

Protect,
enhance
and save
lives



Quality Control Report

Tested device

Name	DR 1
Brand	Philips
Model	
Serial Number	
Department	
Location	
Commissioning Date	
Comment	

Phantom

Name	Phantom
Model	IBA Primus - L
Serial Number	
Comment	

Reference Image

Station Name	STAT^NAME
Study description	STUDY^DESC
Serie description	SERIES^DESC
Modality	DR
Acquisition Date	27 Jun 2013 10:43:02
Patient ID	1.2.840.113169.2.40.4.2147483647.1372344294.640509
SOP Instance UID	1.2.840.113169.2.40.4.2147483647.1372344294.647324

Controlled Image

Station Name	STAT^NAME
Study description	STUDY^DESC
Serie description	SERIES^DESC
Modality	DR
Acquisition Date	27 Jun 2013 10:43:35
Patient ID	1.2.840.113169.2.40.4.2147483647.1372344294.640509
SOP Instance UID	1.2.840.113169.2.40.4.2147483647.1372344294.656856

Control details

Date	1 Dec 2013 10:35:25
By	Admin , Expert
Irradiated areas	Black

Positioning

Center position				
	X (mm)		Y (mm)	
Computed value	159.65	-0.03% (159.70)	159.74	-0.07% (159.84)
Theoretical value	156.63	-0.07% (156.73)	156.63	-0.07% (156.73)
Error	3.03	2.11% (2.96)	3.11	-0.03% (3.11)

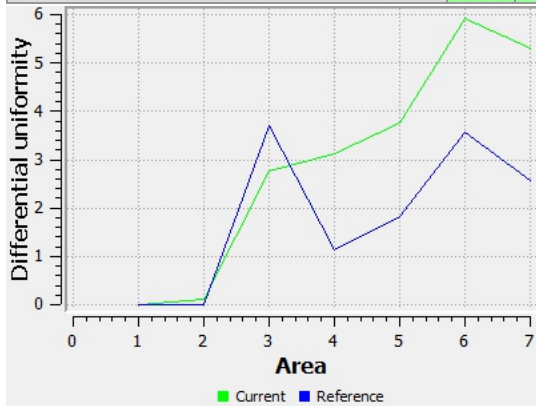
Rotation		
	Computed value	
Theta (degree)	178.32	-0.03% (178.38)
Flip	False	False

Signal to Noise ratio

Signal to Noise ratio						
	Mean		Standard deviation		SNR (%)	
Area #1	9577.25	1.14% (9469.42)	181.23	14.05% (158.90)	1.89	12.77% (1.68)
Area #2	9587.19	1.23% (9470.37)	178.20	11.69% (159.54)	1.86	10.33% (1.68)
Area #3	9850.27	0.17% (9833.73)	165.78	6.88% (155.12)	1.68	6.70% (1.58)

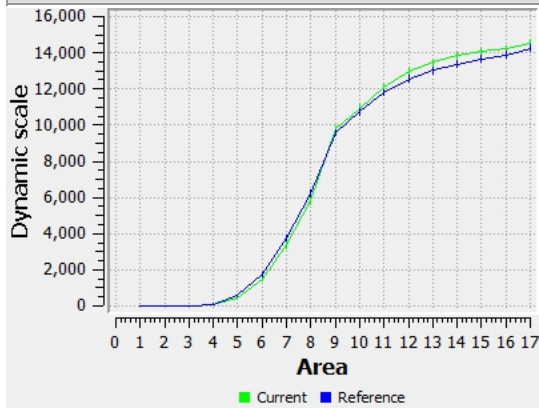
Uniformity

Uniformity												
	Min		Mean		Max		Standard deviation		Heterogeneity		Difference (%)	
Area #1	8920.00	1.20% (8814.00)	9577.25	1.14% (9469.42)	10177.00	-0.04% (10181.00)	181.23	14.05% (158.90)	0.07	-8.54% (0.07)	-	-(0.00)
Area #2	8920.00	0.06% (8915.00)	9587.19	1.23% (9470.37)	10219.00	1.23% (10095.00)	178.20	11.69% (159.54)	0.07	9.34% (0.06)	0.10	932.99% (0.01)
Area #3	9202.00	0.04% (9198.00)	9850.27	0.17% (9833.73)	10503.00	-0.12% (10516.00)	165.78	6.88% (155.12)	0.07	-1.24% (0.07)	2.77	-25.18% (3.70)
Area #4	9366.00	2.81% (9110.00)	9885.69	3.22% (9577.13)	10382.00	3.55% (10026.00)	146.93	3.63% (141.79)	0.05	7.48% (0.05)	3.12	177.42% (1.12)
Area #5	9426.00	2.56% (9191.00)	9950.98	3.15% (9646.63)	10469.00	2.49% (10215.00)	167.98	15.37% (145.60)	0.05	-0.65% (0.05)	3.76	104.45% (1.84)
Area #6	9682.00	3.46% (9358.00)	10180.19	3.68% (9818.57)	10693.00	4.11% (10271.00)	160.11	7.33% (149.18)	0.05	6.68% (0.05)	5.92	66.56% (3.56)
Area #7	9595.00	5.17% (9123.00)	10115.03	4.08% (9718.30)	10615.00	3.01% (10305.00)	157.04	8.27% (145.05)	0.05	-	5.32	107.60% (2.56)



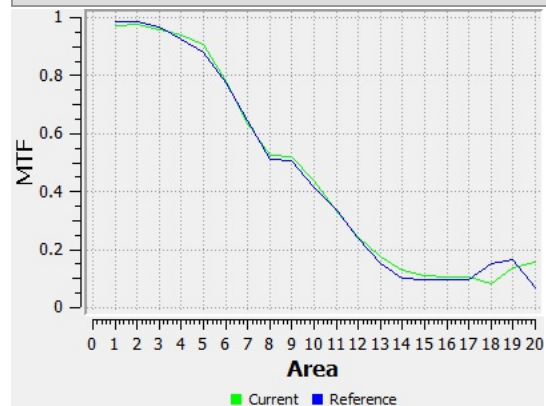
Dynamic scale

Dynamic scale					
	Thickness (mm)	Mean		Standard deviation	
Area #1	0.00	0.00	0.00% (0.00)	0.00	0.00% (0.00)
Area #2	0.18	0.00	0.00% (0.00)	0.00	0.00% (0.00)
Area #3	0.36	3.12	-45.67% (5.74)	1.10	-29.86% (1.56)
Area #4	0.54	77.36	-27.96% (107.38)	10.34	-18.59% (12.70)
Area #5	0.74	440.30	-20.92% (556.79)	39.98	-12.08% (45.47)
Area #6	0.95	1473.81	-15.28% (1739.68)	92.33	-7.32% (99.62)
Area #7	1.16	3357.21	-10.49% (3750.65)	151.35	4.68% (144.59)
Area #8	1.38	5797.61	-6.49% (6199.82)	202.76	6.53% (190.33)
Area #9	1.50	9771.17	1.92% (9586.63)	189.34	14.95% (164.72)
Area #10	1.73	10934.44	1.81% (10739.75)	199.73	5.86% (188.66)
Area #11	1.96	12111.44	2.66% (11797.56)	188.43	9.47% (172.12)
Area #12	2.21	12980.63	3.33% (12562.85)	197.41	12.42% (175.60)
Area #13	2.45	13466.63	3.47% (13014.90)	184.00	-2.19% (188.11)
Area #14	2.70	13827.90	3.36% (13378.04)	146.07	-16.44% (174.81)
Area #15	2.96	14065.40	2.91% (13667.25)	131.70	-21.15% (167.03)
Area #16	3.22	14256.27	2.72% (13878.43)	156.90	-11.74% (177.77)
Area #17	3.48	14558.48	2.29% (14232.00)	152.48	-16.66% (182.96)



High contrast resolution

MTF			
	Frequency (lp/mm)	MTF	
Area #1	0.60	0.97	-1.32% (0.99)
Area #2	0.70	0.98	-0.83% (0.99)
Area #3	0.80	0.96	-1.15% (0.97)
Area #4	0.90	0.94	1.31% (0.93)
Area #5	1.00	0.91	3.25% (0.88)
Area #6	1.20	0.78	0.37% (0.78)
Area #7	1.40	0.64	-1.31% (0.65)
Area #8	1.60	0.52	2.96% (0.51)
Area #9	1.80	0.52	3.35% (0.50)
Area #10	2.00	0.44	5.45% (0.41)
Area #11	2.20	0.33	-0.66% (0.33)
Area #12	2.50	0.24	1.46% (0.24)
Area #13	2.80	0.18	16.14% (0.15)
Area #14	3.10	0.13	27.11% (0.10)
Area #15	3.40	0.11	12.81% (0.10)
Area #16	3.70	0.11	11.77% (0.10)
Area #17	4.00	0.10	7.81% (0.10)
Area #18	4.30	0.08	-43.76% (0.15)
Area #19	4.60	0.14	-15.48% (0.17)
Area #20	5.00	0.15	120.46% (0.07)



Geometrical Distortion

Geometrical Distortion		
	Computed value	
Diameter #1 (mm)	160.54	-0.08% (160.66)
Diameter #2 (mm)	160.58	-0.08% (160.71)
Diameter #3 (mm)	160.54	-0.03% (160.60)
Diameter #4 (mm)	160.89	-0.03% (160.94)
Diameter #5 (mm)	160.64	-0.10% (160.80)
Diameter #6 (mm)	160.70	-0.01% (160.71)
Diameter #7 (mm)	160.62	-0.08% (160.75)
Mean diameter (mm)	160.64	-0.06% (160.74)
Diameter error (mm)	0.11	12.56% (0.10)
Theoretical diameter (mm)	160.00	0.00% (160.00)
Distortion (%)	0.22	3.03% (0.21)
Growth factor	1.00	-0.06% (1.00)

Tolerances definition

Positioning

- Computed center in X : Reference $\pm 15.00 \pm 25.00$ (%)
- Computed center in Y : Reference $\pm 15.00 \pm 25.00$ (%)
- Theoretical center in X : Reference $\pm 15.00 \pm 25.00$ (%)
- Theoretical center in Y : Reference $\pm 15.00 \pm 25.00$ (%)
- Error in X : Reference $\pm 15.00 \pm 25.00$ (%)
- Error in Y : Reference $\pm 15.00 \pm 25.00$ (%)
- Rotation : Reference $\pm 15.00 \pm 25.00$ (%)

Signal to Noise ratio

- Mean : Reference $\pm 15.00 \pm 25.00$ (%)
- Standard deviation : Reference $\pm 15.00 \pm 25.00$ (%)
- Noise : Reference $\pm 15.00 \pm 25.00$ (%)

Uniformity

- Max gray level : Reference $\pm 15.00 \pm 25.00$ (%)
- Min gray level : Reference $\pm 15.00 \pm 25.00$ (%)
- Mean gray level : Reference $\pm 15.00 \pm 25.00$ (%)
- Standard Deviation : Reference $\pm 15.00 \pm 25.00$ (%)
- Heterogeneity : Reference $\pm 15.00 \pm 25.00$ (%)
- Differential uniformity : Reference $\pm 15.00 \pm 25.00$ (%)

Dynamic scale

- Mean : Reference $\pm 15.00 \pm 25.00$ (%)
- Standard deviation : Reference $\pm 15.00 \pm 25.00$ (%)

High contrast resolution

- MTF : Reference $\pm 15.00 \pm 25.00$ (%)

Geometrical Distortion

- Diameter : Reference $\pm 15.00 \pm 25.00$ (%)
- Mean diameter : Reference $\pm 15.00 \pm 25.00$ (%)
- Diameter error : Reference $\pm 15.00 \pm 25.00$ (%)
- Distortion : Reference $\pm 15.00 \pm 25.00$ (%)
- Theoretical diameter : Reference $\pm 15.00 \pm 25.00$ (%)
- Growth factor : Reference $\pm 15.00 \pm 25.00$ (%)