

ANTENNESSA

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CALIBRATION REPORT

VALIDATION DIPOLE

2450 MHz

DATE : 21/09/2007

REFERENCE : SN 01/06 DIP J 37

OBJECT : COMOSAR IEEE REF DIPOLE

MANUFACTURER : ANTENNESSA

SERIAL NUMBER : SN 01/06 DIP J 37

CUSTOMER : CCS

DATE OF CALIBRATION : 20/09/2007

WARRANTY :

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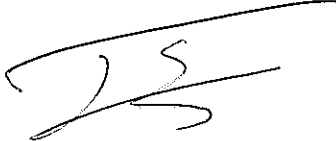
Date

25 OCT. 2007

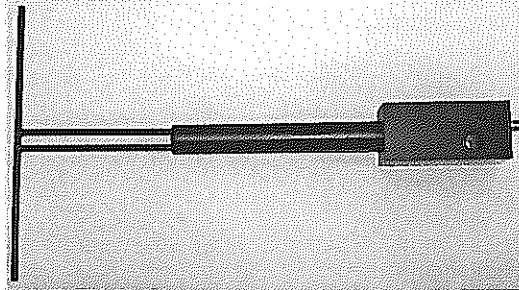
SEAL

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COMOSAR PROJECT MANAGER



PRODUCT DESCRIPTION

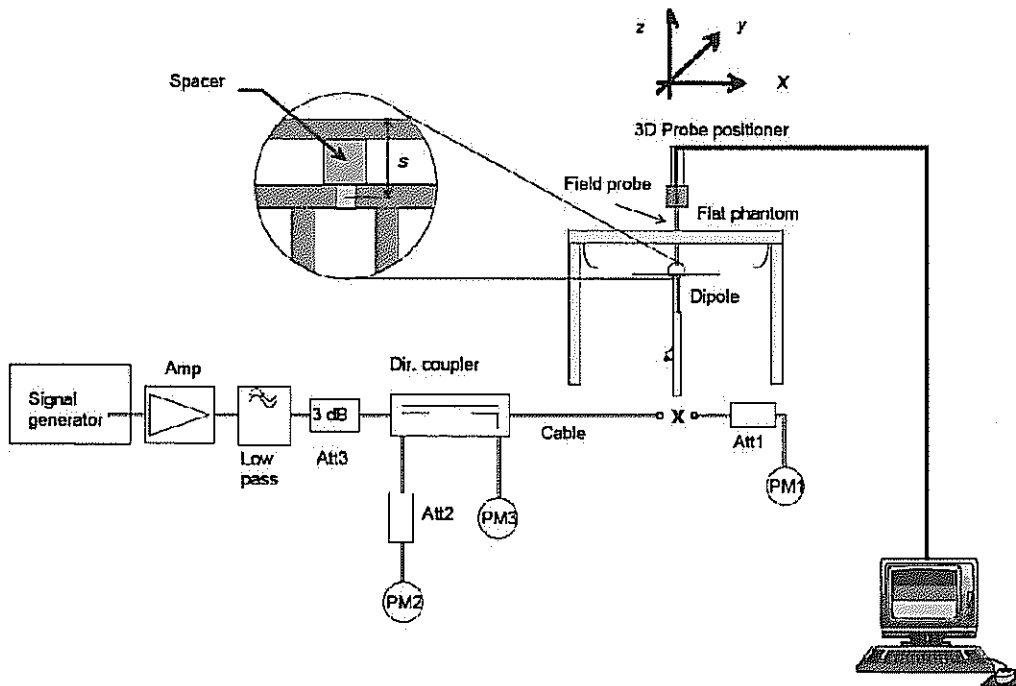


CALIBRATION TEST EQUIPMENT

TYPE	IDENTIFICATION
Vector Network Analyzer	HP8753D

MEASUREMENT PROCEDURE

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



RETURN LOSS MEASUREMENT RESULTS

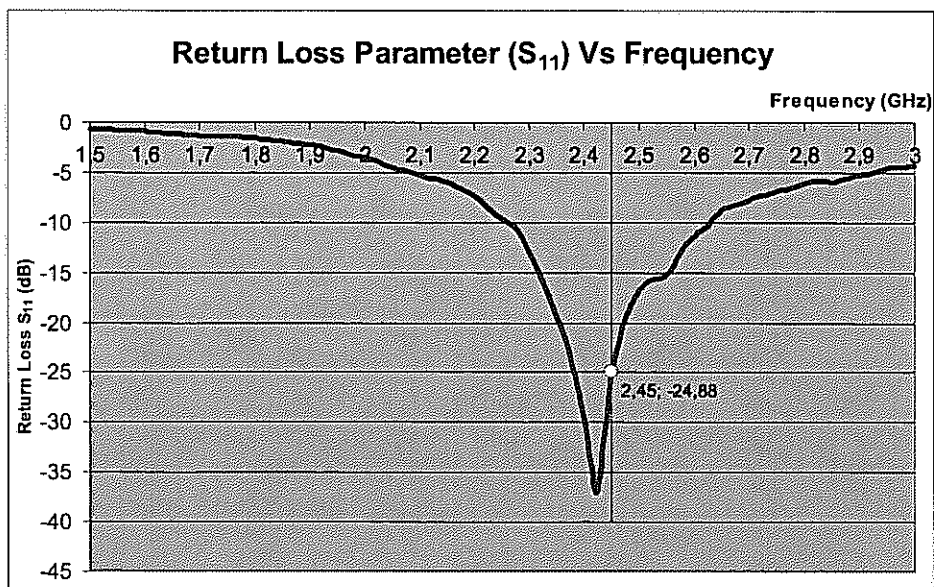


Figure 1 : Return Loss in Head Liquid

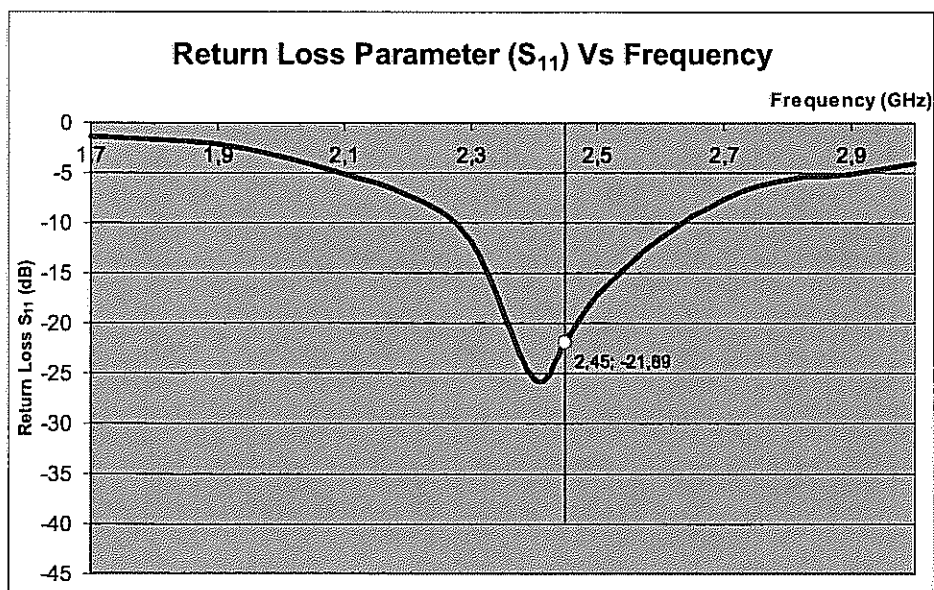


Figure 2 : Return Loss in Body Liquid

VSWR at 2450 MHz in HL: 1.135:1

VSWR at 2450 MHz in BL: 1.179:1



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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' : 38,81 sigma : 1,838 Body Liquid Values: eps' : 55,12 sigma : 2,035
Software	OpenSAR V3

SAR MEASUREMENT RESULT

	10g	1g
SAR measured Liquid : HL Input power : 1W	23,633 W/Kg - 1,55 %	54,718 W/Kg + 4,42 %
SAR measured Liquid : BL Input power : 1W	25,012 W/Kg 4,21%	53,846 W/Kg + 2,76%