



**SLOVENSKI STANDARD**  
**oSIST prEN IEC 63203-201-4:2024**  
**01-januar-2024**

---

**Nosljive elektronske naprave in tehnologije - 201-4. del: Elektronski tekstil - Preskusna metoda za ugotavljanje odpornosti prevodne tkanine po obrabi**

Wearable electronic devices and technologies - Part 201-4: Electronic textile - Test method for determining sheet resistance of conductive fabrics after abrasion

Technologies et dispositifs électroniques prêts-à-porter - Partie 201-4: Textile électronique - Méthode d'essai pour la détermination de la résistance d'une pièce d'étoffe conductrice après abrasion

**Ta slovenski standard je istoveten z: prEN IEC 63203-201-4:2023**

[oSIST prEN IEC 63203-201-4:2024](https://standards.iteh.ai/catalog/standards/sist/25b95106-ad4c-4142-b1ad-cf3b3c019fe1/osist-pr-en-iec-63203-201-4-2024)

<https://standards.iteh.ai/catalog/standards/sist/25b95106-ad4c-4142-b1ad-cf3b3c019fe1/osist-pr-en-iec-63203-201-4-2024>

**ICS:**

59.080.80      Inteligentne tekstilije      Smart textiles

**oSIST prEN IEC 63203-201-4:2024**      en





# 124/246/CDV

## COMMITTEE DRAFT FOR VOTE (CDV)

PROJECT NUMBER:

**IEC 63203-201-4 ED1**

DATE OF CIRCULATION:

**2023-11-10**

CLOSING DATE FOR VOTING:

**2024-02-02**

SUPERSEDES DOCUMENTS:

**124/203/CD, 124/242/CC**

IEC TC 124 : WEARABLE ELECTRONIC DEVICES AND TECHNOLOGIES	
SECRETARIAT: Korea, Republic of	SECRETARY: Mr Jae Yeong Park
OF INTEREST TO THE FOLLOWING COMMITTEES:	PROPOSED HORIZONTAL STANDARD: <input type="checkbox"/> Other TC/SCs are requested to indicate their interest, if any, in this CDV to the secretary.
FUNCTIONS CONCERNED: <input type="checkbox"/> EMC <input type="checkbox"/> ENVIRONMENT <input type="checkbox"/> QUALITY ASSURANCE <input type="checkbox"/> SAFETY	
<input checked="" type="checkbox"/> SUBMITTED FOR CENELEC PARALLEL VOTING <b>Attention IEC-CENELEC parallel voting</b> The attention of IEC National Committees, members of CENELEC, is drawn to the fact that this Committee Draft for Vote (CDV) is submitted for parallel voting.  The CENELEC members are invited to vote through the CENELEC online voting system.	<input type="checkbox"/> NOT SUBMITTED FOR CENELEC PARALLEL VOTING

This document is still under study and subject to change. It should not be used for reference purposes.

Recipients of this document are invited to submit, with their comments, notification of any relevant patent rights of which they are aware and to provide supporting documentation.

Recipients of this document are invited to submit, with their comments, notification of any relevant "In Some Countries" clauses to be included should this proposal proceed. Recipients are reminded that the CDV stage is the final stage for submitting ISC clauses. (SEE [AC/22/2007](#) OR [NEW GUIDANCE DOC](#)).

TITLE:

**Wearable electronic devices and technologies - Part 201-4: Electronic textile - Test method for determining sheet resistance of conductive fabrics after abrasion**

PROPOSED STABILITY DATE: 2029

NOTE FROM TC/SC OFFICERS:

**Copyright © 2023 International Electrotechnical Commission, IEC.** All rights reserved. It is permitted to download this electronic file, to make a copy and to print out the content for the sole purpose of preparing National Committee positions. You may not copy or "mirror" the file or printed version of the document, or any part of it, for any other purpose without permission in writing from IEC.

1

2

3

## 4 CONTENTS

5

6

7

8

9

10

11

12

13

14

15

16

17

18

19

20

21

22

23

24

25

26

27

28

29

30

31

32

33

34

4	FOREWORD .....	3
5	INTRODUCTION .....	5
6	1 Scope .....	6
7	2 Normative references .....	6
8	3 Terms and definitions .....	6
9	4 Principle of test .....	7
10	5 Test equipment .....	7
11	5.1 Abrasion machine .....	7
12	5.2 Abradant .....	7
13	5.3 Foam .....	7
14	5.4 Felt .....	7
15	5.5 Test equipment for measurement of sheet resistance .....	7
16	6 Test procedure .....	7
17	6.1 Sampling and preparation of test specimen .....	7
18	6.2 Abradant .....	8
19	6.3 Sheet resistance before abrasion treatment .....	8
20	6.4 Mounting specimens on abrading tables .....	8
21	6.5 Mounting the abradant on test piece holder .....	8
22	6.6 Preparation of the abrasion machine .....	8
23	6.7 Useful life of auxiliary materials .....	8
24	6.8 Abrasion treatment .....	8
25	6.9 Determination of sheet resistance after abrasion treatment .....	8
26	6.10 Calculation of percent of sheet resistance change .....	9
27	7 Test report .....	9

## INTERNATIONAL ELECTROTECHNICAL COMMISSION

**WEARABLE ELECTRONIC DEVICES AND TECHNOLOGIES –****Part 201-4: Electronic textile – Test method for determining sheet resistance of conductive fabrics after abrasion**

## 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.
- 2) The formal decisions or agreements of IEC on technical matters express, as nearly as possible, an international consensus of opinion on the relevant subjects since each technical committee has representation from all interested IEC National Committees.
- 3) IEC Publications have the form of recommendations for international use and are accepted by IEC National Committees in that sense. While all reasonable efforts are made to ensure that the technical content of IEC Publications is accurate, IEC cannot be held responsible for the way in which they are used or for any misinterpretation by any end user.
- 4) In order to promote international uniformity, IEC National Committees undertake to apply IEC Publications transparently to the maximum extent possible in their national and regional publications. Any divergence between any IEC Publication and the corresponding national or regional publication shall be clearly indicated in the latter.
- 5) IEC itself does not provide any attestation of conformity. Independent certification bodies provide conformity assessment services and, in some areas, access to IEC marks of conformity. IEC is not responsible for any services carried out by independent certification bodies.
- 6) All users should ensure that they have the latest edition of this publication.
- 7) No liability shall attach to IEC or its directors, employees, servants or agents including individual experts and members of its technical committees and IEC National Committees for any personal injury, property damage or other damage of any nature whatsoever, whether direct or indirect, or for costs (including legal fees) and expenses arising out of the publication, use of, or reliance upon, this IEC Publication or any other IEC Publications.
- 8) Attention is drawn to the Normative references cited in this publication. Use of the referenced publications is indispensable for the correct application of this publication.
- 9) Attention is drawn to the possibility that some of the elements of this IEC Publication may be the subject of patent rights. IEC shall not be held responsible for identifying any or all such patent rights.

IEC 63203-201-4 has been prepared by IEC technical committee 124: Wearable electronic devices and technologies.

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

Draft	Report on voting
XX/XX/FDIS	XX/XX/RVD

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

The language used for the development of this International Standard is English.

This document was drafted in accordance with ISO/IEC Directives, Part 2, and developed in accordance with ISO/IEC Directives, Part 1 and ISO/IEC Directives, IEC Supplement, available at

84 [https://www.iec.ch/members\\_experts/refdocs](https://www.iec.ch/members_experts/refdocs). The main document types developed by IEC are  
85 described in greater detail at <https://www.iec.ch/standardsdev/publications>.

86 The committee has decided that the contents of this document will remain unchanged until the stability  
87 date indicated on the IEC website under [webstore.iec.ch](http://webstore.iec.ch) in the data related to the specific document.  
88 At this date, the document will be

- 89 • reconfirmed,
- 90 • withdrawn,
- 91 • replaced by a revised edition, or
- 92 • amended.

93

## iTeh Standards (<https://standards.iteh.ai>) Document Preview

[oSIST prEN IEC 63203-201-4:2024](https://standards.iteh.ai/catalog/standards/sist/25b95106-ad4c-4142-b1ad-cf3b3c019fe1/osist-pren-iec-63203-201-4-2024)

<https://standards.iteh.ai/catalog/standards/sist/25b95106-ad4c-4142-b1ad-cf3b3c019fe1/osist-pren-iec-63203-201-4-2024>