CABINET OF MINISTERS OF UKRAINE

RESOLUTION

Dated 27 December 2008 No. 1144

Kyiv

On Technical Regulations for Labeling of Lamps for Residential Use regarding the Efficiency of Electrical Power Consumption

Pursuant to Article 14 of Law of Ukraine “On Standards, Technical Regulations and Conformity Assessment Procedures,” the Cabinet of Ministers of Ukraine decrees:

1. to approve the Technical Regulations for Labeling of Lamps for Residential Use regarding the Efficiency of Electrical Power Consumption and the Schedule of Measures for its Implementation, attached herein below.

2. that the Ministry of Industrial Policy and National Agency on Efficient Consumption of Power Resources shall ensure implementation of the Technical Regulations, approved by this Resolution.

Prime-Minister of Ukraine
Yu. TYMOSHENKO

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APPROVED
by the Resolution of the Cabinet of Ministers of Ukraine
dated 27 December 2008 No.1144

TECHNICAL REGULATIONS
For Labeling of Lamps for Residential Use regarding the Efficiency of Electrical Power Consumption

General Provisions

1. These Technical Regulations specify the general requirements for labeling of lamps for residential use (hereinafter referred to as Lamp) regarding the efficiency of electrical power consumption, and the implementation of procedures for the assessment of conformity of the lamps with such requirements.

2. Conformity with the requirements of these Technical Regulations is mandatory for:

   central executive authorities that perform functions of technical regulation and monitoring;

   manufacturers or their authorized representatives or suppliers that distribute lamps on the market;

   designated authorities for conformity assessment (hereinafter referred to as Designated Authorities) that comply with the requirements of the Resolution of the Cabinet of Ministers of Ukraine dated 24 January 2007 No. 59 “On Approval of the Procedure of Appointment of Authorities for Assessment of the Conformity of Products, Processes and Services with the requirements of the Technical Regulations” (Oficijnyj Visnyk Ukrainy, 2007, No.6, p. 223).

3. In these Technical Regulations the terms are used in the following meaning:

   Manufacturer – a legal entity or individual – a subject of entrepreneurial activity responsible for the design, production, packaging, marking, and labeling of lamps, with no regard to whether these operations are performed by the entity and/or individual or by other entities and/or individuals on its behalf;

   Label – the printed information of a standard pattern (a sheet) that contains information about the main indicators of electrical power consumption efficiency and lamp power consumption characteristics;

   Electrical power consumption efficiency grade – level of power consumption efficiency of a lamp that defines its power efficiency during use;

   Supplier – a legal entity or individual – a subject of entrepreneurial activity that places lamps on the market;

   Consumer – a legal entity or individual that obtains and/or uses the lamps.

If a lighting product can be disassembled by a consumer without any tools, then, pursuant to the provisions of these Technical Regulations, a lamp means an element that emits light.

Other terms are used in their meaning, as specified in the Law of Ukraine “On certification of conformity,” “On standards, technical regulations and procedures for conformity assessment,” resolution of the Cabinet of Ministers of Ukraine, dated 7 October 2003, No. 1585, “On marking with national mark of conformity that is used in technical regulations” (Oficijnyj Visnyk Ukrainy, 2003, No. 41, p. 2175; 2007, No. 1, p. 31), and national standards for specific lamp categories.
4. These Technical Regulations cover lamps for residential use (including those that are not used exclusively in households) that are powered directly by the electrical power supply grid:

- filament lamp, including halogen;
- fluorescent lamps with embedded start-regulating device;
- fluorescent lamps with double-end cap;
- fluorescent single-end lamps (that work with external ballast).

5. These Technical Regulations do not cover the following lamps:

- luminous flux of which does not exceed 6,500 lm;
- power consumption which is less than 4 W;
- reflector lamps;
- lamps that are designated for use with other power sources (for example, a battery);
- lamps that are not designated for predominantly visible light emission (from 400 nm to 800 nm), such as ultraviolet, infrared, and color lamps;
- lamps that are placed in a device that is not designated for lighting, or in the event that they are supplied as a component of such device and are not offered for individual retail (for example, as spare parts).

6. Central executive authorities that perform functions of technical regulation and monitoring shall take appropriate measures for placement of lamps on the market of Ukraine only if they conform with these Technical Regulations.

7. Foreign-made lamps that are placed on the market of Ukraine shall conform with requirements of these Technical Regulations.

8. Procedure for certification of conformity of declared and specified information on the label regarding the luminous flux, power, lamp burn duration, as well as methods of their measurements, are specified pursuant to State Standard of Ukraine • • • • EN 50285 “Electric Lamps for Residential Use. Power Efficiency Measurement Methods.”

**Information about Electrical Power Consumption Efficiency**

9. A label shall be printed and attached on the outside of the individual packaging of a lamp. Nothing shall obscure or diminish its visibility. Label requirements are specified in Addendum 1.

10. In the event the lamp is offered for retail through a catalog or other published announcement or in any other kind of remote sale, these catalogs or other published announcements shall contain a copy of the label or information specified in item 2 of Addendum 1.

**Definition of a Grade of Electrical Power Consumption Efficiency**

11. Grade A includes the following lamps:
Fluorescent lamps without an embedded start-regulating device (the ones that require ballast and/or other regulating device for connecting to power grid), and in which $\bullet \leq 0,15 \cdot \sqrt{\bullet} + 0,0097 \cdot \bullet$;

Other lamps, in which $\bullet \leq 0,24 \cdot \sqrt{\bullet} + 0,0103 \cdot \bullet$,

where $\bullet$ is luminous flux of a lamp, lm;

$\bullet$ is consumption power of a lamp, W.

If a lamp cannot be considered to be of grade A, then the base power ($\bullet_B$) is calculated by the following formulas:

$\bullet_B = 0,88 \cdot \sqrt{\bullet} + 0,049 \cdot \bullet$, when $\bullet > 34$ lm;

$\bullet_B = 0,2 \cdot \bullet$, when $\bullet \leq 34$ lm,

where $\bullet$ is luminous flux of a lamp, lm.

In such case, index of power consumption efficiency ($\bullet_1$) is established:

$$\bullet_1 = \frac{\bullet}{\bullet_B}$$

where $\bullet$ is consumption capacity of a lamp, W.

$\bullet_B$ is base capacity of a lamp, W.

Depending on the index of consumption efficiency ($\bullet_1$), a grade of electrical power consumption efficiency is established:

<table>
<thead>
<tr>
<th>Grade of Electrical Power Consumption Efficiency</th>
<th>Index of Electrical Power Consumption Efficiency ($\bullet_1$), percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>B</td>
<td>$\bullet_1 &lt; 60$</td>
</tr>
<tr>
<td>C</td>
<td>$60 \leq \bullet_1 &lt; 80$</td>
</tr>
<tr>
<td>D</td>
<td>$80 \leq \bullet_1 &lt; 95$</td>
</tr>
<tr>
<td>E</td>
<td>$95 \leq \bullet_1 &lt; 110$</td>
</tr>
<tr>
<td>F</td>
<td>$110 \leq \bullet_1 &lt; 130$</td>
</tr>
<tr>
<td>G</td>
<td>$\bullet_1 \geq 130$</td>
</tr>
</tbody>
</table>

Technical Documentation
12. Technical documentation shall be sufficient to assess the accuracy of the information specified on the label, cover all stages of lamp design and production, and enable the assessment of its conformity with the requirements of these Technical Regulations. Documentation is written in the state language, or another language if it is approved by a designated authority.

Volume and content of technical documentation shall conform with the Technical regulations for modes of conformity assessment and requirements regarding the marking with a national mark of conformity, which are used in technical regulations approved by the Resolution of the Cabinet of Ministers of Ukraine, dated 7 October 2003, No. 1585, and the State Standard of Ukraine ISO/IEC 17050-2:2006.

The technical documentation shall state:

- full name and address of the manufacturer;
- mark of origin, which may have the form of a trademark, or a mark of a manufacturer or its authorized representative or supplier;
- general description of a lamp, sufficient for its clear identification;
- information (images, if needed) about main construction characteristics of this type, in particular about those elements that significantly influence electrical power consumption;
- confirmation of compliance with harmonized standards (test protocols);
- user manual (if applicable);
- conclusion of a designated authority in the event of implementation of the procedure specified in item 14 or 15 of these Technical Regulations.

Procedure of Conformity Assessment

13. The Manufacturer or its authorized representative or supplier that place lamps on the market, shall conduct a procedure of assessment of conformity of the lamps with the requirements of these Technical Regulations, applying one of the following modules of conformity assessment and requirements for marking with a national mark of conformity, which are used in technical regulations, approved by the Resolution of the Cabinet of Ministers of Ukraine, dated 7 October 2003, No. 1585: A – internal control of production; •• – internal control of production with inspection of products; • – inspection of a type.

The Manufacturer or its authorized representative or supplier that place lamps on the market may apply more complex modules of conformity assessment.

14. The Manufacturer or its authorized representative-resident conducts assessment of conformity of lamps with the requirements of these Technical Regulations with application of modules A or Aa.

The Manufacturer is obliged to assess those lamp characteristics that are instrumental pursuant to these Technical Regulations.

During the assessment of information on a label, all conditions specified for use of lamps shall be considered. For lamps that can be used in several regimes a grade of electrical power
consumption efficiency shall be determined in all possible operational regimes provided by the manufacturer.

The Manufacturer puts a national mark of conformity on each label in the designated space. Lamp conformity with requirements of these Technical Regulations shall be confirmed by a declaration of conformity, compiled by the manufacturer or its authorized representative in a form pursuant to Addendum 2.

In order to register a Declaration of conformity, the technical documentation that was certified by the manufacturer shall comply with the requirements of item 12 of these Technical Regulations.

The Manufacturer or its authorized representative shall:

keep a copy of the Declaration of conformity together with the technical documentation for no less than three years since the last issue of the specific type of lamp, and provide them at the request of central executive authorities that perform functions of technical regulation and monitoring;

take all necessary measures to ensure that the lamps that conform with technical documentation and these Technical Regulations are placed on the market.

15. Assessment of conformity of lamps with involvement of a designated authority is conducted when:

The Manufacturer or its authorized representative-resident have not applied harmonized standards to the specific category of lamps that were specified in item 4 of these Technical Regulations, or applied them partially, he can use a procedure of conformity assessment with application of module B combined with other modules, pursuant to the Technical Regulations of modules of conformity assessment and requirements for marking with a national mark of conformity that are used in technical regulations, approved by the Resolution of the Cabinet of Ministers of Ukraine, dated 7 October 2003, No. 1585;

A supplier-resident that is not an authorized representative of the manufacturer-non-resident performs placement of lamps on the market of Ukraine, assessment of conformity with requirements of these Technical Regulations can be performed with application of module B for each shipment of lamps. The manufacturer-non-resident places a national mark of conformity on each lamp label in a designated space at the request of a supplier-resident, or the supplier does it itself.

Upon completion of conformity assessment of lamps, a designated authority issues the appropriate documentation (test protocol, etc.) to the manufacturer or its authorized representative or supplier.

In the event the manufacturer or its authorized representative are non-residents, the supplier-resident takes upon itself the responsibility regarding the keeping and provision of declarations of conformity and technical documentation to a central executive authority that performs functions of technical regulation and monitoring.

16. The Manufacturer and its authorized representative or supplier:
shall take all necessary measures to ensure that lamps that conform with technical documentation and these Technical Regulations are placed on the market;

shall provide a designated authority with an application, copies of declaration of conformity and technical documentation.

17. Placement of lamps without a national mark of conformity on their labels on the market is prohibited.

Placement of any mark that resembles in shape the national mark of conformity on labels is prohibited.

In the event of inappropriate placement of a national mark of conformity on a lamp label, measures shall be taken to limit or prohibit placement of such products on the market, or recall them from the market pursuant to the laws of Ukraine.

18. A decision concerning the limiting of placement of lamps on the market shall be justified. Information about the decision, as well as the terms for elimination of violations, shall be sent to the interested party.

Addendum 1
to the Technical Regulations

LABEL REQUIREMENTS

1. Label is chosen from the provided images. If the label is not printed on the packaging but is attached separately, a color version shall be used. In the event a bi-color version is used, print and background can be of any color that ensures legibility of caption on the label.
2. Information that is provided on a lamp label:

a grade of electrical power consumption efficiency specified pursuant to item 13 or 14 of the Technical Regulations for labeling of lamps for residential use regarding electrical power consumption efficiency. A letter corresponding to the grade of electrical power consumption efficiency of a lamp is located at the same level as a corresponding arrow;

luminous flux in lumens that is measured in accordance with test methods, as specified in harmonized standards for a specific lamp category;

consumption capacity of a lamp in watts that is measured in accordance with test methods as specified in harmonized standards for a specific lamp category;

average lamp burn duration in hours that is measured in accordance with test methods as specified in harmonized standards for a specific lamp category. This information does not have to be provided on a label if there is no other data on lamp burn duration on the packaging.

3. If the information that is provided in paragraphs three-five of item 2 of this Addendum is placed in any other space on the packaging, it may not be placed on the label or the block that contains it. In such event the label is chosen from the following images:
4. Images provided in this item specify criteria for label printing.

The label shall be placed at a distance of no less than 5 mm from the edge of the packaging. If the length of the packaging side is not enough for label placement, or if the label takes up more than 50 percent of the surface area of the longest side of the packaging, it may be reduced. Label reduction shall not exceed 40 percent (lengthwise) of its standard size. If the size of the packaging is smaller than that of the reduced label, then it shall be attached to the lamp or packaging. In the event a standard size label is displayed with a lamp (for example, it is attached to a shelf where the lamp stands), the label need not be printed on the packaging.

For printing of a color label, blue, bright-red, yellow and black colors shall be used.
The color of any label element is comprised of a combination of the specified primary colors in percentage composition of each of them.

A combination of four symbols (numbers and letter “X”) is used to indicate the color of an element, which shows a percentage composition of colors in the following sequence: blue, bright-red, yellow, black.

For example: an indicator of a label element color as “07X0” indicates that it consists of 0 percent of blue color, 70 percent of bright-red color, 100 percent of yellow color, and 0 percent of black color.

The color of arrows that indicate grades of electrical power consumption efficiency of lamps:

- **A - X0X0:** 100 percent – blue, 0 – bright-red, 100 - yellow, 0 percent - black;
- **B - 70X0:** 70 percent - blue, 0 – bright-red, 100 - yellow, 0 percent - black;
- **C - 30X0:** 30 percent - blue, 0 – bright-red, 100 – yellow, 0 percent - black;
- **D - 00X0:** 0 percent - blue, 0 – bright-red, 100 - yellow, 0 percent - black;
- **E - 03X0:** 0 percent - blue, 30 – bright-red, 100 - yellow, 0 percent - black;
- **F - 07X0:** 0 percent - blue, 70 – bright-red, 100 – yellow, 0 percent - black;
- **G - 0XX0:** 0 percent - blue, 100 – bright-red, 100 – yellow, 0 percent - black.

Color of contour lines:

- **X070:** 100 percent - blue, 0 – bright-red, 70 - yellow, 0 percent - black.

Text color is black.

Background is white.
Addendum 2

to the Technical Regulations

DECLARATION
of Conformity with Requirements of the Technical Regulations for Labeling of Lamps for Residential Use regarding the Efficiency of Electrical Power Consumption

_____________________________________________________________________________________
(full name of manufacturer or its authorized representative or supplier,

location, code pursuant to EDRPOU/National State Registry of Enterprises and Organizations of Ukraine)

represented by ________________________________________________

(title, first name, surname name, last name)

certifies that ______________________________________________________

(full name of products, type, brand)

that is manufactured pursuant to ______________________________________

(name and marking of documentation)

and conforms with the Technical Regulations for labeling of Lamps for Residential Use regarding the Efficiency of Electrical Power Consumption, as well as ____________________________________________

(marking and name of normative documents that certify conformity of products)

with the Technical Regulations if they are used voluntarily)

procedure of conformity assessment that is performed pursuant to the Technical Regulations.

Certificate of Conformity* ____________________________________________

(number of Certificate of Conformity, its registration date, validity, name and location of the designated authority that assesses conformity)

Declaration is composed with full responsibility ________________________

(full name of manufacturer or its authorized representative or supplier)

________________________________________

(title of the person that composed the Declaration) (signature) (initials and last name)

Seal ___ ______________ 20__

Place for indication of registration of Declaration of Conformity

* Is used if conformity assessment is performed by a designated authority.
## SCHEDULE
of Measures for Implementation of the Technical Regulations for Labeling of Lamps for Residential Use regarding the Efficiency of Electrical Power Consumption

<table>
<thead>
<tr>
<th>Measure</th>
<th>Who is responsible for implementation</th>
<th>Period of Performance</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Assignment of organizations that are responsible for the implementation of the Technical Regulations for Labeling of Lamps for Residential Use regarding the Efficiency of Electrical Power Consumption (hereinafter referred to as the Technical Regulations)</td>
<td>The Ministry of Industrial Policy, NAER</td>
<td>2009</td>
</tr>
<tr>
<td>2. Assignment of authorities for the performance of assessment of conformity of lamps for residential use with requirements of the Technical Regulations</td>
<td>The State Committee of Ukraine for Technical Regulation and Consumer Policy (Derzhspozhyvstandart)</td>
<td>- &quot; -</td>
</tr>
<tr>
<td>3. Establishment of Consulting and Technical Center for implementation of the Technical Regulations</td>
<td>The Ministry of Industrial Policy, Derzhspozhyvstandart, NAER</td>
<td>- &quot; -</td>
</tr>
<tr>
<td>4. Conforming existing normative-legal acts with the Technical Regulations, if necessary</td>
<td>Derzhspozhyvstandart, The Ministry of Industrial Policy, NAER</td>
<td>permanently</td>
</tr>
<tr>
<td>5. Popularization of the application of the Technical Regulations by means of mass media, and the administration of seminars and conferences</td>
<td>The Ministry of Industrial Policy, NAER, Derzhspozhyvstandart</td>
<td>2009 – first six months of 2010</td>
</tr>
<tr>
<td>6. Preparation of domestic enterprises-manufacturers of lamps for residential use for the implementation of the Technical Regulations</td>
<td>The Ministry of Industrial Policy, NAER</td>
<td>- &quot; -</td>
</tr>
<tr>
<td>7. Facilitation of voluntary implementation of procedures of assessment of conformity with the Technical Regulations by the enterprises</td>
<td>The Ministry of Industrial Policy, NAER, Derzhspozhyvstandart</td>
<td>- &quot; -</td>
</tr>
<tr>
<td>8. Correction of the Technical Regulations based on</td>
<td>- &quot; -</td>
<td>- &quot; -</td>
</tr>
</tbody>
</table>

APPROVED by the Resolution of the Cabinet of Ministers of Ukraine dated 27 December 2008, No. 1144
| the results of voluntary implementation (if necessary) | 9. Obligatory implementation of the Technical Regulations for all manufacturers and suppliers of lamps for residential use | NAER  
The Ministry of Industrial Policy  
Derzhspozhyvstandart | From 1 July 2010 |

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