $\epsilon_r = 39.762$; $\rho = 1000 \text{ kg/m}^3$

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 – SN7543; ConvF(9.89, 9.89, 9.89); Calibrated: 2021/12/28

Electronics: DAE4 SN1291; Calibrated: 2022/3/24

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

Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.14 (7483)

Back Side Middle/Area Scan (8x14x1): Measurement grid: $dx=15\text{mm}$, $dy=15\text{mm}$

Maximum value of SAR (measured) = 0.441 W/kg

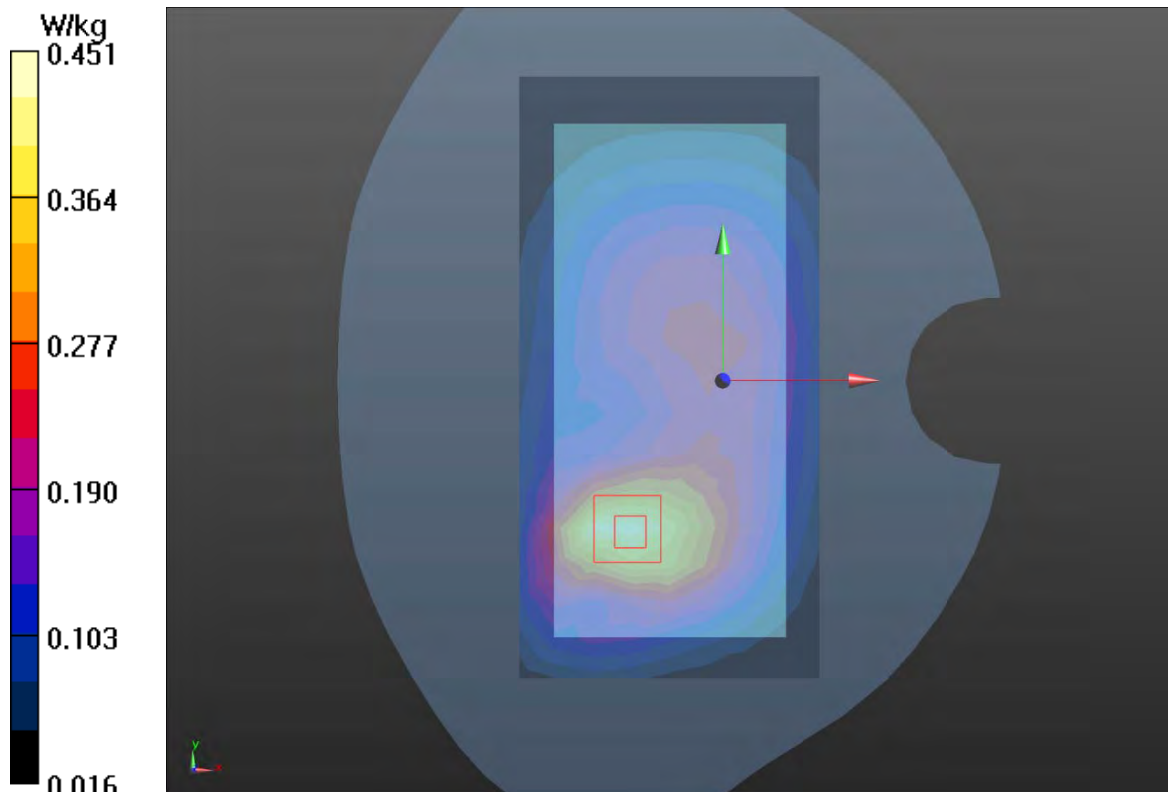
Back Side Middle/Zoom Scan (5x5x7)/Cube 0: Measurement grid: $dx=8\text{mm}$, $dy=8\text{mm}$, $dz=5\text{mm}$

Reference Value = 13.40 V/m ; Power Drift = -0.017 dB

Peak SAR (extrapolated) = 0.522 W/kg

SAR(1 g) = 0.329 W/kg ; SAR(10 g) = 0.212 W/kg

Maximum value of SAR (measured) = 0.451 W/kg



Plot 67 GSM 1900 Back Side Middle (Distance 15mm)

Date: 2022/3/20

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

Medium parameters used: $f = 1880$ MHz; $\sigma = 1.42$ S/m; $\epsilon_r = 38.948$; $\rho = 1000$ kg/m³

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 – SN7543; ConvF(8.20, 8.20, 8.20); Calibrated: 2021/12/28

Electronics: DAE4 SN1291; Calibrated: 2022/3/24

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

Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.14 (7483)

Back Side Middle/Area Scan (7x15x1): Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (measured) = 0.139 W/kg

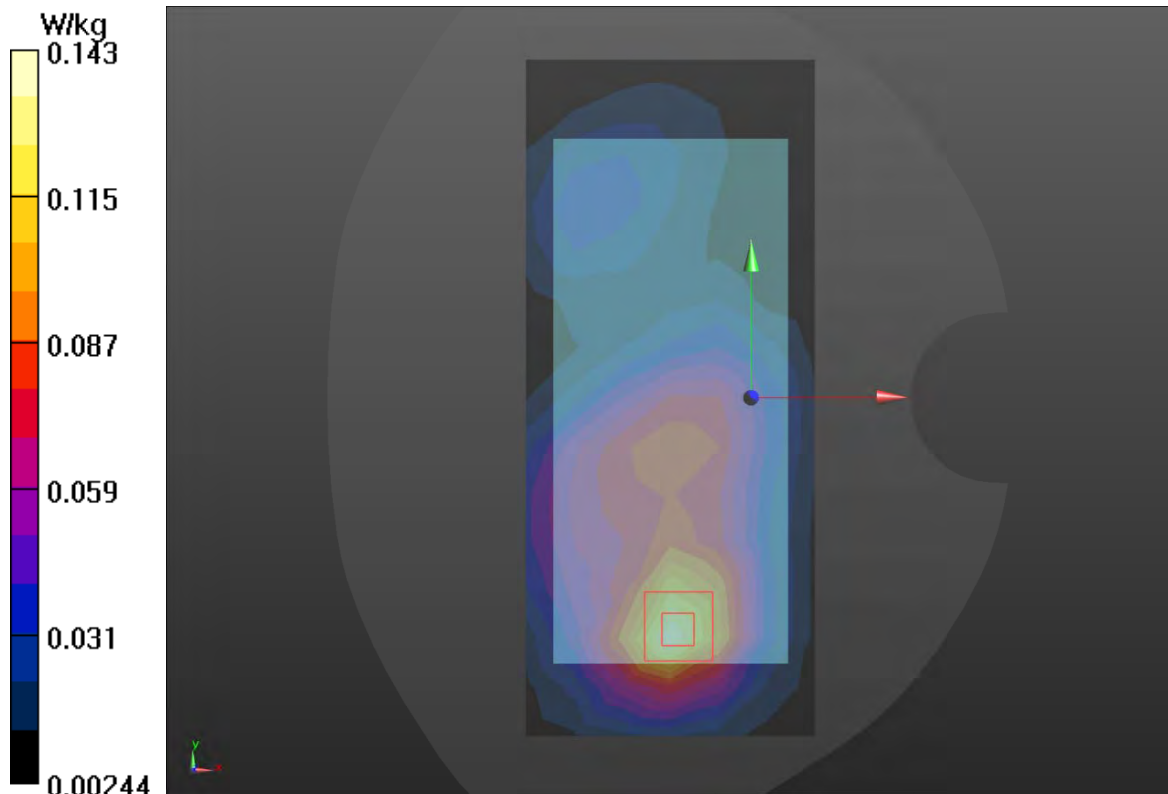
Back Side Middle/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 7.193 V/m; Power Drift = -0.025 dB

Peak SAR (extrapolated) = 0.210 W/kg

SAR(1 g) = 0.132 W/kg; SAR(10 g) = 0.078 W/kg

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



Plot 68 UMTS Band II Back Side Middle (Distance 15mm)

Date: 2022/4/1

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

Medium parameters used: $f = 1880 \text{ MHz}$; $\sigma = 1.42 \text{ S/m}$; $\epsilon_r = 38.948$; $\rho = 1000 \text{ kg/m}^3$

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 – SN7543; ConvF(8.20, 8.20, 8.20); Calibrated: 2021/12/28

Electronics: DAE4 SN1291; Calibrated: 2022/3/24

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

Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.14 (7483)

Back Side Middle/Area Scan (7x15x1): Measurement grid: $dx=15\text{mm}$, $dy=15\text{mm}$

Maximum value of SAR (measured) = 0.283 W/kg

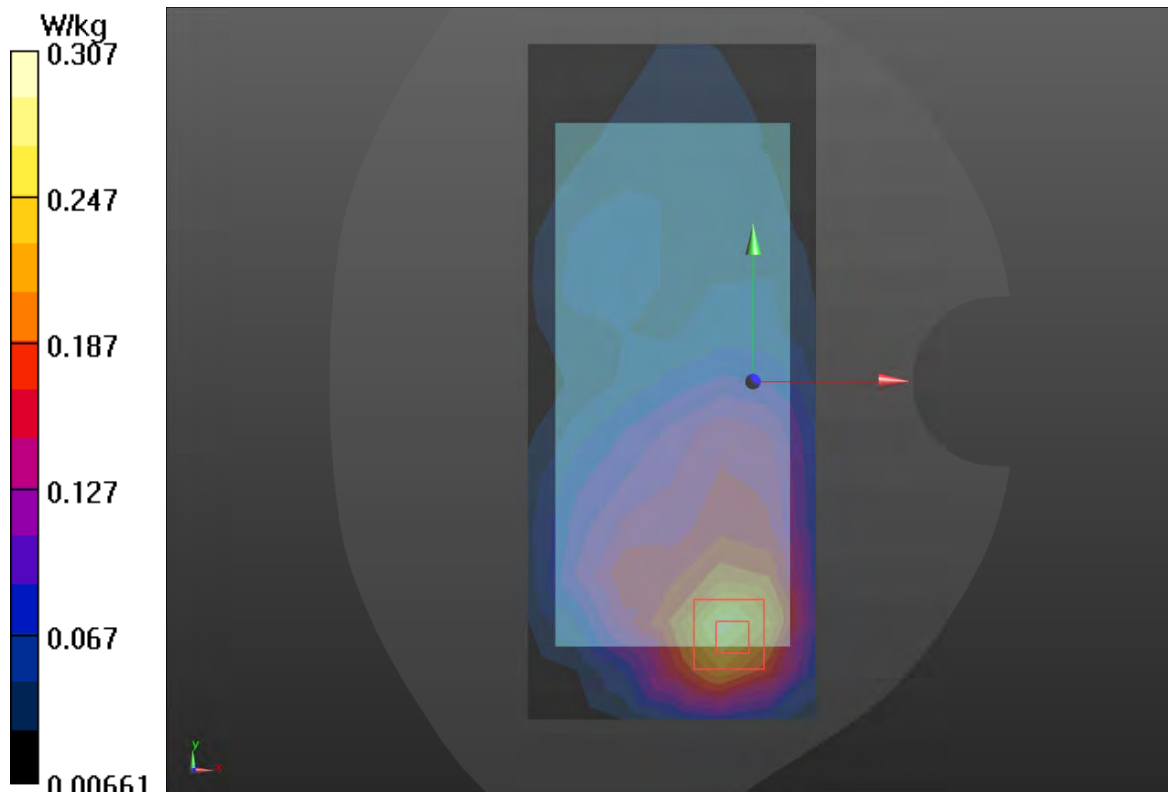
Back Side Middle/Zoom Scan (5x5x7)/Cube 0: Measurement grid: $dx=8\text{mm}$, $dy=8\text{mm}$, $dz=5\text{mm}$

Reference Value = 7.288 V/m ; Power Drift = 0.08 dB

Peak SAR (extrapolated) = 0.460 W/kg

SAR(1 g) = 0.279 W/kg ; SAR(10 g) = 0.163 W/kg

Maximum value of SAR (measured) = 0.307 W/kg



Plot 69 UMTS Band IV Back Side Middle (Distance 15mm)

Date: 2022/4/3

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

Medium parameters used: $f = 1732.6 \text{ MHz}$; $\sigma = 1.312 \text{ S/m}$; $\epsilon_r = 39.365$; $\rho = 1000 \text{ kg/m}^3$

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 – SN7543; ConvF(8.42, 8.42, 8.42); Calibrated: 2021/12/28

Electronics: DAE4 SN1291; Calibrated: 2022/3/24

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

Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.14 (7483)

Back Side Middle/Area Scan (7x15x1): Measurement grid: $dx=15\text{mm}$, $dy=15\text{mm}$

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

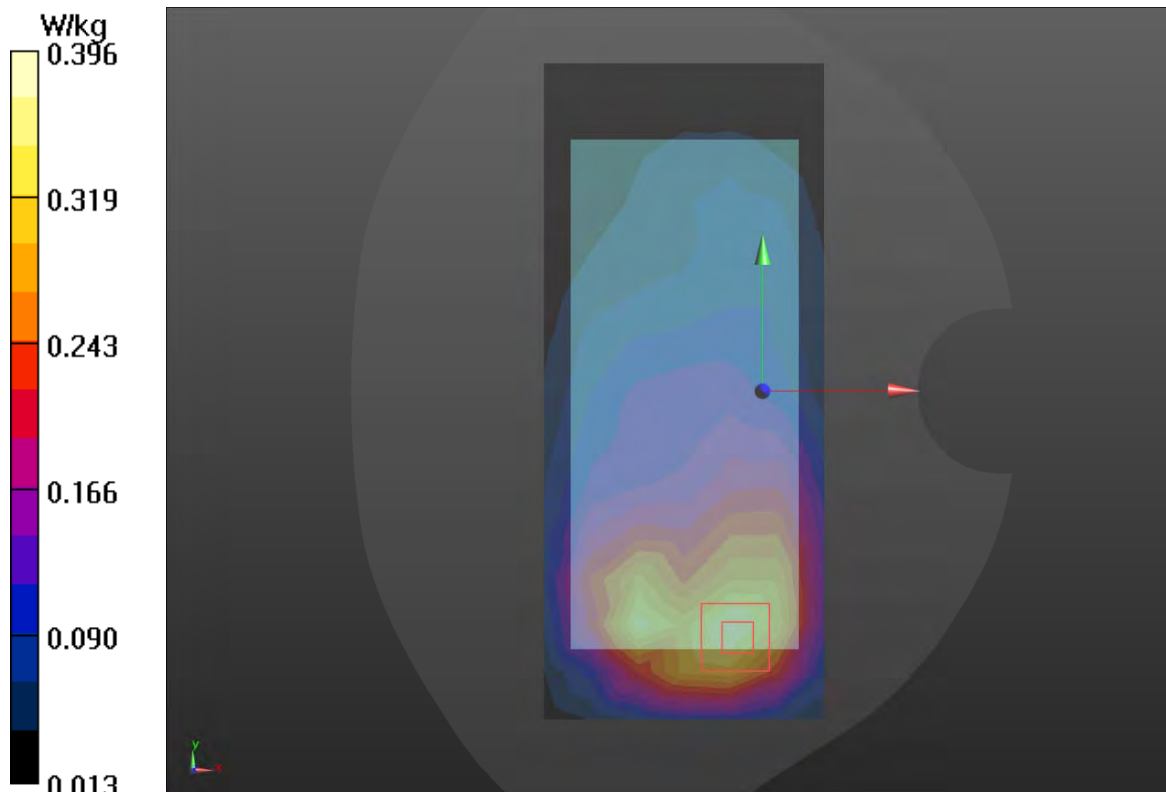
Back Side Middle/Zoom Scan (5x5x7)/Cube 0: Measurement grid: $dx=8\text{mm}$, $dy=8\text{mm}$, $dz=5\text{mm}$

Reference Value = 10.12 V/m ; Power Drift = 0.040 dB

Peak SAR (extrapolated) = 0.578 W/kg

SAR(1 g) = 0.369 W/kg ; SAR(10 g) = 0.226 W/kg

Maximum value of SAR (measured) = 0.396 W/kg



Plot 70 UMTS Band V Back Side Middle (Distance 15mm)

Date: 2022/3/23

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

Medium parameters used: $f = 836.6$ MHz; $\sigma = 0.953$ S/m; $\epsilon_r = 39.762$; $\rho = 1000$ kg/m³

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 – SN7543; ConvF(9.89, 9.89, 9.89); Calibrated: 2021/12/28

Electronics: DAE4 SN1291; Calibrated: 2022/3/24

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

Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.14 (7483)

Back Side Middle/Area Scan (8x15x1): Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (measured) = 0.640 W/kg

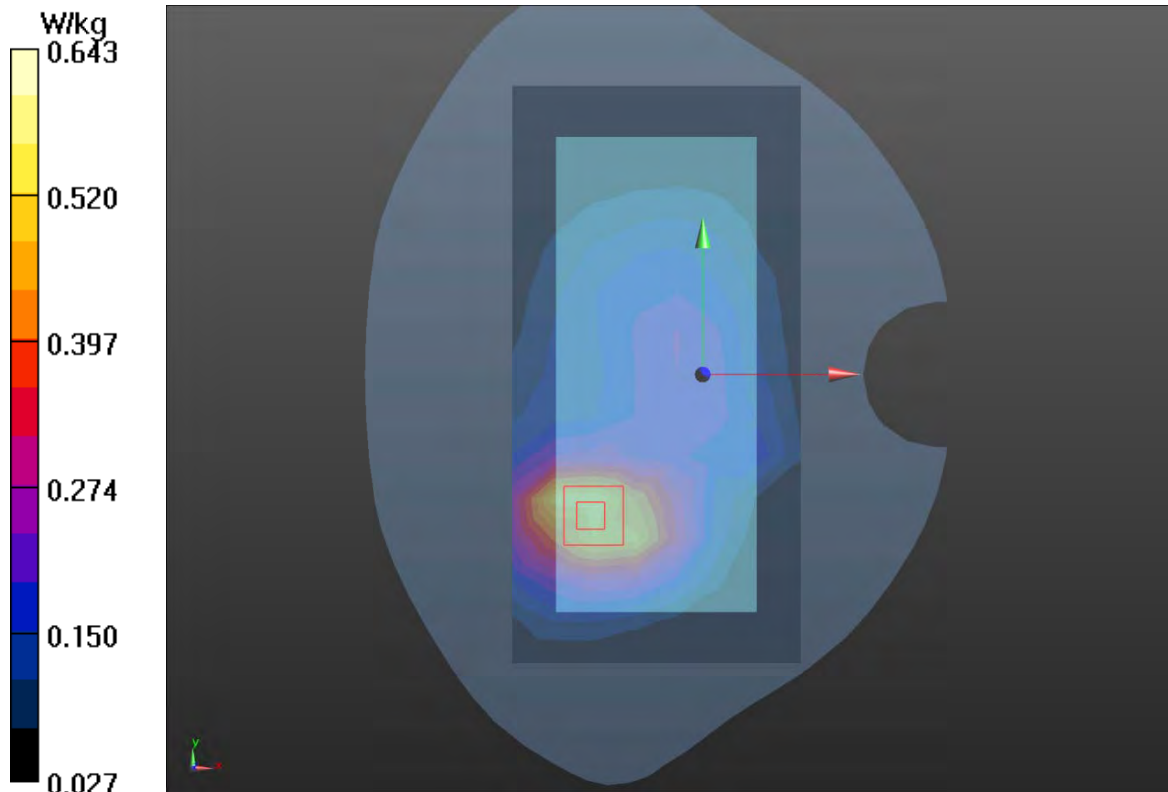
Back Side Middle/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 16.02 V/m; Power Drift = -0.060 dB

Peak SAR (extrapolated) = 0.738 W/kg

SAR(1 g) = 0.463 W/kg; SAR(10 g) = 0.294 W/kg

Maximum value of SAR (measured) = 0.643 W/kg



Plot 71 LTE Band 2 1RB Back Side Middle (Distance 15mm)

Date: 2022/4/2

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

Medium parameters used: $f = 1880$ MHz; $\sigma = 1.42$ S/m; $\epsilon_r = 38.948$; $\rho = 1000$ kg/m³

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 – SN7543; ConvF(8.20, 8.20, 8.20); Calibrated: 2021/12/28

Electronics: DAE4 SN1291; Calibrated: 2022/3/24

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

Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.14 (7483)

Back Side Middle/Area Scan (7x15x1): Measurement grid: dx=15mm, dy=15mm

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

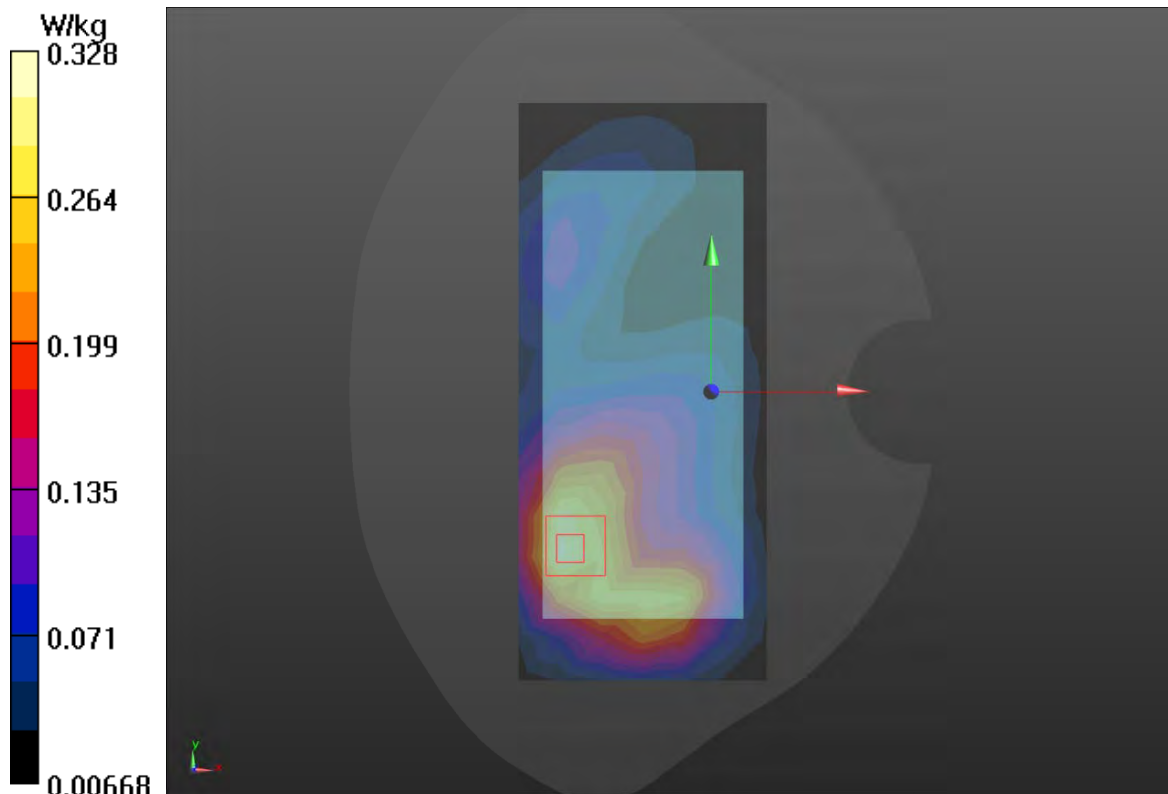
Back Side Middle/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 8.025 V/m; Power Drift = -0.070 dB

Peak SAR (extrapolated) = 0.473 W/kg

SAR(1 g) = 0.305 W/kg; SAR(10 g) = 0.191 W/kg

Maximum value of SAR (measured) = 0.328 W/kg



Plot 72 LTE Band 4 1RB Back Side Middle (Distance 15mm)

Date: 2022/4/15

Communication System: UID 0, LTE (0); Frequency: 1732.5 MHz; Duty Cycle: 1:1

Medium parameters used (interpolated): $f = 1732.5 \text{ MHz}$; $\sigma = 1.313 \text{ S/m}$; $\epsilon_r = 39.384$; $\rho = 1000 \text{ kg/m}^3$

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 – SN7543; ConvF(8.42, 8.42, 8.42); Calibrated: 2021/12/28

Electronics: DAE4 SN1291; Calibrated: 2022/3/24

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

Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.14 (7483)

Back Side Middle/Area Scan (7x15x1): Measurement grid: $dx=15\text{mm}$, $dy=15\text{mm}$

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

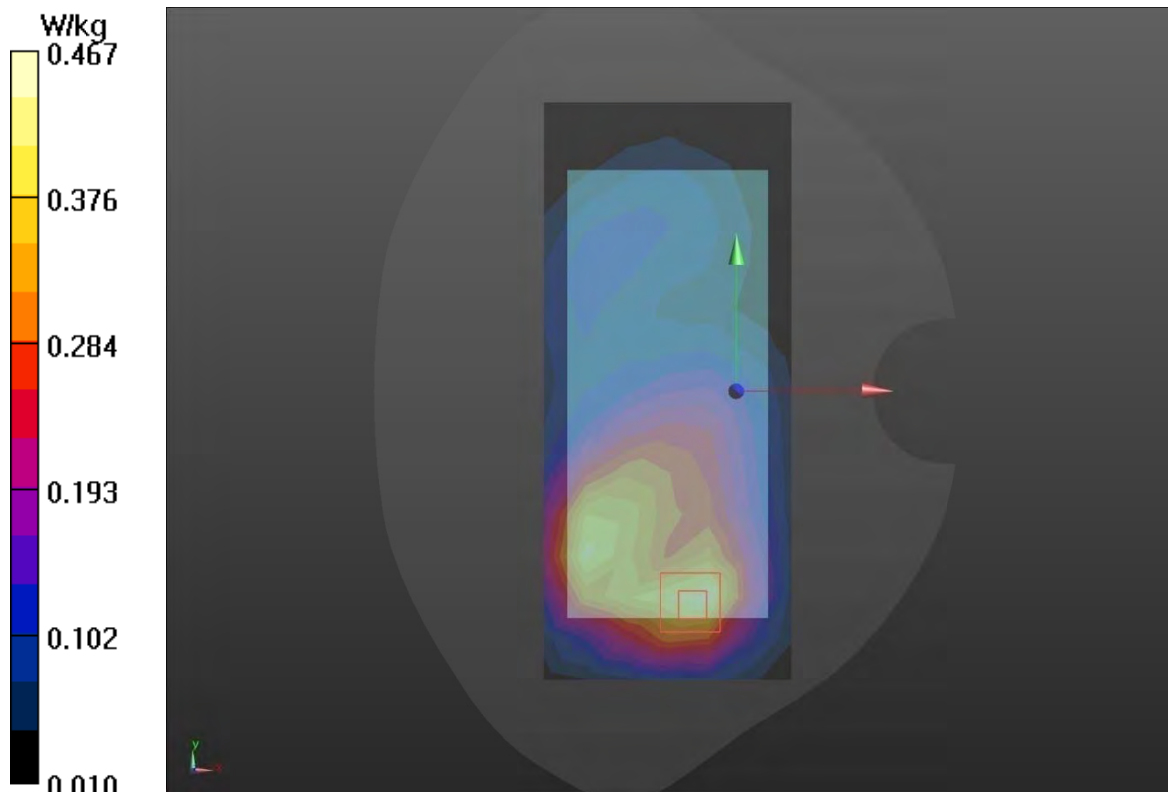
Back Side Middle/Zoom Scan (5x5x7)/Cube 0: Measurement grid: $dx=8\text{mm}$, $dy=8\text{mm}$, $dz=5\text{mm}$

Reference Value = 11.09 V/m ; Power Drift = 0.030 dB

Peak SAR (extrapolated) = 0.697 W/kg

SAR(1 g) = 0.436 W/kg ; SAR(10 g) = 0.261 W/kg

Maximum value of SAR (measured) = 0.467 W/kg



Plot 73 LTE Band 5 1RB Back Side High (Distance 15mm)

Date: 2022/3/24

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

Medium parameters used: $f = 844 \text{ MHz}$; $\sigma = 0.958 \text{ S/m}$; $\epsilon_r = 39.728$; $\rho = 1000 \text{ kg/m}^3$

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 – SN7543; ConvF(9.89, 9.89, 9.89); Calibrated: 2021/12/28

Electronics: DAE4 SN1291; Calibrated: 2022/3/24

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

Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.14 (7483)

Back Side High/Area Scan (8x14x1): Measurement grid: $dx=15\text{mm}$, $dy=15\text{mm}$

Maximum value of SAR (measured) = 0.666 W/kg

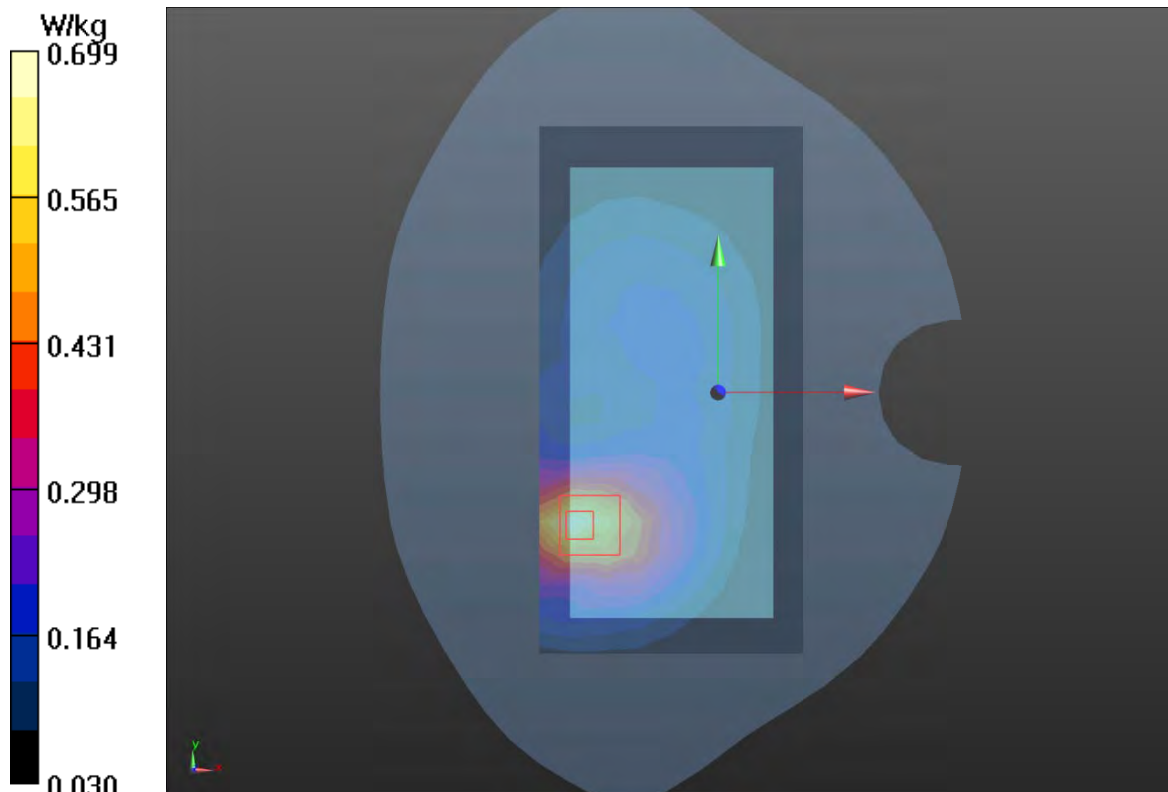
Back Side High/Zoom Scan (5x5x7)/Cube 0: Measurement grid: $dx=8\text{mm}$, $dy=8\text{mm}$, $dz=5\text{mm}$

Reference Value = 12.31 V/m ; Power Drift = 0.00 dB

Peak SAR (extrapolated) = 0.844 W/kg

SAR(1 g) = 0.487 W/kg ; SAR(10 g) = 0.298 W/kg

Maximum value of SAR (measured) = 0.699 W/kg



Plot 74 LTE Band 7 1RB Back Side High (Distance 15mm)

Date: 2022/3/27

Communication System: UID 0, LTE (0); Frequency: 2560 MHz; Duty Cycle: 1:1

Medium parameters used: $f = 2560$ MHz; $\sigma = 1.971$ S/m; $\epsilon_r = 37.231$; $\rho = 1000$ kg/m³

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 – SN7543; ConvF(7.24, 7.24, 7.24); Calibrated: 2021/12/28

Electronics: DAE4 SN1291; Calibrated: 2022/3/24

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

Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.14 (7483)

Back Side High/Area Scan (9x17x1): Measurement grid: dx=12mm, dy=12mm

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

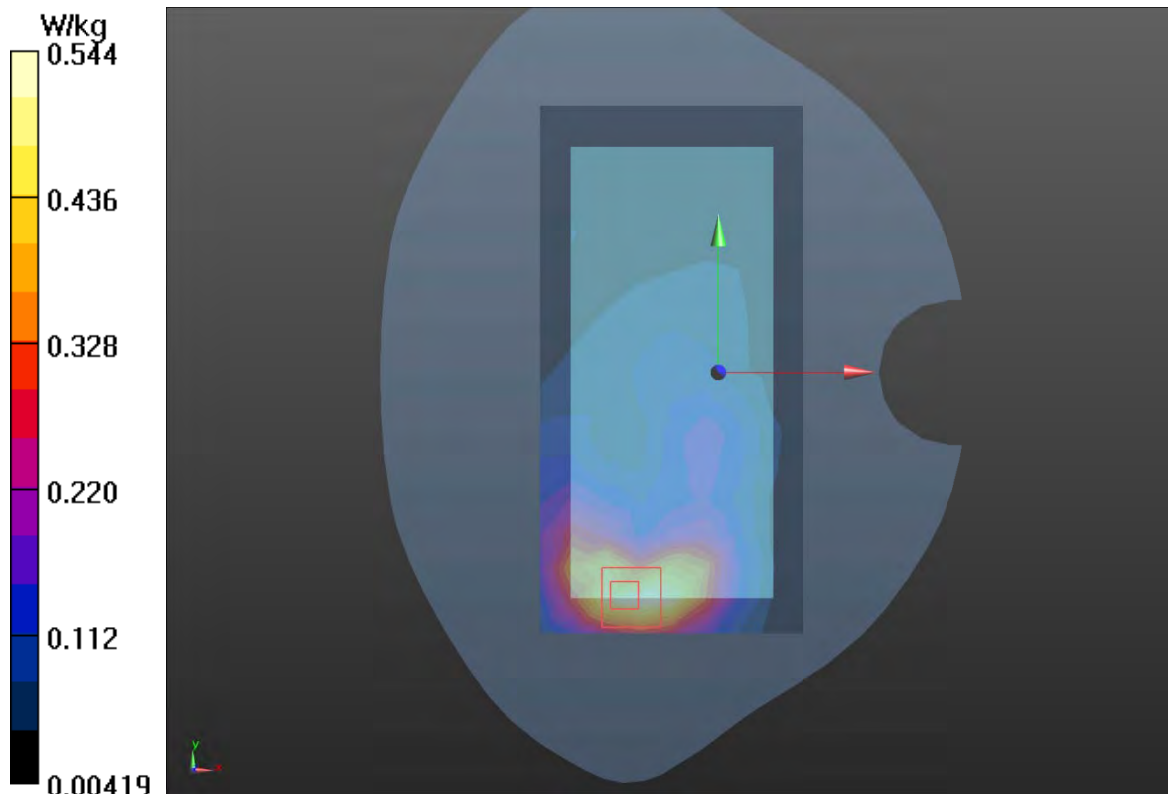
Back Side High/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 6.050 V/m; Power Drift = -0.070 dB

Peak SAR (extrapolated) = 0.670 W/kg

SAR(1 g) = 0.350 W/kg; SAR(10 g) = 0.186 W/kg

Maximum value of SAR (measured) = 0.544 W/kg



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

Date: 2022/3/26

Communication System: UID 0, LTE (0); Frequency: 707.5 MHz; Duty Cycle: 1:1

Medium parameters used (interpolated): $f = 707.5$ MHz; $\sigma = 0.869$ S/m; $\epsilon_r = 40.725$; $\rho = 1000$ kg/m³

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 – SN7543; ConvF(10.27, 10.27, 10.27); Calibrated: 2021/12/28

Electronics: DAE4 SN1291; Calibrated: 2022/3/24

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

Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.14 (7483)

Back Side Middle/Area Scan (8x14x1): Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (measured) = 0.190 W/kg

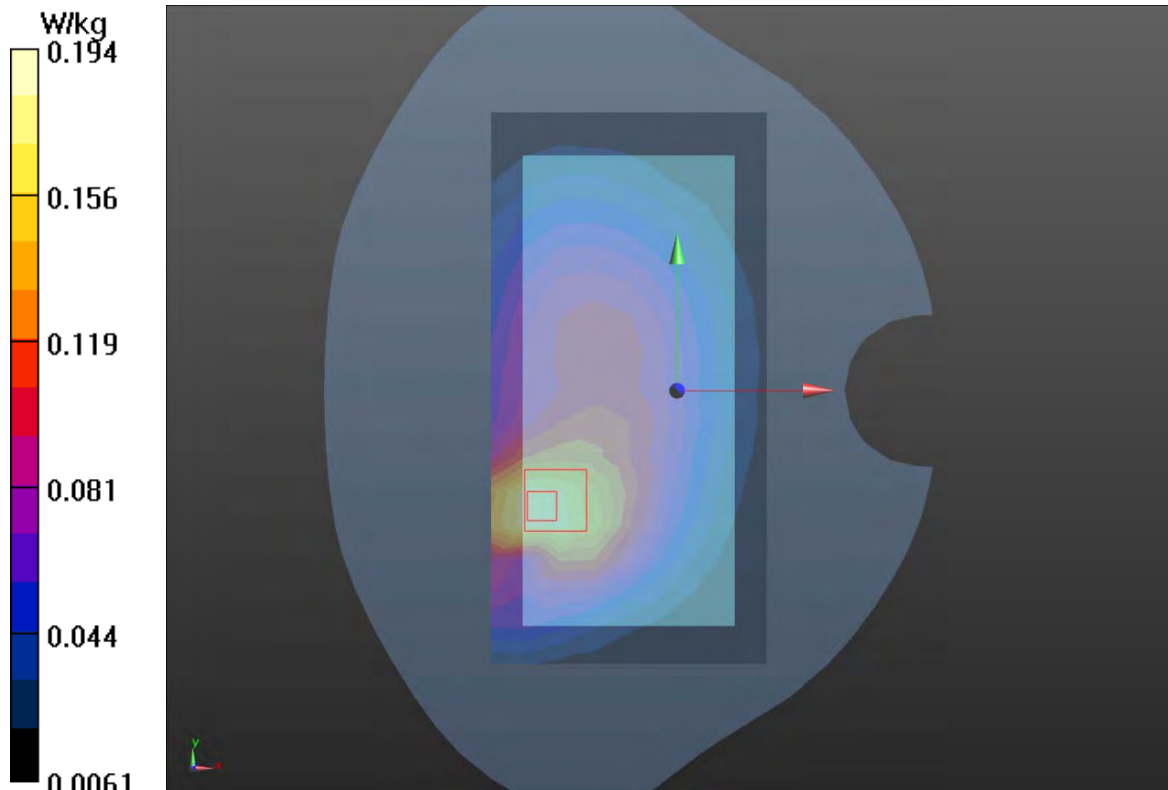
Back Side Middle/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 9.995 V/m; Power Drift = -0.030 dB

Peak SAR (extrapolated) = 0.227 W/kg

SAR(1 g) = 0.141 W/kg; SAR(10 g) = 0.096 W/kg

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



Plot 76 LTE Band 28A 1RB Back Side Low (Distance 15mm)

Date: 2022/3/28

Communication System: UID 0, LTE (0); Frequency: 713 MHz; Duty Cycle: 1:1

Medium parameters used: $f = 713 \text{ MHz}$; $\sigma = 0.873 \text{ S/m}$; $\epsilon_r = 40.697$; $\rho = 1000 \text{ kg/m}^3$

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 – SN7543; ConvF(10.27, 10.27, 10.27); Calibrated: 2021/12/28

Electronics: DAE4 SN1291; Calibrated: 2022/3/24

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

Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.14 (7483)

Back Side Low/Area Scan (8x14x1): Measurement grid: $dx=15\text{mm}$, $dy=15\text{mm}$

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

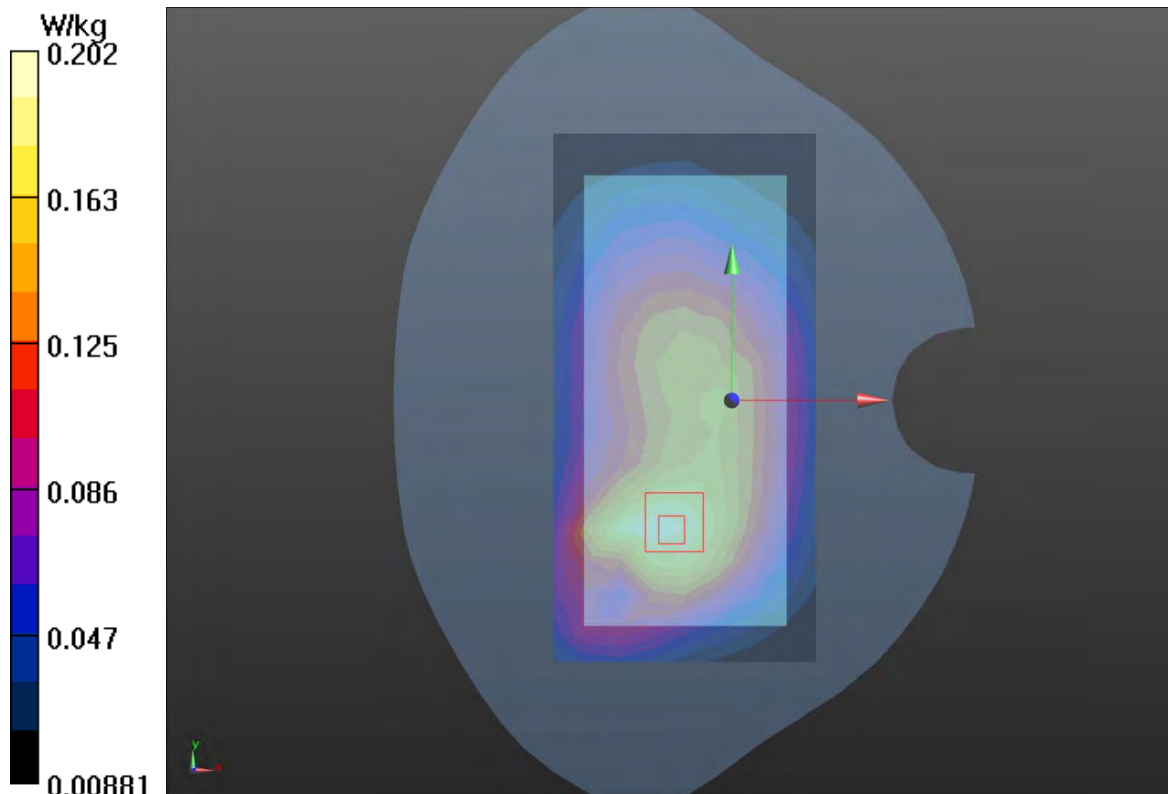
Back Side Low/Zoom Scan (5x5x7)/Cube 0: Measurement grid: $dx=8\text{mm}$, $dy=8\text{mm}$, $dz=5\text{mm}$

Reference Value = 12.06 V/m ; Power Drift = 0.010 dB

Peak SAR (extrapolated) = 0.228 W/kg

SAR(1 g) = 0.159 W/kg ; SAR(10 g) = 0.115 W/kg

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



Plot 77 LTE Band 28B 1RB Back Side High (Distance 15mm)

Date: 2022/4/2

Communication System: UID 0, LTE (0); Frequency: 738 MHz; Duty Cycle: 1:1

Medium parameters used: $f = 738 \text{ MHz}$; $\sigma = 0.889 \text{ S/m}$; $\epsilon_r = 40.525$; $\rho = 1000 \text{ kg/m}^3$ Ambient Temperature: $22.3 \text{ }^\circ\text{C}$ Liquid Temperature: $21.5 \text{ }^\circ\text{C}$

Phantom section: Flat Section

DASY5 Configuration:

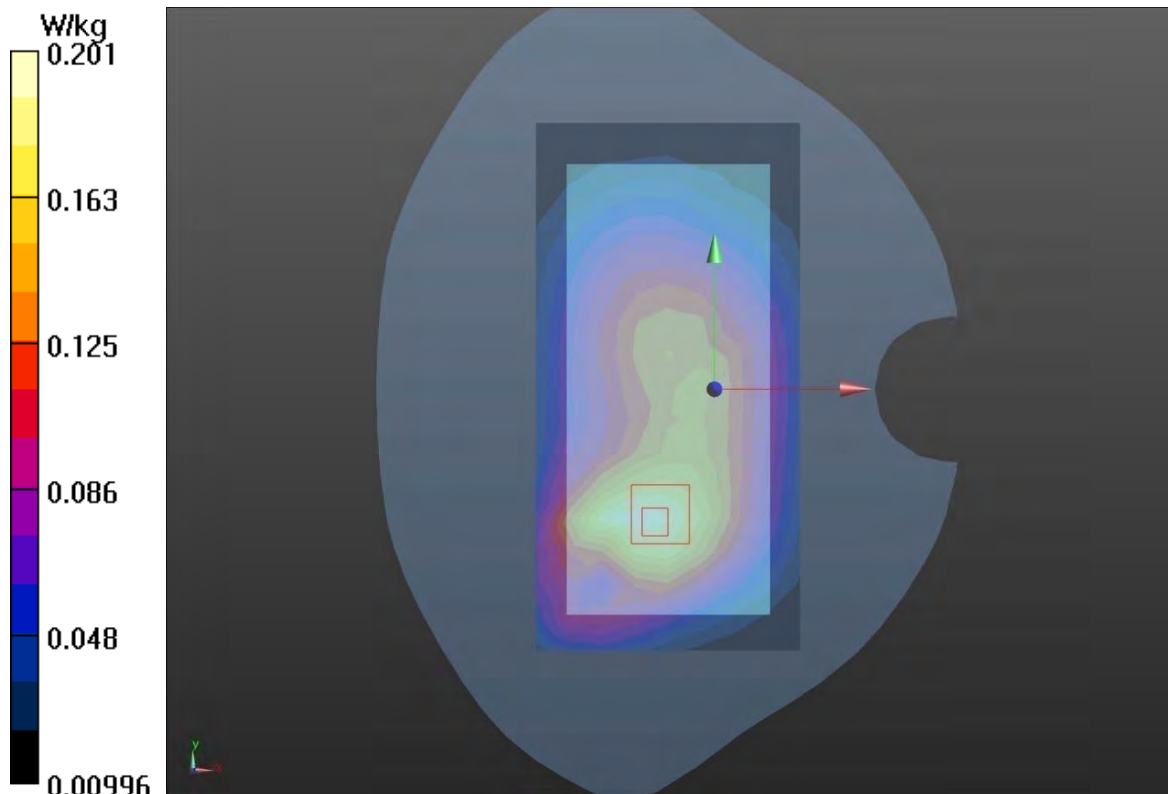
Sensor-Surface: 1.4mm (Mechanical Surface Detection)

Probe: EX3DV4 – SN7543; ConvF(10.27, 10.27, 10.27); Calibrated: 2021/12/28

Electronics: DAE4 SN1291; Calibrated: 2022/3/24

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

Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.14 (7483)

Back Side High/Area Scan (8x18x1): Measurement grid: $dx=15\text{mm}$, $dy=15\text{mm}$ Maximum value of SAR (measured) = 0.200 W/kg **Back Side High/Zoom Scan (5x5x7)/Cube 0:** Measurement grid: $dx=8\text{mm}$, $dy=8\text{mm}$, $dz=5\text{mm}$ Reference Value = 11.49 V/m ; Power Drift = -0.050 dB Peak SAR (extrapolated) = 0.228 W/kg **SAR(1 g) = 0.157 W/kg ; SAR(10 g) = 0.112 W/kg** Maximum value of SAR (measured) = 0.201 W/kg 

Plot 78 LTE Band 38 1RB Back Side Low (Distance 15mm)

Date: 2022/3/31

Communication System: UID 0, LTE (0); Frequency: 2580 MHz; Duty Cycle: 1:1.58

Medium parameters used: $f = 2580$ MHz; $\sigma = 1.995$ S/m; $\epsilon_r = 37.164$; $\rho = 1000$ kg/m³

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 – SN7543; ConvF(7.24, 7.24, 7.24); Calibrated: 2021/12/28

Electronics: DAE4 SN1291; Calibrated: 2022/3/24

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

Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.14 (7483)

Back Side Low/Area Scan (9x17x1): Measurement grid: dx=12mm, dy=12mm

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

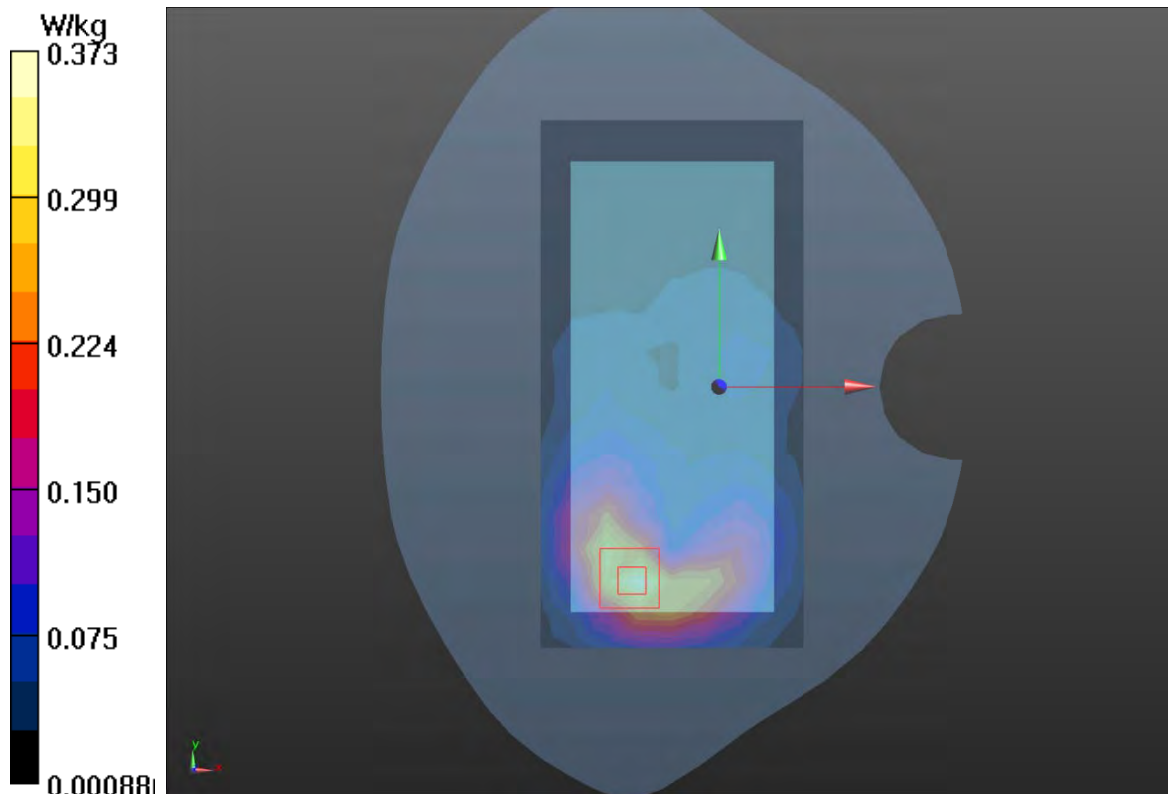
Back Side Low/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 2.937 V/m; Power Drift = 0.069 dB

Peak SAR (extrapolated) = 0.461 W/kg

SAR(1 g) = 0.234 W/kg; SAR(10 g) = 0.121 W/kg

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



Plot 79 LTE Band 40 1RB Back Side Low (Distance 15mm)

Date: 2022/4/4

Communication System: UID 0, LTE (0); Frequency: 2305 MHz; Duty Cycle: 1:1.58

Medium parameters used: $f = 2305$ MHz; $\sigma = 1.687$ S/m; $\epsilon_r = 38.123$; $\rho = 1000$ kg/m³

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 – SN7543; ConvF(7.68, 7.68, 7.68); Calibrated: 2021/12/28

Electronics: DAE4 SN1291; Calibrated: 2022/3/24

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

Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.14 (7483)

Back Side Low/Area Scan (9x17x1): Measurement grid: dx=12mm, dy=12mm

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

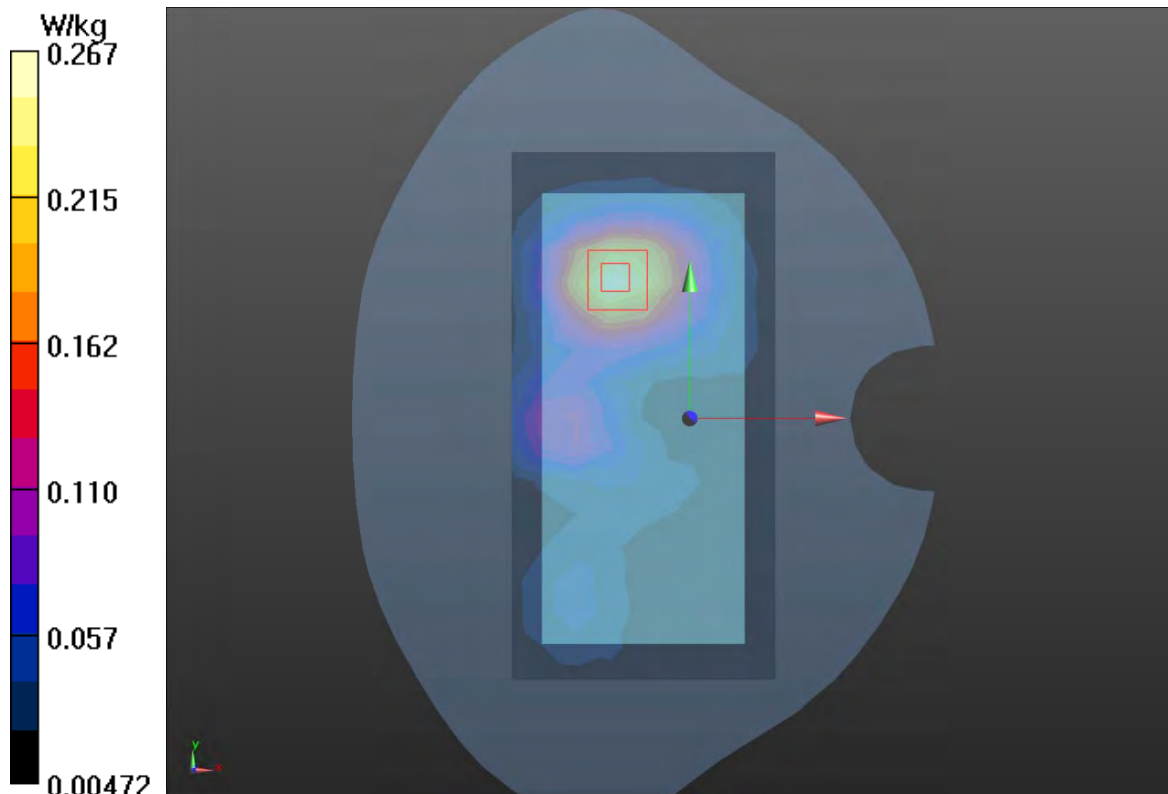
Back Side Low/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 2.967 V/m; Power Drift = 0.115 dB

Peak SAR (extrapolated) = 0.316 W/kg

SAR(1 g) = 0.184 W/kg; SAR(10 g) = 0.106 W/kg

Maximum value of SAR (measured) = 0.267 W/kg



Plot 80 LTE Band 41 1RB Back Side Low (Distance 15mm)

Date: 2022/4/7

Communication System: UID 0, LTE (0); Frequency: 2506 MHz; Duty Cycle: 1:1.58

Medium parameters used: $f = 2506$ MHz; $\sigma = 1.905$ S/m; $\epsilon_r = 37.414$; $\rho = 1000$ kg/m³

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 – SN7543; ConvF(7.24, 7.24, 7.24); Calibrated: 2021/12/28

Electronics: DAE4 SN1291; Calibrated: 2022/3/24

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

Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.14 (7483)

Back Side Low/Area Scan (9x17x1): Measurement grid: dx=12mm, dy=12mm

Maximum value of SAR (measured) = 0.250 W/kg

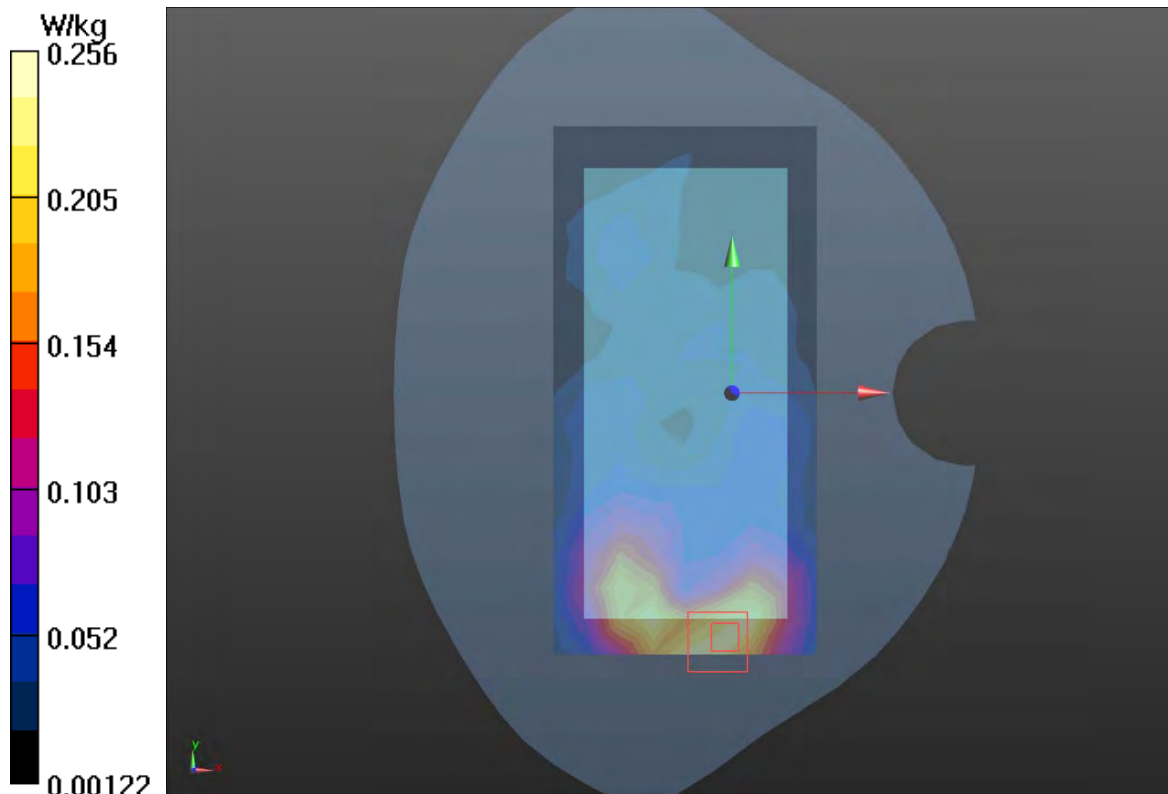
Back Side Low/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 3.345 V/m; Power Drift = 0.060 dB

Peak SAR (extrapolated) = 0.314 W/kg

SAR(1 g) = 0.161 W/kg; SAR(10 g) = 0.086 W/kg

Maximum value of SAR (measured) = 0.256 W/kg



Plot 81 LTE Band 66 1RB Back Side Middle (Distance 15mm)

Date: 2022/4/20

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

Medium parameters used: $f = 1745$ MHz; $\sigma = 1.323$ S/m; $\epsilon_r = 39.378$; $\rho = 1000$ kg/m³

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 – SN7543; ConvF(8.42, 8.42, 8.42); Calibrated: 2021/12/28

Electronics: DAE4 SN1291; Calibrated: 2022/3/24

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

Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.14 (7483)

Back Side Middle/Area Scan (7x15x1): Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (measured) = 0.496 W/kg

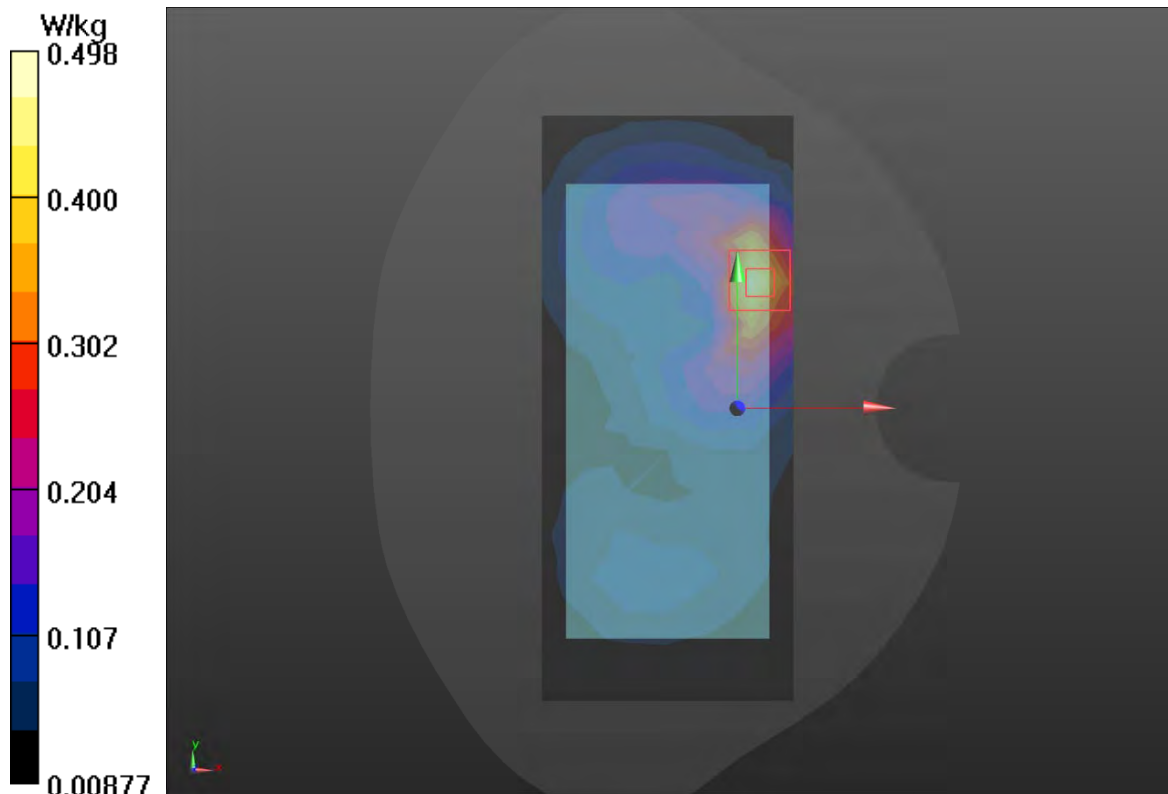
Back Side Middle/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 9.012 V/m; Power Drift = -0.060 dB

Peak SAR (extrapolated) = 0.759 W/kg

SAR(1 g) = 0.448 W/kg; SAR(10 g) = 0.251 W/kg

Maximum value of SAR (measured) = 0.498 W/kg



Plot 82 NR Band n2 50%RB Back Side Low (Distance 15mm)

Date: 2022/4/12

Communication System: UID 0, 5G NR (0); Frequency: 1860 MHz; Duty Cycle: 1:1

Medium parameters used: $f = 1860 \text{ MHz}$; $\sigma = 1.379 \text{ S/m}$; $\epsilon_r = 38.4$; $\rho = 1000 \text{ kg/m}^3$

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 – SN7543; ConvF(8.20, 8.20, 8.20); Calibrated: 2021/12/28

Electronics: DAE4 SN1291; Calibrated: 2022/3/24

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

Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.14 (7483)

Back Side Low/Area Scan (7x14x1): Measurement grid: $dx=15\text{mm}$, $dy=15\text{mm}$

Maximum value of SAR (measured) = 0.239 W/kg

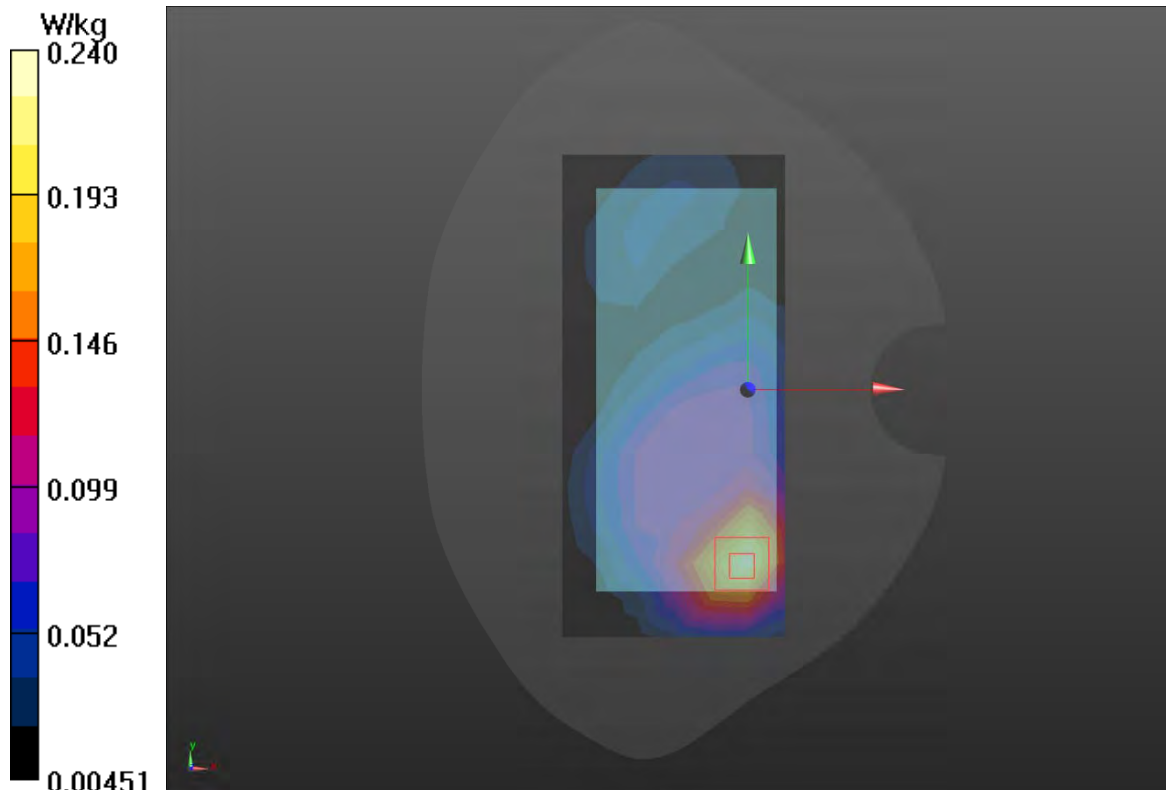
Back Side Low/Zoom Scan (5x5x7)/Cube 0: Measurement grid: $dx=8\text{mm}$, $dy=8\text{mm}$, $dz=5\text{mm}$

Reference Value = 7.531 V/m ; Power Drift = 0.030 dB

Peak SAR (extrapolated) = 0.362 W/kg

SAR(1 g) = 0.223 W/kg ; SAR(10 g) = 0.131 W/kg

Maximum value of SAR (measured) = 0.240 W/kg



Plot 83 NR Band n5 50%RB Back Side Low (Distance 15mm)

Date: 2022/3/25

Communication System: UID 0, 5G NR (0); Frequency: 834 MHz; Duty Cycle: 1:1

Medium parameters used: $f = 834 \text{ MHz}$; $\sigma = 0.953 \text{ S/m}$; $\epsilon_r = 39.907$; $\rho = 1000 \text{ kg/m}^3$

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 – SN7543; ConvF(9.89, 9.89, 9.89); Calibrated: 2021/12/28

Electronics: DAE4 SN1291; Calibrated: 2022/3/24

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

Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.14 (7483)

Back Side Low/Area Scan (8x14x1): Measurement grid: $dx=15\text{mm}$, $dy=15\text{mm}$

Maximum value of SAR (measured) = 0.285 W/kg

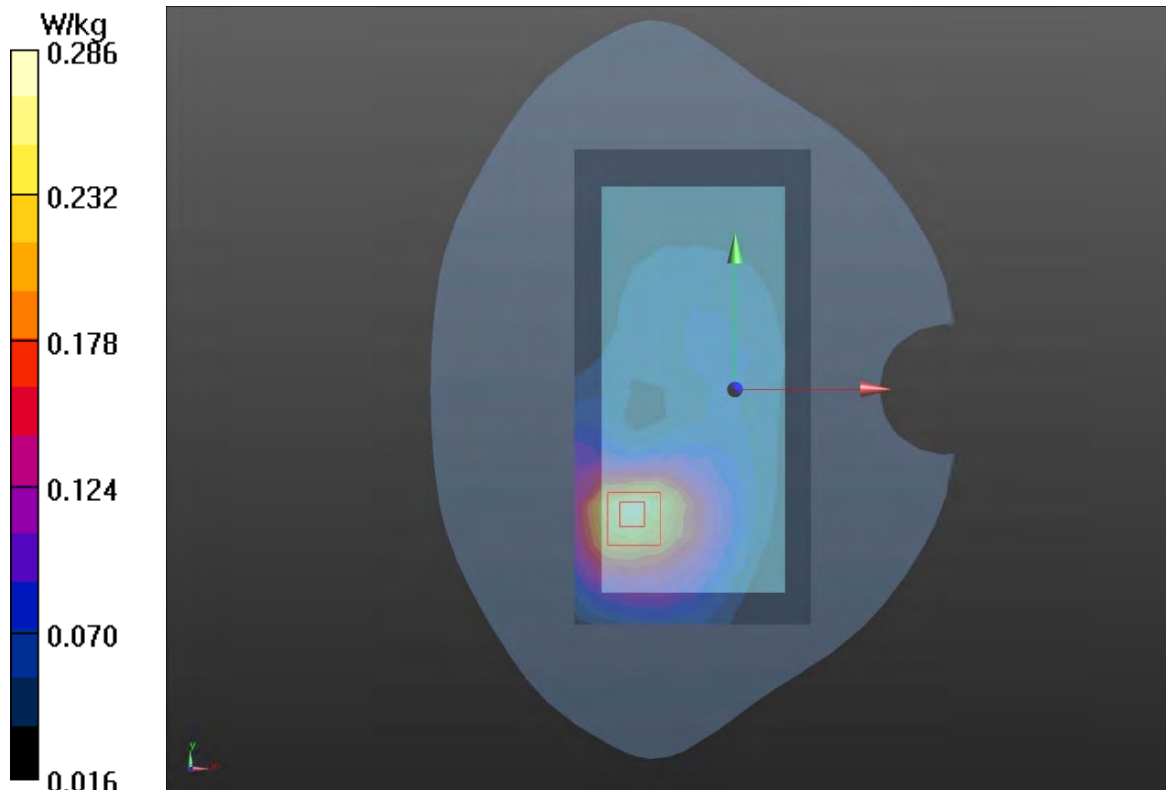
Back Side Low/Zoom Scan (5x5x7)/Cube 0: Measurement grid: $dx=8\text{mm}$, $dy=8\text{mm}$, $dz=5\text{mm}$

Reference Value = 6.491 V/m ; Power Drift = -0.026 dB

Peak SAR (extrapolated) = 0.335 W/kg

SAR(1 g) = 0.220 W/kg ; SAR(10 g) = 0.142 W/kg

Maximum value of SAR (measured) = 0.286 W/kg



Plot 84 NR Band n7 1RB Back Side Low (Distance 15mm)

Date: 2022/4/8

Communication System: UID 0, 5G NR (0); Frequency: 2510 MHz; Duty Cycle: 1:1
 Medium parameters used: $f = 2510$ MHz; $\sigma = 1.91$ S/m; $\epsilon_r = 37.398$; $\rho = 1000$ kg/m³

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 – SN7543; ConvF(7.24, 7.24, 7.24); Calibrated: 2021/12/28

Electronics: DAE4 SN1291; Calibrated: 2022/3/24

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

Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.14 (7483)

Back Side Low/Area Scan (9x17x1): Measurement grid: dx=12mm, dy=12mm

Maximum value of SAR (measured) = 0.424 W/kg

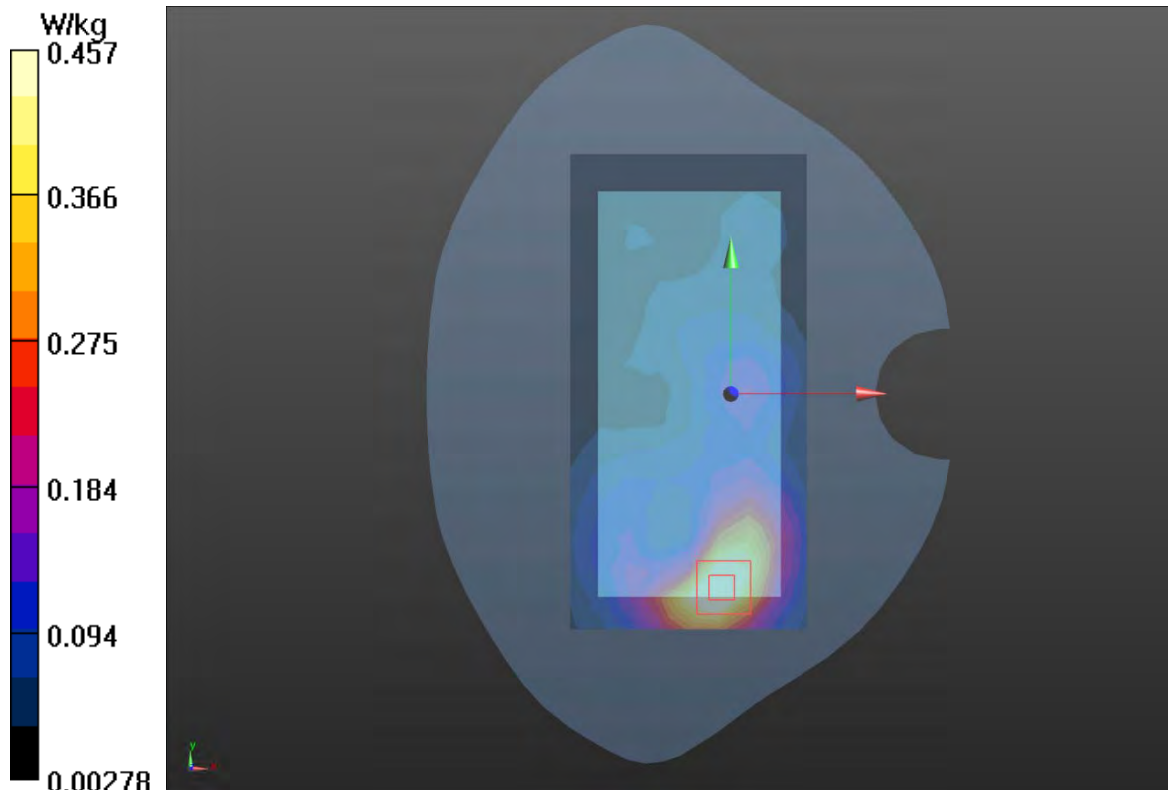
Back Side Low/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 4.639 V/m; Power Drift = -0.013 dB

Peak SAR (extrapolated) = 0.694 W/kg

SAR(1 g) = 0.349 W/kg; SAR(10 g) = 0.182 W/kg

Maximum value of SAR (measured) = 0.457 W/kg



Plot 85 NR Band n38 1RB Back Side Middle (Distance 15mm)

Date: 2022/4/14

Communication System: UID 0, 5G NR (0); Frequency: 2595 MHz; Duty Cycle: 1:4

Medium parameters used: $f = 2595$ MHz; $\sigma = 2.011$ S/m; $\epsilon_r = 37.134$; $\rho = 1000$ kg/m³

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 – SN7543; ConvF(7.24, 7.24, 7.24); Calibrated: 2021/12/28

Electronics: DAE4 SN1291; Calibrated: 2022/3/24

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

Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.14 (7483)

Back Side Middle/Area Scan (9x17x1): Measurement grid: dx=12mm, dy=12mm

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

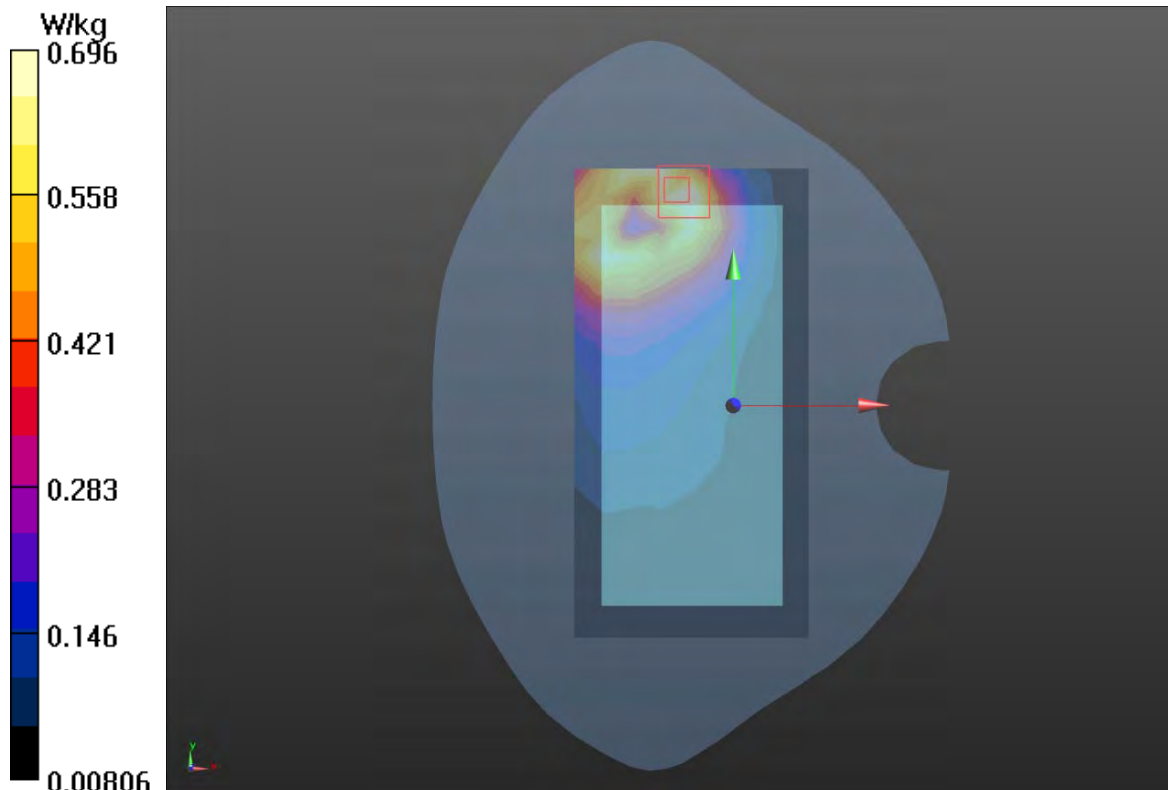
Back Side Middle/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 6.833 V/m; Power Drift = 0.011 dB

Peak SAR (extrapolated) = 0.960 W/kg

SAR(1 g) = 0.490 W/kg; SAR(10 g) = 0.259 W/kg

Maximum value of SAR (measured) = 0.696 W/kg



Plot 86 NR Band n41 1RB Back Side Low (Distance 15mm)

Date: 2022/5/13

Communication System: UID 0, 5G NR (0); Frequency: 2546.01 MHz; Duty Cycle: 1:4

Medium parameters used (interpolated): $f = 2546.01$ MHz; $\sigma = 1.953$ S/m; $\epsilon_r = 37.275$; $\rho = 1000$ kg/m³

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 – SN7543; ConvF(7.24, 7.24, 7.24); Calibrated: 2021/12/28

Electronics: DAE4 SN1291; Calibrated: 2022/3/24

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

Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.14 (7483)

Back Side Low/Area Scan (9x17x1): Measurement grid: dx=12mm, dy=12mm

Maximum value of SAR (measured) = 0.234 W/kg

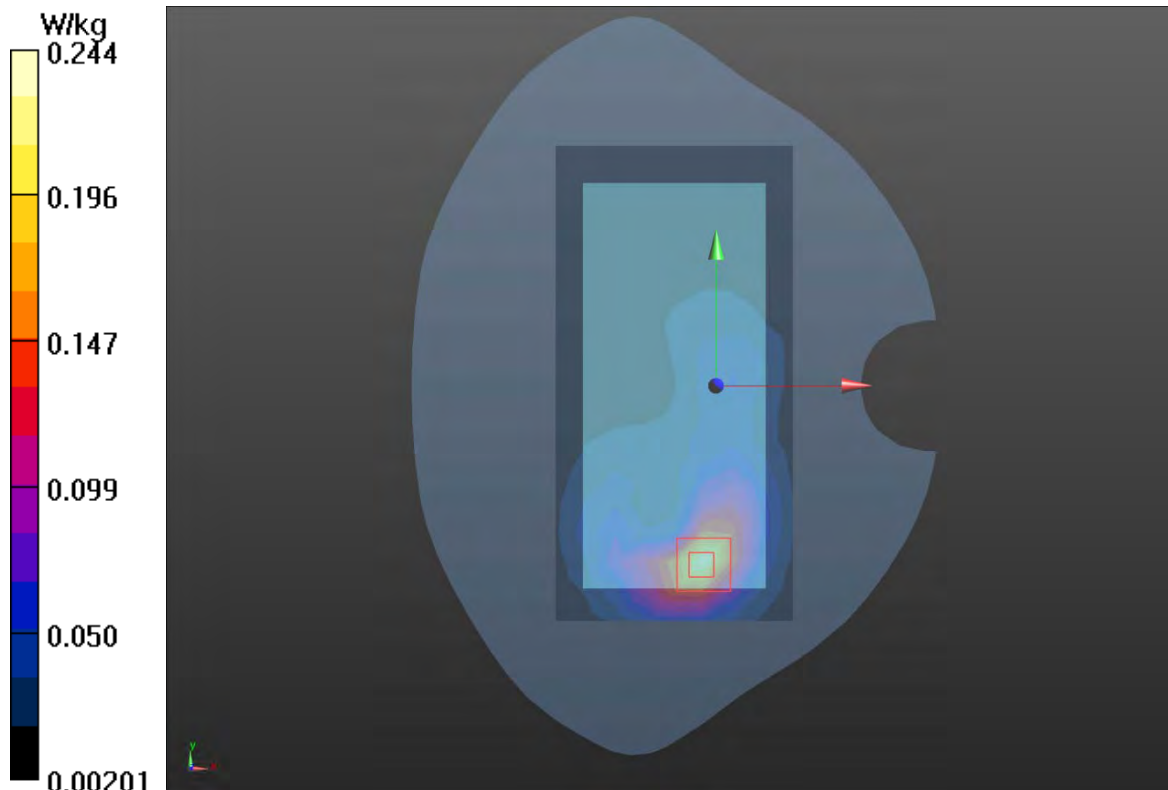
Back Side Low/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 3.935 V/m; Power Drift = -0.149 dB

Peak SAR (extrapolated) = 0.491 W/kg

SAR(1 g) = 0.134 W/kg; SAR(10 g) = 0.070 W/kg

Maximum value of SAR (measured) = 0.244 W/kg



Plot 87 NR Band n66 50%RB Back Side Low (Distance 15mm)

Date: 2022/4/20

Communication System: UID 0, 5G NR (0); Frequency: 1720 MHz; Duty Cycle: 1:1

Medium parameters used: $f = 1720$ MHz; $\sigma = 1.284$ S/m; $\epsilon_r = 38.855$; $\rho = 1000$ kg/m³

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 – SN7543; ConvF(8.42, 8.42, 8.42); Calibrated: 2021/12/28

Electronics: DAE4 SN1291; Calibrated: 2022/3/24

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

Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.14 (7483)

Back Side Low/Area Scan (7x14x1): Measurement grid: dx=15mm, dy=15mm

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

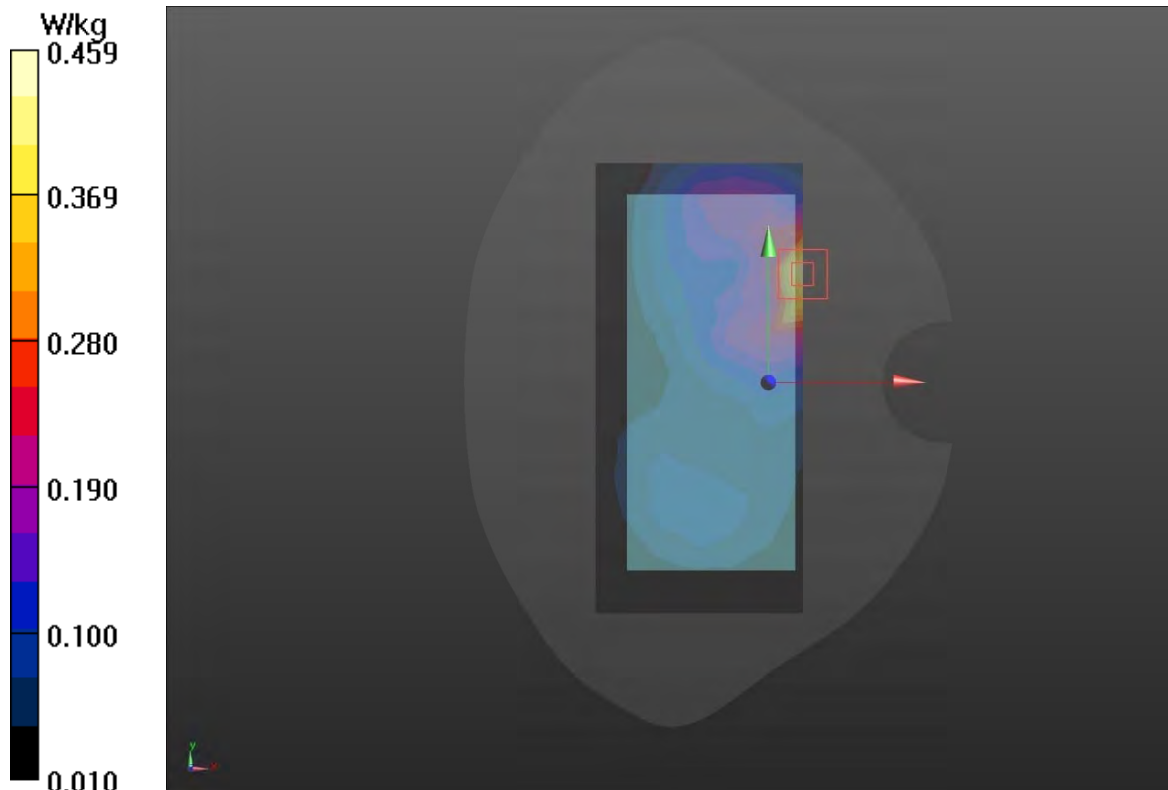
Back Side Low/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 7.411 V/m; Power Drift = -0.110 dB

Peak SAR (extrapolated) = 0.693 W/kg

SAR(1 g) = 0.410 W/kg; SAR(10 g) = 0.227 W/kg

Maximum value of SAR (measured) = 0.459 W/kg



Plot 88 NR Band n77 50%RB Back Side Middle (Distance 15mm)

Date: 2022/4/9

Communication System: UID 0, 5G NR (0); Frequency: 3750 MHz; Duty Cycle: 1:4

Medium parameters used (interpolated): $f = 3750$ MHz; $\sigma = 2.668$ S/m; $\epsilon_r = 38.853$; $\rho = 1000$ kg/m³

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 – SN7543; ConvF(6.51, 6.51, 6.51); Calibrated: 2021/12/28

Electronics: DAE4 SN1291; Calibrated: 2022/3/24

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

Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.14 (7483)

Back Side Middle/Area Scan (11x21x1): Measurement grid: dx=10mm, dy=10mm

Maximum value of SAR (measured) = 0.188 W/kg

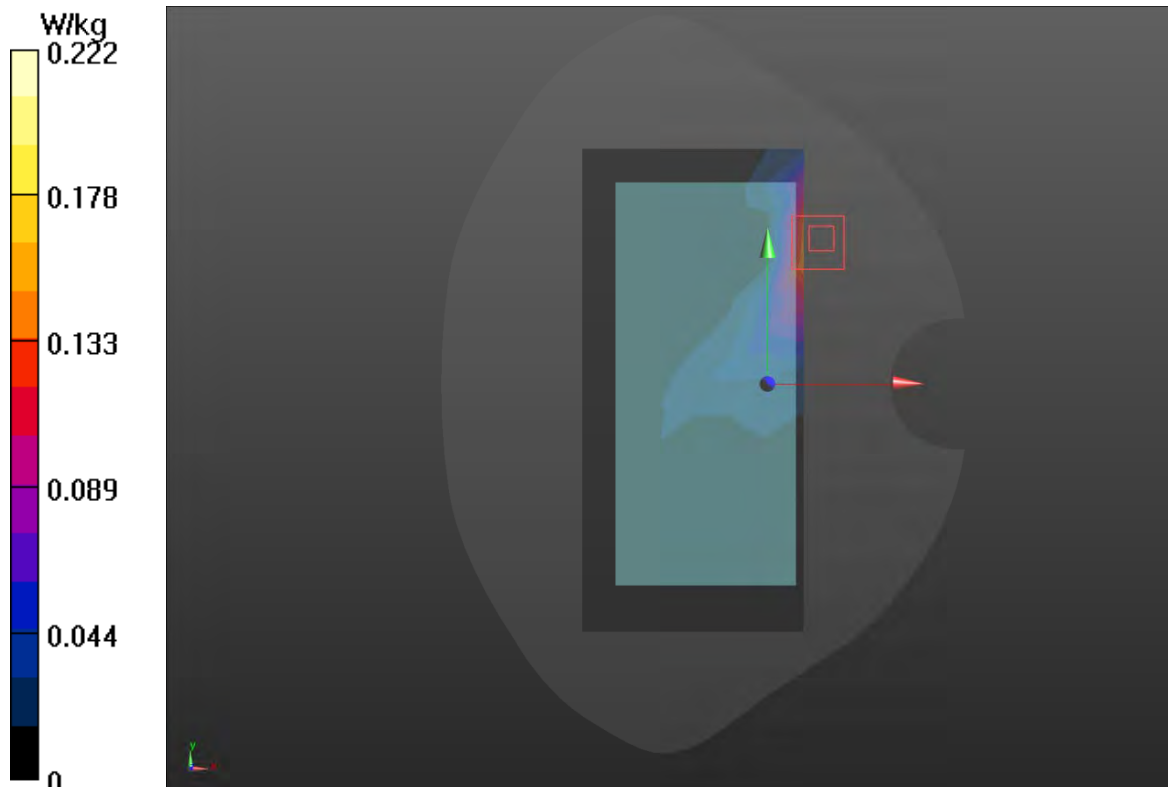
Back Side Middle/Zoom Scan (7x7x12)/Cube 0: Measurement grid: dx=4mm, dy=4mm, dz=2mm

Reference Value = 2.416 V/m; Power Drift = 0.024 dB

Peak SAR (extrapolated) = 0.419 W/kg

SAR(1 g) = 0.176 W/kg; SAR(10 g) = 0.076 W/kg

Maximum value of SAR (measured) = 0.222 W/kg



Plot 89 NR Band n78 50%RB Back Side High (Distance 15mm)

Date: 2022/4/9

Communication System: UID 0, 5G NR (0); Frequency: 3750 MHz; Duty Cycle: 1:4

Medium parameters used (interpolated): $f = 3750$ MHz; $\sigma = 3.088$ S/m; $\epsilon_r = 37.562$; $\rho = 1000$ kg/m³

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 – SN7543; ConvF(6.51, 6.51, 6.51); Calibrated: 2021/12/28

Electronics: DAE4 SN1291; Calibrated: 2022/3/24

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

Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.14 (7483)

Back Side High/Area Scan (11x21x1): Measurement grid: dx=10mm, dy=10mm

Maximum value of SAR (measured) = 0.381 W/kg

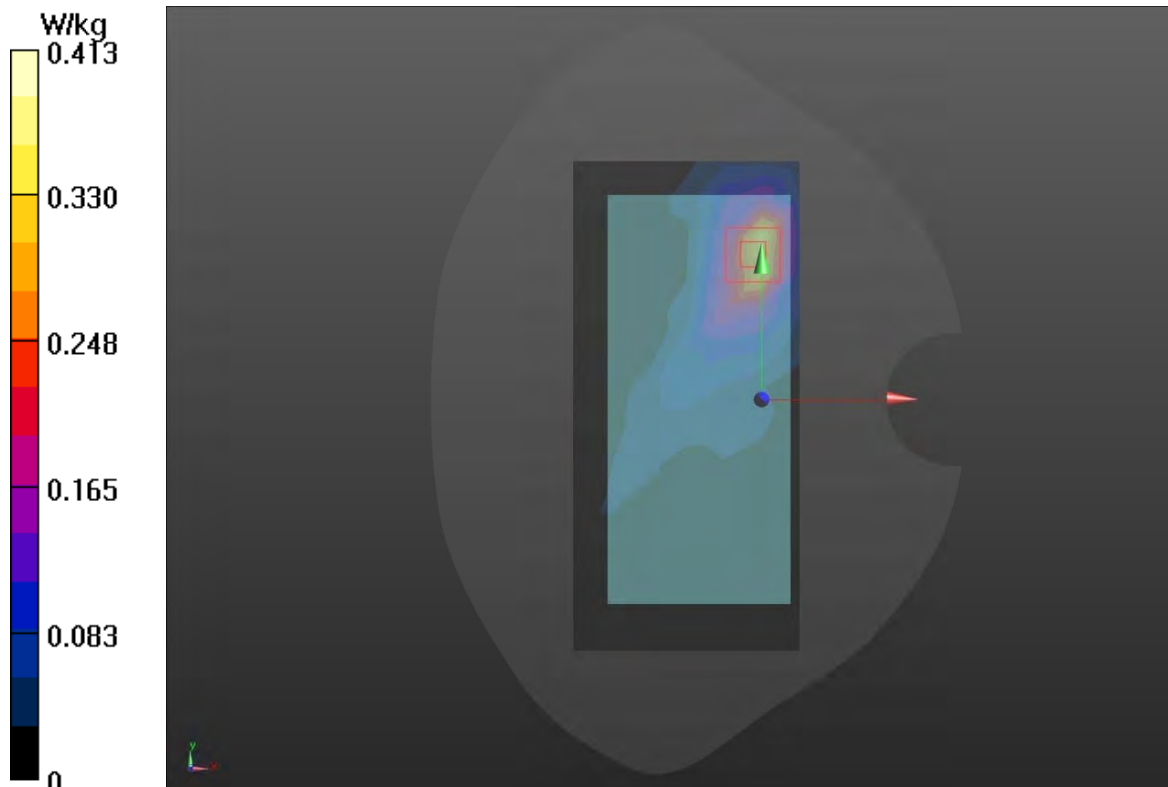
Back Side High/Zoom Scan (7x7x12)/Cube 0: Measurement grid: dx=4mm, dy=4mm, dz=2mm

Reference Value = 3.193 V/m; Power Drift = 0.090 dB

Peak SAR (extrapolated) = 0.880 W/kg

SAR(1 g) = 0.335 W/kg; SAR(10 g) = 0.142 W/kg

Maximum value of SAR (measured) = 0.413 W/kg



Plot 90 802.11nHT20 Back Side High (Distance 15mm)

Date: 2022/5/7

Communication System: UID 0, 802.11n HT20 (0); Frequency: 2462 MHz; Duty Cycle: 1:1

Medium parameters used: $f = 2462$ MHz; $\sigma = 1.859$ S/m; $\epsilon_r = 37.58$; $\rho = 1000$ kg/m³

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 – SN7543; ConvF(7.49, 7.49, 7.49); Calibrated: 2021/12/28

Electronics: DAE4 SN1291; Calibrated: 2022/3/24

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

Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.14 (7483)

Back Side High/Area Scan (9x17x1): Measurement grid: dx=12mm, dy=12mm

Maximum value of SAR (measured) = 0.395 W/kg

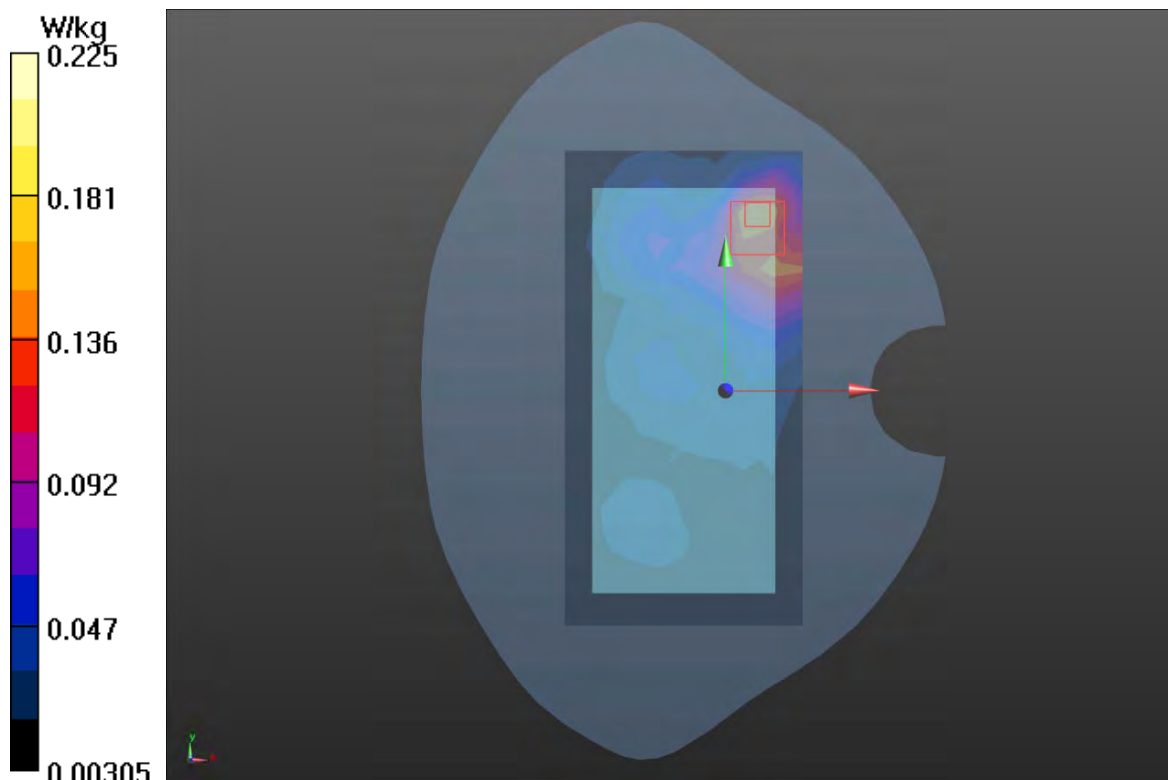
Back Side High/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 6.005 V/m; Power Drift = 0.018 dB

Peak SAR (extrapolated) = 0.557 W/kg

SAR(1 g) = 0.132 W/kg; SAR(10 g) = 0.061 W/kg

Maximum value of SAR (measured) = 0.225 W/kg



Plot 91 802.11a U-NII-1 Back Side High (Distance 15mm)

Date: 2022/5/3

Communication System: UID 0, 802.11a (0); Frequency: 5240 MHz; Duty Cycle: 1:1

Medium parameters used: $f = 5240$ MHz; $\sigma = 4.85$ S/m; $\epsilon_r = 36.872$; $\rho = 1000$ kg/m³

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 – SN7543; ConvF(5.44, 5.44, 5.44); Calibrated: 2021/12/28

Electronics: DAE4 SN1291; Calibrated: 2022/3/24

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

Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.14 (7483)

Back Side High/Area Scan (11x21x1): Measurement grid: dx=10mm, dy=10mm

Maximum value of SAR (measured) = 0.302 W/kg

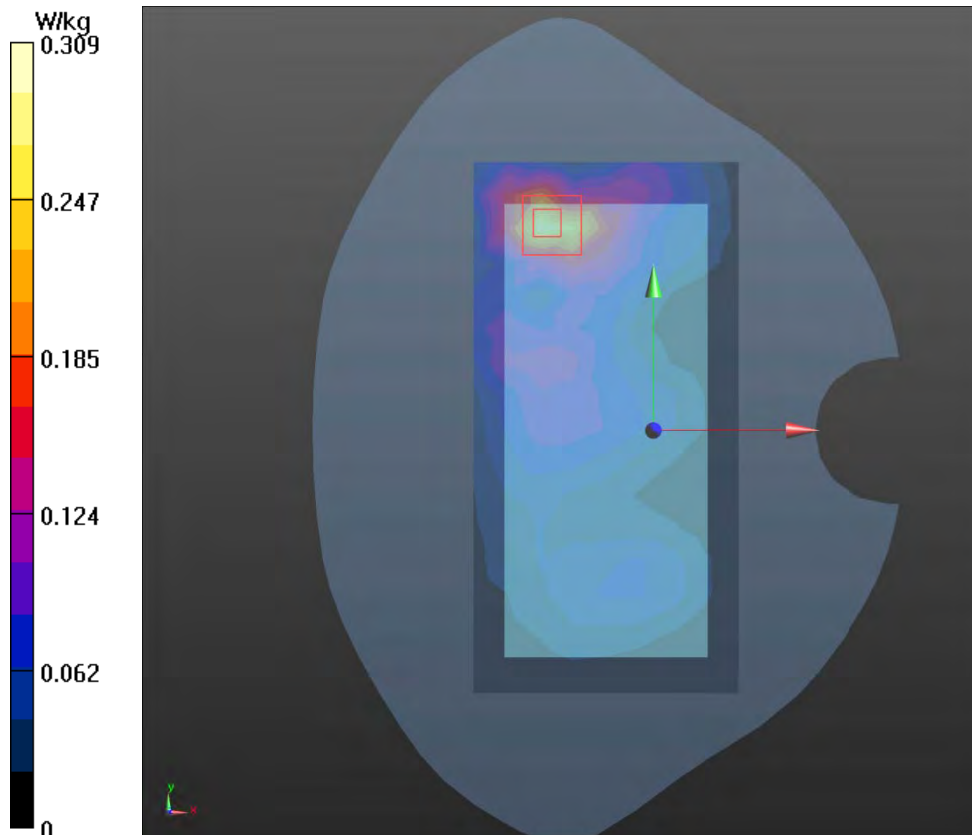
Back Side High/Zoom Scan (7x7x12)/Cube 0: Measurement grid: dx=4mm, dy=4mm, dz=2mm

Reference Value = 1.639 V/m; Power Drift = 0.025 dB

Peak SAR (extrapolated) = 0.750 W/kg

SAR(1 g) = 0.273 W/kg; SAR(10 g) = 0.111 W/kg

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



Plot 92 GSM 850 GPRS (4Txslots) Back Side Middle (Distance 10mm)

Date: 2022/3/23

Communication System: UID 0, GPRS 4TX(0); Frequency: 836.6 MHz; Duty Cycle: 1:2.07

Medium parameters used: $f = 836.6 \text{ MHz}$; $\sigma = 0.953 \text{ S/m}$; $\epsilon_r = 39.762$; $\rho = 1000 \text{ kg/m}^3$

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 – SN7543; ConvF(9.89, 9.89, 9.89); Calibrated: 2021/12/28

Electronics: DAE4 SN1291; Calibrated: 2022/3/24

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

Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.14 (7483)

Back Side Middle/Area Scan (8x14x1): Measurement grid: $dx=15\text{mm}$, $dy=15\text{mm}$

Maximum value of SAR (measured) = 0.613 W/kg

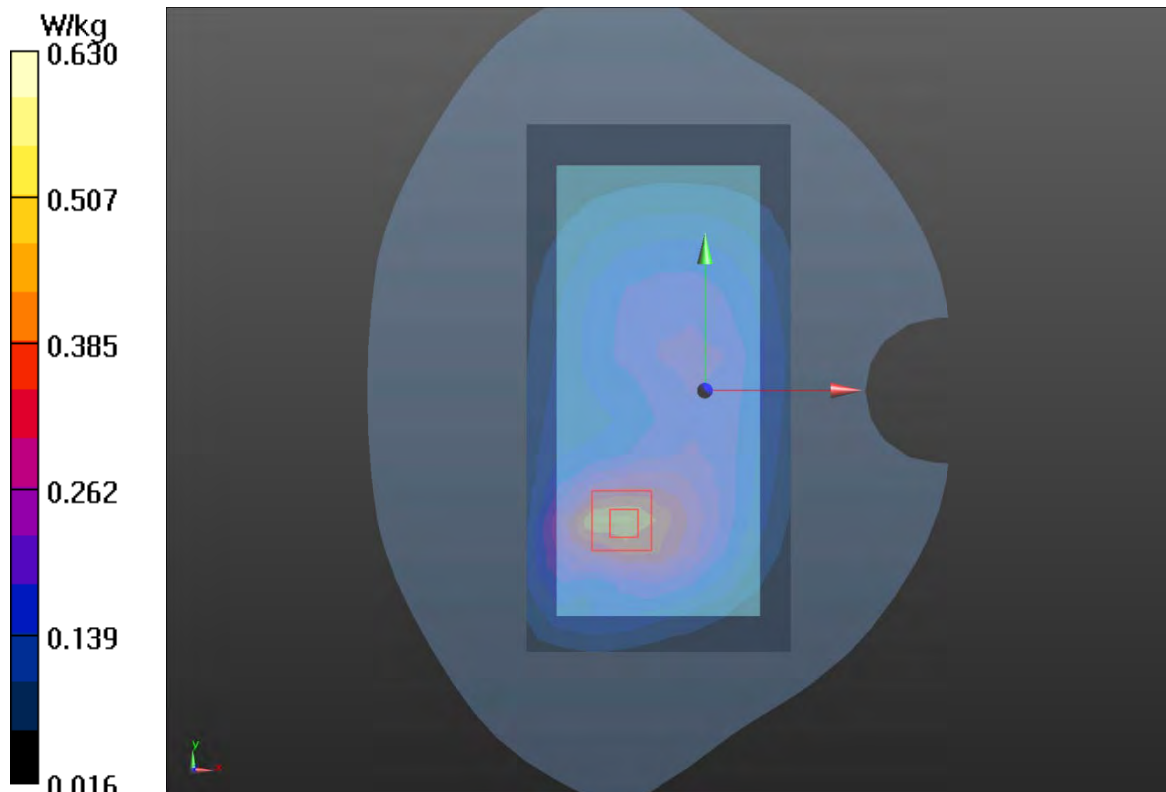
Back Side Middle/Zoom Scan (5x5x7)/Cube 0: Measurement grid: $dx=8\text{mm}$, $dy=8\text{mm}$, $dz=5\text{mm}$

Reference Value = 13.40 V/m ; Power Drift = 0.043 dB

Peak SAR (extrapolated) = 0.822 W/kg

SAR(1 g) = 0.593 W/kg ; SAR(10 g) = 0.340 W/kg

Maximum value of SAR (measured) = 0.630 W/kg



Plot 93 GSM 1900 GPRS (4Txslots) Bottom Edge Middle (Distance 10mm)

Date: 2022/3/20

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

Medium parameters used: $f = 1880 \text{ MHz}$; $\sigma = 1.42 \text{ S/m}$; $\epsilon_r = 38.948$; $\rho = 1000 \text{ kg/m}^3$

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 – SN7543; ConvF(8.20, 8.20, 8.20); Calibrated: 2021/12/28

Electronics: DAE4 SN1291; Calibrated: 2022/3/24

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

Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.14 (7483)

Bottom Edge Middle/Area Scan (4x8x1): Measurement grid: $dx=15\text{mm}$, $dy=15\text{mm}$

Maximum value of SAR (measured) = 0.701 W/kg

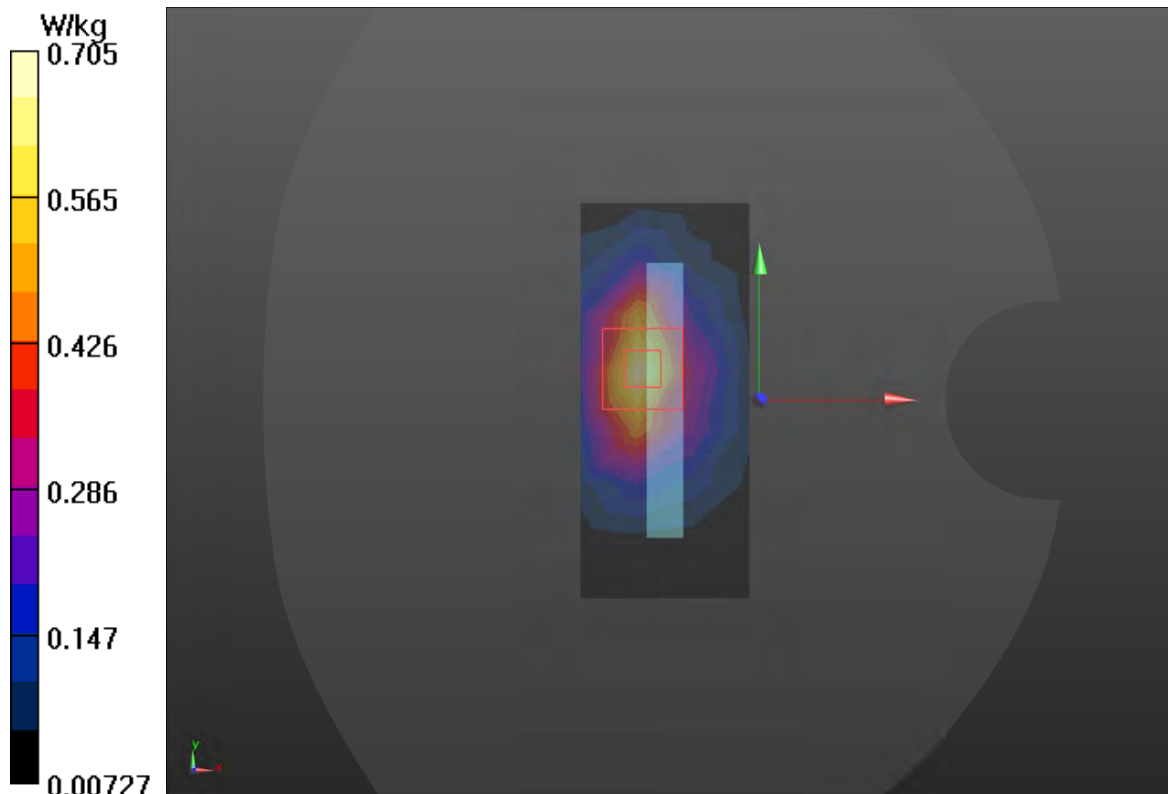
Bottom Edge Middle/Zoom Scan (5x5x7)/Cube 0: Measurement grid: $dx=8\text{mm}$, $dy=8\text{mm}$, $dz=5\text{mm}$

Reference Value = 18.20 V/m ; Power Drift = -0.150 dB

Peak SAR (extrapolated) = 0.856 W/kg

SAR(1 g) = 0.501 W/kg ; SAR(10 g) = 0.271 W/kg

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



Plot 94 UMTS Band II Bottom Edge Middle (Distance 10mm)

Date: 2022/4/1

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

Medium parameters used: $f = 1880 \text{ MHz}$; $\sigma = 1.42 \text{ S/m}$; $\epsilon_r = 38.948$; $\rho = 1000 \text{ kg/m}^3$

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 – SN7543; ConvF(8.20, 8.20, 8.20); Calibrated: 2021/12/28

Electronics: DAE4 SN1291; Calibrated: 2022/3/24

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

Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.14 (7483)

Bottom Edge Middle/Area Scan (4x8x1): Measurement grid: $dx=15\text{mm}$, $dy=15\text{mm}$

Maximum value of SAR (measured) = 0.966 W/kg

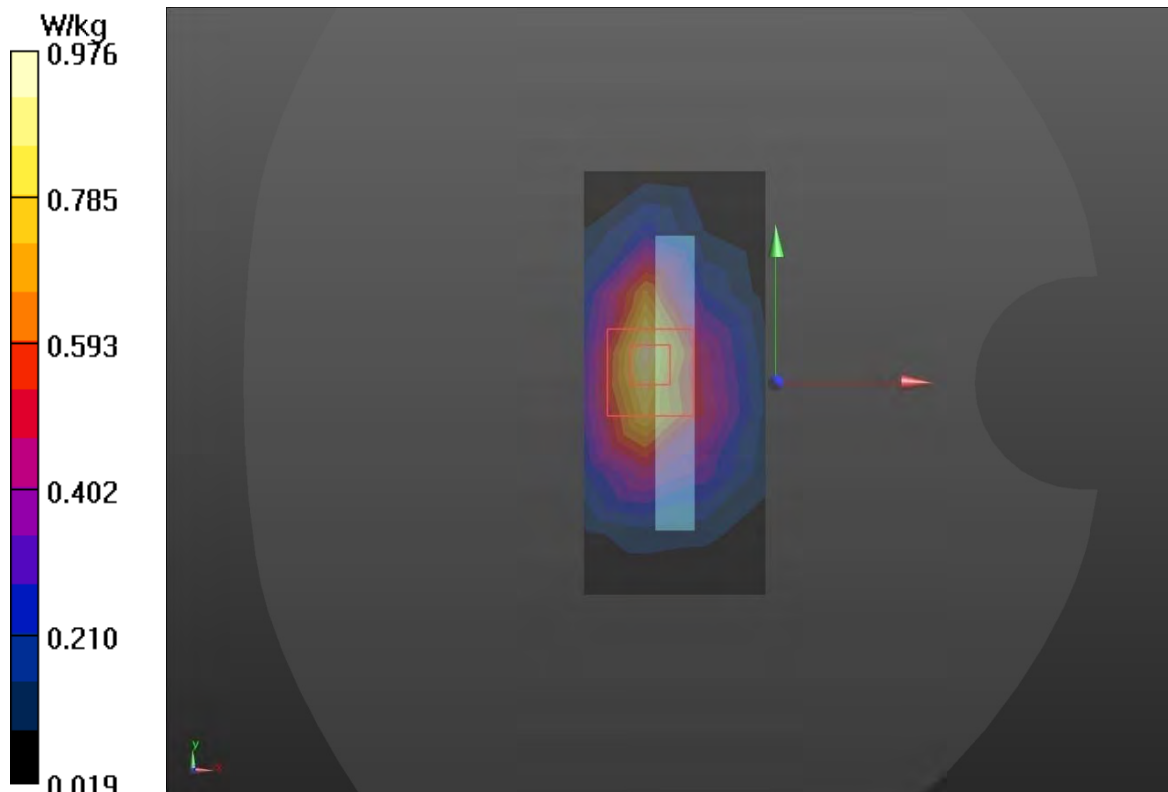
Bottom Edge Middle/Zoom Scan (5x5x7)/Cube 0: Measurement grid: $dx=8\text{mm}$, $dy=8\text{mm}$, $dz=5\text{mm}$

Reference Value = 23.88 V/m ; Power Drift = 0.130 dB

Peak SAR (extrapolated) = 1.54 W/kg

SAR(1 g) = 0.870 W/kg ; SAR(10 g) = 0.478 W/kg

Maximum value of SAR (measured) = 0.976 W/kg



Plot 95 UMTS Band IV Bottom Edge Middle (Distance 10mm)

Date: 2022/4/3

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

Medium parameters used: $f = 1732.6$ MHz; $\sigma = 1.312$ S/m; $\epsilon_r = 39.365$; $\rho = 1000$ kg/m³

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 – SN7543; ConvF(8.42, 8.42, 8.42); Calibrated: 2021/12/28

Electronics: DAE4 SN1291; Calibrated: 2022/3/24

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

Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.14 (7483)

Bottom Edge Middle/Area Scan (4x8x1): Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (measured) = 0.716 W/kg

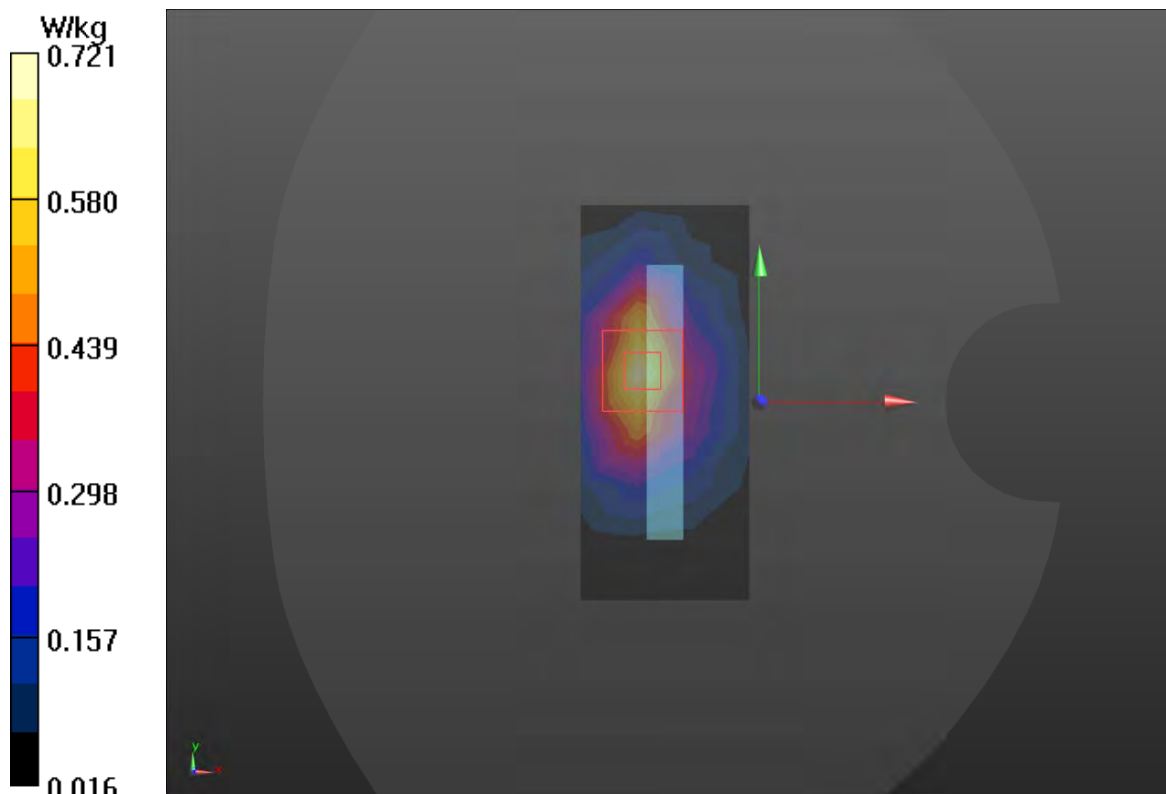
Bottom Edge Middle/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 20.25 V/m; Power Drift = 0.080 dB

Peak SAR (extrapolated) = 1.11 W/kg

SAR(1 g) = 0.631 W/kg; SAR(10 g) = 0.350 W/kg

Maximum value of SAR (measured) = 0.721 W/kg



Plot 96 UMTS Band V Back Side Middle (Distance 10mm)

Date: 2022/3/23

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

Medium parameters used: $f = 836.6$ MHz; $\sigma = 0.953$ S/m; $\epsilon_r = 39.762$; $\rho = 1000$ kg/m³

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 – SN7543; ConvF(9.89, 9.89, 9.89); Calibrated: 2021/12/28

Electronics: DAE4 SN1291; Calibrated: 2022/3/24

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

Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.14 (7483)

Back Side Middle/Area Scan (8x14x1): Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (measured) = 0.778 W/kg

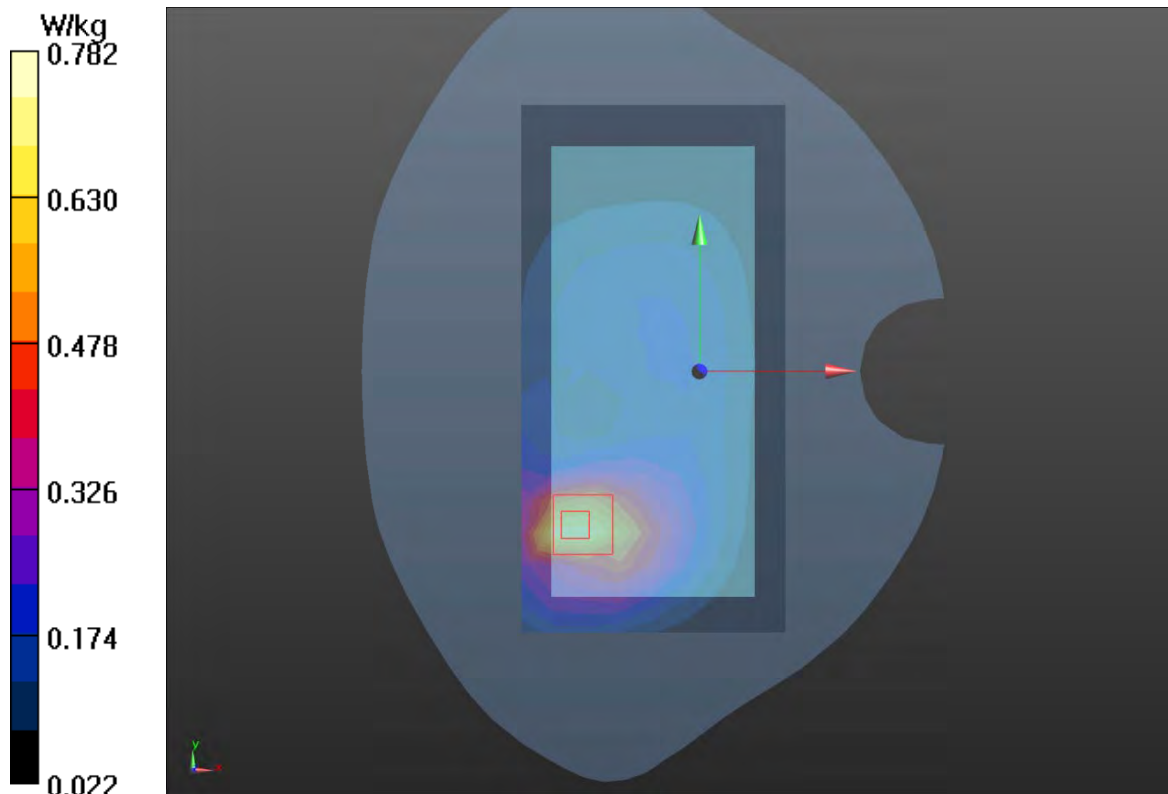
Back Side Middle/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 12.55 V/m; Power Drift = -0.120 dB

Peak SAR (extrapolated) = 0.949 W/kg

SAR(1 g) = 0.520 W/kg; SAR(10 g) = 0.308 W/kg

Maximum value of SAR (measured) = 0.782 W/kg



Plot 97 LTE Band 2 1RB Bottom Edge Low (Distance 10mm)

Date: 2022/4/2

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

Medium parameters used: $f = 1860$ MHz; $\sigma = 1.407$ S/m; $\epsilon_r = 39.071$; $\rho = 1000$ kg/m³

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 – SN7543; ConvF(8.20, 8.20, 8.20); Calibrated: 2021/12/28

Electronics: DAE4 SN1291; Calibrated: 2022/3/24

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

Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.14 (7483)

Bottom Edge Low/Area Scan (4x8x1): Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (measured) = 1.57 W/kg

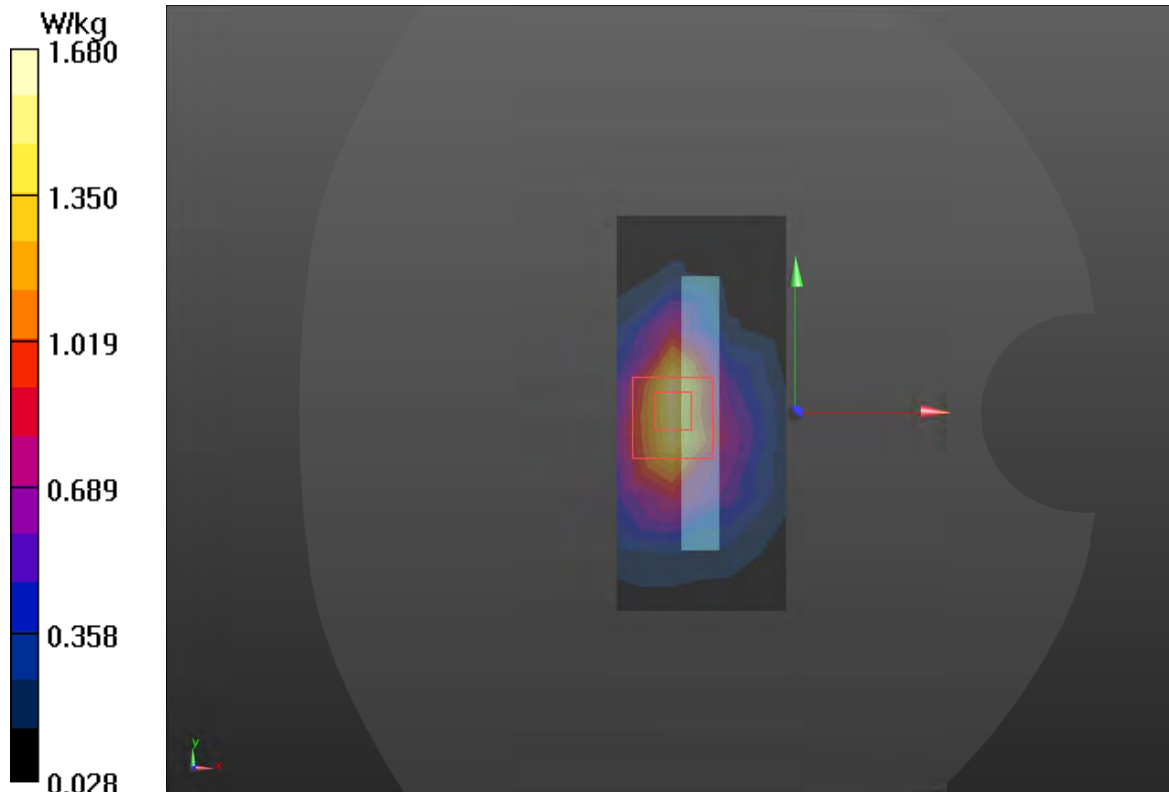
Bottom Edge Low/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 30.03 V/m; Power Drift = 0.019 dB

Peak SAR (extrapolated) = 2.59 W/kg

SAR(1 g) = 0.738 W/kg; SAR(10 g) = 0.413 W/kg

Maximum value of SAR (measured) = 1.68 W/kg



Plot 98 LTE Band 4 1RB Bottom Edge High (Distance 10mm)

Date: 2022/4/15

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

Medium parameters used: $f = 1745$ MHz; $\sigma = 1.323$ S/m; $\epsilon_r = 39.378$; $\rho = 1000$ kg/m³

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 – SN7543; ConvF(8.42, 8.42, 8.42); Calibrated: 2021/12/28

Electronics: DAE4 SN1291; Calibrated: 2022/3/24

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

Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.14 (7483)

Bottom Edge High/Area Scan (4x8x1): Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (measured) = 1.91 W/kg

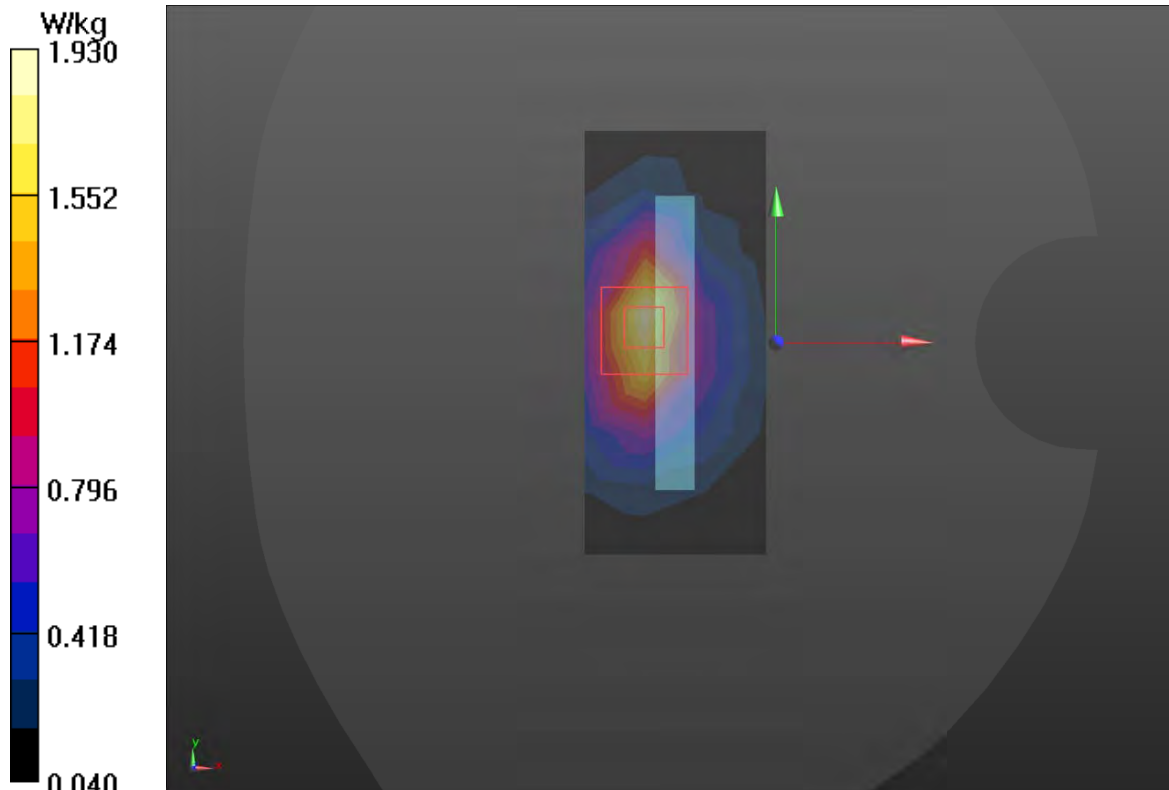
Bottom Edge High/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 32.33 V/m; Power Drift = 0.04 dB

Peak SAR (extrapolated) = 2.93 W/kg

SAR(1 g) = 0.602 W/kg; SAR(10 g) = 0.319 W/kg

Maximum value of SAR (measured) = 1.93 W/kg



Plot 99 LTE Band 5 1RB Back Side High (Distance 10mm)

Date: 2022/3/24

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

Medium parameters used: $f = 844$ MHz; $\sigma = 0.958$ S/m; $\epsilon_r = 39.728$; $\rho = 1000$ kg/m³

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 – SN7543; ConvF(9.89, 9.89, 9.89); Calibrated: 2021/12/28

Electronics: DAE4 SN1291; Calibrated: 2022/3/24

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

Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.14 (7483)

Back Side High/Area Scan (8x14x1): Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (measured) = 0.568 W/kg

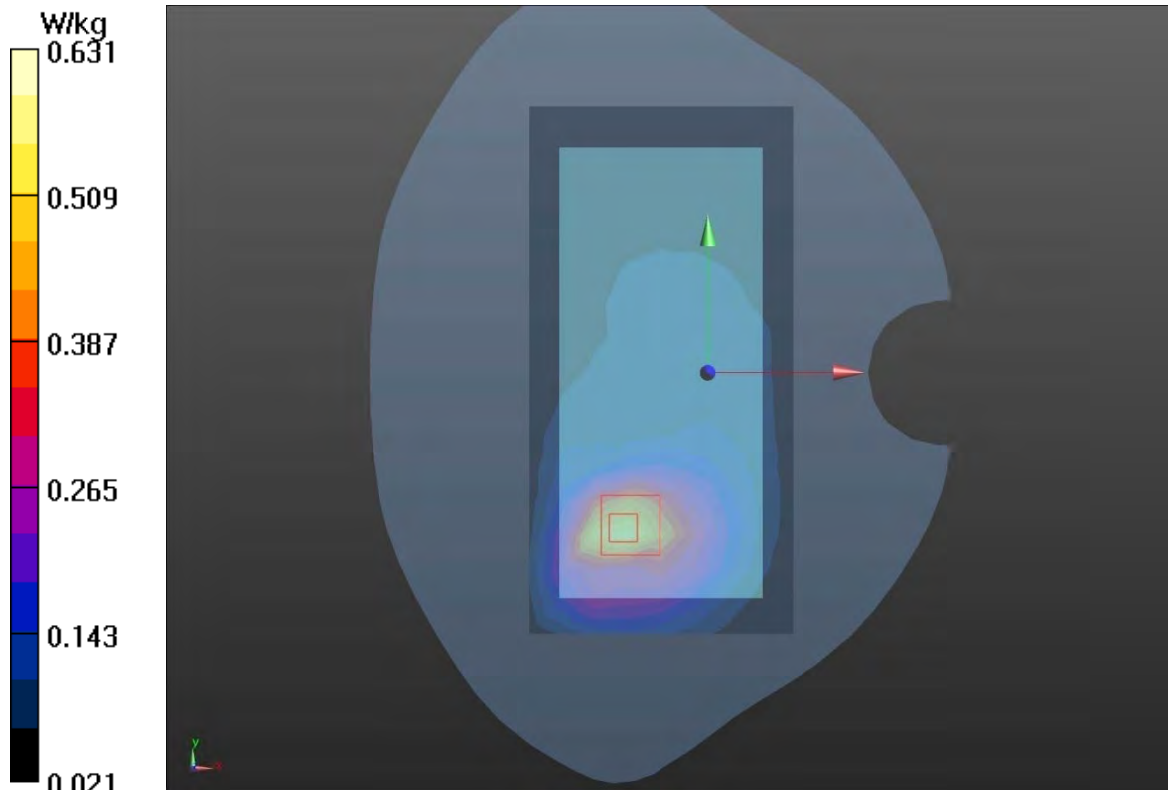
Back Side High/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 8.482 V/m; Power Drift = -0.050 dB

Peak SAR (extrapolated) = 0.750 W/kg

SAR(1 g) = 0.481 W/kg; SAR(10 g) = 0.283 W/kg

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



Plot 100 LTE Band 7 1RB Bottom Edge High (Distance 10mm)

Date: 2022/3/27

Communication System: UID 0, LTE (0); Frequency: 2560 MHz; Duty Cycle: 1:1

Medium parameters used: $f = 2560$ MHz; $\sigma = 1.971$ S/m; $\epsilon_r = 37.231$; $\rho = 1000$ kg/m³

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 – SN7543; ConvF(7.24, 7.24, 7.24); Calibrated: 2021/12/28

Electronics: DAE4 SN1291; Calibrated: 2022/3/24

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

Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.14 (7483)

Bottom Edge High/Area Scan (4x9x1): Measurement grid: dx=12mm, dy=12mm

Maximum value of SAR (measured) = 1.70 W/kg

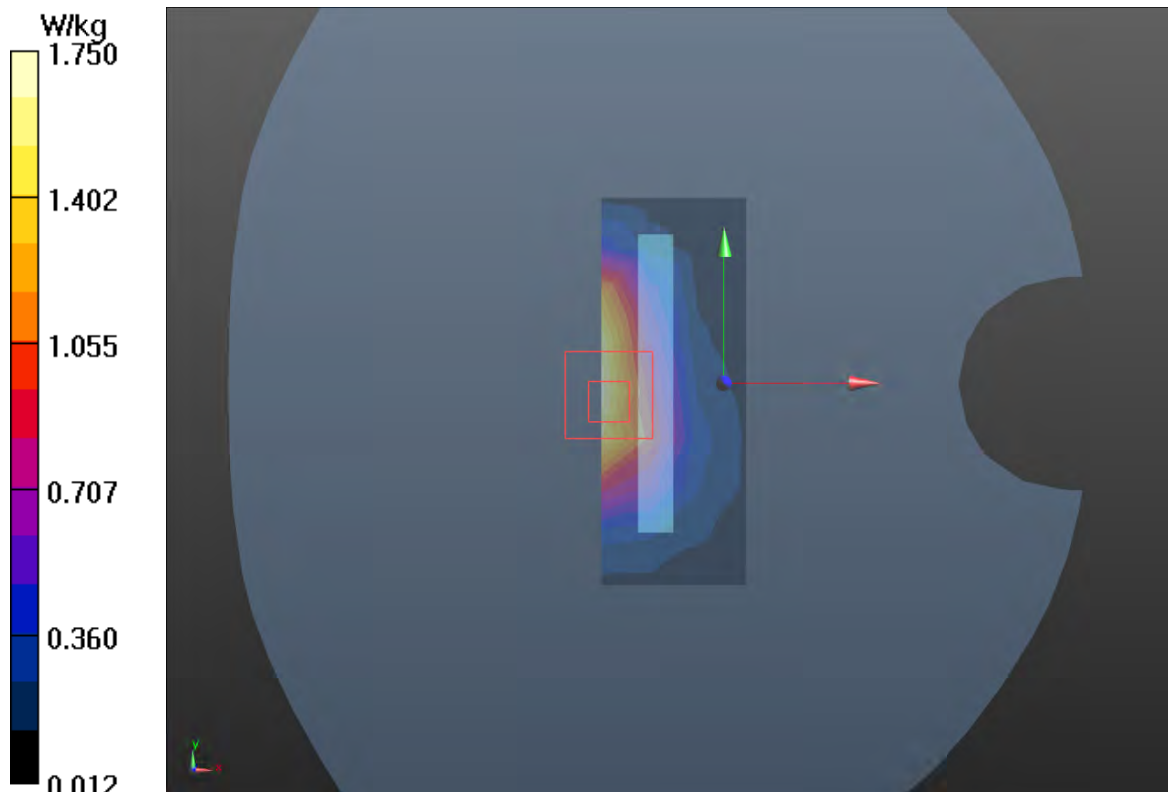
Bottom Edge High/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 16.37 V/m; Power Drift = 0.011 dB

Peak SAR (extrapolated) = 2.18 W/kg

SAR(1 g) = 0.966 W/kg; SAR(10 g) = 0.432 W/kg

Maximum value of SAR (measured) = 1.75 W/kg



Plot 101 LTE Band 12 1RB Back Side Middle (Distance 10mm)

Date: 2022/3/26

Communication System: UID 0, LTE (0); Frequency: 707.5 MHz; Duty Cycle: 1:1

Medium parameters used (interpolated): $f = 707.5$ MHz; $\sigma = 0.869$ S/m; $\epsilon_r = 40.725$; $\rho = 1000$ kg/m³

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 – SN7543; ConvF(10.27, 10.27, 10.27); Calibrated: 2021/12/28

Electronics: DAE4 SN1291; Calibrated: 2022/3/24

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

Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.14 (7483)

Back Side Middle/Area Scan (8x14x1): Measurement grid: dx=15mm, dy=15mm

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

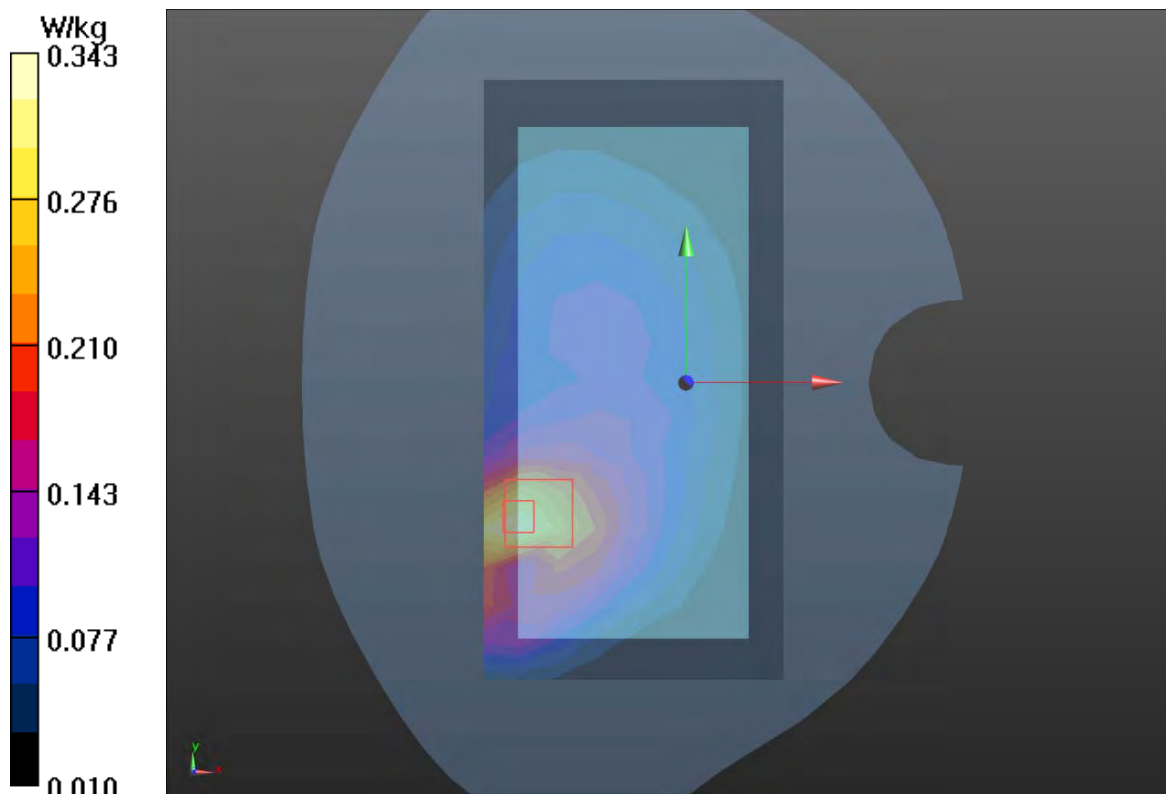
Back Side Middle/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 10.39 V/m; Power Drift = -0.160 dB

Peak SAR (extrapolated) = 0.427 W/kg

SAR(1 g) = 0.231 W/kg; SAR(10 g) = 0.141 W/kg

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



Plot 102 LTE Band 28A 1RB Back Side Low (Distance 10mm)

Date: 2022/3/28

Communication System: UID 0, LTE (0); Frequency: 713 MHz; Duty Cycle: 1:1

Medium parameters used: $f = 713 \text{ MHz}$; $\sigma = 0.873 \text{ S/m}$; $\epsilon_r = 40.697$; $\rho = 1000 \text{ kg/m}^3$

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 – SN7543; ConvF(10.27, 10.27, 10.27); Calibrated: 2021/12/28

Electronics: DAE4 SN1291; Calibrated: 2022/3/24

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

Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.14 (7483)

Back Side Low/Area Scan (8x14x1): Measurement grid: $dx=15\text{mm}$, $dy=15\text{mm}$

Maximum value of SAR (measured) = 0.330 W/kg

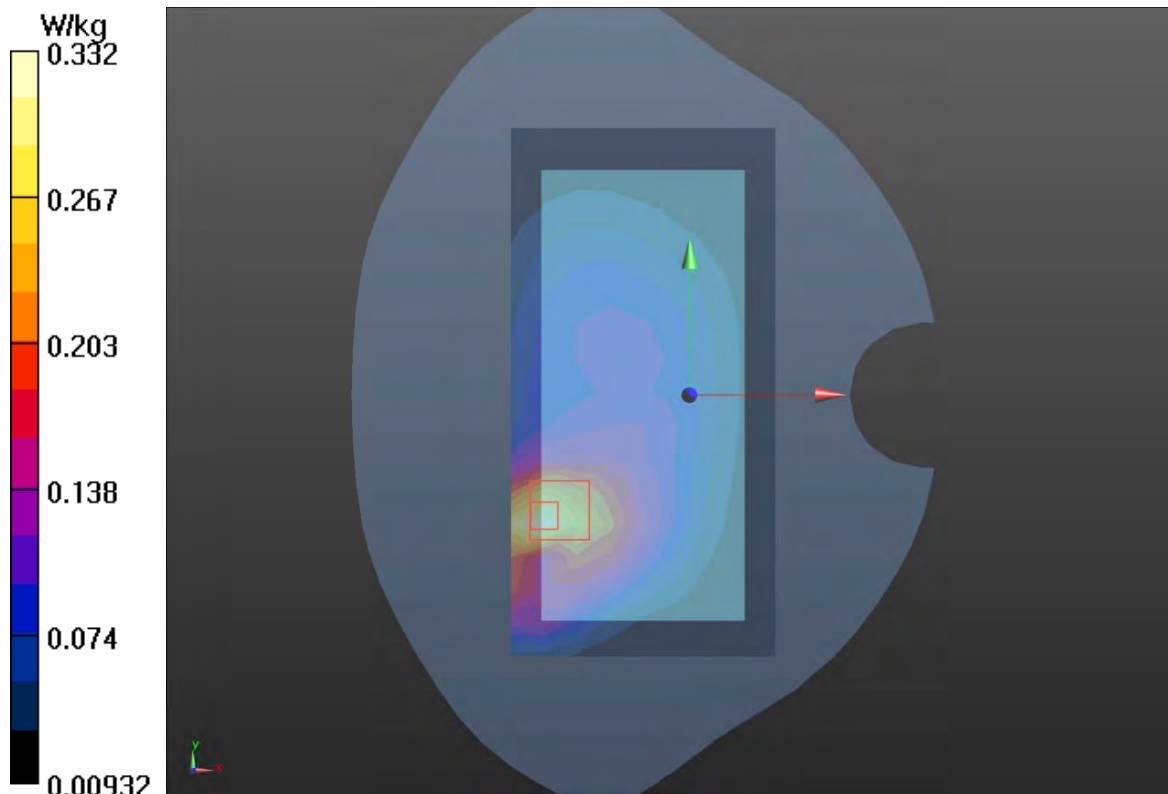
Back Side Low/Zoom Scan (5x5x7)/Cube 0: Measurement grid: $dx=8\text{mm}$, $dy=8\text{mm}$, $dz=5\text{mm}$

Reference Value = 10.08 V/m ; Power Drift = -0.080 dB

Peak SAR (extrapolated) = 0.410 W/kg

SAR(1 g) = 0.223 W/kg ; SAR(10 g) = 0.138 W/kg

Maximum value of SAR (measured) = 0.332 W/kg



Plot 103 LTE Band 28B 1RB Back Side High (Distance 10mm)

Date: 2022/4/2

Communication System: UID 0, LTE (0); Frequency: 738 MHz; Duty Cycle: 1:1

Medium parameters used: $f = 738 \text{ MHz}$; $\sigma = 0.889 \text{ S/m}$; $\epsilon_r = 40.525$; $\rho = 1000 \text{ kg/m}^3$

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 – SN7543; ConvF(10.27, 10.27, 10.27); Calibrated: 2021/12/28

Electronics: DAE4 SN1291; Calibrated: 2022/3/24

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

Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.14 (7483)

Back Side High/Area Scan (8x14x1): Measurement grid: $dx=15\text{mm}$, $dy=15\text{mm}$

Maximum value of SAR (measured) = 0.316 W/kg

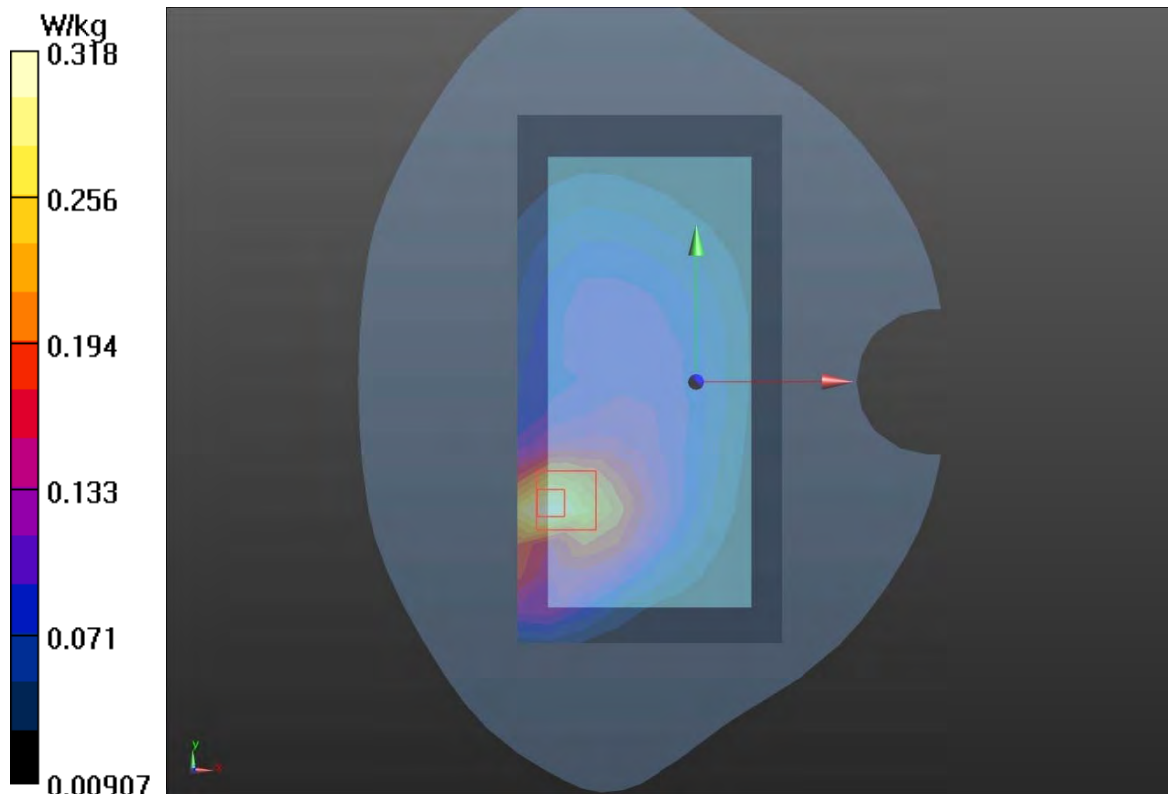
Back Side High/Zoom Scan (5x5x7)/Cube 0: Measurement grid: $dx=8\text{mm}$, $dy=8\text{mm}$, $dz=5\text{mm}$

Reference Value = 10.23 V/m ; Power Drift = -0.040 dB

Peak SAR (extrapolated) = 0.395 W/kg

SAR(1 g) = 0.216 W/kg ; SAR(10 g) = 0.134 W/kg

Maximum value of SAR (measured) = 0.318 W/kg



Plot 104 LTE Band 38 50%RB Bottom Edge High (Distance 10mm)

Date: 2022/4/7

Communication System: UID 0, LTE (0); Frequency: 2610 MHz; Duty Cycle: 1:1.58

Medium parameters used: $f = 2610$ MHz; $\sigma = 2.027$ S/m; $\epsilon_r = 37.056$; $\rho = 1000$ kg/m³

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 – SN7543; ConvF(7.24, 7.24, 7.24); Calibrated: 2021/12/28

Electronics: DAE4 SN1291; Calibrated: 2022/3/24

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

Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.14 (7483)

Bottom Edge High/Area Scan (4x9x1): Measurement grid: dx=12mm, dy=12mm

Maximum value of SAR (measured) = 0.857 W/kg

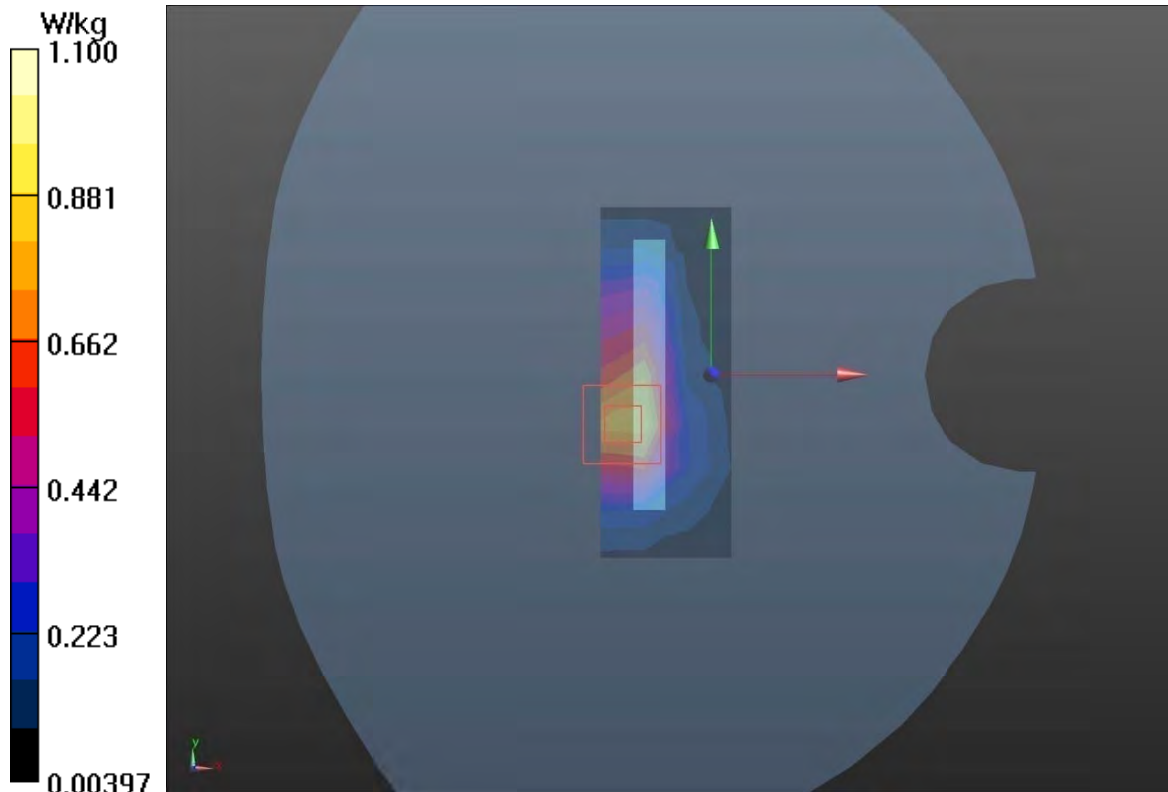
Bottom Edge High/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 14.13 V/m; Power Drift = 0.030 dB

Peak SAR (extrapolated) = 1.41 W/kg

SAR(1 g) = 0.656 W/kg; SAR(10 g) = 0.310 W/kg

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



Plot 105 LTE Band 40 1RB Front Side Middle (Distance 10mm)

Date: 2022/4/5

Communication System: UID 0, LTE (0); Frequency: 2350 MHz; Duty Cycle: 1:1.58

Medium parameters used: $f = 2350$ MHz; $\sigma = 1.734$ S/m; $\epsilon_r = 37.956$; $\rho = 1000$ kg/m³

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 – SN7543; ConvF(7.68, 7.68, 7.68); Calibrated: 2021/12/28

Electronics: DAE4 SN1291; Calibrated: 2022/3/24

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

Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.14 (7483)

Front Side Middle/Area Scan (9x17x1): Measurement grid: dx=12mm, dy=12mm

Maximum value of SAR (measured) = 1.44 W/kg

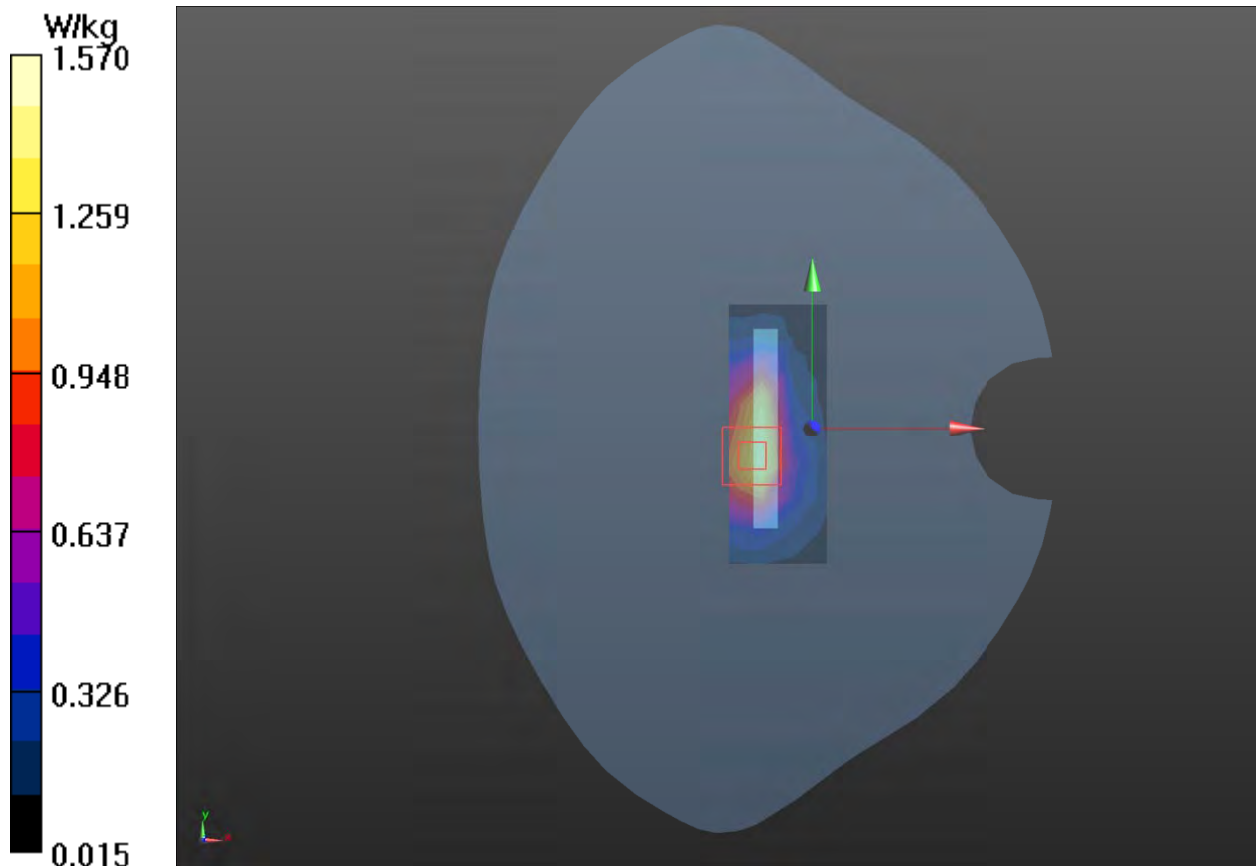
Front Side Middle/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 21.91 V/m; Power Drift = 0.047 dB

Peak SAR (extrapolated) = 1.92 W/kg

SAR(1 g) = 0.912 W/kg; SAR(10 g) = 0.465 W/kg

Maximum value of SAR (measured) = 1.57 W/kg



Plot 106 LTE Band 41 1RB Bottom Edge Low (Distance 10mm)

Date: 2022/4/8

Communication System: UID 0, LTE (0); Frequency: 2506 MHz; Duty Cycle: 1:1.58

Medium parameters used: $f = 2506$ MHz; $\sigma = 1.905$ S/m; $\epsilon_r = 37.414$; $\rho = 1000$ kg/m³

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 – SN7543; ConvF(7.24, 7.24, 7.24); Calibrated: 2021/12/28

Electronics: DAE4 SN1291; Calibrated: 2022/3/24

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

Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.14 (7483)

Bottom Edge Low/Area Scan (4x9x1): Measurement grid: dx=12mm, dy=12mm

Maximum value of SAR (measured) = 1.20 W/kg

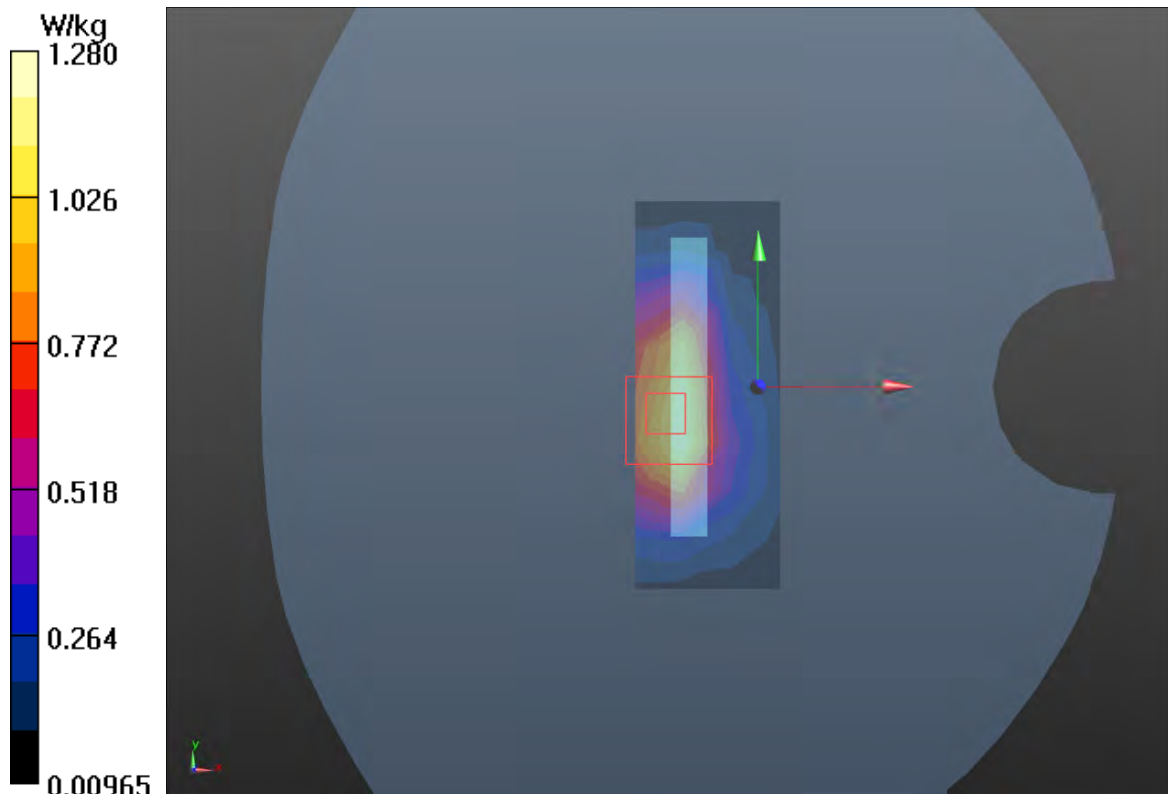
Bottom Edge Low/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 19.38 V/m; Power Drift = 0.035 dB

Peak SAR (extrapolated) = 1.59 W/kg

SAR(1 g) = 0.812 W/kg; SAR(10 g) = 0.409 W/kg

Maximum value of SAR (measured) = 1.280 W/kg



Plot 107 LTE Band 66 1RB Left Edge Low (Distance 10mm)

Date: 2022/4/20

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

Medium parameters used: $f = 1720$ MHz; $\sigma = 1.303$ S/m; $\epsilon_r = 39.467$; $\rho = 1000$ kg/m³

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 – SN7543; ConvF(8.42, 8.42, 8.42); Calibrated: 2021/12/28

Electronics: DAE4 SN1291; Calibrated: 2022/3/24

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

Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.14 (7483)

Left Edge Low/Area Scan (4x15x1): Measurement grid: dx=15mm, dy=15mm

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

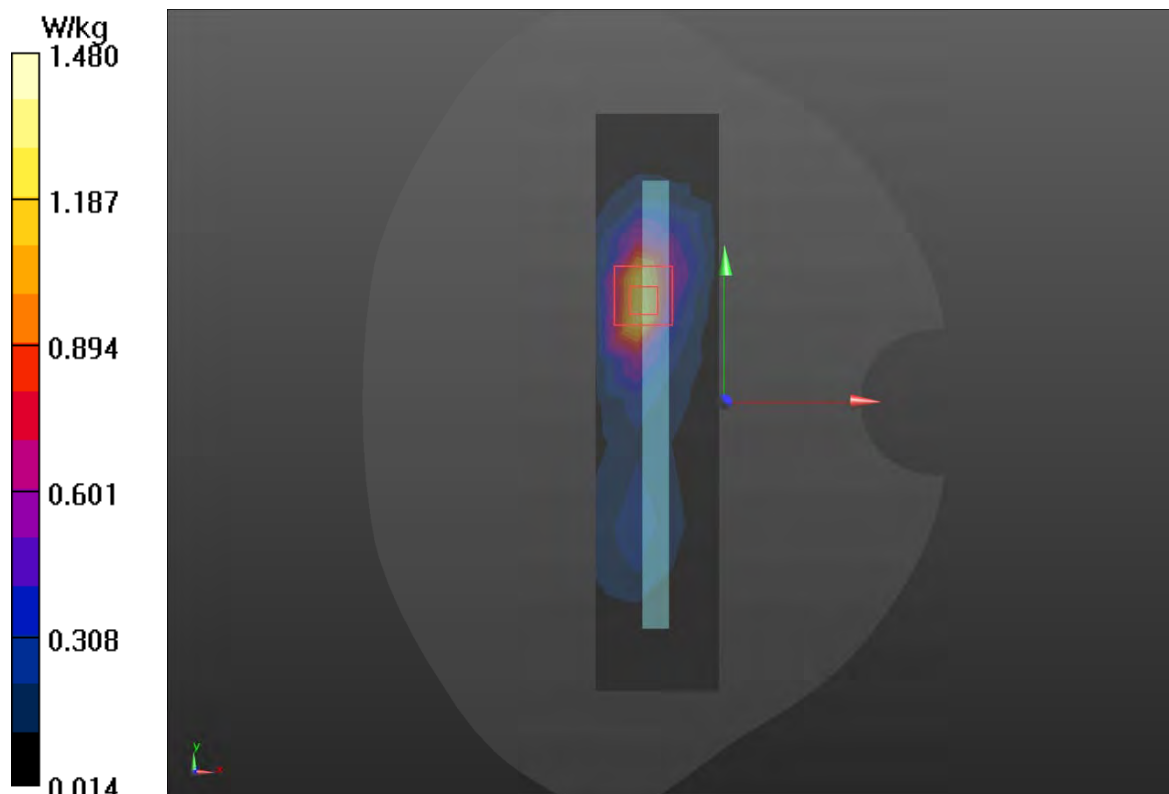
Left Edge Low/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 13.76 V/m; Power Drift = 0.160 dB

Peak SAR (extrapolated) = 2.42 W/kg

SAR(1 g) = 0.527 W/kg; SAR(10 g) = 0.264 W/kg

Maximum value of SAR (measured) = 1.480 W/kg



Plot 108 NR Band 2 1RB Bottom Edge Middle (Distance 10mm)

Date: 2022/4/12

Communication System: UID 0, 5G NR (0); Frequency: 1880 MHz; Duty Cycle: 1:1

Medium parameters used: $f = 1880$ MHz; $\sigma = 1.42$ S/m; $\epsilon_r = 38.948$; $\rho = 1000$ kg/m³

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 – SN7543; ConvF(8.20, 8.20, 8.20); Calibrated: 2021/12/28

Electronics: DAE4 SN1291; Calibrated: 2022/3/24

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

Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.14 (7483)

Bottom Edge Middle/Area Scan (4x8x1): Measurement grid: dx=15mm, dy=15mm

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

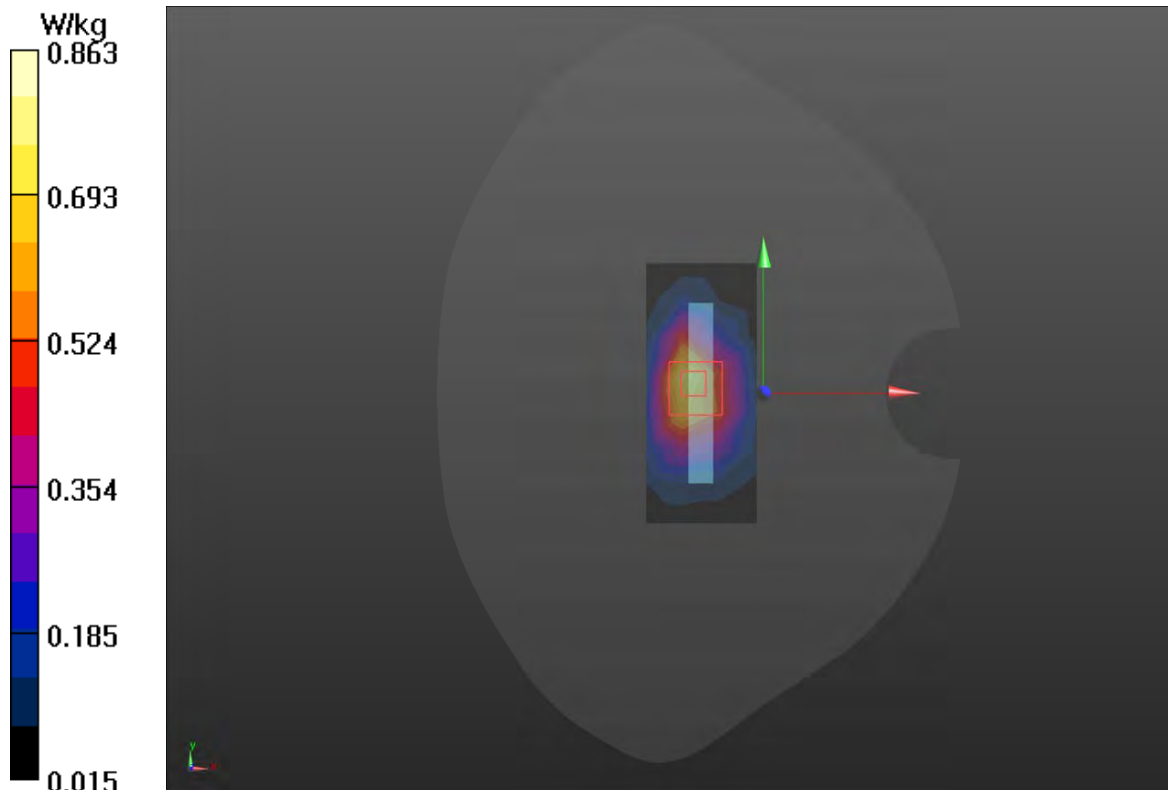
Bottom Edge Middle/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 24.44 V/m; Power Drift = -0.130 dB

Peak SAR (extrapolated) = 1.37 W/kg

SAR(1 g) = 0.767 W/kg; SAR(10 g) = 0.415 W/kg

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



Plot 109 NR Band 5 1RB Back Side Low (Distance 10mm)

Date: 2022/3/25

Communication System: UID 0, 5G NR (0); Frequency: 834 MHz; Duty Cycle: 1:1

Medium parameters used: $f = 834 \text{ MHz}$; $\sigma = 0.953 \text{ S/m}$; $\epsilon_r = 39.907$; $\rho = 1000 \text{ kg/m}^3$ Ambient Temperature: $22.3 \text{ }^\circ\text{C}$ Liquid Temperature: $21.5 \text{ }^\circ\text{C}$

Phantom section: Flat Section

DASY5 Configuration:

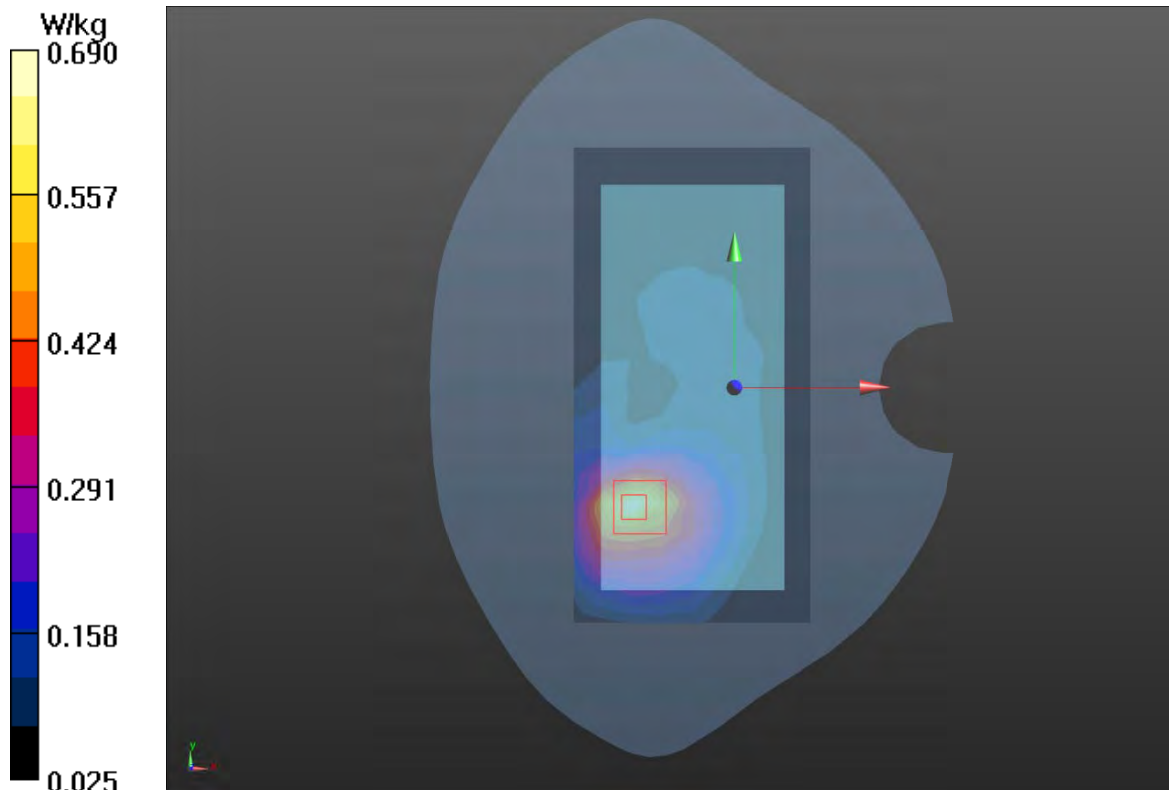
Sensor-Surface: 1.4mm (Mechanical Surface Detection)

Probe: EX3DV4 – SN7543; ConvF(9.89, 9.89, 9.89); Calibrated: 2021/12/28

Electronics: DAE4 SN1291; Calibrated: 2022/3/24

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

Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.14 (7483)

Back Side Low/Area Scan (8x14x1): Measurement grid: $dx=15\text{mm}$, $dy=15\text{mm}$ Maximum value of SAR (measured) = 0.682 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 = 8.427 V/m ; Power Drift = -0.090 dB Peak SAR (extrapolated) = 0.834 W/kg **SAR(1 g) = 0.476 W/kg ; SAR(10 g) = 0.281 W/kg** Maximum value of SAR (measured) = 0.690 W/kg 

Plot 110 NR Band 7 1RB Bottom Edge High (Distance 10mm)

Date: 2022/4/11

Communication System: UID 0, 5G NR (0); Frequency: 2560 MHz; Duty Cycle: 1:1

Medium parameters used: $f = 2560$ MHz; $\sigma = 1.971$ S/m; $\epsilon_r = 37.231$; $\rho = 1000$ kg/m³

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 – SN7543; ConvF(7.24, 7.24, 7.24); Calibrated: 2021/12/28

Electronics: DAE4 SN1291; Calibrated: 2022/3/24

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

Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.14 (7483)

Bottom Edge High/Area Scan (5x10x1): Measurement grid: dx=12mm, dy=12mm

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

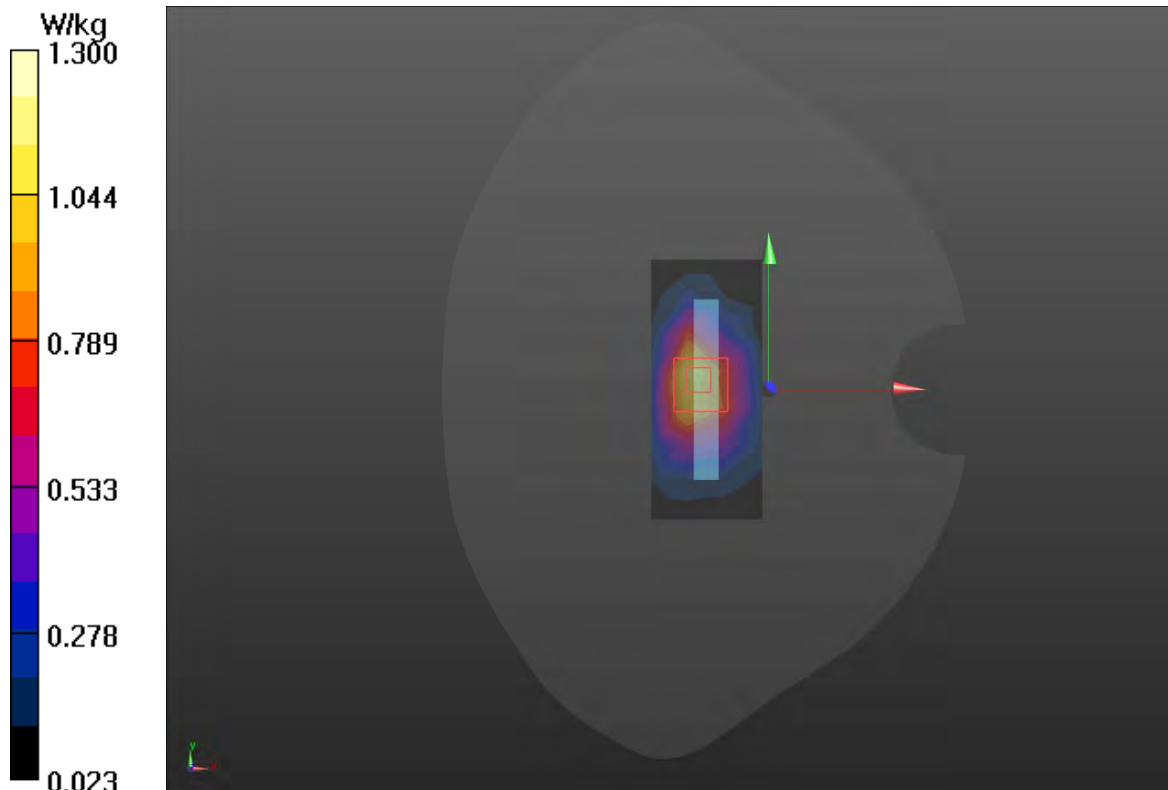
Bottom Edge High/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 25.40 V/m; Power Drift = 0.032 dB

Peak SAR (extrapolated) = 2.07 W/kg

SAR(1 g) = 0.879 W/kg; SAR(10 g) = 0.442 W/kg

Maximum value of SAR (measured) = 1.30 W/kg



Plot 111 NR Band 38 1RB Left Edge Middle (Distance 10mm)

Date: 2022/5/13

Communication System: UID 0, 5G NR (0); Frequency: 2595 MHz; Duty Cycle: 1:4

Medium parameters used: $f = 2595$ MHz; $\sigma = 2.011$ S/m; $\epsilon_r = 37.134$; $\rho = 1000$ kg/m³

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 – SN7543; ConvF(7.24, 7.24, 7.24); Calibrated: 2021/12/28

Electronics: DAE4 SN1291; Calibrated: 2022/3/24

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

Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.14 (7483)

Left Edge Middle/Area Scan (6x17x1): Measurement grid: dx=12mm, dy=12mm

Maximum value of SAR (measured) = 1.01 W/kg

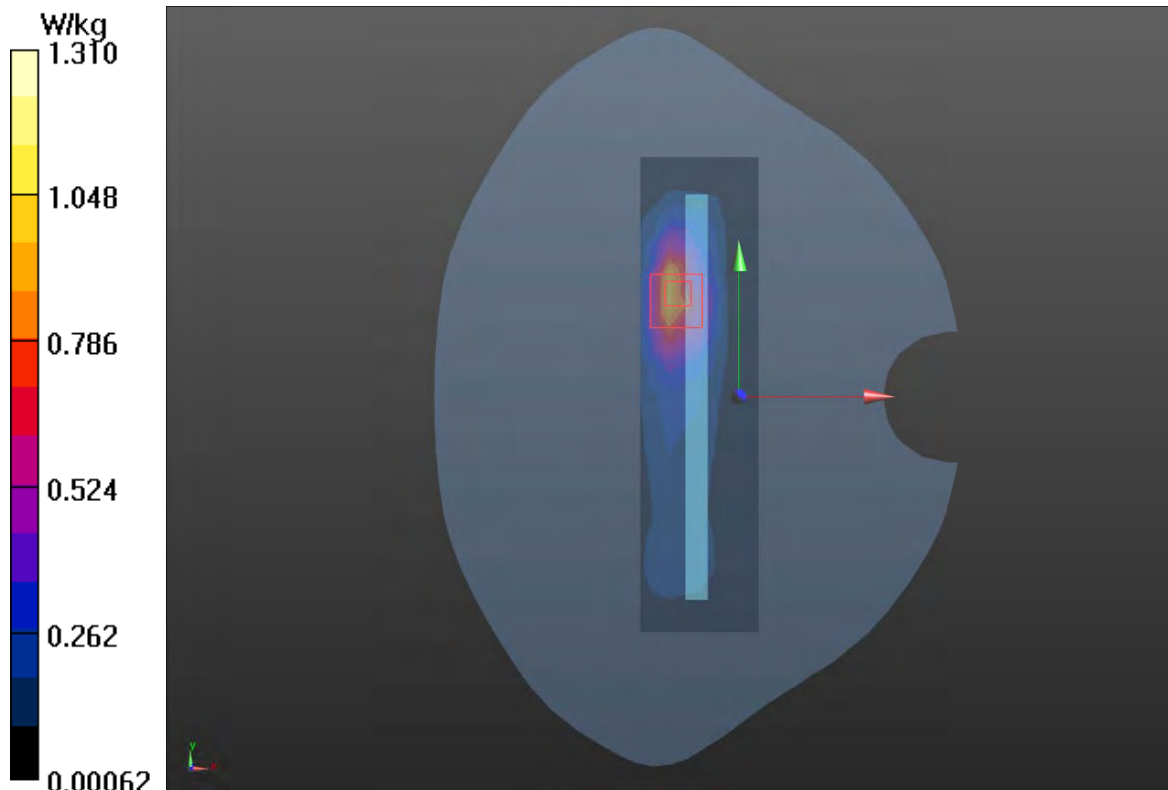
Left Edge Middle/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 8.273 V/m; Power Drift = 0.015 dB

Peak SAR (extrapolated) = 1.75 W/kg

SAR(1 g) = 0.602 W/kg; SAR(10 g) = 0.272 W/kg

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



Plot 112 NR Band 41 50%RB Left Edge High (Distance 10mm)

Date: 2022/4/21

Communication System: UID 0, 5G NR (0); Frequency: 2640 MHz; Duty Cycle: 1:4

Medium parameters used: $f = 2640$ MHz; $\sigma = 2.058$ S/m; $\epsilon_r = 36.937$; $\rho = 1000$ kg/m³

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 – SN7543; ConvF(7.24, 7.24, 7.24); Calibrated: 2021/12/28

Electronics: DAE4 SN1291; Calibrated: 2022/3/24

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

Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.14 (7483)

Left Edge High/Area Scan (5x17x1): Measurement grid: dx=12mm, dy=12mm

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

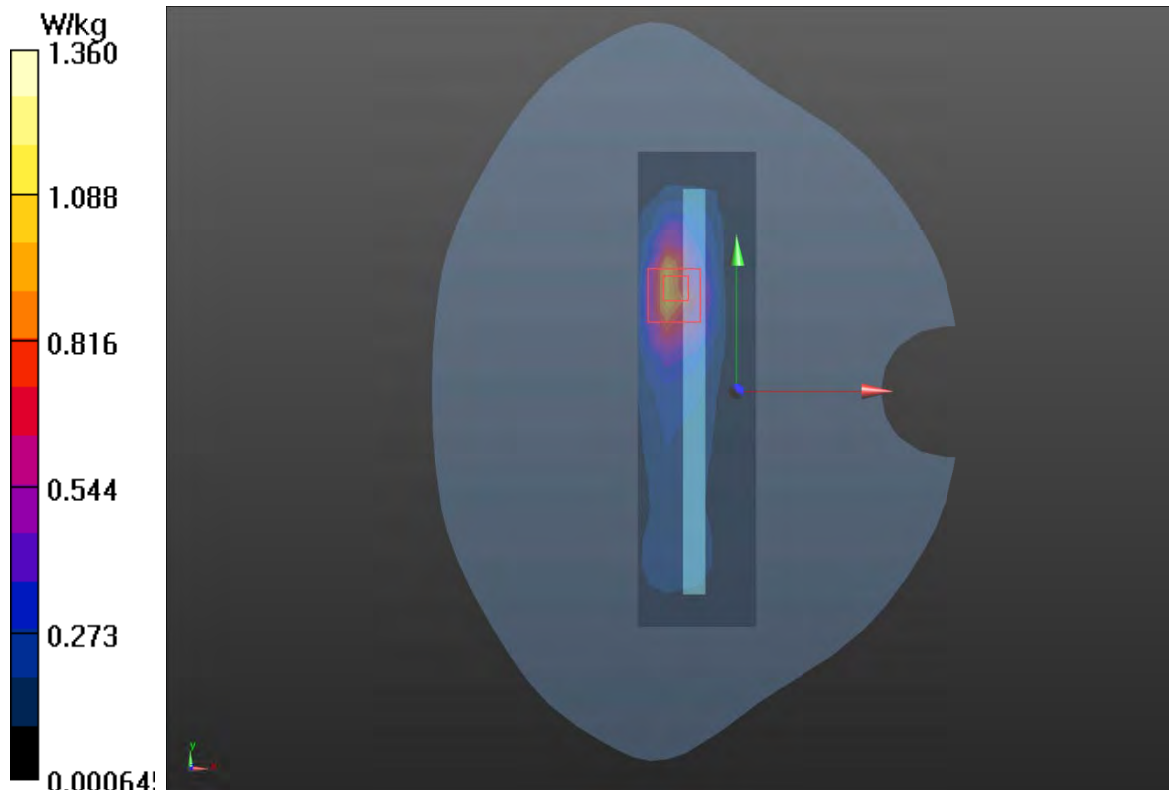
Left Edge High/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 8.335 V/m; Power Drift = 0.41 dB

Peak SAR (extrapolated) = 1.82 W/kg

SAR(1 g) = 0.733 W/kg; SAR(10 g) = 0.311 W/kg

Maximum value of SAR (measured) = 1.36 W/kg



Plot 113 NR Band 66 1RB Left Edge Low (Distance 10mm)

Date: 2022/4/20

Communication System: UID 0, 5G NR (0); Frequency: 1720 MHz; Duty Cycle: 1:1

Medium parameters used: $f = 1720$ MHz; $\sigma = 1.303$ S/m; $\epsilon_r = 39.467$; $\rho = 1000$ kg/m³

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 – SN7543; ConvF(8.42, 8.42, 8.42); Calibrated: 2021/12/28

Electronics: DAE4 SN1291; Calibrated: 2022/3/24

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

Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.14 (7483)

Left Edge Low/Area Scan (4x14x1): Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (measured) = 0.564 W/kg

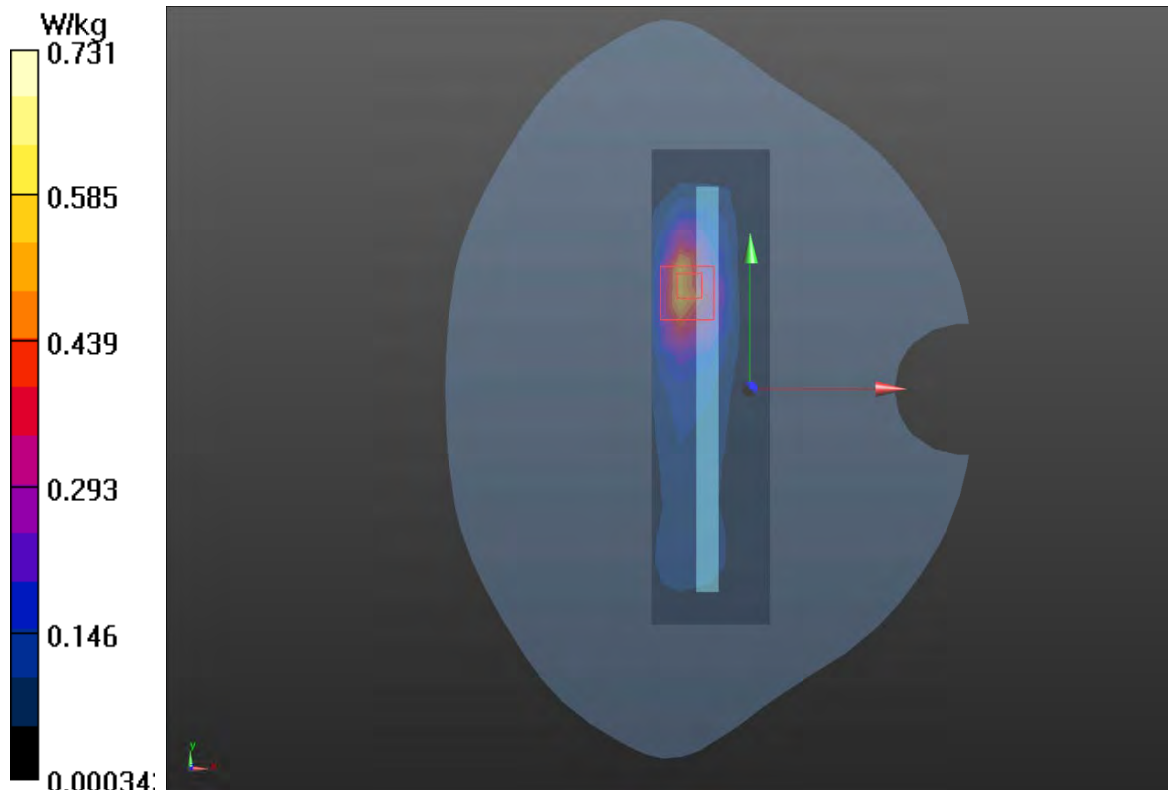
Left Edge Low/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 7.630 V/m; Power Drift = 0.010 dB

Peak SAR (extrapolated) = 0.989 W/kg

SAR(1 g) = 0.381 W/kg; SAR(10 g) = 0.200 W/kg

Maximum value of SAR (measured) = 0.731 W/kg



Plot 114 NR Band 77 50%RB Left Edge Middle (Distance 10mm)

Date: 2022/4/9

Communication System: UID 0, 5G NR (0); Frequency: 3750 MHz; Duty Cycle: 1:4

Medium parameters used (interpolated): $f = 3750$ MHz; $\sigma = 3.088$ S/m; $\epsilon_r = 37.562$; $\rho = 1000$ kg/m³

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 – SN7543; ConvF(6.51, 6.51, 6.51); Calibrated: 2021/12/28

Electronics: DAE4 SN1291; Calibrated: 2022/3/24

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

Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.14 (7483)

Left Edge Middle/Area Scan (6x21x1): Measurement grid: dx=10mm, dy=10mm

Maximum value of SAR (measured) = 0.255 W/kg

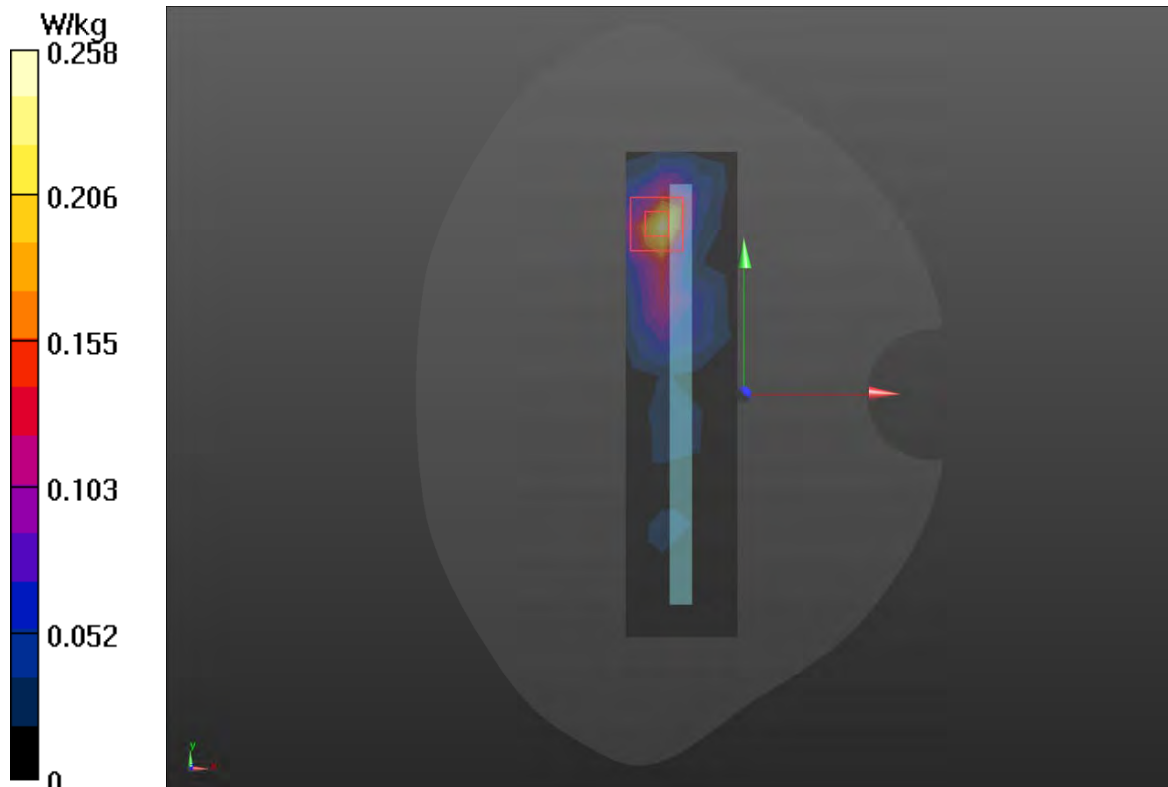
Left Edge Middle/Zoom Scan (7x7x12)/Cube 0: Measurement grid: dx=4mm, dy=4mm, dz=2mm

Reference Value = 2.392 V/m; Power Drift = -0.050 dB

Peak SAR (extrapolated) = 0.348 W/kg

SAR(1 g) = 0.182 W/kg; SAR(10 g) = 0.075 W/kg

Maximum value of SAR (measured) = 0.258 W/kg



Plot 115 NR Band 78 1RB Top Edge Low (Distance 10mm)

Date: 2022/4/6

Communication System: UID 0, 5G NR (0); Frequency: 3500 MHz; Duty Cycle: 1:4

Medium parameters used (interpolated): $f = 3500$ MHz; $\sigma = 3.088$ S/m; $\epsilon_r = 37.562$; $\rho = 1000$ kg/m³

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 – SN7543; ConvF(6.79, 6.79, 6.79); Calibrated: 2021/12/28

Electronics: DAE4 SN1291; Calibrated: 2022/3/24

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

Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.14 (7483)

Top Edge Low/Area Scan (6x21x1): Measurement grid: dx=10mm, dy=10mm

Maximum value of SAR (measured) = 0.206 W/kg

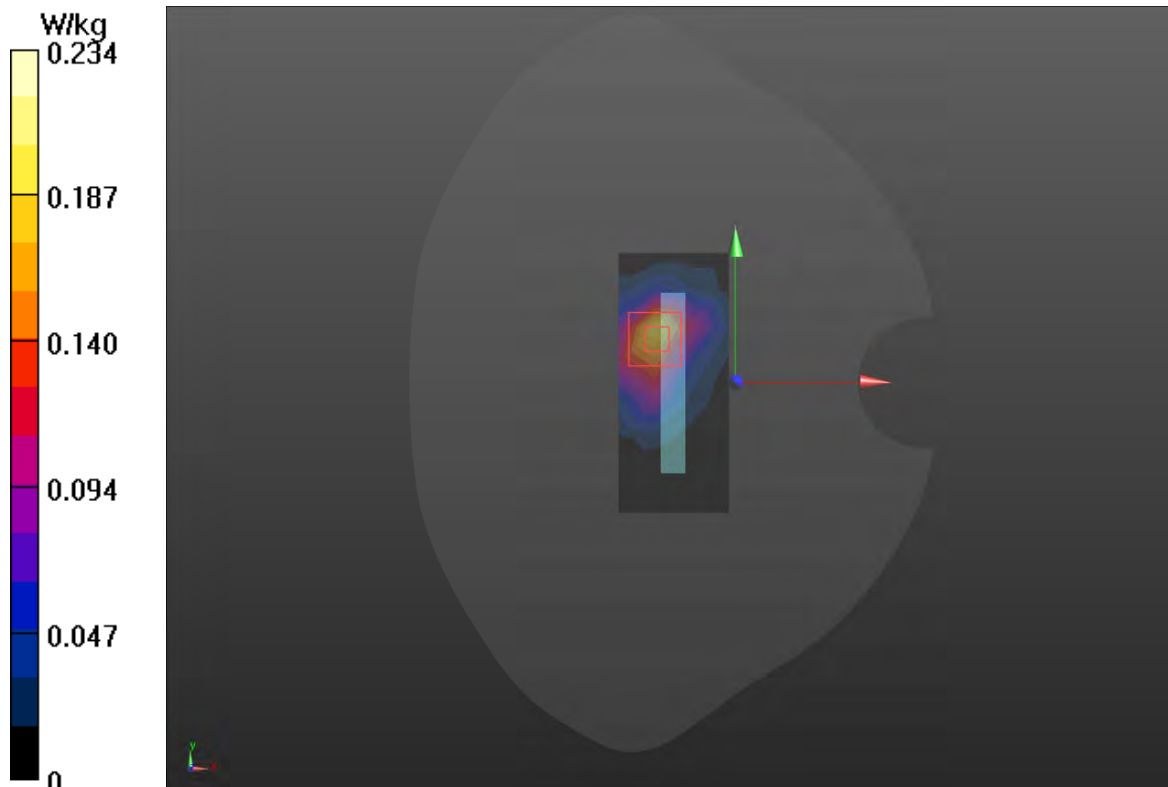
Top Edge Low/Zoom Scan (7x7x12)/Cube 0: Measurement grid: dx=4mm, dy=4mm, dz=2mm

Reference Value = 4.606 V/m; Power Drift = 0.028 dB

Peak SAR (extrapolated) = 0.421 W/kg

SAR(1 g) = 0.194 W/kg; SAR(10 g) = 0.078 W/kg

Maximum value of SAR (measured) = 0.234 W/kg



Plot 116 802.11b Front Side Low (Distance 10mm)

Date: 2022/5/7

Communication System: UID 0, 802.11b (0); Frequency: 2412 MHz; Duty Cycle: 1:1

Medium parameters used: $f = 2412$ MHz; $\sigma = 1.801$ S/m; $\epsilon_r = 37.737$; $\rho = 1000$ kg/m³

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 – SN7543; ConvF(7.49, 7.49, 7.49); Calibrated: 2021/12/28

Electronics: DAE4 SN1291; Calibrated: 2022/3/24

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

Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.14 (7483)

Front Side Low/Area Scan (9x17x1): Measurement grid: dx=12mm, dy=12mm

Maximum value of SAR (measured) = 0.251 W/kg

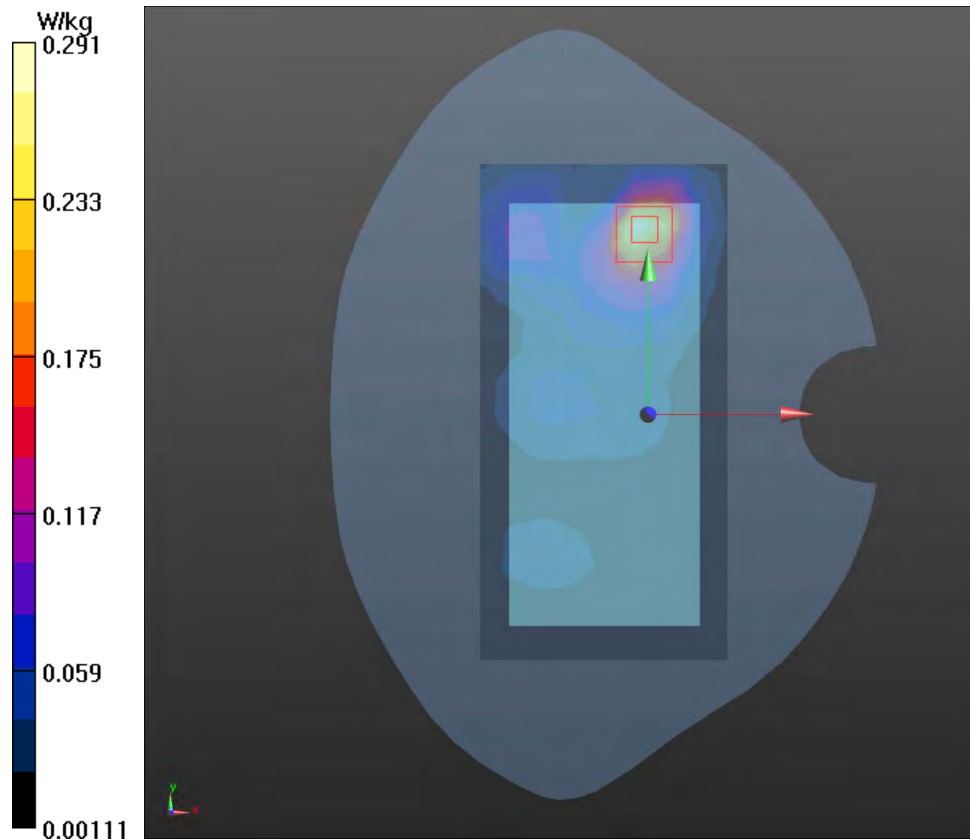
Front Side Low/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 4.085 V/m; Power Drift = 0.015 dB

Peak SAR (extrapolated) = 0.392 W/kg

SAR(1 g) = 0.247 W/kg; SAR(10 g) = 0.118 W/kg

Maximum value of SAR (measured) = 0.291 W/kg



Plot 117 802.11a U-NII-1 Top Edge Low (Distance 10mm)

Date: 2022/5/3

Communication System: UID 0, 802.11ax20 (0); Frequency: 5180 MHz; Duty Cycle: 1:1

Medium parameters used: $f = 5180$ MHz; $\sigma = 4.808$ S/m; $\epsilon_r = 36.877$; $\rho = 1000$ kg/m³

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 – SN7543; ConvF(5.44, 5.44, 5.44); Calibrated: 2021/12/28

Electronics: DAE4 SN1291; Calibrated: 2022/3/24

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

Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.14 (7483)

Top Edge Low /Area Scan (6x21x1): Measurement grid: dx=10mm, dy=10mm

Maximum value of SAR (measured) = 0.691 W/kg

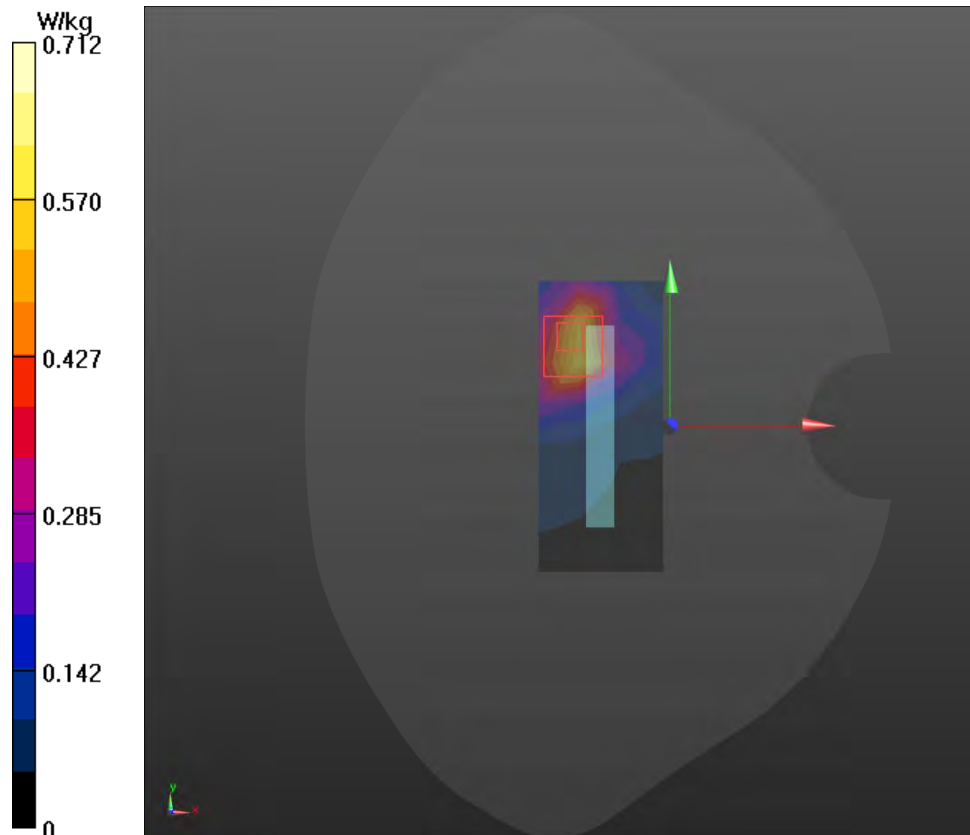
Top Edge Low /Zoom Scan (7x7x12)/Cube 0: Measurement grid: dx=4mm, dy=4mm, dz=2mm

Reference Value = 4.422 V/m; Power Drift = -0.039 dB

Peak SAR (extrapolated) = 1.03 W/kg

SAR(1 g) = 0.692W/kg; SAR(10 g) = 0.278 W/kg

Maximum value of SAR (measured) = 0.712 W/kg



Plot 118 Bluetooth Top Edge High (Distance 10mm)

Date: 2022/5/7

Communication System: UID 0, BT (0); Frequency: 2480 MHz; Duty Cycle: 1:1.31

Medium parameters used: $f = 2480$ MHz; $\sigma = 1.878$ S/m; $\epsilon_r = 37.511$; $\rho = 1000$ kg/m³

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 – SN7543; ConvF(7.49, 7.49, 7.49); Calibrated: 2021/12/28

Electronics: DAE4 SN1291; Calibrated: 2022/3/24

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

Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.14 (7483)

Top Edge High/Area Scan (4x9x1): Measurement grid: dx=12mm, dy=12mm

Maximum value of SAR (measured) = 0.081 W/kg

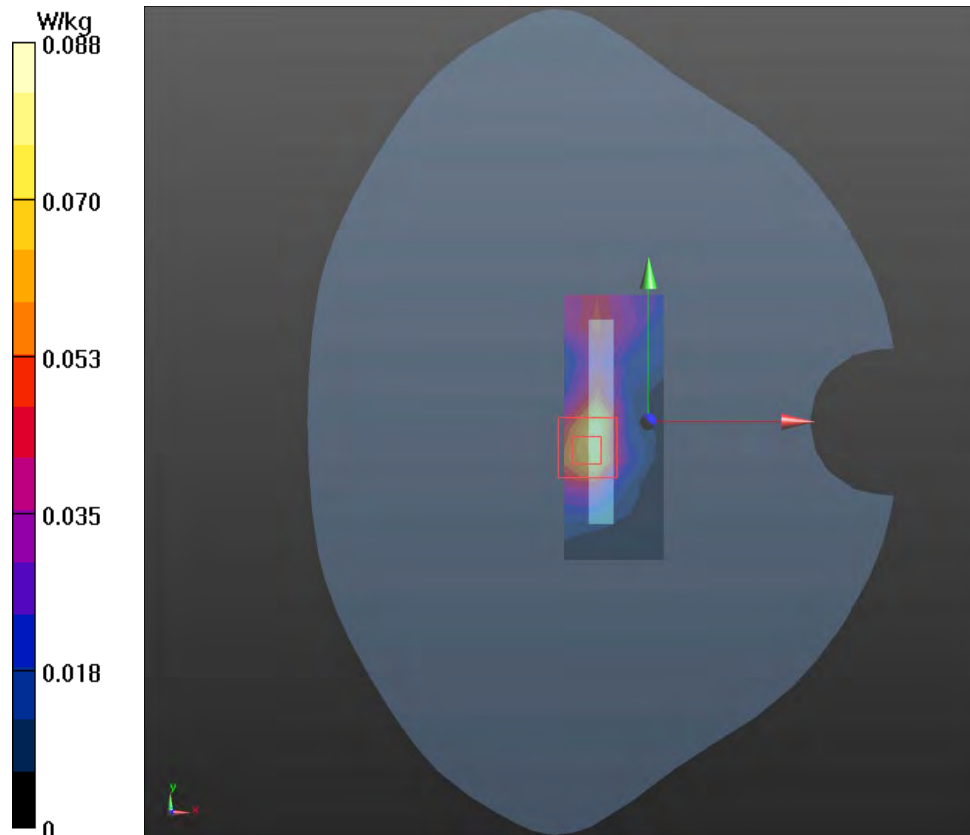
Top Edge High/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 2.616 V/m; Power Drift = 0.010 dB

Peak SAR (extrapolated) = 0.111 W/kg

SAR(1 g) = 0.075 W/kg; SAR(10 g) = 0.039 W/kg

Maximum value of SAR (measured) = 0.088 W/kg



Plot 119 UMTS Band II Bottom Edge Middle (Distance 0mm)

Date: 2022/4/1

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

Medium parameters used: $f = 1880$ MHz; $\sigma = 1.42$ S/m; $\epsilon_r = 38.948$; $\rho = 1000$ kg/m³

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 – SN7543; ConvF(8.20, 8.20, 8.20); Calibrated: 2021/12/28

Electronics: DAE4 SN1291; Calibrated: 2022/3/24

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

Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.14 (7483)

Bottom Edge Middle/Area Scan (4x8x1): Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (measured) = 8.06 W/kg

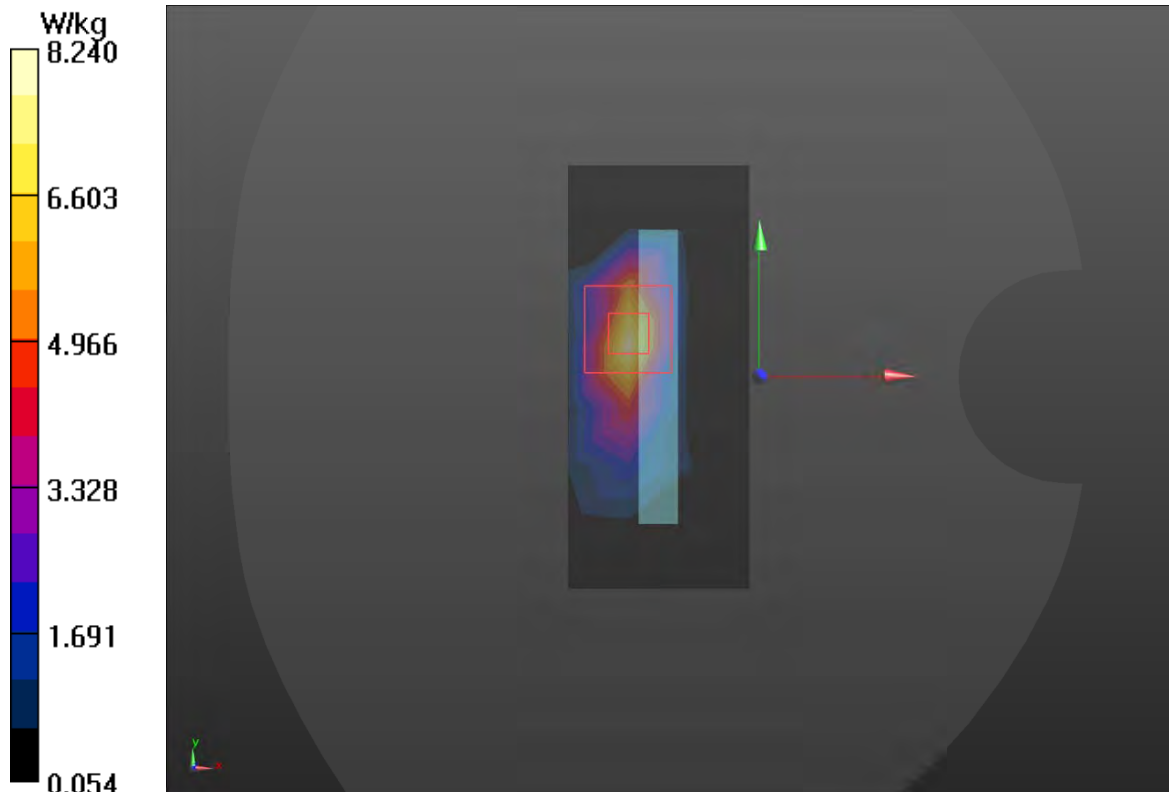
Bottom Edge Middle/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 42.67 V/m; Power Drift = -0.029 dB

Peak SAR (extrapolated) = 17.6 W/kg

SAR(1 g) = 6.53 W/kg; SAR(10 g) = 2.53 W/kg

Maximum value of SAR (measured) = 8.240 W/kg



Plot 120 UMTS Band IV Bottom Edge Middle (Distance 0mm)

Date: 2022/4/3

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

Medium parameters used: $f = 1732.6$ MHz; $\sigma = 1.312$ S/m; $\epsilon_r = 39.365$; $\rho = 1000$ kg/m³

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 – SN7543; ConvF(8.42, 8.42, 8.42); Calibrated: 2021/12/28

Electronics: DAE4 SN1291; Calibrated: 2022/3/24

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

Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.14 (7483)

Bottom Edge Middle/Area Scan (4x8x1): Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (measured) = 7.09 W/kg

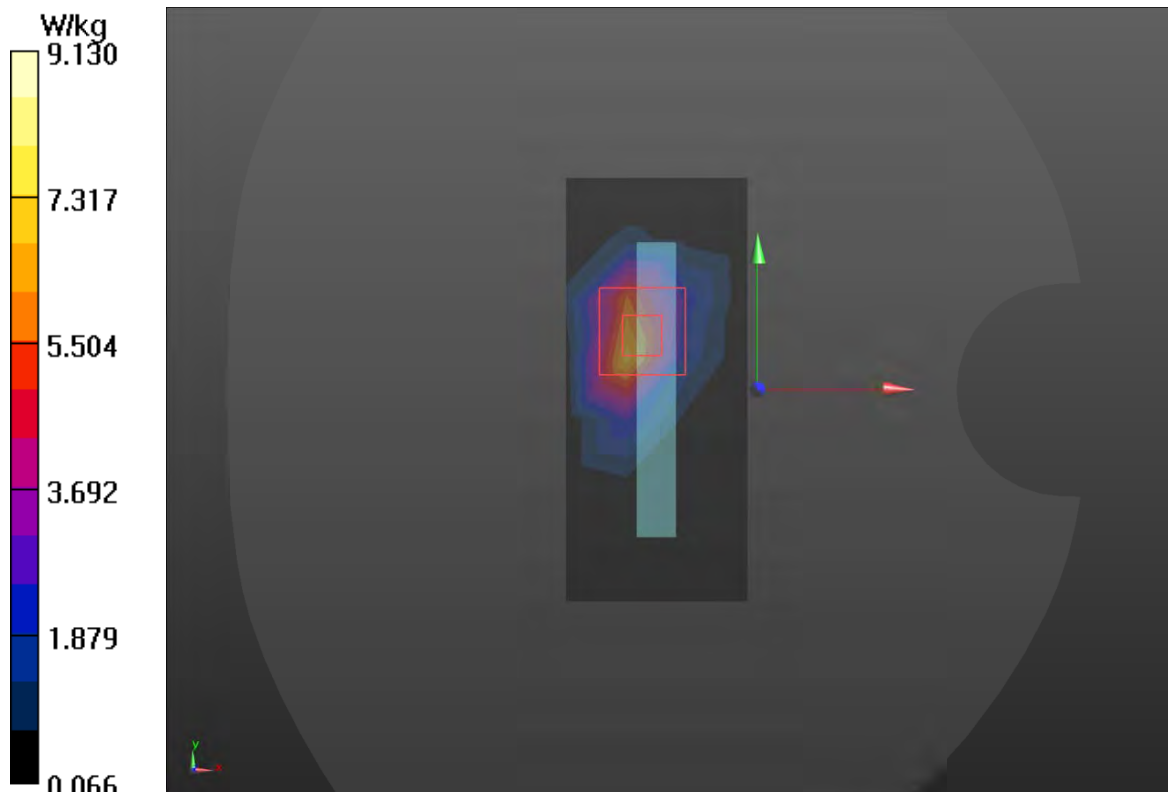
Bottom Edge Middle/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 53.63 V/m; Power Drift = 0.025 dB

Peak SAR (extrapolated) = 19.0 W/kg

SAR(1 g) = 7.55 W/kg; SAR(10 g) = 3.08 W/kg

Maximum value of SAR (measured) = 9.130 W/kg



Plot 121 LTE Band 2 1RB Bottom Edge Middle (Distance 0mm)

Date: 2022/3/20

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

Medium parameters used: $f = 1880$ MHz; $\sigma = 1.42$ S/m; $\epsilon_r = 38.948$; $\rho = 1000$ kg/m³

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 – SN7543; ConvF(8.20, 8.20, 8.20); Calibrated: 2021/12/28

Electronics: DAE4 SN1291; Calibrated: 2022/3/24

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

Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.14 (7483)

Bottom Edge Middle/Area Scan (4x8x1): Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (measured) = 6.90 W/kg

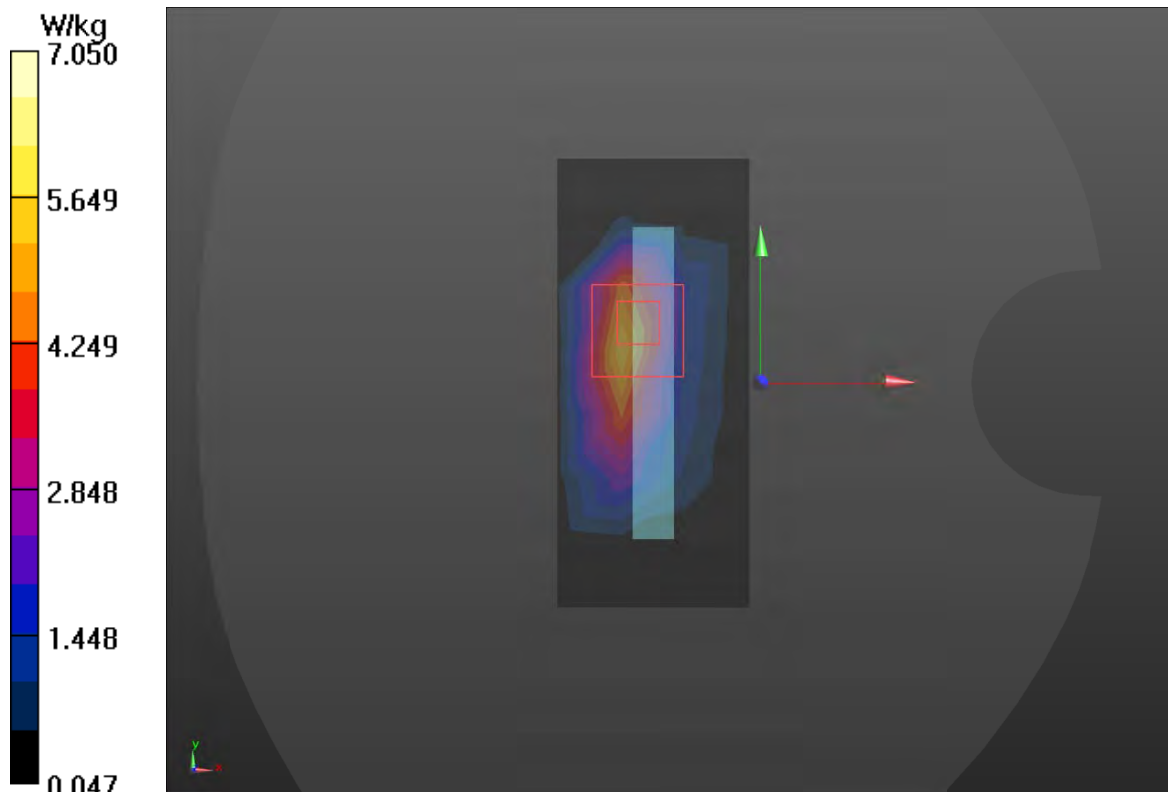
Bottom Edge Middle/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 54.40 V/m; Power Drift = 0.130 dB

Peak SAR (extrapolated) = 14.5 W/kg

SAR(1 g) = 5.91 W/kg; SAR(10 g) = 2.47 W/kg

Maximum value of SAR (measured) = 7.050 W/kg



Plot 122 LTE Band 4 1RB Bottom Edge High (Distance 0mm)

Date: 2022/4/15

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

Medium parameters used: $f = 1745$ MHz; $\sigma = 1.323$ S/m; $\epsilon_r = 39.378$; $\rho = 1000$ kg/m³

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 – SN7543; ConvF(8.42, 8.42, 8.42); Calibrated: 2021/12/28

Electronics: DAE4 SN1291; Calibrated: 2022/3/24

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

Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.14 (7483)

Bottom Edge High/Area Scan (4x8x1): Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (measured) = 7.80 W/kg

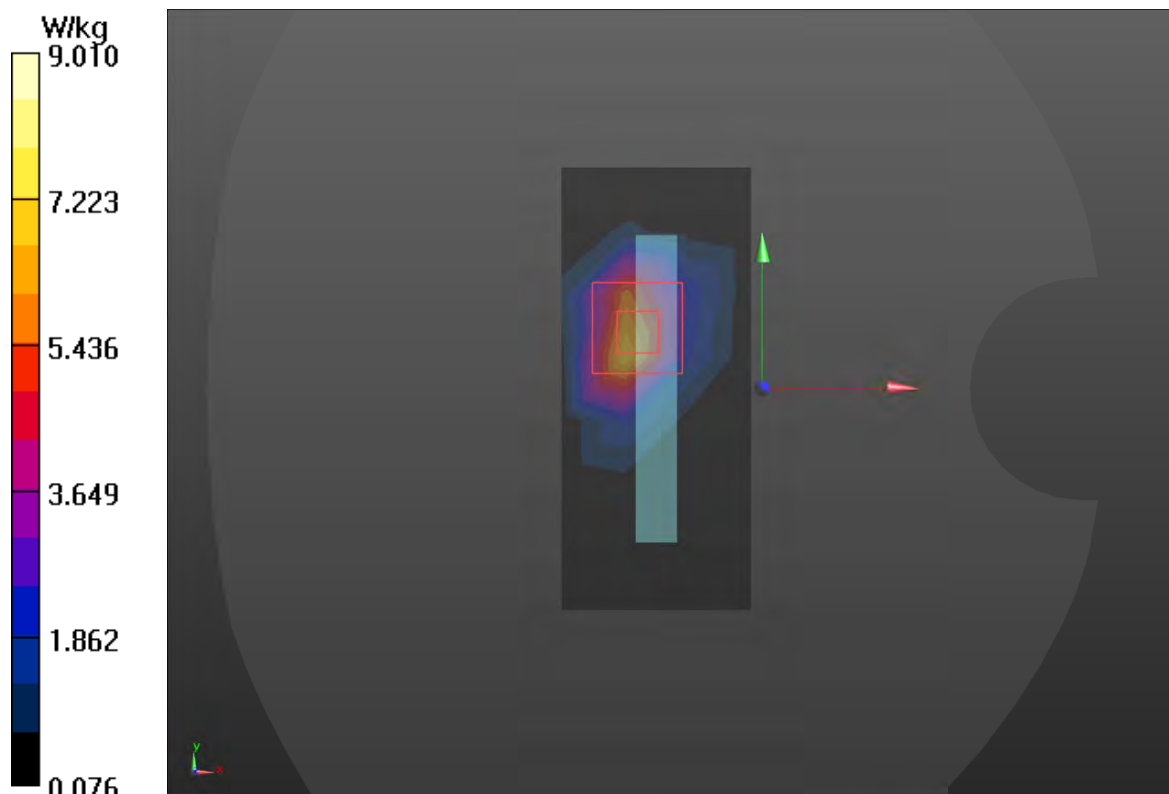
Bottom Edge High/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 51.24 V/m; Power Drift = 0.190 dB

Peak SAR (extrapolated) = 17.4 W/kg

SAR(1 g) = 7.57 W/kg; SAR(10 g) = 3.23 W/kg

Maximum value of SAR (measured) = 9.010 W/kg



Plot 123 LTE Band 7 1RB Bottom Edge High (Distance 0mm)

Date: 2022/3/31

Communication System: UID 0, LTE (0); Frequency: 2560 MHz; Duty Cycle: 1:1

Medium parameters used: $f = 2560$ MHz; $\sigma = 1.971$ S/m; $\epsilon_r = 37.231$; $\rho = 1000$ kg/m³

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 – SN7543; ConvF(7.24, 7.24, 7.24); Calibrated: 2021/12/28

Electronics: DAE4 SN1291; Calibrated: 2022/3/24

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

Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.14 (7483)

Bottom Edge High/Area Scan (4x9x1): Measurement grid: dx=12mm, dy=12mm

Maximum value of SAR (measured) = 16.2 W/kg

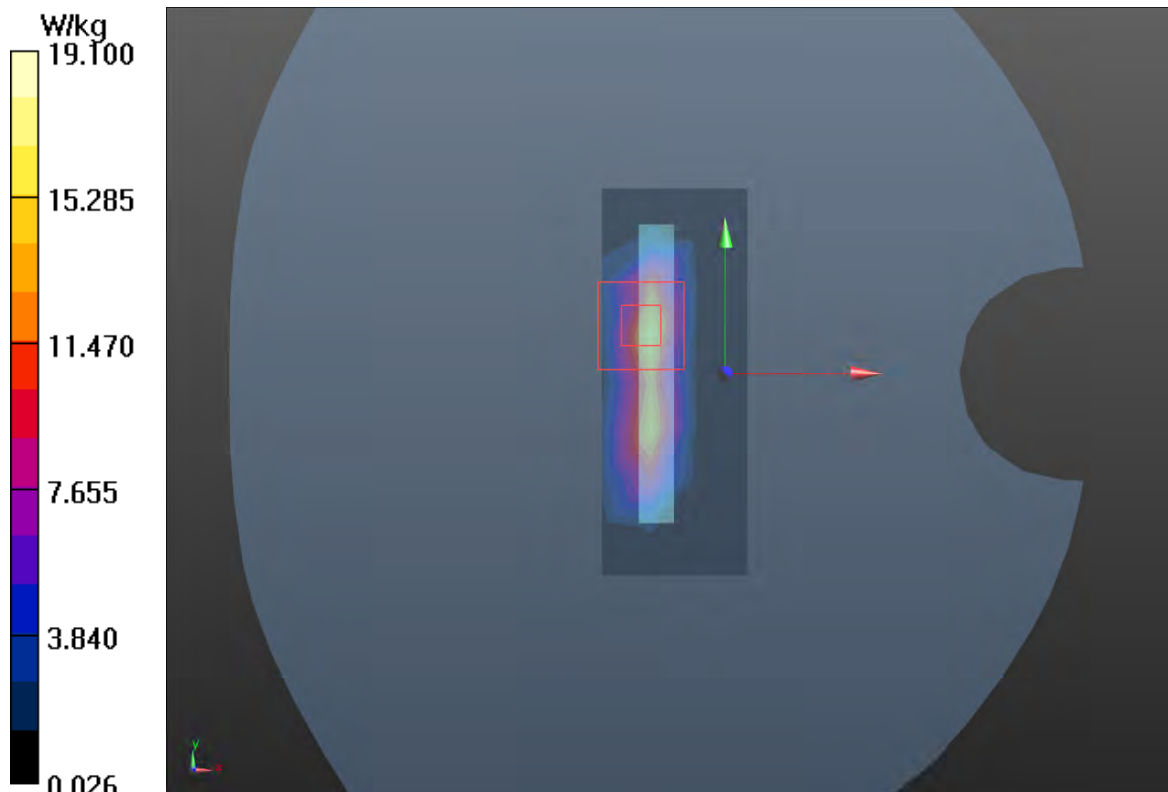
Bottom Edge High/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 54.80 V/m; Power Drift = 0.011 dB

Peak SAR (extrapolated) = 28.6 W/kg

SAR(1 g) = 8.32 W/kg; SAR(10 g) = 2.89 W/kg

Maximum value of SAR (measured) = 19.100 W/kg



Plot 124 LTE Band 66 1RB Left Edge Middle (Distance 0mm)

Date: 2022/4/15

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

Medium parameters used: $f = 1745 \text{ MHz}$; $\sigma = 1.323 \text{ S/m}$; $\epsilon_r = 39.378$; $\rho = 1000 \text{ kg/m}^3$

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 – SN7543; ConvF(8.42, 8.42, 8.42); Calibrated: 2021/12/28

Electronics: DAE4 SN1291; Calibrated: 2022/3/24

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

Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.14 (7483)

Left Edge Middle/Area Scan (4x15x1): Measurement grid: $dx=15\text{mm}$, $dy=15\text{mm}$

Maximum value of SAR (measured) = 7.00 W/kg

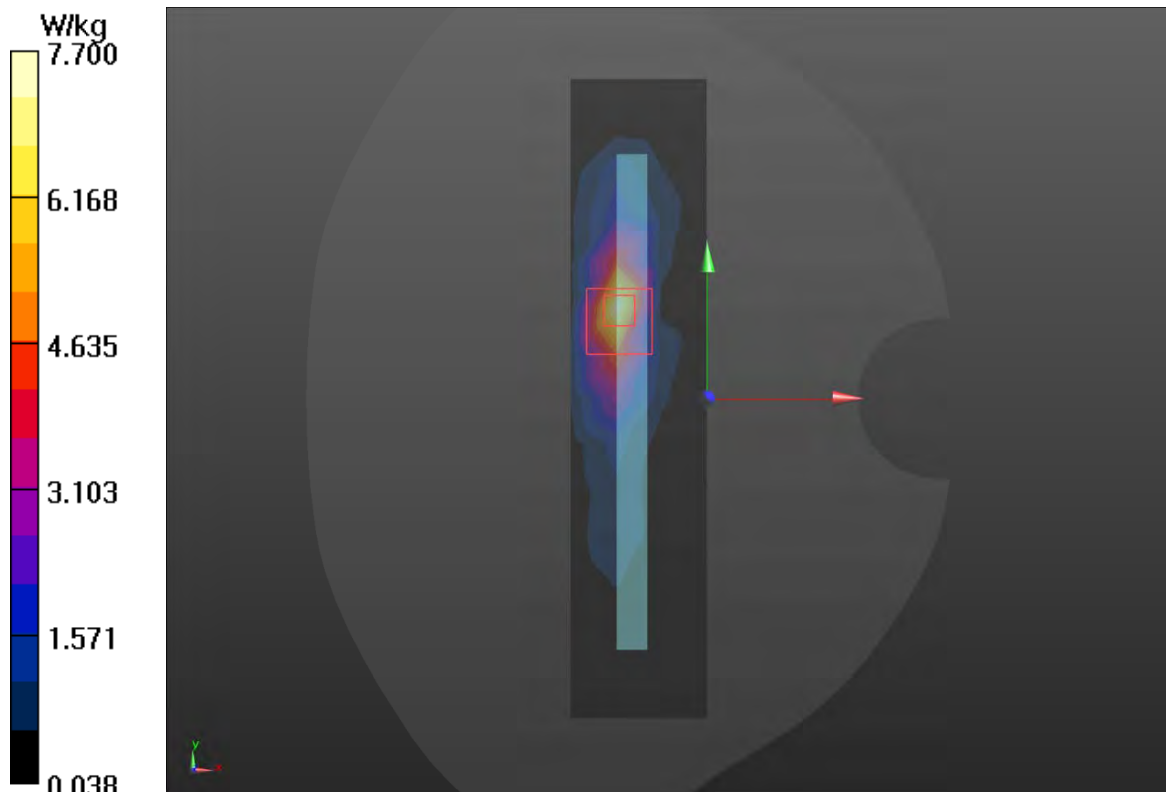
Left Edge Middle/Zoom Scan (5x5x7)/Cube 0: Measurement grid: $dx=8\text{mm}$, $dy=8\text{mm}$, $dz=5\text{mm}$

Reference Value = 41.35 V/m ; Power Drift = 0.050 dB

Peak SAR (extrapolated) = 16.1 W/kg

SAR(1 g) = 5.62 W/kg ; SAR(10 g) = 2.15 W/kg

Maximum value of SAR (measured) = 7.700 W/kg





ANNEX D: Probe Calibration Certificate (SN: 7543)



In Collaboration with
s p e a g
CALIBRATION LABORATORY

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中国认可
国际互认
校准
CALIBRATION
CNAS L0570

Client **TA(Shanghai)**Certificate No: **Z21-60417****CALIBRATION CERTIFICATE**Object **EX3DV4 - SN : 7543**

Calibration Procedure(s) **FF-Z11-004-02**
Calibration Procedures for Dosimetric E-field Probes

Calibration date: **December 28, 2021**

This calibration Certificate documents the traceability to national standards, which realize the physical units of measurements(SI). The measurements and the uncertainties with confidence probability are given on the following pages and are part of the certificate.

All calibrations have been conducted in the closed laboratory facility: environment temperature(22±3)°C and humidity<70%.

Calibration Equipment used (M&TE critical for calibration)

Primary Standards	ID #	Cal Date(Calibrated by, Certificate No.)	Scheduled Calibration
Power Meter NRP2	101919	15-Jun-21(CTTL, No.J21X04466)	Jun-22
Power sensor NRP-Z91	101547	15-Jun-21(CTTL, No.J21X04466)	Jun-22
Power sensor NRP-Z91	101548	15-Jun-21(CTTL, No.J21X04466)	Jun-22
Reference 10dBAttenuator	18N50W-10dB	10-Feb-20(CTTL, No.J20X00525)	Feb-22
Reference 20dBAttenuator	18N50W-20dB	10-Feb-20(CTTL, No.J20X00526)	Feb-22
Reference Probe EX3DV4	SN 3617	27-Jan-21(SPEAG, No.EX3-3617_Jan21)	Jan-22
DAE4	SN 1555	20-Aug-21(SPEAG, No.DAE4-1555_Aug21/2)	Aug-22
Secondary Standards	ID #	Cal Date(Calibrated by, Certificate No.)	Scheduled Calibration
SignalGenerator MG3700A	6201052605	16-Jun-21(CTTL, No.J21X04467)	Jun-22
Network Analyzer E5071C	MY46110673	21-Jan-21(CTTL, No.J20X00515)	Jan-22

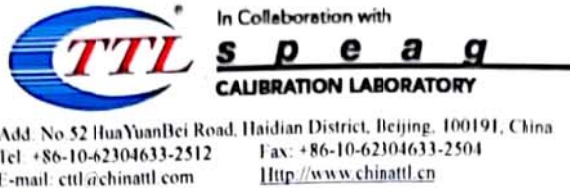
	Name	Function	Signature
Calibrated by:	Yu Zongying	SAR Test Engineer	
Reviewed by:	Lin Hao	SAR Test Engineer	
Approved by:	Qi Dianyuan	SAR Project Leader	

This calibration certificate shall not be reproduced except in full without written approval of the laboratory.

Issued: December 30, 2021

Certificate No: Z21-60417

Page 1 of 9

**Glossary:**

TSL	tissue simulating liquid
NORM _{x,y,z}	sensitivity in free space
ConvF	sensitivity in TSL / NORM _{x,y,z}
DCP	diode compression point
CF	crest factor (1/duty_cycle) of the RF signal
A,B,C,D	modulation dependent linearization parameters
Polarization Φ	Φ rotation around probe axis
Polarization θ	θ rotation around an axis that is in the plane normal to probe axis (at measurement center), $\theta=0$ is normal to probe axis

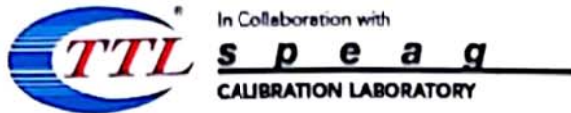
Connector Angle information used in DASY system to align probe sensor X to the robot coordinate system

Calibration is Performed According to the Following Standards:

- IEEE Std 1528-2013, "IEEE Recommended Practice for Determining the Peak Spatial-Averaged Specific Absorption Rate (SAR) in the Human Head from Wireless Communications Devices: Measurement Techniques", June 2013
- IEC 62209-1, "Measurement procedure for the assessment of Specific Absorption Rate (SAR) from hand-held and body-mounted devices used next to the ear (frequency range of 300 MHz to 6 GHz)", July 2016
- IEC 62209-2, "Procedure to determine the Specific Absorption Rate (SAR) for wireless communication devices used in close proximity to the human body (frequency range of 30 MHz to 6 GHz)", March 2010
- KDB 865664, "SAR Measurement Requirements for 100 MHz to 6 GHz"

Methods Applied and Interpretation of Parameters:

- NORM_{x,y,z}:** Assessed for E-field polarization $\theta=0$ ($f \leq 900$ MHz in TEM-cell; $f > 1800$ MHz: waveguide). NORM_{x,y,z} are only intermediate values, i.e., the uncertainties of NORM_{x,y,z} does not effect the E^2 -field uncertainty inside TSL (see below ConvF).
- NORM(f)_{x,y,z} = NORM_{x,y,z} * frequency_response** (see Frequency Response Chart). This linearization is implemented in DASY4 software versions later than 4.2. The uncertainty of the frequency response is included in the stated uncertainty of ConvF.
- DCP_{x,y,z}:** DCP are numerical linearization parameters assessed based on the data of power sweep (no uncertainty required). DCP does not depend on frequency nor media.
- PAR:** PAR is the Peak to Average Ratio that is not calibrated but determined based on the signal characteristics.
- A_{x,y,z}; B_{x,y,z}; C_{x,y,z}; VR_{x,y,z}:** A,B,C are numerical linearization parameters assessed based on the data of power sweep for specific modulation signal. The parameters do not depend on frequency nor media. VR is the maximum calibration range expressed in RMS voltage across the diode.
- ConvF and Boundary Effect Parameters:** Assessed in flat phantom using E-field (or Temperature Transfer Standard for $f \leq 800$ MHz) and inside waveguide using analytical field distributions based on power measurements for $f > 800$ MHz. The same setups are used for assessment of the parameters applied for boundary compensation (alpha, depth) of which typical uncertainty valued are given. These parameters are used in DASY4 software to improve probe accuracy close to the boundary. The sensitivity in TSL corresponds to NORM_{x,y,z} * ConvF whereby the uncertainty corresponds to that given for ConvF. A frequency dependent ConvF is used in DASY version 4.4 and higher which allows extending the validity from ± 50 MHz to ± 100 MHz.
- Spherical Isotropy (3D deviation from isotropy):** in a field of low gradients realized using a flat phantom exposed by a patch antenna.
- Sensor Offset:** The sensor offset corresponds to the offset of virtual measurement center from the probe tip (on probe axis). No tolerance required.
- Connector Angle:** The angle is assessed using the information gained by determining the NORM_x (no uncertainty required).



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DASY/EASY – Parameters of Probe: EX3DV4 – SN:7543

Basic Calibration Parameters

	Sensor X	Sensor Y	Sensor Z	Unc (k=2)
Norm($\mu V/(V/m)^2$) ^A	0.62	0.69	0.55	$\pm 10.0\%$
DCP(mV) ^B	100.4	104.2	102.3	

Modulation Calibration Parameters

UID	Communication System Name		A dB	B dB/ μV	C	D dB	VR mV	Unc ^E (k=2)
0	CW	X	0.0	0.0	1.0	0.00	197.2	$\pm 2.7\%$
		Y	0.0	0.0	1.0		206.6	
		Z	0.0	0.0	1.0		180.8	

The reported uncertainty of measurement is stated as the standard uncertainty of Measurement multiplied by the coverage factor $k=2$, which for a normal distribution corresponds to a coverage probability of approximately 95%.

^A The uncertainties of Norm X, Y, Z do not affect the E^2 -field uncertainty inside TSL (see Page 4)

^B Numerical linearization parameter: uncertainty not required.

^E Uncertainty is determined using the max. deviation from linear response applying rectangular distribution and is expressed for the square of the field value.



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DASY/EASY – Parameters of Probe: EX3DV4 – SN:7543

Calibration Parameter Determined in Head Tissue Simulating Media

f [MHz] ^C	Relative Permittivity ^F	Conductivity (S/m) ^F	ConvF X	ConvF Y	ConvF Z	Alpha ^G	Depth ^G (mm)	Unct. (k=2)
750	41.9	0.89	10.27	10.27	10.27	0.17	1.26	± 12.1%
835	41.5	0.90	9.89	9.89	9.89	0.14	1.62	± 12.1%
1750	40.1	1.37	8.42	8.42	8.42	0.28	0.95	± 12.1%
1900	40.0	1.40	8.20	8.20	8.20	0.28	1.03	± 12.1%
2000	40.0	1.40	8.23	8.23	8.23	0.26	1.08	± 12.1%
2300	39.5	1.67	7.68	7.68	7.68	0.62	0.70	± 12.1%
2450	39.2	1.80	7.49	7.49	7.49	0.68	0.69	± 12.1%
2600	39.0	1.96	7.24	7.24	7.24	0.50	0.81	± 12.1%
3300	38.2	2.71	6.94	6.94	6.94	0.41	1.05	± 13.3%
3500	37.9	2.91	6.79	6.79	6.79	0.43	1.03	± 13.3%
3700	37.7	3.12	6.51	6.51	6.51	0.44	1.01	± 13.3%
3900	37.5	3.32	6.40	6.40	6.40	0.35	1.35	± 13.3%
4100	37.2	3.53	6.49	6.49	6.49	0.40	1.15	± 13.3%
4400	36.9	3.84	6.32	6.32	6.32	0.35	1.35	± 13.3%
4600	36.7	4.04	6.22	6.22	6.22	0.45	1.20	± 13.3%
4800	36.4	4.25	6.16	6.16	6.16	0.45	1.20	± 13.3%
4950	36.3	4.40	5.95	5.95	5.95	0.45	1.25	± 13.3%
5250	35.9	4.71	5.44	5.44	5.44	0.45	1.25	± 13.3%
5600	35.5	5.07	4.81	4.81	4.81	0.55	1.20	± 13.3%
5750	35.4	5.22	4.94	4.94	4.94	0.55	1.25	± 13.3%

^C Frequency validity above 300 MHz of ±100MHz only applies for DASY v4.4 and higher (Page 2), else it is restricted to ±50MHz. The uncertainty is the RSS of ConvF uncertainty at calibration frequency and the uncertainty for the indicated frequency band. Frequency validity below 300 MHz is ± 10, 25, 40, 50 and 70 MHz for ConvF assessments at 30, 64, 128, 150 and 220 MHz respectively. Above 5 GHz frequency validity can be extended to ± 110 MHz.

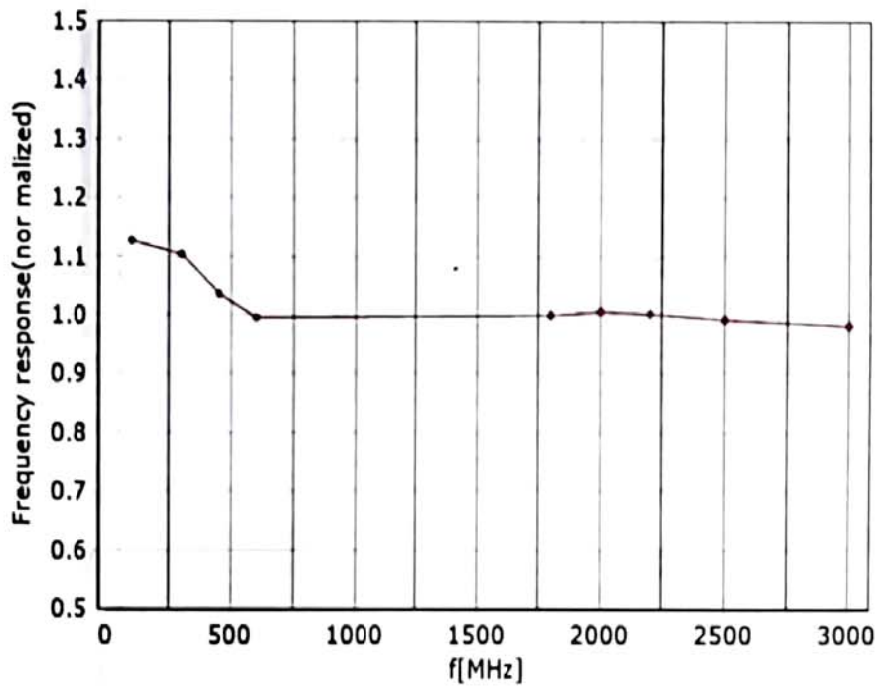
^F At frequency below 3 GHz, the validity of tissue parameters (ϵ and σ) can be relaxed to ±10% if liquid compensation formula is applied to measured SAR values. At frequencies above 3 GHz, the validity of tissue parameters (ϵ and σ) is restricted to ±5%. The uncertainty is the RSS of the ConvF uncertainty for indicated target tissue parameters.

^G Alpha/Depth are determined during calibration. SPEAG warrants that the remaining deviation due to the boundary effect after compensation is always less than ± 1% for frequencies below 3 GHz and below ± 2% for the frequencies between 3-6 GHz at any distance larger than half the probe tip diameter from the boundary.



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Frequency Response of E-Field (TEM-Cell: ifi110 EXX, Waveguide: R22)



* TEM * R22

Uncertainty of Frequency Response of E-field: $\pm 7.4\%$ ($k=2$)

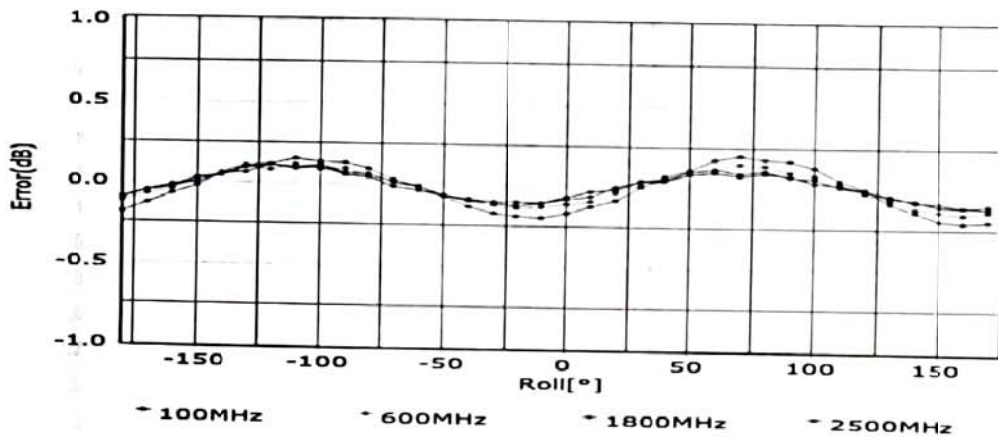
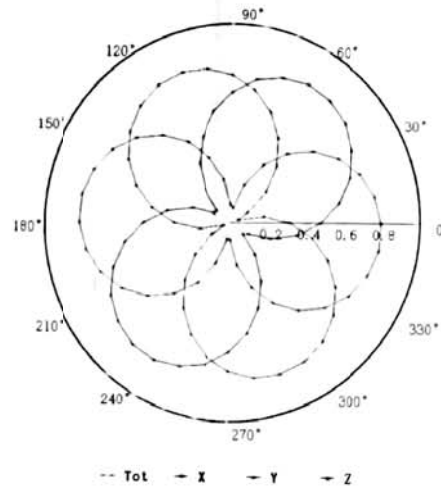
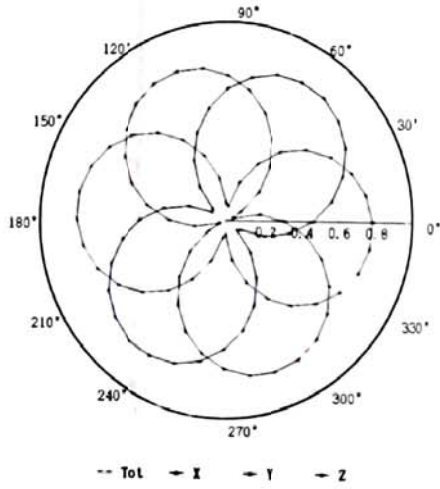


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Receiving Pattern (Φ), $\theta=0^\circ$

f=600 MHz, TEM

f=1800 MHz, R22

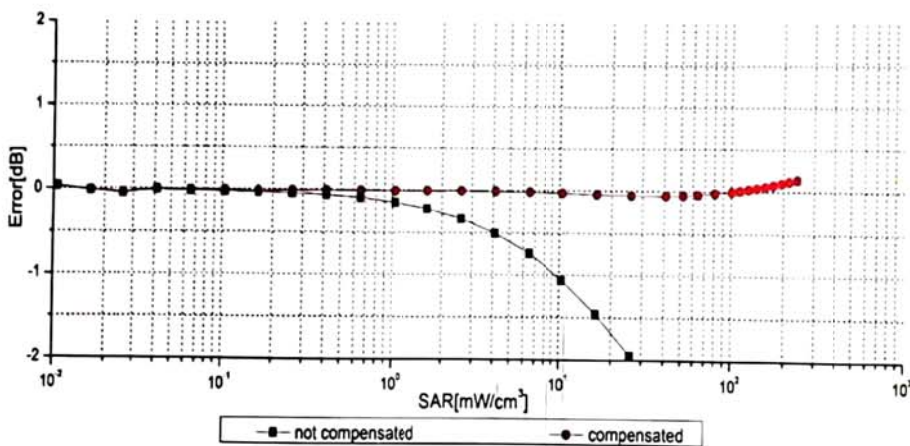
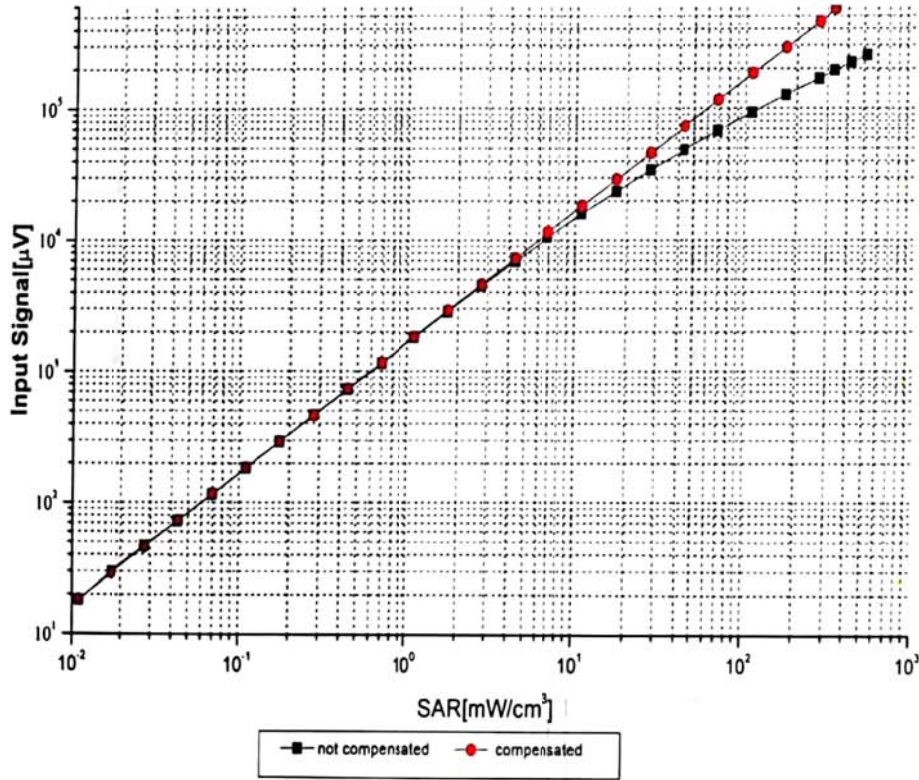


Uncertainty of Axial Isotropy Assessment: $\pm 1.2\%$ ($k=2$)

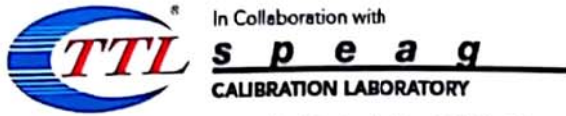


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Dynamic Range f(SAR_{head}) (TEM cell, f = 900 MHz)



Uncertainty of Linearity Assessment: ±0.9% (k=2)

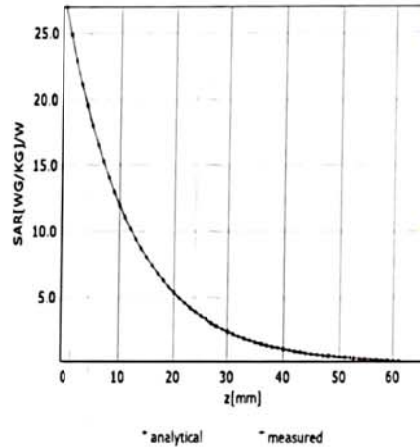
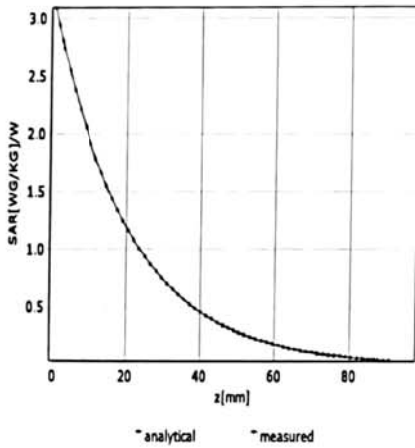


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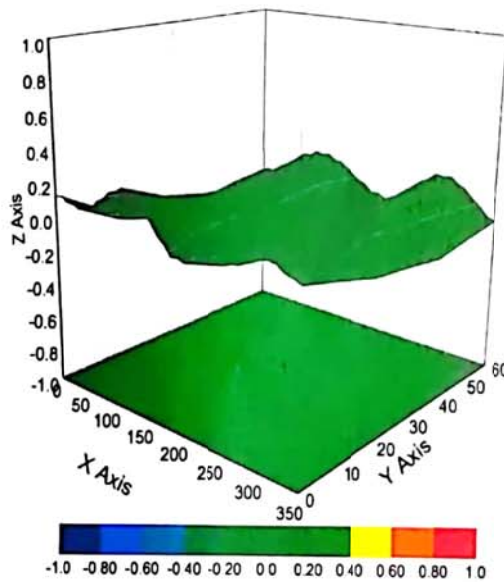
Conversion Factor Assessment

f=750 MHz,WGLS R9(H_convF)

f=1750 MHz,WGLS R22(H_convF)



Deviation from Isotropy in Liquid



Uncertainty of Spherical Isotropy Assessment: $\pm 3.2\%$ ($k=2$)



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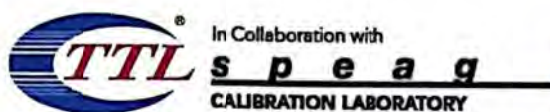
DASY/EASY – Parameters of Probe: EX3DV4 – SN:7543

Other Probe Parameters

Sensor Arrangement	Triangular
Connector Angle (°)	50.7
Mechanical Surface Detection Mode	enabled
Optical Surface Detection Mode	disable
Probe Overall Length	337mm
Probe Body Diameter	10mm
Tip Length	9mm
Tip Diameter	2.5mm
Probe Tip to Sensor X Calibration Point	1mm
Probe Tip to Sensor Y Calibration Point	1mm
Probe Tip to Sensor Z Calibration Point	1mm
Recommended Measurement Distance from Surface	1.4mm



ANNEX E: Probe Calibration Certificate (SN: 3677)



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Client TA(Shanghai)

Certificate No: Z21-60285

CALIBRATION CERTIFICATE

Object EX3DV4 - SN : 3677

Calibration Procedure(s) FF-Z11-004-02
Calibration Procedures for Dosimetric E-field Probes

Calibration date: August 12, 2021

This calibration Certificate documents the traceability to national standards, which realize the physical units of measurements(SI). The measurements and the uncertainties with confidence probability are given on the following pages and are part of the certificate.

All calibrations have been conducted in the closed laboratory facility: environment temperature(22±3)°C and humidity<70%.

Calibration Equipment used (M&TE critical for calibration)

Primary Standards	ID #	Cal Date(Calibrated by, Certificate No.)	Scheduled Calibration
Power Meter NRP2	101919	15-Jun-21(CTTL, No.J21X04466)	Jun-22
Power sensor NRP-Z91	101547	15-Jun-21(CTTL, No.J21X04466)	Jun-22
Power sensor NRP-Z91	101548	15-Jun-21(CTTL, No.J21X04466)	Jun-22
Reference 10dBAttenuator	18N50W-10dB	10-Feb-20(CTTL, No.J20X00525)	Feb-22
Reference 20dBAttenuator	18N50W-20dB	10-Feb-20(CTTL, No.J20X00526)	Feb-22
Reference Probe EX3DV4	SN 3617	27-Jan-21(SPEAG, No.EX3-3617_Jan21)	Jan-22
DAE4	SN 1556	15-Jan-21(SPEAG, No.DAE4-1556_Jan21)	Jan-22
Secondary Standards	ID #	Cal Date(Calibrated by, Certificate No.)	Scheduled Calibration
SignalGenerator MG3700A	6201052605	16-Jun-21(CTTL, No.J21X04467)	Jun-22
Network Analyzer E5071C	MY46110673	21-Jan-21(CTTL, No.J20X00515)	Jan-22

	Name	Function	Signature
Calibrated by:	Yu Zongying	SAR Test Engineer	
Reviewed by:	Lin Hao	SAR Test Engineer	
Approved by:	Qi Dianyuan	SAR Project Leader	

Issued: August 14, 2021

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Glossary:

TSL	tissue simulating liquid
NORM _{x,y,z}	sensitivity in free space
ConvF	sensitivity in TSL / NORM _{x,y,z}
DCP	diode compression point
CF	crest factor (1/duty_cycle) of the RF signal
A,B,C,D	modulation dependent linearization parameters
Polarization Φ	Φ rotation around probe axis
Polarization θ	θ rotation around an axis that is in the plane normal to probe axis (at measurement center), i $\theta=0$ is normal to probe axis

Connector Angle information used in DASY system to align probe sensor X to the robot coordinate system

Calibration is Performed According to the Following Standards:

- a) IEEE Std 1528-2013, "IEEE Recommended Practice for Determining the Peak Spatial-Averaged Specific Absorption Rate (SAR) in the Human Head from Wireless Communications Devices: Measurement Techniques", June 2013
- b) IEC 62209-1, "Measurement procedure for the assessment of Specific Absorption Rate (SAR) from hand-held and body-mounted devices used next to the ear (frequency range of 300 MHz to 6 GHz)", July 2016
- c) IEC 62209-2, "Procedure to determine the Specific Absorption Rate (SAR) for wireless communication devices used in close proximity to the human body (frequency range of 30 MHz to 6 GHz)", March 2010
- d) KDB 865664, "SAR Measurement Requirements for 100 MHz to 6 GHz"

Methods Applied and Interpretation of Parameters:

- **NORM_{x,y,z}:** Assessed for E-field polarization $\theta=0$ ($f \leq 900\text{MHz}$ in TEM-cell; $f > 1800\text{MHz}$: waveguide). NORM_{x,y,z} are only intermediate values, i.e., the uncertainties of NORM_{x,y,z} does not effect the E^2 -field uncertainty inside TSL (see below ConvF).
- **NORM(f)_{x,y,z} = NORM_{x,y,z}* frequency_response** (see Frequency Response Chart). This linearization is implemented in DASY4 software versions later than 4.2. The uncertainty of the frequency response is included in the stated uncertainty of ConvF.
- **DCP_{x,y,z}:** DCP are numerical linearization parameters assessed based on the data of power sweep (no uncertainty required). DCP does not depend on frequency nor media.
- **PAR:** PAR is the Peak to Average Ratio that is not calibrated but determined based on the signal characteristics.
- **A_{x,y,z}; B_{x,y,z}; C_{x,y,z}; VR_{x,y,z}:** A,B,C are numerical linearization parameters assessed based on the data of power sweep for specific modulation signal. The parameters do not depend on frequency nor media. VR is the maximum calibration range expressed in RMS voltage across the diode.
- **ConvF and Boundary Effect Parameters:** Assessed in flat phantom using E-field (or Temperature Transfer Standard for $f \leq 800\text{MHz}$) and inside waveguide using analytical field distributions based on power measurements for $f > 800\text{MHz}$. The same setups are used for assessment of the parameters applied for boundary compensation (alpha, depth) of which typical uncertainty valued are given. These parameters are used in DASY4 software to improve probe accuracy close to the boundary. The sensitivity in TSL corresponds to NORM_{x,y,z}* ConvF whereby the uncertainty corresponds to that given for ConvF. A frequency dependent ConvF is used in DASY version 4.4 and higher which allows extending the validity from $\pm 50\text{MHz}$ to $\pm 100\text{MHz}$.
- **Spherical isotropy (3D deviation from isotropy):** In a field of low gradients realized using a flat phantom exposed by a patch antenna.
- **Sensor Offset:** The sensor offset corresponds to the offset of virtual measurement center from the probe tip (on probe axis). No tolerance required.
- **Connector Angle:** The angle is assessed using the information gained by determining the NORM_x (no uncertainty required).



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DASY/EASY – Parameters of Probe: EX3DV4 – SN:3677

Basic Calibration Parameters

	Sensor X	Sensor Y	Sensor Z	Unc (k=2)
Norm($\mu V/(V/m)^2$) ^A	0.41	0.46	0.40	±10.0%
DCP(mV) ^B	99.3	101.9	101.5	

Modulation Calibration Parameters

UID	Communication System Name		A dB	B dB $\sqrt{\mu V}$	C	D dB	VR mV	Unc ^E (k=2)
0	CW	X	0.0	0.0	1.0	0.00	158.2	±2.0%
		Y	0.0	0.0	1.0		170.4	
		Z	0.0	0.0	1.0		156.9	

The reported uncertainty of measurement is stated as the standard uncertainty of Measurement multiplied by the coverage factor $k=2$, which for a normal distribution Corresponds to a coverage probability of approximately 95%.

^A The uncertainties of Norm X, Y, Z do not affect the E²-field uncertainty inside TSL (see Page 4).

^B Numerical linearization parameter: uncertainty not required.

^E Uncertainty is determined using the max. deviation from linear response applying rectangular distribution and is expressed for the square of the field value.



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DASY/EASY – Parameters of Probe: EX3DV4 – SN:3677

Calibration Parameter Determined in Head Tissue Simulating Media

f [MHz] ^C	Relative Permittivity ^F	Conductivity (S/m) ^F	ConvF X	ConvF Y	ConvF Z	Alpha ^G	Depth ^G (mm)	Uct. (k=2)
750	41.9	0.89	9.64	9.64	9.64	0.40	0.80	±12.1%
835	41.5	0.90	9.30	9.30	9.30	0.16	1.29	±12.1%
1750	40.1	1.37	8.22	8.22	8.22	0.24	1.00	±12.1%
1900	40.0	1.40	7.88	7.88	7.88	0.24	1.10	±12.1%
2000	40.0	1.40	7.96	7.96	7.96	0.21	1.17	±12.1%
2300	39.5	1.67	7.67	7.67	7.67	0.66	0.68	±12.1%
2450	39.2	1.80	7.50	7.50	7.50	0.66	0.70	±12.1%
2600	39.0	1.96	7.25	7.25	7.25	0.62	0.73	±12.1%
3300	38.2	2.71	7.00	7.00	7.00	0.45	0.94	±13.3%
3500	37.9	2.91	6.92	6.92	6.92	0.45	0.98	±13.3%
3700	37.7	3.12	6.71	6.71	6.71	0.45	1.04	±13.3%
3900	37.5	3.32	6.62	6.62	6.62	0.40	1.25	±13.3%
4100	37.2	3.53	6.66	6.66	6.66	0.30	1.38	±13.3%
4400	36.9	3.84	6.43	6.43	6.43	0.35	1.35	±13.3%
4600	36.7	4.04	6.35	6.35	6.35	0.50	1.13	±13.3%
4800	36.4	4.25	6.30	6.30	6.30	0.45	1.25	±13.3%
4950	36.3	4.40	6.13	6.13	6.13	0.45	1.25	±13.3%
5250	35.9	4.71	5.45	5.45	5.45	0.50	1.30	±13.3%
5600	35.5	5.07	5.00	5.00	5.00	0.60	1.15	±13.3%
5750	35.4	5.22	5.04	5.04	5.04	0.55	1.26	±13.3%

^C Frequency validity above 300 MHz of ±100MHz only applies for DASY v4.4 and higher (Page 2), else it is restricted to ±50MHz. The uncertainty is the RSS of ConvF uncertainty at calibration frequency and the uncertainty for the indicated frequency band. Frequency validity below 300 MHz is ± 10, 25, 40, 50 and 70 MHz for ConvF assessments at 30, 64, 128, 150 and 220 MHz respectively. Above 5 GHz frequency validity can be extended to ± 110 MHz.

^F At frequency below 3 GHz, the validity of tissue parameters (ϵ and σ) can be relaxed to ±10% if liquid compensation formula is applied to measured SAR values. At frequencies above 3 GHz, the validity of tissue parameters (ϵ and σ) is restricted to ±5%. The uncertainty is the RSS of the ConvF uncertainty for indicated target tissue parameters.

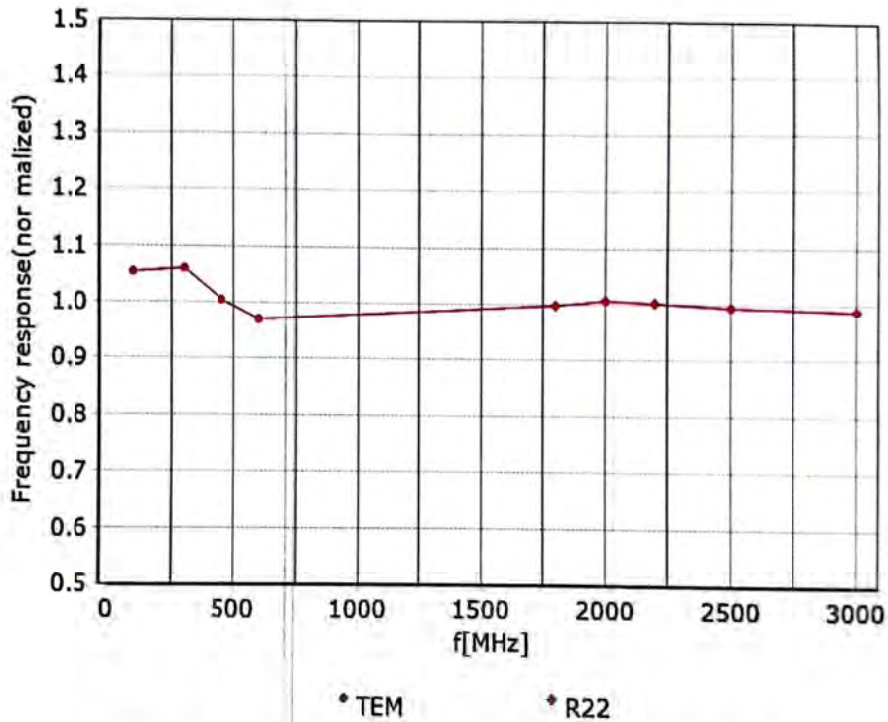
^G Alpha/Depth are determined during calibration. SPEAG warrants that the remaining deviation due to the boundary effect after compensation is always less than ± 1% for frequencies below 3 GHz and below ± 2% for the frequencies between 3-6 GHz at any distance larger than half the probe tip diameter from the boundary.



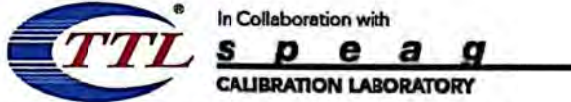
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Frequency Response of E-Field (TEM-Cell: ifi110 EXX, Waveguide: R22)



Uncertainty of Frequency Response of E-field: $\pm 7.4\%$ ($k=2$)

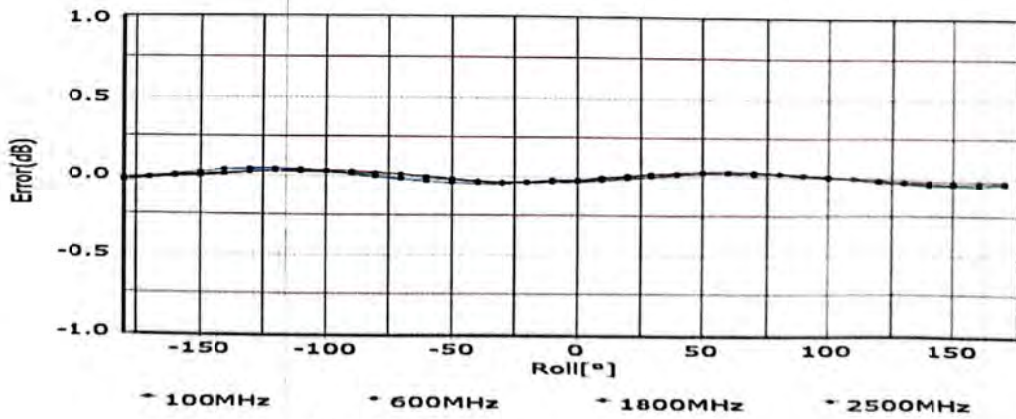
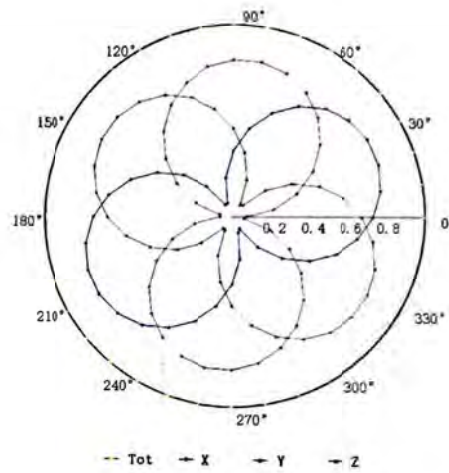
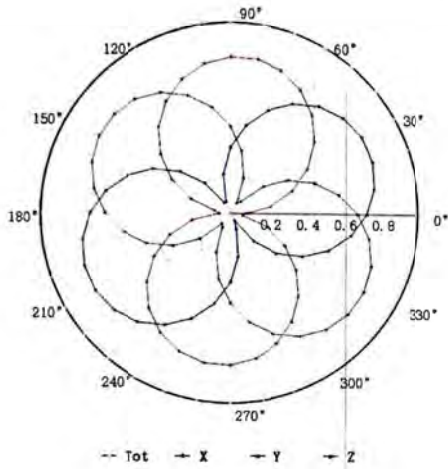


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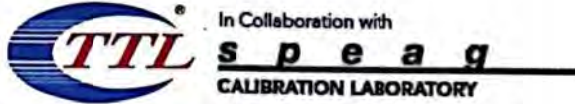
Receiving Pattern (Φ), $\theta=0^\circ$

f=600 MHz, TEM

f=1800 MHz, R22

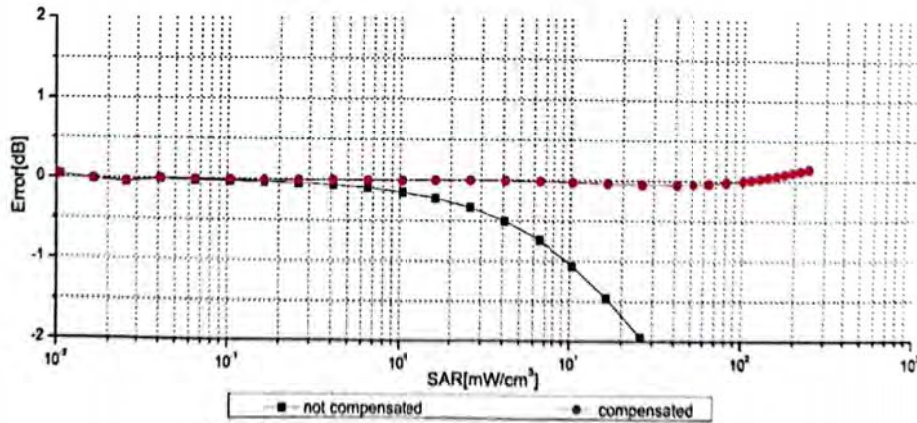
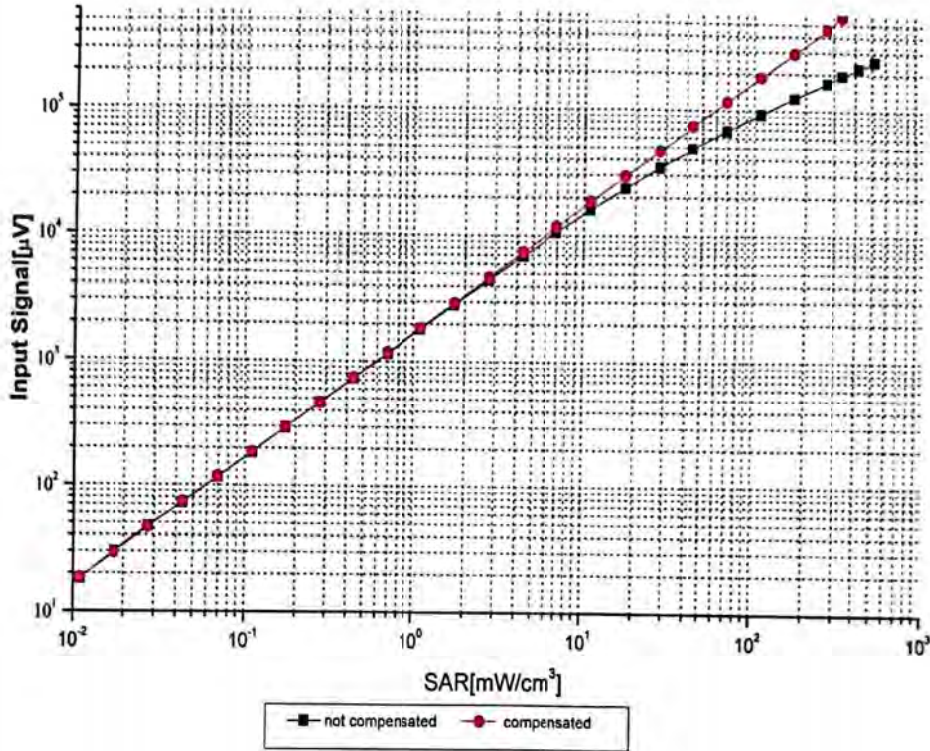


Uncertainty of Axial Isotropy Assessment: $\pm 1.2\%$ ($k=2$)

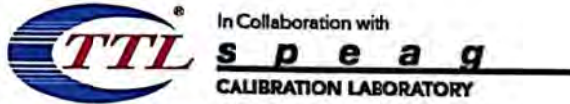


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Dynamic Range f(SAR_{head}) (TEM cell, f = 900 MHz)



Uncertainty of Linearity Assessment: ±0.9% (k=2)

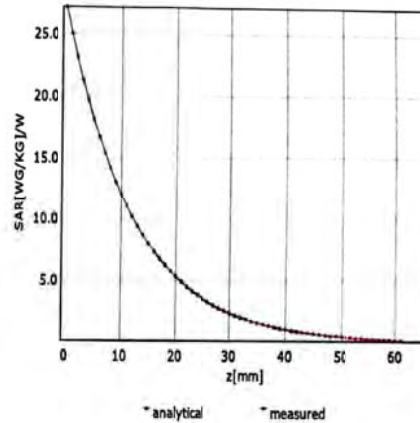
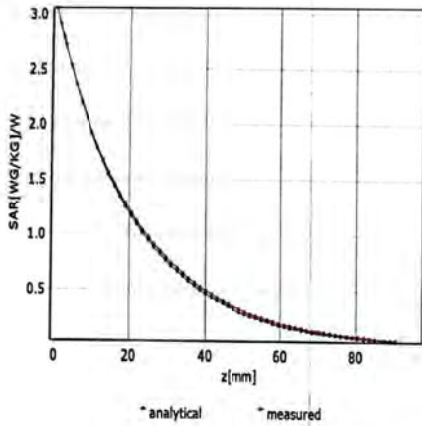


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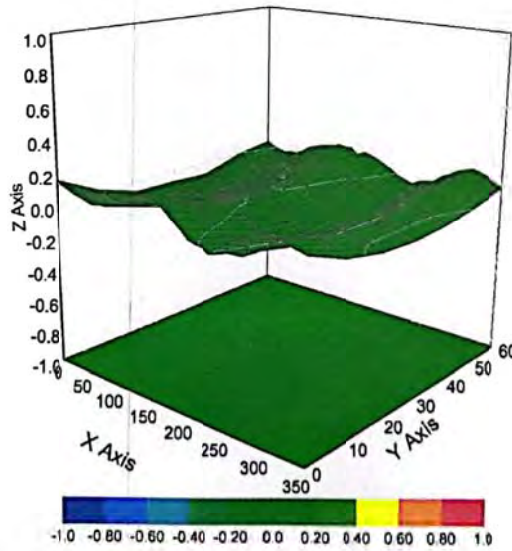
Conversion Factor Assessment

f=750 MHz,WGLS R9(H_convF)

f=1750 MHz,WGLS R22(H_convF)



Deviation from Isotropy in Liquid



Uncertainty of Spherical Isotropy Assessment: $\pm 3.2\%$ ($k=2$)



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DASY/EASY – Parameters of Probe: EX3DV4 – SN:3677

Other Probe Parameters

Sensor Arrangement	Triangular
Connector Angle (°)	117.4
Mechanical Surface Detection Mode	enabled
Optical Surface Detection Mode	disable
Probe Overall Length	337mm
Probe Body Diameter	10mm
Tip Length	9mm
Tip Diameter	2.5mm
Probe Tip to Sensor X Calibration Point	1mm
Probe Tip to Sensor Y Calibration Point	1mm
Probe Tip to Sensor Z Calibration Point	1mm
Recommended Measurement Distance from Surface	1.4mm



ANNEX F: D750V3 Dipole Calibration Certificate



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Client TA(Shanghai)

Certificate No: Z20-60299

CALIBRATION CERTIFICATE

Object D750V3 - SN: 1045

Calibration Procedure(s)
FF-Z11-003-01
Calibration Procedures for dipole validation kits

Calibration date: August 28, 2020

This calibration Certificate documents the traceability to national standards, which realize the physical units of measurements(SI). The measurements and the uncertainties with confidence probability are given on the following pages and are part of the certificate.

All calibrations have been conducted in the closed laboratory facility: environment temperature(22±3)°C and humidity<70%.

Calibration Equipment used (M&TE critical for calibration)

Primary Standards	ID #	Cal Date(Calibrated by, Certificate No.)	Scheduled Calibration
Power Meter NRP2	106276	12-May-20 (CTTL, No.J20X02965)	May-21
Power sensor NRP6A	101369	12-May-20 (CTTL, No.J20X02965)	May-21
Reference Probe EX3DV4	SN 3617	30-Jan-20(SPEAG,No.EX3-3617_Jan20)	Jan-21
DAE4	SN 771	10-Feb-20(CTTL-SPEAG,No.Z20-60017)	Feb-21
Secondary Standards	ID #	Cal Date(Calibrated by, Certificate No.)	Scheduled Calibration
Signal Generator E4438C	MY49071430	25-Feb-20 (CTTL, No.J20X00516)	Feb-21
NetworkAnalyzer E5071C	MY46110673	10-Feb-20 (CTTL, No.J20X00515)	Feb-21

	Name	Function	Signature
Calibrated by:	Zhao Jing	SAR Test Engineer	
Reviewed by:	Lin Hao	SAR Test Engineer	
Approved by:	Qi Dianyuan	SAR Project Leader	

Issued: September 3, 2020

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Glossary:

TSL	tissue simulating liquid
ConvF	sensitivity in TSL / NORMx,y,z
N/A	not applicable or not measured

Calibration is Performed According to the Following Standards:

- IEEE Std 1528-2013, "IEEE Recommended Practice for Determining the Peak Spatial-Averaged Specific Absorption Rate (SAR) in the Human Head from Wireless Communications Devices: Measurement Techniques", June 2013
- IEC 62209-1, "Measurement procedure for assessment of specific absorption rate of human exposure to radio frequency fields from hand-held and body-mounted wireless communication devices- Part 1: Device used next to the ear (Frequency range of 300MHz to 6GHz)", July 2016
- IEC 62209-2, "Procedure to measure the Specific Absorption Rate (SAR) For wireless communication devices used in close proximity to the human body (frequency range of 30MHz to 6GHz)", March 2010
- KDB865664, SAR Measurement Requirements for 100 MHz to 6 GHz

Additional Documentation:

- DASY4/5 System Handbook

Methods Applied and Interpretation of Parameters:

- Measurement Conditions:** Further details are available from the Validation Report at the end of the certificate. All figures stated in the certificate are valid at the frequency indicated.
- Antenna Parameters with TSL:** The dipole is mounted with the spacer to position its feed point exactly below the center marking of the flat phantom section, with the arms oriented parallel to the body axis.
- Feed Point Impedance and Return Loss:** These parameters are measured with the dipole positioned under the liquid filled phantom. The impedance stated is transformed from the measurement at the SMA connector to the feed point. The Return Loss ensures low reflected power. No uncertainty required.
- Electrical Delay:** One-way delay between the SMA connector and the antenna feed point. No uncertainty required.
- SAR measured:** SAR measured at the stated antenna input power.
- SAR normalized:** SAR as measured, normalized to an input power of 1 W at the antenna connector.
- SAR for nominal TSL parameters:** The measured TSL parameters are used to calculate the nominal SAR result.

The reported uncertainty of measurement is stated as the standard uncertainty of Measurement multiplied by the coverage factor $k=2$, which for a normal distribution corresponds to a coverage probability of approximately 95%.



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Measurement Conditions

DASY system configuration, as far as not given on page 1.

DASY Version	DASY52	V52.10.4
Extrapolation	Advanced Extrapolation	
Phantom	Triple Flat Phantom 5.1C	
Distance Dipole Center - TSL	15 mm	with Spacer
Zoom Scan Resolution	dx, dy, dz = 5 mm	
Frequency	750 MHz ± 1 MHz	

Head TSL parameters

The following parameters and calculations were applied.

	Temperature	Permittivity	Conductivity
Nominal Head TSL parameters	22.0 °C	41.9	0.89 mho/m
Measured Head TSL parameters	(22.0 ± 0.2) °C	41.3 ± 6 %	0.87 mho/m ± 6 %
Head TSL temperature change during test	<1.0 °C	---	---

SAR result with Head TSL

SAR averaged over 1 cm ³ (1 g) of Head TSL	Condition	
SAR measured	250 mW input power	2.07 W/kg
SAR for nominal Head TSL parameters	normalized to 1W	8.37 W/kg ± 18.8 % (k=2)
SAR averaged over 10 cm ³ (10 g) of Head TSL	Condition	
SAR measured	250 mW input power	1.38 W/kg
SAR for nominal Head TSL parameters	normalized to 1W	5.57 W/kg ± 18.7 % (k=2)

Body TSL parameters

The following parameters and calculations were applied.

	Temperature	Permittivity	Conductivity
Nominal Body TSL parameters	22.0 °C	55.5	0.96 mho/m
Measured Body TSL parameters	(22.0 ± 0.2) °C	54.4 ± 6 %	0.94 mho/m ± 6 %
Body TSL temperature change during test	<1.0 °C	---	---

SAR result with Body TSL

SAR averaged over 1 cm ³ (1 g) of Body TSL	Condition	
SAR measured	250 mW input power	2.12 W/kg
SAR for nominal Body TSL parameters	normalized to 1W	8.58 W/kg ± 18.8 % (k=2)
SAR averaged over 10 cm ³ (10 g) of Body TSL	Condition	
SAR measured	250 mW input power	1.41 W/kg
SAR for nominal Body TSL parameters	normalized to 1W	5.70 W/kg ± 18.7 % (k=2)



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Appendix (Additional assessments outside the scope of CNAS L0570)

Antenna Parameters with Head TSL

Impedance, transformed to feed point	54.3Ω- 2.29jΩ
Return Loss	- 26.6dB

Antenna Parameters with Body TSL

Impedance, transformed to feed point	47.7Ω- 4.58jΩ
Return Loss	- 25.6dB

General Antenna Parameters and Design

Electrical Delay (one direction)	0.900 ns
----------------------------------	----------

After long term use with 100W radiated power, only a slight warming of the dipole near the feedpoint can be measured

The dipole is made of standard semirigid coaxial cable. The center conductor of the feeding line is directly connected to the second arm of the dipole. The antenna is therefore short-circuited for DC-signals. On some of the dipoles, small end caps are added to the dipole arms in order to improve matching when loaded according to the position as explained in the "Measurement Conditions" paragraph. The SAR data are not affected by this change. The overall dipole length is still according to the Standard. No excessive force must be applied to the dipole arms, because they might bend or the soldered connections near the feedpoint may be damaged.

Additional EUT Data

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DASY5 Validation Report for Head TSL

Date: 08.28.2020

Test Laboratory: CTTL, Beijing, China

DUT: Dipole 750 MHz; Type: D750V3; Serial: D750V3 - SN: 1045

Communication System: UID 0, CW; Frequency: 750 MHz; Duty Cycle: 1:1

Medium parameters used: $f = 750 \text{ MHz}$; $\sigma = 0.873 \text{ S/m}$; $\epsilon_r = 41.28$; $\rho = 1000 \text{ kg/m}^3$

Phantom section: Right Section

DASY5 Configuration:

- Probe: EX3DV4 - SN3617; ConvF(10.07, 10.07, 10.07) @ 750 MHz; Calibrated: 2020-01-30
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn771; Calibrated: 2020-02-10
- Phantom: MFP_V5.1C (20deg probe tilt); Type: QD 000 P51 Cx; Serial: 1062
- Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.14 (7483)

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

Reference Value = 54.97 V/m; Power Drift = -0.02 dB

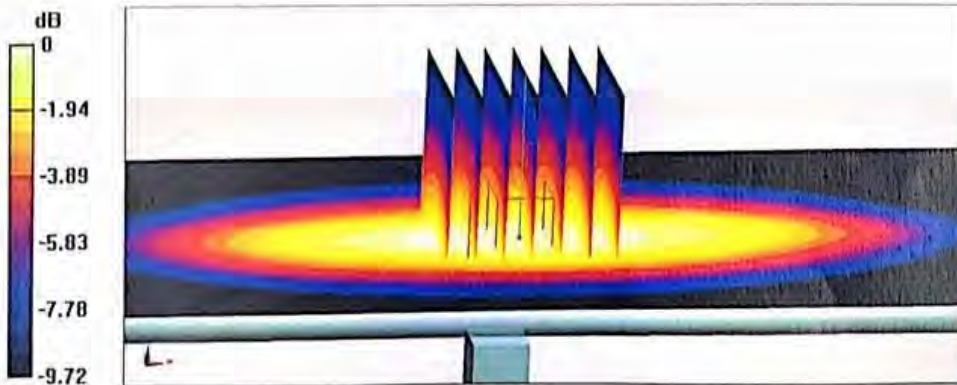
Peak SAR (extrapolated) = 3.00 W/kg

SAR(1 g) = 2.07 W/kg; SAR(10 g) = 1.38 W/kg

Smallest distance from peaks to all points 3 dB below: Larger than measurement grid

Ratio of SAR at M2 to SAR at M1 = 68.7%

Maximum value of SAR (measured) = 2.71 W/kg



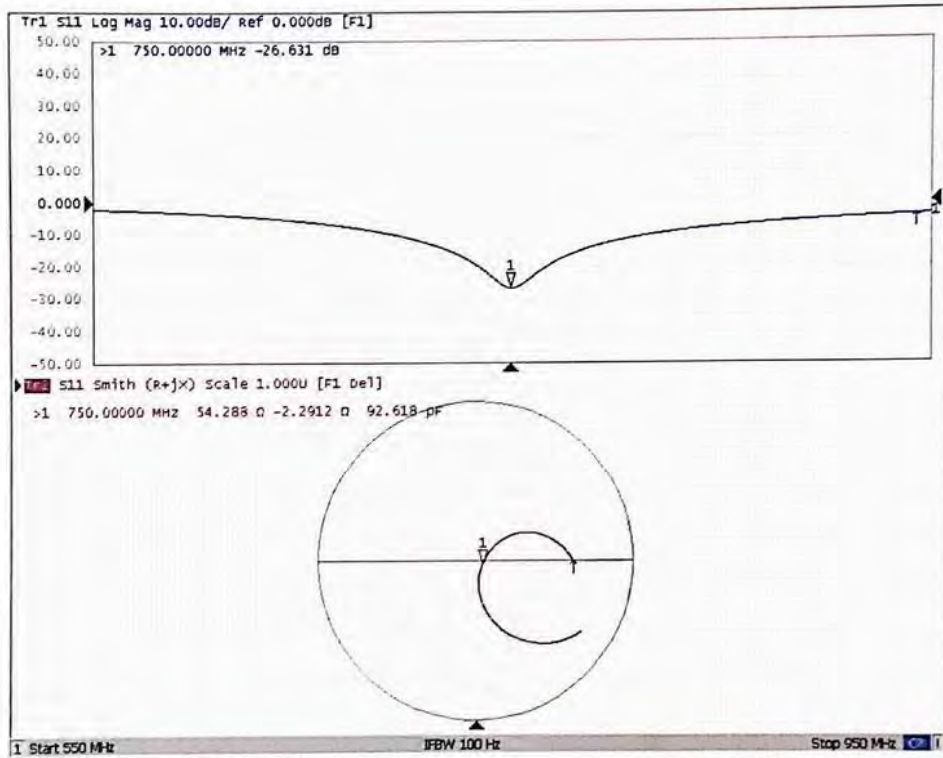
0 dB = 2.71 W/kg = 4.33 dBW/kg



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Impedance Measurement Plot for Head TSL





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DASY5 Validation Report for Body TSL

Date: 08.28.2020

Test Laboratory: CTTL, Beijing, China

DUT: Dipole 750 MHz; Type: D750V3; Serial: D750V3 - SN: 1045

Communication System: UID 0, CW; Frequency: 750 MHz; Duty Cycle: 1:1

Medium parameters used: $f = 750 \text{ MHz}$; $\sigma = 0.94 \text{ S/m}$; $\epsilon_r = 54.36$; $\rho = 1000 \text{ kg/m}^3$

Phantom section: Center Section

DASY5 Configuration:

- Probe: EX3DV4 - SN3617; ConvF(9.8, 9.8, 9.8) @ 750 MHz; Calibrated: 2020-01-30
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn771; Calibrated: 2020-02-10
- Phantom: MFP_V5.1C (20deg probe tilt); Type: QD 000 P51 Cx; Serial: 1062
- Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.14 (7483)

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

Reference Value = 53.84 V/m; Power Drift = -0.02 dB

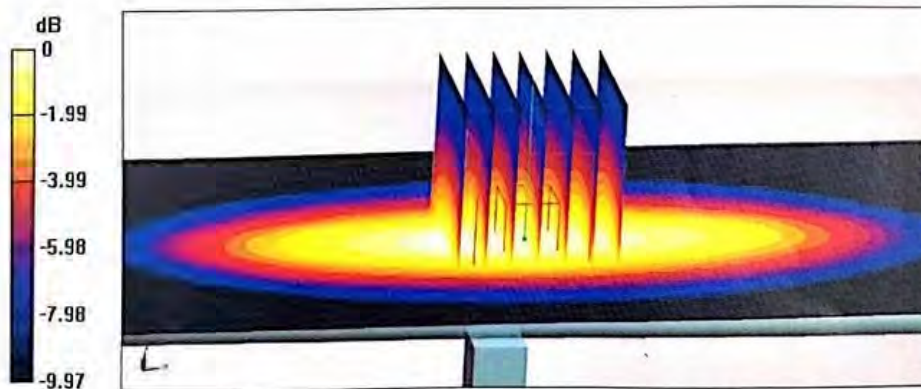
Peak SAR (extrapolated) = 3.14 W/kg

SAR(1 g) = 2.12 W/kg; SAR(10 g) = 1.41 W/kg

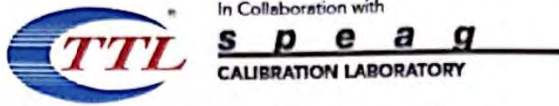
Smallest distance from peaks to all points 3 dB below = 18.4 mm

Ratio of SAR at M2 to SAR at M1 = 67.9%

Maximum value of SAR (measured) = 2.80 W/kg

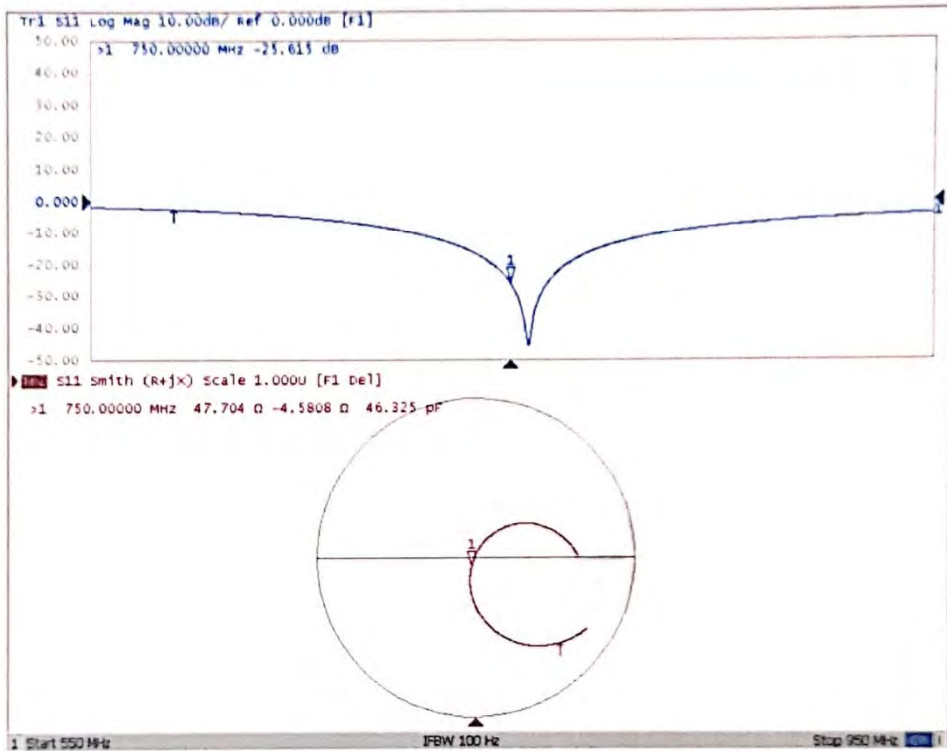


0 dB = 2.80 W/kg = 4.47 dBW/kg



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Impedance Measurement Plot for Body TSL





ANNEX G: D835V2 Dipole Calibration Certificate



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中国认可
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CNAS L0570

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Client TA(Shanghai)

Certificate No: Z20-60296

CALIBRATION CERTIFICATE

Object D835V2 - SN: 4d020

Calibration Procedure(s) FF-Z11-003-01
Calibration Procedures for dipole validation kits

Calibration date: August 28, 2020

This calibration Certificate documents the traceability to national standards, which realize the physical units of measurements(SI). The measurements and the uncertainties with confidence probability are given on the following pages and are part of the certificate.

All calibrations have been conducted in the closed laboratory facility: environment temperature(22±3)°C and humidity<70%.

Calibration Equipment used (M&TE critical for calibration)

Primary Standards	ID #	Cal Date(Calibrated by, Certificate No.)	Scheduled Calibration
Power Meter NRP2	106276	12-May-20 (CTTL, No.J20X02965)	May-21
Power sensor NRP6A	101369	12-May-20 (CTTL, No.J20X02965)	May-21
Reference Probe EX3DV4	SN 3617	30-Jan-20(SPEAG,No.EX3-3617_Jan20)	Jan-21
DAE4	SN 771	10-Feb-20(CTTL-SPEAG,No.Z20-60017)	Feb-21
Secondary Standards	ID #	Cal Date(Calibrated by, Certificate No.)	Scheduled Calibration
Signal Generator E4438C	MY49071430	25-Feb-20 (CTTL, No.J20X00516)	Feb-21
NetworkAnalyzer E5071C	MY46110673	10-Feb-20 (CTTL, No.J20X00515)	Feb-21

	Name	Function	Signature
Calibrated by:	Zhao Jing	SAR Test Engineer	
Reviewed by:	Lin Hao	SAR Test Engineer	
Approved by:	Qi Dianyuan	SAR Project Leader	

Issued: September 3, 2020

This calibration certificate shall not be reproduced except in full without written approval of the laboratory.

Certificate No: Z20-60296

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Glossary:

TSL	tissue simulating liquid
ConvF	sensitivity in TSL / NORM _{x,y,z}
N/A	not applicable or not measured

Calibration is Performed According to the Following Standards:

- IEEE Std 1528-2013, "IEEE Recommended Practice for Determining the Peak Spatial-Averaged Specific Absorption Rate (SAR) in the Human Head from Wireless Communications Devices: Measurement Techniques", June 2013
- IEC 62209-1, "Measurement procedure for assessment of specific absorption rate of human exposure to radio frequency fields from hand-held and body-mounted wireless communication devices- Part 1: Device used next to the ear (Frequency range of 300MHz to 6GHz)", July 2016
- IEC 62209-2, "Procedure to measure the Specific Absorption Rate (SAR) For wireless communication devices used in close proximity to the human body (frequency range of 30MHz to 6GHz)", March 2010
- KDB865664, SAR Measurement Requirements for 100 MHz to 6 GHz

Additional Documentation:

- DASY4/5 System Handbook

Methods Applied and Interpretation of Parameters:

- Measurement Conditions:** Further details are available from the Validation Report at the end of the certificate. All figures stated in the certificate are valid at the frequency indicated.
- Antenna Parameters with TSL:** The dipole is mounted with the spacer to position its feed point exactly below the center marking of the flat phantom section, with the arms oriented parallel to the body axis.
- Feed Point Impedance and Return Loss:** These parameters are measured with the dipole positioned under the liquid filled phantom. The impedance stated is transformed from the measurement at the SMA connector to the feed point. The Return Loss ensures low reflected power. No uncertainty required.
- Electrical Delay:** One-way delay between the SMA connector and the antenna feed point. No uncertainty required.
- SAR measured:** SAR measured at the stated antenna input power.
- SAR normalized:** SAR as measured, normalized to an input power of 1 W at the antenna connector.
- SAR for nominal TSL parameters:** The measured TSL parameters are used to calculate the nominal SAR result.

The reported uncertainty of measurement is stated as the standard uncertainty of Measurement multiplied by the coverage factor $k=2$, which for a normal distribution Corresponds to a coverage probability of approximately 95%.