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RF Exposure Evaluation Report

Application No.: KSCR2609002300AT
FCC ID: 2BTLH-ACCUMEMS7
Applicant: Hangzhou Accumems Technology Co.,Ltd.
Address of Applicant: Room 418-1, Building 2, JinxiuLinglongfu, Xixing Street, Binjiang District, Hangzhou City, Zhejiang Province
Manufacturer: Hangzhou Accumems Technology Co.,Ltd.
Address of Manufacturer: Room 418-1, Building 2, JinxiuLinglongfu, Xixing Street, Binjiang District, Hangzhou City, Zhejiang Province
Equipment Under Test (EUT):
EUT Name: Handheld Thermal Imager
Model No.: TE27D
Standard(s) : FCC Rules 47 CFR §2.1093
KDB 447498 D01 General RF Exposure Guidance v06
Date of Receipt: 2026-09-03
Date of Test: 2026-09-04 to 2026-09-30
Date of Issue: 2026-10-08

Test Result:	Pass*
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* In the configuration tested, the EUT complied with the standards specified above.

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Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 30 days only.



Revision Record			
Version	Description	Date	Remark
00	Original	2026-10-08	/

Authorized for issue by:				
Tested By		<i>Tommie Tang</i>		
		<u>Tommie_Tang /Project Engineer</u>		
Approved By		<i>Terry Hou</i>		
		<u>Terry Hou /Reviewer</u>		



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3 General Information

3.1 General Description of E.U.T.

Power supply:	DC 5V,2A by USB or DC 3.6V by rechargeable Li-ion battery
Product Type:	☒ Portable device
	☐ Mobile device
	☐ Fixed device

3.2 Details of E.U.T.

Operation Frequency:	802.11b/g/n(HT20): 2412MHz to 2462MHz; 802.11n(HT40): 2422MHz to 2452MHz
Modulation Type:	802.11b: DSSS (DBPSK, DQPSK, CCK); 802.11g/n: OFDM (BPSK, QPSK, 16-QAM, 64-QAM)
Number of Channels:	802.11b/g/n(HT20):11;802.11n(HT40):7
Channel Spacing:	5MHz
Antenna Type:	FPC Antenna
Antenna Gain:	2.47dBi(Provided by the manufacturer)

3.3 Test Location

All tests were performed at:

Compliance Certification Services (Kunshan) Inc.

No.10 Weiye Rd, Innovation park, Eco&Tec, Development Zone, Kunshan City, Jiangsu, China.

Tel: +86 512 5735 5888 Fax: +86 512 5737 0818

No tests were sub-contracted.

Note:

1. SGS is not responsible for wrong test results due to incorrect information (e.g., max. internal working frequency, antenna gain, cable loss, etc) is provided by the applicant. (If applicable).
2. SGS is not responsible for the authenticity, integrity and the validity of the conclusion based on results of the data provided by applicant. (If applicable).
3. Sample source: sent by customer.

3.4 Test Facility

The test facility is recognized, certified, or accredited by the following organizations:

• **A2LA (Certificate No. 2541.01)**

Compliance Certification Services (Kunshan) Inc. is accredited by the American Association for Laboratory Accreditation (A2LA).

• **FCC (Designation Number: CN1172)**

Compliance Certification Services (Kunshan) Inc. has been recognized as an accredited testing laboratory.

• **ISED (CAB Identifier: CN0072)**

Compliance Certification Services (Kunshan) Inc. has been recognized by Innovation, Science and Economic Development Canada (ISED) as an accredited testing laboratory.

Company Number: 2324E

• **VCCI (Member No:1938)**

The 3m and 10m Semi-anechoic chamber and Shielded Room of Compliance Certification Services (Kunshan) Inc. has been registered in accordance with the Regulations for Voluntary Control Measures with Registration No.: R-20134, R-11600, C-11707, T-11499, G-10216 respectively.

4 FCC Radiofrequency radiation exposure 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:

$[(\text{max power of channel})/(\text{min test separation distance})] \cdot [\sqrt{f(\text{GHz})}] \leq 3.0$ for 1-g SAR and ≤ 7.5 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
- The result is rounded to one decimal place for comparison
- 3.0 and 7.5 are referred to as the numeric thresholds

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.

For 2.4G Wi-Fi:

according to §2.1093, Specific Absorption Rate (SAR) for general population/uncontrolled exposure limits 1.6W/kg for 1g, 4.0W/kg for 10g Extremity SAR.

the limit of worse case is

$$P_{\text{max}} \leq 3 \cdot D_{\text{min}} / \sqrt{f} = 3 \cdot 5 / \sqrt{2.462} = 9.56 \text{ mW}$$



5 Measurement and Calculation

5.1 Maximum transmit power

The Power Data is based on the RF Test Report KSCR260900230001

Test Mode	Test Frequency (MHz)	Power (dBm)	Power (mW)
802.11b	2412	6.73	4.71
	2437	6.78	4.76
	2462	6.36	4.33
802.11g	2412	6.82	4.81
	2437	7.08	5.11
	2462	6.56	4.53
802.11n (HT20)	2412	6.77	4.75
	2437	6.95	4.95
	2462	6.44	4.41
802.11n (HT40)	2422	6.90	4.90
	2437	6.93	4.93
	2452	6.75	4.73

5.2 RF Exposure Calculation

The Max Conducted Average Output Power is 5.11mW, The best case gain is 2.47dBi.

2.47dBi logarithmic terms convert to numeric result is nearly 1.77

According to the formula, calculate the power test result:

The max power Max Power = $5.11 \times 1.77 \text{mW} = 9.04 \text{mW} < 9.56 \text{mW}$

Remark: we used the maximum power between the conducted power or ERP to perform RF exposure exemption evaluation.

So, the device is to qualify for SAR test exemption, the exemption report is in lieu of the SAR report.

--End of the Report--