# Reference Detector

## Interference-Free Dosimetry Scanning

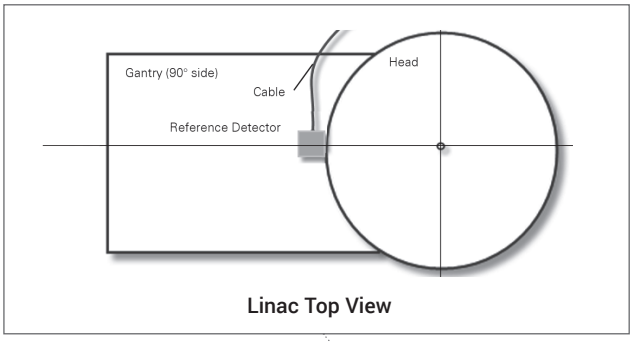
Sun Nuclear's Reference Detector is a patented out-of-field detector that uses linac head leakage to obtain a reference signal during water tank scanning of photon energies.


The Reference Detector works for commissioning measurements of any field size, but is especially helpful for small fields because it is fully out-of-field and does not impinge on the measurement. In addition, there is no need to reposition when changing field sizes -- saving considerable time for your physics staff.

### Features & Benefits

- Used for beam scanning (commissioning and annuals)
- Compatible with 3D SCANNER™
- Eliminates shadowing and interference in-field detectors can cause
- Ideal for small SRS fields, but can be used for any field size; no need to move location for different field sizes
- Parallel plate design

### Reference Detector Placement




**Linac Top View**

Reference Detector mounts to the top surface of a supported linac gantry using a non-invasive dual-lock fastener.

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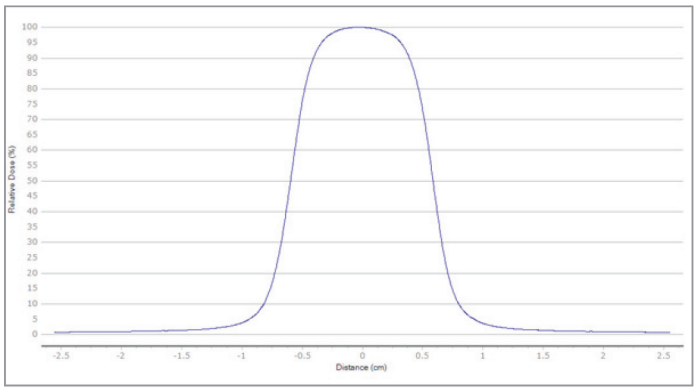
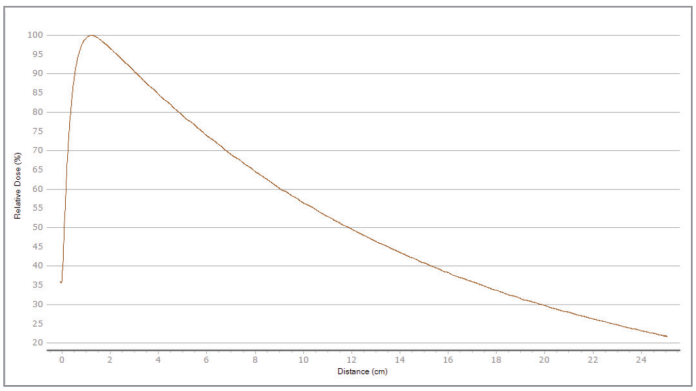
## Scans taken with Reference Detector



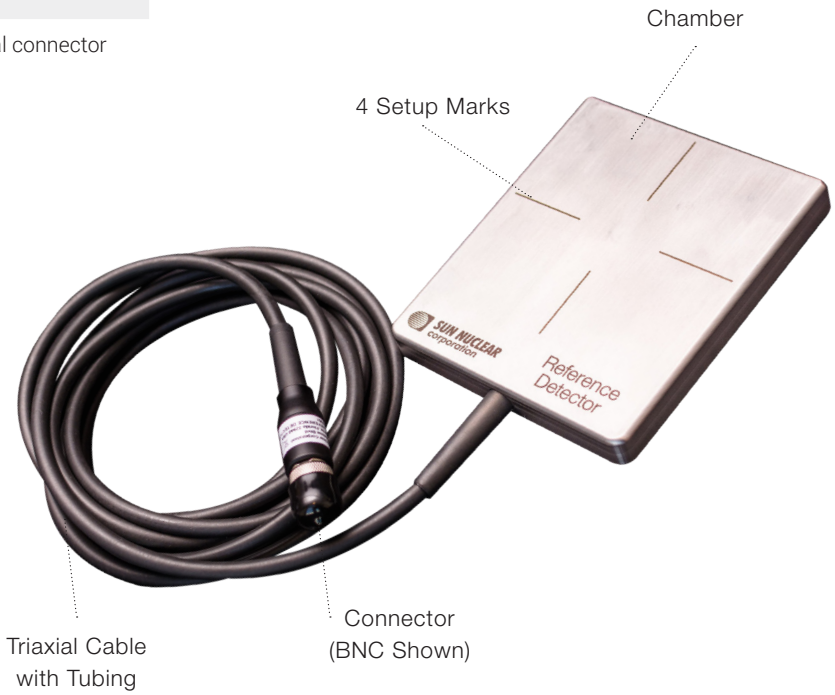

Profile of a 1.0 cm x 1.0 cm jaw defined field taken with 6MV at 100SSD with an EDGE Detector™ using the out-of-field Reference Detector




PDD of a 1.0 cm x 1.0 cm jaw defined field taken with 6MV at 100SSD with an EDGE Detector™ using the out-of-field Reference Detector

## Specifications

| | |
|---|---|
| **Volume (cc):** | 39 |
| **L x W x H (mm):** | 125 x 105 x 15 |
| **Reference Point (mm):** | 2-meter cable with triaxial connector |

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