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Replacing GB/T 14475-1993

Horn loudspeakers - Measuring methods

号筒扬声器 测量方法

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Table of Contents

1 Scope	1
2 Normative references	1
3 Terms and Definitions	1
4 Measurement signal	2
4.1 Overview	2
4.2 Sinusoidal Signal	2
4.3 Broadband Noise Signal	2
4.4 Narrowband Noise Signal	2
4.5 Pulse Signal	2
5 Acoustic Environment	3
5.1 Overview	3
5.2 Free field conditions	3
5.3 Diffusion field conditions	3
5.4 Simulating free-field conditions	3
6 Unwanted acoustic and electrical noise	3
7 Positions of horn loudspeaker and measurement microphone	3
7.1 Measuring distance under free field conditions	3
7.2 Position of horn loudspeaker under diffuse field conditions	4
7.3 Position of horn loudspeaker and microphone under simulated free-field conditions ...	4
8 Measuring equipment	4
9 Accuracy of acoustic measurements	4
10 Horn Loudspeaker Installation	4
11 Preload Processing	5
12 Polarity Mark	5
12.1 Feature Explanation	5
12.2 Test Method	5
13 Reference planes, reference points, and reference axes	5
13.1 Reference surface	5
13.2 Reference Point	5
13.3 Reference axis	5
14 Passive horn loudspeaker (without matching transformer)	5
14.1 Measurement conditions	5

14.2 Impedance	6
14.3 Input Voltage	7
14.4 Input power	9
14.5 Rated frequency range	9
14.6 Sound pressure in free field conditions	10
14.7 Response under free-field conditions	11
14.8 Output power (sound power)	13
14.9 Directional Characteristics	15
14.10 Amplitude Nonlinearity	17
15 Passive horn loudspeaker (with matching transformer)	21
15.1 Measurement conditions	21
15.2 Matching Impedance	22
15.3 Input Voltage	23
15.4 Input power	25
15.5 Rated frequency range	25
15.6 Sound pressure in free field conditions	25
15.7 Response under free-field conditions	25
15.8 Output power (sound power)	26
15.9 Directional Characteristics	26
15.10 Amplitude Nonlinearity	26
16 Active Horn Loudspeaker	27
16.1 Measurement conditions	27
16.2 Input Voltage	28
16.3 Rated frequency range	30
16.4 Sound pressure in free field conditions	30
16.5 Response under free-field conditions	31
16.6 Output power (sound power)	31
16.7 Directional Characteristics	32
16.8 Amplitude Nonlinearity	33
17 Stray magnetic field	35
17.1 Static Component	35
17.2 Dynamic Component	36
18 Size and Quality	36
18.1 Dimensional Measurement	36
39 Reference	41

Foreword

This document is in accordance with the provisions of GB/T 1.1-2020 "Guidelines for standardization work Part

1. Structure and drafting rules for standardization documents" Drafting. This document replaces GB/T 14475-1993 "Methods of measurement of horn loudspeakers". Compared with GB/T 14475-1993, except for the structural adjustment Besides the editorial changes, the main technical changes are as follows:

- a) The scope of application is limited to the performance measurement of electric horn loudspeakers for civil public broadcasting terminals (see Chapter 1, 1993 edition) Chapter 1);
- b) Added a chapter on "Terms and Definitions" (see Chapter 3);
- c) Added the measurement method of "transfer function" (see 14.7.3);
- d) Added "sound power within the frequency band" (see 14.8.1), "average sound power within the specified frequency band" (see 14.8.2), "specified frequency point" Measurement method of "power compression value" (see 14.8.5) and "power compression frequency response curve" (see 14.8.6);
- e) Added the measurement method of "coverage angle" (see 14.9.4);
- f) Added "characteristic harmonic distortion" (see 14.10.3), "nth order modulation distortion" (see 14.10.4), "nth order characteristic modulation distortion" (see 14.10.5) Measurement method of "secondary difference frequency distortion" (see 14.10.6);
- g) Added the measurement method for "passive horn loudspeaker (with matching transformer)" (see Chapter 15);
- h) Added the measurement method for "active horn loudspeakers" (see Chapter 16);
- i) Added the measurement method of "stray magnetic field" (see Chapter 17);
- j) Added the measurement method of "size and mass" (see Chapter 18);
- k) Added the test methods of "Listening Test" (see Appendix A) and "Insulation and Environmental Adaptability" (see Appendix B). Please note that some of the contents of this document may involve patents. The issuing organization of this document does not assume the responsibility for identifying patents. This document is proposed by the Ministry of Industry and Information Technology of the People's Republic of China. This document is under the jurisdiction of the National Technical Committee for Standardization of Audio, Video and Multimedia Systems and Equipment (SAC/TC242). This document was drafted by: Jiangsu Electronic Information Product Quality Supervision and Inspection Institute, Taixing Yangsheng Electronics Co., Ltd., Nanjing University Shenzhen Research Institute,

Wuxi Jeff Electroacoustic Co., Ltd., China Electronics Technology Standardization Institute, and Hangzhou Cheling Network Technology Co., Ltd. The main drafters of this document are. Zhang Zhiqiang, Chen Jiasheng, Shen Dongbo, Shen Yong, Zhang Tengbiao, Yin Xiaogen, Cai Lujun, and Bao Sen. The previous versions of this document and the documents it replaces are as follows:

---First published in.1993 as GB/T 14475-1993.

1 Scope

GB/T 14475-2024 is the Chinese national standard on horn loudspeakers - measuring methods, in the field of telecommunications and audio-video engineering. The /T suffix marks it as a recommended standard: it is not compulsory by itself, but it becomes binding as soon as a contract, a tender or a customer specification calls it up - which in practice is how most foreign buyers meet it. It was issued on 26 October 2024 by the State Administration for Market Regulation; Standardization Administration of China, and has been in force since 1 May 2025. Classification: ICS 33.160.99, CCS M72. This page is published from the official record of the standard held by the Chinese standards administration: the identification, the dates, the classification and the issuing body are taken from there. The clause text, the tables and the numeric limits are in the document itself, which is delivered complete in English translation.

This document describes the methods for measuring the performance of horn loudspeakers for civilian-type public address terminals. This document applies to the measurement of electric horn loudspeakers for civil public broadcasting terminals. Horn loudspeakers for special purposes and other transducers It is used as a reference for measuring the principle of horn loudspeakers. Note

1.The "horn loudspeaker" mentioned in this document refers to the combination of a horn loudspeaker drive unit and a horn. The drive unit or horn may be one or more. It can also have a built-in transformer or a built-in amplifier. NOTE

2 The measurement methods given in this document are appropriately selected to reflect the characteristics of horn loudspeakers.

2 Normative references

The contents of the following documents constitute the essential clauses of this document through normative references in this document. For referenced documents without a date, only the version corresponding to that date applies to this document; for referenced documents without a date, the latest version (including all amendments) applies to This document.

GB/T 2423.18-2021 Environmental testing Part