# RF EXPOSURE REPORT



Report No.: 17071364-FCC-H2 Supersede Report No.: N/A

Applicant	INFINIX MO	OBILITY LIMITED		
Product Name	Mobile phone			
Model No.	X573			
Serial No.	N/A			
Test Standard	FCC 2.109	3:2016		
Test Date	December	06, 2017 to January 1, 2018		
Issue Date	January 2,	January 2, 2018		
Test Result	Pass Fail			
Equipment compl	Equipment complied with the specification			
Equipment did no	Equipment did not comply with the specification			
James Liang		David Huang		
Aaron Liang Test Engineer		David Huang 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**

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



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## 1. Report Revision History

Report No.	Report Version	Description	Issue Date
17071364-FCC-H2	NONE	Original	January 2, 2018

## 2. Customer information

Applicant Name	INFINIX MOBILITY 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.	535293	
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: X573

Serial Model: N/A

Date EUT received: December 05, 2017

Test Date(s): December 06, 2017 to January 1, 2018

GSM850: -0.7dBi PCS1900: 1.4dBi

UMTS-FDD Band V: -0.7dBi UMTS-FDD Band IV: 1.4dBi UMTS-FDD Band II: 1.4dBi

Antenna Gain: LTE Band II: 1.4dBi

LTE Band IV: 1.7dBi LTE Band VII: 1.7dBi Bluetooth/BLE: 1.7dBi

WIFI: 1.7dBi GPS: 1.7dBi

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 IV TX:1712.4 ~ 1752.6 MHz;



Number of Channels:

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

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

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: A88-502000

Input: AC100-240V~50/60Hz,0.35A

Output: DC 5V, 2.0A

Input Power:
Battery:

Model: BL-39GX

Spec: 3.85V, 3900mAh/4000mAh, 15.02Wh/15.4Wh

Voltage: 4.4V

Trade Name : Infinix

GPRS/EGPRS Multi-slot class 8/10/11/12

FCC ID: 2AIZN-X573



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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	3.71	4±1	5	3.162	0.98	3
	Mid	2441	3.76	4±1	5	3.162	0.99	3
	High	2480	3.34	4±1	5	3.162	1.00	3
π /4 DQPSK	Low	2402	5.04	5±1	6	3.981	1.23	3
	Mid	2441	5.02	5±1	6	3.981	1.24	3
	High	2480	4.52	5±1	6	3.981	1.25	3
8-DPSK	Low	2402	5.30	5±1	6	3.981	1.23	3
	Mid	2441	5.34	5±1	6	3.981	1.24	3
	High	2480	4.84	5±1	6	3.981	1.25	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
G FSK	Low	2402	0.34	0±1	1	1.259	0.39	3
	Mid	2440	0.67	0±1	1	1.259	0.39	3
	High	2480	-0.50	0±1	1	1.259	0.40	3

Result: Compliance

No SAR measurement is required.