

## Ecodesign requirements and energy labelling of light sources - (EU) 2019/2020 & (EU) 2019/2015

Regulation (EU) 2019/2020 (ecodesign), (EU) 2019/2015 (energy labelling) and (EU) 2021/340 define requirements which are applicable to importer, supplier, and manufacturers of light sources and containing products. This document shall help members of EUnited Cleaning identify if their products are covered by any of the two regulations.

### Scope:

For members of EUnited Cleaning it is important to notice, that the scope also covers light sources which are placed on the market within a containing product. If manufacturers do not want to fulfill the obligations of light sources manufacturers, they have to take care that the light sources build in their appliance was already placed on the European market by their supplier.

The definition of light sources given by both regulations centers around “white light” as it is demonstrated by the definition and by picture 1:

#### - Light source:

‘light source’ means an electrically operated product intended to emit, or, in the case of a non-incandescent light source, intended to be possibly tuned to emit, light, or both, with all of the following optical characteristics:

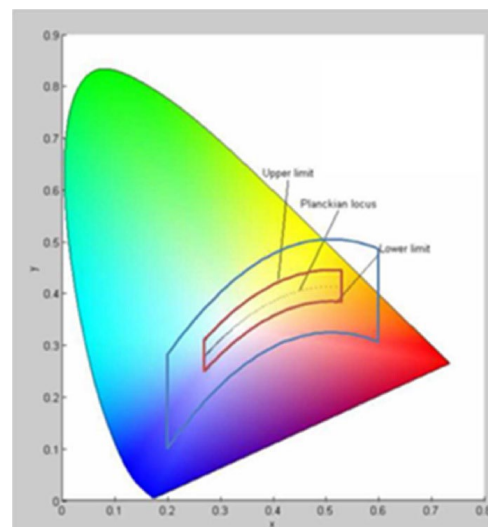
(a) chromaticity coordinates  $x$  and  $y$  in the range:  $0,270 < x < 0,530$ ; and-  $2,3172 x^2 + 2,3653x - 0,2199 < y < - 2,3172 x^2 + 2,3653x - 0,1595$

(b) a luminous flux  $< 500$  lumen per  $mm^2$  of projected light-emitting surface area as defined in Annex I;

(c) a luminous flux between 60 and 82 000 lumen

(d) a color rendering index (CRI)  $> 0$

using incandescence, fluorescence, high-intensity discharge, inorganic light emitting diodes (LED) or organic light emitting diodes (OLED), or their combinations as lighting technology, and that can be verified as a light source according to the procedure of Annex IX.



High-pressure sodium (HPS) light sources that do not fulfil condition (a) are considered light sources for the purposes of this Regulation.

The definition of a containing product is given by both regulations as:

- **'containing product':**

'containing product' means a product containing one or more **light sources**, or separate control gears, or both, including, but not limited to, luminaires that can be taken apart to allow separate verification of the contained light source(s), household appliances containing light source(s), furniture (shelves, mirrors, display cabinets) containing light source(s).';

## **Obligations:**

Only the requirements of manufacturers, importers, or authorized representatives of containing products are listed in this document.

- **(EU) 2019/2020**

The ecodesign regulation requests the following of manufacturers, importers or authorized representatives of containing products

(a) Manufacturers, importers or authorized representatives of containing products shall ensure that light sources and separate control gears can be replaced with the use of common available tools and without permanent damage to the containing product, unless a technical justification related to the functionality of the containing product is provided in the technical documentation explaining why the replacement of light sources and separate control gear is not appropriate. The technical documentation shall also provide instructions on how light sources and separate control gears can be removed without being permanently damaged for verification purposes by market surveillance authorities.

(b) Manufacturers, importers or authorized representatives of containing products shall provide information about the replaceability or non-replaceability of light sources and control gears by end-users or qualified persons without permanent damage to the containing product. Such information shall be available on a free-access website. For products sold directly to end-users, this information shall be on the packaging, at least in the form of a pictogram, and in the user instructions.

(c) Manufacturers, importers or authorized representatives of containing products shall ensure that light sources and separate control gears can be dismantled from containing products at end of life. Dismantling instructions shall be available on a free access website.

- **(EU) 2019/2015**

The energy labelling regulation requests the following of manufacturers, importers or authorized representatives of containing products:

(a) provide information on the contained light source(s), as specified in [point 2 of Annex V](#);

(b) upon request by market surveillance authorities, provide information on how light sources can be removed for verification without permanent damage to the light source

## Exemption:

### General exemptions

Following light sources are exempted by regulation (EU) 2019/2020 and (EU) 2019/2015:

- (a) LED dies or LED chips  
*[(EU) 2019/2020 Article 2 (1) (a)/ (EU) 2019/2015 Article 2 (1) (a)]*
- (b) LED packages  
*[(EU) 2019/2020 Article 2 (1) (b)/ (EU) 2019/2015 Article 2 (1) (b)]*
- (c) Products containing light source(s) from which these light source(s) can be removed for verification  
*[(EU) 2019/2020 Article 2 (1) (c)/ (EU) 2019/2015 Article 2 (1) (c)]*
- (d) light-emitting parts contained in a light source from which these parts cannot be removed for verification as a light source  
*[(EU) 2019/2020 Article 2 (1) (d)/ (EU) 2019/2015 Article 2 (1) (d)]*
- (e) for emergency use(, as set out in Directive 2014/35/EU of the European Parliament and of the Council (2))\*  
*[(EU) 2019/2020 Annex III Article 1 (b)/ (EU) 2019/2015 Annex IV Article 1 (b)]*

\* Text in brackets only applicable in (EU) 2019/2020

Following light are exempt from the requirements of this Regulation, with the exception of the requirements set out in point [3\(e\) of Annex II \(\(EU\) 2019/2020\)/point 4 of Annex V\(\(EU\) 2019/2015\)](#), if they are specifically designed and marketed for its intended use in at least one of the following applications:

- (a) signaling (including, but not limited to, road-, railway-, marine- or air traffic-signaling, traffic control or airfield lamps)  
*[(EU) 2019/2020 Annex III Article 3 (a)/ (EU) 2019/2015 Annex IV Article 3 (a)]*
- (b) light sources with a peak radiation around 253,7 nm and intended for germicidal use (destruction of DNA)  
*[(EU) 2019/2020 Annex III Article 1 (d)/ (EU) 2019/2015 Annex IV Article 1 (d)]*

### Product specific exemptions

Following light sources build in certain products are exempted by regulation (EU) 2019/2020 and (EU) 2019/2015:

- (a) electronic displays  
*[(EU) 2019/2020 Annex III Article 2 (b)/ (EU) 2019/2015 Annex IV Article 3 (a)]*
- (b) light sources in battery-operated product  
*[(EU) 2019/2020 Annex III Article 1 (c)/ (EU) 2019/2015 Annex IV Article 1 (c)]*

Following light sources build in certain products are exempted by regulation (EU) 2019/2020 and (EU) 2019/2015 if they are specifically tested and approved to operate:

- (a) in or on motor vehicles, their trailers and systems, interchangeable towed equipment, components and separate technical units, as set out in Regulation (EC) No 661/2009 of the European Parliament and of the Council (2), Regulation (EU) No 167/2013 of the European Parliament and of the Council (3) and Regulation (EU) No 168/2013 of the European Parliament and of the Council  
*[(EU) 2019/2020 Annex III Article 1 (e)/ (EU) 2019/2015 Annex IV Article 1 (d)]*

(b) in or on non-road mobile machinery as set out in Regulation (EU) 2016/1628 the European Parliament and of the Council (5) and in or on their trailers  
*[(EU) 2019/2020 Annex III Article 1 (f)/ (EU) 2019/2015 Annex IV Article 1 (e)]*

A light source is 'specifically tested and approved' in accordance with regulation (EU) 2019/2020 and (EU) 2019/2015 if it:

(a) has been specifically tested for the mentioned operating condition or application, according to the European legislation mentioned or related implementing measures, or relevant European or international standards or, in the absence of these, according to relevant Member States legislation; and

(b) is accompanied by evidence, to be included in the technical documentation, in the form of a certificate, a type approval mark, a test report, that the product has been specifically approved for the mentioned operating condition or application; and

(c) is placed on the market specifically for the mentioned operating condition or application, as evidenced at least by the technical documentation, and except for point

(d), information on the packaging and any advertising or marketing materials.

#### **Exemptions applicable only to (EU) 2019/2020**

Following light sources build in certain products are exempted by regulation (EU) 2019/2020 if they are specifically tested and approved to operate:

(a) in potentially explosive atmospheres, as defined in Directive 2014/34/EU of the European Parliament and of the Council (1);  
*[(EU) 2019/2020 Annex III Article 1 (a)]*

(b) light sources accompanied by an individual calibration certificate detailing the exact radiometric flux and/or spectrum under specified conditions, and intended for use in photometric calibration (of e.g. wavelength, flux, colour temperature, colour rendering index), or for laboratory use or quality control applications for the evaluation of coloured surfaces and materials under standard viewing conditions (e.g. standard illuminants)

*[(EU) 2019/2020 Annex III Article 3 (o)]*

