

# Application Note

## If the X-Ray Tube is "Enclosed" or "Packaged," is it Radiation Safe?

If you have purchased a "packaged" x-ray tube from us, then we have made every attempt to minimize the amount of radiation emanating from the x-ray tube from regions other than the output port. Having said this, the amount of radiation which leaks from the enclosure will vary from design to design, and careful attention should be paid when implementing a design. This is particularly true for the region surrounding the high voltage cable, as this region will produce a higher level of radiation than the rest of the surrounding enclosure.

If you have purchased a bare, or unpackaged, x-ray tube, you should assume that x-ray photons emanate in a radiation pattern of 360 degrees from the anode target. XT assumes no responsibility for radiation leakage from unpackaged x-ray tubes.

Follow the links below for the radiation map of your packaged XT x-ray source. If you do not find your x-ray source here, e-mail us with your specific part number (e.g. PN93000) and we will send the appropriate document on to you as quickly as possible.

| <b>XT X-Ray Tube</b>                | <b>Radiation Map (PDF)</b>  |
|-------------------------------------|---|
| Series 5000 (All, including Apogee) | <a href="#">Series 5000 radiation map</a>                         |
| Series XTF6000 60kV brass enclosure | <a href="#">Series XTF6000 radiation map</a>                      |
| UltraBright Microfocus x-ray source | <a href="#">UltraBright Microfocus x-ray source radiation map</a> |