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CERTIFICATE OF COMPLIANCE
FCC Part 24 & 22 Certification

Applicant Name:
S.A. Banksys N.V.
1442 Haachtsesteenweg, Bruxeiles 1130
Brussle, Belgium

Date of Testing:
July 10 - July 12, 2006
Test Site/Location:
PCTEST Lab, Columbia, MD, USA
Test Report Serial No.:
0606200530

FCC ID:	**SEKMC56**
APPLICANT:	**S.A. BANKSYS N.V.**

Application Type:	Certification
FCC Classification:	PCS Licensed Transmitter (PCB)
FCC Rule Part(s):	§24(E), §22(H); §2
EUT Type:	Dual-Band GSM Mobile Transmitter Module
Model(s):	MC56 (EUT), XENTA (host 1), XENTISSIMO (host 2)
Tx Frequency Range:	824.20 - 848.80MHz (Cell. GSM) / 1850.20 - 1909.80MHz (PCS GSM)
Rx Frequency Range:	869.20 - 893.80MHz (Cell. GSM) / 1930.20 - 1989.80MHz (PCS GSM)
Max. RF Output Power:	1.995 W Conducted Cell. GSM (32.99 dBm) / 0.741W Conducted PCS GSM (28.70 dBm)
Emission Designator(s):	300KGXW (GSM)
Test Device Serial No.:	[S/N: AGX6226]

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 §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.

Grant Conditions: Power output listed is conducted.

PCTEST certifies that no party to this application has been denied the FCC benefits pursuant to Section 5301 of the Anti-Drug Abuse Act of 1988, 21 U.S.C. 862.

Randy Ortanez
President

2041.01

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TABLE OF CONTENTS

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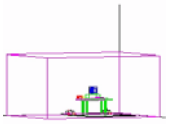
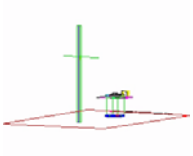
1.0 SCOPE



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.



§2.1033 General Information

Applicant Name:	S.A. Banksys N.V.
Address:	1442 Haachtsesteenweg, Bruxeiles 1130 Brussle, Belgium

- FCC ID: SEKMC56
- Quantity: Quantity production is planned
- Emission Designators: 300KGXW (GSM)
- Tx Freq. Range: 824.20 - 848.80MHz (Cell. GSM)
  1850.20 - 1909.80MHz (PCS GSM)
- Rx Freq. Range: 869.20 - 893.80MHz (Cell. GSM)
  1930.20 - 1989.80MHz (PCS GSM)
- Max. Power Rating: 1.995 W Conducted Cell. GSM (32.99 dBm) /
  0.741W Conducted PCS GSM (28.70 dBm)
- FCC Classification(s): PCS Licensed Transmitter (PCB)
- Equipment (EUT) Type: Dual-Band GSM Mobile Transmitter Module
- Modulation(s): GMSK / 8PSK
- Frequency Tolerance: ±0.00025 % (2.5 ppm)
- FCC Rule Part(s): § 24(E), §22(H); §2
- Dates of Tests: July 10 - July 12, 2006
- Place of Tests: PCTEST Lab, Columbia, MD U.S.A.
- Test Report S/N: 0606200530

Note: Deviation from measurement procedure - None

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2.0 INTRODUCTION

2.1 Testing Facility

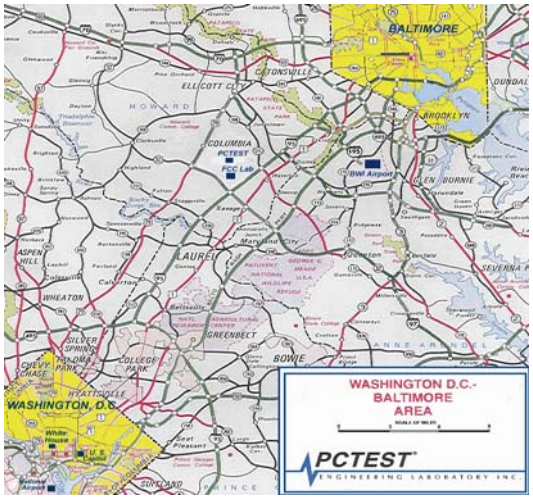

Figure 1. Map of the Greater Baltimore and Metropolitan Washington, D.C. area.

These measurement tests were conducted at PCTEST Engineering Laboratory, Inc. facility in New Concept Business Park, Guilford Industrial Park, Columbia, Maryland. The site address is 6660-B Dobbin Road, Columbia, MD 21045. The test site is one of the highest points in the Columbia area with an elevation of 390 feet above mean sea level. The site coordinates are 39° 11'15" N latitude and 76° 49'38" W longitude. The facility is 1.5 miles North of the FCC laboratory, and the ambient signal and ambient signal strength are approximately equal to those of the FCC laboratory. There are no FM or TV transmitters within 15 miles of the site. The detailed description of the measurement facility was found to be in compliance with the requirements of § 2.948 according to ANSI C63.4 on January 27, 2006 and Industry Canada.

2.2 Measurement Procedure

The radiated spurious measurements were made outdoors at a 3-meter test range (see Figure2). The equipment under test is placed on a wooden turntable 3-meters from the receive antenna. The receive antenna height and turntable rotations were 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 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 antenna are taken into consideration.

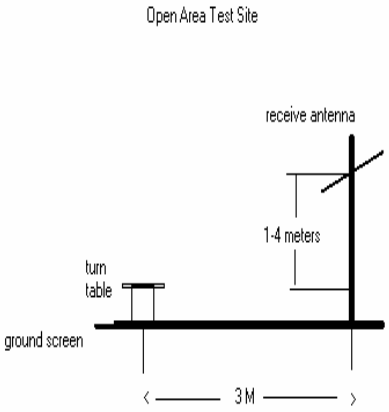

Figure 2. Diagram of 3-meter outdoor test range

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3.0 INSERTS

Function of Active Devices (Confidential)

Block & Schematic Diagrams (Confidential)

Operating Instructions

Parts List & Tune-Up Procedure (Confidential)

Description of Freq. Stabilization Circuit (Confidential)

Description for Suppression of Spurious Radiation, for Limiting Modulation, and Harmonic Suppression Circuits (Confidential)

Note: These exhibits are not included within this report.

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4.0 DESCRIPTION OF TESTS

4.1 Occupied Bandwidth Emission Limits

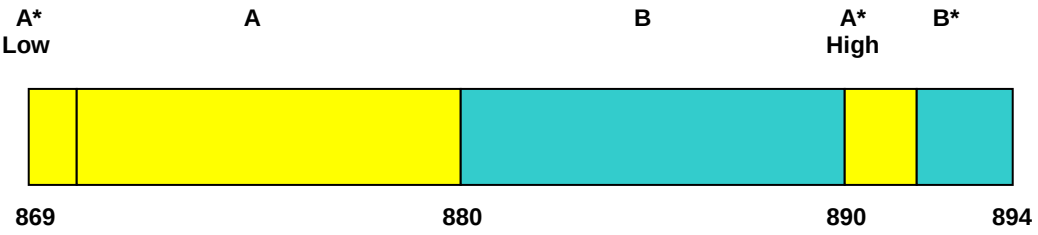
a. On any frequency outside a licensee's frequency block, the power of any emission shall be attenuated below the transmitter power (P) by at least 43 + 10 log(P) dB.

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.

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.

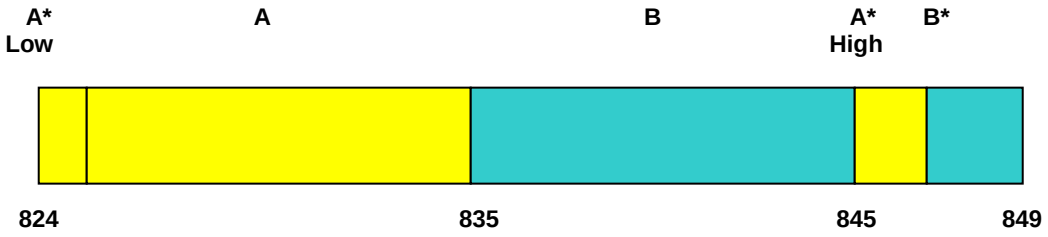
4.2 Cellular - Base Frequency Blocks



BLOCK 1: 869 – 880 MHz (A* Low + A) **BLOCK 3: 890 – 891.5 MHz (A* High)**

BLOCK 2: 880 – 890 MHz (B) **BLOCK 4: 891.5 – 894 MHz (B*)**

4.3 Cellular - Mobile Frequency Blocks



BLOCK 1: 824 – 835 MHz (A* Low + A) **BLOCK 3: 845 – 846.5 MHz (A* High)**

BLOCK 2: 835 – 845 MHz (B) **BLOCK 4: 846.5 – 849 MHz (B*)**

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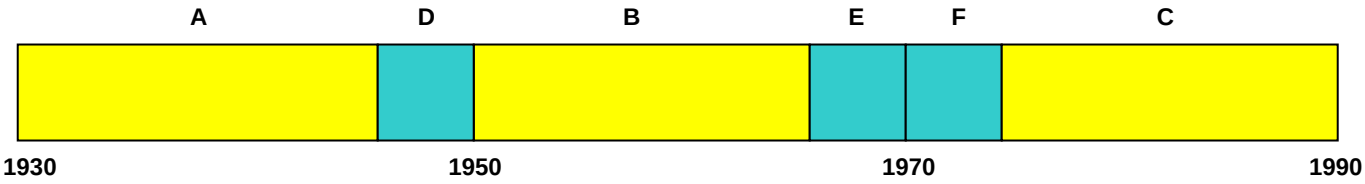
4.4 PCS - Base Frequency Blocks



BLOCK 1: 1930 – 1945 MHz (A)

BLOCK 2: 1945 – 1950 MHz (D)

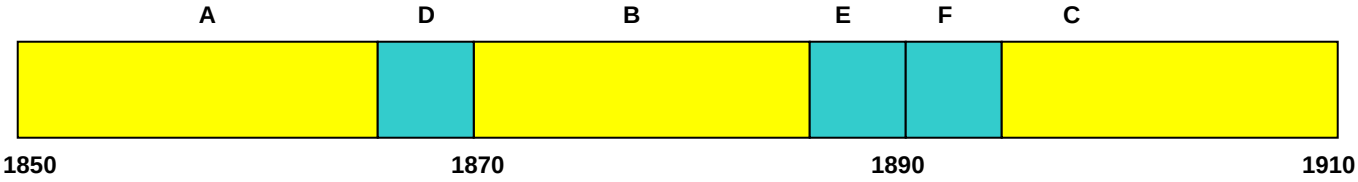
BLOCK 3: 1950 – 1965 MHz (B)

BLOCK 4: 1965 – 1970 MHz (E)

BLOCK 5: 1970 – 1975 MHz (F)

BLOCK 6: 1975 – 1990 MHz (C)

4.5 PCS - Mobile Frequency Blocks



BLOCK 1: 1850 – 1865 MHz (A)

BLOCK 2: 1865 – 1870 MHz (D)

BLOCK 3: 1870 – 1885 MHz (B)

BLOCK 4: 1885 – 1890 MHz (E)

BLOCK 5: 1890 – 1895 MHz (F)

BLOCK 6: 1895 – 1910 MHz (C)

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4.6 Spurious and Harmonic Emissions at Antenna Terminal

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 2500 Hz tone at a level of 16 dB greater than that required to provide 50% modulation.

At the input terminals of the spectrum analyzer, an isolator (RF circulator with one port terminated in 50 Ω) 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 band-pass 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 –90 dBm. Calibration of the test receiver is performed in the 870 – 890 MHz range to insure accuracy to allow variation in the band-pass filter insertion loss to be calibrated.

4.7 Frequencies

At the input terminals of the spectrum analyzer, an isolator (RF pad) and a high-pass filter are connected between the test transceiver (for conducted tests) or the receive antenna (for radiated tests) and the analyzer. The high-pass filter (signals below 1.6 GHz) is to limit the fundamental frequency from interfering with the measurement of low-level spurious and harmonic emissions and to ensure that the preamplifier is not saturated.

4.8 Radiated Spurious and Harmonic Emissions

Radiation and harmonic emissions are measured outdoors at our 3-meter test range. The equipment under test is placed on a wooden turntable 3-meters from the receive antenna. The receive antenna height and turntable rotations were 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 with the level of the signal generator being adjusted to obtain the same receive spectrum analyzer reading. This level is recorded. For readings above 1 GHz, 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. This device was tested using a PCL of 0 in the PCS Band and a PCL of 5 in the Cellular Band.

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4.9 Frequency Stability / Temperature Variation

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 ±0.00025 (±2.5 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 (22°C to 25°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 measurements are 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 re-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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5.0 EFFECTIVE RADIATED POWER

5.1 Effective Radiated Power Output Data

POWER: High (GSM Mode) Data taken with highest gain antenna

Freq. Tuned (MHz)	REF. LEVEL (dBm)	POL (H/V)	ERP (W)	ERP (dBm)	BATTERY
824.20	-8.300	V	1.983	32.973	Standard
836.60	-8.000	V	2.204	33.433	Standard
848.80	-8.400	V	2.081	33.183	Standard

Note: This unit was tested with its standard battery.

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. For CDMA signals, a peak detector is used, with RBW = VBW = 3 MHz. For WCDMA signals, a peak detector is used, with RBW = VBW = 5 MHz. For AMPS, GSM, and NADC TDMA signals, a peak detector is used, with RBW = VBW = 1 MHz. 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. The conducted power at the terminals of the dipole is measured. The ERP is recorded.

This device was tested using a PCL of 0 in the PCS Band and a PCL of 5 in the Cellular Band.

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6.0 EQUIVALENT ISOTROPIC RADIATED POWER

6.1 Equivalent Isotropic Radiated Power Output Data

(Data taken with highest antenna gain)

Radiated measurements at 3 meters

Supply Voltage: 3.7 VDC

Modulation: PCS GSM

FREQ. (MHz)	REF. LEVEL (dBm)	POL (H/V)	Azimuth (o angle)	EIRP (dBm)	EIRP (W)	Battery
1850.80	-12.700	V	30	30.381	1.092	Standard
1880.00	-12.600	V	30	30.651	1.162	Standard
1909.80	-13.000	V	30	30.421	1.102	Standard

Note: This unit was tested with its standard battery.

NOTES:

Equivalent Isotropic Radiated Power 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. For CDMA signals, a peak detector is used, with RBW = VBW = 3 MHz. For WCDMA signals, a peak detector is used, with RBW = VBW = 5 MHz. For AMPS, GSM, and NADC TDMA signals, a peak detector is used, with RBW = VBW = 1 MHz. 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.

This device was tested using a PCL of 0 in the PCS Band and a PCL of 5 in the Cellular Band.

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7.0 RADIATED MEASUREMENTS

7.1 Cellular GSM Radiated Measurements

Field Strength of SPURIOUS Radiation

OPERATING FREQUENCY:	824.20	MHz		
CHANNEL:	128 (Low)			
MEASURED OUTPUT POWER:	33.430	dBm	=	2.200 W
MODULATION SIGNAL:	GSM			
DISTANCE:	3	meters		
LIMIT:	43 + 10 $\log_{10}$ (W) =	46.42	dBc	

FREQ. (MHz)	LEVEL @ ANTENNA TERMINALS (dBm)	SUBSTITUTE ANTENNA GAIN (dBd)	CORRECT GENERATOR LEVEL (dBm)	POL (H/V)	(dBc)
1648.40	-25.13	6.10	-19.03	V	52.5
2472.60	-53.75	6.70	-47.05	V	80.5
3296.80	-49.99	6.80	-43.19	H	76.6
4121.00	-52.98	6.50	-46.48	V	79.9
4945.20	-54.78	7.00	-47.78	H	81.2

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. For CDMA signals, a peak detector is used, with RBW = VBW = 3 MHz. For WCDMA signals, a peak detector is used, with RBW = VBW = 5 MHz. For AMPS, GSM, and NADC TDMA signals, a peak detector is used, with RBW = VBW = 1 MHz. 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.

This device was tested using a PCL of 0 in the PCS Band and a PCL of 5 in the Cellular Band.

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7.1 Cellular GSM Radiated Measurements (Cont'd)

Field Strength of SPURIOUS Radiation

OPERATING FREQUENCY: 836.60 MHz

CHANNEL: 190 (Mid)

MEASURED OUTPUT POWER: 33.430 dBm = 2.200 W

MODULATION SIGNAL: GSM

DISTANCE: 3 meters

LIMIT: $43 + 10 \log_{10} (W)$ = 46.42 dBc

FREQ. (MHz)	LEVEL @ ANTENNA TERMINALS (dBm)	SUBSTITUTE ANTENNA GAIN (dBd)	CORRECT GENERATOR LEVEL (dBm)	POL (H/V)	(dBc)
1673.20	-40.43	6.10	-34.33	H	67.8
2509.80	-54.56	6.70	-47.86	V	81.3
3346.40	-53.90	6.80	-47.10	V	80.5
4183.00	-60.21	6.50	-53.71	V	87.1
5019.60	-61.40	7.00	-54.40	H	87.8

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. For CDMA signals, a peak detector is used, with RBW = VBW = 3 MHz. For WCDMA signals, a peak detector is used, with RBW = VBW = 5 MHz. For AMPS, GSM, and NADC TDMA signals, a peak detector is used, with RBW = VBW = 1 MHz. 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.

This device was tested using a PCL of 0 in the PCS Band and a PCL of 5 in the Cellular Band.

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7.1 Cellular GSM Radiated Measurements (Cont'd)

Field Strength of SPURIOUS Radiation

OPERATING FREQUENCY:	848.80	MHz		
CHANNEL:	251 (High)			
MEASURED OUTPUT POWER:	33.430	dBm	=	2.200 W
MODULATION SIGNAL:	FM (Internal)			
DISTANCE:	3	meters		
LIMIT:	43 + 10 $\log_{10}$ (W) =	46.42	dBc	

FREQ. (MHz)	LEVEL @ ANTENNA TERMINALS (dBm)	SUBSTITUTE ANTENNA GAIN (dBd)	CORRECT GENERATOR LEVEL (dBm)	POL (H/V)	(dBc)
1697.60	-35.34	6.10	-29.24	V	62.7
2546.40	-43.96	6.70	-37.26	V	70.7
3395.20	-49.31	6.80	-42.51	H	75.9
4244.00	-55.75	6.50	-49.25	V	82.7
5092.80	-61.14	7.00	-54.14	V	87.6

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. For CDMA signals, a peak detector is used, with RBW = VBW = 3 MHz. For WCDMA signals, a peak detector is used, with RBW = VBW = 5 MHz. For AMPS, GSM, and NADC TDMA signals, a peak detector is used, with RBW = VBW = 1 MHz. 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.

This device was tested using a PCL of 0 in the PCS Band and a PCL of 5 in the Cellular Band.

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7.2 PCS GSM Radiated Measurements

Field Strength of SPURIOUS Radiation

OPERATING FREQUENCY: 1850.20 MHz
CHANNEL: 512 (Low)
MEASURED OUTPUT POWER: 30.650 dBm = 1.162 W
MODULATION SIGNAL: GSM
DISTANCE: 3 meters
LIMIT: 43 + 10 $\log_{10}$ (W) = 43.65 dBc

FREQ. (MHz)	LEVEL @ ANTENNA TERMINALS (dBm)	SUBSTITUTE ANTENNA GAIN (dBd)	CORRECT GENERATOR LEVEL (dBm)	POL (H/V)	(dBc)
3700.40	-33.33	6.10	-27.23	V	57.9
5550.60	-61.05	6.70	-54.35	H	85.0
7400.80	-57.89	6.80	-51.09	V	81.7
9251.00	-62.68	6.50	-56.18	V	86.8
11101.20	-84.38	7.00	-77.38	H	108.0

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. For CDMA signals, a peak detector is used, with RBW = VBW = 3 MHz. For WCDMA signals, a peak detector is used, with RBW = VBW = 5 MHz. For AMPS, GSM, and NADC TDMA signals, a peak detector is used, with RBW = VBW = 1 MHz. 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.

This device was tested using a PCL of 0 in the PCS Band and a PCL of 5 in the Cellular Band.

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7.2 PCS GSM Radiated Measurements (Cont'd)

Field Strength of SPURIOUS Radiation

OPERATING FREQUENCY: 1880.00 MHz
CHANNEL: 661 (Mid)
MEASURED OUTPUT POWER: 30.650 dBm = 1.162 W
MODULATION SIGNAL: GSM
DISTANCE: 3 meters
LIMIT: $43 + 10 \log_{10} (W)$ = 43.65 dBc

FREQ. (MHz)	LEVEL @ ANTENNA TERMINALS (dBm)	SUBSTITUTE ANTENNA GAIN (dBd)	CORRECT GENERATOR LEVEL (dBm)	POL (H/V)	(dBc)
3760.00	-48.83	6.10	-42.73	H	73.4
5640.00	-61.66	6.70	-54.96	V	85.6
7520.00	-64.50	6.80	-57.70	V	88.3
9400.00	-64.31	6.50	-57.81	V	88.5
11280.00	-83.78	7.00	-76.78	V	107.4

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. For CDMA signals, a peak detector is used, with RBW = VBW = 3 MHz. For WCDMA signals, a peak detector is used, with RBW = VBW = 5 MHz. For AMPS, GSM, and NADC TDMA signals, a peak detector is used, with RBW = VBW = 1 MHz. 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.

This device was tested using a PCL of 0 in the PCS Band and a PCL of 5 in the Cellular Band.

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7.2 PCS GSM Radiated Measurements (Cont'd)

Field Strength of SPURIOUS Radiation

OPERATING FREQUENCY: 1908.80 MHz
CHANNEL: 810 (High)
MEASURED OUTPUT POWER: 30.650 dBm = 1.162 W
MODULATION SIGNAL: GSM
DISTANCE: 3 meters
LIMIT: $43 + 10 \log_{10} (W)$ = 43.65 dBc

FREQ. (MHz)	LEVEL @ ANTENNA TERMINALS (dBm)	SUBSTITUTE ANTENNA GAIN (dBd)	CORRECT GENERATOR LEVEL (dBm)	POL (H/V)	(dBc)
3817.60	-38.54	6.10	-32.44	H	63.1
5726.40	-56.26	6.70	-49.56	V	80.2
7635.20	-57.11	6.80	-50.31	V	81.0
9544.00	-59.95	6.50	-53.45	V	84.1
11452.80	-83.98	7.00	-76.98	H	107.6

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. For CDMA signals, a peak detector is used, with RBW = VBW = 3 MHz. For WCDMA signals, a peak detector is used, with RBW = VBW = 5 MHz. For AMPS, GSM, and NADC TDMA signals, a peak detector is used, with RBW = VBW = 1 MHz. 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.

This device was tested using a PCL of 0 in the PCS Band and a PCL of 5 in the Cellular Band.

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8.0 FREQUENCY STABILITY

8.1 Frequency Stability (Cellular GSM)

OPERATING FREQUENCY: 836,600,009 Hz

CHANNEL: 190

REFERENCE VOLTAGE: 3.7 VDC

DEVIATION LIMIT: ± 0.00025 % or 2.5 ppm

VOLTAGE (%)	POWER (VDC)	TEMP (°C)	FREQ. (Hz)	Freq. Dev. (Hz)	Deviation (%)
100 %	3.70	+ 20 (Ref)	836,600,009	0.00	0.000000
100 %		- 30	836,600,042	-33.46	-0.000004
100 %		- 20	836,599,917	92.03	0.000011
100 %		- 10	836,599,959	50.20	0.000006
100 %		0	836,600,001	8.37	0.000001
100 %		+ 10	836,600,068	-58.56	-0.000007
100 %		+ 20	836,600,009	0.00	0.000000
100 %		+ 25	836,599,992	16.73	0.000002
100 %		+ 30	836,599,934	75.29	0.000009
100 %		+ 40	836,600,034	-25.10	-0.000003
100 %		+ 50	836,600,109	-100.39	-0.000012
100 %		+ 60	836,600,051	-41.83	-0.000005
85 %	3.17	+ 20	836,600,009	0.00	0.000000
115 %	4.26	+ 20	836,600,009	0.00	0.000000
BATT. ENDPOINT	3.01	+ 20	836,600,009	0.00	0.000000

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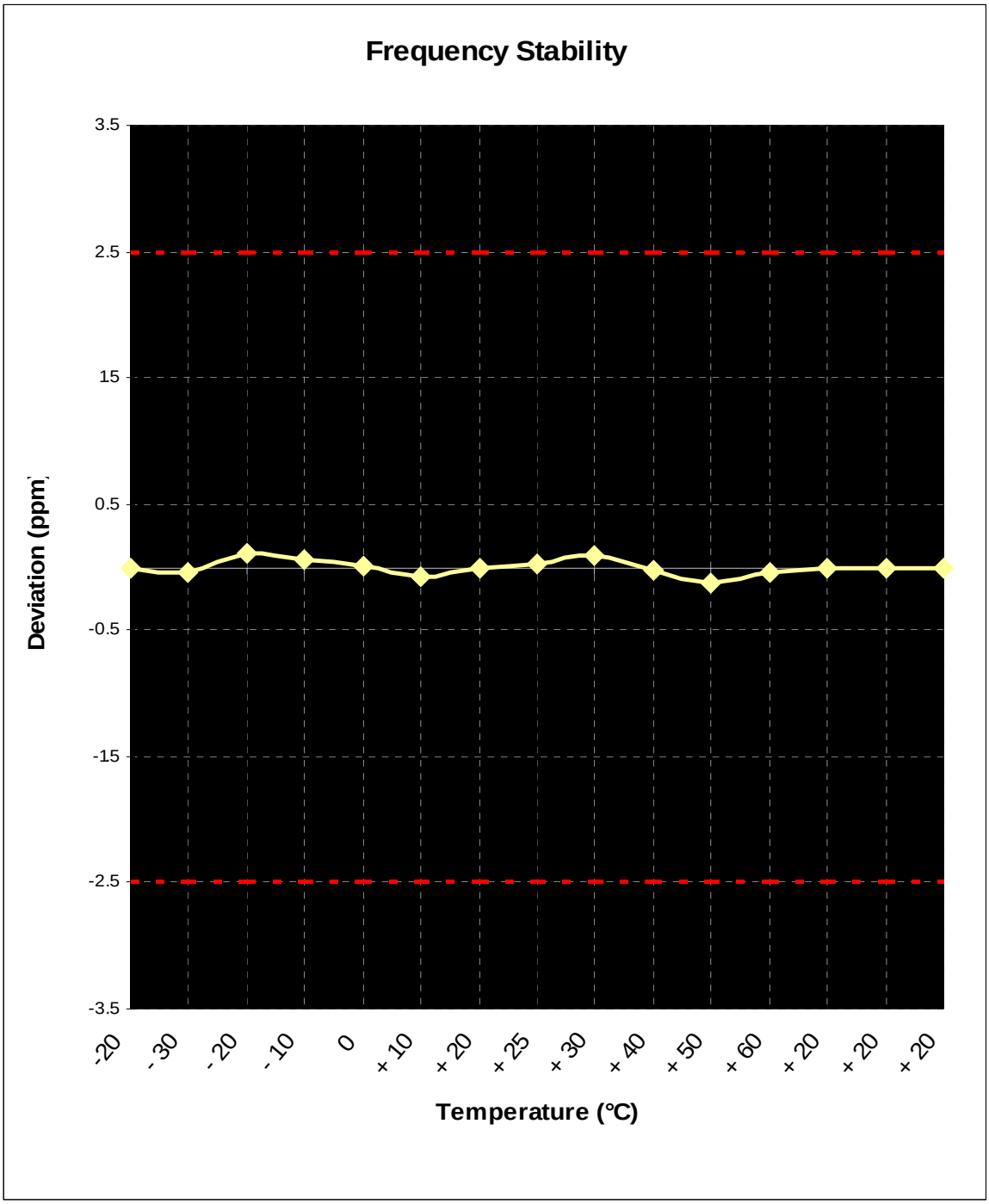
8.1 Frequency Stability (Cellular GSM) (Cont'd)



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8.2 Frequency Stability (PCS GSM)

OPERATING FREQUENCY: 1,880,000,003 Hz

CHANNEL: 661

REFERENCE VOLTAGE: 3.7 VDC

DEVIATION LIMIT: ± 0.00025 % or 2.5 ppm

VOLTAGE (%)	POWER (VDC)	TEMP (ºC)	FREQ. (Hz)	Freq. Dev. (Hz)	Deviation (%)
100 %	3.70	+ 20 (Ref)	1,880,000,003	0.00	0.000000
100 %		- 30	1,880,000,153	-150.40	-0.000008
100 %		-20	1,880,000,210	-206.80	-0.000011
100 %		-10	1,880,000,097	-94.00	-0.000005
100 %		0	1,879,999,928	75.20	0.000004
100 %		10	1,879,999,853	150.40	0.000008
100 %		20	1,880,000,003	0.00	0.000000
100 %		25	1,880,000,135	-131.60	-0.000007
100 %		30	1,880,000,078	-75.20	-0.000004
100 %		40	1,880,000,022	-18.80	-0.000001
100 %		50	1,880,000,285	-282.00	-0.000015
100 %		60	1,880,000,153	-150.40	-0.000008
85 %	3.15	20	1,880,000,003	0.00	0.000000
115 %	4.26	20	1,880,000,003	0.00	0.000000
BATT. ENDPOINT	2.94	20	1,880,000,003	0.00	0.000000

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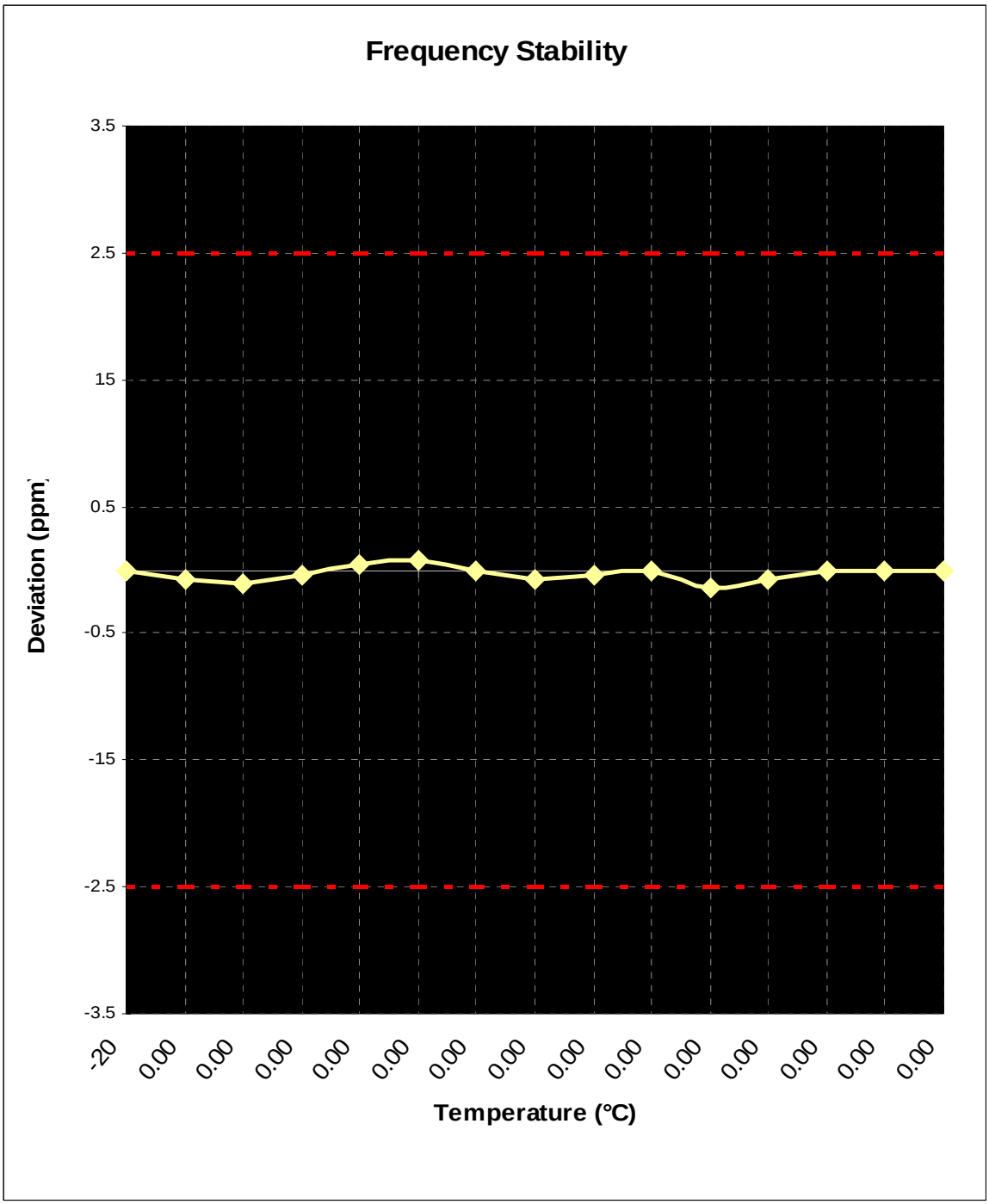
8.2 Frequency Stability (PCS GSM) (Cont'd)



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9.0 PLOT(S) OF EMISSIONS

(SEE ATTACHMENT A)

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10.0 TEST EQUIPMENT

Test Equipment Calibration is traceable to the National Institute of Standards and Technology (NIST).

TYPE	MODEL	CAL. DUE DATE	CAL. INTERVAL	SERIAL No.
Microwave Spectrum Analyzer	Agilent E4448A (3Hz-50GHz)	09/19/06	Annual	US42510244
Spectrum Analyzer/Tracking Generator	HP 8591A (9kHz-1.8GHz)	09/12/06	Annual	3144A02458
Spectrum Analyzer	HP 8566B (100Hz-2.5GHz/2-22GHz)	12/22/06	Annual	3638A08713
Signal Generator	HP 8640D (500Hz-1GHz)	12/07/07	Annual	3613A00315
PSG Analog Signal Generator	Agilent E8257D (250kHz-20GHz)	03/08/07	Annual	MY45470194
5 Watt Amplifier	5S1G4 (800MHz-4.2GHz)	N/A	N/A	22332
Universal Radio Communication Tester	CMU200	04/20/07	Annual	836370/079
Universal Power Meter	Gigatronics 8651A (50MHz-18GHz)	07/28/07	Annual	1834052
Power Sensor	Gigatronics 80701A	04/11/07	Annual	1833460
Quasi-Peak Adapter	HP 85650A	08/09/06	Annual	2043A00301
Preamplifier	HP 8449B (1-26.5GHz)	12/22/06	Annual	3008A00985
Attenutation/Switch Driver	HP 11713A	12/22/06	Annual	N/A
Preselector	HP 85685A (20Hz-2GHz)	12/22/06	Annual	N/A
6dB Res BW Spec. Analyzer Display	OPT 462	12/22/06	Annual	3701A22204
Ailtech/Eaton Adapter	CCA-7 CISPR/ANSI QP Adapter	12/19/06	Annual	0194-04082
Ailtech/Eaton Receiver	NM 37/57A (30MHz – 1GHz)	06/07/07	Annual	0805-03334
Broadband Amplifier (2)	HP 8447D (0.1 – 1300MHz)	N/A	N/A	2443A01900, 1937A03348
Horn Antenna	EMCO Model 3115 (1-18GHz)	08/25/07	Annual	9704-5182
Horn Antenna	EMCO Model 3116 (18-40GHz)	08/25/07	Annual	9203-2178
Roberts Dipoles	Compliance Design (1 set) A100	08/31/06	Annual	5118
EMCO Dipoles (2)	N/A	05/08/08	Annual	00023951
EMCO LISN (3)	3816/2, 3816/2, 3725/2	10/26/06	Annual	1077, 1079, 2099
10dB Attenuator	HP 8493B	N/A	N/A	N/A
Microwave Cables	MicroCoax (1.0-26.5GHz)	02/26/07	Annual	N/A
Shielded Screen Room	RF Lindgren Model 26-2/2-0	N/A	N/A	6710 (PCT270)
Shielded Semi-Anechoic Chamber	Ray Proof Model S81	N/A	N/A	R2437 (PCT278)
Environmental Chamber	Associated Systems 1025	08/08/06	Annual	PCT285
OATS	N/A	12/31/2006	Tri-annual	N/A

Table 10-1. Test Equipment

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11.0 SAMPLE CALCULATIONS

Emission Designator

Emission Designator = 250KGXW

GSM BW = 250 kHz

G = Phase Modulation

X = Cases not otherwise covered

W = Combination (Audio/Data)

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12.0 CONCLUSION

The data collected shows that the Banksys Dual-Band GSM Mobile Transmitter Module FCC ID: SEKMC56 complies with all the requirements of Parts 2, 22, and 24 of the FCC rules.

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