Using a Hewlett Packard 54505B Digital Oscilloscope to monitor the signal of the tubes and a power supply running at 5.24 VDC. The display of the scope is on average reading mode of 128 counts.

1) Without any radioactive source;

$\Delta V = -21.8750 mV$

$\Delta t = 16.000 ns$

ΔV is the potential difference

Δt is the half width

2) With Sr-90 (Beta) placed at the center of the scintillator

$\Delta V = -84.3750 mV$

$\Delta t = 15.200 ns$

With the same source placed at the far end of the scintillator

$\Delta V = -84.3705 mV$

$\Delta t = 15.200 ns$

With the source placed near the phototube

$\Delta V = -156.250 mV$

$\Delta t = 16.800 ns$

3) With Po-210 (alpha) source placed at the center

$\Delta V = -23.4375 mV$

$\Delta t = 15.600 ns$

With the source at the far end

$\Delta V = -20.3125 mV$

$\Delta t = 14.4000 ns$

With the source near the phototube

$\Delta V = -26.5625 mV$

$\Delta t = 14.400 ns$

4) With Co-60 (gamma) placed at the center

$\Delta V = -75.000 mV$

$\Delta t = 14.400 ns$

With the source at the far end

$\Delta V = -73.4375 mV$

$\Delta t = 14.400 ns$

With the source near the phototube

$\Delta V = -128.125 mV$

$\Delta t = 16.800 ns$