



Light Sources and Separate Control Gears – Applicability of Regulations (EU) 2019/2020 and 2019/2015 to CAPIEL Products

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CAPIEL¹ is the Coordinating Committee for the Associations of Manufacturers of Switchgear and Controlgear for industrial, commercial and similar use in the European Union.

The target audience for this guide is manufacturers of CAPIEL products. It should be read in conjunction with Commission Regulation (EU) 2019/2020 “Ecodesign requirements for light sources and separate control gears”, Commission Delegated Regulation (EU) 2019/2015 “Energy labelling of light sources” and any associated amendments and corrigenda. This guide is not intended to conflict with these regulations, and the reader should be aware that both the regulations and any other relevant legislation are legally binding. If in doubt, the supplier of the equipment must seek his own advice on any issues and must not rely on this document alone.

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¹ <https://www.capiel.eu/>

1 Ecodesign Regulation 2019/2020 as amended by 2021/341²

1.1 Repeal of earlier Ecodesign Regulations

The requirements of Commission Regulation (EU) 2019/2020 apply from 1 September 2021 (with the exception of Article 7, regarding circumvention, which applies from 25 December 2019) and it replaces three earlier Ecodesign regulations on lighting:

- Commission Regulation (EC) 244/2009 (non-directional household lamps)
- Commission Regulation (EC) 245/2009 (fluorescent lamps without integrated ballast, for high intensity discharge lamps, and for ballasts and luminaires able to operate such lamps)
- Commission Regulation (EU) 1194/2012 (directional lamps, light emitting diode lamps and related equipment)

1.2 Definitions

1.2.1 Light source

Article 2(1) of Regulation (EU) 2019/2020 defines “light source” as meaning:

“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

$$0,270 < x < 0,530 \text{ and}$$

$$-2,3172 x^2 + 2,3653 x - 0,2199 < y < -2,3172 x^2 + 2,3653 x - 0,1595;$$

(b) a luminous flux < 500 lumen per mm² 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 lighting technology, and that can be verified as a light source according to the procedure of Annex IV”.

Article 2(1) also states that 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.

1.2.2 Separate control gear

Article 2(2) of Regulation (EU) 2019/2020 defines “control gear” as meaning:

“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.”

and Article 2(3) of Regulation (EU) 2019/2020 then defines “separate control gear” as meaning:

“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.”

² See also Corrigendum published 24 February 2020.

1.2.3 Containing Product

Article 2(4) of Regulation (EU) 2019/2020 defines “containing product” as meaning:

“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).”

1.3 Scope and Requirements

Regulation (EU) 2019/2020 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

NOTE Products containing light sources from which these light sources cannot be removed for verification without damaging one or more of them, should be tested as light sources for compliance assessment and verification.

Light sources and separate control gears must comply with requirements set out in:

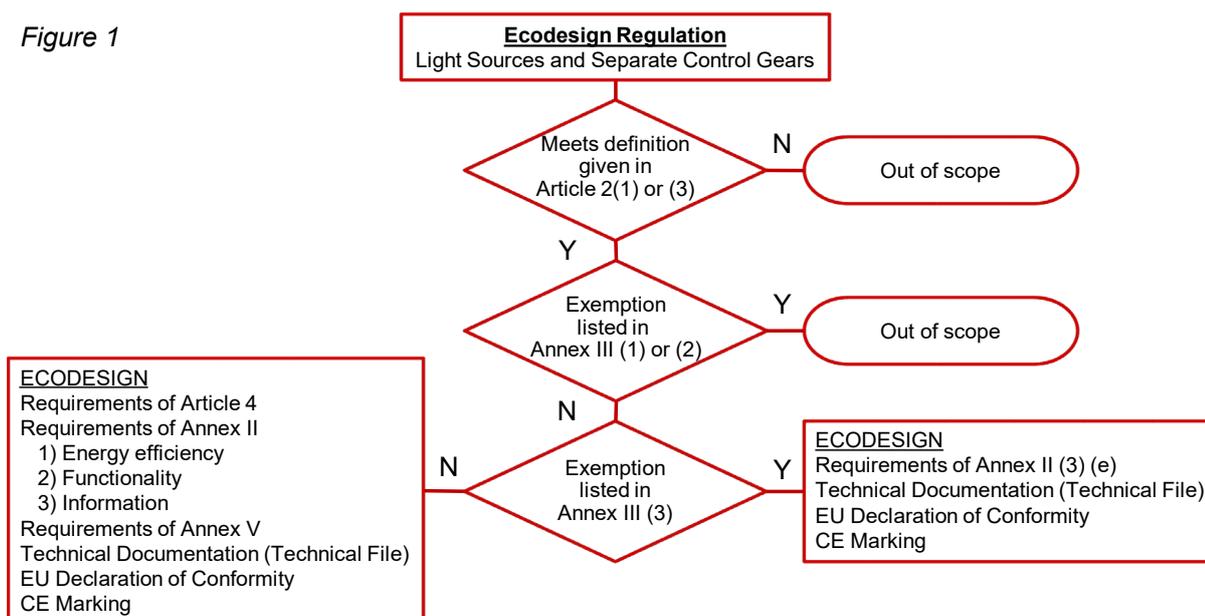
- Article 4 “Removal of light sources and separate control gears”
- Annex II “Ecodesign requirements” and
- Annex V “Functionality after endurance testing”

with the exception of the following:

- Light sources and separate control gears specified in points 1 and 2 of Annex III of the Regulation are excluded;
- Light sources and separate control gears specified in point 3 of Annex III of the Regulation shall comply only with the requirements of point 3(e) of Annex II – see section 1.4 of this document for further information on signalling applications.

Although not a substitute for reading and understanding the Regulation, the following flowchart (Figure 1) provides a high level summary of the requirements:

Figure 1



1.4 Signalling applications

Point 3 of Annex III of Regulation (EU) 2019/2020 lists light sources and separate control gears which are exempt from many of the requirements on the basis of their application.

It includes light sources or separate control gear which are specifically designed and marketed for their intended use in signalling applications:

“signalling (including, but not limited to, road-, railway-, marine- or air traffic- signalling, traffic control or airfield lamps)”

Although not cited as a specific example, CAPIEL considers that industrial signalling applications also qualify as “signalling” for the purposes of this Regulation. On this basis, the requirements that apply to light sources or separate control gear which are specifically designed and marketed for use in industrial signalling applications are:

- *“the intended purpose shall be stated in the technical documentation for compliance assessment as per Article 5 of the Regulation and on all forms of packaging, product information and advertisement, together with an explicit indication that the light source or separate control gear is not intended for use in other applications;”*
- *“the technical documentation file drawn up for the purposes of conformity assessment, in accordance with Article 5 of the Regulation, shall list the technical parameters that make the product design specific to qualify for the exemption.”*

together with the technical documentation (Technical File), EU Declaration of Conformity, and CE Marking.

1.5 Examples

NOTE The following examples assume that the light source or separate control gear is not excluded due to being listed in points 1 or 2 of Annex III.

- a) A light source or separate control gear which is **not** specifically designed and marketed for use in signalling applications is subject to the full requirements of the Regulation – even if it is used for a signalling application.
- b) A light source which is specifically designed and marketed for use in signalling applications (e.g. an LED element unique to a specific indicator-light or stacking beacon) is within the scope of the Regulation, but would only be subject to the requirements described in 1.4 above.
- c) A light source which is used to illuminate a control panel, and which is **not** specifically designed and marketed for use in an application listed in point 3 of Annex III, is subject to the full requirements of the Regulation.

2 Energy Labelling Regulation 2019/2015 as amended by 2021/340

To accompany the Ecodesign regulation for light sources and separate control gears, there is also a new energy labelling regulation for light sources (Commission Delegated Regulation (EU) 2019/2015) which replaces Commission Delegated Regulation (EU) 874/2012 on electrical lamps and luminaires.

Regulation (EU) 2019/2015 establishes requirements for the labelling of, and the provision of supplementary product information on, light sources with or without integrated control gear. The requirements also apply to light sources placed on the market in a containing product.

The Regulation does not apply to light sources specified in points 1 and 2 of Annex IV of the Regulation.

Special requirements (similar to those described in 1.4 above) apply to light sources specified in point 3 of Annex IV of the Regulation – this includes light sources which are specifically designed and marketed for their intended use in signalling applications.

It applies from 1 September 2021. However, point 1(b) of Article 3 (which requires suppliers to enter information into the product database) applies from 1 May 2021.