
– Anhang zur Energieverbrauchskennzeichnung –

Hinweis: Bitte beachten Sie, daß der angehängte Text nur in Englisch verfaßt ist.

EN: Information on the coming EU Lighting Regulations – Ecodesign and Energy Labelling – Compilation * of the Federal Environment Agency (UBA), Germany

The EU Commission's drafts of 6 November 2015

Comments by Netherlands as of 29 January 2016
– Annex on Energy Labelling –


Les projets de la Commission Européenne du 6 novembre 2015

Commentaires des Pays-Bas du 29 janvier 2016
– Annexe sur l’étiquetage énergétique –

Indication: Veuillez noter que le présent texte n’est disponible qu’en anglais.

* http://www.eup-network.de/de/eup-netzwerk-deutschland/offenes-forum-eu-regelungen-beleuchtung/dokumente/texte/
Es folgt ein unveränderter Originaltext.

EN: The following is an unmodified original text.

FR: Ce qui suit est un texte original.
Brussels, XXX
[…](2015) XXX draft

PRELIMINARY DRAFT

COMMISSION DELEGATED REGULATION (EU) …/…

of XXX

supplementing Directive 2010/30/EU of the European Parliament and of the Council with regard to energy labelling of lighting products

(Text with EEA relevance)
COMMISSION DELEGATED REGULATION (EU) …/...

of XXX

supplementing Directive 2010/30/EU of the European Parliament and of the Council with regard to energy labelling of lighting products

(Text with EEA relevance)

THE EUROPEAN COMMISSION,

Having regard to the Treaty on the Functioning of the European Union,

Having regard to Directive 2010/30/EU of the European Parliament and of the Council of 19 May 2010 on the indication by labelling and standard product information of the consumption of energy and other resources by energy-related products (1), and in particular Article 10 thereof,

Whereas:

(1) Directive 2010/30/EU requires the Commission to adopt delegated acts as regards the labelling of energy-related products having significant potential for energy savings and a wide disparity in performance levels with equivalent functionality.

(2) Provisions on the energy labelling of electrical lamps and luminaires were established by Commission Delegated Regulation (EU) No 874/2012 (2).

(3) The Commission has carried out a preparatory study to analyse the technical, environmental and economic aspects of lighting products and components. The study has been developed together with stakeholders and interested parties from the Union and third countries, and the results have been made publicly available.

(4) This preparatory study builds upon and reviews the regulatory requirements introduced through Commission Delegated Regulation 874/2012. The results of this study show the benefit of continued and improved requirements, adapted in stringency to the technological progress of lighting products and components.

(5) Commission Delegated Regulation 874/2012 should be repealed and new provisions should be set out in this Regulation in order to ensure that the energy label provides dynamic incentives for suppliers further to improve the energy efficiency of electrical lamps and to speed up the market shift towards energy-efficient technologies.

(6) The exclusion of certain lighting products and lighting product components specified to operate exclusively in well-defined applications is necessary to minimise unintended negative consequences, e.g. to health and safety, and protect cultural heritages, such as pieces of art. In this context, pieces of art are exceptional objects of great cultural value, which are only produced in limited numbers and not aimed at the mass market.

(7) The information provided on the label should be obtained through reliable reliable, accurate and reproducible measurement methods, which take into account the

---

2 OJ L 251, 26.9.2012, p.1
recognised state-of-the-art measurement methods including, where available, harmonised standards adopted by the European standardisation bodies, as listed in Annex I to Directive 98/34/EC of the European Parliament and of the Council (3).

(8) This Regulation should specify a uniform design and content for the label for lighting products and lighting product components.

(9) In addition, this Regulation should specify requirements for the technical documentation for the fiche of lighting products and lighting product components.

(10) Moreover, this Regulation should specify requirements for the information to be provided for any form of distance selling, advertisements and technical promotional materials of lighting products and lighting product components.

(11) A review of this Regulation should assess the appropriateness and effectiveness of its provisions in achieving its goals. The timing of the review should be sufficient for all provisions to be implemented and show an effect on the market. In case of unforeseen technological developments, an earlier review covering the total or only part of this Regulation should be allowed to happen.

(12) A common verification procedure for compliance with the requirements set out in this Regulation for all Member States' authorities, including the applicable tolerance, gives manufacturers of lighting products and components the necessary legal certainty. The mandatory information sharing on verification testing, including the model of the product tested and the results of the procedure, will minimise unnecessary double testing while reducing the number of non-compliant models on the Union's market.

(13) The deference of this Regulation's application to 1 September 2018 gives manufacturers and importers of lighting products and components the necessary legal certainty concerning future requirements, while allowing old requirements from the Commission Delegated Regulation repealed through this act to stay in force until the technological development of lighting products and components allows for the replacement of these old requirements.

HAS ADOPTED THIS REGULATION:

Article 1

Subject matter and scope

This Regulation establishes requirements for labelling of and providing supplementary product information on lighting products and lighting product components.

This Regulation shall not apply to lighting products and lighting product components, which are either in the scope of Directive 2014/34/EU (4) or specified to operate exclusively in:

(a) military or civil defence equipment or installations;
(b) nuclear installations;
(c) means of transport for persons or goods other than those operated by a stationary motor;
(d) road, railway, marine or air traffic signalling;
(e) medical devices;

(f) laboratory equipment;
(g) electronic displays;
(h) pieces of art;
(i) environments with ambient temperatures below -20°C or above 50°C.

Article 2
Definitions
In addition to the definitions laid down in Article 2 of Directive 2010/30/EU, the following definitions shall apply for the purposes of this Regulation:

1. 'luminous flux' (Φ) is measured in lm and means the quantity derived from radiant flux (radiant power) by evaluating the electromagnetic radiation in accordance with the spectral sensitivity of the human eye, and refers to the initial luminous flux of the lighting product after a short operating period if not specified differently.

2. 'luminous intensity' is measured in cd and means the quotient of the luminous flux leaving the source and propagated in the element of solid angle containing the given direction, by the element of solid angle.

3. 'chromaticity' means the property of a colour stimulus defined by its chromaticity coordinates (x and y), or by its dominant or complementary wavelength and purity taken together.

4. 'colour rendering' is measured with the colour rendering index (CRI) in Ra and means the effect of an illuminant on the colour appearance of objects by conscious or subconscious comparison with their colour appearance under a reference illuminant.

5. 'nominal value' means the value of a quantity used to designate and identify a product.

6. 'rated value' means the value of a quantity used for specification purposes, established for a specified set of operating conditions of a product, and all requirements are set in rated values if not specified otherwise.

7. 'final owner' means the entity owning a product during the use phase of its life cycle, or any other entity acting on its behalf.

8. 'light' means electromagnetic radiation between 380 nm and 780 nm wavelength and the chromaticity coordinates x and y in the range:
   - 0.2 < x < 0.6; and
   - -2.3172 x² + 2.3653 x - 0.28 < y < 2.3172 x² + 2.3653 x - 0.1.

9. 'lighting product' means a configuration of one or more lighting product components that can be operated, without any further modification, by applying electricity with a nominal voltage of 230V (±10%), alternating current and a frequency of 50Hz, and that configuration has the primary function of emitting electromagnetic radiation with all of the following characteristics:
   (a) a light emission with a rated luminous flux of 60lm ≤ Φ ≤ 100klm;
   (b) a maximum luminous flux of 1klm/mm² of the light-emitting surface's orthographic projection viewed from the direction with the highest luminous intensity;
(c) a colour rendering index of CRI ≥ 0Ra.

(10) ‘lighting product component/part’ means a component/part that is intended to be used in a lighting product and intended to be marketed to the final owner of a lighting product or a part thereof, and has the function to transform electrical energy into light (including, but not limited to, lamps and light emitting diodes).

(10)(11) ‘equivalent model’ means XX

Article 3
Responsibilities of suppliers
Suppliers of lighting products or lighting product components/parts placed on the market shall ensure for each lighting product or lighting product component/part that:

(a) a product fiche, as set out in Annex IV, is made available;

(b) the technical documentation as set out in Annex V is made available on request to the authorities of the Member States and to the Commission;

(c) any advertisement, formal price quote or tender offer disclosing energy-related or price information states the energy efficiency class prominently as the first information;

(d) any technical promotional material, which describes specific technical parameters states the energy efficiency class prominently as the first information;

(e) a label produced in the format and containing information as set out in Annex III (1) and is physically provided with each lighting product or lighting part placed or printed on, or attached to, the outside of the individual packaging or model in a matter as specified in in Annex III point 2.1(2), and the packaging displays the nominal power of the lamp outside the label;

(f) an electronic label in the format and containing the information set out in Annex IV is made available to dealers for each lighting product or lighting product component/part model placed on the market.

Article 4
Responsibilities of dealers
Dealers of electrical lighting products or lighting product components/parts shall ensure that:

(a) each lighting product or lighting part at the point of sale is presented as specified in Annex III point 2.2;

(b) each model offered for sale, hire or hire-purchase where the final owner cannot be expected to see the product displayed is marketed with the information to be provided by suppliers in accordance with Annex VIII prominently as the first information; where the offer is made through the internet and an electronic label has been made available in accordance with Article 3(f) the provisions in Annex VII shall apply instead;

(c) any advertisement, formal price quote or tender offer disclosing energy-related or price information for a specific model states the energy efficiency class prominently as the first information.
any technical promotional material concerning a specific model which describes its specific technical parameters states the energy efficiency class of that model prominently as the first information.

Article 5
Verification procedure for market surveillance purposes

Member States shall apply the verification procedure described in Annex VIII to this Regulation when assessing the conformity of the declared energy efficiency class and energy consumption.

Article 6
Repeal

Commission Delegated Regulation (EU) No 874/2012 shall be repealed. References to Commission Delegated Regulation 874/2012 shall be construed as references to this Regulation.

Article 7
Review

The Commission shall review this Regulation and shall present the results to the Energy label Consultation Forum no later than 1 September 2025.

Article 8
Entry into force

This Regulation shall enter into force on the twentieth day following that of its publication in the Official Journal of the European Union.

It shall apply from 1 September 2018.

This Regulation shall be binding in its entirety and directly applicable in all Member States.

Done at Brussels,

For the Commission
The President

[...]
ANNEX I
Definitions for the purposes of Annexes II to VIII

For the purposes of Annexes II to VIII, the following definitions shall apply:

(1) 'display mechanism' means any screen, including tactile screen, or other visual technology used for displaying internet content to users.

(2) 'nested display' means visual interface where an image or data set is accessed by a mouse click, mouse roll-over or tactile screen expansion of another image or data set.

(3) 'tactile screen' means a screen responding to touch, such as that of a tablet computer, slate computer or a smartphone.

(4) 'alternative text' means text provided as an alternative to a graphic allowing information to be presented in non-graphical form where display devices cannot render the graphic or as an aid to accessibility such as input to voice synthesis applications.
ANNEX II

Energy efficiency classes

The energy efficiency class of lighting products and lighting product components parts shall be determined on the basis of their rated luminous flux and rated power consumption. The lower threshold values for each respective energy efficiency class are presented in Table 1:

Table 1
Lower energy efficiency threshold values of energy efficiency classes

<table>
<thead>
<tr>
<th>Energy efficiency class</th>
<th>lm/W</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>210</td>
</tr>
<tr>
<td>B</td>
<td>185</td>
</tr>
<tr>
<td>C</td>
<td>160</td>
</tr>
<tr>
<td>D</td>
<td>135</td>
</tr>
<tr>
<td>E</td>
<td>110</td>
</tr>
<tr>
<td>F</td>
<td>85</td>
</tr>
<tr>
<td>G</td>
<td>0</td>
</tr>
</tbody>
</table>
ANNEX III

Label

1. **LABEL DESIGN**
   The following label design specifications shall apply:
   1. The label shall be as in the following illustration:

   ![Rough example of label for illustration purposes only.]

   2. The following information shall be included on the label:
      I. supplier’s name or trade mark;
      II. supplier’s model identifier, meaning the code, usually alphanumeric, which distinguishes a specific lamp model from other models with the same trade mark or supplier’s name;
      III. the energy efficiency class determined in accordance with Annex II; the head of the arrow containing the energy efficiency class of the lamp shall be placed at the same height as the head of the arrow of the relevant energy efficiency class.
3. The design specifications apply to a label of standard size. If the label is printed in a different format, its content must nevertheless remain proportionate to the specifications below:

1. The label standard size shall be 72mm wide and 136mm high.
2. If the label would cover more than 50% of the largest flat packaging surface, the size can be reduced up to a minimum size of 36mm wide and 68mm high. All specific size specifications should be reduced in scale.
3. The background shall be white.
4. The colours shall be CMYK — cyan, magenta, yellow and black, following this example: 00-70-X-00: 0% cyan, 70% magenta, 100% yellow, 0% black.
5. The label shall meet all the following requirements in its standard size:
   - **Border stroke**: 4 pt — colour: Cyan 100% — round corners: 1 mm.
   - **EU logo** — colours: X-80-00-00 and 00-00-X-00.
   - **Energy logo**: colour: X-00-00-00. Pictogram as depicted: EU logo and energy logo (combined): width: 60mm, height: 18mm.
   - **Sub-logos border**: 2 pt — colour: Cyan 100% — length: 30mm.
   - **A-G scale**
   - **Arrow**: height: 10mm, gap: 1.6mm — colours:
     - Highest class: X-00-X-00,
     - Second class: 70-00-X-00,
     - Third class: 30-00-X-00,
     - Fourth class: 00-00-X-00,
     - Fifth class: 00-30-X-00,
     - Sixth class: 00-70-X-00,
     - Last class: 00-X-X-00.
   - **Text**: Calibri bold 15 pt, capitals and white.
   - **Energy efficiency class**
   - **Arrow**: width: 22.4mm, height: 14mm, 100% black;
   - **Text**: Calibri bold 40 pt, capitals and white.
   - **Supplier’s name or trade mark**
   - **Supplier’s model identifier**: The suppliers’ name or trade mark and the model identifier shall fit in a space of 60 x 14mm.

2. **LABEL APPLICATION RULES**

1. The following label application rules shall apply to suppliers:
   1. The label shall be placed on the side of the packaging that the final owner is intended to see first in a physical store. Only if the label would significantly distort or complicated the packaging (such as in some blister packages), the label can be placed on another side.
(2) If the packaging is too small to accommodate the minimum size label, a standard size label shall be attached or placed in close proximity to the packaging, making it clear which product the label refers to provided in or with the packaging.

(3) If the label cannot be placed on the side of the packaging that the final owner is intended to see first in a physical store as described in point 1, or if the packaging is too small to accommodate the minimum size label as described in point 2, a coloured arrow designating the energy efficiency class shall be placed on the side of the packaging that the final owner is intended to see first in a physical store. The arrow shall follow the relevant design specifications as described in Annex III, point 1 (3)(5), and have a minimum size of 33.4 mm width and 21 mm height.

(4) Nothing else printed on the individual packaging shall confuse its meaning or reduce its visibility, except if the model has been awarded an ‘EU ecolabel’. In this case a copy of the EU ecolabel may be added.

2. The following label application rules shall apply to dealers:

(1) If a model specimen is presented in a physical store, a standard size label shall be attached or placed in close proximity to the specimen, making it clear which product the label refers to.

(2) Nothing else placed or printed on, or attached to, the individual packaging or the model shall obscure the label, confuse its meaning or reduce its visibility, except if the model has been awarded an ‘EU ecolabel’. In this case a copy of the EU ecolabel may be added.
ANNEX IV
Product fiche

The fiche shall contain the information specified for the label below. Where product brochures are not supplied, the label information provided according Regulation (EU) XX/XX <<Ecodesign Regulation>> Annex II, point 3.3.1 can also be considered to be the fiche.

(a) the energy efficiency class;
(b) rated luminous flux;
(c) the rated power consumption;
(d) the nominal life time in operating hours;
(e) the colour temperature in K;
(f) the number of switching cycles before failure;
(g) the CRI;
(h) the warm-up time in $s$ rounded to the first decimal place;
(i) if it contains mercury, the mercury content in $mg$ rounded to the first decimal place;
(j) the outer dimensions in $mm$ (length and largest diameter);
(k) the power factor;
(l) the lumen deterioration;
(m) the failure rate.
ANNEX V

Technical documentation

The technical documentation referred to in Article 3(1) shall include:

(a) the name and address of the supplier;
(b) a general description of the model, sufficient for it to be unequivocally and easily identified;
(c) where appropriate, the references of the harmonised standards applied;
(d) where appropriate, the other technical standards and specifications used;
(e) the identification and signature of the person empowered to bind the supplier;
(f) the technical parameters for determining energy consumption and energy efficiency;
(g) the rated luminous flux and rated power consumption, including test reports supporting these values;
(h) the energy efficiency class determined on the basis of their rated luminous flux and rated power consumption.

The information contained in this technical documentation may be merged with the technical documentation provided in accordance with measures under Directive 2009/125/EC (5).

---

ANNEX VI
Information to be provided in cases where final owners cannot be expected to see the product displayed

1. The information referred to in Article 4(a) shall be provided in the following order:
   (a) the energy efficiency class as defined in Annex II;
   (b) the weighted energy consumption in W rounded to one significant digit behind the decimal
       marked luminous flux in lm.

2. When other information contained in the product fiche is also provided, it shall be in the form and order specified in Annex IV.

3. The size and font in which all the information referred to in this Annex is printed or shown shall be legible.
ANNEX VII

Information to be provided in the case of sale, hire or hire-purchase through the internet

1. The appropriate label made available by suppliers in accordance with Article 3(f) shall be shown on the display mechanism in proximity to the price of the product. The size shall be such that the label is clearly visible and legible and shall be proportionate to the size specified in Annex III. The label may be displayed using a nested display, in which case the image used for accessing the label shall comply with the specifications laid down in point 2 of this Annex. If a nested display is applied, the label shall appear on the first mouse click, mouse roll-over or tactile screen expansion on the image.

2. The image used for accessing the label in the case of nested display shall:
   (a) be an arrow in the colour corresponding to the energy efficiency class of the product on the label;
   (b) indicate on the arrow the energy efficiency class of the product in white in a font size equivalent to that of the price; and
   (c) have one of the following two formats:

3. In the case of nested display, the sequence of display of the label shall be as follows:
   (a) the image referred to in point 2 of this Annex shall be shown on the display mechanism in proximity to the price of the product;
   (b) the image shall link to the label;
   (c) the label shall be displayed after a mouse click, mouse roll-over or tactile screen expansion on the image;
   (d) the label shall be displayed by pop up, new tab, new page or inset screen display;
   (e) for magnification of the label on tactile screens, the device conventions for tactile magnification shall apply;
   (f) the label shall cease to be displayed by means of a close option or other standard closing mechanism;
   (g) the alternative text for the graphic, to be displayed on failure to display the label, shall be the energy efficiency class of the product in a font size equivalent to that of the price.
ANNEX VIII
Verification procedure

In the context of verifying compliance of a product model with the requirements laid down in this Regulation, the authorities of the Member States shall apply the following procedure for the purposes of the requirements referred to in this Annex:

(1) The Member State authorities shall verify a sample batch of a minimum of 10 lighting products or lighting product components\textit{parts} of the same model from the same supplier, where possible obtained in equal proportion from four randomly selected sources.

(2) The model shall be considered to comply with the applicable requirements laid down in Article 3 and 4 if the model's arithmetical mean of the measured values of the relevant parameter power consumption and of the luminous flux and the values calculated from these measurement(s) are within the respective tolerance of 10\% of the declared energy efficiency class and the values in the technical documentation according to Annex V, unless the deviation is unfavourable for the supplier and where appropriate the values used to establish those values that are calculated.

(3) If the results referred to in point 2 are not achieved, the model and all equivalent models shall be considered not to comply with this Regulation.

(4) If Member State authorities find evidence that a model is designed in a way so that its performance is altered during a verification process with the objective to improve its energy efficiency class, this model and all equivalent models shall be considered not to comply with this Regulation regardless of the results referred to in points 2.

(5) Member State authorities shall use reliable, accurate and reproducible measurement procedures, which take into account the generally recognised state-of-the-art measurement methods, including methods set out in documents whose reference numbers have been published for that purpose in the \textit{Official Journal of the European Union}. No other tolerances, such as those set out in harmonised standards or in any other measurement method, shall be applied.

(6) The Member State authorities shall provide all relevant information to the authorities of the other Member States and to the Commission. They shall do so within one month after the model is considered to comply with the requirements according to point 2, or within one month of the decision being taken on either the compliance or the non-compliance of the model according to points 3 and 4.