

RF Exposure Requirements

Product Description: Orasaifu

Model No.: Ora

FCC ID: 2AQA2-ORA

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

13.56 MHz

Tx frequency: 13.56 MHz Type of Modulation: ASK

Antenna Type: Integral antenna (Gain: 0 dBi)

Nominal rated field strength: 50 dB μ V/m at 3m

Maximum allowed field strength of production tolerance: +/- 1dB

Based on the Maximum allowed field strength of production tolerance was 51 dB μ V/m at 3m in frequency 13.56MHz, thus;

The EIRP = $[(FS \cdot D)^2 \cdot 1000 / 30] = 0 \text{ mW}$

Thus;

Conducted power = Radiated Power (EIRP) – Antenna Gain

So;

Conducted Power = 0 mW.

The SAR Exclusion Threshold Level for 13.56MHz when the minimum test separation distance is < 50mm:

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

$$= 443\text{mW}$$

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.