

1 Cover Page

RF Exposure Evaluation Report

Application No.: SHCR2201000019AT
FCC ID: 2A38OWY100
Applicant: Beijing Wanyee Technology CO., LTD.
Address of Applicant: Room X307, Longguan Business Center, Courtyard #16, Huilongguan West Street, Changping Dist., Beijing, China
Manufacturer: Beijing Wanyee Technology CO., LTD.
Address of Manufacturer: Room X307, Longguan Business Center, Courtyard #16, Huilongguan West Street, Changping Dist., Beijing, China
Factory: Suzhou Wutong Electronics Co.Ltd
Address of Factory: Huwan Village, Huang Qiao Town, Suzhou Xiangcheng District, Jiangsu Province, China

Equipment Under Test (EUT):
EUT Name: WiFi Module
Model No.: WY100
Standard(s) : FCC Rules 47 CFR §2.1091
 KDB447498 D01 General RF Exposure Guidance v06

Date of Receipt: 2021-12-26
Date of Test: 2022-12-29 to 2022-01-12
Date of Issue: 2022-01-18

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

Parlam Zhan

Parlam Zhan
Laboratory Manager



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Revision Record			
Version	Description	Date	Remark
00	Original	2022-01-18	/

Authorized for issue by:			
			
		Bill Wu / Project Engineer	
			
		Parlam Zhan /Reviewer	



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SGS-CSTC Standards Technical Services (Shanghai) Co., Ltd.
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3 General Information

3.1 General Description of E.U.T.

Power supply:	DC 2.1V~3.6V
Antenna Gain:	3.33dBi (Provided by manufacturer)
Antenna Type:	FPC Antenna
Channel Spacing:	5MHz
Modulation Type:	802.11b: DSSS (CCK, DQPSK, DBPSK) 802.11g/n: OFDM (64QAM, 16QAM, QPSK, BPSK)
Number of Channels:	802.11b/g/n(HT20):11
Operation Frequency:	802.11b/g/n(HT20): 2412MHz to 2462MHz
Date Rate:	802.11b:1/2/5.5/11Mbps 802.11g:6/9/12/18/24/36/48/54Mbps 802.11n:MCS0-MCS7



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3.2 Test Location

All tests were performed at:

SGS-CSTC Standards Technical Services (Shanghai) Co., Ltd. E&E Lab

588 West Jindu Road, Xinqiao, Songjiang, 201612 Shanghai, China

Tel: +86 21 6191 5666

Fax: +86 21 6191 5678

No tests were sub-contracted.

3.3 Test Facility

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

- **CNAS (No. CNAS L0599)**

CNAS has accredited SGS-CSTC Standards Technical Services (Shanghai) Co., Ltd. to ISO/IEC 17025:2017 General Requirements for the Competence of Testing and Calibration Laboratories (CNAS-CL01 Accreditation Criteria for the Competence of Testing and Calibration Laboratories) for the competence in the field of testing.

- **A2LA (Certificate No. 6332.01)**

SGS-CSTC Standards Technical Services (Shanghai) Co., Ltd. is accredited by the American Association for Laboratory Accreditation (A2LA).

- **FCC (Designation Number: CN1301)**

SGS-CSTC Standards Technical Services (Shanghai) Co., Ltd. has been recognized as an accredited testing laboratory.

- **ISED (CAB Identifier: CN0020)**

SGS-CSTC Standards Technical Services (Shanghai) Co., Ltd. EMC Laboratory has been recognized by Innovation, Science and Economic Development Canada (ISED) as an accredited testing laboratory
Company Number: 8617A

- **VCCI (Member No.: 3061)**

The 3m Semi-anechoic chamber and Shielded Room of SGS-CSTC Standards Technical Services (Shanghai) Co., Ltd. has been registered in accordance with the Regulations for Voluntary Control Measures with Registration No.: R-13868, C-14336, T-12221, G-10830 respectively.



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4 Test Standards and Limits

4.1 FCC Radiofrequency radiation exposure limits:

According to §1.1310, the limit for general population/uncontrolled exposures

Frequency	Power density(mW/cm ²)	Averaging time(minutes)
300MHz~1.5GHz	f/1500	30
1.5GHz~100GHz	1.0	30

5 Measurement and Calculation

5.1 Maximum transmit power

The Power Data is based on the RF Test Report SHCR220100001901

Test Mode	Test Channel	Ant	Power [dBm]	Power [mW]
11B	2412	Ant1	11.76	15.00
11B	2437	Ant1	12.45	17.58
11B	2462	Ant1	13.62	23.01
11G	2412	Ant1	11.23	13.27
11G	2437	Ant1	11.87	15.38
11G	2462	Ant1	13.34	21.58
11N20SISO	2412	Ant1	11.10	12.88
11N20SISO	2437	Ant1	11.71	14.83
11N20SISO	2462	Ant1	12.92	19.59



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5.2 MPE Calculation

According to the formula $S=P/4\pi R^2$, we can calculate S which is MPE.

Note:

- 1) P (mW)
- 2) R = distance to the center of radiation of antenna (in meter) = 20cm
- 3) MPE limit = 1mW/cm²

The max. antenna gain is 3.3 dBi

Max. Conducted Power P(mW)	Gain in Linear Scale G	Operation Distance R(cm)	Power Density (mW/cm ²)	Limit (mW/cm ²)	Result
23.01	2.138	20	0.00979	1	Pass

So the device is exclusion from SAR test.

--End of the Report--



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