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Personal eye-protection - Eye-protectors for adjustment work on lasers and laser systems (laser adjustment eye-protectors)

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English Version

Personal eye-protection - Eye-protectors for adjustment work on lasers and laser systems (laser adjustment eye-protectors)

Protection individuelle de l'œil - Lunettes de protection pour les travaux de réglage sur les lasers et sur les systèmes laser (lunettes de réglage laser)

Persönlicher Augenschutz - Augenschutzgeräte für Justierarbeiten an Lasern und Laseraufbauten (Laser-Justierbrillen)

This European Standard was approved by CEN on 21 November 2009.

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Contents

Page

Foreword 3

1 Scope 4

2 Normative references 4

3 Requirements 4
3.1 Spectral transmittance of filters and frames 4
3.2 Luminous transmittance of filters 5
3.3 Resistance of filters and frames to laser radiation 5
3.4 Refractive values of filters and eye-protectors 6
3.5 Quality of material and surface of filters 6
3.6 Stability of filters and eye-protectors to ultraviolet radiation and to elevated temperature 6
3.7 Resistance of filters and frames to ignition by contact with hot surfaces 7
3.8 Field of vision of eye-protectors 7
3.9 Construction of filters 7
3.10 Construction of frames 7
3.11 Mechanical strength of eye-protectors 7

4 Testing 8
4.1 General 8
4.2 Spectral transmittance of filters and frames 9
4.3 Luminous transmittance of filters 9
4.4 Resistance of filters and frames to laser radiation 9
4.5 Refractive value of filters and eye-protectors 9
4.6 Quality of material and surface of filters 10
4.7 Stability to UV radiation and stability to elevated temperature 10
4.8 Resistance of filters and frames to ignition by contact with hot surfaces 10
4.9 Field of vision of eye-protectors 10
4.10 Determination of the protected range 10
4.11 Frames 10
4.12 Mechanical strength 10

5 Information supplied by the manufacturer 11

6 Marking 11

Annex A (informative) **Principle** 14
A.1 Class 2 lasers 14
A.2 Beam reduction and time base 14
A.3 Resistance to laser radiation 14
A.4 Example test report 16

Annex B (informative) **Recommended use of laser adjustment eye-protectors** 18
B.1 General 18
B.2 Continuous wave lasers 18
B.3 Pulsed lasers 19

Annex C (informative) **Significant technical changes between this European Standard and the previous edition** 21

Annex ZA (informative) **Relationship between this European Standard and the Essential Requirements of EU Directive 89/686/EEC** 22

Bibliography 23

Foreword

This document (EN 208:2009) has been prepared by Technical Committee CEN/TC 85 “Eye protective equipment”, the secretariat of which is held by AFNOR.

This European Standard shall be given the status of a national standard, either by publication of an identical text or by endorsement, at the latest by June 2010, and conflicting national standards shall be withdrawn at the latest by June 2010.

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

This document supersedes EN 208:1998.

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

For relationship with EU Directive(s), see informative Annex ZA, which is an integral part of this document.

The significant technical changes between this European Standard and the previous edition are detailed in Annex C.

According to the CEN/CENELEC Internal Regulations, the national standards organizations of the following countries are bound to implement this European Standard: Austria, Belgium, Bulgaria, Cyprus, Czech Republic, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, Netherlands, Norway, Poland, Portugal, Romania, Slovakia, Slovenia, Spain, Sweden, Switzerland and the United Kingdom.

1 Scope

This European Standard applies to laser adjustment filters and eye-protectors. These are filters and eye-protectors for use in adjustment work on lasers and laser systems as defined in EN 60825-1:2007 where hazardous radiation occurs in the visible spectral range of 400 nm to 700 nm. Filters specified in this European Standard reduce this radiation to values defined for lasers of class 2 (≤ 1 mW for CW (continuous wave) lasers).

This European Standard defines the requirements, test methods and marking. A guide is given in Annex B with regard to selection and use.

EN 207 applies to eye-protection against accidental exposure to laser radiation.

NOTE Before selecting eye protection according to this European Standard a risk assessment should first be undertaken (see Annex B).

2 Normative references

The following referenced documents are indispensable for the application 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 166:2001, *Personal eye-protection — Specifications*

EN 167:2001, *Personal eye-protection — Optical test methods*

EN 168:2001, *Personal eye-protection — Non-optical test methods*

EN 207:2009, *Personal eye-protection equipment — Filters and eye-protectors against laser radiation (laser eye-protectors)*

ISO 11664-1:2007, *Colorimetry — Part 1: CIE standard colorimetric observers*

ISO 11664-2:2007, *Colorimetry — Part 2: CIE standard illuminants*

3 Requirements

3.1 Spectral transmittance of filters and frames

When tested according to 4.2, the spectral transmittance values of the filters and the frames for the laser wavelength shall be as given in Table 1.