

ISO 20954-1:2026-09 (E)

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

Contents

Page

Foreword	v
Introduction	vi
1 Scope	1
2 Normative references	1
3 Terms and definitions	1
4 Measurement method	2
4.1 General	2
4.2 Equipment and environment for measurement	3
4.2.1 Test chart	3
4.2.2 Lighting	3
4.2.3 Temperature and humidity	4
4.2.4 Vibration generator	4
4.2.5 Mounting of camera to be measured on vibratory apparatus	7
4.2.6 Vibration waveform	8
4.2.7 Shooting distance	9
4.3 Settings of camera to be measured	9
4.3.1 Shooting mode	9
4.3.2 Optical image stabilization mode	10
4.3.3 Image quality mode (compression ratio)	10
4.3.4 Image quality mode (number of recorded pixels)	10
4.3.5 Sensitivity	10
4.3.6 Flash	10
4.3.7 Electronic (digital) zoom	10
4.3.8 Focus control	10
4.3.9 White balance	10
4.3.10 Exposure	10
4.3.11 Aperture	10
4.3.12 Aspect ratio	10
4.4 Measurement procedures	10
4.4.1 Brief description of the procedures	10
4.4.2 Calculating value from captured image	12
4.4.3 Measurement of intrinsic image degradation amount	13
4.4.4 Measurement of total image degradation amount (for selection criteria I and II in 4.2.6)	13
4.4.5 Measurement of total image degradation amount (for selection criterion III in 4.2.6)	14
4.4.6 Action when total image degradation amount at peripheral measurement positions is not measurable	15
4.5 Calculation of optical image stabilization performance	15
4.5.1 Calculation of basic values	15
4.5.2 Method of converting intrinsic image degradation amount and measured image degradation amount into 35 mm film equivalent values	21
4.5.3 Calculation of optical image stabilization performance	21
5 Presentation of results	23
5.1 Common requirements	23
5.2 Requirements for the nominal value	23
5.3 Requirements for the non-nominal value	24

5.4	Performance description of lens integrated camera with image stabilization mechanism .	24
5.4.1	Lens integrated camera with image stabilization in roll direction	24
5.4.2	Lens integrated camera with image stabilization in yaw/pitch directions and without image stabilization in roll direction	24
5.5	Performance description of camera body with image stabilization mechanism	24
5.5.1	Camera body with image stabilization in roll direction	24
5.5.2	Camera body with image stabilization in yaw/pitch directions and without image stabilization in roll direction	24
5.6	Performance description of interchangeable lens with image stabilization mechanism	25
5.6.1	Interchangeable lens with image stabilization in yaw/pitch directions and without image stabilization in roll direction	25
5.7	Performance description for pairing a camera body with image stabilization mechanism and an interchangeable lens with image stabilization mechanism	25
5.7.1	Pairing with image stabilization in yaw/pitch/roll directions	25
5.7.2	Pairing with image stabilization in yaw/pitch directions and without image stabilization in roll direction	25
5.8	Examples of presentation	25
Annex A (normative) Vibration waveforms		27
Annex B (informative) CIPA test chart method		29
Annex C (informative) Slanted edge test chart method		31
Annex D (informative) Verification of vibration generator		36
Annex E (informative) Additional information		37
Annex F (informative) Description method in brochures		57
Bibliography		62