LIA LABORATORY PRODUCT CONFORMITY SCHEME LIASC CERTIFICATE

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1 INTRODUCTION

This certification scheme has been developed in accordance with the LIA Laboratory Limited's (LIA Laboratory) Product Certification System, which is detailed in the Product Certification System Document. The scheme is operated in accordance with the LIA Laboratory's Quality and Operations Manuals. This certification scheme is classified as type 1a certification scheme (ISO/IEC 17067). The certification service is accessible to all applicants who fall under the certification scope.(see section 3). The purpose of this scheme is to assess the compliance of:

- **Luminaires** and associated accessories with the essential safety requirements of BS EN 60598-1 (state of art), and the relevant supporting parts of BS EN 60598-2 (state of the art), for home or commercial use.

- **Lamp Controlgears** with the essential safety requirements of BS EN 61347-1 (state of art), and the relevant supporting parts of BS EN 61347-2 (state of the art), for home or commercial use.

- **LED modules** with the essential safety requirements of BS EN 62031 (state of art), and for home or commercial use.

- **Lampholders** with the essential safety requirements of BS EN 60238 (state of the art) and BS EN 61184 (state of the art), for domestic or commercial use.

-**Self-ballasted LED lamps** with the essential safety requirements of BS EN 62560 (state of the art), for home or commercial use.

Customers who have been assessed and meet the requirements of the scheme are granted certification. Voluntary certification to this scheme gives third party confirmation of the manufacturer's declaration in accordance with the European Low Voltage Directive 2014/35/EC and The Electrical Equipment (Safety) Regulations 2016UK SI 2016 No. 1101.

Note that the customer has an obligation to inform LIA Laboratory of any changes to the certified products, which might affect certification.

2 DEFINITIONS & ABBREVIATIONS

The following definitions and abbreviations are used throughout the document. Other definitions are as given in the relevant standards.

Scope	Detailed specification of certified products and associated components.
QMS	Quality Management System
NCR	Non Conformance Report
LIASC	LIA Laboratory safety certification
NCB	National certification body
CBTL	CB Testing Laboratory
TL	Testing laboratory

Luminaire - Apparatus which distributes filters or transforms the light transmitted from one or more lamps.

Lamp Controlgear - One or more components between the supply and one or more lamps which may serve to transform the supply voltage, limit the current of the lamp(s) to the required value, provide starting voltage and preheating current, prevent cold starting, correct power factor or reduce radio interference.

LED module - Unit supplied as a light source. In addition to one or more LEDs, it may contain further components, e.g. optical, mechanical, electrical and electronic, but excluding the control gear.

Lampholder - a device which holds the lamp in position, usually by having the cap inserted in it, in which case it also provides the means of connecting the lamp to the electric supply.

The definitions given in BS EN 60598-1 (and relevant part 2), BS EN 61347-1 (and relevant part 2), BS EN 62031, BS EN 60238 and BS EN 61184 also apply.

3 SCOPE

This scheme has been developed by the LIA Laboratory as a basis of conformity assessment of Luminaires, Lampholders, Controlgears and LED modules. It should be used in accordance with BS EN 60598-1 and relevant part 2; BS EN 61347-1 and relevant part 2; BS EN 62031; BS EN 60238 or BS EN 61184 appropriate to the exact product(s) being assessed (see Annex 1).

This scheme covers luminaires, incorporating electric light sources for operation from supply voltages up to 1000 V. The requirements and related tests of this standard cover: classification, marking, mechanical construction, electrical construction and photobiological safety and type testing.

This scheme covers controlgears that fall under the scope of BS EN 61347 -1 and relevant part 2, for use on d.c. supplies up to 250V and/or a.c. supplies up to 1000V at 50 Hz or 60Hz. The requirements and related tests of this scheme include: classification, marking, mechanical construction, electrical construction and type testing.

This scheme covers light-emitting diode (LED) modules that fall under the scope of BS EN 62031.

– LED modules without integral controlgear for operation under constant voltage, constant, current or constant power;

- Self-ballasted LED modules for use on d.c. supplies up to 250 V a.c. supplies up to 1000 V at 50Hz or 60 Hz.

The requirements and related tests of this standard cover: classification, marking, mechanical construction, electrical construction and photobiological safety and type testing.

This scheme covers lampholders that fall under the scope of BS EN 60238 and BS EN 61184. The requirements and related tests of this scheme include: classification, marking, mechanical construction, electrical construction and type testing.

This scheme covers self-ballasted LED lamps that fall under the scope of BS EN 62560. The requirements and related tests of this scheme include: classification, marking, mechanical construction, electrical construction and type testing.

4 SCHEME REQUIREMENTS

4.1 Technical Conformity

The product shall be designed and constructed so that it is fully in line with its relevant safety standard (refer to Annex 1). No deviations to the testing process are accepted, all relevant clauses of the safety standard (part 1 and if applicable also relevant part 2) shall be considered and only products that are fully in line with the safety standard(s) can be accepted for certification.

Product families may be assessed (if requested). The quantity and type of sample(s) shall be adequate enough to fulfil the technical evaluation requirements. Representative product(s) shall be selected by the LIA Laboratory.

4.1.1 Family variants

Where a particular product has family variants these may be assessed as groups but will be considered by LIA Laboratory on a case by case basis.

When selecting type test sample(s) from a range of products of similar construction for type test verification, the product(s) chosen shall be those which represent the most unfavourable combination of components and housing.

The range of products shall be manufactured by the same manufacturer, under the same quality assurance system. The type variants of the range should be essentially identical with the respect to materials used, components and technology applied.

Additionally, for identification of samples for assessment, the guidance provided by relevant safety standard shall be taken into account (e.g. Annex S of BS EN 60598-1).

The differences to consider during evaluation of the family variants can be:

- Construction,
- Critical components,
- Shape, size and weight,
- Ratings,
- Means of connection to mains supply,
- Availability for indoor and/or outdoor use,
- IP rating,
- IK rating,
- Electrical Class of protection,
- Etc.

4.2 Certification Period

4.2.1 Certification duration

Following a successful conformity assessment a certificate will be issued. The certification period will run for 3 years from the date of issue. Prior to the end of the 3 year period customer may request to reissue the certificate and commence a new certification cycle of 3 years. In such case a review shall be undertaken to determine whether it is appropriate. The purpose of the review is to assess whether:

- Any of the conformity standards, supporting standards or scheme requirements have been updated since the initial assessment.
- Regulatory requirements, appropriate to the product(s) have changed.
- The product(s) range falling under the scope of certification needs to be increased / decreased.
- The products themselves have undergone any significant changes in design or composition.
- There have been significant changes to production location or facilities.

The impact of any such changes on the validity of the initial type testing and hence certification decision shall be assessed.

Where no significant changes are identified, and on-going conformity is assured, then the certificate will be re-issued for a further 3 years, subject to the ongoing scheme requirements.

Where significant changes are identified, which affect the validity and scope of the certification, actions necessary to address these changes will be communicated to the customer. The certificate may be suspended or withdrawn until the issues have been addressed satisfactorily. When actions have been completed satisfactorily to bring the certification up to date, then the certification period will re-commence for a further 3 years.

4.2.2 Changes during certification

In addition to the re-certification review, it is the responsibility of the customer to inform LIA Laboratory of any changes that occur affecting certification as identified in 4.2.1 within the certification period. Customer shall contact LIA Laboratory before applying the changes.

The impact of any such changes on the validity of the initial type testing and hence certification decision shall be assessed.

Where no significant changes are identified, and on-going conformity is assured, then the certificate will remain valid, subject to the ongoing scheme requirements.

Where significant changes are identified, which affect the validity and scope of the certification, actions necessary to address these changes will be communicated to the customer. The certificate may be suspended or withdrawn until the issues have been addressed satisfactorily.

4.3 Documentation

4.3.1 Product Specification

The product specification may form part of the customer's technical documentation or may be a separate document in its own right.

The product specification documentation should contain the following minimum information:

- Safety certificates and/or datasheets of critical components,
- Drawings, photos of the product;
- Marking labels, manufacturer instructions;
- Bill of materials, etc.

LIA Laboratory will conduct a review of the product(s) to be certified to determine the conformity against product specification and relevant safety standard requirements (as specified in Annex 1).

5 RECOGNITION OF TEST CERTIFICATES AND/OR REPORTS

This scheme allows the recognition of test reports and/or certificates issued by other testing houses and certification bodies.

An applicant requesting LIA Laboratory to recognise certificates issued by another NCB, shall provide a copy of the valid safety test certificate accompanied with the associated test report(s).

An applicant requesting LIA Laboratory to recognise safety test reports issued by another TL, shall provide a copy of the valid safety test report(s).

Only test certificates issued by an NCB accredited against ISO/IEC 17065:2012, and test reports issued by TL's accredited against ISO/IEC 17025:2017 can be accepted. NCBs and/or TLs shall be accredited by a national accreditation body. Additional evidence may

be required to confirm that an NCB and/or TL is accredited. The safety standard(s), against which the product was assessed, shall be listed in accredited testing scope of NCB and/or TL.

Only exception is, if test report is prepared by the CBTL which is not accredited against ISO/IEC 17025, but its system is regularly verified by NCB and through ongoing IECEE assessment. Such report can be accepted only if accompanied with CB certificate.

LIA Laboratory will check the validity of test certificates and/or test reports directly with the NCB and/or TL that issued the document. This will be done by reviewing the validity of certificates issued by an NCB on the relevant online database. Where recognition of test reports has been requested, these will be validated by contacting the issuer of the test report directly.

Test certificates and/or test reports shall comply with relevant UK national differences (test certificate and/or test report shall contain evidence that the product(s) was assessed against UK designated standards).

LIA Laboratory will examine the test certificate and/or test report provided. If the evaluation of the provided evidence is favourable, and no additional testing is required, the applicant will be granted certification.

Where certificates and/or reports do not include UK national differences, or there are questions raised during evaluation of the test certificate and/or test report (e.g., results of tests are missing, product(s) photos are missing, there are discrepancies in test results, part of test report is missing, etc.), the LIA Laboratory may request the applicant to provide a sample(s) for further assessment at the LIA Laboratory. Such additional assessments will be kept to a minimum and the applicant will be informed about the additional testing to be conducted.

LIA Laboratory may challenge test certificates and/or test reports where the testing standard to which the product(s) was assessed, is no longer valid. In this situation LIA Laboratory may request additional testing against the valid version of the safety standard.

LIA Laboratory shall have rights to retain all relevant technical documentation, such as photographs, technical documentation, or specimens. Such reference material will remain confidential.

Examples of test certificates and/or test reports include,

- IECEE CB certificate accompanied with CB test report;
- ENEC certificate accompanied with test report;
- Test certificate of testing accredited testing house (e.g., UL, BSI, DEKRA, VDE, IMQ, etc.) accompanied with test report.

6 IDENTIFICATION AND USE OF THE “LIA LABORATORY” AND CERTIFICATION LOGOS

Customer is not allowed to use LIASC Certificate logo. Logo usage policy is explained in LIA Laboratory document LUG005.

The logo shall only be used as a part of the LIASC Certificate that is provided to the customer once all stages of the LIA Laboratory’s LIASC Certificate certification scheme process are successful. The logo is an inseparable part of the LIASC Certificate and it shall not be copied from the LIASC Certificate.

After successful certification process customer will be awarded with LIA Laboratory certificate with unique certification number.

Validity of the certificate can be checked directly in LIA Laboratory certificates database www.lialabcert.org.uk/certificates-search

LIASC Certificate logo

Certificates are valid for 3 years, unless the customer requests renewal (see section 4.2.1). If renewal is not requested, the certificate will be withdrawn and removed from the LIA Laboratory certificate database.

It should be noted that this certification scheme is UKAS accredited.

In general only UKAS and organisation accredited by UKAS may use the relevant national accreditation symbols on stationery, quotations for work, reports and certificates, websites and brochures, and other items relevant to the accredited organisation's accredited activity.

For more information about usage of UKAS accreditation logos and symbols refer to document Accreditation Logo and Symbols – The National Accreditation Logo and Symbols: Conditions for use by UKAS and UKAS accredited organisations

https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/1022081/guidance-ukas-accreditation-logo-and-symbols-v2.pdf

7 ACCESS TO INFORMATION

Where a complaint is received by the LIA Laboratory regarding a product and/or data covered by the Scheme, the manufacturer will make available to the LIA Laboratory any information, data or samples to investigate such complaints.

8 IMPARTIALITY

The latest copy of the LIA Laboratory's impartiality policy along with the Terms & Conditions of this Scheme can be found on
https://www.thelia.org.uk/general/custom.asp?page=Lab_Certification_Services
Alternatively a copy can be requested by e-mail at lab@thelia.org.uk.

9 APPLICATION

An application form for this Scheme can be downloaded from
https://www.thelia.org.uk/general/custom.asp?page=Lab_Certification_Services
Alternatively a copy can be requested by e-mail at lab@thelia.org.uk.

10 ADDITIONAL INFORMATION

Details of the evaluation process, rules and procedures for granting, maintaining, extending or reducing the scope, for suspending and for withdrawing certification can be requested by email at lab@thelia.org.uk.

ANNEX 1 – SAFETY STANDARDS

Note: Where a standard is referenced the latest valid version of the standard shall be used (based on LIA Laboratory UKAS accredited testing scope)

BS EN 60598-1	Luminaires – General requirements and tests
BS EN 60598-2-1	Fixed general purpose luminaires
BS EN 60598-2-2	Recessed luminaires
BS EN 60598-2-3	Luminaires for road and street lighting
BS EN 60598-2-4	Portable general purpose luminaires
BS EN 60598-2-5	Floodlights
BS EN 60598-2-6	Luminaires with built-in transformers for tungsten filament lamps
BS EN 60598-2-10	Portable luminaires for children
BS EN 60598-2-12	Mains socket-outlet mounted nightlights
BS EN 60598-2-13	Ground recessed luminaires
BS EN 60598-2-20	Lighting chains
BS EN 60598-2-22	Luminaires for emergency lighting
BS EN 61347-1	Lamp controlgear – General and safety requirements
BS EN 61347-2-7	Battery supplied electronic controlgear for emergency lighting
BS EN 61347-2-11	Miscellaneous electronic circuits used with luminaires
BS EN 61347-2-13	D.C or A.C supplied electronic controlgear for LED modules
BS EN 62031	LED modules for general lighting – Safety specification
BS EN 60238	Edison screw lampholders
BS EN 61184	Bayonet lampholders
BS EN 62560	Self-ballasted LED-lamps for general lighting services by voltage > 50 V - Safety specifications
IEC 60598-1	Luminaires – General requirements and tests
IEC 60598-2-1	Fixed general purpose luminaires
IEC 60598-2-2	Recessed luminaires
IEC 60598-2-3	Luminaires for road and street lighting
IEC 60598-2-4	Portable general purpose luminaires
IEC 60598-2-5	Floodlights
IEC 60598-2-6	Luminaires with built-in transformers for tungsten filament lamps
IEC 60598-2-10	Portable luminaires for children
IEC 60598-2-12	Mains socket-outlet mounted nightlights
IEC 60598-2-13	Ground recessed luminaires
IEC 60598-2-20	Lighting chains
IEC 60598-2-22	Luminaires for emergency lighting
IEC 61347-1	Lamp controlgear – General and safety requirements
IEC 61347-2-7	Battery supplied electronic controlgear for emergency lighting
IEC 61347-2-11	Miscellaneous electronic circuits used with luminaires
IEC 61347-2-13	D.C or A.C supplied electronic controlgear for LED modules

IEC 62031	LED modules for general lighting – Safety specification
IEC 60238	Edison screw lampholders
IEC 61184	Bayonet lampholders
IEC 62560	Self-ballasted LED-lamps for general lighting services by voltage > 50 V - Safety specifications

ANNEX 2 – REFERENCE DOCUMENTS

BS EN ISO 9001	Quality management systems. Requirements
BS EN ISO/IEC 17065	Conformity assessment. Requirements for bodies certifying products, processes and services
ISO/IEC 17067	Conformity assessment -- Fundamentals of product certification and guidelines for product certification schemes
SI 2016 No. 1101	The Electrical Equipment (Safety) Regulations 2016UK SI 2016 No. 1101.
2014/35/EU	Low Voltage Directive (LVD)