



SLOVENSKI STANDARD
oSIST prEN IEC 60794-1-209:2023
01-maj-2023

Optični kabli - 1-209. del: Splošna specifikacija - Osnovni preskusni postopki za optične kable - Okoljske preskusne metode - Staranje, metoda F9

Optical fibre cables - Part 1-209: Generic specification - Basic optical cable test procedures - Environmental test methods - Ageing, Method F9

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IEC SC 86A : FIBRES AND CABLES	
SECRETARIAT: France	SECRETARY: Mr Laurent Gasca
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	
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- any relevant "in some countries" clauses to be included should this proposal proceed. Recipients are reminded that the enquiry stage is the final stage for submitting "in some countries" clauses. See AC/22/2007.

TITLE:

Optical fibre cables - Part 1-209: Generic specification - Basic optical cable test procedures - Environmental test methods - Ageing, Method F9

PROPOSED STABILITY DATE: 2026

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INTERNATIONAL ELECTROTECHNICAL COMMISSION

OPTICAL FIBRE CABLES –

**Part 1-209: Generic specification –
Basic optical cable test procedures – Environmental test methods -
Ageing, Method F9**

FOREWORD

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International Standard IEC 60794-1-209 has been prepared by subcommittee 86A: Fibres and cables, of IEC technical committee 86: Fibre optics.

This first edition of IEC 60794-1-209 cancels and replaces Method F9 of the second edition of IEC 60794-1-22: 2017. It constitutes a technical revision.

This edition includes the following significant technical changes with respect to the previous edition:

- a) define the ambient temperature condition as per IEC 60794-1-2;
- b) delete all the maximum allowable attenuation increase values for single-mode and multimode fibres and leave to be specified in the detail specification.

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

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

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69 Full information on the voting for the approval of this International Standard can be found in the
70 report on voting indicated in the above table.

71 The French version of this standard has not been voted upon.

72 This document has been drafted in accordance with the ISO/IEC Directives, Part 2.

73 A list of all parts in the IEC 60794 series, published under the general title *Optical fibre cables*,
74 can be found on the IEC website.

75 The committee has decided that the contents of this document will remain unchanged until the
76 stability date indicated on the IEC website under "http://webstore.iec.ch" in the data related to
77 the specific document. At this date, the document will be

- 78 • reconfirmed,
- 79 • withdrawn,
- 80 • replaced by a revised edition, or
- 81 • amended.

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84 <https://standards.iteh.ai/catalog/standards/sist/1a54edff-8770-48ff-a3bf-2fb77cfa69aa/osist-pren-iec-60794-1-209-2023>

OPTICAL FIBRE CABLES –

Part 1-209: Generic specification – Basic optical cable test procedures – Environmental test methods - Ageing, Method F9

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92 1 Scope

93 This part of IEC 60794-1 defines test procedures to be used in establishing uniform
94 requirements for the environmental performance of

- 95 • optical fibre cables for use with telecommunication equipment and devices employing similar
96 techniques, and
- 97 • cables having a combination of both optical fibres and electrical conductors.

98 Throughout this document, the wording "optical cable" can also include optical fibre units,
99 microduct fibre units, etc.

100 This document defines a test standard to determine cable aging performance by high
101 temperature exposure and temperature cycling in order to simulate life-time behaviour of the
102 attenuation of cables, or physical attributes.

103 See IEC 60794-1-2 for a reference guide to test methods of all types and for general
104 requirements and definitions.

105 2 Normative references

106 The following documents are referred to in the text in such a way that some or all of their content
107 constitutes requirements of this document. For dated references, only the edition cited applies.
108 For undated references, the latest edition of the referenced document (including any
109 amendments) applies.

110 IEC 60304, *Standard colours for insulation for low-frequency cables and wires*

111 IEC 60794-1-1, *Optical fibre cables – Part 1-1: Generic specification – General*

112 IEC 60794-1-2, *Optical fibre cables – Part 1-2: Generic specification – Basic optical cable test
113 procedures – General guidance*

114 IEC 60794-1-201, *Optical fibre cables – Part 1-201: Generic specification – Basic optical cable
115 test procedures – Temperature cycling, method F1*

116 3 Terms and definitions

117 No terms and definitions are listed in this document.

118 ISO and IEC maintain terminological databases for use in standardization at the following
119 addresses:

- 120 • IEC Electropedia: available at <http://www.electropedia.org/>
- 121 • ISO Online browsing platform: available at <http://www.iso.org/obp>

122 4 Method F9 – Ageing

123 4.1 Object

124 This test method applies to optical fibre cables which are tested by high temperature exposure
125 and temperature cycling in order to simulate life-time behaviour of the attenuation of cables, or
126 physical attributes specified in the relevant specification.