

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

EESTI STANDARDI EESSÕNA

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English Version

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
(IEC 61300-3-35:2015)

Dispositifs d'interconnexion et composants passifs à fibres
optiques - Procédures fondamentales d'essais et de
mesures - Partie 3-35: Examens et mesures - Examen
visuel des connecteurs à fibres optiques et des émetteurs-
récepteurs à embase fibrée
(IEC 61300-3-35:2015)

Lichtwellenleiter - Verbindungselemente und passive
Bauteile - Grundlegende Prüf- und Messverfahren - Teil 3-
35: Untersuchungen und Messungen - Visuelle Inspektion
von Lichtwellenleiter-Steckverbindern und Faser Stub-
Transceivern
(IEC 61300-3-35:2015)

This European Standard was approved by CENELEC on 2015-07-30. CENELEC members are bound to comply with the CEN/CENELEC Internal Regulations which stipulate the conditions for giving this European Standard the status of a national standard without any alteration.

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European Committee for Electrotechnical Standardization
Comité Européen de Normalisation Electrotechnique
Europäisches Komitee für Elektrotechnische Normung

CEN-CENELEC Management Centre: Avenue Marnix 17, B-1000 Brussels

European foreword

The text of document 86B/3886/FDIS, future edition 2 of IEC 61300-3-35, prepared by SC 86B "Fibre optic interconnecting devices and passive components" of IEC/TC 86 "Fibre optics" was submitted to the IEC-CENELEC parallel vote and approved by CENELEC as EN 61300-3-35:2015.

The following dates are fixed:

- latest date by which the document has to be implemented at national level by publication of an identical national standard or by endorsement (dop) 2016-04-30
- latest date by which the national standards conflicting with the document have to be withdrawn (dow) 2018-07-30

This document supersedes EN 61300-3-35:2010.

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Endorsement notice

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

IEC 60825-2	NOTE	Harmonized as EN 60825-2
IEC 61300-1	NOTE	Harmonized as EN 61300-1
IEC 61755 (Series)	NOTE	Harmonized as EN 61755 (Series)

CONTENTS

FOREWORD	4
1 Scope	6
2 Normative references	6
3 Terms, definitions and abbreviations	6
3.1 Terms and definitions	6
3.2 Abbreviations	7
4 Measurement	7
4.1 General	7
4.2 Measurement conditions	7
4.3 Pre-conditioning	7
4.4 Recovery	7
5 Apparatus	8
5.1 Method A: Direct view optical microscopy	8
5.2 Method B: Video microscopy	8
5.3 Method C: Automated analysis microscopy	8
5.4 Certification requirements for low and high resolution systems	8
5.4.1 General	8
5.4.2 Requirement for low resolution microscope systems	8
5.4.3 Requirements for high resolution microscope systems	9
6 Procedure	9
6.1 Certification procedure	9
6.2 Inspection procedure	9
6.3 Visual requirements	10
Annex A (informative) Examples of inspected end faces with surface anomalies	13
Annex B (normative) Diagram of qualification artefact and method of manufacture	18
B.1 High resolution artefact	18
B.2 Low resolution artefact	20
Bibliography	21
Figure 1 – Inspection procedure flow	10
Figure A.1 – Example 1 (low resolution system)	13
Figure A.2 – Example 1 (high resolution system)	13
Figure A.3 – Example 2 (low resolution system)	14
Figure A.4 – Example 2 (high resolution system)	14
Figure A.5 – Example 3 (low resolution system)	14
Figure A.6 – Example 3 (high resolution system)	15
Figure A.7 – Example 4 (low resolution system)	15
Figure A.8 – Example 4 (high resolution system)	16
Figure A.9 – Example 5 (low resolution system)	16
Figure A.10 – Example 6 (low resolution system)	17
Figure B.1 – Example of nano-indentation test system	18
Figure B.2 – Example of high resolution artefacts	19
Figure B.3 – Example of low resolution artefact pattern	20

Table 1 – Visual requirements for single-mode PC polished connectors, $RL \geq 45$ dB 11

Table 2 – Visual requirements for single-mode angle polished (APC) connectors..... 11

Table 3 – Visual requirements for single-mode PC polished connectors, $RL \geq 26$ dB
and single-mode transceivers using a fibre-stub interface 12

Table 4 – Visual requirements for multi-mode PC polished connectors..... 12

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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

1 Scope

This part of IEC 61300 describes methods for quantitatively assessing the end face quality of a polished fibre optic connector or of a fibre optic transceiver using a fibre-stub type interface. Sub-surface cracks and fractures are not considered in this standard. In general, the methods described in this standard apply to 125 µm cladding fibres contained within a ferrule and intended for use with sources of ≤ 2 W of input power. However, portions are applicable to non-ferruled connectors and other fibre types. Those portions are identified where appropriate. It is not the intention of this standard that the size of scratches should be measured, the dimensions and requirements are selected such that they can be estimated. There is no need to measure for example if a scratch is 2,3 µm wide.

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.

Void.

3 Terms, definitions and abbreviations

3.1 Terms and definitions

For the purposes of this document, the following terms and definitions apply.

3.1.1 defect

non-linear surface feature detectable on the end face of ferrule including particulates, other debris, fluid contamination, pits, chips, edge chipping, etc.

Note 1 to entry: Some fibre types have structural features potentially visible on the fibre end face. Fibres that use microstructures to contain the light signal, such as photonic band-gap and hole-assisted fibres, can have an engineered or random pattern of structures surrounding the core. These features are not defects.

3.1.2 defect size

smallest circle that can encompass the entire defect

3.1.3 loose debris

particulate and debris that can be removed by cleaning

Note 1 to entry: Loose debris are classified as defects.