# RF EXPOSURE REPORT



Report No.: 18070321-FCC-H2
Supersede Report No.: N/A

Applicant	BLU Products,Inc		
Product Name	Feature Phone		
Model No.	TANK X		
Serial No.	N/A		
Test Standard	FCC 2.109	3:2017	
Test Date	April 01 to April 16, 2018		
Issue Date	April 17, 2018		
Test Result	Pass Fail		
Equipment complied with the specification			
Equipment did not comply with the specification			
form Li	ond	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
18070321-FCC-H2	NONE	Original	April 17, 2018

## 2. Customer information

Applicant Name	BLU Products,Inc
Applicant Add	10814 NW 33rd St#100 Doral,FL33172,USA
Manufacturer	BLU Products,Inc
Manufacturer Add	10814 NW 33rd St#100 Doral,FL33172,USA

## 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:	Feature Phone

Main Model: TANK X

Serial Model: N/A

Date EUT received: March 30, 2018

Test Date(s): April 01 to April 16, 2018

GSM850: 0.5dBi

Antenna Gain: PCS1900: 0.8dBi

Bluetooth: 1.0dBi

Antenna Type:

BT: PCB antenna

GSM / GPRS: GMSK

Type of Modulation: EGPRS: GMSK

Bluetooth: GFSK, π /4DQPSK, 8DPSK

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

RF Operating Frequency (ies): PCS1900 TX: 1850.2 ~ 1909.8 MHz; RX: 1930.2 ~ 1989.8 MHz

Bluetooth: 2402-2480 MHz

GSM 850: 124CH

Number of Channels: PCS1900: 299CH

Bluetooth: 79CH

Port: USB Port, Earphone Port

Adapter:

Model: US-NB-0550

Input: AC100-240V~50/60Hz,0.15A

Input Power: Output: DC 5.0V, 550mA

Battery:

Model: N5C100L

Spec: 3.7V, 1000mAh, 3.7Wh



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Trade Name :	BLU
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GPRS Multi-slot class 8/10/11/12

FCC ID: YHLBLUTANKX



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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	-1.25	-1±1	0	1.000	0.31	3
	Mid	2441	-0.99	-1±1	0	1.000	0.31	3
	High	2480	-0.84	-1±1	0	1.000	0.31	3
π /4 DQPSK	Low	2402	-2.09	-2±1	-1	0.794	0.25	3
	Mid	2441	-1.70	-2±1	-1	0.794	0.25	3
	High	2480	-1.66	-2±1	-1	0.794	0.25	3
8-DPSK	Low	2402	-2.96	-2±1	-1	0.794	0.25	3
	Mid	2441	-1.64	-2±1	-1	0.794	0.25	3
	High	2480	-1.51	-2±1	-1	0.794	0.25	3

Result: Compliance

No SAR measurement is required.