

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

August 1, 2002

RE: BROMAX COMMUNICATIONS, INC.

FCC ID: O6M-WE302

After a review of the submitted information, I have a few comments on the above referenced Application.

- Most device are placed underneath the phantom and the liquid depth above is specified to be 15 cm. However, this device was tested from the side of the box (vs. underneath) and therefore the distance as you move away from the device through the liquid (in this case will be horizontally) does not appear to give you 15 cm. Please justify acceptance of testing from the side of the box vs. underneath the box, given the liquid does not provide a 15 cm 'depth' as you move transversely away from the device.
- 2) Is manufacturer/calibration plots available for the dipole used for system verification that includes a list of measured tissue dielectric parameters, ambient and tissue temperatures during the calibration. These values ($\epsilon \& \sigma$) should be within 5% of those used during testing.
- 3) The test report only provides test data for the lowest channel. However the procedure given in the test report (which also match 1528/supplement C) on page 6 of 30 (last paragraph) and page 17 of 30 (last paragraph) state that the middle channel is tested first and if this is at least 2 dB below the SAR limit, the high and low channel is optional. Please provide further justification for only providing data for the lowest channel.
- 4) A field probe must be calibrated in tissue media with the target dielectric parameters specified in Appendix C of IEEE 1528, corresponding to the operating frequency ranges of the test device. Probe conversion factors by extrapolation is not allowed for TCB approval and the calibration should be performed within 5% target dielectric property window for the testing performed (dielectric information was not specified in calibration information). Please provide probe calibration information for the 2.4 GHz band measured. Also please note that the SAR correction factors listed in the report and were used are not exactly as those that appear on the calibration information already provided.
- 5) The test report claims a Crest Factor of 8. We understand that you are awaiting justification from the manufacturer.
- 6) When measuring pulsed signals with low duty factors or high peak-to-average ratios, the probe must be calibrated with correction factors to accurately measure SAR with respect to the average power. Given a Crest Factor of 8, please provide information regarding the probes correction factors for low duty cycles.

Timothy R. Johnson Examining Engineer

Direct Phone: 404-414-8071

mailto: tjohnson@AmericanTCB.com

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.