



## HEALTH TEST REPORT

For

Khadas Technology(Shenzhen) Co., Ltd.

Magnetic Bluetooth headphone amplifier

Test Model: Tea

Prepared for : Khadas Technology(Shenzhen) Co., Ltd.  
Address : D#2101A, Caifugang Building, Baoyuan Road, Xixiang Street,  
Bao'an District, Shenzhen City, China

Prepared by : Shenzhen LCS Compliance Testing Laboratory Ltd.  
Address : Room 101, 201, Building A and Room 301, Building C, Juji  
Industrial Park, Yabianxueziwei, Shajing Street, Bao'an District,  
Shenzhen, Guangdong, China

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Web : www.LCS-cert.com  
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Date of receipt of test sample : December 10, 2021  
Number of tested samples : 2  
Serial number : Prototype  
Date of Test : December 10, 2021 ~ January 06, 2022  
Date of Report : January 08, 2022



Scan code to check authenticity





|  |   |
|--|---|
| <b>HEALTH TEST REPORT</b><br><b>EN 62479: 2010 &amp; EN 50663: 2017</b>  |   |
| Generic standard for assessment of low power electronic and electrical equipment related to human exposure restrictions for electromagnetic fields (10 MHz - 300 GHz)  |   |
| <b>Report Reference No.</b> .....  | : <b>LCS211208017AED</b>  |
| Date of Issue.....   | : January 08, 2022  |
| <b>Testing Laboratory Name</b> .....   | : <b>Shenzhen LCS Compliance Testing Laboratory Ltd.</b>  |
| Address.....   | : Room 101, 201, Building A and Room 301, Building C, Juji Industrial Park, Yabianxueziwei, Shajing Street, Bao'an District, Shenzhen, Guangdong, China |
|  | Full application of Harmonised standards <input checked="" type="checkbox"/>  |
| Testing Location/ Procedure .....  | : Partial application of Harmonised standards <input type="checkbox"/>  |
|  | Other standard testing method <input type="checkbox"/>  |
| <b>Applicant's Name</b> .....  | : <b>Khadas Technology(Shenzhen) Co., Ltd.</b>  |
| Address.....   | : D#2101A, Caifugang Building, Baoyuan Road, Xixiang Street, Bao'an District, Shenzhen City, China  |
| <b>Test Specification</b>  |   |
| Standard .....   | : EN 62479: 2010  |
|  | : EN 50663: 2017  |
| Test Report Form No. ....  | : LCSEMC-1.0  |
| TRF Originator.....  | : Shenzhen LCS Compliance Testing Laboratory Ltd.   |
| Master TRF .....   | : Dated 2011-03   |
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| <b>Test Item Description</b> .....   | : <b>Magnetic Bluetooth headphone amplifier</b>   |
| Trade Mark .....   | : KHADAS  |
| Test Model .....   | : Tea   |
| Ratings .....  | : Input: DC 5V, 0.5A  |
|  | : DC 3.8V By Li-ion Battery(1160mAh)  |
| <b>Result</b> .....  | : <b>Positive</b>   |

**Compiled by:**

**Supervised by:**

**Approved by:**

Vera Deng/ Administrator

Jin Wang/ Technique principal

Gavin Liang/ Manager



# HEALTH --TEST REPORT

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| <b>Test Report No. : LCS211208017AED</b> | <u>January 08, 2022</u><br>Date of issue |
|--|--|

|                          |  |
|--------------------------|--|
| Test Model .....         | : Tea  |
| EUT.....                 | : Magnetic Bluetooth headphone amplifier   |
| <b>Applicant.....</b>    | <b>: Khadas Technology(Shenzhen) Co., Ltd.</b>   |
| Address.....             | : D#2101A, Caifugang Building, Baoyuan Road, Xixiang Street, Bao'an District, Shenzhen City, China |
| Telephone.....           | : /  |
| Fax.....                 | : /  |
| <b>Manufacturer.....</b> | <b>: Khadas Technology Co., Ltd</b>  |
| Address.....             | : D#2101A, Caifugang Building, Baoyuan Road, Xixiang Street, Bao'an District, Shenzhen City, China |
| Telephone.....           | : /  |
| Fax.....                 | : /  |
| <b>Factory.....</b>      | <b>: Khadas Technology Co., Ltd</b>  |
| Address.....             | : D#2101A, Caifugang Building, Baoyuan Road, Xixiang Street, Bao'an District, Shenzhen City, China |
| Telephone.....           | : /  |
| Fax.....                 | : /  |

|                    |                 |
|--------------------|-----------------|
| <b>Test Result</b> | <b>Positive</b> |
|--------------------|-----------------|

The test report merely corresponds to the test sample.  
It is not permitted to copy extracts of these test result without the written permission of the test laboratory.





## Revision History

| Revision | Issue Date       | Revision Content | Revised By  |
|----------|------------------|------------------|-------------|
| 000      | January 08, 2022 | Initial Issue    | Gavin Liang |
|          |                  |                  |             |
|          |                  |                  |             |





## 1. GENERAL INFORMATION

### 1.1. Product Description for Equipment Under Test (EUT)

|                     |   |
|---------------------|---|
| EUT                 | : Magnetic Bluetooth headphone amplifier  |
| Test Model          | : Tea   |
| Power Supply        | : Input: DC 5V, 0.5A<br>DC 3.8V By Li-ion Battery(1160mAh)  |
| Hardware Version    | : V1.3  |
| Software Version    | : V1.0  |
| Bluetooth           | :   |
| Frequency Range     | : 2402MHz ~ 2480MHz   |
| Channel Number      | : 79 channels for Bluetooth V5.1 (BDR/EDR)<br>40 channels for Bluetooth V5.1 (BT LE/BT 2LE)           |
| Channel Spacing     | : 1MHz for Bluetooth V5.1 (BDR/EDR)<br>2MHz for Bluetooth V5.1 (BT LE/BT 2LE)                         |
| Modulation Type     | : GFSK, $\pi/4$ -DQPSK, 8-DPSK for Bluetooth V5.1 (BDR/EDR)<br>GFSK for Bluetooth V5.1 (BT LE/BT 2LE) |
| Bluetooth Version   | : V5.1  |
| Antenna Description | : FIFA Antenna, 1.99dBi(Max.)   |





### 1.2. Objective

According to its specifications, the EUT must comply with the requirements of the following standards:  
EN 62479: 2010 – Generic standard for assessment of low power electronic and electrical equipment related to human exposure restrictions for electromagnetic fields (10 MHz - 300 GHz)  
EN 50663: 2017 – Generic standard for assessment of low power electronic and electrical equipment related to human exposure restrictions for electromagnetic fields (10 MHz - 300 GHz)

### 1.3. Test Methodology

All measurements contained in this report were conducted with EN 62479: 2010 and EN 50663: 2017.

### 1.4. Facilities

All measurement facilities used to collect the measurement data are located at Room 101, 201, Building A and Room 301, Building C, Juji Industrial Park, Yabianxueziwei, Shajing Street, Bao' an District, Shenzhen, Guangdong, China .

The sites are constructed in conformance with the requirements of ANSI C63.7, ANSI C63.4 and CISPR Publication 22.

### 1.5. Host System Configuration List and Details

| Manufacturer | Description | Model    | Serial Number | Certificate |
|--------------|-------------|----------|---------------|-------------|
| OPPO         | Adapter     | OP52KAUH | --            | CE          |

Note: The adapter is supplied by lab and only use tested.

### 1.6. External I/O Cable

| I/O Port Description | Quantity | Cable |
|----------------------|----------|-------|
| Type-C Port          | 1        | N/A   |
| lightning Port       | 1        | N/A   |



## 1.7. Equipment

Radiated emissions are measured with one or more of the following types of linearly polarized antennas: tuned dipole, bi-conical, log periodic, bi-log, and/or ridged waveguide, horn. Spectrum analyzers with pre-selectors and quasi-peak detectors are used to perform radiated measurements. Conducted emissions are measured with Line Impedance Stabilization Networks and EMI Test Receivers.

Calibrated wideband preamplifiers, coaxial cables, and coaxial attenuators are also used for making measurements.

All receiving equipment conforms to CISPR Publication 16-1, "Radio Interference Measuring Apparatus and Measurement Methods."

## 1.8. Laboratory Accreditations And Listings

### Site Description

- EMC Lab. : NVLAP Accreditation Code is 600167-0.  
 FCC Designation Number is CN5024.  
 CAB identifier is CN0071.  
 CNAS Registration Number is L4595.
- Name of Firm : Shenzhen LCS Compliance Testing Laboratory Ltd.
- Site Location : Room 101, 201, Building A and Room 301, Building C, Juji Industrial Park, Yabianxueziwei, Shajing Street, Bao'an District, Shenzhen, Guangdong, China



## 1.9. Measurement Uncertainty

| Test Item                     | Uncertainty            |
|-------------------------------|------------------------|
| Radio Frequency               | 0.9 x 10 <sup>-4</sup> |
| Total RF Power, Conducted     | 1.0 dB                 |
| RF Power Density, Conducted   | 1.8 dB                 |
| Spurious Emissions, Conducted | 1.8 dB                 |
| All Emissions, Radiated       | 3.1 dB                 |
| Temperature                   | 0.5 °C                 |
| Humidity                      | 1 %                    |
| DC And Low Frequency Voltages | 1 %                    |



## 2. HUMAN EXPOSURE TO THE ELECTROMAGNETIC FIELDS

### 2.1 Test Methodology

#### 2.1.1. General description of applied standards

According to its specifications, the EUT must comply with the requirements of the following standards:  
EN 62479- Assessment of the compliance of low power electronic and electrical equipment with the basic restrictions related to human exposure to electromagnetic fields (10 MHz to 300 GHz)  
EN 50663- Generic standard for assessment of low power electronic and electrical equipment related to human exposure restrictions for electromagnetic fields (10 MHz - 300 GHz).

#### 2.1.2. Description of test modes

The EUT has been tested under its typical operating condition. Pre-defined engineering program for regulatory testing used to control the EUT for staying in continuous transmitting and receiving mode is programmed.

### 2.2 Test limit

If the average power emitted by apparatus operating in the frequency range 10 MHz – 300GHz is less than or equal to 20 mW and the transmitting peak power is less than 20 W then the apparatus is deemed to comply with the basic restrictions without testing.

### 2.3 Test Results

Since Max. output power for Bluetooth is 7.23mW (8.59dBm According to radio test report LCS211208017AEB; LCS211208017AEC) less than 20mW specified in EN 62479 and EN 50663. This unit will not generate the harmful EM emission above the reference level as specified in EC Council Recommendation (1999/519/EC).

The unit complies with the EN 62479 and EN 50663 for RF exposure requirement.

No non-compliance noted.



-----THE END OF TEST REPORT-----