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

GB/T 47743.1-2026

**Digital cameras - Measurement method for image stabilization
performance - Part 1: Optical systems**

数码照相机 图像稳定性能的测量方法 第1部分：光学防抖系统

(English Translation)

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Foreword

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This document conforms to GB/T 1.1-2020 "Standardization Work Guidelines Part 1: Structure and Drafting Rules of Standardization Documents".

Drafting is scheduled.

This document is Part 1 of GB/T 47743 "Measurement Methods for Image Stabilization Performance of Digital Cameras". GB/T 47743 has been...

The following sections were published.

--Part 1: Optical Image Stabilization System.

This document is modified to adopt ISO 20954-1:2019 "Digital cameras - Measurement methods for image stabilization performance - Part 1: Optical anti-static properties".

"Shake system".

Compared with ISO 20954-1:2019, this document has undergone the following structural adjustments.

--Figure 5 corresponds to Figure 6 of ISO 20954-1:2019, and Figure 6 corresponds to Figure 5 of ISO 20954-1:2019;

--Increased by 5.5;

--Appendix A corresponds to Appendix E of ISO 20954-1:2019;

The entire content has been updated, with the addition of D.2;

--Appendix E corresponds to Appendix A of ISO 20954-1:2019, and adds E.3.

The technical differences between this document and ISO 20954-1:2019, and the reasons for these differences, are as follows.

--GB/T 20733-2022 has been added as a normative reference in the introductory section of Chapter 3, "Terms and Definitions," to ensure consistency with...

Consistency in current domestic terminology and definitions facilitates the understanding and use of the standard (see Chapter 3).

--ISO 516 has been replaced with GB/T 8338-2023 (see Table 4) for easier understanding and use;

- Added requirements for vibration generators when using alternative solutions (see 4.2.4.1) to accommodate the implementation of alternative solutions;
- Added "Additional Notes" (see 5.5) to standardize reports issued using alternative methods;
- Added the description "vibration waveform obtained from the CIPA website" (see E.2);
- An alternative to the vibration waveform has been added (see E.3), allowing users to evaluate performance without requiring CIPA certification.

The following editorial changes have been made to this document.

- The URLs for the ISO and IEC terminology databases have been removed;
- The terminology for equivalent focal length in a 35 mm sensor format is explained in accordance with the corresponding clause in GB/T 20733-2022;
- Added relevant descriptions to specify Appendix D, Appendix E and Appendix F;
- In Figure 5, labels for the corresponding parameters of the horizontal and vertical axes are added, and the original X and Y index symbols are removed;
- Added table numbers and titles to tables in section 5.4;
- An alternative method for vibration generator verification has been added (see D.2), and JJF 1210 has been added as an informative reference.

This document was proposed by the China Machinery Industry Federation.

This document is under the jurisdiction of the National Technical Committee on Standardization of Photographic Machinery (SAC/TC 107).

Limited Liability Company, Hangzhou Guozhao Testing Technology Co., Ltd., Dongguan Yutong Optical Technology Co., Ltd., Shanghai Seagull Digital Camera Co., Ltd.

The company includes Shenzhen Shunmeng Technology Co., Ltd., Guangdong Huipu Optical Technology Co., Ltd., and Fujian Youenli Optoelectronic Technology Co., Ltd.

Introduction

Image stabilization (also known as image stabilization) is crucial for digital camera applications and has become an important technique in product marketing and promotion.

One of the key features of this technology. Therefore, comparing the image stabilization performance of different cameras based on their brochures requires sophisticated measurement and reporting methods.

Very important.

The Camera & Imaging Products Association of Japan (CIPA) released CIPA Standard

DC-011 in 2012, which aims to specify how to measure and...

This standard describes the optical image stabilization performance of digital cameras. The measurement and description of image stabilization performance based on this standard can help users obtain practical...

The parameter information allows users to make a satisfactory decision when choosing a digital camera.

The measurement method described in ISO 20954-1:2019 is based on the CIPA standard and mainly includes simulating the motion of a handheld digital camera.

The performance evaluation was conducted. This document is a modified version of ISO 20954-1:2019, which adds a method for verifying vibration waveforms and vibration generators.

This alternative solution allows domestic users to conduct horizontal and vertical comparisons of digital camera image stabilization performance without requiring CIPA certification.

GB/T 47743, "Measurement Method for Image Stabilization Performance of Digital Cameras," aims to establish a test method for the image stabilization performance of digital cameras.

Based on the principle of image stabilization in digital cameras, it is proposed to consist of two parts.

--Part 1: Optical Image Stabilization Systems. The purpose is to standardize the measurement methods for the image stabilization performance of optical image stabilization systems in digital cameras.

--Part 2: Digital Image Stabilization Systems. The purpose is to standardize the measurement methods for image stabilization performance of digital image stabilization systems in digital cameras.

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The patent holder has committed to the International Organization for Standardization (ISO) that he is willing to cooperate with any applicant on reasonable and non-discriminatory terms and conditions.

Negotiations are underway regarding a patent licensing agreement. The patent holder's statement has been filed with the International Organization for Standardization (ISO). Further information is available...

You can obtain it through the following contact methods.

Patent holders. Panasonic Corporation and Panasonic Intellectual Property Management

Co., Ltd.

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responsibility.

Measurement methods for image stabilization performance of digital cameras Part 1:
Optical Image Stabilization System

1 Scope

This document describes the test methods for the optical image stabilization performance of digital cameras (hereinafter referred to as "cameras"). This optical image stabilization performance is used to compensate for...

The yaw and pitch shake caused by hand-holding during still image shooting.

This document applies to consumer cameras with optical image stabilization, as well as camcorders and mobile phones with photo-taking capabilities.

2 Normative references

The contents of the following documents, through normative references within the text, constitute essential provisions of this document. Dated citations are listed below.

For references to documents, only the version corresponding to that date applies to this document; for undated references, the latest version (including all amendments) applies.

This document.

GB/T 8338-2023 Measurement of shutter speed of cameras (ISO 516:2019, IDT) GB/T 20733-2022 Digital Camera Terminology (ISO 12231-1:2020, NEQ) the terms and definitions defined in GB/T 20733-2022, as well as the following terms and definitions, apply to this document.

Image stabilization

A digital camera function that uses motion detection to avoid blurry images caused by hand tremors.

Note: If the image stabilization function is mainly based on optimizing the exposure control program and shortening the exposure time, even if motion detection is used, it is not defined in this document.

Image stabilization function.