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JJF 1751-2019

Calibration Specification for Colony Counters

菌落计数器校准规范

(English Translation)

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Indication Error (6)

Introduction

This specification mainly refers to GB/T 20733-2006 "Digital Camera Terminology", CIPA DC-003-Translation-2003 "Measurement Method of Digital Camera Resolution" and GB 4789.2-2016 "Food Safety Country" "Fan writing rules" requirements.

This specification is the first release.

Colony Counter Calibration Specification

1 Scope

This specification is applicable to a scanning imaging system, which is processed according to the imaging results and can be automatically counted.

Calibration of the colony counter to the counting result. For other types of colony counters, refer to this specification.

2 Reference documents this specification refers to the following documents.

JJF 1059.1 Evaluation and expression of measurement uncertainty GB 4789.2-2016 National Food Safety Standard Determination of the total number of colonies in food microbiology inspection GB/T 20733-2006 Digital camera terminology CIPADC-003-Translation-2003 Digital camera resolution measurement method ISO 12233.:2000 Photographic Electronic Still Camera Resolution Measurement (Photography-Electronic stil-picturecameras-Resolutionmeasurements) for dated reference documents, only the dated version applies to this specification; for those without date references the latest version (including all amendments) is applicable to this specification.

3 Terminology

3.1 resolution

A measure of the ability of a digital image capture system or digital image capture system component to resolve spatial image details.

3.2 Discrimination detectionlimited the ability of the colony counter to identify the smallest colony is expressed by the diameter of the smallest colony that the instrument can identify.

4 Overview

The colony counter (hereinafter referred to as the instrument) is an instrument that automatically analyzes and counts the colonies on the treated plate it is mainly composed of image capturing system (mainly including light source and CCD image sensor), image processing system and counting Display equipment, etc. When analyzing, first use a color image sensor to obtain the plate image, and then use professional software the colony on the image is processed, and the processed image is subjected to statistical analysis of the

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colony by the counting system to obtain the plate the total number of colonies.

5 Metrological characteristics

5.1 Indication error

5.2 Repeatability

5.3 Discrimination

5.4 Color temperature

5.5 Resolution

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