

## RF Exposure

The equipment under test (EUT) is a Smart Lock with 2.4GHz zigbee 3.0 function operating in 2405-2480MHz. The EUT is powered by DC 6V(4\*1.5V AA battery). For more detail information pls. refer to the user manual.

### Version: Zigbee 3.0

Antenna Type: Integral antenna

Modulation Type: OQPSK

Antenna Gain: 4dBi Max

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

The nominal radiated output power (e.i.r.p) specified: 7dBm (+/-2dB)

According to the KDB 447498:

The maximum peak radiated emission for the EUT is 104.0dBμV/m at 3m in the frequency 2405MHz

The EIRP =  $[(FS \cdot D)^2 / 30]$  mW = 8.77dBm  
which is within the production variation.

The minimum peak radiated emission for the EUT is 103.1dBμV/m at 3m in the frequency 2480MHz

The EIRP =  $[(FS \cdot D)^2 / 30]$  mW = 7.87dBm  
which is within the production variation.

The maximum conducted output power specified is 5 dBm = 3.16 mW

The source- based time-averaging conducted output power  
= 3.16 \* Duty factor mW (where Duty Factor  $\leq 1$ )  
= 3.16 mW

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.