



RF EXPOSURE REPORT

Applicant	:	ION Audio LLC
Address of Applicant	:	200 Scenic View Drive, Suite 201 Cumberland, RI 02864, U.S.A.
Manufacturer	:	ION Audio LLC
Address of Manufacturer	:	200 Scenic View Drive, Suite 201 Cumberland, RI 02864, U.S.A.
Equipment under Test	:	FLOATING BLUETOOTH SPEAKER
Model No.	:	WAVE RIDER™ X, ISP181, WAVE***** ISP181*****
Project Code	:	iSP181
FCC ID	:	2AB3E-ISP181
Test Standard(s)	:	KDB447498 D01 General RF Exposure Guidance v06
Report No.	:	DDT-RE24082314-1E03
Issue Date	:	2024/11/13
Issue By	:	Guangdong Dongdian Testing Service Co., Ltd. Unit 2, Building 1, No. 17, Zongbu 2nd Road, Songshan Lake Park, Dongguan, Guangdong, China, 523808

REPORT

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Test Report Declare

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Manufacturer	:	ION Audio LLC
Address of Manufacturer	:	200 Scenic View Drive, Suite 201 Cumberland, RI 02864, U.S.A.

Test Standard Used:

KDB447498 D01 General RF Exposure Guidance v06

We Declare:

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

Report No.:	DDT-RE24082314-1E03		
Date of Receipt:	2024/09/13	Date of Test:	2024/09/13~2024/11/13

Prepared By:**Johnson Huang/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 Guangdong Dongdian Testing Service Co., Ltd.

Revision History

Rev.	Revisions	Issue Date	Revised By
---	Initial issue	2024/11/13	

1. General Test Information

1.1. Description of EUT

EUT Name	: FLOATING BLUETOOTH SPEAKER
Model Number	: WAVE RIDER™ X, ISP181, WAVE*****, ISP181*****
Difference of model number	: (“*” can be “0-9”, “a-z”, “A-Z”, “blank”, “-”, “+” or any character, symbol, alphanumeric for marketing purpose) : All models are identical except the appearance color and model number, therefore the test performed on the model WAVE RIDER™ X.
EUT Function Description	: Please reference user manual of this device
Power Supply	: Powered by Type-C port 5V or DC 7.40V Polymer Li-ion built-in battery

Note: The above EUT information is declared by manufacturer and for more detailed features description please refer to the manufacturer's specifications or User's Manual. The above Antenna information is declared by manufacturer and for more detailed features description please refer to the manufacturer's specifications, the laboratory shall not be held responsible.

“☑” means to be chosen or applicable; “☐” means don't to be chosen or not applicable; This note applies to entire report.

1.2. Accessories of EUT

Accessories	Manufacturer	Model number	Description
/	/	/	/

1.3. Test laboratory

Guangdong Dongdian Testing Service Co., Ltd.

Add.: 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.

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

2.1. Assessment procedure

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 ≤ 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 ≤ 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

2.2. Assess result

Manufacturing Tolerance:

Mode	Antenna	Frequency [MHz]	Target (dBm)	Tolerance \pm (dB)
GFSK (Peak)	Ant1	2402	-1.67	1
		2441	-1.57	1
		2480	-0.93	1
$\pi/4$ DQPSK (Peak)	Ant1	2402	-0.92	1
		2441	-1.05	1
		2480	-0.54	1
8DPSK	Ant1	2402	-0.31	1
		2441	-0.49	1
		2480	0.07	1

Mode	Antenna	Frequency [MHz]	Target (dBm)	Tolerance \pm (dB)
BLE 1M	Ant1	2402	-1.46	1
		2440	-1.52	1
		2480	-1.04	1
BLE 2M	Ant1	2404	-1.54	1
		2440	-1.64	1
		2478	-1.17	1

Estimtion Result:

Worse case is as below: [2480 MHz, 1.07 dBm, (1.28 mW) output power]

$(1.28/5) \cdot [\sqrt{2.402(\text{GHz})}] = 0.40 < 3.0$ for 1-g SAR

Then SAR evaluation is not required.

-----End Report-----