



中国赛宝实验室计量检测中心
(工业和信息化部电子第五研究所计量检测中心)
CHINA CEPREI LABORATORY CALIBRATION & TESTING CENTRE

校准证书

CALIBRATION CERTIFICATE

证书编号: 2GB25025943-0001

Certificate No.



中国认可
国际互认
校准
CALIBRATION
CNAS L13344

委托单位:
Client

东莞市华博精测仪表科技有限公司

委托方地址:
Address

东莞市清溪镇青湖工业园区17栋

仪器名称:
Description

声级计

型号/规格:
Model/Type

HT622A

制造商:
Manufacturer

HABOTEST

机身号:
Serial No.

H12F-G338109

管理号:
Asset No.

/

接收日期:
Rec. Date

2025-11-21

校准日期:
Cal. Date

2025-11-24

签发日期:
App. Date

2025-11-25

建议校准周期:
Reference Cal. Period

12个月(12 months)

结论:
Conclusion

所校准项目符合技术要求(The calibrated items meet the technical requirements)

校准:
Calibrated by

罗世安

罗世安

核验:
Inspected by

钟灏

钟灏

签发:
Approved by

郑木力

郑木力

印章:
Stamp



扫一扫查真伪

赛宝计量检测中心

总部地址: 广州市增城区朱村街朱村大道西78号

实验室地址: 广州市增城区朱村街朱村大道西78号

客服电话: 020-87237633 传真: 020-87236189

投诉电话: 020-87236896

邮件: cal@ceprei.com

网址: www.ceprei-cal.com

CEPREI Calibration and Testing Centre

HQ Addr: No.78,Zhucun Avenue West,Zengcheng District,Guangzhou,China

Add. of the Lab: No.78,Zhucun Avenue West,Zengcheng District,Guangzhou,China

Service Tel: 020-87237633 Fax: 020-87236189

Complaint Tel: 020-87236896

Email: cal@ceprei.com

Website: www.ceprei-cal.com

说 明

DIRECTIONS

1. 本机构是国家市场监管总局授权建立的法定计量检定机构：“国家环境综合试验设备计量站”，国家国防科工局授权建立的“国防科技工业4412区域计量站”，本机构质量管理体系符合ISO/IEC 17025:2017标准的要求。

This laboratory is the legal metrological institute authorized by the State Administration for Market Regulation. It is the “Nation Metrology Station of Combined Environmental Testing Equipment”. It is the “No. 4412 Regional Metrology Station of Science, Technology and Industry for National Defense” authorized by the State Administration of Science, Technology and Industry for National Defense. The quality management system of this laboratory is in accordance with the ISO/IEC 17025:2017.

2. 本证书中的数据可溯源到国际单位制（SI）单位和/或社会公用计量标准。

The data of the certificate is traceable to the International system of Units (SI) and/or the public metrological standards.

3. 本次校准的技术依据及CNAS认可范围(Reference documents and CNAS accredited scopes):

- JJG 188-2017 声级计检定规程: Sound pressure level: (20~130)dB; Frequency Weighting: (20~130)dB, (10 Hz~20kHz)
- 详细内容请查看CNAS网站中注册编号为L13344的证书附件，超出范围的内容未被认可，其结果/结论所依据的合格评定活动不在认可范围内。(Please see the attachment of certificate No. L13344 at CNAS website for details, beyond which is not accredited, the conformity assessment activities on which the results/conclusions are based are outside the scope of accreditation.)

4. 本次校准所使用的主要测量标准及溯源性声明(The main measurement standards used during the calibration and traceability declaration):

名 称 (Description)	证书号/有效期/溯源单位 (Certificate No./Due Date/Traceability to)	技术指标 (Specification)	测量范围 (Measuring Range)
前置放大器(3194482)	4GC25000737-0015/2026-07-17/ 赛宝(广州)	$\pm 0.1\text{dB}$	10Hz~50kHz
多功能声校准器(3339878)	4GC25000551-0013/2026-06-09/ 赛宝(广州)	$U=0.15\text{dB}$, $k=2$	31.5Hz~16kHz
信号发生器(389052)	4GC25000366-0015/2026-04-28/ 赛宝(广州)	1.衰减器: 10dB改变量 $\pm 0.05\text{dB}$, 1dB改变量 $\pm 0.02\text{dB}$, 0.1dB改变量 $\pm 0.01\text{dB}$; 2. 频率响应 $\pm 0.1\text{dB}$; 3.失真度 $\leq 0.1\%$; 4.频率 $\pm 0.25\%$; 5. 猝发音, 持续时间 $\pm 1\%$	1.衰减器: (0~80) dB, 2.频率响应: 10Hz~100kHz, 3.频率: 10Hz~20kHz, 4.猝发音: 持续时间(0.25~2000) ms
数字多用表(MY45051674)	GFJGJL1004250400279/2026-03-17/ 航天514所	直流电压: $\pm 1 \times 10^{-4}$; 直流电流: $\pm 1 \times 10^{-4}$; 交流电压: $\pm 0.1\%$; 交流电流: $\pm 0.1\%$; 电阻: $\pm 1 \times 10^{-4}$	直流电压: $\pm 10\text{mV} \sim \pm 1000\text{V}$; 直流电流: $\pm 10 \mu\text{A} \sim \pm 1\text{A}$; 交流电压: (10mV~700V) @ (10Hz~1MHz); 交流电流: (1mA~1A) @ (10Hz~10kHz); 四线电阻: 10 Ω ~10M Ω
实验室标准传声器(2246093)	LSsx2025-07384/2026-06-03/ 中国计量院	LS级	10Hz~20kHz
耦合腔(3081703)	SXE202483019/2026-02-04/ 广东计量院	失真度: <2%, 耦合端一致性: $\pm 0.3\text{dB}$, 短期漂移: <0.5dB, 工作有效声压级: $\geq 80\text{dB}$	10Hz~20kHz
PULSE分析系统(3160-106540)	4GC25000736-0019/2026-07-18/ 赛宝(广州)	动态信号分析仪: A级; 声分析仪: 频率响应 $\pm 0.1\text{dB}$; 信号发生器: 输出电压 $\pm 2.5\%$	频率: 0.001Hz~51.2kHz, 电压: ($1 \times 10^{-5} \sim 30$)V; 输出电压: 10mV~3.5V

计量溯源性声明(Metrological Traceability Declaration):

被校准器具 Instrument	设备名称 Standard Name	外部机构/溯源证书编号 Institute/Certificate No.
声级计	前置放大器	航天514所/GFJGJL1004250400279
	多功能声校准器	航天514所/GFJGJL1004250400279
	信号发生器	航天514所/GFJGJL1004250400279
	数字多用表	航天514所/GFJGJL1004250400279
	实验室标准传声器	中国计量院/LSsx2025-07384
	耦合腔	广东计量院/SXE202483019

5. 校准地点(The calibration place):

广州市增城区朱村街朱村大道西78号9栋110室

6. 环境条件(Environmental conditions):

温度(Temperature): 23.4 相对湿度(Relative Humidity): 52% 其它(Other): /

7. 本证书中给出的扩展不确定度依据JJF1059.1-2012《测量不确定度评定与表示》评定，由合成标准不确定度乘以包含概率约为95%时对应的包含因子 k 得到。

The expended uncertainty given in this certificate is evaluated according to JJF1059.1-2012 "Evaluation and Expression of Uncertainty in Measurement", and is calculated by multiplying the combined standard uncertainty by the coverage factor k which corresponding to the coverage probability about 95%.

8. 证书中"P"、"合格"代表"测量结果在允许范围内"，"F"、"不合格"代表"测量结果不在允许范围内"，"N/A"代表"不适用或技术指标暂时无法确认等"。本证书报告的结论仅供参考，使用人员应结合实际测量的要求合理使用，如考虑测量结果测量不确定度的影响等。

"P" and "Pass" in this certificate stand for "Low Limit≤the measured value ≤High Limit", "F" and "Fail" stand for "the measured value < Low Limit or the measured value > High Limit", "N/A" stands for "Not Applicable or The technical specification has not been confirmed etc". The conclusions of this certificate are for reference only. Users should use them reasonably according to the actual measurement requirements, such as considering the impact of measurement uncertainty, etc.

9. 建议校准周期是本实验室依据本证书报告的技术依据和仪器设备常规使用条件给出的建议，供委托方参考。委托方可以根据实际使用情况自行决定样品的校准周期。

The reference calibration period is based on the reference documents and normal operating conditions of the calibrated instrument. It is only for reference. The client may decide the calibration period of the instrument according to the actual use.

注: 1. 本证书未经本机构书面授权，不得部分复制。(The certificate shall not be partly reproduced without written approval of the laboratory.)

2. 本次校准结果仅与被校物有关。(The results are only related to the items calibrated.)

3. “委托方”、“委托方联络信息”由委托方提供，“制造厂”、“型号规格”、“出厂编号”以及“设备编号”为仪器上标注，委托方对上面内容如有异议，须在收到证书后二十个工作日内提出。

The information Client and Contact Information are provided by client, and the Manufacturer, Model/Type, Serial No. and Equipment No. are marked on the items. Client shall submit any objection within 20 working days after receiving the certificate for the information above.

The logo for CEPREI, featuring a large, stylized 'C' in the background. Inside the 'C' is a smaller, solid blue circle. To the right of the 'C' is a registered trademark symbol (®). Below the 'C' and the symbol, the word 'CEPREI' is written in a large, bold, white, sans-serif font.

1 外观与工作正常性检查 (Appearance and Function Check)

无影响证书中测量结果准确度的因素和缺陷。

There are no factor and defect that affect the measurement result accuracy of the certificate.

2 指示声级调整 (Indication SPL Calibration)

传声器型号 传声器编号 放大器型号 放大器编号 声校准器型号
(Microphone Type)(Microphone SN.) (Preamplifier Type)(Preamplifier SN.) (Calibrator Type)
/ / / / 4226

标称频率	标准声压级	调整前示值	调整后示值	允许范围	结论	<i>U</i>
(Nominal Frequency)	(Reference SPL)	(Before Adjust)	(After Adjust)	(Limit)	(Pass/Fail)	(<i>k</i> =2)
(Hz)	(dB)	(dB)	(dB)	(dB)	(P/F)	(dB)
1000	94.0	93.6	94.0	93.7 ~ 94.3	P	0.2

3 频率计权 (Frequency Weighting)

3.1 A计权 (A-Weighting)

标称频率	A计权	理论值	偏差	允许偏差	结论	<i>U</i>
(Frequency)	(A-weighting)	(Theoretical value)	(Deviation)	(Limit)	(Pass/Fail)	(<i>k</i> =2)
(Hz)	(dB)	(dB)	(dB)	(dB)	(P/F)	(dB)
20	-50.0	-50.5	0.5	± 3.0	P	0.5
31.5	-39.1	-39.4	0.3	± 3.0	P	0.5
63	-25.7	-26.2	0.5	± 2.0	P	0.5
125	-15.9	-16.1	0.2	± 1.5	P	0.5
250	-8.7	-8.6	-0.1	± 1.5	P	0.4
500	-3.4	-3.2	-0.2	± 1.5	P	0.4
1000	0.0	0.0	0.0	± 1.0	P	0.4
2000	0.2	1.2	-1.0	± 2.0	P	0.6
4000	-1.1	1.0	-2.1	± 3.0	P	0.6
8000	-4.6	-1.1	-3.5	± 5.0	P	0.6

4 自生噪声 (Self-generated noise)

4.1 由传声器输入(Input from the microphone)

计权 (Weighting)	自生噪声 (Self-generated noise) (dB)
A	32.3

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