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Guidance of measurement methods and test procedures – Basic tests for polarization-maintaining optical fibres

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GUIDANCE OF MEASUREMENT METHODS AND TEST PROCEDURES – BASIC TESTS FOR POLARIZATION-MAINTAINING OPTICAL FIBRES

FOREWORD

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IEC/TR 62349, which is a technical report, has been prepared by subcommittee 86A: Fibres and cables, of IEC technical committee 86: Fibre optics.

This second edition cancels and replaces the first edition published in 2005. It constitutes a technical revision.

In this edition, guidance of measurement methods and test procedures for dimensional characteristics, cut-off wavelength, mode field diameter and beat length of polarization-maintaining optical fibres have been added. Thus, the title of the technical report is changed to “Guidance of measurement methods and test procedures – Basic tests for polarization-maintaining optical fibres” from “Guidance for polarization crosstalk measurement of optical fibre”.

The text of this technical report is based on the following documents:

Enquiry draft	Report on voting
86A/1488/DTR	86A/1507/RVC

Full information on the voting for the approval of this technical report 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

- reconfirmed,
- withdrawn,
- replaced by a revised edition, or
- amended.

A bilingual version of this publication may be issued at a later date.

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GUIDANCE OF MEASUREMENT METHODS AND TEST PROCEDURES – BASIC TESTS FOR POLARIZATION-MAINTAINING OPTICAL FIBRES

1 Scope and object

This technical report applies to polarization-maintaining (PM) optical fibres.

The object of this report is to define test procedures to be used in establishing uniform requirements for the geometrical and transmission properties of PM fibres.

2 Normative references

The following documents, in whole or in part, are normatively referenced in this document and are indispensable for its application. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments) applies.

IEC 60068-1, *Environmental testing – Part 1: General and guidance*

IEC 60793-1-20:2001, *Optical fibres – Part 1-20: Measurement methods and test procedures – Fibre geometry*

IEC 60793-1-44, *Optical fibres – Part 1-44: Measurement methods and test procedures – Cut-off wavelength*

IEC 60793-1-45:2001, *Optical fibres – Part 1-45: Measurement methods and test procedures – Mode field diameter*

IEC 60793-1-48, *Optical fibres – Part 1-48: Measurement methods and test procedures – Polarization mode dispersion*