



## FCC RF EXPOSURE REPORT

<b>Applicant</b>	:	ION Audio, LLC
<b>Address of Applicant</b>	:	200 Scenic View Drive, Cumberland, RI 02864, U.S.A.
<b>Manufacturer</b>	:	ION Audio, LLC
<b>Address of Manufacturer</b>	:	200 Scenic View Drive, Cumberland, RI 02864, U.S.A.
<b>Equipment under Test</b>	:	Wireless Microphone
<b>Model No.</b>	:	IUV4
<b>FCC ID</b>	:	2AB3E-IUV4
<b>Test Standard(s)</b>	:	KDB447498 D01 General RF Exposure Guidance v06
<b>Report No.</b>	:	DDT-RE23092205-2E07
<b>Issue Date</b>	:	2023/11/23
<b>Issue By</b>	:	Guangdong Dongdian Testing Service Co., Ltd.
<b>Address of Laboratory</b>	:	Unit 2, Building 1, No. 17, Zongbu 2nd Road, Songshan Lake Park, Dongguan, Guangdong, China, 523808

# 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 ..... 6

## Test Report Declare

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<b>Manufacturer</b>	:	ION Audio, LLC
<b>Address of Manufacturer</b>	:	200 Scenic View Drive, Cumberland, RI 02864, U.S.A.

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

**We Declare:**

The equipment described above is assessed by Guangdong 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 Guangdong 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-RE23092205-2E07		
<b>Date of Receipt:</b>	2023/10/16	<b>Date of Test:</b>	2023/10/16 ~ 2023/11/22

**Prepared By:**

**Approved By:**

*Tiger Mo*

**Tiger Mo/Engineer**

*Damon Hu*

**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 Guangdong Dongdian Testing Service Co., Ltd.

## Revision History

Rev.	Revisions	Issue Date	Revised By
---	Initial issue	2023/11/23	

## 1. General Information

### 1.1. Description of equipment

EUT Name	: Wireless Microphone
Model Number	: IUV4
EUT Function Description	: Please reference user manual of this device
Power Supply	: Battery 1.5V*2(Size: AA)
Radio Specification	: Bluetooth V5.0 (BR/EDR)
Operation Frequency	: Bluetooth (BR/EDR): 2402 MHz-2480 MHz
Modulation	: Bluetooth BR/EDR: GFSK, $\pi/4$ -DQPSK, 8DPSK
Data Rate	: 1 Mbps
Antenna	: PCB antenna, maximum PK gain: 0 dBi
Sample Number	: S23092205-04

### 1.2. Assess laboratory

Guangdong Dongdian Testing Service Co., Ltd.

Unit 2,Building 1,No.17,Zongbu 2nd Road, Songshan Lake Park, Dongguan, Guangdong, 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, R-20155, 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:

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

### Manufacturing Tolerance

BT

GFSK (Peak)			
Channel	Channel 0	Channel 39	Channel 78
Target (dBm)	2.15	3.05	0.76
Tolerance $\pm$ (dB)	2	2	2
$\pi/4$ DQPSK (Peak)			
Channel	Channel 0	Channel 39	Channel 78
Target (dBm)	1.89	2.83	0.68
Tolerance $\pm$ (dB)	2	2	2
$\pi/4$ DQPSK (Peak)			
Channel	Channel 0	Channel 39	Channel 78
Target (dBm)	2.35	3.23	0.88
Tolerance $\pm$ (dB)	2	2	2

### Estimation Result

Worse case is as below: [2441 MHz, 5.23 dBm, (3.33 mW) output power]

$(3.33/5) \cdot [\sqrt{2.441(\text{GHz})}] = 1.04 < 3.0$  for 1-g SAR

Then SAR evaluation is not required.

### END OF REPORT