SLOVENSKI STANDARD
SIST EN 60068-2-55:2013

01-julij-2013

Okoljsko preskušanje - 2-55. del: Preskusi - Preskus Ee in navodilo: Preskušanje nepritrjenega tovora, vključno s premetavanjem

Environmental testing - Part 2-55: Tests - Test Ee and guidance: Loose cargo testing including Bounce

Umgebungseinflüsse - Teil 2-55: Prüfverfahren - Prüfung Ee und Leitfaden: Prüfung loser Packstücke einschließlich Prellen

Ta slovenski standard je istoveten z: **EN 60068-2-55:2013**

ICS:

19.040	Preskušanje v zvezi z okoljem	Environmental testing

SIST EN 60068-2-55:2013 **en**

EUROPEAN STANDARD

NORME EUROPÉENNE

EUROPÄISCHE NORM

EN 60068-2-55

May 2013

ICS 19.040; 29.020

Supersedes EN 60068-2-55:1993

English version

Environmental testing - Part 2-55: Tests - Test Ee and guidance - Loose cargo testing including bounce

(IEC 60068-2-55:2013)

Essais d'environnement - Partie 2-55: Essais - Essai Ee et guide - Essais de chargement sans arrimage y compris l'essai de rebondissement (CEI 60068-2-55:2013)

Umgebungseinflüsse - Teil 2-55: Prüfverfahren - Prüfung Ee und Leitfaden: Prüfung loser Packstücke einschließlich Prellen (IEC 60068-2-55:2013)

CENELEC

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

Management Centre: Avenue Marnix 17, B - 1000 Brussels

Ref. No. EN 60068-2-55:2013 E

Foreword

The text of document 104/592/FDIS, future edition 2 of IEC 60068-2-55, 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 60068-2-55:2013.

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)	2013-12-13
• latest date by which the national standards conflicting with the document have to be withdrawn	(dow)	2016-03-13

This document supersedes EN 60068-2-55:1993.

EN 60068-2-55:2013 includes the following significant technical changes with respect to EN 60068-2-55:1993:

This new edition allows for loose cargo testing in a more general sense. The test is no longer aligned with a special testing machine but allows for use of any suitable equipment such as electrodynamic or servo-hydraulic shaker tables. Moreover, sinusoidal and random vibration can be used. The previous rotation table motions are included in Annex A as historical methods.

This standard should be used in conjunction with EN 60068-1.

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

Endorsement notice

The text of the International Standard IEC 60068-2-55:2013 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 60068-2-27	NOTE	Harmonized as EN 60068-2-27.
IEC 60068-2-31	NOTE	Harmonized as EN 60068-2-31.
IEC 60068-5-2	NOTE	Harmonized as EN 60068-5-2.
ISO/IEC 17025	NOTE	Harmonized as EN ISO/IEC 17025.

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.

Publication	Year	Title	EN/HD	Year
IEC 60068-1	-	Environmental testing - Part 1: General and guidance	EN 60068-1	-
IEC 60068-2-6	-	Environmental testing - Part 2-6: Tests - Test Fc: Vibration (sinusoidal)	EN 60068-2-6	-
IEC 60068-2-64	-	Environmental testing - Part 2-64: Tests - Test Fh: Vibration, broadband random and guidance	EN 60068-2-64	-
IEC 60068-2-80	-	Environmental testing - Part 2-80: Tests - Test Fi: Vibration - Mixed mode	EN 60068-2-80	-
ISO 13355	-	Packaging - Complete, filled transport packages and unit loads - Vertical random vibration test	EN ISO 13355	-
ASTM D4169-09	-	Standard Practice for Performance Testing of Shipping Containers and Systems	-	-

IEC 60068-2-55

Edition 2.0 2013-02

INTERNATIONAL STANDARD

NORME INTERNATIONALE

BASIC SAFETY PUBLICATION
PUBLICATION FONDAMENTALE DE SÉCURITÉ

Environmental testing –
Part 2-55: Tests – Test Ee and guidance – Loose cargo testing including bounce

Essais d'environnement –
Partie 2-55: Essais – Essai Ee et guide – Essais de chargement sans arrimage y compris l'essai de rebondissement

INTERNATIONAL
ELECTROTECHNICAL
COMMISSION

COMMISSION
ELECTROTECHNIQUE
INTERNATIONALE

PRICE CODE
CODE PRIX
R

ICS 19.040; 29.020

ISBN 978-2-83220-644-7

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INTERNATIONAL ELECTROTECHNICAL COMMISSION

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ENVIRONMENTAL TESTING –

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FOREWORD

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International Standard IEC 60068-2-55 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 1987, and constitutes a technical revision.

The main changes with respect to the previous edition are listed below:

This new edition allows for loose cargo testing in a more general sense. The test is no longer aligned with a special testing machine but allows for use of any suitable equipment such as electrodynamic or servo-hydraulic shaker tables. Moreover, sinusoidal and random vibration can be used. The previous rotation table motions are included in Annex A as historical methods.

The text of this standard is based on the following documents:

FDIS	Report on voting
104/592/FDIS	104/598/RVD

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

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

It has the status of a basic safety publication in accordance with IEC Guide 104.

This standard should be used in conjunction with IEC 60068-1.

A list of all the parts in the IEC 60068 series, under the general title *Environmental testing*, can be found on the IEC website.

The committee has decided that the contents of this publication will remain unchanged until the stability date indicated on the IEC web site under "http://webstore.iec.ch" in the data related to the specific publication. At this date, the publication will be

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

INTRODUCTION

This test is applicable to specimens which, during transportation on the load-carrying platform of wheeled vehicles either not fastened down or with some degree of freedom, may be subjected to dynamic stresses resulting from random shock conditions (bounce). The test may also be used as a simple means of assessing the satisfactory design of a specimen so far as its structural integrity is concerned.

NOTE In practice, this test is primarily applicable to equipment-type specimens and packages.

Although the test is performed using a vibrating platform, it is not considered as a vibration test, but as an impact test. Vibration tests should be conducted according to the appropriate standards from IEC 60068-2.

In Clause 11, specification writers will find a list of details to be considered for inclusion in specifications and, in Annex A, the necessary accompanying guidance.