

Report No.: FC331305

FCC Test Report

APPLICANT : CT Asia

EQUIPMENT: GSM Mobile Phone

BRAND NAME : BLU
MODEL NAME : Diva

FCC ID : YHLBLUDIVA

STANDARD : FCC 47 CFR FCC Part 15 Subpart B

CLASSIFICATION: Certification

The product was received on Mar. 13, 2013 and completely tested on Mar. 22, 2013. We, SPORTON INTERNATIONAL (KUNSHAN) INC., would like to declare that the tested sample has been evaluated in accordance with the procedures given in ANSI C63.4-2003 and shown the 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 (KUNSHAN) INC., the test report shall not be reproduced except in full.

Reviewed by:

Jones Tsai / Manager





SPORTON INTERNATIONAL (KUNSHAN) INC. No. 3-2, PingXiang Road, Kunshan, Jiangsu Province, P.R.C.

SPORTON INTERNATIONAL (KUNSHAN) INC.

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REVISION HISTORY

REPORT NO.	VERSION	DESCRIPTION	ISSUED DATE
FC331305	Rev. 01	Initial issue of report	Mar. 26, 2013

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SUMMARY OF TEST RESULT

Report Section	FCC Rule	IC Rule	Description	Limit	Result	Remark
3.1	15.107	7.2.4	AC Conducted Emission	< 15.107 limits < RSS-Gen table 2 limits	PASS	Under limit 11.32 dB at 0.150 MHz
3.2	15.109	7.2.3.2	Radiated Emission	< 15.109 limits or < RSS-Gen table 1 limits (Section 6)	PASS	Under limit 3.13 dB at 44.550 MHz for Quasi-Peak

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1. General Description

1.1. Applicant

CT Asia

Unit 01, 15/F, Seaview Centre, 139-141 Hoi bun road, Kwun Tong, Kowloon, Hongkong

1.2. Manufacturer

Shenzhen Tinno Mobile Technology Corp.

4/F., H-3 Building, OCT Eastern Industrial park.No.1 Xiangshan East Road, Nanshan District, Shenzhen, P.R.China

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Feature of Equipment Under Test 1.3.

	Product Feature
Equipment	GSM Mobile Phone
Brand Name	BLU
Model Name	Diva
FCC ID	YHLBLUDIVA
EUT supports Radios application	GSM/GPRS/Bluetooth
HW Version	V1.0
SW Version	BLU_B2051A_V01_GENERIC
EUT Stage	Identical Prototype

Remark:

- 1. The above EUT's information was declared by manufacturer. Please refer to the specifications or user's manual for more detailed description.
- There are two different types of EUT. They are single SIM card mobile and dual SIM card mobile. The others are the same including circuit design, PCB board, structure and all components. It is special to declare. After pre-scan two types of EUT, we found test result of the sample that dual SIM was the worst, so we choose dual SIM card mobile to perform all tests.

1.4. Product Specification of Equipment Under Test

Product Specification subjective to this standard					
Tx Frequency	GSM850: 824.2 MHz ~ 848.8 MHz GSM1900: 1850.2 MHz ~ 1909.8MHz				
Rx Frequency Range	Bluetooth: 2402 MHz ~ 2480 MHz GSM850: 869.2 MHz ~ 893.8 MHz GSM1900: 1930.2 MHz ~ 1989.8 MHz Bluetooth: 2402 MHz ~ 2480 MHz				
Antenna Type	WWAN : Fixed Internal Antenna Bluetooth : PIFA Antenna				
Type of Modulation	GSM: GMSK GPRS: GMSK Bluetooth BDR (1Mbps) : GFSK Bluetooth EDR (2Mbps) : π /4-DQPSK Bluetooth EDR (3Mbps) : 8-DPSK				

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1.5. Test Site

Test Site	SPORTON INTERNATIONAL (KUNSHAN) INC.					
	No. 3-2, PingXiang Road, Kunshan, Jiangsu Province, P.R.C.					
Test Site Location	TEL: +86-0512-5790-0158					
	FAX: +86-0512-5790-0958					
Took Oito No	Sporton	Site No.	FCC/IC Registration No.			
Test Site No.	CO01-KS	03CH01-KS	149928/4086E-1			

1.6. Applied 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

Remark: All test items were verified and recorded according to the standards and without any deviation during the test.

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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).

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

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

Abbreviations:

EMI AC: AC conducted emissions

EMI RE ≥ 1G: EUT radiated emissions ≥ 1GHz

EMI RE < 1G: EUT radiated emissions < 1GHz

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EUT Test Items Configure **Function Type** Mode Mode 1: GSM850 Idle + Bluetooth Idle + USB Cable (Charging from Adapter) + Camera + SIM 1<Fig. 1> Mode 2: GSM1900 Idle + Bluetooth Idle + USB Cable (Charging from Adapter) + MP3 + SIM 1<Fig. 1> AC Conducted 1/2 **Emission** Mode 3: GSM850 Idle + Bluetooth Idle + USB Cable (Charging from Adapter) + FM Rx + SIM 1<Fig. 2> Mode 4: GSM1900 Idle + Bluetooth Idle + USB Cable (Data Link with PC) + SIM 1<Fig. 3> Mode 1: GSM850 Idle + Bluetooth Idle + USB Cable (Charging from Adapter) + Camera + SIM 1<Fig. 1> Mode 2: GSM1900 Idle + Bluetooth Idle + USB Cable (Charging from Adapter) + MP3 + SIM 1<Fig. 1> Radiated 1/2 Emissions < 1GHz Mode 3: GSM850 Idle + Bluetooth Idle + USB Cable (Charging from Adapter) + FM Rx + SIM 1<Fig. 2> Mode 4: GSM1900 Idle + Bluetooth Idle + USB Cable (Data Link with PC) + SIM 1<Fig. 3> Mode 1: GSM850 Idle + Bluetooth Idle + USB Cable (Charging from Adapter) + Camera + SIM 1<Fig. 1> Radiated 1/2 $Emissions \geq 1GHz$ Mode 2: GSM1900 Idle + Bluetooth Idle + USB Cable (Data Link with PC) + SIM 1<Fig. 3>

Remark:

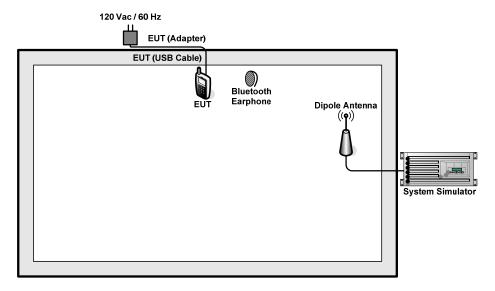
- The worst case of AC Conducted Emission is mode 2; the test data of this mode was reported.
- 2. The USB Link mode of AC Conducted Emission is mode 4; the test data of this mode was also reported.
- 3. The worst case of Radiated Emissions is mode 1; the test data of this mode was reported.
- 4. The USB Link mode of Radiated Emissions is mode 4; the test data of this mode was also reported.
- Data Link with PC means data application transferred mode between EUT and PC.

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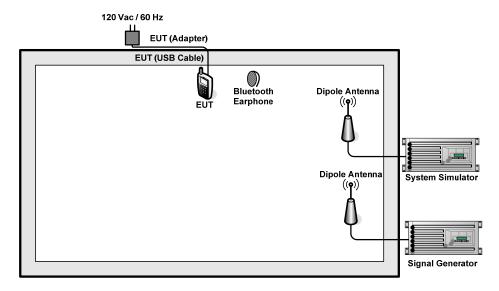


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2.2. Connection Diagram of Test System



<Fig. 1>

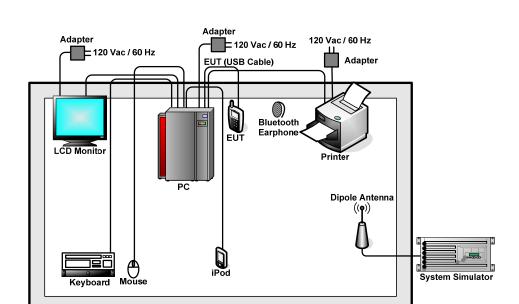


<Fig. 2>

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<Fig. 3>

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2.3. Support Unit used in test configuration and system

Item	Equipment	Trade Name	Model Name	FCC ID	Data Cable	Power Cord
1.	System Simulator	R&S	CMU 200	N/A	N/A	Unshielded, 1.8 m
2.	Signal Generator	R&S	SMR40	N/A	N/A	Unshielded, 1.8 m
3.	Bluetooth Earphone	Nokia	BH-102	PYAHS-107W	N/A	N/A
4.	Bluetooth Earphone	Nokia	BH-106	QTLBH-106	N/A	N/A
5.	PC	Dell	DCSM	FCC DoC	N/A	Unshielded, 1.8 m
6.	PC	Dell	MT320	FCC DoC	N/A	Unshielded, 1.8 m
7.	Monitor	Dell	E1910Hc	FCC DoC	Shielded, 1.2 m	Unshielded, 1.8 m
8.	(USB) Mouse	Dell	N231	FCC DoC	Shielded, 1.8 m	N/A
9.	(USB) Mouse	Dell	MO56UC	FCC DoC	Shielded, 1.8 m	N/A
10.	(USB) Keyboard	Dell	SK-8115	FCC DoC	Shielded, 1.8 m with core	N/A
11.	Printer	HP	Laser Jet 1018	FCC DoC	Shielded, 1.8 m	Unshielded, 1.8 m
12.	iPod	Apple	A1199	FCC DoC	Shielded, 1.2 m	N/A

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2.4. Test Software

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

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

- 1. Execute the program, "Winthrax" under WIN7 installed in PC for files transfer with EUT via USB cable.
- 2. Turn on FM function to make the EUT receive continuous signals from signal generator.
- 3. Execute "Music Player" to play MP3 file.
- 4. Turn on camera to capture images.

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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

See list of measuring instruments 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.
- Both sides of AC line were checked for maximum conducted interference. 6.
- 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.

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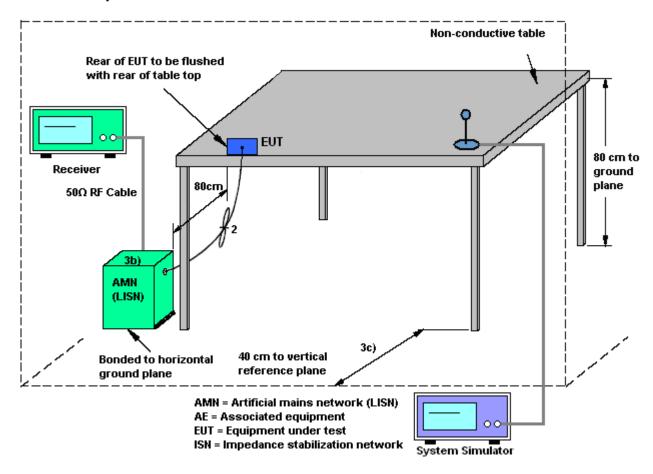
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3.1.4 Test Setup



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3.1.5 Test Result of AC Conducted Emission

Test Mode :	Mode 2			Temp	erature	:	19~20	$^{\circ}\!\mathbb{C}$	
Test Engineer :	Tom Wang			Relati	ve Hum	nidity:	39~40	%	
Test Voltage :	120Vac / 60H	lz		Phase	:		Line		
Function Type :	GSM1900 Idl SIM 1	SM1900 Idle + Bluetooth Idle + USB Cable (Charging from) + MP3 +
Remark :	All emissions	not repo	orted h	ere are	more t	han 10	dB belo	w the prescrib	ed limit.
80 40	Level (dBuV)	No property of the second	dy milke	wykikk	MANAMOO	In the second		FCC CLASS-B(AVG)	
Condition Project	.15 .2 : C001-KS : FCC CLASS-B LI : (FC) 331305 : Mode 2	.5 SN-L20130	1 0306 LIN	Freque	2 ncy (MHz)	5	10	20 3	0 0
	Freq Level	Over Limit	Limit Line	Read Level	LISN Factor	Cable Loss	Remark		
¥ <u></u>	MHz dBuV		dBuV	dBuV	dB	dB		<u></u>	
1 2 3 4 5 6 7 8 9 10 11 11	0.18 50.94 0.18 37.94 0.20 48.16 0.20 36.06 0.24 30.92 0.24 44.52 0.31 43.36 0.31 27.66 0.40 27.77	-11.32 -13.52 -13.61 -16.61 -15.60 -17.70 -21.08 -17.48 -16.57 -22.27 -20.09 -21.49	65.82 55.82 64.55 54.55 63.76 53.76 52.00 62.00 62.00 49.93 47.86 57.86	42.40 30.20 39.40 26.40 36.90 24.80 19.79 33.39 32.50 16.80 17.20 25.80	1.90 1.90 1.33 1.33 1.04 1.04 0.90 0.90 0.62 0.62 0.32	10.21 10.22 10.22 10.23 10.23 10.24 10.24	Average QP Average QP Average Average QP QP QP Average Average		

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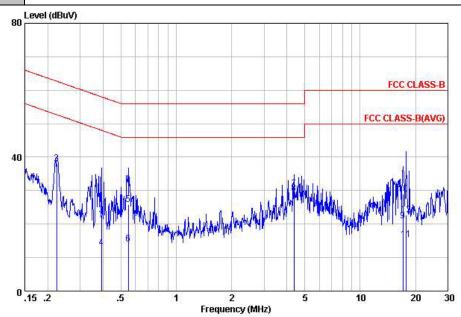
Test Mode :	Mode 2			Temp	erature	:	19~20	$^{\circ}\!\mathbb{C}$	
Test Engineer :	Tom Wang			Relati	ve Hun	nidity:	39~40	%	
Test Voltage :	120Vac / 60H	łz		Phase) :		Neutra	ıl	
Function Type :	GSM1900 ld SIM 1	le + Blu	etooth	ldle +	USB C	able (0	Charging	from Ada	pter) + MP3 +
Remark :	All emissions	not rep	orted h	ere are	more t	han 10	dB belo	w the pres	cribed limit.
80	Level (dBuV)								2
40	.15 .2	.5	**************************************	1 22	ull Y y d	5	White And	FCC CLASS-B(I	900
Condition	: C001-KS : FCC CLASS-B L: : (FC) 331305 : Mode 2 Freq Level	Over	D306 MEU Limit Line	Read	LISN Factor	Cable	Remark		
<u> </u>	MHz dBuV	The state of the s	dBuV	dBuV	dB	- dB	- NOWOTK	<u></u>	
1 2 3 4 5 6 7 8 9 10 11	0.15 39.85 0.18 47.92 0.18 34.92 0.20 45.07 0.20 34.77 0.22 44.58 0.22 31.78 0.24 28.53 0.24 42.53	-13.67 -15.97 -16.63 -19.63 -18.73 -19.03 -18.21 -21.01 -23.42 -19.42 -16.41	65.82 55.82 64.55 54.55 63.80 53.80 62.79 52.79 51.95 61.95 67.86	40.10 27.80 36.40 23.40 33.80 23.50 33.40 20.60 17.39 31.39 20.80 27.80	1.85 1.85 1.31 1.31 1.05 0.96 0.96 0.91 0.40	10.21 10.22 10.22 10.22 10.22 10.22 10.23 10.23	Average QP Average QP Average QP Average Average QP Average		

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19~20℃ Test Mode: Mode 4 Temperature: 39~40% Test Engineer: Tom Wang Relative Humidity: 120Vac / 60Hz Phase: Test Voltage : Line GSM1900 Idle + Bluetooth Idle + USB Cable (Data Link with PC) + SIM 1 Function Type:

Remark: All emissions not reported here are more than 10 dB below the prescribed limit.



: C001-KS Site

Condition: FCC CLASS-B LISN-L20130306 LINE Project : (FC) 331305

mode : Mode 4

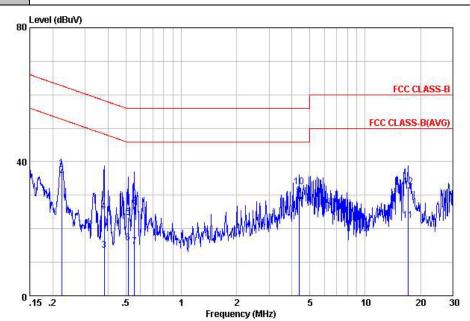
	Freq	Level	Over Limit	Limit Line	Read Level	LISN Factor	Cable Loss	Remark
8 <u>%</u>	MHz	dBuV	dB	dBu₹	dBuV	dB	dB	
1 2 3 4 5 6 7 8 9	0.22	36.30	-16.40	52.70	25.13	0.95	10.22	Average
2	0.22	38.10	-24.60	62.70	26.93	0.95	10.22	QP
3	0.39	22.84	-35.19	58.03	12.26	0.33	10.25	QP
4	0.39	12.84	-35.19	48.03	2.26	0.33	10.25	Average
5	0.55	25.84	-30.16	56.00	15.38	0.20	10.26	
6	0.55	14.14	-31.86	46.00	3.68	0.20	10.26	Average
7	4.36	30.51	-25.49	56.00	19.99	0.19	10.33	
8	4.36	29.21	-16.79	46.00	18.69	0.19		Average
9	17.11	20.86	-29.14	50.00	10.27	0.16		Average
10	17 11	29.06	-30.94	60.00	18.47	0.16	10.43	
11	17.85	15 31	-34.69	50.00	4.72	0.13		Average
12	17.85		-37.19	60.00	12.22	0.13	10.46	

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19~20℃ Test Mode: Mode 4 Temperature: **Relative Humidity:** 39~40% Test Engineer: Tom Wang 120Vac / 60Hz Phase: Test Voltage: Neutral Function Type: GSM1900 Idle + Bluetooth Idle + USB Cable (Data Link with PC) + SIM 1 All emissions not reported here are more than 10 dB below the prescribed limit. Remark:



Site : C001-KS

Condition: FCC CLASS-B LISN-N20130306 NEUTRAL

Project : (FC) 331305 mode : Mode 4

Limit LISN Cable Over Read Freq Level Limit Line Level Factor Loss Remark dBuV dBuV dB 38.20 -24.50 35.80 -16.90 13.50 -34.75 25.10 -33.15 23.50 -32.50 15.85 -30.15 14.80 -31.20 26.85 -29.15 29.91 -16.09 32.61 -23.39 22.54 -27.46 32.64 -27.36 62.70 52.70 48.25 58.25 56.00 46.00 56.00 46.00 56.00 10.22 QP 27.03 24.63 2.81 14.41 12.95 5.30 4.27 16.32 19.39 22.09 11.85 21.95 10.22 Average 10.25 Average 10.25 QP 10.26 QP 10.26 Average 0.22 0.38 0.38 0.51 0.56 0.56 4.36 4.36 17.11 0.95 0.44 0.44 0.29 0.27 0.27 0.19 0.19 0.26 2 3 4 5 6 7 8 9 10

10.26 Average 10.26 QP 10.33 Average 10.33 QP 10.43 Average

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Test of Radiated Emission Measurement 3.2.

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

3.2.2. Measuring Instruments

See list of measuring instruments 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 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.
- For each suspected emission, the EUT was arranged to its worst case and then tune the 5. antenna tower (from 1 m to 4 m) and turntable (from 0 degree to 360 degrees) to find the maximum reading.
- Set the test-receiver system to Peak Detect Function and specified bandwidth with Maximum 6. 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 (dBuV/m) = 20 log Emission level (uV/m)
- 9. Corrected Reading: Antenna Factor + Cable Loss + Read Level - Preamp Factor= Level

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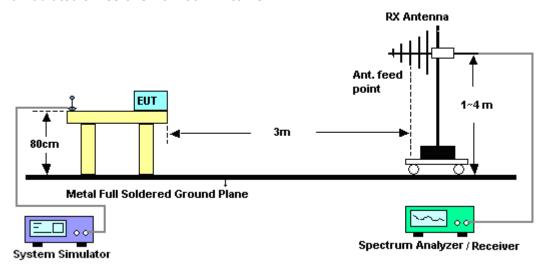
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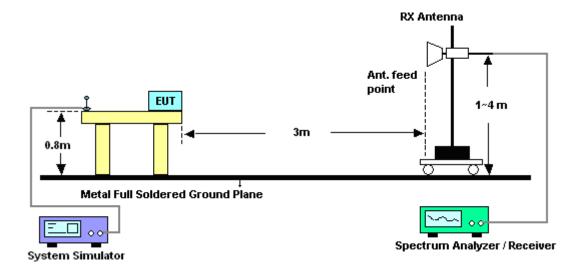
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3.2.4. Test Setup of Radiated Emission

For radiated emissions from 30MHz to 1GHz



For radiated emissions above 1GHz



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3.2.5. To

est Mode :	Mode 1	Temperature :	23~24°C		
est Engineer :	Stone Gu	Relative Humidity:	43~44%		
est Distance :	3m	Polarization :	Horizontal		
	GSM850 Idle + Blueto	oth Idle + USB Cable (Cha	rging from Adapter) + Came		
Function Type :	SIM 1				
120 Level	(dBuV/m)				
110.0					
100.0					
90.0					
80.0			FCC CLASS-B		
70.0			6dB		
60.0			FCC CLASS-B(AV)		
50.0			-6dB-		

: 03CH01-KS Site

1000.

30.0 20.0 10.0

0<mark>11.</mark>

: FCC CLASS-B 3m LF_ANT-100803 HORIZONTAL Condition

5000.

3000.

Project : (FC) 331305 Mode : Mode 1

				0	ver	Limit	: Re	eadA	ntenna	Cab	le	Preamp	A/P	os	T/Pos	
	F	req	Leve	l Li	mit	Line	Lei	vel :	Factor	Lo	SS	Factor				Remark
		MHz	dBuV/	m	dΒ	dBuV/n	ı dI	BuV	dB/m		dΒ	dE		СM	deg	
1 !	44	1. 55	36.8	7 -3	. 13	40.00	60.	49	9.59	0.	40	33.61	. 2	00	0	QP
2	107	7.60	35. 2	1 -8	. 29	43.50	56.	70	11.53	0.	58	33.60) —			Peak
3	263	3.77	35.8	3 -10	. 17	46.00	56.	10	12.22	0.	93	33. 42	-			Peak
4	359	9.80	34. 4	6 -11	. 54	46.00	51.	99	14.71	1.	10	33. 34	_			Peak
5	455	5. 83	30.6	6 -15	. 34	46.00	46.	28	16.37	1.	20	33. 19	-			Peak
6	551	1.86	27. 7	7 -18	. 23	46.00	40.	97	18.49	1.	32	33. 01	_			Peak

7000. Frequency (MHz)

9000.

11000.

13000

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Test Mode :	Mode	1			Temp	erature):	23~24°C			
Test Engineer :	Stone	Gu			Relati	ve Hur	midity :	43~44%			
Test Distance :	3m				Polari	ization	:	Vertic	cal		
Function Type :	GSM8 SIM 1	50 Idle	+ Blue	tooth Id	dle + U	SB Cat	ole (Cha	rging f	rom Ad	lapter)	+ Camera
120 Leve	el (dBuV/m))									
110.0											
100.0											
90.0											
80.0											
70.0										FCC CI	ASS-B 6dB-
60.0										00.01.4.0	D/M.D
50.0									· ·	CC CLAS	6dB-
40.0											
30.0											
20.0											
10.0											
030	1000.	30	000.	5000		7000.		9000.	110	000.	13000
Site		: 03CH0:	1 1/5		Freque	ency (MHz)					
Condition	1	: FCC CL		n IF ANT	T-100803	VERTICA	AI.				
Project		: (FC) 33									
Mode		: Mode 1									
	Freq	Level	Over Limit		Read/ Level		Cable I Loss I	Preamp Factor	A/Pos	T/Pos	Remark
	MHz	$\overline{\text{dBuV/m}}$	dB	$\overline{\text{dBuV/m}}$	dBuV	dB/m	dB	dB	cm	deg	
1 2 3 4 5 6	48. 43 107. 60 169. 68 359. 80 455. 83 551. 86	29. 98 32. 90 36. 48 33. 18	-6. 33 -13. 52 -10. 60 -9. 52 -12. 82 -12. 65	43. 50 43. 50 46. 00 46. 00	51.47	8. 11 11. 53 9. 19 14. 71 16. 37 18. 49	0. 42 0. 58 0. 75 1. 10 1. 20 1. 32	33. 58 33. 60 33. 56 33. 34 33. 19 33. 01	100 100 	0 	QP QP Peak Peak Peak Peak

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Test Mode :	Mode	4			Temperature :			23~2	23~24°C			
Test Engineer :	Stone	Gu			Relati	ve Hun	nidity:	: 43~44%				
Test Distance :	3m				Polari	zation	:	Horizontal				
Function Type :	GSM1	900 Idl	e + Blu	etooth I	dle + U	ISB Cal	ble (Da	ta Link	with PC	C) + SII	M 1	
120 Level	(aRnA/W)										
110.0												
100.0												
90.0												
80.0										ECC CI	LASS-B	
70.0										TCC CI	6dB	
60.0										CC CLAS	S D/M/N	
50.0									-	CC CLAS	6dB	
40.0												
30.0												
20.0												
10.0												
030	1000.	30	000.	5000		7000. ncy (MHz)		9000.	110	00.	13000	
Site		: 03CH0										
Condition Project		: FCC CL		n LF_ANT	-100803	HORIZO	NTAL					
Mode		: Mode 4	1	11.14	D 14	. 4	0.11	D	A /D	T /D		
	Freq	Level	Over Limit		Level	ntenna Factor		Freamp Factor	A/POS	1/108	Remark	
	MHz	$\overline{\text{dBuV/m}}$	dB	$\overline{\text{dBuV/m}}$	dBuV	dB/m	dB	dB	cm	deg		
1	39. 70		-8. 63	40.00	52. 34	12. 29	0.38				Peak	
3	186. 17 275. 41	34. 32 37. 75		46.00		8. 45 12. 51		33.40			Peak Peak	
	299. 66 334. 58		-5. 93 -9. 85	46. 00 46. 00		12. 99 14. 09	0. 98 1. 06		100		Peak Peak	
	600 36			46.00		18.59	1.39				Peak	

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Test Mode :	Mode 4		Temperature	: 23~	23~24°C		
Test Engineer :	Stone Gu		Relative Hun	nidity: 43~	43~44%		
Test Distance :	3m		Polarization	: Ver	tical		
Function Type :	GSM1900 Idl	e + Bluetooth	ldle + USB Cal	ole (Data Lin	k with PC)	+ SIM 1	
120 Level	(dBuV/m)						
110.0							
100.0							
90.0							
80.0						FCC CLASS-B	
70.0							
60.0					FCC	CLASS-B(AV)	
50.0						- OUB-	
11 71	6						
30.0							
20.0							
10.0							
030	1000. 30	000. 5000). 7000. Frequency (MHz)	9000.	11000). 13000	
Site Condition Project Mode	: 03CH0: : FCC CL : (FC) 33 : Mode 4	ASS-B 3m LF_ANT 1305	r-100803 VERTICA	L			
	Freq Level	Over Limit Limit Line	ReadAntenna Level Factor	Cable Pream Loss Facto	•	Γ/Pos Remark	
	MHz dBuV/m	dB dBuV/m	dBuV dB/m	dB d	В ст	deg	
3 4 !	107.60 38.91	-10. 45	60. 40 11. 53 48. 54 16. 02 54. 88 17. 97 55. 45 18. 30	0. 38 33. 6 0. 58 33. 6 1. 15 33. 2 1. 32 33. 0 1. 32 33. 0 1. 53 32. 8	0 9 5 2 116	Peak Peak Peak Peak 176 Peak Peak	

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4. List of Measuring Equipment

Instrument	Manufacturer	Model No.	Serial No.	Characteristics	Calibration Date	Test Date	Due Date	Remark
EMI Receiver	R&S	ESCI7	100768	9kHz~7GHz	Jun. 01, 2012	Mar. 19, 2013	May 31, 2013	Conduction (CO01-KS)
LISN	MessTec	AN3016	60103	9kHz~30MHz	Dec. 29, 2012	Mar. 19, 2013	Dec. 28, 2013	Conduction (CO01-KS)
LISN	MessTec	AN3016	60105	9kHz~30MHz	Dec. 29, 2012	Mar. 19, 2013	Dec. 28, 2013	Conduction (CO01-KS)
AC Power Source	Chroma	61602	ABP0000008 11	N/A	Nov. 15, 2012	Mar. 19, 2013	Nov. 14, 2013	Conduction (CO01-KS)
System Simulator	R&S	CMU200	837587/066	2G Full-Band	Dec. 29, 2012	Mar. 19, 2013	Dec. 28, 2013	Conduction (CO01-KS)
Signal Generator	R&S	SMR40	100455	10MHz~40GHz	Dec. 29, 2012	Mar. 19, 2013	Dec. 28, 2013	Conduction (CO01-KS)
EMI Test Receiver	R&S	ESCI	100534	9kHz~3GHz	Nov. 08, 2012	Mar. 22, 2013	Nov. 07, 2013	Radiation (03CH01-KS)
Spectrum Analyzer	R&S	FSP30	100400	9kHz~30GHz	Jun. 01, 2012	Mar. 22, 2013	May 31, 2013	Radiation (03CH01-KS)
Bilog Antenna	SCHAFFNER	CBL6112D	23182	25MHz~2GHz	Dec. 07, 2012	Mar. 22, 2013	Dec. 06, 2013	Radiation (03CH01-KS)
Double Ridge Horn Antenna	EMCO	3117	00075959	1GHz~18GHz	Jan. 06, 2013	Mar. 22, 2013	Jan. 05, 2014	Radiation (03CH01-KS)
Amplifier	com-power	PA-103A	161069	1MHz~1GHz	Jun. 01, 2012	Mar. 22, 2013	May 31, 2013	Radiation (03CH01-KS)
Amplifier	Agilent	8449B	3008A02370	1GHz~26.5GHz	Dec. 29, 2012	Mar. 22, 2013	Dec. 28, 2013	Radiation (03CH01-KS)
Signal Generator	R&S	SMR40	100455	10MHz~40GHz	Dec. 29, 2012	Mar. 22, 2013	Dec. 28, 2013	Radiation (03CH01-KS)
System Simulator	R&S	CMU200	837587/066	2G Full-Band	Dec. 29, 2012	Mar. 22, 2013	Dec. 28, 2013	Radiation (03CH01-KS)

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5. Uncertainty of Evaluation

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

Measuring Uncertainty for a Level of	2.26
Confidence of 95% (U = 2Uc(y))	2.20

<u>Uncertainty of Radiated Emission Measurement (30 MHz ~ 1000 MHz)</u>

Measuring Uncertainty for a Level of Confidence of 95% (U = 2Uc(y))	2.54
Confidence of 35% (0 = 200(y))	

Uncertainty of Radiated Emission Measurement (1 GHz ~ 40 GHz)

	-
Measuring Uncertainty for a Level of	
Confidence of 95%	4.72
(U = 2Uc(y))	

SPORTON INTERNATIONAL (KUNSHAN) INC.

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Appendix A. Photographs of EUT

Please refer to Sporton report number EP331305 as below.

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