

1) The body-worn and hand configurations tested use conductivity and permittivity parameters for brain tissue. Muscle tissue parameters should be used for body-worn and hand configurations. Retest for body-worn and hand configurations with muscle equivalent parameters and appropriate probe calibration for those parameters OR provide a paragraph showing SAR compliance by explaining the effects of muscle tissue parameters on the current data.

Permittivity and conductivity of muscle tissue simulating liquids at 1850MHz is shown in table 1 and at 836 MHz in table 2. FCC recommendation is from <http://www.fcc.gov/fcc-bin-dielec.sh>

	Permittivity	Conductivity
FCC recommendation	54.373249	1.418387
Used brain tissue	41.6	1.72

Table 1. Properties of liquids simulating muscle tissue @ 1850MHz

The used brain tissue has higher conductivity and lower permittivity than the liquid FCC recommends to be used. Thus all SAR values are overestimated.

	Permittivity	Conductivity
FCC recommendation	56.111336	0.946714
Used brain tissue	44.3	0.80

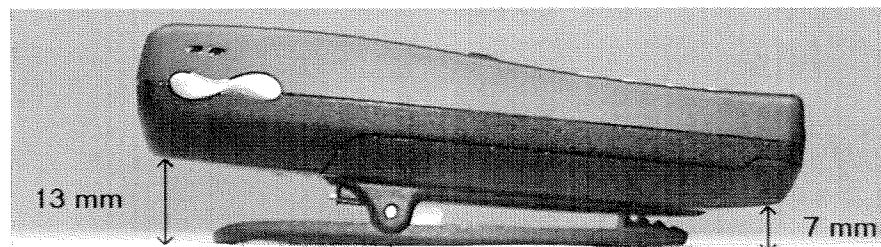
Table 2. Properties of liquids simulating muscle tissue @ 836MHz

FCC recommended conductivity would lead to higher SAR results than the liquid used. On the other hand, the used permittivity compensates the difference caused by the used conductivity.

When the measured SAR values are multiplied by factor 1.18, which is the difference between the conductivity values, the maximum body SAR result changes from 0,93 to 1,10. This approach leads to considerable overestimate of SAR.

2) Provide the separation distance used while testing for body-worn data with the "belt clip against the flat phantom" data.

Separation distance is 13mm at the antenna side and 7mm at the bottom side. This is shown in picture 1.



Picture 1. Separation distance when using SKB-3

3) The full capability of the phone for body-worn configuration (ie: phone in a shirt pocket) was only partially tested as shown with the "display against the flat phantom" data. Additional data with the back side of the phone (without the belt clip) against the phantom will be required to comply with the current version of the manual. As an alternative to additional data, the manual can be revised. If this approach is chosen, the wording "or place the phone in a pocket so that the keypad faces your body" should be removed from the manual ("Radio frequency (RF) signals" heading) and a new page uploaded as an exhibit.

New revised page in the user guide is uploaded separately.

4) Address the conducted power level discrepancies for TDMA 800 and TDMA 1900 modes. For TDMA 800 mode, the tune-up procedure lists the power as 0.478 Watts and the test report lists it as 0.407 Watts. For TDMA 1900 mode, the tune-up procedure lists the power as 0.389 Watts and the test report lists it as 0.372 Watts.

Tune-up procedure powerlevels (for TDMA 800 0.478W and for TDMA 1900 0.389W) are valid for the production. There is no external antenna connector in this product. Conducted powerlevels are merely for reference.

5) FYI: The new Form 731 Corrections exhibit incorrectly lists the conducted power output for TDMA 800 (Cellular) mode. It has been corrected to list the ERP output power of 0.302 Watts. The three frequencies listed in the Test Report for AMPS mode are the same. It is assumed that they should be 824.04 MHz, 836.40 MHz and 848.97 MHz respectively. Please verify this.

Yes