RF TEST REPORT

Product Name: Bluetooth HIFI speaker

Model Name: FW-008, FW-006, FW-007, FW-009, FW-010, BT-006, BT-007, BT-008, BT-009, BT-010, LW-006, LW-007, LW-008, LW-009, LW-010, AY-006, AY-007, AY-008, AY-009, AY-010

FCC ID: 2AQPGFW-008

Issued For	:	Shenzhen Eyin Technology Co.,Ltd Block 33,2nd Baoshan industrial Park,Pingshan District,Shenzhen,China
Issued By	:	Shenzhen LGT Test Service Co., Ltd. Room 205, Building 13, Zone B, Zhenxiong Industrial Park, No.177, Renmin West Road, Jinsha, Kengzi Street, Pingshan District, Shenzhen, Guangdong, China

Report Number:	LGT25C113HA02
Sample Received Date:	Mar. 19, 2025
Date of Test:	Mar. 19, 2025 ~ Apr. 24, 2025
Date of Issue:	Apr. 24, 2025

The test report is effective only with both signature and specialized stamp. This report shall not be reproduced except in full without the written approval of the Laboratory. The results in this report only apply to the tested sample.

TEST REPORT CERTIFICATION

Applicant:	Shenzhen Eyin Technology Co.,Ltd
Address:	Block 33,2nd Baoshan industrial Park,Pingshan District,Shenzhen,China
Manufacturer:	Shenzhen Eyin Technology Co.,Ltd
Address:	Block 33,2nd Baoshan industrial Park,Pingshan District,Shenzhen,China
Product Name:	Bluetooth HIFI speaker
Trademark:	N/A
Model Name:	FW-008
Series Model:	FW-006, FW-007, FW-009, FW-010, BT-006, BT-007, BT-008, BT-009, BT-010, LW-006, LW-007, LW-008, LW-009, LW-010, AY-006, AY-007, AY-008, AY-009, AY-010
Sample Status:	Normal

APPLICABLE STANDARDS	
STANDARD	TEST RESULTS
FCC 47 CFR §2.1091 KDB 447498 D01 General RF Exposure Guidance v06	PASS

Prepared by:

Zane Shan

Zane Shan
Engineer

Approved by:

Vita Li
Technical Director

TABLE OF CONTENTS

1 . GENERAL INFORMATION **5**

1.1 GENERAL DESCRIPTION OF THE EUT 5

1.2 TEST LABORATORY 5

2 . FCC 47CFR § 2.1091 REQUIREMENT **6**

2.1 TEST STANDARDS 6

2.2 LIMIT 6

2.3 EUT OPERATION CONDITION 7

2.4 CLASSIFICATION 7

2.5 TEST RESULT 8

Revision History

Rev.	Issue Date	Revisions
00	Apr. 24, 2025	Initial Issue

1. GENERAL INFORMATION

1.1 GENERAL DESCRIPTION OF THE EUT

Product Name:	Bluetooth HIFI speaker	
Trademark:	N/A	
Model Name:	FW-008	
Series Model:	FW-006, FW-007, FW-009, FW-010, BT-006, BT-007, BT-008, BT-009, BT-010, LW-006, LW-007, LW-008, LW-009, LW-010, AY-006, AY-007, AY-008, AY-009, AY-010	
Model Difference:	Only the appearance and model are different.	
Frequency Bands:	Bluetooth	2402-2480MHz
Rating:	Input: DC 5V 2A	
Battery:	Capacity: 2200mAh Rated Voltage: 7.4V	
Hardware Version:	N/A	
Software Version:	N/A	

1.2 TEST LABORATORY

Company Name:	Shenzhen LGT Test Service Co., Ltd.
Address:	Room 205, Building 13, Zone B, Zhenxiong Industrial Park, No.177, Renmin West Road, Jinsha, Kengzi Street, Pingshan District, Shenzhen, Guangdong, China
Accreditation Certificate:	A2LA Certificate No.: 6727.01
	FCC Registration No.: 746540
	CAB ID: CN0136

2. FCC 47CFR §2.1091 REQUIREMENT

2.1 TEST STANDARDS

The limit for Maximum Permissible Exposure (MPE) specified in FCC 1.1310 is followed. The gain of the antennas used in the product is extracted from the Antenna data sheets provided and also the maximum total power input to the antenna is measured. Through the Friis transmission formula and the maximum gain of the antenna, we can calculate the distance, away from the product, where the limit of MPE is reached.
Although the Friis Transmission formula is far field assumption, the calculated result of that is an over-prediction for near field power density. It is taken as worst case to specify the safety range.

2.2 LIMIT

According to FCC 1.1310: The criteria listed in the following table shall be used to evaluate the environmental impact of the human exposure to radio-frequency (RF) radiation as specified in 1.1307 (b)

Limits for Maximum Permissible Exposure (MPE)

Frequency Range (MHz)	Electric Field Strength (V/m)	Magnetic Field Strength (A/m)	Power Density (mW/cm^2)
Limits for Occupational / controlled Exposures			
0.3-3.0	614	1.63	*(100)
3.0-30	1842/f	4.89/f	*($900/f^2$)
30-300	61.4	0.163	1.0
300 - 1500	--	--	F/300
1500 – 100000	--	--	5.0
Limits for General population / Uncontrolled Exposure			
0.3-1.34	614	1.63	*(100)
1.34-30	824/f	2.19/f	*($180/f^2$)
30-300	27.5	0.073	0.2
300 - 1500	--	--	F/1500
1500 – 100000	--	--	1.0

F= Frequency in MHz

* = Plane-wave equivalent power density.

Friss Formula

Friss Transmission Formula: $Pd = (Pout * G) / (4*pi*r^2)$

Where

Pd = power density in mW/cm^2

Pout = output power to antenna in mW

G = gain of antenna in linear scale

Pi = 3.1416

R = Distance between observation point and the center of radiator in cm

If we know the maximum gain of the antenna and the total output power to the antenna, through calculation, we will know MPE value at distance 20cm.

2.3 EUT OPERATION CONDITION

EUT was enabled to transmit and receive at lowest, middle and highest channels.

2.4 CLASSIFICATION

The antenna of this product, under normal use condition, is at least 20cm away from the body of the user. Warning statement to the user for keeping at least 20cm or more separation distance from the antenna should be included in the User manual. So, this device is classified as Mobile device.

2.5 TEST RESULT

Turn up Result

Mode	Turn up Power
BT-GFSK	8±1dBm
BT-π/4-DQPSK	8±1dBm
BT-8DPSK	8±1dBm

The MPE result of worst mode:

RF Function	Frequency (MHz)	Max Turn up Power (dBm)	Max Turn up Power (mW)	ANT Gain (dBi)	ANT Gain (gain of antenna in linear scale)	Power Density (mW/cm²)	Limit (mW/cm²)	Ratio	Result
BT	2402	9.00	7.94	2.04	1.60	0.003	1	0.003	Pass

Note:

1. The Maximum Power Density is less than the limit, complies with the exemption requirements.

※※※※※END OF THE REPORT※※※※※