# Analysis Report

The Equipment Under Test (EUT) is a 2.4GHz Transceiver (app-controlled robot), which is powered by 3.7V rechargeable battery, operating at the frequency range of 2402-2480MHz with 2MHz channel spacing. The EUT is supposed to pair the mobile app via BLE and then be controlled to move by the app.

Antenna Type: Internal integral antenna
Antenna Gain: 0dBi
Nominal rated field strength: 83.8dBμV/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 86.8dBμV/m at 3m in frequency 2.4GHz, thus;

The EIRP = [(FS*D) ^2*1000 / 30] = 0.144mW

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

Conducted Power = 0.144mW.

The SAR Exclusion Threshold Level:
= 3.0 * (min. test separation distance, mm) / sqrt(freq. in GHz)
= 3.0 * 5 / sqrt (2.480) 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.