

RF Exposure Evaluation Declaration

Report No.: S20250901435002

Issue Date: 11-04-2025

Applicant: Jiangsu Shushi Technology Co., Ltd.

Address: NO.9 Nanxu Road, RunZhou District, Zhenjiang, Jiangsu, China

FCC ID: 2BAGQ-3RWLK01068S

Application Type: Certification

Product: Smart WaterLeak Sensor KM1

Model No.: 3RWLK01068S

Trade Mark:  THIRD REALITY

FCC Rule Part(s): CFR 47, FCC Part 2.1091 Radio frequency radiation exposure evaluation: mobile devices.

Item Receipt date: Sep. 03, 2025

Test Date: Sep. 05 ~ Sep. 17, 2025

Compiled By

Stone Zhang

(Stone Zhang)

Senior Test Engineer

Approved By

Line Chen

(Line Chen)

Engineer Manager



The test results relate only to the samples tested.

This equipment has been shown to be capable of compliance with the applicable technical standards as indicated in the measurement report and was tested in accordance with the measurement procedures specified in KDB 558074 D01. Test results reported herein relate only to the item(s) tested. The test report shall not be reproduced except in full without the written approval of Fangguang Inspection & Testing Co., Ltd. Wuxi Branch

The test report must not be used by the client to claim product certifications, approval, or endorsement by NVLAP, NIST or any agency of U.S. Government.

Revision History

Report No.	Version	Description	Issue Date
S20250901435002	Rev. 01	/	11-04-2025

CONTENTS

Description	Page
1. PRODUCT INFORMATION	5
1.1. Equipment Description	5
1.2. Product Specification Subjective to this Report	5
2. RF Exposure Evaluation	6
2.1. Limits	6
2.2. Calculation Method	7

§2.1033 General Information

Applicant:	Jiangsu Shushi Technology Co., Ltd.
Applicant Address:	NO.9 Nanxu Road,RunZhou District,Zhenjiang,Jiangsu,China
Manufacturer:	Jiangsu Shushi Technology Co., Ltd.
Manufacturer Address:	NO.9 Nanxu Road,RunZhou District,Zhenjiang,Jiangsu,China
Test Site:	Fanguang Inspection & Testing Co., Ltd.
LAB ID:	CN5037
LAB registration number:	600222-0
Test Site Address:	No.8 Ningyun Rd., Xinwu District Wuxi, Jiangsu 214000 China
FCC Rule Part(s):	FCC Part 2.1091
FCC ID:	2BAGQ-3RWLK01068S
Test Device Serial No.:	S/N.:/ ☐ Production ☒ Pre-Production ☐ Engineering

1. PRODUCT INFORMATION

1.1. Equipment Description

Product Name:	Smart Water Leak Sensor KM1
Model Name:	3RWLK01068S
Trade Mark:	 THIRDREALITY
Input Voltage Range:	3V (2*AA)
Hardware Version:	REV.0.3.1
Software Version:	1.00.04
EUT sample number:	S202509014350-1-1 (Radiated)

Note: This information is provided by the Customer and its authenticity is the responsibility of the Customer.

1.2. Product Specification Subjective to this Report

Operating Frequency	433.92MHz
Channel number	1
Type of modulation	ASK
Antenna Type:	PCB Antenna
Antenna Gain:	-5.88dBi

Note: The maximum Antenna Gain was declared by the manufacturer.

2. RF Exposure Evaluation

2.1. Limits

According to KDB447498 D01 General RF Exposure Guidance v06 Section 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 Test Exclusion Threshold condition, listed below, is satisfied. These test exclusion conditions are based on source-based time-averaged maximum conducted output power of the RF channel requiring evaluation, adjusted for tune-up tolerance, and the minimum test separation distance required for the exposure conditions. The minimum test separation distance is determined by the smallest distance from the antenna and radiating structures or outer surface of the device, according to the host form factor, exposure conditions and platform requirements, to any part of the body or extremity of a user or bystander (see 5) of section 4.1). To qualify for SAR test exclusion, the test separation distances applied must be fully explained and justified by the operating configurations and exposure conditions of the transmitter and applicable host platform requirements, typically in the SAR measurement or SAR analysis report, according to the required published RF exposure KDB procedures. When no other RF exposure testing or reporting is required, a statement of justification and compliance must be included in the equipment approval, in lieu of the SAR report, to qualify for the SAR test exclusion. When required, the device specific conditions described in the other published RF exposure KDB procedures must be satisfied before applying these SAR test exclusion provisions;

for example, handheld PTT two-way radios, handsets, laptops & tablets etc. “

$$\left[\frac{(\text{max. power of channel, including tune-up tolerance, mW})}{(\text{min. test separation distance, mm})} \right] \cdot [VF \text{ (GHz)}] \leq 3.0 \text{ for 1-g SAR and } \leq 7.5 \text{ for 10-g extremity SAR, where:}$$

- f (GHz) is the RF channel transmit frequency in GHz
- Power and distance are rounded to the nearest mW and mm before calculation
- The result is rounded to one decimal place for comparison
- 3.0 and 7.5 are referred to as the numeric thresholds in the step 2 below

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 according to f) in section 4.1 is applied to determine SAR test exclusion.

2.2. Calculation Method

$$\left[\frac{\text{(max. power of channel, including tune-up tolerance, mW)}}{\text{(min. test separation distance, mm)}} \cdot [\sqrt{f(\text{GHz})}] \leq 3.0 \right]$$

Conducted Power + tune up tolerance = (84.78-95.20) dBm+0.1=0.190991mW

Distance = 5 mm

f =0.43392

$$[0.190991/5] * \text{SQRT}(0.43392) = 0.025162$$

$$0.025162 \leq 3.0$$

Therefore, excluded from SAR testing.

CONCULISON:

The measurement results comply with the FCC Limit per 47 CFR 2.1091 for the uncontrolled RF Exposure and SAR Exclusion Threshold per KDB 447498 v06.

Statement

1. This report is invalid for the following states: without the special inspection and testing stamp or the official stamp of our institution; without the signature of the report authorized officer; if the report is altered.
2. It is forbidden to copy partial contents of the report except in full without the approval of our institution.
3. The client shall provide the test sample(s) and commission information and be responsible for their authenticity.
4. The report content is only applicable to the tested sample(s) this time.
5. If there are any objections to the report content, please submit them to our company in writing within 15 days from the date of receiving the report.
6. If the reports include both Chinese and English versions, when there are any inconsistencies caused by language, the Chinese version shall prevail.
7. This report is issued by the following laboratory premises:

No.8 Ningyun Rd., Xinwu District Wuxi, Jiangsu 214000 China

——This page is blank below this line ——