

# Thorax Low Contrast Phantom ODA-LC

For image evaluation of low contrast targets with CT, tomosynthesis as well as cone beam CT.



## Features

1. Comparison between CT images and tomosynthesis images.
2. Evaluation of images in three different planes with one scan.
3. A variety of nodules that simulates GGO
4. Quantitative evaluation of image quality, using CNR of simulated nodules
5. Visual evaluation of image quality of simulated nodules, using contrast detail diagram for contrast resolution
6. Optimization of radiation dose in CT scanning
7. Optimization of radiation dose in tomosynthesis
8. Elliptical radiation absorber that simulate human body, to study scattering effect of soft tissue

## Specifications

Materials:

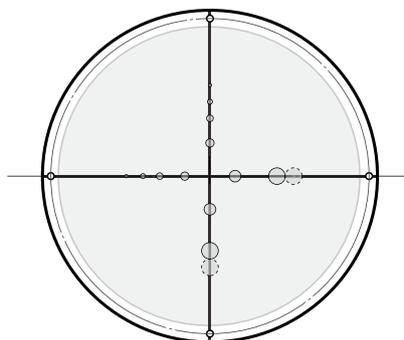
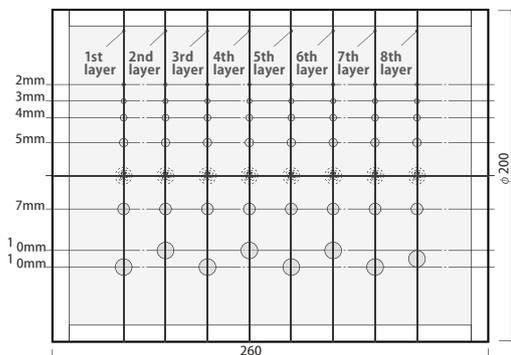
PP, polyurethane foam, polyurethane

Simulated nodules:

Sizes: 2,3,4,5, 7 and 10 mm (0.08, 0.12, 0.16, 0.2, 0.28 and 0.4) dia. in  
HU number: 0, -250, -375, -550, -640, -730, -780, -825

| Modality        | CT               |  | tomosynthesis |
|-----------------|------------------|--|---------------|
|                 |                  |  |               |
| Sectional Image |                  |  |               |
| Absorbed Dose   | 11.9mGy(CTDIvol) |  | 2.18mGy       |
| Tube Voltage    | 120kv            |  | 100kv         |

## Sagittal section



Specific gravity of simulated nodules

\*Specific gravity of the background is 0.14

|           | specific gravity |           | specific gravity |
|-----------|------------------|-----------|------------------|
| 1st layer | 1.06(0)          | 5th layer | 0.24(-780)       |
| 2nd layer | 0.47(-550)       | 6th layer | 0.15(-825)       |
| 3rd layer | 0.35(-640)       | 7th layer | 0.75(-250)       |
| 4th layer | 0.26(-730)       | 8th layer | 0.64(-375)       |

( ): CT

**\*For the radiation absorber in different sizes can be requested as a custom order**