Analysis Report

Report No.: 18011270HKG-001

The Equipment Under Test (EUT) is a portable 2.4GHz Toy Dinosaur (Bluetooth 4.0) operating at the frequency range of 2402-2480MHz with 2 MHz channel spacing. It can be connected to the smartphone via Bluetooth. The EUT has an internal rechargeable battery (3.7VDC) and it can be charged by an USB charging cable.

Antenna Type: Internal integral antenna
Antenna Gain: 0dBi
Nominal rated field strength: 89.3dBμV/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 92.3dBμV/m at 3m in frequency 2.4GHz, thus;

The EIRP = [(FS*D) ^2*1000 / 30] = 0.509mW

Conducted power = Radiated Power (EIRP) – Antenna Gain
So;

Conducted Power = 0.509mW.

The SAR Exclusion Threshold Level:
= 3.0 * (min. test separation distance, mm) / sqrt(freq. in GHz)
= 3.0 * 5 / sqrt (2.480) 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.