

Analysis Report

Report No.: 14010177HKG-002R1

The Equipment Under Test (EUT) is the marker portion of the 2.4GHz remote control system. The EUT contains an audio interface and a Purepath Wireless transceiver. The Purepath Wireless transceiver in the EUT is operating in the frequency range from 2406MHz to 2474MHz (18 channels with 4MHz channel spacing). The EUT can be powered by 1 X 3.7V rechargeable battery (Li-Poly). The EUT can accept audio signal from the audio interface. It can be transferred together with the control signal via Purepath Wireless to the base. To charge the EUT, place it into the dock of the base to start the charging process.

Antenna Type: Internal integral antenna

Antenna Gain: 3.3dBi

Production tolerance: 0dBm (Minimum) to +3.5dBm (Maximum)

According to the KDB 447498:

Based on the Maximum allowed radiated power of production tolerance was +6.8dBm in frequency 2.4GHz, thus;

Maximum radiated power (EIRP) is 4.79mW (i.e. +6.8dBm), thus;

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

Conducted Power = 2.24mW.

The SAR Exclusion Threshold Level:

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

= $3.0 * 5 / \sqrt{(2.474)}$ mW

= 9.54 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.