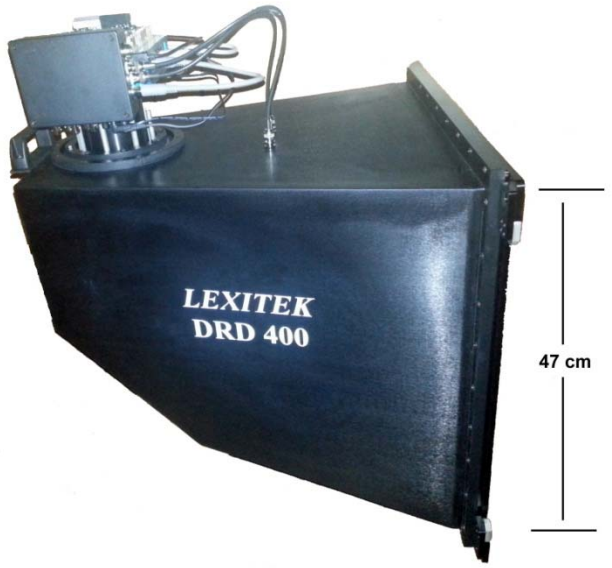
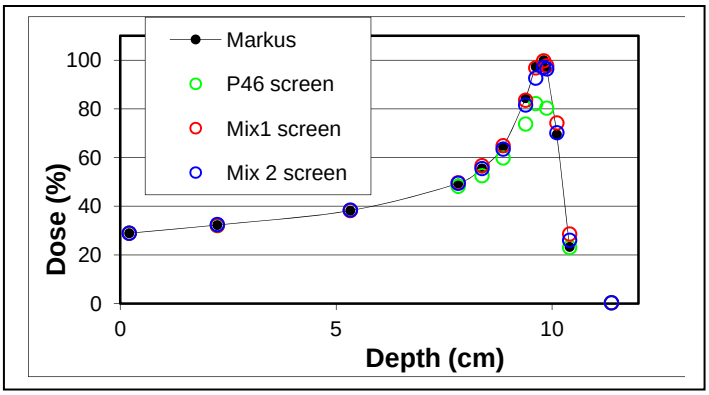
# Lexitek, Inc.

*Innovative Optical Solutions*

## Dosimetric Scintillator System

Scintillating screen detectors such as Lexitek's QA Detector are useful for mapping the distribution of radiation delivered by a radiotherapy system. When coupled with a scattering phantom that has water-like properties, these detectors record 2D radiation field distributions that show what a treatment plan would deliver to the body. For proton and particle therapy, it is difficult to measure the absorbed dose as most scintillators exhibit quenching, i.e. saturation effects, with high ionization near the Bragg peak.




Lexitek has developed a patent pending system with a *custom mixture scintillator that measures light output which is proportional to the absorbed dose*. This graph shows how a properly designed system (red points/Mix1) produces output that is proportional to an ion chamber output through the Bragg peak.

## FEATURES

- Custom high-output, robust scintillator
- Screen sizes up to 40 cm x 40 cm
- Maximum dose limit and lifetime TBD
- Potential to retrofit existing scintillating screen detectors

Related products: QA Detector for Particle Therapy

Please consult us if you are interested in becoming an early adopter of this exciting technology.

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