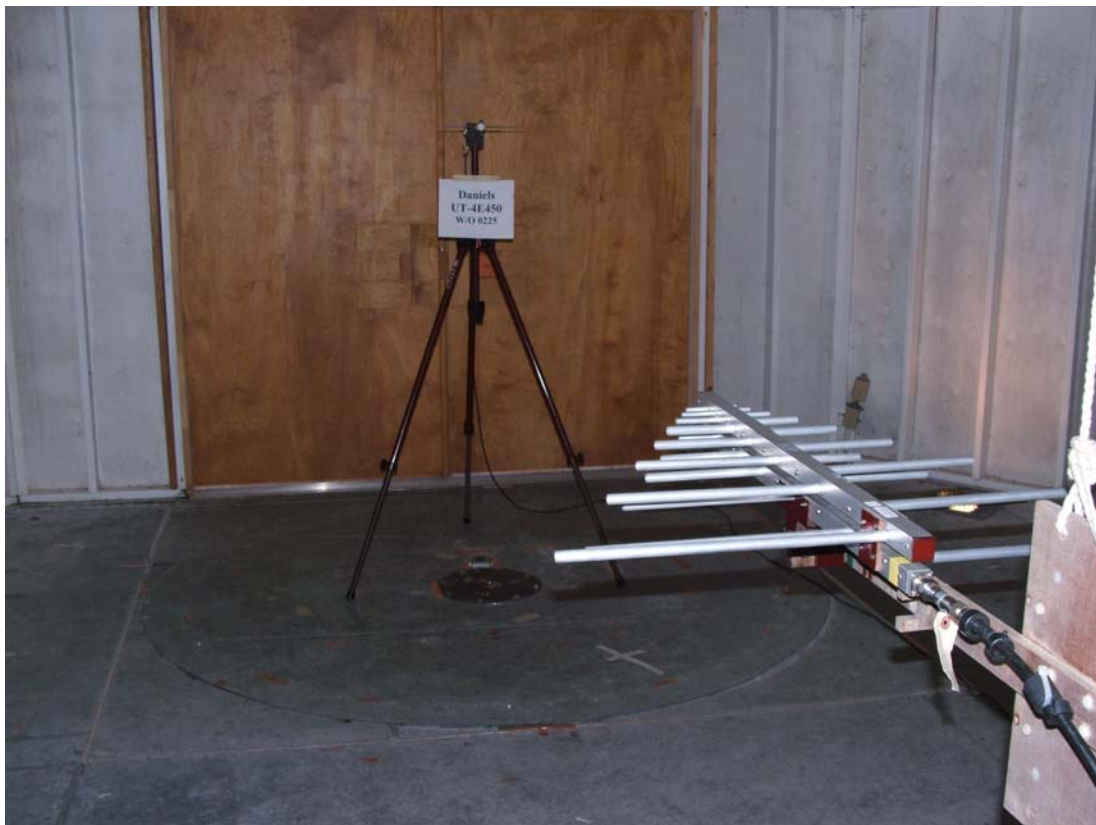




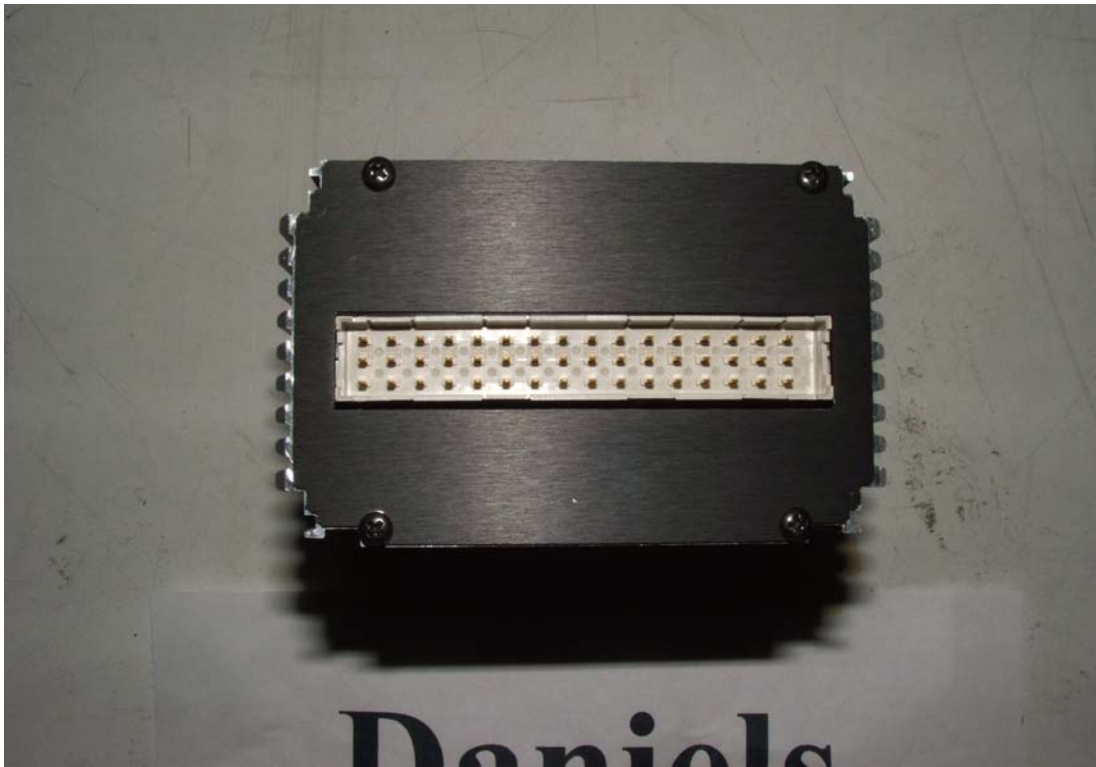








4.5.3 UT-4E500





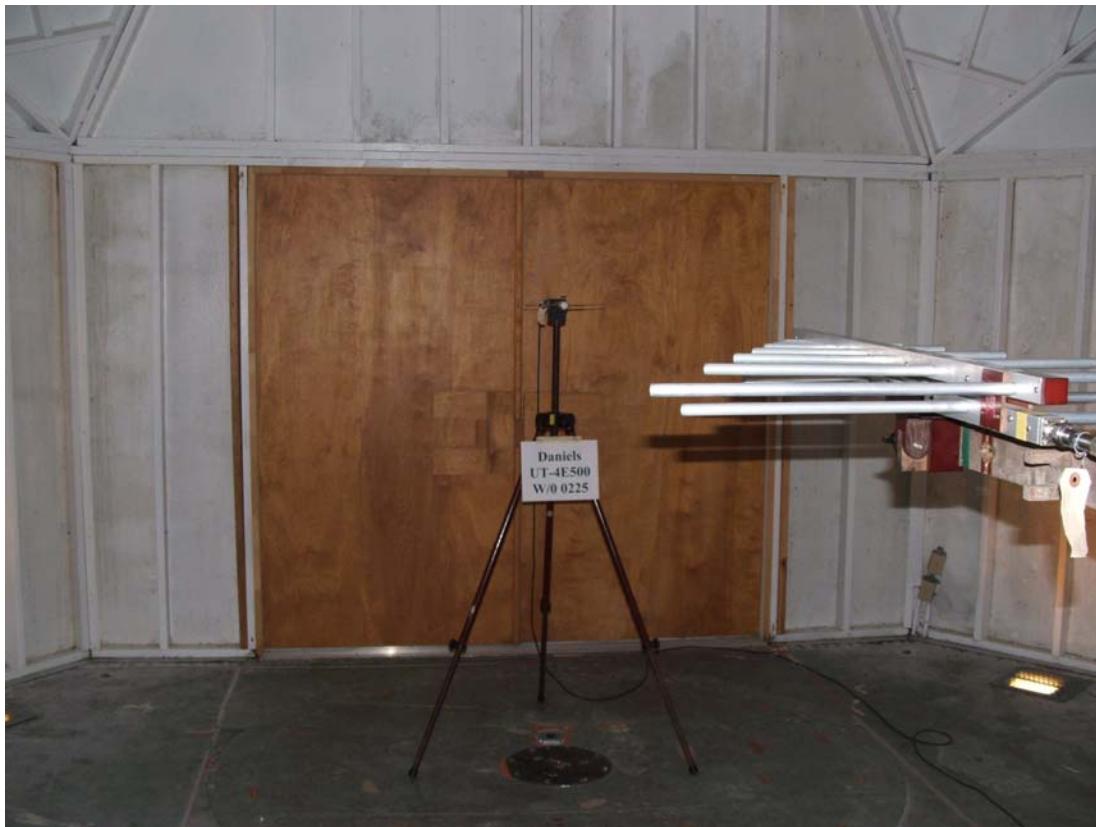




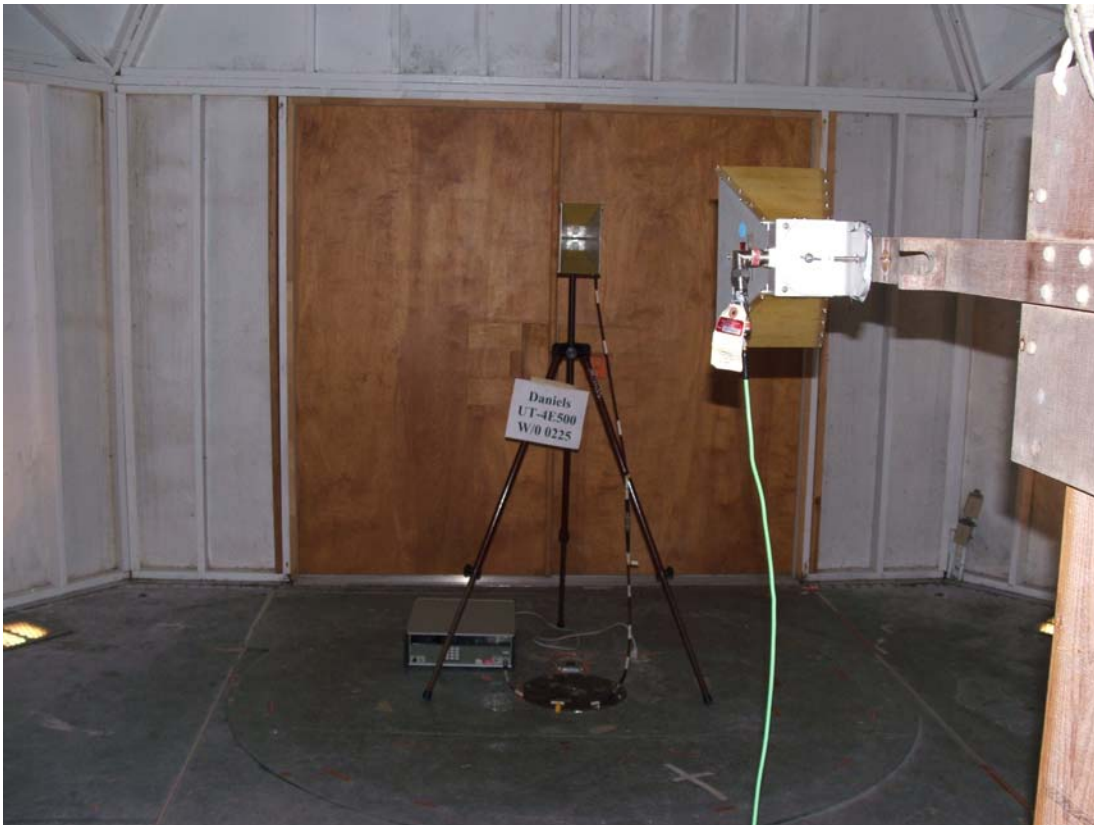
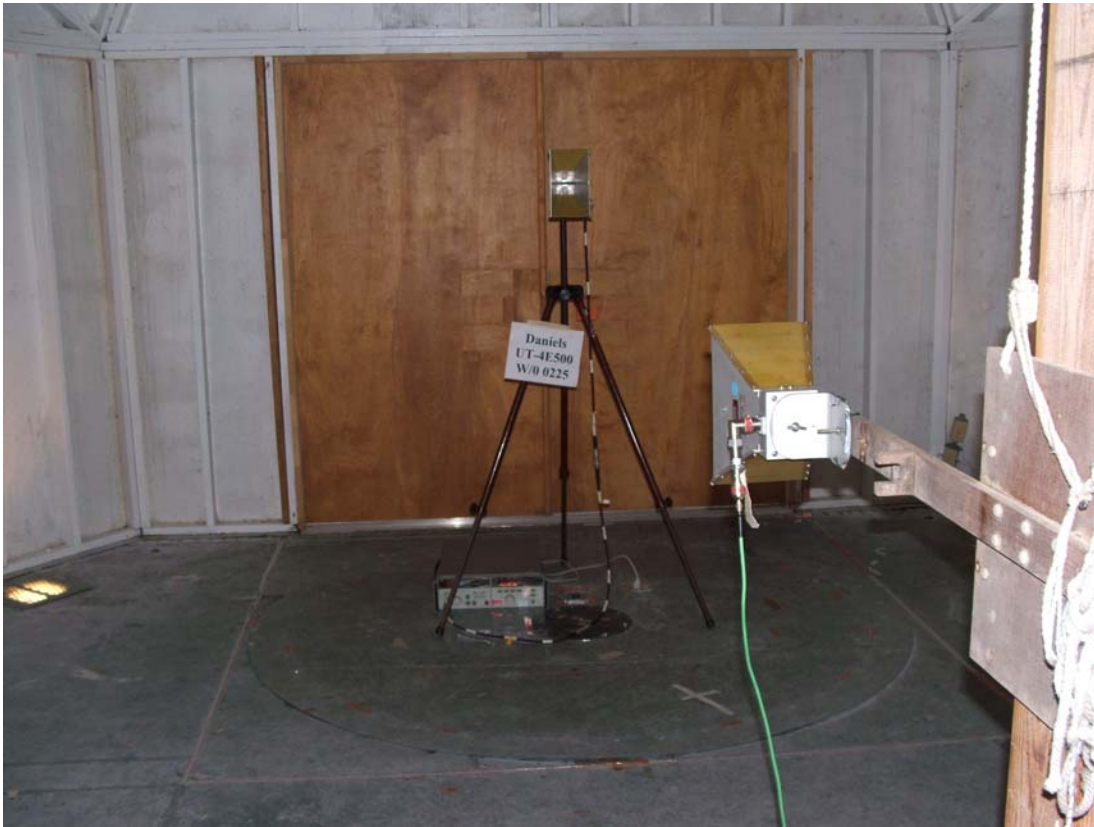












5. Miscellaneous Comments and Notes

None.

6. Annex A: Non-Normative Information



**THE AMERICAN
ASSOCIATION
FOR LABORATORY
ACCREDITATION**

ACCREDITED LABORATORY

A2LA has accredited

ACME TESTING CO.
Acme, WA

for technical competence in the field of

Electrical Testing

The accreditation covers the specific tests and types of tests listed on the agreed scope of accreditation. This laboratory meets the requirements of ISO/IEC 17025 - 1999 "General Requirements for the Competence of Testing and Calibration Laboratories" and any additional program requirements in the identified field of testing.

Presented this 13th day of April 2004.




President
For the Accreditation Council
Certificate Number 829-01
Valid to November 30, 2005

For tests or types of tests to which this accreditation applies,
please refer to the laboratory's Electrical Scope of Accreditation.



American Association for Laboratory Accreditation

SCOPE OF ACCREDITATION TO ISO/IEC 17025-1999

ACME TESTING CO.
Site # 1 and Site # 2
P.O. Box 3,
2002 Valley Highway
Acme, WA 98220-0003
Harry H. Hodes Phone: 1-360-595-2785

ELECTRICAL (EMC)

Valid to: November 30, 2005

Certificate Number: 0829.01

In recognition of the successful completion of the A2LA evaluation process, accreditation is granted to this laboratory to perform the following Electromagnetic Compatibility (EMC) tests:

Test TechnologyTest Method(s)*Basic Test Method Standards (Emissions):*

Conducted & Radiated: ANSI C63.4-1992, ANSI C63.4-2001 & ANSI C63.4-2003;
EIA/TIA-603:1993 & TIA/EIA-603:2001;
FCC OST MP-5:1986;
CISPR 11:1990 & EN 55011:1991; CISPR 11:1997 + A1:1999
+ A2:2002;
CISPR 11:1998; CISPR 11:2003 (*excluding measurements above 1 GHz*);
& EN 55011:1998 + A1:1999 + A2:2002
CISPR 13:1996 + A1:1998; CISPR 13:2001 & EN 55013:2001
+ Corrigendum 1
& EN 55013:1990 + A12:1994 + A13:1996 + A14:1999
CISPR 14-1:1993 + A1:1996 + A2:1998
& EN 55014-1:1993 + A1:1997 + A2:1999;
CISPR 14-1:2000 + A1:2000; EN 55014-1:2000 + A1:2001;
CISPR 22:1993 + A1:1995 + A2:1996 & EN 55022:1994 + A1:1995
+ A2:1997;
CISPR 22:1997 + A1:2000 + A2:2002 & EN 55022:1998 + A1:2000 ;
+ A2:2003
Harmonic Current: IEC 61000-3-2:1995+A1:1997+A2:1998; IEC 61000-3-2:2000;
IEC 61000-3-2:2001 & EN 61000-3-2:1995+A1,A2:1998+A14:2000;
IEC 61000-3-2:2000 & EN 61000-3-2:2000
Voltage Fluctuations & Flicker IEC 61000-3-3:1994+ A1:2001 & EN 61000-3-3:1995+A1:2001

Basic Test Method Standards (Immunity):

Audio Frequency Common Mode IEC 61000-2-1:1990; IEC 61000-2-2:2002
Electrostatic Discharge (ESD): IEC 801-2:1991; IEC 1000-4-2:1995;
IEC 61000-4-2:1995 + A1:1998 + A2:2001;
EN 61000-4-2:1995 + A1:1998 + A2:2001;
Radiated RF Fields: IEC 801-3:1984; ENV 50140:1994; IEC 1000-4-3:1995;
IEC 61000-4-3:1995; IEC 61000-4-3:2002;
EN 61000-4-3:1996 + A1:1998; EN 61000-4-3:2002; &
ENV 50204:1995;

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5301 Buckeystown Pike, Suite 350 • Frederick, MD 21704-8373 • Phone: 301-644 3248 • Fax: 301-662 2974



<u>Test Technology</u>	<u>Test Method(s)</u>
Electrical Fast Transient/Burst:	IEC 801-4:1998; IEC 1000-4-4:1995; IEC 61000-4-4:1995; EN 61000-4-4:1995 + A1:2000 + A2:2001;
Surge:	IEC 801-5(D):1992 (<i>excluding 10/700 surge testing</i>); ENV 50142:1994 (<i>excluding 10/700 surge testing</i>); IEC 1000-4-5:1995 (<i>excluding 10/700 surge testing</i>); IEC 61000-4-5:1995 (<i>excluding 10/700 surge testing</i>); EN 61000-4-5:1995 + A1:2001 (<i>excluding 10/700 surge testing</i>); IEC 61000-4-5:2001 (<i>excluding 10/700 surge testing</i>);
RF Common Mode (Conducted):	ENV 50141:1994; IEC 1000-4-6:1996; IEC 61000-4-6:1996; IEC 61000-4-6:2003; & EN 61000-4-6:1996;
Power Frequency Magnetic Fields:	IEC 1000-4-8:1993; IEC 61000-4-8:1993; EN 61000-4-8:1993; IEC 61000-4-8:1993 + A1:2000; EN 61000-4-8:1993 + A1:2001;
Voltage Dips, Short Interruptions, & Variations:	IEC 1000-4-11:1994; IEC 61000-4-11:1994 + A1:2000, EN 61000-4-11:1994 + A1:2001;
<i>Generic & Product Family Standards:</i>	
47 U.S. Code of Federal Regulations (47 CFR) FCC Methods, as follows: Part 15 (using ANSI C63.4-1992; & ANSI C63.4-2001); & Part 18 (using FCC OST MP-5:1986);	
ICES-003 Issue 2 Revision 1;	
CNS 13438:1997; CNS 13439:1994;	
Bellcore [Telcordia] GR-1089-CORE Issue 2 Revision 1:1999 (<i>Sections 2, 3, 4.5.9, 4.5.10, 9.10.5, & 9.10.6 Only</i>); Telcordia [Bellcore] GR-1089-CORE Issue 3:2002 (<i>Sections 2, 3, 4.6.7[1st Level Surge Pulse 4 only], 4.6.8, 4.6.9, 4.7, 9.12.5, & 9.12.6 Only</i>);	
AS/NZS 2064:1997; AS/NZS 3548:1995; AS/NZS 4251.1:1994; AS/NZS 4252.1:1994; AS/NZS 4268.2:1995	
EN 12015:1998; EN 12016:1998	
EN 50081-1:1992; EN 50081-2:1993; EN 50082-1:1997; EN 50082-2:1995; IEC 61000-6-1:1997 & EN 61000-6-1:2000 & EN 61000-6-1:2001 IEC 61000-6-2:1999 & EN 61000-6-2:1999 & EN 61000-6-2:2001 IEC 61000-6-3:1996 & EN 61000-6-3:2001 IEC 61000-6-4:1997 & EN 61000-6-4:2001	
EN 50083-2:1995 + A1:1997; EN 50083-2:2001; EN 50091-2:1995; EN 50130-4:1995 + A1:1998, EN 50199:1995; EN 50270:1999; EN 50293:2000;	
CISPR 11:1990 & EN 55011:1991; CISPR 11:1997 + A1:1998 + A2:2002 & EN 55011:1998 + A1:1999 + A2:2002; CISPR 11:2003 (<i>excluding measurements above 1GHz</i>)	

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Test TechnologyTest Method(s)*Generic & Product Family Standards:*

CISPR 13:1996 + A1:1998
 & EN 55013:1990 + A12:1994 + A13:1996 + A14:1999
 CISPR 13:2001 & EN 55013:2001 + Corrigendum 1;
 CISPR 14-1:1993 + A1:1996 + A2:1998
 & EN 55014-1:1993 + A1:1997 + A2:1999;
 CISPR 14-1:2000 + A1:2001 & EN 55014-1:2000 + A1:2001;
 & EN 55014-2:1997 + A1:2001
 CISPR 14-2:1997 + A1:1998
 CISPR 22:1993 + A1:1995 + A2:1996
 & EN 55022:1994 + A1:1995 + A2:1997;
 CISPR 22:1997 + A1:2000 + A2:2002 & EN 55022:1998 + A1:2000 + A2:2003;
 CISPR 24: 1997 + A1:2001 & EN 55024:1998 + A1:2001
 EN 55103-1:1996; EN 55103-2:1996;
 IEC 60521:1988 & EN 60521:1995;
 IEC 60555-2:1991 & EN 60555-2:1993;
 IEC 60555-3:1990 & EN 60555-3:1991;
 EN 60601-1-2:1984 (*EMC Requirements Only*);
 IEC 60601-1-2:2001 (2nd Edition) (*EMC Requirements Only*)
 & EN 60601-1-2:2001 (2nd Edition) (*EMC Requirements Only*)
 IEC 60687:1992 & IEC 60687:1992;
 IEC 60870-2-1:1995 & EN 60870-2-1:1996
 IEC 945:1996 (*Clauses 9, 10, 11.2, 12.2, & 12.3 Only*),
 & EN 60945:1997 (*Clauses 9, 10, 11.2, 12.2, & 12.3 Only*);
 IEC 60945:2002 (*Clauses 9, 10, 11.2, 12.2, & 12.3 Only*),
 IEC 61000-3-2:1995+A1:1997+A2:1998; IEC 61000-3-2:2000;
 IEC 61000-3-2:2001; & EN 61000-3-2:1995+A1,A2:1998+A14:2000;
 IEC 61000-3-2:2000 & EN 61000-3-2:2000;
 IEC 61000-3-3:1994 + A1:2001 & EN 61000-3-3:1995 + A1:2001;
 IEC 61036:1996 + A1:2000 & EN 61036:1996 + A1:2000;
 IEC 61131-2:1992 & EN 61131-2:1994 + A1:1996 + A12:2000;
 IEC 61204-3:2000 & IEC 61204-3:2000;
 IEC 61268:1995 & EN 61268:1996;
 IEC 61326:1997 + A1:1998 + A2:2000
 & EN 61326:1997 + A1:1998 + A2:2000;
 IEC 61800-3:1996 & EN 61800-3:1996 + A1:2000;

 EN 300 339:1998
 EN 300 386 V1.3.1(09-2001),
 EN 301 489-01 (09-2001)
 ETS/EN 300 386:1997
 EN 301 489-03 (11-2001)
 EN 300 385:1999
 EN 301 489-04 (07-2000)
 EN 300 279:1999
 EN 301 489-05 (07-2000)
 EN 301 489-09 (09-2000)
 ETS 300 684:1997
 EN 301 489-15 (09-2000)
 EN 301 489-22 (11-2000)

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Radio Test Standards:

47 U.S. Code of Federal Regulations (47 CFR) FCC Methods, as follows:
Part 15 (using ANSI C63.4-1992 & ANSI C63.4-2001)
Part 90 (using ANSI C63.4-1992 & ANSI C63.4-2001, & TIA/EIA-603);

Industry Canada, as follows:
RSS-119 Issue 6: March 2000;
RSS-125 Issue 2: August 1996;
RSS-210 Issue 4: December 2000;

European Union [EU] & European Economic Area [EEA], as follows:
EN 300 086-1 V1.2.1 (2001-03) & EN 300 086-2 V1.2.1 (2001-02);
EN 300 113-1 V1.3.1 (2001-03) & EN 300 113-2 V1.3.1 (2001-03);
EN 300 219-1 V1.2.1 (2001-03) & EN 300 219-2 V1.2.1 (2001-03);
EN 300 220-1 V1.3.1 (2000-09) & EN 300 220-2 V1.3.1 (2000-09)
& EN 300 220-3 V1.1.1 (2000-03);
EN 300 296-1 V1.1.1 (2001-03) & EN 300 296-2 V1.1.1 (2001-02);
EN 300 328 V1.4.1 (2003)
EN 300 330-1 V1.3.1 (2001-06) & EN 300 330-2 V1.1.1 (2001-06);
EN 300 422-1 V1.2.1 (2000-08) & EN 300 422-2 V1.1.1 (2000-08);
EN 300 440-1 V1.3.1 (2001-09) & EN 300 440-2 V1.1.1 (2001-09);
EN 301 751 V1.2.1 (2000-12);
EN 301 753 V1.1.1 (2001-03);
EN 301 783-1 V1.1.1 (2000-09) & EN 301 783-2 V1.1.1 (2000-07)

On the following materials and products:

Electrical and electronic equipment for: information technology; industrial, scientific, and medical applications; residential service; receivers; licensed and unlicensed transmitters/transceivers; UPS systems; alarm/security systems; heavy industrial equipment; marine equipment; professional audio/video equipment; arc welders; PLC controllers; and scientific and laboratory apparatus.



FEDERAL COMMUNICATIONS COMMISSION

**Laboratory Division
7435 Oakland Mills Road
Columbia, MD 21046**

July 12, 2005

Registration Number: 90420

Acme Testing Co.
P.O. Box 3
2002 Valley Highway
Acme, WA 98220-0003

Attention: Harry Hodes

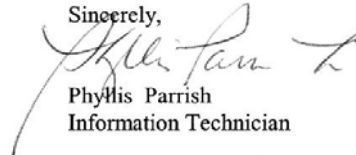
Re: Measurement facility located at Acme
Sites 1 & 2 (3, 10 & 30 meters)
Date of Renewal: July 12, 2005

Dear Sir or Madam:

Your request for renewal of the registration of the subject measurement facility has been received. The information submitted has been placed in your file and the registration has been renewed. The name of your organization will remain on the list of facilities whose measurement data will be accepted in conjunction with applications for Certification under Parts 15 or 18 of the Commission's Rules. Please note that the file must be updated for any changes made to the facility and the registration must be renewed at least every three years.

Measurement facilities that have indicated that they are available to the public to perform measurement services on a fee basis may be found on the FCC website www.fcc.gov under E-Filing, OET Equipment Authorization Electronic Filing, Test Firms.

Sincerely,



Phyllis Parrish
Information Technician



Certificate of Registration

Issued to:
ACME Testing Co.
 2002 Valley Highway
 Acme, Washington
 98220-0003 USA

Highway 5 & Little Plummer Creek
 Plummer, Idaho
 83851-0157 USA

CERT-0003744:
SIC Number / NACE Code:
 8734 / K74.3
Date of Original Registration:
 January 26, 2000
Date of Current Registration:
 November 18, 2002
Registration Expiry Date:
 November 18, 2005

014276
 8734 / K74.3
 November 18, 2002
 November 18, 2002
 November 18, 2005

which has demonstrated that its Quality Management System is in compliance with:

ISO 9001:2000

The following scope of registration applies:

Provider of Electromagnetic Compatibility (EMC) Testing and Product Safety Testing services for manufacturers of electronic equipment [per Authorized Scope(s) of Accreditation and Facility/Site Registrations], and, Conformity Assessment Body (CAB) Third-Party Product Certification Services for manufacturers of electronic equipment [per Validation Letters].








Wendy J. Tilford
President