



Client **CCS**

CALIBRATION CERTIFICATE																											
Object(s)	D900V2 - SN:108																										
Calibration procedure(s)	QA CAL-05.v2 Calibration procedure for dipole validation kits																										
Calibration date:	April 10, 2003																										
Condition of the calibrated item	In Tolerance (according to the specific calibration document)																										
<p>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.</p> <p>All calibrations have been conducted in the closed laboratory facility: environment temperature 22 +/- 2 degrees Celsius and humidity < 75%.</p> <p>Calibration Equipment used (M&TE critical for calibration)</p> <table border="1"> <thead> <tr> <th>Model Type</th> <th>ID #</th> <th>Cal Date</th> <th>Scheduled Calibration</th> </tr> </thead> <tbody> <tr> <td>RF generator R&S SML-03</td> <td>100698</td> <td>27-Mar-2002</td> <td>In house check: Mar-05</td> </tr> <tr> <td>Power sensor HP 8481A</td> <td>MY41092317</td> <td>18-Oct-02</td> <td>Oct-04</td> </tr> <tr> <td>Power sensor HP 8481A</td> <td>US37292783</td> <td>30-Oct-02</td> <td>Oct-03</td> </tr> <tr> <td>Power meter EPM E442</td> <td>GB37480704</td> <td>30-Oct-02</td> <td>Oct-03</td> </tr> <tr> <td>Network Analyzer HP 8753E</td> <td>US38432426</td> <td>3-May-00</td> <td>In house check: May 03</td> </tr> </tbody> </table>				Model Type	ID #	Cal Date	Scheduled Calibration	RF generator R&S SML-03	100698	27-Mar-2002	In house check: Mar-05	Power sensor HP 8481A	MY41092317	18-Oct-02	Oct-04	Power sensor HP 8481A	US37292783	30-Oct-02	Oct-03	Power meter EPM E442	GB37480704	30-Oct-02	Oct-03	Network Analyzer HP 8753E	US38432426	3-May-00	In house check: May 03
Model Type	ID #	Cal Date	Scheduled Calibration																								
RF generator R&S SML-03	100698	27-Mar-2002	In house check: Mar-05																								
Power sensor HP 8481A	MY41092317	18-Oct-02	Oct-04																								
Power sensor HP 8481A	US37292783	30-Oct-02	Oct-03																								
Power meter EPM E442	GB37480704	30-Oct-02	Oct-03																								
Network Analyzer HP 8753E	US38432426	3-May-00	In house check: May 03																								
Calibrated by:	Name Judith Mueller	Function Technician	Signature 																								
Approved by:	Name Katja Pokovic	Function Laboratory Director	Signature 																								
Date issued: April 11, 2003																											
<p>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.</p>																											

DASY

Dipole Validation Kit

Type: D900V2

Serial: 108

Manufactured: March 9, 2001

Calibrated: April 10, 2003

1. Measurement Conditions

The measurements were performed in the flat section of the SAM twin phantom filled with head simulating solution of the following electrical parameters at 900 MHz:

Relative Dielectricity	42.1	$\pm 5\%$
Conductivity	0.95 mho/m	$\pm 5\%$

The DASY4 System with a dosimetric E-field probe ET3DV6 (SN:1507, Conversion factor 6.6 at 900 MHz) was used for the measurements.

The dipole was mounted on the small tripod so that the dipole feedpoint was positioned below the center marking of the flat phantom section and the dipole was oriented parallel to the body axis (the long side of the phantom). The standard measuring distance was 15mm from dipole center to the solution surface. The included distance holder was used during measurements for accurate distance positioning.

The coarse grid with a grid spacing of 15mm was aligned with the dipole. The 7x7x7 fine cube was chosen for cube integration.

The dipole input power (forward power) was $250\text{mW} \pm 3\%$. The results are normalized to 1W input power.

2. SAR Measurement with DASY4 System

Standard SAR-measurements were performed according to the measurement conditions described in section 1. The results (see figure supplied) have been normalized to a dipole input power of 1W (forward power). The resulting averaged SAR-values measured with the dosimetric probe ET3DV6 SN:1507 and applying the advanced extrapolation are:

averaged over 1 cm^3 (1 g) of tissue:	10.5 mW/g $\pm 16.8\%$ (k=2) ¹
averaged over 10 cm^3 (10 g) of tissue:	6.76 mW/g $\pm 16.2\%$ (k=2) ¹

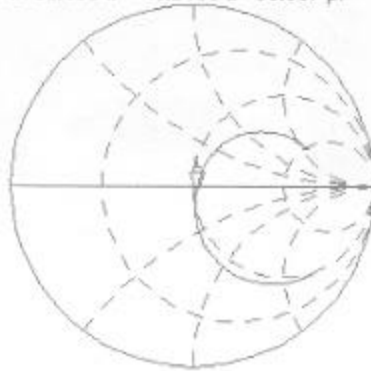
18 Apr 2003 09:58:28
CH1 S11 1 U FS 1: 51.865 a -3.1486 a 56.307 pF 900.000 000 MHz

y

De1

PRa
Cor
Avg
16

↑



CH2 S11 LOG 4 dB/REF -20 dB 1: -28.876 dB 900.000 000 MHz

PRa
Cor

↑

