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Irish Standard I.S. EN 62614:2010

# Fibre optics - Launch condition requirements for measuring multimode attenuation (IEC 62614:2010 (EQV))

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# EUROPEAN STANDARD

# EN 62614

# NORME EUROPÉENNE EUROPÄISCHE NORM

October 2010

ICS 33.180.01

English version

# Fibre optics -Launch condition requirements for measuring multimode attenuation (IEC 62614:2010)

Fibres optiques -Exigences des conditions d'injection pour la mesure de l'affaiblissement en multimodal (CEI 62614:2010) Lichtwellenleiter -Anforderungen an die Anregungsbedingungen für Mehrmoden-Dämpfungsmessungen (IEC 62614:2010)

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# CENELEC

European Committee for Electrotechnical Standardization Comité Européen de Normalisation Electrotechnique Europäisches Komitee für Elektrotechnische Normung

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EN 62614:2010

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#### Foreword

The text of document 86/367/FDIS, future edition 1 of IEC 62614, prepared by IEC TC 86, Fibre optics, was submitted to the IEC-CENELEC parallel vote and was approved by CENELEC as EN 62614 on 2010-10-01.

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

The following dates were fixed:

_	latest date by which the EN has to be implemented at national level by publication of an identical national standard or by endorsement	(dop)	2011-07-01
_	latest date by which the national standards conflicting with the EN have to be withdrawn	(dow)	2013-10-01

Annex ZA has been added by CENELEC.

## Endorsement notice

The text of the International Standard IEC 62614:2010 was approved by CENELEC as a European Standard without any modification.

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## Annex ZA

(normative)

# Normative references to international publications with their corresponding European publications

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.

NOTE When an international publication has been modified by common modifications, indicated by (mod), the relevant EN/HD applies.

Publication	<u>Year</u>	Title	<u>EN/HD</u>	Year
IEC 60793-2-10	-	Optical fibres - Part 2-10: Product specifications - Sectional specification for category A1 multimode fibres	EN 60793-2-10	-
IEC 61280-1-4	-	Fibre optic communication subsystem test procedures - Part 1-4: General communication subsystems - Light source encircled flux measurement method	EN 61280-1-4	-
IEC 61280-4-1	2009	Fibre optic communication subsystem test procedures - Part 4-1: Installed cable plant - Multimode attenuation measurement	EN 61280-4-1	2009

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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.

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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

- reconfirmed,
- withdrawn,
- replaced by a revised edition, or
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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  $\mu$ m /125  $\mu$ m) and A1b (62,5  $\mu$ m /125  $\mu$ 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

#### 3 Terms and definitions

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

NOTE In this clause only specific terms and definitions for the purposes of this document are provided. For common fibre optic terms, reference is made to IEC/TR 61931.



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