

### FCC IC RF EXPOSURE REPORT

For

#### WIFI module

**MODEL NUMBER: W2FM2510** 

FCC ID: 2AC23-W2FM2510

REPORT NUMBER: 4788686591-2

ISSUE DATE: December 17, 2018

Prepared for

Hui Zhou Gaoshengda Technology Co.,LTD NO.75 Zhongkai Development Area,Huizhou,Guangdong, China

Prepared by

UL Verification Services (Guangzhou) Co., Ltd, Song Shan Lake Branch Building 10, Innovation Technology Park, No. 1, Li Bin Road, Song Shan Lake Hi-Tech Development Zone, Dongguan, People's Republic of China

Tel: +86 769-22038881 Fax: +86 769 33244054 Website: www.ul.com

REPORT No.: 4788686591-2 Page 2 of 6

# **TABLE OF CONTENTS**

1.	ATTESTATION OF TEST RESULTS	3
2.	TEST METHODOLOGY	4
3.	FACILITIES AND ACCREDITATION	4
•.		
4	REQUIREMENT	E

REPORT No.: 4788686591-2 Page 3 of 6

# 1. ATTESTATION OF TEST RESULTS

App	licant	Inform	ation
-----	--------	--------	-------

Company Name: Hui Zhou Gaoshengda Technology Co.,LTD

Address: NO.75 Zhongkai Development Area, Huizhou, Guangdong, China

**Manufacturer Information** 

Company Name: Hui Zhou Gaoshengda Technology Co.,LTD

Address: NO.75 Zhongkai Development Area, Huizhou, Guangdong, China

**EUT Description** 

**EUT Name:** WIFI module Model: W2FM2510

**Brand Name: GSD** Sample Status: Normal

Sample Received Date: October 12, 2018

Date of Tested: October 12~ December 11, 2018

#### APPLICABLE STANDARDS

**STANDARD** 

**TEST RESULTS** Complies

FCC 47CFR§2.1091

KDB-447498 D01 V06

Tested By:	Checked By:

Kebo Zhang

kelo. Thurs

Engineer

Shawn Wen

Shemyles

Laboratory Leader

Approved By:

Stephen Guo

Laboratory Manager

REPORT No.: 4788686591-2 Page 4 of 6

### 2. TEST METHODOLOGY

The tests documented in this report were performed in accordance with KDB 447498 D01 General RF Exposure Guidance v06.

## 3. FACILITIES AND ACCREDITATION

5. I ACILITIES AND ACCREDITATION						
	A2LA (Certificate No.: 4102.01)					
	UL Verification Services (Guangzhou) Co., Ltd. Song Shan Lake Branch.					
	has been assessed and proved to be in compliance with A2LA.					
	FCC (FCC Designation No.: CN1187)					
	UL Verification Services (Guangzhou) Co., Ltd. Song Shan Lake Branch.					
	Has been recognized to perform compliance testing on equipment subject					
	to the Commission's Delcaration of Conformity (DoC) and Certification					
	rules					
Accreditation	IC(Company No.: 21320)					
Certificate	UL Verification Services (Guangzhou) Co., Ltd. Song Shan Lake Branch.					
Continoato	has been registered and fully described in a report filed with ISED.					
	The Company Number is 21320.					
	VCCI (Registration No.: G-20019, R-20004, C-20012 and T-20011)					
	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 D, the VCCI registration No. is G-20019 and R-20004					
	Shielding Room B, the VCCI registration No. is C-20012 and T-20011					

Note 1: All tests measurement facilities use to collect the measurement data are located at Building 10, Innovation Technology Park, Song Shan Lake Hi tech Development Zone, Dongguan, 523808, China

Note 2: The test anechoic chamber in UL Verification Services (Guangzhou) Co., Ltd. Song Shan Lake Branch had been calibrated and compared to the open field sites and the test anechoic chamber is shown to be equivalent to or worst case from the open field site.

REPORT No.: 4788686591-2 Page 5 of 6

### 4. REQUIREMENT

## **LIMIT**

Limits for General Population/Uncontrolled Exposure

	Limits for General Population/Uncontrolled Exposure							
Frequency Range (MHz)	Electric Field Strength (E) (V/m)	Magnetic Field Strength (H) (A/m)	Power Density (S) (mW/cm <sup>2</sup> )	Averaging Time $ E ^2$ , $ H ^2$ or S (minutes)				
0.3-1.34	614	1.63	(100)*	30				
1.34-30	824/f	2.19/f	(180/f2)*	30				
30-300	27.5	0.073	0.2	30				
300-1500			f/150	30				
1500-100,000			1.0	30				

Note 1: f = frequency in MHz, \* means Plane-wave equivalent power density

Note 2: General population/uncontrolled exposures apply in situations in which the general public may be exposed, or in which persons that are exposed as a consequence of their employment may not be fully aware of the potential for exposure or cannot exercise control over their exposure.

Note 3: The limit value 1.0mW/cm<sup>2</sup> is available for this EUT.

## **MPE CALCULATION METHOD**

 $S = PG/(4\pi R^2)$ 

where: S = power density (in appropriate units, e.g. mW/ cm2)

P = power input to the antenna (in appropriate units, e.g., mW)

G = power gain of the antenna in the direction of interest relative to an isotropic radiator

R = distance to the center of radiation of the antenna (appropriate units, e.g., cm)

REPORT No.: 4788686591-2 Page 6 of 6

# **CALCULATED RESULTS**

Radio Frequency Radiation Exposure Evaluation

WIFI 2.4G SISO (Worst case)						
Operating Mode	Max. Tune up Power		ver Antenna Gain		Power density	Limit
	(dBm)	(mW)	(dBi)	(num)	(mW/ cm <sup>2</sup> )	Liiiit
802.11b	17	50.12	1.53	1.42	0.015	1

WIFI 2.4G MIMO (Worst case)						
Operating	5		Directional Gain		Power density	Limit
Mode	(dBm)	(mW)	(dBi)	(num)	(mW/ cm <sup>2</sup> )	Liiiit
802.11n20	11	12.59	4.54	2.84	0.007	1

Note: the calculated distance is 20cm.

# **END OF REPORT**