

Mr. Timothy Johnson ATCB

**RE:** Kyocera Wireless Corp. **FCC ID:** OVFKWC-K24B

Attached: Exhibit A Keyocera-CDMA-Draft-1-updated. Exhibit B ATCB003858 Kyocera Response Exhibit C 82-N8865-IEN\_Rev002 Draft User Guide

Dear Mr. Johnson,

Please find forthwith the responses to the questions submitted to APREL Laboratories in respect to the above noted FCC ID.

For Questions numbered 1, 2, 4, 5, 9, 14, and 21 Kyocera Wireless have provided the responses which have been included as Annex B and C. APREL Laboratories have incorporated the proper power level to which the device under test was running at into the report.

# 3) Please explain what is meant by the version of the standard is C63.19 – 2006/5. There are some differences between the 2005 and 2006 editions. Additionally, the FCC insists that all tests for both M and T coils use the same version. Please define.

The T-Coil tests were executed to the latest 2006 version of the standard. In support of the RF evaluation the 2006 version of the standard was not released and as such would not be relevant to this class 2 permissive change which is in support of a T-Coil test.

## 6) Page 5 of the report mentions an overall M rating. Is this correct or should this be a T rating?

This is a type error and has been corrected in the final report.

## 7) It is uncertain why the table on page 30 which mentions 7-7 actually appears different than given in the standard.

This table has been taken from an internal test procedure here at APREL Laboratories and was written to further clarify the statements made in table 7-7 of the standard. As the table from the standard is misleading and technically incorrect we have issued an internal document which is used so as to avoid internal misunderstanding.



8) It appears that testing was performed in July, but test equipment was all due for calibration in June/May (see page 32). Please explain.

This is a type error and should not have the word "due" included in the table heading. This has been corrected in the final report.

# 10) On page 36 & 37 please explain why the tabular data appears to be a few dB different than shown on the plots. Page 38 at first impression appears to be correct.

This is a mistake with the automated graph generation, this has been corrected in the updated report.

### 11) Page 41 does not define the worse case channel reported as implied.

It is not a requirement of the standard to test every channel within the up link band. All channels were assessed and the data reported was the same for each channel at each frequency band.

## 13) It appears that the 900 MHz frequency response should be compared to the limits of Figure 7-1, not 7-2. Please review data provided.

This has been corrected in the final report.

## 15) It appears that contour and field distribution plots were only provided for 800 MHz CDMA. Please provide for 1900 as well. Note the following:

The plots have been added to the final report.

### 16) Volume setting should be documented.

The device was tested at the maximum volume setting.





17) It is uncertain if a sine wave or P.50 test signal was used. If a sine wave signal was used, it is uncertain how the voice coder will handle it (i.e. assurance that it will pass CW correctly). Also some base station simulators require a special vocoder calibration. If so, calibration details should be provided and clear. If a P.50 signal was used, this generally requires integration over time because of the variation of amplitude over time. Information regarding proper time lengths should be provided.

Please NOTE that the following statement was taken from the test report.

### "CDMA Audio Signal

For the purpose of CDMA testing the P.50 signal is fed through the base station emulator (CMU200) and normalized via a simple calibration routine to ensure that the signal is within the required tolerances and not in saturation. The signal after calibration is generally around -18dBm +/- 0.1dBm."

The time period to which measurements were being made is over 2 to 3 minutes depending on the measured output.

18) Use of multiple signal types for the different measurements should be clearly documented and justified. Example 1 KHz CW for ABM1 per 6.3 procedure, and P50 for frequency response per 6.4. Currently the specific signal types actually used (vs. a generic procedure) could not be determined.

We did the measurements with P.50 per 6.4 of the 2006 standard.

# 19) For ABM2 measurements, please justify integration times used and ensure inclusion of the whole audio band. Additionally, please help address the FCC's concern with "demonstration of the ability to power sum as cited below".

The spectra plus software automatically gives the average reading of the whole audio band.

The average time set is sufficiently long enough (about 2 to 3 min) to acquire all data needed to make a measurement.

This is not a circular



20) It is uncertain if measurements under section 6.4 were used. If so, the FCC has specific concerns, such as the input should be directly measured (FCC Desires measured, not calculated). If not we are told we must consult with the FCC for further information. Please explain.

All the measurements were done per 6.4 of the 2006 Standard and the p50 input was directly applied and measured.

### 22) Report does not appear to document AWF factor used.

For CDMA, we set AWF=0 as per the guidance from the 2006 version of the standard.

# 23) Please explain if the CDMA is IS95, IS2000, or 3GPP based handset. Test configurations should follow FCC recently released 3G policies. The configuration must be fully justified and documented.

CDMA setting was IS2000.

The base station was set up at IS2000 during the test following the latest guidance from the FCC which was available at time of test.

I trust that you have sufficient information to proceed with this application.

Thanks,

Stuart Nicol.

