# RF EXPOSURE REPORT



Report No.: 18070333-FCC-H2
Supersede Report No.: N/A

Applicant	BLU Products,Inc			
Product Name	Feature Phone			
Model No.	FLASH			
Serial No.	N/A			
Test Standard	FCC 2.109	3:2017		
Test Date	April 10 to	April 24, 2018		
Issue Date	April 25, 20	18		
Test Result	Pass	Fail		
Equipment complied with the specification				
Equipment did not comply with the specification				
James Lione		David	Huang	
Aaron Liang Test Engineer			Huang ked 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
18070333-FCC-H2	NONE	Original	April 25, 2018

## 2. Customer information

Applicant Name	BLU Products,Inc
Applicant Add	10814 NW 33rd St # 100 Doral, FL 33172,USA
Manufacturer	BLU Products,Inc
Manufacturer Add	10814 NW 33rd St # 100 Doral, FL 33172,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



Input Power:

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## 4. Equipment under Test (EUT) Information

T. Equipment under	
Description of EUT:	Feature Phone
Main Model:	FLASH
Serial Model:	N/A
Date EUT received:	April 09, 2018
Test Date(s):	April 10 to April 24, 2018
Antenna Gain:	GSM850: -0.5dBi PCS1900: -0.8dBi Bluetooth: -0.4dBi
Antenna Type:	GSM: PIFA antenna BT: Monopole antenna
Type of Modulation:	GSM / GPRS: GMSK EGPRS: GMSK Bluetooth: GFSK, π /4DQPSK, 8DPSK
RF Operating Frequency (ies):	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 Bluetooth: 2402-2480 MHz
Number of Channels:	GSM 850: 124CH PCS1900: 299CH Bluetooth: 79CH
Port:	USB Port, Earphone Port
	Adapter:

Model: US-NB-0550

Battery:

Output: DC 5.0V, 550mA

Model: C41664160170L

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



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Spec: 3.7V, 1700mAh, 6.29Wh

Trade Name : BLU

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

FCC ID: YHLBLUFLASH18



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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, <sup>16</sup> 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	1.56	2±1	3	1.995	0.62	3
	Mid	2441	1.92	2±1	3	1.995	0.62	3
	High	2480	2.39	2±1	3	1.995	0.63	3
π /4 DQPSK	Low	2402	4.18	3.5±1	4.5	2.818	0.87	3
	Mid	2441	2.62	3.5±1	4.5	2.818	0.88	3
	High	2480	4.04	3.5±1	4.5	2.818	0.89	3
8-DPSK	Low	2402	1.59	2±1	3	1.995	0.62	3
	Mid	2441	2.23	2±1	3	1.995	0.62	3
	High	2480	2.31	2±1	3	1.995	0.63	3

Result: Compliance

No SAR measurement is required.