



INTERNATIONAL
ACCREDITATION
SERVICE®

CERTIFICATE OF ACCREDITATION

This is to attest that

UL-CCIC COMPANY LIMITED

NO. 2, CHENGWAN ROAD, SUZHOU INDUSTRIAL PARK
SUZHOU, JIA 215122, CHINA

Testing Laboratory TL-471

has met the requirements of AC89, *IAS Accreditation Criteria for Testing Laboratories as well as the FDA ASCA Program specifications*, and has demonstrated compliance with ISO/IEC Standard 17025:2017, *General requirements for the competence of testing and calibration laboratories*. This organization is accredited to provide the services specified in the scope of accreditation.

Effective Date June 4, 2025



International Accreditation Service
Issued under the authority of IAS management

Visit www.iasonline.org for current accreditation information.

SCOPE OF ACCREDITATION

International Accreditation Service, Inc.

3060 Saturn Street, Suite 100, Brea, California 92821, U.S.A. | www.iasonline.org

UL-CCIC COMPANY LIMITED

www.ul.com

Contact Name Antonio Zhang

Contact Phone +86 512 6808 6400 x
66538

*Accredited to ISO/IEC 17025:2017
FDA ASCA Program*

Effective Date June 4, 2025

FDA ASCA Program Scope

Basic Safety and Essential Performance of Medical Electrical Equipment, Medical Electrical Systems and Laboratory Medical Equipment	
ANSI AAMI ES60601-1:2005/(R)2012 & A1:2012, C1:2009/(R)2012 & A2:2010/(R)2012 (Cons. Text) [Incl. AMD2:2021] [19-46]	Medical electrical equipment - Part 1: General requirements for basic safety and essential performance (IEC 60601-1:2005, MOD) [Including Amendment 2 (2021)]
ANSI AAMI HA60601-1-11:2015 [Including AMD1:2021] [19-47]	Medical Electrical Equipment -- 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 60601-1-11:2015 MOD) [Including Amendment1 (2021)]
ANSI AAMI IEC 60601-2-2:2017 [6-389]	Medical electrical equipment - Part 2-2: Particular requirements for the basic safety and essential performance of high frequency surgical equipment and high frequency surgical accessories
ANSI AAMI IEC 60601-2-19:2009/(R)2014 & A1:2016 [6-385]	Medical Electrical Equipment - Part 2-19: Particular requirements for the basic safety and essential performance of infant incubators
ANSI AAMI IEC 80601-2-77:2020 [6-438]	Medical electrical equipment - Part 2-77: Particular requirements for the basic safety and essential performance of robotically assisted surgical equipment
ANSI UL 61010-1 3 rd Edition, dated May 12, 2012 with revision through July 19, 2019 [19-41]	Standard for Safety for Electrical Equipment For Measurement, Control and Laboratory Use; Part 1: General Requirements
IEC 60601-1 Edition 3.2 2020-08 CONSOLIDATED VERSION [19-49]	Medical electrical equipment - Part 1: General requirements for basic safety and essential performance - Note: This standard is recognized with relevant US national differences applied see references #1 and #2 in the Relevant FDA Guidance and/or Supportive Publication section below.



SCOPE OF ACCREDITATION

International Accreditation Service, Inc.

3060 Saturn Street, Suite 100, Brea, California 92821, U.S.A. | www.iasonline.org

IEC 60601-1-6 Edition 3.2 2020-07 CONSOLIDATED VERSION [5-132]	Medical electrical equipment - Part 1-6: General requirements for basic safety and essential performance - Collateral standard: Usability
IEC 60601-1-8 Edition 2.1 2012-11 [5-76]	Medical electrical equipment - 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 60601-1-8 Edition 2.2 2020-07 CONSOLIDATED VERSION [5-131]	Medical electrical equipment - 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 60601-1-10 Edition 1.2 2020-07 CONSOLIDATED VERSION [19-37]	Medical electrical equipment - Part 1-10: General requirements for basic safety and essential performance - Collateral Standard: Requirements for the development of physiologic closed-loop controllers
IEC 60601-1-11 Edition 2.1 2020-07 CONSOLIDATED VERSION [19-38]	Medical electrical equipment - Part 1-11: General requirements for basic safety and essential performance - Collateral Standard: Requirements for medical electrical equipment and medical electrical systems used in the home healthcare environment
IEC 60601-1-12 Edition 1.0 2014-06 [19-15]	Medical electrical equipment - 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 60601-1-12 Edition 1.1 2020-07 CONSOLIDATED VERSION [19-39]	Medical electrical equipment - 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 60601-2-2 Edition 6.0 2017-03 [6-389]	Medical electrical equipment - Part 2-2: Particular requirements for the basic safety and essential performance of high frequency surgical equipment and high frequency surgical accessories
IEC 60601-2-6 Edition 2.1 2016-04 [6-423]	CONSOLIDATED VERSION Medical electrical equipment - Part 2-6: Particular requirements for the basic safety and essential performance of microwave therapy equipment
IEC 60601-2-18: Edition 3.0 2009-08 [9-114]	Medical electrical equipment - Part 2-18: Particular requirements for the basic safety and essential performance of endoscopic equipment
IEC 60601-2-19 Edition 2.1 2016-04	CONSOLIDATED VERSION Medical electrical equipment - Part 2-19: Particular requirements for the basic safety and essential performance of infant incubators



SCOPE OF ACCREDITATION

International Accreditation Service, Inc.

3060 Saturn Street, Suite 100, Brea, California 92821, U.S.A. | www.iasonline.org

[6-385]	
IEC 60601-2-20 Edition 2.1 2016-04 [6-386]	CONSOLIDATED VERSION Medical electrical equipment - Part 2-20: Particular requirements for the basic safety and essential performance of infant transport incubators [Including: Amendment 1 (2016)]
IEC 60601-2-21 Edition 2.1 2016-04 [6-388]	CONSOLIDATED VERSION Medical electrical equipment - Part 2-21: Particular requirements for the basic safety and essential performance of infant radiant warmers [Including: Amendment 1 (2016)]
IEC 60601-2-22 Edition 3.1 2012-10 [12-268]	Medical electrical equipment - Part 2-22: Particular requirements for the basic safety and essential performance of surgical cosmetic therapeutic and diagnostic laser equipment
IEC 60601-2-22 Edition 4.0 2019-11 [12-356]	Medical electrical equipment - Part 2-22: Particular requirements for basic safety and essential performance of surgical cosmetic therapeutic and diagnostic laser equipment
IEC 60601-2-28 Edition 3.0 2017-06 [12-309]	Medical electrical equipment - Part 2-28: Particular requirements for the basic safety and essential performance of X-ray tube assemblies for medical diagnosis
IEC 60601-2-29 Edition 3.0 2008-06 [12-211]	Medical electrical equipment - Part 2-29: Particular requirements for the basic safety and essential performance of radiotherapy simulators
IEC 60601-2-36 Edition 2.0 2014-04 [9-119]	Medical electrical equipment - Part 2-36: Particular requirements for the safety of equipment for extracorporeally induced lithotripsy
IEC 60601-2-43 Edition 3.0 2022-12 [12-351]	Medical electrical equipment - Part 2-43: Particular requirements for the safety and essential performance of X-ray equipment for interventional procedures
IEC 60601-2-45 Edition 3.1 2015 [12-294]	Medical electrical equipment - Part 2-45: Particular requirements for the basic safety and essential performance of mammographic X-ray equipment and mammographic stereotactic devices
IEC 60601-2-50 Edition 2.1 2016-04 [6-387]	CONSOLIDATED VERSION Medical electrical equipment - Part 2-50: Particular requirements for the basic safety and essential performance of infant phototherapy equipment [Including: Amendment 1 (2016)]
IEC 60601-2-50 Edition 3.0 2020-09 [6-450]	Medical electrical equipment - Part 2-50: Particular requirements for the basic safety and essential performance of infant phototherapy equipment
IEC 60601-2-52 Edition 1.0 2009-12 [6-321]	Medical electrical equipment - Part 2-52: Particular requirements for basic safety and essential performance of medical beds [Including: Technical Corrigendum 1 (2010)]
IEC 60601-2-52 Edition 1.1 2015-03 CONSOLIDATED VERSION [6-489]	Medical electrical equipment - Part 2-52: Particular requirements for the basic safety and essential performance of medical beds



SCOPE OF ACCREDITATION

International Accreditation Service, Inc.

3060 Saturn Street, Suite 100, Brea, California 92821, U.S.A. | www.iasonline.org

IEC 60601-2-54 Edition 2.0 2022-09 [12-348]	Medical electrical equipment - Part 2-54: Particular requirements for the basic safety and essential performance of X-ray equipment for radiography and radioscopy
IEC 60601-2-57 Edition 1.0 2011-01 [12-242]	Medical Electrical Equipment - Part 2-57: Particular requirements for the basic safety and essential performance of non-laser light source equipment intended for therapeutic, diagnostic, monitoring and cosmetic/aesthetic use
IEC 60601-2-63 Edition 1.2 2021-05 CONSOLIDATED VERSION [12-339]	Medical electrical equipment - Part 2-63: Particular requirements for the basic safety and essential performance of dental extra-oral X-ray equipment
IEC 60601-2-65 Edition 1.2 2021-05 CONSOLIDATED VERSION [12-340]	Medical electrical equipment - Part 2-65: Particular requirements for the basic safety and essential performance of dental intra-oral-X-ray equipment
IEC 61010-1 Edition 3.1 2017-01 CONSOLIDATED VERSION [19-34]	Safety requirements for electrical equipment for measurement control and laboratory use – Part 1: General requirements
IEC 80601-2-60 Edition 2.0 2019-06 [4-262]	Medical electrical equipment - Part 2-60: Particular requirements for the basic safety and essential performance of dental equipment
IEC 80601-2-77 Edition 1.0 2019-07 [6-438]	Medical electrical equipment - Part 2-77: Particular requirements for the BASIC SAFETY and essential performance of ROBOTICALLY ASSISTED SURGICAL EQUIPMENT
IEC 80601-2-78 Edition 1.0 2019-07 [16-232]	Medical electrical equipment - Part 2-78: Particular requirements for basic safety and essential performance of medical robots for rehabilitation assessment compensation or alleviation
ISO 80601-2-12 Second edition 2020-02 [1-146]	Medical electrical equipment - Part 2-12: Particular requirements for basic safety and essential performance of critical care ventilators
ISO 80601-2-13 First edition 2011-08-11 [1-141]	Medical electrical equipment - Part 2-13: Particular requirements for basic safety and essential performance of an anaesthetic workstation [Including: Amendment 1 (2015) and Amendment 2 (2018)]
ISO 80601-2-13 Second edition 2022-04 [1-165]	Medical electrical equipment - Part 2-13: Particular requirements for basic safety and essential performance of an anaesthetic workstation
ISO 80601-2-69 Second edition 2020-11 [1-148]	Medical electrical equipment - Part 2-69: Particular requirements for basic safety and essential performance of oxygen concentrator equipment
ISO 80601-2-70 First Edition 2015-01-15 [1-115]	Medical electrical equipment - Part 2-70: Particular requirements for the basic safety and essential performance of sleep apnoea breathing therapy equipment



SCOPE OF ACCREDITATION

International Accreditation Service, Inc.

3060 Saturn Street, Suite 100, Brea, California 92821, U.S.A. | www.iasonline.org

ISO 80601-2-70 Second edition 2020-11 [1-151]	Medical electrical equipment - Part 2-70: Particular requirements for the basic safety and essential performance of sleep apnoea breathing therapy equipment
ISO 80601-2-72 First edition 2015-04-11 [1-105]	Medical electrical equipment - Part 2-72: Particular requirements for basic safety and essential performance of home healthcare environment ventilators for ventilator-dependent patients
ISO 80601-2-72 Second edition 2023-06 [1-163]	Medical electrical equipment - Part 2-72: Particular requirements for basic safety and essential performance of home healthcare environment ventilators for ventilator-dependent patients
ISO 80601-2-74 First edition 2017-05 [1-138]	Medical electrical equipment - Part 2-74: Particular requirements for basic safety and essential performance of respiratory humidifying equipment
ISO 80601-2-74 Second edition 2021-07 [1-177]	Medical electrical equipment - Part 2-74: Particular requirements for basic safety and essential performance of respiratory humidifying equipment
ISO 80601-2-79 First edition 2018-07 [1-143]	Medical electrical equipment - Part 2-79: Particular requirements for basic safety and essential performance of ventilatory support equipment for ventilatory impairment
ISO 80601-2-80 First edition 2018-07 [1-144]	Medical electrical equipment - Part 2-80: Particular requirements for basic safety and essential performance of ventilatory support equipment for ventilatory insufficiency
ISO 80601-2-84 First edition 2020-07 [1-160]	Medical electrical equipment - Part 2-84: Particular requirements for the basic safety and essential performance of ventilators for the emergency medical services environment
ISO 80601-2-87 First edition 2021-04 [1-152]	Medical electrical equipment - Part 2-87: Particular requirements for basic safety and essential performance of high-frequency ventilators

Regular Scope

Electrical	
ACCC	Consumer Goods (Products Containing Button/Coin Batteries) Information Standard
ACCC	Consumer Goods (Products Containing Button/Coin Batteries) Safety Standard
ANSI C78.377	Electric Lamps - Specifications for the Chromaticity of Solid-state Lighting Products
ANSI C136:31	Roadway and Area Lighting Equipment — Luminaire Vibration
ANSI/AAMI ES60601-1	Medical electrical equipment – Part 1: General requirements for basic safety and essential performance



SCOPE OF ACCREDITATION

International Accreditation Service, Inc.

3060 Saturn Street, Suite 100, Brea, California 92821, U.S.A. | www.iasonline.org

ANSI AAMI HA 60601-1-11	Medical electrical equipment – Part 1-11: General requirements for basic safety and essential performance – Collateral Standard: Requirements for medical electrical equipment and medical electrical systems used in the home healthcare environment
ANSI AAMI IEC 60601-1-8	Medical electrical equipment – 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
ANSI AAMI IEC 60601-2-19	Medical electrical equipment – Part 2-19: Particular requirements for the basic safety and essential performance of infant incubators
ANSI AAMI IEC 60601-2-20	Medical electrical equipment – Part 2-20: Particular requirements for the basic safety and essential performance of infant transport incubators
ANSI AAMI IEC 60601-2-21	Medical electrical equipment – Part 2-21: Particular requirements for the basic safety and essential performance of infant radiant warmers
ANSI/AAMI/IEC/CSA C22.2 NO. 60601-2-2	Medical electrical equipment – Part 2-2: Particular requirements for the basic safety and essential performance of high frequency surgical equipment and high frequency surgical accessories
ANSI/IES RP-27.1	Recommended practice: Risk group classification and minimization of photobiological hazards from ultraviolet lamps and lamp systems
AS/NZS 4783.1	Performance of electrical lighting equipment-Ballasts for fluorescent lamps Part 1: Method of measurement to determine energy consumption and performance of ballast-lamp circuits
AS/NZS 4783.2	Performance of electrical lighting equipment— Ballasts for fluorescent lamps Part 2: Energy labelling and minimum energy performance standards requirements
CAN/CSA C22.2 No. 60601-1	Medical electrical equipment – Part 1: General requirements for basic safety and essential performance
CIE 13.3	Method of Measuring and Specifying Color Rendering of Light Sources
CIE 15	Colorimetry Standard
CIE 18.2	Basis of Physical Photometry (E)
CIE 63	The Spectroradiometric Measurement of Light Sources (E)
CIE 84	The Measurement of Luminous Flux
CIE 154	The Maintenance of Outdoor Lighting Systems
EN 13032-1+ A1	Light and lighting - Measurement and presentation of photometric data of lamps and luminaires - Part 1: Measurement and file format
EN 13032-4	Light and lighting - Measurement and presentation of photometric data of lamps and luminaires Part 4: LED light sources and luminaires



SCOPE OF ACCREDITATION

International Accreditation Service, Inc.

3060 Saturn Street, Suite 100, Brea, California 92821, U.S.A. | www.iasonline.org

L2(AP)005	Cone lumen measurement
EN 62233	Measurement methods for electromagnetic fields of household appliances and similar apparatus with regard to human exposure
EU 2019/2015	COMMISSION DELEGATED REGULATION (EU) 2019/2015 of 11 March 2019 supplementing Regulation (EU) 2017/1369 of the European Parliament and of the Council with regard to energy labelling of light sources and repealing Commission Delegated Regulation (EU) No 874/2012-Text with EEA relevance
EU 2019/2020	COMMISSION REGULATION (EU) 2019/2020 of 1 October 2019 laying down ecodesign requirements for light sources and separate control gears pursuant to Directive 2009/125/EC of the European Parliament and of the Council and repealing Commission Regulations (EC) No 244/2009, (EC) No 245/2009 and (EU) No 1194/2012-Text with EEA relevance
IEC 60034-1	Rotating electrical machines - part 1: rating and performance
IEC 60034-2-1	Rotating electrical machines - Part 2-1: Standard methods for determining losses and efficiency from tests (excluding machines for traction vehicles)
IEC 60034-5	Rotating electrical machines - Part 5: Degrees of protection provided by the integral design of rotating electrical machines (IP code) – Classification
IEC 60034-11	Rotating electrical machines – Part 11: Thermal protection
IEC 60034-30-1	Rotating electrical machines - Part 30-1: Efficiency classes of line operated AC motors (IE code)
IEC 60335-2-118	Household and similar electrical appliances - Safety - Part 2-118: Particular requirements for professional ice-cream makers
IEC 60601-2-28 Edition 2.0 2010-03	Medical electrical equipment - Part 2-28: Particular requirements for the basic safety and essential performance of X-ray tube assemblies for medical diagnosis
IEC 60601-2-43 Edition 2.1 2017-05 CONSOLIDATED VERSION	Medical electrical equipment - Part 2-43: Particular requirements for the safety and essential performance of X-ray equipment for interventional procedures
IEC 61010-1 Edition 3.1 2017-01	Safety requirements for electrical equipment for measurement, control, and laboratory use - Part 1: General requirements
IEC 61643-11	Low-voltage surge protective devices – Part 11: Surge protective devices connected to low-voltage power systems – Requirements and test
IEC 62563-1:2009	Medical electrical equipment – Medical image display systems – Part 1: Evaluation methods
IEC 63370	Lithium-ion batteries and charging systems – Safety
IEC/EN 60335-1	Household and similar electrical appliances - safety - part 1: general requirements



SCOPE OF ACCREDITATION

International Accreditation Service, Inc.

3060 Saturn Street, Suite 100, Brea, California 92821, U.S.A. | www.iasonline.org

IEC/EN 60335-2-2	Household and similar electrical appliances – Safety – Part 2-2: Particular requirements for vacuum cleaners and water-suction cleaning appliances
IEC/EN 60335-2-8	Household and similar electrical appliances - Safety - Part 2-8: Particular requirements for shavers, hair clippers and similar appliances
IEC/EN 60335-2-9	Household and similar electrical appliances - Safety - Part 2-9: Particular requirements for grills, toasters and similar portable cooking appliances
IEC/EN 60335-2-10	Household and similar electrical appliances – Safety – Part 2-10: Particular requirements for floor treatment machines and wet scrubbing machines
IEC/EN 60335-2-13	Household and similar electrical appliances - Safety - Part 2-13: Particular requirements for deep fat fryers, frying pans and similar appliances
IEC/EN 60335-2-14	Household and similar electrical appliances - Safety - Part 2-14: Particular requirements for kitchen machines
IEC/EN 60335-2-15	Household and similar electrical appliances – Safety – Part 2-15: Particular requirements for appliances for heating liquids
IEC/EN 60335-2-23	Household and similar electrical appliances - Safety - Part 2-23: Particular requirements for appliances for skin or hair care
IEC/EN 60335-2-24	Safety of household and similar electrical appliances, part 2: particular requirements for refrigerating appliances, ice-cream appliances and ice-makers
IEC/EN 60335-2-29	Household and similar electrical appliances - Safety Part 2: Particular requirements for battery chargers
IEC/EN 60335-2-34	Household and similar electrical appliances – Safety – Part 2-34: Particular requirements for motor-compressor
IEC/EN 60335-2-40	Safety of household and similar electrical appliances, part 2-40: particular requirements for electrical heat pumps, air-conditioners and dehumidifiers
IEC/EN 60335-2-54	Household and similar electrical appliances - Safety - Part 2-54: Particular requirements for surface-cleaning appliances for household use employing liquids or steam
IEC/EN 60335-2-69	Household and similar electrical appliances - Safety - Part 2-69: Particular requirements for wet and dry vacuum cleaners, including power brush, for commercial use
IEC/EN 60335-2-89	Household and similar electrical appliances - safety – part 2-89: particular requirements for commercial refrigerating appliances with an incorporated or remote refrigerant unit or compressor
IEC/EN 60601-1	Medical electrical equipment – Part 1: General requirements for basic safety and essential performance



SCOPE OF ACCREDITATION

International Accreditation Service, Inc.

3060 Saturn Street, Suite 100, Brea, California 92821, U.S.A. | www.iasonline.org

IEC/EN 60601-1-3	Medical electrical equipment – Part 1-3: General requirements for basic safety and essential performance – Collateral Standard: Radiation protection in diagnostic X-ray equipment
IEC/EN 60601-1-6	Medical electrical equipment – Part 1-6: General requirements for basic safety and essential performance – Collateral standard: Usability
IEC/EN 60601-1-8	Medical electrical equipment – 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 60601-1-10	Medical electrical equipment – Part 1-10: General requirements for basic safety and essential performance – Collateral standard: Requirements for the development of physiologic closed-loop controllers
IEC/EN 60601-1-11	Medical electrical equipment – Part 1-11: General requirements for basic safety and essential performance – Collateral Standard: Requirements for medical electrical equipment and medical electrical systems used in the home healthcare environment
IEC/EN 60601-1-12	Medical electrical equipment – 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 60601-2-2	Medical electrical equipment – Part 2-2: Particular requirements for the basic safety and essential performance of high frequency surgical equipment and high frequency surgical accessories
IEC/EN 60601-2-6	Medical electrical equipment - Part 2-6: Particular requirements for the basic safety and essential performance of microwave therapy equipment
IEC/EN 60601-2-18	Medical electrical equipment – Part 2-18: Particular requirements for the basic safety and essential performance of endoscopic equipment
IEC/EN 60601-2-19	Medical electrical equipment – Part 2-19: Particular requirements for the basic safety and essential performance of infant incubators
IEC/EN 60601-2-20	Medical electrical equipment – Part 2-20: Particular requirements for the basic safety and essential performance of infant transport incubators
IEC/EN 60601-2-21	Medical electrical equipment – Part 2-21: Particular requirements for the basic safety and essential performance of infant radiant warmers
IEC/EN 60601-2-22	Medical electrical equipment – Part 2-22: Particular requirements for basic safety and essential performance of surgical, cosmetic, therapeutic and diagnostic laser equipment
IEC/EN 60601-2-28	Medical electrical equipment – Part 2-28: Particular requirements for the basic safety and essential performance of X-ray tube assemblies for medical diagnosis



SCOPE OF ACCREDITATION

International Accreditation Service, Inc.

3060 Saturn Street, Suite 100, Brea, California 92821, U.S.A. | www.iasonline.org

IEC/EN 60601-2-29	Medical electrical equipment - Part 2-29: Particular requirements for the basic safety and essential performance of radiotherapy simulators
IEC/EN 60601-2-36	Medical electrical equipment - Part 2-36: Particular requirements for the basic safety and essential performance of equipment for extracorporeally induced lithotripsy
IEC/EN 60601-2-41	Medical electrical equipment - part 2-41: particular requirements for the basic safety and essential performance of surgical luminaires and luminaires for diagnosis
IEC/EN 60601-2-43	Medical electrical equipment - part 2-43: particular requirements for the basic safety and essential performance of x-ray equipment for interventional procedures
IEC/EN 60601-2-45	Medical electrical equipment - part 2-45: particular requirements for the basic safety and essential performance of mammographic x-ray equipment and mammographic stereotactic devices
IEC/EN 60601-2-46	Medical electrical equipment - part 2-46: particular requirements for the basic safety and essential performance of operating tables
IEC/EN 60601-2-50	Medical electrical equipment, Part 2-50: Particular requirements for the basic safety and essential performance of infant phototherapy equipment
IEC/EN 60601-2-52	Medical electrical equipment - part 2-52: particular requirements for the basic safety and essential performance of medical beds
IEC/EN 60601-2-54	Medical electrical equipment - part 2-54: particular requirements for the basic safety and essential performance of x-ray equipment for radiography and radioscopy
IEC/EN 60606-2-57	Medical electrical equipment - part 2-57: particular requirements for the basic safety and essential performance of non-laser light source equipment intended for therapeutic, diagnostic, monitoring and cosmetic/aesthetic use
IEC/EN 60601-2-83	Medical electrical equipment - part 2-83: particular requirements for the basic safety and essential performance of home light therapy equipment
IEC/EN 60730-1	Automatic electrical controls – Part 1: General requirements
IEC/EN 60730-2-9	Automatic electrical controls – Part 2-9: Particular requirements for temperature sensing controls
IEC/EN 60745-1	Hand-held motor-operated electric tools – safety – part 1: general requirements
IEC/EN 60745-2-1	Hand-held motor-operated electric tools – safety – part 2-1: particular requirements for drills and impact drills
IEC/EN 60745-2-2	Hand-held motor-operated electric tools – safety – part 2-2: particular requirements for screwdrivers and impact wrenches



SCOPE OF ACCREDITATION

International Accreditation Service, Inc.

3060 Saturn Street, Suite 100, Brea, California 92821, U.S.A. | www.iasonline.org

IEC/EN 60745-2-3	Hand-held motor-operated electric tools – safety – part 2-3: particular requirements for grinders, polishers and disk-type sanders
IEC/EN 60745-2-4	Hand-held motor-operated electric tools – safety – part 2-4: particular requirements for grinders, polishers and disk-type sanders
IEC/EN 60745-2-5	Hand-held motor-operated electric tools – safety – part 2-5: particular requirements for circular saws
IEC/EN 60745-2-6	Hand-held motor-operated electric tools – safety – part 2-6: particular requirements for hammer
IEC/EN 60745-2-8	Hand-held motor-operated electric tools safety – part 2-8: particular requirements for shears and nibblers
IEC/EN 60745-2-9	Hand-held motor-operated electric tools – safety – part 2-9: particular requirements for tappers
IEC/EN 60745-2-11	Hand-held motor-operated electric tools – safety – part 2-11: particular requirements for reciprocating saws
IEC/EN 60745-2-12	Hand-held motor-operated electric tools – safety – part 2-12: particular requirements for concrete vibrators
IEC/EN 60745-2-14	Hand-held motor-operated electric tools – safety – part 2-14: particular requirements for planers
IEC/EN 60745-2-15	Hand-held motor-operated electric tools – safety – part 2-15: particular requirements for hedge trimmers
IEC/EN 60745-2-16	Hand-held motor-operated electric tools – safety – part 2-16: particular requirements for tackers
IEC/EN 60745-2-17	Hand-held motor-operated electric tools – safety – part 2-17: particular requirements for routers and trimmers
IEC/EN 60745-2-18	Particular requirements for strapping tools
IEC/EN 60745-2-19	Particular requirements for jointers
IEC/EN 60745-2-20	Particular requirements for band saws
IEC/EN 60745-2-21	Particular requirements for drain cleaners
IEC/EN 60745-2-22	Hand-held motor-operated electric tools - safety - part 2-22: particular requirements for cut-off machines
IEC/EN 60745-2-23	Particular requirements for die grinders and small rotary Tools
IEC/EN 61010-1	Safety requirements for electrical equipment for measurement, control and laboratory use - Part 1: General requirements



SCOPE OF ACCREDITATION

International Accreditation Service, Inc.

3060 Saturn Street, Suite 100, Brea, California 92821, U.S.A. | www.iasonline.org

IEC/EN 61010-2-010	Safety requirements for electrical equipment for measurement, control, and laboratory use - Part 2-10: Particular requirements for laboratory equipment for the heating of materials
IEC/EN 61010-2-011	Safety requirements for electrical equipment for measurement, control, and laboratory use - Part 2-011: Particular requirements for refrigerating equipment
IEC/EN 61010-2-040	Safety requirements for electrical equipment for measurement, control, and laboratory use - part 2-040: particular requirements for sterilizers and washer-disinfectors used to treat medical materials
IEC/EN 61010-2-091	Safety requirements for electrical equipment for measurement, control and laboratory use - Part 2-091: Particular requirements for cabinet X-ray systems
IEC/EN 61010-2-101	Safety requirements for electrical equipment for measurement, control and laboratory use – Part 2-101: Particular requirements for in vitro diagnostic (IVD) medical equipment
IEC/EN 61800-5-1	Adjustable Speed Electrical Power Drive Systems – Part 5-1: Safety Requirements – Electrical, Thermal and Energy
IEC/EN 62471	Photobiological safety of lamps and lamp systems
IEC/EN 62841-1	Electric Motor-Operated Hand-Held Tools, Transportable Tools And Lawn And Garden Machinery - Safety - Part 1: General Requirements
IEC/EN 62841-2-1	Electric Motor-Operated Hand-Held Tools, Transportable Tools And Lawn And Garden Machinery - Safety - Part 2-1: Particular Requirements For Hand-Held Drills and Impact Drills
IEC/EN 62841-2-2	Electric Motor-Operated Hand-Held Tools, Transportable Tools And Lawn And Garden Machinery - Safety – Part 2-2: Particular Requirements For Screwdrivers And Impact Wrenches
IEC/EN 62841-2-3	Electric Motor-Operated Hand-Held Tools, Transportable Tools And Lawn And Garden Machinery - Safety - Part 2-3: Particular Requirements For Hand-Held Grinders, Polishers, and Disk-Type Sanders
IEC/EN 62841-2-4	Electric Motor-Operated Hand-Held Tools, Transportable Tools And Lawn And Garden Machinery - Safety – Part 2-4: Particular Requirements For Hand-Held Sanders And Polishers Other Than Disc Type
IEC/EN 62841-2-5	Electric Motor-Operated Hand-Held Tools, Transportable Tools And Lawn And Garden Machinery - Safety Part 2-5: Particular Requirements For Hand-Held Circular Saws
IEC/EN 62841-2-6	Electric Motor-Operated Hand-Held Tools, Transportable Tools And Lawn And Garden Machinery - Safety - Part 2-6 Particular Requirements For Hand-Held Hammers
IEC/EN 62841-2-8	Electric Motor-Operated Hand-Held Tools, Transportable Tools And Lawn And Garden Machinery - Safety – Part 2-8: Particular Requirements For Hand-Held Shears and Nibblers



SCOPE OF ACCREDITATION

International Accreditation Service, Inc.

3060 Saturn Street, Suite 100, Brea, California 92821, U.S.A. | www.iasonline.org

IEC/EN 62841-2-9	Electric Motor-Operated Hand-Held Tools, Transportable Tools And Lawn And Garden Machinery - Safety – Part 2-9: Particular Requirements For Hand- Held Tappers And Threaders
IEC/EN 62841-2-10	Electric Motor-Operated Hand-Held Tools, Transportable Tools And Lawn And Garden Machinery - Safety – Part 2-10: Particular Requirements For Hand-Held Mixers
IEC/EN 62841-2-11	Electric Motor-Operated Hand-Held Tools, Transportable Tools And Lawn And Garden Machinery - Safety – Part 2-11 Particular Requirements for Hand-Held Reciprocating Saws
IEC/EN 62841-2-14	Electric Motor-Operated Hand-Held Tools, Transportable Tools And Lawn And Garden Machinery - Safety – Part 2-14: Particular Requirements For Hand-Held Planers
IEC/EN 62841-2-17	Electric Motor-Operated Hand-Held Tools, Transportable Tools And Lawn And Garden Machinery - Safety - Part 2-17: Particular Requirements For Hand-Held Routers
IEC/EN 62841-2-21	Electric Motor-Operated Hand-Held Tools, Transportable Tools And Lawn And Garden Machinery - Safety - Part 2-21: Particular Requirements For Hand-Held Drain Cleaners
IEC/EN 62841-3-1	Electric Motor-Operated Hand-Held Tools, Transportable Tools And Lawn And Garden Machinery - Safety – Part 3-1: Particular Requirements For Transportable Table Saws
IEC/EN 62841-3-4	Electric Motor-Operated Hand-Held Tools, Transportable Tools And Lawn And Garden Machinery - Safety – Part 3-4: Particular Requirements for Transportable Bench Grinders
IEC/EN 62841-3-6	Electric Motor-Operated Hand-Held Tools, Transportable Tools And Lawn And Garden Machinery – Safety - Part 3-6: Transportable Diamond Drills with Liquid System
IEC/EN 62841-3-9	Electric Motor-Operated Hand-Held Tools, Transportable Tools And Lawn And Garden Machinery - Safety – Part 3-9: Particular Requirements For Transportable Mitre Saws
IEC/EN 62841-3-10	Electric Motor-Operated Hand-Held Tools, Transportable Tools And Lawn And Garden Machinery - Safety – Part 3-10: Particular requirements for Transportable Cut-Off Machines
IEC/EN 62841-4-2	Electric motor-operated hand-held tools, transportable tools and lawn and garden machinery – Safety – Part 4-2: Particular requirements for hedge trimmers
IEC/EN 62841-4-3	Electric motor-operated hand-held tools, transportable tools and lawn and garden machinery – Safety – Part 4-3: Particular requirements for pedestrian controlled walk-behind lawnmowers



SCOPE OF ACCREDITATION

International Accreditation Service, Inc.

3060 Saturn Street, Suite 100, Brea, California 92821, U.S.A. | www.iasonline.org

IEC/EN 62841-4-4	Electric motor-operated hand-held tools, transportable tools and lawn and garden machinery – Safety – Part 4-4: Particular requirements for lawn trimmers, lawn edge trimmers, grass trimmers, brush cutters and brush saws
IEC/EN 62841-4-5	Electric motor-operated hand-held tools, transportable tools and lawn and garden machinery – Safety – Part 4-5: Particular requirements for grass shears
IEC/EN 62841-4-6	Electric motor-operated hand-held tools, transportable tools and lawn and garden machinery – Safety – Part 4-6: Particular requirements for garden blowers, garden vacuums and garden blower/vacuums
IEC/EN 80601-2-60	Medical electrical equipment - Part 2-60: Particular requirements for the basic safety and essential performance of dental equipment
IEC/EN/ ANSI/AAMI/ CSA C22.2 No. 80601-2-77	Medical electrical equipment – Part 2-77: Particular requirements for the basic safety and essential performance of robotically assisted surgical equipment
IEC/EN/ ANSI/AAMI/ CSA C22.2 No. 80601-2-78	Medical electrical equipment – Part 2-78: Particular requirements for basic safety and essential performance of medical robots for rehabilitation, assessment, compensation, or alleviation
IEC/EN/CAN/CSA-C22.2 No. 60601-2-63	Medical electrical equipment – Part 2-63: Particular requirements for basic safety and essential performance of dental extra-oral X-ray equipment
IEC/EN/CAN/CSA-C22.2 No. 60601-2-65	Medical electrical equipment – Part 2-65: Particular requirements for basic safety and essential performance of dental intra-oral X-ray equipment
IEC/PAS 62707-1	LED - Binning - Part 1: General requirements and white grid
IEC/TR 61341	Method of measurement of centre beam intensity and beam angle(s) of reflector lamps
IEC/TR 62778	Application of IEC 62471 for the assessment of blue light hazard to light sources and luminaires
IEC/TS 62504	General lighting – LEDs and LED modules – Terms and definitions
IES LM-16	Practical Guide to Colorimetry of Light Sources
IES LM-79	Approved Method for Electrical and Photometric Measurements of Solid-State Lighting Products
IES TM-21	Projecting Long Term Lumen Maintenance of LED Light Sources
IES TM-28	Projecting Long-Term Luminous Flux Maintenance of LED Lamps and Luminaries
IES TM-30	IES Method for Evaluating Light Source Color Rendition
INMETRO ordinance No. 62	Technical Quality Regulation for Luminaires for Public Street Lighting
INMETRO Regulation 69	Technical regulation of quality for LED lamps with device integrated into the base



SCOPE OF ACCREDITATION

International Accreditation Service, Inc.

3060 Saturn Street, Suite 100, Brea, California 92821, U.S.A. | www.iasonline.org

IS 16102 (PART 2)	Self-Ballasted LED Lamps For General Lighting Services
IS 16108	Photobiological Safety of Lamps and Lamp Systems
ISO 80601-2-69	Medical electrical equipment – Part 2-69: Particular requirements for basic safety and essential performance of oxygen concentrator equipment
ISO/CSA-C22.2 NO. 80601-2-84	Medical Electrical Equipment - Part 2-84: Particular Requirements For Basic Safety And Essential Performance Of Emergency And Transport Ventilators
ISO/EN ISO 80601-2-67	Medical Electrical Equipment – Part 2-67: Particular Requirements for basic safety and Essential Performance of oxygen conserving equipment
ISO/EN ISO 80601-2-87	Medical Electrical Equipment - Part 2-87: Particular Requirements For Basic Safety And Essential Performance Of High-frequency Ventilators
ISO/EN ISO 80601-2-90	Medical electrical equipment —Part 2-90: Particular requirements for basic safety and essential performance of respiratory high-flow therapy equipment
ISO/EN ISO/CAN/CSA-C22.2 No. 80601-2-12	Medical electrical equipment Part 2-12: Particular requirements for basic safety and essential performance of critical care ventilators
ISO/EN ISO/CAN/CSA-C22.2 NO. 80601-2-13	Medical electrical equipment - Part 2-13: Particular requirements for basic safety and essential performance of an anaesthetic workstation
ISO/EN ISO/CAN/CSA-C22.2 NO. 80601-2-70	Medical electrical equipment – Part 2-70: Particular requirements for basic safety and essential performance of sleep apnea breathing therapy equipment
ISO/EN ISO/CAN/CSA-C22.2 NO. 80601-2-72	Medical electrical equipment - Part 2-72: Particular requirements for basic safety and essential performance of home healthcare environment ventilators for ventilator-dependent patients
ISO/EN ISO/CSA-C22.2 NO. 80601-2-74	Medical electrical equipment – Part 2-74: Particular requirements for basic safety and essential performance of respiratory humidifying equipment
ISO/EN ISO/CSA-C22.2 NO. 80601-2-79	Medical electrical equipment - Part 2-79: Particular requirements for basic safety and essential performance of ventilatory support equipment for ventilatory impairment
ISO/EN ISO/CSA-C22.2 NO. 80601-2-80	Medical electrical equipment - Part 2-80: Particular requirements for basic safety and essential performance of ventilatory support equipment for ventilatory insufficiency
NOM-030-ENER	Luminous Efficacy Of Integral Light Emitting Diode (LED) Lamps For General Lighting Limits and Test Methods
NOM-031-ENER	Energy Efficiency For Luminaires With Light Emitting Diodes (LED) For Roadways and Outdoor Public Areas.
UAE.S 5010 2:2013	Labeling Energy efficiency label for electrical appliances part 2: Washing Machines and Dryers
UL 1004-1	Standard for Rotating Electrical Machines - General Requirements



SCOPE OF ACCREDITATION

International Accreditation Service, Inc.

3060 Saturn Street, Suite 100, Brea, California 92821, U.S.A. | www.iasonline.org

UL 1004-5	Standard for Fire Pump Motors
US DOE 10 CFR 429	Certification, Compliance, and Enforcement for Consumer Products and Commercial and Industrial Equipment (restricted to Compact Fluorescent Lamps)
US DOE 10 CFR 429	Certification, Compliance, and Enforcement for Consumer Products and Commercial and Industrial Equipment (restricted to Fluorescent Ballasts)
US DOE 10 CFR 429	Certification, Compliance, and Enforcement for Consumer Products and Commercial and Industrial Equipment (restricted to Metal Halide Ballasts and Fixtures)
US DOE 10 CFR 429 and 430	Energy Conservation Program: Test Procedures for Integrated Light Emitting Diode Lamps
US DOE 10 CFR 430	Appendix W to Subpart B Energy Conservation Program For Consumer Products (Restricted to Compact Fluorescent Lamps)
Electronics	
ANSI/CAN/UL 2272	Standard for Electrical Systems for Personal E-Mobility Devices
ANSI/CAN/UL 2849	Standard for Electrical Systems for eBikes
ANSI/CAN/UL/ULC 2271	Standard for Batteries for Use In Light Electric Vehicle (LEV) Applications
DIN/EN/ISO 9241-307	Ergonomics of human-system interaction — part 307: analysis and compliance test methods for electronic visual displays (clause 5.2)
EK1-ITB2000	Bases for GS-mark tests of IT equipment in combination with visual display units (visual display units within the meaning of the ordinance for work with visual display units)
EN 50332-2	Sound system equipment: headphones and earphones associated with personal music players – maximum sound pressure level measurement methodology part 2: matching of sets with headphones if either or both are offered separately, or are offered as one package equipment but with standardized connectors between the two allowing to combine components of different manufacturers or different design (clause 5)
IEC/EN 62368-1	Audio/video, information and communication technology equipment - Part 1: Safety requirements
UL 4200A	Standard for Safety for Products Incorporating Button Batteries or Coin Cell Batteries
Performance Rating	
10 CFR 430, subpart B, appendix A and appendix A1	Uniform Test Method for Measuring the Energy Consumption of Refrigerators, Refrigerator-Freezers, and Miscellaneous Refrigeration Products



SCOPE OF ACCREDITATION

International Accreditation Service, Inc.

3060 Saturn Street, Suite 100, Brea, California 92821, U.S.A. | www.iasonline.org

10 CFR 430, subpart B, appendix B and appendix B1	Uniform Test Method for Measuring the Energy Consumption of Freezers
10 CFR 430, subpart B, appendix BB	Uniform Test Method for Measuring the Input Power, Lumen Output, Lamp Efficacy, Correlated Color Temperature (CCT), Color Rendering Index (CRI), Power Factor, Time to Failure, and Standby Mode Power of Integrated Light-Emitting Diode (LED) Lamps
10 CFR 430 subpart B, appendix CC	Uniform Test Method for Measuring the Energy Consumption of Portable Air Conditioners
10 CFR 430, subpart B, appendix C1	Uniform Test Method for Measuring the Energy Consumption of Dishwashers
10 CFR 430, subpart B, appendix D1	Uniform Test Method for Measuring the Energy Consumption of Clothes Dryers
10 CFR 430, subpart B, appendix D2	Uniform Test Method for Measuring the Energy Consumption of Clothes Dryers
10 CFR 430, subpart B, appendix J1	Uniform Test Method for Measuring the Energy Consumption of Automatic and Semi-automatic Clothes Washers
10 CFR 430, subpart B, appendix J2	Uniform Test Method for Measuring the Energy Consumption of Automatic and Semi-automatic Clothes Washers
10 CFR 430, subpart B, appendix M and M1	Uniform Test Method for Measuring the Energy Consumption of Central Air Conditioners and Heat Pumps
10 CFR 430, subpart B, appendix X and appendix X1	Uniform Test Method for Measuring the Energy Consumption of Dehumidifiers (Electronic Code of Federal Regulations)
10 CFR Part 431 Subpart C, Appendix B	Amended Uniform Test Method for the Measurement of Energy Consumption of Commercial Refrigerators, Freezers and Refrigerators-Freezers
10 CFR Part 431 Subpart Q, Appendix B	Uniform Test Method for the measurement of Energy Consumption of Refrigerated Bottled or Canned Beverage Vending Machines
10 CFR Part 431.64	Uniform Test Method for the measurement of Energy Consumption of Commercial Refrigerators, Freezers and Refrigerators-Freezers
10 CFR Part 431.66 (d)	Energy conservation standards and their effective dates for commercial refrigerator, freezer and refrigerator-freezer
10 CFR Part 431.66 (e) (2)	Energy conservation standards and their effective dates for commercial refrigerator, Freezer and refrigerator-freezer
AHRI 810-2006	Performance rating of automatic commercial ice makers
AHRI 1230-2010	Performance rating of variable refrigerant flow (VRF) multi-split air conditioning and heat pump equipment



SCOPE OF ACCREDITATION

International Accreditation Service, Inc.

3060 Saturn Street, Suite 100, Brea, California 92821, U.S.A. | www.iasonline.org

AHRI 1360:2017	Performance Rating of Computer and Data Processing Room Air Conditioners
ANSI/AHRI 210/240-2008	Performance Rating of Unitary Air-Conditioning & Air-Source Heat Pump Equipment
ANSI/AHRI 210/240-2017	Performance Rating of Unitary Air-Conditioning & Air-Source Heat Pump Equipment
ANSI/AHRI 210/240-2023 (2020)	Performance Rating of Unitary Air-Conditioning & Air-Source Heat Pump Equipment
ANSI/AHRI 340/360-2007	Performance rating of commercial and industrial unitary air conditioning and heat pump equipment
ASHRAE 118.2	Testing for Rating Residential Water Heaters (excluding gas/oil type water heaters)
AS/NZS: 2442.1	Performance of household electrical appliances – Rotary clothes dryers Part 1: Methods for measuring performance, energy and water consumption
AS/NZS: 2442.2	Performance of household electrical appliances – Rotary clothes dryers Part 2: Energy efficiency labelling requirements
BS EN 60456:2005 (Singapore)	Clothes washing machines for household use – Methods for measuring the performance
CAN/CSA-C360	Energy performance, water consumption, and capacity of household clothes washers
CAN/CSA-C361	Energy performance and drum volume of household electric clothes dryers
CAN/CSA-C373	Energy performance and water consumption of household dishwashers
CEA-2037	Determination of television average power consumption EPRI generalized test protocol for calculating the energy efficiency of internal AC-DC and DC-DC power supplies
CTA-2037	Determination of Television Set Power Consumption
EN 50242	Electric Dishwashers for Household Use – Methods for Measuring the Performance
EN 50294:1998 A1:2001, A2:2003	Measurement Method of Total Input Power of Ballast-Lamp Circuits
EN 50564	Electrical and electronic household and office equipment - Measurement of low power consumption
EN 60456	Part 1: Clothes washing machines for household use – Methods for measuring the performance
EN 61121	Tumble dryers for household use – Methods for measuring the performance



SCOPE OF ACCREDITATION

International Accreditation Service, Inc.

3060 Saturn Street, Suite 100, Brea, California 92821, U.S.A. | www.iasonline.org

EN IEC 62680-1-2	Universal serial bus interfaces for data and power – Part 1-2: Common components - USB Power Delivery specification
EN IEC 62680-1-3	Universal serial bus interfaces for data and power – Part 1-3: Common components – USB Type-C® Cable and Connector Specification
IEC 60456	Part 1: Clothes washing machines for household use – Methods for measuring the performance
IEC 60921:2006	Ballasts for tubular fluorescent lamps – Performance requirements
IEC 61121	Tumble dryers for household use – Methods for measuring the performance
IEC 61951-1	Secondary cells and batteries containing alkaline or other non- acid electrolytes — portable sealed rechargeable single cells — part 1: nickel-cadmium
IEC 61951-2	Secondary cells and batteries containing alkaline or other non- acid electrolytes — portable sealed rechargeable single cells — part 2: nickel-metal hydride
IEC 61960	Secondary cells and batteries containing alkaline or other non- acid electrolytes — secondary lithium cells and batteries for portable applications
IEC 62087-1	Audio, video, and related equipment - Determination of power consumption - Part 1: General
IEC 62087-2	Audio, video, and related equipment - Determination of power consumption - Part 2: Signals and media
IEC 62087-3	Audio, video, and related equipment - Determination of power consumption - Part 3: Television sets
IEC 62087-4	Audio, video, and related equipment - Determination of power consumption - Part 4: Video recording equipment (Standby-passive mode test only)
IEC 62087-5	Audio, video, and related equipment - Determination of power consumption - Part 5: Set-top-boxes (STB) (Standby-passive mode test only)
IEC 62087-6	Audio, video, and related equipment - Determination of power consumption - Part 6: Audio equipment (Standby-passive mode test only)
IEC 62087-7	Audio, video, and related equipment - Methods of measurement for power consumption - Part 7: Computer monitors (Standby-passive mode test only)
IEC 62301	Household electrical appliances — measurement of standby power
CSA-CAN-C62301	Household electrical appliances — measurement of standby power
IEC 62384:2011	DC or AC supplied electronic control gear for LED modules – Performance requirements



SCOPE OF ACCREDITATION

International Accreditation Service, Inc.

3060 Saturn Street, Suite 100, Brea, California 92821, U.S.A. | www.iasonline.org

IEC 62442-1	Energy performance of lamp controlgear – Part 1: Controlgear for fluorescent lamps – Method of measurement to determine the total input power of controlgear circuits and the efficiency of controlgear
IEC 62512-2012(washer & dryer)	Tumble dryers for household use – Methods for measuring the performance
IEC 62623	Desktop and notebook computers – Measurement of energy consumption
IEC 62680-1-2	Universal serial bus interfaces for data and power – Part 1-2: Common components - USB Power Delivery specification
IEC 62680-1-3	Universal serial bus interfaces for data and power – Part 1-3: Common components – USB Type-C® Cable and Connector Specification
IEC 62717	LED modules for general lighting – Performance requirements
IEC 62722-2-1	Luminaire performance – Part 2-1: Particular requirements for LED luminaires
IEC/EN 60436	Electric Dishwashers for Household Use – Methods for Measuring the Performance
IEC/EN 60969	Self-ballasted compact fluorescent lamps for general lighting services - Performance requirements
IEC/EN 62612	Self-ballasted LED lamps for general lighting services with supply voltages > 50 V - Performance requirements
IEC/EN 62663-2	Non-integrated LED lamps - Part 2: Performance requirements
IEC/EN 62722-1	Luminaire performance - Part 1: General requirements
KWS 1898:2023	Electrical Clothes Dryers - Energy Performance Requirements and Labeling
KWS 1900:2023	Refrigerators, Refrigerator-freezers and Freezers- Energy Performance, Testing and Labeling Requirements
MS IEC 60456:2012 (Malaysia)	Clothes washing machines for household use – Methods for measuring the performance
SASO-IEC-62680-1-2	Universal serial bus interfaces for data and power-Part 1-2: Common components-USB Power Delivery specification
SASO-IEC-62680-1-3	Universal serial bus interfaces for data and power – Part 1-3: Common components – USB Type-C® Cable and Connector Specification
SASO 2870	Energy Efficiency, Functionality and Labeling Requirements For Lighting Products Part 1
SASO 2883:2017	Electrical Clothes Dryers-Energy Performance Requirements and Labelling
SASO 2885:2018	Electrical clothes washing machine--Energy and water performance requirements and labelling



SCOPE OF ACCREDITATION

International Accreditation Service, Inc.

3060 Saturn Street, Suite 100, Brea, California 92821, U.S.A. | www.iasonline.org

SASO 2902:2018	Energy Efficiency, Functionality and Labelling Requirements For Lighting Products Part 2
SASO 2927:2019	Energy efficiency functionality and labelling requirements for lighting products, Part 3: Street lighting
UAE.S.IEC 60456:2010	Clothes washing machines for household use – Methods for measuring the performance
ENERGY STAR	
ENERGY STAR® Program Requirements Product Specification for Air Source Heat Pump (ASHP) and Central Air Conditioner Equipment	
ENERGY STAR® Program Requirements Product Specification for Clothes Dryers	
ENERGY STAR® Program Requirements Product Specification for Clothes Washers	
ENERGY STAR® Program Requirements Product Specification for Commercial Ice Machines	
ENERGY STAR® Program Requirements Product Specification for Commercial Refrigerators and Freezers	
ENERGY STAR® Program Requirements Product Specification for Computers	
ENERGY STAR® Program Requirements Product Specification for Dehumidifiers	
ENERGY STAR® Program Requirements Product Specification for Displays	
ENERGY STAR® Program Requirements Product Specification for Imaging	
ENERGY STAR® Program Requirements Product Specification for Laboratory Grade Refrigerators and Freezers	
ENERGY STAR® Program Requirements Product Specification for Light Commercial HVAC	
ENERGY STAR® Program Requirements Product Specification for Residential Dishwashers	
ENERGY STAR® Program Requirements Product Specification for Residential Refrigerators and Freezers	
ENERGY STAR® Program Requirements Product Specification for Televisions	
ENERGY STAR® Program Requirements Product Specification for Water Coolers	
ENERGY STAR® Program Requirements Product Specification for Refrigerated Beverage Vending Machines	
EPRI Generalized Test Protocol for Calculating the Energy Efficiency of Internal AC-DC and DC-DC Power Supplies	
IEC 62301	Household Electrical Appliances — Measurement of Standby Power
ENCLOSURE PROTECTION	
ASTM B117	Standard Practice for Operating Salt Spray (Fog) Apparatus



SCOPE OF ACCREDITATION

International Accreditation Service, Inc.

3060 Saturn Street, Suite 100, Brea, California 92821, U.S.A. | www.iasonline.org

GMW3172	General Specification for Electrical/Electronic components - Environmental/Durability-Clause 6.1.1: 5-Point Functional/Parametric Check
GMW3172	General Specification for Electrical/Electronic components - Environmental/Durability-Clause 6.1.2: 1-Point Functional/Parametric Check
GMW3172	General Specification for Electrical/Electronic components - Environmental/Durability-Clause 6.3: Functional Cycling
GMW3172	General Specification for Electrical/Electronic components - Environmental/Durability-Clause 8.2.2: Reverse Polarity
GMW3172	General Specification for Electrical/Electronic components - Environmental/Durability-Clause 8.4.1: Temperature Measurement
GMW3172	General Specification for Electrical/Electronic components - Environmental/Durability-Clause 8.4.2: Low Temperature Wakeup (LTW)
GMW3172	General Specification for Electrical/Electronic components - Environmental/Durability-Clause 8.4.3: Frost
GMW3172	General Specification for Electrical/Electronic components - Environmental/Durability-Clause 9.4.2: Thermal Shock Air-To-Air (TS)
GMW3172	General Specification for Electrical/Electronic components - Environmental/Durability-Clause 9.4.5: Humid Heat Cyclic (HHC)
GMW3172	General Specification for Electrical/Electronic components - Environmental/Durability-Clause 9.4.6: Humid Heat Constant (HHCO)
GMW3172	General Specification for Electrical/Electronic components - Environmental/Durability-Clause 9.4.10: Minimum Non-Operating Temperature
IEC 60529	Degrees of protection provided by enclosures (IP Code)
IEC 61140	Protection against electric shock - Common aspects for installation and equipment
IEC 62262	Degrees of protection provided by enclosures for electrical equipment against external mechanical impacts (IK code)
ISO 4628-2	Paints and varnishes — Evaluation of degradation of coatings — Designation of quantity and size of defects, and of intensity of uniform changes in appearance — Part 2: Assessment of degree of blistering
ISO 4628-4	Paints and varnishes — Evaluation of degradation of coatings — Designation of quantity and size of defects, and of intensity of uniform changes in appearance — Part 4: Assessment of degree of cracking
ISO 9227	Corrosion tests in artificial atmospheres - Salt spray tests
ISO 10289	Methods for corrosion testing of metallic and other inorganic coatings on metallic substrates — Rating of test specimens and manufactured articles subjected to corrosion tests



SCOPE OF ACCREDITATION

International Accreditation Service, Inc.

3060 Saturn Street, Suite 100, Brea, California 92821, U.S.A. | www.iasonline.org

HEATING/COOLING	
AS 1731	Refrigerated display cabinets
EN 14825	Air conditioners, liquid chilling packages and heat pumps, with electrically driven compressors, for space heating and cooling- testing and rating at part load conditions and calculation of seasonal performance
EN 62552-1	EN 62552-1 Household refrigerating appliances - Characteristics and test methods - Part 1: General requirements
EN 62552-2	EN 62552-2 Household refrigerating appliances - Characteristics and test methods - Part 2: Performance requirements
EN 62552-3	EN 62552-3 Household refrigerating appliances - Characteristics and test methods - Part 3: Energy consumption and volume
EN/IEC 62552	Household refrigerating appliances - characteristics and test methods
EN ISO 23953	Refrigerated display cabinets
GSO ISO 5151	Non-ducted air conditioners and heat pumps - testing and rating for performance
IS 1476	Performance of Household Refrigerating Appliance – Refrigerators With or Without Low Temperature Compartment
IS 15750	Household frost-free refrigerating appliances – Refrigerators cooled by internal forced air circulation – Characteristics and test methods
ISO 5151	Non-ducted air conditioners and heat pumps — testing and rating for performance
ISO 13253	Ducted air-conditioners and air-to-air heat pumps -- testing and rating for performance
ISO 15042	Multiple split-system air-conditioners and air-to-air heat pumps — testing and rating for Performance
MS IEC 62552	Household refrigerating appliances - characteristics and test methods
NOM-015-ENER-2018	Energy Efficiency for Household Refrigerators and Freezers, Limits, Testing Methods, and Labeling
NOM-022-ENER/SCFI-2008	Energy efficiency and user safety requirements for self-contained commercial refrigerating appliances. Limits, test methods and labeling.
NTE INEN 2206	Household refrigerating appliances with or without frost refrigerators with or without low temperature compartment - inspection requirements
NTE INEN 2495	Energy efficiency ductless air conditioners
NTE INEN-IEC 62552	Household refrigerating appliances – Characteristics and test methods



SCOPE OF ACCREDITATION

International Accreditation Service, Inc.

3060 Saturn Street, Suite 100, Brea, California 92821, U.S.A. | www.iasonline.org

SANS 62552	Household refrigerating appliances - characteristics and test methods
SASO 2663:2014	Energy labeling and minimum energy performance requirements for air-conditioners
SASO IEC 62552:2007	Households refrigerating appliances- Characteristics and test methods
WIRE AND CABLE	
BS 6231:2006	Electric Cables - Single core PVC insulated flexible cables of rated voltage 600V/1000V for switchgear and controlgear wiring
EN 50363-3	Insulating, sheathing and covering materials for low voltage energy cables - Part 3: PVC insulating compounds
EN 50395	Electrical test methods for low voltage energy cables
EN 50396	Non electrical test methods for low voltage energy cables
EN 60228	Conductors of insulated cables
EN 60811-100	Electric and optical fibre cables - Test methods for non-metallic materials - Part 100: General
IEC/EN 60332-1-2	Tests on electric and optical fibre cables under fire conditions - Part 1-2: Test for vertical flame propagation for a single insulated wire or cable - Procedure for 1 kW pre-mixed flame
IEC/EN 60332-2-2	Tests on electric and optical fibre cables under fire conditions Part 2-2: Test for vertical flame propagation for a single small insulated wire or cable - Procedure for diffusion flame
IEC/EN 60811-201	Electric and optical fibre cables - Test methods for non-metallic materials - Part 201: General tests - Measurement of insulation thickness
IEC/EN 60811-203	Electric and optical fibre cables - Test methods for non-metallic materials - Part 203: General tests - Measurement of overall dimensions
IEC/EN 60811-401	Electric and optical fibre cables - Test methods for non-metallic materials - Part 401: Miscellaneous tests - Miscellaneous tests - Thermal ageing methods - Ageing in an air oven
IEC/EN 60811-405	Electric and optical fibre cables - Test methods for non-metallic materials - Part 405: Miscellaneous tests - Thermal stability test for PVC insulations and PVC sheaths
IEC/EN 60811-409	Electric and optical fibre cables - Test methods for non-metallic materials - Part 409: Miscellaneous tests - Loss of mass test for thermoplastic insulations and sheaths
IEC/EN 60811-501	Electric and optical fibre cables - Test methods for non-metallic materials - Part 501: Mechanical tests - Tests for determining the mechanical properties of insulating and sheathing compounds



SCOPE OF ACCREDITATION

International Accreditation Service, Inc.

3060 Saturn Street, Suite 100, Brea, California 92821, U.S.A. | www.iasonline.org

IEC/EN 60811-504	Electric and optical fibre cables - Test methods for non-metallic materials - Part 504: Mechanical tests - Bending tests at low temperature for insulation and sheaths
IEC/EN 60811-505	Electric and optical fibre cables - Test methods for non-metallic materials - Part 505: Mechanical tests - Elongation at low temperature for insulations and sheaths
IEC/EN 60811-506	Electric and optical fibre cables – Test methods for non-metallic materials – Part 506: Mechanical tests – Impact test at low temperature for insulations and sheaths
IEC/EN 60811-508	Electric and optical fibre cables - Test methods for non-metallic materials - Part 508: Mechanical tests - Pressure test at high temperature for insulation and sheaths
IEC/EN 60811-509	Electric and optical fibre cables - Test methods for non-metallic materials - Part 509: Mechanical tests - Test for resistance of insulations and sheaths to cracking (heat shock test)
IEC/EN 60811-606	Electric and optical fibre cables - Test methods for non-metallic materials - Part 606: Physical tests - Methods for determining the density
IEC/EN 62275	Cable management systems - Cable ties for electrical installations
ISO 6722-1	Road vehicles — 60 V and 600 V single- core cables — Part 1: Dimensions, test methods and requirements for copper conductor cables (Clause 5.11, Cold Impact Test only)
ISO 6722-2	Road vehicles — 60 V and 600 V single-core cables — Part 2: Dimensions, test methods and requirements for aluminum conductor cables (Clause 5.11 Cold Impact Test only)
ISO 14572	Road vehicles — Round, sheathed, 60 V and 600 V screened and unscreened single- or multi-core cables — Test methods and requirements for basic- and high-performance cables (Clause 5.11, Cold Impact Test only)
ISO 19642-2	Road vehicles — Automotive cables — Part 2: Test methods (Clauses 5.4.8 and 6.4.8, Cold Impact Test only)
UL 2556	Wire and Cable Test Methods
UL 62275	Cable management systems - Cable ties for electrical installations

AHRI: The Air-conditioning, Heating, and Refrigerating Institute

ACCC: Australian Competition and Consumer Commission

ARI: Air-conditioning and Refrigeration Institute

AS: Standards Australia

ASHRAE: American Society of Heating, Refrigerating and Air-conditioning Engineers

CEA: Canadian Electricity Association

CFR: Code of Federal Regulations

TL-471

UL-CCIC COMPANY LIMITED

Effective Date June 4, 2025

Page 26 of 27

IAS/ TL- FDA ASCA /100-1



SCOPE OF ACCREDITATION

International Accreditation Service, Inc.

3060 Saturn Street, Suite 100, Brea, California 92821, U.S.A. | www.iasonline.org

DIN: German Institute for Standardization

EK1: Energy kinetics

EPRI: Electric Power Research Institute

IEC: International Electrotechnical Commission

INMETRO: National Institute of Metrology, Quality and Technology

MS: Malaysian Standards

INEN: Instituto Ecuatoriano de Normalización (Ecuadorian Institute of Standardization)

NZS: Standards New Zealand

SANS: South African National Standards

SASO: Saudi Arabian Standards Organization

