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# RF Exposure Evaluation Report

Under :  
47 CFR Part 2.1093  
KDB447498 D01 General RF Exposure Guidance v06

Prepared For:  
**YEALINK (XIAMEN) NETWORK  
TECHNOLOGY CO., LTD.**  
309, 3rd Floor, No.16, Yun Ding North Road, Huli District, Xiamen City, Fujian, China

|                                  |
|----------------------------------|
| <b>FCC ID: T2C-BT42</b>          |
| <b>EUT: Bluetooth USB Dongle</b> |
| <b>Model: BT42</b>               |

|  |
|--|
| July 29, 2019<br><b>Issue Date:</b>  |
| Original Report<br><b>Report Type:</b>   |
| <br><b>Test Engineer: Jacky Huang</b>       |
| <br><b>Review By: Apollo Liu / Manager</b> |

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**Report Revision History**

| <b>Report #</b>  | <b>Version</b> | <b>Description</b>      | <b>Issued Date</b> |
|------------------|----------------|-------------------------|--------------------|
| KSZ2019062702J02 | Rev.01         | Initial issue of report | July 29, 2019      |

## 1. General Information

### 1.1 Notes

The test results of this report relate exclusively to the test item specified in 1.6. The KMO Lab does not assume responsibility for any conclusions and generalizations drawn from the test results with regard to other specimens or samples of the type of the equipment represented by the test item. The test report may only be reproduced or published in full. Reproduction or publication of extracts from the report requires the prior written approval of the KMO Lab.

### 1.2 Testing Laboratory

|  |   |
|--|---|
| <b>Test Firm Name:</b>   | <b>Ke Mei Ou Lab Co., Ltd.</b>  |
| <b>Test Firm Address:</b>  | 2013-2016, 20th Floor, Business Center, Jiahui Xin Cheng, No 3027, Shen Nan Road, Fu Tian, Shen Zhen, Guang Dong, P. R. China |
| <b>FCC Designation Number:</b>   | CN1532  |
| <b>Test Firm Registration Number:</b>  | 344480  |
| <b>Internet:</b>   | <a href="http://www.kmolab.com">www.kmolab.com</a>  |
| <b>Email:</b>  | <a href="mailto:kmo@kmolab.com">kmo@kmolab.com</a>  |
| ANSI-ASQ National Accreditation Board/ACLASS ISO/IEC 17025 Accredited Lab for telecommunication standards. The Registration Number is AT-1532. The testing quality system meets with ISO/IEC-17025 requirements, This approval results is accepted by MRA of ILAC. |   |

### 1.3 Detail. 3 Details of Applicant

**Name:** YEALINK (XIAMEN) NETWORK TECHNOLOGY CO., LTD.  
**Address:** 309, 3rd Floor, No.16, Yun Ding North Road, Huli District, Xiamen City, Fujian, China

### 1.4 Application Details

**Date of Receipt of Application:** June 27, 2019  
**Date of Receipt of Test Item:** July 4, 2019  
**Date of Test :** July 4~July 23, 2019

### 1.5 Details of Manufacturer

**Name:** Same as applicant  
**Address:** Same as applicant

### 1.6 Test Item

| EUT Feature  |  |
|--|--|
| <b>EUT Description:</b>  | Bluetooth USB Dongle   |
| <b>Brand Name:</b>   | Yealink  |
| <b>Model Name:</b>   | BT42   |
| <b>EUT RF Technology:</b>  | <input checked="" type="checkbox"/> Bluetooth BT <input type="checkbox"/> Bluetooth v4.0 LE <input type="checkbox"/> Bluetooth v4.2 LE<br><input type="checkbox"/> Bluetooth v5.0 LE |
| <b>HW Version:</b>   | WF50V  |
| <b>SW Version:</b>   | BT42   |
| <b>EUT Stage:</b>  | <input checked="" type="checkbox"/> Identical Prototype <input type="checkbox"/> Production  |
| Note: The above EUT's information was declared by manufacturer. Please refer to the specifications or user's manual for more detailed description. |  |

#### Additional Information

| Standard Product Specification           |  |
|--|--|
| <b>Tx/Rx Frequency Range</b>             | 2402~2480 MHz  |
| <b>Number of Channels</b>                | 79   |
| <b>Carrier Frequency of Each Channel</b> | f=2402+k MHz (k=0,1,2,...,78)  |
| <b>Antenna Type / Gain</b>               | Internal PCB Antenna / gain 3 dBi  |
| <b>Type of Modulation</b>                | Bluetooth BR 1Mbps: GFSK<br>Bluetooth EDR 2Mbps: $\pi/4$ -DQPSK<br>Bluetooth EDR 3Mbps: 8DPSK  |
| <b>EUT Operational Condition</b>         | <input type="checkbox"/> AC<br><input checked="" type="checkbox"/> DC → <input type="checkbox"/> From Battery <input checked="" type="checkbox"/> External AC adapter <input type="checkbox"/> POE <input checked="" type="checkbox"/> PC<br><input type="checkbox"/> Li-ion battery |

## 1.7 Applicable Standards

| <b>Applicable Standards</b>  |
|--|
| According to the specifications of the manufacturer, the EUT must comply with the requirements of the following standards:<br>47 CFR Part 2.1093<br>KDB447498 D01 General RF Exposure Guidance v06 |
| Note: All test items were verified and recorded according to the standards and without any deviation during the test.  |

## 2. Technical Test

### 2.1 Summary of Test Results

The EUT has been tested according to the following specifications:

| FCC Rules                     | Test Type     | Limit  | Result | Notes     |
|-------------------------------|---------------|--|--------|-----------|
| KDB 447498 Section:<br>4.3.1. | SAR Exclusion | $\leq 3.0$ for 1-g SAR, and<br>$\leq 7.5$ for 10-g<br>extremity SAR, | PASS   | Complies. |

### 3. EUT Modifications

No modification by test lab.

## 4. General SAR test exclusion guidance

### 4.1\_4.3.1 Standalone SAR test exclusion considerations (FCC)

Unless specifically required by the published RF exposure KDB procedures, standalone 1-g head or body and 10-g extremity SAR evaluation for general population exposure conditions, by measurement or numerical simulation, is not required when the corresponding SAR Test Exclusion Threshold condition(s), listed below, is (are) satisfied.

### 4.2\_4.3.1 RF Exposure Requirements

| <b>RF Exposure Requirements</b>   |
|---|
| <p>a) For 100 MHz to 6 GHz and test separation distances <math>\leq 50</math> mm, the 1-g and 10-g SAR test exclusion thresholds are determined by the following:<br/> <math>[(\text{max. power of channel, including tune-up tolerance, mW}) / (\text{min. test separation distance, mm})] \cdot [\sqrt{f(\text{GHz})}] \leq 3.0</math> for 1-g SAR, and <math>\leq 7.5</math> for 10-g extremity SAR,<sup>30</sup> where</p> <ul style="list-style-type: none"> <li>● <math>f(\text{GHz})</math> is the RF channel transmit frequency in GHz</li> <li>● Power and distance are rounded to the nearest mW and mm before calculation<sup>31</sup></li> <li>● The result is rounded to one decimal place for comparison</li> <li>● The values 3.0 and 7.5 are referred to as numeric thresholds in step b) below</li> </ul> <p>The test exclusions are applicable only when the minimum test separation distance is <math>\leq 50</math> mm, and for transmission frequencies between 100 MHz and 6 GHz. When the minimum test separation distance is <math>&lt; 5</math> mm, a distance of 5 mm according to 4.1 f) is applied to determine SAR test exclusion.</p> |

### 4.3 Conclusion

|                                     |  |
|-------------------------------------|--|
| <input checked="" type="checkbox"/> | During normal operation, user extremities can come within 20 cm of the internal antenna and therefore product is considered as “Portable”. |
|-------------------------------------|--|

| <b>Compliance with FCC Rules</b> |  |                             |                        |                            |
|----------------------------------|--|-----------------------------|------------------------|----------------------------|
| <b>Mode/Band</b>                 | <b>Maximum tune-up Conducted Power (dBm)</b> | <b>Test Separation (mm)</b> | <b>Calculate Value</b> | <b>Exclusion Threshold</b> |
| 2402~2480MHz<br>CH00_2402MHz     | 3.92   | 5                           | 0.76                   | 3.0                        |

-----End of Report-----