

The Philips logo is displayed in white text on a blue background.

Computed tomography

Case study

IQon Spectral CT

CT pulmonary artery angiography with Spectral assessment

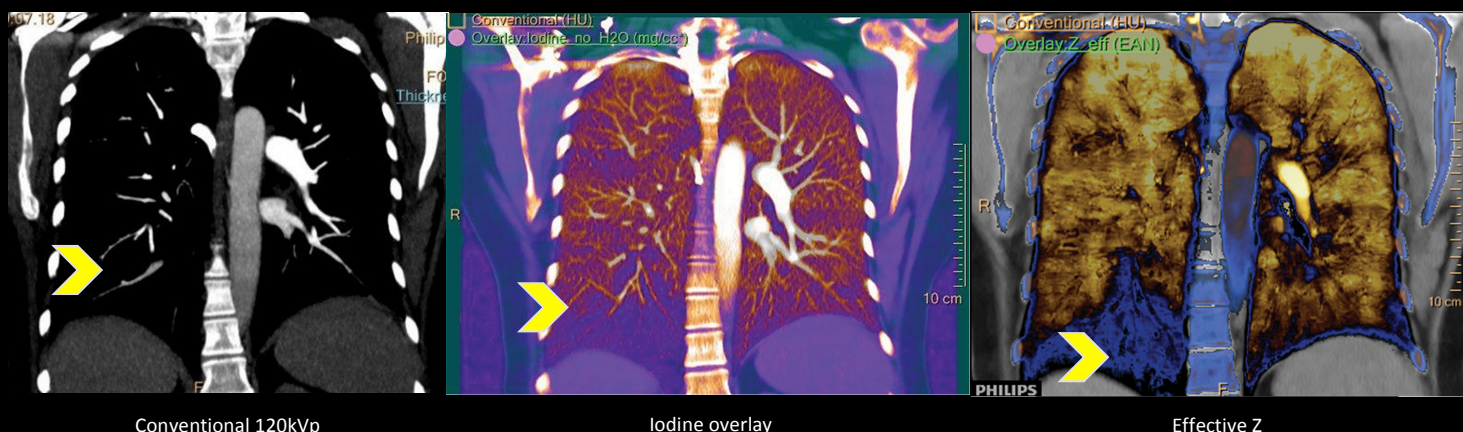
Images courtesy of University Hospitals Case Medical Center, Cleveland, Ohio

Clinical background

Patient presented to UH Case Medical Center's Emergency Department with severe chest pain suggesting either a pulmonary embolus or aortic dissection.

A low dose CT Pulmonary Artery Angiography examination was performed using the IQon Spectral CT, with subsequent spectral data review and analysis.

Clinical findings



Conventional 120kVp

Iodine overlay

Effective Z

The conventional 120kVp image demonstrates filling defects in the segmental and sub segmental vessels of the right lower lobe. There is no evidence of consolidation or infarction.

The iodine and effective Z images demonstrate iodine perfusion defects in the right lower lobe that correlate to the filling defects in the conventional 120kVp images. These findings confirm the differential diagnosis of a pulmonary embolus.

The IQon Spectral CT provides spectral results on-demand when more information is required by the referring and reporting clinicians.

The Philips IQon Spectral CT is the world's first and only spectral-detector based CT, built from the ground up for spectral imaging. It delivers on-demand color quantification and material characterization that's radically simple and low dose. Now, with the IQon Spectral CT, every scan can be spectral on demand.

Iconic quantification

Color quantification adds spectral resolution to your image quality, delivering not just anatomical information, but the ability to identify and characterize structures based on material content.

On-demand spectral analysis

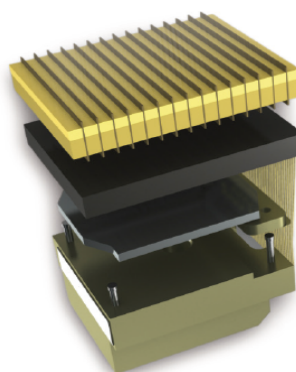
Prospective and retrospective spectral results in one scan – without the need for special scan modes

Iconic innovation in detector technology

With the launch of the IQon Spectral CT, we enrich the realm of clinical information and enable the “and” in CT. Through the uniqueness of the Philips detector-based spectral approach – and the NanoPanel Prism design – high and low energies live in the same time and space.



The uniqueness of the Philips detector-based spectral approach and the NanoPanel Prism design allows you to get the conventional anatomical information that you are used to from your CT and, at the same time, get color quantification and the ability to characterize structures and monoenergetic image information. All in one scan, simultaneously. And you get it without increased complexity and at low dose.



NanoPanel Prism

- Low-dose, simultaneous spectral energy separation
- Low noise with Elite electronics
- No sensitivity to afterglow and no dead time
- Simultaneous detection in both time and space

The images and descriptions contained herein provide technical specifications and optional features which may not be included with the standard system configuration. Contact your local Philips Representative for complete specific system details.

Some or all of the products, features, and accessories shown or described herein may not be available in your market. Please contact your local Philips Representative for availability.

CT performance specifications represent typical measures values. The IQon Spectral CT is not yet CE Marked. Not available for sale in all regions.