



SCOPE OF ACCREDITATION TO ISO/IEC 17025:2017

EUROFINS ELECTRICAL AND ELECTRONIC TESTING NA, INC.

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ELECTRICAL

Valid To: January 31, 2025

Certificate Number: 0591.07

In recognition of the successful completion of the A2LA evaluation process (including an assessment of the organization's compliance with A2LA's EPA ENERGY STAR[®] Accreditation Program¹ requirements and A2LA's FDA ASCA Accreditation Program⁴ requirements), accreditation is granted to this laboratory at the location listed above to perform the following Environmental Simulation, and Safety tests:

Test Technology

Test Method(s)^{2,3}:

Environmental Simulation

Capacitance

MIL-STD-202F/G, Method 305

Contact Bounce

MIL-STD-202F/G, Method 310 (measured with oscilloscope)

Contact Resistance

MIL-STD-202 F/G, Method 311

Dielectric Constant

ASTM D150

Dielectric Strength (withstand)

GR-49

Insulation Resistance

MIL-STD-202F/G, Method 302;
MIL-STD-883F/G, Method 1003

Product Safety Tests⁵

CSA C22.2 series of product safety standards including:

No. 9, No. 12, No. 13, No. 14, No. 25, No. 30,
No. 36, No. 46, No. 64, No. 66, No. 68, No. 71.1,
No. 88, No. 89, No. 94, No. 107.1, No. 107.2,
No. 113, No. 114, No. 117, No. 118, No. 120,
No. 122, No. 125, No. 128, No. 142, No. 150,
No. 151, No. 166, No. 173, No. 174, No. 191,
No. 195, No. 205, No. 213, No. 221, No. 223,
No. 224, No. 231, No. 236, No. 301, No. 601.1, No. 60335-3,
No. 60601-1, No. 60601-2-2, No. 60601-2-7,
No. 60601-2-18, No. 60601-2-37,
No. 60065, No. 60950-1, No. 61010-1, No. 745-1,
No. 60745-2-1, No. 60745-2-2 (*except hammer*),
No. 60745-2-3, No. 60745-2-5, No. 60745-2-6,
No. 60745-2-8, No. 60745-2-9, No. 60745-2-11,

Test Technology**Product Safety Tests⁵**
(continued)**Test Method(s)^{2,3:}**

No. 60745-2-12, No. 60745-2-14, No. 60745-2-17,
No. 60745-2-30, No. 60745-2-31, No. 60745-2-32,
No. 60745-2-33, No. 60745-2-34, No. 60745-2-35,
No. 60745-2-36, No. 60745-2-37, No. E60335-2-67,
No. E60335-2-68, No. E60335-2-69,
No. E60335-2-76, No. E60335-2-82;
CSA C22.2 No. 60601-1-8 Edition 2.0: 2008 (R2018)
(excluding acoustic measurements in an anechoic chamber);
CSA C22.2 No. 60601-1-11 Edition 2: 2015;
CSA C22.2 No. 60601-1-12 Edition 1.0: 2014;
EN 60215; EN 60204-1;
EN 60065-1⁵ (except as noted in table 2);
EN/IEC 60950-1⁵ (except as noted in table 1);
IEC 60950-22;
EN 60335-1⁵ (except as noted in table 4);
EN 60335-2⁵ (except as noted in table 5);
EN 60601-1⁵ (except as noted in table 6);
EN 60601-1-8 Edition 2.1: 2007 + A1:2013 (excluding
acoustic measurements in an anechoic chamber);
EN 60601-1-11 Edition 2: 2015;
EN 60601-1-12 Edition 1.0: 2015;
ANSI/AAMI ES60601-1⁵ (except as noted in table 6);
ANSI AAMI ES60601-1:2005/(R)2012 and A1:2012,
C1:2009/(R)2012 and A2:2010/(R)2012 (Consolidated Text)⁵
(except as noted in table 6);
ANSI/AAMI 60601-1-8 2006 and A1:2012 (excluding
acoustic measurements in an anechoic chamber);
ANSI/AAMI HA60601-1-11 2015;
ANSI/AAMI 60601-1-12 2016;
IEC 60601-1-8 Edition 2.1 2012-11 (excluding acoustic
measurements in an anechoic chamber);
IEC 60601-1-11 Edition 2: 2015-01;
IEC 60601-1-12 Edition 1.0: 2014-06;
IEC 60601-2-18 Edition 3.0 2009-08;
IEC 60601-2-37 Edition 2.1 2015;
EN/IEC 61010-1⁵ (except as noted in table 3);
IEC 61010-1 Edition 3.1 2017-01⁵ (except as noted in table 3);
IEC/EN/CSA 61010-2-81; 61010-2-10; 61010-2-101;
IEC 60745-1 (and all part 2s); EN 60669-2-1; IEC 60669-2-1;
EN/IEC/UL/CSA 62368-1⁵ (except as noted in table 7);
ULC 60839-11-1; 16 CFR 1505

ENERGY STAR¹

Large Network Equipment

ENERGY STAR Product Specification for Large Network
Equipment (Version 1.1);
ENERGY STAR Test Method for Large Network Equipment
(March 2016)

Test Technology

Test Method(s)^{2,3}:

ENERGY STAR¹ (cont.)

Data Center Storage

ENERGY STAR Program Requirements Product Specification for Data Center Storage (Version 2.1);
Test Method for Data Center Storage Equipment, (May 2020)

Enterprise Servers

ENERGY STAR Program Requirements Product Specification for Computer Servers (Version 3.0);
ENERGY STAR Test Method for Computer Servers, (September 2018);
Standard Performance Evaluation Corporation (SPEC) Server Efficiency Rating Tool (SERT) (Version 2.0.3)

¹ A2LA provides accreditation to the U.S. EPA's Conditions and Criteria for Recognition of Laboratories for the ENERGY STAR Program by verifying an organization's compliance to A2LA document R222 - Specific Requirements - EPA ENERGY STAR Accreditation Program and to the related test methods listed above.

Accreditation by A2LA does not infer Recognition by the EPA for ENERGY STAR testing. Please verify this organization's recognition status by using the EPA's searchable database, located at http://www.energystar.gov/index.cfm?fuseaction=recognized_bodies_list.show_RCB_search_form

² The laboratory is only accredited for testing activities outlined within the test methods listed above. Reference to any other activity within these standards, such as risk management or risk assessment, does not fall within the laboratory's accredited capabilities.

³ When the date, edition, version, etc. is not identified in the scope of accreditation, laboratories may use the version that immediately precedes the current version for a period of one year from the date of publication of the standard measurement method, per part C., Section 1 of A2LA R101 - General Requirements- Accreditation of ISO-IEC 17025 Laboratories.

Testing Activities performed under the scope of the U.S FDA ASCA Pilot Program Specifications: *Basic Safety and Essential Performance of Medical Electrical Equipment, Medical Electrical Systems, and Laboratory Medical Equipment – Standards Specific Information for the Accreditation Scheme for Conformity Assessment (ASCA) Pilot Program* published on September 25th, 2020, and in accordance with all requirements of A2LA R256 *Specific Requirements- FDA ASCA Program* ⁴

<u>Standards</u>	<u>ASCA Doc Number</u>
ANSI AAMI ES60601-1:2005/(R)2012 and A1:2012, C1:2009/(R)2012 and A2:2010/(R)2012 (Consolidated Text) ⁵ ;	19-46
IEC 60601-1-8 Edition 2.1 2012-11 (<i>excluding acoustic measurements in an anechoic chamber</i>);	5-76
ANSI AAMI IEC 60601-1-8: 2006 and A1:2012 (<i>excluding acoustic measurements in an anechoic chamber</i>);	5-76
IEC 60601-1-11 Edition 2: 2015-01;	19-14
ANSI AAMI HA60601-1-11:2015;	19-47
IEC 60601-1-12 Edition 1.0: 2014-06;	19-15
ANSI AAMI IEC 60601-1-12:2016;	19-39
IEC 60601-2-18 Edition 3.0 2009-08;	9-114
IEC 60601-2-37 Edition 2.1 2015;	12-293
IEC 61010-1 Edition 3.1 2017-01 ⁵	19-34

⁴ These methods have been assessed by A2LA according to A2LA's FDA ASCA Program requirements. Accreditation by A2LA does not imply FDA ASCA-Accreditation. All ASCA-accreditation decisions for testing laboratory applications are made solely by the FDA, a list of approved laboratories can be found at FDA.gov.

⁵Exclusion Tables

Table #1: Clauses excluded from EN 60950-1

Standard	Clause	Test
60950-1		
	2.10.4	Comparative tracking index measurements
	2.10.5.4	Partial discharge test (on semiconductors)
	2.10.8.4	Abrasion resistance test
	3.2.5.1	Flexing test of AC power supply cords
	4.2.8	CRT tests
	4.3.12	Flammable liquid measurement
	4.3.13.2	Ionizing radiation
	4.3.13.3	Tests after UV exposure on material
	4.3.13.4	Human exposure to UV radiation
	4.3.13.5	Laser radiation
	4.6.2	Hot flaming oil
	6.2.2.1	Impulse
	Annex AA	Mandrel test

⁵Exclusion Tables (*cont.*)

Table #2: Clauses excluded from EN 60065-1

Standard	Clause	Test
60065-1		
	6.1	Ionizing radiation
	6.2	Laser radiation
	7	Vicat softening
	8.18	Endurance test for wound components
	12.3	Barrel test for remote controls
	13.4	Comparative tracking index measurement
	14.1	Surge on resistors
	14.2	RC circuit tests
	16	Cord flexing
	18	CRT tests
	Annex H	Insulated winding wire

Table #3: Clauses excluded from IEC/EN 61010-1

Standard	Clause	Test
61010-1		
	6.7.1.2	CTI measurement
	10.5.3	Vicat softening
	12.2.1	Ionizing radiation
	12.5.2	Ultrasonic pressure
	12.6	Laser radiation
	13.3	High vacuum devices (CRT)

Table #4: Clauses excluded from EN 60335-1

Standard	Clause	Test
60335-1		
	19	IEC 61000-4-13 Mains Signal Test
	22	Oxygen bomb (for rubber ageing) Methylated spirit and pressure (for testing ceramic insulation)
	24	Some Component testing. (SAF typically requires Safety critical components to have appropriate certification)
	Annex F	Capacitor testing
	Annex H	Endurance testing (special apparatus)
	Annex J	Coated PCB test
	Annex R	Software validation

⁵Exclusion Tables (*cont.*)

Table #5: Clauses excluded from EN 60335-2

Standard	Clause	Test
60335-2-7	15	Aging for elastomeric parts
60335-2-34	6	Running overload test (for motors)
60335-2-36	30	Glow-wire test
60335-2-37	30	Glow-wire test
60335-2-38	30	Glow-wire test
60335-2-39	30	Glow-wire test
60335-2-40	22	Vacuum pressure
60335-2-42	30	Glow-wire test
60335-2-48	30	Glow-wire test
60335-2-54	21	Mechanical tests for current carrying hoses
60035-2-58	15/ Annex BB	Ageing for elastomeric parts
	Annex CC	Back siphonage
60335-2-69	21	Mechanical tests for current carrying hoses

Table #6: Clauses excluded from EN 60601-1, ANSI/AAMI ES60601-1, and CSA C22.2 No. 60601-1

Standard	Clause	Test
60601-1	8.5.5.1	Defibrillation protection
	8.5.5.2	Energy reduction test
	8.8.4.2	Resistance to environmental stress
	9.5.2	Cathode Ray Tubes (60065 clause 18)
	9.7.5	Pressure Vessels
	10.1	X-Radiation
	10.4	Lasers and Light Emitting Diodes
	11.2.2 and 11.2.3	Fire Prevention
	Clause G	Protection against hazards of ignition of flammable anesthetic mixtures

Table #7: IEC/EN/UL/CSA 62368-1

Standard	Clause	Test
62368-1	5.4.2, 5.4.3, 5.4.4	Impulse test
	10.3	Laser Radiation
	10.5.3	Ionizing Radiation



Accredited Laboratory

A2LA has accredited

EUROFINS ELECTRICAL AND ELECTRONIC TESTING NA, INC.

Union City, CA

for technical competence in the field of

Electrical Testing

This laboratory is accredited in accordance with the recognized International Standard ISO/IEC 17025:2017 *General requirements for the competence of testing and calibration laboratories*. This laboratory also meets A2LA R222 - *Specific Requirements - EPA ENERGY STAR Accreditation Program* and A2LA R256 – *Specific Requirements FDA ASCA Program*. This accreditation demonstrates technical competence for a defined scope and the operation of a laboratory quality management system (refer to joint ISO-ILAC-IAF Communiqué dated April 2017).



Presented this 4th day of August 2023.

A blue ink signature of Mr. Trace McInturff.

Mr. Trace McInturff, Vice President, Accreditation Services
For the Accreditation Council
Certificate Number 0591.07
Valid to January 31, 2025

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