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

GB/T 22181.24-2016

Replacing GB/T 11483-1989

**Plasma display panels -- Part 2-4: Methods for measuring the
characteristics of devices for digital television sets**

等离子体显示器件 第2-4部分：数字电视机用器件特性测量方法

(English Translation)

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Table of Contents

Preface
1 Scope
2 Normative reference document
3 Terms and definitions
4 General requirements
4.1 Environmental conditions
4.2 Darkroom conditions
4.3 Setting Condition
5 Detailed requirements
5.1 Brightness
5.2 White grayscale characteristics
5.3 Color gamut coverage
5.4 Related color temperature
5.5 Average power consumption
5.6 Maintenance surplus
5.7 Viewing angle
5.8 Dynamic image resolution
5.9 Image Stripes
5.10 Flashing
5.11 Noise
Reference

Foreword

GB/T 22181 "Plasma Display Devices" series of standards have been or are planned to release the following sections.

- Part 1. Terminology and textual symbols;
- Part 2-1. Optical parameter measurement methods;
- Part 2-2. Measurement of optical parameters;
- Part 2-3. Module display quality measurement method;
- Part 2-4. Measurement methods for device characteristics for digital televisions;

- Part 3-1. Mechanical interface;
- Part 3-2. Electronic interfaces;
- Part 4. Climate and mechanical test methods;
- Part 5. General specification;

Part 6. Blank detail specification for plasma display devices for digital televisions.

This part is part 2 of GB/T 22181.

This part is drafted in accordance with the rules given in GB/T 1.1-2009.

This part of the replacement GB/T 11483-1989 "AC plasma display device test method."

This part is related to GB/T 11483-1989, in addition to editorial changes, the main technical changes are as follows.

The measurement items modified by the measurement method include. brightness (see 5.1, GB/T 11483-1989 4.15);

--- Increased measurement items include. white grayscale characteristics (including brightness grayscale, white balance characteristics), color gamut coverage (including high gray Degree of color gamut coverage, low gray color gamut coverage), correlated color temperature, average power consumption, maintenance margin, viewing angle (including brightness angle, contrast Degree of view, chromaticity angle of view), dynamic image resolution, image fringes, flicker and noise (see 5.2 to 5.11);

--- The missing measurement items include. minimum ignition voltage, ignition voltage, operating voltage, ignition voltage dispersion, maximum extinguishing voltage, minimum Off voltage, extinguish voltage, dynamic range, voltage dispersion and, hold voltage, write voltage, erase voltage, power consumption, display power Pole resistance, inter-electrode leakage current, inter-electrode capacitance, brightness uniformity, contrast and dead point (see GB/T 11483-1989 4.1 to 4.14, 4.16 to 4.18).

1 Scope

This part of GB/T 22181 specifies the measurement method for the parameter characteristics of plasma display devices for digital televisions.

This section applies to plasma display devices for digital televisions. For other applications, refer to this section for plasma display devices.

2 Normative reference documents

The following documents are indispensable for the application of this document. For dated references, only the dated edition applies to this article Pieces. For undated references, the latest edition (including all modifications) applies to this document.

GB/T 6882-2008 Acoustic sound pressure method for the determination of noise sources
Sound power level Anechoic chamber and semi-anechoic chamber precision method GB/T
17309.1-1998 Methods of measurement for television broadcast receivers - Part 1. General
consideration of radio frequency and video electrical performance measurements as well as
display performance measurements Plasma display devices - Part 1. Terminology and text
symbols GB/T 22181.1-2008 Plasma display devices - Part 5. Generic specification GB/T
22181.5-2015 GB/T 22181.21-2008 Plasma display devices - Part 2-1. Optical parameters
measurement method Terminology of digital television receiving equipment - SJ/T
11324-2006 IEC 61672-1.:2002 Electroacoustics sound level meter - Part 1.
Electroacoustics - Sound level meters - Part 1. Specifications) CIE15.:2004 Chromaticity
(third edition)

3 Terms and definitions

GB/T 22181.1-2008, GB/T 22181.5-2015, GB/T 17309.1-1998, SJ/T 11324-2006 and IEC
61672-1.:2002 and the following terms and definitions apply to this document.

White grayscale characteristics gray level characteristic of white colour the brightness and
chroma of the screen display vary with the grayscale of the white signal input by the plasma
display device.

Brightness grayscale characteristics gray level characteristic of luminance the brightness of
the screen display varies with the grayscale of the white signal input with the plasma
display device.

White balance characteristics the chromaticity of the screen display varies with the gray
display of the white signal input to the plasma display device.

Perspective view angle Due to the orientation of the screen, the display image quality of the
display changes with the viewing angle, and in the case of an acceptable