TRINIDAD AND TOBAGO STANDARD

ENERGY LABELLING – COMPACT FLUORESCENT LAMPS AND LIGHT EMITTING DIODE LAMPS – COMPULSORY REQUIREMENTS

PCTTCS 11:20XX

Committee Draft

Copyright ©
This National Standard issued by the Trinidad and Tobago Bureau of Standards is copyright protected by the Standards Act No. 18 of 1997 and neither this document nor any extract from it may be reproduced, stored in a retrieval system or transmitted in any form or by any means, electronic, photocopying, recording or otherwise, without prior written permission being secured from the Trinidad and Tobago Bureau of Standards.
Request for permission to reproduce should be addressed as follows:
Executive Director
Trinidad and Tobago Bureau of Standards
Century Drive, Trincity Industrial Estate,
Macoya, Tunapuna,
P.O. Box 467, Port of Spain
Trinidad and Tobago
Phone: 662-TTBS E-MAIL: ttbs@ttbs.org.tt

Trinidad and Tobago Bureau of Standards (TTBS) disclaimer and exclusion of liability

The information contained herein is provided without any representations, warranties or conditions of any kind, expressed or implied, including (but not limited to) implied warranties or conditions concerning the accuracy, reliability, completeness or currency of the information.

The Trinidad and Tobago Bureau of Standards (the Bureau) makes no representation and gives no warranties in relation to the information herein, its compliance with any relevant statue, rule, regulation, policy formulation, legal instrument or notice whatsoever and where so ever derived nor whether the said information infringes or is likely to infringe any patent, copyright, specification, design, invention or drawing which is protected whether locally or internationally.

Neither the Bureau as a body corporate nor its members, employees, subsidiaries, affiliates or volunteers shall be liable to any party (whether local or international) for any loss, damage, costs or expenses incurred whether directly or indirectly, in reliance on the information herein; nor is the Bureau, its members, employees, subsidiaries, affiliates or volunteers liable to indemnify any third party for such loss or damage payable by it arising from the use of said information.

Committee Draft

General statement

The Trinidad and Tobago Bureau of Standards (the Bureau) is a body corporate established under the authority of the Standards Act No. 18 of 1997 (herein after referred to as the Standards Act).

In accordance with the Standards Act, the Bureau shall promote and encourage the development and maintenance of standards and further shall establish standards for the following: to improve goods produced or used in Trinidad and Tobago; to ensure industrial efficiency and development; to promote public and industrial welfare, health and safety; and to protect the environment.

The Bureau develops standards through consultation with relevant interest groups, and public comment is invited on all draft standards before they are declared as Trinidad and Tobago Standards in accordance with the provisions of the Standards Act.

The Bureau is the legal custodian of Trinidad and Tobago Standard Marks, which are issued in accordance with the Standards Act. When a Trinidad and Tobago Standard Mark appears on any product, or in connection with any service, process or practice, it provides assurance that such a product, service, process or practice conforms to a Trinidad and Tobago Standard.

The Bureau's Standards Information Centre maintains a reference library of standards, including local, regional and international standards and is the national node of the International Organization for Standardization Information Network (ISONET). The Centre serves as the WTO/TBT Enquiry Point which disseminates information on standards and technical regulations as it relates to the World Trade Organization, Technical Barriers to Trade Agreement. It also acts as the sales agent for the publications of foreign and international standards organizations.

NOTE In order to keep abreast of progress in the industries concerned, Trinidad and Tobago Standards are subject to periodic review. Suggestions for improvements are welcome.

Committee Draft

Contents

Foreword 1
1 Scope 2
2 Normative reference 2
3 Terms and definitions 2
4 Requirements 3
5 Mechanisms to demonstrate compliance 4
6 Measures related to non-compliance 4

Committee Draft

Foreword

These requirements were declared a Trinidad and Tobago Standard on _____ after the draft had been approved by the Trinidad and Tobago Bureau of Standards (TTBS).

In accordance with the Standards Act, the Bureau shall promote and encourage the development and maintenance of standards and further shall establish standards for the following: to improve goods produced or used in Trinidad and Tobago; to ensure industrial efficiency and development; to promote public and industrial welfare, health and safety; and to protect the environment. The Trinidad and Tobago Bureau of Standards has recommended that this standard be accorded compulsory status.

TTCS 11:20XX specifies the compulsory labelling requirements for all imported and locally manufactured compact fluorescent lamps (CFL) and light emitting diode (LED) lamps and the mechanisms to demonstrate compliance. It was developed by the TTBS which has regulatory oversight for the energy labelling of lighting products.

This standard will be effective as a compulsory standard on a date to be notified by the Minister responsible for trade and industry in a Notice to be published in the Trinidad and Tobago Gazette, as required by the Standards Act.

The Standard is intended to improve the energy performance for compact fluorescent lamps and light emitting diode lamps. The application of the standard is expected to improve energy efficiency within Trinidad and Tobago via the availability, selection and usage of more energy efficient lamps. The information included on the energy label provides consumers with information for consideration when making a purchasing decision.

This Standard, is intended to be used, together with the CARICOM Regional Standard, CRS 58, Energy labelling — Compact fluorescent lamps and light emitting diode lamps — Requirements, which was issued by the CARICOM Regional Organisation for Standards and Quality (CROSQ).

In addition, the requirements of this Standard are expected to encourage manufacturers, importers and retailers to provide more energy efficient lamp options to consumers as they compete to offer better value- for- money products.

This standard is intended for use by:

a. Manufacturers, importers and distributors of compact fluorescent lamps and light emitting diode lamps to assist in manufacturing or procuring products which satisfy minimum requirements and demonstrating compliance in this regard;

b. Regulatory agencies – as a basis for assessing imported or locally manufactured compact fluorescent lamps and light emitting diode lamps within an established regulatory or legal framework; and

c. Conformity assessment bodies – as a basis for conformity assessment activities including inspection, testing and certification activities.

Committee Draft

1 Scope

This standard specifies the relevant test methods, general labelling requirements, energy labelling requirements and safety and performance requirements for the following:

a) Self-ballasted compact fluorescent lamps (CFL) of voltages > 50 V;

b) Integrated light-emitting diode lamps (LEDi) for stable operations, intended for domestic and similar general lighting purposes, having a:

   1) rated power ≤60 W;

   2) rated voltage of > 50 V a.c ≤ 250 V a.c.

NOTE 1 This standard does not apply to semi-integrated (LEDsi) and non-integrated (LEDni) light-emitting diode lamps.

NOTE 2 The nominal supply voltages declared by the Trinidad and Tobago Electricity Commission (T&TEC) in their publication entitled "Wiring for Light and Power" are 115 volts, with a relative tolerance of ± 6 % and 230 volts, with a relative tolerance of ± 6 %. The Electricity Supply Rules made under Section 15 of the Electricity (Inspection) Act Chapter 54:72 provides for variations of six percent above or below the declared voltages.

2 Normative reference

The following referenced documents are indispensable to the application of this document. For the undated references, the latest edition of the referenced documents (including any amendments) applies.

CARICOM Regional Standard

CRS 58, *Energy Labelling – Compact fluorescent lamps and light emitting diode lamps –Requirements*

International Electrotechnical Commission

IEC 61000-3-2, *Electromagnetic compatibility (EMC) - Part 3-2: Limits - Limits for harmonic current emissions (equipment input current ≤16 A per phase)*

IEC 62560, *Self-ballasted LED lamps for general lighting services by voltage > 50 V - Safety specifications*

IEC 62612, *Self-ballasted LED lamps for general lighting services with supply voltages > 50 V - Performance requirements*

IEC 60969, *Self-ballasted compact fluorescent lamps for general lighting services - Performance requirements*

3 Terms and definitions

For the purposes of this standard, the terms and definitions outlined in CRS 58 apply.

Committee Draft

4 Requirements

4.1 Energy labelling requirements for compact fluorescent lamps and light emitting diode lamps shall comply with the following test methods and limits, specified in CRS 58:

a) General requirements for the following parameters:

1) Efficacy;

2) Safety;

3) Colour rendering index (CRI);

4) Power factor (PF);

5) Harmonic distortion;

6) Lumen maintenance;

7) Start time;

8) Run-up time;

9) Switching cycles;

10) Premature failure rate;

11) Rated life.

b) Energy label for the following parameters:

1) Rated wattage (watts);

2) Efficacy (lumens/watt);

3) Light output (lumens); and

4) Rated life (hrs).

c) Packaging label with the following information:

1) Mark of manufacturer;

2) Country of origin;

3) Rated voltage (volts);

4) Light colour;

5) Colour temperature (Kelvin) which shall be tested in accordance with IEC 62612;

6) CRI (Colour Rendering Index);

Committee Draft

7) Cap type; and

8) Frequency (hertz).

4.2 The labelling requirements for CFLs and LEDs shall be in accordance with the language, location and permanence requirements of CRS 58.

5 Mechanisms to demonstrate compliance

5.1 CFLs and LEDs shall be subject to a conformity assessment programme administered by TTBS, through inspection, testing, certification or a combination of all activities.

NOTE TTBS will be developing an energy labelling scheme which would include inspection, testing and market surveillance related to these products and may include assessments of the production process or quality management system as necessary.

5.2 TTBS may consider and accept information from other sources, such as 3rd party testing, product certification and/or quality management system certification from an accredited body. If an accredited body is not available, the information can be provided by a body approved by TTBS, subject to the terms and conditions of TTBS in accordance with the Standards Act No. 18 of 1997, to provide objective evidence of compliance to the standard. The information provided may include test reports and other relevant information. Provision of this information does not exempt TTBS from conducting any further assessment activities deemed necessary to demonstrate compliance with the standard.

6 Measures related to non-compliance

6.1 Where imported or locally manufactured CFLs and LEDs are found to be in breach of any of the requirements outlined in Clause 4, TTBS shall initiate any of the following actions:

a) direct the manufacturer, importer or distributor to remove non-conforming CFLs and LEDs from use throughout Trinidad and Tobago within a specified timeframe;

b) seize and detain non-conforming CFLs and LEDs within the legal framework specified under the Standards Act, Chapter 82:03 including any amendments and revisions;

c) prohibit the sale and distribution of non-compliant CFLs and LEDs in Trinidad and Tobago;

d) permit modifications as it pertains to labelling necessary for compliance, where possible; or

e) direct the manufacturer, importer or distributor to initiate a product recall.

6.2 Any breaches to this standard are subject to fines and penalties as outlined in the Standards Act, Chapter 82:03.

Committee Draft