

ICS 17.020
CCS A 50

JJF

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

JJF 1666-2017

**Calibration Specification for Automatic Quantitative Analyzers
of Microorganism
(English Translation)**

Issued on: November 20, 2017

Implemented on: February 20, 2018

**Issued by: General Administration of Quality Supervision, Inspection and
Quarantine**

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Introduction

This specification mainly refers to GB 4789.3 National Food Safety Standard for Food Microbiology to Test Coliforms Counting, GB/T 5750.12 "Microbiological criteria for standard methods of drinking water for drinking" and based on JJF 1071 the formulation of the "Rules for the preparation of national measurement calibration specifications".

This specification is the first release.

Automatic Microbiological Analyzer Calibration Specification

1 Scope

This specification applies to the calibration of a microbiological quantitative analyzer using the principle of fluorescence detection and maximum possible number method. other the same principle of microbiological quantitative analyzer can refer to this specification.

2 references

This specification refers to the following documents.

JJF 1071-2010 Rules for the preparation of national metrological calibration specifications
GB 4789.3 Food Safety National Standard for Food Microbiological Examination of Coliform Count
GB/T 5750.12 Standard Test Method for Drinking Water Microbiological Index for dated references, only dated editions apply to this specification; all undated references the latest version (including all amendments) applies to this specification.

3 Terms

The definitions of GB 4789.3 and GB/T 5750.12 and the following terms and definitions apply to this specification.

3.1 Poisson distribution Poisson distribution the Poisson distribution is a discrete probability distribution that is common in statistics and probability (discrete probability distribution), suitable for describing the number of random events occurring within a unit of time (or space).

3.2 The most probable number method, MPN an indirect counting method based on Poisson distribution, also known as diluted culture counting, is a variety of calculations in microbial detection the most common method for the number of sample microorganisms.

4 Overview

The automatic microbial quantitative analyzer (hereinafter referred to as the instrument) is based on the principle of fluorescence detection and maximum possible number method.

An instrument for quantitative analysis of microorganisms. The instrument consists of a sample preparation system and a reading system. Sample preparation system the sample and the specific medium are added to the card. Reading system is detected by fluorescence, based on the number of positive holes Calculate the result.

5 Metrological characteristics

5.1 Injection pressure stability

5.2 Reproducibility of injection pressure

5.3 Excitation wavelength

5.4 Uniformity of excitation light intensity

5.5 Excited light intensity stability