Too high kV reading on some GE systems with collimator made in China from 2010 onwards

BACKGROUND

Some GE systems manufactured in China from 2010 onwards has a K9 Barium glass mirror in the collimator. When measuring with RaySafe Xi (verified on base unit firmware 5.27 and higher) on these systems, you need to correct the kV value.

INSTRUCTIONS

1. Calculate the correction factor (CF) using the formula:
   $CF = 1.02 - \frac{measured\ kV}{2070}$
2. Multiply the correction factor (CF) with the measured kV to get a corrected kV value:
   $Corrected\ kV = CF \times Measured\ kV$

EXAMPLE

RaySafe Xi measures 104 kV.

$CF = 1.02 - \frac{104}{2070}$ => $CF = 0.970$

$Corrected\ kV = 0.970 \times 104$ =>

$Corrected\ kV = 100.9$

The corrected kV value is 100.9 kV.

Measured kV	Correction Factor	Corrected kV
50.0	0.995	49.8
60.0	0.991	59.5
70.0	0.986	69.0
80.0	0.981	78.5
90.0	0.977	87.9
100.0	0.971	97.1
110.0	0.967	106.4
120.0	0.962	115.4
130.0	0.957	124.4
140.0	0.952	133.3
150.0	0.948	142.2

CONTACT

Please visit http://www.raysafe.com for more information.

RaySafe™