

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 98.5dB μ V/m at 3m in the frequency 2480MHz

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

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

The EIRP = $[(FS * D)^2 / 30]$ 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 * Duty factor mW (where Duty Factor \leq 1)
 \leq 3.2mW

The SAR Exclusion Threshold Level:

= 3.0 * (min. test separation distance, mm) / sqrt(freq. in GHz)
= 3.0 * 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.