Analysis Report

Report No.: 14060199HKG-002

The Equipment Under Test (EUT) is a 2.4GHz transceiver (i.e. Receiver) for a Recon Tracker. The EUT is powered by 3.0V (1.5V X 2) AAA size battery. It is designed to operate frequency range in the 2407-2470 MHz with 1MHz channel spacing. It is a fix channel used for communication between Tracker and Receiver after pairing. It has ON/OFF switch, a Mute Key and five green LED lights. The EUT can be paired with the Tracker while they are both ON. The number of the flashing LED lights and the beeping sound can indicate the distance between the Tracker and the Receiver.

Antenna Gain: 0dBi
Nominal rated field strength: 88.8dBμV/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 91.8dBμV/m at 3m in frequency 2.4GHz, thus;

The EIRP = [(FS*D) ^2*1000 / 30] = 0.454mW

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

Conducted Power = 0.454mW.

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.