

LASERTOODETE OHUTUS. ERINÕUDED TARBIJATELE
MÕELDUD LASERTOODETELE

Safety of laser products - Particular Requirements for
Consumer Laser Products

EESTI STANDARDI EESSÕNA

NATIONAL FOREWORD

See Eesti standard EVS-EN 50689:2021 sisaldab Euroopa standardi EN 50689:2021 ingliskeelset teksti.	This Estonian standard EVS-EN 50689:2021 consists of the English text of the European standard EN 50689:2021.
Standard on jõustunud sellekohase teate avaldamisega EVS Teatajas.	This standard has been endorsed with a notification published in the official bulletin of the Estonian Centre for Standardisation and Accreditation.
Euroopa standardimisorganisatsioonid on teinud Euroopa standardi rahvuslikele liikmetele kättesaadavaks 05.11.2021.	Date of Availability of the European standard is 05.11.2021.
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ICS 13.280; 31.260

English Version

Safety of laser products - Particular Requirements for Consumer Laser Products

Sécurité des appareils à laser - Exigences particulières relatives aux appareils à laser destinés au grand public

Sicherheit von Laserprodukten - Besondere Anforderungen an Verbraucher-Laser-Produkte

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European foreword

This document (EN 50689:2021) has been prepared by CLC/TC 76 “Optical radiation safety and laser equipment”.

The following dates are fixed:

- latest date by which this document has to be implemented at national level by publication of an identical national standard or by endorsement (dop) 2022-09-27
- latest date by which the national standards conflicting with this document have to be withdrawn (dow) 2024-09-27

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This document has been prepared under a Standardization Request given to CENELEC by the European Commission and the European Free Trade Association, and supports essential requirements of EU Directive(s) / Regulation(s).

For relationship with EU Directive(s) / Regulation(s), see informative Annex ZZA and ZZB, which is an integral part of this document.

Any feedback and questions on this document should be directed to the users' national committee. A complete listing of these bodies can be found on the CENELEC website.

1 Scope

This document provides definitions and specifies the particular requirements for consumer products containing lasers. The objective of this document is to ensure that laser products available to consumers are safe. This document specifies requirements that are additional to those specified in EN 60825-1. Consumer laser products that are battery powered are included, as well as consumer laser products powered by other means.

The requirements of this document are intended to address only the laser radiation hazards to the eyes and skin. Other hazards are not included within its scope. Compliance with this document may not be sufficient to conform to the applicable performance and testing requirements of other applicable product safety standards.

The scope of this document does not include consumer laser products that are designed to project laser radiation in the wavelength range of 380 nm to 780 nm onto the retina, with an intended daily usage duration of potentially many hours (such as for virtual reality or augmented reality applications), because it is currently not possible to provide emission limits that preclude any potential adverse effects for day-long usage, day after day.

NOTE 1 The level of radiation permitted by Class 1 in the visible wavelength range results in an extremely bright image which will be dazzling and uncomfortable, and therefore such a high emission level, that reaches Class 1 limits, is not reasonably foreseeable for this type of device (see also New Work Item Proposal 76/660/NP for the project IEC/TS 60825-20).

The scope of this document does not include products intended for professional use (non-consumer (professional) laser products) and restrictions as specified in this document do not apply to non-consumer laser products. For non-consumer laser products, compliance with EN 60825-1 is sufficient to achieve the necessary level of safety.

This document also specifies which subgroups of lasers are permitted as consumer products. A restricted group of Class 3R laser products are included. The risk of injury is low enough to be accepted under reasonably foreseeable conditions of use (including foreseeable misuse) for compliance with the general product safety directive (GPSD) and low voltage directive (LVD) for consumer products.

Electric toys containing lasers, which are covered by EN 62115, are excluded from the scope of this document.

Class 1C consumer laser products are not in the scope of this document. For example, cosmetic and beauty care Class 1C laser products are covered by prEN IEC 60335-2-113:202X¹⁾.

NOTE 2 National requirements can be more restrictive than the requirements in 6.1 and 6.2.

2 Normative references

The following documents are referred to in the text in such a way that some or all of their content constitutes requirements of this document. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments) applies.

EN 60825-1:2014²⁾, *Safety of laser products - Part 1: Equipment classification and requirements*

EN 60825-1:2014/A11:2021, *Safety of laser products - Part 1: Equipment classification and requirements*

EN IEC 62115:2020³⁾, *Electric toys - Safety*

1) under preparation.

2) Document impacted by AC:2017-06.

3) Document impacted by A11:2020.