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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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SAR TEAM MANAGER

PRESIDENT



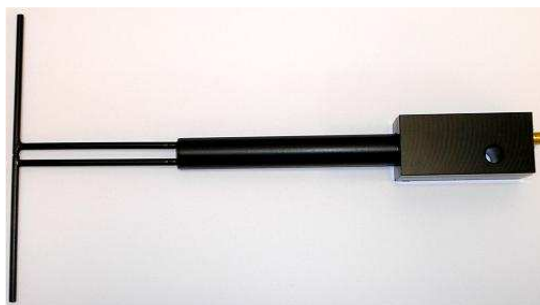
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## PRODUCT DESCRIPTION

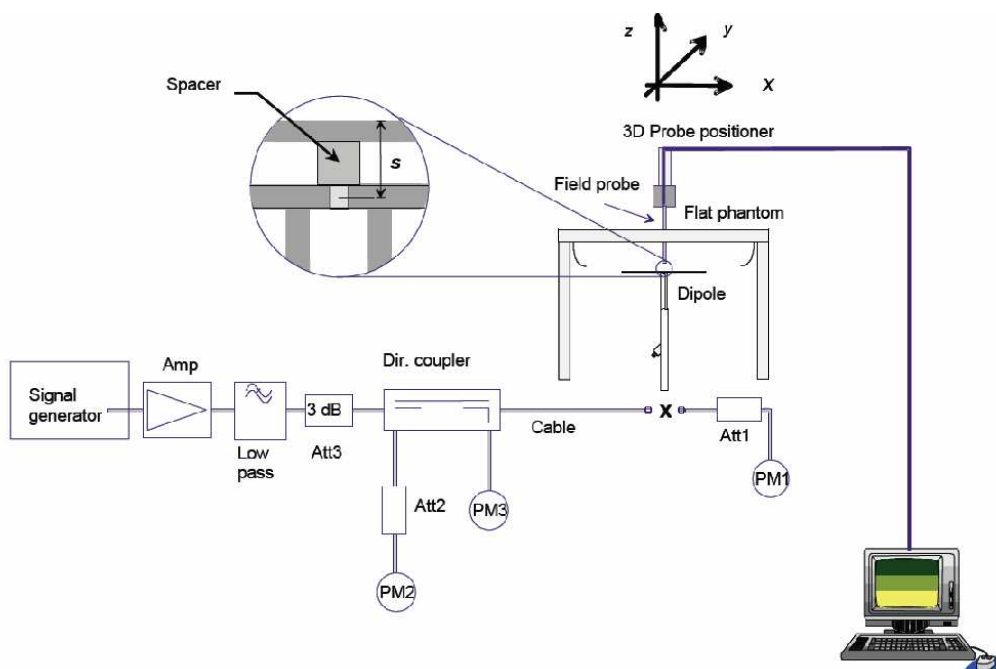


## CALIBRATION TEST EQUIPMENT

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

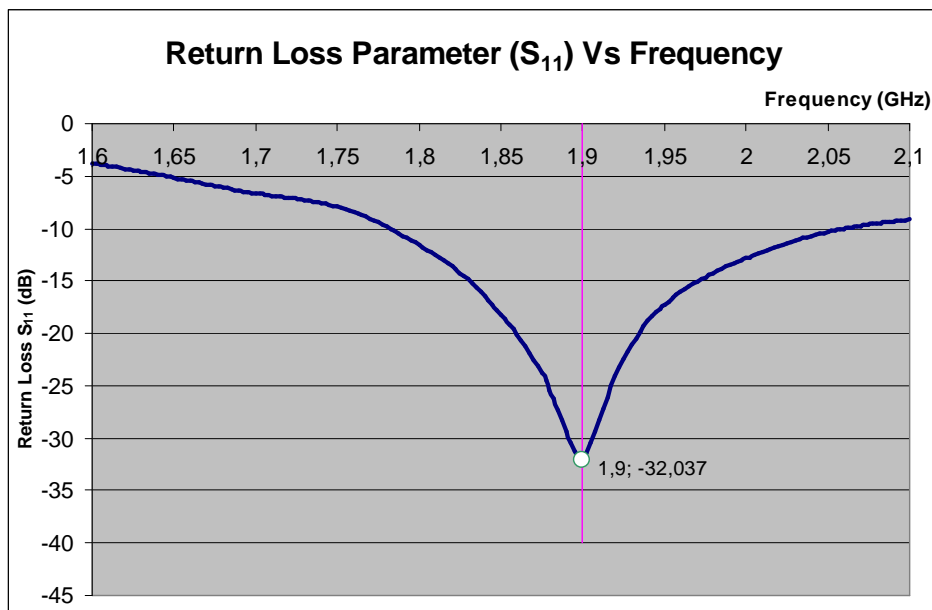


Figure 1 : Return Loss in Head Liquid

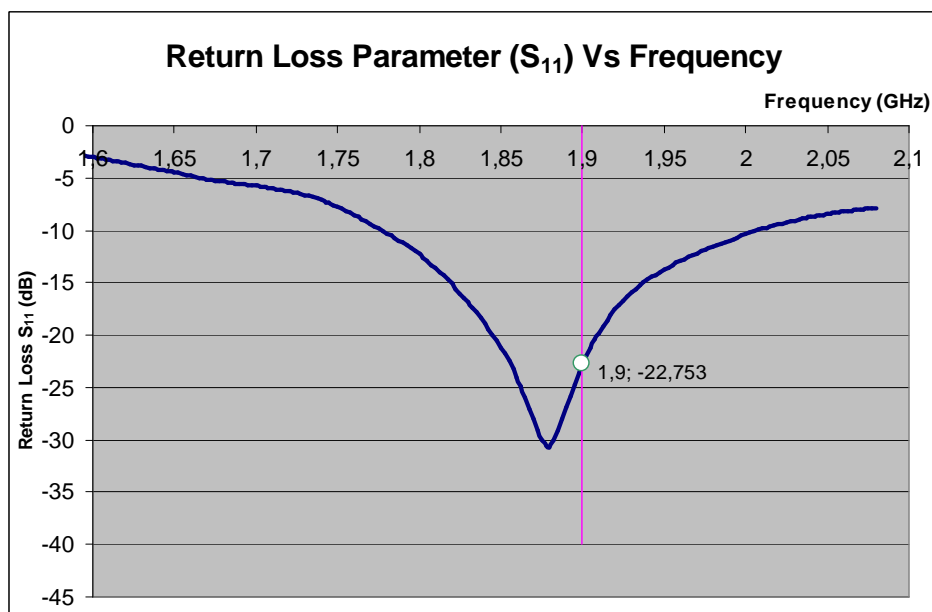


Figure 2 : Return Loss in Body Liquid

VSWR at 1900 MHz in HL: **1.051:1**

VSWR at 1900 MHz in BL: **1.157:1**



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**1900 MHz**

## SAR MEASUREMENT EQUIPEMENT

<b>PC</b>	Dell (Pentium IV 2.4GHz, SN:X10-23533)
<b>Voltmeter</b>	Keithley (2000, SN:1000572)
<b>Synthesizer</b>	Rohde&Schwarz (SML_03, SN:101868)
<b>Amplifier</b>	Nuclétudes (ALB216, SN:10800)
<b>Power Meter</b>	Rohde&Schwarz (NRVD, SN:101066)
<b>Probe</b>	Antennessa (SN:EP37)
<b>Phantom</b>	Antennessa (SN: SN_20_07_SAM42)
<b>Liquid</b>	Antennessa (Last Calibration: 17 09 07) Head Liquid Values: eps' : 39,93 sigma : 1,377 Boby Liquid Values: eps' : 51,34 sigma : 1,574
<b>Software</b>	OpenSAR V3

## SAR MEASUREMENT RESULT

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