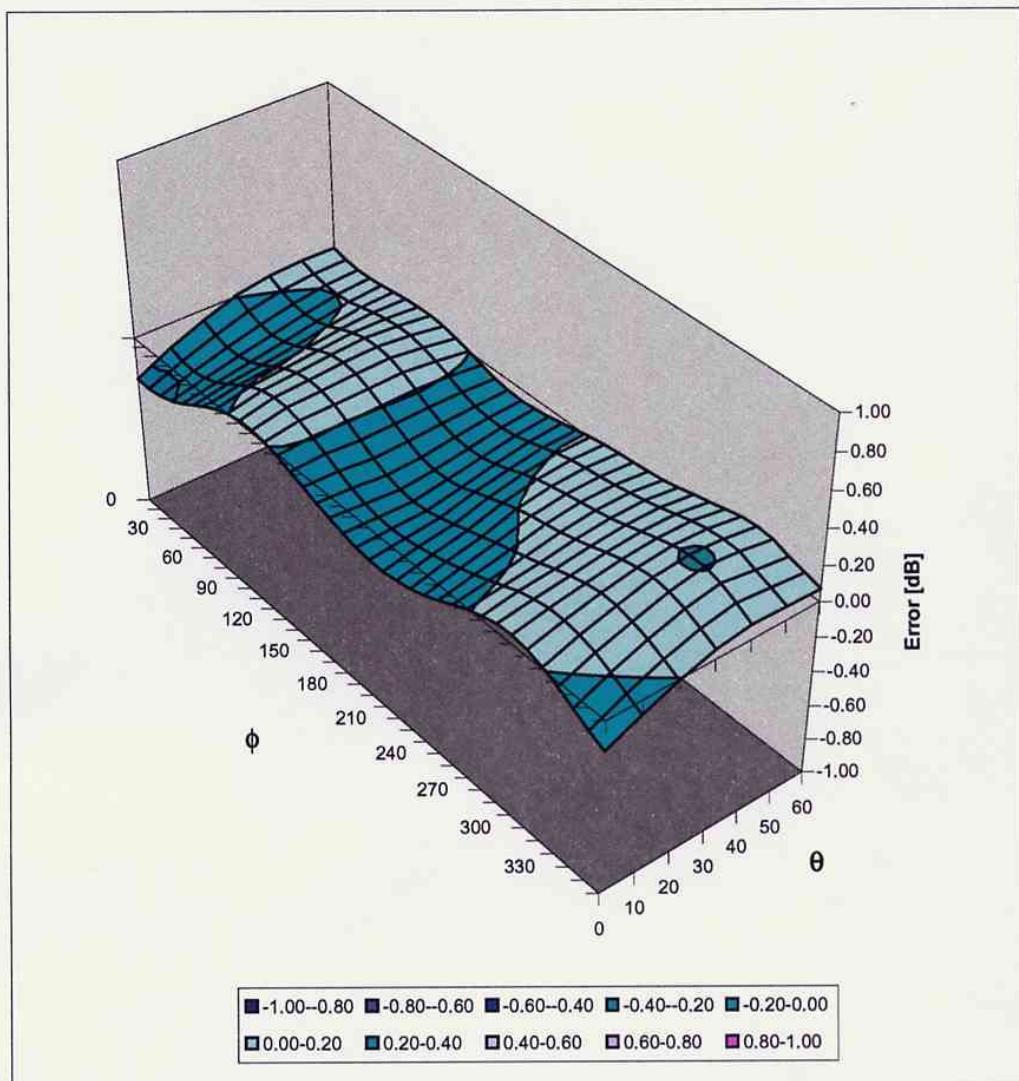


Deviation from Isotropy in HSL

Error (θ, ϕ), $f = 900$ MHz





D3: DAE

Calibration Laboratory of
Schmid & Partner
Engineering AG
Zeughausstrasse 43, 8004 Zurich, Switzerland

Client

CALIBRATION CERTIFICATE

Object(s) DAE3 - SN:579

Calibration procedure(s) QA CAL-06.v3
Calibration procedure for the data acquisition unit (DAE)

Calibration date: August 15, 2003

Condition of the calibrated item In Tolerance (according to the specific calibration document)

This calibration statement documents traceability of M&TE used in the calibration procedures and conformity of the procedures with the ISO/IEC 17025 international standard.

All calibrations have been conducted in the closed laboratory facility: environment temperature 22 +/- 2 degrees Celsius and humidity < 75%.

Calibration Equipment used (M&TE critical for calibration)

Model Type	ID #	Cal Date	Scheduled Calibration
Fluke Process Calibrator Type 702	SN: 6295803	3-Sep-01	Sep-03

Calibrated by:	Name	Function	Signature
	Philipp Storchenegger	Technician	
Approved by:	Fin Bomholt	R&D Director	

Date issued: August 15, 2003

This calibration certificate is issued as an intermediate solution until the accreditation process (based on ISO/IEC 17025 International Standard) for Calibration Laboratory of Schmid & Partner Engineering AG is completed.

1. Cal Lab. Incoming Inspection & Pre Test

Modification Status	Note Status here → → → →	BC
Visual Inspection	Note anomalies.....	None

Pre Test	Indication	Yes/No
Probe Touch	Function	Yes
Probe Collision	Function	Yes
Probe Touch&Collision	Function	Yes

2. DC Voltage Measurement

A/D - Converter Resolution nominal

High Range: 1LSB = $6.1\mu V$, full range = 400 mV
 Low Range: 1LSB = $61nV$, full range = 4 mV

DASY measurement parameters: Auto Zero Time: 3 sec; Measuring time: 3 sec

Calibration Factors	X	Y	Z
High Range rounded to 7 digits	404.5370401	404.5593911	404.3923437
Low Range rounded to 6 digits	3.9686	3.9584	3.95
Connector Angle to be used in DASY System		311 °	

High Range	Input	Reading in μV	% Error
Channel X + Input	200mV	199999.6	0.00
	20mV	19998.2	-0.01
Channel X - Input	20mV	-19995.3	-0.02
Channel Y + Input	200mV	199999.8	0.00
	20mV	19998.3	-0.01
Channel Y - Input	20mV	-19993.6	-0.03
Channel Z + Input	200mV	200000.6	0.00
	20mV	19997.8	-0.01
Channel Z - Input	20mV	-19994.3	-0.03

Low Range	Input	Reading in μV	% Error
Channel X + Input	2mV	1999.99	0.00
	0.2mV	199.66	-0.17
Channel X - Input	0.2mV	-200.21	0.11
Channel Y + Input	2mV	1999.89	-0.01
	0.2mV	199.20	-0.40
Channel Y - Input	0.2mV	-201.14	0.57
Channel Z + Input	2mV	1999.99	0.00
	0.2mV	199.18	-0.41
Channel Z - Input	0.2mV	-202.26	1.13