

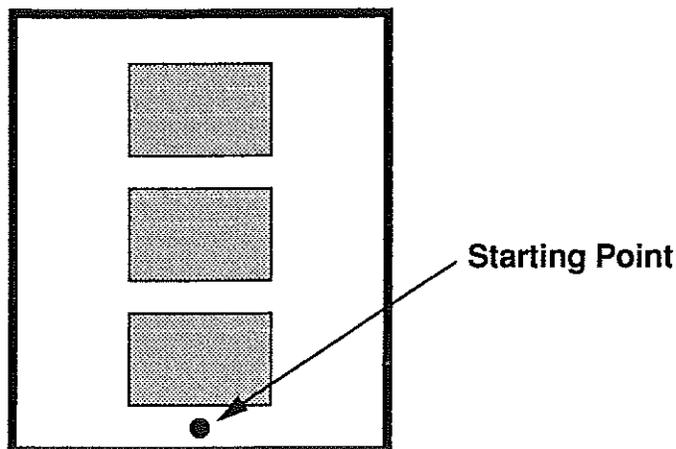
HOLOGIC QDR APPLICATION NOTE

BLOCK PHANTOM **QDR 1000, 1000/W AND PERFORMANCE SERIES MACHINES**

This application note is being provided to inform users of the correct method of scanning and analyzing the HOLOGIC Block Phantom. The instructions enclosed are specific so please follow them in order to keep the precision at a maximum.

SCANNING:

1. Create a Patient Biography for the block phantom if one does not already exist. Be sure to include the phantom number in the Name entry. For example, BLOCK PHANTOM #12.
2. Place the block phantom box cover against the back edge of the table.
3. Place the block phantom against the box cover.
4. Center the red laser as you would for a spine phantom. Mark the starting point with a magic marker. See fig. 1 below. (NOTE: Newer phantoms will already be marked).

FIG 1.

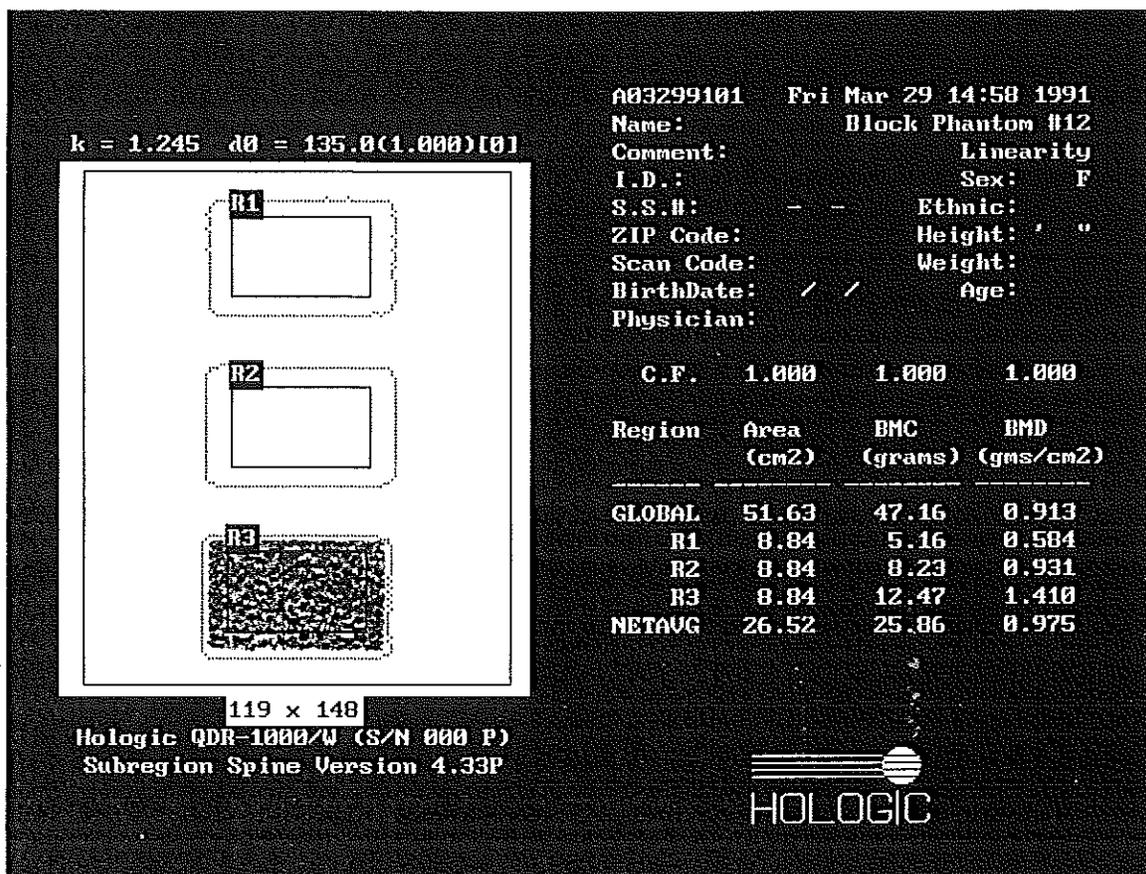
5. Scan.
 - A) As a Lumbar Spine. If you have a Performance Series machine, scan in the Performance mode.
 - B) Use the default length and width
 - C) Use F3 (rescan) if you are not centered or do not have all of the blocks on.
 - D) Let the scan complete itself.

BLOCK PHANTOM ANALYSIS:

1. Using Subregion Analysis of Lumbar Spine.
 - A) In analyze pick **protocol**, then select subregion analysis of lumbar spine. NOTE: If your system does not have the subregion option then skip to page 3 for alternative instructions.

2. Select Region of Interest
 - A) Make the ROI box size 119x148.
 - B) Center the ROI to the blocks.
 - C) End.
3. Select Subregions.
 - A) Press <Ctrl Page Down> 1 time.
 - B) Make the size of the dotted box 39x24.
 - C) Press <Insert> and position the dotted box in the center of the top block.
 - D) Press the / key. Using the down arrow key move the dotted box to the center of the middle block.
 - E) Press the / key and move the box to the center of the bottom block.
 - F) End.
4. Insert or Delete Points
 - A) <End>.
- 5) The Report Screen.
 - A) An example of the report screen is shown in fig. 2 below.
 - B) The results of R1 R2 and R3 should be compared against the values on the label of the block phantom.

FIG. 2.



BLOCK PHANTOM COMPARE:

1. Once a baseline block phantom scan has been established, then, use that scan to **Compare** all future scans to.
2. After a subsequent scan has been done:
 - A) Go to Analyze (F4 or from the Main Menu).
 - B) Go to Compare.
 - C) Pick the baseline block scan by highlighting it and then <Enter>.
 - D) Now analyze.

BLOCK PHANTOM ALTERNATIVE ANALYSIS INSTRUCTIONS:

1. Select Region of Interest.
 - A) Make the ROI box size 119x148.
2. Mark Intervertebral Spaces.
 - A) There should be **no** disk spacers. If some appear press the delete key to eliminate them.
 - B) <End>.
3. Label Vertebrae.
 - A) <End>.
4. Insert or Delete Points.
 - A) <End>.
5. Now you will be at the report screen.
 - A) Press the < **Shift key and F9** > at the same time. This will allow you to analyze one block at a time.
6. Select Region of Interest.
 - A) Make the ROI box size **39x24**.
 - B) Press <Insert> and center the yellow box in the middle of the top block.
 - C) <End>.
7. Mark Intervertebral Spaces.
 - A) <End>.
8. Label Vertebrae.
 - A) <End>.
9. At the report screen print out image and record the results of the top block.
10. Press <Shift F9>.
 - A) At Select ROI press <Insert> and move box to the middle of the second block.

- B) Press <End> 3 times.
 - C) Print and record.
11. Press <Shift F9>.
- A) At Select ROI Press <Insert> and move box to the middle of the bottom block.
 - B) Press <End> 3 times.
 - C) Print and record.

If you have any questions or problems concerning applications related to the block phantom, please contact one of our Product Applications Specialists:

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