

Study information

Institution name	Hospital
Device	Rayos Pimax SRL. DFP4343C7 (sn: 046)
Study Date	26-wrz-2008
Study Description	
mA	10
kVp	80
Exposure Time	
SOP Instance UID	1.2.826.0.1.3680043.2.634.0.62161.2014814.142859.2

Geometry

High-Contrast resolution

Test is passed if accuracy is $\geq 0,6$

Level of details [LP/mm]	Accuracy	Modulation	Result
0,6	1	0,04635797	DETECTED
0,7	1	0,04778544	DETECTED
0,8	1	0,04855965	DETECTED
0,9	1	0,04678001	DETECTED
1,0	1	0,0435027	DETECTED
1,2	1	0,04041275	DETECTED
1,4	1	0,03749596	DETECTED
1,6	0,95	0,0365082	DETECTED
1,8	0,9	0,03474072	DETECTED
2,0	1	0,03423166	DETECTED
2,3	0,85	0,02218338	DETECTED
2,5	0,45	0,0091355	
2,8	0,65	0,01207705	
3,1	0,2	0,003810864	
3,4	0,2	0,002789403	
3,7	0,15	0,002441464	

4,0	0,1	0,002144651	
4,3	0	0	
4,6	0,1	0,002829182	
5,0	0,05	0,001261349	

Dynamic Step Wedge

Number of distinguishable steps: 17 (Two steps are distinguishable if difference between their averages is > 50)

Step	Mean	Standard Deviation	SNR	Normalized Mean	Normalized SD	Contrast Ratio
1	-20958	458,40	45,72	0,54	0,0219	45,89%
2	-18212	456,76	39,87	0,67	0,0218	26,77%
3	-17588	427,56	41,14	0,70	0,0204	22,43%
4	-16965	366,81	46,25	0,73	0,0175	18,09%
5	-16309	335,34	48,63	0,76	0,0160	13,53%
6	-15730	315,53	49,85	0,79	0,0151	9,50%
7	-15169	265,80	57,07	0,81	0,0127	5,60%
8	-14506	254,49	57,00	0,84	0,0121	0,98%
9	-14366	267,70	53,66	0,85	0,0128	0,00%
10	-13495	306,48	44,03	0,89	0,0146	6,06%
11	-13187	285,18	46,24	0,91	0,0136	8,21%
12	-12659	302,93	41,79	0,93	0,0145	11,88%
13	-12497	328,00	38,10	0,94	0,0157	13,01%
14	-12422	328,74	37,79	0,94	0,0157	13,53%
15	-12018	353,76	33,97	0,96	0,0169	16,34%
16	-11711	350,85	33,38	0,98	0,0167	18,48%
17	-11230	447,74	25,08	1,00	0,0214	21,83%

Additional low contrast objects on the step wedge

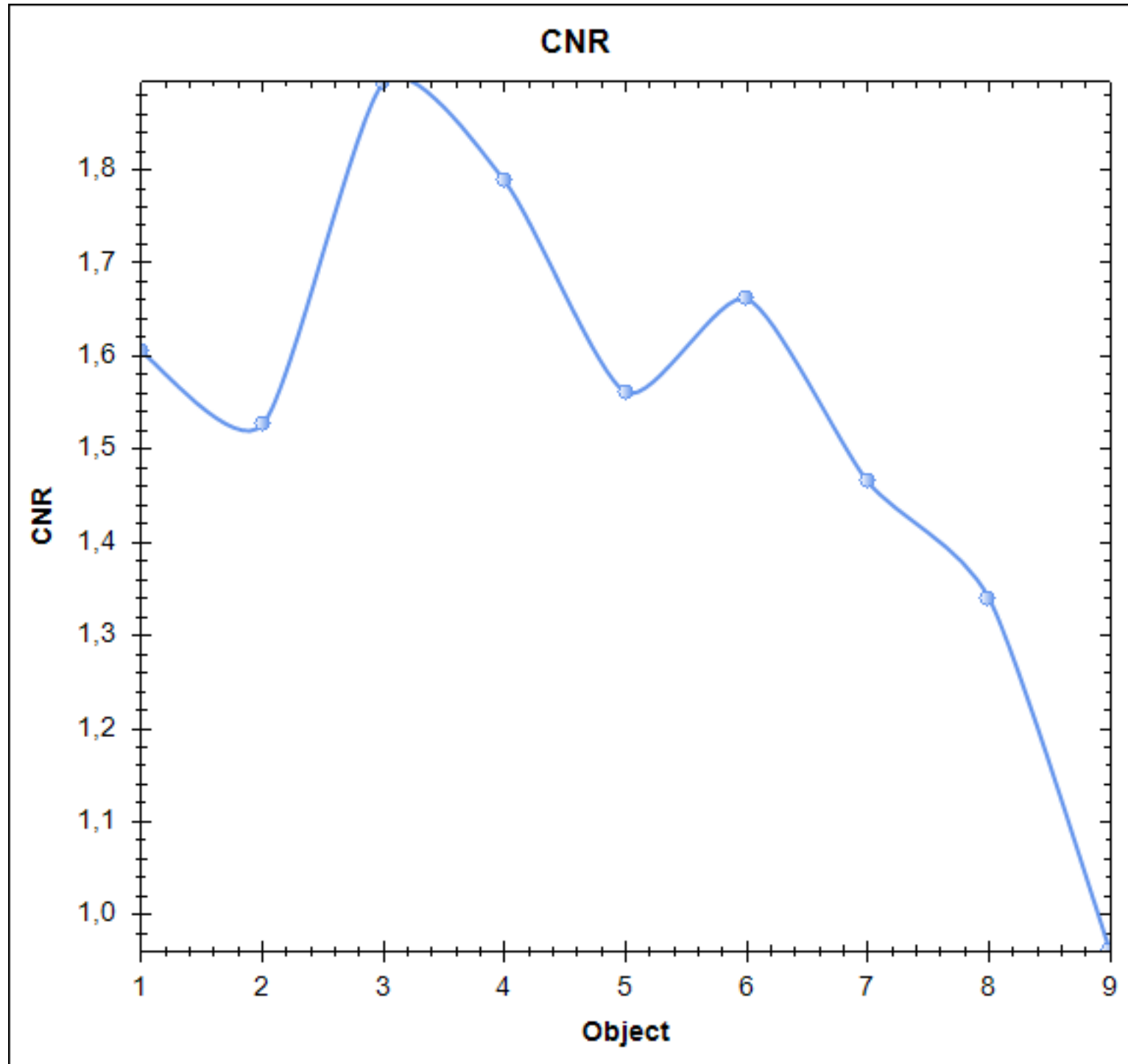
Step	Circle Mean	Circle SD	SNR	Normalized Circle Mean	Normalized Circle SD	Circle Contrast
1	-21656	105,48	205,30	0,54	0,0049	3,33%
2	-19160	119,51	160,32	0,66	0,0055	5,21%
3	-18489	136,69	135,27	0,69	0,0063	5,13%
4	-17755	125,13	141,89	0,72	0,0058	4,66%
5	-17114	161,55	105,93	0,75	0,0075	4,94%
6	-16479	184,58	89,28	0,78	0,0085	4,77%
7	-15860	191,26	82,92	0,81	0,0088	4,55%
8	-15188	180,65	84,08	0,84	0,0083	4,70%
9	-14950	180,21	82,96	0,85	0,0083	4,06%
10	-13975	250,35	55,82	0,90	0,0116	3,55%
11	-13653	266,75	51,18	0,91	0,0123	3,53%
12	-13071	253,13	51,64	0,94	0,0117	3,25%
13	-13116	244,30	53,69	0,94	0,0113	4,95%
14	-12945	258,85	50,01	0,95	0,0120	4,22%
15	-12488	303,17	41,19	0,97	0,0140	3,92%
16	-12186	275,90	44,17	0,98	0,0127	4,05%
17	-11764	300,89	39,10	1,00	0,0139	4,76%

Low-Contrast resolution

Number of visible low contrast objects (CNR >= 0,5): 9

Object	Contrast Ratio	CNR
1	3,31%	1,60
2	2,43%	1,53
3	2,70%	1,89
4	2,56%	1,79

5	2,22%	1,70
6	2,37%	1,66
7	2,18%	1,46
8	2,17%	1,34
9	1,51%	0,96



Centre of image statistics

Image homogeneity

Mean	-14282,80
Standard Deviation	200,25
SNR	71,32
Normalized SD	0,014020
Uniformity (difference between max and min value in the area, should be < 1000)	2111

Image distortion

1 cm segment length (centre)	1,02cm
1 cm segment length (top side)	1,00cm
1 cm segment length (bottom side)	1,00cm
1 cm segment length (left side)	1,00cm
1 cm segment length (right side)	0,99cm

Pixel Size

Nominal Pixel Size	0,1430mm
Measured Pixel Size	0,1408mm
Measured/Nominal Ratio	0,9849