

FCC RF EXPOSURE REPORT

Every Bright (Hong Kong) Company Limited

2.1 Channel Bluetooth Speaker System;
2.1 CHANNEL SPEAKER SYSTEM with Bluetooth Wireless Technology

Model Number:EB-996R

Additional Model:MHT762

Trade Name: Every Bright/Magnavox

FCC ID: 2AJ9X9965118

Prepared for : Every Bright (Hong Kong) Company Limited
Rm1619,16/F,New Tech Plaza,34 Tai Yau Street,San Po
Kong,Kowloon

Prepared By : EST Technology Co., Ltd.
San Tun Management Zone, Houjie District, Dongguan, China
Tel: 86-769-83081888-808

Report Number: ESTE-R1611043
Date of Test : November 03,2016~ November 24,2016
Date of Report : December 01,2016



Maximum Permissible Exposure

1、Applicable Standard

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 level 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 0.2m normally can be maintained between the user and the device.

(a)、Limits for Occupational / Controlled Exposure

Frequency Range (MHz)	Electric Field Strength E) (V/m)	Magnetic Field Strength (H) (A/m)	Power Density (S) (mW/cm ²)	Averaging Times E 2 , H 2 or S (minutes)
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
1500-10000			5	6

(b)、Limits for General Population / Uncontrolled Exposure

Frequency Range (MHz)	Electric Field Strength E) (V/m)	Magnetic Field Strength (H) (A/m)	Power Density (S) (mW/cm ²)	Averaging Times E 2 , H 2 or S (minutes)
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
1500-10000			1.0	30

Note: f=frequency in MHz; *Plane-wave equivalent power density

2、MPE Calculation Method

$$E \text{ (V/m)} = (30 \cdot P \cdot G)^{0.5} / d \quad \text{Power Density: } P_d \text{ (W/m}^2\text{)} = E^2 / 377$$

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

$$P_d = (30 \cdot P \cdot G) / (377 \cdot d^2)$$

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

3、Calculated Result and Limit

Mode	Frequency (MHz)	Peak output power (dBm)	Peak output power (mW)	Target power (dBm)	Antenna gain		Power Density (S) (mW /cm2)	Limited of Power Density (S) (mW /cm2)	Test Result
					(dBi)	(Linear)			
GFSK	2402	-3.327	0.465	-4±1	0	1	0.00010	1	Complies
	2441	-4.375	0.365	-5±1	0	1	0.00008	1	Complies
	2480	-5.355	0.291	-6±1	0	1	0.00006	1	Complies
8-DPSK	2402	-3.534	0.443	-4±1	0	1	0.00010	1	Complies
	2441	-4.496	0.355	-5±1	0	1	0.00008	1	Complies
	2480	-5.466	0.284	-6±1	0	1	0.00006	1	Complies