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

GB/T 6163-2011

Replacing GB/T 6163-1985

**Methods of measurement on radio receivers for FM broadcast
transmissions**

调频广播接收机测量方法

(English Translation)

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Foreword

This standard was drafted in accordance with GB/T 1.1-2009 given rules.

This standard and IEC 60315-4:1997 "Methods of measurement on radio receivers for various classes of emission - Part 4. FM sound broadcasting Transmitter-receiver "of non-equivalent.

This standard replaces GB/T 6163-1985 "FM radio receiver measurements." this standard and GB/T 6163-1985 compared to the main changes are as follows.

--- Added "Preface."

--- Added "normative references."

--- Added "terminology and provisions" in each of the English name.

--- Original standard 2.8 "standard modulation" in standard tuning system requires 30 percent to 3.8 standard is defined as 100% modulation.

100% ($\pm 75\text{kHz}$ deviation) --- original standard 2.8.2 "standard stereo modulation", is amended as. 100% ($\pm 74.25\text{kHz}$ Deviation). The pilot signals account for 10% ($\pm 7.5\text{kHz}$ deviation), revised as follows. 10%. The main composite signal, a signal representing the Deputy 90% ($\pm 67.5\text{kHz}$ deviation), revised as follows. 90%. The spectrum stereo composite signal stereo modulation 100% ($\pm 75\text{kHz}$ deviation), is amended as. 100% ($\pm 74.25\text{kHz}$ deviation). Frequency and 1 "stereo composite signal of FIG.

100% ($\pm 75\text{kHz}$ deviation) spectra "in the standard stereo modulation, modified to 100% ($\pm 74.25\text{kHz}$ deviation) (see 3.8.2).

--- Original standard 2.8.2 Table 3 "offset assignment stereo modulation signal" modulation perch 100% and 30% of no. 7.5kHz amended as. 6.75kHz (see 3.8.2).

--- Increased Chapter 10, "Automatic search system characteristics."

--- Original standard Chapter 9, "two-signal selectivity" of 9.1 measuring method of frequency deviation $\pm 22.5\text{kHz}$ revised as. $\pm 75\text{kHz}$; increase Added, "If necessary, the modulation deviation of the interference signal receiver may be $\pm 40\text{kHz}$ "; the 21 "two-signal selectivity" Frequency Partial $\pm 22.5\text{kHz}$ revised as. $\pm 75\text{kHz}$ (see Chapter 11).

--- Original standard Chapter 10, "IF rejection" in the measurement method of deviation $10.1 \pm 22.5\text{kHz}$ revised as. $\pm 75\text{kHz}$; the original standard Registration 22 adds "input signal level - less than the slice level 3dB", deviation $\pm 22.5\text{kHz}$ revised as. $\pm 75\text{kHz}$ (See Chapter 12).

--- Original standard Chapter 11, "Image Rejection" in the measurement methods 11.1.1 adds "In the tuning frequency of the input signal should be less than the limit Slice level 3dB "; the original standard 24 adds" Test Frequency -88,108MHz; the input signal level - less than limiter Level 3dB; deviation - $\pm 75\text{kHz}$. "(See Chapter 13).

--- Original standard Chapter 12, "spurious response suppression" in the frequency deviation $\pm 22.5\text{kHz}$ revised as. $\pm 75\text{kHz}$; increase the "Input Signal Level - less than the slice level 3dB "(see Chapter 14).

--- Original standard Chapter 13, "capture ratio" in the frequency deviation $\pm 22.5\text{kHz}$ revised as. $\pm 75\text{kHz}$ (see Chapter 15).

--- Original standard Chapter 15, "Tuning Features" deviation $\pm 22.5\text{kHz}$ revised as. $\pm 75\text{kHz}$ (see Chapter 17).

--- Original standard Chapter 16, "RF intermodulation" the deviation $\pm 22.5\text{kHz}$ revised as. $\pm 75\text{kHz}$; will be "used for the measurement frequency interval Δf should not be less than 300kHz, and has been measured to $\pm 2.2\text{MHz}$ ", changed to" used for the measurement frequency interval Δf from $\pm 400\text{kHz} \sim \pm 2.2\text{MHz}$ "(see Chapter 18).

--- Original standard Chapter 17, "Machine voltage harmonic distortion" in the frequency deviation $\pm 22.5\text{kHz}$ revised as. $\pm 75\text{kHz}$; adds new standard 19.6 "distortion of the supply voltage is changed" and 19.7 "distortion caused by the ambient temperature."

--- Increased Chapter 22, "step-down feature."

--- Original standard Chapter 20, "Machine voltage frequency characteristics" in the frequency deviation $\pm 22.5\text{kHz}$ revised as. $\pm 75\text{kHz}$ (see Chapter 23).

--- Original standard Chapter 22, "hum" in the frequency deviation $\pm 22.5\text{kHz}$ revised as. $\pm$

75kHz (see Chapter 25).

--- Original standard Chapter 23 "single whistle signal called" the deviation $\pm 22.5\text{kHz}$ revised as. $\pm 75\text{kHz}$ (see Chapter 26).

--- Original standard Chapter 25, "Audio camera shake" the deviation $\pm 22.5\text{kHz}$ revised as. $\pm 75\text{kHz}$ (see Chapter 28).

--- Original standard Chapter 26, "high-frequency camera shake" the deviation $\pm 22.5\text{kHz}$ revised as. $\pm 75\text{kHz}$ (see Chapter 29).

--- Original standard Chapter 27, "Frequency Range" Frequency Offset $\pm 22.5\text{kHz}$ revised as. $\pm 75\text{kHz}$ (see Chapter 30).

--- Original standard Chapter 28, "intermediate frequency" Frequency Offset $\pm 22.5\text{kHz}$ revised as. $\pm 75\text{kHz}$ (see Chapter 31).

--- Original standard Chapter 31, "change the tuning frequency" Frequency Offset $\pm 22.5\text{kHz}$ revised as. $\pm 75\text{kHz}$ (see Chapter 34).

--- Chapter 33 of the original standard local oscillator radiation in the electromagnetic compatibility GB 6114-1985 "broadcast receiver interference characteristic measurement method" Standard, instead. GB 13837-2003 "Sound and television broadcast receivers and associated equipment - Radio disturbance characteristics - Limits and measurement the method "(see Chapter 36).

--- Original standard Chapter 36, "separation" in the frequency deviation ± 20.25 revised as follows. $\pm 67.5\text{kHz}$ (see Chapter 39).

--- Original standard Chapter 37 "non-linear crosstalk" in the frequency deviation ± 20.25 revised as follows. $\pm 67.5\text{kHz}$ (see Chapter 40).

--- Original standard Chapter 38, "balance" in the frequency deviation ± 20.25 revised as follows. $\pm 67.5\text{kHz}$ (see Chapter 41).

--- Original standard Chapter 39, "Stereo identity" in the frequency deviation ± 20.25 revised as follows. $\pm 67.5\text{kHz}$ (see Chapter 42).

--- Increase in Chapter 45, "causing interference measurements RDS", was added to this standard.

--- Increased measurement items.

--- Basic parameters have been modified.

The standard proposed by the Ministry of Industry and Information Technology of the People's Republic of China.

This standard by the national audio, video and multimedia systems and equipment Standardization Technical Committee (SAC/TC242) centralized.