


# RF EXPOSURE REPORT

## FOR

|                             |   |  |
|-----------------------------|---|--|
| <b>Applicant</b>            | : | DONGGUAN MORITAKE INDUSTRIAL CO.,LTD   |
| <b>Address</b>              | : | Building B, no. 68, xixing third street, changping town,<br>dongguan city, dongguan, China                             |
| <b>Equipment under Test</b> | : | Water Bottle with Wireless Speaker   |
| <b>Model No.</b>            | : | AI6005-BLK, AI6005-TL, AI6005-BUR, AI6005-NVY,<br>AI9003-BLK, AI9003-TL, AI9003-BUR, AI9003-NVY,<br>AI6005-XXX (X=A-Z) |
| <b>Trade Mark</b>           | : |                                     |
| <b>FCC ID</b>               | : | 2AWEN-AI6005   |
| <b>Manufacturer</b>         | : | DONGGUAN MORITAKE INDUSTRIAL CO.,LTD   |
| <b>Address</b>              | : | Building B, no. 68, xixing third street, changping town,<br>dongguan city, dongguan, China                             |

**Issued By: Dongguan Dongdian Testing Service Co., Ltd.**

**Add.:** No. 17, Zongbu Road 2, Songshan Lake Sci&Tech, Industry Park,  
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# REPORT

## Table of Contents

|      |                                     |   |
|------|-------------------------------------|---|
|      | Test report declares.....           | 3 |
| 1.   | General Information .....           | 5 |
| 1.1. | Description of equipment .....      | 5 |
| 1.2. | Assess laboratory.....              | 5 |
| 2.   | RF Exposure evaluation for FCC..... | 5 |

## Test Report Declare

|                             |   |  |
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| <b>Address</b>              | : | Building B, no. 68, xixing third street, changping town, dongguan city, dongguan, China                                |

**Standard Used:** KDB447498 D01 General RF Exposure Guidance v06

**We Declare:**

The equipment described above is assessed by Dongguan Dongdian Testing Service Co., Ltd. and in the configuration assessed the equipment complied with the standards specified above. The assessed results are contained in this report and Dongguan Dongdian Testing Service Co., Ltd. is assumed of full responsibility for the accuracy and completeness of these assess.

**After evaluation, our opinion is that the equipment In Accordance with above standard.**

|                         |                    |                      |                               |
|-------------------------|--------------------|----------------------|-------------------------------|
| <b>Report No:</b>       | DDT-R22070901-1E02 |                      |                               |
| <b>Date of Receipt:</b> | Jul. 11, 2022      | <b>Date of Test:</b> | Jul. 11, 2022 ~ Jul. 28, 2022 |

**Prepared By:**

*Ella Gong*

**Ella Gong/Engineer**

**Approved By:**



**Damon Hu/EMC Manager**

Note: This report applies to above tested sample only. This report shall not be reproduced in parts without written approval of Dongguan Dongdian Testing Service Co., Ltd.

### Revision History

| Rev. | Revisions     | Issue Date    | Revised By |
|------|---------------|---------------|------------|
| ---  | Initial issue | Jul. 28, 2022 |            |
|      |               |               |            |

## 1. General Information

### 1.1. Description of equipment

|                          |   |
|--------------------------|---|
| EUT* Name                | : Water Bottle with Wireless Speaker  |
| Model Number             | : AI6005-BLK, AI6005-TL, AI6005-BUR, AI6005-NVY, AI9003-BLK, AI9003-TL, AI9003-BUR, AI9003-NVY, AI6005-XXX (X=A-Z)  |
| Difference of models     | : Above models are identical in schematic and structure, only the model number and color are different, therefore the test performed on the model AI6005-BLK. |
| EUT function description | : Please reference user manual of this device   |
| Power Supply             | : DC 5V from external AC Adapter<br>: DC 3.7V 350mAH Lithium Ion Battery  |
| Radio Specification      | : Bluetooth V5.1  |
| Operation Frequency      | : 2402 MHz - 2480 MHz   |
| Modulation               | : GFSK, $\pi/4$ -DQPSK, 8DPSK   |
| Data Rate                | : 1 Mbps, 2 Mbps, 3 Mbps  |
| Antenna Gain             | : Maximum PK gain: -0.68 dBi  |
| Sample Number            | : S22070901-02  |

### 1.2. Assess laboratory

Dongguan Dongdian Testing Service Co., Ltd.

Add.: No. 17, Zongbu Road 2, Songshan Lake Sci&Tech, Industry Park, Dongguan City, Guangdong Province, China, 523808.

Tel.: +86-0769-38826678, <http://www.dgddt.com>, Email: [ddt@dgddt.com](mailto:ddt@dgddt.com).

CNAS Accreditation No. L6451; A2LA Accreditation Number: 3870.01

FCC Designation Number: CN1182, Test Firm Registration Number: 540522

Innovation, Science and Economic Development Canada Site Registration Number: 10288A

Conformity Assessment Body identifier: CN0048

VCCI facility registration number: C-20087, T-20088, R-20123, G-20118

## 2. RF Exposure evaluation for FCC

According to 447498 D01 General RF Exposure Guidance v06

The 1-g and 10-g SAR test exclusion thresholds for 100 MHz to 6 GHz at test separation distances  $\leq 50$  mm are determined by:

$$[(\text{max. power of channel, including tune-up tolerance, mW})/(\text{min. test separation distance, mm})] \cdot [\sqrt{f(\text{GHz})}] \leq 3.0 \text{ for 1-g SAR and } \leq 7.5 \text{ for 10-g extremity SAR, where:}$$

$f(\text{GHz})$  is the RF channel transmit frequency in GHz

Power and distance are rounded to the nearest mW and mm before calculation

The result is rounded to one decimal place for comparison

**BT Manufacturing Tolerance**

| GFSK (Peak)     |           |            |              |
|-----------------|-----------|------------|--------------|
| Channel         | Channel 0 | Channel 39 | Channel 78   |
| Target (dBm)    | -11.59    | -10.68     | -10.22       |
| Tolerance ±(dB) | 1         | 1          | 1            |
| π/4DQPSK (Peak) |           |            |              |
| Channel         | Channel 0 | Channel 39 | Channel 78   |
| Target (dBm)    | -11.10    | -10.22     | -9.79        |
| Tolerance ±(dB) | 1         | 1          | 1            |
| 8DPSK (Peak)    |           |            |              |
| Channel         | Channel 0 | Channel 39 | Channel 78   |
| Target (dBm)    | -10.61    | -9.73      | <b>-9.28</b> |
| Tolerance ±(dB) | 1         | 1          | 1            |

**Estimtion Result**

Worse case is as below: [2480 MHz, -8.28 dBm (0.15 mW) output power]

$(0.15/5) \cdot [\sqrt{2.480(\text{GHz})}] = 0.05 < 3.0$  for 1-g SAR

Then SAR evaluation is not required.

**END OF REPORT**