RF EXPOSURE REPORT



Report No.: 18070046-FCC-H2
Supersede Report No.: N/A

| Applicant | BLU Products,Inc | | | |
|---|------------------|--------------------------------|--|--|
| Product Name | Mobile Phone | | | |
| Model No. | VIVO ONE | PLUS | | |
| Serial No. | N/A | | | |
| Test Standard | FCC 2.109 | 3:2016 | | |
| Test Date | January 13 | January 13 to January 28, 2018 | | |
| Issue Date | January 29, 2018 | | | |
| Test Result | Pass Fail | | | |
| Equipment complied with the specification | | | | |
| Equipment did not comply with the specification | | | | |
| Agran Li | one | David Huang | | |
| Aaron Liang Test Engineer | | David Huang Checked By | | |

This test report may be reproduced in full only

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

Issued by:

SIEMIC (SHENZHEN-CHINA) LABORATORIES

Zone A, Floor 1, Building 2 Wan Ye Long Technology Park
South Side of Zhoushi Road, Bao' an District, Shenzhen, Guangdong China 518108
Phone: +86 0755 2601 4629801 Email: China@siemic.com.cn



| Test Report | 18070046-FCC-H2 |
|-------------|-----------------|
| Page | 2 of 10 |

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 | 18070046-FCC-H2 |
|-------------|-----------------|
| Page | 3 of 10 |

This page has been left blank intentionally.



| Test Report | 18070046-FCC-H2 |
|-------------|-----------------|
| Page | 4 of 10 |

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. | 9 |
| 5.1 | RF EXPOSURE | 9 |
| 52 | TEST DESI II T | Λ |



| Test Report | 18070046-FCC-H2 |
|-------------|-----------------|
| Page | 5 of 10 |

1. Report Revision History

| Report No. | Report Version | Description | Issue Date |
|-----------------|----------------|-------------|------------------|
| 18070046-FCC-H2 | NONE | Original | January 29, 2018 |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |

2. Customer information

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

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 | |



| Test Report | 18070046-FCC-H2 |
|-------------|-----------------|
| Page | 6 of 10 |

4. Equipment under Test (EUT) Information

Description of EUT: Mobile Phone

Main Model: VIVO ONE PLUS

Serial Model: N/A

Date EUT received: January 12, 2018

Test Date(s): January 13 to January 28, 2018

GSM850: -2.8dBi PCS1900: -2.3dBi

UMTS-FDD Band V: -2.5dBi
UMTS-FDD Band IV: -2.5dBi
UMTS-FDD Band II: -2.5dBi

LTE Band II: -2.5dBi

Antenna Gain: LTE Band IV: -2.5dBi

LTE Band VII: -3.0dBi LTE Band XII: -2.8dBi LTE Band XVII: -2.8dBi Bluetooth/BLE: -2.7dBi

WIFI: -2.7dBi GPS: -2.5dBi

Antenna Type: PIFA Antenna

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

LTE Band: QPSK, 16QAM Type of Modulation:

802.11b/g/n: DSSS, OFDM

Bluetooth: GFSK, π /4DQPSK, 8DPSK

BLE: GFSK GPS: BPSK



| Test Report | 18070046-FCC-H2 |
|-------------|-----------------|
| Page | 7 of 10 |

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

RF Operating Frequency (ies):

LTE Band II TX: 1850.7 ~ 1909.3MHz; RX : 1930.7 ~ 1989.3 MHz

LTE Band IV TX: 1710.7 ~ 1754.3 MHz; RX : 2110.7~ 2154.3 MHz

LTE Band VII TX: 2502.5 ~ 2567.5 MHz; RX : 2622.5 ~ 2687.5 MHz

LTE Band XII TX:699.7 ~ 715.3 MHz; RX : 729.7~ 745.3MHz LTE Band XVII TX: 706.5 ~ 713.5 MHz; RX : 736.5 ~ 743.5 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 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: TPA-46050200UU

Input: AC100-240V~50/60Hz,0.3A

Output: DC 5V, 2A

Input Power:

Number of Channels:

Battery:

Model: C916241400P

Spec: 3.85V, 4000mAh, 15.4Wh

Voltage: 4.4V

Brand Name : BLU



| Test Report | 18070046-FCC-H2 |
|-------------|-----------------|
| Page | 8 of 10 |

Trade Name:



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

FCC ID: YHLBLUVOONEPLUS



| Test Report | 18070046-FCC-H2 |
|-------------|-----------------|
| Page | 9 of 10 |

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 | 18070046-FCC-H2 |
|-------------|-----------------|
| Page | 10 of 10 |

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 | 3.530 | 3±1 | 4 | 2.512 | 0.78 | 3 |
| | Mid | 2441 | 3.067 | 3±1 | 4 | 2.512 | 0.78 | 3 |
| | High | 2480 | 3.346 | 3±1 | 4 | 2.512 | 0.79 | 3 |
| π /4 DQPSK | Low | 2402 | 2.884 | 2±1 | 3 | 1.995 | 0.62 | 3 |
| | Mid | 2441 | 2.504 | 2±1 | 3 | 1.995 | 0.62 | 3 |
| | High | 2480 | 2.761 | 2±1 | 3 | 1.995 | 0.63 | 3 |
| 8-DPSK | Low | 2402 | 3.067 | 3±1 | 4 | 2.512 | 0.78 | 3 |
| | Mid | 2441 | 2.672 | 3±1 | 4 | 2.512 | 0.78 | 3 |
| | High | 2480 | 2.919 | 3±1 | 4 | 2.512 | 0.79 | 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 | 3.488 | 3±1 | 4 | 2.512 | 0.78 | 3 |
| | Mid | 2440 | 3.038 | 3±1 | 4 | 2.512 | 0.78 | 3 |
| | High | 2480 | 3.346 | 3±1 | 4 | 2.512 | 0.79 | 3 |

Result: Compliance

No SAR measurement is required.