===

RF Exposure information

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

Aug 11, 2011

Attention: Reviewing Engineer
RE: RF exposure information for the equipment (*Bluetooth Stereo Headset/UM-1100*)

The device *Bluetooth Stereo Headset/ UM-1100* 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 1.0dBi

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^2)	Averaging Time (minutes)
300 – 1 500	f/1500	30
1 500 – 10 000	1.0	30

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

Frequency range   **Limit**
 2 402 – 2 480 MHz   1 mW/cm^2

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: 4.71 mW (0.00471 W) measured by test Engineer
Duty cycle: 1
Equivalent conducted output power = Maximum conducted output power x Duty cycle =
0.000471 X 1 = 0.000471 = 4.71 mW
Maximum antenna gain (as stated in the User manual and test report) = 1.0 dBi (numerical gain)

∴ Using the equation: $P.G/4.pi.R^2$ = 4.71 m W• 3/4• pi• $(20cm^2)$ =0.00283mW/cm^2‹ 1.0 mW^2(limit)

Where,
 S = power density in mW/cm^2
 P = power input to the antenna in mW
 G = power gain of the antenna in the direction of interest relative to an isotropic radiation
 R = distance to the centre of radiation of the antenna in cm (20 cm prediction distance)