# RF EXPOSURE REPORT



Report No.: 17070376-FCC-H2 Supersede Report No.: N/A

Applicant	INFINIX MOBILITY LIMITED			
Product Name	Mobile pho	Mobile phone		
Model No.	X572			
Serial No.	N/A			
Test Standard	FCC 2.109	3:2016		
Test Date	May 19 to	May 19 to June 08, 2017		
Issue Date	June 09, 2017			
Test Result	Pass Fail			
Equipment complied with the specification				
Equipment did not comply with the specification				
Vera Zhang David Huang				
Vera Zhang		David Huang		
Test Engineer		Checked 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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### **Laboratories Introduction**

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#### **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



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## 1. Report Revision History

Report No.	Report Version	Description	Issue Date
17070376-FCC-H2	NONE	Original	June 09, 2017

## 2. Customer information

Applicant Name	INFINIX MOBILITY LIMITED	
Applicant Add	RMS 05-15, 13A/F SOUTH TOWER WORLD FINANCE CTR HARBOUR CITY 17	
	CANTON RD TST KLN 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	



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### 4. Equipment under Test (EUT) Information

Description of EUT: Mobile phone

Main Model: X572

Serial Model: N/A

Date EUT received: May 18, 2017

Test Date(s): May 19 to June 08, 2017

GSM850:-3.2dBi

PCS1900:-0.29dBi

UMTS-FDD Band V: -3.2dBi
UMTS-FDD Band IV: -2.98dBi
UMTS-FDD Band II: -0.29dBi

LTE Band II: 1.7dBi

LTE Band IV: -2.98dBi Antenna Gain:

LTE Band VII: 2.5dBi WIFI(2.4G): 1.35dBi

WIFI(5150-5250MHz): -2.2 dBi WIFI(5250-5350MHz): -2.2 dBi

WIFI(5725-5850MHz): -2.2 dBi

Bluetooth/BLE: 1.35dBi

GPS: -0.29dBi

Antenna Type: PIFA antenna

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

LTE Band: QPSK, 16QAM

Type of Modulation: 802.11b: DSSS

802.11a/g/n20/n40: OFDM

Bluetooth: GFSK, π /4DQPSK, 8DPSK

BLE: GFSK GPS: BPSK



RF Operating Frequency (ies):

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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

UMTS-FDD Band V TX: 826.4 ~ 846.6 MHz; RX: 871.4 ~ 891.6 MHz

UMTS-FDD Band IV TX:1712.4 ~ 1752.6 MHz;

RX: 2112.4 ~ 2152.6 MHz

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

RX: 1932.4 ~ 1987.6 MHz

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

802.11b/g: 2412-2462 MHz (TX/RX)

802.11n20: 2412-2462MHz;5180-5320 MHz;

5745-5825 MHz; (TX/RX)

802.11n40: 2422-2452 MHz (TX/RX); 5190-5310 MHz;

5755-5795 MHz; (TX/RX)

802.11 a: 5180-5320 MHz; 5745-5825 MHz (TX/RX)

Bluetooth& BLE: 2402-2480 MHz

GPS: 1575.42 MHz

GSM 850: 124CH PCS1900: 299CH

UMTS-FDD Band V: 102CH UMTS-FDD Band IV: 202CH UMTS-FDD Band II: 277CH

Number of Channels: WIFI :802.11b/g: 11CH

WIFI:802.11a: 24CH

WIFI:802.11n20: 11CH(2.4GHz); 24CH(5GHz) WIFI:802.11n40: 9CH(2.4GHz); 12CH(5GHz)

Bluetooth: 79CH BLE: 40CH GPS:1CH

Port: USB Port, Earphone Port



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Adapter:

Model: CQ-18KX

Input: AC100-240V~50/60Hz,600mA

Output: DC 5.0V-9V,2A

DC 9V-12V,1.5A

Input Power: Battery:

Model: BL-42AX

Spec: 3.85V,4200mAh/4300mAh (min/typ)

16.17Wh/16.55Wh (min/typ)

Limited Charge Voltage: 4.4V

Trade Name : Infinix

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

FCC ID: 2AIZN-X572



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## 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  $\le 7.5$  for 10-g extremity SAR,  $^{16}$  where

- f<sub>(GHz)</sub> is the RF channel transmit frequency in GHz
- Power and distance are rounded to the nearest mW and mm before calculation<sup>17</sup>
- The result is rounded to one decimal place for comparison

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  $\leq 5$  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



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### 5.2 Test Result

#### Bluetooth Mode:

Modulation	СН	Freque ncy	Conducted Power	Tune Up Power	Max Tune Up Power	Max Tune Up Power	Result	Limit
		(MHz)	(dBm)	(dBm)	(dBm)	(mW)		
GFSK	Low	2402	-0.099	-1±1	0	1.000	0.31	3
	Mid	2441	-1.405	-1±1	0	1.000	0.31	3
	High	2480	-1.983	-1±1	0	1.000	0.31	3
π /4 DQPSK	Low	2402	-1.019	-2±1	-1	0.794	0.25	3
	Mid	2441	-1.738	-2±1	-1	0.794	0.25	3
	High	2480	-2.354	-2±1	-1	0.794	0.25	3
8-DPSK	Low	2402	-0.836	-1.5±1	-0.5	0.891	0.28	3
	Mid	2441	-1.439	-1.5±1	-0.5	0.891	0.28	3
	High	2480	-2.271	-1.5±1	-0.5	0.891	0.28	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	-0.249	-1.5±1	-0.5	0.891	0.28	3
	Mid	2440	-1.494	-1.5±1	-0.5	0.891	0.28	3
	High	2480	-1.566	-1.5±1	-0.5	0.891	0.28	3

Result: Compliance

No SAR measurement is required.