

Analysis Report

The Equipment Under Test (EUT) is a 2.4GHz Bluetooth 4.0 Camera. The EUT is powered by a 3.7V rechargeable battery pack. The Bluetooth module in the EUT is operating in the frequency range from 2402MHz to 2480MHz (40 channels with 2MHz channel spacing). After pairing with ios/Android device, the Camera can be controlled by the Application to take a photo, which can be fed back to the device.

Antenna Type: Internal antenna

Antenna Gain: 0dBi

Nominal rated field strength: 91.7 dB μ V/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 94.7dB μ V/m at 3m in frequency 2.4GHz, thus;

The EIRP = $[(FS * D)^2 * 1000 / 30] = 0.885mW$

Conducted power = Radiated Power (EIRP) – Antenna Gain

So;

Conducted Power = 0.885mW.

The SAR Exclusion Threshold Level:

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

= $3.0 * 5 / \text{sqrt}(2.480) \text{ mW}$

= 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.