

# Analysis Report

The Equipment Under Test (EUT) is a Bluetooth 2.1 version + EDR Helmet Speaker operating from 2402-2480MHz with 1MHz channel spacing. The EUT is powered by 4.5V AA batteries. After switch on the EUT and paired with smart device, Music can be played by EUT.

Antenna Type: Internal antenna

Antenna Gain: 0Bi

Nominal rated field strength: 64.5dB $\mu$ V/m at 3m

Maximum allowed field strength of production tolerance: +/- 3dB

According to the KDB 447498:

Based on the Maximum allowed field strength of production tolerance was 67.5dB $\mu$ V/m at 3m in frequency 2.4GHz, thus;

The EIRP =  $[(FS * D)^2 * 1000 / 30] = 0.002\text{mw}$

Conducted power = Radiated Power (EIRP) – Antenna Gain

So;

Conducted Power = 0.002mW.

The SAR Exclusion Threshold Level:

=  $3.0 * (\text{min. test separation distance, mm}) / \text{sqrt}(\text{freq. in}$

GHz) =  $3.0 * 5 / \text{sqrt}(2.475) \text{ mW}$

= 9.53 mW

Since the above conducted output power is well below the SAR Exclusion threshold level, so the EUT is considered to comply with SAR requirement without testing.