

Client

Nokia China

## CALIBRATION CERTIFICATE

Object(s)

D900V2 - SN:136

Calibration procedure(s)

QA CAL-05.v2  
Calibration procedure for dipole validation kits

Calibration date:

October 3, 2003

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 (Calibrated by, Certificate No.) | Scheduled Calibration  |
|---------------------------|------------|-------------------------------------------|------------------------|
| Power sensor HP 8481A     | MY41092317 | 18-Oct-02 (Agilent, No. 20021018)         | Oct-04                 |
| Power sensor HP 8481A     | US37292783 | 30-Oct-02 (METAS, No. 252-0236)           | Oct-03                 |
| Power meter EPM E442      | GB37480704 | 30-Oct-02 (METAS, No. 252-0236)           | Oct-03                 |
| RF generator R&S SML-03   | 100698     | 27-Mar-2002 (R&S, No. 20-92389)           | In house check: Mar-05 |
| Network Analyzer HP 8753E | US37390585 | 18-Oct-01 (Agilent, No. 24BR1033101)      | In house check: Oct 03 |

|                |                |            |                                                                                       |
|----------------|----------------|------------|---------------------------------------------------------------------------------------|
| Calibrated by: | Name           | Function   | Signature                                                                             |
|                | Judith Mueller | Technician |  |

|              |               |                     |
|--------------|---------------|---------------------|
| Approved by: | Name          | Function            |
|              | Katja Pokovic | Laboratory Director |



Date issued: October 9, 2003

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.

Test Laboratory: SPEAG, Zurich, Switzerland

**DUT: Dipole 900 MHz; Type: D900V2; Serial: D900V2 - SN136**

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

Medium: HSL 900 MHz ( $\sigma = 0.96$  mho/m,  $\epsilon_r = 42.26$ ,  $\rho = 1000$  kg/m<sup>3</sup>)

Phantom section: Flat Section

Measurement Standard: DASY4 (High Precision Assessment)

DASY4 Configuration:

- Probe: ET3DV6 - SN1507; ConvF(6.6, 6.6, 6.6); Calibrated: 1/18/2003
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 - SN411; Calibrated: 1/16/2003
- Phantom: SAM with CRP - TP1006; Type: SAM 4.0; Serial: TP:1006
- Measurement SW: DASY4, V4.1 Build 47; Postprocessing SW: SEMCAD, V1.8 Build 60

**Pin = 250 mW; d = 15 mm/Area Scan (81x81x1):** Measurement grid: dx=15mm, dy=15mm

Reference Value = 56.2 V/m

Power Drift = -0.0 dB

Maximum value of SAR = 2.8 mW/g

**Pin = 250 mW; d = 15 mm/Zoom Scan (7x7x7)/Cube 0:** Measurement grid: dx=5mm, dy=5mm, dz=5mm

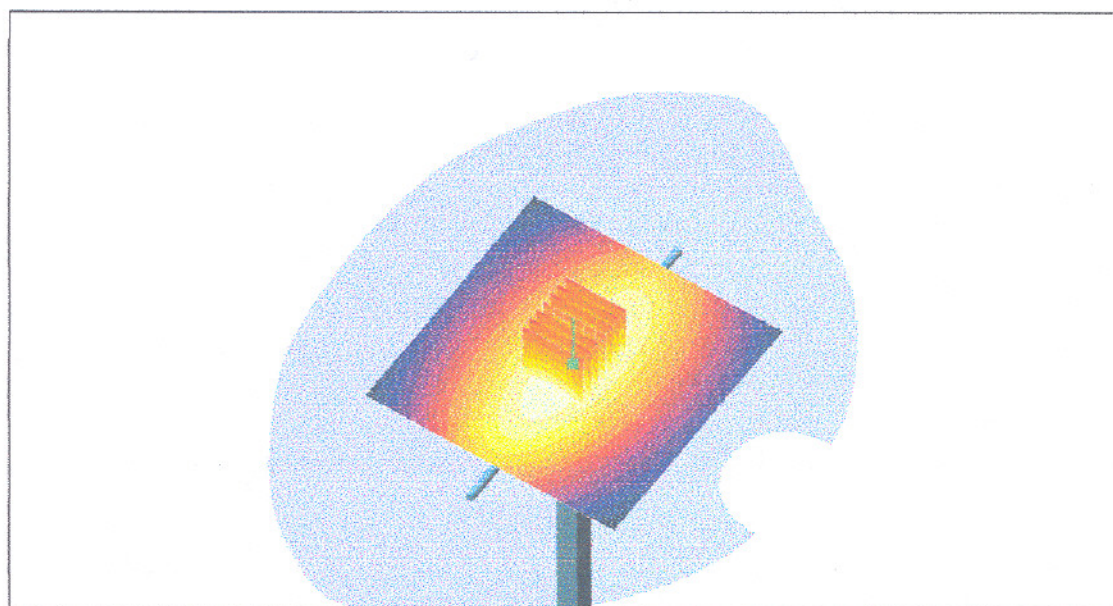
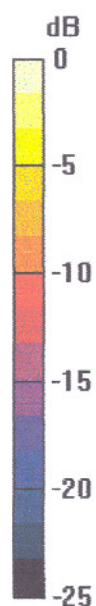
Peak SAR (extrapolated) = 3.88 W/kg ✓

SAR(1 g) = 2.59 mW/g; SAR(10 g) = 1.67 mW/g

Reference Value = 56.2 V/m

Power Drift = -0.0 dB

Maximum value of SAR = 2.8 mW/g



0 dB = 2.8mW/g