

STN	Bezpečnosť laserových zariadení Osobitné požiadavky na spotrebné laserové zariadenia	STN EN 50689 34 1701
------------	---	--

Safety of laser products - Particular Requirements for Consumer Laser Products

Táto norma obsahuje anglickú verziu európskej normy.
This standard includes the English version of the European Standard.

Táto norma bola oznámená vo Vestníku ÚNMS SR č. 01/22

Obsahuje: EN 50689:2021

134273

EUROPEAN STANDARD

EN 50689

NORME EUROPÉENNE

EUROPÄISCHE NORM

November 2021

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

This European Standard was approved by CENELEC on 2021-09-27. CENELEC members are bound to comply with the CEN/CENELEC Internal Regulations which stipulate the conditions for giving this European Standard the status of a national standard without any alteration.

Up-to-date lists and bibliographical references concerning such national standards may be obtained on application to the CEN-CENELEC Management Centre or to any CENELEC member.

This European Standard exists in three official versions (English, French, German). A version in any other language made by translation under the responsibility of a CENELEC member into its own language and notified to the CEN-CENELEC Management Centre has the same status as the official versions.

CENELEC members are the national electrotechnical committees of Austria, Belgium, Bulgaria, Croatia, Cyprus, the Czech Republic, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, the Netherlands, Norway, Poland, Portugal, Republic of North Macedonia, Romania, Serbia, Slovakia, Slovenia, Spain, Sweden, Switzerland, Turkey and the United Kingdom.



European Committee for Electrotechnical Standardization
Comité Européen de Normalisation Electrotechnique
Europäisches Komitee für Elektrotechnische Normung

CEN-CENELEC Management Centre: Rue de la Science 23, B-1040 Brussels

EN 50689:2021 (E)

Contents

European foreword	3
1 Scope	4
2 Normative references	4
3 Terms and definitions	5
4 Classification of consumer laser products.....	6
5 Child appealing consumer laser products	6
6 All other consumer laser products.....	7
6.1 Generic requirements for consumer laser products	7
6.2 Requirements for Class 3R consumer laser products.....	7
7 User information and labelling.....	8
7.1 General.....	8
7.2 For Class 3R consumer laser products	10
Annex A (informative) Flowchart of requirements for a consumer laser product	11
Annex ZZA (informative) Relationship between this European Standard and the safety requirements of Directive 2001/95/EC aimed to be covered	13
Annex ZZB (informative) Relationship between this European standard and the safety objectives of Directive 2014/35/EU [2014 OJ L96] aimed to be covered.....	15
Bibliography	16

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

Attention is drawn to the possibility that some of the elements of this document may be the subject of patent rights. CENELEC shall not be held responsible for identifying any or all such patent rights.

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.

EN 50689:2021 (E)

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*

koniec náhľadu – text ďalej pokračuje v platenej verzii STN

¹⁾ under preparation.

²⁾ Document impacted by AC:2017-06.

³⁾ Document impacted by A11:2020.