

# EN 62311 EMF EVALUATION REPORT

## FOR

<b>Applicant</b>	:	PEAG, LLC dba JLab Audio
<b>Address</b>	:	5927 Landau Ct. Carlsbad, CA 92008, USA
<b>Equipment under Test</b>	:	TWS Earbuds
<b>Model No.</b>	:	Epic Lab Edition
<b>Trade Mark</b>	:	JLAB
<b>Manufacturer</b>	:	GuangDong Simpreal Intelligent Technology Co., Ltd
<b>Address</b>	:	Room 2408, JiaHong ZhenXing DaSha, DongGuan Avenue #13, DongCheng District, DongGuan City, GuangDong Province, P.R. China

**Issued By: 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, **E-mail:** ddt@dgddt.com, <http://www.dgddt.com>

# REPORT

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## Test Report Declare

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### Test Assess Standard Used:

EN IEC 62311:2020, Assessment of electronic and electrical equipment related to human exposure restrictions for electromagnetic fields (0 Hz – 300 GHz)

### We Declare:

The equipment described above is tested and 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 test report and Dongguan Dongdian Testing Service Co., Ltd is assumed of full responsibility for the accuracy and completeness of these assess.

**After test and evaluation, our opinion is that the equipment provided for test compliance with the requirement of the above CE standards.**

<b>Report No.:</b>	DDT-RE23071128-2E16		
<b>Date of Receipt:</b>	Jul. 19, 2023	<b>Date of Test:</b>	Jul. 19, 2023 ~ Aug. 16, 2023



**Prepared By:**

**Approved By:**

*Johnny Wang*

*Damon Hu*

**Johnny Wang/Engineer**

**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	Aug. 16, 2023	

## 1 General Information

### 1.1. Description of equipment

EUT* Name	: TWS Earbuds
Model Number	: Epic Lab Edition
EUT function description	: Please reference user manual of this device
Power Supply	: DC 5V from USB cable and wireless charger DC 3.7V built-in battery
Hardware Version	: V3.0
Software Version	: V1.8
Wireless charging Operation frequency	: 110 kHz - 205 kHz
Antenna Type	: Inductive loop coil antenna
Sample Type	: N/A
Sample Number	: S23071128-06

Note: EUT is the abbreviation of equipment under test.

### 1.2. Assess standard

EN IEC 62311:2020: Assessment of electronic and electrical equipment related to human exposure restrictions for electromagnetic fields (0 Hz – 300 GHz)

### 1.3. 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, R-20155, G-20118

## 2 Equipment Used During Test

Equipment	Manufacturer	Model No.	Serial No.	Last Cal.	Cal. Interval
ELECTRIC AND MAGNETIC FIELD ANALYZER	Narda	EHP-200A	170WX91016	Sep. 1, 2022	1 Year

## 3 Estimation of Exposure of Human to Electromagnetic Fields

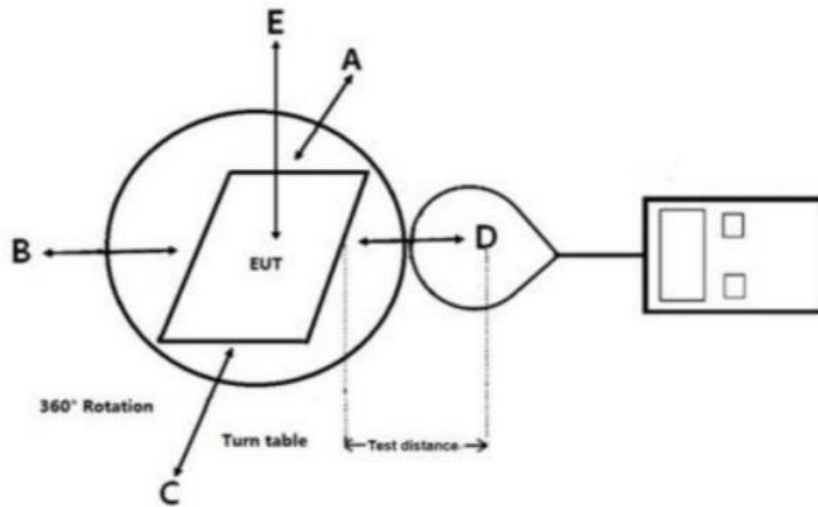
According to EN IEC 62311:2020, the criteria listed in the following table shall be used to evaluate the environmental impact of human exposure to radio-frequency (RF) radiation as specified 1999/519/EC.

Reference levels for electric, magnetic and electromagnetic fields (0 Hz to 300 GHz, unperturbed rms values)				
Frequency range	E-field strength (V/m)	H-field strength (A/m)	B-field (μT)	Equivalent plane wave power density $S_{eq}$ (W/m <sup>2</sup> )
0-1 Hz	—	$3,2 \times 10^4$	$4 \times 10^4$	—
1-8 Hz	10 000	$3,2 \times 10^4/f^2$	$4 \times 10^4/f^2$	—
8-25 Hz	10 000	$4\,000/f$	$5\,000/f$	—
0,025-0,8 kHz	$250/f$	$4/f$	$5/f$	—
0,8-3 kHz	$250/f$	5	6,25	—
3-150 kHz	87	5	6,25	—
0,15-1 MHz	87	$0,73/f$	$0,92/f$	—
1-10 MHz	$87/f^{1/2}$	$0,73/f$	$0,92/f$	—
10-400 MHz	28	0,073	0,092	2
400-2 000 MHz	$1,375 f^{1/2}$	$0,0037 f^{1/2}$	$0,0046 f^{1/2}$	$f/200$
2-300 GHz	61	0,16	0,20	10

**Notes**

- $f$  as indicated in the frequency range column.
- For frequencies between 100 kHz and 10 GHz,  $S_{eq}$ ,  $E^2$ ,  $H^2$ , and  $B^2$  are to be averaged over any six-minute period.
- For frequencies exceeding 10 GHz,  $S_{eq}$ ,  $E^2$ ,  $H^2$ , and  $B^2$  are to be averaged over any  $68/f^{1.05}$  -minute period ( $f$  in GHz).
- No E-field value is provided for frequencies < 1 Hz, which are effectively static electric fields. For most people the annoying perception of surface electric charges will not occur at field strengths less than 25 kV/m. Spark discharges causing stress or annoyance should be avoided.

### 3.1. Block diagram of test setup



Note: Due to installation limitations no tests from the underside of the charging device (Test Position F) are required.

### 3.2. Measurement data

B-field Strength at 10 cm from the edges surrounding the EUT (V/m)

Test Position	Probe Measure Result(V/m)			Limits Test (V/m)
	Full Load	intermediate charge	Zero charge	
A	1.1770	0.7765	0.8378	87
B	1.0823	1.0564	0.9327	87
C	0.9978	0.8200	0.9543	87
D	1.1429	0.9783	0.8293	87
E	1.0030	0.8451	0.8819	87

H-Filed Strength at 10 cm from the edges surrounding the EUT (A/m)

Test Position	Probe Measure Result(A/m)			Limits Test (A/m)
	Full Load	intermediate charge	Zero charge	
A	0.0794	0.0577	0.0561	5
B	0.0769	0.0751	0.0640	5
C	0.0604	0.0616	0.0652	5
D	0.1392	0.1054	0.0948	5
E	0.1897	0.1644	0.1443	5

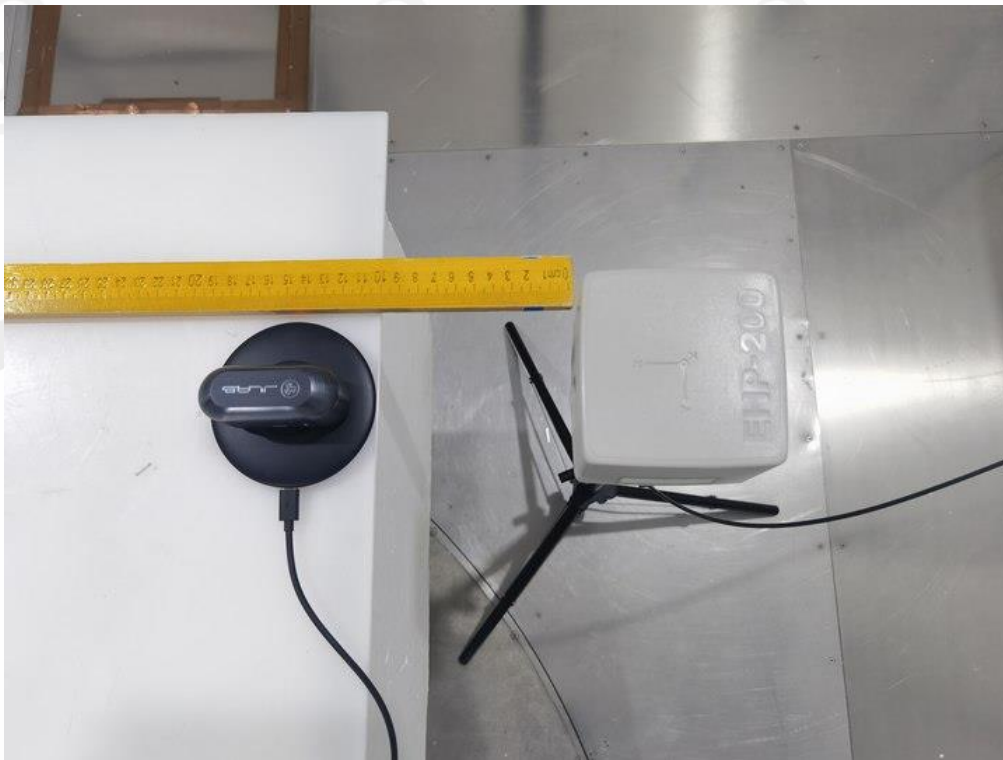
### 3.3. Test result

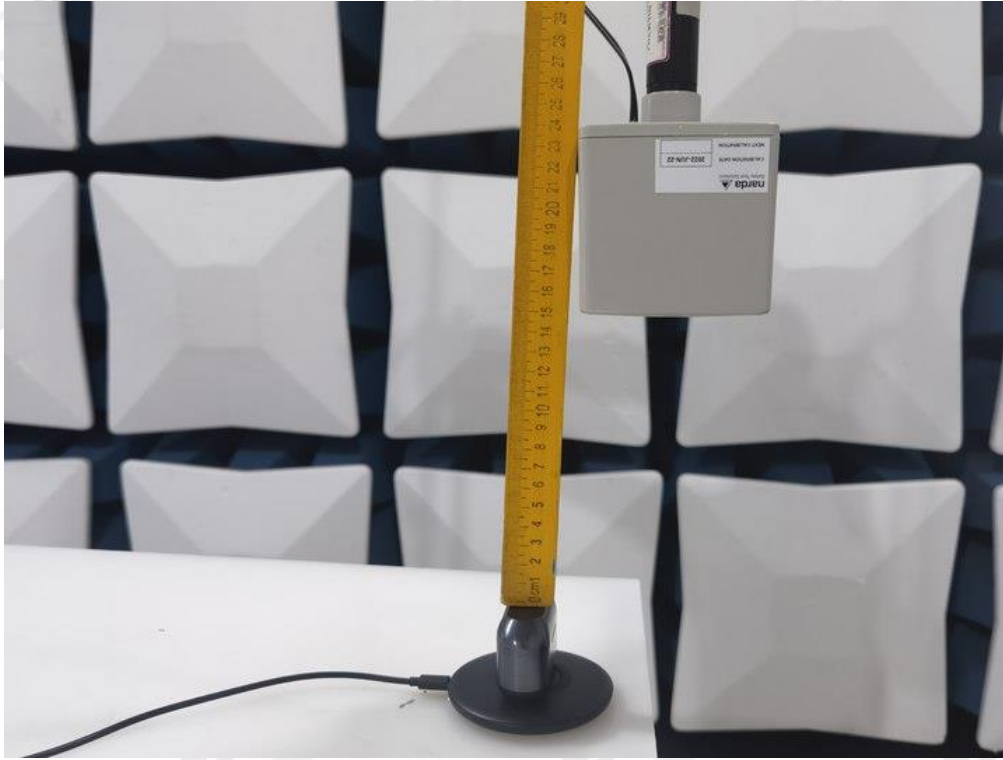
The equipment met the requirement of this clause.



#### 4 Test Setup Photograph







**END OF REPORT**