

RF Exposure Requirements

Product Description: RL ED HERO WALKIE TALKIE SET

Model No.: 01382373

FCC ID: 2AMQ901382399

According to the KDB 447498 D01 V06, clause 4.3, the following RF exposure evaluation shall to demonstrate RF exposure compliance.

27 MHz

Tx frequency: 27.145 MHz Type of Modulation: AM

Antenna Type: Integral antenna (Gain: 0 dBi)

Nominal rated field strength: 50.95 dB μ V/m at 3m

Maximum allowed field strength of production tolerance: +/- 3dB

Based on the Maximum allowed field strength of production tolerance was 53.95 dB μ V/m at 3m in frequency 27.145MHz, thus;

The EIRP = $[(FS \cdot D)^2 \cdot 1000 / 30] = 0.0001\text{mW}$

Thus;

Conducted power = Radiated Power (EIRP) – Antenna Gain

So;

Conducted Power = 0.0001mW.

The SAR Exclusion Threshold Level for 27.145MHz when the minimum test separation distance is < 50mm:

$$= [474 * (1 + \log_{10}(f(\text{MHz}))) / 2]$$

$$= 371.2\text{mW}$$

Since the source-based time-averaging conducted output power is well below the SAR low threshold level, so the EUT is considered to comply with SAR requirement without testing.