DIPOLE 1800 MHZ CALIBRATION REPORT

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Project Description:	SAR TEST BENCH
Prepared For (End User):	Shenzhen Morlab Communication Technology

DIPOLE 1800 MHz CALIBRATION REPORT

DATE: 19/02/2009

REFERENCE: SN 36/08 DIPF101

OBJECT: COMOSAR IEEE REFERENCE DIPOLE

MANUFACTURER: SATIMO

SERIAL NUMBER: SN 36/08 DIPF101

CUSTOMER: Shenzhen Morlab Communication Technology

CONTRACT: PF2130108b_SAR_Morlab

DATE OF CALIBRATION: 24/09/2008

WARRANTY:

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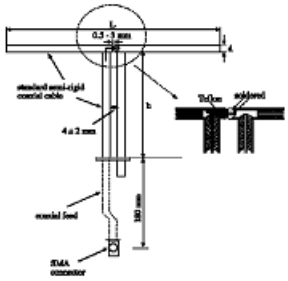
Date

2008/10/06

SATIMO Bretagne
Technopôle Brest Iroise
Zone du Vernis
225 rue Pierre Rivoalon
29200 BREST

SAR TEAM MANAGER

PRODUCT DESCRIPTION



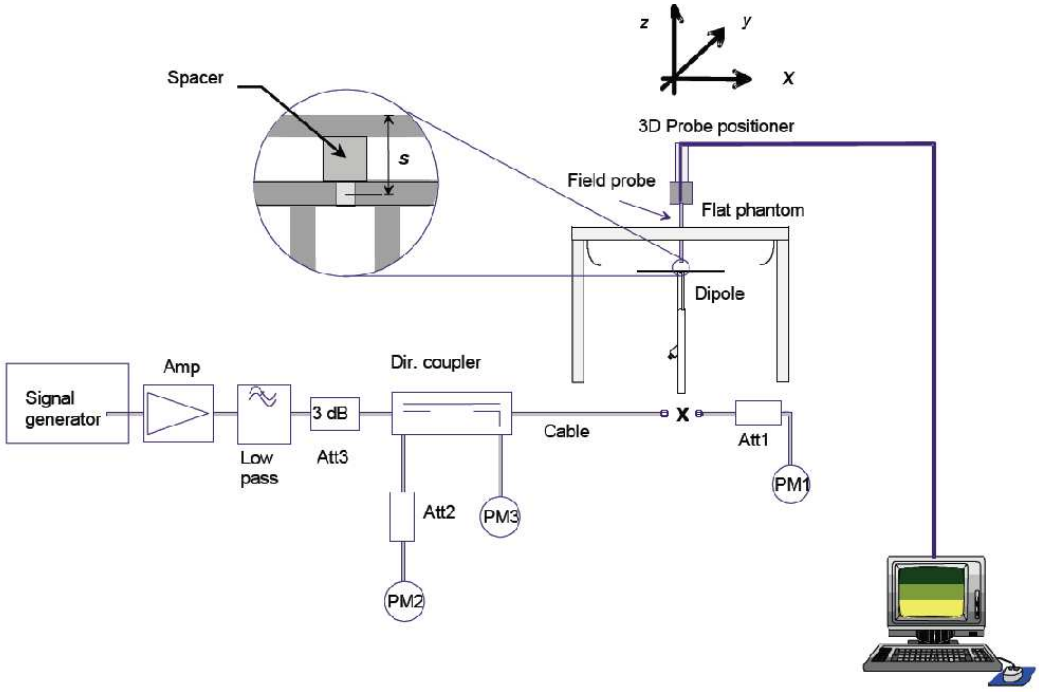
Dimension: L=72 mm/ h=41.7 mm / d=3.6 mm

CALIBRATION TEST EQUIPMENT

TYPE	IDENTIFICATION	DATE OF CALIBRATION
Vector Network Analyzer	HP8753D (SN: 5410A08882)	10-06-2008

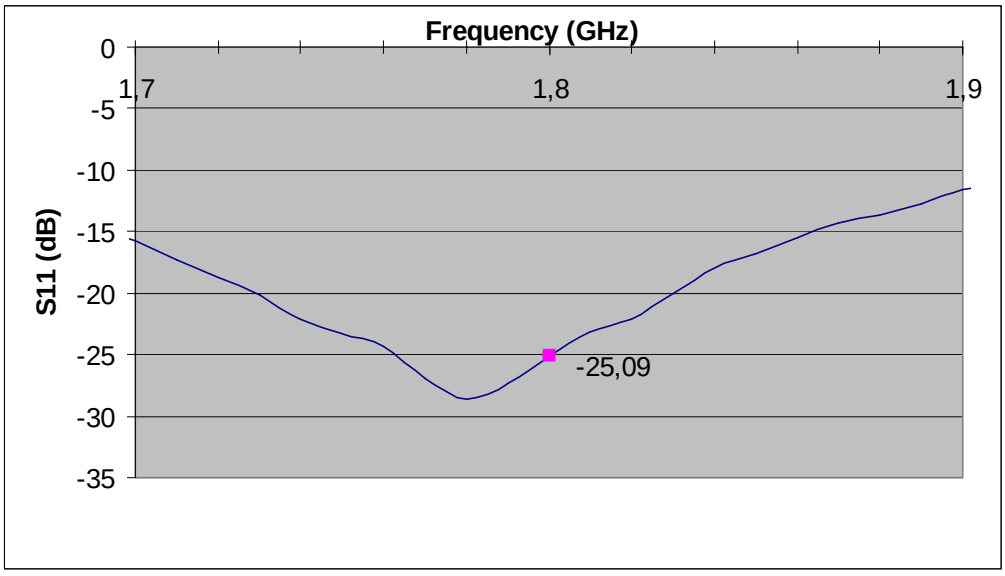
MEASUREMENT PROCEDURE

We placed the dipole under the flat part of SAM phantom fill with 1800 MHz head liquid.



Calibration was performed according to IEEE Std P1528-2003 and OET bulletin 65 Supplement C (Ed. 01-01)

VSWR at 1800 MHz: -25.09 dB



SAR MEASUREMENT EQUIPEMENT

Voltmeter	Keithley (2000, SN:1000572)	Date of calibration: 01-07-2008
Signal generator	Rohde&Schwarz (SML_03, SN:101868)	Date of calibration: 15-11-2007
Power amplifier	Nuclétudes (ALB216, SN:10800)	Date of calibration: 24-10-2007
Power meter	Rohde&Schwarz (NRVD, SN:101066)	Date of calibration: 04-07-2008
Probe	SATIMO Bretagne (SN:EP37) CF (35.35,34.93,37.42)	Date of calibration: 19-06-2008

SAR MEASUREMENT CONDITION

Software	OpenSAR V3
Phantom	SATIMO Bretagne (SN: SN_20_07_SAM42)
Liquid	SATIMO Bretagne (Last Calibration: 19 09 08) Head Liquid Values: eps' : 39,80 sigma : 1,45
Distance between the center of the dipole and the liquid (set with a spacer)	10 mm
Area scan resolution	dx=8mm/dy=8mm
Zoom scan resolution	dx=8mm/dy=8m/dz=5mm
Frequency	1800 MHz
Input power	30 dBm
Expanded uncertainty (K=1)	8.09%

SAR MEASUREMENT RESULT

	10g	1g
SAR measured Liquid : HL Input power : 1W	**20,05 W/Kg** **+ 1,24 %**	**39,32 W/Kg** **+ 3,20 %**

SAR MEASUREMENT PLOTS