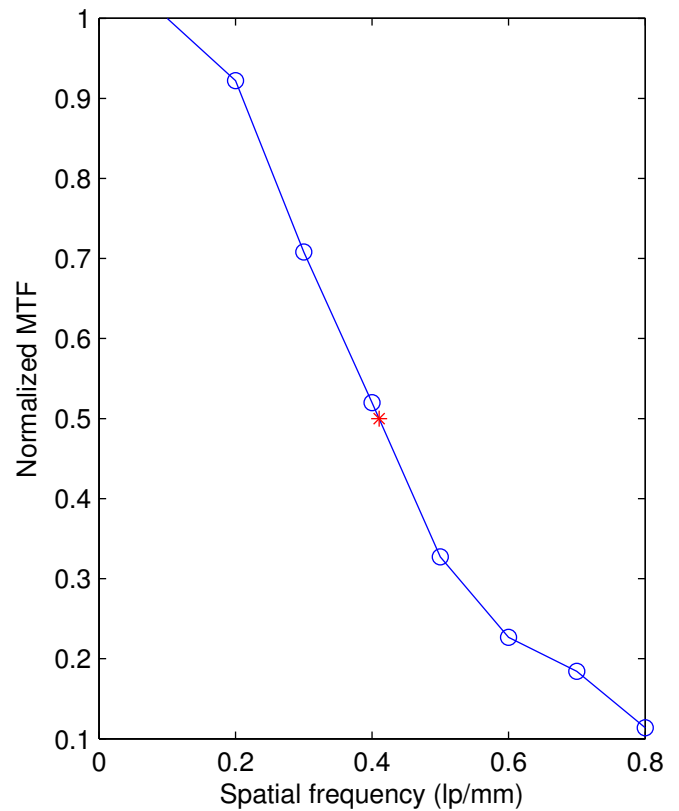# DoseLab CT Imaging QA Results

Summary: Some tests generated a warning

DoseLab version: 6.80
Date: November 25, 2019
Machine: Unit 1, #:3951
Phantom: Catphan 504
Magnification: 99.97%
Energy: 125 kV
Expected slice width: 2.0 mm
Matrix size: 512x512
Performed by: Amy Frederick
Tolerance set: Unit: 1,6,7,8 Small FOV

Scaling discrepancy: 0.1 mm (Pass)
Geometric distortion: 0.1 mm (Pass)
Spatial resolution (50% MTF): 0.41 lp/mm (Pass)
Minimum uniformity (ROI 19): 98.9% (Warning)

CTP404 module results

Contrast ROI details
Measured HU
1: 365
2: 102

HU constancy ROI details
Reference / Measured / Difference
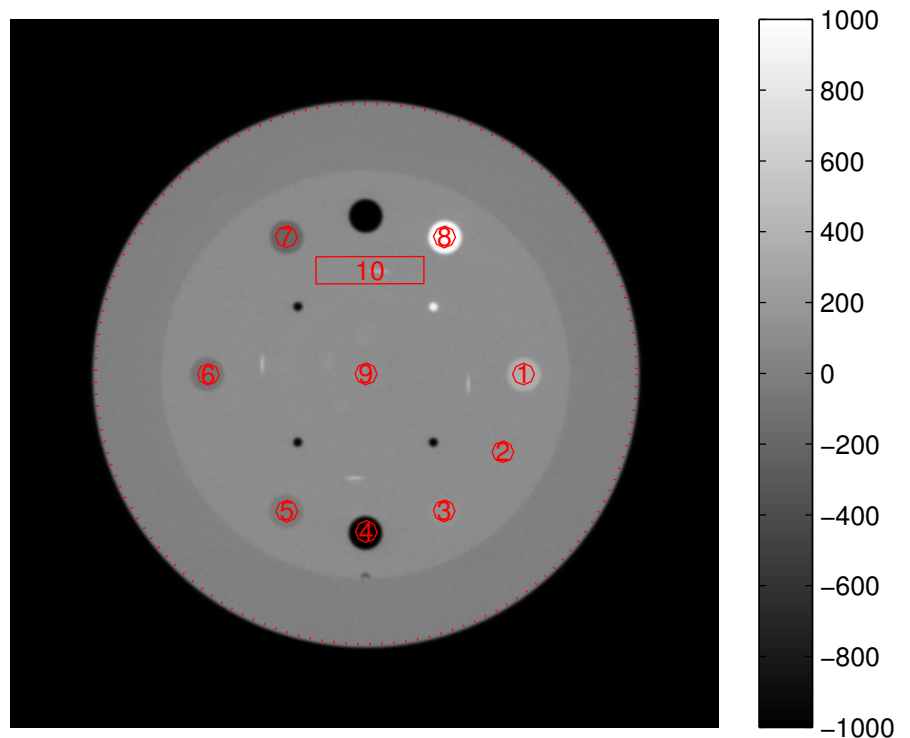3 (Acrylic): 120 / 134 / 14
4 (Air): −1000 / −999 / 1
5 (Polystyrene): −35 / −39 / −4
6 (LDPE): −100 / −95 / 5
7 (PMP): −200 / −189 / 11
8 (Teflon): 990 / 997 / 7
9 (CTP404): 100 / 106 / 6

CTP528 module results

Spatial resolution ROI details
Phantom lp/mm / Normalized MTF
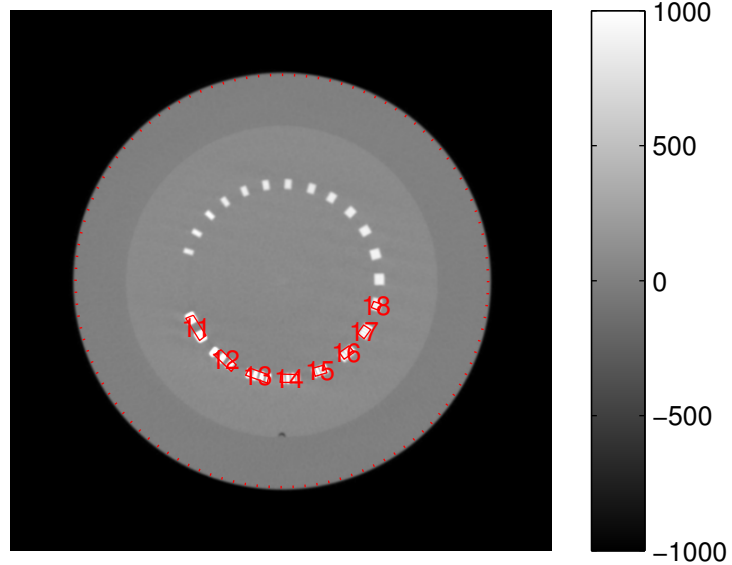11: 0.1 / 1.00
12: 0.2 / 0.92
13: 0.3 / 0.71
14: 0.4 / 0.52
15: 0.5 / 0.33
16: 0.6 / 0.23
17: 0.7 / 0.18
18: 0.8 / 0.11

CTP486 module results

Uniformity ROI details
Measured HU / Uniformity
19: 29 / 98.9%
20: 24 / 99.0%
21: 19 / 99.0%
22: 30 / 99.1%
23: 24 / 99.0%