

RTI LoniMover™



From Radiation
to Information

CT Dose Profiling Made Simple

The growing number of wide beam CT Scanners has increased the demand for monitoring collimation and over-beaming. Traditional methods like TLD, radiochromic film etc. are time consuming, cumbersome and costly, and provide neither the accuracy nor the repeatability required today.

With the RTI Dose Profiler, the LoniMover™ offers a simple, accurate and repeatable procedure e.g. FWHM, geometric efficiency and CTDI free-air.

The LoniMover™ can also be fitted with a Pencil Ion Chamber. This combination offers a simple procedure for CTDI measurements for broad CT collimations according to IEC 3.1*



* IEC 60601-2-44 Ed. 3:A1



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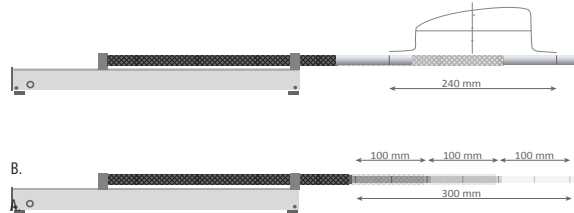
Sweep or Step mode

With the LoniMover™ the full dose profile of wide beam CTs can be measured, both free in air and in a phantom.

In situations when the CT has stationary patient table, the LoniMover™ moves the RTI CT Dose Profiler through the X-ray field in one sweep at a selectable speed. It creates an accurate and easily reproducible method to measure all relevant CT dose parameters, geometric efficiency and the true FWHM in one exposure.

Step mode can be used for **stitching** measurements with a 100mm pencil ion chamber into a virtual 300mm ion chamber, for example.

LoniMover™ can be configured for pre-defined step lengths to ensure high reproducibility. This is particularly useful for CTDI measurements in wide beam CTs according to standard IEC 60601-2-44 Ed. 3:A1



A. Sweep mode with point dose detector.

B. Step mode with 100 mm pencil ion chamber.

CTDP vs LIC*

For precise measurement of the Dose Profile, sweeps with the RTI CT Dose Profiler has been proven to match the data of reference measurements with Liquid Ion Chambers (step-and-shoot with steps as short as 0.5mm between exposures).



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IEC 3.1 and Beyond

Specifications

Performance

Range	up to 300 mm
Speed	10 – 200 mm/s
Speed Accuracy	better than $\pm 0.2\%$
Position Accuracy	better than 0.01 mm

General

Software (included)	LoniCT (windows)
Option Software (for sweep)	RTI Ocean (windows)
Communication	USB 2.0 and Bluetooth®
Dimension (L x W x H)	410 x 48 x 78 mm
Weight	850 g
Force	< 20 N
Power Source	12 VDC, 5 W (6 W peak)

