



SLOVENSKI STANDARD
oSIST prEN IEC 60793-1-47:2026
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Optična vlakna - 1-47. del: Merilne metode in postopki preskušanja - Izgube zaradi makro upogibov

Optical fibres - Part 1-47: Measurement methods and test procedures - Macrobending loss

Lichtwellenleiter - Teil 1-47: Messmethoden und Prüfverfahren - Makrobiegeverlust

Fibres optiques - Partie 1-47: Méthodes de mesure et procédures d'essai - Pertes par macrocourbures

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33.180.10 (Optična) vlakna in kabli Fibres and cables

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86A/2654/CDV

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ASPECTS CONCERNED:	
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TITLE:

Optical fibres - Part 1-47: Measurement methods and test procedures - Macrobending loss

PROPOSED STABILITY DATE: 2030

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INTERNATIONAL ELECTROTECHNICAL COMMISSION

**Optical fibres -
Part 1-47: Measurement methods and test procedures - Macrobending
loss**

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IEC 60793-1-47 has been prepared by subcommittee 86A: Fibres and cables, of IEC technical committee 86: Fibre optics. It is an International Standard.

This fifth edition cancels and replaces the fourth edition published in 2017. This edition constitutes a technical revision.

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

- a) remove calculation formula in [Clause 7](#) and reference to [Clause A.3](#) and [Clause B.4](#) for transmitted power technique and cut-back technique respectively;
- b) revision of [Annex A](#) on the transmitted power monitoring technique and [Annex B](#) on the cut-back technique by directly describing how to carry out macrobending loss test and corresponding calculations.
- c) remove [Annex C](#) (see IEC 60793-1-47:2017, Annex C ed 4) and reference the requirement of optical source characteristics for A1 multimode fibres measurement to IEC 61280-4-1:2019, Annex F.

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

Draft	Report on voting

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 International Standard is English [change language if necessary].

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 https://www.iec.ch/members_experts/refdocs. The main document types developed by IEC are described in greater detail at <https://www.iec.ch/publications>.

This standard is to be read in conjunction with IEC 60793-1-1:2022.

A list of all parts of IEC 60793 series, published under the general title *Optical fibres*, 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 <https://webstore.iec.ch> in the data related to the specific document. At this date, the document will be

- reconfirmed,
- withdrawn, or
- revised.

INTRODUCTION

Publications in the IEC 60793-1 (all parts) concern measurement methods and test procedures as they apply to optical fibres.

Within the same series, several different areas are grouped, but all numbers are possibly not used, as follows:

Parts 1-10 to 1-19	General
Parts 1-20 to 1-29	Measurement methods and test procedures for dimensions
Parts 1-30 to 1-39	Measurement methods and test procedures for mechanical characteristics
Parts 1-40 to 1-49	Measurement methods and test procedures for transmission and optical characteristics
Parts 1-50 to 1-59	Measurement methods and test procedures for environmental characteristics

The following items were listed in the bibliography but not cited in the text. Please find a suitable place to cite them to justify their inclusion in the bibliography:

IEC 60793-1-40, *Optical fibres - Part 1-40: Attenuation measurement methods*⁶: *Measurement methods and test procedures - Monitoring of changes in attenuation*[IEC 60793-1-46 \[1\]](#)

IEC 60793-1-46, *Optical fibres - Part 1-4*

IEC 60793-2-50, *Optical fibres - Part 2-50: Product specifications - Sectional specification for class B single-mode fibres*[IEC 60793-2-50 \[2\]](#)

ITU-T G Suppl. 59:2016, *Guidance on optical fibre and cable reliability*[\[3\]](#)

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