

SAR Plots

- Verification Plots
- SAR Test Plots

DT&C Co., Ltd.

DUT: Dipole 750 MHz; Type: D750V3; Serial: D750V3 - SN:1049

Communication System: UID 0, CW (0); Frequency: 750 MHz; Duty Cycle: 1:1
Medium parameters used: $f = 750 \text{ MHz}$; $\sigma = 0.891 \text{ S/m}$; $\epsilon_r = 42.211$; $\rho = 1000 \text{ kg/m}^3$
Phantom section: Flat Section

DASY5 Configuration:

Probe: EX3DV4 - SN3933; ConvF(10.68, 10.68, 10.68); Calibrated: 9/27/2019 Electronics: DAE3 Sn520
Sensor-Surface: 2mm (Mechanical Surface Detection)
Phantom: ELI v5.0_2017_03_08; Type: QDIVA001BB; Serial: 1223
Measurement SW: DASY52, Version 52.10 (3); SEMCAD X Version 14.6.13 (7474)

Test Date: 2020-06-01; Ambient Temp: 21.6; Tissue Temp: 21.8

750 MHz System Verification (250 mW)

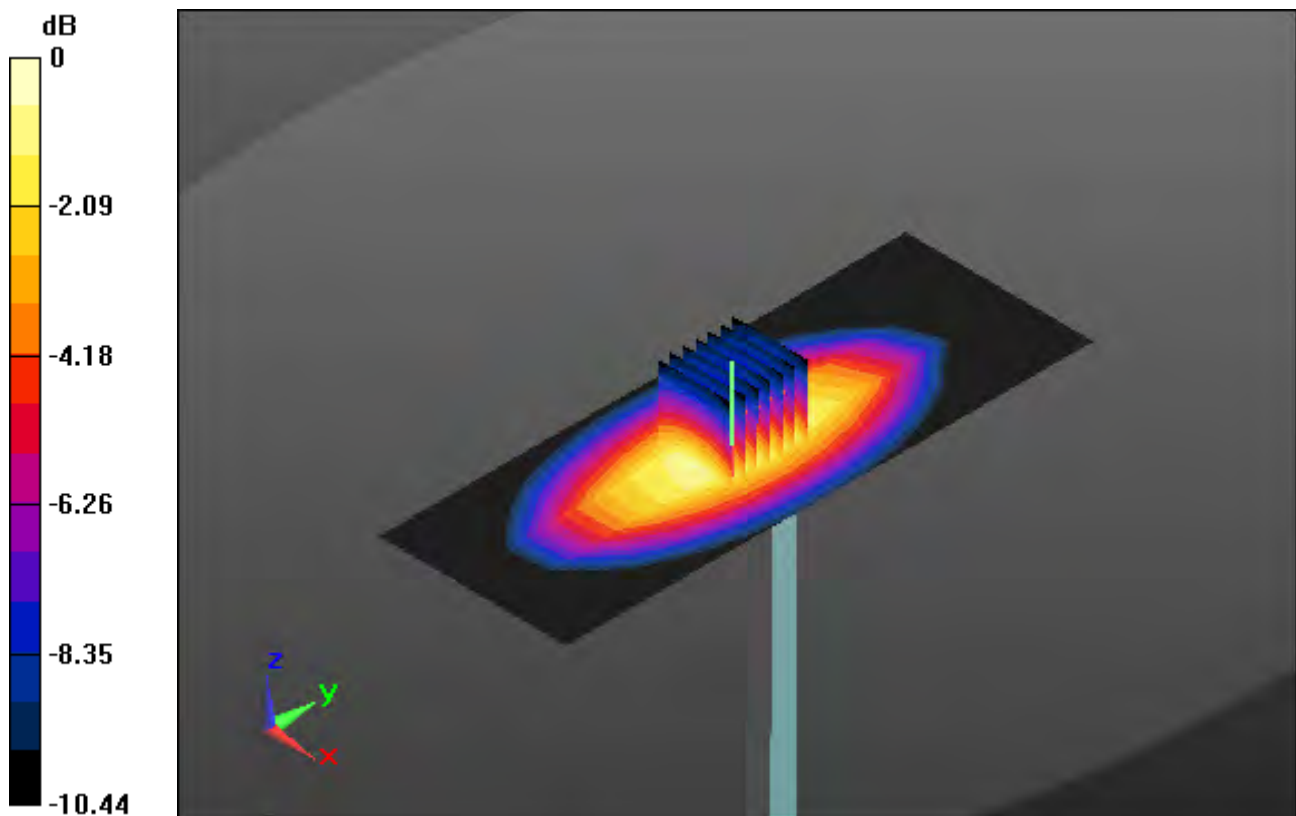
Area Scan (6x15x1): Measurement grid: $dx=15\text{mm}$, $dy=15\text{mm}$

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

Power Drift = -0.08 dB

Peak SAR (extrapolated) = 3.08 W/kg

SAR(1 g) = 2.06 W/kg ; SAR(10 g) = 1.35 W/kg



0 dB = 2.61 W/kg

DT&C Co., Ltd.

DUT: Dipole 835 MHz; Type: D835V2; Serial: D835V2 - SN:464

Communication System: UID 0, CW (0); Frequency: 835 MHz; Duty Cycle: 1:1
Medium parameters used: $f = 835 \text{ MHz}$; $\sigma = 0.922 \text{ S/m}$; $\epsilon_r = 42.918$; $\rho = 1000 \text{ kg/m}^3$
Phantom section: Flat Section

DASY5 Configuration:

Probe: EX3DV4 - SN3933; ConvF(10.32, 10.32, 10.32); Calibrated: 9/27/2019 Electronics: DAE3 Sn520
Sensor-Surface: 2mm (Mechanical Surface Detection)
Phantom: ELI v5.0_2017_03_08; Type: QDIVA001BB; Serial: 1223
Measurement SW: DASY52, Version 52.10 (3); SEMCAD X Version 14.6.13 (7474)

Test Date: 2020-05-29; Ambient Temp: 20.3; Tissue Temp: 20.5

835 MHz System Verification (250 mW)

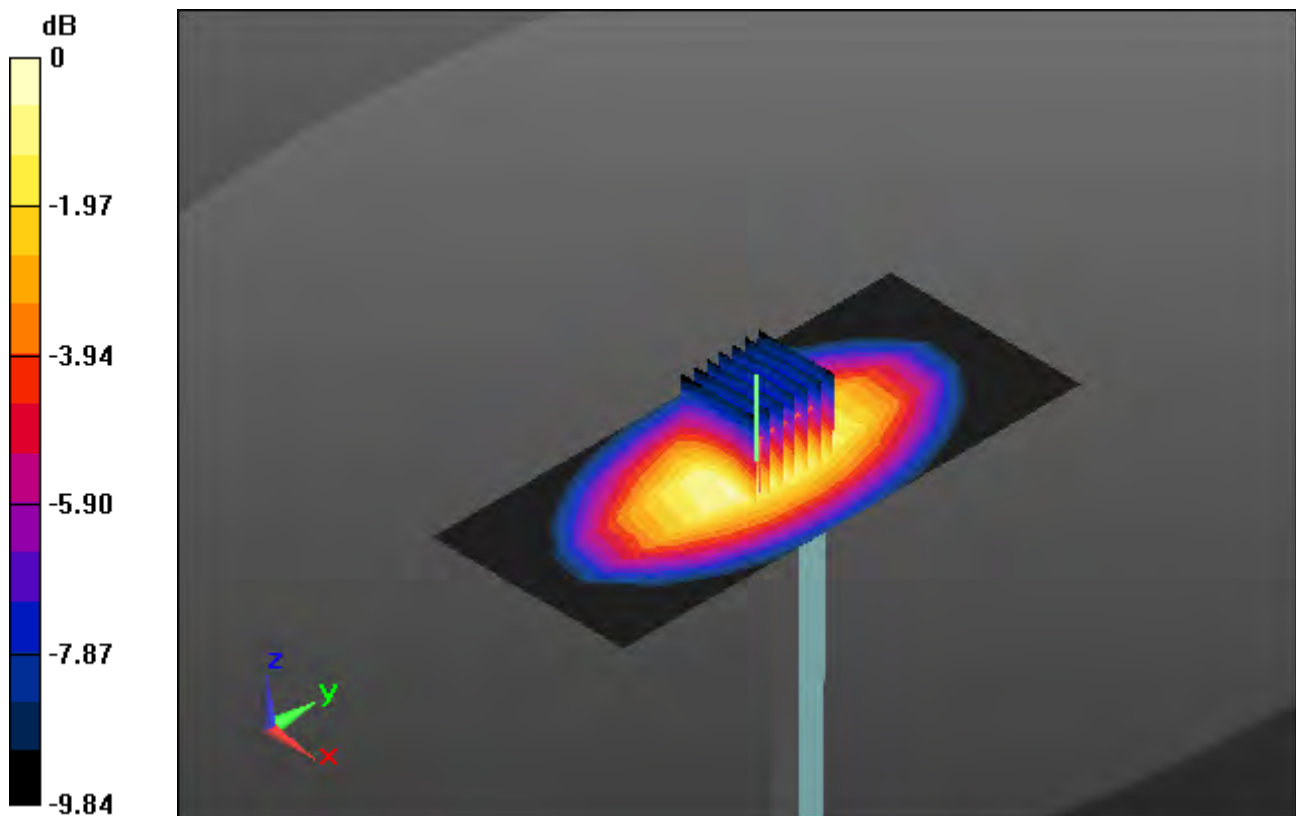
Area Scan (6x13x1): Measurement grid: $dx=15\text{mm}$, $dy=15\text{mm}$

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

Power Drift = -0.06 dB

Peak SAR (extrapolated) = 3.82 W/kg

SAR(1 g) = 2.43 W/kg; SAR(10 g) = 1.57 W/kg



0 dB = 2.95 W/kg

DT&C Co., Ltd.

DUT: Dipole 1800 MHz; Type: D1800V2; Serial: D1800V2 - SN:2d202

Communication System: UID 0, CW (0); Frequency: 1800 MHz; Duty Cycle: 1:1
Medium parameters used: $f = 1800$ MHz; $\sigma = 1.428$ S/m; $\epsilon_r = 39.097$; $\rho = 1000$ kg/m³
Phantom section: Flat Section

DASY5 Configuration:

Probe: ES3DV3 - SN3328; ConvF(5.34, 5.34, 5.34) @ 1800 MHz; Calibrated: 3/25/2020 Electronics: DAE4
Sn1335

Sensor-Surface: 3mm (Mechanical Surface Detection)

Phantom: ELI v5.0_2014_02_13; Type: QDOVA002AA; Serial: TP:1237

Measurement SW: DASY52, Version 52.10 (3); SEMCAD X Version 14.6.13 (7474)

Test Date: 2020-06-01; Ambient Temp: 21.3; Tissue Temp: 21.5

1800 MHz System Verification (100 mW)

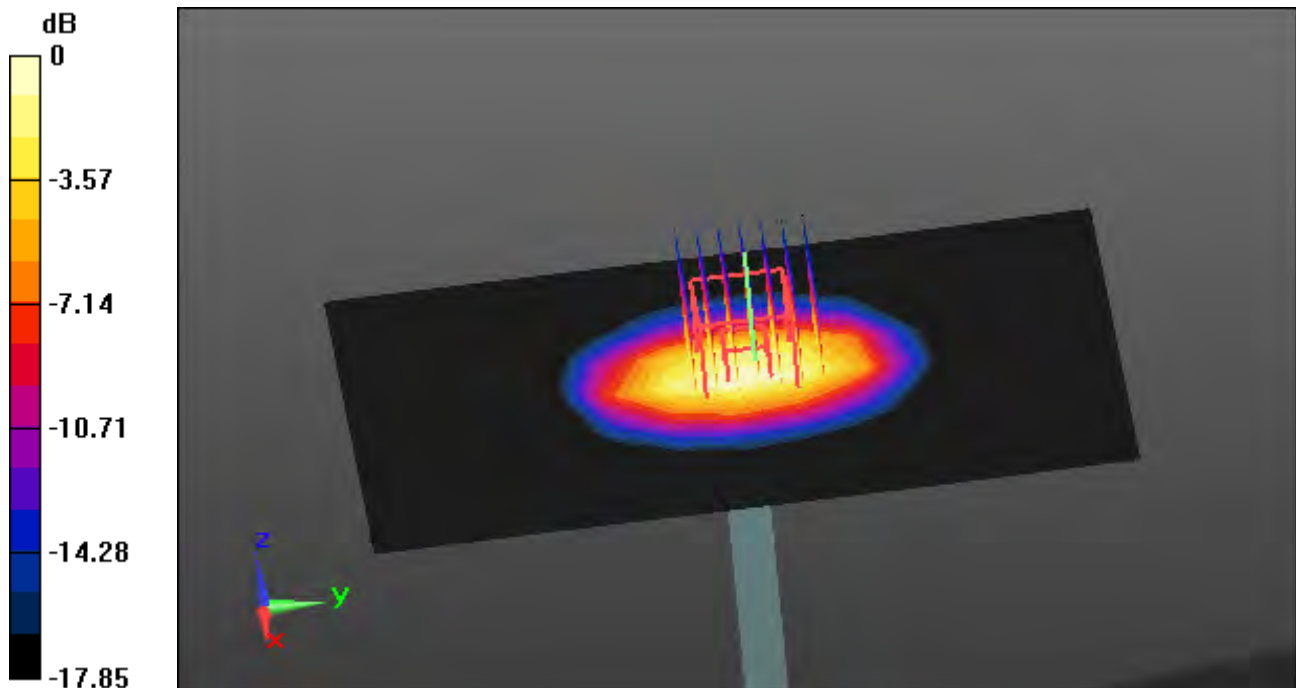
Area Scan (9x13x1): Measurement grid: dx=15mm, dy=15mm

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

Power Drift = 0.09 dB

Peak SAR (extrapolated) = 7.43 W/kg

SAR(1 g) = 3.83 W/kg; SAR(10 g) = 2.03 W/kg



0 dB = 4.54 W/kg

DT&C Co., Ltd.

DUT: Dipole 1900 MHz; Type: D1900V2; Serial: D1900V2 - SN:5d176

Communication System: UID 0, CW (0); Frequency: 1900 MHz; Duty Cycle: 1:1
Medium parameters used: $f = 1900$ MHz; $\sigma = 1.412$ S/m; $\epsilon_r = 40.725$; $\rho = 1000$ kg/m³
Phantom section: Flat Section

DASY5 Configuration:

Probe: ES3DV3 - SN3328; ConvF(5.09, 5.09, 5.09) @ 1900 MHz; Calibrated: 3/25/2020 Electronics: DAE4
Sn1335

Sensor-Surface: 3mm (Mechanical Surface Detection)

Phantom: ELI v5.0_2014_02_13; Type: QDOVA002AA; Serial: TP:1237

Measurement SW: DASY52, Version 52.10 (3); SEMCAD X Version 14.6.13 (7474)

Test Date: 2020-05-29; Ambient Temp: 21.7; Tissue Temp: 21.8

1900 MHz System Verification (100 mW)

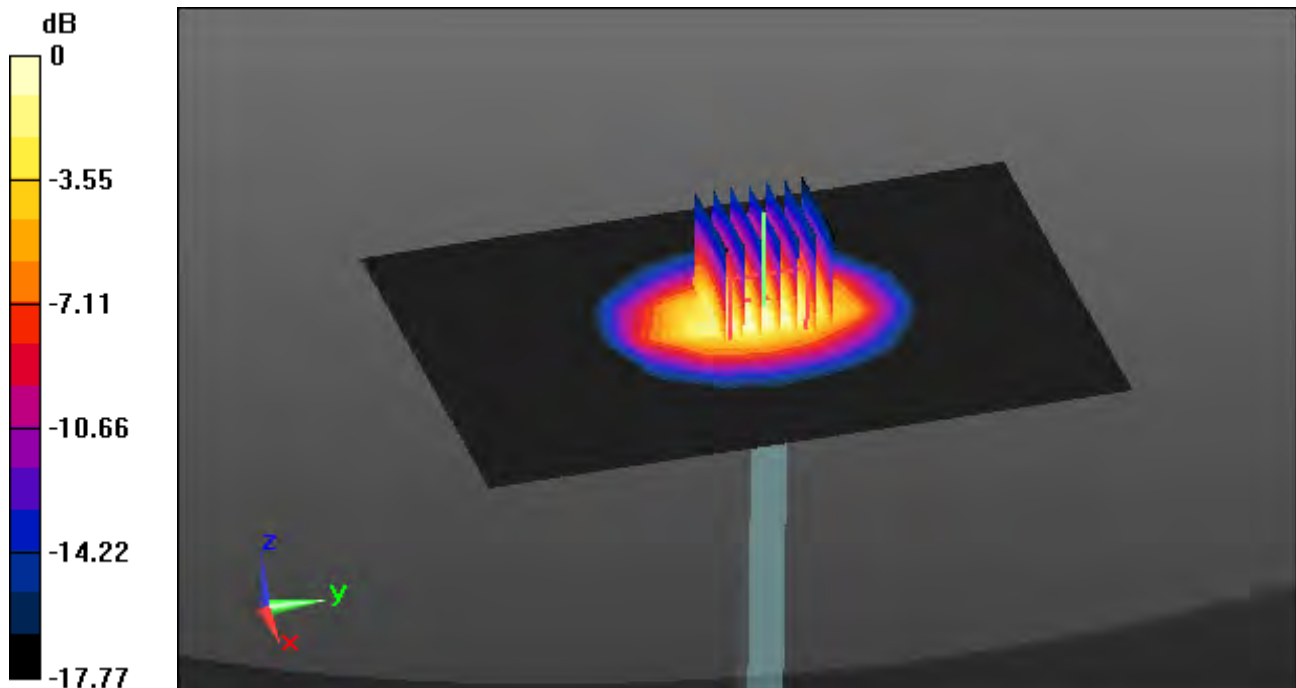
Area Scan (9x13x1): Measurement grid: dx=15mm, dy=15mm

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

Power Drift = -0.03 dB

Peak SAR (extrapolated) = 5.82 W/kg

SAR(1 g) = 4.01 W/kg; SAR(10 g) = 2.13 W/kg



0 dB = 4.29 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; $\sigma = 1.797$ S/m; $\epsilon_r = 37.814$; $\rho = 1000$ kg/m³
Phantom section: Flat Section

DASY5 Configuration:

Probe: ES3DV3 - SN3328; ConvF(4.7, 4.7, 4.7) @ 2450 MHz; Calibrated: 3/25/2020 Electronics: DAE4 Sn1335
Sensor-Surface: 3mm (Mechanical Surface Detection)
Phantom: ELI v5.0_2014_02_13; Type: QDOVA002AA; Serial: TP:1237
Measurement SW: DASY52, Version 52.10 (3); SEMCAD X Version 14.6.13 (7474)

Test Date: 2020-06-03; Ambient Temp: 21.4; Tissue Temp: 21.2

2450 MHz System Verification (100 mW)

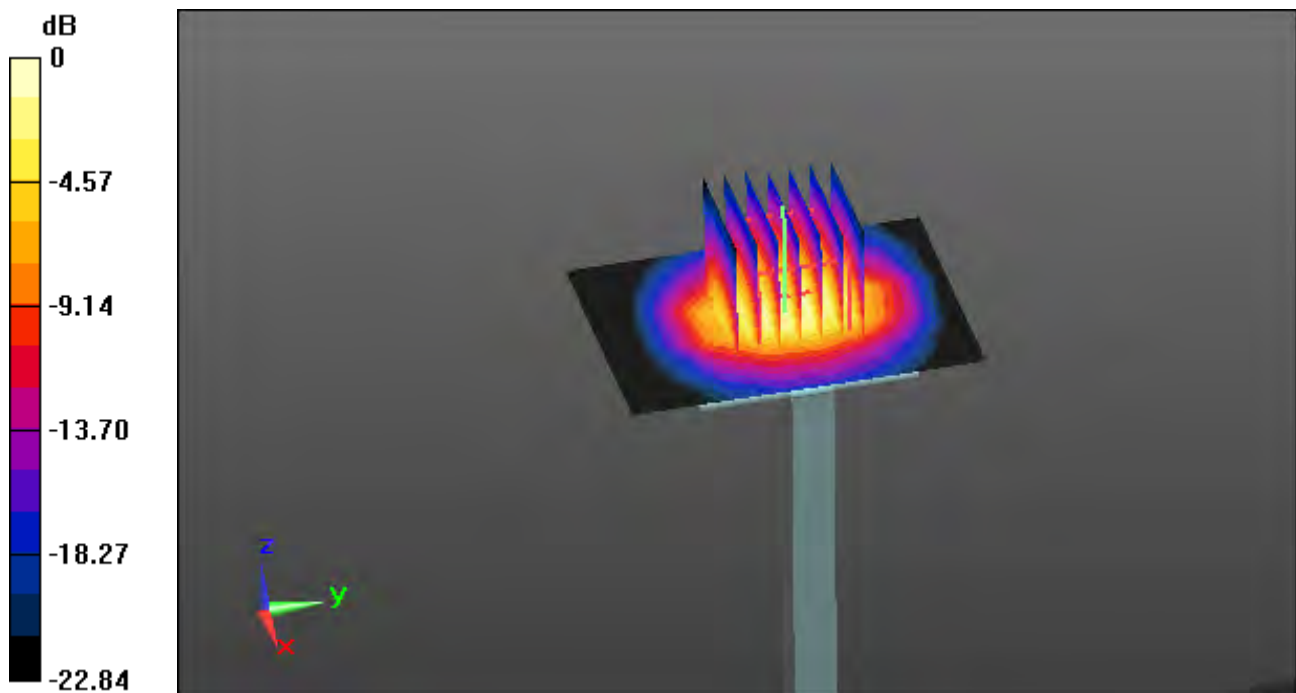
Area Scan (6x8x1): Measurement grid: dx=12mm, dy=12mm

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

Power Drift = 0.02 dB

Peak SAR (extrapolated) = 6.83 W/kg

SAR(1 g) = 5.13 W/kg; SAR(10 g) = 2.39 W/kg



0 dB = 6.17 W/kg

DT&C Co., Ltd.

DUT: Dipole 2600 MHz; Type: D2600V2; Serial: D2600V2 - SN:1103

Communication System: UID 0, CW (0); Frequency: 2600 MHz; Duty Cycle: 1:1
Medium parameters used: $f = 2600$ MHz; $\sigma = 1.948$ S/m; $\epsilon_r = 39.704$; $\rho = 1000$ kg/m³
Phantom section: Flat Section

DASY5 Configuration:

Probe: ES3DV3 - SN3328; ConvF(4.57, 4.57, 4.57) @ 2600 MHz; Calibrated: 3/25/2020 Electronics: DAE4
Sn1335

Sensor-Surface: 3mm (Mechanical Surface Detection)

Phantom: ELI v5.0_2014_02_13; Type: QDOVA002AA; Serial: TP:1237

Measurement SW: DASY52, Version 52.10 (3); SEMCAD X Version 14.6.13 (7474)

Test Date: 2020-06-02; Ambient Temp: 21.7; Tissue Temp: 21.8

2600 MHz System Verification (100 mW)

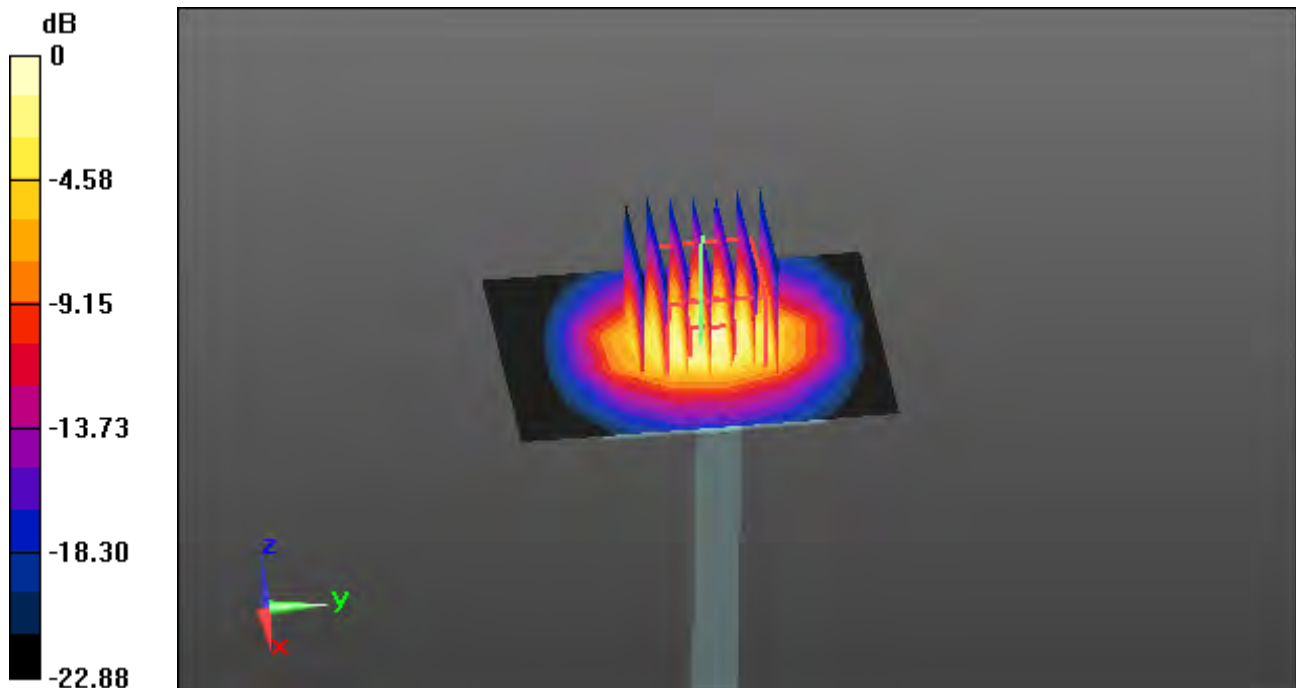
Area Scan (6x8x1): Measurement grid: dx=12mm, dy=12mm

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

Power Drift = -0.06 dB

Peak SAR (extrapolated) = 7.66 W/kg

SAR(1 g) = 5.72 W/kg; SAR(10 g) = 2.61 W/kg



0 dB = 6.91 W/kg

DT&C Co., Ltd.

DUT: Dipole 5000 MHz; Type: D5GHzV2; Serial: D5GHzV2 - SN:1212

Communication System: UID 0, CW (0); Frequency: 5200 MHz; Duty Cycle: 1:1
Medium parameters used: $f = 5200$ MHz; $\sigma = 4.605$ S/m; $\epsilon_r = 35.083$; $\rho = 1000$ kg/m³
Phantom section: Flat Section

DASY5 Configuration:

Probe: EX3DV4 - SN3933; ConvF(5.29, 5.29, 5.29); Calibrated: 9/27/2019 Electronics: DAE3 Sn520
Sensor-Surface: 1.4mm (Mechanical Surface Detection)
Phantom: ELI v5.0_2017_03_08; Type: QDIVA001BB; Serial: 1223
Measurement SW: DASY52, Version 52.10 (3); SEMCAD X Version 14.6.13 (7474)

Test Date: 2020-08-06; Ambient Temp: 21.7; Tissue Temp: 21.5

5200 MHz System Verification (100 mW)

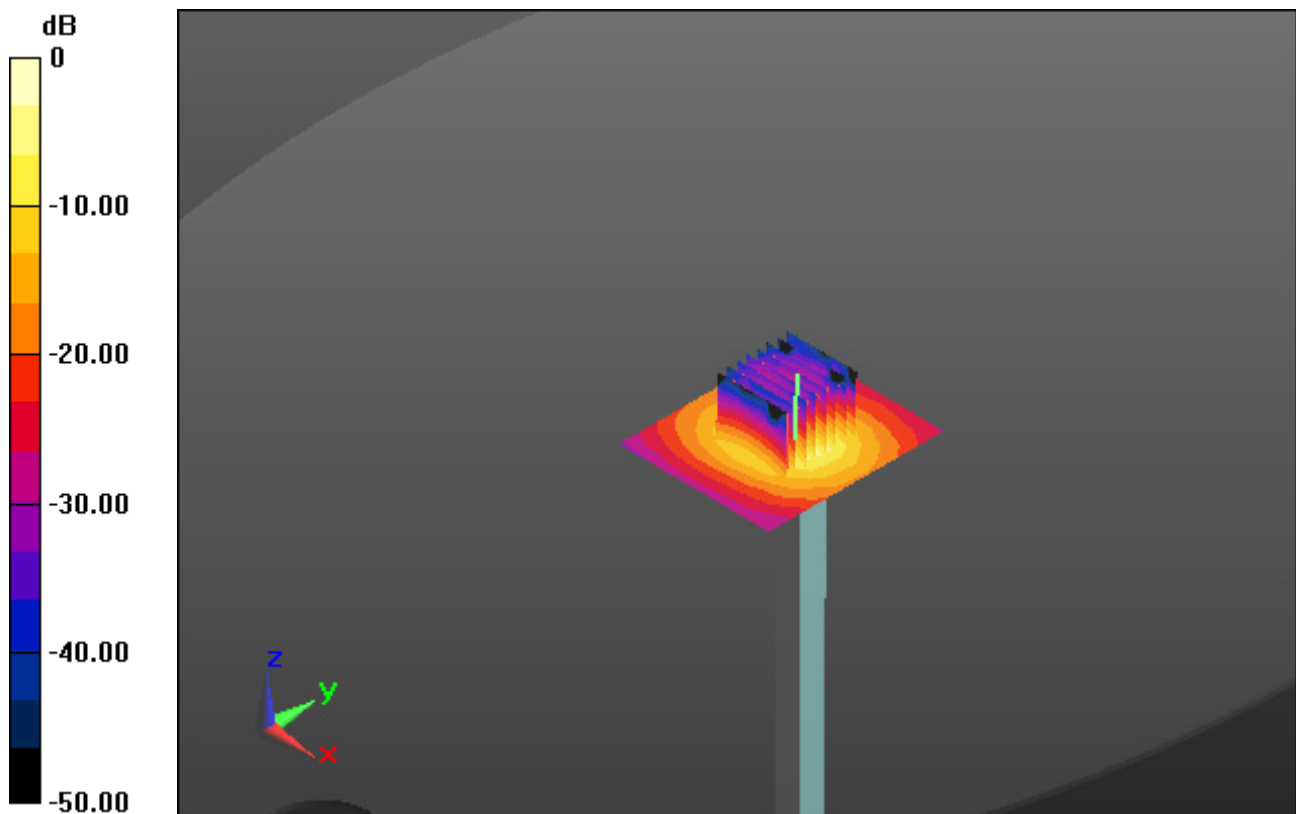
Area Scan (7x8x1): Measurement grid: dx=10mm, dy=10mm

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

Power Drift = 0.08 dB

Peak SAR (extrapolated) = 29.6 W/kg

SAR(1 g) = 7.72 W/kg; SAR(10 g) = 2.19 W/kg



DT&C Co., Ltd.

DUT: Dipole 5000 MHz; Type: D5GHzV2; Serial: D5GHzV2 - SN:1212

Communication System: UID 0, CW (0); Frequency: 5300 MHz; Duty Cycle: 1:1
Medium parameters used: $f = 5300$ MHz; $\sigma = 4.881$ S/m; $\epsilon_r = 35.661$; $\rho = 1000$ kg/m³
Phantom section: Flat Section

DASY5 Configuration:

Probe: EX3DV4 - SN3933; ConvF(5.1, 5.1, 5.1); Calibrated: 9/27/2019 Electronics: DAE3 Sn520
Sensor-Surface: 1.4mm (Mechanical Surface Detection)
Phantom: ELI v5.0_2017_03_08; Type: QDIVA001BB; Serial: 1223
Measurement SW: DASY52, Version 52.10 (3); SEMCAD X Version 14.6.13 (7474)

Test Date: 2020-06-02; Ambient Temp: 21.3; Tissue Temp: 21.5

5300 MHz System Verification (100 mW)

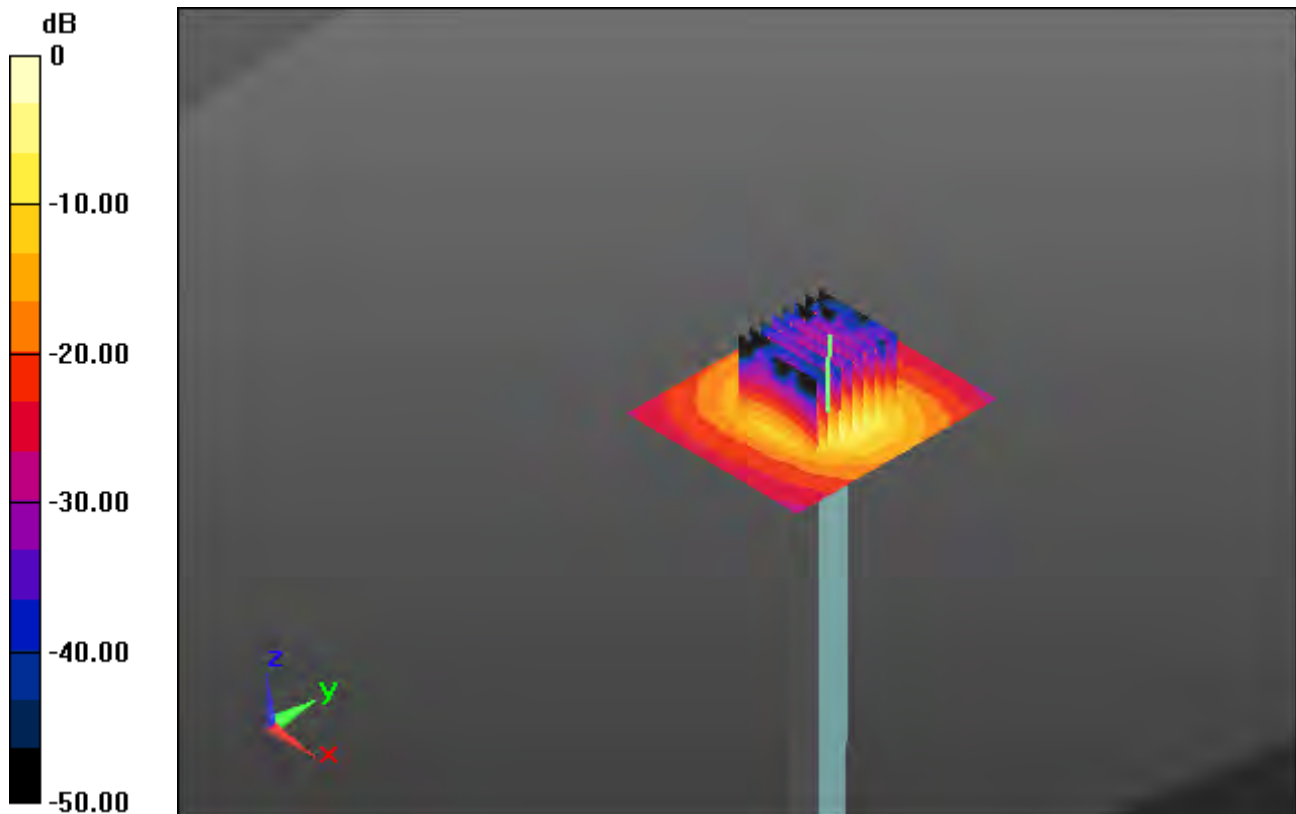
Area Scan (7x8x1): Measurement grid: dx=10mm, dy=10mm

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

Power Drift = -0.03 dB

Peak SAR (extrapolated) = 36.5 W/kg

SAR(1 g) = 8.29 W/kg; SAR(10 g) = 2.32 W/kg



0 dB = 18.4 W/kg

DT&C Co., Ltd.

DUT: Dipole 5000 MHz; Type: D5GHzV2; Serial: D5GHzV2 - SN:1212

Communication System: UID 0, CW (0); Frequency: 5500 MHz; Duty Cycle: 1:1
Medium parameters used: $f = 5500$ MHz; $\sigma = 4.922$ S/m; $\epsilon_r = 36.036$; $\rho = 1000$ kg/m³
Phantom section: Flat Section

DASY5 Configuration:

Probe: EX3DV4 - SN3933; ConvF(4.95, 4.95, 4.95); Calibrated: 9/27/2019 Electronics: DAE3 Sn520
Sensor-Surface: 1.4mm (Mechanical Surface Detection)
Phantom: ELI v5.0_2017_03_08; Type: QDIVA001BB; Serial: 1223
Measurement SW: DASY52, Version 52.10 (3); SEMCAD X Version 14.6.13 (7474)

Test Date: 2020-06-03; Ambient Temp: 21.4; Tissue Temp: 21.7

5500 MHz System Verification (100 mW)

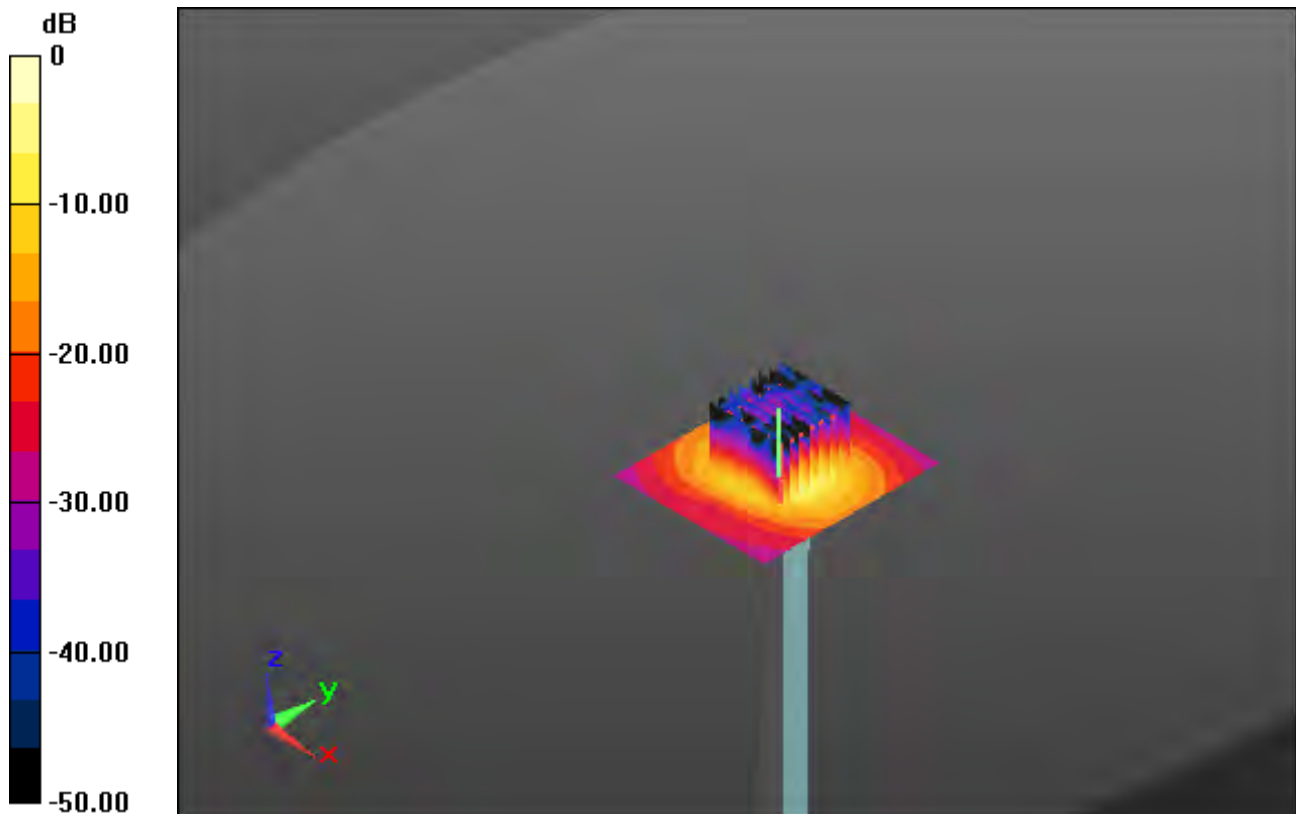
Area Scan (7x8x1): Measurement grid: dx=10mm, dy=10mm

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

Power Drift = 0.09 dB

Peak SAR (extrapolated) = 38.9 W/kg

SAR(1 g) = 8.42 W/kg; SAR(10 g) = 2.37 W/kg



DT&C Co., Ltd.

DUT: Dipole 5000 MHz; Type: D5GHzV2; Serial: D5GHzV2 - SN:1212

Communication System: UID 0, CW (0); Frequency: 5600 MHz; Duty Cycle: 1:1
Medium parameters used: $f = 5600$ MHz; $\sigma = 5.029$ S/m; $\epsilon_r = 35.883$; $\rho = 1000$ kg/m³
Phantom section: Flat Section

DASY5 Configuration:

Probe: EX3DV4 - SN3933; ConvF(4.8, 4.8, 4.8); Calibrated: 9/27/2019 Electronics: DAE3 Sn520
Sensor-Surface: 1.4mm (Mechanical Surface Detection)
Phantom: ELI v5.0_2017_03_08; Type: QDIVA001BB; Serial: 1223
Measurement SW: DASY52, Version 52.10 (3); SEMCAD X Version 14.6.13 (7474)

Test Date: 2020-06-03; Ambient Temp: 21.4; Tissue Temp: 21.7

5600 MHz System Verification (100 mW)

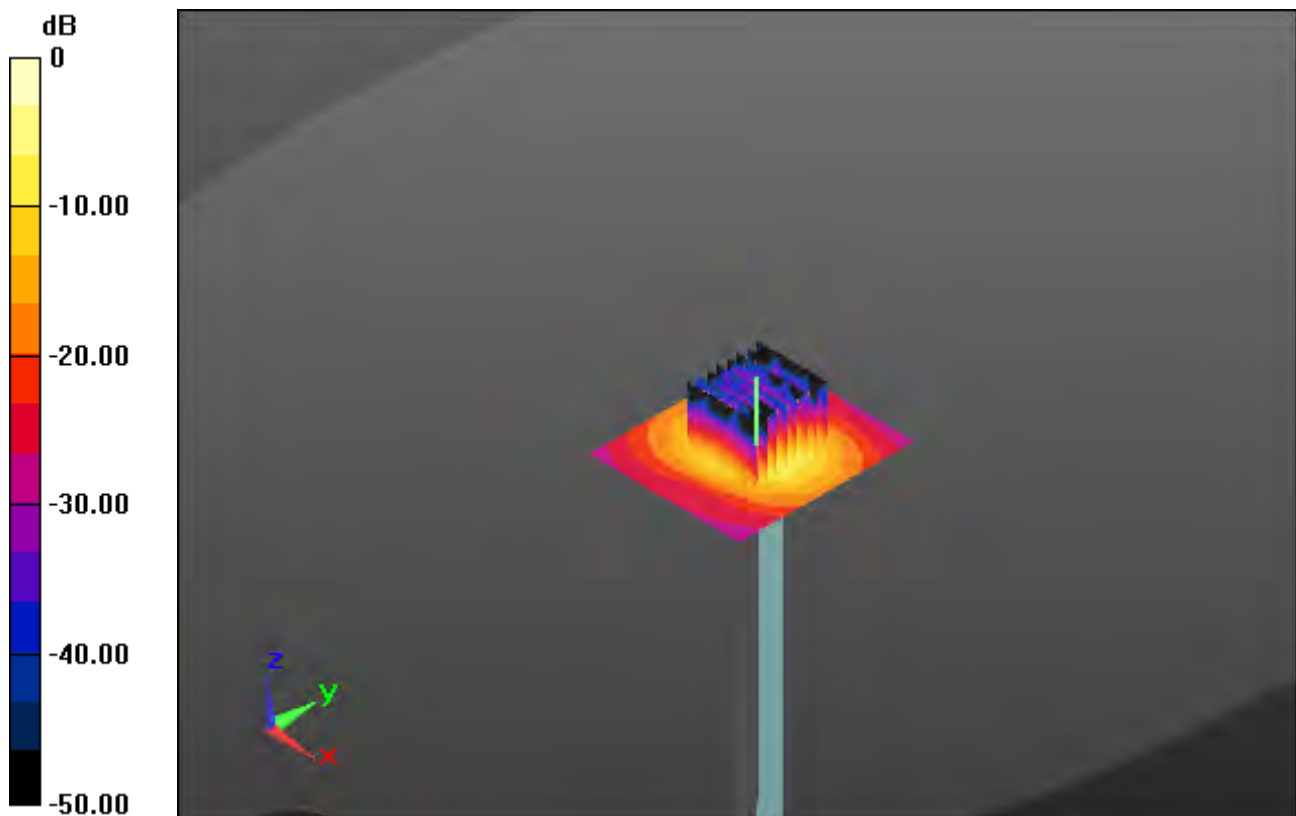
Area Scan (7x8x1): Measurement grid: dx=10mm, dy=10mm

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

Power Drift = -0.06 dB

Peak SAR (extrapolated) = 39.4 W/kg

SAR(1 g) = 8.56 W/kg; SAR(10 g) = 2.40 W/kg



DT&C Co., Ltd.

DUT: Dipole 5000 MHz; Type: D5GHzV2; Serial: D5GHzV2 - SN:1212

Communication System: UID 0, CW (0); Frequency: 5800 MHz; Duty Cycle: 1:1
Medium parameters used: $f = 5800 \text{ MHz}$; $\sigma = 5.38 \text{ S/m}$; $\epsilon_r = 34.819$; $\rho = 1000 \text{ kg/m}^3$
Phantom section: Flat Section

DASY5 Configuration:

Probe: EX3DV4 - SN3933; ConvF(4.75, 4.75, 4.75); Calibrated: 9/27/2019 Electronics: DAE3 Sn520
Sensor-Surface: 1.4mm (Mechanical Surface Detection)
Phantom: ELI v5.0_2017_03_08; Type: QDIVA001BB; Serial: 1223
Measurement SW: DASY52, Version 52.10 (3); SEMCAD X Version 14.6.13 (7474)

Test Date: 2020-06-04; Ambient Temp: 21.1; Tissue Temp: 21.1

5800 MHz System Verification (100 mW)

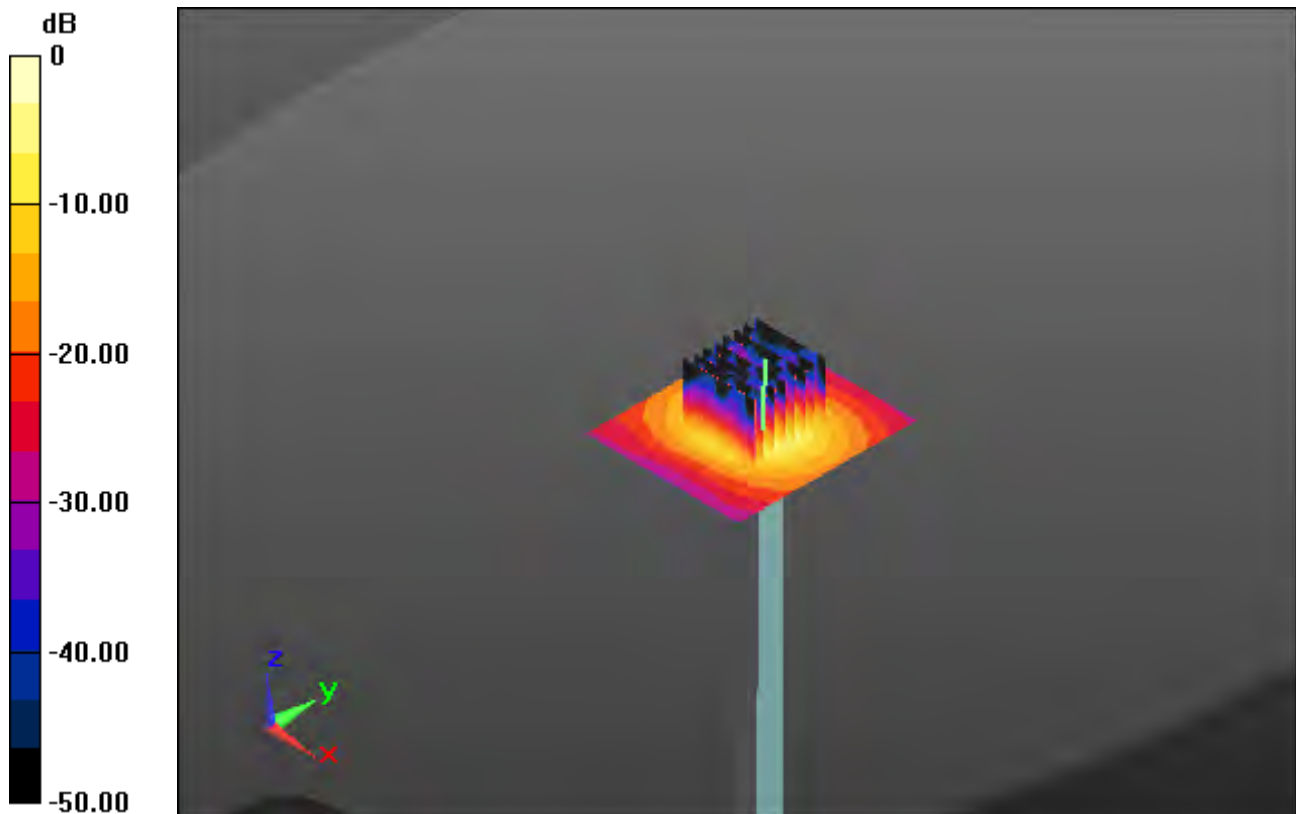
Area Scan (7x8x1): Measurement grid: $dx=10\text{mm}$, $dy=10\text{mm}$

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

Power Drift = 0.03 dB

Peak SAR (extrapolated) = 37.1 W/kg

SAR(1 g) = 8.24 W/kg; SAR(10 g) = 2.29 W/kg



0 dB = 19.6 W/kg

DT&C Co., Ltd.

DUT: PM451; Type: PDA

Communication System: UID 0, GSM 850_12 (0); Frequency: 836.6 MHz; Duty Cycle: 1:2.075

Medium parameters used: $f = 836.6$ MHz; $\sigma = 0.923$ S/m; $\epsilon_r = 42.898$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

DASY5 Configuration:

Probe: EX3DV4 - SN3933; ConvF(10.32, 10.32, 10.32); Calibrated: 9/27/2019 Electronics: DAE3 Sn520

Sensor-Surface: 2mm (Mechanical Surface Detection)

Phantom: ELI v5.0_2017_03_08; Type: QDIVA001BB; Serial: 1223

Measurement SW: DASY52, Version 52.10 (3); SEMCAD X Version 14.6.13 (7474)

Test Date: 2020-05-29; Ambient Temp: 20.3; Tissue Temp: 20.5

1 cm space from Body, Front, GSM850 GPRS 4 Tx Ch. 190, Ant Internal

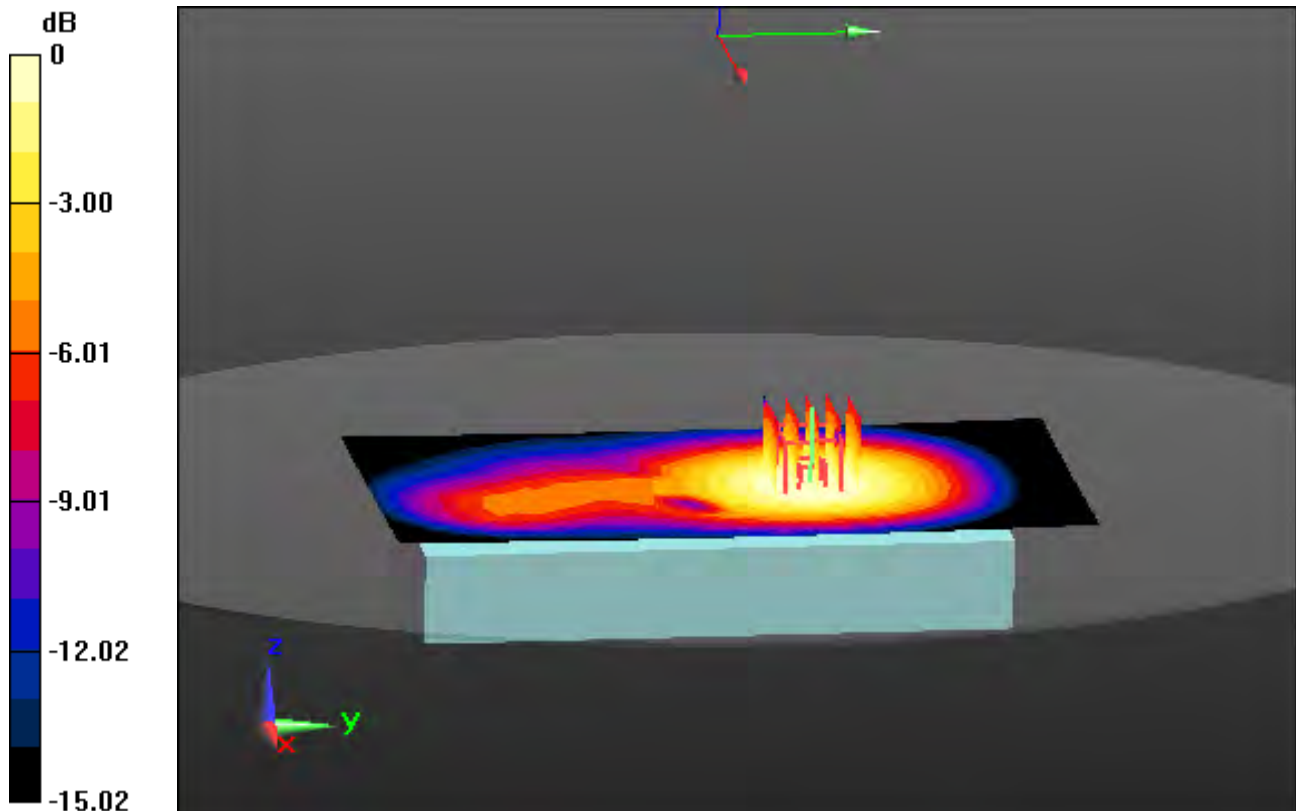
Area Scan (10x19x1): Measurement grid: dx=15mm, dy=15mm

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

Power Drift = 0.05 dB

Peak SAR (extrapolated) = 0.503 W/kg

SAR(1 g) = 0.398 W/kg; SAR(10 g) = 0.299 W/kg



0 dB = 0.459 W/kg

DT&C Co., Ltd.

DUT: PM451; Type: PDA;

Communication System: UID 0, PCS1900_4 Tx (0); Frequency: 1880 MHz; Duty Cycle: 1:2.075

Medium parameters used: $f = 1880$ MHz; $\sigma = 1.398$ S/m; $\epsilon_r = 40.844$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

DASY5 Configuration:

Probe: ES3DV3 - SN3328; ConvF(5.09, 5.09, 5.09) @ 1880 MHz; Calibrated: 3/25/2020 Electronics: DAE4 Sn1335

Sensor-Surface: 3mm (Mechanical Surface Detection)

Phantom: ELI v5.0_2014_02_13; Type: QDOVA002AA; Serial: TP:1237

Measurement SW: DASY52, Version 52.10 (3); SEMCAD X Version 14.6.13 (7474)

Test Date: 2020-05-29; Ambient Temp: 21.7; Tissue Temp: 21.8

1 cm space from Body, Front, PCS1900 GPRS 4 Tx Ch. 661, Ant Internal

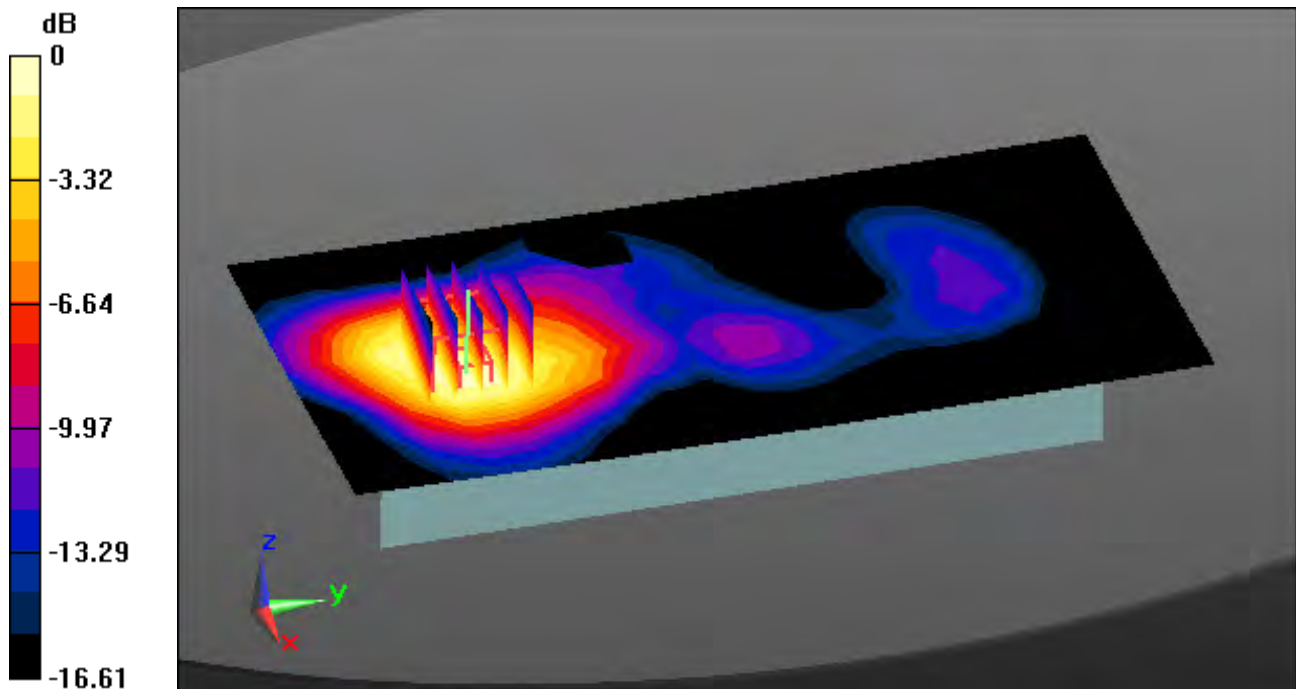
Area Scan (10x19x1): Measurement grid: dx=15mm, dy=15mm

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

Power Drift = -0.03 dB

Peak SAR (extrapolated) = 0.597 W/kg

SAR(1 g) = 0.375 W/kg; SAR(10 g) = 0.229 W/kg



0 dB = 0.446 W/kg

DT&C Co., Ltd.

DUT: PM451; Type: PDA

Communication System: UID 0, WCDMA 850 (0); Frequency: 836.6 MHz; Duty Cycle: 1:1

Medium parameters used: $f = 836.6 \text{ MHz}$; $\sigma = 0.923 \text{ S/m}$; $\epsilon_r = 42.898$; $\rho = 1000 \text{ kg/m}^3$

Phantom section: Flat Section

DASY5 Configuration:

Probe: EX3DV4 - SN3933; ConvF(10.32, 10.32, 10.32); Calibrated: 9/27/2019 Electronics: DAE3 Sn520

Sensor-Surface: 2mm (Mechanical Surface Detection)

Phantom: ELI v5.0_2017_03_08; Type: QDIVA001BB; Serial: 1223

Measurement SW: DASY52, Version 52.10 (3); SEMCAD X Version 14.6.13 (7474)

Test Date: 2020-05-29; Ambient Temp: 20.3; Tissue Temp: 20.5

1 cm space from Body, Front, WCDMA Band 5 Ch. 4183, Ant Internal

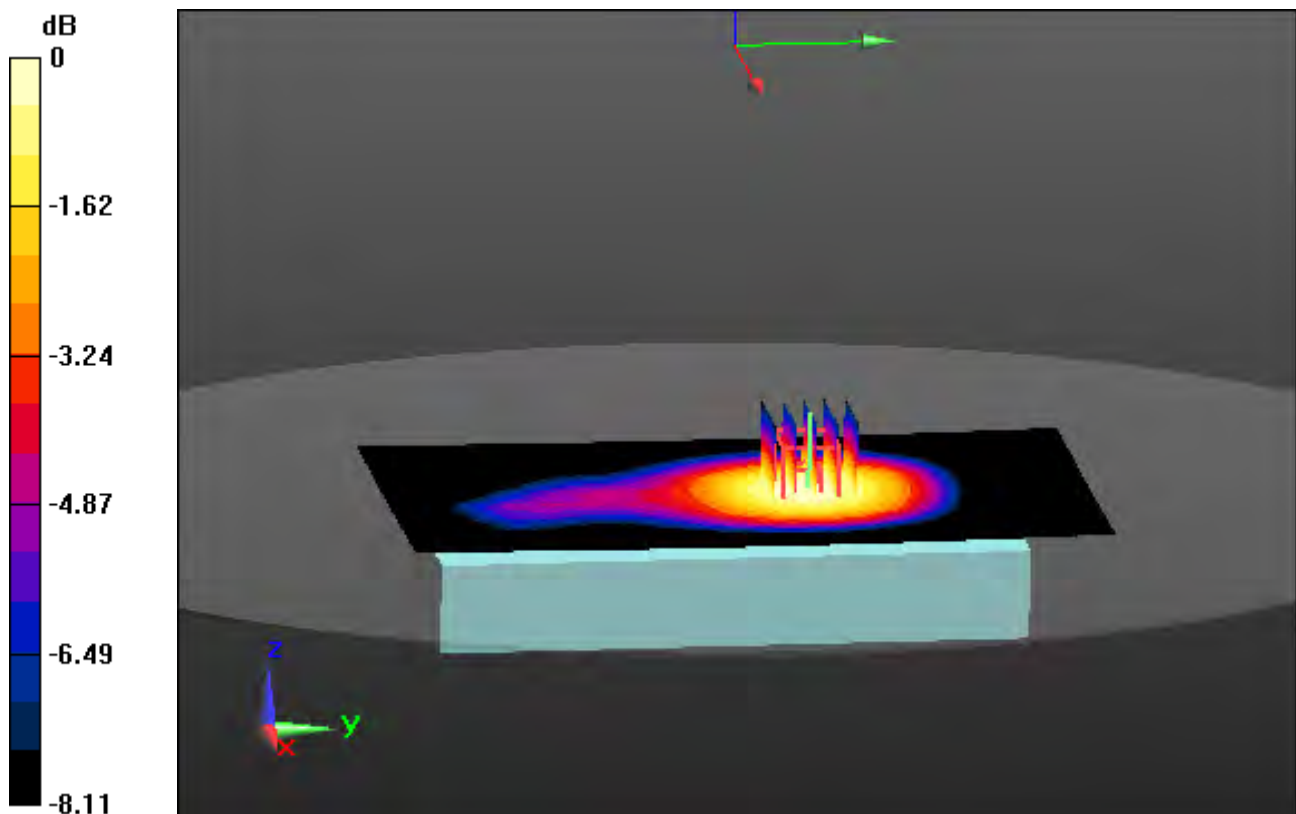
Area Scan (10x19x1): Measurement grid: $dx=15\text{mm}$, $dy=15\text{mm}$

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

Power Drift = 0.04 dB

Peak SAR (extrapolated) = 0.417 W/kg

SAR(1 g) = 0.330 W/kg; SAR(10 g) = 0.249 W/kg



0 dB = 0.380 W/kg

DT&C Co., Ltd.

DUT: PM451; Type: PDA

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

Medium parameters used: $f = 1732.4$ MHz; $\sigma = 1.383$ S/m; $\epsilon_r = 39.227$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

DASY5 Configuration:

Probe: ES3DV3 - SN3328; ConvF(5.34, 5.34, 5.34) @ 1732.4 MHz; Calibrated: 3/25/2020 Electronics: DAE4 Sn1335

Sensor-Surface: 3mm (Mechanical Surface Detection)

Phantom: ELI v5.0_2014_02_13; Type: QDOVA002AA; Serial: TP:1237

Measurement SW: DASY52, Version 52.10 (3); SEMCAD X Version 14.6.13 (7474)

Test Date: 2020-06-01; Ambient Temp: 21.3; Tissue Temp: 21.5

1 cm space from Body, Front, WCDMA Band 4 Ch. 1412, Ant Internal

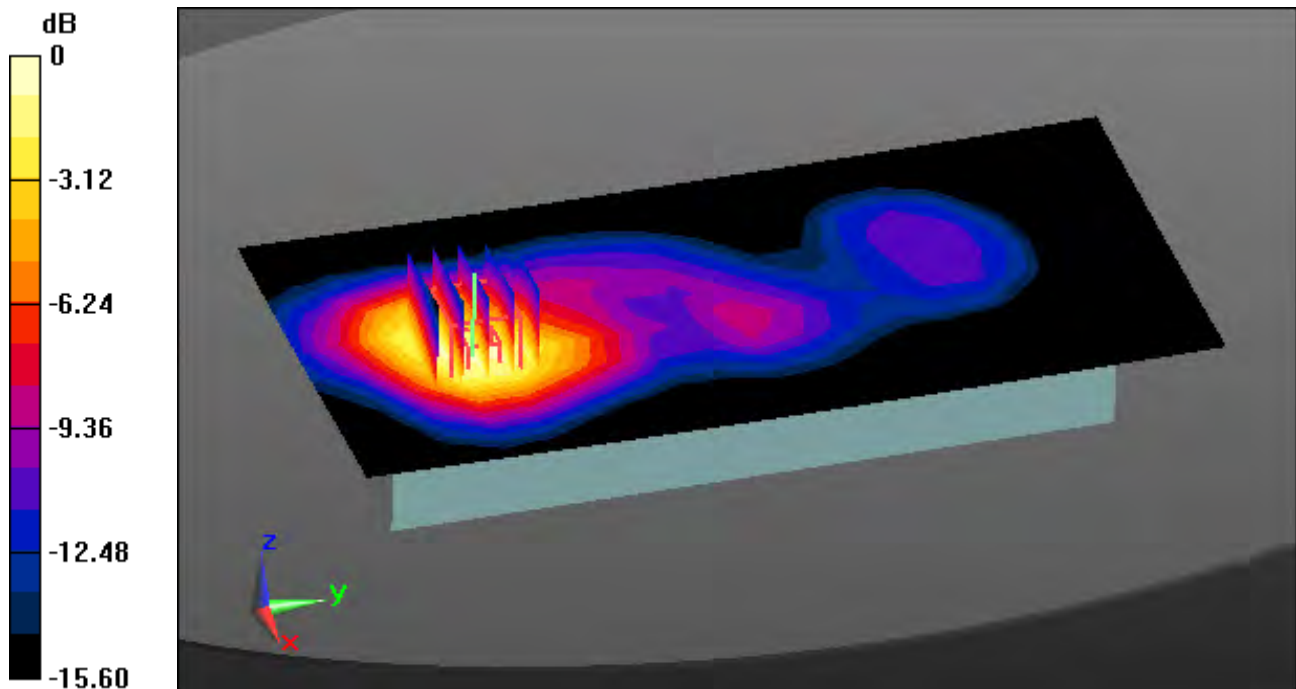
Area Scan (10x19x1): Measurement grid: dx=15mm, dy=15mm

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

Power Drift = -0.00 dB

Peak SAR (extrapolated) = 0.762 W/kg

SAR(1 g) = 0.494 W/kg; SAR(10 g) = 0.300 W/kg



0 dB = 0.588 W/kg

DT&C Co., Ltd.

DUT: PM451; Type: PDA

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

Medium parameters used: $f = 1880$ MHz; $\sigma = 1.398$ S/m; $\epsilon_r = 40.844$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

DASY5 Configuration:

Probe: ES3DV3 - SN3328; ConvF(5.09, 5.09, 5.09) @ 1880 MHz; Calibrated: 3/25/2020 Electronics: DAE4 Sn1335

Sensor-Surface: 3mm (Mechanical Surface Detection)

Phantom: ELI v5.0_2014_02_13; Type: QDOVA002AA; Serial: TP:1237

Measurement SW: DASY52, Version 52.10 (3); SEMCAD X Version 14.6.13 (7474)

Test Date: 2020-05-29; Ambient Temp: 21.7; Tissue Temp: 21.8

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

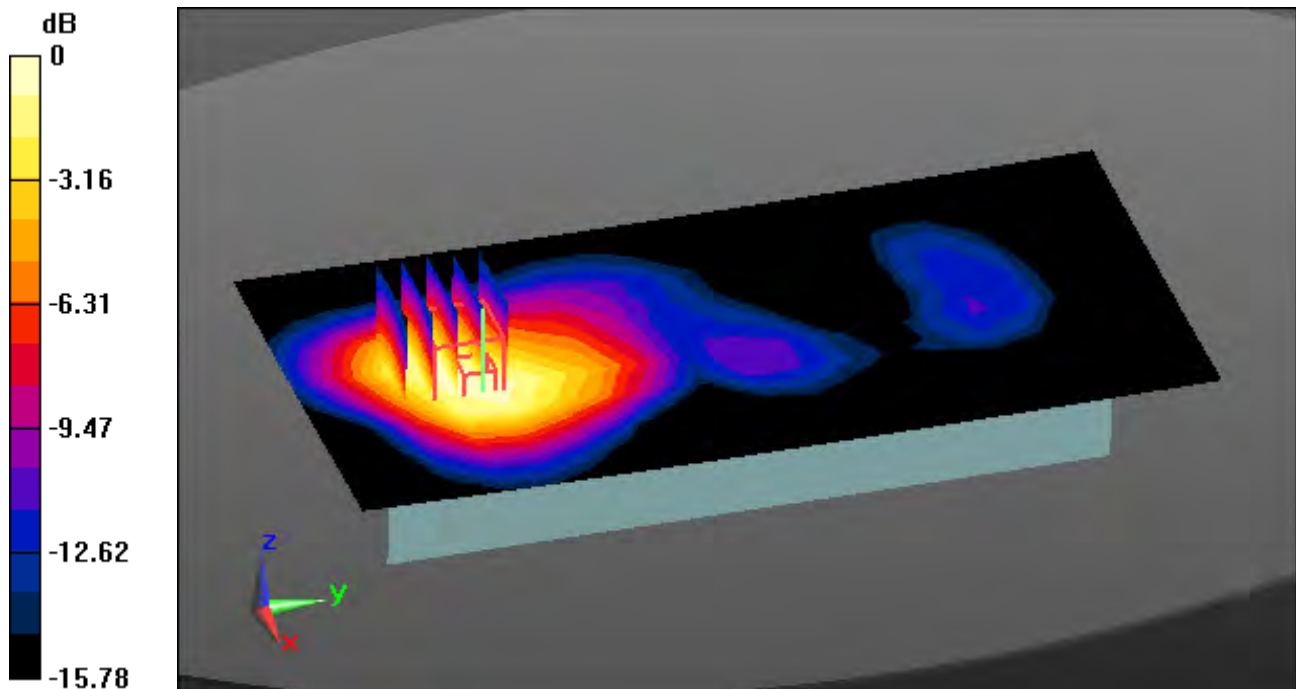
Area Scan (10x19x1): Measurement grid: dx=15mm, dy=15mm

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

Power Drift = -0.03 dB

Peak SAR (extrapolated) = 0.740 W/kg

SAR(1 g) = 0.437 W/kg; SAR(10 g) = 0.270 W/kg



0 dB = 0.548 W/kg

DT&C Co., Ltd.

DUT: PM451; Type: PDA

Communication System: UID 0, LTE Band 12 (0); Frequency: 707.5 MHz; Duty Cycle: 1:1

Medium parameters used: $f = 707.5 \text{ MHz}$; $\sigma = 0.856 \text{ S/m}$; $\epsilon_r = 42.748$; $\rho = 1000 \text{ kg/m}^3$

Phantom section: Flat Section

DASY5 Configuration:

Probe: EX3DV4 - SN3933; ConvF(10.68, 10.68, 10.68); Calibrated: 9/27/2019 Electronics: DAE3 Sn520

Sensor-Surface: 2mm (Mechanical Surface Detection)

Phantom: ELI v5.0_2017_03_08; Type: QDIVA001BB; Serial: 1223

Measurement SW: DASY52, Version 52.10 (3); SEMCAD X Version 14.6.13 (7474)

Test Date: 2020-06-01; Ambient Temp: 21.6; Tissue Temp: 21.8

1 cm space from Body, Front, LTE Band 12 Ch. 23095, Ant Internal

Mode : BandWidth 10 MHz, QPSK, RB Size: 1

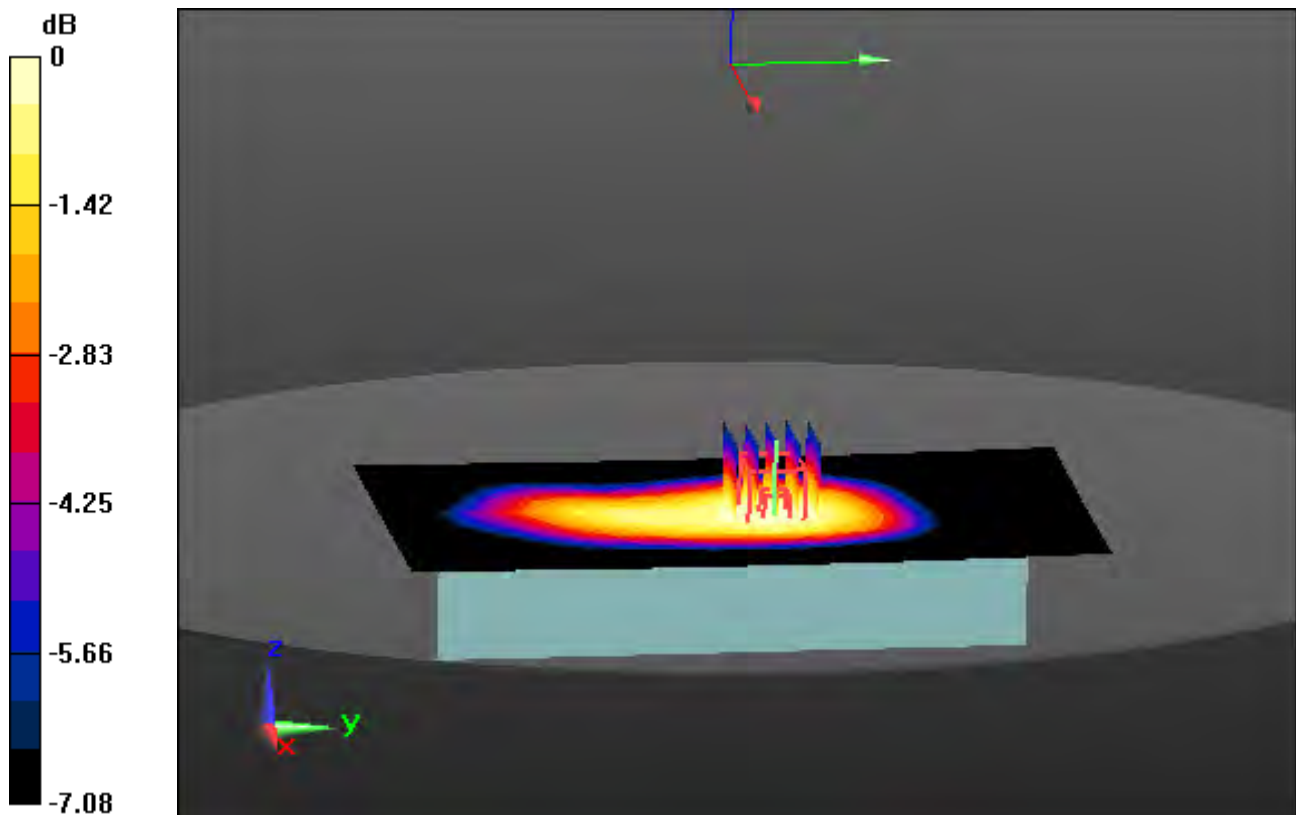
Area Scan (10x19x1): Measurement grid: $dx=15\text{mm}$, $dy=15\text{mm}$

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

Power Drift = -0.02 dB

Peak SAR (extrapolated) = 0.218 W/kg

SAR(1 g) = 0.179 W/kg; SAR(10 g) = 0.140 W/kg



0 dB = 0.202 W/kg

DT&C Co., Ltd.

DUT: PM451; Type: PDA

Communication System: UID 0, LTE Band 13 (0); Frequency: 782 MHz; Duty Cycle: 1:1

Medium parameters used: $f = 782 \text{ MHz}$; $\sigma = 0.923 \text{ S/m}$; $\epsilon_r = 41.713$; $\rho = 1000 \text{ kg/m}^3$

Phantom section: Flat Section

DASY5 Configuration:

Probe: EX3DV4 - SN3933; ConvF(10.68, 10.68, 10.68); Calibrated: 9/27/2019 Electronics: DAE3 Sn520

Sensor-Surface: 2mm (Mechanical Surface Detection)

Phantom: ELI v5.0_2017_03_08; Type: QDIVA001BB; Serial: 1223

Measurement SW: DASY52, Version 52.10 (3); SEMCAD X Version 14.6.13 (7474)

Test Date: 2020-06-01; Ambient Temp: 21.6; Tissue Temp: 21.8

1 cm space from Body, Front, LTE Band 13 Ch. 23230, Ant Internal

Mode : BandWidth 10 MHz, QPSK, RB Size: 1

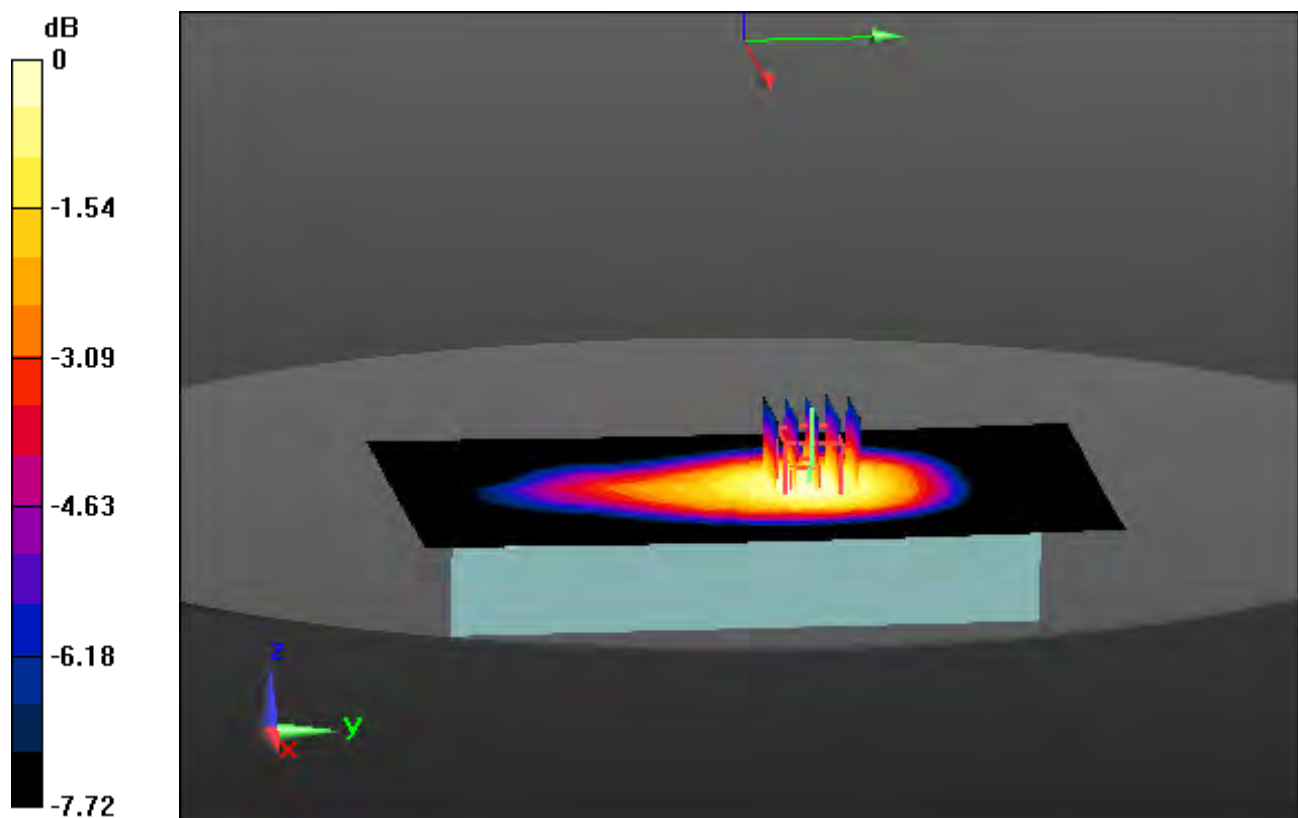
Area Scan (10x19x1): Measurement grid: $dx=15\text{mm}$, $dy=15\text{mm}$

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

Power Drift = 0.09 dB

Peak SAR (extrapolated) = 0.369 W/kg

SAR(1 g) = 0.294 W/kg; SAR(10 g) = 0.223 W/kg



0 dB = 0.338 W/kg

DT&C Co., Ltd.

DUT: PM451; Type: PDA

Communication System: UID 0, LTE Band 26 (0); Frequency: 831.5 MHz; Duty Cycle: 1:1

Medium parameters used: $f = 831.5 \text{ MHz}$; $\sigma = 0.919 \text{ S/m}$; $\epsilon_r = 42.957$; $\rho = 1000 \text{ kg/m}^3$

Phantom section: Flat Section

DASY5 Configuration:

Probe: EX3DV4 - SN3933; ConvF(10.32, 10.32, 10.32); Calibrated: 9/27/2019 Electronics: DAE3 Sn520

Sensor-Surface: 2mm (Mechanical Surface Detection)

Phantom: ELI v5.0_2017_03_08; Type: QDIVA001BB; Serial: 1223

Measurement SW: DASY52, Version 52.10 (3); SEMCAD X Version 14.6.13 (7474)

Test Date: 2020-05-29; Ambient Temp: 20.3; Tissue Temp: 20.5

1 cm space from Body, Front, LTE Band 26 Ch. 26865, Ant Internal

Mode : BandWidth 15 MHz, QPSK, RB Size: 1

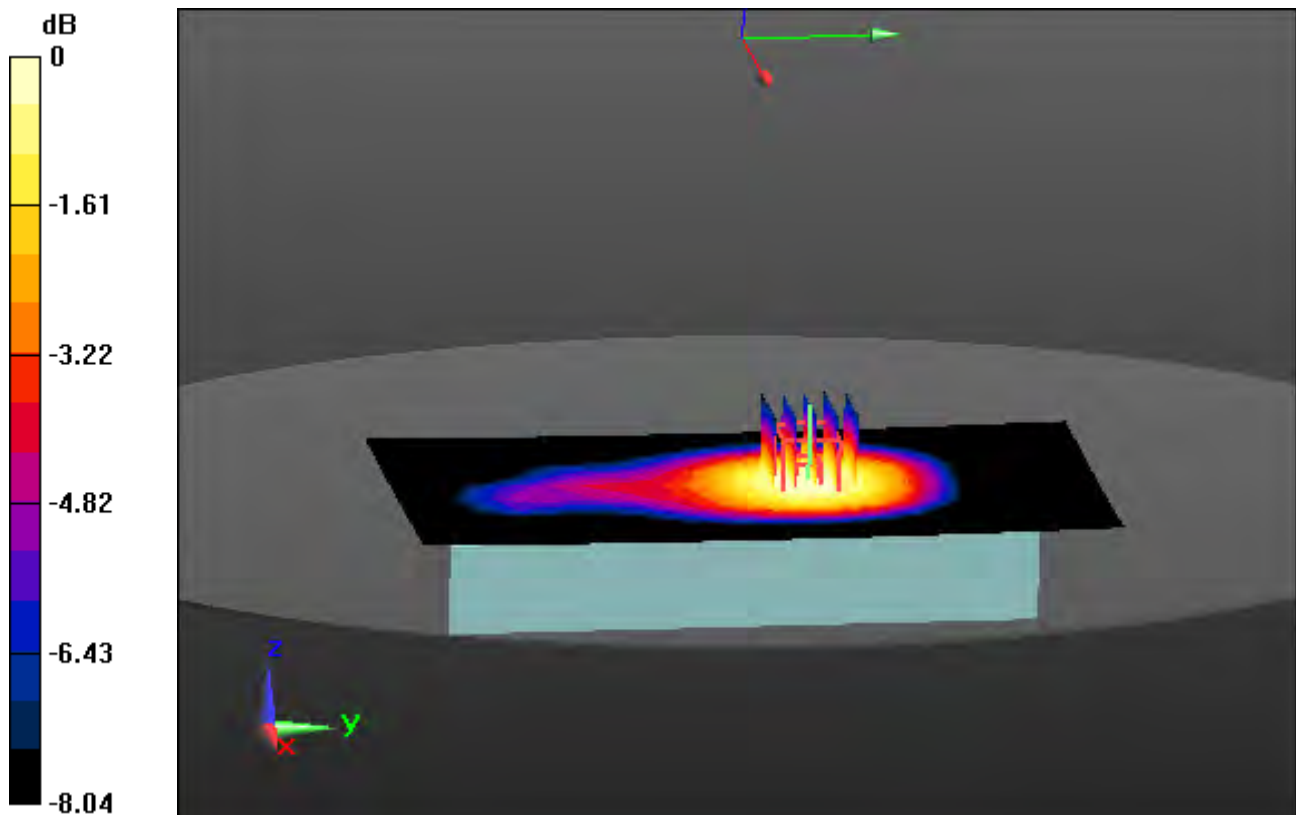
Area Scan (10x19x1): Measurement grid: $dx=15\text{mm}$, $dy=15\text{mm}$

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

Power Drift = -0.09 dB

Peak SAR (extrapolated) = 0.445 W/kg

SAR(1 g) = 0.354 W/kg; SAR(10 g) = 0.269 W/kg



0 dB = 0.407 W/kg

DT&C Co., Ltd.

DUT: PM451; Type: PDA

Communication System: UID 0, LTE Band 4 (0); Frequency: 1732.5 MHz; Duty Cycle: 1:1

Medium parameters used: $f = 1732.5$ MHz; $\sigma = 1.383$ S/m; $\epsilon_r = 39.227$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

DASY5 Configuration:

Probe: ES3DV3 - SN3328; ConvF(5.34, 5.34, 5.34) @ 1732.5 MHz; Calibrated: 3/25/2020 Electronics: DAE4 Sn1335

Sensor-Surface: 3mm (Mechanical Surface Detection)

Phantom: ELI v5.0_2014_02_13; Type: QDOVA002AA; Serial: TP:1237

Measurement SW: DASY52, Version 52.10 (3); SEMCAD X Version 14.6.13 (7474)

Test Date: 2020-06-01; 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

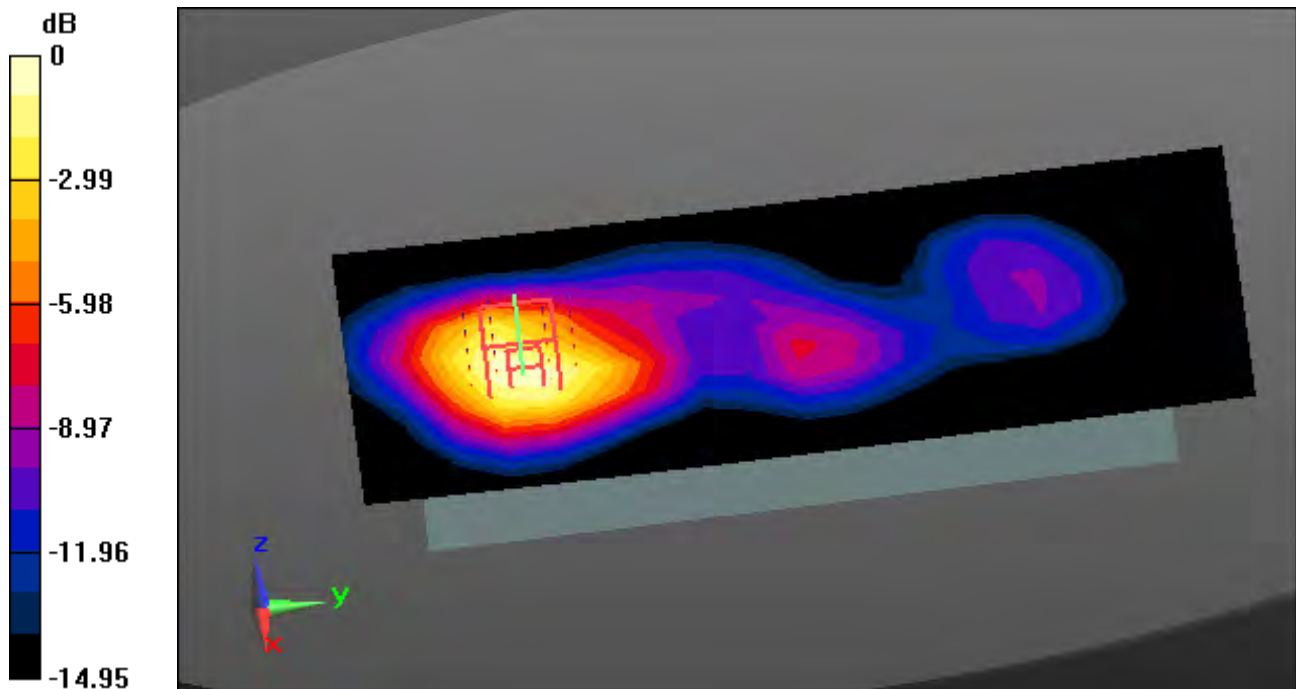
Area Scan (10x19x1): Measurement grid: dx=15mm, dy=15mm

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

Power Drift = 0.19 dB

Peak SAR (extrapolated) = 0.752 W/kg

SAR(1 g) = 0.490 W/kg; SAR(10 g) = 0.290 W/kg



0 dB = 0.586 W/kg

DT&C Co., Ltd.

DUT: PM451; Type: PDA

Communication System: UID 0, LTE Band 25 (0); Frequency: 1882.5 MHz; Duty Cycle: 1:1

Medium parameters used: $f = 1882.5$ MHz; $\sigma = 1.4$ S/m; $\epsilon_r = 40.838$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

DASY5 Configuration:

Probe: ES3DV3 - SN3328; ConvF(5.09, 5.09, 5.09) @ 1882.5 MHz; Calibrated: 3/25/2020 Electronics: DAE4
Sn1335

Sensor-Surface: 3mm (Mechanical Surface Detection)

Phantom: ELI v5.0_2014_02_13; Type: QDOVA002AA; Serial: TP:1237

Measurement SW: DASY52, Version 52.10 (3); SEMCAD X Version 14.6.13 (7474)

Test Date: 2020-05-29; Ambient Temp: 21.7; Tissue Temp: 21.8

1 cm space from Body, Front, LTE Band 25 Ch. 26365, Ant Internal

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

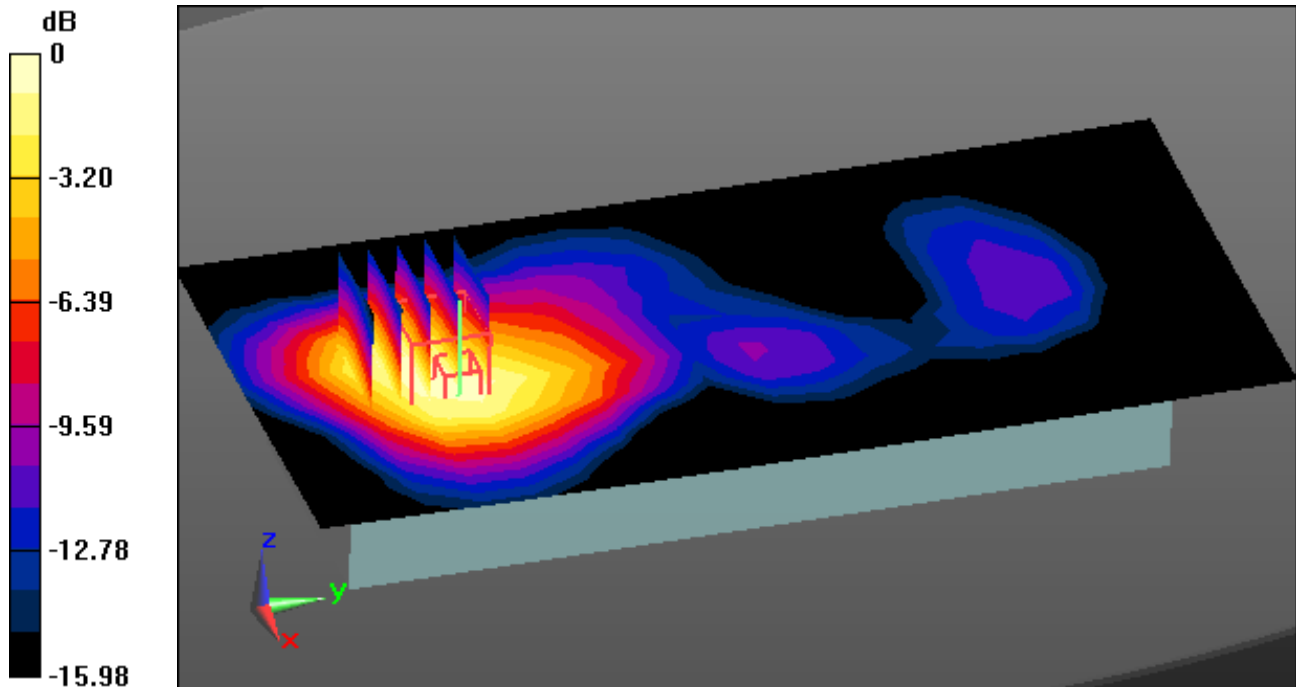
Area Scan (10x19x1): Measurement grid: dx=15mm, dy=15mm

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

Power Drift = 0.01 dB

Peak SAR (extrapolated) = 0.625 W/kg

SAR(1 g) = 0.383 W/kg; SAR(10 g) = 0.232 W/kg



DT&C Co., Ltd.

DUT: PM451; Type: PDA

Communication System: UID 0, LTE Band 7 (FCC) (0); Frequency: 2535 MHz; Duty Cycle: 1:1

Medium parameters used: $f = 2535 \text{ MHz}$; $\sigma = 1.877 \text{ S/m}$; $\epsilon_r = 39.931$; $\rho = 1000 \text{ kg/m}^3$

Phantom section: Flat Section

DASY5 Configuration:

Probe: ES3DV3 - SN3328; ConvF(4.57, 4.57, 4.57) @ 2535 MHz; Calibrated: 3/25/2020 Electronics: DAE4 Sn1335

Sensor-Surface: 3mm (Mechanical Surface Detection)

Phantom: ELI v5.0_2014_02_13; Type: QDOVA002AA; Serial: TP:1237

Measurement SW: DASY52, Version 52.10 (3); SEMCAD X Version 14.6.13 (7474)

Test Date: 2020-06-02; Ambient Temp: 21.7; Tissue Temp: 21.8

1 cm space from Body, Front, LTE Band 7 Ch. 20850, Ant Internal

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

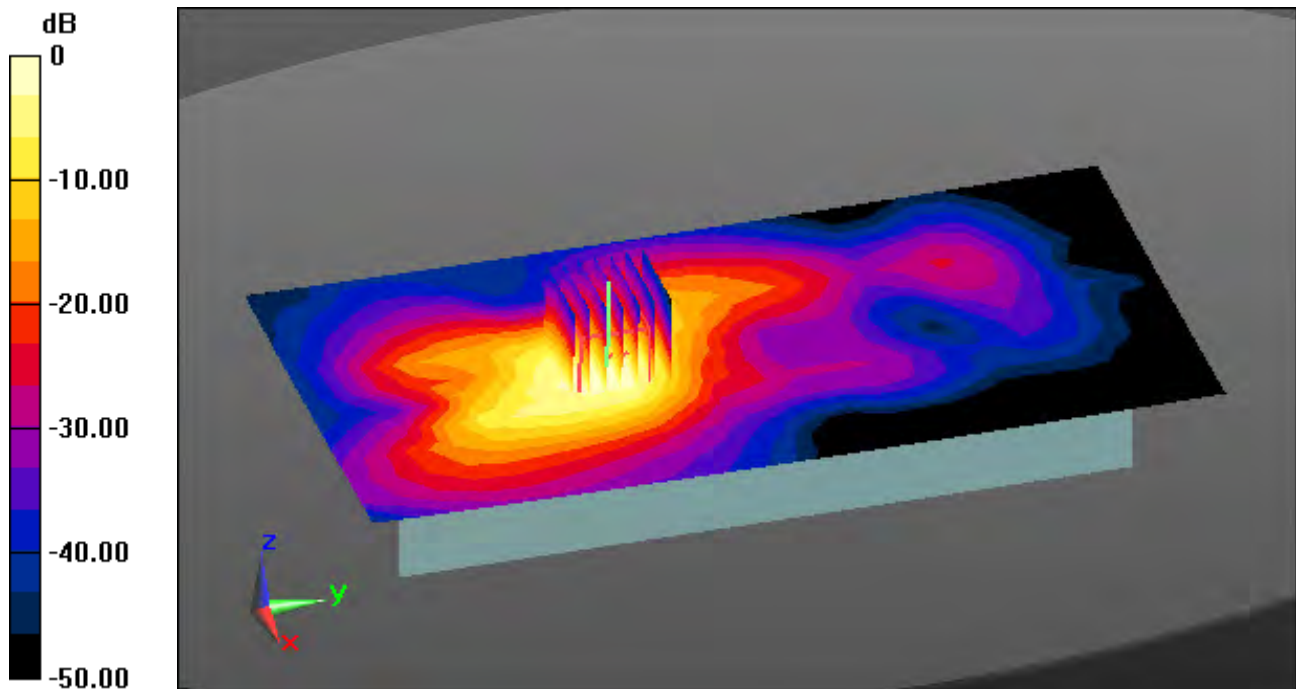
Area Scan (12x23x1): Measurement grid: $dx=12\text{mm}$, $dy=12\text{mm}$

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

Power Drift = 0.00 dB

Peak SAR (extrapolated) = 1.20 W/kg

SAR(1 g) = 0.670 W/kg; SAR(10 g) = 0.370 W/kg



0 dB = 0.833 W/kg

DT&C Co., Ltd.

DUT: PM451; Type: PDA

Communication System: UID 0, LTE Band 41(TDD) (0); Frequency: 2593 MHz; Duty Cycle: 1:1.58

Medium parameters used: $f = 2593 \text{ MHz}$; $\sigma = 1.94 \text{ S/m}$; $\epsilon_r = 39.729$; $\rho = 1000 \text{ kg/m}^3$

Phantom section: Flat Section

DASY5 Configuration:

Probe: ES3DV3 - SN3328; ConvF(4.57, 4.57, 4.57) @ 2593 MHz; Calibrated: 3/25/2020 Electronics: DAE4 Sn1335

Sensor-Surface: 3mm (Mechanical Surface Detection)

Phantom: ELI v5.0_2014_02_13; Type: QDOVA002AA; Serial: TP:1237

Measurement SW: DASY52, Version 52.10 (3); SEMCAD X Version 14.6.13 (7474)

Test Date: 2020-06-02; Ambient Temp: 21.7; Tissue Temp: 21.8

1 cm space from Body, Front, LTE Band 41 Ch. 40620, Ant Internal

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

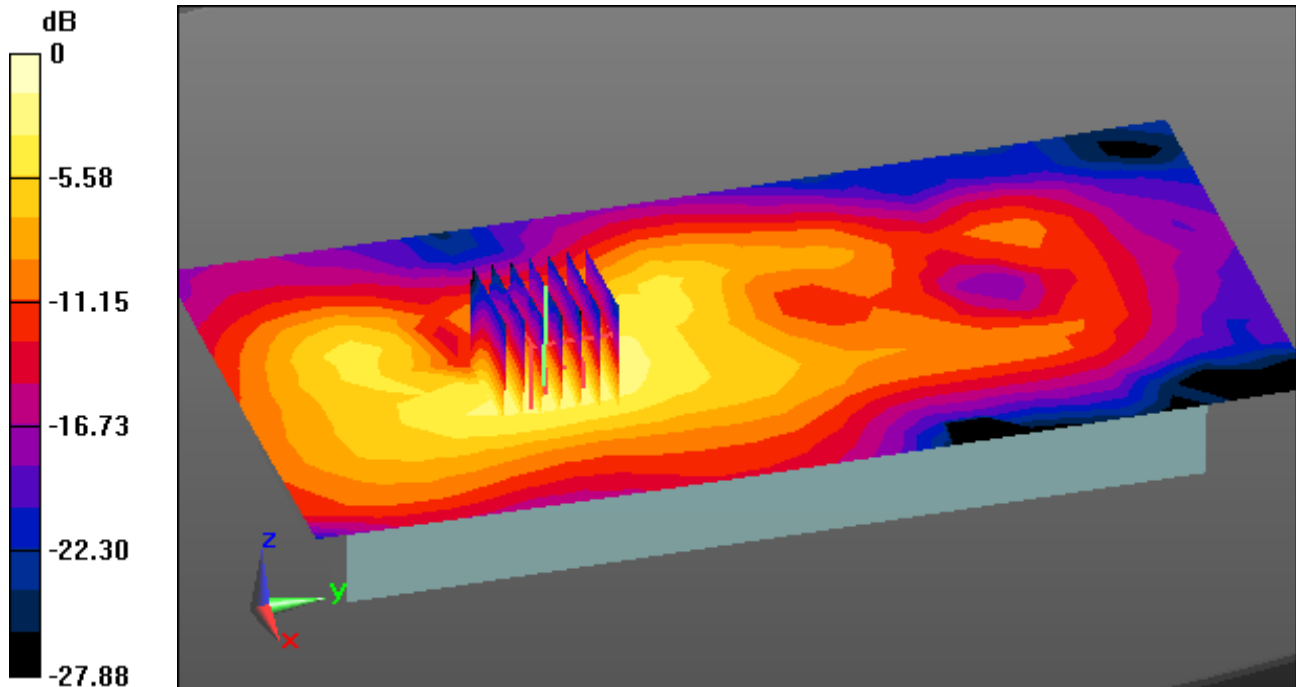
Area Scan (12x23x1): Measurement grid: $dx=12\text{mm}$, $dy=12\text{mm}$

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

Power Drift = 0.02 dB

Peak SAR (extrapolated) = 0.273 W/kg

SAR(1 g) = 0.140 W/kg; SAR(10 g) = 0.076 W/kg



0 dB = 0.294 W/kg

DT&C Co., Ltd.

DUT: PM451; Type: PDA

Communication System: UID 0, 00_2.4 GHz W-LAN (0); Frequency: 2462 MHz; Duty Cycle: 1:1

Medium parameters used: $f = 2462 \text{ MHz}$; $\sigma = 1.81 \text{ S/m}$; $\epsilon_r = 37.786$; $\rho = 1000 \text{ kg/m}^3$

Phantom section: Flat Section

DASY5 Configuration:

Probe: ES3DV3 - SN3328; ConvF(4.7, 4.7, 4.7) @ 2462 MHz; Calibrated: 3/25/2020 Electronics: DAE4 Sn1335
Sensor-Surface: 3mm (Mechanical Surface Detection)

Phantom: ELI v5.0_2014_02_13; Type: QDOVA002AA; Serial: TP:1237

Measurement SW: DASY52, Version 52.10 (3); SEMCAD X Version 14.6.13 (7474)

Test Date: 2020-06-03; Ambient Temp: 21.4; Tissue Temp: 21.2

1 cm space from Body, Front, WLAN(802.11b) Ch. 11, Ant Internal, Ant.1

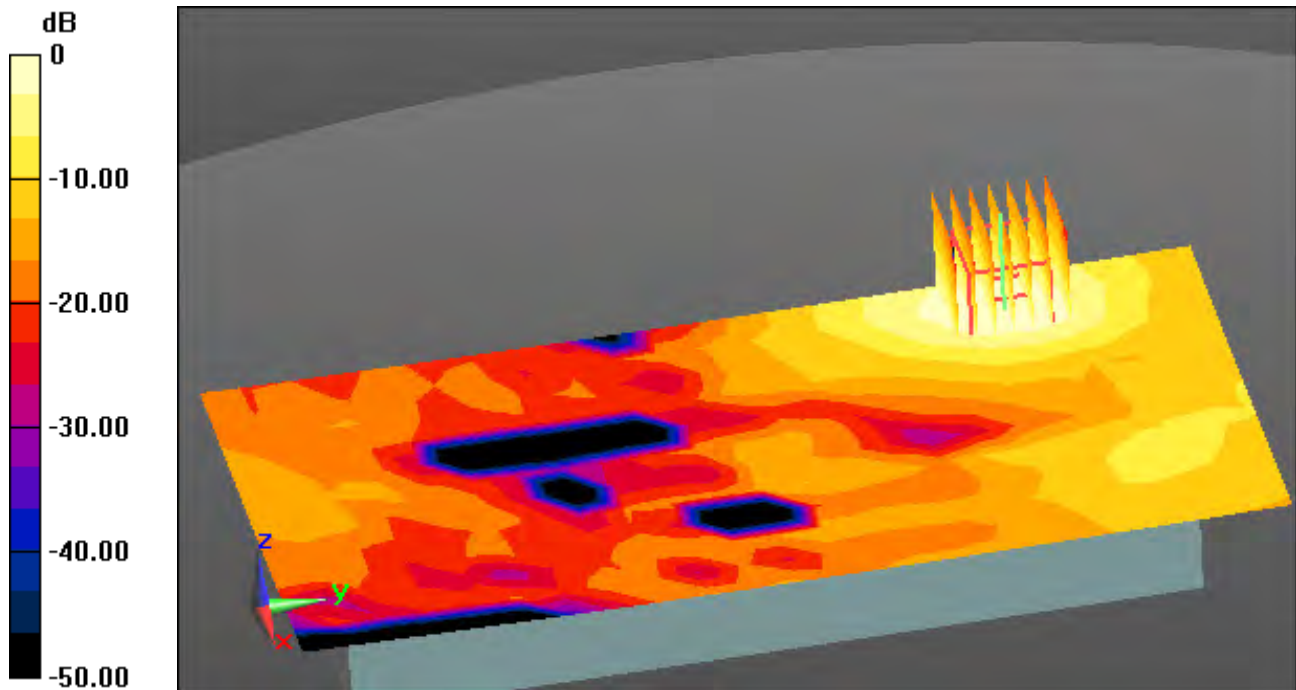
Area Scan (12x23x1): Measurement grid: $dx=12\text{mm}$, $dy=12\text{mm}$

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

Power Drift = -0.08 dB

Peak SAR (extrapolated) = 0.0790 W/kg

SAR(1 g) = 0.042 W/kg; SAR(10 g) = 0.022 W/kg



0 dB = 0.0515 W/kg

DT&C Co., Ltd.

DUT: PM451; Type: PDA

Communication System: UID 0, 00_2.4 GHz W-LAN (0); Frequency: 2437 MHz; Duty Cycle: 1:1

Medium parameters used: $f = 2437 \text{ MHz}$; $\sigma = 1.782 \text{ S/m}$; $\epsilon_r = 37.857$; $\rho = 1000 \text{ kg/m}^3$

Phantom section: Flat Section

DASY5 Configuration:

Probe: ES3DV3 - SN3328; ConvF(4.7, 4.7, 4.7) @ 2437 MHz; Calibrated: 3/25/2020 Electronics: DAE4 Sn1335

Sensor-Surface: 3mm (Mechanical Surface Detection)

Phantom: ELI v5.0_2014_02_13; Type: QDOVA002AA; Serial: TP:1237

Measurement SW: DASY52, Version 52.10 (3); SEMCAD X Version 14.6.13 (7474)

Test Date: 2020-06-03; Ambient Temp: 21.4; Tissue Temp: 21.2

1 cm space from Body, Front, WLAN(802.11b) Ch. 6, Ant Internal, Ant.2

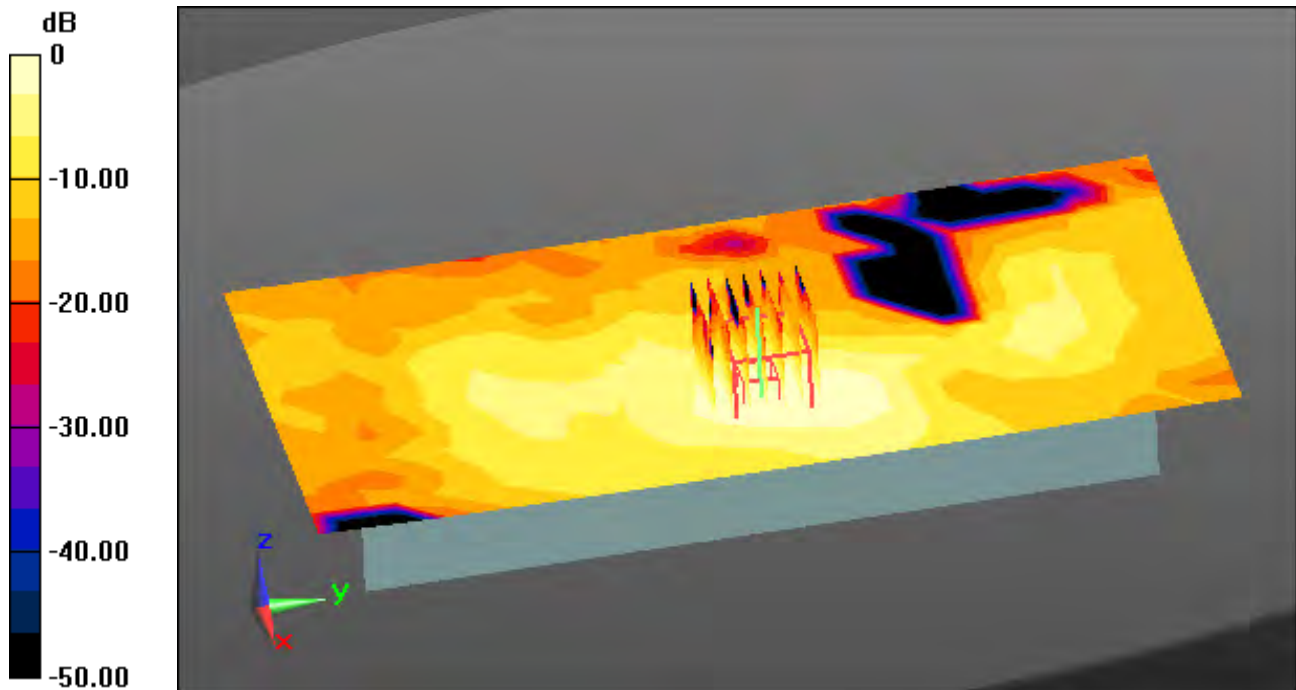
Area Scan (12x23x1): Measurement grid: $dx=12\text{mm}$, $dy=12\text{mm}$

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

Power Drift = 0.00 dB

Peak SAR (extrapolated) = 0.0570 W/kg

SAR(1 g) = 0.028 W/kg; SAR(10 g) = 0.014 W/kg



0 dB = 0.0349 W/kg

DT&C Co., Ltd.

DUT: PM451; Type: PDA

Communication System: UID 0, 00_2.4 GHz W-LAN (0); Frequency: 2437 MHz; Duty Cycle: 1:1

Medium parameters used: $f = 2437 \text{ MHz}$; $\sigma = 1.782 \text{ S/m}$; $\epsilon_r = 37.857$; $\rho = 1000 \text{ kg/m}^3$

Phantom section: Flat Section

DASY5 Configuration:

Probe: ES3DV3 - SN3328; ConvF(4.7, 4.7, 4.7) @ 2437 MHz; Calibrated: 3/25/2020 Electronics: DAE4 Sn1335

Sensor-Surface: 3mm (Mechanical Surface Detection)

Phantom: ELI v5.0_2014_02_13; Type: QDOVA002AA; Serial: TP:1237

Measurement SW: DASY52, Version 52.10 (3); SEMCAD X Version 14.6.13 (7474)

Test Date: 2020-06-03; Ambient Temp: 21.4; Tissue Temp: 21.2

1 cm space from Body, Front, WLAN(802.11b) Ch. 6, Ant Internal, MIMO

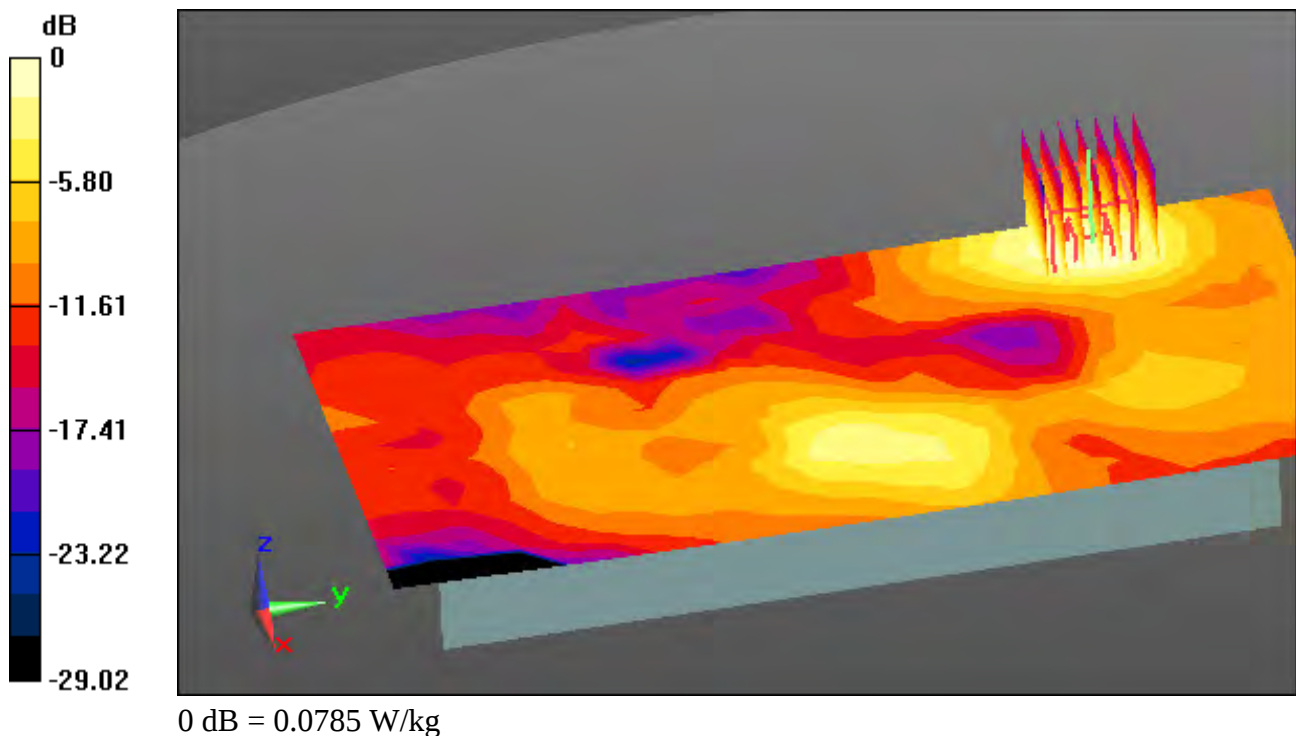
Area Scan (12x23x1): Measurement grid: $dx=12\text{mm}$, $dy=12\text{mm}$

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

Power Drift = 0.03 dB

Peak SAR (extrapolated) = 0.121 W/kg

SAR(1 g) = 0.062 W/kg; SAR(10 g) = 0.032 W/kg



DT&C Co., Ltd.

DUT: PM451; Type: PDA

Communication System: UID 0, W-LAN_5300 (0); Frequency: 5260 MHz; Duty Cycle: 1:1

Medium parameters used: $f = 5260$ MHz; $\sigma = 4.837$ S/m; $\epsilon_r = 35.718$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

DASY5 Configuration:

Probe: EX3DV4 - SN3933; ConvF(5.1, 5.1, 5.1); Calibrated: 9/27/2019 Electronics: DAE3 Sn520

Sensor-Surface: 1.4mm (Mechanical Surface Detection)

Phantom: ELI v5.0_2017_03_08; Type: QDIVA001BB; Serial: 1223

Measurement SW: DASY52, Version 52.10 (3); SEMCAD X Version 14.6.13 (7474)

Test Date: 2020-06-02; Ambient Temp: 21.3; Tissue Temp: 21.5

1 cm space from Body, Front, WLAN(802.11a) Ch. 52, Ant Internal, Ant.1

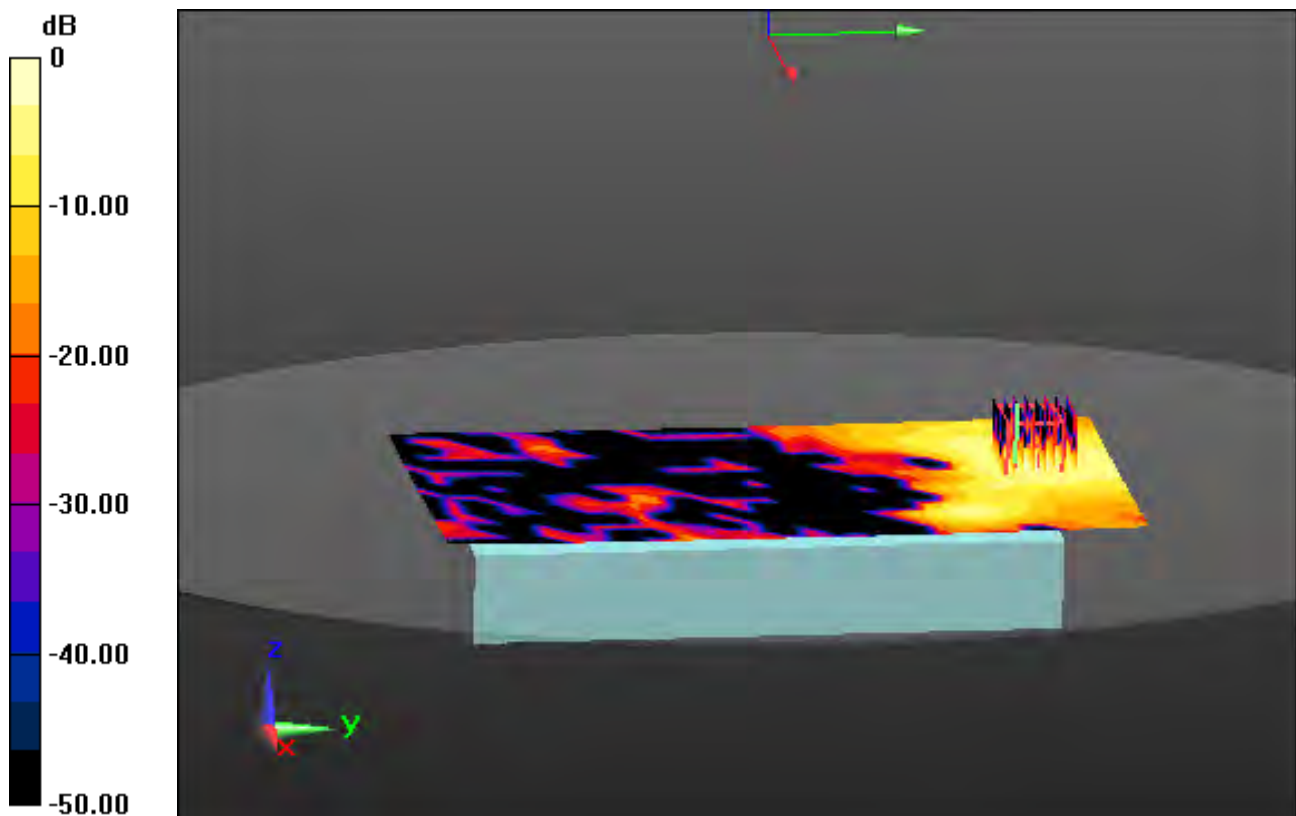
Area Scan (15x28x1): Measurement grid: dx=10mm, dy=10mm

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

Power Drift = -0.19 dB

Peak SAR (extrapolated) = 0.168 W/kg

SAR(1 g) = 0.047 W/kg; SAR(10 g) = 0.019 W/kg



0 dB = 0.106 W/kg

DT&C Co., Ltd.

DUT: PM451; Type: PDA

Communication System: UID 0, W-LAN_5300 (0); Frequency: 5280 MHz; Duty Cycle: 1:1

Medium parameters used: $f = 5280$ MHz; $\sigma = 4.864$ S/m; $\epsilon_r = 35.686$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

DASY5 Configuration:

Probe: EX3DV4 - SN3933; ConvF(5.1, 5.1, 5.1); Calibrated: 9/27/2019 Electronics: DAE3 Sn520

Sensor-Surface: 1.4mm (Mechanical Surface Detection)

Phantom: ELI v5.0_2017_03_08; Type: QDIVA001BB; Serial: 1223

Measurement SW: DASY52, Version 52.10 (3); SEMCAD X Version 14.6.13 (7474)

Test Date: 2020-06-02; Ambient Temp: 21.3; Tissue Temp: 21.5

1 cm space from Body, Front, WLAN(802.11a) Ch. 56, Ant Internal, Ant.2

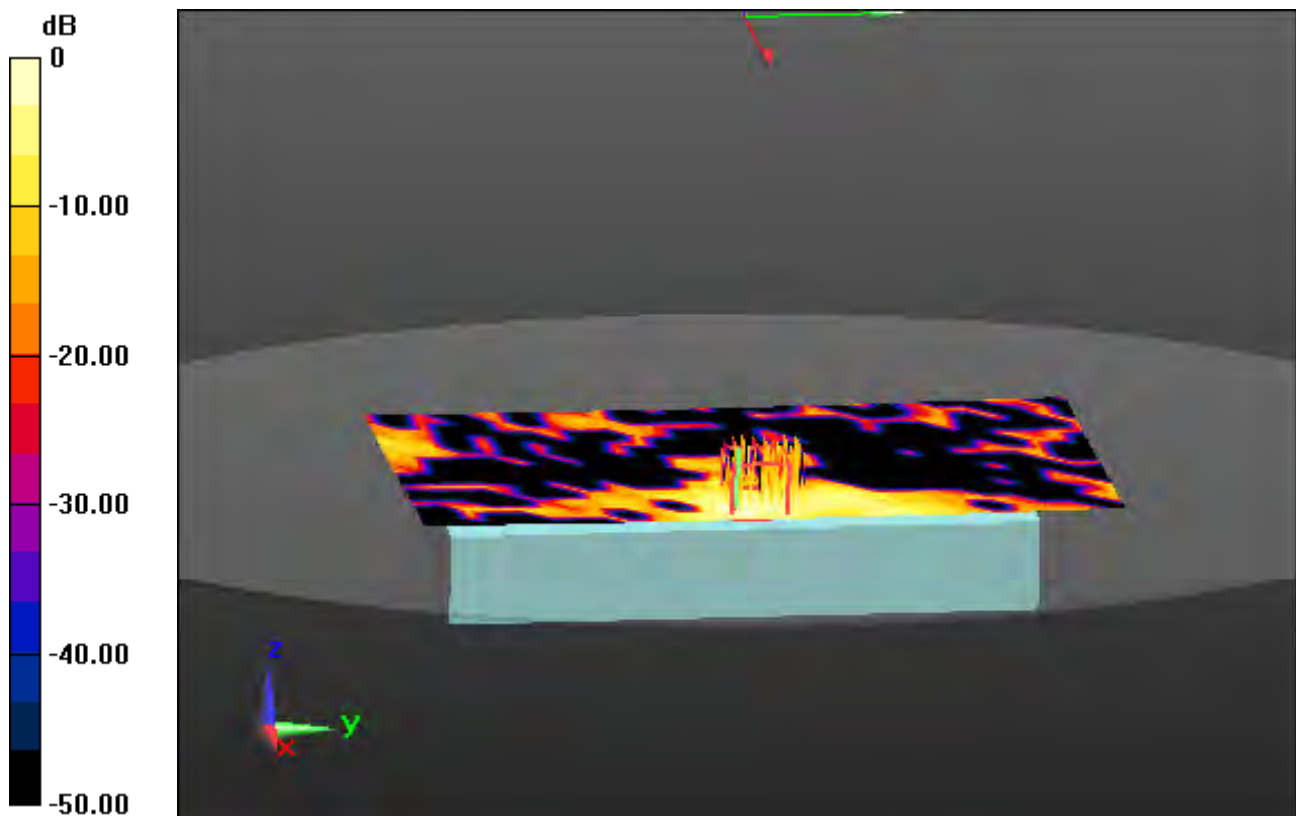
Area Scan (15x28x1): Measurement grid: dx=10mm, dy=10mm

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

Power Drift = -0.08 dB

Peak SAR (extrapolated) = 0.0490 W/kg

SAR(1 g) = 0.011 W/kg; SAR(10 g) = 0.00425 W/kg



0 dB = 0.0324 W/kg

DT&C Co., Ltd.

DUT: PM451; Type: PDA

Communication System: UID 0, W-LAN_5300 (0); Frequency: 5260 MHz; Duty Cycle: 1:1

Medium parameters used: $f = 5260$ MHz; $\sigma = 4.837$ S/m; $\epsilon_r = 35.718$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

DASY5 Configuration:

Probe: EX3DV4 - SN3933; ConvF(5.1, 5.1, 5.1); Calibrated: 9/27/2019 Electronics: DAE3 Sn520

Sensor-Surface: 1.4mm (Mechanical Surface Detection)

Phantom: ELI v5.0_2017_03_08; Type: QDIVA001BB; Serial: 1223

Measurement SW: DASY52, Version 52.10 (3); SEMCAD X Version 14.6.13 (7474)

Test Date: 2020-06-02; Ambient Temp: 21.3; Tissue Temp: 21.5

1 cm space from Body, Front, WLAN(802.11a) Ch. 52, Ant Internal, MIMO

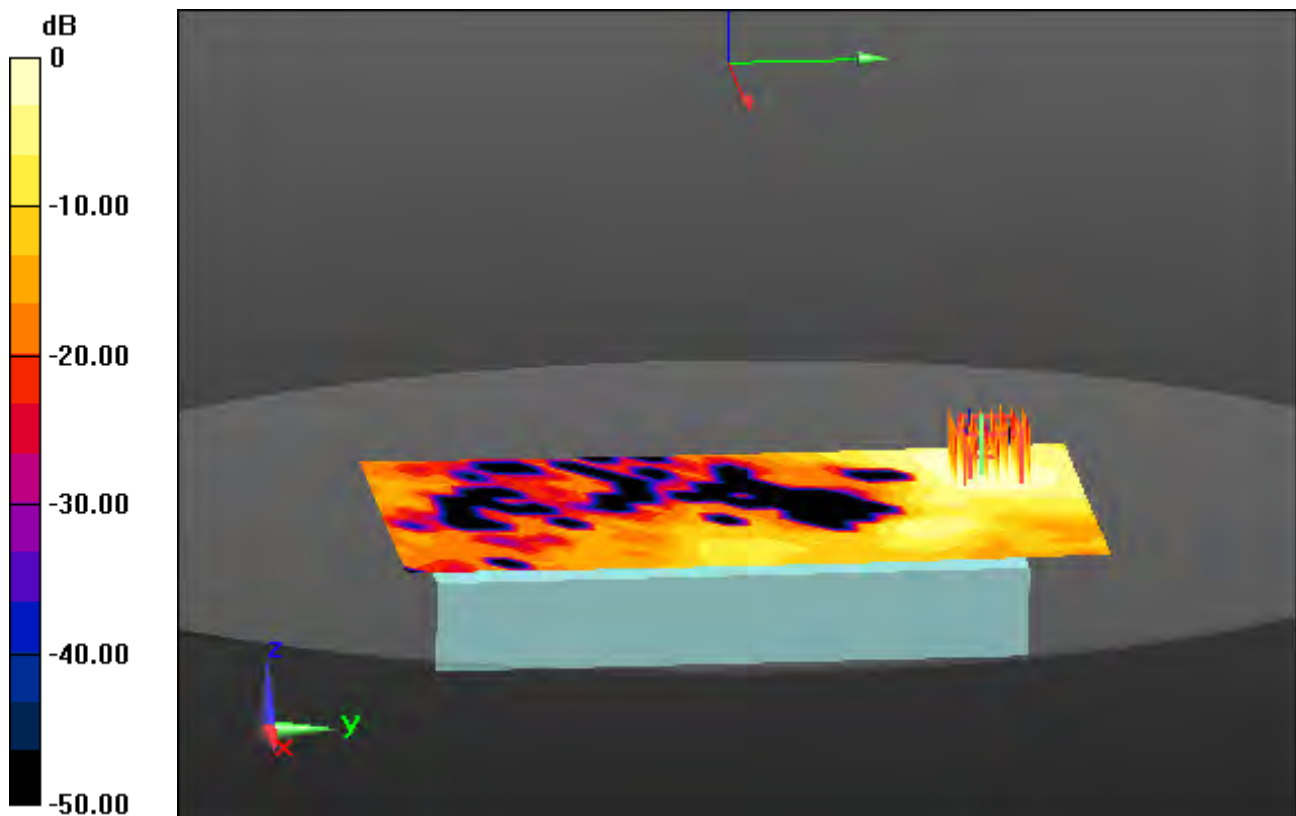
Area Scan (15x28x1): Measurement grid: dx=10mm, dy=10mm

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

Power Drift = 0.14 dB

Peak SAR (extrapolated) = 0.207 W/kg

SAR(1 g) = 0.059 W/kg; SAR(10 g) = 0.026 W/kg



0 dB = 0.125 W/kg

DT&C Co., Ltd.

DUT: PM451; Type: PDA

Communication System: UID 0, W-LAN_5600 (0); Frequency: 5500 MHz; Duty Cycle: 1:1

Medium parameters used: $f = 5500$ MHz; $\sigma = 4.922$ S/m; $\epsilon_r = 36.036$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

DASY5 Configuration:

Probe: EX3DV4 - SN3933; ConvF(4.95, 4.95, 4.95); Calibrated: 9/27/2019 Electronics: DAE3 Sn520

Sensor-Surface: 1.4mm (Mechanical Surface Detection)

Phantom: ELI v5.0_2017_03_08; Type: QDIVA001BB; Serial: 1223

Measurement SW: DASY52, Version 52.10 (3); SEMCAD X Version 14.6.13 (7474)

Test Date: 2020-06-03; Ambient Temp: 21.4; Tissue Temp: 21.7

1 cm space from Body, Front, WLAN(802.11a) Ch. 100, Ant Internal, Ant.1

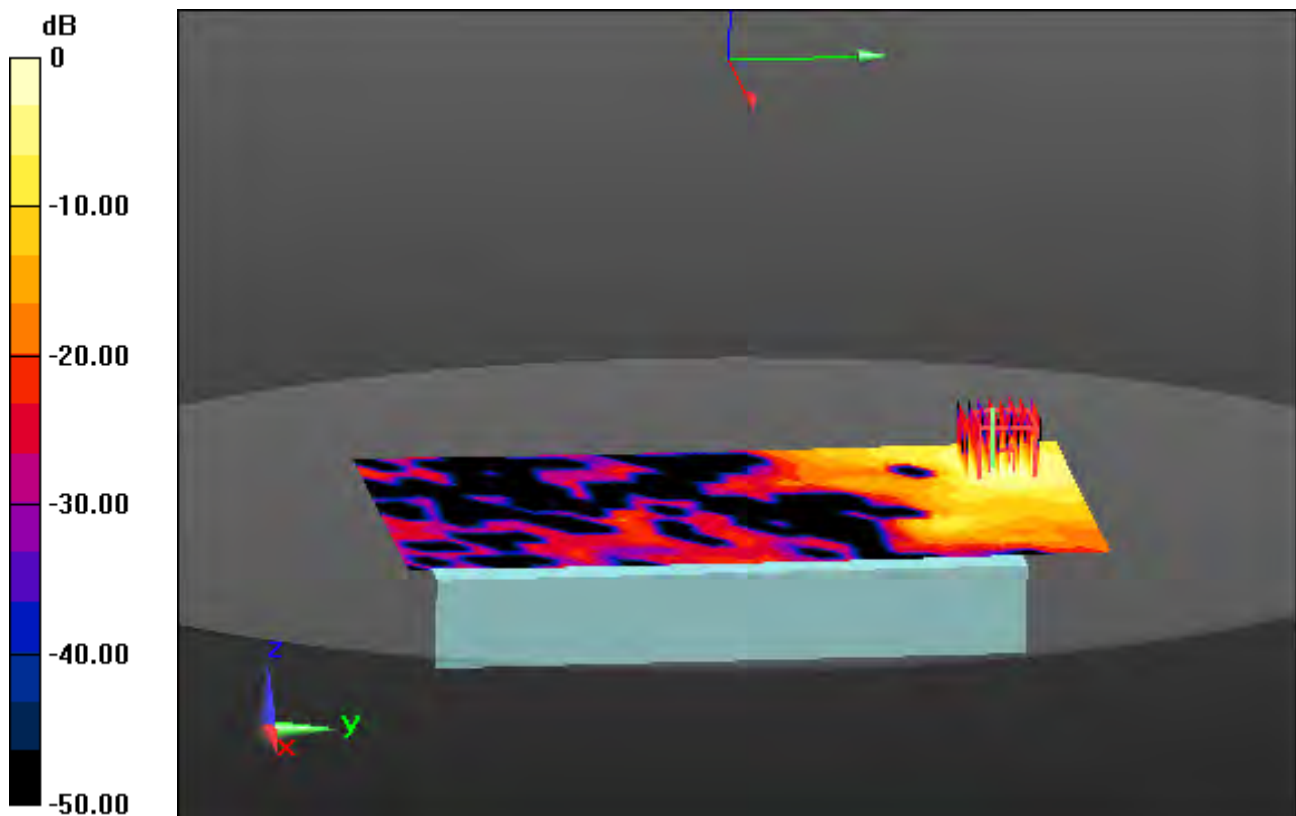
Area Scan (15x28x1): Measurement grid: dx=10mm, dy=10mm

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

Power Drift = 0.01 dB

Peak SAR (extrapolated) = 0.387 W/kg

SAR(1 g) = 0.104 W/kg; SAR(10 g) = 0.043 W/kg



0 dB = 0.390 W/kg

DT&C Co., Ltd.

DUT: PM451; Type: PDA

Communication System: UID 0, W-LAN_5600 (0); Frequency: 5660 MHz; Duty Cycle: 1:1

Medium parameters used: $f = 5660$ MHz; $\sigma = 5.094$ S/m; $\epsilon_r = 35.807$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

DASY5 Configuration:

Probe: EX3DV4 - SN3933; ConvF(4.8, 4.8, 4.8); Calibrated: 9/27/2019 Electronics: DAE3 Sn520

Sensor-Surface: 1.4mm (Mechanical Surface Detection)

Phantom: ELI v5.0_2017_03_08; Type: QDIVA001BB; Serial: 1223

Measurement SW: DASY52, Version 52.10 (3); SEMCAD X Version 14.6.13 (7474)

Test Date: 2020-06-03; Ambient Temp: 21.4; Tissue Temp: 21.7

1 cm space from Body, Front, WLAN(802.11a) Ch. 132, Ant Internal, Ant.2

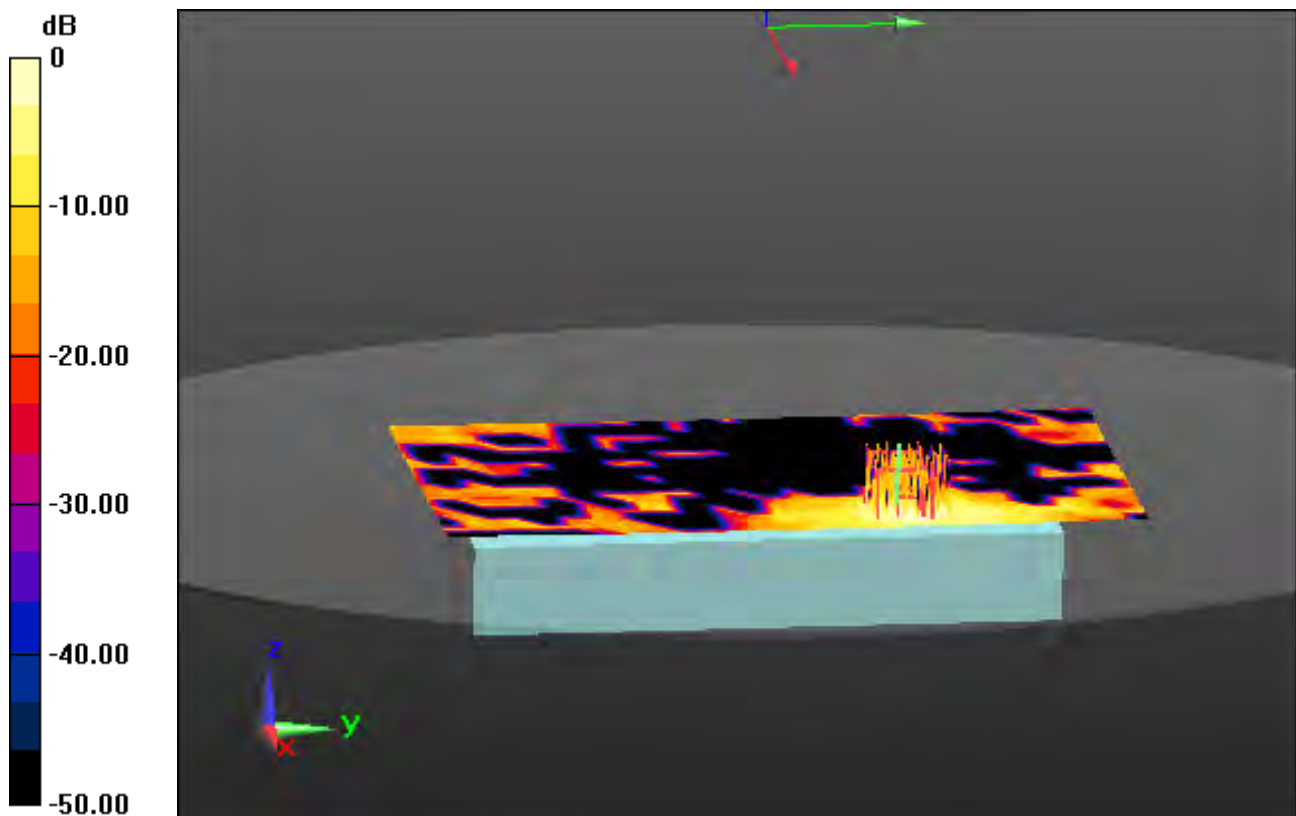
Area Scan (15x28x1): Measurement grid: dx=10mm, dy=10mm

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

Power Drift = -0.11 dB

Peak SAR (extrapolated) = 0.0740 W/kg

SAR(1 g) = 0.013 W/kg; SAR(10 g) = 0.00549 W/kg



0 dB = 0.0385 W/kg

DT&C Co., Ltd.

DUT: PM451; Type: PDA

Communication System: UID 0, W-LAN_5600 (0); Frequency: 5500 MHz; Duty Cycle: 1:1

Medium parameters used: $f = 5500$ MHz; $\sigma = 4.922$ S/m; $\epsilon_r = 36.036$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

DASY5 Configuration:

Probe: EX3DV4 - SN3933; ConvF(4.95, 4.95, 4.95); Calibrated: 9/27/2019 Electronics: DAE3 Sn520

Sensor-Surface: 1.4mm (Mechanical Surface Detection)

Phantom: ELI v5.0_2017_03_08; Type: QDIVA001BB; Serial: 1223

Measurement SW: DASY52, Version 52.10 (3); SEMCAD X Version 14.6.13 (7474)

Test Date: 2020-06-03; Ambient Temp: 21.4; Tissue Temp: 21.7

1 cm space from Body, Front, WLAN(802.11a) Ch. 100, Ant Internal, MIMO

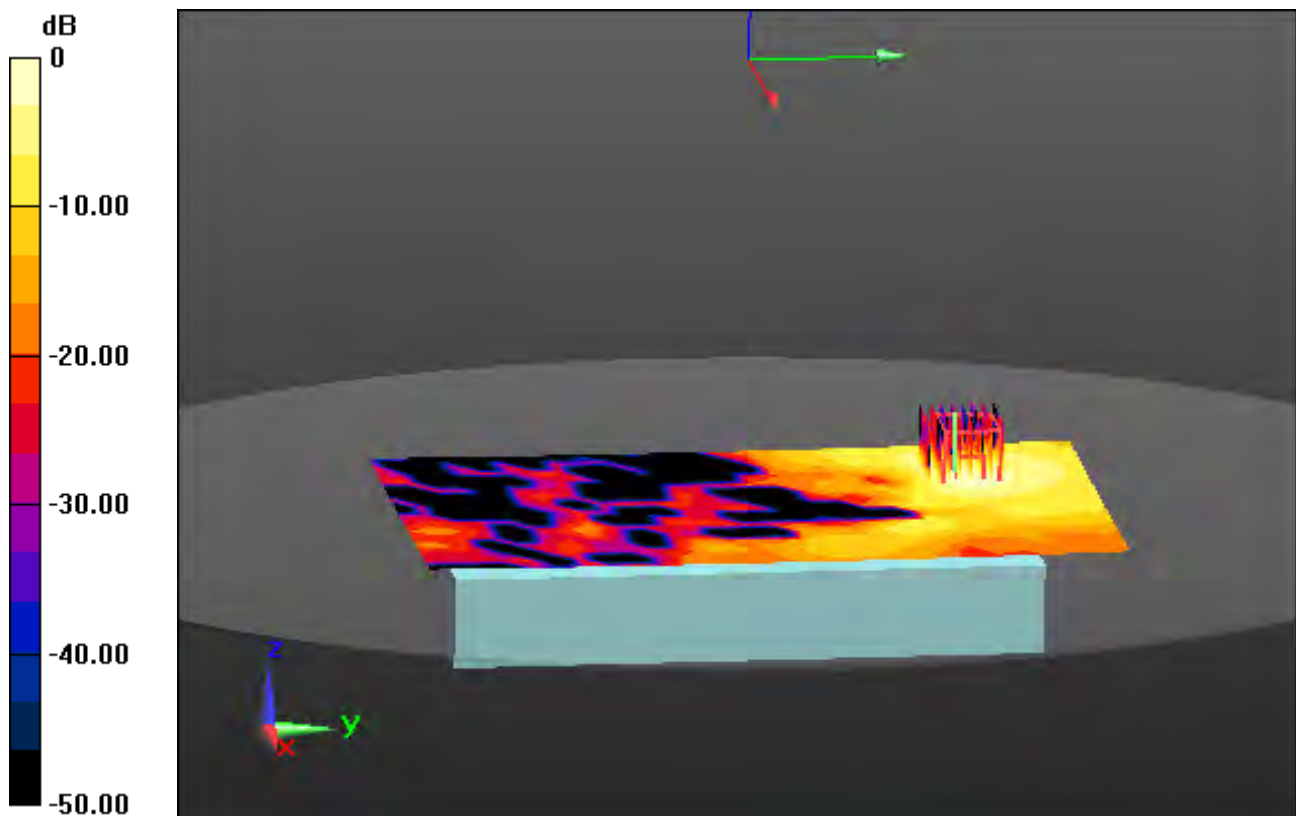
Area Scan (15x28x1): Measurement grid: dx=10mm, dy=10mm

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

Power Drift = -0.07 dB

Peak SAR (extrapolated) = 0.390 W/kg

SAR(1 g) = 0.103 W/kg; SAR(10 g) = 0.044 W/kg



0 dB = 0.319 W/kg

DT&C Co., Ltd.

DUT: PM451; Type: PDA

Communication System: UID 0, W-LAN_5800 (0); Frequency: 5825 MHz; Duty Cycle: 1:1

Medium parameters used: $f = 5825 \text{ MHz}$; $\sigma = 5.415 \text{ S/m}$; $\epsilon_r = 34.782$; $\rho = 1000 \text{ kg/m}^3$

Phantom section: Flat Section

DASY5 Configuration:

Probe: EX3DV4 - SN3933; ConvF(4.75, 4.75, 4.75; Calibrated: 9/27/2019 Electronics: DAE3 Sn520

Sensor-Surface: 1.4mm (Mechanical Surface Detection)

Phantom: ELI v5.0_2017_03_08; Type: QDIVA001BB; Serial: 1223

Measurement SW: DASY52, Version 52.10 (3); SEMCAD X Version 14.6.13 (7474)

Test Date: 2020-06-04; Ambient Temp: 21.1; Tissue Temp: 21.1

1 cm space from Body, Front, WLAN(802.11a) Ch. 165, Ant Internal, Ant.1

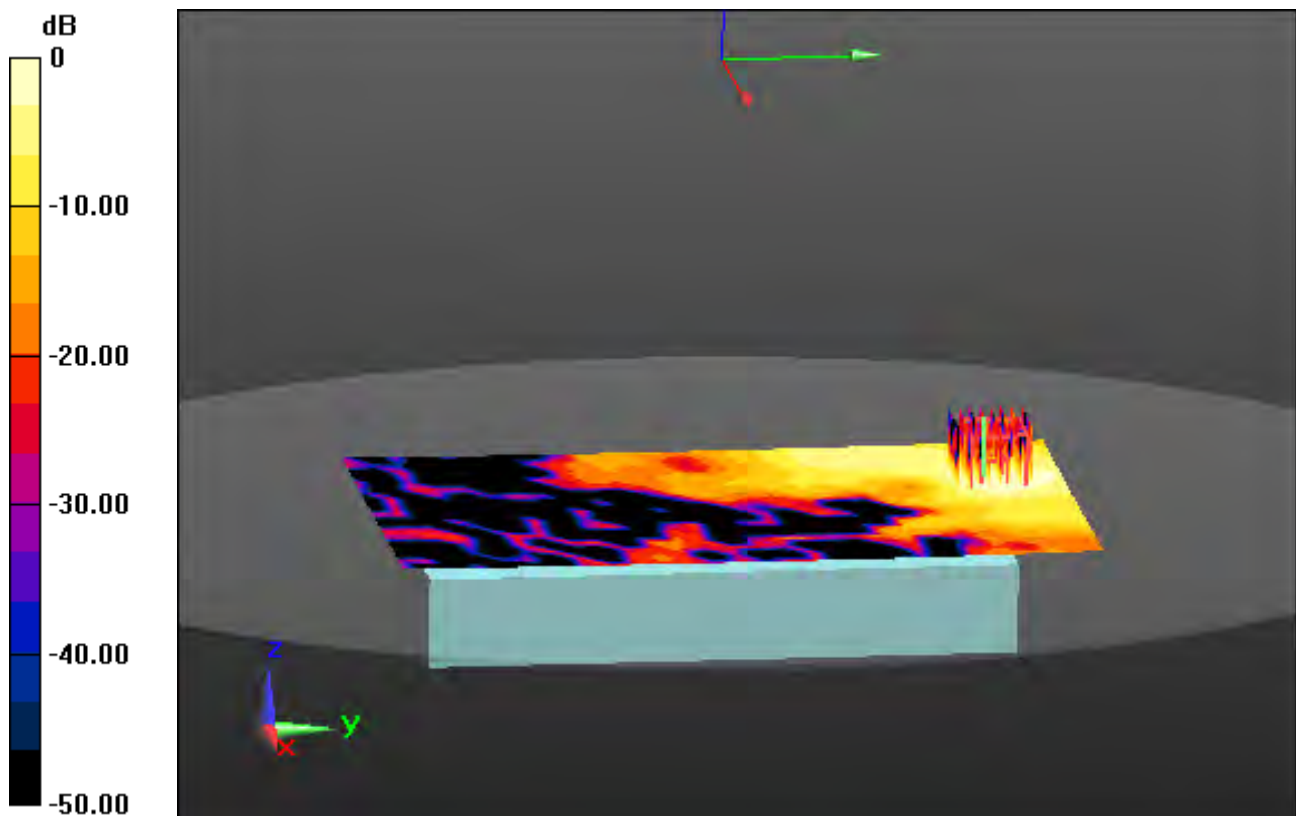
Area Scan (15x28x1): Measurement grid: $dx=10\text{mm}$, $dy=10\text{mm}$

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

Power Drift = -0.06 dB

Peak SAR (extrapolated) = 0.353 W/kg

SAR(1 g) = 0.089 W/kg; SAR(10 g) = 0.038 W/kg



0 dB = 0.254 W/kg

DT&C Co., Ltd.

DUT: PM451; Type: PDA

Communication System: UID 0, W-LAN_5800 (0); Frequency: 5785 MHz; Duty Cycle: 1:1

Medium parameters used: $f = 5785 \text{ MHz}$; $\sigma = 5.361 \text{ S/m}$; $\epsilon_r = 34.851$; $\rho = 1000 \text{ kg/m}^3$

Phantom section: Flat Section

DASY5 Configuration:

Probe: EX3DV4 - SN3933; ConvF(4.75, 4.75, 4.75); Calibrated: 9/27/2019 Electronics: DAE3 Sn520

Sensor-Surface: 1.4mm (Mechanical Surface Detection)

Phantom: ELI v5.0_2017_03_08; Type: QDIVA001BB; Serial: 1223

Measurement SW: DASY52, Version 52.10 (3); SEMCAD X Version 14.6.13 (7474)

Test Date: 2020-06-04; Ambient Temp: 21.1; Tissue Temp: 21.1

1 cm space from Body, Front, WLAN(802.11a) Ch. 157, Ant Internal, Ant.2

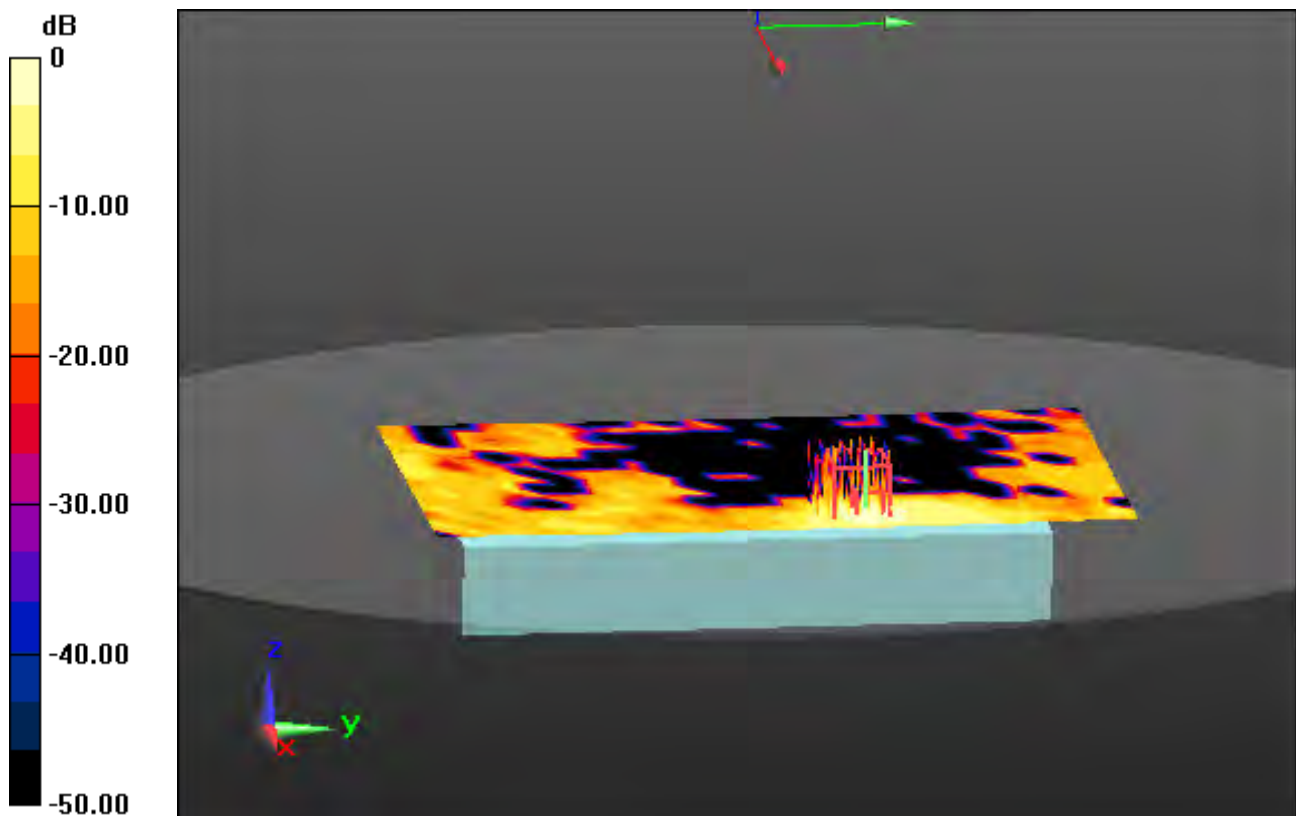
Area Scan (15x28x1): Measurement grid: $dx=10\text{mm}$, $dy=10\text{mm}$

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

Power Drift = 0.13 dB

Peak SAR (extrapolated) = 0.0870 W/kg

SAR(1 g) = 0.017 W/kg; SAR(10 g) = 0.00619 W/kg



0 dB = 0.0635 W/kg

DT&C Co., Ltd.

DUT: PM451; Type: PDA

Communication System: UID 0, W-LAN_5800 (0); Frequency: 5785 MHz; Duty Cycle: 1:1

Medium parameters used: $f = 5785 \text{ MHz}$; $\sigma = 5.361 \text{ S/m}$; $\epsilon_r = 34.851$; $\rho = 1000 \text{ kg/m}^3$

Phantom section: Flat Section

DASY5 Configuration:

Probe: EX3DV4 - SN3933; ConvF(4.75, 4.75, 4.75); Calibrated: 9/27/2019 Electronics: DAE3 Sn520

Sensor-Surface: 1.4mm (Mechanical Surface Detection)

Phantom: ELI v5.0_2017_03_08; Type: QDIVA001BB; Serial: 1223

Measurement SW: DASY52, Version 52.10 (3); SEMCAD X Version 14.6.13 (7474)

Test Date: 2020-06-04; Ambient Temp: 21.1; Tissue Temp: 21.1

1 cm space from Body, Front, WLAN(802.11a) Ch. 157, Ant Internal, MIMO

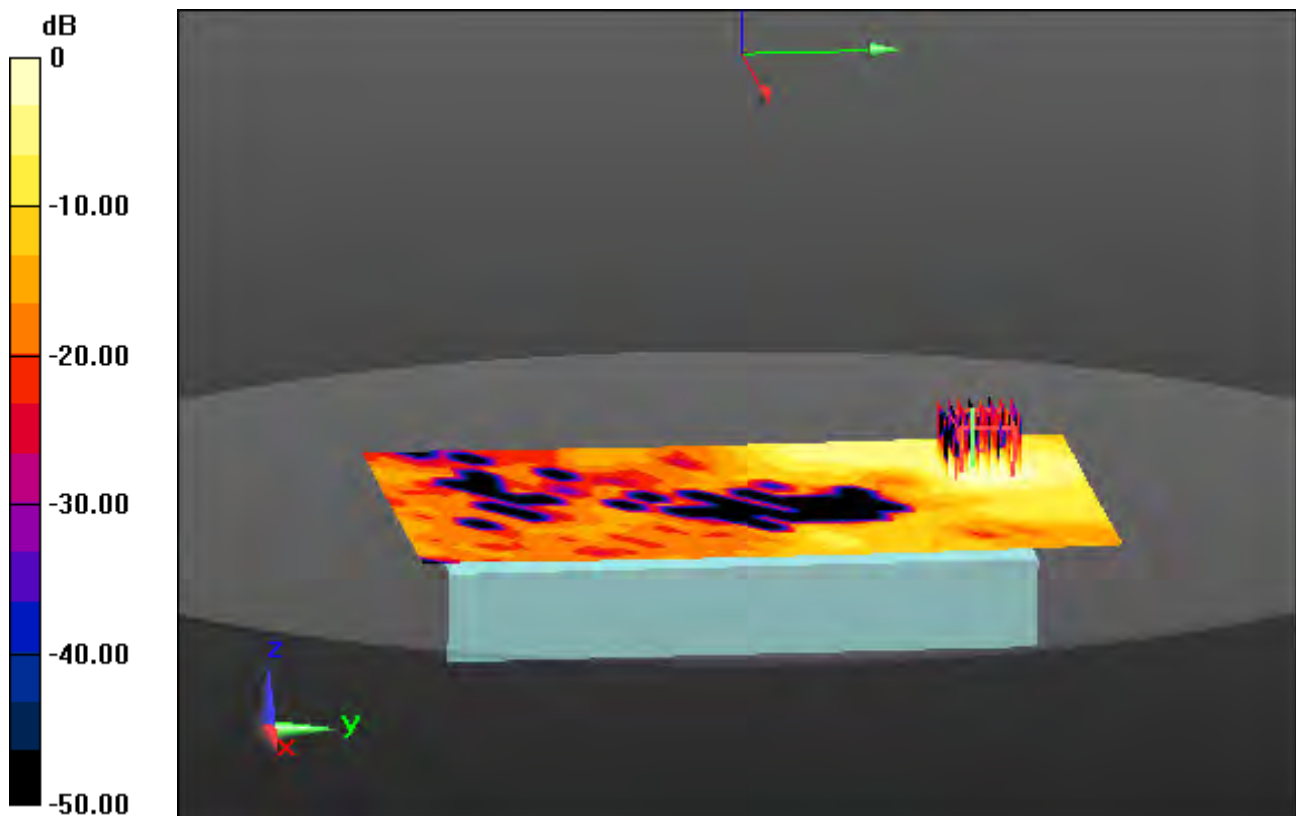
Area Scan (15x28x1): Measurement grid: $dx=10\text{mm}$, $dy=10\text{mm}$

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

Power Drift = -0.10 dB

Peak SAR (extrapolated) = 0.381 W/kg

SAR(1 g) = 0.089 W/kg; SAR(10 g) = 0.037 W/kg



DT&C Co., Ltd.

DUT: PM451; Type: PDA

Communication System: UID 0, Bluetooth (0); Frequency: 2441 MHz; Duty Cycle: 1:1.302

Medium parameters used: $f = 2441$ MHz; $\sigma = 1.786$ S/m; $\epsilon_r = 37.843$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

DASY5 Configuration:

Probe: ES3DV3 - SN3328; ConvF(4.7, 4.7, 4.7) @ 2441 MHz; Calibrated: 3/25/2020 Electronics: DAE4 Sn1335

Sensor-Surface: 3mm (Mechanical Surface Detection)

Phantom: ELI v5.0_2014_02_13; Type: QDOVA002AA; Serial: TP:1237

Measurement SW: DASY52, Version 52.10 (3); SEMCAD X Version 14.6.13 (7474)

Test Date: 2020-06-03; Ambient Temp: 21.4; Tissue Temp: 21.2

1 cm space from Body, Front, Bluetooth 1Mbps Ch. 39, Ant Internal

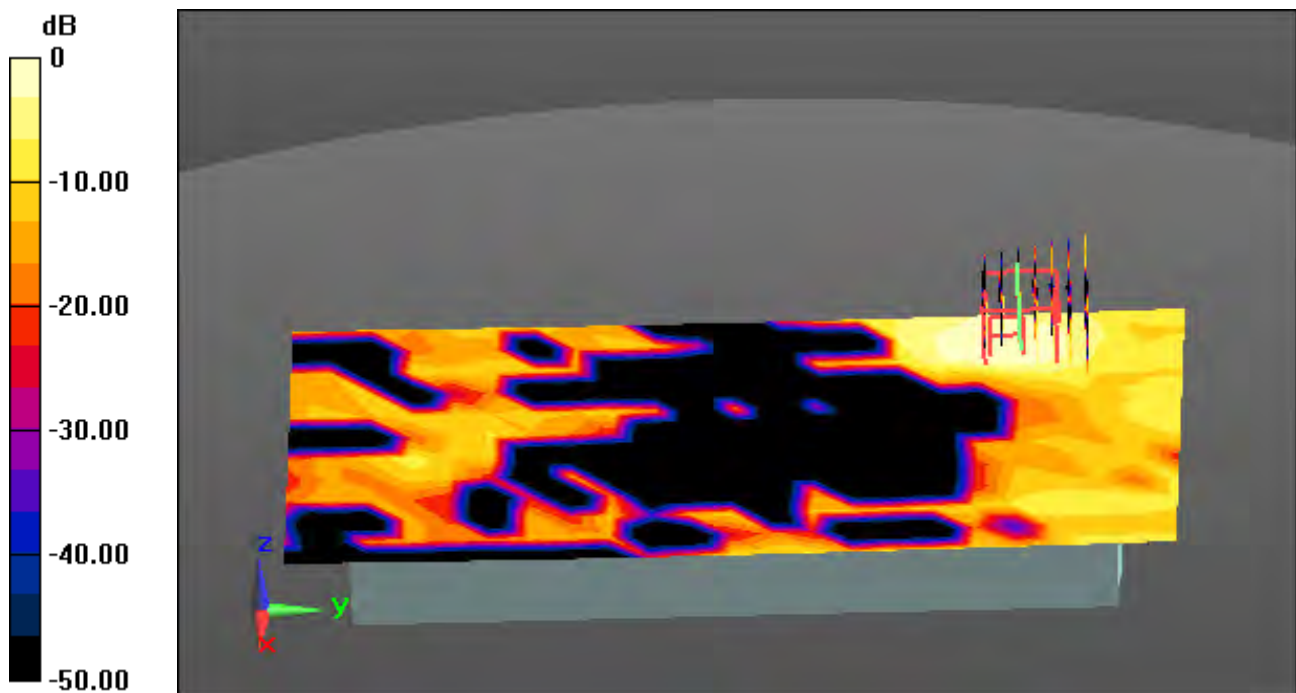
Area Scan (12x23x1): Measurement grid: dx=12mm, dy=12mm

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

Power Drift = 0.06 dB

Peak SAR (extrapolated) = 0.0210 W/kg

SAR(1 g) = 0.0079 W/kg; SAR(10 g) = 0.0031 W/kg



0 dB = 0.0103 W/kg

DT&C Co., Ltd.

DUT: PM451; Type: PDA

Communication System: UID 0, GSM 850_12 (0); Frequency: 836.6 MHz; Duty Cycle: 1:2.075

Medium parameters used: $f = 836.6$ MHz; $\sigma = 0.923$ S/m; $\epsilon_r = 42.898$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

DASY5 Configuration:

Probe: EX3DV4 - SN3933; ConvF(10.32, 10.32, 10.32); Calibrated: 9/27/2019 Electronics: DAE3 Sn520

Sensor-Surface: 2mm (Mechanical Surface Detection)

Phantom: ELI v5.0_2017_03_08; Type: QDIVA001BB; Serial: 1223

Measurement SW: DASY52, Version 52.10 (3); SEMCAD X Version 14.6.13 (7474)

Test Date: 2020-05-29; Ambient Temp: 20.3; Tissue Temp: 20.5

Touch from Body, Rear, GSM850 GPRS 4 Tx Ch. 190, Ant Internal

With Handstrap(15mm Thickness)

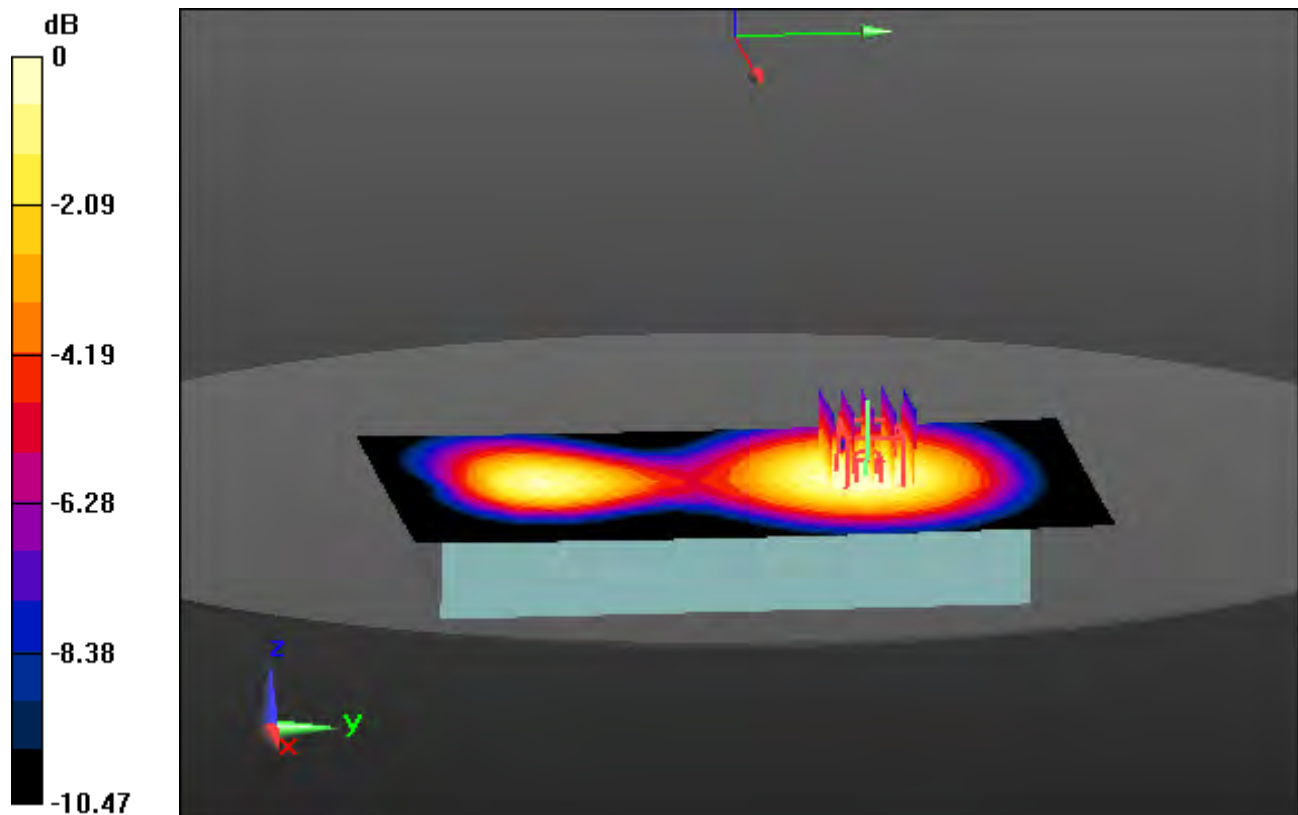
Area Scan (10x19x1): Measurement grid: dx=15mm, dy=15mm

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

Power Drift = 0.05 dB

Peak SAR (extrapolated) = 0.273 W/kg

SAR(1 g) = 0.213 W/kg; SAR(10 g) = 0.154 W/kg



0 dB = 0.248 W/kg

DT&C Co., Ltd.

DUT: PM451; Type: PDA;

Communication System: UID 0, PCS1900_4 Tx (0); Frequency: 1880 MHz; Duty Cycle: 1:2.075

Medium parameters used: $f = 1880$ MHz; $\sigma = 1.398$ S/m; $\epsilon_r = 40.844$; $\rho = 1000$ kg/m³
Phantom section: Flat Section

DASY5 Configuration:

Probe: ES3DV3 - SN3328; ConvF(5.09, 5.09, 5.09) @ 1880 MHz; Calibrated: 3/25/2020 Electronics: DAE4
Sn1335

Sensor-Surface: 3mm (Mechanical Surface Detection)

Phantom: ELI v5.0_2014_02_13; Type: QDOVA002AA; Serial: TP:1237

Measurement SW: DASY52, Version 52.10 (3); SEMCAD X Version 14.6.13 (7474)

Test Date: 2020-05-29; Ambient Temp: 21.7; Tissue Temp: 21.8

Touch from Body, Rear, PCS1900 GPRS 4 Tx Ch. 661, Ant Internal

With Handstrap(15mm Thickness)

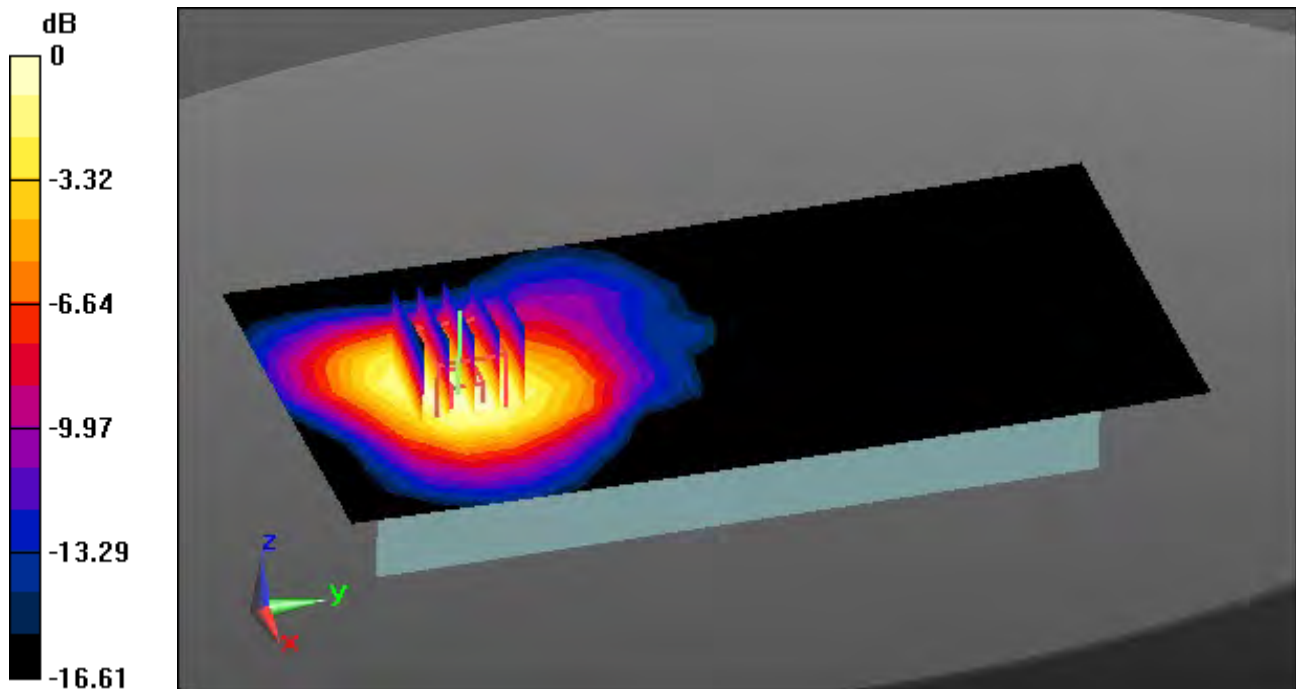
Area Scan (10x19x1): Measurement grid: dx=15mm, dy=15mm

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

Power Drift = -0.16 dB

Peak SAR (extrapolated) = 0.732 W/kg

SAR(1 g) = 0.510 W/kg; SAR(10 g) = 0.338 W/kg



0 dB = 0.582 W/kg

DT&C Co., Ltd.

DUT: PM451; Type: PDA

Communication System: UID 0, WCDMA 850 (0); Frequency: 836.6 MHz; Duty Cycle: 1:1

Medium parameters used: $f = 836.6 \text{ MHz}$; $\sigma = 0.923 \text{ S/m}$; $\epsilon_r = 42.898$; $\rho = 1000 \text{ kg/m}^3$

Phantom section: Flat Section

DASY5 Configuration:

Probe: EX3DV4 - SN3933; ConvF(10.32, 10.32, 10.32); Calibrated: 9/27/2019 Electronics: DAE3 Sn520

Sensor-Surface: 2mm (Mechanical Surface Detection)

Phantom: ELI v5.0_2017_03_08; Type: QDIVA001BB; Serial: 1223

Measurement SW: DASY52, Version 52.10 (3); SEMCAD X Version 14.6.13 (7474)

Test Date: 2020-05-29; Ambient Temp: 20.3; Tissue Temp: 20.5

Touch from Body, Rear, WCDMA Band 5 Ch. 4183, Ant Internal

With Handstrap(15mm Thickness)

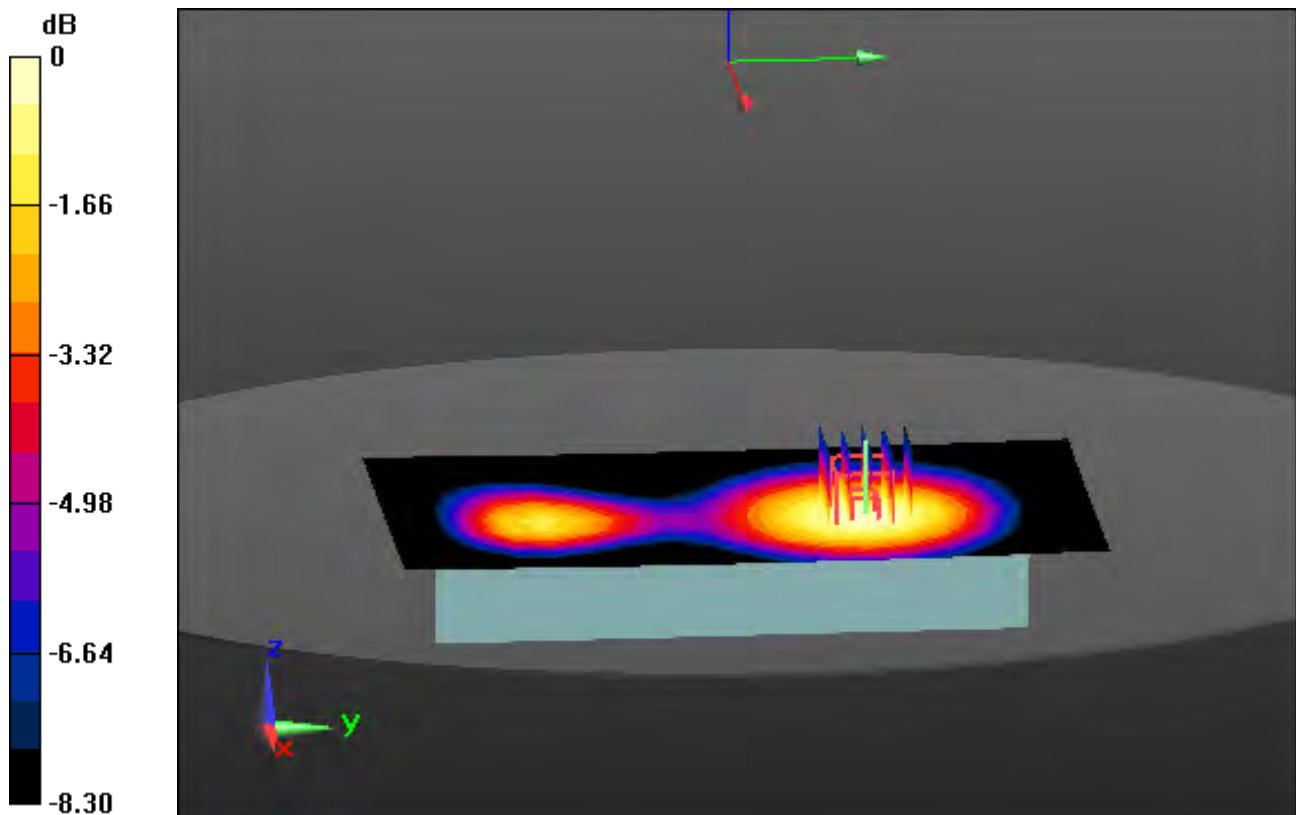
Area Scan (10x19x1): Measurement grid: $dx=15\text{mm}$, $dy=15\text{mm}$

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

Power Drift = 0.04 dB

Peak SAR (extrapolated) = 0.229 W/kg

SAR(1 g) = 0.179 W/kg; SAR(10 g) = 0.133 W/kg



0 dB = 0.209 W/kg

DT&C Co., Ltd.

DUT: PM451; Type: PDA

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

Medium parameters used: $f = 1732.4$ MHz; $\sigma = 1.383$ S/m; $\epsilon_r = 39.227$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

DASY5 Configuration:

Probe: ES3DV3 - SN3328; ConvF(5.34, 5.34, 5.34) @ 1732.4 MHz; Calibrated: 3/25/2020 Electronics: DAE4 Sn1335

Sensor-Surface: 3mm (Mechanical Surface Detection)

Phantom: ELI v5.0_2014_02_13; Type: QDOVA002AA; Serial: TP:1237

Measurement SW: DASY52, Version 52.10 (3); SEMCAD X Version 14.6.13 (7474)

Test Date: 2020-06-01; Ambient Temp: 21.3; Tissue Temp: 21.5

Touch from Body, Rear, WCDMA Band 4 Ch. 1412, Ant Internal

With Handstrap(15mm Thickness)

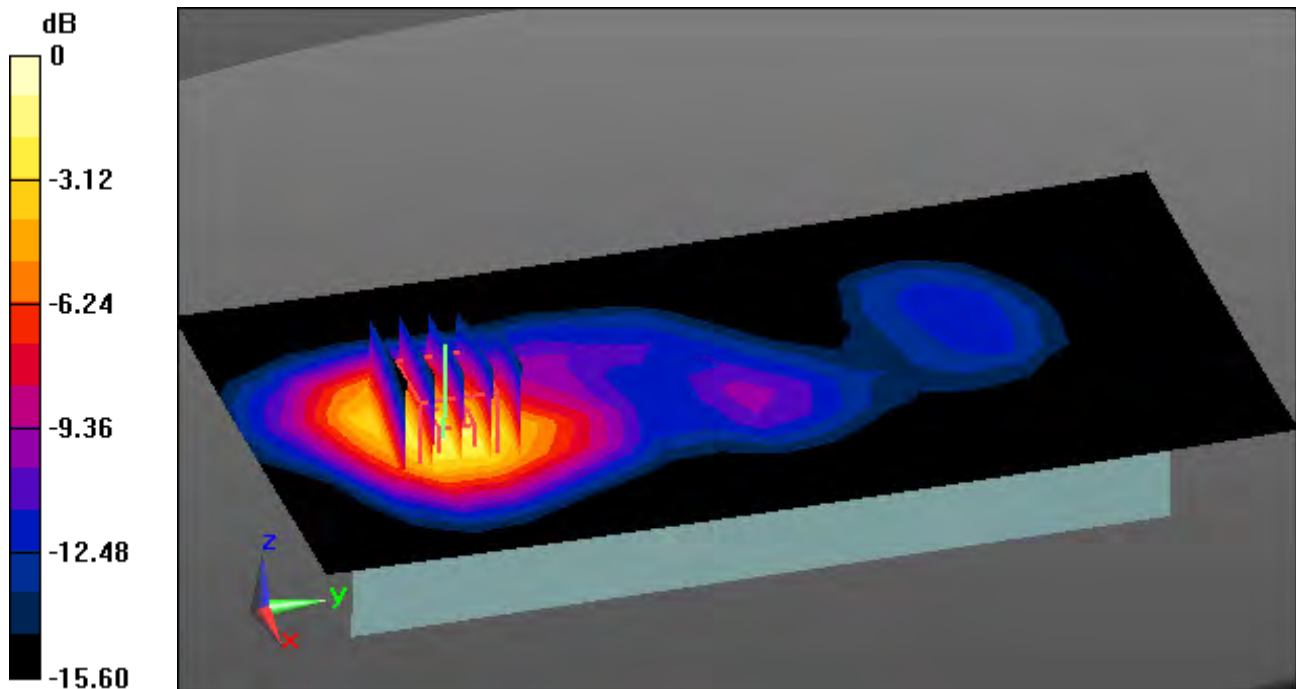
Area Scan (10x19x1): Measurement grid: dx=15mm, dy=15mm

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

Power Drift = -0.05 dB

Peak SAR (extrapolated) = 0.702 W/kg

SAR(1 g) = 0.401 W/kg; SAR(10 g) = 0.278 W/kg



0 dB = 0.676 W/kg

DT&C Co., Ltd.

DUT: PM451; Type: PDA

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

Medium parameters used: $f = 1880$ MHz; $\sigma = 1.398$ S/m; $\epsilon_r = 40.844$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

DASY5 Configuration:

Probe: ES3DV3 - SN3328; ConvF(5.09, 5.09, 5.09) @ 1880 MHz; Calibrated: 3/25/2020 Electronics: DAE4 Sn1335

Sensor-Surface: 3mm (Mechanical Surface Detection)

Phantom: ELI v5.0_2014_02_13; Type: QDOVA002AA; Serial: TP:1237

Measurement SW: DASY52, Version 52.10 (3); SEMCAD X Version 14.6.13 (7474)

Test Date: 2020-05-29; Ambient Temp: 21.7; Tissue Temp: 21.8

Touch from Body, Rear, WCDMA Band 2 Ch. 9400, Ant Internal

With Handstrap(15mm Thickness)

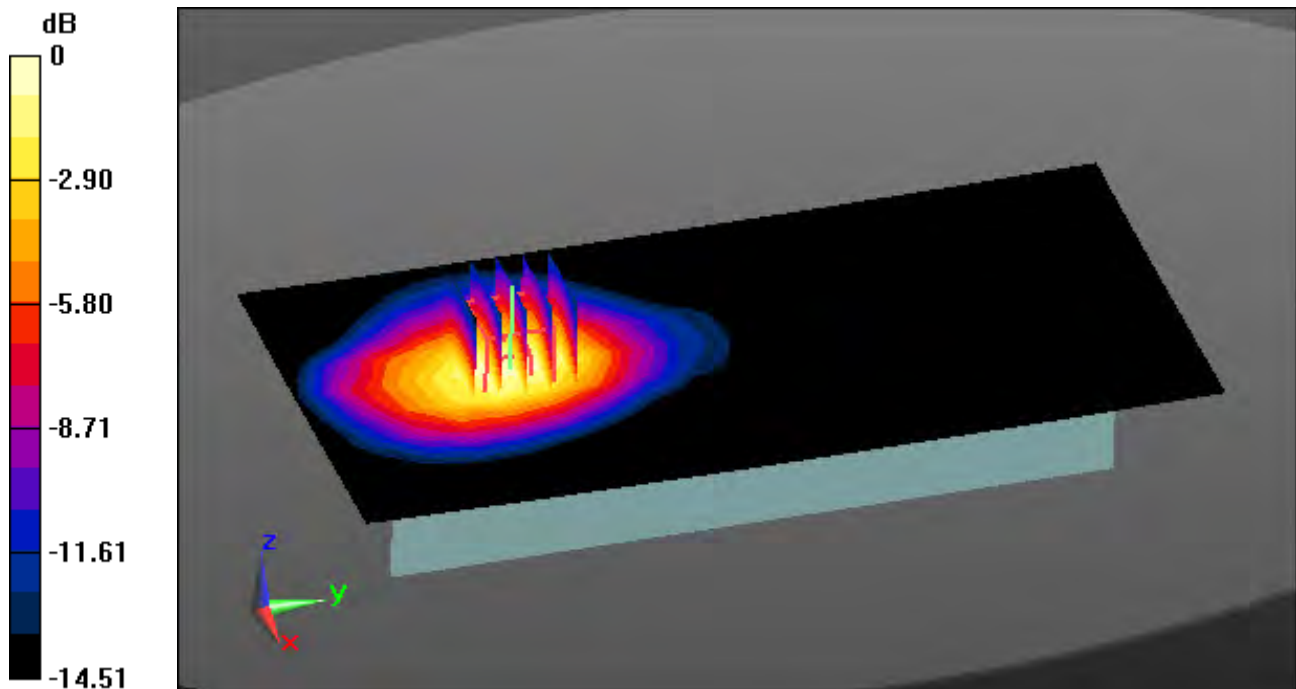
Area Scan (10x19x1): Measurement grid: dx=15mm, dy=15mm

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

Power Drift = 0.07 dB

Peak SAR (extrapolated) = 1.16 W/kg

SAR(1 g) = 0.521 W/kg; SAR(10 g) = 0.310 W/kg



0 dB = 0.779 W/kg

DT&C Co., Ltd.

DUT: PM451; Type: PDA

Communication System: UID 0, LTE Band 12 (0); Frequency: 707.5 MHz; Duty Cycle: 1:1

Medium parameters used: $f = 707.5 \text{ MHz}$; $\sigma = 0.856 \text{ S/m}$; $\epsilon_r = 42.748$; $\rho = 1000 \text{ kg/m}^3$

Phantom section: Flat Section

DASY5 Configuration:

Probe: EX3DV4 - SN3933; ConvF(10.68, 10.68, 10.68); Calibrated: 9/27/2019 Electronics: DAE3 Sn520

Sensor-Surface: 2mm (Mechanical Surface Detection)

Phantom: ELI v5.0_2017_03_08; Type: QDIVA001BB; Serial: 1223

Measurement SW: DASY52, Version 52.10 (3); SEMCAD X Version 14.6.13 (7474)

Test Date: 2020-06-01; Ambient Temp: 21.6; Tissue Temp: 21.8

Touch from Body, Rear, LTE Band 12 Ch. 23095, Ant Internal

Mode : BandWidth 10 MHz, QPSK, RB Size: 1

With Handstrap(15mm Thickness)

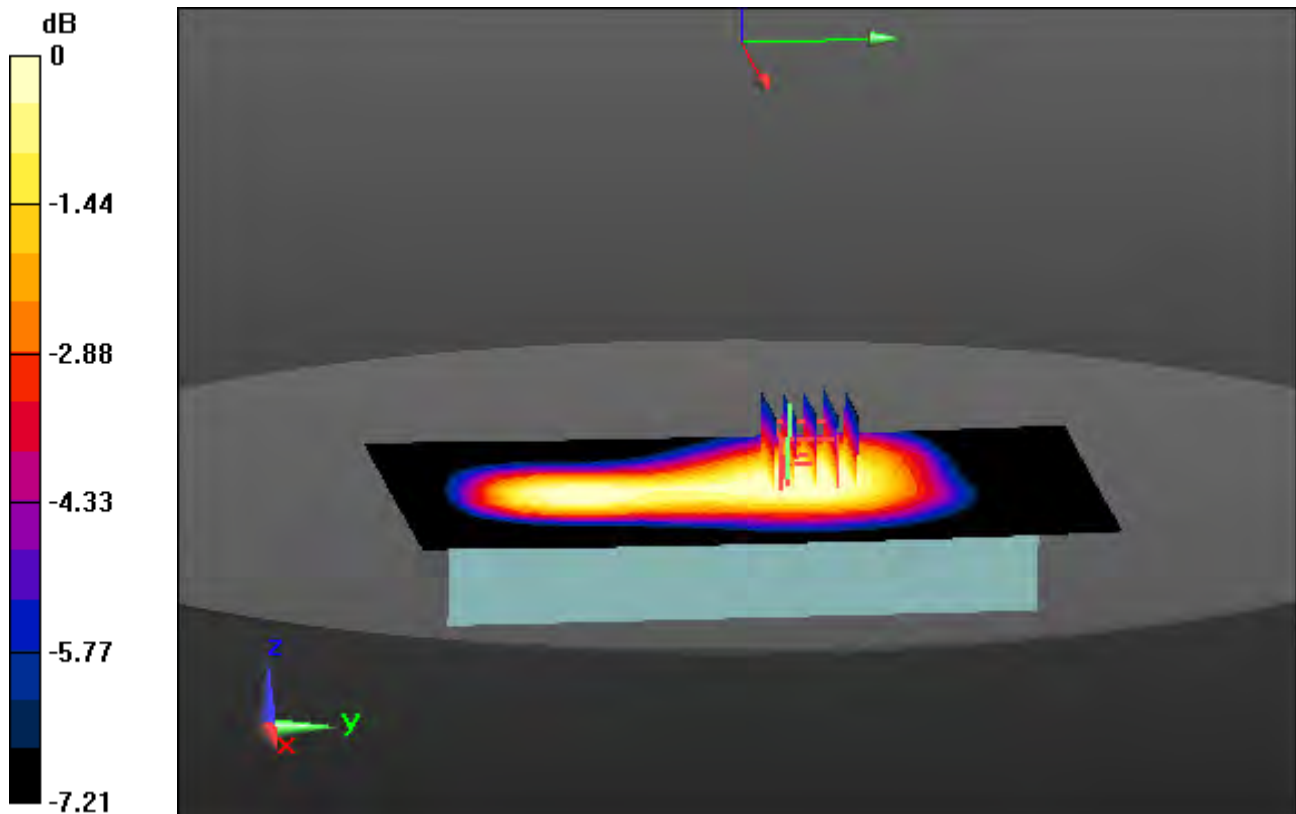
Area Scan (10x19x1): Measurement grid: $dx=15\text{mm}$, $dy=15\text{mm}$

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

Power Drift = 0.04 dB

Peak SAR (extrapolated) = 0.127 W/kg

SAR(1 g) = 0.098 W/kg; SAR(10 g) = 0.076 W/kg



0 dB = 0.114 W/kg

DT&C Co., Ltd.

DUT: PM451; Type: PDA

Communication System: UID 0, LTE Band 13 (0); Frequency: 782 MHz; Duty Cycle: 1:1

Medium parameters used: $f = 782 \text{ MHz}$; $\sigma = 0.923 \text{ S/m}$; $\epsilon_r = 41.713$; $\rho = 1000 \text{ kg/m}^3$

Phantom section: Flat Section

DASY5 Configuration:

Probe: EX3DV4 - SN3933; ConvF(10.68, 10.68, 10.68); Calibrated: 9/27/2019 Electronics: DAE3 Sn520

Sensor-Surface: 2mm (Mechanical Surface Detection)

Phantom: ELI v5.0_2017_03_08; Type: QDIVA001BB; Serial: 1223

Measurement SW: DASY52, Version 52.10 (3); SEMCAD X Version 14.6.13 (7474)

Test Date: 2020-06-01; Ambient Temp: 21.6; Tissue Temp: 21.8

Touch from Body, Rear, LTE Band 13 Ch. 23230, Ant Internal

Mode : BandWidth 10 MHz, QPSK, RB Size: 1

With Handstrap(15mm Thickness)

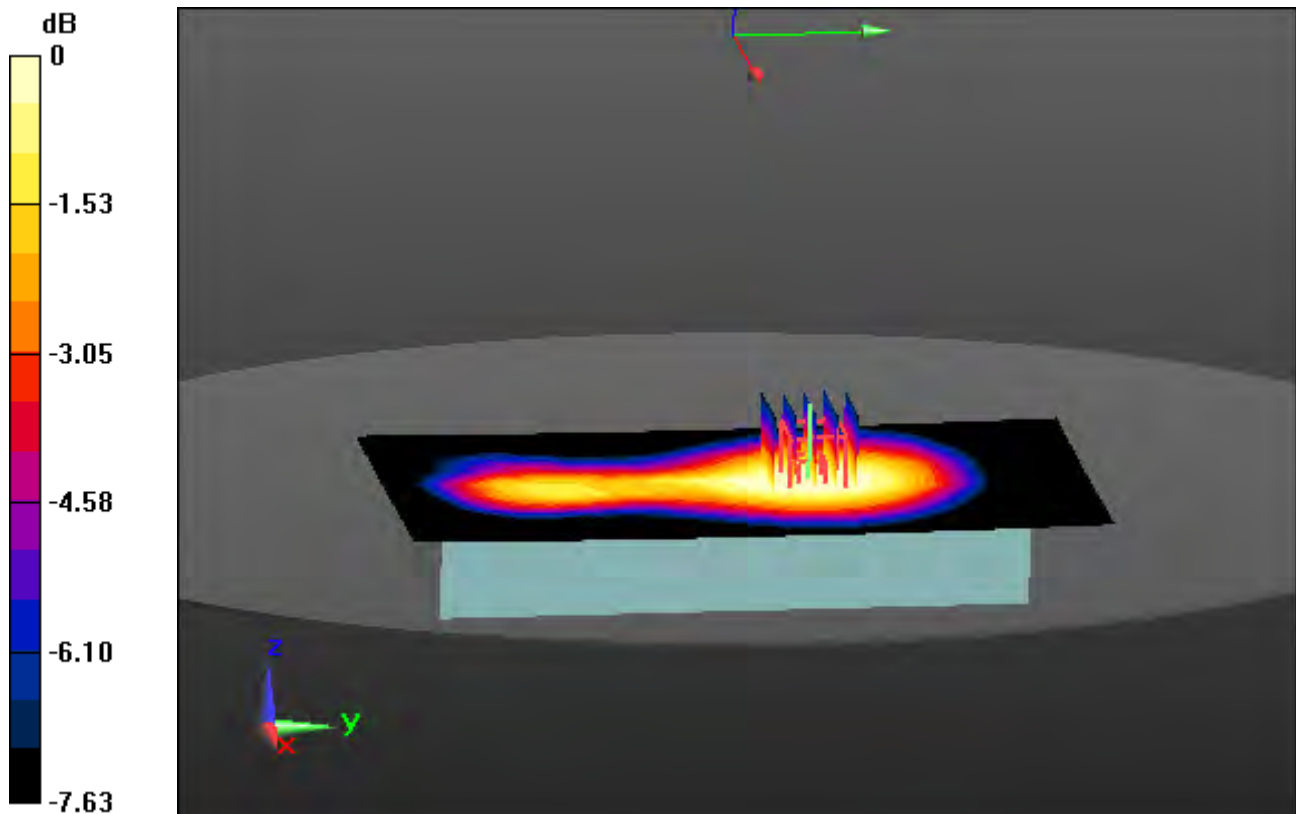
Area Scan (10x19x1): Measurement grid: $dx=15\text{mm}$, $dy=15\text{mm}$

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

Power Drift = -0.08 dB

Peak SAR (extrapolated) = 0.207 W/kg

SAR(1 g) = 0.160 W/kg; SAR(10 g) = 0.120 W/kg



0 dB = 0.186 W/kg

DT&C Co., Ltd.

DUT: PM451; Type: PDA

Communication System: UID 0, LTE Band 26 (0); Frequency: 831.5 MHz; Duty Cycle: 1:1

Medium parameters used: $f = 831.5 \text{ MHz}$; $\sigma = 0.919 \text{ S/m}$; $\epsilon_r = 42.957$; $\rho = 1000 \text{ kg/m}^3$

Phantom section: Flat Section

DASY5 Configuration:

Probe: EX3DV4 - SN3933; ConvF(10.32, 10.32, 10.32); Calibrated: 9/27/2019 Electronics: DAE3 Sn520

Sensor-Surface: 2mm (Mechanical Surface Detection)

Phantom: ELI v5.0_2017_03_08; Type: QDIVA001BB; Serial: 1223

Measurement SW: DASY52, Version 52.10 (3); SEMCAD X Version 14.6.13 (7474)

Test Date: 2020-05-29; Ambient Temp: 20.3; Tissue Temp: 20.5

Touch from Body, Rear, LTE Band 26 Ch. 26865, Ant Internal

Mode : BandWidth 15 MHz, QPSK, RB Size: 1

With Handstrap(15mm Thickness)

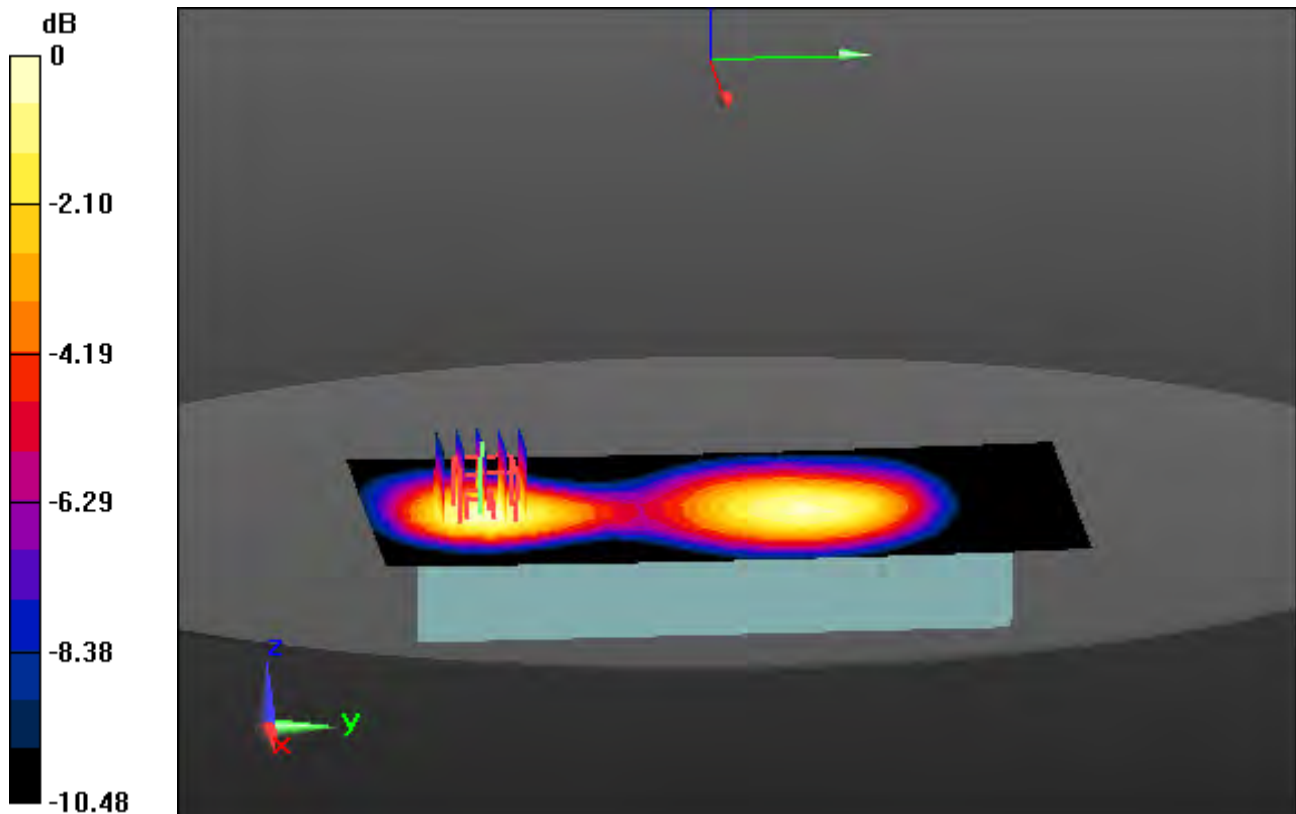
Area Scan (10x19x1): Measurement grid: $dx=15\text{mm}$, $dy=15\text{mm}$

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

Power Drift = 0.19 dB

Peak SAR (extrapolated) = 0.305 W/kg

SAR(1 g) = 0.226 W/kg; SAR(10 g) = 0.160 W/kg



0 dB = 0.271 W/kg

DT&C Co., Ltd.

DUT: PM451; Type: PDA

Communication System: UID 0, LTE Band 4 (0); Frequency: 1732.5 MHz; Duty Cycle: 1:1

Medium parameters used: $f = 1732.5$ MHz; $\sigma = 1.383$ S/m; $\epsilon_r = 39.227$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

DASY5 Configuration:

Probe: ES3DV3 - SN3328; ConvF(5.34, 5.34, 5.34) @ 1732.5 MHz; Calibrated: 3/25/2020 Electronics: DAE4 Sn1335

Sensor-Surface: 3mm (Mechanical Surface Detection)

Phantom: ELI v5.0_2014_02_13; Type: QDOVA002AA; Serial: TP:1237

Measurement SW: DASY52, Version 52.10 (3); SEMCAD X Version 14.6.13 (7474)

Test Date: 2020-06-01; Ambient Temp: 21.3; Tissue Temp: 21.5

Touch From Body, Rear, LTE Band 4 Ch. 20175, Ant Internal

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

With Handstrap(15mm Thickness)

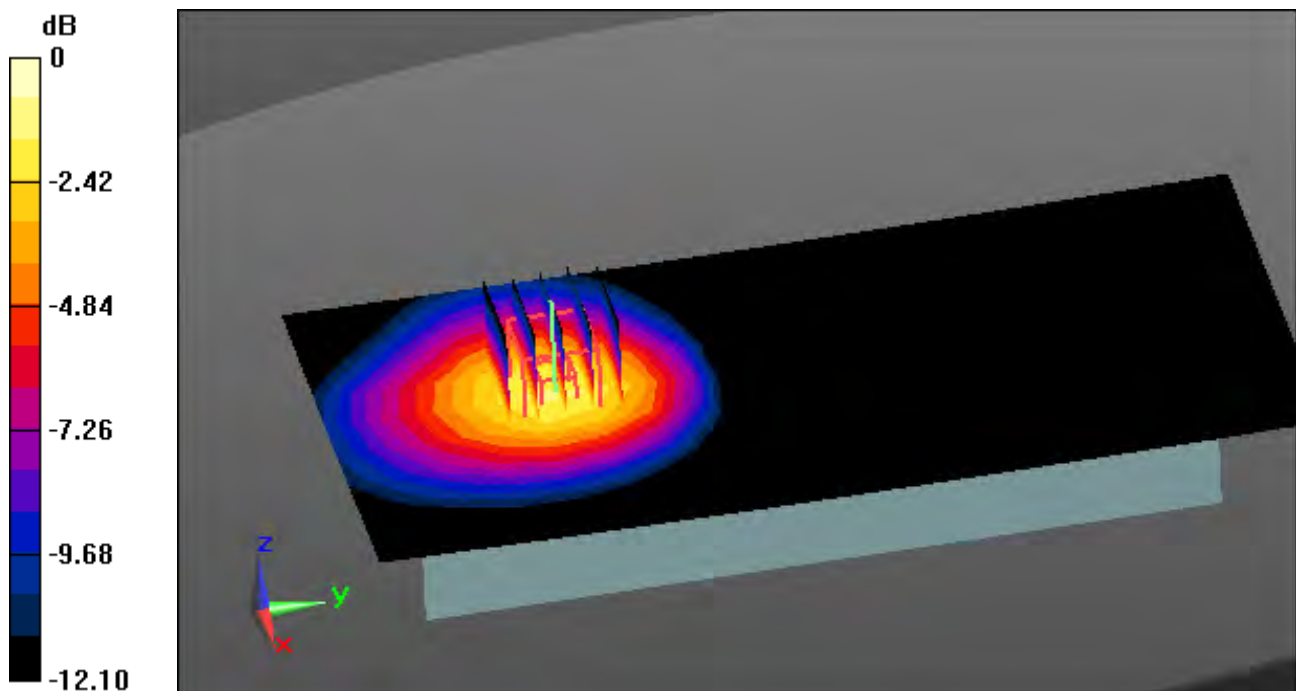
Area Scan (10x19x1): Measurement grid: dx=15mm, dy=15mm

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

Power Drift = 0.11 dB

Peak SAR (extrapolated) = 0.602 W/kg

SAR(1 g) = 0.390 W/kg; SAR(10 g) = 0.270 W/kg



0 dB = 0.469 W/kg

DT&C Co., Ltd.

DUT: PM451; Type: PDA

Communication System: UID 0, LTE Band 25 (0); Frequency: 1882.5 MHz; Duty Cycle: 1:1

Medium parameters used: $f = 1882.5$ MHz; $\sigma = 1.4$ S/m; $\epsilon_r = 40.838$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

DASY5 Configuration:

Probe: ES3DV3 - SN3328; ConvF(5.09, 5.09, 5.09) @ 1882.5 MHz; Calibrated: 3/25/2020 Electronics: DAE4 Sn1335

Sensor-Surface: 3mm (Mechanical Surface Detection)

Phantom: ELI v5.0_2014_02_13; Type: QDOVA002AA; Serial: TP:1237

Measurement SW: DASY52, Version 52.10 (3); SEMCAD X Version 14.6.13 (7474)

Test Date: 2020-05-29; Ambient Temp: 21.7; Tissue Temp: 21.8

Touch from Body, Rear, LTE Band 25 Ch. 26365, Ant Internal

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

With Handstrap(15mm Thickness)

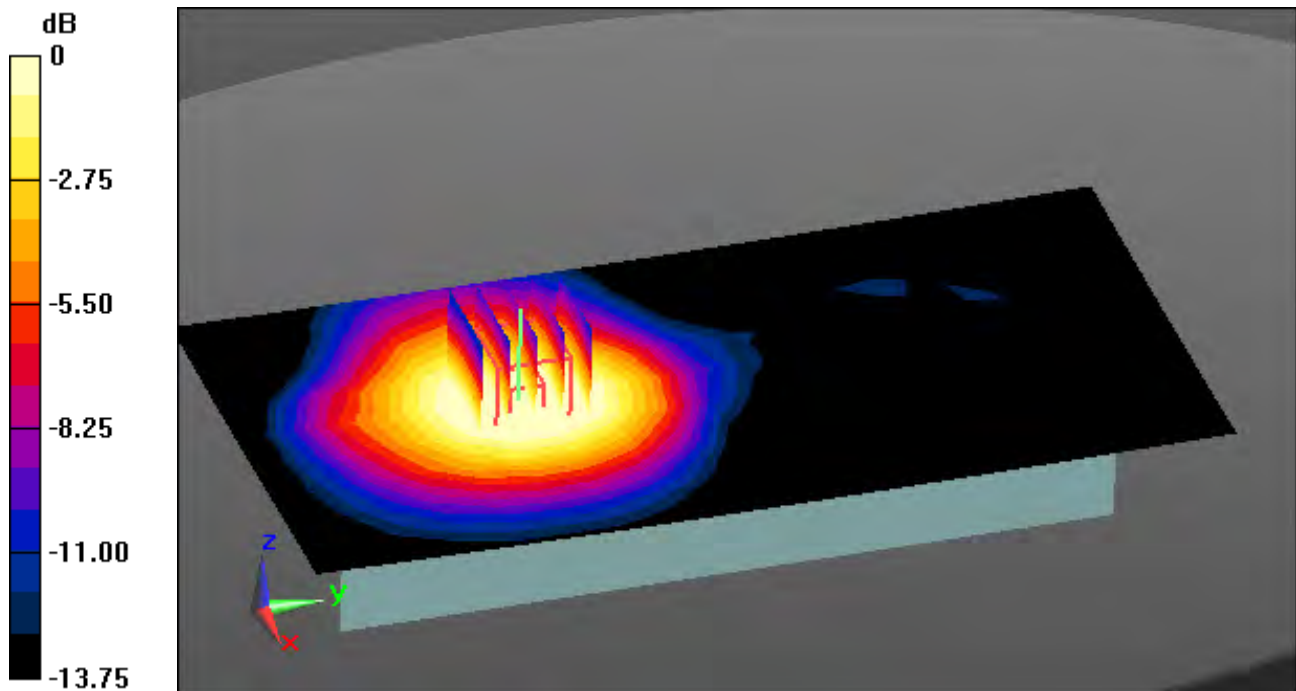
Area Scan (10x19x1): Measurement grid: dx=15mm, dy=15mm

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

Power Drift = -0.05 dB

Peak SAR (extrapolated) = 0.782 W/kg

SAR(1 g) = 0.468 W/kg; SAR(10 g) = 0.313 W/kg



0 dB = 0.311 W/kg

DT&C Co., Ltd.

DUT: PM451; Type: PDA

Communication System: UID 0, LTE Band 7 (FCC) (0); Frequency: 2535 MHz; Duty Cycle: 1:1

Medium parameters used: $f = 2535 \text{ MHz}$; $\sigma = 1.877 \text{ S/m}$; $\epsilon_r = 39.931$; $\rho = 1000 \text{ kg/m}^3$

Phantom section: Flat Section

DASY5 Configuration:

Probe: ES3DV3 - SN3328; ConvF(4.57, 4.57, 4.57) @ 2535 MHz; Calibrated: 3/25/2020 Electronics: DAE4 Sn1335

Sensor-Surface: 3mm (Mechanical Surface Detection)

Phantom: ELI v5.0_2014_02_13; Type: QDOVA002AA; Serial: TP:1237

Measurement SW: DASY52, Version 52.10 (3); SEMCAD X Version 14.6.13 (7474)

Test Date: 2020-06-02; Ambient Temp: 21.7; Tissue Temp: 21.8

Touch From Body, Rear, LTE Band 7 Ch. 20850, Ant Internal

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

With Handstrap(15mm Thickness)

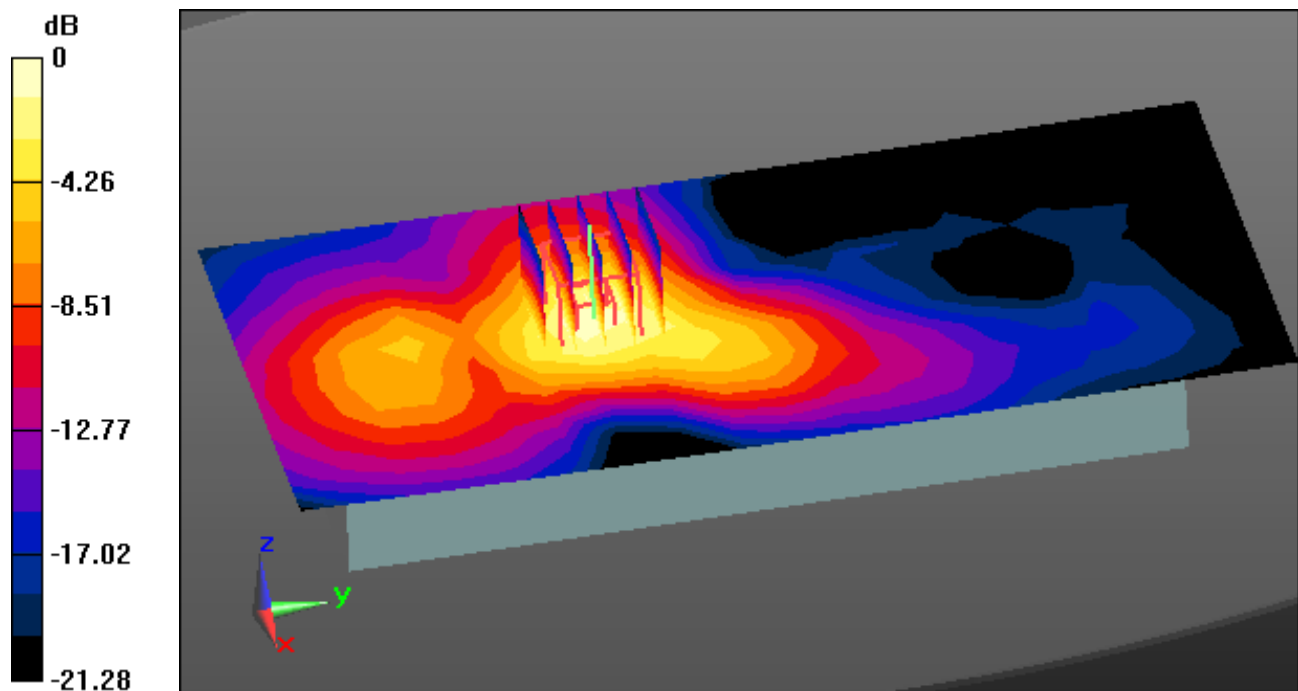
Area Scan (12x23x1): Measurement grid: $dx=12\text{mm}$, $dy=12\text{mm}$

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

Power Drift = -0.10 dB

Peak SAR (extrapolated) = 0.711 W/kg

SAR(1 g) = 0.343 W/kg; SAR(10 g) = 0.192 W/kg



0 dB = 0.446 W/kg

DT&C Co., Ltd.

DUT: PM451; Type: PDA

Communication System: UID 0, LTE Band 41(TDD) (0); Frequency: 2593 MHz; Duty Cycle: 1:1.58

Medium parameters used: $f = 2593 \text{ MHz}$; $\sigma = 1.94 \text{ S/m}$; $\epsilon_r = 39.729$; $\rho = 1000 \text{ kg/m}^3$

Phantom section: Flat Section

DASY5 Configuration:

Probe: ES3DV3 - SN3328; ConvF(4.57, 4.57, 4.57) @ 2593 MHz; Calibrated: 3/25/2020 Electronics: DAE4 Sn1335

Sensor-Surface: 3mm (Mechanical Surface Detection)

Phantom: ELI v5.0_2014_02_13; Type: QDOVA002AA; Serial: TP:1237

Measurement SW: DASY52, Version 52.10 (3); SEMCAD X Version 14.6.13 (7474)

Test Date: 2020-06-02; Ambient Temp: 21.7; Tissue Temp: 21.8

Touch From Body, Rear, LTE Band 41 Ch. 40620, Ant Internal

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

With Handstrap(15mm Thickness)

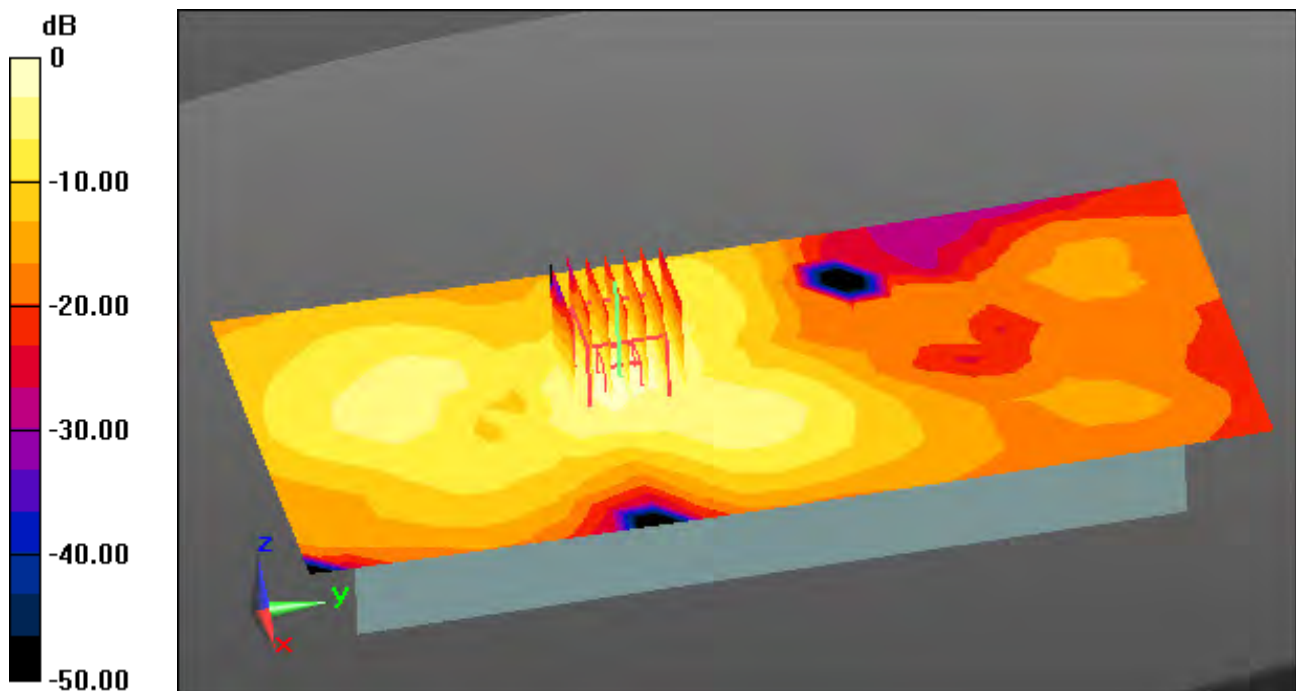
Area Scan (12x23x1): Measurement grid: $dx=12\text{mm}$, $dy=12\text{mm}$

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

Power Drift = 0.10 dB

Peak SAR (extrapolated) = 0.226 W/kg

SAR(1 g) = 0.092 W/kg; SAR(10 g) = 0.049 W/kg



0 dB = 0.129 W/kg

DT&C Co., Ltd.

DUT: PM451; Type: PDA

Communication System: UID 0, 00_2.4 GHz W-LAN (0); Frequency: 2462 MHz; Duty Cycle: 1:1

Medium parameters used: $f = 2462 \text{ MHz}$; $\sigma = 1.81 \text{ S/m}$; $\epsilon_r = 37.786$; $\rho = 1000 \text{ kg/m}^3$

Phantom section: Flat Section

DASY5 Configuration:

Probe: ES3DV3 - SN3328; ConvF(4.7, 4.7, 4.7) @ 2462 MHz; Calibrated: 3/25/2020 Electronics: DAE4 Sn1335

Sensor-Surface: 3mm (Mechanical Surface Detection)

Phantom: ELI v5.0_2014_02_13; Type: QDOVA002AA; Serial: TP:1237

Measurement SW: DASY52, Version 52.10 (3); SEMCAD X Version 14.6.13 (7474)

Test Date: 2020-06-03; Ambient Temp: 21.4; Tissue Temp: 21.2

Touch from Body, Rear, WLAN(802.11b) Ch. 11, Ant Internal, Ant.1

With Handstrap(15mm Thickness)

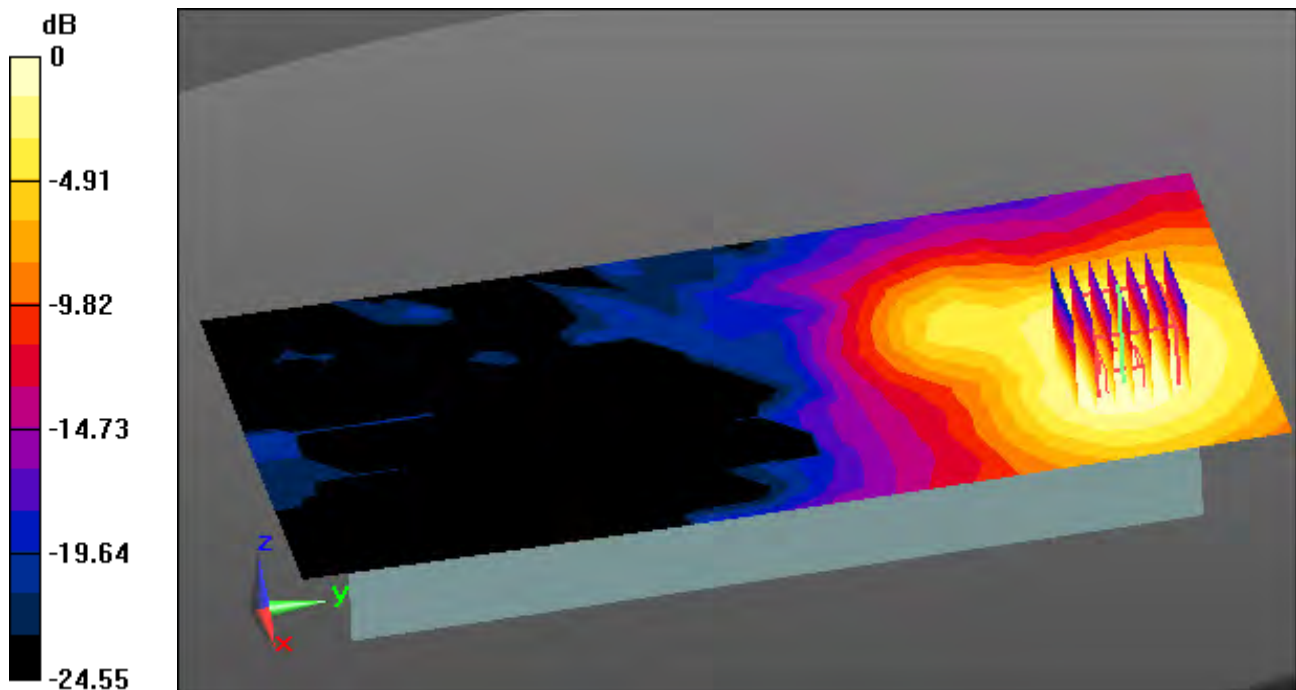
Area Scan (12x23x1): Measurement grid: $dx=12\text{mm}$, $dy=12\text{mm}$

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

Power Drift = 0.06 dB

Peak SAR (extrapolated) = 0.146 W/kg

SAR(1 g) = 0.050 W/kg; SAR(10 g) = 0.022 W/kg



0 dB = 0.080 W/kg

DT&C Co., Ltd.

DUT: PM451; Type: PDA

Communication System: UID 0, 00_2.4 GHz W-LAN (0); Frequency: 2437 MHz; Duty Cycle: 1:1

Medium parameters used: $f = 2437 \text{ MHz}$; $\sigma = 1.782 \text{ S/m}$; $\epsilon_r = 37.857$; $\rho = 1000 \text{ kg/m}^3$

Phantom section: Flat Section

DASY5 Configuration:

Probe: ES3DV3 - SN3328; ConvF(4.7, 4.7, 4.7) @ 2437 MHz; Calibrated: 3/25/2020 Electronics: DAE4 Sn1335

Sensor-Surface: 3mm (Mechanical Surface Detection)

Phantom: ELI v5.0_2014_02_13; Type: QDOVA002AA; Serial: TP:1237

Measurement SW: DASY52, Version 52.10 (3); SEMCAD X Version 14.6.13 (7474)

Test Date: 2020-06-03; Ambient Temp: 21.4; Tissue Temp: 21.2

Touch from Body, Rear, WLAN(802.11b) Ch. 6, Ant Internal, Ant.2

With Handstrap(15mm Thickness)

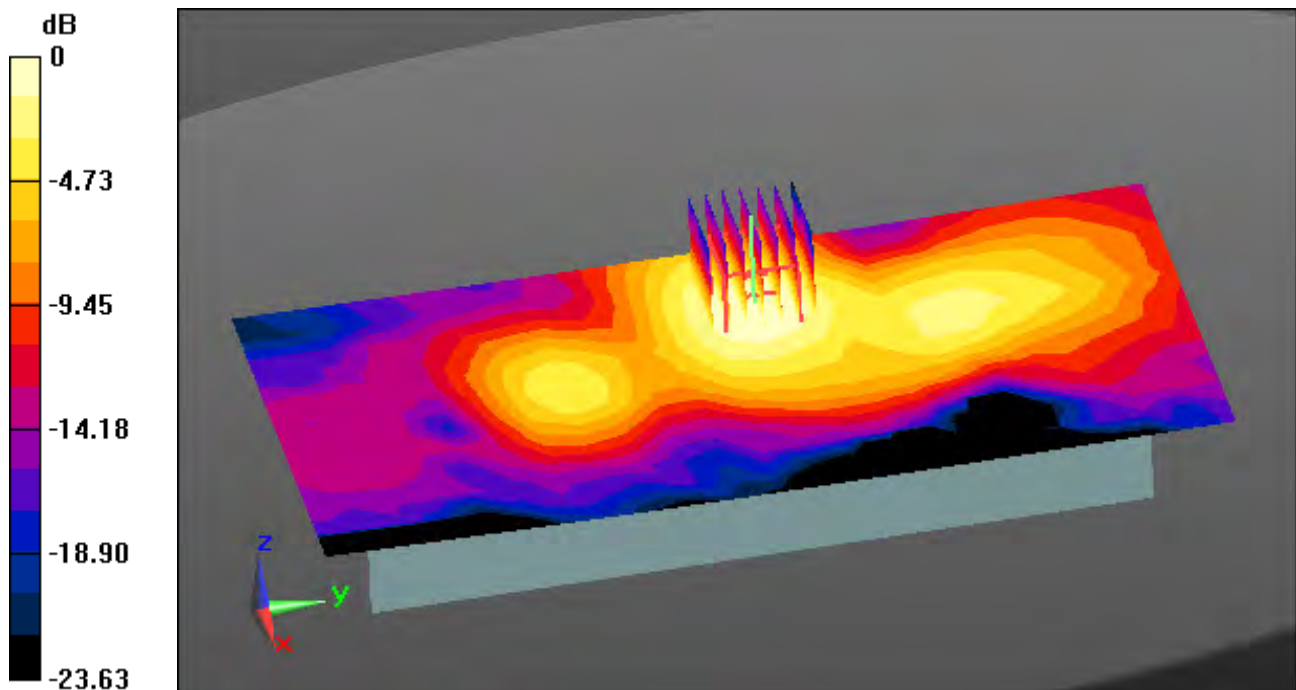
Area Scan (12x23x1): Measurement grid: $dx=12\text{mm}$, $dy=12\text{mm}$

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

Power Drift = 0.00 dB

Peak SAR (extrapolated) = 0.127 W/kg

SAR(1 g) = 0.065 W/kg; SAR(10 g) = 0.037 W/kg



0 dB = 0.0845 W/kg = -10.73 dBW/kg

DT&C Co., Ltd.

DUT: PM451; Type: PDA

Communication System: UID 0, 00_2.4 GHz W-LAN (0); Frequency: 2437 MHz; Duty Cycle: 1:1

Medium parameters used: $f = 2437$ MHz; $\sigma = 1.782$ S/m; $\epsilon_r = 37.857$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

DASY5 Configuration:

Probe: ES3DV3 - SN3328; ConvF(4.7, 4.7, 4.7) @ 2437 MHz; Calibrated: 3/25/2020 Electronics: DAE4 Sn1335

Sensor-Surface: 3mm (Mechanical Surface Detection)

Phantom: ELI v5.0_2014_02_13; Type: QDOVA002AA; Serial: TP:1237

Measurement SW: DASY52, Version 52.10 (3); SEMCAD X Version 14.6.13 (7474)

Test Date: 2020-06-03; Ambient Temp: 21.4; Tissue Temp: 21.2

Touch from Body, Rear, WLAN(802.11b) Ch. 6, Ant Internal,MIMO

With Handstrap(15mm Thickness)

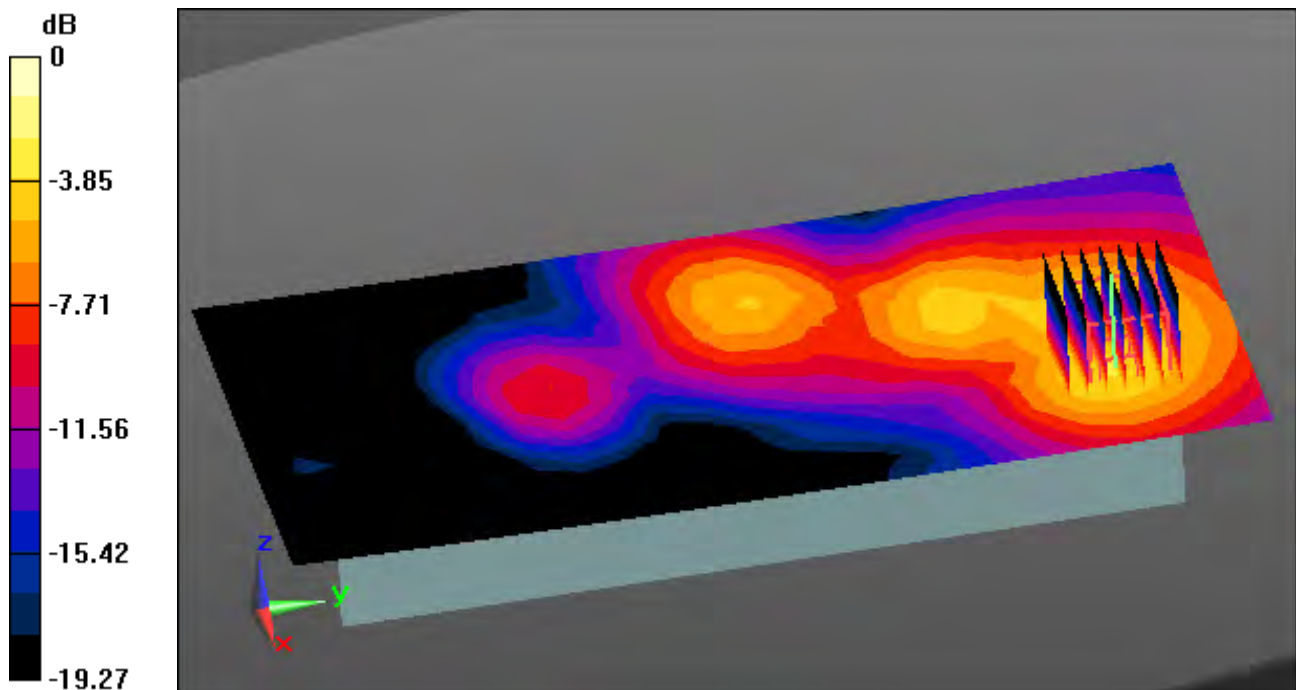
Area Scan (12x23x1): Measurement grid: dx=12mm, dy=12mm

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

Power Drift = -0.03 dB

Peak SAR (extrapolated) = 0.148 W/kg

SAR(1 g) = 0.068 W/kg; SAR(10 g) = 0.037 W/kg



0 dB = 0.240 W/kg

DT&C Co., Ltd.

DUT: PM451; Type: PDA

Communication System: UID 0, W-LAN_5300 (0); Frequency: 5260 MHz; Duty Cycle: 1:1

Medium parameters used: $f = 5260$ MHz; $\sigma = 4.837$ S/m; $\epsilon_r = 35.718$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

DASY5 Configuration:

Probe: EX3DV4 - SN3933; ConvF(5.1, 5.1, 5.1); Calibrated: 9/27/2019 Electronics: DAE3 Sn520

Sensor-Surface: 1.4mm (Mechanical Surface Detection)

Phantom: ELI v5.0_2017_03_08; Type: QDIVA001BB; Serial: 1223

Measurement SW: DASY52, Version 52.10 (3); SEMCAD X Version 14.6.13 (7474)

Test Date: 2020-06-02; Ambient Temp: 21.3; Tissue Temp: 21.5

Touch from Body, Rear, WLAN(802.11a) Ch. 52, Ant Internal, Ant.1

With Handstrap(15mm Thickness)

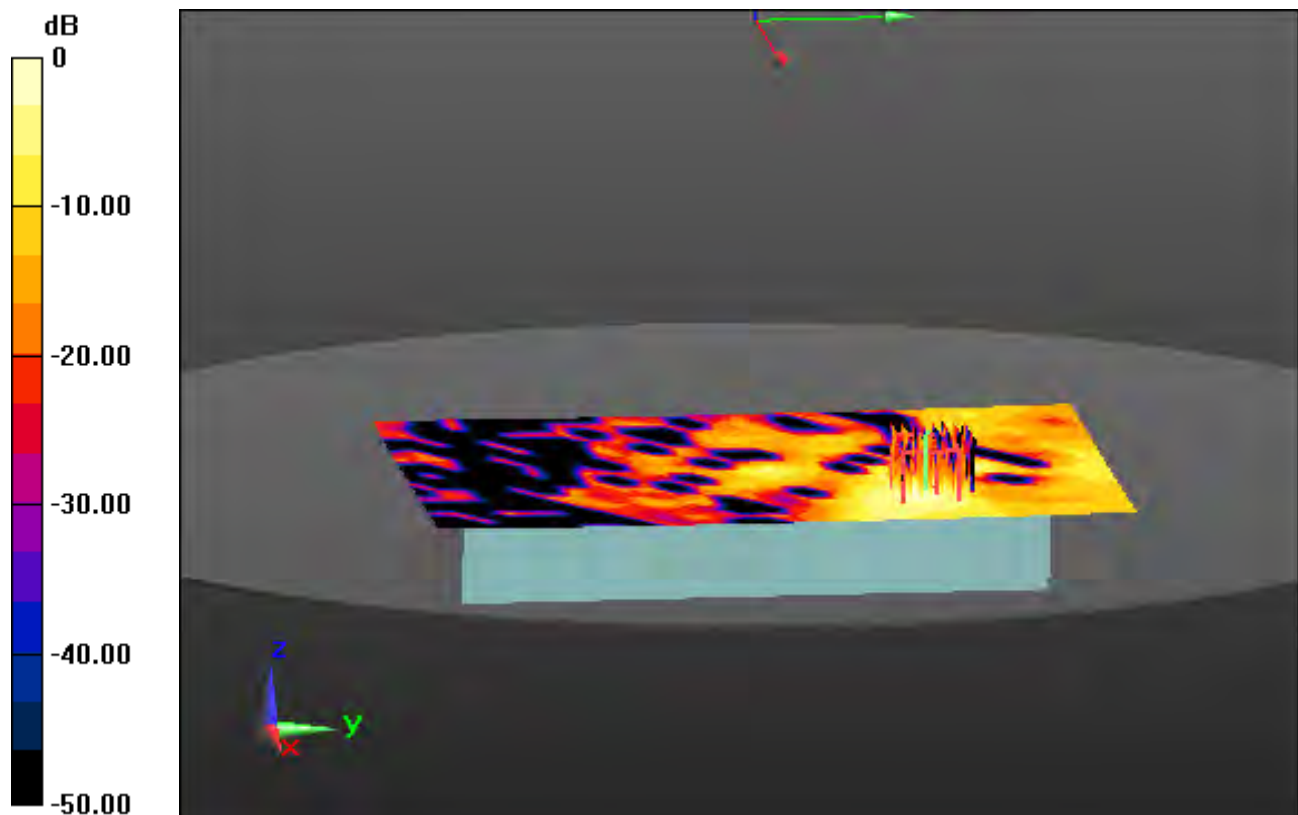
Area Scan (15x28x1): Measurement grid: dx=10mm, dy=10mm

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

Power Drift = -0.08 dB

Peak SAR (extrapolated) = 0.0800 W/kg

SAR(1 g) = 0.015 W/kg; SAR(10 g) = 0.00435 W/kg



0 dB = 0.0414 W/kg

DT&C Co., Ltd.

DUT: PM451; Type: PDA

Communication System: UID 0, W-LAN_5300 (0); Frequency: 5280 MHz; Duty Cycle: 1:1

Medium parameters used: $f = 5280 \text{ MHz}$; $\sigma = 4.864 \text{ S/m}$; $\epsilon_r = 35.686$; $\rho = 1000 \text{ kg/m}^3$

Phantom section: Flat Section

DASY5 Configuration:

Probe: EX3DV4 - SN3933; ConvF(5.1, 5.1, 5.1); Calibrated: 9/27/2019 Electronics: DAE3 Sn520

Sensor-Surface: 1.4mm (Mechanical Surface Detection)

Phantom: ELI v5.0_2017_03_08; Type: QDIVA001BB; Serial: 1223

Measurement SW: DASY52, Version 52.10 (3); SEMCAD X Version 14.6.13 (7474)

Test Date: 2020-06-02; Ambient Temp: 21.3; Tissue Temp: 21.5

Touch from Body, Rear, WLAN(802.11a) Ch. 56, Ant Internal, Ant.2

With Handstrap(15mm Thickness)

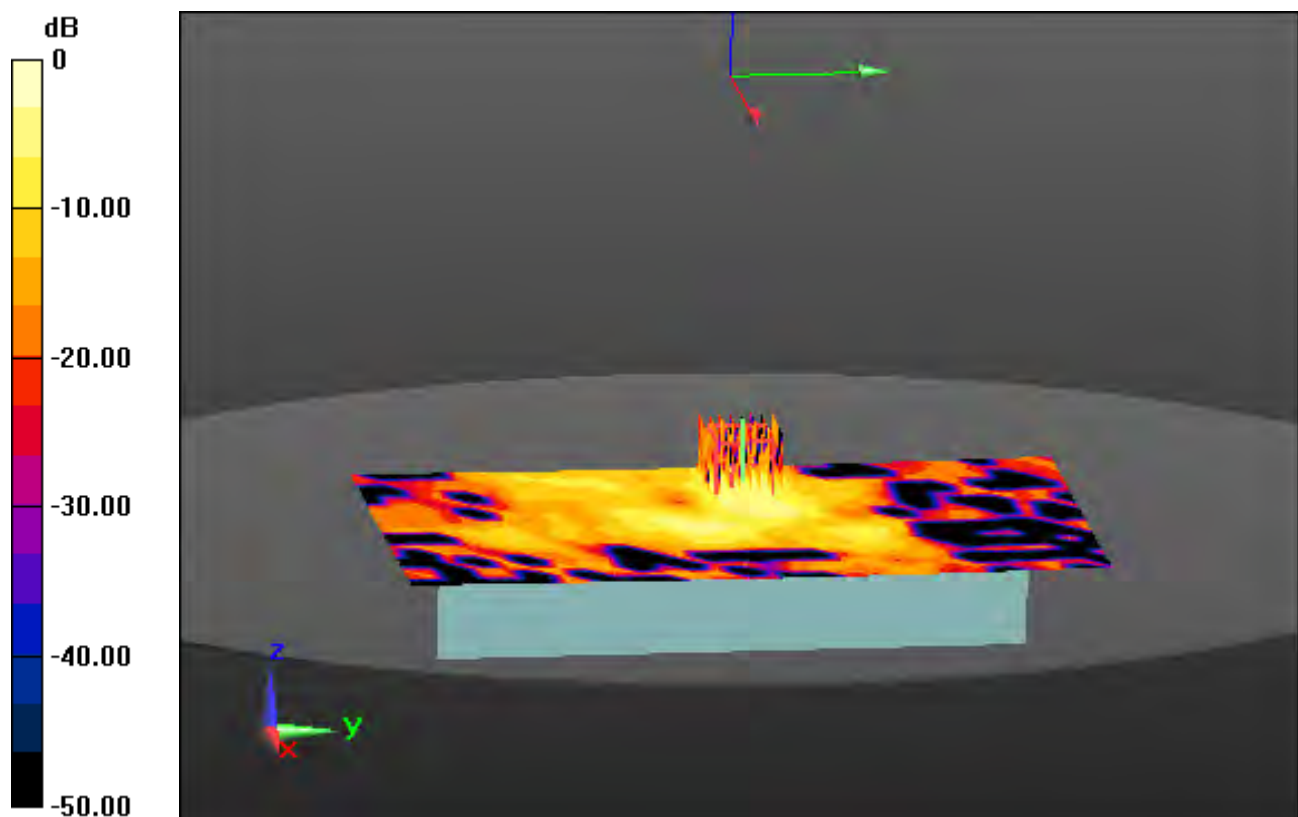
Area Scan (15x28x1): Measurement grid: $dx=10\text{mm}$, $dy=10\text{mm}$

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

Power Drift = -0.15 dB

Peak SAR (extrapolated) = 0.0810 W/kg

SAR(1 g) = 0.015 W/kg; SAR(10 g) = 0.00598 W/kg



0 dB = 0.0800 W/kg

DT&C Co., Ltd.

DUT: PM451; Type: PDA

Communication System: UID 0, W-LAN_5300 (0); Frequency: 5260 MHz; Duty Cycle: 1:1

Medium parameters used: $f = 5260$ MHz; $\sigma = 4.837$ S/m; $\epsilon_r = 35.718$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

DASY5 Configuration:

Probe: EX3DV4 - SN3933; ConvF(5.1, 5.1, 5.1); Calibrated: 9/27/2019 Electronics: DAE3 Sn520

Sensor-Surface: 1.4mm (Mechanical Surface Detection)

Phantom: ELI v5.0_2017_03_08; Type: QDIVA001BB; Serial: 1223

Measurement SW: DASY52, Version 52.10 (3); SEMCAD X Version 14.6.13 (7474)

Test Date: 2020-06-02; Ambient Temp: 21.3; Tissue Temp: 21.5

Touch from Body, Rear, WLAN(802.11a) Ch. 52, Ant Internal, MIMO

With Handstrap(15mm Thickness)

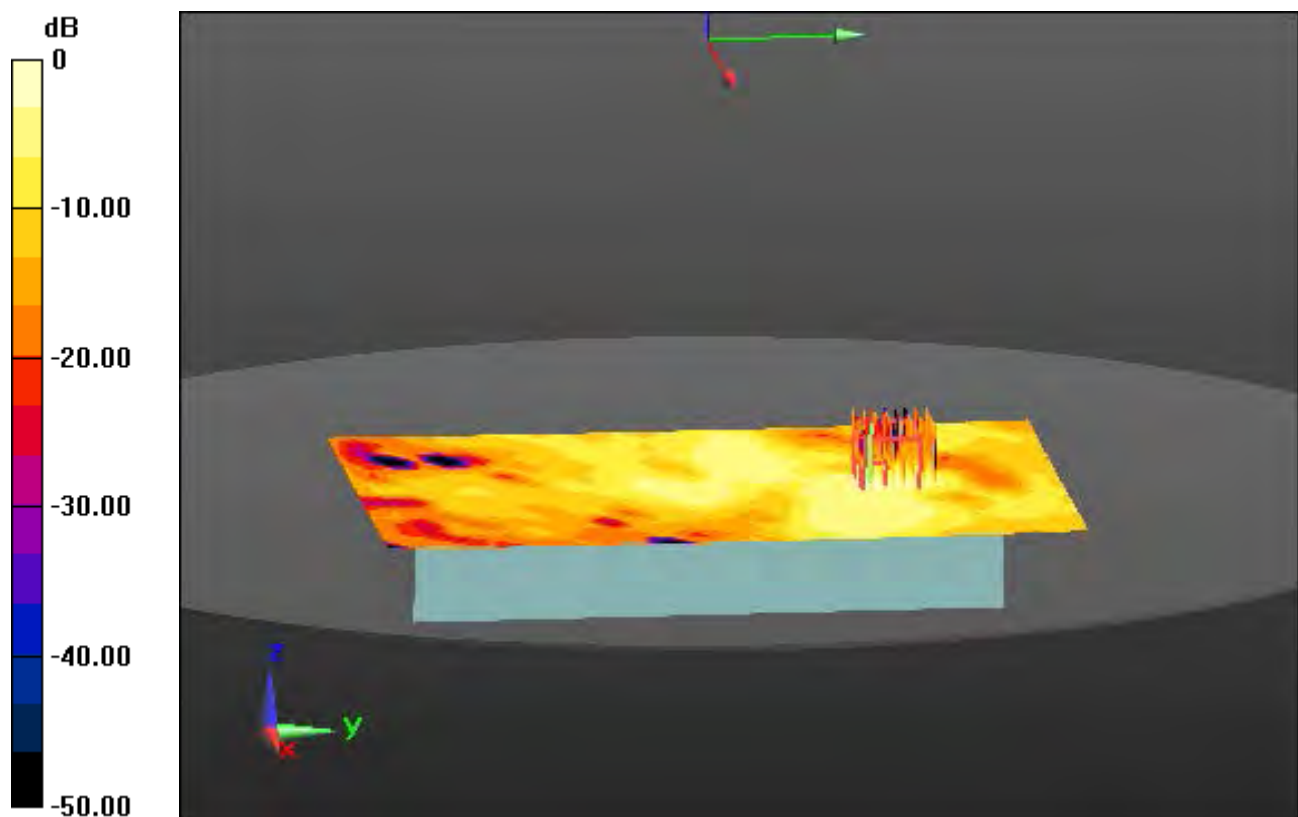
Area Scan (15x28x1): Measurement grid: dx=10mm, dy=10mm

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

Power Drift = 0.18 dB

Peak SAR (extrapolated) = 0.0870 W/kg

SAR(1 g) = 0.021 W/kg; SAR(10 g) = 0.00811 W/kg



0 dB = 0.0800 W/kg

DT&C Co., Ltd.

DUT: PM451; Type: PDA

Communication System: UID 0, W-LAN_5600 (0); Frequency: 5500 MHz; Duty Cycle: 1:1

Medium parameters used: $f = 5500$ MHz; $\sigma = 4.922$ S/m; $\epsilon_r = 36.036$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

DASY5 Configuration:

Probe: EX3DV4 - SN3933; ConvF(4.95, 4.95, 4.95); Calibrated: 9/27/2019 Electronics: DAE3 Sn520

Sensor-Surface: 1.4mm (Mechanical Surface Detection)

Phantom: ELI v5.0_2017_03_08; Type: QDIVA001BB; Serial: 1223

Measurement SW: DASY52, Version 52.10 (3); SEMCAD X Version 14.6.13 (7474)

Test Date: 2020-06-03; Ambient Temp: 21.4; Tissue Temp: 21.7

Touch from Body, Rear, WLAN(802.11a) Ch. 100, Ant Internal, Ant.1

With Handstrap(15mm Thickness)

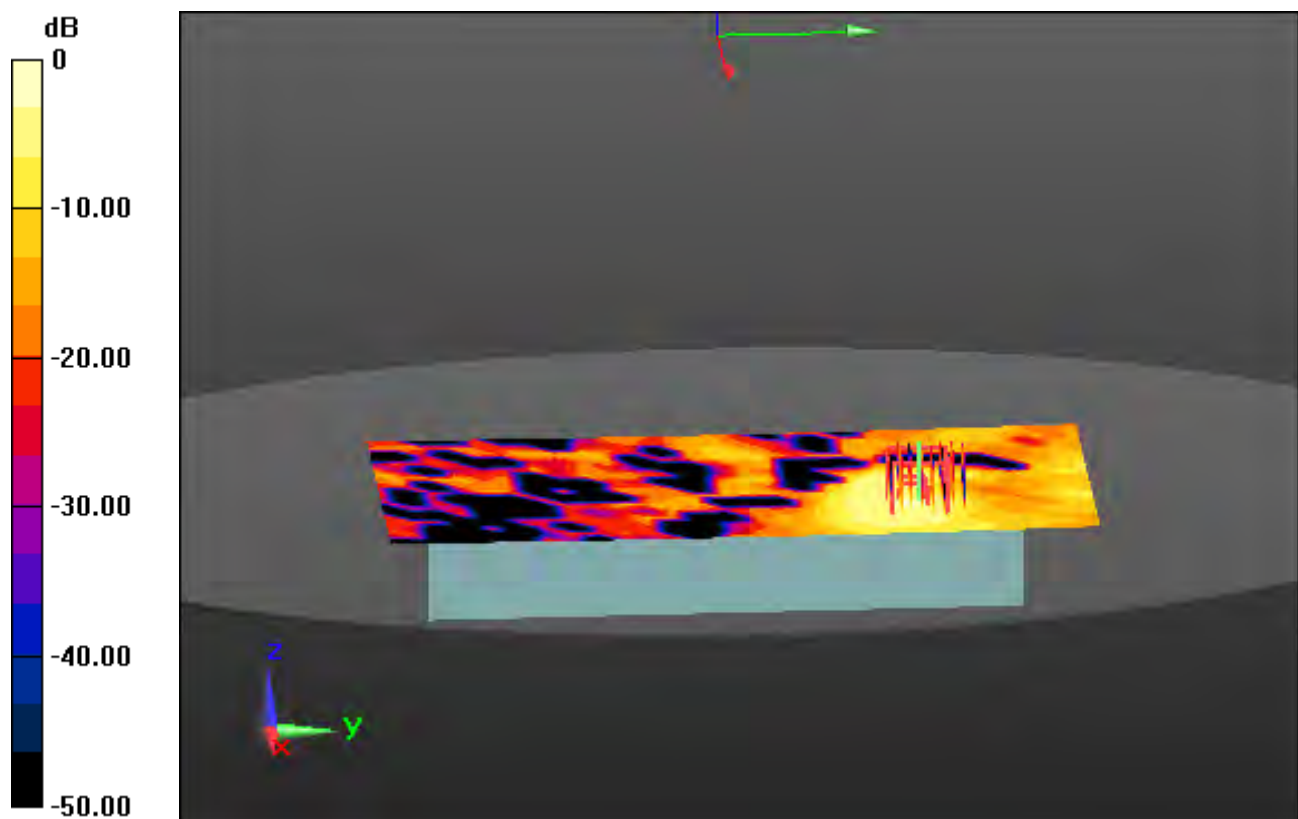
Area Scan (15x28x1): Measurement grid: dx=10mm, dy=10mm

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

Power Drift = -0.14 dB

Peak SAR (extrapolated) = 0.196 W/kg

SAR(1 g) = 0.025 W/kg; SAR(10 g) = 0.00927 W/kg



0 dB = 0.119 W/kg

DT&C Co., Ltd.

DUT: PM451; Type: PDA

Communication System: UID 0, W-LAN_5600 (0); Frequency: 5660 MHz; Duty Cycle: 1:1

Medium parameters used: $f = 5660$ MHz; $\sigma = 5.094$ S/m; $\epsilon_r = 35.807$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

DASY5 Configuration:

Probe: EX3DV4 - SN3933; ConvF(4.8, 4.8, 4.8); Calibrated: 9/27/2019 Electronics: DAE3 Sn520

Sensor-Surface: 1.4mm (Mechanical Surface Detection)

Phantom: ELI v5.0_2017_03_08; Type: QDIVA001BB; Serial: 1223

Measurement SW: DASY52, Version 52.10 (3); SEMCAD X Version 14.6.13 (7474)

Test Date: 2020-06-03; Ambient Temp: 21.4; Tissue Temp: 21.7

Touch from Body, Rear, WLAN(802.11a) Ch. 132, Ant Internal, Ant.2

With Handstrap(15mm Thickness)

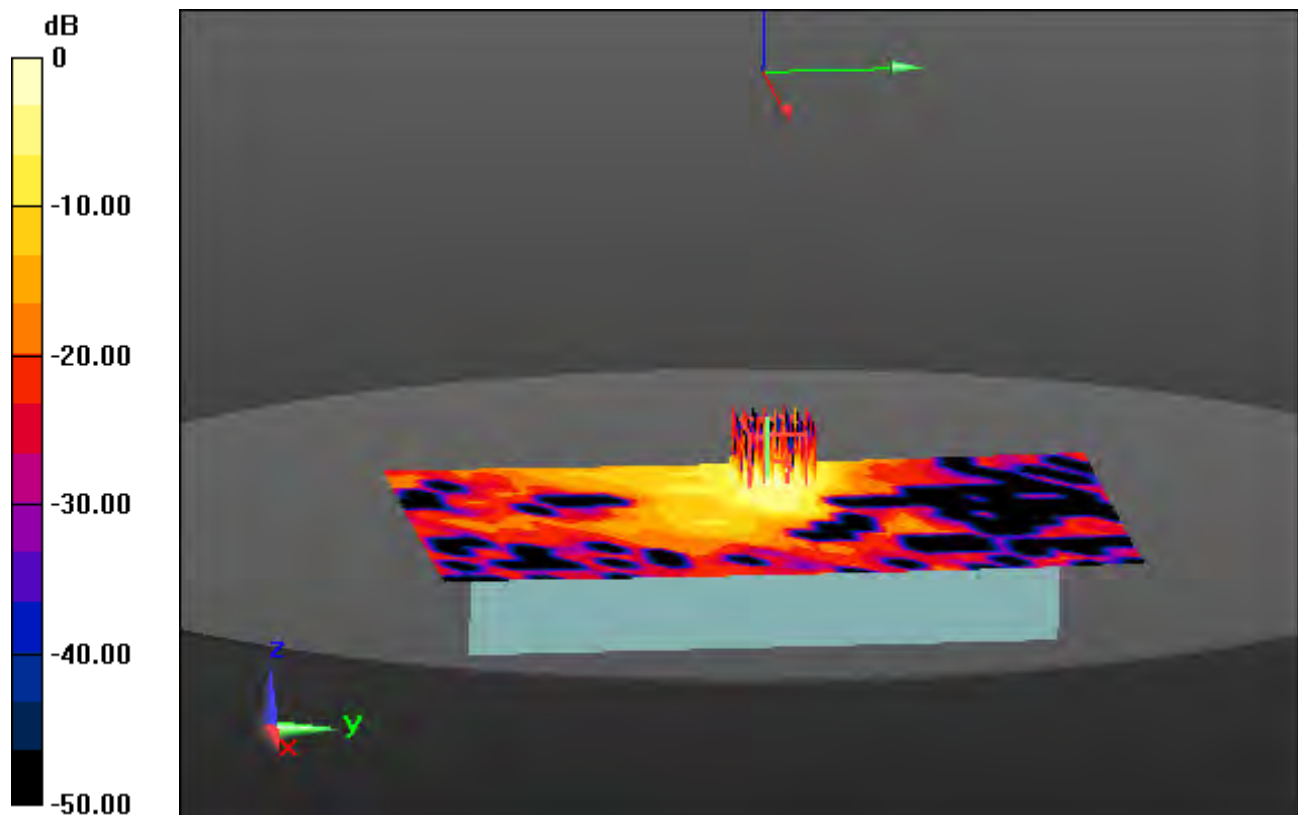
Area Scan (15x28x1): Measurement grid: dx=10mm, dy=10mm

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

Power Drift = -0.06 dB

Peak SAR (extrapolated) = 0.230 W/kg

SAR(1 g) = 0.059 W/kg; SAR(10 g) = 0.023 W/kg



0 dB = 0.208 W/kg

DT&C Co., Ltd.

DUT: PM451; Type: PDA

Communication System: UID 0, W-LAN_5600 (0); Frequency: 5500 MHz; Duty Cycle: 1:1

Medium parameters used: $f = 5500$ MHz; $\sigma = 4.922$ S/m; $\epsilon_r = 36.036$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

DASY5 Configuration:

Probe: EX3DV4 - SN3933; ConvF(4.95, 4.95, 4.95); Calibrated: 9/27/2019 Electronics: DAE3 Sn520

Sensor-Surface: 1.4mm (Mechanical Surface Detection)

Phantom: ELI v5.0_2017_03_08; Type: QDIVA001BB; Serial: 1223

Measurement SW: DASY52, Version 52.10 (3); SEMCAD X Version 14.6.13 (7474)

Test Date: 2020-06-03; Ambient Temp: 21.4; Tissue Temp: 21.7

Touch from Body, Rear, WLAN(802.11a) Ch. 100, Ant Internal, MIMO

With Handstrap(15mm Thickness)

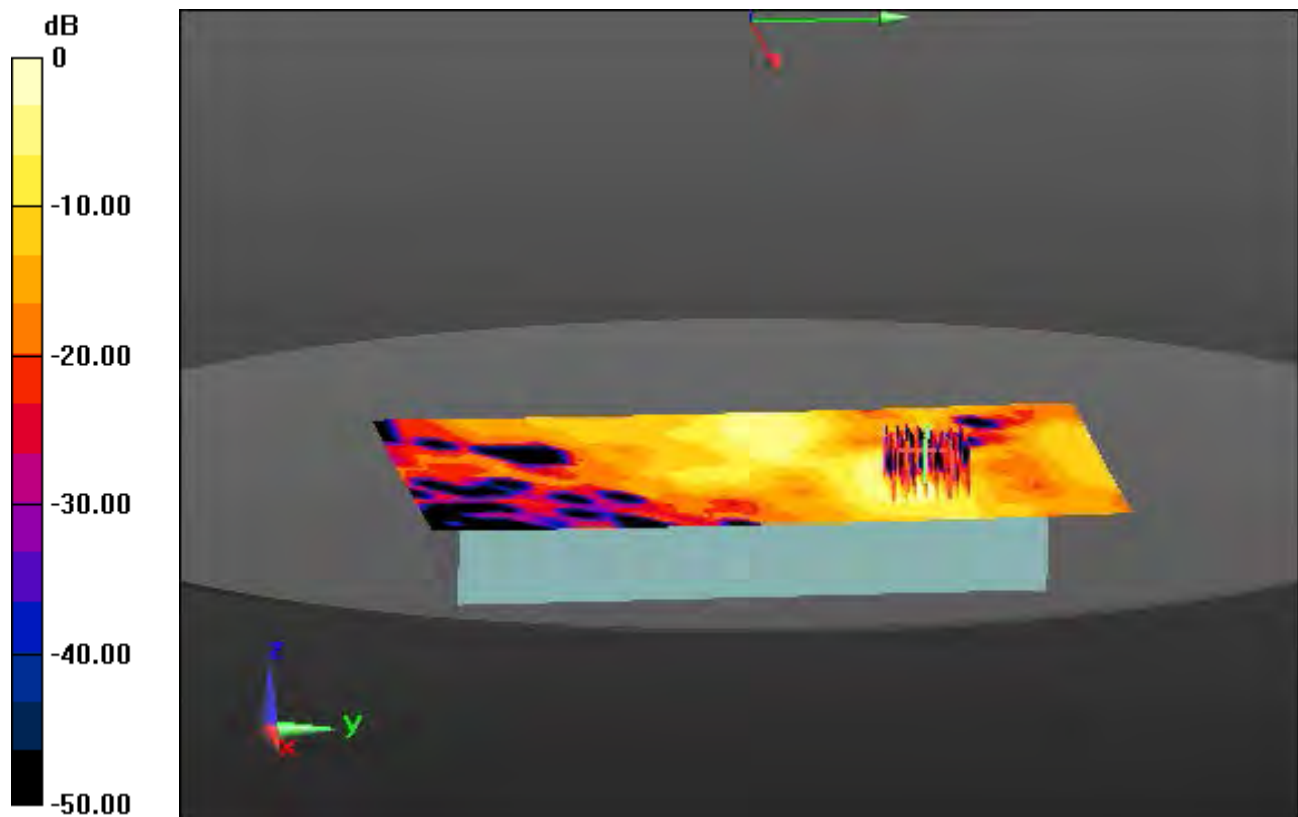
Area Scan (15x28x1): Measurement grid: dx=10mm, dy=10mm

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

Power Drift = -0.06 dB

Peak SAR (extrapolated) = 0.149 W/kg

SAR(1 g) = 0.025 W/kg; SAR(10 g) = 0.00968 W/kg



0 dB = 0.175 W/kg

DT&C Co., Ltd.

DUT: PM451; Type: PDA

Communication System: UID 0, W-LAN_5800 (0); Frequency: 5825 MHz; Duty Cycle: 1:1

Medium parameters used: $f = 5825$ MHz; $\sigma = 5.415$ S/m; $\epsilon_r = 34.782$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

DASY5 Configuration:

Probe: EX3DV4 - SN3933; ConvF(4.75, 4.75, 4.75); Calibrated: 9/27/2019 Electronics: DAE3 Sn520

Sensor-Surface: 1.4mm (Mechanical Surface Detection)

Phantom: ELI v5.0_2017_03_08; Type: QDIVA001BB; Serial: 1223

Measurement SW: DASY52, Version 52.10 (3); SEMCAD X Version 14.6.13 (7474)

Test Date: 2020-06-04; Ambient Temp: 21.1; Tissue Temp: 21.1

Touch from Body, Rear, WLAN(802.11a) Ch. 165, Ant Internal, Ant.1

With Handstrap(15mm Thickness)

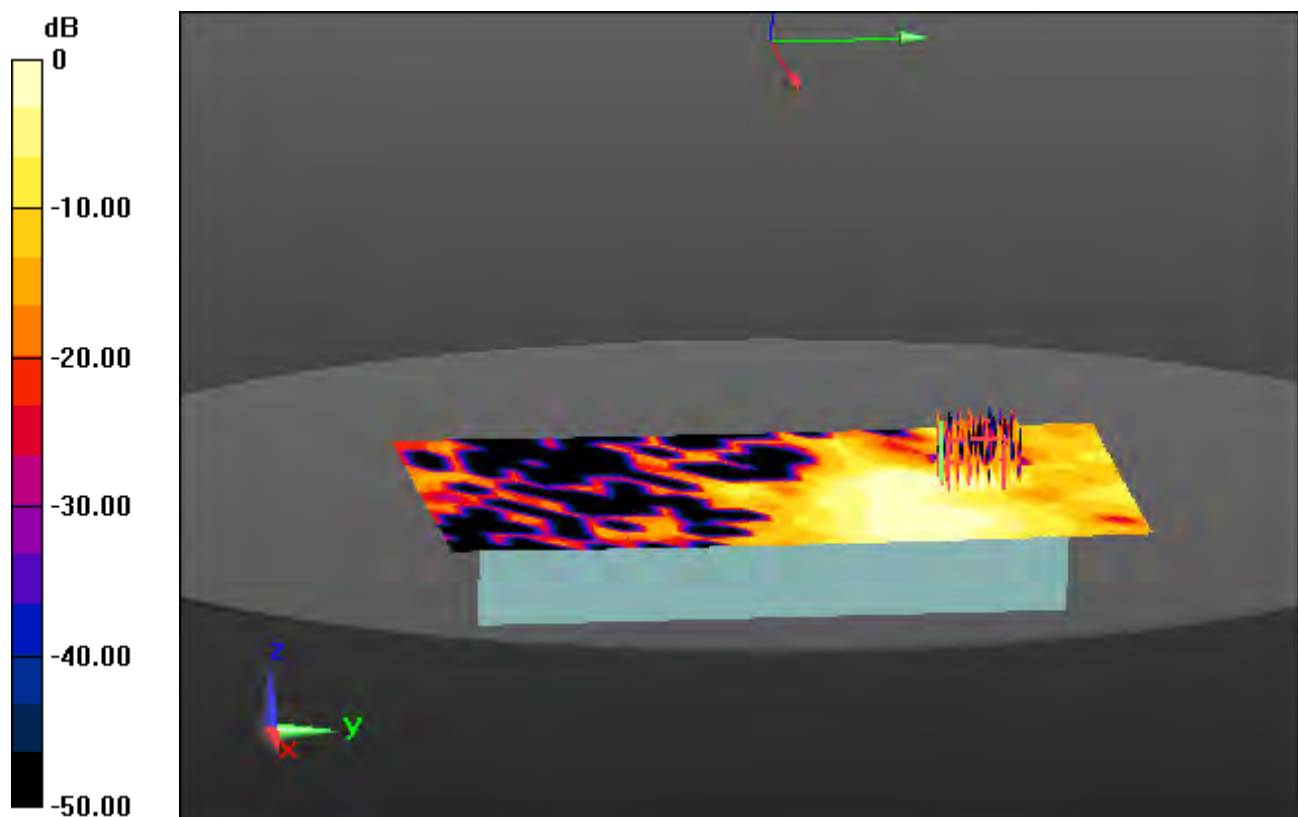
Area Scan (15x28x1): Measurement grid: dx=10mm, dy=10mm

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

Power Drift = -0.02 dB

Peak SAR (extrapolated) = 0.152 W/kg

SAR(1 g) = 0.024 W/kg; SAR(10 g) = 0.00816 W/kg



0 dB = 0.0780 W/kg

DT&C Co., Ltd.

DUT: PM451; Type: PDA

Communication System: UID 0, W-LAN_5800 (0); Frequency: 5785 MHz; Duty Cycle: 1:1

Medium parameters used: $f = 5785 \text{ MHz}$; $\sigma = 5.361 \text{ S/m}$; $\epsilon_r = 34.851$; $\rho = 1000 \text{ kg/m}^3$

Phantom section: Flat Section

DASY5 Configuration:

Probe: EX3DV4 - SN3933; ConvF(4.75, 4.75, 4.75); Calibrated: 9/27/2019 Electronics: DAE3 Sn520

Sensor-Surface: 1.4mm (Mechanical Surface Detection)

Phantom: ELI v5.0_2017_03_08; Type: QDIVA001BB; Serial: 1223

Measurement SW: DASY52, Version 52.10 (3); SEMCAD X Version 14.6.13 (7474)

Test Date: 2020-06-04; Ambient Temp: 21.1; Tissue Temp: 21.1

Touch from Body, Rear, WLAN(802.11a) Ch. 157, Ant Internal, Ant.2

With Handstrap(15mm Thickness)

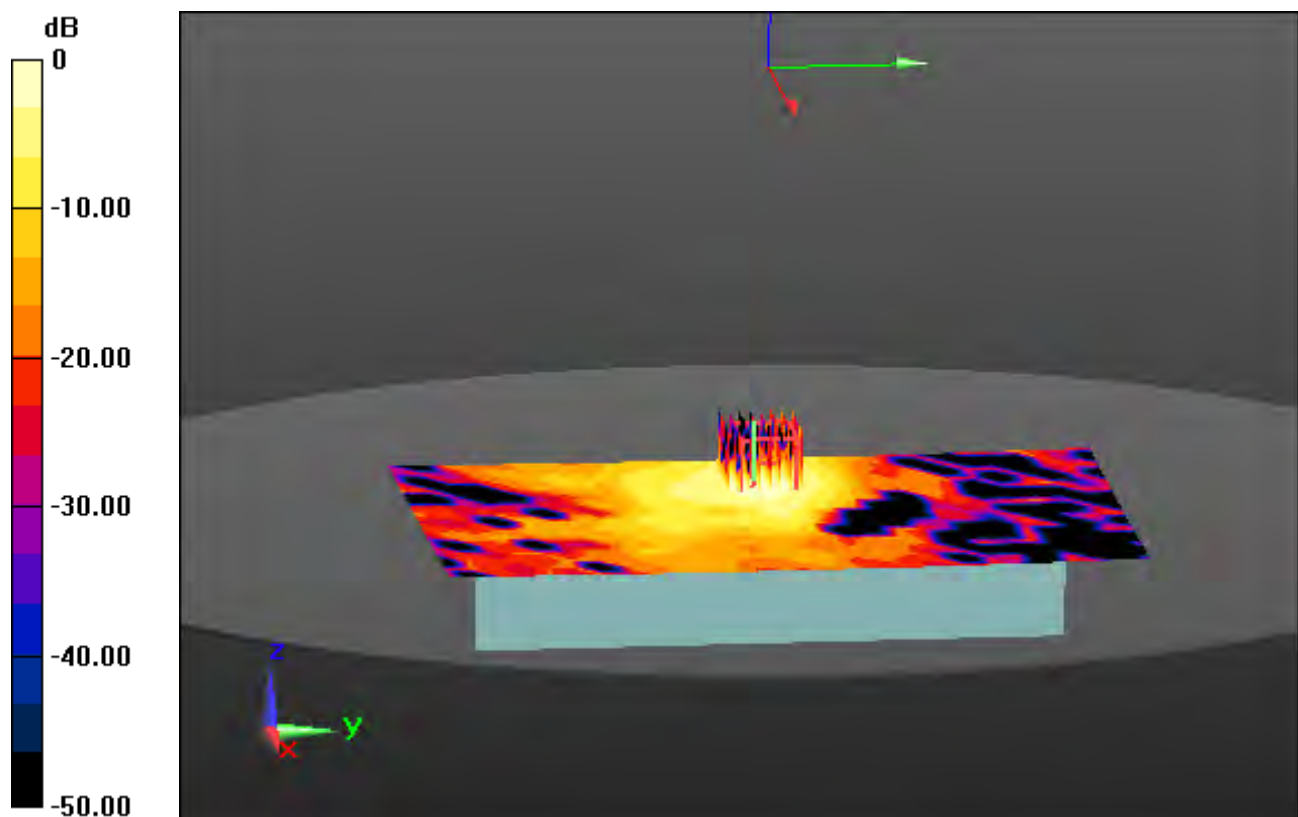
Area Scan (15x28x1): Measurement grid: $dx=10\text{mm}$, $dy=10\text{mm}$

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

Power Drift = 0.00 dB

Peak SAR (extrapolated) = 0.237 W/kg

SAR(1 g) = 0.057 W/kg; SAR(10 g) = 0.023 W/kg



0 dB = 0.183 W/kg

DT&C Co., Ltd.

DUT: PM451; Type: PDA

Communication System: UID 0, W-LAN_5800 (0); Frequency: 5785 MHz; Duty Cycle: 1:1

Medium parameters used: $f = 5785 \text{ MHz}$; $\sigma = 5.361 \text{ S/m}$; $\epsilon_r = 34.851$; $\rho = 1000 \text{ kg/m}^3$

Phantom section: Flat Section

DASY5 Configuration:

Probe: EX3DV4 - SN3933; ConvF(4.75, 4.75, 4.75); Calibrated: 9/27/2019 Electronics: DAE3 Sn520

Sensor-Surface: 1.4mm (Mechanical Surface Detection)

Phantom: ELI v5.0_2017_03_08; Type: QDIVA001BB; Serial: 1223

Measurement SW: DASY52, Version 52.10 (3); SEMCAD X Version 14.6.13 (7474)

Test Date: 2020-06-04; Ambient Temp: 21.1; Tissue Temp: 21.1

Touch from Body, Rear, WLAN(802.11a) Ch. 157, Ant Internal, MIMO

With Handstrap(15mm Thickness)

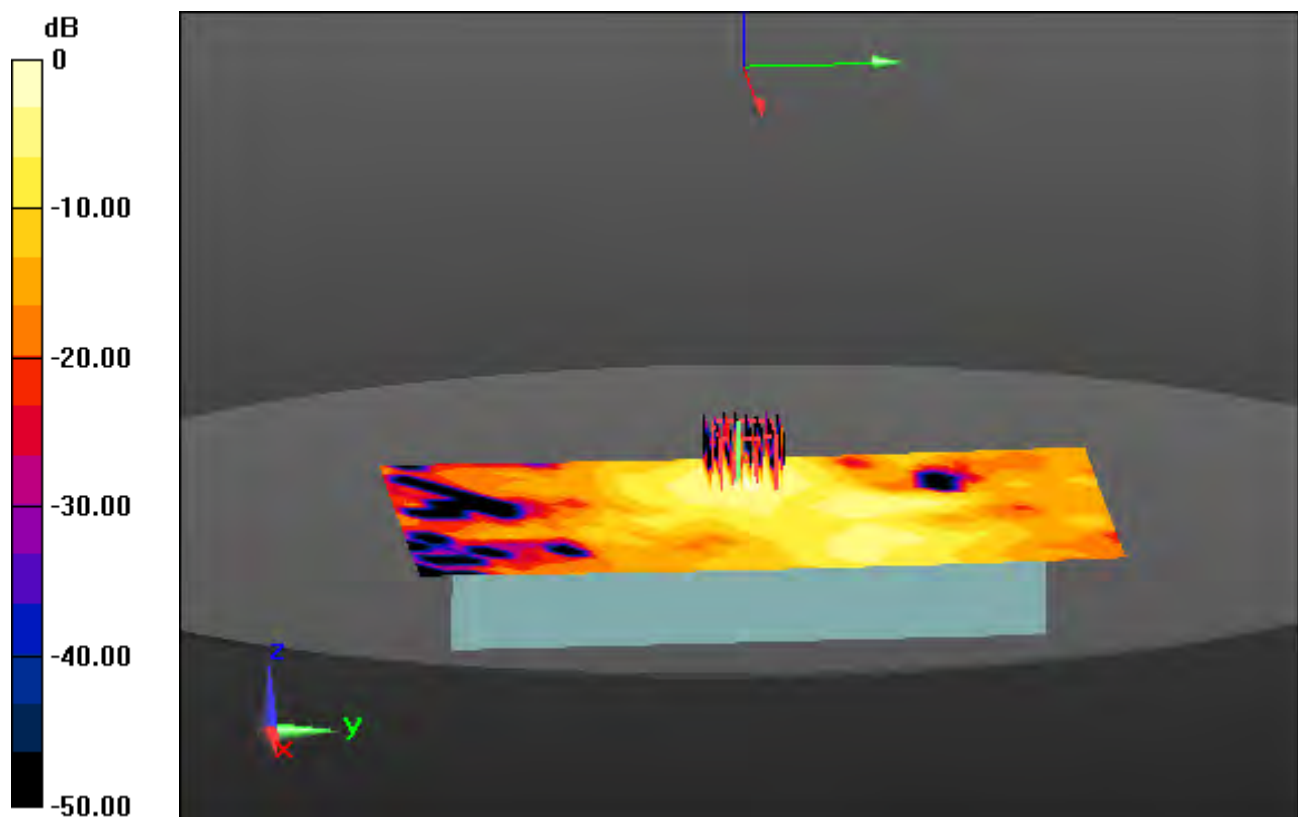
Area Scan (15x28x1): Measurement grid: $dx=10\text{mm}$, $dy=10\text{mm}$

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

Power Drift = -0.03 dB

Peak SAR (extrapolated) = 0.210 W/kg

SAR(1 g) = 0.049 W/kg; SAR(10 g) = 0.020 W/kg



0 dB = 0.224 W/kg

DT&C Co., Ltd.

DUT: PM451; Type: PDA

Communication System: UID 0, Bluetooth (0); Frequency: 2441 MHz; Duty Cycle: 1:1.302

Medium parameters used: $f = 2441 \text{ MHz}$; $\sigma = 1.786 \text{ S/m}$; $\epsilon_r = 37.843$; $\rho = 1000 \text{ kg/m}^3$

Phantom section: Flat Section

DASY5 Configuration:

Probe: ES3DV3 - SN3328; ConvF(4.7, 4.7, 4.7) @ 2441 MHz; Calibrated: 3/25/2020 Electronics: DAE4 Sn1335

Sensor-Surface: 3mm (Mechanical Surface Detection)

Phantom: ELI v5.0_2014_02_13; Type: QDOVA002AA; Serial: TP:1237

Measurement SW: DASY52, Version 52.10 (3); SEMCAD X Version 14.6.13 (7474)

Test Date: 2020-06-03; Ambient Temp: 21.4; Tissue Temp: 21.2

Touch from Body, Rear, Bluetooth 1Mbps Ch. 39, Ant Internal

With Handstrap(15mm Thickness)

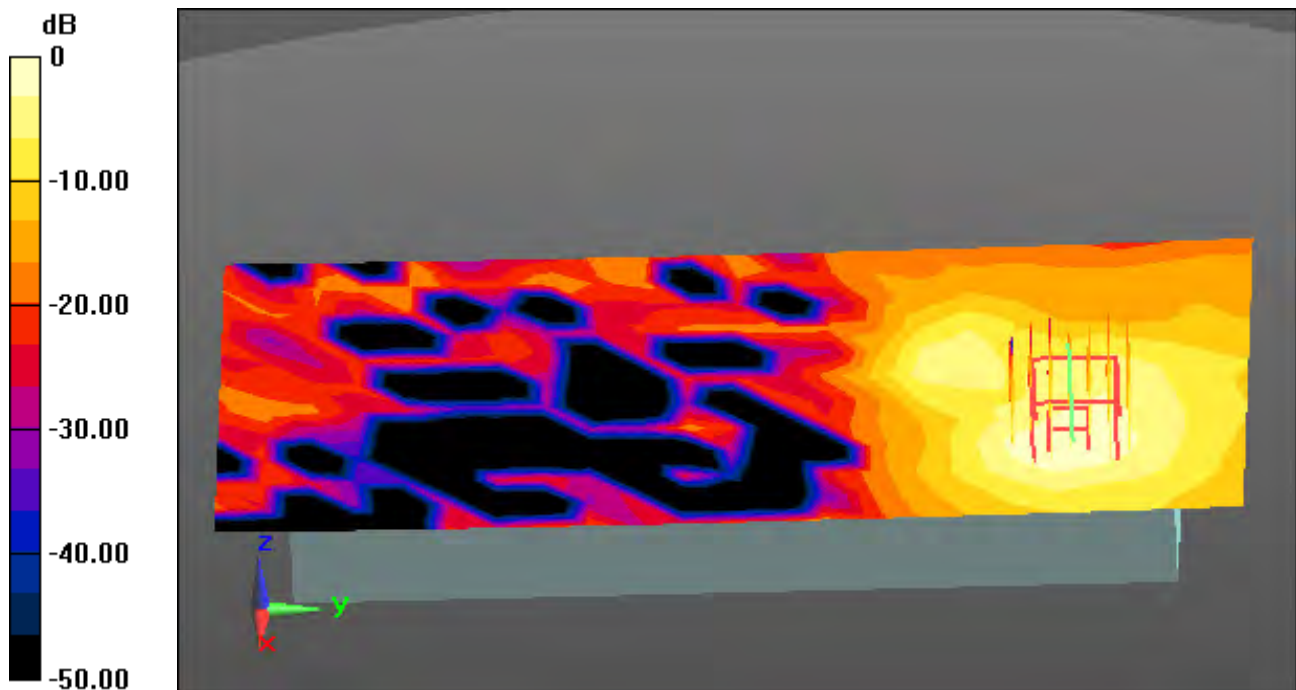
Area Scan (12x23x1): Measurement grid: $dx=12\text{mm}$, $dy=12\text{mm}$

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

Power Drift = 0.00 dB

Peak SAR (extrapolated) = 0.0290 W/kg

SAR(1 g) = 0.0091 W/kg; SAR(10 g) = 0.00321 W/kg



0 dB = 0.0188 W/kg

DT&C Co., Ltd.

DUT: PM451; Type: PDA

Communication System: UID 0, GSM 850_12 (0); Frequency: 836.6 MHz; Duty Cycle: 1:2.075

Medium parameters used: $f = 836.6 \text{ MHz}$; $\sigma = 0.923 \text{ S/m}$; $\epsilon_r = 42.898$; $\rho = 1000 \text{ kg/m}^3$

Phantom section: Flat Section

DASY5 Configuration:

Probe: EX3DV4 - SN3933; ConvF(10.32, 10.32, 10.32); Calibrated: 9/27/2019 Electronics: DAE3 Sn520

Sensor-Surface: 2mm (Mechanical Surface Detection)

Phantom: ELI v5.0_2017_03_08; Type: QDIVA001BB; Serial: 1223

Measurement SW: DASY52, Version 52.10 (3); SEMCAD X Version 14.6.13 (7474)

Test Date: 2020-05-29; Ambient Temp: 20.3; Tissue Temp: 20.5

1 cm space from Body, Left, GSM850 GPRS 4 Tx Ch. 190, Ant Internal

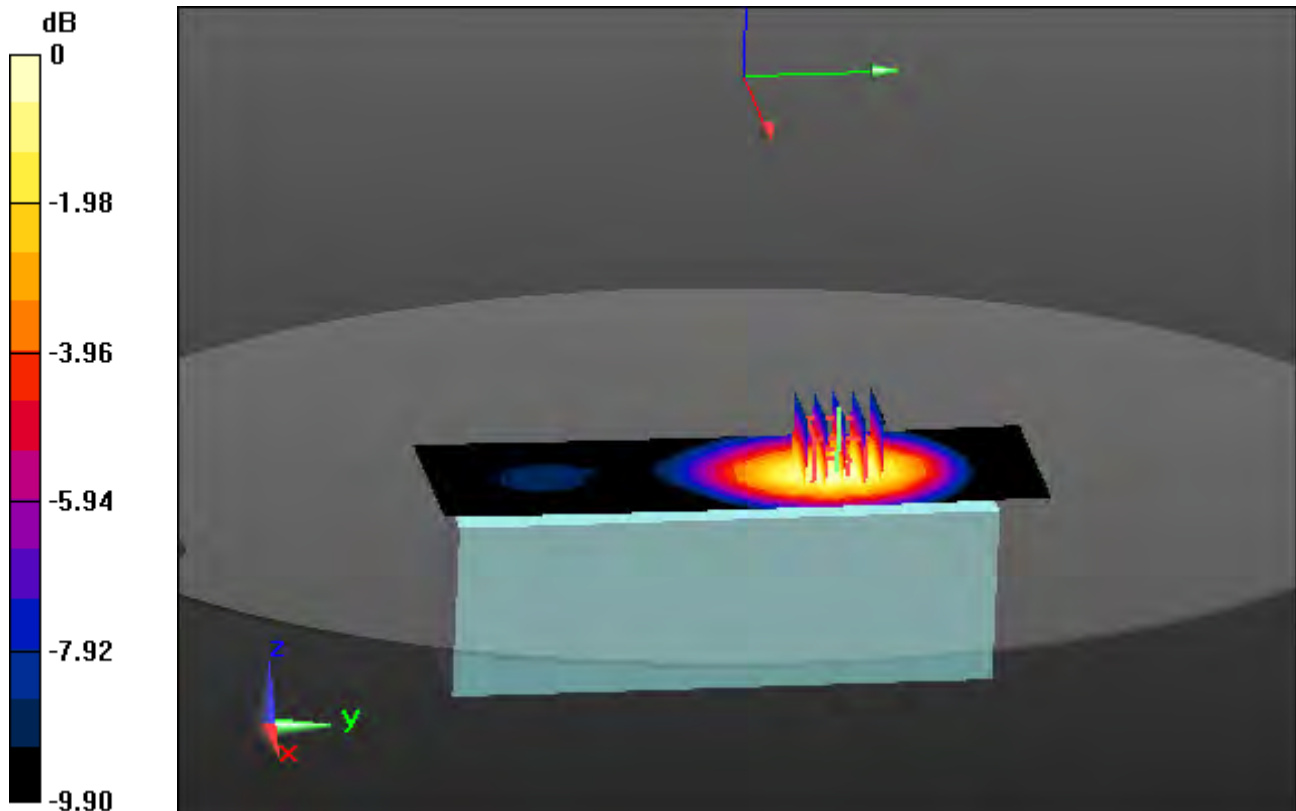
Area Scan (6x18x1): Measurement grid: $dx=15\text{mm}$, $dy=15\text{mm}$

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

Power Drift = 0.15 dB

Peak SAR (extrapolated) = 0.718 W/kg

SAR(1 g) = 0.515 W/kg; SAR(10 g) = 0.358 W/kg



0 dB = 0.630 W/kg

DT&C Co., Ltd.

DUT: PM451; Type: PDA;

Communication System: UID 0, PCS1900_4 Tx (0); Frequency: 1880 MHz; Duty Cycle: 1:2.075

Medium parameters used: $f = 1880$ MHz; $\sigma = 1.398$ S/m; $\epsilon_r = 40.844$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

DASY5 Configuration:

Probe: ES3DV3 - SN3328; ConvF(5.09, 5.09, 5.09) @ 1880 MHz; Calibrated: 3/25/2020 Electronics: DAE4 Sn1335

Sensor-Surface: 3mm (Mechanical Surface Detection)

Phantom: ELI v5.0_2014_02_13; Type: QDOVA002AA; Serial: TP:1237

Measurement SW: DASY52, Version 52.10 (3); SEMCAD X Version 14.6.13 (7474)

Test Date: 2020-05-29; Ambient Temp: 21.7; Tissue Temp: 21.8

1 cm space from Body, Rear, PCS1900 GPRS 4 Tx Ch. 661, Ant Internal

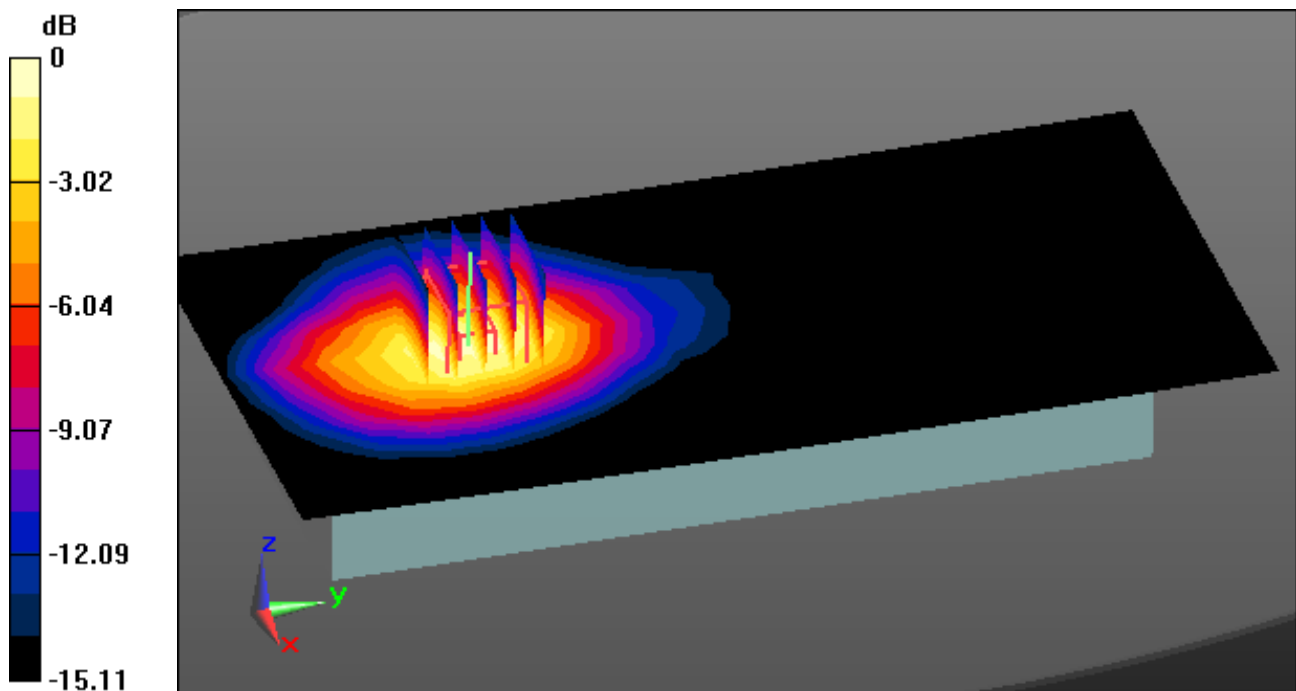
Area Scan (10x19x1): Measurement grid: dx=15mm, dy=15mm

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

Power Drift = -0.02 dB

Peak SAR (extrapolated) = 1.28 W/kg

SAR(1 g) = 0.767 W/kg; SAR(10 g) = 0.494 W/kg



0 dB = 0.801 W/kg

DT&C Co., Ltd.

DUT: PM451; Type: PDA

Communication System: UID 0, WCDMA 850 (0); Frequency: 836.6 MHz; Duty Cycle: 1:1

Medium parameters used: $f = 836.6 \text{ MHz}$; $\sigma = 0.923 \text{ S/m}$; $\epsilon_r = 42.898$; $\rho = 1000 \text{ kg/m}^3$

Phantom section: Flat Section

DASY5 Configuration:

Probe: EX3DV4 - SN3933; ConvF(10.32, 10.32, 10.32); Calibrated: 9/27/2019 Electronics: DAE3 Sn520

Sensor-Surface: 2mm (Mechanical Surface Detection)

Phantom: ELI v5.0_2017_03_08; Type: QDIVA001BB; Serial: 1223

Measurement SW: DASY52, Version 52.10 (3); SEMCAD X Version 14.6.13 (7474)

Test Date: 2020-05-29; Ambient Temp: 20.3; Tissue Temp: 20.5

1 cm space from Body, Left, WCDMA Band 5 Ch. 4183, Ant Internal

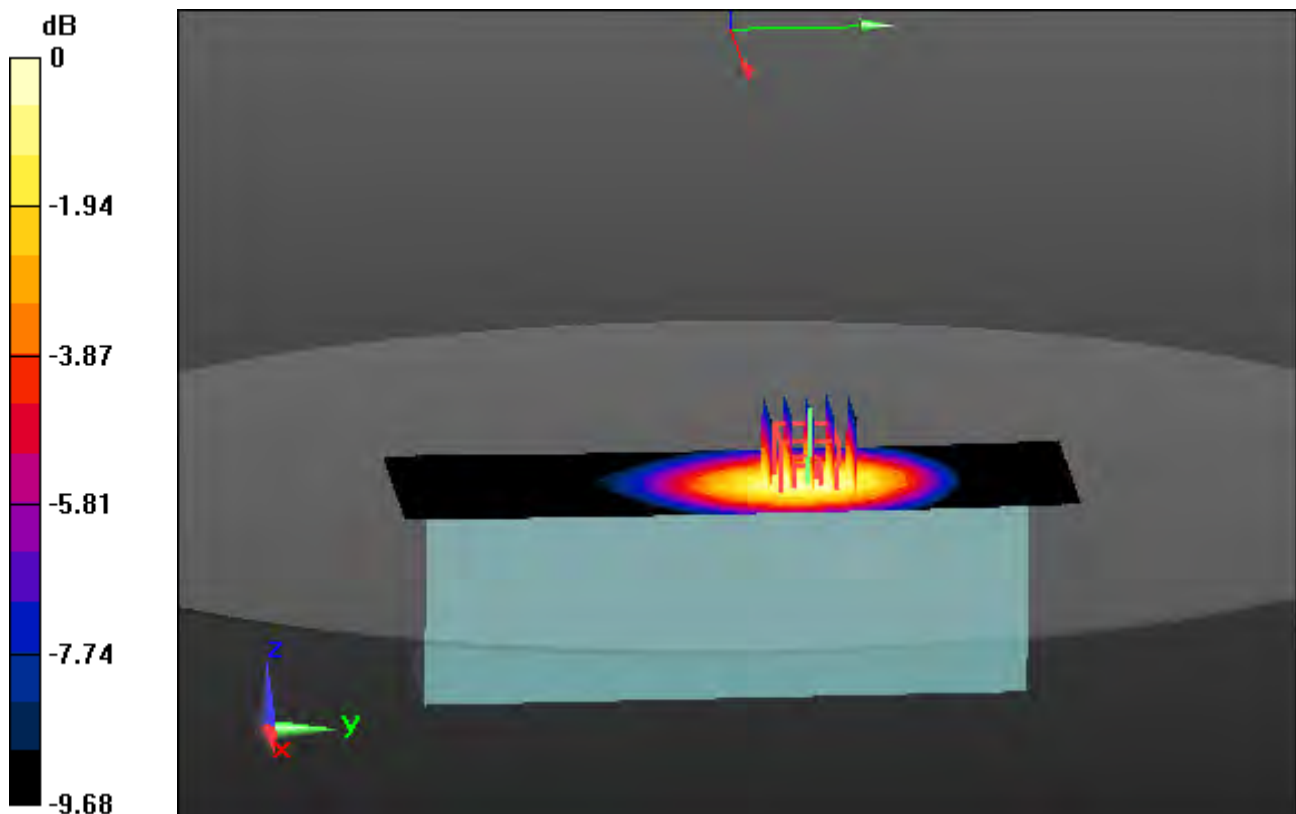
Area Scan (6x18x1): Measurement grid: $dx=15\text{mm}$, $dy=15\text{mm}$

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

Power Drift = 0.11 dB

Peak SAR (extrapolated) = 0.479 W/kg

SAR(1 g) = 0.349 W/kg; SAR(10 g) = 0.244 W/kg



0 dB = 0.424 W/kg

DT&C Co., Ltd.

DUT: PM451; Type: PDA

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

Medium parameters used: $f = 1732.4$ MHz; $\sigma = 1.383$ S/m; $\epsilon_r = 39.227$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

DASY5 Configuration:

Probe: ES3DV3 - SN3328; ConvF(5.34, 5.34, 5.34) @ 1732.4 MHz; Calibrated: 3/25/2020 Electronics: DAE4 Sn1335

Sensor-Surface: 3mm (Mechanical Surface Detection)

Phantom: ELI v5.0_2014_02_13; Type: QDOVA002AA; Serial: TP:1237

Measurement SW: DASY52, Version 52.10 (3); SEMCAD X Version 14.6.13 (7474)

Test Date: 2020-06-01; Ambient Temp: 21.3; Tissue Temp: 21.5

1 cm space from Body, Rear, WCDMA Band 4 Ch. 1412, Ant Internal

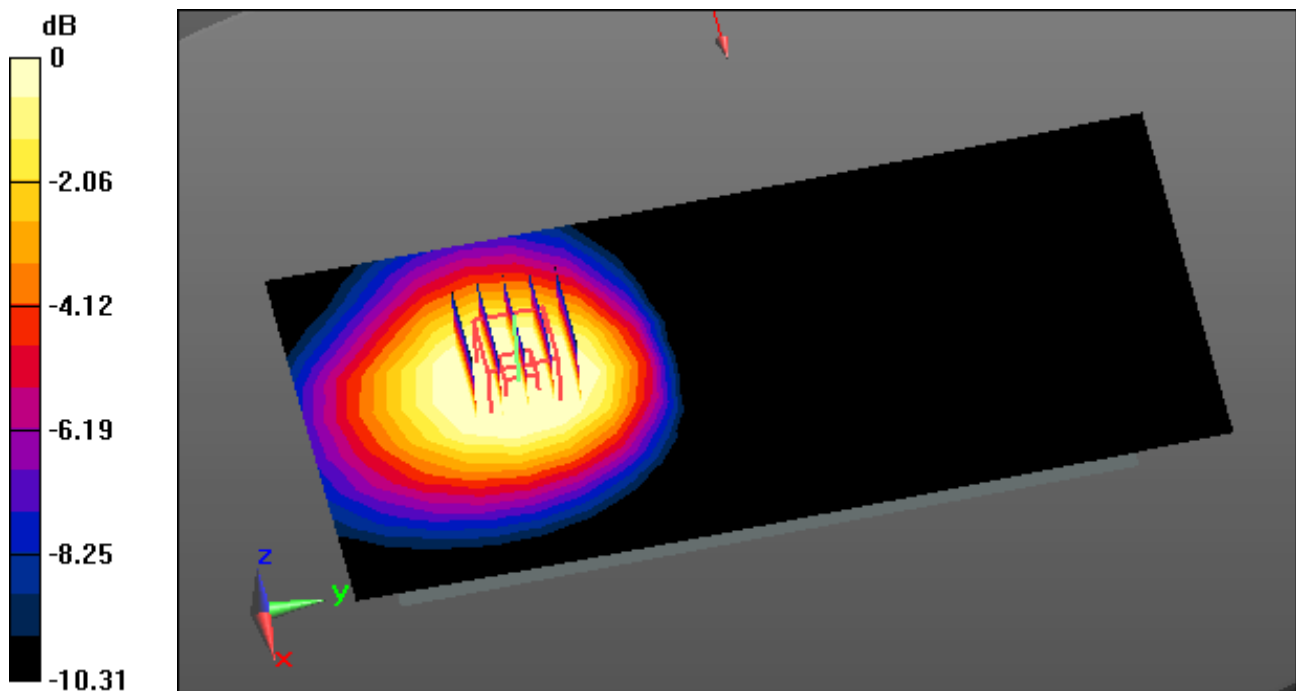
Area Scan (10x19x1): Measurement grid: dx=15mm, dy=15mm

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

Power Drift = 0.01 dB

Peak SAR (extrapolated) = 0.814 W/kg

SAR(1 g) = 0.598 W/kg; SAR(10 g) = 0.400 W/kg



0 dB = 0.481 W/kg

DT&C Co., Ltd.

DUT: PM451; Type: PDA

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

Medium parameters used: $f = 1880$ MHz; $\sigma = 1.398$ S/m; $\epsilon_r = 40.844$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

DASY5 Configuration:

Probe: ES3DV3 - SN3328; ConvF(5.09, 5.09, 5.09) @ 1880 MHz; Calibrated: 3/25/2020 Electronics: DAE4 Sn1335

Sensor-Surface: 3mm (Mechanical Surface Detection)

Phantom: ELI v5.0_2014_02_13; Type: QDOVA002AA; Serial: TP:1237

Measurement SW: DASY52, Version 52.10 (3); SEMCAD X Version 14.6.13 (7474)

Test Date: 2020-05-29; Ambient Temp: 21.7; Tissue Temp: 21.8

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

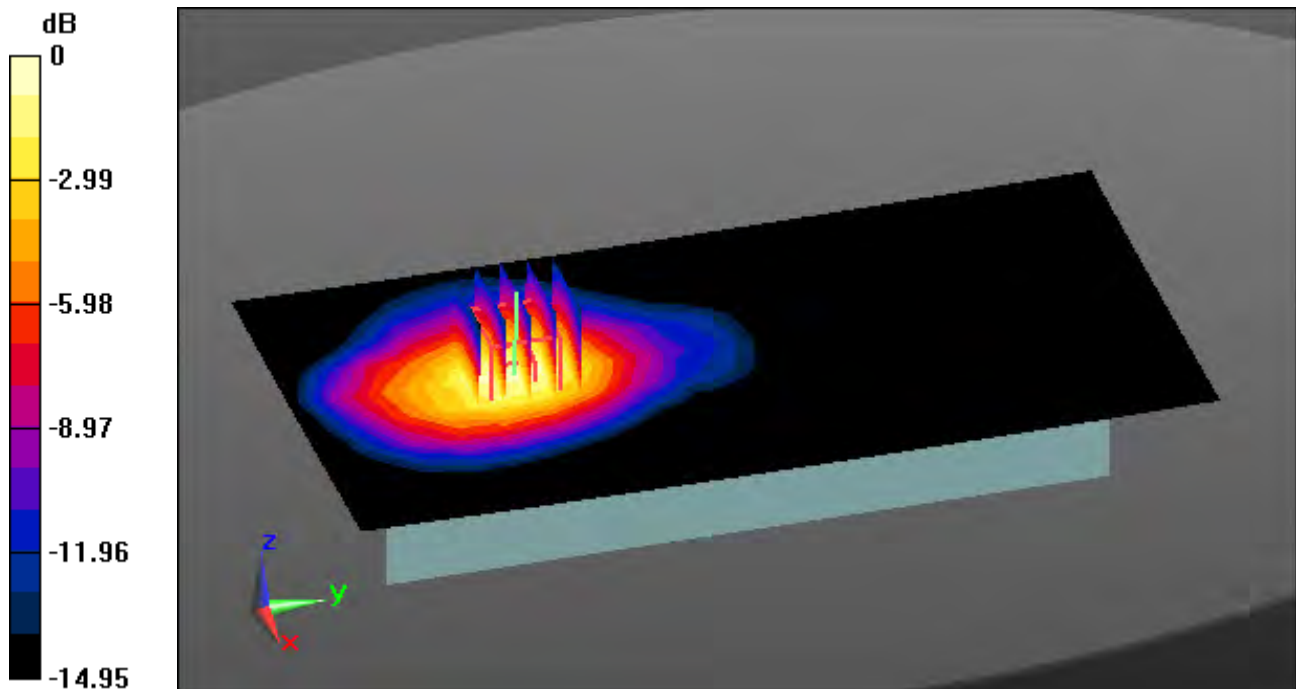
Area Scan (10x19x1): Measurement grid: dx=15mm, dy=15mm

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

Power Drift = -0.19 dB

Peak SAR (extrapolated) = 1.47 W/kg

SAR(1 g) = 0.781 W/kg; SAR(10 g) = 0.451 W/kg



0 dB = 1.05 W/kg

DT&C Co., Ltd.

DUT: PM451; Type: PDA

Communication System: UID 0, LTE Band 13 (0); Frequency: 782 MHz; Duty Cycle: 1:1

Medium parameters used: $f = 782 \text{ MHz}$; $\sigma = 0.923 \text{ S/m}$; $\epsilon_r = 41.713$; $\rho = 1000 \text{ kg/m}^3$

Phantom section: Flat Section

DASY5 Configuration:

Probe: EX3DV4 - SN3933; ConvF(10.68, 10.68, 10.68); Calibrated: 9/27/2019 Electronics: DAE3 Sn520

Sensor-Surface: 2mm (Mechanical Surface Detection)

Phantom: ELI v5.0_2017_03_08; Type: QDIVA001BB; Serial: 1223

Measurement SW: DASY52, Version 52.10 (3); SEMCAD X Version 14.6.13 (7474)

Test Date: 2020-06-01; Ambient Temp: 21.6; Tissue Temp: 21.8

1 cm space from Body, Left, LTE Band 13 Ch. 23230, Ant Internal

Mode : BandWidth 10 MHz, QPSK, RB Size: 1

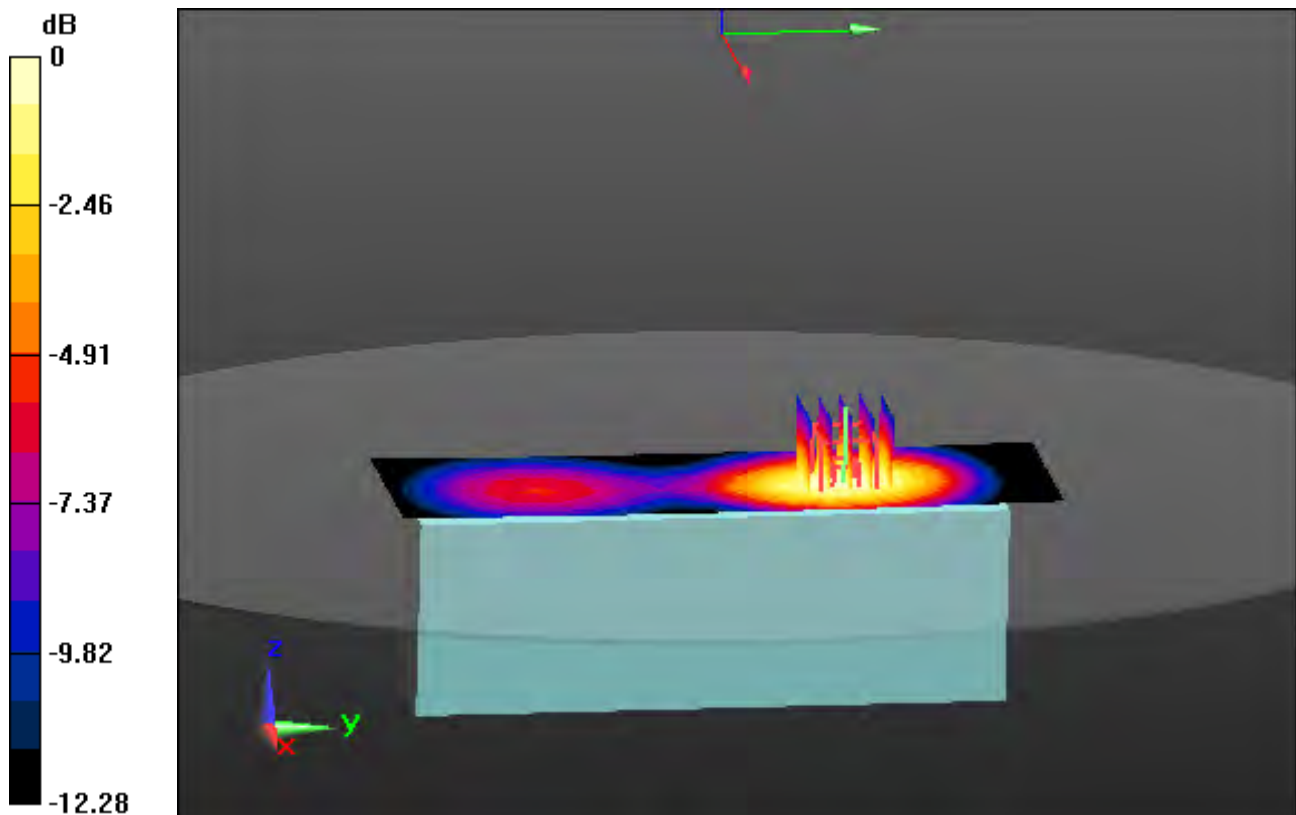
Area Scan (6x18x1): Measurement grid: $dx=15\text{mm}$, $dy=15\text{mm}$

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

Power Drift = 0.07 dB

Peak SAR (extrapolated) = 0.552 W/kg

SAR(1 g) = 0.392 W/kg; SAR(10 g) = 0.269 W/kg



0 dB = 0.482 W/kg

DT&C Co., Ltd.

DUT: PM451; Type: PDA

Communication System: UID 0, LTE Band 4 (0); Frequency: 1732.5 MHz; Duty Cycle: 1:1

Medium parameters used: $f = 1732.5$ MHz; $\sigma = 1.383$ S/m; $\epsilon_r = 39.227$; $\rho = 1000$ kg/m³
Phantom section: Flat Section

DASY5 Configuration:

Probe: ES3DV3 - SN3328; ConvF(5.34, 5.34, 5.34) @ 1732.5 MHz; Calibrated: 3/25/2020 Electronics: DAE4
Sn1335

Sensor-Surface: 3mm (Mechanical Surface Detection)

Phantom: ELI v5.0_2014_02_13; Type: QDOVA002AA; Serial: TP:1237

Measurement SW: DASY52, Version 52.10 (3); SEMCAD X Version 14.6.13 (7474)

Test Date: 2020-06-01; Ambient Temp: 21.3; Tissue Temp: 21.5

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

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

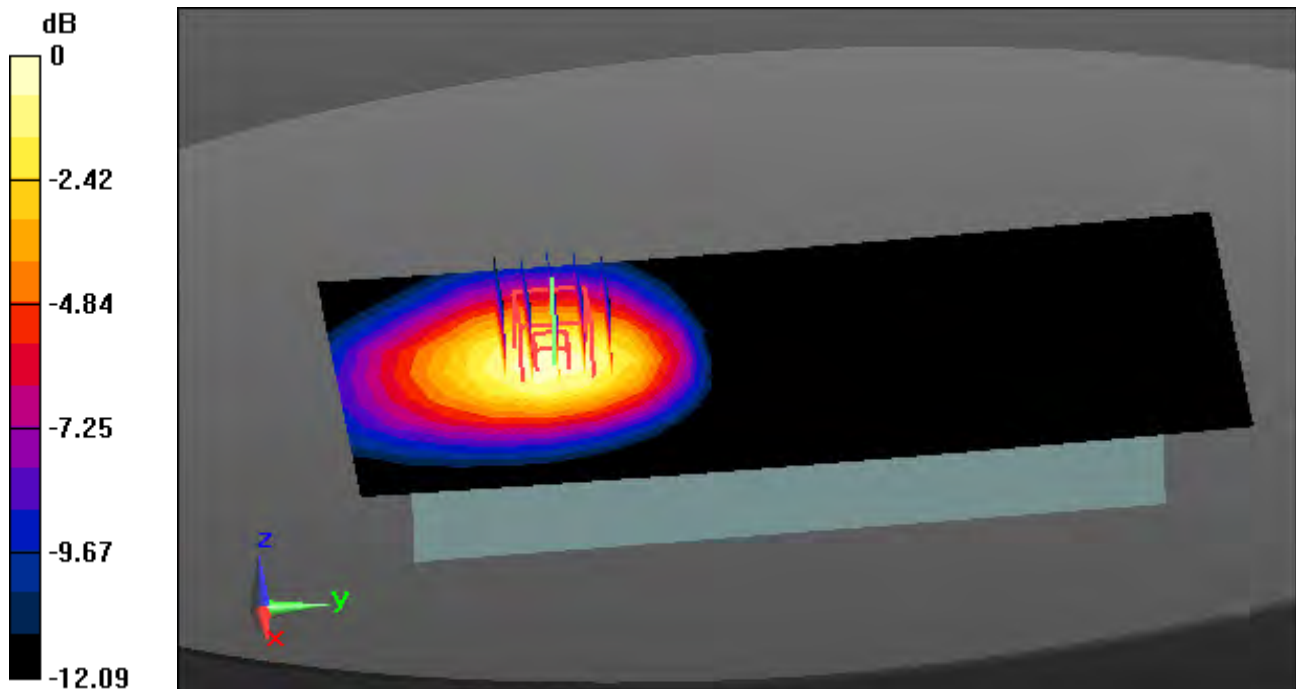
Area Scan (10x19x1): Measurement grid: dx=15mm, dy=15mm

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

Power Drift = 0.12 dB

Peak SAR (extrapolated) = 0.844 W/kg

SAR(1 g) = 0.585 W/kg; SAR(10 g) = 0.390 W/kg



0 dB = 0.682 W/kg

DT&C Co., Ltd.

DUT: PM451; Type: PDA

Communication System: UID 0, LTE Band 25 (0); Frequency: 1882.5 MHz; Duty Cycle: 1:1

Medium parameters used: $f = 1882.5$ MHz; $\sigma = 1.4$ S/m; $\epsilon_r = 40.838$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

DASY5 Configuration:

Probe: ES3DV3 - SN3328; ConvF(5.09, 5.09, 5.09) @ 1882.5 MHz; Calibrated: 3/25/2020 Electronics: DAE4 Sn1335

Sensor-Surface: 3mm (Mechanical Surface Detection)

Phantom: ELI v5.0_2014_02_13; Type: QDOVA002AA; Serial: TP:1237

Measurement SW: DASY52, Version 52.10 (3); SEMCAD X Version 14.6.13 (7474)

Test Date: 2020-05-29; Ambient Temp: 21.7; Tissue Temp: 21.8

1 cm space from Body, Rear, LTE Band 25 Ch. 26365, Ant Internal

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

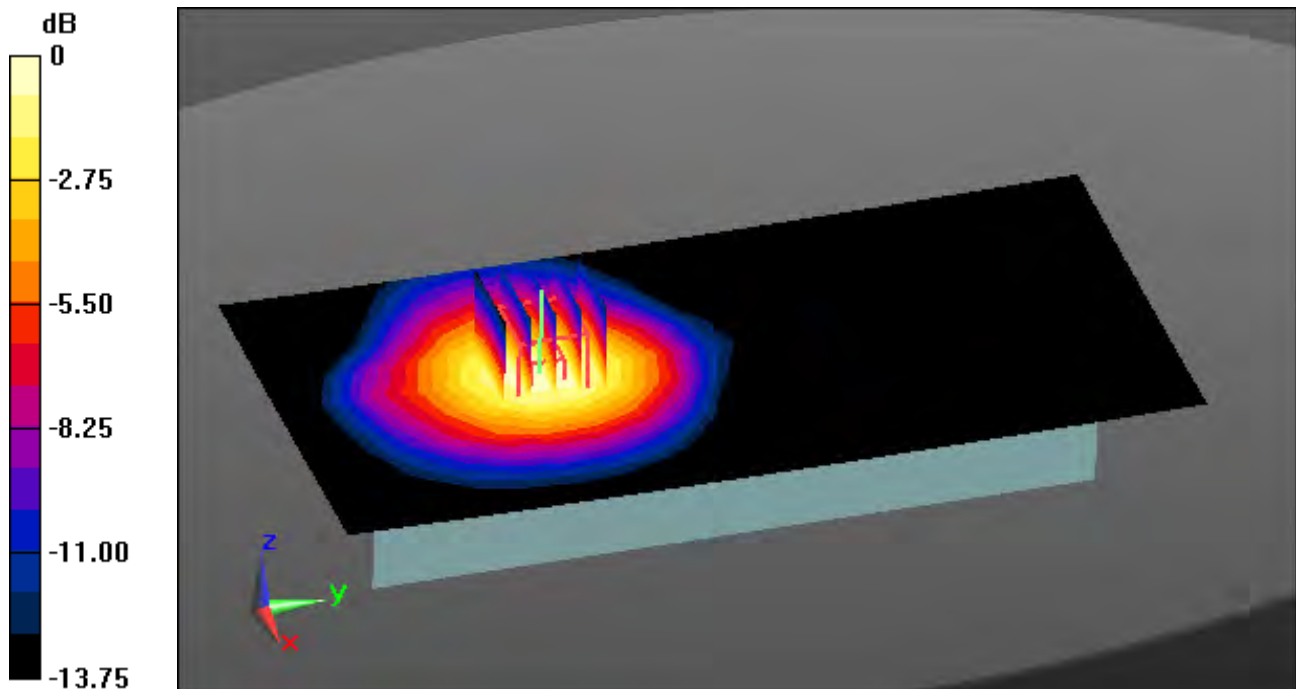
Area Scan (10x19x1): Measurement grid: dx=15mm, dy=15mm

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

Power Drift = -0.02 dB

Peak SAR (extrapolated) = 1.02 W/kg

SAR(1 g) = 0.699 W/kg; SAR(10 g) = 0.451 W/kg



0 dB = 0.814 W/kg

DT&C Co., Ltd.

DUT: PM451; Type: Bar

Communication System: UID 0, LTE Band 41(TDD) (0); Frequency: 2593 MHz; Duty Cycle: 1:1.58

Medium parameters used: $f = 2593 \text{ MHz}$; $\sigma = 1.94 \text{ S/m}$; $\epsilon_r = 39.729$; $\rho = 1000 \text{ kg/m}^3$

Phantom section: Flat Section

DASY5 Configuration:

Probe: ES3DV3 - SN3328; ConvF(4.57, 4.57, 4.57) @ 2593 MHz; Calibrated: 3/25/2020 Electronics: DAE4 Sn1335

Sensor-Surface: 3mm (Mechanical Surface Detection)

Phantom: ELI v5.0_2014_02_13; Type: QDOVA002AA; Serial: TP:1237

Measurement SW: DASY52, Version 52.10 (3); SEMCAD X Version 14.6.13 (7474)

Test Date: 2020-06-02; Ambient Temp: 21.7; Tissue Temp: 21.8

1 cm space from Body, Bottom, LTE Band 41 Ch. 40620, Ant Internal

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

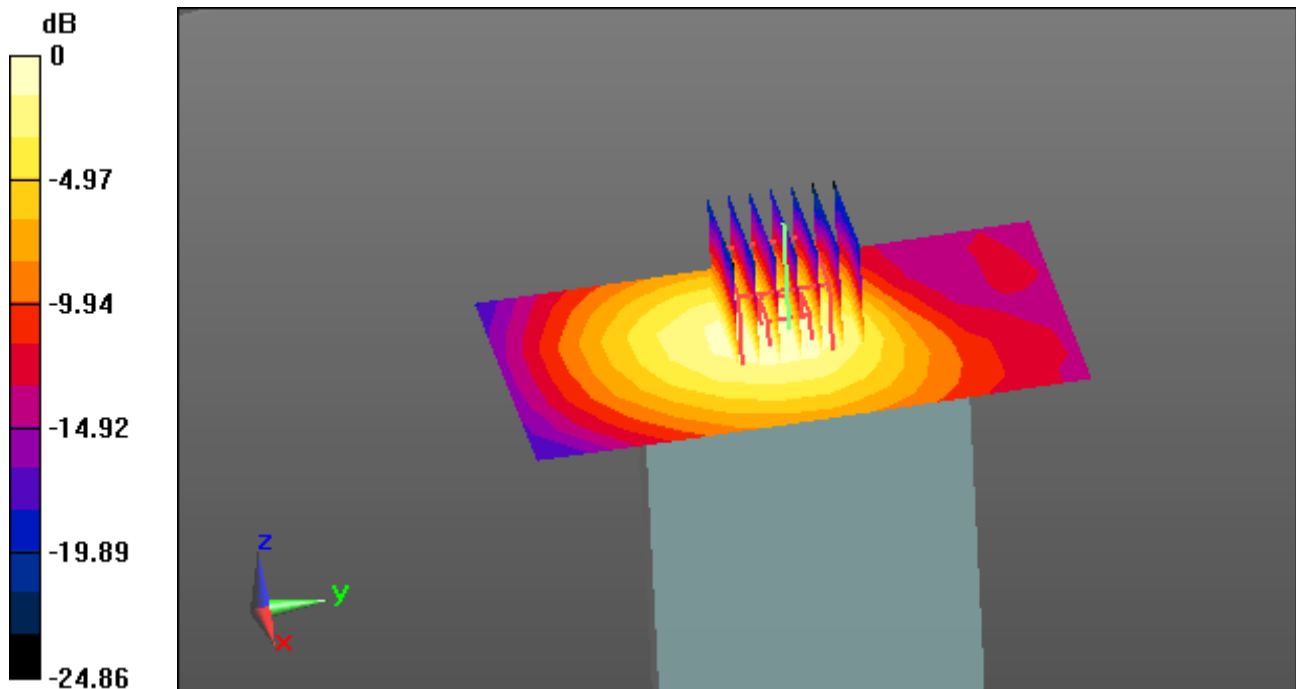
Area Scan (7x12x1): Measurement grid: $dx=12\text{mm}$, $dy=12\text{mm}$

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

Power Drift = 0.17 dB

Peak SAR (extrapolated) = 0.349 W/kg

SAR(1 g) = 0.177 W/kg; SAR(10 g) = 0.093 W/kg



0 dB = 0.223 W/kg

DT&C Co., Ltd.

DUT: PM451; Type: PDA

Communication System: UID 0, 00_2.4 GHz W-LAN (0); Frequency: 2462 MHz; Duty Cycle: 1:1

Medium parameters used: $f = 2462 \text{ MHz}$; $\sigma = 1.81 \text{ S/m}$; $\epsilon_r = 37.786$; $\rho = 1000 \text{ kg/m}^3$

Phantom section: Flat Section

DASY5 Configuration:

Probe: ES3DV3 - SN3328; ConvF(4.7, 4.7, 4.7) @ 2462 MHz; Calibrated: 3/25/2020 Electronics: DAE4 Sn1335

Sensor-Surface: 3mm (Mechanical Surface Detection)

Phantom: ELI v5.0_2014_02_13; Type: QDOVA002AA; Serial: TP:1237

Measurement SW: DASY52, Version 52.10 (3); SEMCAD X Version 14.6.13 (7474)

Test Date: 2020-06-03; Ambient Temp: 21.4; Tissue Temp: 21.2

1 cm space from Body, Left, WLAN(802.11b) Ch. 11, Ant Internal, Ant.1

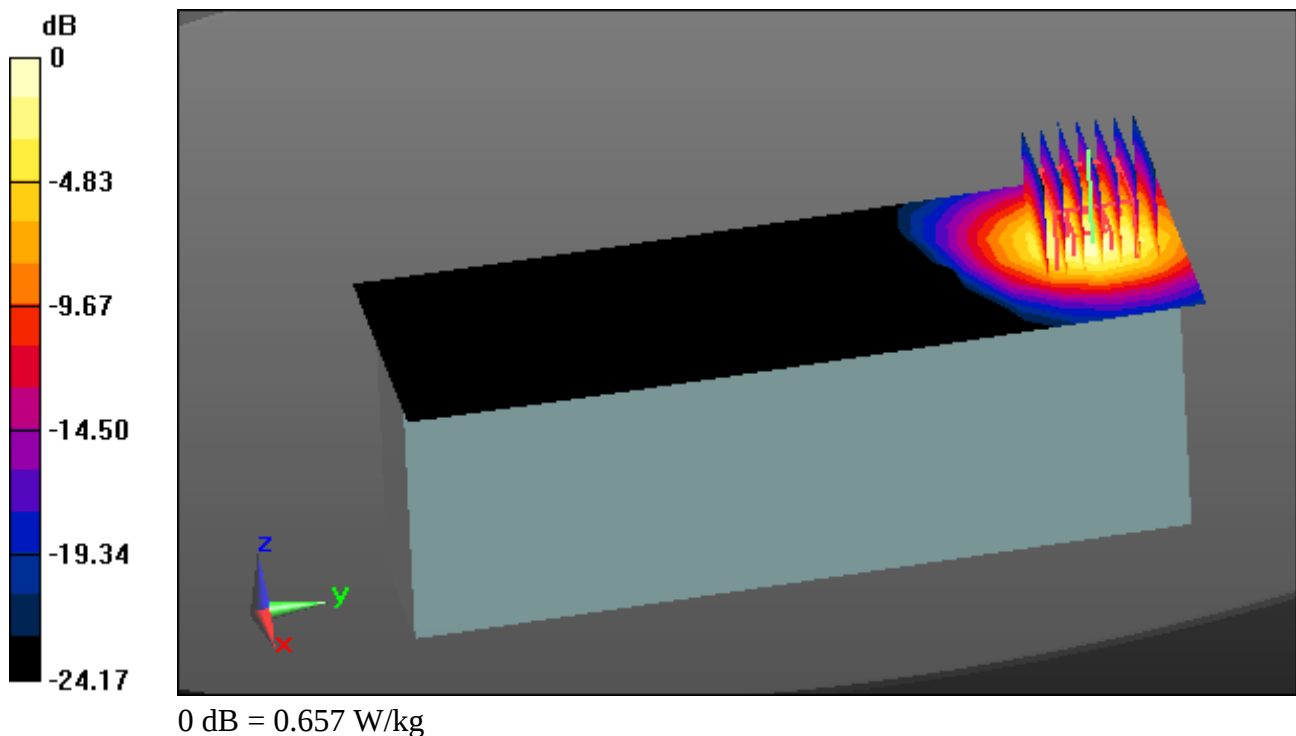
Area Scan (7x19x1): Measurement grid: $dx=12\text{mm}$, $dy=12\text{mm}$

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

Power Drift = 0.10 dB

Peak SAR (extrapolated) = 0.996 W/kg

SAR(1 g) = 0.508 W/kg; SAR(10 g) = 0.238 W/kg



DT&C Co., Ltd.

DUT: PM451; Type: PDA

Communication System: UID 0, 00_2.4 GHz W-LAN (0); Frequency: 2437 MHz; Duty Cycle: 1:1

Medium parameters used: $f = 2437$ MHz; $\sigma = 1.782$ S/m; $\epsilon_r = 37.857$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

DASY5 Configuration:

Probe: ES3DV3 - SN3328; ConvF(4.7, 4.7, 4.7) @ 2437 MHz; Calibrated: 3/25/2020 Electronics: DAE4 Sn1335

Sensor-Surface: 3mm (Mechanical Surface Detection)

Phantom: ELI v5.0_2014_02_13; Type: QDOVA002AA; Serial: TP:1237

Measurement SW: DASY52, Version 52.10 (3); SEMCAD X Version 14.6.13 (7474)

Test Date: 2020-06-03; Ambient Temp: 21.4; Tissue Temp: 21.2

1 cm space from Body, Right, WLAN(802.11b) Ch. 6, Ant Internal, Ant.2

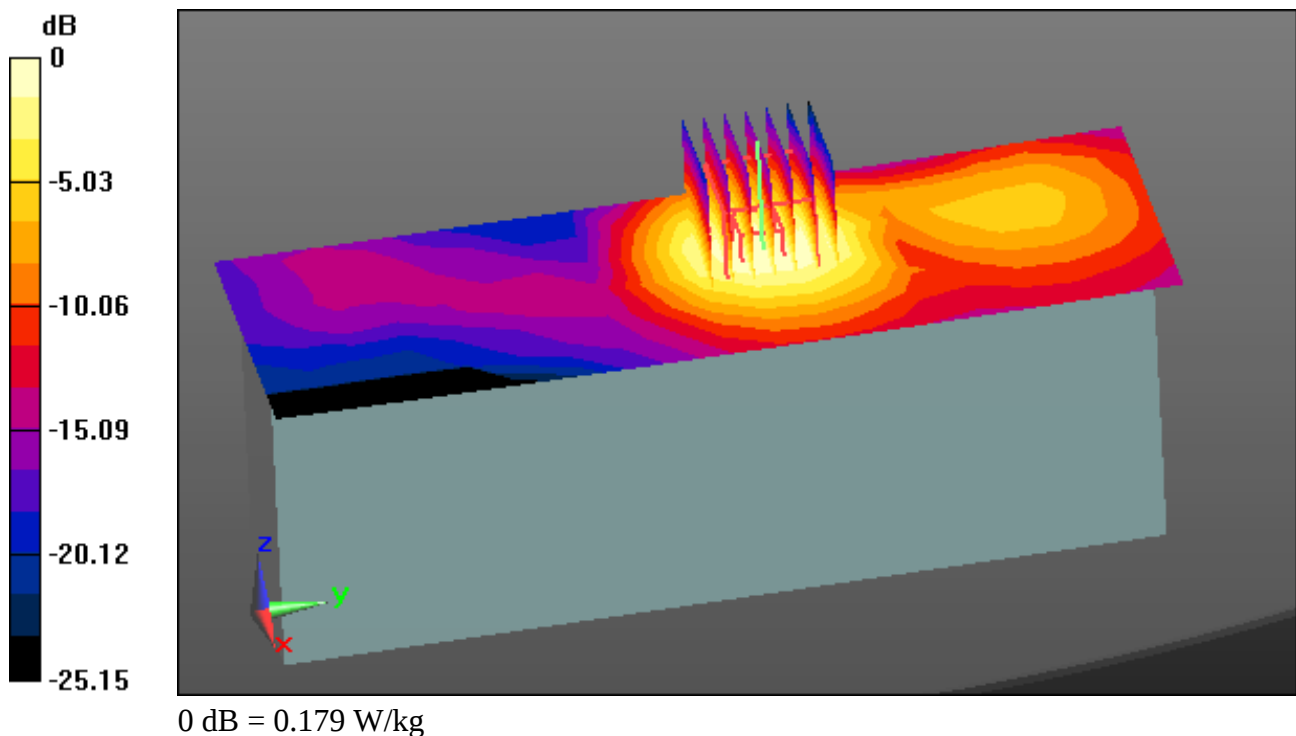
Area Scan (7x19x1): Measurement grid: dx=12mm, dy=12mm

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

Power Drift = 0.01 dB

Peak SAR (extrapolated) = 0.260 W/kg

SAR(1 g) = 0.144 W/kg; SAR(10 g) = 0.077 W/kg



DT&C Co., Ltd.

DUT: PM451; Type: PDA

Communication System: UID 0, 00_2.4 GHz W-LAN (0); Frequency: 2437 MHz; Duty Cycle: 1:1

Medium parameters used: $f = 2437$ MHz; $\sigma = 1.782$ S/m; $\epsilon_r = 37.857$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

DASY5 Configuration:

Probe: ES3DV3 - SN3328; ConvF(4.7, 4.7, 4.7) @ 2437 MHz; Calibrated: 3/25/2020 Electronics: DAE4 Sn1335

Sensor-Surface: 3mm (Mechanical Surface Detection)

Phantom: ELI v5.0_2014_02_13; Type: QDOVA002AA; Serial: TP:1237

Measurement SW: DASY52, Version 52.10 (3); SEMCAD X Version 14.6.13 (7474)

Test Date: 2020-06-03; Ambient Temp: 21.4; Tissue Temp: 21.2

1 cm space from Body, Left, WLAN(802.11b) Ch. 6, Ant Internal,MIMO

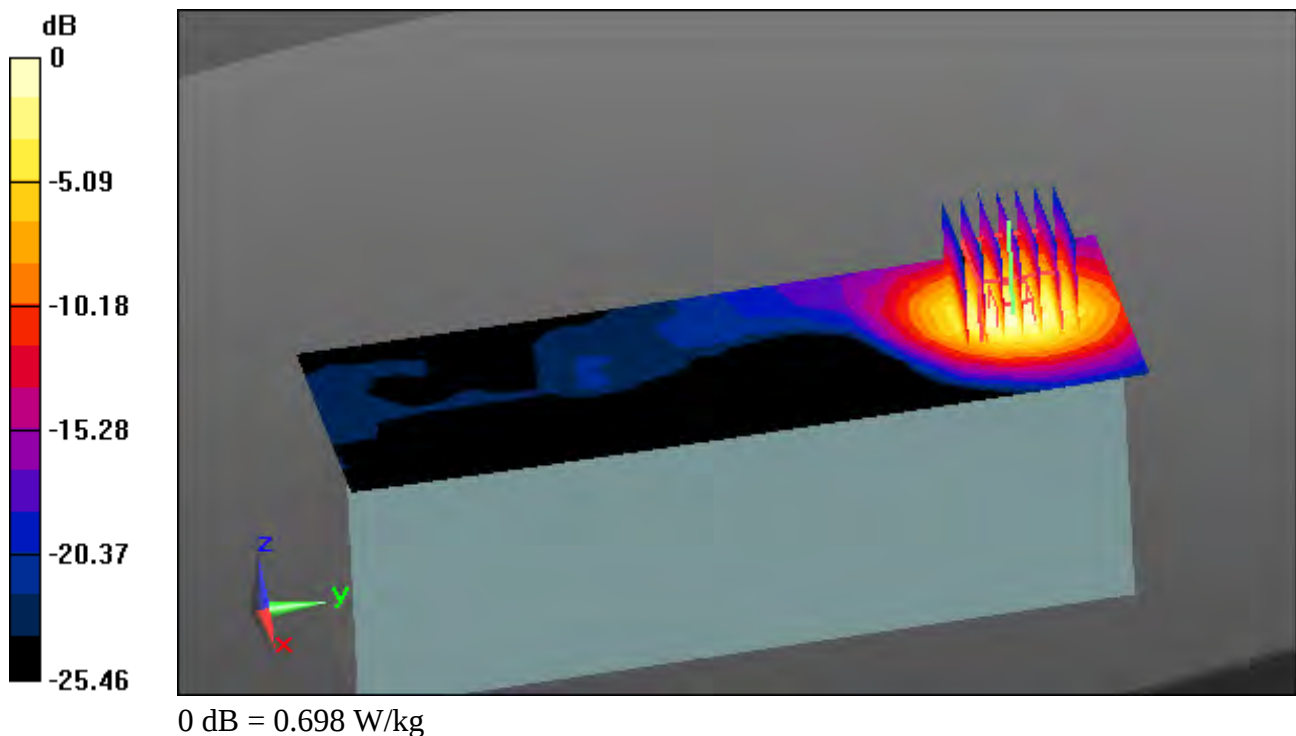
Area Scan (7x19x1): Measurement grid: dx=12mm, dy=12mm

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

Power Drift = -0.05 dB

Peak SAR (extrapolated) = 1.06 W/kg

SAR(1 g) = 0.534 W/kg; SAR(10 g) = 0.250 W/kg



DT&C Co., Ltd.

DUT: PM451; Type: PDA

Communication System: UID 0, W-LAN_5800 (0); Frequency: 5825 MHz; Duty Cycle: 1:1

Medium parameters used: $f = 5825 \text{ MHz}$; $\sigma = 5.415 \text{ S/m}$; $\epsilon_r = 34.782$; $\rho = 1000 \text{ kg/m}^3$

Phantom section: Flat Section

DASY5 Configuration:

Probe: EX3DV4 - SN3933; ConvF(4.75, 4.75, 4.75); Calibrated: 9/27/2019 Electronics: DAE3 Sn520

Sensor-Surface: 1.4mm (Mechanical Surface Detection)

Phantom: ELI v5.0_2017_03_08; Type: QDIVA001BB; Serial: 1223

Measurement SW: DASY52, Version 52.10 (3); SEMCAD X Version 14.6.13 (7474)

Test Date: 2020-06-04; Ambient Temp: 21.1; Tissue Temp: 21.1

1 cm space from Body, Left, WLAN(802.11a) Ch. 165, Ant Internal, Ant.1

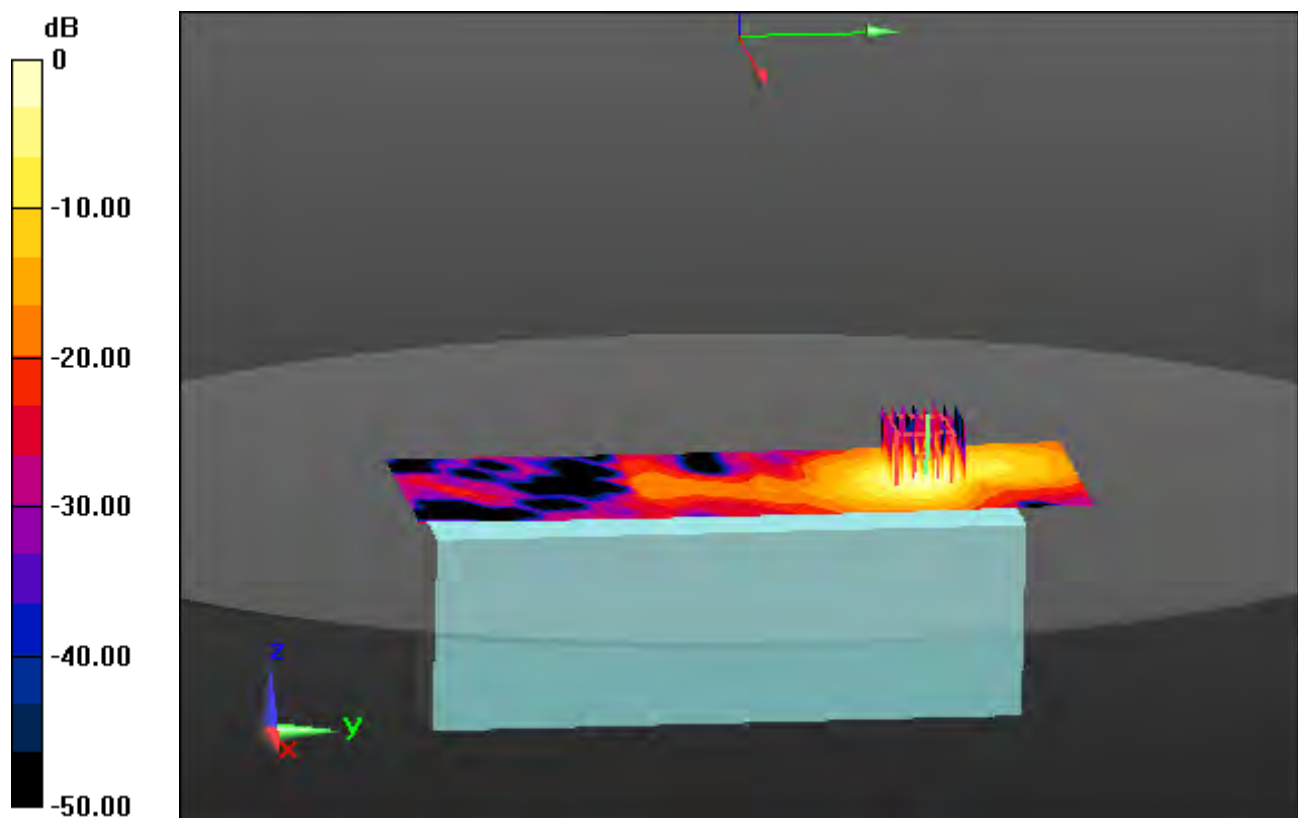
Area Scan (9x27x1): Measurement grid: $dx=10\text{mm}$, $dy=10\text{mm}$

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

Power Drift = 0.07 dB

Peak SAR (extrapolated) = 1.92 W/kg

SAR(1 g) = 0.471 W/kg; SAR(10 g) = 0.166 W/kg



0 dB = 1.09 W/kg

DT&C Co., Ltd.

DUT: PM451; Type: PDA

Communication System: UID 0, W-LAN_5800 (0); Frequency: 5785 MHz; Duty Cycle: 1:1

Medium parameters used: $f = 5785 \text{ MHz}$; $\sigma = 5.361 \text{ S/m}$; $\epsilon_r = 34.851$; $\rho = 1000 \text{ kg/m}^3$

Phantom section: Flat Section

DASY5 Configuration:

Probe: EX3DV4 - SN3933; ConvF(4.75, 4.75, 4.75); Calibrated: 9/27/2019 Electronics: DAE3 Sn520

Sensor-Surface: 1.4mm (Mechanical Surface Detection)

Phantom: ELI v5.0_2017_03_08; Type: QDIVA001BB; Serial: 1223

Measurement SW: DASY52, Version 52.10 (3); SEMCAD X Version 14.6.13 (7474)

Test Date: 2020-06-04; Ambient Temp: 21.1; Tissue Temp: 21.1

1 cm space from Body, Right, WLAN(802.11a) Ch. 157, Ant Internal, Ant.2

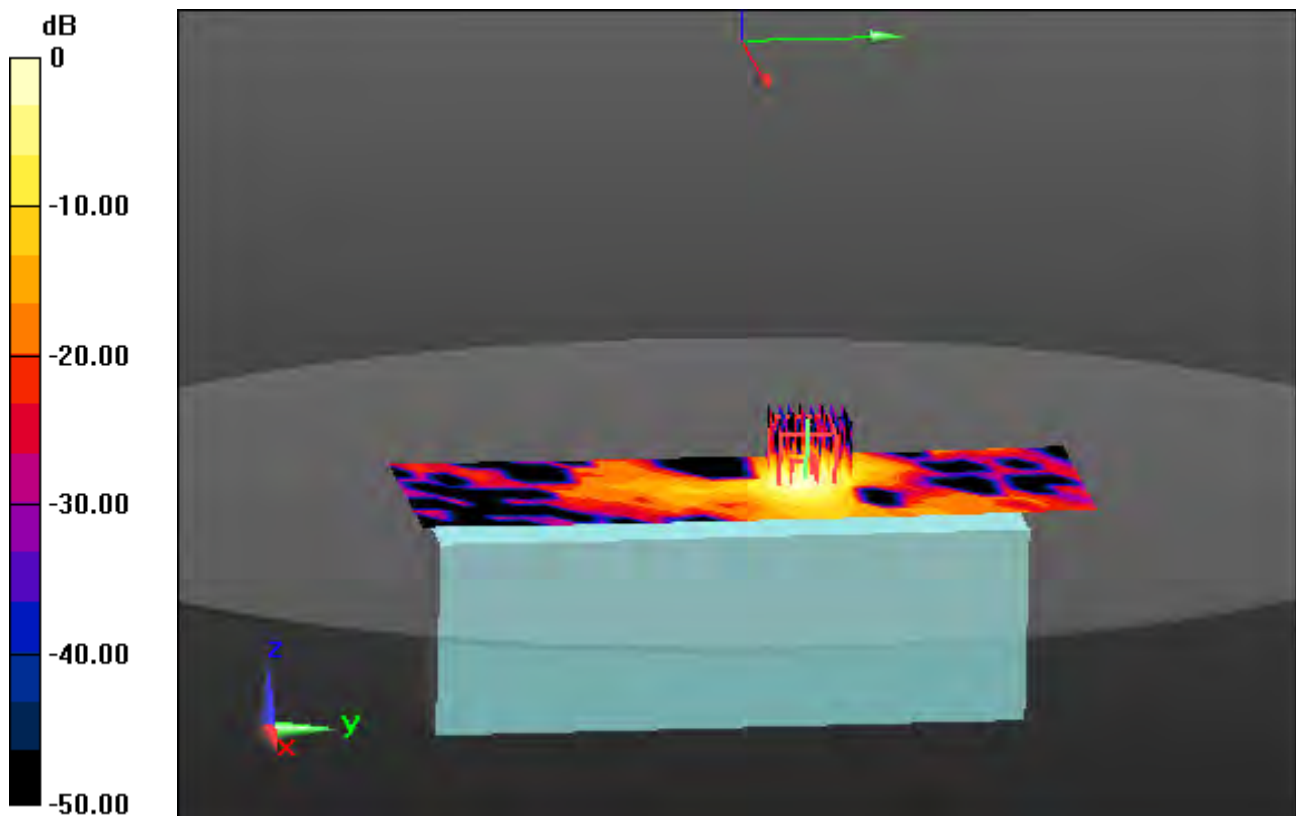
Area Scan (9x27x1): Measurement grid: $dx=10\text{mm}$, $dy=10\text{mm}$

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

Power Drift = -0.09 dB

Peak SAR (extrapolated) = 0.585 W/kg

SAR(1 g) = 0.147 W/kg; SAR(10 g) = 0.049 W/kg



0 dB = 0.350 W/kg

DT&C Co., Ltd.

DUT: PM451; Type: PDA

Communication System: UID 0, W-LAN_5800 (0); Frequency: 5785 MHz; Duty Cycle: 1:1

Medium parameters used: $f = 5785 \text{ MHz}$; $\sigma = 5.361 \text{ S/m}$; $\epsilon_r = 34.851$; $\rho = 1000 \text{ kg/m}^3$

Phantom section: Flat Section

DASY5 Configuration:

Probe: EX3DV4 - SN3933; ConvF(4.75, 4.75, 4.75); Calibrated: 9/27/2019 Electronics: DAE3 Sn520

Sensor-Surface: 1.4mm (Mechanical Surface Detection)

Phantom: ELI v5.0_2017_03_08; Type: QDIVA001BB; Serial: 1223

Measurement SW: DASY52, Version 52.10 (3); SEMCAD X Version 14.6.13 (7474)

Test Date: 2020-06-04; Ambient Temp: 21.1; Tissue Temp: 21.1

1 cm space from Body, Left, WLAN(802.11a) Ch. 157, Ant Internal, MIMO

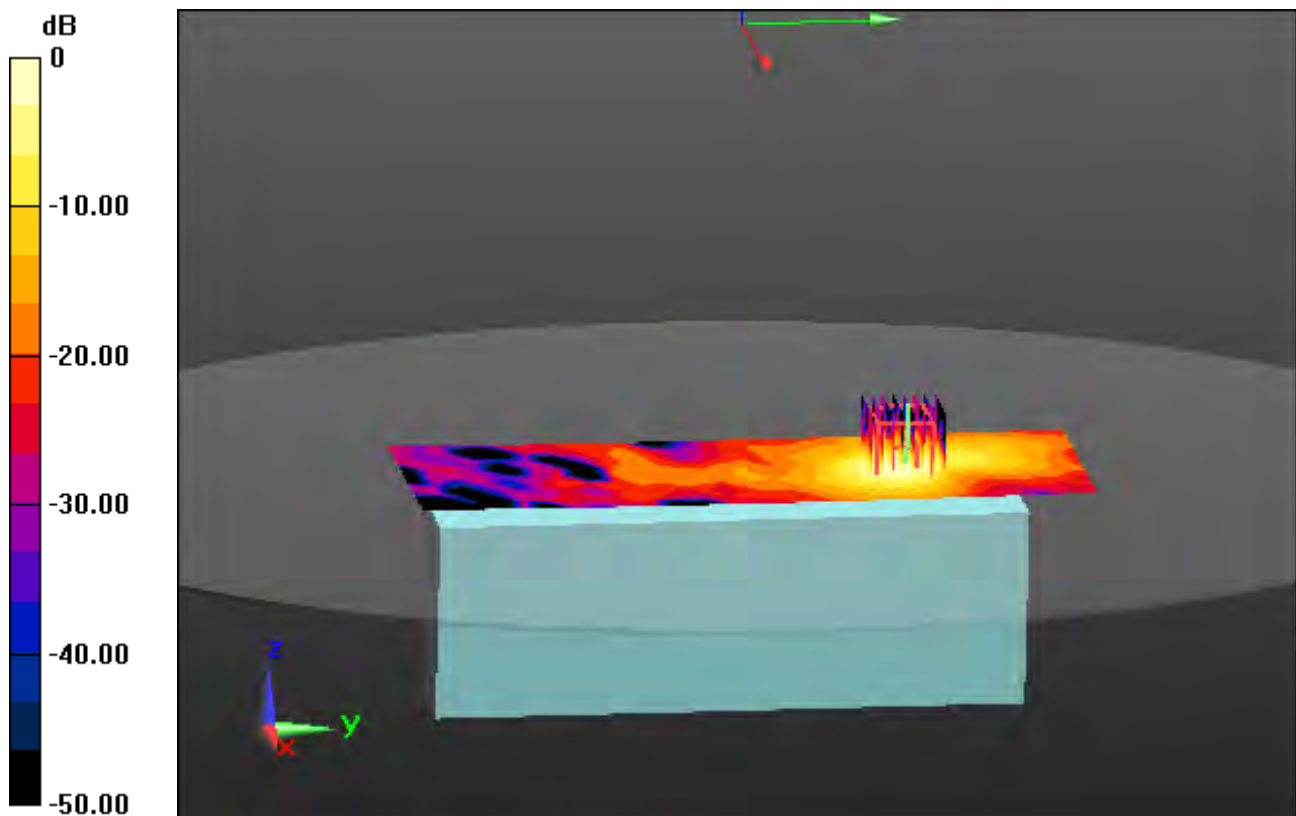
Area Scan (9x27x1): Measurement grid: $dx=10\text{mm}$, $dy=10\text{mm}$

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

Power Drift = 0.02 dB

Peak SAR (extrapolated) = 1.94 W/kg

SAR(1 g) = 0.474 W/kg; SAR(10 g) = 0.164 W/kg



0 dB = 1.09 W/kg

DT&C Co., Ltd.

DUT: PM451; Type: PDA

Communication System: UID 0, Bluetooth (0); Frequency: 2441 MHz; Duty Cycle: 1:1.302

Medium parameters used: $f = 2441 \text{ MHz}$; $\sigma = 1.786 \text{ S/m}$; $\epsilon_r = 37.843$; $\rho = 1000 \text{ kg/m}^3$

Phantom section: Flat Section

DASY5 Configuration:

Probe: ES3DV3 - SN3328; ConvF(4.7, 4.7, 4.7) @ 2441 MHz; Calibrated: 3/25/2020 Electronics: DAE4 Sn1335

Sensor-Surface: 3mm (Mechanical Surface Detection)

Phantom: ELI v5.0_2014_02_13; Type: QDOVA002AA; Serial: TP:1237

Measurement SW: DASY52, Version 52.10 (3); SEMCAD X Version 14.6.13 (7474)

Test Date: 2020-06-03; Ambient Temp: 21.4; Tissue Temp: 21.2

1 cm space from Body, Left, Bluetooth 1Mbps Ch. 39, Ant Internal

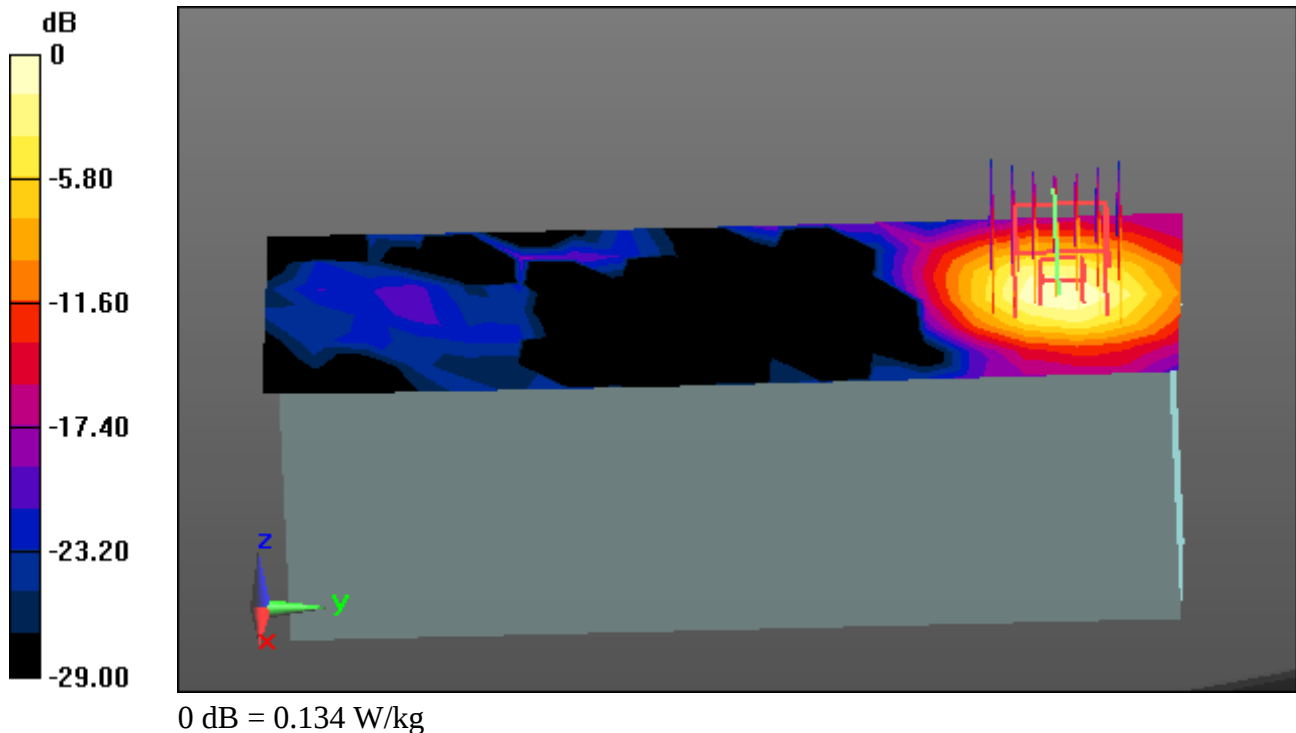
Area Scan (7x19x1): Measurement grid: $dx=12\text{mm}$, $dy=12\text{mm}$

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

Power Drift = -0.01 dB

Peak SAR (extrapolated) = 0.211 W/kg

SAR(1 g) = 0.105 W/kg; SAR(10 g) = 0.048 W/kg



DT&C Co., Ltd.

DUT: PM451; Type: PDA

Communication System: UID 0, GSM 850_12 (0); Frequency: 836.6 MHz; Duty Cycle: 1:2.075

Medium parameters used: $f = 836.6 \text{ MHz}$; $\sigma = 0.923 \text{ S/m}$; $\epsilon_r = 42.898$; $\rho = 1000 \text{ kg/m}^3$

Phantom section: Flat Section

DASY5 Configuration:

Probe: EX3DV4 - SN3933; ConvF(10.32, 10.32, 10.32); Calibrated: 9/27/2019 Electronics: DAE3 Sn520

Sensor-Surface: 2mm (Mechanical Surface Detection)

Phantom: ELI v5.0_2017_03_08; Type: QDIVA001BB; Serial: 1223

Measurement SW: DASY52, Version 52.10 (3); SEMCAD X Version 14.6.13 (7474)

Test Date: 2020-05-29; Ambient Temp: 20.3; Tissue Temp: 20.5

Touch from Body, Rear, GSM850 GPRS 4 Tx Ch. 190, Ant Internal

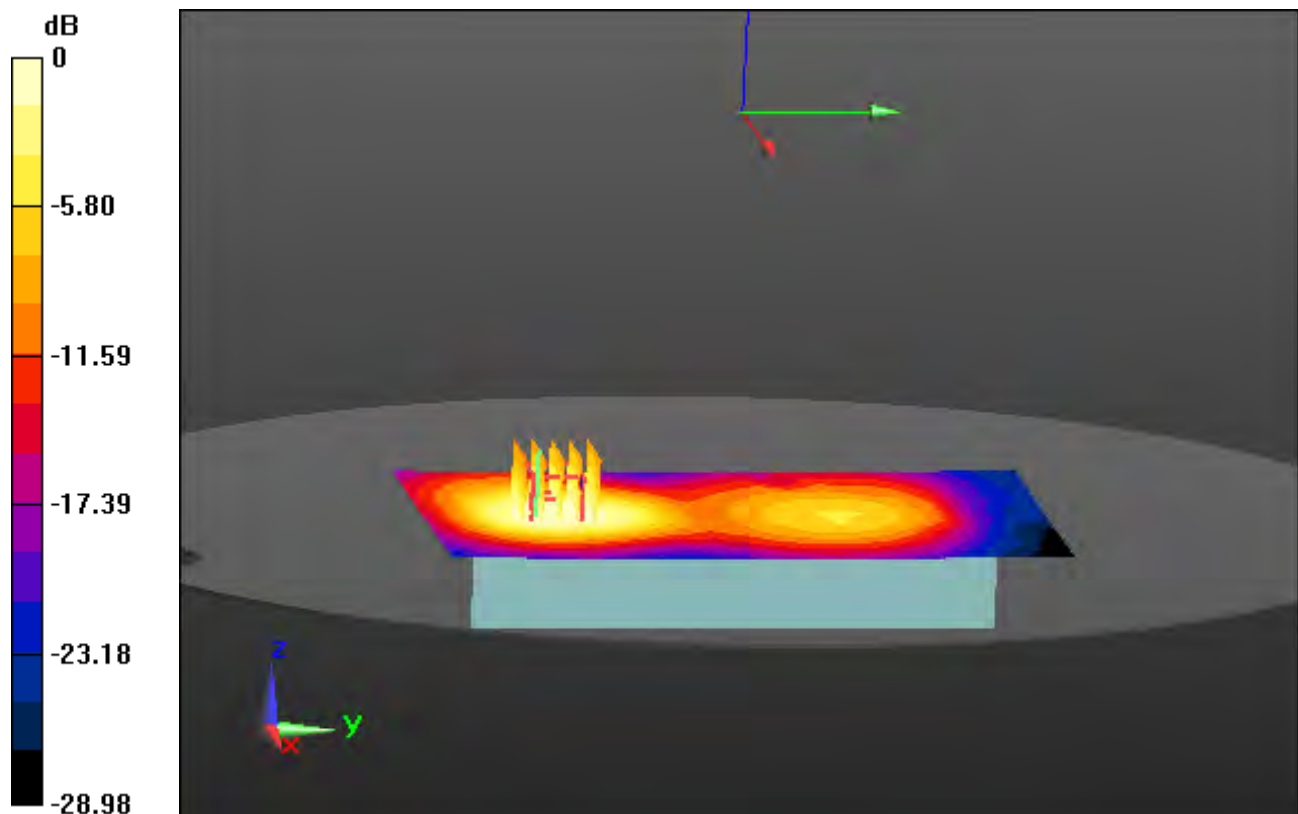
Area Scan (10x19x1): Measurement grid: $dx=15\text{mm}$, $dy=15\text{mm}$

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

Power Drift = -0.02 dB

Peak SAR (extrapolated) = 1.57 W/kg

SAR(1 g) = 1.13 W/kg; SAR(10 g) = 0.781 W/kg



0 dB = 1.34 W/kg

DT&C Co., Ltd.

DUT: PM451; Type: PDA;

Communication System: UID 0, PCS1900_4 Tx (0); Frequency: 1880 MHz; Duty Cycle: 1:2.075

Medium parameters used: $f = 1880$ MHz; $\sigma = 1.398$ S/m; $\epsilon_r = 40.844$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

DASY5 Configuration:

Probe: ES3DV3 - SN3328; ConvF(5.09, 5.09, 5.09) @ 1880 MHz; Calibrated: 3/25/2020 Electronics: DAE4 Sn1335

Sensor-Surface: 3mm (Mechanical Surface Detection)

Phantom: ELI v5.0_2014_02_13; Type: QDOVA002AA; Serial: TP:1237

Measurement SW: DASY52, Version 52.10 (3); SEMCAD X Version 14.6.13 (7474)

Test Date: 2020-05-29; Ambient Temp: 21.7; Tissue Temp: 21.8

Touch from Body, Rear, PCS1900 GPRS 4 Tx Ch. 661, Ant Internal

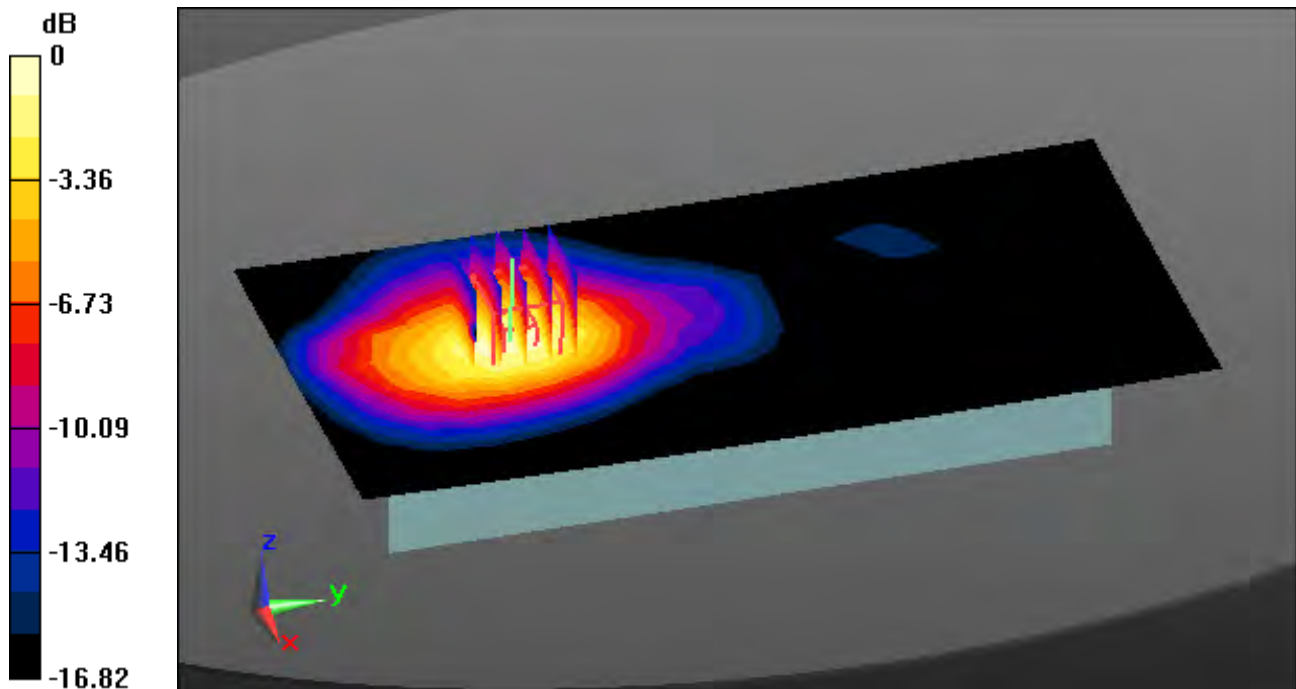
Area Scan (10x19x1): Measurement grid: dx=15mm, dy=15mm

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

Power Drift = 0.07 dB

Peak SAR (extrapolated) = 1.95 W/kg

SAR(1 g) = 1.35 W/kg; SAR(10 g) = 0.830 W/kg



0 dB = 1.59 W/kg

DT&C Co., Ltd.

DUT: PM451; Type: PDA

Communication System: UID 0, WCDMA 850 (0); Frequency: 836.6 MHz; Duty Cycle: 1:1

Medium parameters used: $f = 836.6 \text{ MHz}$; $\sigma = 0.923 \text{ S/m}$; $\epsilon_r = 42.898$; $\rho = 1000 \text{ kg/m}^3$

Phantom section: Flat Section

DASY5 Configuration:

Probe: EX3DV4 - SN3933; ConvF(10.32, 10.32, 10.32); Calibrated: 9/27/2019 Electronics: DAE3 Sn520

Sensor-Surface: 2mm (Mechanical Surface Detection)

Phantom: ELI v5.0_2017_03_08; Type: QDIVA001BB; Serial: 1223

Measurement SW: DASY52, Version 52.10 (3); SEMCAD X Version 14.6.13 (7474)

Test Date: 2020-05-29; Ambient Temp: 20.3; Tissue Temp: 20.5

Touch from Body, Left, WCDMA Band 5 Ch. 4183, Ant Internal

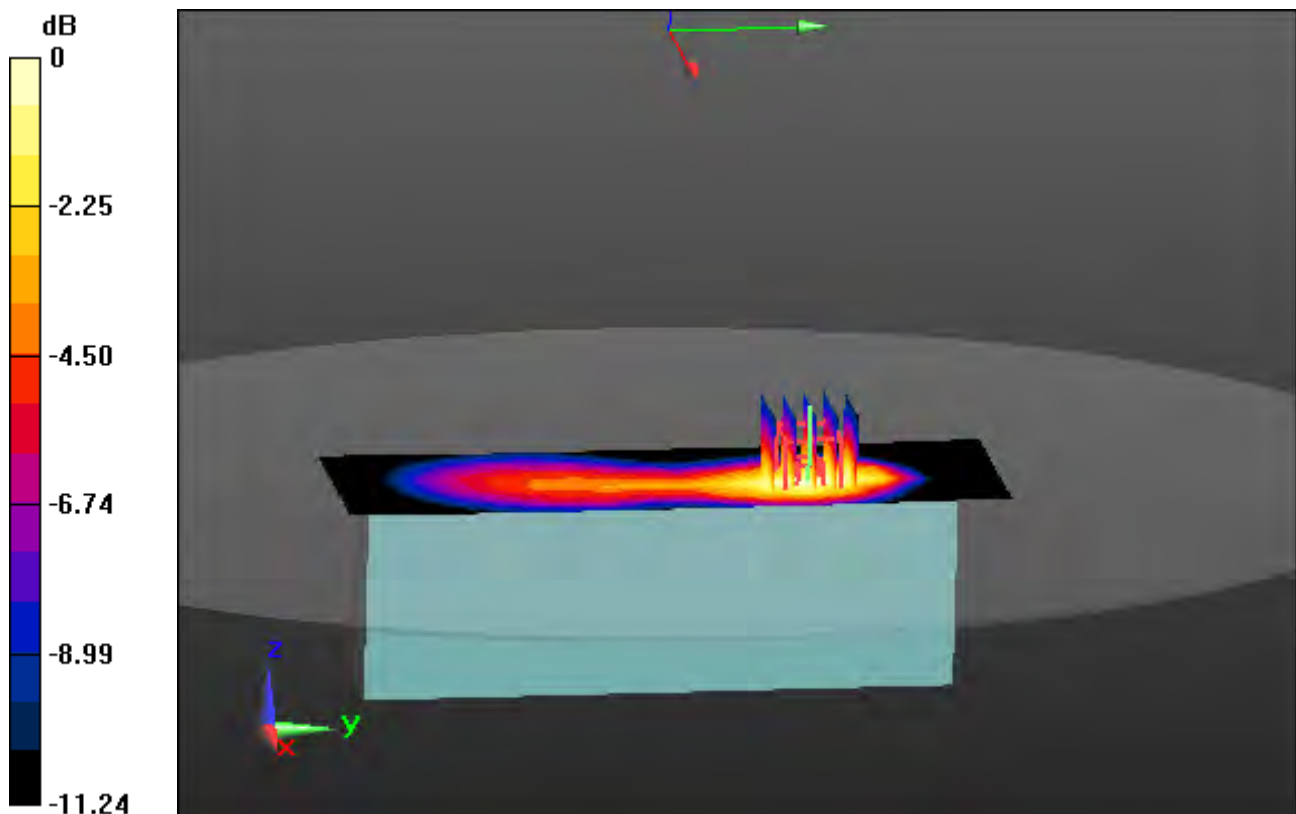
Area Scan (6x18x1): Measurement grid: $dx=15\text{mm}$, $dy=15\text{mm}$

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

Power Drift = -0.12 dB

Peak SAR (extrapolated) = 1.12 W/kg

SAR(1 g) = 0.753 W/kg; SAR(10 g) = 0.499 W/kg



0 dB = 0.949 W/kg

DT&C Co., Ltd.

DUT: PM451; Type: PDA

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

Medium parameters used: $f = 1732.4$ MHz; $\sigma = 1.383$ S/m; $\epsilon_r = 39.227$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

DASY5 Configuration:

Probe: ES3DV3 - SN3328; ConvF(5.34, 5.34, 5.34) @ 1732.4 MHz; Calibrated: 3/25/2020 Electronics: DAE4 Sn1335

Sensor-Surface: 3mm (Mechanical Surface Detection)

Phantom: ELI v5.0_2014_02_13; Type: QDOVA002AA; Serial: TP:1237

Measurement SW: DASY52, Version 52.10 (3); SEMCAD X Version 14.6.13 (7474)

Test Date: 2020-06-01; Ambient Temp: 21.3; Tissue Temp: 21.5

Touch from Body, Front, WCDMA Band 4 Ch. 1412, Ant Internal

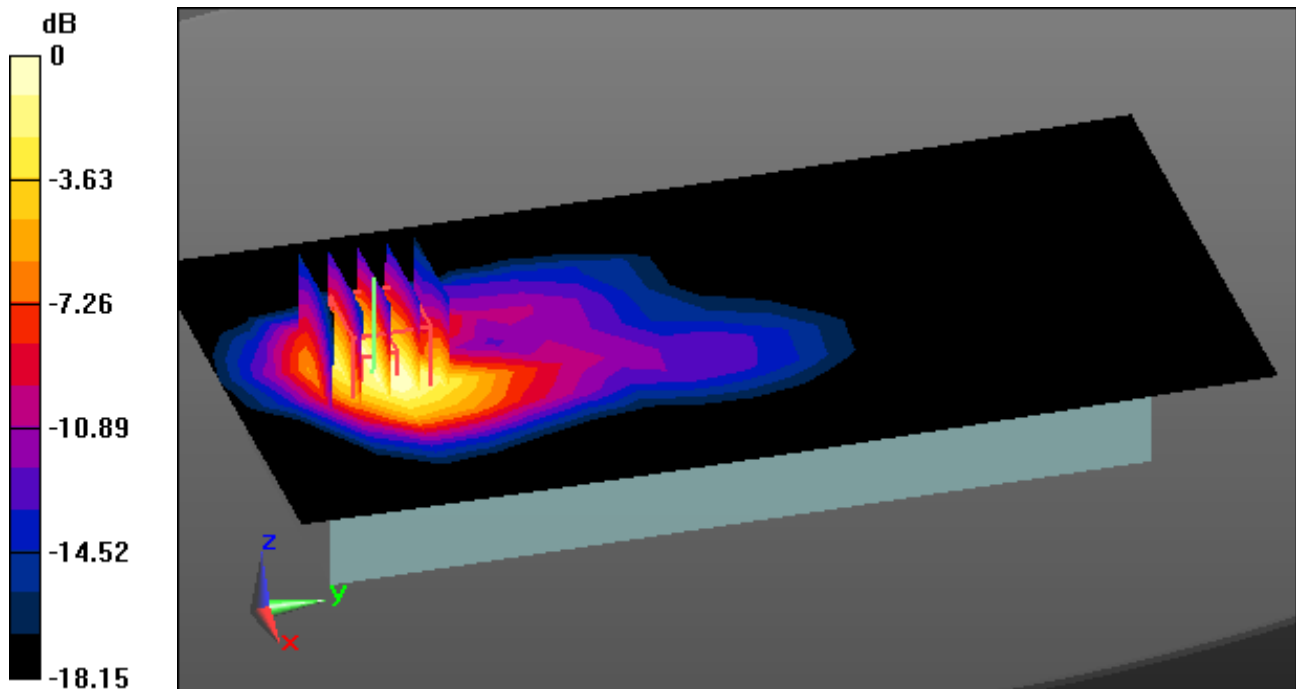
Area Scan (10x19x1): Measurement grid: dx=15mm, dy=15mm

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

Power Drift = -0.01 dB

Peak SAR (extrapolated) = 3.01 W/kg

SAR(1 g) = 1.82 W/kg; SAR(10 g) = 1 W/kg



0 dB = 2.20 W/kg

DT&C Co., Ltd.

DUT: PM451; Type: PDA

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

Medium parameters used: $f = 1880$ MHz; $\sigma = 1.398$ S/m; $\epsilon_r = 40.844$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

DASY5 Configuration:

Probe: ES3DV3 - SN3328; ConvF(5.09, 5.09, 5.09) @ 1880 MHz; Calibrated: 3/25/2020 Electronics: DAE4 Sn1335

Sensor-Surface: 3mm (Mechanical Surface Detection)

Phantom: ELI v5.0_2014_02_13; Type: QDOVA002AA; Serial: TP:1237

Measurement SW: DASY52, Version 52.10 (3); SEMCAD X Version 14.6.13 (7474)

Test Date: 2020-05-29; Ambient Temp: 21.7; Tissue Temp: 21.8

Touch from Body, Rear, WCDMA Band 2 Ch. 9400, Ant Internal

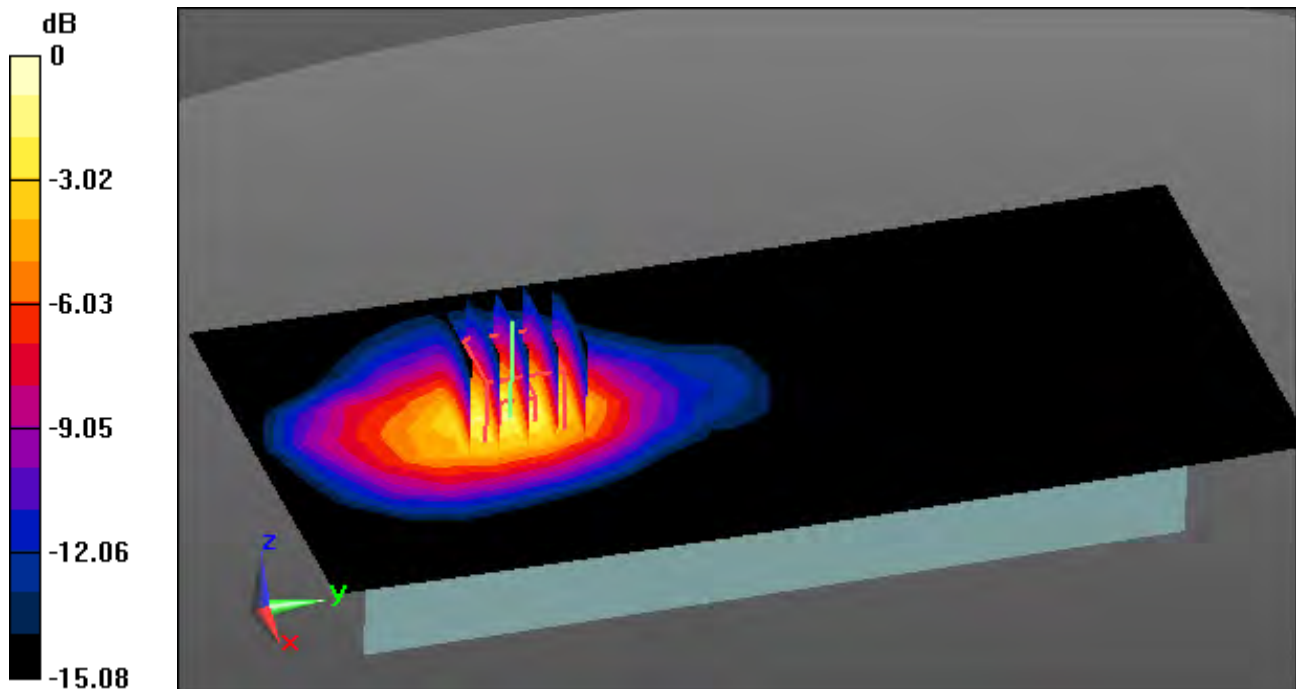
Area Scan (10x19x1): Measurement grid: dx=15mm, dy=15mm

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

Power Drift = 0.09 dB

Peak SAR (extrapolated) = 2.32 W/kg

SAR(1 g) = 1.64 W/kg; SAR(10 g) = 1.01 W/kg



0 dB = 2.50 W/kg

DT&C Co., Ltd.

DUT: PM451; Type: PDA

Communication System: UID 0, LTE Band 12 (0); Frequency: 707.5 MHz; Duty Cycle: 1:1

Medium parameters used: $f = 707.5 \text{ MHz}$; $\sigma = 0.856 \text{ S/m}$; $\epsilon_r = 42.748$; $\rho = 1000 \text{ kg/m}^3$

Phantom section: Flat Section

DASY5 Configuration:

Probe: EX3DV4 - SN3933; ConvF(10.68, 10.68, 10.68); Calibrated: 9/27/2019 Electronics: DAE3 Sn520

Sensor-Surface: 2mm (Mechanical Surface Detection)

Phantom: ELI v5.0_2017_03_08; Type: QDIVA001BB; Serial: 1223

Measurement SW: DASY52, Version 52.10 (3); SEMCAD X Version 14.6.13 (7474)

Test Date: 2020-06-01; Ambient Temp: 21.6; Tissue Temp: 21.8

Touch from Body, Front, LTE Band 12 Ch. 23095, Ant Internal

Mode : BandWidth 10 MHz, QPSK, RB Size: 1

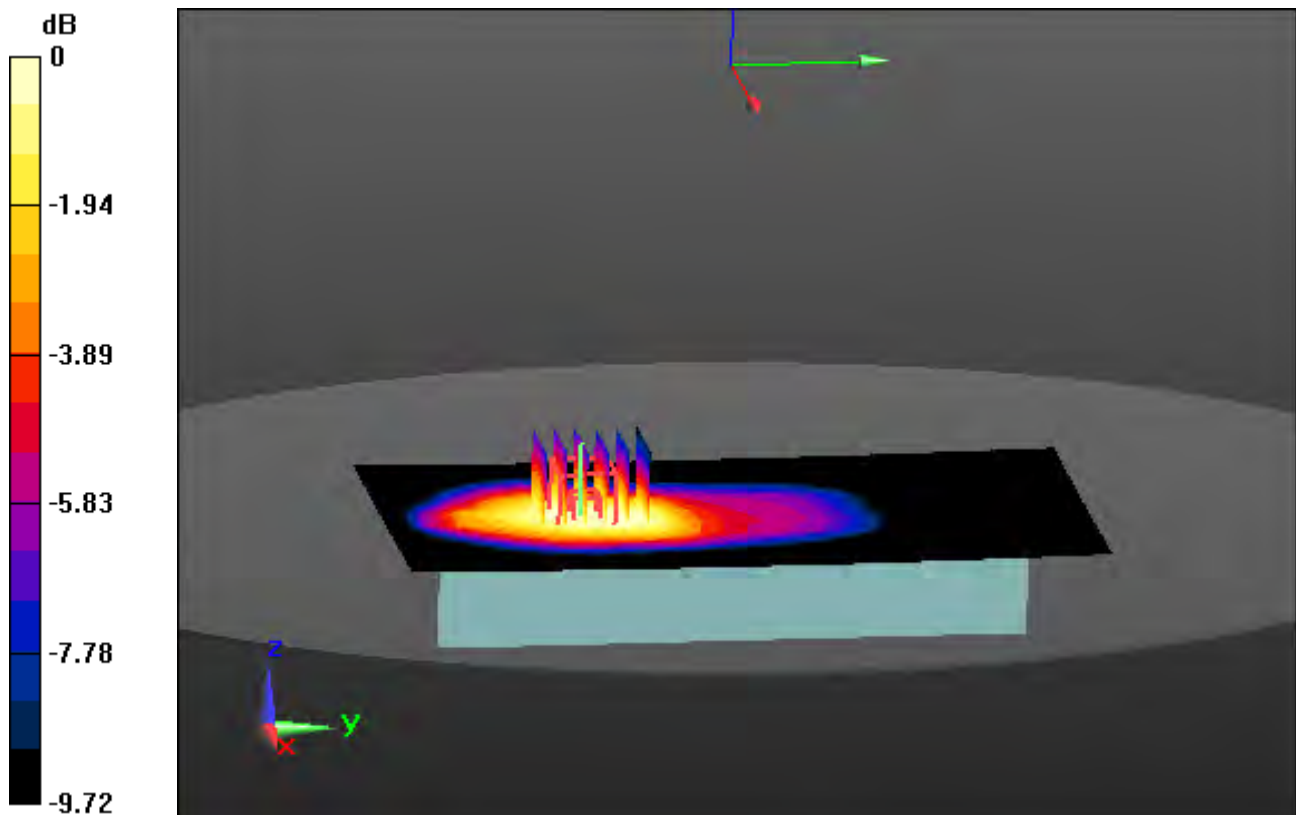
Area Scan (10x19x1): Measurement grid: $dx=15\text{mm}$, $dy=15\text{mm}$

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

Power Drift = -0.00 dB

Peak SAR (extrapolated) = 0.596 W/kg

SAR(1 g) = 0.463 W/kg; SAR(10 g) = 0.343 W/kg



0 dB = 0.530 W/kg

DT&C Co., Ltd.

DUT: PM451; Type: PDA

Communication System: UID 0, LTE Band 13 (0); Frequency: 782 MHz; Duty Cycle: 1:1

Medium parameters used: $f = 782 \text{ MHz}$; $\sigma = 0.923 \text{ S/m}$; $\epsilon_r = 41.713$; $\rho = 1000 \text{ kg/m}^3$

Phantom section: Flat Section

DASY5 Configuration:

Probe: EX3DV4 - SN3933; ConvF(10.68, 10.68, 10.68); Calibrated: 9/27/2019 Electronics: DAE3 Sn520

Sensor-Surface: 2mm (Mechanical Surface Detection)

Phantom: ELI v5.0_2017_03_08; Type: QDIVA001BB; Serial: 1223

Measurement SW: DASY52, Version 52.10 (3); SEMCAD X Version 14.6.13 (7474)

Test Date: 2020-06-01; Ambient Temp: 21.6; Tissue Temp: 21.8

Touch from Body, Left, LTE Band 13 Ch. 23230, Ant Internal

Mode : BandWidth 10 MHz, QPSK, RB Size: 1

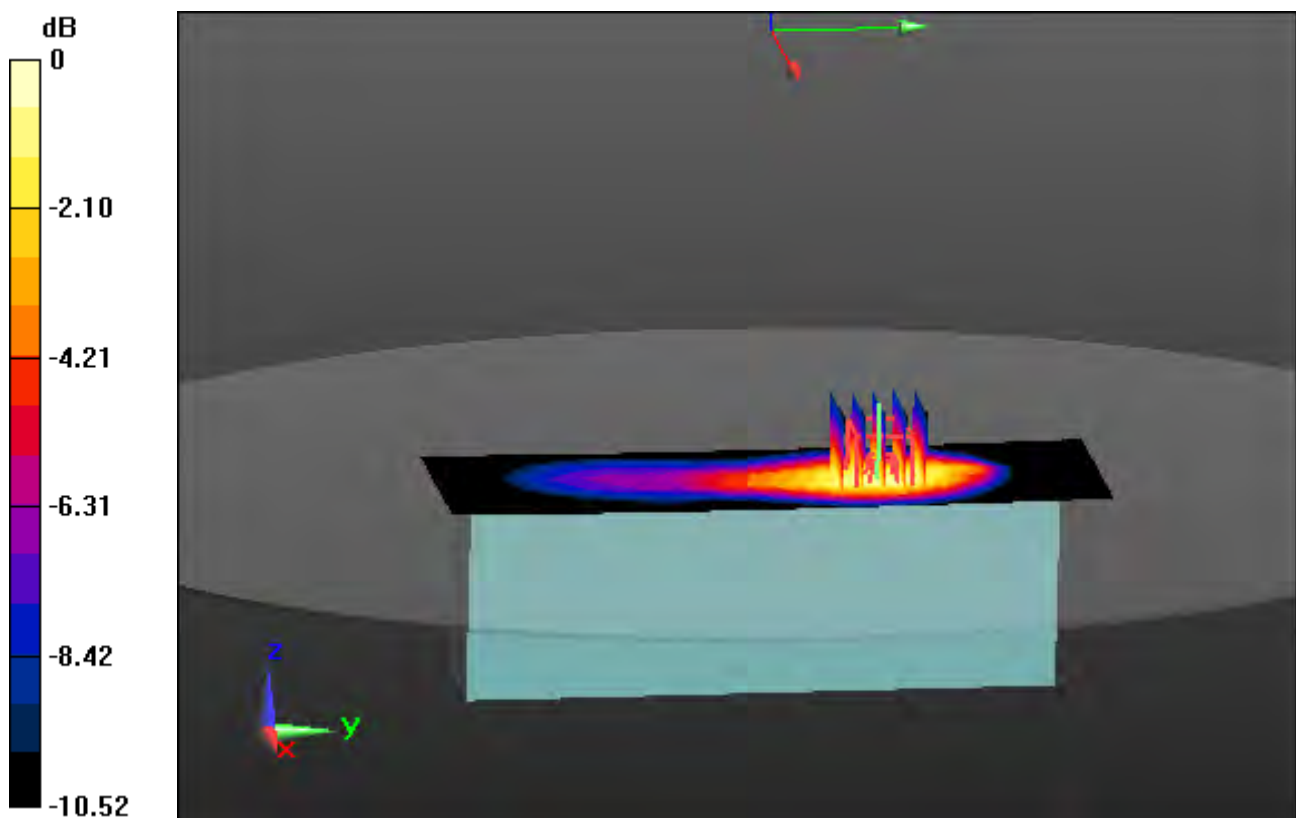
Area Scan (6x18x1): Measurement grid: $dx=15\text{mm}$, $dy=15\text{mm}$

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

Power Drift = 0.10 dB

Peak SAR (extrapolated) = 1.09 W/kg

SAR(1 g) = 0.723 W/kg; SAR(10 g) = 0.479 W/kg



0 dB = 0.921 W/kg

DT&C Co., Ltd.

DUT: PM451; Type: PDA

Communication System: UID 0, LTE Band 26 (0); Frequency: 831.5 MHz; Duty Cycle: 1:1

Medium parameters used: $f = 831.5$ MHz; $\sigma = 0.919$ S/m; $\epsilon_r = 42.957$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

DASY5 Configuration:

Probe: EX3DV4 - SN3933; ConvF(10.32, 10.32, 10.32); Calibrated: 9/27/2019 Electronics: DAE3 Sn520

Sensor-Surface: 2mm (Mechanical Surface Detection)

Phantom: ELI v5.0_2017_03_08; Type: QDIVA001BB; Serial: 1223

Measurement SW: DASY52, Version 52.10 (3); SEMCAD X Version 14.6.13 (7474)

Test Date: 2020-05-29; Ambient Temp: 20.3; Tissue Temp: 20.5

Touch from Body, Left, LTE Band 26 Ch. 26865, Ant Internal

Mode : BandWidth 15 MHz, QPSK, RB Size: 1

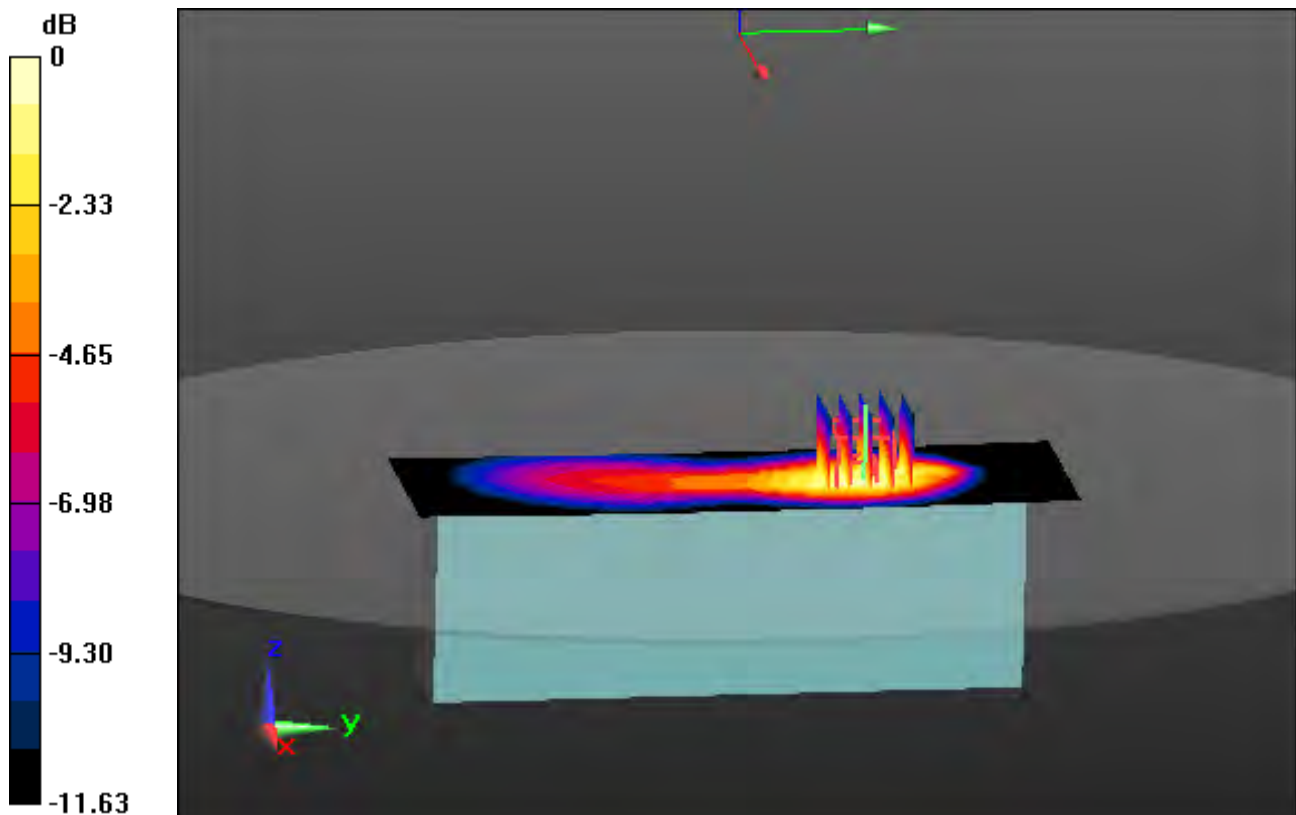
Area Scan (6x18x1): Measurement grid: dx=15mm, dy=15mm

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

Power Drift = 0.10 dB

Peak SAR (extrapolated) = 1.17 W/kg

SAR(1 g) = 0.767 W/kg; SAR(10 g) = 0.501 W/kg



0 dB = 0.986 W/kg

DT&C Co., Ltd.

DUT: PM451; Type: PDA

Communication System: UID 0, LTE Band 4 (0); Frequency: 1732.5 MHz; Duty Cycle: 1:1

Medium parameters used: $f = 1732.5$ MHz; $\sigma = 1.383$ S/m; $\epsilon_r = 39.227$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

DASY5 Configuration:

Probe: ES3DV3 - SN3328; ConvF(5.34, 5.34, 5.34) @ 1732.5 MHz; Calibrated: 3/25/2020 Electronics: DAE4 Sn1335

Sensor-Surface: 3mm (Mechanical Surface Detection)

Phantom: ELI v5.0_2014_02_13; Type: QDOVA002AA; Serial: TP:1237

Measurement SW: DASY52, Version 52.10 (3); SEMCAD X Version 14.6.13 (7474)

Test Date: 2020-06-01; Ambient Temp: 21.3; Tissue Temp: 21.5

Touch from Body, Front, LTE Band 4 Ch. 20175, Ant Internal

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

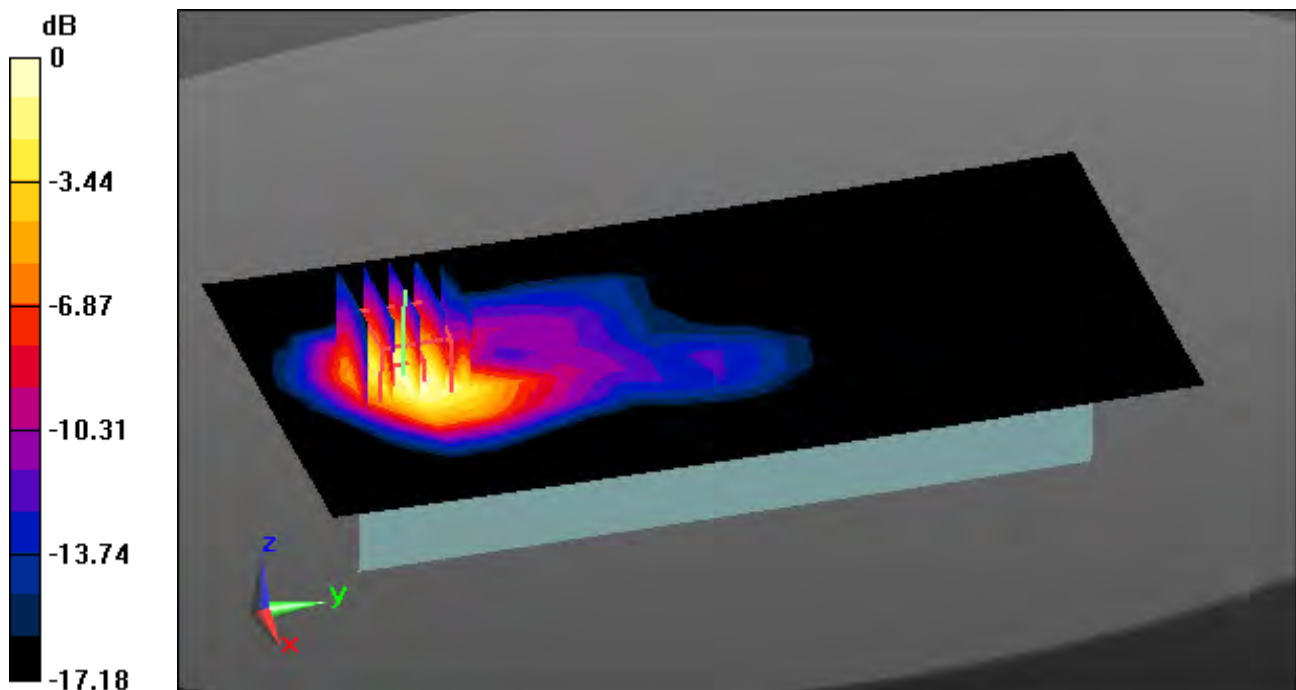
Area Scan (10x19x1): Measurement grid: dx=15mm, dy=15mm

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

Power Drift = 0.01 dB

Peak SAR (extrapolated) = 3.08 W/kg

SAR(1 g) = 1.84 W/kg; SAR(10 g) = 1.01 W/kg



0 dB = 2.33 W/kg

DT&C Co., Ltd.

DUT: PM451; Type: PDA

Communication System: UID 0, LTE Band 25 (0); Frequency: 1882.5 MHz; Duty Cycle: 1:1

Medium parameters used: $f = 1882.5$ MHz; $\sigma = 1.4$ S/m; $\epsilon_r = 40.838$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

DASY5 Configuration:

Probe: ES3DV3 - SN3328; ConvF(5.09, 5.09, 5.09) @ 1882.5 MHz; Calibrated: 3/25/2020 Electronics: DAE4 Sn1335

Sensor-Surface: 3mm (Mechanical Surface Detection)

Phantom: ELI v5.0_2014_02_13; Type: QDOVA002AA; Serial: TP:1237

Measurement SW: DASY52, Version 52.10 (3); SEMCAD X Version 14.6.13 (7474)

Test Date: 2020-05-29; Ambient Temp: 21.7; Tissue Temp: 21.8

Touch from Body, Front, LTE Band 25 Ch. 26365, Ant Internal

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

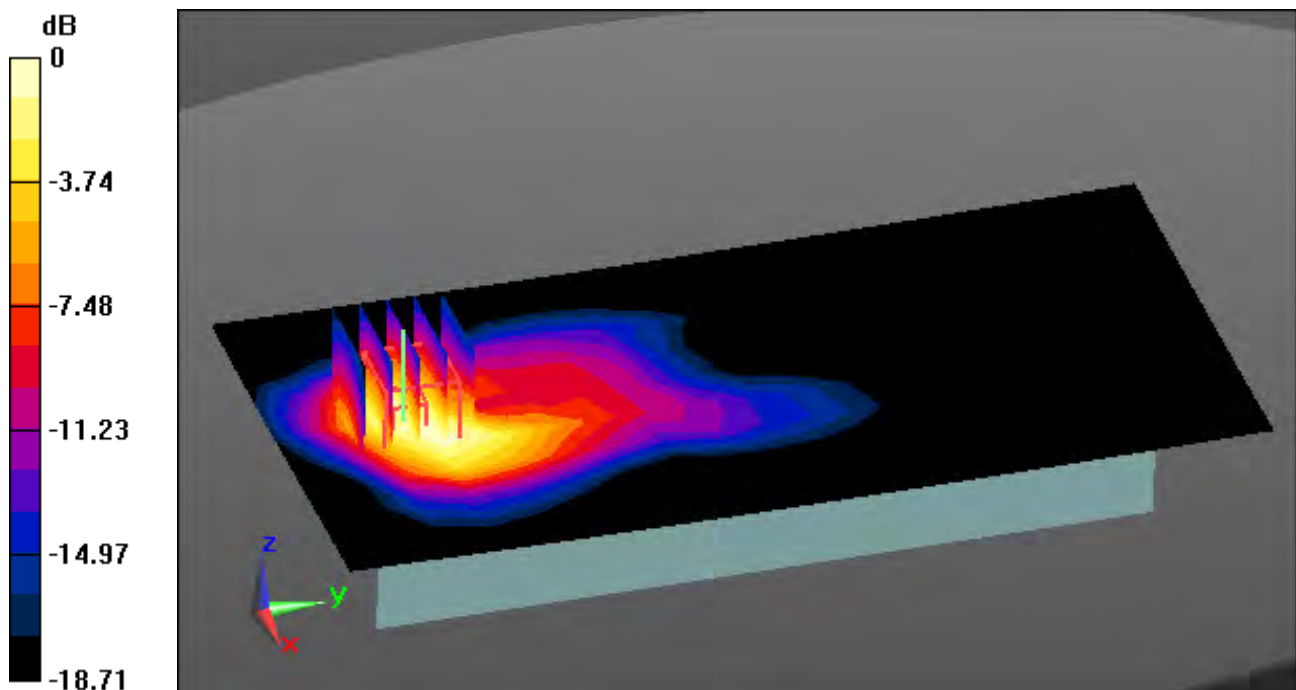
Area Scan (10x19x1): Measurement grid: dx=15mm, dy=15mm

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

Power Drift = 0.04 dB

Peak SAR (extrapolated) = 2.76 W/kg

SAR(1 g) = 1.55 W/kg; SAR(10 g) = 0.836 W/kg



0 dB = 1.97 W/kg

DT&C Co., Ltd.

DUT: PM451; Type: PDA

Communication System: UID 0, LTE Band 7 (FCC) (0); Frequency: 2510 MHz; Duty Cycle: 1:1

Medium parameters used: $f = 2510$ MHz; $\sigma = 1.848$ S/m; $\epsilon_r = 40.003$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

DASY5 Configuration:

Probe: ES3DV3 - SN3328; ConvF(4.57, 4.57, 4.57) @ 2510 MHz; Calibrated: 3/25/2020 Electronics: DAE4 Sn1335

Sensor-Surface: 3mm (Mechanical Surface Detection)

Phantom: ELI v5.0_2014_02_13; Type: QDOVA002AA; Serial: TP:1237

Measurement SW: DASY52, Version 52.10 (3); SEMCAD X Version 14.6.13 (7474)

Test Date: 2020-06-02; Ambient Temp: 21.7; Tissue Temp: 21.8

Touch from Body, Rear, LTE Band 7 Ch. 20850, Ant Internal

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

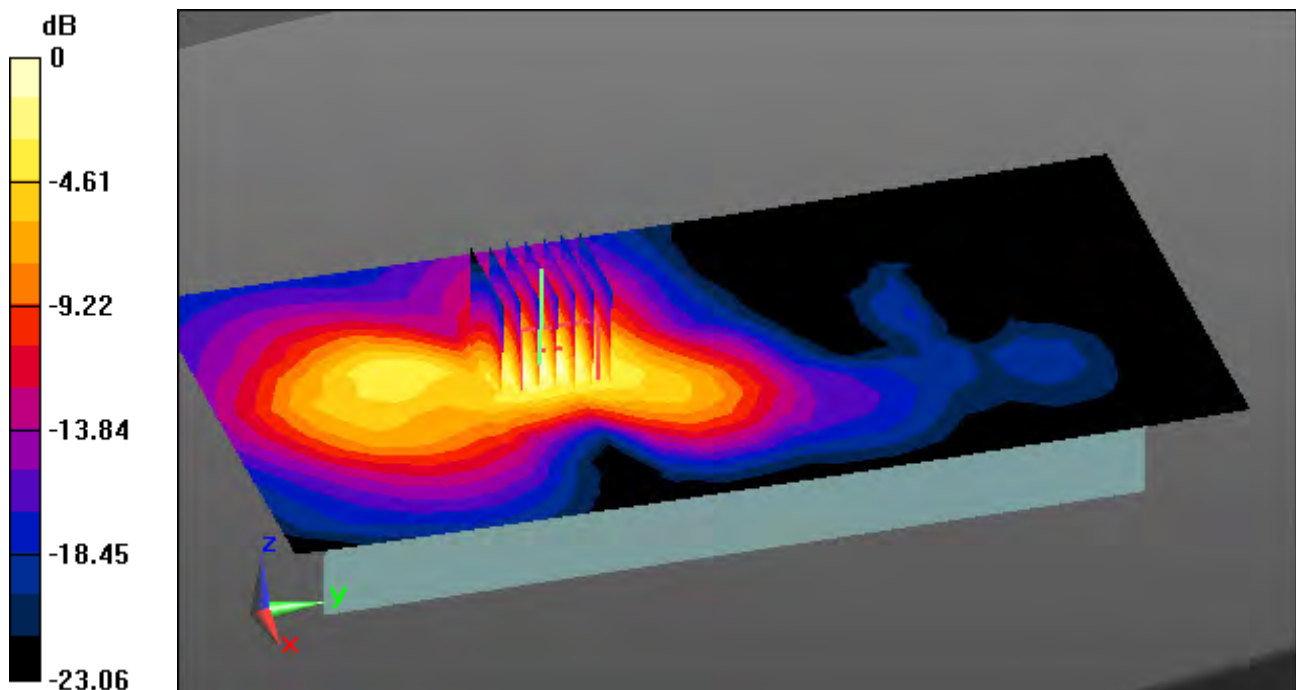
Area Scan (12x23x1): Measurement grid: dx=12mm, dy=12mm

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

Power Drift = 0.19 dB

Peak SAR (extrapolated) = 2.12 W/kg

SAR(1 g) = 1.2 W/kg; SAR(10 g) = 0.613 W/kg



0 dB = 1.46 W/kg

DT&C Co., Ltd.

DUT: PM451; Type: PDA

Communication System: UID 0, LTE Band 41(TDD) (0); Frequency: 2593 MHz; Duty Cycle: 1:1.58

Medium parameters used: $f = 2593 \text{ MHz}$; $\sigma = 1.94 \text{ S/m}$; $\epsilon_r = 39.729$; $\rho = 1000 \text{ kg/m}^3$

Phantom section: Flat Section

DASY5 Configuration:

Probe: ES3DV3 - SN3328; ConvF(4.57, 4.57, 4.57) @ 2593 MHz; Calibrated: 3/25/2020 Electronics: DAE4 Sn1335

Sensor-Surface: 3mm (Mechanical Surface Detection)

Phantom: ELI v5.0_2014_02_13; Type: QDOVA002AA; Serial: TP:1237

Measurement SW: DASY52, Version 52.10 (3); SEMCAD X Version 14.6.13 (7474)

Test Date: 2020-06-02; Ambient Temp: 21.7; Tissue Temp: 21.8

Touch from Body, Rear, LTE Band 41 Ch. 40620, Ant Internal

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

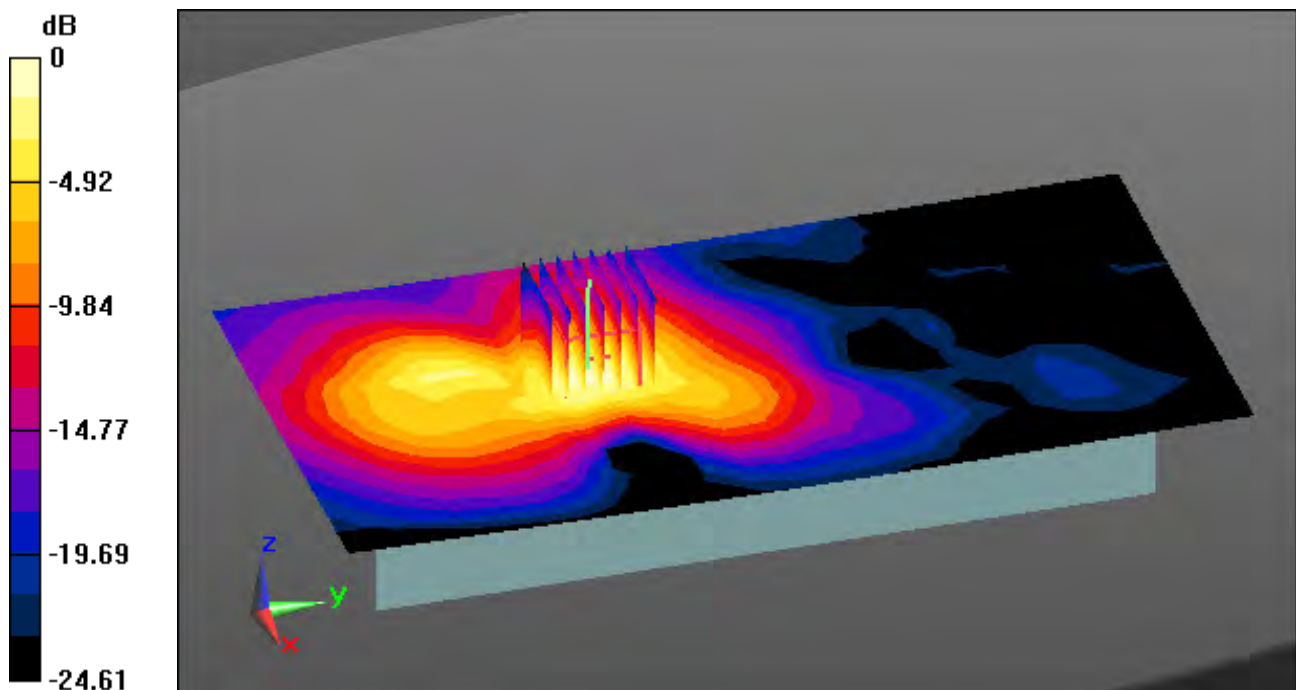
Area Scan (12x23x1): Measurement grid: $dx=12\text{mm}$, $dy=12\text{mm}$

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

Power Drift = 0.05 dB

Peak SAR (extrapolated) = 1.12 W/kg

SAR(1 g) = 0.651 W/kg; SAR(10 g) = 0.334 W/kg



0 dB = 0.918 W/kg

DT&C Co., Ltd.

DUT: PM451; Type: PDA

Communication System: UID 0, 00_2.4 GHz W-LAN (0); Frequency: 2462 MHz; Duty Cycle: 1:1

Medium parameters used: $f = 2462 \text{ MHz}$; $\sigma = 1.81 \text{ S/m}$; $\epsilon_r = 37.786$; $\rho = 1000 \text{ kg/m}^3$

Phantom section: Flat Section

DASY5 Configuration:

Probe: ES3DV3 - SN3328; ConvF(4.7, 4.7, 4.7) @ 2462 MHz; Calibrated: 3/25/2020 Electronics: DAE4 Sn1335

Sensor-Surface: 3mm (Mechanical Surface Detection)

Phantom: ELI v5.0_2014_02_13; Type: QDOVA002AA; Serial: TP:1237

Measurement SW: DASY52, Version 52.10 (3); SEMCAD X Version 14.6.13 (7474)

Test Date: 2020-06-03; Ambient Temp: 21.4; Tissue Temp: 21.2

Touch from Body, Left, WLAN(802.11b) Ch. 11, Ant Internal, Ant.1

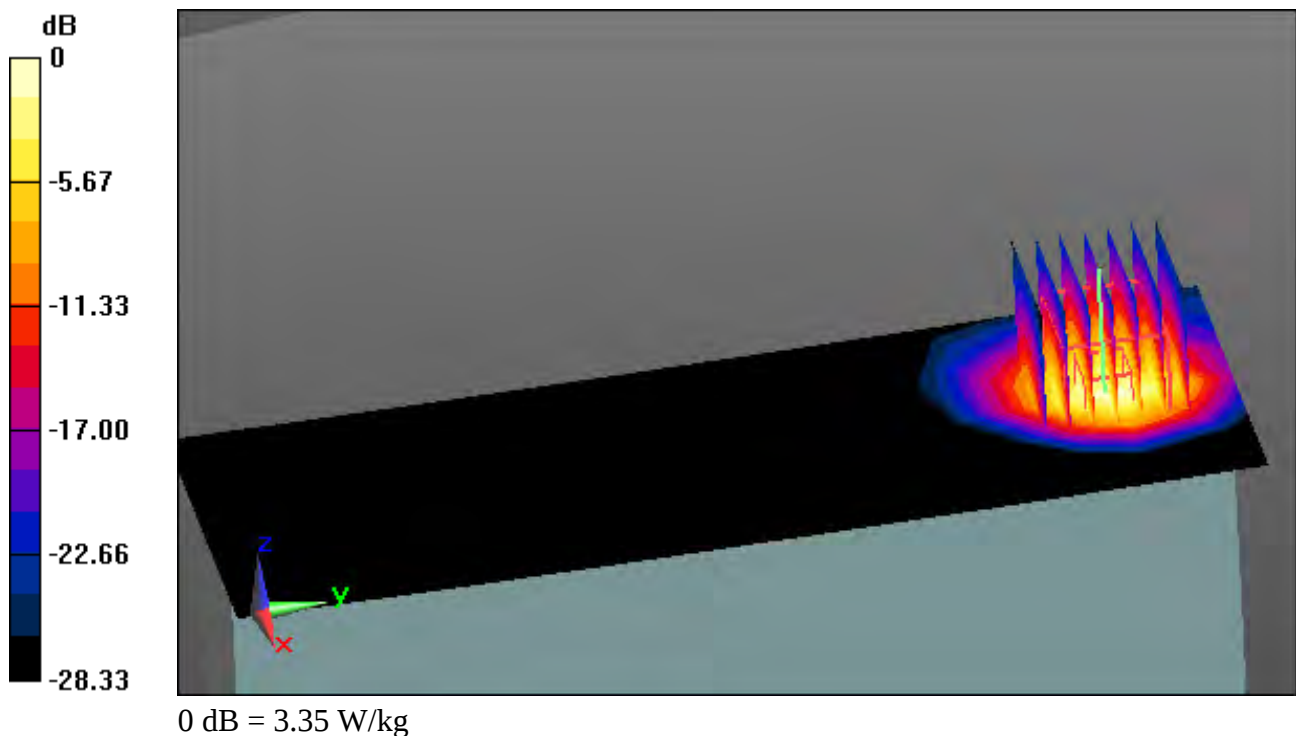
Area Scan (7x19x1): Measurement grid: $dx=12\text{mm}$, $dy=12\text{mm}$

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

Power Drift = -0.15 dB

Peak SAR (extrapolated) = 5.40 W/kg

SAR(1 g) = 2.39 W/kg; SAR(10 g) = 0.891 W/kg



DT&C Co., Ltd.

DUT: PM451; Type: PDA

Communication System: UID 0, 00_2.4 GHz W-LAN (0); Frequency: 2437 MHz; Duty Cycle: 1:1

Medium parameters used: $f = 2437$ MHz; $\sigma = 1.782$ S/m; $\epsilon_r = 37.857$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

DASY5 Configuration:

Probe: ES3DV3 - SN3328; ConvF(4.7, 4.7, 4.7) @ 2437 MHz; Calibrated: 3/25/2020 Electronics: DAE4 Sn1335

Sensor-Surface: 3mm (Mechanical Surface Detection)

Phantom: ELI v5.0_2014_02_13; Type: QDOVA002AA; Serial: TP:1237

Measurement SW: DASY52, Version 52.10 (3); SEMCAD X Version 14.6.13 (7474)

Test Date: 2020-06-03; Ambient Temp: 21.4; Tissue Temp: 21.2

Touch from Body, Right, WLAN(802.11b) Ch. 6, Ant Internal, Ant.2

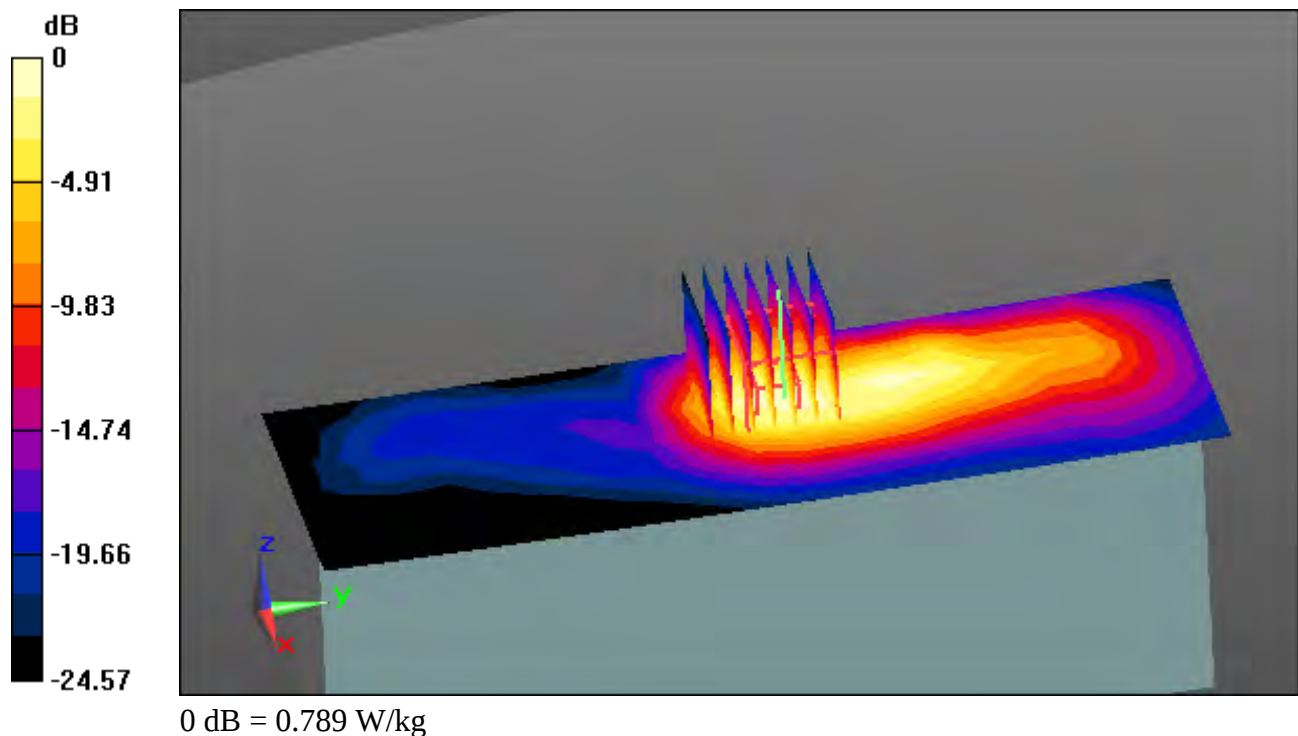
Area Scan (7x19x1): Measurement grid: dx=12mm, dy=12mm

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

Power Drift = 0.07 dB

Peak SAR (extrapolated) = 1.15 W/kg

SAR(1 g) = 0.611 W/kg; SAR(10 g) = 0.291 W/kg



DT&C Co., Ltd.

DUT: PM451; Type: PDA

Communication System: UID 0, 00_2.4 GHz W-LAN (0); Frequency: 2437 MHz; Duty Cycle: 1:1

Medium parameters used: $f = 2437 \text{ MHz}$; $\sigma = 1.782 \text{ S/m}$; $\epsilon_r = 37.857$; $\rho = 1000 \text{ kg/m}^3$

Phantom section: Flat Section

DASY5 Configuration:

Probe: ES3DV3 - SN3328; ConvF(4.7, 4.7, 4.7) @ 2437 MHz; Calibrated: 3/25/2020 Electronics: DAE4 Sn1335

Sensor-Surface: 3mm (Mechanical Surface Detection)

Phantom: ELI v5.0_2014_02_13; Type: QDOVA002AA; Serial: TP:1237

Measurement SW: DASY52, Version 52.10 (3); SEMCAD X Version 14.6.13 (7474)

Test Date: 2020-06-03; Ambient Temp: 21.4; Tissue Temp: 21.2

Touch from Body, Left, WLAN(802.11b) Ch. 6, Ant Internal, MIMO

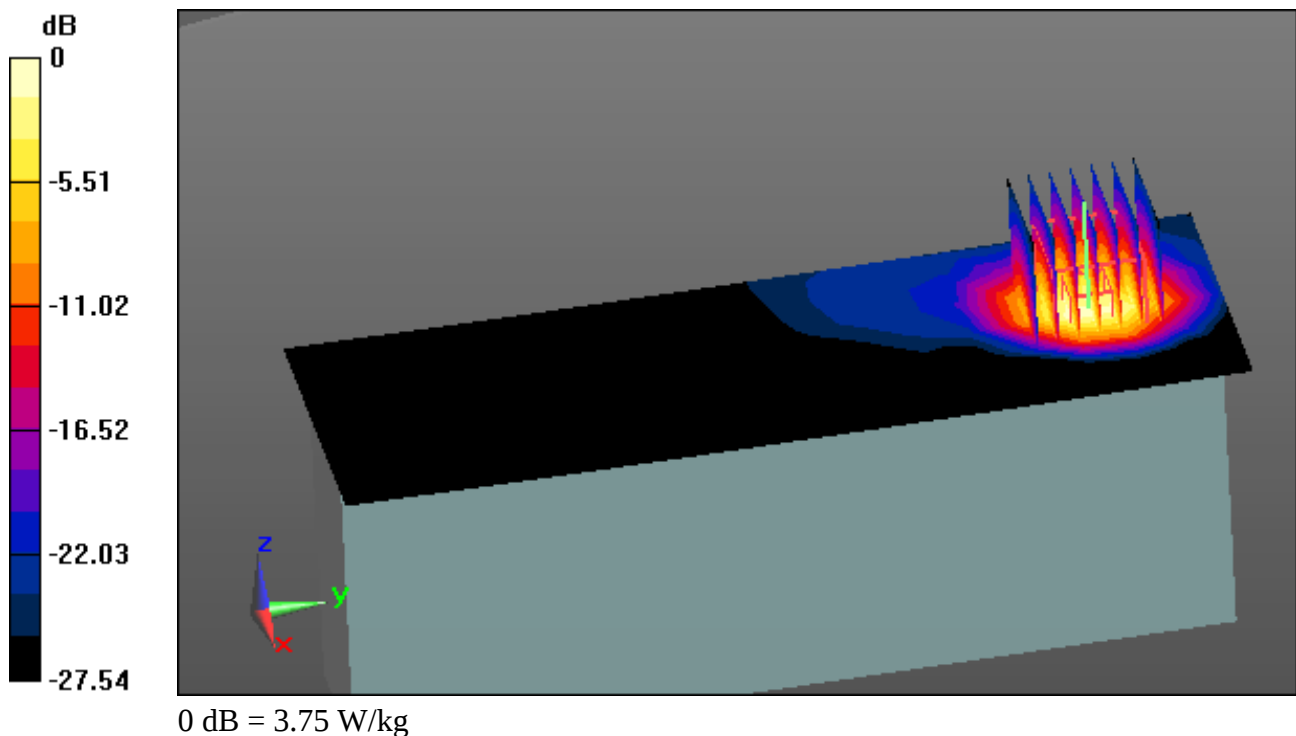
Area Scan (7x19x1): Measurement grid: $dx=12\text{mm}$, $dy=12\text{mm}$

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

Power Drift = 0.00 dB

Peak SAR (extrapolated) = 6.16 W/kg

SAR(1 g) = 2.68 W/kg; SAR(10 g) = 0.994 W/kg



DT&C Co., Ltd.

DUT: PM451; Type: PDA

Communication System: UID 0, W-LAN_5300 (0); Frequency: 5260 MHz; Duty Cycle: 1:1

Medium parameters used: $f = 5260 \text{ MHz}$; $\sigma = 4.837 \text{ S/m}$; $\epsilon_r = 35.718$; $\rho = 1000 \text{ kg/m}^3$

Phantom section: Flat Section

DASY5 Configuration:

Probe: EX3DV4 - SN3933; ConvF(5.1, 5.1, 5.1); Calibrated: 9/27/2019 Electronics: DAE3 Sn520

Sensor-Surface: 1.4mm (Mechanical Surface Detection)

Phantom: ELI v5.0_2017_03_08; Type: QDIVA001BB; Serial: 1223

Measurement SW: DASY52, Version 52.10 (3); SEMCAD X Version 14.6.13 (7474)

Test Date: 2020-06-02; Ambient Temp: 21.3; Tissue Temp: 21.5

Touch from Body, Left, WLAN(802.11a) Ch. 52, Ant Internal, Ant.1

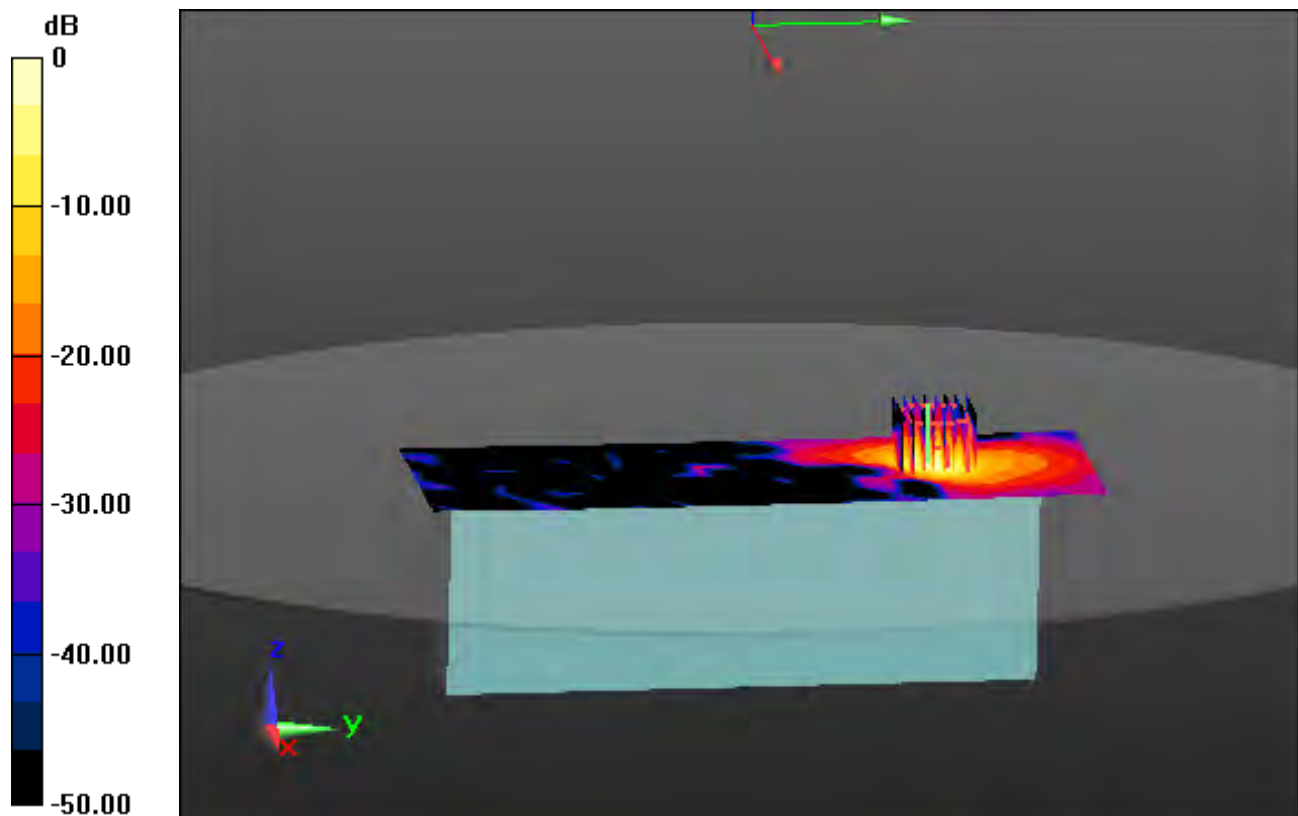
Area Scan (9x27x1): Measurement grid: $dx=10\text{mm}$, $dy=10\text{mm}$

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

Power Drift = 0.07 dB

Peak SAR (extrapolated) = 6.34 W/kg

SAR(1 g) = 1.41 W/kg; SAR(10 g) = 0.332 W/kg



0 dB = 3.44 W/kg

DT&C Co., Ltd.

DUT: PM451; Type: PDA

Communication System: UID 0, W-LAN_5300 (0); Frequency: 5280 MHz; Duty Cycle: 1:1

Medium parameters used: $f = 5280 \text{ MHz}$; $\sigma = 4.864 \text{ S/m}$; $\epsilon_r = 35.686$; $\rho = 1000 \text{ kg/m}^3$

Phantom section: Flat Section

DASY5 Configuration:

Probe: EX3DV4 - SN3933; ConvF(5.1, 5.1, 5.1); Calibrated: 9/27/2019 Electronics: DAE3 Sn520

Sensor-Surface: 1.4mm (Mechanical Surface Detection)

Phantom: ELI v5.0_2017_03_08; Type: QDIVA001BB; Serial: 1223

Measurement SW: DASY52, Version 52.10 (3); SEMCAD X Version 14.6.13 (7474)

Test Date: 2020-06-02; Ambient Temp: 21.3; Tissue Temp: 21.5

Touch from Body, Right, WLAN(802.11a) Ch. 56, Ant Internal, Ant.2

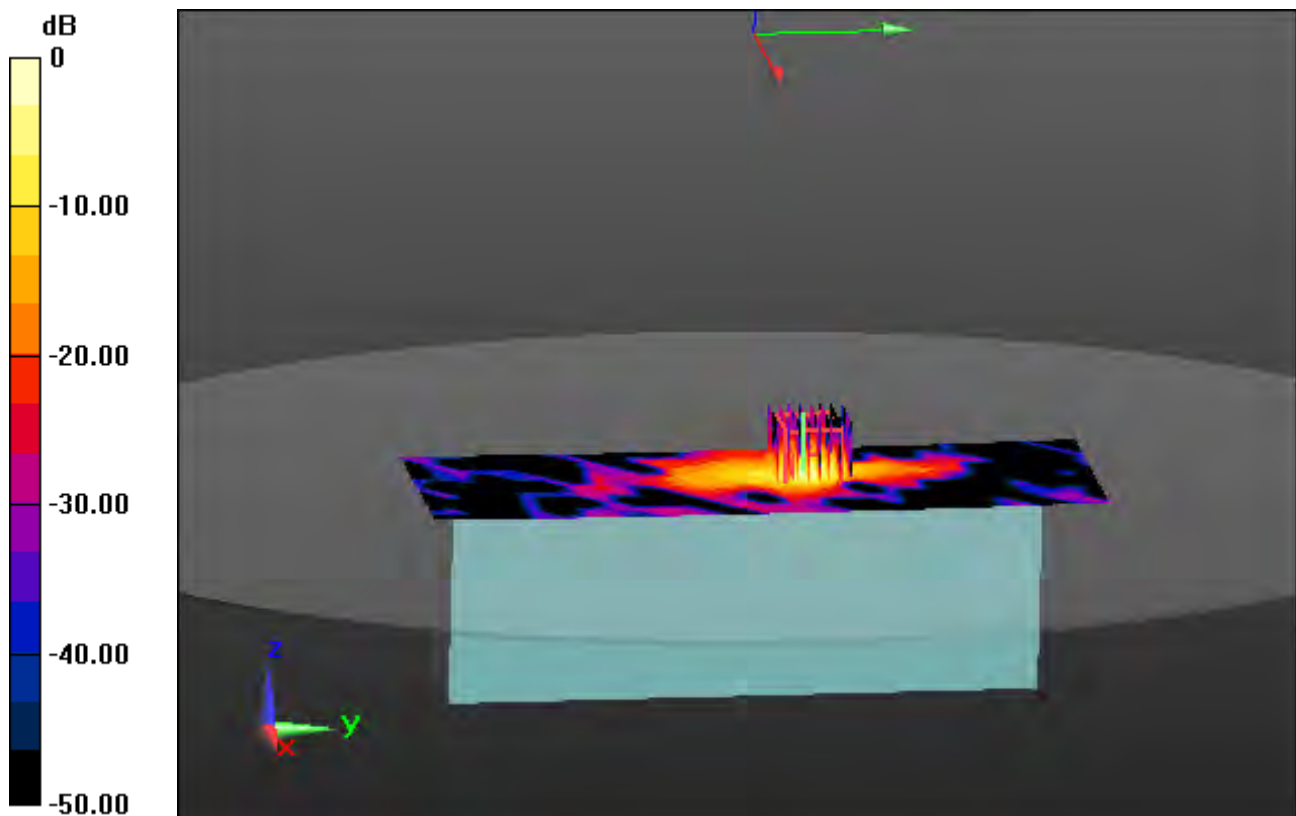
Area Scan (9x27x1): Measurement grid: $dx=10\text{mm}$, $dy=10\text{mm}$

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

Power Drift = -0.03 dB

Peak SAR (extrapolated) = 2.60 W/kg

SAR(1 g) = 0.485 W/kg; SAR(10 g) = 0.116 W/kg



0 dB = 1.35 W/kg

DT&C Co., Ltd.

DUT: PM451; Type: PDA

Communication System: UID 0, W-LAN_5300 (0); Frequency: 5260 MHz; Duty Cycle: 1:1

Medium parameters used: $f = 5260$ MHz; $\sigma = 4.837$ S/m; $\epsilon_r = 35.718$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

DASY5 Configuration:

Probe: EX3DV4 - SN3933; ConvF(5.1, 5.1, 5.1); Calibrated: 9/27/2019 Electronics: DAE3 Sn520

Sensor-Surface: 1.4mm (Mechanical Surface Detection)

Phantom: ELI v5.0_2017_03_08; Type: QDIVA001BB; Serial: 1223

Measurement SW: DASY52, Version 52.10 (3); SEMCAD X Version 14.6.13 (7474)

Test Date: 2020-06-02; Ambient Temp: 21.3; Tissue Temp: 21.5

Touch from Body, Left, WLAN(802.11a) Ch. 52, Ant Internal, MIMO

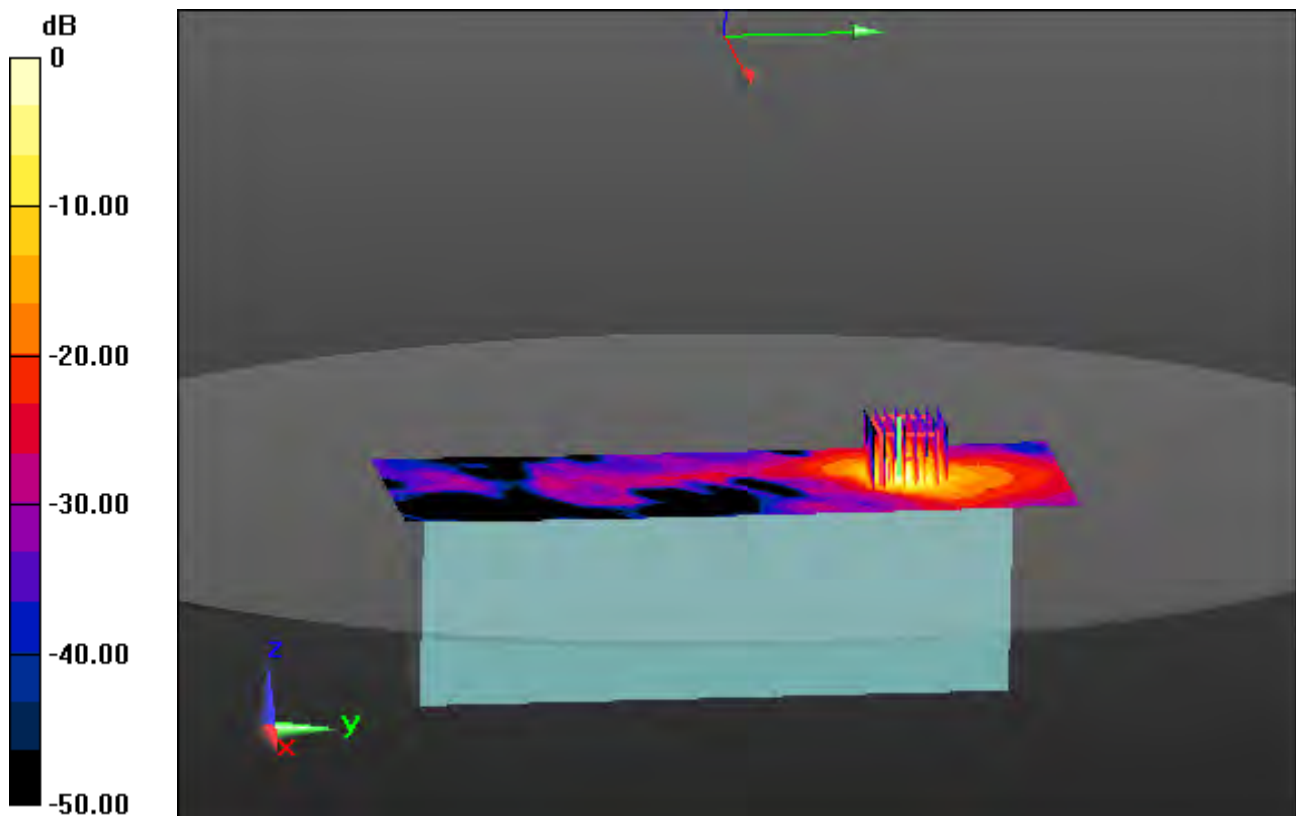
Area Scan (9x27x1): Measurement grid: dx=10mm, dy=10mm

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

Power Drift = -0.03 dB

Peak SAR (extrapolated) = 6.78 W/kg

SAR(1 g) = 1.49 W/kg; SAR(10 g) = 0.354 W/kg



0 dB = 4.01 W/kg

DT&C Co., Ltd.

DUT: PM451; Type: PDA

Communication System: UID 0, W-LAN_5600 (0); Frequency: 5500 MHz; Duty Cycle: 1:1

Medium parameters used: $f = 5500$ MHz; $\sigma = 4.922$ S/m; $\epsilon_r = 36.036$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

DASY5 Configuration:

Probe: EX3DV4 - SN3933; ConvF(4.95, 4.95, 4.95); Calibrated: 9/27/2019 Electronics: DAE3 Sn520

Sensor-Surface: 1.4mm (Mechanical Surface Detection)

Phantom: ELI v5.0_2017_03_08; Type: QDIVA001BB; Serial: 1223

Measurement SW: DASY52, Version 52.10 (3); SEMCAD X Version 14.6.13 (7474)

Test Date: 2020-06-03; Ambient Temp: 21.4; Tissue Temp: 21.7

Touch from Body, Left, WLAN(802.11a) Ch. 100, Ant Internal, Ant.1

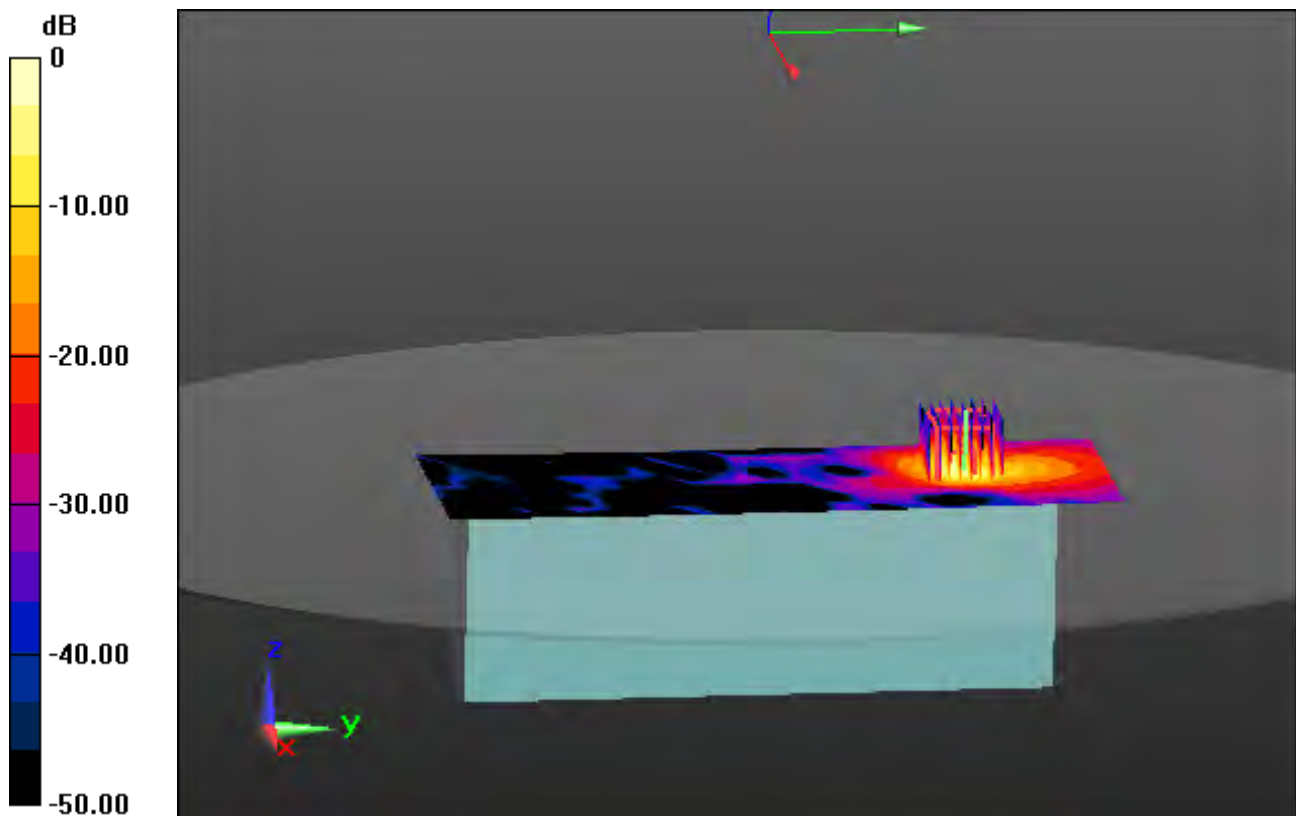
Area Scan (9x27x1): Measurement grid: dx=10mm, dy=10mm

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

Power Drift = 0.07 dB

Peak SAR (extrapolated) = 11.3 W/kg

SAR(1 g) = 2.28 W/kg; SAR(10 g) = 0.501 W/kg



0 dB = 5.88 W/kg

DT&C Co., Ltd.

DUT: PM451; Type: PDA

Communication System: UID 0, W-LAN_5600 (0); Frequency: 5660 MHz; Duty Cycle: 1:1

Medium parameters used: $f = 5660 \text{ MHz}$; $\sigma = 5.094 \text{ S/m}$; $\epsilon_r = 35.807$; $\rho = 1000 \text{ kg/m}^3$

Phantom section: Flat Section

DASY5 Configuration:

Probe: EX3DV4 - SN3933; ConvF(4.8, 4.8, 4.8); Calibrated: 9/27/2019 Electronics: DAE3 Sn520

Sensor-Surface: 1.4mm (Mechanical Surface Detection)

Phantom: ELI v5.0_2017_03_08; Type: QDIVA001BB; Serial: 1223

Measurement SW: DASY52, Version 52.10 (3); SEMCAD X Version 14.6.13 (7474)

Test Date: 2020-06-03; Ambient Temp: 21.4; Tissue Temp: 21.7

Touch from Body, Right, WLAN(802.11a) Ch. 132, Ant Internal, Ant.2

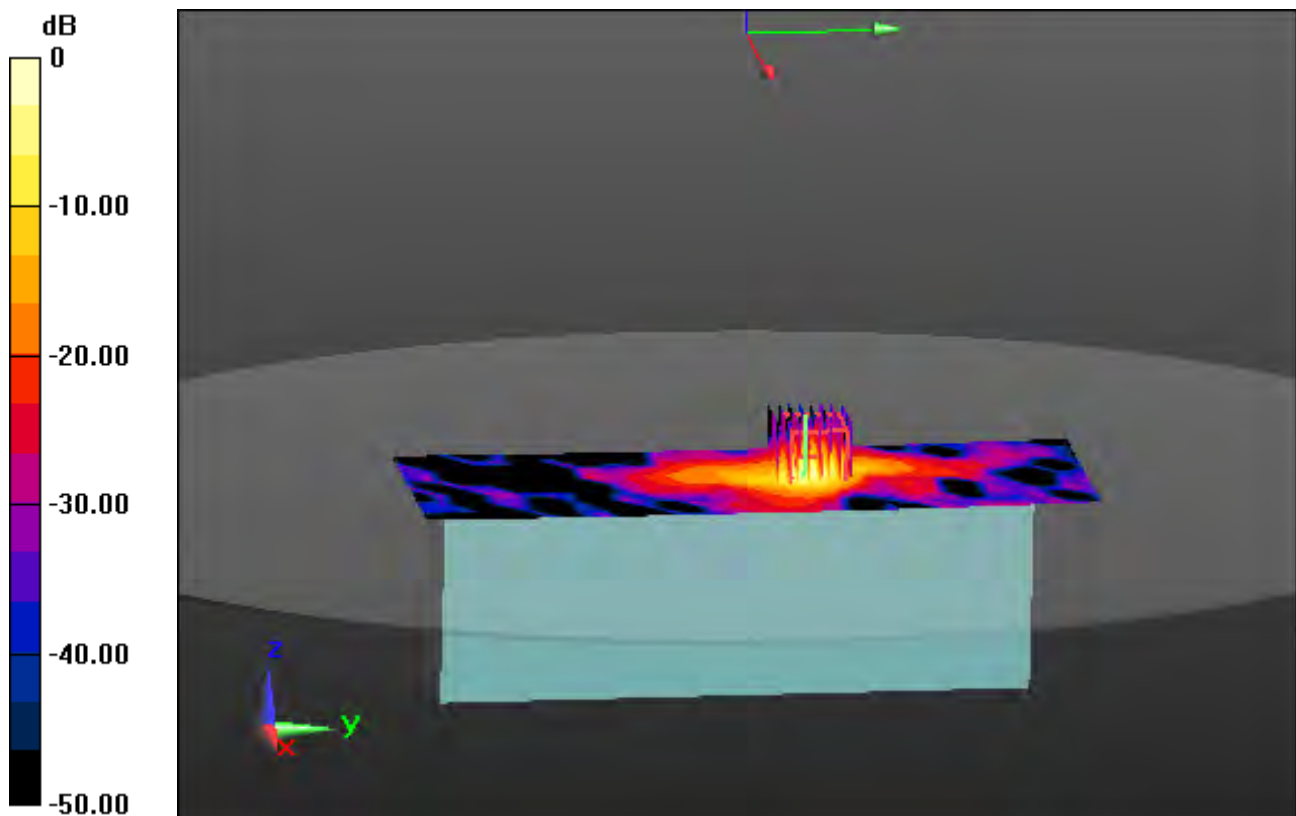
Area Scan (9x27x1): Measurement grid: $dx=10\text{mm}$, $dy=10\text{mm}$

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

Power Drift = -0.03 dB

Peak SAR (extrapolated) = 5.45 W/kg

SAR(1 g) = 1.01 W/kg; SAR(10 g) = 0.241 W/kg



0 dB = 2.79 W/kg

DT&C Co., Ltd.

DUT: PM451; Type: PDA

Communication System: UID 0, W-LAN_5600 (0); Frequency: 5500 MHz; Duty Cycle: 1:1

Medium parameters used: $f = 5500$ MHz; $\sigma = 4.922$ S/m; $\epsilon_r = 36.036$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

DASY5 Configuration:

Probe: EX3DV4 - SN3933; ConvF(4.95, 4.95, 4.95); Calibrated: 9/27/2019 Electronics: DAE3 Sn520

Sensor-Surface: 1.4mm (Mechanical Surface Detection)

Phantom: ELI v5.0_2017_03_08; Type: QDIVA001BB; Serial: 1223

Measurement SW: DASY52, Version 52.10 (3); SEMCAD X Version 14.6.13 (7474)

Test Date: 2020-06-03; Ambient Temp: 21.4; Tissue Temp: 21.7

Touch from Body, Left, WLAN(802.11a) Ch. 100, Ant Internal, MIMO

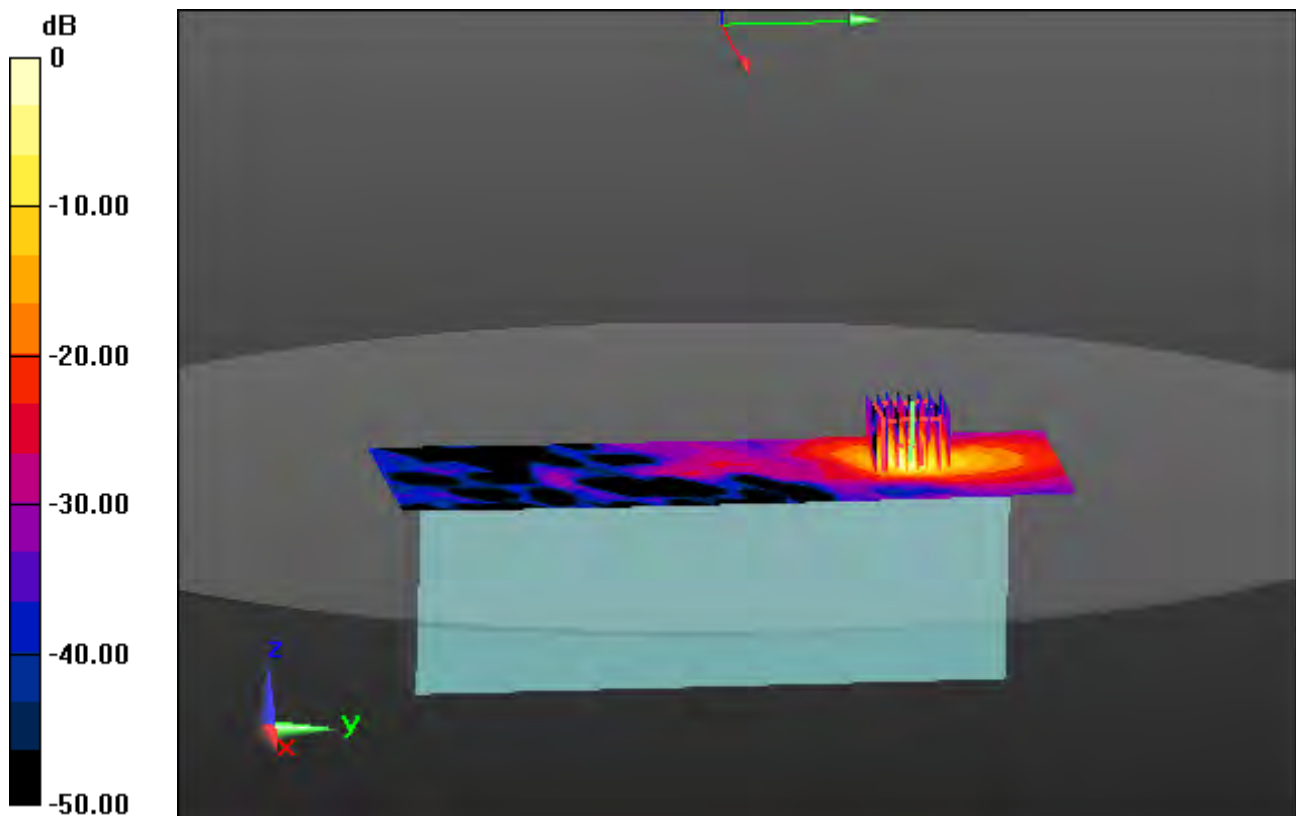
Area Scan (9x27x1): Measurement grid: dx=10mm, dy=10mm

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

Power Drift = 0.19 dB

Peak SAR (extrapolated) = 12.2 W/kg

SAR(1 g) = 2.41 W/kg; SAR(10 g) = 0.526 W/kg



0 dB = 6.21 W/kg

DT&C Co., Ltd.

DUT: PM451; Type: PDA

Communication System: UID 0, W-LAN_5800 (0); Frequency: 5825 MHz; Duty Cycle: 1:1

Medium parameters used: $f = 5825$ MHz; $\sigma = 5.415$ S/m; $\epsilon_r = 34.782$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

DASY5 Configuration:

Probe: EX3DV4 - SN3933; ConvF(4.75, 4.75, 4.75); Calibrated: 9/27/2019 Electronics: DAE3 Sn520

Sensor-Surface: 1.4mm (Mechanical Surface Detection)

Phantom: ELI v5.0_2017_03_08; Type: QDIVA001BB; Serial: 1223

Measurement SW: DASY52, Version 52.10 (3); SEMCAD X Version 14.6.13 (7474)

Test Date: 2020-06-04; Ambient Temp: 21.1; Tissue Temp: 21.1

Touch from Body, Left, WLAN(802.11a) Ch. 165, Ant Internal, Ant.1

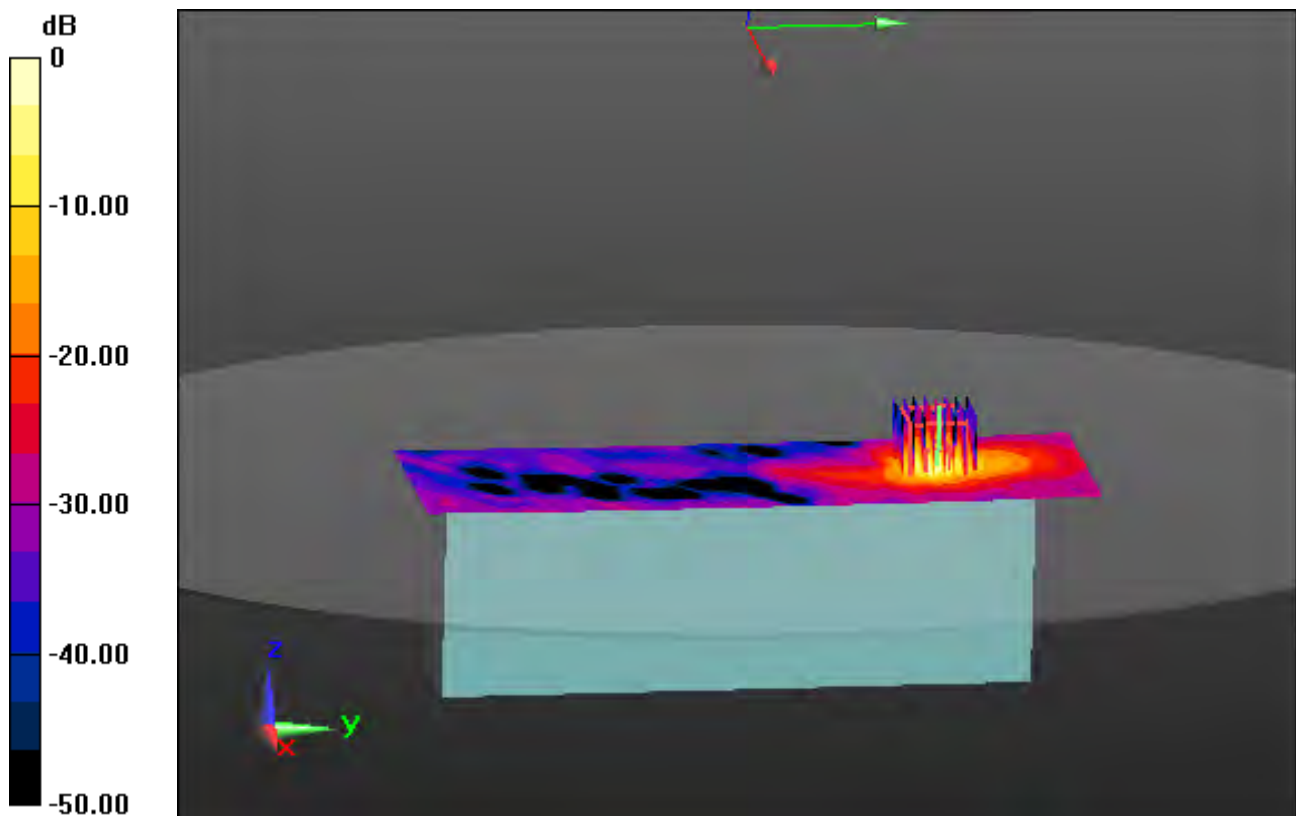
Area Scan (9x27x1): Measurement grid: dx=10mm, dy=10mm

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

Power Drift = 0.10 dB

Peak SAR (extrapolated) = 14.4 W/kg

SAR(1 g) = 2.81 W/kg; SAR(10 g) = 0.625 W/kg



0 dB = 7.39 W/kg

DT&C Co., Ltd.

DUT: PM451; Type: PDA

Communication System: UID 0, W-LAN_5800 (0); Frequency: 5785 MHz; Duty Cycle: 1:1

Medium parameters used: $f = 5785 \text{ MHz}$; $\sigma = 5.361 \text{ S/m}$; $\epsilon_r = 34.851$; $\rho = 1000 \text{ kg/m}^3$

Phantom section: Flat Section

DASY5 Configuration:

Probe: EX3DV4 - SN3933; ConvF(4.75, 4.75, 4.75); Calibrated: 9/27/2019 Electronics: DAE3 Sn520

Sensor-Surface: 1.4mm (Mechanical Surface Detection)

Phantom: ELI v5.0_2017_03_08; Type: QDIVA001BB; Serial: 1223

Measurement SW: DASY52, Version 52.10 (3); SEMCAD X Version 14.6.13 (7474)

Test Date: 2020-06-04; Ambient Temp: 21.1; Tissue Temp: 21.1

Touch from Body, Right, WLAN(802.11a) Ch. 157, Ant Internal, Ant.2

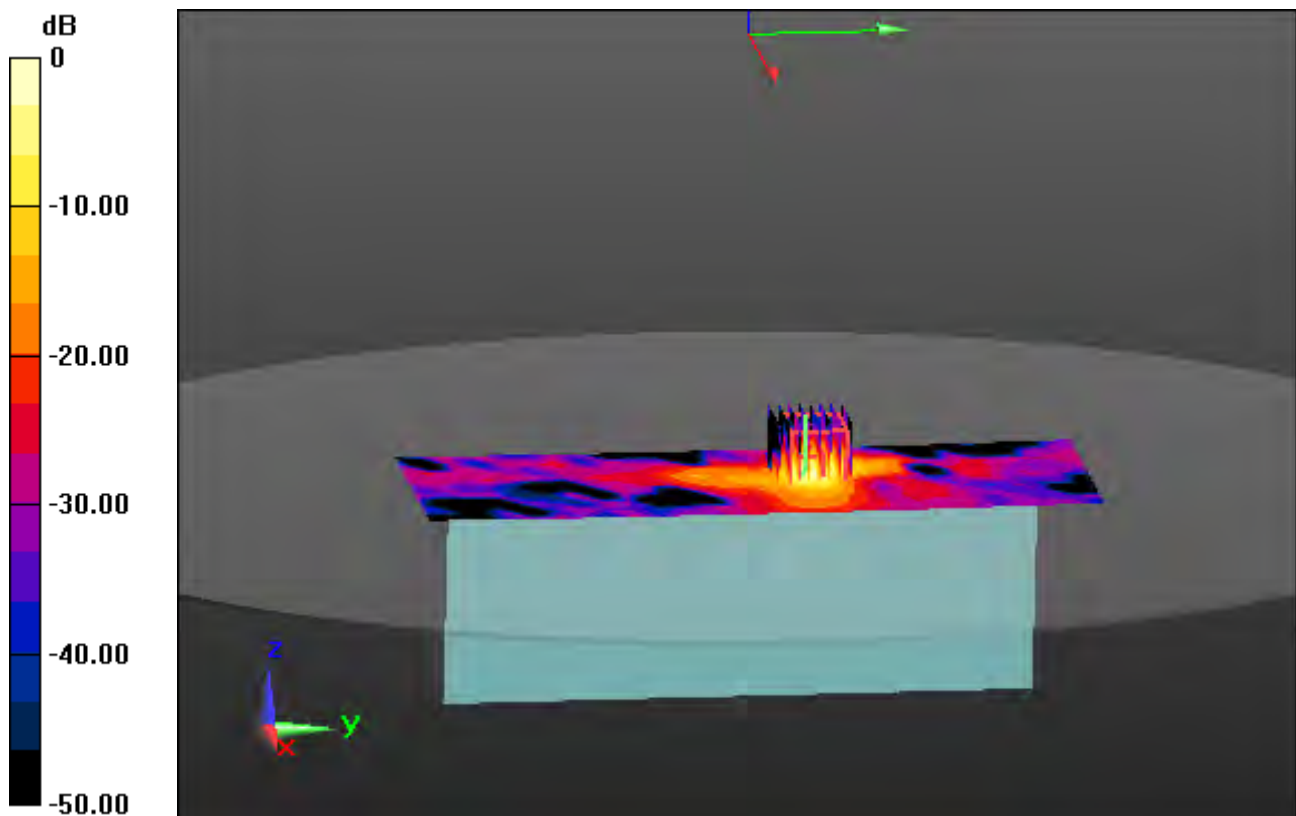
Area Scan (9x27x1): Measurement grid: $dx=10\text{mm}$, $dy=10\text{mm}$

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

Power Drift = -0.05 dB

Peak SAR (extrapolated) = 6.02 W/kg

SAR(1 g) = 1.12 W/kg ; SAR(10 g) = 0.272 W/kg



0 dB = 3.02 W/kg

DT&C Co., Ltd.

DUT: PM451; Type: PDA

Communication System: UID 0, W-LAN_5800 (0); Frequency: 5785 MHz; Duty Cycle: 1:1

Medium parameters used: $f = 5785 \text{ MHz}$; $\sigma = 5.361 \text{ S/m}$; $\epsilon_r = 34.851$; $\rho = 1000 \text{ kg/m}^3$

Phantom section: Flat Section

DASY5 Configuration:

Probe: EX3DV4 - SN3933; ConvF(4.75, 4.75, 4.75); Calibrated: 9/27/2019 Electronics: DAE3 Sn520

Sensor-Surface: 1.4mm (Mechanical Surface Detection)

Phantom: ELI v5.0_2017_03_08; Type: QDIVA001BB; Serial: 1223

Measurement SW: DASY52, Version 52.10 (3); SEMCAD X Version 14.6.13 (7474)

Test Date: 2020-06-04; Ambient Temp: 21.1; Tissue Temp: 21.1

Touch from Body, Left, WLAN(802.11a) Ch. 157, Ant Internal, MIMO

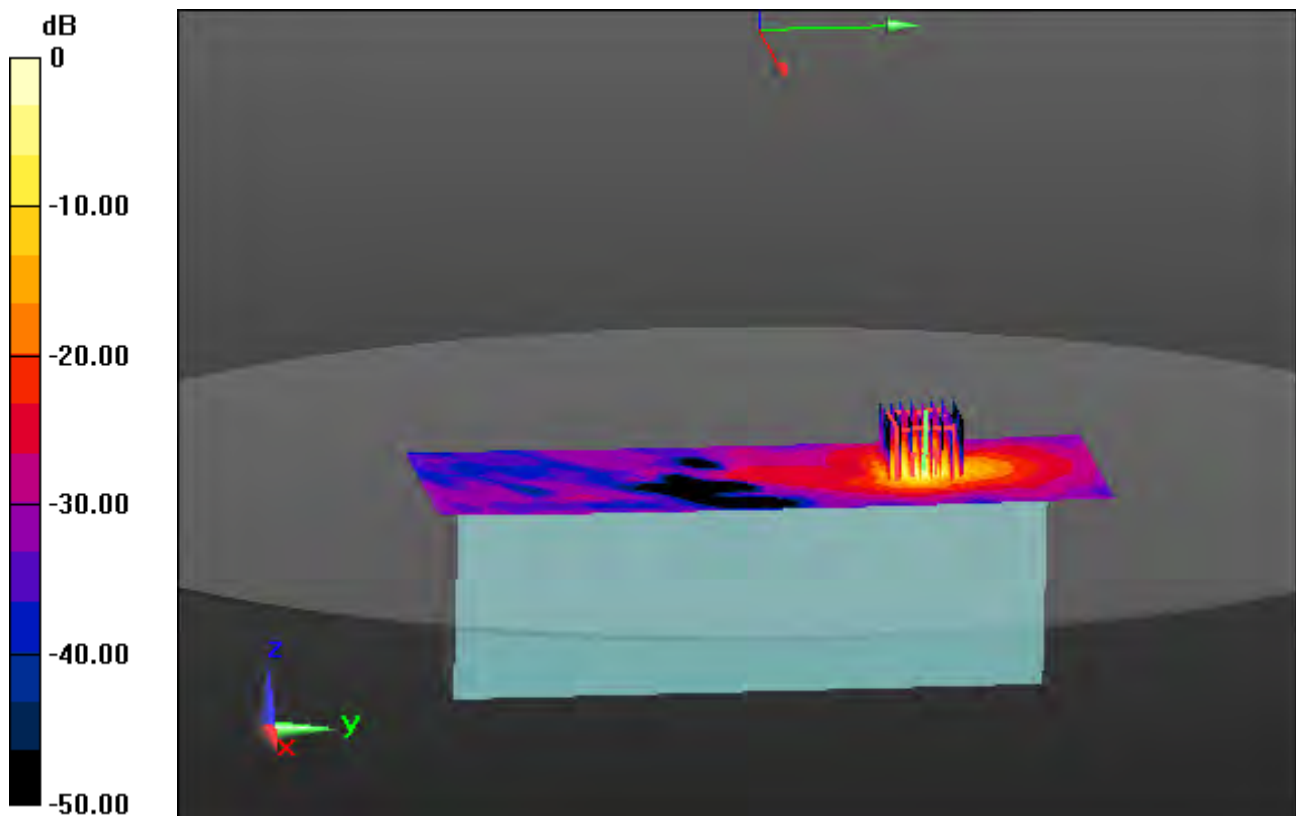
Area Scan (9x27x1): Measurement grid: $dx=10\text{mm}$, $dy=10\text{mm}$

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

Power Drift = 0.15 dB

Peak SAR (extrapolated) = 16.8 W/kg

SAR(1 g) = 3.19 W/kg; SAR(10 g) = 0.682 W/kg



0 dB = 8.66 W/kg

DT&C Co., Ltd.

DUT: PM451; Type: PDA

Communication System: UID 0, Bluetooth (0); Frequency: 2441 MHz; Duty Cycle: 1:1.302

Medium parameters used: $f = 2441 \text{ MHz}$; $\sigma = 1.786 \text{ S/m}$; $\epsilon_r = 37.843$; $\rho = 1000 \text{ kg/m}^3$

Phantom section: Flat Section

DASY5 Configuration:

Probe: ES3DV3 - SN3328; ConvF(4.7, 4.7, 4.7) @ 2441 MHz; Calibrated: 3/25/2020 Electronics: DAE4 Sn1335

Sensor-Surface: 3mm (Mechanical Surface Detection)

Phantom: ELI v5.0_2014_02_13; Type: QDOVA002AA; Serial: TP:1237

Measurement SW: DASY52, Version 52.10 (3); SEMCAD X Version 14.6.13 (7474)

Test Date: 2020-06-03; Ambient Temp: 21.4; Tissue Temp: 21.2

Touch from Body, Left, Bluetooth 1Mbps Ch. 39, Ant Internal

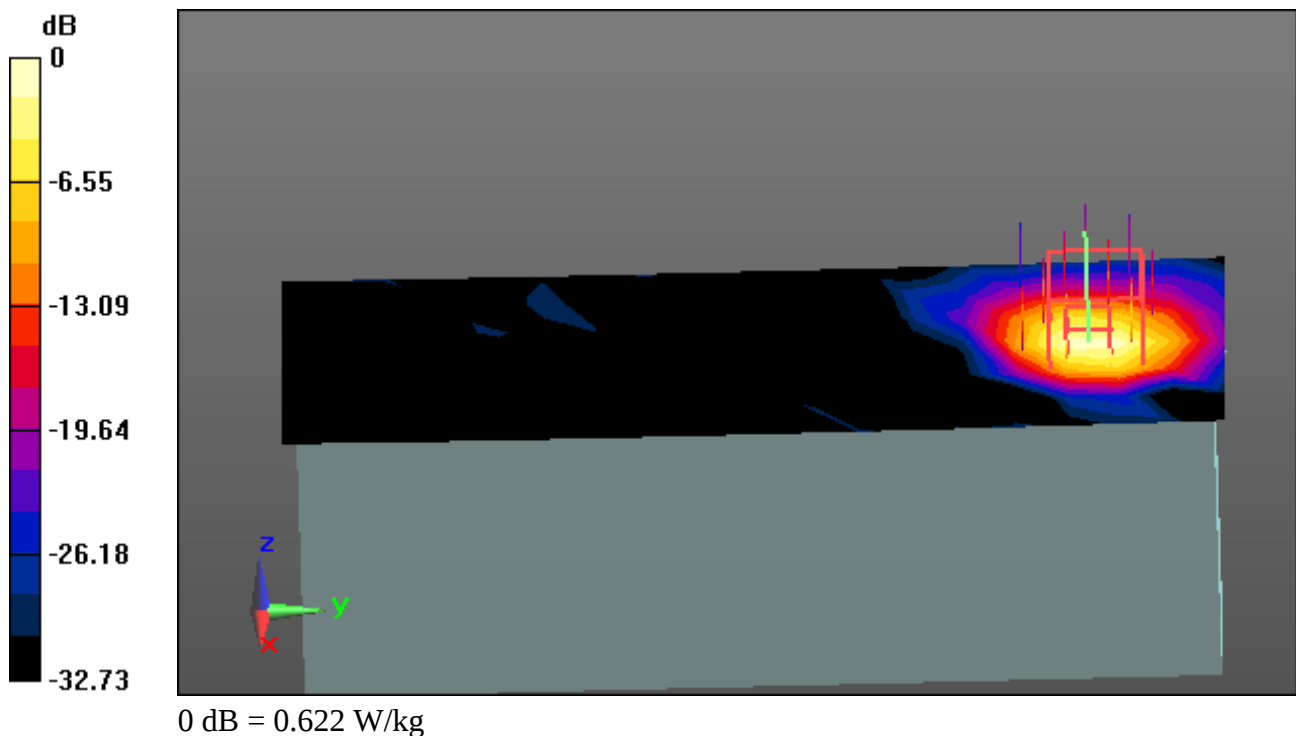
Area Scan (7x19x1): Measurement grid: $dx=12\text{mm}$, $dy=12\text{mm}$

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

Power Drift = 0.06 dB

Peak SAR (extrapolated) = 1.06 W/kg

SAR(1 g) = 0.449 W/kg; SAR(10 g) = 0.166 W/kg



DT&C Co., Ltd.

DUT: PM451; Type: PDA

Communication System: UID 0, W-LAN_5200(40,44) (0); Frequency: 5180 MHz; Duty Cycle: 1:1

Medium parameters used: $f = 5180 \text{ MHz}$; $\sigma = 4.582 \text{ S/m}$; $\epsilon_r = 35.128$; $\rho = 1000 \text{ kg/m}^3$

Phantom section: Flat Section

DASY5 Configuration:

Probe: EX3DV4 - SN3933; ConvF(5.29, 5.29, 5.29); Calibrated: 9/27/2019 Electronics: DAE3 Sn520

Sensor-Surface: 1.4mm (Mechanical Surface Detection)

Phantom: ELI v5.0_2017_03_08; Type: QDIVA001BB; Serial: 1223

Measurement SW: DASY52, Version 52.10 (3); SEMCAD X Version 14.6.13 (7474)

Test Date: 2020-08-06; Ambient Temp: 21.7; Tissue Temp: 21.5

1 cm space from Body, Left, WLAN(802.11a) Ch. 36, Ant Internal, Ant.1

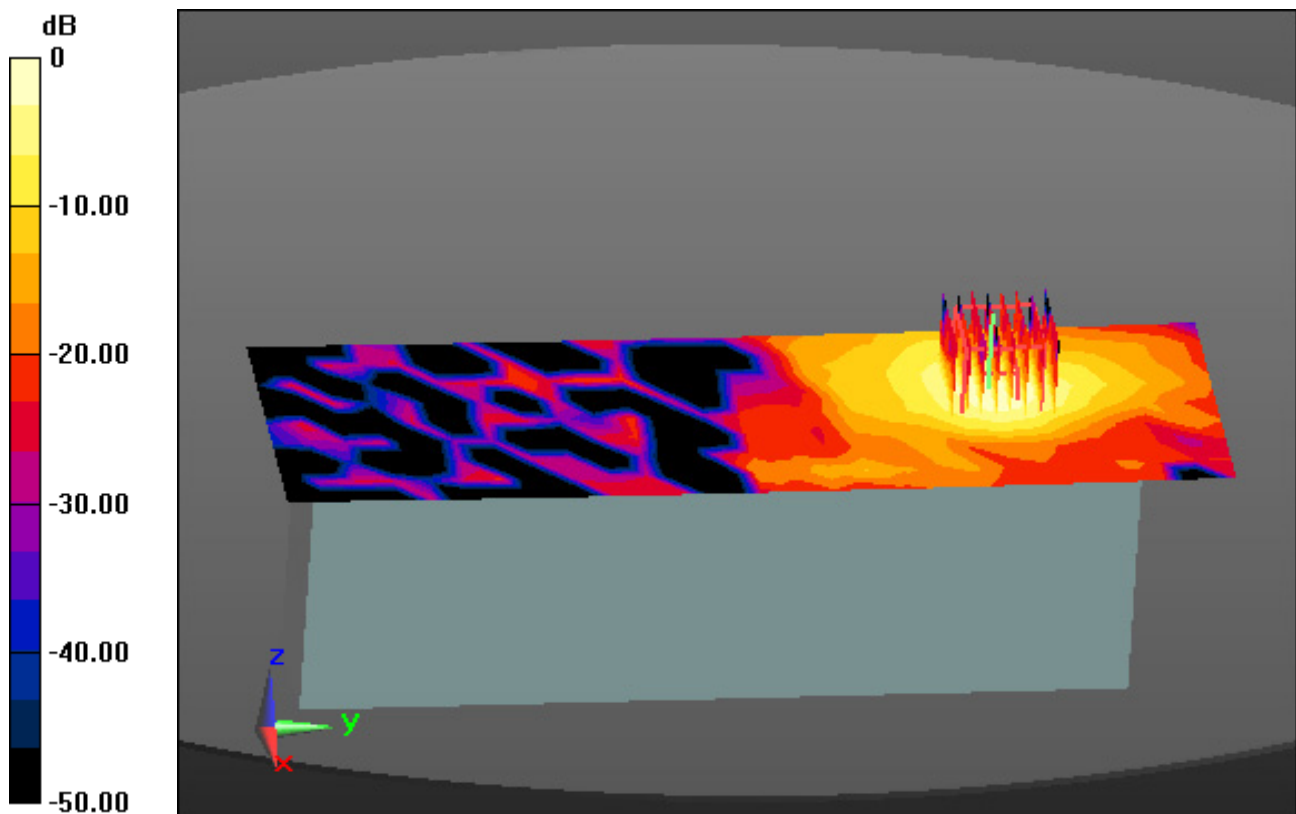
Area Scan (9x27x1): Measurement grid: $dx=10\text{mm}$, $dy=10\text{mm}$

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

Power Drift = -0.04 dB

Peak SAR (extrapolated) = 0.671 W/kg

SAR(1 g) = 0.175 W/kg; SAR(10 g) = 0.062 W/kg



DT&C Co., Ltd.

DUT: PM451; Type: PDA

Communication System: UID 0, W-LAN_5200(40,44) (0); Frequency: 5220 MHz; Duty Cycle: 1:1

Medium parameters used: $f = 5220$ MHz; $\sigma = 4.627$ S/m; $\epsilon_r = 35.057$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

DASY5 Configuration:

Probe: EX3DV4 - SN3933; ConvF(5.29, 5.29, 5.29); Calibrated: 9/27/2019 Electronics: DAE3 Sn520

Sensor-Surface: 1.4mm (Mechanical Surface Detection)

Phantom: ELI v5.0_2017_03_08; Type: QDIVA001BB; Serial: 1223

Measurement SW: DASY52, Version 52.10 (3); SEMCAD X Version 14.6.13 (7474)

Test Date: 2020-08-06; Ambient Temp: 21.7; Tissue Temp: 21.5

1 cm space from Body, Right, WLAN(802.11a) Ch. 44, Ant Internal, Ant.2

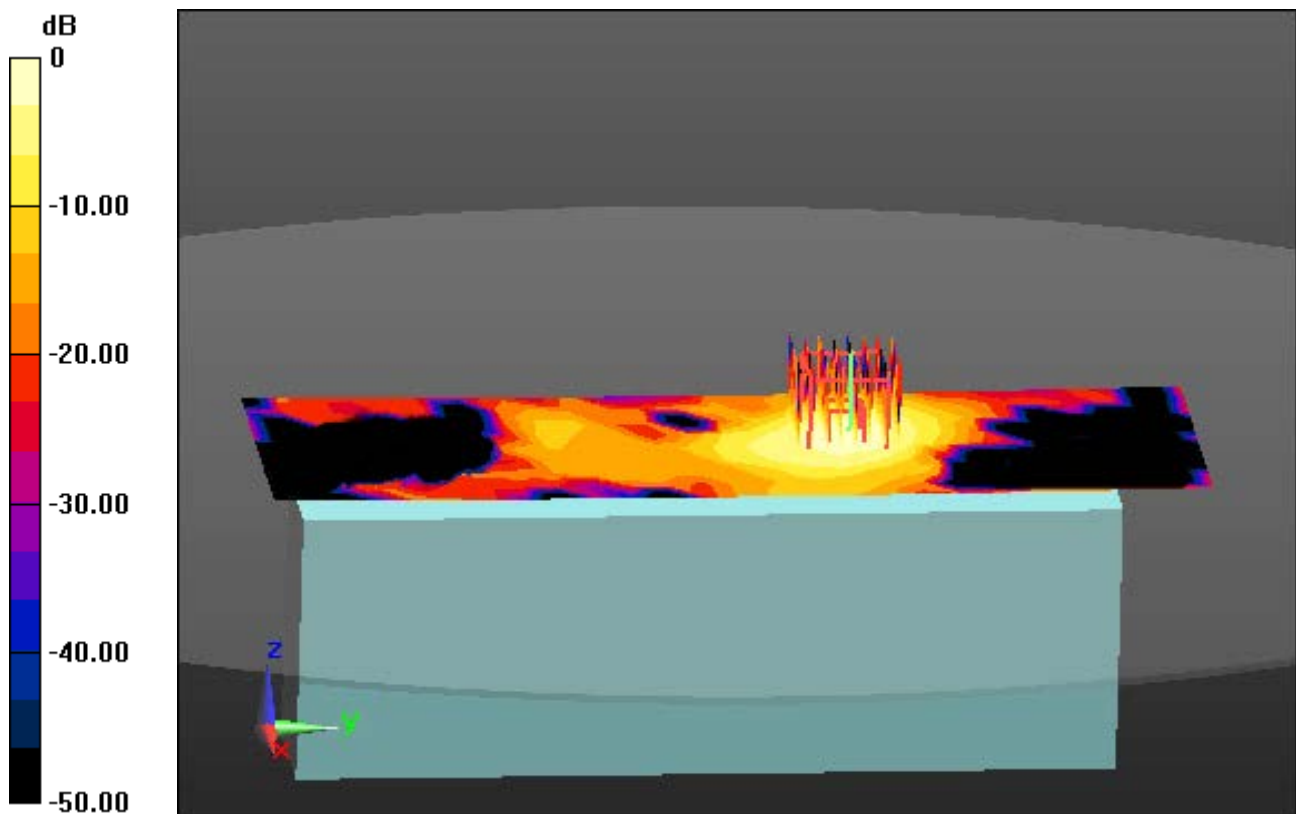
Area Scan (9x27x1): Measurement grid: dx=10mm, dy=10mm

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

Power Drift = -0.11 dB

Peak SAR (extrapolated) = 0.258 W/kg

SAR(1 g) = 0.063 W/kg; SAR(10 g) = 0.024 W/kg



0 dB = 0.143 W/kg

DT&C Co., Ltd.

DUT: PM451; Type: PDA

Communication System: UID 0, W-LAN_5200(40,44) (0); Frequency: 5180 MHz; Duty Cycle: 1:1

Medium parameters used: $f = 5180$ MHz; $\sigma = 4.582$ S/m; $\epsilon_r = 35.128$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

DASY5 Configuration:

Probe: EX3DV4 - SN3933; ConvF(5.29, 5.29, 5.29); Calibrated: 9/27/2019 Electronics: DAE3 Sn520

Sensor-Surface: 1.4mm (Mechanical Surface Detection)

Phantom: ELI v5.0_2017_03_08; Type: QDIVA001BB; Serial: 1223

Measurement SW: DASY52, Version 52.10 (3); SEMCAD X Version 14.6.13 (7474)

Test Date: 2020-08-06; Ambient Temp: 21.7; Tissue Temp: 21.5

1 cm space from Body, Left, WLAN(802.11a) Ch. 36, Ant Internal, MIMO

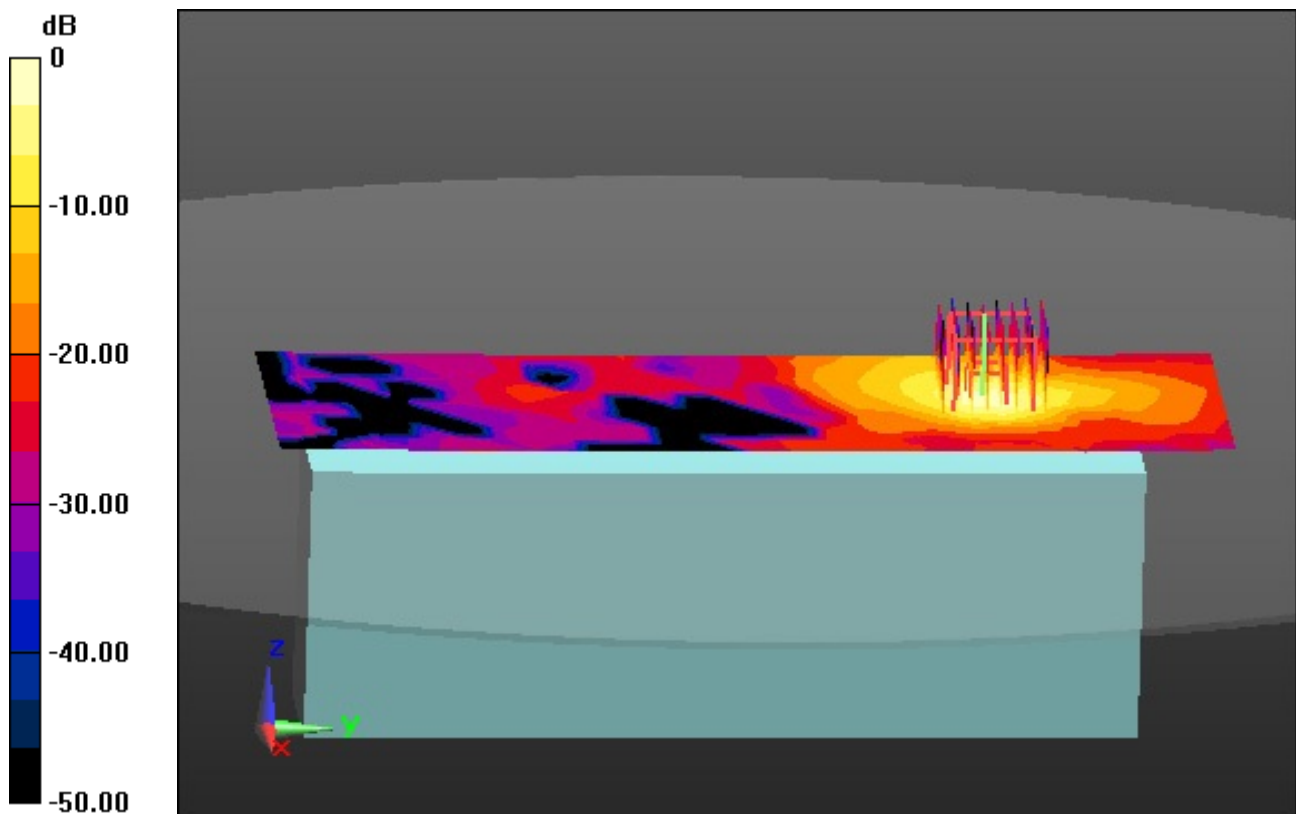
Area Scan (9x27x1): Measurement grid: dx=10mm, dy=10mm

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

Power Drift = 0.01 dB

Peak SAR (extrapolated) = 1.13 W/kg

SAR(1 g) = 0.300 W/kg; SAR(10 g) = 0.098 W/kg



0 dB = 0.784 W/kg