# TEST REPORT

**Reference No.** : WTS16S0961742E

FCC ID ..... : 2AJXM-KL05

Applicant.....: SUPERCOW TECHNOLOGY LIMITED

Address ...... FLAT C 23/F LUCKY PLAZA 315-321 LOCKHART ROAD WAN

CHAI HONG KONG

Manufacturer .....: HK Guang Shen Xin Electronics Technology Limited

Address...... Unit A5, 9/F, HK Spinners Ind. Bldg., Phase 6,481 Castle Peak

Road, Cheung Sha Wan, Kowloon, Hong Kong

Product Name.....: Mobile Phone

Model No. ..... : KL05

Brand.....: GOMETEL

Standards .....: FCC PART15 SUBPART B: 2015

Date of Receipt sample .... : Sep. 27, 2016

**Date of Test** .....: Sep. 28 – Oct. 17, 2016

**Date of Issue**.....: Oct. 18, 2016

Test Result..... : Pass

#### Remarks:

The results shown in this test report refer only to the sample(s) tested, this test report cannot be reproduced, except in full, without prior written permission of the company. The report would be invalid without specific stamp of test institute and the signatures of compiler and approver.

## Prepared By:

EST REPO

Waltek Services (Shenzhen) Co., Ltd.

Address: 1/F., Fukangtai Building, West Baima Road, Songgang Street, Baoan District, Shenzhen, Guangdong, China

Tel:+86-755-83551033 Fax:+86-755-83552400

Compiled by:

Zero Zhou / Test Engineer

Philo Zhong / Manager

oved by:

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## 1 Test Summary

Test Item	Test Requirement	Class	Test Method	Test Result
Power Line Conducted Emission (150kHz to 30MHz)	FCC PART 15, SUBPART B: 2015	Class B	ANSI C63.4: 2014	Pass
Radiated Emission 30MHz to 1GHz)	FCC PART 15, SUBPART B: 2015	Class B	ANSI C63.4: 2014	Pass
Radiated Emission (Above 1GHz)	FCC PART 15, SUBPART B: 2015	Class B	ANSI C63.4: 2014	Pass

#### Remark:

Pass Test item meets the requirement

Fail Test item does not meet the requirement N/A Test case does not apply to the test object

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# 3 Report Revision History

Report No.	Report Version	Description	Issue Date
WTS16S0961742E	NONE	Original	Oct. 18, 2016

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#### 4 General Information

#### 4.1 General Description of E.U.T.

Product Name : Mobile Phone

Model No. : KL05
Model Description : N/A

GSM Band(s) : GSM 850/1900MHz

GPRS Class : 12

WCDMA Band(s) : N/A

LTE Bnad(s) : N/A

Wi-Fi Specification : N/A

Bluetooth Version : Bluetooth v3.0+EDR

GPS : N/A NFC : N/A

Hardware Version : KCX915\_MAIN\_PCB(V1.1)

Software Version : C39\_V09\_0726

Storage Location : Internal Storage

#### 4.2 Details of E.U.T.

Technical Data : Battery DC 3.7V, 300mAh

DC 5.7V, 0.8A, charging from adapter (Adapter Input: 100-240V~50/60Hz 0.125A)

Adapter : Manufacture: Shenzhen ZhengHengda Technology Co. Ltd.

Model No.: ZHD-002

#### 4.3 Standards Applicable for Testing

The tests were performed according to following standards:

FCC PART 15, SUBPART B: Electronic Code of Federal Regulations- Unintentional Radiators 2015

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#### 4.4 Test Facility

The test facility has a test site registered with the following organizations:

#### IC – Registration No.: 7760A-1

Waltek Services (Shenzhen) Co., Ltd. has been registered and fully described in a report filed with the Industry Canada. The acceptance letter from the Industry Canada is maintained in our files. Registration 7760A-1, October 15, 2015.

#### FCC Test Site 1# Registration No.: 880581

Waltek Services(Shenzhen) Co., Ltd. EMC Laboratory `has been registered and fully described in a report filed with the (FCC) Federal Communications Commission. The acceptance letter from the FCC is maintained in our files. Registration 880581, April 29, 2014.

#### FCC Test Site 2# Registration No.: 328995

Waltek Services(Shenzhen) Co., Ltd. EMC Laboratory `has been registered and fully described in a report filed with the (FCC) Federal Communications Commission. The acceptance letter from the FCC is maintained in our files. Registration 328995, December 3, 2014.

#### 4.5 Subcontracted

	Whether i	parts of	tests for	the pi	roduct I	have b	een su	ıbcontracted	d to	other	labs
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☐ Yes ☐ No

If Yes, list the related test items and lab information:

Test Lab: N/A
Lab address: N/A

Test items: N/A

#### 4.6 Abnormalities from Standard Conditions

None.

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## 5 Equipment Used during Test

## 5.1 Equipment List

					Last		
Item	Equipment	Manufacturer	Model No.	Serial No.	Calibration Date	Calibration Due Date	
1.	EMI Test Receiver	R&S	ESCI	100947	Apr.19,2016	Apr.18,2017	
2.	LISN	R&S	ENV216	101215	Apr.19,2016	Apr.18,2017	
3.	Cable	Тор	TYPE16(3.5M)	-	Apr.19,2016	Apr.18,2017	
Condu	cted Emissions Test	Site 2#					
Item	Equipment	Manufacturer	Model No.	Serial No.	Last Calibration Date	Calibration Due Date	
1.	EMI Test Receiver	R&S	ESCI	101155	Apr.19,2016	Apr.18,2017	
2.	LISN	SCHWARZBECK	NSLK 8128	8128-289	Apr.19,2016	Apr.18,2017	
3.	Limiter	York	MTS-IMP-136	261115-001- 0024	Apr.19,2016	Apr.18,2017	
4.	Cable	LARGE	RF300	-	Apr.19,2016	Apr.18,2017	
3m Se	mi-anechoic Chamber	for Radiation Emis	ssions Test site	1#			
Item	Equipment	Manufacturer	Model No.	Serial No.	Last Calibration Date	Calibration Due Date	
1	EMC Analyzer	Agilent	E7405A	MY45114943	Apr.19,2016	Apr.18,2017	
2	Active Loop Antenna	Beijing Dazhi	ZN30900A	-	Apr.19,2016	Apr.18,2017	
3	Trilog Broadband Antenna	SCHWARZBECK	VULB9163	336	Apr.19,2016	Apr.18,2017	
4	Coaxial Cable (below 1GHz)	Тор	TYPE16(13M)	-	Apr.19,2016	Apr.18,2017	
5	Broad-band Horn Antenna	SCHWARZBECK	BBHA 9120 D	667	Apr.19,2016	Apr.18,2017	
6	Broad-band Horn Antenna	SCHWARZBECK	BBHA 9170	335	Apr.19,2016	Apr.18,2017	
7	Broadband Preamplifier	COMPLIANCE DIRECTION	PAP-1G18	2004	Apr.19,2016	Apr.18,2017	
8	Coaxial Cable (above 1GHz)	Тор	1GHz-25GHz	EW02014-7	Apr.10,2016	Apr.09,2017	
3m Semi-anechoic Chamber for Radiation Emissions Test site 2#							
Item	Equipment	Manufacturer	Model No.	Serial No	Last Calibration Date	Calibration Due Date	
1	Test Receiver	R&S	ESCI	101296	Apr.19,2016	Apr.18,2017	
2	Trilog Broadband Antenna	SCHWARZBECK	VULB9160	9160-3325	Apr.19,2016	Apr.18,2017	
3	Amplifier	Compliance pirection systems inc	PAP-0203	22024	Apr.19,2016	Apr.18,2017	

4	Cable	HUBER+SUHNER	CBL2	525178	Apr.19,2016	Apr.18,2017		
RF Co	RF Conducted Testing							
Item	Equipment	Manufacturer	Model No.	Serial No.	Last Calibration Date	Calibration Due Date		
1.	EMC Analyzer (9k~26.5GHz)	Agilent	E7405A	MY45114943	Apr.19,2016	Apr.18,2017		
2.	Spectrum Analyzer (9k-6GHz)	R&S	FSL6	100959	Apr.19,2016	Apr.18,2017		
3.	Signal Analyzer (9k~26.5GHz)	Agilent	N9010A	MY50520207	Apr.19,2016	Apr.18,2017		

## 5.2 Description of Support Units

Equipment	Manufacturer	Model No.	Series No.
MacBook Air	APPLE	A1465	C17KTQDNF5N7
	LPS DELTA		
Power Supply	ELECTRNICS	ADP-45GD	-
	UIANG CO,.LTD		

## 5.3 Measurement Uncertainty

Test Item	Frequency Range	Uncertainty	Note
Conduction disturbance	150kHz~30MHz	±3.64dB	(1)
De dietien Enriceien	30MHz~1000MHz	±5.03dB	(1)
Radiation Emission	1GHz~18GHz	±5.47dB	(1)

<sup>(1)</sup>This uncertainty represents an expanded uncertainty expressed at approximately the 95% confidence level using a coverage factor of k=2.

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#### 6 Emission Test Results

#### 6.1 Power Line Conducted Emission, 150kHz to 30MHz

Test Requirement .....: FCC PART 15, SUBPART B

Test Method ..... : ANSI C63.4 2014

Test Result.....: Pass

Frequency Range .....: 150kHz to 30MHz

Class .....: Class B

Limit .....: :

Frequency (MHz)	Limit (dBμV)			
riequency (Minz)	Quasi-peak	Average		
0.15 to 0.5	66 to 5 *	56 to 46*		
0.5 to 5	56	60		
5 to 3	60	50		

#### 6.1.1 E.U.T. Operation

Operating Environment:

Temperature .....: 23°C

Humidity ..... : 53.6%RH

Atmospheric Pressure ......: 101kPa

**EUT Operation:** 

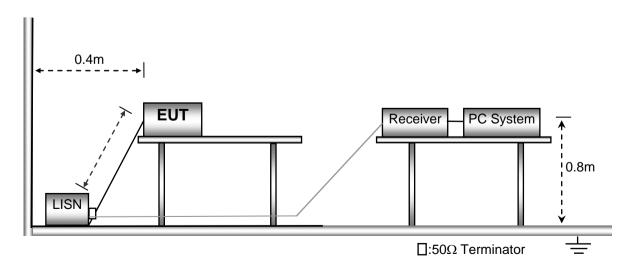
Input Voltage .....: DC 5.7V by Adapter Input AC 120V/60Hz

Operating Mode .....: Data transmitting mode, Earphone mode, Adapter mode

Remark ......: The worse case Data transmitting mode is under the condition of AC 120V/60Hz adapter input and the data is shown as follow.

#### 6.1.2 Block Diagram of Test Setup

The Mains Terminals Disturbance Voltage tests were performed in accordance with the ANSI C63.4.

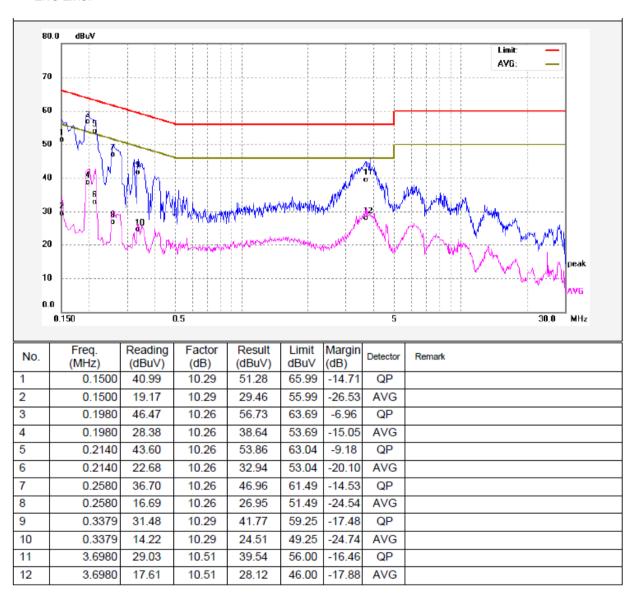


#### 6.1.3 Measurement Data

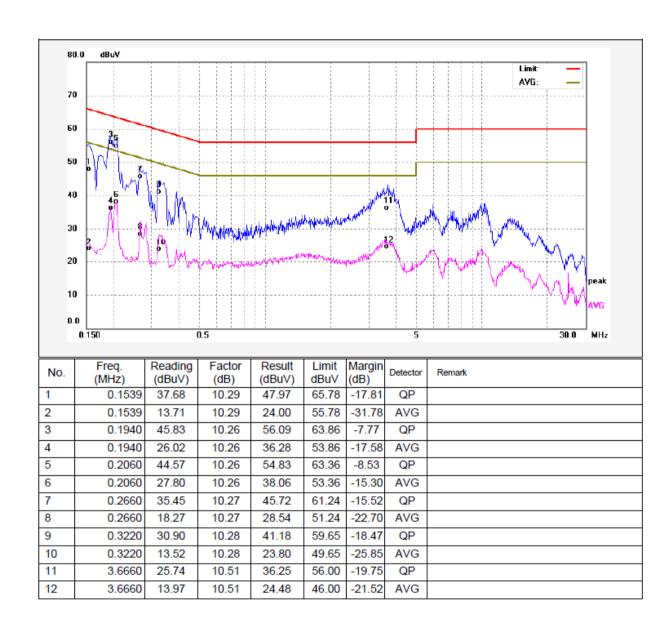
The maximised peak emissions from the EUT was scanned and measured for both the Live and Neutral Lines. Quasi-peak & average measurements were performed if peak emissions were within 6dB of the average limit line. According to the data in below section 6.1.4, the EUT complied with the FCC PART 15, SUBPART B standards.

#### 6.1.4 Power Line Conducted Emission Test Data

Live Line:



#### **Neutral Line:**



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#### 6.2 Radiation Emission, 30MHz to 1000MHz

Test Requirement .....: FCC PART 15, SUBPART B

Test Method .....: : ANSI C63.4 2014

Test Result .....: Pass

Frequency Range .....: 30MHz to 1000MHz

Class. : Class B

Limit.....: :

Fraguency (MHz)	Distance	Limit (dBµV/m)
Frequency (MHz)	(Meter)	Quas -peak
30 to 88	3	40
88 to 216	3	43.5
216 to 960	3	46
960 to 1000	3	54

#### 6.2.1 E.U.T. Operation

Operating Environment:

 Temperature
 : 22.5°C

 Humidity
 : 52.6%RH

 Atmospheric Pressure
 : 101.2kPa

**EUT Operation:** 

Input Voltage.....: DC 5.7V by Adapter Input AC 120V/60Hz

Operating Mode .....: Data transmitting with PC mode, Earphone mode

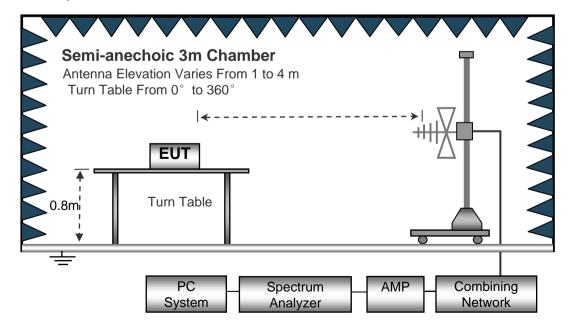
Remark .....: The worse case Data transmitting with PC mode is under the

condition of AC 120V/60Hz adapter input and the data is shown

as follow.

#### 6.2.2 Block Diagram of Test Setup

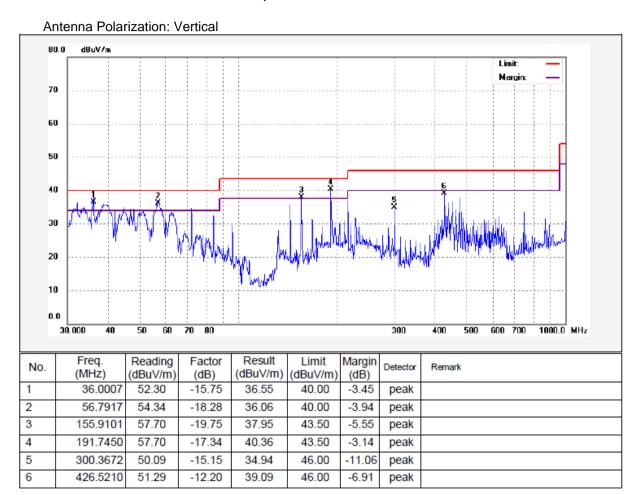
The radiated emission tests were performed in the 3m Semi- Anechoic Chamber test site, using the setup accordance with the ANSI C63.4.



#### 6.2.3 Measurement Data

The maximised peak emissions from the EUT was scanned and measured for both the Antenna Vertical Polarization and Antenna Horizontal Polarization. Quasi-peak measurements were performed if peak emissions were within 6dB of the Quasi-peak limit line.

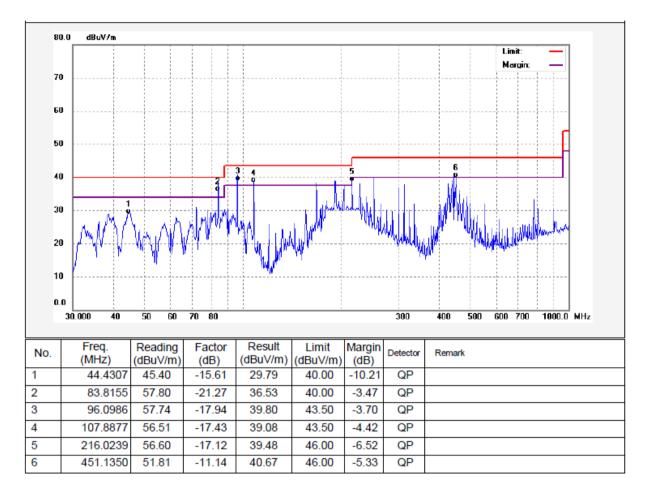
#### 6.2.4 Radiated Emission Test Data, 30MHz to 1000MHz



Factor= antenna factor + cable loss - preamplifier factor

Result = Reading + Factor

#### Antenna Polarization: Horizontal



Factor= antenna factor + cable loss - preamplifier factor

Result = Reading + Factor

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#### 6.3 Radiation Emission, Above 1000MHz

Test Requirement .....: FCC PART 15, SUBPART B

Test Method ..... : ANSI C63.4 2014

Test Result.....: Pass

Frequency Range .....: 1GHz~18GHz

Class B: Class B

Limit. .....

Frequency Range (MHz)	Distance (Meter)	Average Limit dB(uV/m)	Peak Limit (dBuV/m)
Above 1GHz	3	54	74

### 6.3.1 E.U.T. Operation

**Operating Environment:** 

 Temperature
 : 22.4°C

 Humidity
 : 52.3%RH

 Atmospheric Pressure
 : 101.3kPa

**EUT Operation:** 

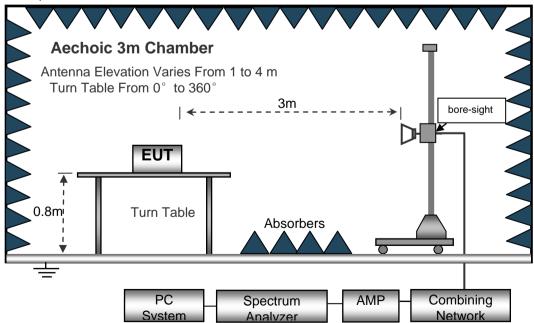
Input Voltage .....: DC 5.7V by Adapter Input AC 120V/60Hz

Operating Mode .....: Data transmitting with PC mode, Earphone mode

AC 120V/60Hz adapter input and the data is shown as follow.

#### 6.3.2 Block Diagram of Test Setup

The radiated emission tests were performed in the 3m Semi- Anechoic Chamber test site, using the setup accordance with the ANSI C63.4.

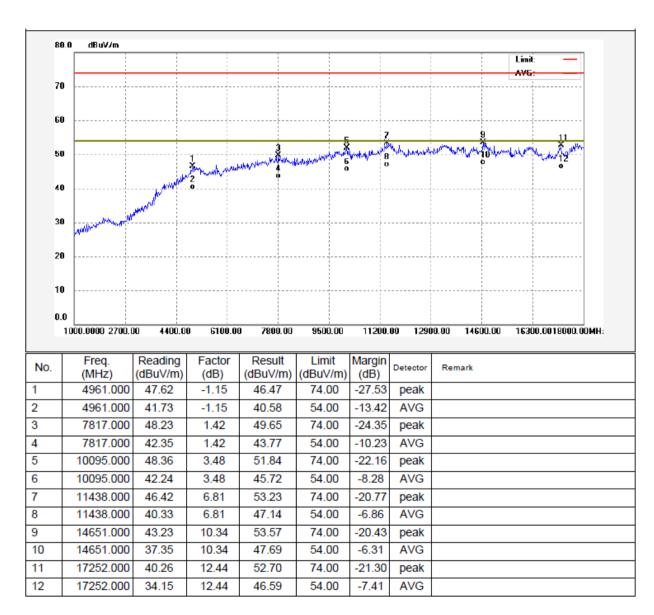


#### 6.3.3 Measurement Data

The maximised peak emissions from the EUT was scanned and measured for both the Antenna Vertical Polarization and Antenna Horizontal Polarization. Average measurements were performed if peak emissions were within 6dB of the average limit line

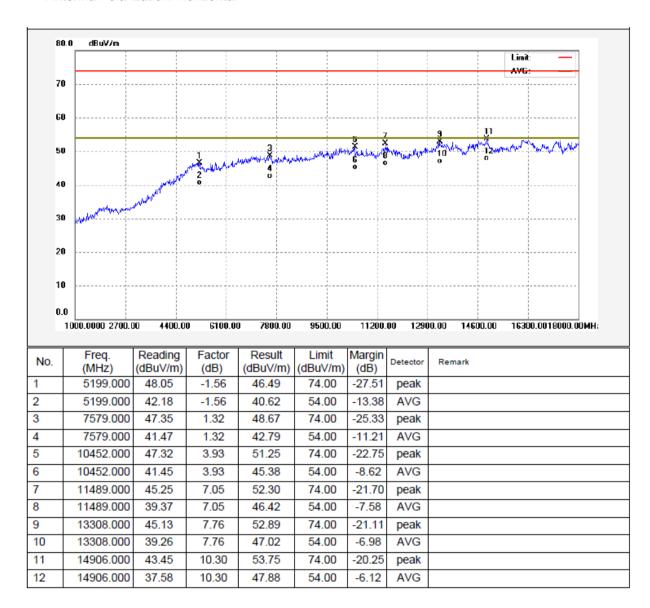
#### 6.3.4 Radiated Emission Test Data, Above 1000MHz

Antenna Polarization: Vertical



Factor= antenna factor + cable loss - preamplifier factor Result = Reading + Factor

#### Antenna Polarization: Horizontal



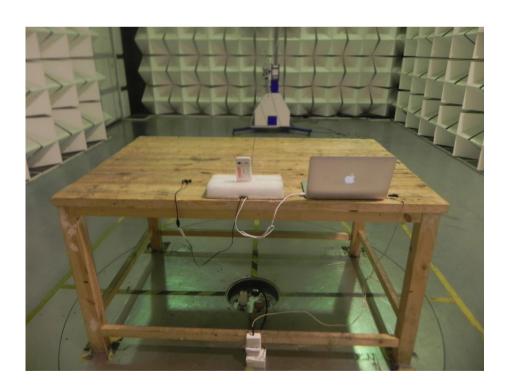
Factor= antenna factor + cable loss - preamplifier factor Result = Reading + Factor

# 7 Photographs – Test Setup FCC ID 2AJXM-KL05

## 7.1 Photograph -Power Line Conducted Emission Test Setup at Test Site 1#



## 7.2 Photograph - Radiated Emission Test Setup for 30~1000MHz at Test Site 2#



## 7.3 Photograph - Radiated Emission Test Setup for Above 1GHz at Test Site 1#



=====End of Report=====