

INTERNATIONAL STANDARD

NORME INTERNATIONALE



Electrostatics –

Part 4-5: Standard test methods for specific applications – Methods for characterizing the electrostatic protection of footwear and flooring in combination with a person

Électrostatique –

Partie 4-5: Méthodes d'essai normalisées pour des applications spécifiques – Méthodes de caractérisation de la protection électrostatique des chaussures et des revêtements de sol par rapport à une personne



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INTERNATIONAL ELECTROTECHNICAL COMMISSION

ELECTROSTATICS –

**Part 4-5: Standard test methods for specific applications – Methods
for characterizing the electrostatic protection of footwear
and flooring in combination with a person**

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International Standard IEC 61340-4-5 has been prepared by IEC technical committee 101: Electrostatics.

This second edition cancels and replaces the first edition published in 2004. This edition constitutes a technical revision.

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

- a) normative references have been updated;
- b) Figure 2 has been improved and expanded to include actual examples of body voltage recordings, and text has been added to explain how to interpret recordings;
- c) an alternative walking pattern has been added in an informative annex.

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

FDIS	Report on voting
101/545/FDIS	101/552/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 the parts in the IEC 61340 series, published under the general title *Electrostatics*, 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- withdrawn,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
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ELECTROSTATICS –

Part 4-5: Standard test methods for specific applications – Methods for characterizing the electrostatic protection of footwear and flooring in combination with a person

1 Scope

This part of IEC 61340 specifies test methods for evaluating electrostatic protection provided by a system of footwear and flooring in combination with a person.

Test results are valid only for the specific footwear and flooring combination tested.

The test methods are not intended for individual product qualification purposes.

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 62631-3-1, *Dielectric and resistive properties of solid insulating materials – Part 3-1: Determination of resistive properties (DC methods) – Volume resistance and volume resistivity – General method*

IEC 61340-4-1, *Electrostatics – Part 4-1: Standard test methods for specific applications – Electrical resistance of floor coverings and installed floors*

ISO 1957, *Machine-made textile floor coverings – Selection and cutting of specimens for physical tests*

3 Terms and definitions

No terms and definitions are listed in this document.

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>

4 Principle

The characterization of a system is achieved by measuring electrical resistance and chargeability of the footwear and flooring in combination with a person. Chargeability is determined using a walking test.

WARNING – Test procedures described in this document can expose personnel to potentially hazardous electrical conditions. Appropriate electrical hazard reduction practices should be