

 <p>TÜVRheinland® Precisely Right.</p>	COMPLEMENT		Doc: CRC-029-ILM
	SELF BALLASTED LAMP – SAFETY REQUIREMENTS – NBR14538 AND IEC 60968		Revision: 00 Page: 1/4
Prepared by:	Arnaldo Barbulio Filho	Checked by:	Suzete Suzuki
Approved by:	Marcos Zevzikovas	Approval Date:	September/26/2008

1. PURPOSE:

This document presents the complementary criteria for the “Product Certification Rule” – RC-002 certification and maintenance of the license to use of the SBAC Conformity Mark.

Note: SBAC – Sistema Brasileiro de Avaliação da Conformidade, on wich means Conformity Evaluation Brazilian System.

2. APPLICATION FIELD

This complement applies to the products that fit into the scope of the below-referenced standard.

3. APPLICABLE STANDARDS, REGULATIONS, AND REQUIREMENTS

NBR 14538:2000 Fluorescent lamp with integrated ballast in base for general lighting services – Safety requirements

IEC 60968:1999 Self-ballasted lamps for general lighting services - Safety requirements

NBR ISO 9001:2000 Quality Management System – Requirements.

Inmetro Rule (Portaria) No. 27 dated February 18th, 2000, which validates the standardized supply voltages;

Inmetro Rule (Portaria) No. 73 dated March 29th, 2006, which approves the Regulation for use of Inmetro’s Marks, Accreditation Symbols and Conformity Identification Seals.

4. DEFINITIONS

The definitions contained in the above-mentioned standards shall apply, further to the definitions in 4.1 thru 4.4.

4.1 – Primary Package

Package that contains the product for purposes of market to the end consumers.

4.2 – Homogeneous Series / FAMILY

Group of self ballasted lamp, supplied by alternated current, manufactured in the same plant and having the same basic project: that uses the same printed circuit board, partially or totally mounted, same type of thread, and same supply voltage.

4.3 – Manufacturer

Responsible for manufacturing and approving the product.

4.4 - Applicant

In charge of applying for the certification, which may be the manufacturer itself.

5. CONFORMITY EVALUATION

To evaluate the conformity, the provisions in RC-002 must be followed, complemented by the items below.

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5.1 – DOCUMENTATION REVIEW

The following documents must be submitted to review:

- Product complementary characteristics (CCP) table, to be provided by TÜV Rheinland do Brasil and filled out by the applicant;
- Printed circuit board layout (PCB).
- Casing drawing;
- Electric diagram (schematic);
- Lists of materials (B.O.M.) and main suppliers;
- Product marking, for the intended market (printers, labels, etc);
- Product packaging.

5.2 – INITIAL FACTORY EVALUATION

The control and quality requirements included on the Factory Inspection Report – CIG 23 are checked in the factory evaluation, using the following content of the ISO 9001:2000 standard as reference:

- Records control – to meet Standard item 4.2.4;
- Production control – to meet Standard items 7.5.1 and 7.5.2;
- Purchased product check – to meet Standard item 7.4.3;
- Product identification and traceability - to meet Standard item 7.5.3;
- Product preservation – to meet Standard item 7.5.5;
- Monitoring and measuring devices control – to meet Standard item 7.6;
- Complaint handling – to meet Standard item 8.2.1;
- Product measuring and monitoring – to meet Standard item 8.2.4;
- Non-conforming product control – to meet Standard item 8.3;
- Corrective action – to meet Standard item 8.5.2.

5.3 – INITIAL TESTS

The initial tests are all those specified in the product standards, to be applied on ten (10) samples of the highest power model and ten (10) samples of the lowest power model of every family to be certified.

Complementary tests may be requested for intermediate power models of a same family, due to ballasts casing or lamp bulbs variations.

Tests shall be performed to check compliance with the Inmetro Rule (Portaria) 27/2000 requirements.

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5.4 – TEST LABORATORY USAGE

The tests must be performed at Laboratories authorized by an Accreditation Body signatory to a multilateral mutual recognition agreement such as ILAC, EA, or IAAC.

TÜV may accept tests by non-accredited 3rd party laboratories as long as they have been evaluated and approved by TÜV Rheinland based on ISO 17025 or on the attachment of the NIT DICOR 021. Tests performed by 1st party laboratories must be witnessed by a TÜV auditor or expert technician.

Test Reports from laboratories Accredited under the CB SCHEME system are accepted, if issued up to one year within the analysis/certification current year.

5.5 – SURVEILLANCE AUDITS

The surveillance audits must be performed at least every 12 months according to the description on this complement item 5.2,.

Factory inspection reports issued by IAF-accredited organizations that use the same methodology employed by TÜV as well as the registration through CIG 23, will be accepted.

5.6 – SURVEILLANCE TESTS

The surveillance tests must be performed after the grant of authorization for use of the conformity identification seal.

- Items to be tested:

Identifications;

Protection against electric shock;

Insulation resistance and dielectric strength after moisture treatment;

Flame and ignition resistance;

Cap temperature rise

Heat resistance;

Failure conditions;

Torsion resistance.

- Periodicity:

Must be performed at least every 12 months

- Test sampling:

At least one model of each family.

- Sample acquisition:

Preferably from the market.

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5.7 – ROUTINE TESTS

The manufacturer is responsible for conducting routine tests that must be performed on the complete product. Records on such tests must be kept for TÜV checks during follow-up.

- Lighting-on, under rated voltage and frequency, of 100% of the production;

5.8 – PERIODIC TESTS OF PRODUCT CHECKING

The following tests must be performed and recorded based at manufacturer's discretion:

- Lamp base torque (thread);
- Visual inspection;
- Insulation resistance and dielectric strength.

The manufacturer must keep result records for TÜV review.

These are the minimum requirements, is recommended to the manufacturer to perform from periodically other tests to check whether the product holds its characteristics. These tests may be determined by mutual agreement between manufacturer and TÜV.

6. CERTIFICATION IDENTIFICATION

The product must receive individual tags or other identification form according to figures 1 or 2 below.

The seal may not be used on visiting cards, and TÜV must formally approve the usage of the mark in advertising material, stationery or any other usage.



Figura 1



Figura 2

UC LOGO: to be used only for customers that still use it on their products and packages.

7. CHANGES INTRODUCED

Original version. This document is a English version of the CRC-029-ILM revision 00.