
Ceramic tiles —

Part 18:
**Determination of light reflectance
value (LRV)**

Carreaux et dalles céramiques —

Partie 18: Détermination de la valeur de réflectance lumineuse (LRV)



This document is a preview generated by ELS



COPYRIGHT PROTECTED DOCUMENT

© ISO 2022

All rights reserved. Unless otherwise specified, or required in the context of its implementation, no part of this publication may be reproduced or utilized otherwise in any form or by any means, electronic or mechanical, including photocopying, or posting on the internet or an intranet, without prior written permission. Permission can be requested from either ISO at the address below or ISO's member body in the country of the requester.

ISO copyright office
CP 401 • Ch. de Blandonnet 8
CH-1214 Vernier, Geneva
Phone: +41 22 749 01 11
Email: copyright@iso.org
Website: www.iso.org

Published in Switzerland

Contents

| | Page |
|---|----------|
| Foreword..... | iv |
| 1 Scope..... | 1 |
| 2 Normative references..... | 1 |
| 3 Terms and definitions..... | 1 |
| 4 Principle..... | 2 |
| 5 Apparatus..... | 2 |
| 5.1 Type of instrument..... | 2 |
| 5.2 Instrument setup..... | 2 |
| 5.3 Instrument calibration and standards..... | 2 |
| 6 Preparation of test specimens..... | 3 |
| 6.1 Solid coloured tiles..... | 3 |
| 6.2 Multi-coloured, non-uniform shade, speckled or textured surface tile..... | 3 |
| 7 Test..... | 3 |
| 7.1 Measurement on solid coloured surfaces..... | 3 |
| 7.2 Measurement on multi-coloured surfaces..... | 3 |
| 7.3 Measurement on non-uniform shade, speckled or textured surface..... | 4 |
| 8 Test report..... | 4 |
| Bibliography..... | 6 |

Foreword

ISO (the International Organization for Standardization) is a worldwide federation of national standards bodies (ISO member bodies). The work of preparing International Standards is normally carried out through ISO technical committees. Each member body interested in a subject for which a technical committee has been established has the right to be represented on that committee. International organizations, governmental and non-governmental, in liaison with ISO, also take part in the work. ISO collaborates closely with the International Electrotechnical Commission (IEC) on all matters of electrotechnical standardization.

The procedures used to develop this document and those intended for its further maintenance are described in the ISO/IEC Directives, Part 1. In particular, the different approval criteria needed for the different types of ISO documents should be noted. This document was drafted in accordance with the editorial rules of the ISO/IEC Directives, Part 2 (see www.iso.org/directives).

Attention is drawn to the possibility that some of the elements of this document may be the subject of patent rights. ISO shall not be held responsible for identifying any or all such patent rights. Details of any patent rights identified during the development of the document will be in the Introduction and/or on the ISO list of patent declarations received (see www.iso.org/patents).

Any trade name used in this document is information given for the convenience of users and does not constitute an endorsement.

For an explanation of the voluntary nature of standards, the meaning of ISO specific terms and expressions related to conformity assessment, as well as information about ISO's adherence to the World Trade Organization (WTO) principles in the Technical Barriers to Trade (TBT), see www.iso.org/iso/foreword.html.

This document was prepared by Technical Committee ISO/TC 189, *Ceramic tile*, in collaboration with the European Committee for Standardization (CEN) Technical Committee CEN/TC 67, *Ceramic tiles*, in accordance with the Agreement on technical cooperation between ISO and CEN (Vienna Agreement).

A list of all parts in the ISO 10545 series can be found on the ISO website.

Any feedback or questions on this document should be directed to the user's national standards body. A complete listing of these bodies can be found at www.iso.org/members.html.

Ceramic tiles —

Part 18:

Determination of light reflectance value (LRV)

1 Scope

The objective of this document is to define a test method to determine the light reflectance value (LRV) of ceramic tiles, including mosaic tiles.

It is applicable to solid-coloured, multicoloured and non-uniform shade tile surfaces including tile with flame effects, speckled or textured with different types of finishing.

2 Normative references

There are no normative references in this document.

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:

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

3.1

solid coloured surface

surface with colour uniformity and same shade value

3.2

multi-coloured surface

surface formed by distinct areas of different colour, which when viewed from a distance of 3 m, remain distinct, or surface formed from small colour specks, which when viewed from a distance of 1 m, assume the appearance of one colour

3.3

non-uniform shade surface

surface with a certain shade variability

3.4

speckled surface

surface or covered with small marks, spots, or shake

3.5

textured surface

surface that causes extreme angular dependences of reflected light and that has a superficial texture with maximum peak-valley distance <2 mm