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Leaky waveguides -
Part 1: Generic specification - General requirements and test methods

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Leaky waveguides - Part 1: Generic specification - General requirements and test methods

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

Draft	Report on voting
46/1065/FDIS	46/1072/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 www.iec.ch/members_experts/refdocs. The main document types developed by IEC are described in greater detail at www.iec.ch/publications.

A list of all parts in the IEC 63466 series, published under the general title *Leaky waveguides*, 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 webstore.iec.ch in the data related to the specific document. At this date, the document will be

– reconfirmed,
– withdrawn, or
– revised.

1 Scope

This part of IEC 63466 specifies the general requirements and test methods for leaky waveguides, including terms and definitions, design and structure, type designation, ratings and characteristics, identification, marking and labelling, requirements and test methods, etc.

This document is applicable to leaky waveguides, including rigid rectangular leaky waveguides and elliptic leaky waveguides. These leaky waveguides are intended for use in tunnels, railways, highways, subways, elevators and other installations in which conventional antenna transmission is not satisfactory or even impossible.

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 60068-1:2013, *Environmental testing - Part 1: General and guidance*

IEC 60153-1, *Hollow metallic waveguides - Part 1: General requirements and measuring methods*

IEC 60261, *Sealing test for pressurized waveguide tubing and assemblies*

IEC 60332-1-2, *Tests on electric and optical fibre cables under fire conditions - Part 1-2: Test for vertical flame propagation for a single insulated wire or cable - Procedure for 1 kW pre-mixed flame*

IEC 60754-1, *Test on gases evolved during combustion of materials from cables - Part 1: Determination of the halogen acid gas content*

IEC 61034-2, *Measurement of smoke density of cables burning under defined conditions - Part 2: Test procedure and requirements*

IEC 61196-1:2005, *Coaxial communication cables - Part 1: Generic specification - General, definitions and requirements*

IEC 61196-1-106, *Coaxial communication cables - Part 1-106: Electrical test methods - Test for withstand voltage of cable sheath*

IEC 61196-1-212, *Coaxial communication cables - Part 1-212: Environmental test methods - UV stability*

IEC 61196-1-215, *Coaxial communication cables - Part 1-215: Environmental test methods - High temperature cable ageing*

IEC 61196-1-302, *Coaxial communication cables - Part 1-302: Mechanical test methods - Test for eccentricity*

IEC 61196-1-316, *Coaxial communication cables - Part 1-316: Mechanical test methods - Test of maximum pulling force of cable*

IEC 62230, *Electric cables - Spark-test method*

ISO 3274, *Geometrical Product Specifications (GPS) - Surface texture: Profile method - Nominal characteristics of contact (stylus) instruments*

ISO 21920-3, *Geometrical product specifications (GPS) - Surface texture: Profile - Part 3: Specification operators*