

Analysis Report

The Equipment Under Test (EUT) is a Gameaugmented Reality Laser with Bluetooth 4.0 BLE only function. The Bluetooth module in the EUT is operating in the frequency range from 2402MHz to 2480MHz (40 channels with 2MHz channel spacing). The EUT can be connected with an iPhone so than it can control the movement and fire in the Apps.

The EUT is powered by 2 x 1.5V AAA batteries power supply.

The Model: 1005959, 1007075, 1008634, 1006350 and 1006790 are the same as the Model: 1006041 in hardware aspect. The difference in model number serves as marketing strategy. The models are different in model number and brand name only.

Antenna Type: Internal, Integral

For electronic filing, the brief circuit description is saved with filename: descri.pdf.

Antenna Type: Internal antenna

Antenna Gain: 0dBi

Nominal rated field strength is 97.3 dB μ V/m at 3m

Maximum allowed production tolerance: +/- 3dB

According to the KDB 447498:

Based on the Maximum allowed field strength of production tolerance was 100.3dB μ V/m at 3m in frequency 2.480GHz, thus;

The EIRP = $[(FS^*D)^2 * 1000 / 30] = 3.22\text{mW}$

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

Conducted Power = 3.22 mW .

The SAR Exclusion Threshold Level:

$$\begin{aligned} &= 3.0 * (\text{min. test separation distance, mm}) / \text{sqrt(freq. in GHz)} \\ &= 3.0 * 5 / \text{sqrt}(2.480) \text{ mW} \\ &= 9.53 \text{ mW} \end{aligned}$$

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.