

Appendix B

Measurement Plots

Test Laboratory: ELECTRONIC TECHNOLOGY SYSTEMS DR. GENZ GMBH

Dipol Valid.1900(h)_250mW

DUT: Dipole 1900 MHz; Type: D1900V2; Serial: 5d025

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

Medium: Head 1900 MHz Medium parameters used: $f = 1900$ MHz; $\sigma = 1.42$ mho/m; $\epsilon_r = 39.9$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

DASY4 Configuration:

- Probe: ET3DV6 - SN1711; ConvF(5.16, 5.16, 5.16); Calibrated: 10/16/2006
- Sensor-Surface: 4mm (Mechanical And Optical Surface Detection)
- Electronics: DAE3 Sn522; Calibrated: 9/21/2006
- Phantom: SAM 12; Type: TP-1217; Serial: QD000P40CA
- Measurement SW: DASY4, V4.6 Build 23; Postprocessing SW: SEMCAD, V1.8 Build 171

Dipol 1900 (250mW)/Area Scan (61x81x1): Measurement grid: dx=10mm, dy=10mm
Maximum value of SAR (interpolated) = 11.6 mW/g

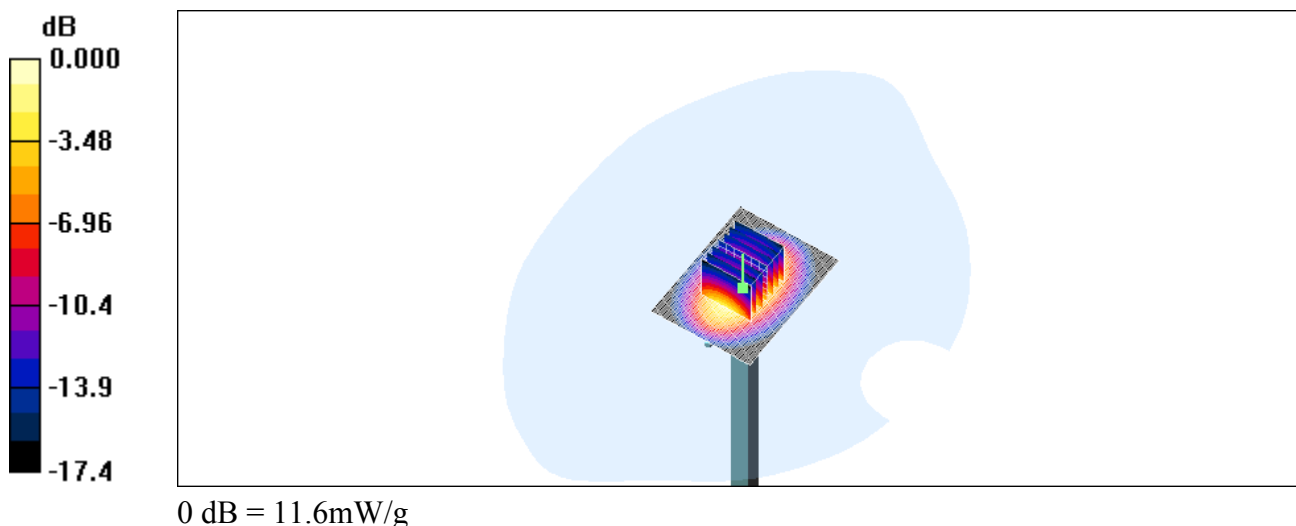
Dipol 1900 (250mW)/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 96.0 V/m; Power Drift = -0.006 dB

Peak SAR (extrapolated) = 17.9 W/kg

SAR(1 g) = 10.2 mW/g; SAR(10 g) = 5.38 mW/g

Maximum value of SAR (measured) = 11.6 mW/g



Test Laboratory: ELECTRONIC TECHNOLOGY SYSTEMS DR. GENZ GMBH

Dipol Valid.1900(m)_250mW_9.11.2006

DUT: Dipole 1900 MHz; Type: D1900V2; Serial: 5d025

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

Medium: Muscle 1900 MHz Medium parameters used: $f = 1900$ MHz; $\sigma = 1.58$ mho/m; $\epsilon_r = 51.9$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

DASY4 Configuration:

- Probe: ET3DV6 - SN1711; ConvF(4.57, 4.57, 4.57); Calibrated: 10/16/2006
- Sensor-Surface: 4mm (Mechanical And Optical Surface Detection)
- Electronics: DAE3 Sn522; Calibrated: 9/21/2006
- Phantom: SAM 12; Type: TP-1217; Serial: QD000P40CA
- Measurement SW: DASY4, V4.6 Build 23; Postprocessing SW: SEMCAD, V1.8 Build 171

Dipol 1900 (250mW)/Area Scan (61x81x1): Measurement grid: $dx=10$ mm, $dy=10$ mm
Maximum value of SAR (interpolated) = 13.7 mW/g

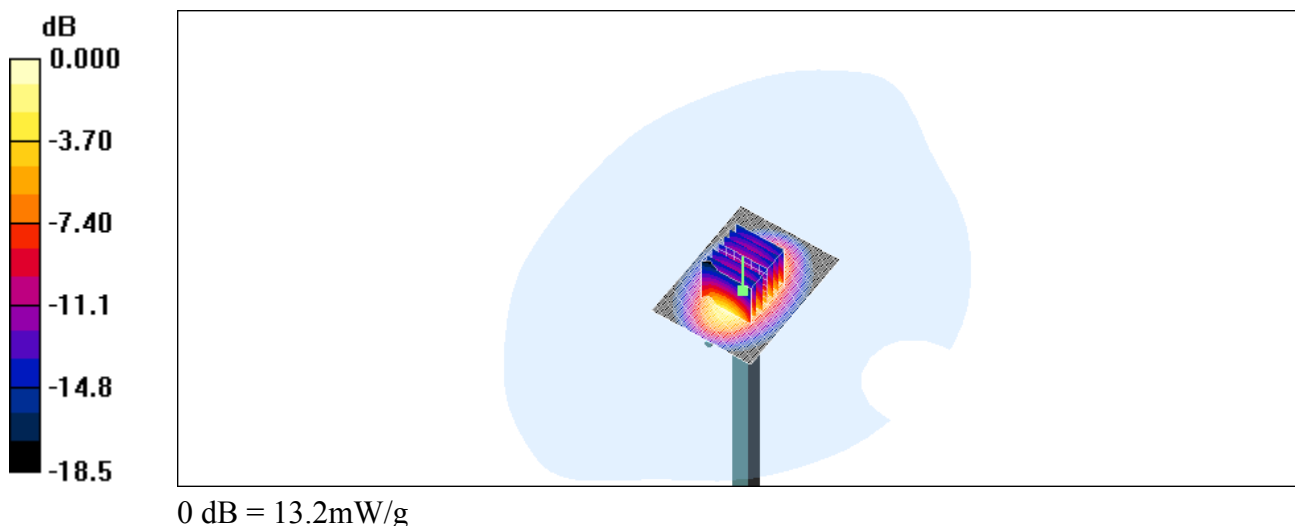
Dipol 1900 (250mW)/Zoom Scan (7x7x7)/Cube 0: Measurement grid: $dx=5$ mm, $dy=5$ mm, $dz=5$ mm

Reference Value = 98.2 V/m; Power Drift = -0.070 dB

Peak SAR (extrapolated) = 19.6 W/kg

SAR(1 g) = 11.6 mW/g; SAR(10 g) = 6.09 mW/g

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



Test Laboratory: ELECTRONIC TECHNOLOGY SYSTEMS DR. GENZ GMBH

left_ch2_cheek

DUT: DeTeWe Systems GmbH; Type: DECT Handset (USA); Serial: Aastra Phone 142 - UPCS

Communication System: UPCS single slot; Frequency: 1924.99 MHz; Duty Cycle: 1:24
Medium: Head 1900 MHz Medium parameters used: $f = 1924.99 \text{ MHz}$; $\sigma = 1.44 \text{ mho/m}$; $\epsilon_r = 39.7$; $\rho = 1000 \text{ kg/m}^3$
Phantom section: Left Section

DASY4 Configuration:

- Probe: ET3DV6 - SN1711; ConvF(4.89, 4.89, 4.89); Calibrated: 10/16/2006
- Sensor-Surface: 4mm (Mechanical And Optical Surface Detection)
- Electronics: DAE3 Sn522; Calibrated: 9/21/2006
- Phantom: SAM 12; Type: TP-1217; Serial: QD000P40CA
- Measurement SW: DASY4, V4.6 Build 23; Postprocessing SW: SEMCAD, V1.8 Build 171

Aastra Phone 142/Area Scan (71x131x1): Measurement grid: $dx=10\text{mm}$, $dy=10\text{mm}$
Maximum value of SAR (interpolated) = 0.059 mW/g

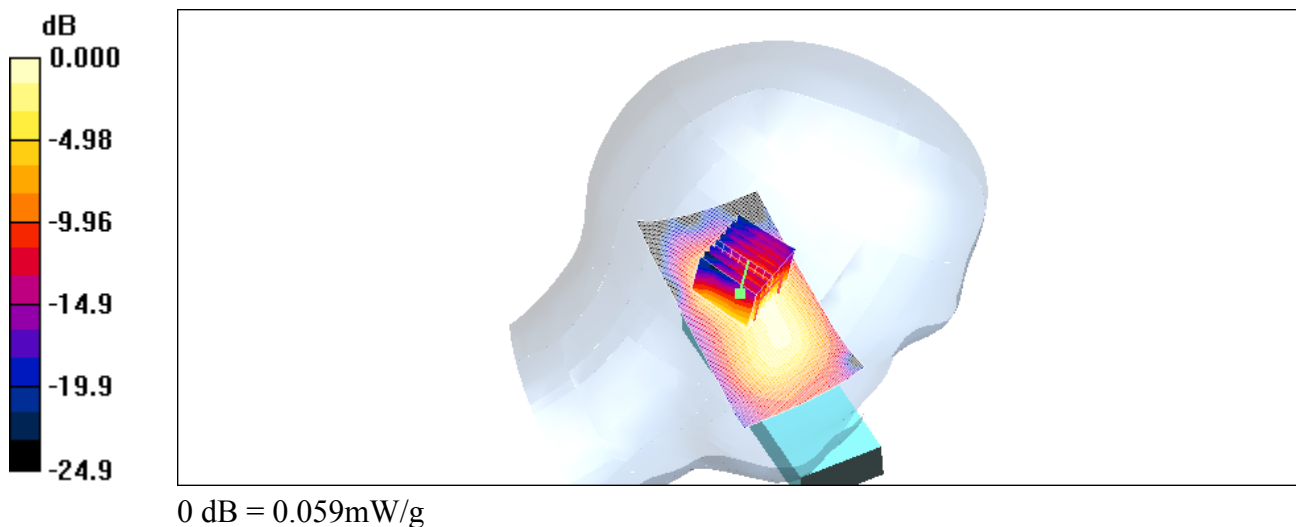
Aastra Phone 142/Zoom Scan (8x8x7)/Cube 0: Measurement grid: $dx=5\text{mm}$, $dy=5\text{mm}$, $dz=5\text{mm}$

Reference Value = 6.90 V/m; Power Drift = 0.008 dB

Peak SAR (extrapolated) = 0.090 W/kg

SAR(1 g) = 0.053 mW/g; SAR(10 g) = 0.029 mW/g

Maximum value of SAR (measured) = 0.059 mW/g



Test Laboratory: ELECTRONIC TECHNOLOGY SYSTEMS DR. GENZ GMBH

left_ch2_tilted

DUT: DeTeWe Systems GmbH; Type: DECT Handset (USA); Serial: Aastra Phone 142 - UPCS

Communication System: UPCS single slot; Frequency: 1924.99 MHz; Duty Cycle: 1:24
Medium: Head 1900 MHz Medium parameters used: $f = 1924.99$ MHz; $\sigma = 1.44$ mho/m; $\epsilon_r = 39.7$; $\rho = 1000$ kg/m³
Phantom section: Left Section

DASY4 Configuration:

- Probe: ET3DV6 - SN1711; ConvF(4.89, 4.89, 4.89); Calibrated: 10/16/2006
- Sensor-Surface: 4mm (Mechanical And Optical Surface Detection)
- Electronics: DAE3 Sn522; Calibrated: 9/21/2006
- Phantom: SAM 12; Type: TP-1217; Serial: QD000P40CA
- Measurement SW: DASY4, V4.6 Build 23; Postprocessing SW: SEMCAD, V1.8 Build 171

Aastra Phone 142/Area Scan (101x141x1): Measurement grid: dx=10mm, dy=10mm
Maximum value of SAR (interpolated) = 0.059 mW/g

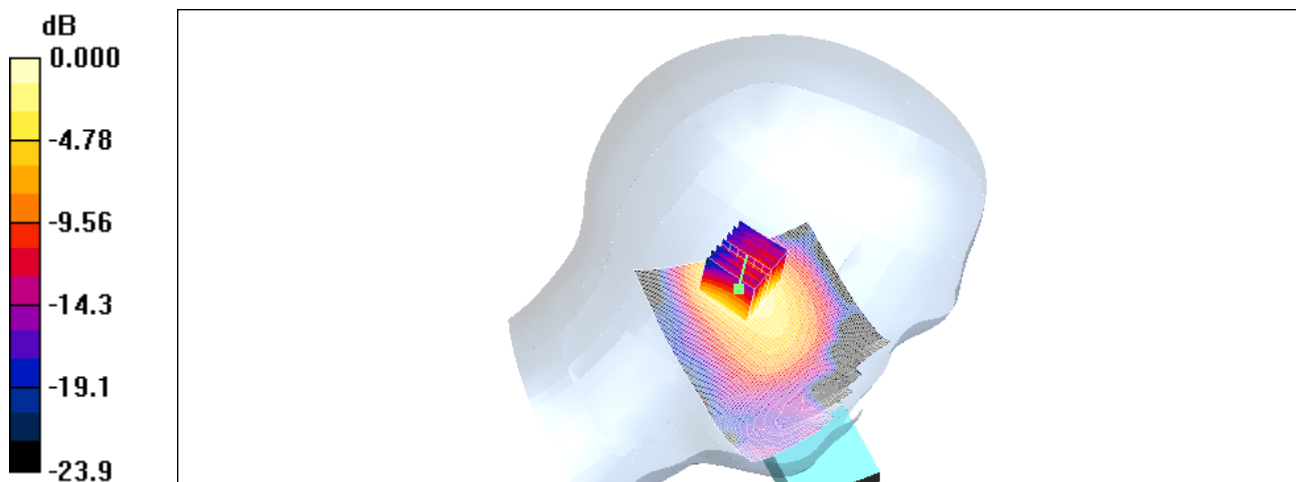
Aastra Phone 142/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 6.65 V/m; Power Drift = 0.014 dB

Peak SAR (extrapolated) = 0.087 W/kg

SAR(1 g) = 0.051 mW/g; SAR(10 g) = 0.027 mW/g

Maximum value of SAR (measured) = 0.057 mW/g



0 dB = 0.057mW/g

Test Laboratory: ELECTRONIC TECHNOLOGY SYSTEMS DR. GENZ GMBH

right_ch0_cheek

DUT: DeTeWe Systems GmbH; Type: DECT Handset (USA); Serial: Aastra Phone 142 - UPCS

Communication System: UPCS single slot; Frequency: 1928.45 MHz; Duty Cycle: 1:24
Medium: Head 1900 MHz Medium parameters used: $f = 1928.45 \text{ MHz}$; $\sigma = 1.45 \text{ mho/m}$; $\epsilon_r = 39.6$; $\rho = 1000 \text{ kg/m}^3$
Phantom section: Right Section

DASY4 Configuration:

- Probe: ET3DV6 - SN1711; ConvF(4.89, 4.89, 4.89); Calibrated: 10/16/2006
- Sensor-Surface: 4mm (Mechanical And Optical Surface Detection)
- Electronics: DAE3 Sn522; Calibrated: 9/21/2006
- Phantom: SAM 12; Type: TP-1217; Serial: QD000P40CA
- Measurement SW: DASY4, V4.6 Build 23; Postprocessing SW: SEMCAD, V1.8 Build 171

Aastra Phone 142/Area Scan (101x161x1): Measurement grid: $dx=10\text{mm}$, $dy=10\text{mm}$
Maximum value of SAR (interpolated) = 0.081 mW/g

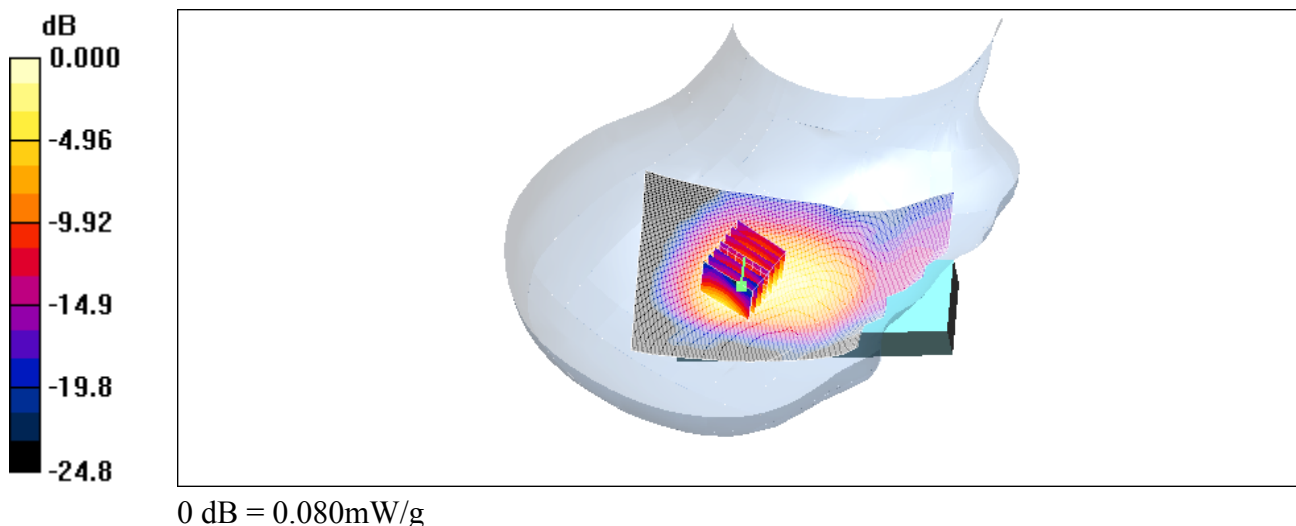
Aastra Phone 142/Zoom Scan (7x7x7)/Cube 0: Measurement grid: $dx=5\text{mm}$, $dy=5\text{mm}$, $dz=5\text{mm}$

Reference Value = 5.53 V/m ; Power Drift = -0.006 dB

Peak SAR (extrapolated) = 0.126 W/kg

SAR(1 g) = 0.072 mW/g ; SAR(10 g) = 0.038 mW/g

Maximum value of SAR (measured) = 0.080 mW/g



Test Laboratory: ELECTRONIC TECHNOLOGY SYSTEMS DR. GENZ GMBH

right_ch2_cheek

DUT: DeTeWe Systems GmbH; Type: DECT Handset (USA); Serial: Aastra Phone 142 - UPCS

Communication System: UPCS single slot; Frequency: 1924.99 MHz; Duty Cycle: 1:24
Medium: Head 1900 MHz Medium parameters used: $f = 1924.99 \text{ MHz}$; $\sigma = 1.44 \text{ mho/m}$; $\epsilon_r = 39.7$; $\rho = 1000 \text{ kg/m}^3$
Phantom section: Right Section

DASY4 Configuration:

- Probe: ET3DV6 - SN1711; ConvF(4.89, 4.89, 4.89); Calibrated: 10/16/2006
- Sensor-Surface: 4mm (Mechanical And Optical Surface Detection)
- Electronics: DAE3 Sn522; Calibrated: 9/21/2006
- Phantom: SAM 12; Type: TP-1217; Serial: QD000P40CA
- Measurement SW: DASY4, V4.6 Build 23; Postprocessing SW: SEMCAD, V1.8 Build 171

Aastra Phone 142/Area Scan (101x161x1): Measurement grid: $dx=10\text{mm}$, $dy=10\text{mm}$
Maximum value of SAR (interpolated) = 0.073 mW/g

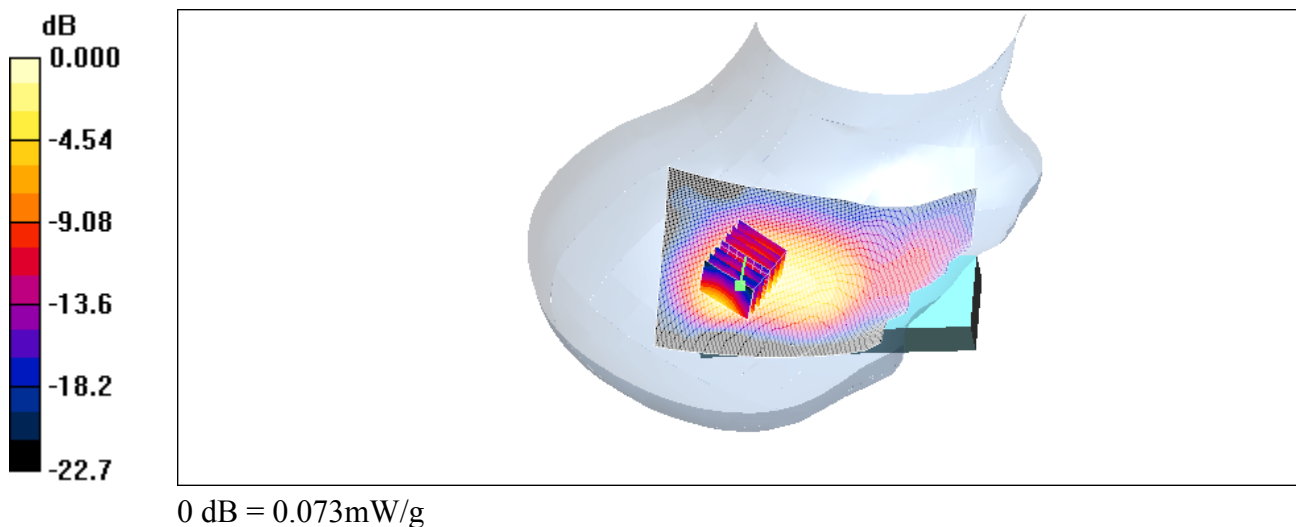
Aastra Phone 142/Zoom Scan (7x7x7)/Cube 0: Measurement grid: $dx=5\text{mm}$, $dy=5\text{mm}$, $dz=5\text{mm}$

Reference Value = 7.42 V/m ; Power Drift = 0.020 dB

Peak SAR (extrapolated) = 0.111 W/kg

SAR(1 g) = 0.064 mW/g ; SAR(10 g) = 0.034 mW/g

Maximum value of SAR (measured) = 0.073 mW/g



Test Laboratory: ELECTRONIC TECHNOLOGY SYSTEMS DR. GENZ GMBH

right_ch2_tilted

DUT: DeTeWe Systems GmbH; Type: DECT Handset (USA); Serial: Aastra Phone 142 - UPCS

Communication System: UPCS single slot; Frequency: 1924.99 MHz; Duty Cycle: 1:24
Medium: Head 1900 MHz Medium parameters used: $f = 1924.99 \text{ MHz}$; $\sigma = 1.44 \text{ mho/m}$; $\epsilon_r = 39.7$; $\rho = 1000 \text{ kg/m}^3$
Phantom section: Right Section

DASY4 Configuration:

- Probe: ET3DV6 - SN1711; ConvF(4.89, 4.89, 4.89); Calibrated: 10/16/2006
- Sensor-Surface: 4mm (Mechanical And Optical Surface Detection)
- Electronics: DAE3 Sn522; Calibrated: 9/21/2006
- Phantom: SAM 12; Type: TP-1217; Serial: QD000P40CA
- Measurement SW: DASY4, V4.6 Build 23; Postprocessing SW: SEMCAD, V1.8 Build 171

Aastra Phone 142/Area Scan (101x141x1): Measurement grid: $dx=10\text{mm}$, $dy=10\text{mm}$
Maximum value of SAR (interpolated) = 0.068 mW/g

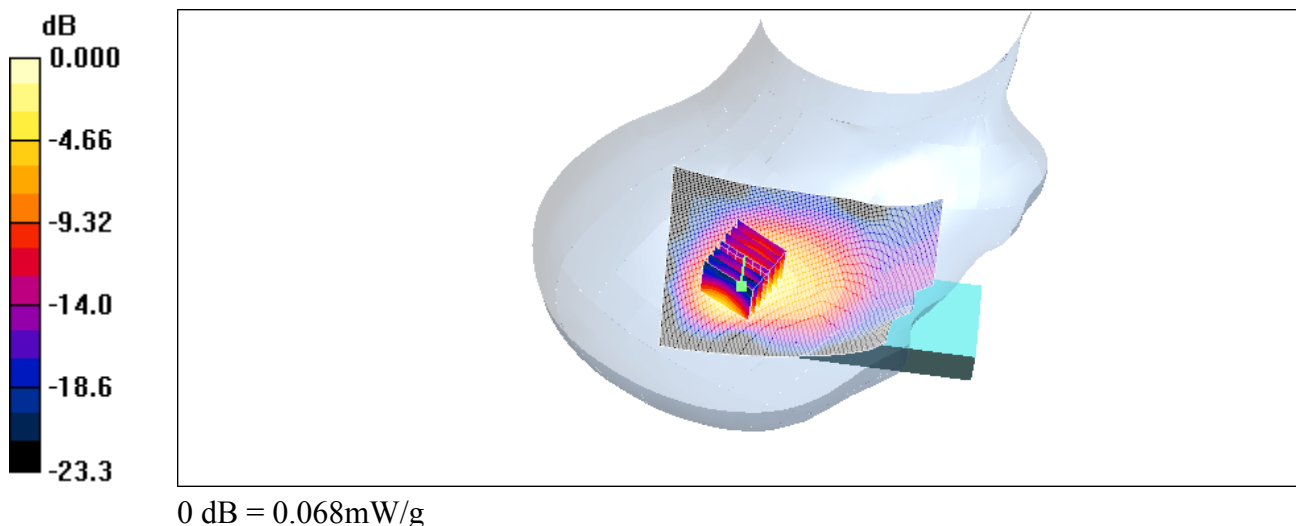
Aastra Phone 142/Zoom Scan (7x7x7)/Cube 0: Measurement grid: $dx=5\text{mm}$, $dy=5\text{mm}$, $dz=5\text{mm}$

Reference Value = 7.06 V/m ; Power Drift = -0.015 dB

Peak SAR (extrapolated) = 0.107 W/kg

SAR(1 g) = 0.060 mW/g ; SAR(10 g) = 0.031 mW/g

Maximum value of SAR (measured) = 0.068 mW/g



Test Laboratory: ELECTRONIC TECHNOLOGY SYSTEMS DR. GENZ GMBH

right_ch4_cheek

DUT: DeTeWe Systems GmbH; Type: DECT Handset (USA); Serial: Aastra Phone 142 - UPCS

Communication System: UPCS single slot; Frequency: 1921.54 MHz; Duty Cycle: 1:24
Medium: Head 1900 MHz Medium parameters used: $f = 1921.54 \text{ MHz}$; $\sigma = 1.44 \text{ mho/m}$; $\epsilon_r = 39.7$; $\rho = 1000 \text{ kg/m}^3$
Phantom section: Right Section

DASY4 Configuration:

- Probe: ET3DV6 - SN1711; ConvF(4.89, 4.89, 4.89); Calibrated: 10/16/2006
- Sensor-Surface: 4mm (Mechanical And Optical Surface Detection)
- Electronics: DAE3 Sn522; Calibrated: 9/21/2006
- Phantom: SAM 12; Type: TP-1217; Serial: QD000P40CA
- Measurement SW: DASY4, V4.6 Build 23; Postprocessing SW: SEMCAD, V1.8 Build 171

Aastra Phone 142/Area Scan (101x161x1): Measurement grid: $dx=10\text{mm}$, $dy=10\text{mm}$
Maximum value of SAR (interpolated) = 0.082 mW/g

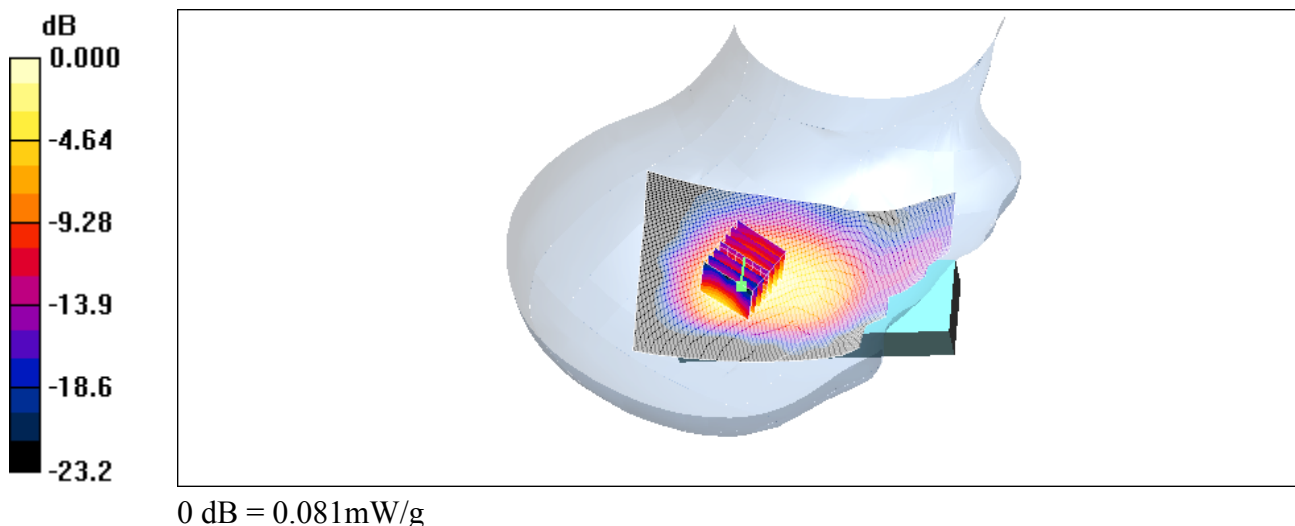
Aastra Phone 142/Zoom Scan (7x7x7)/Cube 0: Measurement grid: $dx=5\text{mm}$, $dy=5\text{mm}$, $dz=5\text{mm}$

Reference Value = 6.32 V/m ; Power Drift = -0.038 dB

Peak SAR (extrapolated) = 0.124 W/kg

SAR(1 g) = 0.072 mW/g ; SAR(10 g) = 0.038 mW/g

Maximum value of SAR (measured) = 0.081 mW/g



Test Laboratory: ELECTRONIC TECHNOLOGY SYSTEMS DR. GENZ GMBH

flat_front_ch0

DUT: DeTeWe Systems GmbH; Type: DECT Handset (USA); Serial: Aastra Phone 142

Communication System: UPCS single slot; Frequency: 1928.45 MHz; Duty Cycle: 1:24

Medium: Muscle 1900 MHz Medium parameters used: $f = 1928.54$ MHz; $\sigma = 1.61$ mho/m; $\epsilon_r = 51.8$;

$\rho = 1000$ kg/m³

Phantom section: Flat Section

DASY4 Configuration:

- Probe: ET3DV6 - SN1711; ConvF(4.42, 4.42, 4.42); Calibrated: 10/16/2006
- Sensor-Surface: 4mm (Mechanical And Optical Surface Detection)
- Electronics: DAE3 Sn522; Calibrated: 9/21/2006
- Phantom: SAM 12; Type: TP-1217; Serial: QD000P40CA
- Measurement SW: DASY4, V4.6 Build 23; Postprocessing SW: SEMCAD, V1.8 Build 171

Aastra Phone 142/Area Scan (101x181x1): Measurement grid: dx=10mm, dy=10mm

Maximum value of SAR (interpolated) = 0.086 mW/g

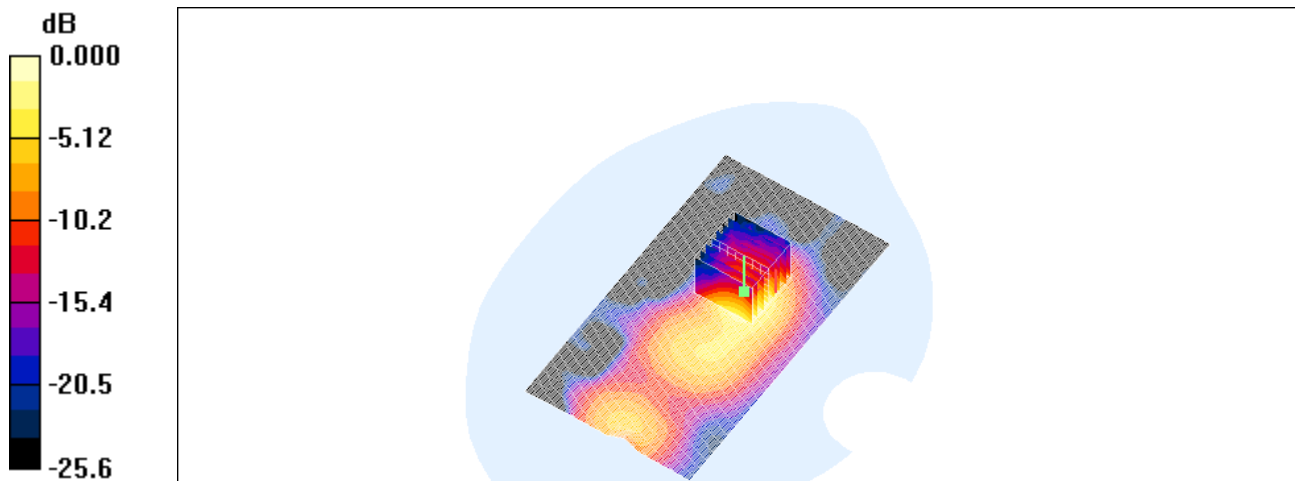
Aastra Phone 142/Zoom Scan (8x8x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 3.37 V/m; Power Drift = 0.089 dB

Peak SAR (extrapolated) = 0.129 W/kg

SAR(1 g) = 0.074 mW/g; SAR(10 g) = 0.037 mW/g

Maximum value of SAR (measured) = 0.084 mW/g



0 dB = 0.084mW/g

Test Laboratory: ELECTRONIC TECHNOLOGY SYSTEMS DR. GENZ GMBH

flat_front_ch2

DUT: DeTeWe Systems GmbH; Type: DECT Handset (USA); Serial: Aastra Phone 142

Communication System: UPCS single slot; Frequency: 1924.99 MHz; Duty Cycle: 1:24

Medium: Muscle 1900 MHz Medium parameters used: $f = 1924.99$ MHz; $\sigma = 1.6$ mho/m; $\epsilon_r = 51.9$;

$\rho = 1000$ kg/m³

Phantom section: Flat Section

DASY4 Configuration:

- Probe: ET3DV6 - SN1711; ConvF(4.42, 4.42, 4.42); Calibrated: 10/16/2006
- Sensor-Surface: 4mm (Mechanical And Optical Surface Detection)
- Electronics: DAE3 Sn522; Calibrated: 9/21/2006
- Phantom: SAM 12; Type: TP-1217; Serial: QD000P40CA
- Measurement SW: DASY4, V4.6 Build 23; Postprocessing SW: SEMCAD, V1.8 Build 171

Aastra Phone 142/Area Scan (101x181x1): Measurement grid: dx=10mm, dy=10mm

Maximum value of SAR (interpolated) = 0.094 mW/g

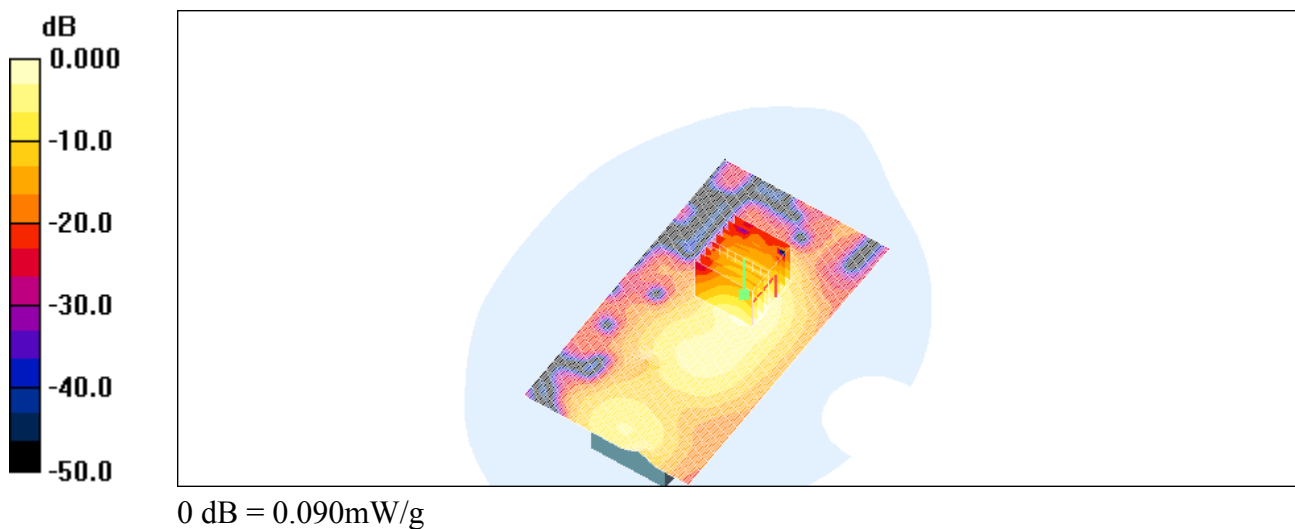
Aastra Phone 142/Zoom Scan (8x8x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 3.33 V/m; Power Drift = -0.077 dB

Peak SAR (extrapolated) = 0.140 W/kg

SAR(1 g) = 0.079 mW/g; SAR(10 g) = 0.040 mW/g

Maximum value of SAR (measured) = 0.090 mW/g



Test Laboratory: ELECTRONIC TECHNOLOGY SYSTEMS DR. GENZ GMBH

flat_back_ch2_clip

DUT: DeTeWe Systems GmbH; Type: DECT Handset (USA); Serial: Aastra Phone 142

Communication System: UPCS single slot; Frequency: 1924.99 MHz; Duty Cycle: 1:24

Medium: Muscle 1900 MHz Medium parameters used: $f = 1924.99$ MHz; $\sigma = 1.6$ mho/m; $\epsilon_r = 51.9$;

$\rho = 1000$ kg/m³

Phantom section: Flat Section

DASY4 Configuration:

- Probe: ET3DV6 - SN1711; ConvF(4.42, 4.42, 4.42); Calibrated: 10/16/2006
- Sensor-Surface: 4mm (Mechanical And Optical Surface Detection)
- Electronics: DAE3 Sn522; Calibrated: 9/21/2006
- Phantom: SAM 12; Type: TP-1217; Serial: QD000P40CA
- Measurement SW: DASY4, V4.6 Build 23; Postprocessing SW: SEMCAD, V1.8 Build 171

Aastra Phone 142/Area Scan (101x181x1): Measurement grid: dx=10mm, dy=10mm

Maximum value of SAR (interpolated) = 0.017 mW/g

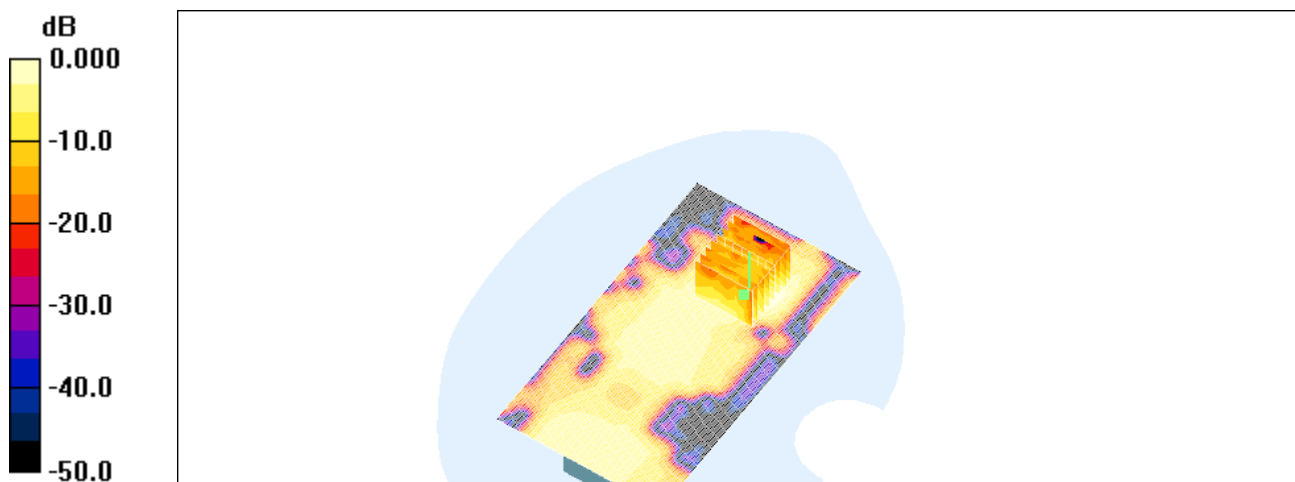
Aastra Phone 142/Zoom Scan (8x8x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 2.08 V/m; Power Drift = 0.008 dB

Peak SAR (extrapolated) = 0.025 W/kg

SAR(1 g) = 0.015 mW/g; SAR(10 g) = 0.00799 mW/g

Maximum value of SAR (measured) = 0.017 mW/g



0 dB = 0.017mW/g

Test Laboratory: ELECTRONIC TECHNOLOGY SYSTEMS DR. GENZ GMBH

flat_front_ch4

DUT: DeTeWe Systems GmbH; Type: DECT Handset (USA); Serial: Aastra Phone 142

Communication System: UPCS single slot; Frequency: 1921.54 MHz; Duty Cycle: 1:24

Medium: Muscle 1900 MHz Medium parameters used: $f = 1921.54$ MHz; $\sigma = 1.6$ mho/m; $\epsilon_r = 51.9$;

$\rho = 1000$ kg/m³

Phantom section: Flat Section

DASY4 Configuration:

- Probe: ET3DV6 - SN1711; ConvF(4.42, 4.42, 4.42); Calibrated: 10/16/2006
- Sensor-Surface: 4mm (Mechanical And Optical Surface Detection)
- Electronics: DAE3 Sn522; Calibrated: 9/21/2006
- Phantom: SAM 12; Type: TP-1217; Serial: QD000P40CA
- Measurement SW: DASY4, V4.6 Build 23; Postprocessing SW: SEMCAD, V1.8 Build 171

Aastra Phone 142/Area Scan (101x181x1): Measurement grid: dx=10mm, dy=10mm

Maximum value of SAR (interpolated) = 0.093 mW/g

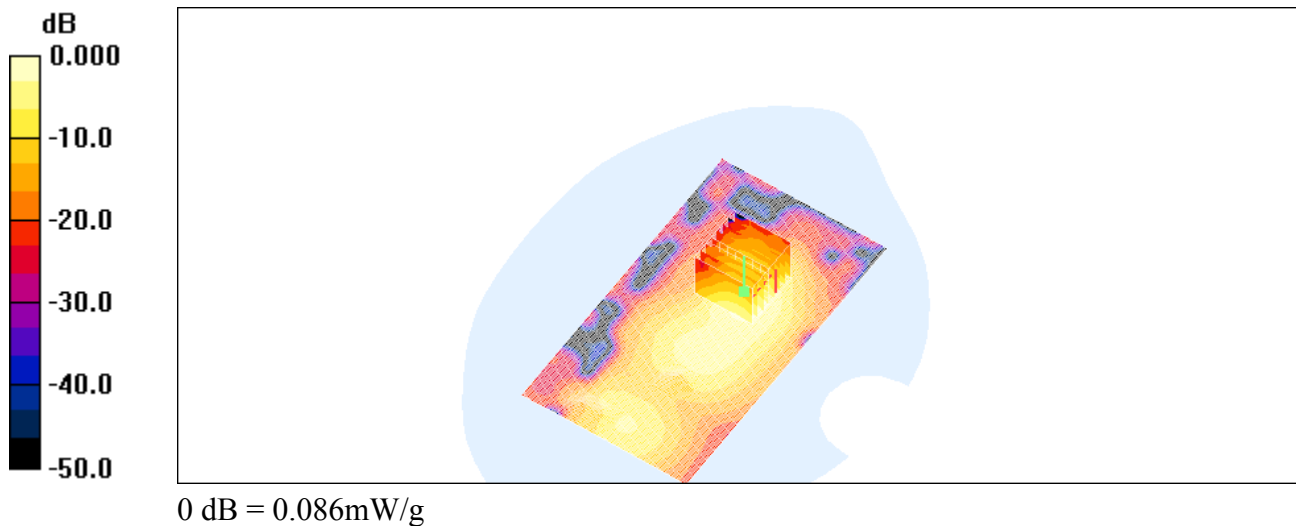
Aastra Phone 142/Zoom Scan (8x8x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 3.48 V/m; Power Drift = -0.065 dB

Peak SAR (extrapolated) = 0.132 W/kg

SAR(1 g) = 0.076 mW/g; SAR(10 g) = 0.038 mW/g

Maximum value of SAR (measured) = 0.086 mW/g



Test Laboratory: ELECTRONIC TECHNOLOGY SYSTEMS DR. GENZ GMBH

Z-axis scan

DUT: DeTeWe Systems GmbH; Type: DECT Handset (USA); Serial: Aastra Phone 142

Communication System: UPCS single slot; Frequency: 1924.99 MHz; Duty Cycle: 1:24

Medium: Muscle 1900 MHz Medium parameters used: $f = 1924.99$ MHz; $\sigma = 1.6$ mho/m; $\epsilon_r = 51.9$;

$\rho = 1000$ kg/m³

Phantom section: Flat Section

DASY4 Configuration:

- Probe: ET3DV6 - SN1711; ConvF(4.42, 4.42, 4.42); Calibrated: 10/16/2006
- Sensor-Surface: 4mm (Mechanical And Optical Surface Detection)
- Electronics: DAE3 Sn522; Calibrated: 9/21/2006
- Phantom: SAM 12; Type: TP-1217; Serial: QD000P40CA
- Measurement SW: DASY4, V4.6 Build 23; Postprocessing SW: SEMCAD, V1.8 Build 171

Aastra Phone 142/Area Scan (101x181x1): Measurement grid: dx=10mm, dy=10mm

Maximum value of SAR (interpolated) = 0.094 mW/g

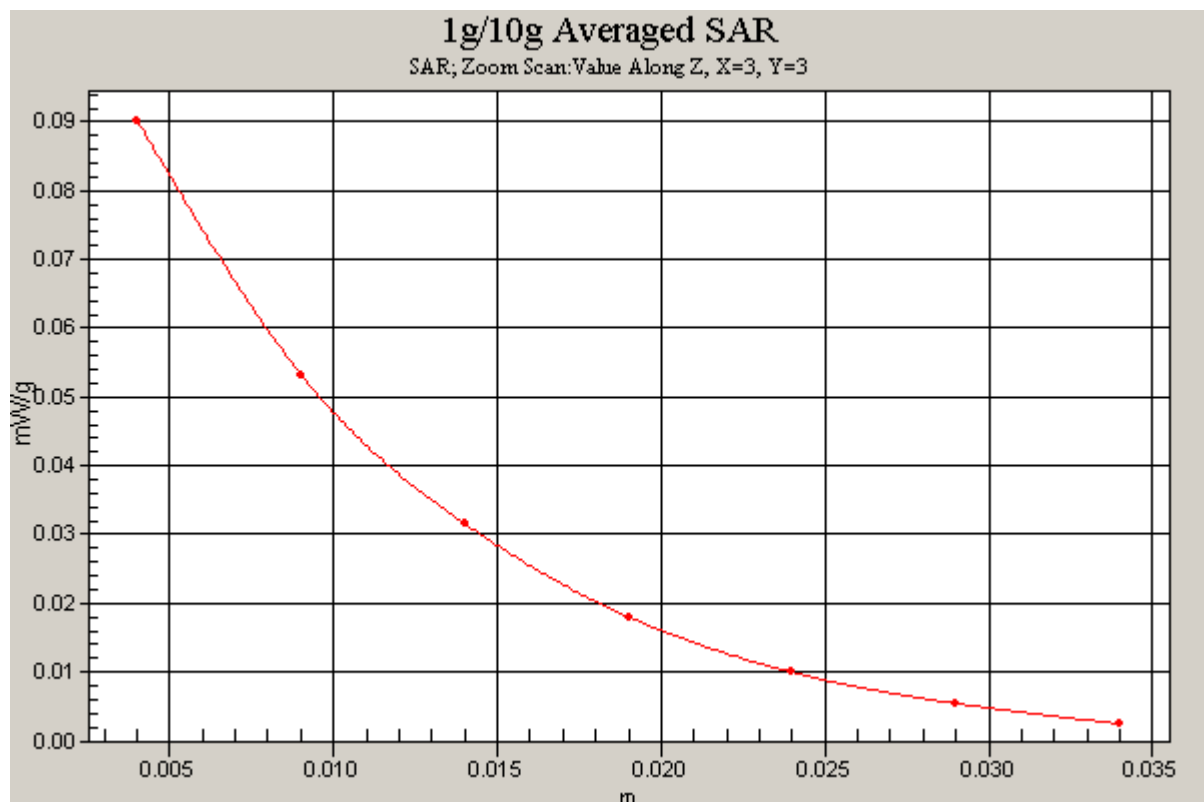
Aastra Phone 142/Zoom Scan (8x8x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 3.33 V/m; Power Drift = -0.077 dB

Peak SAR (extrapolated) = 0.140 W/kg

SAR(1 g) = 0.079 mW/g; SAR(10 g) = 0.040 mW/g

Maximum value of SAR (measured) = 0.090 mW/g



Appendix C

Pictures

Appendix

C. Pictures





