SLOVENSKI STANDARD
SIST EN IEC 60118-4:2015/A1:2018

01-april-2018

Elektroakustika - Slušni pripomočki - 4. del: Sistemi z indukcijsko zanko za slušne pripomočke - Zahteve sistema - Dopolnilo A1 (IEC 60118-4:2014/A1:2017)

Electroacoustics - Hearing aids - Part 4: Induction-loop systems for hearing aid purposes - System performance requirements (IEC 60118-4:2014/A1:2017)

Akustik - Hörgeräte - Teil 4: Induktionsschleifen für Hörgeräte - Leistungsanforderungen (IEC 60118-4:2014/A1:2017)

Électroacoustique - Appareils de correction auditive - Partie 4: Systèmes de boucles d'induction utilisées à des fins de correction auditive - Exigences de performances système (IEC 60118-4:2014/A1:2017)

Ta slovenski standard je istoveten z: **EN IEC 60118-4:2015/A1:2018**

ICS:

11.180.15	Pripomočki za gluhe osebe in osebe z okvaro sluha	Aids for deaf and hearing impaired people
17.140.50	Elektroakustika	Electroacoustics

SIST EN IEC 60118-4:2015/A1:2018 **en**

EUROPEAN STANDARD

NORME EUROPÉENNE

EUROPÄISCHE NORM

EN IEC 60118-4:2015/A1

February 2018

ICS 17.140.50

English Version

Electroacoustics - Hearing aids - Part 4: Induction-loop systems for hearing aid purposes - System performance requirements (IEC 60118-4:2014/A1:2017)

Électroacoustique - Appareils de correction auditive - Partie 4: Systèmes de boucles d'induction utilisées à des fins de correction auditive - Exigences de performances système (IEC 60118-4:2014/A1:2017)

Akustik - Hörgeräte - Teil 4: Induktionsschleifen für Hörgeräte - Leistungsanforderungen (IEC 60118-4:2014/A1:2017)

This amendment A1 modifies the European Standard EN 60118-4:2015; it was approved by CENELEC on 2017-12-14. CENELEC members are bound to comply with the CEN/CENELEC Internal Regulations which stipulate the conditions for giving this amendment 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 amendment 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 29/952/CDV, future edition 1 of IEC 60118-4:2014/A1:2017, prepared by IEC/TC 29 "Electroacoustics" was submitted to the IEC-CENELEC parallel vote and approved by CENELEC as EN IEC 60118-4:2015/A1:2018.

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)	2018-09-14
• latest date by which the national standards conflicting with the document have to be withdrawn	(dow)	2020-12-14

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 60118-4:2014/A1:2017 was approved by CENELEC as a European Standard without any modification.

IEC 60118-4

Edition 3.0 2017-11

INTERNATIONAL STANDARD

NORME INTERNATIONALE

AMENDMENT 1
AMENDEMENT 1

Electroacoustics – Hearing aids –
Part 4: Induction-loop systems for hearing aid purposes – System performance requirements

Électroacoustique – Appareils de correction auditive –
Partie 4: Systèmes de boucles d'induction utilisées à des fins de correction auditive – Exigences de performances système

INTERNATIONAL
ELECTROTECHNICAL
COMMISSION

COMMISSION
ELECTROTECHNIQUE
INTERNATIONALE

ICS 17.140.50

ISBN 978-2-8322-4970-3

FOREWORD

This amendment has been prepared by committee IEC technical committee 29: Electroacoustics.

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

CDV	Report on voting
29/952/CDV	29/961/RVC

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

The committee has decided that the contents of this amendment and the base publication will remain unchanged until the stability date indicated on the IEC website 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.

3 Terms and definitions

Add, after 3.3, the following new term and definition:

3.4
automatic gain control
AGC
process or device by which the gain of an amplifier is controlled by the level of the output signal so as to reduce changes in this level as compared with the changes in the input signal

Note 1 to entry: Frequently, automatic gain control is used to keep the output signal level nearly constant.

Note 2 to entry: There is a consistent but more general definition in IEC 60118-7, but this standard may have a limited future, so the IEV definition is preferred.

9 Small-volume systems

Replace the existing text of Clause 9 by the following new text:

9.1 Definition of measurement points

For small-volume systems, it is possible and necessary in some applications to specify in this standard the positions of the measurement points. For this reason, points are specified for both disabled refuge and similar call points, and for counter systems. However, where these suggested measurement points are not practical, the "useful magnetic field volume" method

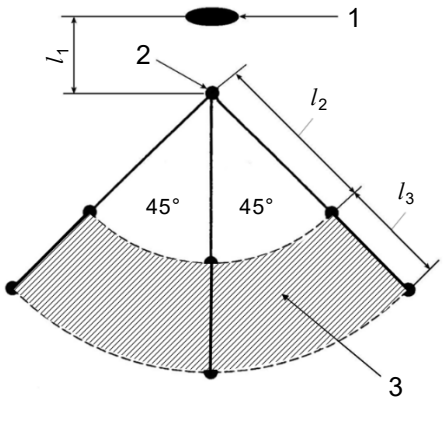
as defined in 9.4 can be applied, the details of which should be agreed as part of the contractual requirements.

9.2 Disabled refuge and similar call-points

Measurements shall be made at the six points specified in Figures 2 a) and b). The reference point (or line) is the face or surface of the call point, intercom, or help point closest to the user, and is not necessarily the location of the magnetic field source.

The semi-circular layout is suitable for small magnetic field sources and the rectangular layout is suitable for vertical or floor loop sources. Only one of the methods shall be used for a given system.

NOTE An offset (shown as l_1 in Figure 2) between the reference point (or line) and the position of the magnetic field source promotes evenness of field pattern over the area where people are expected to stand.



Key

1 magnetic field source

2 reference point

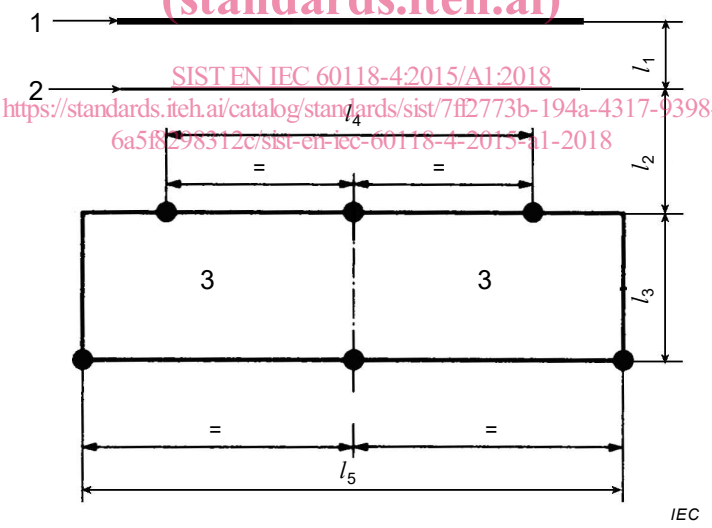
3 area where people are expected to stand

l_1 offset

l_2 inner radius: 300 mm

l_2+l_3 outer radius: 500 mm

a) Magnetic field source of small dimensions



Key

1 magnetic field source (vertical loop)

2 reference line

3 area where people are expected to stand

l_1 offset

l_2 300 mm

l_3 200 mm

l_4 424 mm

l_5 700 mm

b) Larger magnetic field source

Figure 2 – Measurement points for disabled refuge and similar call-points

The six measurement points are required at 1,2 m and 1,7 m (see Figure 3 b)), but there is no requirement to measure at 1,45 m.

9.3 Counter systems

Measurements shall be made at the points specified in Figures 3 a) and b). The reference point is the face or surface of the counter closest to the user, and is not necessarily the position of the magnetic field source. For counter systems, there is often a requirement to control overspill to an adjacent counter position. Controlling this overspill is likely to be a significant factor in design, and as such may result in a compromise of evenness of field over the area where people are expected to stand.

NOTE 1 It is not necessary to reduce the magnetic spill between counter positions below a level comparable with the acoustic spill. A difference greater than 20 dB between equivalent positions at the two counters is normally enough.

NOTE 2 The boundaries of the area where people are expected to stand cannot be standardized as they depend on the building layout and counter design.

NOTE 3 For vertical loops, an offset (shown as l_3 in Figure 3) between the reference point and the position of the loop promotes evenness of field pattern over the area where people are expected to stand, but reduces the effectiveness of overspill control to the next counter position.