

FCC RF Test Report

APPLICANT : Huawei Technologies Co. Ltd.
EQUIPMENT : cdma2000 Digital Mobile Phone

BRAND NAME : HUAWEI

MODEL NAME : HUAWEI C8100

FCC ID : QISC8100

STANDARD : FCC 47 CFR Part 2, 22(H), 24(E)

CLASSIFICATION : PCS Licensed Transmitter Held to Ear (PCE) Tx/Rx FREQUENCY RANGE : 824.70 ~ 848.31 MHz / 869.70 ~ 893.31 MHz

MAX. ERP/EIRP POWER : 0.25 W EMISSION DESIGNATOR : 1M28F9W

The product was received on Apr. 10, 2010 and completely tested on Apr. 27, 2010. We, SPORTON INTERNATIONAL INC., would like to declare that the tested sample has been evaluated in accordance with the procedures given in ANSI / TIA / EIA-603-C-2004 and shown 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 INC., the test report shall not be reproduced except in full.

Reviewed by:

Roy Wu / Manager

lac-MRA



Report No.: FG042027

SPORTON INTERNATIONAL (KUNSHAN) INC.

No. 3-2, PingXiang Road, Kunshan, Jiangsu Province, P.R.C.

SPORTON INTERNATIONAL (KUNSHAN) INC.

TEL: 86-0512-5790-0158 FAX: 86-0512-5790-0958 FCC ID: QISC8100 Page Number : 1 of 27
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REVISION HISTORY

REPORT NO.	VERSION	DESCRIPTION	ISSUED DATE
FG042027	Rev. 01	Initial issue of report	May 07, 2010

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SUMMARY OF TEST RESULT

Report Section	FCC Rule	IC Rule	Description	Limit	Result	Remark
3.1	§2.1046	N/A	Conducted Output Power	N/A	PASS	-
3.2	§22.913(a)(2)	RSS-132(4.4) SRSP-503(5.1.3)	Effective Radiated Power	< 7 Watts	PASS	-
3.3	§2.1049 §22.917(a)	N/A	Occupied Bandwidth	N/A	PASS	-
3.4	§2.1051 §22.917(a)	RSS-132 (4.5.1)	Band Edge Measurement	< 43+10log ₁₀ (P[Watts])	PASS	-
3.5	§2.1051 §22.917(a)	RSS-132 (4.5.1)	Conducted Emission	< 43+10log ₁₀ (P[Watts])	PASS	-
3.6	§2.1053 §22.917(a)	RSS-132 (4.5.1)	Field Strength of Spurious Radiation	< 43+10log ₁₀ (P[Watts])	PASS	Under limit 28.59 dB at 5018 MHz
3.7	§2.1055 §22.355	RSS-132(4.3)	Frequency Stability for Temperature & Voltage	< 2.5 ppm	PASS	-

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1 General Description

1.1 Applicant

Huawei Technologies Co. Ltd.

Huawei Industrial Base, Bantian Longgang Shenzhen 518128, P.R. China

1.2 Manufacturer

Huawei Technologies Co. Ltd.

Huawei Industrial Base, Bantian Longgang Shenzhen 518128, P.R. China

1.3 Feature of Equipment Under Test

Product Feature & Specification				
Equipment	cdma2000 Digital Mobile Phone			
Brand Name	HUAWEI			
Model Name	HUAWEI C8100			
FCC ID	QISC8100			
Tx Frequency	824 MHz ~ 849 MHz			
Rx Frequency	869 MHz ~ 894 MHz			
Maximum Output Power to Antenna	22.66 dBm			
Maximum ERP	0.25 W (23.94 dBm)			
Antenna Type	Fixed Internal Antenna			
HW Version	HC3C8100M Ver.A			
SW Version	81002.11.00.01.100			
Type of Modulation	QPSK			
Type of Emission	1M28F9W			
EUT Stage	Identical Prototype			

Remark:

- 1. For other wireless features of this EUT, the test report will be issued separately.
- This test report recorded only product characteristics and test results of PCS Licensed Transmitter Held to Ear (PCE).

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List of Accessory:

	Specification of Accessory				
	Brand Name	HUAWEI			
	Model Name	HS-050040U6			
AC Adapter 1	S/N	BYXXXXX			
	Bower Beting	I/P:100-240Vac, 50-60Hz, 0.2A;			
	Power Rating	O/P: 5.0Vdc, 400mA			
	Brand Name	HUAWEI			
	Model Name	HS-050040U6			
AC Adapter 2	S/N	HKXXXXX			
	Power Rating	I/P:100-240Vac, 50-60Hz, 0.2A;			
		O/P: 5.0Vdc, 400mA			
	Brand Name	HUAWEI			
Battery	Model Name	HB5A2H			
Dallel y	Power Rating	3.7Vdc, 1150mAh			
	Туре	Li-ion			
	Brand Name	HUAWEI			
Earphone	Model Name	EMC179P-YE29			
	Signal Line Type	1.55 meter non-shielded cable without ferrite core			
	Brand Name	HUAWEI			
USB Cable	Model Name	LSA00017			
	Signal Line Type	1.03 meter shielded cable without ferrite core			

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

1.4 Testing 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	
Test Site No.	Sporton Site No.	
Test Site No.	TH01-KS; 03CH01-KS	

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1.5 Applied Standards

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

- Preliminary Guidance for Receiving Applications for Certification of 3G Device. May 9, 2006.
- FCC 47 CFR Part 2, 22(H)
- ANSI / TIA / EIA-603-C-2004
- IC RSS-132 Issue 2

Remark:

- 1. All test items were verified and recorded according to the standards and without any deviation during the test.
- 2. This EUT has also been tested and complied with the requirements of FCC Part 15, Subpart B, recorded in a separate test report.

1.6 Ancillary Equipment List

ltem	Equipment	Trade Name	Model No.	FCC ID	Data Cable	Power Cord
1.	System Simulator	R&S	CMU 200	N/A	N/A	Unshielded, 1.8 m

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2 Test Configuration of Equipment Under Test

2.1 Test Mode

During all testing, EUT is in link mode with base station emulator at maximum power level. The spurious emission measurements were carried out in semi-anechoic chamber with 3-meter test range, and EUT is rotated on three test planes to find out the worst emission.

Frequency range investigated for radiated emission is 30 MHz to 9000 MHz for CDMA2000 BC0.

Test Modes						
Band Radiated TCs Conducted TCs						
CDMA2000 BC0	■ 1xRTT Link Mode	■ 1xRTT Link Mode				

Note:

- For CDMA2000 BC0, The maximum RF output power levels are 1xRTT RC3+SO55 mode for QPSK Link; only this mode was used for all tests.
- **2.** Because there are individual antennas for each WWAN, WLAN, and Bluetooth, the co-location test modes are not required.

The conducted power table is as follows:

Conducted Power (*Unit: dBm)						
Band		CDMA2000 BC0				
Channel	1013	384	777			
Frequency	824.7	836.52	848.31			
1xRTT RC1+SO55	22.32	22.40	22.63			
1xRTT RC3+SO55	22.33	22.42	22.66			
1xRTT RC3+SO32	22.28	22.35	22.58			
EV-DO RTAP 9.6K	22.15	22.22	22.26			
EV-DO RTAP 38.4K	22.14	22.27	22.16			
EV-DO RTAP 153.6K	22.15	22.29	22.33			
EV-DO RETAP 128K	22.36	22.41	22.37			
EV-DO RETAP 2048K	22.38	22.40	22.38			
EV-DO RETAP 12288K	22.28	22.30	22.29			

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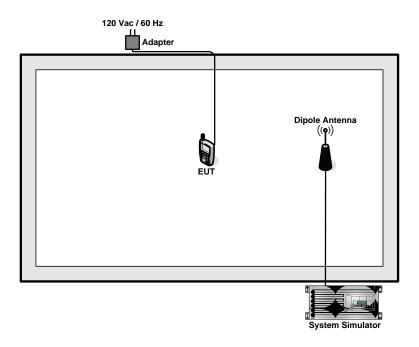
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2.2 Connection Diagram of Test System



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Test Result

3.1 Conducted Output Power Measurement

3.1.1 Description of the Conducted Output Power Measurement

A base station simulator was used to establish communication with the EUT. Its parameters were set to transmit the maximum power on the EUT. The measured power in the radio frequency on the transmitter output terminals shall be reported.

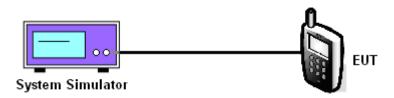
3.1.2 Measuring Instruments

See list of measuring instruments of this test report.

3.1.3 Test Procedures

- 1. The transmitter output port was connected to base station.
- 2. Set EUT at maximum power through base station.
- 3. Select lowest, middle, and highest channels for each band and different modulation.

3.1.4 Test Setup



3.1.5 Test Result of Conducted Output Power

	CDMA2000 BC0						
Test Mode	Test Status	Channel	Frequency (MHz)	Conducted Power (dBm)	Conducted Power (Watts)		
00144 0000		1013 (Low)	824.70	22.33	0.17		
CDMA 2000 1xRTT	RC3+SO55	384 (Mid)	836.52	22.42	0.17		
IXIXII		777 (High)	848.31	22.66	0.18		

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3.2 Effective Radiated Power and Measurement

3.2.1 Description of the ERP Measurement

ERP is measured by substitution method according to ANSI / TIA / EIA-603-C-2004. The ERP of mobile transmitters must not exceed 7 Watts.

3.2.2 Measuring Instruments

See list of measuring instruments of this test report.

Test Procedures 3.2.3

- The EUT was placed on an non-conductive rotating platform with 0.8 meter height in a semi-anechoic chamber. The radiated emission at the fundamental frequency was measured at 3 m with a test antenna and a spectrum analyzer with RBW= 3MHz, VBW= 3MHz, and peak detector settings.
- During the measurement, the EUT was enforced in maximum power and linked with a base 2. station. The highest emission was recorded from analyzer power level (LVL) from the 360 degrees rotation of the turntable and the test antenna raised and lowered over a range from 1 to 4 meters in both horizontally and vertically polarized orientations.
- Effective Isotropic Radiated Power(EIRP) was measured by substitution method according to 3. TIA/EIA-603-C. The EUT was replaced by dipole antenna (substitution antenna) at same location, and then a known power from S.G. was applied into the dipole antenna through a Tx cable, and then recorded the maximum Analyzer reading through raised and lowered the test antenna. The correction factor (in dB) = S.G. - Tx Cable loss + Substitution antenna gain -Analyzer reading. Then the EUT's EIRP was calculated with the correction factor, EIRP= LVL + Correction factor and ERP = EIRP - 2.15.

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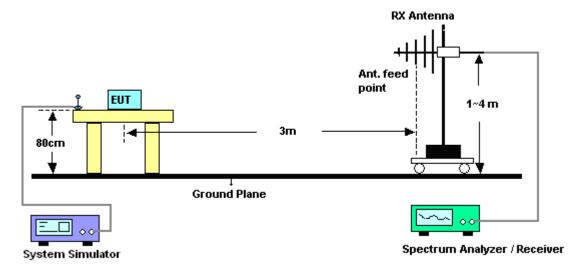
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3.2.4 Test Setup



3.2.5 Test Result of ERP

CDMA2000 BC0 1xRTT RC3+SO55 Radiated Power ERP							
		Horizontal Polarization					
Frequency	LVL	Correction Factor	ERP	ERP			
(MHz)	(dBm)	(dB)	(dBm)	(W)			
824.70	-2.69	28.11	23.27	0.21			
836.52	-1.93	27.85	23.77	0.24			
848.31	-1.81	27.90	23.94	0.25			
		Vertical Polarization					
Frequency	Frequency LVL Correction Factor ERP ERP						
(MHz)	(MHz) (dBm) (dB) (dBm) (W)						
824.70	-11.55	32.22	18.52	0.07			
836.52	-11.16	31.78	18.47	0.07			
848.31	-9.44	32.24	20.65	0.12			

^{*} ERP = LVL (dBm) + Correction Factor (dB) - 2.15

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3.3 Occupied Bandwidth Measurement

3.3.1 Description of Occupied Bandwidth Measurement

The emission bandwidth is defined as the width of the signal between two points, located at the 2 sides of the carrier frequency, outside of which all emissions are attenuated at least 26 dB below the transmitter power.

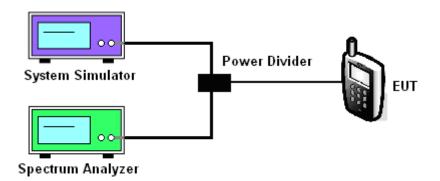
3.3.2 Measuring Instruments

See list of measuring instruments of this test report.

3.3.3 Test Procedures

- 1. The EUT was connected to Spectrum Analyzer and Base Station via power divider.
- 2. The 99% and 26 dB occupied bandwidth (BW) of the middle channel for the highest RF powers were measured.

3.3.4 Test Setup



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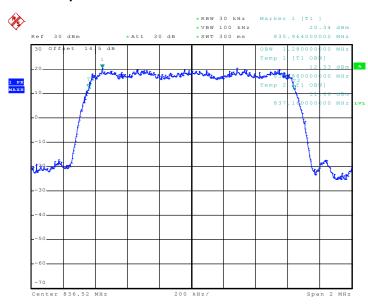
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3.3.5 Test Result (Plots) of Occupied Bandwidth

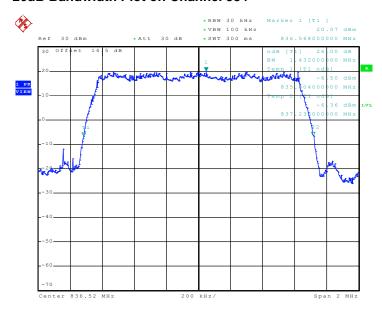
Band :	CDMA2000 BC0	Power Stage :	High
Test Mode :	1xRTT RC3+SO55		

99% Occupied Bandwidth Plot on Channel 384



Date: 13.APR.2010 13:35:39

26dB Bandwidth Plot on Channel 384



Date: 13.APR.2010 13:29:05

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3.4 Band Edge Measurement

3.4.1 Description of Band Edge Measurement

The power of any emission outside of the authorized operating frequency ranges must be lower than the transmitter power (P) by a factor of at least 43 + 10 log (P) dB.

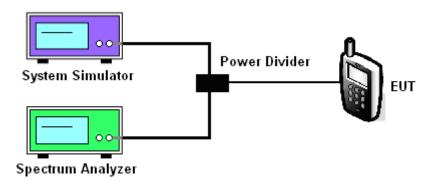
3.4.2 Measuring Instruments

See list of measuring instruments of this test report.

3.4.3 Test Procedures

- 1. The EUT was connected to Spectrum Analyzer and Base Station via power divider.
- 2. The band edges of low and high channels for the highest RF powers were measured. Setting RBW as roughly BW/100.
- The RBW was replaced by 10 kHz, due to the spectrum analyzer IF-Filter including an excess 3. of the limit. A worst case correction factor of 10 log (1% BW/measurement RBW) was implemented.

3.4.4 Test Setup



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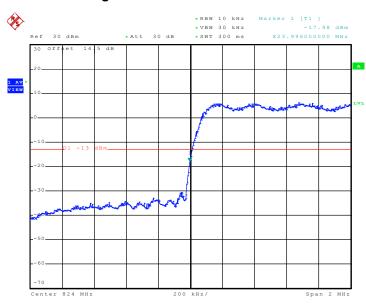
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3.4.5 Test Result (Plots) of Conducted Band Edge

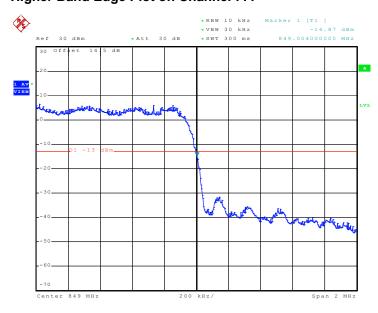
Band :	CDMA2000 BC0	Power Stage :	High
Test Mode :	1xRTT RC3+SO55		

Lower Band Edge Plot on Channel 1013



Date: 22.APR.2010 11:34:23

Higher Band Edge Plot on Channel 777



Date: 27.APR.2010 15:45:59

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3.5 Conducted Emission Measurement

3.5.1 Description of Conducted Emission Measurement

The power of any emission outside of the authorized operating frequency ranges must be lower than the transmitter power (P) by a factor of at least 43 + 10 log (P) dB.

It is measured by means of a calibrated spectrum analyzer and scanned from 30 MHz up to a frequency including its 10th harmonic.

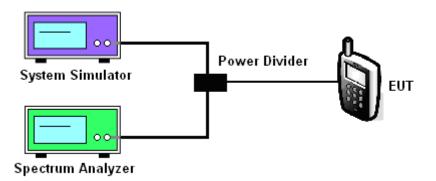
3.5.2 Measuring Instruments

See list of measuring instruments of this test report.

3.5.3 Test Procedures

- 1. The EUT was connected to spectrum analyzer and base station via power divider.
- 2. The middle channel for the highest RF power within the transmitting frequency was measured.
- 3. The conducted spurious emission for the whole frequency range was taken.

3.5.4 Test Setup



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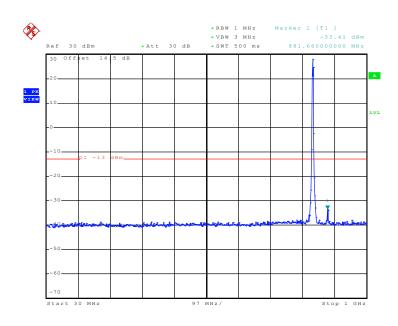
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3.5.5 Test Result (Plots) of Conducted Emission

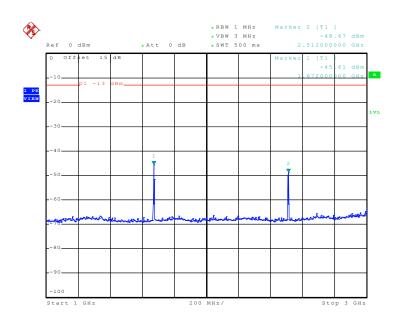
Band :	d: CDMA2000 BC0		High
Test Mode :	1xRTT RC3+SO55		

Conducted Emission Plot between 30MHz ~ 1GHz



Date: 13.APR.2010 13:52:52

Conducted Emission Plot between 1GHz ~ 3GHz



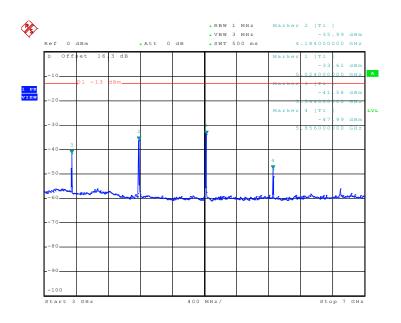
Date: 13.APR.2010 13:56:51

SPORTON INTERNATIONAL (KUNSHAN) INC.

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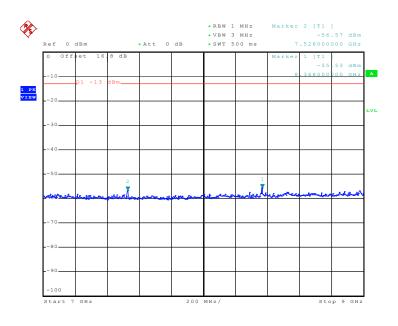


Conducted Emission Plot between 3GHz ~ 7GHz



Date: 13.APR.2010 14:03:24

Conducted Emission Plot between 7GHz ~ 9GHz



Date: 13.APR.2010 14:06:03

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3.6 Field Strength of Spurious Radiation Measurement

3.6.1 Description of Field Strength of Spurious Radiated Measurement

The radiated spurious emission was measured by substitution method according to ANSI / TIA / EIA-603-C-2004. The power of any emission outside of the authorized operating frequency ranges must be attenuated below the transmitter power (P) by a factor of at least 43+10log₁₀(P[Watts]) dB. The spectrum is scanned from 30 MHz up to a frequency including its 10th harmonic.

3.6.2 Measuring Instruments

See list of measuring instruments of this test report.

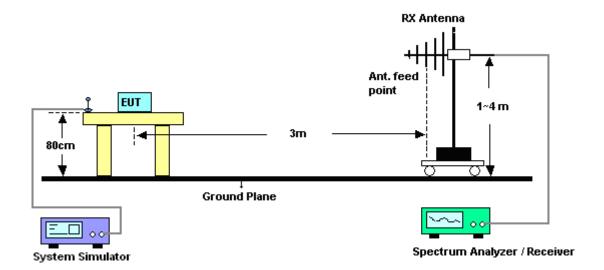
3.6.3 Test Procedures

- The EUT was placed on a rotatable wooden table with 0.8 meter about ground.
- 2. The EUT was set 3 meters from the receiving antenna, which was mounted on the antenna tower.
- 3. The table was rotated 360 degrees to determine the position of the highest spurious emission.
- 4. The height of the receiving antenna is varied between one meter and four meters to search the maximum spurious emission for both horizontal and vertical polarizations.
- Make the measurement with the spectrum analyzer's RBW = 1MHz, VBW = 3MHz, Sweep = 500ms, Taking the record of maximum spurious emission.
- 6. A horn antenna was substituted in place of the EUT and was driven by a signal generator.
- 7. Tune the output power of signal generator to the same emission level with EUT maximum spurious emission.
- 8. Taking the record of output power at antenna port.
- 9. Repeat step 7 to step 8 for another polarization.
- 10. EIRP (dBm) = S.G. Power Tx Cable Loss + Tx Antenna Gain
- 11. ERP (dBm) = EIRP 2.15

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3.6.4 Test Setup



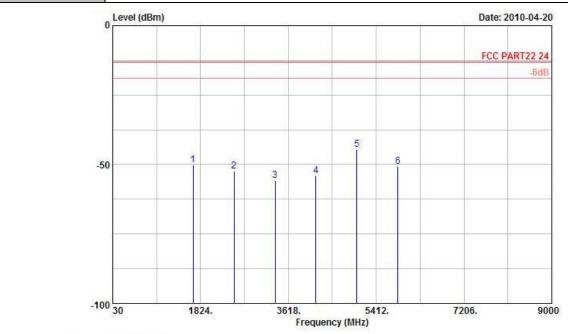
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3.6.5 Test Result of Field Strength of Spurious Radiated

Band :	CDMA2000 BC0	Temperature :	21~22°C		
Test Mode :	1xRTT RC3+SO55	Relative Humidity :	42~43%		
Test Engineer :	Haitao Yin	Polarization :	Horizontal		
Damark .	Sourious amissions within 20 4000MHz were found more than 20dP halou limit line				

Remark: Spurious emissions within 30-1000MHz were found more than 20dB below limit line.



Site : 03CH01-KS

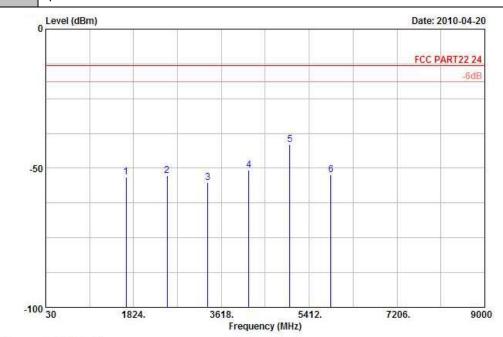
Condition: FCC PART22 24 HF EIRP FACTOR-09020 HORIZONTAL

Frequency	ERP	Limit	Over	SPA	S.G.	TX Cable	TX Antenna	Polarization	Result
			Limit	Reading	Power	loss	Gain		
(MHz)	(dBm)	(dBm)	(dB)	(dBm)	(dBm)	(dB)	(dBi)	(H/V)	
1674	-50.17	-13	-37.17	-48.52	-50.82	0.57	3.37	Н	Pass
2512	-52.47	-13	-39.47	-54.65	-54.70	0.78	5.16	Н	Pass
3346	-55.66	-13	-42.66	-57.56	-59.30	0.87	6.66	Н	Pass
4182	-54.17	-13	-41.17	-57.36	-58.76	0.97	7.71	Н	Pass
5018	-44.48	-13	-31.48	-51.97	-50.15	1.09	8.91	Н	Pass
5858	-50.77	-13	-37.77	-59.91	-57.21	1.22	9.81	Н	Pass

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Band :CDMA2000 BC0Temperature :21~22°CTest Mode :1xRTT RC3+S055Relative Humidity :42~43%Test Engineer :Haitao YinPolarization :Vertical

Remark: Spurious emissions within 30-1000MHz were found more than 20dB below limit line.



Site : 03CH01-K5

Condition: FCC PART22 24 HF EIRP FACTOR-09020 VERTICAL

Frequency	ERP	Limit	Over	SPA	S.G.	TX Cable	TX Antenna	Polarization	Result
			Limit	Reading	Power	loss	Gain		
(MHz)	(dBm)	(dBm)	(dB)	(dBm)	(dBm)	(dB)	(dBi)	(H/V)	
1674	-53.32	-13	-40.32	-53.34	-53.97	0.57	3.37	V	Pass
2510	-52.72	-13	-39.72	-56.45	-54.95	0.78	5.16	V	Pass
3342	-55.21	-13	-42.21	-58.04	-58.85	0.87	6.66	V	Pass
4182	-50.80	-13	-37.80	-54.74	-55.39	0.97	7.71	V	Pass
5018	-41.59	-13	-28.59	-49.26	-47.26	1.09	8.91	V	Pass
5856	-52.31	-13	-39.31	-60.45	-58.75	1.22	9.81	V	Pass

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3.7 Frequency Stability Measurement

3.7.1 Description of Frequency Stability Measurement

The frequency stability shall be measured by variation of ambient temperature and variation of primary supply voltage to ensure that the fundamental emission stays within the authorized frequency block. The frequency stability of the transmitter shall be maintained within ±0.00025% (±2.5ppm) of the center frequency.

3.7.2 Measuring Instruments

See list of measuring instruments of this test report.

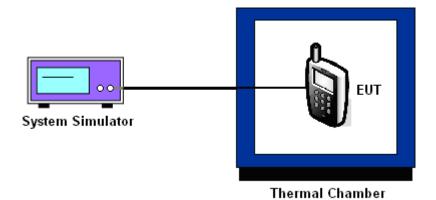
Test Procedures for Temperature Variation

- 1. The EUT was set up in the thermal chamber and connected with the base station.
- 2. With power OFF, the temperature was decreased to -30°C and the EUT was stabilized for three hours. Power was applied and the maximum change in frequency was recorded within one minute.
- 3. With power OFF, the temperature was raised in 10°C step up to 50°C. The EUT was stabilized at each step for at least half an hour. Power was applied and the maximum frequency change was recorded within one minute.
- If the EUT can not be turned on at -30°C, the testing lowest temperature will be raised in 10°C step until the EUT can be turned on.

Test Procedures for Voltage Variation

- The EUT was placed in a temperature chamber at 25±5° C and connected with the base 1. station.
- The power supply voltage to the EUT was varied from BEP to 115% of the nominal value measured at the input to the EUT.
- The variation in frequency was measured for the worst case. 3.

3.7.5 Test Setup



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3.7.6 Test Result of Temperature Variation

Band :	CDMA2000 BC0	Channel:	384
Test Mode :	1xRTT RC3+SO55	Limit (ppm):	2.5

Temperature (°C)	rature (°C) Freq. Dev. Deviation (Hz) (ppm)		Result
-30	N/A	N/A	
-20	N/A	N/A	
-10	-8	-0.01	
0	-16	-0.02	
10	-10	-0.01	PASS
20	-19	-0.02	
30	10	0.01	
40	-9	-0.01	
50	-12	-0.01	

Note:

- 1. The EUT stops transmitting at temperatures -20°C and -30°C.
- 2. The manufacturer declared that the EUT could work properly between temperatures -10°C~55°C.

3.7.7 Test Result of Voltage Variation

Band & Channel	Mode	Voltage (Volt)	Freq. Dev. (Hz)	Deviation (ppm)	Limit (ppm)	Result
CDMA2000 BC0 CH384		3.9	15	0.02	2.5	PASS
	1xRTT RC3+SO55	BEP	7	0.01		
		4.2	-8	-0.01		

Note:

- 1. Normal Voltage = 3.9V.
- 2. Battery End Point (BEP) = 3.7 V.

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4 List of Measuring Equipment

Instrument	Manufacturer	Model No.	Serial No.	Characteristics	Calibration Date	Due Date	Remark
Spectrum Analyzer	R&S	FSP40	100319	9kHz~40GHz	Jan. 18, 2010	Jan. 17, 2011	Conducted (TH01-KS)
Power Meter	Agilent	E4416A	MY45101555	N/A	Aug. 27, 2009	Aug. 26, 2010	Conducted (TH01-KS)
Power Sensor	Agilent	E9327A	MY44421198	N/A	Aug. 28, 2009	Aug. 27, 2010	Conducted (TH01-KS)
EMI Receiver	R&S	ESCI	100534	9kHz~3GHz	Nov. 17, 2009	Nov. 16, 2010	Radiation (03CH01-KS)
Spectrum Analyzer	R&S	FSP40	100319	9kHz~40GHz	Jan. 18, 2010	Jan. 17, 2011	Radiation (03CH01-KS)
Bilog Antenna	SCHAFFNER	CBL6112D	23182	25MHz~2GHz	Jan. 18, 2010	Jan. 17, 2011	Radiation (03CH01-KS)
Double Ridge Horn Antenna	EMCO	3117	75959	1GHz~18GHz	Jan. 18, 2010	Jan. 17, 2011	Radiation (03CH01-KS)
Amplifier	Wireless	FPA6592G	60004	30MHz~2GHz	Feb. 02, 2010	Feb. 01, 2011	Radiation (03CH01-KS)
Amplifier	Agilent	8449B	3008A02370	1GHz~26.5GHz	Jan. 18, 2010	Jan. 17, 2011	Radiation (03CH01-KS)
actice hore antenna	com-power	AHA-118	701023	1G-18GHz	Nov. 18, 2009	Nov. 17, 2010	Radiation (03CH01-KS)
Signal Generator	R&S	SMR40	100455	10MHz~40GHz	Jan. 18, 2010	Jan. 17, 2011	Radiation (03CH01-KS)
SHF-EHF Horn	Schwarzbeck	BBHA 9170	BBHA170249	15-40GHz	Oct. 22, 2009	Oct. 21, 2010	Radiation (03CH01-KS)
System Simulator	R&S	CMU200	837587/066	Full-Band	Jan. 08, 2009	Jan. 07, 2011	Radiation (03CH01-KS)

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5 Uncertainty of Evaluation

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

	Uncerta	Uncertainty of X _i			
Contribution	dB	Probability Distribution	u(X _i)		
Receiver Reading	0.41	Normal (k=2)	0.21		
Antenna Factor Calibration	0.83	Normal (k=2)	0.42		
Cable Loss Calibration	0.25	Normal (k=2)	0.13		
Pre-Amplifier Gain Calibration	0.27	Normal (k=2)	0.14		
RCV/SPA Specification	2.50	Rectangular	0.72		
Antenna Factor Interpolation for Frequency	1.00	Rectangular	0.29		
Site Imperfection	1.43	Rectangular	0.83		
Mismatch	+0.39 / -0.41	U-Shape	0.28		
Combined Standard Uncertainty Uc(y)	1.27				
Measuring Uncertainty for a Level of Confidence of 95% (U = 2Uc(y))	2.54				

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

	Uncertai	nty of X _i			
Contribution	dB	Probability Distribution	u(X _i)	C _i	C _i * u(X _i)
Receiver Reading	±0.10	Normal (k=2)	0.10	1	0.10
Antenna Factor Calibration	±1.70	Normal (k=2)	0.85	1	0.85
Cable Loss Calibration	±0.50	Normal (k=2)	0.25	1	0.25
Receiver Correction	±2.00	Rectangular	1.15	1	1.15
Antenna Factor Directional	±1.50	Rectangular	0.87	1	0.87
Site Imperfection	±2.80	Triangular	1.14	1	1.14
Mismatch Receiver VSWR Γ 1 = 0.197 Antenna VSWR Γ 2 = 0.194 Uncertainty = 20Log(1- Γ 1* Γ 2)	+0.34 / -0.35	U-Shape	0.244	1	0.244
Combined Standard Uncertainty Uc(y)	2.36				
Measuring Uncertainty for a Level of Confidence of 95% (U = 2Uc(y))	4.72				

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