SLOVENSKI STANDARD
SIST EN 61726:2016

01-april-2016

Kabelski sestavi, kabli, konektorji in pasivne mikrovalovne komponente - Meritve zaslonskega slabljenja z metodo odmevne komore (IEC 61726:2015)

Cable assemblies, cables, connectors and passive microwave components - Screening attenuation measurement by the reverberation chamber method (IEC 61726:2015)

Ta slovenski standard je istoveten z: EN 61726:2015

ICS:

33.120.10	Koaksialni kabli. Valovodi	Coaxial cables. Waveguides
33.120.30	Radiofrekvenčni konektorji (RF)	RF connectors

SIST EN 61726:2016 **en**

EUROPEAN STANDARD

NORME EUROPÉENNE

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EN 61726

November 2015

ICS 33.120.10; 33.120.30

Supersedes EN 61726:2000

English Version

Cable assemblies, cables, connectors and passive microwave components - Screening attenuation measurement by the reverberation chamber method (IEC 61726:2015)

Câbles, cordons, connecteurs et composants hyperfréquence passifs - Mesure de l'affaiblissement d'écran par la méthode de la chambre réverbérante (IEC 61726:2015)

Konfektionierte Kabel, Kabel, Steckverbinder und passive Mikrowellenbauteile - Messung der Schirmdämpfung mit dem Strahlungskammerverfahren (IEC 61726:2015)

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

CEN-CENELEC Management Centre: Avenue Marnix 17, B-1000 Brussels

European foreword

The text of document 46/551/FDIS, future edition 3 of IEC 61726, prepared by IEC/TC 46 "Cables, wires, waveguides, R.F. connectors, R.F. and microwave passive components and accessories" was submitted to the IEC-CENELEC parallel vote and approved by CENELEC as EN 61726:2015.

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)	2016-07-13
• latest date by which the national standards conflicting with the document have to be withdrawn	(dow)	2018-10-13

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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 1 When 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.

Publication	Year	Title	EN/HD	Year
IEC TS 62153-4-1	-	Metallic communication cable test methods - Part 4-1: Electromagnetic compatibility (EMC) - Introduction to electromagnetic screening measurements	-	-
IEC 61000-4-21	-	Electromagnetic compatibility (EMC) -- Part 4-21: Testing and measurement techniques - Reverberation chamber test methods	EN 61000-4-21	-
IEC 61196-1	-	Coaxial communication cables - Part 1: Generic specification - General, definitions and requirements	-	-

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INTERNATIONAL STANDARD

Cable assemblies, cables, connectors and passive microwave components – Screening attenuation measurement by the reverberation chamber method

INTERNATIONAL ELECTROTECHNICAL COMMISSION

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INTERNATIONAL ELECTROTECHNICAL COMMISSION

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CABLE ASSEMBLIES, CABLES, CONNECTORS AND PASSIVE MICROWAVE COMPONENTS – SCREENING ATTENUATION MEASUREMENT BY THE REVERBERATION CHAMBER METHOD

FOREWORD

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International Standard IEC 61726 has been prepared by IEC technical committee 46: Cables, wires, waveguides, R.F. connectors, R.F. and microwave passive components and accessories.

This third edition cancels and replaces the second edition, published in 1999. This edition constitutes a technical revision.

It takes into account the latest developments in the design of reverberation chambers as described in IEC 61000-4-21, which is also referencing this standard as a possible test method. Furthermore, an alternative measurement procedure is added which is able to reduce the measurement time needed.

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

FDIS	Report on voting
46/551/FDIS	46/569/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.

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.

A bilingual version of this publication may be issued at a later date.

CABLE ASSEMBLIES, CABLES, CONNECTORS AND PASSIVE MICROWAVE COMPONENTS – SCREENING ATTENUATION MEASUREMENT BY THE REVERBERATION CHAMBER METHOD

1 Scope

The requirements of modern electronic equipment have indicated a demand for a method for testing screening attenuation of microwave components over their whole frequency range. Convenient test methods exist for low frequencies and components of regular shape. These test methods are described in the relevant IEC product specifications (e.g. IEC 62153-4-3). For higher frequencies and for components of irregular shape, a new test method has become necessary and such a test method is described in this International Standard.

This International Standard describes the measurement of screening attenuation by the reverberation chamber test method, sometimes named mode stirred chamber, suitable for virtually any type of microwave component and having no theoretical upper frequency limit. It is only limited toward low frequencies due to the size of the test equipment, which is frequency-dependent and is only one of several methods of measuring screening attenuation.

For the purpose of this standard, examples of microwave components are waveguides, phase shifters, diplexers/multiplexers, power dividers/combiners etc.

2 Normative references

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.

IEC 61196-1, *Coaxial communication cables – Part 1: Generic specification – General, definitions and requirements*

IEC TS 62153-4-1, *Metallic communication cable test methods – Part 4-1: Electromagnetic compatibility (EMC) – Introduction to electromagnetic screening measurements*

IEC 61000-4-21, *Electromagnetic compatibility (EMC) – Part 4-21: Testing and measurement techniques – Reverberation chamber test methods*

3 Terms and definitions

For the purposes of this document, the terms and definitions given in IEC 61196-1 and IEC 61000-4-21 apply.

4 Basic description of the reverberation chamber method

The reverberation chamber method for measurement of the screening attenuation of microwave components consists of exposing the device under test (DUT) to an almost homogeneous and isotropic electromagnetic field and then measuring the signal level induced into the device.