

ANTENNESSA

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CALIBRATION REPORT**VALIDATION DIPOLE****1900 MHz****DATE :** 21/09/2007**REFERENCE :** SN 01/06 DIP G 35**OBJECT :** COMOSAR IEEE REF DIPOLE**MANUFACTURER :** ANTENNESSA**SERIAL NUMBER :** SN 01/06 DIP G 35**CUSTOMER :** CCS**DATE OF CALIBRATION :** 19/09/2007**WARRANTY :**

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Date

SEAL

25 OCT. 2007

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COMOSAR PROJECT MANAGER



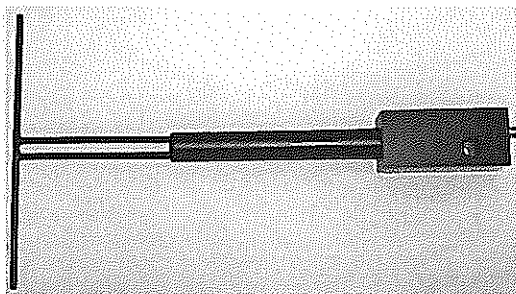
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CALIBRATION REPORT

VALIDATION DIPOLE

1900 MHz

PRODUCT DESCRIPTION

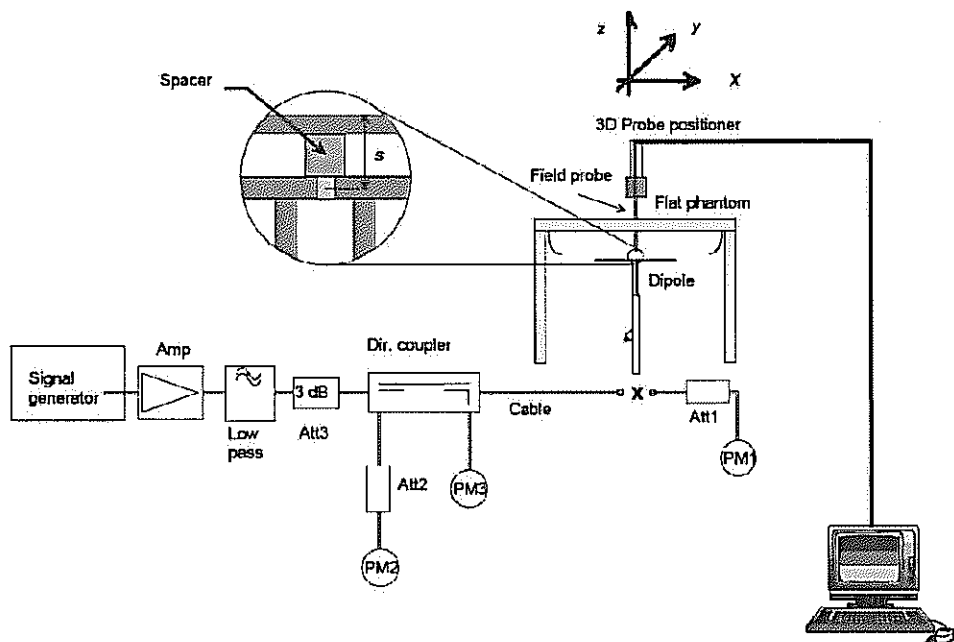


CALIBRATION TEST EQUIPMENT

TYPE	IDENTIFICATION
Vector Network Analyzer	HP8753D

MEASUREMENT PROCEDURE

We placed the dipole as define in IEEE1528-2005 SAR standard :





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RETURN LOSS MEASUREMENT RESULTS

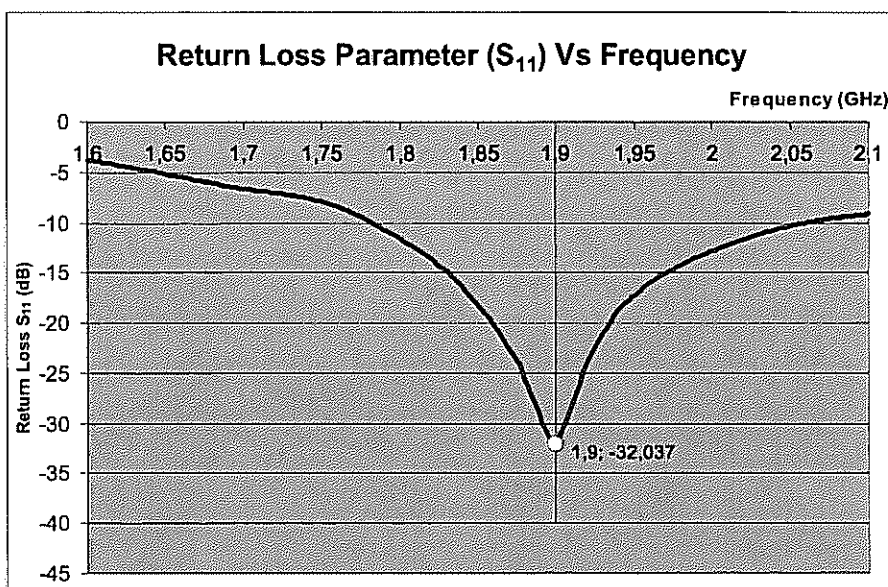


Figure 1 : Return Loss in Head Liquid

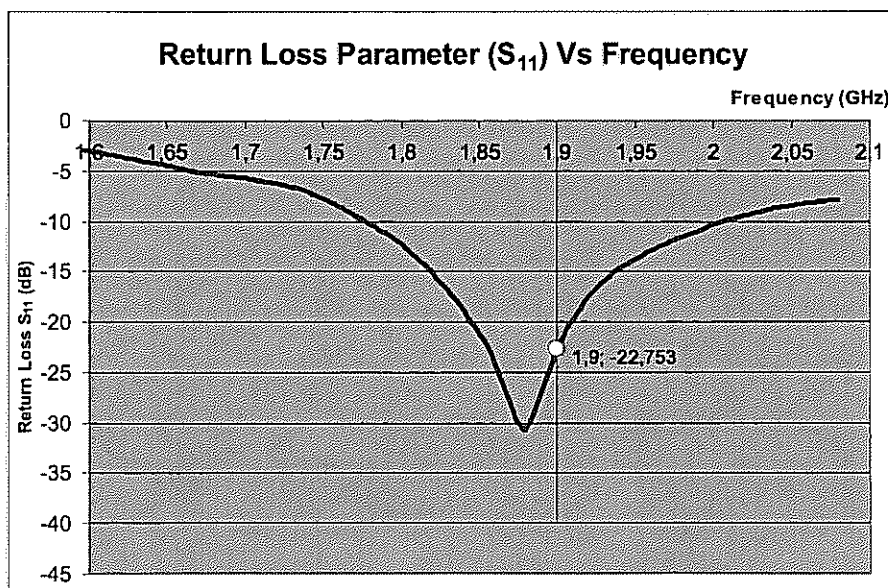


Figure 2 : Return Loss in Body Liquid

VSWR at 1900 MHz in HL: 1.051:1

VSWR at 1900 MHz in BL: 1.157:1

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CALIBRATION REPORT**VALIDATION DIPOLE****1900 MHz****SAR MEASUREMENT EQUIPEMENT**

PC	Dell (Pentium IV 2.4GHz, SN:X10-23533)
Voltmeter	Keithley (2000, SN:1000572)
Synthesizer	Rohde&Schwarz (SML_03, SN:101868)
Amplifier	Nuclétudes (ALB216, SN:10800)
Power Meter	Rohde&Schwarz (NRVD, SN:101066)
Probe	Antennessa (SN:EP37)
Phantom	Antennessa (SN: SN 20 07 SAM42)
Liquid	Antennessa (Last Calibration: 17 09 07) Head Liquid Values: eps' : 39,93 sigma : 1,377 Boby Liquid Values: eps' : 51,34 sigma : 1,574
Software	OpenSAR V3

SAR MEASUREMENT RESULT

	10g	1g
SAR measured Liquid : HL Input power : 1W	20.358 W/Kg - 0,69%	38,248 W/Kg - 3,66%
SAR measured Liquid : BL Input power : 1W	20.110 W/Kg - 1,90%	37,746 W/Kg - 4,92%