

# INTERNATIONAL STANDARD

## NORME INTERNATIONALE



**Fibre optics – Launch condition requirements for measuring multimode attenuation**

**Fibres optiques – Exigences des conditions d'injection pour la mesure de l'affaiblissement en multimodal**



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## INTERNATIONAL ELECTROTECHNICAL COMMISSION

**FIBRE OPTICS –  
LAUNCH CONDITION REQUIREMENTS  
FOR MEASURING MULTIMODE ATTENUATION**

## FOREWORD

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International Standard IEC 62614 has been prepared by IEC technical committee 86: Fibre optics.

This standard cancels and replaces IEC/PAS 62614, published in 2009. This first edition constitutes a technical revision.

The text of this standard is based on the following documents:

FDIS	Report on voting
86/367/FDIS	86/368/RVD

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

This publication has been drafted in accordance with the ISO/IEC Directives, Part 2.

The committee has decided that the contents of this publication will remain unchanged until the stability date indicated on the IEC web site under "<http://webstore.iec.ch>" in the data related to the specific publication. At this date, the publication will be

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## FIBRE OPTICS – LAUNCH CONDITION REQUIREMENTS FOR MEASURING MULTIMODE ATTENUATION

### 1 Scope

This International Standard describes the launch condition requirements used for measuring multimode attenuation in passive components and in installed cable plants.

In this standard, the fibre types that are addressed include category A1a (50  $\mu\text{m}$  /125  $\mu\text{m}$ ) and A1b (62,5  $\mu\text{m}$  /125  $\mu\text{m}$ ) multimode fibres, as specified in IEC 60793-2-10. The nominal test wavelengths detailed are 850 nm and 1 300 nm. This standard may be suitable for multimode attenuation measurements for other multimode categories and/or other wavelengths, but the source condition for other categories and wavelengths are not defined here.

The purpose of these requirements is as follows:

- to ensure consistency of field measurements when different types of test equipment are used;
- to ensure consistency of factory measurements when different types of test equipment are used;
- to ensure consistency of field measurements when compared with factory measurements.

This standard describes launch condition requirements for optical attenuation using sources with a controlled encircled flux (EF).

### 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.

IEC 60793-2-10, *Optical fibres – Part 2-10: Product specifications – Sectional specification for category A1 multimode fibres*

IEC 61280-1-4, *Fibre optic communication subsystem test procedures – Part 1-4: General communication subsystems – Light source encircled flux measurement method*

IEC 61280-4-1:2009, *Fibre optic communication subsystem test procedures – Part 4-1: Installed cable plant – Multimode attenuation measurement*

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