

IECQ PUBLICATION

IEC Quality Assessment System for Electronic Components (IECQ System)

Rules of Procedure – Part 8: IECQ Scheme for LED Lighting



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IECQ PUBLICATION

IEC Quality Assessment System for Electronic Components (IECQ System)

**Rules of Procedure –
Part 8: IECQ Scheme for LED Lighting**

INTERNATIONAL
ELECTROTECHNICAL
COMMISSION

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INTERNATIONAL ELECTROTECHNICAL COMMISSION

**Rules of Procedure –
Part 8: IECQ Scheme for LED Lighting****FOREWORD**

This publication has been prepared by the Management Committee (MC) of the IECQ.

This publication is directly related to Publication IECQ 01 containing the Basic Rules of the IECQ System.

This second edition of IECQ 03-8 replaces the first edition IECQ 03-8. Main changes to the second edition include:

- Inclusion into the Testing facilities provision for CB's with their own Testing Laboratory,
- Inclusion of technical capability for assessment teams,
- Clarification of Application and inclusion of Automotive Sector,
- Clarification on Application process.

Demand for use of solid state, in particular, LED (Light Emitting Diode) technology for general and specific lighting applications continues to grow. Along with demand are the concerns over quality and reliability of electronic components, parts and assemblies. While international standards exist that address safety requirements, including interoperability, along with approval and certification schemes that aim to provide assurance that these standards are met, manufacturers of components and assemblies need to address issues that are much broader than those covered by standards when controlling their supply chain manufacturing processes.

The IECQ Scheme for LED Lighting is part of the generic IECQ Approved Component Scheme and provides a valuable supply chain tool that gives assurance that performance requirements of declared Standards and Specifications for components, assemblies and modules used in the manufacture and supply of Solid-State Lighting systems (with focus on LED technology) complies with Component and Process Specifications that embody requirements of:

- safety and interoperability Standards;
- specific performance criteria associated with the component;
- environmental criteria;
- manufacturing and process controls;
- material and supply chain controls;
- design change control;
- material and component traceability;
- sample selections during 3rd party factory audits. (Ensuring that test samples are selected by CB Auditor and not selected by the manufacturer itself);
- test samples being taken from mass production and not from the small/pilot production or hand-made samples; and
- others.

In line with the approved scope of the IECQ System, the IECQ Approved Component Scheme IECQ LED Lighting Certification can be used to certify manufacturers and suppliers of

electronic components and assemblies used in the production of LED lamps, luminaires and associated LED ballasts/drivers.

As with all IECQ Approved Components, a Component specification is to be prepared according to the Annex E of IECQ 03-3.

Therefore in noting the existence of many international standards, including IEC International Standards, these form but a small portion of the overall specification for electronic components and assemblies associated with LED lamps and luminaires.

In noting that various aspects of LED components and associated LED electronic ballasts/drivers may be covered by testing regimes beyond IECQ, for example under the IECEE CB Scheme, such CB Test Certificates and Reports provide valuable evidence of compliance with those attributes addressed by the relevant IEC International Standard as such form an integral part of the manufacturer's compliance dossier for which the IECQ Certification Body will use and recognize when conducting assessments and audits of the manufacturer.

The text of this publication is based on the following documents:

Document	Report on MC Consultation
MC/340/CA	MC/365/R

Full information on the approval by the MC of this publication can be found in the report indicated in the above table.

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INTRODUCTION

Taking into account the object of the International Electrotechnical Commission (IEC) as given in Article 2 of the Statutes, the particular object of the IECQ System, operated in conformity with the Statutes and under the authority of the IEC, is to facilitate international trade in electronic components of assessed quality, by providing a global framework for independent assessment and certification.

The object is achieved by the implementation of quality assessment procedures in such a manner that organizations, processes, and components certified as conforming to the requirements of an applicable standard or specification, are acceptable to all participants.

The IECQ Schemes provide organizations with a “Supply chain verification tool” for seeking assurance that electronic components, assemblies, processes and related materials conform to declared technical standards and specifications.

IECQ Approved Components Certification may be applied to electronic Components Products, related materials and assemblies for which a technical standard or specification exists or a client specification accepted for use in the IECQ System. For example this may cover but not be limited to; silicon wafer slabs, integrated and discrete electronic components, connectors, printed wiring boards, components/products/materials that assist in the construction, installation and use of electronic components. E.g. ceramic insulators, heat sinks etc.

Organizations that are holding IECQ Approved Components Certification demonstrate to the international market place that their organization and facilities through testing and other verification criteria comply with the requirements of the IECQ System and the relevant declared technical standards and specifications for their scope of activity. Components products, related materials and assemblies produced within the defined scope of activity of the IECQ Approved Components Certification are recognized as IECQ certified, and can be released with a Declaration of Conformity and confidence that the components are produced using manufacturing processes that have been successfully assessed and under constant surveillance by an independent, internationally accepted IECQ Certification Body.

Rules of Procedure – Part 8: IECQ Scheme for LED Lighting

1 Scope

This publication contains the Rules of Procedure for the IECQ Scheme for LED Lighting Certification, which also includes other Solid-State Lighting (SSL) technologies.

While this document refers to the IECQ Scheme for LED Lighting, it is intended that it includes other types of SSL technologies, including LED and OLED, from hereon throughout the document referred to as LED lighting.

NOTE LED is a technology and OLED is another. Perhaps in the future “PLED” may be common, i.e. a plastic or “printed LED”.

The IECQ Scheme for LED Lighting covers electronic components, associated materials and assemblies (including modules) for use within SSL application.

These IECQ Scheme for LED Lighting Rules of Procedure are to be used in conjunction with applicable IECQ System management Basic Rules (IECQ 01), General Rules of Procedure (IECQ 03-1).

This publication is based on the general Rules of Procedures for the Approved Component Scheme (IECQ 03-3) and includes changes or additions that relate specifically to the LED lighting industry, as such this publication takes precedence over IECQ 03-3.

This publication may also be supplemented by IECQ Operational Documents (ODs) as approved for use by the IECQ Management Committee, see www.iecq.org for latest publications.

2 Application

The IECQ Scheme for LED Lighting is intended for use as a means of 3rd party verification of claims of compliance with safety and performance requirements of components, component parts, assemblies and modules associated with Solid-State Lighting (SSL) applications, principally LED lighting.

LED lighting covered by the IECQ Scheme for LED Lighting includes but is not limited to applications involving:

- Household and domestic lighting
- Commercial and industrial
- Road-way street lighting
- Hospital and medical
- Automotive
- Others

Purchasers of components or services associated with the manufacturing and assembly of LED lighting assemblies may use this IECQ Scheme for LED Lighting as assurance that characteristics covering safety and performance, reliability and quality of products purchased are in compliance with the stated technical specification(s) and applicable quality standard(s) thru the evaluation and certification of manufacturers of electronic components, assemblies and modules for LED lighting.

In essence the IECQ Scheme for LED Lighting provides a valuable “Supply-Chain Management Tool” for LED lighting.

The requirements of this Scheme are based on sound engineering principles as reflected in the International Standards covering conformity assessment, e.g. ISO/IEC 17000 series and international accepted quality management system requirements, e.g. ISO 9001.

3 Normative references

The following publications contain provisions, which, through reference in this text, constitute provisions of these Rules. At the time of publication, the editions indicated were valid. The IECQ Management Committee shall decide the timetable for the introduction of revised editions of the publications.

IECQ 01, *IEC Quality Assessment System for Electronic Components (IECQ System) – Basic Rules*

IECQ 02, *IEC Quality Assessment System for Electronic Components (IECQ System) – Rules of Procedure – General requirements for the acceptance of IECQ Certification Bodies into the IECQ System*

IECQ 03-1, *IEC Quality Assessment System for Electronic Components (IECQ System) – Rules of Procedure – Part 1: General Requirements for all IECQ Schemes*

ISO 9001, *Quality management systems – Requirements*

ISO/IEC 17000, *Conformity assessment – Vocabulary and general principles*

ISO/IEC 17021, *Conformity assessment – Requirements for bodies providing audit and certification of management systems*

ISO/IEC 17050-1, *Conformity assessment — Supplier's declaration of conformity — Part 1: General requirements*

ISO/IEC 17025, *General requirements for the competence of testing and calibration laboratories*

ISO/IEC 17065, *Conformity assessment – Requirements for bodies operating product certification systems*

In the event of conflict between the provisions of this document and any other directly or indirectly referenced provisions, the provisions of this document shall take precedence.

4 Terms and definitions

The basic definitions concerning conformity assessment contained in ISO/IEC 17000 apply.

For the purpose of the IECQ Scheme for LED Lighting, the definitions contained in IECQ 01, IECQ 03-1 and the following apply:

4.1

IECQ Scheme for LED Lighting

Scheme of the IECQ that enables the independent conformity assessment of an organization for compliance of Component Products, related materials and assemblies and processes with declared specifications, listed on the IECQ LED Component Product Certificate, used for the production, installation and servicing of LED lighting

4.2

IECQ LED Component Product Certificate

a Certificate issued by an IECQ Certification Body (CB) informing that an organization has the resources and facilities necessary to assure the quality of Component Products, assemblies and related materials in compliance with the standards and specifications as stated on the Certificate

NOTE the IECQ On-Line Certificate System provides for live on line Certificates of Conformity.

4.3

Quality plan (Process manual)

a document describing the processes and process control methods specific to the Component Products, related materials and assemblies within the scope of IECQ LED Lighting Certification. This may also be known as a Process plan or Process manual

4.4

Component Product(s)

an electronic device or module, range of electronic devices or modules, related materials, assemblies that are the subject of IECQ LED Lighting Certification. Component Product also includes items and devices that are not electronic but are used in conjunction with electronic devices to ensure their functionality, e.g. spacers, housings, mounting devices, sealing components etc.

4.5

Component Product Specification (CPS)

Specification prepared and maintained by the applicant for IECQ Certification (usually manufacturer) covering Component Product(s) detailing all information necessary to describe a given Component Product, range of Component Product(s) to ensure conformance thereof with the requirements for quality assessment. A product specification may comprise a single document that refers to several documents, including standards, or maybe a national, regional or international standard

NOTE IECQ OD 302 provides guidance on the preparation of IECQ Component Product Specifications.

4.6

Supplier's Declaration of Conformity (SDoC)

a Supplier's Declaration of Conformity in accordance with ISO/IEC 17050-1, refer to Annex B for specific content and use

4.7

Designated Management Representative

a Designated Management Representative (DMR) is a person, acceptable to the IECQ Certification Body (CB), who is a member of the organization and who is responsible for liaison with the IECQ CB regarding all matters of IECQ Certification. That person is the focus of communication between the IECQ CB and the organization

5 Governing of the IECQ Scheme

The IECQ Scheme for LED Lighting is governed in accordance with requirements of the IECQ System as specified in IECQ 01, *Basic Rules*, and IECQ 03-1, *Rules of Procedure*.

This document contains the Rules of Procedures specific to the IECQ Scheme for LED Lighting that are in addition to those contained in IECQ 01 and IECQ 03-1 and are supplemented by Operational Documents (ODs). These ODs are available to all IECQ Member Bodies, IECQ CBs, and Applicants who have applied for an IECQ Scheme for LED Lighting Certification.

6 Principles of the IECQ Scheme for LED Lighting

IECQ LED Component Product Certificate

Subclause 5 of IECQ 03-1 applies except as follows:

The IECQ Scheme for LED Lighting provides the means for organizations to obtain an IECQ LED Component Product Certificate. This IECQ LED Component Product Certificate is intended to provide the international LED lighting industry assurance that Component Products covered by an IECQ Certificate and the respective batch release Declarations of Conformity (DoCs) comply with the technical specification(s) listed.

Conformity is demonstrated by way of an organization having implemented processes in accordance with the technical and quality management system requirements of this IECQ Scheme for LED Lighting. This is ensured through independent conformity assessment and on-going surveillance by an IECQ Certification Body (CB).

Manufacturers and Suppliers (referred to as Organizations) seeking to have their Component Product covered by an IECQ LED Component Product Certificate make their application to any of the IECQ Approved Certification Bodies (IECQ CB). A current list of IECQ CBs can be found on the IECQ website: www.iecq.org.

Manufacturers and Suppliers holding an IECQ LED Component Product Certificate are subjected to on-going surveillance audit inspections by the IECQ CB which shall include on-going assessment of the Component Products according to its Component Product Specification.

The IECQ CB shall determine the frequency of the surveillance audit. The frequency shall not be greater than annually (12 months apart). Such frequency shall take into account whether the organization holds current Quality Management System (QMS) certification/registration by a Certification Body that has current accreditation by an accreditation body that is a member of the International Accreditation Forum (IAF).

7 Organizational responsibilities

The Organization (Client/Applicant/Certificate holder)

An organization holding an IECQ LED Component Product Certificate shall have the responsibilities, specified in Subclause 7.2.3 of IECQ 03-1 and the following:

- a) The organization shall ensure that their Quality Management System (QMS) is documented and complies with all requirements of the IECQ Scheme for LED Lighting and is effectively implemented and maintained.
- b) The organization shall nominate a Designated Management Representative (DMR), who shall be responsible for all matters in connection with the requirements of the IECQ Scheme for LED Lighting as defined in Annex A of IECQ 03-1 and the following;
 - for maintaining the QMS of the organization;
 - for controlling the quality of the manufacture, inspection and test of products released covered by the IECQ LED Component Product Certificate;
 - for suspending release under the IECQ Scheme for LED Lighting that fails to meet the requirements of the Component Product Specification;
 - for any required re-inspection of the Component Product subject to delayed delivery;

- for verifying the accuracy of certified records of released lots and signing the Supplier's Declaration of Conformity (SDoC);
- for notifying the IECQ CB immediately of any change to any certified Component Product.

8 IECQ Scheme for LED Lighting – Documentation requirements

8.1 IECQ Scheme for LED Lighting – Organization's Product Quality Plan

The Organization shall prepare and maintain a Product Quality Plan covering the Component Product that is to be covered by an IECQ LED Component Product Certificate.

The Product Quality Plan shall have the structure of the listed content as detailed in IECQ OD 3802.

8.2 IECQ Scheme for LED Lighting – IECQ CB's requirements

In placing an application with an IECQ CB, the Organization authorizes the IECQ CB to keep, for future reference any technical documentation of the Organization. Such reference material shall be confidential.

The samples tested during the certification audit, test records, and records containing test conditions and other necessary information shall be retained to meet local regulatory requirements.

9 IECQ Scheme for LED Lighting Certification procedure

9.1 General

IECQ Scheme for LED Lighting assessments of an organization broadly fall under the following areas:

- Identifying/developing a specification to cover the Component Product, by the manufacturer or applicant seeking IECQ Certification which is accepted by the IECQ CB to which application is lodged
- Assessment/testing of the Component Product(s)
- Assessment of the Organization's Quality Management System and associated Product Quality Plans and their implementation
- Upon granting IECQ Certification, the on-going surveillance audit assessments of the Organization holding IECQ LED Lighting Certification in accordance with IECQ 03-1 and these Rules, which shall include on-going assessment of the Component Products according to its Component Product Specification.

Specifications covering Component Product(s) encompass the minimum requirements of applicable standards along with the manufacturer's declared operating and performance characteristics. Annex A sets out requirements for specifications.

IECQ OD 3801 sets out the detailed stages of the assessment and certification process that is to be followed.

9.2 Assessment / testing of the Component Products

9.2.1 General

Assessment and testing of Component Products are conducted or arranged by the IECQ CB to which an application for IECQ Certification has been made. The IECQ CB usually requires assessment and testing of Component Products when:

- a) the certified Component Products have undergone or may have a design change;
- b) testing of certified Component Products indicates a failure to comply with the specification listed on the IECQ Certificate; or
- c) the IECQ Certificate holder wishes to add other Component Products to the IECQ Certificate.

The application for IECQ Certification shall follow the procedure as detailed in IECQ 03-3 Clause 8.2.

9.2.2 Testing facilities

Any of the following testing arrangements shall be used by the IECQ CB:

- a) a test laboratory holding IECQ Independent Testing Laboratory (ITL) Approval, or an IECQ CB with its own Testing Laboratory;
- b) a test laboratory approved to participate in the IECEE CB Scheme with the testing covered within their scope of acceptance and test results are supported by an IECEE CB test data; or
- c) a test facility where the IECQ CB witness testing arrangements are in place and the IECQ CB has the necessary technical capability to control and manage the tests conducted.

NOTE IECQ Technical Notice, IECQ-TN-010 outlines use of test results to support IECQ certification.

9.3 Quality Management System and associated Product Quality Plans

9.3.1 General

Manufacturers shall establish and implement a documented quality plan for the component part(s) in order to assure on-going compliance of Component Product(s) with specifications during the production process.

The documentation for the quality plan to address IECQ OD 3802 shall include but is not limited to the following:

- a) an overview or summary of the quality plan;
- b) procedures and work instructions and other documents and records as required to ensure the effective planning, operation and control of processes;
- c) maintenance of records as required by the IECQ Scheme for LED Lighting.

The IECQ CB shall arrange an initial assessment and on-site audit of the manufacturing location(s) to ensure the quality plan(s) comply with this clause.

9.3.2 Assessment team requirements for IECQ Scheme for LED Lighting assessments

The IECQ CB shall arrange for a qualified assessor or assessment team in accordance with the IECQ CB's procedures to undertake the assessment of the manufacturer in accordance with these Rules. The decision to use one assessor or a team of assessors is determined by the IECQ CB taking into account the technical capability of the assessor and scope of the application and size of the assessment. Technical capability shall include as a minimum knowledge on photometry and ESD.

NOTE Refer to IECQ Operational Document, OD 010 for guidance.

IECQ CBs shall comply with the general requirements of ISO/IEC 17021-1 concerning the assessment and on-site audit of quality systems and associated quality plans.

9.3.3 Assessment man-day requirements

The IECQ CB appointed Lead Assessor shall determine the total man-days required and required technical competence for the initial assessment based on the complexity of the scope, the Component Product Specification and test plan, in line with the guidelines of ISO/IEC 17021-1 and the following:

Stage 1: document review

- 1 man-day

Stage 2: on-site witness test (compliance and production tests) assessments;

- 2 man-days for production line assessment, sampling and lot-by-lot witness test audit, etc.
- 1 man-day on-site shall be used to confirm and evaluate the test result of the period tests.

NOTE Minimum requirements based on one category Component Product/one production line.

The IECQ CB appointed Lead Assessor shall determine before on-site assessment any required increase to the minimum requirements and shall fully document the justification/reasons in the final report.

Where the conducted audit man-days delivered are less than the minimum requirements as above during the actual assessment, the IECQ CB appointed Lead Assessor shall explain in the audit report the justification.

9.4 Granting of IECQ Certification, surveillance and expansion of scope

9.4.1 Granting of certification

With the successful completion of stages in Clause 9.2 and 9.3 above the IECQ CB may proceed to issue the IECQ LED Component Product Certificate in accordance with the IECQ On-Line Certificate System.

The IECQ CB shall notify the applicant and commence annual surveillance planning in accordance with Clause 9.8 of IECQ 03-1 and these Rules.

9.4.2 Ensuring conformity

In addition to the requirements in Subclause 9.10 of IECQ 03-1 the following applies:

The organization has the responsibility to ensure that the on-going production of all certificated Component Product(s) is in conformity with the Component Product Specification. Failure to do so could lead to suspension or cancellation of the IECQ LED Component Product Certificate.

While the IECQ CB auditor is performing the annual auditing of the IECQ LED Component Product Certification, it is necessary to confirm that the plant being audited is performing lot-by-lot inspection according to the Component Product Specification. The auditor may perform random monitoring and/or review of test results to confirm that the results meet the requirement of the Component Product Specification.

If the lot-by-lot inspection and periodic tests or the reliability test are not performed according to the Component Product Specification, or the random monitoring result fails to fulfil the requirement, improvement must be done within the given deadline as specified by the IECQ

CB that issued the IECQ LED Component Product Certificate, or suspension or cancellation of certificate may be enforced.

9.4.3 Changes to IECQ LED Component Product Certificate(s)

If an Organization that has acquired IECQ LED Lighting Certification wishes to make changes to the Component Product Certificate(s), the organization shall prepare related documentation according to these Rules, and the DMR shall inform the IECQ CB that issued the certificates. This IECQ CB will determine the need for additional auditing, prior to the annual audit and/or testing that may be required.

9.4.4 Surveillance

Organizations that have acquired IECQ LED Component Product Certification shall be audited for on-going compliance to the Component Product Specification and the quality plan by the IECQ CB that issued the IECQ LED Component Product Certificate.

The IECQ CB that issued the IECQ LED Component Product Certificate may engage another IECQ CB to carry out the surveillance audit under the direction and process of the IECQ CB that issued the IECQ LED Component Product Certificate.

9.4.5 Supplier's Declaration of Conformity (SDoC)

Lots released by an Organization holding IECQ LED Component Product Certification shall be unambiguously identified with a Supplier's Declaration of Conformity (SDoC). This SDoC means that the lot has been released in accordance with the requirements of the Component Product Specification in line with the IECQ LED Component Product Certificate.

9.4.6 Transfer of IECQ LED Lighting Certification

While the general requirements contained in 9.18 of IECQ 03-1 provide for the transfer of certification, under the IECQ Scheme for LED Lighting the transfer of an IECQ LED Component Product Certificate to another IECQ CB is not permissible.

Client holding IECQ LED Lighting Certification wishing to obtain an IECQ LED Component Product Certificate from an alternate IECQ CB shall apply in full to that IECQ CB, whom shall determine whether previously obtained test and audit results may be used as part of the Certification procedure to issue a new IECQ LED Component Product Certificate.

9.5 Renewal of the Certificate of Conformity (recertification)

The requirements of 9.12 of IECQ 03-1 apply.

9.6 Suspension or cancellation (withdrawal)

The requirements of 9.13 of IECQ 03-1 apply.

9.7 Reinstatement of IECQ Certificates

The requirements of 9.14 of IECQ 03-1 apply.

10 Acceptance of IECQ CB for IECQ Scheme for LED Lighting

10.1 General

New IECQ CBs or existing IECQ CBs seeking to participate in the IECQ Scheme(s) shall comply with the general requirements of IECQ 02 along with the specific requirements below.

10.2 Specific requirements for IECQ Scheme for LED Lighting

IECQ CBs shall be assessed and approved by the IECQ for specific areas of competence. The general competence, efficiency, experience, familiarity with IECQ System rules and competence to carry out assessment and certification as well as compliance with ISO/IEC 17065 and ISO/IEC 17021, regarding management of auditing, shall be assessed. Acceptance in another IECQ Scheme or accreditation by a recognized national accreditation body shall be taken into account along with results of the last IECQ peer assessment. In those cases, the IECQ Management Committee (MC) shall decide upon the extent of the assessment that is necessary.

Existing IECQ CBs participating in the IECQ System seeking to participate in the IECQ Scheme for LED Lighting would not normally require a site assessment visit by an IECQ peer assessment team, however the IECQ Secretariat shall arrange for their operating procedures to be reviewed for compliance with these Scheme rules and supporting operational documents. In such cases the IECQ Secretariat shall prepare a report for submission to the IECQ Executive for a decision concerning the acceptance of the application with the Management Committee being asked to endorse at the next meeting.

For a new IECQ CB Application a satisfactory assessment as documented in an IECQ Assessor Report (IECQ OD 013) shall be approved by the IECQ Conformity Assessment Bodies Committee (CABC) and accepted by the IECQ MC.

10.3 IECQ LED Assessor qualifications

IECQ LED Assessors shall be qualified by their IECQ CBs in accordance with IECQ OD 010.

IECQ LED Assessors may be subjected to a witness assessment by IECQ in accordance with 10.4 below.

10.4 Witness assessment of an IECQ CB

The application process for an applicant CB wishing to become an IECQ CB in the IECQ Scheme for LED Lighting includes a witness assessment conducted by the IECQ. The witness assessment is normally conducted within 12 months of the applicant CB being accepted as an IECQ CB or acceptance of a scope extension. Witness assessments are managed and coordinated by the IECQ Secretariat with the IECQ Executive Secretary responsible for the appointment of all IECQ Peer Assessment Teams.

11 Identification of conformity

Holders of current IECQ LED Certification may be permitted to use the IECQ Logo and Mark in accordance with IECQ 01A and Annex B of this document, respectively.

Annex A (normative)

Requirements for specifications used for LED Component Product(s)

A.1 General principles

The drafting and content of IECQ Specifications shall comply with ISO/IEC 17007.

A.2 Requirements for preparation of specifications

The manufacturer or applicant for IECQ Certification prepares the Component Product Specifications for use in the IECQ Scheme for LED Lighting. In all cases an IECQ CB operating in the IECQ Scheme for LED Lighting shall approve IECQ Specifications for use. Specifications are expected to contain:

- reference to applicable standards that are met;
- operating and performance characteristics;
- technical data;
- details concerning storage, handling and transportation criteria that ensure characteristics are preserved;
- any other relevant information required by a manufacturer receiving the Component Product for assembly or connection as part of a final self-functioning product, e.g. restrictions or limitations regarding the interconnection, assembly etc.

A.3 Numbering

Specifications shall be uniquely identified by a numbering system maintained by the IECQ CB, according to the requirements in IECQ OD 302.

A.4 Product verification testing

Specifications should contain the verification testing to be conducted to confirm the initial Component Product compliance with the specification. Refer to IECQ OD 302 for guidance.

A.5 Assessment schedule

Specifications should be accompanied by a clearly defined assessment schedule. Refer to IECQ OD 302 for guidance.

Annex B (normative)

Supplier's Declaration of Conformity

B.1 Introduction

An attestation of conformity may be authenticated by the application of an IECQ Mark of Conformity, or by the issue of a Supplier's Declaration of Conformity (SDoC) bearing the IECQ Logo along with the IECQ's Mark of Conformity and in accordance with ISO/IEC 17050-1.

Refer to IECQ Guide IECQ 01A, *Guidance for the use of the IECQ Logo and IECQ Mark of Conformity*, available at www.iecq.org/publications/rules-procedures

The application of a IECQ Mark of Conformity or the issue of an SDoC attests that the component(s) conform to the IECQ Approved Component Certification to which they have been produced.

B.2 General requirements for attestation of conformity

B.2.1 The information shall be intelligible to the customer and shall not be in coded form.

B.2.2 All forms of attestation shall be authorized by the Designated Management Representative (DMR) or the Approved Signatory and only for components being part of a released lot.

B.2.3 Arrangements for authenticating the attestation of conformity shall be controlled under secure conditions by the organization and approved by the IECQ CB.

B.2.4 When a IECQ Mark of Conformity is being used, the DMR shall maintain a record of the application of the Mark.

B.3 Marking of the packaging

In addition to any marking of the components, the following information shall be marked on the labelling and/or packaging, including component reels or trays:

- a) the name of the organization to which IECQ LED Certification has been granted;
- b) the name of the issuing IECQ CB;
- c) the inspection lot identification under which the components were released;
- d) the number of the detail specification or specification to which the component conforms. If required by the national rules, the national number of the detail specification may be added;
- e) that form of authentication which has been agreed with the IECQ CB;
- f) the component identification giving the full catalogue name and reference of the component allotted to it by the manufacturer.

B.4 Mark of conformity (IECQ Mark of Conformity)

B.4.1 The Mark of Conformity as detailed in IECQ 01A shall have information permitting the identification of

- a) the IECQ CB;
- b) the manufacturer's or the distributor's IECQ Certification number relating to the product;
- c) the inspection lot;

placed close to the Mark of Conformity in the order given above.

NOTE Import regulations of some countries may require the country of origin to be marked.

B.4.2 The information given in a) to c) should normally allow the delivery lot to be traced to the manufacturer's test report. If this is not so, the necessary extra information shall be given on the package and/or on the component.

B.4.3 At the manufacturer's discretion and agreed by the IECQ CB, a smaller version of the Mark of Conformity accompanied only by the information in a) and c) may be used for the marking of individual components, provided that they are contained in a sealed package as described in B.4.4.

B.4.4 The Mark of Conformity shall be applied to an adhesive tape or to any other similar means of sealing the package. Component reels and tray are considered as forms of packaging. This is not compulsory if the individual components bear the Mark of Conformity. In the latter case, the Mark of Conformity shall be placed in the vicinity of the marking required by the relevant specification.

B.4.5 When sealed packages are used, the protection by the Mark of Conformity cannot be given if the order is less than the capacity of the smallest package for the corresponding component or, for part of the order, if this is not a multiple of the capacity of the smallest package.

B.4.6 Sealed packages may be opened by a distributor holding IECQ Approved Process Certification in order to re-distribute their contents in adequate packages of smaller unit capacity, the latter in turn being sealed with the Mark of Conformity by the distributor. This operation ensures that the components delivered come from an identifiable package which the distributor has opened on his premises, and that the operations that he has carried out on the components are as specified in IECQ 03-1, annex A, item 12).

B.4.7 The Mark of Conformity shall be affixed under the responsibility of the DMR and only on components from released lots or their packages or both.

B.4.8 The stamps or the sealing material bearing the Mark of Conformity shall be stored and used under secure conditions approved by the IECQ CB.

B.4.9 The DMR shall keep a register of seals or sealing material bearing the Mark of Conformity so that the IECQ CB may know where they are kept and how they are used.

B.5 Supplier's Declaration of Conformity (SDoC)

A Supplier's Declaration of Conformity (SDoC) for use by organizations to which IECQ AC Certification has been granted, shall be by a

- separate document (certificate style); or
- incorporated into the delivery documentation; or
- incorporated into the product label attached to the component reels and trays (where the use of the Mark of Conformity shall be securely controlled, the method of control shall be approved by the IECQ CB.).

In either case it shall be in accordance with ISO/IEC 17050-1 and shall additionally contain the following information:

B.5.1 Manufacturers of IECQ LED Certified Components

- a) per ISO/IEC 17050-1, “the name and contact address of the issuer of the declaration of conformity”, where the “issuer” is the organization (manufacturer) to which IECQ AC Certification has been granted;
- b) optional – the trade mark and/or symbol of the organization (manufacturer);
- c) the IECQ Logo with the IECQ AC Certificate Number to which the components have been produced, printed adjacent to it. Refer to IECQ 01A for usage of the IECQ Logo and IECQ Mark of Conformity;
- d) the IECQ Mark of Conformity;
- e) the date of declaration;
- f) the component identification giving the full catalogue name and reference of the component allotted to it by the organization (manufacturer);
- g) the organization’s (manufacturer’s) inspection lot identification under which the component was released. If the component has been re-inspected by the organization (for example, after long storage) the new inspection lot identification shall also be given;
- h) the number of the detail specification or standard to which the component conforms. If required by the national rules, the national number of the detail specification may be added;
- i) the statement of conformity as follows: “The components in this package have been released according to the above numbered detail specification or standard under the IECQ System in accordance with the rules of procedure of the IECQ Approved Component Scheme given in IECQ 03-3, under the supervision of IECQ CB(s)¹”.

The DMR shall maintain records showing the relationship between a Declaration of Conformity and the inspection lot to which it refers. The DMR shall in accordance with ISO/IEC 17050-1 allot a unique reference number to each SDoC.

¹ The name of the IECQ CB who supervises the manufacturer.

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