



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: 0591.01

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 Program⁶ requirements), accreditation is granted to this laboratory to perform the following Electrical, EMC, Radio, Product Safety, Meter Accuracy, Environmental Simulation, Fiber Optics and RF Exposure tests:

Test Technology

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

Product Safety Tests

- Dielectric Strength
- Input Current
- Input Power
- Leakage Current
- Force Withstand Test
- Impact Ball Test
- Ground Impedance
- Strain Relief Test
- Heat Rise - Thermocouple Method
- Tilt Test
- Temperature Conditioning
- Humidity Conditioning
- Flammability (UL 94V0)
- Ball Pressure Test
- Impact Hammer Test
- Icing
- Rain/Hose Down Test
- Heat Rise - Rise of Resistance Method
- Impulse Test of UL/CSA 60950-1
- Mold Stress
- Abnormal Operation (component failure)

CSA C22.2 series of product safety standards including:
No. 9; No. 10; 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. 100; No. 107.1; No. 107.2; No. 108;
No. 109; No. 113; No. 114; No. 117; No. 118; No. 120;
No. 122; No. 125; No. 128; No. 137; No. 142; No. 150;
No. 151; No. 157; 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. 280; No. 301; No. 601.1; No. 745-1

IEC/EN/CSA series of product safety standards including:
No. 60601-1 (*excluding Risk Assessment*)³;
No. 60601-2-2; No. 60601-2-7; No. 60601-2-18;
No. 60601-2-22; No. 60601-2-34; No. 60601-2-37;
No. 60601-2-38; No. 60601-2-40; No. 60601-2-46;
No. 60601-2-49; No. 60601-2-51; No. 60601-2-54;
No. 60745-2-1; No. 60745-2-2 (*excluding Hammer Test*);
No. 60745-2-3 to -6; No. 60745-2-8; No. 60745-2-9;
No. 60745-2-11; No. 60745-2-12; No. 60745-2-14;
No. 60745-2-17; No. 745-2-30; No. 745-2-31;
No. 745-2-32; No. 745-2-33; No. 745-2-34;
No. 745-2-35; No. 745-2-36; No. 745-2-37;
No. 60065; No. 60947-1; No. 60947-4-1;
No. 60950-1; No. 61010-1;
No. 61010-2-010; No. 61010-2-020; No. 61010-2-030;

Test Technology

Product Safety Tests (cont.)

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

IEC/EN/CSA series of product safety standards including:
No. 61010-2-031; No. 61010-2-32; No. 61010-2-42;
No. 61010-2-43; No. 61010-2-45; No. 61010-2-51;
No. 61010-2-61; No. 61010-2-81; No. 61010-2-101;
No. 61010-2-201; No. 62109; No. 62368-1; No. 62368-3;

ANSI/AAMI ES60601-1;

CSA C22.2:

No. 62841-1; No. 62841-2-1; 62841-2-2; No. 62841-2-4;
No. 62841-2-5; No. 62841-2-8; No. 62841-2-9;
No. 62841-2-10; No. 62841-2-11; No. 62841-2-14;
No. 62841-2-17; No. 62841-2-21; No. 62841-3-1;
No. 62841-3-4; No. 62841-3-6; No. 62841-3-9;
No. 62841-3-13; No. 62841-4-2;
No. 60335-1; No. 60335-1/4E; No. 60335-2-2;
No. 60335-2-3; No. 60335-2-6; No. 60335-2-7;
No. 60335-2-11; No. 60335-2-16; No. 60335-2-21;
No. 60335-2-23; No. 60335-2-24; No. 60335-2-25 to -30;
No. 60335-2-32; No. 60335-2-34 to -43; No. 60335-2-45;
No. 60335-2-47 to -52; No. 60335-2-54;
No. 60335-2-56; No. 60335-2-58; No. 60335-2-62;
No. 60335-2-64; No. 60335-2-67; No. 60335-2-68;
No. 60335-2-69; No. 60335-2-72; No. 60335-2-76;
No. 60335-2-82; No. 60335-2-89

IEC/EN/CAN/CSA E60079-0, 1, 2, 5, 6, 7, 11, 14, 15, 18,
26, 28, and 31;

EN/ISO 80079-36 and 37; EN 60204-1; EN 60215;

IEC 60745-1 and all part 2's;

IEC/EN 60601-1 and all part 2's (*excluding clauses 29
and 59*);

AS/NZS/EN 60950-1 (*excluding clauses detailed in
Table #1 below ⁴*);

IEC/EN/CSA 60950-22;

EN 60065 (*excluding clauses detailed in
Table #2 below ⁴*);

EN 61010-1 and all part 2's (*Excluding clauses detailed in
Table #3 below,⁴ and EN 61010-2-51, Clause 5.4.4.101
Steam Cleaning*);

EN 60335-1 (*excluding clauses detailed in
Table #4 below ⁴*);

IEC/EN/UL 60335-2 (*excluding clauses detailed in
Table #5 below ⁴*);

UL 2735; UL 2735C;

IEC/EN/EN/CSA/UL 60079-18, 26, 28, 31;

ULC 60839-11-1; EN/ISO 80079-36, 37;

16 CFR 1505

Test Technology

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

Product Safety Tests (cont.)

ANSI AAMI ES60601-1:2005/(R)2012 and A1:2012,
C1:2009/(R)2012 and A2:2010/(R)2012
(Consolidated Text);
IEC 60601-2-18: Edition 3.0 2009-08;
IEC 60601-2-22: Edition 3.1 2012-10;
IEC 60601-2-34: Edition 3.0 2011-05;
IEC 60601-2-37: Edition 2.1 2015;
IEC 60601-2-54: Edition 1.1 2015-04;
IEC 60601-2-54: Edition 1.2 2018-06;
IEC 61010-1: Edition 3.1 2017-01

Energy Efficiency

Test Method for Calculating the Energy
Efficiency of Single-Voltage External
AC-DC and AC-AC Power Supplies

CSA C381.1-08

Energy Performance of Battery-Charging
Systems and Uninterruptible Power
Supplies

CSA C381.2-17

Airport Lighting

FAA Specification for L-823 Plug and Receptacle,
Cable Connectors AC No: 150/5345-26D;
FAA Specification for Wind Cone Assemblies –
AC No: 150/5345-27E (*excluding photometrics*);
FAA Specification for Obstruction Lighting Equipment –
AC No: 150/5345-43G (*excluding photometrics*);
FAA Specification for Runway and Taxiway
Light Fixtures – AC No: 150/5345-46E
(*excluding photometrics*);
FAA Specification for Series-to-Series Isolation
Transformers for Airport Lighting Systems –
AC No: 150/5345-47C

ENERGY STAR Testing

Product Family Guideline

(Using IEC 62301 Household electrical
appliances – Measurement of standby power)

Computers

Computer Types Tested:
Desktops & Notebooks;
Workstations;
Game Consoles;
Small-Scale Servers; Thin Clients

ENERGY STAR Program Requirements Product
Specification for Computers, Version 8.0;
EPRI Generalized Test Protocol for Calculating the
Energy Efficiency of Internal AC-DC and DC-DC Power
Supplies (for Products that have Internal, Multi-output, or
Single Output with Integral Cooling Power Supplies);
ENERGY STAR Test Method for Computers,
Rev. Oct. 2019



Test Technology

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

Computer Servers
(Enterprise Servers)

ENERGY STAR Test Procedure for Determining the Power Use of Computer Servers at Idle and Full Load (Appendix A of Specification);
ENERGY STAR Test Method for Computer Servers, Rev. Sept-2018;
Generalized Internal Power Supply Efficiency Test Protocol, Rev. 6.6 (available at www.efficientpowersupplies.org).
Standard Performance Evaluation Corporation (SPEC) most current Server Efficiency Rating Tool (SERT), V.3.0

Data Center Storage

ENERGY STAR Program Requirements for Data Center Storage, Version 2.0; Test Method for Data Center Storage Equipment, Rev. May 2020;
Product Specification for Data Center Storage Equipment, Rev. May 2020; SNIA Emerald Power Efficiency Measurement Specification V4.0.0

Electric Vehicle Supply Equipment

ENERGY STAR Program Requirements for Electric Vehicle Supply Equipment, Final Test Method for DC-output EVSE

Large Network Equipment

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

Energy Efficiency

Household electrical appliances –
Measurement of standby power

IEC 62301

Electrical / Fiber (ESL)

Point Discontinuities

FOTP-59; FOTP-61

Capacitance

MIL-STD-202 F & G, Method 305

Contact Resistance

MIL-STD-202 F & G, Method 307

Current/Voltage/Watts
(up to 225 amps and 600 volts)

ANSI C.12.1, C.12.20; LMB-EG-07

Dielectric Constant

ASTM D250

Dielectric Strength (Withstand)

MIL-STD-202 F & G, Method 301; ASTM D149

Inductance and Impedance

MIL-STD-883 E & F, Method 309

Insulation Resistance

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



Test Technology

Contact Bounce

Meter Accuracy

Effect of Internal Heating
Effect of Operating Temperature
Effect of Polyphase Loading
Effect of Relative Humidity
Effect of Storage Temperature
Effect of Temporary Overloads
Electrical Fast Transients
Equality of Current Circuits
Immunity
Independence of Elements
Insulation
Insulation Resistance
Leakage Current
Lightning Surge
Load Performance
Low Input Voltage Recovery
Low Input Voltage Shutdown
Mechanical Characteristics
Mechanical Shock
Mechanical Vibration
90 Degree phase fired waveform
Quadriform waveform
Peaked Waveform
Pulse Waveform
Multiple zero crossings on current
Multiple zero crossings on voltage
Meter Losses
No Load
Rain Tightness
Stability of Performance
Starting Load
Temperature Rise
Transportation Drop
Transportation Vibration
Variation of Ambient Temperature
Variation of Frequency
Variation of Power Factor
Variation of Voltage
Weather Simulation

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

MIL-STD-202 F & G, Method 310 (Measured with Oscilloscope)

ANSI C12.1; ANSI C12.1:2014; ANSI C12.20:2015;
LMB-EG-07



Test Technology

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

Electromagnetic Compatibility

Emissions

Radiated and Conducted Emissions
(3 m semi-anechoic chamber)

CISPR 32; EN 55032; KS C 9832;
CISPR 22; EN 55022; AS/NZS CISPR 22;
AS/NZS CISPR 32; CISPR 11; EN 55011; AS CISPR 11;
ANSI C63.4:2014; FCC-MP-5:1986;
ICES-001; ICES-003; CNS 13438 (up to 6 GHz);
VCCI V-3 (up to 6 GHz); VCCI-CISPR 32;
EN 55035 (excluding Broadcast Receivers);
CISPR 35 (excluding Broadcast Receivers);
KS C 9835; TCVN 7189:2009; QCVN 118:2018

Harmonics and Flicker

EN 61000-3-2; KS C 9610-3-2/KS C 9610-3-12; EN
61000-3-3; KS C 9610-3-3/KS C 9610-3-11

Immunity

Electrostatic Discharge

IEC/EN 61000-4-2; KS C 9610-4-2

Radiated Immunity

IEC/EN 61000-4-3; KS C 9610-4-3

EFT/B

IEC/EN 61000-4-4; KS C 9610-4-4

Surge

IEC/EN 61000-4-5; KS C 9610-4-5;
IEEE C62.41-1; IEEE C62.41-2; IEEE C62.45

Conducted Immunity

IEC/EN 61000-4-6; KS C 9610-4-6

Magnetic Immunity

IEC/EN 61000-4-8; KS C 9610-4-8

Voltage Dips and Interruptions

IEC/EN 61000-4-11; KS C 9610-4-11

Oscillatory Waves Immunity

IEC/EN 61000-4-12

*Family, Product or Industry Specific
Specifications*

ANSI C12.1; ANSI C12.20; CISPR 24; IEEE C37.90;
IEEE C37.90.1; IEEE C37.90.2;
IEEE C37.90.3; IEEE-299 1997 and 2006;
IEEE C57.13 (CT Testing only);
IEC C57.13.6 (CT Testing only);
EN 50370-1; EN 50370-2; EN 50470-1, EN 50470-3;
EN 55014-1 (excluding measurement of clicks);
EN 55014-2; EN 55024;
IEC 60044-1 (CT Testing only);
IEC/EN 60601-1-2;
IEC/EN 60601-2-2 through -2-13;
IEC/EN 60601-2-16 through -2-30;
IEC/EN 60601-2-32 through -2-42;
IEC/EN 60601-2-44; IEC/EN 60601-2-45;
IEC/EN 60601-2-46; IEC/EN 60601-2-47;

Test Technology

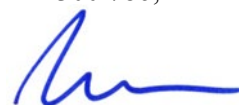
Electromagnetic Compatibility (cont.)
Family, Product, or Industry Specific Specifications (cont.)

Intentional and Unintentional Radiators using ANSI C63.4:2014, ANSI C63.10:2013, ANSI C63.26:2015, ANSI C63.27:2017, and ANSI/TIA 603-E (Unless otherwise noted); (Excluding SAR and HAC)

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

IEC/EN 60601-2-49; IEC/EN 60601-2-50;
IEC/EN 60601-2-51; IEC/EN 60601-2-52;
IEC/EN 60601-2-54; EN 60945; EN 61000-6-1;
EN 61000-6-2; EN/ 61000-6-3;
EN 61000-6-4; IEC/EN 61326-1; IEC/EN 61326-2-1;
IEC/EN 61326-2-2; IEC/EN 61326-2-3;
IEC/EN 61326-2-4; IEC/EN 61326-2-5;
IEC 61869-2 (*CT Testing only*); IEC/EN 62052-11;
IEC/EN 62053-11; IEC/EN 62053-21; IEC/EN 62053-22;
IEC/EN 62053-23; UL/CSA/IEC/EN 62368-1; CFE
G0100-05; CFE GWH00-34; CFE GWH00-09;
CFE GWH00-78; Telcordia GR-1089; ETSI EN 300 386;
RTCA/DO-160 D through G (*only Sections 15 to 22 and 25*);
MIL-STD-461D using MIL-STD 462D
(*excluding transient test RS105*);
MIL-STD-461E (*excluding transient test RS105*);
MIL-STD-461F (*excluding reverberating chamber test method RS-103 and transient test RS105*);
MIL-STD-461G (*excluding reverberating chamber test method RS-103 and transient test RS105*);
MIL-STD-704A-F with MIL-HDBK-704-1 through 8;
MIL-STD-1275A through E;
DOD-STD-1399, Sections 070 Part 1 1979;
MIL-STD-1399, Sections 300A and 300B;
MIL-PRF-28800F

47 CFR, FCC Parts 2, 11 and 15 B, C, D, E, F, G, H
(*Using ANSI C63.4:2014, ANSI C63.10:2013, ANSI C63.17:2013, ANSI C63.27:2017, and FCC KDB 905462 D02 (v02)*);
47 CFR, FCC Part 18 (*using MP-5:1986*);
47 CFR, FCC Parts 20, 22, 24, 25, 27, 74, 80, 87, 90, 95, 96, 97 and 101 (*using ANSI/TIA 603-E*);
AZ/NZS 4268; AZ/NZS 4295; AZ/NZS 4281;
AZ/NZS 4355; AZ/NZS 4365; AZ/NZS 4768;
AZ/NZS 4770; AZ/NZS 4771; ARIB STD-T96;
ETSI EN 300 086-1; ETSI EN 300 113-1;
ETSI EN 300 113-2; ETSI EN 300 127;
ETSI EN 300 132-1; ETSI EN 300 220-1;
ETSI EN 300 220-2; ETSI EN 300 220-3;
ETSI EN 300 328; ETSI EN 300 330-1;
ETSI EN 300 330-2; ETSI EN 300 342-1;
ETSI EN 300 342-2; ETSI EN 300 342-3;
ETSI EN 300 385; ETSI EN 300 390-1;
ETSI EN 300 390-2; ETSI EN 300 440-1;
ETSI EN 300 440-2; ETSI EN 300 487;
ETSI EN 300 609-4; ETSI EN 300 683;
ETSI EN 300 198; ETSI EN 300 786; ETSI EN 301 360;



Test Technology

Electromagnetic Compatibility (cont.)
Intentional and Unintentional Radiators using ANSI C63.4:2014, ANSI C63.10:2013, ANSI C63.26:2015, and ANSI/TIA 603-E (Unless otherwise noted); (Excluding SAR and HAC) (cont.)

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

ETSI EN 301 428; ETSI EN 301 441; ETSI EN 301 443; ETSI EN 301 459; ETSI EN 301 489 series 1-34; ETSI EN 301 502; ETSI EN 301 893; ETSI EN 301 908-1 through -20; ETSI EN 302 217; ETSI EN 302 502; ETSI EN 302 208-1; ETSI EN 302 208-2; ETSI EN 303 978; HKCA 1001; HKCA 1002; HKCA 1003; HKCA 1004; HKCA 1005; HKCA 1006; HKCA 1007; HKCA 1008; HKCA 1010; HKCA 1015; HKCA 1016; HKCA 1019; HKCA 1020; HKCA 1022; HKCA 1026; HKCA 1027; HKCA 1030; HKCA 1034; HKCA 1035; HKCA 1036; HKCA 1037; HKCA 1039; HKCA 1041; HKCA 1042; HKCA 1043; HKCA 1044; HKCA 1045; HKCA 1046; HKCA 1047; HKCA 1048; HKCA 1049; HKCA 1050; HKCA 1052; HKCA 1053; HKCA 1054; HKCA 1056; HKCA 1061; HKCA 1063; IMDA TS SRD; IMDA TS LMR; IMDA TS AR; IMDA TS CT-CTS; IMDA TS WBA; IMDA TS RPG; IMDA TS UWB; IS2034-1; IS2045-0; LP0002; PLMN09; RSS-102 measurement (RF Exposure Evaluation); RSS-111; RSS-112; RSS-117; RSS-119; RSS-123; RSS-125; RSS-127; RSS-130; RSS-131; RSS-132; RSS-133; RSS-134; RSS-135; RSS-137; RSS-139; RSS-140; RSS-141; RSS-142; RSS-170; RSS-181; RSS-182; RSS-191; RSS-192; RSS-194; RSS-195; RSS-196; RSS-197; RSS-199; RSS-210; RSS-211; RSS-213; RSS-215; RSS-216; RSS-220; RSS-222; RSS-236; RSS-238; RSS-243; RSS-244; RSS-247; RSS-248; RSS-251; RSS-252; RSS-287; RSS-288; RSS-310; RSS-GEN; IFT-008-2015; NOM-208-SCFI-2016

Battery Testing

Short-Circuit/External/Internal/Abnormal Charging (high charging rate)	IEC 62133; UL 1642; UL 2054;
Continuous Low-Rate Charge	UN/DOT 38.3
Incorrect Installation of a Single Cell	IEC 62133
Forced Discharge	IEC 62133
Abusive Overcharge	IEC 62133; UL 1642; UL 2054; UN/DOT 38.3
Overcharge	UL 2054
	IEC 62133; UN/DOT 38.3

Note: For Product Safety tests, this laboratory performs field testing, excluding Acoustic Pressure, Overvoltage/Line Cross, Surge/Impulse, and Flammability.



On the following products or types of products:

Information Technology Equipment, Household Appliances, Industrial Equipment, Audio/Visual Equipment, Wireless Equipment, Medical Electrical Equipment, Radio Equipment, Electric Tools, Lighting Equipment, Telecommunications Equipment, Power Supplies, Batteries

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 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*.

³ This 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.

Testing Activities Performed in Support of FCC Certification in Accordance with 47 Code of Federal Regulations and FCC KDB 974614, Appendix A, Table A.1 ⁵ :		
Rule Subpart/Technology	Test Method	Maximum Frequency
Unintentional Radiators		
Part 15B	ANSI C63.4:2014	40000 MHz
Industrial, Scientific, and Medical Equipment		
Part 18	FCC MP-5 (February 1986)	6000 MHz
Intentional Radiators		
Part 15C	ANSI C63.10:2013	260000 MHz
Unlicensed Personal Communication Systems Devices		
Part 15D	ANSI C63.17:2013	260000 MHz
U-NII without DFS Intentional Radiators		
Part 15E	ANSI C63.10:2013	260000 MHz
U-NII with DFS Intentional Radiators		
Part 15E	FCC KDB 905462 D02 (v02)	260000 MHz
UWB Intentional Radiators		
Part 15F	ANSI C63.10:2013	260000 MHz



Testing Activities Performed in Support of FCC Certification in Accordance with 47 Code of Federal Regulations and FCC KDB 974614, Appendix A, Table A.1 ⁵ :		
Rule Subpart/Technology	Test Method	Maximum Frequency
BPL Intentional Radiators		
Part 15G	ANSI C63.10:2013	40000 MHz
White Space Device Intentional Radiators		
Part 15H	ANSI C63.10:2013	40000 MHz
Commercial Mobile Services (FCC Licensed Radio Service Equipment)		
Parts 22 (cellular), 24, 25 (below 3 GHz), and 27	ANSI/TIA-603-E; ANSI C63.26:2015	260000 MHz
General Mobile Radio Services (FCC Licensed Radio Service Equipment)		
Parts 22 (non-cellular), 90 (below 3 GHz), 95 (below 3 GHz), 97 (below 3 GHz), and 101 (below 3 GHz)	ANSI/TIA-603-E; ANSI C63.26:2015	40000 MHz
Citizens Broadband Radio Services (FCC Licensed Radio Service Equipment)		
Part 96	ANSI/TIA-603-E; ANSI C63.26:2015	260000 MHz
Maritime and Aviation Radio Services		
Parts 80 and 87	ANSI/TIA-603-E; ANSI C63.26:2015	260000 MHz
Microwave and Millimeter Bands Radio Services		
Parts 25, 30, 74, 90 (above 3 GHz), 95 (above 3 GHz), 97 (above 3 GHz), and 101	ANSI/TIA-603-E; ANSI C63.26:2015	260000 MHz
Signal Boosters		
Part 20 (Wideband Consumer Signal Boosters, Provider-specific Signal Boosters, and Industrial Signal Boosters), Section 90.219	ANSI C63.26:2015	260000 MHz

⁵Accreditation does not imply acceptance to the FCC equipment authorization program. Please see the FCC website (<https://apps.fcc.gov/oetcf/eas/>) for a listing of FCC approved 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* ⁶:

Standards	ASCA DOC #
ANSI AAMI ES60601-1:2005/(R)2012 and A1:2012, C1:2009/(R)2012 and A2:2010/(R)2012 (Consolidated Text)	19-46
IEC 60601-2-18 Edition 3.0 2009-08	9-114
IEC 60601-2-22 Edition 3.1 2012-10	12-268
IEC 60601-2-34 Edition 3.0 2011-05	3-115
IEC 60601-2-37 Edition 2.1 2015	12-293
IEC 60601-2-54 Edition 1.2 2018-06 CONSOLIDATED VERSION	12-317
IEC 60601-1-2 Edition 4.1 2020-09 CONSOLIDATED VERSION	19-36
IEC 61010-1 Edition 3.1 2017-01 ⁴	19-34

⁶ 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.

⁴ **Exclusion Tables**

Table #1: Clauses excluded from AS/NZS and 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
	Annex AA	Mandrel test

⁴Exclusion 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 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

⁴Exclusion Tables (cont.)

Table #5: Clauses excluded from IEC/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



Accredited Laboratory

A2LA has accredited

EUROFINS ELECTRICAL AND ELECTRONIC TESTING NA, INC.

Baltimore, MD

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 the requirements of 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 15th day of May 2023.

A blue ink signature of Trace McInturff, written over a horizontal line.

Mr. Trace McInturff, Vice President, Accreditation Services
For the Accreditation Council
Certificate Number 0591.01
Valid to January 31, 2025

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