

# INTERNATIONAL STANDARD



**Eyewear display –  
Part 22-20: Specific measurement methods for AR type – Image quality**



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Part 22-20: Specific measurement methods for AR type – Image quality**

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## EYEWEAR DISPLAY –

Part 22-20: Specific measurement methods for AR type –  
Image quality

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The text of this International Standard is based on the following documents:

Draft	Report on voting
110/1580/FDIS	110/1599/RVD

Full information on the voting for its approval can be found in the report on voting indicated in the above table.

The language used for the development of this International Standard is English.

This document was drafted in accordance with ISO/IEC Directives, Part 2, and developed in accordance with ISO/IEC Directives, Part 1 and ISO/IEC Directives, IEC Supplement, available at [www.iec.ch/members\\_experts/refdocs](http://www.iec.ch/members_experts/refdocs). The main document types developed by IEC are described in greater detail at [www.iec.ch/publications](http://www.iec.ch/publications).

A list of all parts in the IEC 63145 series, published under the general title *Eyewear display*, can be found on the IEC website.

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## EYEWEAR DISPLAY –

### Part 22-20: Specific measurement methods for AR type – Image quality

#### 1 Scope

This part of IEC 63145 specifies the standard measuring conditions and measurement methods for determining the image quality of augmented reality (AR) type eyewear displays. This document applies to see-through type (AR glasses) eyewear displays using virtual image optics.

See-through type displays (VR glasses), contact lens-type displays, and retina direct projection displays are out of the scope of this document.

#### 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.

IEC 63145-1-2, *Eyewear display – Part 1-2: Generic – Terminology*

IEC 63145-20-10:2019, *Eyewear display – Part 20-10: Fundamental measurements – Optical properties*

IEC 63145-20-20:2019, *Eyewear display – Part 20-20: Fundamental measurements – Image quality*

ISO 9241-302, *Ergonomics of human-system interaction – Part 302: Terminology for electronic visual displays*

ISO/CIE 11664-1, *Colorimetry – Part 1: CIE standard colorimetric observers*

ISO/CIE 11664-5, *Colorimetry – Part 5: CIE 1976  $L^*u^*v^*$  colour space and  $u'$ ,  $v'$  uniform chromaticity scale diagram*

CIE 015:2018, *Colorimetry*

#### 3 Terms, definitions, abbreviated terms and letter symbols

##### 3.1 Terms and definitions

For the purposes of this document, the terms and definitions given in IEC 63145-1-2, IEC 63145-20-10, IEC 63145-20-20 and ISO 9241-302 apply.

ISO and IEC maintain terminology databases for use in standardization at the following addresses:

- IEC Electropedia: available at <https://www.electropedia.org/>
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