



**FCC CFR47 PART 24E
CLASS II PERMISSIVE CHANGE
CERTIFICATION TEST REPORT**

FOR

SINGLE BAND 1XRTTCDMA PHONE

MODEL NUMBER: K33BI - 01

FCC ID: OVF-K33BI01

REPORT NUMBER: 08U11911-1

ISSUE DATE: JULY 02, 2008

Prepared for

**KYOCERA WIRELESS
10300 CAMPUS POINT DRIVE
SAN DIEGO, CA 92121, U.S.A.**

Prepared by

**COMPLIANCE CERTIFICATION SERVICES
47173 BENICIA STREET
FREMONT, CA 94538, USA
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NVLAP LAB CODE 200065-0

1. ATTESTATION OF TEST RESULTS

COMPANY NAME: KYOCERA WIRELESS
10300 CAMPUS POINT DRIVE
SAN DIEGO, CA 92121, U.S.A.

EUT DESCRIPTION: SINGLE BAND 1XRTT CDMA PHONE

MODEL: K33BI - 01

SERIAL NUMBER: F0000025782491

DATE TESTED: JUNE 29, 2008

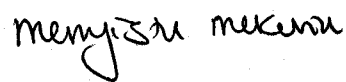
APPLICABLE STANDARDS	
STANDARD	TEST RESULTS
FCC PART 24E (Radiation Emissions)	PASS

Compliance Certification Services, Inc. (CCS) tested the above equipment in accordance with the requirements set forth in the above standards. All expressions of Pass/Fail in this report are opinions expressed by CCS based on interpretations of the test results. The test results show that the equipment tested is capable of demonstrating compliance with the requirements as documented in this report.

Note: The results documented in this report apply only to the tested sample, under the conditions and modes of operation as described herein. This document may not be altered or revised in any way unless done so by Compliance Certification Services and all revisions are duly noted in the revisions section. Any alteration of this document not carried out by Compliance Certification Services will constitute fraud and shall nullify the document. No part of this report may be used to claim product certification, approval, or endorsement by NVLAP, NIST, or any government agency.

Approved & Released For CCS By:

Tested By:



THU CHAN
EMC SUPERVISOR
COMPLIANCE CERTIFICATION SERVICES

MENGISTU MEKURIA
EMC ENGINEER
COMPLIANCE CERTIFICATION SERVICES

2. TEST METHODOLOGY

The tests documented in this report were performed in accordance with TIA/EIA 603C (2004), ANSI C63.4-2003, FCC CFR 47 Part 2, FCC CFR 47 Part 15 and FCC CFR 47 Part 24E.

3. FACILITIES AND ACCREDITATION

The test sites and measurement facilities used to collect data are located at 47173 Benicia Street, Fremont, California, USA. The sites are constructed in conformance with the requirements of ANSI C63.4, ANSI C63.7 and CISPR Publication 22. All receiving equipment conforms to CISPR Publication 16-1, "Radio Interference Measuring Apparatus and Measurement Methods."

CCS is accredited by NVLAP, Laboratory Code 200065-0. The full scope of accreditation can be viewed at <http://www.ccsemc.com>.

4. CALIBRATION AND UNCERTAINTY

4.1. MEASURING INSTRUMENT CALIBRATION

The measuring equipment utilized to perform the tests documented in this report has been calibrated in accordance with the manufacturer's recommendations, and is traceable to recognized national standards.

4.2. MEASUREMENT UNCERTAINTY

Where relevant, the following measurement uncertainty levels have been estimated for tests performed on the apparatus:

PARAMETER	UNCERTAINTY
Radiated Emission, 30 to 200 MHz	+/- 3.3 dB
Radiated Emission, 200 to 1000 MHz	+4.5 / -2.9 dB
Radiated Emission, 1000 to 2000 MHz	+4.5 / -2.9 dB
Radiated Emission, Above 2000 MHz	+/- 4.3 dB
Power Line Conducted Emission	+/- 2.9 dB

Uncertainty figures are valid to a confidence level of 95%.

5. EQUIPMENT UNDER TEST

5.1. DESCRIPTION OF EUT

The EUT is a Single band 1xRTT CDMA Phone, and the radio module is manufactured by Kyocera.

5.2. DESCRIPTION OF CLASS II CHANGE

Add alternate components-Power Amplifier and LCD.

5.3. MAXIMUM OUTPUT POWER

The transmitter has a maximum peak EIRP output powers as follows:

1850 to 1910 MHz Authorized Band

Frequency Range (MHz)	Modulation	EIRP Peak Power (dBm)	EIRP Peak Power (mW)
Low CH - 1851.25	CDMA2000	30.30	1071.52
Mid CH - 1880		30.20	1047.13
High CH - 1908.75		29.40	870.96

5.4. SOFTWARE AND FIRMWARE

The EUT is linked with Agilent Communication Test Set.

5.5. WORST-CASE CONFIGURATION AND MODE

The worst-position was the EUT with highest emissions. To determine the worst-case, the EUT was investigated for X, Y, and Z-Positions, and the worst position with battery charger. The worst-position was turned out Y-position.

PROCEDURE USED TO ESTABLISH TEST SIGNAL

3G-CDMA2000 1xRTT

This procedure assumes the Agilent 8960 Test Set has the following applications installed and with valid license.

<u>Application</u>	<u>Rev, License</u>
CDMA2000 Mobil Test	B.10.11, L

1xRTT

- Call Setup > Shift & Preset
- Protocol Rev > 6 (IS-2000-0)
- Radio Config (RC) > RC3 (Fwd3, Rvs3)
- FCH Service Option (SO) Setup > 55
- Traffic Data Rate > Full
- TDSO SCH Info > F-SCH Parameters > F-SCH Data Rate > 153.6 kbps
> R-SCH Parameters > R-SCH Data Rate > 153.6 kbps
- Cell Info > Cell Parameters > System ID (SID) > 6503
> Network ID (NID) > 0

Once "Active Cell" show "Connected" then change "Rvs Power Ctrl" from "Active bits" to "**All Up bits**" to get the maximum power.

Worst-case Measurement Result @ Low, Middle and High Channel

Worst-case Measurement Result for Low, Middle and High Channel under Radio Configuration RC3 and Service Option 55.

5.6. DESCRIPTION OF TEST SETUP

SUPPORT EQUIPMENT

PERIPHERAL SUPPORT EQUIPMENT LIST				
Description	Manufacturer	Model	Serial Number	FCC ID
Communications Test Set	Agilent / HP	E5515C	GB46160222	N/A

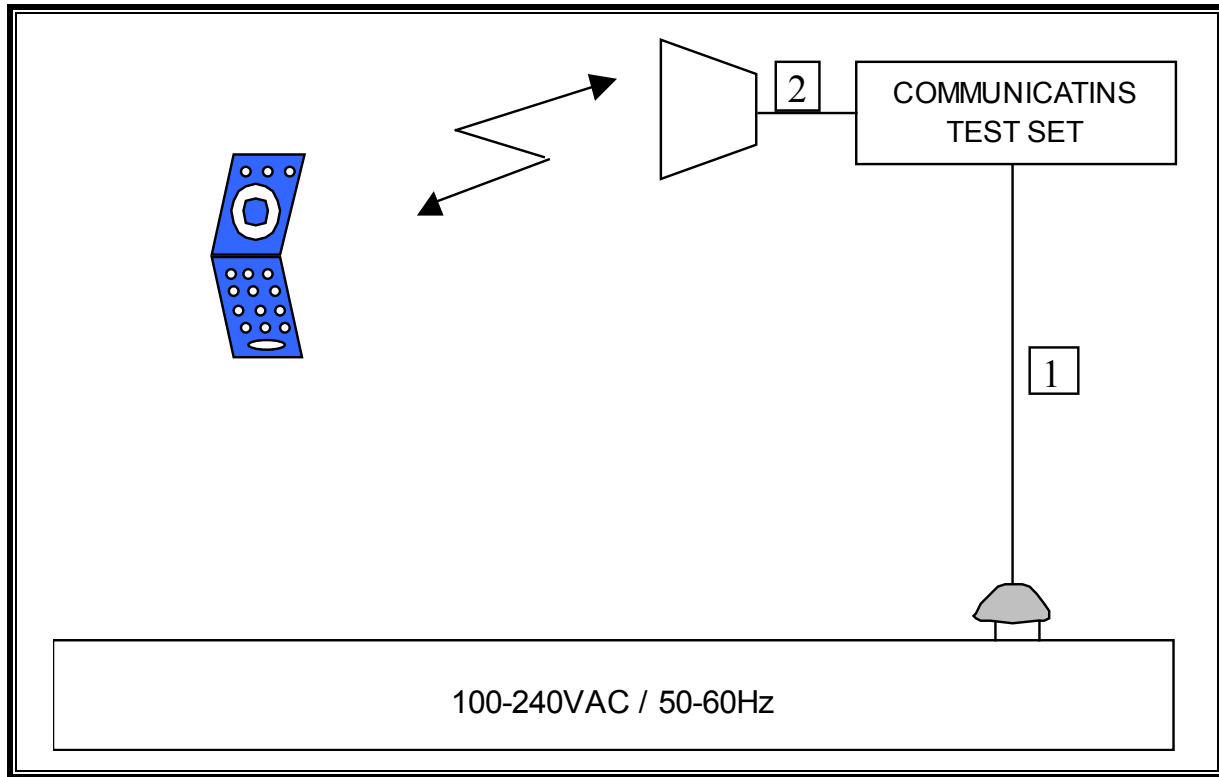
I/O CABLES

I/O CABLE LIST						
Cable No.	Port	# of Identical Ports	Connector Type	Cable Type	Cable Length	Remarks
1	AC Input	1	3-Prong	Un-Shielded	2.0 m	N/A
2	RF In/Out	1	SMA	Un-shielded	1.5 m	N/A

TEST SETUP

The EUT is a CDMA phone and-is tested as a standalone configuration. Communications Test Set is used to link the device under test.

RADIATED TEST SETUP DIAGRAM



6. TEST AND MEASUREMENT EQUIPMENT

The following test and measurement equipment was utilized for the tests documented in this report:

TEST EQUIPMENT LIST				
Description	Manufacturer	Model	Serial Number	Cal Due
Preamplifier, 26.5 GHz	Agilent / HP	8449B	C00749	8/3/2008
Antenna, Horn, 18 GHz	EMCO	3115	C00872	4/22/2009
Antenna, Horn, 18 GHz	EMCO	3115	C00945	4/22/2009
Signal Generator 2 -40 GHz	R & S	SMP04	DE 34210	2/16/2009
Signal Generator 1024 MHz	R & S	SMY01	DE 12311	5/28/2009
2.7GHz HPF	MicroTronic	HPM13194	2	CNR
Communications Test Set	Agilent / HP	E5515C	GB46160222	6/16/2009
Spectrum Analyzer 3 Hz ~ 44 GHz	Agilent / HP	E4446A	MY45300064	10/27/2008

7. LIMITS AND RESULTS

7.1. RADIATED OUTPUT POWER

LIMIT

24.232(b) & RSS133 § 6.4 Mobile/portable stations are limited to 2 watts e.i.r.p. peak power and the equipment must employ means to limit the power to the minimum necessary for successful communications.

TEST PROCEDURE

RSS-132, RSS-133, & ANSI / TIA / EIA 603C Clause 2.2.17

RESULTS

1900 MHz CDMA Mode

Channel	Frequency (MHz)	EIRP Peak Power (dBm)	EIRP Peak Power (mW)
Low	1850.75	30.30	1071.52
Middle	1880.00	30.20	1047.13
High	1909.25	29.40	870.96

PCS BAND CDMA OUTPUT POWER (EIRP)

High Frequency Fundamental Measurement									
Compliance Certification Services, Morgan Hill 5m Chamber Site									
Company:		KYOCERA WIRELESS							
Project #:		08U11911							
Date:		6/29/2008							
Test Engineer:		MENGISTU MEKURIA							
Configuration:		WUT ALONE							
Mode:		TX CDMA MODE							
Test Equipment:									
Receiving: Horn T73, and 12ft S/N: 197209005 (Setup this one for testing EUT) Thanh Cable									
Substitution: Horn T60 Substitution, 4ft SMA Cable Warehouse S/N: 177081003, Thanh cable									
f GHz	SA reading (dBuV/m)	Ant. Pol. (H/V)	SG reading (dBm)	CL (dB)	Gain (dBi)	EIRP (dBm)	Limit (dBm)	Margin (dB)	Notes
Low Ch									
1.851	100.1	V	22.9	0.9	8.3	30.3	33.0	-2.7	
1.851	91.0	H	13.0	0.9	8.3	20.4	33.0	-12.6	
Mid Ch									
1.880	100.0	V	22.8	0.9	8.3	30.2	33.0	-2.8	
1.880	90.9	H	13.0	0.9	8.3	20.4	33.0	-12.6	
High Ch									
1.909	99.1	V	21.9	0.9	8.4	29.4	33.0	-3.6	
1.909	89.2	H	11.4	0.9	8.4	18.9	33.0	-14.1	
Rev. 1.24.7									

7.2. FIELD STRENGTH OF SPURIOUS EMISSION

LIMIT

§24.238 (a) Out of band emissions. The power of any emission outside of the authorized operating frequency ranges must be attenuated below the transmitting power (P) by a factor of at least $43 + 10 \log (P)$ dB.

TEST PROCEDURE

ANSI / TIA / EIA 603 Clause 3.2.12 & FCC 24.238 (b)

RESULTS

Note: No emissions were found within 30-1000MHz & after the third harmonic of 20dB below the system noise.

PCS BAND CDMA SPURIOUS & HARMONIC (EIRP)

High Frequency Substitution Measurement
 Compliance Certification Services, Fremont 5m B-Chamber

Company: KYOCERA WIRELESS
 Project #: 08U11911
 Date: 6/29/2008
 Test Engineer: MENGISTU MEKURIA
 Configuration: WUT ALONE
 Mode: TX CDMA MODE

Test Equipment:

EMCO Horn 1-18GHz
T73; S/N: 6717 @3m

Horn > 18GHz

Limit
EIRP

High Pass Filter

Hi Frequency Cables
 (2 ft) (2~3 ft) (4~6 ft) (12 ft)

Pre-amplifier 1-26GHz
T34 HP 8449B

Pre-amplifier 26-40GHz

f GHz	SA reading (dBuV/m)	Ant. Pol. (H/V)	SG reading (dBm)	CL (dB)	Gain (dBi)	Gain (dBd)	EIRP (dBm)	Limit (dBm)	Margin (dB)	Notes
LOW CH. (1851.25 MHz)										
3.703	68.9	V	-28.6	5.9	9.7	7.6	-24.8	-13.0	-11.8	
5.554	45.0	V	-47.3	7.4	11.3	9.1	-43.4	-13.0	-30.4	
3.703	63.8	H	-33.5	5.9	9.7	7.6	-29.8	-13.0	-16.8	
5.554	42.6		-49.8	7.4	11.3	9.1	-45.9	-13.0	-32.9	
MID CH. 1880 MHz)										
3.760	71.8	V	-25.4	6.0	9.7	7.6	-21.6	-13.0	-8.6	
5.640	44.5	V	-48.1	7.4	11.5	9.3	-44.0	-13.0	-31.0	
3.760	67.0	H	-30.0	6.0	9.7	7.6	-26.3	-13.0	-13.3	
5.640	42.9	H	-48.6	7.4	11.5	9.3	-44.6	-13.0	-31.6	
HI CH. (1908.75 MHz)										
3.818	69.5	V	-27.3	6.0	9.7	7.5	-23.6	-13.0	-10.6	
5.726	46.9	V	-45.8	7.5	11.6	9.5	-41.7	-13.0	-28.7	
3.818	64.9	H	-31.9	6.0	9.7	7.5	-28.2	-13.0	-15.2	
5.726	43.0	H	-48.7	7.5	11.6	9.5	-44.6	-13.0	-31.6	

Rev. 4.12.7