

FCC Test Report

APPLICANT	:	Brightstar Corporation
EQUIPMENT	:	3G mobile phone
BRAND NAME	:	Avvio/PULSARE
MODEL NAME	:	Avvio 793, Avvio 793S, Pulsare 793,
		Pulsare 793S
FCC ID	:	WVBA793X
STANDARD	:	FCC 47 CFR FCC Part 15 Subpart B
CLASSIFICATION	:	Certification

The product was received on Jun. 13, 2014 and testing was completed on Jun. 23, 2014. We, SPORTON INTERNATIONAL (SHENZHEN) INC., would like to declare that the tested sample has been evaluated in accordance with the test procedures given in ANSI C63.4-2003 and has been in compliance with the applicable technical standards.

The test results in this report apply exclusively to the tested model / sample. Without written approval of SPORTON INTERNATIONAL (SHENZHEN) INC., the test report shall not be reproduced except in full.

Louis Wu

Reviewed by: Louis Wu / Manager

mertsai

Approved by: Jones Tsai / Manager



SPORTON INTERNATIONAL (SHENZHEN) INC.

No. 3 Building, the third floor of south, Shahe River west, Fengzeyuan warehouse, Nanshan District, Shenzhen, Guangdong, P. R. C.



TABLE OF CONTENTS

RE	EVISION HISTORY		
รบ	MMAF	RY OF TEST RESULT	4
1.	GEN	ERAL DESCRIPTION	5
	1.1.	Applicant	5
	1.2.	Manufacturer	5
	1.3.	Product Feature of Equipment Under Test	5
	1.4.	Product Specification subjective to this standard	
	1.5.	Modification of EUT	
	1.6.	Test Location	
	1.7.	Applicable Standards	7
2.	TEST	CONFIGURATION OF EQUIPMENT UNDER TEST	8
	2.1.	Test Mode	8
	2.2.	Connection Diagram of Test System	10
	2.3.	Support Unit used in test configuration and system	
	2.4.	EUT Operation Test Setup	12
3.	TEST	RESULT	13
	3.1.	Test of AC Conducted Emission Measurement	13
	3.2.	Test of Radiated Emission Measurement	
4.	LIST	OF MEASURING EQUIPMENT	23
5.	UNC	ERTAINTY OF EVALUATION	24
A	PENI	DIX A. SETUP PHOTOGRAPHS	



REVISION HISTORY

REPORT NO.	VERSION	DESCRIPTION	ISSUED DATE
FC461314	Rev. 01	Initial issue of report	Jul. 11, 2014



Report Section	FCC Rule	Description	Limit	Result	Remark
					Under limit
3.1	15.107	AC Conducted Emission	< 15.107 limits	PASS	12.38 dB at
					0.550 MHz
					Under limit
3.2 15.109	Radiated Emission	< 15.109 limits	PASS	4.10 dB at	
				192.00 MHz for	
					Quasi-Peak

SUMMARY OF TEST RESULT



1. General Description

1.1. Applicant

Brightstar Corporation 9725 NW 117th Ave., Miami, Florida, FL 33178, United States

1.2. Manufacturer

Konka Telecommunications Techenology co., LTD.

Overseas Chinese Town, Nanshan District, Shenzhen, China

1.3. Product Feature of Equipment Under Test

	Product Feature
Equipment	3G mobile phone
Brand Name	Avvio/PULSARE
Model Name	Avvio 793, Avvio 793S, Pulsare 793, Pulsare 793S
FCC ID	WVBA793X
EUT supports Radios application	GSM/GPRS/EGPRS/WCDMA/HSPA/HSPA+(Downlink Only) WLAN 2.4GHz 802.11b/g/n HT20/HT40/ Bluetooth v3.0 + EDR/Bluetooth v4.0 LE
HW Version	v1.1
SW Version	KAAI172_SA_Sp_En_0.01.421
EUT Stage	Pre-Production

Remark:

- 1. The above EUT's information was declared by manufacturer. Please refer to the specifications or user's manual for more detailed description.
- 2. There are four types of EUT for this project. The differences between them are summary below:

Sample List	Model name	Brand name	SIM Slots
Sample 1	Avvio 793	Αννίο	1
Sample 2	Avvio 793S	Avvio	2
Sample 3	Pulsare 793	PULSARE	1
Sample 4	Pulsare 793S	PULSARE	2

Avvio and PULSARE are identical on hardware. The only difference is for different market purpose.



1.4. Product Specification subjective to this standard

Product Specification subjective to this standard			
Tx Frequency	GSM850 : 824.2 MHz ~ 848.8 MHz GSM1900 : 1850.2 MHz ~ 1909.8MHz WCDMA Band V : 826.4 MHz ~ 846.6 MHz WCDMA Band II : 1852.4 MHz ~ 1907.6 MHz 802.11b/g/n: 2412 MHz ~ 2462 MHz Bluetooth: 2402 MHz ~ 2480 MHz		
Rx Frequency	GSM850 : 869.2 MHz ~ 893.8 MHz GSM1900 : 1930.2 MHz ~ 1989.8 MHz WCDMA Band V : 871.4 MHz ~ 891.6 MHz WCDMA Band II : 1932.4 MHz ~ 1987.6 MHz 802.11b/g/n: 2412 MHz ~ 2462 MHz Bluetooth: 2402 MHz ~ 2480 MHz GPS : 1.57542 GHz		
Antenna Type	WWAN : PIFA Antenna WLAN : Chip Antenna Bluetooth : Chip Antenna GPS: Chip Antenna		
Type of Modulation	GSM: GMSK GPRS: GMSK EDGE(MCS 0-4): GMSK / (MCS 5-9): 8PSK WCDMA: QPSK (Uplink) HSDPA: QPSK (Uplink) HSUPA: QPSK (Uplink) HSPA+: 16QAM (Downlink Only) 802.11b : DSSS (DBPSK / DQPSK / CCK) 802.11g/n: OFDM (BPSK / QPSK / 16QAM / 64QAM Bluetooth v4.0 LE : GFSK Bluetooth v3.0 EDR : GFSK, π /4-DQPSK, 8-DPSK GPS : BPSK		

1.5. Modification of EUT

No modifications are made to the EUT during all test items.



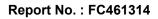
1.6. Test Location

Test Site	SPORTON INTERNATIONAL (SHENZHEN) INC.			
	No. 3 Building, the third floor of south, Shahe River west, Fengzeyuan			
Test Site Location	warehouse, Nanshan District, Shenzhen, Guangdong, P.R.C. TEL: +86-755- 3320-2398			
Toot Site No	Sporton Site No.		FCC Registration No.	
Test Site No.	CO01-SZ	03CH01-SZ	831040	

1.7. Applicable Standards

According to the specifications of the manufacturer, the EUT must comply with the requirements of the following standards:

- FCC 47 CFR FCC Part 15 Subpart B
- ANSI C63.4-2003
- ٠
- **Remark:** All test items were verified and recorded according to the standards and without any deviation during the test.





2. Test Configuration of Equipment Under Test

2.1. Test Mode

The EUT has been associated with peripherals pursuant to ANSI C63.4-2003 and configuration operated in a manner tended to maximize its emission characteristics in a typical application. Frequency range investigated: conduction (150 kHz to 30 MHz), radiation (30MHz to the 5th harmonic

of the highest fundamental frequency or to 40 GHz, whichever is lower).

		Test Condition			
ltem	EUT Configuration	EMI AC	EMI RE<1G	EMI RE≥1G	
1.	Charging Mode (EUT with adapter)	\boxtimes	\boxtimes	Note 1	
2.	Data application transferred mode (EUT connected with notebook)	\boxtimes	\boxtimes		

The following tables are showing the test modes as the worst cases and recorded in this report.

Abbreviations:

- EMI AC: AC conducted emissions
- EMI RE ≥ 1G: EUT radiated emissions ≥ 1GHz
- EMI RE < 1G: EUT radiated emissions < 1GHz

Note 1: Testing for this mode is not required or not the worst case.

Remark: For signal above 1GHz, the worst case was test item 2.

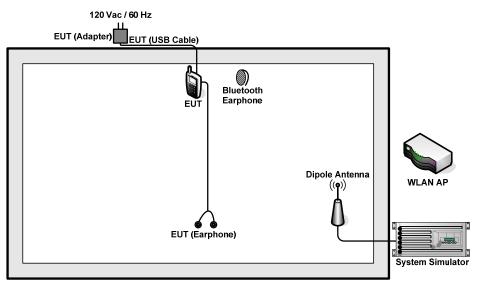


Test Items	EUT Configure Mode	Function Type		
		Mode 1: GSM850 Idle + Bluetooth Idle + WLAN Idle + USB Cable (Charging from Adapter) + Earphone + Camera + SIM1 <fig1></fig1>		
AC Conducted Emission	1/2	Mode 2: GSM1900 Idle + Bluetooth Idle + WLAN Idle + USB Cable (Charging from Adapter) + Earphone + MPEG4 + SIM1 <fig1></fig1>		
		Mode 3: WCDMA Band V Idle + Bluetooth Idle + WLAN Idle + USB Cable (Data Link with Notebook) + Earphone + GPS Rx + SIM1 <fig2></fig2>		
		Mode 1: GSM850 Idle + Bluetooth Idle + WLAN Idle + USB Cable (Charging from Adapter) + Earphone + Camera + SIM1 <fig1></fig1>		
Radiated Emissions < 1GHz	1/2	Mode 2: GSM1900 Idle + Bluetooth Idle + WLAN Idle + USB Cable (Charging from Adapter) + Earphone + MPEG4 + SIM1 <fig1></fig1>		
		Mode 3: WCDMA Band V Idle + Bluetooth Idle + WLAN Idle + USB Cable (Data Link with Notebook) + Earphone + GPS Rx + SIM1 <fig2></fig2>		
Radiated		Mode 1: WCDMA Band V Idle + Bluetooth Idle + WLAN Idle + USB Cable (Data Link with Notebook) + Earphone + GPS Rx + SIM1 <fig2></fig2>		
Remark:				
1. The worst case of AC is mode 2; and the USB Link mode of AC is mode 3, the test data of				
these mod	these modes are reported.			
2. The worst case of RE < 1G is mode 3; only the test data of this mode was reported.				
3. Link with Notebook means data application transferred mode between EUT and Notebook				

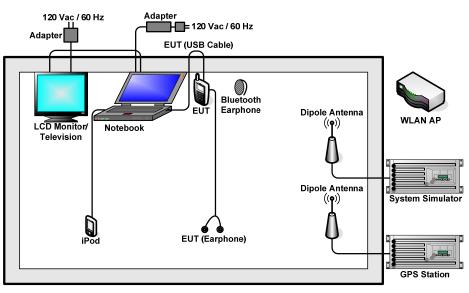


2.2. Connection Diagram of Test System

<EUT with Adapter Mode>







<Fig. 2>



ltem	Equipment	Trade Name	Model Name	FCC ID	Data Cable	Power Cord
1.	System Simulator	R&S	CMW 500	N/A	N/A	Unshielded, 1.8 m
2.	System Simulator	Agilent	8960	N/A	N/A	Unshielded, 1.8 m
3.	LCD monitor	changhong	LTE19920EX	N/A	N/A	Unshielded, 1.8 m
4.	GPS Station	ADIVIC	MP9000	N/A	N/A	Unshielded, 1.8 m
5.	WLAN AP	D-link	DIR-628	KA2DIR628A2	N/A	Unshielded,1.8m
6.	WLAN AP	D-link	DIR-615	N/A	N/A	Unshielded,1.8m
7.	Bluetooth Earphone	Nokia	BH-108	PYAHS-107W	N/A	N/A
8.	Notebook	Lenovo	G480	FCC DoC	N/A	AC I/P: Unshielded, 1.2m DC O/P: Shielded, 1.8 m
9.	Notebook	Lenovo	E540	FCC DoC	N/A	AC I/P: Unshielded, 1.2m DC O/P: Shielded, 1.8 m
10.	LCD Monitor	DELL	IN1940MWb	FCC DoC	Shielded, 1.6 m	Unshielded, 1.8 m
11.	SD Card	SanDisk	4G class 4	FCC DoC	N/A	N/A
12.	iPod	Apple	MC525 ZP/A	FCC DoC	Shielded, 1.0 m	N/A
13.	iPod nano 8GB	Apple	MC690ZP/A	FCC DoC	Shielded, 1.2 m	N/A



2.4. EUT Operation Test Setup

The EUT was in GSM or WCDMA idle mode during the testing. The EUT was synchronized to the BCCH, and was in continuous receiving mode by setting system simulator's paging reorganization.

At the same time, the EUT was attached to the Bluetooth earphone or WLAN AP, and the following programs installed in the EUT were programmed during the test.

- 1. Execute the program, "Winthrax" under WIN7 installed in notebook for files transfer with EUT via USB cable.
- 2. Execute "GPS Test" to make the EUT receive continuous signals from GPS station.
- 3. Execute "Windows Media Player" to play MPEG4 files.
- 4. Turn on camera to capture images.



3. Test Result

3.1. Test of AC Conducted Emission Measurement

3.1.1 Limits of AC Conducted Emission

For equipment that is designed to be connected to the public utility (AC) power line, the radio frequency voltage that is conducted back onto the AC power line on any frequency or frequencies within the band 150 kHz to 30 MHz shall not exceed the limits in the following table.

Frequency of emission	Conducted limit (dBuV)				
(MHz)	Quasi-peak	Average			
0.15-0.5	66 to 56*	56 to 46*			
0.5-5	56	46			
5-30	60	50			

*Decreases with the logarithm of the frequency.

3.1.2 Measuring Instruments

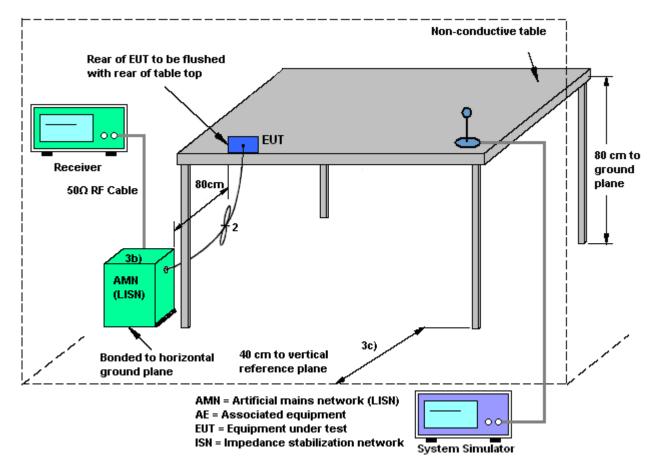
The measuring equipment is listed in the section 4 of this test report.

3.1.3 Test Procedure

- 1. The EUT was placed 0.4 meter from the conducting wall of the shielding room was kept at least 80 centimeters from any other grounded conducting surface.
- 2. Connect EUT to the power mains through a line impedance stabilization network (LISN).
- 3. All the support units are connecting to the other LISN.
- 4. The LISN provides 50 ohm coupling impedance for the measuring instrument.
- 5. The FCC states that a 50 ohm, 50 microhenry LISN should be used.
- 6. Both sides of AC line were checked for maximum conducted interference.
- 7. The frequency range from 150 kHz to 30 MHz was searched.
- 8. Set the test-receiver system to Peak Detect Function and specified bandwidth with Maximum Hold Mode.



3.1.4 Test Setup

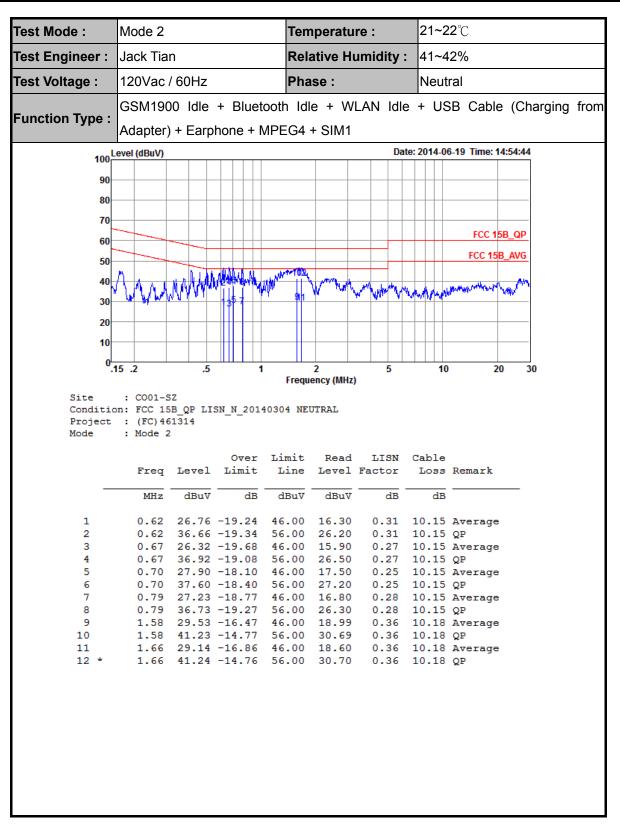




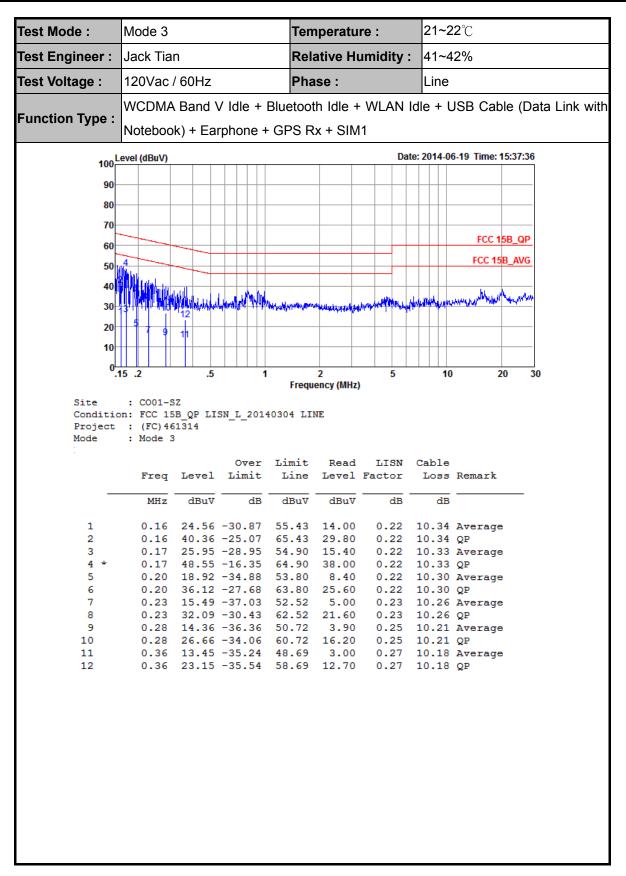
3.1.5 Test Result of AC Conducted Emission

Test Mode :	Mode 2			Ten	nperatur	e:	21~2	21~22 ℃			
Test Engineer :	Jack Tia	n		Rel	ative Hu	midity	41~4	41~42%			
Test Voltage :	120Vac/	/ 60Hz		Pha	Phase :						
	GSM190	0 Idle	+ Blue	tooth Id	e + WL	AN Idle	e + US	SB Cable	e (Ch	argin	g fror
Function Type :	Adapter)	+ Earp	hone +	MPEG4	+ SIM1						
100	evel (dBuV)					Da	te: 2014-0	2014-06-19 Time: 14:49:55			
90-											
80											
70											
60								FCC 1	5B_QP		
50								FCC 15	B_AVG		
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30-	·•• W·•		5 1 17								
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0 Site Conditio	5 .2 : CO01-S n: FCC 15 : (FC) 46 : Mode 2	B_QP LI: 1314		-	2 ency (MHz) NE	5	10) 2	0 3	60	
0 Site Conditio Project	: CO01-S n: FCC 15 : (FC)46	Z B_QP LI: 1314	SN_L_201	Frequ	ency (MHz)	-	Cable) 2	0 3	60	
0 Site Conditio Project	: CO01-S n: FCC 15 : (FC)46	Z B_QP LI: 1314	SN_L_201	Frequ 40304 LI Limit	ency (MHz) NE	LISN	Cable) 2 Remark	0 3	60	
0 Site Conditio Project	: CO01-S n: FCC 15 : (FC)46 : Mode 2	Z B_QP LI: 1314	SN_L_201 Over	Frequ 40304 LI Limit	ency (MHz) NE Read	LISN	Cable		0 3	0	
0 Site Conditio Project	: CO01-S n: FCC 15 : (FC)46 : Mode 2 Freq	Z B_QP LI: 1314 Level dBuV	SN_L_201 Over Limit dB	Frequ 40304 LI Limit Line	Read Level	LISN Factor	Cable Loss dB 10.16	Remark 		0	
0_1 Site Conditio Project Mode 1 2	: C001-S n: FCC 15 : (FC) 46 : Mode 2 Freq MHz 0.51 0.51	Z B_QP LI: 1314 Level dBuV 30.25 40.15	SN_L_201 Over Limit dB -15.75 -15.85	Frequ 40304 LI Limit Line dBuV 46.00 56.00	Read Level dBuV 19.80 29.70	LISN Factor dB 0.29 0.29	Cable Loss dB 10.16 10.16	Remark ——— Average QP		0	
0_1 Site Conditio Project Mode 1 2 3 *	: CO01-S n: FCC 15 : (FC)46 : Mode 2 Freq MHz 0.51 0.51 0.55	Z B_QP LI: 1314 Level dBuV 30.25 40.15 33.62	Over Limit -15.75 -15.85 -12.38	Frequ 40304 LI Limit Line dBuV 46.00 56.00 46.00	Read Level 	LISN Factor dB 0.29 0.29 0.27	Cable Loss dB 10.16 10.16 10.15	Remark Average QP Average		0	
0_1 Site Conditio Project Mode 1 2	: CO01-S n: FCC 15 : (FC)46 : Mode 2 Freq MHz 0.51 0.51 0.55 0.55	Z B_QP LI: 1314 Level dBuV 30.25 40.15 33.62 42.12	Over Limit -15.75 -15.85 -12.38 -13.88	Frequ 40304 LI Limit Line dBuV 46.00 56.00 46.00 56.00	Read Level 	LISN Factor dB 0.29 0.29 0.27 0.27	Cable Loss dB 10.16 10.15 10.15	Remark ———— Average QP Average QP		0	
0_1 Site Conditio Project Mode 1 2 3 * 4	: CO01-S n: FCC 15 : (FC)46 : Mode 2 Freq MHz 0.51 0.51 0.55 0.55 0.60	Z B_QP LI: 1314 Level dBuV 30.25 40.15 33.62 42.12 28.79	Over Limit -15.75 -15.85 -12.38 -13.88	Frequ 40304 LI Limit Line dBuV 46.00 56.00 46.00	Read Level 	LISN Factor dB 0.29 0.29 0.27	Cable Loss dB 10.16 10.15 10.15	Remark ————— Average QP Average QP Average		0	
0_1 Site Conditio Project Mode 1 2 3 * 4 5 6 7	: C001-S n: FCC 15 : (FC) 46 : Mode 2 Freq MHz 0.51 0.51 0.55 0.55 0.60 0.60 0.63	Z B_QP LI: 1314 Level dBuV 30.25 40.15 33.62 42.12 28.79 40.29 32.47	Over Limit 	Frequ 40304 LI Limit Line dBuV 46.00 56.00 46.00 56.00 46.00 56.00 46.00	Read Level dBuV 19.80 29.70 23.20 31.70 18.40 29.90 22.10	LISN Factor dB 0.29 0.27 0.27 0.27 0.24 0.24 0.22	Cable Loss dB 10.16 10.15 10.15 10.15 10.15 10.15	Remark Average QP Average QP Average QP Average		0	
0_1 Site Conditio Project Mode 	: C001-S n: FCC 15 : (FC) 46 : Mode 2 Freq MHz 0.51 0.55 0.55 0.60 0.60 0.63 0.63	Z B_QP LI: 1314 Level dBuV 30.25 40.15 33.62 42.12 28.79 40.29 32.47 43.47	Over Limit dB -15.75 -15.85 -12.38 -13.88 -17.21 -15.71 -13.53 -12.53	Frequ 40304 LI Limit Line dBuV 46.00 56.00 46.00 56.00 46.00 56.00 46.00 56.00	Read Level dBuV 19.80 29.70 23.20 31.70 18.40 29.90 22.10 33.10	LISN Factor dB 0.29 0.27 0.27 0.27 0.24 0.24 0.22 0.22	Cable Loss dB 10.16 10.15 10.15 10.15 10.15 10.15 10.15	Remark Average QP Average QP Average QP Average QP		60	
Length Site Conditio Project Mode 1 2 3 * 4 5 6 7 8 9	: C001-S n: FCC 15 : (FC) 46 : Mode 2 Freq MHz 0.51 0.55 0.55 0.60 0.60 0.63 0.63 0.68	Z B_QP LI: 1314 Level dBuV 30.25 40.15 33.62 42.12 28.79 40.29 32.47 43.47 31.24	Over Limit dB -15.75 -15.85 -12.38 -13.88 -17.21 -15.71 -13.53 -12.53 -14.76	Frequ 40304 LI Limit Line dBuV 46.00 56.00 46.00 56.00 46.00 56.00 46.00 56.00 46.00 56.00 46.00	Read Level dBuV 19.80 29.70 23.20 31.70 18.40 29.90 22.10 33.10 20.90	LISN Factor dB 0.29 0.27 0.27 0.27 0.27 0.24 0.22 0.22 0.22 0.19	Cable Loss dB 10.16 10.15 10.15 10.15 10.15 10.15 10.15 10.15	Remark Average QP Average QP Average QP Average QP Average		60	
0_1 Site Conditio Project Mode 	: C001-S n: FCC 15 : (FC) 46 : Mode 2 Freq MHz 0.51 0.55 0.60 0.63 0.63 0.63 0.68 0.68	Z B_QP LI: 1314 Level dBuV 30.25 40.15 33.62 42.12 28.79 40.29 32.47 43.47 31.24 42.14	Over Limit dB -15.75 -15.85 -12.38 -13.88 -17.21 -15.71 -13.53 -12.53 -14.76 -13.86	Frequ 40304 LI Limit Line dBuV 46.00 56.00 46.00 56.00 46.00 56.00 46.00 56.00 46.00 56.00 46.00 56.00	Read Level dBuV 19.80 29.70 23.20 31.70 18.40 29.90 22.10 33.10 20.90 31.80	LISN Factor dB 0.29 0.27 0.27 0.27 0.24 0.22 0.22 0.22 0.22 0.19 0.19	Cable Loss dB 10.16 10.15 10.15 10.15 10.15 10.15 10.15 10.15 10.15	Remark Average QP Average QP Average QP Average QP Average QP		0	
Length Site Conditio Project Mode 1 2 3 * 4 5 6 7 8 9 10	: C001-S n: FCC 15 : (FC) 46 : Mode 2 Freq MHz 0.51 0.55 0.55 0.60 0.63 0.63 0.63 0.68 0.68 0.76	Z B_QP LI: 1314 Level dBuV 30.25 40.15 33.62 42.12 28.79 40.29 32.47 43.47 31.24 42.14 32.85	Over Limit dB -15.75 -15.85 -12.38 -17.21 -15.71 -13.53 -12.53 -14.76 -13.86 -13.15	Frequ 40304 LI Limit Line dBuV 46.00 56.00 46.00 56.00 46.00 56.00 46.00 56.00 46.00 56.00 46.00 56.00 46.00	Read Level dBuV 19.80 29.70 23.20 31.70 18.40 29.90 22.10 33.10 20.90 31.80	LISN Factor dB 0.29 0.27 0.27 0.27 0.27 0.24 0.22 0.22 0.22 0.19 0.19 0.20	Cable Loss dB 10.16 10.15 10.15 10.15 10.15 10.15 10.15 10.15 10.15	Remark Average QP Average QP Average QP Average QP Average QP		0	
0.1 Site Conditio Project Mode 1 2 3 * 4 5 6 7 8 9 10 11 12 13	: C001-S n: FCC 15 : (FC) 46 : Mode 2 Freq 0.51 0.51 0.55 0.60 0.63 0.63 0.63 0.63 0.68 0.68 0.76 0.76 0.80	Z B_QP LI: 1314 Level dBuV 30.25 40.15 33.62 42.12 28.79 40.29 32.47 43.47 31.24 42.14 32.85 43.45 32.56	Over Limit dB -15.75 -15.85 -12.38 -13.88 -17.21 -15.71 -13.53 -12.53 -14.76 -13.86 -13.15 -12.55 -13.44	Frequ 40304 LI Limit Line dBuV 46.00 56.00 46.00 56.00 46.00 56.00 46.00 56.00 46.00 56.00 46.00 56.00 46.00 56.00 46.00 56.00 46.00	Read Level dBuV 19.80 29.70 23.20 31.70 18.40 29.90 22.10 33.10 20.90 31.80 22.50 33.10 22.20	LISN Factor dB 0.29 0.27 0.27 0.27 0.27 0.24 0.22 0.22 0.22 0.19 0.19 0.20 0.20 0.21	Cable Loss dB 10.16 10.15 10.15 10.15 10.15 10.15 10.15 10.15 10.15 10.15 10.15	Remark Average QP Average QP Average QP Average QP Average QP Average QP		0	
0.1 Site Conditio Project Mode 1 2 3 * 4 5 6 7 8 9 10 11 12 13 14	: CO01-S n: FCC 15 : (FC) 46 : Mode 2 Freq 0.51 0.51 0.55 0.60 0.60 0.63 0.63 0.63 0.63 0.68 0.68 0.76 0.76 0.80 0.80	Z B_QP LI: 1314 Level dBuV 30.25 40.15 33.62 42.12 28.79 40.29 32.47 43.47 31.24 42.14 32.85 43.45 32.56 43.26	Over Limit -15.75 -15.85 -12.38 -13.88 -17.21 -15.71 -13.53 -12.53 -14.76 -13.86 -13.15 -12.55 -13.44 -12.74	Frequ 40304 LI Limit Line dBuV 46.00 56.00 46.00 56.00 46.00 56.00 46.00 56.00 46.00 56.00 46.00 56.00 46.00 56.00	Read Level dBuV 19.80 29.70 23.20 31.70 18.40 29.90 22.10 33.10 22.50 33.10 22.20 33.10 22.20 32.90	LISN Factor dB 0.29 0.27 0.27 0.27 0.24 0.22 0.22 0.22 0.19 0.19 0.20 0.20 0.21 0.21	Cable Loss dB 10.16 10.15 10.15 10.15 10.15 10.15 10.15 10.15 10.15 10.15 10.15	Remark Average QP Average QP Average QP Average QP Average QP Average QP		0	
0.1 Site Conditio Project Mode 1 2 3 * 4 5 6 7 8 9 10 11 12 13 14 15	: CO01-S n: FCC 15 : (FC) 46 : Mode 2 Freq 0.51 0.55 0.55 0.60 0.63 0.63 0.63 0.63 0.68 0.68 0.76 0.76 0.80 0.80 0.85	Z B_QP LI: 1314 Level dBuV 30.25 40.15 33.62 42.12 28.79 40.29 32.47 43.47 31.24 42.14 32.85 43.45 32.56 43.26 32.17	Over Limit -15.75 -15.85 -12.38 -13.88 -17.21 -15.71 -13.53 -14.76 -13.86 -13.15 -12.55 -13.44 -12.74 -13.83	Frequ 40304 LI Limit Line dBuV 46.00 56.00 46.00 56.00 46.00 56.00 46.00 56.00 46.00 56.00 46.00 56.00 46.00 56.00 46.00 56.00 46.00	Read Level dBuV 19.80 29.70 23.20 31.70 18.40 29.90 22.10 33.10 22.50 33.10 22.20 33.10 22.20 32.90 21.80	LISN Factor dB 0.29 0.27 0.27 0.24 0.22 0.22 0.22 0.19 0.20 0.20 0.21 0.21 0.22	Cable Loss dB 10.16 10.15 10.15 10.15 10.15 10.15 10.15 10.15 10.15 10.15 10.15 10.15	Remark Average QP Average QP Average QP Average QP Average QP Average QP Average		0	
0.1 Site Conditio Project Mode 1 2 3 * 4 5 6 7 8 9 10 11 12 13 14 15 16	: CO01-S n: FCC 15 : (FC) 46 : Mode 2 Freq 0.51 0.55 0.55 0.60 0.63 0.63 0.63 0.63 0.63 0.63 0.68 0.76 0.76 0.80 0.80 0.85 0.85	Z B_QP LI: 1314 Level dBuV 30.25 40.15 33.62 42.12 28.79 40.29 32.47 43.47 31.24 43.47 31.24 42.14 32.85 43.45 32.56 43.26 32.17 42.97	Over Limit dB -15.75 -15.85 -12.38 -13.88 -17.21 -15.71 -13.53 -12.53 -14.76 -13.86 -13.15 -12.55 -13.44 -12.74 -13.83 -13.03	Frequ 40304 LI Limit Line dBuV 46.00 56.00 46.00 56.00 46.00 56.00 46.00 56.00 46.00 56.00 46.00 56.00 46.00 56.00 46.00 56.00	Read Level dBuV 19.80 29.70 23.20 31.70 18.40 29.90 22.10 33.10 22.50 33.10 22.50 33.10 22.20 32.90 21.80 32.60	LISN Factor dB 0.29 0.27 0.27 0.27 0.24 0.22 0.22 0.19 0.20 0.20 0.20 0.21 0.21 0.22 0.22	Cable Loss dB 10.16 10.15 10.15 10.15 10.15 10.15 10.15 10.15 10.15 10.15 10.15 10.15 10.15 10.15	Remark Average QP Average QP Average QP Average QP Average QP Average QP Average QP		0	
0.1 Site Conditio Project Mode 1 2 3 * 4 5 6 7 8 9 10 11 12 13 14 15	: C001-S n: FCC 15 : (FC) 46 : Mode 2 Freq 0.51 0.55 0.55 0.60 0.63 0.63 0.63 0.63 0.63 0.63 0.63	Z B_QP LI: 1314 Level dBuV 30.25 40.15 33.62 42.12 28.79 40.29 32.47 43.47 31.24 42.14 32.85 43.45 32.56 43.26 32.17 42.97 31.59	Over Limit dB -15.75 -15.85 -12.38 -13.88 -17.21 -13.53 -12.53 -14.76 -13.86 -13.15 -12.55 -13.44 -12.74 -13.83 -13.03 -14.41	Frequ 40304 LI Limit Line dBuV 46.00 56.00 46.00 56.00 46.00 56.00 46.00 56.00 46.00 56.00 46.00 56.00 46.00 56.00 46.00 56.00 46.00 56.00 46.00 56.00 46.00	Read Level dBuV 19.80 29.70 23.20 31.70 18.40 29.90 22.10 33.10 22.50 33.10 22.20 33.10 22.20 32.90 21.80	LISN Factor dB 0.29 0.27 0.27 0.27 0.24 0.22 0.22 0.22 0.19 0.20 0.20 0.20 0.21 0.22 0.22 0.22 0.22	Cable Loss dB 10.16 10.15 10.15 10.15 10.15 10.15 10.15 10.15 10.15 10.15 10.15 10.15 10.15 10.15	Remark Average QP Average QP Average QP Average QP Average QP Average QP Average QP		6	
0.1 Site Conditio Project Mode 1 2 3 * 4 5 6 7 8 9 10 11 12 13 14 15 16 17	: C001-S n: FCC 15 : (FC) 46 : Mode 2 Freq 0.51 0.51 0.55 0.60 0.63 0.63 0.63 0.63 0.63 0.63 0.68 0.76 0.76 0.80 0.80 0.85 0.85 0.91 0.91 1.68	Z B_QP LI: 1314 Level dBuV 30.25 40.15 33.62 42.12 28.79 40.29 32.47 43.47 31.24 42.14 32.85 43.45 32.56 43.25 43.25 43.25 32.50 43.26 32.17 42.97 31.59 40.39 27.81	Over Limit dB -15.75 -15.85 -12.38 -13.88 -17.21 -13.53 -12.53 -14.76 -13.86 -13.15 -12.55 -13.44 -12.74 -13.83 -13.03 -14.41 -15.61 -18.19	Frequ 40304 LI Limit Line dBuV 46.00 56.00 46.00 56.00 46.00 56.00 46.00 56.00 46.00 56.00 46.00 56.00 46.00 56.00 46.00 56.00 46.00 56.00 46.00 56.00 46.00 56.00 46.00 56.00 46.00	Read Level dBuV 19.80 29.70 23.20 31.70 18.40 29.90 22.10 33.10 20.90 31.80 32.50 33.10 22.20 33.10 22.20 32.90 21.80 32.60 21.20 30.00	LISN Factor dB 0.29 0.27 0.27 0.27 0.24 0.22 0.22 0.22 0.19 0.20 0.20 0.21 0.21 0.22 0.22 0.22 0.22	Cable Loss dB 10.16 10.15 10.15 10.15 10.15 10.15 10.15 10.15 10.15 10.15 10.15 10.15 10.15 10.15 10.15 10.15	Remark Average QP Average QP Average QP Average QP Average QP Average QP Average QP Average QP		6	

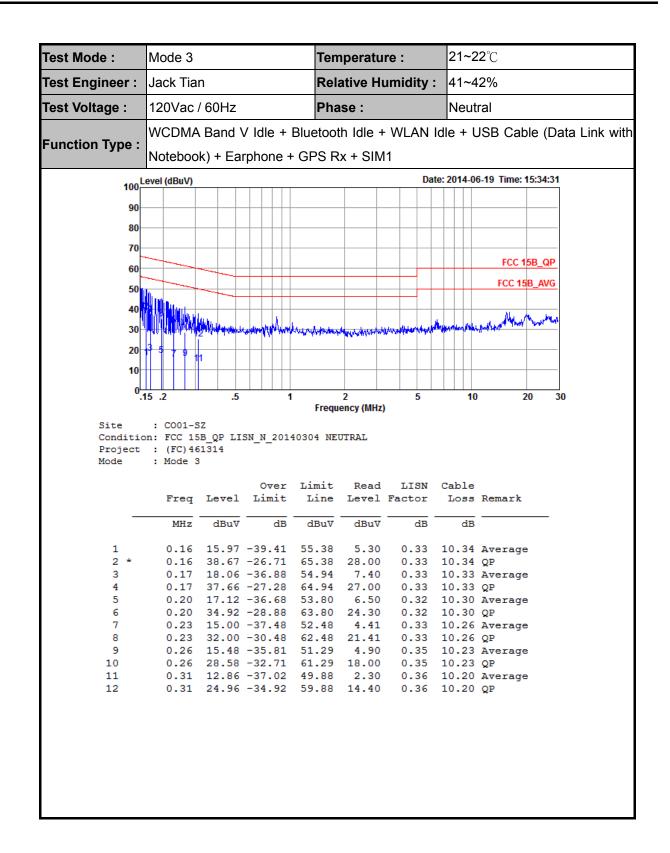


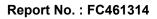














3.2. Test of Radiated Emission Measurement

3.2.1. Limit of Radiated Emission

The emissions from an unintentional radiator shall not exceed the field strength levels specified in the following table:

Frequency	Field Strength	Measurement Distance		
(MHz)	(microvolts/meter)	(meters)		
30 – 88	100	3		
88 – 216	150	3		
216 - 960	200	3		
Above 960	500	3		

3.2.2. Measuring Instruments

The measuring equipment is listed in the section 4 of this test report.

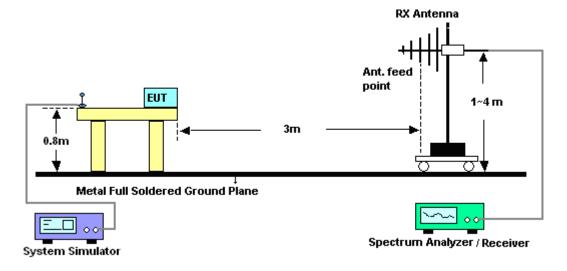
3.2.3. Test Procedures

- 1. The EUT was placed on a turntable with 0.8 meter above ground.
- 2. The EUT was set 3 meters from the interference receiving antenna, which was mounted on the top of a variable height antenna tower.
- 3. The table was rotated 360 degrees to determine the position of the highest radiation.
- 4. The antenna is a Bi-Log antenna and its height is adjusted between one to four meters above ground to find the maximum value of the field strength for both horizontal polarization and vertical polarization of the antenna.
- 5. For each suspected emission, the EUT was arranged to its worst case and then tune the antenna tower (from 1 m to 4 m) and turntable (from 0 degree to 360 degrees) to find the maximum reading.
- 6. Set the test-receiver system to Peak Detect Function and specified bandwidth with Maximum Hold Mode.
- 7. If the emission level of the EUT in peak mode was 3 dB lower than the limit specified, peak values of EUT will be reported. Otherwise, the emission will be repeated by using the quasi-peak method and reported.
- 8. Emission level (dB μ V/m) = 20 log Emission level (μ V/m)
- 9. Corrected Reading: Antenna Factor + Cable Loss + Read Level Preamp Factor = Level

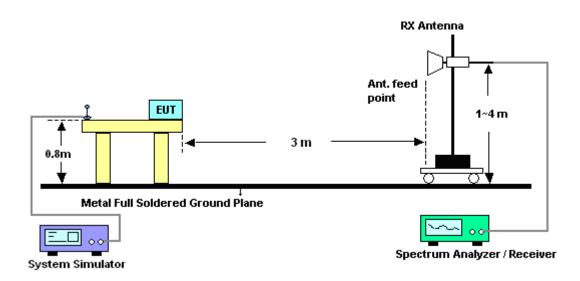


3.2.4. Test Setup of Radiated Emission

For radiated emissions from 30MHz to 1GHz



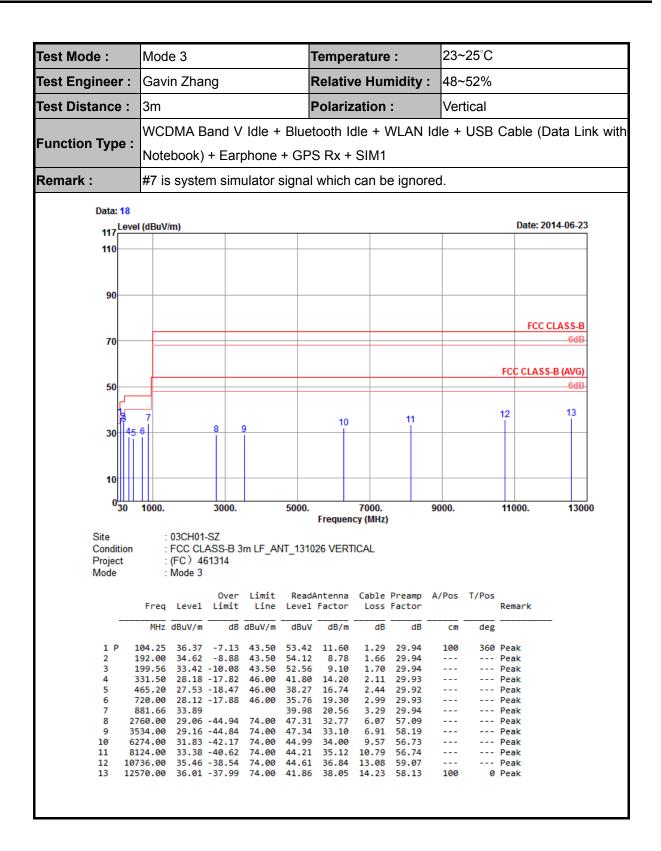
For radiated emissions above 1GHz





3.2.5. Test Result of Radiated Emission

Test Mode :	Mod	e 3			-	Гетре	rature	:	23~	-25°C			
Test Engineer :	Gavin Zhang					Relativ	ive Humidity: 48~52%						
Fest Distance :	3m				1	Polariz	ation	:	Hor	rizonta	al		
Function Type :	WCE	DMA B	and V	Idle +	Blue	tooth lo	dle + V	WLAN	Idle +	USB	Cable (Data Lin	k w
	Note	book)	+ Earp	phone	+ GP	S Rx +	SIM1						
Remark :	#7 is	syster	n sim	ulator	signal	which	can b	e ignor	ed.				
117	el (dBuV/	m)									Date:	2014-06-23	
110													
90													
70											FCO	CLASS-B 6dB	
10													
											FCC CLA	SS-B (AVG) 6dB	
50 P	7											-0013-	
14		8				1	0	11		12		13	
30	6	- Î		9									
10													
030	1000.		3000.		5000.		7000.		9000.		11000.	13000	
50	1000.		5000.		5000.	Frequen)	9000.		11000.	15000	,
Site Condition		03CH01- FCC CLA			VT 1310	26 HORE							
Project	1	(FC) 46				2011014							
Mode	:	Mode 3											
	Freq	Level	Over Limit	Limit Line		Antenna Factor		Preamp Factor	A/Pos	T/Pos	Remark		
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB	cm	deg			
1 Q	192.00	39.40	-4.10	43.50	58.90	8.78	1.66	29.94	171	9	QP		
2 !	199.56	39.01	-4.49	43.50	58.15		1.70	29.94 29.93	100	360	-		
		41.44 36.47				11.35		29.93	157		QP Peak		
		27.74				15.54	2.26	29.93			Peak		
	699.70 881.66	29.44 39.21	-16.56	46.00		18.95 20.56		29.93 29.94			Peak Peak		
8 1	998.00	30.34			52.07	30.00	5.14	56.87			Peak		
		28.35						58.45			Peak		
		31.00 32.87					9.84 10.39				Peak Peak		
12 10	292.00	35.12	-38.88	74.00	43.99	36.82	12.81	58.50			Peak		
13 11	990.00	36.44	-37.56	74.00	43.00	38.19	13.47	58.22	100	360	Peak		





4. List of Measuring Equipment

Instrument	Manufacturer	Model No.	Serial No.	Characteristics	Calibration Date	Test Date	Due Date	Remark
ESCIO TEST Receiver	R&S	ESCI	100724	9kHz~3GHz	Feb. 21, 2014	Jun. 23, 2014	Feb. 20, 2015	Radiation (03CH01-SZ)
Spectrum Analyzer	Agilent Technologies	N9038A	MY52260185	20Hz~26.5GHz	May 26, 2014	Jun. 23, 2014	May 25, 2015	Radiation (03CH01-SZ)
Bilog Antenna	TESEQ	CBL 6112D	23188	30MHz~2GHz	Oct. 26, 2013	Jun. 23, 2014	Oct. 25, 2014	Radiation (03CH01-SZ)
Double Ridge Horn Antenna	ETS Lindgren	3117	00119436	1GHz~18GHz	Oct. 26, 2013	Jun. 23, 2014	Oct. 25, 2014	Radiation (03CH01-SZ)
Amplifier	ADVANTEST	BB525C	E9007003	9kHz~3000MHz	Feb. 21, 2014	Jun. 23, 2014	Feb. 20, 2015	Radiation (03CH01-SZ)
Amplifier	Yiai	AV3860B	04030	2GHz~26.5GHz	May 08, 2014	Jun. 23, 2014	May 07, 2015	Radiation (03CH01-SZ)
AC Source(AVR)	Chroma	61601	61601000198 5	100Vac~250Vac	Mar. 25, 2014	Jun. 23, 2014	Mar. 24, 2015	Radiation (03CH01-SZ)
Turn Table	EM Electronics	EM 1000	N/A	0~360 degree	NCR	Jun. 23, 2014	NCR	Radiation (03CH01-SZ)
Antenna Mast	EM Electronics	EM 1000	N/A	1 m~4 m	NCR	Jun. 23, 2014	NCR	Radiation (03CH01-SZ)
ESCIO TEST Receiver	R&S	ESCI	100724	9kHz~3GHz	Feb. 21, 2014	Jun. 19, 2014	Feb. 20, 2015	Conduction (CO01-SZ)
AC LISN	EMCO	3816/2SH	00103912	9kHz~30MHz	Mar. 04, 2014	Jun. 19, 2014	Mar. 03, 2015	Conduction (CO01-SZ)
AC LISN (for auxiliary equipment)	EMCO	3816/2SH	00103892	9kHz~30MHz	Mar. 04, 2014	Jun. 19, 2014	Mar. 03, 2015	Conduction (CO01-SZ)
AC Power Source	Chroma	61602	61602000089 1	100Vac~250Vac	Dec. 17, 2013	Jun. 19, 2014	Dec. 16, 2014	Conduction (CO01-SZ)



5. Uncertainty of Evaluation

Uncertainty of Conducted Emission Measurement (150 kHz ~ 30 MHz)

Measuring Uncertainty for a Level of	2.2
Confidence of 95% (U = 2Uc(y))	2.3

Uncertainty of Radiated Emission Measurement (30 MHz ~ 1000 MHz)

Measuring Uncertainty for a Level of	2.0
Confidence of 95% (U = 2Uc(y))	3.9