

INTERNATIONAL STANDARD

NORME INTERNATIONALE

**Fibre optic interconnecting devices and passive components – Performance standard –
Part 381-6: Cyclic arrayed waveguide grating – Category O (uncontrolled environment)**

**Dispositifs d'interconnexion et composants passifs à fibres optiques – Norme de performance –
Partie 381-6: Réseau sélectif planaire cyclique – Catégorie O (environnement non contrôlé)**





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INTERNATIONAL ELECTROTECHNICAL COMMISSION

**FIBRE OPTIC INTERCONNECTING
DEVICES AND PASSIVE COMPONENTS –
PERFORMANCE STANDARD –**

**Part 381-6: Cyclic arrayed waveguide grating –
Category O (uncontrolled environment)**

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International Standard IEC 61753-381-6 has been prepared by subcommittee 86B: Fibre optic interconnecting devices and passive components, of IEC technical committee 86: Fibre optics.

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

FDIS	Report on voting
86B/3955/FDIS	86B/3970/RVD

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

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

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FIBRE OPTIC INTERCONNECTING DEVICES AND PASSIVE COMPONENTS – PERFORMANCE STANDARD –

Part 381-6: Cyclic arrayed waveguide grating – Category O (uncontrolled environment)

1 Scope

This part of IEC 61753 contains the minimum initial test and measurement requirements and severities which a Gaussian-passband-profile cyclic arrayed waveguide grating (AWG) for single bidirectional transmission systems satisfies in order to be categorised as meeting the requirements of IEC 61753-1 for category O (uncontrolled environment). This standard pertains to wavelength division multiplexing (WDM) network with multiple spectral-band usage. This standard covers the requirements of cyclic AWG devices with free spectral range (FSR) characteristics to ensure multiple spectral bands transmission performance. The requirement covers devices with single-mode non-connectorized pigtails and no electric circuit board.

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 61300-2-1, *Fibre optic interconnecting devices and passive components – Basic test and measurement procedures – Part 2-1: Tests – Vibration (sinusoidal)*

IEC 61300-2-4, *Fibre optic interconnecting devices and passive components – Basic test and measurement procedures – Part 2-4: Tests – Fibre/cable retention*

IEC 61300-2-5, *Fibre optic interconnecting devices and passive components – Basic test and measurement procedures – Part 2-5: Tests – Torsion*

IEC 61300-2-9, *Fibre optic interconnecting devices and passive components – Basic test and measurement procedures – Part 2-9: Tests – Shock*

IEC 61300-2-14, *Fibre optic interconnecting devices and passive components – Basic test and measurement procedures – Part 2-14: Tests – High optical power*

IEC 61300-2-19, *Fibre optic interconnecting devices and passive components – Basic test and measurement procedures – Part 2-19: Tests – Damp heat (steady state)*

IEC 61300-2-22, *Fibre optic interconnecting devices and passive components – Basic test and measurement procedures – Part 2-22: Tests – Change of temperature*

IEC 61300-2-42, *Fibre optic interconnecting devices and passive components – Basic test and measurement procedures – Part 2-42: Tests – Static side load for strain relief*

IEC 61300-2-44, *Fibre optic interconnecting devices and passive components – Basic test and measurement procedures – Part 2-44: Tests – Flexing of the strain relief of fibre optic devices*