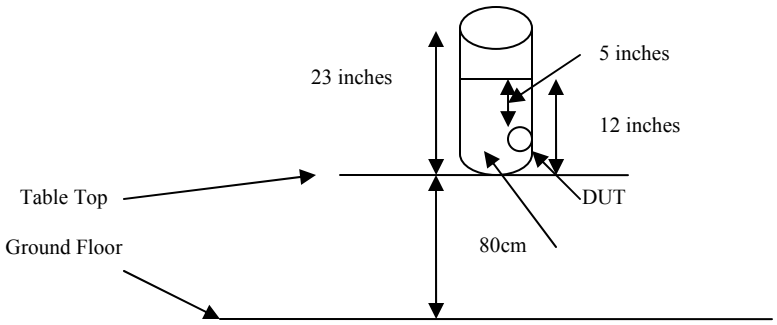
FCC Response Questions

1. **FCC - EMC Test set-up photo is ambiguous – please submit additional photos and/or diagrams showing how device is mounted and describing other proximate or associated apparatus.**

   Transoma – The DUT was placed into a tissue equivalent water sugar mixture used to simulate the attenuation of the human body at 916MHz. This tissue equivalent was contained in a poly-propylene container with a height of 23", diameter of 16", and a thickness of 1/8". The tissue equivalent liquid was filled in the container to a height of 12" so that the DUT was suspended in the tissue equivalent liquid to a depth of 5", and .5" away from the edge of the container. This is the nominal implant depth of our device.



   The antenna is the only other apparatus that is located in the area as that is used to measure the field strength. That distance varies from 3, 10, or 30 meters from the center of the table. Page 25 of the EMC Test Report also has a diagram explaining the test configuration

2. **FCC - If not in filing already, please provide info about liquid ingredients, mixing procedures, relative permeability, and conductivity**

   Transoma – The tissue recipe was constructed as reported by Hartsgrove et. al. in "Simulated Biological Materials for Electromagnetic Radiation Absorption Studies," Biloelectromagnetics 8:29-36 (1987)

The ingredients are listed as percentage by weight

- Water - 56%; De-ionized, 16MΩ^{+} resistivity
- Salt (NaCl) - .76%; 99^{+}% Pure Sodium Chloride
- Sugar – 41.76%; 98^{+}% Pure Sucrose
- HEC 1.21%; Hydroxyethyl Cellulose
- Bactericide .27%

The dielectric constant of the tissue equivalent liquid is 56.8, and the Conductivity (S/m) is 1.07.

Preparation Methods –

- Weigh all ingredients accurately
- Heat Water to 40°C
- Add salt and bactericide while stirring
- Add sugar
- Continue to stir at low speed to minimize the amount of air bubbles in the solution.
- Add the Hydroxyethyl Cellulose
- Remove from heat.
- Continue to stir until mixture thickens
- Let cool to room temperature.

3. **FCC - If not in filing already, please give details about phantom dimensions, wall thickness, material, liquid depth, height above ground.**

   Transoma – The tissue equivalent was contained in a poly-propylene container. The container had a height of about 23", and a diameter of 16". The container was about 1/8" thick, and the tissue equivalent was filled in the container until it was about 12" in height.

4. Response to question 4 has been filed as a separate document for which confidentiality is requested.