RF EXPOSURE REPORT



Report No.: 17070248-FCC-H2 Supersede Report No.: N/A

Applicant	Verykool USA Inc				
Product Name	Mobile Phone				
Model No.	s4009	s4009			
Serial No.	N/A	N/A			
Test Standard	FCC 2.109	FCC 2.1093:2016			
Test Date	April 25, 2017				
Issue Date	April 26, 2017				
Test Result	Pass Fail				
Equipment complied with the specification					
Equipment did not comply with the specification					
Lean Tong		David Huang			
Leen Yang 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	17070248-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	17070248-FCC-H2
Page	3 of 10

This page has been left blank intentionally.



Test Report	17070248-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	.8
5.1	RF EXPOSURE	.8
5.2	TEST RESULT	.9



Test Report	17070248-FCC-H2
Page	5 of 10

1. Report Revision History

Report No.	Report Version	Description	Issue Date
17070248-FCC-H2	NONE	Original	April 26, 2017

2. Customer information

Applicant Name	Verykool USA Inc	
Applicant Add	3636 Nobel Drive, Suite 325, San Diego, California 92122 United States	
Manufacturer	TEM MOBILE LIMITED	
Manufacturer Add	No 1708, Cangsong Building, Tairan 6 Road, Futian ShenZhen, 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	



Test Report	17070248-FCC-H2
Page	6 of 10

4. Equipment under Test (EUT) Information

Description of	of EUT:	Mobile Phone

Main Model: s4009

Serial Model: N/A

Date EUT received: March 31, 2017

Test Date(s): April 25, 2017

GSM850:1.5dBi PCS1900:1.55dBi

UMTS-FDD Band V: 1.58dBi

Antenna Gain: UMTS-FDD Band II: 1.56dBi

WIFI: 1.35dBi

Bluetooth/BLE: 1.35dBi

GPS: 1.8dBi

Antenna Type: PIFA antenna

GSM / GPRS: GMSK

EGPRS: GMSK,8PSK UMTS-FDD: QPSK

Type of Modulation: 802.11b/g/n: DSSS, OFDM

Bluetooth: GFSK, π /4DQPSK, 8DPSK

BLE: GFSK GPS:BPSK



Test Report	17070248-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 II TX:1852.4 ~ 1907.6 MHz;

RF Operating Frequency (ies): RX: 1932.4 ~ 1987.6 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 II: 277CH

Number of Channels: 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: s4009

Input: AC100-240V~50/60Hz,0.2A

Output: DC 5.0V,550mA

Input Power:

Battery:

Model: s4009

Spec: 3.7V,1200mAh(4.44Wh) Limited charger voltage: 4.2V

Trade Name : Verykool

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

FCC ID: WA6S4009



Test Report	17070248-FCC-H2
Page	8 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	17070248-FCC-H2
Page	9 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	-2.742	-2±1	-1	0.794	0.25	3
	Mid	2441	-1.685	-2±1	-1	0.794	0.25	3
	High	2480	-1.061	-2±1	-1	0.794	0.25	3
π /4 DQPSK	Low	2402	-2.869	-2±1	-1	0.794	0.25	3
	Mid	2441	-1.779	-2±1	-1	0.794	0.25	3
	High	2480	-1.314	-2±1	-1	0.794	0.25	3
8-DPSK	Low	2402	-2.845	-2±1	-1	0.794	0.25	3
	Mid	2441	-1.816	-2±1	-1	0.794	0.25	3
	High	2480	-1.137	-2±1	-1	0.794	0.25	3

WIFI Mode:

Modulation	СН	Freque ncy (MHz)	Conducted Power (dBm)	Tune Up Power (dBm)	Max Tune Up Power (dBm)	Max Tune Up Power (mW)	Result	Limit
	Low	2412	8.61	8.5±1	9.5	8.913	2.77	3
802.11b	Mid	2437	8.59	8.5±1	9.5	8.913	2.78	3
	High	2462	8.69	8.5±1	9.5	8.913	2.80	3
802.11g	Low	2412	8.43	8.5±1	9.5	8.913	2.77	3
	Mid	2437	8.19	8.5±1	9.5	8.913	2.78	3
	High	2462	9.01	8.5±1	9.5	8.913	2.80	3
000 445	Low	2412	8.49	8.5±1	9.5	8.913	2.77	3
802.11n (20M)	Mid	2437	7.89	8.5±1	9.5	8.913	2.78	3
	High	2462	9.11	8.5±1	9.5	8.913	2.80	3
802.11n (40M)	Low	2422	8.72	8±1	9	7.943	2.47	3
	Mid	2437	8.38	8±1	9	7.943	2.48	3
	High	2452	7.79	8±1	9	7.943	2.49	3



Test Report	17070248-FCC-H2
Page	10 of 10

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	-9.715	-9±1	-8	0.158	0.05	3
	Mid	2440	-8.904	-9±1	-8	0.158	0.05	3
	High	2480	-8.411	-9±1	-8	0.158	0.05	3

Result: Compliance

No SAR measurement is required.