

Ref: CR-280-5-08-SATB-C

DIPOLE 1900 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 1900 MHz CALIBRATION REPORT

DATE: 19/02/2009

REFERENCE: SN 36/08 DIPF102

OBJECT: COMOSAR IEEE REFERENC2E DIPOLE

MANUFACTURER: SATIMO

SERIAL NUMBER: SN 36/08 DIPF102

CUSTOMER: Shenzhen Morlab Communication Technology

CONTRACT: PF2130108b_SAR_Morlab

DATE OF CALIBRATION: 23/09/2010

WARRANTY:

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Date

20/0/10/05

SAR TEAM MANAGER

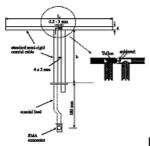
SATIMO Bretagne
Technopôle Brest Iroise
Zone du Vernis
225 rue Pierre Rivoalon
29200 BREST



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PRODUCT DESCRIPTION





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

CALIBRATION TEST EQUIPMENT

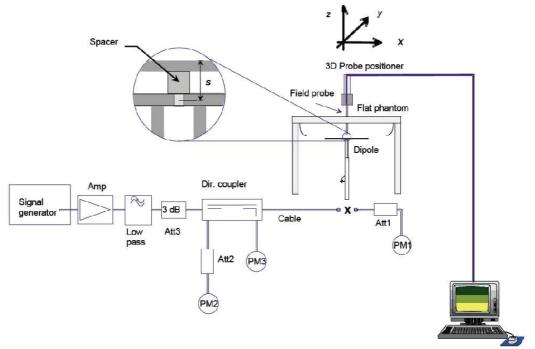
TYPE	IDENTIFICATION	DATE OF CALIBRATION
Vector Network Analyzer	HP8753D (SN: 5410A08882)	10-05-2010

MEASUREMENT PROCEDURE

We placed the dipole under the flat part of SAM phantom fill with 1900 MHz head liquid.

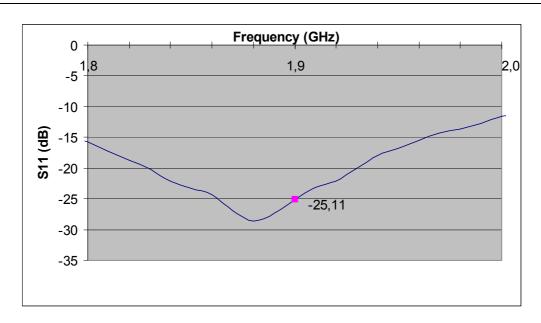


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Calibration was performed according to IEEE Std P1528-2003 and OET bulletin 65 Supplement C (Ed. 01-01)

VSWR at 1900 MHz: -25.11 dB





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SAR MEASUREMENT EQUIPEMENT

Voltmeter	Keithley (2000, SN:1000572)	Date of calibration: 01-07-2010
Signal generator	Rohde&Schwarz (SML_03, SN:101868)	Date of calibration: 15-11-2009
Power amplifier	Nuclétudes (ALB216, SN:10800)	Date of calibration: 24-10-2009
Power meter	Rohde&Schwarz (NRVD, SN:101066)	Date of calibration: 04-07-2010
Probe	SATIMO Bretagne (SN:EP37)	Date of calibration: 19-06-2010
	CF (35.35,34.93,37.42)	

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	1900 MHz	
Input power	30 dBm	
Expanded uncertainty (K=1)	8.09%	

SAR MEASUREMENT RESULT

	10g	1g
SAR measured Liquid : HL Input power : 1W	20,16 W/Kg + 1,82 %	39,18 W/Kg + 2,83 %



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SAR MEASUREMENT PLOTS

