

## TEST REPORT

### FCC Rules Part 15.231

**Report Reference No.**.....: **MTWG22010006-H**

**FCC ID**..... : **2A3TT-AK-F01C**

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Date of issue.....: **January 20, 2022**

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**Applicant's name**.....: **SHENZHEN GREPOW BATTERY CO.,LTD**

Address .....: No.123, Huarong Road Gaofeng Community,Dalang  
Street,Longhua District,Shenzhen City

**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** .....: Two keys forsmall pepper

Trade Mark .....: N/A

Model/Type reference.....: AK-F01C

Listed Models .....: N/A

Modulation Type .....: ASK

Operation Frequency.....: 433.92MHz

Hardware version .....: AK-F01C V02

Software version .....: AK-F01C EV1527 V01

Rating .....: DC3V(by Battery)

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

## TEST REPORT

Equipment under Test : Two keys forsmall pepper

Model /Type : AK-F01C

Listed Models : N/A

Applicant : **SHENZHEN GREPOW BATTERY CO.,LTD**

Address : No.123, Huarong Road Gaofeng Community,Dalang Street,Longhua District,Shenzhen City

Manufacturer : **SHENZHEN GREPOW BATTERY CO.,LTD**

Address : No.123, Huarong Road Gaofeng Community,Dalang Street,Longhua District,Shenzhen City

<b>Test Result:</b>	<b>PASS</b>
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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	2022.01.20	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  $\leq 50$  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 calculation<sup>17</sup>

The result is rounded to one decimal place for comparison

The test exclusions are applicable only when the minimum test separation distance is  $\leq 50$  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 MTWC21120961) is below:

Antenna polarization: Horizontal		
Frequency (MHz)	Level (dBuV/m)	Polarization
433.92	80.04	Peak
433.92	70.40	Average

Antenna polarization: Vertical		
Frequency (MHz)	Level (dBuV/m)	Polarization
433.92	78.78	Peak
433.92	69.14	Average

$$\text{eirp} = \text{pt} \times \text{gt} = (\text{E} \times \text{d})^2 / 30 = 0.0303 \text{ mW}$$

$$\text{exclusion} = 0.0040 < 3.0 \text{ for 1-g SAR}$$

So the SAR report is not required.