

16. REFERENCES

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APPENDIX A: Validation Test Data

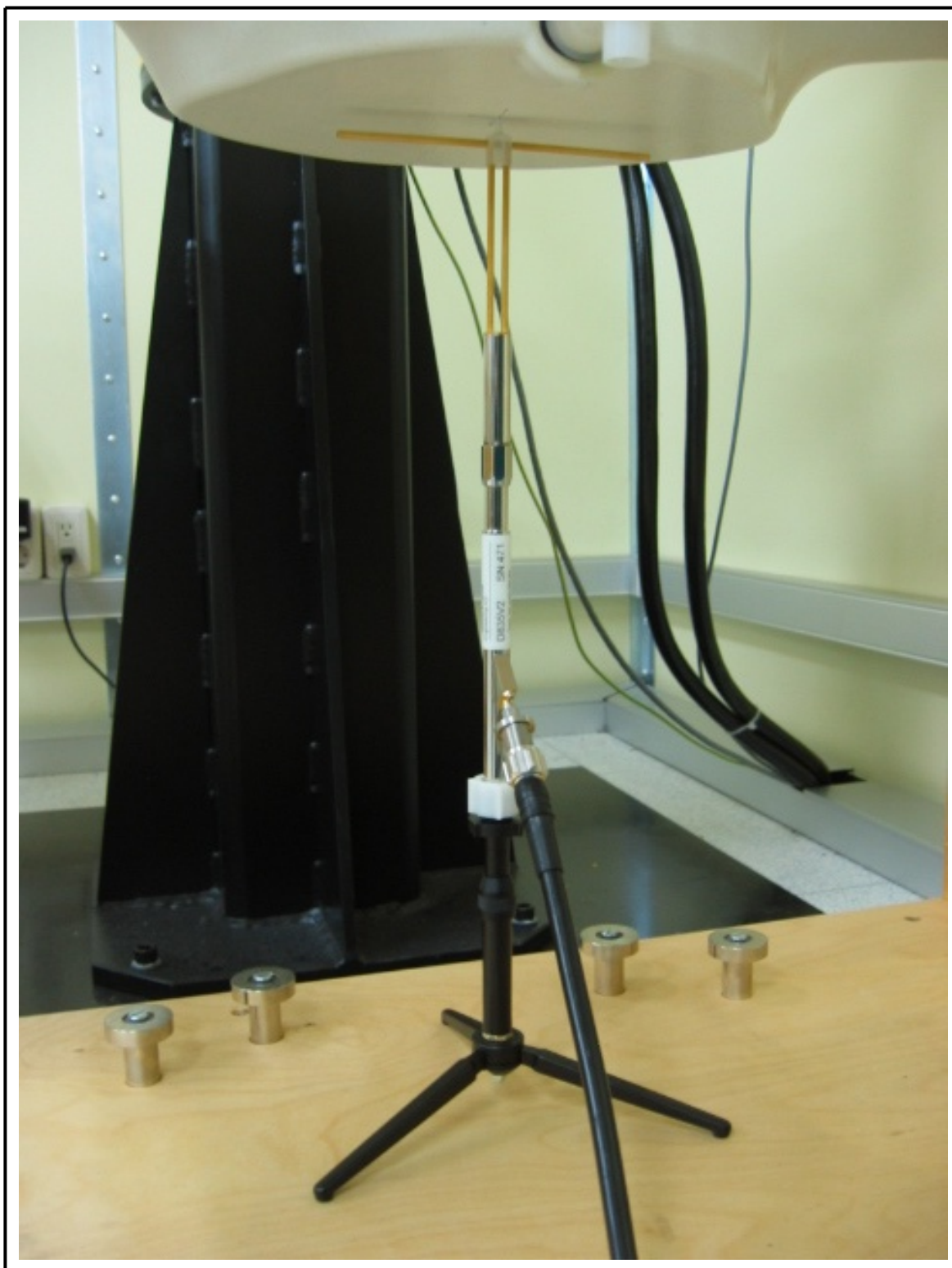


Figure 1 835 MHz Dipole Validation Test Setup

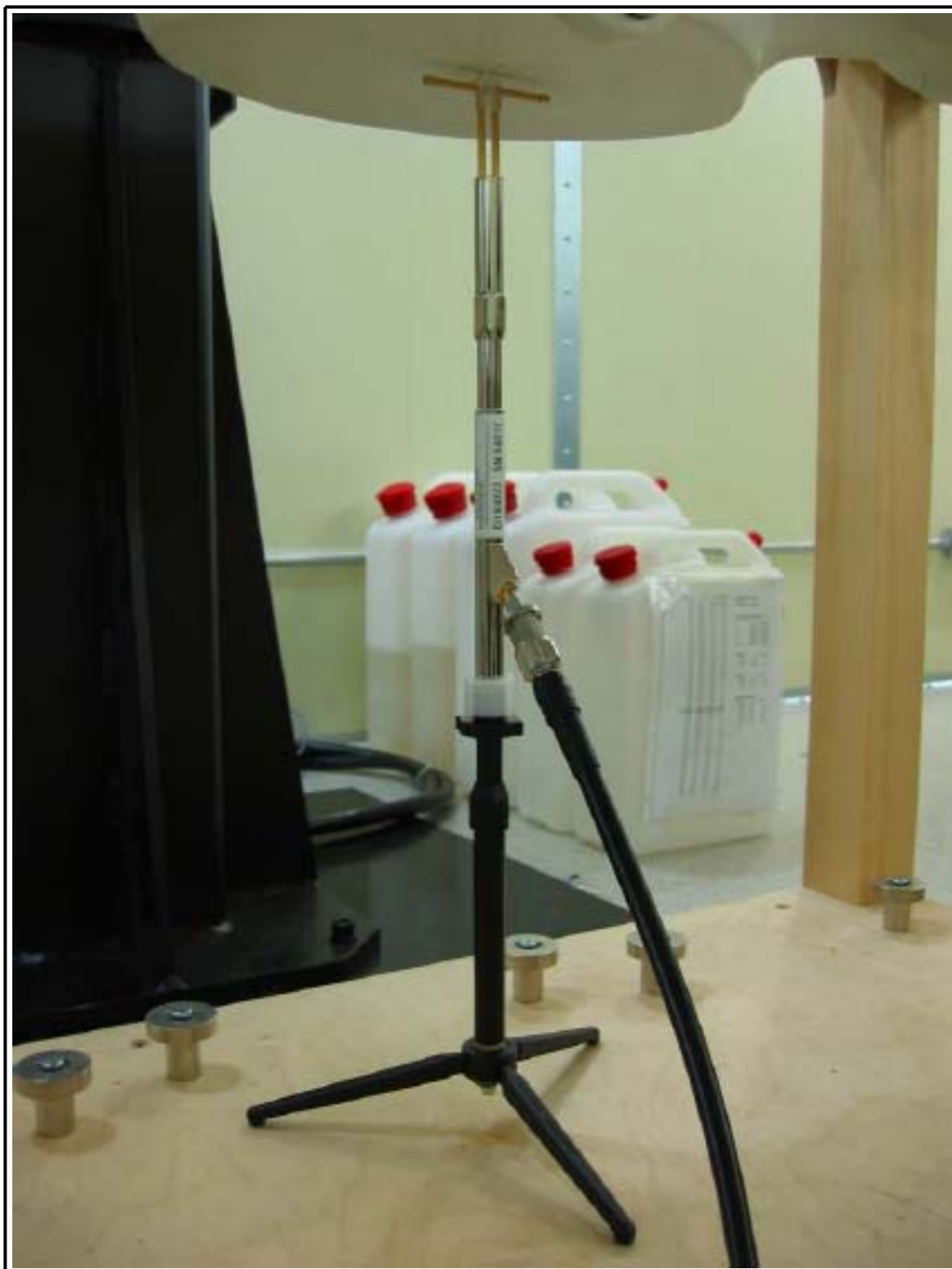


Figure 2 1900 MHz Dipole Validation Test Setup



Figure 3 2450 MHz Dipole Validation Test Setup

LG Electronics Inc.

DUT: Dipole 835 MHz; Type: D835V2; Serial: 471

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

Medium parameters used: $f = 835 \text{ MHz}$; $\sigma = 0.902 \text{ mho/m}$; $\epsilon_r = 42.8$; $\rho = 1000 \text{ kg/m}^3$

Phantom section: Flat Section

Test Date: 07/19/2010; Ambient Temp: 22.0°C; Tissue Temp: 21.8°C

Probe: ES3DV3 - SN3066; ConvF(5.68, 5.68, 5.68); Calibrated: 2010-02-24

Sensor-Surface: 3mm (Mechanical Surface Detection)

Electronics: DAE3 Sn362; Calibrated: 2010-04-30

Phantom: SAM with CRP 835MHz; Type: SAM; Serial: TP-1066

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

835 MHz Dipole Validation

Validation/Area Scan (71x81x1): Measurement grid: $dx=15\text{mm}$, $dy=15\text{mm}$

Maximum value of SAR (interpolated) = 2.95 mW/g

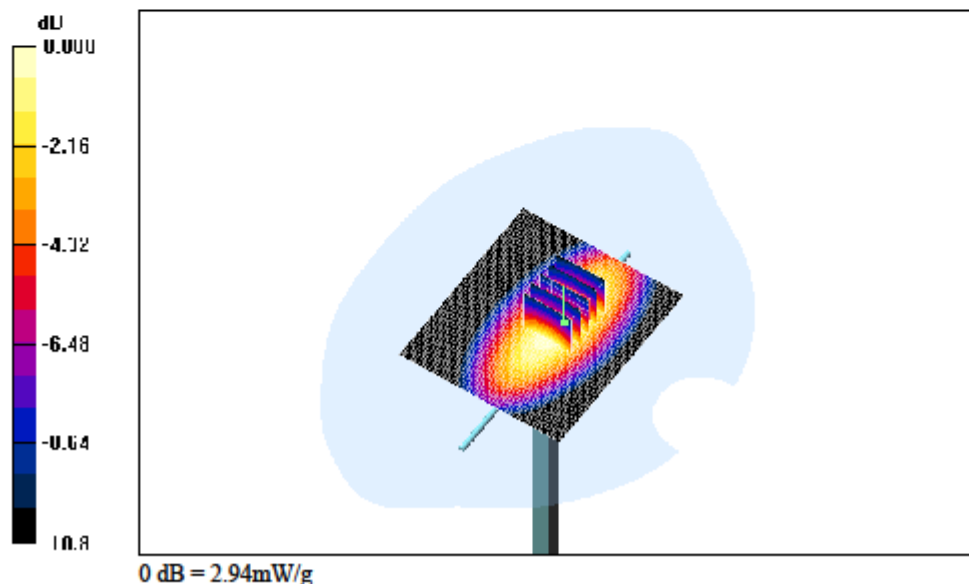
Validation/Zoom Scan (5x5x7)/Cube 0: Measurement grid: $dx=8\text{mm}$, $dy=8\text{mm}$, $dz=5\text{mm}$

Reference Value = 56.5 V/m; Power Drift = -0.144 dB

Peak SAR (extrapolated) = 3.78 W/kg

SAR(1 g) = 2.51 mW/g; SAR(10 g) = 1.63 mW/g

Maximum value of SAR (measured) = 2.94 mW/g



LG Electronics Inc.

DUT: Dipole 1900 MHz; Type: D1900V2; Serial: D1900V2 - SN:5d057

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

Medium parameters used: $f = 1900$ MHz; $\sigma = 1.39$ mho/m; $\epsilon_r = 40.1$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

Test Date: 07/16/2010; Ambient Temp: 22.0°C; Tissue Temp: 21.8°C

Probe: ES3DV3 - SN3066; ConvF(4.66, 4.66, 4.66); Calibrated: 2010-02-24

Sensor-Surface: 3mm (Mechanical Surface Detection)

Electronics: DAE3 Sn362; Calibrated: 2010-04-30

Phantom: SAM with CRP 835MHz; Type: SAM; Serial: TP-1066

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

1900 MHz Dipole Validation

Validation/Area Scan (71x81x1): Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (interpolated) = 13.2 mW/g

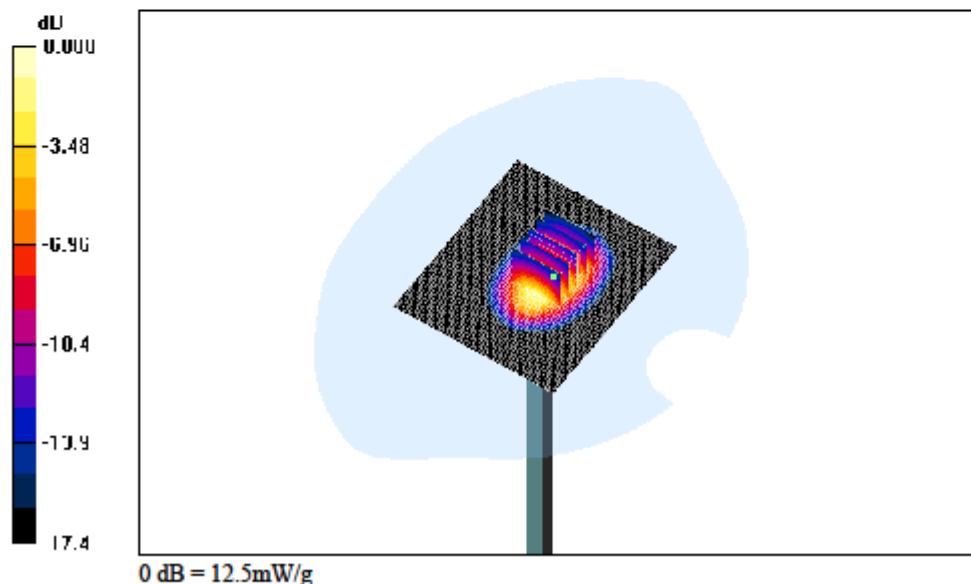
Validation/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 90.6 V/m; Power Drift = -0.133 dB

Peak SAR (extrapolated) = 17.9 W/kg

SAR(1 g) = 10 mW/g; SAR(10 g) = 5.27 mW/g

Maximum value of SAR (measured) = 12.5 mW/g



LG Electronics Inc.

DUT: Dipole 2450 MHz; Type: D2450V2; Serial: 836

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

Medium parameters used: $f = 2450 \text{ MHz}$; $\sigma = 2.01 \text{ mho/m}$; $\epsilon_r = 51.1$; $\rho = 1000 \text{ kg/m}^3$

Phantom section: Flat Section

Test Date: 07/17/2010; Ambient Temp: 22.0°C; Tissue Temp: 21.8°C

Probe: ES3DV3 - SN3066; ConvF(3.9, 3.9, 3.9); Calibrated: 2010-02-24

Sensor-Surface: 3mm (Mechanical Surface Detection)

Electronics: DAE3 Sn362; Calibrated: 2010-04-30

Phantom: SAM with CRP 1800MHz; Type: SAM; Serial: TP-1244

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

2450 MHz Dipole Validation

Validation/Area Scan (71x81x1): Measurement grid: $dx=15\text{mm}$, $dy=15\text{mm}$

Maximum value of SAR (interpolated) = 15.9 mW/g

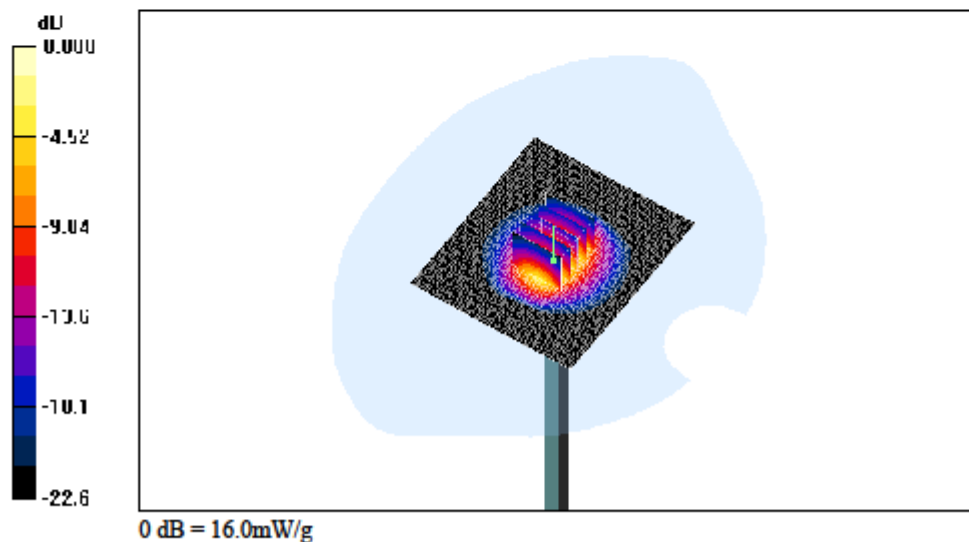
Validation/Zoom Scan (5x5x7)/Cube 0: Measurement grid: $dx=8\text{mm}$, $dy=8\text{mm}$, $dz=5\text{mm}$

Reference Value = 91.9 V/m; Power Drift = 0.010 dB

Peak SAR (extrapolated) = 25.7 W/kg

SAR(1 g) = 12.3 mW/g; SAR(10 g) = 5.69 mW/g

Maximum value of SAR (measured) = 16.0 mW/g



LG Electronics Inc.

DUT: Dipole 835 MHz; Type: D835V2; Serial: 471

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

Medium parameters used: $f = 835 \text{ MHz}$; $\sigma = 0.902 \text{ mho/m}$; $\epsilon_r = 42.8$; $\rho = 1000 \text{ kg/m}^3$

Phantom section: Flat Section

Test Date: 07/19/2010; Ambient Temp: 22.0°C; Tissue Temp: 21.8°C

Probe: ES3DV3 - SN3066; ConvF(5.68, 5.68, 5.68); Calibrated: 2010-02-24

Sensor-Surface: 3mm (Mechanical Surface Detection)

Electronics: DAE3 Sn362; Calibrated: 2010-04-30

Phantom: SAM with CRP 835MHz; Type: SAM; Serial: TP-1066

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

835 MHz Dipole Validation

Validation/Area Scan (71x81x1): Measurement grid: $dx=15\text{mm}$, $dy=15\text{mm}$

Maximum value of SAR (interpolated) = 2.95 mW/g

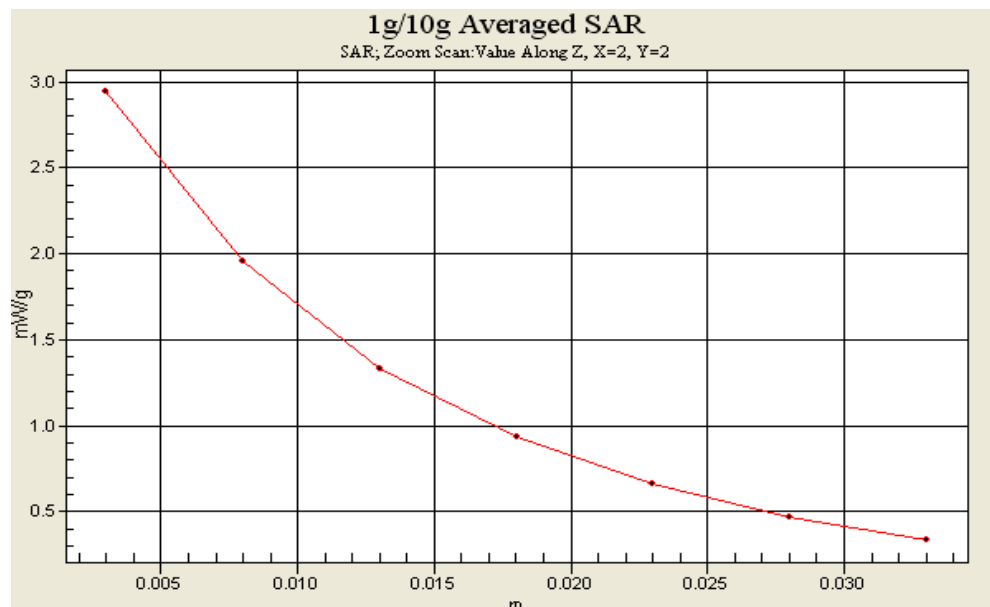
Validation/Zoom Scan (5x5x7)/Cube 0: Measurement grid: $dx=8\text{mm}$, $dy=8\text{mm}$, $dz=5\text{mm}$

Reference Value = 56.5 V/m; Power Drift = -0.144 dB

Peak SAR (extrapolated) = 3.78 W/kg

SAR(1 g) = 2.51 mW/g; SAR(10 g) = 1.63 mW/g

Maximum value of SAR (measured) = 2.94 mW/g



LG Electronics Inc.

DUT: Dipole 1900 MHz; Type: D1900V2; Serial: D1900V2 - SN:5d057

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

Medium parameters used: $f = 1900$ MHz; $\sigma = 1.39$ mho/m; $\epsilon_r = 40.1$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

Test Date: 07/16/2010; Ambient Temp: 22.0°C; Tissue Temp: 21.8°C

Probe: ES3DV3 - SN3066; ConvF(4.66, 4.66, 4.66); Calibrated: 2010-02-24

Sensor-Surface: 3mm (Mechanical Surface Detection)

Electronics: DAE3 Sn362; Calibrated: 2010-04-30

Phantom: SAM with CRP 835MHz; Type: SAM; Serial: TP-1066

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

1900 MHz Dipole Validation

Validation/Area Scan (71x81x1): Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (interpolated) = 13.2 mW/g

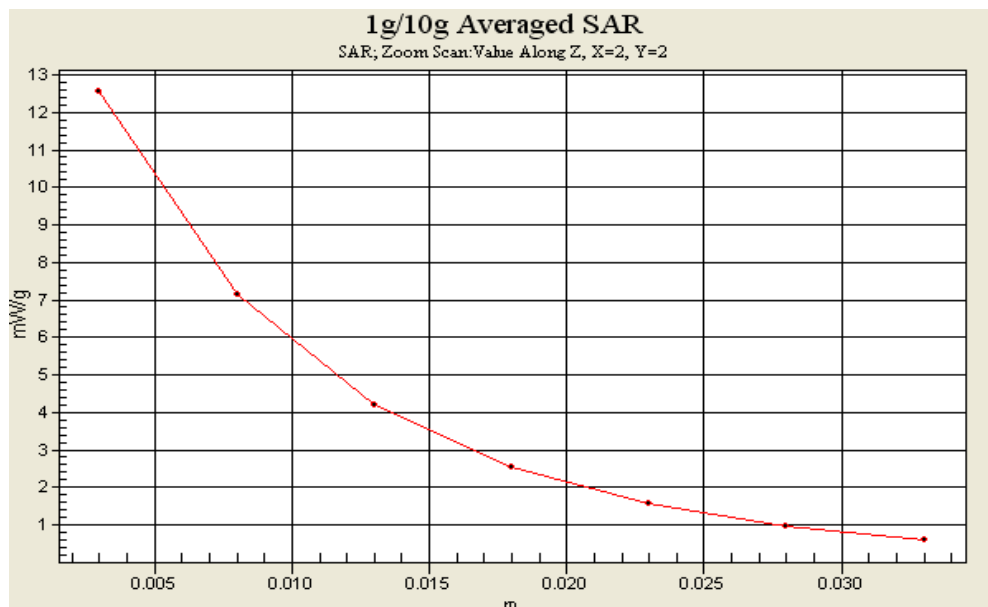
Validation/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 90.6 V/m; Power Drift = -0.133 dB

Peak SAR (extrapolated) = 17.9 W/kg

SAR(1 g) = 10 mW/g; SAR(10 g) = 5.27 mW/g

Maximum value of SAR (measured) = 12.5 mW/g



LG Electronics Inc.

DUT: Dipole 2450 MHz; Type: D2450V2; Serial: 836

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

Medium parameters used: $f = 2450 \text{ MHz}$; $\sigma = 2.01 \text{ mho/m}$; $\epsilon_r = 51.1$; $\rho = 1000 \text{ kg/m}^3$

Phantom section: Flat Section

Test Date: 07/17/2010; Ambient Temp: 22.0°C; Tissue Temp: 21.8°C

Probe: ES3DV3 - SN3066; ConvF(3.9, 3.9, 3.9); Calibrated: 2010-02-24

Sensor-Surface: 3mm (Mechanical Surface Detection)

Electronics: DAE3 Sn362; Calibrated: 2010-04-30

Phantom: SAM with CRP 1800MHz; Type: SAM; Serial: TP-1244

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

2450 MHz Dipole Validation

Validation/Area Scan (71x81x1): Measurement grid: $dx=15\text{mm}$, $dy=15\text{mm}$

Maximum value of SAR (interpolated) = 15.9 mW/g

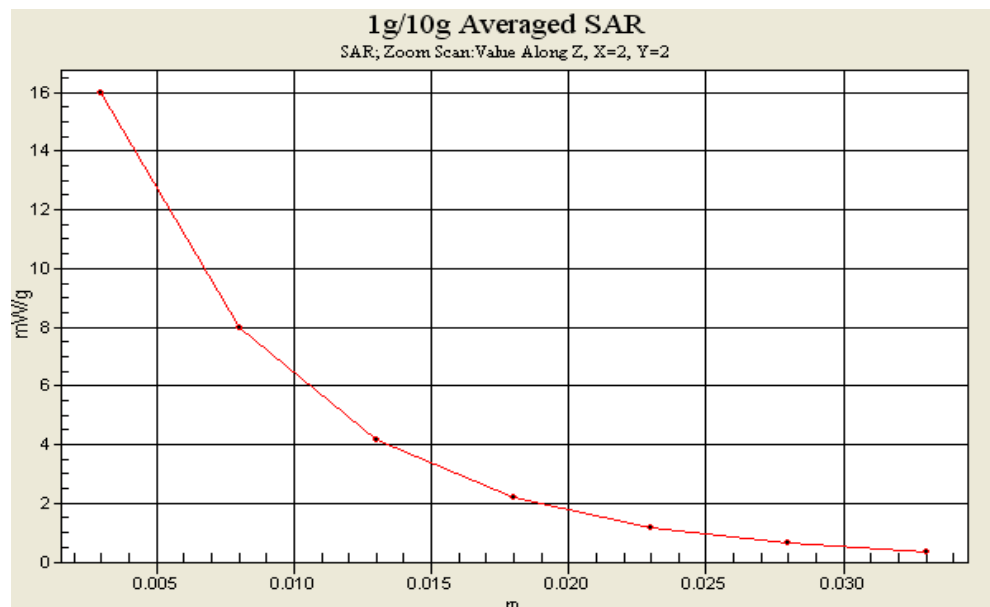
Validation/Zoom Scan (5x5x7)/Cube 0: Measurement grid: $dx=8\text{mm}$, $dy=8\text{mm}$, $dz=5\text{mm}$

Reference Value = 91.9 V/m; Power Drift = 0.010 dB

Peak SAR (extrapolated) = 25.7 W/kg

SAR(1 g) = 12.3 mW/g; SAR(10 g) = 5.69 mW/g

Maximum value of SAR (measured) = 16.0 mW/g



APPENDIX B: SAR Test Data

LG Electronics Inc.

DUT: LG-T310i; Type: Cellular/PCS GSM with Bluetooth&WLAN; Serial: #1

Communication System: GSM 850; Frequency: 836.6 MHz; Duty Cycle: 1:8.3

Medium parameters used: $f = 837$ MHz; $\sigma = 0.902$ mho/m; $\epsilon_r = 42.7$; $\rho = 1000$ kg/m³

Phantom section: Right Section

Test Date: 07/19/2010; Ambient Temp: 22.0°C; Tissue Temp: 21.8°C

Probe: ES3DV3 - SN3066; ConvF(5.68, 5.68, 5.68); Calibrated: 2010-02-24

Sensor-Surface: 3mm (Mechanical Surface Detection)

Electronics: DAE3 Sn362; Calibrated: 2010-04-30

Phantom: SAM with CRP 835MHz; Type: SAM; Serial: TP-1066

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

Right Head Touch, CH190, Fixed Ant, Standard Battery

GSM850/Area Scan (61x111x1): Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (interpolated) = 0.624 mW/g

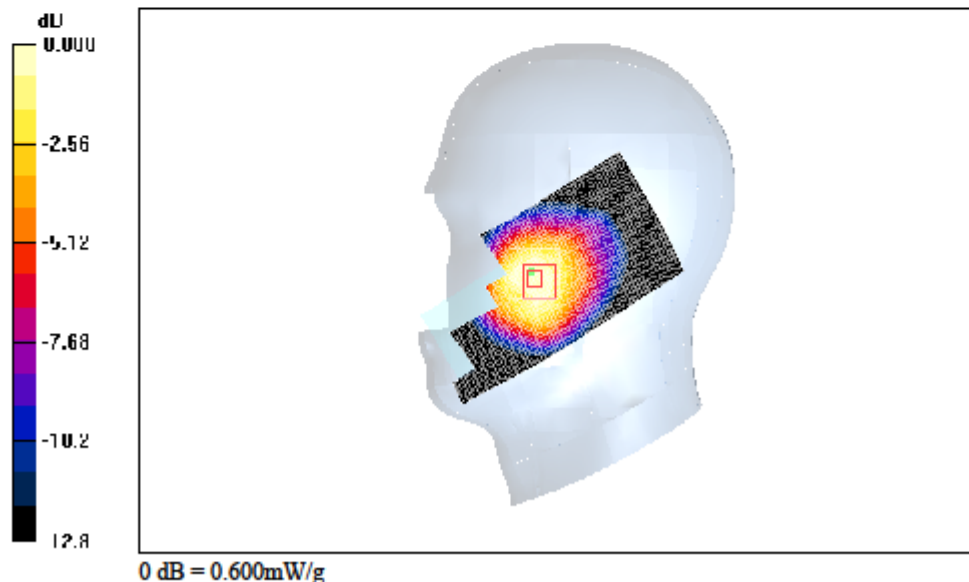
GSM850/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 6.79 V/m; Power Drift = 0.072 dB

Peak SAR (extrapolated) = 0.780 W/kg

SAR(1 g) = 0.520 mW/g; SAR(10 g) = 0.356 mW/g

Maximum value of SAR (measured) = 0.600 mW/g



LG Electronics Inc.

DUT: LG-T310i; Type: Cellular/PCS GSM with Bluetooth&WLAN; Serial: #1

Communication System: GSM 850; Frequency: 836.6 MHz; Duty Cycle: 1:8.3

Medium parameters used: $f = 837$ MHz; $\sigma = 0.902$ mho/m; $\epsilon_r = 42.7$; $\rho = 1000$ kg/m³

Phantom section: Right Section

Test Date: 07/19/2010; Ambient Temp: 22.0°C; Tissue Temp: 21.8°C

Probe: ES3DV3 - SN3066; ConvF(5.68, 5.68, 5.68); Calibrated: 2010-02-24

Sensor-Surface: 3mm (Mechanical Surface Detection)

Electronics: DAE3 Sn362; Calibrated: 2010-04-30

Phantom: SAM with CRP 835MHz; Type: SAM; Serial: TP-1066

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

Right Head Tilt, CH190, Fixed Ant, Standard Battery

GSM850/Area Scan (61x101x1): Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (interpolated) = 0.274 mW/g

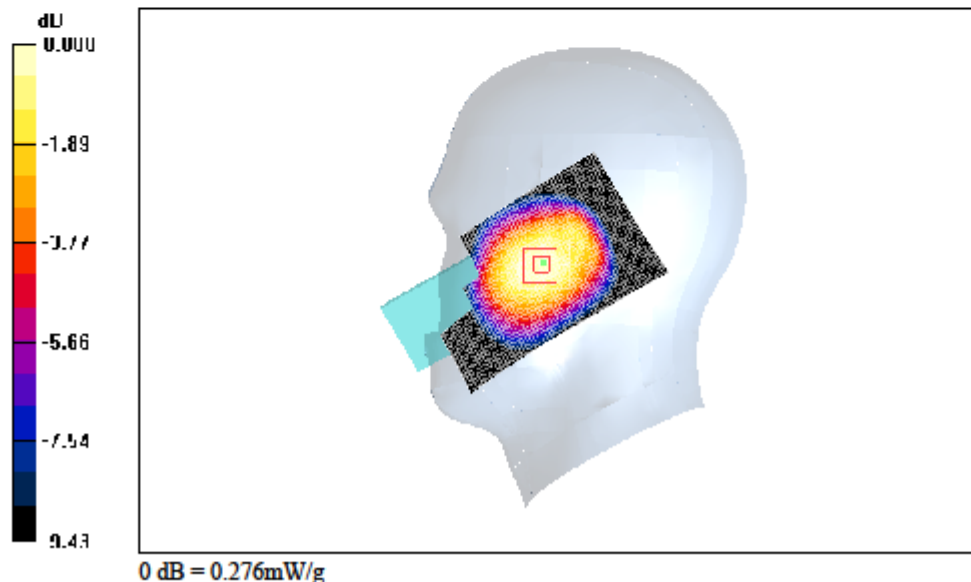
GSM850/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 11.4 V/m; Power Drift = -0.052 dB

Peak SAR (extrapolated) = 0.319 W/kg

SAR(1 g) = 0.246 mW/g; SAR(10 g) = 0.181 mW/g

Maximum value of SAR (measured) = 0.276 mW/g



LG Electronics Inc.

DUT: LG-T310i; Type: Cellular/PCS GSM with Bluetooth&WLAN; Serial: #1

Communication System: GSM 850; Frequency: 836.6 MHz; Duty Cycle: 1:8.3

Medium parameters used: $f = 837$ MHz; $\sigma = 0.902$ mho/m; $\epsilon_r = 42.7$; $\rho = 1000$ kg/m³

Phantom section: Left Section

Test Date: 07/19/2010; Ambient Temp: 22.0°C; Tissue Temp: 21.8°C

Probe: ES3DV3 - SN3066; ConvF(5.68, 5.68, 5.68); Calibrated: 2010-02-24

Sensor-Surface: 3mm (Mechanical Surface Detection)

Electronics: DAE3 Sn362; Calibrated: 2010-04-30

Phantom: SAM with CRP 835MHz; Type: SAM; Serial: TP-1066

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

Left Head Touch, CH190, Fixed Ant, Standard Battery

GSM850/Area Scan (61x101x1): Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (interpolated) = 0.626 mW/g

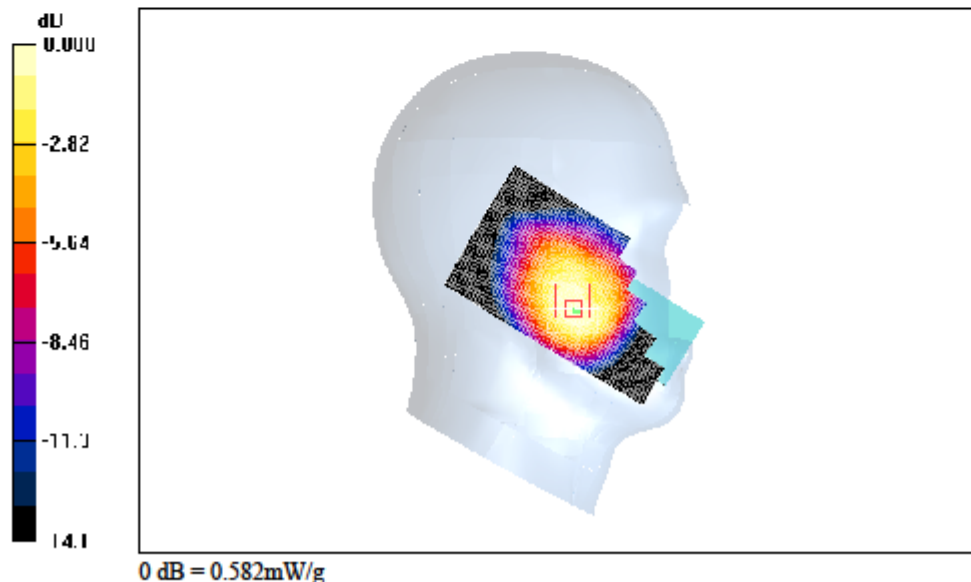
GSM850/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 5.84 V/m; Power Drift = -0.256 dB

Peak SAR (extrapolated) = 0.780 W/kg

SAR(1 g) = 0.498 mW/g; SAR(10 g) = 0.323 mW/g

Maximum value of SAR (measured) = 0.582 mW/g



LG Electronics Inc.

DUT: LG-T310i; Type: Cellular/PCS GSM with Bluetooth&WLAN; Serial: #1

Communication System: GSM 850; Frequency: 836.6 MHz; Duty Cycle: 1:8.3

Medium parameters used: $f = 837$ MHz; $\sigma = 0.902$ mho/m; $\epsilon_r = 42.7$; $\rho = 1000$ kg/m³

Phantom section: Left Section

Test Date: 07/19/2010; Ambient Temp: 22.0°C; Tissue Temp: 21.8°C

Probe: ES3DV3 - SN3066; ConvF(5.68, 5.68, 5.68); Calibrated: 2010-02-24

Sensor-Surface: 3mm (Mechanical Surface Detection)

Electronics: DAE3 Sn362; Calibrated: 2010-04-30

Phantom: SAM with CRP 835MHz; Type: SAM; Serial: TP-1066

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

Left Head Tilt, CH190, Fixed Ant, Standard Battery

GSM850/Area Scan (61x101x1): Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (interpolated) = 0.344 mW/g

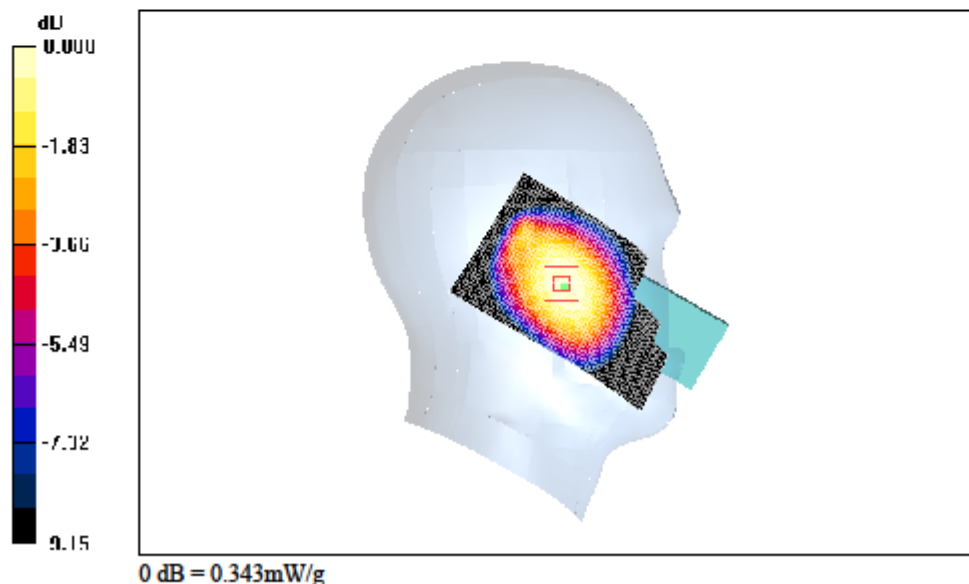
GSM850/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 13.9 V/m; Power Drift = -0.101 dB

Peak SAR (extrapolated) = 0.396 W/kg

SAR(1 g) = 0.309 mW/g; SAR(10 g) = 0.229 mW/g

Maximum value of SAR (measured) = 0.343 mW/g



LG Electronics Inc.

DUT: LG-T310i; Type: Cellular/PCS GSM with Bluetooth&WLAN; Serial: #1

Communication System: PCS 1900; Frequency: 1880 MHz; Duty Cycle: 1:8.3

Medium parameters used: $f = 1880 \text{ MHz}$; $\sigma = 1.37 \text{ mho/m}$; $\epsilon_r = 40.2$; $\rho = 1000 \text{ kg/m}^3$

Phantom section: Right Section

Test Date: 07/16/2010; Ambient Temp: 22.0°C; Tissue Temp: 21.8°C

Probe: ES3DV3 - SN3066; ConvF(4.66, 4.66, 4.66); Calibrated: 2010-02-24

Sensor-Surface: 3mm (Mechanical Surface Detection)

Electronics: DAE3 Sn362; Calibrated: 2010-04-30

Phantom: SAM with CRP 835MHz; Type: SAM; Serial: TP-1066

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

Right Head Touch, CH661, Fixed Ant, Standard Battery

PCS1900/Area Scan (61x101x1): Measurement grid: $dx=15\text{mm}$, $dy=15\text{mm}$

Maximum value of SAR (interpolated) = 1.11 mW/g

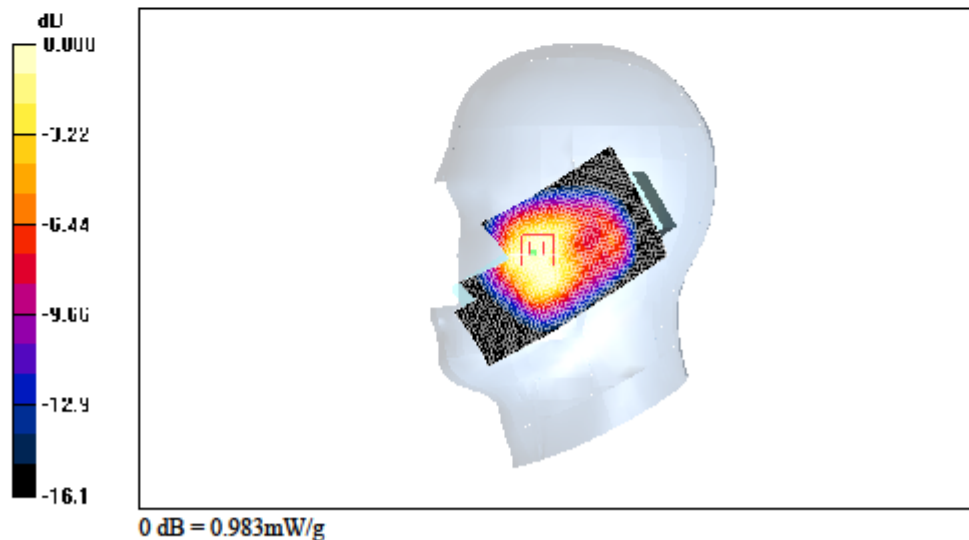
PCS1900/Zoom Scan (5x5x7)/Cube 0: Measurement grid: $dx=8\text{mm}$, $dy=8\text{mm}$, $dz=5\text{mm}$

Reference Value = 7.89 V/m; Power Drift = -0.205 dB

Peak SAR (extrapolated) = 1.31 W/kg

SAR(1 g) = 0.869 mW/g; SAR(10 g) = 0.537 mW/g

Maximum value of SAR (measured) = 0.983 mW/g



LG Electronics Inc.

DUT: LG-T310i; Type: Cellular/PCS GSM with Bluetooth&WLAN; Serial: #1

Communication System: PCS 1900; Frequency: 1880 MHz; Duty Cycle: 1:8.3

Medium parameters used: $f = 1880$ MHz; $\sigma = 1.37$ mho/m; $\epsilon_r = 40.2$; $\rho = 1000$ kg/m³

Phantom section: Right Section

Test Date: 07/16/2010; Ambient Temp: 22.0°C; Tissue Temp: 21.8°C

Probe: ES3DV3 - SN3066; ConvF(4.66, 4.66, 4.66); Calibrated: 2010-02-24

Sensor-Surface: 3mm (Mechanical Surface Detection)

Electronics: DAE3 Sn362; Calibrated: 2010-04-30

Phantom: SAM with CRP 835MHz; Type: SAM; Serial: TP-1066

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

Right Head Tilt, CH661, Fixed Ant, Standard Battery

PCS1900/Area Scan (61x101x1): Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (interpolated) = 0.289 mW/g

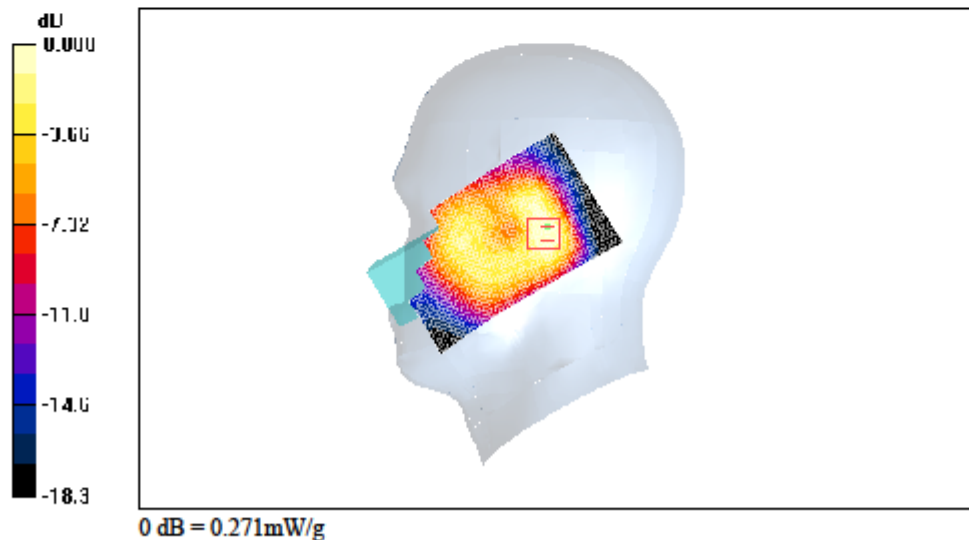
PCS1900/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 10.3 V/m; Power Drift = -0.102 dB

Peak SAR (extrapolated) = 0.357 W/kg

SAR(1 g) = 0.234 mW/g; SAR(10 g) = 0.139 mW/g

Maximum value of SAR (measured) = 0.271 mW/g



LG Electronics Inc.

DUT: LG-T310i; Type: Cellular/PCS GSM with Bluetooth&WLAN; Serial: #1

Communication System: PCS 1900; Frequency: 1880 MHz; Duty Cycle: 1:8.3

Medium parameters used: $f = 1880 \text{ MHz}$; $\sigma = 1.37 \text{ mho/m}$; $\epsilon_r = 40.2$; $\rho = 1000 \text{ kg/m}^3$

Phantom section: Left Section

Test Date: 07/16/2010; Ambient Temp: 22.0°C; Tissue Temp: 21.8°C

Probe: ES3DV3 - SN3066; ConvF(4.66, 4.66, 4.66); Calibrated: 2010-02-24

Sensor-Surface: 3mm (Mechanical Surface Detection)

Electronics: DAE3 Sn362; Calibrated: 2010-04-30

Phantom: SAM with CRP 835MHz; Type: SAM; Serial: TP-1066

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

Left Head Touch, CH661, Fixed Ant, Standard Battery

PCS1900/Area Scan (61x101x1): Measurement grid: $dx=15\text{mm}$, $dy=15\text{mm}$

Maximum value of SAR (interpolated) = 1.68 mW/g

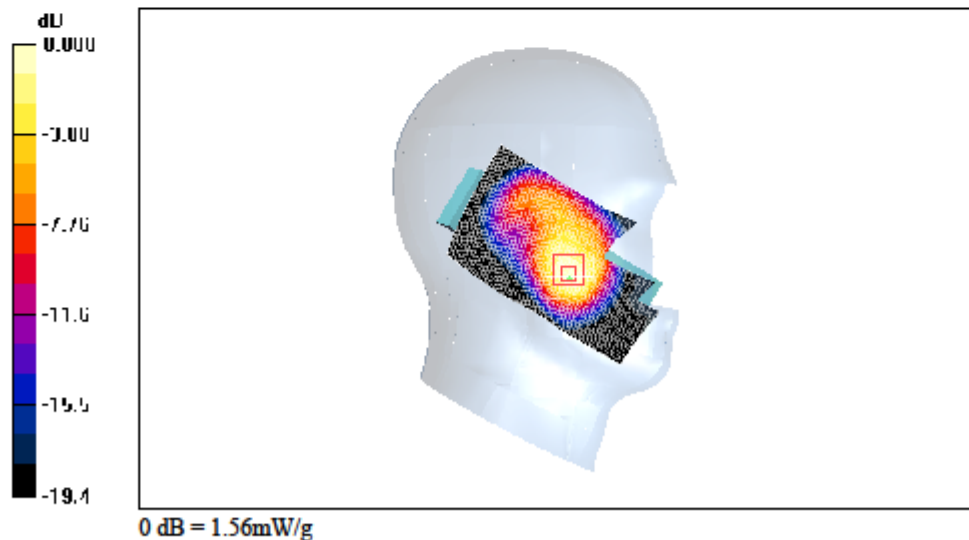
PCS1900/Zoom Scan (5x5x7)/Cube 0: Measurement grid: $dx=8\text{mm}$, $dy=8\text{mm}$, $dz=5\text{mm}$

Reference Value = 7.35 V/m; Power Drift = -0.013 dB

Peak SAR (extrapolated) = 2.05 W/kg

SAR(1 g) = 1.28 mW/g; SAR(10 g) = 0.732 mW/g

Maximum value of SAR (measured) = 1.56 mW/g



LG Electronics Inc.

DUT: LG-T310i; Type: Cellular/PCS GSM with Bluetooth&WLAN; Serial: #1

Communication System: PCS 1900; Frequency: 1880 MHz; Duty Cycle: 1:8.3

Medium parameters used: $f = 1880 \text{ MHz}$; $\sigma = 1.37 \text{ mho/m}$; $\epsilon_r = 40.2$; $\rho = 1000 \text{ kg/m}^3$

Phantom section: Left Section

Test Date: 07/16/2010; Ambient Temp: 22.0°C; Tissue Temp: 21.8°C

Probe: ES3DV3 - SN3066; ConvF(4.66, 4.66, 4.66); Calibrated: 2010-02-24

Sensor-Surface: 3mm (Mechanical Surface Detection)

Electronics: DAE3 Sn362; Calibrated: 2010-04-30

Phantom: SAM with CRP 835MHz; Type: SAM; Serial: TP-1066

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

Left Head Tilt, CH661, Fixed Ant, Standard Battery

PCS1900/Area Scan (61x101x1): Measurement grid: $dx=15\text{mm}$, $dy=15\text{mm}$

Maximum value of SAR (interpolated) = 0.528 mW/g

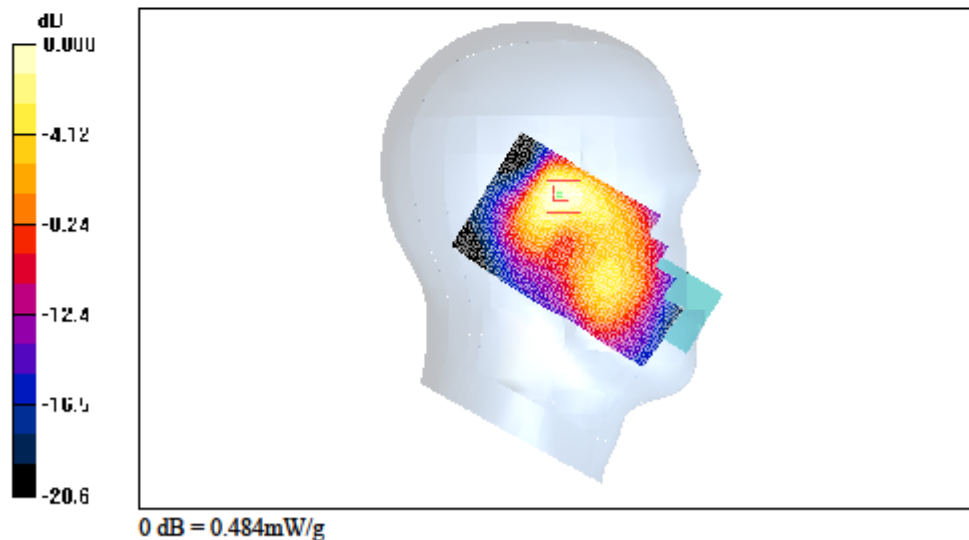
PCS1900/Zoom Scan (5x5x7)/Cube 0: Measurement grid: $dx=8\text{mm}$, $dy=8\text{mm}$, $dz=5\text{mm}$

Reference Value = 10.3 V/m; Power Drift = -0.196 dB

Peak SAR (extrapolated) = 0.640 W/kg

SAR(1 g) = 0.409 mW/g; SAR(10 g) = 0.238 mW/g

Maximum value of SAR (measured) = 0.484 mW/g



LG Electronics Inc.

DUT: LG-T310i; Type: Cellular/PCS GSM with Bluetooth&WLAN; Serial: #1

Communication System: PCS 1900; Frequency: 1850.2 MHz; Duty Cycle: 1:8.3

Medium parameters used (interpolated): $f = 1850.2 \text{ MHz}$; $\sigma = 1.34 \text{ mho/m}$; $\epsilon_r = 40.3$; $\rho = 1000 \text{ kg/m}^3$

Phantom section: Right Section

Test Date: 07/16/2010; Ambient Temp: 22.0°C; Tissue Temp: 21.8°C

Probe: ES3DV3 - SN3066; ConvF(4.66, 4.66, 4.66); Calibrated: 2010-02-24

Sensor-Surface: 3mm (Mechanical Surface Detection)

Electronics: DAE3 Sn362; Calibrated: 2010-04-30

Phantom: SAM with CRP 835MHz; Type: SAM; Serial: TP-1066

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

Right Head Touch, CH512, Fixed Ant, Standard Battery

PCS1900/Area Scan (61x101x1): Measurement grid: dx=15mm, dy=15mm

[Info: Interpolated medium parameters used for SAR evaluation.](#)

Maximum value of SAR (interpolated) = 1.06 mW/g

PCS1900/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm

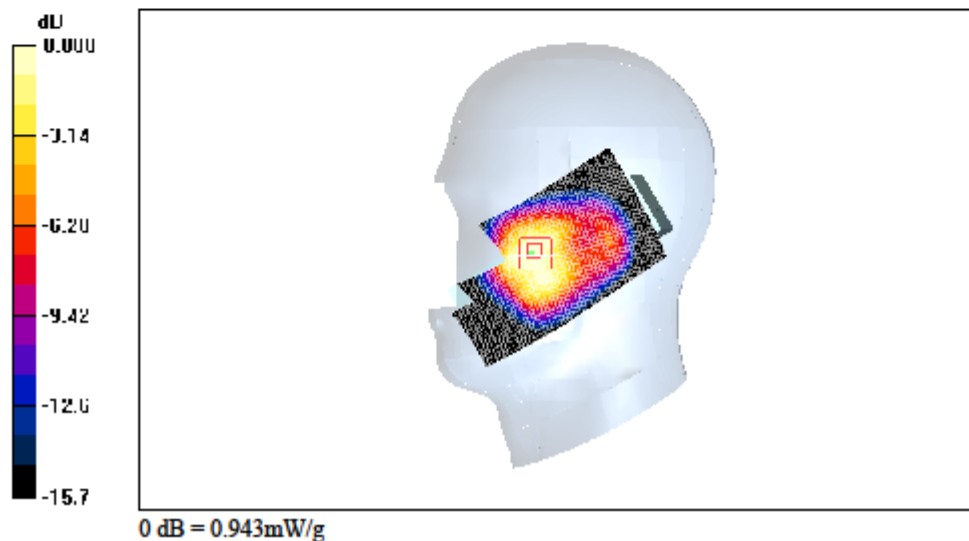
Reference Value = 8.13 V/m; Power Drift = 0.098 dB

Peak SAR (extrapolated) = 1.24 W/kg

SAR(1 g) = 0.837 mW/g; SAR(10 g) = 0.518 mW/g

[Info: Interpolated medium parameters used for SAR evaluation.](#)

Maximum value of SAR (measured) = 0.943 mW/g



LG Electronics Inc.

DUT: LG-T310i; Type: Cellular/PCS GSM with Bluetooth&WLAN; Serial: #1

Communication System: PCS 1900; Frequency: 1909.8 MHz; Duty Cycle: 1:8.3
Medium parameters used: $f = 1910$ MHz; $\sigma = 1.41$ mho/m; $\epsilon_r = 40.1$; $\rho = 1000$ kg/m³
Phantom section: Right Section

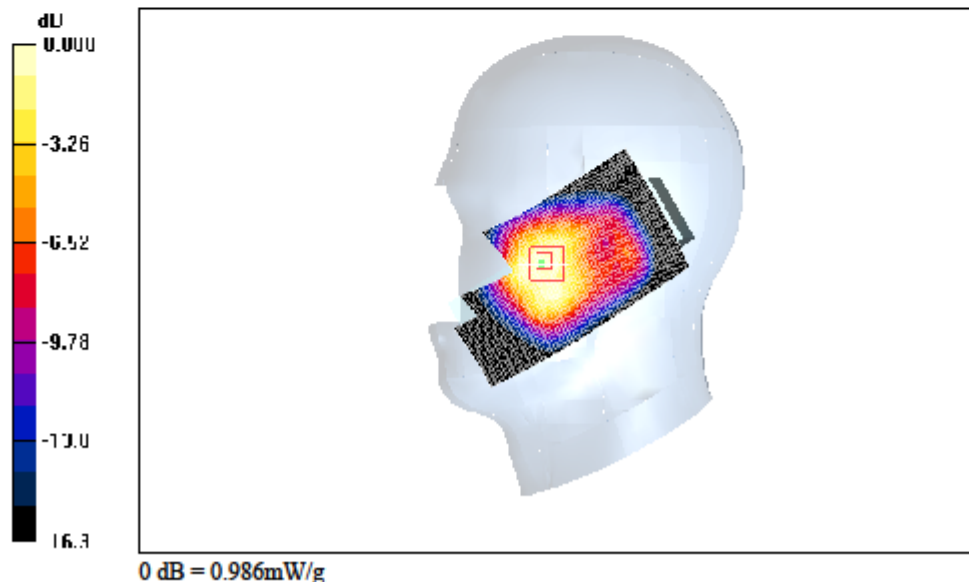
Test Date: 07/16/2010; Ambient Temp: 22.0°C; Tissue Temp: 21.8°C

Probe: ES3DV3 - SN3066; ConvF(4.66, 4.66, 4.66); Calibrated: 2010-02-24
Sensor-Surface: 3mm (Mechanical Surface Detection)
Electronics: DAE3 Sn362; Calibrated: 2010-04-30
Phantom: SAM with CRP 835MHz; Type: SAM; Serial: TP-1066
Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 186

Right Head Touch, CH810, Fixed Ant, Standard Battery

PCS1900/Area Scan (61x101x1): Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (interpolated) = 1.10 mW/g

PCS1900/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 6.96 V/m; Power Drift = 0.254 dB
Peak SAR (extrapolated) = 1.27 W/kg
SAR(1 g) = 0.851 mW/g; SAR(10 g) = 0.527 mW/g
Maximum value of SAR (measured) = 0.986 mW/g



LG Electronics Inc.

DUT: LG-T310i; Type: Cellular/PCS GSM with Bluetooth&WLAN; Serial: #1

Communication System: PCS 1900; Frequency: 1850.2 MHz; Duty Cycle: 1:8.3

Medium parameters used (interpolated): $f = 1850.2 \text{ MHz}$; $\sigma = 1.34 \text{ mho/m}$; $\epsilon_r = 40.3$; $\rho = 1000 \text{ kg/m}^3$

Phantom section: Left Section

Test Date: 07/16/2010; Ambient Temp: 22.0°C; Tissue Temp: 21.8°C

Probe: ES3DV3 - SN3066; ConvF(4.66, 4.66, 4.66); Calibrated: 2010-02-24

Sensor-Surface: 3mm (Mechanical Surface Detection)

Electronics: DAE3 Sn362; Calibrated: 2010-04-30

Phantom: SAM with CRP 835MHz; Type: SAM; Serial: TP-1066

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

Left Head Touch, CH512, Fixed Ant, Standard Battery

PCS1900/Area Scan (61x101x1): Measurement grid: dx=15mm, dy=15mm

[Info: Interpolated medium parameters used for SAR evaluation.](#)

Maximum value of SAR (interpolated) = 1.49 mW/g

PCS1900/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm

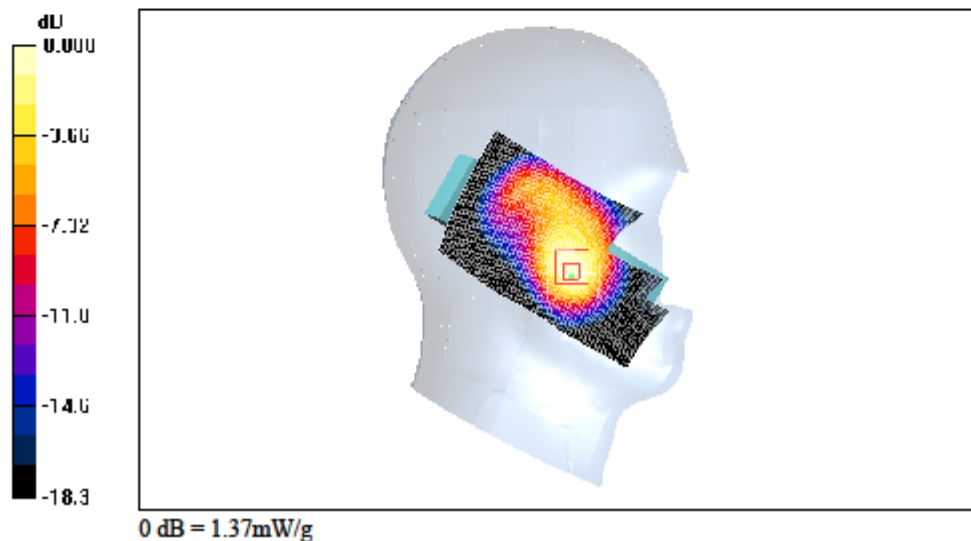
Reference Value = 7.16 V/m; Power Drift = -0.115 dB

Peak SAR (extrapolated) = 1.78 W/kg

SAR(1 g) = 1.13 mW/g; SAR(10 g) = 0.651 mW/g

[Info: Interpolated medium parameters used for SAR evaluation.](#)

Maximum value of SAR (measured) = 1.37 mW/g



LG Electronics Inc.

DUT: LG-T310i; Type: Cellular/PCS GSM with Bluetooth&WLAN; Serial: #1

Communication System: PCS 1900; Frequency: 1909.8 MHz; Duty Cycle: 1:8.3
Medium parameters used: $f = 1910$ MHz; $\sigma = 1.41$ mho/m; $\epsilon_r = 40.1$; $\rho = 1000$ kg/m³
Phantom section: Left Section

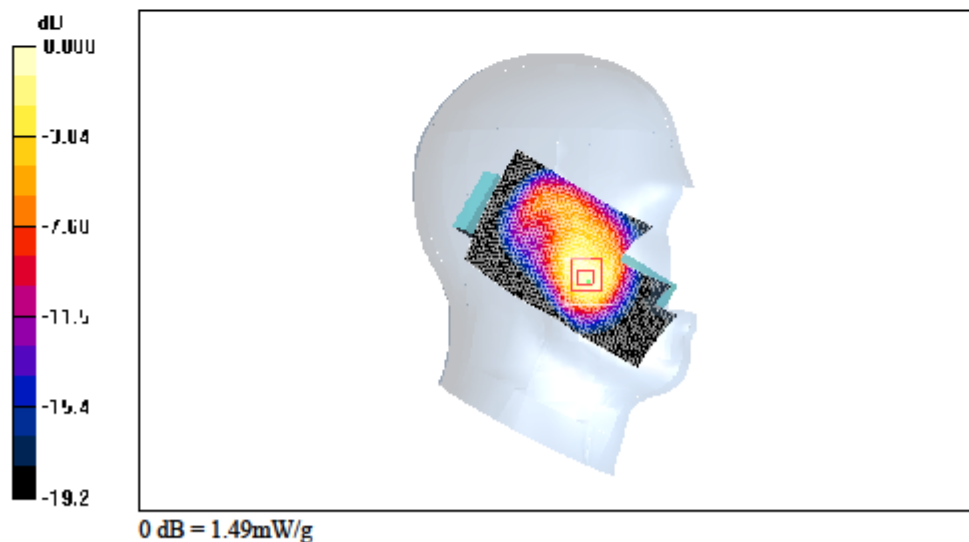
Test Date: 07/16/2010; Ambient Temp: 22.0°C; Tissue Temp: 21.8°C

Probe: ES3DV3 - SN3066; ConvF(4.66, 4.66, 4.66); Calibrated: 2010-02-24
Sensor-Surface: 3mm (Mechanical Surface Detection)
Electronics: DAE3 Sn362; Calibrated: 2010-04-30
Phantom: SAM with CRP 835MHz; Type: SAM; Serial: TP-1066
Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 186

Left Head Touch, CH810, Fixed Ant, Standard Battery

PCS1900/Area Scan (61x101x1): Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (interpolated) = 1.61 mW/g

PCS1900/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 6.95 V/m; Power Drift = -0.016 dB
Peak SAR (extrapolated) = 1.99 W/kg
SAR(1 g) = 1.23 mW/g; SAR(10 g) = 0.693 mW/g
Maximum value of SAR (measured) = 1.49 mW/g



LG Electronics Inc.

DUT: LG-T310i; Type: Cellular/PCS GSM with Bluetooth&WLAN; Serial: #1

Communication System: GPRS 850; Frequency: 836.6 MHz; Duty Cycle: 1:2.075
Medium parameters used: $f = 837 \text{ MHz}$; $\sigma = 0.937 \text{ mho/m}$; $\epsilon_r = 54.8$; $\rho = 1000 \text{ kg/m}^3$
Phantom section: Flat Section

Test Date: 07/19/2010; Ambient Temp: 22.0°C; Tissue Temp: 21.8°C

Probe: ES3DV3 - SN3066; ConvF(5.55, 5.55, 5.55); Calibrated: 2010-02-24

Sensor-Surface: 3mm (Mechanical Surface Detection)

Electronics: DAE3 Sn362; Calibrated: 2010-04-30

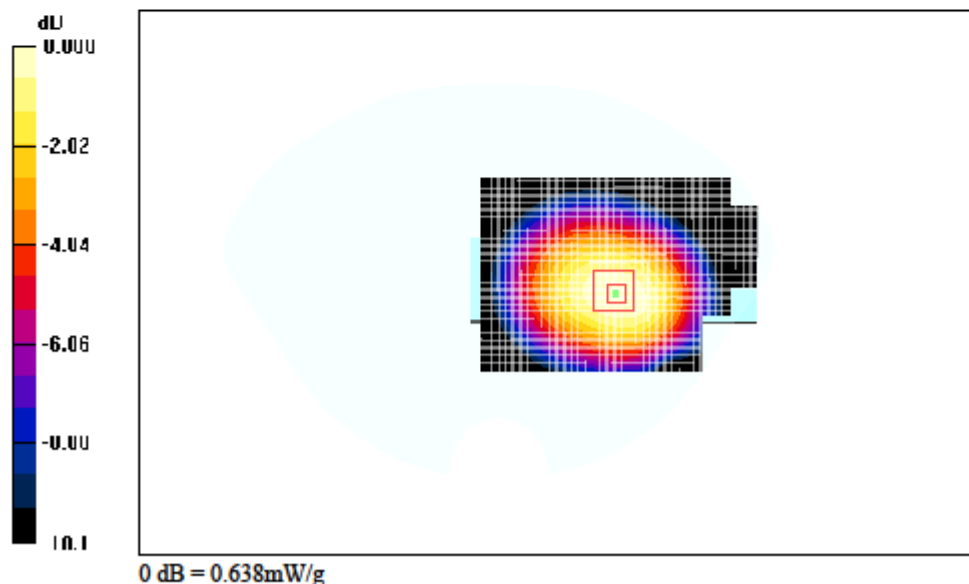
Phantom: SAM with CRP 1800MHz; Type: SAM; Serial: TP-1244

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

Flat Touch ,CH190, Front, 4TX, Fixed Ant, Standard Battery

GPRS850/Area Scan (71x101x1): Measurement grid: $dx=15\text{mm}$, $dy=15\text{mm}$
Maximum value of SAR (interpolated) = 0.647 mW/g

GPRS850/Zoom Scan (5x5x7)/Cube 0: Measurement grid: $dx=8\text{mm}$, $dy=8\text{mm}$, $dz=5\text{mm}$
Reference Value = 10.3 V/m; Power Drift = -0.011 dB
Peak SAR (extrapolated) = 0.762 W/kg
 $\text{SAR}(1 \text{ g}) = 0.566 \text{ mW/g}$; $\text{SAR}(10 \text{ g}) = 0.409 \text{ mW/g}$
Maximum value of SAR (measured) = 0.638 mW/g



LG Electronics Inc.

DUT: LG-T310i; Type: Cellular/PCS GSM with Bluetooth&WLAN; Serial: #1

Communication System: GPRS 850; Frequency: 836.6 MHz; Duty Cycle: 1:2.075
Medium parameters used: $f = 837 \text{ MHz}$; $\sigma = 0.937 \text{ mho/m}$; $\epsilon_r = 54.8$; $\rho = 1000 \text{ kg/m}^3$
Phantom section: Flat Section

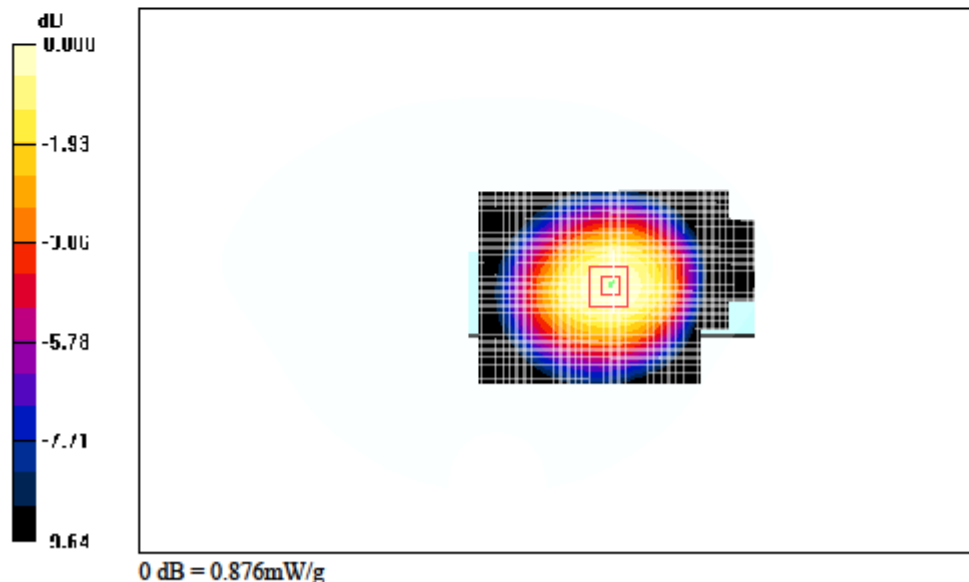
Test Date: 07/19/2010; Ambient Temp: 22.0°C; Tissue Temp: 21.8°C

Probe: ES3DV3 - SN3066; ConvF(5.55, 5.55, 5.55); Calibrated: 2010-02-24
Sensor-Surface: 3mm (Mechanical Surface Detection)
Electronics: DAE3 Sn362; Calibrated: 2010-04-30
Phantom: SAM with CRP 1800MHz; Type: SAM; Serial: TP-1244
Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 186

Flat Touch ,CH190, Rear, 4TX, Fixed Ant, Standard Battery

GPRS850/Area Scan (71x101x1): Measurement grid: $dx=15\text{mm}$, $dy=15\text{mm}$
Maximum value of SAR (interpolated) = 0.890 mW/g

GPRS850/Zoom Scan (5x5x7)/Cube 0: Measurement grid: $dx=8\text{mm}$, $dy=8\text{mm}$, $dz=5\text{mm}$
Reference Value = 11.5 V/m; Power Drift = -0.005 dB
Peak SAR (extrapolated) = 1.05 W/kg
 $\text{SAR}(1 \text{ g}) = 0.780 \text{ mW/g}$; $\text{SAR}(10 \text{ g}) = 0.563 \text{ mW/g}$
Maximum value of SAR (measured) = 0.876 mW/g



LG Electronics Inc.

DUT: LG-T310i; Type: Cellular/PCS GSM with Bluetooth&WLAN; Serial: #1

Communication System: GPRS 850; Frequency: 836.6 MHz; Duty Cycle: 1:2.77
Medium parameters used: $f = 837 \text{ MHz}$; $\sigma = 0.937 \text{ mho/m}$; $\epsilon_r = 54.8$; $\rho = 1000 \text{ kg/m}^3$
Phantom section: Flat Section

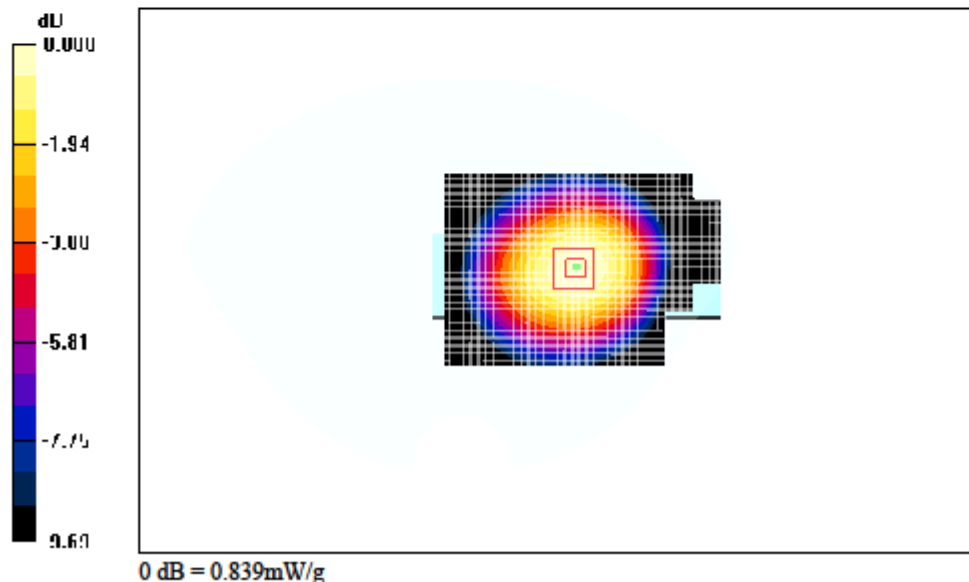
Test Date: 07/19/2010; Ambient Temp: 22.0°C; Tissue Temp: 21.8°C

Probe: ES3DV3 - SN3066; ConvF(5.55, 5.55, 5.55); Calibrated: 2010-02-24
Sensor-Surface: 3mm (Mechanical Surface Detection)
Electronics: DAE3 Sn362; Calibrated: 2010-04-30
Phantom: SAM with CRP 1800MHz; Type: SAM; Serial: TP-1244
Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 186

Flat Touch ,CH190, Rear, 3TX, Fixed Ant, Standard Battery

GPRS850/Area Scan (71x101x1): Measurement grid: $dx=15\text{mm}$, $dy=15\text{mm}$
Maximum value of SAR (interpolated) = 0.847 mW/g

GPRS850/Zoom Scan (5x5x7)/Cube 0: Measurement grid: $dx=8\text{mm}$, $dy=8\text{mm}$, $dz=5\text{mm}$
Reference Value = 11.3 V/m; Power Drift = -0.116 dB
Peak SAR (extrapolated) = 0.993 W/kg
SAR(1 g) = 0.744 mW/g; SAR(10 g) = 0.536 mW/g
Maximum value of SAR (measured) = 0.839 mW/g



LG Electronics Inc.

DUT: LG-T310i; Type: Cellular/PCS GSM with Bluetooth&WLAN; Serial: #1

Communication System: GPRS 850; Frequency: 836.6 MHz; Duty Cycle: 1:4.15
Medium parameters used: $f = 837 \text{ MHz}$; $\sigma = 0.937 \text{ mho/m}$; $\epsilon_r = 54.8$; $\rho = 1000 \text{ kg/m}^3$
Phantom section: Flat Section

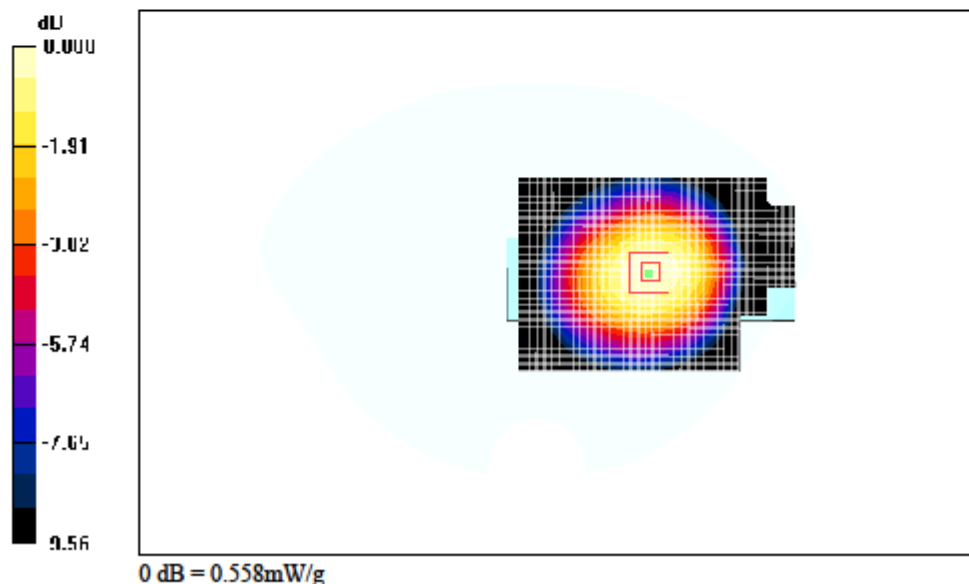
Test Date: 07/19/2010; Ambient Temp: 22.0°C; Tissue Temp: 21.8°C

Probe: ES3DV3 - SN3066; ConvF(5.55, 5.55, 5.55); Calibrated: 2010-02-24
Sensor-Surface: 3mm (Mechanical Surface Detection)
Electronics: DAE3 Sn362; Calibrated: 2010-04-30
Phantom: SAM with CRP 1800MHz; Type: SAM; Serial: TP-1244
Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 186

Flat Touch ,CH190, Rear, 2TX, Fixed Ant, Standard Battery

GPRS850/Area Scan (71x101x1): Measurement grid: $dx=15\text{mm}$, $dy=15\text{mm}$
Maximum value of SAR (interpolated) = 0.563 mW/g

GPRS850/Zoom Scan (5x5x7)/Cube 0: Measurement grid: $dx=8\text{mm}$, $dy=8\text{mm}$, $dz=5\text{mm}$
Reference Value = 9.15 V/m; Power Drift = -0.092 dB
Peak SAR (extrapolated) = 0.666 W/kg
 $\text{SAR}(1 \text{ g}) = 0.498 \text{ mW/g}$; $\text{SAR}(10 \text{ g}) = 0.360 \text{ mW/g}$
Maximum value of SAR (measured) = 0.558 mW/g



LG Electronics Inc.

DUT: LG-T310i; Type: Cellular/PCS GSM with Bluetooth&WLAN; Serial: #1

Communication System: GPRS 850; Frequency: 836.6 MHz; Duty Cycle: 1:8.3

Medium parameters used: $f = 837 \text{ MHz}$; $\sigma = 0.937 \text{ mho/m}$; $\epsilon_r = 54.8$; $\rho = 1000 \text{ kg/m}^3$

Phantom section: Flat Section

Test Date: 07/19/2010; Ambient Temp: 22.0°C; Tissue Temp: 21.8°C

Probe: ES3DV3 - SN3066; ConvF(5.55, 5.55, 5.55); Calibrated: 2010-02-24

Sensor-Surface: 3mm (Mechanical Surface Detection)

Electronics: DAE3 Sn362; Calibrated: 2010-04-30

Phantom: SAM with CRP 1800MHz; Type: SAM; Serial: TP-1244

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

Flat Touch ,CH190, Rear, 1TX, Fixed Ant, Standard Battery

GPRS850/Area Scan (71x101x1): Measurement grid: $dx=15\text{mm}$, $dy=15\text{mm}$

Maximum value of SAR (interpolated) = 0.277 mW/g

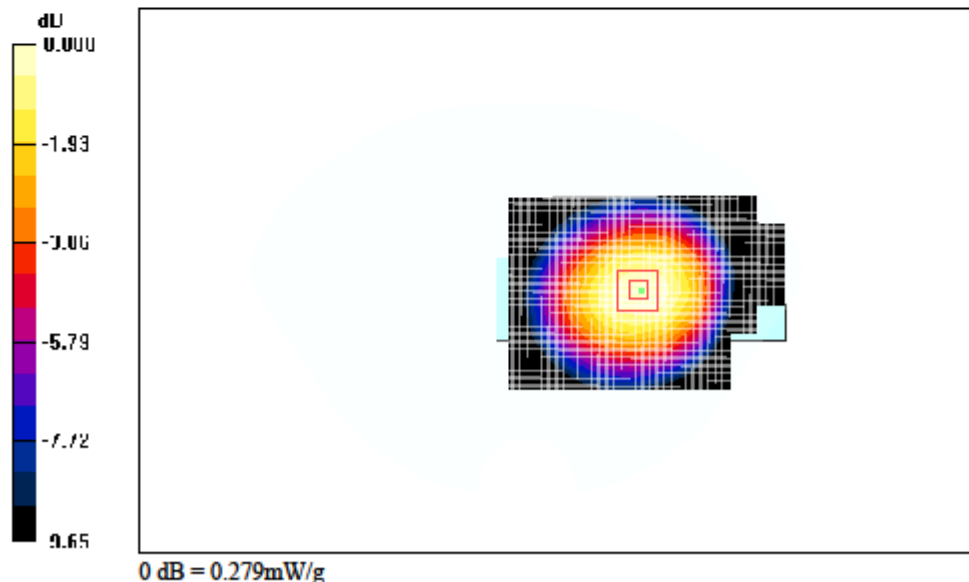
GPRS850/Zoom Scan (5x5x7)/Cube 0: Measurement grid: $dx=8\text{mm}$, $dy=8\text{mm}$, $dz=5\text{mm}$

Reference Value = 6.42 V/m; Power Drift = 0.104 dB

Peak SAR (extrapolated) = 0.331 W/kg

SAR(1 g) = 0.248 mW/g; SAR(10 g) = 0.178 mW/g

Maximum value of SAR (measured) = 0.279 mW/g



LG Electronics Inc.

DUT: LG-T310i; Type: Cellular/PCS GSM with Bluetooth&WLAN; Serial: #1

Communication System: GPRS 1900; Frequency: 1880 MHz; Duty Cycle: 1:2.075
Medium parameters used: $f = 1880 \text{ MHz}$; $\sigma = 1.48 \text{ mho/m}$; $\epsilon_r = 52.8$; $\rho = 1000 \text{ kg/m}^3$
Phantom section: Flat Section

Test Date: 07/16/2010; Ambient Temp: 22.0°C; Tissue Temp: 21.8°C

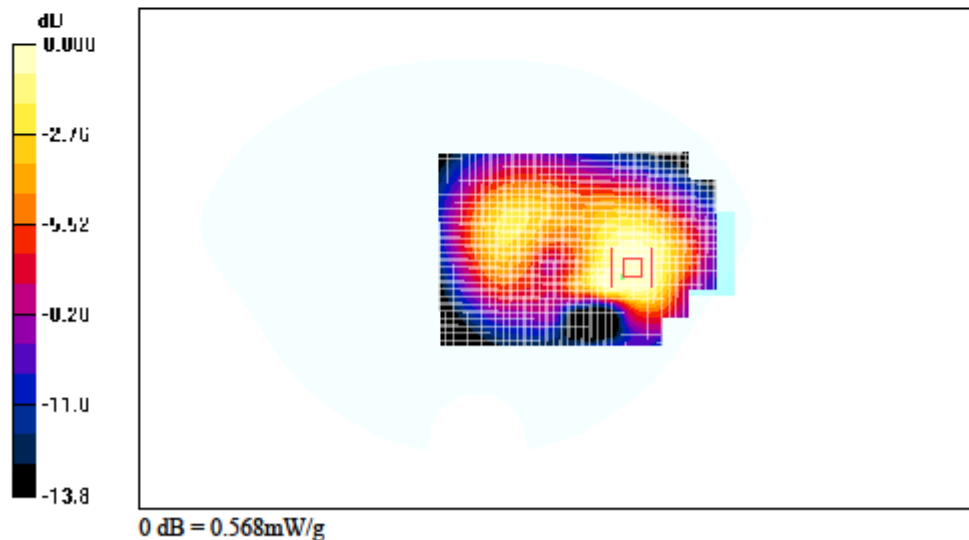
Probe: ES3DV3 - SN3066; ConvF(4.2, 4.2, 4.2); Calibrated: 2010-02-24
Sensor-Surface: 3mm (Mechanical Surface Detection)
Electronics: DAE3 Sn362; Calibrated: 2010-04-30

Phantom: SAM with CRP 1800MHz; Type: SAM; Serial: TP-1244
Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 186

Flat Touch ,CH661, Front, 4TX, Fixed Ant, Standard Battery

GPRS1900/Area Scan (71x101x1): Measurement grid: $dx=15\text{mm}$, $dy=15\text{mm}$
Maximum value of SAR (interpolated) = 0.722 mW/g

GPRS1900/Zoom Scan (5x5x7)/Cube 0: Measurement grid: $dx=8\text{mm}$, $dy=8\text{mm}$, $dz=5\text{mm}$
Reference Value = 11.4 V/m; Power Drift = -0.084 dB
Peak SAR (extrapolated) = 0.730 W/kg
 $\text{SAR}(1 \text{ g}) = 0.505 \text{ mW/g}$; $\text{SAR}(10 \text{ g}) = 0.325 \text{ mW/g}$
Maximum value of SAR (measured) = 0.568 mW/g



LG Electronics Inc.

DUT: LG-T310i; Type: Cellular/PCS GSM with Bluetooth&WLAN; Serial: #1

Communication System: GPRS 1900; Frequency: 1880 MHz; Duty Cycle: 1:2.075
Medium parameters used: $f = 1880 \text{ MHz}$; $\sigma = 1.48 \text{ mho/m}$; $\epsilon_r = 52.8$; $\rho = 1000 \text{ kg/m}^3$
Phantom section: Flat Section

Test Date: 07/16/2010; Ambient Temp: 22.0°C; Tissue Temp: 21.8°C

Probe: ES3DV3 - SN3066; ConvF(4.2, 4.2, 4.2); Calibrated: 2010-02-24
Sensor-Surface: 3mm (Mechanical Surface Detection)
Electronics: DAE3 Sn362; Calibrated: 2010-04-30

Phantom: SAM with CRP 1800MHz; Type: SAM; Serial: TP-1244
Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 186

Flat Touch ,CH661, Rear, 4TX, Fixed Ant, Standard Battery

GPRS1900/Area Scan (71x101x1): Measurement grid: $dx=15\text{mm}$, $dy=15\text{mm}$
Maximum value of SAR (interpolated) = 0.552 mW/g

GPRS1900/Zoom Scan (5x5x7)/Cube 0: Measurement grid: $dx=8\text{mm}$, $dy=8\text{mm}$, $dz=5\text{mm}$
Reference Value = 8.91 V/m; Power Drift = 0.177 dB
Peak SAR (extrapolated) = 0.676 W/kg
SAR(1 g) = 0.467 mW/g; SAR(10 g) = 0.300 mW/g
Maximum value of SAR (measured) = 0.542 mW/g

