

FCC CFR47 PART 15 SUBPART B ICES-003 ISSUE 4

DECLARATION OF CONFORMITY TEST REPORT

FOR

TRI-BAND CDMA PHONE

MODEL NUMBER: K33BIC-03

REPORT NUMBER: 08U12167-2, REVISION A

ISSUE DATE: OCTOBER 16, 2008

Prepared for

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

Prepared by

COMPLIANCE CERTIFICATION SERVICES 47173 BENICIA STREET FREMONT, CA 94538, U.S.A.

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Revision History

| Rev. | Issue Date | Revisions | Revised By |
|------|---------------|------------------------|------------|
| | 10/13/08 | Initial Issue | T. Chan |
| В | 10/16/08 | Added ICES-003 ISSUE 4 | T. Chan |

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1. ATTESTATION OF TEST RESULTS

COMPANY NAME: KYOCERA WIRELESS CORP.

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

EUT DESCRIPTION: TRI BAND CDMA PHONE

MODEL: K33BIC-03

SERIAL NUMBER: FF10000001711

DATE TESTED: OCTOBER 10 – 13, 2008

APPLICABLE STANDARDS

STANDARD TEST RESULTS

FCC PART 15 SUBPART B
ICES-003 ISSUE 4

Pass

Compliance Certification Services, Inc. (CCS) tested the above equipment in accordance with the requirements set forth in the above standards. All indications of Pass/Fail in this report are opinions expressed by CCS based on interpretations and/or observations of 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 CCS and all revisions are duly noted in the revisions section. Any alteration of this document not carried out by CCS 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:

My

THUN CHAN
EMC SUPERVISOR
COMPLIANCE CERTIFICATION SERVICES

DOUGLAS ANDERSON EMC ENGINEER COMPLIANCE CERTIFICATION SERVICES

Douglas Combuser

2. TEST METHODOLOGY

The tests documented in this report were performed in accordance with ANSI C63.4-2003 as referenced by ICES-003 Issue 4.

3. FACILITIES AND ACCREDITATION

The test sites and measurement facilities used to collect data are located at 47173 Benicia Street, Fremont, California, USA.

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 |
|-------------------------------|-------------|
| Power Line Conducted Emission | +/- 2.3 dB |
| Radiated Emission | +/- 3.4 dB |

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

5. EQUIPMENT UNDER TEST

5.1. DESCRIPTION OF EUT

The EUT is a Tri Band CDMA cell phone.

The radio module is manufactured by Kyocera Wireless.

5.2. PRELIMINARY TEST CONFIGURATIONS

The following configurations were investigated during preliminary testing:

| EUT Configuration | Description |
|-------------------|--|
| Configuration 1 | Cell phone / Travel Charger / Headset |
| Configuration 2 | Cell phone / Headset / Notebook PC / Printer / Modem |

5.3. MODE(S) OF OPERATION

| Mode | Description |
|----------|--|
| Charging | EUT in Configuration 1 charging battery from AC mains. |
| Normal | EUT in Configuration 2 powered "On" and connected to PC via USB cable. |

5.4. MODIFICATIONS

No modifications were made during testing.

5.5. DETAILS OF TESTED SYSTEM

SUPPORT EQUIPMENT & PERIPHERALS

CONFIGURATION 1:

| PERIPHERAL SUPPORT EQUIPMENT LIST | | | | | | | | |
|---|--|--|--|--|--|--|--|--|
| Description Manufacturer Model Serial Number FCC ID | | | | | | | | |
| Travel Charger Kyocera TXTVL10127 02224 DoC | | | | | | | | |
| Headset | | | | | | | | |

CONFIGURATION 2:

| PERIPHERAL SUPPORT EQUIPMENT LIST | | | | | | | | | |
|-----------------------------------|---|-----------------|----------------|-------------------|--|--|--|--|--|
| Description | Description Manufacturer Model Serial Number FCC ID | | | | | | | | |
| Travel Charger | Kyocera | TXTVL10127 | 02224 | DoC | | | | | |
| Notebook PC | HP | Compaq nx5000 | CNU4180X4R | DoC | | | | | |
| AC Adapter 1 | HP | SU10095-1003 | F3-0404082195D | DoC | | | | | |
| Printer | Microline 186 | D22300A | AC5C018494A0 | DoC | | | | | |
| Modem | Hayes | 4714US | A02247143261 | BFJUSA-31719-M5-E | | | | | |
| AC Adapter 2 | US Robotics | TEAC-41-091000U | 01910 | DoC | | | | | |
| Headset | Made in China | NA | NA | NA | | | | | |

I/O CABLES

CONFIGURATION 1:

| | I/O CABLE LIST | | | | | | | |
|--------------|----------------|----------------------------|-------------------|---------------|-----------------|---------|--|--|
| Cable No. | Port | # of Identical Ports | Connector Type | Cable Type | Cable Length | Remarks | | |
| 1 | DC Power | 1 | Mini-Jack | Un-Shielded | 2m | | | |
| 2 | USB | 1 | USB | Shielded | 1m | | | |

CONFIGURATION 2:

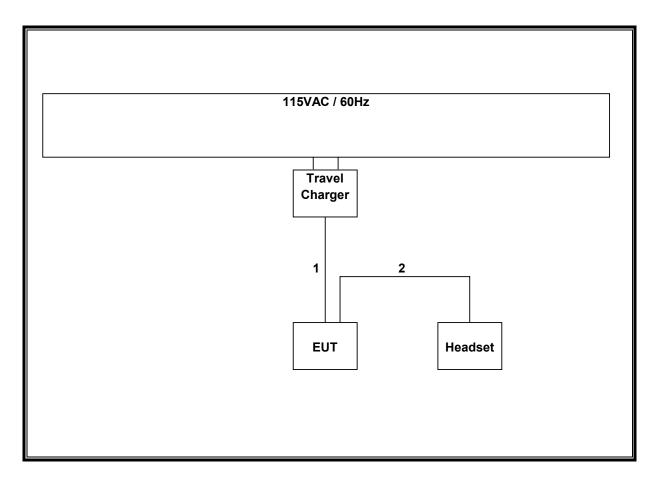
| | I/O CABLE LIST | | | | | | | | |
|-------|----------------|-----------|-----------|-------------|--------|---------|--|--|--|
| Cable | Port | # of | Connector | Cable | Cable | Remarks | | | |
| No. | | Identical | Type | Type | Length | | | | |
| | | Ports | | | | | | | |
| 1 | AC Power | 2 | 3-Prong | Un-Shielded | 1.5m | | | | |
| 2 | DC Power | 2 | Mini-Jack | Un-Shielded | 2m | | | | |
| 3 | Audio | 1 | Mini-Jack | Un-Shielded | 1.25m | | | | |
| 4 | USB | 1 | USB | Shielded | 1m | | | | |
| 5 | Parallel | 1 | DB-25 | Shielded | 1.5m | | | | |
| 6 | RS-232 | 1 | DB-9 | Shielded | 1.25m | | | | |

TEST SETUP

The EUT is installed in typical configurations.

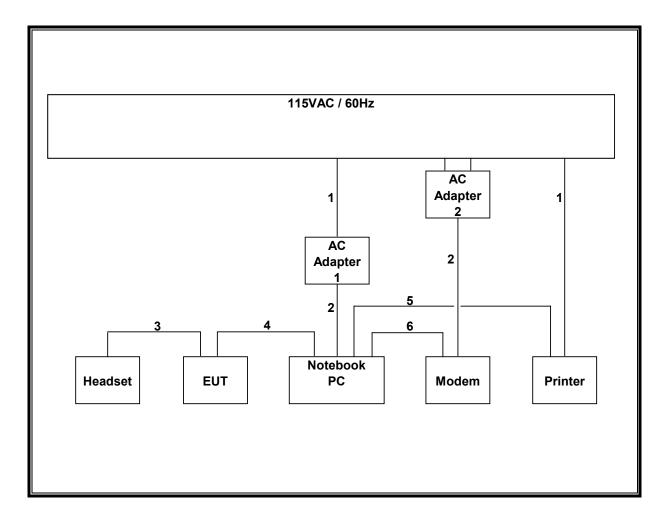
TEST SETUP DIAGRAM

CONFIGURATION 1



CONFIGURATION 2

DATE: OCTOBER 16, 2008



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 | Asset | Cal Due | | |
| EMI Receiver, 2.9 GHz | Agilent / HP | 8542E | C00957 | 09/19/09 | | |
| RF Filter Section, 2.9 GHz | Agilent / HP | 85420E | C00958 | 09/19/09 | | |
| Antenna, Bilog, 2 GHz | Sunol Sciences | JB1 | C01016 | 02/11/09 | | |
| Preamplifier, 1300 MHz | Agilent / HP | 8447D | C00885 | 03/31/09 | | |
| Spectrum Analyzer, 44 GHz | Agilent / HP | E4446A | C01012 | 03/03/09 | | |
| Preamplifier, 26.5 GHz | Agilent / HP | 8449B | C01063 | 12/27/08 | | |
| Antenna, Bilog, 2 GHz | Sunol Sciences | JB1 | C01011 | 02/11/09 | | |
| Preamp, 1000MHz | Sonoma | 310N | N02891 | 03/31/09 | | |
| EMI Receiver, 2.9 GHz | Agilent / HP | 8542E | C00957 | 09/19/09 | | |
| RF Filter Section, 2.9 GHz | Agilent / HP | 85420E | C00958 | 09/19/09 | | |
| EMI Test Receiver, 30 MHz | R&S | ESHS 20 | N02396 | 09/19/09 | | |
| LISN, 30 MHz | FCC | LISN-50/250-25-2 | N02625 | 10/25/08 | | |
| LISN, 10 kHz ~ 30 MHz | Solar | 8012-50-R-24-BNC | N02481 | 10/25/08 | | |

7. APPLICABLE LIMITS AND TEST RESULTS

7.1. RADIATED EMISSIONS

TEST PROCEDURE

ANSI C63.4

The highest clock frequency generated or used in the EUT is 1900 MHz, therefore the frequency range was investigated from 30 MHz to 9500 MHz.

LIMIT

§15.109 (a) Except for Class A digital devices, the field strength of radiated emissions from unintentional radiators at a distance of 3 meters shall not exceed the following values:

| Limits for radiated disturbance of Class B ITE at measuring distance of 3 m | | | | | |
|---|------------|--|--|--|--|
| Frequency range Quasi-peak limits | | | | | |
| (MHz) | (dBµV/m) | | | | |
| 30 to 88 | 40 | | | | |
| 88 to 216 | 43.5 | | | | |
| 216 to 960 46 | | | | | |
| Above 960 MHz 54 | | | | | |
| Note: The lower limit shall apply at the transition | frequency. | | | | |

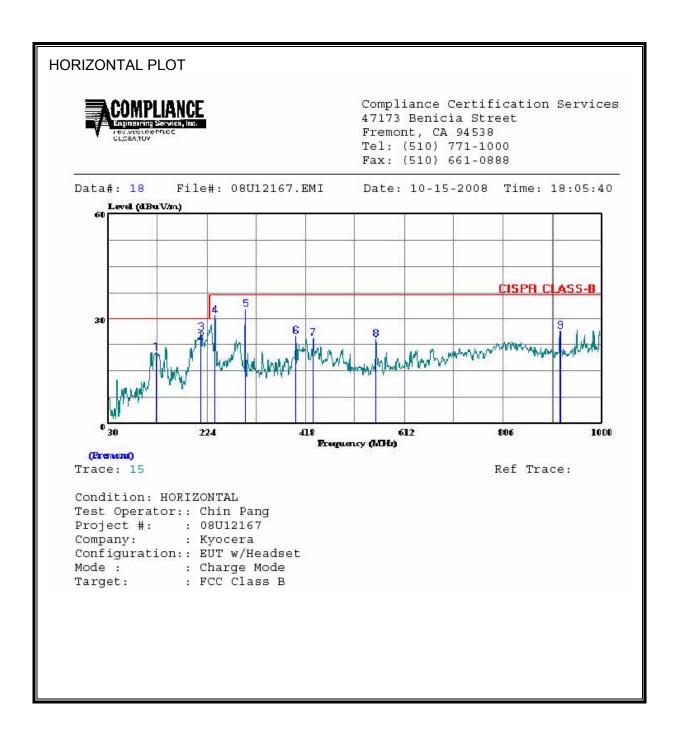
RESULTS

7.1.1. RADIATED EMISSIONS BELOW 1 GHz

EUT WITH SUPPORT EQUIPMENT

SPURIOUS EMISSIONS 30 TO 1000 MHz (WORST-CASE CONFIGURATION, HORIZONTAL)

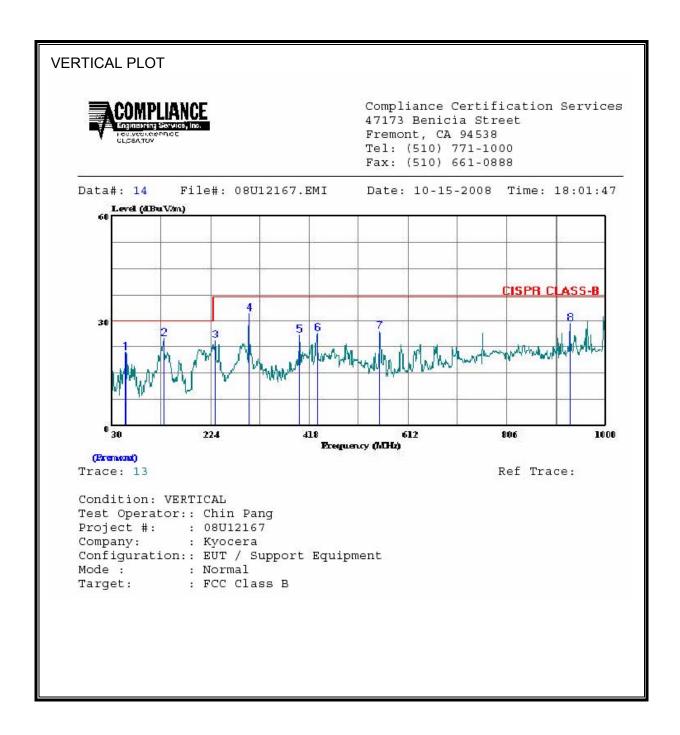
DATE: OCTOBER 16, 2008



| HORIZONTAL DATA | | | | | | | |
|---|--|--|---|--|---|---|--|
| | Freq | Read Level | Factor | Level | Limit Line | Over Limit | Remark |
| | MHz | dBuV | dB | $\overline{\mathtt{dBuV/m}}$ | $\overline{\mathtt{dBuV/m}}$ | dB | |
| 1 2 3 4 5 6 7 8 9 | 125.060 212.360 212.360 239.520 299.660 399.570 | 36.83 39.85 42.50 47.67 47.17 36.50 35.00 32.00 | -16.51 -16.44 -16.44 -16.75 -14.53 -11.66 -10.58 -7.95 | 20.33 23.41 26.06 30.92 32.64 24.84 24.42 24.05 | 30.00 30.00 30.00 37.00 37.00 37.00 37.00 | -9.67 -6.59 -3.94 -6.08 -4.36 -12.16 -12.58 -12.58 | QP Peak Peak Peak Peak Peak Peak |

SPURIOUS EMISSIONS 30 TO 1000 MHz (WORST-CASE CONFIGURATION, VERTICAL)

DATE: OCTOBER 16, 2008

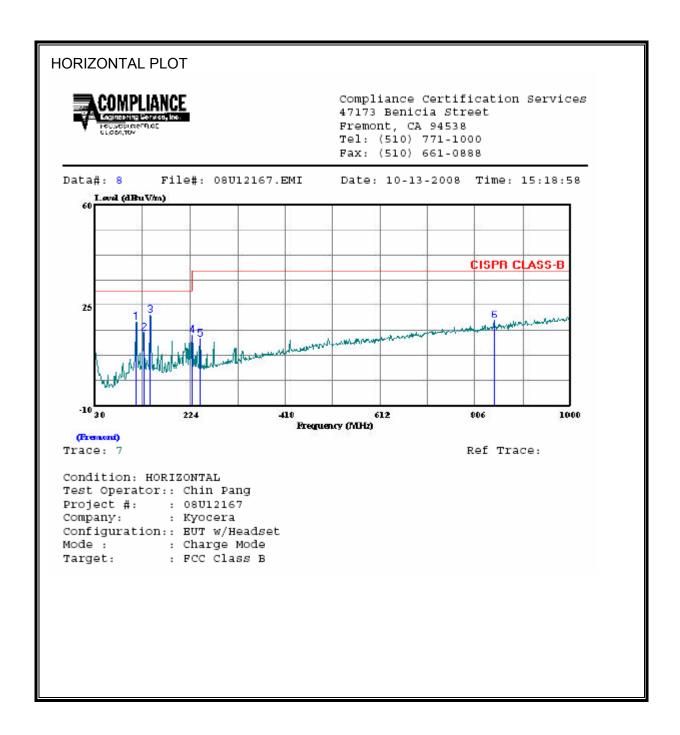


| | Freq | Read Level | Factor | Level | Limit Line | Over Limit | Remark |
|--------------------------------------|---|--|---|---|----------------------------------|------------------------------------|--|
| | MHz | dBuV | dB | $\overline{\mathtt{dBuV/m}}$ | dBuV/m | dB | |
| 1 2 3 4 5 6 7 8 | 57.160 131.850 233.700 299.660 399.570 433.520 556.710 930.160 | 41.83 41.17 46.83 37.67 37.17 35.00 | -23.11 -16.79 -16.63 -14.53 -11.66 -10.59 -7.95 | 21.03 25.05 24.54 32.30 26.01 26.58 27.05 | 37.00 37.00 37.00 37.00 | -4.95 -12.46 -4.70 -10.99 | Peak Peak Peak Peak Peak Peak |

EUT AND AC ADAPTER CHARGER

SPURIOUS EMISSIONS 30 TO 1000 MHz (WORST-CASE CONFIGURATION, HORIZONTAL)

DATE: OCTOBER 16, 2008



HORIZONTAL DATA Read Limit Over Freq Level Factor Level Line Limit Remark dBuV dB dBuV/m dBuV/m MHZ 114.390 36.08 -17.11 18.98 30.00 -11.02 Peak 129.910 32.17 -16.71 15.46 30.00 -14.54 Peak 142.520 38.50 -17.07 21.43 30.00 -8.57 Peak 229.820 31.17 -16.64 14.53 30.00 -15.47 Peak 243.400 30.17 -16.77 13.40 37.00 -23.60 Peak 844.800 22.17 -2.59 19.58 37.00 -17.42 Peak

DATE: OCTOBER 16, 2008

SPURIOUS EMISSIONS 30 TO 1000 MHz (WORST-CASE CONFIGURATION, VERTICAL)

VERTICAL PLOT Compliance Certification Services 47173 Benicia Street Fremont, CA 94538 Tel: (510) 771-1000 Fax: (510) 661-0888 Data#: 2 File#: 08U12167.EMI Date: 10-13-2008 Time: 14:13:59 Level (dBuV/m) 30 224 418 612 906 1000 Frequency (MHz) (Frement) Ref Trace: Trace: 1 Condition: VERTICAL Test Operator:: Chin Pang Project #: : 08U12167 Company: : Kyocera Configuration:: EUT / Support Equipment Mode : : Normal Target: : FCC Class B

DATE: OCTOBER 16, 2008

VERTICAL DATA

DATE: OCTOBER 16, 2008

| | Prog | Read | | Lorrol | Limit Line | Over | Romark |
|--------|--------------------|-------|--------|--------|---------------|-------|---------|
| | | Pevel | Factor | | | | Kellalk |
| | MHz | dBuV | đВ | dBuV/m | dBuV/m | đВ | |
| 1 | 131.850 | | | | | | |
| 2 | 299.660 | | | | | | |
| 3 | 433.520 | | | | | | |
| 4 | 556.710 | | | | | | |
| 5 6 | 930.160 964.110 | | | | | | |
| 0 | 364.110 | 29.03 | 0.03 | 29.92 | 37.00 | -7.08 | Pear |
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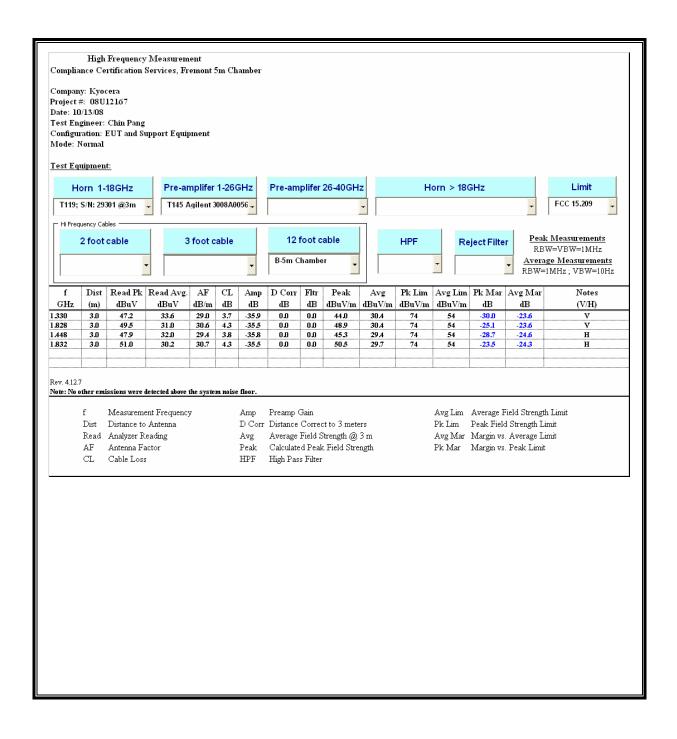
REPORT NO: 08U12167-2A EUT: TRI-BAND CDMA PHONE

7.1.2. RADIATED EMISSIONS ABOVE 1 GHz

EUT WITH SUPPORT EQUIPMENT

SPURIOUS EMISSIONS 1 TO 10GHz (WORST-CASE CONFIGURATION, HORIZONTAL)

DATE: OCTOBER 16, 2008



EUT WITH AC CHARGER

NOTE: No emissions were found within above 1GHz of 20dB below the system noise floor.

REPORT NO: 08U12167-2A EUT: TRI-BAND CDMA PHONE

7.2. AC MAINS LINE CONDUCTED EMISSIONS

TEST PROCEDURE

ANSI C63.4

LIMIT

§15.107 (a) Except for Class A digital devices, for equipment that is designed to be connected to the public utility (AC) power line, the radio frequency voltage that is conducted back onto the AC power line on any frequency or frequencies within the band 150 kHz to 30 MHz shall not exceed the limits in the following table, as measured using a 50 μ H/50 ohms line impedance stabilization network (LISN). Compliance with the provisions of this paragraph shall be based on the measurement of the radio frequency voltage between each power line and ground at the power terminal. The lower limit applies at the band edges.

DATE: OCTOBER 16, 2008

MODEL: K33BIC-03

| Frequency range | Limits (dBµV) | | | | |
|-----------------|---------------|----------|--|--|--|
| (MHz) | Quasi-peak | Average | | | |
| 0.15 to 0.50 | 66 to 56 | 56 to 46 | | | |
| 0.50 to 5 | 56 | 46 | | | |
| 5 to 30 | 60 | 50 | | | |

Notes:

- 1. The lower limit shall apply at the transition frequencies
- 2. The limit decreases linearly with the logarithm of the frequency in the range 0.15 MHz to 0.50 MHz.

RESULTS

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CONFIGURATION 1

6 WORST EMISSIONS

| Freq. | Reading | | | Closs | Limit | EN B | Margin | | Remark |
|-------|-----------|-----------|-----------|-------|-------|-------|---------|---------|---------|
| (MHz) | PK (dBuV) | QP (dBuV) | AV (dBuV) | (dB) | QP | AV | QP (dB) | AV (dB) | L1 / L2 |
| 0.71 | 46.49 | | 13.61 | 0.00 | 56.00 | 46.00 | -9.51 | -32.39 | L1 |
| 0.75 | 45.14 | | 10.04 | 0.00 | 56.00 | 46.00 | -10.86 | -35.96 | L1 |
| 0.77 | 45.85 | | 2.61 | 0.00 | 56.00 | 46.00 | -10.15 | -43.39 | L1 |
| 0.77 | 47.57 | | 1.08 | 0.00 | 56.00 | 46.00 | -8.43 | -44.92 | L2 |
| 0.80 | 47.45 | | 2.19 | 0.00 | 56.00 | 46.00 | -8.55 | -43.81 | L2 |
| 0.82 | 47.13 | | 6.37 | 0.00 | 56.00 | 46.00 | -8.87 | -39.63 | L2 |

REPORT NO: 08U12167-2A EUT: TRI-BAND CDMA PHONE

LINE 1 RESULTS

Compliance Certification Services 47173 Benicia Street Fremont, CA 94538 Tel: (510) 771-1000 Fax: (510) 661-0888 Data#: 7 File#: 08U12167 LC.EMI Date: 10-10-2008 Time: 09:53:32 Level (dBuV) ISPR CLASS-B AVERAGE Prequency (MHz) (Line Conduction) Trace: 5 Ref Trace: Condition: CISPR CLASS-B Test Operator:: Doug Anderson Project #: : 08U12167 Company: : Kyocera Wireless Configuration:: EUT w/Travel Charger and Headset : (Configuration 1) : Charging Mode: : FCC Class B Target: Voltage: : 115VAC / 60Hz : L1: Peak (Blue); Average (Green)

DATE: OCTOBER 16, 2008

LINE 2 RESULTS

Compliance Certification Services 47173 Benicia Street Fremont, CA 94538 Tel: (510) 771-1000 Fax: (510) 661-0888 Data#: 14 File#: 08U12167 LC.EMI Date: 10-10-2008 Time: 10:04:03 Level (dBuV) ISPR CLASS-B <u>AVERAGE</u> 0.150.2 0.5 30 10 Prequency (MHz) (Line Conduction) Trace: 12 Ref Trace: Condition: CISPR CLASS-B Test Operator:: Doug Anderson Project #: : 08U12167 Company: : Kyocera Wireless Configuration:: EUT w/Travel Charger and Headset : (Configuration 1) Mode: : Charging : FCC Class B Target: Voltage: : 115VAC / 60Hz : L2: Peak (Blue); Average (Green)

DATE: OCTOBER 16, 2008

CONFIGURATION 2

6 WORST EMISSIONS

| CONDUCTED EMISSIONS DATA (115VAC 60Hz) | | | | | | | | | | |
|--|-------------------------------|--|-------|-------|-------|-----------------|--------|---------|--------|--|
| Freq. | Reading | | | Closs | Limit | EN_B | Margin | | Remark | |
| (MHz) | PK (dBuV) QP (dBuV) AV (dBuV) | | (dB) | QP | AV | QP (dB) AV (dB) | | L1 / L2 | | |
| 0.15 | 55.28 | | 20.70 | 0.00 | 66.00 | 56.00 | -10.72 | -35.30 | L1 | |
| 3.58 | 42.29 | | 36.72 | 0.00 | 56.00 | 46.00 | -13.71 | -9.28 | L1 | |
| 3.68 | 44.05 | | 36.79 | 0.00 | 56.00 | 46.00 | -11.95 | -9.21 | L1 | |
| 0.15 | 54.50 | | 18.00 | 0.00 | 66.00 | 56.00 | -11.50 | -38.00 | L2 | |
| 3.47 | 42.34 | | 33.33 | 0.00 | 56.00 | 46.00 | -13.66 | -12.67 | L2 | |
| 3.68 | 43.89 | | 35.62 | 0.00 | 56.00 | 46.00 | -12.11 | -10.38 | L2 | |
| 6 Worst Data | | | | | | | | | | |

REPORT NO: 08U12167-2A EUT: TRI-BAND CDMA PHONE

LINE 1 RESULTS

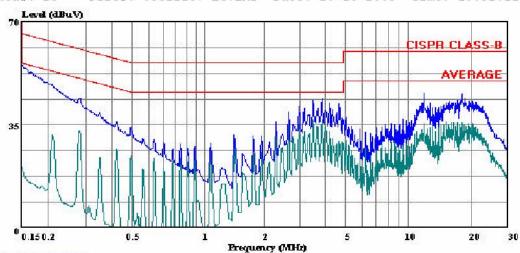
Compliance Certification Services 47173 Benicia Street

DATE: OCTOBER 16, 2008

MODEL: K33BIC-03

Fremont, CA 94538 Tel: (510) 771-1000 Fax: (510) 661-0888

Data#: 28 File#: 08U12167 LC.EMI Date: 10-10-2008 Time: 10:52:11



(Line Conduction)

Trace: 26 Ref Trace:

Condition: CISPR CLASS-B Test Operator:: Doug Anderson Project #: : 08U12167

Company: : Kyocera Wireless

Configuration:: EUT w/Headset, PC, Printer, Modem

: (Configuration 2)

Mode: : Normal
Target: : FCC Class B
Voltage: : 115VAC / 60Hz

: L1: Peak (Blue); Average (Green)

LINE 2 RESULTS

Compliance Certification Services 47173 Benicia Street Fremont, CA 94538 Tel: (510) 771-1000 Fax: (510) 661-0888 Data#: 21 File#: 08U12167 LC.EMI Date: 10-10-2008 Time: 10:31:01 Level (dBuV) ISPR CLASS-B AVERAGE 35 0.150.2 0.5 5 30 Prequency (MHz) (Line Conduction) Trace: 19 Ref Trace: Condition: CISPR CLASS-B Test Operator:: Doug Anderson Project #: : 08U12167 Company: : Kyocera Wireless Configuration:: EUT w/Headset, PC, Printer, Modem : (Configuration 2) Mode: : Normal Target: : FCC Class B Voltage: : 115VAC / 60Hz : L2: Peak (Blue); Average (Green)

DATE: OCTOBER 16, 2008