

Optical amplifiers — Test methods —

Part 5-2: Reflectance parameters — Electrical spectrum analyser method

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National foreword

This British Standard is the official English language version of EN 61290-5-2:2004. It is identical with IEC 61290-5-2:2003.

The UK participation in its preparation was entrusted by Technical Committee GEL/86, Fibre optics, to Subcommittee GEL/86/3, Fibre optic systems and active devices, which has the responsibility to:

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**Optical amplifiers –
Test methods
Part 5-2: Reflectance parameters –
Electrical spectrum analyser method
(IEC 61290-5-2:2003)**

Amplificateurs optiques –
Méthodes d'essai
Partie 5-2: Paramètres du facteur
de réflexion –
Méthode de l'analyseur de spectre
électrique
(CEI 61290-5-2:2003)

Prüfverfahren für Lichtwellenleiter-
Verstärker
Teil 5-2: Reflexionsparameter –
Verfahren mit einem elektrischen
Spektralanalysator
(IEC 61290-5-2:2003)

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CENELEC

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

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Foreword

The text of document 86C/547/FDIS, future edition 1 of IEC 61290-5-2, prepared by SC 86C, Fibre optic systems and active devices, of IEC TC 86, Fibre optics, was submitted to the IEC-CENELEC parallel vote and was approved by CENELEC as EN 61290-5-2 on 2004-05-01.

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- latest date by which the national standards conflicting
with the EN have to be withdrawn (dow) 2007-05-01

Annex ZA has been added by CENELEC.

Endorsement notice

The text of the International Standard IEC 61290-5-2:2003 was approved by CENELEC as a European Standard without any modification.

In the official version, for Bibliography, the following notes have to be added for the standards indicated:

IEC 60793-1	NOTE	Harmonized in EN 60793-1 series (partly modified).
IEC 60825-1	NOTE	Harmonized as EN 60825-1:1994 (not modified).
IEC 60825-2	NOTE	Harmonized as EN 60825-1:2000 (not modified).
IEC 60874-1	NOTE	Harmonized as EN 60874-1:1999 (not modified).

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OPTICAL AMPLIFIERS – TEST METHODS –

Part 5-2: Reflectance parameters – Electrical spectrum analyser method

1 Scope and object

This part of IEC 61290 applies to optical fibre amplifiers (OFAs) using active fibres, containing rare-earth dopants, presently commercially available.

The object of this part of IEC 61290 is to establish uniform requirements for accurate and reliable measurements, by means of the electrical spectrum analyser test method, of the following OFA parameters, as defined in IEC 61291-1:

- a) input reflectance;
- b) output reflectance.

NOTE 1 All numerical values followed by (‡) are currently under study.

NOTE 2 The measurement uncertainty should be better than ± 1 dB.

2 Normative references

The following referenced documents are indispensable for the application 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 61291-1, *Optical fibre amplifiers – Part 1: Generic specification*

3 Abbreviated terms

For the purposes of this document, the following abbreviations apply:

ASE	Amplified spontaneous emission
DFB	Distributed feedback (laser diode)
EA	Electro-absorption
ESA	Electrical spectrum analyser
MZ	Mach-Zehnder
OFA	Optical fibre amplifier
OSA	Optical spectrum analyser