

INTERNATIONAL STANDARD

NORME INTERNATIONALE



**Optical fibre cables –
Part 1-2: Generic specification – Cross reference table for optical cable test
procedures**

**Câbles à fibres optiques –
Partie 1-2: Spécification générique – Table des références croisées relative aux
procédures d'essais des câbles optiques**



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INTERNATIONAL
ELECTROTECHNICAL
COMMISSION

COMMISSION
ELECTROTECHNIQUE
INTERNATIONALE

PRICE CODE
CODE PRIX

G

ICS 33.180.10

ISBN 978-2-8322-1599-9

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INTERNATIONAL ELECTROTECHNICAL COMMISSION

OPTICAL FIBRE CABLES –

**Part 1-2: Generic specification –
Cross reference table for optical cable test procedures**

FOREWORD

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International Standard IEC 60794-1-2 has been prepared by subcommittee 86A: Fibres and cables, of IEC technical committee 86: Fibre optics.

This bilingual version (2014-05) corresponds to the English version, published in 2013-09.

This third edition of IEC 60794-1-2 cancels and replaces the second edition published in 2003. It constitutes a technical revision.

It has been decided to split the second edition of IEC 60794-1-2 into six new documents:

- IEC 60794-1-2, *Optical fibre cables – Part 1-2: Generic specification – Basic optical cable test procedures*
- IEC 60794-1-20, *Optical fibre cables – Part 1-20: Generic specification – Basic optical cable test procedures – General and definitions*

- IEC 60794-1-21, *Optical fibre cables – Part 1-21: Generic specification – Basic optical cable test procedures – Mechanical tests methods*
- IEC 60794-1-22, *Optical fibre cables – Part 1-22: Generic specification – Basic optical cable test procedures – Environmental tests methods*
- IEC 60794-1-23, *Optical fibre cables – Part 1-23: Generic specification – Basic optical cable test procedures – Cable elements tests methods*
- IEC 60794-1-24, *Optical fibre cables – Part 1-24: Generic specification – Basic optical cable test procedures – Electrical tests methods*

This standard is intended to be used in conjunction with IEC 60794-1-1.

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

CDV	Report on voting
86A/1475/CDV	86A/1515/RVC

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

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

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

A list of all the parts in the IEC 61754 series, under the general title *Optical fibre cables*, can be found on the IEC website.

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.

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OPTICAL FIBRE CABLES –

Part 1-2: Generic specification – Cross reference table for optical cable test procedures

1 Scope and object

This part of IEC 60794 applies to optical fibre cables for use with telecommunication equipment and devices employing similar techniques, and to cables having a combination of both optical fibres and electrical conductors.

The object of this standard is to provide the end user with a cross reference table between the second edition of IEC 60794-1-2:2003 and the five new separate parts into which it has now been split up, namely:

- IEC 60794-1-2, Cross reference table
- IEC 60794-1-20, General and definitions
- IEC 60794-1-21, Mechanical tests
- IEC 60794-1-22, Environmental tests
- IEC 60794-1-23, Cable elements tests
- IEC 60794-1-24, Electrical tests

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

3 Cross reference table

IEC 60794-1-2:2003		IEC 60794-1-20:First edition	
		1	Scope and object
		2	Normative references
		3	Terms and definitions
3	General and guidance	4	General and guidance
3.2	Test procedure format	4.2	Test procedure format
3.3	Definitions		
3.4	Standard atmospheric conditions	4.3	Standard atmospheric conditions
3.6	Graphical symbols and terminology	4.6	Graphical symbols and terminology
3.7	Safety	4.7	Safety and environmental aspects
3.8	Calibration	4.8	Calibration
		4.10	Definition of "No change in attenuation"
		4.9.2	No change in attenuation, single-mode (B)
		4.9.3	No change in attenuation, multimode (A1)
		4.9.4	No change in attenuation, plastic optical fibre (A4)
		4.9.5	Allowable change in attenuation during mechanical and environmental tests

	IEC 60794-1-2:2003		IEC 60794-1-20:First edition
3.9	Definition of "No change in fibre strain"	4.10	Definition of "No change in fibre strain"
3.10	Preconditioning	4.11	Preconditioning
		4.12	Cable load definitions
		4.13	Recovery time
		5	Test procedures
		6	Test methods and cross references

	IEC 60794-1-2:2003		IEC 60794-1-21: First edition
5	Method E1 – Tensile performance	3	Method E1 – Tensile performance
6	Method E2 – Abrasion	4	Method E2 – Abrasion
7	Method E3 – Crush	5	Method E3 – Crush
8	Method E4 – Impact	6	Method E4 – Impact
9	Method E5 – Stripping force stability of cabled optical fibres	7	Method E5A – Stripping force stability of cabled optical fibres
		8	Method E5B – Strippability of optical fibre ribbons
		9	Method E5C – Strippability of buffered optical fibres
10	Method E6 – Repeated bending	10	Method E6 – Repeated bending
11	Method E7 – Torsion	11	Method E7 – Torsion
12	Method E8 – Flexing	12	Method E8 – Flexing
		13	Method E9 – Snatch (Test deleted)
13	Method E10 – Kink	14	Method E10 – Kink
14	Method E11 – Bend	15	Method E11 – Bend
15	Method E12 – Cut-through resistance	16	Method E12 – Cut-through resistance (test deleted)
16	Method E13 – Shotgun damage	17	Method E13 – Shotgun damage
17	Method E14 – Compound flow (drip)	18	Method E14 – Compound flow (drip)
18	Method E15 – Bleeding and evaporation	19	Method E15 – Bleeding and evaporation
		20	Method E16 – [Title unknown] (test deleted)
19	Method E17 – Stiffness	21	Method E17 – Bending stiffness
		221.3	Method E17A – Three-point bend
		221.4	Method E17B – Cantilever bend
		221.5	Method E17C – Buckling bend
20	Method E18 – Bending under tension (Sheave test)	22	Method E18A – Bending under tension
		23	Method E18B – Sheave test (primarily for OPGW and OPAC)
21	Method E19 – Aeolian vibration	24	Method E19 – Aeolian vibration
22	Method E20 – Cable coiling performance	25	Method E20 – Cable coiling performance
		26	Method E21 – Sheath pull-off force for optical fibre cable for use in patch cords
		27	Method E22 – Buffered fibre movement under compression in optical fibre cables for use in patch cords
		28	Method E23 – Microduct route verification test
		29	Method E24 – Installation test for microduct cables
		30	Method E25 – Rip cord functional test
		31	Method E26 – Galloping
		32	Method E27 Indoor simulated installation test
		33	Method E28 Cable and fibre mechanical reliability test

IEC 60794-1-2:2003			IEC 60794-1-22:2012
23	Method F1 – Temperature cycling	3	Method F1 – Temperature cycling
		4	Method F2 – Contamination (test deleted)
24	Method F3 – Sheath integrity	5	Method F3 – Sheath integrity (test deleted)
		6	Method F4 – External static pressure (test deleted)
25	Method F5 – Water penetration	7	Method F5 – Water penetration
25.2.1	Method F5A	7.2.1	Method F5A
25.2.2	Method F5B	7.2.2	Method F5B
		7.2.3	Method F5C (for cables with swellable water blocking material)
26	Method F7 – Nuclear radiation	9	Method F7 – Nuclear radiation
27	Method F8 – Pneumatic resistance	10	Method F8 – Pneumatic resistance
28	Method F9 – Ageing	11	Method F9 – Ageing
29	Method F10 – Underwater cable resistance to hydrostatic pressure	12	Method F10 – Underwater cable resistance to hydrostatic pressure
		13	Method F11 – Sheath shrinkage (cables intended for patch cords)
		14	Method F12 – Temperature cycling of cables used for patch cords
		15	Method F13 – Microduct pressure-withstand
		16	Method F14 – Cable UV resistance
		17	Method F15 – Cable external freezing
		18	Method F16 – [Title unknown] (test deleted)
		19	Method F17 – Sheath shrinkage

IEC 60794-1-2:2003			IEC 60794-1-23:2012
30	Method G1 – Bend test for cable elements	3	Method G1 – Bend test for cable elements
31	Method G2 – Ribbon dimensions and geometry – Visual method	4	Method G2 – Ribbon dimensions and geometry – Visual method
32	Method G3 – Ribbon dimensions – Aperture gauge	5	Method G3 – Ribbon dimensions – Aperture gauge
33	Method G4 – Ribbon dimensions – Dial gauge	6	Method G4 – Ribbon dimensions – Dial gauge (test deleted)
34	Method G5 – Ribbon tear (separability)	7	Method G5 – Ribbon tear (separability)
35	Method G6 – Ribbon torsion	8	Method G6 – Ribbon torsion
36	Method G7 – Tube kinking	9	Method G7 – Tube kinking
		10	Method G8 – Ribbon residual twist test

IEC 60794-1-2:2003			IEC 60794-1-24: First edition
37	Method H1 – Short-circuit test	3	Method H1 – Short-circuit test (for OPGW and OPAC)
38	Method H2 – Lightning test method for optical aerial cables along electric power lines.	4	Method H2 – Lightning test method for optical aerial cables along electric power lines (OPGW and OPAC)
		5	Method H3 – Electrical continuity test of cable metallic elements

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