

RF Exposure Evaluation Report

Product : ACOUSTIC GUITAR AMP
Trade mark : AROMA
Model/Type reference : AG-60A
Serial Number : N/A
Report Number : EED32L00247002
FCC ID : 2APP6AG-60A
Date of Issue : Dec. 23, 2019
Test Standards : 47 CFR Part 1.1307(2015)
47 CFR Part 1.1310(2015)
KDB447498D01v06
Test result : PASS

Prepared for:

Aroma Music Co., Ltd.

**Floor 6 , Building 56 Baotian Industry Zone,
Baotian 3 Road Bao An District, Shenzhen 518102 China**

Prepared by:

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2 Version

Version No.	Date	Description
00	Dec. 23, 2019	Original

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4 General Information

4.1 Client Information

Applicant:	Aroma Music Co., Ltd.
Address of Applicant:	Floor 6 , Building 56 Baotian Industry Zone, Baotian 3 Road Bao An District, Shenzhen 518102 China
Manufacturer:	Aroma Music Co., Ltd.
Address of Manufacturer:	Floor 6 , Building 56 Baotian Industry Zone, Baotian 3 Road Bao An District, Shenzhen 518102 China
Factory:	Aroma Music Co., Ltd.
Address of Factory:	Floor 6 , Building 56 Baotian Industry Zone, Baotian 3 Road Bao An District, Shenzhen 518102 China

4.2 General Description of EUT

Product Name:	ACOUSTIC GUITAR AMP
Model No.(EUT):	AG-60A
Trade Mark:	AROMA
EUT Supports Radios application	BT 5.0 Single mode

4.3 Product Specification subjective to this standard

Frequency Range:	2402MHz to 2480MHz				
Modulation Type:	GFSK, π/4DQPSK				
Number of Channels:	79				
Test Power Grade:	GFSK:10/10/10; π/4DQPSK:6/6/6				
Test Software of EUT:	PUTTY				
Antenna Type:	PCB antenna				
Antenna Specification	Bluetooth :	Antenna Gain :	-0.68 dBi	(Numeric gain: 0.86)	
Maximum tune up power	Bluetooth:		0.93 dBm	(1.238 mW)	
Power Supply:	Battery	18.5V 2200mAH			
	Adapter	MODEL: A361-24015001 INPUT: 100-240V~50/60HZ 1.5A OUTPUT:24V 1500mA			
Sample Received Date:	Sep. 02, 2019				
Sample tested Date:	Sep. 02, 2019 to Oct. 10, 2019				
The tested sample(s) and the sample information are provided by the client.					

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4.4 Test Location

All tests were performed at:

Centre Testing International Group Co., Ltd

Building C, Hongwei Industrial Park Block 70, Bao'an District, Shenzhen, China

Telephone: +86 (0) 755 33683668 Fax: +86 (0) 755 33683385

No tests were sub-contracted.

FCC Designation No.: CN1164

4.5 Deviation from Standards

None.

4.6 Abnormalities from Standard Conditions

None.

4.7 Other Information Requested by the Customer

None.

5 RF Exposure Evaluation

5.1 RF Exposure Compliance Requirement

Given $E = \frac{\sqrt{30 \times P \times G}}{d}$ & $S = \frac{E^2}{377}$

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

Combining equations and re-arranging the terms to express the distance as a function of the remaining variables yields:

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

Changing to units of mW and cm, using:

$$P \text{ (mW)} = P \text{ (W)} / 1000 \text{ and}$$

$$d \text{ (cm)} = d \text{ (m)} / 100$$

Yields

$$S = \frac{30 \times (P/1000) \times G}{377 \times (d/100)^2} = 0.0796 \times \frac{P \times G}{d^2} \quad \text{Equation 1}$$

Where d = Distance in cm

P = Power in mW

G = Numeric antenna gain

S = Power density in mW / cm²

5.2 Maximum Permissible Exposure

Substituting the MPE safe distance using $d = 20$ cm into Equation 1:

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

Where P = Power in mW

G = Numeric antenna gain

S = Power density in mW / cm²

Bluetooth:

Ch.	Frq.(MHz)	P (mW)	Gain (num.)	D (cm)	Power density in mW / cm ²	Limit (mW/cm2)
0	2480	1.238	0.86	20	0.0002	1

PHOTOGRAPHS OF EUT Constructional Details

Refer to Report No.EED32L00247001 for EUT external and internal photos.

*** End of Report ***

The test report is effective only with both signature and specialized stamp, The result(s) shown in this report refer only to the sample(s) tested. Without written approval of CTI, this report can't be reproduced except in full.