

ICS 33.160.25
CCS M 74



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

GB/T 26684-2011

**Methods of measurement for digital terrestrial set-top box
(English Translation)**

Issued on: June 16, 2011

Implemented on: November 1, 2011

**Issued by: General Administration of Quality Supervision, Inspection and
Quarantine (AQSIQ)**

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Foreword

This Standard is drafted in accordance with the rules specified in GB/T 1.1-2009.

This Standard was proposed by the Ministry of Industry and Information Technology of the People's Republic of China.

This Standard shall be under the jurisdiction of the National Technical Committee 242 on Audio, Video, Multimedia System and Equipment of Standardization Administration of China (SAC/TC 242).

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Methods of Measurement for Digital Terrestrial Set-top Box

1 Scope

This Standard specifies the measuring conditions, electric property measurement items and measurement methods of digital terrestrial set-top box (hereinafter referred to as set-top box or SB) that supports digital terrestrial television reception function specified in GB 20600-2006.

This Standard is applicable to standard definition (SD) and high definition (HD) digital terrestrial set-top boxes that support digital terrestrial television reception function specified in GB 20600-2006.

2 Normative References

The following documents are essential for the application of this Standard. For the dated normative references, only the dated editions are applicable to this document. For the undated references, the latest editions of the normative documents (including all the amendments) are applicable to this document.

GB/T 3174 Characteristics of PAL-D Television Broadcasting System

GB 3659-1983 Methods of Measurement of Television Video Channel

GB/T 17975.1 Information Technology - Generic Coding of Moving Picture and Associated Audio Information - Part 1.System (GB/T 17975.1-2010, ISO/IEC 13818-1:2007, MOD)

GB/T 17975.2 Information Technology - Generic Coding of Moving Picture and Associated Audio Information - Part 2.Video (ITU-TH, 262.1995, IDT)

GB/T 17975.3 Information Technology - Generic Coding of Moving Picture and Associated Audio Information - Part 3.Audio (ISO/IEC 13818-3:1998, IDT)

GB 20600-2006 Framing Structure, Channel-Coding and Modulation for Digital Television Terrestrial Broadcasting System

GB/T 22122-2008 Methods of Measurement of Surround Audio for Digital TV

GB/T 26685-2011 Methods of Measurement for Digital Terrestrial Television Set-top box

GB/T 26270-2010 Standard Test Signals for Digital Television Receiving Equipment

SJ/T 11324-2006 Terminology of Digital Television Receiving Equipment

3.1 Term and Definition

For the purpose of this Standard, the following terms and definitions AND the ones defined in SJ/T 11324-2006 apply.

3.1.1

Acceptable error free [Translator. abbreviated as error-free]

Error code events that are not corrected within the specified time are less than a

certain threshold during the signal reception process.

3.2 Abbreviation

AEF - Acceptable error-free;

EPG - Electronic program guide;

PSI - Program specific information;

SI - Service information;

UHF - Ultra high frequency;

VHF - Very high frequency.

4.1.1 Operating conditions

Unless otherwise specified, the tested set-top box (TSB) shall be tested according to the measuring conditions specified in 4.4.

4.1.2 Measurement site

The measurement shall be carried out in indoor room not subject to the ambient radio frequency and low frequency electromagnet field interference; if ambient electromagnet field interferes the measuring results, the measurement shall be done in a shielded room.

4.1.3.1 Measurement conditions

Ambient temperature. 15°C~35°C;

Relative humidity. 25%~75%;

Atmosphere pressure. 86kPa~106kPa;

Power. 220x(1±5%) V, 50x(1±2%) Hz.

4.1.3.2 Arbitration conditions

Environment temperature. 20°C±2°C;

Relative humidity. 60%~70%;

Atmosphere pressure. 86kPa~106kPa;

Power. 220x(1±2%) V, 50x(1±1%) Hz;

Power harmonic. (0~5)%.