



# ULTRASONICS, FERROELECTRICS, AND FREQUENCY CONTROL

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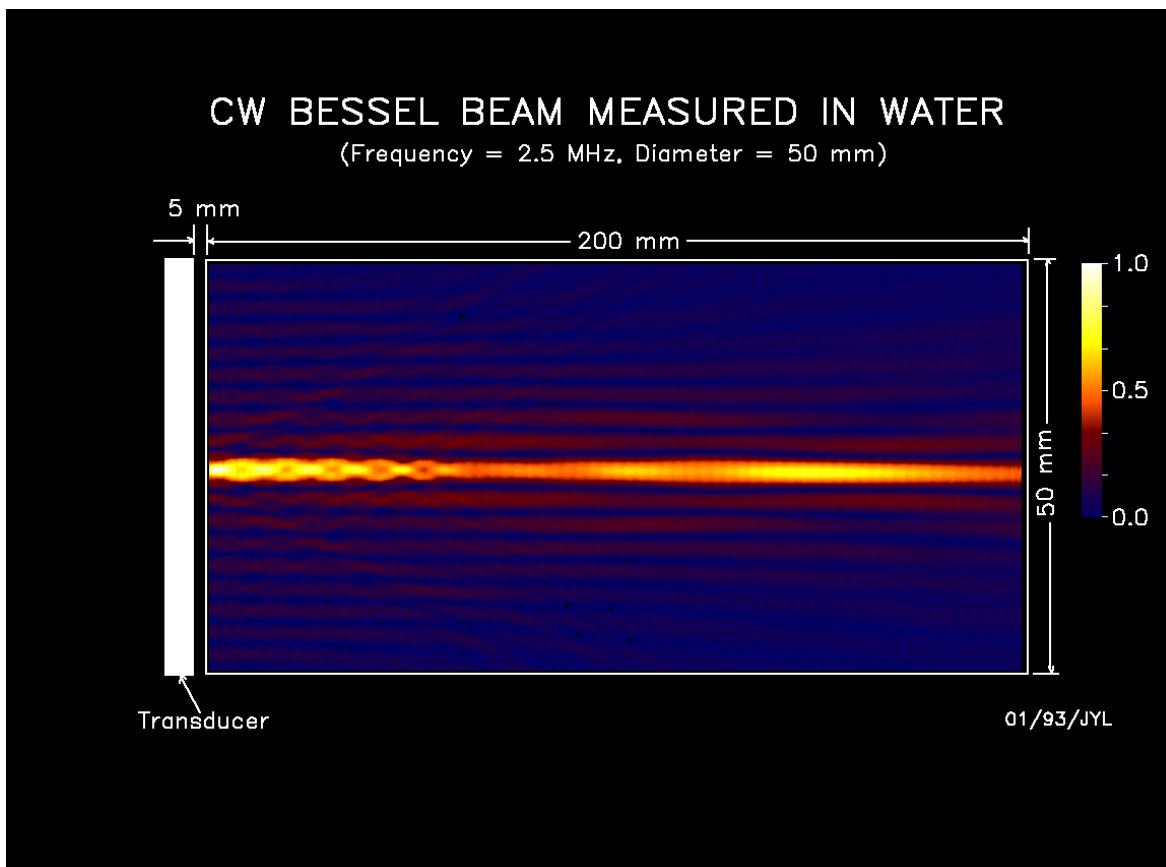
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## **Limited Diffraction Bessel Beam Measured in Water**

A limited diffraction Bessel beam produced with a 10-ring, 50-mm diameter, 2.5-MHz, and 1-3 ceramic/polymer composite annular array transducer, measured in water along the transducer axis with a 0.5-mm diameter needle hydrophone. The beam has about a 2.4-mm -6 dB central beamwidth and a depth of field of 216 mm.

Image courtesy of Jian-yu Lu (Ultrasound Lab, Department of Bioengineering, The University of Toledo, Toledo, OH) and James F. Greenleaf (Ultrasound Research Laboratory, Mayo Clinic, Rochester, MN).

Image file available for download: Image (zipped), TIFF format, 182KB (2.8MB decompressed)