

INTERNATIONAL STANDARD

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Fibre optic interconnecting devices and passive components – Basic test and measurement procedures

Part 3-53: Examinations and measurements – Encircled angular flux (EAF) measurement method based on two-dimensional far field data from multimode waveguide (including fibre)

Dispositifs d'interconnexion et composants passifs fibroniques – Procédures fondamentales d'essais et de mesures –

Partie 3-53: Examens et mesures – Méthode de mesure du flux angulaire inscrit (EAF) fondée sur les données bidimensionnelles de champ lointain d'un guide d'ondes multimodal (fibre incluse)



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INTERNATIONAL ELECTROTECHNICAL COMMISSION

**FIBRE OPTIC INTERCONNECTING
DEVICES AND PASSIVE COMPONENTS –
BASIC TEST AND MEASUREMENT PROCEDURES****Part 3-53: Examinations and measurements – Encircled angular
flux (EAF) measurement method based on two-dimensional
far field data from multimode waveguide (including fibre)**

FOREWORD

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International Standard IEC 61300-3-53 has been prepared by subcommittee 86B: Fibre optic interconnecting devices and passive components, of IEC technical committee 86: Fibre optics.

This second edition cancels and replaces the first edition in 2015. This edition constitutes a technical revision.

This edition includes the following significant technical changes with respect to the previous edition:

- a) the scope of the applicable wave guides, and graded index multimode optical wave guide and fibre have been included;
- b) the structure of 5.3 has been rearranged;
- c) Annex C and Annex D have been added.

The text of this International Standard is based on the following documents:

FDIS	Report on voting
86B/4343/FDIS	86B/4373/RVD

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

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

A list of all parts in the IEC 61300, published under the general title *Fibre optic interconnecting devices and passive components – Basic test and measurement procedures*, can be found on the IEC website.

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

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FIBRE OPTIC INTERCONNECTING DEVICES AND PASSIVE COMPONENTS – BASIC TEST AND MEASUREMENT PROCEDURES

Part 3-53: Examinations and measurements – Encircled angular flux (EAF) measurement method based on two-dimensional far field data from multimode waveguide (including fibre)

1 Scope

This part of IEC 61300 defines the encircled angular flux measurement of multimode waveguide light sources, in which most of the transverse modes are excited. The term "waveguide" is understood to include both channel waveguides and optical fibres but not slab waveguides.

The applicable fibre types are the followings:

- A1 specified in IEC 60793-2-10;
- A3 specified in IEC 60793-2-30;
- A4 specified in IEC 60793-2-40.

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.

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

IEC 60793-2-30, *Optical fibres – Part 2-30: Product specifications – Sectional specification for category A3 multimode fibres*

IEC 60793-2-40, *Optical fibres – Part 2-40: Product specifications – Sectional specification for category A4 multimode fibres*

IEC 60825-1, *Safety of laser products – Part 1: Equipment classification and requirements*

IEC 61300-1:2016, *Fibre optic interconnecting devices and passive components – Basic test and measurement procedures – Part 1: General and guidance*

3 Terms and definitions

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

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