

Fibre optic communication subsystem basic test procedures —

Part 4-2: Fibre optic cable plant — Single-mode fibre optic cable plant attenuation

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National foreword

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The UK participation in its preparation was entrusted by Technical Committee GEL/86, Fibre optics, to Subcommittee GEL/86/3, Fibre optic systems and active devices, which has the responsibility to:

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Summary of pages

This document comprises a front cover, an inside front cover, the EN title page, pages 2 to 15 and a back cover.

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Fibre optic communication subsystem basic test procedures
Part 4-2: Fibre optic cable plant
Single-mode fibre optic cable plant attenuation
(IEC 61280-4-2:1999)

Procédures d'essai de base des
sous-systèmes de télécommunication
à fibres optiques
Partie 4-2: Installation de câbles à
fibres optiques
Affaiblissement des installations de
câbles à fibres unimodales
(CEI 61280-4-2:1999)

Lichtwellenleiter-Kommunikations-
untersysteme
Grundlegende Prüfverfahren
Teil 4-2: Lichtwellenleiter-Kabelanlagen
Dämpfungsmessung in
Einmoden-LWL-Kabelanlagen
(IEC 61280-4-2:1999)

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Foreword

The text of document 86C/246/FDIS, future edition 1 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 was approved by CENELEC as EN 61280-4-2 on 1999-10-01.

The following dates were fixed:

- latest date by which the EN has to be implemented
at national level by publication of an identical
national standard or by endorsement (dop) 2000-07-01
- latest date by which the national standards conflicting
with the EN have to be withdrawn (dow) 2002-10-01

Annexes designated "normative" are part of the body of the standard.
Annexes designated "informative" are given for information only.
In this standard, annex ZA is normative and annex A is informative.
Annex ZA has been added by CENELEC.

Endorsement notice

The text of the International Standard IEC 61280-4-2:1999 was approved by CENELEC as a European Standard without any modification.

In the official version, for annex A, Bibliography, the following note has to be added for the standard indicated:

IEC 60825-1 NOTE: Harmonized as EN 60825-1:1994 (not modified).

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FIBRE OPTIC COMMUNICATION SUBSYSTEM BASIC TEST PROCEDURES –

Part 4-2: Fibre optic cable plant – Single-mode fibre optic cable plant attenuation

1 Scope and object

The purpose of this part of IEC 61280 is to describe procedures to measure the optical attenuation (loss) performance of installed single-mode fibre optic cable plants. It is neither intended for component testing, nor does it define those elements of an installation which are to be measured. The document that invokes the procedure of this part of IEC 61280 is to establish the requirements for installation, maintenance, repair and conformance testing.

The optical attenuation (loss) performance is a specific test associated with IEC 61281-1.

The test procedure of this part of IEC 61280 may be used to measure the optical loss between any two passively connected points, including end terminations, of a single-mode fibre optic cable plant. The fibre optic cable plant may consist of fibre optic cables, connectors, mounting panels, jumper cables, and other passive components, but may not include active components.

2 Normative references

The following normative documents contain provisions which, through reference in this text, constitute provisions of this part of IEC 61280. For dated references, subsequent amendments to, or revisions of, any of these publications do not apply. However, parties to agreements based on this part of IEC 61280 are encouraged to investigate the possibility of applying the most recent editions of the normative documents indicated below. For undated references, the latest edition of the normative document referred to applies. Members of IEC and ISO maintain registers of currently valid International Standards.

IEC 60793-1-4:1995, *Optical fibres – Part 1: Generic specification – Section 4: Measuring methods for transmission and optical characteristics*

IEC 61281-1:1999, *Fibre optic communication subsystems – Part 1: Generic specification*

IEC 61300-3-4:1998, *Fibre optic interconnecting devices and passive components – Basic test and measurement procedures – Part 3-4: Examination and measurements – Attenuation*

IEC 61300-3-6:1997, *Fibre optic interconnecting devices and passive components – Basic test and measurement procedures – Part 3-6: Examinations and measurements – Return loss*

IEC 61315:1995, *Calibration of fibre optic power meters*