

TEST EQUIPMENT

List of Measuring Equipment

ARA model ALA-130/RS Calibrated Loop Antenna
Agilent Technologies model E7402A Spectrum Analyzer
Electro-Metrics Model EM-6917 Biconical Log Periodic Antenna

Calibration

Certificates of calibration are included for the listed measuring equipment.

 ARA TECHNOLOGIES		11317 Frederick Avenue Beltsville, MD 20705-2088 Phone: (301) 937-9381 • Fax: (301) 937-2796 http://www.aratech-inc.com • emc@aratech-inc.com
CERTIFICATE OF CALIBRATION		
<i>Customer:</i> Southwest Microwave 9055 South McKemy Street Tempe AZ 85282-2946 Attention: Jim Cheal		
OWNER: Antenna Research Associates, Inc. 11317 Frederick Avenue Beltsville, MD 20705 Phn: 301-937-8888; Fa: 301-937-2796	JOB NUMBER: 803-040 PO NUMBER: 26346 PROCEDURE NUMBER: Q.A1 40810 REPORT NUMBER: 01150304 CONTROL NUMBER:	811791
Calibration Performed In Accordance With: ANSI / NCSL Z540-1 1994		
Reports Sent With Certificate of Calibration: Antenna Factor		
Out Of Tolerance Conditions: None		
Calibration Equipment Used: TE-405, TE-109		
NIST Traceability: 811791		
Date Of Calibration:	January 15, 2003	Temperature: 70° F
Calibration Due Date:	January 15, 2004	Humidity: 70% rH
Calibrated By: <u>Jol B. Joy</u>		
Certified By:	<u>RPL</u>	Date: <u>1-15-03</u>
Calibrations of reference standards and instrumentation that have been used in obtaining results, are traceable to the National Institute of Standards and Technology (NIST) or other nationally accepted measuring systems. This certificate is valid for one year from the date of issue.		

Fig 1

 Agilent Technologies	EPSG Support Operation 10090 Foothills Blvd. Roseville, CA. 95747 (800) 403-0801	AGILENT TECHNOLOGIES INTERNAL ASSESSMENT PROGRAM : TMO-Q-07/95
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Certificate of Calibration

Standard Calibration

Certificate No: 1-9759327-1

Manufacturer:	Agilent/HP	Description:	EMC analyzer 9 KHz to 3.0 GHz
Model No:	E7402A	Options installed:	
Serial No:	US40240233	Customer asset No:	
Customer:		Location of calibration:	
		EPSG Support Operation 10090 Foothills Blvd. Roseville, CA. 95747 (800) 403-0801	

Customer PO No.:	Agreement No:
Date of calibration:	Received date:
Temperature:	Humidity:
Procedure:	20-80 %RH

This certifies that the above product was calibrated in compliance with a quality system compliant to ISO9002:1994 using applicable Agilent Technologies procedures.

As received conditions:

Initial testing found the equipment to be **IN-SPECIFICATION** at the points tested.

As shipped conditions:

At the completion of the calibration, measured values were **IN-SPECIFICATION** at the points tested.

Remarks or special requirements:

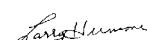
Our calibration procedures are designed to provide measurement uncertainty of less than or equal to one quarter of the specification of the unit under test, where possible, with a coverage factor of 2.

The test limits stated in the report correspond to the published specifications of the equipment, at the points tested.

This certificate is composed of 2 pages containing a summary of calibration information.

Based on the recommended calibration interval, the next calibration is due on 28 Feb 2004.

Print Date: 28 Feb 2003


Larry Hermone
Operations Manager

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Fig 2

