

HEALTH TEST REPORT

For

Shenzhen Sonoff Technologies Co., Ltd.

433MHz Remote Control

Test Model: RM433R2

Prepared for : Shenzhen Sonoff Technologies Co., Ltd.
Address : Building 8, Room 1001, Lianhua industrial park, Longyuan Road,
Hualian community, Longhua St, Longhua dist, Shenzhen,
Guangdong, China.

Prepared by : Shenzhen LCS Compliance Testing Laboratory Ltd.
Address : Room 101, 201, Building A and Room 301, Building C, Juji
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Date of receipt of test sample : January 15, 2021
Number of tested samples : 1
Serial number : Prototype
Date of Test : January 15, 2021 ~ January 25, 2021
Date of Report : January 25, 2021



HEALTH TEST REPORT

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)

Report Reference No. : **LCS210115045AEC**
Date of Issue..... : January 25, 2021

Testing Laboratory Name : **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
Testing Location/ Procedure : Full application of Harmonised standards
 Partial application of Harmonised standards
 Other standard testing method

Applicant's Name..... : **Shenzhen Sonoff Technologies Co., Ltd.**
Address..... : Building 8, Room 1001, Lianhua industrial park, Longyuan Road, Hualian community, Longhua St, Longhua dist, Shenzhen, Guangdong, China.

Test Specification
Standard : 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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Test Item Description..... : **433MHz Remote Control**
Trade Mark..... : 
Test Model : RM433R2
Ratings : DC 3.0V By Button Cell
Result : **Positive**

Compiled by:

Lh Li

Lh Li/ Administrators

Supervised by:

Jin Wang

Jin Wang/ Technique principal



Gavin Liang/ Manager

HEALTH -- TEST REPORT**Test Report No. : LCS210115045AEC**January 25, 2021
Date of issue

Test Model..... : RM433R2

EUT..... : 433MHz Remote Control

Applicant..... : Shenzhen Sonoff Technologies Co., Ltd.

Address..... : Building 8, Room 1001, Lianhua industrial park, Longyuan Road, Hualian community, Longhua St, Longhua dist, Shenzhen, Guangdong, China.

Telephone..... : /

Fax..... : /

Manufacturer..... : Shenzhen Sonoff Technologies Co., Ltd.

Address..... : Building 8, Room 1001, Lianhua industrial park, Longyuan Road, Hualian community, Longhua St, Longhua dist, Shenzhen, Guangdong, China.

Telephone..... : /

Fax..... : /

Factory..... : Dongguan SI Electronic Co., Ltd.

Address..... : No.4 Fuzhu 1st Street Zhangyang, Zhangmutou Town, Dongguan City, Guangdong, China.

Telephone..... : /

Fax..... : /

Test Result**Positive**

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	Revisions	Revised By
000	January 25, 2021	Initial Issue	Gavin Liang

1. GENERAL INFORMATION

1.1. Product Description for Equipment Under Test (EUT)

EUT	: 433MHz Remote Control
Test Model	: RM433R2
List Model No.	: RM433R2
Power Supply	: DC 3.0V By Button Cell
Hardware Version	: RM433 V2.1
Software Version	: /
Transmit(433)	:
Frequency Range	: 433.92MHz
Channel Number	: 1
Modulation Type	: ASK
Antenna Description	: Internal Antenna, 0 dBi

1.2. Objective

According to its specifications, the EUT must comply with the requirements of the following standards:

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 EN50663: 2017.

1.4. Description of Test Facility

NVLAP Accreditation Code is 600167-0.

FCC Designation Number is CN5024.

CAB identifier is CN0071.

CNAS Registration Number is L4595.

1.5. Support Equipment List

Manufacturer	Description	Model	Serial Number	Certificate
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1.6. External I/O

I/O Port Description	Quantity	Cable
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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. Measurement Uncertainty

Parameter	Uncertainty
Occupied Channel Bandwidth	5 %
RF output power, conducted	1,5 dB
Power Spectral Density, conducted	3 dB
Unwanted Emissions, conducted	3 dB
All emissions, radiated	6 dB
Temperature	1 °C
Humidity	5 %
DC and low frequency voltages	3 %
Time	5 %
Duty Cycle	5 %

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 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

RF Mode	Max. RF Output Power EIRP (dBm)	Max. RF Output Power EIRP (mW)	Limit (mW)	Conclusion
433	8.65	7.33	<20	Compliance

Since Max. RF output power is (According to radio test report LCS210115045AEB) less than 20mW. 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 50663 for RF exposure requirement.

No non-compliance noted.

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