

WCDMA_Band2_back_ch9400

DUT: MS-ND52

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

Medium: H1900 Medium parameters used: $f = 1880$ MHz; $\sigma = 1.423$ S/m; $\epsilon_r = 39.809$; $\rho = 1000$ kg/m³

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

DASY5 Configuration:

- Probe: EX3DV4 - SN3970; ConvF(8.5, 8.5, 8.5); Calibrated: 2021/3/30;
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1418; Calibrated: 2021/3/11
- 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) = 0.564 W/kg

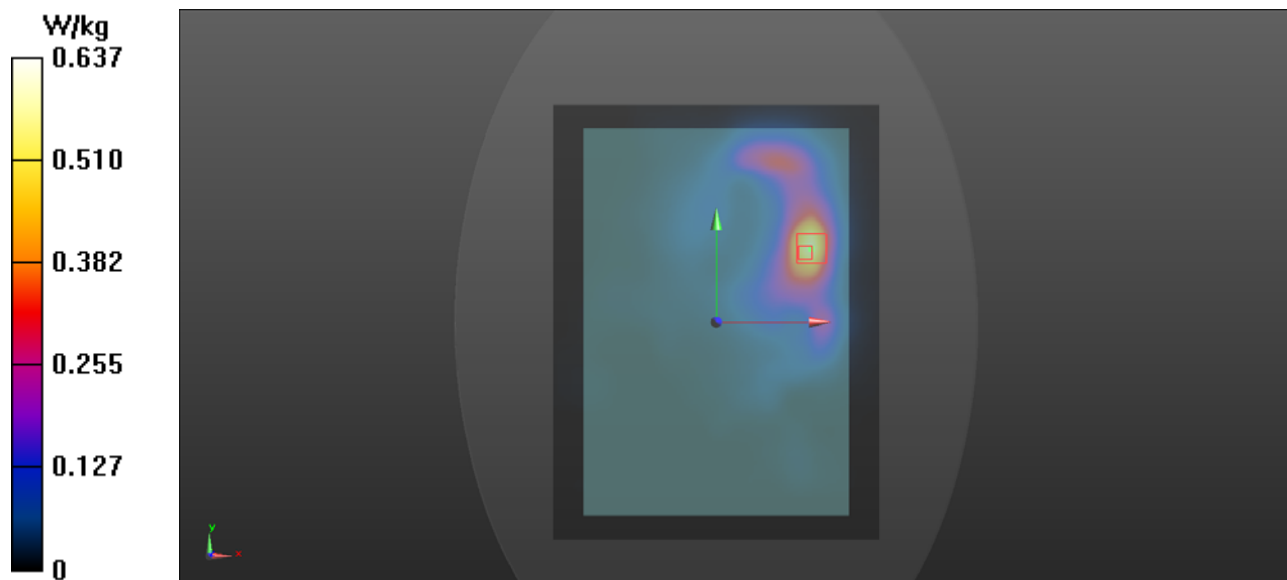
Body Back/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 4.811 V/m; Power Drift = -0.09 dB

Peak SAR (extrapolated) = 1.86 W/kg

SAR(1 g) = 0.631 W/kg; SAR(10 g) = 0.303 W/kg

Maximum value of SAR (measured) = 0.637 W/kg



WCDMA_Band4_back_ch1413

DUT: MS-ND52

Communication System: WCDMA; Frequency: 1732.6 MHz; Duty Cycle: 1:1

Medium: H1750 Medium parameters used: $f = 1733$ MHz; $\sigma = 1.334$ S/m; $\epsilon_r = 41.906$; $\rho = 1000$ kg/m³

Ambient Temperature : 22.5 °C ; Liquid Temperature : 21.7 °C

DASY5 Configuration:

- Probe: EX3DV4 - SN3970; ConvF(8.8, 8.8, 8.8); Calibrated: 2021/3/30;
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1418; Calibrated: 2021/3/11
- 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) = 0.757 W/kg

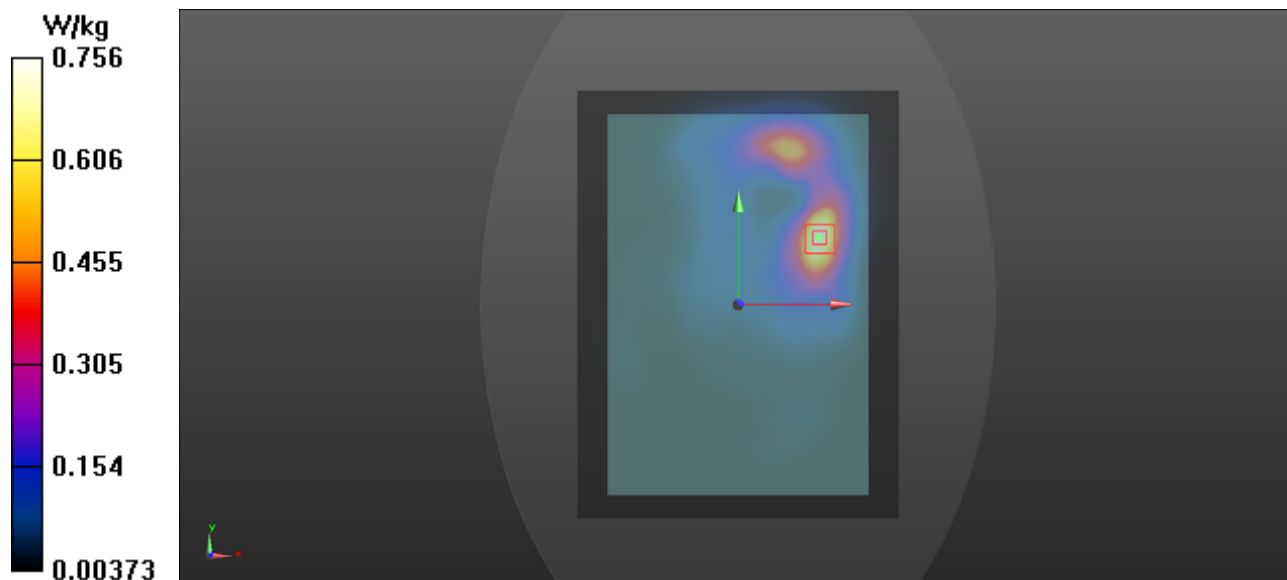
Body Back/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 7.399 V/m; Power Drift = -0.19 dB

Peak SAR (extrapolated) = 1.28 W/kg

SAR(1 g) = 0.690 W/kg; SAR(10 g) = 0.363 W/kg

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



WCDMA_Band5_back_ch4182**DUT: MS-ND52**

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

Medium: H835 Medium parameters used (interpolated): $f = 836.4$ MHz; $\sigma = 0.919$ S/m; $\epsilon_r = 42.859$; $\rho = 1000$ kg/m³

Ambient Temperature : 22.5 °C ; Liquid Temperature : 21.5 °C

DASY5 Configuration:

- Probe: EX3DV4 - SN3970; ConvF(10.3, 10.3, 10.3); Calibrated: 2021/3/30;
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1418; Calibrated: 2021/3/11
- 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) = 0.460 W/kg

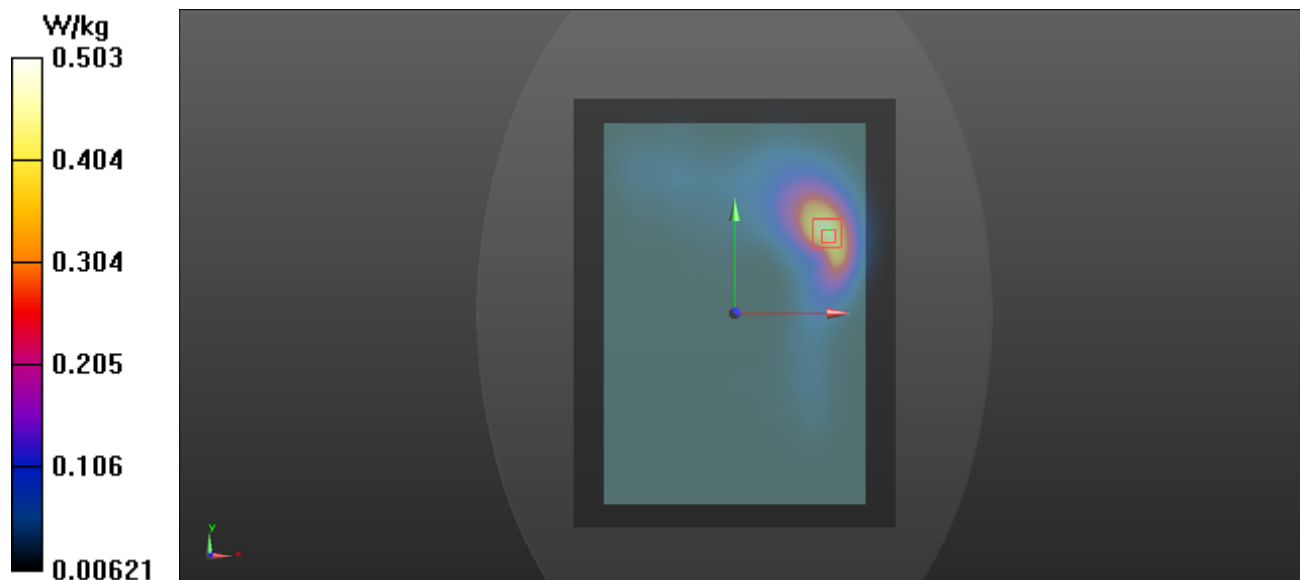
Body Back/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 2.569 V/m; Power Drift = 0.05 dB

Peak SAR (extrapolated) = 0.890 W/kg

SAR(1 g) = 0.459 W/kg; SAR(10 g) = 0.248 W/kg

Maximum value of SAR (measured) = 0.503 W/kg



LTE_Band7_back_ch21100

DUT: MS-ND52

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

Medium: H2600 Medium parameters used: $f = 2535$ MHz; $\sigma = 1.979$ S/m; $\epsilon_r = 38.606$; $\rho = 1000$

kg/m³

Ambient Temperature : 22.4 °C; Liquid Temperature : 21.5 °C

DASY5 Configuration:

- Probe: EX3DV4 - SN3970; ConvF(8.06, 8.06, 8.06); Calibrated: 2021/3/30;
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1418; Calibrated: 2021/3/11
- 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) = 0.849 W/kg

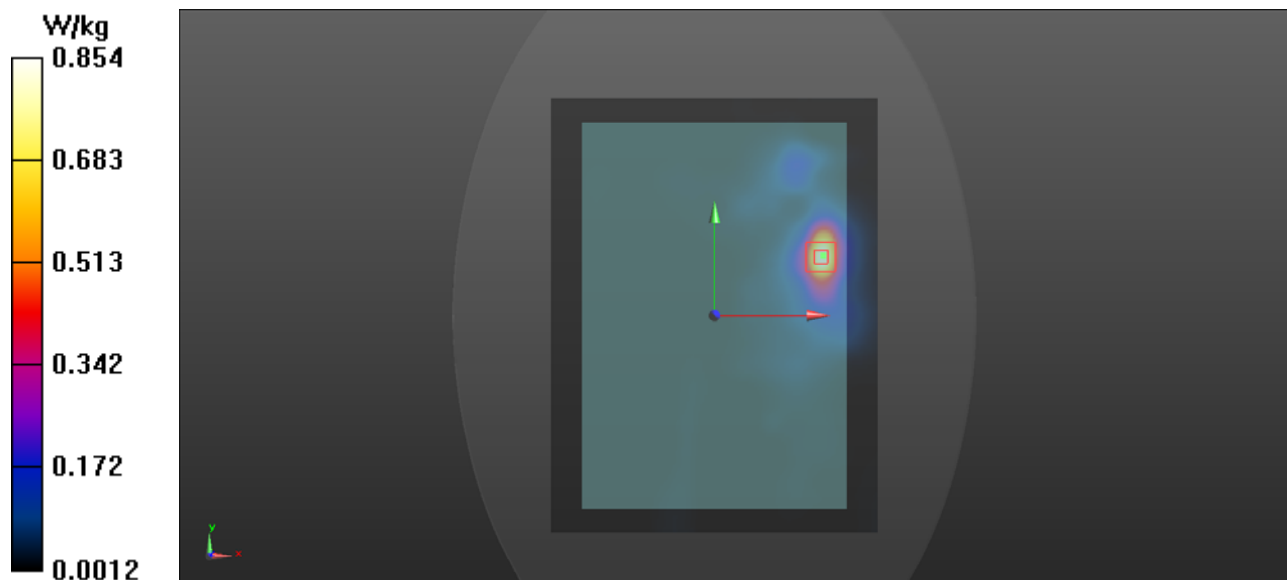
Body Back/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 2.477 V/m; Power Drift = -0.03 dB

Peak SAR (extrapolated) = 1.81 W/kg

SAR(1 g) = 0.792 W/kg; SAR(10 g) = 0.368 W/kg

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



LTE_Band12_back_ch23095**DUT: MS-ND52**

Communication System: LTE; Frequency: 707.5 MHz; Duty Cycle: 1:1

Medium: H750 Medium parameters used: $f = 707.5$ MHz; $\sigma = 0.864$ S/m; $\epsilon_r = 41.561$; $\rho = 1000$ kg/m³

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

DASY5 Configuration:

- Probe: EX3DV4 - SN3970; ConvF(10.5, 10.5, 10.5); Calibrated: 2021/3/30;
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1418; Calibrated: 2021/3/11
- 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) = 0.152 W/kg

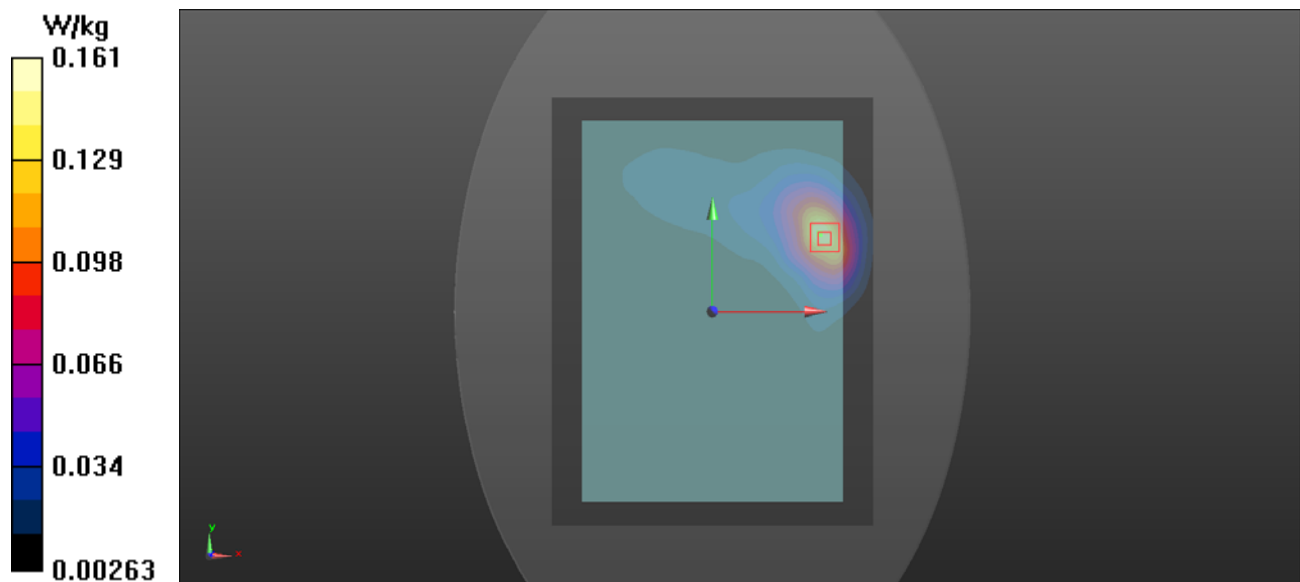
Body Back/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 2.134 V/m; Power Drift = -0.11 dB

Peak SAR (extrapolated) = 0.288 W/kg

SAR(1 g) = 0.149 W/kg; SAR(10 g) = 0.081 W/kg

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



LTE_Band13_back_ch23230

DUT: MS-ND52

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

Medium: H750 Medium parameters used: $f = 782 \text{ MHz}$; $\sigma = 0.916 \text{ S/m}$; $\epsilon_r = 41.135$; $\rho = 1000 \text{ kg/m}^3$

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

DASY5 Configuration:

- Probe: EX3DV4 - SN3970; ConvF(10.5, 10.5, 10.5); Calibrated: 2021/3/30;
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1418; Calibrated: 2021/3/11
- 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) = 0.290 W/kg

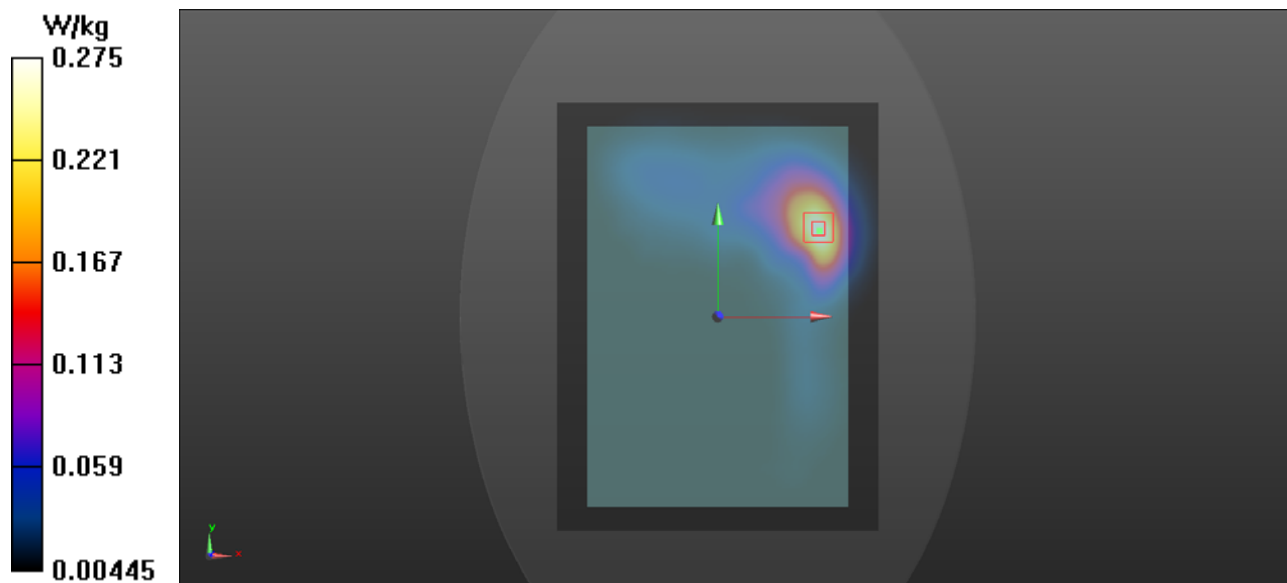
Body Back/Zoom Scan (7x7x7)/Cube 0: Measurement grid: $dx=5\text{mm}$, $dy=5\text{mm}$, $dz=5\text{mm}$

Reference Value = 2.225 V/m ; Power Drift = -0.05 dB

Peak SAR (extrapolated) = 0.487 W/kg

SAR(1 g) = 0.253 W/kg ; SAR(10 g) = 0.141 W/kg

Maximum value of SAR (measured) = 0.275 W/kg



LTE_Band25_back_ch26340**DUT: MS-ND52**

Communication System: LTE; Frequency: 1882.5 MHz; Duty Cycle: 1:1

Medium: H1900 Medium parameters used: $f = 1882.5$ MHz; $\sigma = 1.418$ S/m; $\epsilon_r = 39.822$; $\rho = 1000$ kg/m³

Ambient Temperature : 22.5 °C; Liquid Temperature : 21.4 °C

DASY5 Configuration:

- Probe: EX3DV4 - SN3970; ConvF(8.5, 8.5, 8.5); Calibrated: 2021/3/30;
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1418; Calibrated: 2021/3/11
- 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) = 0.557 W/kg

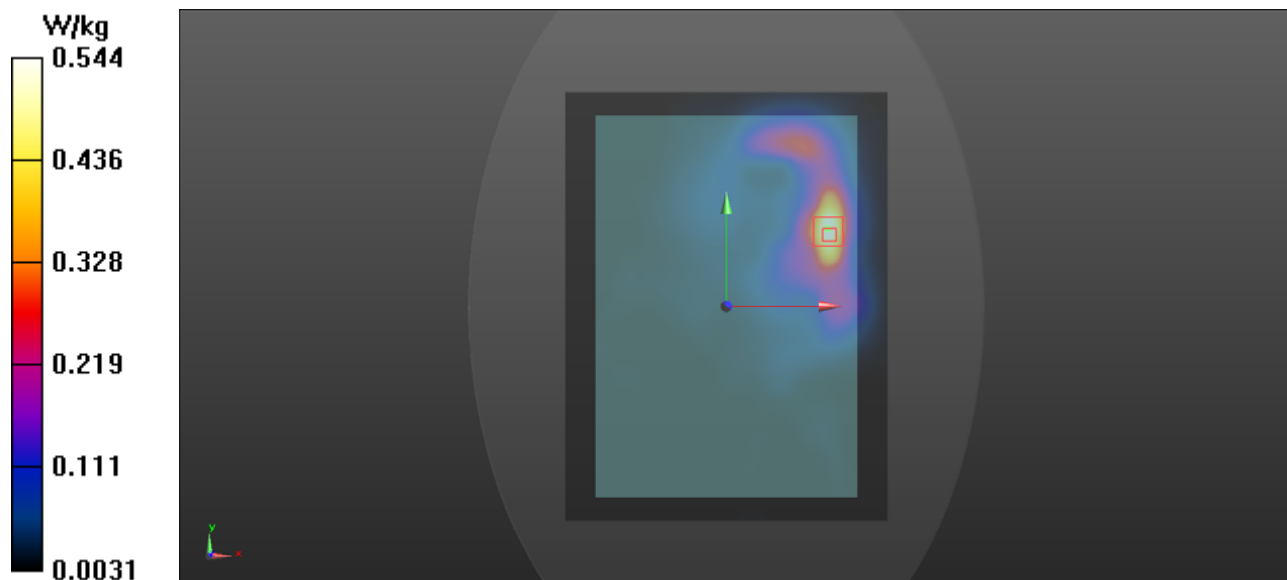
Body Back/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 4.383 V/m; Power Drift = -0.18 dB

Peak SAR (extrapolated) = 1.06 W/kg

SAR(1 g) = 0.495 W/kg; SAR(10 g) = 0.248 W/kg

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



LTE_Band26_back_ch26865**DUT: MS-ND52**

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

Medium: H835 Medium parameters used: $f = 831.5$ MHz; $\sigma = 0.912$ S/m; $\epsilon_r = 42.791$; $\rho = 1000$ kg/m³

Ambient Temperature : 22.5 °C; Liquid Temperature : 21.5 °C

DASY5 Configuration:

- Probe: EX3DV4 - SN3970; ConvF(10.3, 10.3, 10.3); Calibrated: 2021/3/30;
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1418; Calibrated: 2021/3/11
- 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) = 0.426 W/kg

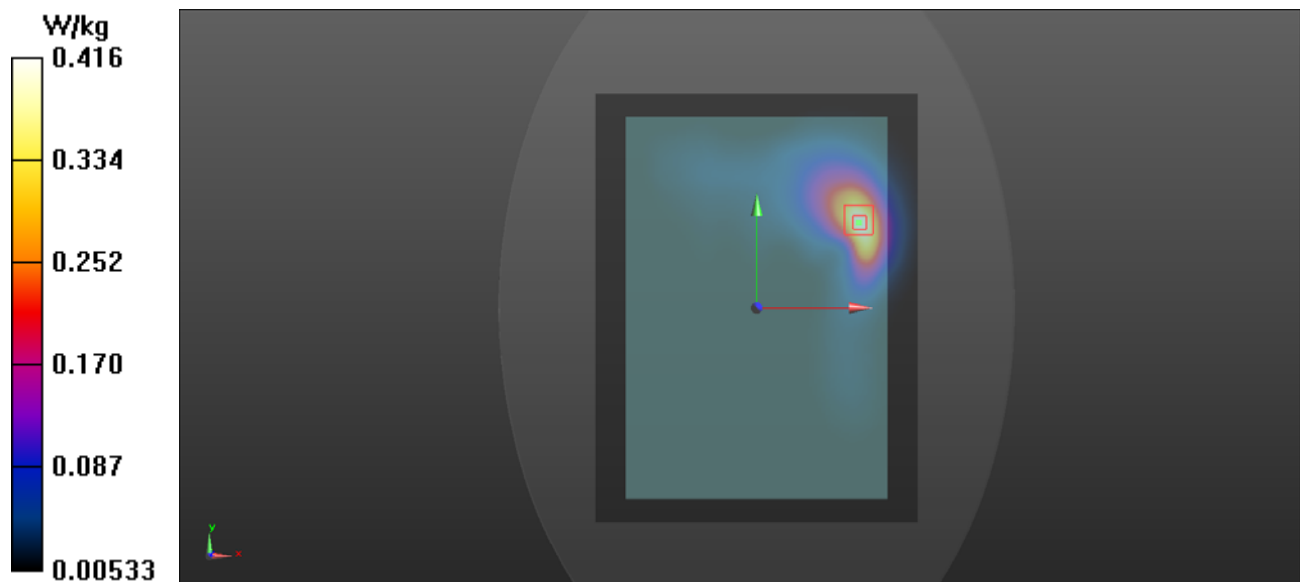
Body Back/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 2.163 V/m; Power Drift = -0.09 dB

Peak SAR (extrapolated) = 0.735 W/kg

SAR(1 g) = 0.382 W/kg; SAR(10 g) = 0.207 W/kg

Maximum value of SAR (measured) = 0.416 W/kg



LTE_Band30_back_ch27710

DUT: MS-ND52

Communication System: LTE; Frequency: 2310 MHz; Duty Cycle: 1:1

Medium: H2450 Medium parameters used: $f = 2300$ MHz; $\sigma = 1.703$ S/m; $\epsilon_r = 38.634$; $\rho = 1000$ kg/m³

Ambient Temperature : 22.4 °C ; Liquid Temperature : 21.6 °C

DASY5 Configuration:

- Probe: EX3DV4 - SN3970; ConvF(8.27, 8.27, 8.27); Calibrated: 2021/3/30;
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1418; Calibrated: 2021/3/11
- 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) = 0.778 W/kg

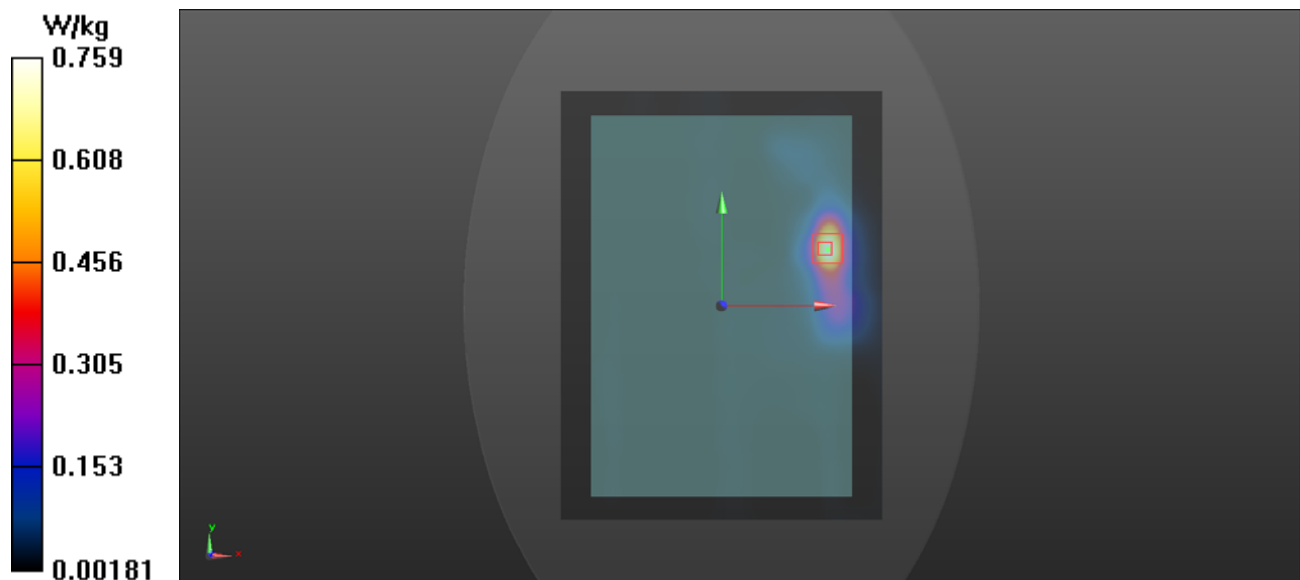
Body Back/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 2.777 V/m; Power Drift = -0.03 dB

Peak SAR (extrapolated) = 1.58 W/kg

SAR(1 g) = 0.707 W/kg; SAR(10 g) = 0.328 W/kg

Maximum value of SAR (measured) = 0.759 W/kg



LTE_Band41_back_ch40620**DUT: MS-ND52**

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

Medium: H2600 Medium parameters used: $f = 2593$ MHz; $\sigma = 2.045$ S/m; $\epsilon_r = 38.373$; $\rho = 1000$ kg/m³

Ambient Temperature : 22.4 °C; Liquid Temperature : 21.5 °C

DASY5 Configuration:

- Probe: EX3DV4 - SN3970; ConvF(7.8, 7.8, 7.8); Calibrated: 2021/3/30;
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1418; Calibrated: 2021/3/11
- 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) = 1.02 W/kg

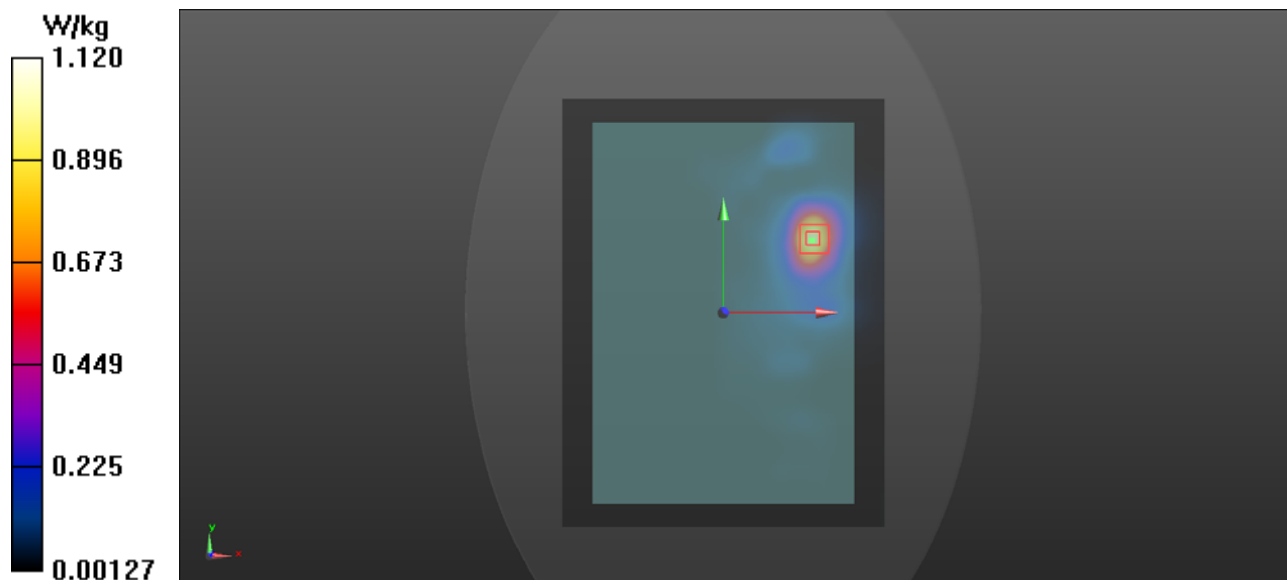
Body Back/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 3.347 V/m; Power Drift = -0.02 dB

Peak SAR (extrapolated) = 2.31 W/kg

SAR(1 g) = 0.965 W/kg; SAR(10 g) = 0.473 W/kg

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



LTE_Band66_back_ch132322

DUT: MS-ND52

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

Medium: H1750 Medium parameters used: $f = 1745$ MHz; $\sigma = 1.331$ S/m; $\epsilon_r = 41.515$; $\rho = 1000$

kg/m³

Ambient Temperature : 22.5 °C; Liquid Temperature : 21.7 °C

DASY5 Configuration:

- Probe: EX3DV4 - SN3970; ConvF(8.8, 8.8, 8.8); Calibrated: 2021/3/30;
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1418; Calibrated: 2021/3/11
- 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) = 0.509 W/kg

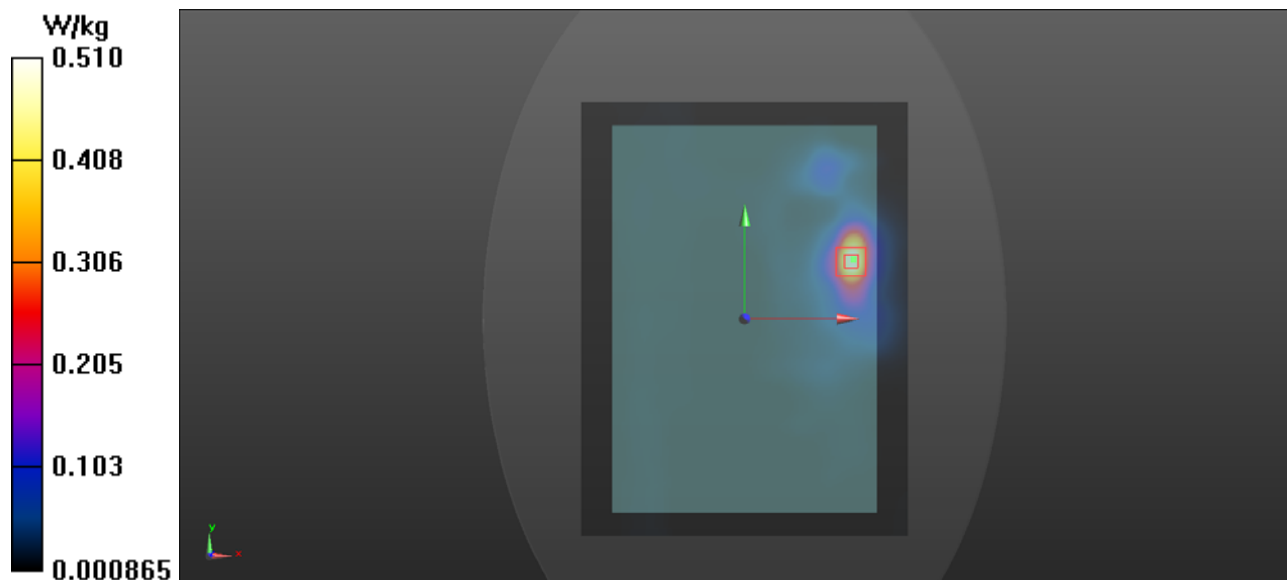
Body Back/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 1.832 V/m; Power Drift = -0.13 dB

Peak SAR (extrapolated) = 1.07 W/kg

SAR(1 g) = 0.474 W/kg; SAR(10 g) = 0.221 W/kg

Maximum value of SAR (measured) = 0.510 W/kg



body back_ch11**DUT: MS-ND52**

Communication System: 802.11b; Frequency: 2462 MHz; Duty Cycle: 1:1

Medium: H2450 Medium parameters used: $f = 2462$ MHz; $\sigma = 1.803$ S/m; $\epsilon_r = 40.386$; $\rho = 1000$

kg/m³

Ambient Temperature : 22.3 °C ; Liquid Temperature : 21.6 °C

DASY5 Configuration:

- Probe: EX3DV4 - SN3970; ConvF(8.06, 8.06, 8.06); Calibrated: 2021/3/30;
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1418; Calibrated: 2021/3/11
- 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) = 0.494 W/kg

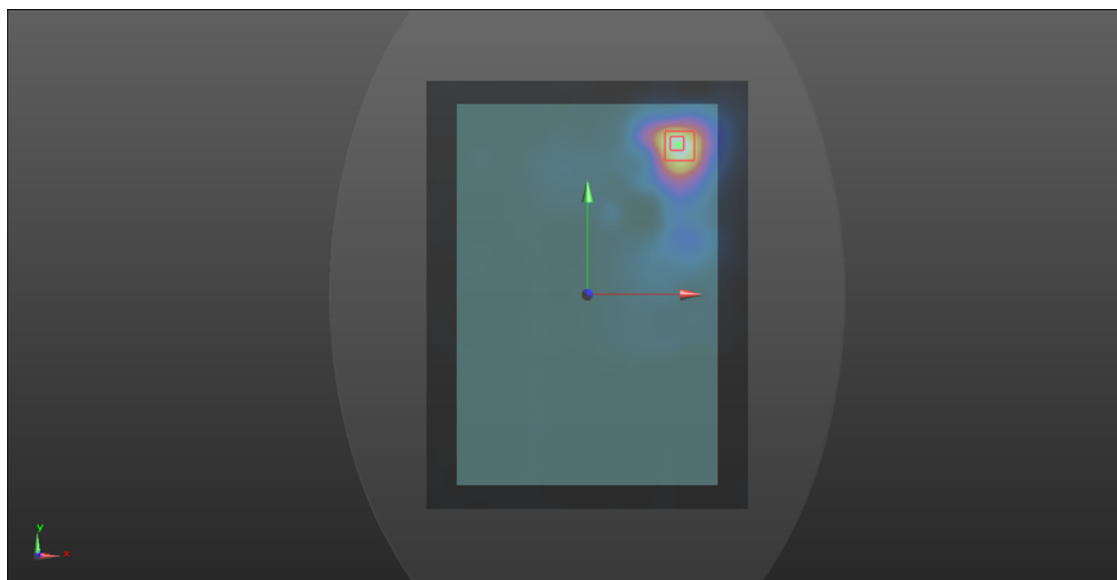
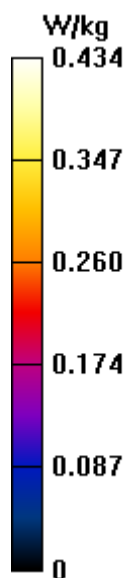
Body Back/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 2.845 V/m; Power Drift = -0.13 dB

Peak SAR (extrapolated) = 0.901 W/kg

SAR(1 g) = 0.366 W/kg; SAR(10 g) = 0.197 W/kg

Maximum value of SAR (measured) = 0.434 W/kg



body back_ch40**DUT: MS-ND52**

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

Medium: H5G Medium parameters used: $f = 5200$ MHz; $\sigma = 4.705$ S/m; $\epsilon_r = 37.101$; $\rho = 1000$ kg/m³

Ambient Temperature : 22.4 °C ; Liquid Temperature : 21.7 °C

DASY5 Configuration:

- Probe: EX3DV4 - SN3970; ConvF(5.85, 5.85, 5.85); Calibrated: 2021/3/30;
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1418; Calibrated: 2021/3/11
- 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) = 0.134 W/kg

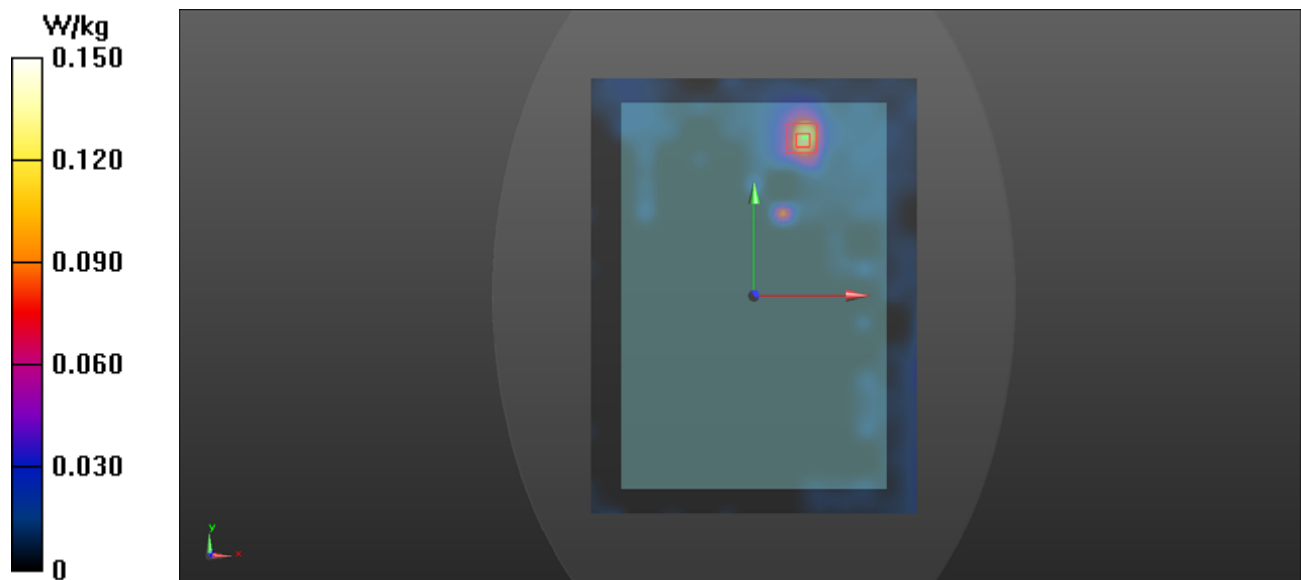
Body Back/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=4mm, dy=4mm, dz=2mm

Reference Value = 2.338 V/m; Power Drift = -0.10 dB

Peak SAR (extrapolated) = 0.346 W/kg

SAR(1 g) = 0.169 W/kg; SAR(10 g) = 0.052 W/kg

Maximum value of SAR (measured) = 0.150 W/kg



body back_ch56**DUT: MS-ND52**

Communication System: 802.11a; Frequency: 5280 MHz; Duty Cycle: 1:1

Medium: H5G Medium parameters used: $f = 5280$ MHz; $\sigma = 4.812$ S/m; $\epsilon_r = 36.936$; $\rho = 1000$ kg/m³

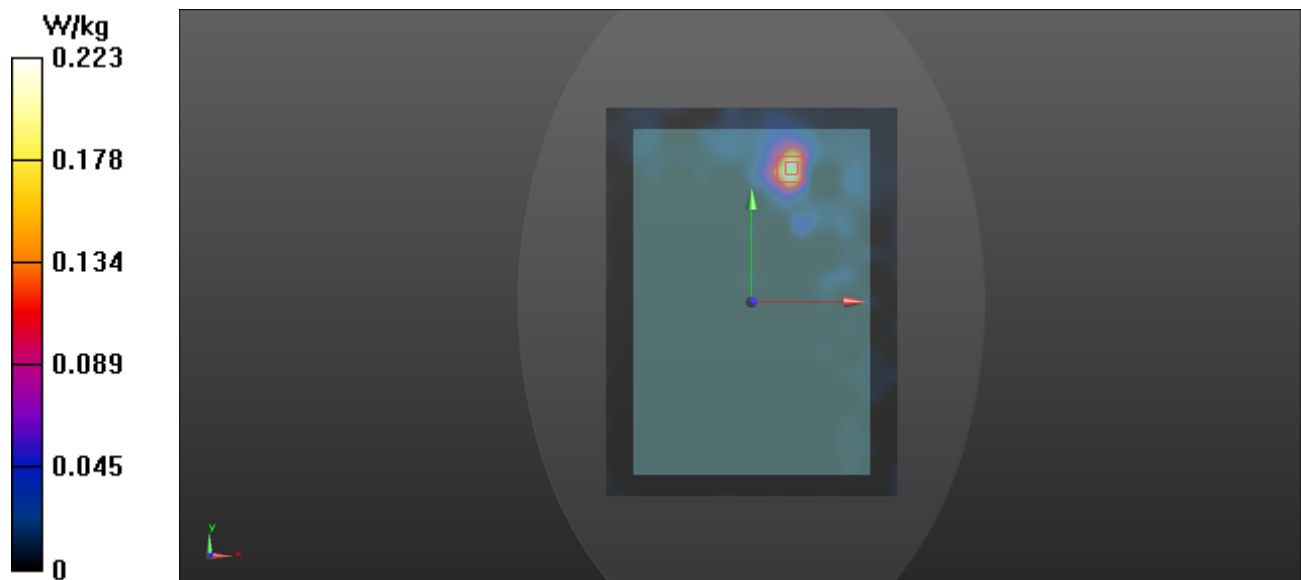
Ambient Temperature : 22.4 °C ; Liquid Temperature : 21.7 °C

DASY5 Configuration:

- Probe: EX3DV4 - SN3970; ConvF(5.85, 5.85, 5.85); Calibrated: 2021/3/30;
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1418; Calibrated: 2021/3/11
- 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) = 0.261 W/kg

Body Back/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=4mm, dy=4mm, dz=2mm
Reference Value = 2.557 V/m; Power Drift = -0.05 dB
Peak SAR (extrapolated) = 0.547 W/kg
SAR(1 g) = 0.198 W/kg; SAR(10 g) = 0.079 W/kg
Maximum value of SAR (measured) = 0.223 W/kg



body back_ch100

DUT: MS-ND52

Communication System: 802.11a; Frequency: 5500 MHz; Duty Cycle: 1:1

Medium: H5G Medium parameters used: $f = 5500$ MHz; $\sigma = 5.086$ S/m; $\epsilon_r = 36.467$; $\rho = 1000$ kg/m³

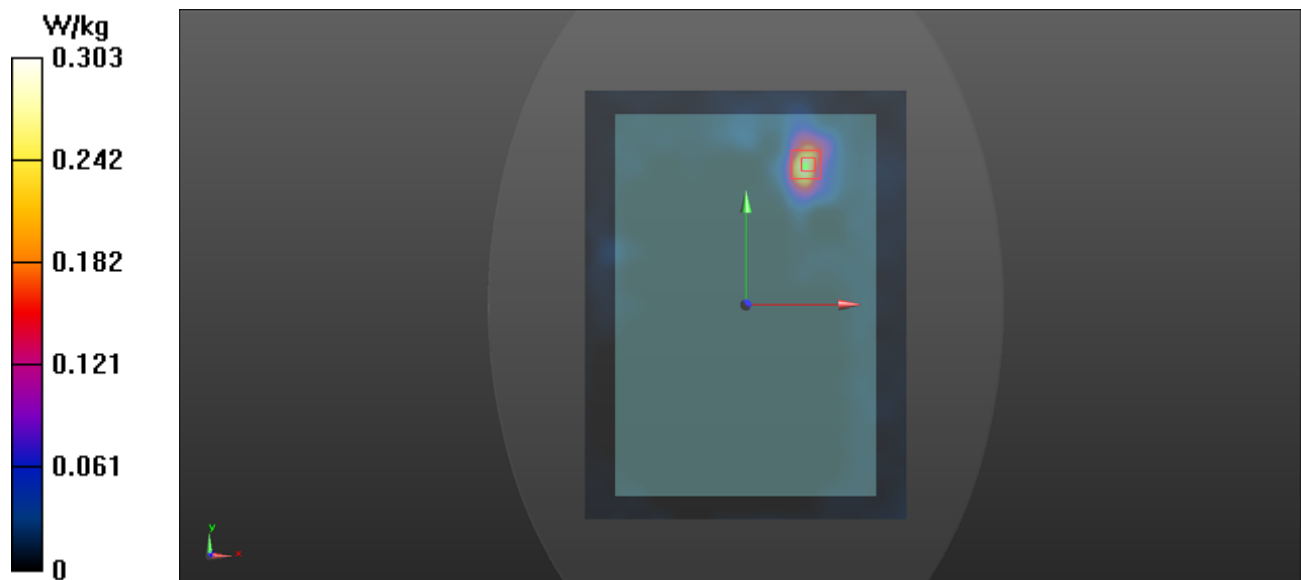
Ambient Temperature : 22.3 °C ; Liquid Temperature : 21.5 °C

DASY5 Configuration:

- Probe: EX3DV4 - SN3970; ConvF(5.17, 5.17, 5.17); Calibrated: 2021/3/30;
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1418; Calibrated: 2021/3/11
- 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) = 0.294 W/kg

Body Back/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=4mm, dy=4mm, dz=2mm
Reference Value = 2.180 V/m; Power Drift = -0.03 dB
Peak SAR (extrapolated) = 1.35 W/kg
SAR(1 g) = 0.322 W/kg; SAR(10 g) = 0.122 W/kg
Maximum value of SAR (measured) = 0.303 W/kg



body back_ch149**DUT: MS-ND52**

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

Medium: H5G Medium parameters used: $f = 5745$ MHz; $\sigma = 5.38$ S/m; $\epsilon_r = 35.961$; $\rho = 1000$ kg/m³

Ambient Temperature : 22.3 °C ; Liquid Temperature : 21.4 °C

DASY5 Configuration:

- Probe: EX3DV4 - SN3970; ConvF(5.2, 5.2, 5.2); Calibrated: 2021/3/30;
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1418; Calibrated: 2021/3/11
- 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) = 0.375 W/kg

Body Back/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=4mm, dy=4mm, dz=2mm
Reference Value = 2.982 V/m; Power Drift = 0.01 dB
Peak SAR (extrapolated) = 1.05 W/kg
SAR(1 g) = 0.342 W/kg; SAR(10 g) = 0.121 W/kg
Maximum value of SAR (measured) = 0.387 W/kg

