



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

April 21, 2005

RE: Medtronic Inc.

FCC ID: LF537741

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

- 1) According to ANSI C63.4 (13.1.4.1), Portable devices are required to be positioned in each of 3 axis and measured to obtain worst case. This does not appear to have been done. Please review?
- 2) There appears to be an internal and external antenna option associated with this. However test configuration photographs only appear to show the external antenna version. Was the internal antenna version also tested? If so are photographs available? If not, why not?
- 3) It appears the fundamental was measured in average mode. Please note that there is also a limit on the peak emissions that is 20 dB above the average limit (15.35). It is also unsure of what type of modulation was present. If the device contains pulsed emissions, the FCC expects the device to have been measured in peak mode and corrected mathematically for average. Please provide further information as necessary. For instance, what was the peak to average ratio. What type of modulation was present.
- 4) Please explain how the loop antenna (measurement antenna) was positioned and maximized during test. Loop antennas should be checked positioned in Vertical and Horizontal polarities according to ANSI C63.4 at a 1 meter height. Additionally, Vertical polarity should have been rotated about the Vertical axis to obtain worst case (ANSI C63.4 8.2.1). Antenna positioning can dramatically affect the results. No mention of antenna positioning appears in the report. Please explain.

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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.