

TEST REPORT

FCC Rules Part 15.231

Report Reference No......: **MTEC21102469-H**

FCC ID..... : **2AA9Q-JR-296**

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Date of issue.....: **October 21, 2021**

Representative Laboratory Name.: **Shenzhen Most Technology Service Co., Ltd.**

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Applicant's name.....: **ZHUJI JIARONG ELECTRICAL APPLIANCE CO.,LTD.**

Address: No.93 Lan Ling Village, Ruan Shi Town, Zhu Ji City, Zhe Jiang
Province, China .

Test specification/ Standard: **47 CFR Part 1.1307**

47 CFR Part 2.1093

TRF Originator.....: Shenzhen Most Technology Service Co., Ltd.

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Test item description: **WIRELESS SECURITY ALERT SYSTEM**

Trade Mark: **JIARONG**

Manufacturer: **Zhuji Jiarong Electical Appliance Co.,Ltd .**

Model/Type reference.....: **JR-296**

Listed Models: **N/A**

Modulation Type.....: **ASK**

Operation Frequency.....: **433.92MHz**

Rating: **DC6V(by Batteries)**

Result.....: **PASS**

TEST REPORT

Equipment under Test : WIRELESS SECURITY ALERT SYSTEM

Model /Type : JR-296

Listed Models : N/A

Applicant : **ZHUJI JIARONG ELECTRICAL APPLIANCE CO.,LTD.**

Address : No.93 Lan Ling Village, Ruan Shi Town, Zhu Ji City, Zhe Jiang Province, China.

Manufacturer : **ZHUJI JIARONG ELECTRICAL APPLIANCE CO.,LTD.**

Address : No.93 Lan Ling Village, Ruan Shi Town, Zhu Ji City, Zhe Jiang Province, China.

| | |
|---------------------|-------------|
| Test Result: | PASS |
|---------------------|-------------|

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.

Contents**1. Revision History**

| Revision | Issue Date | Revisions | Revised By |
|----------|------------|---------------|------------|
| 00 | 2021.10.21 | Initial Issue | Alisa Luo |
| | | | |
| | | | |

2.1 RF Exposure Compliance Requirement

2.1.1 Standard Requirement

According to KDB447498D01 General RF Exposure Guidance v06

4.3.1. Standalone SAR test exclusion considerations

Unless specifically required by the published RF exposure KDB procedures, standalone 1-g head or body and 10-g extremity SAR evaluation for general population exposure conditions, by measurement or numerical simulation, is not required when the corresponding SAR Exclusion Threshold condition, listed below, is satisfied.

2.1.2 Limits

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:

$$\left[\frac{\text{max. power of channel, including tune-up tolerance, mW}}{\text{min. test separation distance, mm}} \right] \cdot$$

$$\left[\sqrt{f(\text{GHz})} \right] \leq 3.0 \text{ for 1-g SAR and } \leq 7.5 \text{ for 10-g extremity SAR, where}$$

$f(\text{GHz})$ is the RF channel transmit frequency in GHz

Power and distance are rounded to the nearest mW and mm before calculation¹⁷

The result is rounded to one decimal place for comparison

The test exclusions are applicable only when the minimum test separation distance is ≤ 50 mm and for transmission frequencies between 100 MHz and 6 GHz. When the minimum test separation distance is < 5 mm, a distance of 5 mm is applied to determine SAR test exclusion

2.1.3 EUT RF Exposure

$$\text{eirp} = \text{pt} \times \text{gt} = (\text{E} \times \text{d})^2 / 30$$

where:

pt = transmitter output power in watts,

gt = numeric gain of the transmitting antenna (unitless),

E = electric field strength in V/m, $10((\text{dB}\mu\text{V}/\text{m})/20)/10^6$,

d = measurement distance in meters (m)---3m,

$$\text{So pt} = (\text{E} \times \text{d})^2 / 30 / \text{gt}$$

The worst case (refer to report MTEC21102469) is below:

| Antenna polarization: Horizontal | | |
|----------------------------------|----------------|--------------|
| Frequency (MHz) | Level (dBuV/m) | Polarization |
| 433.92 | 76.13 | Peak |
| 433.92 | 67.97 | Average |

| Antenna polarization: Vertical | | |
|--------------------------------|----------------|--------------|
| Frequency (MHz) | Level (dBuV/m) | Polarization |
| 433.92 | 78.13 | Peak |
| 433.92 | 69.97 | Average |

$$\text{eirp} = \text{pt} \times \text{gt} = (\text{E} \times \text{d})^2 / 30 = 0.0195 \text{ mW}$$

$$\text{exclusion} = 0.0026 < 3.0 \text{ for 1-g SAR}$$

So the SAR report is not required.