Analysis Report

Report No.: 14071362HKG-001

The Equipment Under Test (EUT) is a Speed Sensor which is mounted on a baseball bat and used to measure swing speed and swing radius. The EUT can operate while connected and controlled by an IOS device (Apple iphone) via Bluetooth radio link. The EUT can only support Bluetooth 4.0 BLE. The Bluetooth portion occupies frequency range of 2402MHz to 2480MHz (40 channels with channel spacing of 2MHz). The EUT is powered by a CR2032 3.0V Lithium battery.

Antenna Type: Internal integral antenna
Antenna Gain: 0dBi
Nominal rated field strength: 91.8dBμV/m at 3m
Maximum allowed field strength of production tolerance: +/- 4dB

According to the KDB 447498:

Based on the Maximum allowed field strength of production tolerance was 95.8dBμV/m at 3m in frequency 2.4GHz, thus;

The EIRP = [(FS*D) ^2*1000 / 30] = 1.141mW

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

Conducted Power = 1.141mW.

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.