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**Postopki za preskušanje optičnih komunikacijskih podsistemov - 4-2. del:
Kabelska inštalacija - Meritve slabljenja v enorodovnih vlaknih in optičnih
povratnih izgub (IEC 61280-4-2:2024)**

Fibre-optic communication subsystem test procedures - Part 4-2: Installed cabling plant -
Single-mode attenuation and optical return loss measurements (IEC 61280-4-2:2024)

Prüfverfahren für Lichtwellenleiter-Kommunikationsuntersysteme - Teil 4-2: Installierte
Kabelanlagen - Einmoden-Dämpfungs- und optische Rückflusdämpfungsmessung (IEC
61280-4-2:2024)

Procédures d'essai des sous-systèmes de télécommunication fibroniques - Partie 4-2:
Installations câblées - Mesure de l'affaiblissement de réflexion optique et de
l'affaiblissement des fibres unimodales (IEC 61280-4-2:2024)

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33.180.01	Sistemi z optičnimi vlakni na splošno	Fibre optic systems in general
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**Fibre-optic communication subsystem test procedures - Part 4-2:
Installed cabling plant - Single-mode attenuation and optical
return loss measurements
(IEC 61280-4-2:2024)**

Procédures d'essai des sous-systèmes de
télécommunication fibroniques - Partie 4-2: Installations
câblées - Mesures de l'affaiblissement de réflexion optique
et de l'affaiblissement des fibres unimodales
(IEC 61280-4-2:2024)

Prüfverfahren für Lichtwellenleiter-
Kommunikationsuntersysteme - Teil 4-2: Installierte
Kabelanlagen - Einmoden-Dämpfungs- und optische
Rückflussdämpfungsmessung
(IEC 61280-4-2:2024)

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EN IEC 61280-4-2:2024 (E)**European foreword**

The text of document 86C/1912/FDIS, future edition 3 of IEC 61280-4-2, prepared by SC 86C "Fibre optic systems and active devices" of IEC/TC 86 "Fibre optics" was submitted to the IEC-CENELEC parallel vote and approved by CENELEC as EN IEC 61280-4-2:2024.

The following dates are fixed:

- latest date by which the document has to be implemented at national (dop) 2025-03-10 level by publication of an identical national standard or by endorsement
- latest date by which the national standards conflicting with the (dow) 2027-06-10 document have to be withdrawn

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In the official version, for Bibliography, the following notes have to be added for the standard indicated:

IEC 60793-1-40	NOTE	Approved as EN IEC 60793-1-40
IEC 60793-2	NOTE	Approved as EN IEC 60793-2
IEC 60793-2-50	NOTE	Approved as EN IEC 60793-2-50
IEC 61280-1-3	NOTE	Approved as EN IEC 61280-1-3
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IEC 61280-4-5	NOTE	Approved as EN IEC 61280-4-5
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IEC 61755-2-4	NOTE	Approved as EN 61755-2-4
IEC 61755-2-5	NOTE	Approved as EN 61755-2-5

Annex ZA (normative)

Normative references to international publications with their corresponding European publications

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.

NOTE 1 Where an International Publication has been modified by common modifications, indicated by (mod), the relevant EN/HD applies.

NOTE 2 Up-to-date information on the latest versions of the European Standards listed in this annex is available here: www.cencenelec.eu.

<u>Publication</u>	<u>Year</u>	<u>Title</u>	<u>EN/HD</u>	<u>Year</u>
IEC 60825-2	-	Safety of laser products - Part 2: Safety of optical fibre communication systems (OFCSs)	-	-
IEC 61300-3-35	-	Fibre optic interconnecting devices and passive components - Basic test and measurement procedures - Part 3-35: Examinations and measurements - Visual inspection of fibre optic connectors and fibre-stub transceivers	EN IEC 61300-3-35	-
IEC 61315	-	Calibration of fibre-optic power meters	EN IEC 61315	-
IEC 61746-1	2009	Calibration of optical time-domain reflectometers (OTDR) - Part 1: OTDR for single mode fibres	EN 61746-1	2011
IEC/TR 62627-01	-	Fibre optic interconnecting devices and passive components - Part 01: Fibre optic connector cleaning methods	+ AC	2014



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**Fibre- optic communication subsystem test procedures –
Part 4-2: Installed cabling plant – Single-mode attenuation and optical return
loss measurements**

**Procédures d'essai des sous-systèmes de télécommunication fibroniques –
Partie 4-2: Installations câblées – Mesures de l'affaiblissement de réflexion
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INTERNATIONAL ELECTROTECHNICAL COMMISSION

FIBRE-OPTIC COMMUNICATION SUBSYSTEM TEST PROCEDURES –**Part 4-2: Installed cabling plant –
Single-mode attenuation and optical return loss measurements**

FOREWORD

- 1) The International Electrotechnical Commission (IEC) is a worldwide organization for standardization comprising all national electrotechnical committees (IEC National Committees). The object of IEC is to promote international co-operation on all questions concerning standardization in the electrical and electronic fields. To this end and in addition to other activities, IEC publishes International Standards, Technical Specifications, Technical Reports, Publicly Available Specifications (PAS) and Guides (hereafter referred to as "IEC Publication(s)"). Their preparation is entrusted to technical committees; any IEC National Committee interested in the subject dealt with may participate in this preparatory work. International, governmental and non-governmental organizations liaising with the IEC also participate in this preparation. IEC collaborates closely with the International Organization for Standardization (ISO) in accordance with conditions determined by agreement between the two organizations.
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IEC 61280-4-2 has been prepared by subcommittee 86C: Fibre optic systems and active devices, of IEC technical committee 86: Fibre optics. It is an International Standard.

This third edition cancels and replaces the second edition published in 2014. This edition constitutes a technical revision.

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

- a) addition of the equipment cord method;
- b) addition of test limit adjustment related to test cord grades;
- c) refinements on measurement uncertainties.