



PUBLIC NOTICE

Federal Communications Commission
445 12th St., S.W.
Washington, D.C. 20554

News Media Information 202 / 418-0500
Internet: <http://www.fcc.gov>
TTY: 1-888-835-5322

DA 02-1438

June 19, 2002

Office of Engineering and Technology Announces a Transition Period for the Phantom Requirements of Supplement C to OET Bulletin 65

This Public Notice sets forth a transition period requiring the termination of the use of head phantoms other than that specified in Edition 01-01 of Supplement C to OET Bulletin 65 for Specific Absorption Rate (SAR) measurements. It also provides notice of updates of recommended SAR measurement procedures.

In Public Notice DA 01-1557, dated June 29, 2001, which announced the release of Edition 01-01 of Supplement C to OET Bulletin 65, the Commission noted that it intended to issue a future Public Notice specifying a three-to-six-month transition period after which use of the new standard head phantom recommended by IEEE Standards Coordinating Committee 34 would become mandatory. We note that since the end of last calendar year, the new standard head phantom has become commercially available, and that most SAR testing laboratories have acquired the new phantom and have already voluntarily begun using it for compliance verification for the FCC equipment authorization program. We also note that, in December, 2001, CTIA issued Revision 1.1 of its "Method of Measurement for Radiated RF Power and Receiver Performance" for the CTIA Certification Program, in which use of the new standard head phantom is made mandatory after May 31, 2002.

For these reasons, we believe a three-month transition period is adequate. Therefore, we will require that the new standard IEEE SCC 34 head phantom (the "SAM" phantom) be used for all SAR testing in any FCC certification application submitted on or after September 15, 2002.

The Standards Coordinating Committee 34, Subcommittee 2, of the Institute of Electrical and Electronics Engineers, Inc. (IEEE SCC-34/SC-2) has made additional revisions to its draft standard (P-1528) on Specific Absorption Rate (SAR) measurement procedures since the release of Supplement C 01-01. In the interim, this Public Notice provides updated SAR measurement procedures recently recommended by the SCC-34/SC-2 that will replace the current procedures described in Supplement C. Applicants are encouraged to use these new procedures immediately, and are required to use them beginning September 15, 2002.

It is currently indicated in Appendix D of Supplement C 01-01, in the last paragraph of the section “Device Operating Next to a Person’s Ear,” that “If the SAR measured at the middle channel for each test configuration (left, right, Cheek/Touch, Tilt/Ear, extended and retracted) is at least 2.0 dB lower than the SAR limit, testing at the high and low channels is optional for such test configuration(s).” The SCC-34/SC-2 has revised its recommended SAR measurement procedures from 2.0 dB to 3.0 dB. To ensure the most up-to-date procedures recommended by the experts are used for the FCC equipment authorization process, all SAR test results filed with the Commission after September 15, 2002 must follow the 3.0 dB requirement now recommended by the SCC-34/SC-2.

The SCC-34/SC-2 has also revised its recommended procedures for testing wireless handsets with multiple operating modes in the same frequency band. The procedures described in Appendix D of Supplement C 01-01 require all modes with a maximum source-based time-averaged output within 1.0 dB of the mode with the highest output to be tested to demonstrate compliance. The SCC-34/SC-2 has recently replaced its earlier recommendation with new procedures. The new procedures that replace the 1.0 dB requirement described in the current version of Supplement C are described below:

1. When multiple operating modes exist within the same frequency band, test the device in the highest output mode according to the normal Supplement C requirements
2. The following procedures may be used if the difference between the highest output of a low output mode and the lowest output of the highest output mode is more than 2 dB; otherwise, such low output modes should be tested according to the normal Supplement C requirements (the highest and lowest output of an operating mode should be determined with respect to the output for high, middle and low frequency channel of each mode)
 - a. Test each lower output modes in the configuration that resulted in the highest 1-g SAR in the mode with the highest output
 - b. In additional, test the lower output modes in the following configurations when the 1-g SAR for the highest output mode of such configurations are greater than 0.8 W/kg –
 - i. The antenna position and channel that produced the highest 1-g SAR in the for the Left Head Touch Position
 - ii. The antenna position and channel that produced the highest 1-g SAR in the for the Left Head Tilt Position

- iii. The antenna position and channel that produced the highest 1-g SAR in the for the Right Head Touch Position
 - iv. The antenna position and channel that produced the highest 1-g SAR in the for the Right Head Tilt Position
- c. If the 1-g SAR measured for any configuration in each of the lower output mode is $\geq 85\%$ of that measured for the highest output mode, the normal Supplement C requirements should be used to complete the entire set of required tests for such lower output mode(s).

Until Draft Standard P-1528 is adopted by the IEEE, further revisions should be anticipated. Therefore, after Standard P-1528 is adopted for final release, we will revise and reprint Supplement C accordingly. In the interim, all SAR test results filed with the Commission after September 15, 2002, should follow the requirements described above.

Office of Engineering and Technology Contacts: Dave Means and Kwok Chan (301) 362-3000.