



MPE REPORT

FCC ID: 2A5BCA9-1

Product	:	Multifunction Bluetooth Speaker
Model Name	:	A9-1
Brand	:	N/A
Report No.	:	PTC22021603201E-FC03
Prepared for		
Shenzhen Eifer Commerce and Trade Co.,Ltd.		
No. 401, Elevator B, Building No. 2, Baoyunda Logistics Center, District 115, Xixiang Street, Baoan District, Shenzhen		
Prepared by		
Precise Testing & Certification Co., Ltd		
Building 1, No. 6, Tongxin Road, Dongcheng Street, Dongguan, Guangdong, China		



1 TEST RESULT CERTIFICATION

Applicant's name : Shenzhen Eifer Commerce and Trade Co., Ltd.

Address : No. 401, Elevator B, Building No. 2, Baoyunda Logistics Center,
District 115, Xixiang Street, Baoan District, Shenzhen

Manufacture's name : Shenzhen Topo Electronic Technology Co., Ltd.

Address : 3rd Floor, 4th Floor, Building A, Fuhe Tongfuyu Industrial Park,
Heping Road, Heping Community, Fuyong Street, Baoan District,
Shenzhen, 3rd Floor, Building B

Product name : Multifunction Bluetooth Speaker

Model name : A9-1

Additional model : B9-3,B10,A1,A12,B12,A16,B9-2,B9,A9-2,C16,C9

Test procedure : KDB 447498 D01 General RF Exposure Guidance v06

Test Date : Feb. 21, 2022 to Mar. 10, 2022

Date of Issue : Mar. 10, 2022

Test Result : Pass

This device described above has been tested by PTC, 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.

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Test Engineer:

Abel Yu / Engineer

Technical Manager:

Wu Weimin / Manager



2 Test Summary

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

3 RF Exposure

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

Evaluation Method : FCC Part 2.1091

3.1 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.

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

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

Test Result

Item	Antenna Gain (numeric)	Max. Peak Output Power (dBm)	Peak Output Power (mW)	Power Density (mW/cm ²)	Limit of Power Density (mW/cm ²)	Result
BLE	0.87	1.320	1.355189	0.000236	1	Pass
3DH5	0.87	4.890	3.083188	0.000537	1	Pass

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