

# CT AutoQA Lite v3.01

## KFJ-IRO

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Varian Med: Patient Ve                      Serial Number: 1469  
Date Tested: 04/17/2013  
Testing Performed by: DICOM Service

### Scan Parameters

Image #	kV	mA	Time (msec)	FOV(cm)	Table	Filter	Slice(mm)	Mode	File Name
1	125	60	1788	464	118.80	Ram-La	1.98	Axial	60.0001.dcm
2	125	60	1788	464	87.12	Ram-La	1.98	Axial	Image 44.dcm
3	125	60	1788	464	53.46	Ram-La	1.98	Axial	Image 27.dcm
4	125	60	1788	464	13.86	Ram-La	1.98	Axial	.Image 7.dcm

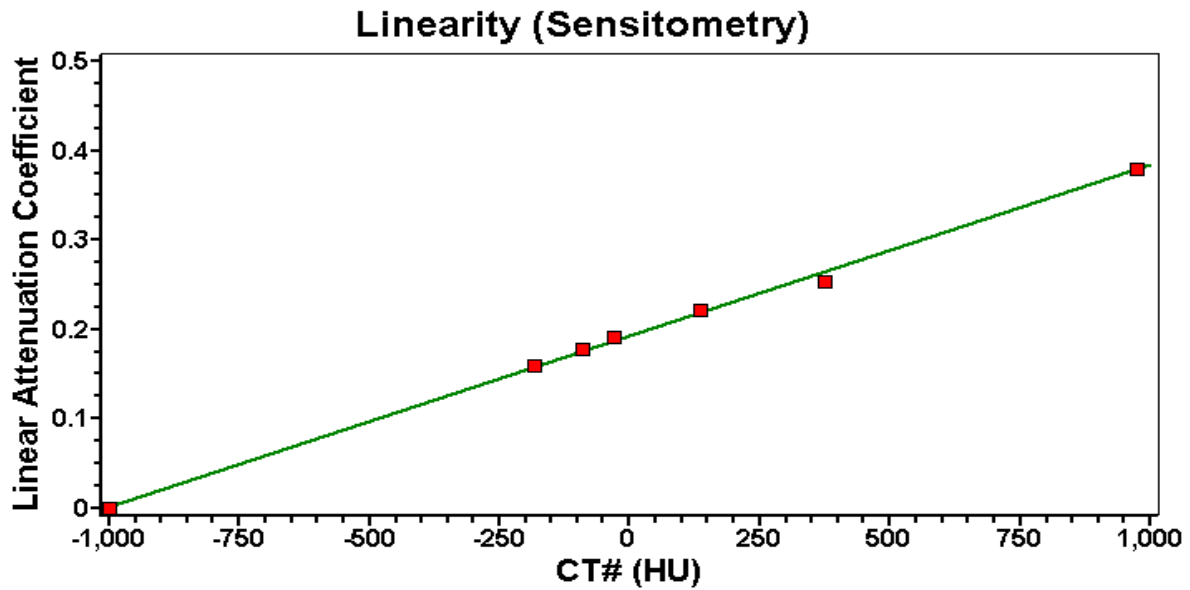
### Test Results

Image #	Test	Status
Im	Verification	Phantom ID: 504 Series (Varian Trilogy) ; Orientation: 1 Phantom Center: 257, 255; CT# of Module Material : 86.48 +/- 5.39 HU
2	CT # Linearity	Contrast Scale: 0.000191                      Effective Energy: 64 keV                      R = 0.998892 Material      Teflon              Air                      LDPE              Delrin              Acrylic              Polystyrene              PMP CT#              974.1              -999.0              -91.3              373.7              134.0              -30.7              -182.1
3	Low Contrast (Model)	Contrast (%) 1.59 1.20 0.96 0.80 0.68 0.60 0.53 0.48 0.43 0.40 0.37 0.34 0.32 Detail (mm) 3.00 4.00 5.00 6.00 7.00 8.00 9.00 10.0 11.0 12.0 13.0 14.0 15.0
3	Low Contrast	Diameter of Smallest Object Visualized (mm): 4 Mean CT# over target: 67.38HU Mean CT# over Bkg: 56.17HU Measured Contrast: 11.21HU
4	Noise/Uniformity	CT#(HU)              5.4 +/- 5.4              12.4 +/- 5.6              11.2 +/- 5.6              11.0 +/- 5.4              11.8 +/- 6.5 Diff (HU)              -----              7.0              5.8              5.6              6.4 Location              center              3 o'clock              6 o'clock              9 o'clock              12 o'clock
2	Pixel Size	Expected(mm)      X-Axis(mm)              Y-Axis(mm) 0.91                      0.89 0.89                      0.89 0.89 Phantom Rotation : 0.0 degrees Phantom Center is 0.91 mm RIGHT OF CENTER and 0.91 mm ABOVE CENTER
2	Slice Thickness	Expected(mm)              X-Axis(mm)              Y-Axis(mm) 1.98                      2.49 , -----                      2.60 , ----- Avg Slice Width: 2.55 mm              Ramp Angle (deg): 23.0
1	Spatial Resolution	Bead not located for PSF - Signal Level too Low

**Image #****Test****Status**

4	Uniformity	X-Axis Y-Axis Uniformity Index 1.00 1.00 Std Dev (HU): 10.0
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# CT Linearity (Sensitometry)

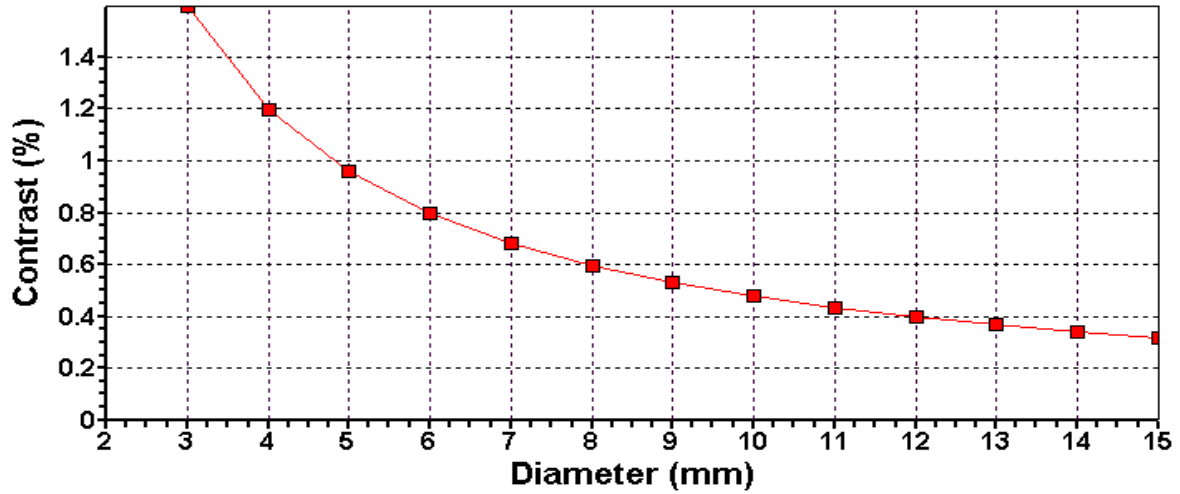


Contrast Scale: 0.000191      Intercept: -1011.1H  
Teflon      Air      LDPE      Delrin      Acrylic      Polystyrene      PMP  
974.1      -999.0      -91.3      373.7      134.0      -30.7      -182.1

KFJ-IR0      04/17/2013      504 Series (Varian Trilogy)  
Patient Ue      SN: 1469      Image #2 CT # Linearity  
125kV, 60mA, 1788msec, 464.cm, Filter:Ram-Lak, 1.98mm, @ 87.12, Axial

# Low Contrast Detectability

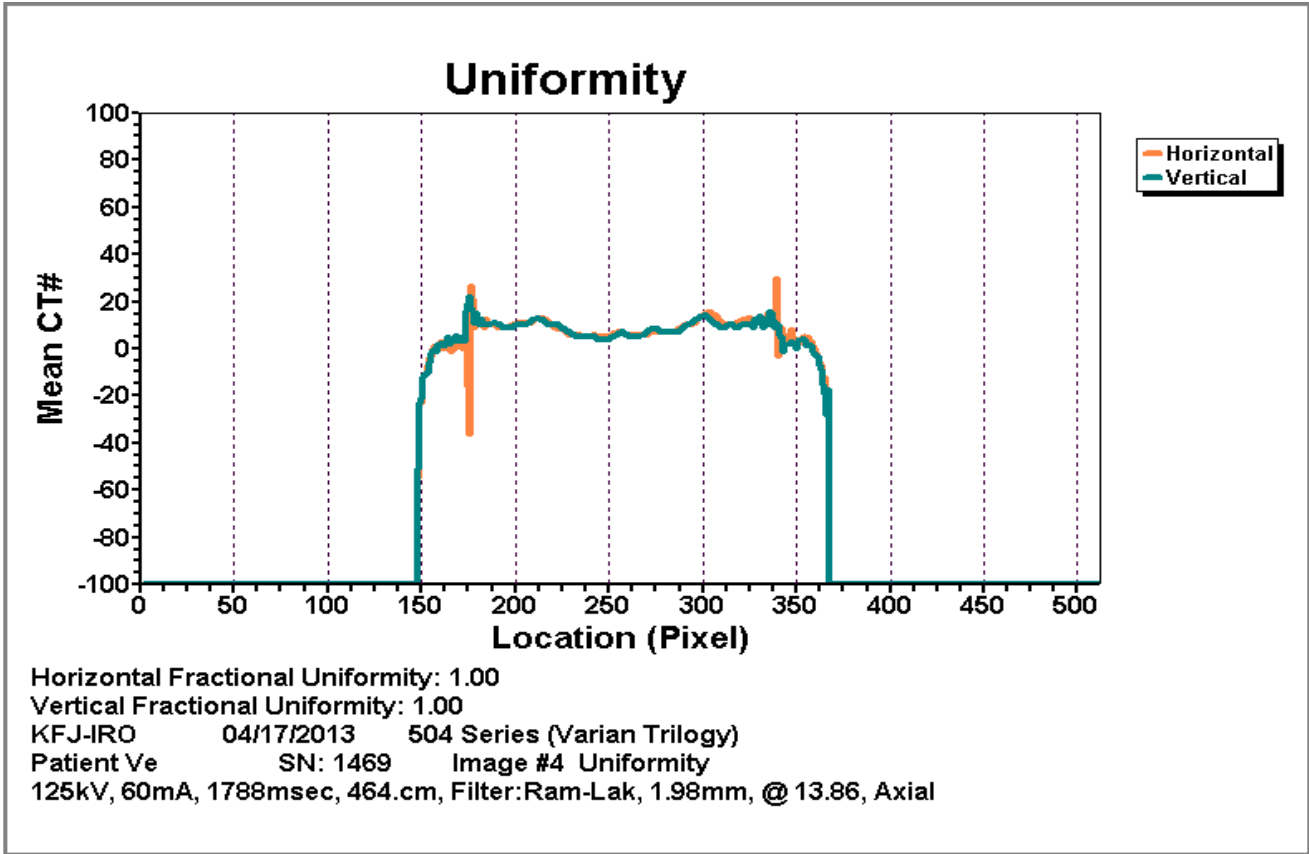
## Low Contrast Model



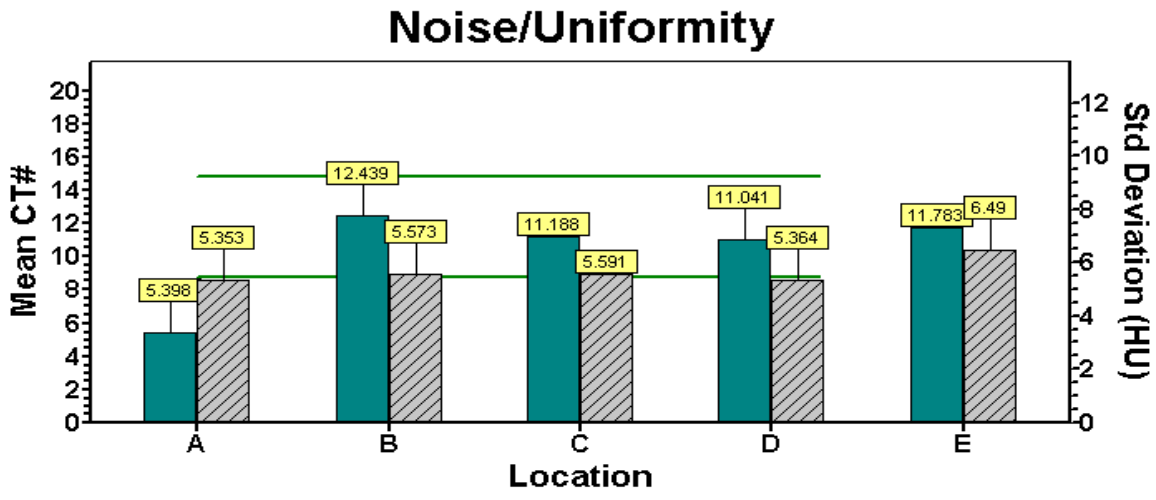
Contrast(%) 1.59 1.20 0.96 0.80 0.68 0.60 0.53 0.48 0.43 0.40 0.37 0.34 0.32  
Diameter(mm) 3.0 4.0 5.0 6.0 7.0 8.0 9.0 10.0 11.0 12.0 13.0 14.0 15.0  
Factor: 1.00

KFJ-IRO 04/17/2013 504 Series (Varian Trilogy)  
Patient Ve SN: 1469 Image #3 Low Contrast (Model)  
125kV, 60mA, 1788msec, 464.cm, Filter:Ram-Lak, 1.98mm, @ 53.46, Axial

# Uniformity



Noise/Uniformity



StdDev Mean

A (0,0) B (50,0) C (0,50) D (-50,0) E (0,-50)

KFJ-IRO 04/17/2013 504 Series (Varian Trilogy)  
Patient Ve SN: 1469 Image #4 Noise/Uniformity  
125kV, 60mA, 1788msec, 464.cm, Filter:Ram-Lak, 1.98mm, @ 13.86, Axial

Image #1

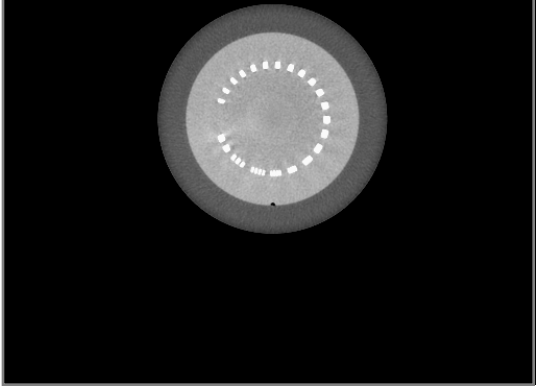


Image #2

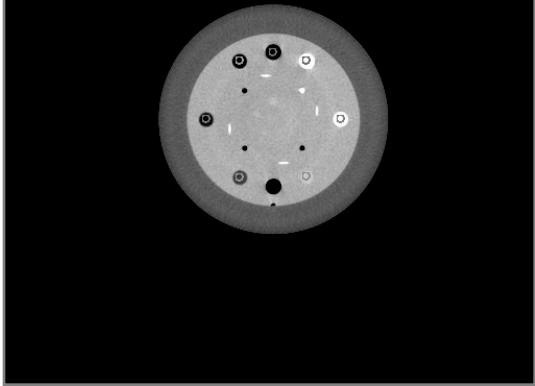


Image #3

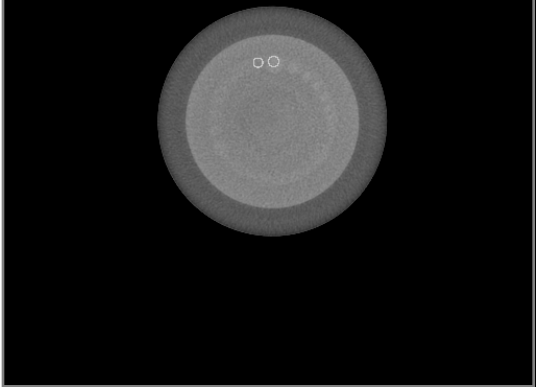


Image #4

