

TEST REPORT

FCC ID..... :	2APP6AG-10S	
Test Report No..... :	TCT240311E040	
Date of issue..... :	Mar. 19, 2024	
Testing laboratory	SHENZHEN TONGCE TESTING LAB	
Testing location/ address:	2101 & 2201, Zhenchang Factory, Renshan Industrial Zone, Fuhai Subdistrict, Bao'an District, Shenzhen, Guangdong, 518103, People's Republic of China	
Applicant's name..... :	Aroma Music Co., Ltd.	
Address..... :	203, No. 93 Qianjin 2nd Road, Area 81, Hexi Neighbourhood, Xixiang Town, Baoan District, Shenzhen City, Guangdong, 518000 China	
Manufacturer's name ... :	Aroma Technology Co., Limited	
Address..... :	Building A, Aroma Park, Guwu Village, Danshui Town, Huiyang District, Huizhou, Guangdong 516200 China	
Standard(s)	FCC CFR Title 47 Part 1.1307	
Test item description	ELECTRIC GUITAR AMP	
Trade Mark	N/A	
Model/Type reference..... :	AG-10S, Fazley Kubo BT 10, FAM-10, SG-10, EG-10, JG-10S, HG-10S, GA-10S, GG-10S, ZG-10S, MG-10S, NJ-10S, DG-10S, LG-10S, WG-10S	
Rating(s)..... :	Refer to EUT description of page 3	
Date of receipt of test item	Mar. 11, 2024	
Date (s) of performance of test..... :	Mar. 11, 2024 ~ Mar. 19, 2024	
Tested by (+signature) ... :	Ronaldo LUO	
Check by (+signature)..... :	Beryl ZHAO	
Approved by (+signature):	Tomsin	

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Table of Contents

1. General Product Information	3
1.1. EUT description	3
1.2. Model(s) list.....	3
2. General Information.....	4
2.1. Test environment and mode.....	4
2.2. Description of Support Units.....	4
3. Facilities and Accreditations	5
3.1. Facilities	5
3.2. Location	5
4. Test Results and Measurement Data	6

1. General Product Information

1.1. EUT description

Test item description	ELECTRIC GUITAR AMP
Model/Type reference.....	AG-10S
Sample Number.....	TCT240311E039-0101
Operation Frequency	2402MHz~2480MHz
Modulation Type	GFSK, $\pi/4$ -DQPSK, 8DPSK
Antenna Type.....	PCB Antenna
Antenna Gain.....	-0.58dBi
Rating(s).....	Adapter Information: MODEL: GM53-120150-F INPUT: AC 100-240V, 50/60Hz, 2.0A OUTPUT: DC 12.0V, 1.5A, 18.0W

Note: The antenna gain listed in this report is provided by applicant, and the test laboratory is not responsible for this parameter.

1.2. Model(s) list

No.	Model No.	Tested with
1	AG-10S	☒
Other models	Fazley Kubo BT 10, FAM-10, SG-10, EG-10, JG-10S, HG-10S, GA-10S, GG-10S, ZG-10S, MG-10S, NJ-10S, DG-10S, LG-10S, WG-10S	☐

Note: AG-10S is tested model, other models are derivative models. The models are identical in circuit and PCB layout, only different on the model names. So the test data of AG-10S can represent the remaining models.

2. General Information

2.1. Test environment and mode

Item	Normal condition
Temperature	+25°C
Voltage	AC 120V/60Hz
Humidity	56%
Atmospheric Pressure:	1008 mbar
Test Mode:	
Engineering mode:	Keep the EUT in continuous transmitting by select channel

2.2. Description of Support Units

The EUT has been tested as an independent unit together with other necessary accessories or support units. The following support units or accessories were used to form a representative test configuration during the tests.

Equipment	Model No.	Serial No.	FCC ID	Trade Name
/	/	/	/	/

Note:

1. All the equipment/cables were placed in the worst-case configuration to maximize the emission during the test.
2. Grounding was established in accordance with the manufacturer's requirements and conditions for the intended use.
3. For conducted measurements (Output Power, 20dB Occupied Bandwidth, Carrier Frequencies Separation, Hopping Channel Number, Dwell Time, Spurious Emissions), the antenna of EUT is connected to the test equipment via temporary antenna connector, the antenna connector is soldered on the antenna port of EUT, and the temporary antenna connector is listed in the Test Instruments.

3. Facilities and Accreditations

3.1. Facilities

The test facility is recognized, certified, or accredited by the following organizations:

- FCC - Registration No.: 645098

SHENZHEN TONGCE TESTING LAB

Designation Number: CN1205

The testing lab has been registered and fully described in a report with the (FCC) Federal Communications Commission. The acceptance letter from the FCC is maintained in our files.

- IC - Registration No.: 10668A-1

SHENZHEN TONGCE TESTING LAB

CAB identifier: CN0031

The testing lab has been registered by Certification and Engineering Bureau of Industry Canada for radio equipment testing.

3.2. Location

SHENZHEN TONGCE TESTING LAB

Address: 2101 & 2201, Zhenchang Factory, Renshan Industrial Zone, Fuhai Subdistrict, Bao'an District, Shenzhen, Guangdong, 518103, People's Republic of China

TEL: +86-755-27673339

4. Test Results and Measurement Data

According to §1.1307(b), systems operating under the provisions of this section shall be operated in a manner that ensure that the public is not exposed to radio frequency energy level in excess of the Commission's guideline.

- Remark: 1) The maximum output power for antenna is 3.29dBm (2.13mW) at 2480MHz, -0.58dBi antenna gain (with 0.87 numeric antenna gain.)
2) For mobile or fixed location transmitters, no SAR consideration applied. The minimum separation generally be used is at least 20cm, even if the calculation indicate that the MPE distance would be lesser.

Calculation

Given $E = \frac{\sqrt{30 \times P \times G}}{d}$ & $S = \frac{E^2}{3770}$

Where E = Field Strength in Volts / meter

P = Power in Watts

G = Numeric antenna gain

d = Distance in meters

S = Power Density in milliwatts / square centimeter

Maximum Permissible Exposure

output power= 2.13mW

Numeric Antenna gain= 0.87

Substituting the MPE safe distance using $d=20\text{cm}$ into above equation.

Yields:

$$S = 0.000199 \times P \times G$$

Where P = Power in mW

G = Numeric antenna gain

S = Power density in mW/cm²

Power density= 0.000369mW/cm²

(For mobile or fixed location transmitters, the maximum power density is 1.0 mW/cm² even if the calculation indicates that the power density would be larger.)

*******END OF REPORT*******