

Analysis Report

Report No.: 14070526HKG-001

The 10000-13(EUT) is a 2.4G Bluetooth speaker. It can pair with a Bluetooth device as the audio source. It operates at frequency range of 2402MHz-2480MHz (79 channels with 1MHz channel spacing). The EUT is powered by internal 4.3VDC Lithium polymer rechargeable battery which can be charged by 5VDC from USB port (USB port is for charging only).

Antenna Type: Internal integral antenna

Antenna Gain: 0dBi

Nominal rated field strength: 85.7 dBμV/m at 3m

Maximum allowed field strength of production tolerance: +4 to -6dB

According to the KDB 447498:

Based on the Maximum allowed field strength of production tolerance was 89.7 dBμV/m at 3m in frequency 2.4GHz, thus;

The EIRP = $[(FS \cdot D)^2 \cdot 1000 / 30]$ = 0.280mW

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

Conducted Power = 0.280mW.

The SAR Exclusion Threshold Level:

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

= $3.0 \cdot 5 / \sqrt{2.48}$ 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.