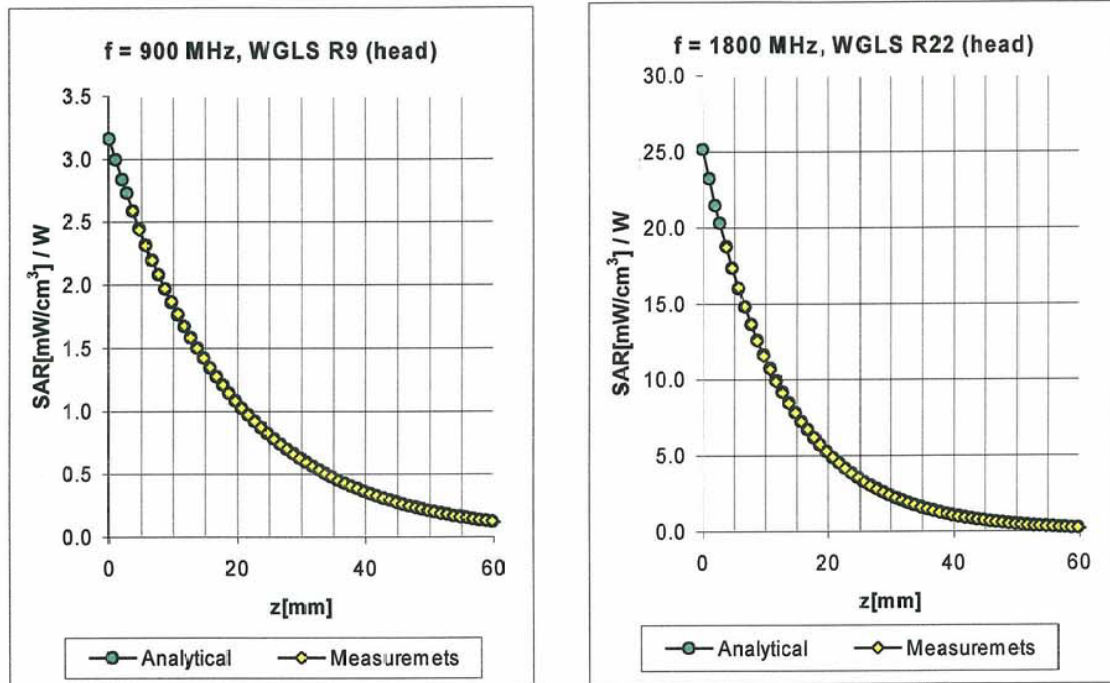


Conversion Factor Assessment

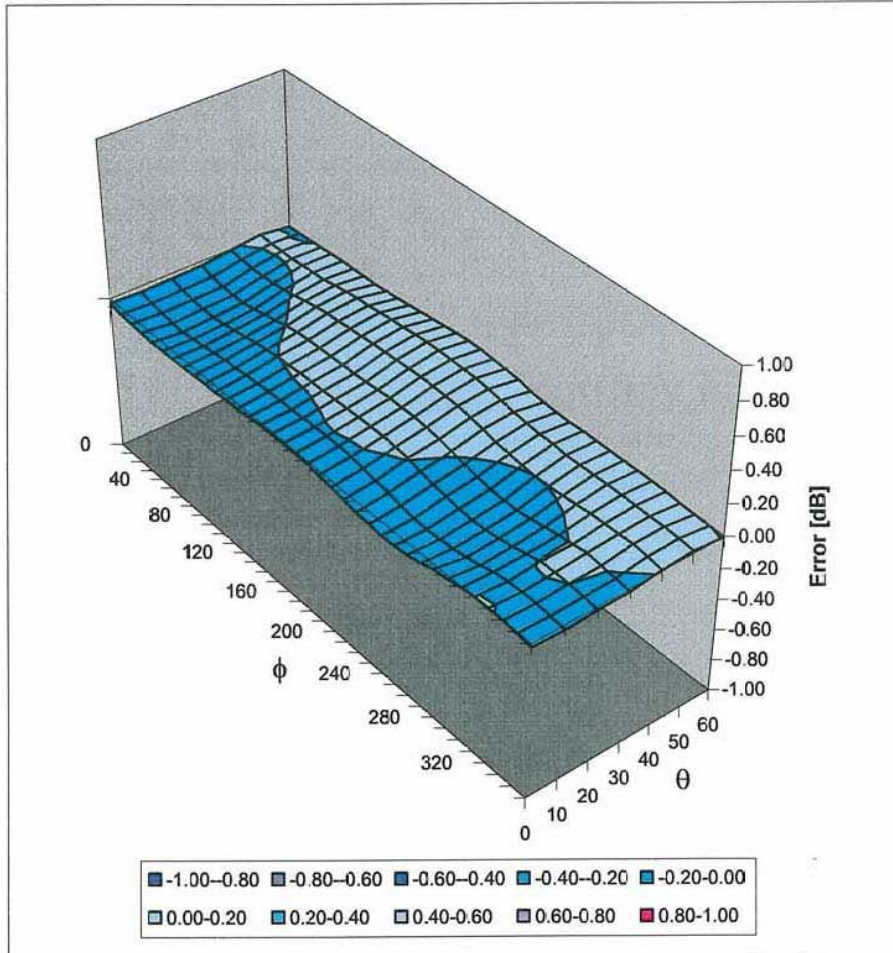


| f [MHz] | Validity [MHz] ^B | Tissue | Permittivity | Conductivity | Alpha | Depth | ConvF Uncertainty |
|---------|-----------------------------|--------|--------------|--------------|-------|-------|--------------------|
| 900 | 800-1000 | Head | 41.5 ± 5% | 0.97 ± 5% | 0.38 | 2.58 | 6.34 ± 11.3% (k=2) |
| 1800 | 1710-1910 | Head | 40.0 ± 5% | 1.40 ± 5% | 0.46 | 2.71 | 5.16 ± 11.7% (k=2) |
| 2450 | 2400-2500 | Head | 39.2 ± 5% | 1.80 ± 5% | 0.90 | 1.93 | 4.41 ± 9.7% (k=2) |
| 900 | 800-1000 | Body | 55.0 ± 5% | 1.05 ± 5% | 0.52 | 2.10 | 6.06 ± 11.3% (k=2) |
| 1800 | 1710-1910 | Body | 53.3 ± 5% | 1.52 ± 5% | 0.52 | 2.88 | 4.54 ± 11.7% (k=2) |
| 2450 | 2400-2500 | Body | 52.7 ± 5% | 1.95 ± 5% | 1.04 | 1.62 | 4.23 ± 9.7% (k=2) |

^B The total standard uncertainty is calculated as root-sum-square of standard uncertainty of the Conversion Factor at calibration frequency and the standard uncertainty for the indicated frequency band.

Deviation from Isotropy in HSL

Error (θ, ϕ), $f = 900$ MHz



Spherical Isotropy Error <math>\lt; \pm 0.4 dB



D3: DAE SN: 510

**Calibration Laboratory of
Schmid & Partner
Engineering AG**
Zeughausstrasse 43, 8004 Zurich, Switzerland

Client **Auden ADT**

CALIBRATION CERTIFICATE

Object(s) **DAE3 - SD 000 D03 AA - SN: 510**

Calibration procedure(s) **QA CAL-06.v7
Calibration procedure for the data acquisition unit (DAE)**

Calibration date: **17.08.2004**



Condition of the calibrated item **In Tolerance (according to the specific calibration document)**

This calibration statement documents traceability of M&TE used in the calibration procedures and conformity of the procedures with the ISO/IEC 17025 international standard.

All calibrations have been conducted in the closed laboratory facility: environment temperature 22 +/- 2 degrees Celsius and humidity < 75%.

Calibration Equipment used (M&TE critical for calibration)

| Model Type | ID # | Cal Date | Scheduled Calibration |
|-----------------------------------|-------------|----------|-----------------------|
| Fluke Process Calibrator Type 702 | SN: 6295803 | 8-Sep-03 | Sep-04 |

| | Name | Function | Signature |
|----------------|-----------------------|--------------|---|
| Calibrated by: | Philipp Storchenegger | Technician |  |
| Approved by: | Fin Bomholt | R&D Director |  |

Date issued: 17.08.2004

This calibration certificate is issued as an intermediate solution until the accreditation process (based on ISO/IEC 17025 International Standard) for Calibration Laboratory of Schmid & Partner Engineering AG is completed.

1. DC Voltage Measurement

A/D - Converter Resolution nominal

High Range: 1LSB = 6.1 μ V, full range = -100...+300 mV

Low Range: 1LSB = 61nV, full range = -1.....+3mV

DASY measurement parameters: Auto Zero Time: 3 sec; Measuring time: 3 sec

| Calibration Factors | X | Y | Z |
|----------------------------|---------------------|---------|---------|
| High Range | 403.405 | 403.470 | 403.844 |
| Low Range | 3.95588 | 3.93301 | 3.95923 |
| Connector Angle to be used | in DASY System 43 ° | | |

| High Range | Input (μ V) | Reading (μ V) | Error (%) |
|-------------------|------------------|--------------------|-----------|
| Channel X + Input | 200000 | 199999.5 | 0.00 |
| Channel X + Input | 20000 | 20004.1 | 0.02 |
| Channel X - Input | 20000 | -19988.8 | -0.06 |
| Channel Y + Input | 200000 | 199999.9 | 0.00 |
| Channel Y + Input | 20000 | 19999.3 | 0.00 |
| Channel Y - Input | 20000 | -19993.8 | -0.03 |
| Channel Z + Input | 200000 | 199999.6 | 0.00 |
| Channel Z + Input | 20000 | 20005.6 | 0.03 |
| Channel Z - Input | 20000 | -19995.4 | -0.02 |

| Low Range | Input (μ V) | Reading (μ V) | Error (%) |
|-------------------|------------------|--------------------|-----------|
| Channel X + Input | 2000 | 1999.96 | 0.00 |
| Channel X + Input | 200 | 200.00 | 0.00 |
| Channel X - Input | 200 | -200.34 | 0.17 |
| Channel Y + Input | 2000 | 2000.03 | 0.00 |
| Channel Y + Input | 200 | 199.39 | -0.31 |
| Channel Y - Input | 200 | -200.81 | -0.41 |
| Channel Z + Input | 2000 | 2000.07 | 0.00 |
| Channel Z + Input | 200 | 199.29 | -0.36 |
| Channel Z - Input | 200 | -201.07 | 0.53 |

2. Common mode sensitivity

DASY measurement parameters: Auto Zero Time: 3 sec; Measuring time: 3 sec

| | Common mode Input Voltage (mV) | High Range Reading (μ V) | Low Range Reading (μ V) |
|-----------|--------------------------------|-------------------------------|------------------------------|
| Channel X | 200 | 17.42 | 16.88 |
| | - 200 | -17.00 | -17.10 |
| Channel Y | 200 | 14.86 | 14.26 |
| | - 200 | -15.53 | -16.14 |
| Channel Z | 200 | -8.63 | -8.44 |
| | - 200 | 7.15 | 7.51 |