

Analysis Report

The Equipment Under Test (EUT), is a portable 2.4GHz Transceiver (Portable monster Unit) for a RC monster. The operation frequency range is between 2423MHz and 2463MHz with following 4 channels used.

Channel	Frequency (MHz)
1	2423
2	2443
3	2458
4	2463

The EUT is powered by 3 x 1.5V AA batteries.

After switching on the EUT, the monster will have sound function, recording function and walkie talkie function based on the switches pressed in the controller.

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 96.3 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 99.3dB μ V/m at 3m in frequency 2.463GHz, thus;

The EIRP = $[(FS * D)^2 * 1000 / 30] = 2.55mW$

Conducted power = Radiated Power (EIRP) – Antenna Gain

So;

Conducted Power = 2.55mW.

The SAR Exclusion Threshold Level:

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

= $3.0 * 5 / \text{sqrt}(2.463) \text{ mW}$

= 9.56 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.