

Radcal SRC-500 Ionization Chamber is a direct replacement for the Fluke® 96010A Ion Chamber. Having the same form factor but manufactured by Radcal Corporation it can be used in the Fluke® Radiation Leakage Detection System. This chamber meets 21 CFR 1020.30(k) for leakage measurement requirements\* (Electrometer not provided)



### SPECIFICATIONS -

#### Construction

Volume: 500 cc (nominal)  
Vented: open to air

#### Entrance Surface

50 X200 mm (100 cm<sup>2</sup>)

#### Connection

Signal (BNC), HV (BNC)

#### Bias

±400 VDC nom, ±600 VDC max

#### Nominal Sensitivity

1.84E-05 C/Gy (± 5%) (1.61E-07 C/R)

Reference conditions - IEC 61267

Beam Quality: RQR 8 (100 kVp, 4mm Al hvl)

#### Energy Response

± 5% 40-150 kVp for IEC 61267

Beam Qualities: RQR and RQA

#### Rate Dependence

<5% up to 5 Gy/hr (570 R/hr) @ 400 VDC

#### Electrical Leakage

<50 fA with 400 VDC bias



Fluke 96010A  
Ion Chamber

Fluke Radiation Leakage  
Detection System

\*(k) Leakage radiation from the diagnostic source assembly. The leakage radiation from the diagnostic source assembly measured at a distance of 1 meter in any direction from the source shall not exceed 0.88 milligray (mGy) air kerma (vice 100 milliroentgen (mR) exposure) in 1 hour when the X-ray tube is operated at the leakage technique factors. If the maximum rated peak tube potential of the tube housing assembly is greater than the maximum rated peak tube potential for the diagnostic source assembly, positive means shall be provided to limit the maximum X-ray tube potential to that of the diagnostic source assembly. Compliance shall be determined by measurements averaged over an area of 100 square cm with no linear dimension greater than 20 cm.