

## Analysis Report

The Equipment Under Test (EUT), is a portable 2.4GHz Bluetooth 4.0 BLE Toy (Rabbit Unit) for a RC Rabbit toy. The sample supplied operated on 40 channels, normally at 2402 - 2480MHz. The channels are separated with 2MHz spacing.

The EUT is powered by 3 x 1.5V AAA batteries. After switching on the EUT, the rabbit starts talking and glowing lights based on the buttons pressed on the smartphone app controller.

Antenna Type: Internal, Integral antenna

Antenna Gain: 0dBi

Nominal rated field strength is 95.1dB $\mu$ V/m at 3m (Peak), 92.9dB $\mu$ V/m at 3m (Average)

Maximum allowed production tolerance: +/- 3dB

According to the KDB 447498:

Based on the maximum average field strength of production tolerance was 95.9dB $\mu$ V/m at 3m in frequency 2.480GHz.

Thus, it below calculated field strength according to minimum SAR exclusion threshold level as follows:

The worst case of SAR Exclusion Threshold Level:

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

= 3.0 \* 5 / sqrt (2.483.5) mW

= 9.52 mW

According to the KDB 412172 D01:

EIRP = [(FS\*D) ^2\*1000 / 30]

Calculated Field Strength for 9.52mW is 105dBuV/m @3m

Since maximum average field strength plus production tolerance < = 105dBuV/m @3m and antenna gain is > = 0.0dBi, it is concluded that maximum Conducted Power and Field Strength are well below the SAR Exclusion threshold level, so the EUT is considered to comply with SAR requirement without testing.