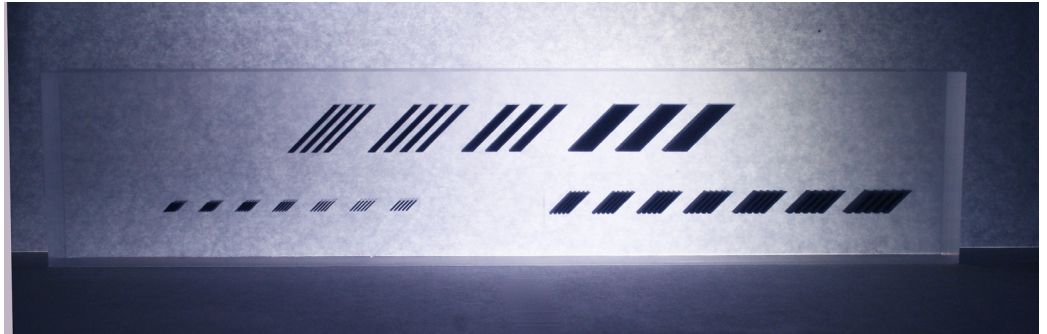


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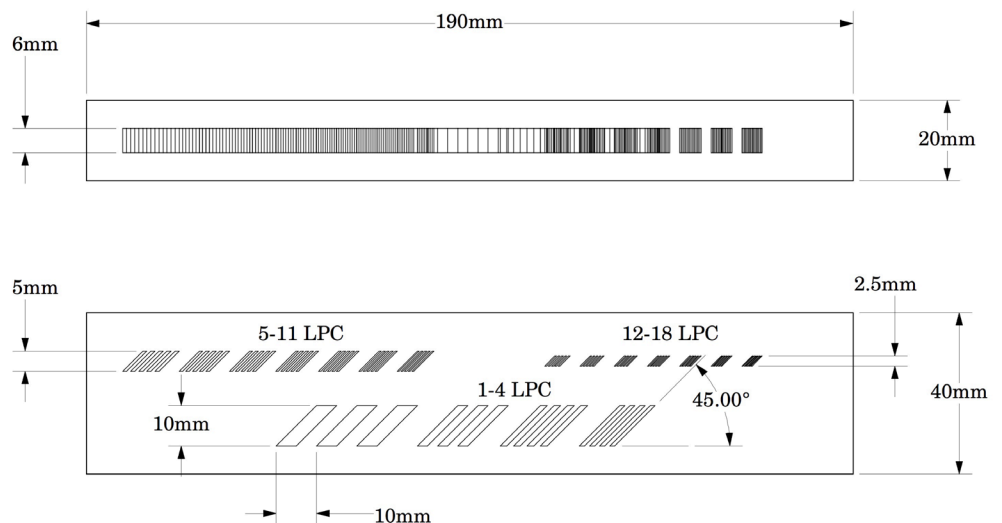


## CTP754 45° High Resolution Gauge

The patented 45° High Resolution Gauge is designed to illustrate the 3-D volume resolution of a CT scanner at a specific imaging protocol. 3-D resolution is important when using CT for volume measurements or modeling such as radiation therapy treatment planning or building patient matched prosthetic devices. This can be used to evaluate the manufacturer's developments of greater isotropic resolution.

Traditionally, we have measured 2-D resolution and then slice thickness or a slice sensitivity profile for the third dimension. The 45° Resolution Gauge provides a simple evaluation that reflects both of these measurements. This is very helpful when selecting protocols and trying to understand the influence of imaging protocols such as reconstruction filter, slice thickness and spiral pitch on the voxel size and precision.

The 45° Resolution Gauge contains 3 gauge sections in a 40mm x 190mm x 20mm clear urethane object. The Gauge is designed to fit into a Catphan® 700, in the slot used by the Wave insert. The contrast in the gauge is created by the aluminum bars set into the clear urethane. Based on the x direction, the gauge sections range from 1 to 18 line pair per centimeter LPCM. The bars are all set at a 45° angle from the axial slice plane.



## The Phantom Laboratory

**phone**  
800-525-1190 or 518-692-1190  
**fax**  
518-692-3329

**mail**  
P.O. Box 511  
Salem, New York 12865  
**shipping**  
2727 State Route 29  
Greenwich, New York 12834

**email**  
info@phantomlab.com  
**web**  
www.phantomlab.com