



**Audix Technology (Shenzhen) Co., Ltd.**  
 No. 6, Kefeng Road, Science & Technology Park,  
 Nanshan District, Shenzhen, Guangdong, China

**Tel: 0755 26639496**  
**Fax: 0755 26632877**

## Maximum Permissible Exposure

FCC ID: AK8YY7862E  
 Product Name: Wireless Speaker  
 M/N: YY7862E

1. According to FCC CFR 47 §1.1310, the criteria listed in the following table shall be used to evaluate the environmental impact of human exposure to radio frequency (RF) radiation as specified in 1.1307(b).

Table 1 Limits for Maximum Permissible Exposure

Frequency Range (MHz)	Electric Field Strength (V/m)	Magnetic Field Strength (A/m)	Power Density (mW/cm <sup>2</sup> )	Average Time (Minutes)
(A) Limits for Occupational / Control Exposures (f = frequency)				
30-300	61.4	0.163	1.0	6
300-1500	---	---	f/300	6
1500-100,000	---	---	5.0	6
(B) Limits for General Population / Uncontrolled Exposures (f = frequency)				
30-300	27.5	0.073	0.2	30
300-1500	---	---	f/1500	30
1500-100,000	---	---	1.0	30

### 2. MPE Calculation

We declares that the product described above has been evaluated and found to comply with the RF exposure limits for humans, as specified based on ANSI/FCC recommendation.

RF Exposure Calculations:  $S = (P * G) / (4 * \pi * r^2)$  or  $r = \sqrt{(P * G) / (4 * \pi * S)}$

## 2.1. Estimation Result

EUT: Wireless Speaker		
M/N: YY7862E		
Test date: 2023-09-25	Pressure: 102.4±1.0 kpa	Humidity: 54.7±3.0%
Tested by: Carl	Test site: RF site	Temperature: 23.6±0.6 °C

Test Mode	Output Power (dBm)	Output Power (mW)	Antenna Gain (dBi)	Antenna Gain (Linear)	MPE
BDR	8.743	7.49	1.77	1.50	0.0022
EDR	8.836	<b>7.65</b>	1.77	1.50	<b>0.0023</b>
BLE-1Mbps	4.938	3.12	1.77	1.50	0.0009
BLE-2Mbps	4.946	3.12	1.77	1.50	0.0009

Based on safety distance (r) **20cm**, the antenna gain (G) numerical as below:

Antenna System	
Type of Antenna	PCB Antenna
Antenna Peak Gain	1.77dBi

and the EDR highest power output (P) is **7.65mW**;  
the EDR power density (S) is **0.0023 mW/cm<sup>2</sup>**.