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**Bärbar elektronik –
Del 204-1: Elektroniska textilier –
Testmetoder –
Bedömning av tvätthållbarhet för sport- och fritidskläder i e-textilsystem**

Wearable electronic devices and technologies –

Part 204-1: Electronic textile –

Test method for assessing washing durability of leisurewear and sportswear e-textile systems

Som svensk standard gäller europastandarden EN IEC 63203-204-1:2021. Den svenska standarden innehåller den officiella engelska språkversionen av EN IEC 63203-204-1:2021.

Nationellt förord

Europastandarden EN IEC 63203-204-1:2021

består av:

- **europastandardens ikraftsättningsdokument**, utarbetat inom CENELEC
- **IEC 63203-204-1, First edition, 2021 - Wearable electronic devices and technologies - Part 204-1: Electronic textile - Test method for assessing washing durability of leisurewear and sportswear e-textile systems**

utarbetad inom International Electrotechnical Commission, IEC.

ICS 59.080.80; 59.080.01

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English Version

**Wearable electronic devices and technologies - Part 204-1:
Electronic textile - Test method for assessing washing durability
of leisurewear and sportswear e-textile systems
(IEC 63203-204-1:2021)**

Technologies et dispositifs électroniques prêts-à-porter -
Partie 204-1 : Textile électronique - Méthode d'essai pour
l'évaluation de la durabilité au lavage des systèmes e-
textiles des vêtements de sport et de loisirs
(IEC 63203-204-1:2021)

Tragbare elektronische Geräte und Technologien -
Teil 204-1: Elektronische Textilien - Prüfverfahren zur
Beurteilung der Waschbeständigkeit von E-
Textiliensystemen der Freizeit- und Sportbekleidung
(IEC 63203-204-1:2021)

This European Standard was approved by CENELEC on 2021-06-15. 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.

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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

European foreword

The text of document 124/139/FDIS, future edition 1 of IEC 63203-204-1, prepared by IEC/TC 124 "Wearable electronic devices and technologies" was submitted to the IEC-CENELEC parallel vote and approved by CENELEC as EN IEC 63203-204-1:2021.

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) 2022-03-15
- latest date by which the national standards conflicting with the document have to be withdrawn (dow) 2024-06-15

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.

Endorsement notice

The text of the International Standard IEC 63203-204-1:2021 was approved by CENELEC as a European Standard without any modification.

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.

<u>Publication</u>	<u>Year</u>	<u>Title</u>	<u>EN/HD</u>	<u>Year</u>
ISO 139	-	Textiles - Standard atmospheres for conditioning and testing	EN ISO 139	-
ISO 6330	-	Textiles - Domestic washing and drying procedures for textile testing	EN ISO 6330	-
-	-	Textiles and textile products - Electrically conductive textiles - Determination of the linear electrical resistance of conductive tracks	EN 16812	2016

INTERNATIONAL STANDARD

NORME INTERNATIONALE



**Wearable electronic devices and technologies –
Part 204-1: Electronic textile – Test method for assessing washing durability of
leisurewear and sportswear e-textile systems**

**Technologies et dispositifs électroniques prêts-à-porter –
Partie 204-1: Textile électronique – Méthode d'essai pour l'évaluation de la
durabilité au lavage des systèmes e-textiles des vêtements de sport et de loisirs**

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INTERNATIONAL ELECTROTECHNICAL COMMISSION

WEARABLE ELECTRONIC DEVICES AND TECHNOLOGIES –**Part 204-1: Electronic textile – Test method for assessing washing durability of leisurewear and sportswear e-textile systems**

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 63203-204-1 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:

FDIS	Report on voting
124/139/FDIS	124/145/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 63203 series, published under the general title *Wearable electronic devices and technologies*, 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.

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WEARABLE ELECTRONIC DEVICES AND TECHNOLOGIES –

Part 204-1: Electronic textile – Test method for assessing washing durability of leisurewear and sportswear e-textile systems

1 Scope

This document specifies a household washing durability test method for leisurewear and sportswear e-textile systems. This document includes testing procedures for leisurewear and sportswear products with electrically conductive components and sensors to collect the data of the user.

This document does not cover safety or heat-generation test methods. Products containing other components than those listed in this clause are not covered by this document.

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.

ISO 139, *Textiles – Standard atmospheres for conditioning and testing*

ISO 6330, *Textiles – Domestic washing and drying procedures for textile testing*

EN 16812:2016, *Textiles and textile products – Electrically conductive textiles – Determination of the linear electrical resistance of conductive tracks*