

## INTERTEK TESTING SERVICES

### RF Exposure

The equipment under test (EUT) is a Smart Anti-Snore Pillow with Bluetooth(BLE mode) function operating in 2402-2480MHz, 2.4G Wi-Fi function operating in 2412MHz~2462MHz. The EUT is powered by DC 5V/2A from adapter. For more detail information pls. refer to the user manual.

| TestMode  | Antenna | Frequency (MHz) | Average Conducted Power[dBm] | Gain [dBi] | ERP [dBm] |
|-----------|---------|-----------------|------------------------------|------------|-----------|
| BLE       | Ant1    | 2402            | 7.11                         | 3.4        | 9.89      |
|           |         | 2440            | 6.66                         | 3.4        | 9.44      |
|           |         | 2480            | 6.04                         | 3.4        | 8.82      |
| 11B       | Ant1    | 2412            | 17.2                         | 3.4        | 18.45     |
|           |         | 2437            | 16.6                         | 3.4        | 17.85     |
|           |         | 2462            | 16.2                         | 3.4        | 17.45     |
| 11G       | Ant1    | 2412            | 14.9                         | 3.4        | 16.15     |
|           |         | 2437            | 14.4                         | 3.4        | 15.65     |
|           |         | 2462            | 14                           | 3.4        | 15.25     |
| 11N20SISO | Ant1    | 2412            | 15                           | 3.4        | 16.25     |
|           |         | 2437            | 14.4                         | 3.4        | 15.65     |
|           |         | 2462            | 14.1                         | 3.4        | 15.35     |
| 11N40SISO | Ant1    | 2422            | 14.3                         | 3.4        | 15.55     |
|           |         | 2437            | 13.8                         | 3.4        | 15.05     |
|           |         | 2452            | 13.6                         | 3.4        | 14.85     |

#### BLE

Antenna Type: Internal antenna

Modulation Type: GFSK

Antenna Gain: 3.4dBi

Bluetooth Version: 4.2 BLE (Single Mode)

The nominal Average conducted output power specified: 6 dBm ( $\pm 2$ dB)

According to the KDB 447498 V07:

The maximum Average conducted output power for the EUT is 7.11dBm in the frequency 2.402GHz which is within the production variation.

The minimum Average conducted output power for the EUT is 6.04dBm in the frequency 2.480GHz which is within the production variation.

The maximum Average conducted output power specified is 8.0 dBm = 6.310mW

The maximum ERP specified is dBm  $8.0 - 2.15\text{dB} + 3.4\text{dBi} = 9.25\text{dBm} = 8.41\text{mW}$

## 2.4G WIFI

Antenna Type: Internal Antenna.

2.4G Wi-Fi: Antenna: 3.4 dBi.

Modulation Type: BPSK, QPSK, 16QAM, 64QAM for OFDM, CCK, DQPSK, DBPSK for DSSS.

The nominal Average conducted output power specified: 15dBm (Tolerance: +/-3dB).

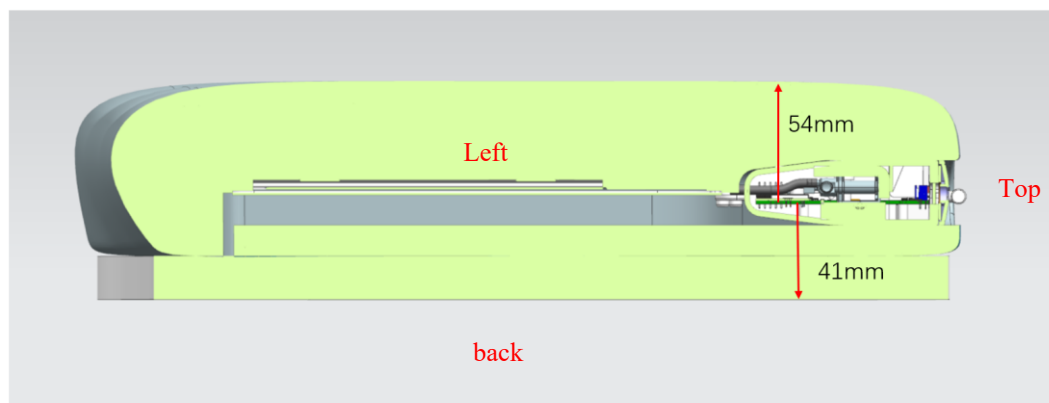
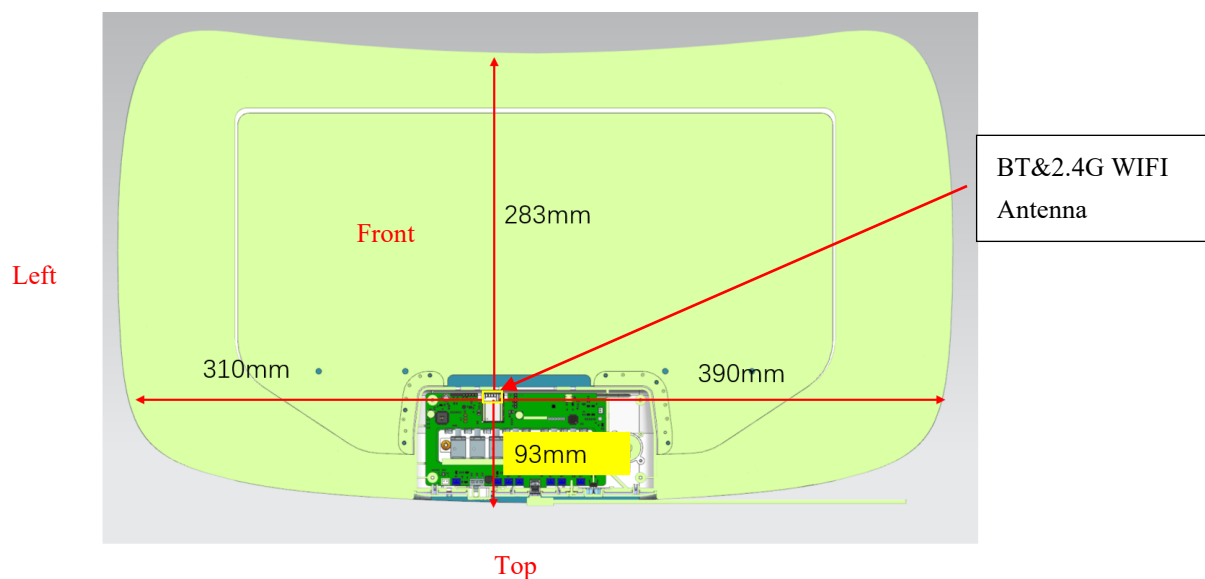
According to the KDB 447498 V07:

The maximum time-averaged conducted output power for the EUT is 17.2dBm in the frequency 2.412GHz(11b) which is within the production variation.

The minimum time-averaged conducted output power for the EUT is 13.6dBm in the frequency 2.452GHz(11N40 SISO) which is within the production variation.

The maximum Average conducted output power 18.0 dBm= 63.096mW specified is

The maximum ERP specified is dBm 18.0- 2.15dB + 3.4dBi = 19.25dBm = 84.14mW



**Distance to the host shell:**

Distance from BT&amp;2.4G WIFI ANT to Front Side: 54mm

Distance from BT&amp;2.4G WIFI ANT to back Side: 41mm

Distance from BT&amp;2.4G WIFI ANT to Top Side: 93mm

Distance from BT&amp;2.4G WIFI ANT to Bottom Side: 283mm

Distance from BT&amp;2.4G WIFI ANT to Left Side: 310mm

Distance from BT&amp;2.4G WIFI ANT to Right Side: 390mm

| Mode      | Location    | Distance from ANT (mm) | Max. tune-up Power (mW) | Exemption with Max. Allowed Power (1g,mW) | SAR Test |
|-----------|-------------|------------------------|-------------------------|-------------------------------------------|----------|
| BLE       | Front Side  | 54                     | 8.41mW                  | 219                                       | N/A      |
|           | Back Side   | 41                     |                         | 143                                       | N/A      |
|           | Top Side    | 93                     |                         | >219                                      | N/A      |
|           | Bottom Side | 283                    |                         | >219                                      | N/A      |
|           | Left Side   | 310                    |                         | >219                                      | N/A      |
|           | Right Side  | 390                    |                         | >219                                      | N/A      |
| 2.4G WIFI | Front Side  | 54                     | 84.14mW                 | 219                                       | N/A      |
|           | Back Side   | 41                     |                         | 143                                       | N/A      |
|           | Top Side    | 93                     |                         | >219                                      | N/A      |
|           | Bottom Side | 283                    |                         | >219                                      | N/A      |
|           | Left Side   | 310                    |                         | >219                                      | N/A      |
|           | Right Side  | 390                    |                         | >219                                      | N/A      |

Since max. time-averaged conducted output power and effective radiated power (ERP) is well below the SAR low threshold level, so the EUT is considered to comply with SAR requirement without testing.