RF EXPOSURE REPORT



Report No.: 17070365-FCC-H2 Supersede Report No.: N/A

Applicant	TECNO MO	OBILE LIMITE	ĒD	
Product Name	Mobile pho	Mobile phone		
Model No.	WX3F LTE			
Serial No.	N/A			
Test Standard	FCC 2.109	3:2016		
Test Date	May 17 to I	May 30, 2017		
Issue Date	May 31, 2017			
Test Result	Pass Fail			
Equipment complied with the specification				
Equipment did no	Equipment did not comply with the specification			
Loven	LOVEN LUO David Huang			
Loren Luo Test Engineer			d Huang cked By	

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Test result presented in this test report is applicable to the tested sample only

Issued by:

SIEMIC (SHENZHEN-CHINA) LABORATORIES

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Test Report	17070365-FCC-H2
Page	2 of 9

Laboratories Introduction

SIEMIC, headquartered in the heart of Silicon Valley, with superior facilities in US and Asia, is one of the leading independent testing and certification facilities providing customers with one-stop shop services for Compliance Testing and Global Certifications.



In addition to testing and certification, SIEMIC provides initial design reviews and compliance management throughout a project. Our extensive experience with China, Asia Pacific, North America, European, and International compliance requirements, assures the fastest, most cost effective way to attain regulatory compliance for the global markets.

Accreditations for Conformity Assessment

Country/Region	Scope
USA	EMC, RF/Wireless, SAR, Telecom
Canada	EMC, RF/Wireless, SAR, Telecom
Taiwan	EMC, RF, Telecom, SAR, Safety
Hong Kong	RF/Wireless, SAR, Telecom
Australia	EMC, RF, Telecom, SAR, Safety
Korea	EMI, EMS, RF, SAR, Telecom, Safety
Japan	EMI, RF/Wireless, SAR, Telecom
Singapore	EMC, RF, SAR, Telecom
Europe	EMC, RF, SAR, Telecom, Safety



Test Report	17070365-FCC-H2
Page	3 of 9

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Test Report	17070365-FCC-H2
Page	4 of 9

CONTENTS

1.	REPORT REVISION HISTORY	. 5
2.	CUSTOMER INFORMATION	. 5
3.	TEST SITE INFORMATION	. 5
4.	EQUIPMENT UNDER TEST (EUT) INFORMATION	. 6
5.	FCC §2.1093 - RADIOFREQUENCY RADIATION EXPOSURE EVALUATION: PORTABLE DEVICES	.8
5.1	RF EXPOSURE	. 8
5.2	TEST RESULT	. 9



Test Report	17070365-FCC-H2
Page	5 of 9

1. Report Revision History

Report No.	Report Version	Description	Issue Date
17070365-FCC-H2	NONE	Original	May 31, 2017

2. Customer information

Applicant Name	TECNO MOBILE LIMITED	
Applicant Add	ROOMS 05-15, 13A/F., SOUTH TOWER,WORLD FINANCE CENTRE, HARBOUR	
	CITY, 17 CANTON ROAD, TSIM SHA TSUI, KOWLOON, HONG KONG	
Manufacturer	SHENZHEN TECNO TECHNOLOGY CO.,LTD.	
Manufacturer Add	1-4th Floor,3rd Building,Pacific Industrial Park,No.2088,Shenyan Road,Yantian	
	District, Shenzhen,Guangdong,China	

3. Test site information

Lab performing tests	SIEMIC (Shenzhen-China) LABORATORIES		
	Zone A, Floor 1, Building 2 Wan Ye Long Technology Park		
Lab Address	South Side of Zhoushi Road, Bao' an District, Shenzhen, Guangdong China		
	518108		
FCC Test Site No.	718246		
IC Test Site No.	4842E-1		
Test Software	Radiated Emission Program-To Shenzhen v2.0		



Test Report	17070365-FCC-H2
Page	6 of 9

4. Equipment under Test (EUT) Information

Description of EUT: Mobile phone

Main Model: WX3F LTE

Serial Model: N/A

Date EUT received: May 16, 2017

Test Date(s): May 17 to May 30, 2017

GSM850: -0.22dBi PCS1900: 1.9dBi

UMTS-FDD Band V: -0.22dBi UMTS-FDD Band II: 1.9dBi

LTE Band II: 1.9dBi

Antenna Gain:

LTE Band IV: 2dBi

LTE Band VII: 1dBi

WIFI: 0.5dBi

Bluetooth/BLE: 0.5dBi

GPS: 1.9dBi

Antenna Type: PIFA antenna

GSM / GPRS: GMSK EGPRS: GMSK,8PSK UMTS-FDD: QPSK

Type of Modulation: LTE Band: QPSK, 16QAM

802.11b/g/n: DSSS, OFDM

Bluetooth: GFSK, π /4DQPSK, 8DPSK

BLE: GFSK GPS:BPSK

GSM850 TX: 824.2 ~ 848.8 MHz; RX: 869.2 ~ 893.8 MHz

PCS1900 TX: 1850.2 ~ 1909.8 MHz; RX: 1930.2 ~ 1989.8 MHz

RF Operating Frequency (ies): UMTS-FDD Band V TX: 826.4 ~ 846.6 MHz; RX: 871.4 ~ 891.6 MHz

UMTS-FDD Band II TX:1852.4 ~ 1907.6 MHz;

RX: 1932.4 ~ 1987.6 MHz



Test Report	17070365-FCC-H2
Page	7 of 9

LTE Band II TX: $1850.7 \sim 1909.3$ MHz; RX: $1930.7 \sim 1989.3$ MHz LTE Band IV TX: $1710.7 \sim 1754.3$ MHz; RX: $2110.7 \sim 2154.3$ MHz LTE Band VII TX: $2502.5 \sim 2567.5$ MHz; RX: $2622.5 \sim 2687.5$ MHz

WIFI: 802.11b/g/n(20M): 2412-2462 MHz WIFI: 802.11n(40M): 2422-2452 MHz Bluetooth& BLE: 2402-2480 MHz

GPS: 1575.42 MHz

GSM 850: 124CH PCS1900: 299CH

UMTS-FDD Band V: 102CH
UMTS-FDD Band II: 277CH

Number of Channels: WIFI :802.11b/g/n(20M): 11CH

WIFI:802.11n(40M): 7CH

Bluetooth: 79CH BLE: 40CH

GPS:1CH

Port: USB Port, Earphone Port

Adapter:

Model: A8-501000

Input: AC100-240V~50/60Hz,200mA

Output: DC 5.0V,1.0A

Input Power: Battery:

Model: BL-23CT

Spec: 3.8V,2300mAh,8.74Wh

Maximum chargeable voltage: 4.35V

Trade Name : TECNO

GPRS/EGPRS Multi-slot class 8/10/12

FCC ID: 2ADYY-WX3FLTE



Test Report	17070365-FCC-H2
Page	8 of 9

5. FCC §2.1093 - Radiofrequency radiation exposure evaluation: portable devices.

5.1 RF Exposure

Standard Requirement:

According to §15.247 (i) and §1.1307(b)(1), systems operating under the provisions of this section shall be operated in a manner that ensures that the public is not exposed to radio frequency energy level in excess of the Commission's guidelines.

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:

[(max. power of channel, including tune-up tolerance, mW)/(min. test separation distance, mm)] $\cdot [\sqrt{f_{(GHz)}}] \le 3.0$ for 1-g SAR and ≤ 7.5 for 10-g extremity SAR, 16 where

- f_(GHz) is the RF channel transmit frequency in GHz
- Power and distance are rounded to the nearest mW and mm before calculation¹⁷
- The result is rounded to one decimal place for comparison

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.

Routine SAR evaluation refers to that specifically required by § 2.1093, using measurements or computer simulation. When routine SAR evaluation is not required, portable transmitters with output power greater than the applicable low threshold require SAR evaluation to qualify for TCB approval.

result = $P\sqrt{F}/D$

P= Maximum turn-up power in mW

F= Channel frequency in GHz

D= Minimum test separation distance in mm



Test Report	17070365-FCC-H2
Page	9 of 9

5.2 Test Result

Bluetooth Mode:

		Freque	Conducted	Tune Up	Max Tune	Max Tune		
Modulation	СН	ncy	Power	Power	Up Power	Up Power	Result	Limit
		(MHz)	(dBm)	(dBm)	(dBm)	(mW)		
GFSK	Low	2402	0.941	1.5±1	2.5	1.778	0.55	3
	Mid	2441	2.476	1.5±1	2.5	1.778	0.56	3
	High	2480	2.158	1.5±1	2.5	1.778	0.56	3
π /4 DQPSK	Low	2402	0.015	1±1	2	1.585	0.49	3
	Mid	2441	1.514	1±1	2	1.585	0.50	3
	High	2480	1.261	1±1	2	1.585	0.50	3
8-DPSK	Low	2402	0.237	1±1	2	1.585	0.49	3
	Mid	2441	1.498	1±1	2	1.585	0.50	3
	High	2480	1.203	1±1	2	1.585	0.50	3

BLE Mode:

Modulation	СН	Freq (MHz)	Conducted Power (dBm)	Tune Up Power (dBm)	Max Tune Up Power (dBm)	Max Tune Up Power (mW)	Result	Limit
GFSK	Low	2402	0.901	1.5±1	2.5	1.778	0.55	3
	Mid	2440	2.344	1.5±1	2.5	1.778	0.56	3
	High	2480	1.874	1.5±1	2.5	1.778	0.56	3

Result: Compliance

No SAR measurement is required.