



BSI Standards Publication

Fibre optic interconnecting devices and passive components — Basic test and measurement procedures

Part 2-19: Tests – Damp heat (steady state)

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National foreword

This British Standard is the UK implementation of EN 61300-2-19:2013. It is identical to IEC 61300-2-19:2012. It supersedes BS EN 61300-2-19:2005 which is withdrawn.

The UK participation in its preparation was entrusted by Technical Committee GEL/86, Fibre optics, to Subcommittee GEL/86/2, Fibre optic interconnecting devices and passive components.

A list of organizations represented on this committee can be obtained on request to its secretary.

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Published by BSI Standards Limited 2013

ISBN 978 0 580 75319 0

ICS 33.180.20

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This British Standard was published under the authority of the Standards Policy and Strategy Committee on 30 April 2013.

Amendments issued since publication

Amd. No.	Date	Text affected
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English version

**Fibre optic interconnecting devices and passive components -
 Basic test and measurement procedures -
 Part 2-19: Tests -
 Damp heat (steady state)
 (IEC 61300-2-19:2012)**

Dispositifs d'interconnexion et composants
 passifs à fibres optiques -
 Méthodes fondamentales d'essais et de
 mesures -
 Partie 2-19: Essais -
 Chaleur humide (essai continu)
 (CEI 61300-2-19:2012)

Lichtwellenleiter -
 Verbindungselemente und passive
 Bauteile -
 Grundlegende Prüf- und Messverfahren -
 Teil 2-19: Prüfungen -
 Feuchte Wärme (konstant)
 (IEC 61300-2-19:2012)

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CENELEC

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

Management Centre: Avenue Marnix 17, B - 1000 Brussels

Foreword

The text of document 86B/3491/FDIS, future edition 3 of IEC 61300-2-19, 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 61300-2-19:2013.

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) 2013-09-12
- latest date by which the national standards conflicting with the document have to be withdrawn (dow) 2013-12-12

This document supersedes EN 61300-2-19:2005.

The changes with respect to EN 61300-2-19:2005 are to reconsider the severities and details to be specified.

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Endorsement notice

The text of the International Standard IEC 61300-2-19:2012 was approved by CENELEC as a European Standard without any modification.

Annex ZA (normative)

Normative references to international publications with their corresponding European publications

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.

NOTE When an international publication has been modified by common modifications, indicated by (mod), the relevant EN/HD applies.

<u>Publication</u>	<u>Year</u>	<u>Title</u>	<u>EN/HD</u>	<u>Year</u>
IEC 60068-2-78	-	Environmental testing - Part 2-78: Tests - Test Cab: Damp heat, steady state	EN 60068-2-78	-
IEC 61300-3-1	-	Fibre optic interconnecting devices and passive components - Basic test and measurement procedures - Part 3-1: Examinations and measurements - Visual examination	EN 61300-3-1	-
IEC 61300-3-3	-	Fibre optic interconnecting devices and passive components - Basic test and measurement procedures - Part 3-3: Examinations and measurements - Active monitoring of changes in attenuation and return loss	EN 61300-3-3	-
IEC 61300-3-4	-	Fibre optic interconnecting devices and passive components - Basic test and measurement procedures - Part 3-4: Examinations and measurements - Attenuation	EN 61300-3-4	-

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FIBRE OPTIC INTERCONNECTING DEVICES AND PASSIVE COMPONENTS – BASIC TEST AND MEASUREMENT PROCEDURES –

Part 2-19: Tests – Damp heat (steady state)

1 Scope

This part of IEC 61300 details a procedure for determining the suitability of a fibre optic device to withstand the environmental condition of high humidity and high temperature which may occur in actual use, storage and/or transport. The test is primarily intended to permit the observation of effects of high humidity at constant temperature over a given period. Absorption of moisture may result in swelling that would destroy functional utility, cause loss of physical strength, and cause changes in other important mechanical properties. Degradation of optical properties may also occur. Although not necessarily intended as a simulated tropical test, this test can, nevertheless, be useful in determining moisture absorption of insulating or covering materials.

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.

IEC 60068-2-78, *Environmental testing – Part 2-78: Tests – Test Cab: Damp heat, steady state*

IEC 61300-3-1, *Fibre optic interconnecting devices and passive components – Basic test and measurement procedures – Part 3-1: Examinations and measurements – Visual examination*

IEC 61300-3-3, *Fibre optic interconnecting devices and passive components – Basic test and measurement procedures – Part 3-3: Examinations and measurements – Active monitoring of changes in attenuation and return loss*

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

3 General description

This procedure is conducted in accordance with IEC 60068-2-78, Test Cab. The specimen is placed in a chamber and subjected to a damp-heat environment which is maintained at a given temperature and relative humidity for a specified duration, as specified in the relevant specification.

4 Apparatus

4.1 Chamber

The apparatus consists of an environmental chamber in accordance with IEC 60068-2-78, test Cab. The chamber shall be capable of housing the specimen and shall be so constructed that: