



American Telecommunications Certification Body Inc.
6731 Whittier Ave, McLean, VA 22101

August 20, 2007

RE: Airo Wireless Media, Inc.

FCC ID: QDL-A25TVVJ

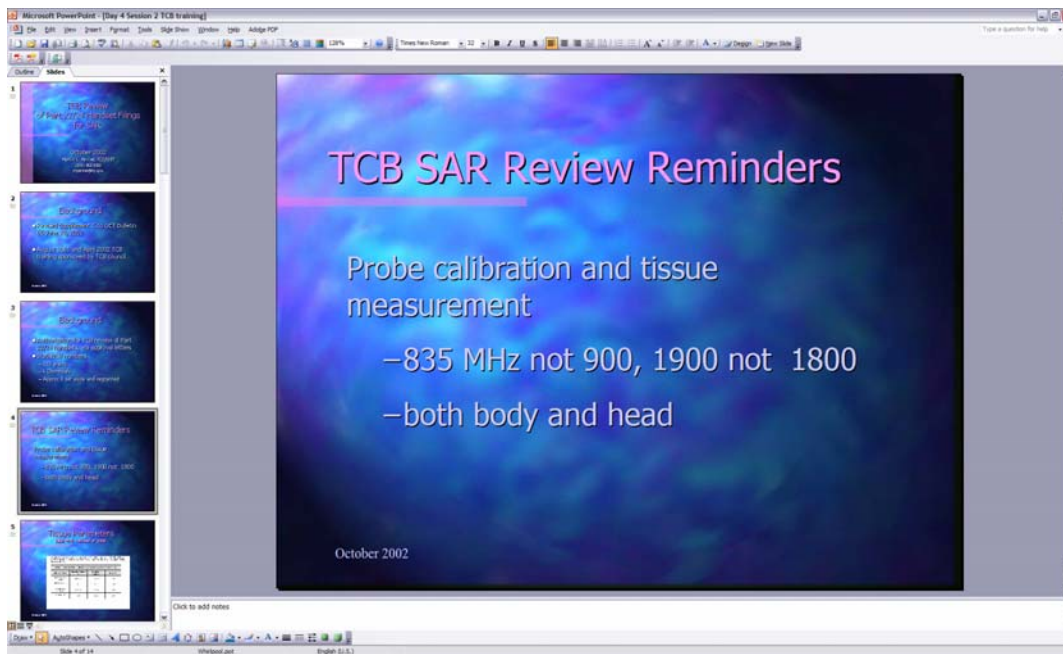
After a review of the submitted information, I have a few comments on the above referenced Application. Depending on your responses, kindly understand there may be additional comments.

- 1) Please provide an appropriate agency letter for this application.
- 2) Note that due to various concerns recently seen about proper authority being given to others for FCC and/or IC matters, the agency letter should be signed by someone traceable to have the proper authority. For instance, the FCC site shows Hicks Chip as the correct contact of authority for FCC matters. Therefore the agency letters & confidentiality letters should be signed by this contact or alternatively a letter showing who he has "deputized" to sign on his behalf may be provided as well. Please correct this.
- 3) FYI...A multi-turn ferrite appears on the AC adapter cable. Please note that the final version of this device must incorporate a permanently attached ferrite (not a snap on ferrite). The ferrites shown in the photographs appear to be snap-on and would not be allowed by the FCC for this type of device.
- 4) The label shows FCC ID "QDLA25TVVJ" while the 731 form, SAR Report, EMC Report shows "QDL-A25TVVJ". Please confirm which FCC ID is correct and correct all affected exhibits.
- 5) Labeling exhibit should include placement of the label on the device as well.
- 6) Tune Up Procedure and Operational Descriptions have not yet been received?
- 7) Users Manual Page 11 references and incorrect FCC ID.
- 8) This device contains an external GSM antenna connector (i.e. page 2 & Page 14 of the users manual). This will require additional ERP/EIRP information and MPE calculations and possibly spurious emissions. The manual should also provide specific guidance on the antennas approved for use with this connector. Currently this is not covered by this application.
- 9) Page 15 mentions that a minimum distance of 2.5 should be maintained between user and device. This is normally required for body worn, but not head used positions. Please correct.
- 10) Within the users manual, the RF exposure info should also explain that the device is not approved for body worn use with any accessories utilizing metal. For instance:
"Body-worn operations are restricted to belt-clips, holsters or similar accessories that have no metallic component in the assembly and must provide at least --cm separation between the device and the user's body."
- 11) Test report appears to only provide emissions designator of GXW for GSM. Manual mentions GSM, GPRS and Edge compliant. Please note that this is sufficient for GSM and GPRS. However Edge requires emissions designator G7W. Additionally certain tests should be tested for both modes (i.e. power [worse case ERP, EIRP], bandwidth, bandedge, etc.)
- 12) GSM frequencies listed on the 731 form should cite 824.2 – 848.8 and 1850.2 – 1909.8. Please correct 731.
- 13) Power for BT is listed as conducted power on the 731 form which is correct. However power should be listed as ERP for Part 22 (1.16 W) and EIRP for Part 24 (0.714 W). Please correct.
- 14) Emissions designators on the 731 form for GSM should cite 300KGXW and 300KG7W. Please adjust.
- 15) The Bluetooth supports V2.0. Due to difference in modulation, envelope, and wider bandwidth, certain tests should be repeated for all modulations (i.e. power, bandwidth, band edge, spectral density, etc.). Also note that 20 dB bandwidth for new modulation is > 1 MHz. Please review.

- 16) If possible, for the GSM portion of the device please provide information regarding both DC voltages AND currents applied into the several elements of the final radio frequency amplifying device for normal operation over the power range been provided? (2.1033(c)(8)).

SAR:

- 17) Please note that although the FCC accepts verifications done within 100 MHz of the center frequency, they have issued information during training that they want 835 MHz calibration done – not 900 MHz. Please correct this in the future.
- 18) SAR Report cites ¼ crest factor for GPRS on page 5. However information found in the manual cites the GPRS is class 12 compliant which would be a ½ crest factor – which appears to possibly be correct on data plots. Please review/correct.
- 19) Tissue dielectric parameters and probe factors must be measured at mid band frequencies (i.e. 835 MHz). See below....It is also uncertain if the probe factors of +/- 50 MHz or +/- 100 MHz apply under the calibration certificate given the note given.



- 20) Please explain if this device can send data while voice mode is active. If so, then GPRS mode would be required to be tested at the head level as well.
- 21) Please explain compliance to worse case mode for Edge compliance as well. While edge is lower power, the crest factor is doubled as well. Maybe measurements of the worse case position should have been repeated for Edge mode?
- 22) Permittivity and conductivity of Dipole validation is expected to be within 5% of the values used during the original dipole calibration. Some values exceed this.
- 23) SAR report appears to be missing:
- Descriptions of coarse area scan procedures, including grid size, area shape and size
 - Descriptions of interpolation procedures used to locate peak SARs at a finer spatial resolution
 - Descriptions of high-resolution cube volume or "zoom" scan procedures used for local scan; list measurement and interpolation resolutions
 - Descriptions of extrapolation procedures used to estimate SAR values adjacent to phantom surface (unreachable due to probe case and boundary effects)
 - Descriptions of within-cube interpolation procedures to get 1 mm or 2 mm SAR grid
 - Description of averaging (integration) procedures to get 1-g SAR from final interpolated grid
 - Report does not defined if the device is a production unit or identical prototype.

- h) Describes the positioning procedures used to evaluate the highest exposure expected under normal operating configurations
 - i) Z-axis plots are required for worse case results.
 - j) A tabulated list of the error components and uncertainty values contributing to the total measurement uncertainty (Suppl C App. D)
 - k) Reporting the combined standard uncertainty and expanded uncertainty (for $k=2$) of each test – 30% or less expected
- 24) Without Z-axis or other information, the following could not be determined:
- a) Distance between the measurement point (distance + offset) at the probe sensor location (geometric center behind the probe tip) and the phantom surface is < 8.0 mm and maintained at a constant distance of +/- 1.0 mm during an area scan to determine peak SAR locations
 - b) When Probe boundary effect compensation is not used the probe tip should be positioned at least half a probe tip diameter from the phantom surface during area and zoom scans.
 - c) The first 2 measurements points in a zoom scan, closest to the phantom surface, should be within 1 cm of the surface.



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The items indicated above must be submitted before processing can continue on the above referenced application. Failure to provide the requested information may result in application termination. Correspondence should be considered part of the permanent submission and may be viewed from the Internet after a Grant of Equipment Authorization is issued.

Please do not respond to this correspondence using the email reply button. In order for your response to be processed expeditiously, you must submit your documents through the AmericanTCB.com website. Also, please note that partial responses increase processing time and should not be submitted.

Any questions about the content of this correspondence should be directed to the sender.