

Appendix B

Measurement Plots

Test Laboratory: ELECTRONIC TECHNOLOGY SYSTEMS DR. GENZ GMBH

Dipol Valid.900 (m)_250mW 16.03.2006

DUT: Dipole 900 MHz; Type: D900V2; Serial: 164

Communication System: CW; Frequency: 900 MHz; Duty Cycle: 1:1

Medium: Muscle 900 MHz Medium parameters used: $f = 900 \text{ MHz}$; $\sigma = 1.04 \text{ mho/m}$; $\epsilon_r = 54.4$; $\rho = 1000 \text{ kg/m}^3$

Phantom section: Flat Section

DASY4 Configuration:

- Probe: ET3DV6 - SN1711; ConvF(5.73, 5.73, 5.73); Calibrated: 11/21/2005
- Sensor-Surface: 4mm (Mechanical And Optical Surface Detection)
- Electronics: DAE3 Sn522; Calibrated: 11/23/2005
- Phantom: SAM 12; Type: TP-1217; Serial: QD000P40CA
- Measurement SW: DASY4, V4.6 Build 23; Postprocessing SW: SEMCAD, V1.8 Build 160

Dipol 900 (250mW)/Area Scan (81x161x1): Measurement grid: $dx=10\text{mm}$, $dy=10\text{mm}$
Maximum value of SAR (interpolated) = 3.18 mW/g

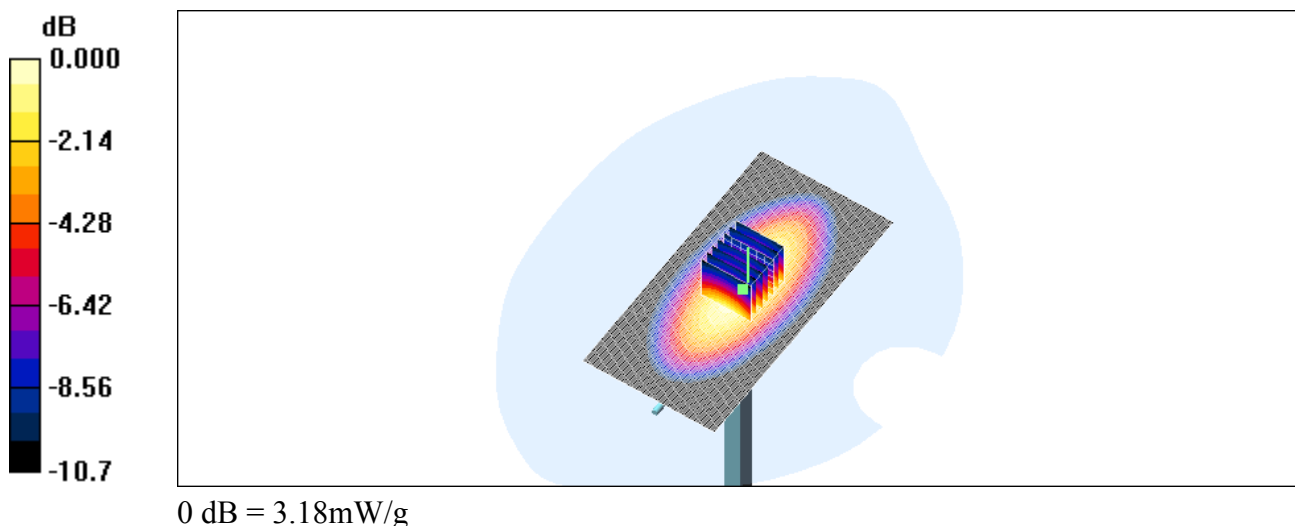
Dipol 900 (250mW)/Zoom Scan (7x7x7)/Cube 0: Measurement grid: $dx=5\text{mm}$, $dy=5\text{mm}$, $dz=5\text{mm}$

Reference Value = 57.0 V/m ; Power Drift = -0.024 dB

Peak SAR (extrapolated) = 4.21 W/kg

SAR(1 g) = 2.91 mW/g ; SAR(10 g) = 1.9 mW/g

Maximum value of SAR (measured) = 3.18 mW/g



Test Laboratory: ELECTRONIC TECHNOLOGY SYSTEMS DR. GENZ GMBH

Dipol Valid.1900(m)_250mW 16.3.06

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(4.31, 4.31, 4.31); Calibrated: 11/21/2005
- Sensor-Surface: 4mm (Mechanical And Optical Surface Detection)
- Electronics: DAE3 Sn522; Calibrated: 11/23/2005
- Phantom: SAM 12; Type: TP-1217; Serial: QD000P40CA
- Measurement SW: DASY4, V4.6 Build 23; Postprocessing SW: SEMCAD, V1.8 Build 160

Dipol 1900 (250mW)/Area Scan (61x81x1): Measurement grid: $dx=10$ mm, $dy=10$ mm
Maximum value of SAR (interpolated) = 13.4 mW/g

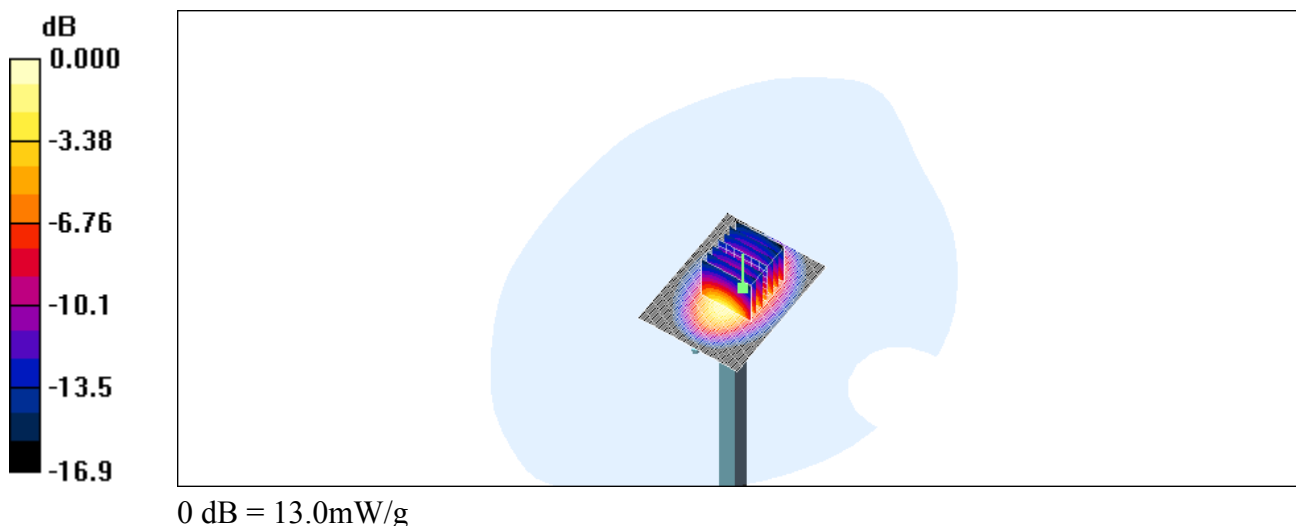
Dipol 1900 (250mW)/Zoom Scan (7x7x7)/Cube 0: Measurement grid: $dx=5$ mm, $dy=5$ mm, $dz=5$ mm

Reference Value = 93.4 V/m; Power Drift = 0.013 dB

Peak SAR (extrapolated) = 19.4 W/kg

SAR(1 g) = 11.5 mW/g; SAR(10 g) = 6.07 mW/g

Maximum value of SAR (measured) = 13.0 mW/g



Test Laboratory: ELECTRONIC TECHNOLOGY SYSTEMS DR. GENZ GMBH

850_flat_back_ch128_dist 5mm

DUT: Triple-Band GSM 850 (E-GSM)/DCS 1800 /PCS1900 (with WAP & GPRS); Type: ---; Serial: PG-3310

Communication System: GSM 850; Frequency: 824.2 MHz; Duty Cycle: 1:8.3

Medium: Muscle 900 MHz Medium parameters used: $f = 824.2 \text{ MHz}$; $\sigma = 0.962 \text{ mho/m}$; $\epsilon_r = 55.2$; $\rho = 1000 \text{ kg/m}^3$

Phantom section: Flat Section

DASY4 Configuration:

- Probe: ET3DV6 - SN1711; ConvF(5.73, 5.73, 5.73); Calibrated: 11/21/2005
- Sensor-Surface: 4mm (Mechanical And Optical Surface Detection)
- Electronics: DAE3 Sn522; Calibrated: 11/23/2005
- Phantom: SAM 12; Type: TP-1217; Serial: QD000P40CA
- Measurement SW: DASY4, V4.6 Build 23; Postprocessing SW: SEMCAD, V1.8 Build 160

PG-3310/Area Scan (61x101x1): Measurement grid: $dx=10\text{mm}$, $dy=10\text{mm}$

Maximum value of SAR (interpolated) = 0.574 mW/g

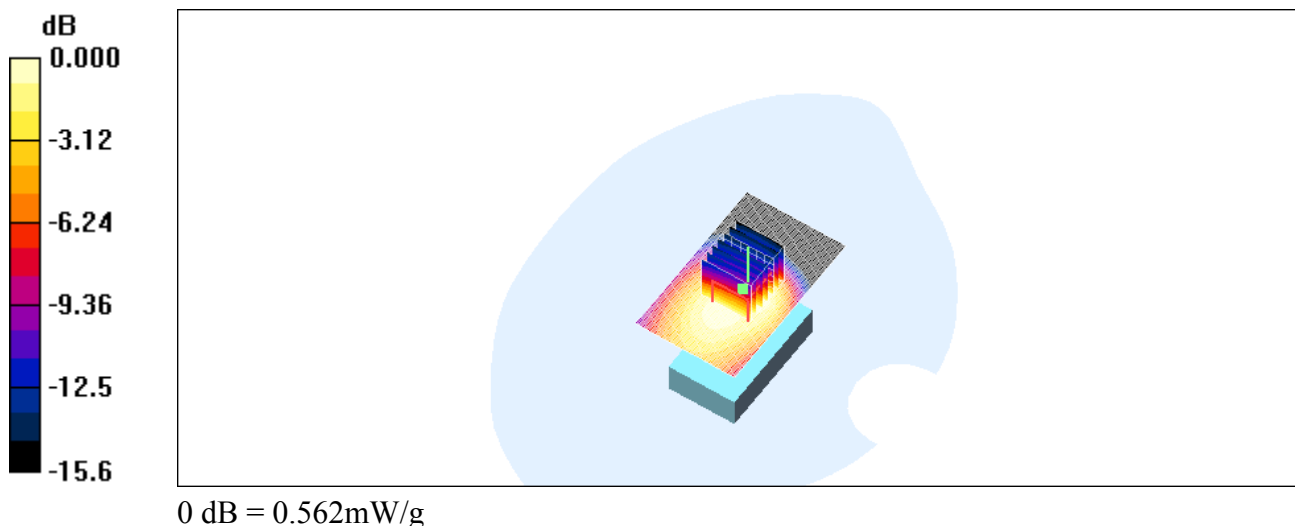
PG-3310/Zoom Scan (7x7x7)/Cube 0: Measurement grid: $dx=5\text{mm}$, $dy=5\text{mm}$, $dz=5\text{mm}$

Reference Value = 21.9 V/m; Power Drift = 0.002 dB

Peak SAR (extrapolated) = 1.31 W/kg

SAR(1 g) = 0.523 mW/g; SAR(10 g) = 0.277 mW/g

Maximum value of SAR (measured) = 0.562 mW/g



Test Laboratory: ELECTRONIC TECHNOLOGY SYSTEMS DR. GENZ GMBH

850_flat_front_ch189_dist 5mm

DUT: Triple-Band GSM 850 (E-GSM)/DCS 1800 /PCS1900 (with WAP & GPRS); Type: ---; Serial: PG-3310

Communication System: GSM 850; Frequency: 836.4 MHz; Duty Cycle: 1:8.3

Medium: Muscle 900 MHz Medium parameters used: $f = 836.4 \text{ MHz}$; $\sigma = 0.972 \text{ mho/m}$; $\epsilon_r = 55.1$; $\rho = 1000 \text{ kg/m}^3$

Phantom section: Flat Section

DASY4 Configuration:

- Probe: ET3DV6 - SN1711; ConvF(5.73, 5.73, 5.73); Calibrated: 11/21/2005
- Sensor-Surface: 4mm (Mechanical And Optical Surface Detection)
- Electronics: DAE3 Sn522; Calibrated: 11/23/2005
- Phantom: SAM 12; Type: TP-1217; Serial: QD000P40CA
- Measurement SW: DASY4, V4.6 Build 23; Postprocessing SW: SEMCAD, V1.8 Build 160

PG-3310/Area Scan (61x101x1): Measurement grid: $dx=10\text{mm}$, $dy=10\text{mm}$

Maximum value of SAR (interpolated) = 0.077 mW/g

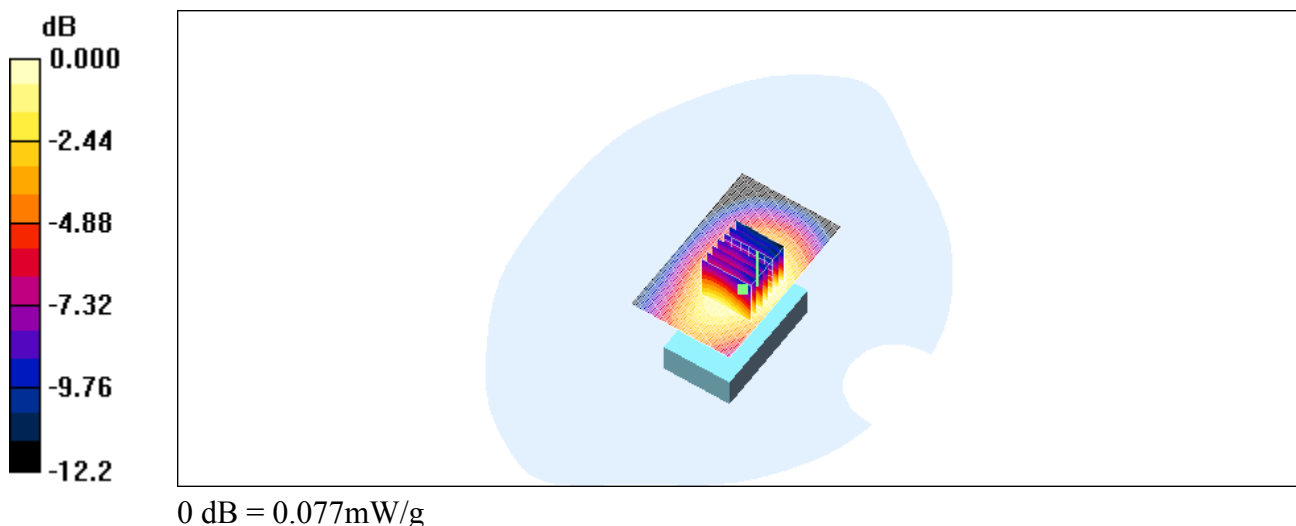
PG-3310/Zoom Scan (7x7x7)/Cube 0: Measurement grid: $dx=5\text{mm}$, $dy=5\text{mm}$, $dz=5\text{mm}$

Reference Value = 9.01 V/m ; Power Drift = 0.086 dB

Peak SAR (extrapolated) = 0.114 W/kg

SAR(1 g) = 0.072 mW/g ; SAR(10 g) = 0.049 mW/g

Maximum value of SAR (measured) = 0.077 mW/g



Test Laboratory: ELECTRONIC TECHNOLOGY SYSTEMS DR. GENZ GMBH

850_flat_back_ch189_dist 5mm

DUT: Triple-Band GSM 850 (E-GSM)/DCS 1800 /PCS1900 (with WAP & GPRS); Type: ---;
Serial: PG-3310

Communication System: GSM 850; Frequency: 836.4 MHz; Duty Cycle: 1:8.3

Medium: Muscle 900 MHz Medium parameters used: $f = 836.4 \text{ MHz}$; $\sigma = 0.972 \text{ mho/m}$; $\epsilon_r = 55.1$; $\rho = 1000 \text{ kg/m}^3$

Phantom section: Flat Section

DASY4 Configuration:

- Probe: ET3DV6 - SN1711; ConvF(5.73, 5.73, 5.73); Calibrated: 11/21/2005
- Sensor-Surface: 4mm (Mechanical And Optical Surface Detection)
- Electronics: DAE3 Sn522; Calibrated: 11/23/2005
- Phantom: SAM 12; Type: TP-1217; Serial: QD000P40CA
- Measurement SW: DASY4, V4.6 Build 23; Postprocessing SW: SEMCAD, V1.8 Build 160

PG-3310/Area Scan (61x101x1): Measurement grid: $dx=10\text{mm}$, $dy=10\text{mm}$

Maximum value of SAR (interpolated) = 0.687 mW/g

PG-3310/Zoom Scan (7x7x7)/Cube 0: Measurement grid: $dx=5\text{mm}$, $dy=5\text{mm}$, $dz=5\text{mm}$

Reference Value = 24.1 V/m ; Power Drift = -0.027 dB

Peak SAR (extrapolated) = 1.77 W/kg

SAR(1 g) = 0.632 mW/g ; SAR(10 g) = 0.336 mW/g

Maximum value of SAR (measured) = 0.671 mW/g

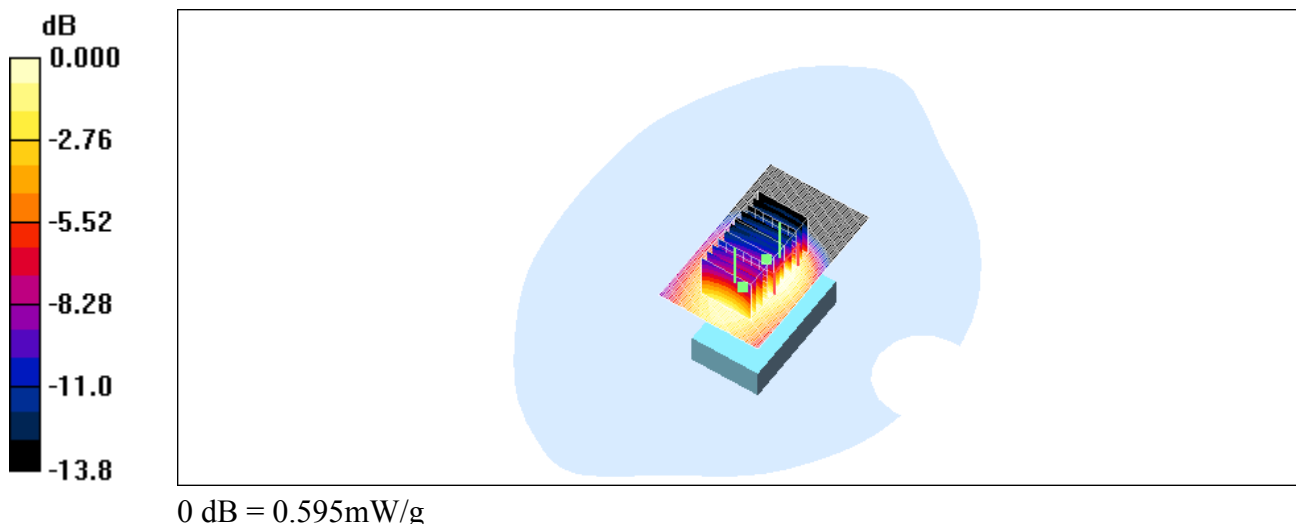
PG-3310/Zoom Scan (7x7x7)/Cube 1: Measurement grid: $dx=5\text{mm}$, $dy=5\text{mm}$, $dz=5\text{mm}$

Reference Value = 24.1 V/m ; Power Drift = -0.027 dB

Peak SAR (extrapolated) = 1.17 W/kg

SAR(1 g) = 0.553 mW/g ; SAR(10 g) = 0.358 mW/g

Maximum value of SAR (measured) = 0.595 mW/g



Test Laboratory: ELECTRONIC TECHNOLOGY SYSTEMS DR. GENZ GMBH

850_flat_back_ch251_dist 5mm

**DUT: Triple-Band GSM 850 (E-GSM)/DCS 1800 /PCS1900 (with WAP & GPRS); Type: ---;
Serial: PG-3310**

Communication System: GSM 850; Frequency: 848.8 MHz; Duty Cycle: 1:8.3

Medium: Muscle 900 MHz Medium parameters used: $f = 848.8$ MHz; $\sigma = 0.981$ mho/m; $\epsilon_r = 55$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

DASY4 Configuration:

- Probe: ET3DV6 - SN1711; ConvF(5.73, 5.73, 5.73); Calibrated: 11/21/2005
- Sensor-Surface: 4mm (Mechanical And Optical Surface Detection)
- Electronics: DAE3 Sn522; Calibrated: 11/23/2005
- Phantom: SAM 12; Type: TP-1217; Serial: QD000P40CA
- Measurement SW: DASY4, V4.6 Build 23; Postprocessing SW: SEMCAD, V1.8 Build 160

PG-3310/Area Scan (61x101x1): Measurement grid: dx=10mm, dy=10mm

Maximum value of SAR (interpolated) = 0.756 mW/g

PG-3310/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 23.9 V/m; Power Drift = 0.044 dB

Peak SAR (extrapolated) = 1.73 W/kg

SAR(1 g) = 0.681 mW/g; SAR(10 g) = 0.351 mW/g

Maximum value of SAR (measured) = 0.750 mW/g

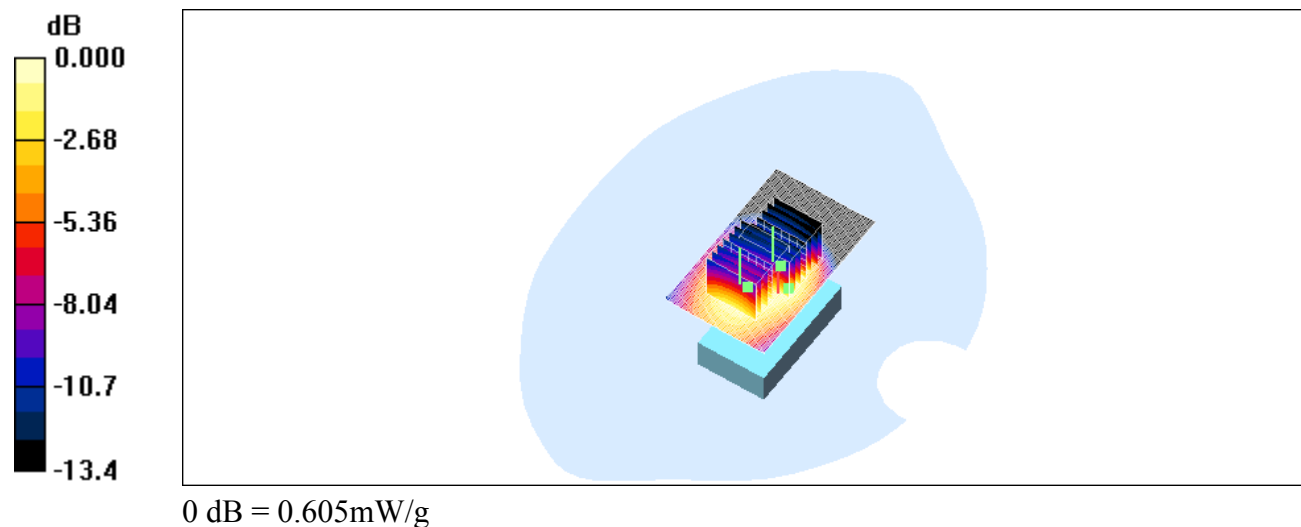
PG-3310/Zoom Scan (7x7x7)/Cube 1: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 23.9 V/m; Power Drift = 0.044 dB

Peak SAR (extrapolated) = 1.13 W/kg

SAR(1 g) = 0.556 mW/g; SAR(10 g) = 0.352 mW/g

Maximum value of SAR (measured) = 0.605 mW/g



Test Laboratory: ELECTRONIC TECHNOLOGY SYSTEMS DR. GENZ GMBH

1900_flat_back_ch512_dist 5mm

DUT: Triple-Band GSM 850 (E-GSM)/DCS 1800 /PCS1900 (with WAP & GPRS); Type: ---; Serial: PG-3310

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

Medium: Muscle 1900 MHz Medium parameters used: $f = 1850.2 \text{ MHz}$; $\sigma = 1.51 \text{ mho/m}$; $\epsilon_r = 52$; $\rho = 1000 \text{ kg/m}^3$

Phantom section: Flat Section

DASY4 Configuration:

- Probe: ET3DV6 - SN1711; ConvF(4.31, 4.31, 4.31); Calibrated: 11/21/2005
- Sensor-Surface: 4mm (Mechanical And Optical Surface Detection)
- Electronics: DAE3 Sn522; Calibrated: 11/23/2005
- Phantom: SAM 12; Type: TP-1217; Serial: QD000P40CA
- Measurement SW: DASY4, V4.6 Build 23; Postprocessing SW: SEMCAD, V1.8 Build 160

PG-3310/Area Scan (61x101x1): Measurement grid: $dx=10\text{mm}$, $dy=10\text{mm}$

Maximum value of SAR (interpolated) = 1.76 mW/g

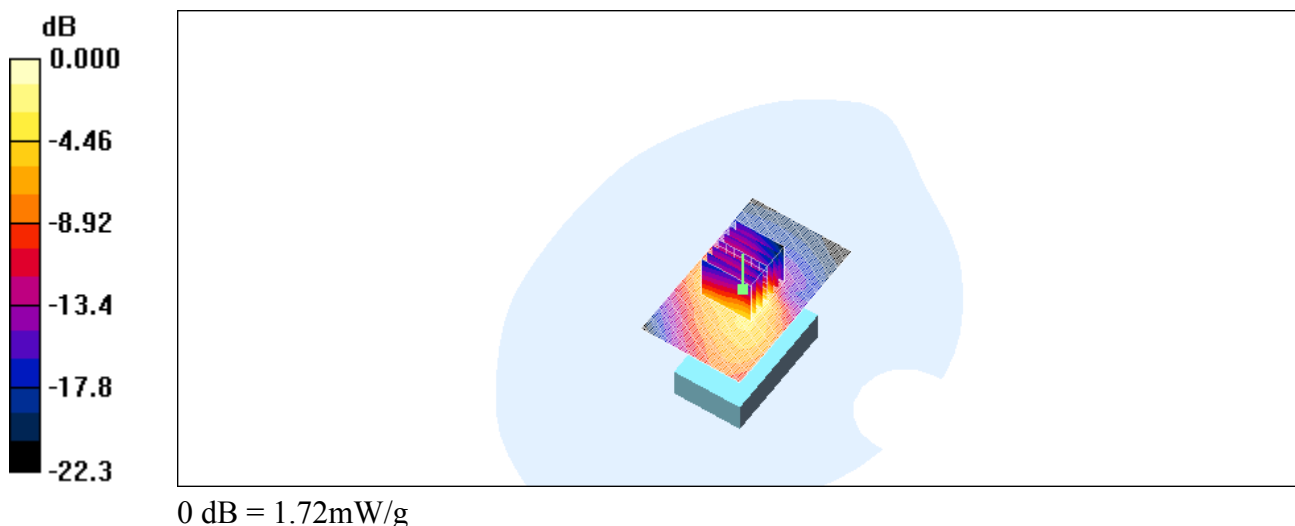
PG-3310/Zoom Scan (7x7x7)/Cube 0: Measurement grid: $dx=5\text{mm}$, $dy=5\text{mm}$, $dz=5\text{mm}$

Reference Value = 21.0 V/m ; Power Drift = 0.032 dB

Peak SAR (extrapolated) = 3.30 W/kg

SAR(1 g) = 1.45 mW/g ; SAR(10 g) = 0.653 mW/g

Maximum value of SAR (measured) = 1.72 mW/g



Test Laboratory: ELECTRONIC TECHNOLOGY SYSTEMS DR. GENZ GMBH

1900_flat_front_ch661_dist 5mm

DUT: Triple-Band GSM 850 (E-GSM)/DCS 1800 /PCS1900 (with WAP & GPRS); Type: ---;
Serial: PG-3310

Communication System: GSM 1900; Frequency: 1909.8 MHz; Duty Cycle: 1:8.3

Medium: Muscle 1900 MHz Medium parameters used: $f = 1909.8$ MHz; $\sigma = 1.59$ mho/m; $\epsilon_r = 51.9$;

$\rho = 1000$ kg/m³

Phantom section: Flat Section

DASY4 Configuration:

- Probe: ET3DV6 - SN1711; ConvF(4.31, 4.31, 4.31); Calibrated: 11/21/2005
- Sensor-Surface: 4mm (Mechanical And Optical Surface Detection)
- Electronics: DAE3 Sn522; Calibrated: 11/23/2005
- Phantom: SAM 12; Type: TP-1217; Serial: QD000P40CA
- Measurement SW: DASY4, V4.6 Build 23; Postprocessing SW: SEMCAD, V1.8 Build 160

PG-3310/Area Scan (61x101x1): Measurement grid: dx=10mm, dy=10mm

Maximum value of SAR (interpolated) = 0.259 mW/g

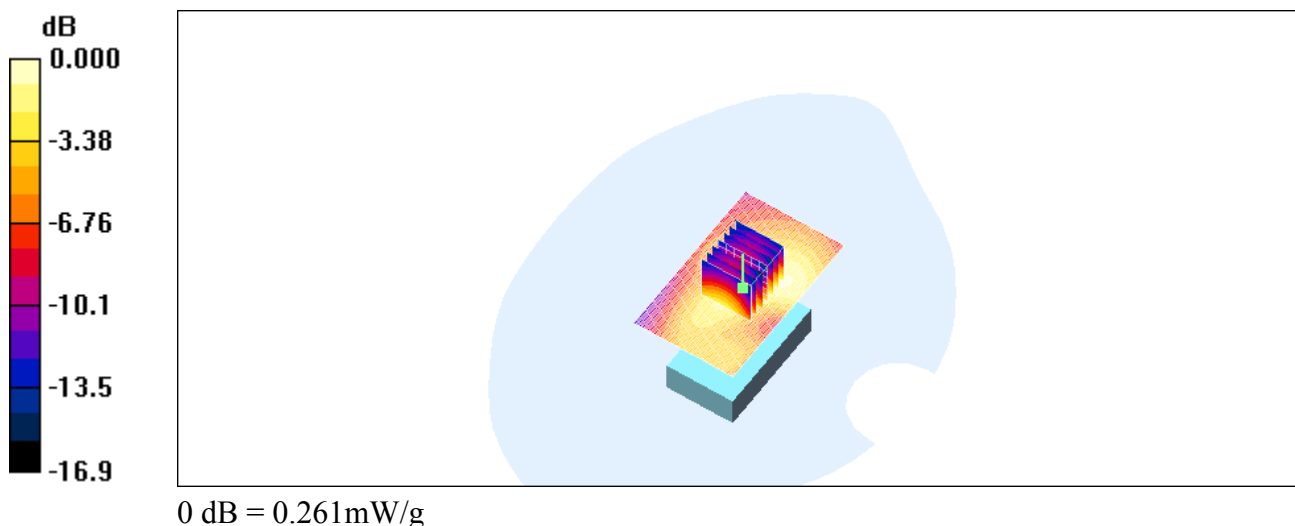
PG-3310/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 10.8 V/m; Power Drift = -0.058 dB

Peak SAR (extrapolated) = 0.362 W/kg

SAR(1 g) = 0.228 mW/g; SAR(10 g) = 0.129 mW/g

Maximum value of SAR (measured) = 0.261 mW/g



Test Laboratory: ELECTRONIC TECHNOLOGY SYSTEMS DR. GENZ GMBH

1900_flat_back_ch661_dist 5mm

DUT: Triple-Band GSM 850 (E-GSM)/DCS 1800 /PCS1900 (with WAP & GPRS); Type: ---; Serial: PG-3310

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

Medium: Muscle 1900 MHz Medium parameters used: $f = 1880 \text{ MHz}$; $\sigma = 1.55 \text{ mho/m}$; $\epsilon_r = 51.9$; $\rho = 1000 \text{ kg/m}^3$

Phantom section: Flat Section

DASY4 Configuration:

- Probe: ET3DV6 - SN1711; ConvF(4.31, 4.31, 4.31); Calibrated: 11/21/2005
- Sensor-Surface: 4mm (Mechanical And Optical Surface Detection)
- Electronics: DAE3 Sn522; Calibrated: 11/23/2005
- Phantom: SAM 12; Type: TP-1217; Serial: QD000P40CA
- Measurement SW: DASY4, V4.6 Build 23; Postprocessing SW: SEMCAD, V1.8 Build 160

PG-3310/Area Scan (61x101x1): Measurement grid: $dx=10\text{mm}$, $dy=10\text{mm}$

Maximum value of SAR (interpolated) = 1.30 mW/g

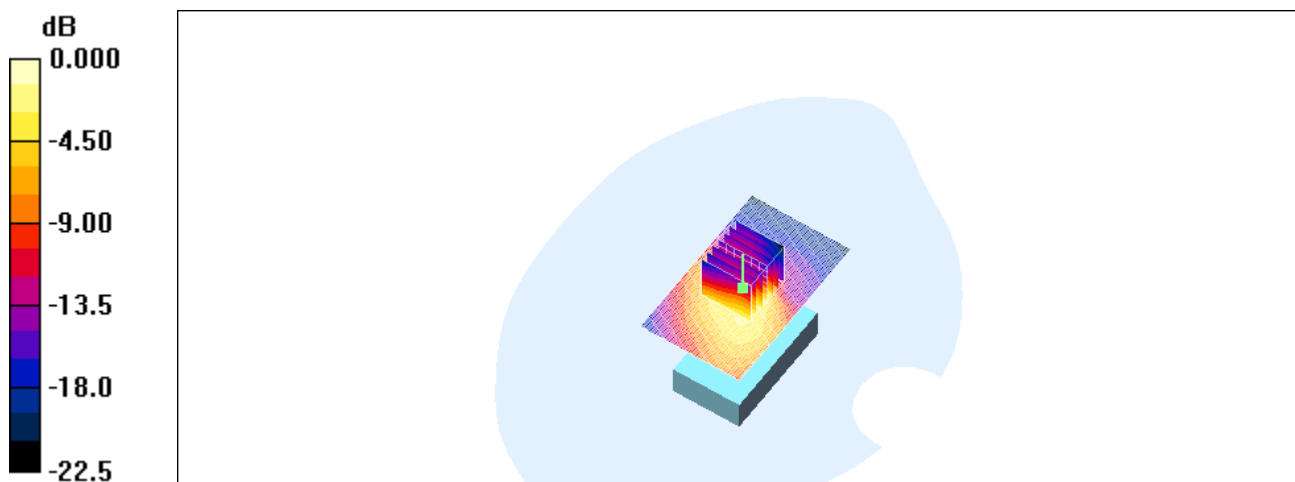
PG-3310/Zoom Scan (7x7x7)/Cube 0: Measurement grid: $dx=5\text{mm}$, $dy=5\text{mm}$, $dz=5\text{mm}$

Reference Value = 21.0 V/m ; Power Drift = -0.074 dB

Peak SAR (extrapolated) = 2.39 W/kg

SAR(1 g) = 1.08 mW/g ; SAR(10 g) = 0.495 mW/g

Maximum value of SAR (measured) = 1.24 mW/g



0 dB = 1.24 mW/g

Test Laboratory: ELECTRONIC TECHNOLOGY SYSTEMS DR. GENZ GMBH

1900_flat_back_ch810_dist 5mm

**DUT: Triple-Band GSM 850 (E-GSM)/DCS 1800 /PCS1900 (with WAP & GPRS); Type: ---;
Serial: PG-3310**

Communication System: GSM 1900; Frequency: 1909.8 MHz; Duty Cycle: 1:8.3

Medium: Muscle 1900 MHz Medium parameters used: $f = 1909.8$ MHz; $\sigma = 1.59$ mho/m; $\epsilon_r = 51.9$;

$\rho = 1000$ kg/m³

Phantom section: Flat Section

DASY4 Configuration:

- Probe: ET3DV6 - SN1711; ConvF(4.31, 4.31, 4.31); Calibrated: 11/21/2005
- Sensor-Surface: 4mm (Mechanical And Optical Surface Detection)
- Electronics: DAE3 Sn522; Calibrated: 11/23/2005
- Phantom: SAM 12; Type: TP-1217; Serial: QD000P40CA
- Measurement SW: DASY4, V4.6 Build 23; Postprocessing SW: SEMCAD, V1.8 Build 160

PG-3310/Area Scan (61x101x1): Measurement grid: dx=10mm, dy=10mm

Maximum value of SAR (interpolated) = 1.20 mW/g

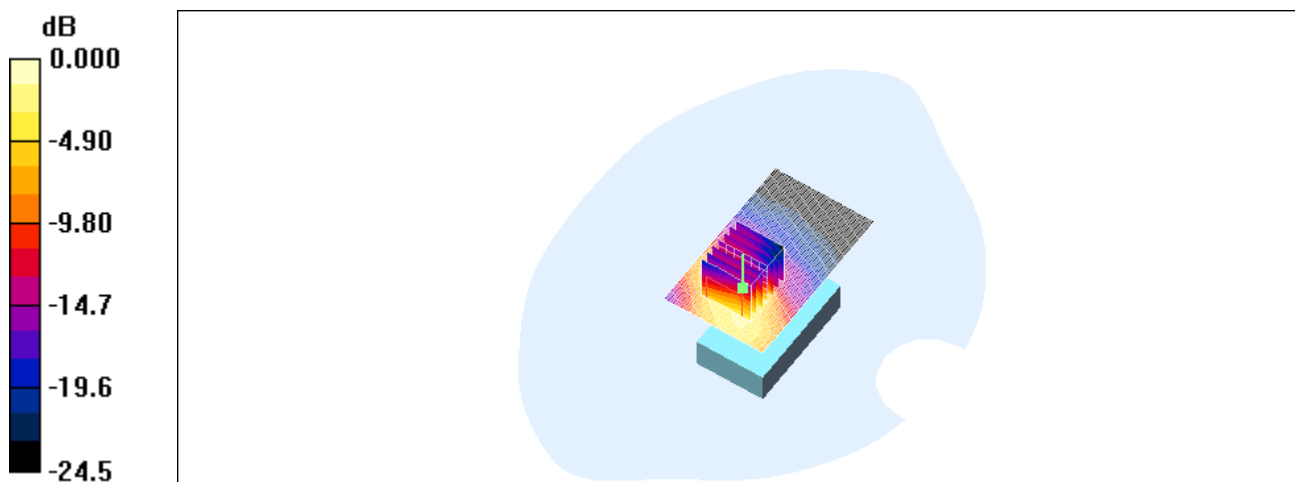
PG-3310/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 16.0 V/m; Power Drift = -0.057 dB

Peak SAR (extrapolated) = 2.34 W/kg

SAR(1 g) = 0.990 mW/g; SAR(10 g) = 0.439 mW/g

Maximum value of SAR (measured) = 1.18 mW/g



0 dB = 1.18mW/g

Test Laboratory: ELECTRONIC TECHNOLOGY SYSTEMS DR. GENZ GMBH

1900_flat_back_ch512_dist 5mm

DUT: Triple-Band GSM 850 (E-GSM)/DCS 1800 /PCS1900 (with WAP & GPRS); Type: ---; Serial: PG-3310

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

Medium: Muscle 1900 MHz Medium parameters used: $f = 1850.2 \text{ MHz}$; $\sigma = 1.51 \text{ mho/m}$; $\epsilon_r = 52$; $\rho = 1000 \text{ kg/m}^3$

Phantom section: Flat Section

DASY4 Configuration:

- Probe: ET3DV6 - SN1711; ConvF(4.31, 4.31, 4.31); Calibrated: 11/21/2005
- Sensor-Surface: 4mm (Mechanical And Optical Surface Detection)
- Electronics: DAE3 Sn522; Calibrated: 11/23/2005
- Phantom: SAM 12; Type: TP-1217; Serial: QD000P40CA
- Measurement SW: DASY4, V4.6 Build 23; Postprocessing SW: SEMCAD, V1.8 Build 160

PG-3310/Area Scan (61x101x1): Measurement grid: $dx=10\text{mm}$, $dy=10\text{mm}$

Maximum value of SAR (interpolated) = 1.76 mW/g

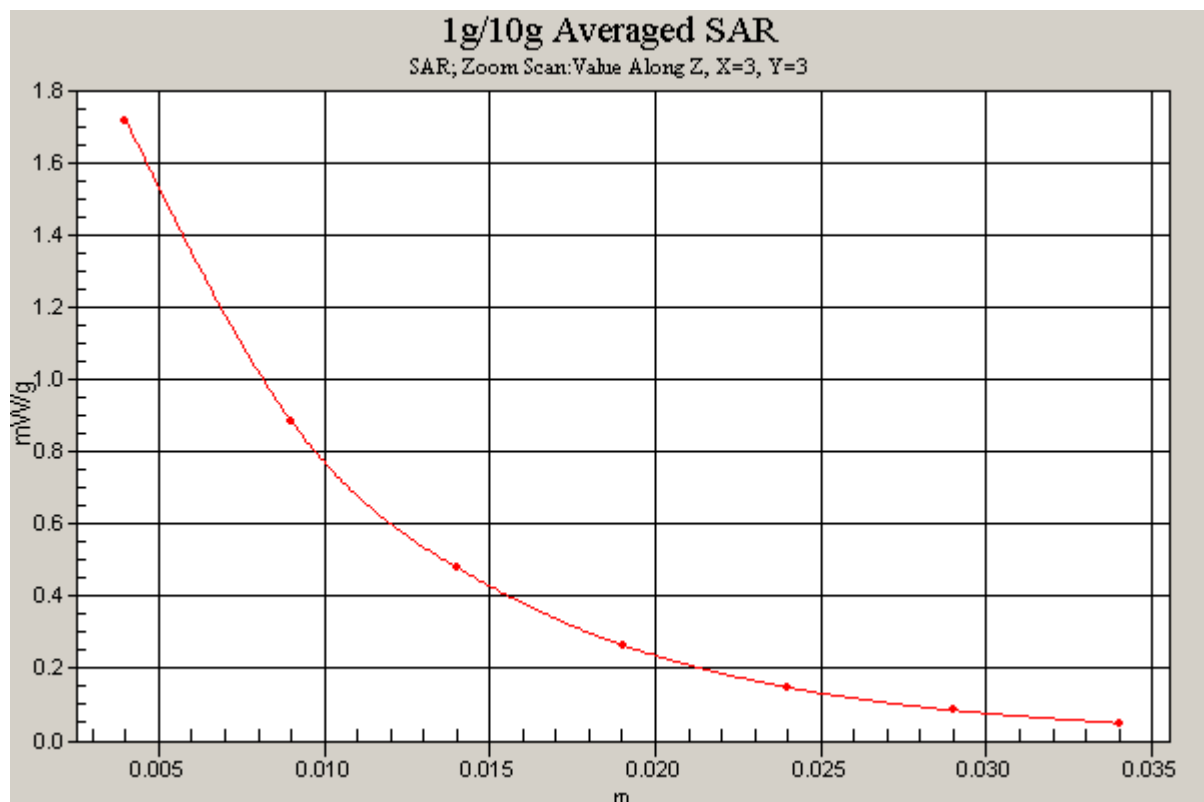
PG-3310/Zoom Scan (7x7x7)/Cube 0: Measurement grid: $dx=5\text{mm}$, $dy=5\text{mm}$, $dz=5\text{mm}$

Reference Value = 21.0 V/m ; Power Drift = 0.032 dB

Peak SAR (extrapolated) = 3.30 W/kg

SAR(1 g) = 1.45 mW/g ; SAR(10 g) = 0.653 mW/g

Maximum value of SAR (measured) = 1.72 mW/g



Appendix C

Pictures

Appendix

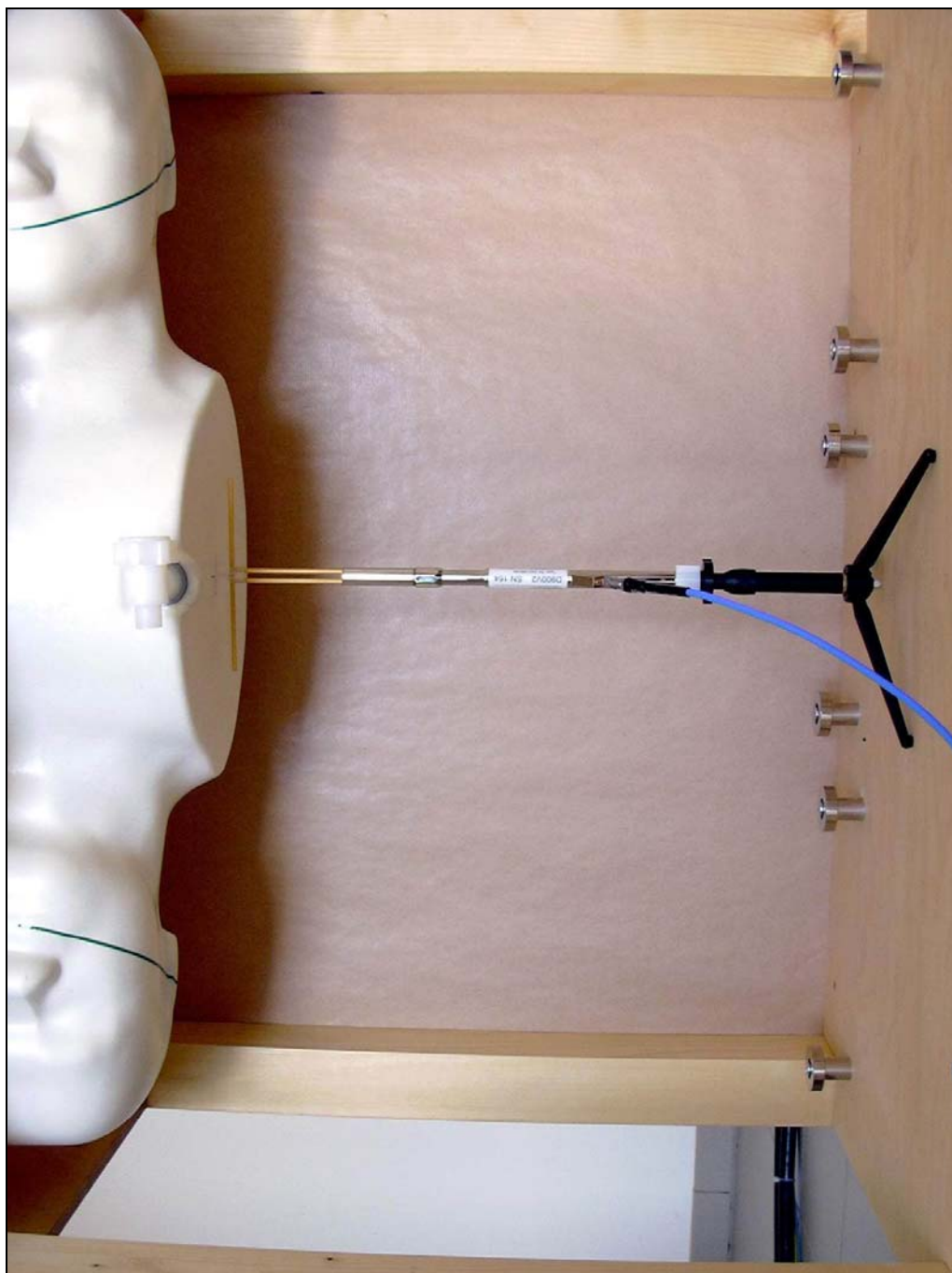
C. Pictures



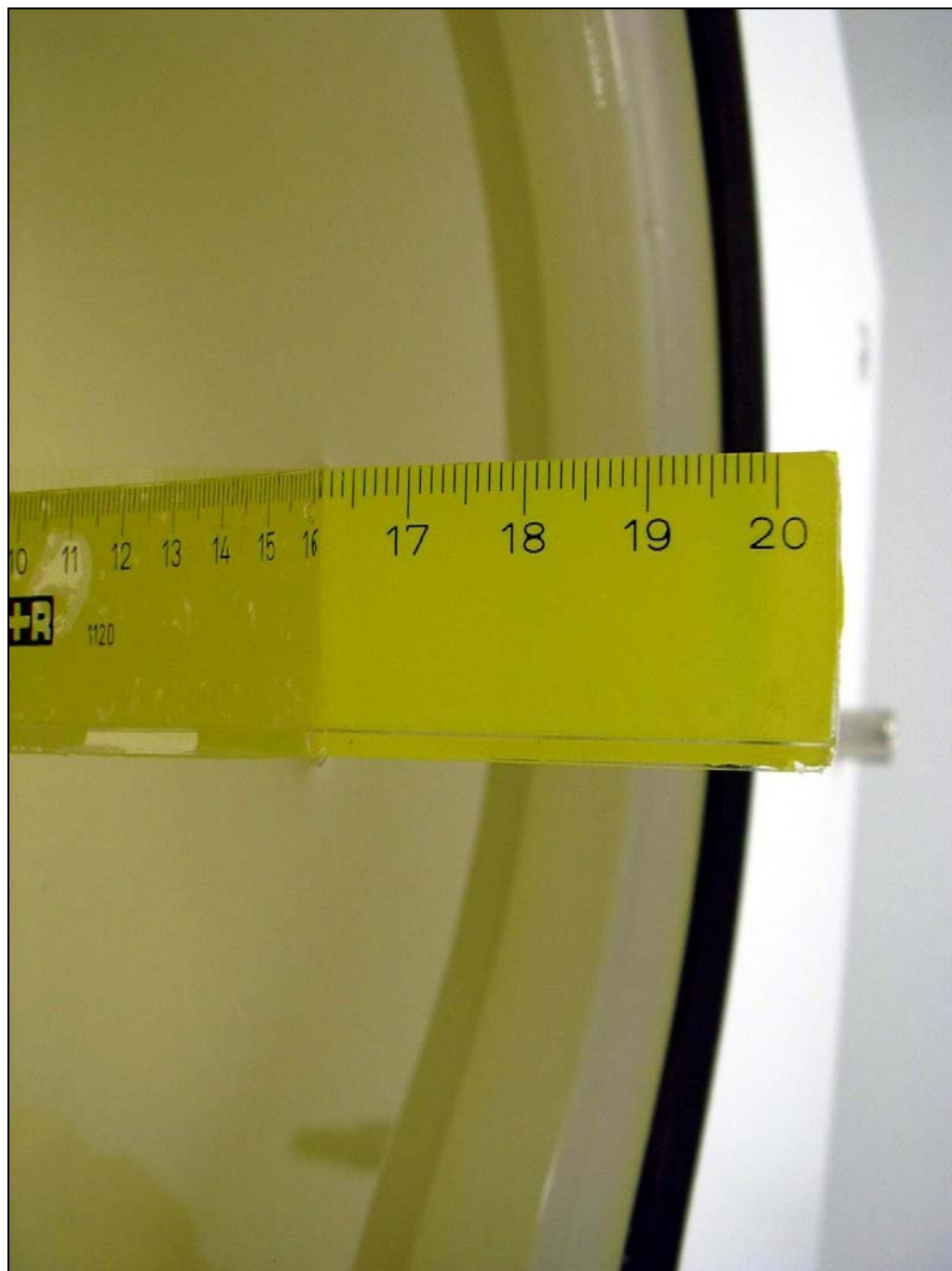




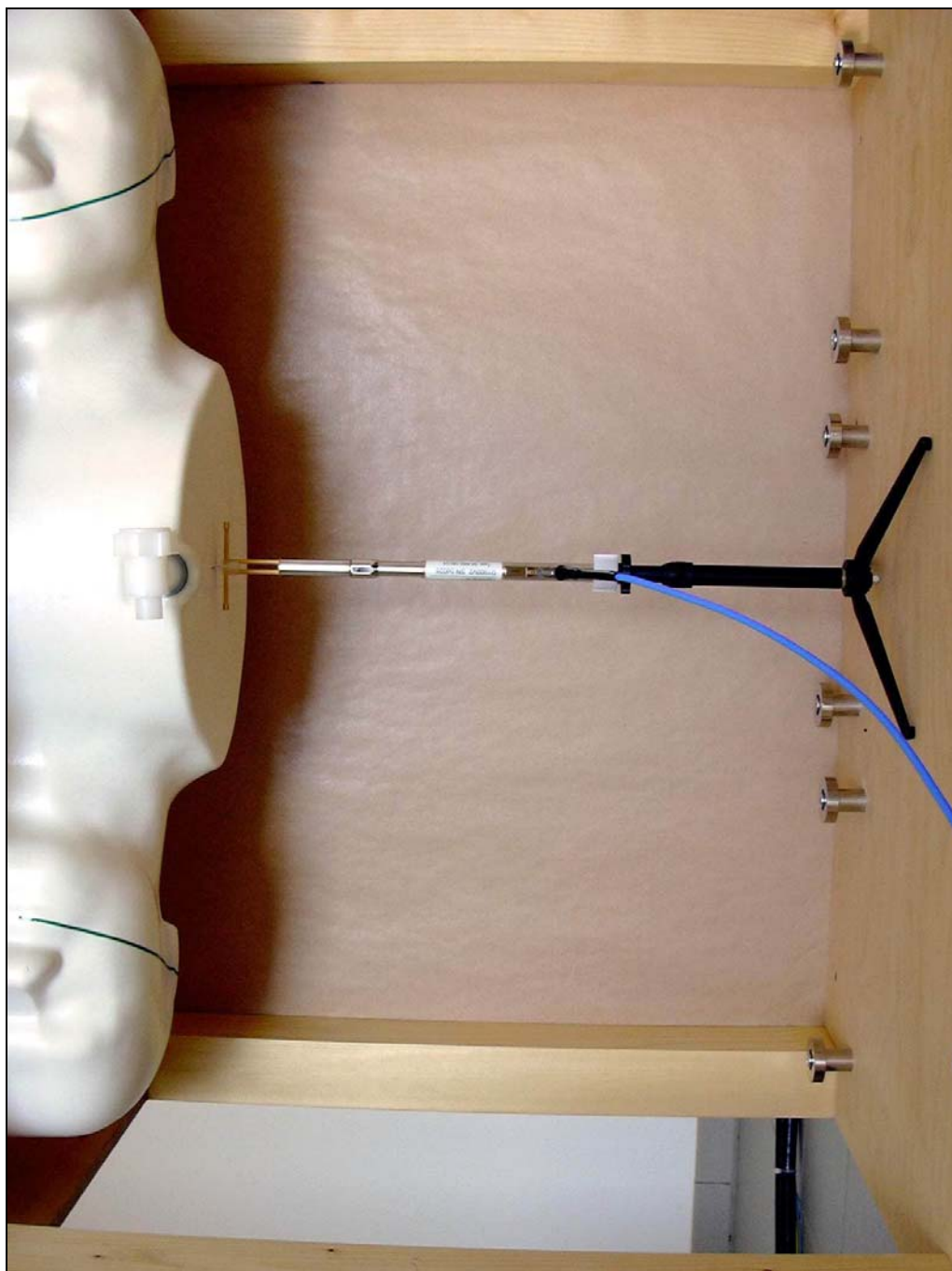
Valid 850



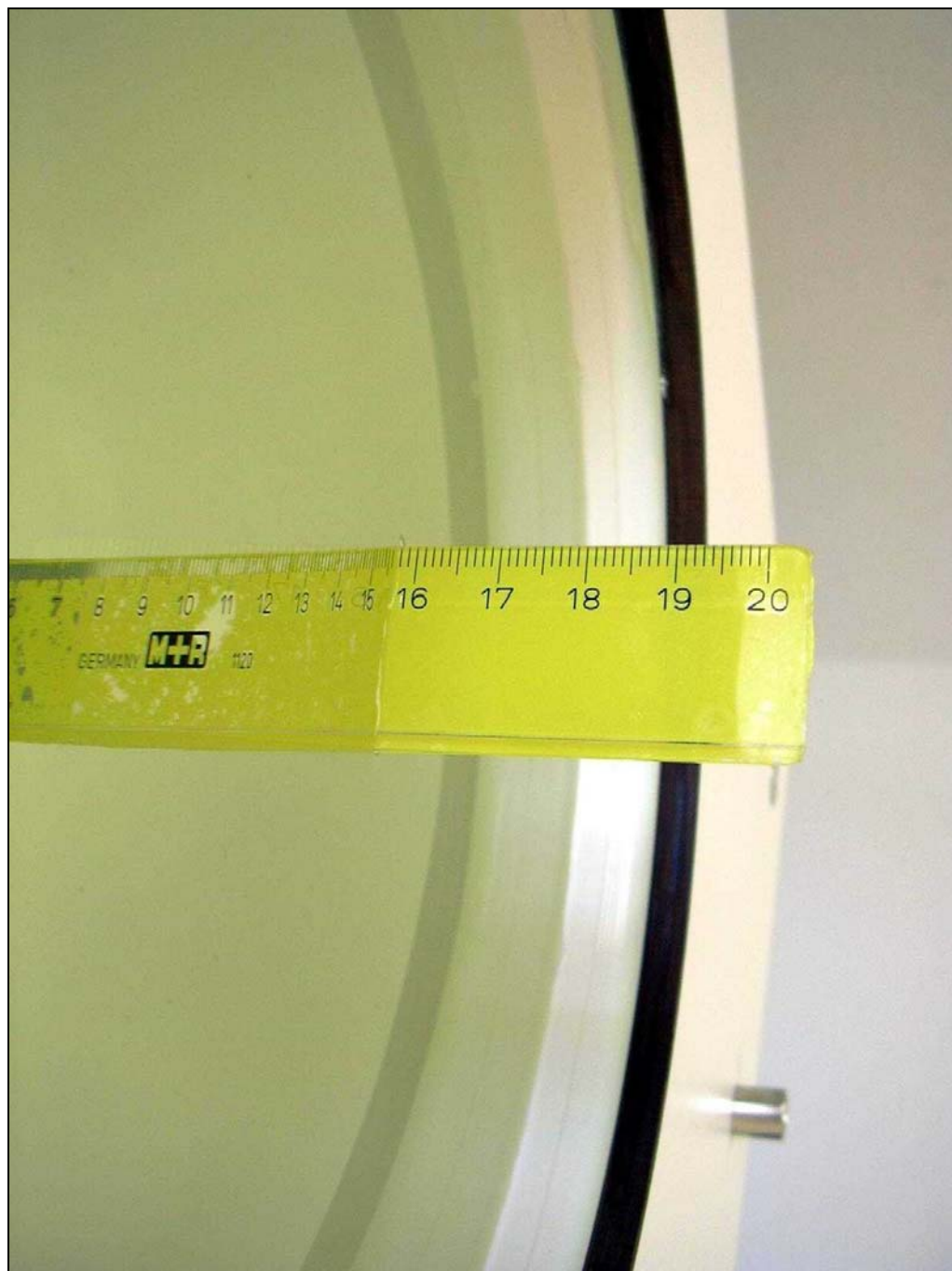
Liquid depth 850



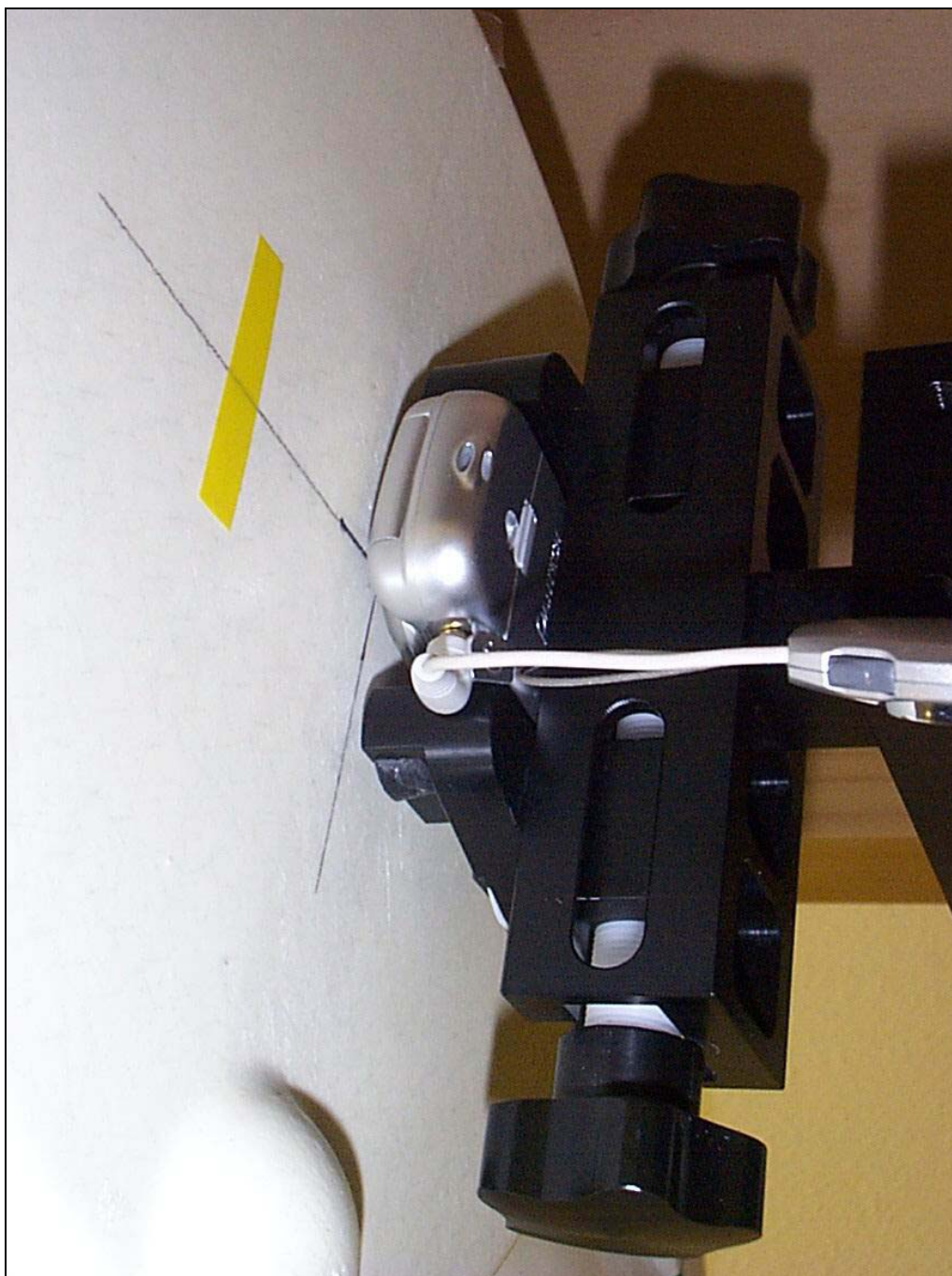
Valid 1900



Liquid depth 1900



Flat front



Flat back

