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

GB/T 33724-2017

Replacing GB/T 33724-2017

**Horology - Procedure for evaluating the accuracy of quartz
watches**

(English Translation)

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Foreword

This document complies with the provisions of GB/T 1.1-2020 "Standardization Work Guidelines Part 1. Structure and Drafting Rules of Standardization Documents".

Drafting.

This document replaces GB/T 33724-2017 "Procedures for Evaluating the Accuracy of Quartz Watches". Compared with GB/T 33724-2017,

Apart from structural adjustments and editorial changes, the main technical changes are as follows.

- a) The term and definition of "indicator accuracy level" have been removed (see 3.2 in the 2017 edition);
- b) The sign of the coefficients of the logarithmic function used has been changed (see Tables 1 and 8.2, 2017 editions of Tables 1 and 8.2);
- c) The wording regarding "sample size" has been changed (see 7.1.4, 2017 version 7.1.4);
- d) The value of k_2 in Table A.2 was changed (see Table A.2, 2017 version);
- e) The nature of Appendix B is changed from normative to informative (see Appendix B, Appendix B of the 2017 edition).

This document adopts ISO 10553:2018 "Steps for assessing the accuracy of quartz watches".

The following minimal editorial changes have been made to this document.

---The URLs for the ISO and IEC terminology databases have been removed.

Please note that some content in this document may involve patents. The issuing organization of this document assumes no responsibility for identifying patents.

This document was proposed by the China National Light Industry Council.

This document is under the jurisdiction of the National Technical Committee on Standardization of Clocks and Watches (SAC/TC160).

1 Scope

This document describes the procedures for assessing the accuracy of single and batch quartz watches (statistical assessment of batch accuracy is given in Appendix A), and provides...

Explanation of the relationship between the measurement accuracy and the accuracy class given by the manufacturer.

This document applies to quartz watches with accuracy indicators.

2 Normative references

The contents of the following documents, through normative references within the text, constitute essential provisions of this document. Dated citations are not included.

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.

tions)

Note: GB/T 4028-2013 Inspection position markings for timing instruments (ISO 3158:1976, IDT)

ISO 16269-6:2014 Statistical processing and interpretation of data - Part 6. Determination of statistical tolerance intervals

Note: GB/T 3359-2009 Statistical processing and interpretation of data - Determination of statistical tolerance intervals (ISO 16269-6:2005, IDT)

3 Terms and Definitions

The following terms and definitions apply to this document.

3.1

Quartz watches whose accuracy class is indicated in the accompanying documents such as instruction manuals, manuals, and labels.

3.2

Display

It indicates the accuracy level of hours and minutes, and has at least one second indicator element to check for indication errors.

Note: The unit of accuracy level is seconds (s).

4 Symbols and Units

The symbols and units for aging, temperature simulation, and accuracy given in Table 1 are applicable to this document.