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**Fibre optic interconnecting devices and  
passive components performance standard –**

**Part 081-2:  
Non-connectorized single-mode fibre optic  
middle-scale 1 × N DWDM devices for category C –  
Controlled environments**

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# INTERNATIONAL ELECTROTECHNICAL COMMISSION

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

### Part 081-2: Non-connectorized single-mode fibre optic middle-scale 1 × N DWDM devices for category C – Controlled environments

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The text of this PAS is based on the following document:

This PAS was approved for publication by the P-members of the committee concerned as indicated in the following document

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Withdrawn

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

### **Part 081-2: Non-connectorized single-mode fibre optic middle-scale 1 × N DWDM devices for category C – Controlled environments**

#### **1 Scope**

This specification contains the minimum initial test and measurement requirements and severities which a fibre optic middle-scale 1 × N ( $16 \leq N \leq 64$ ) DWDM (Dense Wavelength Division Multiplexing) device shall satisfy in order to be categorized as meeting the IEC standard category C-controlled environments. The requirements cover devices with single-mode non-connectorized pigtails and no circuit-board. There is also a distinction between small-scale ( $N < 16$ ) and large-scale ( $N > 64$ ) 1 × N DWDM devices for the purpose of standards.

#### **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 60793-1-42:2001, *Optical fibres – Part 1-42: Measurement methods and test procedures – Chromatic dispersion*

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 61300-2-9, *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 – Maximum input power*

IEC 61300-2-17, *Fibre optic interconnecting devices and passive components – Basic test and measurement procedures – Part 2-17: Tests – Cold*

IEC 61300-2-18, *Fibre optic interconnecting devices and passive components – Basic test and measurement procedures – Part 2-18: Tests – Dry heat – High temperature endurance*

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 connectors*

IEC 61300-3-2, *Fibre optic interconnecting devices and passive components – Basic test and measurement procedures – Part 3-2: Examinations and measurements – Polarization dependence of attenuation in a single-mode fibre optic device*

IEC 61300-3-6, *Fibre optic interconnecting devices and passive components – Basic test and measurement procedures – Part 3-6: Examinations and measurements – Return loss*

IEC 61300-3-20, *Fibre optic interconnecting devices and passive components – Basic test and measurement procedures – Part 3-20: Examinations and measurements – Directivity of fibre optic branching devices*

IEC 61300-3-29, *Fibre optic interconnecting devices and passive components – Basic test and measurement procedures – Part 3-29: Examinations and measurements – Measurement techniques for characterizing the amplitude of the spectral transfer function of DWDM components*

IEC 61753-2-1, *Fibre optic interconnecting devices and passive components performance standard – Part 2-1: Fibre optic connectors terminated on single-mode fibre for category U – Uncontrolled environment*

IEC 62074-1, *Fibre optic WDM devices – Part 1: Generic specification for fibre optic WDM devices*

ITU-T Recommendation G.692, *Optical interfaces for intra-office systems*

ITU-T Recommendation G.694-1, *Spectral grids for WDM applications – DWDM frequency grid*