MLC Product Design Specifications

- Each leaf must be 0.5 mm in thickness

- Each leaf must move at least 1.0 cm between the open and closed states

- The total area to be collimated by the leaves should be 2.0 x 1.0 cm

- The area magnification from the collimator to the animal bed will be 5x

- Each leaf needs to be independently controlled by an actuator

- A microcontroller will be used to control the leaves

- The "housing" of the collimator should be as small as possible

- The leaves will be in contact with each other

- Each leaf should have 99% attenuation of x-rays at 250 kV when closed

- The minimum speed of leaf movement is 1 cm/s. A faster speed is desirable

- Power consumption should be considered, but is not a concern