NACIONALINIS
AKREDITACIJOS BIURAS

Lithuanian National Accreditation Bureau is a signatory to the European co-operation for Accreditation (EA) Multilateral Agreement (for accreditation of testing, calibration, medical examinations, certification of products, persons and management systems and inspection) and International Laboratory Accreditation Cooperation (ILAC) Mutual Recognition Arrangement (for accreditation in the fields of testing, calibration, medical examinations and inspection)

ACCREDITATION CERTIFICATE
No. LA.01.007

Lithuanian National Accreditation Bureau hereby certifies that

JSC „Sertika“ testing laboratory

legal entity: UAB „Sertika“
legal entity code: 133827738

complies with the requirements of

LST EN ISO/IEC 17025:2018

and is competent to perform:

mechanical and electrical testing of medical, measurement, control equipment, household and similar electrical appliances, audio-visual, information and communication technology equipment, luminaires, plugs and socket-outlets

The scope of accreditation below is an integral part of this certificate. Locations of the conformity assessment body are specified in the scope of accreditation

Initial accreditation date: **1997-01-07**

Certificate issued / valid since: **2024-04-10**
Version of: **2024-04-10**
Expiry date: **2027-10-10**

Director

DALIA BALEŽENTĖ

The certificate may be changed, its validity suspended or withdrawn by the decision of the National Accreditation Bureau. Information on the actual data of accreditation certificates may be verified at nab.lrv.lt

SCOPE OF ACREDITATION

JSC „Sertika“ testing laboratory, accredited in accordance with **LST EN ISO/IEC 17025:2018**

Location of the conformity assessment body:

Mituvos g. 2-255, 50131 Kaunas

Materials or products tested	Component, parameter or characteristic to be tested	Reference number of the document specifying test methods, clause (if relevant)	Techniques, methods and/or equipment used (where appropriate)
Medical electrical equipment	Power input	LST EN 60601-1:2007 LST EN 60601-1:2007/ AC:2010 LST EN 60601-1:2007/ A1:2013 LST EN 60601-1:2007/ A1:2013/AC:2015 LST EN 60601-1:2007/ A2:2021 except: G and L annexes testing, 9.6.2 cl., 9.6.3 cl – acoustic energy and vibration measurements, 10.1.1 cl. – X-radiation measurements, 10.4 cl. laser power measurements, 11.2 cl., 11.3 cl. – flammability tests	Direct measurement of electrical quantities
	Accessible parts		Test with standardized templates
	Equipment identification, marking and documents		Expert evaluation
	Durability of marking		Functional tests
	Classification of applied parts		Expert evaluation
	Working voltage of accessible parts		Test with standardized templates, direct measurement of electrical quantities
	Patient leads parameters		Direct measurement of geometric quantities
	Defibrillation protection		Functional tests with direct measurements of electrical quantities
	Coatings resistance		Expert evaluation
	Protective earth resistance		Direct measurement of electrical quantities
	Touch and patient leakage currents		Functional tests with direct measurements of electrical quantities
	Solid insulation		Direct measurement of geometric quantities
	Dielectric strength up to 5 kV		Functional tests
	Insulation other than wire insulation resistance to heat		Functional tests with direct measurements of linear quantities
	Spaces filled by insulating compound resistance		Functional tests

Materials or products tested	Component, parameter or characteristic to be tested	Reference number of the document specifying test methods, clause (if relevant)	Techniques, methods and/or equipment used (where appropriate)
	Creepages and clearances distance from 0,2 mm		Direct measurement of linear quantities
	Cord-connected hand-held parts and cord-connected foot-operated control voltage		Direct measurement of electrical quantities
	Internal wiring fixing parameters		Direct measurement of electrical quantities
	Wiring cross-sectional area		Direct measurement of geometric quantities
	Equipment not lighter than 1 kg cord anchorage fixing reliability		Direct measurement and calculation of geometric quantities
	Protection from excessive cord bending		Functional tests with direct measurements
	Mains terminal device connection reliability		Functional tests with direct measurements
	Safe gaps		Functional tests
	Safe distances		Direct measurement of geometric quantities
	Guards robustness		Direct measurement of geometric quantities
	Continious activation reliability		Functional tests
	Speed of movement(s)		Functional tests
	Overtravel prevention		Functional tests
	Instability from horizontal and vertical forces		Functional testing and direct measurement of linear quantities
	Force for propulsion		Functional testing and direct force measurement
	Grips and other handling devices robustness		Functional tests
	Pressure vessels and parts subjected to pneumatic and hydraulic pressure resistance to pressure up to 6 MPa		Functional tests
	Support system robustness		Functional tests
	Protection against excessive temperatures		Direct temperature measurement and calculation
	Resistance to liquids		Functional tests
	Protection from infress of water or particulate matter (up to IP67)		Functional tests
	Resistance to cleaning, disinfection and sterilization		Functional tests
	Resistance to single fault simulation		Functional tests with direct measurements
	Enclosure mechanical strength		Functional tests
	Moulded or formed thermoplastics resistance		Functional tests

Materials or products tested	Component, parameter or characteristic to be tested	Reference number of the document specifying test methods, clause (if relevant)	Techniques, methods and/or equipment used (where appropriate)
	Battery single fault resistance		Expert evaluation and functional tests
	Indicators and prie-set conrtrols resistance		Functional tests
	Mechanical strength of cord-connected hand-held and foot-operated control devices		Functional tests
	Internal aluminium wires cross-sectional area		Direct measurement and calculation of geometric quantities
	Oil container tightness		Functional tests
	Mains supply transformers and tranformers providing separation dielectric strength up to 5 kV		Functional tests
	Mains supply transformers and tranformers providing separation resistance to short-circuit		Functional tests with direct temperature measurements
	Mains supply transformers and tranformers providing separation resistance to overload		Functional tests with direct temperature measurements
	Electircal medical systems leakage current		Direct measurement of electrical quantities
Infusion pumps and controllers	Equipment identification marking and documents	LST EN 60601-2-24:2015 except: 202 cl. – electromagnetic compatibility tests, 208.6.3.3.2.101 cl. – volume of auditory alarm signal measurement	Expert evaluation
	Resistance to spillage on equipment		Functional tests
	Protection from water ingress (up to IPX7)		Functional tests
	Resistance to interruption of power supply		Expert evaluation and functional testing
	Accuracy of infusion		Liquid mass measurement with electronic scales and calculation of flow accuracy
	Protection from overinfusion		Functional tests
	Maximum infusion pressure		Functional tests
	Unintended bolus volume		Direct measurement of liquid mass with an electronic scale and calculation of bolus volume
	Improper use resistance of equipment with a drop sensor		Functional tests
	Protection against air infusion		Expert evaluation and functional testing
	Protection from incorrect administration set use		Expert evaluation and functional testing
	Protection against underinfusion		Expert evaluation
	Resistance to leakage of liquid		Functional tests
	Protection against fitting of incorrect syringe/container		Expert evaluation and functional testing
Medical beds	Equipment identification marking and documents	LST EN 60601-2-52:2010	Ekspertinis vertinimas

Materials or products tested	Component, parameter or characteristic to be tested	Reference number of the document specifying test methods, clause (if relevant)	Techniques, methods and/or equipment used (where appropriate)
	Gaps between non-moving parts	LST EN 60601-2-52:2010/ AC:2011 LST EN 60601-2-52:2010/ A1:2015 except: 201.9.6.2.1 cl. – audible acoustic energy tests, 201.11.6.6.101 cl. – machine washable medical bed	Expert evaluation
	Trapping zone gaps		Direct measurement of geometric quantities
	Safe gaps		Direct measurement of geometric quantities
	Protection from unintended movement		Direct measurement of geometric quantities
	Stability		Expert evaluation
	Force of propulsion		Functional tests
	Ability to move over threshold		Functional testing by direct force measurement
	Unintended horizontal movement distance		Functional tests
	Resistance to static forces due to loading from persons		Functional test with direct distance measurement
	Resistance to dynamic forces		Functional tests
	Resistance to dynamic forces of the height adjustment mechanism		Functional tests
	Side rails strength		Functional tests
	Mechanical strength of lifting pole		Functional tests
	Protection against inadvertent patient fall		Functional testing by direct strain measurement
	Protection from water ingress (up to IPX7)		Direct measurement of geometric quantities
	Resistance to interruption of power supply		Functional tests
	Resistance to single fault simulation		Direct recovery time measurement
	Mechanical strength of hand-held devices		Functional tests with direct measurements
	Medical bed construction resistance to rough handling		Functional tests
	Maximum angle between moving parts		Functional tests
	Mechanical strength of hand-held and foot-operated control devices		Direct angle measurement
	Head/foot board assembly time		Functional tests
	Mattress support platform robustness		Direct time measurement
	Mattress support platform height adjustment		Functional tests with direct measurements
	Dimensions of handles and pedals		Direct height measurement
	Handles and pedals operation force		Direct measurement of geometric quantities

Materials or products tested	Component, parameter or characteristic to be tested	Reference number of the document specifying test methods, clause (if relevant)	Techniques, methods and/or equipment used (where appropriate)
	Medical bed and height adjustment mechanism dimensions		Direct force measurement
	Dimension of medical bed and matters		
Assistive products	Equipment identification marking and documents	LST EN ISO 21856:2022, Except: 5.2 cl. – flammability, 5.3 cl. – biocompatibility and toxicity, 5.4 cl. – contaminants and residues, 5.5.3.2 cl. – machine washable assistive products testing method, 5.5.4 cl. – animal tissue, 6 cl. – emitted sound and vibration, 7 cl. – electromagnetic compatibility, 11 cl. – sterility, 13 cl. – means to prevent falling out, 17.4 cl. – requirements and test method for tips, 19 cl. – surfaces, corners, edges and protruding parts	Expert evaluation
	Feedback		Expert evaluation
	Protection from water ingress (up to IPX7)		Functional tests
	Resistance to liquids		Functional tests
	Excessive temperatures		Temperature measurement and conversion
	Gaps between moving parts		Direct measurement of geometric quantities
	Emergency stopping device access		Expert evaluation
	Gaps between non-moving parts		Direct measurement of geometric quantities
	Guards functionality		Expert evaluation
	Carrying handles robustness		Functional tests
	Robustness of assistive products that support or suspend users		Functional tests
	Robustness of portable and mobile assistive products		Functional tests
	Robustness of hand-held assistive products		Functional tests
	Dimension of handles and pedals		Direct measurement of geometric quantities
Electrical equipment for measurement, control, and laboratory use	Resistance to single faults simulation	LST EN 61010-1:2011 LST EN 61010-1:2010/ A1:2019 Except: 6.7.1.3 cl. – CTI tracking index, 9.3.2, 14.7 cl. – flammability tests, 12.2.1.1 cl. – ionizing radiation measurements, 12.3 cl. – Ultraviolet radiation, 12.4 cl. – microwave radiation measurements, 12.5.1 cl. – sound level measurements, 12.5.2 cl. – ultrasonic pressure measurements, 12.6 cl. – laser sources, 13.2.3 cl. – implosion of cathode ray tubes test,	Functional tests with direct temperature measurements
	Robustness of portable and mobile assistive products		Expert evaluation
	Input power/current measurement		Direct measurement of electrical quantities
	Durability of markings		Functional tests
	Determination of accessible parts		Testing with standardized templates, direct measurement of electrical quantities
	Voltage and leakage current limit values for accessible parts		Direct measurement of electrical quantities
	Protective impedance		Direct measurement of electrical quantities
	Reliability of protective earthing		Expert evaluation
	Protective earth resistance		Direct measurement of electrical quantities
	Automatic disconnection breaking capacity		Direct time measurement

Materials or products tested	Component, parameter or characteristic to be tested	Reference number of the document specifying test methods, clause (if relevant)	Techniques, methods and/or equipment used (where appropriate)
	External circuits voltage	6.8.3.3, 14.8 cl., K.3 annex – resistance to transients impulse tests	Direct measurement of electrical quantities
	Creepage and clearance distances from 0,2 mm		Direct distance measurement
	Solid insulation dielectric strength up to 5 kV		Functional tests
	Reliability of mains supply cord connection		Expert evaluation and direct measurement of geometric quantities
	Equipment not lighter than 1 kg cord anchorage fixing reliability		Functional tests with direct measurements
	Disconnection from power source		Expert evaluation
	Surfaces and edges smoothness		Expert evaluation
	Moving parts movement		Direct force measurement
	Gaps between moving parts		Direct measurement of geometric quantities
	Stability		Functional tests
	Carrying handles robustness		Functional tests
	Robustness of wall mounting brackets		Functional tests
	Protection from expelled parts		Functional tests
	Mechanical strength		Functional tests
	Limited energy circuit voltage and current		Direct measurement of electrical quantities
	Protection from overcurrent		Expert evaluation
	Excessive temperature		Direct temperature measurement
	Resistance to heat		Functional testing by direct measurements
	Protection from liquid spillage into equipment		Functional tests
	IP protection class (up to IP67)		Functional tests
	Pressure system resistance up to 6 MPa		Functional tests
	Resistance of battery single fault simulation		Expert evaluation and functional tests
	Overtemperature protection devices reliability		Functional tests
	Interlock reliability		Expert evaluation and functional tests
Medical supply units	Equipment identification marking and documents	LST EN ISO 11197:2020 except:	Expert evaluation
	Protective earthing terminal suitability		Expert evaluation

Materials or products tested	Component, parameter or characteristic to be tested	Reference number of the document specifying test methods, clause (if relevant)	Techniques, methods and/or equipment used (where appropriate)
	Wiring cross-sectional area	201.9.1.101 cl. – dynamic forces test for the medical supply unit with medical gas terminal units 201.9.1.102 b) cl. – impact resistance est for the medical supply unit with medical gas terminal units, 201.9.6 cl. – acoustic energy, 201.10 cl. – protection against unwanted and excessive radiation hazards, 201.11.2 cl. – fire prevention testing, 201.11.2.2.101 cl. – venting testing, 201.15.4.101 cl. – medical gas supply construction, 201.15.4.102 cl. – anaesthetic gas scavenging system construction, 201.15.4.104.2 cl. – terminal units for anaesthetic gas scavenging systems, 202 cl. – electromagnetic compatibility tests	Direct measurement and calculation of geometric quantities
	Enclosure resistance to impacts		Functional tests
	Resistance to static loads		Functional tests with direct parameter measurements
	Support system robustness		Functional tests
	Resistance to single fault simulation		Functional tests
	Liquid supply construction suitability		Expert evaluation
	Terminal units for liquids and dialysis suitability		Expert evaluation
Household and similar electrical appliances	Equipment identification marking and documents	LST EN 60335-1:2012 LST EN 60335-1:2012/ A11:2014 LST EN 60335-1:2012/ AC:2014 LST EN 60335-1:2012/ A13:2017 LST EN 60335-1:2012/ A1:2019 LST EN 60335-1:2012/ A2:2019 LST EN 60335-1:2012/ A14:2019 except: 19.11.4.1–19.11.4.7 cl. – electromagnetic compatibility tests, 21.1 cl. – spring hammer tests, 22.5 cl. – residual voltage measeurements, when it depends on electronic circuit operation in equipment, 22.32 cl. – ceramic parts quality tests, 22.46 and annex R – software,	Expert evaluation
	Durability of markings		Functional tests
	Accessible parts working voltage		Testing with standardized templates, direct measurement of electrical quantities
	Input power and current		Direct measurement of electrical quantities
	Excessive temperatures		Direct temperature measurement and calculation
	Leakage currents		Functional tests with direct measurements of electrical quantities
	Dielectric strength up to 5 kV		Functional tests
	Resistance to transient voltage		Functional tests
	Protection from water ingress (up to IPX7)		Functional tests
	Protection from liquid spillage		Functional tests
	Transformers and its circuits protection from overload		Functional tests with direct temperature measurements
	Resistance to single fault simulation		Functional tests with direct parameter measurements

Materials or products tested	Component, parameter or characteristic to be tested	Reference number of the document specifying test methods, clause (if relevant)	Techniques, methods and/or equipment used (where appropriate)
	Stability of equipment	22.57 cl. annex T– UV-C radiation test for non-metallic parts, 29.2 cl. – CTI determination 30.2.2, 30.2.4 cl., annex E – needle-flame test, Annex F –capacitor tests, Annex N – PTI index determination, Annex S 30.2.3.2 cl. – resistance to heat and fire test.	Functional tests and direct temperature measurement
	Insulation mechanical strength		Test with standardized templates
	IP protection class (up to IP67)		Functional tests
	Direct plug-in equipment torque on soucket-outlet		Direct torque measurement
	Residual voltages		Direct measurement of electrical quantities
	Plugs robustness		Functional tests with direct parameter measurements
	Mechanical strength of control devices		Functional tests
	Equipment edges smoothness		Expert evaluation
	Stength of cable reels		Functional tests
	Pressure equipment resistance up to 6 MPa		Functional tests
	Battery accessibility		Expert evaluation
	Internal wirnig strength		Functional tests
	Equipment mains connectors suitability		Expert evaluation
	Wiring cross-sectional area		Direct measurement and calculation of geometric quantities
	Supply cord twisting test for equipment not lighter than 1 kg		Functional tests with direct parameter measurements
	X type supply cord connection reliability		Functional tests with direct parameter measurements
	Terminals reliabilty for external wiring		Expert evaluation and Functional tests
	Protective earthing connection reliability		Expert evaluation
	Resistance of protective earthing		Direct measurement of electrical quantities
	Electrical connection reliability		Expert evaluation and Functional tests
	Creepage and clearance distances from 0,2 mm		Direct distance measurement
	Thermoplastic enclosure robustness		Functional tests with direct parameter measurements
	Rechargable battery resistance to single fault simulation		Functional tests
	Motor insulation resistance		Functional tests
	Reliability of motor protection from excessive temperature		Functional tests with direct temperature measurements

Materials or products tested	Component, parameter or characteristic to be tested	Reference number of the document specifying test methods, clause (if relevant)	Techniques, methods and/or equipment used (where appropriate)
	Reliability of switches		Functional tests with direct temperature measurements
	Equipment powered by non-rechargeable batteries resistance to single fault condition simulation		Functional tests
Audio/video, information and communication technology equipment	Mechanical strength of safeguards	LST EN IEC 62368-1:2020 LST EN IEC 62368-1:2020/ A11:2020 except: 4.10.2 cl. – switches and relays (the exception of annexes G.1 and G.2 also applies), 5.4.1.10.2 cl. - Vicat test, 5.4.2.3.2.5 c) – determination of transients voltages of external circuits, 5.4.2.4 cl. – Adequacy check of clearances with dielectric strength test – exception is applied only for impulse test, 5.4.5.1 - 5.4.5.3 cl. – antenna terminal insulation, 5.4.10.2.2 cl. – impulse tests, 8.5.5.2 and 8.5.5.3 cl. – explosion tests for high pressure lamps, 10 cl. - radiation, B.2.5 cl. – input power measurement only for displays, Annex C – equipment protection from UV radiation, G.1.2 – G.1.3 cl., G.2.1 – G.2.4 cl., G.3.1.1 – G.3.1.2 cl., G.3.2.1 – G.3.3 cl., G.5.1.2 – G.5.1.3 cl., G.5.2.1, G.5.3.4.6, G.6, G.7.1, G.8, G.9, G.10.4, G.10.5, G.12, G.15.2.3, G.15.2.4, G.16 cl., J.2 – J.3 cl., M.7 – M.8 cl., Annex R, S.3, S.5, Annex U, Y.1 – Y.3 cl., Y.4.3 – Y.4.5 cl., Y.5.3 cl.	Functional tests
	Reliability of wiring fixing		Functional tests
	Direct plug-in equipment torque on mains socket-outlet		Direct torque measurement
	Enclosure strength for equipment containing coin / button cell batteries		Functional tests
	Leakage current		Direct measurement of electrical quantities
	Determination of accessible parts		Testing with standardized templates, direct measurement of electrical quantities
	Temperature of accessible parts		Direct temperature measurement
	Robustness of thermoplacstic parts		Functional tests with direct parameter measurements
	Creepage and clearance distances from 0,2 mm		Direct distance measurement
	Thickness of solid insulation		Direct measurement of geometric quantities
	Dielectric strength up to 5 kV		Functional tests
	Residual volage		Direct measurement of electrical quantities
	Wiring cross-sectional area		Direct measurement and calculation of geometric quantities
	Size of protective earthing terminals		Direct measurement of geometric quantities
	Resistance of protective earthing		Direct measurement of electrical quantities
	Circuit power source		Direct measurement of electrical quantities
	Protection from fire during normal and abnormal conditions		Direct measurement of parameters
	Protection from fire during single fault condition		Direct measurement of parameters
	Fire enclosure openings dimension		Direct measurement of geometric quantities
	Connection to building wiring overcurrent protection		Direct measurement of electrical quantities
	Enclosure mechanical strength of equipment having hazardous substances		Expert evaluation and Functional tests
	Sharp edges and corners accessibility		Expert evaluation and test with standardized templates

Materials or products tested	Component, parameter or characteristic to be tested	Reference number of the document specifying test methods, clause (if relevant)	Techniques, methods and/or equipment used (where appropriate)
	Protection against moving parts		Expert evaluation and test with standardized templates
	High pressure lamps safeguard robustness		Functional tests with direct measurements of geometric quantities
	Stability of equipment		Functional tests
	Wall mounting equipment robustness		Functional tests
	Carrying handle mechanical strength		Functional tests
	Equipment wheels mechanical strength		Functional tests
	Carts, stands, and similar carriers mechanical strength		Functional tests
	Slide-rail mounted equipment mechanical strength		Functional tests
	Excessive temperature		Direct temperature measurement
	Input power measurement (except displays)		Direct measurement of electrical quantities
	Resistance to abnormal condition simulation		Functional tests atliekant tiesioginius parametrų matavimus
	Resistance to single fault condition simulation		Functional tests with direct measurements of parameters
	Equipment identification marking and documents		Expert evaluation
	Durability of markings		Functional tests
	Transformer and motors resistance to single fault simulation		Functional tests with direct measurements of parameters
	Supply cord fixing mechanical strength		Functional tests with direct measurements of parameters
	Non-detachable suplly cord bending		Functional tests with direct measurements of parameters
	Gaps for twisted pair conductors fixing		Functional tests
	Capacitor and RC components suitability		Expert evaluation
	Printed wiring board durability		Functional tests
	Resistance of components filled with pressurized liquid up to 6 MPa		Functional tests
	Mechanical strength of components filled with pressurized liquid		Functional tests
	Telephone ringing signal		Direct measurement of electrical quantities
	Interlock resistance to single fault simulation		Functional tests with direct measurements of parameters
	Durability of interlocks		Functional tests

Materials or products tested	Component, parameter or characteristic to be tested	Reference number of the document specifying test methods, clause (if relevant)	Techniques, methods and/or equipment used (where appropriate)
	Battery resistance to single fault simulation		Functional tests with direct measurements of parameters
	Safeguard reliability of equipment containing secondary lithium batteries		Functional tests with direct measurements of parameters
	Mechanical strength of equipment containing batteries		Functional tests
	Protection against entry of foreign objects (iki IP6X)		Functional tests and direct measurements of geometric quantities
	Protection from liquid spillage into equipment		Functional tests
	Resistance of metalized surfaces		Functional tests
	Enclosure mechanical strength		Functional tests
Degrees of protection provided by enclosures (IP code)	Protection from accessible hazardous parts (IP1X-IP6X)	LST EN 60529:1999 LST EN 60529:1999/ A1+AC:2002 LST EN 60529:1999/ A2:2014 LST EN 60529:1999/ AC:2017 LST EN 60529:1999/ A2:2014/AC:2019	Test with standardized templates
	Enclosure resistance to solid foreign objects (IP1X – IP6X)		Functional tests
	Enclosure protection against water ingress (IPX1-IPX7)		Functional tests
Luminaires	Size of symbols	LST EN 60598-1:2021 LST EN 60598-1:2021/ A11:2022 except: 4.13.4 cl. – impact test in low temperature, 4.18.2 cl. and annex F – corrosion resistance of copper parts, 4.20 cl. – vibration tests, 4.24 cl. and annex P – photobiological hazards, 4.34 cl. – electromagnetic fields measurement, 4.35 p. – protection against moving fan blades of luminaire, 9.2.9 cl. - IPX8 degree of protection, 9.2.10 cl. and 9.2.11 cl. – IPX9 degree of protection,	Direct measurement of geometric quantities
	Input voltage		Expert evaluation
	Input current		Expert evaluation
	Durability of markings		Functional tests
	Replaceable components		Functional tests
	Smoothness of wiring guideways edges		Functional tests and Expert evaluation
	Lampholder robustness		Functional tests
	Luminaires with ignitors – pulse voltage measurement		Measurement of electrical quantities
	Pozition of edison lampholder contacts		Expert evaluation
	Light source fixing suitability		Expert evaluation
	Starterholders suitability		Testing with standardized templates
	Terminal blocks dimensions		Testing with standardized templates
	Wiring and screws fixing reliability		Expert evaluation
	Dimensions of supply terminals		Functional tests
	External wiring prtoection from heated parts		Expert evaluation

Materials or products tested	Component, parameter or characteristic to be tested	Reference number of the document specifying test methods, clause (if relevant)	Techniques, methods and/or equipment used (where appropriate)
	Strength of insulation layers and sleeves		Functional tests
	Openings – accessibility		Testing with standardized templates
	Reliability of class II luminaires supplementary and reinforced insulation		Functional tests
	Reliability of electrical connections		Expert evaluation and Functional tests
	Chemical composition of current carrying parts		Expert evaluation
	Resistance to electrical stress of electromechanical parts		Functional tests by direct measurement of electrical quantities
	Mechanical strength of parts and cables		Functional tests
	Mechanical strength of luminaires		Functional tests, testing with standard test templates
	Mechanical strength of rough handling luminaires		Functional tests
	Mechanical strength of luminaires connected directly to mains socket-outlet		Functional tests
	Mechanical strength of suspensions consisting of flexible cords		Functional tests
	Mechanical strength of control devices		Functional tests
	Cables in tubes		Expert evaluation
	Gemoetric parameters of guiding pulleys		Functional tests by direct measurement of linear quantities
	Socket-outlet torque measurement		Functional tests by direct torque measurement
	Falmmabale covers and other surfaces distances from heated parts		Functional tests by direct distance measurement
	Luminaires fixed on flammable surface – distance from heated parts to mounting surface		Expert evaluation and Functional tests by direct distance measurement
	Resistance to corrosion		Functional tests
	Starters and ballasts compatibility		Expert evaluation
	Protection from lapm fragments		Expert evaluation
	Mass of luminaire accessories		Functional tests by direct measurement of mass and temperature
	Protection from short-circuit		Expert evaluation
	Protection from non-replaceable light source		Expert evaluation
	Robustness of supply cord anchorage		Functional tests
	Reliability of internal wiring		Expert evaluation

Materials or products tested	Component, parameter or characteristic to be tested	Reference number of the document specifying test methods, clause (if relevant)	Techniques, methods and/or equipment used (where appropriate)
	Cross-sectional area of internal wiring		Direct measurement of linear quantities
	Protective earthing continuity of adjustable parts		Expert evaluation
	Resistance of protective earthing		Direct measurement of electrical quantities
	Compatibility of protectively earthed parts		Expert evaluation
	Electrical continuity of class II luminaire electrical connections		Expert evaluation
	Protection from electric shock – accessibility of live parts		Tests with standardized test patterns, functional tests by direct measurement of electrical quantities
	Residual voltage of luminaires		Direct measurement of electrical quantities
	Protection against solid objects (IP1X – IP4X)		Tests with standardized test templates
	Protection against dust (IP5X – IP6X)		Functional tests
	Protection against water (IPX1 – IPX7)		Functional tests
	Dielectric strength		Functional tests and direct measurement of electrical quantities
	Touch and protective earth conductor leakage current		Direct measurement of electrical quantities
	Clearance and creepage distance measurements		Functional tests, direct distance measurement
	Luminaire temperature during normal, abnormal and single fault conditions		Expert evaluation, functional tests with direct temperature measurements
	Resistance to heat of thermoplastic parts – ball impression diameter		Functional tests, direct measurement of linear quantities
	Resistance to flame anf ignition		Functional tests
	Resistance to tracking		Functional tests with direct measurements of electrical quantities
	Geometric parameters of conductors fixing		Expert evaluation
	Resistance of luminaire terminals to adverse supply voltage		Functional tests
	Mechanical strength of terminals		Functional tests
	Reliability of terminals – contact resistance		Direct measurement of electrical quantities
	Reliability of terminals – voltage drop		Direct measurement of electrical quantities and temperature
	Temperature rise of windings		Direct measurement of electrical quantities and temperature
	Classification	IEC 60884-1:2022	Expert evaluation

Materials or products tested	Component, parameter or characteristic to be tested	Reference number of the document specifying test methods, clause (if relevant)	Techniques, methods and/or equipment used (where appropriate)
Plugs and socket-outlets for household and similar purposes	Marking	except: 12.5.1 cl. – 12.5.2 cl. Requirements for crimped connections, 19.5.1.1 cl. – 19.5.1.2 cl. additional temperature rise test for accessories with crimped connections, 24.8 cl. insulation strength of plug pins with sleeves, 28.1.3 cl. test for pins with insulating sleeves 30 cl. additional tests on pins provided with insulating sleeves, Annex I - additional requirements and tests for plugs and socket-outlets for high-load (HL) application	Expert evaluation
	Durability of marking		Functional tests
	Checking of dimensions		Functional tests
	Protection against accessibility of live parts		Functional tests
	Plug pin accessibility		Functional tests
	Single-pole insertion		Direct measurement of linear quantities
	Shuttered socket-outlets		Functional tests
	Accessible parts of socket-outlets		Functional tests
	Accessories with earthing contact		Expert evaluation
	Accessible parts with earthed metal part		Expert evaluation
	Resistance of earthing		Measurement of electrical quantities
	Requirements of fixed socket-outlets		Expert evaluation
	Socket-outlets terminals		Expert evaluation
	Connections of accessories		Expert evaluation
	Mechanical strength of terminals with screw clamping		Expert evaluation
	Reliability of terminals with screws		Functional tests
	Construction of earthing terminals with screws		Expert evaluation
	Earthing terminal and conductor material compatibility		Expert evaluation
	Distance between the clamping screw and the end of the conductor of pillar terminals		Direct measurement of distance
	Screwless-type terminals for external wiring		Expert evaluation
	Socket-outlets connections mechanical strength		Expert evaluation
	Socket-outlets and plug pins resistance to corrosion		Expert evaluation
	Insulating linings and barriers		Expert evaluation
	Construction of socket-outlets		Functional tests
	Cover-plates of socket-outlets		Expert evaluation
	Compatibility of cover-plates of socket-outlets		Expert evaluation

Materials or products tested	Component, parameter or characteristic to be tested	Reference number of the document specifying test methods, clause (if relevant)	Techniques, methods and/or equipment used (where appropriate)
	Construction of surface-type socket-outlets		Expert evaluation
	Means for mounting socket-outlet		Expert evaluation
	Multiple socket-outlets		Expert evaluation
	Socket-outlet resistance to lateral strain		Functional tests
	Lampholders		Expert evaluation
	Surface-type socket-outlets having an IP code higher than IP20		Direct measurement of geometric quantities
	Earthing pins		Expert evaluation
	Poles fixation		Expert evaluation
	Installation in boxes		Expert evaluation
	Requirements for membranes		Functional tests
	Non-rewireable portable accessories		Expert evaluation
	Pins of portable accessories		Functional testing by direct geometric quantities measurements
	Pins and contacts of portable accessories		Functional tests
	Socket-outlets terminals contact pressure		Expert evaluation
	Tightness of enclosure		Expert evaluation
	Rewireable portable socket-outlets space for internal earthing conductor		Expert evaluation
	Testo of conductor loosened from terminal		Functional testing by direct distance measurements
	Lids of accessories		Expert evaluation
	Requirements of accessories having an IP code higher than IP20		Expert evaluation
	Portable socket-outlets having means for suspension		Expert evaluation
	Combinations of portable accessories and switches, circuit-breakers or other devices		Expert evaluation
	Requirements of plugs protection against electric shock		Expert evaluation
	Components incorporated in accessories		Expert evaluation
	Plug which is an integral part of plug-in equipment		Expert evaluation
	Socket-outlet torque		Functional testing by direct measurements of torque

Materials or products tested	Component, parameter or characteristic to be tested	Reference number of the document specifying test methods, clause (if relevant)	Techniques, methods and/or equipment used (where appropriate)
	Form of plugs		Expert evaluation
	Membranes		Expert evaluation
	Interlocked socket-outlets		Expert evaluation and functional tests
	Resistance to ageing, protection provided by enclosures, and resistance to humidity		Functional tests
	Resistance to ageing		Functional tests
	Protection provided by enclosures		Expert evaluation
	Protection against access to hazardous parts and against harmful effects due to ingress of solid foreign objects		Functional tests
	Protection against access to hazardous parts (IP1X – IP6X)		Functional tests
	Protection against harmful effects due to ingress of water (IPX1 – IPX7)		Functional tests
	Resistance to humidity		Functional tests
	Insulation resistance and electric strength		Expert evaluation
	Insulation resistance measurement		Direct measurement of electrical quantities
	Dielectric strength test		Functional tests
	Temperature rise (up to 16A 440V equipment)		Direct measurement of temperature
	Breaking capacity		Functional tests
	Normal operation (up to 16A 440V equipment) – durability		Functional tests
	Force necessary to withdraw the plug		Expert evaluation
	Verification of the maximum withdrawal force		Functional tests
	Test for socket-outlets		Functional tests
	Test for plugs with resilient earthing contact assemblies		Functional tests
	Verification of the minimum withdrawal force		Functional tests
	Flexible cables and their connection		Functional tests
	Mechanical strength		Expert evaluation
	Impact test with pendulum hammer		Functional tests
	Drop test		Functional tests

Materials or products tested	Component, parameter or characteristic to be tested	Reference number of the document specifying test methods, clause (if relevant)	Techniques, methods and/or equipment used (where appropriate)
	Test for fixed socket-outlets with a main part intended to be mounted directly on a surface		Functional tests
	Impact test at low temperature		Functional tests
	Compression test		Functional tests
	Cord connections		Functional tests
	Abrasion test		Functional tests
	Shutters mechanical strength		Functional tests
	Retention test for pins		Functional tests
	Barriers mechanical strength		Functional tests
	Verification of the retention of covers		Functional tests
	Socket-outlets covers		Functional tests
	Resistance to heat		Expert evaluation
	Screws, current-carrying parts and connections		Expert evaluation and functional tests
	Creepage distances, clearances and distances through sealing compound		Direct measurement of distance
	Glow-wire test		Functional tests
	Resistance to tracking		Functional tests
	Resistance to rusting		Functional tests
	Pressure test at high temperature		Functional tests
	Static damp heat test		Functional tests

Note. In case of any discrepancies, ambiguities or disputes regarding the subject matter content between the English and Lithuanian versions of the document, the Lithuanian version shall prevail.

The accreditation certificate is signed with a qualified electronic signature as an attachment to the order of the Director of the National Accreditation Bureau, by which it was approved