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1. Proposals for Reg. 2019/2020 on ecodesign for lighting

| Reg. 2019/2020 | Commission proposal of 7 October 2020 | LightingEurope comments |
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| <p>Art. 2(4) of Reg. 2019/2020 ‘containing product’ means a product containing one or more light sources, or separate control gears, or both.</p> <p>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;</p> | <p>Art. 2(4) of Reg. 2019/2020 ‘containing product’ means a product containing one or more light sources, or separate control gears, or both. Examples of containing products are, including 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;</p> | <p>All light sources according to Art. 2(1) are within the scope, unless exempted. Therefore, the removal of the last sentence adds to the confusion, because now a non-removable light source is neither a light source or a containing product. Previously, with the last sentence included, there was no overlap and clarity on which rules to apply on non-removable light sources.</p> <p>Ideally, the definition can be maintained as agreed for the regulation published in the OJEU on 5 December 2019. Alternatively, the problem can be solved by keeping the last sentence, and by changing it as follows: <i>“If a containing product cannot be taken apart for verification of the light source and or separate control gear (or both), the entire containing product is to be considered respectively a light source or separate control gear (or in case both are non-removable, light source with integrated control gear)”</i></p> |

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| <p>Article 7 of Reg. 2019/2020 The manufacturer, importer or authorised representative shall not place on the market products designed to be able to detect they are being tested (e.g. by recognising the test conditions or test cycle), and to react specifically by automatically altering their performance during the test with the aim of reaching a more favourable level for any of the parameters declared by the manufacturer, importer or authorised representative in the technical documentation or included in any of the documentation provided.</p> <p>The energy consumption of the product and any of the other declared parameters shall not deteriorate after a software or firmware update when measured with the same test standard originally used for the declaration of conformity, except with explicit consent of the end-user prior to the update.</p> | <p>Article 7 of Reg. 2019/2020 The manufacturer, importer or authorised representative shall not place on the market products designed to be able to detect they are being tested (e.g. for example, by recognising the test conditions or test cycle) and to react specifically by automatically altering their performance during the test with the aim of reaching a more favourable level for any of the parameters declared by the manufacturer, importer or authorised representative in the technical documentation or included in any documentation provided.</p> <p>The energy consumption of the product and any of the other declared parameters shall not deteriorate after a software or firmware update when measured with the same test standard originally used for the declaration of conformity, except with explicit consent of the end-user prior to the update. No performance change shall occur as a result of rejecting the update.</p> <p>A software update shall never have the effect of changing the product's performance in a way that makes it non-compliant with the ecodesign requirements applicable for the declaration of conformity.</p> | |
| <p>Article 9 Review The Commission shall review this Regulation in the light of technological progress and shall present the results of this review,</p> | <p>Article 9 Review The Commission shall review this Regulation in the light of technological progress and shall present the results of this review,</p> | <p>While deciding on setting more stringent requirements on flicker and stroboscopic effects, the Commission should launch a study, to investigate whether stroboscopic effect has health impacts. For the time being,</p> |

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| <p>including, if appropriate, a draft revision proposal, to the Consultation Forum no later than 25 December 2024.</p> <p>This review shall in particular assess the appropriateness of:</p> <p>(a) setting more stringent energy efficiency requirements for all light source types, in particular for non-LED light source types, and for separate control gears;</p> <p>(b) setting requirements on lighting control parts;</p> <p>(c) setting more stringent requirements on flicker and stroboscopic effects, while extending them to separate control gears;</p> | <p>including, if appropriate, a draft revision proposal, to the Consultation Forum no later than 25 December 2024.</p> <p>This review shall in particular assess the appropriateness of:</p> <p>(a) setting more stringent energy efficiency requirements for all light source types, in particular for non-LED light source types, and for separate control gears;</p> <p>(b) setting requirements on lighting control parts;</p> <p>(c) setting more stringent requirements on flicker and stroboscopic effects, while extending them to separate control gears.</p> | <p>no published studies prove health impact of the stroboscopic effect.</p> <p>LightingEurope therefore proposes to adjust point c as follows: <i>“(c) setting more stringent requirements on flicker and stroboscopic effects, while extending them to separate control gears. The European Commission should also launch a study, to investigate whether stroboscopic effect has health impacts and whether stricter requirements are needed;”</i></p> | | | | |
| <p>Annex I.52 of Reg. 2019/2020 ‘declared value’ for a parameter means the value given by the manufacturer or importer in the technical documentation pursuant to point 2 of Annex IV to Directive 2009/125/EC;</p> | <p>Annex I.52 of Reg. 2019/2020 ‘declared values’ for a parameter means the values given provided by the manufacturer or importer in supplier for the stated, calculated or measured technical documentation parameters in accordance with pursuant to point 2 of Annex IV to Directive 2009/125/EC Article 4.2, for the verification of compliance by the Member State authorities;</p> | | | | | |
| <p>Annex II.2, Table 4 of Reg. 2019/2020</p> <table border="1" data-bbox="215 1078 779 1374"> <tr> <td data-bbox="215 1078 495 1374">Stroboscopic effect for LED and OLED MLS</td> <td data-bbox="506 1078 779 1374">SVM ≤ 0,4 at full-load (except for HID with $\Phi_{use} > 4$ klm and for light sources intended for use in outdoor applications, industrial</td> </tr> </table> | Stroboscopic effect for LED and OLED MLS | SVM ≤ 0,4 at full-load (except for HID with $\Phi_{use} > 4$ klm and for light sources intended for use in outdoor applications, industrial | <p>Annex II.2, Table 4 of Reg. 2019/2020</p> <table border="1" data-bbox="835 1078 1400 1374"> <tr> <td data-bbox="835 1078 1115 1374">Stroboscopic effect for LED and OLED MLS</td> <td data-bbox="1126 1078 1400 1374">SVM ≤ 0,4 0,9 at full-load (except for HID with $\Phi_{use} > 4$ klm and for light sources intended for use in outdoor applications,</td> </tr> </table> | Stroboscopic effect for LED and OLED MLS | SVM ≤ 0,4 0,9 at full-load (except for HID with $\Phi_{use} > 4$ klm and for light sources intended for use in outdoor applications, | <p>LightingEurope does not agree with the limit values proposed by the European Commission and refers to the LightingEurope proposal on SVM, which proposes steps to lower the SVM limit to ≤ 1.0.</p> <p>We agree with the removal of the HID reference in the requirements.</p> |
| Stroboscopic effect for LED and OLED MLS | SVM ≤ 0,4 at full-load (except for HID with $\Phi_{use} > 4$ klm and for light sources intended for use in outdoor applications, industrial | | | | | |
| Stroboscopic effect for LED and OLED MLS | SVM ≤ 0,4 0,9 at full-load (except for HID with $\Phi_{use} > 4$ klm and for light sources intended for use in outdoor applications, | | | | | |

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| | <p>applications or other applications where lighting standards allow a CRI < 80)</p> | | <p>industrial applications or other applications where lighting standards allow a CRI < 80)</p> <p>From 1 September 2023: SVM ≤ 0,4 at full-load (except for light sources intended for use in outdoor applications, industrial applications or other applications where lighting standards allow a CRI < 80)</p> | <p>We absolutely cannot accept the SVM values that are not in line with the outcomes of the SVM RRT nor based on science.</p> <p>To avoid loopholes, we propose to remove bracket exemptions as well.</p> <p>LightingEurope fully supports the need for an adequate and good quality of light. To this end, as already outlined in Art. 9 of this regulation, the metrics and threshold values might best be worked out during the review process of this regulation during the next few years. This review should ideally be based on scientific research and standards.</p> <p>Therefore, LightingEurope recommends that:</p> <ul style="list-style-type: none"> - the following LED lamps are exempted and have SVM limit of ≤ 1.6: full-glass G9, full-glass R7S, G5 > 8 W, E14 > 5 W, and E27 tubular; and - the European Commission launches a study, in preparation for the 2024 revision, to investigate whether stroboscopic effect has health impacts and whether stricter requirements are needed. <p>We propose the following requirement:</p> <table border="1" data-bbox="1451 1145 2011 1380"> <tr> <td data-bbox="1451 1145 1727 1380"> <p>Stroboscopic effect for LED and OLED MLS</p> </td> <td data-bbox="1727 1145 2011 1380"> <p>From 1 September 2021: SVM ≤ 1.3 at full-load (except full-glass G9, full-glass R7S, G5 > 8</p> </td> </tr> </table> | <p>Stroboscopic effect for LED and OLED MLS</p> | <p>From 1 September 2021: SVM ≤ 1.3 at full-load (except full-glass G9, full-glass R7S, G5 > 8</p> |
| <p>Stroboscopic effect for LED and OLED MLS</p> | <p>From 1 September 2021: SVM ≤ 1.3 at full-load (except full-glass G9, full-glass R7S, G5 > 8</p> | | | | | |

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| | | <p>W, E14 > 5 W, and E27 tubular where SVM ≤ 1.6 should be applied)</p> <p>From 1 September 2023: SVM ≤ 1.0 at full-load (except full-glass G9, full-glass R7S, G5 > 8 W, E14 > 5 W, and E27 tubular where SVM ≤ 1.6 should be applied)</p> <p>LightingEurope has produced a short video summarising the technology and science behind SVM and the implications of the current ecodesign limit values. It is freely accessible: https://youtu.be/U3DtTuso27A.</p> |
| <p>Annex II.3(d)(1) of Reg. 2019/2020 The information specified in point 3(c)(2) of this Annex shall also be contained in the technical documentation file drawn up for the purposes of conformity assessment pursuant to Article 8 of Directive 2009/125/EC.</p> | <p>Annex II.3(d)(1) of Reg. 2019/2020 The information specified in point 3(c)(21) of this Annex shall also be contained in the technical documentation file drawn up for the purposes of conformity assessment pursuant to Article 8 of Directive 2009/125/EC.</p> | |
| <p>Annex III.1(c) of Reg. 2019/2020 in radiological and nuclear medicine installations, as defined in Article 3 of Council Directive 2009/71/Euratom ⁽¹⁾;</p> | <p>Annex III.1(c) of Reg. 2019/2020 in radiological and nuclear medicine installations, as defined in Article 3 of that are subject to radiation safety standards as set out in Council Directive 2009/712013/59/Euratom ⁽¹⁾;</p> | |

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| <p>(¹) Council Directive 2009/71/Euratom of 25 June 2009 establishing a Community framework for the nuclear safety of nuclear installations (OJ L 172, 2.7.2009, p. 18).</p> | <p>(¹) Council Directive 2009/712013/59/Euratom of 25 June 2009 5 December 2013 establishing a Community framework for the nuclear safety of nuclear installations (OJ L 172, 2.7.2009, p. 18) laying down basic safety standards for protection against the dangers arising from exposure to ionising radiation (OJ L 13, 17.1.2014, p. 1).</p> | |
| <p>Annex III.3(s) of Reg. 2019/2020 halogen light sources with blade contact-, metal lug-, cable-, litz wire- or non-standard customised electrical interface, specifically designed and marketed for industrial or professional electro-heating equipment (e.g. stretch blow-moulding process in PET-Industry, 3D-printing, gluing, inks, paint and coating hardening);</p> | <p>Annex III.3(s) of Reg. 2019/2020 Halogen Incandescent light sources with blade contact-, metal lug-, cable-, litz wire- or non-standard customised electrical interface, specifically designed and marketed for industrial or professional electro-heating equipment (e.g. stretch blow-moulding process in PET-Industry, 3D-printing, photovoltaic and electronic manufacturing processes, drying or hardening of adhesives, gluing, inks, paint and or coatings hardening);</p> | |
| <p>Annex III.3(w) of Reg. 2019/2020 white light sources which</p> <p>(1) are designed and marketed specifically for scene-lighting use in film-studios, TV-studios and locations, and photographic-studios and locations, or for stage-lighting use in theatres, during concerts or other entertainment events;</p> <p>and which:</p> | <p>Annex III.3(w) of Reg. 2019/2020 white light sources which that</p> <p>(1) are designed and marketed specifically for scene-lighting use in film-studios, TV-studios and locations, and photographic-studios and locations, or for stage-lighting use in theatres, during concerts or other entertainment events;</p> <p>and which that:</p> | <p>LightingEurope fully supports the proposals made the Commission on Annex III.3(w).</p> |

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| <p>(2) provide two or more of the following specifications:</p> <ul style="list-style-type: none"> (a) LED with high CRI > 90; (b) GES/E40, K39d socket with changeable Colour Temperature down to 1 800 K (undimmed), used with low voltage power supply; (c) LED rated at 180W and greater and arranged to direct output to an area smaller than the light emitting surface; (d) DWE lamp type which is a tungsten lamp defined by its wattage (650 W) voltage (120 V) and terminal type (pressure screw terminal); (e) white bi-colour LED sources; (f) fluorescent tubes: Min BI Pin T5 and Bi Pin T12 with CRI ≥ 85 and CCT 2 900, 3 000, 3 200, 5 600 or 6 500 K. | <p>(2) provide two or more meet at least one of the following specifications:</p> <ul style="list-style-type: none"> (a) LED with power ≥ 100 W and high CRI > 90; (b) GES/E40, K39d socket with changeable Colour Temperature down to 1 800 K (undimmed), used with low voltage power supply; (c) LED rated at with power ≥ 180W and greater and arranged to direct output to an area smaller than the light emitting surface; (d) DWE lamp type which is a tungsten lamp defined by its wattage (650 W) voltage (120 V) and terminal type (pressure screw terminal) Incandescent light source that is DWE type and has 650 W power, 120 V voltage and pressure screw terminal; (e) white bi-colour LED sources LED with power ≥ 100 W that allows the user to set different correlated colour temperatures for the emitted light; (f) fluorescent tubes: Min BI Pin T5 and Bi Pin T12 LFL T5 with G5 cap and LFL T12 with G13 cap, with CRI ≥ 85 and CCT 2 900, 3 000, 3 200, 5 600 or 6 500 K. | |
| <p>Annex III.3(x) of Reg 2019/2020 [NEW POINT 3(x)]</p> | <p>Annex III.3(x) of Reg 2019/2020 incandescent DLS fulfilling all of the following conditions: E27 cap, clear envelope, power ≥ 100 W and ≤ 400 W, CCT ≤ 2 500 K, specifically designed and marketed for infrared heating.</p> | <p>LightingEurope fully supports the proposals made the Commission on Annex III.3(x).</p> |

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| <p>Annex IV of Reg. 2019/2020, 1st para. The verification tolerances defined in this Annex relate only to the verification of the measured parameters by Member State authorities. These tolerances shall not be used by the manufacturer, importer or authorised representative as an allowed tolerance to establish the values in the technical documentation or in interpreting these values with a view to achieving compliance or to communicate better performance by any means.</p> | <p>Annex IV of Reg. 2019/2020, 1st para. The verification tolerances defined in this Annex relate only to the verification of the measured parameters by Member State authorities. These tolerances of the declared values and shall not be used by the manufacturer, importer or authorised representative as an allowed tolerance to establish the values in the technical documentation or in interpreting these values with a view to achieving compliance or to communicate better performance by any means.</p> | |
| <p>Annex IV.4 of Reg. 2019/2020 The authorities of the Member State shall provide all relevant information to the authorities of the other Member States and to the Commission without delay after a decision is taken on the non-compliance of the model in accordance with point 3 of this Annex.</p> | <p>Annex IV.4 of Reg. 2019/2020 The authorities of the Member State authorities shall provide all relevant information to the authorities of the other Member States and to the Commission without delay after a decision being taken on the non-compliance of the model in accordance with according to points 3 or the second paragraph of this Annex.</p> | |
| <p>Annex IV, Table 6 of Reg. 2019/2020 Flicker [P_{st}^{LM}] and stroboscopic effect [SVM] (...) The determined value shall not exceed the declared value by more than 10 %.</p> | <p>Annex IV, Table 6 of Reg. 2019/2020 Flicker [P_{st}^{LM}] and stroboscopic effect [SVM] (...) The determined value shall not exceed the declared value by more than 10% 0.1.</p> | <p>The SVM round-robin test (RRT) shows a 3sigma standard deviation of 0.3. We propose a tolerance of 0.1 or 10 %, whichever is higher, for Flicker and SVM. More info on this can be found in our presentation on SVM.</p> |

2. Proposals for Reg. 2019/2015 on energy labelling for lighting

Explanatory Memorandum, p. 2:

Commission Delegated Regulation (EU) 2019/2015 on the energy labelling of light sources is amended by amending the definition of declared values, amending Annex II to clarify the size of the labels, clarifying the exemptions in Annex IV, making minor changes to the product information sheet table in Annex V and the technical documentation in Annex VI, and amending Annex IX (verification tolerances).

| Reg. 2019/2015 | Commission proposal of 7 October 2020 | LightingEurope comments |
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| <p>Art. 2(3) of Reg. 2019/2015 'containing product' means a product containing one or more light sources, or separate control gears, or both.</p> <p>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;</p> | <p>Art. 2(3) of Reg. 2019/2015 'containing product' means a product containing one or more light sources, or separate control gears, or both.</p> <p>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;</p> | <p>All light sources according to Art. 2(1) are within the scope, unless exempted. Therefore, the removal of the last sentence adds to the confusion, because now a non-removable light source is neither a light source or a containing product. Previously, with the last sentence included, there was no overlap and clarity on which rules to apply on non-removable light sources.</p> <p>Ideally, the definition can be maintained as agreed for the regulation published in the OJEU on 5 December 2019. Alternatively, the problem can be solved by keeping the last sentence, aligning the definition as in Reg. 2019/2020 (ecodesign for lighting) and by changing it as follows: <i>"If a containing product cannot be taken apart for verification of the light source and or separate control gear (or both), the entire containing product is to be considered respectively a light source or separate control gear (or in case both are non-removable, light source with integrated control gear)"</i></p> |

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| | | Please see the LightingEurope comment on art 2(4) of the Reg 2019/2020 on the definition of containing product (<i>supra</i> in this document). |
| Art. 3(1)(b) of Reg. 2019/2015 the parameters of the product information sheet, as set out in Annex V, are entered into the product database; | Art. 3(1)(b) of Reg. 2019/2015 the values of the parameters of included in the product information sheet, as set out in Annex V, are entered into the public part of the product database; | |
| Between Art. 8 and 9 of Reg. 2019/2015: Transitional period [NEW LightingEurope PROPOSAL] | Between Art. 8 and 9 of Reg. 2019/2015: Transitional period [NEW LightingEurope PROPOSAL] | <p>The current regulation envisages a 'hard switch' of energy labels on packaging of units placed on the market on 1 September 2021.</p> <p>This is logistically impracticable in supply chain management. Products with the new labelling requirements need to be placed on the market (e.g., shipped to a dealer/distributor, imported) before 1 September 2021.</p> <p>Therefore, we request a similar transitional period as has been provided in Regulation 874/2012.</p> <p>We propose to add between Articles 8 and 9 the following provision: "Transitional period 1) Lamps referred to in Article 1 of Regulation 874/2012 placed on the market before 1 September 2021 shall comply with the provisions set out in Regulation 874/2012. 2) Light sources referred to in and complying with this Regulation are regarded as complying with the</p> |

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| | | <i>requirements from Regulation 874/2012 as applicable in case those light sources are placed on the market after 1 May 2021 and before 1 September 2021.”</i> |
| <p>Annex I.42 of Reg. 2019/2015 ‘declared value’ for a parameter means the value given by the supplier in the technical documentation pursuant to Article 3(3) of Regulation (EU) 2017/1369;</p> | <p>Annex I.42 of Reg. 2019/2015 ‘declared values’ for a parameter means the values given provided by the supplier in the technical documentation for the stated, calculated or measured technical parameters, pursuant to in accordance with Article 3(3) of Regulation (EU) 2017/1369 Article 3(1)(d) and Annex VI, for the verification of compliance by the Member State authorities;</p> | |
| <p>Annex III.1 of Reg. 2019/2015 The label shall be:</p> <ul style="list-style-type: none"> - for the standard-sized label at least 36 mm wide and 75 mm high; - for the small-sized label (width less than 36 mm) at least 20 mm wide and 54 mm high. | <p>Annex III.1 of Reg. 2019/2015 The label shall be:</p> <ul style="list-style-type: none"> - for the standard-sized label at least 36 mm wide and 75 72 mm high; for the small-sized label (width less than 36 mm) at least 20 mm wide and 54 mm high. | |
| <p>Annex IV.1(a) of Reg. 2019/2015 in radiological and nuclear medicine installations, as defined in Article 3 of Council Directive 2009/71/Euratom ⁽¹⁾;</p> <p>(¹) Council Directive 2009/71/Euratom of 25 June 2009 establishing a Community framework for the nuclear safety of nuclear installations (OJ L 172, 2.7.2009, p. 18).</p> | <p>Annex IV.1(a) of Reg. 2019/2015 in radiological and nuclear medicine installations, as defined in Article 3 of that are subject to radiation safety standards as set out in Council Directive 2009/71 2013/59/Euratom ⁽¹⁾;</p> <p>(¹) Council Directive 2009/71 2013/59/Euratom of 25 June 2009 5 December 2013 establishing a Community framework for the nuclear safety of nuclear installations (OJ L 172, 2.7.2009, p. 18) laying down basic safety standards for</p> | |

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| | | protection against the dangers arising from exposure to ionising radiation (OJ L 13, 17.1.2014, p. 1). | | | | | |
| Annex IV.3(I) of Reg. 2019/2015 [NEW TEXT] | | Annex IV.3(I) of Reg. 2019/2015 Incandescent light sources with blade contact-, metal lug-, cable-, litz wire-, metric thread-, pin base- or non-standard customised electrical interface, encasing made from quartz-glass tubes, specifically designed and marketed for industrial or professional electro-heating equipment (e.g. stretch blow-moulding process in PET-Industry, 3D-printing, photovoltaic and electronic manufacturing processes, drying or hardening of adhesives, inks, paints or coatings). | | | | | |
| Annex V.1, Table 3 of Reg. 2019/2015 [NEW TEXT between the rows 'Lighting technology used' and 'Mains or non-mains'] | | Annex V.1, Table 3 of Reg. 2019/2015 <i>New row between 'Lighting technology used' and 'Mains or non-mains'</i> | | | | | |
| | | <table border="1"> <tr> <td>Light source cap-type (or other electric interface)</td> <td>[free text]</td> </tr> </table> | Light source cap-type (or other electric interface) | [free text] | | | |
| Light source cap-type (or other electric interface) | [free text] | | | | | | |
| Annex V.1, Table 3 of Reg. 2019/2015 Energy consumption in on-mode (kWh / 1,000 h) | | Annex V.1, Table 3 of Reg. 2019/2015 Energy consumption in on-mode (kWh / 1,000 h), rounded up to the nearest integer | | | | | |
| Annex V.1, Table 3 of Reg. 2019/2015 | | Annex V.1, Table 3 of Reg. 2019/2015 | | | | | |
| <table border="1"> <tr> <td>Correlated colour temperature, rounded to the nearest 100 K, or</td> <td>[x/x...x]</td> </tr> </table> | Correlated colour temperature, rounded to the nearest 100 K, or | [x/x...x] | <table border="1"> <tr> <td>Correlated colour temperature, rounded to the nearest 100 K, or</td> <td>[x/x...x/x or x (or x...)]</td> </tr> </table> | Correlated colour temperature, rounded to the nearest 100 K, or | [x/x...x/x or x (or x...)] | | |
| Correlated colour temperature, rounded to the nearest 100 K, or | [x/x...x] | | | | | | |
| Correlated colour temperature, rounded to the nearest 100 K, or | [x/x...x/x or x (or x...)] | | | | | | |

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| the range of correlated colour temperatures, rounded to the nearest 100 K, that can be set | | the range of correlated colour temperatures, rounded to the nearest 100 K, that can be set | | |
| Annex V.1, Table 7 of Reg. 2019/2015 Rated light source luminous flux Φ (lm) | | Annex V.1, Table 7 of Reg. 2019/2015 Rated light Light source luminous flux Φ (lm) | | |
| Annex VI.1(e) of Reg. 2019/2015 [NEW TEXT] | | Annex VI.1(e) of Reg. 2019/2015 (4a) peak luminous intensity in cd for directional light sources (DLS); (7a) R9 colour rendering index value for LED and OLED light sources; (7b) survival factor for LED and OLED light sources; (7c) lumen maintenance factor for LED and OLED light sources; (7d) lifetime L₇₀B₅₀ for LED and OLED light sources; | | |
| Annex VI.1(e)(5) of Reg. 2019/2015 correlated colour temperature (CCT) in K for FL and HID light sources; | | Annex VI.1(e)(5) of Reg. 2019/2015 correlated colour temperature (CCT) in K for FL and HID light sources; | | |
| Annex VI.2 of Reg. 2019/2015 [NEW TEXT] | | Annex VI.2 of Reg. 2019/2015 The elements listed under point 1 shall also constitute the mandatory specific parts of the technical documentation that the supplier shall enter into the database, pursuant to point 5 of Article 12 of Regulation (EU) 2017/1369.' | | |
| Annex IX of Reg. 2019/2015, 1st para. The verification tolerances defined in this Annex relate only to the verification of the measured parameters by Member State authorities. These tolerances shall not be | | Annex IX of Reg. 2019/2015, 1st para. The verification tolerances defined in this Annex relate only to the verification of the measured parameters by Member State authorities. These tolerances of the | | |

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| <p>used by the supplier as an allowed tolerance to establish the values in the technical documentation. The values and classes on the label or on the product information sheet shall not be more favourable for the supplier than the values reported in the technical documentation.</p> | <p>declared values and shall not be used by the supplier manufacturer, importer or authorised representative as an allowed tolerance to establish the values in the technical documentation or in interpreting these values with a view to achieving compliance or to communicate better performance by any means. The values and classes published on the label or on in the product information sheet shall not be more favourable for the supplier than the values reported declared in the technical documentation</p> | |
| <p>Annex IX of Reg. 2019/2015 [NEW 2ND PARAGRAPH]</p> | <p>Annex IX of Reg. 2019/2015 Where a model has been designed to be able to detect it is being tested (e.g. by recognising the test conditions or test cycle), and to react specifically by automatically altering its performance during the test with the objective of reaching a more favourable level for any of the parameters specified in this Regulation or included in the technical documentation or included in any of the documentation provided, the model and all equivalent models shall be considered not compliant.</p> | |
| <p>Annex IX.1, 2nd sent. of Reg. 2019/2015 The Member State authorities shall verify 10 units of the light source model for point 2(c) of this Annex. The verification tolerances are laid down in Table 6 of this Annex.</p> | <p>Annex IX.1, 2nd sent. of Reg. 2019/2015 The Member State authorities shall verify 10 units of the light source model for point 2(c) of this Annex. The verification tolerances are laid down in Table 6 9 of this Annex.</p> | |
| <p>Annex IX, Table 9 of Reg. 2019/2015 Flicker [P_{st}^{LM}] and stroboscopic effect [SVM] (...)</p> | <p>Annex IX, Table 9 of Reg. 2019/2015 Flicker [P_{st}^{LM}] and stroboscopic effect [SVM] (...)</p> | <p>The SVM round-robin test (RRT) shows a 3sigma standard deviation of 0.3.</p> |

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| <p>The determined value shall not exceed the declared value by more than 10 %.</p> | <p>The determined value shall not exceed the declared value by more than 10% 0.1.</p> | <p>We propose a tolerance of 0.1 or 10 %, whichever is higher, for Flicker and SVM. More info on this can be found in our presentation on SVM.</p> |
| <p>Annex IX, Table 9 of Reg. 2019/2015 Luminous peak intensity [cd]</p> | <p>Annex IX, Table 9 of Reg. 2019/2015 Luminous peak Peak luminous intensity [cd]</p> | |