

D100 HCR Test Pattern Phantom

The HCR-Test-Pattern Phantom is a perfect tool to assess inplane resolution of CT and CBCT X-ray systems in a direct visible manner.

The high-contrast resolution D100 phantom visualizes the impact of scan-protocols and image reconstruction algorithms.

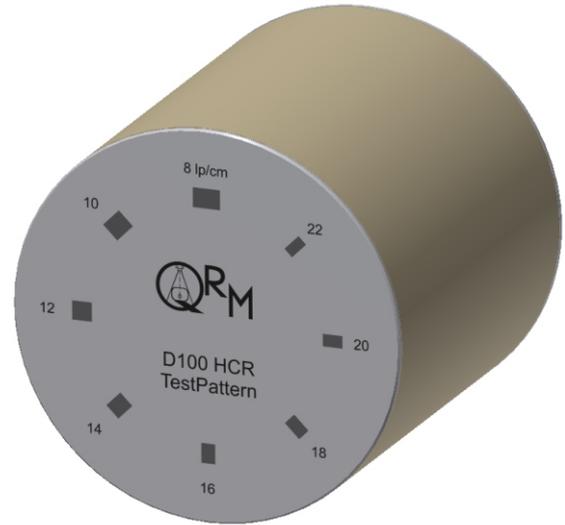
The test pattern is a series of high contrast bars with varying width and spacing from 4.0 mm down to 0.4 mm (table 1) allowing for an order of magnitude in spatial frequency.

The D100-HCR phantom fits excellent in our standard D100 phantoms as QRM-Thorax or QRM-Abdomen.

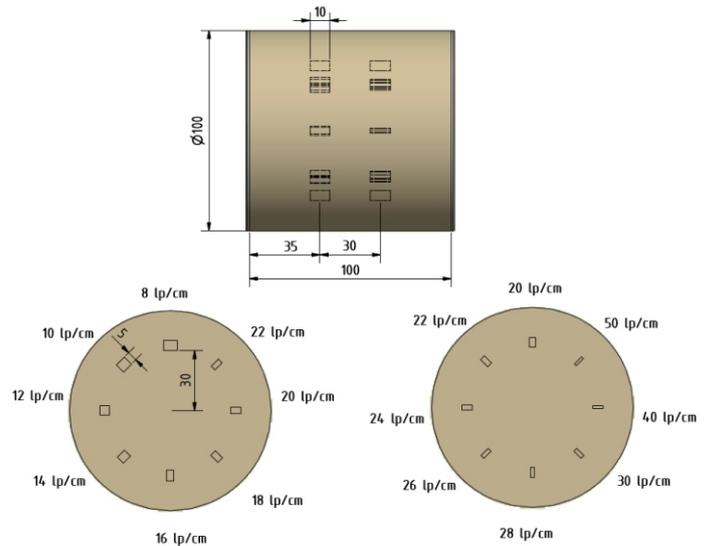
Specifications

- Soft tissue equivalent material approx. 35 HU at 120 kV.
- Overall phantom diameter 100 mm
- Overall phantom length 100 mm
- Phantom weight 500 g

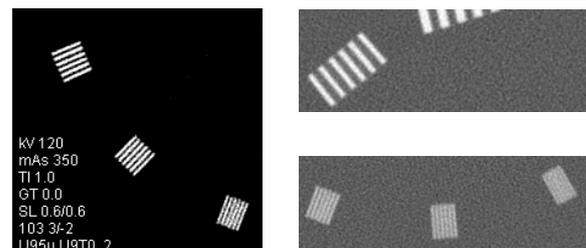
| LP/cm | LP/mm | line (mm) |
|-------|-------|-----------|
| 8 | 0.8 | 0.63 |
| 10 | 1.0 | 0.50 |
| 12 | 1.2 | 0.42 |
| 14 | 1.4 | 0.36 |
| 16 | 1.6 | 0.31 |
| 18 | 1.8 | 0.28 |
| 20 | 2.0 | 0.25 |
| 22 | 2.2 | 0.23 |
| 24 | 2.4 | 0.21 |
| 26 | 2.6 | 0.19 |
| 28 | 2.8 | 0.18 |
| 30 | 3.0 | 0.17 |
| 40 | 4.0 | 0.13 |
| 50 | 5.0 | 0.10 |



D100-HCR Test Pattern Phantom



Geometrical properties of patterns



Examples of X-ray CT-scans