IP TEST REPORT

Report No:STS1904113A01

Issued for

Kingta Technology Co., Ltd

Floor 4, Building 9 & Floor 6, Building C, Futing , Zhucun, Guanlan, Longhua, Shenzhen,China

Product Name:	Bluetooth speaker
Brand Name:	N/A
Model Name:	B29
Series Model:	B28, B30, EPIC 1, TPB012710KT, TPB012210KT, TREVI XR 9A5, EE1035
Test Standard:	EN 60529:1991/A2:2013

Shenzhen STS Test Services Co., Ltd.
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TEST REPORT

IEC/EN 60529

egrees of protection provided by enclosures (IP Code)

Report Number.....:	STS1904113A01
Tested by (+ signature) .....:	Mona Tao
Reviewed by (+ signature) .....:	Sky Hu
Approved by (+ signature) .....:	Bovey Yang
Date of issue.....:	03 April 2019
Total number of pages.....	14 pages
Testing laboratory .....:	Shenzhen STS Test Services Co., Ltd.
Address .....:	1/F., Building B, Zhuoke Science Park, No.190, Chongqing Road, Fuyong Street, Bao'an District, Shenzhen, Guangdong, China
Applicant's name.....:	Kingta Technology Co., Ltd
Address.....:	Floor 4, Building 9 & Floor 6, Building C, Futing , Zhucun, Guanlan, Longhua, Shenzhen,China
Test specification:	
Standard .....:	EN 60529:1991/A2:2013 (IP code:67)
Test procedure.....:	Type Test
Non-standard test method……..:	-
This test report is specially limited to the above client company and product model only. It may not be duplicated without prior written consent of STS Test.	
Test item description..... :	Bluetooth speaker
Trade Mark .....:	N/A
Manufacturer.....:	Same as applicant
Address .....:	Same as applicant
Model/Type reference.....:	B29, B28, B30, EPIC 1, TPB012710KT, TPB012210KT, TREVI XR 9A5, EE1035

Summary of testing:	
Tests performed (name of test and test clause): EN 60529:1991/A2:2013 The submitted samples were found to comply with the requirements of above specification.	**Testing location:** Shenzhen STS Test Services Co., Ltd. 1/F., Building B, Zhuoke Science Park, No.190, Chongqing Road, Fuyong Street, Bao'an District, Shenzhen, Guangdong, China

Test item particulars……..:	
Classification of installation and use……..	Class III, IP67
Supply Connection……..	Battery connector
Possible test case verdicts:	
- test case does not apply to the test object:	N (or N)
- test object does meet the requirement:	P (Pass)
- test object does not meet the requirement:	F (Fail)
Testing:	
Date of receipt of test item:	01 April 2019
Date(s) of performance of tests:	01 April 2019~03 April 2019
Ambient Condition During Testing:	22.5 -24.0℃, 47-52%R.H

General remarks:

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

Comments:

This report also includes:

- Photo documentation: 4 pages

General product information:

1. The first characteristic numeral 6 indicated protect against access to hazardous parts with a wire:the test wire of Φ1.0mm shall not penetrate and adequate clearance shall be kept. Dust-tight requirement: no ingress of dust.
2. The second characteristic numeral 7 indicted protected against water: immersion between 0.15m and 1m.
   a) the lowest point of enclosures with a height less than 850mm is located 1000mm below the surface of the water;
   b) the highest point of enclosures with a height equal to or greater than 850mm is located 150mm below the surface of the water;
   c) the duration of the test is 30min;
   d) the water temperature does not differ from that of the equipment by more 5K ;

3. The maximum testing temperature is 25℃.
4. All models are identical to each other except for model name, unless otherwise specified, all tests are perform on model B29.

IEC/EN 60529			
Clause	Requirement+Test	Result-Remark	Verdict

	GENERAL CONDITIONS FOR THE TESTS		
13.1	Test means and the main test conditions are given in table 7. Table 7 - Test means for the tests for protection against solid foreign objects		

First character-istic numeral	Test means (object probes and dust chamber)	Test force	Test conditions, see
0	No test required	--	--
1	Rigid sphere without handle or guard 0,0550+0 mm diameter	50 N ± 10 %	13.2
2	Rigid sphere without handle or guard 0,212,5+0 mm diameter	30 N ± 10 %	13.2
3	Rigid steel rod 0,052,5+0 mm diameter with edges free from burrs	3 N ± 10 %	13.2
4	Rigid steel rod 0,051,0+0 mm diameter with edges free from burrs	1 N ± 10 %	13.2
5	Dust chamber figure 2, with or without under-pressure	--	13.4 + 13.5
6	Dust chamber figure 2, with under-pressure	--	13.4 + 13.6

13.2	Test conditions for first characteristic numerals 1, 2, 3, 4 The object probe is pushed against any openings of the enclosure with the force specified in table 7.	IP6X	N

IEC/EN 60529			
Clause	Requirement+Test	Result-Remark	Verdict
13.3	Acceptance conditions for first characteristic numerals 1, 2, 3, 4 The protection is satisfactory if the full diameter of the probe specified in table 7 does not pass through any opening. NOTE For the first characteristic numerals 3 and 4 the probes specified in table 7 are intended to simulate foreign objects which may be spherical. Where an enclosure has an indirect or tortuous entry path and there is any doubt about ingress of a spherical object capable of motion, it may be necessary to examine drawings or to provide special access for the object probe to be applied with the specified force to the opening(s) where ingress has to be checked.	IP6X	N
13.4	Dust test for first characteristic numerals 5 and 6	IP6X	P
	The test is made using a dust chamber incorporating the basic principles shown in figure 2 where by the power circulation pump may be replaced by other means suitable to maintain the talcum powder in suspension in a closed test chamber. The talcum powder used shall be the nominal width of a gap between wires 75um. The amount of talcum power to be used is 2 kg per cubic metre of the test chamber volume. It shall not have been used for more than 20 tests.	IP6X	P
	Category 1: enclosures where the normal working cycle of the equipment causes reductions in air pressure within the enclosure below that of the surrounding air. For example, due to thermal cycling effects.	After testing, no deposit of dust is observable inside the enclosure	P
	Category 2: enclosures where on pressure difference relative to the surrounding air is present.		N
13.5	Special conditions for first characteristic numeral 5		N

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Clause	Requirement+Test	Result-Remark	Verdict
13.5.1	Test conditions for first characteristic numeral 5		N
13.5.2	Acceptance conditions for first characteristic numeral 5		N
13.6	Special conditions for first characteristic numeral 6	IP6X	P
13.6.1	Test conditions for first characteristic numeral 6	IP6X	P
13.6.2	Acceptance conditions for first characteristic numeral 6	IP6X	P
14	Test for protection against water indicated by the second characteristic numeral		P
14.1	The test means and the main test conditions are given in table 8		P
14.2	Test conditions		P
	Test means and main test conditions are given in table 8		P
	During the tests for IPX1 to IPX6 the water temperature should not differ by more than 5K from the temperature of the specimen under test		N
	For IPX7 and IPX9 details of the water temperature are given in 14.2.7 and 14.2.9 respectively.	IPX7	P
	Test for second characteristic numeral 8, the test conditions are subject to agreement between manufacturer and user, but they shall be more severe than those prescribed in 14.2.7 and they shall take account of the condition than the enclosure will be continuously immersed in actual use		N
14.2.1	Test for second characteristic numeral 1 with the drip box		N
14.2.2	Test for second characteristic numeral 2 with the drip box		N
14.2.3	Test for second characteristic numeral 3 with oscillating tube or spray nozzle		N
14.2.4	Test for second characteristic numeral 4 with oscillating tube or spray nozzle		N
14.2.5	Test for second characteristic numeral 5 with the 6.3mm nozzle		N
14.2.6	Test for second characteristic numeral 6 with the 12.5mm nozzle		N

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Clause	Requirement+Test	Result-Remark	Verdict
14.2.7	Test for second characteristic numeral 7: temporary immersion between 0.15m and 1m	IPX7 The duration of the test is 30 mins; The sample is located 1000 mm below the surface of the water, after testing, no water is observable inside the enclosure	P
	The test is made by completely immersing the enclosure in water in its service position as specified by the manufacturer so that the following conditions are satisfied		P
	a) the lowest point of enclosures with a height less than 850mm is located 1000mm below the surface of the water		P
	b) the highest point of enclosures with a height equal to or greater than 850mm is located 150mm below the surface of the water		P
	c) the duration of the test is 30min		P
	d)the water temperature does not differ from that of the equipment by more 5K		P
14.2.8	Test for second characteristic numeral 8: continuous immersion subject to agreement Unless there is relevant product standard, the test conditions are subject to agreement between manufacturer and user, but they shall be more severe than those prescribed in 14.2.7 and they shall take account of the condition that the enclosure will be continuously immersed in actual use.		N
	a) the lowest point of enclosures with a height less than 850 mm is located 1000 mm below the surface of the water;		N
	b) the highest point of enclosure with a height equal to or greater than 850 mm is located 150 mm below the surface of the water;		N
	c) the duration of the test is 30 min;		N
	d) the water temperature does not differ from that of the equipment by more than 5 k. However, a modified requirement may be specified in the relevant product standard if the tests are to be made when the equipment is energized and or its parts in motion.		N

IEC/EN 60529			
Clause	Requirement+Test	Result-Remark	Verdict
14.3	Acceptance conditions After testing in accordance with the appropriate requirements of 14.2.1 to 14.2.8 the enclosure shall be inspected for ingress of water. It is the responsibility of the relevant technical committee to specify the amount of water which may be allowed to enter the enclosure and the details of a dielectric strength test, if any.		N
	In general, if any water has entered, it shall not:		N
	be sufficient to interfere with the correct operation of the equipment or impair safety;		N
	deposit on insulation parts where it could lead to tracking along the creepage distances;		N
	reach live parts or windings not designed to operate when wet;		N
	accumulate near the cable end or enter the cable if any.		N
	If the enclosure is provided with drain-holes, it should be proved by inspection that any water which enters does not accumulate and that it drains away without doing any harm to the equipment.		N

IEC/EN 60529			
Clause	Requirement+Test	Result-Remark	Verdict

After the test of IP67, following test was conducted

A.1	**Insulation resistance test**	---
	Test requirements: Immediately after the moisture treatment, the insulation resistance shall be measured with a d.c. voltage of approximately 500 V, 1 min after application of the unit having an insulating cover or envelope shall be wrapped with metal foil. Test result: Between input and enclosure: Max._____ MΩ > 2MΩ	N

A.2	**Electric strength test**	---
	Test requirement: Immediately after the test of A.1, the insulation is subjected for 1 min to a voltage of substantially sine-wave form at rated frequency. The value of the test voltage and the points of application are as following Test result: Between input and enclosure: 500 V There is no flashover or breakdown occurred.	N

REMARKS:

1. The test report is valid for above tested sample only and shall not be reproduced in part without written approval of the laboratory

2. Characterization & Condition of Sample: Normal

PHOTO

Fig. 1 Testing of IP6X

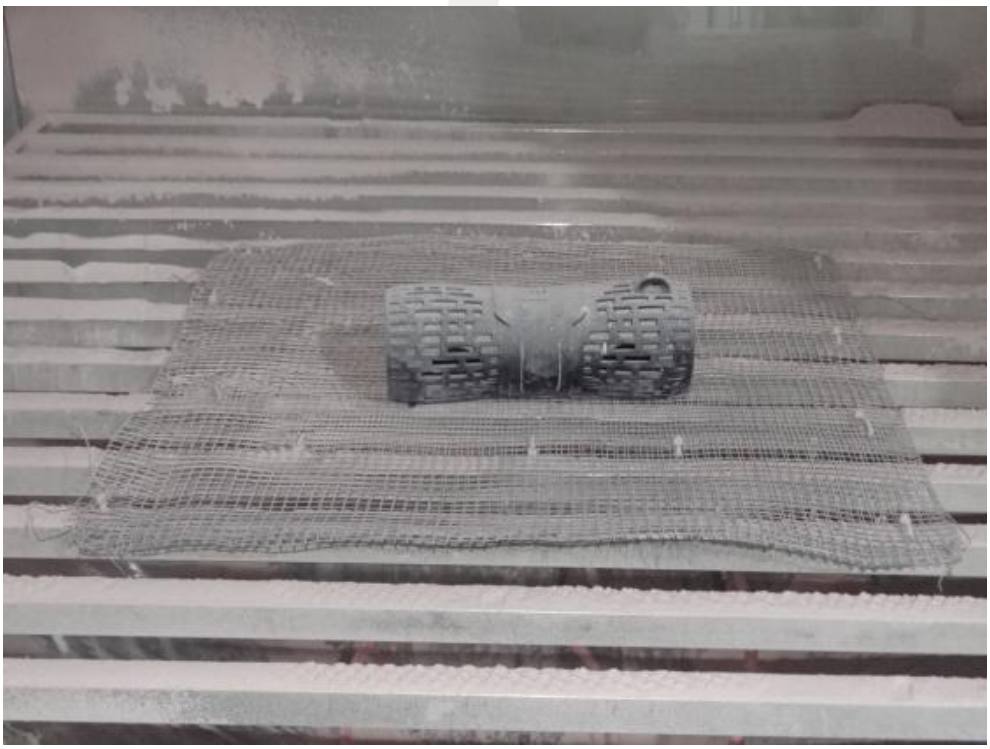

Fig. 2 Testing of IP6X

Fig. 3 After testing of IP6X

Fig. 4 After testing of IP6X

Fig. 5 Testing of IPX7

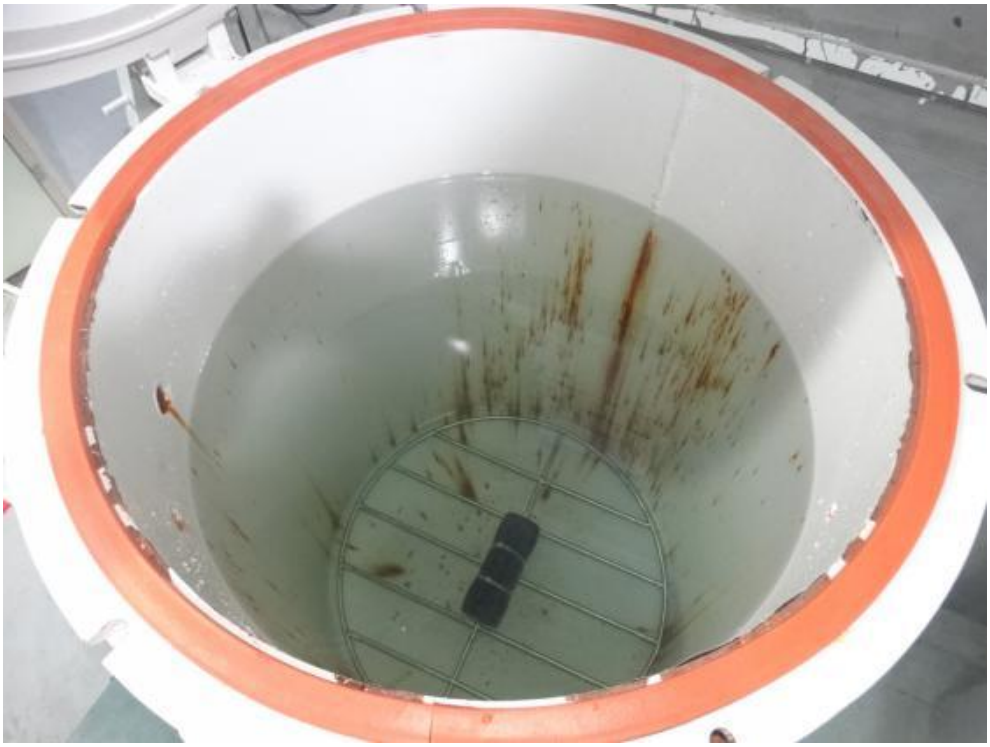

Fig. 6 Testing of IPX7

Fig. 7 After testing of IPX7

Fig. 8 After testing of IPX7

===== End of Test Report =====