

**TA Technology (Shanghai) Co., Ltd.**  
**Test Report**

No. RZA2008-0194FCC

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**Appendix**

**Antenna Parameters with Head TSL**

Impedance, transformed to feed point	52.5 $\Omega$ + 3.3 j $\Omega$
Return Loss	- 27.9 dB

**Antenna Parameters with Body TSL**

Impedance, transformed to feed point	48.5 $\Omega$ + 2.9 j $\Omega$
Return Loss	- 29.6 dB

**General Antenna Parameters and Design**

Electrical Delay (one direction)	1.203 ns
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After long term use with 100W radiated power, only a slight warming of the dipole near the feedpoint can be measured.

The dipole is made of standard semirigid coaxial cable. The center conductor of the feeding line is directly connected to the second arm of the dipole. The antenna is therefore short-circuited for DC-signals.

No excessive force must be applied to the dipole arms, because they might bend or the soldered connections near the feedpoint may be damaged.

**Additional EUT Data**

Manufactured by	SPEAG
Manufactured on	June 4, 2002

**DASY4 Validation Report for Head TSL**

Date/Time: 23.04.2007 14:40:32

Test Laboratory: SPEAG, Zurich, Switzerland

**DUT: Dipole 1900 MHz; Type: D1900V2; Serial: D1900V2 - SN:5d018**

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

Medium: HSL U10 BB;

Medium parameters used:  $f = 1900$  MHz;  $\sigma = 1.46$  mho/m;  $\epsilon_r = 39.5$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Phantom section: Flat Section

Measurement Standard: DASY4 (High Precision Assessment)

**DASY4 Configuration:**

- Probe: ET3DV6 - SN1507 (HF); ConvF(4.97, 4.97, 4.97); Calibrated: 19.10.2006
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn601; Calibrated: 30.01.2007
- Phantom: Flat Phantom 5.0 (front); Type: QD000P50AA
- Measurement SW: DASY4, V4.7 Build 53; Postprocessing SW: SEMCAD, V1.8 Build 172

**Pin = 250 mW; d = 10 mm/Zoom Scan (7x7x7)/Cube 0:**

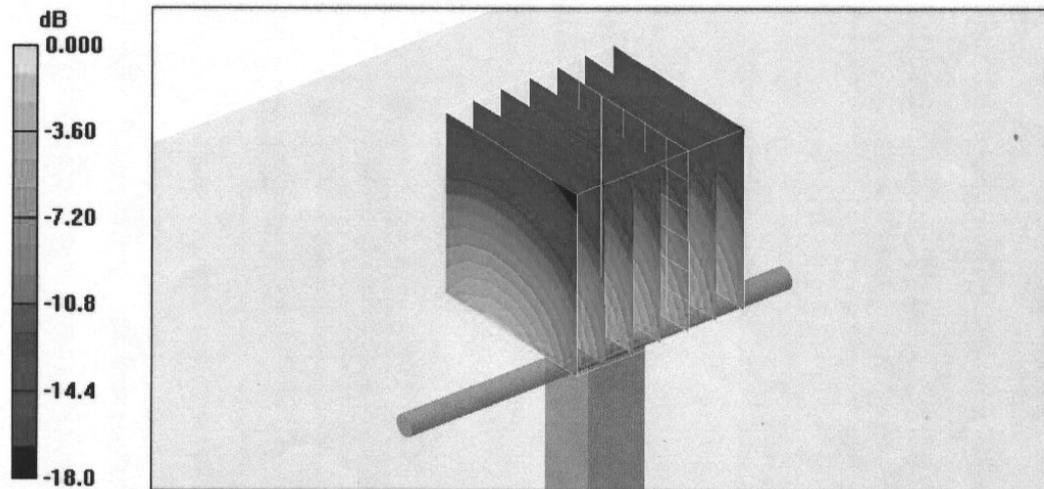
Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 88.2 V/m; Power Drift = 0.034 dB

Peak SAR (extrapolated) = 15.9 W/kg

**SAR(1 g) = 9.35 mW/g; SAR(10 g) = 4.94 mW/g**

Maximum value of SAR (measured) = 10.3 mW/g



0 dB = 10.3mW/g

Impedance Measurement Plot for Head TSL

