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JJF 1382-2012

Program of Pattern Evaluation of Flourescence Spectrophotometers

荧光分光光度计型式评价大纲

(English Translation)

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Introduction

This type of evaluation outline evaluation projects. Wavelength indication error, wavelength reproducibility, detection limit, measuring line , Fluorescence spectral peak intensity repetitive fluorescence intensity upper limit value shown in 10min drift and other technical indicators adopted JJG537-2006 "fluorescence spectrophotometer" metrics; within 10min zero line drift index using Industry Standard JB/T 5594-1991 "fluorescence spectrophotometer" in the index; increase the signal to noise ratio in the measurement of performance requirements, because Indicators for the different requirements of different manufacturers, which indicators to manufacturers declaration or instrument specification is based on indicators; in the pass Technical requirements increased dielectric strength, the power supply voltage and environmental adaptability of the pilot project, dielectric strength, power supply Pressure adaptation index using Industry Standard JB/T 5594-1991 "fluorescence spectrophotometer" in the index; Environmental Testing Mainly related to low temperature test, high temperature test, low temperature storage test, high temperature storage test, alternating hot and humid test, crash test Test, drop test and other projects, technical requirements and testing methods GB/T 11606-2007 "Environmental analysis instrument test Test method "in the relevant content.

This type of evaluation outline for the first release.

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Fluorescence spectrophotometer type evaluation outline

1 Scope

This type of evaluation outline provides fluorescence spectrophotometer product classifications, requirements, test methods, and results processing Determine the rules for the new fluorescence spectrophotometer product type evaluation.

2. References

JJG537-2006 fluorescence spectrophotometer GB/T 11606-2007 analytical instruments environmental test methods JB/T 5594-1991 fluorescence spectrophotometer these documents contain provisions which through reference in this syllabus constitute provisions of this outline. For dated reference documents Member, all subsequent amendments (not including errata content) or revisions do not apply to this outline, however, the drum Reed whether the latest versions of these files according to the parties that this outline agreement. Those who do not note cited date Use, the latest versions apply to this outline.

3 Overview

Fluorescence spectrophotometer (hereinafter referred to as the instrument) from the light source system, excitation monochromator system, sample room, single launch Color system, the detector system and a data processing system structure. The light emitted by the light source, through the excitation monochromator becomes After the monochromatic light, according to the fluorescent substance on the test sample cell, thereby excite fluorescence emission monochromator is collected by Monochromator dispersion into monochromatic light, and fluorescence intensity was measured into an electrical signal by a detector system, the data processing system and converted into digital spectrum.

For a given material, the intensity of the excitation light and the wavelength is fixed, the fixed thickness of the liquid layer, the concentration of the solution at lower concentrations the fluorescence intensity F c and the fluorescent substance, the instrument constant k have the following relationship.

F = kc

According to this principle, a fluorescence spectrophotometer can be applied to the determination of the nature and amount of the fluorescent substance.

The instrument can be divided into two categories monochromator. A class is a dispersive monochromator, a class B filter monochromator.

Technical information and test prototype to be submitted by the applicant 4

4.1 Technical Information 4.1.1 the whole picture, assembly diagram, schematic diagram and major components.

4.1.2 Technical Standards Document (including test methods).

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4.1.3 product manual.

Test report 4.1.4 manufacturing units or technical bodies prototype made.

4.2 Experimental Prototype the applicant can apply for a single product and to be filed by product. Where a single product by Shin Please, under normal circumstances should provide a prototype. By Series application products, each product extracted at least one-third

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