
FCC Test Report

Report No.: AGC01272160102FE03

FCC ID : 2ACDFC5
APPLICATION PURPOSE : Class II Permissive Change
PRODUCT DESIGNATION : Mobile Phone
BRAND NAME : Superinworld
MODEL NAME : C5
CLIENT : SUPERDIGITAL TECHNOLOGY CO., LIMITED
DATE OF ISSUE : Mar.17, 2016
STANDARD(S) : FCC Part 15 Rules
REPORT VERSION : V1.0

Attestation of Global Compliance (Shenzhen) Co., Ltd



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Report Revise Record

Report Version	Revise Time	Issued Date	Valid Version	Notes
V1.0	/	Mar.17, 2016	Valid	Class II Permissive Change
Note: The report was based-on the project - AGC01272160102FE03, which was named (C5), has replaced a new one adapter; In the test results, the conducted emission test results were different from the original.				

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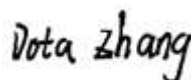
1. VERIFICATION OF CONFORMITY

Applicant	SUPERDIGITAL TECHNOLOGY CO., LIMITED
Address	F19, Block B, Nanxian Building, Longhua New District, Shenzhen 518000, P.R.China
Manufacturer	SUPERDIGITAL TECHNOLOGY CO., LIMITED
Address	F19, Block B, Nanxian Building, Longhua New District, Shenzhen 518000, P.R.China
Product Designation	Mobile Phone
Brand Name	Superinworld
Test Model	C5
Date of test	Mar.01, 2016 to Mar.11, 2016
Deviation	None
Condition of Test Sample	Normal
Report Template	AGCRT-US-IT/AC

We hereby certify that:

The above equipment was tested by Dongguan Precise Testing Service Co., Ltd. The test data, data evaluation, test procedures, and equipment configurations shown in this report were made in accordance with the procedures given in ANSI C63.4 (2003) and the energy emitted by the sample EUT tested as described in this report is in compliance with radiated emission limits of FCC Rules Part 15.247.

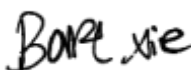
Tested By



Dota Zhang(Zhang Jianfeng)

Mar.17, 2016

Reviewed By



Bart Xie(Xie Xiaobin)

Mar.17, 2016

Approved By



Solger Zhang(Zhang Hongyi)
Authorized Officer

Mar.17, 2016

2. GENERAL INFORMATION

2.1. PRODUCT DESCRIPTION

The EUT is "Mobile Phone" designed as a "Communication Device". It is designed by way of utilizing the FHSS technology to achieve the system operation.

2.2. TABLE OF CARRIER FREQUENCIES

Frequency Band	Channel Number	Frequency
2400~2483.5MHZ	0	2402MHZ
	1	2403MHZ
	:	:
	38	2440 MHZ
	39	2441 MHZ
	40	2442 MHZ
	:	:
	77	2479 MHZ
	78	2480 MHZ

2.3. RELATED SUBMITTAL(S) / GRANT (S)

This submittal(s) (test report) is intended for **FCC ID: 2ACDFC5** filing to comply with Section 15.247 of the FCC Part 15, Subpart C Rules.

2.4. TEST METHODOLOGY

Both conducted and radiated testing was performed according to the procedures in FCC DA 00-705. Radiated testing was performed at an antenna to EUT distance 3 meters.

2.5. SPECIAL ACCESSORIES

Refer to section 5.2.

2.6. EQUIPMENT MODIFICATIONS

Not available for this EUT intended for grant.

3. MEASUREMENT UNCERTAINTY

Conducted measurement: +/- 2.75dB

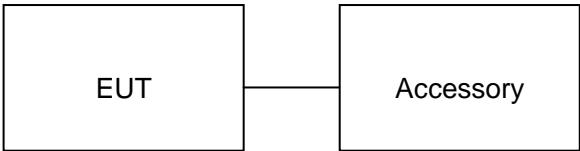
4. DESCRIPTION OF TEST MODES

NO.	TEST MODE DESCRIPTION
1	TX + Charging
Note: The test mode can be supply by Built-in Li-ion battery, only the result of the worst case was recorded in the report, if no other cases.	

5. SYSTEM TEST CONFIGURATION

5.1. CONFIGURATION OF EUT SYSTEM

Configuration:



5.2. EQUIPMENT USED IN EUT SYSTEM

Item	Equipment	Model No.	ID or Specification	Remark
1	Mobile Phone	C5	FCC ID:2ACDFC5	EUT
2	Adapter	TEKA006-0501000UK	DC5V / 1A	Accessory
3	Battery	C5	DC3.7V / 1150 mAh	Accessory
4	Earphone	C5	N/A	Accessory
5	USB Cable	C5	N/A	Accessory

5.3. SUMMARY OF TEST RESULTS

FCC RULES	DESCRIPTION OF TEST	RESULT
§15.207	Conduction Emission	Compliant

6. TEST FACILITY

Site	Dongguan Precise Testing Service Co., Ltd.
Location	Building D, Baoding Technology Park, Guangming Road2,Dongcheng District, Dongguan, Guangdong, China,
FCC Registration No.	371540
Description	The test site is constructed and calibrated to meet the FCC requirements in documents ANSI C63.4:2009.

ALL TEST EQUIPMENT LIST

Conducted Emission Test Site					
Name of Equipment	Manufacturer	Model Number	Serial Number	Last Calibration	Due Calibration
EMI Test Receiver	Rohde & Schwarz	ESCI	101417	July 4, 2015	July 3, 2016
Artificial Mains Network	Narda	L2-16B	000WX31025	July 8, 2015	July 7, 2016
Artificial Mains Network (AUX)	Narda	L2-16B	000WX31026	July 8, 2015	July 7, 2016
RF Cable	SCHWARZBECK	AK9515E	96222	July 4, 2015	July 3, 2016
Shielded Room	CHENGYU	843	PTS-002	June 6,2015	June 5,2016

7. FCC LINE CONDUCTED EMISSION TEST

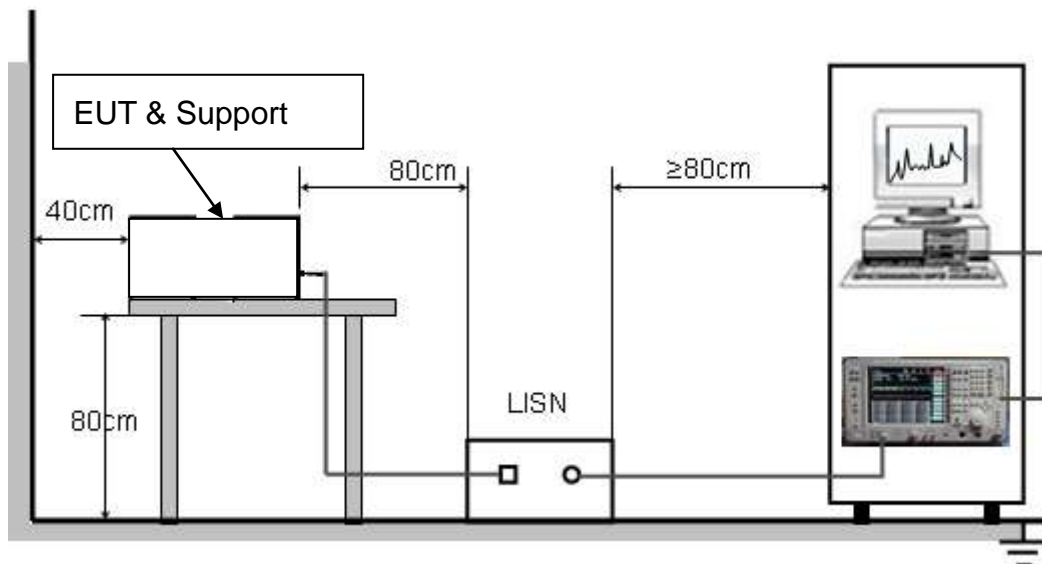
7.1. LIMITS OF LINE CONDUCTED EMISSION TEST

Frequency	Maximum RF Line Voltage	
	Q.P.(dBuV)	Average(dBuV)
150kHz~500kHz	66-56	56-46
500kHz~5MHz	56	46
5MHz~30MHz	60	50

Note:

1. The lower limit shall apply at the transition frequency.
2. The limit decreases linearly with the logarithm of the frequency in the range 0.15 MHz to 0.50 MHz.

7.2. BLOCK DIAGRAM OF LINE CONDUCTED EMISSION TEST



7.3. PRELIMINARY PROCEDURE OF LINE CONDUCTED EMISSION TEST

1. The equipment was set up as per the test configuration to simulate typical actual usage per the user's manual. When the EUT is a tabletop system, a wooden table with a height of 0.8 meters is used and is placed on the ground plane as per ANSI C63.4 (see Test Facility for the dimensions of the ground plane used). When the EUT is a floor-standing equipment, it is placed on the ground plane which has a 3-12 mm non-conductive covering to insulate the EUT from the ground plane.
2. Support equipment, if needed, was placed as per ANSI C63.4.
3. All I/O cables were positioned to simulate typical actual usage as per ANSI C63.4.
4. All support equipments received AC120V/60Hz power from a LISN, if any.
5. The EUT received DC charging voltage by adapter which received 120V/60Hz power by a LISN..
6. The test program was started. Emissions were measured on each current carrying line of the EUT using a spectrum Analyzer / Receiver connected to the LISN powering the EUT. The LISN has two monitoring points: Line 1 (Hot Side) and Line 2 (Neutral Side). Two scans were taken: one with Line 1 connected to Analyzer / Receiver and Line 2 connected to a 50 ohm load; the second scan had Line 1 connected to a 50 ohm load and Line 2 connected to the Analyzer / Receiver.
7. Analyzer / Receiver scanned from 150 kHz to 30MHz for emissions in each of the test modes.
8. During the above scans, the emissions were maximized by cable manipulation.
9. The test mode(s) were scanned during the preliminary test.

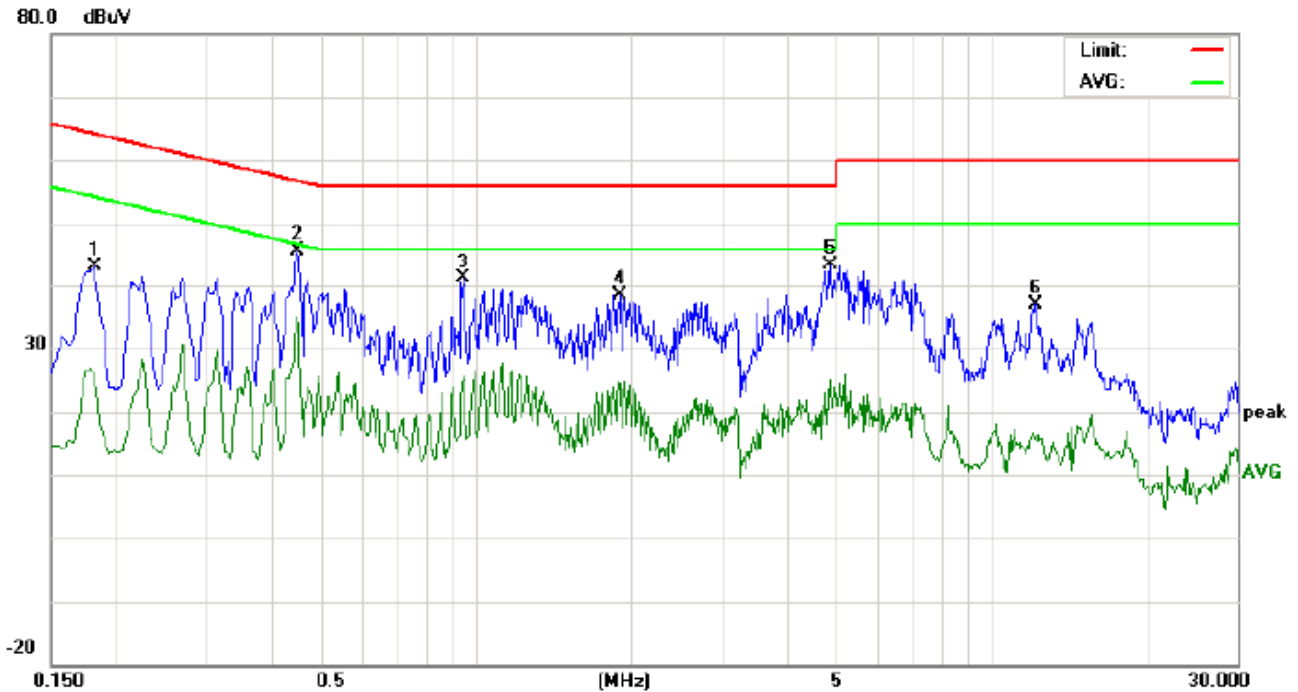
Then, the EUT configuration and cable configuration of the above highest emission level were recorded for reference of final testing.

7.4. FINAL PROCEDURE OF LINE CONDUCTED EMISSION TEST

1. EUT and support equipment was set up on the test bench as per step 2 of the preliminary test.
2. A scan was taken on both power lines, Line 1 and Line 2, recording at least the six highest emissions. Emission frequency and amplitude were recorded into a computer in which correction factors were used to calculate the emission level and compare reading to the applicable limit. If EUT emission level was less -2dB to the A.V. limit in Peak mode, then the emission signal was re-checked using Q.P and Average detector.
3. The test data of the worst case condition(s) was reported on the Summary Data page.

7.5. TEST RESULT OF LINE CONDUCTED EMISSION TEST

Line Conducted Emission Test Line 1-L

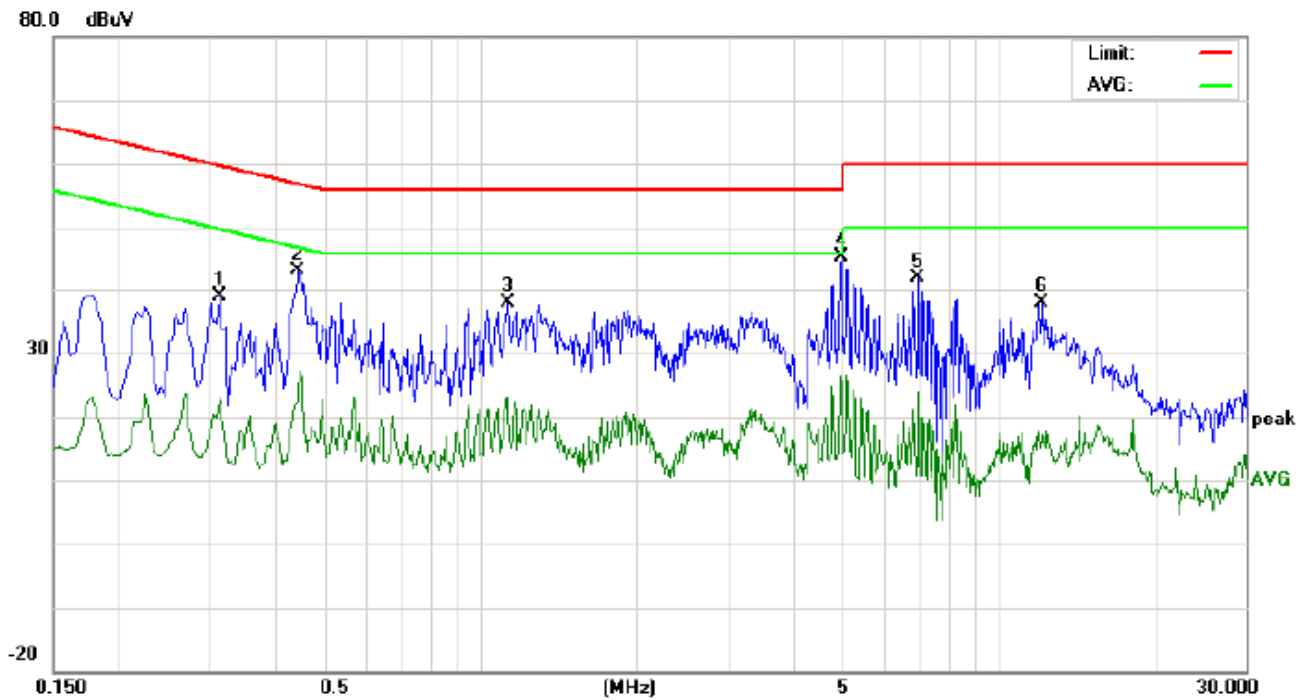


Site: Conduction
Limit: FCC Class B Conduction(QP)
EUT: Mobile phone
M/N: C5
Mode: BT 3.0 TX + charging
Note:

Phase: **L1**
Power: AC 120V/60Hz
Temperature: 23.6
Humidity: 53.6 %

No.	Freq. (MHz)	Reading_Level (dBuV)			Correct Factor	Measurement (dBuV)			Limit (dBuV)		Margin (dB)		P/F	Comment
		Peak	QP	AVG		Peak	QP	AVG	QP	AVG	QP	AVG		
1	0.1819	32.85		15.75	10.20	43.05		25.95	64.39	54.39	-21.34	-28.44	P	
2	0.4500	35.21		24.52	10.37	45.58		34.89	56.87	46.87	-11.29	-11.98	P	
3	0.9460	30.64		15.30	10.39	41.03		25.69	56.00	46.00	-14.97	-20.31	P	
4	1.8980	28.05		14.18	10.25	38.30		24.43	56.00	46.00	-17.70	-21.57	P	
5	4.8580	33.12		14.96	10.23	43.35		25.19	56.00	46.00	-12.65	-20.81	P	
6	12.1980	26.69		5.25	10.14	36.83		15.39	60.00	50.00	-23.17	-34.61	P	

Line Conducted Emission Test Line 2-N



Site: Conduction Phase: **N** Temperature: 23.6
Limit: FCC Class B Conduction(QP) Power: AC 120V/60Hz Humidity: 53.6 %
EUT: Mobile phone
M/N: C5
Mode: BT 3.0 TX + charging
Note:

No.	Freq. (MHz)	Reading_Level (dBuV)			Correct Factor dB	Measurement (dBuV)			Limit (dBuV)		Margin (dB)		P/F	Comment
		Peak	QP	AVG		Peak	QP	AVG	QP	AVG	QP	AVG		
1	0.3140	28.64		12.48	10.30	38.94		22.78	59.86	49.86	-20.92	-27.08	P	
2	0.4460	32.70		14.76	10.36	43.06		25.12	56.95	46.95	-13.89	-21.83	P	
3	1.1300	27.52		10.22	10.37	37.89		20.59	56.00	46.00	-18.11	-25.41	P	
4	4.9699	35.20		14.77	10.24	45.44		25.01	56.00	46.00	-10.56	-20.99	P	
5	7.0140	31.46		13.39	10.36	41.82		23.75	60.00	50.00	-18.18	-26.25	P	
6	12.1459	27.86		6.99	10.14	38.00		17.13	60.00	50.00	-22.00	-32.87	P	

APPENDIX A: PHOTOGRAPHS OF TEST SETUP

FCC LINE CONDUCTED EMISSION TEST SETUP



APPENDIX B: PHOTOGRAPHS OF EUT

TOTAL VIEW OF EUT



TOP VIEW OF EUT



BOTTOM VIEW OF EUT



FRONT VIEW OF EUT



BACK VIEW OF EUT



LEFT VIEW OF EUT



RIGHT VIEW OF EUT



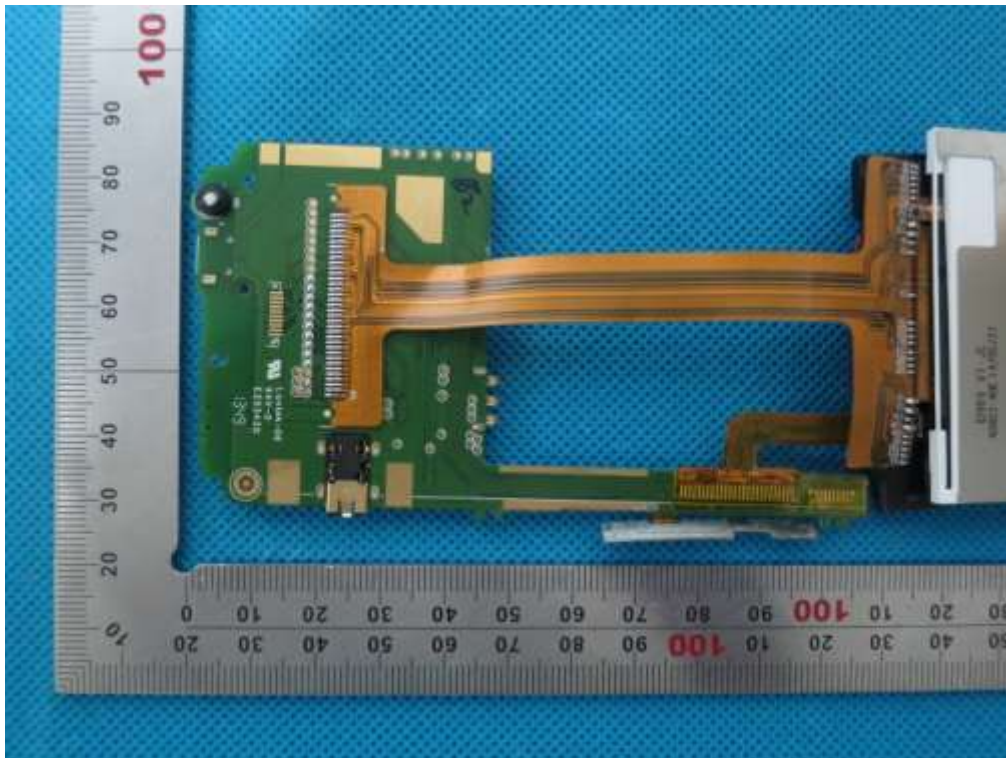
OPEN VIEW OF EUT-1



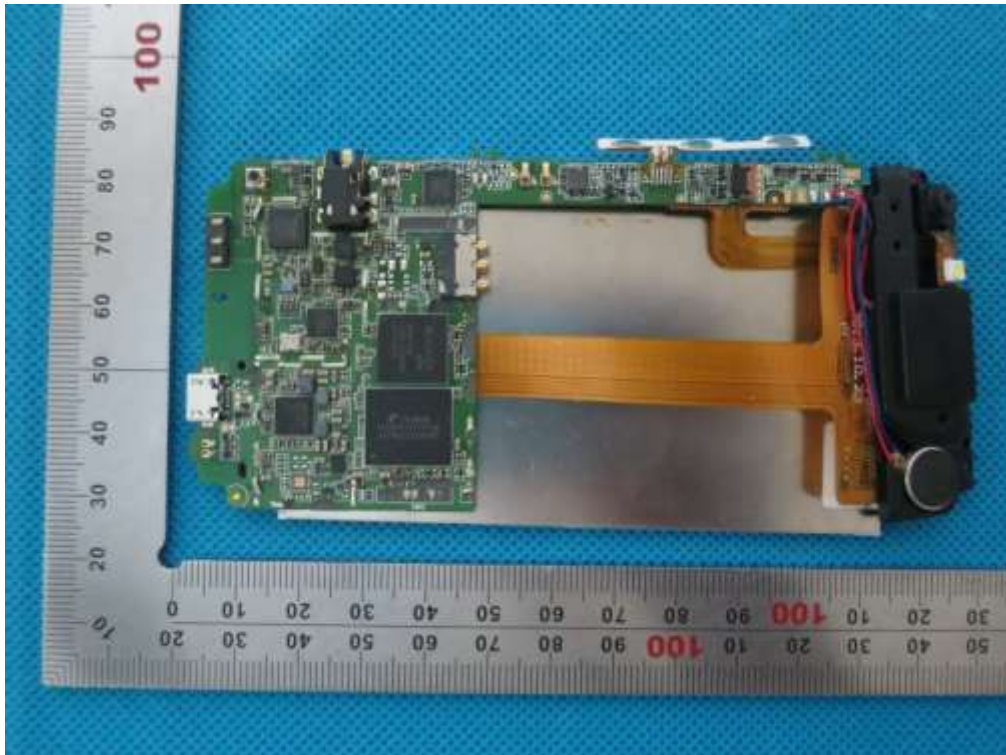
OPEN VIEW OF EUT-2



INTERNAL VIEW OF EUT-1



INTERNAL VIEW OF EUT-2



-----END OF REPORT-----