



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

July 9, 2003

RE: Icom Incorporated

FCC ID: AFJ262700

I have a few comments on the above referenced Application. This response addresses the SAR report recently uploaded.

- 1) The FCC ID given throughout the SAR report does not match the information given in the filing. Please adjust.
- 2) The SAR scans do not appear to have covered the entire antenna area. Scans should have been performed over the whole antenna and device to ensure that no secondary hot spots occurred in these areas. Was this done during prescans? Please explain.
- 3) Please provide a justification for not providing all SAR plots for each configuration tested on page 54 (i.e. if they had similar SAR distributions, a plot of the highest SAR for each test configuration should be sufficient; otherwise additional plots should be included to document the different SAR distributions – purpose is to identify peak locations relative to device and phantom).
- 4) The SAR test report should include:
 - a) statement of compliance with FCC RF exposure (§2.1093)
 - b) mobile or portable transmitter device category identified
 - c) test device is production unit or identical prototype (47 CFR §2.908)?
 - d) brief description handset holders
- 5) The user manual does not appear to contain any specific information regarding SAR compliance. If it is expected that the users manual will be updated for this information, please provide an updated users manual for review.
- 6) Testing appears to have taken place over a 2 day period (5/12 & 5/13). Note that dipole validation test results for each date of device testing must be provided, but it appears to only have been provide for 5/12.
- 7) The test date on the cover of the report 5/14 does not appear to match the actual test dates. Please correct.
- 8) P1528 specifies the use of a phantom @ 450 MHz to be 700x600mm with a thickness of 6.3 mm as shown in table 8.2. FCC information from various training has stipulated L and W at $\geq 0.6 \lambda$ (apprx. 400 mm at 450 MHz) and $< 6.5 \pm 0.2$ mm with $< 0.5\%$ sagging. It appears that the phantom used was 2 mm thickness. Please explain how compliance with the sag requirements if the phantom was achieved with only a 2 mm thickness.
- 9) The calibration of the probe does not appear to have shown boundary effect error measurements or measurement uncertainty issues addressed in its calibration. Please provide this information.
- 10) Please provide further information regarding the reference dipole (i.e. manufacturer, model, serial, etc.). Also, please provide a plot of return loss data for the dipole used. Is original manufacturer calibration information available?
- 11) Although the dipole verification may have been performed for 450 MHz, the FCC asks to provide the liquid dielectric parameters measured at device mid-band frequencies as well for each day of testing.
- 12) It appears as if probe boundary effect compensation was not used (section 5.6.4.4). The FCC has specified that 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. It appears that the closest measurements were made at 4mm (page 60) while the probe diameter is also 4 mm (page 62).

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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.