

Attachment 1. – Dipole Validation Plots

DIGITAL EMC CO., LTD

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

Communication System: CW; Frequency: 835 MHz; Duty Cycle: 1:1

Medium parameters used: $f = 835 \text{ MHz}$; $\sigma = 0.882 \text{ mho/m}$; $\epsilon_r = 40.7$; $\rho = 1000 \text{ kg/m}^3$

Phantom section: Flat Section

DASY4 Configuration:

Probe: EX3DV4 - SN3643; ConvF(8.96, 8.96, 8.96); Calibrated: 2011-01-24; Electronics: DAE3 Sn519

Phantom: SAM with 835MHz; Type: SAM; Serial: TP-1223

Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 186

Test Date: 2011-03-21; Ambient Temp: 22.0; Tissue Temp: 22.5

Dipole Validation

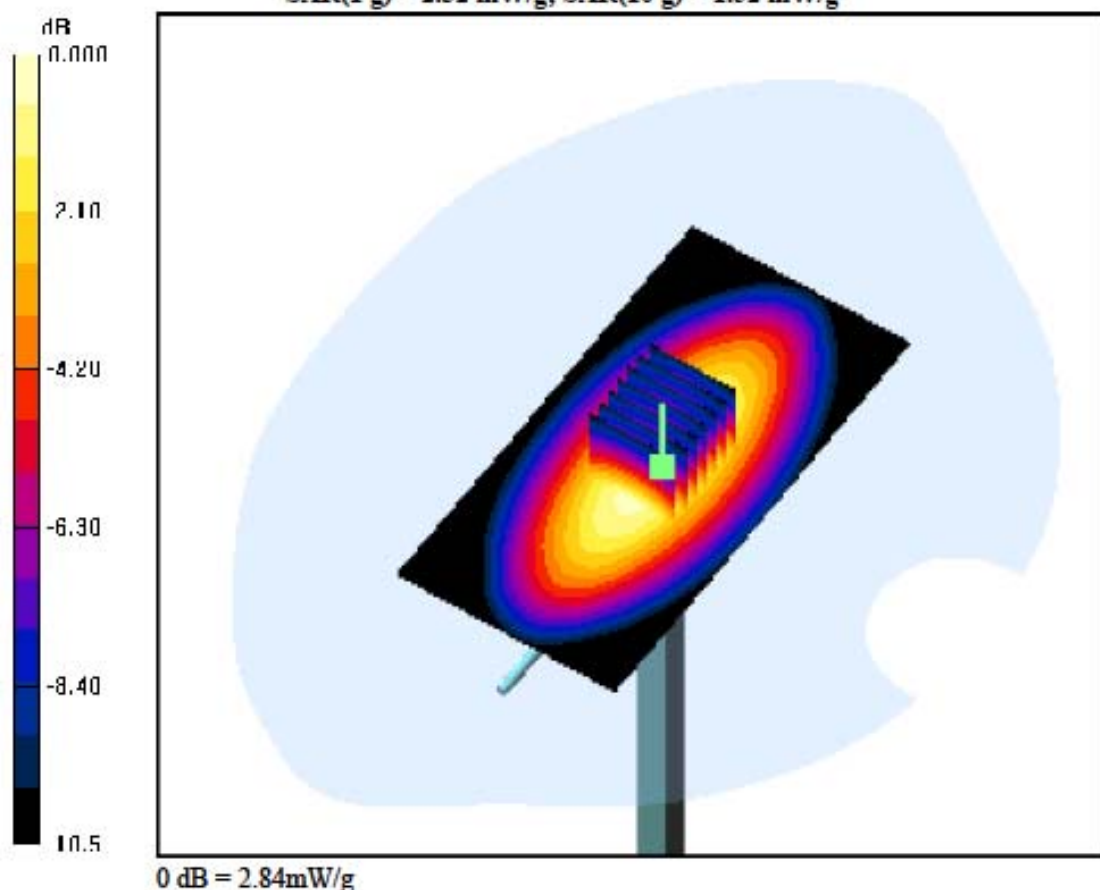
Area Scan (51x101x1): Measurement grid: $dx=15\text{mm}$, $dy=15\text{mm}$

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

Power Drift = -0.036 dB

Peak SAR (extrapolated) = 3.55 W/kg

SAR(1 g) = 2.32 mW/g; SAR(10 g) = 1.52 mW/g



DIGITAL EMC CO., LTD

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

Communication System: CW; Frequency: 835 MHz; Duty Cycle: 1:1

Medium parameters used: $f = 835 \text{ MHz}$; $\sigma = 0.956 \text{ mho/m}$; $\epsilon_r = 54.3$; $\rho = 1000 \text{ kg/m}^3$

Phantom section: Flat Section

DASY4 Configuration:

Probe: EX3DV4 - SN3643; ConvF(8.97, 8.97, 8.97); Calibrated: 2011-01-24; Electronics: DAE3 Sn519

Phantom: SAM with 835MHz; Type: SAM; Serial: TP-1223

Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 186

Test Date: 2011-03-21; Ambient Temp: 22.0; Tissue Temp: 22.5

Dipole Validation

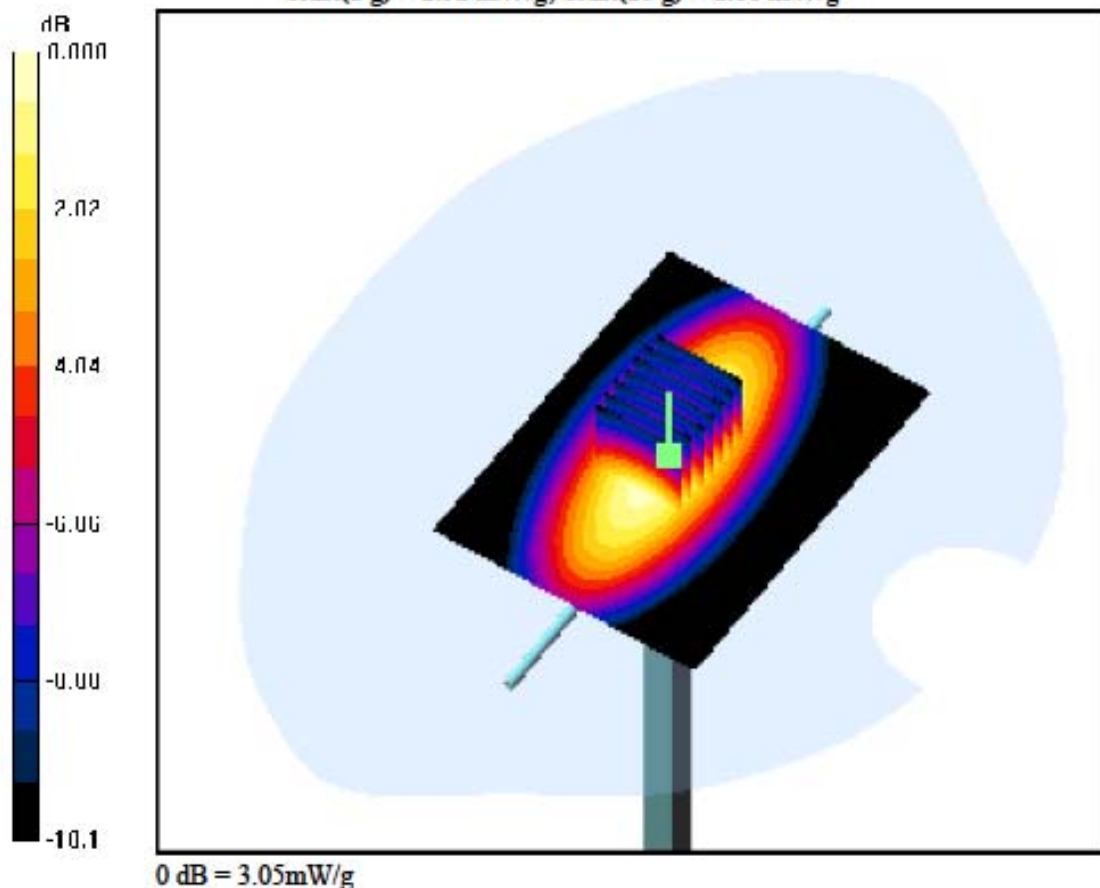
Area Scan (61x81x1): Measurement grid: $dx=15\text{mm}$, $dy=15\text{mm}$

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

Power Drift = -0.028 dB

Peak SAR (extrapolated) = 3.74 W/kg

SAR(1 g) = 2.51 mW/g; SAR(10 g) = 1.66 mW/g



DIGITAL EMC CO., LTD

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

Communication System: CW; Frequency: 1900 MHz; Duty Cycle: 1:1

Medium parameters used: $f = 1900$ MHz; $\sigma = 1.42$ mho/m; $\epsilon_r = 39.8$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

DASY4 Configuration:

Probe: EX3DV4 - SN3643; ConvF(8.26, 8.26, 8.26); Calibrated: 2011-01-24; Electronics: DAE3 Sn519

Phantom: SAM 1800/1900 MHz; Type: SAM; Serial: TP-1224

Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 186

Test Date: 2011-03-22; Ambient Temp: 22.3; Tissue Temp: 22.6

Dipole Validation

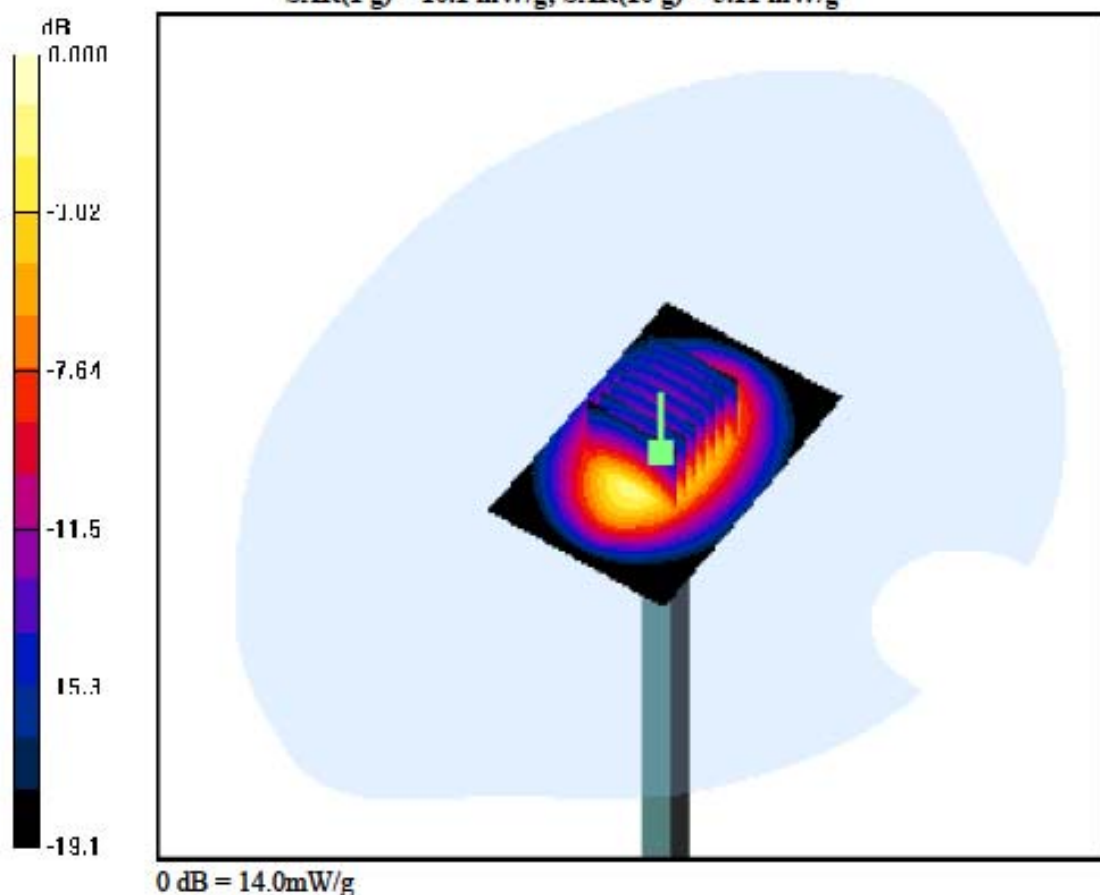
Area Scan (61x91x1): Measurement grid: dx=10mm, dy=10mm

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

Power Drift = -0.068 dB

Peak SAR (extrapolated) = 19.8 W/kg

SAR(1 g) = 10.1 mW/g; SAR(10 g) = 5.11 mW/g



DIGITAL EMC CO., LTD

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

Communication System: CW; Frequency: 1900 MHz; Duty Cycle: 1:1

Medium parameters used: $f = 1900 \text{ MHz}$; $\sigma = 1.53 \text{ mho/m}$; $\epsilon_r = 53.9$; $\rho = 1000 \text{ kg/m}^3$

Phantom section: Flat Section

DASY4 Configuration:

Probe: EX3DV4 - SN3643; ConvF(7.19, 7.19, 7.19); Calibrated: 2011-01-24; Electronics: DAE3 Sn519

Phantom: SAM 1800/1900 MHz; Type: SAM; Serial: TP-1224

Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 186

Test Date: 2011-03-22; Ambient Temp: 22.3; Tissue Temp: 22.6

Dipole Validation

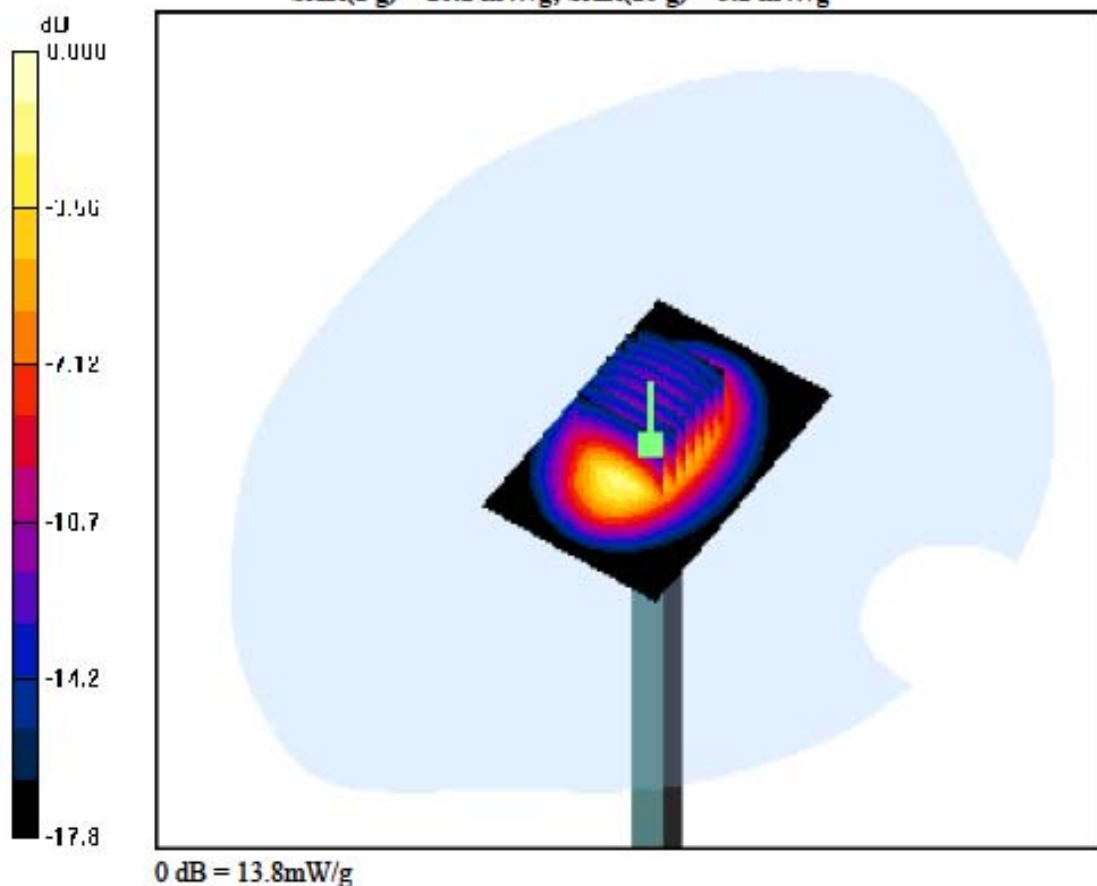
Area Scan (61x91x1): Measurement grid: $dx=10\text{mm}$, $dy=10\text{mm}$

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

Power Drift = 0.050 dB

Peak SAR (extrapolated) = 19.0 W/kg

SAR(1 g) = 10.1 mW/g; SAR(10 g) = 5.2 mW/g



Attachment 2. – SAR Test Plots

DIGITAL EMC CO., LTD**DUT: LG-A190a; Type: Bar**

Communication System: GSM 850; Frequency: 824.2 MHz; Duty Cycle: 1:8.3
Medium parameters used: $f = 824.2 \text{ MHz}$; $\sigma = 0.869 \text{ mho/m}$; $\epsilon_r = 40.5$; $\rho = 1000 \text{ kg/m}^3$
Phantom section: Left Section

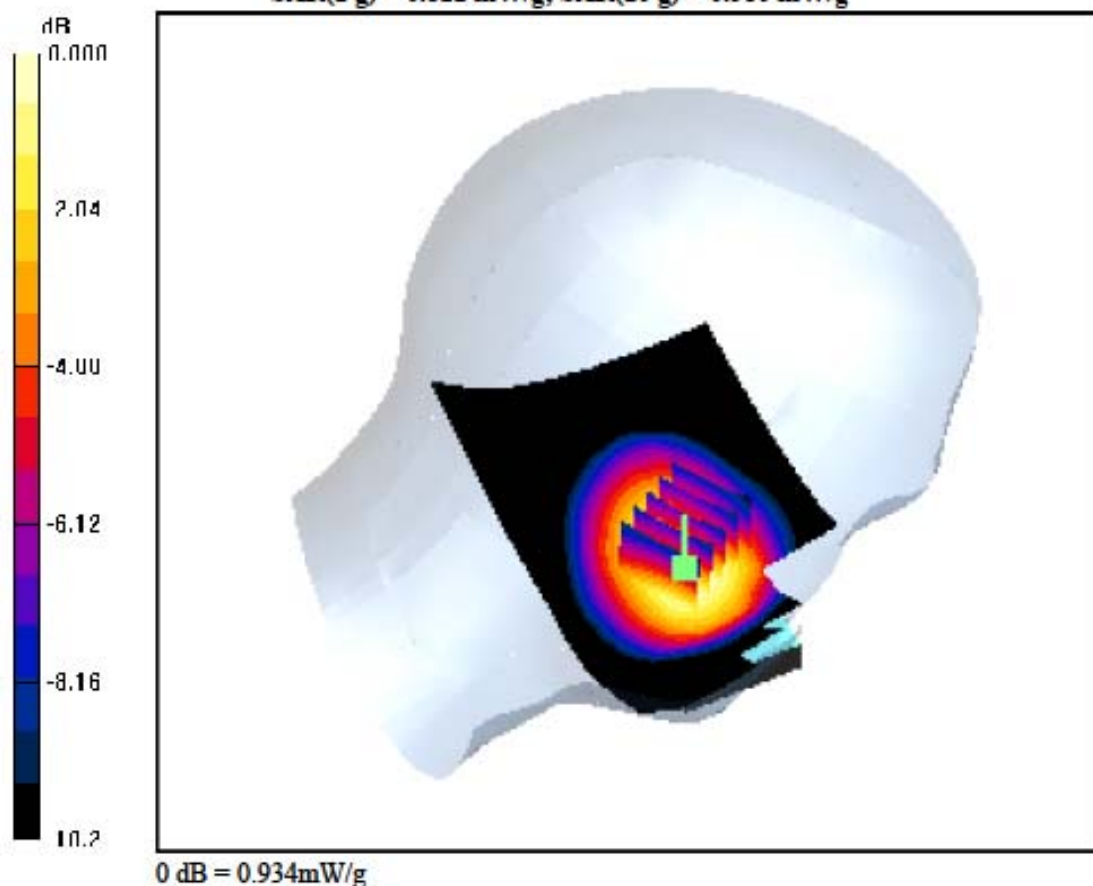
DASY4 Configuration:

Probe: EX3DV4 - SN3643; ConvF(8.96, 8.96, 8.96); Calibrated: 2011-01-24; Electronics: DAE3 Sn519
Phantom: SAM with 835MHz; Type: SAM; Serial: TP-1223
Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 186

Date: 2011-03-21; Ambient Temp: 22.0; Tissue Temp: 22.5

Left Touch, GSM850 Ch. 128, Ant Internal, Standard Battery

Area Scan (71x111x1): 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 = -0.007 dB
Peak SAR (extrapolated) = 1.07 W/kg
SAR(1 g) = 0.811 mW/g; SAR(10 g) = 0.580 mW/g



DIGITAL EMC CO., LTD**DUT: LG-A190a; Type: Bar**

Communication System: GSM 850; Frequency: 836.6 MHz; Duty Cycle: 1:8.3
Medium parameters used: $f = 836.6$ MHz; $\sigma = 0.895$ mho/m; $\epsilon_r = 41$; $\rho = 1000$ kg/m³
Phantom section: Left Section

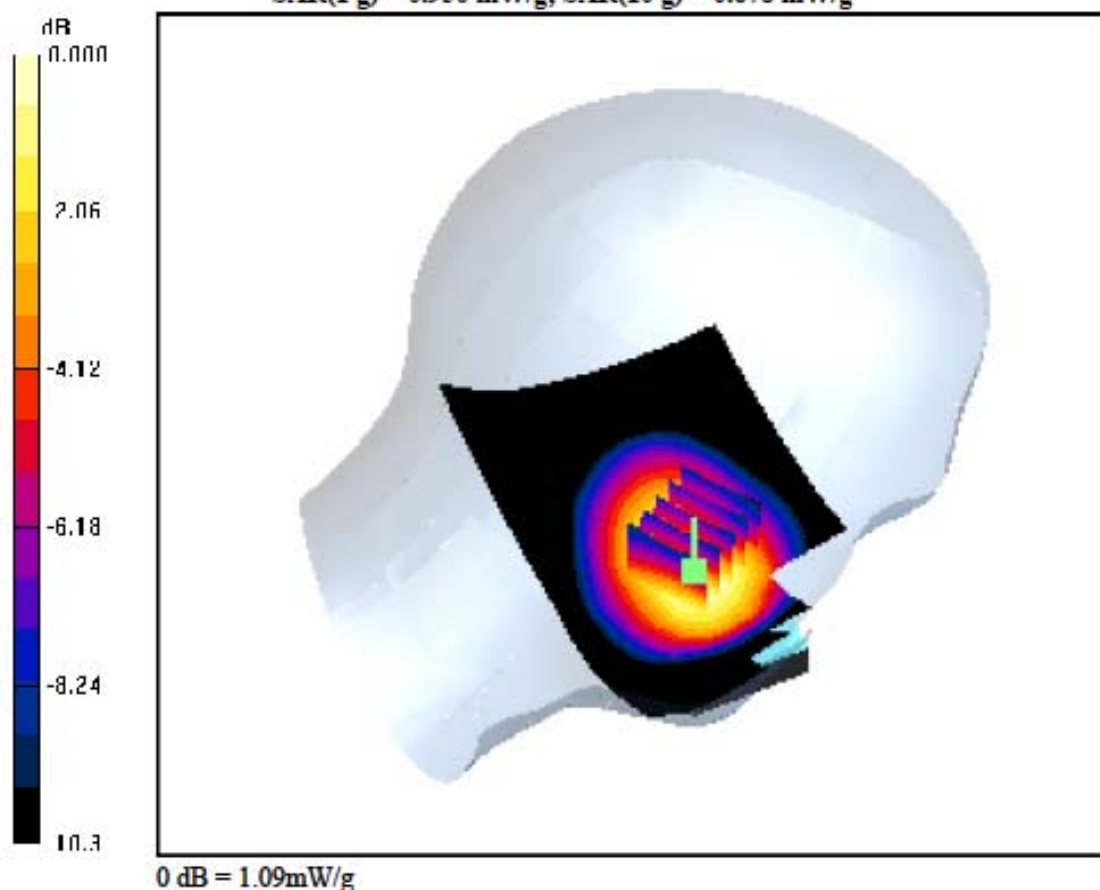
DASY4 Configuration:

Probe: EX3DV4 - SN3643; ConvF(8.96, 8.96, 8.96); Calibrated: 2011-01-24; Electronics: DAE3 Sn519
Phantom: SAM with 835MHz; Type: SAM; Serial: TP-1223
Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 186

Date: 2011-03-21; Ambient Temp: 22.0; Tissue Temp: 22.5

Left Touch, GSM850 Ch. 190, Ant Internal, Standard Battery

Area Scan (71x111x1): Measurement grid: dx=15mm, dy=15mm
Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Power Drift = -0.025 dB
Peak SAR (extrapolated) = 1.24 W/kg
SAR(1 g) = 0.950 mW/g; SAR(10 g) = 0.678 mW/g



DIGITAL EMC CO., LTD**DUT: LG-A190a; Type: Bar**

Communication System: GSM 850; Frequency: 848.8 MHz; Duty Cycle: 1:8.3
Medium parameters used: $f = 848.8 \text{ MHz}$; $\sigma = 0.92 \text{ mho/m}$; $\epsilon_r = 41.2$; $\rho = 1000 \text{ kg/m}^3$
Phantom section: Left Section

DASY4 Configuration:

Probe: EX3DV4 - SN3643; ConvF(8.96, 8.96, 8.96); Calibrated: 2011-01-24; Electronics: DAE3 Sn519
Phantom: SAM with 835MHz; Type: SAM; Serial: TP-1223
Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 186

Date: 2011-03-21; Ambient Temp: 22.0; Tissue Temp: 22.5

Left Touch, GSM850 Ch. 251, Ant Internal, Standard Battery

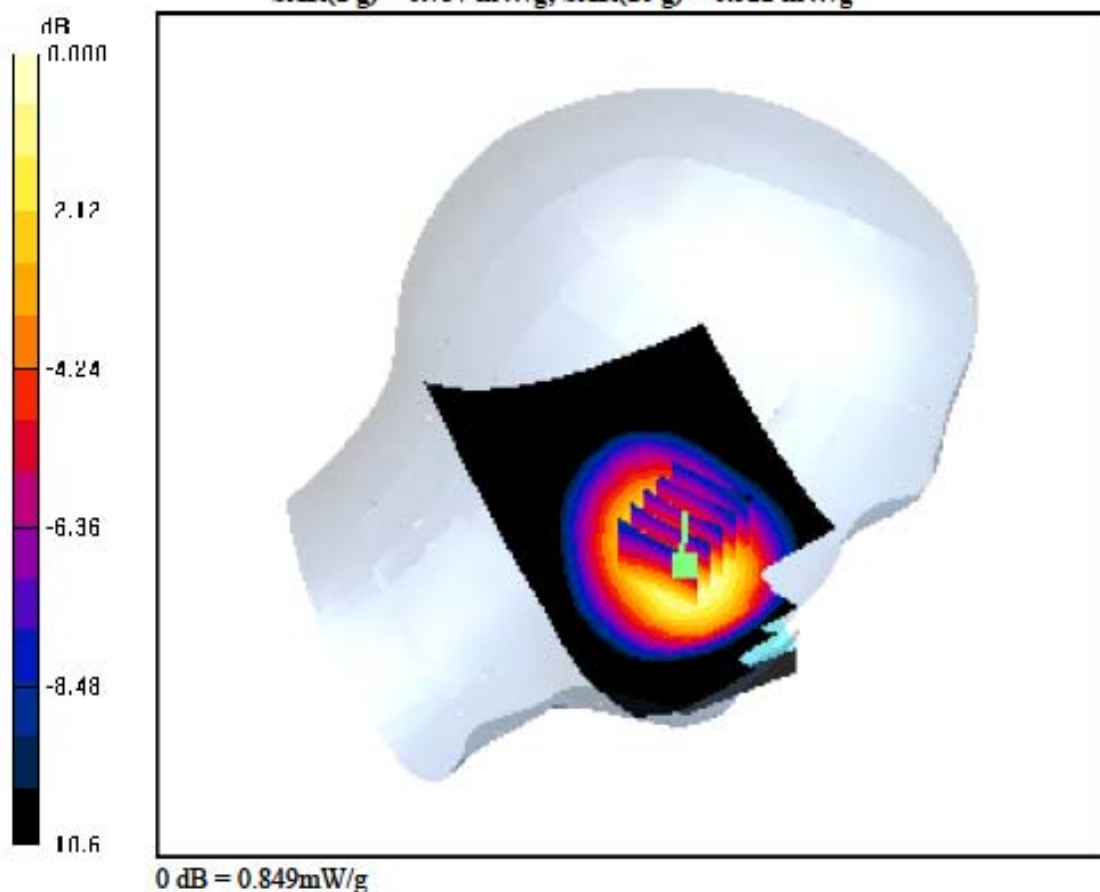
Area Scan (71x111x1): Measurement grid: $dx=15\text{mm}$, $dy=15\text{mm}$

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

Power Drift = -0.137 dB

Peak SAR (extrapolated) = 0.972 W/kg

SAR(1 g) = 0.737 mW/g; SAR(10 g) = 0.522 mW/g



DIGITAL EMC CO., LTD**DUT: LG-A190a; Type: Bar**

Communication System: GSM 850; Frequency: 824.2 MHz; Duty Cycle: 1:8.3
Medium parameters used: $f = 824.2 \text{ MHz}$; $\sigma = 0.869 \text{ mho/m}$; $\epsilon_r = 40.5$; $\rho = 1000 \text{ kg/m}^3$
Phantom section: Right Section

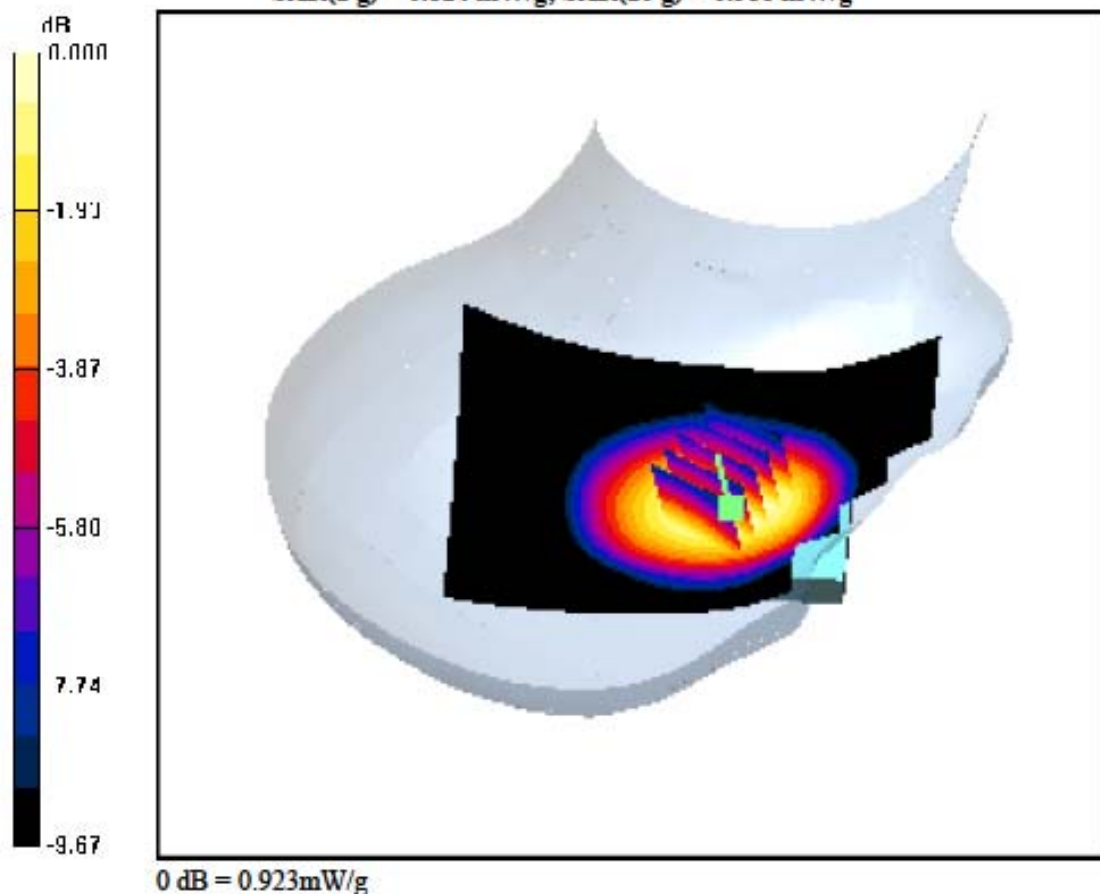
DASY4 Configuration:

Probe: EX3DV4 - SN3643; ConvF(8.96, 8.96, 8.96); Calibrated: 2011-01-24; Electronics: DAE3 Sn519
Phantom: SAM with 835MHz; Type: SAM; Serial: TP-1223
Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 186

Date: 2011-03-21; Ambient Temp: 22.0; Tissue Temp: 22.5

Right Touch, GSM850 Ch. 128, Ant Internal, Standard Battery

Area Scan (71x111x1): 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 = 0.071 dB
Peak SAR (extrapolated) = 1.06 W/kg
SAR(1 g) = 0.814 mW/g; SAR(10 g) = 0.586 mW/g



DIGITAL EMC CO., LTD**DUT: LG-A190a; Type: Bar**

Communication System: GSM 850; Frequency: 836.6 MHz; Duty Cycle: 1:8.3
Medium parameters used: $f = 836.6$ MHz; $\sigma = 0.895$ mho/m; $\epsilon_r = 41$; $\rho = 1000$ kg/m³
Phantom section: Right Section

DASY4 Configuration:

Probe: EX3DV4 - SN3643; ConvF(8.96, 8.96, 8.96); Calibrated: 2011-01-24; Electronics: DAE3 Sn519
Phantom: SAM with 835MHz; Type: SAM; Serial: TP-1223
Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 186

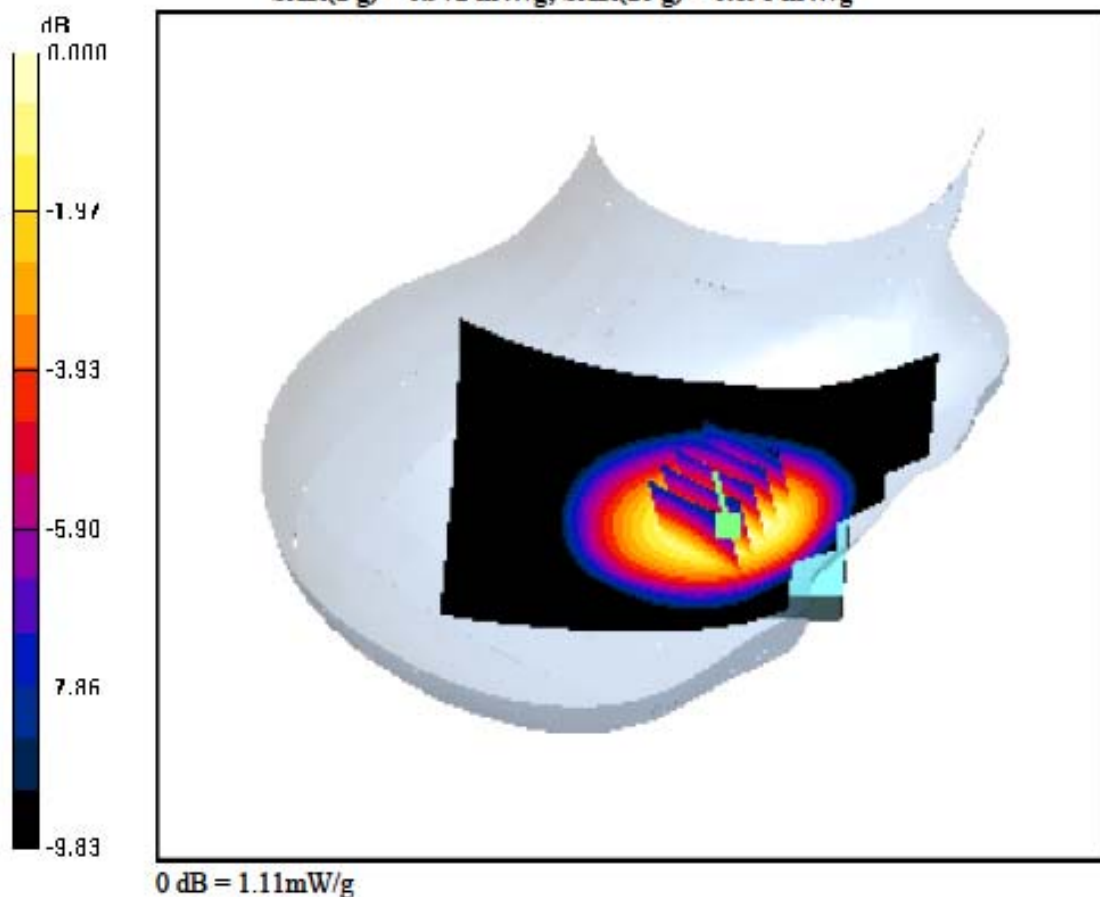
Date: 2011-03-21; Ambient Temp: 22.0; Tissue Temp: 22.5

Right Touch, GSM850 Ch. 190, Ant Internal, Standard Battery**Area Scan (71x111x1):** Measurement grid: dx=15mm, dy=15mm**Zoom Scan (5x5x7)/Cube 0:** Measurement grid: dx=8mm, dy=8mm, dz=5mm

Power Drift = -0.008 dB

Peak SAR (extrapolated) = 1.27 W/kg

SAR(1 g) = 0.972 mW/g; SAR(10 g) = 0.696 mW/g



DIGITAL EMC CO., LTD**DUT: LG-A190a; Type: Bar**

Communication System: GSM 850; Frequency: 848.8 MHz; Duty Cycle: 1:8.3
Medium parameters used: $f = 848.8 \text{ MHz}$; $\sigma = 0.92 \text{ mho/m}$; $\epsilon_r = 41.2$; $\rho = 1000 \text{ kg/m}^3$
Phantom section: Right Section

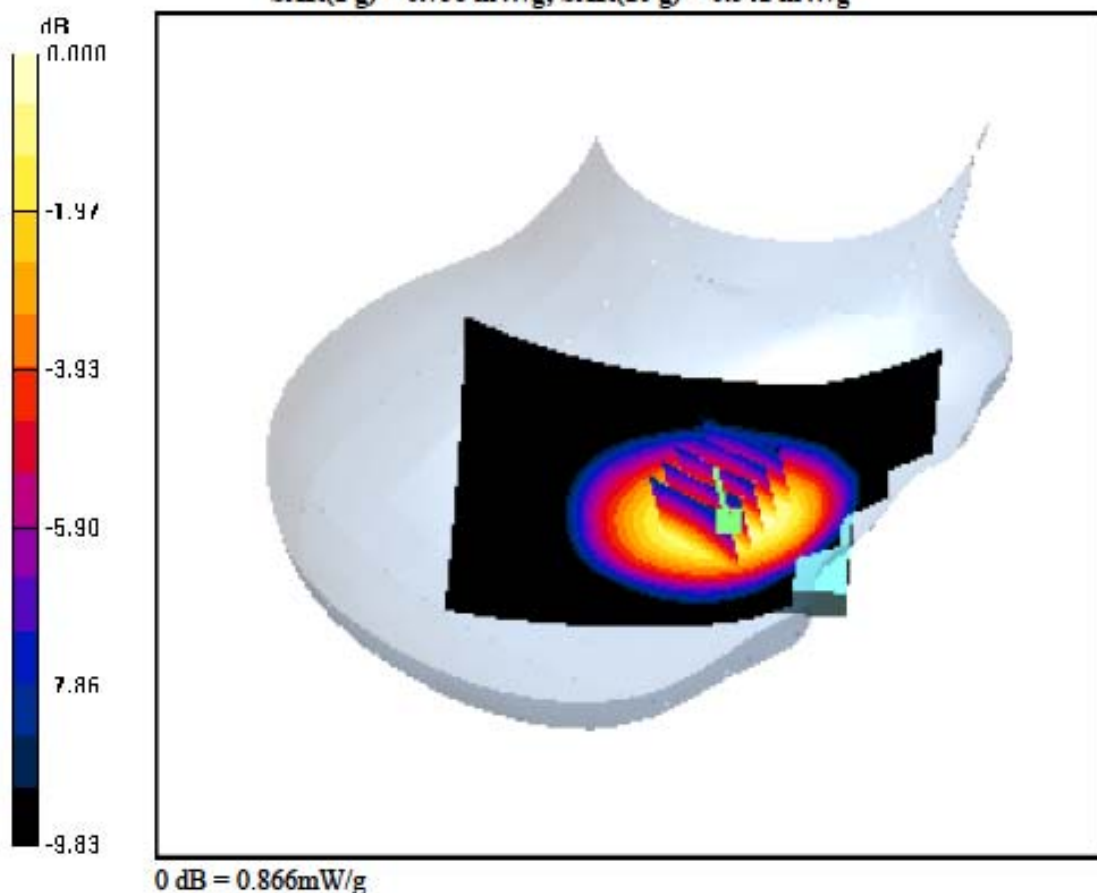
DASY4 Configuration:

Probe: EX3DV4 - SN3643; ConvF(8.96, 8.96, 8.96); Calibrated: 2011-01-24; Electronics: DAE3 Sn519
Phantom: SAM with 835MHz; Type: SAM; Serial: TP-1223
Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 186

Date: 2011-03-21; Ambient Temp: 22.0; Tissue Temp: 22.5

Right Touch, GSM850 Ch. 251, Ant Internal, Standard Battery

Area Scan (71x111x1): 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 = 0.006 dB
Peak SAR (extrapolated) = 0.987 W/kg
SAR(1 g) = 0.756 mW/g; SAR(10 g) = 0.541 mW/g



DIGITAL EMC CO., LTD**DUT: LG-A190a; Type: Bar**

Communication System: GSM 850; Frequency: 836.6 MHz; Duty Cycle: 1:8.3
Medium parameters used: $f = 836.6 \text{ MHz}$; $\sigma = 0.895 \text{ mho/m}$; $\epsilon_r = 41$; $\rho = 1000 \text{ kg/m}^3$
Phantom section: Left Section

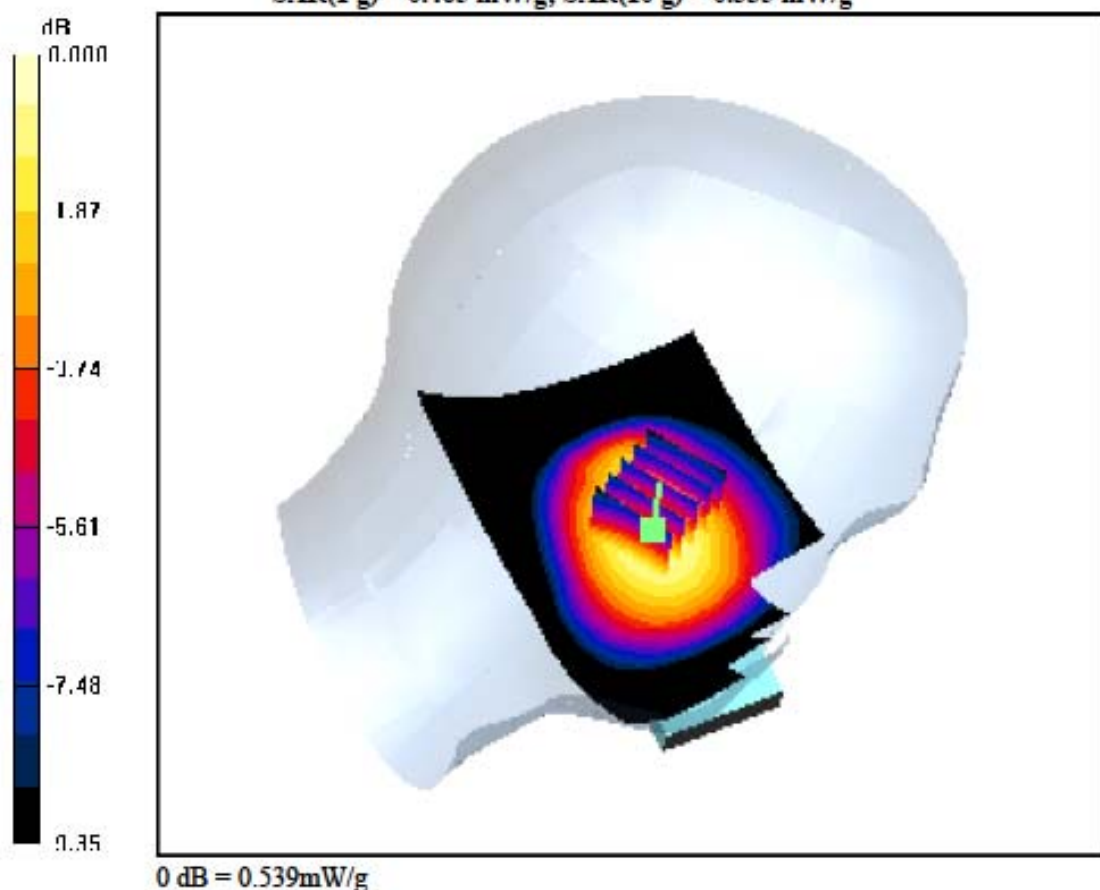
DASY4 Configuration:

Probe: EX3DV4 - SN3643; ConvF(8.96, 8.96, 8.96); Calibrated: 2011-01-24; Electronics: DAE3 Sn519
Phantom: SAM with 835MHz; Type: SAM; Serial: TP-1223
Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 186

Date: 2011-03-21; Ambient Temp: 22.0; Tissue Temp: 22.5

Left Tilt, GSM850 Ch. 190, Ant Internal, Standard Battery

Area Scan (71x111x1): 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 = -0.001 dB
Peak SAR (extrapolated) = 0.624 W/kg
SAR(1 g) = 0.465 mW/g; SAR(10 g) = 0.335 mW/g



DIGITAL EMC CO., LTD**DUT: LG-A190a; Type: Bar**

Communication System: GSM 850; Frequency: 836.6 MHz; Duty Cycle: 1:8.3
Medium parameters used: $f = 836.6 \text{ MHz}$; $\sigma = 0.895 \text{ mho/m}$; $\epsilon_r = 41$; $\rho = 1000 \text{ kg/m}^3$
Phantom section: Right Section

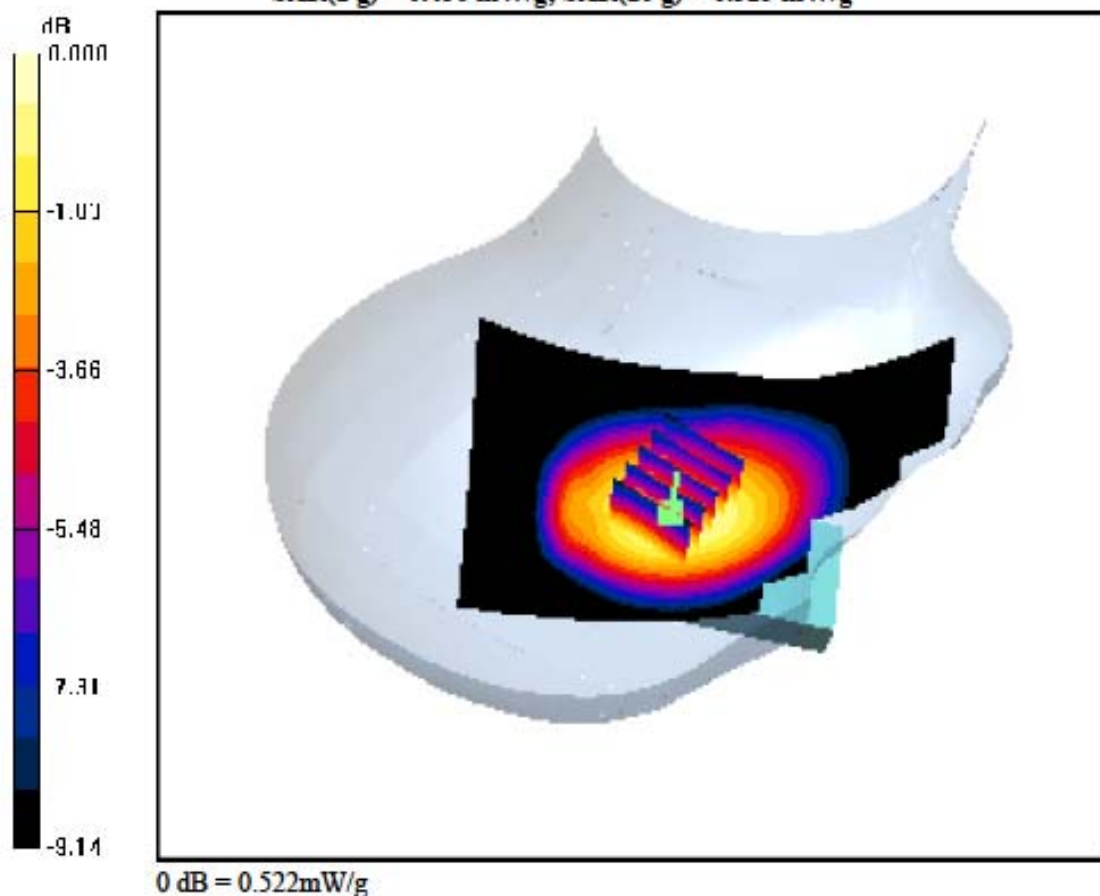
DASY4 Configuration:

Probe: EX3DV4 - SN3643; ConvF(8.96, 8.96, 8.96); Calibrated: 2011-01-24; Electronics: DAE3 Sn519
Phantom: SAM with 835MHz; Type: SAM; Serial: TP-1223
Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 186

Date: 2011-03-21; Ambient Temp: 22.0; Tissue Temp: 22.5

Right Tilt, GSM850 Ch. 190, Ant Internal, Standard Battery

Area Scan (71x111x1): 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 = -0.064 dB
Peak SAR (extrapolated) = 0.602 W/kg
SAR(1 g) = 0.450 mW/g; SAR(10 g) = 0.325 mW/g



DIGITAL EMC CO., LTD**DUT: LG-A190a; Type: Bar**

Communication System: GSM 850; Frequency: 836.6 MHz; Duty Cycle: 1:8.3
Medium parameters used: $f = 836.6$ MHz; $\sigma = 0.895$ mho/m; $\epsilon_r = 41$; $\rho = 1000$ kg/m³
Phantom section: Right Section

DASY4 Configuration:

Probe: EX3DV4 - SN3643; ConvF(8.96, 8.96, 8.96); Calibrated: 2011-01-24; Electronics: DAE3 Sn519
Phantom: SAM with 835MHz; Type: SAM; Serial: TP-1223
Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 186

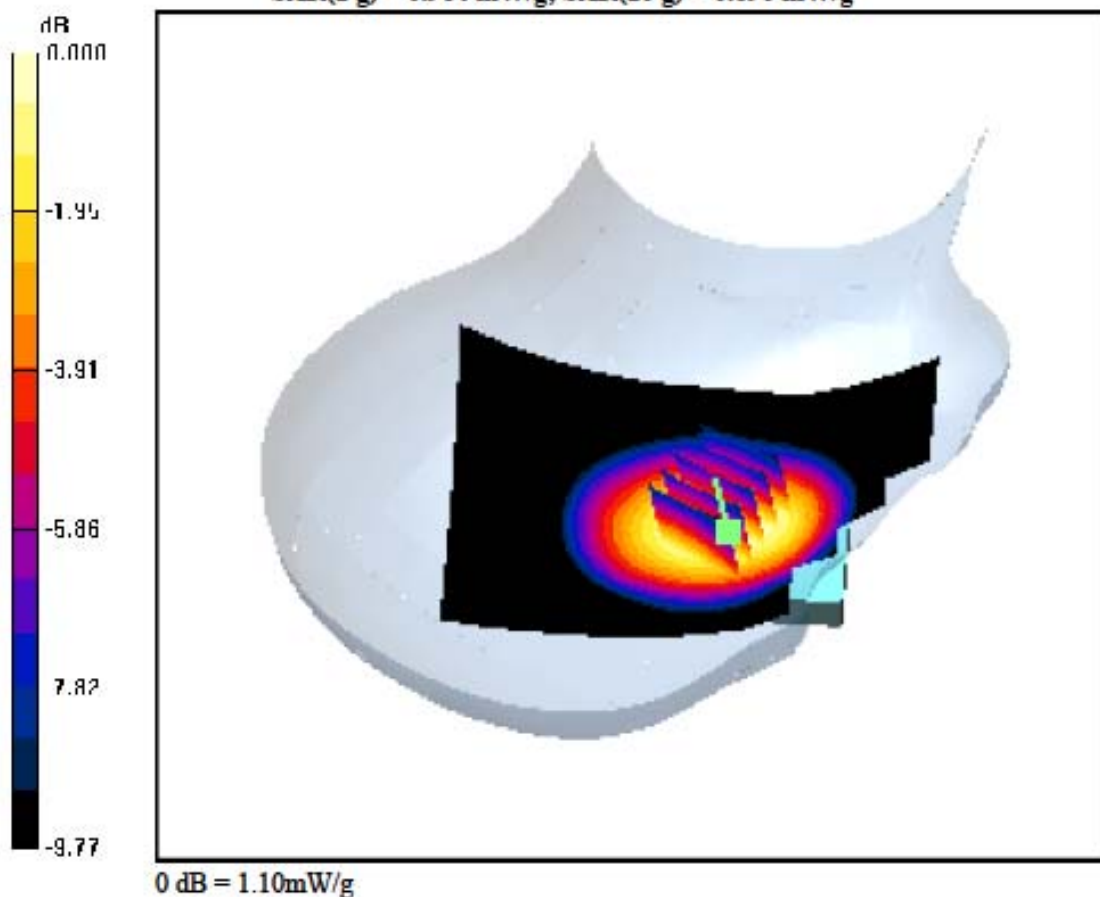
Date: 2011-03-21; Ambient Temp: 22.0; Tissue Temp: 22.5

Right Touch, GSM850 + SIM2 Ch. 190, Ant Internal, Standard Battery**Area Scan (71x111x1):** Measurement grid: dx=15mm, dy=15mm**Zoom Scan (5x5x7)/Cube 0:** Measurement grid: dx=8mm, dy=8mm, dz=5mm

Power Drift = 0.126 dB

Peak SAR (extrapolated) = 1.26 W/kg

SAR(1 g) = 0.964 mW/g; SAR(10 g) = 0.690 mW/g



DIGITAL EMC CO., LTD**DUT: LG-A190a; Type: Bar**

Communication System: PCS1900; Frequency: 1850.2 MHz; Duty Cycle: 1:8.3
Medium parameters used: $f = 1850.2 \text{ MHz}$; $\sigma = 1.37 \text{ mho/m}$; $\epsilon_r = 39.5$; $\rho = 1000 \text{ kg/m}^3$
Phantom section: Left Section

DASY4 Configuration:

Probe: EX3DV4 - SN3643; ConvF(8.26, 8.26, 8.26); Calibrated: 2011-01-24; Electronics: DAE3 Sn519
Phantom: SAM 1800/1900 MHz; Type: SAM; Serial: TP-1224
Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 186

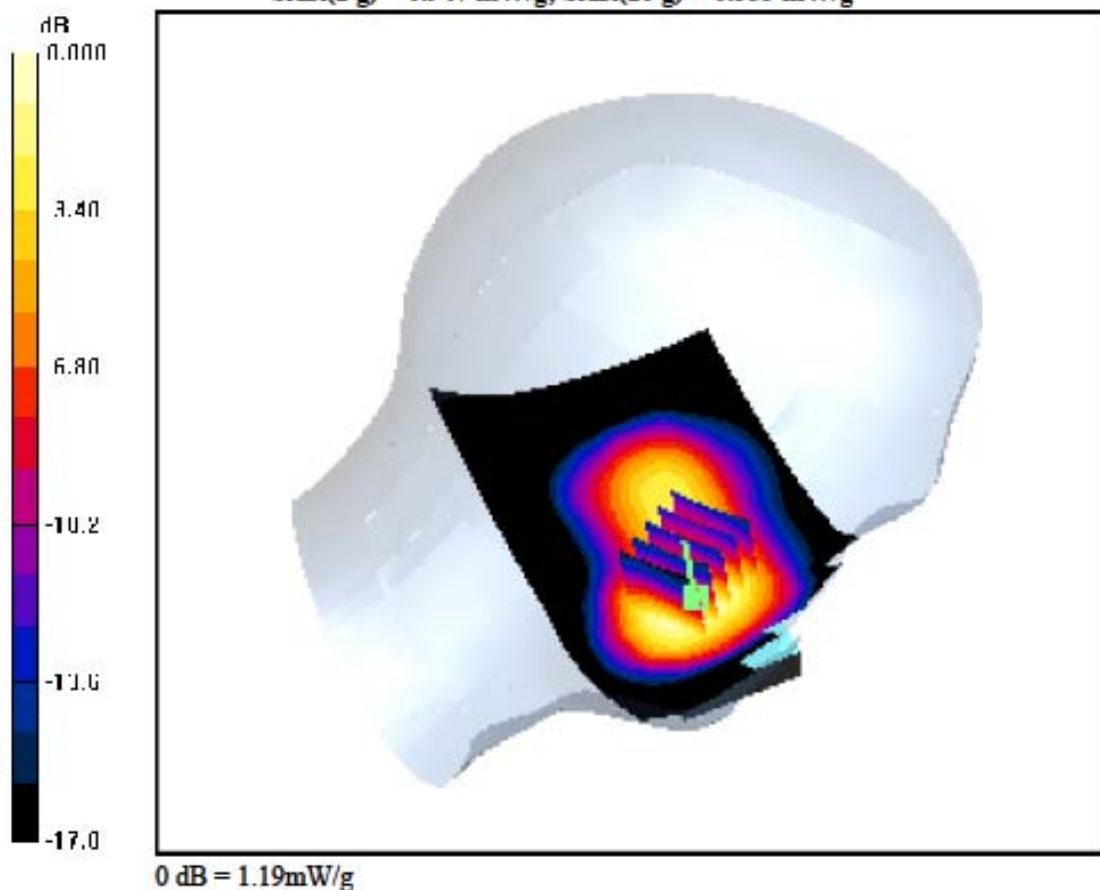
Date: 2011-03-22; Ambient Temp: 22.3; Tissue Temp: 22.6

Left Touch, PCS1900 Ch. 512, Ant Internal, Standard Battery**Area Scan (71x111x1):** 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 = -0.012 dB

Peak SAR (extrapolated) = 1.56 W/kg

SAR(1 g) = 0.947 mW/g; SAR(10 g) = 0.555 mW/g



DIGITAL EMC CO., LTD**DUT: LG-A190a; Type: Bar**

Communication System: PCS1900; Frequency: 1880 MHz; Duty Cycle: 1:8.3
Medium parameters used: $f = 1880 \text{ MHz}$; $\sigma = 1.39 \text{ mho/m}$; $\epsilon_r = 39.7$; $\rho = 1000 \text{ kg/m}^3$
Phantom section: Left Section

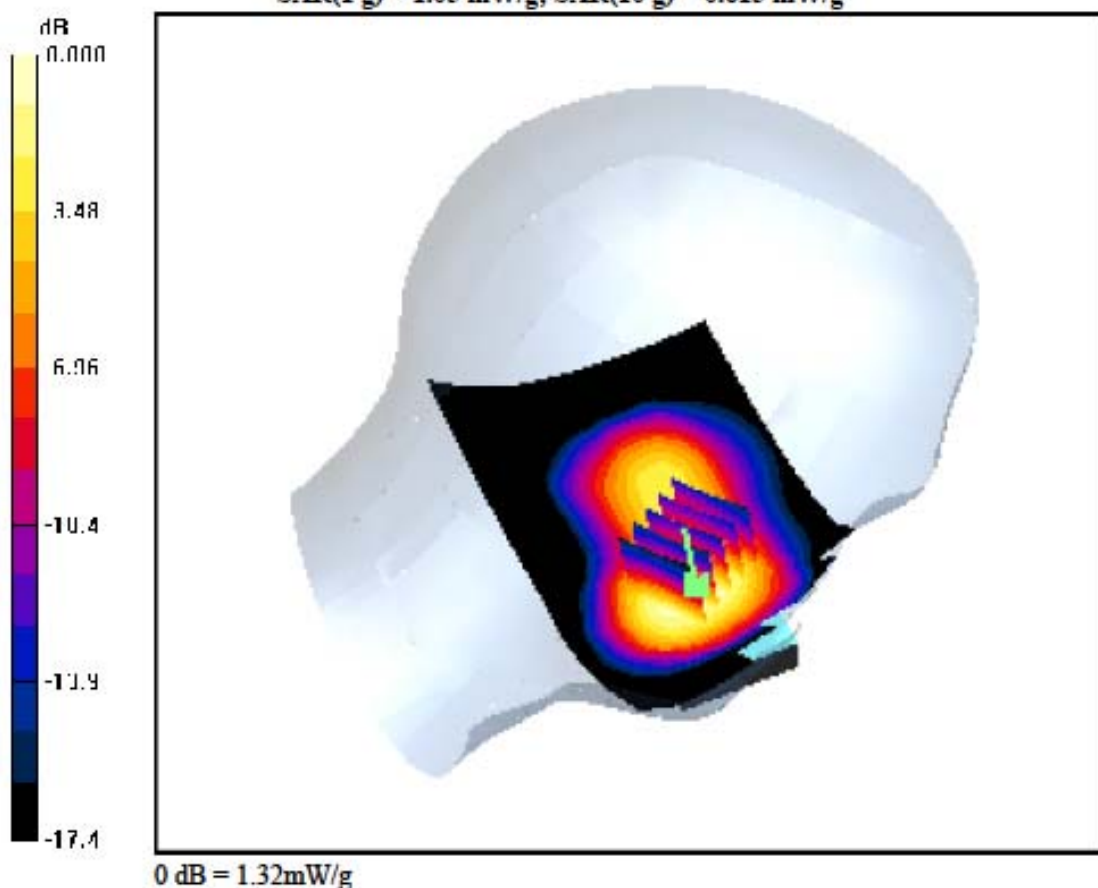
DASY4 Configuration:

Probe: EX3DV4 - SN3643; ConvF(8.26, 8.26, 8.26); Calibrated: 2011-01-24; Electronics: DAE3 Sn519
Phantom: SAM 1800/1900 MHz; Type: SAM; Serial: TP-1224
Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 186

Date: 2011-03-22; Ambient Temp: 22.3; Tissue Temp: 22.6

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

Area Scan (71x111x1): 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 = -0.104 dB
Peak SAR (extrapolated) = 1.67 W/kg
SAR(1 g) = 1.05 mW/g; SAR(10 g) = 0.615 mW/g



DIGITAL EMC CO., LTD**DUT: LG-A190a; Type: Bar**

Communication System: PCS1900; Frequency: 1909.8 MHz; Duty Cycle: 1:8.3
Medium parameters used: $f = 1909.8 \text{ MHz}$; $\sigma = 1.43 \text{ mho/m}$; $\epsilon_r = 40.3$; $\rho = 1000 \text{ kg/m}^3$
Phantom section: Left Section

DASY4 Configuration:

Probe: EX3DV4 - SN3643; ConvF(8.26, 8.26, 8.26); Calibrated: 2011-01-24; Electronics: DAE3 Sn519
Phantom: SAM 1800/1900 MHz; Type: SAM; Serial: TP-1224
Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 186

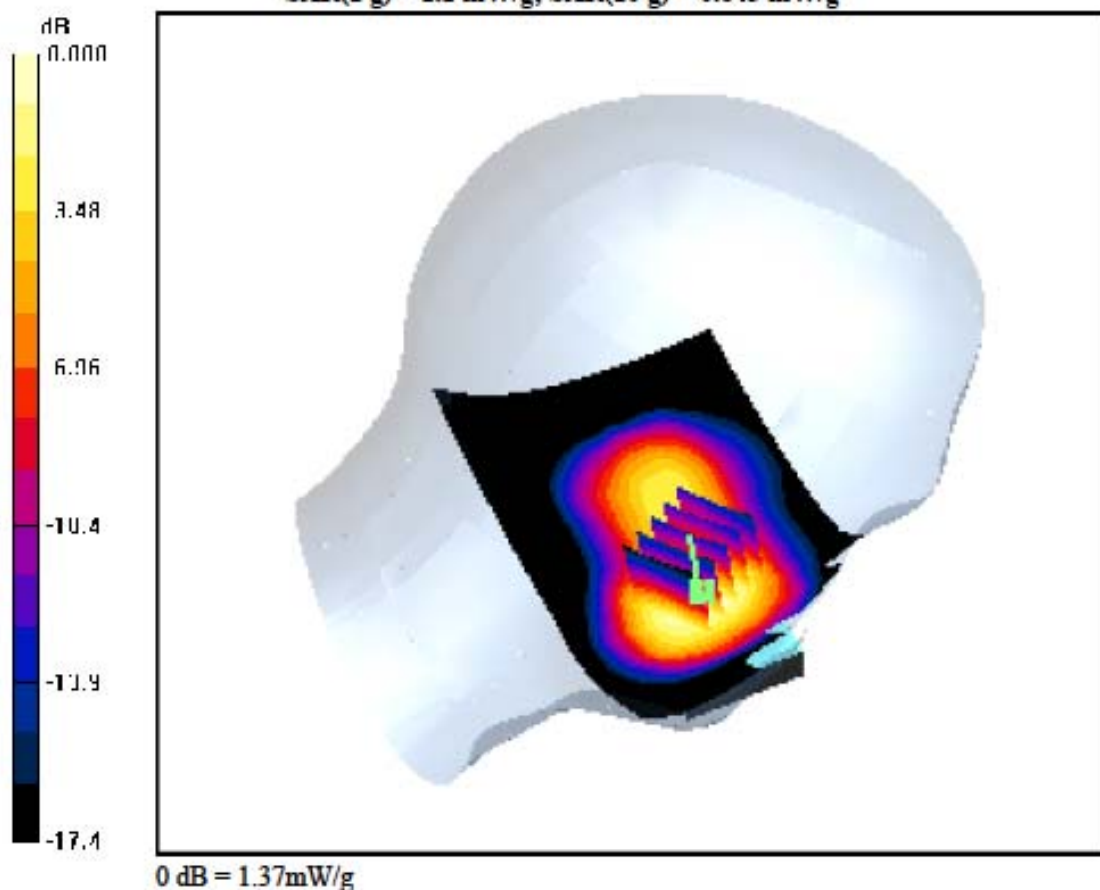
Date: 2011-03-22; Ambient Temp: 22.3; Tissue Temp: 22.6

Left Touch, PCS1900 Ch. 810, Ant Internal, Standard Battery**Area Scan (71x111x1):** 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 = -0.051 dB

Peak SAR (extrapolated) = 1.73 W/kg

SAR(1 g) = 1.1 mW/g; SAR(10 g) = 0.643 mW/g



DIGITAL EMC CO., LTD**DUT: LG-A190a; Type: Bar**

Communication System: PCS1900; Frequency: 1850.2 MHz; Duty Cycle: 1:8.3
Medium parameters used: $f = 1850.2$ MHz; $\sigma = 1.37$ mho/m; $\epsilon_r = 39.5$; $\rho = 1000$ kg/m³

Phantom section: Right Section**DASY4 Configuration:**

Probe: EX3DV4 - SN3643; ConvF(8.26, 8.26, 8.26); Calibrated: 2011-01-24; Electronics: DAE3 Sn519

Phantom: SAM 1800/1900 MHz; Type: SAM; Serial: TP-1224

Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 186

Date: 2011-03-22; Ambient Temp: 22.3; Tissue Temp: 22.6

Right Touch, PCS1900 Ch. 512, Ant Internal, Standard Battery

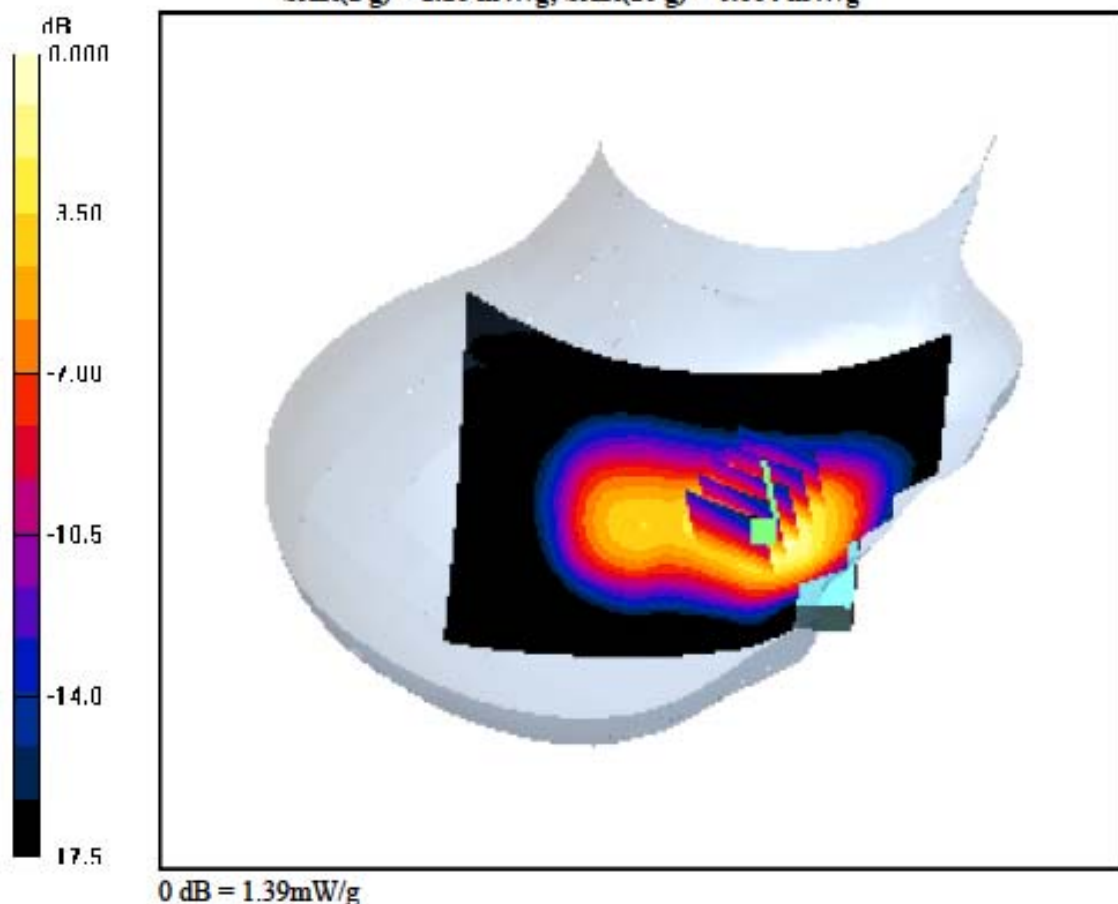
Area Scan (81x111x1): Measurement grid: dx=15mm, dy=15mm

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

Power Drift = -0.040 dB

Peak SAR (extrapolated) = 1.82 W/kg

SAR(1 g) = 1.16 mW/g; SAR(10 g) = 0.664 mW/g



DIGITAL EMC CO., LTD**DUT: LG-A190a; Type: Bar**

Communication System: PCS1900; Frequency: 1880 MHz; Duty Cycle: 1:8.3
Medium parameters used: $f = 1880 \text{ MHz}$; $\sigma = 1.39 \text{ mho/m}$; $\epsilon_r = 39.7$; $\rho = 1000 \text{ kg/m}^3$
Phantom section: Right Section

DASY4 Configuration:

Probe: EX3DV4 - SN3643; ConvF(8.26, 8.26, 8.26); Calibrated: 2011-01-24; Electronics: DAE3 Sn519
Phantom: SAM 1800/1900 MHz; Type: SAM; Serial: TP-1224
Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 186

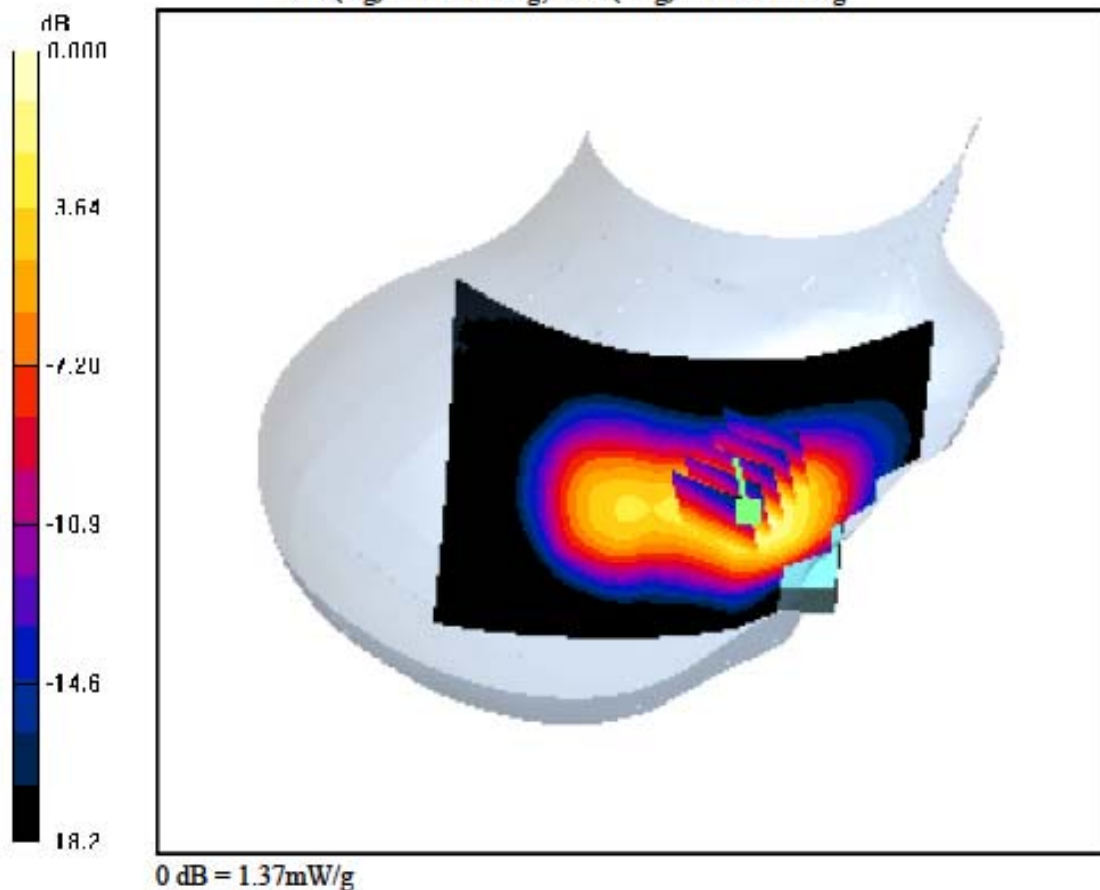
Date: 2011-03-22; Ambient Temp: 22.3; Tissue Temp: 22.6

Right Touch, PCS1900 Ch. 661, Ant Internal, Standard Battery**Area Scan (81x111x1):** 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 = -0.006 dB

Peak SAR (extrapolated) = 1.78 W/kg

SAR(1 g) = 1.12 mW/g; SAR(10 g) = 0.635 mW/g



DIGITAL EMC CO., LTD**DUT: LG-A190a; Type: Bar**

Communication System: PCS1900; Frequency: 1909.8 MHz; Duty Cycle: 1:8.3
Medium parameters used: $f = 1909.8 \text{ MHz}$; $\sigma = 1.43 \text{ mho/m}$; $\epsilon_r = 40.3$; $\rho = 1000 \text{ kg/m}^3$
Phantom section: Right Section

DASY4 Configuration:

Probe: EX3DV4 - SN3643; ConvF(8.26, 8.26, 8.26); Calibrated: 2011-01-24; Electronics: DAE3 Sn519

Phantom: SAM 1800/1900 MHz; Type: SAM; Serial: TP-1224

Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 186

Date: 2011-03-22; Ambient Temp: 22.3; Tissue Temp: 22.6

Right Touch, PCS1900 Ch. 810, Ant Internal, Standard Battery

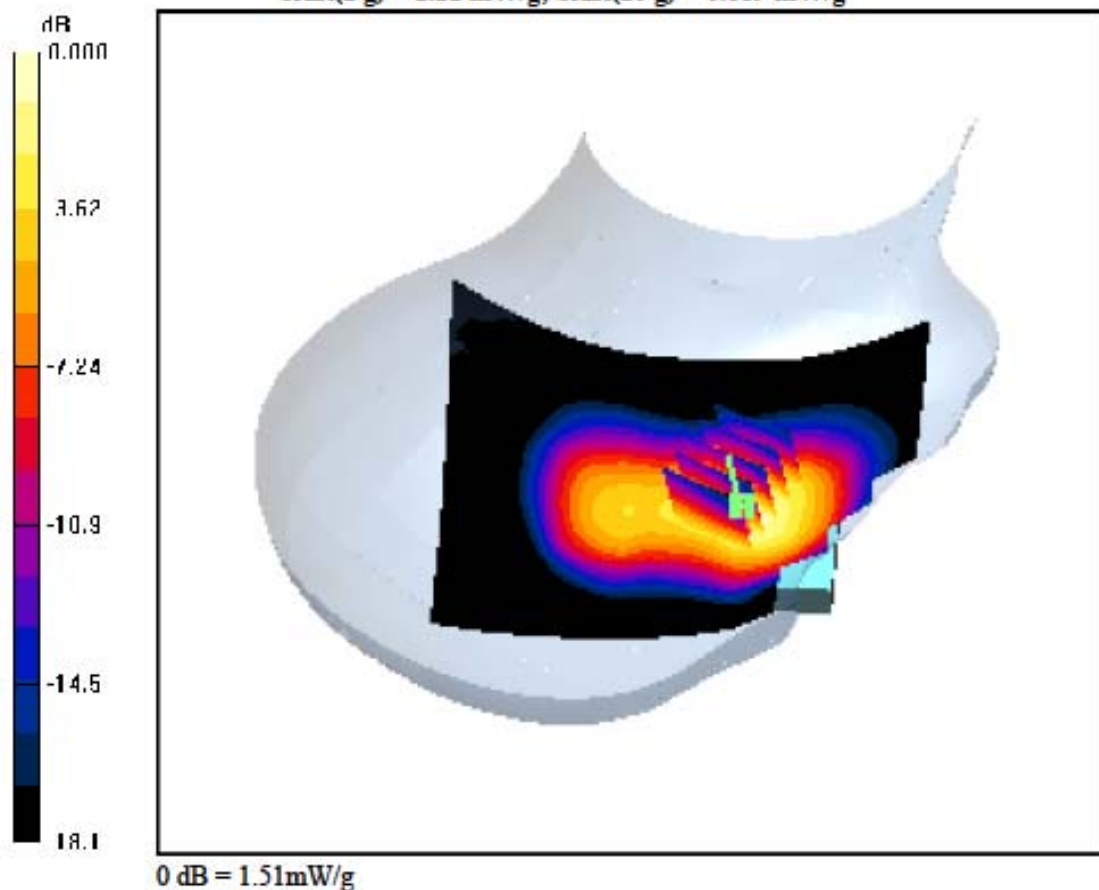
Area Scan (81x111x1): Measurement grid: $dx=15\text{mm}$, $dy=15\text{mm}$

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

Power Drift = 0.026 dB

Peak SAR (extrapolated) = 1.91 W/kg

SAR(1 g) = 1.21 mW/g; SAR(10 g) = 0.689 mW/g



DIGITAL EMC CO., LTD**DUT: LG-A190a; Type: Bar**

Communication System: PCS1900; Frequency: 1880 MHz; Duty Cycle: 1:8.3
Medium parameters used: $f = 1880 \text{ MHz}$; $\sigma = 1.39 \text{ mho/m}$; $\epsilon_r = 39.7$; $\rho = 1000 \text{ kg/m}^3$
Phantom section: Left Section

DASY4 Configuration:

Probe: EX3DV4 - SN3643; ConvF(8.26, 8.26, 8.26); Calibrated: 2011-01-24; Electronics: DAE3 Sn519

Phantom: SAM 1800/1900 MHz; Type: SAM; Serial: TP-1224

Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 186

Date: 2011-03-22; Ambient Temp: 22.3; Tissue Temp: 22.6

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

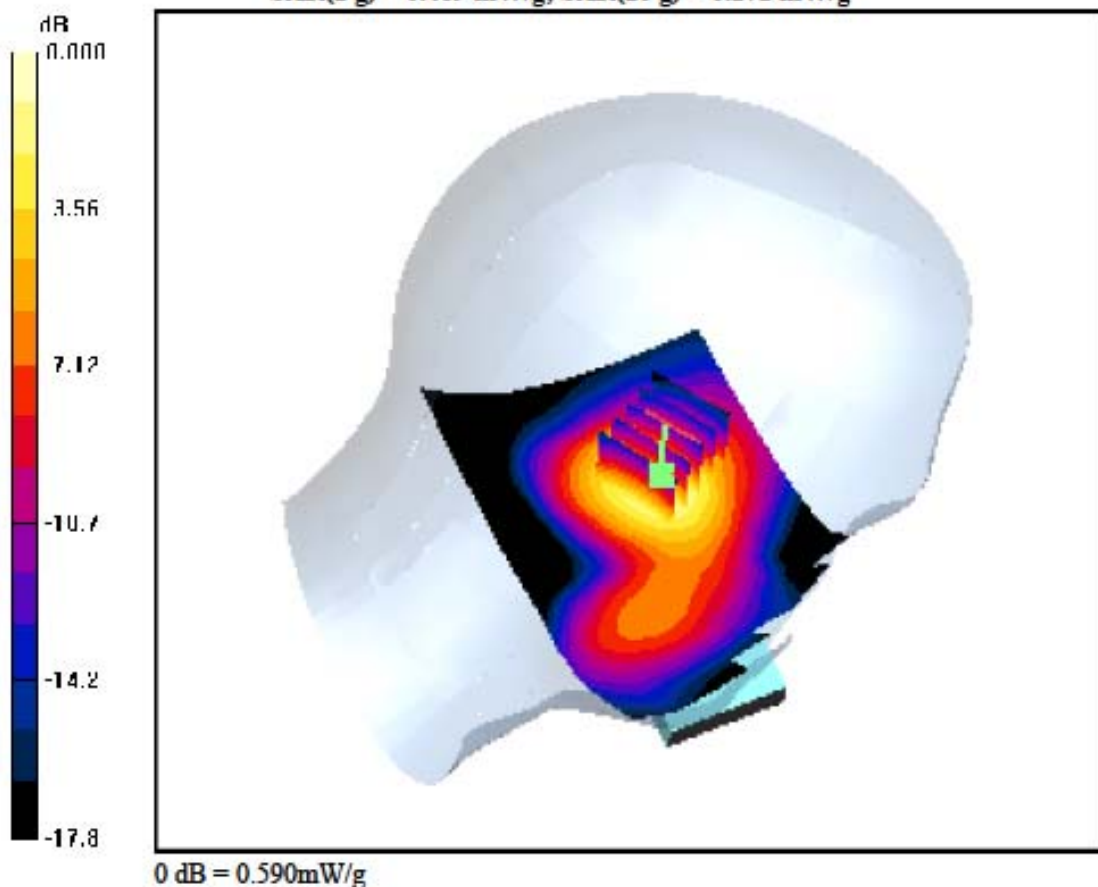
Area Scan (71x111x1): Measurement grid: $dx=15\text{mm}$, $dy=15\text{mm}$

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

Power Drift = 0.081 dB

Peak SAR (extrapolated) = 0.754 W/kg

SAR(1 g) = 0.469 mW/g; SAR(10 g) = 0.272 mW/g



DIGITAL EMC CO., LTD**DUT: LG-A190a; Type: Bar**

Communication System: PCS1900; Frequency: 1880 MHz; Duty Cycle: 1:8.3
Medium parameters used: $f = 1880 \text{ MHz}$; $\sigma = 1.39 \text{ mho/m}$; $\epsilon_r = 39.7$; $\rho = 1000 \text{ kg/m}^3$
Phantom section: Right Section

DASY4 Configuration:

Probe: EX3DV4 - SN3643; ConvF(8.26, 8.26, 8.26); Calibrated: 2011-01-24; Electronics: DAE3 Sn519

Phantom: SAM 1800/1900 MHz; Type: SAM; Serial: TP-1224

Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 186

Date: 2011-03-22; Ambient Temp: 22.3; Tissue Temp: 22.6

Right Tilt, PCS1900 Ch. 661, Ant Internal, Standard Battery

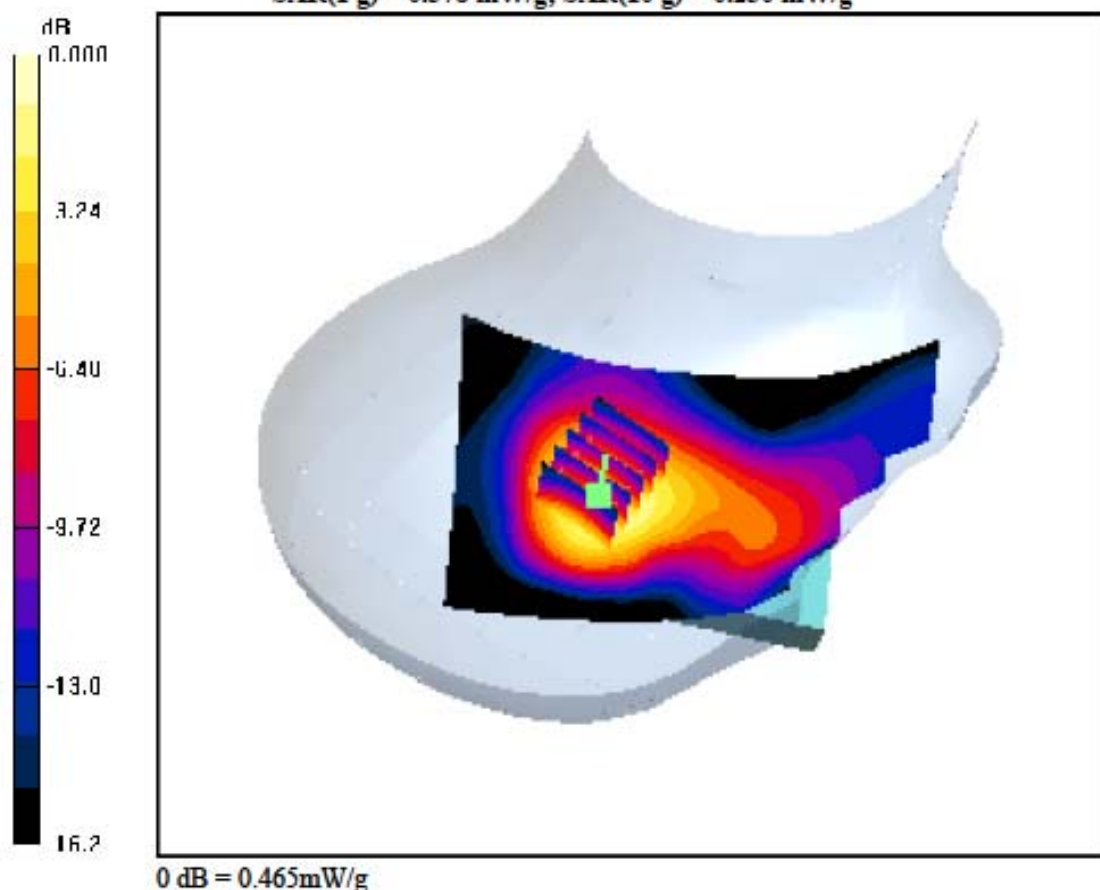
Area Scan (71x111x1): Measurement grid: $dx=15\text{mm}$, $dy=15\text{mm}$

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

Power Drift = 0.008 dB

Peak SAR (extrapolated) = 0.572 W/kg

SAR(1 g) = 0.378 mW/g; SAR(10 g) = 0.230 mW/g



DIGITAL EMC CO., LTD**DUT: LG-A190a; Type: Bar**

Communication System: PCS1900; Frequency: 1909.8 MHz; Duty Cycle: 1:8.3
Medium parameters used: $f = 1909.8 \text{ MHz}$; $\sigma = 1.43 \text{ mho/m}$; $\epsilon_r = 40.3$; $\rho = 1000 \text{ kg/m}^3$
Phantom section: Right Section

DASY4 Configuration:

Probe: EX3DV4 - SN3643; ConvF(8.26, 8.26, 8.26); Calibrated: 2011-01-24; Electronics: DAE3 Sn519

Phantom: SAM 1800/1900 MHz; Type: SAM; Serial: TP-1224

Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 186

Date: 2011-03-22; Ambient Temp: 22.3; Tissue Temp: 22.6

Right Touch, PCS1900 + SIM2 Ch. 810, Ant Internal, Standard Battery

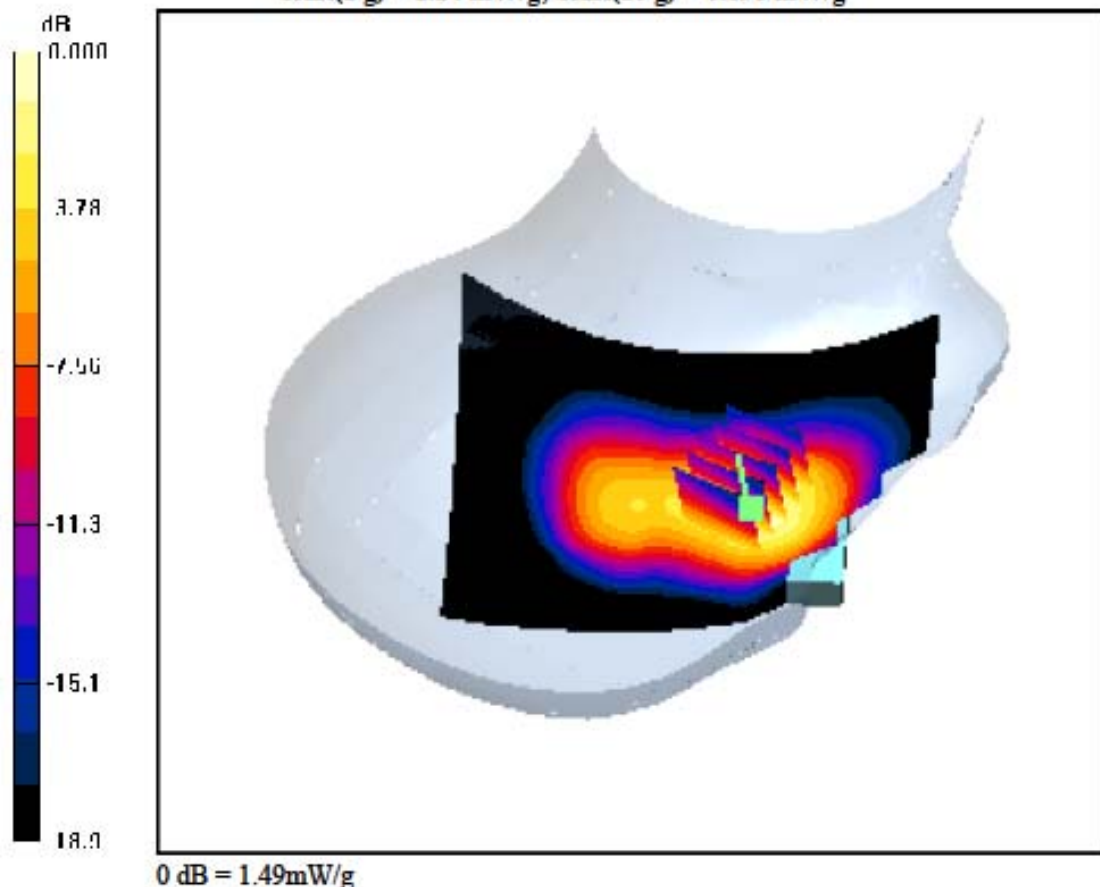
Area Scan (81x111x1): Measurement grid: $dx=15\text{mm}$, $dy=15\text{mm}$

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

Power Drift = 0.308 dB

Peak SAR (extrapolated) = 1.99 W/kg

SAR(1 g) = 1.24 mW/g; SAR(10 g) = 0.698 mW/g



DIGITAL EMC CO., LTD**DUT: LG-A190a; Type: Bar**

Communication System: GSM 850; Frequency: 824.2 MHz; Duty Cycle: 1:8.3
Medium parameters used: $f = 824.2 \text{ MHz}$; $\sigma = 0.934 \text{ mho/m}$; $\epsilon_r = 54.2$; $\rho = 1000 \text{ kg/m}^3$
Phantom section: Flat Section

DASY4 Configuration:

Probe: EX3DV4 - SN3643; ConvF(8.97, 8.97, 8.97); Calibrated: 2011-01-24; Electronics: DAE3 Sn519

Phantom: SAM with 835MHz; Type: SAM; Serial: TP-1223

Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 186

Test Date: 2011-03-21; Ambient Temp: 22.0; Tissue Temp: 22.5

2cm space from Body, Rear, GSM850 Ch. 128, Ant Internal

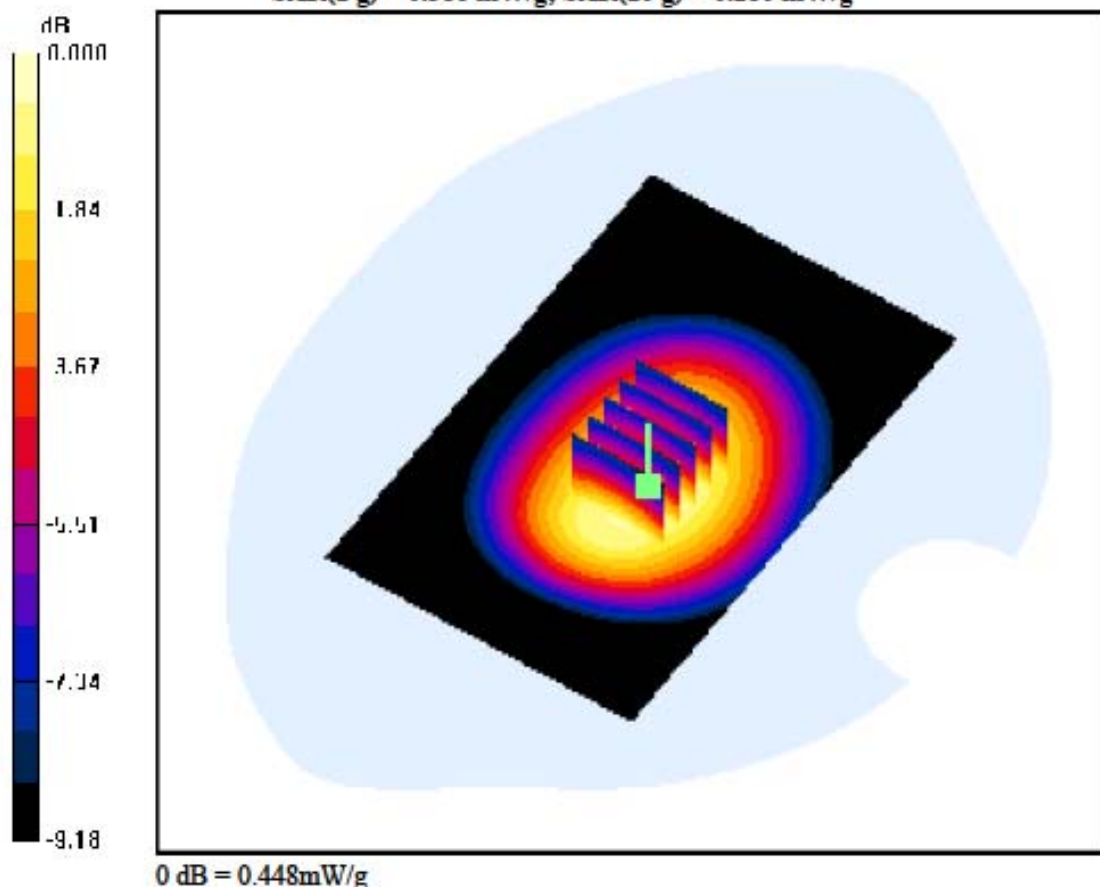
Area Scan (71x111x1): Measurement grid: $dx=15\text{mm}$, $dy=15\text{mm}$

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

Power Drift = 0.034 dB

Peak SAR (extrapolated) = 0.518 W/kg

SAR(1 g) = 0.386 mW/g; SAR(10 g) = 0.280 mW/g



DIGITAL EMC CO., LTD**DUT: LG-A190a; Type: Bar**

Communication System: GSM 850; Frequency: 836.6 MHz; Duty Cycle: 1:8.3
Medium parameters used: $f = 836.6 \text{ MHz}$; $\sigma = 0.971 \text{ mho/m}$; $\epsilon_r = 54.6$; $\rho = 1000 \text{ kg/m}^3$
Phantom section: Flat Section

DASY4 Configuration:

Probe: EX3DV4 - SN3643; ConvF(8.97, 8.97, 8.97); Calibrated: 2011-01-24; Electronics: DAE3 Sn519

Phantom: SAM with 835MHz; Type: SAM; Serial: TP-1223

Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 186

Test Date: 2011-03-21; Ambient Temp: 22.0; Tissue Temp: 22.5

2cm space from Body, Rear, GSM850 Ch. 190, Ant Internal

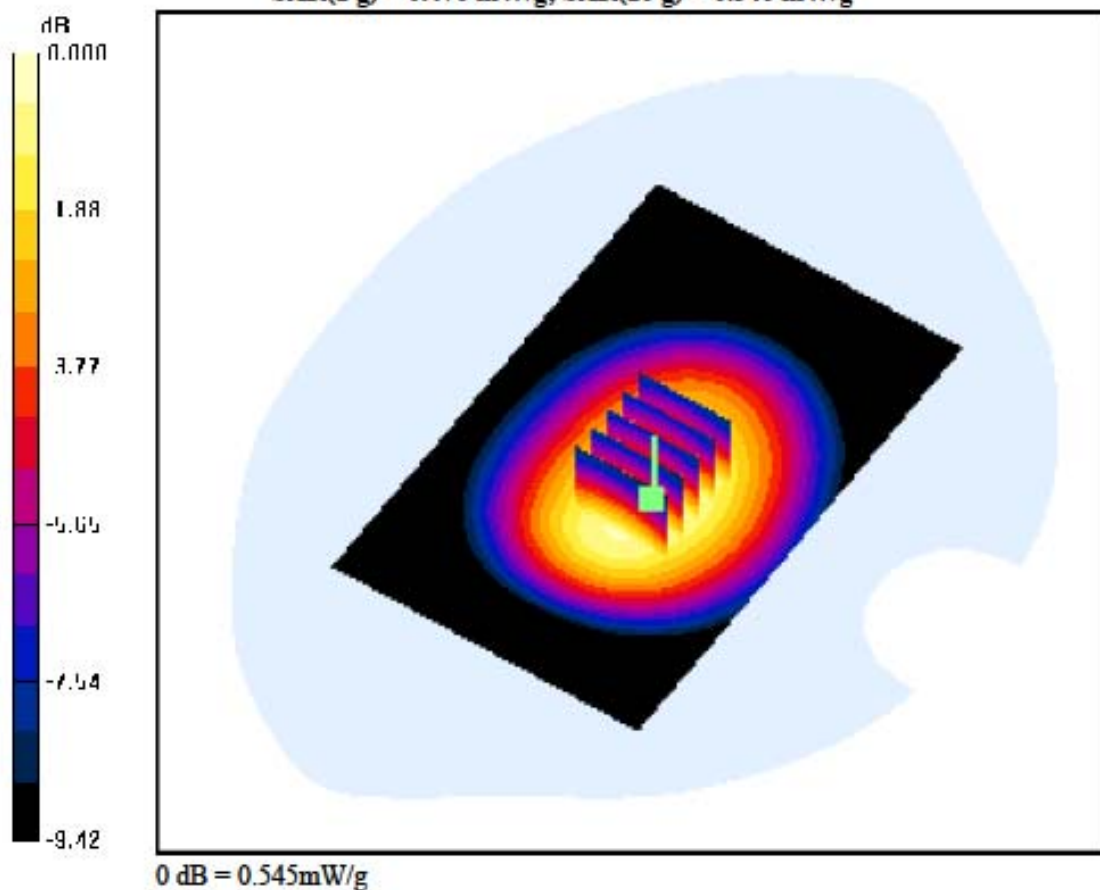
Area Scan (71x111x1): Measurement grid: $dx=15\text{mm}$, $dy=15\text{mm}$

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

Power Drift = -0.014 dB

Peak SAR (extrapolated) = 0.630 W/kg

SAR(1 g) = 0.470 mW/g; SAR(10 g) = 0.340 mW/g



DIGITAL EMC CO., LTD**DUT: LG-A190a; Type: Bar**

Communication System: GSM 850; Frequency: 848.8 MHz; Duty Cycle: 1:8.3
Medium parameters used: $f = 848.8 \text{ MHz}$; $\sigma = 0.991 \text{ mho/m}$; $\epsilon_r = 54.8$; $\rho = 1000 \text{ kg/m}^3$
Phantom section: Flat Section

DASY4 Configuration:

Probe: EX3DV4 - SN3643; ConvF(8.97, 8.97, 8.97); Calibrated: 2011-01-24; Electronics: DAE3 Sn519

Phantom: SAM with 835MHz; Type: SAM; Serial: TP-1223

Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 186

Test Date: 2011-03-21; Ambient Temp: 22.0; Tissue Temp: 22.5

2cm space from Body, Rear, GSM850 Ch. 251, Ant Internal

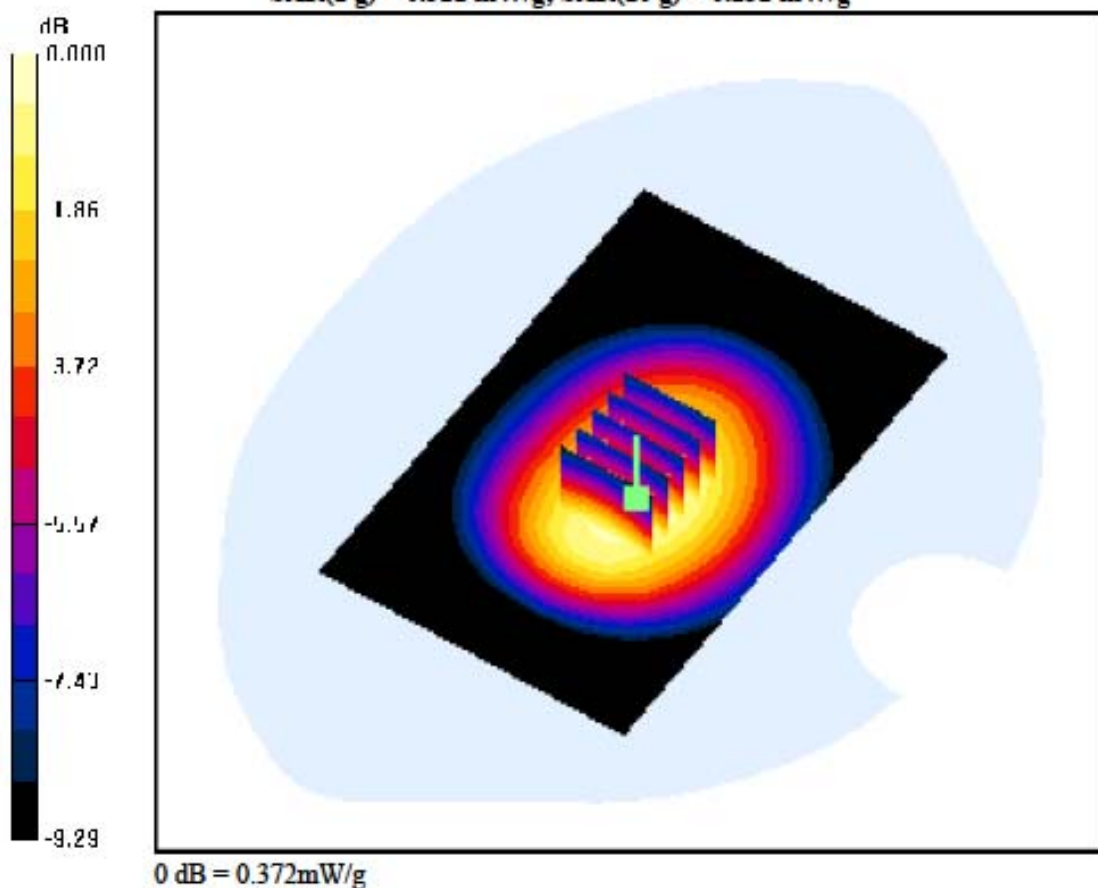
Area Scan (71x111x1): Measurement grid: $dx=15\text{mm}$, $dy=15\text{mm}$

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

Power Drift = -0.034 dB

Peak SAR (extrapolated) = 0.432 W/kg

SAR(1 g) = 0.321 mW/g; SAR(10 g) = 0.232 mW/g



DIGITAL EMC CO., LTD**DUT: LG-A190a; Type: Bar**

Communication System: GSM 850; Frequency: 836.6 MHz; Duty Cycle: 1:8.3
Medium parameters used: $f = 836.6 \text{ MHz}$; $\sigma = 0.971 \text{ mho/m}$; $\epsilon_r = 54.6$; $\rho = 1000 \text{ kg/m}^3$
Phantom section: Flat Section

DASY4 Configuration:

Probe: EX3DV4 - SN3643; ConvF(8.97, 8.97, 8.97); Calibrated: 2011-01-24; Electronics: DAE3 Sn519
Phantom: SAM with 835MHz; Type: SAM; Serial: TP-1223
Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 186

Test Date: 2011-03-21; Ambient Temp: 22.0; Tissue Temp: 22.5

2cm space from Body, Front, GSM850 Ch. 190, Ant Internal

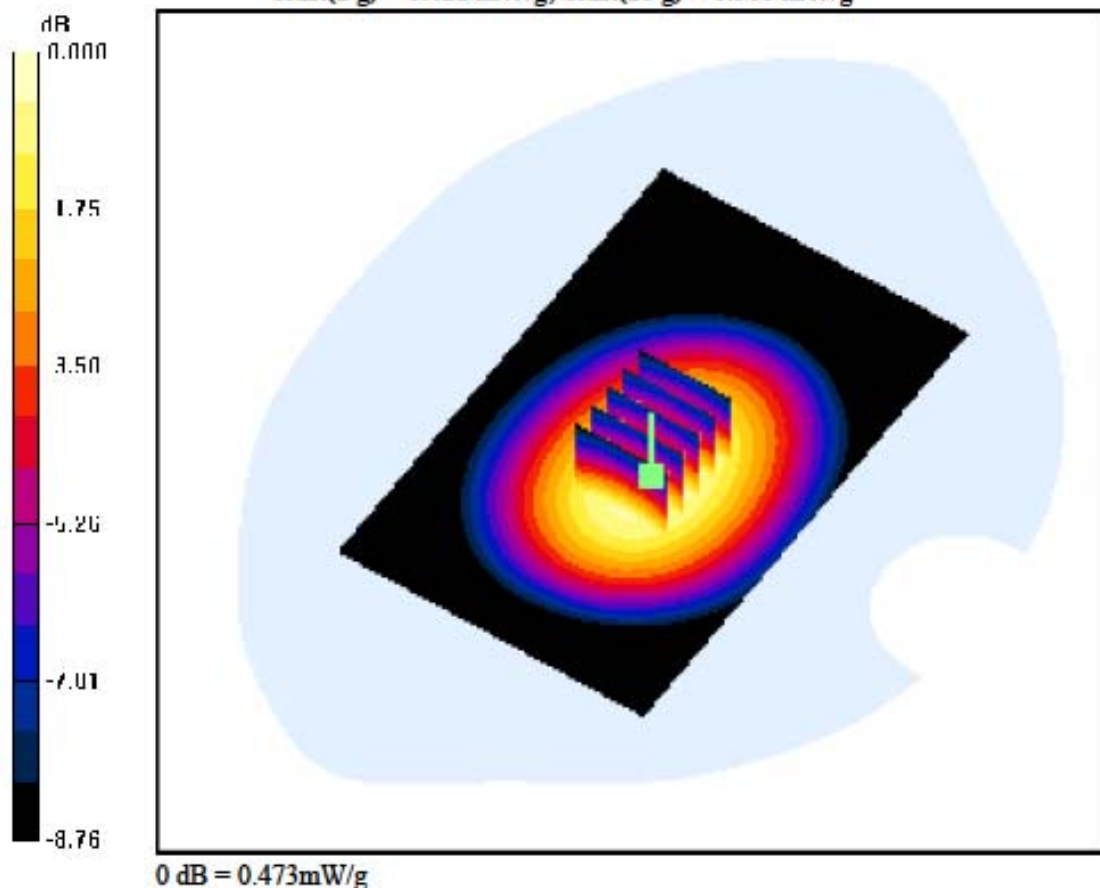
Area Scan (71x111x1): Measurement grid: $dx=15\text{mm}$, $dy=15\text{mm}$

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

Power Drift = -0.082 dB

Peak SAR (extrapolated) = 0.544 W/kg

SAR(1 g) = 0.411 mW/g; SAR(10 g) = 0.300 mW/g



DIGITAL EMC CO., LTD**DUT: LG-A190a; Type: Bar**

Communication System: GSM 850; Frequency: 836.6 MHz; Duty Cycle: 1:8.3
Medium parameters used: $f = 836.6 \text{ MHz}$; $\sigma = 0.971 \text{ mho/m}$; $\epsilon_r = 54.6$; $\rho = 1000 \text{ kg/m}^3$

Phantom section: Flat Section**DASY4 Configuration:**

Probe: EX3DV4 - SN3643; ConvF(8.97, 8.97, 8.97); Calibrated: 2011-01-24; Electronics: DAE3 Sn519

Phantom: SAM with 835MHz; Type: SAM; Serial: TP-1223

Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 186

Test Date: 2011-03-21; Ambient Temp: 22.0; Tissue Temp: 22.5

2cm space from Body, Rear, GSM850 + SIM2 Ch. 190, Ant Internal

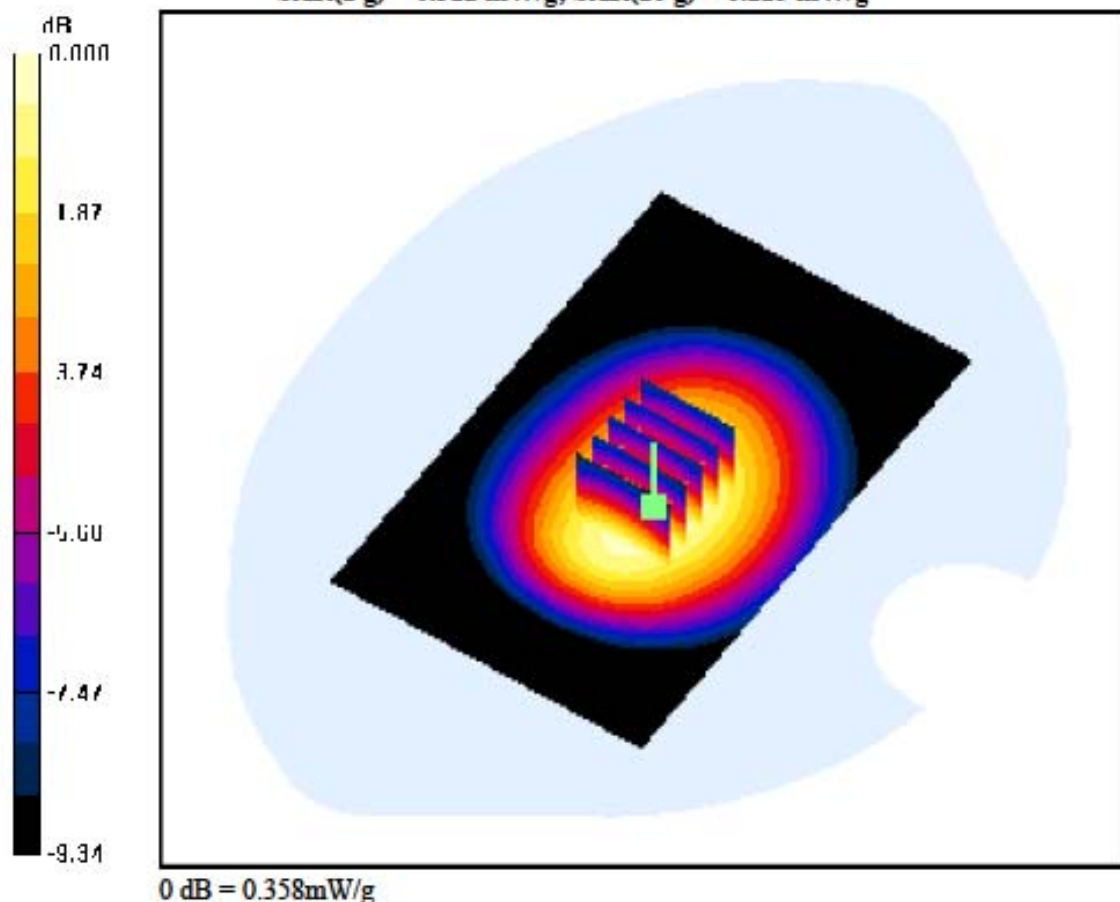
Area Scan (71x111x1): Measurement grid: $dx=15\text{mm}$, $dy=15\text{mm}$

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

Power Drift = -0.088 dB

Peak SAR (extrapolated) = 0.414 W/kg

SAR(1 g) = 0.312 mW/g; SAR(10 g) = 0.225 mW/g



DIGITAL EMC CO., LTD**DUT: LG-A190a; Type: Bar**

Communication System: PCS1900; Frequency: 1850.2 MHz; Duty Cycle: 1:8.3
Medium parameters used: $f = 1850.2 \text{ MHz}$; $\sigma = 1.57 \text{ mho/m}$; $\epsilon_r = 53.6$; $\rho = 1000 \text{ kg/m}^3$
Phantom section: Flat Section

DASY4 Configuration:

Probe: EX3DV4 - SN3643; ConvF(7.19, 7.19, 7.19); Calibrated: 2011-01-24; Electronics: DAE3 Sn519
Phantom: SAM 1800/1900 MHz; Type: SAM; Serial: TP-1224
Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 186

Test Date: 2011-03-22; Ambient Temp: 22.3; Tissue Temp: 22.6

2cm space from Body, Rear, PCS1900 Ch. 512, Ant Internal

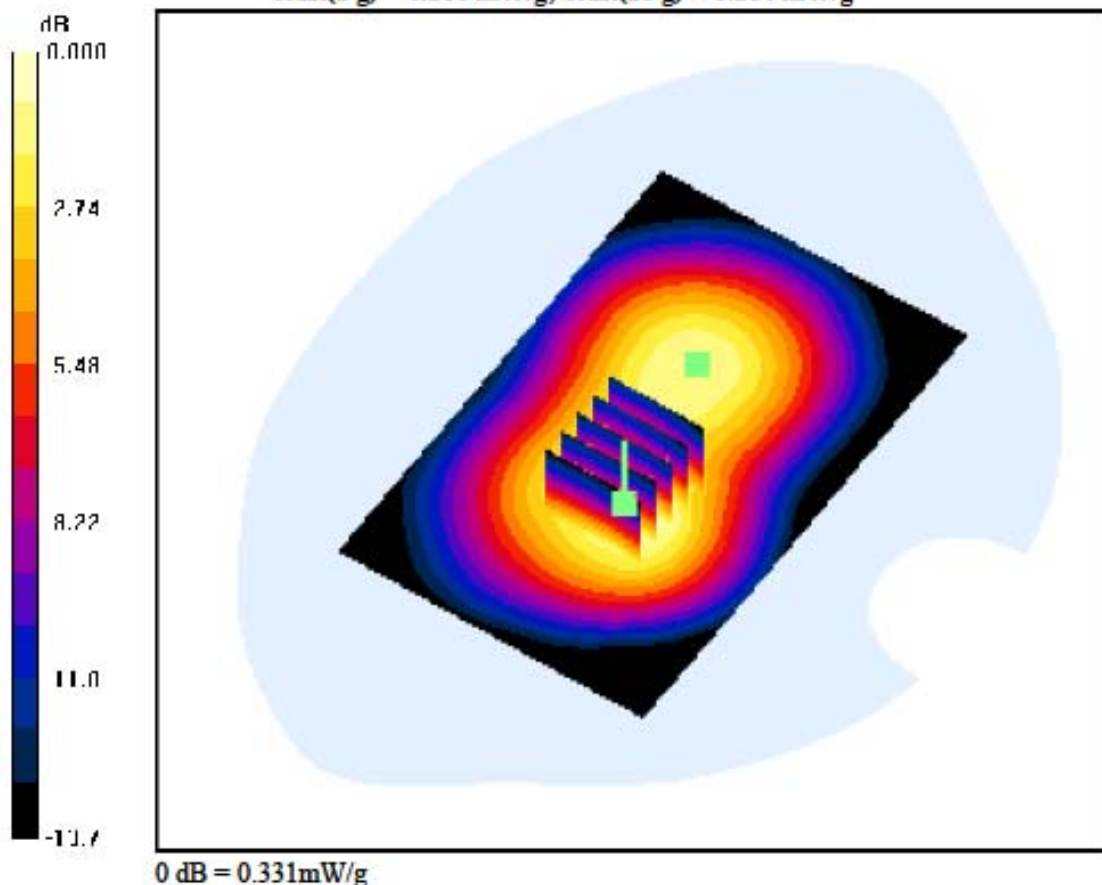
Area Scan (71x111x1): Measurement grid: $dx=15\text{mm}$, $dy=15\text{mm}$

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

Power Drift = 0.038 dB

Peak SAR (extrapolated) = 0.424 W/kg

SAR(1 g) = 0.266 mW/g; SAR(10 g) = 0.164 mW/g



DIGITAL EMC CO., LTD**DUT: LG-A190a; Type: Bar**

Communication System: PCS1900; Frequency: 1850.2 MHz; Duty Cycle: 1:8.3
Medium parameters used: $f = 1850.2 \text{ MHz}$; $\sigma = 1.57 \text{ mho/m}$; $\epsilon_r = 53.6$; $\rho = 1000 \text{ kg/m}^3$
Phantom section: Flat Section

DASY4 Configuration:

Probe: EX3DV4 - SN3643; ConvF(7.19, 7.19, 7.19); Calibrated: 2011-01-24; Electronics: DAE3 Sn519
Phantom: SAM 1800/1900 MHz; Type: SAM; Serial: TP-1224
Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 186

Test Date: 2011-03-22; Ambient Temp: 22.3; Tissue Temp: 22.6

2cm space from Body, Rear, PCS1900 Ch. 512, Ant Internal

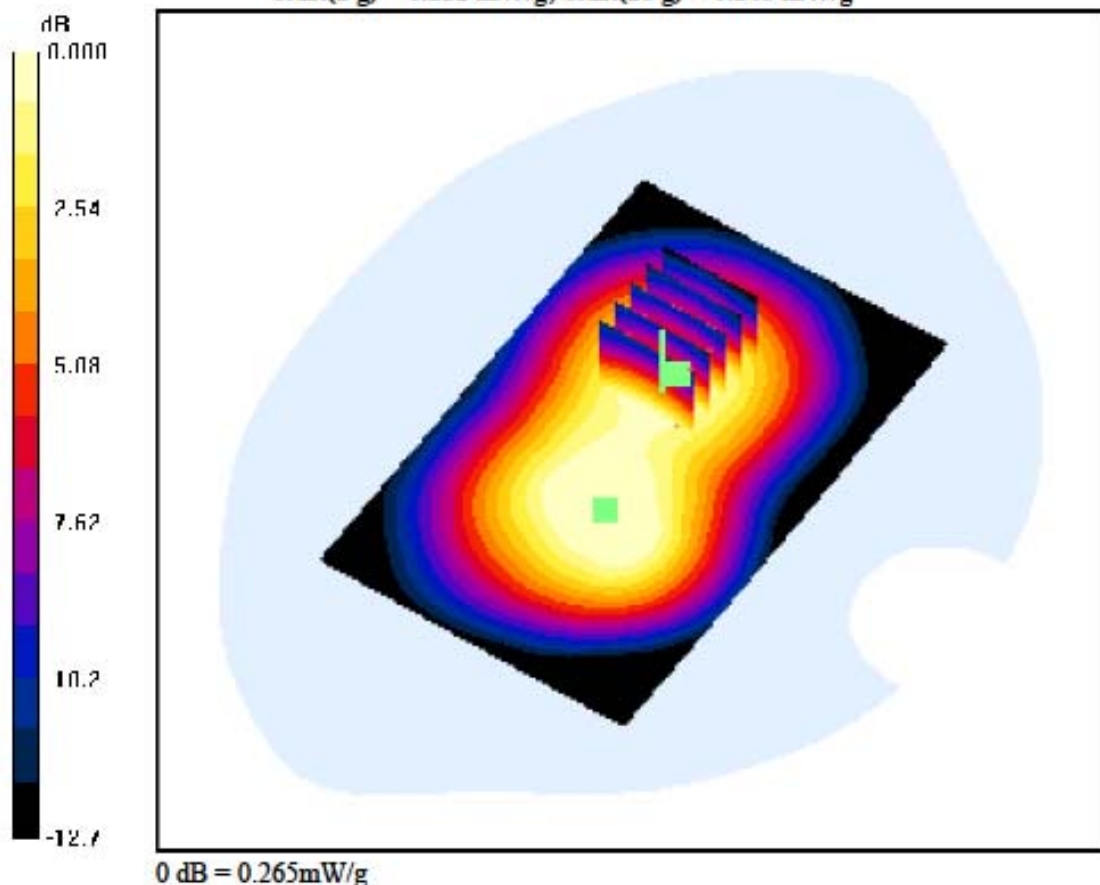
Area Scan (71x111x1): Measurement grid: $dx=15\text{mm}$, $dy=15\text{mm}$

Zoom Scan (5x5x7)/Cube 1: Measurement grid: $dx=8\text{mm}$, $dy=8\text{mm}$, $dz=5\text{mm}$

Power Drift = 0.038 dB

Peak SAR (extrapolated) = 0.328 W/kg

SAR(1 g) = 0.222 mW/g; SAR(10 g) = 0.145 mW/g



DIGITAL EMC CO., LTD**DUT: LG-A190a; Type: Bar**

Communication System: PCS1900; Frequency: 1880 MHz; Duty Cycle: 1:8.3
Medium parameters used: $f = 1880 \text{ MHz}$; $\sigma = 1.55 \text{ mho/m}$; $\epsilon_r = 53.8$; $\rho = 1000 \text{ kg/m}^3$
Phantom section: Flat Section

DASY4 Configuration:

Probe: EX3DV4 - SN3643; ConvF(7.19, 7.19, 7.19); Calibrated: 2011-01-24; Electronics: DAE3 Sn519

Phantom: SAM 1800/1900 MHz; Type: SAM; Serial: TP-1224

Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 186

Test Date: 2011-03-22; Ambient Temp: 22.3; Tissue Temp: 22.6

2cm space from Body, Rear, PCS1900 Ch. 661, Ant Internal

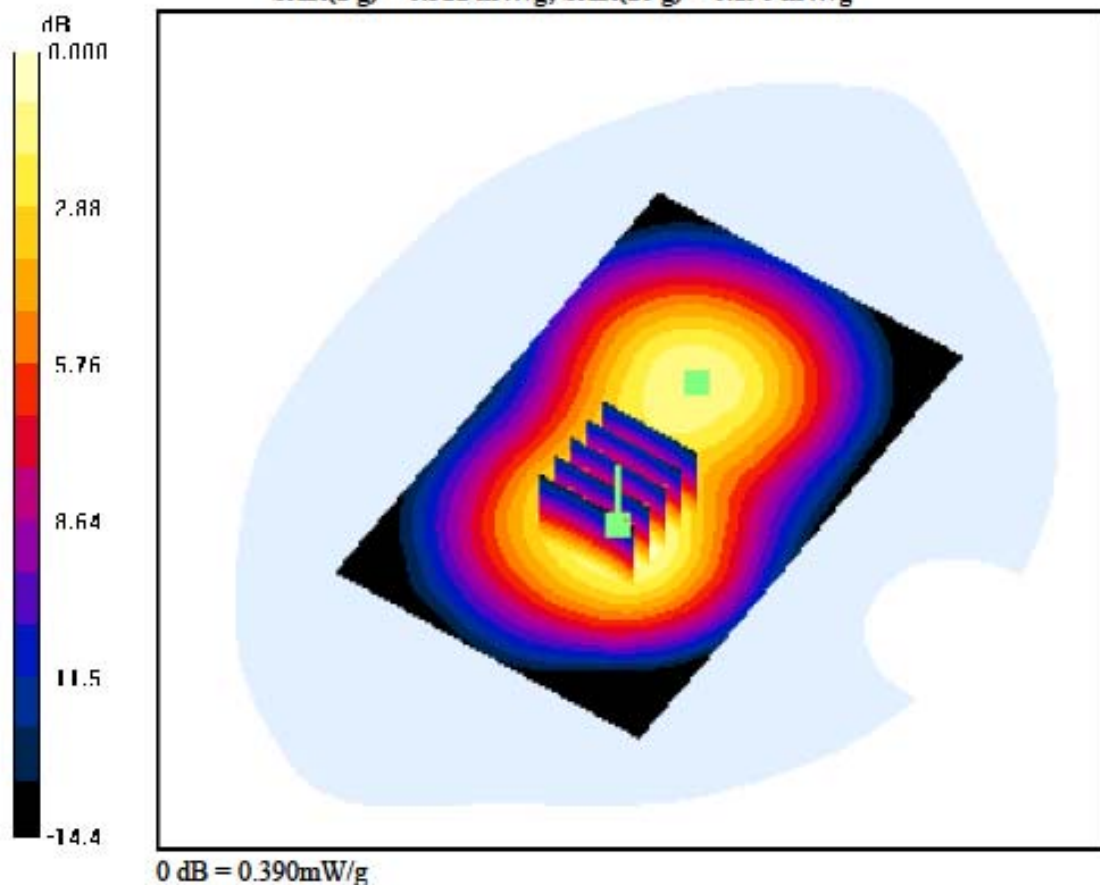
Area Scan (71x111x1): Measurement grid: $dx=15\text{mm}$, $dy=15\text{mm}$

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

Power Drift = 0.020 dB

Peak SAR (extrapolated) = 0.502 W/kg

SAR(1 g) = 0.311 mW/g; SAR(10 g) = 0.190 mW/g



DIGITAL EMC CO., LTD**DUT: LG-A190a; Type: Bar**

Communication System: PCS1900; Frequency: 1880 MHz; Duty Cycle: 1:8.3
Medium parameters used: $f = 1880 \text{ MHz}$; $\sigma = 1.55 \text{ mho/m}$; $\epsilon_r = 53.8$; $\rho = 1000 \text{ kg/m}^3$
Phantom section: Flat Section

DASY4 Configuration:

Probe: EX3DV4 - SN3643; ConvF(7.19, 7.19, 7.19); Calibrated: 2011-01-24; Electronics: DAE3 Sn519
Phantom: SAM 1800/1900 MHz; Type: SAM; Serial: TP-1224
Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 186

Test Date: 2011-03-22; Ambient Temp: 22.3; Tissue Temp: 22.6

2cm space from Body, Rear, PCS1900 Ch. 661, Ant Internal

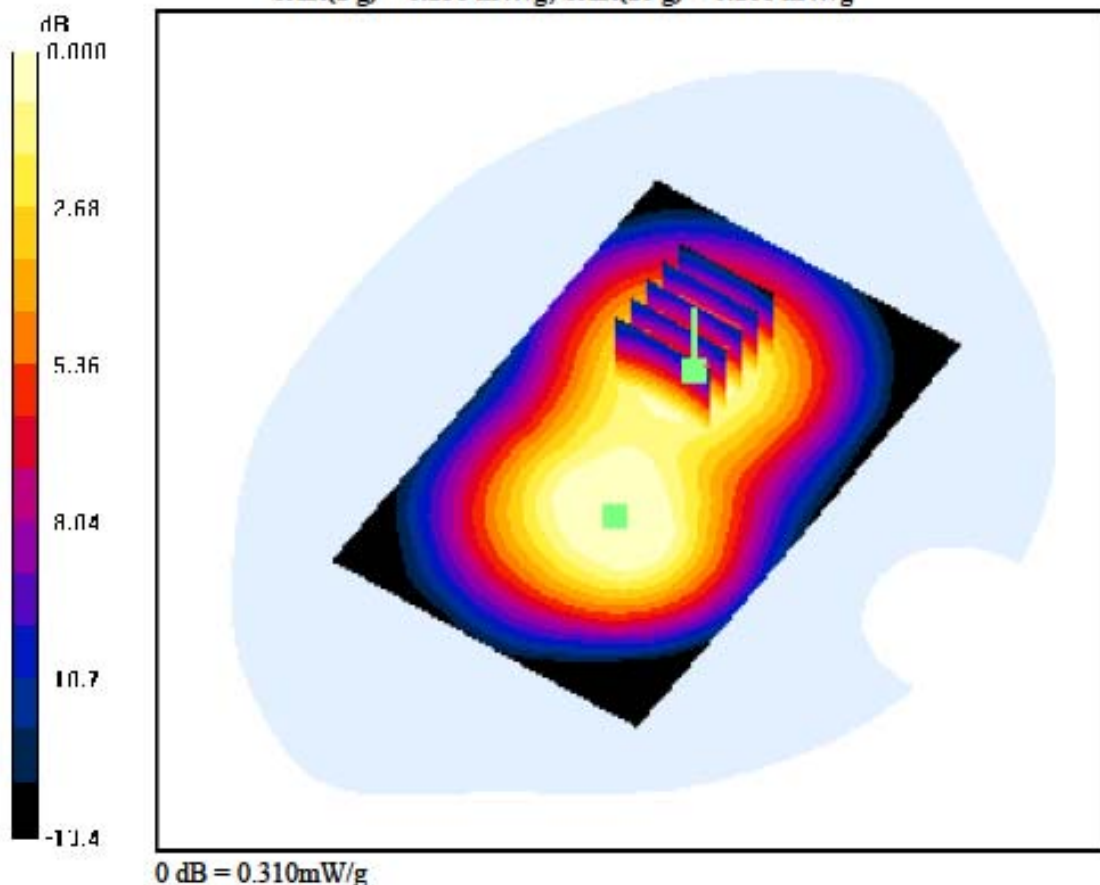
Area Scan (71x111x1): Measurement grid: $dx=15\text{mm}$, $dy=15\text{mm}$

Zoom Scan (5x5x7)/Cube 1: Measurement grid: $dx=8\text{mm}$, $dy=8\text{mm}$, $dz=5\text{mm}$

Power Drift = 0.020 dB

Peak SAR (extrapolated) = 0.383 W/kg

SAR(1 g) = 0.256 mW/g; SAR(10 g) = 0.166 mW/g



DIGITAL EMC CO., LTD**DUT: LG-A190a; Type: Bar**

Communication System: PCS1900; Frequency: 1909.8 MHz; Duty Cycle: 1:8.3
Medium parameters used: $f = 1909.8$ MHz; $\sigma = 1.5$ mho/m; $\epsilon_r = 54.2$; $\rho = 1000$ kg/m³
Phantom section: Flat Section

DASY4 Configuration:

Probe: EX3DV4 - SN3643; ConvF(7.19, 7.19, 7.19); Calibrated: 2011-01-24; Electronics: DAE3 Sn519

Phantom: SAM 1800/1900 MHz; Type: SAM; Serial: TP-1224

Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 186

Test Date: 2011-03-22; Ambient Temp: 22.3; Tissue Temp: 22.6

2cm space from Body, Rear, PCS1900 Ch. 810, Ant Internal

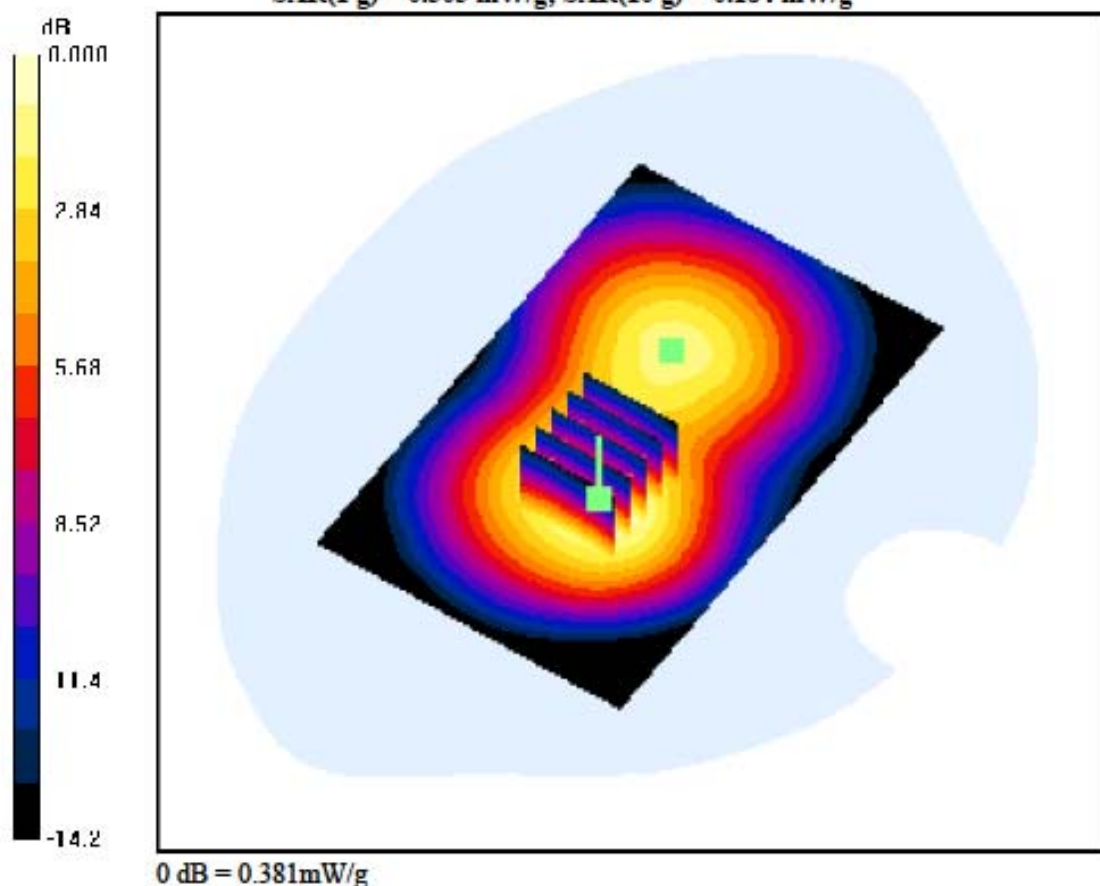
Area Scan (71x111x1): Measurement grid: dx=15mm, dy=15mm

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

Power Drift = 0.012 dB

Peak SAR (extrapolated) = 0.489 W/kg

SAR(1 g) = 0.303 mW/g; SAR(10 g) = 0.184 mW/g



DIGITAL EMC CO., LTD**DUT: LG-A190a; Type: Bar**

Communication System: PCS1900; Frequency: 1909.8 MHz; Duty Cycle: 1:8.3
Medium parameters used: $f = 1909.8 \text{ MHz}$; $\sigma = 1.5 \text{ mho/m}$; $\epsilon_r = 54.2$; $\rho = 1000 \text{ kg/m}^3$
Phantom section: Flat Section

DASY4 Configuration:

Probe: EX3DV4 - SN3643; ConvF(7.19, 7.19, 7.19); Calibrated: 2011-01-24; Electronics: DAE3 Sn519

Phantom: SAM 1800/1900 MHz; Type: SAM; Serial: TP-1224

Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 186

Test Date: 2011-03-22; Ambient Temp: 22.3; Tissue Temp: 22.6

2cm space from Body, Rear, PCS1900 Ch. 810, Ant Internal

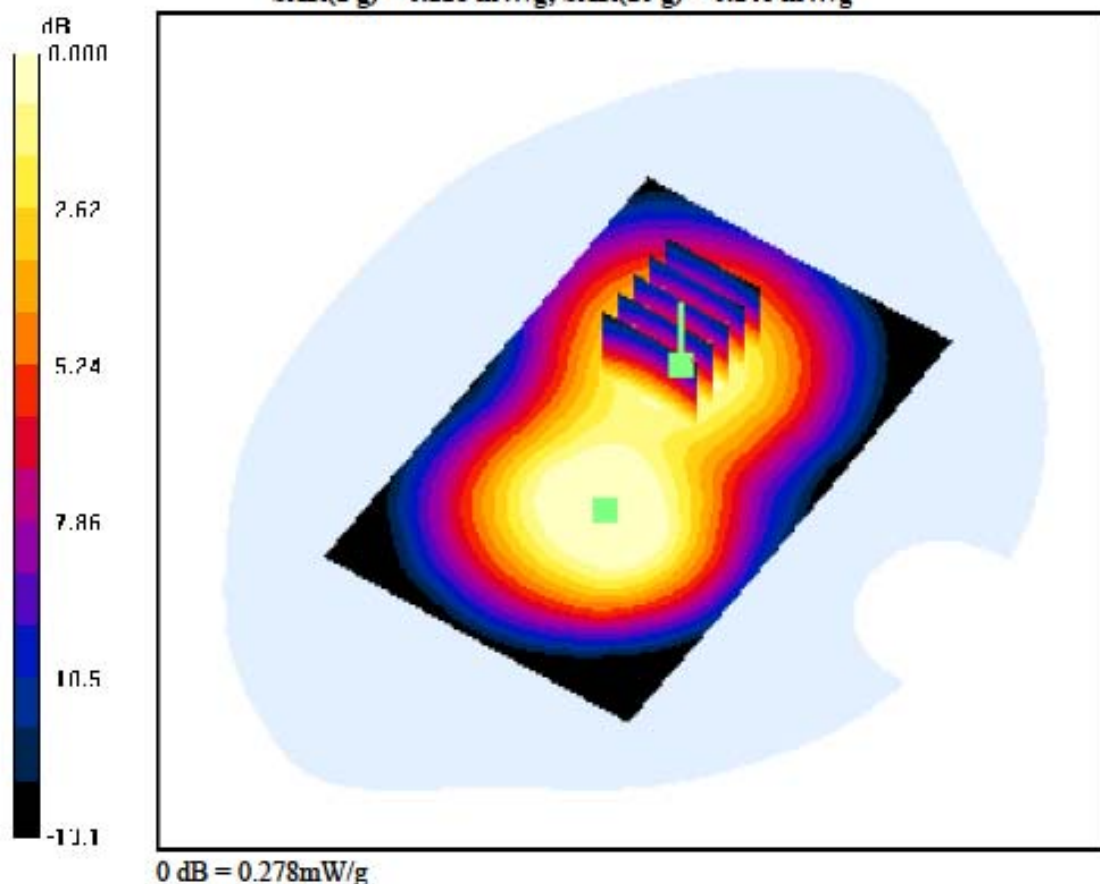
Area Scan (71x111x1): Measurement grid: $dx=15\text{mm}$, $dy=15\text{mm}$

Zoom Scan (5x5x7)/Cube 1: Measurement grid: $dx=8\text{mm}$, $dy=8\text{mm}$, $dz=5\text{mm}$

Power Drift = 0.012 dB

Peak SAR (extrapolated) = 0.343 W/kg

SAR(1 g) = 0.228 mW/g; SAR(10 g) = 0.146 mW/g



DIGITAL EMC CO., LTD**DUT: LG-A190a; Type: Bar**

Communication System: PCS1900; Frequency: 1880 MHz; Duty Cycle: 1:8.3
Medium parameters used: $f = 1880 \text{ MHz}$; $\sigma = 1.55 \text{ mho/m}$; $\epsilon_r = 53.8$; $\rho = 1000 \text{ kg/m}^3$
Phantom section: Flat Section

DASY4 Configuration:

Probe: EX3DV4 - SN3643; ConvF(7.19, 7.19, 7.19); Calibrated: 2011-01-24; Electronics: DAE3 Sn519

Phantom: SAM 1800/1900 MHz; Type: SAM; Serial: TP-1224

Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 186

Test Date: 2011-03-22; Ambient Temp: 22.3; Tissue Temp: 22.6

2cm space from Body, Front, PCS1900 Ch. 661, Ant Internal

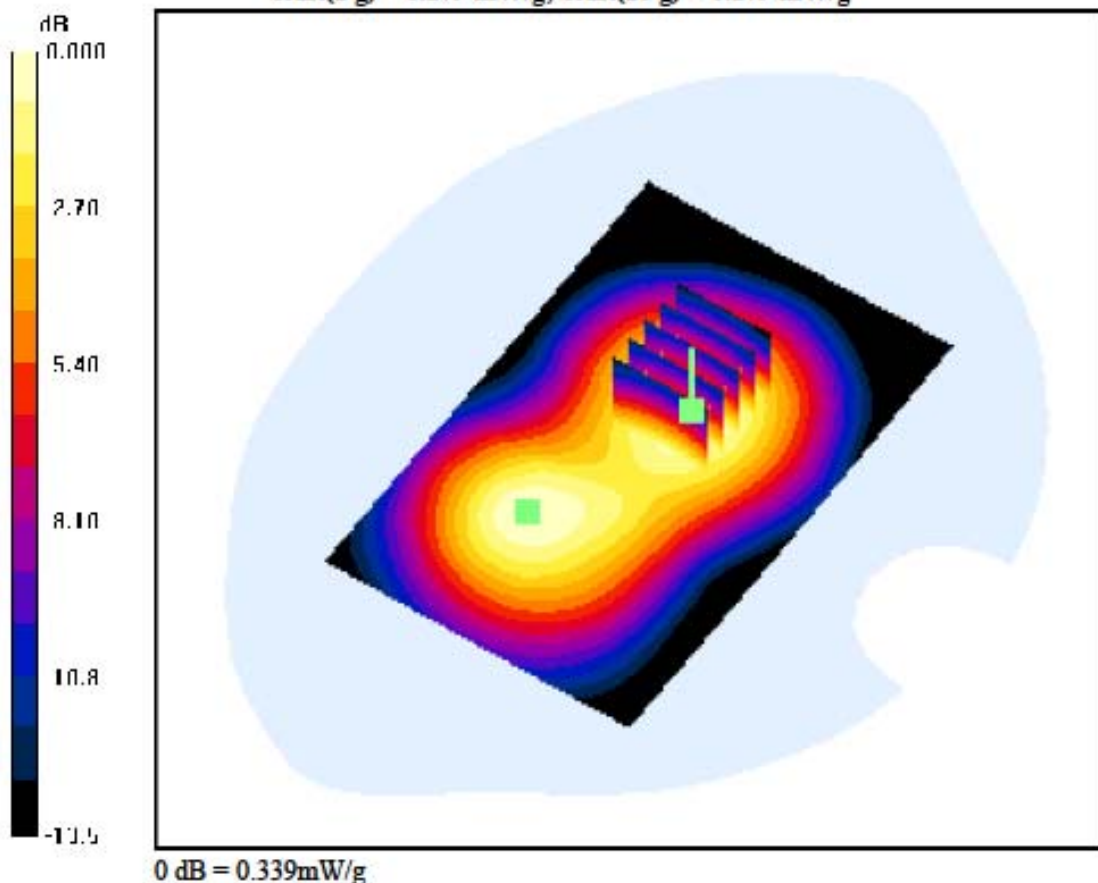
Area Scan (71x111x1): Measurement grid: $dx=15\text{mm}$, $dy=15\text{mm}$

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

Power Drift = -0.027 dB

Peak SAR (extrapolated) = 0.418 W/kg

SAR(1 g) = 0.279 mW/g; SAR(10 g) = 0.179 mW/g



DIGITAL EMC CO., LTD**DUT: LG-A190a; Type: Bar**

Communication System: PCS1900; Frequency: 1880 MHz; Duty Cycle: 1:8.3
Medium parameters used: $f = 1880 \text{ MHz}$; $\sigma = 1.55 \text{ mho/m}$; $\epsilon_r = 53.8$; $\rho = 1000 \text{ kg/m}^3$
Phantom section: Flat Section

DASY4 Configuration:

Probe: EX3DV4 - SN3643; ConvF(7.19, 7.19, 7.19); Calibrated: 2011-01-24; Electronics: DAE3 Sn519

Phantom: SAM 1800/1900 MHz; Type: SAM; Serial: TP-1224

Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 186

Test Date: 2011-03-22; Ambient Temp: 22.3; Tissue Temp: 22.6

2cm space from Body, Front, PCS1900 Ch. 661, Ant Internal

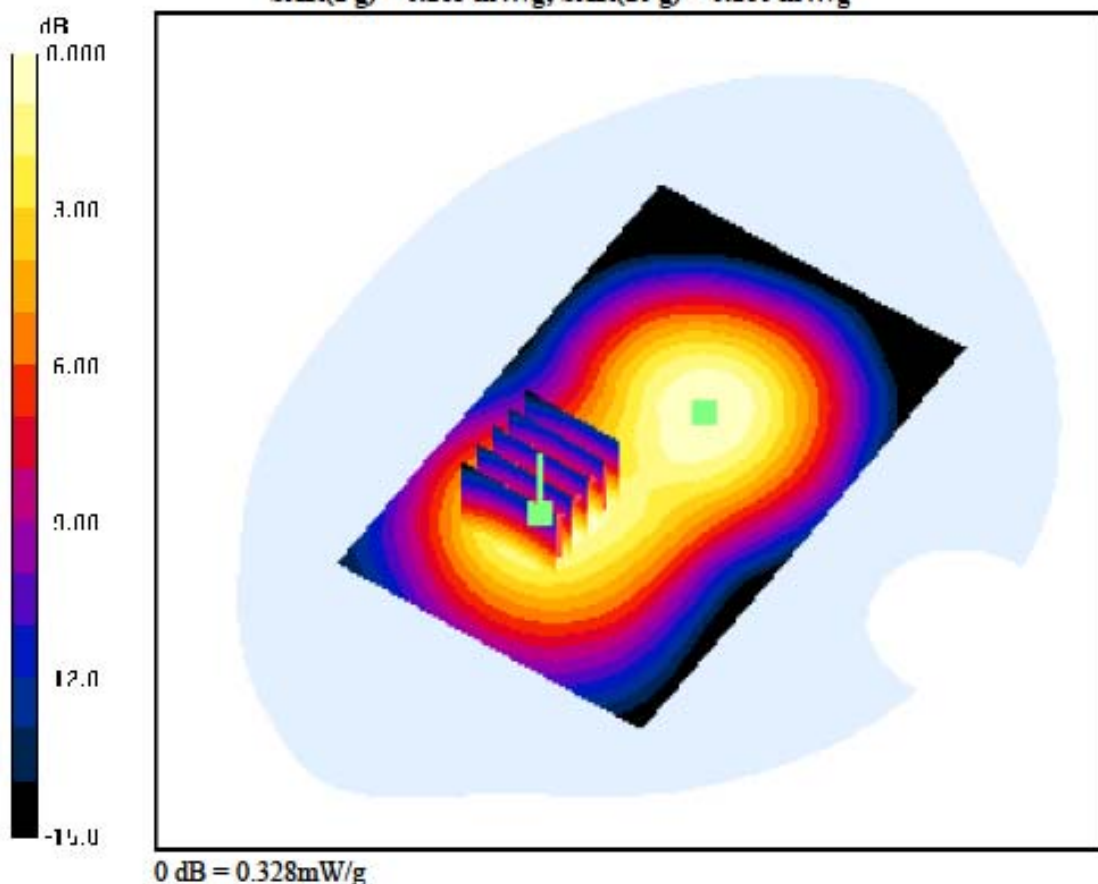
Area Scan (71x111x1): Measurement grid: $dx=15\text{mm}$, $dy=15\text{mm}$

Zoom Scan (5x5x7)/Cube 1: Measurement grid: $dx=8\text{mm}$, $dy=8\text{mm}$, $dz=5\text{mm}$

Power Drift = -0.027 dB

Peak SAR (extrapolated) = 0.425 W/kg

SAR(1 g) = 0.263 mW/g; SAR(10 g) = 0.160 mW/g



DIGITAL EMC CO., LTD**DUT: LG-A190a; Type: Bar**

Communication System: PCS1900; Frequency: 1880 MHz; Duty Cycle: 1:8.3
Medium parameters used: $f = 1880 \text{ MHz}$; $\sigma = 1.55 \text{ mho/m}$; $\epsilon_r = 53.8$; $\rho = 1000 \text{ kg/m}^3$
Phantom section: Flat Section

DASY4 Configuration:

Probe: EX3DV4 - SN3643; ConvF(7.19, 7.19, 7.19); Calibrated: 2011-01-24; Electronics: DAE3 Sn519

Phantom: SAM 1800/1900 MHz; Type: SAM; Serial: TP-1224

Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 186

Test Date: 2011-03-22; Ambient Temp: 22.3; Tissue Temp: 22.6

2cm space from Body, Rear, PCS1900 + SIM2 Ch. 661, Ant Internal

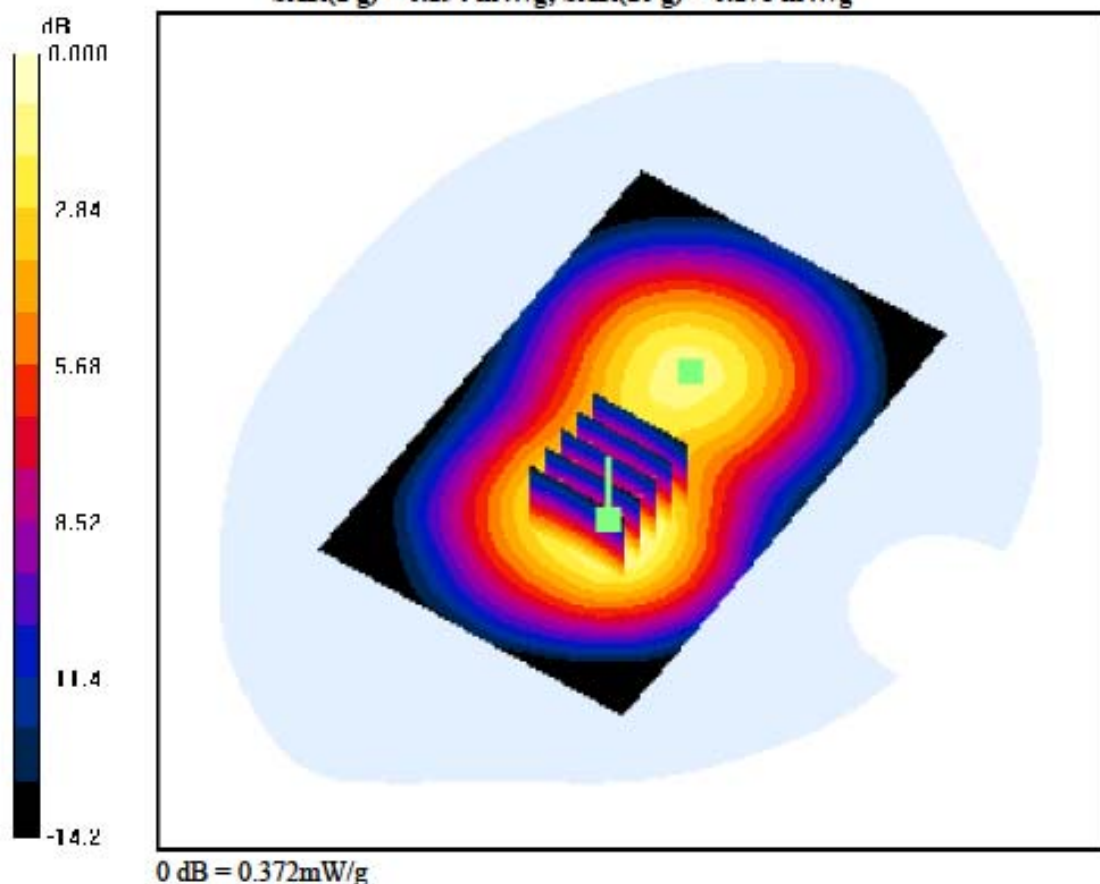
Area Scan (71x111x1): Measurement grid: $dx=15\text{mm}$, $dy=15\text{mm}$

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

Power Drift = -0.016 dB

Peak SAR (extrapolated) = 0.477 W/kg

SAR(1 g) = 0.294 mW/g; SAR(10 g) = 0.178 mW/g



DIGITAL EMC CO., LTD**DUT: LG-A190a; Type: Bar**

Communication System: PCS1900; Frequency: 1880 MHz; Duty Cycle: 1:8.3
Medium parameters used: $f = 1880 \text{ MHz}$; $\sigma = 1.55 \text{ mho/m}$; $\epsilon_r = 53.8$; $\rho = 1000 \text{ kg/m}^3$
Phantom section: Flat Section

DASY4 Configuration:

Probe: EX3DV4 - SN3643; ConvF(7.19, 7.19, 7.19); Calibrated: 2011-01-24; Electronics: DAE3 Sn519
Phantom: SAM 1800/1900 MHz; Type: SAM; Serial: TP-1224
Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 186

Test Date: 2011-03-22; Ambient Temp: 22.3; Tissue Temp: 22.6

2cm space from Body, Rear, PCS1900 + SIM2 Ch. 661, Ant Internal

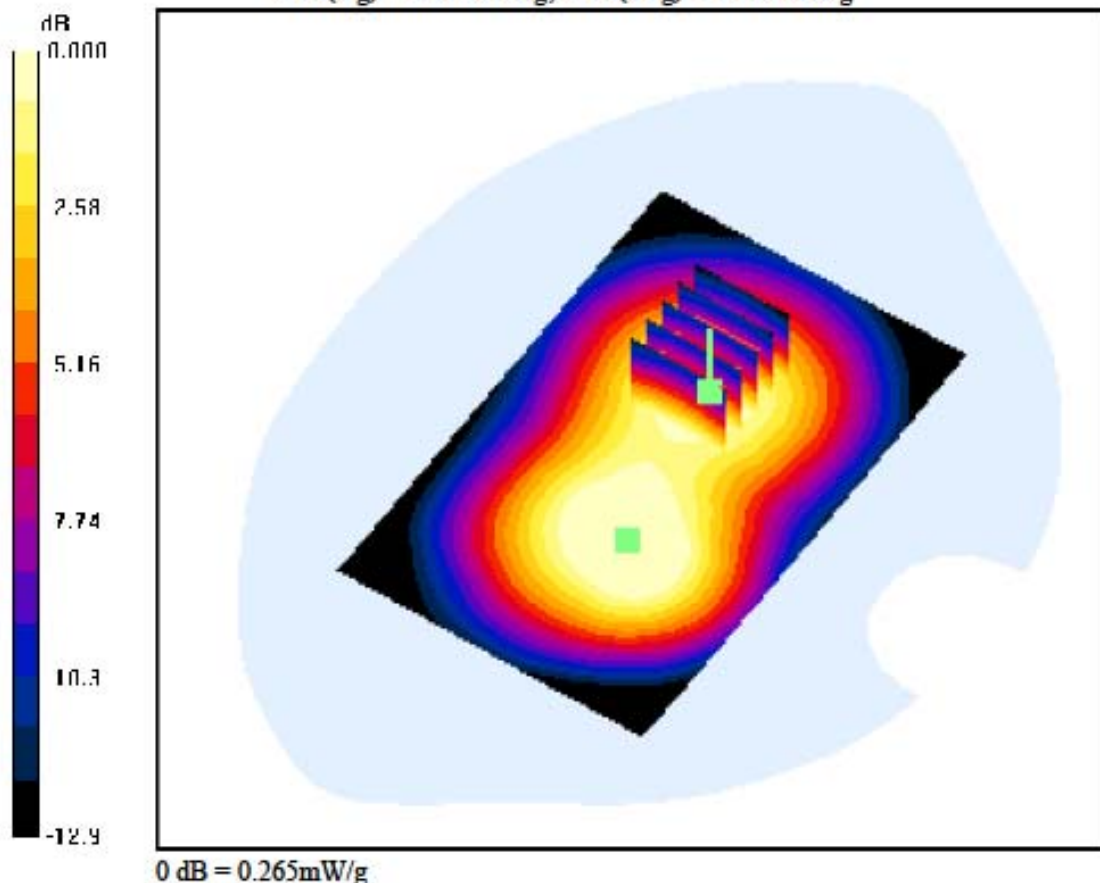
Area Scan (71x111x1): Measurement grid: $dx=15\text{mm}$, $dy=15\text{mm}$

Zoom Scan (5x5x7)/Cube 1: Measurement grid: $dx=8\text{mm}$, $dy=8\text{mm}$, $dz=5\text{mm}$

Power Drift = -0.016 dB

Peak SAR (extrapolated) = 0.329 W/kg

SAR(1 g) = 0.219 mW/g; SAR(10 g) = 0.143 mW/g



DIGITAL EMC CO., LTD**DUT: LG-A190a; Type: Bar**

Communication System: GSM 850; Frequency: 836.6 MHz; Duty Cycle: 1:8.3
 Medium parameters used: $f = 836.6 \text{ MHz}$; $\sigma = 0.895 \text{ mho/m}$; $\epsilon_r = 41$; $\rho = 1000 \text{ kg/m}^3$
 Phantom section: Right Section

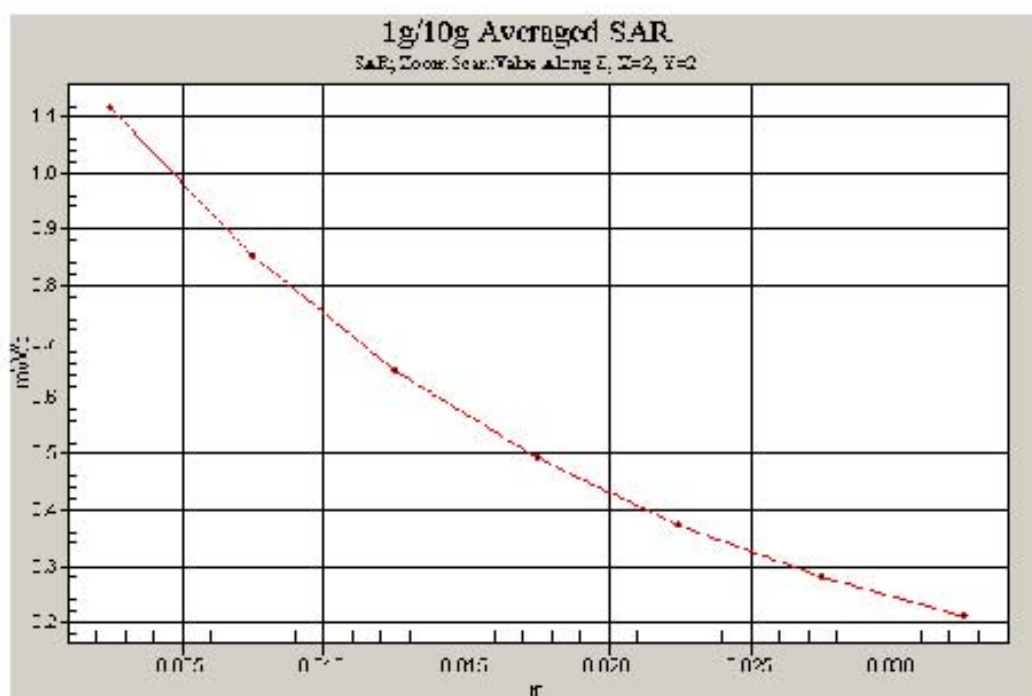
DASY4 Configuration:

Probe: EX3DV4 - SN3643; ConvF(8.96, 8.96, 8.96); Calibrated: 2011-01-24; Electronics: DAE3 Sn519
 Phantom: SAM with 835MHz; Type: SAM; Serial: TP-1223
 Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 186

Date: 2011-03-21; Ambient Temp: 22.0; Tissue Temp: 22.5

Right Touch, GSM850 Ch. 190, Ant Internal, Standard Battery

Area Scan (71x111x1): 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 = -0.008 dB
 Peak SAR (extrapolated) = 1.27 W/kg
 SAR(1 g) = 0.972 mW/g; SAR(10 g) = 0.696 mW/g



DIGITAL EMC CO., LTD**DUT: LG-A190a; Type: Bar**

Communication System: PCS1900; Frequency: 1909.8 MHz; Duty Cycle: 1:8.3
 Medium parameters used: $f = 1909.8 \text{ MHz}$; $\sigma = 1.43 \text{ mho/m}$; $\epsilon_r = 40.3$; $\rho = 1000 \text{ kg/m}^3$
 Phantom section: Right Section

DASY4 Configuration:

Probe: EX3DV4 - SN3643; ConvF(8.26, 8.26, 8.26); Calibrated: 2011-01-24; Electronics: DAE3 Sn519

Phantom: SAM 1800/1900 MHz; Type: SAM; Serial: TP-1224

Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 186

Date: 2011-03-22; Ambient Temp: 22.3; Tissue Temp: 22.6

Right Touch, PCS1900 + SIM2 Ch. 810, Ant Internal, Standard Battery

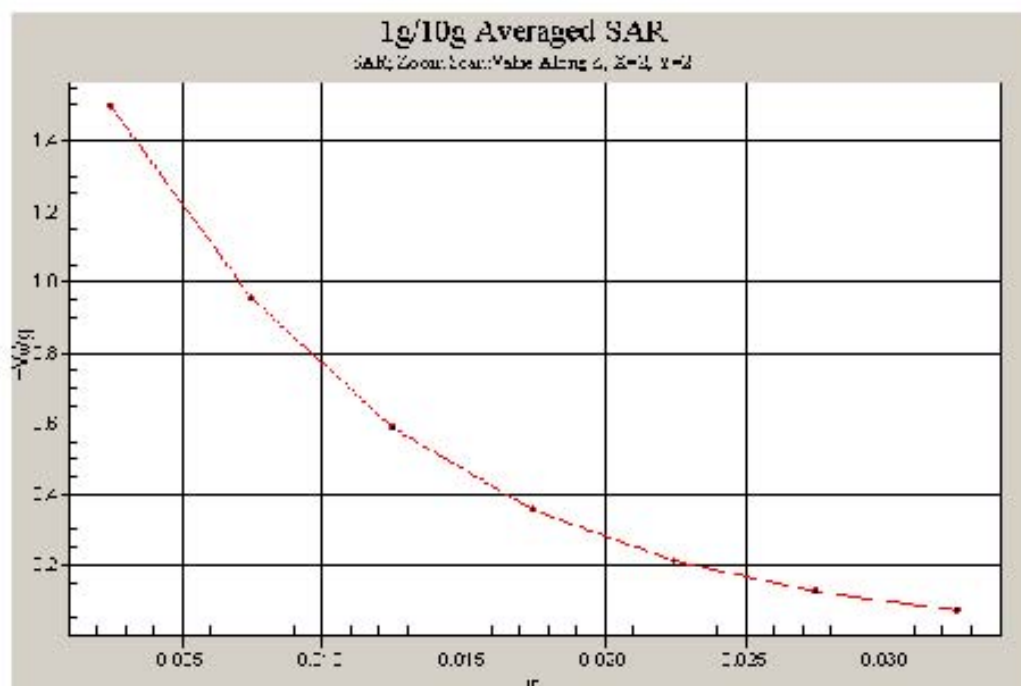
Area Scan (81x111x1): Measurement grid: $dx=15\text{mm}$, $dy=15\text{mm}$

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

Power Drift = 0.308 dB

Peak SAR (extrapolated) = 1.99 W/kg

SAR(1 g) = 1.24 mW/g; SAR(10 g) = 0.698 mW/g



DIGITAL EMC CO., LTD**DUT: LG-A190a; Type: Bar**

Communication System: GSM 850; Frequency: 836.6 MHz; Duty Cycle: 1:8.3
 Medium parameters used: $f = 836.6 \text{ MHz}$; $\sigma = 0.971 \text{ mho/m}$; $\epsilon_r = 54.6$; $\rho = 1000 \text{ kg/m}^3$
 Phantom section: Flat Section

DASY4 Configuration:

Probe: EX3DV4 - SN3643; ConvF(8.97, 8.97, 8.97); Calibrated: 2011-01-24; Electronics: DAE3 Sn519

Phantom: SAM with 835MHz; Type: SAM; Serial: TP-1223

Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 186

Test Date: 2011-03-21; Ambient Temp: 22.0; Tissue Temp: 22.5

2cm space from Body, Rear, GSM850 Ch. 190, Ant Internal

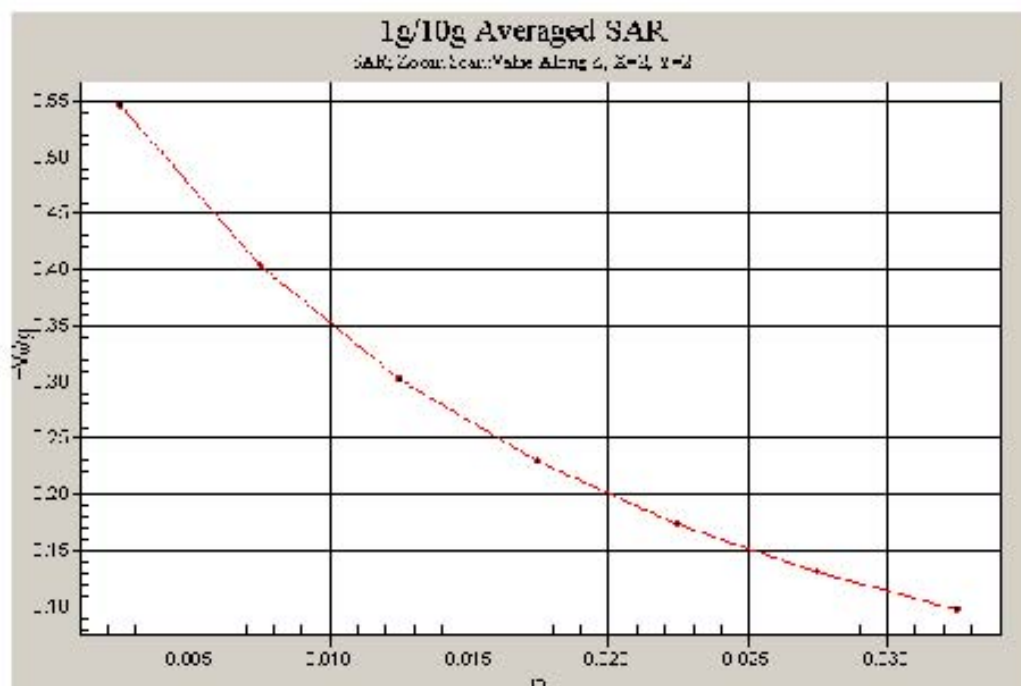
Area Scan (71x111x1): Measurement grid: $dx=15\text{mm}$, $dy=15\text{mm}$

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

Power Drift = -0.014 dB

Peak SAR (extrapolated) = 0.630 W/kg

SAR(1 g) = 0.470 mW/g; SAR(10 g) = 0.340 mW/g



DIGITAL EMC CO., LTD**DUT: LG-A190a; Type: Bar**

Communication System: PCS1900; Frequency: 1880 MHz; Duty Cycle: 1:8.3
 Medium parameters used: $f = 1880 \text{ MHz}$; $\sigma = 1.55 \text{ mho/m}$; $\epsilon_r = 53.8$; $\rho = 1000 \text{ kg/m}^3$

Phantom section: Flat Section**DASY4 Configuration:**

Probe: EX3DV4 - SN3643; ConvF(7.19, 7.19, 7.19); Calibrated: 2011-01-24; Electronics: DAE3 Sn519

Phantom: SAM 1800/1900 MHz; Type: SAM; Serial: TP-1224

Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 186

Test Date: 2011-03-22; Ambient Temp: 22.3; Tissue Temp: 22.6

2cm space from Body, Rear, PCS1900 Ch. 661, Ant Internal

Area Scan (71x111x1): 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 = 0.020 dB

Peak SAR (extrapolated) = 0.502 W/kg

SAR(1 g) = 0.311 mW/g; SAR(10 g) = 0.190 mW/g

