DoseLab CT Imaging QA Results

Summary: All tests passed

DoseLab version: 6.80
Date: January 06, 2020
Machine: Unit 3, #:3484
Phantom: Catphan 504
Magnification: 99.85%
Energy: 120 kV
Expected slice width: 2.0 mm
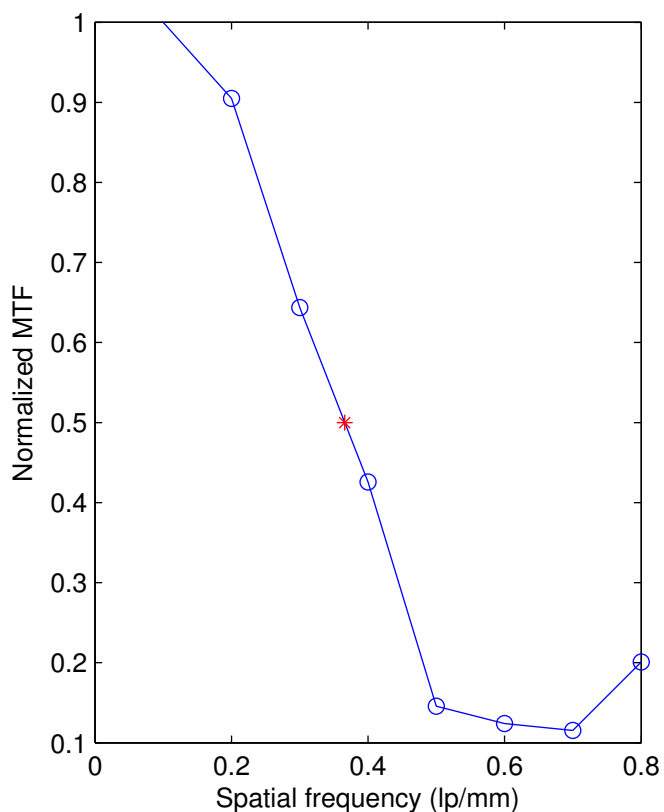Matrix size: 512x512
Performed by: Pedro Martinez
Tolerance set: Unit 3&5 Large FOV

Scaling discrepancy: 0.7 mm (Pass)
Geometric distortion: 0.1 mm (Pass)
Spatial resolution (50% MTF): 0.37 lp/mm (Pass)
Minimum uniformity (ROI 21): 98.7% (Pass)

CTP404 module results

Contrast ROI details
Measured HU
1: 357
2: 98

HU constancy ROI details
Reference / Measured / Difference
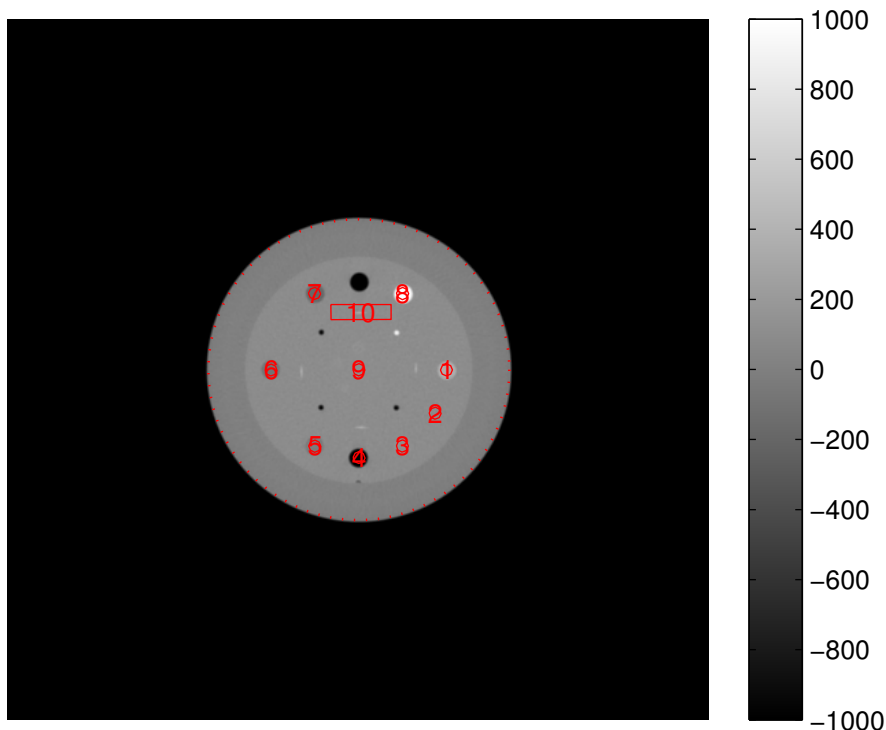3 (Acrylic): 120 / 125 / 5
4 (Air): −1000 / −999 / 1
5 (Polystyrene): −35 / −35 / 0
6 (LDPE): −100 / −90 / 10
7 (PMP): −200 / −183 / 17
8 (Teflon): 990 / 987 / −3
9 (CTP404): 100 / 107 / 7

CTP528 module results

Spatial resolution ROI details
Phantom lp/mm / Normalized MTF
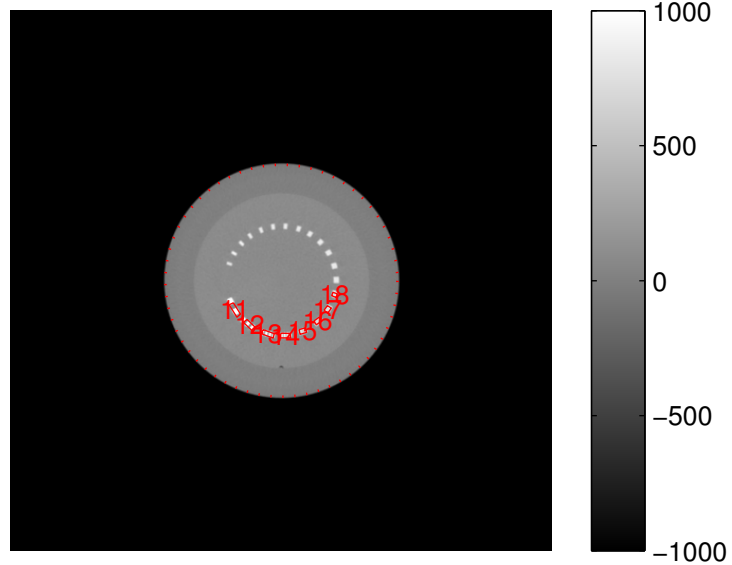11: 0.1 / 1.00
12: 0.2 / 0.91
13: 0.3 / 0.64
14: 0.4 / 0.43
15: 0.5 / 0.15
16: 0.6 / 0.12
17: 0.7 / 0.12
18: 0.8 / 0.20

CTP486 module results

Uniformity ROI details
Measured HU / Uniformity
19: 27 / 98.9%
20: 18 / 98.7%
21: 18 / 98.7%
22: 18 / 98.8%
23: 15 / 98.7%