



**National Standards Authority of Ireland**

IRISH STANDARD

**I.S. EN 60068-2-81:2003**

ICS 19.040

**ENVIRONMENTAL TESTING PART 2-81:  
TESTS - TEST EI: SHOCK - SHOCK  
RESPONSE SPECTRUM SYNTHESIS  
(IEC 60068-2-81:2003)**

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Údarás um Chaighdeáin Náisiúnta na hÉireann

EUROPEAN STANDARD

**EN 60068-2-81**

NORME EUROPÉENNE

EUROPÄISCHE NORM

October 2003

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ICS 19.040

English version

**Environmental testing**  
**Part 2-81: Tests –**  
**Test Ei: Shock –**  
**Shock response spectrum synthesis**  
(IEC 60068-2-81:2003)

Essais d'environnement  
Partie 2-81: Essais –  
Essai Ei: Chocs –  
Synthèse du spectre de réponse au choc  
(CEI 60068-2-81:2003)

Umweltprüfungen  
Teil 2-81: Prüfungen –  
Prüfung Ei: Schocken –  
Synthese des Schockantwortspektrums  
(IEC 60068-2-81:2003)

This European Standard was approved by CENELEC on 2003-10-01. 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 Central Secretariat 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 Central Secretariat has the same status as the official versions.

CENELEC members are the national electrotechnical committees of Austria, Belgium, Czech Republic, Denmark, Finland, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Lithuania, Luxembourg, Malta, Netherlands, Norway, Portugal, Slovakia, Spain, Sweden, Switzerland and United Kingdom.

**CENELEC**

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

**Central Secretariat: rue de Stassart 35, B - 1050 Brussels**

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## Foreword

The text of document 104/306/FDIS, future edition 1 of IEC 60068-2-81, prepared by IEC TC 104, Environmental conditions, classification and methods of test, was submitted to the IEC-CENELEC parallel vote and was approved by CENELEC as EN 60068-2-81 on 2003-10-01.

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) 2004-07-01
- latest date by which the national standards conflicting  
with the EN have to be withdrawn (dow) 2006-10-01

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 annexes A, B, C and D are informative.

Annex ZA has been added by CENELEC.

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## Endorsement notice

The text of the International Standard IEC 60068-2-81:2003 was approved by CENELEC as a European Standard without any modification.

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## Annex ZA (normative)

### Normative references to international publications with their corresponding European publications

This European Standard incorporates by dated or undated reference, provisions from other publications. These normative references are cited at the appropriate places in the text and the publications are listed hereafter. For dated references, subsequent amendments to or revisions of any of these publications apply to this European Standard only when incorporated in it by amendment or revision. For undated references the latest edition of the publication referred to applies (including amendments).

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 60068-1	1988	Environmental testing Part 1: General and guidance	EN 60068-1 <sup>1)</sup>	1994
IEC 60068-2-6 + corr. March	1995 1995	Part 2: Tests - Test Fc: Vibration (sinusoidal)	EN 60068-2-6	1995
IEC 60068-2-27	1987	Part 2: Tests - Test Ea and guidance: Shock	EN 60068-2-27	1993
IEC 60068-2-47	1999	Part 2-47: Test methods - Mounting of components, equipment and other articles for vibration, impact and similar dynamic tests	EN 60068-2-47 + corr. June	1999 2000
IEC 60068-2-57	1999	Part 2-57: Tests - Test Ff: Vibration - Time-history method	EN 60068-2-57	2000
IEC 60068-2-64 + corr. October	1993 1993	Part 2: Test methods - Test Fh: Vibration, broad-band random (digital control) and guidance	EN 60068-2-64	1994
ISO 266	1997	Acoustics - Preferred frequencies	-	-
ISO 2041	1990	Vibration and shock - Vocabulary	-	-

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<sup>1)</sup> EN 60068-1 includes corrigendum October 1988 + A1:1992 to IEC 60068-1.

**NORME  
INTERNATIONALE  
INTERNATIONAL  
STANDARD**

**CEI  
IEC**

**60068-2-81**

Première édition  
First edition  
2003-07

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**Essais d'environnement –**

**Partie 2-81:**

**Essais – Essai Ei: Chocs –**

**Synthèse du spectre de réponse au choc**

**Environmental testing –**

**Part 2-81:**

**Tests – Test Ei: Shock –**

**Shock response spectrum synthesis**



Numéro de référence  
Reference number  
CEI/IEC 60068-2-81:2003

## Numérotation des publications

Depuis le 1er janvier 1997, les publications de la CEI sont numérotées à partir de 60000. Ainsi, la CEI 34-1 devient la CEI 60034-1.

## Editions consolidées

Les versions consolidées de certaines publications de la CEI incorporant les amendements sont disponibles. Par exemple, les numéros d'édition 1.0, 1.1 et 1.2 indiquent respectivement la publication de base, la publication de base incorporant l'amendement 1, et la publication de base incorporant les amendements 1 et 2.

## Informations supplémentaires sur les publications de la CEI

Le contenu technique des publications de la CEI est constamment revu par la CEI afin qu'il reflète l'état actuel de la technique. Des renseignements relatifs à cette publication, y compris sa validité, sont disponibles dans le Catalogue des publications de la CEI (voir ci-dessous) en plus des nouvelles éditions, amendements et corrigenda. Des informations sur les sujets à l'étude et l'avancement des travaux entrepris par le comité d'études qui a élaboré cette publication, ainsi que la liste des publications parues, sont également disponibles par l'intermédiaire de:

- **Site web de la CEI** ([www.iec.ch](http://www.iec.ch))
- **Catalogue des publications de la CEI**

Le catalogue en ligne sur le site web de la CEI ([www.iec.ch/searchpub](http://www.iec.ch/searchpub)) vous permet de faire des recherches en utilisant de nombreux critères, comprenant des recherches textuelles, par comité d'études ou date de publication. Des informations en ligne sont également disponibles sur les nouvelles publications, les publications remplacées ou retirées, ainsi que sur les corrigenda.

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## Publication numbering

As from 1 January 1997 all IEC publications are issued with a designation in the 60000 series. For example, IEC 34-1 is now referred to as IEC 60034-1.

## Consolidated editions

The IEC is now publishing consolidated versions of its publications. For example, edition numbers 1.0, 1.1 and 1.2 refer, respectively, to the base publication, the base publication incorporating amendment 1 and the base publication incorporating amendments 1 and 2.

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- **IEC Web Site** ([www.iec.ch](http://www.iec.ch))
- **Catalogue of IEC publications**

The on-line catalogue on the IEC web site ([www.iec.ch/searchpub](http://www.iec.ch/searchpub)) enables you to search by a variety of criteria including text searches, technical committees and date of publication. On-line information is also available on recently issued publications, withdrawn and replaced publications, as well as corrigenda.

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