



**NSAI**  
Standards

Irish Standard  
I.S. EN IEC 60068-3-5:2018

# Environmental testing - Part 3-5: Supporting documentation and guidance - Confirmation of the performance of temperature chambers

**I.S. EN IEC 60068-3-5:2018**

*Incorporating amendments/corrigenda/National Annexes issued since publication:*

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## National Foreword

I.S. EN IEC 60068-3-5:2018 is the adopted Irish version of the European Document EN IEC 60068-3-5:2018, Environmental testing - Part 3-5: Supporting documentation and guidance - Confirmation of the performance of temperature chambers

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EUROPEAN STANDARD  
NORME EUROPÉENNE  
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**EN IEC 60068-3-5**

March 2018

ICS 19.040

Supersedes EN 60068-3-5:2002

English Version

**Environmental testing - Part 3-5: Supporting documentation and  
guidance - Confirmation of the performance of temperature  
chambers  
(IEC 60068-3-5:2018)**

Essais d'environnement - Partie 3-5: Documentation  
d'accompagnement et guide - Confirmation des  
performances des chambres d'essai en température  
(IEC 60068-3-5:2018)

Umweltprüfungen - Teil 3-5: Unterstützende Dokumentation  
und Leitfaden - Bestätigung des Leistungsvermögens von  
Temperaturprüfkammern  
(IEC 60068-3-5:2018)

This European Standard was approved by CENELEC on 2018-02-27. 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.

Up-to-date lists and bibliographical references concerning such national standards may be obtained on application to the CEN-CENELEC Management Centre or to any CENELEC member.

This European Standard exists in three official versions (English, French, German). A version in any other language made by translation under the responsibility of a CENELEC member into its own language and notified to the CEN-CENELEC Management Centre has the same status as the official versions.

CENELEC members are the national electrotechnical committees of Austria, Belgium, Bulgaria, Croatia, Cyprus, the Czech Republic, Denmark, Estonia, Finland, Former Yugoslav Republic of Macedonia, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, the Netherlands, Norway, Poland, Portugal, Romania, Serbia, Slovakia, Slovenia, Spain, Sweden, Switzerland, Turkey and the United Kingdom.



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

**CEN-CENELEC Management Centre: Rue de la Science 23, B-1040 Brussels**

**EN IEC 60068-3-5:2018 (E)****European foreword**

The text of document 104/759/FDIS, future edition 2 of IEC 60068-3-5, prepared by IEC/TC 104 "Environmental conditions, classification and methods of test" was submitted to the IEC-CENELEC parallel vote and approved by CENELEC as EN IEC 60068-3-5:2018.

The following dates are fixed:

- latest date by which the document has to be (dop) 2018-11-27  
implemented at national level by  
publication of an identical national  
standard or by endorsement
- latest date by which the national (dow) 2021-02-27  
standards conflicting with the  
document have to be withdrawn

This document supersedes EN 60068-3-5:2002.

Attention is drawn to the possibility that some of the elements of this document may be the subject of patent rights. CENELEC shall not be held responsible for identifying any or all such patent rights.

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The text of the International Standard IEC 60068-3-5:2018 was approved by CENELEC as a European Standard without any modification.

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

IEC 60068-1	NOTE	Harmonized as EN 60068-1.
IEC 60068-3-6	NOTE	Harmonized as EN 60068-3-6.
IEC 60584-1	NOTE	Harmonized as EN 60584-1.
IEC 60751	NOTE	Harmonized as EN 60751.
ISO 10012	NOTE	Harmonized as EN ISO 10012.

## 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.cenelec.eu](http://www.cenelec.eu).

<u>Publication</u>	<u>Year</u>	<u>Title</u>	<u>EN/HD</u>	<u>Year</u>
IEC 60068-2	series	Environmental testing - Part 2-1: Tests - Test A: Cold	EN 60068-2	series
IEC 60068-3-7	-	Environmental testing - Part 3-7: Supporting documentation and guidance - Measurements in temperature chambers for tests A and B (with load)	EN 60068-3-7	-
IEC 60068-3-11	-	Environmental testing - Part 3-11: Supporting documentation and guidance - Calculation of the uncertainty of conditions in climatic test chambers	EN 60068-3-11	-

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**IEC 60068-3-5**

Edition 2.0 2018-01

# **INTERNATIONAL STANDARD**

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**Environmental testing –  
Part 3-5: Supporting documentation and guidance – Confirmation of the  
performance of temperature chambers**



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**IEC 60068-3-5**

Edition 2.0 2018-01

# **INTERNATIONAL STANDARD**

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**Environmental testing –  
Part 3-5: Supporting documentation and guidance – Confirmation of the  
performance of temperature chambers**

INTERNATIONAL  
ELECTROTECHNICAL  
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## INTERNATIONAL ELECTROTECHNICAL COMMISSION

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### ENVIRONMENTAL TESTING –

#### **Part 3-5: Supporting documentation and guidance – Confirmation of the performance of temperature chambers**

#### 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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International Standard IEC 60068-3-5 has been prepared by IEC technical committee 104: Environmental conditions, classification and methods of test.

This second edition cancels and replaces the first edition published in 2001. This edition constitutes a technical revision.

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

- a) Confirmation procedures are clarified.

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

FDIS	Report on voting
104/759/FDIS	104/778/RVD

Full information on the voting for the approval of this International Standard can be found in the report on voting indicated in the above table.

This document has been drafted in accordance with the ISO/IEC Directives, Part 2.

A list of all parts in the IEC 60068 series, published under the general title *Environmental testing*, 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 "<http://webstore.iec.ch>" in the data related to the specific document. At this date, the document will be

- reconfirmed,
- withdrawn,
- replaced by a revised edition, or
- amended.

A bilingual version of this publication may be issued at a later date.

## INTRODUCTION

IEC 60068 (all parts) contains fundamental information on environmental testing procedures and severities.

The expression "environmental conditioning" or "environmental testing" covers the natural and artificial environments to which components or equipment may be exposed so that an assessment can be made of their performance under conditions of use, transport and storage to which they may be exposed in practice.

Temperature chambers used for "environmental conditioning" or "environmental testing" are not described in any publication, although the method of maintaining and measuring temperature and/or humidity has a great influence on test results. The physical characteristics of temperature chambers can also influence test results.

## **ENVIRONMENTAL TESTING –**

### **Part 3-5: Supporting documentation and guidance – Confirmation of the performance of temperature chambers**

#### **1 Scope**

This part of IEC 60068 provides a uniform and reproducible method of confirming that temperature test chambers, without specimens, conform to the requirements specified in climatic test procedures of IEC 60068-2 (all parts) and other standards. This document is intended for users when conducting regular chamber performance monitoring.

#### **2 Normative references**

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.

IEC 60068-2 (all parts), *Environmental testing – Part 2: Tests*

IEC 60068-3-7, *Environmental testing – Part 3-7: Supporting documentation and guidance – Measurements in temperature chambers for tests A and B (with load)*

IEC 60068-3-11, *Environmental testing – Part 3-11: Supporting documentation and guidance – Calculation of uncertainty of conditions in climatic test chambers*

#### **3 Terms and definitions**

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

ISO and IEC maintain terminological databases for use in standardization at the following addresses:

- IEC Electropedia: available at <http://www.electropedia.org/>
- ISO Online browsing platform: available at <http://www.iso.org/obp>

##### **3.1**

##### **temperature test chamber**

enclosure or space in some parts of which the temperature conditions, specified in IEC 60068-2 (all parts), can be achieved

##### **3.2**

##### **temperature setpoint**

desired temperature as set by the chamber controls

##### **3.3**

##### **achieved temperature**

stabilized temperature which desired temperature at the centre of the working space achieves within specified tolerance



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