

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

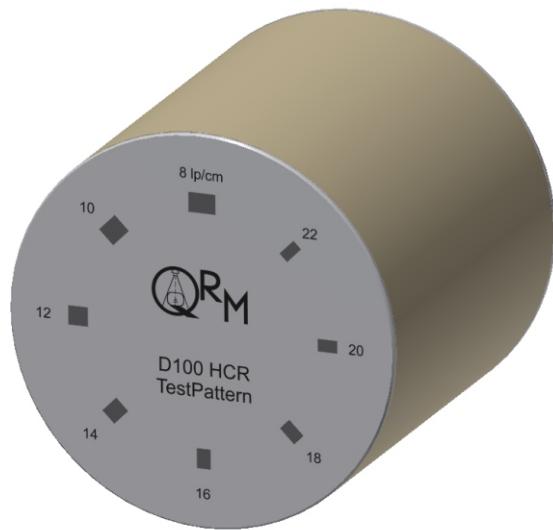
Soft tissue equivalent material
approx. 35 HU at 120 kV.

Overall phantom diameter 100 mm

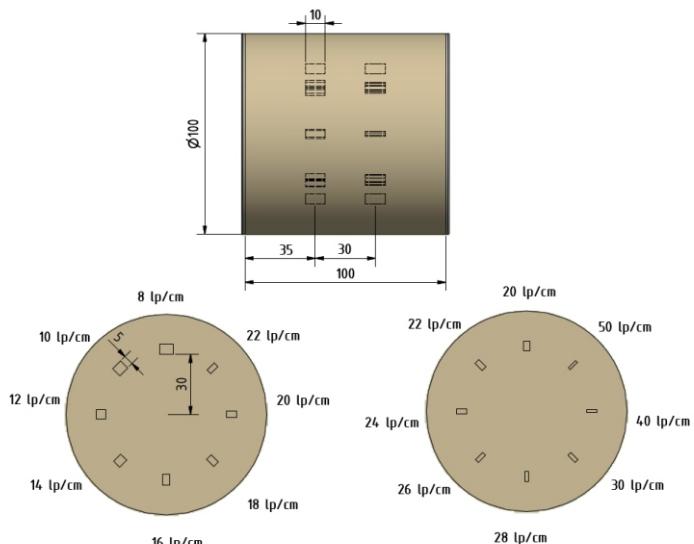
Overall phantom length 100 mm

Phantom weight 500 g

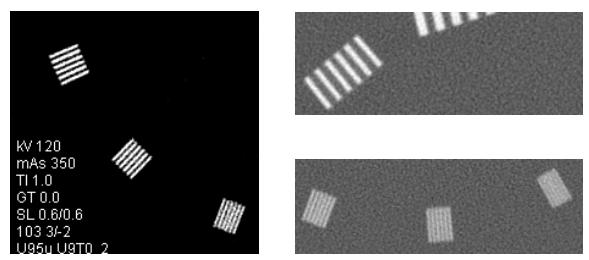
LP/cm	LP/mm	line (mm)
8	0.8	0.63
10	1.0	0.50
12	1.2	0.42
14	1.4	0.36
16	1.6	0.31
18	1.8	0.28
20	2.0	0.25
22	2.2	0.23
24	2.4	0.21
26	2.6	0.19
28	2.8	0.18
30	3.0	0.17
40	4.0	0.13
50	5.0	0.10



D100-HCR Test Pattern Phantom



Geometrical properties of patterns



Examples of X-ray CT-scans