

TEST REPORT

FCC ID.	2A85Z-FIAMINGO
Test Report No.	TCT221024E015
Date of issue	Oct. 28, 2022
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	Wuhan Aune Acoustics Co., Ltd
Address	No.17, Gutian 5RD, Wuhan SanXin Material Incubator 5#201, Qiaokou District, Wuhan, 430000 China
Manufacturer's name ...	Wuhan Aune Acoustics Co., Ltd
Address	No.17, Gutian 5RD, Wuhan SanXin Material Incubator 5#201, Qiaokou District, Wuhan, 430000 China
Standard(s)	FCC CFR Title 47 Part 1.1307 KDB 447498 D04 Interim General RF Exposure Guidance v01
Product Name	Aune Audio DAC
Trade Mark	aune
Model/Type reference	Refer to model list of page 3
Rating(s)	Adapter Information: Model: GA-1202000 Input: AC 100-240V, 50/60Hz, 0.6A Output: DC 12.0V, 2000mA
Date of receipt of test item	Oct. 24, 2022
Date (s) of performance of test	Oct. 24, 2022 - Oct. 28, 2022
Tested by (+signature) ...	Ronaldo LUO
Check by (+signature)	Beryl ZHAO
Approved by (+signature) :	Tomsin

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1. General Product Information

1.1. EUT description

Product Name.....	Aune Audio DAC
Model/Type reference.....	Flamingo-BT Tube DAC
Sample Number.....	TCT221024E014-0101
Operation Frequency	2402MHz~2480MHz
Modulation Type	GFSK, π/4-DQPSK, 8DPSK
Antenna Type.....	External Antenna
Antenna Gain.....	3dBi
Rating(s).....	Adapter Information: Model: GA-1202000 Input: AC 100-240V, 50/60Hz, 0.6A Output: DC 12.0V, 2000mA

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	Flamingo-BT Tube DAC	<input checked="" type="checkbox"/>
Other models	u7y6667y, FLAMINGO-BD Tube DAC, FLAMINGO-SP Tube DAC, FLAMINGO-NP Tube DAC, X8 XVIII -BT DAC, S9C DAC, S10 NPDAC, A8DAC, X5S NP DAC, S6C DAC, A6 DAC, X1SGT-BT DAC, BU2 DAC, M1P NP DAC, B2DAC, M6DAC, CP1, X5s 8 th anniversary BT, X8 18th Anniversary Edition-BT DAC, X1s GT BT Hi-Res DAC, Falmingo-BT DAC	<input type="checkbox"/>

Note: Flamingo-BT Tube DAC 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 Flamingo-BT Tube DAC 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 10.21dBm (10.50mW) at 2402MHz, 3dBi antenna gain (with 2.00 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 $E = \frac{\sqrt{30*P*G}}{d}$ & $S = \frac{E^2}{3770}$

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 result

Output power= 10.50mW

Numeric Antenna gain= 2.00

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

Yields:

$$S=0.000199*P*G$$

Where P =Power in mW

G =Numeric antenna gain

S =Power density in mW/cm^2

$$\text{Power density}=0.004179\text{mW}/\text{cm}^2$$

(For mobile or fixed location transmitters, the maximum power density is $1.0\text{ mW}/\text{cm}^2$ even if the calculation indicates that the power density would be larger.)

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