HYUNDAI CALIBRATION & CERTIFICATION TECH. CO., LTD.



PRODUCT COMPLIANCE DIVISION SAN 136-1, AMI-RI , BUBAL-EUP, ICHEON-SI, KYOUNGKI-DO, 467-701, KOREA

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CERTIFICATE OF COMPLIANCE

FCC Part 24 Certification

NEWGEN Telecom CO., LTD

3rd FL, Samyoung Bldg., 106-2, Banpo-Dong,

Seocho-Gu, Seoul, 137-040, Korea

APPLICANT

FRN: 0010936045

Date of Issue : December 23, 2005 Test Report No.: HCT-SAR05-1211

Test Site: HYUNDAI CALIBRATION & CERTIFICATION

TECHNOLOGIES CO., LTD.

FRN: 0005866421

FCC ID :

R5WNGTC1500

NEWGEN Telecom CO., LTD

EUT Type: Dual - Band GSM Phone (GSM900/ GSM1900) - Prototype

Tx Frequency: 1850.20MHz – 1909.80MHz (GSM1900)
Rx Frequency: 1930.20MHz – 1989.80MHz (GSM1900)
Max. RF Output Power: 0.366 W EIRP GSM1900 (25.63Bm)

Trade Name/Model(s): NEWGEN Telecom / C1500

FCC Classification: Licensed Portable Transmitter Held to Ear (PCE)

Application Type: Certification

FCC Rule Part(s): §24 Subpart E, §2

Maximum SAR: 1.34 W/kg GSM1900 Head SAR / 0.374W/kg GSM1900 Body SAR

Antenna Specifications: Manufacturer: ACE TECHNOLOGY

Model: TOPAZ1900 (Length= 28 mm)

Emission Designator(s): 300KGXW (GSM)

This equipment has been shown to be capable of compliance with the applicable technical standards as indicated in the measurement report and was tested in accordance with the measurement procedures specified in \mathcal{I} 2.947.

I attest to the accuracy of data. All measurements reported herein were performed by me or were made under my supervision and are correct to the best of my knowledge and belief. I assume full responsibility for the completeness of these measurements and vouch for the qualifications of all persons taking them.

Hyundai C-Tech Co., Ltd. Certifies that no party to this application has been denied FCC benefits pursuant to section 5301 of the Anti- Drug Abuse Act of 1998, 21 U.S. C. 853(a)

Report prepared by: Ki-Soo Kim

Manager of Product Compliance Team

4 SOO Kim

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DIPOLE CALIBRATION

FCC ID: R5WNGTC1500 **DATE** : December 23, 2005

MEASUREMENT REPORT

1.1 SCOPE

Measurement and determination of electromagnetic emissions (EME) of radio frequency devices including intentional and/or unintentional radiators for compliance with the technical rules and regulations of the Federal Communications Commission.

General Information

Company Name: NEWGEN Telecom CO., LTD

Address: 3rd FL, Samyoung Bldg., 106-2, Banpo-Dong,

Seocho-Gu, Seoul, 137-040, Korea

Attention: Yady Dong / R&D Department Section Manager

Tel. / Fax: 82-2-596-6581 / 82-2-3481-5163

E-Mail: ksdong@newgentel.com

• FCC ID: R5WNGTC1500

• EUT Type: Dual - Band GSM Phone (GSM900/ GSM1900) - Prototype

• Trade Name: **NEWGEN Telecom**

C1500 • Model(s):

• Serial Number(s): R5WC150020051200001

• Tx Frequency: 1850.20MHz - 1909.80MHz (GSM1900) 1930.20MHz - 1989.80MHz (GSM1900) • Rx Frequency:

• Application Type: Certification

• FCC Classification: Licensed Portable Transmitter Held to Ear (PCE)

• FCC Rule Part(s): §24 Subpart E, §2

GSM Modulation(s): Antenna Type: Fixed

• Max. RF Output Power: 0.366 W EIRP GSM1900 (25.63Bm)

• Date(s) of Tests: December 20, 2005

Place of Tests: Hyundai C-Tech. EMC Lab.

Icheon, Kyounki-Do, KOREA

• Report Serial No.: HCT-SAR05-1211 Report No.: HCT-SAR05-1211

2.1 INTRODUCTION

EUT DESCRIPTION

The NEWGEN Telecom CO., LTD C1500 Dual - Band GSM Phone.

Its basic purpose is used for communications. It transmits from 1850.20MHz – 1909.80MHz

(GSM1900) and receives from 1930.20MHz - 1989.80MHz (GSM1900).

The RF power is rated at GSM1900 (0.366W).

MEASURING INSTRUMENT CALIBRATION

The measuring equipment, which was utilized in performing the tests documented herein, has been

calibrated in accordance with the manufacturer's recommendations for utilizing calibration

equipment, which is traceable to recognized national standards.

Test Facility

The open area test site and conducted measurement facility used to collect the radiated data are

located at the 254-1, Maekok-Ri, Hobup-Myun, Ichon-Si, Kyoungki-Do, 467-701, KOREA. The site

is constructed in conformance with the requirements of ANSI C63.4 and CISPR Publication 22.

Detailed description of test facility was submitted to the Commission and accepted dated July 23,

2003(Registration Number: 90661)

3.1 INSERTS

Function of Active Devices (Confidential)

Block/Circuit Diagrams & Description (Confidential)

Operating Instructions

Parts List & Tune-Up Procedure (Confidential)

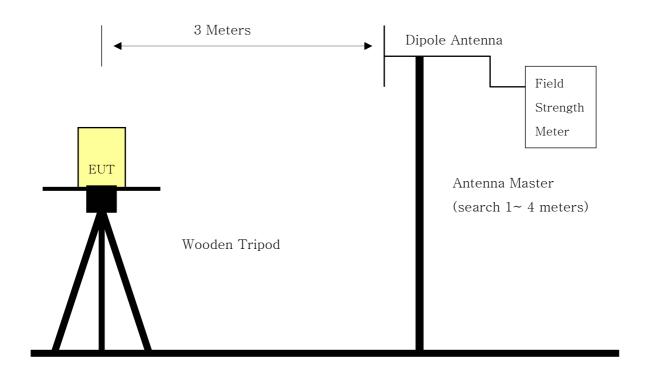
Description of Freq. Stabilization Circuit (Confidential)

<u>Description for Suppression of Spurious Radiation, for Limiting</u>
<u>Modulation, and Harmonic Suppression Circuits (Confidential)</u>

4.1 DESCRIPTION OF TESTS

4.2 Effective Radiated Power.

Test Set-up



[Open Field Test Site]

Test Procedure

The measurement facilities used for this test have been documented in previous filings with the commission pursuant to section 2.948.

The open field test site is situated in open field with ground screen whose site attenuation characteristics meet ANSI C63.4 –2003. A mast capable of lifting the receiving antenna from a height of one to four meters is used together with a routable wooden platform mounted at three from the antenna mast.

- 1) The EUT mounted on a wooden tripod is 0.8 meter above test site ground level.
- 2) During the test, the turn table is rotated and the antenna height is also varied from 1 to 4 meters until the maximum signal is found.
- 3) Record the field strength meter's level.
- 4) Replace the EUT with λ / 2 dipole antenna that is connected to a calibrated signal generator.
- 5) Increase the signal generator output till the field strength meter's level is equal to the item(4).
- 6) The signal generator output level is the rating of effective radiated power(ERP).

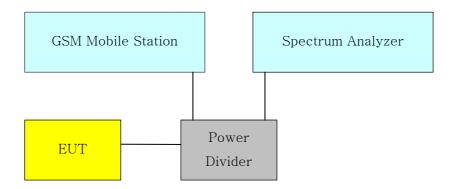
TEL: +82 31 639 8518 FAX: +82 31 639 8525

- 7) The instrument settings used (RBW/ VBW) during ERP/ EIRP output power measurement are as Blows;
 - -. Below 1GHz: RBW 100KHz, VBW 300KHz / Above 1GHz: RBW 1MHz, VBW 1MHz

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4.3 Occupied bandwidth.

Test Set-up



- (a) On any frequency outside a licensee's frequency block, the power of any emission shall be attenuated below the transmitter power (P) by at least 43 + 10 log(P) dB.
- (b) Compliance with these provisions is based on the use of measurement instrumentation employing a resolution bandwidth of 1 MHz or greater. However, in the 1 MHz bands immediately outside and adjacent to the frequency block a resolution bandwidth of at least one percent of the emission bandwidth of the fundamental emission of the transmitter may be employed. The emission bandwidth is defined as the width of the signal between two points, one below the carrier center frequency and one above the carrier center frequency, outside of which all emission are attenuated at least 26 dB below the transmitter power.

Note: The test plots by the 99% power method defined FCC Rule 2.1049 is included in this test report.

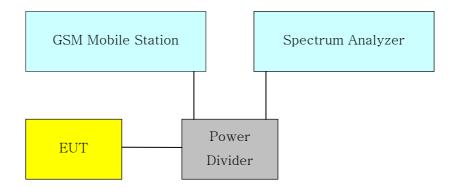
- (c) When measuring the emission limits, the nominal carrier frequency shall be adjusted as close to the licensee's frequency block edges, both upper and lower, as the design permits.
- (d) The measurement of emission power can be expressed in peak or average values, provided they are expressed in the same parameters as the transmitter power.



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4.4 Spurious and Harmonic Emissions at Antenna Terminal.

Test Set-up

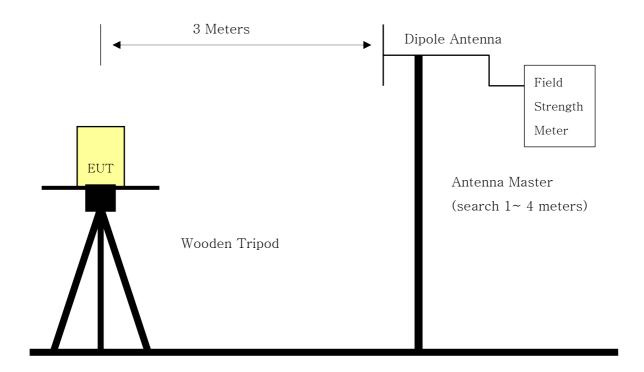


The level of the carrier and the various conducted spurious and harmonic frequencies is measured by means of a calibrated spectrum analyzer. The spectrum is scanned from the lowest frequency generated in the equipment up to 10 GHz. The transmitter is modulated with a 2500Hz tone at a level of 16dB greater than that required to provided 50% modulation.

At the input terminals of the spectrum analyzer, an isolator (RF circulator with on port terminated with 50 ohms) and an 870 MHz to 890 MHz band pass filter is connected between the test transceiver (for conducted tests) or the receive antenna (for radiated tests) and the analyzer. The rejection of the bandpass filter to signals in the 825 – 845 MHz range is adequate to limit the transmit energy from the test transceiver which appears to a level which will allow the analyzer to measure signals less than -90dBm. Calibration of the test receiver is performed in the 870 - 890 MHz range to insure accuracy to allow variation in the bandpass filter insertion loss to be calibrated.

4.5 Field strength of spurious radiation.

Test Set-up



FCC ID: R5WNGTC1500

[Open Field Test Site]

Test Procedure

The measurement facilities used for this test have been documented in previous filings with the commission pursuant to section 2.948.

The open field test site is situated in open field with ground screen whose site attenuation characteristics meet ANSI C63.4 –2003. A mast capable of lifting the receiving antenna from a height of one to four meters is used together with a rotable wooden platform mounted at three from the antenna mast.

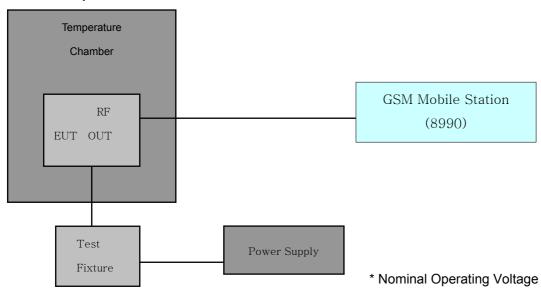
- 1) The unit mounted on a wooden table 1.5m imes 1.0m imes 0.80 $\,$ is 0.8 meter above test site ground level.
- During the emission test, the turntable is rotated and the EUT is manipulated to find the configuration resulting in maximum emission under normal condition of installation and operation.
- 3) The antenna height and polarization are also varied from 1 to 4 meters until the maximum signal is found.
- 4) The spectrum shall be scanned up to the 10th harmonic of the fundamental frequency.
- 5) The instrument settings used (RBW/ VBW) during ERP/ EIRP output power measurement are as belows;
 - -. Below 1GHz: RBW 100KHz, VBW 300KHz
 - -. Above 1GHz: RBW 1MHz, VBW 1MHz

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4.6 Frequency stability.

4.6.1Frequency stability with variation of ambient temperature.

Test Set-up



Test Procedure

The frequency stability of the transmitter is measured by:

- a.) Temperature: The temperature is varied from -30 °C to +60 °C using an environmental chamber.
- b.) **Primary Supply Voltage:** The primary supply voltage is varied from 85% to 115% of the voltage normally at the input to the device or at the power supply terminals if cables are not normally supplied.

Specification — The frequency stability shall be sufficient to ensure that the fundamental emission stays within the authorized frequency block. The frequency stability of the transmitter shall be maintained within ± 0.0001 (± 1 ppm) of the center frequency.

Time Period and Procedure:

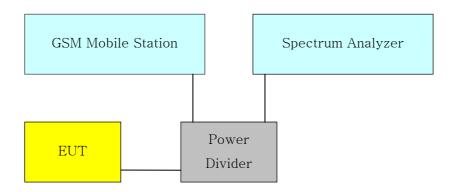
- 1. The carrier frequency of the transmitter and the individual oscillators is measured at room temperature (25 °C to 27 °C to provide a reference).
- 2. The equipment is subjected to an overnight "soak" at -30 °C without any power applied.
- 3. After the overnight "soak" at 30 °C (usually 14-16 hours), the equipment is turned on in a "standby" condition for one minute before applying power to the transmitter. Measurement of the carrier frequency of the transmitter and the individual oscillators is made within a three minute interval after applying power to the transmitter.
- 4. Frequency measurements are made at 10 °C interval up to room temperature. At least a period of one and one half-hour is provided to allow stabilization of the equipment at each temperature level.
- 5. Again the transmitter carrier frequency and the individual oscillators is measured at room temperature to begin measurement of the upper temperature levels.
- 6. Frequency were made at 10 intervals starting at 30 °C up to +50 °C allowing at least two hours at each temperature for stabilization. In all measurements the frequency is measured within three minutes after applying power to the transmitter.
- 7. The artificial load is mounted external to the temperature chamber.

NOTE: The EUT is tested down to the battery endpoint.

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4.6.2 Frequency stability with variation of primary supply voltage.

Test Set-up

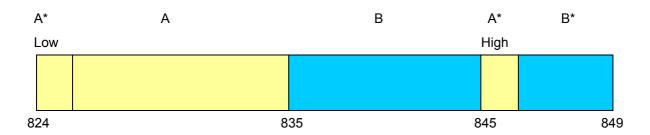


Test Procedure

- 1) The primary supply is varied in steps of 5% from 85 to 115% of the nominal supply voltage, or reduce primary supply voltage to the battery operating end point.
- 2) The frequency is recorded each 5% step.

4.7 Frequency stability.

4.7.1 Cellular - Mobile Frequency Blocks



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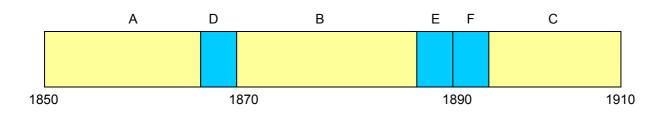
BLOCK 1: 824 – 835 MHz (A* Low + A)

BLOCK 2: 835 – 845 MHz (B)

BLOCK 3: 845 – 846.5 MHz (A* High)

BLOCK 4: 846.5 – 849 MHz (B*)

4.7.2 Cellular - Mobile Frequency Blocks



BLOCK 1: 1850 – 1865 MHz (A) BLOCK 4: 1885 – 1890 MHz (E)

BLOCK 2: 1865 – 1870 MHz (D) BLOCK 5: 1890 – 1895 MHz (F)

BLOCK 3: 1870 – 1885 MHz (B) BLOCK 6: 1895 – 1910 MHz (C)



5.1 Test Data

5.2 Equivalent Isotropic Radiated Power (E.I.R.P.) GSM

A. Power: High (GSM1900 Mode)

Freq.	REF. LEVEL	POL	Azimuth	EIRP	EIRP	BATTERY
(MHz)	(dBm)	(H/V)	(o angle)	(W)	(dBm)	DAIIERI
1850.20	-28.6	V	90°	0.348	25.42	Standard
1880.00	-28.4	V	90°	0.366	25.63	Standard
1909.80	-28.9	V	90°	0.329	25.17	Standard

Note: Standard batteries are the only options for this phone

NOTES:

Effective Radiated Power Output Measurements by Substitution Method according to ANSI/TIA/EIA-603-A-2001, Aug. 15, 2001:

The EUT was placed on a wooden turn table 3-meters from the receive antenna. The receive antenna height and turntable rotation was adjusted for the highest reading on the receive spectrum analyzer. A Horn antenna was substituted in place of the EUT. This Horn antenna was driven by a signal generator and the level of the signal generator was adjusted to obtain the same receive spectrum analyzer reading. The conducted power at the terminals of the Horn antenna is measured. The difference between the gain of the horn and an isotropic antenna is taken into consideration and the EIRP is recorded.

6.1 Test Data

6.2 GSM1900 Radiated Measurements

Field Strength of SPURIOUS Radiation

 ■ OPERATING FREQUENCY:
 1850.20 MHz

 ■ CHANNEL:
 512 (Low)

 ■ MEASURED OUTPUT POWER:
 25.63dBm = 0.366 W

 ■ MODULATION SIGNAL:
 GSM (Internal)

 ■ DISTANCE:
 3 meters

 ■ LIMIT: -(43 + 10 log10 (W)) =
 -38.63dBc

	LEVEL@	SUBSTITUTE	CORRECT		
Freq.	ANTENNA	ANTENNA	GENERATOR	POL	(dBc)
(MHz)	TERMINALS	GAIN	LEVEL	(H/V)	(dbc)
	(dBm)	(dBd)	(dBm)		
3700.40	-54.0	12.4	-41.6	V	-58.2
5550.60	-59.2	11.7	-47.5	V	-65.1
7400.80	-62.8	11.5	-51.3	V	-69.2

NOTES:

Radiated Spurious Emission Measurements by Substitution Method according to ANSI/TIA/EIA-603-A-2001, Aug. 15, 2001:

The EUT was placed on a wooden turn table 3-meters from the receive antenna. The receive antenna height and turntable rotation was adjusted for the highest reading on the receive spectrum analyzer. A half-wave dipole was substituted in place of the EUT. This dipole antenna was driven by a signal generator and the level of the signal generator was adjusted to obtain the same receive spectrum analyzer reading. This spurious level is recorded. For readings above 1GHz, the above procedure is repeated using horn antennas and the difference between the gain of the horn and an isotropic or dipole antenna are taken into consideration.

6.1 Test Data

6.3 GSM1900 Radiated Measurements

Field Strength of SPURIOUS Radiation

 ■ OPERATING FREQUENCY:
 1880.00 MHz

 ■ CHANNEL:
 661 (Mid)

 ■ MEASURED OUTPUT POWER:
 25.63dBm = 0.366 W

 ■ MODULATION SIGNAL:
 GSM (Internal)

 ■ DISTANCE:
 3 meters

 ■ LIMIT: -(43 + 10 log10 (W)) =
 -38.63dBc

Freq. (MHz)	LEVEL@ ANTENNA TERMINALS	SUBSTITUTE ANTENNA GAIN	CORRECT GENERATOR LEVEL	POL (H/V)	(dBc)
	(dBm)	(dBd)	(dBm)		
3760.00	-54.9	12.4	-42.5	V	-59.1
5460.00	-60.3	11.7	-48.6	V	-66.1
7520.00	-63.9	11.5	-52.4	V	-70.3

NOTES:

Radiated Spurious Emission Measurements by Substitution Method according to ANSI/TIA/EIA-603-A-2001, Aug. 15, 2001:

The EUT was placed on a wooden turn table 3-meters from the receive antenna. The receive antenna height and turntable rotation was adjusted for the highest reading on the receive spectrum analyzer. A half-wave dipole was substituted in place of the EUT. This dipole antenna was driven by a signal generator and the level of the signal generator was adjusted to obtain the same receive spectrum analyzer reading. This spurious level is recorded. For readings above 1GHz, the above procedure is repeated using horn antennas and the difference between the gain of the horn and an isotropic or dipole antenna are taken into consideration.

6.1 Test Data

6.4 GSM1900 Radiated Measurements

Field Strength of SPURIOUS Radiation

 ■ OPERATING FREQUENCY:
 1909.80 MHz

 ■ CHANNEL:
 810 (High)

 ■ MEASURED OUTPUT POWER:
 25.63dBm = 0.366 W

 ■ MODULATION SIGNAL:
 GSM (Internal)

 ■ DISTANCE:
 3 meters

 ■ LIMIT: -(43 + 10 log10 (W)) =
 -38.63Bc

	LEVEL@	SUBSTITUTE	CORRECT		
Freq.	ANTENNA	ANTENNA	GENERATOR	POL	(dBc)
(MHz)	TERMINALS	GAIN	LEVEL	(H/V)	(ubc)
	(dBm)	(dBd)	(dBm)		
3819.60	-53.0	12.4	-40.6	V	-57.2
5729.40	-57.8	11.7	-46.1	V	-63.6
7639.20	-62.2	11.5	-50.7	V	-68.6

NOTES:

Radiated Spurious Emission Measurements by Substitution Method according to ANSI/TIAEIA-603-A-2001, Aug. 15, 2001:

The EUT was placed on a wooden turn table 3-meters from the receive antenna. The receive antenna height and turntable rotation was adjusted for the highest reading on the receive spectrum analyzer. A half-wave dipole was substituted in place of the EUT. This dipole antenna was driven by a signal generator and the level of the signal generator was adjusted to obtain the same receive spectrum analyzer reading. This spurious level is recorded. For readings above 1GHz, the above procedure is repeated using horn antennas and the difference between the gain of the horn and an isotropic or dipole antenna are taken into consideration.

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7.1 Test Data

7.2 FREQUENCY STABILITY (GSM1900)

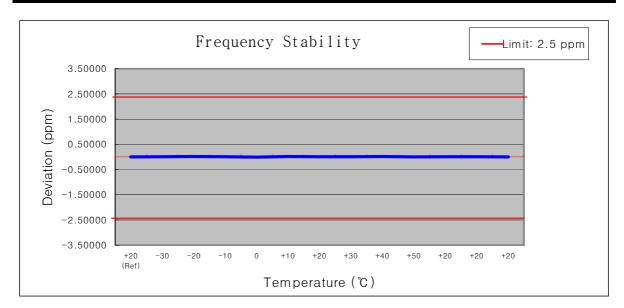
 OPERATING FREQUENCY:
 1,880,000,058 Hz

 CHANNEL:
 661

 REFERENCE VOLTAGE:
 3.7 VDC

 DEVIATION LIM IT:
 ± 0.00025 % or 2.5 ppm

Voltage	Power	Temp.	Frequency	Deviation	Deviation
(%)	(VDC)	(℃)	(Hz)	(%)	(ppm)
100		+20 (Ref)	1,880,000,058	0.000000	0.00000
100		-30	1,880,000,043	0.000001	0.00798
100		-20	1,880,000,027	0.000002	0.01649
100		-10	1,880,000,040	0.000001	0.00957
100	3.7	0	1,880,000,072	-0.000001	-0.00745
100		+10	1,880,000,026	0.000002	0.01702
100		+20	1,880,000,042	0.000001	0.00851
100		+30	1,880,000,039	0.000001	0.01011
100		+40	1,880,000,024	0.000002	0.01809
100		+50	1,880,000,052	0.000000	0.00319
85	3.15	+20	1,880,000,038	#REF!	0.01064
115	4.26	+20	1,880,000,046	0.000001	0.00638
BATT.END POINT	2.91	+20	1,880,000,051	0.000000	0.00372





8.1 PLOT(S) OF EMISSION

(SEE ATTACHMENT D)



Report No.: HCT-SAR05-1211 FCC ID: R5WNGTC1500 DATE: December 23, 2005

9.1 LIST OF TEST EQUIPMENT

Spectrum Analyzer (20Hz~40GHz) R&S ESI40 Dec. 05 1088.7410 Spectrum Analyzer (10Hz~2e.5GHz) R3273 April 06 J04821 Signal Generator HP8373ED (10MHz ~ 20GHz) July 05 US8710152 Signal Generator MARCONI(10kHz ~ 2.7GHz) Sep. 05 119331 Power Meter(A) HP 438A July 05 2822A05909 Power Sensor(A) HP8481B July 05 3318A08777 Power Sensor(B) HP8481A Oct. 05 2349A37617 Power Sensor(B) HP8481A Oct. 05 2349A37617 Power Amp A0825-4343-R(800~2.5GHz) +43dB Sep. 05 A00450 Network Analyzer HP-8753D (30kHz ~ 3GHz) Sep. 05 A00450 Network Analyzer HP8901A June 05 3438A05231 Dipole Antenna UHAP June 05 557 Dipole Antenna UHAP June 05 558 AMF-4D-001180-26-10P(0.1~18GHz) Feb.05 671009 AMF-4D-001180-26-10P(18~26.5GHz) Feb.05 671314 Audio Analyzer HP 8903A Feb.05 3011A08285 Function Generator HP 8116A Feb.05 301408285 Horn Antenna BBHA 912D01(~18GHz)	Type / Model	Calib. Date	S/N
Signal Generator HP8373ED (10MHz ~ 20GHz) July 05 US8710152 Signal Generator MARCONI(10kHz ~ 2.7GHz) Sep. 05 119331 Power Meter(A) HP 438A July 05 2822A05909 Power Sensor(A) HP8481B July 05 3318A08777 Power Meter(B) HP 438A Nov. 05 2427A00963 Power Sensor(B) HP8481A Oct. 05 2349A37617 Power Amp A0825-4343-R(800~2.5GHz) +43dB Sep. 05 A00450 Network Analyzer HP-8753D (30kHz ~ 3GHz) Sep. 05 A00450 Network Analyzer HP8901A June 05 3438A05231 Dipole Antenna UHAP June 05 557 Dipole Antenna UHAP June 05 557 Dipole Antenna UHAP June 05 671009 AMF-4D-001180-26-10P(18~26.5GHz) Feb.05 67624 AMF-4D-001180-26-10P(18~26.5GHz) Feb.05 671314 Audio Analyzer HP 8903A Feb.05 671314 Audio Analyzer HP 8903A Feb.05 1099 Horn Antenna BBHA 9120D(1~18GHz) March 05 1201 Horn Antenna BBHA 9170(15~40GHz)			
Signal Generator MARCONI(10kHz ~ 2.7GHz) Sep. 05 119331 Power Meter(A) HP 438A July 05 2822A05909 Power Sensor(A) HP8481B July 05 3318A08777 Power Meter(B) HP 438A Nov. 05 2427A00963 Power Sensor(B) HP841A Oct. 05 2349A37617 Power Amp A0825-4343-R(800~2.5GHz) +43dB Sep. 05 A00450 Network Analyzer HP-8753D (30kHz ~ 3GHz) Sep. 05 A00450 Network Analyzer HP8901A June 05 3438A05231 Dipole Antenna UHAP June 05 557 Dipole Antenna UHAP June 05 558 AMF-4D-001180-26-10P(0.1~18GHz) Feb. 05 671009 AMF-4D-001180-26-10P(26~40GHz) Feb. 05 67624 AMF-4D-001180-26-10P(26~40GHz) Feb. 05 671314 Audio Analyzer HP 8903A Feb. 05 301408285 Function Generator HP 8116A Feb. 05 301408285 Horn Antenna BBHA 9120D(1~18GHz) June 05 1099 Horn Antenna BBHA 9170(15~40GHz) Feb. 05 BBHA9170124	Spectrum Analyzer(100Hz~26.5GHz) R3273	April 05	J04821
Power Meter(A) HP 438A July 05 2822A05909 Power Sensor(A) HP8481B July 05 3318A08777 Power Meter(B) HP 438A Nov. 05 2427A00963 Power Sensor(B) HP8481A Oct. 05 2349A37617 Power Amp A0825-4343-R(800~2.5GHz) + 43dB Sep. 05 A00450 Network Analyzer HP-8753D (30kHz ~ 3GHz) Sep. 05 3401J02111 Modulation Analyzer HP8901A June 05 3438A05231 Dipole Antenna UHAP June 05 557 Dipole Antenna UHAP June 05 558 AMF-4D-001180-26-10P(18~26.5GHz) Feb.05 671009 AMF-4D-001180-26-10P(26~40GHz) Feb.05 677314 Audio Analyzer HP 8903A Feb.05 671314 Feb.05 677324 671314 Horn Antenna BBHA 912DD(1~18GHz) June 05 1099 Horn Antenna BBHA 912DD(1~18GHz) June 05 1099 Horn Antenna BBHA 9170(15~40GHz) Feb.05 BBHA9170124 CDMA Mobile Station Test Set HP8924C June 05 3538037 EMI Test Receiver R	Signal Generator HP8373ED (10MHz ~ 20GHz)	July 05	US8710152
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Power Meter(B) HP 438A Nov. 05 2427A00963 Power Sensor(B) HP8481A Oct. 05 2349A37617 Power Amp A0825-4343-R(800~2.5GHz) +43dB Sep. 05 A00450 Network Analyzer HP-8753D (30kHz ~ 3GHz) Sep. 05 3401J02111 Modulation Analyzer HP8901A June 05 3438A05231 Dipole Antenna UHAP June 05 557 Dipole Antenna UHAP June 05 558 AMF-4D-001180-26-10P(0.1~18GHz) Feb.05 671009 AMF-4D-001180-26-10P(0.1~18GHz) Feb.05 667624 AMF-4D-001180-26-10P(26~40GHz) Feb.05 671314 Audio Analyzer HP 8903A Feb.05 671314 Audio Analyzer HP 8903A Feb.05 3001A08285 Horn Antenna BBHA 9120D(1~18GHz) June 05 1099 Horn Antenna BBHA 9120D(1~18GHz) March 05 1201 Horn Antenna BBHA 9170(15~40GHz) Feb.05 BBHA9170124 CDMA Mobile Station Test Set HP8924C June 05 US39063847 PCS Interface HP83236B 1.7 ~ 2.0GHz June 05 3711J04841 EMI Test Receiver Rohde & Schwarz ESH3	Power Meter(A) HP 438A	July 05	2822A05909
Power Sensor(B) HP8481A Oct. 05 2349A37617 Power Amp A0825-4343-R(800~2.5GHz) +43dB Sep. 05 A00450 Network Analyzer HP-8753D (30kHz ~ 3GHz) Sep. 05 3401J02111 Modulation Analyzer HP8901A June 05 3438A05231 Dipole Antenna UHAP June 05 557 Dipole Antenna UHAP June 05 558 AMF-4D-001180-26-10P(0.1~18GHz) Feb.05 671009 AMF-4D-001180-26-10P(26~40GHz) Feb.05 67724 AMF-4D-001180-26-10P(26~40GHz) Feb.05 671314 Audio Analyzer HP 8903A Feb.05 671314 Audio Analyzer HP 8903A Feb.05 671314 Horn Antenna BBHA 9120D(1~18GHz) June 05 1099 Horn Antenna BBHA 9120D(1~18GHz) March 05 1201 Horn Antenna BBHA 9170(15~40GHz) Feb.05 BBHA9170124 CDMA Mobile Station Test Set HP8924C June 05 US39063847 PCS Interface HP83236B 1.7 ~ 2.0GHz June 05 3711J04841 EMI Test Receiver Rohde & Schwarz ESH3 June 05 354.3000 EMI Test Receiver Rohde & Schwarz ESH2 </td <td>Power Sensor(A) HP8481B</td> <td>July 05</td> <td>3318A08777</td>	Power Sensor(A) HP8481B	July 05	3318A08777
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Dipole Antenna UHAP June 05 557 Dipole Antenna UHAP June 05 558 AMF-4D-001180-26-10P(0.1~18GHz) Feb.05 671009 AMF-4D-001180-26-10P(18~26.5GHz) Feb.05 667624 AMF-4D-001180-26-10P(26~40GHz) Feb.05 671314 Audio Analyzer HP 8903A Feb.05 2433A04322 Function Generator HP 8116A Feb.05 3001A08285 Horn Antenna BBHA 9120D(1~18GHz) June 05 1099 Horn Antenna BBHA 9170(15~40GHz) Feb.05 BBHA9170124 CDMA Mobile Station Test Set HP8924C June 05 US39063847 PCS Interface HP83236B 1.7 ~ 2.0GHz June 05 335.8017 EMI Test Receiver Rohde & Schwarz ESH3 June 05 335.8017 EMI Test Receiver Rohde & Schwarz ESVP Feb. 05 354.3000 EMI Test Receiver Rohde & Schwarz ESVS30 June 05 3590A00155 LISN EMCO 3825/2 July 05 3509A00155 LISN Rohde & Schwarz ESH2-Z5 July 05 9706-1071 Amplifier Hewlett-Packard 8447E March 05 2805A03141 Biconical Antenna BBA-9106(30	Network Analyzer HP-8753D (30kHz ~ 3GHz)	Sep. 05	3401J02111
Dipole Antenna UHAP June 05 558 AMF-4D-001180-26-10P(0.1~18GHz) Feb.05 671009 AMF-4D-001180-26-10P(18~26.5GHz) Feb.05 667624 AMF-4D-001180-26-10P(26~40GHz) Feb.05 671314 Audio Analyzer HP 8903A Feb.05 2433A04322 Function Generator HP 8116A Feb.05 3001A08285 Horn Antenna BBHA 9120D(1~18GHz) June 05 1099 Horn Antenna BBHA 9170(15~40GHz) Feb.05 BBHA9170124 CDMA Mobile Station Test Set HP8924C June 05 US39063847 PCS Interface HP83236B 1.7 ~ 2.0GHz June 05 3711J04841 EMI Test Receiver Rohde & Schwarz ESH3 June 05 335.8017 EMI Test Receiver Rohde & Schwarz ESVP Feb. 05 354.3000 EMI Test Receiver Rohde & Schwarz ESVS30 June 05 354.3000 EMI Test Receiver Rohde & Schwarz ESVS30 June 05 3509A00155 LISN EMCO 3825/2 July 05 3509A00155 LISN Rohde & Schwarz ESH2-Z5 July 05 9706-1070 Amplifier Hewlett-Packard 8447E March 05 2805A03141 B	Modulation Analyzer HP8901A	June 05	3438A05231
AMF-4D-001180-26-10P(0.1~18GHz) Feb.05 671009 AMF-4D-001180-26-10P(18~26.5GHz) Feb.05 667624 AMF-4D-001180-26-10P(26~40GHz) Feb.05 671314 Audio Analyzer HP 8903A Feb.05 2433A04322 Function Generator HP 8116A Feb.05 3001A08285 Horn Antenna BBHA 9120D(1~18GHz) June 05 1099 Horn Antenna BBHA 9120D(1~18GHz) March 05 1201 Horn Antenna BBHA 9170(15~40GHz) Feb.05 BBHA9170124 CDMA Mobile Station Test Set HP8924C June 05 US39063847 PCS Interface HP83236B 1.7~2.0GHz June 05 3711J04841 EMI Test Receiver Rohde & Schwarz ESH3 June 05 335.8017 EMI Test Receiver Rohde & Schwarz ESVP Feb. 05 354.3000 EMI Test Receiver Rohde & Schwarz ESVS30 June 05 3509A00155 EISN EMCO 3825/2 July 05 3509A00155 LISN Rohde & Schwarz ESH2-Z5 July 05 9706-1070 LISN Rohde & Schwarz ESH2-Z5 July 05 9706-1071 Amplifier Hewlett-Packard 8447E March 05 2805A03141 Biocnical Antenna BBA-9106(30~1000MHz) June 05 91071107	Dipole Antenna UHAP	June 05	557
AMF-4D-001180-26-10P(18~26.5GHz) Feb.05 667624 AMF-4D-001180-26-10P(26~40GHz) Feb.05 671314 Audio Analyzer HP 8903A Feb.05 2433A04322 Function Generator HP 8116A Feb.05 3001A08285 Horn Antenna BBHA 9120D(1~18GHz) June 05 1099 Horn Antenna BBHA 9120D(1~18GHz) March 05 1201 Horn Antenna BBHA 9170(15~40GHz) Feb.05 BBHA9170124 CDMA Mobile Station Test Set HP8924C June 05 US39063847 PCS Interface HP83236B 1.7 ~ 2.0GHz June 05 3711J04841 EMI Test Receiver Rohde & Schwarz ESH3 June 05 354.3000 EMI Test Receiver Rohde & Schwarz ESVP Feb. 05 354.3000 EMI Test Receiver Rohde & Schwarz ESVS30 June 05 3509A00155 LISN EMCO 3825/2 July 05 3509A00155 LISN EMCO 3825/2 July 05 9706-1070 LISN Rohde & Schwarz ESH2-Z5 July 05 9706-1071 Amplifier Hewlett-Packard 8447E March 05 2805A03141 Biconical Antenna BBA-9106(30~1000MHz) June 05 91071107 Antenna VULB9160 (25MHz~1800MHz) June 05 91071107 <td>Dipole Antenna UHAP</td> <td>June 05</td> <td>558</td>	Dipole Antenna UHAP	June 05	558
AMF-4D-001180-26-10P(26~40GHz) Feb.05 671314 Audio Analyzer HP 8903A Feb.05 2433A04322 Function Generator HP 8116A Feb.05 3001A08285 Horn Antenna BBHA 9120D(1~18GHz) June 05 1099 Horn Antenna BBHA 9120D(1~18GHz) March 05 1201 Horn Antenna BBHA 9170(15~40GHz) Feb.05 BBHA9170124 CDMA Mobile Station Test Set HP8924C June 05 US39063847 PCS Interface HP83236B 1.7 ~ 2.0GHz June 05 3711J04841 EMI Test Receiver Rohde & Schwarz ESH3 June 05 335.8017 EMI Test Receiver Rohde & Schwarz ESVP Feb. 05 354.3000 EMI Test Receiver Rohde & Schwarz ESVS30 June 05 3509A00155 LISN EMCO 3825/2 July 05 3509A00155 LISN EMCO 3825/2 July 05 9706-1070 LISN Rohde & Schwarz ESH2-Z5 July 05 9706-1071 Amplifier Hewlett-Packard 8447E March 05 2805A03141 Biconical Antenna BBA-9106(30~1000MHz) June 05 91071107 Antenna VULB9160 (25MHz~1800MHz) June 05 91071107 Antenna Position Tower HD240 N.A 3241 <tr< td=""><td>AMF-4D-001180-26-10P(0.1~18GHz)</td><td>Feb.05</td><td>671009</td></tr<>	AMF-4D-001180-26-10P(0.1~18GHz)	Feb.05	671009
Audio Analyzer HP 8903A Feb.05 2433A04322 Function Generator HP 8116A Feb.05 3001A08285 Horn Antenna BBHA 9120D(1~18GHz) June 05 1099 Horn Antenna BBHA 9120D(1~18GHz) March 05 1201 Horn Antenna BBHA 9170(15~40GHz) Feb.05 BBHA9170124 CDMA Mobile Station Test Set HP8924C June 05 US39063847 PCS Interface HP83236B 1.7 ~ 2.0GHz June 05 3711J04841 EMI Test Receiver Rohde & Schwarz ESH3 June 05 358.017 EMI Test Receiver Rohde & Schwarz ESVP Feb. 05 354.3000 EMI Test Receiver Rohde & Schwarz ESVS30 June 05 826006/013 Spectrum Analyzer HP 8591EM July 05 3509A00155 LISN EMCO 3825/2 July 05 9706-1070 LISN Rohde & Schwarz ESH2-Z5 July 05 9706-1071 Amplifier Hewlett-Packard 8447E March 05 2805A03141 Biconical Antenna BBA-9106(30~1000MHz) June 05 91071107 Antenna VULB9160 (25MHz~1800MHz) June 05 91071107 Antenna Position Tower HD240 N.A 3241 Turn Table EMCO 1060-06 N.A 1253A	AMF-4D-001180-26-10P(18~26.5GHz)	Feb.05	667624
Function Generator HP 8116A Feb.05 3001A08285 Horn Antenna BBHA 9120D(1~18GHz) June 05 1099 Horn Antenna BBHA 9120D(1~18GHz) March 05 1201 Horn Antenna BBHA 9170(15~40GHz) Feb.05 BBHA9170124 CDMA Mobile Station Test Set HP8924C June 05 US39063847 PCS Interface HP83236B 1.7~2.0GHz June 05 3711J04841 EMI Test Receiver Rohde & Schwarz ESH3 June 05 354.3000 EMI Test Receiver Rohde & Schwarz ESVP Feb. 05 354.3000 EMI Test Receiver Rohde & Schwarz ESVS30 June 05 3509A00155 EISN EMCO 3825/2 July 05 3509A00155 LISN EMCO 3825/2 July 05 9706-1070 LISN Rohde & Schwarz ESH2-Z5 July 05 9706-1071 Amplifier Hewlett-Packard 8447E March 05 2805A03141 Biconical Antenna BBA-9106(30~1000MHz) June 05 D6901 Log-Periodic Antenna UHALP-9107(300~1000MHz) June 05 91071107 Antenna Position Tower HD240 N.A 3241 Turn Table EMCO 1060-06 N.A 1253A AC P	AMF-4D-001180-26-10P(26~40GHz)	Feb.05	671314
Horn Antenna BBHA 9120D(1~18GHz) June 05 1099 Horn Antenna BBHA 9120D(1~18GHz) March 05 1201 Horn Antenna BBHA 9170(15~40GHz) Feb.05 BBHA9170124 CDMA Mobile Station Test Set HP8924C June 05 US39063847 PCS Interface HP83236B 1.7 ~ 2.0GHz June 05 3711J04841 EMI Test Receiver Rohde & Schwarz ESH3 June 05 354.3000 EMI Test Receiver Rohde & Schwarz ESVP Feb. 05 354.3000 EMI Test Receiver Rohde & Schwarz ESVS30 June 05 826006/013 Spectrum Analyzer HP 8591EM July 05 3509A00155 LISN EMCO 3825/2 July 05 9706-1070 LISN Rohde & Schwarz ESH2-Z5 July 05 9706-1071 Amplifier Hewlett-Packard 8447E March 05 2805A03141 Biconical Antenna BBA-9106(30~1000MHz) June 05 91071107 Antenna VULB9160 (25MHz~1800MHz) June 05 91071107 Antenna Position Tower HD240 N.A 3241 Turn Table EMCO 1060-06 N.A 1253A AC Power Source PACIFIC Magnetic Module N.A 45321	Audio Analyzer HP 8903A	Feb.05	2433A04322
Hom Antenna BBHA 9120D(1~18GHz) March 05 1201 Horn Antenna BBHA 9170(15~40GHz) Feb.05 BBHA9170124 CDMA Mobile Station Test Set HP8924C June 05 US39063847 PCS Interface HP83236B 1.7 ~ 2.0GHz June 05 3711J04841 EMI Test Receiver Rohde & Schwarz ESH3 June 05 335.8017 EMI Test Receiver Rohde & Schwarz ESVP Feb. 05 354.3000 EMI Test Receiver Rohde & Schwarz ESVS30 June 05 826006/013 Spectrum Analyzer HP 8591EM July 05 3509A00155 LISN EMCO 3825/2 July 05 9706-1070 LISN Rohde & Schwarz ESH2-Z5 July 05 9706-1071 Amplifier Hewlett-Packard 8447E March 05 2805A03141 Biconical Antenna BBA-9106(30~1000MHz) June 05 91071107 Antenna VULB9160 (25MHz~1800MHz) June 05 91071107 Antenna Position Tower HD240 N.A 3241 Turn Table EMCO 1060-06 N.A 1253A AC Power Source PACIFIC Magnetic Module N.A 45321	Function Generator HP 8116A	Feb.05	3001A08285
Horn Antenna BBHA 9170(15~40GHz) Feb.05 BBHA9170124 CDMA Mobile Station Test Set HP8924C June 05 US39063847 PCS Interface HP83236B 1.7 ~ 2.0GHz June 05 3711J04841 EMI Test Receiver Rohde & Schwarz ESH3 June 05 335.8017 EMI Test Receiver Rohde & Schwarz ESVP Feb. 05 354.3000 EMI Test Receiver Rohde & Schwarz ESVS30 June 05 826006/013 Spectrum Analyzer HP 8591EM July 05 3509A00155 LISN EMCO 3825/2 July 05 9706-1070 LISN Rohde & Schwarz ESH2-Z5 July 05 9706-1071 Amplifier Hewlett-Packard 8447E March 05 2805A03141 Biconical Antenna BBA-9106(30~1000MHz) June 05 91071107 Antenna VULB9160 (25MHz~1800MHz) June 05 91071107 Antenna Position Tower HD240 N.A 3241 Turn Table EMCO 1060-06 N.A 1253A AC Power Source PACIFIC Magnetic Module N.A 45321	Horn Antenna BBHA 9120D(1~18GHz)	June 05	1099
CDMA Mobile Station Test Set HP8924C June 05 US39063847 PCS Interface HP83236B 1.7 ~ 2.0GHz June 05 3711J04841 EMI Test Receiver Rohde & Schwarz ESH3 June 05 335.8017 EMI Test Receiver Rohde & Schwarz ESVP Feb. 05 354.3000 EMI Test Receiver Rohde & Schwarz ESVS30 June 05 826006/013 Spectrum Analyzer HP 8591EM July 05 3509A00155 LISN EMCO 3825/2 July 05 9706-1070 LISN Rohde & Schwarz ESH2-Z5 July 05 9706-1071 Amplifier Hewlett-Packard 8447E March 05 2805A03141 Biconical Antenna BBA-9106(30~1000MHz) June 05 D6901 Log-Periodic Antenna UHALP-9107(300~1000MHz) June 05 91071107 Antenna VULB9160 (25MHz~1800MHz) June 05 91071107 Antenna Position Tower HD240 N.A 3241 Turn Table EMCO 1060-06 N.A 1253A AC Power Source PACIFIC Magnetic Module N.A 45321	Horn Antenna BBHA 9120D(1~18GHz)	March 05	1201
PCS Interface HP83236B 1.7 ~ 2.0GHz June 05 3711J04841 EMI Test Receiver Rohde & Schwarz ESVP Feb. 05 355.8017 EMI Test Receiver Rohde & Schwarz ESVP Feb. 05 354.3000 EMI Test Receiver Rohde & Schwarz ESVS30 June 05 826006/013 Spectrum Analyzer HP 8591EM July 05 3509A00155 LISN EMCO 3825/2 July 05 9706-1070 LISN Rohde & Schwarz ESH2-Z5 July 05 9706-1071 Amplifier Hewlett-Packard 8447E March 05 2805A03141 Biconical Antenna BBA-9106(30~1000MHz) June 05 D6901 Log-Periodic Antenna UHALP-9107(300~1000MHz) June 05 91071107 Antenna VULB9160 (25MHz~1800MHz) June 05 91071107 Antenna Position Tower HD240 N.A 3241 Turn Table EMCO 1060-06 N.A 1253A AC Power Source PACIFIC Magnetic Module N.A 45321	Horn Antenna BBHA 9170(15~40GHz)	Feb.05	BBHA9170124
EMI Test Receiver Rohde & Schwarz ESH3 June 05 335.8017 EMI Test Receiver Rohde & Schwarz ESVP Feb. 05 354.3000 EMI Test Receiver Rohde & Schwarz ESVS30 June 05 826006/013 Spectrum Analyzer HP 8591EM July 05 3509A00155 LISN EMCO 3825/2 July 05 9706-1070 LISN Rohde & Schwarz ESH2-Z5 July 05 9706-1071 Amplifier Hewlett-Packard 8447E March 05 2805A03141 Biconical Antenna BBA-9106(30~1000MHz) June 05 D6901 Log-Periodic Antenna UHALP-9107(300~1000MHz) June 05 91071107 Antenna VULB9160 (25MHz~1800MHz) June 05 91071107 Antenna Position Tower HD240 N.A 3241 Turn Table EMCO 1060-06 N.A 1253A AC Power Source PACIFIC Magnetic Module N.A 45321	CDMA Mobile Station Test Set HP8924C	June 05	US39063847
EMI Test Receiver Rohde & Schwarz ESVP Feb. 05 354.3000 EMI Test Receiver Rohde & Schwarz ESVS30 June 05 826006/013 Spectrum Analyzer HP 8591EM July 05 3509A00155 LISN EMCO 3825/2 July 05 9706-1070 LISN Rohde & Schwarz ESH2-Z5 July 05 9706-1071 Amplifier Hewlett-Packard 8447E March 05 2805A03141 Biconical Antenna BBA-9106(30~1000MHz) June 05 D6901 Log-Periodic Antenna UHALP-9107(300~1000MHz) June 05 91071107 Antenna VULB9160 (25MHz~1800MHz) June 05 91071107 Antenna Position Tower HD240 N.A 3241 Turn Table EMCO 1060-06 N.A 1253A AC Power Source PACIFIC Magnetic Module N.A 45321	PCS Interface HP83236B 1.7 ~ 2.0GHz	June 05	3711J04841
EMI Test Receiver Rohde & Schwarz ESVS30 June 05 826006/013 Spectrum Analyzer HP 8591EM July 05 3509A00155 LISN EMCO 3825/2 July 05 9706-1070 LISN Rohde & Schwarz ESH2-Z5 July 05 9706-1071 Amplifier Hewlett-Packard 8447E March 05 2805A03141 Biconical Antenna BBA-9106(30~1000MHz) June 05 D6901 Log-Periodic Antenna UHALP-9107(300~1000MHz) June 05 91071107 Antenna VULB9160 (25MHz~1800MHz) June 05 91071107 Antenna Position Tower HD240 N.A 3241 Turn Table EMCO 1060-06 N.A 1253A AC Power Source PACIFIC Magnetic Module N.A 45321	EMI Test Receiver Rohde & Schwarz ESH3	June 05	335.8017
Spectrum Analyzer HP 8591EM July 05 3509A00155 LISN EMCO 3825/2 July 05 9706-1070 LISN Rohde & Schwarz ESH2-Z5 July 05 9706-1071 Amplifier Hewlett-Packard 8447E March 05 2805A03141 Biconical Antenna BBA-9106(30~1000MHz) June 05 D6901 Log-Periodic Antenna UHALP-9107(300~1000MHz) June 05 91071107 Antenna VULB9160 (25MHz~1800MHz) June 05 91071107 Antenna Position Tower HD240 N.A 3241 Turn Table EMCO 1060-06 N.A 1253A AC Power Source PACIFIC Magnetic Module N.A 45321	EMI Test Receiver Rohde & Schwarz ESVP	Feb. 05	354.3000
LISN EMCO 3825/2 July 05 9706-1070 LISN Rohde & Schwarz ESH2-Z5 July 05 9706-1071 Amplifier Hewlett-Packard 8447E March 05 2805A03141 Biconical Antenna BBA-9106(30~1000MHz) June 05 D6901 Log-Periodic Antenna UHALP-9107(300~1000MHz) June 05 91071107 Antenna VULB9160 (25MHz~1800MHz) June 05 91071107 Antenna Position Tower HD240 N.A 3241 Turn Table EMCO 1060-06 N.A 1253A AC Power Source PACIFIC Magnetic Module N.A 45321	EMI Test Receiver Rohde & Schwarz ESVS30	June 05	826006/013
LISN Rohde & Schwarz ESH2-Z5 July 05 9706-1071 Amplifier Hewlett-Packard 8447E March 05 2805A03141 Biconical Antenna BBA-9106(30~1000MHz) June 05 D6901 Log-Periodic Antenna UHALP-9107(300~1000MHz) June 05 91071107 Antenna VULB9160 (25MHz~1800MHz) June 05 91071107 Antenna Position Tower HD240 N.A 3241 Turn Table EMCO 1060-06 N.A 1253A AC Power Source PACIFIC Magnetic Module N.A 45321	Spectrum Analyzer HP 8591EM	July 05	3509A00155
Amplifier Hewlett-Packard 8447E March 05 2805A03141 Biconical Antenna BBA-9106(30~1000MHz) June 05 D6901 Log-Periodic Antenna UHALP-9107(300~1000MHz) June 05 91071107 Antenna VULB9160 (25MHz~1800MHz) June 05 91071107 Antenna Position Tower HD240 N.A 3241 Turn Table EMCO 1060-06 N.A 1253A AC Power Source PACIFIC Magnetic Module N.A 45321	LISN EMCO 3825/2	July 05	9706-1070
Biconical Antenna BBA-9106(30~1000MHz) June 05 D6901 Log-Periodic Antenna UHALP-9107(300~1000MHz) June 05 91071107 Antenna VULB9160 (25MHz~1800MHz) June 05 91071107 Antenna Position Tower HD240 N.A 3241 Turn Table EMCO 1060-06 N.A 1253A AC Power Source PACIFIC Magnetic Module N.A 45321	LISN Rohde & Schwarz ESH2-Z5	July 05	9706-1071
Log-Periodic Antenna UHALP-9107(300~1000MHz) June 05 91071107 Antenna VULB9160 (25MHz~1800MHz) June 05 91071107 Antenna Position Tower HD240 N.A 3241 Turn Table EMCO 1060-06 N.A 1253A AC Power Source PACIFIC Magnetic Module N.A 45321	Amplifier Hewlett-Packard 8447E	March 05	2805A03141
Antenna VULB9160 (25MHz~1800MHz) Antenna Position Tower HD240 N.A Turn Table EMCO 1060-06 N.A AC Power Source PACIFIC Magnetic Module N.A 91071107 3241 N.A 1253A 45321	Biconical Antenna BBA-9106(30~1000MHz)	June 05	D6901
Antenna Position Tower HD240 N.A 3241 Turn Table EMCO 1060-06 N.A 1253A AC Power Source PACIFIC Magnetic Module N.A 45321	Log-Periodic Antenna UHALP-9107(300~1000MHz)	June 05	91071107
Turn Table EMCO 1060-06N.A1253AAC Power Source PACIFIC Magnetic ModuleN.A45321	Antenna VULB9160 (25MHz~1800MHz)	June 05	91071107
AC Power Source PACIFIC Magnetic Module N.A 45321	Antenna Position Tower HD240	N.A	3241
-	Turn Table EMCO 1060-06	N.A	1253A
AC Power Source PACIFIC 360AMX N.A 22B87	AC Power Source PACIFIC Magnetic Module	N.A	45321
	AC Power Source PACIFIC 360AMX	N.A	22B87

10.1 SAMPLE CALCULATIONS

A. ERP Sample Calculation

Freq. Tuned	LEVEL(1)	POL	ERP	ERP(2)	BATTERY
(MHz)	(dBm)	(H/V)	(W)	(dBm)	BATTERT
824.70	-29.73	Н	0.346	25.393	Standard

FCC ID: R5WNGTC1500

DATE : December 23, 2005

- 1) The EUT mounted on a wooden tripod is 0.8 meter above test site ground level.
- 2) During the test, the turn table is rotated and the antenna height is also varied from 1 to 4 meters until the maximum signal is found.
- 3) Record the field strength meter's level.(LEVEL)
- 4) Replace the EUT with dipole antenna that is connected to a calibrated signal generator.
- 5) Increase the signal generator output till the field strength meter's level is equal to the item(3).
- 6) The signal generator output level with cable loss is the rating of effective radiated power(**ERP**). (Cable loss means the factor between Signal Generator and Transmitting Antenna.)

For more details, please refer to the test set-up procedure.

B. Emission Designator

Emission Designator = 300KGXW

GSM BW = 300 KHz

G = Phase Modulation

X = Cases not otherwise covered

W = Combination (Audio/Data)

Emission Designator = 300KGXW

FCC ID: R5WNGTC1500 DATE: December 23, 2005

11.1 CONCLUSION

The data collected shows that the Dual - Band GSM Phone. **FCC ID: R5WNGTC1500** complies with all the requirements of Parts 2, 24 of the FCC rules.