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STANDARD**

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Material measures of length for general  
use - Part 2: Test methods

PREVIEW

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**Mauritius Standards Bureau  
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## National foreword

This Mauritian Standard is identical with the International Organization of Legal Metrology Recommendations, OIML R 35-2, Edition 2011 (E) - *Material measures of length for general use. Part 2: Test methods*. It was adopted by the Mauritius Standards Bureau on the recommendation of the **Metrology Standards Committee** through its Subcommittee on Dimensional Measurement Equipment and approval of the Standards Council on March 2015. It was notified in the Government Gazette on **04 April 2015**.\*

For the purposes of this standard the following change should be made:

- wherever the word '*Recommendation*' appears, referring to this standard, it should be read as '*Mauritian Standard*'.

\* General Notice No. 622 of 2015



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## Foreword

The International Organization of Legal Metrology (OIML) is a worldwide, intergovernmental organization whose primary aim is to harmonize the regulations and metrological controls applied by the national metrological services, or related organizations, of its Member States. The main categories of OIML publications are:

- **International Recommendations (OIML R)**, which are model regulations that establish the metrological characteristics required of certain measuring instruments and which specify methods and equipment for checking their conformity. OIML Member States shall implement these Recommendations to the greatest possible extent;
- **International Documents (OIML D)**, which are informative in nature and which are intended to harmonize and improve work in the field of legal metrology;
- **International Guides (OIML G)**, which are also informative in nature and which are intended to give guidelines for the application of certain requirements to legal metrology; and
- **International Basic Publications (OIML B)**, which define the operating rules of the various OIML structures and systems.

OIML Draft Recommendations, Documents and Guides are developed by Project Groups linked to Technical Committees or Subcommittees which comprise representatives from OIML Member States. Certain international and regional institutions also participate on a consultation basis. Cooperative agreements have been established between the OIML and certain institutions, such as ISO and the IEC, with the objective of avoiding contradictory requirements. Consequently, manufacturers and users of measuring instruments, test laboratories, etc. may simultaneously apply OIML publications and those of other institutions.

International Recommendations, Documents, Guides and Basic Publications are published in English (E) and translated into French (F) and are subject to periodic revision.

Additionally, the OIML publishes or participates in the publication of **Vocabularies (OIML V)** and periodically commissions legal metrology experts to write **Expert Reports (OIML E)**. Expert Reports are intended to provide information and advice, and are written solely from the viewpoint of their author, without the involvement of a Technical Committee or Subcommittee, nor that of the CIML. Thus, they do not necessarily represent the views of the OIML.

This publication - reference OIML R 35-2, edition 2011 (E) - was developed by the OIML Technical Subcommittee TC 7 *Measuring instruments for length and associated quantities*. It was approved for final publication by the International Committee of Legal Metrology at its 46th Meeting in Prague, Czech Republic in October 2011 and will be submitted to the International Conference of Legal Metrology in 2012 for formal sanction.

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# Material measures of length for general use

## Part 2 – Test methods

### 1 Scope

This Recommendation is applicable to the type evaluation and initial verification testing of material measures of length for general use, as defined in OIML R 35-1.

This Recommendation sets out details of the test program, principles, equipment and procedures to be used for type evaluation and initial verification testing.

### 2 Terminology

Terms conform to the *International Vocabulary of Metrology - Basic and general concepts and associated terms* (VIM, edition 2007) [1] and to the *International Vocabulary of Terms in Legal Metrology* (VIML, edition 2000) [2].

In addition, for the purpose of this Recommendation, the terms and definitions given in R 35-1 also apply.

#### 2.1 ancillary device

device intended to perform a particular function, directly involved in elaborating, transmitting or displaying results

#### 2.2 disturbance

influence quantity having a value within specified limits but outside the specified rated operating conditions of the measure

#### 2.3 durability

ability of the measure to maintain its performance characteristics over a period of use

#### 2.4 equipment under test (EUT)

material measure of length; also referred to as the “measure”

#### 2.5 error (of measurement)

measured quantity value minus a reference quantity value [1 (VIM 2.16)]

#### 2.6 fault

difference between the error of indication and the intrinsic error of a measure