

The Equipment Under Test (EUT) is a 2.4GHz Transmitter (Hulk Left Hand). The EUT is powered by 2 x 1.5V AA batteries. The 2.4GHz module is operating at the frequencies (2420, 2423, 2427, 2430, 2433, 2435, 2447 and 2449) MHz (8 channels). The EUT contains two impact buttons and one shake switch, when the EUT is powered on, there will be a RF signal out while the impact button or the shake switch is activated, the (Hulk Right Hand) then receive the signal and burst out the sound effect through the speaker.

Antenna Type: Internal antenna

Antenna Gain: 0dBi

Nominal rated field strength: 92.2 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 95.2dB μ V/m at 3m in frequency 2.4GHz, thus;

The EIRP = $[(FS \cdot D)^2 \cdot 1000 / 30] = 0.993\text{mW}$

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

Conducted Power = 0.993mW.

The SAR Exclusion Threshold Level:

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

= $3.0 \cdot 5 / \sqrt{2.480} \text{ mW}$

= 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.