

Test Laboratory: Shenzhen EMTEK Co.,Ltd.

Date: 2021/1/5

WCDMA BAND2

DUT: TB170

Communication System: WCDMA; Frequency: 1852.4 MHz; Duty Cycle: 1:1

Medium: B1900 Medium parameters used (interpolated): $f = 1852.4$ MHz; $\sigma = 1.488$ S/m; $\epsilon_r = 53.11$;
 $\rho = 1000$ kg/m³

Ambient Temperature : 22.5 °C; Liquid Temperature : 21.6 °C

DASY5 Configuration:

- Probe: EX3DV4 - SN3970; ConvF(8.22, 8.22, 8.22); Calibrated: 2020/2/8;
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1418; Calibrated: 2020/1/8
- Phantom: ELI v5.0; Type: QDOVA002AA; Serial: TP:1231
- Measurement SW: DASY52, Version 52.8 (7); SEMCAD X Version 14.6.10 (7164)

Body Back/Area Scan (121x161x1): Interpolated grid: dx=2.000 mm, dy=2.000 mm
 Maximum value of SAR (interpolated) = 0.952 W/kg

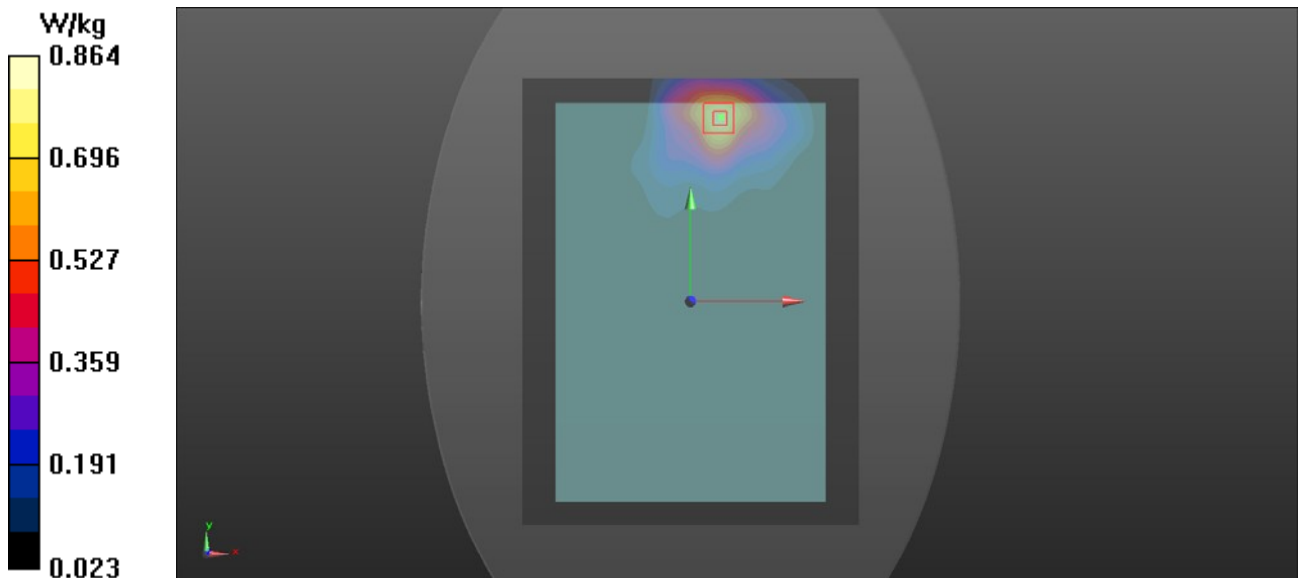
Body Back/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 3.646 V/m; Power Drift = -0.09 dB

Peak SAR (extrapolated) = 1.26 W/kg

SAR(1 g) = 0.694 W/kg; SAR(10 g) = 0.456 W/kg

Maximum value of SAR (measured) = 0.864 W/kg



WCDMA BAND4

DUT: TB170

Communication System: WCDMA; Frequency: 1712.4 MHz; Duty Cycle: 1:1

Medium: B1750 Medium parameters used (interpolated): $f = 1712.4$ MHz; $\sigma = 1.429$ S/m; $\epsilon_r =$

53.763 ; $\rho = 1000$ kg/m³

Ambient Temperature : 22.5 °C ; Liquid Temperature : 21.6 °C

DASY5 Configuration:

- Probe: EX3DV4 - SN3970; ConvF(8.55, 8.55, 8.55); Calibrated: 2020/2/8;
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1418; Calibrated: 2020/1/8
- Phantom: ELI v5.0; Type: QDOVA002AA; Serial: TP:1231
- Measurement SW: DASY52, Version 52.8 (7); SEMCAD X Version 14.6.10 (7164)

Body Back/Area Scan (121x161x1): Interpolated grid: dx=2.000 mm, dy=2.000 mm

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

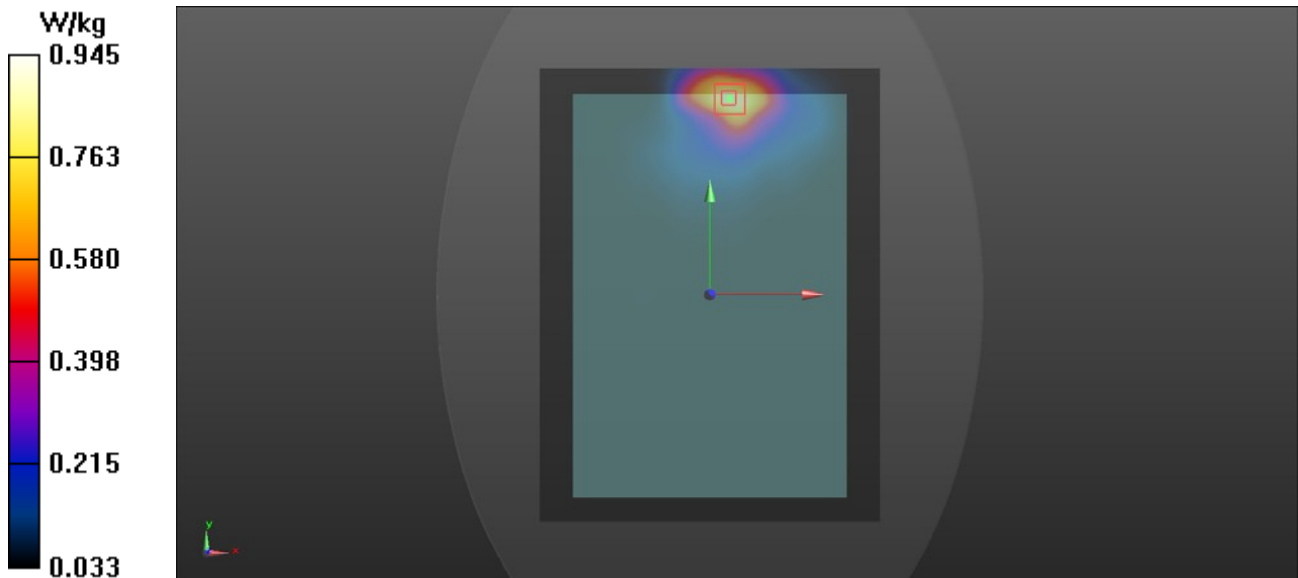
Body Back/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 3.021 V/m; Power Drift = -0.08 dB

Peak SAR (extrapolated) = 1.66 W/kg

SAR(1 g) = 0.783 W/kg; SAR(10 g) = 0.499 W/kg

Maximum value of SAR (measured) = 0.945 W/kg



WCDMA BAND5

DUT: TB170

Communication System: WCDMA; Frequency: 836.4 MHz; Duty Cycle: 1:1

Medium: B835 Medium parameters used (interpolated): $f = 836.4$ MHz; $\sigma = 0.998$ S/m; $\epsilon_r = 56.367$; $\rho = 1000$ kg/m³

Ambient Temperature : 22.5 °C ; Liquid Temperature : 21.6 °C

DASY5 Configuration:

- Probe: EX3DV4 - SN3970; ConvF(10.3, 10.3, 10.3); Calibrated: 2020/2/8;
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1418; Calibrated: 2020/1/8
- Phantom: ELI v5.0; Type: QDOVA002AA; Serial: TP:1231
- Measurement SW: DASY52, Version 52.8 (7); SEMCAD X Version 14.6.10 (7164)

Body Back/Area Scan (121x161x1): Interpolated grid: dx=2.000 mm, dy=2.000 mm
Maximum value of SAR (interpolated) = 0.628 W/kg

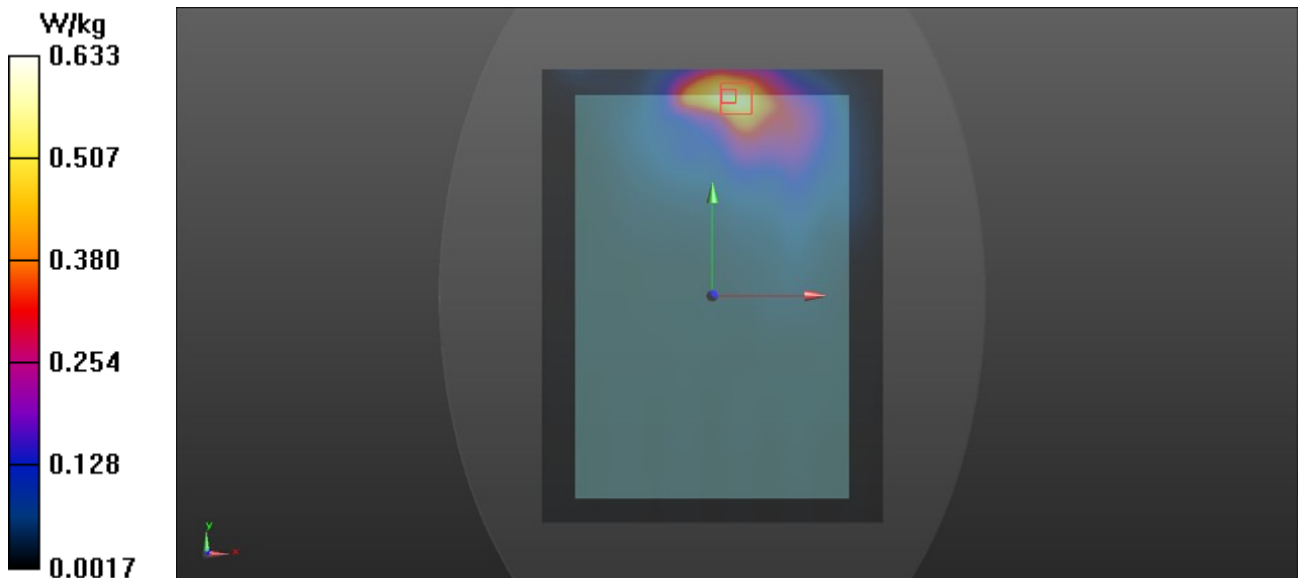
Body Back/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 3.466 V/m; Power Drift = -0.01 dB

Peak SAR (extrapolated) = 1.09 W/kg

SAR(1 g) = 0.525 W/kg; SAR(10 g) = 0.389 W/kg

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



LTE BAND2

DUT: TB170

Communication System: LTE; Frequency: 1880 MHz; Duty Cycle: 1:1

Medium: B1900 Medium parameters used: $f = 1880$ MHz; $\sigma = 1.525$ S/m; $\epsilon_r = 52.973$; $\rho = 1000$ kg/m³

Ambient Temperature : 22.5 °C; Liquid Temperature : 21.6 °C

DASY5 Configuration:

- Probe: EX3DV4 - SN3970; ConvF(8.22, 8.22, 8.22); Calibrated: 2020/2/8;
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1418; Calibrated: 2020/1/8
- Phantom: ELI v5.0; Type: QDOVA002AA; Serial: TP:1231
- Measurement SW: DASY52, Version 52.8 (7); SEMCAD X Version 14.6.10 (7164)

Body Back/Area Scan (121x161x1): Interpolated grid: dx=2.000 mm, dy=2.000 mm
Maximum value of SAR (interpolated) = 0.914 W/kg

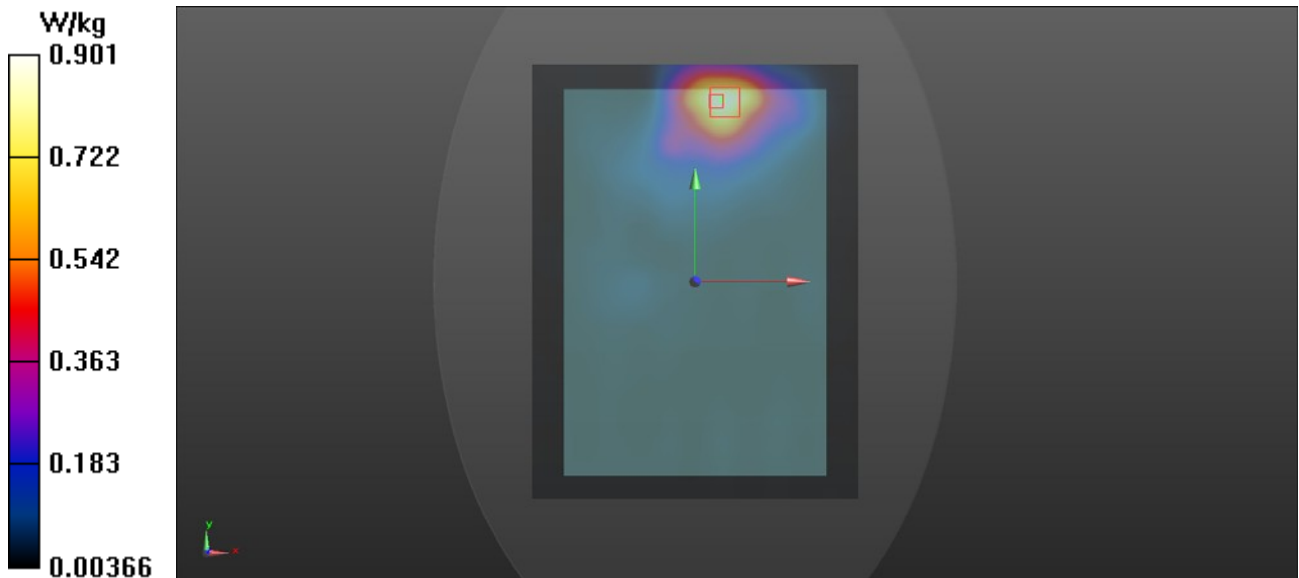
Body Back/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 3.444 V/m; Power Drift = -0.00 dB

Peak SAR (extrapolated) = 1.29 W/kg

SAR(1 g) = 0.803 W/kg; SAR(10 g) = 0.498 W/kg

Maximum value of SAR (measured) = 0.901 W/kg



LTE BAND7

DUT: TB170

Communication System: LTE; Frequency: 2535 MHz; Duty Cycle: 1:1

Medium: B2600 Medium parameters used: $f = 2535 \text{ MHz}$; $\sigma = 2.125 \text{ S/m}$; $\epsilon_r = 52.655$; $\rho = 1000 \text{ kg/m}^3$

Ambient Temperature : 22.5 °C; Liquid Temperature : 21.6 °C

DASY5 Configuration:

- Probe: EX3DV4 - SN3970; ConvF(7.96, 7.96, 7.96); Calibrated: 2020/2/8;
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1418; Calibrated: 2020/1/8
- Phantom: ELI v5.0; Type: QDOVA002AA; Serial: TP:1231
- Measurement SW: DASY52, Version 52.8 (7); SEMCAD X Version 14.6.10 (7164)

Body Back/Area Scan (121x161x1): Interpolated grid: $dx=2.000 \text{ mm}$, $dy=2.000 \text{ mm}$
Maximum value of SAR (interpolated) = 1.03 W/kg

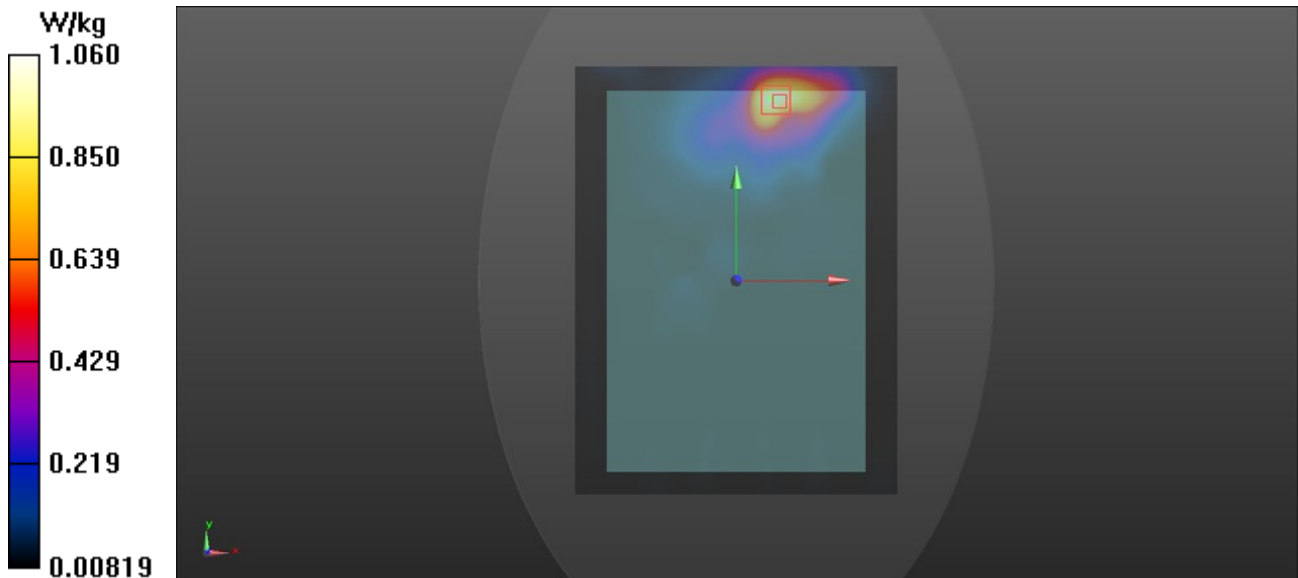
Body Back/Zoom Scan (7x7x7)/Cube 0: Measurement grid: $dx=5\text{mm}$, $dy=5\text{mm}$, $dz=5\text{mm}$

Reference Value = 2.833 V/m; Power Drift = -0.02 dB

Peak SAR (extrapolated) = 1.64 W/kg

SAR(1 g) = 0.954 W/kg; SAR(10 g) = 0.508 W/kg

Maximum value of SAR (measured) = 1.06 W/kg



LTE BAND12

DUT: TB170

Communication System: LTE; Frequency: 711 MHz; Duty Cycle: 1:1

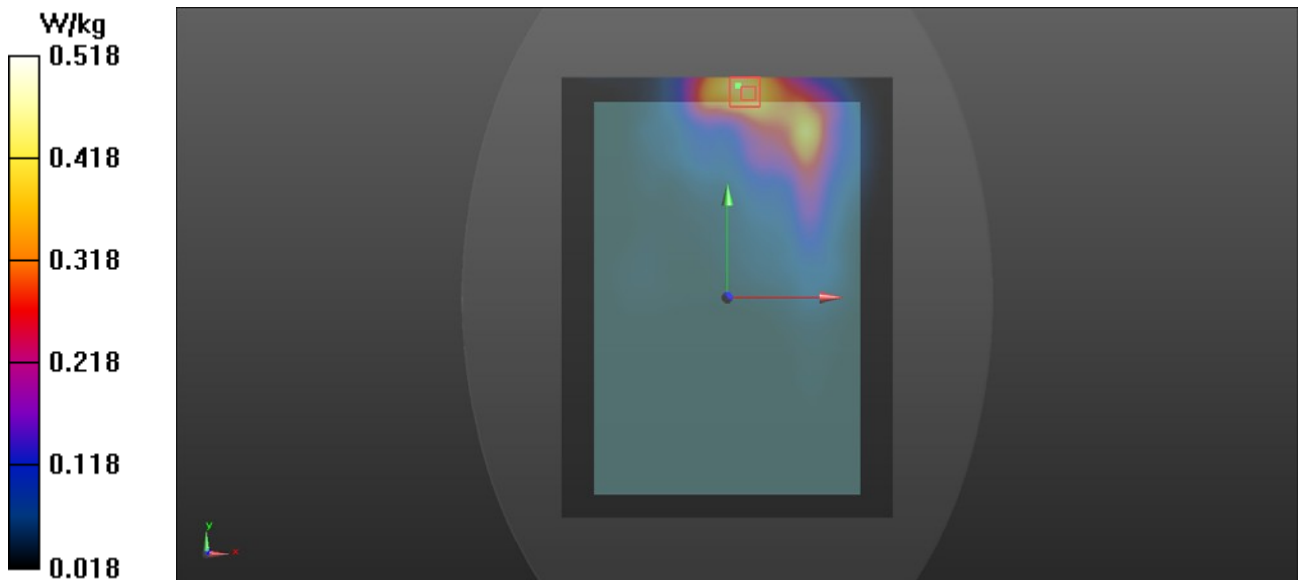
Medium: B750 Medium parameters used: $f = 711$ MHz; $\sigma = 0.941$ S/m; $\epsilon_r = 56.215$; $\rho = 1000$ kg/m³
Ambient Temperature : 22.5 °C ; Liquid Temperature : 21.6 °C

DASY5 Configuration:

- Probe: EX3DV4 - SN3970; ConvF(10.6, 10.6, 10.6); Calibrated: 2020/2/8;
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1418; Calibrated: 2020/1/8
- Phantom: ELI v5.0; Type: QDOVA002AA; Serial: TP:1231
- Measurement SW: DASY52, Version 52.8 (7); SEMCAD X Version 14.6.10 (7164)

Body Back/Area Scan (121x161x1): Interpolated grid: dx=2.000 mm, dy=2.000 mm
Maximum value of SAR (interpolated) = 0.451 W/kg

Body Back/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 4.754 V/m; Power Drift = -0.08 dB
Peak SAR (extrapolated) = 0.553 W/kg
SAR(1 g) = 0.461 W/kg; SAR(10 g) = 0.294 W/kg
Maximum value of SAR (measured) = 0.518 W/kg



LTE BAND13

DUT: TB170

Communication System: LTE; Frequency: 782 MHz; Duty Cycle: 1:1

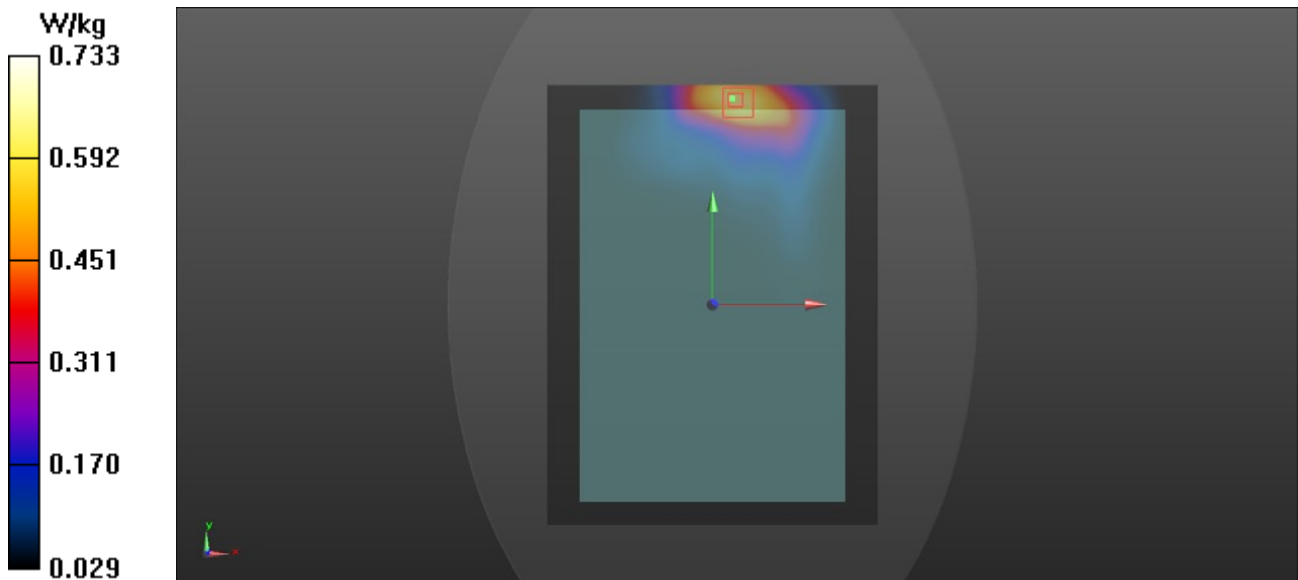
Medium: B750 Medium parameters used: $f = 782 \text{ MHz}$; $\sigma = 0.998 \text{ S/m}$; $\epsilon_r = 55.594$; $\rho = 1000 \text{ kg/m}^3$
Ambient Temperature : $22.5 \text{ }^\circ\text{C}$; Liquid Temperature : $21.6 \text{ }^\circ\text{C}$

DASY5 Configuration:

- Probe: EX3DV4 - SN3970; ConvF(10.6, 10.6, 10.6); Calibrated: 2020/2/8;
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1418; Calibrated: 2020/1/8
- Phantom: ELI v5.0; Type: QDOVA002AA; Serial: TP:1231
- Measurement SW: DASY52, Version 52.8 (7); SEMCAD X Version 14.6.10 (7164)

Body Back/Area Scan (121x161x1): Interpolated grid: $dx=2.000 \text{ mm}$, $dy=2.000 \text{ mm}$
Maximum value of SAR (interpolated) = 0.628 W/kg

Body Back/Zoom Scan (7x7x7)/Cube 0: Measurement grid: $dx=5\text{mm}$, $dy=5\text{mm}$, $dz=5\text{mm}$
Reference Value = 3.165 V/m ; Power Drift = -0.10 dB
Peak SAR (extrapolated) = 0.779 W/kg
SAR(1 g) = 0.655 W/kg ; SAR(10 g) = 0.428 W/kg
Maximum value of SAR (measured) = 0.733 W/kg



LTE BAND26

DUT: TB170

Communication System: LTE; Frequency: 831.5 MHz; Duty Cycle: 1:1

Medium: B835 Medium parameters used (interpolated): $f = 831.5$ MHz; $\sigma = 0.993$ S/m; $\epsilon_r = 56.422$; $\rho = 1000$ kg/m³

Ambient Temperature : 22.5 °C ; Liquid Temperature : 21.6 °C

DASY5 Configuration:

- Probe: EX3DV4 - SN3970; ConvF(10.3, 10.3, 10.3); Calibrated: 2020/2/8;
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1418; Calibrated: 2020/1/8
- Phantom: ELI v5.0; Type: QDOVA002AA; Serial: TP:1231
- Measurement SW: DASY52, Version 52.8 (7); SEMCAD X Version 14.6.10 (7164)

Body Back/Area Scan (121x161x1): Interpolated grid: dx=2.000 mm, dy=2.000 mm
Maximum value of SAR (interpolated) = 0.550 W/kg

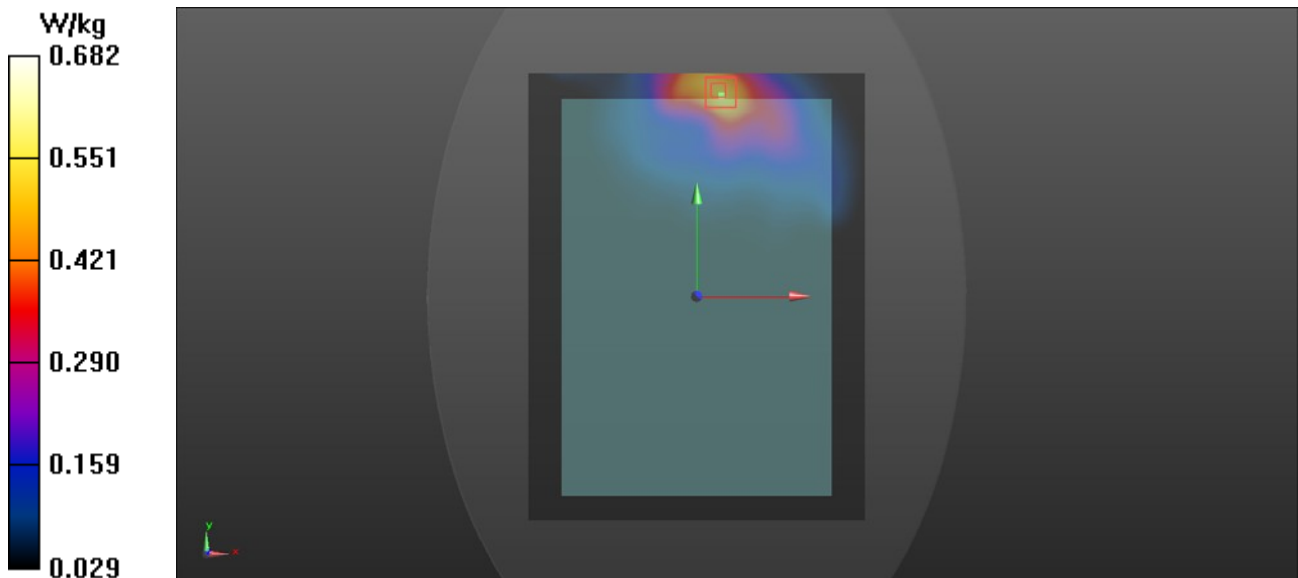
Body Back/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 3.176 V/m; Power Drift = -0.07 dB

Peak SAR (extrapolated) = 0.688 W/kg

SAR(1 g) = 0.589 W/kg; SAR(10 g) = 0.377 W/kg

Maximum value of SAR (measured) = 0.682 W/kg



LTE BAND41

DUT: TB170

Communication System: LTE; Frequency: 2593 MHz; Duty Cycle: 1:1

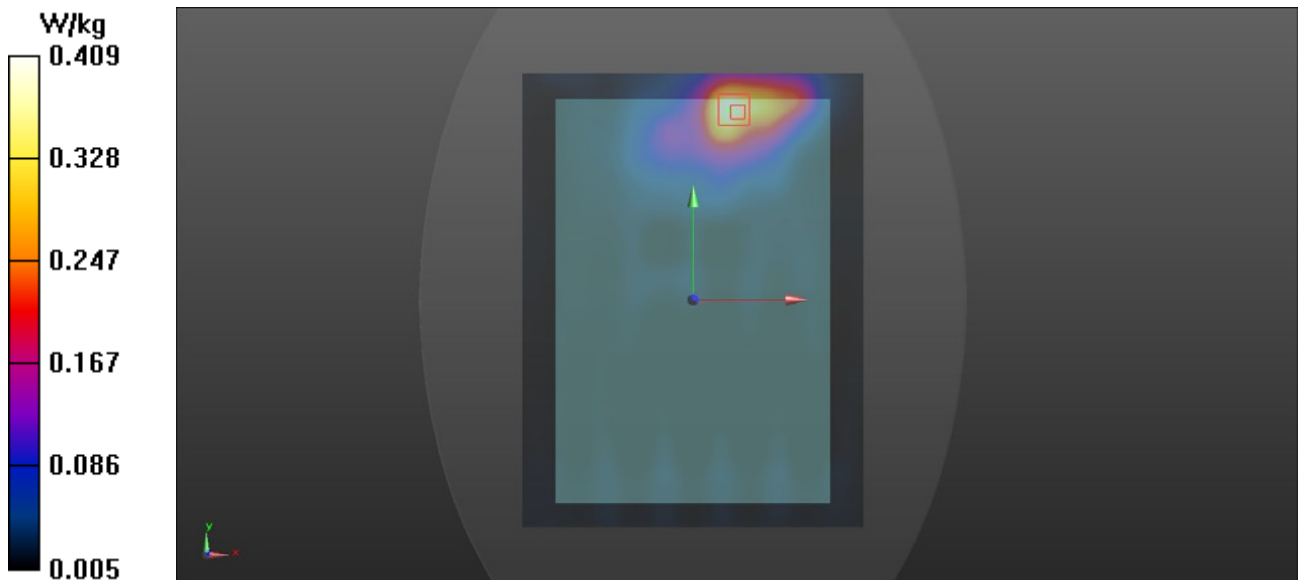
Medium: B2600 Medium parameters used: $f = 2593$ MHz; $\sigma = 2.2$ S/m; $\epsilon_r = 52.447$; $\rho = 1000$ kg/m³
Ambient Temperature : 22.5 °C ; Liquid Temperature : 21.6 °C

DASY5 Configuration:

- Probe: EX3DV4 - SN3970; ConvF(7.72, 7.72, 7.72); Calibrated: 2020/2/8;
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1418; Calibrated: 2020/1/8
- Phantom: ELI v5.0; Type: QDOVA002AA; Serial: TP:1231
- Measurement SW: DASY52, Version 52.8 (7); SEMCAD X Version 14.6.10 (7164)

Body Back/Area Scan (121x161x1): Interpolated grid: dx=2.000 mm, dy=2.000 mm
Maximum value of SAR (interpolated) = 0.417 W/kg

Body Back/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 3.54 V/m; Power Drift = 0.14 dB
Peak SAR (extrapolated) = 0.589 W/kg
SAR(1 g) = 0.362 W/kg; SAR(10 g) = 0.196 W/kg
Maximum value of SAR (measured) = 0.409 W/kg



LTE BAND66

DUT: TB170

Communication System: LTE; Frequency: 1745 MHz;Duty Cycle: 1:1

Medium: B1750 Medium parameters used: $f = 1745$ MHz; $\sigma = 1.463$ S/m; $\epsilon_r = 53.681$; $\rho = 1000$ kg/m³

Ambient Temperature : 22.5 °C ; Liquid Temperature : 21.6 °C

DASY5 Configuration:

- Probe: EX3DV4 - SN3970; ConvF(8.55, 8.55, 8.55); Calibrated: 2020/2/8;
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1418; Calibrated: 2020/1/8
- Phantom: ELI v5.0; Type: QDOVA002AA; Serial: TP:1231
- Measurement SW: DASY52, Version 52.8 (7); SEMCAD X Version 14.6.10 (7164)

Configuration/Body Back/Area Scan (121x161x1): Interpolated grid: dx=2.000mm, dy=2.000 mm

Maximum value of SAR (interpolated) = 1.34 W/kg

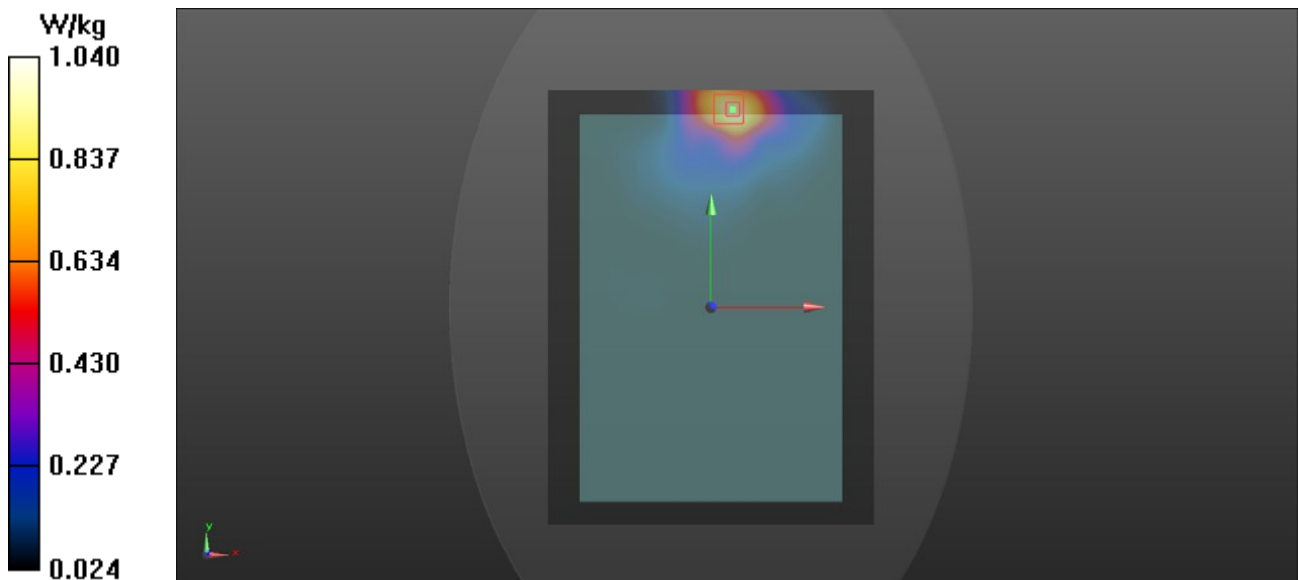
Configuration/Body Back/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 2.166 V/m; Power Drift = -0.02 dB

Peak SAR (extrapolated) = 1.74 W/kg

SAR(1 g) = 0.891 W/kg; SAR(10 g) = 0.485 W/kg

Maximum value of SAR (measured) = 1.04 W/kg



802.11b_BACK

DUT: TB170

Communication System: 802.11b; Frequency: 2437 MHz; Duty Cycle: 1:1

Medium: B2450 Medium parameters used: $f = 2437$ MHz; $\sigma = 1.958$ S/m; $\epsilon_r = 52.849$; $\rho = 1000$ kg/m³

Ambient Temperature : 22.5 °C ; Liquid Temperature : 21.6 °C

DASY5 Configuration:

- Probe: EX3DV4 - SN3970; ConvF(7.96, 7.96, 7.96); Calibrated: 2020/2/8;
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1418; Calibrated: 2020/1/8
- Phantom: ELI v5.0; Type: QDOVA002AA; Serial: TP:1231
- Measurement SW: DASY52, Version 52.8 (7); SEMCAD X Version 14.6.10 (7164)

Body Back/Area Scan (121x161x1): Interpolated grid: dx=2.000 mm, dy=2.000 mm
Maximum value of SAR (interpolated) = 0.430 W/kg

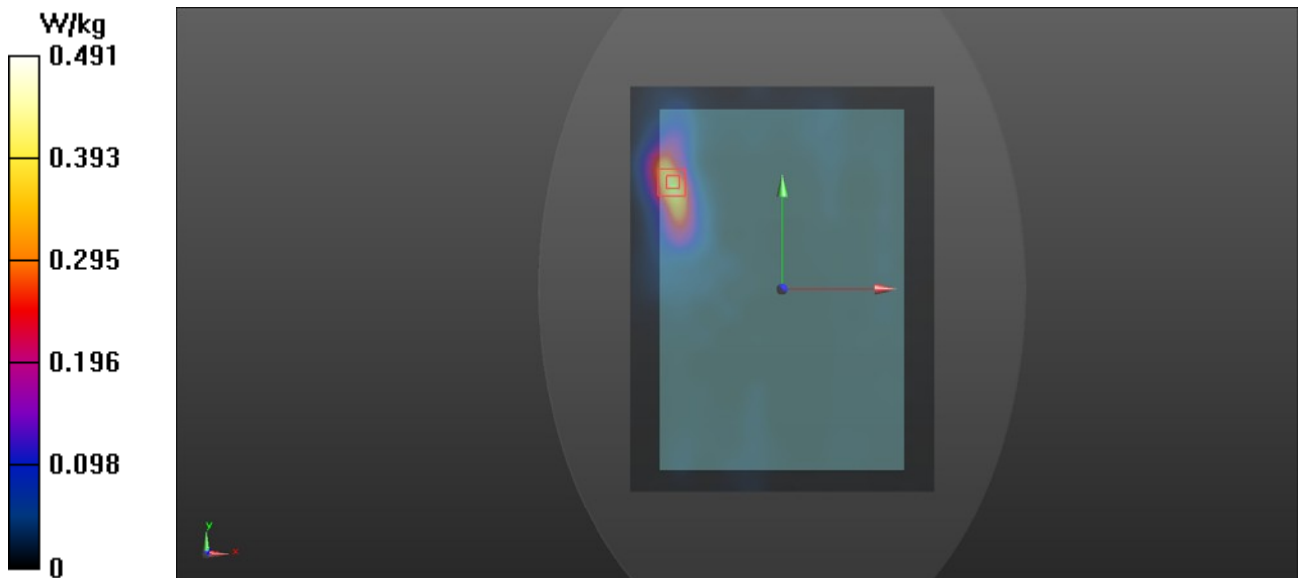
Body Back/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 2.527 V/m; Power Drift = -0.04 dB

Peak SAR (extrapolated) = 0.682 W/kg

SAR(1 g) = 0.405 W/kg; SAR(10 g) = 0.190 W/kg

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



802.11a_BACK

DUT: TB170

Communication System: 802.11a; Frequency: 5200 MHz; Duty Cycle: 1:1

Medium: B5G Medium parameters used: $f = 5200$ MHz; $\sigma = 5.383$ S/m; $\epsilon_r = 49.148$; $\rho = 1000$ kg/m³

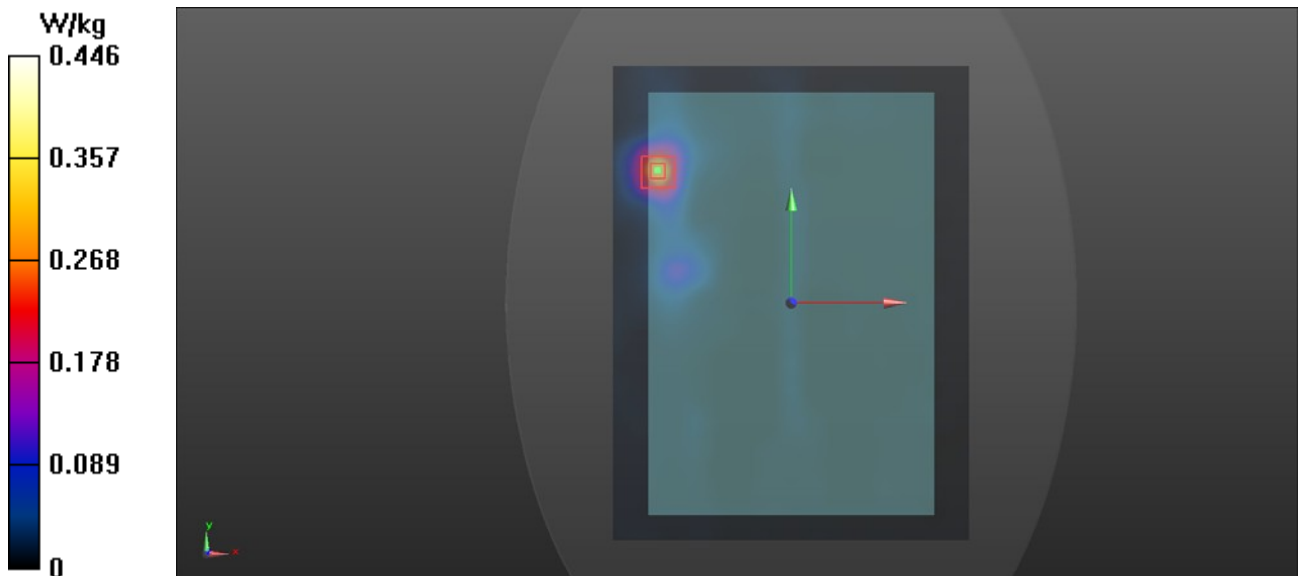
Ambient Temperature : 22.5 °C ; Liquid Temperature : 21.6 °C

DASY5 Configuration:

- Probe: EX3DV4 - SN3970; ConvF(5.16, 5.16, 5.16); Calibrated: 2020/2/8;
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1418; Calibrated: 2020/1/8
- Phantom: ELI v5.0; Type: QDOVA002AA; Serial: TP:1231
- Measurement SW: DASY52, Version 52.8 (7); SEMCAD X Version 14.6.10 (7164)

Body Back/Area Scan (121x161x1): Interpolated grid: dx=2.000 mm, dy=2.000 mm
Maximum value of SAR (interpolated) = 0.463 W/kg

Body Back/Zoom Scan (7x7x12)/Cube 0: Measurement grid: dx=4mm, dy=4mm, dz=2mm
Reference Value = 2.893 V/m; Power Drift = -0.10 dB
Peak SAR (extrapolated) = 0.824 W/kg
SAR(1 g) = 0.342 W/kg; SAR(10 g) = 0.106 W/kg
Maximum value of SAR (measured) = 0.446 W/kg



802.11a_BACK

DUT: TB170

Communication System: 802.11a; Frequency: 5300 MHz; Duty Cycle: 1:1

Medium: B5G Medium parameters used: $f = 5300$ MHz; $\sigma = 5.420$ S/m; $\epsilon_r = 50.283$; $\rho = 1000$ kg/m³

Ambient Temperature : 22.5 °C ; Liquid Temperature : 21.6 °C

DASY5 Configuration:

- Probe: EX3DV4 - SN3970; ConvF(5.16, 5.16, 5.16); Calibrated: 2020/2/8;
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1418; Calibrated: 2020/1/8
- Phantom: ELI v5.0; Type: QDOVA002AA; Serial: TP:1231
- Measurement SW: DASY52, Version 52.8 (7); SEMCAD X Version 14.6.10 (7164)

Body Back/Area Scan (121x161x1): Interpolated grid: dx=2.000 mm, dy=2.000 mm

Maximum value of SAR (interpolated) = 0.465 W/kg

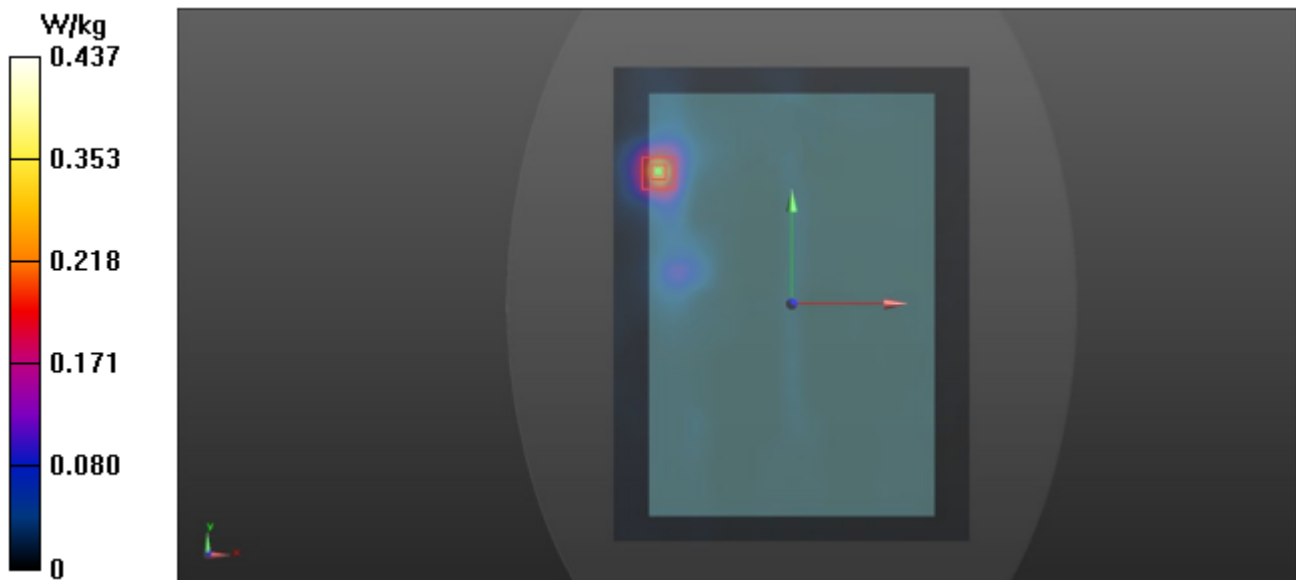
Body Back/Zoom Scan (7x7x12)/Cube 0: Measurement grid: dx=4mm, dy=4mm, dz=2mm

Reference Value = 2.997 V/m; Power Drift = -0.11 dB

Peak SAR (extrapolated) = 0.831 W/kg

SAR(1 g) = 0.325 W/kg; SAR(10 g) = 0.101 W/kg

Maximum value of SAR (measured) = 0.437W/kg



802.11a_BACK

DUT: TB170

Communication System: 802.11a; Frequency: 5700 MHz;Duty Cycle: 1:1

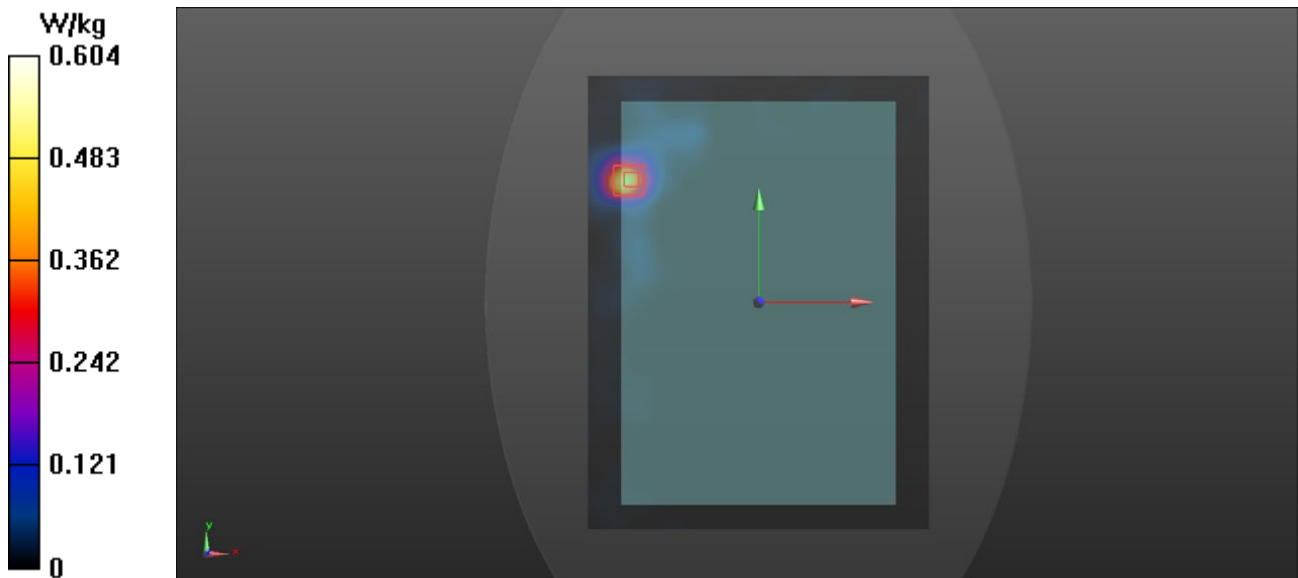
Medium: B5G Medium parameters used: $f = 5700$ MHz; $\sigma = 5.329$ S/m; $\epsilon_r = 48.485$; $\rho = 1000$ kg/m³
Ambient Temperature : 22.5 °C ; Liquid Temperature : 21.6 °C

DASY5 Configuration:

- Probe: EX3DV4 - SN3970; ConvF(4.47, 4.47, 4.47); Calibrated: 2020/2/8;
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1418; Calibrated: 2020/1/8
- Phantom: ELI v5.0; Type: QDOVA002AA; Serial: TP:1231
- Measurement SW: DASY52, Version 52.8 (7); SEMCAD X Version 14.6.10 (7164)

Body Back/Area Scan (121x161x1): Interpolated grid: dx=2.000 mm, dy=2.000 mm
Maximum value of SAR (interpolated) = 0.861 W/kg

Body Back/Zoom Scan (7x7x12)/Cube 0: Measurement grid: dx=4mm, dy=4mm, dz=2mm
Reference Value = 2.355 V/m; Power Drift = -0.17 dB
Peak SAR (extrapolated) = 1.19 W/kg
SAR(1 g) = 0.486 W/kg; SAR(10 g) = 0.124 W/kg
Maximum value of SAR (measured) = 0.604 W/kg



802.11a_BACK

DUT: TB170

Communication System: 802.11a; Frequency: 5745 MHz; Duty Cycle: 1:1

Medium: B5G Medium parameters used: $f = 5745$ MHz; $\sigma = 6.878$ S/m; $\epsilon_r = 58.453$; $\rho = 1000$ kg/m³
Ambient Temperature : 22.5 °C ; Liquid Temperature : 21.6 °C

DASY5 Configuration:

- Probe: EX3DV4 - SN3970; ConvF(4.57, 4.57, 4.57); Calibrated: 2020/2/8;
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1418; Calibrated: 2020/1/8
- Phantom: ELI v5.0; Type: QDOVA002AA; Serial: TP:1231
- Measurement SW: DASY52, Version 52.8 (7); SEMCAD X Version 14.6.10 (7164)

Body Back/Area Scan (121x161x1): Interpolated grid: dx=2.000 mm, dy=2.000 mm
Maximum value of SAR (interpolated) = 0.702 W/kg

Body Back/Zoom Scan (7x7x12)/Cube 0: Measurement grid: dx=4mm, dy=4mm, dz=2mm
Reference Value = 3.300 V/m; Power Drift = -0.05 dB
Peak SAR (extrapolated) = 0.971 W/kg
SAR(1 g) = 0.319 W/kg; SAR(10 g) = 0.108 W/kg
Maximum value of SAR (measured) = 0.512 W/kg

