

INTERTEK TESTING SERVICES

RF Exposure

The equipment under test (EUT) is a Smart Bracelet with Bluetooth function. The EUT was powered by DC 3.7V, 55mAh rechargeable battery. For more detail information pls. refer to the user manual.

Modulation Type: GFSK.

Bluetooth Version: 4.0.

Antenna Type: Integral antenna.

Antenna Gain: 0dBi.

The nominal conducted output power specified: 2dBm +/-3dB.

The nominal radiated output power (e.i.r.p) specified: 2dBm (+/- 3dB)

According to the KDB 447498:

The maximum peak radiated emission for the EUT is 98.5dBμV/m at 3m in the frequency 2480MHz

The EIRP = $[(FS \cdot D)^2 / 30]$ mW = 3.3dBm
which is within the production variation.

The minimum peak radiated emission for the EUT is 95.1dBμV/m at 3m in the frequency 2402MHz

The EIRP = $[(FS \cdot D)^2 / 30]$ mW = -0.1dBm
which is within the production variation.

The maximum conducted output power specified is 5.0dBm = 3.2mW

The source- based time-averaging conducted output power
= $3.2 \cdot \text{Duty factor}$ mW (where Duty Factor ≤ 1)
 $\leq 3.2\text{mW}$

The SAR Exclusion Threshold Level:

= $3.0 \cdot (\text{min. test separation distance, mm}) / \sqrt{\text{freq. in GHz}}$
= $3.0 \cdot 5 / \sqrt{2.480}$ mW
= 9.53 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.