



11317 Frederick Avenue
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CERTIFICATE OF CALIBRATION

Customer:

Antenna Research Associates, Inc.
11317 Frederick Avenue
Beltsville, MD 20705
Phn. 301-937-8888; Fa. 301-937-2796

Southwest Microwave
9055 South McKemy Street
Tempe, AZ 85284-2946

OWNER: Southwest Microwave
MANUFACTURER: Antenna Research
MODEL NUMBER: ALA-130/RS

DESCRIPTION: Active Loop Antenna
SERIAL NUMBER: 1040
ASSET NUMBER:

JOB NUMBER: 404-067
PO NUMBER: R56584
PROCEDURE NUMBER: Q.A.140810
REPORT NUMBER: 02170406
CONTROL NUMBER:

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: February 17, 2004 Temperature: 70° F
Calibration Due Date: February 17, 2005 Humidity: 62% rH

Calibrated By: 

Certified By: 

Date: 2-17-04

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 relates only to the equipment listed and shall not be reproduced except in full, without the written approval of Antenna Research Associates, Inc. All calibrations have been performed using standards having an accuracy of four times or better than the instrument(s) listed above. Instruments and Standards are periodically calibrated and maintained.



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Model: ALA-130/A

H-FIELD ANTENNA FACTOR CALIBRATION

$$H(\text{dB V/m}) = V_0(\text{dB V}) + AFH(\text{dB AVm}^{-1})$$

Frequency	AFH
MHz	dB/AV
1khz	3.9
3khz	-8.6
10khz	-20.8
30khz	-32.2
50 khz	-36.8
80khz	-41.4
100khz	-42.2
200khz	-48.5
500khz	-56.4
700khz	-58.8
1mhz	-61.2
2mhz	-65.6
3mhz	-65.9
6mhz	-64.0
10mhz	-60.6
20mhz	-53.4
30mhz	-49.0

Model Number: ALA-130/RS

Serial Number: 1040

Job Number: 404-067

Standard: BBH-3100/A, TE-109

Remarks: 1 meter cal

Temperature: 70°F

Humidity: 62%

Traceability: 811791

Date: February 17, 2004


Calibrated by