

## SAR EXEMPTION EVALUATION REPORT

*For*

**STICK VACUUM CLEANER**

**FCC MODEL NUMBER: VS27\*\*\*\*\***

**REPORT NUMBER: 4791834887-1-RF-3**

**FCC ID: 2AV7A-A90**

**IC: 26039-A90**

*Prepared for*

**Tineco Intelligent Technology Co., Ltd.  
No. 108 Shihu Road West, Wuzhong Zone, Suzhou, 215168 P.R. China**

*Prepared by*

**UL Verification Services (Guangzhou) Co., Ltd, Song Shan Lake Branch**

**Room 101, Building 2, No.4, Information Road, Songshan Lake, Dongguan, Guangdong, China**

**Tel: +86 769 22038881**

**Fax: +86 769 33244054**

**Website: [www.ul.com](http://www.ul.com)**

## Revision History

Rev.	Issue Date	Revisions	Revised By
V0	September 17, 2025	Initial Issue	

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## 1. ATTESTATION OF TEST RESULTS

### Applicant Information

Company Name: Tineco Intelligent Technology Co., Ltd.  
Address: No. 108 Shihu Road West, Wuzhong Zone, Suzhou, 215168 P.R. China

### Manufacturer Information

Company Name: Tineco Intelligent Technology Co., Ltd.  
Address: No. 108 Shihu Road West, Wuzhong Zone, Suzhou, 215168 P.R. China

### EUT Information

EUT Name: STICK VACUUM CLEANER  
FCC Model: VS27\*\*\*\*\*  
Sample Received Date: June 30, 2025  
Sample Status: Normal  
Sample ID: 8650258

APPLICABLE STANDARDS	
STANDARD	TEST RESULTS
447498 D04 Interim General RF Exposure Guidance v01	PASS

Prepared By:

  
Wite Chen

Engineer Project Associate

Checked By:

  
Kebo Zhang

Senior Project Engineer

Approved By:

  
Stephen Guo

Operations Manager

## 2. TEST METHODOLOGY

The tests documented in this report were performed in accordance with 47 CFR FCC Part 1 Subpart I, section 1.1307 and KDB 447498 D04 Interim General RF Exposure Guidance v01.

## 3. FACILITIES AND ACCREDITATION

Accreditation Certificate	<p><b>A2LA (Certificate No.: 4102.01)</b> UL Verification Services (Guangzhou) Co., Ltd. Song Shan Lake Branch. has been assessed and proved to be in compliance with A2LA.</p> <p><b>FCC (FCC Designation No.: CN1187)</b> UL Verification Services (Guangzhou) Co., Ltd. Song Shan Lake Branch. Has been recognized to perform compliance testing on equipment subject to the Commission's Declaration of Conformity (DoC) and Certification rules</p> <p><b>ISED (Company No.: 21320)</b> UL Verification Services (Guangzhou) Co., Ltd. Song Shan Lake Branch. has been registered and fully described in a report filed with ISED. The Company Number is 21320 and the test lab Conformity Assessment Body Identifier (CABID) is CN0046.</p> <p><b>VCCI (Registration No.: C-20202, G-20240, R-20248 and T-20202)</b> UL Verification Services (Guangzhou) Co., Ltd. Song Shan Lake Branch. has been assessed and proved to be in compliance with VCCI, the Membership No. is 3793. Facility Name: Chamber E, the VCCI registration No. is G-20240 and R-20248 Shielding Room F, the VCCI registration No. is C-20202 and T-20202</p>
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## 4. DESCRIPTION OF EUT

EUT Name		STICK VACUUM CLEANER
Model		VS27*****
Model differences		“*”=0-9, A-Z or blank used to denote different customers, colors or minor cosmetic changes, or for indicate factory identification.
Product Description (BLE)	Frequency Range:	2402 MHz to 2480 MHz
	Type of Modulation:	GFSK
	Data Rate:	1Mbps/2Mbps
Product Description (2.4G WLAN)	Frequency Range:	2412 MHz to 2462 MHz
	Type of Modulation:	IEEE 802.11b: DSSS(CCK, DQPSK, DBPSK) IEEE 802.11g/n: OFDM(64-QAM, 16-QAM, QPSK, BPSK)
	Radio Technology:	IEEE 802.11b/g/n HT20
Normal Test Voltage:		AC 120 V, 60 Hz

## 5. REQUIREMENT

### 5.1. FCC SAR test exclusions per KDB 447498

KDB 447498 D01 General RF Exposure Guidance v06 Section: 4.3.1. Standalone SAR test exclusion considerations states: For 100 MHz to 6 GHz and test separation distances  $\leq$  50 mm, the 1-g and 10-g SAR test exclusion thresholds are determined by the following:

$[(\text{max. power of channel, including tune-up tolerance, mW}) / (\text{min. test separation distance, mm})] \cdot [\sqrt{f(\text{GHz})}] \leq 3.0 \text{ for 1-g SAR, and } \leq 7.5 \text{ for 10-g extremity SAR, 30 where}$

- $f(\text{GHz})$  is the RF channel transmit frequency in GHz
- Power and distance are rounded to the nearest mW and mm before calculation
- The result is rounded to one decimal place for comparison
- The values 3.0 and 7.5 are referred to as numeric thresholds.

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

Frequency (MHz)	Tune-up (dBm)	Tune-up (mW)	Separation Distance (mm)	Calculation Result	Threshold	SAR Test
2450	12.00	15.85	15.00	1.7	7.5	Excluded

Note: the calculation result is less than the threshold, so SAR test is excluded.

### 5.2. ISED SAR test exclusions per RSS-102

Power limits for exemption from routine SAR evaluation based on the separation distance

Freq. (MHz)	$\leq 5 \text{ mm}$ (mW)	10 mm (mW)	15 mm (mW)	20 mm (mW)	25 mm (mW)	30 mm (mW)	35 mm (mW)	40 mm (mW)	45 mm (mW)	$> 50 \text{ mm}$ (mW)
$\leq 300$	45	116	139	163	189	216	246	280	319	362
450	32	71	87	104	124	147	175	208	248	296
835	21	32	41	54	72	96	129	172	228	298
1900	6	10	18	33	57	92	138	194	257	323
2450	3	7	16	32	56	89	128	170	209	245
3500	2	6	15	29	50	72	94	114	134	158
5800	1	5	13	23	32	41	54	74	102	128

For limb-worn devices where the 10 gram of tissue applies, the exemption limits for routine evaluation in table 11 are multiplied by a factor of 2.5.

Frequency (MHz)	Tune-up (dBm)	Gain (dBi)	E.I.R.P (mW)	Separation Distance (mm)	Power threshold of 10-g SAR (mW)	SAR Test
2450	12.00	3.96	39.5	15.00	40	Excluded

Note: the E.I.R.P in mW is less than power threshold of 10-g SAR, so SAR test is excluded.

Note:

1. The distance is 15.1380 mm, it is rounded to 15 mm.
2. The power comes from operation description.

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**END OF REPORT**