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### RF Exposure information

Federal Communication Commission  
Equipment Authorization Division, Application Processing Branch  
7435 Oakland Mills Road  
Columbia, MD 21048

Aug 24, 2009

Attention: Reviewing Engineer

RE: RF exposure information for the equipment (*Bluetooth Stereo Headset/UNB-2000S*)

The device *Bluetooth Stereo Headset/ UNB-2000S* is designed as stand along type and it is to be used for person's head side and must not be co-located or operating in conjunction with any other antenna or transmitter and also use of a permanently attached antenna that user a unique coupling to the intentional radiator comply with the FCC Rule according to this product's antenna type is a Chip and it's gain is 2.84dBi

the table below is excepted from Table 1B of 47 CFR 1.1310 titled Limits for Maximum Permissible Exposure (MPE), Limits for General Population /Uncontrolled Exposure

Frequency Range (MHz)	Powr Density (mW/cm <sup>2</sup> )	Averaging Time (minutes)
300 – 1 500	f/1500	30
1 500 – 10 000	1.0	30

The equipment *Bluetooth Stereo Headset/ UNB-2000S* transmits in the following frequency ranges so that the applicable limits are:

Frequency range	Limit
2 402 – 2 480 MHz	1 mW/cm <sup>2</sup>

The equipment is a Bluetooth class 0, and it's duty cycle = 1

Under conditions stated above MPE limits can be guaranteed as the calculation below shows:

Maximum conducted output power: 1.60 mW (0.00016 W) measured by test Engineer

Duty cycle: 1

Equivalent conducted output power = Maximum conducted output power x Duty cycle =  
0.00016 X 1 = 0.00016 = 1.60 mW

Maximum antenna gain (as stated in the User,s manual and test report) = 2.84 dBi (numerical gain)

∴ Using the equation:  $P \cdot G / 4 \cdot \pi \cdot R^2 = 1.60 \text{ mW} \cdot 3/4 \cdot \pi \cdot (20 \text{ cm}^2) = 0.00096 \text{ mW/cm}^2 < 1.0 \text{ mW}^2(\text{limit})$

Where,

S = power density in Mw/cm<sup>2</sup>

P = power input to the antenna in mW

G = power gain of the antenna in the direction of interest relative to an isotropic radiato

R = distance to the centre of radiation of the antenna in cm (20 cm prediction distance)