

# RF Exposure Evaluation declaration

Product Name: BT Mini Stereo Headset

Model No. : BT-362

FCC ID : PANBT362

Applicant: CC&C Technologies, Inc.

Address: 8F., No.150, Jian Yi Road., Chung Ho City, Taipei County,

Taiwan 235, R.O.C.

Date of Receipt : Aug. 15, 2005

Date of Declaration: Aug. 30, 2005

Report No. : 058L095FI

The declaration results relate only to the samples calculated.

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## 1. RF Exposure Evaluation

#### 1.1. Limits

According to FCC 1.1310: The criteria listed in the following table shall be used to evaluate the environment impact of human exposure to radio frequency (RF) radiation as specified in 1.1307(b) LIMITS FOR MAXIMUM PERMISSIBLE EXPOSURE (MPE)

Frequency Range	Electric Field	Magnetic Field	Power Density	Average Time
(MHz)	Strength (V/m)	Strength (A/m)	(mW/cm <sup>2</sup> )	(Minutes)
(A) Limits for Occupational/ Control Exposures				
300-1500			F/300	6
1500-100,000			5	6
(B) Limits for General Population/ Uncontrolled Exposures				
300-1500			F/1500	6
1500-100,000			1	30

F= Frequency in MHz

Friis Formula

Friis 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 center of the radiator in cm

Pd id the limit of MPE, 1 mW/cm<sup>2</sup>. If we know the maximum gain of the antenna and the total power input to the antenna, through the calculation, we will know the distance r where the MPE limit is reached.

#### 1.2. Test Procedure

Software provided by client enabled the EUT to transmit and receive data at lowest, middle and highest channel individually.

The temperature and related humidity: 18°C and 78% RH.

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# 1.3. Test Result of RF Exposure Evaluation

Product : BT Mini Stereo Headset Test Item : RF Exposure Evaluation

Test Site : No.3 OATS

#### Antenna Gain

Antenna Gain: The maximum Gain is 1.98dBi measured in fully anechoic chamber in linear scale.

### Output Power Into Antenna & RF Exposure Evaluation Distance (1.98dBi):

Francisco ( a control )						
Channel	Frequency (MHz)	Output Power to Antenna (mW)	Power Density at $R = 2.5 \text{ cm}$ (mW/cm2)			
1	2402.00	2.3933	0.0469			
39	2441.00	2.3067	0.0452			
78	2480.00	2.2284	0.0436			

The distance  $r(4^{th} \text{ column})$  calculated from the Fries transmission formula is far shorter than 2.5 cm separation requirement.

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