



# INTERNATIONAL STANDARD

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**Optical fibre cables –  
Part 1-401: Generic specification – Basic optical cable test procedures –  
Electrical test methods – Short-circuit test (for OPGW, OPPC and OPAC),  
Method H1**

INTERNATIONAL  
ELECTROTECHNICAL  
COMMISSION

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## INTERNATIONAL ELECTROTECHNICAL COMMISSION

### OPTICAL FIBRE CABLES –

#### **Part 1-401: Generic specification – Basic optical cable test procedures – Electrical test methods – Short-circuit test (for OPGW, OPPC and OPAC), Method H1**

#### FOREWORD

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IEC 60794-1-401 has been prepared by subcommittee 86A: Fibres and cables, of IEC technical committee 86: Fibre optics. It is an International Standard.

This first edition cancels and replaces the first edition of IEC 60794-1-24 published in 2014. This edition constitutes a technical revision.

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

- a) OPPC is included;
- b) the test methods have been updated.

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

Draft	Report on voting
86A/2044/CDV	86A/2127/RVC

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](http://www.iec.ch/members_experts/refdocs). The main document types developed by IEC are described in greater detail at [www.iec.ch/standardsdev/publications](http://www.iec.ch/standardsdev/publications).

A list of all the parts in the IEC 60794 series, published under the general title *Optical fibre cables*, 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](http://webstore.iec.ch) in the data related to the specific document. At this date, the document will be

- reconfirmed,
- withdrawn,
- replaced by a revised edition, or
- amended.

## INTRODUCTION

The electrical tests contained in IEC 60794-1-24:2014 will now be individually numbered in the IEC 60794-1-4xx series. Each test method is now considered to be an individual document rather than part of a multi-test method compendium. Full cross-reference details are given in IEC 60794-1-2.

## OPTICAL FIBRE CABLES –

### **Part 1-401: Generic specification – Basic optical cable test procedures – Electrical test methods – Short-circuit test (for OPGW, OPPC and OPAC), Method H1**

#### **1 Scope**

This part of IEC 60794 applies to the short-circuit test intended to assess the performance of an optical ground wire (OPGW) or optical phase conductor (OPPC) under typical short-circuit, or the impact on the performance of optical attached cable (OPAC) under short-circuit current on the messenger wire.

#### **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 60793-1-46, *Optical fibres – Part 1-46: Measurement methods and test procedures – Monitoring of changes in optical transmittance*

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