Images of an Anthropomorphic Breast Phantom. The phantom was imaged in a plane containing two 9 mm diameter cysts on the periphery of the phantom and one 4 mm diameter cyst near the center. Top Left: single b-scan image obtained with the ring transducer system using f/1.0 aperture and scan plane diameter of 80 mm. Top right: b-scan image produced by a state-of-the-art clinical b-scanner operating at the same center frequency as the ring transducer system. Bottom Left: compounded b-scan image from six geometrically corrected views with the ring transducer system. Bottom Right: X-ray computed tomograph obtained with a state-of-the-art scanner using a 1 mm slice thickness. These images show that ring transducer b-scan resolution is superior to current clinical scanners at the same frequency and is comparable with x-ray computed tomography.