

ICS 17.180.99

CCS M35



**NATIONAL STANDARD OF THE
PEOPLE'S REPUBLIC OF CHINA**

GB/T 14075-2008

Replacing GB/T 14075-1993

**Specifications for optical fibre chromatic dispersion measuring
set**

光纤色散测试仪技术条件

Issued on: October 7, 2008

Implemented on: April 1, 2009

**Issued by: General Administration of Quality Supervision, Inspection and
Quarantine of the People's Republic of China;
Standardization Administration of China**

Table of Contents

- 1 Scope
- 2 Normative references
- 3 Terms and Definitions

Foreword

The reference to the standard IEC 61744.2005 "fiber dispersion tester calibration", combined with the current domestic single-mode fiber dispersion tester to make Developed with actual requirements. This standard replaces GB/T 14075-1993 "fiber dispersion tester technical conditions." This standard and GB/T 14075-1993 compared to the main changes are as follows:

- Increased foreword by deleting the additional instructions;
- Increased fiber dispersion tester using 1625nm band requirements (see Chapter 4 edition);
- Increased terms and definitions (see Chapter 3 edition);
- Deleted the press test wavelength range classification (1993 edition Table 1, Table 1 edition);
- Modify the dispersion main technical and performance indicators (1993 edition Table 1, Table 1 edition);
- Test dynamic range to allow the channel fader (1993 Version 4.1.4 and Table 1, and Table 1 edition 5.1.4);
- The measurement accuracy to the accuracy, increasing the zero-dispersion wavelength and zero dispersion slope indicators (1993 Version 4.1.3 and Table 1, Table edition 1 and 5.1.3);
- Modify the wavelength selector spectrum bandwidth requirements (1993 Version 4.1.1.3, this version 5.1.1.3);
- Delay detector to the phase meter (1993 Version 4.1.1.5, this version 5.1.1.5);
- Increasing the spectrum analyzer or an optical wavelength meter requirements (see this edition 5.1.1.8);
- Modify the variable attenuator light attenuation requirements (1993 Version 4.1.1.7, this version 5.1.1.7);

1 Scope

GB/T 14075-2008 is the Chinese national standard on specifications for optical fibre chromatic dispersion measuring set, in the field of metrology and measurement. The /T suffix marks it as a recommended standard: it is not compulsory by itself, but it becomes binding as soon as a contract, a tender or a customer specification calls it up - which in practice is how most foreign buyers meet it. It was issued on 7 October 2008 by the General Administration of Quality Supervision, Inspection and Quarantine of the People's Republic of China; Standardization Administration of China, and has been in force since 1 April 2009. Classification: ICS 17.180.99, CCS M35. This page is published from the official record of the standard held by the Chinese standards administration: the identification, the dates, the classification and the issuing body are taken from there. The clause text, the tables and the numeric limits are in the document itself, which is delivered complete in English translation.

This standard specifies the single-mode fiber dispersion tester (hereinafter referred to as the dispersion device) terms and definitions, requirements, test methods, inspection rules and Signs, packaging, transportation and storage. This standard applies to 1310nm, 1550nm and 1625nm band fiber dispersion tester used.

2 Normative references

The following documents contain provisions which, through reference in this standard and become the standard terms. For dated references, subsequent Amendments (not including errata content) or revisions do not apply to this standard, however, encourage the parties to the agreement are based on research Whether the latest versions of these documents. For undated reference documents, the latest versions apply to this standard.

GB/T 191-2008 Packaging - Pictorial signs

GB/T 4793.1-2007 measurement, control and laboratory safety requirements for electrical equipment - Part 1. General requirements

GB/T 4798.2-2008 application of electric and electronic products environmental conditions - Part 2. Transport

GB/T 6587.1-1986 master environmental testing electronic measuring instruments

GB/T 6587.2-1986 electronic measuring instruments Temperature Test

GB/T 6587.3-1986 electronic measuring instruments humidity test

GB/T 6587.4-1986 electronic measuring instrument vibration test

GB/T 6587.5-1986 electronic measuring instruments impact test

GB/T 6587.6-1986 electronic measuring instruments test transport

GB/T 6587.7-1986 electronic measuring instruments basic safety test

GB/T 6587.8-1986 electronic measuring instruments and power frequency voltage test

GB/T 6592-1996 Electrical and electronic measurement equipment - Expression of performance

GB/T 6593-1996 quality inspection rules for electronic measuring instruments GB/T 6833.1

~

3 Terms and Definitions

The following terms and definitions apply to this standard.

3.1 Dispersion tester is used to measure the optical fiber at different wavelengths of light transmission window dispersion value (D) of the instrument, typical light transmission window To 1310nm, 1550nm, 1625nm. The instrument can display measurement results output group delay - wavelength dispersive - wavelength correlation curve, and gives zero-dispersion wavelength (λ_0) and zero Dispersion slope (S0) parameter.

3.2 Zero-dispersion wavelength that is a wavelength dispersion value of zero point.