



???	<i>Study Date</i>	<i>Vendor</i>	<i>Model</i>	<i>Study Name</i>
	4/23/2017	SIEMENS	Avanto	Anonymized-AV.

Site Information

Operator Initials: **JK**
 Phantom Serial #: **N/A**
 Device Serial Number: **26492**

Magnetic Field: **1.5**
 Recv Coil: **HeadMatrix**
 Center Frequency: **63.63 MHz**



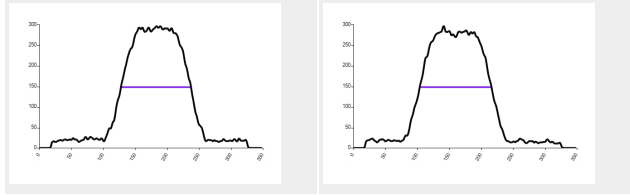




Series Information

Description: **ACR T1**
 Pulse Sequence: **SE**
 Series Number: **4**
 TR: **500**
 TE: **20**
 FOV: **250**
 Number of Slices: **11**
 Thickness: **5 mm**

Spacing: **10mm**
 NSA: **1**
 Percent Sampling: **100**
 Frequency Matrix: **256**
 Phase Matrix: **256**
 Display Matrix: **512**
 Bandwidth : **122 Hz**
 Scan Time: **2:08**

Test Results

Processed Date: 12/3/2018

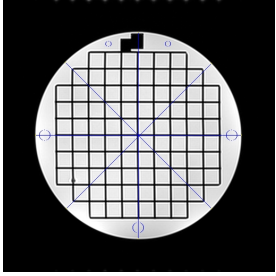
<i>Test</i>	<i>Details</i>	<i>Results</i>	<i>Pass/Fail</i>														
Slice: 1 Location (mm): -41.86 File : ...0001.2017.04.23.11.05.52.281250.22335038																	
High Contrast Spatial Resolution		<table border="1"> <tr> <td>Expected</td> <td>Upper Left</td> <td>Lower Right</td> </tr> <tr> <td>≤ 1.0mm</td> <td>1.0</td> <td>1.0</td> </tr> </table>	Expected	Upper Left	Lower Right	≤ 1.0mm	1.0	1.0									
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≤ 1.0mm	1.0	1.0															
Slice Thickness Accuracy	<table border="1"> <tr> <td>Top Ramp</td> <td>Bottom Ramp</td> </tr> <tr> <td>53.6</td> <td>54.9</td> </tr> <tr> <td>Slice Offset</td> <td>Threshold</td> </tr> <tr> <td>0.5mm</td> <td>148</td> </tr> </table>  	Top Ramp	Bottom Ramp	53.6	54.9	Slice Offset	Threshold	0.5mm	148	<table border="1"> <tr> <td colspan="2">Slice Thickness</td> </tr> <tr> <td>Expected</td> <td>Measured</td> </tr> <tr> <td>5 ± 1.6mm</td> <td>5.4</td> </tr> </table>	Slice Thickness		Expected	Measured	5 ± 1.6mm	5.4	
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Slice Position Accuracy	<table border="1"> <tr> <td>Threshold</td> </tr> <tr> <td>729</td> </tr> </table> 	Threshold	729	<table border="1"> <tr> <td colspan="2">Bar Length Difference</td> </tr> <tr> <td>Expected</td> <td>Measured</td> </tr> <tr> <td>-5.0mm to 5.0mm</td> <td>0.5</td> </tr> </table>	Bar Length Difference		Expected	Measured	-5.0mm to 5.0mm	0.5							
Threshold																	
729																	
Bar Length Difference																	
Expected	Measured																
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Geometric Accuracy	Horizontal	Vertical	Threshold	Diameter		✓
	189.7mm	190.7mm	765	Expected	Measured	
			190 ± 2mm	189.7		
				190.7		

Slice: 5

Location (mm): -1.86

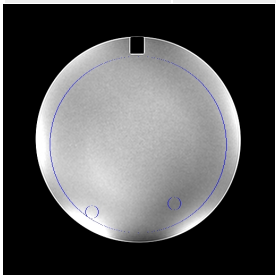
File : ...0005.2017.04.23.11.05.52.281250.22335072

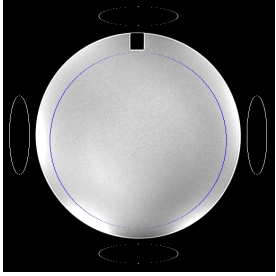
Geometric Accuracy	↗ Rising Diagonal	↘ Falling Diagonal	Horizontal	Vertical	Diameter		✓
	189.1mm	190.7mm	189.4mm	190.6mm	Expected	Measured	
Threshold					190 ± 2mm	189.1	
786						190.7	
					189.4	190.6	

Slice: 7

Location (mm): 18.14

File : ...0007.2017.04.23.11.05.52.281250.22335089

Image Intensity Uniformity	Large Mean	Small High Mean	Small Low Mean	Uniformity		✓
	1,597	1,704	1,493	Expected	Measured	
				≥ 87.5%	93.4	

Ghosting	Top Mean ± SD	Bottom Mean ± SD	Large Mean	Ghosting Ratio		✓
	12.4 ± 4.42	9.0 ± 3.44	1,597	Expected	Measured	
Left Mean ± SD		Right Mean ± SD		≤ 0.025	0.001	
9.3 ± 3.56		9.9 ± 3.56				
						

Signal to noise (SNR)	Large Mean	Background	Noise (SD)	SNR		
	1,597	10	3.56	Expected	Measured	
				≥ 250	449	

Slice: 8
 Location (mm): 28.14
 File : ...0008.2017.04.23.11.05.52.281250.22335191

Low Contrast Detectability	Number of Spokes Detected	CNR: Spoke 1 (7mm Diameter Disk)		
	9	Inner: 7.7		
		Middle: 7.4		
		Outer: 9.6		

Slice: 9
 Location (mm): 38.14
 File : ...0009.2017.04.23.11.05.52.281250.22335106

Low Contrast Detectability	Number of Spokes Detected	CNR: Spoke 1 (7mm Diameter Disk)		
	10	Inner: 14.9		
		Middle: 14.2		
		Outer: 10.5		

Slice: 10
 Location (mm): 48.14
 File : ...0010.2017.04.23.11.05.52.281250.22335208

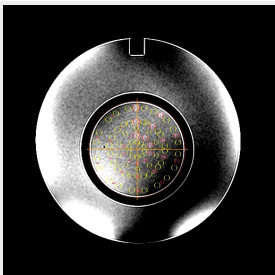
Low Contrast Detectability	Number of Spokes Detected	CNR: Spoke 1 (7mm Diameter Disk)		
	10	Inner: 17.9		
		Middle: 19.3		
		Outer: 18.9		

Slice: 11
 Location (mm): 58.14
 File : ...0011.2017.04.23.11.05.52.281250.22335123

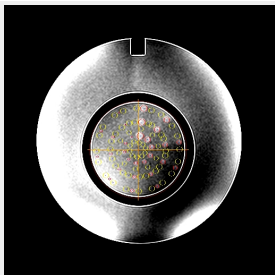
Low Contrast Detectability	Number of Spokes Detected	CNR: Spoke 1 (7mm Diameter Disk)		
	10	Inner: 24.4		
		Middle: 25.7		
		Outer: 25.1		

Total Spokes Detected
Manual Method

Slice 8



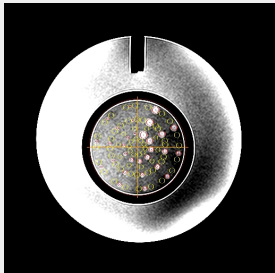
Slice 9



Slice 10



Slice 11



Total Spokes Detected

Expected	Measured
≥ 9 Spokes	39



Slice Position Accuracy

Threshold

761



Bar Length Difference

Expected	Measured
-5.0mm to 5.0mm	-1.6

