

# COMOSAR Dipole 1800 MHz Calibration Report



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Issue: B

Date: 2009/10/05

## DIPOLE 1800 MHZ CALIBRATION REPORT

Prepared By: LUC Jérôme, SATIMO  
Project Description: SAR TEST BENCH  
Prepared For (End User): Shenzhen Morlab Communication Technology

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## 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:** 23/09/2009

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Date

2009/10/05

SAR TEAM MANAGER

*JS*

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

# COMOSAR Dipole 1800 MHz Calibration Report



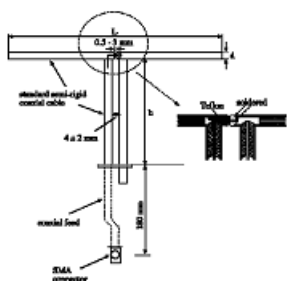
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## PRODUCT DESCRIPTION



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)	10-05-2009

## MEASUREMENT PROCEDURE

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

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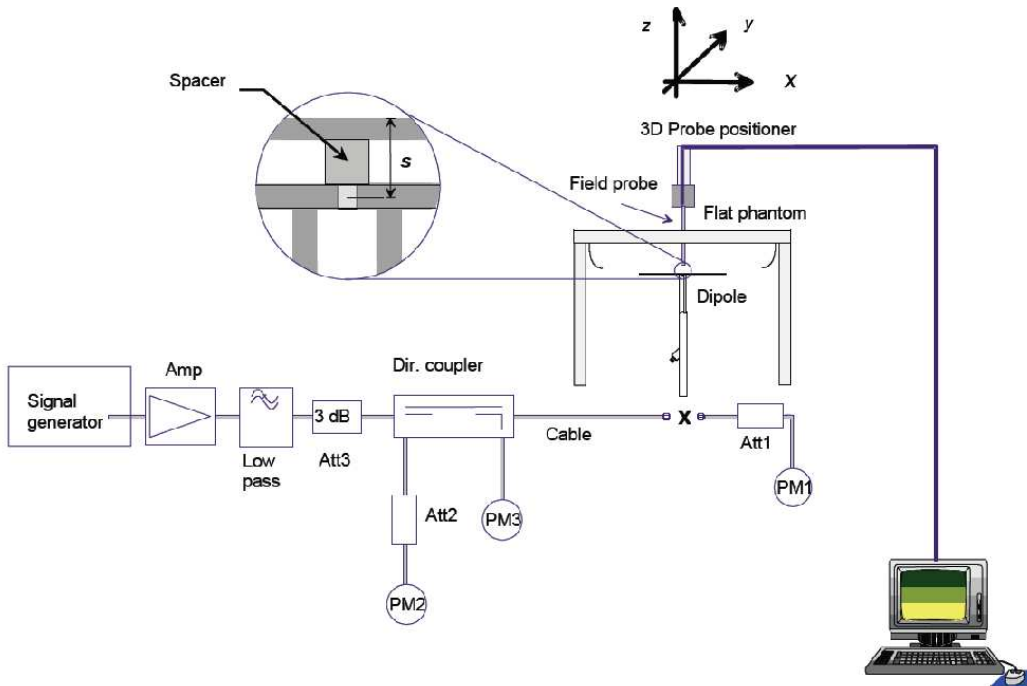


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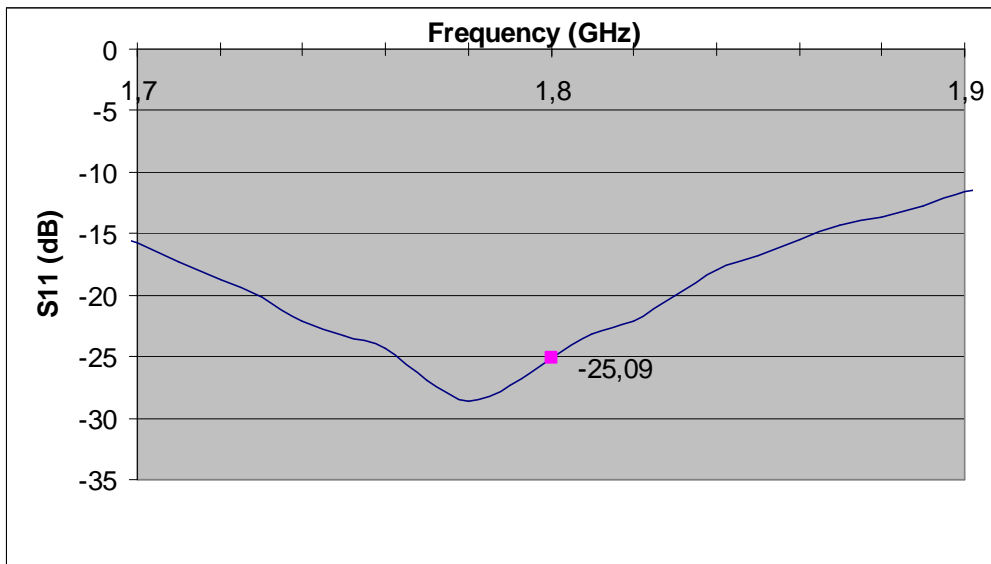
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Calibration was performed according to IEEE Std P1528-2003 and OET bulletin 65 Supplement C (Ed. 01-01)

**VSWR at 1800 MHz: -25.09 dB**



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## SAR MEASUREMENT EQUIPEMENT

<b>Voltmeter</b>	Keithley (2000, SN:1000572)	Date of calibration: 01-07-2009
<b>Signal generator</b>	Rohde&Schwarz (SML_03, SN:101868)	Date of calibration: 15-11-2008
<b>Power amplifier</b>	Nuclétudes (ALB216, SN:10800)	Date of calibration: 24-10-2008
<b>Power meter</b>	Rohde&Schwarz (NRVD, SN:101066)	Date of calibration: 04-07-2009
<b>Probe</b>	SATIMO Bretagne (SN:EP37) CF (35.35,34.93,37.42)	Date of calibration: 19-06-2009

## SAR MEASUREMENT CONDITION

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

## SAR MEASUREMENT RESULT

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

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## SAR MEASUREMENT PLOTS

