

INTERTEK TESTING SERVICES

RF Exposure

The Equipment Under Test (EUT) is a Remote operating at 868.35MHz. The EUT is powered by DC 3V button battery. For more detailed features description, please refer to the user's manual.

Antenna Type: PCB antenna.

Antenna Gain: -16.16dBi.

Modulation Type: FSK.

The nominal conducted output power specified: -15.54dBm (Tolerance: +/-1dB)

The nominal radiated output power (e.i.r.p) specified: -27dBm (Tolerance: +/-1dB).

Note:

the appropriate maximum ground reflection factor to the EIRP (6 dB for frequencies ≤ 30 MHz; 4.7 dB for frequencies between 30 MHz and 1000 MHz, inclusive; and 0 dB for frequencies >1000 MHz).

$$E = \text{EIRP} - 20 \log d + 104.8$$

where

E is the electric field strength in dB μ V/m

EIRP is the equivalent isotropically radiated power in dBm

d is the specified measurement distance in m

According to the KDB 447498 D04 v01:

The peak radiated emission for the EUT is 67.8dB μ V/m at 3m in the frequency 868.35MHz

The EIRP = 67.8 - 95.2 dBm = -27.4dBm

which is within the production variation.

The maximum conducted output power specified is -14.54dBm = 0.035 mW

The source-based time-averaging conducted output power = 0.035 mW

1-mW Test Exemption:

Since the source-based time-averaging conducted output power is well below 1-mW Test Exemption, per KDB 447498 D04 v01 and §1.1307 (b) (3) (i) (A), the EUT is considered to comply with SAR requirement without testing and no evaluation is required.