

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: $f = 835 \text{ MHz}$; $\sigma = 0.887 \text{ mho/m}$; $\epsilon_r = 41.9$; $\rho = 1000 \text{ kg/m}^3$
Phantom section: Flat Section

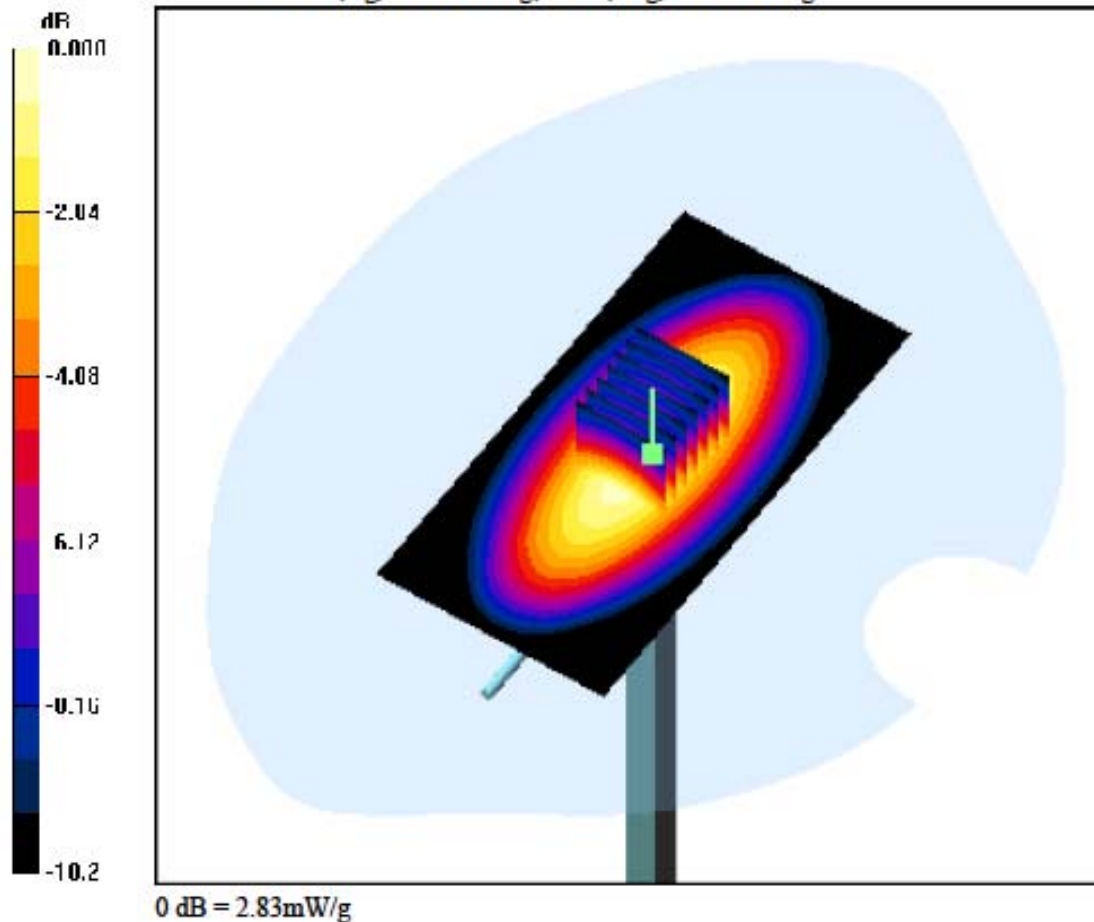
DASY4 Configuration:

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: 2011-08-22; Ambient Temp: 22.2; Tissue Temp: 22.4

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 = 0.015 dB
Peak SAR (extrapolated) = 3.51 W/kg
SAR(1 g) = 2.33 W/kg; SAR(10 g) = 1.53 W/kg



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: $f = 835 \text{ MHz}$; $\sigma = 0.952 \text{ mho/m}$; $\epsilon_r = 55.4$; $\rho = 1000 \text{ kg/m}^3$
Phantom section: Flat Section

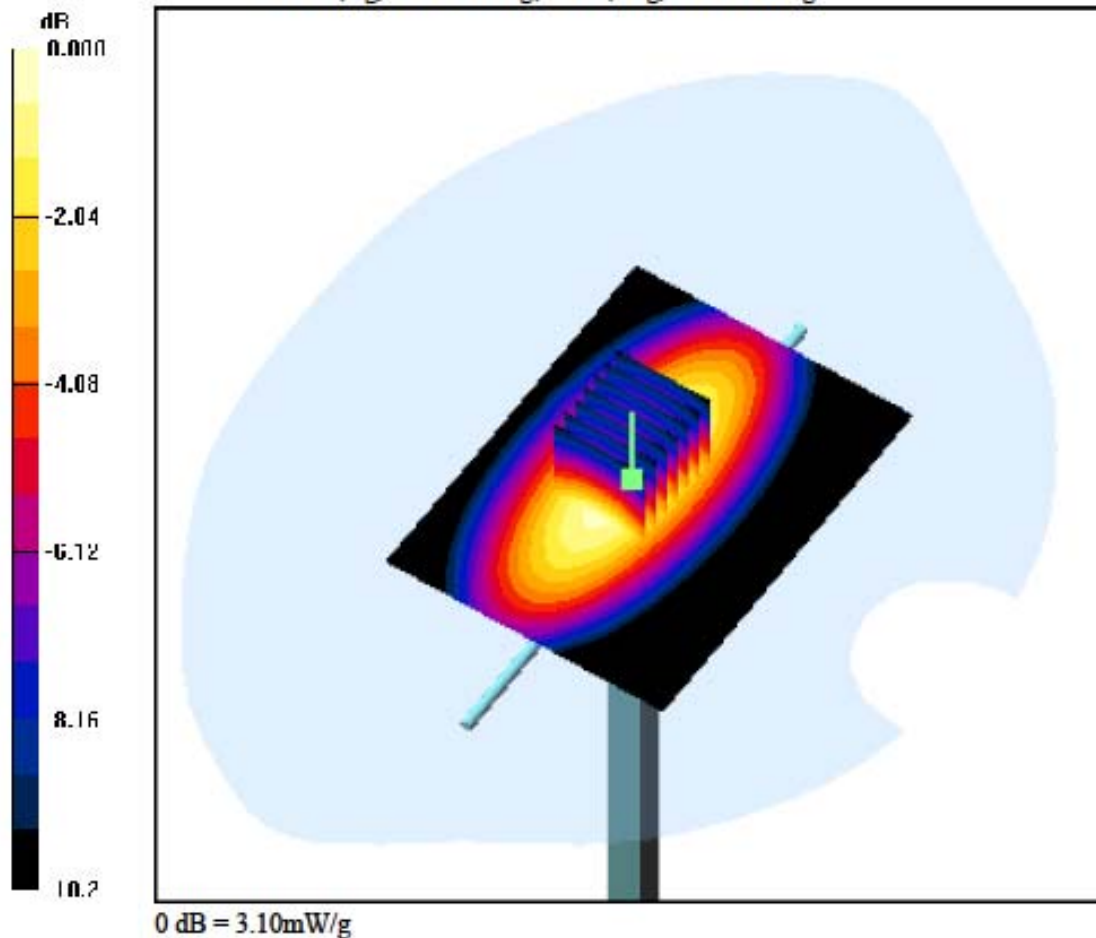
DASY4 Configuration:

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: 2011-08-22; Ambient Temp: 22.2; Tissue Temp: 22.4

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 = 0.004 dB
Peak SAR (extrapolated) = 3.82 W/kg
SAR(1 g) = 2.55 W/kg; SAR(10 g) = 1.68 W/kg



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; $\sigma = 1.41$ mho/m; $\epsilon_r = 41$; $\rho = 1000$ 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: 2011-08-23; Ambient Temp: 22.4; Tissue Temp: 22.7

Dipole Validation

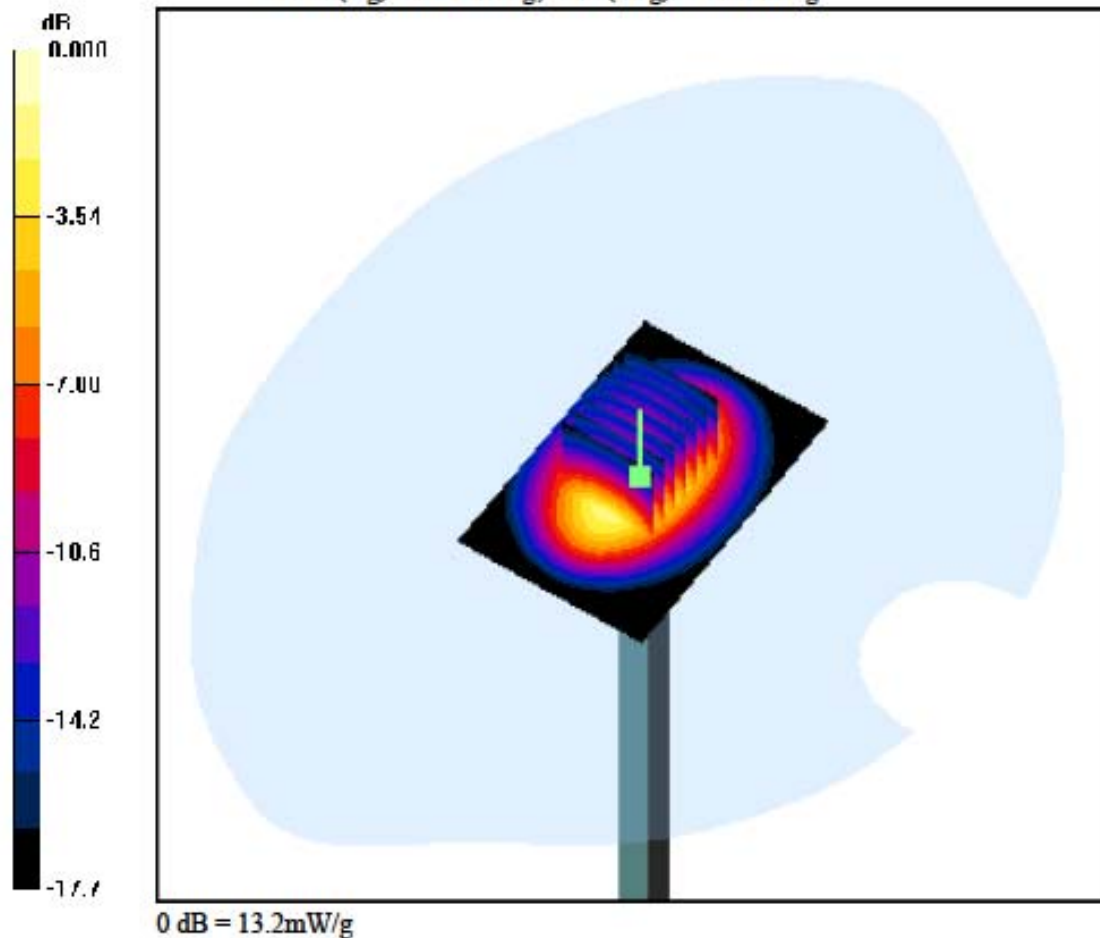
Area Scan (61x91x1): Measurement grid: dx=10mm, dy=10mm

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

Power Drift = 0.133 dB

Peak SAR (extrapolated) = 18.2 W/kg

SAR(1 g) = 9.76 W/kg; SAR(10 g) = 5.06 W/kg



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; $\sigma = 1.53$ mho/m; $\epsilon_r = 53$; $\rho = 1000$ 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: 2011-08-23; Ambient Temp: 22.4; Tissue Temp: 22.7

Dipole Validation

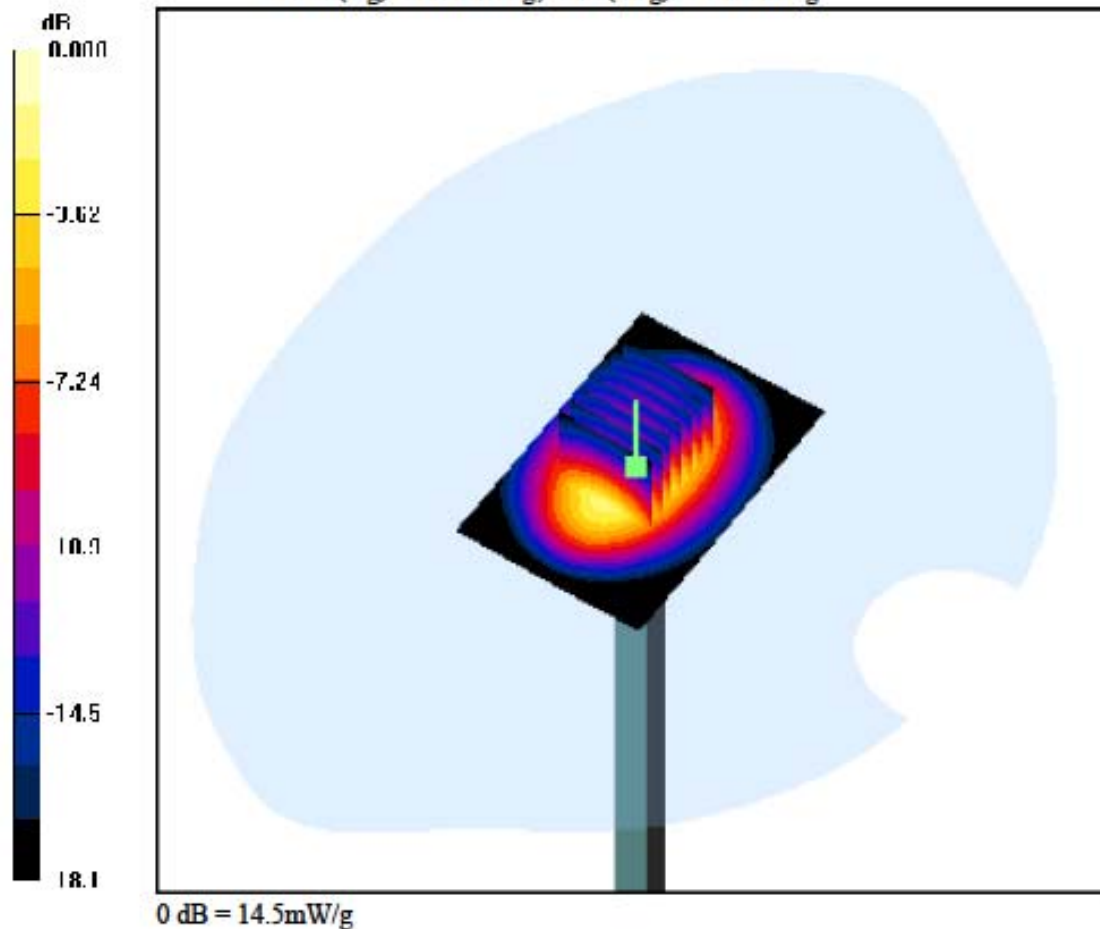
Area Scan (61x91x1): Measurement grid: dx=10mm, dy=10mm

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

Power Drift = -0.015 dB

Peak SAR (extrapolated) = 20.0 W/kg

SAR(1 g) = 10.6 W/kg; SAR(10 g) = 5.43 W/kg



DIGITAL EMC CO., LTD

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

Communication System: CW; Frequency: 2450 MHz; Duty Cycle: 1:1
 Medium parameters used: $f = 2450 \text{ MHz}$; $\sigma = 1.83 \text{ mho/m}$; $\epsilon_r = 38.9$; $\rho = 1000 \text{ kg/m}^3$
 Phantom section: Flat Section

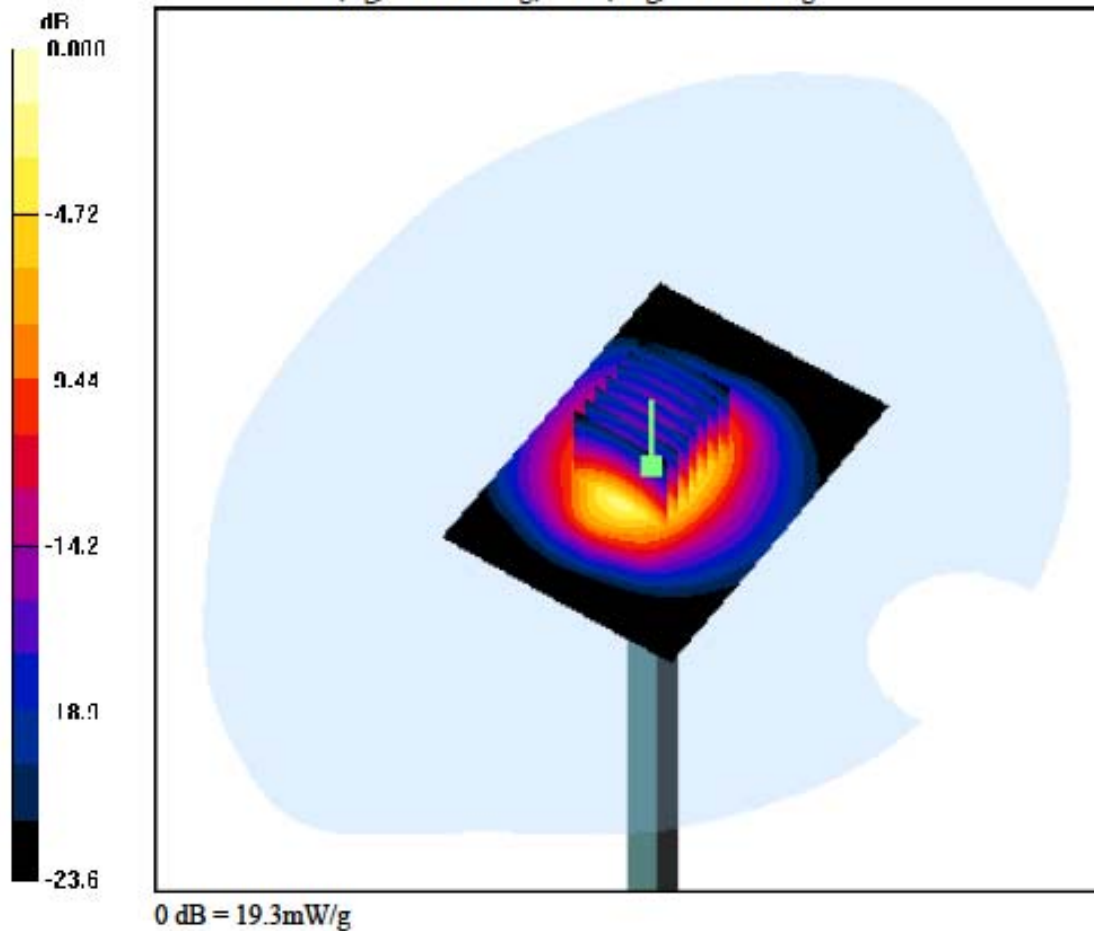
DASY4 Configuration:

Probe: EX3DV4 - SN3643; ConvF(7.4, 7.4, 7.4); 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: 2011-08-24; Ambient Temp: 22.3; Tissue Temp: 22.5

Dipole Validation

Area Scan (51x71x1): 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 = 0.053 dB
 Peak SAR (extrapolated) = 29.7 W/kg
 SAR(1 g) = 13.4 W/kg; SAR(10 g) = 6.06 W/kg



DIGITAL EMC CO., LTD

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

Communication System: CW; Frequency: 2450 MHz; Duty Cycle: 1:1

Medium parameters used: $f = 2450$ MHz; $\sigma = 1.96$ mho/m; $\epsilon_r = 53$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

DASY4 Configuration:

Probe: EX3DV4 - SN3643; ConvF(7.03, 7.03, 7.03); 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: 2011-08-24; Ambient Temp: 22.3; Tissue Temp: 22.5

Dipole Validation

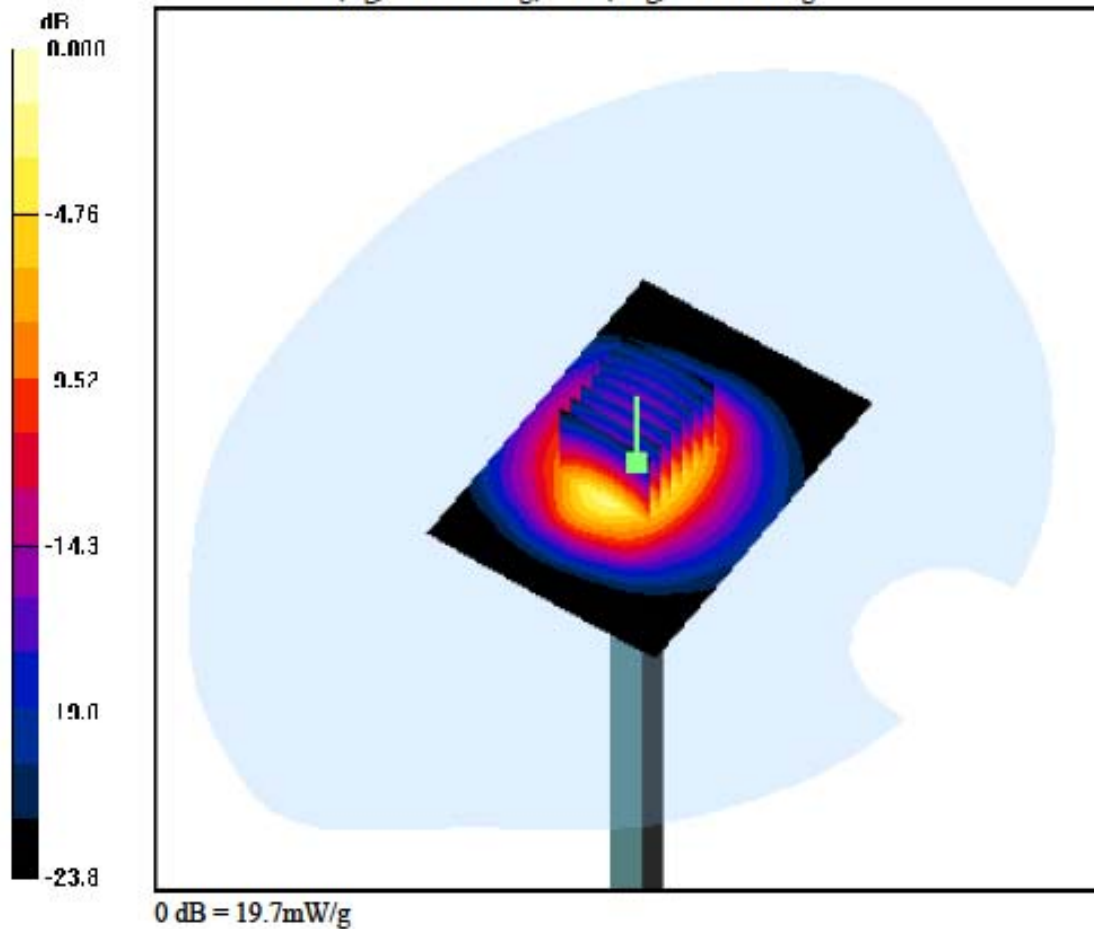
Area Scan (51x71x1): Measurement grid: dx=15mm, dy=15mm

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

Power Drift = 0.033 dB

Peak SAR (extrapolated) = 30.3 W/kg

SAR(1 g) = 13.5 W/kg; SAR(10 g) = 6.08 W/kg



Attachment 2. – SAR Test Plots

DIGITAL EMC CO., LTD**DUT: LG-E510; Type: Bar**

Communication System: GSM 850; Frequency: 824.2 MHz; Duty Cycle: 1:8.3
 Medium parameters used: $f = 824.2 \text{ MHz}$; $\sigma = 0.869 \text{ mho/m}$; $\epsilon_r = 41.8$; $\rho = 1000 \text{ kg/m}^3$
 Phantom section: Left Section

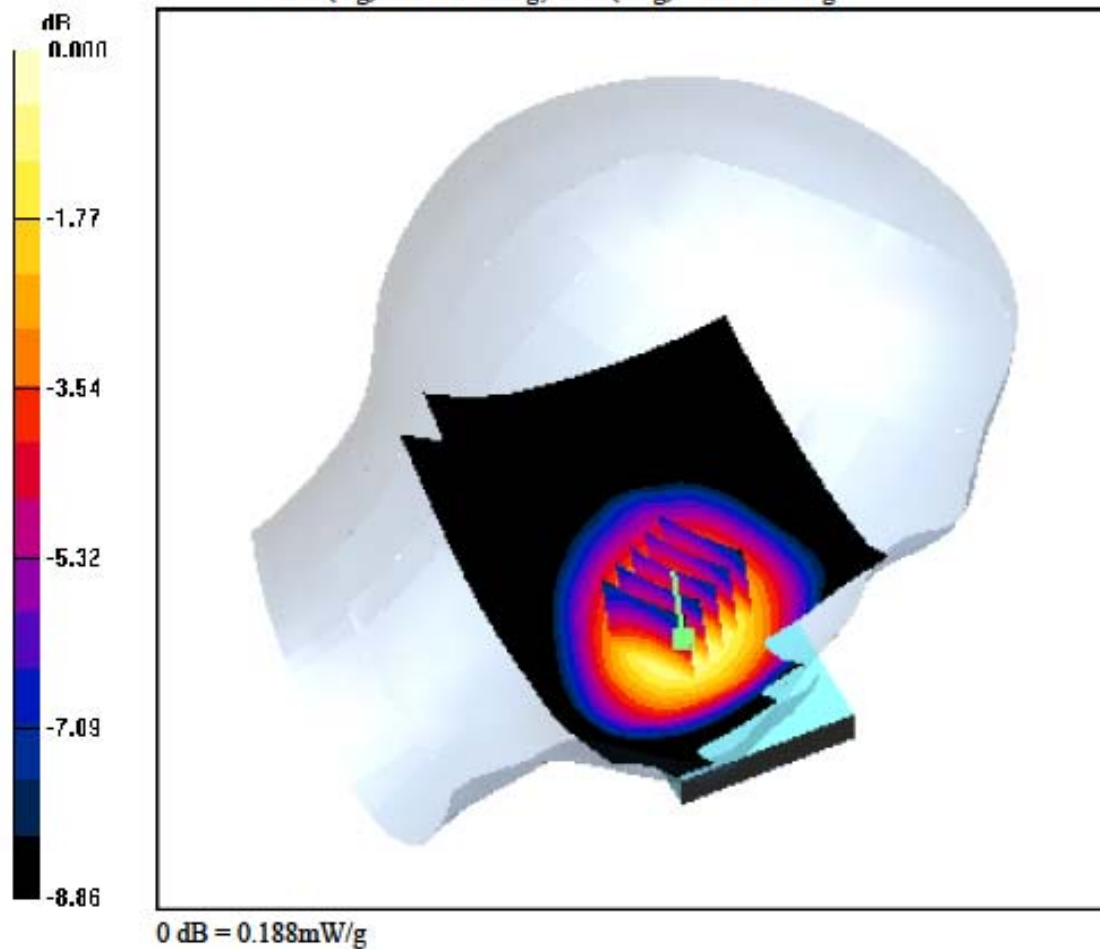
DASY4 Configuration:

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: 2011-08-22; Ambient Temp: 22.2; Tissue Temp: 22.4

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

Area Scan (81x121x1): 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 = -0.033 dB
 Peak SAR (extrapolated) = 0.213 W/kg
 SAR(1 g) = 0.167 W/kg; SAR(10 g) = 0.126 W/kg



DIGITAL EMC CO., LTD**DUT: LG-E510; 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; $\epsilon_r = 42$; $\rho = 1000$ kg/m³
Phantom section: Left Section

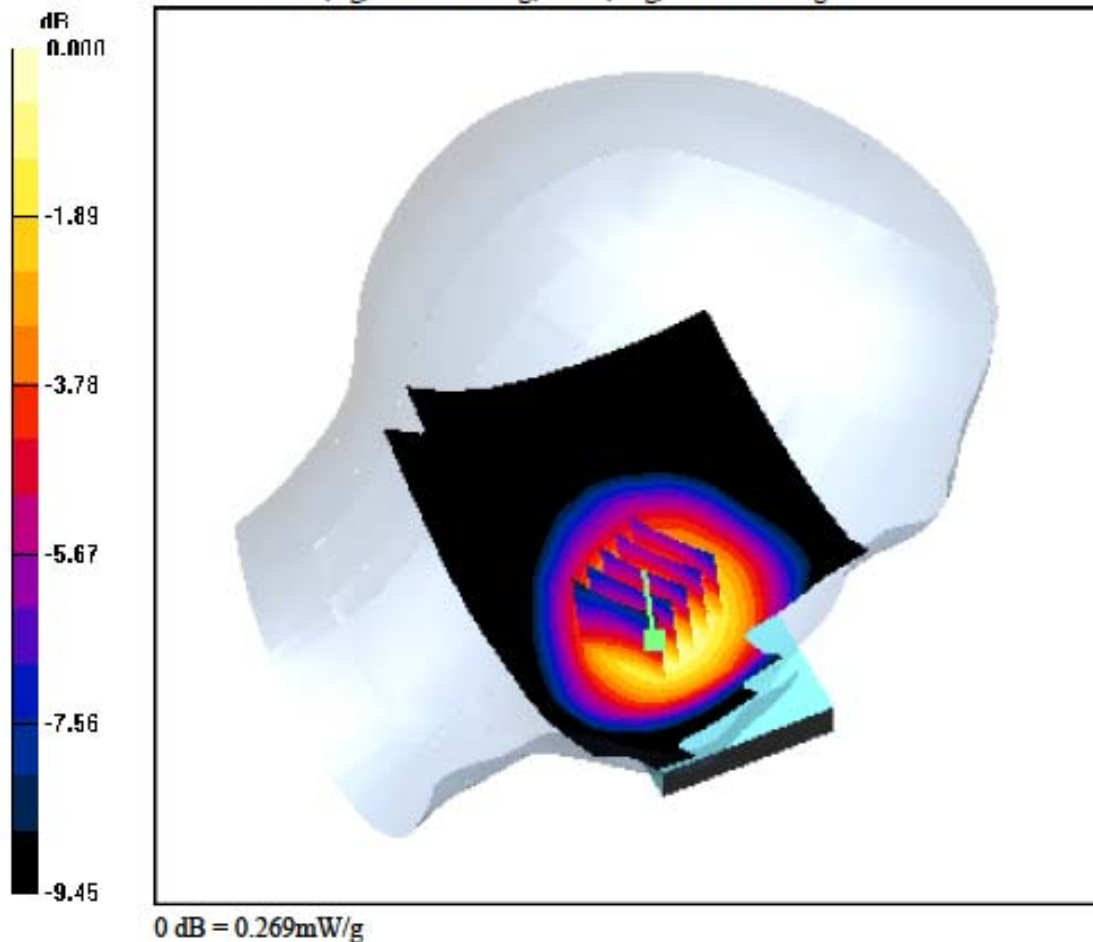
DASY4 Configuration:

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: 2011-08-22; Ambient Temp: 22.2; Tissue Temp: 22.4

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

Area Scan (81x121x1): Measurement grid: dx=15mm, dy=15mm
Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Power Drift = -0.035 dB
Peak SAR (extrapolated) = 0.303 W/kg
SAR(1 g) = 0.239 W/kg; SAR(10 g) = 0.179 W/kg



DIGITAL EMC CO., LTD**DUT: LG-E510; Type: Bar**

Communication System: GSM 850; Frequency: 848.8 MHz; Duty Cycle: 1:8.3
 Medium parameters used: $f = 848.8 \text{ MHz}$; $\sigma = 0.913 \text{ mho/m}$; $\epsilon_r = 42.2$; $\rho = 1000 \text{ kg/m}^3$
 Phantom section: Left Section

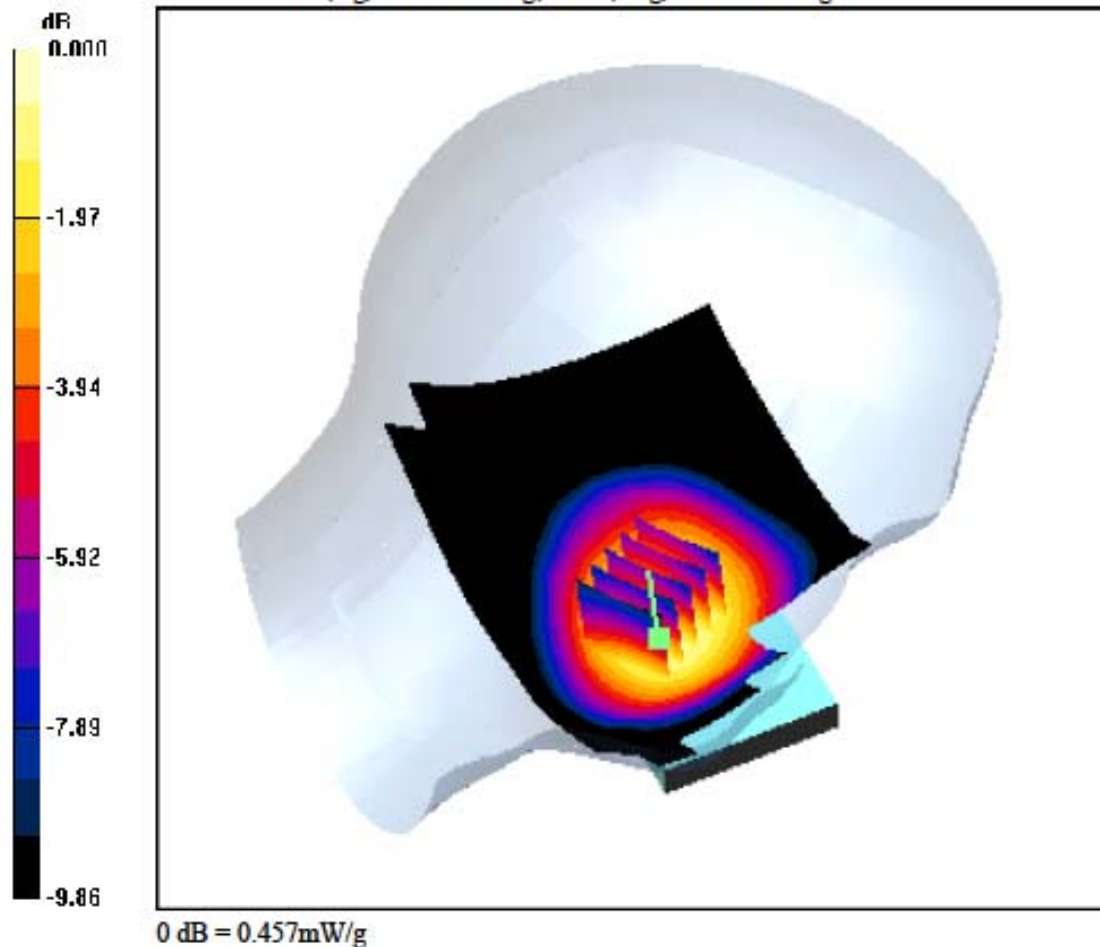
DASY4 Configuration:

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: 2011-08-22; Ambient Temp: 22.2; Tissue Temp: 22.4

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

Area Scan (81x121x1): 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 = -0.042 dB
 Peak SAR (extrapolated) = 0.516 W/kg
 SAR(1 g) = 0.405 W/kg; SAR(10 g) = 0.302 W/kg



DIGITAL EMC CO., LTD**DUT: LG-E510; Type: Bar**

Communication System: GSM 850; Frequency: 836.6 MHz; Duty Cycle: 1:8.3
 Medium parameters used: $f = 836.6 \text{ MHz}$; $\sigma = 0.895 \text{ mho/m}$; $\epsilon_r = 42$; $\rho = 1000 \text{ kg/m}^3$
 Phantom section: Right Section

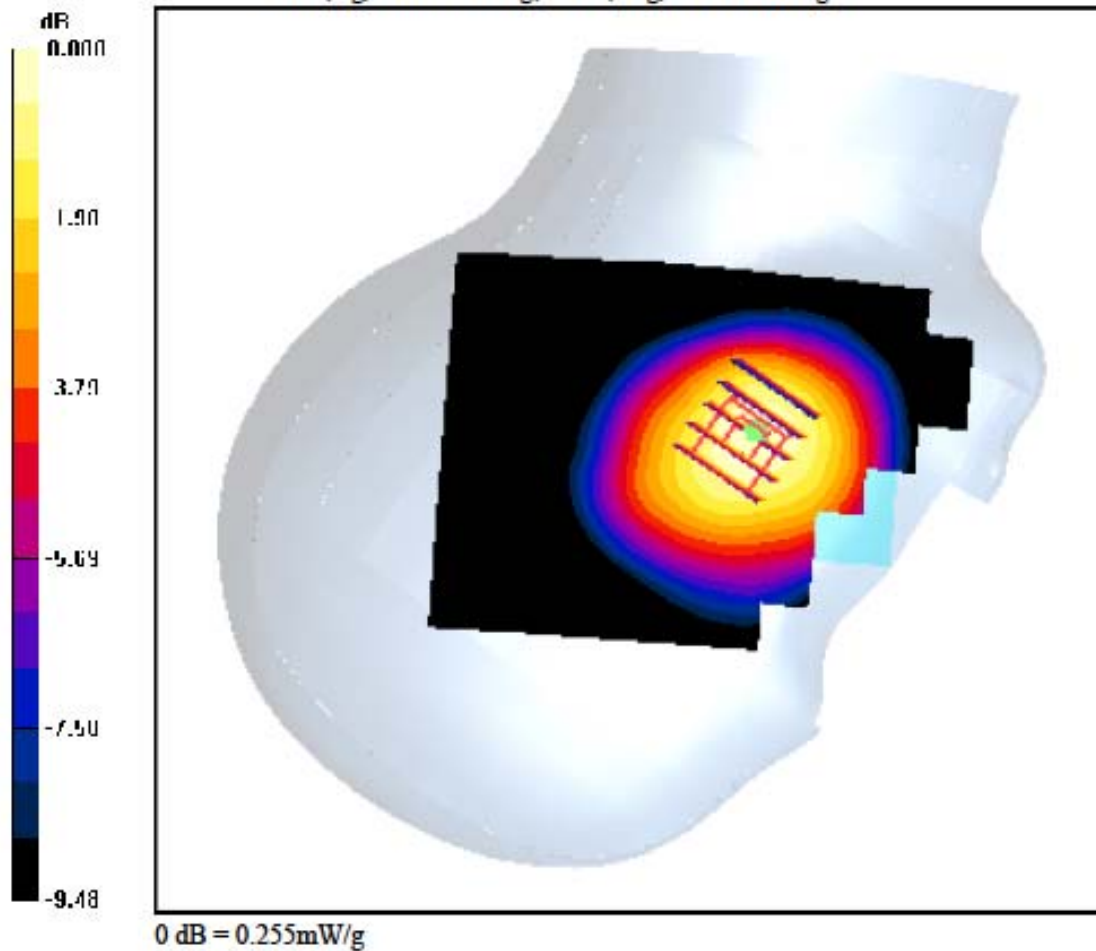
DASY4 Configuration:

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: 2011-08-22; Ambient Temp: 22.2; Tissue Temp: 22.4

Right Touch, GSM850 Ch. 190, 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 = 0.229 dB
 Peak SAR (extrapolated) = 0.292 W/kg
 SAR(1 g) = 0.227 W/kg; SAR(10 g) = 0.170 W/kg



DIGITAL EMC CO., LTD**DUT: LG-E510; Type: Bar**

Communication System: GSM 850; Frequency: 836.6 MHz; Duty Cycle: 1:8.3
 Medium parameters used: $f = 836.6 \text{ MHz}$; $\sigma = 0.895 \text{ mho/m}$; $\epsilon_r = 42$; $\rho = 1000 \text{ kg/m}^3$
 Phantom section: Left Section

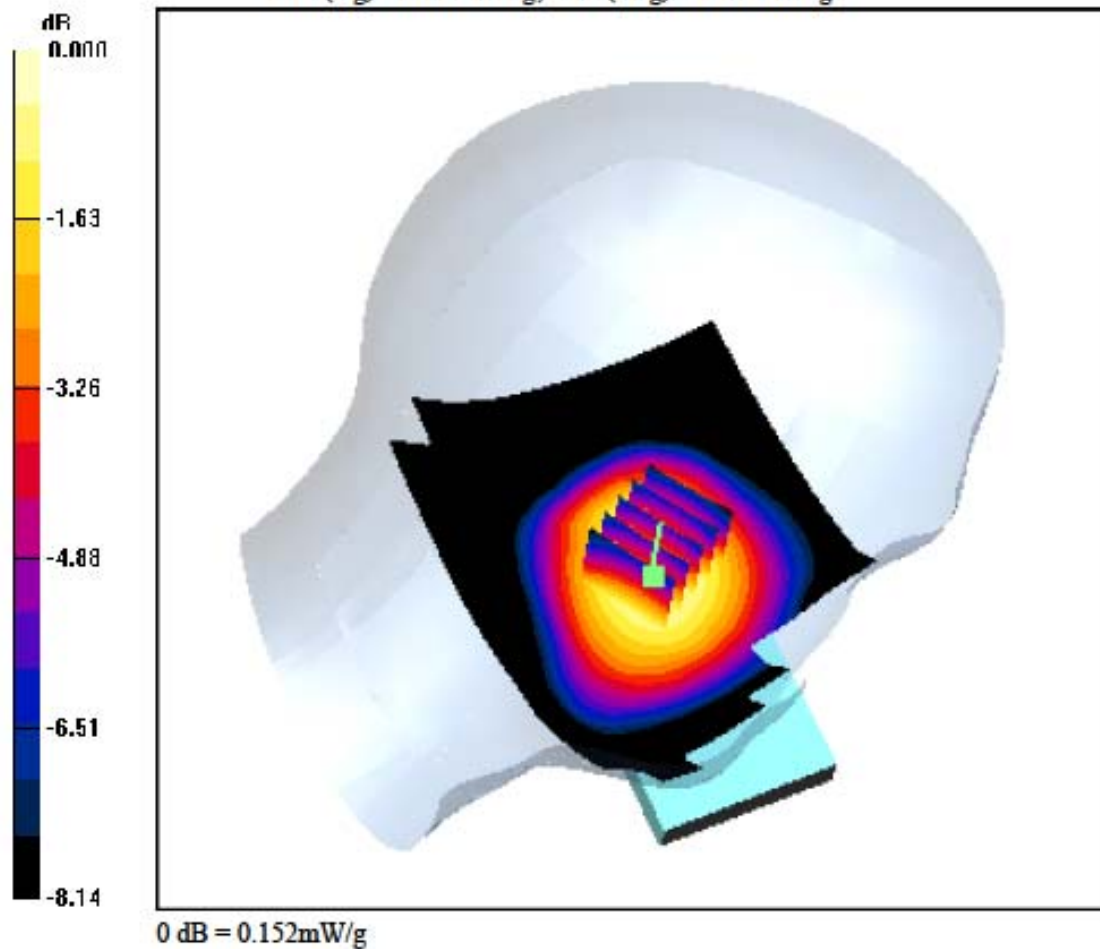
DASY4 Configuration:

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: 2011-08-22; Ambient Temp: 22.2; Tissue Temp: 22.4

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

Area Scan (81x121x1): 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 = 0.107 dB
 Peak SAR (extrapolated) = 0.170 W/kg
 SAR(1 g) = 0.135 W/kg; SAR(10 g) = 0.102 W/kg



DIGITAL EMC CO., LTD**DUT: LG-E510; 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; $\epsilon_r = 42$; $\rho = 1000$ kg/m³
 Phantom section: Right Section

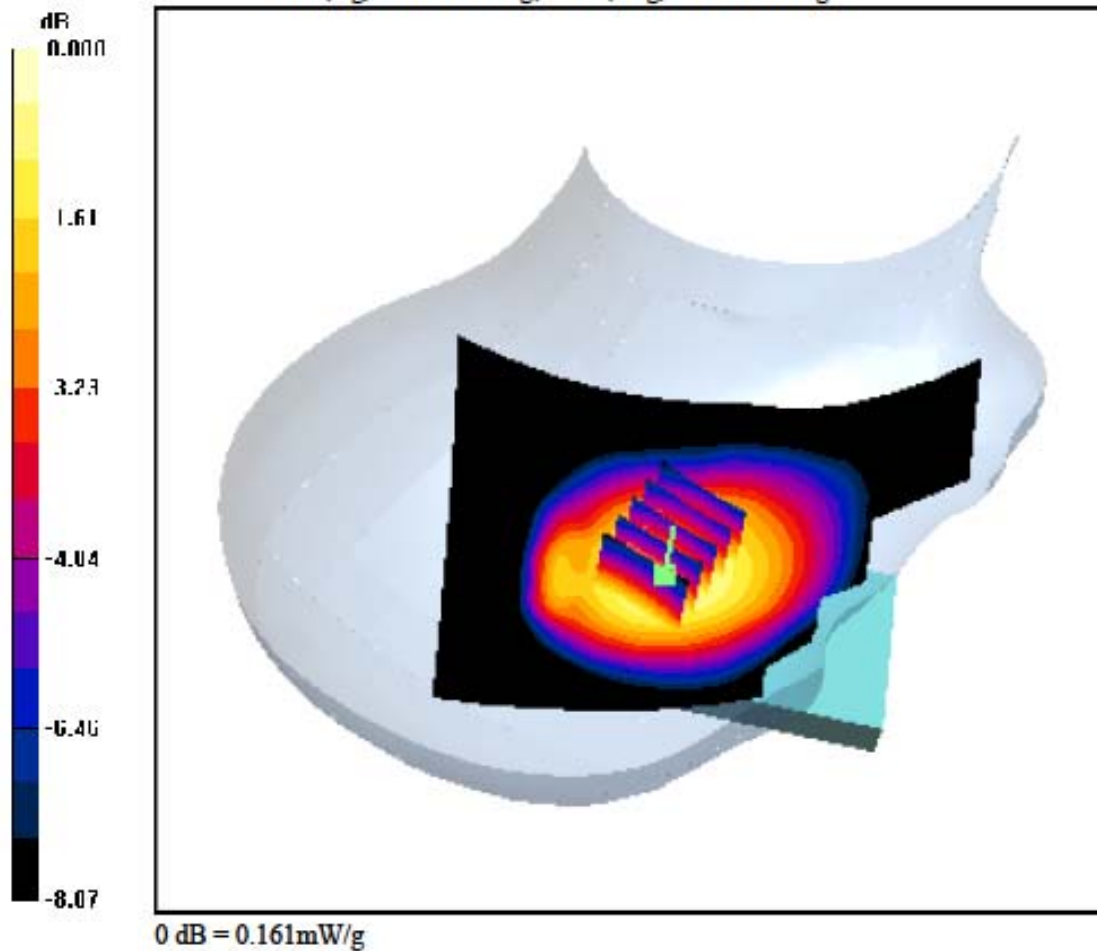
DASY4 Configuration:

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: 2011-08-22; Ambient Temp: 22.2; Tissue Temp: 22.4

Right Tilt, GSM850 Ch. 190, 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 = 0.167 dB
 Peak SAR (extrapolated) = 0.180 W/kg
 SAR(1 g) = 0.142 W/kg; SAR(10 g) = 0.108 W/kg



DIGITAL EMC CO., LTD**DUT: LG-E510; Type: Bar**

Communication System: PCS1900; Frequency: 1850.2 MHz; Duty Cycle: 1:8.3
 Medium parameters used: $f = 1850.2 \text{ MHz}$; $\sigma = 1.4 \text{ mho/m}$; $\epsilon_r = 40.9$; $\rho = 1000 \text{ kg/m}^3$
 Phantom section: Left Section

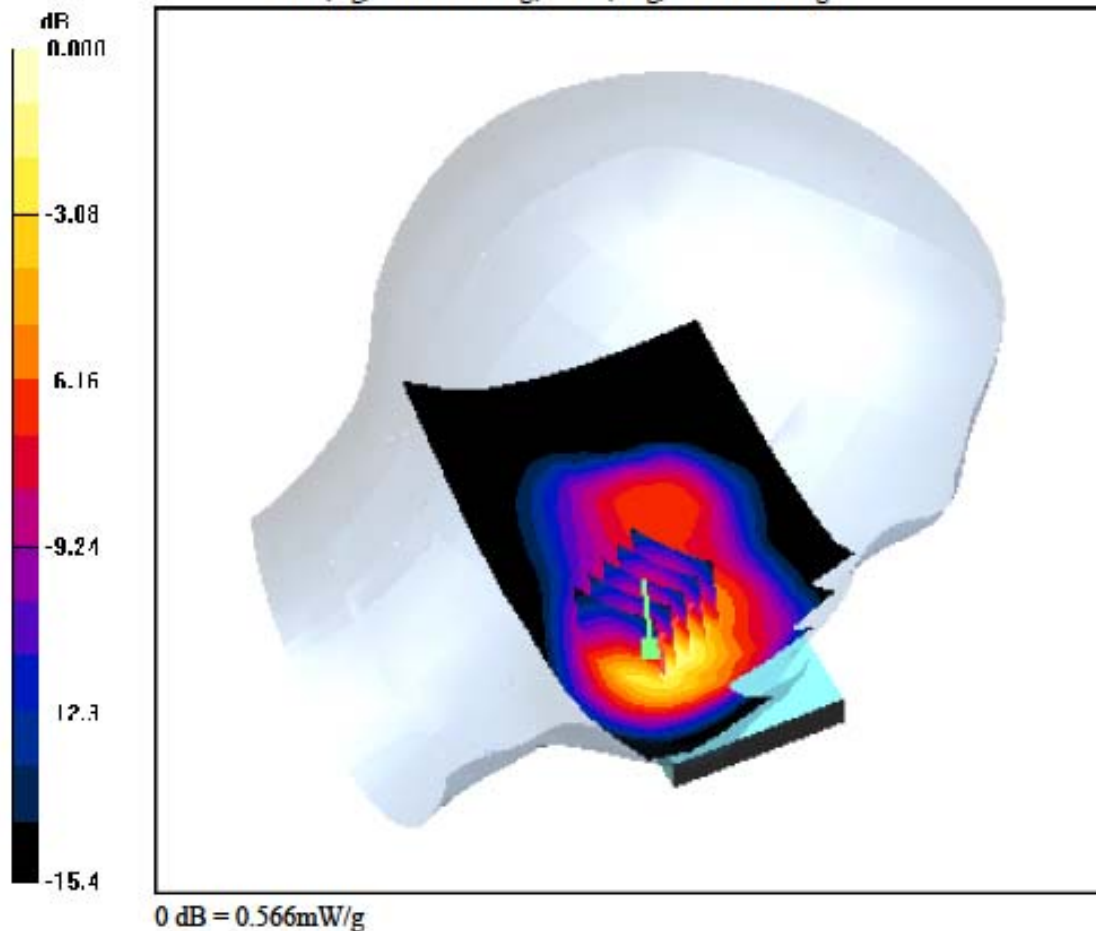
DASY4 Configuration:

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: 2011-08-23; Ambient Temp: 22.4; Tissue Temp: 22.7

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

Area Scan (71x121x1): 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 = 0.061 dB
 Peak SAR (extrapolated) = 0.702 W/kg
 SAR(1 g) = 0.457 W/kg; SAR(10 g) = 0.270 W/kg



DIGITAL EMC CO., LTD**DUT: LG-E510; Type: Bar**

Communication System: PCS1900; Frequency: 1880 MHz; Duty Cycle: 1:8.3
 Medium parameters used: $f = 1880$ MHz; $\sigma = 1.41$ mho/m; $\epsilon_r = 40.9$; $\rho = 1000$ kg/m³
 Phantom section: Left Section

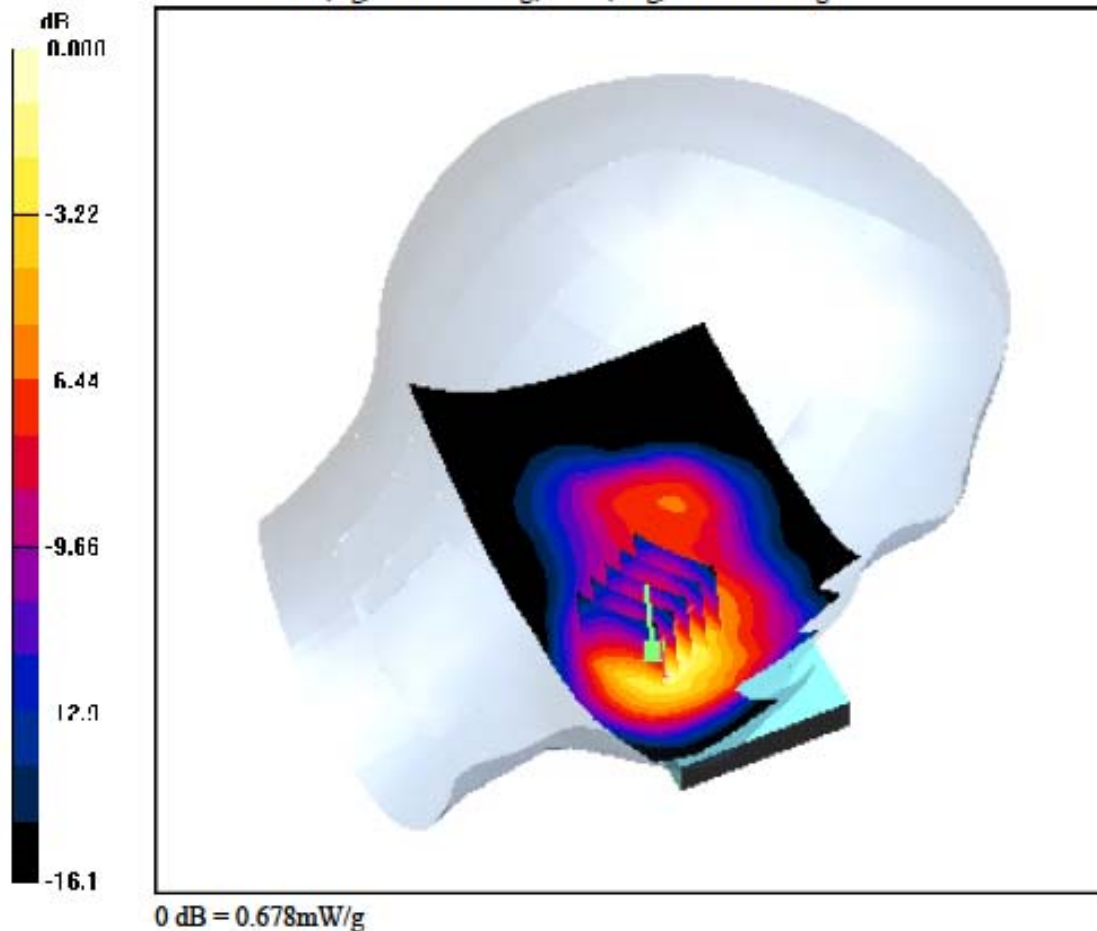
DASY4 Configuration:

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: 2011-08-23; Ambient Temp: 22.4; Tissue Temp: 22.7

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

Area Scan (71x121x1): Measurement grid: dx=15mm, dy=15mm
Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
 Power Drift = -0.153 dB
 Peak SAR (extrapolated) = 0.845 W/kg
 SAR(1 g) = 0.547 W/kg; SAR(10 g) = 0.325 W/kg



DIGITAL EMC CO., LTD**DUT: LG-E510; Type: Bar**

Communication System: PCS1900; Frequency: 1909.8 MHz; Duty Cycle: 1:8.3
Medium parameters used: $f = 1909.8$ MHz; $\sigma = 1.42$ mho/m; $\epsilon_r = 41.1$; $\rho = 1000$ kg/m³
Phantom section: Left Section

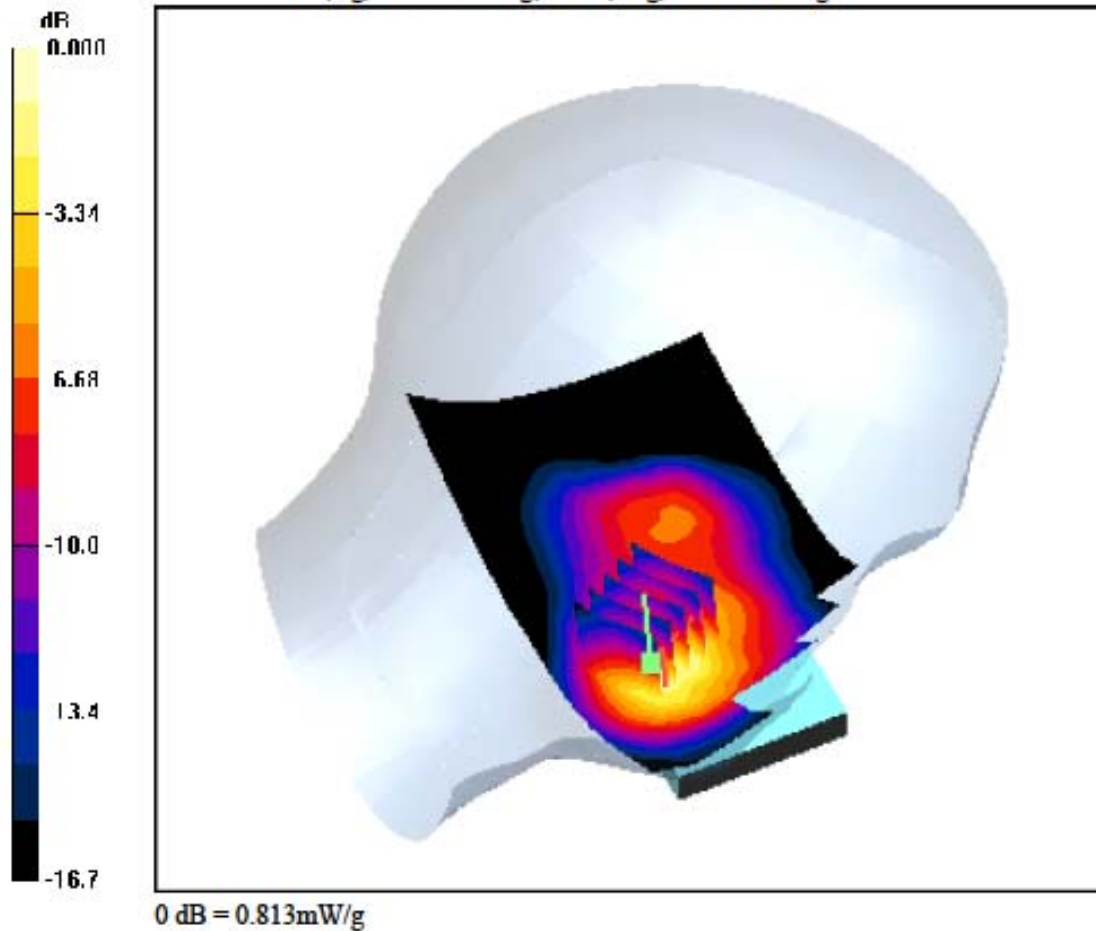
DASY4 Configuration:

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: 2011-08-23; Ambient Temp: 22.4; Tissue Temp: 22.7

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

Area Scan (71x121x1): Measurement grid: dx=15mm, dy=15mm
Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Power Drift = 0.024 dB
Peak SAR (extrapolated) = 1.03 W/kg
SAR(1 g) = 0.654 W/kg; SAR(10 g) = 0.383 W/kg



DIGITAL EMC CO., LTD**DUT: LG-E510; Type: Bar**

Communication System: PCS1900; Frequency: 1880 MHz; Duty Cycle: 1:8.3
Medium parameters used: $f = 1880$ MHz; $\sigma = 1.41$ mho/m; $\epsilon_r = 40.9$; $\rho = 1000$ kg/m³
Phantom section: Right Section

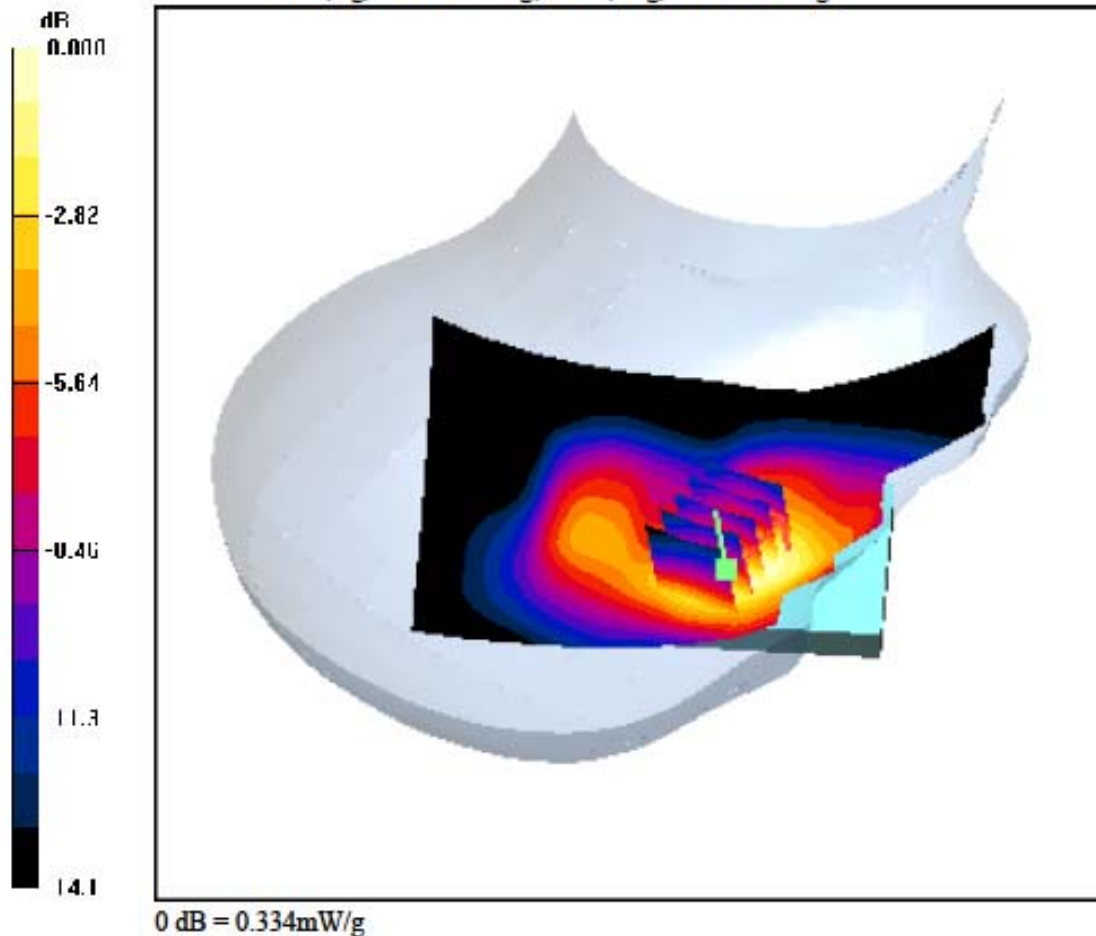
DASY4 Configuration:

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: 2011-08-23; Ambient Temp: 22.4; Tissue Temp: 22.7

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

Area Scan (71x121x1): Measurement grid: dx=15mm, dy=15mm
Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Power Drift = -0.039 dB
Peak SAR (extrapolated) = 0.418 W/kg
SAR(1 g) = 0.275 W/kg; SAR(10 g) = 0.173 W/kg



DIGITAL EMC CO., LTD**DUT: LG-E510; Type: Bar**

Communication System: PCS1900; Frequency: 1880 MHz; Duty Cycle: 1:8.3
Medium parameters used: $f = 1880$ MHz; $\sigma = 1.41$ mho/m; $\epsilon_r = 40.9$; $\rho = 1000$ kg/m³
Phantom section: Left Section

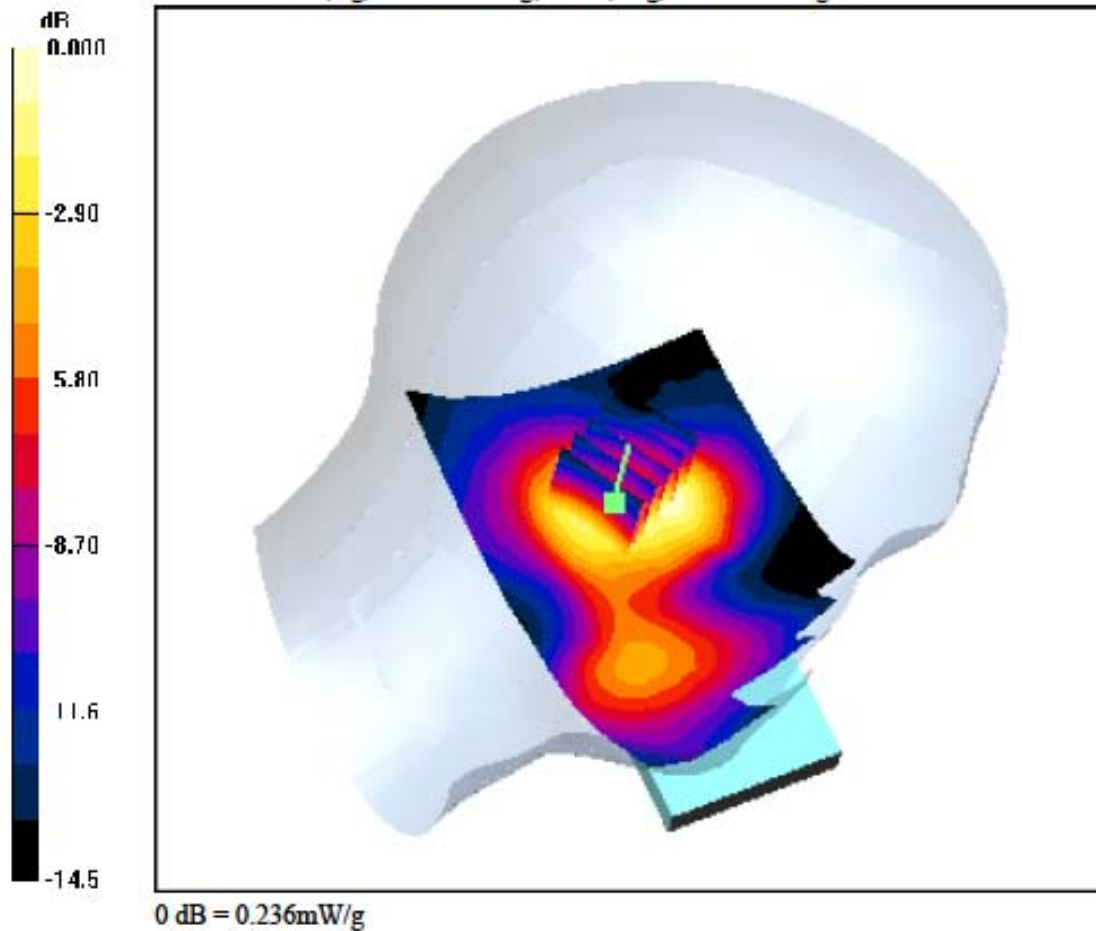
DASY4 Configuration:

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: 2011-08-23; Ambient Temp: 22.4; Tissue Temp: 22.7

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

Area Scan (71x121x1): Measurement grid: dx=15mm, dy=15mm
Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Power Drift = 0.139 dB
Peak SAR (extrapolated) = 0.298 W/kg
SAR(1 g) = 0.192 W/kg; SAR(10 g) = 0.118 W/kg



DIGITAL EMC CO., LTD**DUT: LG-E510; Type: Bar**

Communication System: PCS1900; Frequency: 1880 MHz; Duty Cycle: 1:8.3
 Medium parameters used: $f = 1880$ MHz; $\sigma = 1.41$ mho/m; $\epsilon_r = 40.9$; $\rho = 1000$ kg/m³
 Phantom section: Right Section

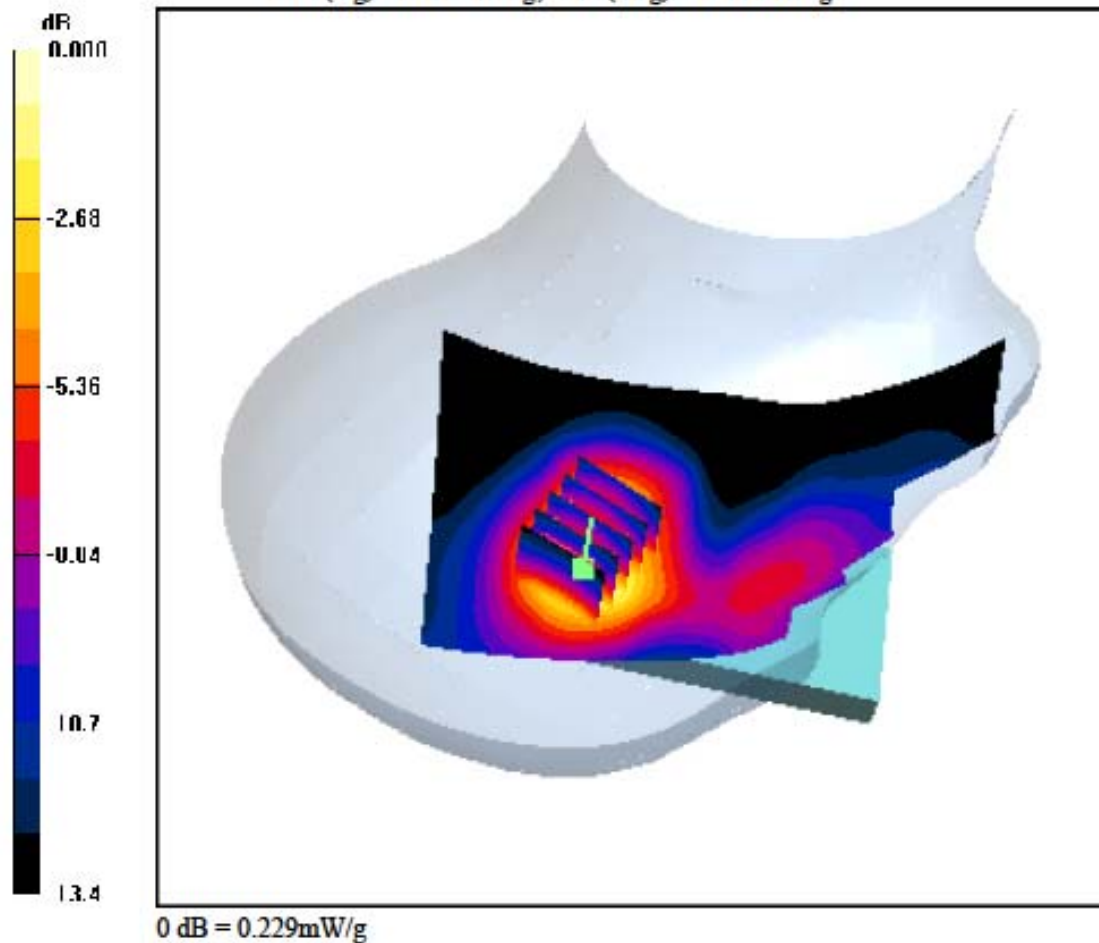
DASY4 Configuration:

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: 2011-08-23; Ambient Temp: 22.4; Tissue Temp: 22.7

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

Area Scan (71x121x1): Measurement grid: dx=15mm, dy=15mm
Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
 Power Drift = 0.127 dB
 Peak SAR (extrapolated) = 0.290 W/kg
 SAR(1 g) = 0.187 W/kg; SAR(10 g) = 0.113 W/kg



DIGITAL EMC CO., LTD**DUT: LG-E510; Type: Bar**

Communication System: W-LAN; Frequency: 2462 MHz; Duty Cycle: 1:1
 Medium parameters used: $f = 2462$ MHz; $\sigma = 1.85$ mho/m; $\epsilon_r = 39$; $\rho = 1000$ kg/m³
 Phantom section: Left Section

DASY4 Configuration:

Probe: EX3DV4 - SN3643; ConvF(7.4, 7.4, 7.4); 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: 2011-08-24; Ambient Temp: 22.3; Tissue Temp: 22.5

Left Touch, W-LAN(802.11b) Ch. 11, Ant Internal, Standard Battery

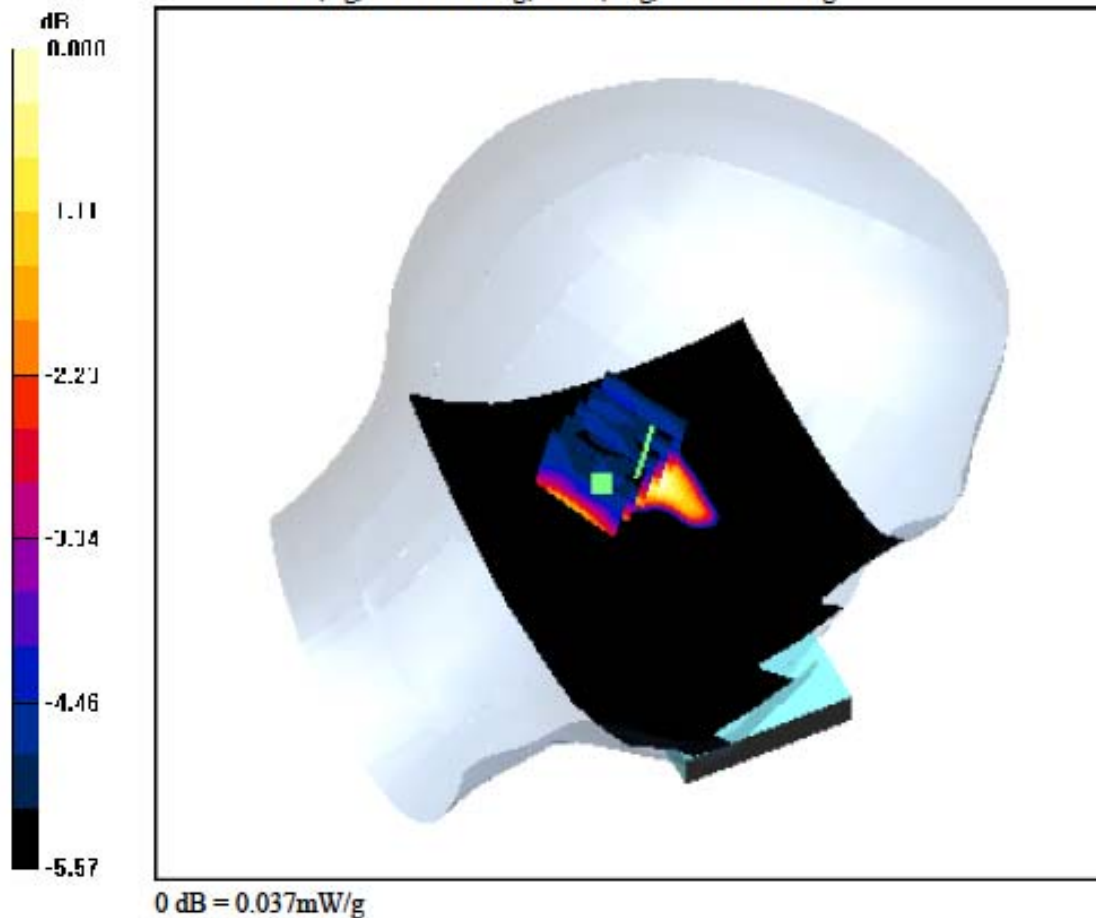
Area Scan (81x121x1): Measurement grid: dx=15mm, dy=15mm

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

Power Drift = -0.116 dB

Peak SAR (extrapolated) = 0.117 W/kg

SAR(1 g) = 0.026 W/kg; SAR(10 g) = 0.0097 W/kg



DIGITAL EMC CO., LTD**DUT: LG-E510; Type: Bar**

Communication System: W-LAN; Frequency: 2412 MHz; Duty Cycle: 1:1
 Medium parameters used: $f = 2412 \text{ MHz}$; $\sigma = 1.76 \text{ mho/m}$; $\epsilon_r = 38.6$; $\rho = 1000 \text{ kg/m}^3$
 Phantom section: Right Section

DASY4 Configuration:

Probe: EX3DV4 - SN3643; ConvF(7.4, 7.4, 7.4); 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: 2011-08-24; Ambient Temp: 22.3; Tissue Temp: 22.5

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

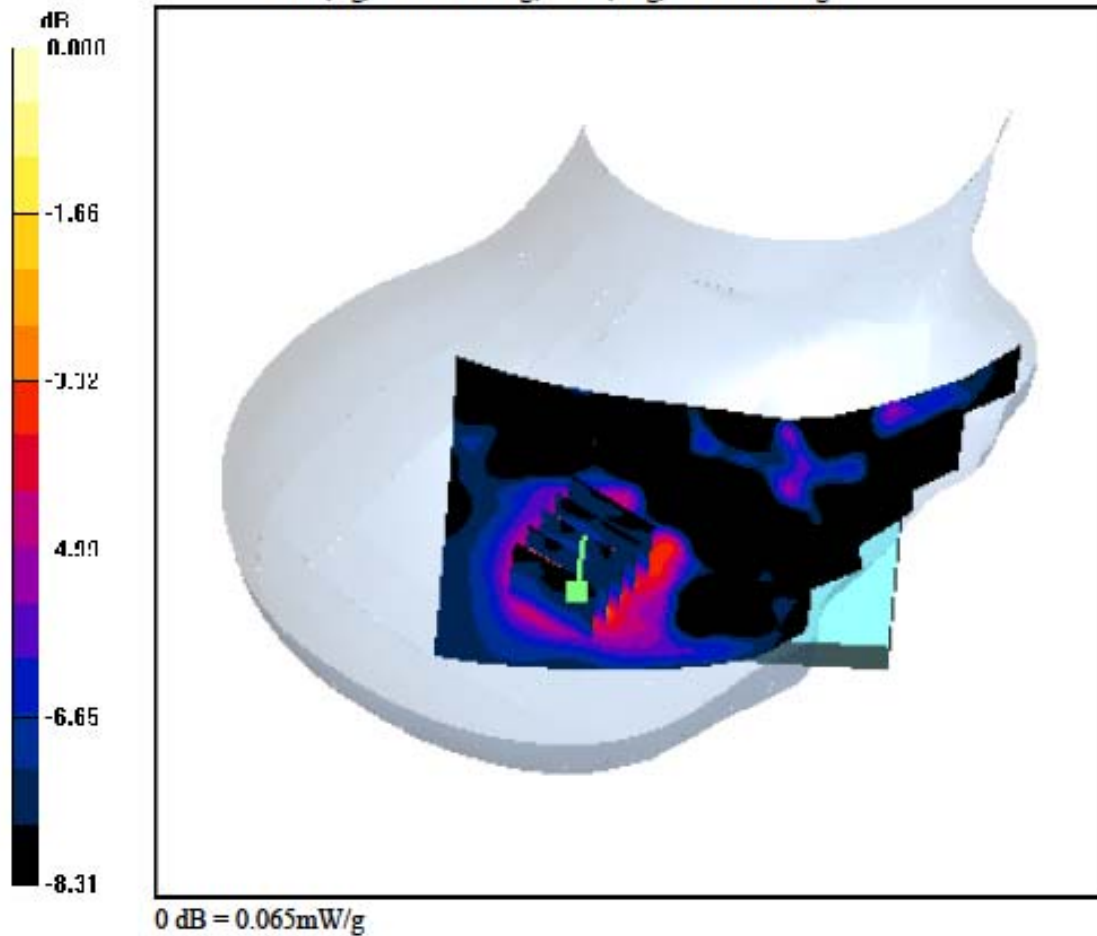
Area Scan (71x121x1): Measurement grid: $dx=15\text{mm}$, $dy=15\text{mm}$

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

Power Drift = 0.199 dB

Peak SAR (extrapolated) = 0.111 W/kg

SAR(1 g) = 0.048 W/kg; SAR(10 g) = 0.027 W/kg



DIGITAL EMC CO., LTD**DUT: LG-E510; Type: Bar**

Communication System: W-LAN; Frequency: 2437 MHz; Duty Cycle: 1:1
Medium parameters used: $f = 2437$ MHz; $\sigma = 1.79$ mho/m; $\epsilon_r = 38.8$; $\rho = 1000$ kg/m³
Phantom section: Right Section

DASY4 Configuration:

Probe: EX3DV4 - SN3643; ConvF(7.4, 7.4, 7.4); 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

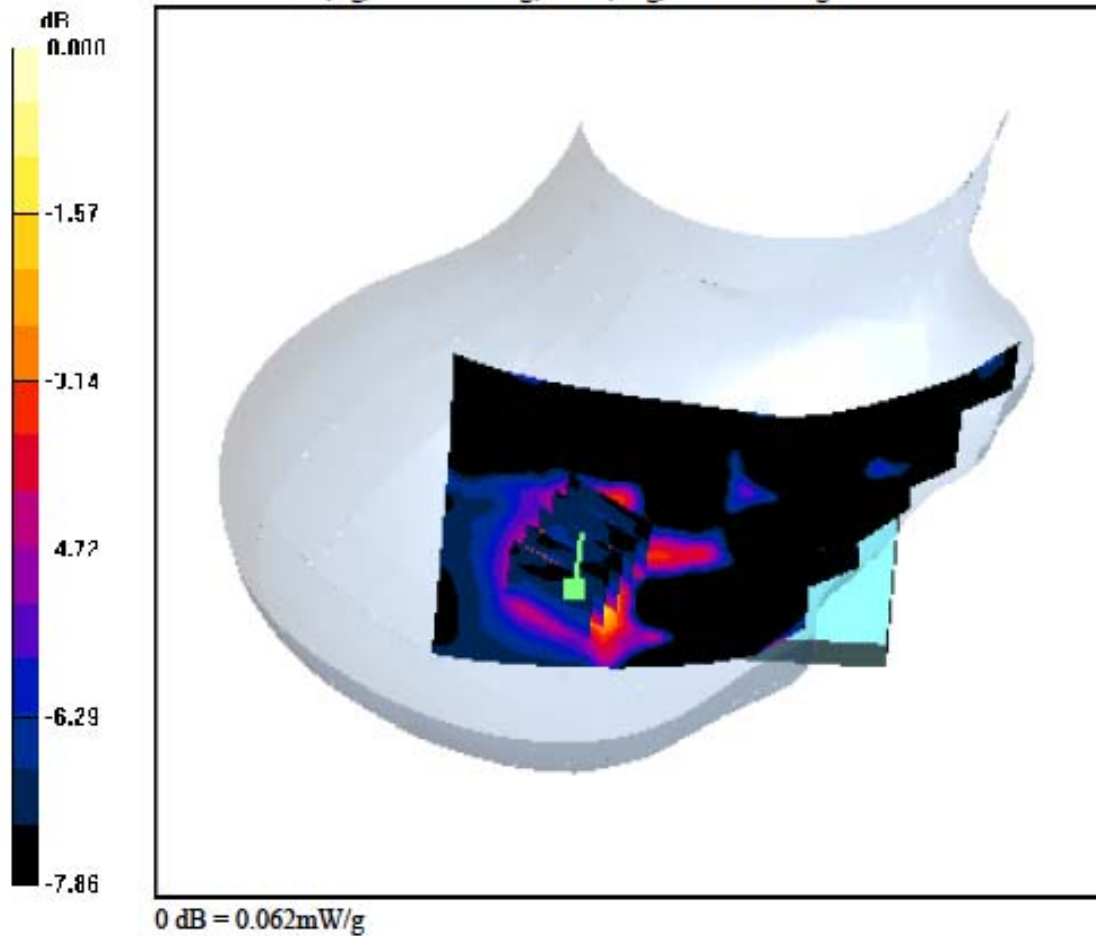
Date: 2011-08-24; Ambient Temp: 22.3; Tissue Temp: 22.5

Right Touch, W-LAN(802.11b) Ch. 6, Ant Internal, Standard Battery**Area Scan (71x121x1):** Measurement grid: dx=15mm, dy=15mm**Zoom Scan (5x5x7)/Cube 0:** Measurement grid: dx=8mm, dy=8mm, dz=5mm

Power Drift = 0.379 dB

Peak SAR (extrapolated) = 0.099 W/kg

SAR(1 g) = 0.047 W/kg; SAR(10 g) = 0.027 W/kg



DIGITAL EMC CO., LTD**DUT: LG-E510; Type: Bar**

Communication System: W-LAN; Frequency: 2462 MHz; Duty Cycle: 1:1
 Medium parameters used: $f = 2462$ MHz; $\sigma = 1.85$ mho/m; $\epsilon_r = 39$; $\rho = 1000$ kg/m³
 Phantom section: Right Section

DASY4 Configuration:

Probe: EX3DV4 - SN3643; ConvF(7.4, 7.4, 7.4); 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: 2011-08-24; Ambient Temp: 22.3; Tissue Temp: 22.5

Right Touch, W-LAN(802.11b) Ch. 11, Ant Internal, Standard Battery

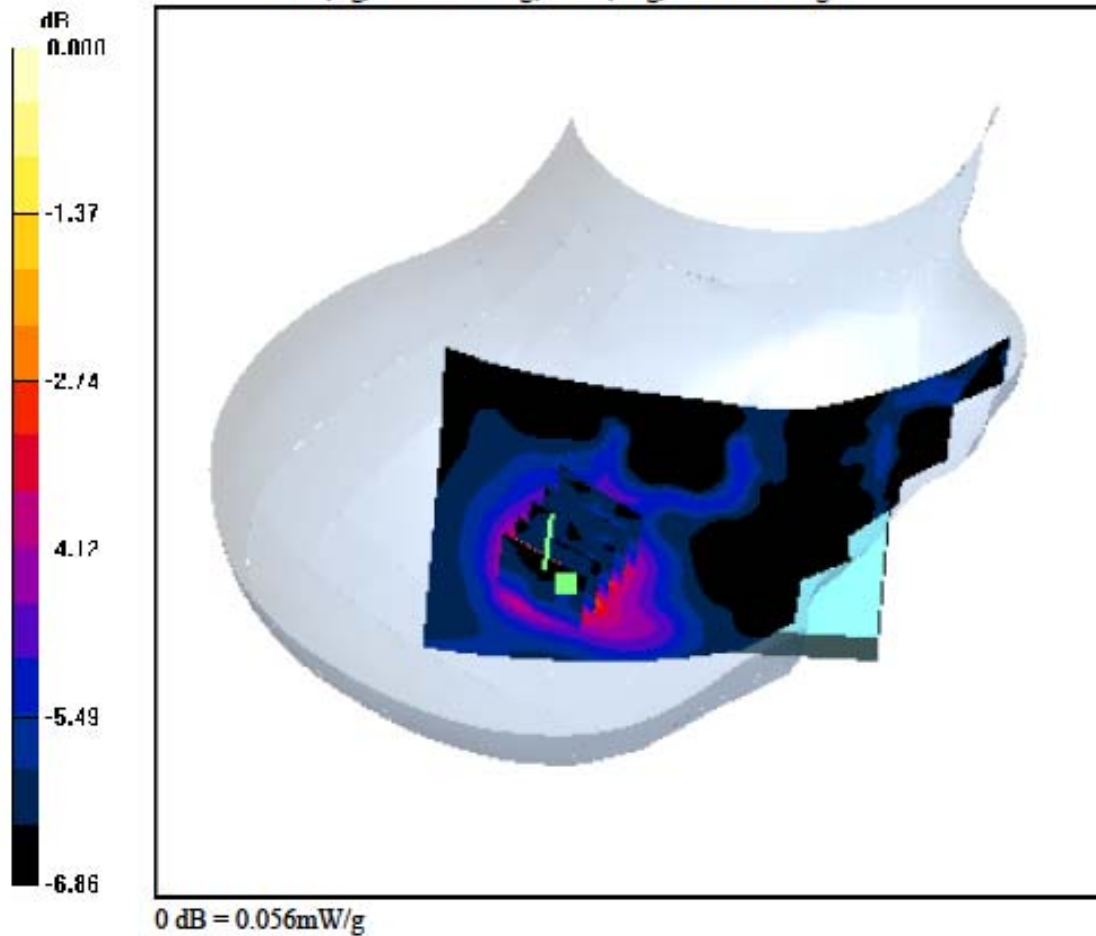
Area Scan (71x121x1): Measurement grid: dx=15mm, dy=15mm

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

Power Drift = 0.007 dB

Peak SAR (extrapolated) = 0.085 W/kg

SAR(1 g) = 0.042 W/kg; SAR(10 g) = 0.026 W/kg



DIGITAL EMC CO., LTD**DUT: LG-E510; Type: Bar**

Communication System: W-LAN; Frequency: 2462 MHz; Duty Cycle: 1:1
 Medium parameters used: $f = 2462$ MHz; $\sigma = 1.85$ mho/m; $\epsilon_r = 39$; $\rho = 1000$ kg/m³
 Phantom section: Left Section

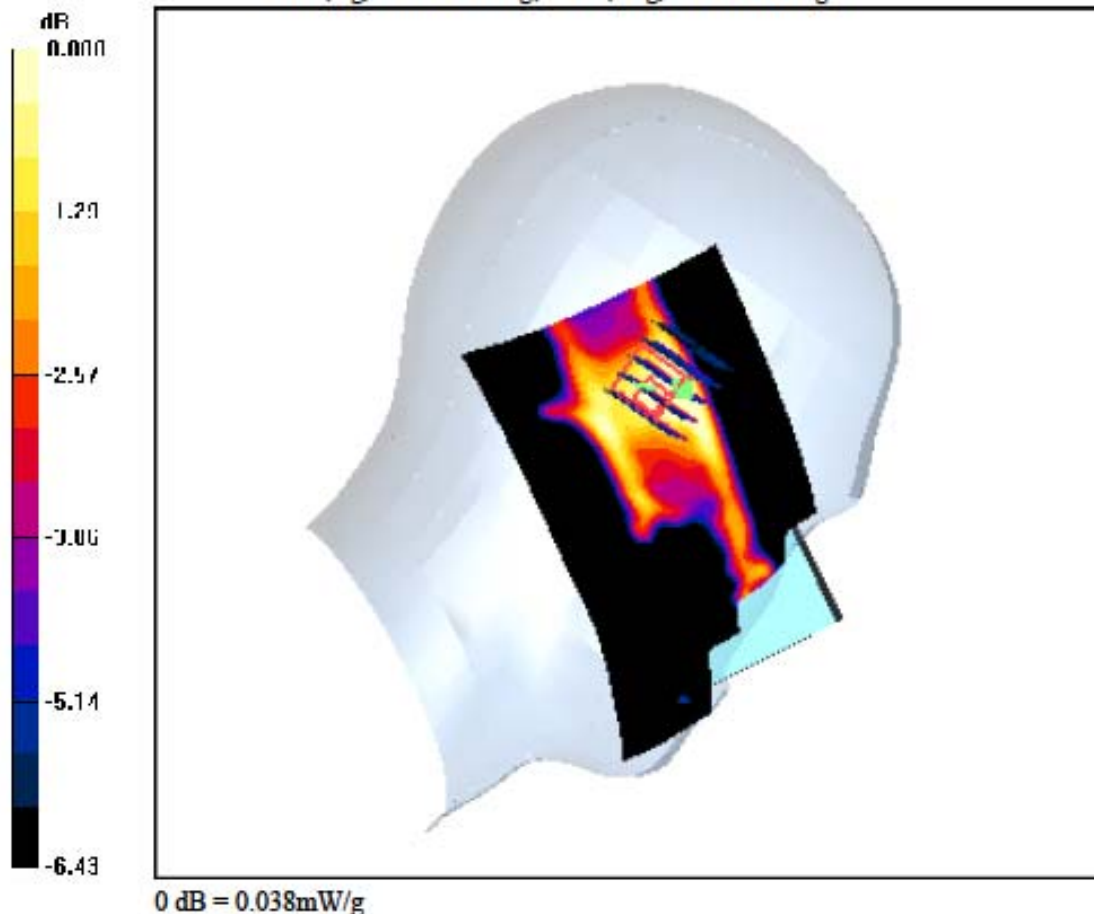
DASY4 Configuration:

Probe: EX3DV4 - SN3643; ConvF(7.4, 7.4, 7.4); 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: 2011-08-24; Ambient Temp: 22.3; Tissue Temp: 22.5

Left Tilt, W-LAN(802.11b) Ch. 11, Ant Internal, Standard Battery

Area Scan (71x121x1): Measurement grid: dx=15mm, dy=15mm
Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
 Power Drift = 0.207 dB
 Peak SAR (extrapolated) = 0.060 W/kg
 SAR(1 g) = 0.030 W/kg; SAR(10 g) = 0.011 W/kg



DIGITAL EMC CO., LTD

DUT: LG-E510; Type: Bar

Communication System: W-LAN; Frequency: 2462 MHz; Duty Cycle: 1:1
 Medium parameters used: $f = 2462$ MHz; $\sigma = 1.85$ mho/m; $\epsilon_r = 39$; $\rho = 1000$ kg/m³
 Phantom section: Right Section

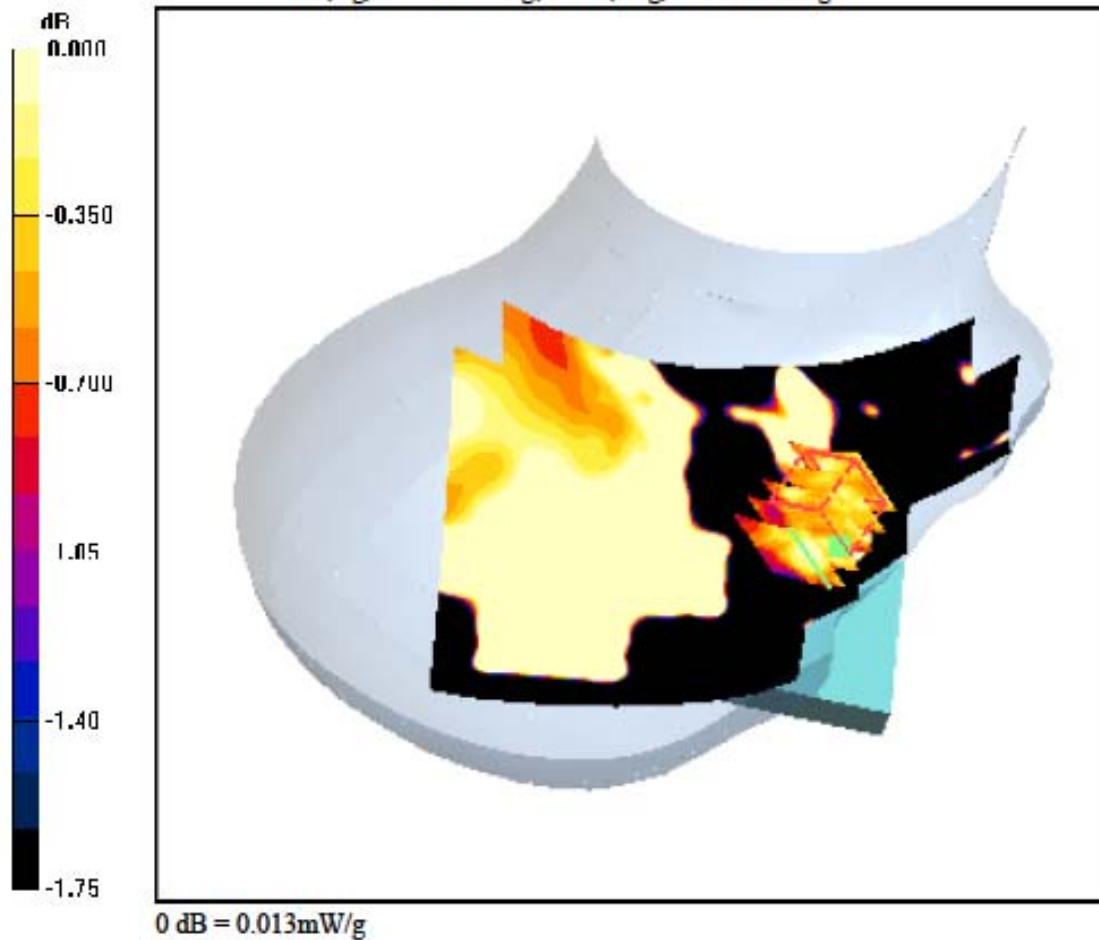
DASY4 Configuration:

Probe: EX3DV4 - SN3643; ConvF(7.4, 7.4, 7.4); 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: 2011-08-24; Ambient Temp: 22.3; Tissue Temp: 22.5

Right Tilt, W-LAN(802.11b) Ch. 11, Ant Internal, Standard Battery

Area Scan (91x121x1): Measurement grid: dx=15mm, dy=15mm
Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
 Power Drift = -0.054 dB
 Peak SAR (extrapolated) = 0.022 W/kg
 SAR(1 g) = 0.015 W/kg; SAR(10 g) = 0.013 W/kg



DIGITAL EMC CO., LTD**DUT: LG-E510; Type: Bar**

Communication System: GSM 850; Frequency: 836.6 MHz; Duty Cycle: 1:2.075
 Medium parameters used: $f = 836.6 \text{ MHz}$; $\sigma = 0.959 \text{ mho/m}$; $\epsilon_r = 55.5$; $\rho = 1000 \text{ kg/m}^3$
 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: 2011-08-22; Ambient Temp: 22.2; Tissue Temp: 22.4

1cm space from Body, Bottom, GSM850 GPRS Class 12 Ch. 190, Ant Internal

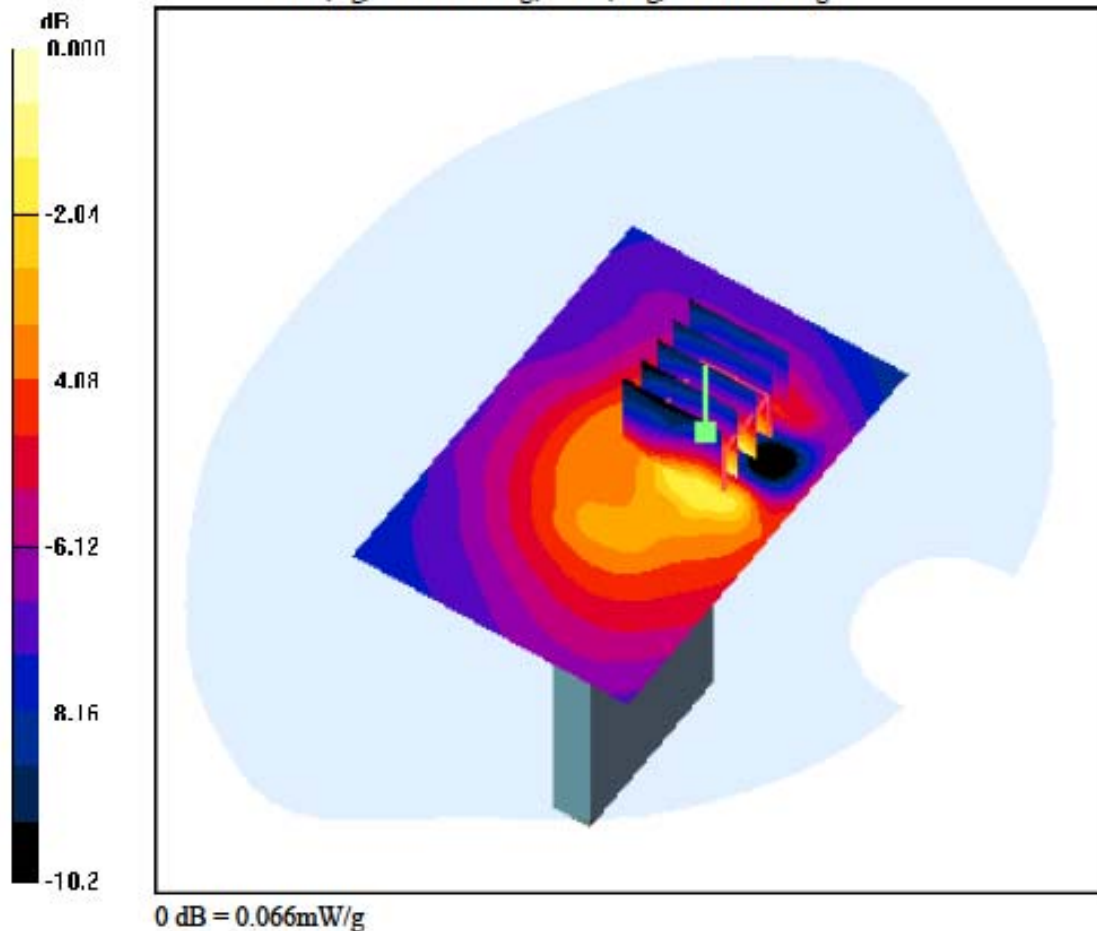
Area Scan (61x91x1): Measurement grid: $dx=15\text{mm}$, $dy=15\text{mm}$

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

Power Drift = 0.278 dB

Peak SAR (extrapolated) = 0.087 W/kg

SAR(1 g) = 0.052 W/kg; SAR(10 g) = 0.033 W/kg



DIGITAL EMC CO., LTD**DUT: LG-E510; Type: Bar**

Communication System: GSM 850; Frequency: 836.6 MHz; Duty Cycle: 1:2.075
 Medium parameters used: $f = 836.6 \text{ MHz}$; $\sigma = 0.959 \text{ mho/m}$; $\epsilon_r = 55.5$; $\rho = 1000 \text{ kg/m}^3$
 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: 2011-08-22; Ambient Temp: 22.2; Tissue Temp: 22.4

1cm space from Body, Front, GSM850 GPRS Class 12 Ch. 190, Ant Internal

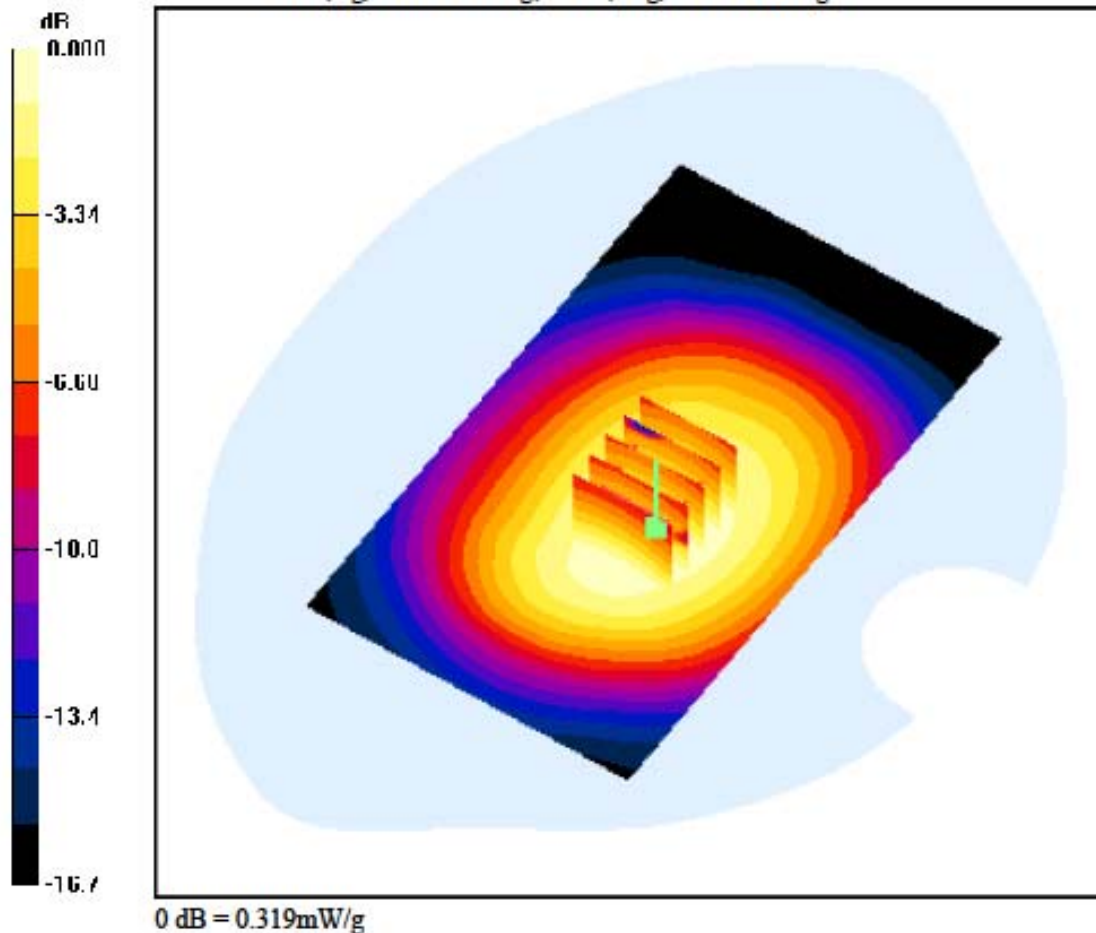
Area Scan (71x121x1): Measurement grid: $dx=15\text{mm}$, $dy=15\text{mm}$

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) = 0.361 W/kg

SAR(1 g) = 0.284 W/kg; SAR(10 g) = 0.214 W/kg



DIGITAL EMC CO., LTD**DUT: LG-E510; Type: Bar**

Communication System: GSM 850; Frequency: 836.6 MHz; Duty Cycle: 1:8.3
 Medium parameters used: $f = 836.6 \text{ MHz}$; $\sigma = 0.959 \text{ mho/m}$; $\epsilon_r = 55.5$; $\rho = 1000 \text{ kg/m}^3$
 Phantom section: Flat Section

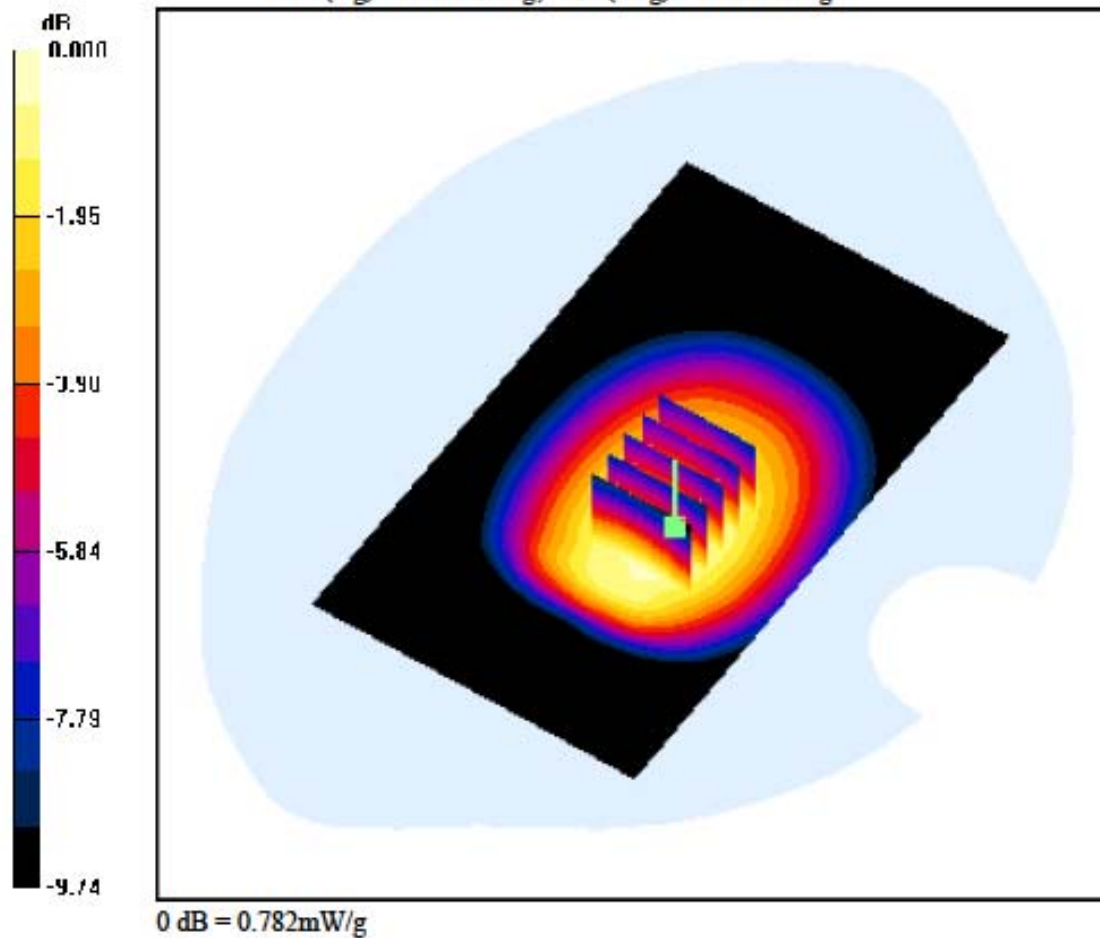
DASY4 Configuration:

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: 2011-08-22; Ambient Temp: 22.2; Tissue Temp: 22.4

1cm space from Body, Rear, GSM850 Ch. 190, Ant Internal

Area Scan (71x121x1): 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 = -0.055 dB
 Peak SAR (extrapolated) = 0.898 W/kg
 SAR(1 g) = 0.685 W/kg; SAR(10 g) = 0.502 W/kg



DIGITAL EMC CO., LTD**DUT: LG-E510; Type: Bar**

Communication System: GSM 850; Frequency: 836.6 MHz; Duty Cycle: 1:8.3
Medium parameters used: $f = 836.6 \text{ MHz}$; $\sigma = 0.959 \text{ mho/m}$; $\epsilon_r = 55.5$; $\rho = 1000 \text{ kg/m}^3$
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

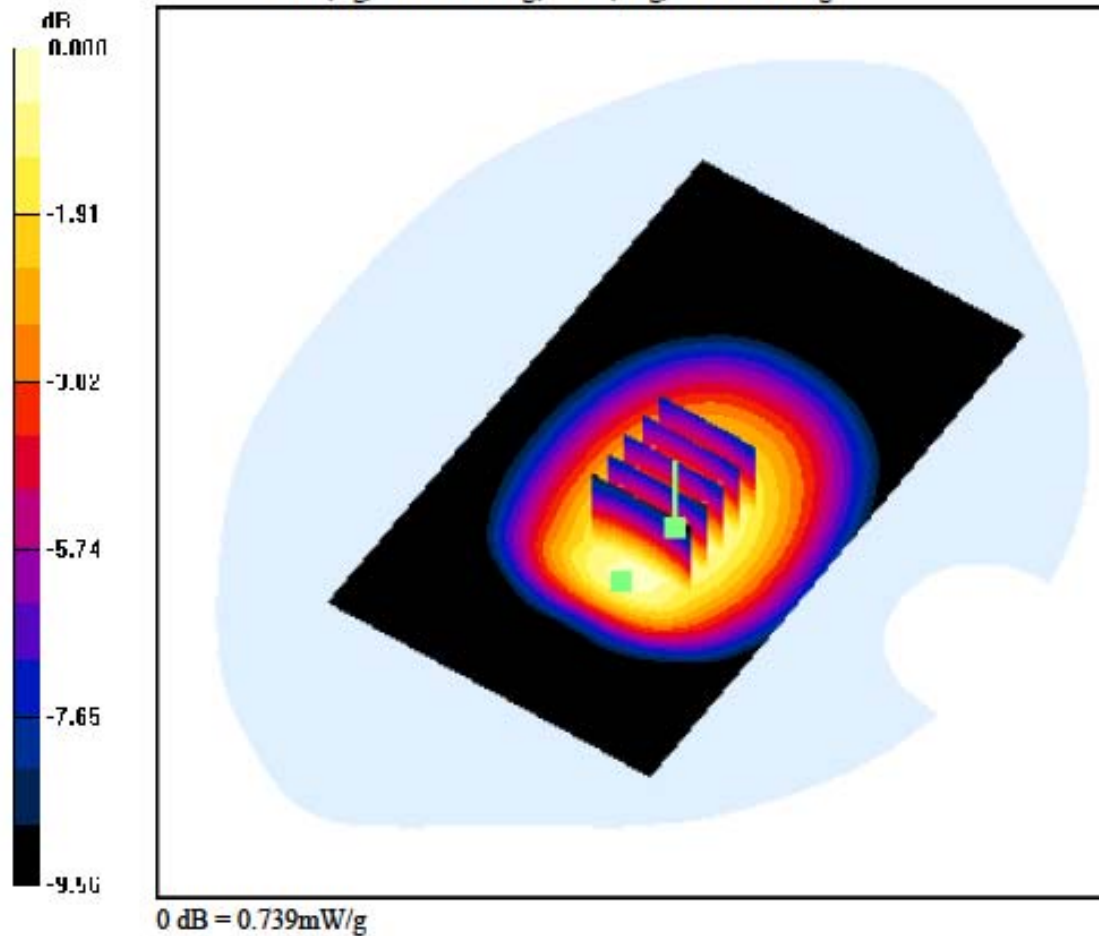
Test Date: 2011-08-22; Ambient Temp: 22.2; Tissue Temp: 22.4

1cm space from Body, Rear, GSM850 GPRS Class 8 Ch. 190, Ant Internal**Area Scan (71x121x1):** 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) = 0.847 W/kg

SAR(1 g) = 0.648 W/kg; SAR(10 g) = 0.476 W/kg



DIGITAL EMC CO., LTD**DUT: LG-E510; Type: Bar**

Communication System: GSM 850; Frequency: 836.6 MHz; Duty Cycle: 1:8.3
Medium parameters used: $f = 836.6$ MHz; $\sigma = 0.959$ mho/m; $\epsilon_r = 55.5$; $\rho = 1000$ kg/m³
Phantom section: Flat Section

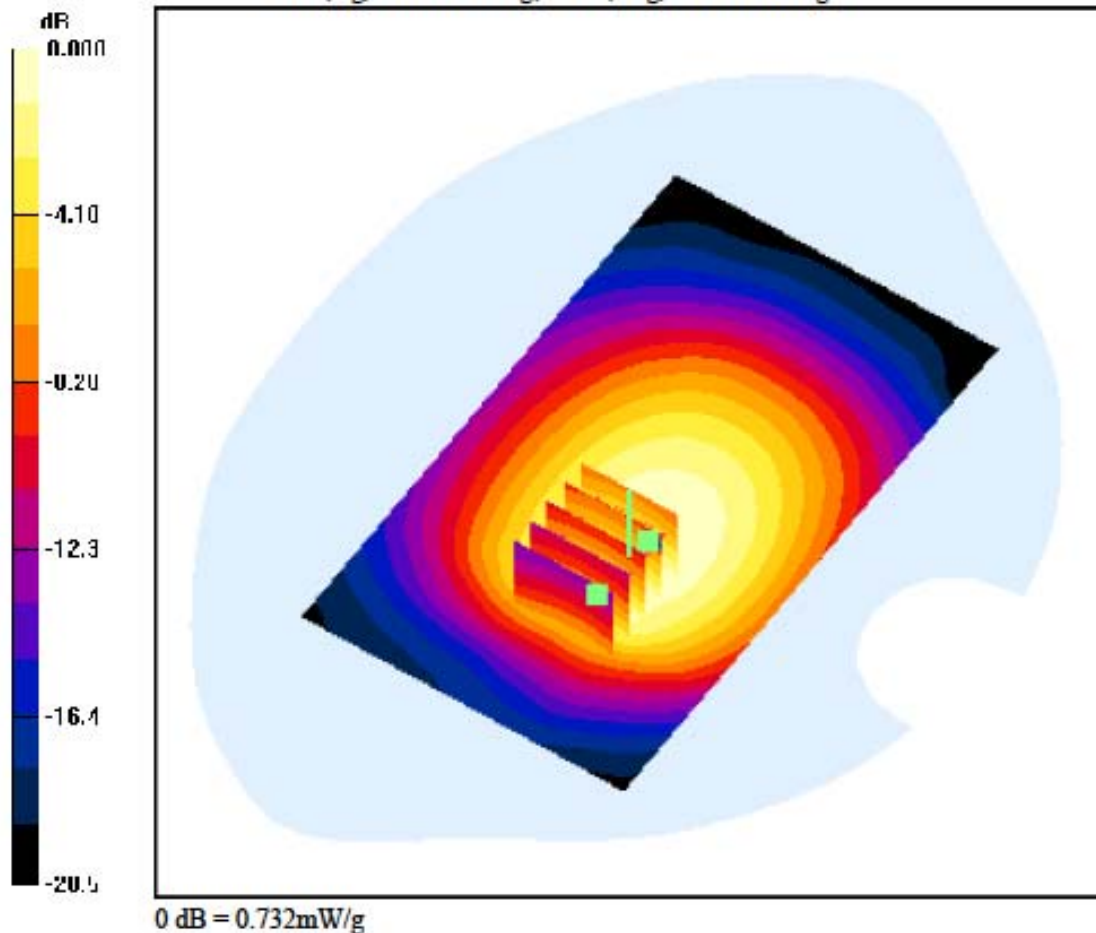
DASY4 Configuration:

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: 2011-08-22; Ambient Temp: 22.2; Tissue Temp: 22.4

1cm space from Body, Rear, GSM850 GPRS Class 8 Ch. 190, Ant Internal

Area Scan (71x121x1): Measurement grid: dx=15mm, dy=15mm
Zoom Scan (5x5x7)/Cube 1: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Power Drift = -0.026 dB
Peak SAR (extrapolated) = 0.842 W/kg
SAR(1 g) = 0.608 W/kg; SAR(10 g) = 0.402 W/kg



DIGITAL EMC CO., LTD**DUT: LG-E510; Type: Bar**

Communication System: GSM 850; Frequency: 836.6 MHz; Duty Cycle: 1:4.15
 Medium parameters used: $f = 836.6 \text{ MHz}$; $\sigma = 0.959 \text{ mho/m}$; $\epsilon_r = 55.5$; $\rho = 1000 \text{ kg/m}^3$
 Phantom section: Flat Section

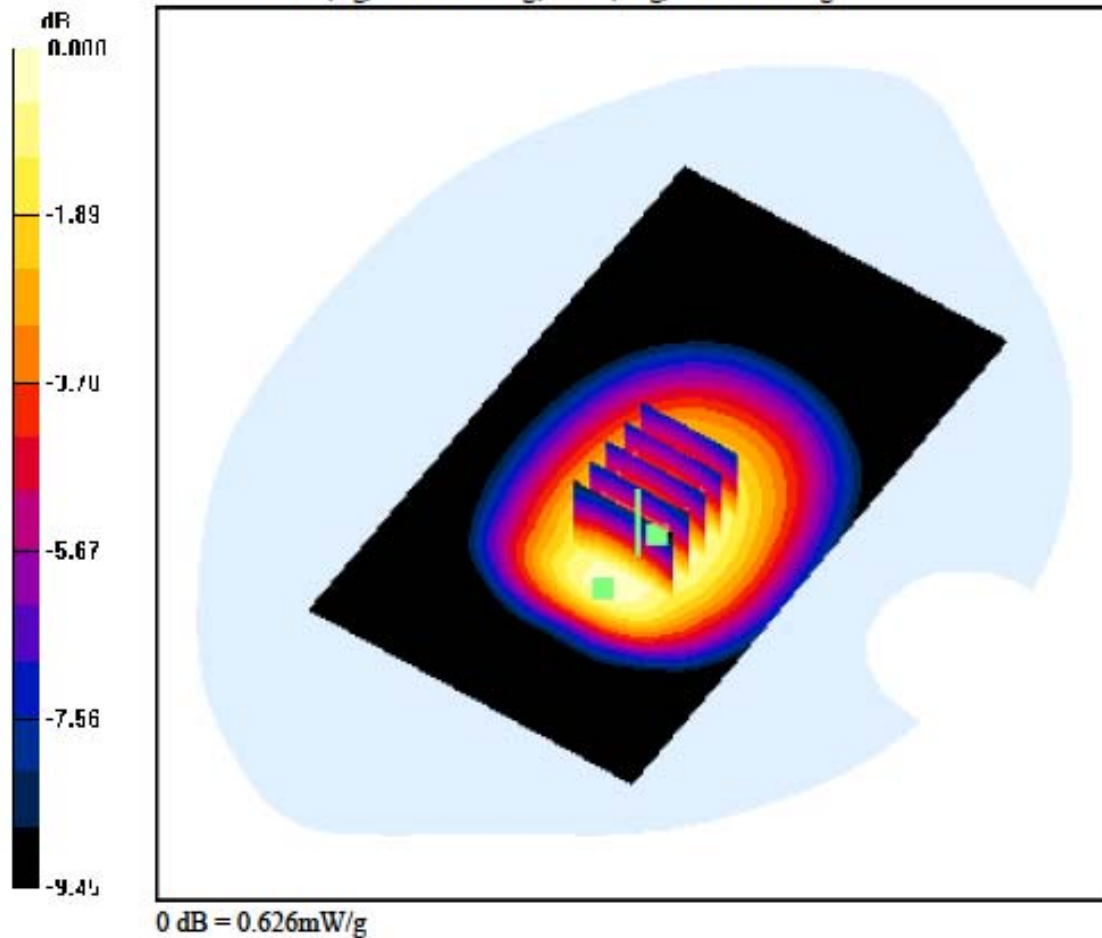
DASY4 Configuration:

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: 2011-08-22; Ambient Temp: 22.2; Tissue Temp: 22.4

1cm space from Body, Rear, GSM850 GPRS Class 10 Ch. 190, Ant Internal

Area Scan (71x121x1): 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 = -0.003 dB
 Peak SAR (extrapolated) = 0.700 W/kg
 SAR(1 g) = 0.532 W/kg; SAR(10 g) = 0.402 W/kg



DIGITAL EMC CO., LTD**DUT: LG-E510; Type: Bar**

Communication System: GSM 850; Frequency: 836.6 MHz; Duty Cycle: 1:4.15
 Medium parameters used: $f = 836.6 \text{ MHz}$; $\sigma = 0.959 \text{ mho/m}$; $\epsilon_r = 55.5$; $\rho = 1000 \text{ kg/m}^3$
 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: 2011-08-22; Ambient Temp: 22.2; Tissue Temp: 22.4

1cm space from Body, Rear, GSM850 GPRS Class 10 Ch. 190, Ant Internal

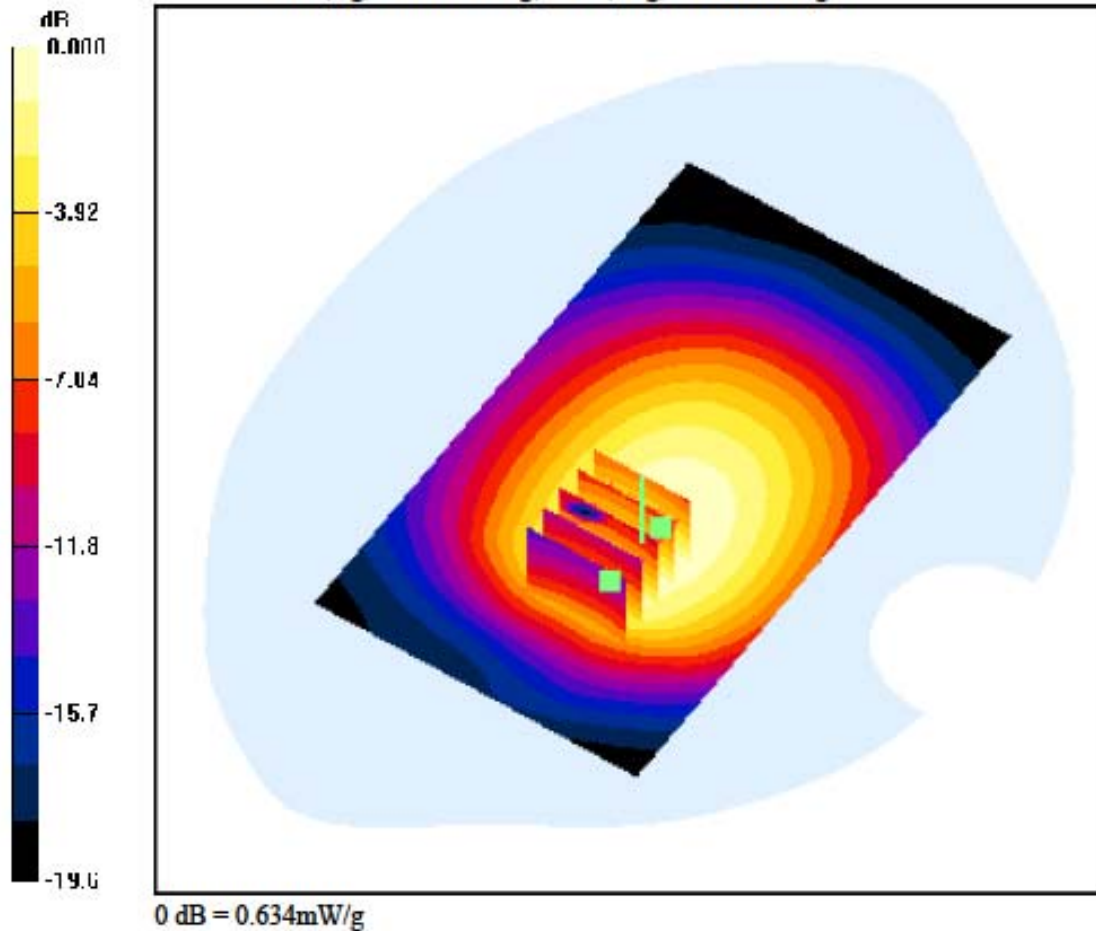
Area Scan (71x121x1): Measurement grid: $dx=15\text{mm}$, $dy=15\text{mm}$

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

Power Drift = -0.003 dB

Peak SAR (extrapolated) = 0.732 W/kg

SAR(1 g) = 0.527 W/kg; SAR(10 g) = 0.349 W/kg



DIGITAL EMC CO., LTD**DUT: LG-E510; Type: Bar**

Communication System: GSM 850; Frequency: 836.6 MHz; Duty Cycle: 1:2.77
 Medium parameters used: $f = 836.6 \text{ MHz}$; $\sigma = 0.959 \text{ mho/m}$; $\epsilon_r = 55.5$; $\rho = 1000 \text{ kg/m}^3$
 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: 2011-08-22; Ambient Temp: 22.2; Tissue Temp: 22.4

1cm space from Body, Rear, GSM850 GPRS Class II Ch. 190, Ant Internal

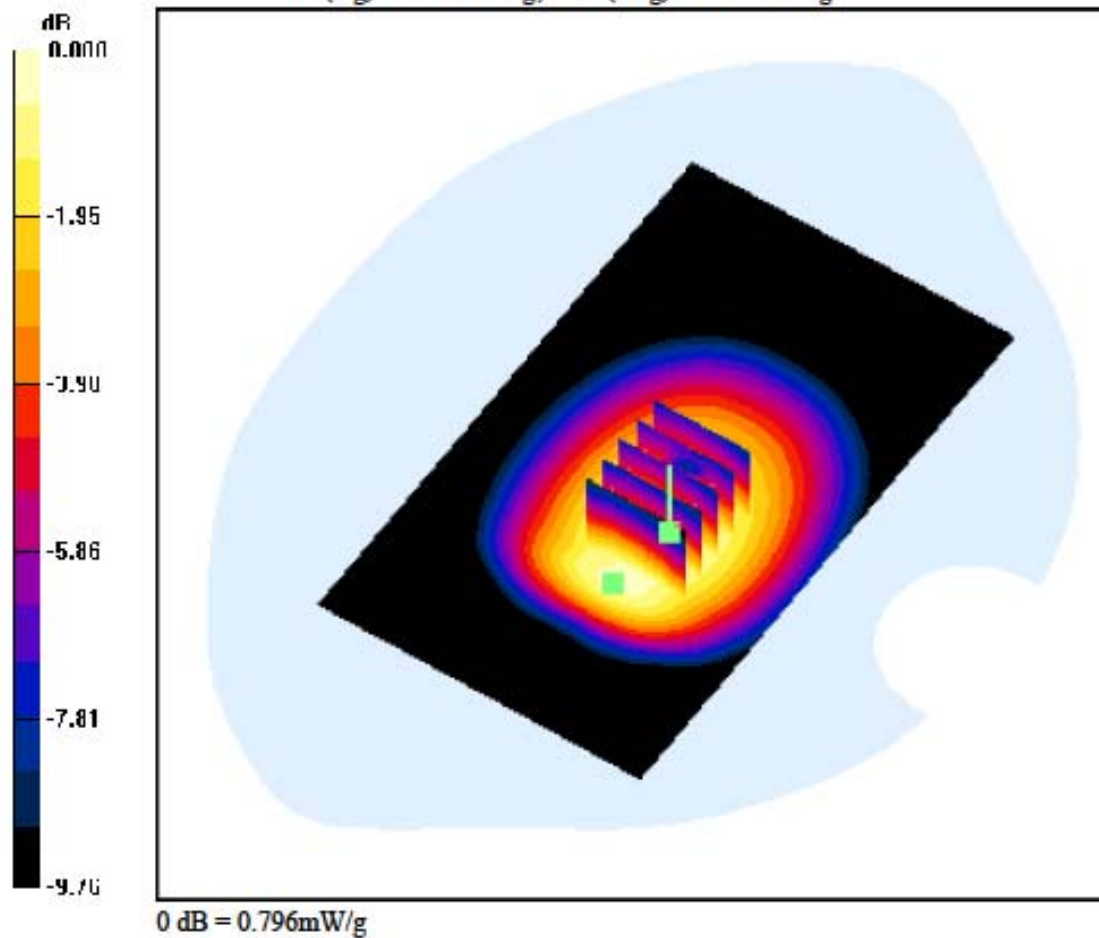
Area Scan (71x121x1): Measurement grid: $dx=15\text{mm}$, $dy=15\text{mm}$

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

Power Drift = -0.050 dB

Peak SAR (extrapolated) = 0.911 W/kg

SAR(1 g) = 0.694 W/kg; SAR(10 g) = 0.505 W/kg



DIGITAL EMC CO., LTD

DUT: LG-E510; Type: Bar

Communication System: GSM 850; Frequency: 836.6 MHz; Duty Cycle: 1:2.77
Medium parameters used: $f = 836.6$ MHz; $\sigma = 0.959$ mho/m; $\epsilon_r = 55.5$; $\rho = 1000$ kg/m³
Phantom section: Flat Section

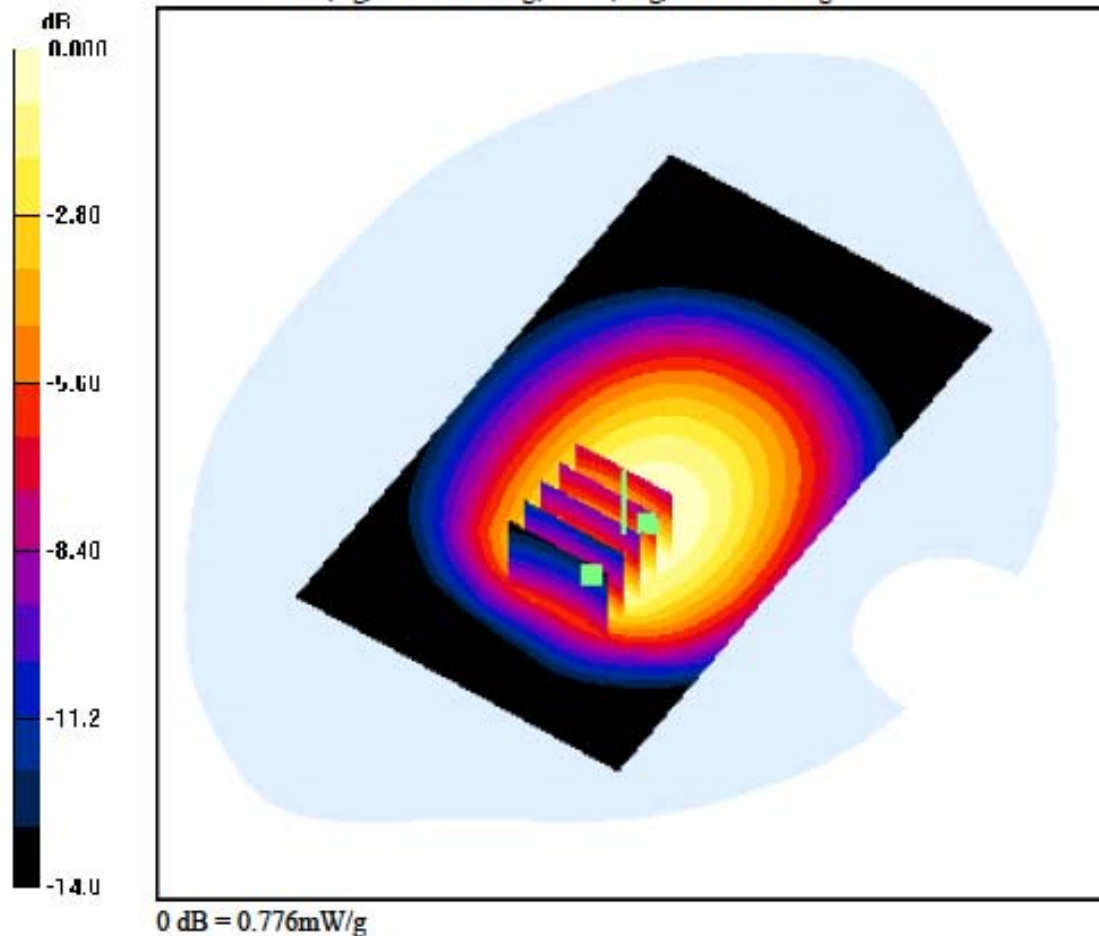
DASY4 Configuration:

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: 2011-08-22; Ambient Temp: 22.2; Tissue Temp: 22.4

1cm space from Body, Rear, GSM850 GPRS Class II Ch. 190, Ant Internal

Area Scan (71x121x1): Measurement grid: dx=15mm, dy=15mm
Zoom Scan (5x5x7)/Cube I: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Power Drift = -0.050 dB
Peak SAR (extrapolated) = 0.897 W/kg
SAR(1 g) = 0.648 W/kg; SAR(10 g) = 0.429 W/kg



DIGITAL EMC CO., LTD**DUT: LG-E510; Type: Bar**

Communication System: GSM 850; Frequency: 824.2 MHz; Duty Cycle: 1:2.075
 Medium parameters used: $f = 824.2 \text{ MHz}$; $\sigma = 0.939 \text{ mho/m}$; $\epsilon_r = 55.4$; $\rho = 1000 \text{ kg/m}^3$
 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: 2011-08-22; Ambient Temp: 22.2; Tissue Temp: 22.4

Icm space from Body, Rear, GSM850 GPRS Class 12 Ch. 128, Ant Internal

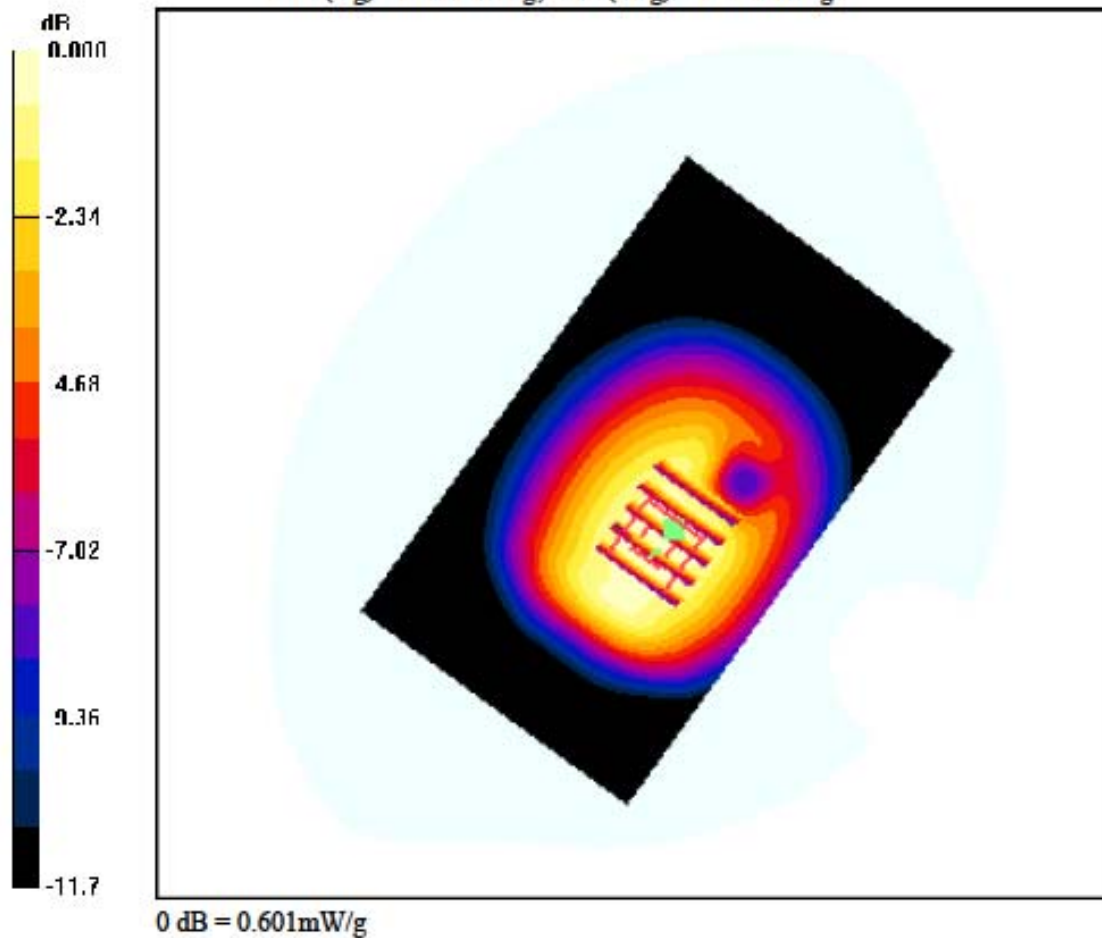
Area Scan (71x121x1): Measurement grid: $dx=15\text{mm}$, $dy=15\text{mm}$

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

Power Drift = -0.075 dB

Peak SAR (extrapolated) = 0.691 W/kg

SAR(1 g) = 0.524 W/kg; SAR(10 g) = 0.383 W/kg



DIGITAL EMC CO., LTD**DUT: LG-E510; Type: Bar**

Communication System: GSM 850; Frequency: 836.6 MHz; Duty Cycle: 1:2.075
 Medium parameters used: $f = 836.6 \text{ MHz}$; $\sigma = 0.959 \text{ mho/m}$; $\epsilon_r = 55.5$; $\rho = 1000 \text{ kg/m}^3$
 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: 2011-08-22; Ambient Temp: 22.2; Tissue Temp: 22.4

1cm space from Body, Rear, GSM850 GPRS Class 12 Ch. 190, Ant Internal

Area Scan (71x121x1): 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) = 0.920 W/kg

SAR(1 g) = 0.704 W/kg; SAR(10 g) = 0.511 W/kg

