Furniture - Assessment of the surface reflectance



EESTI STANDARDI EESSÕNA

NATIONAL FOREWORD

See Eesti standard EVS-EN 13721:2023 sisaldab Euroopa standardi EN 13721:2023 ingliskeelset teksti.

This Estonian standard EVS-EN 13721:2023 consists of the English text of the European standard EN 13721:2023.

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 26.04.2023.

Date of Availability of the European standard is 26.04.2023.

Standard on kättesaadav Eesti Standardimis-ja Akrediteerimiskeskusest.

The standard is available from the Estonian Centre for Standardisation and Accreditation.

Tagasisidet standardi sisu kohta on võimalik edastada, kasutades EVS-i veebilehel asuvat tagasiside vormi või saates e-kirja meiliaadressile <u>standardiosakond@evs.ee</u>.

ICS 97.140

Standardite reprodutseerimise ja levitamise õigus kuulub Eesti Standardimis- ja Akrediteerimiskeskusele

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EUROPEAN STANDARD

EN 13721

NORME EUROPÉENNE ..

EUROPÄISCHE NORM

April 2023

ICS 97.140

Supersedes EN 13721:2004

English Version

Furniture - Assessment of the surface reflectance

Ameublement - Évaluation de la luminance lumineuse des surfaces

Möbel - Bewertung des Oberflächenreflexionsgrades

This European Standard was approved by CEN on 17 March 2023.

CEN 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 CEN 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 CEN member into its own language and notified to the CEN-CENELEC Management Centre has the same status as the official versions.

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



EUROPEAN COMMITTEE FOR STANDARDIZATION COMITÉ EUROPÉEN DE NORMALISATION EUROPÄISCHES KOMITEE FÜR NORMUNG

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

ean foreword		3
50		
•		
Principle		5
Viewing/illumination condition g	geometry	
General		<i>6</i>
() 4		
CalibrationReference scaleReference standards (primary and	nd working)	7 7 7
Test Procedure		7
Test report		8
	Normative references Terms and definitions Principle Viewing/illumination condition g Standard colorimetric observer a Equipment General Conditioning chamber Cleaning cloth Preparation and conditioning of t Instrument calibration Calibration Reference scale Reference standards (primary and Test Procedure	Scope

European foreword

This document (EN 13721:2023) has been prepared by Technical Committee CEN/TC 207 "Furniture", the secretariat of which is held by UNI.

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 October 2023, and conflicting national standards shall be withdrawn at the latest by October 2023.

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

This document supersedes EN 13721:2004.

The main changes compared to the previous edition are listed below:

- revised scope: test method is not applicable to some metallic paints and pearly coatings;
- normative references updated;
- additional terms and definitions "final inspection", "colorants control" added;
- revised Table 1 Recommended measurement geometries;
- additional 7.2 Conditioning chamber and 7.3 Cleaning cloth added;
- document editorially revised in its entirety.

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

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

1 Scope

This document specifies a method for the assessment of the surface reflectance of furniture surfaces and relates to rigid surfaces of all finished products regardless of materials, except for finishes on leather and fabrics, which are excluded from this document.

This document is applicable to the test, intended to be carried out on finished furniture, but can be carried out on test panels of the same material, finished in an identical manner to the finished product, and of a size sufficient to meet the requirements of the test.

The test method is not applicable to some metallic paints and pearly coatings.

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 ISO/CIE 11664-1:2019, Colorimetry - Part 1: CIE standard colorimetric observers (ISO/CIE 11664-1:2019)

EN ISO/CIE 11664-2, Colorimetry - Part 2: CIE standard illuminants (ISO/CIE 11664-2)

EN ISO/CIE 11664-3, Colorimetry - Part 3: CIE tristimulus values (ISO/CIE 11664-3)

EN ISO 18314-1:2018, Analytical colorimetry - Part 1: Practical colour measurement (ISO 18314-1:2015)

CIE 1931, Standard colorimetric colour coordinates

CIE 1964, Colorimetry, CIE Standard Recommendations

3 Terms and definitions

For the purposes of this document, the following terms and definitions apply.

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

- IEC Electropedia: available at https://www.electropedia.org/
- ISO Online browsing platform: available at https://www.iso.org/obp

3.1

reflectance

ratio of the radiant flux reflected in the directions within a given cone to that reflected in the same directions by a perfect reflecting diffuser identically irradiated in the observed wavelength interval (spectral reflectance factor $R(\lambda)$ in EN ISO/CIE 11664-3)

3.2

trichromatic compound lightness factor

 \boldsymbol{V}

value given by the equation in Clause 10 of this document

3.3

test unit

finished item of furniture