Answers for Curtis-Straus
Re: SAR.230625305.OU5 SAR Report
Prepared By PCTEST Engineering Laboratory, Inc.

1. The target system verification target SAR value was obtained by multiplying the 1W target of $9.5 \mathrm{~W} / \mathrm{kg}$ (IEEE Std P1528 Draft 6.5 Table 7.1) by the actual input power of 0.250 W . Thus, the target SAR value for the system at 0.250 W is:
$9.5 * 0.250=\mathbf{2 . 3 7 5} \mathbf{W} / \mathbf{k g}$.
2. The liquid for system verification was brain-simulating liquid (per Supplement C), whereas the muscle simulating liquid (a different tissue material) was used to assess the Body SAR for the device.
3. Please find attached photographs with measurements indicating a liquid depth of at least 15 cm in the phantom shell.

4. The Area scan is a single layer scan done at 2.5 mm above the phantom surface. The grid data is run in $10 \times 10 \mathrm{~mm}$ increments and cover the whole DUT. A splined is run on the data at 1 mm increments. This is used to determine the local hot spot. The zoom scan is centered on this hot spot. The zoom scan is a cube scan of size $7 \times 7 \times 7$ points at spacing $5 \times 5 \times 5 \mathrm{~mm}$ for a cube size of $30 \times 30 \times 30 \mathrm{~mm}$.
5. The probe tip distance to phantom inner surface during coarse-scan is 2.5 mm (less than half the probe tip diameter).
6. The points are extrapolated to the surface using a $4^{\text {th }}$ order Lagrange polynomial. A 3D spline is run over all sampled and extrapolated points to get points spaced 1 mm apart in all directions. For the 1-gram average, the software then calculates all the $10 \times 10 \times 10 \mathrm{~mm}$ averages. It then finds the greatest value and reports it.

## SAR Calculation:

Each SAR point was found using:
Sum $=(($ Ch1Ave $*$ Gain $) /$ Sense $1+($ Ch2Ave * Gain $) /$ Sense $2+(C h 3 A v e ~ * ~$ Gain)/Sense)

Sense 1-3 = Sensitivity of probe $\mathrm{mv} /\left(\mathrm{mW} / \mathrm{cm}^{\wedge} 2\right)$
Ch\#Ave = Average reading from the Probe Channel
Gain = DC Amplifier Gain (Around 20x)
SAR $=($ Sum $* \sigma * 3770) /(\rho * \mathrm{CF})$
Sum = Sum of 3 channels (from above) ( $\mathrm{mW} / \mathrm{cm}^{\wedge} 2$ )
$\sigma \quad=$ Conductivity
$\rho \quad=$ Tissue Density (usually 1.0 during scan)
CF = Conversion Factor

