Title: Coverage of LED Components, Parts and Assemblies within IECQ AC Scheme

Introduction

This IECQ Technical Notice is intended to clarify the coverage of electronic components and assemblies associated with LED Lamps by IECQ Approved Component Certification.

The IECQ Basic Rules, publication IECQ 01 Defines the scope of the IECQ System as

“...Applicable to all electronic components, assemblies and related materials and processes for which quality assessment is required in standards and specifications......”

Demand for use of 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 Approved Component Scheme is a valuable supply chain tool that provides for the identification of and verification of compliance 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 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 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 Standard as such form an integral part of the manufacturer’s compliance dossier for which the IECQ Certification Body will use and recognise when conducting assessments and audits of the manufacturer.

In this context, IECQ CBs are to make use of IECEE CB Scheme Test Certificates and Reports with the following guidelines being provided to all IECQ CBs as part of their overall assessment of the manufacturer:-

- For a Test report to be regarded as an IECEE CB Test Report, it MUST be accompanied with a CB Test Certificate that refers to the Test Report;
- The CB Test Report and CB Test Certificate must be issued by one of the accepted CB Scheme member NCBs as listed on the official CB Scheme website http://members.iecee.org/
- The item covered by the CB scheme test report and certificate should be included in the annual reliability test plan; and
- Where there are any questions concerning the completeness or authenticity of the CB Test Report and Test Certificate, such issues are to be raised with the issuing CB Scheme NCB in the first instance. If such matters cannot be resolved the matter maybe referred to the CB Scheme Secretariat info@cbsceme.org

Where test results of parameters are being presented in test reports that are not IECEE CB Scheme Test reports or where a CB Scheme Test Certificate is not available then the IECQ CB shall use their normal procedures for the evaluation of such test facility to determine their capability to conduct such tests.

For any questions regarding this IECQ Technical Notice, please contact the Secretariat as follows:

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