RF EXPOSURE REPORT



Report No.: 16070911-FCC-H2
Supersede Report No.: N/A

Applicant	Verykool USA Inc			
Product Name	Mobile pho	ne		
Model No.	SL5200			
Serial No.	N/A			
Test Standard	FCC 2.109	3:2015		
Test Date	August 1 to	August 29, 2	016	
Issue Date	August 31,	2016		
Test Result	Pass	Fail		
Equipment compl	ied with the	specification	V	
Equipment did no	t comply with	n the specifica	tion 🗆	
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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
16070911-FCC-H2	NONE	Original	August 31, 2016

2. Customer information

Applicant Name	Verykool USA Inc
Applicant Add	3636 Nobel Drive, Suite 325, San Diego, California 92122 United States
Manufacturer	Kozen Mobile Co.,Ltd
Manufacturer Add	Floor 3rd,building 29,No.368 Zhangjiang Road,pudong District,Shanghai,China
	201203

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		



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4. Equipment under Test (EUT) Information

Description of EUT: Mobile phone

Main Model: SL5200

Serial Model: N/A

Date EUT received: July 26, 2016

Test Date(s): August 1 to August 29, 2016

GSM850: -3.2dBi PCS1900: -2.21dBi

UMTS-FDD Band V: -3.62dBi
UMTS-FDD Band IV: -2.42dBi
UMTS-FDD Band II: -2.42dBi

LTE Band 2: -2.5dBi

Antenna Gain: LTE Band 4: -3.0dBi

LTE Band 5: -3.20dBi LTE Band 7: -3.0dBi LTE Band 12: -4.2dBi LTE Band 17: -4.2dBi Bluetooth/BLE/WIFI: 0dBi

GPS: 0dBi

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



Number of Channels:

Input Power:

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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

LTE Band 2 TX: 1852.5 ~ 1907.5 MHz; RX : 1932.5 ~ 1987.5 MHz

RF Operating Frequency (ies): LTE Band 4 TX: 1712.5 ~ 1752.5 MHz; RX: 2112.5 ~ 2152.5 MHz

LTE Band 5 TX: 826.5 \sim 846.5 MHz; RX : 871.5 \sim 891.5 MHz

LTE Band 7 TX: 2502.5 ~ 2567.5 MHz; RX : 2622.5 ~ 2687.5 MHz

LTE Band 12 TX:699.7 ~ 715.3 MHz; RX : 729.7~ 745.3MHz LTE Band 17 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: Earphone Port, USB Port

Adapter:

Model: TPA-46B050100UU

Input: 100-240V~50/60Hz,0.2A

Output:5.0V,1000mA

Battery:

Model: MLP415879

Spec: 3.8V,2960mAh(11.248Wh) Charge limited voltage: 4.35V



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Trade Name : verykool

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

FCC ID: WA6SL5200



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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 ≤ 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



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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	4.286	4.5±1	5.5	3.548	1.10	3
	Mid	2441	5.276	4.5±1	5.5	3.548	1.11	3
	High	2480	2.588	3±1	4	2.512	0.79	3
π /4 DQPSK	Low	2402	3.444	4±1	5	3.162	0.98	3
	Mid	2441	4.544	4±1	5	3.162	0.99	3
	High	2480	1.874	2.5±1	3.5	2.239	0.71	3
8-DPSK	Low	2402	3.655	4±1	5	3.162	0.98	3
	Mid	2441	4.473	4±1	5	3.162	0.99	3
	High	2480	1.981	2.5±1	3.5	2.239	0.71	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	-2.773	-3.0±1	-2.0	0.631	0.20	3
	Mid	2440	-0.986	-0.5±1	0.5	1.122	0.35	3
	High	2480	-3.843	-3.0±1	-2.0	0.631	0.20	3



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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	8.73	8.5±1	9.5	8.913	2.76	3
802.11b	Mid	2442	8.81	8.5±1	9.5	8.913	2.78	3
	High	2472	8.56	8.5±1	9.5	8.913	2.81	3
802.11g	Low	2412	8.61	8.5±1	9.5	8.913	2.76	3
	Mid	2442	8.38	8.5±1	9.5	8.913	2.78	3
	High	2472	8.92	8.5±1	9.5	8.913	2.81	3
000 44.5	Low	2412	8.54	8.5±1	9.5	8.913	2.76	3
802.11n	Mid	2442	8.46	8.5±1	9.5	8.913	2.78	3
(20M)	High	2472	8.17	8.5±1	9.5	8.913	2.81	3
802.11n (40M)	Low	2422	8.78	8.5±1	9.5	8.913	2.76	3
	Mid	2442	8.35	8.5±1	9.5	8.913	2.78	3
	High	2462	8.74	8.5±1	9.5	8.913	2.81	3

Result: Compliance

No SAR measurement is required.