

Rating of leakage radiation for GE Phoenix v/tome/x 240KV scanner (GE Installation Data Document Page 31):

< 1 $\mu\text{Sv/h}$ (less than one [1] micro Sievert per hour)

or

< 10 millirems per hour

----- Radiation Measurement Units -----

American Nuclear Society Website: "How is radiation measured?"

(<http://www.ans.org/pi/resources/dosechart/>) (accessed on: 16 July 2014)

Measurement units of radiation are the rem and the millirem (1/1,000th of a rem).

The international unit for measuring radiation exposure is the sievert (Sv), and 1 Sv = 100 rems. Therefore, to convert from the mrem values above to mSv (millisievert), divide the value by 100.

1 sievert (Sv) = 100 rems = 100,000 millirems

1 micro sievert (μSv) = 10 millirems

---- Annual occupational safety limit for working with radiological equipment ----

Adults:

Not to exceed 5,000 millirems per year

Minors (18 or younger):

Not to exceed 500 millirems per year, above the 300 millirems from natural sources

Embryos/fetuses of pregnant women:

Not to exceed 500 millirems per year, or 50 millirems per month

Info on Safety Standard from Public Websites

US Nuclear Regulatory Commission:

<http://www.nrc.gov/images/about-nrc/radiation/dose-limits.jpg>

UChicago Campus Safety Training:

Chalk/UChicago -> Community -> Safety Training Class on "Radiation Safety Awareness"

MIT "A Primer on Radiation":

<http://tech.mit.edu/Bulletins/Radiation/rad5.txt>

American Nuclear Society:

<http://www.ans.org/pi/resources/dosechart/>

Chart on "Estimate Your Personal Annual Radiation Dose"