Commission Regulation (EU) 2019/2020 of 1 October 2019 laying down ecodesign requirements for light sources and separate control gears pursuant to Directive 2009/125/EC of the European Parliament and of the Council and repealing Commission Regulations (EC) No 244/2009, (EC) No 245/2009 and (EU) No 1194/2012 (Text with EEA relevance)

COMMISSION REGULATION (EU) 2019/2020

of 1 October 2019

laying down ecodesign requirements for light sources and separate control gears pursuant to Directive 2009/125/EC of the European Parliament and of the Council and repealing Commission Regulations (EC) No 244/2009, (EC) No 245/2009 and (EU) No 1194/2012

(Text with EEA relevance)

THE EUROPEAN COMMISSION,

Having regard to Article 114 of the Treaty on the Functioning of the European Union,

Having regard to Directive 2009/125/EC of the European Parliament and of the Council of 21 October 2009 establishing a framework for the setting of ecodesign requirements for energy-related products[(1)], and in particular Article 15(1) thereof,

Whereas:

(1) Pursuant to Directive 2009/125/EC the Commission should set ecodesign requirements for energy-related products which account for significant volumes of sales and trade in the Union and which have a significant environmental impact and presenting significant potential for improvement through design in terms of their environmental impact, without entailing excessive costs.

(2) The Ecodesign Working Plan 2016-2019[(2)] established by the Commission in application of Article 16(1) of Directive 2009/125/EC sets out the working priorities under the ecodesign and energy labelling framework for the period 2016-2019. The Working Plan identifies the energy-related product groups to be considered as priorities for the undertaking of preparatory studies and eventual adoption of implementing measures, as well as the review of the current regulations.

(3) Measures from the Working Plan have an estimated potential to deliver a total in excess of 260 TWh of annual final energy savings in 2030, which is equivalent to reducing greenhouse gas emissions by approximately 100 million tonnes per year in 2030. Lighting is one of the product groups listed in the Working Plan, with an estimated 41,9 TWh of annual final energy savings in 2030.

(4) The Commission established ecodesign requirements for lighting products in Commission Regulations (EC) No 244/2009[(3)], (EC) No 245/2009[(4)] and (EU) No 1194/2012[(5)]. Pursuant to those Regulations the Commission should review them in the light of technological progress.

Changes to legislation: *There are outstanding changes not yet made to Commission Regulation (EU) 2019/2020. Any changes that have already been made to the legislation appear in the content and are referenced with annotations. (See end of Document for details) View outstanding changes*

(5) The Commission has reviewed those Regulations and analysed the technical, environmental and economic aspects of lighting products as well as real-life user behaviour. The review was carried out in close cooperation with stakeholders and interested parties from the Union and third countries. The results of the review were made public and presented to the Consultation Forum established by Article 18 of Directive 2009/125/EC.

(6) The review shows the benefit of updating the requirements for lighting products and the benefit of simplifying the requirements to be applied to lighting products, in particular by having one single regulation for this product group. This is in line with the Commission's 'Better Regulation' policy and should decrease the administrative burden for manufacturers and importers, and to facilitate verification by market surveillance authorities, inter alia, by better defining the scope and exemptions, reducing the number of parameters for compliance testing and decreasing the time of some test procedures.

(7) In accordance with the review, broadly, all lighting products that fall within the scope of the three existing regulations should be covered by this Regulation. Furthermore, a uniform formula should be set to calculate the energy efficiency of such lighting products.

(8) The annual electricity consumption of products subject to this Regulation in the Union was estimated at 336 TWh in 2015. This covers 12,4 % of the overall use of electricity by the 28 Member States and corresponds to 132 million tonnes of CO_2 equivalent greenhouse gas emissions. The energy consumption of lighting products in a business-as-usual scenario is projected to decrease by 2030. However, this reduction is expected to slow down unless the existing ecodesign requirements are updated.

(9) The environmental aspects of lighting products that have been identified as significant for the purposes of this Regulation are energy consumption in the use phase along with mercury content.

(10) The use of hazardous substances, including mercury in light sources, is governed by Directive 2011/65/EU of the European Parliament and of the Council (RoHS)[(6)]. No specific ecodesign requirements on mercury content should therefore be set in this Regulation.

(11) The Commission Communication on the circular economy[(7)] and the Working Plan underline the importance of using the ecodesign framework to support the move towards more resource efficient and circular economy. Directive 2012/19/EU of the European Parliament and of the Council[(8)] refers to Directive 2009/125/EC and indicates that ecodesign requirements should facilitate the re-use, dismantling and recovery of waste of electrical and electronic equipment (WEEE) by tackling the issues upstream. The WEEE Directive sets requirements for separate collection and recycling of lighting products, with new provisions from August 2018. This Regulation should therefore not lay down further requirements for this. At the same time, this Regulation supports the repairability of products containing light sources.

(12) In view of the need to promote the circular economy and the ongoing work for material efficiency standardisation in relation to energy-related products, future standardisation

***Changes to legislation:** There are outstanding changes not yet made to Commission Regulation (EU) 2019/2020. Any changes that have already been made to the legislation appear in the content and are referenced with annotations. (See end of Document for details) View outstanding changes*

work should also address the modularisation of LED lighting products, including aspects such as luminous flux, radiation spectrum and light distribution.

(13) Specific requirements for the standby and networked standby electric power demand of lighting products should be laid down. Therefore, the requirements of Commission Regulation (EC) No 1275/2008[(9)] should not apply to lighting products covered by the scope of this Regulation.

(14) Mandatory ecodesign requirements apply to products placed on the Union market wherever they are installed or used and should therefore not be made dependent on the application in which the product is used.

(15) Exemptions from the requirements set out in this Regulation should be made for light sources with special technical features for use in specific applications, including those related to health and safety, and for which higher energy efficiency alternatives are not available or not cost-effective.

(16) The relevant product parameters should be measured using reliable, accurate and reproducible methods. Those methods should take into account recognised state-of-the-art measurement methods, including, where available, harmonised standards adopted by the European standardisation organisations, as listed in Annex I to Regulation (EU) No 1025/2012 of the European Parliament and of the Council[(10)].

(17) In accordance with Article 8 of Directive 2009/125/EC, this Regulation should specify the applicable conformity assessment procedures.

(18) To facilitate compliance checks, manufacturers, importers or authorised representatives should provide information in the technical documentation referred to in Annexes IV and V to Directive 2009/125/EC in so far as that information relates to the requirements laid down in this Regulation. The parameters of the technical documentation in accordance with this Regulation which are identical to the parameters of the product information sheet in accordance with Commission Delegated Regulation (EU) 2019/2015[(11)] and which have been entered in the product database established by Regulation (EU) 2017/1369 of the European Parliament and of the Council[(12)] should no longer be included in the technical documentation of this Regulation.

(19) This Regulation should specify tolerance values for lighting parameters taking into account the approach to information declaration laid down in Commission Regulation (EU) 2016/2282[(13)].

(20) To improve the effectiveness of this Regulation and to protect consumers, products that automatically alter their performance in test conditions to improve the declared parameters should be prohibited.

(21) In addition to the legally binding requirements laid down in this Regulation, indicative benchmarks for best available technologies should be identified to make information on products' environmental performance over their life cycle subject to this Regulation widely available and easily accessible, in accordance with Directive 2009/125/EC, Annex 1, part 3, point 2.

Changes to legislation: *There are outstanding changes not yet made to Commission Regulation (EU) 2019/2020. Any changes that have already been made to the legislation appear in the content and are referenced with annotations. (See end of Document for details) View outstanding changes*

(22) A review of this Regulation should assess the appropriateness and effectiveness of its provisions in achieving its goals. The timing of the review should allow for all provisions to be implemented and show an effect on the market.

(23) Regulations (EC) No 244/2009, (EC) No 245/2009 and (EU) No 1194/2012 should therefore be repealed.

(24) The measures provided for in this Regulation are in accordance with the opinion of the Committee established by Article 19(1) of Directive 2009/125/EC.

HAS ADOPTED THIS REGULATION:

Article 1

Subject matter and scope

1 This Regulation establishes ecodesign requirements for the placing on the market of
- a light sources;
- b separate control gears.

The requirements also apply to light sources and separate control gears placed on the market in a containing product.

2 This Regulation shall not apply to light sources and separate control gears specified in points 1 and 2 of Annex III.

3 Light sources and separate control gears specified in point 3 of Annex III shall comply only with the requirements of point 3(e) of Annex II.

Article 2

Definitions

For the purpose of this Regulation, the following definitions shall apply:

(1) ‘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) **[**[X1]chromaticity coordinates x and y in the range

$0{,}27 < x < 0{,}53$ and

$-2{,}3172\,x^2 + 2{,}3653\,x - 0{,}2199 < y < -2{,}3172\,x^2 + 2{,}3653\,x - 0{,}1595$;**]**

(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 colour 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

***Changes to legislation:** There are outstanding changes not yet made to Commission Regulation (EU) 2019/2020. Any changes that have already been made to the legislation appear in the content and are referenced with annotations. (See end of Document for details) View outstanding changes*

lighting technology, and that can be verified as a light source according to the procedure of Annex IV.

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

Light sources do not include:

(a) LED dies or LED chips;

(b) LED packages;

(c) products containing light source(s) from which these light source(s) can be removed for verification;

(d) light-emitting parts contained in a light source from which these parts cannot be removed for verification as a light source;

(2) 'control gear' means one or more devices, that may or may not be physically integrated in a light source, intended to prepare the mains for the electric format required by one or more specific light sources within boundary conditions set by electric safety and electromagnetic compatibility. It may include transforming the supply and starting voltage, limiting operational and preheating current, preventing cold starting, correcting the power factor and/or reducing radio interference.

The term 'control gear' does not include power supplies within the scope of Commission Regulation (EC) No 278/2009[14]. The term also does not include lighting control parts and non-lighting parts (as defined in Annex I), although such parts may be physically integrated with a control gear or marketed together as a single product.

A Power over Ethernet (PoE) switch is not a control gear in the sense of this Regulation. 'Power-over-Ethernet switch' or 'PoE switch' means equipment for power-supply and data-handling that is installed between the mains and office equipment and/or light sources for the purpose of data transfer and power supply;

(3) 'separate control gear', means a control gear that is not physically integrated with a light source and is placed on the market as a separate product or as a part of a containing product;

(4) 'containing product' means a product containing one or more light sources, or separate control gears, or both. Examples of containing products are 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). If a containing product cannot be taken apart for verification of the light source and separate control gear, the entire containing product is to be considered a light source;

(5) 'light' means electromagnetic radiation with a wavelength between 380 nm and 780 nm;

(6) 'mains' or 'mains voltage' (MV) means the electricity supply of 230 (± 10 %) volt of alternating current at 50 Hz;

(7) 'LED die' or 'LED chip' means a small block of light-emitting semiconducting material on which a functional LED circuit is fabricated;

(8) 'LED package' means a single electric part comprising principally at least one LED die. It does not include a control gear or parts of it, a cap or active electronic