ECMG
Worldwide Certification Solutions
EMC Compliance Management Group
670 National Avenue, Mountain View, CA 94043
Tel. (650) 988-0900 Fax (650) 988-6647
www.emclab2000.com

NVLAP Lab code: 200068-0
ISO/IEC 17025:1999, ISO 9002:1994

MPE Test Report

On Model Name : 2.4G RF Wireless Digital Audio Transmitter and Receiver

Model Numbers : ELPWA01T,ELPWA02R

Trade Marks : Original

FCC ID : UN9ETNRJPELPWA

Prepared for

Shenzhen Ether Electronics Ltd

According to FCC Part 2 subpart J ,Section 2.1091

Test Report #:	**FCC06-8072-MPE**
Prepared by:	**Ravin Su**
Reviewed by:	**Ivan Wen**
QC Manager:	**Paul Chen**

Test Report Released by: Paul J. Chen — Paul Chen

2007，Feb , 02 — Date

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 nox exposed to radio frequency 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/cm2)	Averaging Times (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
1500-100000			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/cm2)	Averaging Times (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
1500-100000			1	30

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

2. MPE Calculation Method

E(V/m) = 30*P*G ½/D

Power density : Pd (W/m²) = E²/377

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

Pd = (30*P*G) / (377 * D²)

From the peak EUT RF output power , the minimum mobile separation distance, D = 0.2 m , as well as the gain of the used antenna , the RF power density can be obtained .

3. Calculated Result and Limit

Low Ch---2402MHz

Antenna Gain (Numeric)	Peak output power (dBm)	Peak output power (mW)	Power density (S) (Mw/cm2)	Limit of power density	Test Result
1.5	0.30	1.073	0.0003	1	Complies

Mid CH---2441MHz

Antenna Gain (Numeric)	Peak output power (dBm)	Peak output power (mW)	Power density (S) (Mw/cm2)	Limit of power density	Test Result
1.5	0.33	1.079	0.0003	1	Complies

High CH---2480MHz

Antenna Gain (Numeric)	Peak output power (dBm)	Peak output power (mW)	Power density (S) (Mw/cm2)	Limit of power density	Test Result
1.5	-1.80	0.660	0.0002	1	Complies