

APREL SAM Phantom for OTA 3D Antenna Measurement



The APREL Laboratories SAM phantom has been designed to aid repeatability and positioning for any DUT for both antenna design and OTA measurements. Developed using the IEEE SAM CAD file the phantom is fully compliant with the requirements of the CTIA Test Plan for Mobile Station "Over the Air Performance". Mechanical interface for locating within 3D measurement chambers can be custom made and the standard phantom is compatible with any third party system e.g. SATIMO, NSI, Orbit and ETS. The phantom comes in either white or black and custom colours are available. The phantom is made to strict tolerances and exceeds all criteria specified in the IEEE 1528 standard. Phantoms can be shipped with tissue inserted and hermetically sealed to aid preservation and shelf life.

Features:

- Custom colors available*
- Custom mechanical interface available on request according to submitted specification*
- Interface available on neck side (customer selected)
- Interface available on top of head (customer selected)
- Patented design which eliminates air bubble formation
- Patented design prevents damage to phantom through expansion and contraction due to temperature changes

* Additional Cost

Compliant Standards	IEEE-1528, CTIA Test Plan for Mobile Station Over the Air Performance
SAM	In accordance with the IEEE 1528 standard CAD file
Material	Designed to be fully compliant with CTIA Test Plan for Mobile Station Over the Air Performance
Phantom Shell Shape Tolerance	Designed to be better than ± 0.2 mm
Tissue Simulation Volume	7 liters
Thickness	2 mm ± 0.2 mm 6 mm ± 0.2 mm at NF/MB intersection
Loss Tangent	<0.05
Relative Permittivity	<5
Resistant to Tissue Materials	Resistant to all anti-bactericides used for tissue manufacturing detailed in the CTIA Test Plan for Mobile Station Over the Air Performance
Load Deflection	<0.1mm with sugar water compositions
Phantom Weight	Less than 10kg when filled with simulation tissue

