Gretchen Torres

From: Bruno Clavier [bruno@timcoengr.com]
Sent: Wednesday, November 22, 2006 11:02 AM
To: Bruno Clavier
Subject: FW: Response to Inquiry to FCC (Tracking Number 158006) SAR probe conversion factor for 74H TELEX

From: Generic Office of Engineering Technology [mailto:oetech@fccsun27w.fcc.gov]
Sent: Wed 11/22/2006 10:33 AM
To: Bruno Clavier
Subject: Response to Inquiry to FCC (Tracking Number 158006)

Inquiry:
TIMCO-TCB Request guidance on SAR testing and approval of a Part 74 body-worn tx using an 835MHz reference dipole at offset frequencies.

This request is in follow-up of KDB #556330 submitted by Jon Hughes with Celltech Labs.

Based on Celltech's telephone discussion with Kwok Chan on Nov. 3rd and the Nov. 14th FCC Application Note "SAR Probe Calibration and System Verification Considerations for Measurements at 150MHz - 3GHz" we are requesting authorization to implement the referenced guidelines and subsequent TCB processing.

The following procedure is considered:
1. SAR Probe conversion factors for the testing will be 650 MHz and 750 MHz (numerically assessed by SAR System Manufacturer),
2. SAR System Manufacturer's Reference Dipole frequency will be 835 MHz and alternative system verification method B will be utilized,
3. SAR evaluation would be performed at the low (614 MHz), mid (680 MHz) and high (746 MHz) frequencies of the test device operating band.

The recommended procedures described in the referenced Application Note will be applied and described in the SAR report submittal to TCB.

Response:
You may proceed with the review provided the following are addressed in both the test report and also during the review:

1. Procedures detailed in the Probe Calibration and System Verification Application Note (AP) are followed and specific items/issued identified in the AP are properly addressed in the test report

2. Two probe calibration frequencies are identified in the inquiry. Which calibration point is used for the SAR measurements? This same calibration point should be used with the required tissue dielectric medium according to alternative system verification method B for system verification with the 835 MHz reference dipole. The tissue dielectric medium property used during the dipole and device measurements should be examined according to those illustrated to attachments 1-3 in the Application Note to ensure both probe calibration and tissue medium are adequate

within the device test frequency range. If not, both calibration points (650 & 750 MHz) would need to be used and two dipole measurements according to method B would be necessary, according to the tissue medium dielectric parameters dictated by the probe calibrations and routine measurements. It appears the 650 MHz calibration point might be able to cover all three test frequencie! s; and you will have to check the actual probe calirbation and tissue parameters to be sure.

3. The procedues in the Permit But Ask KDB should be followed for any subsequent follow-up requirements before equipment certification is issued.

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