Subject: Re: KENWOOD TK-370G-2. YOUR FILE MFA-004Q SAR REPORT
Date: Fri, 15 Dec 2000 15:10:29 -0500
From: "Victor H. Kee" <vhk.ultratech@sympatico.ca>
Organization: Ultratech Engineering Labs Inc.
To: "Martha Flom" <martha@mflom.com>

Madam Flom,

1. "W" represent for "Wide Bandwidth" and "N" represent for "Narrow Bandwidth" setting of the radio device under test. Because the effect with the different bandwidth settings to evaluate SAR is not known to us and also it is not mentioned in the reference (OET BULLETIN 65). The SAR measurement was performed with both bandwidth setting of the radio device under test respectively.

2. The tissue conductivity used for the head SAR test (0.76 S/m) is found to be within 5.0% according to the Tissue Dielectric Properties CGI software, based on the 4-Cole-Cole Analysis in "Compilation of the Dielectric Properties of Body Tissues at RF and Microwave Frequencies by Camelia Gabriel, in the FCC's web site(http://www.fcc.gov/fcc-bin/dielec.sh), where 0.742999 S/m is specified as the target conductivity for brain at 835 MHz.

Also the target conductivity for brain at 835 MHz from two software, as listed below, which can be downloaded from the "Member Only" section of the IEEE SC34 committee's web site (http://grouper.ieee.org/groups/scc34/sc2/), are found to be less than or equal to 0.74299 S/m.

Tissue Dielectric Properties : DOS Executable File (Dielec.exe)

Tissue Dielectric Properties : Excel Spreadsheet (Tissue2.xlw)

In addition to this, the IEEE SC 34 committee's standard(Recommended Practice for Determining the Spatial-Peak Specific Absorption Rate (SAR) in the Human Body due to Wireless Communications Devices: Experimental Techniques, Table 4-1, p.46) where the 0.9 S/m is specified as the target conductivity for brain at 835 MHz was still in draft form when the SAR measurements were carried out and as such may be subject to change before the final version is ratified. Since the Camilla Gabriell data is widely published at the FCC and SCC34 web sites, we have used this data to provide target conductivity a dielectric constant data for our tissue samples.

We are currently in correspondence with Kwok to now claify which parameters to use as we have always used those by Camilla Gabriel up until now without incident. The draft standard that Kwok is referencing was not ratified at the time of testing and the Camilla Gabriel tissue parameters are the ones listed in the FCC web site on their tissue parameter calculator as well as those provided under the SCC-34 web page. You may be assured that we will use tissue parameters acceptable to FCC in the future....as soon as we find out which reference they are now accepting. I just hope that they don't change their minds too often after that.

Regards,
Victor

----- Original Message -----
From: Martha Flom
To: vhk.ultratech@sympatico.ca ; JBerger@kenwoodusa.com
Sent: Thursday, December 14, 2000 3:15 PM
Subject: KENWOOD TK-370G-2. YOUR FILE MFA-004Q SAR REPORT

SIR:

Your report has been electronically filed with the FCC and there are two items which have been raised by them and which require your attention, i.e.

FCC Item 7. "In the frequency column of the SAR report summary data, the test configurations have been identified by 'W' and 'N', PLEASE