Slice Sensitivity Phantom

QRM-SSP

Optimize collimation, pitch and image reconstruction for improved slice profile and axial spatial resolution in all types of clinical applications.

The phantom is designed to evaluate the slice sensitivity profile (SSP) of a CT scanner's spiral/helical scan modes.

It contains a 25 micron thick metal foil (Au) of circular shape, embedded in a cylinder of uniform tissue-equivalent plastic. The heavy-metal foil is designed to evaluate all collimations from 0.5 mm to 10 mm (and more) with adequate image contrast.

We suggest to analyze the maximum CT number of the high-contrast insert for a series of axial images.

Specifications

Phantom: length ..... 100 mm
diameter ..... 23 mm

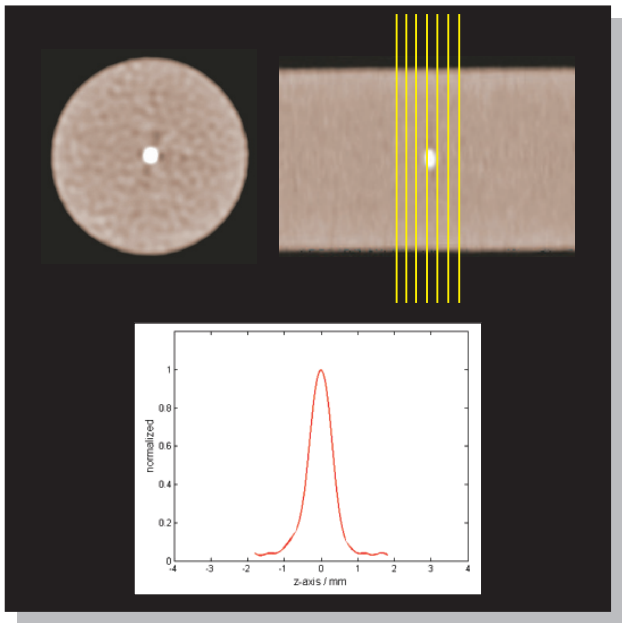
Metal foil: diameter ..... 1 mm
(typically Au) thickness ..... 0.025 mm

Other dimensions or materials are available upon request.

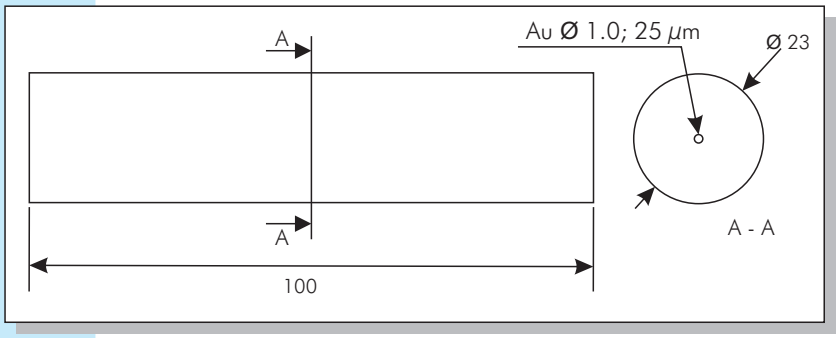
References

[1] A. Polacin and W. A. Kalender, Measurement of slice sensitivity profiles in spiral CT, 1994, Med. Phys. 21, 133–140

Orientation in axial direction on scanner bench



Example for evaluating a scanners SSP



Dimensions of the phantom

V09.19.QL.05

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