Declaration of Conformity

Registration No.: EPTC-AY-S1501520

Issue date: January 08, 2015

The submitted products have been tested by us with the listed standards and found in compliance with the following Standard:

EN 131-1: 2007+A1: 2011

EN 131-2: 2010+A1: 2012

EN 131-3: 2007

Applicant:	**Zhejiang Yongkang Aoyi Industry & Trade Co., Ltd.** **Longshan Industrial Base, Yongkang, Zhejiang, China**
Product:	STEEL LADDER
Model number:	AY-T003, AY-T002, AY-T04, AY-T005, AY-T006

The tests were performed in normal operation mode. The test results apply only to the particular sample tested and to the specific tests carried out.

This certificate applies specifically to the sample investigated in our test reference number only.

The CE markings as shown below can be affixed on the product after preparation of necessary technical documentation.

Other relevant directives have to be observed.

CE

Authorized by: _____

Eliza Chen

EPORT COMPLIANCE LABORATORY LIMITED COMMON SEAL

Eport Compliance Laboratory Limited

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Test Report

On Behalf of

Zhejiang Yongkang Aoyi Industry & Trade Co., Ltd.

Steel Ladder

Model: AY-T003, AY-T002, AY-T04, AY-T005, AY-T006

Prepared For :	**Zhejiang Yongkang Aoyi Industry & Trade Co., Ltd.**
	Longshan Industrial Base, Yongkang,
	Zhejiang, China
Prepared By :	**Eport (Shenzhen) Electronics Co., Ltd.**
	Rm 5-508, Haibin City Plaza, 46 Section, Baoan District, Shenzhen, P.R.C

Date of Test	**:**	**Jan. 06-08, 2014**
Date of Report	**:**	**Jan. 08-09, 2014**
Report Number	**:**	**EPTC-AY-S1501520**

Test Report EN 131-1:2007+A1: 2011 Ladders – Part 1: Specification for terms, types, functional sizes EN 131-2:2010+A1: 2012 Part 2: Specification for requirements testing, marking EN 131-3:2007 Part 3: User instructions	
Testing laboratory ……...:	Eport (Shenzhen) Electronics Co., Ltd.
Address …… :	Rm 5-508, Haibin City Plaza, 46 Section, Baoan District, Shenzhen, P.R.C
Testing location ……..…:	Eport (Shenzhen) Electronics Co., Ltd. Rm 5-508, Haibin City Plaza, 46 Section, Baoan District, Shenzhen, P.R.C
Applicant …… :	Zhejiang Yongkang Aoyi Industry & Trade Co., Ltd.
Address …….. :	Longshan Industrial Base, Yongkang, Zhejiang, China
Standard …… :	EN 131-1:2007+A1: 2011 & EN 131-2:2010+A1: 2012 & EN 131-3: 2007
Result …….. :	Comply with: EN 131-1:2007+A1: 2011 & EN 131-2:2010+A1: 2012 & EN 131-3: 2007
Procedure deviation …… :	N.A.
Non-standard …… :	N.A.
Type of verdict object …… :	Steel Ladder
Trademark …… :	N.A.
Model/type reference …….. :	AY-T003
Manufacturer …… :	Zhejiang Yongkang Aoyi Industry & Trade Co., Ltd.
Address …….. :	Longshan Industrial Base, Yongkang, Zhejiang, China

Possible case verdicts :	
Case does not apply to the verdict object …….. :	N (.A.)
Verdict object does meet the requirement ……:	P(ass)
Verdict object does not meet the requirement … :	F(ail)

Name and address of the testing laboratory: **Eport (Shenzhen) Electronics Co., Ltd.**

Rm 5-508, Haibin City Plaza, 46 Section, Baoan District, Shenzhen, P.R.C

Reported by :

Signature

Jan. 09, 2015
Date

Mark Zhang / Project Engineer
Name and Title

Approved by :

Signature

Jan. 09, 2015
Date

Eliza Chen / Manager
Name and Title

General remarks:	

"(see remark #)" refers to a remark appended to the report.

"(see appended table)" refers to a table appended to the report.

Throughout this report a comma is used as the decimal separator.

The test results presented in this report relate only to the object tested.

This report shall not be reproduced except in full without the written approval of the testing laboratory.

Attached with:

A. 1 page of photo documentation

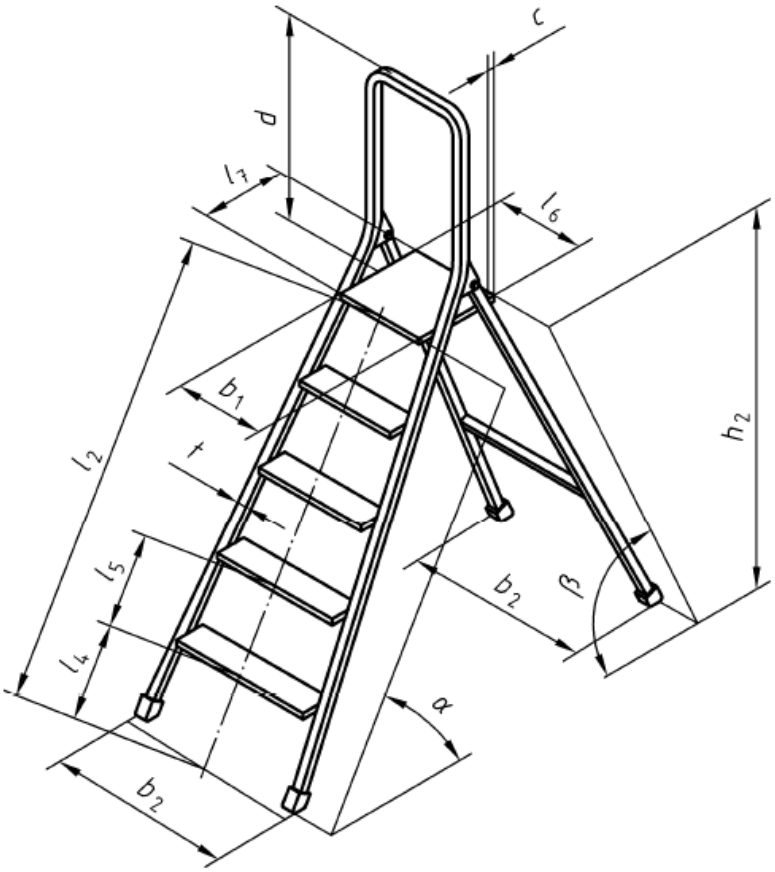
Remark 1:

1. All tests were conducted on AY-T003 unless otherwise special.
2. All models are the same material and load capacity (max.150kg)

Remark 2:

Copy of marking plate see appendix 2

EN 131-1			
Clause	**Requirement - Test**	**Result - Remark**	**Verdict**
4.	**Functional sizes**		**P**
4.1	General		**P**
	The rungs and steps of a ladder shall be equally spaced with limit deviations of ±2mm		**P**
	The inner width b1 shall be measured at the upper edge of the topmost rung/step	406mm	**P**
	The outside width b2 shall be measured at the lower end of the ladder	525mm	**P**
	The complete ladder sections which can be dismantled without the use of tools shall conform, section by section, with the requirements for one piece leaning ladders		**P**
4.2	Leaning rung ladders		**N**
4.2.1	general		**N**
	These ladders are of equal width over their total length or are wider at the bottom and/or top		**N**
4.2.2	One-piece leaning rung ladders		**N**
4.2.3	Sectional ladders		**N**
4.3	Standing rung ladders		**N**
	The legs are connected with hinge joints and shall be secured from sliding apart		**N**
4.4	Combination ladders		**N**
4.4.1	general		**N**
4.4.2	Two-piece combination ladder		**N**
4.4.3	Three-piece combination ladder		**N**
4.5	Leaning step ladders		**N**
4.6	Standing step ladders		**P**
	The legs are connected with hinge joints and shall be secured from sliding apart		**P**
	During the use of ladder the steps shall be in horizontal position		**P**
	The projection of the handrail onto the platform shall not go beyond the latter		**P**

EN 131-1			
Clause	**Requirement - Test**	**Result - Remark**	**Verdict**
	The radius of the horizontal edges of a platform shall be max 15 mm in order to avoid slipping at the edges of the platform.		**P**
	The functional sizes comply with the requirement of the following form:(mm) 		**P**

		b_1	b_2	c	d	l_4	l_5	l_6	l_7	α	β	
	Min.	280	b_1+0.1 l_2+2t	-	600	0.5l_5	230	250	250	60°	65°	**-**
	Max.	-	-	30	-	l_5+15	300	-	-	70°	75°	
	Meas.	406	525	15	415	210	290	380	260	70°	72°	**P**

4.7	Standing rung and step ladder	**N**

EN 131-2			
Clause	**Requirement - Test**	**Result - Remark**	**Verdict**
4.	**Requirements**		**P**
4.1	General		**P**
	Be based upon a maximum total load of 150kg		**P**
	Ladder are determined to be use by one person at a time but this excludes any person footing the ladder		**P**
4.2	Materials	Be steel	**P**
4.2.1	Aluminium – alloy		**N**
4.2.2	Steel	All load bear parts made of steel have a thickness of at least 1.0mm	**P**
4.2.3	Plastics		**N**
4.2.4	Timber		**N**
4.3	Design		**P**
	Shearing points or squeeze points shall be avoided		**P**
	All connections shall be durable and have a strength corresponding to the strain		**P**
	The connections shall be designed in a manner that arising notch tensions remain low		**P**
	Screws and nuts shall be secured against loosening		**P**
	Nails are allowed when their function is related to the production process		**P**
	Welding of joints is permitted if welding procedures and welding personnel are suitable		**P**
4.4	Surface finish		**P**
	Accessible edges, corners, and protruding parts	Be free of burrs, chamfered or rounded	**P**
	Metals parts susceptible to corrosion shall be protected by means of a paint coating or other coating		**P**

EN 131-2			
Clause	**Requirement - Test**	**Result - Remark**	**Verdict**
	Wooden parts shall be smoothed and coated on all sides	Not use wooden	**N**
	The coating be transparent and permeable to water vapour		**P**
4.5	Hinges		**P**
	Hinges shall connect the legs of the standing rung ladders and the standing step ladders durably		**P**
	Hinges shall be designed in such a manner that no abutment of the ladder parts over the hinges is formed during use of the ladder		**P**
	The hinge pin is to be secured against unintentional loosening		**P**
	Pin have at least the same strength as M6 pins of steel 8.8		**P**
	If the pin has several shearing points there is no restriction as to the hinge pin diameter		**N**
4.6	Opening restraints	No such devices, be instead of locking devices	**N**
	The legs of the standing ladders shall be prevented from opening beyond the normal use configuration by means of opening restraints		**N**
	If chains are used, all chain links with the exception of the first and the last one shall be free to move		**N**
	The opening restraints shall satisfy the tests according to clause 5.8		**N**
4.7	Rungs/steps/platforms		**P**
	Be made of metal or plastics shall have a textured surface on the working fact to reduce slipping	Be metal	**P**
	The contact surface of the coverings shall adhere firmly to the rungs or steps		**P**
	Rungs and steps shall be firmly and durably connected to the stiles		**P**

EN 131-2			
Clause	**Requirement - Test**	**Result - Remark**	**Verdict**
	For wooden rungs		**N**
	Round rungs shall have a diameter greater than or equal to 25mm. The top surface of flat standing surfaces shall have an angle less than or equal to 25° to the horizontal. For leaning ladders the angle related to the stile shall be 65° to 90° for rungs and 60° to 70° for steps		**N**
	Rungs/steps/platforms shall satisty the tests according to 5.6 and 5.7		**P**
4.8	Platform	Be satisfy the kick-up test according to 5.10	**P**
4.9	Antiskid devices		**P**
	Bottom-ends of the ladder shall be slip resistant	By safety rubber shoes	**P**
	The ends of wood stiles are considered to be slip resistant		**N**
4.10	Extending and sectional ladders		**N**
4.10.1	Rung/step hooks/locking devices		**N**
4.10.2	Ropes		**N**

5.	**Testing**		**P**
5.1	General		**P**
5.2	Strength test of stiles		**P**
	A pre-load of 500N shall be applied for a duration of one minute	The position of the ladder after removal of the pre-load is the origin for measurement	**P**
	A test load F of 1100N shall be applied for a duration of one minute	The deformation not exceed 0.1% of the distance between the supports	**P**

EN 131-2			
Clause	**Requirement - Test**	**Result - Remark**	**Verdict**
5.3	Bending test of the stiles		**P**
	A test load F of 750N shall be applied vertically on the centre of the ladder for a duration of at least 1 minute		**P**
5.4	Lateral deflection test of the ladder		**P**
	A pre-load of 100N shall be applied for the duration of one minute		**P**
	A load F of 250N shall be applied to the lower stile equidistant from the supports		**P**
5.5	Bottom stile ends test	Neither fracture nor visible cracks	**P**
	A vertical force F of 1100N is placed in the middle of the load block and is maintained for one min.		**P**
5.6	Vertical load on rungs, steps and platforms		**P**
	A pre-load F of 200N be applied for the duration of one min.		**P**
	For rungs and steps, a test load F of 2600N be applied vertically on the mid-point for the duration of one min.		**P**
	For platform, a test load F of 2600N be applied vertically in the centre and at a corner of the front edge for the duration of one min		**P**
5.7	Torsion test of rungs and steps		**P**
	A torque M of 50Nm be applied on the midpoint alternately 10 times in clockwise and 10 times in counter-clockwise direction for a period of 10s each	No relative movement in the connection between stile and rung/step	**P**
5.8	Test of opening restraints and hinges of standing ladders		**P**
	The test load F of 1300N be applied to each uppermost rung as close as possible to the stiles for a duration of 1min		**P**
5.9	Test for ladder rung/step hooks of extending ladders and combination ladders	Be standing step ladders	**P**

EN 131-2			
Clause	**Requirement - Test**	**Result - Remark**	**Verdict**
	A uniformly distributed test load F of 3500N be applied vertically to the upper part of the ladder for a period of 1 min	No permanent distortion in locking devices	**P**
5.10	Kick-up test of the platform of standing ladders		**P**
	A force F of 100N be applied to the pivoted edge of the platform at an angel of 90° to the horizontal	Not lift from its stop by more than 6°	**P**
5.11	Feet pull test		**P**
5.11.1	For ladder feet made of one part		**N**
5.11.2	For feet made of one part on stabilizer bars supplied by the ladder manufacturer		**P**
	A load of 150N be applied to a free foot in the position and direction most likely to separate the foot from the stabilizer bar for 1 min	Remain functional and show a movement from its original position of less than or equal to 4mm	**P**
5.11.3	For ladder feet and feet of stabilizer bars made of more than one part		**N**
5.12	Test on hand-/kneerails		**P**
5.12.1	Standing ladder top hand-/kneerails	Not show any visible permanent deformation	**P**
	A vertical load of 300N be applied to the top centre of the hand for 1min		**P**
5.12.2	Side handrail		**N**
5.13	Maximum extension of ladder		**N**
5.14	3-part combination ladder in A-position test		**N**
5.15	Torsion on ladder length		**P**
	Apply a pre-load torque of 65Nm gently and ten remove		**P**
	Apply a test torque of 130Nm		**P**
5.16	Test methods for plastic ladders		**N**

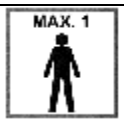
6.	**Markings and user instructions**	**P**

EN 131-2			
Clause	**Requirement - Test**	**Result - Remark**	**Verdict**
	Only ladders that are in compliance with EN131-1 and EN131-2 may be marked EN131	EN131	**P**
	The marking and user instructions in accordance with EN 131-3		**P**
	Marking shall be durable		**P**

EN 131-3			
Clause	**Requirement - Test**	**Result - Remark**	**Verdict**
4.	**Provision of user instructions**		**P**
	The producer shall be responsible for the content of the user instructions and the provision of the instructions with each other		**P**
	The distributor should ensure that the user instructions are provided with each ladder		**P**
	The ladder owner should ensure that user instructions are available to the user		**P**
	The instructions shall be in the language of the country where the ladder is sold	English	**P**
5.	**Reasons for accidents**		**P**
	a) loss of stability		**P**
	b) from handling		**P**
	c) slip trip and fall of user		**P**
	d) structural failure of ladder		**P**
	e) electrical hazards		**P**
6.	**Marking**		**P**
6.1	Leaning ladders		**N**
6.1.1	Pictograms		**N**
	a) read the instructions (A.1)		**N**
	b) maximum load (A.2)		**N**
	c) correct angle of erection (A.3)		**N**
	d) erect on a level base (A.4)		**N**
	e) do not over-reach (A.5)		**N**
	f) ensure ground is free from contaminants (A.6)		**N**
	g) erect on a firm base (A.7)		**N**

EN 131-3			
Clause	**Requirement - Test**	**Result - Remark**	**Verdict**
	h) ladder extension above landing point (A.8)		**N**
	i) do not step off the side of a ladder (A.9)		**N**
	j) use the ladder the correct way up (A.22)		**N**
6.1.2	Correct angle indicator		**N**
6.2	Standing ladders		**P**
	a) read the instructions (A.1)		**P**
	b) maximum load (A.2)		**P**
	c) erect on a level base (A.4)		**P**
	d) fully opened before use (A.17)		**P**
	e) do not overreach (A.5)		**P**
	f) erect on a firm base (A.7)		**P**
	g) do not step off the side of a ladder (A.9)		**P**
	h) ensure restraint devices are engaged (A.21)		**P**
6.3	Useable rungs or treads		**P**
	Be used as a leaning ladder: the top three rungs not be used for standing on		**N**
	Be used as a standing ladder: to indicate the rungs or treads that not be used for standing on		**P**
6.4	Other marking information for all ladders	See marking label	**P**
	a) identity and address of the product and/or distributor	Zhejiang Yongkang Aoyi Industry & Trade Co., Ltd.	**P**
	b) type of ladder	AY-T003	**P**
	c) month and year of production and/or serial number	January, 2015	**P**
	d) indication of inclination for ladders where this is not obvious because of their construction or design		**N**
	e) maximum total load	150kg	**P**
	f) maximum number of users allowed on the ladder		**P**

EN 131-3			
Clause	**Requirement - Test**	**Result - Remark**	**Verdict**
	g) weight of the ladder after production		**P**
	h) insulation		**N**

 A.1	 A.2	 A.3	 A.4	 A.4	 A.4
 A.5	 A.5	 A.6	 A.6	 A.7	 A.8
 A.8	 A.9	 A.9	 A.10	 A.10	 A.11
 A.12	 A.12	 A.13	 A.14	 A.15	 A.15
 A.16	 A.16	 A.17	 A.18	 A.19	 A.20
 A.21	 A.21	 A.22			

7.	**User instructions**		**P**
7.1	General	See user manual	**P**
7.2	Before use		**P**
	a) ensure that you are fit enough to use a ladder. Certain medial conditions or medication, alcohol or drug abuse could make ladder use unsafe		**P**
	b) when transporting ladders on roof bars or in a truck, ensure they are suitably placed to prevent damage		**P**

EN 131-3			
Clause	**Requirement - Test**	**Result - Remark**	**Verdict**
	c) inspect the ladder after delivery and before first use to confirm condition and operation of all parts		**P**
	d) visually check the ladder is not damaged and is safe to use at the start of each working day when the ladder is to be used		**P**
	e) for professional users regular periodic inspection is required		**P**
	f) ensure the ladder is suitable for the task		**P**
	g) do not use a damage ladder		**P**
	h) remove any contamination from the ladder, such as wet paint, mud, oil or snow		**P**
	i) before using a ladder at work a risk assessment should be carried out respecting the legislation in the country of use		**P**
7.3	Positioning and erecting the ladder		**P**
	a) ladder shall be erected at the correct position, such as the correct angle for a leaning aldder		**P**
	b) locking devices		**P**
	c) ladder shall be on an even, level and unmoveable base		**P**
	d) leaning ladder should lean against a flat non-fragile surface and should be secured before use		**P**
	e) ladder shall never be repositioned from above		**P**
	f) when positioning the ladder take into account risk of collision with the ladder		**P**
	g) identify any electrical risks in the work area, such as overhead lines or other exposed electrical equipment		**P**
	h) ladder shall be stood on its feet, not the rungs or steps		**P**

EN 131-3			
Clause	**Requirement - Test**	**Result - Remark**	**Verdict**
	i) ladders shall not be positioned on slippery surfaces unless additional effective measures are taken to prevent the ladder slipping or ensuring contaminated surface are sufficiently clean		**P**
7.4	Using the ladder		**P**
	a) do not exceed the maximum total load for the type of ladder		**P**
	b) do not overreach, user should keep their belt buckle inside the stiles and both feet on the same step/rung throughout the task		**P**
	c) do not step off a leaning ladder at a higher level without additional security, such as tying off or use of a suitable stability device		**P**
	d) do not use standing ladders for access to another level		**P**
	e) do not stand on the top three steps/rungs of a leaning ladder		**P**
	f) do not stand on the top two steps/rungs of a standing ladder without a platform and hand/knee rail		**P**
	g) do not stand on the top four step/rungs of a standing ladder with an extending ladder at the top		**P**
	h) ladder should only be used for light work of short duration		**P**
	i) use non-conductive ladders for unavoidable live electrical work		**P**
	j) do not use the ladder outside in adverse weather conditions, such as strong wind		**P**
	k) take precautions against children playing on the ladder		**P**
	l) secure doors and windows where possible in the work area		**P**
	m) face the ladder when ascending and descending		**P**

EN 131-3			
Clause	**Requirement - Test**	**Result - Remark**	**Verdict**
	n) keep a secure grip on the ladder when ascending and descending		**P**
	o) do not use the ladder as a bridge		**P**
	p) wear suitable footwear when climbing a ladder		**P**
	q) avoid excessive side loadings		**P**
	r) do not spend long periods on a ladder without regular breaks		**P**
	s) leaning ladders used for access to a higher level should be extended at least 1m above the landing point		**P**
	t) equipment carried while using a ladder should be light and easy to handle		**P**
	u) avoid work that imposes a sideways load on standing ladders, such as side-on drilling through solid materials		**P**
	v) maintain a handhold whilst working from a ladder or take additional safety precautions if you cannot		**P**
7.5	Repair, maintenance and storage		**P**

Appendix 1

The whole views of 'Steel Ladder '

Model: AY-T003

Appendix 2

The product marking label and warning marking views of 'Steel Ladder '

Model: AY-T003

Marking label

Steel Ladder

Model No: AY-T003

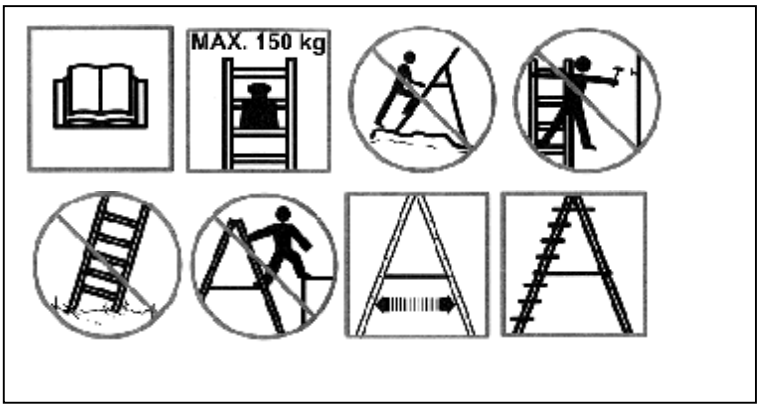
Standard: EN 131

Max Load: 150Kg

Zhejiang Yongkang Aoyi Industry & Trade Co., Ltd.

Made in China Manufacture date: January, 2015

Warning marking



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