

PCTEST ENGINEERING LABORATORY, INC.

DUT: SPH-A680; Type: SAMSUNG Tri Mode Phone; SN: 3F0F7C4D

Communication System: AMPS; Frequency: 824.04 MHz; Duty Cycle: 1:1

Medium: 835 Brain ($\sigma = 0.91$ mho/m, $\epsilon_r = 40.13$, $\rho = 1000$ kg/m³)

Phantom section: Right Section

Test Date: 02-24-2004; Ambient Temp: 23.8°C; Tissue Temp: 20.5°C

Probe: ES3DV2 - SN3022; ConvF(6.1, 6.1, 6.1); Calibrated: 9/23/2003

Sensor-Surface: 4mm (Mechanical Surface Detection)

Electronics: DAE3 Sn455; Phantom: SAM 12b; Type: SAM 4.0; Serial: TP:1197

Measurement SW: DASY4, V4.2 Build 12; Postprocessing SW: SEMCAD, V1.8 Build 93

AMPS Right Touch, Ch.0991, Antenna Out, Standard Battery, Conducted Power: 26.0dBm

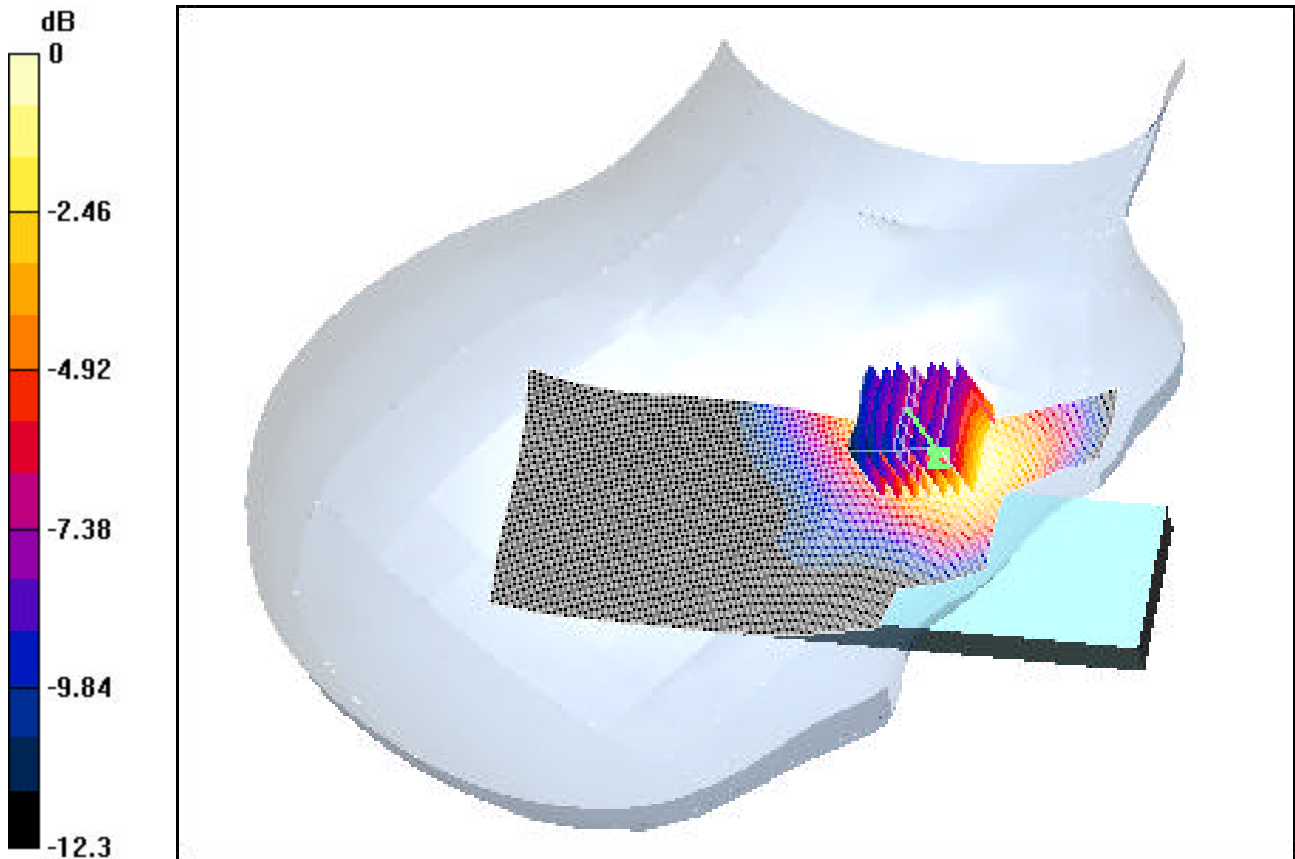
Area Scan (51x131x1): Measurement grid: dx=15mm, dy=15mm

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

Peak SAR (extrapolated) = 1.77 W/kg

SAR(1 g) = 1.11 mW/g; SAR(10 g) = 0.694 mW/g

Reference Value = 9.31 V/m



PCTEST ENGINEERING LABORATORY, INC.

DUT: SPH-A680; Type: SAMSUNG Tri Mode Phone; SN: 3F0F7C4D

Communication System: AMPS; Frequency: 836.49 MHz; Duty Cycle: 1:1

Medium: 835 Brain ($\sigma = 0.91$ mho/m, $\epsilon_r = 40.13$, $\rho = 1000$ kg/m³)

Phantom section: Right Section

Test Date: 06-14-2003; Ambient Temp: 23.8°C; Tissue Temp: 20.5°C

Probe: ES3DV2 - SN3022; ConvF(6.1, 6.1, 6.1); Calibrated: 9/23/2003

Sensor-Surface: 4mm (Mechanical Surface Detection)

Electronics: DAE3 Sn455; Phantom: SAM 12b; Type: SAM 4.0; Serial: TP:1197

Measurement SW: DASY4, V4.2 Build 12; Postprocessing SW: SEMCAD, V1.8 Build 93

AMPS Right Tilt, Ch.0383, Antenna Out, Standard Battery, Conducted Power: 26.0dBm

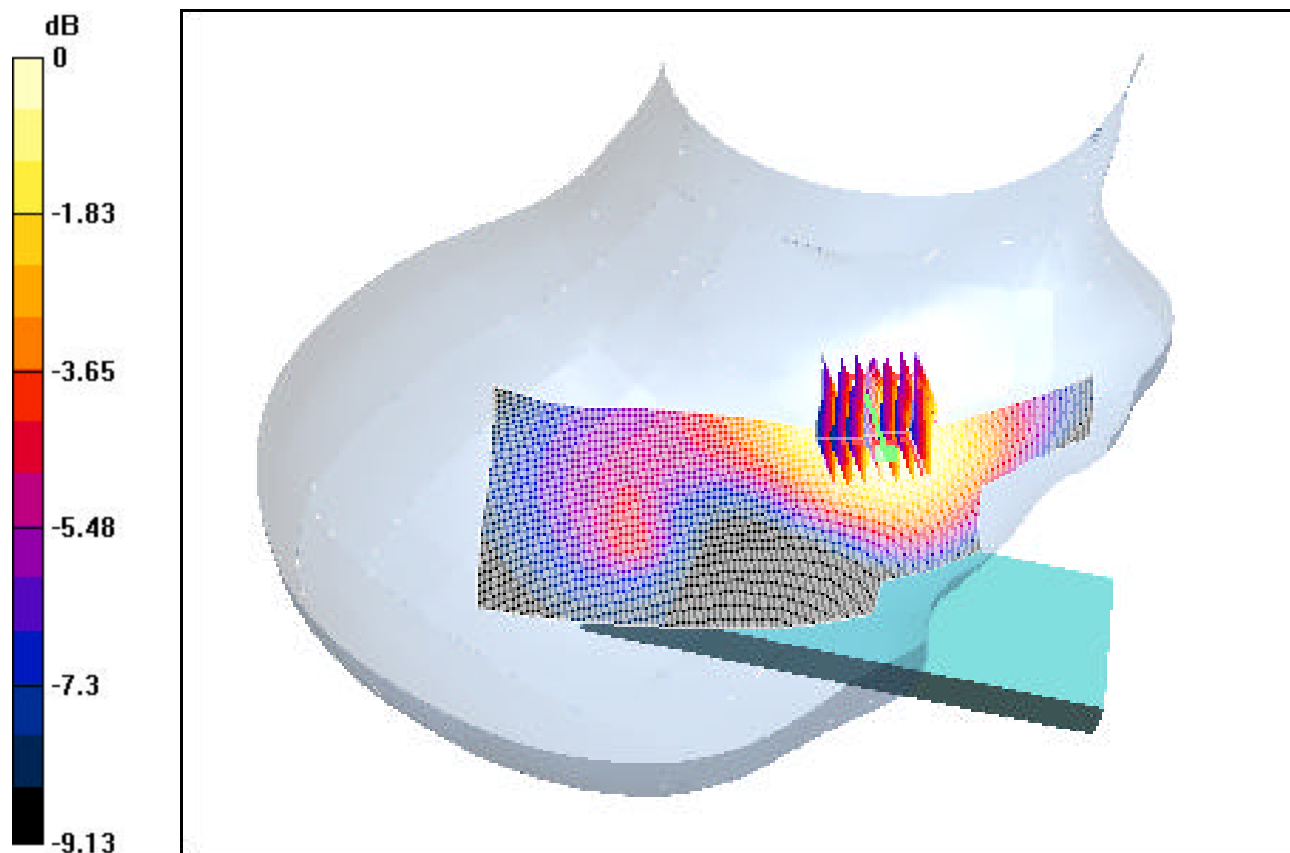
Area Scan (51x131x1): Measurement grid: dx=15mm, dy=15mm

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

Peak SAR (extrapolated) = 0.318 W/kg

SAR(1 g) = 0.248 mW/g; SAR(10 g) = 0.179 mW/g

Reference Value = 9.65 V/m



PCTEST ENGINEERING LABORATORY, INC.

DUT: SPH-A680; Type: SAMSUNG Tri Mode Phone; SN: 3F0F7C4D

Communication System: AMPS; Frequency: 836.49 MHz; Duty Cycle: 1:1

Medium: 835 Brain ($\sigma = 0.91$ mho/m, $\epsilon_r = 40.13$, $\rho = 1000$ kg/m³)

Phantom section: Left Section

Test Date: 02-24-2004; Ambient Temp: 23.8°C; Tissue Temp: 20.5°C

Probe: ES3DV2 - SN3022; ConvF(6.1, 6.1, 6.1); Calibrated: 9/23/2003

Sensor-Surface: 4mm (Mechanical Surface Detection)

Electronics: DAE3 Sn455; Phantom: SAM 12b; Type: SAM 4.0; Serial: TP:1197

Measurement SW: DASY4, V4.2 Build 12; Postprocessing SW: SEMCAD, V1.8 Build 93

AMPS Left Touch, Ch.0383, Antenna Out, Standard Battery, Conducted Power: 26.0dBm

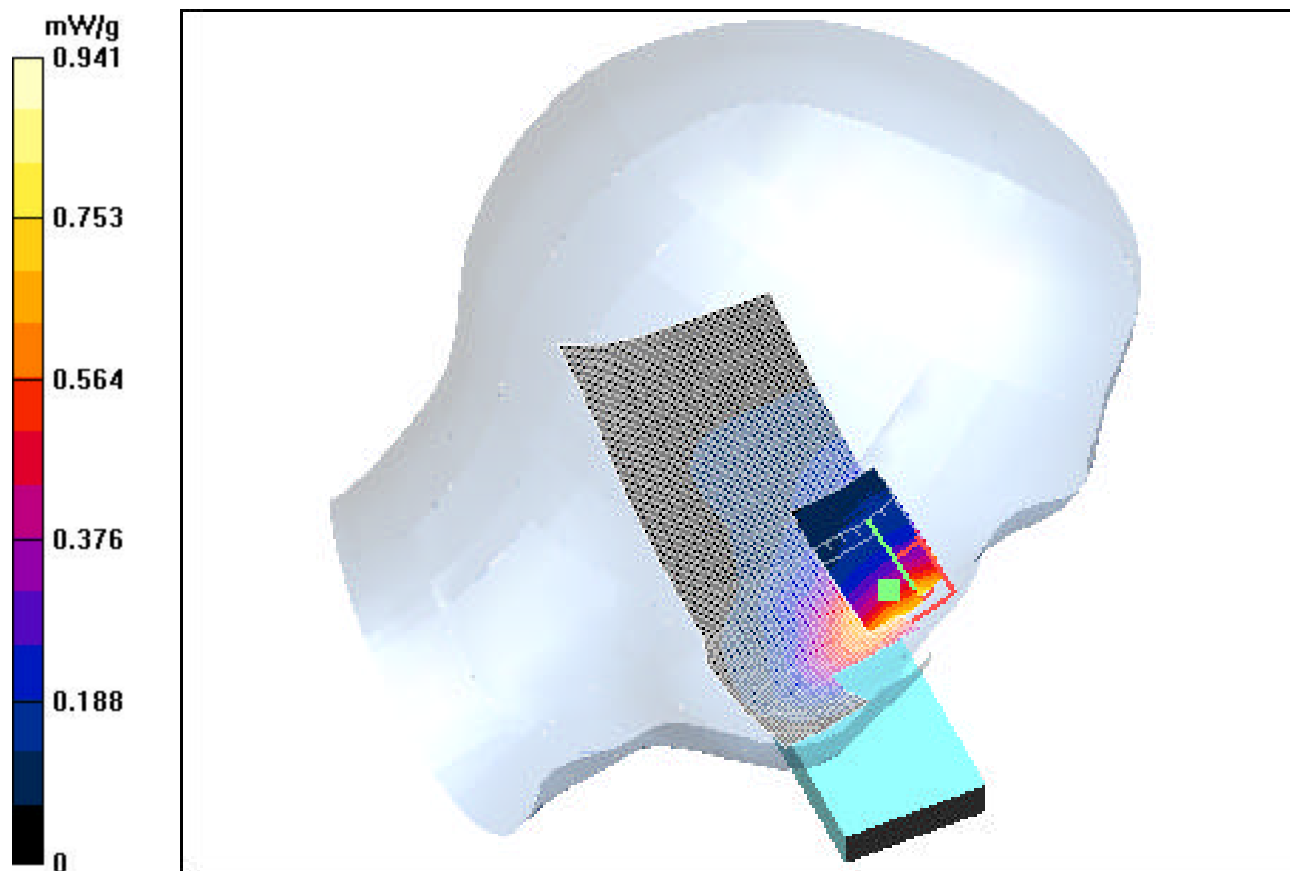
Area Scan (51x131x1): Measurement grid: dx=15mm, dy=15mm

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

Peak SAR (extrapolated) = 1.31 W/kg

SAR(1 g) = 0.877 mW/g; SAR(10 g) = 0.557 mW/g

Reference Value = 9.8 V/m



PCTEST ENGINEERING LABORATORY, INC.

DUT: SPH-A680; Type: SAMSUNG Tri Mode Phone; SN: 3F0F7C4D

Communication System: AMPS; Frequency: 836.49 MHz; Duty Cycle: 1:1

Medium: 835 Brain ($\sigma = 0.91$ mho/m, $\epsilon_r = 40.13$, $\rho = 1000$ kg/m³)

Phantom section: Left Section

Test Date: 02-24-2004; Ambient Temp: 23.8°C; Tissue Temp: 20.5°C

Probe: ES3DV2 - SN3022; ConvF(6.1, 6.1, 6.1); Calibrated: 9/23/2003

Sensor-Surface: 4mm (Mechanical Surface Detection)

Electronics: DAE3 Sn455; Phantom: SAM 12b; Type: SAM 4.0; Serial: TP:1197

Measurement SW: DAS4, V4.2 Build 12; Postprocessing SW: SEMCAD, V1.8 Build 93

AMPS Left Tilt, Ch.0383, Antenna Out, Standard Battery, Conducted Power: 26.0dBm

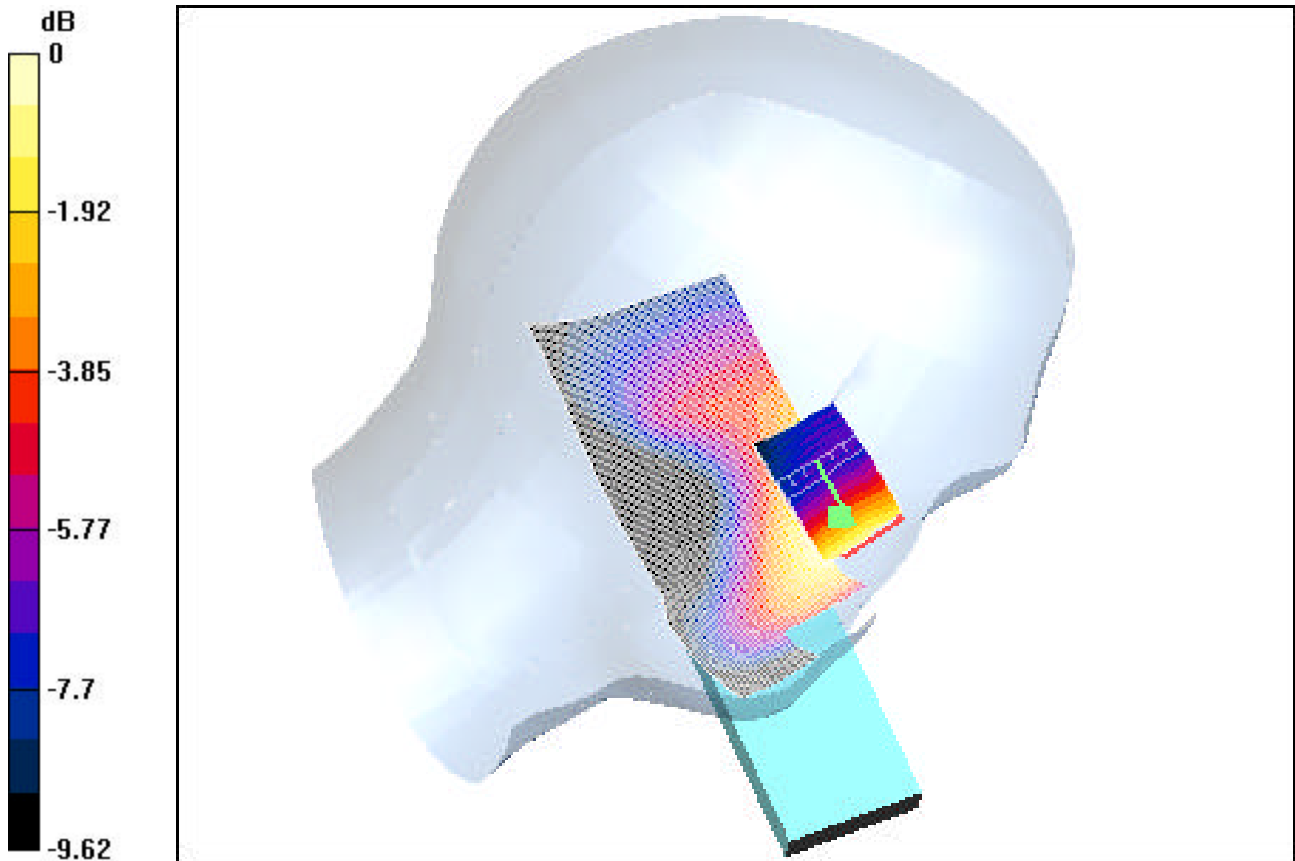
Area Scan (51x131x1): Measurement grid: dx=15mm, dy=15mm

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

Peak SAR (extrapolated) = 0.305 W/kg

SAR(1 g) = 0.237 mW/g; SAR(10 g) = 0.170 mW/g

Reference Value = 9.36 V/m



PCTEST ENGINEERING LABORATORY, INC.

DUT: SPH-A680; Type: SAMSUNG Tri Mode Phone; SN: 3F0F7C4D

Communication System: Cellular CDMA; Frequency: 835.89 MHz; Duty Cycle: 1:1

Medium: 835 Brain ($\sigma = 0.91$ mho/m, $\epsilon_r = 40.13$, $\rho = 1000$ kg/m³)

Phantom section: Right Section

Test Date: 02-25-2004; Ambient Temp: 23.6°C; Tissue Temp: 20.3°C

Probe: ES3DV2 - SN3022; ConvF(6.1, 6.1, 6.1); Calibrated: 9/23/2003

Sensor-Surface: 4mm (Mechanical Surface Detection)

Electronics: DAE3 Sn455; Phantom: SAM 12b; Type: SAM 4.0; Serial: TP:1197

Measurement SW: DASY4, V4.2 Build 12; Postprocessing SW: SEMCAD, V1.8 Build 93

CDMA Right Touch, Ch.0363, Antenna Out, Standard Battery, Conducted Power: 25.5dBm

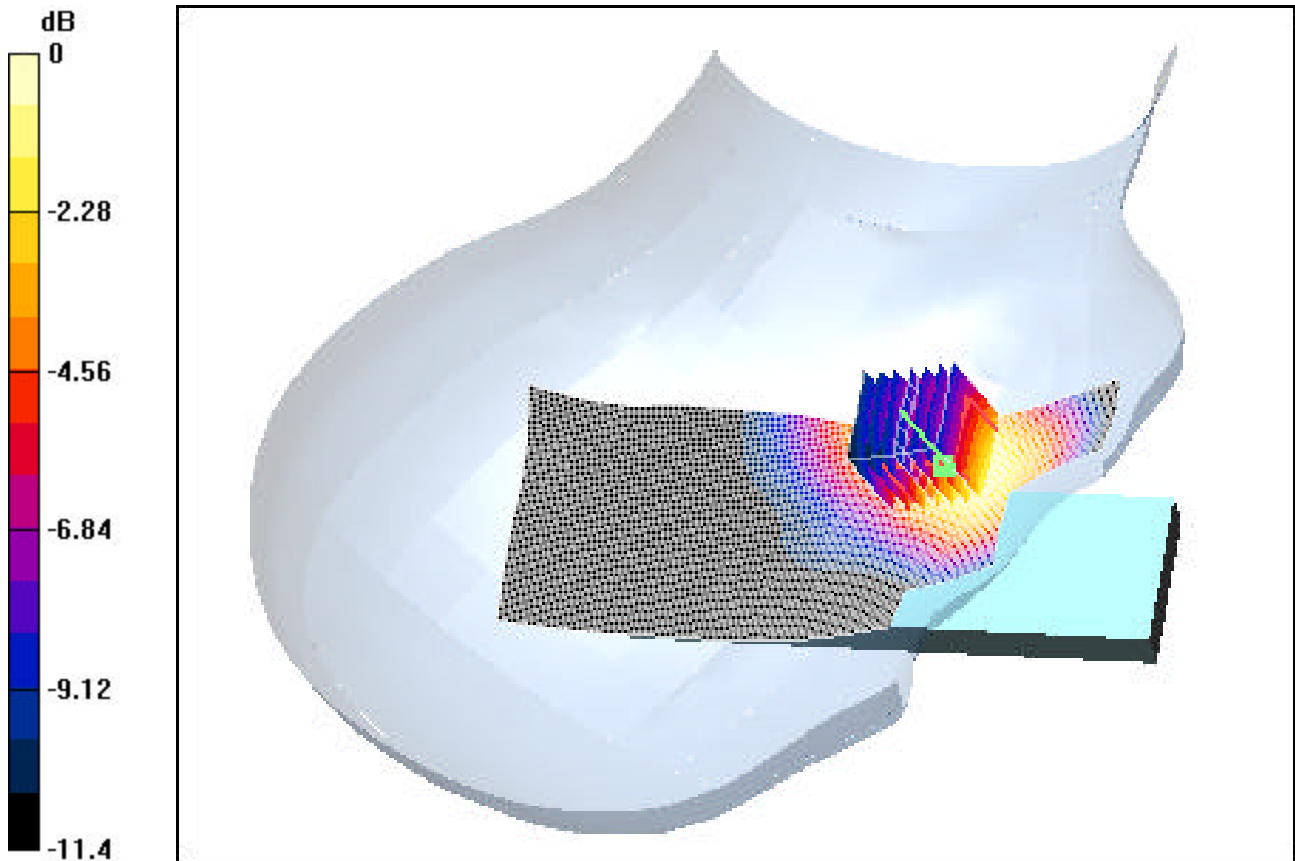
Area Scan (51x131x1): Measurement grid: dx=15mm, dy=15mm

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

Peak SAR (extrapolated) = 1.47 W/kg

SAR(1 g) = 1.02 mW/g; SAR(10 g) = 0.652 mW/g

Reference Value = 9.02 V/m



PCTEST ENGINEERING LABORATORY, INC.

DUT: SPH-A680; Type: SAMSUNG Tri Mode Phone; SN:3F0F7C4D

Communication System: Cellular CDMA; Frequency: 835.89 MHz; Duty Cycle: 1:1

Medium: 835 Brain ($\sigma = 0.91$ mho/m, $\epsilon_r = 40.13$, $\rho = 1000$ kg/m³)

Phantom section: Right Section

Test Date: 02-25-2005; Ambient Temp: 23.6°C; Tissue Temp: 20.3°C

Probe: ES3DV2 - SN3022; ConvF(6.1, 6.1, 6.1); Calibrated: 9/23/2003

Sensor-Surface: 4mm (Mechanical Surface Detection)

Electronics: DAE3 Sn455; Phantom: SAM 12b; Type: SAM 4.0; Serial: TP:1197

Measurement SW: DASY4, V4.2 Build 12; Postprocessing SW: SEMCAD, V1.8 Build 93

CDMA Right Tilt, Ch.0363, Antenna Out, Standard Battery, Conducted Power: 25.5dBm

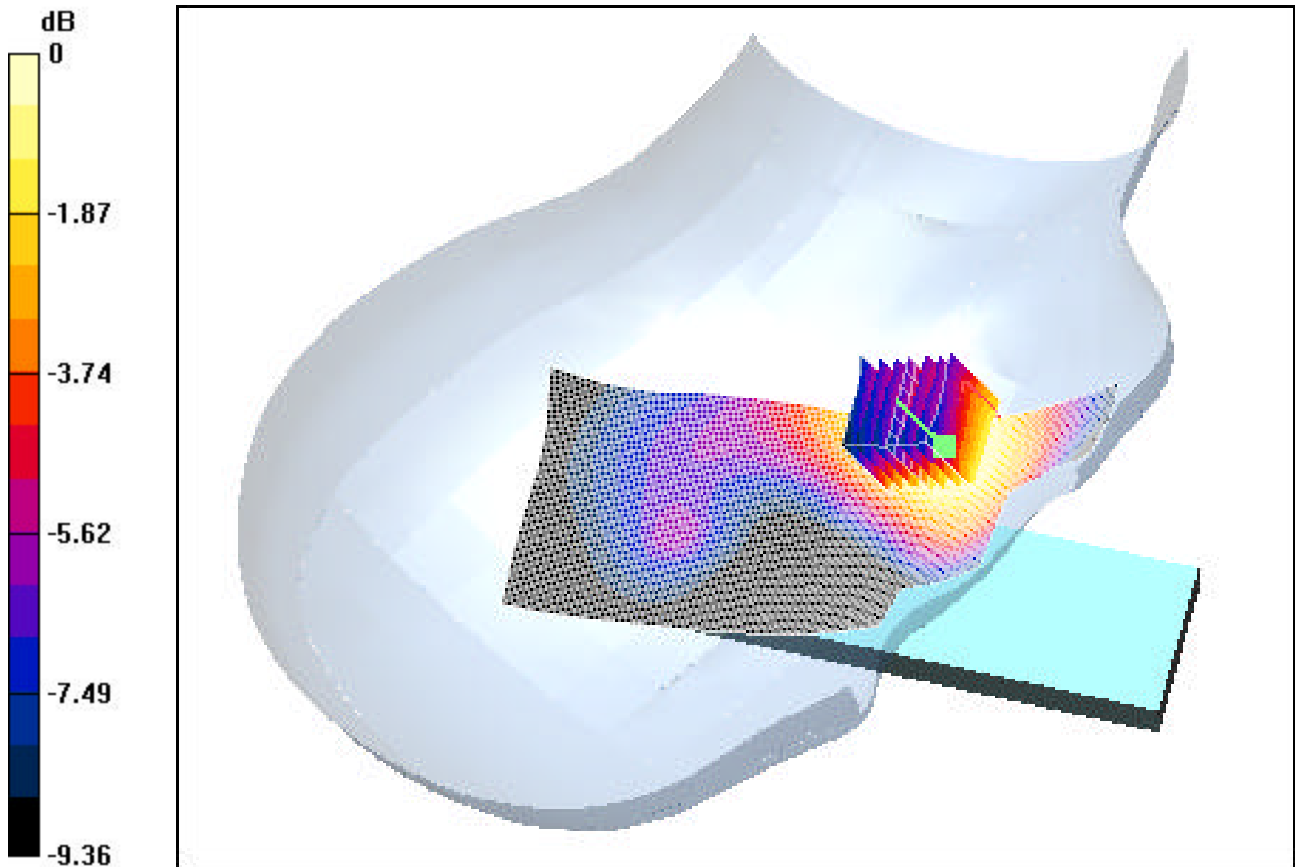
Area Scan (51x131x1): Measurement grid: dx=15mm, dy=15mm

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

Peak SAR (extrapolated) = 0.325 W/kg

SAR(1 g) = 0.242 mW/g; SAR(10 g) = 0.175 mW/g

Reference Value = 8.5 V/m



PCTEST ENGINEERING LABORATORY, INC.

DUT: SPH-A680; Type: SAMSUNG Tri Mode Phone; SN: 3F0F7C4D

Communication System: Cellular CDMA; Frequency: 835.89 MHz; Duty Cycle: 1:1

Medium: 835 Brain ($\sigma = 0.91$ mho/m, $\epsilon_r = 40.13$, $\rho = 1000$ kg/m³)

Phantom section: Left Section

Test Date: 02-25-2004; Ambient Temp: 23.6°C; Tissue Temp: 20.3°C

Probe: ES3DV2 - SN3022; ConvF(6.1, 6.1, 6.1); Calibrated: 9/23/2003

Sensor-Surface: 4mm (Mechanical Surface Detection)

Electronics: DAE3 Sn455; Phantom: SAM 12b; Type: SAM 4.0; Serial: TP:1197

Measurement SW: DASY4, V4.2 Build 12; Postprocessing SW: SEMCAD, V1.8 Build 93

CDMA Left Touch, Ch.0363, Antenna Out, Standard Battery, Conducted Power: 25.5dBm

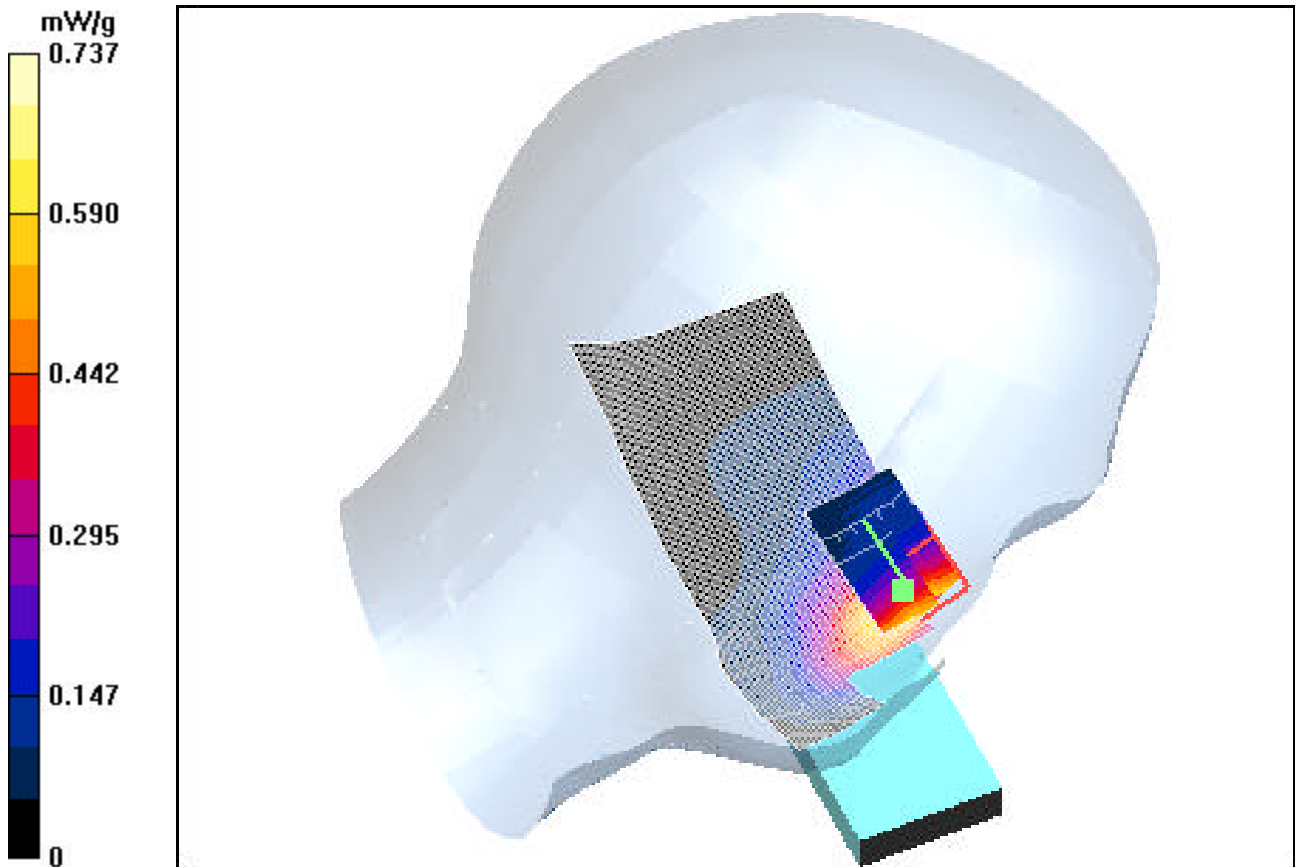
Area Scan (51x131x1): Measurement grid: dx=15mm, dy=15mm

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

Peak SAR (extrapolated) = 1.04 W/kg

SAR(1 g) = 0.702 mW/g; SAR(10 g) = 0.460 mW/g

Reference Value = 8.58 V/m



PCTEST ENGINEERING LABORATORY, INC.

DUT: SPH-A680; Type: SAMSUNG Tri Mode Phone; SN: 3F0F7C4D

Communication System: Cellular CDMA; Frequency: 835.89 MHz; Duty Cycle: 1:1

Medium: 835 Brain ($\sigma = 0.91$ mho/m, $\epsilon_r = 40.13$, $\rho = 1000$ kg/m³)

Phantom section: Left Section

Test Date: 02-25-2005; Ambient Temp: 23.6°C; Tissue Temp: 20.3°C

Probe: ES3DV2 - SN3022; ConvF(6.1, 6.1, 6.1); Calibrated: 9/23/2003

Sensor-Surface: 4mm (Mechanical Surface Detection)

Electronics: DAE3 Sn455; Phantom: SAM 12b; Type: SAM 4.0; Serial: TP:1197

Measurement SW: DASY4, V4.2 Build 12; Postprocessing SW: SEMCAD, V1.8 Build 93

CDMA Left Tilt, Ch.0363, Antenna Out, Standard Battery, Conducted Power: 25.5dBm

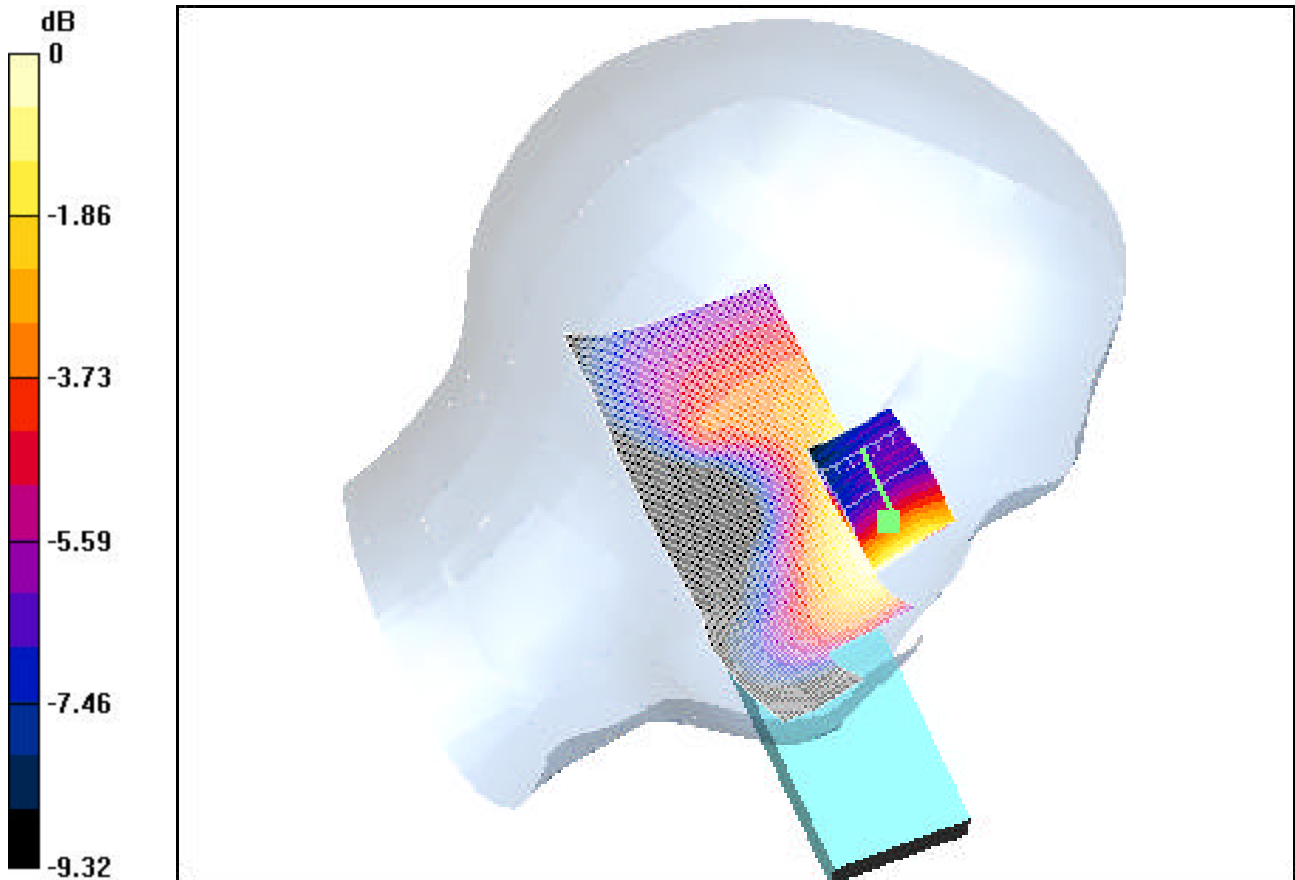
Area Scan (51x131x1): Measurement grid: dx=15mm, dy=15mm

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

Peak SAR (extrapolated) = 0.200 W/kg

SAR(1 g) = 0.156 mW/g; SAR(10 g) = 0.113 mW/g

Reference Value = 8.77 V/m



PCTEST ENGINEERING LABORATORY, INC.

DUT: SPH-A680; Type: SAMSUNG Tri Mode Phone; SN: 3F0F7C4D

Communication System: PCS CDMA; Frequency: 1880 MHz; Duty Cycle: 1:1

Medium: 1900 Brain ($\sigma = 1.45$ mho/m, $\epsilon_r = 39.51$, $\rho = 1000$ kg/m³)

Phantom section: Right Section

Test Date: 02-23-2004; Ambient Temp: 23.6°C; Tissue Temp: 19.8°C

Probe: ES3DV2 - SN3022; ConvF(5, 5, 5); Calibrated: 9/23/2003

Sensor-Surface: 4mm (Mechanical Surface Detection)

Electronics: DAE3 Sn445; Phantom: SAM 12b; Type: SAM 4.0; Serial: TP:1197

Measurement SW: DASY4, V4.2 Build 12; Postprocessing SW: SEMCAD, V1.8 Build 93

PCS Right Touch, Ch.0600, Antenna In, Standard Battery, Conducted Power: 24.5dBm

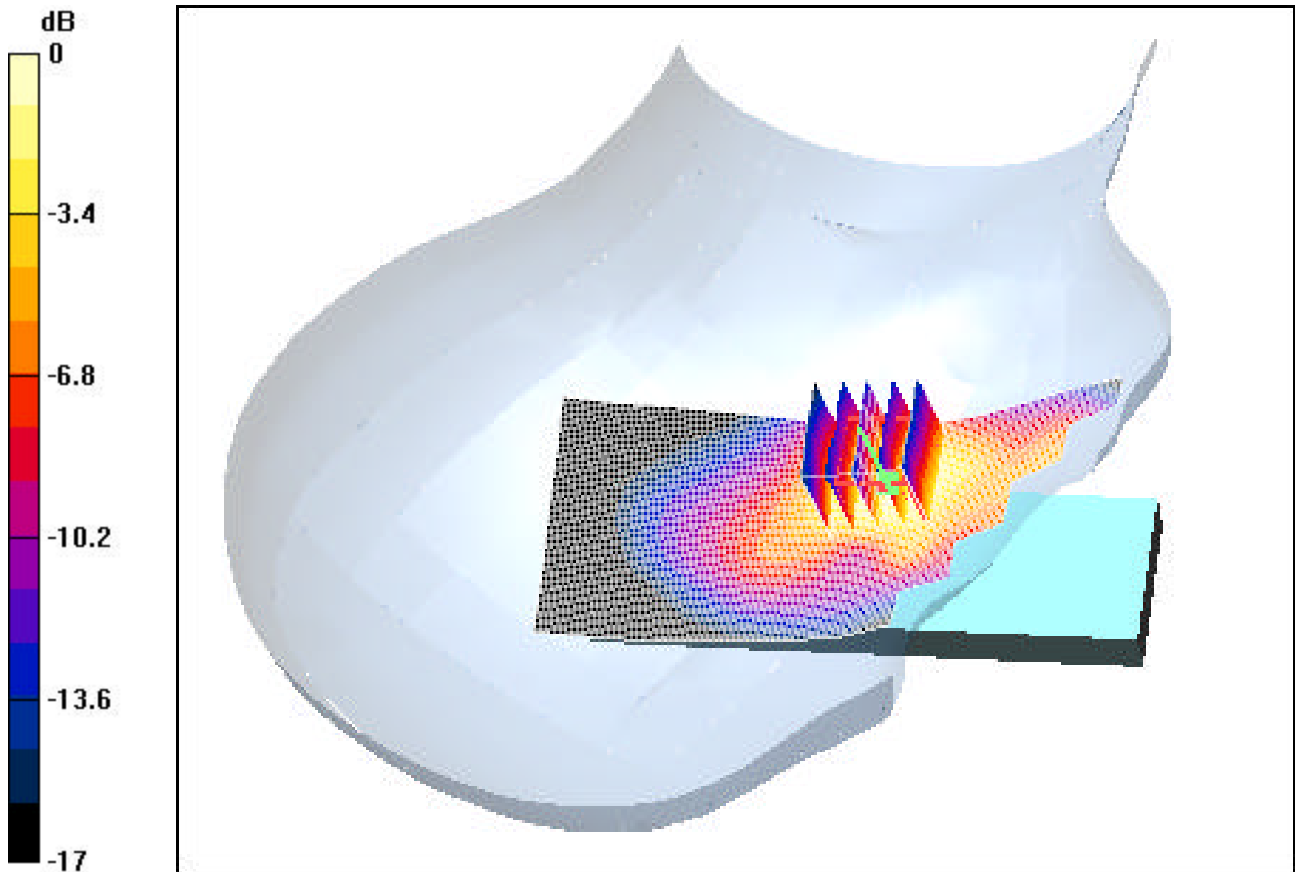
Area Scan (51x121x1): Measurement grid: dx=15mm, dy=15mm

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

Peak SAR (extrapolated) = 1.7 W/kg

SAR(1 g) = 1.05 mW/g; SAR(10 g) = 0.588 mW/g

Reference Value = 5.40 V/m



PCTEST ENGINEERING LABORATORY, INC.

DUT: SPH-A680; Type: SAMSUNG Tri Mode Phone; SN: 3F0F7C4D

Communication System: PCS CDMA; Frequency: 1880 MHz; Duty Cycle: 1:1

Medium: 1900 Brain ($\sigma = 1.45$ mho/m, $\epsilon_r = 39.51$, $\rho = 1000$ kg/m³)

Phantom section: Right Section

Test Date: 02-23-2004; Ambient Temp: 23.6°C; Tissue Temp: 19.8°C

Probe: ES3DV2 - SN3022; ConvF(5, 5, 5); Calibrated: 9/23/2003

Sensor-Surface: 4mm (Mechanical Surface Detection)

Electronics: DAE3 Sn445; Phantom: SAM 12b; Type: SAM 4.0; Serial: TP:1197

Measurement SW: DASY4, V4.2 Build 12; Postprocessing SW: SEMCAD, V1.8 Build 93

PCS Right Tilt, Ch.0600, Antenna In, Standard Battery, Conducted Power: 24.5dBm

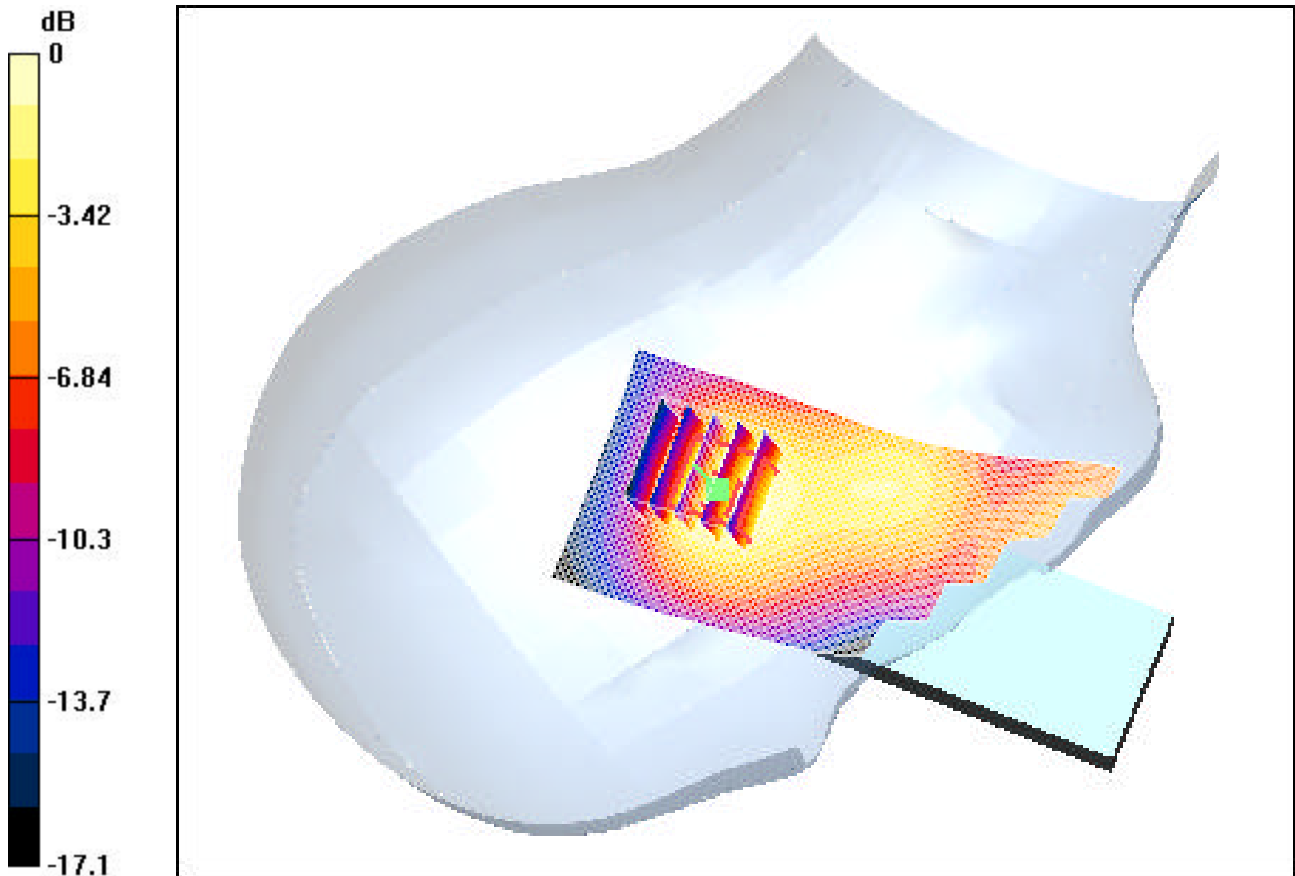
Area Scan (51x121x1): Measurement grid: dx=15mm, dy=15mm

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

Peak SAR (extrapolated) = 0.427 W/kg

SAR(1 g) = 0.278 mW/g; SAR(10 g) = 0.141 mW/g

Reference Value = 10.5 V/m



PCTEST ENGINEERING LABORATORY, INC.

DUT: SPH-A680; Type: SAMSUNG Tri Mode Phone; SN: 3F0F7C4D

Communication System: PCS CDMA; Frequency: 1880 MHz; Duty Cycle: 1:1

Medium: 1900 Brain ($\sigma = 1.45$ mho/m, $\epsilon_r = 39.51$, $\rho = 1000$ kg/m³)

Phantom section: Left Section

Test Date: 02-23-2004; Ambient Temp: 23.6°C; Tissue Temp: 19.8°C

Probe: ES3DV2 - SN3022; ConvF(5, 5, 5); Calibrated: 9/23/2003

Sensor-Surface: 4mm (Mechanical Surface Detection)

Electronics: DAE3 Sn455; Phantom: SAM 12b; Type: SAM 4.0; Serial: TP:1197

Measurement SW: DAS4, V4.2 Build 12; Postprocessing SW: SEMCAD, V1.8 Build 93

PCS Left Touch, Ch.0600, Antenna In, Standard Battery, Conducted Power: 24.5dBm

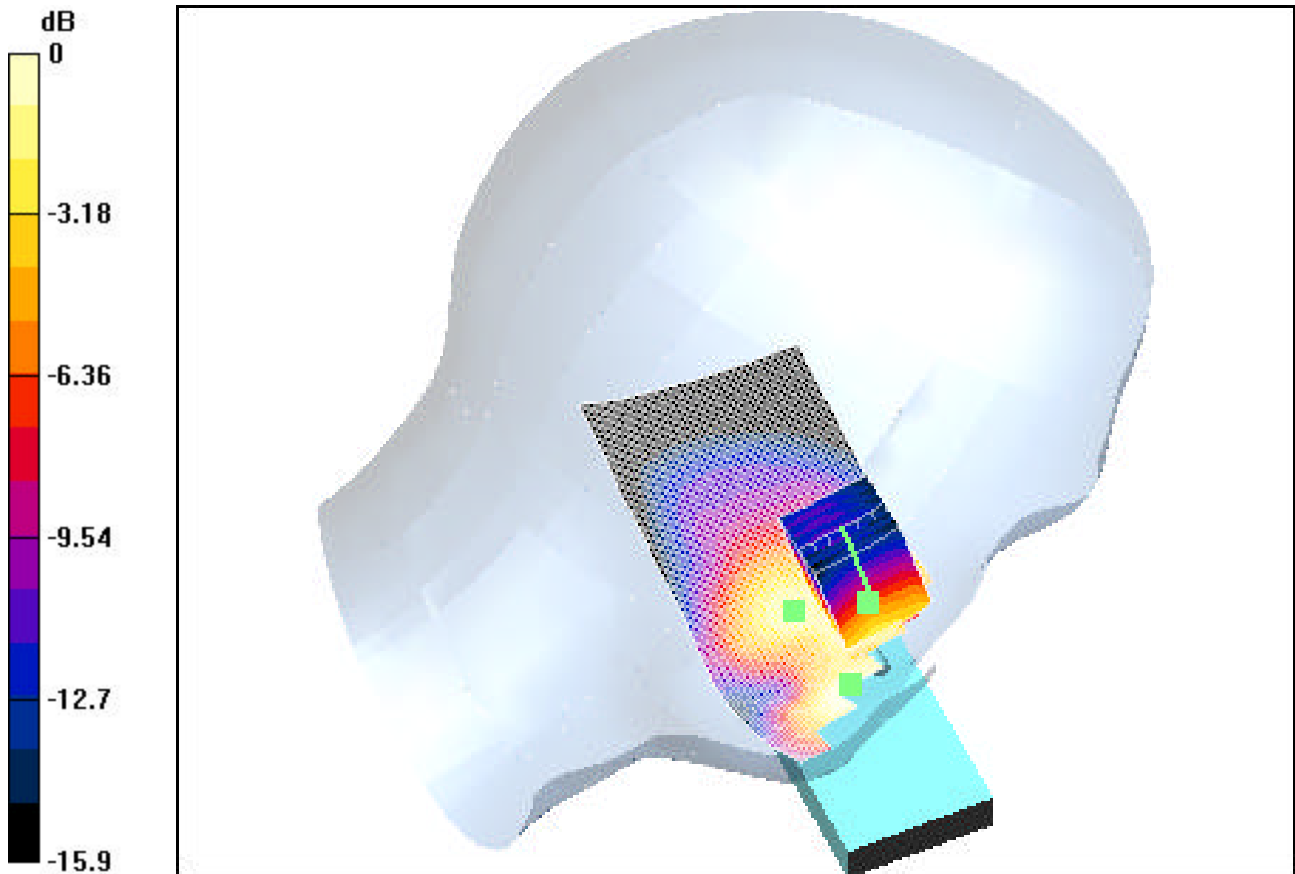
Area Scan (51x121x1): Measurement grid: dx=15mm, dy=15mm

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

Peak SAR (extrapolated) = 1.34 W/kg

SAR(1 g) = 0.812 mW/g; SAR(10 g) = 0.460 mW/g

Reference Value = 5.6 V/m



PCTEST ENGINEERING LABORATORY, INC.

DUT: SPH-A680; Type: SAMSUNG Tri Mode Phone; SN: 3F0F7C4D

Communication System: PCS CDMA; Frequency: 1880 MHz; Duty Cycle: 1:1

Medium: 1900 Brain ($\sigma = 1.45$ mho/m, $\epsilon_r = 39.51$, $\rho = 1000$ kg/m³)

Phantom section: Left Section

Test Date: 02-23-2004; Ambient Temp: 23.6°C; Tissue Temp: 19.8°C

Probe: ES3DV2 - SN3022; ConvF(5, 5, 5); Calibrated: 9/23/2003

Sensor-Surface: 4mm (Mechanical Surface Detection)

Electronics: DAE3 Sn455; Phantom: SAM 12b; Type: SAM 4.0; Serial: TP:1197

Measurement SW: DASY4, V4.2 Build 12; Postprocessing SW: SEMCAD, V1.8 Build 93

PCS Left Tilt, Ch.0600, Antenna In, Standard Battery, Conducted Power: 24.5dBm

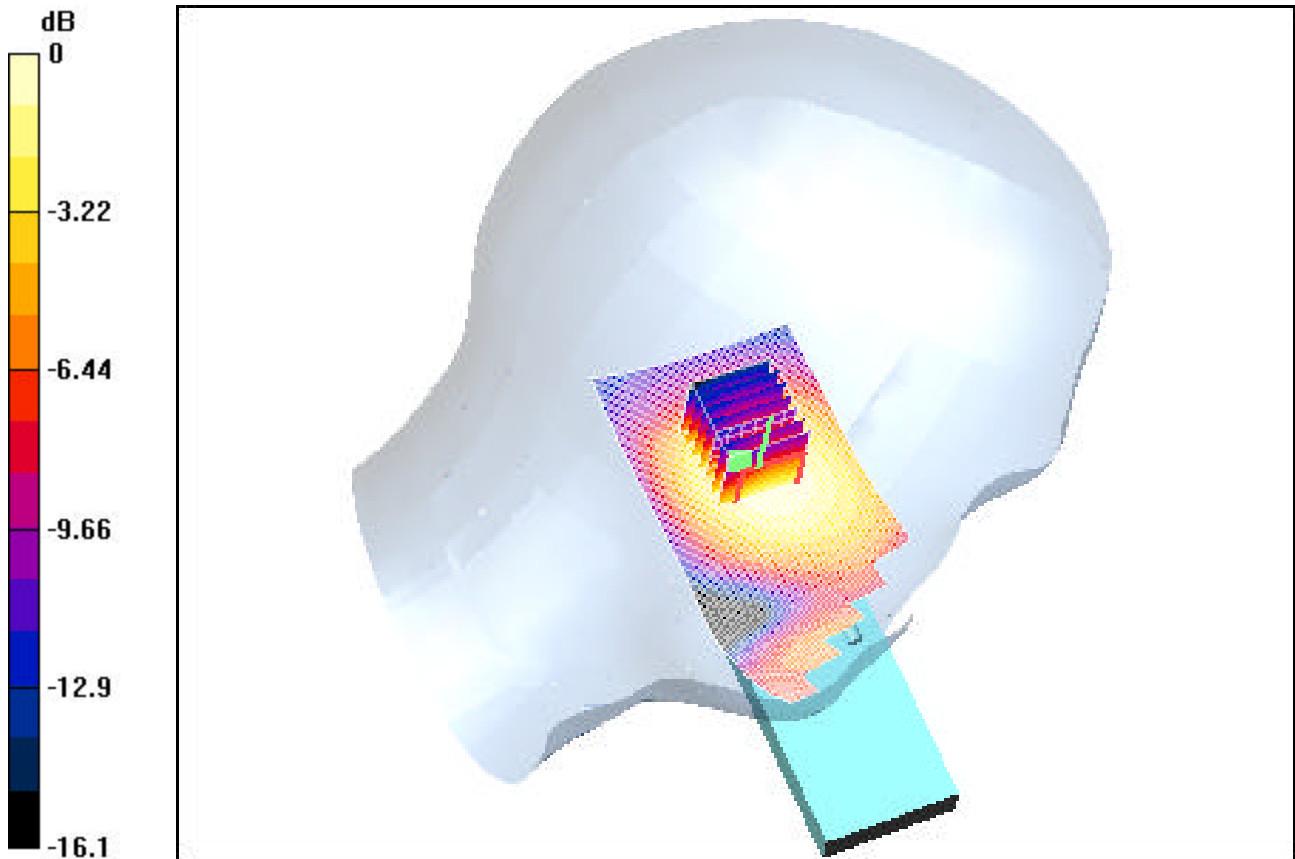
Area Scan (51x121x1): Measurement grid: dx=15mm, dy=15mm

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

Peak SAR (extrapolated) = 0.318 W/kg

SAR(1 g) = 0.207 mW/g; SAR(10 g) = 0.131 mW/g

Reference Value = 9.95 V/m



PCTEST ENGINEERING LABORATORY, INC.

DUT: SPH-A680; Type: SAMSUNG Tri Mode Phone; SN: 3F0F7C4D

Communication System: AMPS; Frequency: 848.97 MHz; Duty Cycle: 1:1

Medium: 835 Muscle ($\sigma = 0.97$ mho/m, $\epsilon_r = 53.16$, $\rho = 1000$ kg/m³)

Phantom section: Flat Section

Test Date: 02-26-2004; Ambient Temp: 23.5°C; Tissue Temp: 20.3°C

Probe: ES3DV2 - SN3022; ConvF(6, 6, 6); Calibrated: 9/23/2003

Sensor-Surface: 4mm (Mechanical Surface Detection)

Electronics: DAE3 Sn455; Phantom: SAM 12b; Type: SAM 4.0; Serial: TP:1197

Measurement SW: DASY4, V4.2 Build 12; Postprocessing SW: SEMCAD, V1.8 Build 93

AMPS Body 2.5cm Space, Ch.0799, Antenna Out, Standard Battery, Conducted Power: 26.0dBm

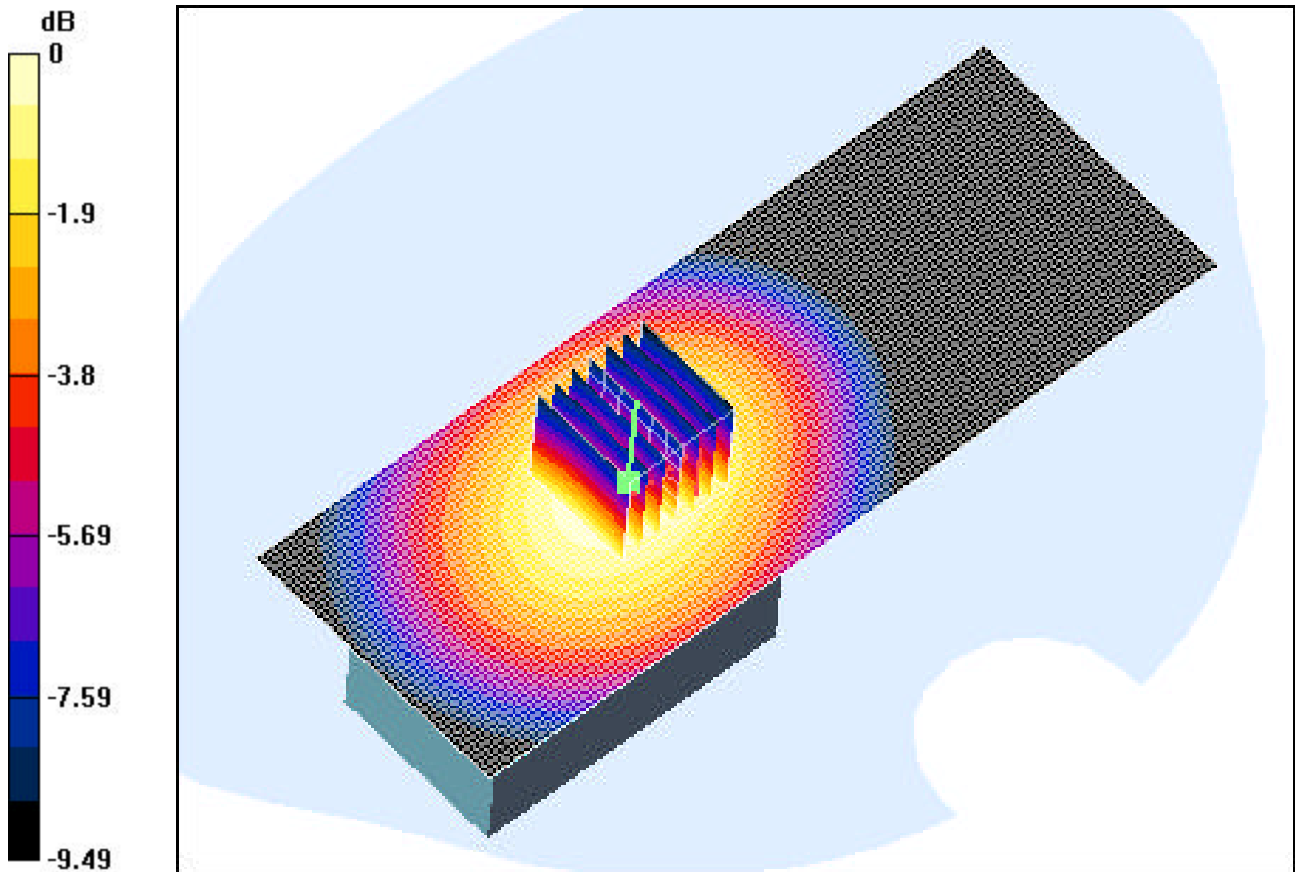
Area Scan (51x141x1): Measurement grid: dx=15mm, dy=15mm

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

Peak SAR (extrapolated) = 1.8 W/kg

SAR(1 g) = 1.3 mW/g; SAR(10 g) = 0.923 mW/g

Reference Value = 32.6 V/m



PCTEST ENGINEERING LABORATORY, INC.

DUT: SPH-A680; Type: SAMSUNG Tri Mode Phone; SN: 3F0F7C4D

Communication System: Cellular CDMA; Frequency: 848.31 MHz; Duty Cycle: 1:1

Medium: 835 Muscle ($\sigma = 0.97$ mho/m, $\epsilon_r = 53.16$, $\rho = 1000$ kg/m³)

Phantom section: Flat Section

Test Date: 02-26-2004; Ambient Temp: 23.5°C; Tissue Temp: 20.3°C

Probe: ES3DV2 - SN3022; ConvF(6, 6, 6); Calibrated: 9/23/2003

Sensor-Surface: 4mm (Mechanical Surface Detection)

Electronics: DAE3 Sn455; Phantom: SAM 12b; Type: SAM 4.0; Serial: TP:1197

Measurement SW: DASY4, V4.2 Build 12; Postprocessing SW: SEMCAD, V1.8 Build 93

CDMA Body 2.5cm Space, Ch.0777, Antenna Out, Standard Battery, Conducted Power: 25.5dBm

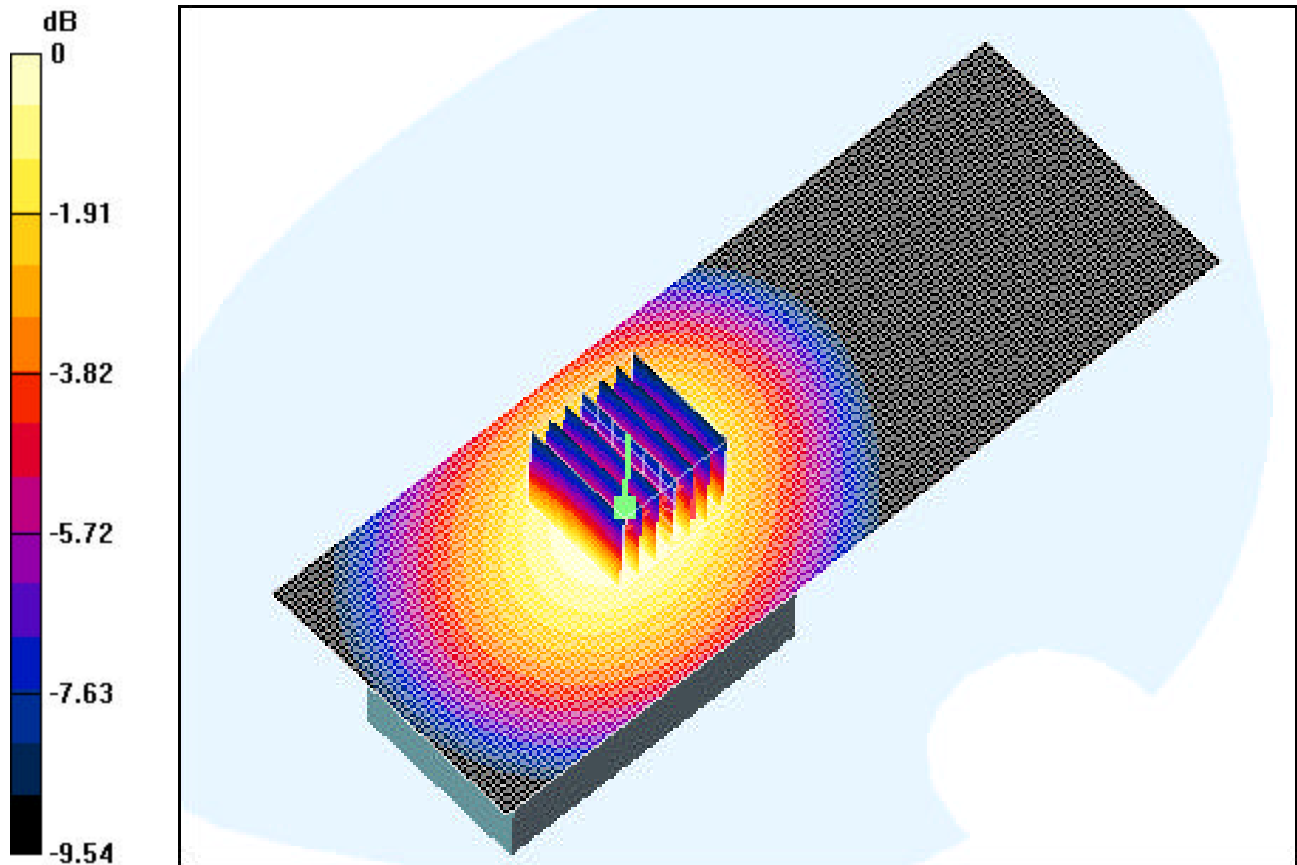
Area Scan (51x141x1): Measurement grid: dx=15mm, dy=15mm

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

Peak SAR (extrapolated) = 1.67 W/kg

SAR(1 g) = 1.21 mW/g; SAR(10 g) = 0.856 mW/g

Reference Value = 29.8 V/m



PCTEST ENGINEERING LABORATORY, INC.

DUT: SPH-A680; Type: SAMSUNG Tri Mode Phone; SN: 3F0F7C4D

Communication System: PCS CDMA; Frequency: 1851.25 MHz; Duty Cycle: 1:1

Medium: 1900 Muscle ($\sigma = 1.58$ mho/m, $\epsilon_r = 51.01$, $\rho = 1000$ kg/m³)

Phantom section: Flat Section

Test Date: 02-27-2004; Ambient Temp: 23.3°C; Tissue Temp: 20.2°C

Probe: ES3DV2 - SN3022; ConvF(4.5, 4.5, 4.5); Calibrated: 9/23/2003

Sensor-Surface: 4mm (Mechanical Surface Detection)

Electronics: DAE3 Sn455; Phantom: SAM 12b; Type: SAM 4.0; Serial: TP:1197

Measurement SW: DAS4, V4.2 Build 12; Postprocessing SW: SEMCAD, V1.8 Build 93

PCS Body 2.5cm Space, Ch.0025, Antenna Out, Standard Battery, Conducted Power: 24.5Dbm

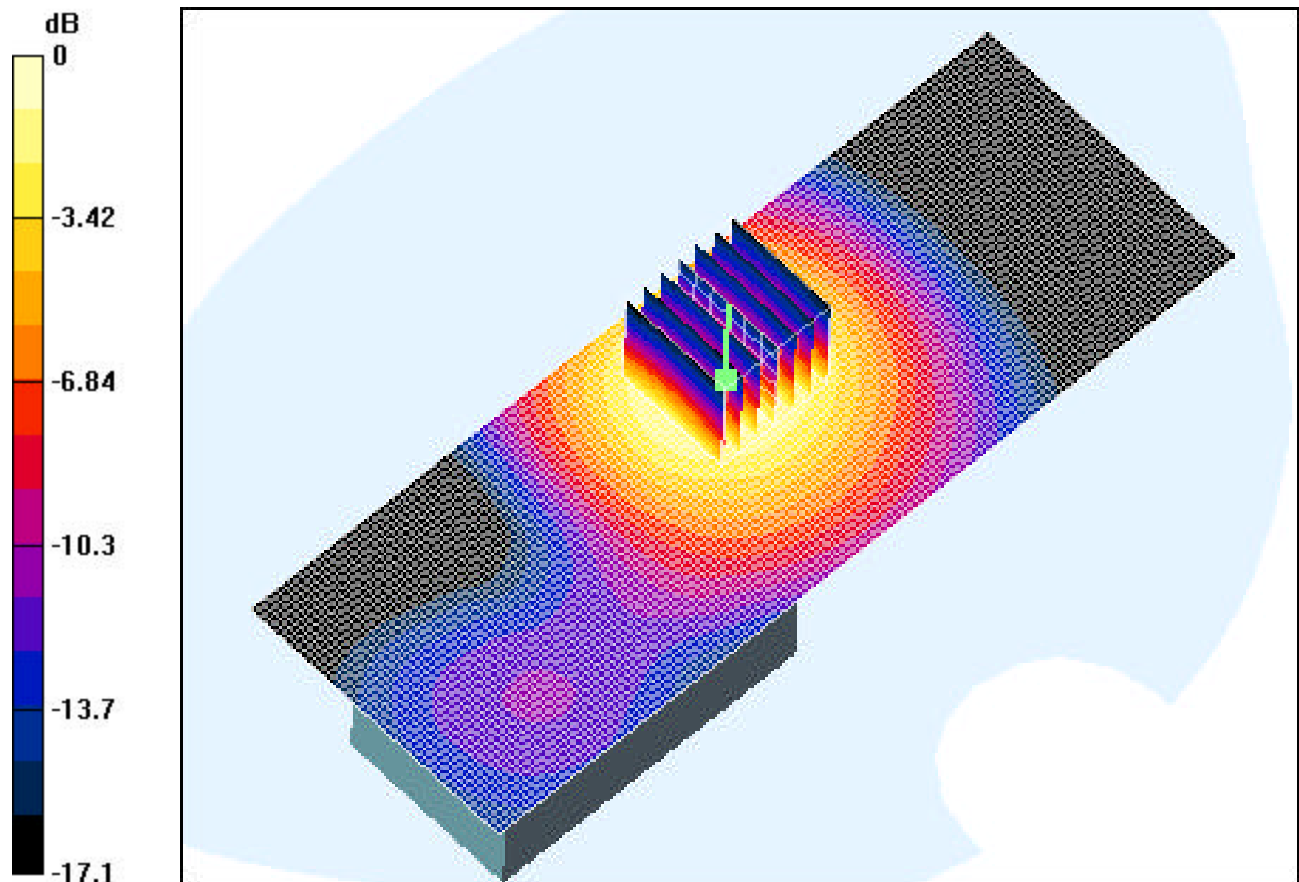
Area Scan (51x141x1): Measurement grid: dx=15mm, dy=15mm

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

Peak SAR (extrapolated) = 1.61 W/kg

SAR(1 g) = 0.972 mW/g; SAR(10 g) = 0.567 mW/g

Reference Value = 21.9 V/m



PCTEST ENGINEERING LABORATORY, INC.

DUT: SPH-A680; Type: SAMSUNG Tri Mode Phone; SN: 3F0F7C4D

Communication System: AMPS; Frequency: 824.04 MHz; Duty Cycle: 1:1

Medium: 835 Brain ($\sigma = 0.91$ mho/m, $\epsilon_r = 40.13$, $\rho = 1000$ kg/m³)

Phantom section: Right Section

Test Date: 02-24-2004; Ambient Temp: 23.8°C; Tissue Temp: 20.9°C

Probe: ES3DV2 - SN3022; ConvF(6.1, 6.1, 6.1); Calibrated: 9/23/2003

Sensor-Surface: 4mm (Mechanical Surface Detection)

Electronics: DAE3 Sn455; Phantom: SAM 12b; Type: SAM 4.0; Serial: TP:1197

Measurement SW: DAS4, V4.2 Build 12; Postprocessing SW: SEMCAD, V1.8 Build 93

AMPS Right Touch, Ch.0991, Antenna.Out, Standard Battery, Conducted Power: 26.0dBm

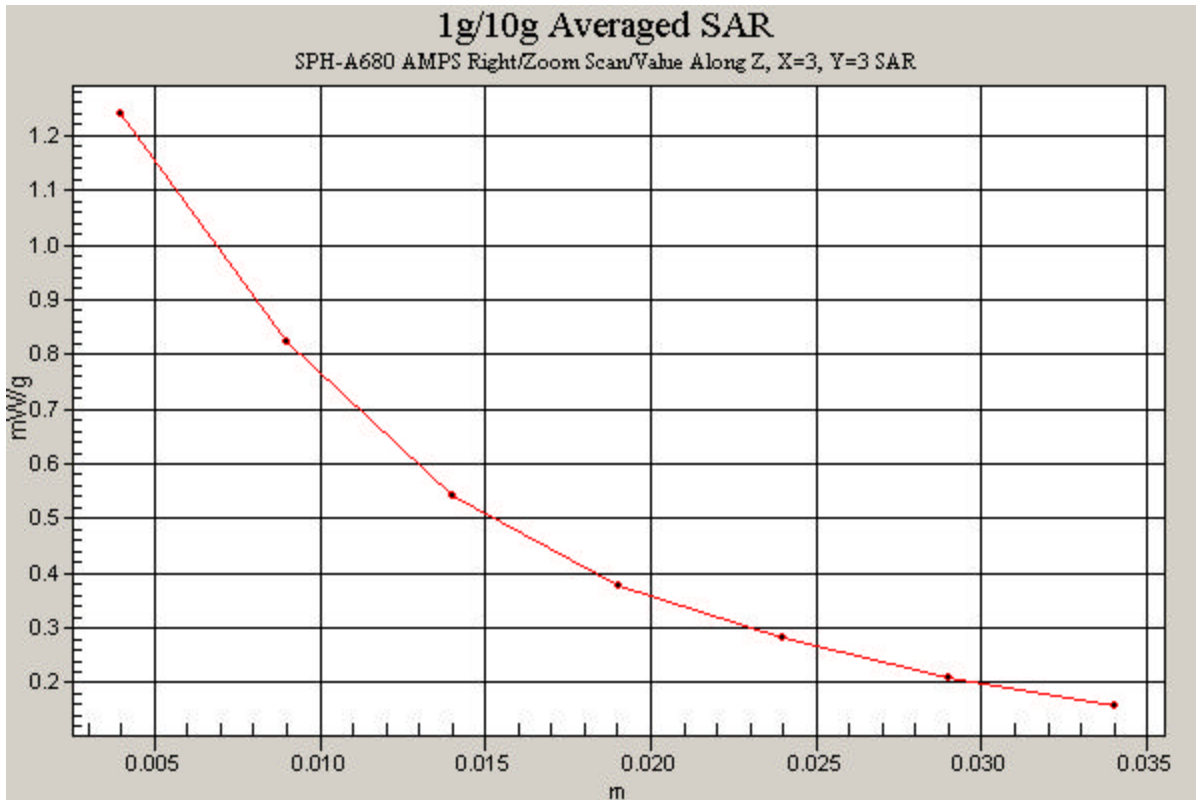
Area Scan (51x131x1): Measurement grid: dx=15mm, dy=15mm

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

Peak SAR (extrapolated) = 1.77 W/kg

SAR(1 g) = 1.11 mW/g; SAR(10 g) = 0.694 mW/g

Reference Value = 9.31 V/m



PCTEST ENGINEERING LABORATORY, INC.

DUT: SPH-A680; Type: SAMSUNG Tri Mode Phone; Model: SPH-A680; SN: 01

Communication System: AMPS; Frequency: 848.97 MHz; Duty Cycle: 1:1

Medium: 835 Muscle ($\sigma = 0.97$ mho/m, $\epsilon_r = 53.10$, $\rho = 1000$ kg/m³)

Phantom section: Flat Section

Test Date: 02-26-2004; Ambient Temp: 23.1°C; Tissue Temp: 20.3°C

Probe: ES3DV2 - SN3022; ConvF(6, 6, 6); Calibrated: 9/23/2003

Sensor-Surface: 4mm (Mechanical Surface Detection)

Electronics: DAE3 Sn455; Phantom: SAM 12b; Type: SAM 4.0; Serial: TP:1197

Measurement SW: DASY4, V4.2 Build 12; Postprocessing SW: SEMCAD, V1.8 Build 93

AMPS Body 2.5cm Space, Ch.0799, Antenna Out, Standard Battery, Conducted Power: 26.0dBm

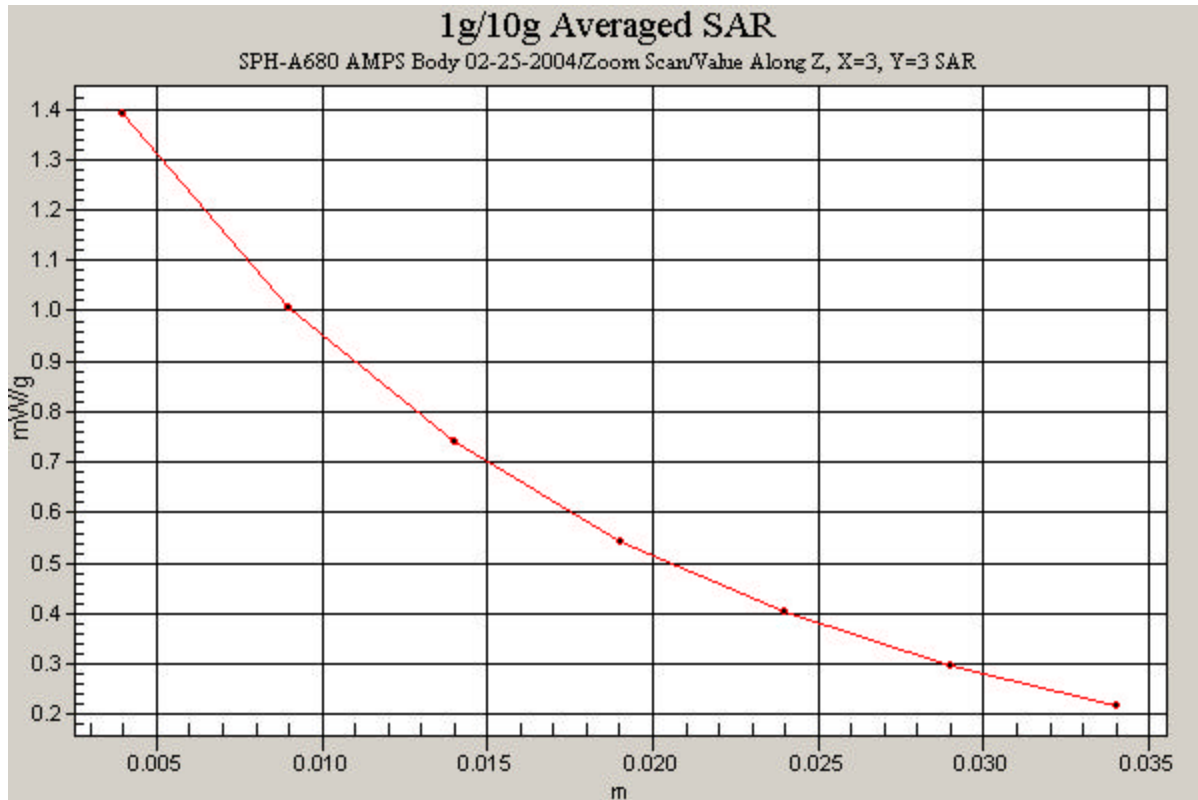
Area Scan (51x141x1): Measurement grid: dx=15mm, dy=15mm

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

Peak SAR (extrapolated) = 1.8 W/kg

SAR(1 g) = 1.3 mW/g; SAR(10 g) = 0.923 mW/g

Reference Value = 32.6 V/m



PCTEST ENGINEERING LABORATORY, INC.

DUT: SPH-A680; Type: SAMSUNG Tri Mode Phone; SN: 3F0F7C4D

Communication System: PCS CDMA; Frequency: 1880 MHz; Duty Cycle: 1:1

Medium: 1900 Brain ($\sigma = 1.45$ mho/m, $\epsilon_r = 39.51$, $\rho = 1000$ kg/m³)

Phantom section: Right Section

Test Date: 02-23-2004; Ambient Temp: 23.6°C; Tissue Temp: 19.8°C

Probe: ES3DV2 - SN3022; ConvF(5, 5, 5); Calibrated: 9/23/2003

Sensor-Surface: 4mm (Mechanical Surface Detection)

Electronics: DAE3 Sn455; Phantom: SAM 12b; Type: SAM 4.0; Serial: TP:1197

Measurement SW: DASY4, V4.2 Build 12; Postprocessing SW: SEMCAD, V1.8 Build 93

PCS Right Touch, Ch.0600, Antenna In, Standard Battery, Conducted Power: 24.5dBm

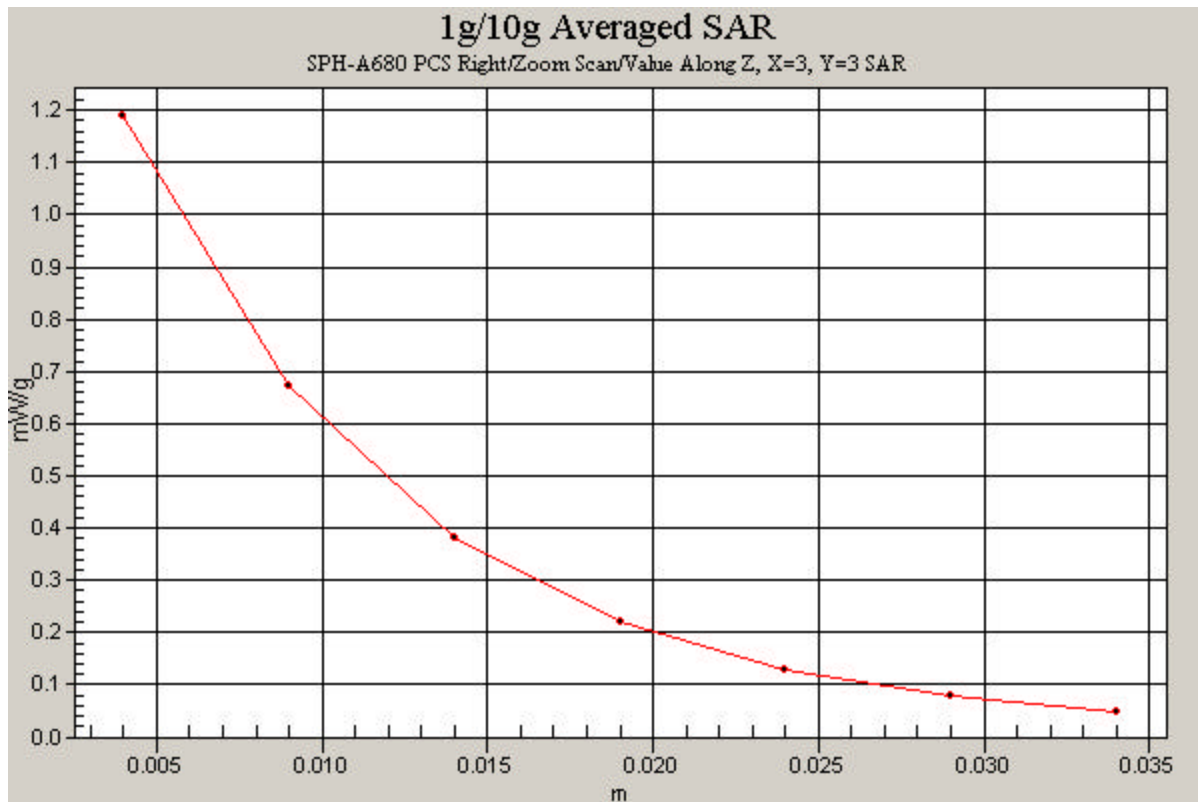
Area Scan (51x121x1): Measurement grid: dx=15mm, dy=15mm

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

Peak SAR (extrapolated) = 1.89 W/kg

SAR(1 g) = 1.05 mW/g; SAR(10 g) = 0.552 mW/g

Reference Value = 5.4 V/m



PCTEST ENGINEERING LABORATORY, INC.

DUT: SPH-A680; Type: SAMSUNG Tri Mode Phone; SN: 3F0F7C4D

Communication System: PCS CDMA; Frequency: 1851.25 MHz; Duty Cycle: 1:1

Medium: 1900 Muscle ($\sigma = 1.58 \text{ mho/m}$, $\epsilon_r = 51.01$, $\rho = 1000 \text{ kg/m}^3$)

Phantom section: Flat Section

Test Date: 02-27-2004; Ambient Temp: 23.3°C; Tissue Temp: 20.2°C

Probe: ES3DV2 - SN3022; ConvF(4.5, 4.5, 4.5); Calibrated: 9/23/2003

Sensor-Surface: 4mm (Mechanical Surface Detection)

Electronics: DAE3 Sn455; Phantom: SAM 12b; Type: SAM 4.0; Serial: TP:1197

Measurement SW: DASY4, V4.2 Build 12; Postprocessing SW: SEMCAD, V1.8 Build 93

PCS Body 2.5cm Space, Ch.0025, Antenna Out, Standard Battery, Conducted Power: 24.5dBm

Area Scan (51x91x1): Measurement grid: dx=15mm, dy=15mm

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

Peak SAR (extrapolated) = 1.61 W/kg

SAR(1 g) = 0.972 mW/g; SAR(10 g) = 0.567 mW/g

Reference Value = 21.9 V/m

