



# FCC TEST REPORT

## FCC ID: 2ALNA-TSBTS20

|                                                                                                                        |   |                           |
|------------------------------------------------------------------------------------------------------------------------|---|---------------------------|
| Product Name                                                                                                           | : | Portable Wireless Speaker |
| Model Name                                                                                                             | : | TS-BTS20                  |
| Brand                                                                                                                  | : | Tribit                    |
| Report No.                                                                                                             | : | PTC20042201801E-FC02      |
| <b>Prepared for</b>                                                                                                    |   |                           |
| Shenzhen Thousandshores Technology Co., Ltd.                                                                           |   |                           |
| 5/F,Chuangxin Building,Seven-star Creative Square,No.2North Alley,Chuangye 2nd Road, Bao'an Dis<br>28th,ShenZhen,China |   |                           |
| <b>Prepared by</b>                                                                                                     |   |                           |
| Precise Testing & Certification Co., Ltd.                                                                              |   |                           |
| Building 1, No. 6, Tongxin Road, Dongcheng Street, Dongguan, Guangdong, China                                          |   |                           |



## TEST RESULT CERTIFICATION

Applicant's name : Shenzhen Thousandshores Technology Co., Ltd.  
Address : 5/F, Chuangxin Building, Seven-star Creative Square, No.2 North Alley, Chuangye 2nd Road, Bao'an Dis 28th, ShenZhen, China  
Manufacture's name : Shenzhen Thousandshores Technology Co., Ltd.  
Address : 5/F, Chuangxin Building, Seven-star Creative Square, No.2 North Alley, Chuangye 2nd Road, Bao'an Dis 28th, ShenZhen, China  
Product name : Portable Wireless Speaker  
Model name : TS-BTS20  
Standards : N/A  
Test procedure : KDB 447498 D01 General RF Exposure Guidance v05  
Test Date : Apr. 27, 2020 to May. 19, 2020  
Date of Issue : May. 19, 2020  
Test Result : Pass

This device described above has been tested by PTS, and the test results show that the equipment under test (EUT) is in compliance with the FCC requirements. And it is applicable only to the tested sample identified in the report.

This report shall not be reproduced except in full, without the written approval of PTS, this document may be altered or revised by PTS, personal only, and shall be noted in the revision of the document.

Test Engineer:

A handwritten signature in black ink that reads "Leo Yang".

Leo Yang / Engineer

Technical Manager:

A handwritten signature in black ink that appears to read "Chris Du".

Chris Du / Manager



## Contents

|                                       | <b>Page</b> |
|---------------------------------------|-------------|
| <b>2 TEST SUMMARY.....</b>            | <b>4</b>    |
| <b>3 GENERAL INFORMATION.....</b>     | <b>5</b>    |
| 3.1 GENERAL DESCRIPTION OF E.U.T..... | 5           |
| <b>4 RF EXPOSURE.....</b>             | <b>6</b>    |
| 4.1 REQUIREMENTS.....                 | 6           |
| 4.2 THE PROCEDURES / LIMIT.....       | 6           |
| 4.3 MPE CALCULATION METHOD.....       | 7           |
| 4.4 TEST RESULT.....                  | 7           |



## 2 Test Summary

| Test Items                                                        | Test Requirement | Result |
|-------------------------------------------------------------------|------------------|--------|
| Maximum Permissible Exposure<br>(Exposure of Humans to RF Fields) | 1.1307(b)(1)     | PASS   |
| Remark:                                                           |                  |        |
| N/A: Not Applicable                                               |                  |        |



### 3 General Information

#### 3.1 General Description of E.U.T.

|                       |   |                                                                             |
|-----------------------|---|-----------------------------------------------------------------------------|
| Product Name          | : | Portable Wireless Speaker                                                   |
| Model Name            | : | TS-BTS20                                                                    |
| Additional model      | : | N/A                                                                         |
| Model Description     | : | N/A                                                                         |
| Bluetooth Version     | : | V5.0(BDR+EDR)                                                               |
| Operating frequency   | : | 2402-2480MHz                                                                |
| Type of Modulation    | : | GFSK, Pi/4 DQPSK,8DPSK                                                      |
| Antenna installation: | : | PCB antenna                                                                 |
| Antenna Gain:         | : | 2.3 dbi                                                                     |
| Power supply          | : | Adapter model:N/A<br>Input: DC 5V, 1A(with DC 3.7V, 4400mAh Battery inside) |
| Hardware Version      | : | N/A                                                                         |
| Software Version      | : | N/A                                                                         |



## 4 RF Exposure

Test Requirement : FCC Part 1.1307(b)(1)

Evaluation Method : FCC Part 2.1091

### 4.1 Requirements

Systems operating under the provisions of this section shall be operated in a manner that ensures that the public is not exposed to radio frequency energy levels in excess limit for maximum permissible exposure. In accordance with 47 CFR FCC Part 2 Subpart J, section 2.1091 this device has been defined as a mobile device whereby a distance of 0.2 m normally can be maintained between the user and the device.

### 4.2 The procedures / limit

(A) Limits for Occupational / Controlled Exposure

| Frequency Range | Electric Field | Magnetic Field | Power Density (S) | Averaging Time |
|-----------------|----------------|----------------|-------------------|----------------|
| 0.3-3.0         | 614            | 1.63           | (100)*            | 6              |
| 3.0-30          | 1842 / f       | 4.89 / f       | (900 / f)*        | 6              |
| 30-300          | 61.4           | 0.163          | 1.0               | 6              |
| 300-1500        |                |                | F/300             | 6              |
| 1500-100,000    |                |                | 5                 | 6              |

(B) Limits for General Population / Uncontrolled Exposure

| Frequency Range | Electric Field | Magnetic Field | Power Density (S) | Averaging Time |
|-----------------|----------------|----------------|-------------------|----------------|
| 0.3-1.34        | 614            | 1.63           | (100)*            | 30             |
| 1.34-30         | 824/f          | 2.19/f         | (180/f)*          | 30             |
| 30-300          | 27.5           | 0.073          | 0.2               | 30             |
| 300-1500        |                |                | F/1500            | 30             |
| 1500-100,000    |                |                | 1.0               | 30             |

Note: f = frequency in MHz ; \*Plane-wave equivalent power density



#### 4.3 MPE Calculation Method

$$E \text{ (V/m)} = \frac{\sqrt{30 \times P \times G}}{d} \quad \text{Power Density: } P_d \text{ (W/m}^2\text{)} = \frac{E^2}{377}$$

E = Electric field (V/m)

P = Peak RF output power (W)

G = EUT Antenna numeric gain (numeric)

d = Separation distance between radiator and human body (m)

The formula can be changed to

$$P_d = \frac{30 \times P \times G}{377 \times d^2}$$

From the peak EUT RF output power, the minimum mobile separation distance, d=0.2m, as well as the gain of the used antenna, the RF power density can be obtained

#### 4.4 Test Result

| Item | Antenna Gain (numeric) | Max. Peak Output Power (dBm) | Peak Output Power (mW) | Power Density (mW/cm <sup>2</sup> ) | Limit of Power Density (mW/cm <sup>2</sup> ) | Result |
|------|------------------------|------------------------------|------------------------|-------------------------------------|----------------------------------------------|--------|
| BT   | 1.698                  | 4.066                        | 2.55                   | 0.00086                             | 1                                            | Pass   |

\*\*\*\*\*THE END REPORT\*\*\*\*\*