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**INDUSTRY STANDARD OF THE
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**Non-contact Tonometers
(English Translation)**

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7.5 Certification Cycle (4)

Appendix A Non-Contact Tonometer Verification Original Recording Format (5)

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Introduction

JJF1001 "General Measurement Terms and Definitions", JJF1059.1 "Evaluation and Expression of Uncertainty in Measurement", JJF1002 the "Rules for the preparation of

national metrological verification regulations" together form the basic series of specifications that support the formulation of this verification protocol.

This procedure is based on the ISO 8612:2009 Ophthalmic Instrument Tonometer.

This regulation is issued for the first time.

Non-contact tonometer verification procedure

1 Scope

This procedure is applicable to non-contact tonometers (hereinafter referred to as intraocular pressure) that have passed the clinical test and are qualified by the jet measurement method.

First verification, follow-up verification, and in-use inspection.

2 references

This procedure cites the following documents.

ISO 8612:2009 Ophthalmic instruments-Tonometers for dated references, only the dated version applies to this procedure; any undated references the latest version (including all amendments) is applicable to this procedure.

3 Terms and units of measure

3.1 Terms

3.1.1 intraocular pressure intraocularpressure[ISO 8612:2009,3.1] the pressure inside the eyeball. Referred to as intraocular pressure.

3.1.2 indication error errorofindication [JJF1001-2011, 7.32] Refers to the difference between the non-contact tonometer test display and the standard analog human eye display.

3.2 Units of measurement Intraocular pressure measurement unit name. kPa; symbol. kPa.

4 Overview

Tonometer is an instrument for measuring intraocular pressure. It is mainly used for intraocular pressure screening and uses the principle of Imber-Fick.

Controlled air pulse squeezes the center of the cornea and deforms the cornea to form a circular plane with a diameter of about 3.6mm.

At this point, the pressure of the air pulse is equal to the intraocular pressure, and the value of the intraocular pressure is measured. Tonometer mainly includes jet system, infrared pair Coke system, applanation monitoring system, data processing system, etc.

5 Metrological performance requirements

5.1 Measurement Range the tonometer's measurement range should include at least. (0.93~6.65)kPa.

5.2 Indication Error Tonometer indication maximum allowable error. ± 0.67 kPa.

5.3 Repeatability

Repeatability of tonometer. 0.13 kPa.

6 General technical requirements

6.1 Appearance

6.1.1 No significant damage to the tonometer, text and markings should be clearly visible.