

No.: EGZ2311220178R00101R Date: Dec. 07, 2023 Page 1 of 24

Applicant : henzhen Sunell Technology Corporation

Address : 22-23F, Bldg. 2, Nanshan I Park Chongwen, 3370 Liuxian Avenue, Nanshan District,

Shenzhen, China, 518052

Sample Name : Camera

Model : SN-IPV8080EWAR-B

Received Date : Nov. 24, 2023

Test Period : Nov. 26, 2023~ Dec. 06, 2023

Test Summary :

Test Item	Conclusion
Cooling test	Pass
Dry heat test	Pass
Damp heat test	Pass
Low temperature storage test	Pass
Random vibration test	Pass
Mechanical shock test	Pass

Remark: Pass: meet the requirement; Fail: Doesn't meet the requirement; N/A: Without conclusions or provide test results only.

Signed for and on behalf of EMTEK(Guangzhou) Co., Ltd.

Prepared by:

Lin Jingyan,

Hallin.Lam Assistant engineer Reviewed by:

Yuan din Eric Yua

Technical supervisor

Approved by:

Authorized signatory

Dec. 07, 2023





No.: EGZ2311220178R00101R Date: Dec. 07, 2023 Page 2 of 24

Sample Information (The following sample(s) was/were submitted and identified by the client):

Sample No.	Sample name	Model
E2311220178-01	Camera	SN-IPV8080EWAR-B

Sample No.	Sample name	Model	Test state
1	Camera	SN-IPV8080EWAR-B	Main survey
2	Camera	SN-IPV8050EWAR-B	/
3	Camera	SN-IPV8040EWAR-B	/
4	Camera	SN-IPV8020EWAR-B	/
5	Camera	SN-IPV8082EWAR-B	/
6	Camera	SN-IPV8081EWAR-B	/
7	Camera	SN-IPV8041EWAR-B	/
8	Camera	SN-IPV8084EWAR-B	/
9	Camera	SN-IPV8026EWAR-B	/
10	Camera	SN-IPV8046EWAR-B	/
11	Camera	SN-IPV8056EWAR-B	/
12	Camera	SN-IPV8540EWAR-B	/
13	Camera	SN-IPV8550EWAR-B	/
14	Camera	SN-IPV8580EWAR-B	/





No.: EGZ2311220178R00101R Date: Dec. 07, 2023 Page 3 of 24

15	Camera	SN-IPV8080EGAR-B	/
16	Camera	SN-IPV8050EGAR-B	/
17	Camera	SN-IPV8040EGAR-B	/
18	Camera	SN-IPV8020EGAR-B	/
19	Camera	SN-IPV8082EGAR-B	/
20	Camera	SN-IPV8081EGAR-B	/
21	Camera	SN-IPV8041EGAR-B	/
22	Camera	SN-IPV8084EGAR-B	/
23	Camera	SN-IPV8026EGAR-B	/
24	Camera	SN-IPV8046EGAR-B	/
25	Camera	SN-IPV8056EGAR-B	/
26	Camera	SN-IPV8540EGAR-B	/
27	Camera	SN-IPV8550EGAR-B	/
28	Camera	SN-IPV8580EGAR-B	/
		·	

Remarks: The above are samples of the same material.





No.: EGZ2311220178R00101R Date: Dec. 07, 2023 Page 4 of 24

Test Information:

1. Test Item: Cooling test

1.1 Test Method and Condition:

Test method: EN50155 2017

Test quantity: 1 pc

Test condition: The DUT was placed at -25 ℃ for 24h.

Acceptance criteria: See test results

1.2 Test Instrument:

Instrument name	Instrument Model	Instrument No.	Calibration Valid Date
High and low temperature wet heat testing machine	EL-04KA	EYR-023	2024.11.08

1.3 Test Period: 2023.11.30~2023.12.01

1.4 Test Results:

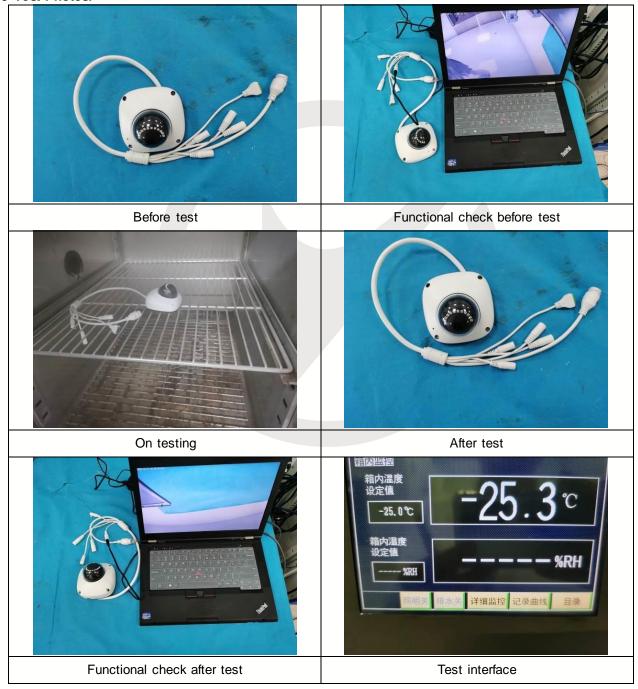
Sample No.	Test result	Acceptance Criteria	Evaluation
E2311220178- 01-01	The appearance is intact and the function is normal.	The appearance is intact and the function is normal.	Pass





No.: EGZ2311220178R00101R Date: Dec. 07, 2023 Page 5 of 24

1.5 Test Photos:







No.: EGZ2311220178R00101R Date: Dec. 07, 2023 Page 6 of 24

2. Test Item: Dry heat test

2.1 Test Method and Condition:

Test method: EN50155 2017

Test quantity: 1 pc

Test condition: The DUT was placed at 55 $^{\circ}\mathrm{C}$ for 24h.

Acceptance criteria: See test results

2.2 Test Instrument:

Instrument name	Instrument Model	Instrument No.	Calibration Valid Date
High and low temperature wet heat testing machine	EL-04KA	EYR-023	2024.11.08

2.3 Test Period: 2023.11.26~2023.11.27

2.4 Test Results:

Sample No.	Test result	Acceptance Criteria	Evaluation
E2311220178- 01-01	The appearance is intact and the function is normal.	The appearance is intact and the function is normal.	Pass





No.: EGZ2311220178R00101R Date: Dec. 07, 2023 Page 7 of 24

2.5 Test Photos:







No.: EGZ2311220178R00101R Date: Dec. 07, 2023 Page 8 of 24

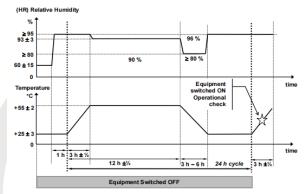
3. Test Item: Damp heat test

3.1 Test Method and Condition:

Test method: EN50155 2017

Test quantity: 1 pc

Test condition: DUT test conditions are shown below:



Acceptance criteria: See test results

3.2 Test Instrument:

Instrument name	Instrument Model	Instrument No.	Calibration Valid Date
High and low temperature wet heat testing machine	EL-04KA	EYR-023	2024.11.08

3.3 Test Period: 2023.12.01~2023.12.05

3.4 Test Results:

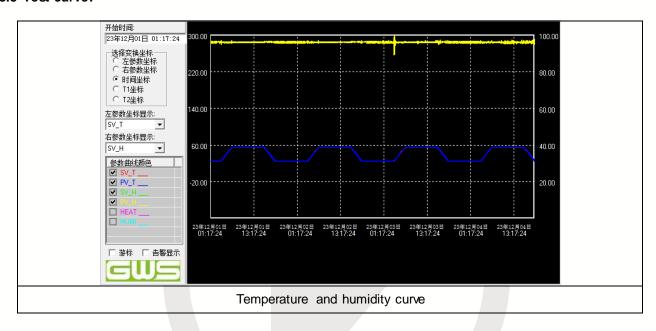
Sample No.	Test result	Acceptance Criteria	Evaluation
E2311220178- 01-01	The appearance is intact and the function is normal.	The appearance is intact and the function is normal.	Pass





No.: EGZ2311220178R00101R Date: Dec. 07, 2023 Page 9 of 24

3.5 Test curve:







No.: EGZ2311220178R00101R Date: Dec. 07, 2023 Page 10 of 24

3.6 Test Photos:







No.: EGZ2311220178R00101R Date: Dec. 07, 2023 Page 11 of 24

4. Test Item: Low temperature storage test

4.1 Test Method and Condition:

Test method: EN50155 2017

Test quantity: 1 pc

Test condition: The DUT was placed at -40 $^{\circ}\mathrm{C}$ for 24h.

Acceptance criteria: See test results

4.2 Test Instrument:

Instrument name	Instrument Model	Instrument No.	Calibration Valid Date
High and low temperature wet heat testing machine	EL-04KA	EYR-023	2024.11.08

4.3 Test Period: 2023.11.27~2023.11.28

4.4 Test Results:

Sample No.	Test result	Acceptance Criteria	Evaluation
E2311220178- 01-01	The appearance is intact and the function is normal.	The appearance is intact and the function is normal.	Pass





No.: EGZ2311220178R00101R Date: Dec. 07, 2023 Page 12 of 24

4.5 Test Photos:







No.: EGZ2311220178R00101R Date: Dec. 07, 2023 Page 13 of 24

5. Test Item: Random vibration test

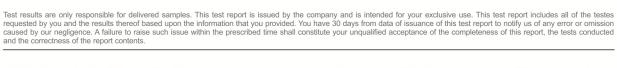
5.1 Test Method and Condition:

Test method: EN50155: 2017 and client's requirements

Test quantity: 1 pc Test condition:

Vibration condition				
X				
Frequency (Hz)	ASD(g²/ Hz)	Slope(dB/Oct)		
5	0.006	0		
20	0.006	-6		
150	0.0001	1		
	Y			
Frequency (Hz)	ASD(g²/ Hz)	Slope(dB/Oct)		
5	0.0144	0		
20	0.00144	-6		
150	0.0003	1		
Z				
Frequency (Hz)	Frequency (Hz) ASD(g²/ Hz)			
5	0.0301	0		
20	0.0301	-6		
150 0.0005		1		

Acceptance criteria: See test results







No.: EGZ2311220178R00101R Date: Dec. 07, 2023 Page 14 of 24

5.2 Test Instrument:

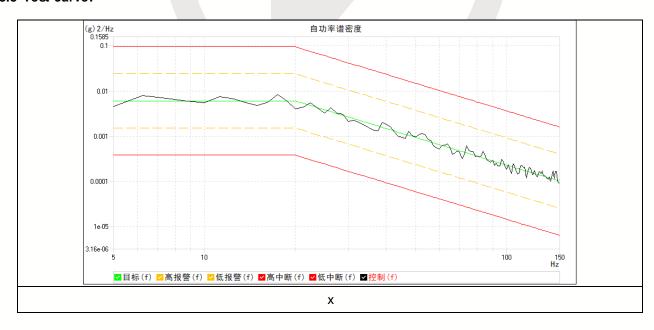
Instrument name	Instrument Model	Instrument No.	Calibration Valid Date
Electromagnetic vibration test bench	DC-3200-36/SA-36	EYR-004	2024.11.08
Electric vibration test system	DC-3200-36 /SA-36	EYR-168	2024.11.08

5.3 Test Period: 2023.12.02~2023.12.06

5.4 Test Results:

Sample No.	Test result	Acceptance Criteria	Evaluation
E2311220178- 01-02	The appearance is intact and the function is normal.	The appearance is intact and the function is normal.	Pass

5.5 Test curve:

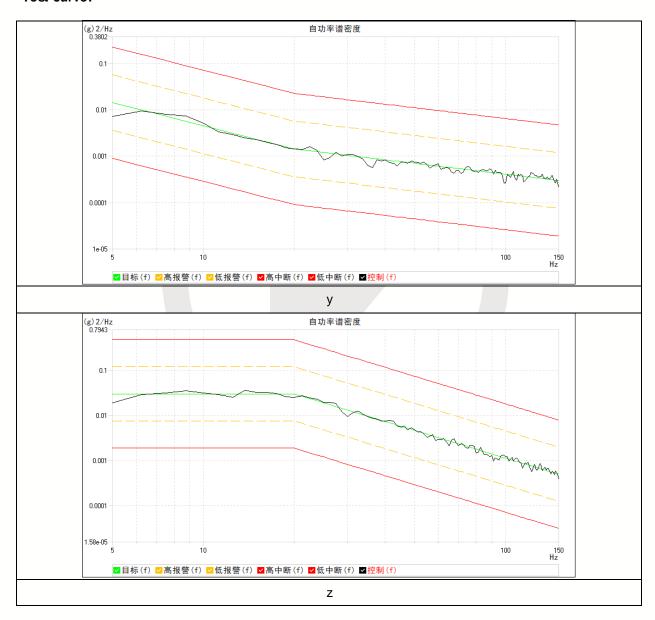






No.: EGZ2311220178R00101R Date: Dec. 07, 2023 Page 15 of 24

Test curve:

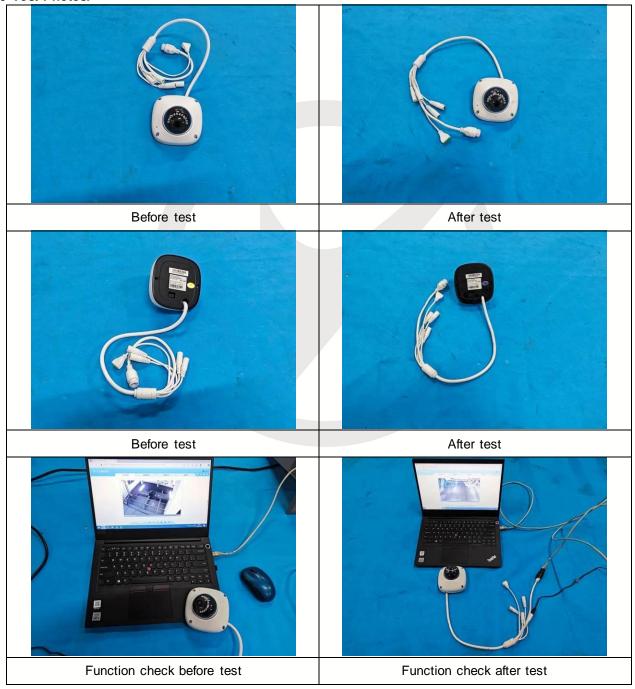






No.: EGZ2311220178R00101R Date: Dec. 07, 2023 Page 16 of 24

5.6 Test Photos:

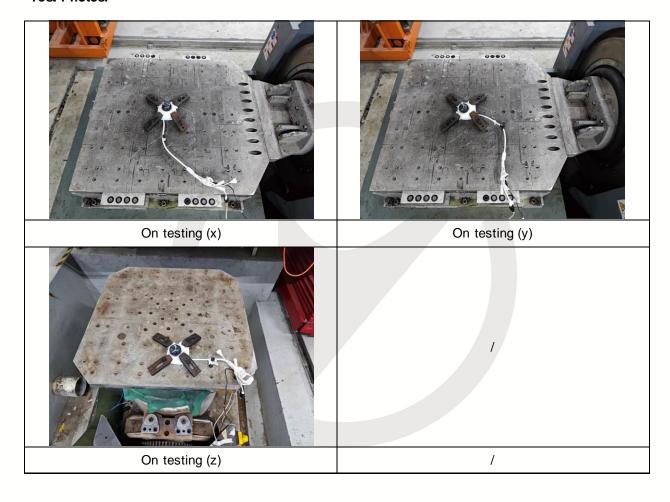






No.: EGZ2311220178R00101R Date: Dec. 07, 2023 Page 17 of 24

Test Photos:







No.: EGZ2311220178R00101R Date: Dec. 07, 2023 Page 18 of 24

6. Test Item: Mechanical shock test

6.1 Test Method and Condition:

Test method: EN50155: 2017 and client's requirements

Test quantity: 1 pc Test condition:

Impact waveform		Half sine wave			
Pulse duration		30 (ms)			
Acceleration (m/s ²)					
±Χ	30	±Υ	50	±Ζ	30
Test direction		±X, ±Y, ±Z			
Number of tests 3 times/direction					

Acceptance criteria: See test results

6.2 Test Instrument:

Instrument name	Instrument Model	Instrument No.	Calibration Valid Date
Electromagnetic vibration test bench	DC-3200-36/SA-36	EYR-004	2024.11.08
Electric vibration test system	DC-3200-36 /SA-36	EYR-168	2024.11.08

6.3 Test Period: 2023.12.06

6.4 Test Results:

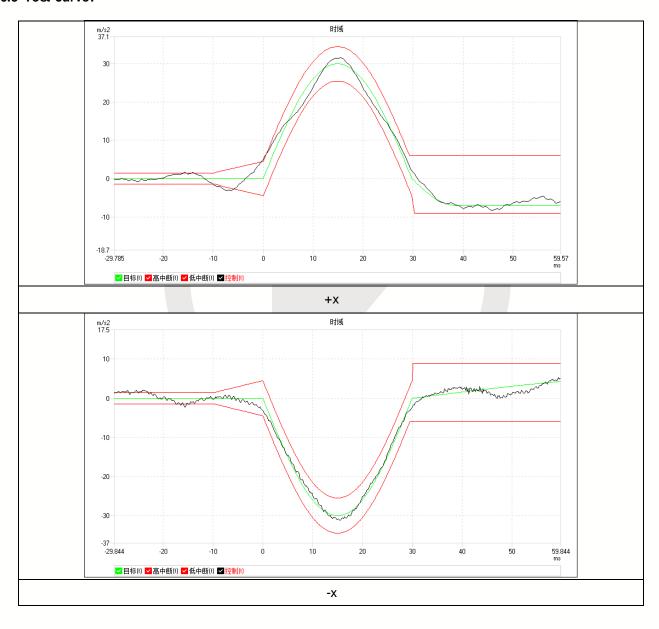
Sample No.	Test result	Acceptance Criteria	Evaluation
E2311220178- 01-02	The appearance is intact and the function is normal.	The appearance is intact and the function is normal.	Pass





No.: EGZ2311220178R00101R Date: Dec. 07, 2023 Page 19 of 24

6.5 Test curve:

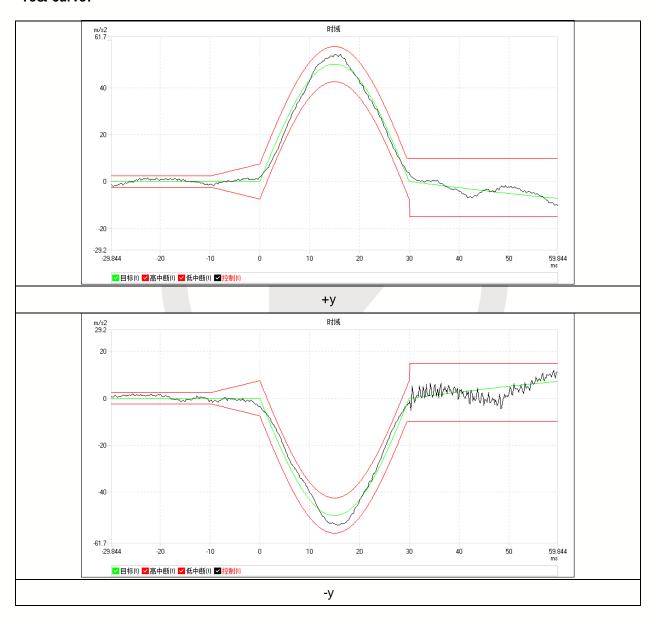






No.: EGZ2311220178R00101R Date: Dec. 07, 2023 Page 20 of 24

Test curve:

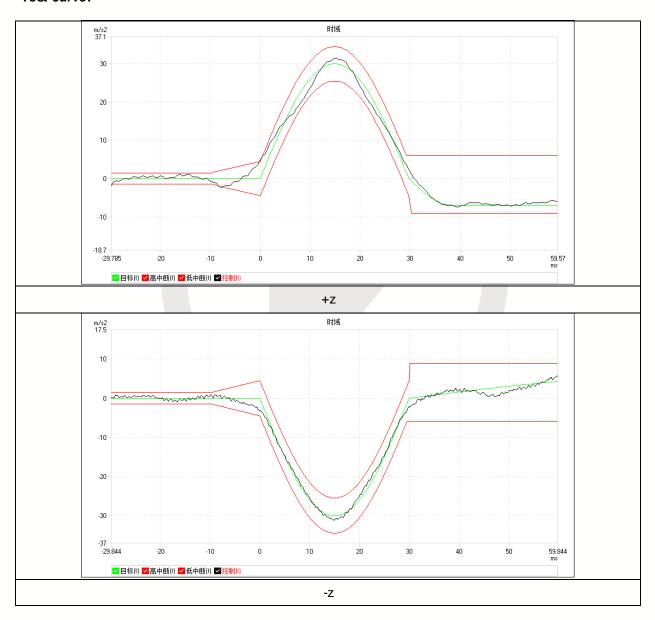






No.: EGZ2311220178R00101R Date: Dec. 07, 2023 Page 21 of 24

Test curve:

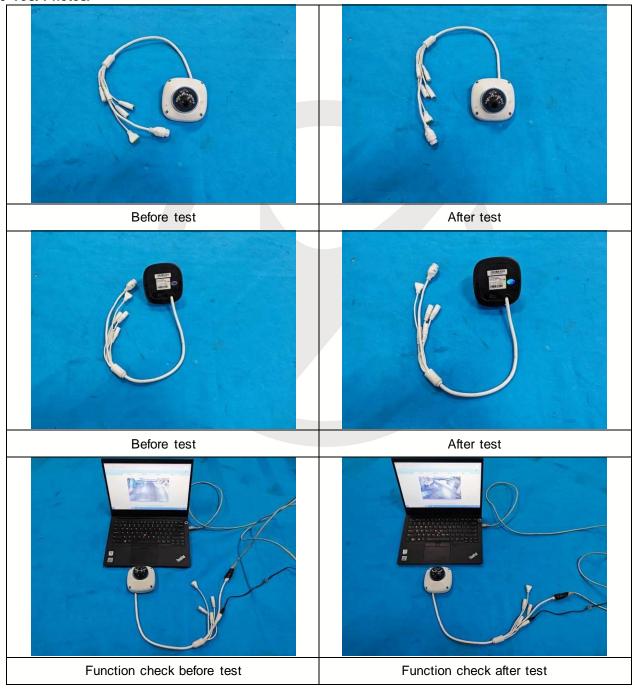






No.: EGZ2311220178R00101R Date: Dec. 07, 2023 Page 22 of 24

6.6 Test Photos:

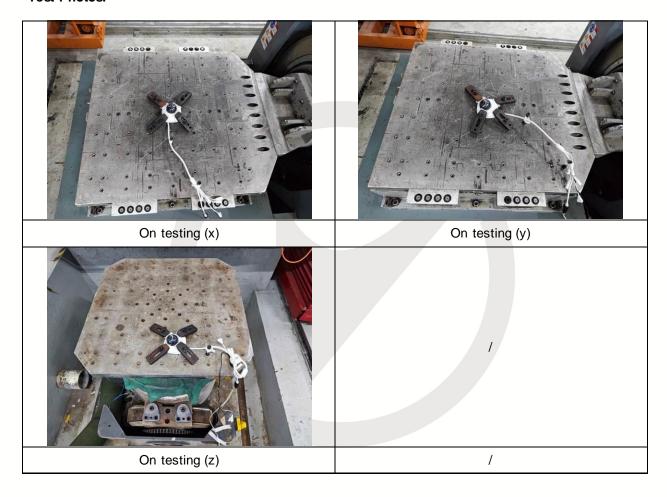




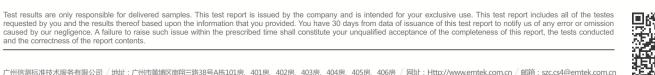


No.: EGZ2311220178R00101R Date: Dec. 07, 2023 Page 23 of 24

Test Photos:



*** End of report ***







No.: EGZ2311220178R00101R Date: Dec. 07, 2023 Page 24 of 24

声明 Statement

1.本检测报告首页所列信息中除样品来源、接样日期、检测日期、检测结果和检测结论外,均由委托方提供,委托方对样品的代表性和 资料的真实性负责,本实验室不承担任何相关责任。

The information as listed on the first page of this test report was all provided by the client except the sample from, date received, test period, test results and test conclusion. The client shall be responsible for the representativeness of sample and authenticity of materials, for which EMTEK shall bear no responsibilities.

2.本检测报告以实测值进行符合性判定,未考虑不确定度所带来的风险,特别约定、标准或规范中有明确规定的除外。此种判定方式所带来的风险由客户自行承担,本实验室不承担相关责任。

The judgment method of determining the conformity in this test report is according to the measured value without considering the risk caused by uncertainty, unless otherwise clearly stipulated in special agreement, standard or specification. The client shall assume the risk caused by the judgment method, and EMTEK shall not bear related responsibilities.

- 3. 检测报告无批准人签字及"检验检测专用章"无效,未经本实验室书面同意,不得整体或部分复制本报告。
 The test report is effective only with both signature and specialized stamp. Without written approval of EMTEK, this report can't be reproduced in full or in part.
- 4.本检测报告的检测结果仅对送测样品负责,未加盖资质认定标志的检测报告不对社会具有公证证明作用,对于检测数据、结果的使用, 所产生的直接或间接损失及一切法律后果,本实验室不承担任何经济和法律责任。

This test data is only responsible for the tested sample. The data and results provided by the report without CMA accreditation are not to prove to the society, and EMTEK is not responsible for any economic and legal responsibility for the use of the test data, the direct or indirect losses resulting from the use of the test and all legal consequences.

5.本检测报告中检测项目标注有下划线则该项目不在本实验室资质认定能力范围内,该项目检测结果仅作为客户委托、科研、教学或内部质量控制等目的使用。

The underlined test item in the report is out of the scope of CMA accreditation. The test result only used for client's requirement, scientific researching, teaching or internal quality control.

6.其它声明请查阅报告页脚及书面报告背页。

For other statements, please refer to the footer of the report.





签发测试报告条款 Conditions of Issuance of Test Reports

- 1.广州信测标准技术服务有限公司(以下简称[本公司])为提供符合下述条款的测试和报告,而接受有关样品和货品。本公司基于下述条款提供服务,下述条款为本公司与申请服务的个人,企业或公司(以下简称[客户])的协议。
 All samples and goods are accepted by the EMTEK(Guangzhou) Co., Ltd. (the "Company") solely for testing and reporting in accordance with the following terms and conditions. The company provides its services on the basis that such terms and conditions constitute express agreement between the Company and any person, firm or company requesting its services (the "Clients").
- 2.由此测试申请所发出的任何报告(以下简称[报告]),本公司会严格为客户保密。未经本公司的书面同意,报告的整体或部分不得复制,也不得用于广告或授权的其他用途。然而,客户可以将本公司印制的报告或认可的副本,向其客户、供货商或直接相关的其他人出示或提交。除非相关政府部门、法律或法规要求,否则未经客户同意,本公司不得将报告内容向任何第三方讨论或披露。 Any report issued by Company as a result of this application for testing services (the "Report") shall be issued in confidence to the Clients and the Report will be strictly treated as such by the Company. It may not be reproduced either in its entirety or in part and it may not be used for advertising or other unauthorized purposes without the written consent of the Company. The Clients to whom the Report is issued may, how ever, show or send it, or a certified copy thereof prepared by the Company to its customer, supplier or other persons directly concerned. The Company will not, without the consent of the Clients, enter into any discussion or correspondence with any third party concerning the contents of the Report, unless required by the relevant governmental authorities, laws or court orders.
- 3.除非相关政府部门、法律或法院要求,否则未经公司预先书面同意,本公司毋需,也并无义务到法院对有关报告作证。
 The Company shall not be called or be liable to be called to give evidence or testimony on the Report in a court of law without its prior written consent, unless required by the relevant governmental authorities, laws or court orders.
- 4.如果本公司确定报告被不当地使用,本公司保留撤回报告的权利,并有权要求其它适当的额外赔偿。 In the event of the improper use of the report as determined by the Company, the Company reserves the right to withdraw it, and to adopt any other additional remedies which may be appropriate.
- 5. 本公司接受样品进行测试的前提是,该测试报告不能作为针对本公司法律行动的依据。
 Samples submitted for testing are accepted on the understanding that the Report issued cannot form the basis of, or be the instrument for, any legal action against the Company.
- 6.如因使用本公司中心任何报告内的资料,或任何传播信息所描述与之有关的测试或研究导致的任何损失或损害,本公司概不负责。
 The Company will not be liable for or accept responsibility for any loss or damage how ever arising from the use of information contained in any of its Reports or in any communication whatsoever about its said tests or investigations.
- 7.若需要在法院审理程序或者仲裁过程中使用测试报告,客户必须在提交测试样品前将该意图告知本公司。
 Clients wishing to use the Report in court proceedings or arbitration shall inform the Company to that effect prior to submitting the sample for testing.
- 8.该测试报告的支持数据和信息本公司保存 10 年。个别评审机构有特别要求的,检测数据和报告的保存期可依情况变动。一旦超过上述提交的保存期限,数据和信息将被处理掉。任何情况下,本公司不必提供任何被处理的过期数据或信息。即使本公司事先被告知可能会发生相关的损害,本公司在任何情况下也不必承担任何损害,包括(但不限于)补偿性赔偿、利润损失、数据遗失、或任何形式的特殊损害、附带损害、间接损害、从属损害或任何违反约定、违反承诺、侵权(包括疏忽)、产品责任或其他原因的惩罚性损害。

Subject to the variable length of retention time for test data and report stored hereinto as otherwise specifically required by individual accreditation authorities, the Company will only keep the supporting test data and information of the test report for a period of ten years. The data and information will be disposed of after the aforementioned retention period has elapsed. Under no circumstances shall we provide any data and information which has been disposed of after retention period. Under no circumstances shall we be liable for damage of any kind, including (but not limited to) compensatory damages, lost profits, lost data, or any form of special, incidental, indirect, consequential or punitive damages of any kind, whether based on breach of contract of warranty, tort (including negligence), product liability or otherwise, even if we are informed in advance of the possibility of such damages.

