

**ANTENNESSA**

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**CALIBRATION REPORT****VALIDATION DIPOLE****835 MHz****DATE :** 20/09/2007**REFERENCE :** SN 01/06 DIP C 32**OBJECT :** COMOSAR IEEE REF DIPOLE**MANUFACTURER :** ANTENNESSA**SERIAL NUMBER :** SN 01/06 DIP C 32**CUSTOMER :** CCS**DATE OF CALIBRATION :** 18/09/2007**WARRANTY :**

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Date

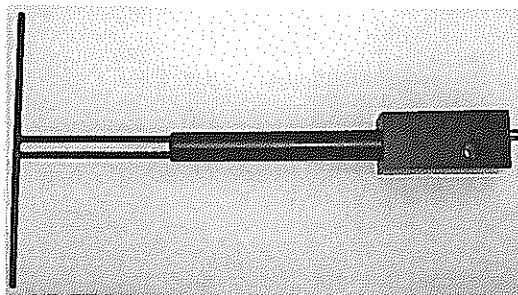
**25 OCT. 2007**

SEAL

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**COMOSAR PROJECT MANAGER**

### PRODUCT DESCRIPTION

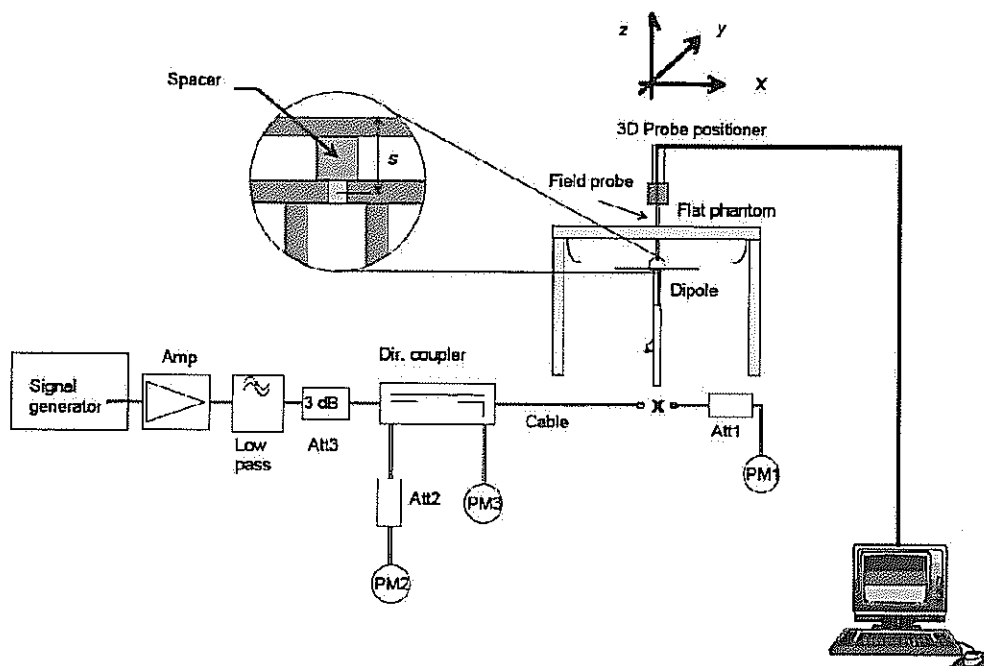


### CALIBRATION TEST EQUIPMENT

TYPE	IDENTIFICATION
Vector Network Analyzer	HP8753D

### MEASUREMENT PROCEDURE

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





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## CALIBRATION REPORT

VALIDATION DIPOLE

**835 MHz**

### RETURN LOSS MEASUREMENT RESULTS

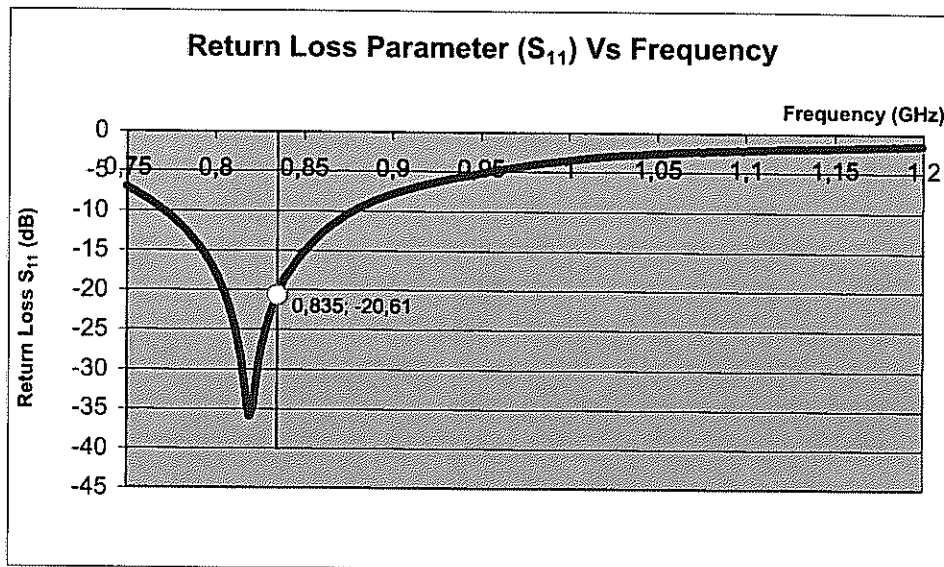


Figure 1 : Return Loss in Head Liquid

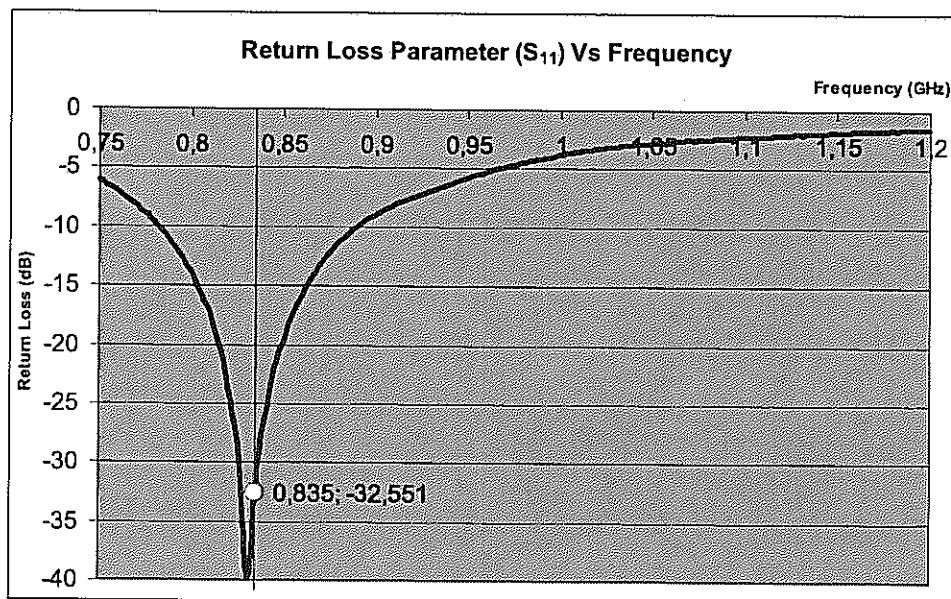


Figure 2 : Return Loss in Body Liquid

VSWR at 835 MHz in HL : 1.206:1  
VSWR at 835 MHz in BL : 1.048:1

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**VALIDATION DIPOLE****835 MHz**

### SAR MEASUREMENT EQUIPEMENT

<b>PC</b>	Dell (Pentium IV 2.4GHz, SN:X10-23533)
<b>Voltmeter</b>	Keithley (2000, SN:1000572)
<b>Synthetizer</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' : 41,76 sigma : 0,877 Body Liquid Values: eps' : 55,17 sigma : 1,009
<b>Software</b>	OpenSAR V3

### SAR MEASUREMENT RESULT

	10g	1g
SAR measured Liquid : HL Input power : 1W	6,364 W/Kg + 2,65%	9,610 W/Kg + 1,16%
SAR measured Liquid : BL Input power : 1W	6,422 W/Kg + 3,58%	9,590 W/Kg + 0,95%