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# TECHNICAL REPORT

**Active fibres – Characteristics and measurement methods – Guidance**

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# ACTIVE FIBRES – CHARACTERISTICS AND MEASUREMENT METHODS – GUIDANCE

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IEC TR 63309 has been prepared by subcommittee 86A: Fibres and cables, of IEC technical committee 86: Fibre optic. It is a Technical Report.

The text of this Technical Report is based on the following documents:

| Draft | Report on voting |
|---|---|
| 86A/2515/DTR | 86A/2586/RVDTR |

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

The language used for the development of this Technical Report is English.

This document was drafted in accordance with ISO/IEC Directives, Part 2, and developed in accordance with ISO/IEC Directives, Part 1 and ISO/IEC Directives, IEC Supplement, available at www.iec.ch/members_experts/refdocs. The main document types developed by IEC are described in greater detail at www.iec.ch/publications.

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

- reconfirmed,
- withdrawn, or
- revised.

# ACTIVE FIBRES – CHARACTERISTICS AND MEASUREMENT METHODS – GUIDANCE

## 1 Scope

This document provides an introduction of active fibres describing key characteristics and measurement methods. For the purpose of this document, an active fibre is a silica-based optical fibre doped in the core with rare-earth ions to allow optical gain, named rare-earth doped fibre. Other fibres enabling optical gain by means of different effects (e.g. Raman effect) are not included in the scope of this document.

## 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 TR 61931, *Fibre optic – Terminology*

IEC TS 62627-09, *Fibre optic interconnecting devices and passive components – Vocabulary for passive optical devices*