

SAR Plots

- Verification Plots
- SAR Test Plots

DT&C Co., Ltd.

DUT: Dipole 1800 MHz; Type: D1800V2; Serial: D1800V2 - SN:2d047

Communication System: UID 0, CW (0); Frequency: 1800 MHz; Duty Cycle: 1:1
Medium parameters used: $f = 1800 \text{ MHz}$; $\sigma = 1.388 \text{ S/m}$; $\epsilon_r = 40.019$; $\rho = 1000 \text{ kg/m}^3$

Phantom section: Flat Section

DASY5 Configuration:

Probe: ES3DV3 - SN3328; ConvF(5.56, 5.56, 5.56); Calibrated: 2018-03-21; Electronics: DAE4 Sn1394
Sensor-Surface: 3mm (Mechanical Surface Detection)
Phantom: Twin-SAM V5.0 ; Type: QD 000 P40 CD; Serial: 1679
Measurement SW: DASY52, Version 52.8 (8); SEMCAD X Version 14.6.10 (7331)

Test Date: 2018-05-08; Ambient Temp: 21.6; Tissue Temp: 21.8

1800 MHz System Head Verification (250 mW)

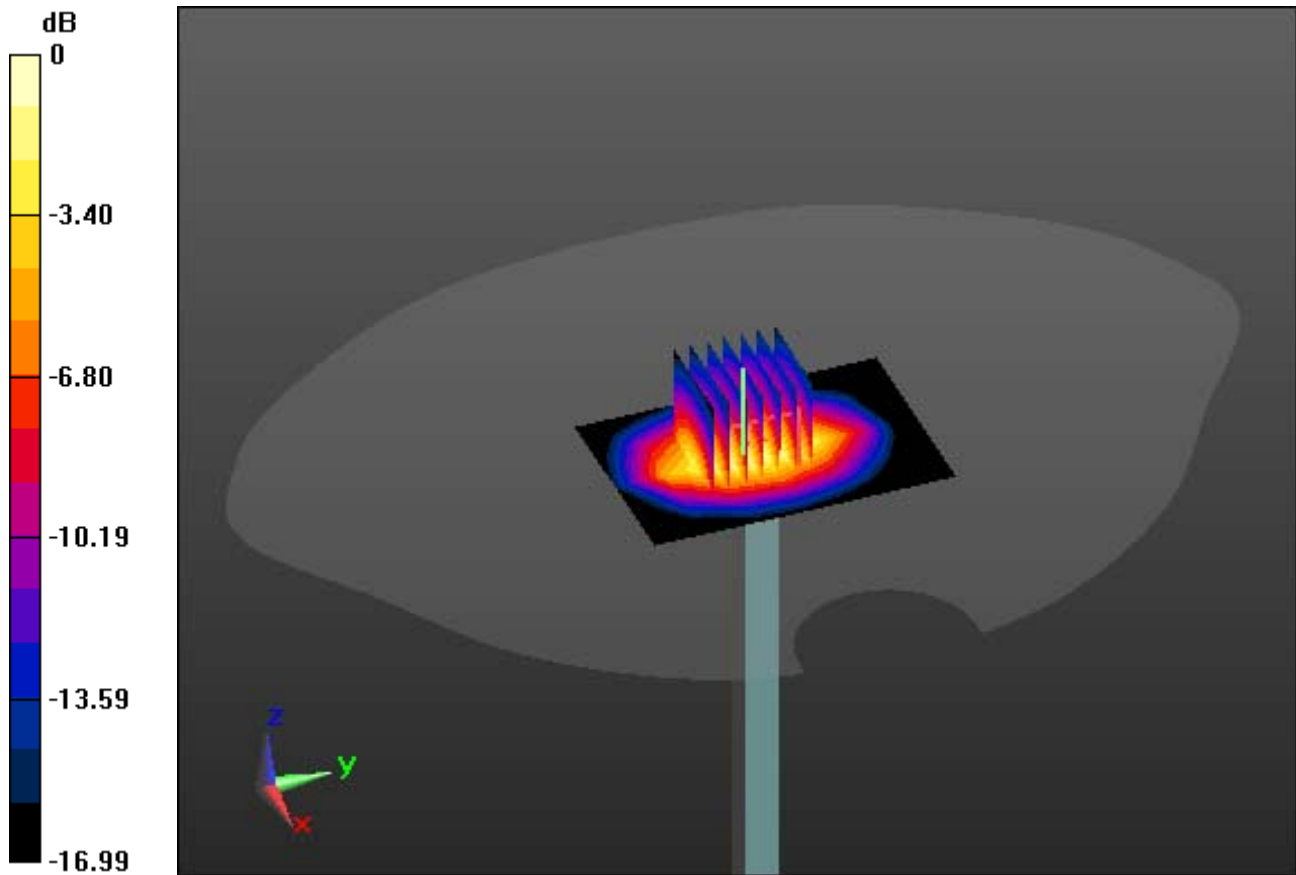
Area Scan (5x7x1): Measurement grid: $dx=15\text{mm}$, $dy=15\text{mm}$

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

Power Drift = 0.05 dB

Peak SAR (extrapolated) = 18.4 W/kg

SAR(1 g) = 9.70 W/kg; SAR(10 g) = 5.06 W/kg



0 dB = 13.9 W/kg

DT&C Co., Ltd.

DUT: Dipole 1800 MHz; Type: D1800V2; Serial: D1800V2 - SN:2d047

Communication System: UID 0, CW (0); Frequency: 1800 MHz; Duty Cycle: 1:1
Medium parameters used: $f = 1800 \text{ MHz}$; $\sigma = 1.531 \text{ S/m}$; $\epsilon_r = 51.371$; $\rho = 1000 \text{ kg/m}^3$

Phantom section: Flat Section

DASY5 Configuration:

Probe: ES3DV3 - SN3328; ConvF(5.1, 5.1, 5.1); Calibrated: 2018-03-21; Electronics: DAE4 Sn1394
Sensor-Surface: 3mm (Mechanical Surface Detection)
Phantom: Twin-SAM V5.0 ; Type: QD 000 P40 CD; Serial: 1679
Measurement SW: DASY52, Version 52.8 (8); SEMCAD X Version 14.6.10 (7331)

Test Date: 2018-05-09; Ambient Temp: 21.7; Tissue Temp: 22.1

1800 MHz System Body Verification (250 mW)

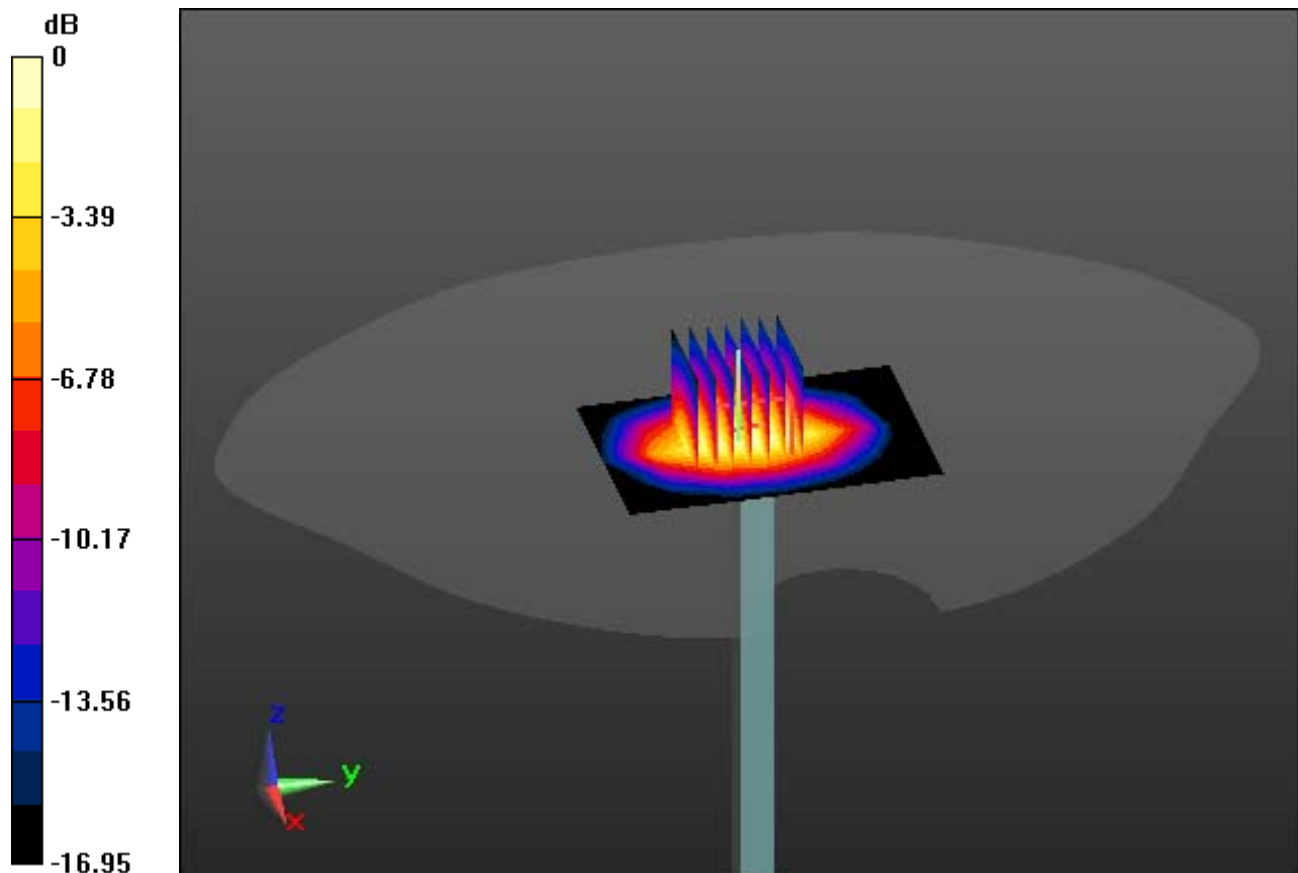
Area Scan (5x7x1): Measurement grid: $dx=15\text{mm}$, $dy=15\text{mm}$

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

Power Drift = 0.02 dB

Peak SAR (extrapolated) = 18.1 W/kg

SAR(1 g) = 9.63 W/kg; SAR(10 g) = 4.98 W/kg



0 dB = 14.0 W/kg

DT&C Co., Ltd.

DUT: Dipole 1800 MHz; Type: D1800V2; Serial: D1800V2 - SN:2d047

Communication System: UID 0, CW (0); Frequency: 1800 MHz; Duty Cycle: 1:1
Medium parameters used: $f = 1800 \text{ MHz}$; $\sigma = 1.393 \text{ S/m}$; $\epsilon_r = 40.255$; $\rho = 1000 \text{ kg/m}^3$

Phantom section: Flat Section

DASY5 Configuration:

Probe: ES3DV3 - SN3328; ConvF(5.56, 5.56, 5.56); Calibrated: 2018-03-21; Electronics: DAE4 Sn1394
Sensor-Surface: 3mm (Mechanical Surface Detection)
Phantom: Twin-SAM V5.0 ; Type: QD 000 P40 CD; Serial: 1679
Measurement SW: DASY52, Version 52.8 (8); SEMCAD X Version 14.6.10 (7331)

Test Date: 2018-05-10; Ambient Temp: 21.4; Tissue Temp: 21.5

1800 MHz System Head Verification (250 mW)

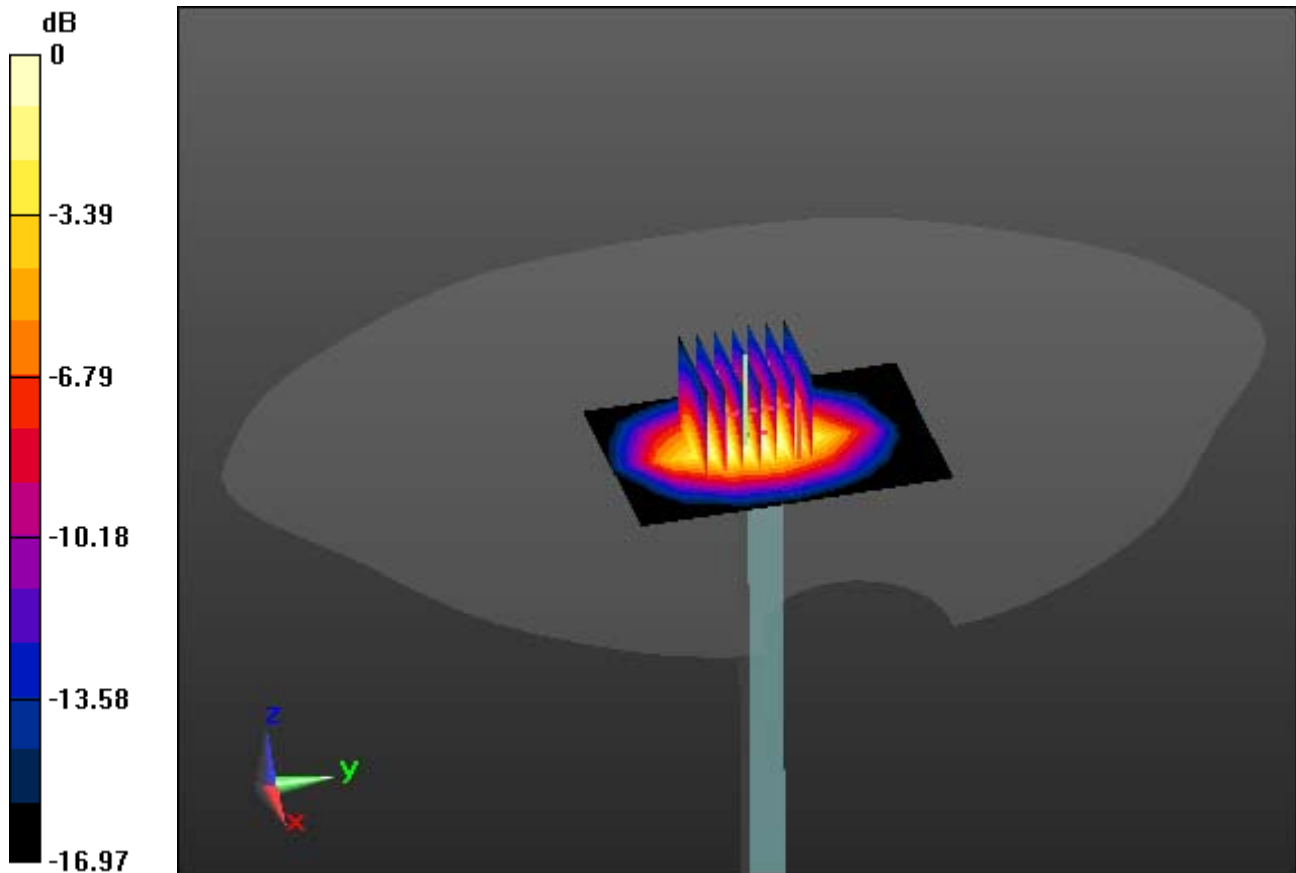
Area Scan (5x7x1): Measurement grid: $dx=15\text{mm}$, $dy=15\text{mm}$

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

Power Drift = 0.09 dB

Peak SAR (extrapolated) = 18.9 W/kg

SAR(1 g) = 9.76 W/kg; SAR(10 g) = 5.09 W/kg



0 dB = 14.5 W/kg

DT&C Co., Ltd.

DUT: Dipole 1800 MHz; Type: D1800V2; Serial: D1800V2 - SN:2d047

Communication System: UID 0, CW (0); Frequency: 1800 MHz; Duty Cycle: 1:1
Medium parameters used: $f = 1800$ MHz; $\sigma = 1.538$ S/m; $\epsilon_r = 51.797$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

DASY5 Configuration:

Probe: ES3DV3 - SN3328; ConvF(5.1, 5.1, 5.1); Calibrated: 2018-03-21; Electronics: DAE4 Sn1394
Sensor-Surface: 3mm (Mechanical Surface Detection)
Phantom: Twin-SAM V5.0 ; Type: QD 000 P40 CD; Serial: 1679
Measurement SW: DASY52, Version 52.8 (8); SEMCAD X Version 14.6.10 (7331)

Test Date: 2018-05-11; Ambient Temp: 21.3; Tissue Temp: 21.5

1800 MHz System Body Verification (250 mW)

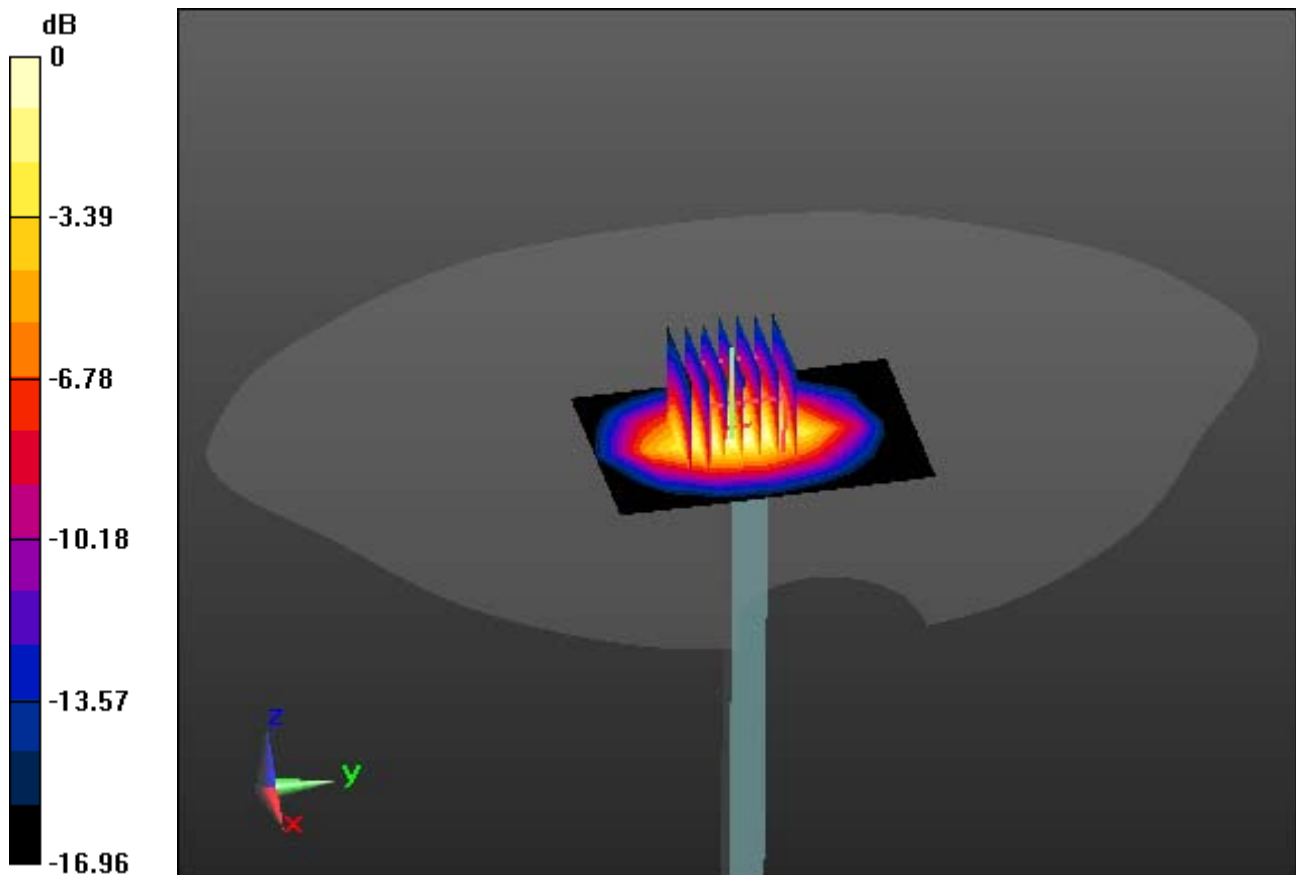
Area Scan (5x7x1): Measurement grid: dx=15mm, dy=15mm

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

Power Drift = 0.04 dB

Peak SAR (extrapolated) = 18.5 W/kg

SAR(1 g) = 9.67 W/kg; SAR(10 g) = 5.01 W/kg



0 dB = 14.5 W/kg

DT&C Co., Ltd.

DUT: Dipole 1900 MHz; Type: D1900V2; Serial: D1900V2 - SN:5d029

Communication System: UID 0, CW (0); Frequency: 1900 MHz; Duty Cycle: 1:1
Medium parameters used: $f = 1900$ MHz; $\sigma = 1.409$ S/m; $\epsilon_r = 39.71$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

DASY5 Configuration:

Probe: ES3DV3 - SN3328; ConvF(5.26, 5.26, 5.26); Calibrated: 2018-03-21; Electronics: DAE4 Sn1394
Sensor-Surface: 3mm (Mechanical Surface Detection)
Phantom: Twin-SAM V5.0 ; Type: QD 000 P40 CD; Serial: 1679
Measurement SW: DASY52, Version 52.8 (8); SEMCAD X Version 14.6.10 (7331)

Test Date: 2018-05-01; Ambient Temp: 21.4; Tissue Temp: 21.7

1900 MHz System Head Verification (250 mW)

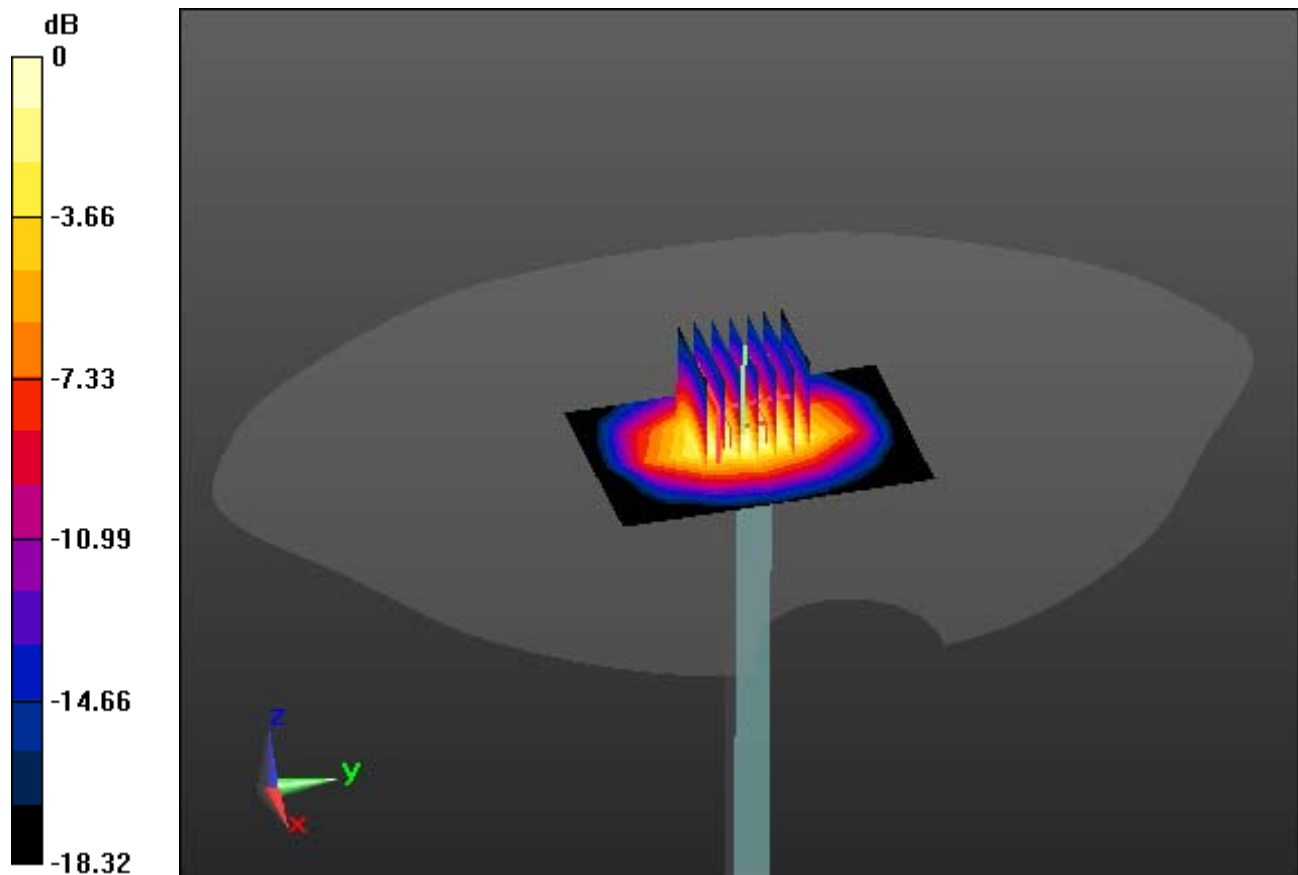
Area Scan (5x7x1): Measurement grid: dx=15mm, dy=15mm

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

Power Drift = 0.11 dB

Peak SAR (extrapolated) = 17.7 W/kg

SAR(1 g) = 9.64 W/kg; SAR(10 g) = 4.97 W/kg



0 dB = 13.1 W/kg

DT&C Co., Ltd.

DUT: Dipole 1900 MHz; Type: D1900V2; Serial: D1900V2 - SN:5d029

Communication System: UID 0, CW (0); Frequency: 1900 MHz; Duty Cycle: 1:1
Medium parameters used: $f = 1900$ MHz; $\sigma = 1.538$ S/m; $\epsilon_r = 51.579$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

DASY5 Configuration:

Probe: ES3DV3 - SN3328; ConvF(4.88, 4.88, 4.88); Calibrated: 2018-03-21; Electronics: DAE4 Sn1394
Sensor-Surface: 3mm (Mechanical Surface Detection)
Phantom: Twin-SAM V5.0 ; Type: QD 000 P40 CD; Serial: 1679
Measurement SW: DASY52, Version 52.8 (8); SEMCAD X Version 14.6.10 (7331)

Test Date: 2018-05-02; Ambient Temp: 21.6; Tissue Temp: 21.8

1900 MHz System Body Verification (250 mW)

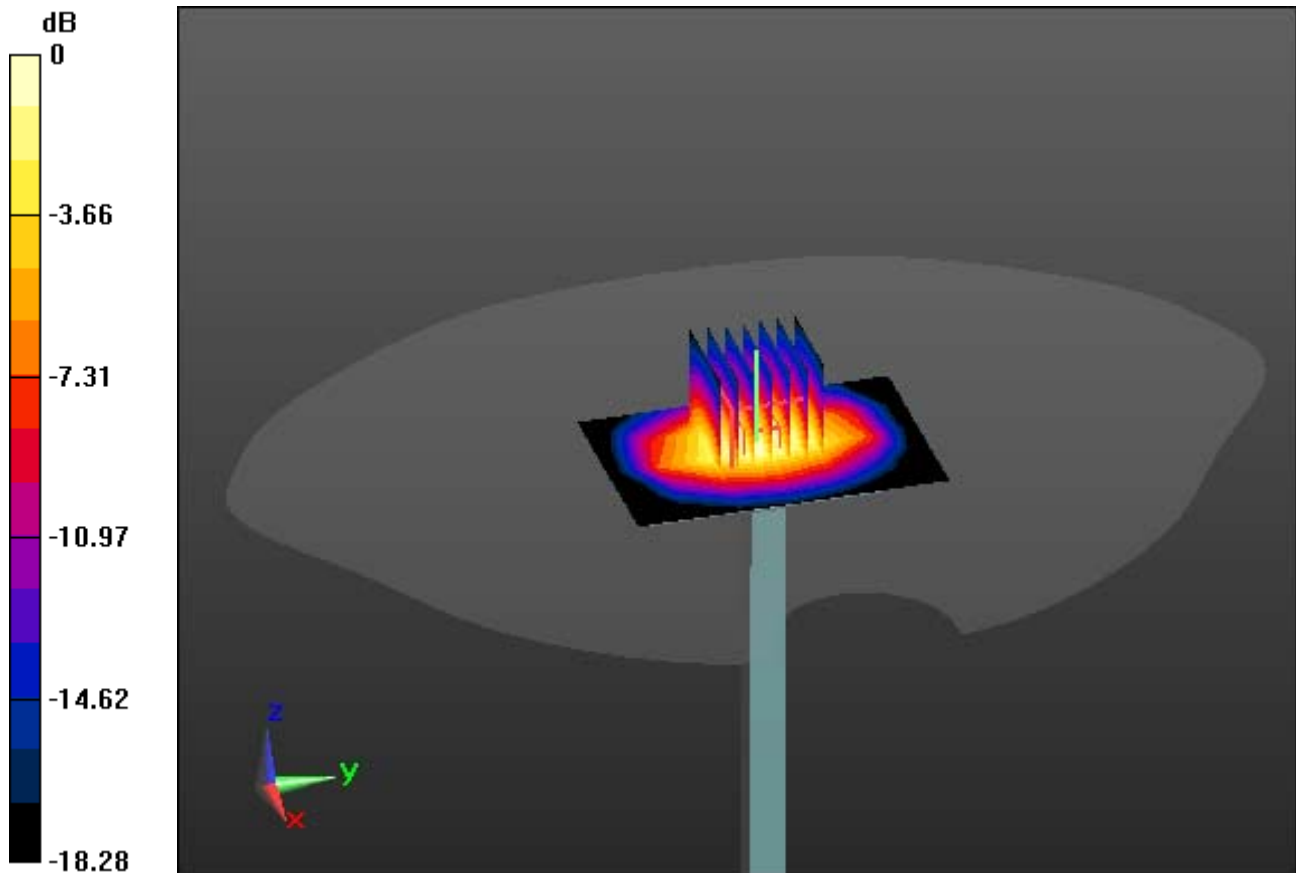
Area Scan (5x7x1): Measurement grid: dx=15mm, dy=15mm

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

Power Drift = 0.13 dB

Peak SAR (extrapolated) = 18.3 W/kg

SAR(1 g) = 9.77 W/kg; SAR(10 g) = 5.06 W/kg



0 dB = 14.1 W/kg

DT&C Co., Ltd.

DUT: Dipole 1900 MHz; Type: D1900V2; Serial: D1900V2 - SN:5d029

Communication System: UID 0, CW (0); Frequency: 1900 MHz; Duty Cycle: 1:1
Medium parameters used: $f = 1900$ MHz; $\sigma = 1.411$ S/m; $\epsilon_r = 39.749$; $\rho = 1000$ kg/m³
Phantom section: Flat Section

DASY5 Configuration:

Probe: ES3DV3 - SN3328; ConvF(5.26, 5.26, 5.26); Calibrated: 2018-03-21; Electronics: DAE4 Sn1394
Sensor-Surface: 3mm (Mechanical Surface Detection)
Phantom: Twin-SAM V5.0 ; Type: QD 000 P40 CD; Serial: 1679
Measurement SW: DASY52, Version 52.8 (8); SEMCAD X Version 14.6.10 (7331)

Test Date: 2018-05-03; Ambient Temp: 21.2; Tissue Temp: 21.5

1900 MHz System Head Verification (250 mW)

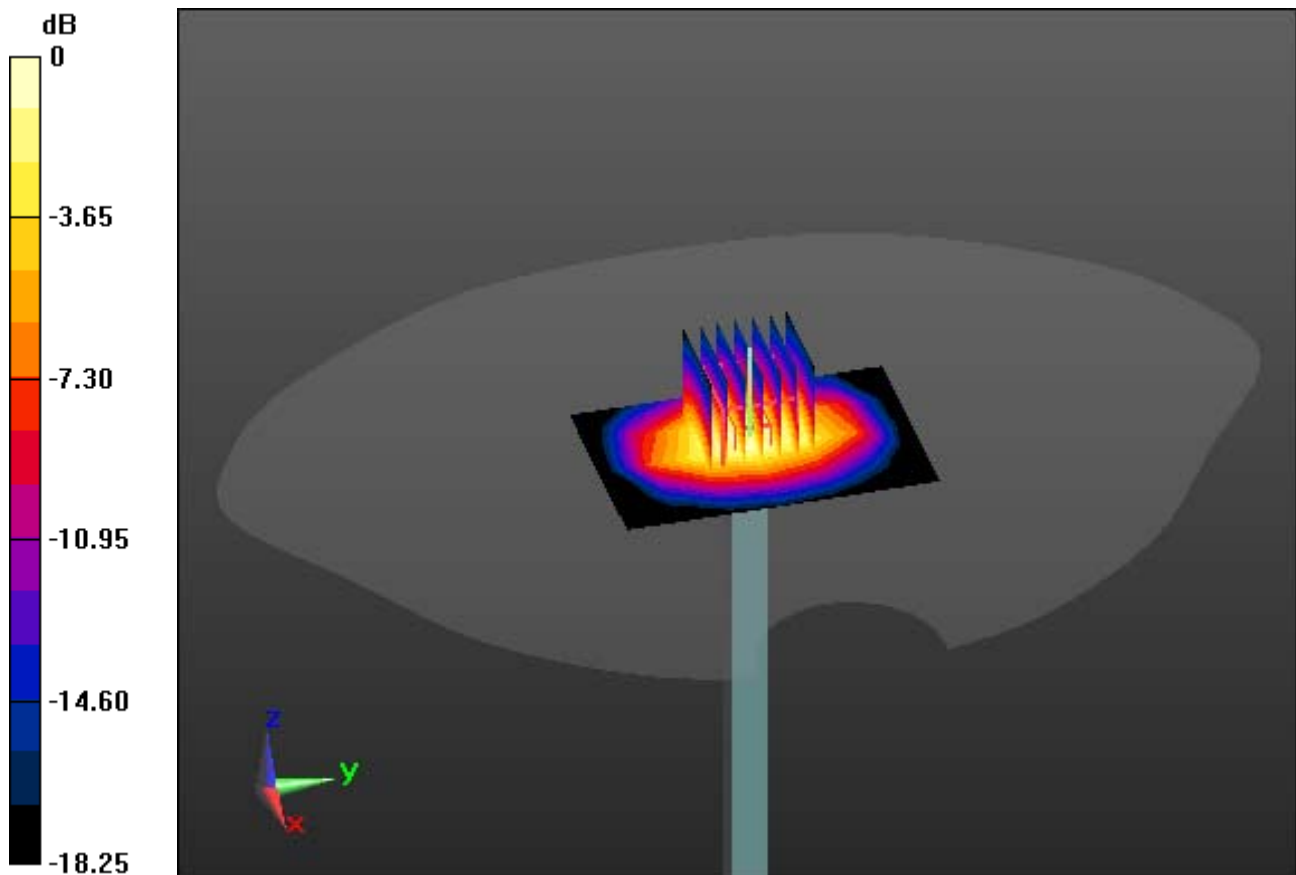
Area Scan (5x7x1): Measurement grid: dx=15mm, dy=15mm

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

Power Drift = 0.16 dB

Peak SAR (extrapolated) = 18.1 W/kg

SAR(1 g) = 9.68 W/kg; SAR(10 g) = 4.99 W/kg



0 dB = 13.4 W/kg

DT&C Co., Ltd.

DUT: Dipole 1900 MHz; Type: D1900V2; Serial: D1900V2 - SN:5d029

Communication System: UID 0, CW (0); Frequency: 1900 MHz; Duty Cycle: 1:1
Medium parameters used: $f = 1900$ MHz; $\sigma = 1.531$ S/m; $\epsilon_r = 51.739$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

DASY5 Configuration:

Probe: ES3DV3 - SN3328; ConvF(4.88, 4.88, 4.88); Calibrated: 2018-03-21; Electronics: DAE4 Sn1394
Sensor-Surface: 3mm (Mechanical Surface Detection)
Phantom: Twin-SAM V5.0 ; Type: QD 000 P40 CD; Serial: 1679
Measurement SW: DASY52, Version 52.8 (8); SEMCAD X Version 14.6.10 (7331)

Test Date: 2018-05-04; Ambient Temp: 21.8; Tissue Temp: 22.1

1900 MHz System Body Verification (250 mW)

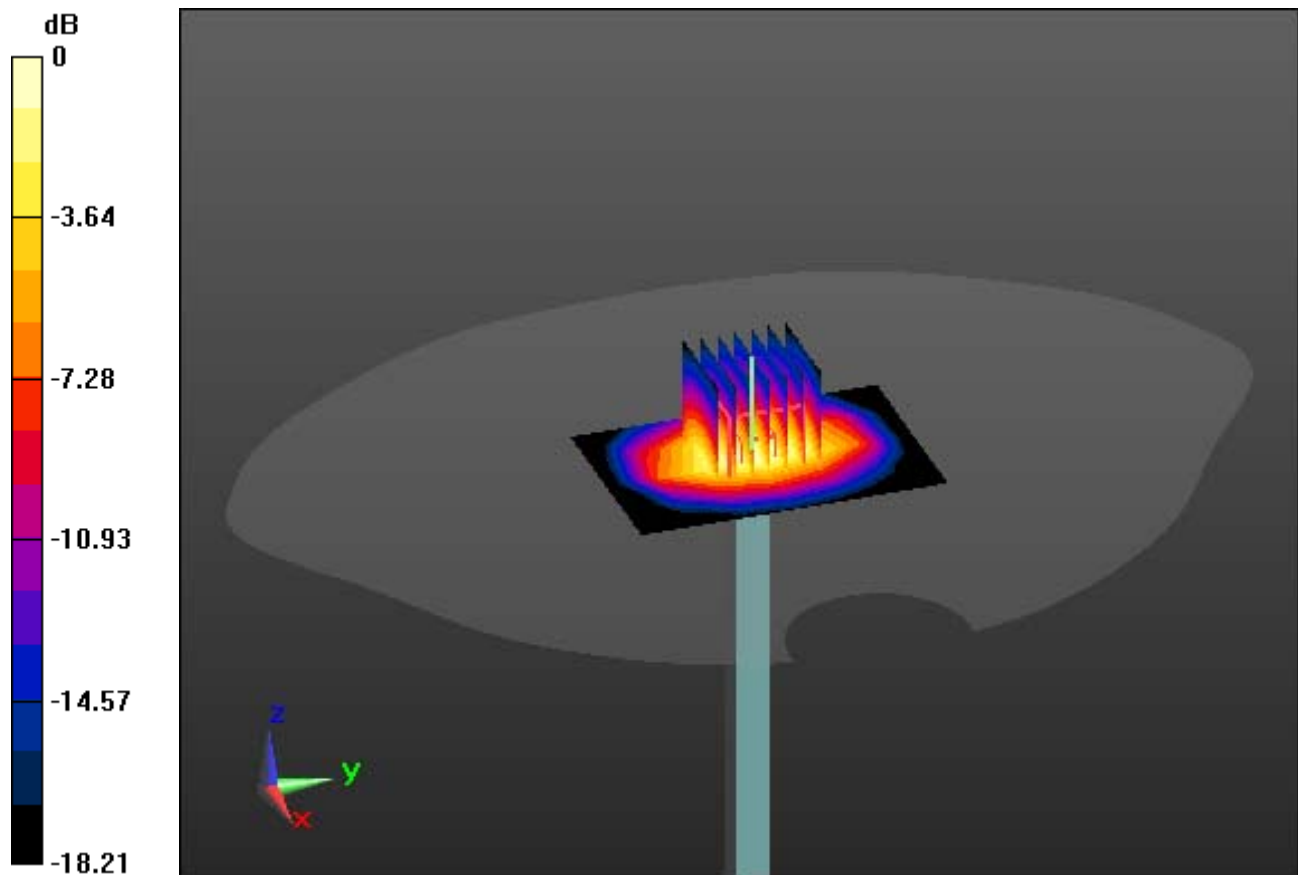
Area Scan (5x7x1): Measurement grid: dx=15mm, dy=15mm

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

Power Drift = 0.15 dB

Peak SAR (extrapolated) = 18.1 W/kg

SAR(1 g) = 9.75 W/kg; SAR(10 g) = 5.04 W/kg



0 dB = 13.8 W/kg

DT&C Co., Ltd.

DUT: Dipole 2450 MHz; Type: D2450V2; Serial: D2450V2 - SN:726

Communication System: UID 0, CW (0); Frequency: 2450 MHz; Duty Cycle: 1:1
Medium parameters used: $f = 2450$ MHz; $\sigma = 1.844$ S/m; $\epsilon_r = 38.231$; $\rho = 1000$ kg/m³
Phantom section: Flat Section

DASY5 Configuration:

Probe: ES3DV3 - SN3328; ConvF(4.82, 4.82, 4.82); Calibrated: 2018-03-21; Electronics: DAE4 Sn1394
Sensor-Surface: 3mm (Mechanical Surface Detection)
Phantom: Twin-SAM V5.0 ; Type: QD 000 P40 CD; Serial: 1679
Measurement SW: DASY52, Version 52.8 (8); SEMCAD X Version 14.6.10 (7331)

Test Date: 2018-05-14; Ambient Temp: 21.8; Tissue Temp: 21.9

2450 MHz System Head Verification (100 mW)

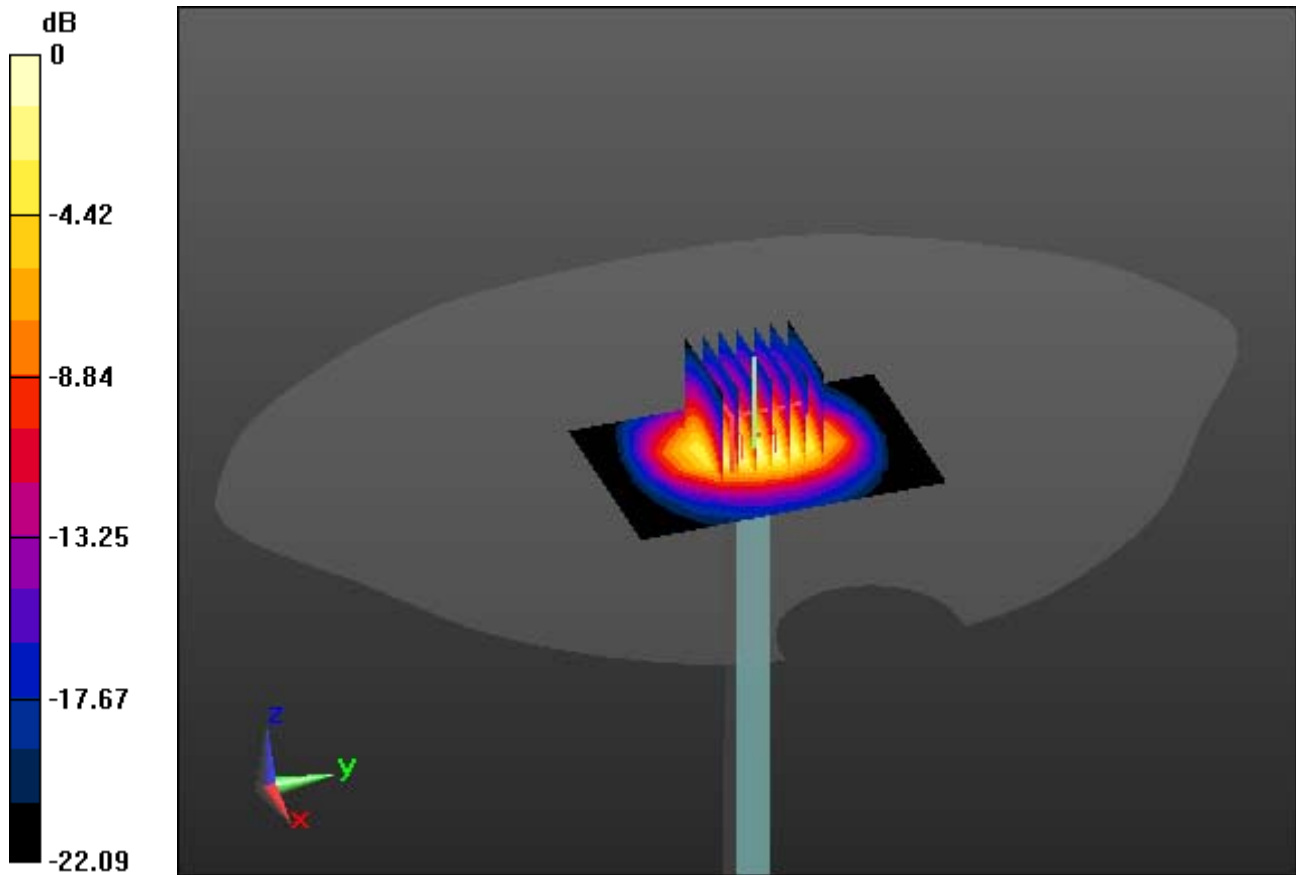
Area Scan (7x10x1): Measurement grid: dx=10mm, dy=10mm

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

Power Drift = -0.12 dB

Peak SAR (extrapolated) = 11.1 W/kg

SAR(1 g) = 5.25 W/kg; SAR(10 g) = 2.37 W/kg



0 dB = 8.14 W/kg

DT&C Co., Ltd.

DUT: Dipole 2450 MHz; Type: D2450V2; Serial: D2450V2 - SN:726

Communication System: UID 0, CW (0); Frequency: 2450 MHz; Duty Cycle: 1:1
Medium parameters used: $f = 2450$ MHz; $\sigma = 1.893$ S/m; $\epsilon_r = 52.584$; $\rho = 1000$ kg/m³
Phantom section: Flat Section

DASY5 Configuration:

Probe: ES3DV3 - SN3328; ConvF(4.48, 4.48, 4.48); Calibrated: 2018-03-21; Electronics: DAE4 Sn1394
Sensor-Surface: 3mm (Mechanical Surface Detection)
Phantom: Twin-SAM V5.0 ; Type: QD 000 P40 CD; Serial: 1679
Measurement SW: DASY52, Version 52.8 (8); SEMCAD X Version 14.6.10 (7331)

Test Date: 2018-05-15; Ambient Temp: 21.5; Tissue Temp: 21.8

2450 MHz System Body Verification (100 mW)

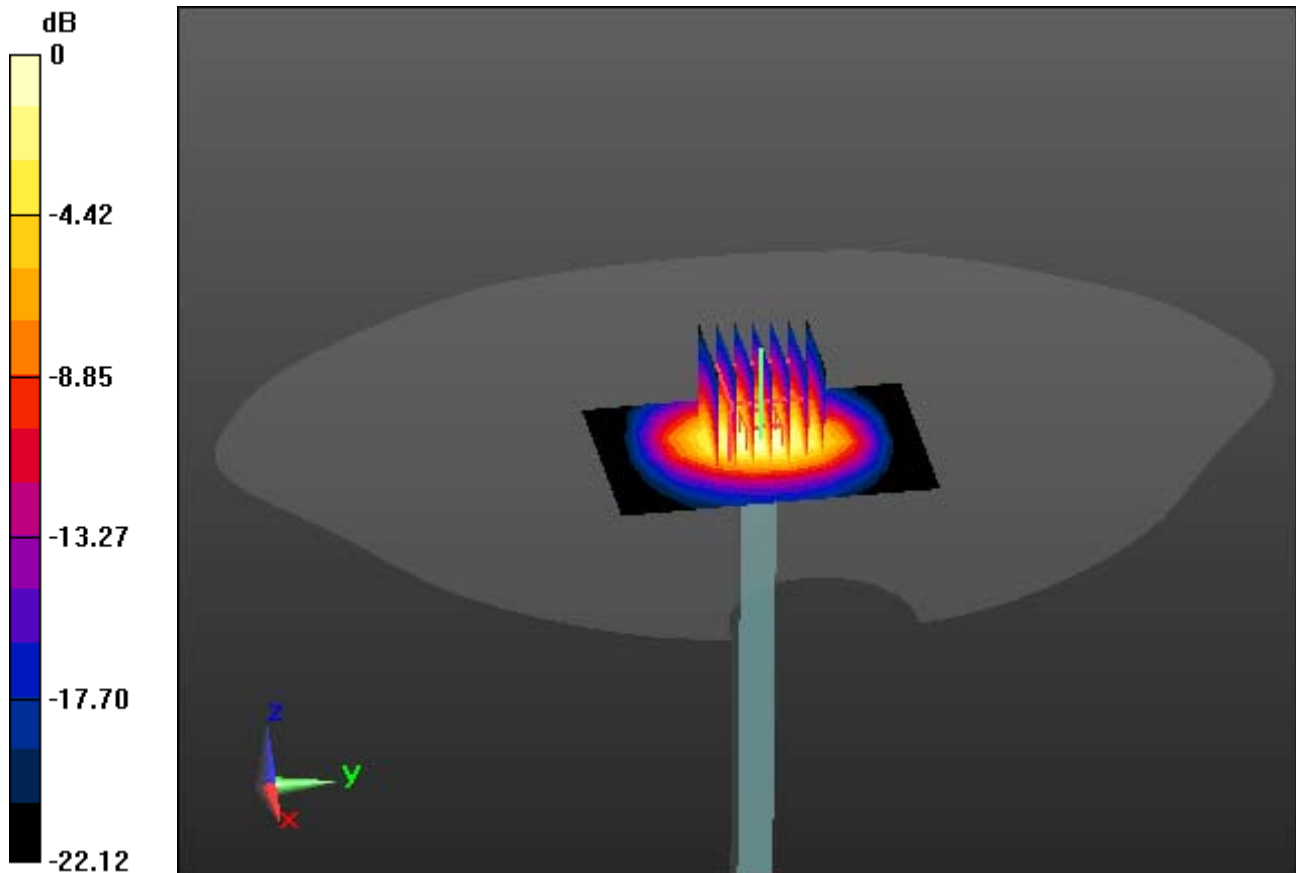
Area Scan (7x10x1): Measurement grid: dx=10mm, dy=10mm

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

Power Drift = -0.09 dB

Peak SAR (extrapolated) = 11.4 W/kg

SAR(1 g) = 5.15 W/kg; SAR(10 g) = 2.33 W/kg



0 dB = 7.96 W/kg

DT&C Co., Ltd.

DUT: HA81; Type: Bar

Communication System: UID 0, PCS 1900 (0); Frequency: 1880 MHz; Duty Cycle: 1:8.3

Medium parameters used: $f = 1880 \text{ MHz}$; $\sigma = 1.39 \text{ S/m}$; $\epsilon_r = 39.798$; $\rho = 1000 \text{ kg/m}^3$

Phantom section: Left Section

DASY5 Configuration:

Probe: ES3DV3 - SN3328; ConvF(5.26, 5.26, 5.26); Calibrated: 3/21/2018; Electronics: DAE4 Sn1394

Sensor-Surface: 3mm (Mechanical Surface Detection)

Phantom: Twin-SAM V5.0 ; Type: QD 000 P40 CD; Serial: 1679

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

Test Date: 2018-05-01; Ambient Temp: 21.4; Tissue Temp: 21.7

Left Touch, PCS1900 Ch. 661, Ant Internal, Standard Battery

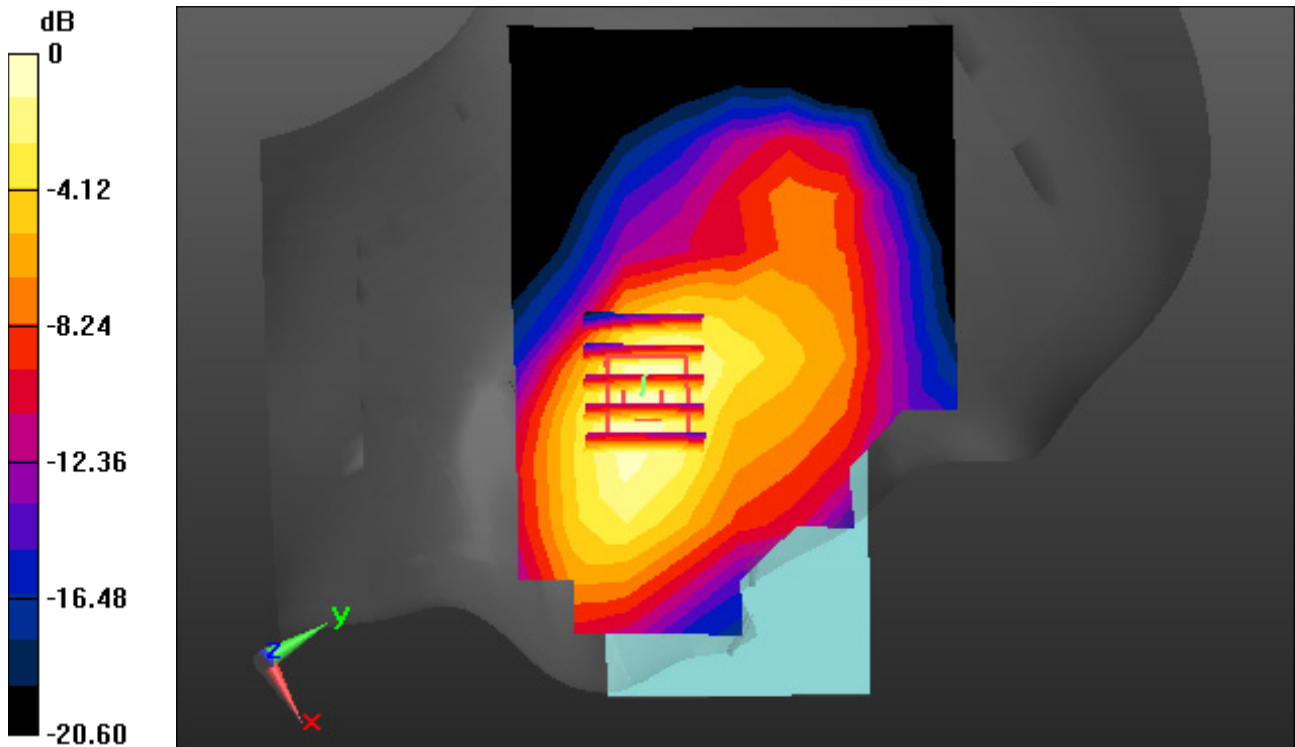
Area Scan (9x14x1): Measurement grid: $dx=15\text{mm}$, $dy=15\text{mm}$

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

Power Drift = 0.14 dB

Peak SAR (extrapolated) = 0.573 W/kg

SAR(1 g) = 0.358 W/kg; SAR(10 g) = 0.216 W/kg



0 dB = 0.432 W/kg

DT&C Co., Ltd.

DUT: HA81; Type: Bar

Communication System: UID 0, PCS1900_Class 10(0); Frequency: 1880 MHz; Duty Cycle: 1:4.15

Medium parameters used: $f = 1880$ MHz; $\sigma = 1.39$ S/m; $\epsilon_r = 39.798$; $\rho = 1000$ kg/m³

Phantom section: Left Section

DASY5 Configuration:

Probe: ES3DV3 - SN3328; ConvF(5.26, 5.26, 5.26); Calibrated: 3/21/2018; Electronics: DAE4 Sn1394

Sensor-Surface: 3mm (Mechanical Surface Detection)

Phantom: Twin-SAM V5.0 ; Type: QD 000 P40 CD; Serial: 1679

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

Test Date: 2018-05-01; Ambient Temp: 21.4; Tissue Temp: 21.7

Left Touch, GPRS1900 2Tx Ch. 661, Ant Internal, Standard Battery

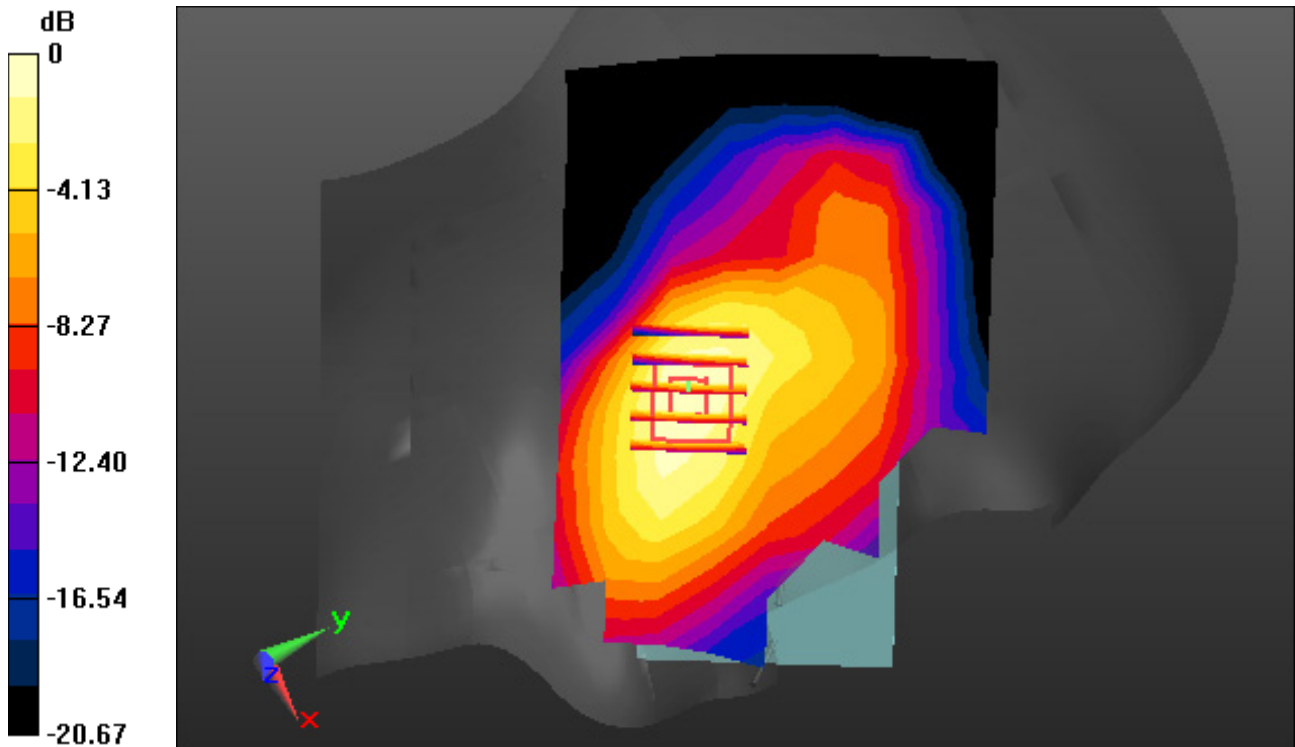
Area Scan (9x14x1): Measurement grid: dx=15mm, dy=15mm

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

Power Drift = 0.03 dB

Peak SAR (extrapolated) = 0.607 W/kg

SAR(1 g) = 0.370 W/kg; SAR(10 g) = 0.225 W/kg



0 dB = 0.435 W/kg

DT&C Co., Ltd.

DUT: HA81; Type: Bar

Communication System: UID 0, WCDMA Band 4 (0); Frequency: 1732.4 MHz; Duty Cycle: 1:1

Medium parameters used: $f = 1732.4$ MHz; $\sigma = 1.325$ S/m; $\epsilon_r = 40.343$; $\rho = 1000$ kg/m³

Phantom section: Left Section

DASY5 Configuration:

Probe: ES3DV3 - SN3328; ConvF(5.56, 5.56, 5.56); Calibrated: 3/21/2018; Electronics: DAE4 Sn1394

Sensor-Surface: 3mm (Mechanical Surface Detection)

Phantom: Twin-SAM V5.0 ; Type: QD 000 P40 CD; Serial: 1679

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

Test Date: 2018-05-08; Ambient Temp: 21.6; Tissue Temp: 21.8

Left Touch, WCDMA Band 4 Ch. 1412, Ant Internal, Standard Battery

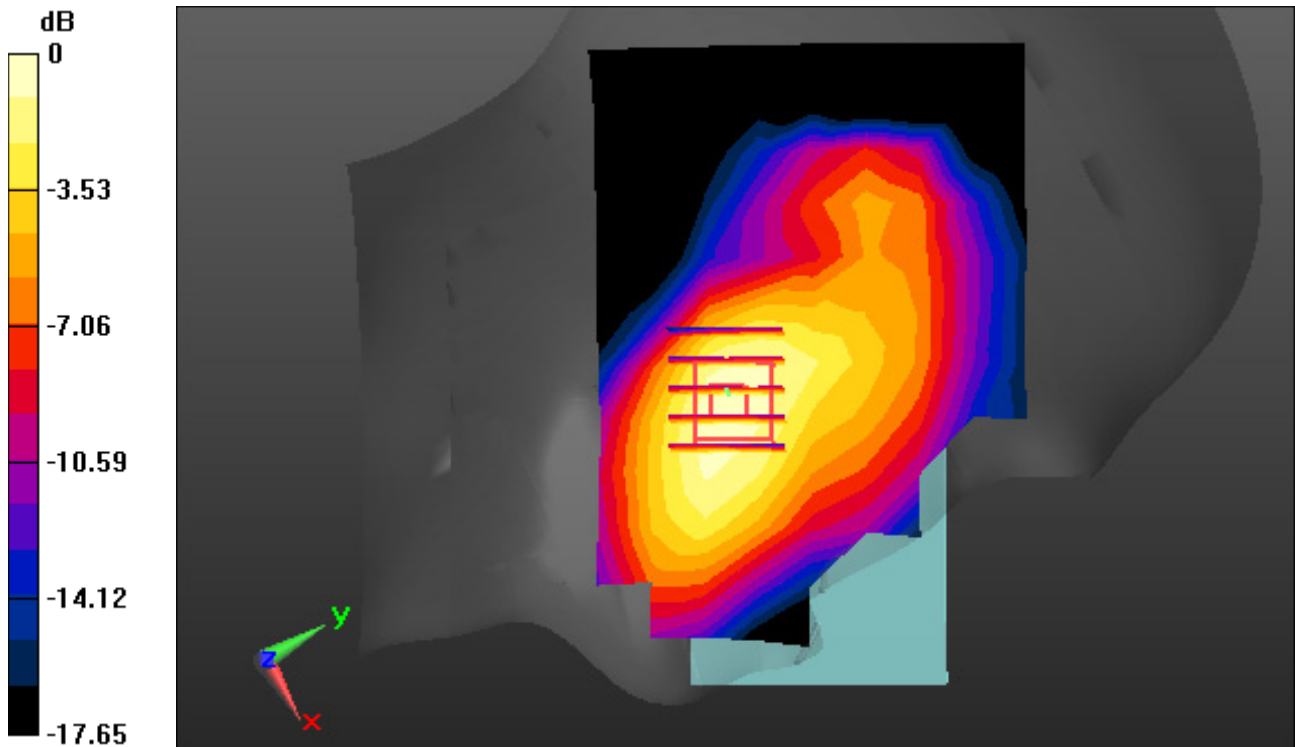
Area Scan (9x14x1): Measurement grid: dx=15mm, dy=15mm

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

Power Drift = 0.16 dB

Peak SAR (extrapolated) = 0.658 W/kg

SAR(1 g) = 0.441 W/kg; SAR(10 g) = 0.284 W/kg



0 dB = 0.516 W/kg

DT&C Co., Ltd.

DUT: HA81; Type: Bar

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

Medium parameters used: $f = 1880$ MHz; $\sigma = 1.39$ S/m; $\epsilon_r = 39.798$; $\rho = 1000$ kg/m³

Phantom section: Left Section

DASY5 Configuration:

Probe: ES3DV3 - SN3328; ConvF(5.26, 5.26, 5.26); Calibrated: 3/21/2018; Electronics: DAE4 Sn1394

Sensor-Surface: 3mm (Mechanical Surface Detection)

Phantom: Twin-SAM V5.0 ; Type: QD 000 P40 CD; Serial: 1679

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

Test Date: 2018-05-01; Ambient Temp: 21.4; Tissue Temp: 21.7

Left Touch, WCDMA Band 2 Ch. 9400, Ant Internal, Standard Battery

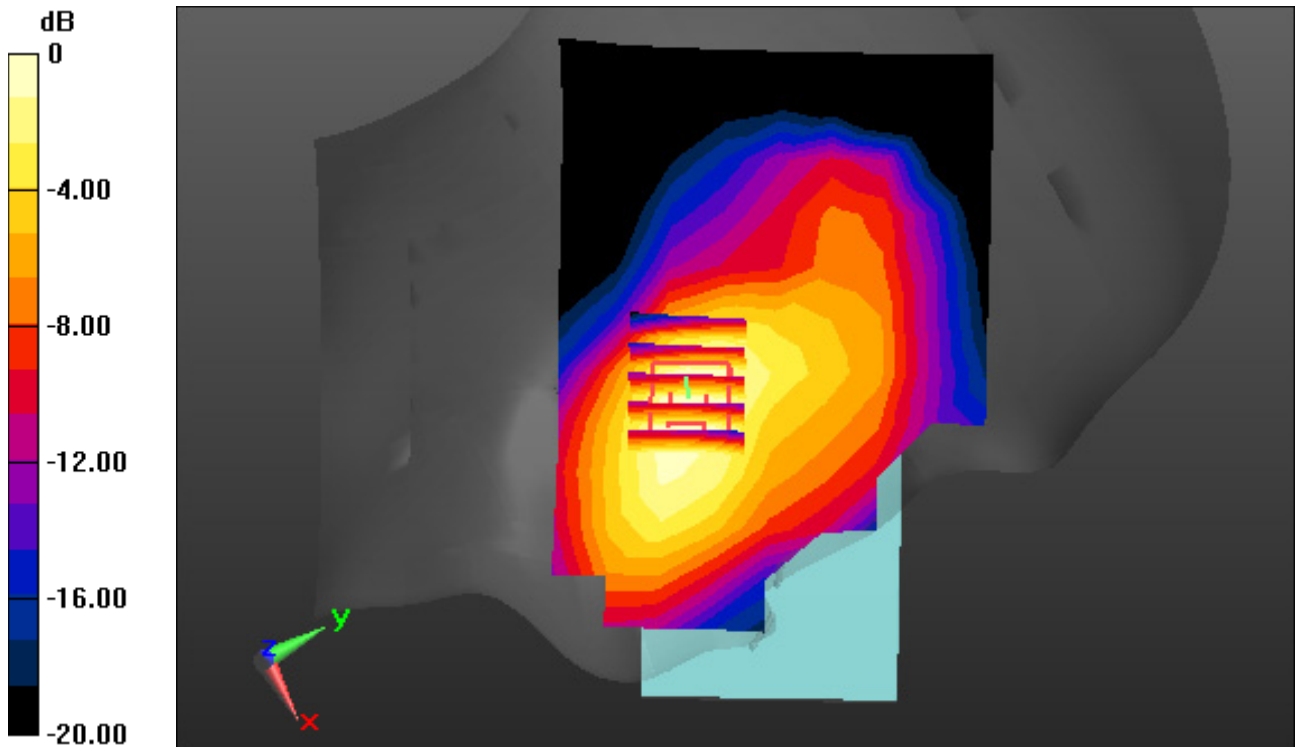
Area Scan (9x14x1): Measurement grid: dx=15mm, dy=15mm

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

Power Drift = -0.14 dB

Peak SAR (extrapolated) = 0.917 W/kg

SAR(1 g) = 0.587 W/kg; SAR(10 g) = 0.361 W/kg



0 dB = 0.693 W/kg

DT&C Co., Ltd.

DUT: HA81; Type: Bar

Communication System: UID 0, LTE Band 4 (FCC) (0); Frequency: 1732.5 MHz; Duty Cycle: 1:1
Medium parameters used: $f = 1732.5$ MHz; $\sigma = 1.331$ S/m; $\epsilon_r = 40.609$; $\rho = 1000$ kg/m³
Phantom section: Left Section

DASY5 Configuration:

Probe: ES3DV3 - SN3328; ConvF(5.56, 5.56, 5.56); Calibrated: 3/21/2018; Electronics: DAE4 Sn1394
Sensor-Surface: 3mm (Mechanical Surface Detection)
Phantom: Twin-SAM V5.0 ; Type: QD 000 P40 CD; Serial: 1679
Measurement SW: DASY52, Version 52.8 (8); SEMCAD X Version 14.6.10 (7331)

Test Date: 2018-05-10; Ambient Temp: 21.4; Tissue Temp: 21.5

Left Touch, LTE Band 4 Ch. 20175, Ant Internal, Standard Battery

Mode : BandWidth 20 MHz, QPSK, RB Size : 1

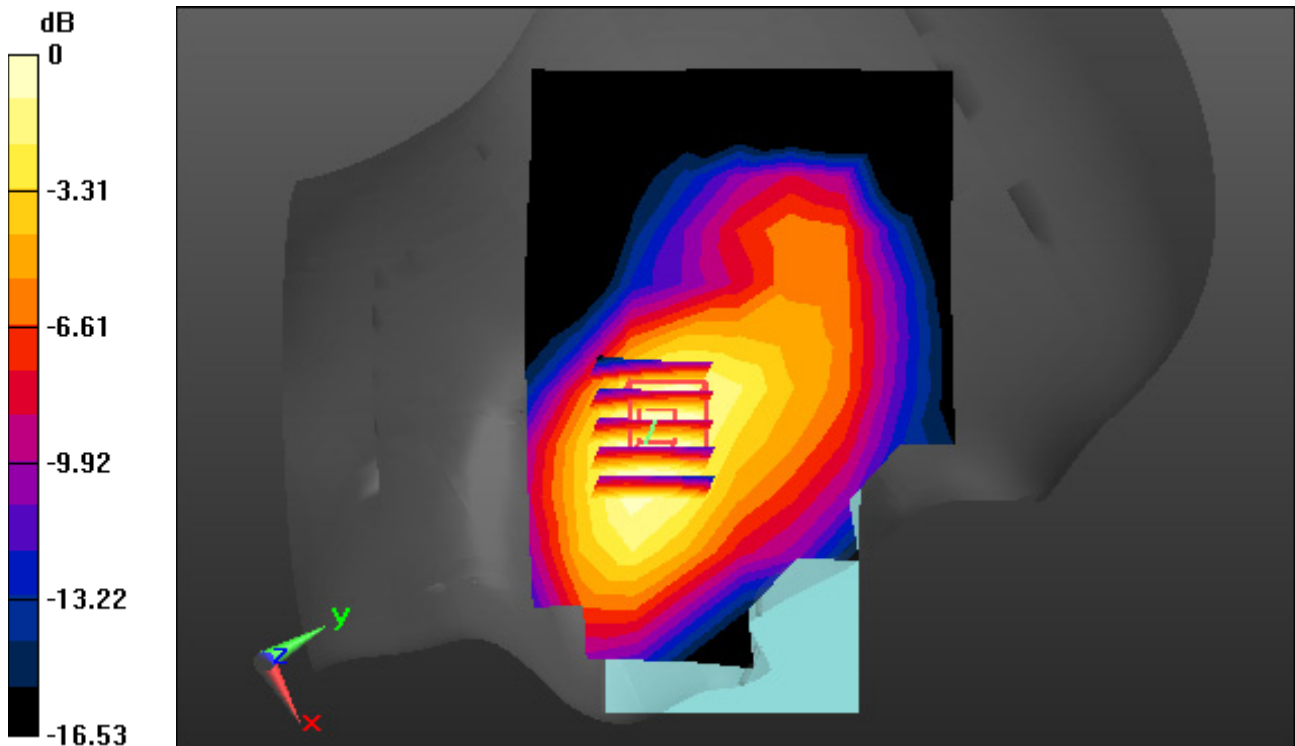
Area Scan (9x14x1): Measurement grid: dx=15mm, dy=15mm

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

Power Drift = 0.18 dB

Peak SAR (extrapolated) = 0.895 W/kg

SAR(1 g) = 0.596 W/kg; SAR(10 g) = 0.384 W/kg



0 dB = 0.683 W/kg

DT&C Co., Ltd.

DUT: HA81; Type: Bar

Communication System: UID 0, LTE Band 2 (0); Frequency: 1880 MHz; Duty Cycle: 1:1

Medium parameters used: $f = 1880$ MHz; $\sigma = 1.392$ S/m; $\epsilon_r = 39.838$; $\rho = 1000$ kg/m³

Phantom section: Left Section

DASY5 Configuration:

Probe: ES3DV3 - SN3328; ConvF(5.26, 5.26, 5.26); Calibrated: 3/21/2018; Electronics: DAE4 Sn1394

Sensor-Surface: 3mm (Mechanical Surface Detection)

Phantom: Twin-SAM V5.0 ; Type: QD 000 P40 CD; Serial: 1679

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

Test Date: 2018-05-03; Ambient Temp: 21.2; Tissue Temp: 21.5

Left Touch, LTE Band 2 Ch. 18900, Ant Internal, Standard Battery

Mode : BandWidth 20 MHz, QPSK, RB Size : 1

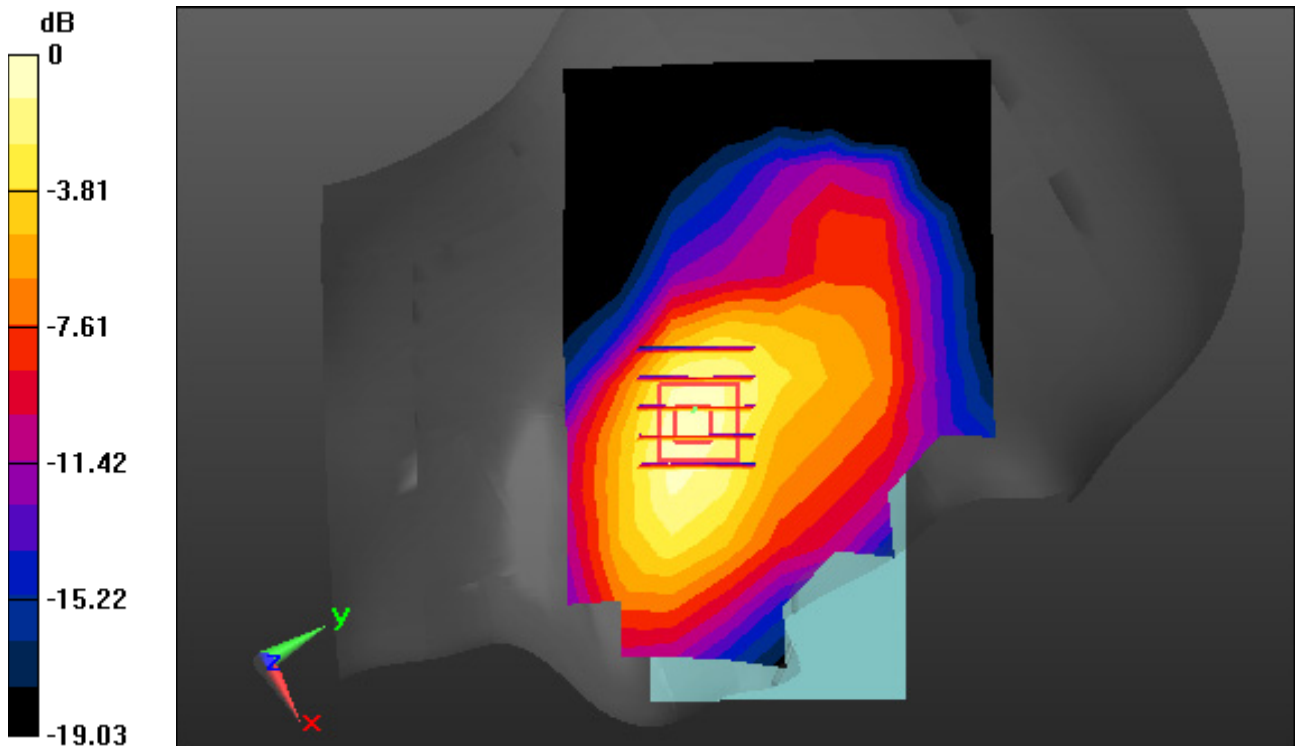
Area Scan (9x14x1): Measurement grid: dx=15mm, dy=15mm

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

Power Drift = 0.17 dB

Peak SAR (extrapolated) = 1.17 W/kg

SAR(1 g) = 0.740 W/kg; SAR(10 g) = 0.446 W/kg



0 dB = 0.884 W/kg

DT&C Co., Ltd.

DUT: HA81; Type: Bar

Communication System: UID 0, W-LAN (0); Frequency: 2412 MHz; Duty Cycle: 1:1
Medium parameters used: $f = 2412 \text{ MHz}$; $\sigma = 1.799 \text{ S/m}$; $\epsilon_r = 38.353$; $\rho = 1000 \text{ kg/m}^3$

Phantom section: Left Section

DASY5 Configuration:

Probe: ES3DV3 - SN3328; ConvF(4.82, 4.82, 4.82); Calibrated: 2018-03-21; Electronics: DAE4 Sn1394
Sensor-Surface: 3mm (Mechanical Surface Detection)
Phantom: Twin-SAM V5.0 ; Type: QD 000 P40 CD; Serial: 1679
Measurement SW: DASY52, Version 52.8 (8); SEMCAD X Version 14.6.10 (7331)

Test Date: 2018-05-14; Ambient Temp: 21.8; Tissue Temp: 21.9

Left Touch, W-LAN(802.11b) Ch. 1, Ant Internal, Standard Battery

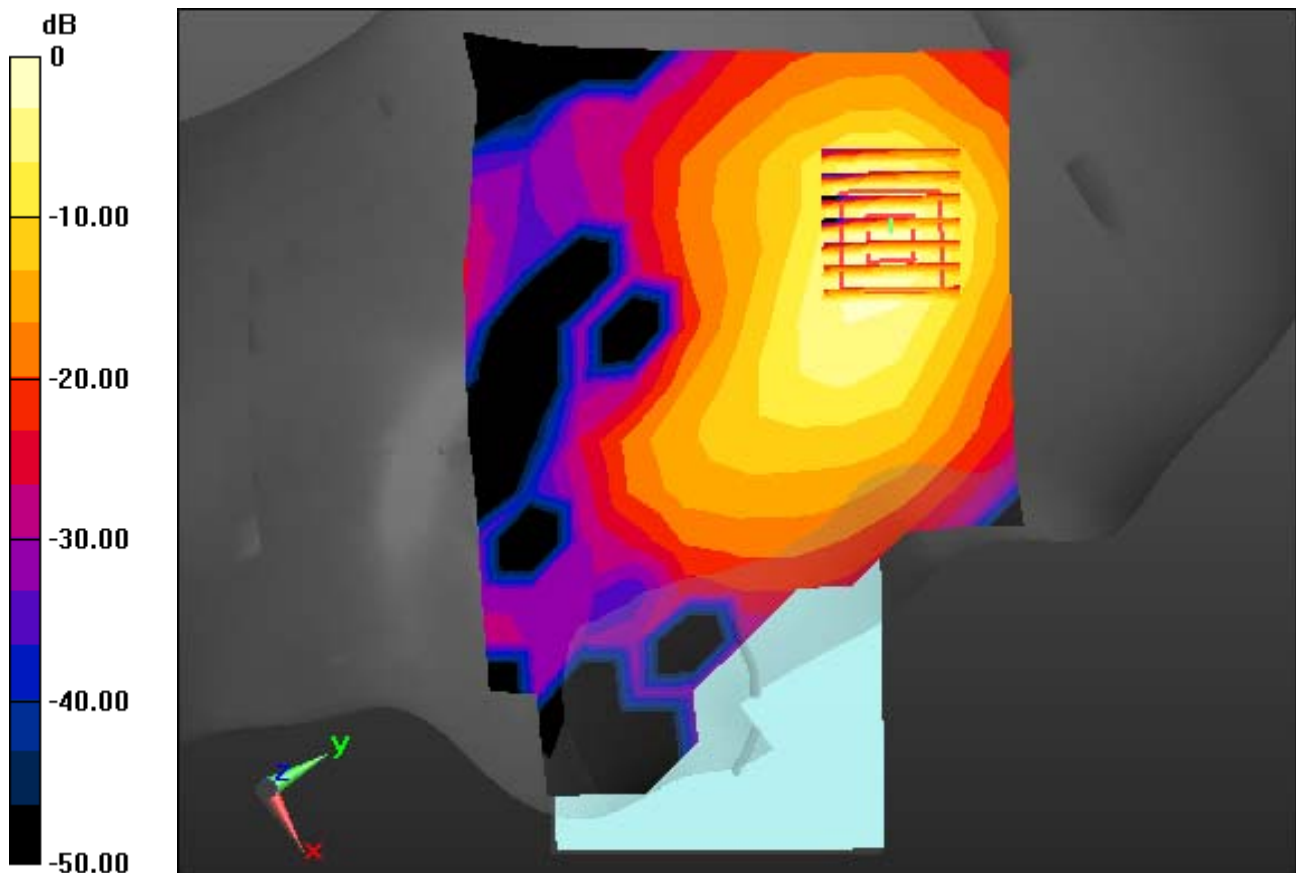
Area Scan (11x17x1): Measurement grid: $dx=12\text{mm}$, $dy=12\text{mm}$

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

Power Drift = 0.13 dB

Peak SAR (extrapolated) = 1.43 W/kg

SAR(1 g) = 0.612 W/kg; SAR(10 g) = 0.264 W/kg



0 dB = 0.840 W/kg

DT&C Co., Ltd.

DUT: HA81; Type: Bar

Communication System: UID 0, PCS 1900 (0); Frequency: 1880 MHz; Duty Cycle: 1:8.3

Medium parameters used: $f = 1880$ MHz; $\sigma = 1.519$ S/m; $\epsilon_r = 51.639$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

DASY5 Configuration:

Probe: ES3DV3 - SN3328; ConvF(4.88, 4.88, 4.88); Calibrated: 3/21/2018; Electronics: DAE4 Sn1394

Sensor-Surface: 3mm (Mechanical Surface Detection)

Phantom: Twin-SAM V5.0 ; Type: QD 000 P40 CD; Serial: 1679

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

Test Date: 2018-05-02; Ambient Temp: 21.6; Tissue Temp: 21.8

1 cm space from Body, Front, PCS1900 Ch. 661, Ant. Internal

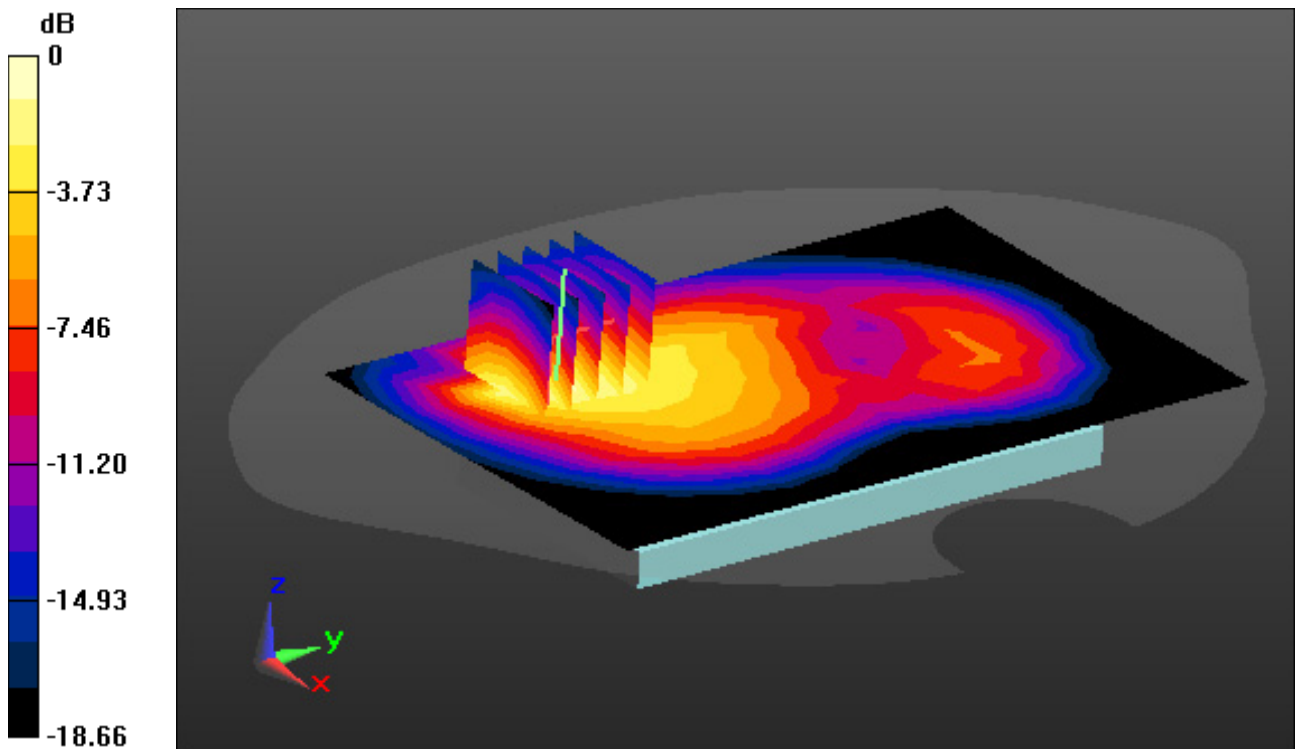
Area Scan (9x14x1): Measurement grid: dx=15mm, dy=15mm

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

Power Drift = -0.01 dB

Peak SAR (extrapolated) = 0.853 W/kg

SAR(1 g) = 0.485 W/kg; SAR(10 g) = 0.263 W/kg



0 dB = 0.586 W/kg

DT&C Co., Ltd.

DUT: HA81; Type: Bar

Communication System: UID 0, PCS1900_Class 10 (0); Frequency: 1880 MHz; Duty Cycle: 1:4.15

Medium parameters used: $f = 1880$ MHz; $\sigma = 1.519$ S/m; $\epsilon_r = 51.639$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

DASY5 Configuration:

Probe: ES3DV3 - SN3328; ConvF(4.88, 4.88, 4.88); Calibrated: 3/21/2018; Electronics: DAE4 Sn1394

Sensor-Surface: 3mm (Mechanical Surface Detection)

Phantom: Twin-SAM V5.0 ; Type: QD 000 P40 CD; Serial: 1679

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

Test Date: 2018-05-02; Ambient Temp: 21.6; Tissue Temp: 21.8

1 cm space from Body, Front, GPRS1900 2Tx Ch. 661, Ant. Internal

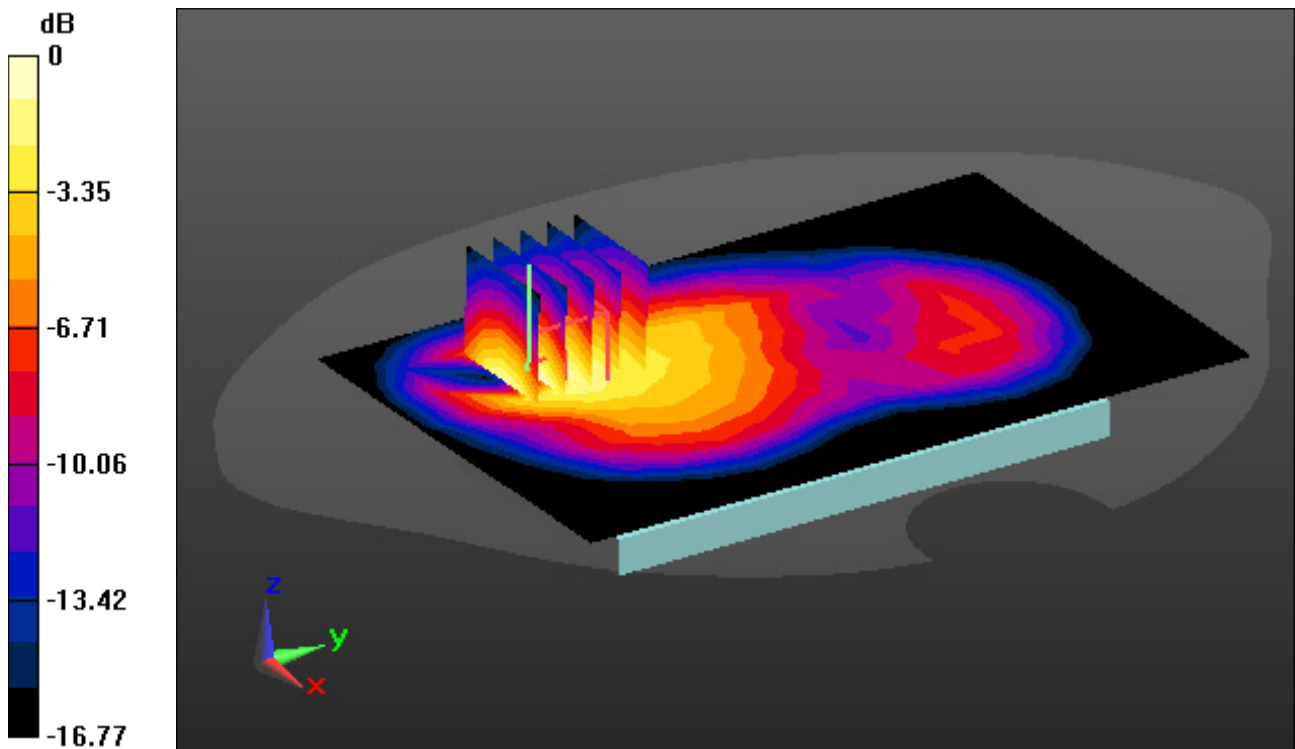
Area Scan (9x14x1): Measurement grid: dx=15mm, dy=15mm

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

Power Drift = -0.04 dB

Peak SAR (extrapolated) = 0.812 W/kg

SAR(1 g) = 0.494 W/kg; SAR(10 g) = 0.278 W/kg



DT&C Co., Ltd.

DUT: HA81; Type: Bar

Communication System: UID 0, WCDMA Band 4 (0); Frequency: 1732.4 MHz; Duty Cycle: 1:1

Medium parameters used: $f = 1732.4$ MHz; $\sigma = 1.475$ S/m; $\epsilon_r = 51.568$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

DASY5 Configuration:

Probe: ES3DV3 - SN3328; ConvF(5.1, 5.1, 5.1); Calibrated: 3/21/2018; Electronics: DAE4 Sn1394

Sensor-Surface: 3mm (Mechanical Surface Detection)

Phantom: Twin-SAM V5.0 ; Type: QD 000 P40 CD; Serial: 1679

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

Test Date: 2018-05-09; Ambient Temp: 21.7; Tissue Temp: 22.1

1 cm space from Body, Front, WCDMA Band 2 Ch. 1412, Ant. Internal

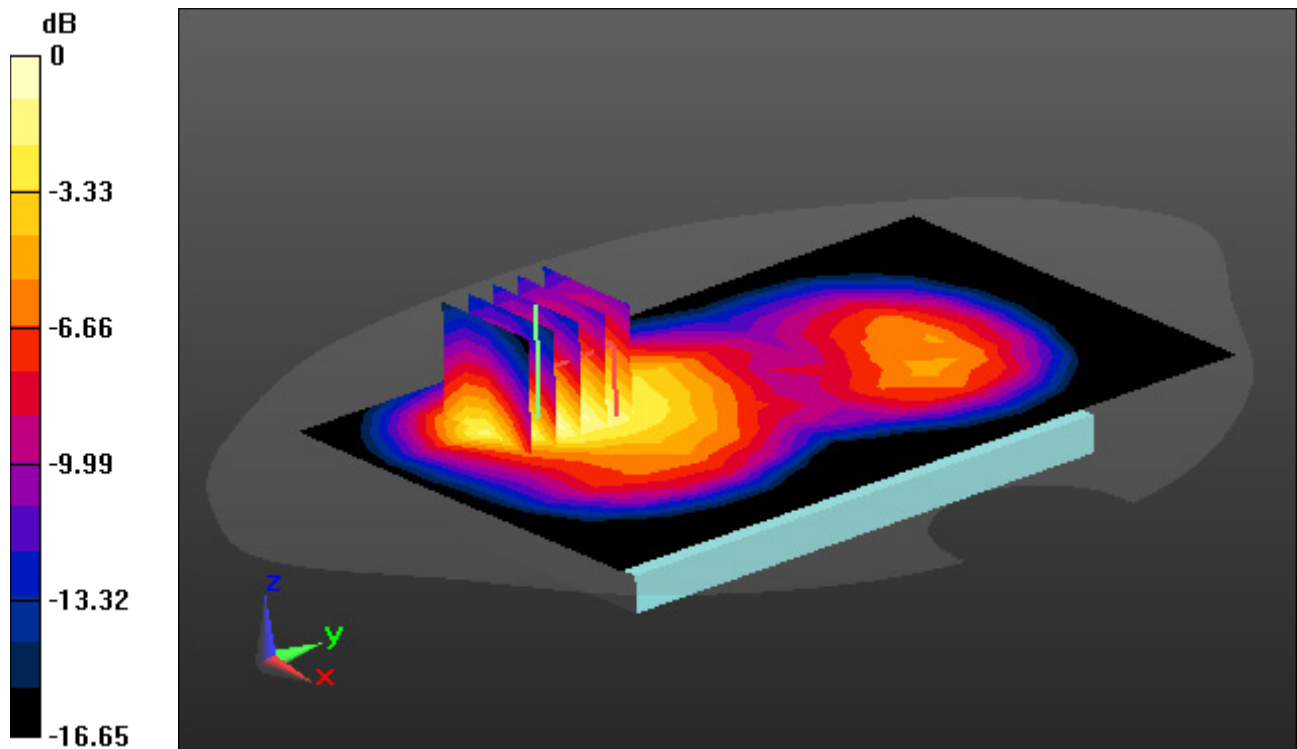
Area Scan (9x14x1): Measurement grid: dx=15mm, dy=15mm

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

Power Drift = -0.04 dB

Peak SAR (extrapolated) = 0.944 W/kg

SAR(1 g) = 0.605 W/kg; SAR(10 g) = 0.366 W/kg



0 dB = 0.717 W/kg

DT&C Co., Ltd.

DUT: HA81; Type: Bar

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

Medium parameters used: $f = 1880$ MHz; $\sigma = 1.519$ S/m; $\epsilon_r = 51.639$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

DASY5 Configuration:

Probe: ES3DV3 - SN3328; ConvF(4.88, 4.88, 4.88); Calibrated: 3/21/2018; Electronics: DAE4 Sn1394

Sensor-Surface: 3mm (Mechanical Surface Detection)

Phantom: Twin-SAM V5.0 ; Type: QD 000 P40 CD; Serial: 1679

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

Test Date: 2018-05-02; Ambient Temp: 21.6; Tissue Temp: 21.8

1 cm space from Body, Front, WCDMA Band 2 Ch. 9400, Ant. Internal

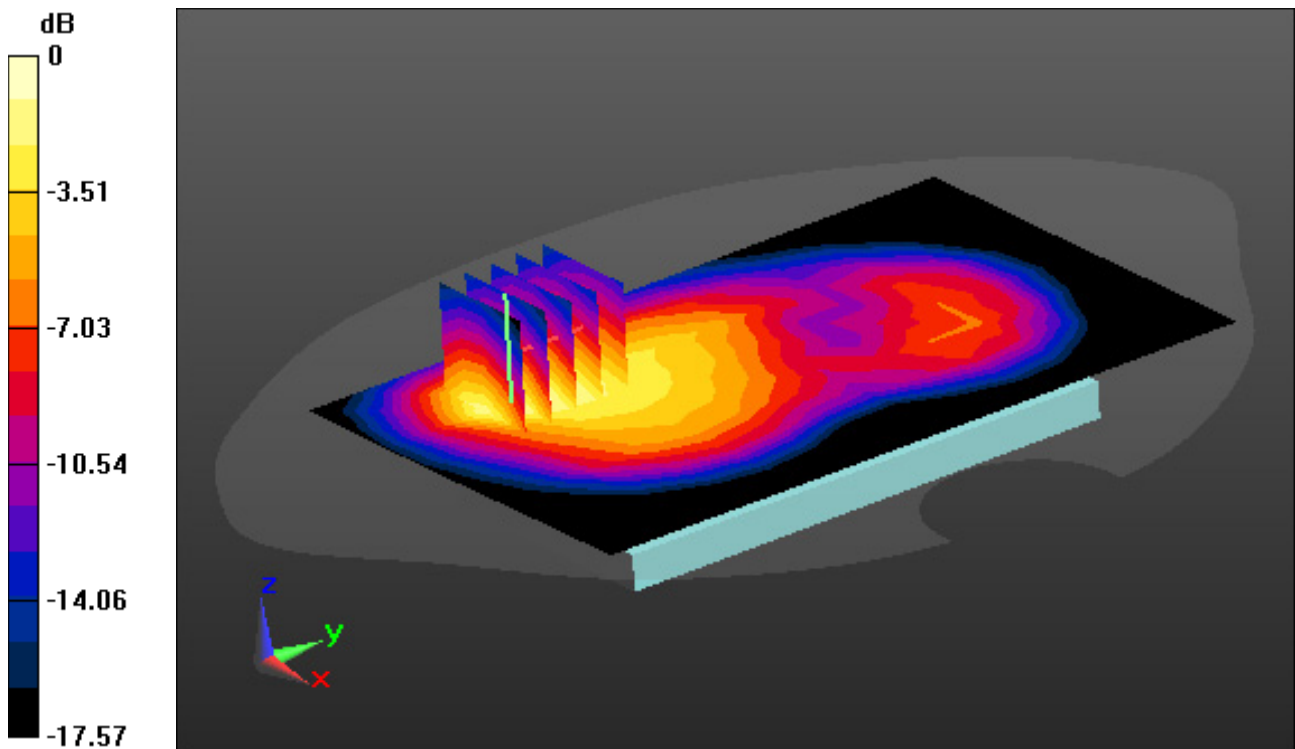
Area Scan (9x14x1): Measurement grid: dx=15mm, dy=15mm

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

Power Drift = 0.14 dB

Peak SAR (extrapolated) = 1.16 W/kg

SAR(1 g) = 0.684 W/kg; SAR(10 g) = 0.379 W/kg



0 dB = 0.811 W/kg

DT&C Co., Ltd

DUT: HA81; Type: Bar

Communication System: UID 0, LTE Band 4 (FCC) (0); Frequency: 1732.5 MHz; Duty Cycle: 1:1
Medium parameters used: $f = 1732.5$ MHz; $\sigma = 1.482$ S/m; $\epsilon_r = 52.021$; $\rho = 1000$ kg/m³
Phantom section: Flat Section

DASY5 Configuration:

Probe: ES3DV3 - SN3328; ConvF(5.1, 5.1, 5.1); Calibrated: 3/21/2018; Electronics: DAE4 Sn1394
Sensor-Surface: 3mm (Mechanical Surface Detection)
Phantom: Twin-SAM V5.0 ; Type: QD 000 P40 CD; Serial: 1679
Measurement SW: DASY52, Version 52.8 (8); SEMCAD X Version 14.6.10 (7331)

Test Date: 2018-05-11; Ambient Temp: 21.3; Tissue Temp: 21.5

1 cm space from Body, Front, LTE Band 4 Ch. 20175, Ant Internal

Mode : BandWidth 20 MHz, QPSK, RB Size : 1

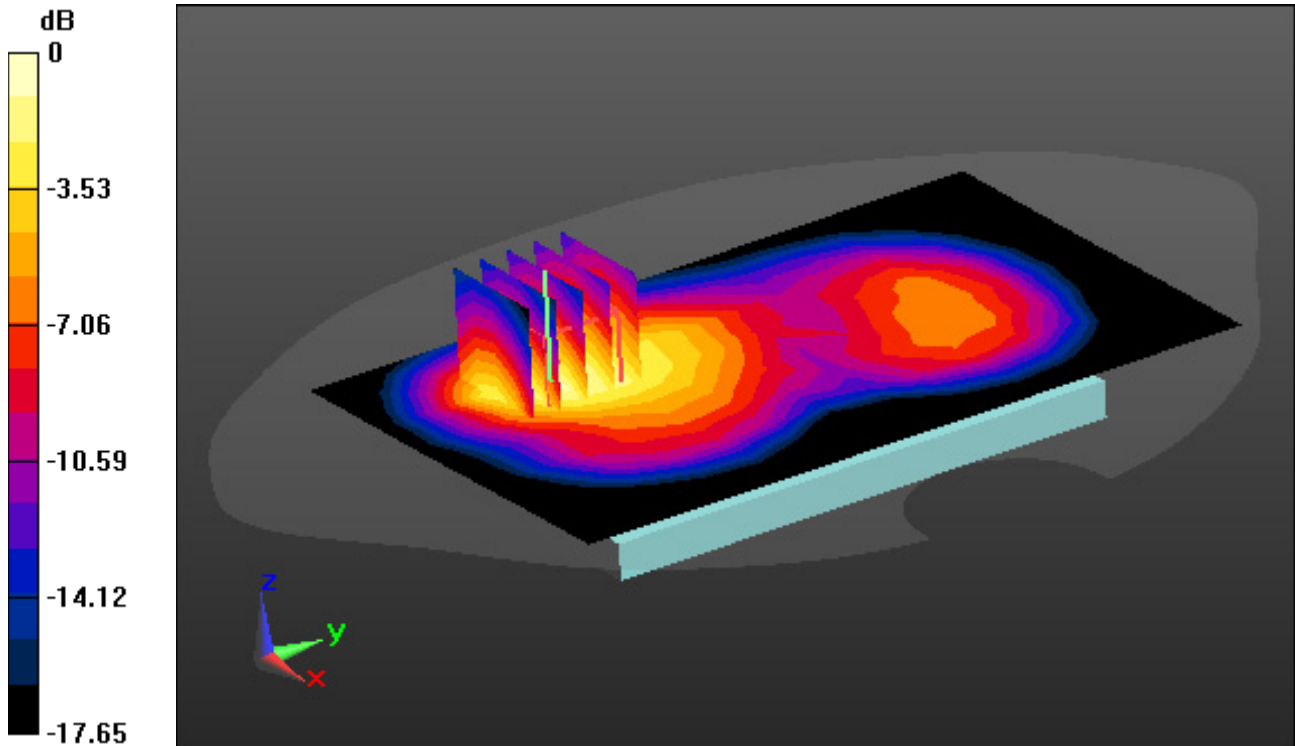
Area Scan (9x14x1): Measurement grid: dx=15mm, dy=15mm

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

Power Drift = 0.02 dB

Peak SAR (extrapolated) = 1.40 W/kg

SAR(1 g) = 0.871 W/kg; SAR(10 g) = 0.510 W/kg



0 dB = 1.05 W/kg

DT&C Co., Ltd

DUT: HA81; Type: Bar

Communication System: UID 0, LTE Band 2 (0); Frequency: 1880 MHz; Duty Cycle: 1:1

Medium parameters used: $f = 1880$ MHz; $\sigma = 1.513$ S/m; $\epsilon_r = 51.802$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

DASY5 Configuration:

Probe: ES3DV3 - SN3328; ConvF(4.88, 4.88, 4.88); Calibrated: 3/21/2018; Electronics: DAE4 Sn1394

Sensor-Surface: 3mm (Mechanical Surface Detection)

Phantom: Twin-SAM V5.0 ; Type: QD 000 P40 CD; Serial: 1679

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

Test Date: 2018-05-04; Ambient Temp: 21.8; Tissue Temp: 22.1

1 cm space from Body, Front, LTE Band 2 Ch. 18900, Ant Internal

Mode : BandWidth 20 MHz, QPSK, RB Size : 1

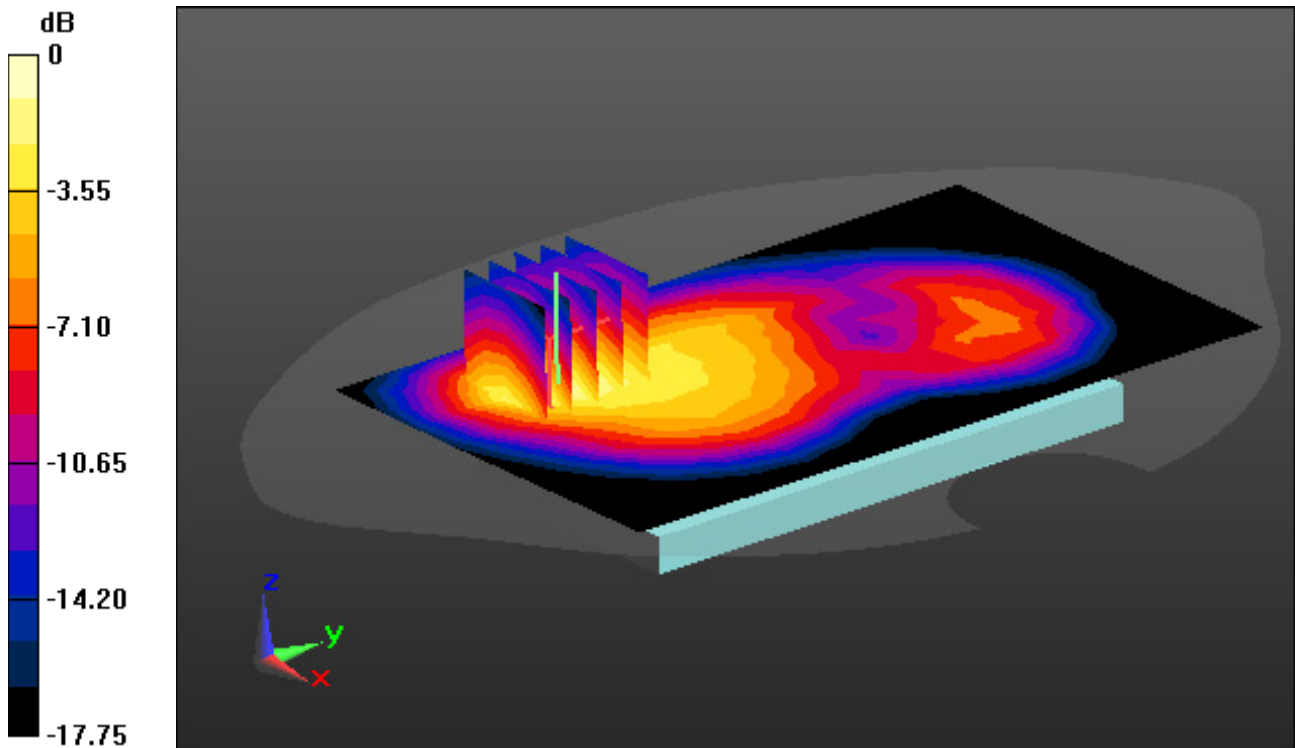
Area Scan (9x14x1): Measurement grid: dx=15mm, dy=15mm

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

Power Drift = 0.10 dB

Peak SAR (extrapolated) = 1.34 W/kg

SAR(1 g) = 0.806 W/kg; SAR(10 g) = 0.445 W/kg



0 dB = 0.969 W/kg

DT&C Co., Ltd.

DUT: HA81; Type: Bar

Communication System: UID 0, W-LAN (0); Frequency: 2412 MHz; Duty Cycle: 1:1
Medium parameters used: $f = 2412$ MHz; $\sigma = 1.846$ S/m; $\epsilon_r = 52.675$; $\rho = 1000$ kg/m³
Phantom section: Flat Section

DASY5 Configuration:

Probe: ES3DV3 - SN3328; ConvF(4.48, 4.48, 4.48); Calibrated: 3/21/2018; Electronics: DAE4 Sn1394
Sensor-Surface: 3mm (Mechanical Surface Detection)
Phantom: Twin-SAM V5.0 ; Type: QD 000 P40 CD; Serial: 1679
Measurement SW: DASY52, Version 52.8 (8); SEMCAD X Version 14.6.10 (7331)

Test Date: 2018-05-15; Ambient Temp: 21.5; Tissue Temp: 21.8

1 cm space from Body, Rear, WLAN(802.11b) Ch. 1, Ant. Internal

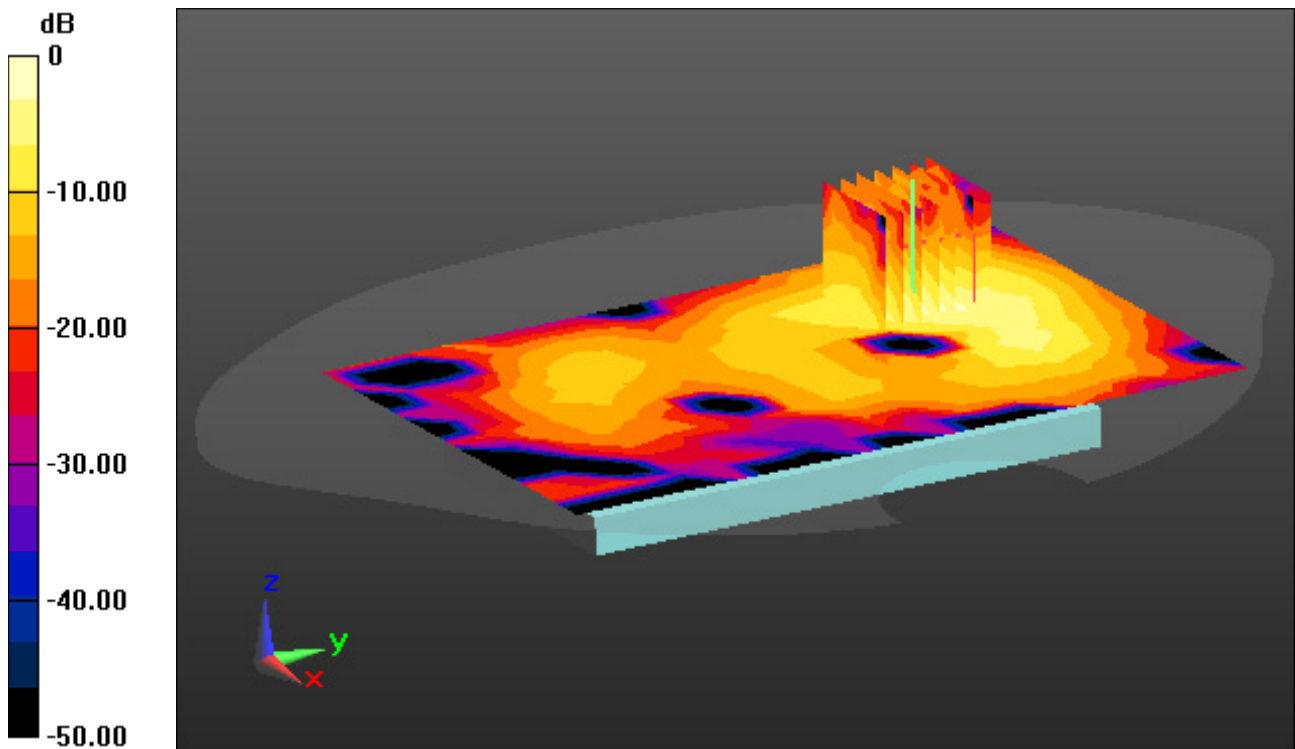
Area Scan (11x17x1): Measurement grid: dx=12mm, dy=12mm

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

Power Drift = 0.03 dB

Peak SAR (extrapolated) = 0.164 W/kg

SAR(1 g) = 0.075 W/kg; SAR(10 g) = 0.033 W/kg



0 dB = 0.100 W/kg