

Mr. Timothy Johnson ATCB

RE: Kyocera Wireless Corp. **FCC ID:** OVFKWC-K24-2J0

Attached:

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, 3, 4, 5, and 6 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.

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 and this is the table which is included in the test report.

8) Page 17 – Please verify the date use for ANSI C63.19.

This part of the document is taken from the specification for the TMFS. Both the TMFS specification and the report will reflect this change going forward. Please note that it is stated within the report that the 2006 version of the C63.19 standard was used for all testing.

10) FCC does not allow for reduced RF power or limited capability on protocol of air interface for HAC modes. It is uncertain how this device was handled.

This device was tested at the maximum rated RF power as per the manufacturer. The protocol was run via a base station emulator and controlled via the IS2000 standard and this is described on page 28 and 35 of the test report. If additional information is required please provide further clarification as to what is needed and we will provide this.



11) Volume setting should be documented.

The volume was set at full.

12) It appears the communication test set may have been out of calibration. Please review page 33.

As per our internal QA system and ISO17025 guidelines we have placed this piece of equipment into a 2 year cycle. This will now be updated on our report moving forward.

13) On page 42 please explain why the tabular data appears to be different than shown on the plots. Page 38 at first impression appears to be correct.

The plots represent the data collected to determine the peak point for each measurement position. This data was collected using a 1KHz sine wave as per section 6.3, to save time in measurement. Once the peak was determined a P50 signal was injected as per section 6.4, this data is represented in the table on page 42.

14) 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.

As stated in the answer to question 13, a sine wave was used for the purposes of determining the peak as per section 6.3 and a P.50 was used as per section 6.4 at each peak point. Integration time used was 33 seconds. Our P50 signal has a length of 11s, integrating over 3 times its period should provide an adequate reading.

15) 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.

Measurements under section 6.4 were used. The input signal was directly measured from the source and met the testing signal requirements outlined in section 6.3.2

16) Report does not appear to document AWF factor used.

This is a type error and the reference given on page 35 as AWB = Zero should have read AWF = Zero.

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18) Calibration of the probe does not appear to address if the probe was calibrated as part of the system (specific cable, measuring amplifier, etc). Information from FCC suggests that generally these are calibrated as a system and that frequency and amplitude are calibrated for the combination, and in some cases even includes a specific cable.

The probe was calibrated as part of the system along with all ancillary equipment using a Helmholtz Coil and TMFS as per C63.19 2006. We then ran a verification measurement using the complete system and associated equipment on the TMFS prior to testing the DUT to confirm that the system is acting as originally designed and calibrated.

19) Please comment on the system and how the system meets the requirements of D.17.

For the full band integrator we utilize a physical quantity (filter) which is applied between the T-Coil probe and data acquisition card. This is a permanent feature of our system and remains as a constant. For the half band integrator the data from table D.8 is adopted within our software and is applied as a post processing correction factor to ABM2.

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

Thanks,

Stuart Nicol.