Analysis Report

Report No.: 14060199HKG-001

The Equipment Under Test (EUT) is a 2.4GHz transceiver (i.e. Tracker) for a Recon Tracker. The EUT is powered by 3.0V (3.0V X 1 CR2032) 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 and a green LED light. It can be paired with the Receiver while they are both ON. The light and beep can indicate the distance between the Tracker and the Receiver.

Antenna Gain: 0dBi
Nominal rated field strength: 78.3dBμV/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 81.3dBμV/m at 3m in frequency 2.4GHz, thus;

The EIRP = [(FS*D) ^2*1000 / 30] = 0.04mW

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

Conducted Power = 0.04mW.

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.