# **FCC Test Report**

APPLICANT : CT Asia

**EQUIPMENT**: Mobile phone

BRAND NAME : BLU

MODEL NAME : Dash Music 2

FCC ID : YHLBLUDASHMC2

STANDARD : FCC 47 CFR FCC Part 15 Subpart B

**CLASSIFICATION**: Certification

The product was received on Jul. 03, 2014 and testing was completed on Jul. 15, 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.

Reviewed by: Louis Wu / Manager

Lunis Win

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.

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Report Issued Date : Jul. 21, 2014

Testing Laboratory 2353

Report No.: FC470301

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### **REVISION HISTORY**

REPORT NO.	VERSION	DESCRIPTION	ISSUED DATE
FC470301	Rev. 01	Initial issue of report	Jul. 21, 2014

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### **SUMMARY OF TEST RESULT**

Report Section	FCC Rule	Description	Limit	Result	Remark
					Under limit
3.1	15.107	AC Conducted Emission	< 15.107 limits	PASS	10.00 dB at
					4.340 MHz
					Under limit
3.2	15.109	Radiated Emission	< 15.109 limits	PASS	5.28 dB at
					33.510 MHz

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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

#### **TINNO MOBILE**

4/F., H-3 Building, OCT Eastern Industrial Park. NO.1 Xiangshan East Road., Nan Shan District, Shenzhen, P.R. CHINA

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### 1.3. Product Feature of Equipment Under Test

	Product Feature
Equipment	Mobile phone
Brand Name	BLU
Model Name	Dash Music 2
FCC ID	YHLBLUDASHMC2
	GSM/GPRS
EUT supports Radios application	WLAN 2.4GHz 802.11b/g/n HT20/HT40
	Bluetooth v3.0 + EDR/Bluetooth v4.0 LE
HW Version	V1.0
SW Version	BLU_D330_V11_GENERIC
EUT Stage	Identical Prototype

**Remark:** The above EUT's information was declared by manufacturer. Please refer to the specifications or user's manual for more detailed description.

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## 1.4. Product Specification subjective to this standard

Product Specifi	Product Specification subjective to this standard				
Tx Frequency	GSM850: 824.2 MHz ~ 848.8 MHz GSM1900: 1850.2 MHz ~ 1909.8MHz 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 802.11b/g/n: 2412 MHz ~ 2462 MHz Bluetooth: 2402 MHz ~ 2480 MHz				
Antenna Type	WWAN: Monopole Antenna WLAN: PIFA Antenna Bluetooth: PIFA Antenna				
Type of Modulation	GSM: GMSK GPRS: GMSK 802.11b: DSSS (DBPSK / DQPSK / CCK) 802.11g/n: OFDM (BPSK / QPSK / 16QAM / 64QAM) Bluetooth LE: GFSK Bluetooth (1Mbps): GFSK Bluetooth (2Mbps): π /4-DQPSK Bluetooth (3Mbps): 8-DPSK				

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#### 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.				
Test Site Location	No. 3 Building, the third floor of south, Shahe River west, Fengzeyuan warehouse, Nanshan District, Shenzhen, Guangdong, P.R.C.				
	TEL: +86-755- 3320-2	EL: +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
- 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.

		Те	st Condition	on
Item	EUT Configuration	EMI	EMI	EMI
		AC	RE<1G	RE≥1G
1.	Charging Mode (EUT with adapter)	$\boxtimes$	$\boxtimes$	$\boxtimes$
2.	Data application transferred mode		$\boxtimes$	$\boxtimes$
	(EUT connected with notebook)			

#### Abbreviations:

EMI AC: AC conducted emissions

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

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

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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: GSM850 Idle + Bluetooth Idle + WLAN Idle + USB Cable (Data Link with Notebook) + Earphone + 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: GSM850 Idle + Bluetooth Idle + WLAN Idle + USB Cable (Data Link with Notebook) + Earphone + SIM1 <fig2></fig2>
Radiated	1/2	Mode 1: GSM850 Idle + Bluetooth Idle + WLAN Idle + USB Cable (Charging from Adapter) + Earphone + Camera + SIM1 <fig1></fig1>
Emissions ≥ 1GHz		Mode 2: GSM850 Idle + Bluetooth Idle + WLAN Idle + USB Cable (Data Link with Notebook) + Earphone + SIM1 <fig2></fig2>

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#### 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 modes are reported.
- The worst case of RE < 1G is mode 1, and the USB Link mode of RE is mode 3; the test data of these modes are reported.
- 3. Link with Notebook means data application transferred mode between EUT and Notebook.

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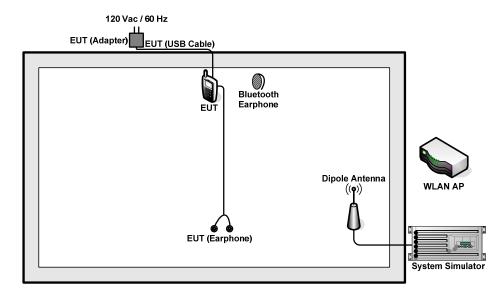
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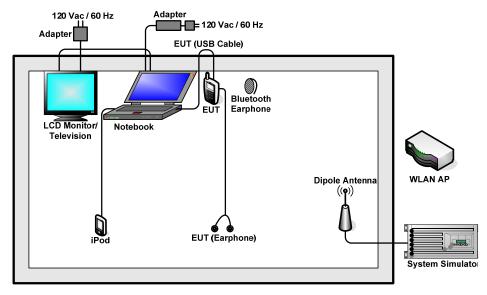
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## 2.2. Connection Diagram of Test System



<Fig1>



<Fig2>

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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	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.	WLAN AP	D-link	DIR-628	KA2DIR628A2	N/A	Unshielded,1.8m
5.	WLAN AP	D-link	DIR-615	N/A	N/A	Unshielded,1.8m
6.	Bluetooth Earphone	Nokia	BH-108	PYAHS-107W	N/A	N/A
7.	Notebook	Lenovo	G480	FCC DoC	N/A	AC I/P: Unshielded, 1.2m DC O/P: Shielded, 1.8 m
8.	Notebook	Lenovo	E540	FCC DoC	N/A	AC I/P: Unshielded, 1.2m DC O/P: Shielded, 1.8 m
9.	LCD Monitor	DELL	IN1940MWb	FCC DoC	Shielded, 1.6 m	Unshielded, 1.8 m
10.	SD Card	SanDisk	4G class 4	FCC DoC	N/A	N/A
11.	iPod nano 8GB	Apple	MC690 ZP/A	FCC DoC	Shielded, 1.2 m	N/A
12.	iPod	Apple	MC525 ZP/A	FCC DoC	Shielded, 1.0 m	N/A

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### 2.4. EUT Operation Test Setup

The EUT was in GSM 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 "Windows Media Player" to play MPEG4 files.
- 3. Turn on camera to capture images.

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#### 3. Test Result

#### **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

<sup>\*</sup>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.

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#### 3.1.4 Test Setup

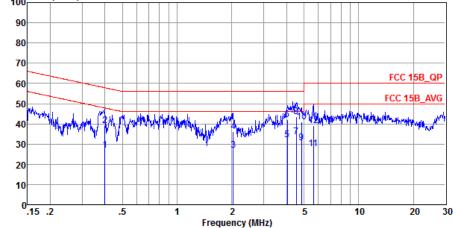


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#### 3.1.5 Test Result of AC Conducted Emission

Test Mode :	Mode 2	Temperature :	<b>21~22</b> ℃		
Test Engineer :	Jack Tian	Relative Humidity :	41~42%		
Test Voltage :	120Vac / 60Hz	Phase :	Line		
Function Type :	GSM1900 Idle + Bluetooth	n Idle + WLAN Idle	+ USB Cable (Charging from		

Adapter) + Earphone + MPEG4 + SIM1 100 Level (dBuV) Date: 2014-07-08 Time: 15:39:21 90 80 70



Site : CO01-SZ

Condition: FCC 15B\_QP LISN\_L\_20140304 LINE

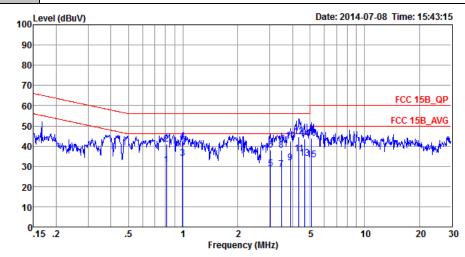
Project : (FC) 470301 Mode : Mode 2

			Over	Limit	Read	LISN	Cable	
	Freq	Level	Limit	Line	Level	Factor	Loss	Remark
_	MHz	dBu∇	dB	dBu∀	dBu∇	dB	dB	
1	0.40	27.05	-20.81	47.86	16.60	0.28	10.17	Average
2	0.40	39.25	-18.61	57.86	28.80	0.28	10.17	QP
3	2.03	26.91	-19.09	46.00	16.50	0.22	10.19	Average
4	2.03	36.21	-19.79	56.00	25.80	0.22	10.19	QP
5	4.05	32.00	-14.00	46.00	21.40	0.37	10.23	Average
6	4.05	41.90	-14.10	56.00	31.30	0.37	10.23	QP
7 *	4.53	33.53	-12.47	46.00	22.90	0.40	10.23	Average
8	4.53	43.53	-12.47	56.00	32.90	0.40	10.23	QP
9	4.85	30.75	-15.25	46.00	20.10	0.41	10.24	Average
10	4.85	41.05	-14.95	56.00	30.40	0.41	10.24	QP
11	5.62	27.76	-22.24	50.00	17.10	0.41	10.25	Average
12	5.62	38.96	-21.04	60.00	28.30	0.41	10.25	OP

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Test Mode :	Mode 2	Temperature :	21~22℃				
Test Engineer :	Jack Tian	Relative Humidity :	41~42%				
Test Voltage :	120Vac / 60Hz	Phase :	Neutral				
Function Type	GSM1900 Idle + Bluetooth Idle + WLAN Idle + USB Cable (Cha						
Function Type :	Adapter) + Earphone + MPEG4 + SIM1						



: CO01-SZ Site

Condition: FCC 15B\_QP\_LISN\_N\_20140304 NEUTRAL Project : (FC)470301

Mode : Mode 2

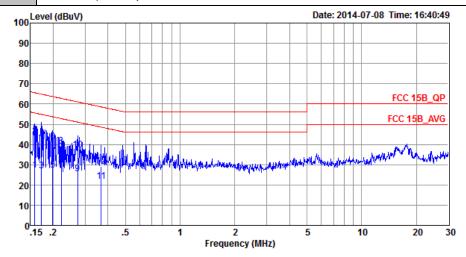
			Over	Limit	Read	LISN	Cable	
	Freq	Level	Limit	Line	Level	Factor	Loss	Remark
	MHz	dBuV	dB	dBuV	dBu₹	dB	dB	
1	0.81	30.53	-15.47	46.00	20.10	0.28	10.15	Average
2	0.81	41.13	-14.87	56.00	30.70	0.28	10.15	QP
3	0.99	33.98	-12.02	46.00	23.50	0.33	10.15	Average
4	0.99	42.48	-13.52	56.00	32.00	0.33	10.15	QP
5	3.03	28.74	-17.26	46.00	18.11	0.42	10.21	Average
6	3.03	37.94	-18.06	56.00	27.31	0.42	10.21	QP
7	3.47	28.26	-17.74	46.00	17.60	0.44	10.22	Average
8	3.47	38.16	-17.84	56.00	27.50	0.44	10.22	QP
9	3.90	31.68	-14.32	46.00	20.99	0.46	10.23	Average
10	3.90	42.28	-13.72	56.00	31.59	0.46	10.23	QP
11 *	4.34	36.00	-10.00	46.00	25.30	0.47	10.23	Average
12	4.34	44.60	-11.40	56.00	33.90	0.47	10.23	QP
13	4.67	34.02	-11.98	46.00	23.30	0.48	10.24	Average
14	4.67	43.42	-12.58	56.00	32.70	0.48	10.24	QP
15	5.08	33.03	-16.97	50.00	22.30	0.49	10.24	Average
16	5.08	43.83	-16.17	60.00	33.10	0.49	10.24	QP

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Test Mode :	Mode 3	Temperature :	21~22℃			
Test Engineer :	Jack Tian	Relative Humidity :	41~42%			
Test Voltage :	120Vac / 60Hz	Phase :	Line			
Function Type :	USB Cable (Data Link with					
Function Type :	Notebook) + Earphone + SIM1					



Site : CO01-SZ

Condition: FCC 15B\_QP LISN\_L\_20140304 LINE

Project : (FC)470301 Mode : Mode 3

			Over	Limit	Read	LISN	Cable	
	Freq	Level	Limit	Line	Level	Factor	Loss	Remark
	MHz	dBuV	dB	dBu∀	dBu∀	dB	dB	
1	0.16	27.27	-28.29	55.56	16.70	0.22	10.35	Average
2	* 0.16	43.87	-21.69	65.56	33.30	0.22	10.35	QP
3	0.17	26.85	-28.01	54.86	16.30	0.22	10.33	Average
4	0.17	42.05	-22.81	64.86	31.50	0.22	10.33	QP
5	0.20	27.22	-26.45	53.67	16.70	0.22	10.30	Average
6	0.20	41.22	-22.45	63.67	30.70	0.22	10.30	QP
7	0.22	27.40	-25.34	52.74	16.90	0.23	10.27	Average
8	0.22	39.10	-23.64	62.74	28.60	0.23	10.27	QP
9	0.27	25.47	-25.56	51.03	15.00	0.25	10.22	Average
10	0.27	37.17	-23.86	61.03	26.70	0.25	10.22	QP
11	0.37	21.65	-26.91	48.56	11.20	0.27	10.18	Average
12	0.37	29.25	-29.31	58.56	18.80	0.27	10.18	QP

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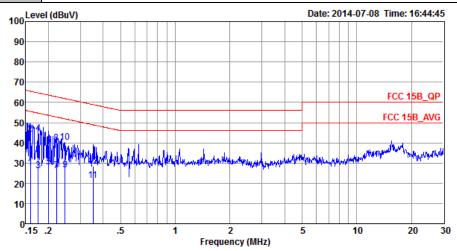


Test Mode: Mode 3
Temperature: 21~22°C

Test Engineer: Jack Tian
Relative Humidity: 41~42%

Test Voltage: 120Vac / 60Hz
Phase: Neutral

GSM850 Idle + Bluetooth Idle + WLAN Idle + USB Cable (Data Link with Notebook) + Earphone + SIM1



Site : CO01-SZ

Condition: FCC 15B\_QP LISN\_N\_20140304 NEUTRAL

Project : (FC)470301 Mode : Mode 3

				Over	Limit	Read	LISN	Cable	
		Freq	Level	Limit	Line	Level	Factor	Loss	Remark
		MHz	dBuV	dB	dBuV	dBu∀	dB	dB	
1		0.16	27.67	-27.85	55.52	16.99	0.33	10.35	Average
2		0.16	44.27	-21.25	65.52	33.59	0.33	10.35	QP
3		0.18	26.35	-28.33	54.68	15.71	0.32	10.32	Average
4	*	0.18	44.65	-20.03	64.68	34.01	0.32	10.32	QP
5		0.20	27.91	-25.67	53.58	17.30	0.32	10.29	Average
6		0.20	38.91	-24.67	63.58	28.30	0.32	10.29	QP
7		0.22	26.10	-26.64	52.74	15.50	0.33	10.27	Average
8		0.22	39.70	-23.04	62.74	29.10	0.33	10.27	QP
9		0.25	26.59	-25.27	51.86	16.00	0.34	10.25	Average
10		0.25	40.29	-21.57	61.86	29.70	0.34	10.25	QP
11		0.35	21.56	-27.35	48.91	11.00	0.38	10.18	Average
12		0.35	28.26	-30.65	58.91	17.70	0.38	10.18	QP

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#### 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 (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

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 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 $\mu$ V/m) = 20 log Emission level ( $\mu$ V/m)
- 9. Corrected Reading: Antenna Factor + Cable Loss + Read Level Preamp Factor = Level

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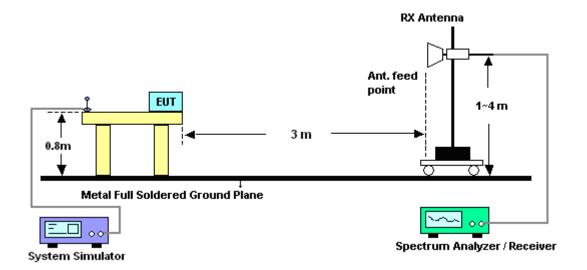
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### 3.2.4. Test Setup of Radiated Emission

#### For radiated emissions from 30MHz to 1GHz

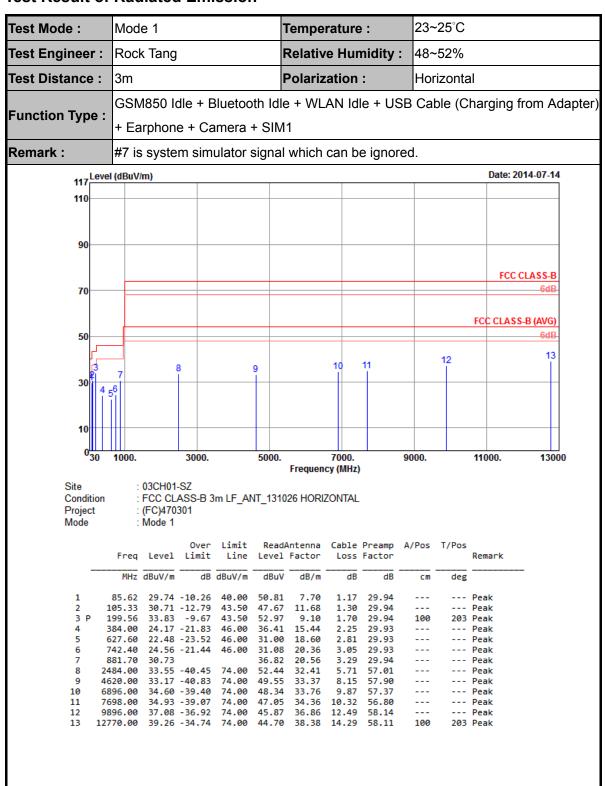


#### For radiated emissions above 1GHz



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#### 3.2.5. Test Result of Radiated Emission

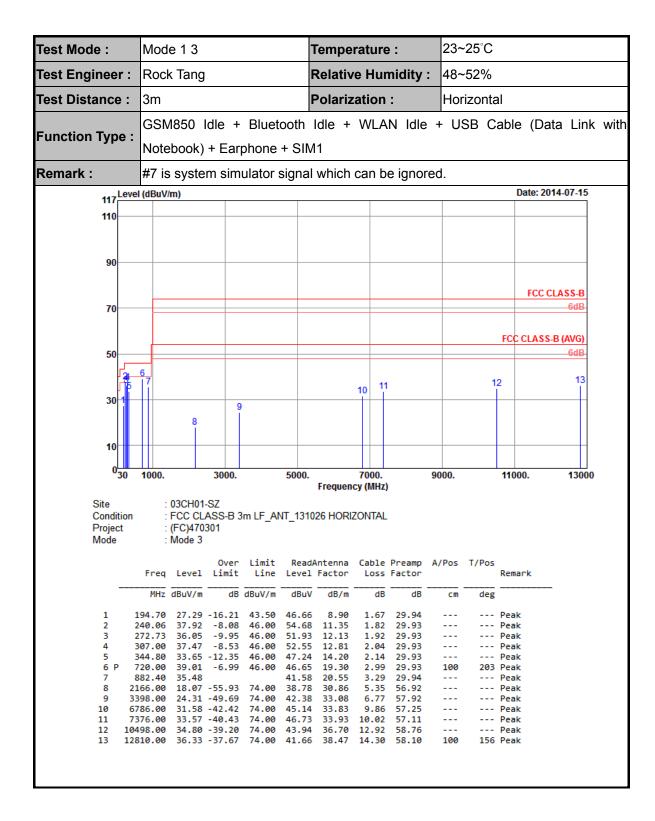


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Test Mode :	Mode 1				Temperature :			23~	23~25°C				
Test Engineer :	Rocl	k Tang				Relative Humidity :			48~	48~52%			
Test Distance :	3m	3m				Polariz	ation	:	Ver	tical			
Function Type :	GSN	GSM850 Idle + Bluetooth I					AN Id	lle + US	В Са	ble (C	harging	from Ad	apter)
Function Type :	+ Ea	- Earphone + Camera + SIM1											
Remark :		7 is system simulator signal which can be ignored.											
117 Leve	el (dBuV	/m)									Date: 2	2014-07-14	
110													
90													
											ECC	CLASS-B	
70											rcc	6dB	
											ECC C  40	C D (AVC)	
50											FCC CLAS	-6dB	
										12		13	
30 4	- 7	(	3		9	10	)	11					
30	56'  												
10													
030	1000.		3000.		5000.	Frequen	7000. cy (MHz	)	9000.		11000.	13000	)
Site Condition		03CH01- FCC CL/		m LF Al	NT 1310								
Project Mode	:	(FC)4703 Mode 1		_	_								
			Over	Limit	Read	Antenna	Cable	Preamp	A/Pos	T/Pos			
	Freq	Level			Level	Factor	Loss	Factor			Remark		
		dBuV/m		dBuV/m	dBuV		dB		cm	deg			
1 P 2		34.72 36.72						29.93 29.94	100		Peak Peak		
		34.45 28.41						29.94			Peak		
		26.19						29.93 29.92			Peak Peak		
		25.31	-20.69	46.00				29.93			Peak		
		27.77 30.98	-43.02	74.00		20.56 32.52		29.94 57.02			Peak Peak		
9 4	810.00	32.49	-41.51	74.00	47.93	33.78	8.33	57.55			Peak		
		33.69 34.48						56.89 56.83			Peak Peak		
12 9	918.00	36.91	-37.09	74.00	45.60	36.90	12.54	58.13			Peak		
13 12	/46.00	39.39	-34.61	/4.00	44.87	38.35	14.28	58.11	100	206	Peak		

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Test Mode :	Mode 3 Temperature : 23~25°C							
Test Engineer :	Rock Tang	Relative Humidity :	48~52%					
Test Distance :	3m	3m Polarization : Vertical						
Function Type :		SM850 Idle + Bluetooth Idle + WLAN Idle + USB Cable (Data Lirotebook) + Earphone + SIM1						
Remark :		7 is system simulator signal which can be ignored.						
117 Leve 110 90 70	I (dBuV/m)		FCC CLASS-B					
300 2 5 5 10 10 10 10 10 10 10 10 10 10 10 10 10	6 7 8 9	10 11	12 13					
Site Condition Project	1000. 3000. : 03CH01-SZ : FCC CLASS-B 3m LF_/ : (FC)470301	Frequency (MHz)	000. <b>11</b> 000. <b>13</b> 000					

Mode : Mode 3

			Over	Limit	Read	Antenna	Cable	Preamp	A/Pos	T/Pos	
	Freq	Level	Limit	Line	Level	Factor	Loss	Factor			Remark
	MHz	dBuV/m	dB	dBuV/m	dBuV	dB/m	dB	dB	cm	deg	
1	35.13	27.86	-12.14	40.00	40.88	16.10	0.81	29.93			Peak
2	166.08	26.87	-16.63	43.50	46.59	8.66	1.56	29.94			Peak
3	240.06	35.46	-10.54	46.00	52.22	11.35	1.82	29.93			Peak
4	307.00	30.17	-15.83	46.00	45.25	12.81	2.04	29.93			Peak
5	479.90	27.85	-18.15	46.00	37.89	17.40	2.48	29.92			Peak
6 F	720.00	39.33	-6.67	46.00	46.97	19.30	2.99	29.93	100	199	Peak
7	881.70	31.73			37.82	20.56	3.29	29.94			Peak
8	2044.00	33.28	-40.72	74.00	54.79	30.17	5.20	56.88			Peak
9	3200.00	33.21	-40.79	74.00	51.12	33.04	6.57	57.52			Peak
10	6848.00	32.51	-41.49	74.00	46.17	33.79	9.87	57.32			Peak
11	7902.00	33.62	-40.38	74.00	44.91	34.72	10.59	56.60			Peak
12	9828.00	37.87	-36.13	74.00	46.92	36.76	12.36	58.17			Peak
13	12816.00	38.05	-35.95	74.00	43.38	38.47	14.30	58.10	100	163	Peak

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## 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	Jul. 08, 2014	Feb. 20, 2015	Conduction (CO01-SZ)
AC LISN	EMCO	3816/2SH	00103912	9kHz~30MHz	Mar. 04, 2014	Jul. 08, 2014	Mar. 03, 2015	Conduction (CO01-SZ)
AC LISN (for auxiliary equipment)	EMCO	3816/2SH	00103892	9kHz~30MHz	Mar. 04, 2014	Jul. 08, 2014	Mar. 03, 2015	Conduction (CO01-SZ)
AC Power Source	Chroma	61602	616020000891	100Vac~250Vac	Dec. 17, 2013	Jul. 08, 2014	Dec. 16, 2014	Conduction (CO01-SZ)
ESCIO TEST Receiver	R&S	ESCI	100724	9kHz~3GHz	Feb. 21, 2014	Jul. 14, 2014~ Jul. 15, 2014	Feb. 20, 2015	Radiation (03CH01-SZ)
Spectrum Analyzer	Agilent Technologies	N9038A	MY52260185	20Hz~26.5GHz	May 26, 2014	Jul. 14, 2014~ Jul. 15, 2014	May 25, 2015	Radiation (03CH01-SZ)
Bilog Antenna	TESEQ	CBL 6112D	23188	30MHz~2GHz	Oct. 26, 2013	Jul. 14, 2014~ Jul. 15, 2014	Oct. 25, 2014	Radiation (03CH01-SZ)
Double Ridge Horn Antenna	ETS Lindgren	3117	00119436	1GHz~18GHz	Oct. 26, 2013	Jul. 14, 2014~ Jul. 15, 2014	Oct. 25, 2014	Radiation (03CH01-SZ)
Amplifier	ADVANTEST	BB525C	E9007003	9kHz~3000MHz	Feb. 21, 2014	Jul. 14, 2014~ Jul. 15, 2014	Feb. 20, 2015	Radiation (03CH01-SZ)
Amplifier	Yiai	AV3860B	04030	2GHz~26.5GHz	May 08, 2014	Jul. 14, 2014~ Jul. 15, 2014	May 07, 2015	Radiation (03CH01-SZ)
AC Source(AVR)	Chroma	61601	616010001985	100Vac~250Vac	Mar. 25, 2014	Jul. 14, 2014~ Jul. 15, 2014	Mar. 24, 2015	Radiation (03CH01-SZ)
Turn Table	EM Electronics	EM 1000	N/A	0~360 degree	NCR	Jul. 14, 2014~ Jul. 15, 2014	NCR	Radiation (03CH01-SZ)
Antenna Mast	EM Electronics	EM 1000	N/A	1 m~4 m	NCR	Jul. 14, 2014~ Jul. 15, 2014	NCR	Radiation (03CH01-SZ)

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## 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

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

	<del>-</del>
Measuring Uncertainty for a Level of	2.0
Confidence of 95% (U = $2Uc(y)$ )	ა.ყ

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