



SCOPE OF ACCREDITATION TO ISO/IEC 17025:2017

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ELECTRICAL

Valid To: July 31, 2027

Certificate Number: 5376.01

In recognition of the successful completion of the A2LA evaluation process, (including an assessment of the laboratory's compliance with A2LA's ENERGY STAR® Accreditation Program requirements¹ and A2LA's R256 – Specific Requirements) accreditation is granted to the main laboratory listed above, ***as well as the two laboratories listed below***, to perform tests on the following Electromagnetic Compatibility (EMC), Telecommunication, Exposure, Medical Devices, New Energy and Electrical Safety Tests:

<u>Test Technology:</u>	<u>Test Method(s)^{2,3,4:}</u>
<i>Emissions</i>	
Conducted and Radiated	CFR 47 FCC Part 15B (using ANSI C63.4-2014); CFR 47 FCC Part 18 (using FCC OST/MP-5); EN 55011; EN/EN IEC 55014-1; EN 55032; EN 55015; EN IEC 55015; EN/EN IEC 61326-1; CISPR 11; CISPR 15; CISPR 32; CISPR 14-1; CISPRJ 32; CISPRJ 15; AS/NZS CISPR 11; AS/NZS CISPR 14.1; AS/NZS CISPR 32; AS/NZS CISPR 15; ICES-001; ICES-003; ICES-005; J55014-1; IEC/EN/EN IEC 61000-6-3; IEC/EN 61000-6-4; EN IEC 61000-6-4; IEC/EN 60601-1-2; IEC/EN 60730-1; IEC/EN/EN IEC 60730-2-9; IEC/EN 60730-2-9; IEC/EN/EN IEC 60669-2-1; IEC/EN 60669-1
Current Harmonics	IEC 61000-3-2; EN 61000-3-2; EN IEC 61000-3-2
Voltage Fluctuations & Flicker	IEC 61000-3-3; EN 61000-3-3
<i>Immunity</i>	
Electrostatic Discharge (ESD)	IEC/EN 61000-4-2

<u>Test Technology:</u>	<u>Test Method(s) ^{2,3,4}:</u>
Radiated Immunity (up to 6 GHz, 10V/m)	IEC/EN/EN IEC 61000-4-3
Electrical Fast Transient/Burst	IEC/EN 61000-4-4
Surge	IEC/EN 61000-4-5
Conducted Immunity	IEC/EN/EN IEC 61000-4-6
Power Frequency Magnetic Field	IEC/EN 61000-4-8
Voltage Dips, Short Interruptions Line Voltage Variations	IEC/EN 61000-4-11; EN IEC 61000-4-11; SANS 61000-4-11
Generic Standards	IEC/EN 61000-6-1; EN IEC 61000-6-1; IEC/EN 61000-6-2; EN IEC 61000-6-2; IEC/EN 61000-6-3; IEC/EN/EN IEC 61000-4-4
Product Family Standards and Industry Standards (<i>excluding Close Proximity Field Immunity Test</i>)	CISPR 24; EN 55024; CISPR 35; EN 55035; CISPR 20; EN 55020; EN 55103-2; IEC/EN/EN IEC 61547; IEC/EN/EN IEC 61326-1; IEC/EN/EN IEC 61326-2-1; IEC/EN/EN IEC 61326-2-2; IEC/EN/EN IEC 61326-2-3; IEC/EN/EN IEC 61326-2-6; CISPR 14-2; EN/EN IEC 55014-2; IEC/EN 60601-1-2; IEC/EN 60601-4-2; IEC/EN/EN IEC 60730-1; IEC/EN 60730-2-9; EN IEC 60730-2-9; IEC/EN/EN IEC 60669-1; IEC/EN 60669-2-1
<i>Telecommunication Standards</i>	ETSI EN 301 489-1; ETSI EN 301 489-3; ETSI EN 301 489-7; ETSI EN 301 489-17; ETSI EN 301 489-34; ETSI EN 300 386
<i>RF Exposure (MPE calculation only)</i>	AUSTRALIAN COMMUNICATIONS AND MEDIA AUTHORITY Radiocommunications (Electromagnetic Radiation — Human Exposure) Standard 2014; IEC/EN 62479; EN 50663; EN 50385; IEC/EN/EN IEC 62311; C95.3
<i>Radio Frequency Test</i>	
Unlicensed Radio – FCC	CFR 47 FCC Part 15, Subpart C (using ANSI C63.10); CFR 47 FCC Part 15, Subpart E (using ANSI C63.10 and FCC KDB 905462)
Canada	RSS-GEN; RSS-210 (up to 40 GHz); RSS-213; RSS-216 (up to 40 GHz); RSS-247; RSS-248

<u>Test Technology:</u>	<u>Test Method(s) ^{2,3,4}:</u>
European Union (EU)	ETSI EN 300 220-1; ETSI EN 300 220-2; ETSI EN 300 330; ETSI EN 300 440; ETSI EN 300 328; ETSI EN 301 893; ETSI EN 303 417; ETSI EN 301 357; ETSI EN 303 340
Australia	Radio Communications (Short Range Devices) Standards AS/NZS 4268
<u>Electrical Safety Testing</u>	
<i>Household Appliance</i>	
Household and similar electrical appliances – Safety–Part 1: General Requirements	IEC/EN/EN IEC 60335-1/AS/NZS 60335.1
Part 2-2: Particular requirements for vacuum cleaners and water-suction cleaning appliances	IEC/EN 60335-2-2/AS NZS 60335.2.2
Part 2-3: Particular requirements for electric irons	IEC/EN 60335-2-3/AS NZS 60335.2.3
Part 2-6: Particular requirements for stationary cooking ranges, hobs, ovens and similar appliances	IEC/EN 60335-2-6
Part 2-8: Particular requirements for shavers, hair clippers and similar appliances	IEC/EN 60335-2-8/AS/NZS 60335.2.8
Part 2-9: Particular requirements for grills, toasters, and similar portable cooking appliances	IEC/EN/EN IEC 60335-2-9/AS NZS 60335.2.9
Part 2-10: Particular requirements for floor treatment machines and wet scrubbing machines	IEC/EN 60335-2-10/AS NZS 60335.2.10
Part 2-12: Particular requirements for warming plates and similar appliances	IEC/EN 60335-2-12/AS/NZS 60335.2.12
Part 2-13: Particular requirements for deep fat fryers, frying pans and similar appliances	IEC/EN 60335-2-13/AS NZS 60335.2.13
Part 2-14: Particular requirements for kitchen machines	IEC/EN 60335-2-14/AS/NZS 60335.2.14
Part 2-15: Particular requirements for appliances for heating liquids	IEC/EN/EN IEC 60335-2-15/AS/NZS 60335.2.15

<u>Test Technology:</u>	<u>Test Method(s) ^{2,3,4}:</u>
Part 2-23: Particular requirements for appliances for skin or hair care	IEC/EN/EN IEC 60335-2-23/AS/NZS 60335.2.23
Part 2-24: Particular requirements for refrigerating appliances, ice-cream appliances and ice makers	IEC/EN/EN IEC 60335-2-24/AS/NZS 60335.2.24
Part 2-26: Particular requirements for clocks	IEC/EN 60335-2-26/AS/NZS 60335.2.26
Part 2-27: Particular requirements for appliances for skin exposure to optical radiation	IEC/EN 60335-2-27/AS/NZS 60335.2.27
Part 2-28: Particular requirements for sewing machines	IEC/EN 60335-2-28/AS/NZS 60335.2.28
Part 2-29: Particular requirements for battery chargers	IEC/EN 60335-2-29/AS/NZS 60335.2.29
Part 2-30: Particular requirements for room heaters	IEC/EN 60335-2-30/AS/NZS 60335.2.30
Part 2-32: Particular requirements for massage appliances	IEC/EN IEC 60335-2-32
Part 2-41: Particular requirements for pumps	IEC/EN/EN IEC 60335-2-41/AS/NZS 60335.2.41
Part 2-43: Particular clothes dryers and towel rails	IEC/EN/EN IEC 60335-2-43/AS/NZS 60335.2.43
Part 2-45: Particular requirements for portable heating tools and similar appliances	IEC/EN 60335-2-45/AS/NZS 60335.2.45
Part 2-52: Particular requirements for oral hygiene appliances	IEC/EN 60335-2-52/AS/NZS 60335.2.52
Part 2-54: Particular requirements for surface-cleaning appliances for household use employing liquids or steam	IEC/EN 60335-2-54/AS/NZS 60335.2.54
Part 2-59: Particular requirements for insect killers	IEC/EN 60335-2-59/AS/NZS 60335.2.59
Part 2-65: Particular requirements for air-cleaning appliances	IEC/EN 60335-2-65/AS/NZS 60335.2.65

<u>Test Technology:</u>	<u>Test Method(s) ^{2,3,4}:</u>
Part 2-75: Particular requirements for commercial dispensing appliances and vending machines	IEC/EN/EN IEC 60335-2-75/AS/NZS 60335.2.75
Part 2-80: Particular requirements for fans	IEC/EN 60335-2-80/AS/NZS 60335.2.80
Part 2-85: Particular requirements for fabric steamers	IEC/EN 60335-2-85/AS/NZS 60335.2.85
Part 2-89: Particular requirements for commercial refrigerating appliances and ice makers with an incorporated or remote refrigerant unit or motor-compressor	IEC/EN/EN IEC 60335-2-89
Part 2-97: Particular requirements for drives for shutters, awnings, blinds, and similar equipment	IEC/EN/EN IEC 60335-2-97/AS/NZS 60335.2.97
Part 2-98: Particular requirements for humidifiers	IEC/EN 60335-2-98/AS/NZS 60335.2.98
Part 2-101: Particular requirements for vaporizers	IEC/EN 60335-2-101/AS/NZS 60335.2.101
Part 2-114: Particular requirements for self-balancing personal transport devices for use with batteries containing alkaline or other non-acid electrolytes	IEC 60335-2-114/AS/NZS 60335.2.114
Household and similar electrical appliances - Safety - Part 2-115: Particular requirements for skin beauty-care appliances	IEC/EN IEC 60335-2-115/AS/NZS 60335.2.115
Household and similar electrical appliances - Safety - Part 2-116: Particular requirements for furniture with electrically motorized parts	IEC 60335-2-116/AS/NZS 60335.2.116
Household and similar electrical appliances - Safety - Part 2-120: Particular requirements for the safety of appliances for the generation of directly inhalable aerosols	IEC 60335-2-120
<i>Luminaries and Related Products</i>	
Luminaries – Part 1: General requirements and tests	IEC/EN/EN IEC 60598-1/AS/NZS 60598.1

<u>Test Technology:</u>	<u>Test Method(s) ^{2,3,4}:</u>
Part 2-1: Particular requirements – Fixed general-purpose luminaires	IEC/EN/EN IEC 60598-2-1/AS/NZS 60598.2.1
Part 2-2: Particular requirements – Recessed luminaires	IEC/EN/EN IEC 60598-2-2/AS/NZS 60598.2.2
Part 2-3: Particular requirements – Luminaires for road and street lighting	IEC/EN 60598-2-3/AS/NZS 60598.2.3
Part 2-4: Particular requirements – Portable general-purpose luminaires	IEC/EN 60598-2-4/AS/NZS 60598.2.4
Part 2-5: Particular requirements – Floodlights	IEC/EN 60598-2-5/AS/NZS 60598.2.5
Part 2-17: Particular requirements - Luminaires for stage lighting, television and film studios (outdoor and indoor)	IEC/EN IEC 60598-2-17/AS NZS 60598.2.17
Part 2-20: Particular requirements – Lighting chains	IEC/EN/EN IEC 60598-2-20/AS/NZS 60598.2.20
Self-ballasted LED-lamps for general lighting services by voltage >50 V - Safety specifications	IEC/EN 62560/AS/NZS 62560
Lamp control gear- Part 1: General and safety requirements	IEC/EN/EN IEC 61347-1/AS/NZS 61347.1
Lamp control gear - Part 2-11: Particular requirements for miscellaneous electronic circuits used with luminaires.	IEC/EN/EN IEC 61347-2-11/AS/NZS 61347.2.11
Part 2-13: Particular requirements for DC or AC supplied electronic control gear for LED modules	IEC/EN/EN IEC 61347-2-13/AS 61347.2.13
LED modules for general lighting - Safety specifications	IEC/EN/EN IEC 62031
Photobiological safety of lamps and lamp systems	IEC/EN 62471
Application of IEC 62471 for the assessment of blue light hazard to light sources and luminaires	IEC TR 62778

<u>Test Technology:</u>	<u>Test Method(s) ^{2,3,4}:</u>
<i>Audio/Video Equipment Safety</i>	
Audio, video and similar electronic apparatus – Safety requirements	IEC/EN 60065/AS/NZS 60065
Audio/video, information and communication technology equipment - Part 1: Safety requirements	IEC/EN/EN IEC 62368-1/AS/NZS 62368.1/ UL 62368-1/CSA C22.2 NO. 62368-1
<i>ITE Equipment Safety</i>	
Information technology equipment – Safety – Part I: General Requirements	IEC/EN 60950-1/AS/NZS 60950.1
<i>SAFE Appliance</i>	
Safety of power transformers, power supply units and similar – Part 1: General requirements	IEC/EN/EN IEC 61558-1/AS/NZS 61558.1
Part 2-6: Particular requirements and tests for safety isolating transformers and power supply units incorporating safety isolating transformers	IEC/EN 61558-2-6/AS/NZS 61558.2.6
Part 2-7: Particular requirements and tests for transformers and power supplies for toys	IEC/EN 61558-2-7/AS/NZS 61558.2.7
Part 2-16: Particular requirements and tests for switch mode power supply units and transformers for switch mode power supply units	IEC/EN 61558-2-16/AS/NZS 61558.2.16
<i>INST Equipment Safety</i>	
Safety requirements for power electronic converter systems and equipment - Part 1: General	IEC/EN/EN IEC/BS EN/BS EN IEC 62477-1
<i>ELVH Equipment Safety</i>	
Electric vehicle conductive charging system - Part 1: General requirements	IEC/EN/EN IEC/BS EN/BS EN IEC 61851-1
Part 23: DC electric vehicle charging station	IEC/EN/EN IEC/BS EN/BS EN IEC 61851-23
Part 24: Digital communication between a DC EV supply equipment and an electric vehicle for control of DC charging	IEC/EN/EN IEC/BS EN/BS EN IEC 61851-24
In-cable control and protection device (IC-CPD) for mode 2 charging of electric road vehicles	IEC/EN/EN IEC/BS EN/BS EN IEC 62752

<u>Test Technology:</u>	<u>Test Method(s) ^{2,3,4}:</u>
ENERGY STAR® Program Requirements Product Specification for Electric Vehicle Supply Equipment Eligibility Criteria	ENERGY STAR® Program Requirements Product Specification for Electric Vehicle Supply Equipment Eligibility Criteria, ver. 1.2
ENERGY STAR® Level 1 and Level 2 Electric Vehicle Supply Equipment Test Method	ENERGY STAR® Level 1 and Level 2 Electric Vehicle Supply Equipment Test Method (Apr-2017)
ENERGY STAR® DC-output Electric Vehicle Supply Equipment Test Method	ENERGY STAR® DC-output Electric Vehicle Supply Equipment Test Method (Mar-2021)
ENERGY STAR® Displays Test Method	ENERGY STAR® Displays Test Method (Sep-2015)
Section 6.7.5.2 of Consumer Electronics Association (CEA) 2037-A, Determination of Television Set Power Consumption	ANSI/CEA-2037-A
<i>Functional Safety</i>	
Functional safety test	Annex H of IEC/EN/EN IEC/UL 60730-1
<i>Environment Test</i>	
Degrees of protection provided by enclosures (IP Code)	IEC/EN/AS/ANSI/CSA C22.2 NO. 60529
<i>MEAS Equipment</i>	
Safety requirements for electrical equipment for measurement, control, and laboratory use - Part 1: General requirements	IEC/EN/UL 61010-1/AS 61010.1; CAN/CSA-C22.2 NO. 61010-1
Part 2-010: Particular requirements for laboratory equipment for the heating of materials	IEC/EN IEC 61010-2-010
Part 2-081: Particular requirements for automatic and semi-automatic laboratory equipment for analysis and other purposes	IEC/EN/EN IEC 61010-2-081
<i>Battery Testing</i>	
Secondary cells and batteries containing alkaline or other non-acid electrolytes – Safety requirements for portable sealed secondary cells, and for batteries made from them, for use in portable applications – Part 2: Lithium systems	IEC/EN/UL 62133-2

<u>Test Technology:</u>	<u>Test Method(s) ^{2,3,4}:</u>
Secondary cells and batteries containing alkaline or other non-acid electrolytes - Safety requirements for portable sealed secondary cells, and for batteries made from them, for use in portable applications – Part 1: Nickel systems	IEC/EN 62133-1
Primary batteries - Part 4: Safety of lithium batteries	IEC/EN/EN IEC 60086-4
Safety Standard for Button Cell or Coin Batteries and Consumer Products Containing Such Batteries	16 CFR 1263; ANSI/UL 4200A
Secondary cells and batteries containing alkaline or other non-acid electrolytes - Safety requirements for secondary lithium cells and batteries, for use in industrial applications	IEC/EN 62619
<i>General Efficiency Test</i>	
Uniform Test Method for Measuring the Energy Consumption of Battery Chargers	Appendix Y to Subpart B, 10 CFR Part 430 – ENERGY CONSERVATION PROGRAM FOR CONSUMER PRODUCTS, 20 CCR Title 20, Uniform Test Method for Measuring the Energy Consumption of Battery Chargers
Uniform Test Method for Measuring the Energy Consumption of External Power Supplies	Appendix Z to Subpart B, 10 CFR Part 430 – ENERGY CONSERVATION PROGRAM FOR CONSUMER PRODUCTS, 20 CCR Title 20, Public Utilities and Energy, Uniform Test Method for Measuring the Energy Consumption of External Power Supplies

<u>Test Technology:</u>	<u>Test Method(s) ^{2,3,4:}</u>
Electrical Safety Testing	
<i>Medical Devices</i>	
Medical electrical equipment - Part 1: General requirements for basic safety and essential performance (IEC 60601-1:2005, MOD) [Including Amendment 2 (2021)]	IEC/EN 60601-1; ANSI/AAMI ES60601-1; CAN/CSA-C22.2 No.60601-1:14
Part 1-2: General requirements for basic safety and essential performance - Collateral Standard: Electromagnetic disturbances - Requirements and tests	IEC/EN 60601-1-2; ANSI AAMI IEC 60601-1-2
Part 1-6: General requirements for basic safety and essential performance - Collateral standard: Usability	IEC/EN 60601-1-6
Part 1-8: General requirements for basic safety and essential performance - Collateral Standard: General requirements, tests and guidance for alarm systems in medical electrical equipment and medical electrical systems	IEC/EN 60601-1-8; ANSI/AAMI/IEC 60601-1-8; CAN/CSA-C22.2 NO. 60601-1-8A
Part 1-11: General requirements for basic safety and essential performance -- Collateral Standard: Requirements for medical electrical equipment and medical electrical equipment and medical electrical systems used in the home healthcare environment	IEC/EN 60601-1-11; ANSI AAMI HA60601-1-11; CSA C22.2 No. 60601-1-11
Part 1-12: General requirements for basic safety and essential performance - Collateral Standard: Requirements for medical electrical equipment and medical electrical systems intended for use in the emergency medical services environment	IEC/EN 60601-1-12; ANSI AAMI IEC 60601-1-12; CSA-C22.2 No. 60601-1-12
Part 2-10: Particular requirements for the basic safety and essential performance of nerve and muscle stimulators	IEC/EN 60601-2-10

<u>Test Technology:</u>	<u>Test Method(s) ^{2,3,4}:</u>
Part 2-18: Particular requirements for the basic safety and essential performance of endoscopic equipment	IEC/EN 60601-2-18; CAN/CSA C22.2 NO.60601-2-18-01
Part 2-25: Particular requirements for the basic safety and essential performance of electrocardiographs	IEC/EN 60601-2-25; ANSI AAMI IEC 60601-2-25
Part 2-27: Particular requirements for the basic safety and essential performance of electrocardiographic monitoring equipment [Including: Corrigendum 1 (2012)]	IEC/EN 60601-2-27; ANSI AAMI IEC 60601-2-27
Part 2-2: Particular requirements for the basic safety and essential performance of high frequency surgical equipment and high frequency surgical accessories	IEC/EN 60601-2-2; ANSI AAMI IEC 60601-2-2; CSA C22.2 NO. 60601-2-2:19
Safety of laser products - Part 1: Equipment classification and requirements	IEC/EN 60825-1
Part 2-22: Particular requirements for basic safety and essential performance of surgical, cosmetic, therapeutic and diagnostic laser equipment	IEC/EN 60601-2-22; CSA-C22.2 NO. 60601-2-22
Part 2-30: Particular requirements for the basic safety and essential performance of automated non-invasive sphygmomanometers	IEC 80601-2-30; ANSI AAMI IEC 80601-2-30; CSA C22.2 NO.80601-2-30:19
Medical electrical equipment - Part 2-47: Particular requirements for the basic safety and essential performance of ambulatory electrocardiographic systems	IEC/EN 60601-2-47; ANSI AAMI IEC 60601-2-47; CSA C22.2 NO. 60601-2-47
Part 2-56: Particular requirements for basic safety and essential performance of clinical thermometers for body temperature measurement. [Including: Amendment 1 (2018)].	ISO/EN ISO 80601-2-56; CSA-C22.2 No. 80601-2-56

<u>Test Technology:</u>	<u>Test Method(s) ^{2,3,4}:</u>
Part 2-57: Particular requirements for the basic safety and essential performance of non-laser light source equipment intended for therapeutic, diagnostic, monitoring, cosmetic and aesthetic use	IEC/EN 60601-2-57; CAN/CSA-C22.2 No. 60601-2-57
Part 2-60: Particular requirements for the basic safety and essential performance of dental equipment	IEC/EN IEC 80601-2-60
Part 2-61: Particular requirements for basic safety and essential performance of pulse oximeter equipment	ISO 80601-2-61; EN ISO 80601-2-61; CAN/CSA-C22.2 No. 80601-2-61
Part 2-69: Particular requirements for the basic safety and essential performance of oxygen concentrator equipment	ISO/EN ISO 80601-2-69; CSA C22.2 NO. 80601-2-69
Part 2-83: Particular requirements for the basic safety and essential performance of home light therapy equipment	IEC/EN 60601-2-83
Part 2-35: Particular requirements for the basic safety and essential performance of heating devices using blankets, pads or mattresses and intended for heating in medical use	IEC/EN 60601-2-35; CSA C22.2 NO. 60601-2-35
Part 4-2: Guidance and interpretation - Electromagnetic immunity: performance of medical electrical equipment and medical electrical systems	IEC TS 60601-4-2
<i>MEAS Equipment</i>	
Part 1: General requirements [Including: Corrigendum 1 (2019)]	IEC/EN/UL 61010-1; CAN/CSA-C22.2 NO. 61010-1-12
Part 2-010: Particular requirements for laboratory equipment for the heating of materials	IEC/EN/UL 61010-2-010; CAN/CSA-C22.2 NO. 61010-2-010
Part 2-040: Particular requirements for sterilizers and washer-disinfectors used to treat medical materials	IEC/EN/UL 61010-2-040; CAN/CSA-C22.2 NO. 61010-2-040

<u>Test Technology:</u>	<u>Test Method(s)^{2,3,4}:</u>
Part 2-051: Particular requirements for laboratory equipment for mixing and stirring	IEC/EN/UL 61010-2-051; CAN/CSA-C22.2 NO. 61010-2-051
Part 2-081: Particular requirements for automatic and semi-automatic laboratory equipment for analysis and other purposes	IEC/EN/UL 61010-2-081; CAN/CSA-C22.2 NO. 61010-2-081
Part 2-101: Particular requirements for in vitro diagnostic (IVD) medical equipment	IEC/EN/UL 61010-2-101; CAN/CSA-C22.2 NO. 61010-2-101

INFORMATION TECHNOLOGY

<u>Test Technology:</u>	<u>Test Method(s):</u>
Cybersecurity	ETSI TS 103 701; EN/BS EN 18031-1; EN/BS EN 18031-2; EN/BS EN 18031-3

**A201, Yucheng North Road, Lunjiao Street, Shunde District
Foshan, Guangdong, People's Republic of China**

<u>Test Technology:</u>	<u>Test Method(s)^{2,3,4}:</u>
Electrical Safety Testing	
Household and similar electrical appliances – Safety–Part 1: General Requirements	IEC/EN/EN IEC/UL 60335-1; AS/NZS 60335.1
Part 2-40: Particular requirements for electrical heat pumps, air-conditioners and dehumidifiers	IEC/EN/EN IEC /UL 60335-2-40; AS/NZS 60335.2.40

On the following types of materials and products: Household Appliance, Lighting, Audio/Video Equipment, Information Technology Equipment (ITE), SAFE Appliance, MEAS, MED Equipment.

¹A2LA 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 listed below:

EPA-Recognized Certification Bodies (CBs) and Laboratories | ENERGY STAR

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 Annex A, Part C of A2LA R101 - *General Requirements: Accreditation of Conformity Assessment Bodies*.

³ 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.

⁴ Exclusions Tables

Standard	Clause	Test/Remarks
IEC/EN/EN IEC 61000-4-6	6.2.3.2	Current clamp
IEC/EN/ 60950-1	1.5.9	Surge suppressors Humidity conditioning (dimensions exceed 1m×1m×1m sample)
	2.10.3.9	Measurement of transient levels
	4.2.8	Cathode ray tubes
	4.2.9	High pressure lamps
	4.2.12	Flammable liquids
	4.2.13.2	Ionizing radiation
	4.3.13.3	Effect of UV radiation on materials
	4.3.13.4	Human exposure to UV radiation
	4.3.13.5.1	Laser (including laser diodes)
	4.6.2	Bottom of fire enclosure (Distillate fuel oil as described in Annex A.3.2)
	6.2.2.1	Impulse Test (Test generator reference 1 of table N.1)
	7.4.2	Voltage surge test (Test generator reference 3 of table N.1)
	7.4.3	Impulse test (Test generator reference 1 of table N.1)
	Annex A.3	Hot flaming oil test
	Annex G	Alternative method for determining minimum clearance
	Annex H	Ionizing radiation
	Annex M	Criteria for telephone ringing signals;
	Annex N	Impulse test generators
	Annex Q	Voltage dependent resistors (VDRs)
	Annex T	Guidance on protection against ingress of water
	Annex Y	Ultraviolet light conditioning test
	Annex CC	Evaluation of integrated circuit (IC) current limiters;
	Annex Zx	Protection against excessive sound pressure from personal music players
IEC/EN 60065	6.1	Ionizing Radiation
	6.2	Laser radiation
	8.17	Endurance test for wound components
	13.3.4	Transient voltages [Test generator according to Annex K (1.2 /50 us and 10/700 us)]
	14.2	Resistors (Discharge Test. Surge Test Apparatus acc. Fig 5a. Measurement device for resistance. Test according to IEC 60068-2-78)
	14.3	Capacitor and RC-units (Test according to IEC 60384-1, sub clause 4.38 and IEC 60384-14)

	16.3	Flexible cords
	18	Mechanical strength of picture tubes and protection against the effects of Implosion
	Annex H	Insulating winding wires (Test equipment according to IEC 60851-3, IEC 60851-5 and IEC 60851-6)
	Annex Zx	Protection against excessive sound pressure from personal music players
IEC/EN/EN IEC 62368-1/ AS/NZS 62368.1/UL 62368-1/CSA 62368-1	8.5.5.2	High pressure lamps
	10	Radiation
	Annex C	Ultra-violet radiation
	Annex G	Components
	Annex H	Criteria for telephone ringing signals
	Annex I	Overvoltage categories
	Annex K	Safety interlocks
	Annex S.3.2	Hot flaming oil test
	Annex U	Cathode ray tubes
IEC/EN/EN IEC 60598-1	4.28	Fixing of thermal sensing controls
IEC/EN 61347-1	13	Thermal endurance test for windings of ballasts
IEC/EN/EN IEC 60335-1	14	Transient over-voltages
	22.32	Oxygen bomb test for Rubber
	Annex J	Coated printed circuit boards
	Annex T	UV-C radiation effect on non-metallic materials
IEC/EN 60335-2-2	21.101	Crush test for current-carrying hose
	21.102	Abrasion test for current-carrying hose
	21.103	Flexing test for current-carrying hose
	21.104	Torsion test for current-carrying hose
	21.105	Bent test in cold condition
IEC/EN/EN IEC 60335-2-24	21.101	Vibration test for camping or similar use appliance
	22.107	Refrigerant leakage test
	22.108	Refrigerant leakage test
	22.109	Refrigerant leakage test
	Annex CC	Non-sparking “n” electrical apparatus
EN 60335-2-52	22.Z103	Chemical corrosive test
	Annex AA	Aging test for elastomeric parts
IEC/EN 60335-2-54	21.101	Crush test for current-carrying hose
	21.102	Abrasion test for current-carrying hose
	21.103	Flexing test for current-carrying hose
	21.104	Torsion test for current-carrying hose
IEC/EN 60335-2-59	32	UV radiation
IEC/EN 60335-2-65	32.101	Ozone concentration
	32.102	UV radiation
	Annex AA	UV radiation conditioning
IEC/EN 60335-2-75	Annex AA	Aging test for elastomeric parts
IEC/EN/EN IEC 61558-1	16.5	Appliance used in vehicles and railway applications
	20.8	Tests for thermal cut-outs
	20.9	Test for thermal-links
	Annex K	Insulated winding wires

IEC/EN 61558-2-6	6.103	Only for appliance with rated supply frequency of 50-60Hz
IEC/EN 61558-2-7	6.103	Only for appliance with rated supply frequency of 50-60Hz
IEC/EN 61558-2-16	6.103	Only for appliance with rated supply frequency of 50-60Hz
	18.102	Insulation above working voltage 750 V peak
	Annex K	Insulated winding wires
IEC/EN/UL 61010-1	10.5.3	Insulating materials -Vicat (ISO 306 method A)
	12.2.1	Ionizing radiation
	12.5.2	Ultrasonic pressure
	13.2.3	High vacuum devices
	Annex H	Qualification of conformal coating for protection against pollution
	General	3 phase power supply
IEC/EN 60601-1; ANSI/AAMI ES60601-1; CAN/CSA-C22.2 No.60601-1:14	8.8.4.2	Resistance to environmental stress
	9.5.2	Cathode ray tubes
	10.1	X-Radiation
	10.2	Alpha, beta, gamma, neutron and other particle radiation
	11.2.2	ENVIRONMENTS ME EQUIPMENT and ME SYSTEMs used in conjunction with OXYGEN RICH
	11.4	ME EQUIPMENT and ME SYSTEMs intended for use with flammable anaesthetics
	11.5	ME EQUIPMENT and ME SYSTEMS intended for use in conjunction with flammable agents
	11.7	Biocompatibility of ME EQUIPMENT and ME SYSTEMS
	12.4.5.2	Diagnostic X-ray equipment
IEC/EN/EN IEC/BS EN/BS EN IEC 62477-1	5.2.3.13.3	Mandrel test
	5.2.7	Hydrostatic pressure test
	5.2.8	Electromagnetic field (EMF)
IEC/EN/EN IEC/BS EN/BS EN IEC 61851-23	Annex DD	Bidirectional power transfer control
	Annex EE	Test load impedance verification
ISO 80601-2-61	201.103.2	Connection to electronic health record
	201.12.1.101.3	Data analysis for determination of SpO2 ACCURACY
	201.12.1.101.2	Data collection for determination of SpO2 ACCURACY
IEC 60601-1-12 ANSI AAMI IEC 60601-1-12	10.1.4	Requirements for mechanical strength for ME EQUIPMENT intended for airborne use
ISO 80601-2-69	201.12.4.103	Filter for the delivered gas
	201.101	OUTLET CONNECTOR: EN 13544-2:2002+AMD1:2009;9/16-18 UNF-2A-RH
	201.102.3	FIRE PROPAGATION RISK REDUCTION MEANS
	201.105	Integrated conserving equipment function: ISO 80601-2-67
IEC 60601-2-47	201.12.1	Integrated conserving equipment function
ISO 80601-2-56	201.11.7	Biocompatibility Of ME EQUIPMENT and ME SYSTEMS

IEC 80601-2-60	201.11.1.3	Measurement: ISO 14457:2017
IEC/EN IEC 60601-2-35	201.8.8.4.101	Mechanical and thermal resistance to damage of the enclosure of the flexible part of heating devices
	201.9.1.101	PADs (impact test on PADs)

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-5:1986	40000 MHz
Intentional Radiators Part 15C	ANSI C63.10:2013	40000 MHz
U-NII without DFS Intentional Radiators Part 15E	ANSI C63.10:2013	40000 MHz
U-NII with DFS Intentional Radiators Part 15E	FCC KDB 905462 D02 (v02)	40000 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.



Accredited Laboratory

A2LA has accredited

EUROFINS ELECTRICAL TESTING SERVICE (SHENZHEN) CO., LTD.

Shenzhen, People's Republic of China

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 A2LA R253 – Specific Requirements and A2LA R222 - Specific Requirements - EPA ENERGY STAR Accreditation 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 12th day of August 2025.

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

Mr. Trace McInturff, Vice President, Accreditation Services
For the Accreditation Council

Certificate Number 5376.01

Valid to July 31, 2027

Revised August 14, 2025

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