Conversion Factors

Water to Eye Tissue

1:1.05

i.e. Pure Bragg peak range in water (90%) is 30.7mm and equates to 29.24mm in eye tissue

Water to Perspex

1:1.16

i.e. Pure Bragg peak range in water (90%) is 30.7mm and equates to 26.47mm in eye tissue

Step Sizes

Water tank

First Step 0.26mm Water – 1st measurement point

Step increment 0.1mm Water

Taking into account the detector wall (thickness) = 0.96mm eye tissue (1.008mm water; 0.869mm Perspex)

Depth of 1st measurement point = 1.268mm (water); 1.207mm (eye tissue); 1.093mm (Perspex)

I think we can have up to 350 steps with our Markus chamber in water

Perspex Wheel

First Step 0.76mm Perspex – 1st measurement point

Step increment 0.1506mm Perspex

Detector thickness = 0.3mm eye tissue (0.315mm water; 0.272mm Perspex)

Depth of 1st measurement point = 1.197mm (water); 1.140mm (eye tissue); 1.032mm (Perspex)

I think we can have up to 192 steps with our Bragg wheel



