

Customer Technical Bulletin

CTB-00564

Date: Apr	ril 4, 2019					
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Product:	Selenia	Subsystem:	Acquisition Workstation			
	Dimensions/3Dimensions		(AWS)			
Subject:	ACR 2018 DM QC Manual D	BT Z-Resolutio	n Test for Selenia			
	Dimensions-3Dimensions Systems					

<u>Purpose</u>

To provide information on how the Digital Breast Tomosynthesis (DBT) Z Resolution Test outlined in the ACR 2018 DM QC Manual on Selenia Dimensions and 3Dimensions systems can be performed outside of the Hologic Capture Application.

<u>Scope</u>

This information applies to Selenia Dimensions systems runing software versions 1.7 and later and all 3Dimensions systems.

Resolution

The Z-Resolution Test cannot be performed using the Hologic Capture Application. The Region of Interest (ROI) tool provided by Hologic currently cannot be used on reconstructed slices. It is enabled for use on tomosynthesis projections or conventional 2D images.

The Region of Interest (ROI) measurements on the reconstructed slices will need to be performed using a separate image analysis program, such as ImageJ.

• This is similar to the AEC Performance Test outlined in the 2018 ACR DM QC Manual (reference Page 169), "if the acquisition workstation does not have ROI capability, the medical physicist [can,]...using image analysis software, make the ROI measurement on an external computer system."

The following are instructions on how to export the images.

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Instructions

Per the 2018 ACR 2018 DM QC Manual, the tomosynthesi image of the ACR DM Phantom shall be used to perform the Z-Resolution measurements with.

The reconstructed ACR DM Phantom Images can be exported in BTO format as follows:

1. Insert flash drive or CD into AWS where images are to be stored. In the Procedure screen, click on the "Archive/Export" button as shown in Figure 1.



Figure 1 - Exporting ACR DM Phantom Images in Procedure Screen

2. Select the ACR Tomosynthesis images to be exported. Click "Export" as shown in Figure 2.

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Figure 2: Selecting Images to Export on Archive/Export Screen.

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3. In the "Export" menu, select the desired location where the images will be saved. Click "Advanced." Select "Reconstructed Slices (BTO)" as shown in Figure3.

Note: BTO format images are large in file size. The exporting process may take several minutes to complete.

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Figure 3: Selecting Drive Location and Format Type for Images.

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